



ADDENDUM

Public Building Commission of Chicago | Richard J. Daley Center | 50 West Washington Street, Room 200 | Chicago, Illinois 60602 | (312) 744-3090 | pbcchicago.com

ADDENDUM NO.: 02
PROJECT NAME: Dore Elementary School New Construction Project
PROJECT NO.: 05025
CONTRACT NO.: C1577
DATE OF ISSUE: June 30, 2017

NOTICE OF CHANGES, MODIFICATIONS, OR CLARIFICATIONS TO CONTRACT DOCUMENTS

The following changes, modifications, or clarifications are hereby incorporated and made an integral part of the Contract Documents. Unless clearly expressed otherwise by this Addendum, all terms and conditions defined in the original Contract Documents shall continue in full force and effect and shall have the same meaning in this Addendum. Issued Addenda represent responses/clarifications to various inquiries. Contractors shall be responsible for including all associated labor/material costs in its bid. Drawings/specifications corresponding to inquiry responses will be issued with the Issue for Construction Documents, upon issuance of building permit.

ITEM NO. 1: CHANGE TO KEY DATES

None.

ITEM NO. 2: REVISIONS TO BOOK 1 – PBC INSTRUCTIONS TO BIDDERS

None.

ITEM NO. 3: REVISIONS TO BOOK 2 – PBC STANDARD TERMS AND CONDITIONS

None.

ITEM NO. 4: REVISIONS TO BOOK 3 – TECHNICAL SPECIFICATIONS

Change 1 Book 3 – Volume 1 – Section 11 40 00: REVISED Part 4, items #19.1, #298, #298.1, #298.2, #298.3, #298.4, #449, and #451.

ITEM NO. 5: REVISIONS TO DRAWINGS

Architectural

Change 1 REMOVED Sheet A1407 dated June 7, 2017 in its entirety and REPLACED WITH A1407 dated June 30, 2017.

ITEM NO. 6: REQUESTS FOR INFORMATION

RFI-1.

Question: Specification 312318.11, Paragraph 1.2, Item B2b indicates that a letter from the selected CCDD fill site is to be provided with the GC's bid acknowledging the terms of the LPC-663 form and its attachments.

Please consider allowing this letter to be submitted by the apparent low bidder within a specified amount of time rather than by all bidders.

This would require multiple CCDD facilities to prepare letters for various earthwork subcontractors who then submit them to the GC's prior to bidding – a lot to ask of all parties rather than just those under consideration of getting the work.

Additionally, this requirement is not shown in the Instructions for Bidders for items to be submitted with the bid.

Response: Contractor shall provide written authorization from the CCDD facility in accordance with the Contract Documents within 14 calendar days of Contract Award.

RFI-2.

Question: After reviewing both Dore and South Loop drawings relative to the exterior wall assemblies we find the following:

Both schools have the 2.5" rigid foam insulation between the sheathing and the brick but only South Loop calls for Spray Insulation in the stud cavity. Dore indicates Spray Insulation at the parapet just below the roof blocking but that is the extent of it.

Please clarify if there is insulation in the exterior wall stud cavity on the Dore project and if so what it is.

Response: Spray insulation for Dore ES to be located as shown on drawings. No spray insulation in stud cavity.

RFI-3.

Question: Regarding exterior signage, sheet A1407 Signage Site Plan shows various exterior signs including a sign type ES. I did not find a sign detail labeled ES. What is sign type ES?

Response: Signage tags on sheet A1407 should read 'ED' instead of 'ES'. Refer to sheet ADA0001 for type 'ED'. See sheet A1407 of this addendum.

RFI-4.

Question: I was wondering if you could help me clear up some confusion I was having about the trusses in the gym from which the basketball backstops will need to be hung. The framing plan indicates that the trusses are about 9' apart from one another and they run length court. The Reflected ceiling plan, building sections, and elevations indicate that they're running cross court and are about 7' apart from one another. I've attached the plans I'm referring to. In order to properly quote the basketball backstops, we need to know which way they will actually be run. We're assuming the project requires the cross court configuration, since 3 of the 4 cited plans agree on that configuration. I just wanted to double check before preparing any numbers, however. (0064 S0102W Second Floor Framing Plan - West, 0113 A0225 Gymnasium Elevations, 0150 A0703W Reflected Ceiling Plan, 0119 A0332 Building Sections)

Response: Refer to sheet S0104W for Gymnasium roof framing plan for truss layout and direction.

RFI-5.

Question: I wanted to know if you can answer a question regarding the split bussing called for in the panelboard specification for John C Dore Elementary? I am looking at the panel schedules and specifications now, but they do not identify a location for the split bussing. Do you have any knowledge of this, or know who I should contact to find an answer? Please let me know.

Response: No split bus panelboards to be used on the project.

RFI-6.

Question: Refer to Spec 11 40 00 – 14 through 11 40 00 – 22, also refer to drawing FS0001 equipment schedule. The equipment schedule on drawing FS0001 states which food service items are to be installed by the G.C. and the Owner, however the spec contradicts which equipment is to be provided and installed by the owner and which equipment is to be provided and installed by the G.C.. Please clarify which equipment is owner provided and installed and which equipment is G.C. provided and installed.

Response: Refer to RFI answer #17 & #18 of Addendum #1.

RFI-7.

Question: Detail 7 on M0703 shows pressure independent control valves on the dual temperature coils. Are these valves to be PI valve or standard control valves?

Response: Standard Control valves.

RFI-8.

Question: Please refer to A1001 – Partition Types

There are several partitions, Types A, B, F, G, H, K, and L show two sheets of GWB but are labeled as either a non-rated partition, or a 1 hr. rated partition.

Please confirm details as shown reflect desired partition construction.

Partition types D and E show a note that requests an additional layer of 5/8 GWB on the side with the 5/8 GWB cant where scheduled. In the schedule below the details, there is no note of this.

Please include note in the schedule to show which partitions need this additional layer of 5/8 GWB. Unless noted otherwise, we will not include this additional layer in construction

Response: Wall types A, B, F, G, H, K and L require (2) layers of GWB.

RFI-9.

Question: Please refer to A0703E – Reflected Ceiling Plan – Third Floor East

RCP Keynote Legend note 20 states that 2 layers of 5/8ths GWB are to be installed above the ACT tile shown.

Will this need any sort of finish prior to the installation of the ACT or is this to remain exposed?

Response: No finish required on the (2) layers GWB above the ACT ceiling.

RFI-10.

Question: Please refer to A0301 – Exterior Elevations – KN 21

KN 21 points to exposed galvanized steel

Will this steel need paint per 09 91 00?

Response: Only exposed steel at the canopy is to be painted. All other exposed galvanized steel is not to be painted.

RFI-11.

Question: Please refer to S0102W – Second Floor Framing Plan – West

Exposed supporting steel for the roof mounted chiller unit

Does this need to get painted?

Response: No paint required.

RFI-12.

Question: Please refer to A0220 – Details 9 and 10

Alternate 3 – SS-1 on east and south walls in main lobby 101

Where is this to be included in the bid form?

Response: Disregard any reference to Alternate #3 regarding SS-1 work. Contractor bid amount shall include all material and labor pricing to execute the SS-1 Work. In addition Contractor to disregard references to any other alternates, except for Alternate #1. The Alternate #1 scope is clearly identified in the Contract Documents and Bid Forms.

RFI-13.

Question: Addendum 1 changed domestic water piping spec section 22116, 3.2, E to now read 4" to 6" pipe shall be galvanized threaded. This was in response to an RFI question asking if the grooved copper type "L" system for 4" would be acceptable. Using galvanized will require a lot of dielectric fittings where it branches off to copper piping, due to dissimilar materials. Also, using the threaded galvanized system is a lot more labor intense than using the grooved system. If galvanized piping (instead of type L copper) for 4" and larger is what is desired for the above grade domestic water piping, then would using the grooved system in lieu of threaded be acceptable?

Response: Copper is acceptable for 4" and below.

RFI-14.

Question: Please refer to A0701W – Reflected Ceiling Plan – First Floor West

Between column lines 3 and 4 there is a note on the north end of the dining area to provide a 12ft x 8ft recessed motorized projection screen.

Please provide detail for how the motorized projection screen in the dining area is to be installed.

Response: For a similar detail of the projection screen in the Gymnasium see Detail 4 on Sheet A0456.

RFI-15.

Question: Locker Base: Plan sheet A0901 shows CMU Base that allows the lockers to overhang by 3" (by others). Spec section 105113 2.6 C calls for Steel sheet channel or Z – base. Which is to be provided?

Response: Reference to "by others" is related to the pad lock which will be by CPS.

RFI-16.

Question: Please respond to the following RFI at you earliest convenience:

None of the classrooms call for manual projector screens. The only projector screens are called out on the drawings are motorized screens at the stage and in the dining room. Please confirm if manual projector screens are required in each classroom. Unless noted otherwise, F.H. Paschen will only include the two (2) motorized projection screens shown on the plans.

Response: Manual projection screens are not required in classrooms.

RFI-17.

Question: Please reference contract drawing A1005 and A1006. On A1005, Door Type A2 isn't shown with a lite, but on the door schedule A2 is shown to have a lite at various locations e.g. 190A, 190B, 301A etc. Please clarify if certain A2 doors are supposed to have lites. If so, please clarify the size of the lite.

Response: Door Nos. 190A ,190B, 190C, 201A, and 301A are incorrectly noted on the Door Schedule as Type A2. These should be Type B2, with glazed lites as indicated in the "Type Mark" column of the Door Schedule.

RFI-18.

Question: Please reference L0102 Detail 1. On the left hand side there is a section that shows both the "Concrete" hatch and the "Lawn Sod" hatch. Please clarify if in that area is to be sodded or is concrete is to be installed.

Response: The section in question where the two different hatches appear is to be sod.

Question: Please reference the Door Schedule on A1006. Door 168B and 189B are both (2) leaf hollow metal doors with aluminum framing. Those are the only (2) Type A2 doors that have aluminum framing with a hollow metal door. Please clarify if that is correct. Based on conversation with suppliers, that appears to be a typo.

Response: This is a typo. These doors are to have Hollow Metal frames as do all the other Type A2 doors.

RFI-19.

Question: Refer to Drawing A0225, Key Notes G06 and G07. These Key Notes state that we are to provide alternates #1 and #2, However on the Bid form, There are no Alternates #1 and #2.

Response: Disregard key note references to Alternate #1 and Alternate #2 on this drawing only. Contractor bid amount shall include all material and labor pricing required to provide and install both the bleachers and score boards. In addition Contractor to disregard references to any other alternates, except for Alternate #1 (Solid Vinyl Tile). The Alternate #1 scope is clearly identified in the Contract Documents and Bid Forms.

RFI-20.

Question: Stair details on A0504 show Woven Wire Mesh infills at the stair railings, but the specifications for 055113 Metal Pan Stairs (Section 2.9 Stair Railings, Part B, Item 2) call for 1/2" Diameter Pickets at 4" OC. Please clarify which infill type is to be utilized.

Response: The stair guardrail infills are to be woven wire mesh.

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List of Attachments and Drawings:

(Available at Springer's Online Planroom: <https://www.springerblueprint.com/>)

This Addendum includes the following attached Specifications and/or Documents:

1. Book 3 – Volume 1 – Section 11 40 00 FOOD SERVICE EQUIPMENT

This Addendum includes the following attached Architectural Drawings:

2. Sheet A1407 – SIGNAGE SITE PLAN

END OF ADDENDUM NO. 02

SECTION 11 40 00 FOODSERVICE EQUIPMENT

PART 1 - GENERAL

1.1 SCOPE

- A. The work referred to in this section consists of furnishing all labor and material required to provide and deliver all equipment hereinafter specified into the building, uncrate, assemble, hang, set in place, level, and completely install, exclusive of final utility connections.
- B. Coordinate but do not install (unless specifically directed to do so in the technical specifications) Owner and Vendor-supplied equipment noted on the drawings or in the specifications as NIKEC. Show on roughing in plans the sizes, utilities, and other requirements as furnished in the Specifications, by Owner or appropriate supplier in submittals as if the equipment is contractor furnished.
- C. Coordinate and show sizes, utilities, and other requirements as determined by physical inspection for equipment noted as existing to be reused. Include costs for marking, removing, storing, cleaning, redelivering and installing such equipment. All requirements within the project manual apply to reused equipment except warranty as if contractor furnished including but not limited to code compliance and accessories necessary to conform with the new application.

1.2 SUBMITTALS

- A. Upon award of Contract, furnish the Architect with reproducible copies of the following drawings, in accordance with the approved project schedule, which shall be made on sheets equal in size and matching the bid set drawing size. Reproduced copies of bid documents will not be accepted for this purpose in any fashion.
 - 1. Equipment specified for fabrication shall be detailed and fully dimensioned to a minimum scale of 3/4" = 1'-0" (1:20) for plan and elevation views and 1-1/2" = 1'-0" (1:10) for sections.
 - 2. Prepare separate electrical and mechanical dimensioned rough-in drawings at 1/4" = 1'-0" (1:50) showing exact point of penetration of floors, walls, and ceilings for all services required to operate the equipment that the Contractor shall furnish, including the requirements for Contractor supplied and installed refrigerant and beverage piping line runs. These drawings shall also show exact locations of final connections to equipment. Indicate floor drains, floor sinks, receptacles, lights, and other special conditions related to the equipment known to the Contractor but provided under other Sections.
 - 3. Dimensioned drawings shall be submitted showing the location and size of all bases, depressions, grease interceptors, special height walls, openings in walls for equipment or operations, and critical dimensions, etc. Drawings shall be drawn to a scale of not less than 1/4" = 1'-0" (1:50).
- B. Manufacturers' Data: Upon award of Contract, submit bound copies of Manufacturers' Illustrations and Technical Data to the Architect for review prior to procurement. Items of Standard Manufacture shall be submitted, including items purchased to be built into fabricated equipment. Each illustration

shall be marked to describe accurately the item to be furnished as specified, including voltage, phase, load, accessories, etc.

- C. Manufacturers' List: Submit in writing a list of all manufacturers' representatives of the foodservice equipment, such as convection ovens, ranges, etc., and their authorized service agencies' addresses and telephone numbers.
- D. Foundation Data: Data and drawings shall be submitted for each item, if any, requiring special foundations, structures, or supports. Such foundations, structures, or supports will be provided and installed by other appropriate trades in accordance with the drawings and specifications which shall be provided by the Contractor and reviewed by the Architect.
- E. Operation and Maintenance Manuals: Provide three bound copies of operation, maintenance, and parts manuals for all equipment items of standard manufacture including standard component assemblies built into all custom-fabricated items.
- F. Review by the Architect of the drawings and brochures submitted by the Contractor does not waive the responsibility of the Contractor to furnish each item of equipment in complete compliance with the specifications and contract drawings.
- G. The number of copies of all submittals shall be as determined by the Architect.
- H. Samples: Samples of materials, products, and fabrication methods shall be submitted for review at no additional cost, before proceeding with the work.

1.3 QUALITY ASSURANCE

- A. Standard Products: Materials, products, and equipment furnished under this contract shall be the standard items of manufacturers regularly engaged in the production of such materials, products, and equipment and shall be of the manufacturers' latest design that complies with the specifications.
- B. Manufacturers' Qualifications: Manufacturers shall be regularly engaged in the production of the items furnished and shall have demonstrated the capability to furnish similar equipment that performs the functions specified or indicated herein.
- C. Installation Qualifications: Contractor shall use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work defined in this Section.
- D. Coordination of Work: Coordinate work with the respective trades performing preparatory work for installation of equipment under this Contract, including, but not limited to: construction of pits, trenches, receptors; rough-in of supply, waste and vent piping; electrical connections; and field verification of dimensions.
- E. Product Options: Drawings indicate foodservice equipment based upon equipment specified herein. All substitutions shall be in compliance with the requirements in Division 1 (or Section I if appropriate.).

- F. Conflict: Where written specifications and drawings conflict or appear to conflict, request clarification. Prior to receiving clarification use the greater quality or greater quantity.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver foodservice equipment in containers designed to protect equipment and finish until final installation. Make arrangements to receive equipment at project site at a time and place agreed with the General Contractor. If the site is not ready for delivery, then either delay delivery or arrange to hold in a secure and protected warehouse until delivery can be made to job site.
- B. Store foodservice equipment in original containers and in location to provide adequate protection to equipment while not interfering with other construction operations. Coordinate with other trades so that worktables, serving counters and equipment are not used for scaffolding or as workbenches.
- C. Handle foodservice equipment carefully to avoid damage to components, enclosures, and finish. Do not install damaged foodservice equipment; replace and return damaged components to equipment manufacturer.

1.5 APPLICABLE CODES AND STANDARDS

- A. Except as otherwise indicated, each item of equipment shall comply with the latest current edition of the following standards as applicable to the manufacture, fabrication, and installation of the work in this section. Comply with all Federal, State, and Municipal regulations and notifications which bear on the execution of this work. Call to the attention of the Owner in writing any design conflict with the requirements of the Americans with Disabilities Act (ADA) during Bid Process so resolution can be effected prior to Contract Award.
 1. NSF Standards: Comply with applicable National Sanitation Foundation standards and criteria and provide NSF "Seal of Approval" on each manufactured item and on major items of custom-fabricated work.
 2. UL / ETL / CSA Standards: For electrical components and assemblies, provide either UL / ETL / CSA listed products or, where no listing service is available, provide a complete index of the components used as selected from the UL / ETL / CSA "Recognized Component Index." For fire extinguishing systems comply with UL 300.
 3. ANSI Standards: Comply with applicable ANSI standards for electric-powered and gas-burning equipment; for piping to compressed-gas cylinders; and for plumbing fittings, including vacuum breakers and air gaps, to prevent siphonage in water piping.
 4. AGA / CGA: All gas-fired equipment shall be AGA / CGA approved, equipped to operate on the type gas available at the job site, and shall contain 100% automatic safety shut-off devices.
 5. NFPA Standards: Comply with NFPA Bulletin 96 for exhaust systems; with NFPA Bulletins 13, 17, 17A and 96 for fire extinguishing systems; and with NFPA 54, National Fuel Gas Code and NFPA 70, National Electrical Code.
 6. ASME Code: Comply with ASME boiler code requirements for steam-generating and steam-heated equipment; provide ASME inspection, stamps, and certification of registration with National Board.
 7. SMACNA Guidelines: Provide seismic restraints for food service equipment to comply with the Sheet Metal and Air Conditioning Contractors National Association's (SMACNA) "Kitchen Equipment Fabrication Guidelines", appendix 1, "Guidelines for Seismic Restraints of Kitchen Equipment", unless otherwise indicated.

8. ASHRAE: Provide mechanical refrigeration systems complying with the American Society of Heating, Refrigerating and Air Conditioning Engineers' ASHRAE 15, "Safety Code for Mechanical Refrigeration".

1.6 PROJECT CONDITIONS

- A. Visit the job site to field check actual wall dimensions and roughing-in and be responsible for furnishing, fabricating, and installing the equipment in accordance with the available space and utility services as they exist on the job site for an accurate fit.
- B. Check all door openings, passageways, elevators, etc., to be sure that the equipment can be conveyed to its proper location within the building and, if necessary, check with the Contractor regarding the possibility of holding wall erection, placement of doorjambes, windows, etc., for the purpose of moving the equipment to its proper location. Any removal and rebuilding of walls, partitions, doorjambes, etc., necessary to place the equipment or, if caused by incorrect information on the Contractor's drawings, shall be done at the expense of the Contractor.
- C. Physically check the location and utility size of all "rough-ins" at the job site for compatibility with the equipment being installed before finished floors, walls, and/or ceilings are in place.
- D. Check electrical characteristics and water, steam, and gas pressure. Provide pressure-regulating valves where required for proper operation of equipment.

1.7 GUARANTIES AND WARRANTIES

- A. Self-contained or remote refrigeration systems furnished under this Contract shall be provided with start-up and a one-year service contract providing free service, 24 hours per day, seven days per week, including parts and labor. Hermetic or semi-hermetic compressors shall be covered by the manufacturers' factory warranty for an additional four years. Other equipment provided shall include a one-year warranty covering parts and labor, plus any extended warranties as normally provided by individual manufacturers. Equipment including refrigeration systems both self-contained and remote shall be warrantied by the Contractor on the project for one year as indicated in the preceding sentence. The first day of the first year commences upon the issuance of a certificate of occupancy for each area.

PART 2 – PRODUCTS

2.1 GENERAL

- A. The equipment and its component parts shall be new and unused. All items of standard manufactured equipment shall be current models at the time of delivery. Parts subject to wear, breakage, or distortion shall be accessible for adjustment, replacement, and repair.
- B. Means shall be provided to ensure adequate lubrication for moving parts. Oil holes, grease fittings, and filler caps shall be accessible without the use of tools.
- C. The design of the equipment shall be such as to provide for safe and convenient operation. Covers or other safety devices shall be provided for all items of equipment presenting safety hazards. Such guards or safety devices shall not present substantial interference to the operation of the equipment. Guards shall provide easy access to guarded parts.

- D. Trim shall not be an acceptable substitute for accuracy and neatness. When trim is required and accepted by Architect in lieu of rejection of items of equipment, it shall be the Contractor's responsibility to provide same at no additional cost.
- E. Unless otherwise specified herein, no material lighter than #20 gauge shall be incorporated into the work. Gauges for sheet iron and sheet steel shall be U.S. Standard Gauges and finished equipment gauge thickness shall not vary more than 5% plus or minus from the thickness indicated below.

| <u>GAUGE</u> | <u>THICKNESS</u> | <u>GAUGE</u> | <u>THICKNESS</u> |
|--------------|------------------|--------------|------------------|
| #10 | 0.1406" (3.0mm) | #16 | 0.0625" (1.6mm) |
| #12 | 0.1094" (2.5mm) | #18 | 0.0500" (1.25mm) |
| #14 | 0.0781" (2.0mm) | #20 | 0.0375" (1.0mm) |

- F. Materials or work described in words which have a well-known and accepted technical or trade meaning shall be held to refer to such accepted meanings.

2.2 MATERIALS

- A. Submit a certified copy of the mill analysis of materials if requested by the Architect.
- B. Stainless steel sheets shall conform to American Society for Testing and Materials (ASTM) specification A240, Type 304 Condition A, 18-8, having a No. 4 finish. A No. 2B finish shall be acceptable on surfaces of equipment not exposed to view. Sheets shall be uniform throughout in color, finish, and appearance.
- C. Stainless steel tubing and pipe shall be Type 304, 18-8, having a No. 4 finish, and shall conform to either ASTM A213 if seamless or ASTM A249 if welded.
- D. Rolled shapes shall be of the cold-rolled type conforming to ASTM A36.
- E. Galvanized sheet steel shall conform to ASTM A526; where extensive forming to take place, conform to ASTM A527; conform to ASTM A525, coating designation G115, chemical treatment.
- F. Galvanized steel sheets shall be cold-rolled, stretcher leveled, bonderized, and rerolled to ensure a smooth surface.
- G. Castings shall be corrosion-resisting metal containing not less than 30% nickel. Castings shall be rough ground, polished, and buffed to bright luster and free from pit marks, runs, checks, burrs, and other imperfections. In lieu of corrosion-resisting metal castings, die-stamped or cast 18-8 stainless steel will be acceptable.
- H. Millwork materials shall be free from defects impairing strength, durability, or appearance; straight and free from warpage; and of the best grade for their particular function. Wood shall be well seasoned and kiln dried and shall have an average moisture content of 8%, a maximum of 10%, and a minimum of 5%.

1. Plywood and other woodwork of treatable species, where so required by the code, shall be fire-retardant treated to result in a flame spread rating of 25 or less with no evidence of significant progressive combustion when tested for 30 minutes duration under ASTM E84 and shall bear the testing laboratory mark on a surface to be concealed.
2. Concealed softwood or hardwood lumber shall be of poplar, Douglas fir, basswood, red oak, birch, maple, beech, or other stable wood and shall be select or better grade, unselected for color and grain, surfaced four sides, square-edged, and straight. Basswood may be used where fire-retardant treated materials are required.
3. Plywood for transparent finish shall conform to U.S. Product Standard PS-51-71, Type I (fully waterproofed bond), with architectural grade face veneers of species as specified, free of all pin knots, patches, color streaks and spots, sapwood, and other defects. Plywood designated to have plywood cores shall be of either 5 ply or 7 ply construction. Plywood so designated on the drawings and plywood not otherwise shown shall have a particle board core, cross banding of veneers, and face and back veneers. Particle board cores shall have a 45-pound density, except where the fire retardant treatment requires cores of lesser density.
4. Face veneers shall be matched for color and grain to produce balance and continuity of character. Mineral streaks and other discolorations, worm holes, ruptured grain, loose texture, doze, or shake will not be permitted. Face veneer leaves on each surface shall be full-length, book matched, center matched, and sequence matched. Surfaces shall be sequenced and blueprint matched. Veneers not otherwise indicated shall be plain sliced. Backing veneers for concealed surfaces shall be of a species and thickness to balance the pull of the face veneers.
5. Hardwood plywood for painted surfaces shall conform to U.S. Product Standard PS-51-71, Type I, and shall have sound birch, maple, or other approved close grain hardwood faces suitable for a paint finish.
6. Perforated hardboard shall be a tempered hardboard, 1/4" (6 mm) thick, conforming to Federal Specification LLL-B-810B, Type I, SIS, Finish B (primed), Design B (perforated), with 1/4" (6 mm) diameter holes spaced on 1" (25 mm) centers both ways.
7. Plastic laminate surfaces shall be laminated with thermosetting decorative sheets of the color, pattern, and style as selected by the Architect. Horizontal surfaces shall be laminated with sheets conforming to Federal Specification L-P-508F, Style D, Type I (general purpose), Grade HP, Class 1, 1/16" (2 mm) thick, satin finish, with rough sanded backs. Vertical surfaces shall be laminated with sheets conforming to Federal Specification L-P-598F, Style D, Type II, (vertical surface), Grade HP, Class 1, non-forming, satin finish, 1/32" (1 mm) thick or heavier. Surfacing for curved surfaces shall be laminated from sheets conforming to Federal Specification L-P-508F, Style D, Type III (post-forming), Grade HP, Class 1, satin finish. Balance sheets for backs in concealed locations shall be either reject material of the same type and thickness as the general purpose grade facing or may be .020" (0.5 mm) thick laminate backing sheets conforming to Federal Specification L-P-00508E, Style ND, Type V (backing sheet), Grade HP.
8. Adhesive for application of plastic laminate to wood substrates of counter tops shall be a phenolic, resorcinol, or melamine adhesive conforming to Federal Specification MMM-A-181C and producing a waterproof bond. Adhesive for applying plastic laminate to vertical surfaces shall be either a waterproof type or a water resistant type such as a modified urea- formaldehyde resin liquid glue conforming to Federal Specification MMM-A-188C. Contact adhesive will not be acceptable.
9. Plywood for laminate assemblies shown or specified with plywood core shall be of the 5 or 7 ply construction with sanded close-grain hardwood face and back veneers, laminated with waterproof glue, in thickness shown, conforming to U.S. Product Standard PS-51-71. Particle

board for plastic laminate assemblies shown or specified with particle board wood core shall conform to U.S. Products Standard CS-236-66, Type 1 or 2, Grade B (45 pound density), Class 2; except where fire-retardant treatment is required, the density shall conform to the treatment requirements.

- I. Sealant: ASTM C 920; type S, Grade NS, Class 25, use, NT. Provide elastomeric sealant, NSF certified for end use application indicated. Provide sealant that, when cured and washed, meeting requirements of Food and Drug Administration's 21 CFR, Section 177.2600 for use in areas that come in contact with food. Dow-Corning #780 or General Electric "Silastic" or approved equal in either clear or approved color to match surrounding surfaces and applied in accordance with sealant manufacturers' recommendations for smooth, sealed finish.
- J. Tempered Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated surfaces), Type I (transparent), Class 1 (clear), Quality q3 (glazing select). Provide products complying with ANSI Z97.1, manufactured by horizontal (roller hearth) process and 1/4" (6 mm) thick, unless otherwise indicated. Provide exposed safety edges, if any, seamed before tempering.
- K. Sound Dampening: NSF-certified, nonabsorbent, hard-drying, sound deadening coating. Provide coating compounded for permanent adhesion to metal in 1/8" (3 mm) thickness that does not chip, flake, or blister.

2.3 FINISHES

- A. Paint and coatings shall be of an NSF approved type suitable for use in conjunction with foodservice equipment. Such paint or coating shall be durable, non-toxic, non-dusting, non-flaking, and mildew resistant; shall comply with all governing regulations; and shall be applied in accordance with the recommendations of the manufacturer.
- B. Exterior, galvanized parts, exposed members of framework, and wrought steel pipe where specified to be painted shall be cleaned, properly primed with rust-inhibiting primer, degreased, and finished with two (2) coats of epoxy-based grey hammertone paint, unless otherwise specified.
- C. Stainless steel, where exposed, shall be polished to a #4 commercial finish. Where unexposed, finish shall be #2B. The grain of polishing shall run in the same direction wherever possible. Where surfaces are disturbed by the fabricating process, such surfaces shall be finished to match adjacent undisturbed surfaces.
- D. Galvanized shelving shall not be painted.
- E. Fabricated equipment shall be spray coated with plastic suitable for protecting the equipment during transport and installation. The coating shall be easily removable and shall be removed after the equipment installation is complete at the work site or, alternatively, when directed by the Architect.
- F. Exposed surfaces on brass, bronze, or steel shall be plated with chromium over nickel in accordance with Federal Specifications WW-P-541, Paragraph 9.5 and Table 9.4, unless otherwise specified.

2.4 ELECTRICAL AND MECHANICAL REQUIREMENTS

- A. Standard UL / ETL / CSA listed materials, devices, and components shall be selected and installed in accordance with NEMA Standards and recommendations and as required for safe and efficient use and operation of the foodservice equipment without objectionable noise, vibration, and sanitation problems.
1. Provide recognized commercial grade signals, "on-off" pushbuttons or switches, and other speed and temperature controls as required for operation of each item, complete with pilot lights and permanent engraved, plastic laminate signs and graphics identifying each item. Provide stainless steel cover plates at controls and signals.
 2. Each item requiring electrical power shall be equipped with either a terminal box for permanent connection or with cord and plug for interruptible connection, as indicated. Provide NEMA standard grounding type plugs, where used.
 3. Furnish foodservice equipment completely wired internally using wire and conduit suitable for a wet location, including a separate grounding wire. Provide electrical outlets and receptacles required to be mounted on or in fabricated equipment and interconnect to a suitable terminal box (subpanel, starter, or disconnect switch if so specified) with all wires neatly tagged showing item number, voltage characteristics, and load information.
 4. Receptacles for all wall- and floor-mounted outlets will be provided to be used for plug-in equipment with characteristics as noted on the drawings. Provide Hubbell three-wire or four-wire grounding-type connectors and neoprene cords installed on each item of plug-in equipment to match receptacles provided.
 5. Electrically heated equipment shall be internally wired to a thermostatic control and an "on-off" red neon light indicator, which shall be mounted in a terminal box on a removable stainless steel access panel.
 6. Only rigid steel zinc-coated conduit shall be used, painted to match adjacent surfaces where exposed. Wiring shall be run concealed wherever possible.
 7. Provide on, or for, each motor-driven appliance or electrical heating or control unit, a suitable control switch or starter of the proper type and rating.
 8. Appliances shall be furnished complete with motors, driving mechanism, starters, and controllers, including but not limited to, master switches, timers, cut-outs, reversing mechanism, and other electrical equipment if and as applicable. Wiring and connection diagrams shall be furnished with electrically operated machines and for electrically wired fabricated equipment.
 9. Appliances shall be of rigid construction, free from objectionable vibration. Quietness of operation of all foodservice equipment is a requirement. Remove or repair any equipment producing objectionable noise and/or vibration as directed by the Architect.
 10. Motors shall be of the drip-proof, splash-proof, or totally enclosed type, having a continuous duty cycle and ball bearings, except small timing motors which may have sleeve bearings. Motors shall have windings impregnated to resist moisture. Motors located where subject to deposits of dust, lint, or other similar matter from the machine on which installed shall be of the totally enclosed type. Motors shall have ample power to operate the machines for which designated under full load operating conditions without exceeding their nameplate ratings. Horsepower requirements on driven equipment shall be determined by the manufacturer based on normal operation at maximum capacity. The nominal rated motor horsepower shall be not less than the horsepower required for normal operation of the equipment at maximum capacity. Insulation shall be NEMA Class B, or better.
 11. Cover plates shall be furnished and installed for all electrical outlets, receptacles, switches, etc., to match the material and finish of the equipment to which they will be fastened.

12. Switches, controls, etc., shall be conspicuously labeled as to use with plastic nameplates secured to the adjacent surface as previously specified in Article 2.01-C. Submit a sample for approval if requested by Architect.
 13. Where specified for custom fabricated equipment, provide compartment with electrical sub-panel which shall be pre-wired in conduit concealed in cabinet body construction and connected to all electrical components built into or set upon the counter. Electrical sub-panel shall be UL / ETL / CSA listed, 3-phase, 4-wire circuit breaker type with a ground buss main breaker and individual breakers for each serviced load. Buss shall be copper and the circuit breakers shall be the molded case, bolt-on type with thermomagnetic quick-make, quick-break trip. Multi-pole circuit breakers shall have an internal trip bar. The circuit breakers shall have an interrupting capacity of 10,000 amperes at 120 volts and there shall be a separate breaker for each connected load. Each breaker shall be sized for 125% of the connected load and a minimum of two (2) extra, single pole, 20 amp circuit breakers shall be provided. The loads shall be connected through the breakers in a phased sequence to balance the load on each phase.
- B. Water inlets shall be located above the positive water level wherever possible to prevent siphoning of liquids into the water supply system. Wherever conditions shall require a submerged inlet, a suitable type of check valve (except in jurisdictions where check valves are prohibited) and vacuum breaker shall be provided with the fixture to prevent siphoning. Where exposed, piping and fittings shall be chrome-plated. Where vacuum breaker piping is through equipment, provide chrome -plated escutcheon plates to cover holes.
1. Provide and install indirect waste lines from equipment which will discharge into floor drains or safe wastes, chrome-plated where exposed. Extend to a point at least 1" (25 mm) (or as required by local or state code) above the rim of the floor drain, cut bottom on 45-degree angle and secure in position.
 2. Horizontal piping lines shall be run at the highest possible elevation and not less than 6" (150 mm) above the floor, through equipment where possible.
 3. No exposed piping in or around fixtures or in other conspicuous places shall show tool marks or more than one thread at the fitting.
 4. Steam operating valves on or in fabricated and purchased foodservice equipment shall be provided with composition hand wheels, which shall remain reasonably cool in service.
 5. Provide suitable gas and liquid pressure-reducing valves for equipment with such components that might reasonably be expected to be affected over a period of time by adverse pressure conditions, including but not limited to dishwashers, booster heaters, coffee urns, ranges, steam boilers, etc.
- C. Provide and install complete refrigeration systems--charged, started, and operating properly--including, but not limited to:
- compressors, condensers, racks, coils, vibration eliminators, sight glasses (moisture indicating type), expansion valves, filters, oil separators, thermostats, defrost time clocks, all controls and control wiring, liquid line driers, piping, and refrigeration grade copper tubing with all sweat joints using Safety-Silv No. 1200 or approved equal silver solder (with as few joints as possible)
1. Where specifications call for pre-piped lines (i.e., from a fixture to a valve compartment, etc.), provide such work in strict conformance with other sections of the specifications which set forth standards for this type of work or in conformity with the requirements of the ASHRAE Standards or local authorities, whichever is the greater.

2. Mechanically refrigerated cold pans shall have a normally closed liquid line electric solenoid valve installed before the expansion valve and wired to a silent-type toggle switch complete with an "on-off" red neon light indicator and both mounted in a terminal box on a removable access panel. This switch shall be fed by a separate control circuit and shall not be wired into the compressor circuit so that it shall stop the flow of refrigerant to the cold pan and not turn off the compressor. The compressor shall then pump down and turn off through the action of the pressure control.
3. Each refrigeration item specification is written to provide minimum specifications and scope of work. Refrigeration equipment shall be designed and installed to maintain the following general temperatures unless otherwise specified.

| | |
|-------------------------------|-----------------|
| a. Walk-In Refrigerators | 1.7°C / 35°F |
| b. Walk-In Freezers | -23.3°C / -10°F |
| c. Reach-In Refrigerators | 1.7°C / 35°F |
| d. Reach-In Freezers | -23.3°C / -10°F |
| e. Undercounter Refrigerators | 1.7°C / 35°F |
| f. Undercounter Freezers | -23.3°C / -10°F |
| g. Cold Pan | -17.8°C / 0°F |
| h. Work Rooms | 10°C / 50°F |

4. Provide electrical and refrigeration components needed by the completed system and complete all refrigeration and control connections of and to said components.
5. Provide evaporator coil defrost system on all walk-in refrigerator and freezer rooms where the refrigeration systems are designed to operate at room temperature of less than 35°F (1.7°C).
6. Verify the requirements of and provide any or all additional refrigeration specialty(s) or component(s) required or recommended by the manufacturer for proper operation under the specific operating conditions and location of each system specified.
7. Verify and provide manufacturer's certification (or certification by manufacturer's authorized agent) that the equipment selection hereinafter specified for each refrigeration system is properly sized and shall meet the operating requirements set forth for each system regarding maintaining specified operating temperature, hours of compressor running time, and system pressures and velocities as recommended by the equipment manufacturer(s).
8. During check-out and initial operation, verify that:
 - a. Controls are properly adjusted.
 - b. Condensers are equipped with an overload protector.
 - c. A competent service mechanic is on site during the first eight (8) hours of operation.
 - d. Switches, starters, and controls are identified as to function.
9. Unless otherwise specified, furnish thermometers for walk-in units mounted above the exterior entrance door with suitable length armored capillary tubes to allow the sensing bulbs to be installed in the incoming air stream to the blower coil with runs fastened to the walk-in walls to prevent it from damage. This identical requirement applies to alarm systems when specified.

2.5 PRODUCT SPECIFICATIONS

- A. Refer to Part 4 for complete itemized product specifications.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Begin installing the equipment at the time the building is ready to receive the equipment and in accordance with the schedule.
- B. Provide a competent foreman or supervisor for erection of equipment and to coordinate with other trades regarding connections, installation, and inspection. Coordinate delivery schedule to ensure adequate openings in the building to receive the equipment.
- C. Install refrigeration work in an approved manner, using first quality fittings, controls, valves, etc. Refrigeration items shall be started up, tested, adjusted, and turned over to the Architect in first-class condition and left operating in accordance with the manufacturer's specifications.
- D. Set equipment that rests on masonry bases level onto a bed of silicone rubber sealant.
- E. Seal equipment that butts to a wall or against other equipment with silicone rubber sealant. Set trim strips or other items requiring fasteners in a bed of silicone rubber sealant and fastened with suitable stainless steel fasteners 48" (1200mm) or less on centers. , surfaces shall be thoroughly clean and degrease all surfaces prior to the application of sealant.
- F. Install and interconnect electrical controls, switches, or other units which are separately furnished for field installation in or on equipment provided, unless otherwise specified.
- G. Install and wire refrigeration systems in strict conformance with the manufacturers' instructions and recommendations. Ensure that all refrigeration condensing units are ventilated properly and are accessible for repair, maintenance, and inspection.
- H. Hang evaporator coils per the manufacturer's recommendation at the locations as shown on the drawings. Mount units such that the drain pans are pitched to the drain lines. Hang the coils using nylon or other approved non-conductive, non-corrosive fasteners Furnish #12 gauge galvanized steel fish plates of suitable size and shape on the exterior ceiling of the walk-in to spread the weight of the coils adequately. Connect coils to the condensing unit and install to constitute a complete working system capable of maintaining the interior temperatures specified regardless of the heavy usage the walk-in units may receive.
- I. Furnish and install a copper or PVC drainline painted silver from each coil outlet to a point 1" (25mm) above the floor drain. Trap drainlines immediately above the floor drain. Provide continuous electrified heater tape for freezer drainlines, coordinate electrical requirements and wiring with electrical division. Insulate drainline after installation.
- J. Refrigeration tubing shall be the Type L, ACR hard drawn degreased, sealed copper and shall be installed with horizontal runs sloped 1" per 20 feet (1:240) toward the condensing units. Refrigerant piping shall be properly supported by adjustable hangers spaced and adjusted to the drop

- required. Where vertical runs of more than 5' (1500mm) occur in the suction line, trap the risers at the bottom. Install piping so that refrigerant or oil cannot drain back into the coils from the suction line.
- K. Insulate suction and refrigerant lines with minimum 1/2" (13mm) Armstrong armaflex or equal cellular type insulation. Provide metal pipe sleeves where piping passes through a wall, ceiling, or floor. Fill space around the tubing with mastic insulating compound. Install a permanent suction line filter in each compressor suction line with pressure fitting ahead of the filter to facilitate checking of pressure drop through the filter. Fully insulate and seal penetrations through walk-in cooler or freezer structures to be vapor tight to prevent condensation within any light fixtures, switch boxes, junction boxes, or any other fittings. Fully seal refrigeration and drain lines and provide escutcheon plates.
 - L. Furnish and completely install a thermostat to control the refrigeration temperatures for each individual compartment.
 - M. Mount the condensing units on a welded steel rack containing all accessories and components necessary to form a complete condensing unit package. Provide each condensing unit with a factory mounted, pre-wired control panel/disconnect switch complete with circuit breakers, contactors, and time clocks as required.
 - N. Furnish the refrigeration systems with a one-year refrigeration service contract, covering all parts and labor, with service available seven days per week, 24-hours per day. Provide an option for continuation of the service contract after the first year.. Warrant the refrigeration system for one year and provide the compressors with the manufacturer's extended five-year warranty.
 - O. Furnish four (4) copies of complete remote refrigeration system control wiring and piping diagrams. Frame one (1) copy in Plexiglas and mount at compressor location or inside the refrigeration system enclosure as appropriate.
 - P. Coordinate the equipment work with the respective work of other Sections so that electrical and mechanical components built into the equipment will conform and/or adapt to the type, materials, and characteristics of the building components.
 - Q. Install heated and motor-driven equipment so as to operate efficiently. Provide additional vents, guards, deflectors, and other accessories as needed at no additional cost. Note such additions or modifications on the shop drawings and bring to Architect's attention by special accompanying letter.

3.2 FABRICATION

- A. Items of fabricated equipment shall be fabricated in the same factory and shall be similar in construction details, materials, methods, and appearance to similar types of items so fabricated under this contract.
- B. Each fabricated item of equipment shall include necessary reinforcing, bracing, and welding with the proper number and spacing of uprights and cross members for strength. Wherever standard sheet sizes will permit, the tops of all tables, shelves, exterior panels of cabinet type fixtures, and doors and drainboards shall be constructed of a single sheet of metal. Except where required to be removable, flat surfaces shall be secured to vertical and horizontal bracing members by welding or other

approved means to eliminate buckle, warp, rattle, and wobble. Equipment not braced in a rigid manner and which is subject to rattle and wobble shall be unacceptable, and the Contractor shall add additional bracing in an approved manner to achieve acceptance.

- C. Suitable pipe slots shall be provided on fabricated equipment to accommodate service and utility lines and mechanical connections. These slots shall be of proper size and shall be neatly made with turned up edges around to eliminate cutting or defacing of equipment on the job. Cabinet bases shall be provided with an inner panel duct at the ends or rear of the cabinet allowing adequate space to conceal vertical piping. Such work, when performed at the job site, shall be of the same quality as similar work performed in the shop.
- D. Exposed surfaces shall be free from bolt and screw heads. When bolts are required, they shall be of the concealed type and be of similar composition as the metal to which they are applied. Where bolt or screw threads on the interior of fixtures are visible or may come into contact with hands or wiping cloths, they shall be capped with a stainless steel acorn nut and stainless steel lock washer.
- E. Where screw threads are not visible or readily accessible, they shall be assembled with stainless steel lock washers and nuts. Wherever bolts or screws are welded to the underside of trim or tops, the reverse side of the weld shall be finished uniformly with the adjoining surfaces. Depressions at these points shall not be acceptable.
- F. Rivets shall not be permitted in any location.
- G. Welding shall be the heliarc method with welding rod of the same composition as the sheets or parts welded. Welds shall be complete, strong, and ductile with excess metal ground off and joints finished smooth to match adjoining surfaces. Welds shall be free of mechanical imperfections such as gas holes, pits, cracks, etc., and shall be continuously welded so that the fixtures shall appear as one piece construction. Butt welds made by spot solder and finished by grinding shall not be acceptable.
 - 1. Spot welds shall have a maximum spacing of 3" (75mm). Tack welds shall be of at least 1/4" (6mm) length of welding material at a maximum space of 4" (100mm) from center to center. Weld spacing at the ends of the channel battens shall not exceed 2" (50mm) centers.
 - 2. In no case shall soldering be accepted.
 - 3. Fixtures shall be shop fabricated of one piece and shipped to the job completely assembled wherever possible. Equipment too large to transport or enter the building as one piece shall be constructed so that the field joints can be welded at the job site.
 - 4. Exposed joints shall be ground flush with adjoining material and finished to harmonize therewith. Whenever material has been depressed by a welding operation, such depression shall be suitably hammered and peened flush with the adjoining surface and, if necessary, again ground to eliminate low spots. In all cases, the grain of rough grinding shall be removed by successive fine polishing operations.
 - 5. Unexposed welded joints on undershelves of tables or counters in stainless steel construction shall be suitably coated at the factory with an approved metallic-based paint.
 - 6. After galvanized steel members have been welded, welds and areas where galvanizing has been damaged shall have a zinc dust coating applied in conformance with U.S. Government Military Specification Number MIL-P-26915.

- H. Butt joints and contact joints, wherever they occur, shall be close fitting and shall not require filler. Wherever break bends occur, they shall be free of undue extrudence and shall not be flaky, scaly, or cracked in appearance; where such breaks do mar the uniform surface appearance of the material, such marks shall be removed by suitable grinding, polishing, and finishing. Wherever sheared edges occur, they shall be free of burrs, fins, and irregular projections and be finished to obviate danger of cutting or laceration when the hand is drawn over them. In no case shall overlapping materials be acceptable where miters or bullnosed corners occur.
- I. The grain of polishing shall run in the same direction on horizontal and on vertical surfaces of each item of fabricated equipment except in the case where the finish of the horizontal sections of each shall terminate in a mitered edge. Where sinks and adjacent drainboards are equipped with backsplash, the grain of polishing shall be consistent in direction throughout the length of the backsplash and sink compartment.
- J. Component parts, whether fabricated by the Contractor or purchased for building into the fabricated equipment, shall conform to the following.
- K. Bolts, screws, nuts, and washers shall be of steel, except where brass or stainless steel is fastened, in which case they shall be of brass or stainless steel, respectively. Where dissimilar metals are fastened, bolts, screws, nuts, and washers shall be of the higher grade metal. The spacing and extent of bolts and screws shall be such as to ensure suitable fastening and prevent buckling of the metals fastened.

3.3 CLEAN-UP

- A. At completion of the installation, clean up, lubricate, and adjust where necessary items of equipment provided and turn them over in first-class condition.
 - 1. Where stainless steel surfaces are disturbed by the installation or fabricating process, such surface shall be finished to match adjoining undisturbed surfaces.
 - 2. At the completion of the installation work, stainless steel shall be gone over with a portable polishing machine and buffed to perfect surfaces. Painted surfaces shall be carefully gone over and retouched as required.

3.4 START-UP AND TESTING AND COMMISSIONING

- A. Startup Services: Engage factory-authorized service representatives to perform startup services and to demonstrate and train Owner's maintenance personnel as specified below.
 - 1. Coordinate food service equipment startup with service-utility testing, balancing, and adjustments. Do not operate steam lines before they have been cleaned and sanitized.
 - 2. Remove protective coverings and clean and sanitize equipment, both inside and out, and relamp equipment with integral lighting. Where applicable, comply with manufacturer's written cleaning instructions.
 - 3. Test each equipment item for proper operation. Repair or replace equipment that is defective in operation, including units that operate below required capacity or that operate with excessive noise or vibration.
 - 4. Test refrigeration equipment's ability to maintain specified operating temperature under heavy-use conditions. Repair or replace equipment that does not maintain specified operating temperature.

5. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
6. Test motors and rotating equipment for proper rotation and lubricate moving parts according to manufacturer's written instructions.
7. Test water, drain, gas, steam, oil, refrigerant, and liquid-carrying components for leaks. Repair or replace leaking components.
8. Train Owner's maintenance personnel on procedures and schedules related to startup and shutdown, troubleshooting, servicing, and preventive maintenance for each food service equipment item.
9. Review data in the operation and maintenance manuals. Refer to Division 1 Section "Contract Closeout."
10. Review data in the operation and maintenance manuals. Refer to Division 1 Section "Operation and Maintenance Data."
11. Schedule training with Owner, through Architect, with at least 7 days' advance notice.

3.5 SEISMIC RESTRAINTS

- A. Install equipment in these contract documents according to the "SMACNA Guidelines for Seismic Restraint of Kitchen Equipment" in any State, province, or jurisdiction that has legislated this requirement as necessary for acceptance. This shall include:
1. Identifying these items on his submittal drawings, Plans, Elevations, and Sections.
 2. Showing required SMACNA methods of restraint on his submittal drawings.
 3. Referencing the appropriate detail(s).
 4. Obtain regulatory approval for all seismic engineering details.
- B. If no SMACNA detail exists for a particular situation, prepare and obtain approval for a special attachment detail:
1. Detail must be prepared by an engineer licensed by the State having jurisdiction over the project and accompanied by the supporting calculations used in the design.
 2. Verify that the restraint design is appropriate to the building's structural conditions and the surfaces to which the equipment will be secured.

PART 4 - ITEMIZED PRODUCT SPECIFICATIONS

ITEM #1 PLASTIC SHELVING UNIT-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Cambro
Model: ESU Elements Series
Camshelving Elements Starter Unit, width x Length per plan x 72"H, 5 shelf, includes:
four posts, 2 sets of post connectors, traverses
Five (5) tier; four (4) vented shelves plus one (1) solid bottom shelf, speckled gray, NSF

ITEM #01.1 DUNNAGE RACK-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Cambro
Model: DRS
S-Series Dunnage Rack, slotted top, 3000 lb. load capacity, 21"W x Length per Plan x 12"H, polyethylene, one-piece, seamless double wall construction, 4" square legs, speckled gray, NSF

ITEM # 06 WALL / SPLASH MOUNT FAUCET – G.C. PROVIDED & INSTALLED

Manufacturer: Fisher or equal by T&S or Chicago Faucet
Model: 13269
Faucet, backsplash mount, 8" c/c, 12" long swing spout, 1/2" inlets
Shipped loose to plumber to install on site

ITEM # 06.2 WALL / SPLASH MOUNT FAUCET– G.C. PROVIDED & INSTALLED

Manufacturer: Fisher or equal by T&S or Chicago Faucet
Model: 13218
Faucet, backsplash mount, 8" c/c, 16" long swing spout, 1/2" inlets
Shipped loose to plumber to install on site

ITEM # 07 LEVER WASTE- G.C. PROVIDED & INSTALLED

Manufacturer: Fisher
Model: 22322
DrainKing Waste Valve, flat strainer, overflow body, 14 x 16 tube & elbow, 12 GPM drain rate, cast red brass body
Shipped loose to plumber to install on site

ITEM # 08 MOBILE WORK TABLE-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide
Model: T3072SE
Work Table, open base, 72"W x 30"D, 14/300 series stainless steel top, square edge on front & back, Uni-Lok® gusset system, adjustable 18/300 series stainless steel undershelf with marine edge, (4) stainless steel legs, NSF
Square edge table, front and/or rear, per table
All welded construction, legs, undershelf & top
Table Casters, 5"Diameter, set of (4), (2) swivel & (2) braked, 250 lb weight capacity per caster, poly cart washable with polymer tread, NSF
Include (1) one Edlund model 1S Can Opener, manual, #1 with stainless steel base

ITEM # 09 RACK, ROLL-IN-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, or New Age
Model: 4338
Lifetime Series Roll-In Refrigerator, universal, 21-1/2" x 26" x 64"H, heavy duty, (18) 18" x 26", (17) 12" x 20", (36) 13" x 18" or (36) 14" x 18" pan capacity, slides on 3" centers, fully welded aluminum construction, (4) 5" x 1-3/8" non-marking swivel plate casters, NSF

~~ITEM # 19.1 CONVECTION OVEN DOUBLE STACKED-OWNER/VENDOR PROVIDED & INSTALLED~~

~~Manufacturer: Vulcan
Model: VC44GD~~

~~Convection Oven, gas, double deck, standard depth, solid state controls, electronic spark igniters, 60 minute timer, 8" high legs, stainless steel front, top and sides, stainless steel doors with windows, 50,000 BTU each section, NSF, CSA Star, CSA Flame, ENERGY STAR®
Natural Gas
Casters, set of (4) in lieu of standard legs~~

~~Dormont Blue Hose™ Moveable Gas Connector Hose Assembly, 3/4" inside dia., 60" long, covered with stainless steel braid, coated with blue antimicrobial PVC, 1 SnapFast® QD, 2 Swivel MAX®, coiled restraining cable with hardware, 140,000 BTU/hr minimum flow capacity~~

ITEM # 19.1 CONVECTION OVEN-DOUBLE STACKED-OWNER/VENDOR PROVIDED & INSTALLED

**Manufacturer: Vulcan
Model: VC66GD**

Convection Oven, gas, double-deck, bakery depth, solid state controls, electronic spark igniters, 60 minute timer, 8" high legs, stainless steel front, top and sides, stainless steel doors with windows, 50,000 BTU each section, NSF, CSA Star, CSA Flame, ENERGY STAR®

**Natural Gas
Casters, set of (4) in lieu of standard legs**

Dormont Blue Hose™ Moveable Gas Connector Hose Assembly, 3/4" inside dia., 60" long, covered with stainless steel braid, coated with blue antimicrobial PVC, 1 SnapFast® QD, 2 Swivel MAX®, coiled restraining cable with hardware, 140,000 BTU/hr minimum flow capacity

ITEM # 23 HAND SINK-OWNER/VENDOR PROVIDED & INSTALLED

**Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide
Model: HSA-10-1FK**

Hand Sink, wall mount, 13-1/2" wide x 9-3/4" front-to-back x 6-3/4" deep bowl, 304 stainless steel construction, splash mounted faucet, single knee pedal, skirt, basket drain, deep-drawn seamless design-positive drain, inverted "V" edge, NSF

**Model 326015 Temperature mixing valve
Left & right side splashes
P-Trap, nickel-plated
Faucet and drain shipped loose to plumber to install on site
Paper Towel and Soap Dispensers**

ITEM # 23.1 HAND SINK-ADA-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Universal Stainless

Model: HSAP-14-ADA-FW

Hand Sink, wall mount, 14" wide x 16" front-to-back x 5" deep bowl, 16/304 stainless steel construction, splash mount gooseneck faucet with wrist handles & mixer valve, marine edge on front 7 sides, 1/2" NPS water inlet, chrome-plated P-trap, wrist handles, soap dispenser, basket drain, skirt assembly & paper towel dispenser, PHYSICALLY CHALLENGED, NSF

Left & right side splashes

Faucet and drain shipped loose to plumber to install on site

ITEM # 30 SHELVING, WALL-MOUNTED- G.C. PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide

Model: WS1296-14/3

Shelf, wall mount, 96"W x 12"D, rolled frontedge, 1-1/2" upturn on rear & ends, includes stainless steel mounting brackets stud welded to shelf, 14/304 stainless steel construction, NSF

Shelf mounted 60" AFF

ITEM # 34 WORK TABLE W/ SINK- G.C. PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide

Model: T3096STE-BS

Work Table, open base, 96"W x 30"D, 14/304 stainless steel top with 6" backsplash and sides turned down 90 degrees, square front edge, square turndown ends, heavy gauge stainless steel 1-1/4" O.D. side & rear crossrails, (6) 1-5/8" O.D. legs, 1" adjustable stainless steel bullet feet, Uni-Lok® system, NSF

Square edge table, front and/or rear, per table

Fabricated sink welded in place, 16" x 20" x 14" bowl

Stainless steel bullet feet

All welded construction, legs, undershelf & top

Right end side splash

Side splash enclosed if exposed

ITEM # 35 SHELVING, WALL-MOUNTED- G.C. PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide

Model: WS1272-14/3

Shelf, wall mount, 72"W x 12"D, rolled frontedge, 1-1/2" upturn on rear & ends, includes stainless steel mounting brackets stud welded to shelf, 14/304 stainless steel construction, NSF

Mount at 60" AFF

ITEM # 47.1 HEATED CABINET, MOBILE-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Vulcan

Model: VBP15

Holding/Transport Cabinet, Institutional Series, mobile, capacity (15) 18" x 26" x 1" or (30) 12" x 20" x 2-1/2" pans, includes (10) pair of adjustable tray slides 1-1/2" OC, forced air blower, side mounted push handles, recessed control panel, dial thermometer ambient to 190° F, 20 gauge stainless steel interior and exterior, ENERGY STAR®

ITEM # 51 THREE (3) COMPARTMENT SINK-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide

Model: FN2860-3-24-14/3

Sink, three compartment, stainless steel, with 24" left & right-hand drainboards, 28" front-to-back x 20"W compartment, 14"D, with 10"H splash, stainless steel open frame base, boxed crossrails, 2 set of faucet holes, 14/304 stainless steel, NSF

Turndown backsplash
14/304
Individual fabricated sink bowls welded in place-14/304
All welded construction
Side splash when located next to wall

ITEM # 68 SHELVING, WALL-MOUNTED- G.C. PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide

Model: WS12120-14/3

Shelf, wall mount, 120"W x 12"D, rolled frontedge, 1-1/2" upturn on rear & ends, includes stainless steel mounting brackets stud welded to shelf, 14/304 stainless steel construction, NSF
Coordinate mounting height of wall shelf with EcoLab provided equipment

ITEM # 77 TRASH CAN-OWNER/VENDOR PROVIDED & INSTALLED

NIKEC - This is not in the kitchen equipment contract and is shown here for informational purposes only. General Contractor to confirm all required utilities are provided.

ITEM # 84 EXHAUST HOOD TYPE II 10'-0" x 5'-0" - G.C. PROVIDED & INSTALLED.

Manufacturer: Captive Aire

Model: VHB

Stainless steel matching enclosure panels from the top of the Hood to the finished ceiling to be furnished by KEC. (Verify ceiling height with plan.)

KEC shall provide 20 gauge stainless steel wall sheathing to extend from the top of the floor base where so installed. Sheathing shall be maximum practical size and trimmed with Component Hardware joining and end strips. Pre-cut holes for utilities to minimize field cutting. All holes to be trimmed with chrome-plated escutcheon plates. Finish to match exhaust hood.

Reference foodservice drawing FS-5 for additional details

ITEM # 106 CASH REGISTER/POS SYSTEM-BY FOODSERVICE OPERATOR- OWNER/VENDOR PROVIDED & INSTALLED

NIKEC - This is not in the kitchen equipment contract and is shown here for informational purposes only. General Contractor to confirm all required utilities are provided.

ITEM # 110 REACH-IN REFRIGERATOR– G.C. PROVIDED & INSTALLED

Manufacturer: True
Model: TS-49-HC

Refrigerator, Reach-in, two-section, (2) stainless steel doors, stainless steel front/sides, stainless steel interior, (6) gray PVC coated wire shelves, interior lighting, 4" castors, R290 Hydrocarbon refrigerant, 1/2 HP, cULus, UL EPH Classified, CE, MADE IN USA

Cord/plug
Doors hinged per plan
Casters, swivel, with brakes (5" diameter rubber tires) set of 4 (6" height)
Two (2) extra shelves per section, epoxy coated, plated steel with clips

ITEM # 112 REACH-IN FREEZER– G.C. PROVIDED & INSTALLED

Manufacturer: True
Model: TS-49F-HC

Freezer, Reach-in, two-section, -10°F, (2) stainless steel doors, stainless steel front/sides, stainless steel interior, (6) gray PVC coated wire shelves, interior lighting, 4" castors, R290 Hydrocarbon refrigerant, 1 HP, cULus, CE, UL EPH Classified, MADE IN USA

Cord/plug
Door hinged per plan
Casters, swivel, with brakes (5" diameter rubber tires) set of 4 (6" height)
Two (2) extra shelves per section, epoxy coated, plated steel with clips

ITEM # 163 WORK TABLE W/ SINK– G.C. PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide

Model: T3072STE-BS

Work Table, open base, 72"W x 30"D, 14/304 stainless steel top with 6" backsplash and sides turned down 90 degrees, square front edge, square turndown ends, heavy gauge stainless steel 1-1/4" O.D. side & rear crossrails, (4) 1-5/8" O.D. legs, 1" adjustable stainless steel bullet feet, Uni-Lok® system, NSF

Square edge table, front and/or rear, per table
Fabricated sink welded in place, 16" x 20" x 14" bowl
Stainless steel bullet feet
All welded construction, legs, undershelf & top
Right and left side splashes

ITEM # 190 WALK-IN COOLER/FREEZER– G.C. PROVIDED & INSTALLED

Manufacturer: Nor-Lake or equal by Kolpak, Bally, Imperial, Thermo-Kool, or ThermalRite
Model: Custom

Per plan x 8'-6"H
4" urethane insulation, minimum value R-25.
NSF & UL approved construction
Interior vertical panels finished with stucco embossed .040 aluminum
Floorless unit- Coordinate the recessed insulated slab with G.C.
Interior ceiling panels to be smooth white aluminum finish
Unexposed exterior vertical and ceiling panels to be stucco embossed galvanized
Exposed and exterior vertical panels to be stucco embossed .040 aluminum

Doors- 36"W x 76" high; three hinges; Provide a vinyl curtain
48"H 1/8" thick aluminum tread plate inside and out; 14" x 24" observation window. Provide inside safety release.

Provide Modularm 75LC for each door for light and alarm control, recessed into panel.
Automatic door closer
1/8" thick aluminum tread plate for 48" high wainscoting exposed exterior.
Provide Two (2) 4'-0" LED light fixture per compartment to meet health department and 2009 standards with efficacy of no less than 40 lumens per watt.
Matching trim strips and enclosure panels as required to adjacent walls and ceiling.
Provide complete refrigeration system. Provide on-demand defrost on freezer system.
Unit shall meet or exceed all 2009 Federal mandates.

ITEM # 190.1 EVAPORATOR COIL-COOLER- G.C. PROVIDED & INSTALLED
Included with item #190.

ITEM # 190.2 COMPRESSOR -COOLER- G.C. PROVIDED & INSTALLED
Included with item #190.

ITEM # 190.3 EVAPORATOR COIL-FREEZER- G.C. PROVIDED & INSTALLED
Included with item #190.

ITEM # 190.4 COMPRESSOR -FREEZER- G.C. PROVIDED & INSTALLED
Included with item #190.

ITEM # 195 LEVER WASTE- G.C. PROVIDED & INSTALLED

Manufacturer: Fisher or equal by T&S or Chicago Faucet
Model: 22209

DrainKing Waste Valve, with flat strainer, 12 GPM drain rate, dual teflon seals, stainless steel ball, cast red brass body
Shipped loose to plumber to install onsite

ITEM # 210 STEAMER – DOUBLE STACKED-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Groen
Model: XS-208-14-3

Convection Steamer, boilerless, electric, countertop, (6) 12" x 20" pan capacity, external heating element, fan in cooking chamber, no water or drain line required, stainless steel interior & exterior, , NSF, UL listed, ENERGY STAR®
Provide water connection
Left hand door hinge
Model 170944 Stand, 27" w x 32.5" D, with bullet feet, for double stacked
Model Z098611 Casters, set of (4), (2) locking

ITEM # 236 MILK COOLER -OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: True Food Service Equipment
Model: TMC-49-S-SS-HC

Mobile Milk Cooler, FORCED-AIR, (12) crates, stainless steel drop front/hold-open flip-up lids, lock, 33-38°F, stainless exterior, stainless steel interior & floor, (3) heavy duty floor racks, digital thermometer, 4" castors, R290 Hydrocarbon refrigerant, 1/5 HP, 9' cord, , cULus, UL EPH
Classified, MADE IN USA

ITEM # 298 HOT FOOD COUNTER -OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Duke Manufacturing

Model: TEHF-60SS

Thurmaduke™ Hot Food Unit, mobile, electric, 60"W x 32"D x 34"H, 14ga stainless steel top, (4) stainless steel heat wells, drains, copper manifolds, (1) valve, thermostats, dish shelf, 20ga stainless steel body & undershelf, 5" swivel casters (2 with brakes), 10 ft cord with plug, J hook electric cord holder, cULus, UL EPH CLASSIFIED

Solid stainless steel trayslide, 16ga stainless steel, (2) rubbing tracks, on (2) stainless steel fixed brackets. Tray slide height 32" AFF

Located on customer's side

For stainless steel hinged bracket in lieu of standard bracket, each bracket

Internal locking device

#TS454-60 Single Deck Food Shield, 59" long, full service style, 1/4" glass guard with stainless steel edging & stainless steel fold down brackets for easy cleaning, 14ga stainless steel single shelf, 12-1/2"W on 1" square stainless steel tube posts & 1/4" acrylic end guards

Full front panel and end enclosure panels with laminate or fiberglass finish. Verify finishes with the Architect

ITEM # 298.1 BUFFET/CAFETERIA, FLAT TOP-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Duke Manufacturing

Model: TST-46SS

Thurmaduke™ Solid Top Unit, mobile utility counter, 46"W x 32"D x 34"H, 14ga stainless steel top, 20ga stainless steel body & undershelves, 5" dia. gray poly swivel casters (2 with brakes), NSF

Solid stainless steel trayslide, 16ga stainless steel, (2) rubbing tracks, on (2) stainless steel fixed brackets. Tray slide height 32" AFF

Located on customer's side

For stainless steel hinged bracket in lieu of standard bracket, each bracket

Internal locking device

Full front panel panel with laminate or fiberglass finish. Verify finishes with the Architect

ITEM # 298.2 BUFFET/CAFETERIA, COLD FOOD STATION-OWNER/VENDOR
PROVIDED & INSTALLED

Manufacturer: Duke Manufacturing
Model: TCM-60SS-N7

Thurmaduke™ Cold Food Unit, mobile, 60"W x 32"D x 34"H, 14ga stainless steel top, NSF 7 stainless steel mech. cold pan, 8" deep, 56-1/2" x 21-3/4" liner, 1" drain line & valve, 20ga stainless steel body & undershelf, 5" dia. swivel casters (2 with brakes), 10' cord & plug, J hook electric cord holder, cULus, UL EPH CLASSIFIED, 1/4 HP compressor
Solid stainless steel trayslide, 16ga stainless steel, (2) rubbing tracks, on (2) stainless steel fixed brackets. Tray slide height 32" AFF
Located on customer's side
For stainless steel hinged bracket in lieu of standard bracket, each bracket
Internal locking device
#956-460-4D double-deck serving shelves with glass protector panels, 18ga 300 series stainless shelves, 10-1/2"wide, 20"high lower, 32-1/2"high upper, 58-1/2"long, 3/4" square stainless tube posts, 1/4" thick glass panel & 1/4" acrylic end guards

Full front panel and end enclosure panels with laminate or fiberglass finish. Verify finishes with the Architect

ITEM # 298.3 BUFFET/CAFETERIA, CASHIER STATION-OWNER/VENDOR PROVIDED
& INSTALLED

Manufacturer: Duke Manufacturing
Model: TCS-30SS

Thurmaduke™ Cashier Stand, mobile, 30"L, 32"W, 34"H, ~~16ga~~ **14ga** stainless top, 20ga stainless steel body & partial undershelf, stainless steel tube foot rest, 5" dia. gray poly swivel casters (2 with brakes), NSF
with drawer, stainless steel face & frame, 24.375" x 20" x 3-1/2" deep stainless steel liner, roller slides, & black pull handle (TCS-DR)
Cylinder lock & keys (TCS-LK)
Internal locking device
Solid stainless steel trayslide, 16ga stainless steel, (2) rubbing tracks, on (2) stainless steel fixed brackets, mounted 34"H, NSF

Reference foodservice drawings for location of trays slide

Full front panel and end enclosure panels with laminate or fiberglass finish. Verify finishes with the Architect

ITEM # 298.4 TRASH COUNTER W/SINK– G.C. PROVIDED & INSTALLED

Manufacturer: Eagle Group or equal by Advance Tabco, Aero, Universal Stainless, IEI, or Nationwide
Model: CUSTOM

Trash counter, 34" ~~32"~~ **32"** high x length per plan, x 30" deep, 14/300 ga. Stainless steel top, 40" x 20" x 12" deep sink bowl with lever waste and back splash mounted faucet, 8" o.c. with wrist blades & 12" spout, 12" x 12" square trash cutouts with 16/300 stainless steel trash chute per plan, 18/300 ga. Stainless steel cabinet base, hinged doors with handle & locks to allow trash cans to roll-in and out, intermediate adjustable shelving wherever possible. 18/300 stainless steel kickplate, mount kickplate to hinged door at openings, 6" x 2" backplash and side splashes, NSF

ITEM # 323 CAN RACK-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Lakeside

Model: 458

Can Storage & Dispensing Rack, mobile, stainless steel top, capacity (72) #10 or (96) #5 cans, gravity feed system, stainless steel construction, 5" casters (2) fixed & (2) swivel,

~~ITEM # 449 ROLL THRU REFRIGERATOR G.C. PROVIDED & INSTALLED~~

~~Manufacturer: True~~

~~Model: STAIRRI-1S~~

~~SPEC SERIES® Roll in Refrigerator, one-section, stainless steel front & sides, (1) stainless steel door with lock, cam lift hinges, digital temperature control, aluminum interior, incandescent interior lighting, stainless steel ramp, 1/3 HP, eULus, UL EPH Classified, MADE IN USA
Hinged per plan~~

ITEM # 449 ROLL-THRU REFRIGERATOR- G.C. PROVIDED & INSTALLED

Manufacturer: True

Model: STR1RRT-1S-1S

SPEC SERIES® Roll-thru Refrigerator, stainless steel front & sides, (1) stainless steel door front & rear with locks, cam-lift hinges, digital temperature control, stainless steel interior, incandescent interior lighting, stainless steel ramps, accommodates 27"Wx29"Dx66"H cart, NOT included], eULus, UL EPH Classified, MADE IN USA

Cord/plug

Hinged per plan

~~ITEM # 451 ROLL THRU HEATED CABINET G.C. PROVIDED & INSTALLED~~

~~Manufacturer: True~~

~~Model: STAIHRI-1S~~

~~SPEC SERIES® Heated Roll in, one-section, stainless steel front & sides, (1) stainless steel door with lock, cam lift hinges, color coded temperature display, aluminum interior, interior lighting, stainless steel ramp, 2.0KW, eULus, UL EPH Classified, MADE IN USA
Hinged per plan~~

ITEM # 451 ROLL-THRU HEATED CABINET- G.C. PROVIDED & INSTALLED

Manufacturer: True

Model: STR1HRT-1S-1S

SPEC SERIES® Heated Roll-thru, one-section, stainless steel front & sides, (1) stainless steel door front & rear, locks, cam-lift hinges, color-coded temperature display, stainless steel interior, interior lighting, stainless steel ramps, [accommodates 27"Wx29"Dx66"H cart, NOT included], eULus, UL EPH Classified, MADE IN USA

Cord/plug

Hinged per plan

ITEM # 452 UTILITY CART-OWNER/VENDOR PROVIDED & INSTALLED

Manufacturer: Lakeside

Model: 953

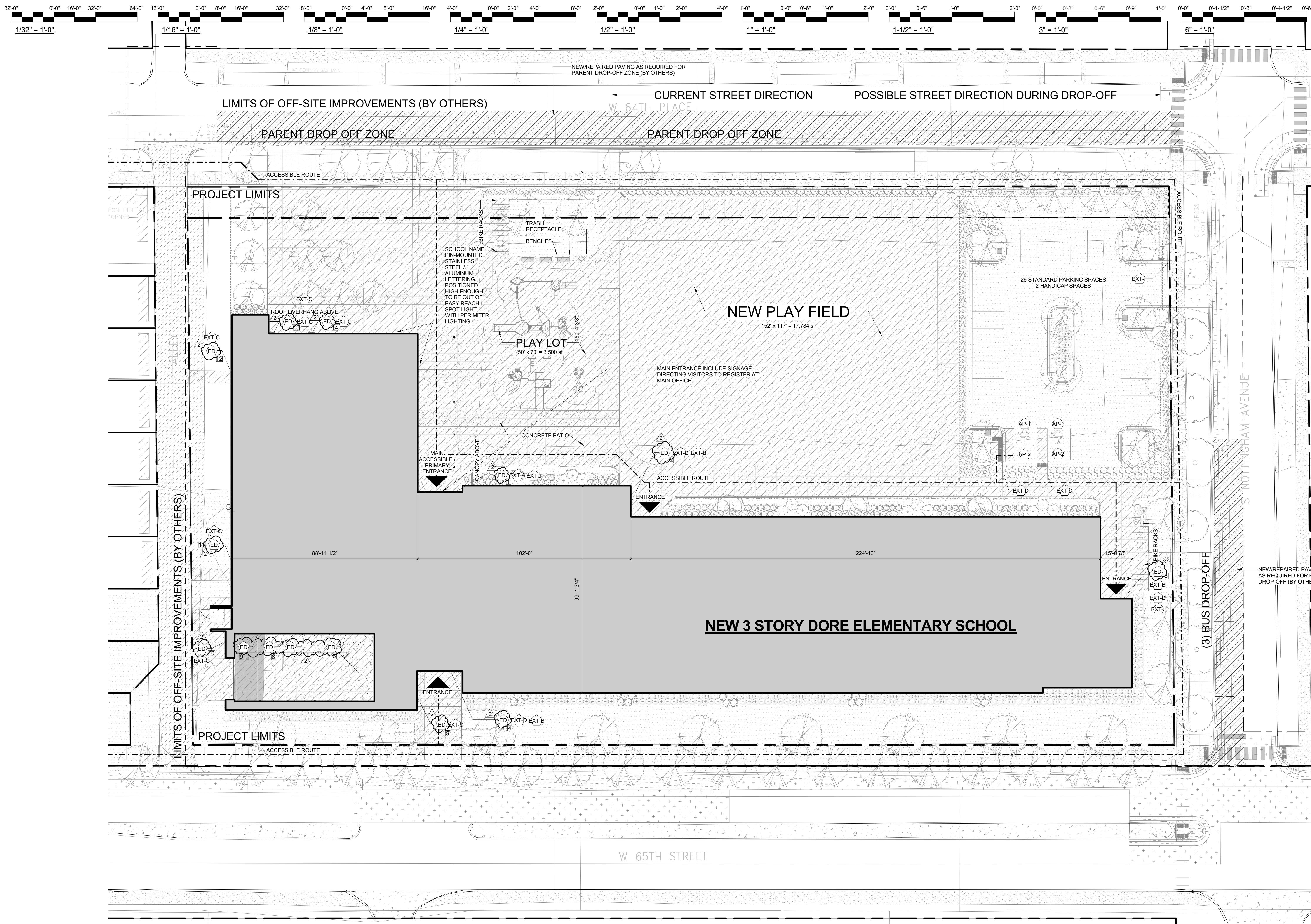
Tough Transport® Utility Cart, 2-tier, 48"W x 25-3/4"D x 37-3/8"H, stainless steel construction, open base U-frame with angled stainless steel, 24" x 42" 14-gauge shelves with reinforced edges, 21" shelf clearance, 1" O.D. tube push handle with bumpers, (2) 6" bumpers riveted to front legs,

1000 lb. capacity, (2) 5" reinforced swivel plate casters & (2) 8" fixed casters with non-marking polyurethane wheels, NSF

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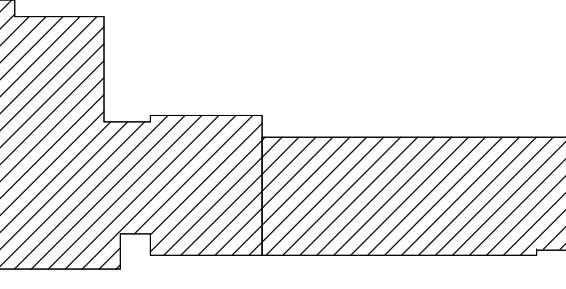
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| | | |
|---|----------------|---------------|
| 2 | ADDENDUM 2 | JUNE 30, 2017 |
| 1 | ISSUED FOR BID | JUNE 7, 2017 |

| No. | Description | Date |
|-----|-------------|------|
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KEY PLAN

Drawing Title:
SIGNAGE SITE PLAN

Project No.: 004665.01 Checked by: Checker

A1407

1 SIGNAGE SITE PLAN
1" = 20'-0"

SEE SHEET ADA0001 FOR SIGN TYPES

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