



Material and Product Standards

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INTRODUCTION

ALL DESIGN BUILD ENTITIES (DBE), ARCHITECTS, CONSULTANTS, SUB-CONSULTANTS and SUB-CONTRACTORS are required to READ and FOLLOW these STANDARDS and DESIGN GUIDELINES FOR ALL PROJECTS Designed and Built for the West Contra Unified School District

This document defines West Contra Costa Unified School District's material and products standards, for ALL design and construction projects. In the case of renovation/modernization, coordination with the existing systems in place may govern; this document will assist where there are not similar existing systems, or where the District would like to change a material or product to a District standard. By providing clear and straightforward material and product standards the District's goal is to minimize obstacles in providing what the District considers qualitative direction to those involved in designing and constructing facilities in the District.

This document contains two levels of District preferences. The first level is the NO SUBSTITUTION District Standard or "DS." The Board of Education has approved these items as "sole source." (West Contra Costa Unified School District Resolution 17-0607) . The second level is the "AR" designation or Approval Required. The DBE, Architect or Consultant is at liberty to pursue alternative products but must bring the material or products to the District for approval before proceeding with inclusion into the design. The DBE, Architect or Consultant will be required to show why the District should change the material or product. This proof would include a cost-benefit analysis.

This document follows the CSI (Construction Specifications Institute) format. Divisions with the DS or AR designation are included, while other CSI divisions may apply to a construction project, these are strictly the responsibility of the DBE, Architect or Consultant. The District has focused on identifying only the material and products that are critical for maintaining continuity and stocking of material and products to ensure intended life-cycle and long term maintenance. The DBE, Architect or Consultant are expected to synthesize these district standards and provide early feedback to the District on any conflicts and constraints.

The following reference documents are necessary for coordination and continuity:

- The District Facilities Master Plan
- Educational Facilities Specifications (General and project specific)
- Technology Standard
- Fire Alarm System Standard
- District Hardware Standard
- Waterproofing Standard
- Sole Source Resolution

Consistent Terminology: Terms and abbreviations used in the plans/specifications shall be defined. Please check to ensure that these definitions are compatible with the definitions used in your contract. For example, some specifications use the phrase "contract documents" while others use "plans and specifications" which means the same thing. Correct Identification of Roles and Responsibilities: The specifications identify two or more parties, i.e. Owner, contractor, Inspector of Record, Testing Lab, etc. For all specifications make sure the roles and responsibilities of all parties are defined.

North Arrow and Legend: All sheets should have a north arrow and a legend to define symbols. All disciplines should orient in the same direction.

All Electronic Plan Reviews will need to include District representation

Design guidelines and objectives described herein is significantly important, yet it is just one aspect of what it takes to achieve a successful project. A truly successful project is one where project goals are identified early on and where the interdependencies of all building systems are coordinated concurrently from the planning and programming phase. Further, all design objectives: accessible, aesthetics, cost effective, functional/operational, historic preservation, productive, secure/safe, and sustainable and their interrelationships must be understood, evaluated, and appropriately applied. Each of these design objectives is presented in the context of the others throughout the Material and Product Standards.

DIVISION 03 CONCRETE AND REINFORCING

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	03	33316	ARCHITECTURAL CONCRETE	N/A	N/A	N/A	Mix design to be reviewed and approved by District	Architectural concrete is required on 2nd floor and above, and for both floor and curbs at all restrooms on all levels. No Gypcrete or other similar products will be approved		ALL
AR	03	31513	CONCRETE WATERSTOPS	N/A	GRACE, ADCOR, SIKA USA OR EQUAL	ADCOR JOINT PROTECTION	SELF-ADHESIVE	Application required for sealing cold joints, joints between slabs and retaining walls, etc. Type needs to be appropriate for the condition.	N/A	ALL
AR	03	33510	POLISHED CONCRETE	N/A	N/A	N/A	Grind: Level A Cream Level Surface Cracking: All surface cracking shall be filled and ground level. Gloss: Level 3, semi-gloss, 800 grit, Slip Resistance 0.6 Polished Concrete Floor Finishing: Water-based dye (non-reactive penetrating stain) Penetrating Liquid Floor Treatments: Clear waterborne solution of inorganic silicate or silicate materials and proprietary components; odorless; that penetrates,	District to be consulted on the use of Polished Concrete.	Concrete Polishing Council, a specialty council of the American Society of Concrete Contractors.	ALL
AR	03	33900	CURING AND SEALING COMPOUND CONCRETE	N/A	WR Meadows, or Equal	SEALTIGHT #1100	ASTM C 309, Type 1, Class B, non dissipating, certified by curing compound manufacturer to not interfere with bonding of floor covering.	Water-based concrete curing compound for use on interior, exterior and horizontal concrete surfaces. Product should dissipate within four weeks in preparation for the installation of paint, resilient tile or flooring.		ALL

DIVISION 04 MASONRY

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	04	42223.29	Split Face Concrete Unit Masonry	N/A	N/A	N/A	N/A	Split Face Concrete Unit Masonry can be for trash enclosure structures, and other project areas upon approval of the District. Smooth faced, non colored CMU are not acceptable unless dressed with another exterior finish.	N/A	E/M/H

DIVISION 05 METALS

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	05	55113	METAL PAN STAIRS	Metal Pan Stairs	N/A	N/A	All risers, subtread pans, and sub platforms to be from steel sheet of thickness needed comply with performance requirements, but not less than 0.067 inch. All finished treads to be Concrete-filled, and a Cast-in stair nosings, see item below. Railings are to be stainless steel. Final design and finish to be approved by District.	At all interior and exterior stairs. Concrete finish on treads to be approved by District	N/A	E/M/H
AR	05	55213	METAL FABRICATIONS	Exterior Pipe Handrail	N/A	N/A	All Exterior Handrails Designs are required to be galvanized pipe. Galvanized after Fabrication. No field welding allowed. Design of Handrail and component parts are subject to approval by the District. Anchorage of Handrails must be reviewed and approved by District. See Waterproofing Standards.	Do not paint.	N/A	E/M/H
AR	05	55213	METAL FABRICATIONS	Interior Pipe Handrail	N/A	N/A	All Interior Handrails are required to be Stainless Steel. No field welding allowed. Design of Handrail and component parts are subject to approval by the District. Anchorage of Handrails must be reviewed and approved by the District.	Do not paint.	N/A	E/M/H
AR	05	55516	STAIR NOSINGS	STAIR NOSING	Wooster Products, Inc. or Approved Equal	Supergrit	Extruded aluminum base with satin lacquered finish, with a anti-slip filler.	Required at all interior and exterior steps or stairs		E/M/H

DIVISION 06 WOOD, PLASTICS & COMPOSITES

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	6	61100	WOOD FRAMING	N/A	N/A	N/A	N/A	Provide adequate clearances for any penetrations through framing. At all pipes where fluid flows provide isolators or sticky-back felt between the piping and the framing and/or structure to eliminate direct contact.		
AR	6	61600	SHEATHING	N/A	N/A	N/A	N/A	Provide either Plywood or Oriented Strand Board (OSB). No particle board.		
AR	6	61626	UNDERLAYMENT	N/A	N/A	N/A	N/A	Provide either Plywood or Oriented Strand Board (OSB). No particle board.		
AR	6	64100	Architectural Wood Casework	All Casework	N/A	N/A	All casework to be Institutional grade. Locks to be provided at all cabinet drawers and slides, to be Olympus, with Schlage IC Cores.	This is required for all cabinets, shelves, storage, and other items required by the Educational Specifications. All Hinges, drawer slides, and other mechanisms to be reviewed and approved by the District. Shelving to be metal strip lock style shelf bracket. All lockable storage to be keyed the same as the room door.	Provide all cabinet designs and construction in accordance with North American Architectural Woodwork Standards (NAAWS). NAAWS Standards Reference for basic design: Section Section 10 Custom Grade. WI Certified.	E/M/H
AR	6	64100	Architectural Wood Casework	Science, Laboratory Case Work	N/A	N/A	All casework to be institutional grade. Cabinet tops to be Phenolic	All Science Laboratory casework design is subject to review and approval of the District. Material and products will depend on the functional uses within the Laboratory. Refer to Educational Specifications for additional location and use requirements. All lockable storage to be keyed the same as the room door.	NAAWS Standards Reference for basic design: Section 10 and Annex 10D Requirements for Laboratory Casework. WI Certified.	M/H
AR	6	64600	WOOD TRIM	Interior Windows	N/A	N/A	Provide wood window stool and apron at all windows	Wood stool and apron to be stain grade and finished with semi gloss enamel paint or varnish. Design to be approved by the District	N/A	E/M/H
AR	6	64629	WOOD TRIM	Wood Fascia and Soffits	Woodtone or approved equal	Real Trim	N/A	Design and color for all exterior trim and casing of windows to be approved by District	N/A	E/M/H
AR	6	66116	Solid Surfacing Fabrications	Cabinet Tops and Counters	Wilsonart, or approved equal	Surfaces for Education	Solid surface description	All casework cabinet tops and counters to be solid surface with integral rolled edge and splash. Design details and colors to be approved by District	N/A	E/M/H

DIVISION 07 THERMAL & MOISTURE PROTECTION

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary / Middle/ High
AR	07	71353	BELOW GRADE SHEET WATERPROOFING	Below Grade Sheet Waterproofing	Grace Construction Products or Approved Equal	Preprufe 300R Membrane	Integrally bonded sheet waterproofing membrane; high density polyethylene film.	Required at elevator pits or below grade utility chase areas. See District Waterproofing Standards for Sample of Specific application.	N/A	E/M/H
AR	07	71326	BELOW GRADE SHEET WATERPROOFING	Below Grade Sheet Waterproofing	Grace Construction Products or Approved Equal	Bituthene 3000, Preprufe 800 XP	Cold rubberized asphalt waterproof membrane. Surfaces should be structurally sound and free of voids, spalled areas, loose aggregate and sharp protrusions. Remove contaminants such as grease, oil and wax from exposed surfaces. Remove dust, dirt, loose stone and debris.	See District Waterproofing Standards for Sample of specific application. For use at exterior elevated walkway with a concrete topping slab - no habitable space underneath.	N/A	E/M/H
AR	07	72500	2 PLY DRAINABLE WEATHER RESISTANT BARRIER	Weather Barriers, WRB	Henry Hydrotex, or approved equal	N/A	N/A	See District Waterproofing Standards for Sample of specific application.	N/A	E/M/H
AR	07	72616	FLUID APPLIED AIR BARRIER ACCESSORY	Drainage Ventilation Composite Sheet	Cosella -Dorken Products, Keene Driwall, or Equal	N/A	3-dimensional rainscreen membrane with drainage and ventilation channels.	See District Waterproofing Standards for Sample of specific application.	N/A	E/M/H
AR	07	72616	BELOW GRADE VAPOR RETARDERS	Below Slab Vapor Barrier	Stego Industries LLC	Stego Wrap	15 mil	See District Waterproofing Standards for Sample of specific application.	N/A	E/M/H
AR	07	72726	FLUID APPLIED AIR BARRIER	Vapor Permeable Fluid Applied Air Barrier	GCP AT, Carlisle, Prosoco, or approved equal	Perm-A-Barrier VPL 50	Synthetic rubber, cold-vulcanized, fluid applied air and vapor barrier membrane. It cures to form a resilient monolithic elastomeric sheet.	See District Waterproofing Standards for Sample of specific application.	N/A	E/M/H
AR	07	73113	ASPHALT ROOFING SHINGLES	Shingles	CertainTeed, Owens Corning or approved equal	Presidential	Use Energy Star compliant roofing. 30 year warranty and commensurate useful service life.	This is required on all slope roofs over 3/12 in pitch.	N/A	E/M/H
AR	07	74626	FIBER CEMENT SIDING SYSTEM	Fiber Cement Siding	James Hardie Company, or approved equal	N/A	Trim, siding and sheet goods fabricated from cellulose fiber-reinforced ground sand and Portland cement.	Used as a substitute for redwood or cedar siding. Recommend not using embossed wood grains or other patterns, which become 'dated' in appearance.	N/A	E/M/H
AR	07	75216	MODIFIED BITUMINOUS SHEET ROOFING	SBS 2-Ply Mod-Bit Roofing	Soprema, or Garland, or approved equivalent.	N/A	SBS 2-ply Modified Bituminous Sheet Roofing with PMMA Liquid-Applied Reinforced Coating with embedded marble chips.	This is required on all low slope roof areas.	30 year warranty.	E/M/H
AR	07	76200	SHEET METAL FLASHING AND TRIM	Flashing	N/A	N/A	Type 316 stainless steel	Use stainless steel for all exterior flashing and trim. 22 gauge minimum. Only where prefinished roofing is used, the flashing and gutter assemblies shall be made of the same material.	All Sheet Metal Flashing and Trim must have a 30 year warranty.	E/M/H
AR	07	77123	GUTTERS AND DOWNSPOUTS	Gutters	N/A	N/A	Gutters: Type 316 stainless steel with potable water interior coating. Downspouts: ASTM A53, Grade B, Schedule 40 galvanized steel pipe, standard weight.	Connect to the site storm drain system to avoid water sheeting across walks and playgrounds, include cleanout. Downspont needs to be structurally supported vertically from a building, structure or post.	N/A	E/M/H

DIVISION 07 THERMAL & MOISTURE PROTECTION

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary / Middle/ High</i>
AR	07	77616	ROOF DECKING PAVERS	Roof deck pavers	Hanover Architectural Products	N/A	N/A	Required at all areas of low slope roofs where access it required for maintenance and or pedestrian circulation.	N/A	E/M/H

DIVISION 08 OPENINGS

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	08	81200	METAL FRAMES	Hollow Metal Frames, Exterior	N/A	N/A	16 gauge Custom commercial security grade, fully welded. Conform to requirements of ANSI A250.8. Fire rated door and frame construction to conform to UL 9 and UL 10C.	Typical all exterior openings, unless approved by District. Installed exterior frame and door assembly to be weather tight.	HMMA 862 "Guide Specifications for Commercial Security Hollow Metal Doors and Frames"	E/M/H
AR	08	81200	METAL FRAMES	Hollow Metal Frames, Interior	N/A	N/A	Custom commercial grade, fully welded. Submit Certificate NRCC-ENV-05-E from the Non-residential Compliance Manual documenting compliance with the CBC, California Building Code, California Code of Regulations (CCR), Title 24, Part 6, Section 110, Table 110.6-A and 110-6.B.	Typical at all interior locations unless approved by District.	HMMA 861 "Guide Specifications for Commercial Hollow Metal Doors and Frames"	E/M/H
AR	08	81200	WOOD FRAMES	Frames, Fire- Rated	N/A	N/A	N/A	All new construction, provide metal frames. At retrofits, remodels and some modernizations, and only upon approval of District. Architect to verify fire-rating of existing wood frames .	NA	E/M/H
AR	08	81300	METAL DOORS	Hollow Metal Doors, Exterior	N/A	N/A	Custom, commercial security grade, fully welded.	Provide Metal doors at all door openings except at locations listed below that are to receive Wood Doors	HMMA 862 "Guide Specifications for Commercial Security Hollow Metal Doors and Frames"	E/M/H
AR	08	81300	METAL DOORS	Hollow Metal Doors, Interior	N/A	N/A	Custom, commercial security grade, fully welded.	Only when needed for fire rating.	HMMA 861 "Guide Specifications for Commercial Hollow Metal Doors and Frames"	E/M/H
AR	08	81400	WOOD DOORS	Flush Wood Doors	N/A	N/A	Flush Face Solid Core. PC-HPDL-5 unless otherwise required. All Doors to be Stain Grade	District requires at all Interior locations except where metal doors are used listed above. Wood doors are used at studios, offices, meeting rooms, and other educational spaces.	Woodwork Institute "North American Architectural Woodwork Standards" Section 09 Doors Custom Grade	E/M/H
AR	08	83300	COILING DOORS AND COUNTERTOPS	Coiling Doors and Grilles	N/A	N/A	Painted finish for galvanized steel; coated finish for aluminum. STC Rating of 32.	To be used at Kitchen to MPR, or any other service door area. Review the use of manual or power-operated coiling doors with the District.	NA	E/M/H
AR	08	83600	PANEL DOORS	Single Panel and Multi panel doors	Modern Fold or Hufcor, or approved equal	Acoustical Seal Model by Modernfold, Encore, with a minimum STC rating of 50	Marker Board or Tack Board on both sides of each panel to be coordinated with room layout and functions.	Use this door type at openings between learning spaces. Door panel size and operational system to be reviewed and approved by District. Percentage of white board and tack board to be approved by District	NA	E/M/H
AR	08	83213	SLIDING ALUMINUM GLASS DOORS	Single and multi panel doors	Arcadia, Kawneer Company, or approved equal	Arcadia Thermal Shield, Multi Slide Door	Product must be STC (50) Rated for use as an opening to other spaces or to collaboration or circulation spaces	Use this door type at openings between rooms or to collaboration and circulation spaces. And other spaces as stated in Ed Specifications and approved by District	NA	E/M/H
AR	08	83300	ROLLING DOOR	Roll up Doors	Cookson or approved Equal		Aluminum, insulated, with a STC rating of no less than 30.	Use in areas that call for access to the exterior for outdoor learning, or in areas for service to the building. Relites in the door need to be reviewed and approved by the District.	N/A	E/M/H
AR	08	84100	ENTRANCES AND STOREFRONTS, CURTAIN WALL	N/A	Arcadia, Kawneer or Approved Equal	Arcadia Thermal Shield	Finish: Clear Anodized. Glass shall be no lower than 36" to finished floor. STC rated at 50 minimum	District allows storefront systems at main entrances to MPR, Administration, and other District approved areas when presented during design.	N/A	E/M/H

DIVISION 08 OPENINGS

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	08	85113	WINDOWS	Exterior Windows	EFCO, Kawneer Company, Arcadia, or approved equal		Hollow Metal and Aluminum Framed windows, clear anodized finish. Sills shall have a continuous slope to the exterior. Weep flaps to be constructed of the same finish as the windows. Mitered sash corners will not be acceptable. All operable windows shall be awning style.	To be used at all windows except where there is storefront. No windows should be located below 18" to exterior or interior finished floor surface. District requires that every room with windows that at least two of them be operable.		E/M/H
DS	08	87100	DOOR Handle and Lock Hardware	N/A	Locks and Keying System:Allegion- Schlage, No Exceptions	Locks and Keying System ND Series, ANSI A156.2 Series 4000 Grade 1	N/A	Refer to District Hardware Standards	N/A	E/M/H
AR	08	87100	Door Hardware Other than Handles and Locks	All Hardware except Door Handles and Locks	Varies	N/A	N/A	Refer to District Hardware Standards	N/A	E/M/H

DIVISION 09 FINISHES

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	09	92400	CEMENT PLASTER	System	Non-Proprietary	N/A	Three-coat traditional 7/8" cementitious system per PSDM. Lath shall meet ASTM C993 weight. Cement Plaster Finish: Hard trowelled, smooth trowel finish. Integral color	District requires an approval of control joint layouts prior to application. All control joints to be, at a minimum, compliant with ASTM C 1063 and PSDM. District requires a "mock up" of the proposed Finish for approval prior to application. Colors to be approved by the District	PSDM Plaster and Drywall Systems Manual	E/M/H
AR		92000	PLASTER ASSEMBLIES	Rainscreen. Drainage / Ventilation Composite Sheet	Driwall, Stc-O-Flex, or approved equal	N/A	N/A	Use at all stucco walls, no exceptions. See waterproofing details	N/A	E/M/H
AR	09	92236.23	METAL LATH	Self-furring metal lath	Structa Wire Corp Megalath, Phillips, Amico or approved equal	Structalath	Lath to be self-furring welded wire lath.	See Waterproofing Standards	N/A	
AR	09	92200	SUPPORTS FOR PLASTER	J Bead	Stockton or approved equal	J-B J Bead	Standard plaster stop/casing beam for terminating stucco	All metal exposed to the weather is to be Stainless Steel. See Waterproofing Standards	N/A	E/M/H
AR	09	92900	GYPSUM BOARD (High Impact)	High Impact	N/A	N/A	Mesh reinforced gypsum board. Dense core. Soft Body Impact per ASTM C 1629 Level 3.	Install on all corridor walls or walls subject to high impact, such as Multipurpose Rooms, Athletic facilities, locker rooms, and other areas to determined in design and approved by the District. Install to 6" above suspended ceiling height.	N/A	E/M/H
AR	09	93013	TILE	Floor Tile	Dal Tile & American Olean, or Approved Equal		Unglazed colorbody porcelain tile.	District requires tile approval of all colors. Tile and grout color is to minimize appearance of soil. Colors in standard price groups (groups 1-3). Tile selection shall accommodate slope to drain. Tile selection shall accommodate grout width not to exceed 1/16 inch.	Master Grade Certificate required.	E/M/H
AR	09	93013	TILE	Wall Tile	Dal Tile & American Olean, or Approved Equal	Daltile Modern Dimensions	Ceramic Tile. Tile selection shall accommodate grout width not to exceed 1/16 inch.	District requires approval of tile colors. Include at least two colors in a pattern for the wall. Tile and grout color is to minimize appearance of soil. Colors in standard price groups (Groups 1-3).	Master Grade Certificate required.	E/M/H
AR	09	93013	GROUT	GROUT	Custom Building Products, or Approved Equal	Prism Ultimate Performance Grout	N/A	District requires tile approval of all colors. Tile and grout color is to minimize appearance of soil. Colors in standard price groups. All grout needs to be Epoxy.	Standards ANSI A118.6 and 7; ANSI A108.10 and A118.7	
AR	09	95000	ACOUSTICAL CEILINGS	Ceiling Tiles	Armstrong or Approved Equal	<u>School Zone</u> <u>Fine Fissured</u>	Minimum NRC 0.90 Square Lay-In.	Use at classroom and other educational spaces.	ANSI S12.60	E/M/H

DIVISION 09 FINISHES

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	09	95000	ACOUSTICAL CEILINGS	Ceiling Tiles	Armstrong or Approved Equal	Optima	School one Fine Fissured only comes in 2x2 size.	Use at office & library ceilings.	ANSI S12.60	E/M/H
AR	09	9500	ACOUSTICAL CEILINGS	Ceiling Tiles	Armstrong or Approved Equal	ULTIMA Health Zone High NRC		Use at Nurses and other wet area.		
AR	09	96466	WOOD FLOORING	Stage and wood floors other than sports	N/A	N/A	3/4 inch by 3/4 inch vertical grain Maple flooring applied directly over wood sheathing.	Use at performance floors where resilience is not required. Do not place floor clean outs in wood flooring. No Pre-finished Products will be approved	N/A	E/M/H
AR	09	96466	WOOD ATHLETIC FLOORING	Sport venues	MFMA listed	N/A	Strip flooring type, MFMA-RL Second Grade or Better. Anchored wood Sleeper system. Meet DIN 18032, part 2. Under-floor ventilation system.	District requires Strip flooring in all competition gymnasiums. Post supports, sports layouts and logos are to be approved by District. No Pre-finished Products will be approved.	DIN 18032 part 2	M/H
AR	09	96466	WOOD ATHLETIC FLOORING	Dance	N/A	N/A	Strip flooring type, 3/34" thick, MFMA-RL Second Grade or Better. Floating type, resilient pad system. Meet DIN 18032, part 2.	District requires Strip Flooring in all Dance Studios. No Pre-finished Products will be approved.	DIN 18032 part 2	M/H
AR	09	96513	RESILIENT BASE AND ACCESSORIES	Base and Accessories	N/A	N/A	ASTM F 1861 Type TS: rubber, vulcanized thermoset.	Test moisture in concrete and glue used to apply tile for compatibility	ASTM F 1861	E/M/H
AR	09	96519	RESILIENT FLOORING	Marmoleum Composition Tile	Forbo or Approved Equal	mct	UV cured finish. Heterogeneous linoleum tile made primarily of natural materials consisting of linseed oil, wood flour, and rosin binders, mixed and calendared onto a polyester backing. Pattern and color shall extend throughout total thickness of material. Thickness: 0.1 inch. Sheet Goods are acceptable upon approval of District, provided they meet minimum thickness above.	Review with Owner prior to use. Use 'no-wax' maintenance techniques. Review resilient flooring selection with District. Use the adhesives which meet the vapor-emissions testing requirements. Design Team is to create a pattern with 3 or more colors, District to review and approve design.	N/A	E/M/H
AR	09	96519	RESILIENT FLOORING	Luxury Vinyl Tile	Armstrong	Natural Creations	A layered construction consisting of a UV-cured polyurethane finish, embossed clear vinyl wear layer, protecting a high-fidelity print layer on a solid vinyl backing coated with a pressure sensitive, releasable adhesive. Sheet Goods are acceptable upon approval of District, provided they meet minimum thickness.	Use 'no-wax' maintenance techniques. Review resilient flooring selection with District. Use the adhesives which meet the vapor-emissions testing requirements. Design Team is to create a pattern with 3 or more colors, District to review and approve design.	N/A	E/M/H

DIVISION 09 FINISHES

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/Middle/High
AR	09	96519	RESILIENT FLOORING	Rubber Tile	Nora, Mondo, Roppe, Tarkett/Johnsonite or approved equal	N/A	Thickness: 3 mm min (includes 3 mm, 0.12 inch, 1/8 inch, 3.5 mm, 0.14 inch). Texture: Smooth, hammered, sealskin. Pattern: Marble or fleck Colors: choose from least expensive price group. Sheet goods are acceptable provided they meet minimum thickness above.	Use 'no-wax' maintenance techniques. Review resilient flooring selection with District. Use the adhesives which meet the vapor-emissions testing requirements. Design Team is to create a pattern with 3 or more colors, District to review and approve design.	N/A	E/M/H
AR	09	96566	RESILIENT ATHLETIC FLOORING	Faux Wood cushioned athletic floor, or approved equal	Connor	SportGrain	Cushioned Vinyl Flooring with wood pattern. cushion thickness: 5-7 mm Vinyl Thickness: 2 mm min	Use Only where District approves and needed for function of space	N/A	E/M
AR	09	96723	RESINOUS FLOORING	Epoxy Floor, Heat-Tolerant	Dexotec, or approved equal	N/A	1/4 inch thick fluid applied quartzchip urethane floor and base with epoxy top coat and antimicrobial properties. Three-component, integral troweled mortar base consisting of urethane resin, curing agent, and silica aggregate.	Traffic grey is not allowed as final finish.	N/A	E/M/H
AR	09	96816	CARPETING	Carpet, Broadloom or Tile	N/A	N/A	Yarn Type: Nylon Type 6,6. Dye Process: 100% Solution Dyed. Lifetime Warranty against raveling. Lifetime warranty against static buildup. CRI Green Label Plus NSF/ANSI 140 Certified Gold. Nylon Fibers with applied soil resistance and antimicrobial treatment.	Use the adhesives and product which meet the vapor-emissions testing requirements. Design Team is to create a pattern with 2 or more colors, District to review and approve design. Monolithic design not acceptable for plank size carpet.	CRI Carpet and Rug Institute	E/M/H
AR	09	97200	WALLCOVERING	Vinyl Wallcovering	N/A	N/A	All wallcovering needs to be installed over a solid backer board.NFPA 255 Class A NFPA 286 Corner Burn: Pass ANSI 342	Apply to areas that are not Tackboard, or white board that require washable wall covering. Prior approval of walls to receive wallcovering to be approved by District	ANSI 342	E/M/H
AR		98400	ACOUSTIC ROOM COMPONENTS	Acoustical wall panel	Lamvin, or Approved Equal	Eco Sonic I Acoustical Panels	Panels, composed of 1/2-inch, 6-7 lb. density rigid fiberglass core (with no added urea-formaldehyde) with chemically hardened edges. The panel covering shall be fabric and all edges wrapped a minimum 1-1/2 inches to the back of the panel. All acoustical wall treatment must have a solid backer board.	To be used to accomplish acoustical standards	N/A	E/M/H

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<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/Middle/High</i>
AR	09	99113	PAINTING	Exterior Painting	Benjamin Moore, Dunn-Edwards, Sherwin-Williams, or approved equal	N/A	All painted surfaces to be primed. Two coats are required after prime coat. Intermediate coat to be match color of top coat. Wood or wood containing products are to be primed on all sides and cut ends.	To be applied to exterior materials that are to receive paint. No paint to be applied to galvanized handrails, stainless steel, or factory finished products. District requires approval of all paint and finish colors, initially selected by the Architect from the manufacturer's entire range of standard and custom color selections and special colors selected to match or compliment the colors of other materials, equipment, or components which comprise the work. Exterior paint design shall include at least four colors. Avoid light colors at height and locations where students hands and feet have frequent access. Exterior door frame and door color should wrap to interior surface.	N/A	E/M/H
AR	09	92123	PAINTING	Interior Painting	Benjamin Moore, Dunn-Edwards, Sherwin-Williams, or approved equal		Acrylic is required where paint it scheduled. All painted surfaces to be primed. Two coats are required after prime coat. Intermediate coat to be match color of top coat. Wood or wood containing products are to be primed on all sides and cut ends. Eggshell or greater sheen on gypsum, semi gloss on trim	To be applied to all interior material, except noted items such as galvanized handrails or factory finished products. Stainless Steel, do not paint. District requires approval of all paint and finish colors, initially selected by the Architect from the manufacturer's entire range of standard and custom color selections and special colors selected to match or compliment the colors of other materials, equipment, or components which comprise the work.	N/A	E/M/H
AR		99623	Graffiti-Resistant Coatings	Anti-Graffiti Coating	GSS Coatings, Monochem, US Coatings, or Approved Equal	<u>GSS-10</u> , Permashield Premium, Anti-Graffiti Protection System, or Approved Equal	N/A	District requires application at all CMU Walls only. District to approve locations	N/A	E/M/H

DIVISION 10 SPECIALTIES

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/Middle/High</i>
AR	10	101123	FIXED TACKBOARDS	Tackable Wall Board Systems	N/A	N/A	Vinyl Wallcovering factory-applied to 1/2 inch x 4 foot wide industrial insulation board, ironed and prime coated, meeting ASTM C208. Minimize openings.	Tackboards to be applied on walls where indicated in the Educational Specifications 4' x 8' unit with aluminum frame unless multiple panels are mounted adjacent one another than the framing should occur around the group of boards. Panels must be mounted with z-clips for ease of replacement.	N/A	E/M/H
AR	10	101400	SIGNAGE	Exterior Signs	N/A	N/A	Brushed Aluminum or Stainless Steel.	See Educational Specifications for locations	N/A	E/M/H
AR	10	101400	SIGNAGE	Interior Signs	N/A	N/A	Interior-rated acrylic.	See Educational Specifications for locations	N/A	E/M/H
AR	10	101400	SIGNAGE	Interior Signs, Administration Areas	N/A	N/A	Interior-rated acrylic.	See Educational Specifications for locations	N/A	E/M/H
DS	10	101463	ELECTRONIC MESSAGE SIGNAGE	Electronic Marquee	Stewart Signs, No Exceptions	LED School Signs	Electronic signage to be operational through a web based application. Besides operational cables, provide two (2) CAT6a cables 1-1/4" conduit for future.	Provide either wall or free standing, installation to be approved by District	N/A	E/M/H
AR	10	102113	TOILET COMPARTMENTS	Solid Color Reinforced Composite from Mfg.	Bobrick, or Approved Equal	Sierra Series 1092 overhead braced	Provide a full range of colors for the Districts selection	Use stainless steel continuous butts & hinges and institutional hardware. Specify backing plate detail with through bolts/sex bolts. All partition doors to have door stops at the top and bottom of each panel. Do not use urinal screens. At the high school level, only use for panels at stall doors. All other separations to be constructed with full tile walls.	N/A	E/M/H
AR	10	102113	TOILET COMPARTMENTS	Custom	N/A	N/A	Stalls to be enclosed on three sides with solid construction. Hollow Metal Doors per Division 8. Provide backing plate detail with through bolts/sex-bolt.	Applies where there is a single stall in a restroom	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Toilet Tissue, Multi-Roll, Recessed	Bobrick or Approved Equal	B-3888	Satin-finish stainless steel unit and dispensing mechanism. Unit needs to hold two rolls up to 5 1/4" (133mm) diameter (1800 sheets). Theft-resistant, heavy-duty spindles.	All dispensers to be lockable	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Toilet Tissue, Surface Mounted	Bobrick or Approved Equal	B-2888	Satin-finish stainless steel unit with stainless steel dispensing mechanism.	All dispensers are to be lockable	N/A	E/M/H

DIVISION 10 SPECIALTIES

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	10	102813	TOILET ACCESSORIES	Foam Soap Dispenser, Surface Mounted	Technical Concepts, or Approved Equal	Model # 750382	Stainless steel.		N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Toilet Seat Cover Dispenser	Bobrick, or Approved Equal	B-221	Commercial Toilet Seat Cover Dispenser, Surface-Mounted, Stainless Steel	See Educational Specification "General Spaces Standards – Restrooms & Sinks"	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Sanitary Napkin Disposal	Bobrick or Approved Equal	B-3544	ASI #0473	Provide at every female restroom location, and gender neutral restrooms	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Sanitary Napkin , recessed	Bobrick or Approved Equal	B-352	ASI #464	Provide at all student female restrooms, and gender neutral restrooms	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Hand Dryer, Electric	Bobrick or Approved Equal	B-7125 InstaDry™ High Speed Dryer	N/A	Provide the appropriate number, no less than one, per restroom based on occupancy level Plan for drivers to be semi obsessed with a stainless steel plate below fixture	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Shower Curtain Rod	Bobrick or Approved Equal	B-6107 x 72 ClassicSeries®	N/A	N/A	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Shower Curtain Hook	Bobrick or Approved Equal	B 204-1 Standard Shower Curtain Hook	N/A	N/A	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Changing Station	Koala or approved equal	N/A	Koala is purchased through the Bobrick company	Use in restrooms which are accessed by community	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Folding Shower Seat	Bobrick, or Approved Equal		Shower Curtain Hook	See Educational Specification "General Spaces Standards – Restrooms & Sinks"	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Clothes Hook	Bobrick, or Approved Equal	B-983	Surface-mounted vertical design. (Koala Model KB111-SSWM)	Provide in each restroom stall	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Grab Bars	Bobrick, or Approved Equal	B-6806.99, B-5837	Recessed-mounted horizontal design. (Koala Model KB110-SSRE)	Provide all grab bars as determined for access and at lengths to meet code requirements	N/A	E/M/H
AR	10	102813	TOILET ACCESSORIES	Mop Rack, Shelf	Bobrick, or Approved Equal	B-239	N/A	Provide at all Janitorial and maintenance rooms.	N/A	E/M/H
AR	10	104100	SAFETY SPECIALTIES	EMERGENCY ACCESS AND KEY CABINETS	Knox Box, and Padlock	3200 Series	Hinged door. Heavy duty. Heavy duty padlock with stainless steel shackle, designed for securing perimeter or fire access gate.	Locate in Administration, Location to be Approved By District. All Locations to be approved by local Fire Department.	N/A	E/M/H
AR	10	105113	METAL LOCKERS	Student Lockers	Lyon or approved equal	Quite Lockers, single and double tiered	Integrated locks, 5 combinations. All standard Lockers to be 15" wide, an 12" deep	Double tier and single tier lockers use to be discussed and approved by District.	N/A	M/H
AR	10	105113	METAL LOCKERS	Athletic Locker	Lyon or approved equal	N/A	Padlocks on all Athletic lockers	Locate Athletic Lockers in District Approved Locations	N/A	M/H
AR	10	107500	FLAGPOLE	Flagpoles	Playworks, or Approved Equal		Aluminum flagpoles with heat-treated seamless 6063-T6 tubing to withstands winds of 160 MPH. Clear anodized aluminum and lockable compartments.	District to approve location of Flagpole. See Educational Specifications for Height	N/A	E/M/H

DIVISION 11 EQUIPMENT

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AR	11	111616	SAFES	Safe	Sentry or approved equal	N/A	fire-rated, bolt-to-floor. Mechanical function - not electrical. 4 cubic feet minimum.	See Educational Specifications. Final location to be approved by District	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	GENERAL	N/A	N/A	City of Richmond, Waste Water Department, requests no garbage disposals due to difficulty in processing solid waste materials.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Hand Sinks	Aero Manufacturing	HSD	Stainless steel wall mount 10 inch wide x 14 inch front-to-back x 5 inch deep with 8 inch splash gooseneck splash mount faucet, P-Trap, lever waste, wrist handles and overflow. NSF.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Manual Can Opener	Edlund	S-11	Manual can opener with cast stainless steel base, removable blade assembly, dishwasher safe, NSF.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Pre-Rinse Faucet Unit	T & S Brass	B-0133 with B0107 spray valve with B-0044-H flex stainless steel base	35 1/2 inch high x 15 inch overhang, x 8 1/4 inch clearance, 18 inch riser	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Pot Filler	T & S Brass	B-0610	Kettle and pot assembly with vacuum breaker, 68 inch long. 1/2 inch wide flexible stainless steel hose, mixing valve, lever handles with squeeze valve and hook nozzle.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Pot Washer	Metcraft Inc.		Polished stainless steel, floor mounted 168 inch long x 30 inch wide complete with all dispensing, drainage systems and controls.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Laundry Sink	Aero Manufacturing	2F1-2424	Size as required for project installation.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Small Grease Exhaust Hood	Greenheck	GXFW Type 1	Size as required for project installation.	N/A	N/A	E/M/H

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AR	11	114000	FOODSERVICE EQUIPMENT	Large Grease Exhaust Hood	Greenheck	GHFQ Type 1	one section 216 inch long x 60 inch wide x 24 inch high, UL listed, with fire damper, NSF, Type 1 high efficiency baffle filter face supply wall canopy with fire control system.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Stainless Steel Hood Closure Panels	N/A	N/A	20 ga. Closure from top of exhaust hood to finish ceiling, and trim at ceiling and walls, finish to match hoods.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Stainless Steel Tray Shelf	N/A	N/A	12 inch wide x 36 inch long 20 ga. on 14 ga. wall brackets.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Stainless Steel Wall Flashing	N/A	N/A	20 ga to 54 inches above top of base, behind all hot and wet areas.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Stainless Steel Corner Guards	N/A	N/A	14 ga 2 inch x 2 inch x approx. 49 inches long.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Stainless Steel Work Tables, Mobile	N/A	N/A	60 inches long x 30 inches wide with undershelf and 20 inch x 20 inch drawer mounted to the left side near hand sink, with four 5 inch diameter heavy duty non-marking casters	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Stainless Steel Work Tables, Mobile ADA	N/A	N/A	84 inches long, similar to above. ADA compliant.	N/A	N/A	E/M/H
AR	11	114000	FOODSERVICE EQUIPMENT	Stem Caster Carts	Metro	A456EC	Adjustable stem caster wire carts 21 inches wide x 48 inches long x 69 inches high with four shelves, posts, split sleeves, donut bumpers, chrome shelves and posts, with 5 inch polyurethane swivel casters all with brakes, 900 pound capacity.	N/A	N/A	E/M/H
AR	11	114100	FOOD STORAGE EQUIPMENT	Air Doors	Mars	NHV 42	One pair unheated, high impact type, 42 inch long, with door-operated microswitch. NSF.	N/A	N/A	E/M/H
AR	11	114100	FOOD STORAGE EQUIPMENT	Walk In Freezer	Koolstar, RMI Econocold, Pacific Refrigerator Co, Thermalite	N/A	10' 2" long x 8' 6" wide x 9' clear inside, with 3' x 6'8" with entry/exit door hardware with cam lift and spring assisted self-closing hinges	N/A	N/A	M/H

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AR	11	114100	FOOD STORAGE EQUIPMENT	Walk In Cooler	Koolstar, RMI Econocold, Pacific Refrigerator Co, Thermalite	N/A	10' 10" long x 8' 6" wide x 9' clear inside, with 3' x 6'8" with entry/exit door hardware with cam lift and spring assisted self-closing hinges	N/A	N/A	E/M/H
AR	11	114100	FOOD STORAGE EQUIPMENT	Freezer Strip Door	Aleco	<u>440042 Clear-Flex II</u>	Freezer secondary door assembly of 6 inch wide 0.060 replaceable clear nylon strips.	N/A	N/A	E/M/H
AR	11	114100	FOOD SERVICE EQUIPMENT	Mobile Wire Shelving Units	GA Systems	Speed Line, Model ED336	Mobile, dry, non-heated with heated display unit on top.	N/A	N/A	E/M/H
DS	11	114100	FOOD SERVICE EQUIPMENT	Mobile Refrigerated Speed Line Cabinets with Baskets	GA Systems	Speedee-Serv Speed Line Model EF336-EDSN6336G Basket C436	Modular style self-service refrigerated cabinets with slide/lift-off lids. #B13262 baskets 25-7/8 in x 13-1/4 inch x 2-3/8 inch stainless steel.	N/A	N/A	E/M/H
DS	11	114100	FOOD SERVICE EQUIPMENT	Mobile Heated Speed Line Cabinet	GA Systems	Speedee-Serv Speedlines Model EC536-EDSN6336G	31 inches long x 36 inches wide x 34 inches high, stainless steel, with holding capacity of 15 B13262 baskets.	N/A	N/A	E/M/H
DS			FOOD SERVICE EQUIPMENT	Mobile Freezer Cabinet	GA Systems	Speedee-Serve Speedline F336 Modular with DSN36 guard	31 inches long x 36 inches wide x 34 inches high, modular self-service style, stainless steel, with holding capacity of 15 B13262 baskets.			
DS	11	114400	FOOD SERVICE EQUIPMENT	Mobile Cash Stand with Locking Cash Drawer	GA Systems	Speedee-Serve Speedline D336 Modular with Shelf	31 inches long x 36 inches wide x 34 inches high, stainless steel drawer assembly and cabinet base with 18 gauge undershelf.	N/A	N/A	E/M/H
AR	11	114400	FOOD SERVICE EQUIPMENT	Gas Range	Montague	<u>136-5 Legend</u>	36 inch wide heavy duty open burner type, stainless steel front and side, adjustable legs	N/A	N/A	E/M/H

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AR	11	114400	FOOD SERVICE EQUIPMENT	Gas Convection Oven	Montague	2-115B Vectaire	Convection Oven, Baker depth, thermostatic controls, single speed fan, top and bottom vertical opening doors with windows, stainless steel construction, 3 inch high deflector 6 inch adjustable legs, gas pressure regulator. Non-computer controls.	N/A	N/A	E/M/H
AR	11	114600	FOOD SERVICE EQUIPMENT	Mobile Kiosk Cart with Umbrellas	Beverage Air	N/A	78 inches long x 30 1/2 deep x 54 inches high with 7 1/2 foot folding umbrella mounted to center of cart, with two food wells and 18 ga. SS undershelf on 5 inch diameter plate-type casters, with brakes, and top display shelf.	The district is moving past specifying equipment manufactured by True Mfg due to inconsistent performance, Typical.	N/A	E/M/H
DS	11	114600	FOOD SERVICE EQUIPMENT	Heated Cabinet, Double Door Roll-Thru with dollies and trays	Beverage Air	N/A	2-section, each section 34 1/2 inch deep 27CF for 27 inch x 29 inch deep x 66 inch high carts with stainless steel door with cam-lift hinging, lock, digital thermometer, and stainless steel ramp.	N/A	N/A	E/M/H
DS	11	114600	FOOD SERVICE EQUIPMENT	Refrigerator Cabinet, Double Door Roll-Thru with dollies and trays	Beverage Air	N/A	2-section 75 cubic foot top mount, 300 series stainless steel exterior and interior, four stainless steel doors with cam hinging lock, digital thermometer and stainless steel ramps.	N/A	N/A	E/M/H
AR	11	114600	FOOD SERVICE EQUIPMENT	Reach-In Refrigerator	Beverage Air	N/A	56 CF 34 1/4 inch deep, stainless steel, with two-hinged doors with lock, digital thermometer, and nine sets of trays for each section, leg mounted.	N/A	N/A	E/M/H
AR	11	114600	FOOD SERVICE EQUIPMENT	Dual Temperature Refrigerator/ Freezer	Beverage Air	N/A	13 CF capacity each section, refrigerator up and freezer down, stainless steel, provide legs with seismic mount.	N/A	N/A	E/M/H
AR	11	114600	FOOD SERVICE EQUIPMENT	Heated Cabinets, Roll-In	Beverage Air	N/A	Two-section, 34 1/2 inch deep 27CF for 27 inch x 29 inch deep x 66 inch high carts with stainless steel door with cam-lift hinging, lock, digital thermometer, and stainless steel ramp.	N/A	N/A	M/H

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AR	11	114600	FOOD SERVICE EQUIPMENT	Stainless Steel Serving Counter	N/A	Make to same size and configuration as adjacent units.	14 ga. 34 inch x 36 inch long x 38 inch high, with 16 ga. Under-shelf and master-keyed locking cash drawer assembly, including electric receptacles for POS stations.	N/A	N/A	E/M/H
AR	11	114601	FOOD SERVICE EQUIPMENT	Stainless Steel Cashier's Serving Counter	N/A	include heavy-duty non-marking casters with brakes and electric receptacles in counter top for power and data lines.	14 ga. 34 inch wide x approx 120 inches long x 38 inches high, with 16 ga. Undershelf.	N/A	N/A	E/M/H
AR	11	114602	FOOD SERVICE EQUIPMENT	Mobile Milk Coolers	Beverage Air	SM58N	Refrigerated milk storage units with oversized forced-air refrigeration system with 2 sliding self-service doors with stainless steel drop front and 'hold-open' flui-up tops, with white laminate exterior and white aluminum lined interior, standard floor racks and clean-out drains. Capacity: 12 milk crates.	The district is moving past specifying equipment manufactured by True Mfg due to inconsistent performance.	N/A	E/M/H
AR	11	114603	FOOD SERVICE EQUIPMENT	Heated Cabinets, Mobile	Vulcan	VHP7	Insulated, bottom mount forced-air heat system, universal slides for 24 - 12 x 20 inch or 12 18 inch x 26 inch pans at 3 1/2 inch spacing, slides adjustable in 1 1/2 inch increments and 5 inch swivel casters with brakes.	Also Metro approved equal.	N/A	M/H
AR	11	114700	FOOD SERVICE EQUIPMENT	Ice Maker, Cube Style	Manitowoc	N/A	Air Cooled self-contained condenser stainless steel, makes half-dice size cubes		N/A	E/M/H
AR	11	114700	FOOD SERVICE EQUIPMENT	Ice Bin	Manitowoc	N/A	Top hinged front-opening door, approx. 710 pound storage capacity	N/A	N/A	E/M/H
AR	11	114700	FOOD SERVICE EQUIPMENT	Ice Maker, Water Filter	Everpure	EV9324-02 Insurice 2000	1/2 micron precoat filtration, sized for most low flow cuber ice machines less than 1200 pounds per day, flaker less than 2,500 lbs per day	N/A	N/A	E/M/H
AR	11	116133	RIGGING SYSTEMS AND CONTROLS	Rigging Hardware	JR Clancy Inc., Tru-Roll Inc., Protech Theatrical Systems or approved equal	N/A	Framework and mounting for sheaves, blocks, tee bars, arbors, ropes, rope clips, pipe battens, outrigger lights, and motor winches for adjusting light arboars.	See Educational Specifications for further requirements	N/A	M/H

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AR	11	116133	RIGGING SYSTEMS AND CONTROLS	Traverse Tracks and Related Hardware	Automatic Devices Co., Tru-Roll Inc., H & H Specialties or approved equal	N/A	3 inch x 3 inch x 14 gauge track operated bi-parting, with pulleys and ball bearings and non-stretch 1/2 inch sash cord.	See Educational Specifications for further requirements	N/A	M/H
AR	11	116143	STAGE CURTAINS	Curtain Machines and tracks	Automatic Devices Co., Tru-Roll Inc., H & H Specialties or approved equal	N/A	Floor-mounted drum-drive operator, 1/2 HP, 208v, 3 inch x 3 inch x 14 gauge traverse track bi-parting, with pulleys and ball bearings and non-stretch 1/2 inch sash cord, with operating controls and limit switches.	See Educational Specifications for further requirements	N/A	E/M/H
AR	11	116143	STAGE CURTAINS	Curtain Materials	KM Fabrics, Inc. or approved equal	N/A	Cotton Velour, 32 ounce, flame-resistance treated, if required.	Front curtains only. See Educational Specifications	N/A	E/M/H
AR	11	116143	STAGE CURTAINS	Curtain Materials	KM Fabrics, Inc., JB Martin, Frankel Associates, Rose Brand or approved equal	N/A	Cotton Velour, 20 ounce with opaque denim lining flame-resistance treated.	This for wings and back curtains. See Educational Specifications	N/A	E/M/H
AR	11	119513	KILNS	Kilns	N/A	N/A	Electric operation. Coordinate power disconnect voltage. Coordinate exhausting of heat. Lockable emergency shutoff.	See Educational Specifications. Final location to be approved by District	N/A	M/H
AR	11	116643	INTERIOR SCOREBOARDS	Athletic Signs	Daktronics, or approved equal	N/A	N/A	Coordinate with District sports that need to be included. Location to be approved by District	N/A	M/H
AR	11	116843	EXTERIOR SCOREBOARDS	Athletic Signs	Daktronics or approved equal	N/A	N/A	Coordinate with District sports that need to be included. Location to be approved by District	N/A	M/H
AR	11	116623	BASKETBALL EQUIPMENT	Ceiling Suspended Forward Fold Backstop	Porter or approved equal	N/A	Vertical lift backboard with rectangular glass and electric winch	See Educational Specifications for further requirements	N/A	M/H

DIVISION 12 FURNISHINGS

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	12	123553	LABORATORY/ SPECIALTY CASEWORK	Lab Casework	N/A	N/A	Phenolic faced, seismic shelf lips on all laboratory shelving and other storage cabinets where spillage and breakage of contents are of a concern. Do not use these lips for normal book storage shelves. Epoxy Resin countertop. Per SEFA recommended practices.	N/A	WI Section 10 Annex 10D Requirements for Laboratory Casework. WI Certified. WI inspection required.	M/H
AR	12	123553	LABORATORY/ SPECIALTY CASEWORK	Casework	N/A	N/A	Institutional grade attachments.	N/A	WI Section Section 10 Custom Grade. WI Certified. WI inspection required.	E/M/H
AR	12	123553	LABORATORY/ SPECIALTY CASEWORK	Hinges	Rockford Process	374 or 376	Institutional Hinges for Overlay doors, 2-3/4" five knuckle with hospital tips and 2-5/8" extended side panel wing	N/A	N/A	E/M/H
AR	12	123553	LABORATORY/ SPECIALTY CASEWORK	Drawer slides, 200 lb capacity	Accuride	3640A	Side mount load capacity up to 200 lbs. per pair with drawer width of 42", Adapter rail mount/disconnect	N/A	N/A	E/M/H
AR	12	123553	LABORATORY/ SPECIALTY CASEWORK	Drawer slides, 350 lb capacity	Accuride	7957	Heavy-duty slide series Up to 350 lb. handed lever disconnect	N/A	N/A	E/M/H
AR	12	123553	LABORATORY/ SPECIALTY CASEWORK	Drawer slides, 500 lb capacity	Accuride	9301	Load Rating: up to 500, Non-disconnect	N/A	N/A	E/M/H
AR	12	122413	ROLLER WINDOW SHADES	Window Shades	Draper Inc., Hunter Douglas Contract, MechoShade Systems, Inc or Approved Equal	N/A	Blinds are to be manual, except at clerestory windows or windows that are above 8 feet from finish floor, then then need to be electronically controlled by a key lock switch. Light-Filtering Fabric : Woven Fabric, stain and resistant. Type: 76% PVC and 24% polyester.	Provide Window Blinds at all windows in all buildings below 8 feet above finish floor. Provide blinds at all windows above 8 feet windows that need to be shaded due to site orientation. All MPR's must have blinds on all windows, and they need to be electronically controlled	N/A	E/M/H

DIVISION 13 SPECIAL CONSTRUCTION

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	13	133133	Framed Fabric Structures	Shade Structure	USA SHADE and Fabric Structures, or approved Equal	N/A	Design size and final shape to be approved by the District	Provide in areas as defined in Educational Specifications for shade areas. All locations to be approved by the District	N/A	E/M/H

DIVISION 14 ELEVATORS

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	14	142423	ELEVATOR	Hydraulic Passenger Elevator	Thyssenkrupp Elevator Co. or Approved Equal	N/A	No Painted doors, polished stainless steel. Interior of CAB finish to be approved by District.	Provide keyed call button at all stop levels and phone service for emergency to administration. Provide a one year monitoring and one year service.	N/A	E/M/H
AR	14	144100	PEOPLE LIFT	Counterbalanced People Lift	Hoyer, or Approved Equal	N/A	N/A	Required in SH rest rooms	N/A	E/M/H
AR	14	144100	WHEELCHAIR LIFT	Wheelchair Lift	Access Industries, Concord Elevator, Garaventa Accessibility or Approved Equal	Access Industries, Porch Lift PL-S	Capacity to be 750 LBS with static load safety factor of five. Rated Speed to be 17 feet/minute. Nominal platform size to be 49 3/8" x 51" Open configuration	Wheelchair to operate without an attendant	N/A	E/M/H

DIVISION 21 FIRE SUPPRESSION SYSTEM

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	21	210000	FIRE SUPPRESSION	Sprinkler Head Protection	Sprinkguard or Approved Equal	Threadguard	N/A	Provide at all fire sprinkler heads that are exposed and not in a finished ceiling, installed below 8' or all exterior locations	N/A	E/M/H

DIVISION 22 PLUMBING

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	22	221316	SANITARY WASTE AND VENT PIPING	Wye with Cleanout	N/A	N/A	N/A	Where two waste lines come to a common vent, install a wye (Y) with cleanout near. Additionally, provide a cleanout and stainless access door in wall. Location to be reviewed approved by the District.	N/A	E/M/H
AR	22	224200	PLUMBING	Recessed Box, Hose Bibb	Acorn, or Approved Equal	8200-1	Stainless Steel Recessed Box with Door and Wall Flange.	See Educational Specifications for Locations	N/A	E/M/H
AR	22	224216	PLUMBING	Floor Sinks	Fiat or approved equal	MSB-2424 White; with 889-CC Mop Hanger and dE-88-AA Stainless Steel Bumper Guard	Cast iron, with Chicago Fixtures	District requires that all janitorial rooms have a Floor Mop Sink with Hot and Cold Water. Provide Mop hanger and bumper guard at all locations	N/A	E/M/H
AR	22	224213.13	PLUMBING	Water Closets - Wall Mount	American Standard, Kohler or Approved Equal	American Standard 2859.128.020	Manual Flush	Use wall mount in all staff and student restrooms.	N/A	E/M/H
AR	22	224216.13	PLUMBING	Lavatory	Elkay, American Standard, Kohler, or Approved Equal with a Chicago Faucet or Approved Equal	Elkay DRKAD22176 01 Single Bowl, single Faucet ADA Drop in Sink. Chicago Faucet Similar to #333-336COLDABC P	Single in-cabinet sink. Single faucet.	Use in classroom install in a countertop. Size of under counter opening must allow front approach for wheelchair access for any grade above kindergarten.	N/A	E/M/H
AR	22	224216.13	PLUMBING	Lavatory	Acorn or approved Equal with Sloan or approved Equal faucet	Acorn Series 3400. Size and exact Model number to be determined based on number of Lavatory Stations Required Sloan 5wHW8 Electronic Faucet	Multi-station Lavatory.	Lavatory to be used all ganged student restrooms where multiple sinks are required	N/A	E/M/H

DIVISION 22 PLUMBING

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	22	224216.13	PLUMBING	Lavatory	American Standard, or Approved Equal	American Standard 0356.066.020, Single Faucet Location Sloan 5WHW8 electronic faucet	Electronic metering faucets. Industrial grade	Lavatory and Faucet to be used only in single use toilet rooms where there is no cabinet	N/A	E/M/H
AR	22	224213.16	PLUMBING	Urinals	American Standard, Kohler with Sloan flushometer or Approved Equal	Vitreous china, water saving, white. Flush Valve to be lever handle	N/A	Urinals to be used in all multi fixture mens toilet rooms	N/A	E/M/H
AR	22	224200	PLUMBING	High Efficiency Toilet and Carrier System	ZURN, or Approved Equal	EcoVantage toilet and EZCarry. Mechanical flush valve: Z6000AV-HET.	Evacuates waste 50 feet.	To be used at all restrooms	N/A	E/M/H
AR	22	224700	DRINKING FOUNTAINS	Interior Drinking Fountain and bottle filler	Haws or Approved Equal	N/A	Stainless steel, institutional grade.	Provide industrial-grade water bottle filler at interior drinking fountains.	N/A	E/M/H
AR	22	224700	DRINKING FOUNTAINS and BOTTLE FILLERS	Exterior Drinking Fountain and Bottle Fillers	Haws or Approved Equal	N/A	High Low industrial grade, rated for exterior use, Filter system to be included	See Educational Specifications for Locations	N/A	E/M/H
AR	22	224239	COMMERCIAL FAUCETS	Hose Bibb	Arrowhead Brass, or Approved Equal	35CLF and 35PLF	N/A	See Educational Specifications for Locations	N/A	E/M/H
AR	22	221000	WATER, VENT AND CD PIPING	N/A	N/A	N/A	N/A	The District requires that all plumbing pipe under slabs to be Cast Iron. All piping is to be isolated with acoustical isolators such as the Hubbard Holdrite Silencer System. Alternatively, felt or rubber (E.g. Cooper B-line B1999 Vibra-Cushion) may be wrapped around the pipe to eliminate direct contact. Applies to all pipes where fluid flows and especially important at locations directly adjacent to noise-sensitive spaces.	N/A	E/M/H
AR	22	220000	Plumbing	Floor Drains	Zurn, J.R. Smith or approved equal	N/A	N/A	Provide floor drains that are flush with adjacent flooring. Location to be approved by District	N/A	E/M/H

DIVISION 22 PLUMBING

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	22	220000	Plumbing	Wall and Floor Cleanouts	Zurn, J.R. Smith or approved equal	N/A	N/A	Clean outs to be located in floor. Except Wood Floors. If clean outs are to be located in wall, District needs to approve. All cleanout locations need to be approved by District.	N/A	E/M/H
AR	22	220000	Plumbing	Water Hammer Arrestor	Watts or approved equal	N/A	N/A	Provide Hammer Arrestors at locations of flush valves, single handle faucets, dishwashers and all locations that have fast closing positive shut-off valves or solenoid valves.	N/A	E/M/H

DIVISION 23 HEATING, VENTILATING, & AIR CONDITIONING

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/Middle/ High
AR	23	230000	HEATING, VENTILATING, AND AIR CONDITIONING	HVAC, System, Acoustics	N/A	N/A	N/A	Acceptable Noise Collefinencts: Small Conference Rooms NC 30-35; Small Private Offices, Libraries NC30-35; General Offices NC 35-40; and Computer Rooms NC 40-50. Follow ANSI S12.60, Part 1 for classrooms	N/A	E/M/H
DS	23	230900	ENERGY MANAGEMENT CONTROLS	Site EMS for HVAC	Alerton Technologies, no exceptions	BACTalk Series	N/A	No exceptions will be considered. This is an Board approved District Standard A physical button which shuts down all HVAC systems shall be installed in the office with a clear plastic cover.	N/A	E/M/H
AR	23	233416	CENTRIFUGAL HVAC FANS	Exhaust Fans	N/A	N/A	All exhaust shall be direct drive/ beltless drive.	N/A	N/A	E/M/H
AR	23	233416	CENTRIFUGAL HVAC FANS	In line Ceiling Mounted Exhaust Fan	Greenheck, or approved equal		Beltless direct drive exhaust fan with backdraft damper.	N/A	N/A	E/M/H
AR	23	233416	CENTRIFUGAL HVAC FANS	Chemistry Lab Fume Hood exhaust	Greenheck, or approved equal	N/A	Direct drive.	N/A	N/A	E/M/H
AR	23	233416	CENTRIFUGAL HVAC FANS	Gravity Relief Ventilator	Vibro Acoustics, or approved equal	N/A	Sound Attenuation	N/A	N/A	E/M/H
AR	23	233513	DUST COLLECTION SYSTEM	Dust collection system	Stern Vent , or approved equal	N/A	N/A	N/A	N/A	E/M/H
AR	23	238000	DECENTRALIZED HVAC EQUIPMENT	High Efficiency Rooftop Gas Packaged A/C Unit	Carrier, or Approved Equal	N/A	Complete with 2 inch filters, time delay relay, stainless steel heat exchanger, condenser coil corrosion resistant coating	For new construction only in locations such as library, computer, and media rooms. District to approve locations and configuration of ductwork	N/A	E/M/H
AR	23	238000	DECENTRALIZED HVAC EQUIPMENT	N/A	Carrier or Approved Equal	N/A	All spaces to be heated and cooled. All spaces need to have control on unit operation.	To be located in all Learning Spaces. Condenser units to be located on roofs where possible, District to approve all locations. HVAC units to be above ceiling, or in attic. District to approve any multi room usage of a single unit. Controls must be located in all rooms. District to approve locations and configuration of ductwork	N/A	E/M/H
AR	23	238000	BUILDING AUTOMATION AND CONTROL	Interlock Operation	N/A	N/A	N/A	Hard wire HVAC interlocks for operable windows, per energy code requirements	N/A	E/M/H

DIVISION 26 ELECTRICAL

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
AR	26	260000	ELECTRICAL	N/A	N/A	N/A	N/A	In all cases if there is a data outlet there needs to be a Power outlet.	N/A	E/M/H
AR	26	260000	ELECTRICAL	N/A	N/A	N/A	N/A	Multi-function copiers require two data ports, one power outlet on dedicated circuit, labeled accordingly.	N/A	E/M/H
AR	26	260000	ELECTRICAL	N/A	N/A	N/A	N/A	All outlet and switch boxes at sound-rated assemblies should have putty pads. No back to back outlets or switches allowed. All switch and outlet locations to be approved by District. See Educational Specifications	N/A	E/M/H
DS	26	260926	LIGHTING CONTROL	Lighting Controls Panelboards	Lutron	Quantum Series	Bi-level switching, daylighting, occupancy sensors in classrooms	All spaces to have bi-level switching, daylighting controls, and occupancy sensors. If a new system at an existing campus, tie into existing lighting control panel. All school systems should connect to District wide lighting control.	N/A	E/M/H
AR	26	261800	PANELBOARDS/SWITCHBOARDS	Panels/Switch boards	N/A	N/A	Copper Busses	N/A	N/A	E/M/H
AR	26	265100	INTERIOR LIGHTING	Interior Light Fixtures	N/A	N/A	LED luminaires	Mount pendant fixtures 1/3 down from ceiling, 2/3 up from floor. Final location to be approved by District. Coordinate light fixtures, with all ceiling other ceiling apparatuses, such as ceiling mounted projectors and exit signs.	N/A	E/M/H
AR	26	265200	EXTERIOR LIGHTING	Exterior Lighting Fixtures	N/A	N/A	Wall lights where possible.	All light locations to be reviewed and approved by District	N/A	E/M/H
AR	26	26000	ELECTRICAL	Floor Boxes	LeGrand, or Approved Equal		N/A	Use of floor mounted boxes are to reviewed and approved by District.	N/A	E/M/H

DIVISION 26 ELECTRICAL

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR			EMERGENCY POWER SYSTEMS	Backup Power	Myers Centralized Inverters for Emergency Lighting or approved equal	Myers Power Products Fast Transfer Emergency Inverters, le Series for LED Lighting, or approved Equal	N/A	Location to be approved by District	N/A	E/M/H

DIVISION 27 COMMUNICATIONS

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
DS	27	272000	DATA COMMUNICATIONS	Voice over IP	Cisco, No Exceptions	N/A	N/A	This is a Board approved District standard, no exceptions	N/A	E/M/H
DS	27	272000	DATA COMMUNICATIONS	Switches and Routers	Cisco, No Exceptions	N/A	N/A	This is a Board approved District standard, no exceptions	N/A	E/M/H
DS	27	272000	DATA COMMUNICATIONS	Wireless Access Points	Cisco, No Exceptions	N/A	N/A	This is a Board approved District standard, no exceptions	N/A	E/M/H
DS	27	272000	DATA COMMUNICATIONS	Network Cabling Manufacturer	Belden	N/A	N/A	This is a Board approved District standard, no exceptions	N/A	E/M/H
DS	27	272000	DATA COMMUNICATIONS	Uninterruptible Power System Manufacturer	APC, No Exceptions	N/A	N/A	This is a Board approved District standard, no exceptions	N/A	E/M/H
DS	27	272000	DATA COMMUNICATIONS	Network equipment cabinet	APC, No Exceptions	N/A	N/A	This is a Board approved District standard, no exceptions	N/A	E/M/H
DS	27	275116	PUBLIC ADDRESS AND MASS NOTIFICATION SYSTEMS and CLOCKS	Paging System	Bogen, No Exceptions	Quantum (updated from the sole source list due to availability)	Flush mounted for clock/speaker. Provide product information for vertical clock/speaker combo. Provide wiring destination schedule for each circuit	This is a Board approved District standard, no exceptions	N/A	E/M/H
AR	27	274000	AUDIO-VISUAL COMMUNICATIONS	Cabinets	N/A	N/A	N/A	Location for cabinets to house Audio Visual Components are to be coordinated with the District	N/A	E/M/H

DIVISION 28 ELECTRONIC SAFETY & SECURITY

DS/AR	Div	CSI No.	Spec Section Name	Product Type	Basis of Design Manuf.	Basis of Design Model	Product Description	Design Guideline	Standards	Elementary/ Middle/ High
DS	28	282300	ACCESS CONTROL & VIDEO SURVEILLANCE	System	Gentec, No Exceptions	Unified Access Control and Security Video System, No Exceptions	N/A	There will be no exceptions this a Board approved District Standard		E/M/H
						Ademco	N/A	There will be no exceptions this a Board approved District Standard.	N/A	
								See Educational Specification for required locations of door contacts and motion sensors.		
								Provide at least one key pad per building with plastic cover plate. MPR Buildings to have two keypads, one in the kitchen and one in the main dining area.		
DS	28	283000	DETECTION AND ALARM SYSTEM	Main Panel	Honeywell Intrusion, No Exceptions			Programing of the system is required and must include partitioning of separate zones as identified by the District.	N/A	E/M/H
						Gamewell E3 Series	N/A	There will be no exceptions this a Board approved District Standard		
						Velociti Series 3				
DS	28	283100	FIRE ALARM SYSTEM	Fire Alarm Control Panel (FACP)	Honeywell, No Exceptions				N/A	E/M/H

DIVISION 32 EXTERIOR IMPROVEMENTS

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/ Middle/ High</i>
AR	32	321813	SYNTHETIC GRASS SURFACING	Synthetic Grass, Elementary Playgrounds	N/A	N/A	Synthetic grass surfacing, no black crumb rubber is allowed for product "infill"	Provide in areas as identified in the Educational Specifications.	N/A	E/M
AR	32	323119	ORNAMENTAL METAL	Ornamental Metal, System	N/A	N/A	Galvanized after fabrication. Gates to support 400 LBS Plus	Ornamental Metal fencing and gates are to be used at the "Front" of the school. Design and exact location is to be approved by the District. Finish Colors to be approved by the District. See Educational Specifications	N/A	E/M/H
AR	32	323113	CHAIN LINK FENCING	Chain Link Fencing	N/A	N/A	Line Posts: 2" NPS Steel Pipe; Corner and Terminal Posts: 3" NPS Steel Pipe; Gate posts: minimum 3" NPS Steel Posts, sized for load; Top and Bottom Rails: 1 1/4" inch NPS; Fabric: 1" diamond mesh steel wire interwoven, 9 gage thick, with top and bottom selvage knuckle end closed; Caps: cast steel or malleable iron; Tension wire: 7 gauge single strand. All gates to be sized appropriately for use and function.	Provide at all perimeters of campus and internal campus areas not designated to be ornamental . Heights vary and set to appropriate height for location. Gate locations to be approved by District	N/A	E/M/H
AR	32	323111	AUTOMATIC GATES	Automatic gates	N/A	N/A	Rails to be located in out-of-reach areas for safety. The U-shaped receiver to be located outside of reach areas for safety, welded chains and IC core padlocks should be provided.	Use of Automatic Gates to be approved by District.	N/A	E/M/H
AR	32	328000	IRRIGATION SYSTEMS	General	N/A	N/A	N/A	The District standard for all campuses is for landscapes that incorporate water and energy conservation methods	N/A	E/M/H

DIVISION 32 EXTERIOR IMPROVEMENTS

<i>DS/AR</i>	<i>Div</i>	<i>CSI No.</i>	<i>Spec Section Name</i>	<i>Product Type</i>	<i>Basis of Design Manuf.</i>	<i>Basis of Design Model</i>	<i>Product Description</i>	<i>Design Guideline</i>	<i>Standards</i>	<i>Elementary/Middle/High</i>
DS	32	328000	IRRIGATION SYSTEMS	Master Control System	Rainmaster, no substitution allowed	N/A	<p>Controller to include: Data line to controller, surge protection, on-off switch, exterior GFI outlet, 20% extra capacity, control valve with flow meter and bypass.</p> <p>System to include all necessary assemblies for specific project. This would include at a minimum:</p> <ol style="list-style-type: none"> 1. Master Control Valve - With flow meter. Sized for specific installation 2. Backflow preventer and Enclosure - Vandal resistant cover in green 3. Booster Pump - If needed for the system to function properly 4. Quick Couplers - One per valve grouping, every 200 feet maximum. Install in 9 inch round brooks or carson valve box 5. Spray Heads - Rain Bird 1800 SAM PRS Pop-up spray heads with VPC caps 6. Rotors - Toro 340 Rotor Rainbird 700S Hunter I-Series. Toro 570Z 6 inch in turf. 	<p>Provide laminated chart showing 'as-builts' at each controller.</p> <p>Position controller to face field or irrigated area. district to approve location</p> <p>Design all spray heads directed away from buildings as that no over-spray contacts any part of a building.</p>	N/A	E/M/H
DS	32	328000	IRRIGATION SYSTEMS	Controller Enclosure and Lock	VTI Products, non substitution allowed	N/A	Controller Enclosure and Cabinet , Stainless Steel, Top Mount Strong Box with Lock	N/A	N/A	E/M/H