Donald L. Welch Architect

March 20, 2017

Salt Lake County Planning & Development 2001 South State Street Salt Lake City, Utah 84190

RE: Brighton Recovery Campus
Plan Review Comment Responses
Building 'A'
4915 South 900 East
Salt Lake County, Utah

CODE REVIEW COMMENT-No. 2 RESPONSES:

A2. Sheet A1.1

E. Please refer to Sheet A1.1, clouded notes, and Sheet A8.1, for new one hour fire rated wall assembly at existing walls located adjacent to other existing buildings, existing building roof overhangs, and existing breezeway roof structures.

A3. Sheet A2.1

- E. Accessible Type Sleeping Units:
 - Please refer to Sheet A2.1 and A2.1A for required turning spaces in all rooms.
 Please refer to Sheet A2.1, A2.1A, and A4.1 for depth clearances within closets of ADA sleeping units.
 - II. Resolved.
 - III. Please refer to sheet A8.2 for mounting height notes, details & reach ranges.
 - IV. Resolved
 - V. Please refer to sheets A8.2, for mounting height notes, details, and reach ranges.
 - VI. Resolved.
- F. Type B Sleeping Units:
 - II. Please refer to Sheet A8.2 for mounting height notes, details, and reach ranges, for switches and receptacles.
 - a. Please refer to sheet A8.2 for switches and outlets located over counters.
- A4. Sheet A2.1A & A2.B: refer to sheet A8.1 for construction details at roof access ladder & opening to attic space at roof. There is no roof hatch. Only a ¾" plywood platform leading from the access ladder to the existing opening in the mechanical roof well.
- A5. Resolved.
- A6. Resolved

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- A7. Please refer to Sheet A8.1 for typical interior wall details, identifying how the interior walls are being constructed and connected at the floor and ceiling.
- A8. Resolved.
- A9. Resolved.
- A10. Sheet A4.2 (should be A4.6):
 - A. I. II. & III. Please refer to sheet A4.6, enlarged kitchen floor plans, for work surface location, notes and dimensions, and clear floor space requirements for the work surface, and accessibility, and knee and toe space requirements for the kitchen sink and other appliances.
 - IV. Resolved.
 - V. Please refer to sheet A4.6, enlarged kitchen floor plan, for kitchen notes clarifying oven and cooktop control requirements.

Mechanical Review Comments:

Resolved.

Plumbing Review Comments:

Resolved

Electrical Review Comments:

Please refer to Electrical drawings, dated February 24, 2017, for information concerning Electrical review comments.

Energy Review Comments:

N1 & N2: Please refer to RESCheck, attached to the end of the Mechanical/Plumbing pdf files, for extent of thermal envelope and corresponding R-values, and the energy compliance.

Structural Comments:

General:

S1. Sheets D2.1 and D3.1:

Resolved

Thank you.

Donald L. Welch

Architect



Sandy Layton St. George

Project Number: L0133-001-171

March 6, 2017

Brighton Land Holdings 1275 East Fort Union Blvd. Ste 210 Cottonwood Heights, UT 84047

ATTENTION:

Thomas Godfrey

REFERENCE:

Brighton Recovery Campus, Building A (4915 S 900 E, SLC, UT)

Interior Demolition

Mr. Godfrey:

Per your request, we have reviewed the architectural drawings for the above-referenced project. We also visited the above-referenced site on December 20, 2016. Please be advised as follows:

From our observation, the roof structure appeared to be manufactured wood roof trusses, bearing at the exterior perimeter walls and/or exterior overhang beams. In addition, there is an interior beam running the length of the building, supporting the roof trusses at or near their mid-span. See the attached "Demolition Plan," for approximate location of existing beams and posts. Interior partitions are non-bearing non-shear walls and can, therefore, be removed without adversely affecting the structure.

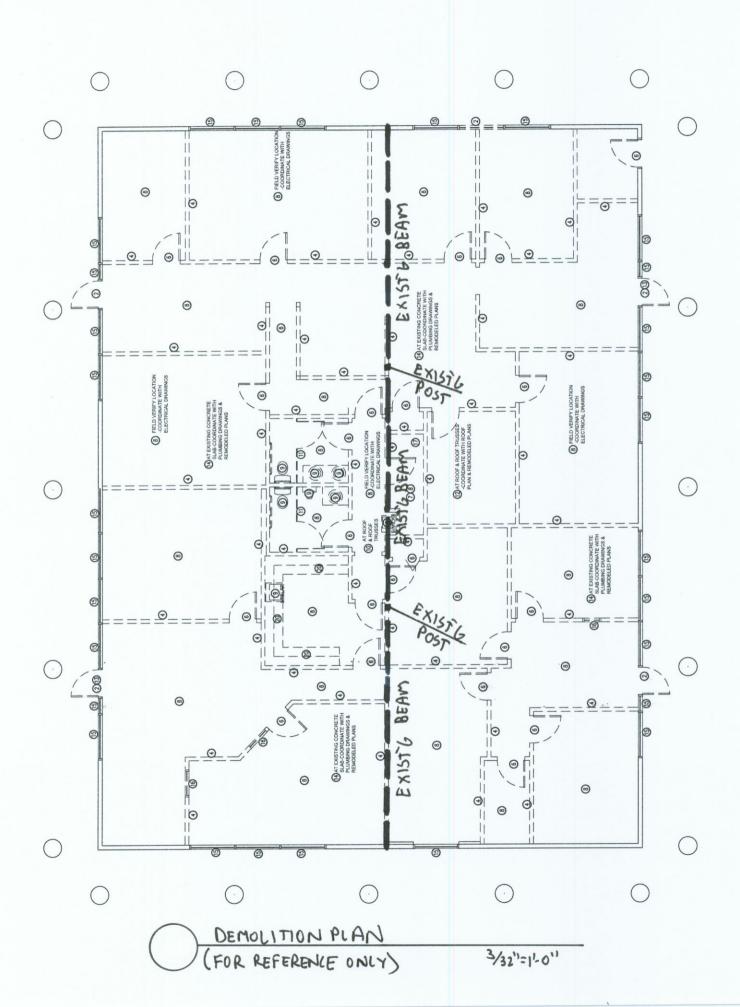
We hope this meets your needs. If you have any further questions regarding this matter, please call this office at your convenience.

Very truly yours, VECTOR STRUCTURAL ENGINEERS



David H. Fotheringham, S.E. Principal

Enclosure



info@spectrum-engineers.com

Tenant Finish for New Brighton Recovery Campus

BUILDING GRID LINES

4905 South, 4911 South, 4915 South, 4925 South, 4931 South, 4953 South 900 East, Salt Lake County, Utah BUILDING 'A' 4915 South 900 East parcel #22081850100000 BUILDING CODE SUMMARY Section 310.6 Residential Group R-4 Residential Group R-4 occupancy shall include buildings, structures or portions thereof for more than **APPLICABLE CODES** five but not more than 16 persons, excluding staff, who reside on a 24 hour basis in a supervised -BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE residential environment and receive custodial care. Buildings of Group R-4 shall be classified as one of 2015 INTERNATIONAL EXISTING BUILDING CODE the occupancy conditions specified in Section 310.6.1 or 310.6.2. this group shall include, but not -MECHANICAL CODE: 2015 IMC FIRE RESISTANT CONSTRUCTION / FIREPROOFING SCHEDULE limited to, the following: -PLUMBING CODE: 2015 IPC -ELECTRICAL CODE: 2015 NATIONAL ELECTRICAL CODE REQ'D RATING / HR **INTENT OF PLANS:** MATERIALS / LEGEND -FIRE CODE: 2015 IFC Alcohol and drug centers -EXTERIOR WALLS: LOAD BEARING 0 HRS. -LIFE SAFETY CODE: 2015 NFPA 101 NON-LOAD BEARING 0 HR. -ACCESSIBILITY CODE: <u>IBC & NE ACC. GUIDE</u>LINES Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as 30 MIN. (W/ APPROVED FIRE SPRINKLING SYSTEM) otherwise provided for in this code **EXISTING BUILDING 'A'** CONCRETE MASONRY UNIT IT IS THE INTENT OF THESE DRAWINGS, SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS TO **BUILDING PLANNING** Section 420 Groups I-1, R-1, R-2, R-3, and R-4 DESCRIBE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE WORK CALLED FOR, BRICK VENEER OCCUPANCY: RESIDENTIAL OCCUPANCY GROUP R-4 INDICATED OR REASONABLY IMPLIED BY THEM, INCLUDING PARTITIONING, MECHANICAL AND ELECTRICAL -INTERIOR WALL: LOAD BEARING O HR. 420.2 Separation Walls. MIXED (NON SEPARATED) OCCUPANCY YES /NO) WORK, AIR CONDITIONING AND ALL OTHER ITEMS DESCRIBED. FAILURE TO SHOW DETAILS OR REPEAT NON-LOAD BEARING 0 HR. STONE VENEER REQUIRED FIRE SEPARATION: O HR. (FIRE SPRINKLER SYSTEM) ON ANY DRAWINGS THAT FIGURES, NOTES OR DETAILS GIVEN ON ANOTHER DRAWING SHALL NOT Walls separating dwelling units in the same building, walls separating sleeping units in the same TYPE OF CONSTRUCTION RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PERFORM THE WORK (AT NO ADDITIONAL COST) 4 4 4 4 CONCRETE building, and walls separating dwelling or sleeping units from other occupancies contiguous to them in CONSTRUCTION TYPE: VB S1 1 LEVEL; 28,000 SQ. FT. ALLOWED-OCCUPANCY R-4 AS IF SHOWN ON EACH AND EVERY DRAWING. the same building shall be constructed as fire partitions in accordance with Section 708. RISK CATEGORY GYPSUM BOARD OR RISK CATEGORY: -ROOF/CEILING O HR. Section 708 Fire Partitions **CHANGE OF OCCUPANCY BATT INSULATION** ALL WORK SHALL BE IN A FIRST CLASS WORKMANSHIP MANNER, NEAT AND COMPLETE IN ACCORDANCE WORK AREA METHOD, LEVEL 2 708.1 General WORK BEING DONE: WITH DRAWINGS AND SPECIFICATIONS AND THE UNIFORM BUILDING CODE, THE STATE ENERGY EFFICIENCY **GENERAL BUILDING LIMITATIONS** RIGID INSULATION 1 Separation walls as required by Section 420.2 for Groups I-1, R-1, R-2, and R-3. CODE AND ALL AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL ENDEAVOR TO PROTECT THE -HEIGHT OF BUILDING: <u>25 FEET MAXIMUM</u> <u>NUMBER OF STORIES: 1 STORY</u> OWNER'S AND ADJACENT OWNER'S PROPERTY FROM DAMAGE DUE TO THE CONSTRUCTION PROCESS AT PLYWOOD 708.3 Fire-resistance rating -TOTAL AREA OF BUILDING: 4,800 SQ. FT. - OCCUPANCY 'R-4' ALL TIMES AND REPAIR AT NO COST TO THE OWNER ANY DAMAGE THAT DOES OCCUR. -OCCUPANCY PER PERSON: 4,800 SQ. FT.; 200 SQ. FT./PERSON = 24 OCCUPANTS ROUGH WOOD-CONTINUOUS Fire partitions shall have a fire-resistance rating of not less than 1 hour. 16 IN-HOUSE RESIDENT OCCUPANTS UP TO 8 STAFF MEMBERS ALLOWED ROUGH WOOD-BLOCKING TYPE OF CONSTRUCTION OCCUPANCY GROUP R CONTRACTOR SHALL ARRANGE FOR INSPECTIONS AND TESTS SPECIFIED OR REQUIRED BY THE -FIRE EXTINGUISHING SYSTEM: YES / NO TYPE: NFPA 13 SPRINKLER SYSTEM 2. Dwelling unit and sleeping unit separations in buildings of Type IIB, Type IIIB, and Type VB CITY/COUNTY BUILDING DEPARTMENT AND SHALL PAY ALL FEES AND COSTS FOR THE SAME. IT -FIRE ALARM SYSTEM: YES / NO 10≤ X <30 construction, shall have fire resistance ratings of not less than ½ hour in buildings equipped throughout SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SECURE AND PAY FOR ALL PERMITS AND UPON \bigcirc GROUP R-4 OCCUPANCIES FIRE AREAS, NOT MORE THAT 4,500 GROSS SQ. FT., AND NOT CONTAINING MORE THAT 16 RESIDENTS, PROVIDED THAT THE BUILDING IS EQUIPPED THROUGHOUT WITH AN APPROVED FIRE ALARM SYSTEM THAT IS INTERCONNECTED AND RECEIVES IT'S PRIMARY POWER FROM THE BUILDING WIRING AND A COMMERCIAL POWER with an automatic sprinkler system in accordance with Section 903.3.1.1. COMPLETION OF THE WORK (PRIOR TO FINAL PAYMENT) DELIVER TO THE OWNER A CERTIFIED CERTIFICATE OF OCCUPANCY FROM THE CITY/COUNTY BUILDING AND ZONING DEPARTMENT. 708.4 Continuity CONTRACTOR SHALL BE REQUIRED TO CARRY COMPREHENSIVE LIABILITY INSURANCE IN THE AMOUNT OF 50 The supporting construction shall be protected to afford the required fire-resistance rating of the wall THE CONTRACT AND WORKMAN'S COMPENSATION INSURANCE AT HIS OWN EXPENSE. THE A.I.A. GENERAL GROUP R-4 CONDITION 1: AT LEAST ONE OF THE SLEEPING UNITS SHALL BE AN ACCESSIBLE UNIT. supported, except for walls separating tenant spaces in covered and open mall buildings, walls CONDITIONS OF THE CONTRACT FORM A201 (LATEST EDITION) ARE HEREBY MADE A PART OF THIS separating dwelling units, walls separating sleeping units and corridor walls, in buildings of Type IIB, IIIB, ∞ CONTRACT AS IF WRITTEN ON THE DOCUMENTS. and VB construction. ∞ Exceptions: 6. Fireblocking or draftstopping is not required at the partition line in buildings, equipped with an \sim automatic sprinkler system installed throughout in accordance with Section 9033.3.1.1 or 903.3.1.2, \sim provided that automatic sprinklers are installed in combustible floor/ceiling and roof/ceiling spaces. **ABBREVIATIONS** PROJECT TEAM GRAPHIC SYMBOLS DRAWING INDEX AR SHEET TITLE SHEET TITLE INC. SHEET SHEET TITLE INC. SHEET SHEET TITLE Project Architect FLOOR OR POINT ELEVATION ELECTRIC WATER COOLER ARCHITECTURAL/CIVIL MECHANICAL/PLUMBING CONTINUED OUTSIDE FACE CENTER LINE **FOUNDATION** A0.1 COVER SHEET PLUMBING GENERAL NOTES & LEGEND Donald L. Welch CENTER LINE OVERHEAD DOOR **FOUNDATION** FIRE EXTINGUISHER A0.2 **SPECIFICATIONS** P02 PLUMBING EQUIPMENT SPECIFICATIONS OPEN WEB STEEL JOIST FIRE EXTINGUISHER CABINET O.W.S.J. Architect A0.3 **SPECIFICATIONS** P11 PLUMBING SCHEDULES ANCHOR BOLT POUNDS PER CUBIC FOOT **SPECIFICATIONS** P12 PLUMBING DETAILS **ADJUSTABLE** KEY NOTE ABOVE FINISH F 7533 Sandy Land Lane C100 UTILITIES PLAN PLUMBING DETAILS POUNDS PER LINEAL FOOT AMERICAN INSTITUTE FOOTING Midvale, Utah 84047-2799 GAGE/GAUGE C200 DETAILS MECH/PLUMB ROOF PLAN-BUILDING 'A' 801-548-6391 dwelch5977@msn.com EXISTING SITE PLAN MECHANICAL PLAN-BUILDING 'A' A1.1 APPROXIMATE GALVANIZED DOOR NUMBER GOVERNMENT FURNISHED Civil Engineers PLUMBING PLAN-BUILDING 'A EXISTING DEMOLITION FLR. PLAN-BUILDING 'A' A.S.T.M. CONTRACTOR INSTALLED POUNDS PER SQUARE INCH AMERICAN SOCIETY FOR GOVERNMENT FURNISHED D3.1 EXISTING DEMO. ELEVATIONS-BLDG'S. 'A' & 'E ELECTRICAL DEFORMED BAR ANCHOR GALLONS PER MINUTE A2.1 REMODELED DIMENSION FLR. PLAN-BLDG. 'A' EE001 SYMBOL SCHEDULE, SHEET INDEX FIXTURE TAG REINFORCED A2.1A REMODELED FLOOR PLAN-BLDG. 'A' ES101 BLDG. **GOVERNMENT** REQUIRED BUILDING **BENCHMARK** GYPSUM WALL BOARD REVISION TAG REMODELED REFLECTED CLG. PLAN-BLDG. 'A' POWER PLAN-BUILDING 'A' EP11A ROUGH OPENING B.0. BOTTOM OF GYPSUM WALL BOARD David Jenkins, PE, SE SCHEDULE HANDICAPPED EXISTING ROOF PLAN-BLDG. 'A' EP401 TYPICAL POWER PLANS STEEL DECK INSTITUTE A3.1 EXIST'G. REMODELED ELEV'S.-BLDG'S. 'A' & 'E EP501 DETAILS HOLLOW METAL 45 West 10000 South, Suite 500 BETWEEN A4.1 ENLARGED PLANS-BUILDING 'A' EP502 DETAILS BUILDING OR WALL ELEVATION Sandy, UT 84070 CONSTRUCTION . HEADED STUD ANCHOR ENLARGED PLANS-MISC. PLANS EP503 Phone: 801-255-0529 CEILING HEATING/VENTILATION/ SOUND TRANSMISSION **EQUIPMENT KEYED NOTES** EP601 ONE-LINE DIAGRAM Fax: 801-255-4449 WALL SECTION CONCRETE MASON AIR CONDITIONING COEFFICIENT A6.1A FINISH SCHEDULE EP602 PANEL SCHEDULES COL. STANDARD CONCRETE Mechanical/Plumbing/ INSIDE DIAMETER STIFFENER A7.1A DOOR SCHEDULE PANEL SCHEDULES CONTINUOUS STRUCTURAL INSIDE FACE BUILDING SECTION \bigcirc Electrical Engineers A7.1C DOOR HARDWARE SCHEDULE LIGHTING PLAN-BUILDING 'A' SUSPENDED COORDINATE INFORMATION THROUGH A8.1 ARCHITECTURAL DETAILS LIGHTING FIXTURE SCHEDULE CAP PLATE INSULATION INTERIOR ELEVATION CONTRACTION LAVATORY TOP OF A8.2 ACCESSIBILE AND FIRE PENETRATION DETAILS EY11A AUXILIARY PLAN-BUILDING 'A' TOP OF ASPHALT LT. WT. DEPARTMENT TOP OF CURB ENTERY MECHANICAL/PLUMBING FA11A FIRE ALARM PLAN — BUILDING 'A' TOP OF FOOTING ROOM NAME & NUMBER MAINTENANCE TOP OF SLAB DIAMETER MANUFACTURER MECHANICAL GENERAL NOTES & LEGENDS MAXIMUM MECHANICAL EQUIPMENT SPECIFICATIONS MATERIAL MASONRY CONTROL JOINT MECHANICAL SCHEDULES & DETAILS EACH FACE UNLESS NOTED MECHANICAL EXPANSION JOINT OTHERWISE MANUFACTURER MASTER GRID LINES M12 MECHANICAL DETAILS ELEVATION VINYL COMPOSITION MINIMUM Benjamin J. Schlup ELEVATION M13 MECHANICAL DETAILS MISCELLANEOUS VERTICAL -Mechanical/Plumbing Engineer MASONRY OPENING VESTIBULE Peter E. Johansen, P.E. VENEER EACH WAY NOT IN CONTRACT **EXISTING** WITH - Electrical Engineer **EXPANSION** NOT TO SCALE PARKING GRID LINES 324 South State Street, Suite 400 WELDED WIRE FABRIC EXTERIOR ON CENTER Salt Lake City, UT 84111 [p] 801-328-5151

onald L. Welch Architect

THE DESIGNS SHOWN AND DESCRIBED HEREIN NCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & CAN NOT BE COPIED, DUPLICATED, OR COMMERCIALLY EXPLOITED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM DONALD I. WELCH

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THESE DRAWINGS ARE AVAILABLE FOR LIMITED REVIEW AND EVALUATION BY CLIENTS CONSULTANTS, CONTRACTORS, GOVERNMENT AGENCIES, VENDORS, AND OFFICE PERSONNEL DNLY IN ACCORDANCE WITH THIS NOTICE.

consultant:

project: Tenant Finish

Brighton Recovery
Campus

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

> date DECEMBER 28, 2016

JANUARY 3, 2017
SECOND SUBMITTAL FOR
EACH SEPERATE BUILDING PARCEL

JANUARY 6, 2017

ADDENDUM #2-BUILDING 'C'

JANUARY 17, 2017

ADDENDUM #4-BUILDING 'B'

FEBRUARY 24, 2017

ADDENDUM #7-BUILDING 'A'

ADDENDUM #7-BUILDING 'A'
BUILDING 'F', 'B', 'C', 'D', 'E'
MARCH 20, 2017

ADDENDUM #8-BUILDING 'A'
BUILDING 'F'

project no:
drawn by:
checked by:
title

TITLE SHEET

sheet

AO

B. In the event any conflicting items should occur in the drawings, general notes, specifications, building codes, or soils report, that condition or requirement which is the most stringent shall govern.

C. Any construction technique, process, or specialty not specifically dealt with in these plans shall be in ac- cordance with the minimum requirements set forth in the 2015 edition of the International Building Code, 2015 International Existing Building Code, any applicable local municipal code, or manufacturer's or trade association's recommendations; the most stringent shall govern.

D. Any proposed modifications or changes to these plans are subject to review by the Architect. The Architect shall NOT BE RESPONSIBLE FOR ANY CHANGES made without his knowledge and written approval.

E. The contractor shall abide by the requirements set forth in the "General Conditions of the Contract for Construction", A.I.A. Document A-201, dated 2012.

F. ALL MATERIALS MENTIONED HEREIN MAY NOT BE USED IN EVERY BUILDING (coordinate with drawings).

G. Any "or equal" note shall mean "if approved by the Designer in advance. H. For all applicable Specification Sections: Comply with gov-

erning codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

DIVISION 2 - SITEWORK 02010 - SUBSURFACE INVESTIGATION

-NOT APPLICABLE SECTION 02419 - SELECTIVE DEMOLITION PART 1 GENERAL

PART I - GENERAL

1.1 SECTION INCLUDES A. Selective Site Demolition:

1. Demolition of designated site improvements including paving, curbing, site walls, and utility structures 2. Demolition of below-grade foundations and site

improvements to depth to avoid conflict with new construction or site work 3. Removal of hollow items or items which could collapse.

4. Salvage of designated items.

Protection of site work and adjacent structures 6. Disconnection, capping, and removal of utilities. 7. Pollution control during building demolition, including noise

8. Removal and legal disposal of materials. 9. Designated site improvements and adjacent construction.

10. Interruption, capping or removal of utilities as applicable.

B. Selective Building Demolition: 1. Selective demolition of interior partitions, systems, and building components designated to be removed

2. Selective demolition of exterior facade, structures, components designated to be removed. 3. Protection of portions of building adjacent to or affected by selective demolition

4. Removal of abandoned utilities and wiring systems. 5. Notification to Owner of schedule of shut-off of

utilities which serve occupied spaces 6. Pollution control during selective demolition, including noise 7. Removal and legal disposal of materials. 8. Protection of designated site improvements and

adjacent construction. Salvage of designated items. 10. Interruption, capping or removal of utilities as

applicable C. Hazardous Materials:

 Not present. 2. Removed under separate prior contract. 3. Removed as a part of this contract.

1.2 QUALITY ASSURANCE A. Codes and Regulations: Comply with governing codes Use experienced workers. and regulations. 1.3 SEQUENCING

A. Immediate areas of work will not be occupied during selective demolition. The public, including children, may occupy adjacent B. No responsibility for buildings and structures to be demolished will be assumed by the Owner.

C. Ensure that products of this section are supplied to time to prevent interruption of affected trades in construction progress. PART 3 EXECUTION

3.1 SELECTIVE DEMOLITION

A. Demolition Operations: Do not damage building elements and improvements indicated to remain. Items of salvage value, not schedule of salvage items to be returned to Owner, shall be removed from structure. Storage or sale of items at project site

prohibited. B. Utilities: Locate, identify, disconnect, and seal or cap off buildings to be demolished. C. Shoring and Bracing: Provide and maintain interior and exterior shoring and bracing.

D. Occupied Spaces: Do not close or obstruct streets, walks. drives or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner and authorities having

jurisdiction. If necessary, provide temporary utilities. E. Operations: Cease operations if public safety or remaining structures are endangered. Perform temporary corrective measures until can be continued properly.

F. Security: Provide adequate protection against accidental trespassing. Secure project after work hours. G. Restoration: Restore finishes of patched areas. 3.2 SCHEDULE

A. Items to be Salvaged for Delivery to Owner: Doors and hardware.

D. Utilities Requiring Interruption, Capping, or Removal: Electric.

Heat. Water. Gas. 5. Sewerage 02730 - SANITARY SEWERAGE

PART I - GENERAL

A. The contractor and plumber shall check actual sewer depth PRIOR to foundation excavation. If sewer depth is inadequately shallow for construction according to plans, the contractor shall notify the Architect in writing, and obtain Architect's response before proceeding with excavation work.

DIVISION 3 - CONCRETE 03300 - CAST-IN-PLACE CONCRETE

PART I - GENERAL

A. If requested, submit concrete mix designs to general contractor for approval prior to any pours.

B. Concrete compressive strength of all footings, stem walls, crawlspace foundation walls, and interior slabs-on-grade shall be equal to at least 2500 psi within 28 days after pouring; whereas full basement walls and retaining walls shall attain a compressive strength of at least 3000 psi. Minimum strength for exterior flatwork shall be 2500 psi, but 3000 psi is recommended.

PART II - PRODUCTS

A. Cement shall be gray Portland Type II, low alkaline. Slump shall be 3 to 4 maximum for stem walls and footings, 4 to 5 maximum for walls, and slabs-on-grade, including interior slabs-on-grade, self-supporting slabs, exterior concrete porches, driveways and sidewalks. B. Continuous footings shall be 10" deep x 20" wide, w/ (2) #4 bars x cont., and #4 J-bar dowels at 24" o.c. (unless

noted otherwise on drawings). C. Foundation walls shall be 8" wide (typical unless otherwise noted on drawings)

D. All foundation walls shall be reinforced with #4 bars @ 24" o.c. horizontally & vertically, with every other vertical bar tied to footing dowel (unless noted otherwise on drawings).

E. Fly ash content shall not exceed 15% in any mix design. F. All metal reinforcing bars shall be ASTM A-615 grade 60

G. Welded wire fabric/mesh shall comply with ASTM A 185. H. Where 6" x 6" welded wire mesh is recommended, slabs shall be 4" thick and have "chairs" @ 3'-0" o.c. each way to hold mesh 1" minimum above bottom of slab.

PART III - EXECUTION

A. All concrete work shall comply with A.C.I. Standard Specification for Structural Concrete for Buildings (A.C.I. 301-72; revised 1981). B. All walls shall be shored prior to backfilling.

C. Maximum spacing of horizontal bars in stem walls shall be D. All reinforcing bars shall be anchored and spaced from the forms (unless otherwise noted) as follows: 3/4" in protected walls and suspended slabs, 2" in unprotected

walls, and 3" above bottom of footings. E. All splices in continuous reinforcing bars are to be lapped a minimum of 40 bar diameters.

treated lumber or redwood. See 06 610 - Rough

F. Horizontal reinforcing shall run continuous around foundation wall corners, or shall be tied to corner rebar G. All lumber in contact with concrete to be pressure

Carpentry. **DIVISION 5 - METALS**

05120 - STRUCTURAL STEEL PART I - GENERAL See DIVISION 1

A. All structural steel shall conform to ASTM a-36, Fy = 36 ksi, and anchor bolts shall conform to ASTM A-307.

05500 - METAL FABRICATIONS PART I - GENERAL

See DIVISION 1

PART II - PRODUCTS

A. Materials:

1. Steel plates, shapes, and bars: ASTM A 36. Steel bar grating: ASTM A569. Bolts: ASTM A 325.

4. Fasteners: Zinc coated fasteners designed for loading and use.

PART III - EXECUTION

A. Take field measurements prior to fabrication. Do not delay job; allow for cutting and fitting if field measurement not practical.

B. Form work true to line with sharp angles and edges. Weld continuously, grind flush and make smooth on exposed surfaces.

C. Lintels: Provide sizes indicated with 8" bearing each end.

DIVISION 6 - WOOD AND PLASTICS 06100 - ROUGH CARPENTRY

PART I - GENERAL See DIVISION 1

A. All lumber shall conform to PS20-70 (the American Lumber Standard) and be graded by the latest edition of the WWPA. Each piece of lumber shall bear an official grade stamp and trademark. B. Assumed floor and roof loads (verify with local

PART II - PRODUCTS

A. Unless otherwise noted in structural drawings, all structural members shall be of Douglas Fir No. 2 grade or better

B. Timber in contact with concrete shall be redwood

or pressure treated fire C. Exposed wood columns and timbers shall be Douglas Fir Larch, Construction Grade, and "Free of Heart Center", with edges lightly eased. Concealed columns and timbers may be Douglas Fir Larch No. 1 (Fb=1200 psi, Fv=85, and E = 1,600,000 psi, minimum.

jurisdiction and coordinate w/ Struct. Drawings and notes.

D. Framing anchors shall be "Simpson Strong-Tie", "Teco", or "Silver Metal Products, Inc.". Provide Simpson connectors at locations as required or where indicated on on framing drawings. Use "Simpson Ornamental Connectors" or equal, at front entry porch posts and beams (unless otherwise directed by Owner).

E. All headers shall be (2) 2 x 12's minimum, unless otherwise noted.

F. Provide cross bridging at midspan for all spans over 8'-0", and at one-third points for spans over 16'-0" (bridging not required with TJI floor system, unless noted otherwise. G. Provide and install tie-down clips as per code on each

truss, alternate ends. H. Provide diagonal bracing at all truss gable ends. I. Bearing walls supporting two floors shall be 2 x 6 studs

@ 16" o.c. anchored as noted in structural notes. Non-bearing interior walls shall be 2 x 4 studs @ 16" o.c. J. Interior (non-bearing) prefabricated "Marbeline columns to be as directed, selected and approved by Owner & Designer.

PART III - EXECUTION

A. All built-up beams and typical headers shall be nailed together with 16d nails at each end, and construction adhesive between members. Typical headers shall, in addition, contain a single solid layer of 1/2" CDX plywood between members

B. Crown all framing members. C. Provide solid fire blocking at floor and roof lines for fireplace chase.

D. Double framing members shall be provided directly below roof-mounted equipment plates, hangers for heavy equipment, and hangers for any and all piping 4" in diameter or larger, unless otherwise detailed.

E. Double joists under all parallel partitions. F. All wood stud bearing walls over 10'-0" high shall have horizontal herringbone bridging, not less than 2" nominal thickness x same width as studs, fitted tight and spiked to studs. Bridging shall be at mid-height of partition, or not more than 7'-0" o.c. in any situation. For walls over 10'-0" in height studs shall be minimum 2 x 6 studs at 16" o.c. with horizontal herringbone bridging of same dimension, fitted tight and spiked to studs.

Bridging shall be spaced at one-third points. G. Provide solid blocking at all bearing walls, midheight. H. Cross bridging or bracing shall be provided at all floor

and roof joist locations where the span exceeds 8'-0" clear. Span locations that exceed 16'-0" clear shall receive bridging at one-third points. Bridging shall be Simpson Strong-Tie (or equal) Nailess Metal Bridging, min. 16 gauge steel with "V" section, or solid bridging not less than one size smaller than joist.

I. Minimum nailing of lumber members shall be installed in accordance with U.B.C. tables or other applicable local building codes.

J. Bearing walls shall have double top plates with ioints lapped a minimum of 48", and fastened together with a minimum of (10) 16d nails each side of lap; nails shall be driven in pairs at a maximum spacing of 12" o.c.

K. Provide bracing at all corners and at every 25', minimum, along all exterior walls unless otherwise noted on structural plans. Braced area shall be not less than 25% of total exterior wall area. L. Wood Treatment: Preservative treatment: Pressure

treated with waterborne preservatives, to comply with AWPB LP-2 for above-ground items. Kiln dry after treatment to 19% max. moisture content for lumber and 15% for plywood. Treat above-ground wood exposed to deterioration by moisture and all wood in contact with the ground or fresh water.

06112 - PLYWOOD AND DIAPHRAGMS PART I - GENERAL See DIVISION 1

PART II - PRODUCTS

A. Unless otherwise noted in structural drawings, Roof sheathing shall be 5/8" waferboard sheathing or 5/8" CDX plywood with exterior glue, bearing a 42/20 span index. "Simpson Strong-Tie" plywood sheathing clips shall be installed at midspan at all locations where spacing of trusses exceeds 24" o.c. Fasten plywood at edges with 8d commons at 6" o.c., or 14 gauge 1 1/2" staples. Fasten field of panels with 8d commons at 12" o.c., or 14 gauge 1 1/2" staples.

B. Floor sheathing shall be 3/4" C.D.X. T & G plywood or waferboard with exterior glue, bearing a 42/20 span index, minimum. Fasten with 10d ring shank nails at 6" o.c. at edges and boundary, and 10" o.c. in field, or use 16 gauge 1 5/8" x 7/16" staples at 2 1/2" o.c. at edges and 4" o.c. in field.

C. Structural shear panels at exterior and interior walls shall be 1/2" C.D.X. plywood or waferboard 24/0 nailed same as roof sheathing above. Solid block above shear panels, and nail through sheathing with (4) 8d nails and toenail with (3) 16d nails minimum. D. Non-structural shear panels at walls may be 1/2" celotex.

E. Provide metal hurricane ties at each rafter or truss. PART III - EXECUTION

A. All sheathing shall be installed with joints staggered, and face grain running perpendicular to framing direction, with a two-span minimum.

06190 - PREFABRICATED WOOD TRUSSES

PART I - GENERAL See DIVISION 1 THIS SECTION PERTAINS TO ANY EXISTING WOOD TRUSSES THAT MAY BE NECESSARY TO BE REPLACED-FIELD VERIFY AND INSPECT ALL EXISTING

A. Provide prefabricated and pre-engineered wood trusses. B. Comply with recommendations of TPI Design Specifications

ROOF TRUSSES

for Metal Plate Connected Wood Trusses. PART II - PRODUCTS

A. Trusses: Standard dimensional lumber connected by metal plates. B. Wood: Softwood meeting stress rating and design requirements. C. Metal Plates: Galvanized sheet steel, ASTM A 446, Grade A, coating G60.

D. Accessories: Wind anchors and bracing. 06200 - FINISH CARPENTRY AND MILLWORK

A. Provide finish carpentry for exterior items exposed to view: 1. Running and standing trim and moldings. 2. Door frames. 3. Decorative elements.

B. Provide finish carpentry for interior items exposed to view: 1. Running and standing trim and mouldings, door and window casing, paneling, wood shelving and closet accessories, wood stair treads, rails and balusters, wood valences, decorative elements, and fireplace mantel. C. Provide custom millwork with ship finish 1. Wood casework and cabinets, plastic laminate casework

and countertops. Quality standard for fabrication

Standards. Premium grade unless noted otherwise.

and products: Architectural Woodwork Institute Quality

See DIVISION 1

PART II - PRODUCTS

PART I - GENERAL

A. Exterior finish carpentry: Trim and boards for transparent finish: N.A. Trim and boards for painted finish: Clear pine or

fir. or other softwood suitable for exposure and use. B. Interior finish carpentry and millwork: . Trim and boards for transparent finish: N.A. 2. Trim and boards for opaque finish: Softwood suitable for exposure and use. Base and door casing shall

be 3" colonial profile (coordinate with Owner). Profile to be approved by Owner. 3. Plastic Laminate: NEMA LD-3, 0.050" thick horizontal grade. At counters, adhere to 3/4" particle substrate. 4. Wood shelving and closet accessories.

5. Wood stair treads, risers, stringers (including circular stair-to be designed by stair manuf. as directed by home Designer), rails and balusters. 6. Fireplace mantels as directed by Owner and Designer.

C. Shelving and closets: . Service and closet shelving: Melamine with round nosing. 2. Wall brackets: Knape and Vogt or approved equal. 3. Closet bars: Telescoping steel with chrome finish.

PART III - EXECUTION

A. Provide work to sizes, shapes, and profiles indicated. Install work to comply with quality standards referenced. Back prime work and install plumb, level and straight with tight joints; scribe work to fit.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

07196 - NON WOVEN AIR RETARDERS PART I - GENERAL See DIVISION 1

A. Furnish and install air retarder on the exterior

side of exterior wall sheathing PART II - PRODUCTS

A. Approved Manufacturers: Barracade by Simplex Products Division, Adrian, MI. 2. Rufcowrap by Raven Industries, Sioux Falls. SD.

3. Tyvek Housewrap by DuPont Company, Wilmington, DE.

PART III - EXECUTION A. Install in accordance with manuf. instructions over

exterior wall sheathing. Seal penetrations through air infiltration retarder immediately prior to installation of finish material. B. Vapor retarder is to be air tight and free from holes, tears,

and punctures. 1. At completion of air infiltration retarder installation, inspect exposed air infiltration retarder for holes, tears, and punctures and repair damaged areas.

07200 - INSULATION PART I - GENERAL

See DIVISION 1

A. Provide building insulation of blanket and loose-fill types as applicable: 1. Roofs and attics (interior), fiberglass batt or loose fill type insulation.

2. Exterior stud walls, fiberglass, mineral fiber batt or loose fill type insulation. 3. Soffits (where occurs at structural overhang), floors of living spaces above garage & crawlspace.

B. Provide vapor barrier at building perimeter. C. Use experienced installers.

PART II - PRODUCTS A. Blanket/batt type insulation: Unfaced, 4 mil visqueen (vapor barrier), glass fiber blanket insulation types; Owens Corning Fiberglass Corp. or approved equal (ALTERNATE: Loose fill type insulation). Roof:

a. 12" fiberglass batt, R-38 (or loose fill type insul.), 4 mil visqueen. 2. Exterior stud walls and floors over crawlspace, garage, or overhang:

a. 6" fiberglass batt, R-19 (or loose fill type insul.), 4 mil visqueen; 3 1/2" fiberglass batt, R-11 (min.) @ basement fndn. walls (Coord. w/ Owner). B. Alternate loose fill type insulation: Loose, granular

perlite or vermiculite. C. Vapor barrier: 4 mil clear polyethylene sheet. PART III - EXECUTION

A. Install materials and systems in accordance with

manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction. Coordinate with work of other sections. Provide full thickness in one layer over entire area, tightly fitting around penetrations B. Install vapor barrier over entire area of inside face of exterior walls and elsewhere as indicated. Seal all seams and around perimeter and penetrations with duct

tape to form a continuous vapor barrier free of holes.

C. Protect installed insulation and vapor barrier. D. Blow loose insulation into required areas; take great care to provide uniform coverage at correct density and thickness to obtain specified R-value. SECTION 07320 **CLAY ROOF TILE**

PART 1 GENERAL

1.1 SECTION INCLUDES A. Replacement of existing Clay roof tiles and roof system components if required and determined necessary.

B. Underlayment. C. Related roof accessories.

1.5 QUALITY ASSURANCE A. Manufacturer Qualifications: Minimum five years documented experience producing concrete roof tile and member of Tile Roof Institute. B. Installer Qualifications: Minimum five years documented experience installing products specified in this section and/or supervision by a

1.6 DELIVERY, STORAGE, AND HANDLING

manufacturers authorized installation representative.

A. Store products in manufacturer's unopened packaging with labels intact until ready for installation. B. Deliver products to project site in manufacturer's unopened pallets, labeled with data indicating compliance with specified requirements. C. Maintain dry storage area for products of this section until installation of products.

1.7 SEQUENCING A. Ensure that locating templates and other information required for

installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress. B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.8 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's B. Do not overload the roof. Distribute stacks of tile uniformly on roof

1.9 WARRANTY A. 50-Year Limited Warranty is available on all MCA Tiles. 1.10 EXTRA MATERIALS

at not greater than 12 inches (305 mm) in height.

A. Provide an additional 1 percent of installed roof tiles, but not less than one full square, for Owner's use in roof maintenance. C. Furnish extra materials packaged with protective covering for storage and identified with labels clearly describing contents.

PART 2 PRODUCTS

2.1 MANUFACTURERS

B. Substitutions: As approved

A. Clay Tile General:

A. Acceptable Manufacturer: MCA Clay Roof Tile, which is located at: 1985 Sampson Ave.; Corona, CA 92879; Toll Free Tel: 800-736-6221; Tel: 951-736-9590; Fax: 951-736-6052; Email: request info (sales@mca-tile.com); Web: www.mca-tile.com

C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements. 2.2 CLAY ROOF TILE

1. Made with up to 59 percent recycled raw materials and are 100 percent recyclable. 2. Class A fire rated. 3. Cool Roof and Energy Star rated.

4. Weight per square: 788 lbs (38 kg/m2).

B. One Piece "S" Mission Roofing Tile: Type I, ASTM C 1167 Grade 1 and ASTM E 108 (UL790), Class A. 1. Complies with Uniform Evaluation Report IAPMO ES 0356 (covers City of Los Angeles and is in lieu of ICC-ES), Florida Building Code -FL1109-R. Miami-Dade County Approval 12-0320.32 and TDI Approval

2. Size: 19 inches by 14-1/2 inches (463 mm by 368 mm) 3. Exposed Size: 16 inches by 12 inches (406 mm by 305 mm)

5. Weight per piece: 10.5 lbs (4.8 kg). Pieces per square: 75 pcs (pieces per M2: 8.073 pcs). 7. Color: Color to match existing unless otherwise determined

2.3 ACCESSORY MATERIALS A. Substrate Materials: 1. Nailer Boards: Decay resistant, nominal 2 inches (50 mm) by sufficient height to satisfy project conditions, not bowed or twisted.

B. Underlayment: 1. No. 30 asphalt felt or equivalent complying with ASTM D 226, C. Fasteners: Sized to penetrate deck minimum 3/4 inch (19 mm) or through thickness of deck or batten. 1. Minimum No, 11 gage, 5/16 inch-diameter-head (7.9 mm),

corrosion-resistant nails. D. Rake and Gable End: 1. Prefabricated Rake and Ridge tile. Choose to match tile profile and color. ** NOTE TO SPECIFIER ** Select the required flashing material from the

following paragraphs and delete those not required. Coordinate with flashing

specified in other sections of the specification. E. Flashings: 1. Ribbed Valley Metal, minimum 0.016-inch (26 gauge galvanized sheet) corrosion resistant metal flashing. 2. Other Flashing: At the juncture of the roof and vertical surfaces, flashing and counter-flashing shall be provided per roofing manufacturer's instructions, and when the flashing and counterflashing are of metal, they shall be not less than 0.019-inch (No. 26 galvanized sheet gage) corrosion-resistant metal.

3. Plumbing Stacks and Other Pipes Penetrating Roofs as recommended by the manufacturer. NOTE TO SPECIFIER: Select adhesive if required, delete if not required.

F. Mortar materials, plastic cement and sealant: Code approved adhesive suitable to bond to clay roof tile. 1. Cement Mortar: ASTM C 270, Type M 2. Sand: ASTM C 144.

for metal and concrete roofing decks.

3. Portland cement: ASTM C 150, Type 1. 4. Plastic cement: ASTM D 2822. 5. Silicone sealant: ASTM D 1002. G. Snow Retention: Provide as required per local code and snow loads

3.1 EXAMINATION A. Do not begin installation until substrates have been properly prepared. B. Verify surfaces are uniform free of ridges, warp or voids, smooth, clean and dry

notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

Cold and Snow Regions.

PART 3 EXECUTION

A. Clean surfaces thoroughly prior to installation. B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result under the project conditions. 3.3 INSTALLATION - GENERAL A. Install in accordance with manufacturer's instructions and the

C. If substrate preparation is the responsibility of another installer,

following: IAPMO UES Evaluation Report 0356 - Clay Roof Tiles. 2. IAPMO UES ER-2015 - TRI Concrete and Clay Roof Tile Installation Manual (TRI Installation Manual) 3. TRI Cold & Snow Concrete and Clay Tile Design Criteria for

3.4 INSTALLATION A. Install in accordance with manufacturer's instructions and the applicable building code

1. Deck surfaces must be clean and dry prior to installation of underlayment. Foreign particles must be cleaned from all interlocking areas to ensure proper seating and to prevent water damming. 2. Fascia boards or cant strips must be installed to properly elevate the first tile course.

B. On vertical applications, and on extremely steep pitches where wind currents may cause lift: 1. Set the butt of each tile in a bead of the specified plastic cement or sealant, or provide stainless steel "Wind Locks" as required 2. Use plastic cement and sealant carefully, and avoid smearing the exposed tile surface.

NOTE TO SPECIFIER: Select paragraphs applicable to the tile specified under Products and delete the paragraphs that are not applicable. 3) Completely and neatly fill and point up all voids. C. Visual Inspection: Avoid color patterning, checkerboarding, spotting,

1. After the installation of each 80 roofing tiles, make a visual

inspection from the ground level and at a distance from the building of about 40 feet (12 m). 2. Verify that tile courses follow straight and true lines; 3. Verify that color range is smooth with no abrupt changes.

4. Make necessary corrections before proceeding with further installation 3.5 CLEANING A. Remove all broken tile, debris and excess tile from roof. B. Sweep cut tiles clean.

3.6 REPAIR AND REPLACEMENT A. Damaged Tile: Break out damaged roof tile. Repair torn underlayment

3. Drive fastener flush. 4. Apply minimum 3/8 inch (10 mm) by 2 inch (51 mm) bead of approved adhesive on tile in course below replacement tile. 5. Immediately set replacement tile in position assuring proper

** NOTE TO SPECIFIER ** For hip cuts on roof pitches greater than 7:12, mechanical fastening may be required. 1. Apply a minimum of 3/8 inch (10 mm) by 2 inch (51 mm) bead of approved adhesive at head of cut tile. 2. Immediately set tile in course above in position assuring

A. Protect installed products until completion of project. B. Touch-up, repair or replace damaged products before Substantial

07600 - FLASHING AND SHEET METAL

B. Damaged Small Valley and Hip Cuts:

PART I - GENERAL See DIVISION 1

A. Provide flashing and sheet metal components for building construction.

2. Metal counter-flashing.

3. Gutters and downspouts 4. Exposed metal trim units. Miscellaneous sheet metal accessories.

proper contact.

3.7 PROTECTION

PART II - PRODUCTS A. Flashing (including preformed metal fascia): 1. 20 gauge galvanized steel, G90 galvanizing, ASTM A 525. Flashing and fascia to be painted. Color as selected

2. Aluminum: 20 gage alloy 3003 anodized aluminum. Color as selected by Owner. 3. Aluminum clad fascia and soffits (coord. w/ Owner & B. Gutters and downspouts:

G90 galvanizing, ASTM A 525. 2. Downspouts connected to 24" long concrete splashblock.

PART III - EXECUTION A. Follow recommendations of SMACNA "Sheet Metal Manual". Allow for expansion. Isolate dissimilar materials.

1. Galvanized Steel: 20 gage galvanized steel,

B. Flashing along the junction where any sloping roof surface abuts a vertical wall, parapet, chimney, etc., shall be stepped separately with each shingle course C. Install roof vents to provide a net free ventilating area

soffit, and half near ridge.

not less than 1/300 of the attic floor area, half at

Welch

rchitect $\Delta \infty$ Donald

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THESE DRAWINGS ARE AVAILABLE FOR LIMITED REVIEW AND EVALUATION BY CLIENTS CONSULTANTS, CONTRACTORS, GOVERNMENT AGENCIES, VENDORS, AND OFFICE PERSONNE DNLY IN ACCORDANCE WITH THIS NOTICE.

consultant:

Tenant Finish for Brighton Recovery

4905, 4911, 4915, 4925,

4931, 4953 South 900 East

Salt Lake County, Utah

project:

date **DECEMBER 28, 2016**

revisions **JANUARY 3, 2017** SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL **JANUARY 6, 2017**

/2 addendum #2-building '(

JANUARY 17, 2017

FEBRUARY 24, 2017

4 Addendum #4-Building 'B' $^{\prime}$ 7 addendum #7—Building 'a' data project no:

drawn by:

checked by:

sheet

title **SPECIFICATIONS**

PART II - PRODUCTS

A. Exterior Doors: . Solid core flush wood (oak veneer) door (w/ insul. glass)

> at entrie - coord. w/ Architect) with AWI PC-7 particleboard core for exterior use; AWI premium grade. a. Face for transparent finish: Rift cut red oak veneer, book matched for transparent finish. End match transoms (coord. w/ Owner & Architect) b. Face for painted finish: Birch veneer.

2. Metal doors shall be of insulated hollow core construction with surfaces not less than the equivalent of 16 gauge (0.06") sheet metal in thickness. Fire rated at garage/house opening.

B. Interior Doors: 1. Solid core flush panel masonite doors for interior

use with sealed finish and applied molding. C. Shop Finish: Sand and provide first coat of finish system specified in painting section. Wrap and protect. D. NOT USED.

E. All door hardware shall be as noted on hardware schedule and notes. Finish as noted.

PART III - EXECUTION

A. All pin-type hinges which are accessible from outside the secured area when the door is in the closed position shall have non-removeable hinge pins. B. Top and bottom hinges shall have 1/4" steel jamb

studs which project a minimum of 1/4". C. Deadbolts shall be hardened steel, or shall contain hardened

D. Straight deadbolts shall have a minimum throw of 1" and an embedment of not less than 5/8". E. A hook-shaped or expanding lug-type deadbolt shall have a minimum throw of 3/4".

F. Sliding doors and windows shall have a locking device, and shall be constructed and installed, or equipped, with a device to prohibit the raising and removing of the active panel from the track while unit is in the closed position. G. Strike plates shall be secured to the jamb with a

minimum of (2) screws no less than 1 1/2" long. H. Upward-acting doors shall be secured with either a cylinder lock, a padlock with hardened steel shackle and hasp, a metal slide bar or bolt, or any equivalent device.

I. Prefit doors to frames. Factory bevel doors. Adjust, clean, and protect from damage. J. Install doors with not more than 1/8" clearance at top and sides, 1/2" at bottom.

08813 - GLASS AND GLAZING

PART I - GENERAL See DIVISION 1

A. Provide mirrors in bathrooms (coordinate with Owner); all glass in doors and shower enclosures and within 5'-0" of bathtub, and glass within 24" of floor or swinging doors shall be tempered. B. Mount mirror against gypsum board with suitable construction mastic.

PART II - PRODUCTS

A. Glass and Mirrors: meet requirements of ASTM C 1036-85, 'Specification for Flat Glass". 1. Type I, Class 1-Clear. 2. Quality: q2 Mirror or q1 Mirror select. 3. Thickness: 0.16 inch minimum (Double Strength). 4. Size: Field Verify.

DIVISION 9 - FINISHES

09250 - GYPSUM DRYWALL

PART I - GENERAL See DIVISION 1 A. Tolerances: Not more than 1/16" difference in true plane at joints between adjacent boards before finishing. After finishing, joints shall not be visible. Not more than

1/8" in 10' (10 feet) deviation from true plane, plumb, level and proper relation to adjacent surfaces in finished

PART II - PRODUCTS

A. Gypsum board:

1. Interior use: ASTM C 36, 1/2" thick regular, water resistant, and fire resistant types as required; U.S. Gypsum, Gold Bond Div. National Gypsum, Domtar Gypsum or approved equal. a. Provide waterproof gypsum board at all tubs

and showers. b. Provide 5/8" type 'X' gypsum board at garage-side surface of all walls and ceilings of attached garage which adjoin any living space, screwed 7" o.c. maximum. Firetape all joints. Smooth finish. Also Type 'X' gyp. bd. below all stairways.

B. Fasteners: ASTM C 514 and ASTM C 646. Provide Type S bugle head screws at interior, cadmium plated at humid and exterior areas. Provide additional anchors and fasteners as required. C. Joint reinforcement: ASTM C 587 paper or fiberglass tape

and ready-mixed vinyl compound. D. Accessories: Galvanized steel corner beads, casing beads, control joints; U.S. Gypsum 800 series as applicable.

PART III - EXECUTION

A. Comply with ASTM C 840 and GA 216, "Recommended Specifications for the Application and Finishing of Gypsum Board". Fill wall cavities with insulation. Include blocking for accessories and similar items.

B. Install boards vertically. Do not allow butt-to-butt joints and joints that do not fall over framing members.

09300 - TILE

PART I - GENERAL See DIVISION 1

A. Provide and install ceramic and marble tile (coord. w/ Architect). B. Submit to Architect or Owner for approval samples, product data, mock-ups.

C. DIVISION 1 - GENERAL REQUIREMENTS. PART II - PRODUCTS (coord, the following tile with the Owner) A. Unglazed porcelain ceramic mosaic tile: 2" x 2" x 1/4" factory mounted, plain face, square edges except cushion edge at corner; Porcelain Ceramics by American Olean or approved equal, price range 3,

color as selected by Owner: 1. Floor tile, with slip resistant finish. 2. Counter top and bath tub tile (if applicable, coordinate with drawings and Owner). B. Glazed wall tile: 4 1/4" x 4 1/4" x 5/16", plain with modified

square edges, factory mounted; Bright Glazed Tile by

American Olean or approved equal, color as selected by C. Quarry Tile: 12" x 12" x 1/2", unglazed slip-resistant square edged tile; Dal Tile or approved equal, color as selected by Owner.

D. Trim: Matching field tile color, size, texture; coved base. E. Setting Methods: 1. Floors or horizontal surfaces: Thick set latex

Portland cement mortar over waterproof membrane or Laticrete System as per manuf, recommendations. 2. Walls: Thin set latex Portland cement mortar.

3. Grout: Colored latex Portland cement grout. PART III - EXECUTION

A. Comply with Tile Council of America and and ANSI Standard Specifications for Installation for substrate and installation required. Comply with manufacturer's instructions and recommendations. B. Lay tile in grid pattern with alignment grids. Layout

to provide uniform joint widths and to minimize cutting; do not use less than 1/2 tile units. C. Provide sealant joints where recommended by

TCA and approved by Designer. D. Grout and cure, clean and protect.

(If applicable - coordinate 09550 - WOOD FLOORING with Owner) PART I - GENERAL See DIVISION 1

A. Provide finished wood flooring. 1. Wood strip flooring (coord. w/ Owner & Designer. B. Comply with recommendations of National Oak Flooring Manuf. Association and the American Parquet Association.

C. DIVISION 1 - GENERAL REQUIREMENTS. PART II - PRODUCTS (coord. the following tile with the Owner) A. Wood strip flooring: Select grade plain-sawn white oak,

> 25/32" thick; 2 1/4" face width with standard random lengths; tongue and groove edges; Bruce Hardwood Floors or approved equal. 1. Field finish: Sand to level using successively finer sandpaper. : Benjamin Moore Benwood Paste Wood Filler or approved equal. Stain: 1 coat Benjamin Moore Benwood Architectural Penetrating Stain or approved equal. Varnish: 3 coats Benjamin Moore

Satin Finish Varnish or approved equal. B. Trim and accessories: Provide wood trim, saddles, nosing, thresholds matching wood flooring.

PART III - EXECUTION

A. Comply with National Oak Flooring Manufacturer's Association Installation Manual. Provide adequate expansion space B. Restore damaged finishes. Clean and protect work from damage.

09650 - RESILIENT FLOORING

PART I - GENERAL See DIVISION 1

A. Provide resilient flooring and base. B. Submit for approval samples, product data, extra stock.

C. DIVISION 1 - GENERAL REQUIREMENTS. D. Provide materials and adhesives which do not contain asbestos. PART II - PRODUCTS

A. Sheet Flooring: Vinyl sheet flooring: 0.085" overall gage, 0.050" vinyl wear layer; Custom Corlon by Armstrong World

(coord. the following

tile with the Owner)

PART III - EXECUTION

A. Comply with manufacturer's instructions and recommendations. Install in proper relation to adjacent B. Prepare surfaces by cleaning, leveling and priming as required.

Industries, or approved equal.

Test adhesive for bond before general installation. Level to 1/8" in 10' tolerance. C. Sheet flooring: Install sheets with tight joints and pattern in adjoining areas running in the same direction.

Layout to minimize seams as practical. D. Install accessories to minimize joints. E. Clean, polish, and protect.

09680 - CARPET PART I - GENERAL

See DIVISION 1

A. Provide and install carpeting: Carpet and pad for tackless installation. B. DIVISION 1 - GENERAL REQUIREMENTS.

C. Submit for approval samples, product data, warranty, maintenance data, extra stock, proposed seaming layout.

PART II - PRODUCTS (coord. the following tile with the Owner) A. Carpet:

1. Manufacturer and Style: As approved by Owner. 2. Color: As selected by Owner. B. Mounting: 1. Tackless on pad:

a. As approved by Owner. C. Accessories 1. Edge guard: Rubber or vinyl. a. Exceptions:

> 1) At tile use bullnose tile. 2. Reducer strip: Vinyl or rubber.

PART III - EXECUTION

A. Comply with recommendations of Carpet and Rug Institute "Specifier's Handbook"

B. Prepare surfaces and install materials in accordance with manufacturer's instructions and approved submittals. Clean, patch, and level substrate. Install materials in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other

C. Install edge guards and reducer strips as required; clean and protect materials during and after installation.

SECTION 07320 **CLAY ROOF TILE**

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Replacement of existing Clay roof tiles and roof system components if required and determined necessary. B. Underlayment.

 C. Related roof accessories. 1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum five years documented experience producing concrete roof tile and member of Tile Roof Institute. B. Installer Qualifications: Minimum five years documented experience installing products specified in this section and/or supervision by a manufacturers authorized installation representative.

1.6 DELIVERY, STORAGE, AND HANDLING A. Store products in manufacturer's unopened packaging with labels

intact until ready for installation. B. Deliver products to project site in manufacturer's unopened pallets, labeled with data indicating compliance with specified requirements. C. Maintain dry storage area for products of this section until installation of products.

1.7 SEQUENCING

A. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress. B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.8 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits. B. Do not overload the roof. Distribute stacks of tile uniformly on roof at

not greater than 12 inches (305 mm) in height. 1.9 WARRANTY A. 50-Year Limited Warranty is available on all MCA Tiles. 1.10 EXTRA MATERIALS

A. Provide an additional 1 percent of installed roof tiles, but not less than one full square, for Owner's use in roof maintenance. C. Furnish extra materials packaged with protective covering for storage and identified with labels clearly describing contents.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: MCA Clay Roof Tile, which is located at: 1985 Sampson Ave.; Corona, CA 92879; Toll Free Tel: 800-736-6221; Tel: 951-736-9590; Fax: 951-736-6052; Email: request info (sales@mca-tile.com); Web: www.mca-tile.com

B. Substitutions: As approved C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 CLAY ROOF TILE

A. Clay Tile General: 1. Made with up to 59 percent recycled raw materials and are 100

Class A fire rated. 3. Cool Roof and Energy Star rated. B. One Piece "S" Mission Roofing Tile: Type I, ASTM C 1167 Grade 1 and ASTM E 108 (UL790), Class A.

1. Complies with Uniform Evaluation Report IAPMO ES 0356 (covers City of Los Angeles and is in lieu of ICC-ES), Florida Building Code -FL1109-R. Miami-Dade County Approval 12-0320.32 and TDI Approval RC-21. 2. Size: 19 inches by 14-1/2 inches (463 mm by 368 mm) 3. Exposed Size: 16 inches by 12 inches (406 mm by 305 mm)

4. Weight per square: 788 lbs (38 kg/m2).

5. Weight per piece: 10.5 lbs (4.8 kg). 6. Pieces per square: 75 pcs (pieces per M2: 8.073 pcs). 7. Color: Color to match existing unless otherwise determined by

2.3 ACCESSORY MATERIALS A. Substrate Materials: 1. Nailer Boards: Decay resistant, nominal 2 inches (50 mm) by

sufficient height to satisfy project conditions, not bowed or twisted. B. Underlayment: 1. No. 30 asphalt felt or equivalent complying with ASTM D 226,

C. Fasteners: Sized to penetrate deck minimum 3/4 inch (19 mm) or through thickness of deck or batten 1. Minimum No, 11 gage, 5/16 inch-diameter-head (7.9 mm), corrosion-resistant nails

D. Rake and Gable End: 1. Prefabricated Rake and Ridge tile. Choose to match tile profile and color.

E. Flashings: 1. Ribbed Valley Metal, minimum 0.016-inch (26 gauge galvanized sheet) corrosion resistant metal flashing. 2. Other Flashing: At the juncture of the roof and vertical surfaces, flashing and counter-flashing shall be provided per roofing manufacturer's instructions, and when the flashing and counterflashing are of metal, they shall be not less than 0.019-inch (No. 26 galvanized sheet gage) corrosion-resistant

3. Plumbing Stacks and Other Pipes Penetrating Roofs as recommended by the manufacturer F. Mortar materials, plastic cement and sealant: Code approved

adhesive suitable to bond to clay roof tile. 1. Cement Mortar: ASTM C 270, Type M 2. Sand: ASTM C 144. 3. Portland cement: ASTM C 150, Type 1.

4. Plastic cement: ASTM D 2822. 5. Silicone sealant: ASTM D 1002. G. Snow Retention: Provide as required per local code and snow loads

for metal and concrete roofing decks.

PART 3 EXECUTION 3.1 EXAMINATION A. Do not begin installation until substrates have been properly

Architect of unsatisfactory preparation before proceeding.

B. Verify surfaces are uniform free of ridges, warp or voids, smooth, clean and dry C. If substrate preparation is the responsibility of another installer, notify

3.2 PREPARATION A. Clean surfaces thoroughly prior to installation. B. Prepare surfaces using the methods recommended by the

manufacturer for achieving the best result under the project conditions. 3.3 INSTALLATION - GENERAL A. Install in accordance with manufacturer's instructions and the

following: 1. IAPMO UES Evaluation Report 0356 - Clay Roof Tiles. 2. IAPMO UES ER-2015 - TRI Concrete and Clay Roof Tile Installation Manual (TRI Installation Manual). 3. TRI Cold & Snow Concrete and Clay Tile Design Criteria for

Cold and Snow Regions. 3.4 INSTALLATION A. Install in accordance with manufacturer's instructions and the applicable building code. 1. Deck surfaces must be clean and dry prior to installation of

underlayment. Foreign particles must be cleaned from all interlocking areas to ensure proper seating and to prevent water damming. 2. Fascia boards or cant strips must be installed to properly elevate the first tile course.

B. On vertical applications, and on extremely steep pitches where wind currents may cause lift: 1. Set the butt of each tile in a bead of the specified plastic cement or sealant, or provide stainless steel "Wind Locks" as required. 2. Use plastic cement and sealant carefully, and avoid smearing the exposed tile surface.

3) Completely and neatly fill and point up all voids. C. Visual Inspection: Avoid color patterning, checkerboarding, spotting, 1. After the installation of each 80 roofing tiles, make a visual inspection from the ground level and at a distance from the building of about 40

feet (12 m). 2. Verify that tile courses follow straight and true lines; 3. Verify that color range is smooth with no abrupt changes 4. Make necessary corrections before proceeding with further

3.5 CLEANING A. Remove all broken tile, debris and excess tile from roof. B. Sweep cut tiles clean.

3.6 REPAIR AND REPLACEMENT A. Damaged Tile: Break out damaged roof tile Repair torn underlayment.

3. Drive fastener flush. 4. Apply minimum 3/8 inch (10 mm) by 2 inch (51 mm) bead of approved adhesive on tile in course below replacement tile. 5. Immediately set replacement tile in position assuring proper

contact B. Damaged Small Valley and Hip Cuts: 1. Apply a minimum of 3/8 inch (10 mm) by 2 inch (51 mm) bead of approved adhesive at head of cut tile. 2. Immediately set tile in course above in position assuring proper

3.7 PROTECTION A. Protect installed products until completion of project. B. Touch-up, repair or replace damaged products before Substantial Completion

09200 - EXTERIOR INSULATION & FINISH SYSTEM (EIFS)

PART I - GENERAL See DIVISION 1

A. Provide EIFS for exterior walls, to match existing stucco finish and thickness. 1. Exterior Insulation & Finish System, for exterior use. B. DIVISION 1 - GENERAL REQUIREMENTS

C. Contractor to provide submittal (deferred submittal) for EIFS system to Architect, then to city, for review and approval. PART II - PRODUCTS

A. Finish System: Per Manuf's. instructions and recommendations.

1. Prepare finish coat for Top Coat Acrylic Finish (texture to be chosen by Owner). 2. Color to be chosen by Owner. B. Provide submittals to Architect and to Local Jurisdiction

that will meet IBC 1704.12 for a water managment system, with a water resistive barrier, or provide special inspection for non-water management EIFS systems. C. Accessories: Galvanized steel corner beads, casing

beads, control joints, expansion joints, trim. D. Bonding agent for patching: Compatible with substrate E. Exterior rigid insulation per Manuf's. instructions & recommendations.

PART III - EXECUTION

A. Install EFIS in accordance with ASTM C 926 and in accordance with

manufacturer's instructions. B. At patching, prepare surface to sound substrate, apply bonding agent and patching materials in accordance with manufacturer's instructions.

C. Install metal trims at perimeters and joints. At scratch coat form full keys. At second and third coats, ensure tight contact between coats. Tool edges at windows, doors, other openings to small 'V' to control spalling. D. Apply Top Coat per manufacturer's instructions and

recommendations. E. Clean adjacent surfaces soiled during installation. Touch-up damaged surfaces. Protect work from damage.

09900 - PAINTING

PART I - GENERAL See DIVISION 1

A. Provide surface preparation and painting for all unfinished interior and exterior surfaces, including electrical and mechanical equipment with shop primed surfaces.

B. The use of paint containing more than the percent of lead by weight permitted by law is prohibited.

C. First-line standard products for all systems by Benjamin Moore, Pratt and Lambert, Glidden, Sherwin-Williams, Devoe, Howells, or approved equal.

PART II - PRODUCTS

A. Exterior paint systems: 1. Concrete and masonry: 2. Wood for opaque finish (walls): 3. Wood for opaque finish (trim): Acrylic latex stain 4. Wood for semi-transparent finish: Semi-transparent stain (flat appearing finish), 2 coats. Ferrous metal: 6. Galvanized metal: Alkyd primer, 1 coat; alkyd enamel gloss finish, 2 coats.

N/A. Concrete: Drywall (general): Latex primer, 1 coat; interior latex (semigloss finish), 2 coats. 3. Drywall (Bath Room): Latex primer, 1 coat: interior latex (semigloss finish), 2 coats. 4. Wood opaque finish (walls): Latex primer, 1 coat; interior latex (flat finish), 2 coats. 5. Wood opaque finish (trim): N/A.

6. Wood transparent finish: Oil stain, 1 coat; sanding sealer, 1 coat: alkvd varnish (gloss finish), 2 7. Ferrous metal: Alkyd metal primer, 1 coat; alkyd enamel (gloss finish), 2 coats.

Latex primer, 1 coat;

latex (semialoss

finish), 2 coats.

PART III - EXECUTION

8. Garage (walls & ceiling)

A. Match approved mock-ups for color, texture, and pattern Re-coat or remove and replace work which does not match or shows loss of adhesion. Clean-up, touch-up, and protect work.

DIVISION 10 - SPECIALTIES

SECTION 10310 MANUFACTURED FIREPLACES PART 1 GENERAL

1.1 SECTION INCLUDES A. Vent Free Gas Burning Manufactured Fireplaces.

B. Direct Vent Gas Burning Manufactured Fireplaces.

1.4 SUBMITTALS

A. Submit under provisions of Section 01 30 00 - Administrative Requirements. B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations. 2. Storage and handling requirements and recommendations.

Installation methods. Including: a. Fireplace unit rough opening dimensions, rough opening sizes for flue, and

installation details b. Fireplace unit cabinet dimensions, clearances required from adjacent c. construction, and applicable regulatory agency approvals

D. Manufacturer's Certificates: Certify products meet or exceed specified requirements. E. Closeout Submittals: Provide manufacturer's maintenance instructions that include recommendations for periodic checking and adjustment and periodic cleaning and maintenance of

1.7 SEQUENCING

A. Ensure that locating templates and other information required for installation of products of this section are furnished to affected trades in time to prevent interruption of construction progress. B. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.8 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 WARRANTY A. Provide manufacturer's limited lifetime warranty covering combustion chamber heat exchanger, stainless steel burner, logs, ceramic glass against thermal breakage, gold plated parts against tarnishing, porcelain enameled surfaces and aluminum extrusion trim.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Napoleon Fireplaces, which is located at: Wolf Steel USA 103 Miller Dr.; Crittenden, KY 41030; Toll Free Tel: 800-461-5581; Email: request info (athomas@napoleonproducts.com); Web: www.napoleonfireplaces.com

C. Requests for substitutions will be considered in accordance with provisions of Section 01

60 00 - Product Requirements. 2.2 VENT FREE GAS BURNING MANUFACTURED FIREPLACES (OPTION 1)

A. General: 1. Comply with applicable building codes.

B. Model: Plazma Fire VF31 1. Type: Vent free. Fuel type:

 a. Natural gas 3. Dimensions: 43-5/16 inches wide by 28 inches high by 9-1/8 inches deep. 4. BTU rating: 6,000 BTU (natural gas and propane). 5. Fronts and Frame Fnish: Painted metallic black.

6. Mounting Cabinets Finish: Painted metallic black. 7. Standard Features: a. MIRRO-FLAME Porcelain Reflective Radiant Panels Options: a. LED Accent Light Kit.

a. Electronic Ignition

2.3 DIRECT VENT GAS BURNING MANUFACTURED FIREPLACES (OPTION 2) A. General: 1. Comply with applicable building codes. 2. Comply with ANSI Z21.88/CSA 2.33. WHI listed.

b. Safety Barrier.

Standard Features:

4. Safety Barriers are "Safety Barrier Approved". B. Model: Ascent Linear BL36 1. Type: Direct Vent. Fuel type: a. Natural gas. 3. Dimensions:

a. 34-1/2 inches high by 35 inches wide by 16-1/4 inches deep.

4. BTU rating: a. Up to 16,000 BTU (natural gas and propane). Standard Features: a. Flame heat adjustment. b. Safety Barrier. c. Prewired for wall switch.

d. Glass ember bed. 6. Options: a. Decorative Front: 3) 4-Sided Surround with painted black finish. b. MIRRO-FLAME Porcelain Reflective Radiant Panels.

c. On/off or Modulating Remote with Digital Screen

d. Shore fire media kit a. Decorative Front:

PART 3 EXECUTION 3.1 EXAMINATION A. Do not begin installation until substrates have been properly prepared.

unsatisfactory preparation before proceeding. ** NOTE TO SPECIFIER ** Include the following paragraph if powered ventilators are provided. Delete if not required.

C. Verify proper power supply and fuel source are available. 3.2 PREPARATION A. Clean surfaces thoroughly prior to installation. B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

B. If substrate preparation is the responsibility of another installer, notify Architect of

3.3 INSTALLATION A. Install in accordance with manufacturer's instructions, ANSI Z21.44 and the requirements of authorities having jurisdiction.

B. Use manufacturer's guidelines for minimum clearances to combustibles, walls, and

C. Set fireplace units plumb, level, and rigid

D. Anchor all components firmly in position.

E. Connect to natural gas system in accordance with NFPA 54. F. Upon completion of installation, visually inspect all exposed surfaces. Touch up scratches and abrasions with touch up paint recommended by the manufacturer; make imperfections invisible to the unaided eye from a distance of 5 feet.

3.4 PROTECTION

A. Protect installed products until completion of project. B. Touch-up, repair or replace damaged products before Substantial Completion.

elch ect Archite Donald

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consultant:



project: Tenant Finish Brighton Recovery

4905, 4911, 4915, 4925, 4931, 4953 South 900 East

Salt Lake County, Utah

date

DECEMBER 28, 2016 revisions

> SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL **JANUARY 6, 2017** $\frac{\sqrt{2}}{\sqrt{2}}$ addendum #2-Building '(JANUARY 17, 2017 4 Addendum #4—Building 'B'

> > FEBRUARY 24, 2017

 $\frac{7}{}$ addendum #7-Building 'A

data project no: drawn by: checked by:

title

sheet

SPECIFICATIONS

10800 - TOILET ACCESSORIES

A. Provide and install toilet accessories.

B. DIVISION 1 - GENERAL REQUIREMENTS

custom accessories/kits as manufactured by GE Appliances, as

determined by Owner.

See DIVISION 1

PART 3 EXECUTION

A. Do not begin installation until substrates have been

and connection to meter: Carbon . Schedule 40 black

valve, with copper ground from electrical service

steel pipe, ASTM A 53, Grade A.

Q. Provide pressure regulator at water main shut-off

attached each side of regulator.

3.1 EXAMINATION

PART I - GENERAL

PART III - EXECUTION A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials in proper relation with adjacent construction and with uniform appearance for exposed work. Coordinate with work of other sections. Comply with applicable regulations and building code B. Support piping properly. Pitch to drain points. Install with pipe expansion loops, mechanical expansion joints, and anchors. C. Install shut-off valves on each piece of equipment on both hot and cold water supply. D. Clearly label all valves and components. E. Sterilize water distribution system. Flush and test all systems for proper operation. Adjust system to prevent F. Install gas piping in accordance with local gas utility company regulations and specifications. G. Restore damaged finishes. Clean and protect work from damage. H. Instruct Owner in proper operation of systems. I. Install steam room equipment (if applicable) per manufacturer's requirements and instructions. 15500 - HEATING, VENTILATING, & AIR CONDITIONING (coordinate with mechanical drawings and notes) PART I - GENERAL See DIVISION 1 A. Provide and install mechanical systems including: 1. Ventilating system including fans, sheet metal work registers, grilles and diffusers. 2. Exhaust system for kitchen, kitchenettes, wet bar, and laundry equipment. 3. Air conditioning system (optional-verify w/ Owner). 4. Piping distribution system and insulation Temperature controls. Testing, adjusting and balancing. B. Coordinate with Owner's room uses to provide adequate system for all contract areas. C. Coordinate location of mechanical systems to avoid interference with location of other systems. Notify Owner prior to construction of conflicts which cannot be resolved. D. DIVISION 1 - GENERAL REQUIREMENTS. E. Arrangement of systems indicated on the drawings is diagrammatic, and indicates the minimum requirements for mechanical work. Be responsible for accuracy of dimensions and layout. Overhead ductwork shall be laid out to obtain maximum head room. PART II - PRODUCTS (coord. w/ mech. dwgs. & sched's) A. Valves: Provide valves required by service intended including gate, globe, check, and ball valves. Provide valves by Kennedy, Crane, Nibco, or approved equal. B. Hangers and supports: Comply with ANSI B31.1. C. Convectors: Copper tubes with aluminum fins, 16 gauge steel front and top panels by Trane, Airtherm or approved equal. D. Sheet metal work and accessories: Comply with "SMACNA Duct Manual and Sheet Metal Construction for Ventilating 1. (1) 80% or 90% efficient furnaces (Owner's option) designed for service intended by Carrier, Trane, Payne or approved equal. 2. Air conditioning system (Owner's option). F. Fan coil units: 22 gauge galvanized steel with seamless copper tube and aluminum fin coil by Trane, Carrier, Airtherm or approved equal. G. Grilles and registers: Units with approved face and frame design, gaskets, and baked enamel finish by Agitair, Titus or approved equal. H. Controls: Automatic temperature control system with thermostats as required, by Honeywell, Johnson Controls or approved equal. I. Mechanical subcontractor shall provide ducting of all exhaust fans, range hoods and dryer vents to exterior (flex ducting allowable only for bath exhausts). J. Mechanical subcontractor shall size furnace and all plenums, ducts, registers, vents, flues, etc. K. Provide (2) combustion air vents to (each) furnace; (1) no lower than 12" below ceiling, and (1) no higher than 12" above floor. PART III - EXECUTION A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials in proper relation with adjacent construction and with uniform appearance for exposed work. Coordinate with work of other sections. Comply with applicable regulations and building code requirements. B. Install ductwork in accordance with SMACNA recommendations. Seal duct seams with sealer. Provide splitters and balancing dampers. Provide fire dampers and automatic smoke and fire dampers where required. Provide flexible connectors and inlet and discharge connections. Clean before testing and balancing. C. Clearly label and tag all components. D. Test and balance all systems for proper operation. E. Restore damaged finishes. Clean & protect work from damage. F. Instruct Owner in proper operation of systems.

DIVISION 16 - ELECTRICAL 16000 - ELECTRICAL (coord. w/ elec. dwgs. & notes) PART I - GENERAL See DIVISION 1 A. Provide electrical systems including: 1. Power. Lighting. 3. Cable TV System (optional) 4. Telephone. 5. Security System (coordinate w/ Owner). 6. Smoke Detectors. B. DIVISION 1 - GENERAL REQUIREMENTS C. Include primary service, transformers, distribution center, grounding, power and lighting panels, wiring, outlet boxes, receptacles, lighting fixtures, switches, conduits, and raceways and all accessories. D. Provide telephone and data outlets with cutout, box and pull string only. E. Service panel shall be 200 amp, and shall comply with NEC 110-16. F. Coordinate with Owner's room uses to provide adequate system for all contract areas. G. Coordinate location of ductwork and to avoid interference with location of designated lighting fixture locations. Notify Owner prior to construction of conflicts which cannot be resolved. H. Coordinate schedule of telephone outlet completion with Owner's communications requirements and installer as applicable. Arrangement of systems indicated on the drawings is diagrammatic, and indicates the minimum requirements for electrical work. Site conditions shall determine the actual arrangement of conduits, boxes, and similar items. Take field measurements before fabrication. Be responsible for accuracy of dimensions and layout. J. Comply with the National Electrical Code and applicable local regulations. PART II - PRODUCTS (coord. w/ elec. drawings & notes) A. Conduit: At service panel only. B. Exposed metal raceways: N/A. C. Boxes: Plastic or metal. D. Conductors and wiring: Romex or equal. E. Wiring devices: Receptacles, lighting switches, ground fault receptacles, dimmers, and coverplates as required. Color: Standard almond. F. All electrical outlets in firewall at garage shall be GFCI in metal boxes. PART III - EXECUTION A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials in proper relation with adjacent construction and with uniform appearance for exposed work. Coordinate with work of other sections. Comply with applicable regulations and building code B. Comply with National Electrical Code and building code requirements. Maintain continuity of circuits required to supply new equipment in service. C. Test all systems for proper operation. Restore damaged finishes. Clean and protect work from damage. D. Smoke detectors shall comply with UBC 43-6, shall be wired in series, and shall be placed a minimum of 36" from nearest duct opening and within 12" of ceiling. E. Provide ground fault interruptor (GFI) circuits to all exterior outlets and all interior outlets within 72" of water source. F. Service grounding shall be a minimum of (20) linear feet of #4 copper conductor, placed in footing with a minimum clearance of 2". G. Interior metal water piping shall be grounded by electrically continuous bonding with a minimum #4 copper conductor connected to the grounding electrode conductor at the service panel. Bridge over pressure reducing valve (if installed). H. Electrician shall pre-wire for blower unit at all fireplace locations and pushbutton control(s) for automatic garage door opener(s).

Donald L. Welch Architect

THE DESIGNS SHOWN AND DESCRIBED HEREIN NCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS

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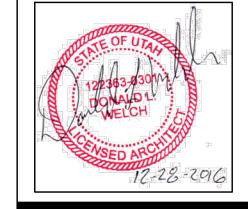
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consultant:



project:
Tenant Finish
for
Brighton Recovery

Campus 905, 4911, 4915, 4925

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016

| revisions

revision

SECOND SUBMITTAL FOR
EACH SEPERATE BUILDING PARCEL

JANUARY 6, 2017

ADDENDUM #2-BUILDING 'C'

JANUARY 17, 2017

JANUARY 17, 2017

ADDENDUM #4-BUILDING 'B'
FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A'

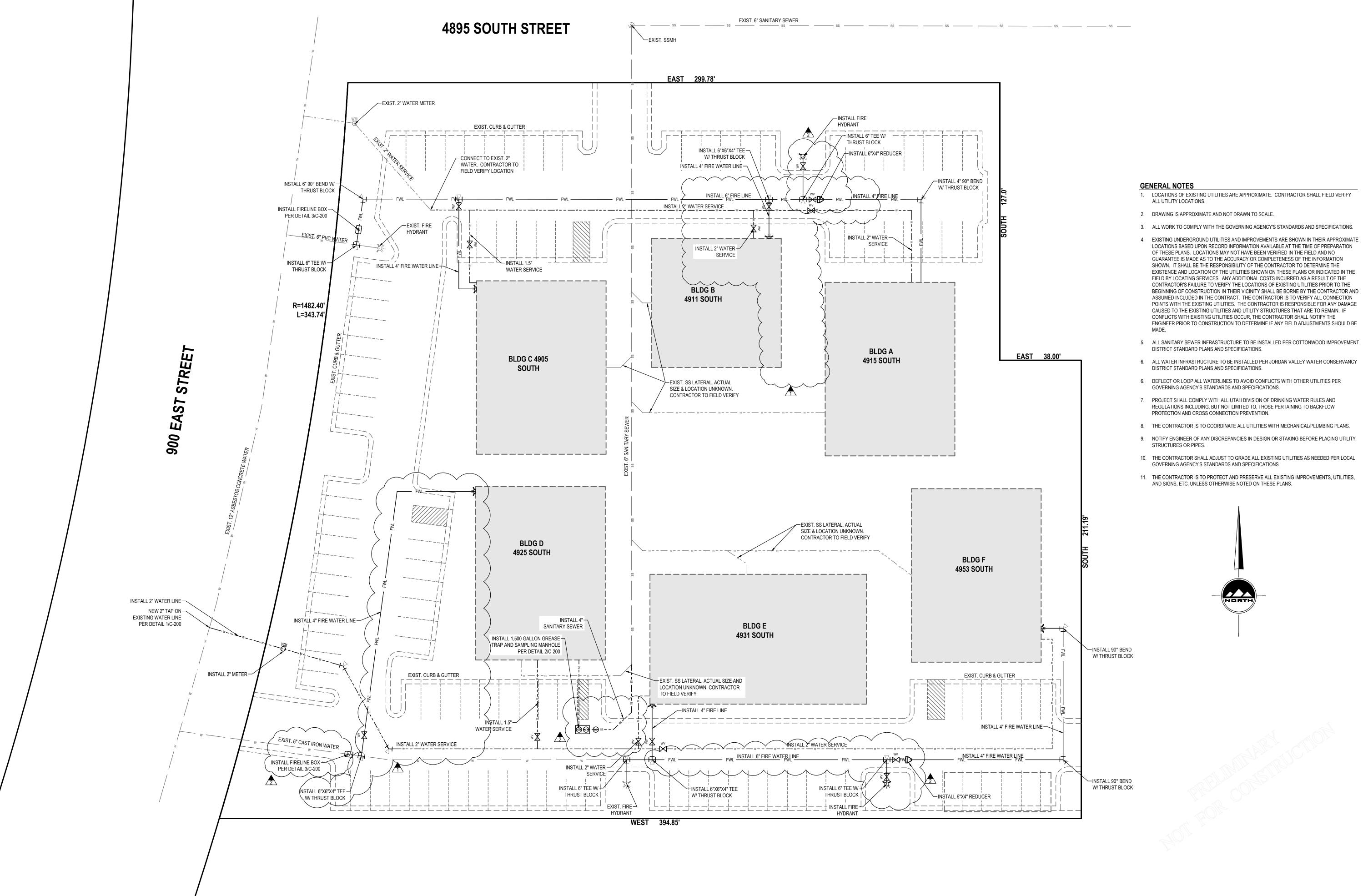
project no:
drawn by:
checked by:

title

SPECIFICATIONS

sheet

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SALT LAKE CITY 45 W. 10000 S., Suite 500 Sandy, UT 84070 Phone: 801.255.0529

Phone: 801.547.1100 TOOELE Phone: 435.843.3590 CEDAR CITY Phone: 435.865.1453 RICHFIELD

Phone: 435.896.2983

LAYTON

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COUNTY

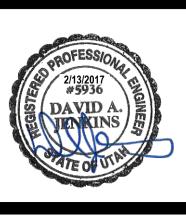
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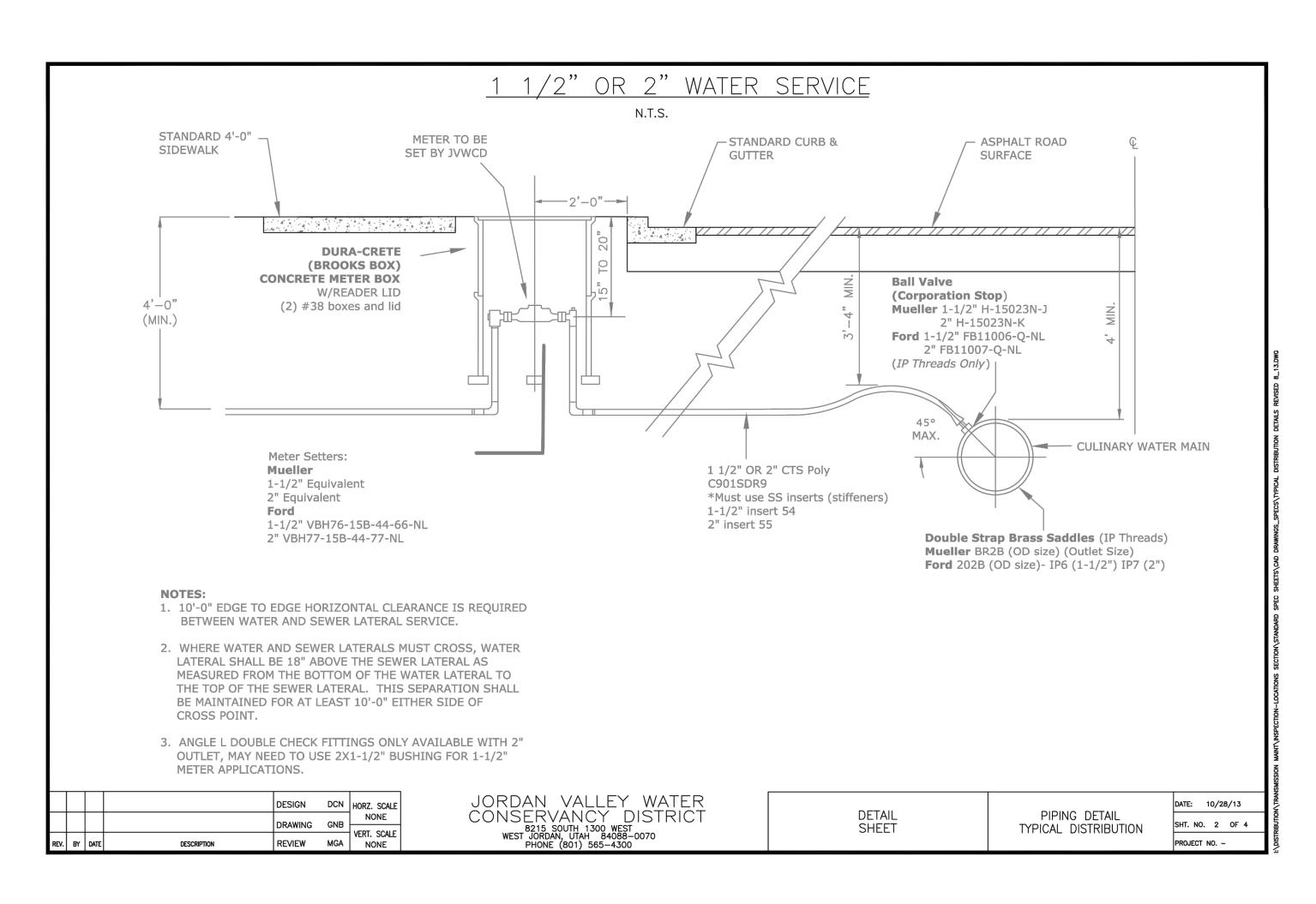


1 01/20/2017 WATER LINE CHANGES 2 2/13/2017 WATER/SEWER CHANGES MSB

UTILITY PLAN

M. BUDGE

D. JENKINS

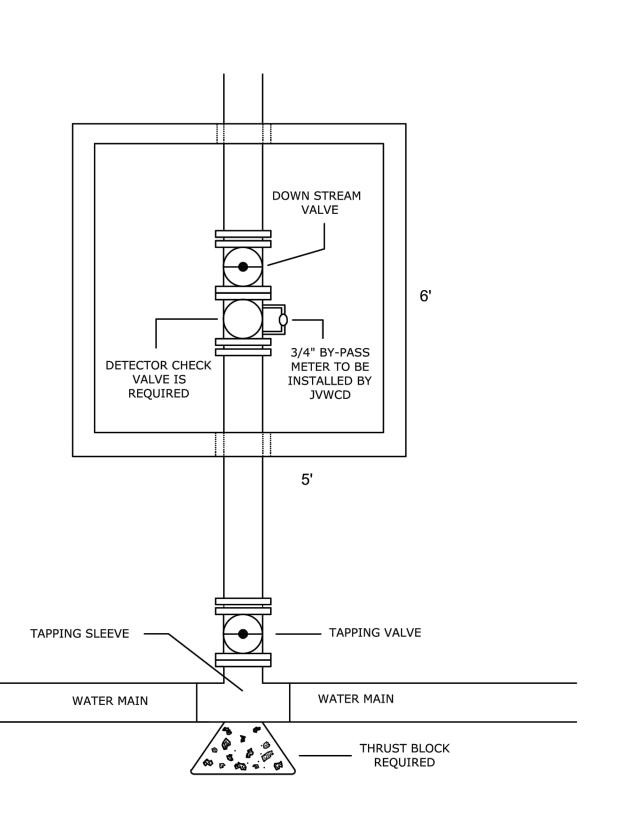


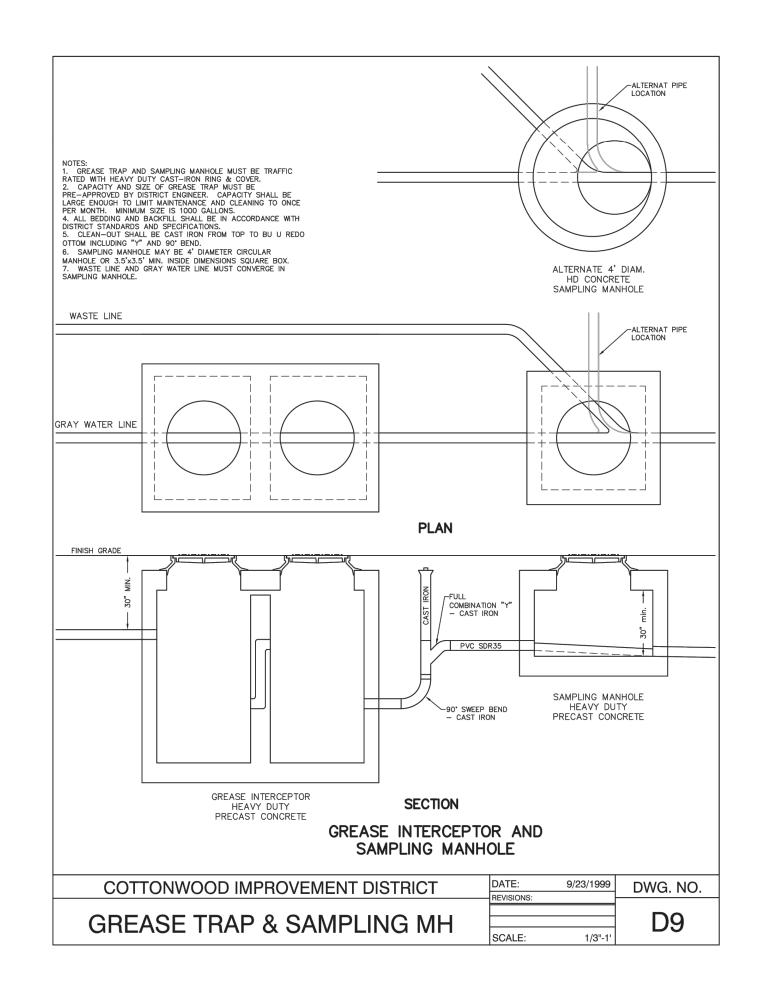


GENERAL NOTES

- All taps are to be hot-tapped only. No hot taps will be allowed on Friday. A minimum of 24 hours notice is required prior to the tap.
- A down stream valve is required inside the fireline box.
 The tapping valve can be used as the unstream
- 3. The tapping valve can be used as the upstream valve.4. The tapping valve must have a slip type valve
- box and must be set to finish grade.

 5. Floor must have a minimum of 6" of gravel
- spread evenly throughout.6. All knock-outs for pipe coming into and going out of the box must be cement grouted once
- pipe is in place.7. All bolts & nuts upstream of the box must be greased and wrapped. All bolts will be coated with an acceptable thread lubricant prior to
- installation.8. Standard size 24" ring and lid is required for vault entrance.
- Typical fireline vault is to be a minimum of 5'x6'
 o.d. in size with gravel bottom.
- A 14-guage underground rated locating wire must be laid with the pipe if using C-900.





GREASE TRAP & SAMPLING MANHOLE

SCALE: NONE



SALT LAKE CITY 45 W. 10000 S., Suite 500 Sandy, UT 84070 Phone: 801.255.0529

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BRIGHTON RECOVERY CENTER
4895 S 900 E

PROFESSION 2/13/2017 25936
DAVID A. TENKINS

NO. DATE REVISION BY
1 01/20/2017 WATER LINE CHANGES MSE
2 ADDENDUM #6
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DETAILS

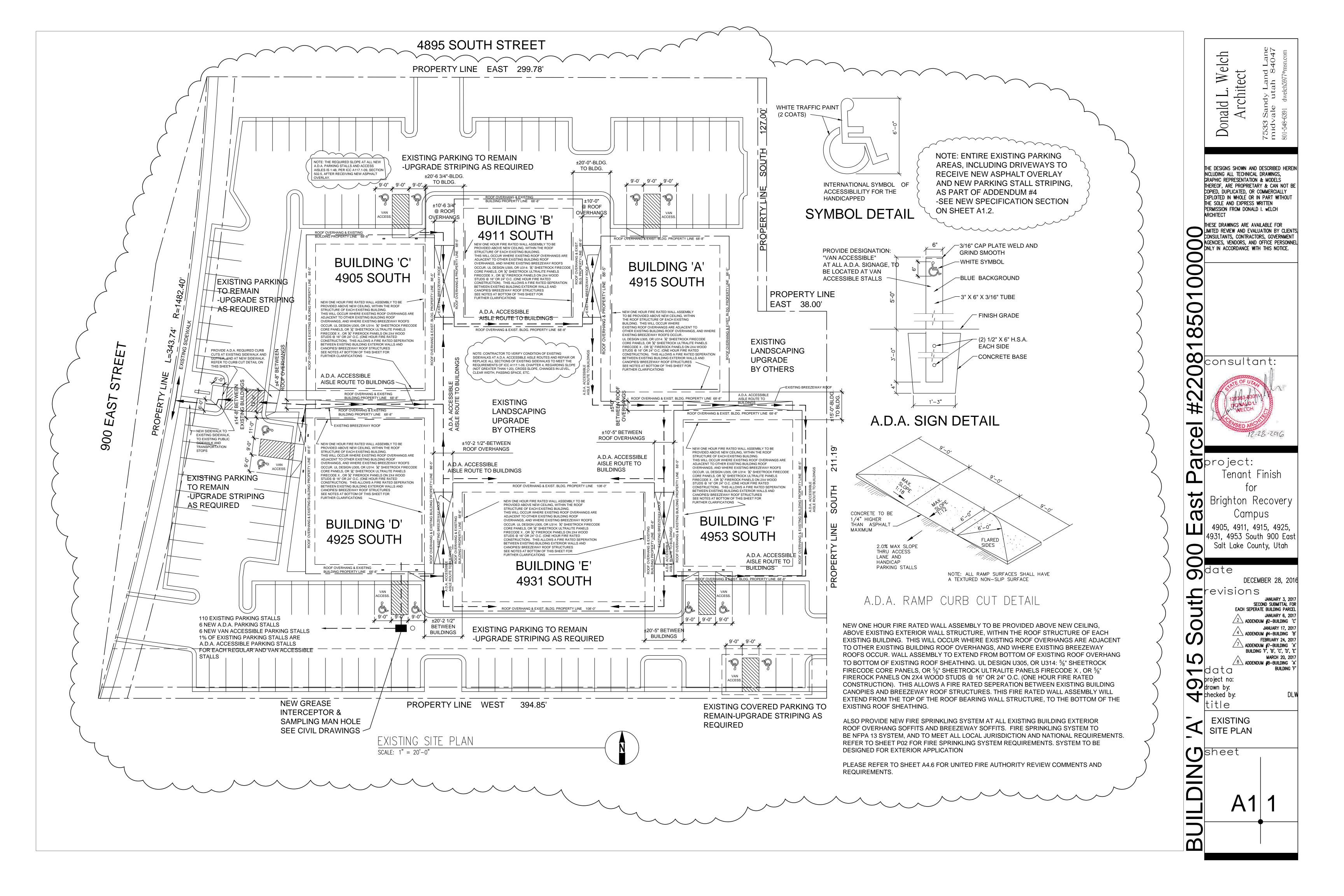
PROJECT MANAGER

PROJECT NUMBER PRINT DATE
7227 2/13/17

DRAWN BY CHECKED BY
M. BUDGE

D. JENKINS

TYPICAL FIRELINE BOX DETAIL



ASPHALT PAVING SPECIFICATIONS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - Hot-mix asphalt paving overlay. 2. Pavement-marking paint.

1.2 PROJECT CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
 - 1. Asphalt Surface Course: Minimum surface temperature of 60 deg F (15.6 deg C) at time of placement.
- B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of [40 deg F (4.4 deg C) for oil-based materials] [55 deg F (12.8 deg C) for water-based materials], and not exceeding 95 deg F (35 deg C).

PART 2 - PRODUCTS

2.1 AGGREGATES

- A. Coarse Aggregate: ASTM D 692, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.
- B. Fine Aggregate: [ASTM D 1073] [or] [AASHTO M 29], sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.
- C. Mineral Filler: [ASTM D 242] [or] [AASHTO M 17], rock or slag dust, hydraulic cement, or other inert material.

ASPHALT MATERIALS

- A. Asphalt Binder: AASHTO M 320 or AASHTO MP 1a, [PG 70-22]
- B. Tack Coat: [ASTM D 977] [or] [AASHTO M 140] emulsified asphalt, or [ASTM D 2397] [or] [AASHTO M 208] cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.

2.3 AUXILIARY MATERIALS

- A. Pavement-Marking Paint: MPI #32 Alkyd Traffic Marking Paint.
 - Color: [Yellow]

2.4 MIXES

- Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes approved by authorities having jurisdiction[; designed according to procedures in AI MS-2, "Mix Design Methods for Asphalt Concrete and Other Hot-Mix Types";] and complying with the following
- 1. Provide mixes with a history of satisfactory performance in geographical area where

PART 3 - EXECUTION

3.1 EXAMINATION

A. Proceed with paving only after unsatisfactory conditions have been corrected.

3.2 COLD MILLING

- A. Clean existing pavement surface of loose and deleterious material immediately before cold milling. Remove existing asphalt pavement by cold milling to grades and cross sections indicated.
 - 1. Mill to a depth of [1-1/2 inches (38 mm)].

3.3 PATCHING

- A. Hot-Mix Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches (300 mm) into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.
- Tack Coat: Apply uniformly to vertical surfaces abutting or projecting into new, hot-mix asphalt paving at a rate of 0.05 to 0.15 gal./sq. yd. (0.2 to 0.7 L/sq. m).
 - Allow tack coat to cure undisturbed before applying hot-mix asphalt paving. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- C. Patching: Fill excavated pavements with hot-mix asphalt base mix for full thickness of patch and, while still hot, compact flush with adjacent surface.

3.4 SURFACE PREPARATION

- A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.
- B. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd. (0.2 to 0.7 L/sq. m).
 - Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

HOT-MIX ASPHALT PLACING

- Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
 - Spread mix at minimum temperature of 250 deg F (121 deg C).
 - Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
- B. Place paving in consecutive strips not less than 10 feet (3 m) wide unless infill edge strips of a lesser width are required.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix
 - Clean contact surfaces and apply tack coat to joints.
 - Offset longitudinal joints, in successive courses, a minimum of 6 inches (150 mm).
 - Offset transverse joints, in successive courses, a minimum of 24 inches (600 mm). Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving

COMPACTION

Operations."

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratoryplate compactors in areas inaccessible to rollers.
- 1. Complete compaction before mix temperature cools to 185 deg F (85 deg C).
- Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
 - 1. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent nor greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled
- Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

INSTALLATION TOLERANCES

- Pavement Thickness: Compact each course to produce the thickness indicated within the
 - Base Course: Plus or minus 1/2 inch (13 mm). Surface Course: Plus 1/4 inch (6 mm), no minus.

3.9 PAVEMENT MARKING

- Do not apply pavement-marking paint until layout, colors, and placement have been verified
- B. Allow paying to age for [30] days before starting payement marking.
- C. Sweep and clean surface to eliminate loose material and dust.
- Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils (0.4 mm).
 - 1. Broadcast glass beads uniformly into wet pavement markings at a rate of 6 lb/gal. (0.72)

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Replace and compact hot-mix asphalt where core tests were taken.
- Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.11 DISPOSAL

A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.

CLARIFICATION NOTES FOR ALL 6 BUILDINGS (ADDENDUM #4):

- 1 COMMERCIAL KITCHEN EQUIPMENT WILL BE SUPPLIED AND INSTALLED BY "STANDARD RESTAURANT SUPPLY". MR. TERRILL ROE. THEY WILL BE PROVIDING AND INSTALLING ALL OF THE EQUIPMENT, INCLUDING THE HOOD VENTILATION SYSTEMS. THEY WILL ALSO CONNECT TO THE GAS, ELECTRICAL AND PLUMBING WHERE TERMINATED AT THE WALLS, FLOOR AND CEILING, BY OTHER SUBCONTRACTOR WORK.
- 2 THE OWNER SHALL PROVIDE ALL TELEVISION SETS, LOCATED IN THE COMMON AREAS OF THE RESIDENTIAL AREAS, AND THE COMMUNITY CENTER. THE CONTRACTOR SHALL PROVIDE AND INSTALL THE SUPPORT AND BLOCKING, AT THE
- WALLS WHERE THE TELEVISIONS WILL BE INSTALLED.

3 - CONTRACTOR IS TO PROVIDE AN ALLOWANCE, IN THEIR BID, FOR PROVIDING AND INSTALLING THE RESIDENTIAL KITCHEN EQUIPMENT IN EACH OF THE RESIDENTIAL COMMON AREAS. PROVIDE AN ALLOWANCE FOR "MAYTAG" OR "GENERAL ELECTRIC" APPLIANCES, OR APPROVED EQUIVALENT.

- 4 CONTRACTOR IS TO PROVIDE AN ALLOWANCE, IN THEIR BID, INCLUDING A DESIGN FEE, FOR THE BASE AND WALL CABINETS THROUGHOUT THE ENTIRE 6 BUILDINGS. CABINETS TO BE GRADE 1, MAPLE CABINET DOORS AND DRAWERS, WITH GRADE 1 STAIN FINISH. WHITE MELAMINE FACED INTERIOR CABINET DOORS, SHELVES AND DRAWERS. CABINET HARDWARE TO BE "AMEROCK" CABINET HARDWARE OR EQUIVALENT. COUNTER TOPS TO BE GRANITE OR STONE, GRADE 1.
- THE FOLLOWING ROOMS SHALL HAVE BASE CABINETS ONLY, OR BASE AND WALL CABINETS... WITH MIXED CABINETS AND DRAWERS:
- A RESIDENT LAUNDRY A101 (BASE CABINET ONLY)
- B KITCHEN A115 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS, DELETE CROWN MOLDING AT WALL CABINETS)
- C RESIDENT LAUNDRY A127 (BASE CABINET ONLY) D - KITCHEN A132 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS, DELETE CROWN MOLDING AT WALL CABINETS)
- E RESIDENT LAUNDRY B101 (BASE CABINET ONLY)
- F KITCHEN B115 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS, DELETE CROWN MOLDING AT WALL CABINETS)
- G RESIDENT LAUNDRY B125 (BASE CABINET ONLY) H - KITCHEN B129 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS, DELETE CROWN MOLDING AT WALL CABINETS)
- I LAB C111 (BASE AND WALL CABINETS, WITH LOCKS ON BOTH CABINETS AND DRAWERS. WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS, DELETE CROWN MOLDING AT
- J- MEDS C112 (BASE AND WALL CABINETS, WITH LOCKS ON BOTH CABINETS AND DRAWERS, DELETE CROWN MOLDING AT WALL CABINETS) K - STAFF BREAK ROOM C113 (BASE AND WALL CABINETS, DELETE CROWN MOLDING AT
- WALL CABINETS) L - RECEPTION C122 (BASE CABINET WITH RETURN; RECEPTION COUNTER W/ LOWER A.D.A. COUNTER)
- M PATIENT BREAK AREA C129 (BASE AND WALL CABINETS, DELETE CROWN MOLDING AT WALL CABINETS)
- N REAR WALL OF RECEPTION/OFFICE D109 (BACK WALL TO HAVE BASE CABINET ONLY; FRONT OF RECEPTION AREA TO HAVE BASE CABINET WITH RECEPTION COUNTER AND LOWER A.D.A. COUNTER.
- 0 WARMING KITCHEN D101 (COUNTERTOP ONLY)
- P SERVING D104 (BASE CABINET)
- Q WORKOUT ROOM D113 (WALNUT CUBICLES W/ MELAMINE INTERIOR FINISH) R - YOGA STUDIO D114 (WALNUT CUBICLES W/ MELAMINE INTERIOR FINISH)
- S MALE EMPLOYEE LOCKER ROOM D115 (WALNUT FACED LOCKER DOORS WITH PADLOCK HARDWARE, 1 SHELF AND DOUBLE HOOK; MELAMINE INTERIOR FINISH)
- T FEMALE EMPLOYEE LOCKER ROOM D115A (WALNUT FACED LOCKER DOORS WITH PADLOCK HARDWARE, 1 SHELF AND DOUBLE HOOK; MELAMINE INTERIOR FINISH)
- U DINING D103 (CURVED EATING BENCH AND HALF WALL-BENCH TO MATCH DINING FURNITURE SUPPLIED BY OTHERS)
- V RESIDENT LAUNDRY E101 (BASE CABINET ONLY)
- W KITCHEN E115 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS; DELETE CROWN MOLDING AT WALL CABINETS)
- X RESIDENT LAUNDRY E127 (BASE CABINET ONLY) Y - KITCHEN E132 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS, DELETE CROWN MOLDING AT WALL CABINETS)
- Z SERVING CENTER E140 (BASE CABINET ONLY)
- AA RESIDENT LAUNDRY F101 (BASE CABINET ONLY) BB - KITCHEN F115 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL
- SUBMITTAL SETS, DELETE CROWN MOLDING AT WALL CABINTES) CC - RESIDENT LAUNDRY F127 (BASE CABINET ONLY)
- DD KITCHEN F132 (BASE AND WALL CABINETS, WALL CABINETS NOT SHOWN ON ORIGINAL SUBMITTAL SETS, DELETE CROWN MOLDING AT WALL CABINETS) 5 - ALL RESIDENTIAL BATHROOM COUNTERTOPS TO BE GRANITE OR STONE; PROVIDE
- BRACING. 6 - ALL PUBLIC RESTROOM COUNTERTOPS TO BE GRANITE OR STOONE; PROVIDE ANGLED METAL BRACING WHERE GREATER THAN 3'-O" WIDE, WITH A.D.A. PROTECTION ON BRACING.

ANGLED METAL BRACING WHERE GREATER THAN 3' WIDE, WITH A.D.A. PROTECTION ON

7 - ALL INTERIOR DOOR FRAME CASEWORK TO BE STANDARD PAINT-GRADE. 3/1 X 3" TRIM SURROUND, EACH SIDE (UNLESS OTHERWISE DIRECTED BY OWNER).

- 8 ALL ROOMS, i.e.: LINEN CLOSETS, STORAGE ROOMS, PANTRY, ETC., THROUGHOUT ALL 6 BUILDINGS TO HAVE 3/4" PLYWOOD OR PARTICLE BOARD SHELVING WITH MELAMINE FINISH TOP AND BOTTOM, AND EDGE. PROVIDE MINIMUM 6 SHELVES IN EACH ROOM. BRACE SHELVES AS REQUIRED FOR STURDY SUPPORT.
- 9 PROVIDE SOUND ATTENUATION INSULATION AT ALL RESIDENTIAL PARTY WALLS, AT MUSIC ROOM D117 (AS NOTED), AT PARTY WALL AT GATHERING/LEARNING AREA E136 (AS NOTED), AND AT PARTY WALLS SEPARATING RESIDENTIAL AREAS, BETWEEN KITCHENS AND COMMON AREAS.
- 10 ALL INTERIOR DOORS TO BE SOLID CORE WALNUT DOORS WITH STAINED FINISH. DOORS WITH MACHINED, AND KNOCK DOWN FRAMES ARE ACCEPTIBLE.
- 11 ALL WOOD BASE TO BE 1X4 MAPLE W/ RADIUSED TOP EDGE, OR APPROVED EQUIVALENT
- 12 CARPET TO BE AS MANUFACTURED BY "TUFTEX CARPET" OR EQUIVALENT, R2X STAIN AND SOIL RESISTANCE, ANSO NYLON. PROVIDE SAMPLES FOR APPROVAL BY OWNER.
- 13 PROVIDE FRP (FIBERGLASS REINFORCED PLASTIC) PANEL SURROUND IN JANITOR'S CLOSETS, IN LIEU OF CERAMIC TILE NOTED.
- 14 DELETE "MARBLE" TILE FROM SPECIFICATION. TILE WILL BE EITHER CERAMIC OR QUARRY TILE AS NOTED. DALTILE OR EQUIVALENT. PLEASE SUBMIT SAMPLES FOR OWNER APPROVAL
- 15 TILE BACKSPLASH TO OCCUR WHEREVER A SINK OCCURS AT COUNTERTOPS. PROVIDE 4" HIGH CERAMIC TILE BACKSPLASH, DALTILE OR EQUIVALENT. PROVIDE SAMPLES FOR
- 16 INTERIOR AND EXTERIOR SIGNAGE TO BE A SEPERATE BID PACKAGE PER OWNER. CONTRACTOR MAY PROVIDE AN ALLOWANCE FOR INTERIOR AND EXTERIOR SIGNAGE.
- 17 FIRE EXTINGUISHERS AND CABINETS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- 18 ALL FURNISHINGS, i.e.: DINING AREA TABLES AND CHAIRS, POOL TABLES, WORK OUT EOUIPMENT, ETC., TO BE PROVIDED BY EITHER OWNER, OR BY KITCHEN EQUIPMENT
- 19 PLEASE NOTE THAT ALL BIDS TO BE SUBMITTED TO OWNER BY END OF WORK DAY, ON MONDAY, JANUARY 23, 2017. PLEASE SUBMIT TO OWNER'S OFFICE, LOCATED AT 5200 SOUTH HIGHLAND DRIVE, SUITE 210.

MECHANICAL DUCT CLARIFICATION:

- INSTALL RIGID DUCTWORK THROUGHOUT THE PLENUM SPACE WITH MINIMAL DUCTWORK TRANSITIONS/FITTINGS, TO ALLOW FOR MAXIMUM AIRFLOW.
- INSULATE ALL SUPPLY AND RETURN DUCTWORK WITH R-VALUE (R-12 MIN.), AS INDICATED IN MECHANICAL PLAN VIEW GENERAL NOTES.
- A FLEXIBLE CONNECTION IS TO BE PROVIDED ON ALL MAIN SUPPLY AND RETURN AIR RUNS TO MINIMIZE VIBRATION FROM ASSOCIATED RTU.

PLUMBING CLARIFICATION:

SHOWER VALVES TO BE "KOHLER", SINGLE HANDLE, OR EQUIVALENT AS APPROVED BY



Welch Donald L. We Architect

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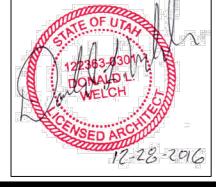
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consultant:



project: Tenant Finish

> Brighton Recovery 4905, 4911, 4915, 4925, 4931, 4953 South 900 East

Salt Lake County, Utah date

0 **DECEMBER 28, 2016**

> evisions SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL **JANUARY 6, 2017** $\sqrt{2}$ Addendum #2-Building 'c'

> > JANUARY 17, 2017

FEBRUARY 24, 2017

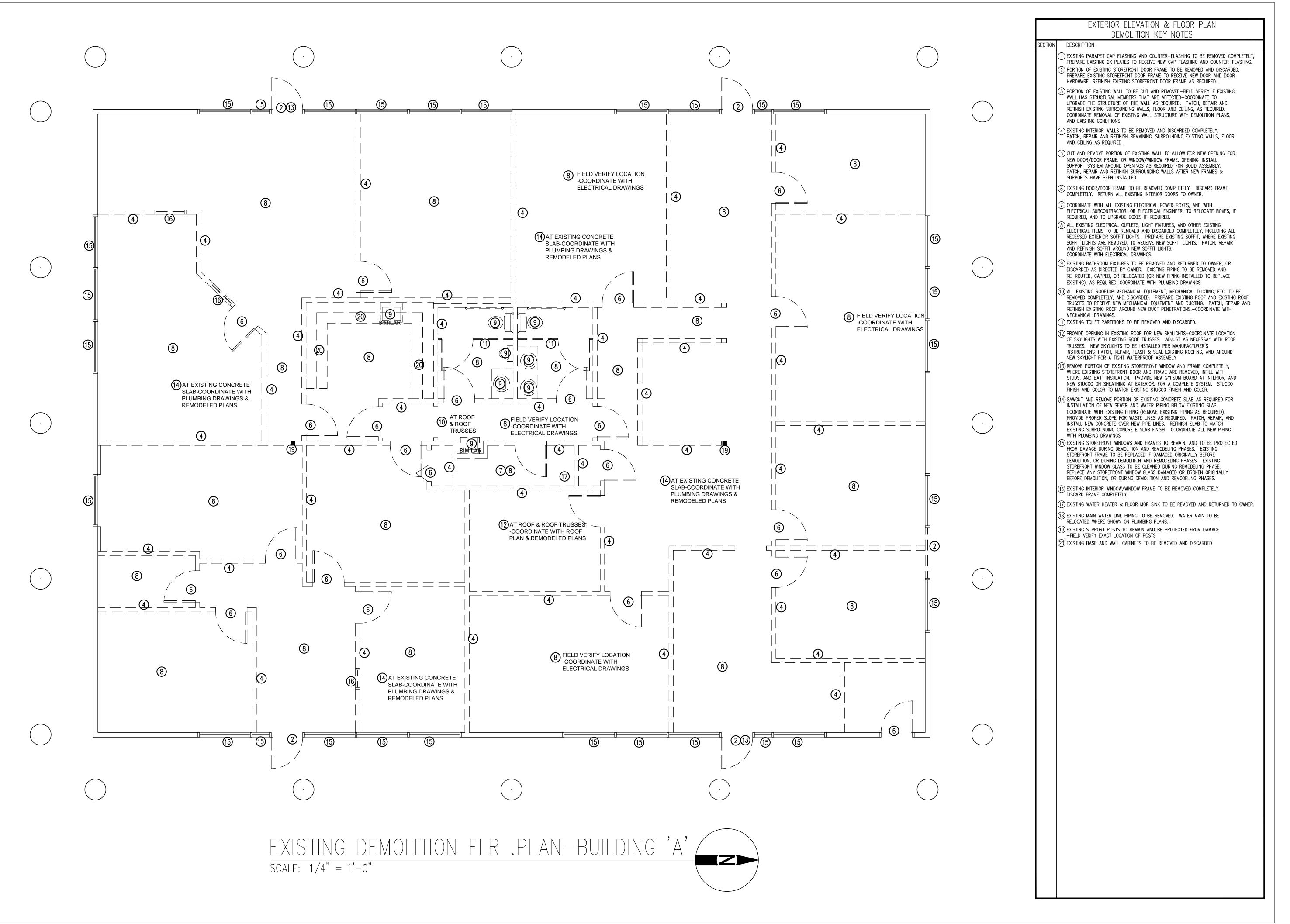
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drawn by: checked by: title

PARKING LOT RE-PAVING **SPECIFICATIONS** AND GENERAL CLARIFICATION NOTES

A1 2

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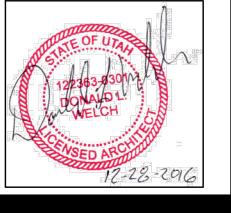
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project:
Tenant Finish
for
Brighton Recovery

Campus 4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016

JANUARY 3, 2017

revisions

SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL

JANUARY 6, 2017

ADDENDUM #2-BUILDING 'C'

JANUARY 17, 2017

ADDENDUM #4-BUILDING 'B'

FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A'

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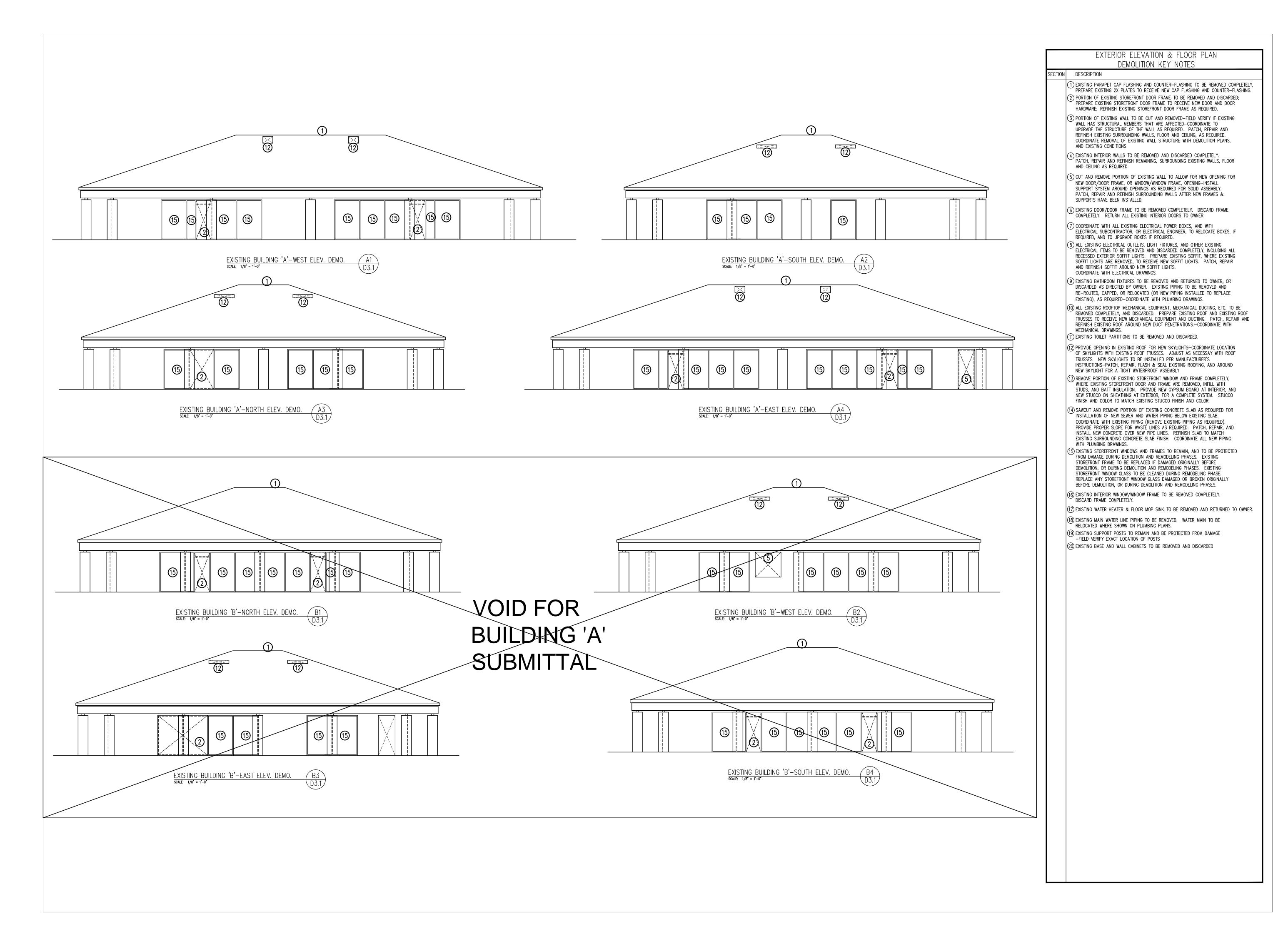
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BUILDING 'A'
EXISTING
DEMOLITION PLAN

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Donald L. We Architect ndy Land utah 84

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project:

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revisions

JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL

JANUARY 6, 2017 2 ADDENDUM #2-BUILDING 'C' JANUARY 17, 2017 4 ADDENDUM #4-BUILDING 'B'

FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A' data

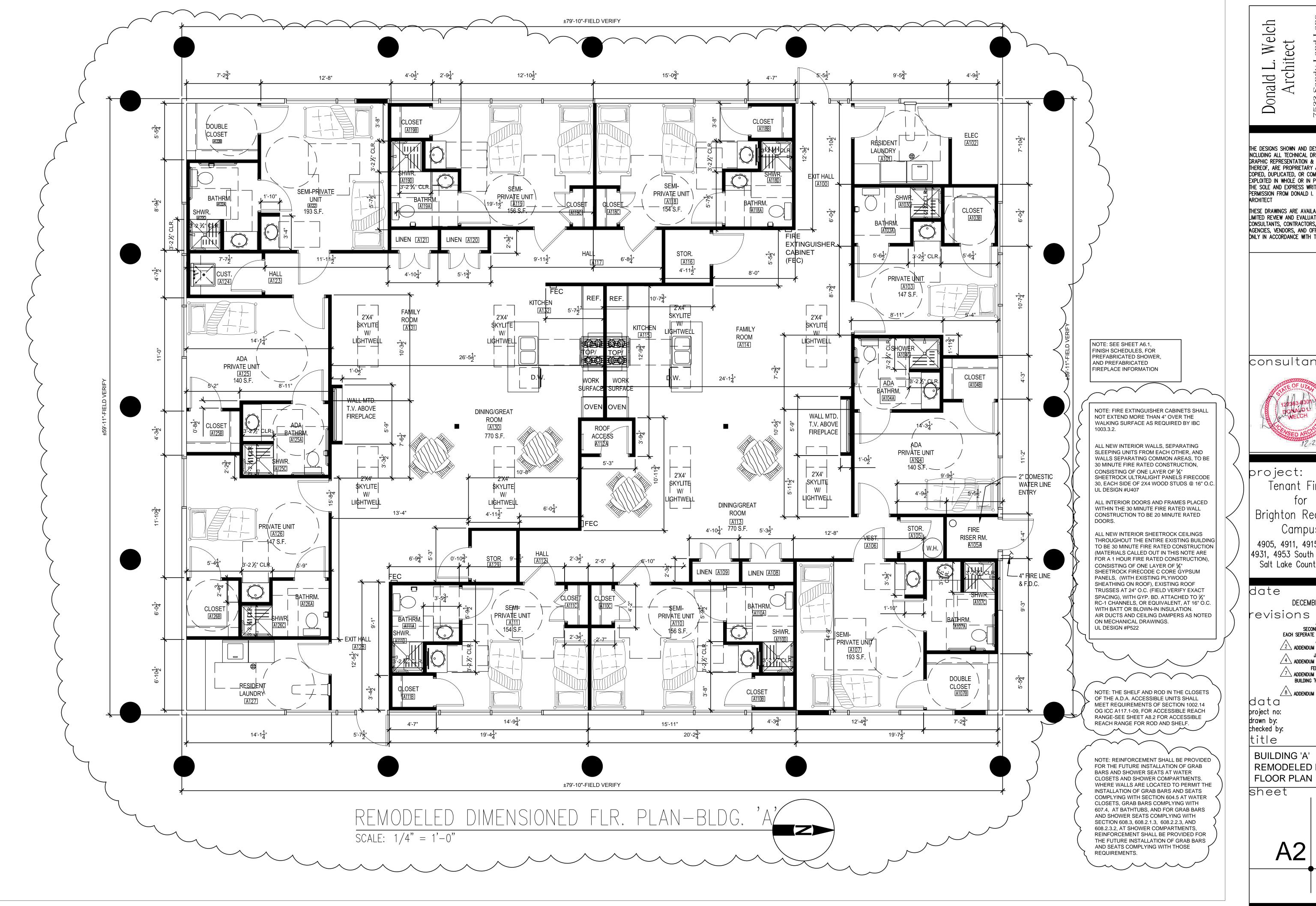
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BUILDINGS 'A' & 'B' EXISTING/DEMOLITION ELEVATIONS

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revisions JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL

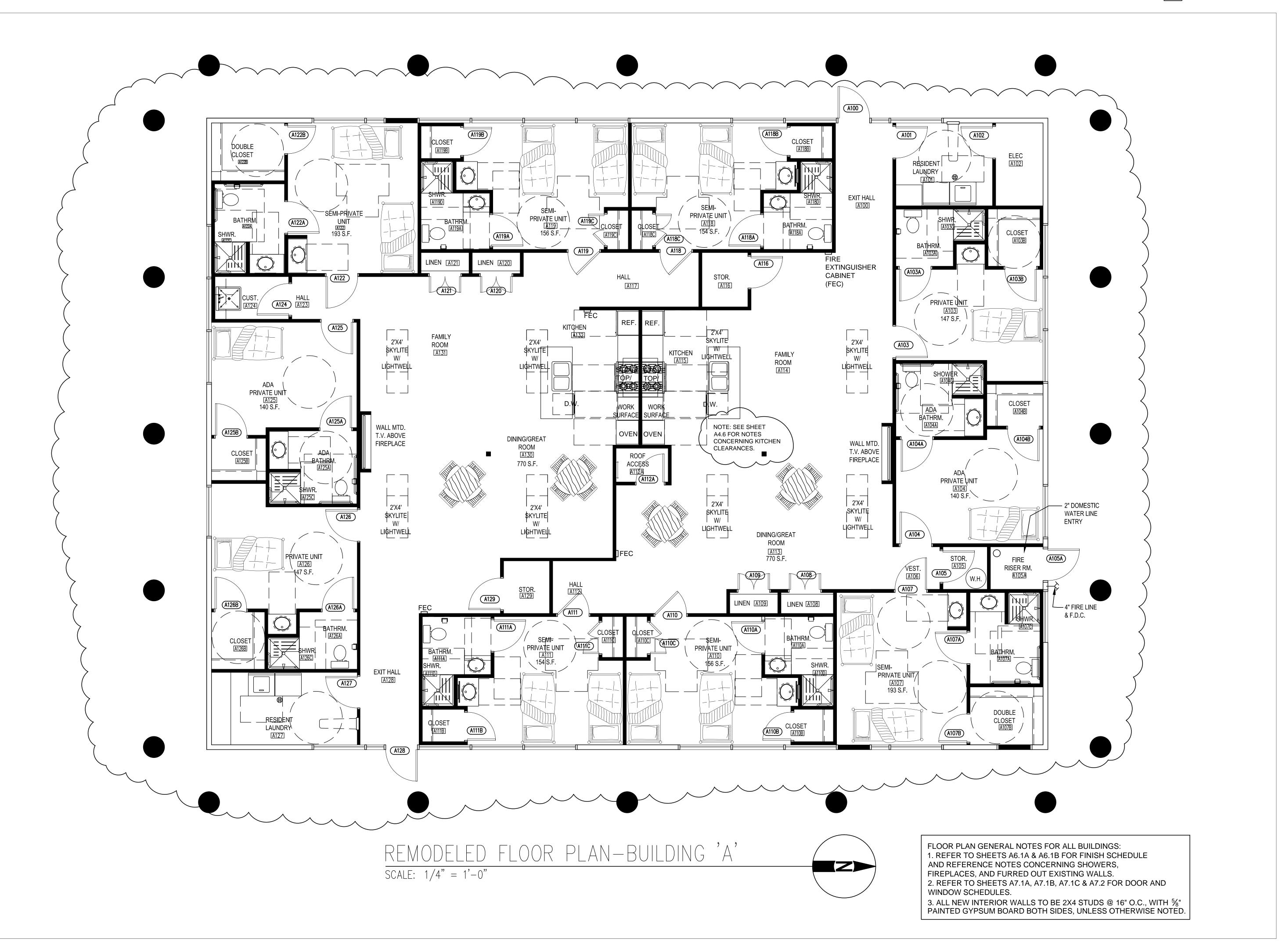
JANUARY 6, 2017 2 ADDENDUM #2-BUILDING 'C' JANUARY 17, 2017 4 ADDENDUM #4-BUILDING 'B' FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A' BUILDING 'F", 'B', 'C', 'D', 'E' MARCH 20, 2017

 $\sqrt{8}$ Addendum #8-Building 'A

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BUILDING 'A' REMODELED DIM.

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Brighton Recovery Campus

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date

DECEMBER 28, 2016 revisions

JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL JANUARY 6, 2017 2 ADDENDUM #2-BUILDING 'C

4 ADDENDUM #4-BUILDING 'B' FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A'
BUILDING 'F', 'B', 'C', 'D', 'E' MARCH 20, 2017

8 ADDENDUM #8-BUILDING 'A'

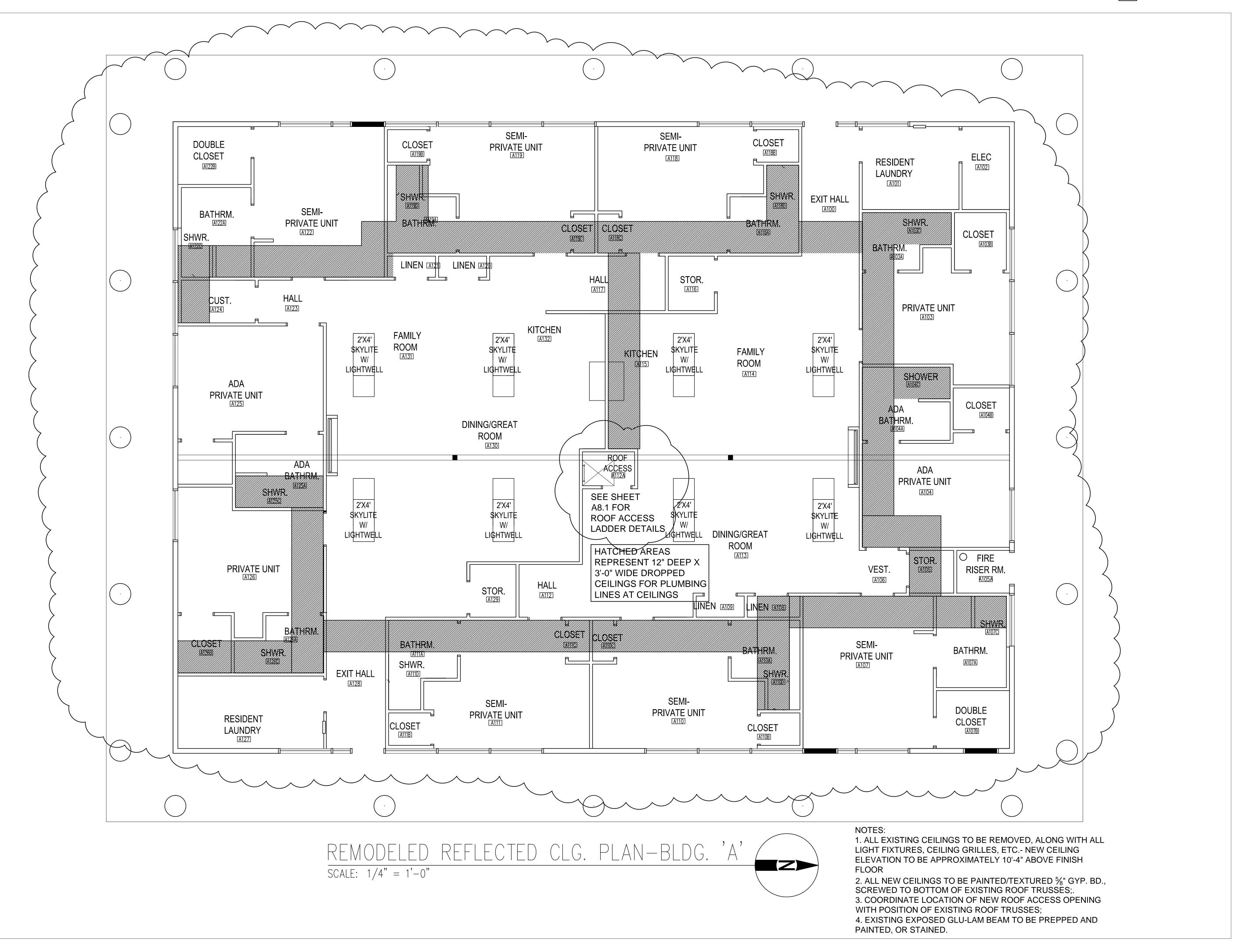
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BUILDING 'A' REMODELED FLOOR PLAN

sheet

A2 1A



Donald L. Welch Architect 7533 Sandy Land Lane midvale utah 84047

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Tenant Finish
for

Brighton Recovery Campus

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

revisions

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JANUARY 3, 2017
SECOND SUBMITTAL FOR
EACH SEPERATE BUILDING PARCEL

A JANUARY 6, 2017

JANUARY 6, 2017
ADDENDUM #2-BUILDING 'C'

JANUARY 17, 2017
ADDENDUM #4-BUILDING 'B'
FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A'
BUILDING 'F, 'B', 'C', 'D', 'E'

BUILDING 'F', 'B', 'C', 'D', 'E'

MARCH 20, 2017

ADDENDUM #8-BUILDING 'A'
BUILDING 'F'

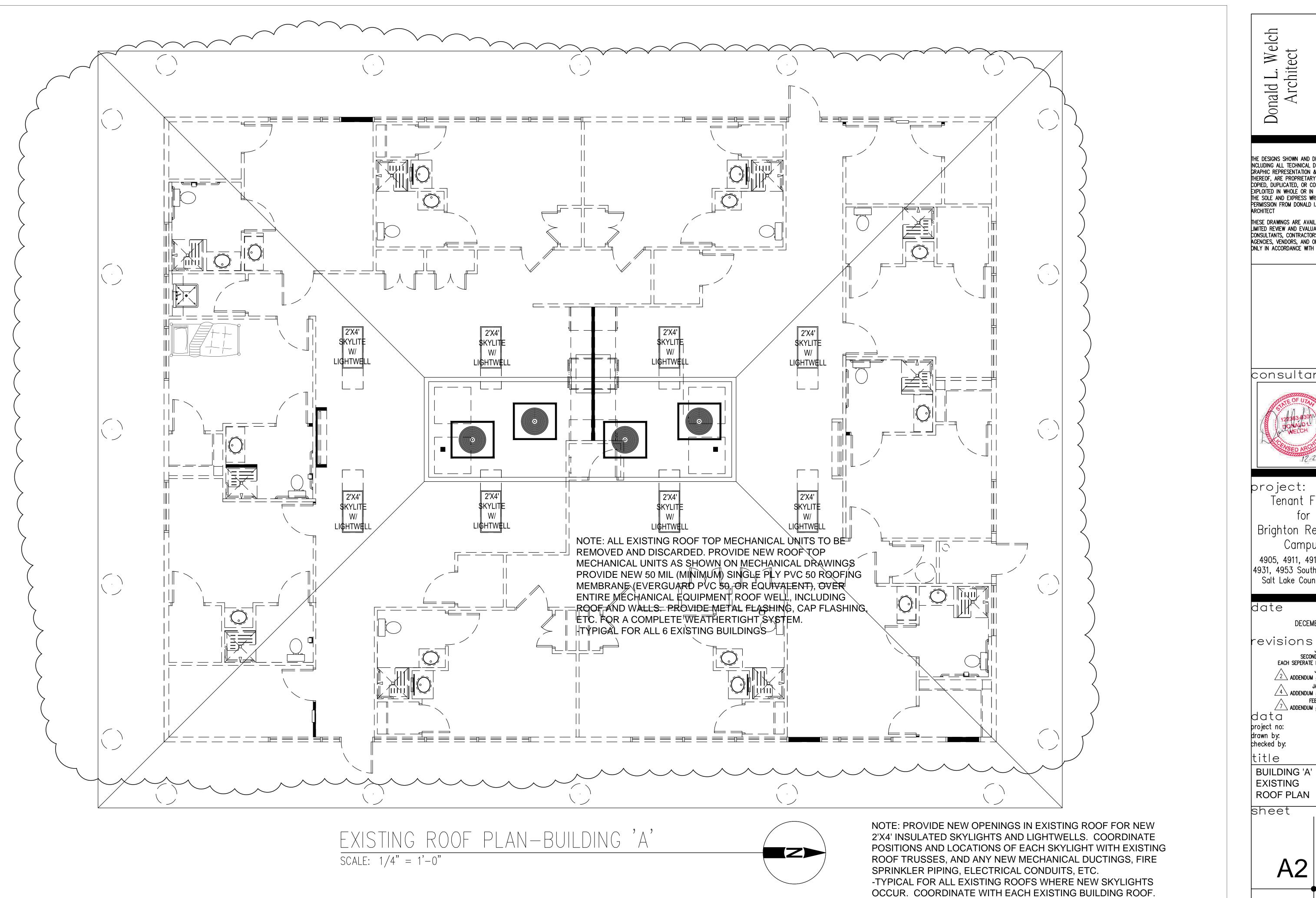
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REFL. CLG. PLAN

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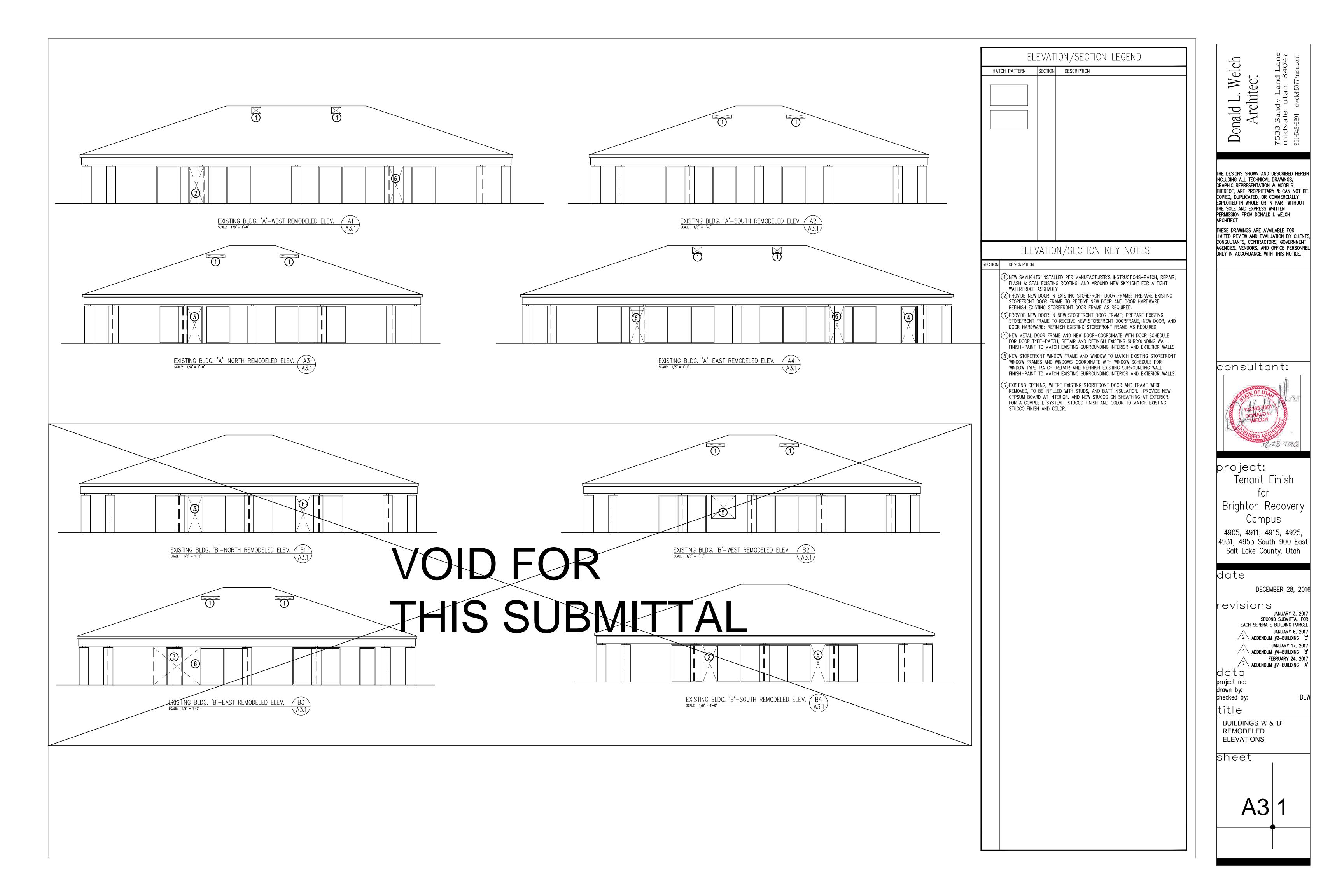
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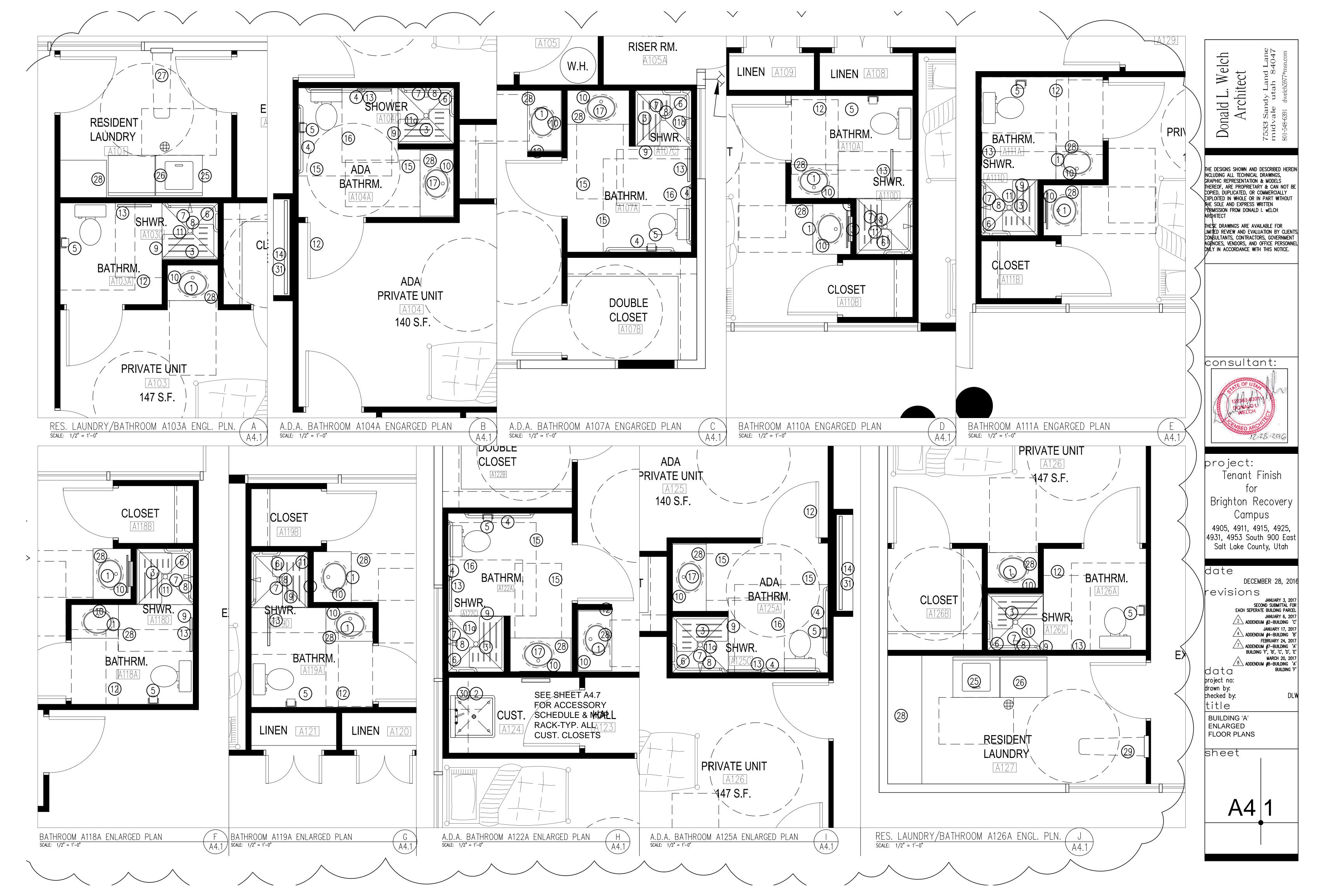
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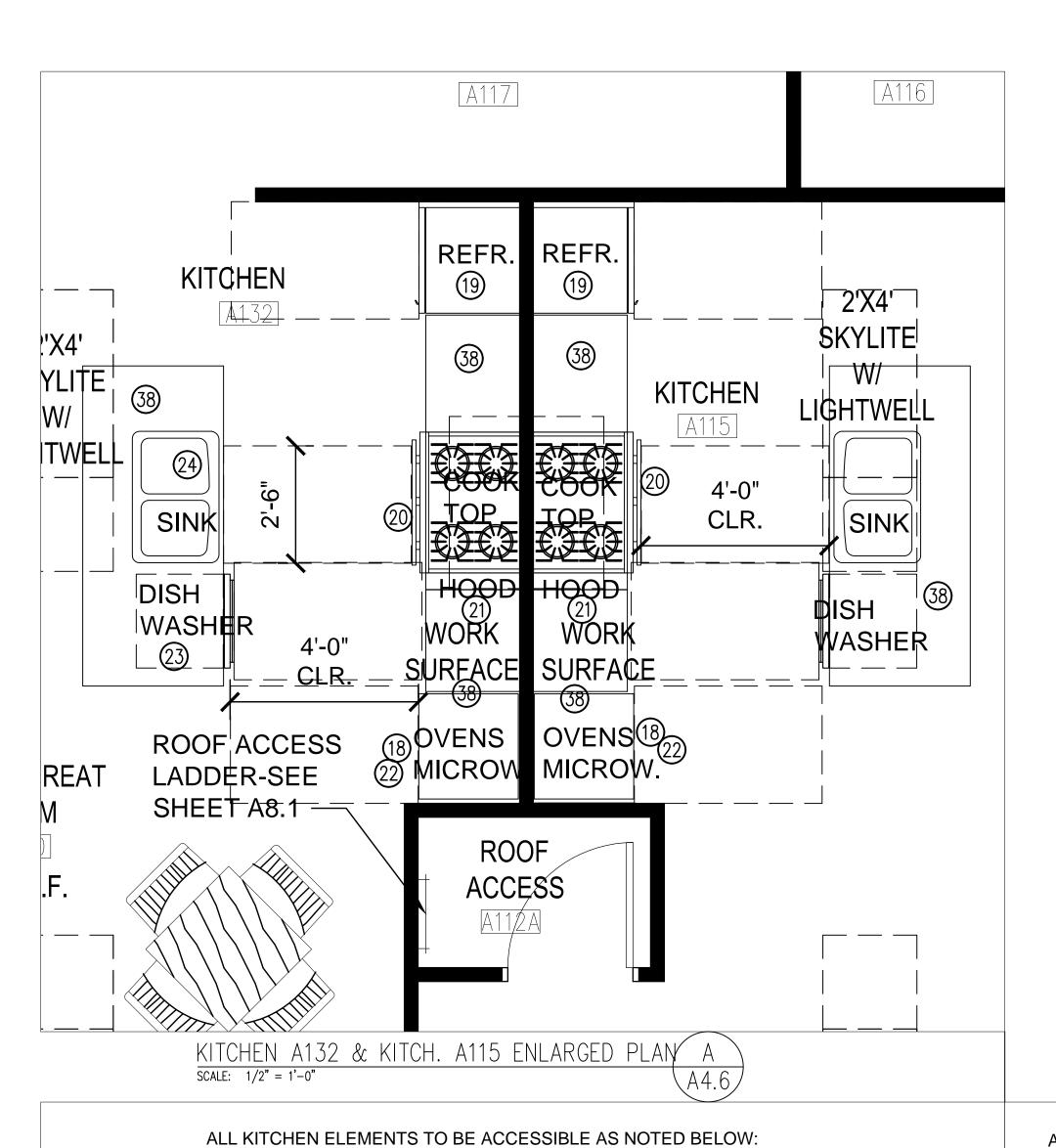
ADDENDUM #4-BUILDING 'B'
FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A'

BUILDING 'A' EXISTING

A2 1C







i. PROVIDE A WORK SURFACE WHERE SHOWN, (30" WIDE X 28"-34"

a. CLEAR FLOOR SPACE FOR FORWARD APPROACH WITH KNEE

b. THE WORK SURFACE IS REQUIRED TO BE LOCATED

ADJACENT TO OVEN. EITHER ON THE SIDE OPPOSITE THE HINGE,

II. SINK SHALL BE 34" HIGH WITH A FORWARD APPROACH WITH TOE

WITHIN REACH RANGE AS REQUIRED BY SECTION 804.5.2, 309.3, and

IV. CONTROLS FOR OVER THE RANGE MICROWAVE NEED TO BE

V. OVEN AND COOKTOP CONTROLS ARE NOT PERMITTED TO

804.5.5 Oven. Ovens shall comply with Section

804.5.5.1 Clear floor space. A clear floor space

shall be provided. The oven door in the open posi-

tion shall not obstruct the clear floor space for the

804.5.5.2 Side-Hinged Door Ovens. Side-hinged

door ovens shall have a work surface complying

with Section 804.3 positioned adjacent to the latch

804.5.5.3 Bottom-Hinged Door Ovens. Bottom-

hinged door ovens shall have a work surface com-

plying with Section 804.3 positioned adjacent to

804.5.5.4 Controls. The location of controls shall

not require reaching across burners.

ABOVE FINISHED FLOOR

AND TOE CLEARANCE IS REQUIRED.

OR ON EITHER SIDE, FOR A BOTTOM HINGE.

AND KNEE CLEARANCE (NO CABINET)

REQUIRE REACH OVER THE BURNERS.

side of the oven door.

one side of the door.

309.4 OF ICC A117.1-09 (48").



Unified Fire Authority, Greater Salt Lake Fire Prevention Bureau **Building and Site Development Plan Review**



Salt Lake County Townships

UNIFIED FIRE AUTHORITY REVIEW

Date: January 23, 2017

Permit #: 170067

Project Name: New Brighton Recovery Campus

Address: 4911 S 900 E, SALT LAKE CITY UT 84117

Thank you for submitting your plans for the New Brighton Recovery Campus project. Please review all comments contained in this letter. This project SHALL, be designed to meet all requirements of the 2012 International Fire Code. Please contact the Area Fire Marshal Don Buckley at (801) 824-3714 for any and all inspections or questions.

Comments:

- 1. **Fire Sprinklers Required.** Deferred submittal for fire sprinkler shop drawings are to be sent directly to the following address: Unified Fire Authority, 3380 South 900 West, Salt Lake City, Utah 84119. Attention: Stewart Gray. A minimum of two sets of plans, complete with manufacturer cut sheets, and hydraulic calculations. Plans must be ink signed by a NICET level III or better in Auto Sprinkler Layout. (There needs to be a hydrant with-in a 100 feet of the FDC.) FDC is required to have KNOX Locking Caps. ALL FIRE PROTECTION PLANS REQUIRE 3rd PARTY REVIEW PRIOR TO BE SUBMITTED TO THE UNIFIED FIRE AUTHORITY.
- 2. Post Indicator Valve with Tamper Required. If there is no designated fire riser room with a direct access door from the outside. There shall be either a wall mounted P.I.V (OS&Y) or a typical P.I.V placed a minimum distance of 40 feet from the building with a tamper switch.
- 3. Low Frequency Fire Alarm Required. Deferred submittal for fire alarm shop drawings are to be sent directly to the following address: Unified Fire Authority, 3380 South 900 West, Salt Lake City, Utah 84119. Attention: Stewart Gray. A minimum of two sets of plans, complete with manufacturer cut sheets, and battery calculations. Plans must be ink signed by a NICET level III or better in Fire Alarm Systems. ALL FIRE ALARM PLANS REQUIRE 3rd PARTY REVIEW PRIOR TO BE SUBMITTED TO THE UNIFIED FIRE AUTHORITY.
- 4. **Knox Boxes Required**. Fire Department "Knox Brand" lock box to be mounted to exterior walls, near the main entrance and/or nearest the door serving the exterior access to the fire sprinkler riser room. (At a height of 5 feet to the top of the box) Lock box purchase can be arranged by the General Contractor. See attached information form.

5. Visible Addressing Required. New and existing buildings shall have approved address numbers plainly legible and visible from the street fronting the property. These numbers shall contrast with their

All plans pertaining to fire protection and/or life safety are to be made available upon request at the construction

Plan approval or review shall not be construed to relieve from or lessen the responsibility of any person designing, owning, operating or controlling any building. Damages to persons or property caused by defects, fire, improper installation, or other emergency conditions that occur in or on the building property shall not hold the Unified Fire Authority as assuming any liability.

Thank you, Donald P. Buckley Jr., Salt Lake County East Area Fire Marshal. Unified Fire Authority, 3380 South 900 West Salt Lake City, Utah 84119 Phone: (801) 824-3714

Fax: (385) 468-9030

consultant:

Welch

Donald

Architect

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PERMISSION FROM DONALD I. WELCH

THESE DRAWINGS ARE AVAILABLE FOR

LIMITED REVIEW AND EVALUATION BY CLIENTS

CONSULTANTS, CONTRACTORS, GOVERNMENT

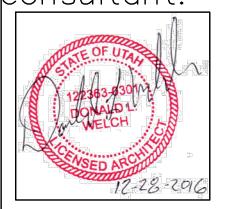
AGENCIES. VENDORS, AND OFFICE PERSONNE

DNLY IN ACCORDANCE WITH THIS NOTICE.

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broject: Tenant Finish

Brighton Recovery Campus

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016 revisions

JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL **JANUARY 6, 2017** $\frac{2}{2}$ addendum #2-Building ' JANUARY 17, 2017 4 addendum #4-Building 'F FEBRUARY 24, 2017 $\sqrt{7}$ addendum #7-Building $^{\prime}$ BUILDING 'F", 'B', 'C', 'D', 'E

MARCH 20, 2017 8 ADDENDUM #8-BUILDING ' data project no:

drawn by: checked by: title

ENLARGED KITCHEN FLOOR PLAN & CABINET SECTIONS

sheet

A4 6

ALL LAUNDRY ROOM EQUIPMENT TO BE ACCESSIBLE AS NOTED BELOW:

SECTION 305 ALLOWS A PARALLEL APPROACH TO AN ELEMENT, AND THE EDGE OF THE SHALL BE 48" MAXIMUM, AND THE LOW SIDE REACH SHALL BE 15 INCHES ABOVE THE FLOOR.

308.3.2 OBSTRUCTED HIGH REACH. WHERE A CLEAR FLOOR SPACE COMPLYING WITH SECTION 305, ALLOWS A PARALLEL APPROACH TO AN ELEMENT, AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 THE HIGH SIDE REACH SHALL BE 48 INCHES MAXIMUM ABOVE THE FLOOR FOR A REACH

309.3 HEIGHT. OPERABLE PARTS SHALL BE PLACED WITHIN ONE OR MORE OF THE REACH RANGES SPECIFIED IN SECTION 308.

309.4 OPERATION. OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5.0 POUNDS MAXIMUM.

DOORS, LINT SCREENS, DETERGENT AND BLEACH COMPARTMENTS, SHALL COMPLY WITH SECTION 309.

611.4 HEIGHT OF LAUNDRY EQUIPMENT. TOP LOADING MACHINES SHALL HAVE THE DOOR TO THE LAUNDRY COMPARTMENT 36 INCHES MAXIMUM ABOVE THE FLOOR. FRONT LOADING MACHINES SHALL HAVE THE BOTTOM OF THE OPENING TO THE LAUNDRY COMPARMENT, 15 INCHES MINIMUM AND 36 INCHES MAXIMUM ABOVE THE FLOOR.

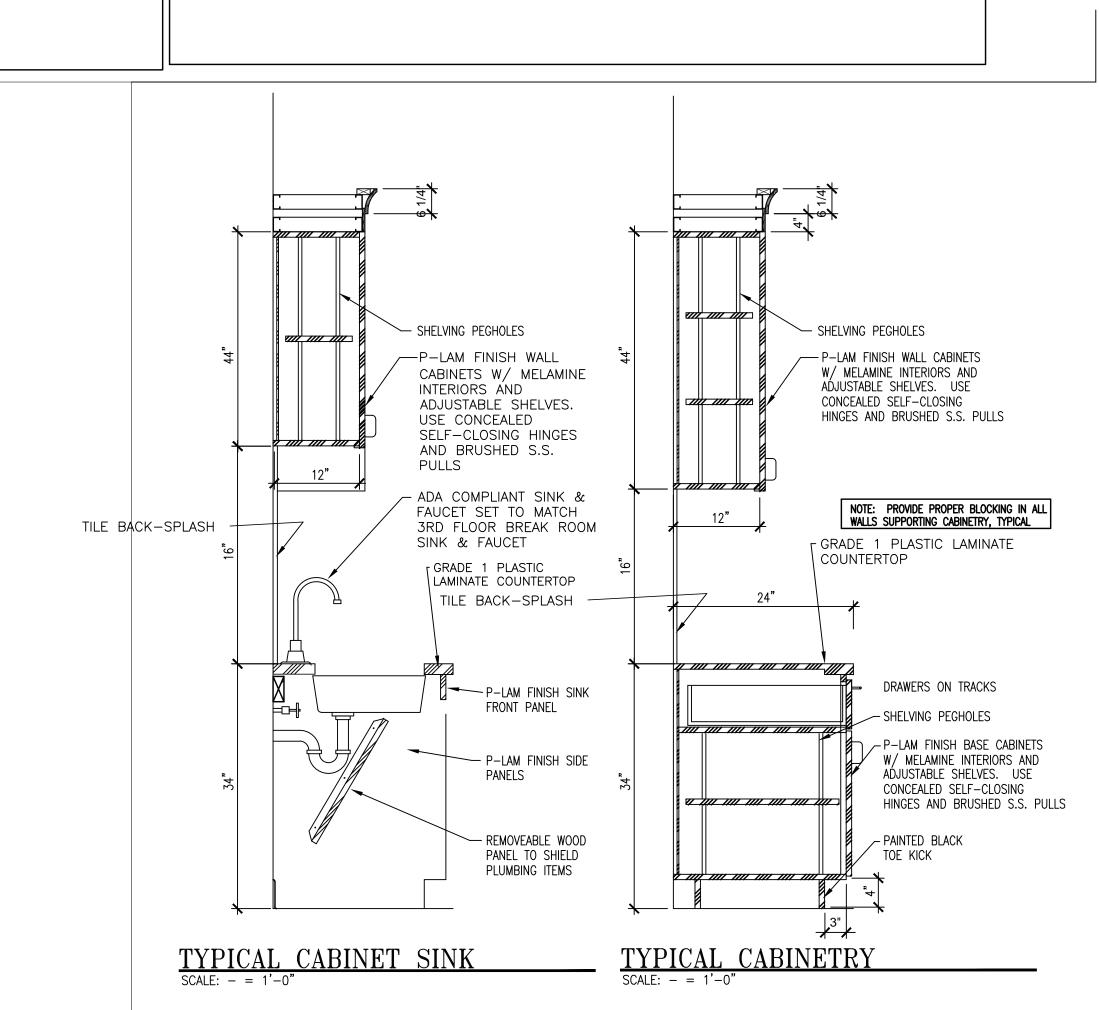
308.3.1 UNOBSTRUCTED SIDE REACH. WHERE A CLEAR FLOOR SPACE COMPLYING WITH CLEAR FLOOR SPACE IS 10 INCHES. MAXIMUM FROM THE ELEMENT. THE HIGH SIDE REACH

INCHES ABOVE THE FLOOR, AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAXIMUM. THE HIGH SIDE REAH SHALL BE 48 INCHES MAXIMUM ABOVE THE FLOOR FOR A REACH DEPTH OF 10 INCHES MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10 INCHES. DEPTH OF 24 INCHES MAXIMUM.

EXCEPTION: AT WASHING MACHINES AND CLOTHES DRYERS, THE HEIGHT OF THE OBSTRUCTION SHALL BE PERMITTED TO BE 36" MAXIMUM ABOVE THE FLOOR.

309 OPERABLE PARTS

611.3 OPERABLE PARTS FOR LAUNDRY EQUIPMENT. OPERABLE PARTS, INCLUDING



		V C C L E D L L E D E E E D T C	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\Box			
		Y SCHEDULE - REFER TO					
NO	DESCRIPTION	MANUFACTURER / VENDOR	FURNISH O C		INSTALI O C		REMARKS
	LAVATORY - COUNTERTOP ACCESSIBLE	SEE PLUMBING SCHEDULE	•	V		V	
2	4"X4" X 4'-0" HIGH TILE SURROUND	SEE SPECIFICATIONS; REAR OF MOP SINK	•		•		
3	ADA SHOWER SEAT	SEE FINISH SCHED.; COORD. W/ PREFAB	•		•		SEE NOTE A.
1	TOUET ODAD DAD	SHOWER UNIT					
5	TOILET GRAB BAR TOILET PAPER HOLDER - CHROME	TO MEET A.D.A. REQUIREMENTS COORD. WITH OWNER-SEE FINISH SCHED.	•		•		PROVIDE BLOCKING PER MANUFACT. RECOMMENDATION
6	SHOWER GRAB BARS	COORDINATE WITH PRE-FAB SHOWER	•		•		PROVIDE BLOCKING PER MANUFACT. RECOMMENDATION
7	SHOWER SPRAY UNIT - 60" LONG HOSE,	SEE FINISH SCHEDULE \$	•		•		
	HEAD HEIGHT ADJUSTABLE FROM 26" TO	PLUMBING SCHEDULE					
	54" ABOVE TOP OF TUB						
8	SHOWER CONTROLS	SEE PLUMBING SCHEDULE	•		•		IN ACCESSIBLE ROOMS INSTALL AT 8" FROM EDGE OF
							TUB \$ 8" ABOVE TOP OF TUB, SEE INTERIOR ELEVATIONS. SEE INTERIOR ELEVATIONS FOR SHOWERS.
			•				LLLVATIONS, SLL INTERIOR LLLVATIONS FOR SHOWERS.
9	STRAIGHT SHOWER CURTAIN ROD -	COORDINATE WITH OWNER	•		•		
	CHROME PLATED, SCREW MOUNTED						
10	MIRROR - 16" WIDE X 30" HIGH - ADA		•		•		FIXED TILT MIRROR W/ STAINLESS STEEL FRAME
	ONE PIECE FIBERGLASS SHOWER UNIT	SEE FINISH SCHEDULE & PLUMBING SCHEDUL	E •		•		SEE NOTE B
l la	ONE PIECE FIBERGLASS ACCESSIBLE	SEE FINISH SCHEDULE & PLUMBING SCHEDUL			•		SEE NOTE B
, , ,	SHOWER						
			•		•		
12	DOUBLE ROBE HOOK - MOUNTED ON	CONTACT DESIGNATED SERVICE PROVIDERS	•		•		IN ACCESSIBLE ROOMS PROVIDE TWO SETS, ONE SET
	BACK OF BATHROOM DOOR 66" A.F.F.						AT 66" AFF AND ONE SET AT 48" AFF.
13	UNLESS NOTED OTHERWISE TOWEL RACK - CHROME 18" WIDE	CONTACT DESIGNATED SERVICE PROVIDERS	•		•		
	TOWELT (OR OTHER)	CONTROL DESIGNATED SERVICE FRONTERS					
14	FLAT PANEL TELEVISION W/ FIXED	CONTACT DESIGNATED SERVICE PROVIDERS	•		•		40" OR 60" FLAT SCREEN PER OWNERS PREFERENCE
	MOUNTING BRACKET						
			•		•		
15	ADA CLEARANCE ADA CLEARANCE						SEE NOTE C SEE NOTE D
16	ADA CLLARANCL						JLL NOTE D
17	ACCESSIBLE SINK FRONT/PLUMBING	SEE PLUMBING SCHEDULE	•		•		
18	BUILT-IN MICROWAVE ABOVE OVENS	COORDINATE WITH OWNER	•		•		SEE NOTE L
	REFRIGERATOR	COORDINATE WITH OWNER	•		•		SEE NOTE L
	COOK-TOP HOOD	COORDINATE WITH OWNER	•		•		SEE NOTE L
21	COOK-TOP HOOD DOUBLE OVEN	COORDINATE WITH OWNER COORDINATE WITH OWNER	•		•		SEE NOTE L SEE NOTE L
	UNDER-COUNTER DISHWASHER	COORDINATE WITH OWNER	•		•		SEE NOTE L
	DOUBLE SINK W/ DISPOSAL	SEE PLUMBING DRAWINGS	•		•		
25	CLOTHES WASHER	COORDINATE WITH OWNER	•		•		
	CLOTHES DRYER	COORDINATE WITH OWNER	•		•		
	RECESSED WALL IRONING BOARD	COORDINATE WITH OWNER	•		•		SEE NOTE H
28	COUNTERTOP - PLASTIC LAMINATE OVER 3/4" SUBSTRATE - 1 1/2" SUBSTRATE AT	COORDINATE WITH OWNER	•		•		SEE NOTE H
	PERIMETER W/ BACKSPLASH					-	
						+	
29	ADA CLEARANCE						SEE NOTE F
	411 411 0555 44 44 44 4 51 5 64 155 64 155 64 155						
30	4" x 4" CERAMIC WALL TILE SURROUND X 4'-0" HIGH AT CUSTODIAL MOP SINK		•		•	-	
	X 4-0 THIGHTAT COSTODIAL MOT SINK						
31	PREFABRICATED GAS FIREPLACE	COORDINATE WITH FINISH SCHEDULE	•		•	1	COORDINATE WITH PLUMBING AND ELECTRICAL
	TILLI DICIONILLI CI						FOR GAS BIBB AND ELECTRICAL SWITCH
32	STAINLESS STEEL OR LAMINATE	COORDINATE WITH OWNER	•		•		PROVIDE BLOCKING PER MANUFACT. RECOMMENDATION
	TOILET PARTITIONS AND PARTITION DOORS					<u> </u>	
	Liniber colliser sees	* ('CORDINATE WITH OWNIER	•		•		SEE NOTE L
	UNDER-COUNTER SPECIMEN REFRIGERATOR		-	I	_		
34	SINGLE LAB SINK	COORDINATE WITH OWNER	•		•		COORDINATE WITH PLUMBING SEE NOTE I
34 35			•		•		SEE NOTE L #B505; I I 1/2" W. X 10 7/8" HIGH; SEE NOTE L
34 35 36	SINGLE LAB SINK LOCKABLE CABINETS	COORDINATE WITH OWNER COORDINATE WITH OWNER	•		•		SEE NOTE L
34 35 36 37	SINGLE LAB SINK LOCKABLE CABINETS THROUGH-WALL SPECIMENT PASS-THRU	COORDINATE WITH OWNER COORDINATE WITH OWNER STAINLESS STEEL-BOBRICK OR EQUIVALENT COORDINATE WITH OWNER	•		•		SEE NOTE L #B505; 1/2" W. X 0 7/8" HIGH; SEE NOTE L
34 35 36 37	SINGLE LAB SINK LOCKABLE CABINETS THROUGH-WALL SPECIMENT PASS-THRU SINGLE BAR SINK COUNTERTOP/CABINET - PLASTIC LAMINATE OVER 3/4" SUBSTRATE - 1 1/2" SUBSTRATE	COORDINATE WITH OWNER COORDINATE WITH OWNER STAINLESS STEEL-BOBRICK OR EQUIVALENT COORDINATE WITH OWNER COORDINATE WITH OWNER	•		•		SEE NOTE L #B505; I I 1/2" W. X 10 7/8" HIGH; SEE NOTE L COORDINATE WITH PLUMBING
34 35 36 37	SINGLE LAB SINK LOCKABLE CABINETS THROUGH-WALL SPECIMENT PASS-THRU SINGLE BAR SINK COUNTERTOP/CABINET - PLASTIC LAMINATE OVER 3/4" SUBSTRATE - 1 1/2" SUBSTRATE AT PERIMETER W/ BACKSPLASH	COORDINATE WITH OWNER COORDINATE WITH OWNER STAINLESS STEEL-BOBRICK OR EQUIVALENT COORDINATE WITH OWNER COORDINATE WITH OWNER	•		•		SEE NOTE L #B505; I I 1/2" W. X 10 7/8" HIGH; SEE NOTE L COORDINATE WITH PLUMBING

LEGEND

O - OWNER

C - CONTRACTOR

V - VENDOR

RES	TROOM ACCESSORIES SO	CHEDULE	
MARK	ITEM	MANUF./ MODEL NO.#	NOTES:
	NOT USED		
2	WALL MTD. SOAP DISPENSER	BOBRICK OR BRADLEY	
3	ROBE HOOK @ 6'-0" A.F.F.	BOBRICK OR BRADLEY	
4	PARTITION MTD. SANITARY NAPKIN DISPOSAL	BRADLEY 4721-15	
5	WALL MTD. SANITARY NAPKIN DISPOSAL	BRADLEY 4722-15	
6	PARTITION MTD. TOILET TISSUE DISPENSER	BOBRICK OR BRADLEY	
7	WALL MTD. TOILET TISSUE DISPENSER	BRADLEY 5412	
8	SANITARY NAPKIN DISPENSER	BRADLEY 401	
(c)	TOWEL DISPENSER / WASTE CAN	BRADLEY 235	
9	TOILET STALL PARTITION	SANYMETAL	
1	36" X 52" X 1 1/2" GRAB BAR	BRADLEY 059	STAINLESS STEEL
12	MOP RACK		WALL/CLG. MTD., STAINLESS STEEL
13	36" WIDE x 48" HIGH FRAMELESS MIRROR	BOBRICK OR BRADLEY	COORD. MIRROR WDTH. W/ FIN. WALLS
14	TOWEL DISPENSER	BRADLEY OR BOBRICK	WALL HUNG ABOVE COUNTER TOP
15	COAT HOOK	BOBRICK OR BRADLEY	

NOTES:

- A. IN-TUB SEAT SHALL BE MOUNTED SECURELY \$ SHALL NOT SLIP DURING USE. STRUCT. STRENGTH PER ADA REQUIREMENTS.
- B. VERIFY REQUIRED R.O. WITH SHOWER MANUF.
- C. ADA 30"x 48" CLEAR FLOOR SPACE @ LAVATORY, AND 60" x 56" CLEAR FLOOR SPACE @ WATER CLOSET.
- D. ADA 36" CLEAR FLOOR SPACE @ SHOWER.
- PROVIDE CUTOUT IN HEADBOARD FOR ELECTRICAL BOX - COORD. W/ ELEC. DWGS. (SEE 8/A-9 FOR BACK-TO-BACK CONDITION). NOTE: ELEC. OUTLETS IN ALL GUEST ROOMS SHALL BE 4" HIGHER THAN IN COMMON AREAS.
- ADA 3'-O" CLEAR FLOOR SPACE AROUND BED.
- G. FURNISHING
- H. CONTRACTOR TO PROVIDE AND INSTALL BLOCKING AND COORDINATE ELECTRICAL INSTALLATION W/ ELECTRICAL DRAWINGS.
- NOT USED
- NOT USED
- ALL OWNER SUPPLIED ITEMS MUST BE PURCHASED THROUGH ONE OF THE OWNER DESIGNATED SERVICE PROVIDERS. COORDINATE WITH OWNER.

Welch

Donald L. We Architect

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PERMISSION FROM DONALD I. WELCH
ARCHITECT

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consultant:



project: Tenant Finish for Brighton Recovery Campus

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016

revisions

JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL JANUARY 6, 2017 ADDENDUM #2-BUILDING 'C' JANUARY 17, 2017

ADDENDUM #4-BUILDING 'B'
FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A'

data project no: drawn by: checked by:

title

EQUIPMENT/ ACCESSORY SCHEDULE

sheet

ROOM IO.	ROOM NAME	FLOOR	BASE	I	WA	HS.		CEILG.	CEILG.	REMARKS
		1		NORTH	EAST	SOUTH	WEST	OLILO.	HGT.	KLWAKKS
	EXISTING BUILD	ING 'A'		NORTH	Littoi	000111	1 11201			
A100	EXIT HALL	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	T _
A101	RESIDENT LAUNDRY	F-3	B-1	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A102	ELECTRICAL	F-3	B-1	W-1	W-1	W-1	W-2	C-1	±10'-4"	-
A103	PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A103A	BATHROOM	F-2	B-2	W-2	W-2	W-2	W-2	C-1	±10'-4"	5
A103B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
4103C	SHOWER (PREFAB.)		-					-		3
A104	A.D.A. PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A104A	BATHROOM	F-2	B-2	W - 2	W - 2	W-2	W-2	C-1	±10'-4"	5
A104B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
4104C	SHOWER		-					-		3
A105	STORAGE	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A105A	FIRE RISER ROOM	F-3	B-1	W-3	W-3	W-3	W-3	C-1	±10'-4"	_
A106	VESTIBULE	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A107	SEMI-PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A107A	DOUBLE CLOSET	F-2	B-2	W-2	W-2 W-1	W-2	W-2 W-1	C-1 C-1	±10'-4"	5
4107B 4107C	SHOWER	F-1	B-3	W-1	VV-1	W-1	VV-1	<u>-</u>	±10-4	3
A107C	LINEN	 F-4	- В-3	 W-1	 W-1	 W-1	 W-1	- C-1	±10'-4"	_
A109	LINEN	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A110	SEMI-PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A110A	BATHROOM	F-2	B-2	W-2	W-2	W-2	W-2	C-1	±10'-4"	5
A110B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
4110C	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A110D	SHOWER		-					-		3
A111	SEMI-PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A111A	BATHROOM	F-2	B-2	W - 2	W-2	W-2	W-2	C-1	±10'-4"	5
A111B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
4111C	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
4111D	SHOWER		-					-		3
A112	HALL	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A112A	ROOF ACCESS	F-3	B-1	W-3	W-3	W-3	W-3	C-2	±10'-4"	-
A113	DINING/GREAT ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	4
A114	FAMILY ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A115	KITCHEN	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A116	STORAGE	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A117 A118	HALL SEMI-PRIVATE UNIT	F-4 F-1	B-3 B-3	W-1 W-1	W-1 W-1	W-1 W-1	W-1 W-1	C-1 C-1	±10'-4"	-
A118A	BATHROOM	F-2	B-3	W-2	W-2	W-2	W-2	C-1	±10'-4"	5
4118B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
4118C	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	- <u>-</u>
4118D	SHOWER	<u></u>	_							3
A119	SEMI-PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A119A	BATHROOM	F-2	B-2	W - 2	W - 2	W-2	W-2	C-1	±10'-4"	5
A119B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
A119C	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
4119D	SHOWER		-					=		3
A120	LINEN	F - 4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A121	LINEN	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A122	SEMI-PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A122A	BATHROOM	F-2	B-2	W - 2	W - 2	W-2	W - 2	C-1	±10'-4"	5
A122B	DOUBLE CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
4122C	SHOWER		-					_		3
A123	HALL	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A124	CUSTODIAN	F-3	B-1	W-1	W-1	W-1	W-1	C-1	±10'-4"	6
A125	A.D.A. PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A125A	BATHROOM	F-2	B-2	W-2	W-2	W-2	W-2	C-1	±10'-4"	5
A125B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A125C A126	SHOWER PRIVATE UNIT	 F-1	- В-3	 W-1	 W-1	 W-1	 W-1	 C-1	±10'-4"	3
A126 A126A	BATHROOM	F-1 F-2	B-3 B-2	W-1	W-2	W-2	W-2	C-1 C-1	±10'-4"	5
4126A 4126B	CLOSET	F-2 F-1	B-2 B-3	W-1	W-1	W-1	W-1	C-1	±10-4 ±10'-4") -
4126B 4126C	SHOWER	F-1	_ D-3	VV-1	VV-1	VV-1 	VV-1	- -	±10-4	3
A120C	RESIDENT LAUNDRY	F-3	B-1	W-1	 W-1	W-1	W-1	C-1	±10'-4"	-
A128	EXIT HALL	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
	R TO ADJACENT EXISTING B									L HEDULE****
		_								

CARPET
2X2 CERAMIC TILE

F-3 VINYL COMPOSITION TILE F-4 1x4 HARDWOOD FLOORING

F-5 UNFINISHED CONCRETE-CLEANED

F-6 8X8 QUARRY TILE-SEALED WALLS:

W-1 PAINTED GYP. BOARD

W-2 4X4 CERAMIC TILE (5'-0" HIGH WAINSCOT)

W-3 GYPSUM BOARD UNPAINTED W-4 8' HIGH FIBER REINFORCED PLASTIC (FRP) PANELS

INTERIOR FINISH SCHEDULE NOTES: 1. PROVIDE METAL EDGE AT CARPET AND VINYL COMPOSITION TILE TRANSITION OR TRANSITION TO CONCRETE INSIDE.

2. PROVIDE DROPPED GYP. BD. CLG. IN TOILET ROOMS AND ALCOVES INTO TOILET ROOMS-TYPICAL. 3. PREFABRICATED SHOWER UNITS-SEE INFORMATION AND SPECIFICATION INFORMATION, THIS SHEET.:

C-1 PAINTED GYP. BOARD-TEXTURED

C-2 GYPSUM BOARD UNPAINTED

C-3 EXPOSED STRUCTURE

B-4 NO BASE

4. PREFABRICATED FIREPLACE UNITS-SEE INFORMATION AND SPECIFICATION INFORMATION, THIS SHEET.:

5. PROVIDE PAINTED GYP. BD. ABOVE CERAMIC TILE WAINSCOT, AND FRP PANELS.

6. PROVIDE CERAMIC TILE WAINSCOT AROUND 3 SIDES OF FLOOR SINK-PROVIDE PAINTED GYP. BD. ABOVE CERAMIC TILE WAINSCOT.

GENERAL NOTES FOR ALL 6 BUILDINGS:

1- TO MEET THE ENERGY CODE

REQUIREMENTS, PROVIDE 5/8" PAINTED GYP. BD. ON 2X4 STUD FURRING @ 24" O.C., AND R-13 BATT OR BLOWN-INSULATION AT ALL EXISTING EXTERIOR WALLS, AT WINDOW SILLS AND HEADS, BELOW NEW CEILINGS.

2- PROVIDE NEW R-38 BATT, OR BLOWN-IN INSULATION ABOVE NEW CEILING IN ALL **BUILDINGS-COORDINATE WITH NEW FIRE** SPRINKLER LINES ABOVE NEW CEILING.

3. COORDINATE WITH REFLECTED CEILING PLANS FOR 12" DEEP X 36" WIDE FURRED-DOWN CEILING AREAS, FOR HOT & COLD WATER PIPING LINES -ALSO COORDINATE WITH PLUMBING PLANS FOR HOT AND COLD WATER PIPING LINE LOCATIONS

PREFABRICATED FIREPLACE UNITS: NAPOLEON FIREPLACES 1-866-820-8686 PLAZMA FIRE VF31 PRODUCT CODE: WHVF31 VENT FREE GAS FIREPLACE 28" H X 43 ½6" WIDE X 9 ½" DEEP

OR EQUIVALENT

4-Piece for Remodeling

Made in America

NAPOLEON FIREPLACES DIRECT VENT GAS FIREPLACE ASCENT LINEAR 36 PRODUCT CODE: BL36 34 ½" HIGH X 35" WIDE X 16 ½" DEEP COORDINATE FIREPLACE SURROUND TO MEET REQUIRED DIMENSIONS

PREFABRICATED SHOWER UNITS: www.FreedomShowers.com 1-877-947-7769 38 5/8" x 38 7/16" Freedom ADA Transfer Shower Or equivalent (dimensions shown on plans are for this prefabricated shower. adjust wall dimensions for other prefab showers selected.

ADA Transfer Shower Features: •Outside Dimensions: 38 5/8"w x 38 7/16"d x 79"h •ADA compliant inside dimension 36" x 36" •4-piece unit for remodeling •1/2" barrier free threshold Center drain location •Self-supporting and pre-leveled shower base eliminates mud setting Full wood backing Subway tile pattern •Easy-to-clean gelcoat finish Textured slip-resistant floor

•30 Year Manufacturer's Limited Warranty

Commercial Code Compliance: •ADA Accessibility Guidelines for Buildings and Facilities •IPC International Plumbing Code •UPC Uniform Plumbing Code •ANSI Z124.2 Standards for Plastic Showers •ANSI A117.1 Accessible and Useable Buildings and Facilities CSA approved •NAHB, HUD, FHA

(Call for MAS compiance or regional requirements)

PROVIDE THE FOLLOWING AVAILABLE ACCESSORIES

IN ALL SHOWERS (UNLESS DIRECTED OTHERWISE BY OWNER: •Z Strip to create receiver flange (recommended)

Shower Rod Weighted Curtain •Pressure Balance Valve •Hand-held Shower and Slide Bar •Surface mount stainless soap dish Caulkless Drain

•Folding Shower Seat

Grab Bars

 Collapsible Water Retainer •Color upgrade to Bone or Biscuit-TO BE SELECTED BY OWNER

n.c.=			F : ::	l					
РООМ Ир.	ROOM NAME	FLOOR	BASE	NORTH	WA EAST	SOUTH	WEST	CEILG.	CE F
$\overline{}$	EXISTING BUILD	ING 'R'		NORTH	LAGI	300111	VVLST		
P10d	EXIT HALL	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10
B100 B101	RESIDENT LAUNDRY	F-3	B-1	W-1	W-1	W-1	W-1	C-1	±10
B102	ELECTRICAL	F-3	B-1	W-1	W-1	W-1	W-2	C-1	±10
B103	STORAGE	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10
B104	PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10
B104A	ватнкоом	F-2	B-2	W-2	W-2	W-2	W-2	C-1	±10
B104B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±1/0
B104C	SHOWER (PREFAB.)		_		-				<i> </i>
B105	A.D.A. PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10
B105A	BATHROOM	F-2	B-2	W - 2	W - 2	W - 2	W - 2	C-1/	±10
B105B	CLOSET	F-1	B-3	W-1	W-1	W-1	W-1	C/1	±10
B105C	SHOWER		_		_			<i>-</i>	
B106	CUSTODIAN	F-3	B-1	W-1	W-1	W-1	W-1	/ C-1	±10
B107	VESTIBULE VALUE UNITE UNITE	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10
B108 B108A	A.D.A. SEMI-PRIVATE UNI BATHROOM	F-1 F-2	B-3 B-2	W-1 W-2	W-1 W-2	W-1 W-2	W-1 W-2 /	C-1	±10
B108A B108B	CLOSET	F-2 F-1	B-2 B-3	W-1	W-1	W-1	W-/	C-1	±10
B108C	CLOSET	F-1	B-3	W-1	W-1	W-1	VV-1	C-1	±10
B108D	SHOWER				_		/		
B109	LINEN	F-4	B-3	W-1	W-1	W-1	/ W-1	C-1	±10
B110	LINEN	F-4	B-3	W-1	W-1	W-1	/ W-1	C-1	±10
B111	SEMI-PRIVATE UNIT	F-1	B- 3	W-1	W-1	W-1	/ W-1	C-1	±10
B111A	BATHROOM	F-2	B - 2	W-2	W - 2	W-2/	W - 2	C-1	±10
B111B	CLOSET	P\1	B-3	W-1	W-1	w/1	W-1	C-1	±10
B111C	CLOSET	F-1	B-3	W-1	W-1	/ W-1	W-1	C-1	±10
B111D	SHOWER				_	/			
B112	HALL	F-4	B-3	W-1	W-1	/ W-1	W-1	C-1	±10
B112A	ROOF ACCESS	F-3	B-1	W-3	W-3	W-3	W-3	C-2	±10
B113	DINING/GREAT ROOM	F-4	\B-3	W-1	W-1	W-1	W-1	C-1	±10
B114 B115	FAMILY ROOM KITCHEN	F-4 F-4	B -8	W-1 W-1	W-1/ W-1	W-1 W-1	W-1 W-1	C-1 C-1	±10
B116	STORAGE	F-4	B-3	W-1	/W-1	W-1	W-1	C-1	±10
B117	SEMI-PRIVATE UNIT	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10
B117A	BATHROOM	F-2	B-	W-2	W-2	W ₂	W-2	C-1	±10
B117B	CLOSET	V		W	W-1		W-1	C-1	±10
B117C	CLOSET	F-1	B-3	W-1/	W-1	W-1	W-1	C-1	±10
B117D	SHOWER	T			-				
B118	LINEN	-4	-3		W-1	W-1	W-1	C-1	±10
B119	A.D.A. SEMI-PRIVATE UNI	F-1	B-3	/W-1	W-1	W-1	W-1	C-1	±10
B119A	BATHROOM	<u> </u>	B-2	W-2	W-2	W-2	W-2	C-1	±10
B119B	CLOSET		E 3	$\mathbf{A}\mathbf{A}$	/ -1	W	V-1	C-1	±10
B119C	CLOSET		3-3	₩-1	I \ I \-1	■ W	₩ W	C-1	±10
B119D	SHOWER		-/						
B120	FIRE RISER ROOM	F-5	B - 4	W-3	M/3	W-3	W-3	C-2	±10
B121	STORAGE	F-4	/ 8-3	W-1	W-1\	W-1	W-1	C-1	±10
B122 B122A	A.D.A. PRIVATE UNIT BATHROOM	F-1 F-2	B-3 B-2	W-1 W-2	W-1 W-2	W-1 W-2	W-1 W-2	C-1 C-1	±10
B122A B122B	CLOSET	F-2 F-1	/ B-2 / B-3	W-2 W-1	W-2 W-1	W-1	W-1	C-1	±10
B122B B122C	SHOWER	,	/ b-3	VV-1	v v = 1 —	\		U-1	
B122C	PRIVATE UNIT	F-1/	B-3	W-1	 W-1	VX-1	W-1	C-1	±10
B123A	BATHROOM	F/2	B-2	W-2	W-2	W-2	W-2	C-1	±10
B123B	CLOSET	/F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10
B123C	SHOWER	/- -	-		-		\ -		
B124	STORAGE	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10
B125	RESIDENT LAUNDRY	F-3	B-1	W-1	W-1	W-1	\W-1	C-1	±10
B126	EXIT HALL	F-4	B-3	W-1	W-1	W-1	₩-1	C-1	±10
B127	DINING/GREAT ROOM	F-4	B-3	W-1	W-1	W-1	W - 1	C-1	±10
B128	FAMILY ROOM	F-4	B-3	W-1	W-1	W-1	W-1\	C-1	±10
B129	KITCHEN	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10
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FLOO	<u> </u>				_	<u>····</u> ·			

FLOOR: F-1 CARPET

CEILINGS:

C-1 PAINTED GYP. BOARD-TEXTURED C-2 GYPSUM BOARD UNPAINTED

C-3 EXPOSED STRUCTURE

INTERIOR FINISH SCHEDULE NOTES: PROVIDE METAL EDGE AT CARPET AND VINYL COMPOSITION TILE TRANSITION OR TRANSITION TO CONCRETE INSIDE. m/ 2. PROVIDE DROPPED GYP. BD. CLG. IN TOILET ROOMS AND ALCOVES INTO TOILET ROOMS-TYPICAL.

3. PREFABRICATED SHOWER UNITS-SEE INFORMATION AND SPECIFICATION INFORMATION, THIS SHEET. 4. PREFABRICATED FIREPLACE UNITS-SEE INFORMATION AND SPECIFICATION INFORMATION, THIS SHEET.

8X8 QUARRY TILE-SEALED

W-2/ 4X4 CERAMIC TILE (5'-0" HIGH WAINSCOT)

W/4 8' HIGH FIBER REINFORCED PLASTIC (FRP) PANELS

W-1 / PAINTED GYP. BOARD

W- GYPSUM BOARD UNPAINTED

F-6

5. PROVIDE PAINTED GYP. BD. ABOVE CERAMIC TILE WAINSCOT & FRP PANELS. 6. PROVIDE CERAMIC TILE WAINSCOT AROUND 3 SIDES OF FLOOR SINK-PROVIDE PAINTED GYP. BD. ABOVE CERAMIC TILE WAINSCOT.

ROOM	ROOM NAME	FLOOR	BASE		WA	LLS		CEILG.	CEILG.	REMARKS
NO.				NORTH	EAST	SOUTH	WEST		HGT.	
	EXISTING BUILD	ING 'C'								
C100	EXIT HALL	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	T/-
C101	OFFICE	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	1-
C102	CORRIDOR	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'- / 4"	-
C103	OFFICE	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
C104	OFFICE	F-1	B-3	W-1	W-1	W-1	W-1	C-1/	±10'-4"	-
C105	OFFICE	F-1	B-3	W-1	W-1	W-1	W-1	2 -1	±10'-4"	_
C106	OFFICE	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
C107	OFFICE	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
C108	OFFICE	FA	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
C109	CORRIDOR	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
C110	CORRIDOR	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
C111	LABORATORY	F-2	8-2	W-2	W-2	WZ	W-2	C-1	±10'-4"	3
C112	MEDS	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	
C113	STAFF BREAK ROOM	F-€	P P	W 1	W-1	<u> </u>		C-1	±10'-4"	_
C114	OFFICE	F-1	B-3		W.	W-1	H	C-1	±10'-4"	_
C115	OFFICE	F-1	/				W-	C-1	±10'-4"	_
C116	OFFICE	F-1	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	
C117	OFFICE	F-1	B-3	W-1	$\bot \triangle$	W-1	W-1	C-1	±10'-4"	-
C117	CORRIDOR	F-4	B-3	W-1	\ \ \	W-1	W-1	C-1	±10'-4"	- _
C118	ELECTRICAL	F-4 F-3	B -3 B-1	W-1	W-1	W-1	W-2	C-1	±10'-4"	-
	TOILET ROOM	F-3		VV-1	-	VV-1	VV-Z		±10'-4"	1
C120		<u> </u>	B-2		$\frac{-2}{1}$	W 2		C-1	-	5
C121	COPY/ROOF ACCESS	F-4			 V 	W-1		C-1	±10'-4"	-
C122	RECEPTION	F-4	B-3	W-1	W-1	■ W-1	W-1	C-1	±10'-4"	-
C123	CHECK-IN/EXIT HALL	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
C124	CORRIDOR	F-4/	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
C125	MEN'S RESTROOM	F-2	B-2	W-2	W-2	W-2	W-2\	C-1	±10'-4"	5
C126	GROUP ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
C127	GROUP ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
C127A	FIRE RISER ROOM	F-5	B - 4	W-3	W - 3	W-3	W-3	C-8	±10'-4"	-
C128	GROUP ROOM	F-4	B - 3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
C129	PATIENT BREAK AREA	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	_
C130	GROUP ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
C131	GROUP ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	\-
C132	WOMEN'S RESTROOM	F-2	B-2	W-2	W-2	W-2	W-2	C-1	±10'-4"	5
C133	CUSTODIAN	F-3	B-1	W-1	W-1	W-1	W-1	C-1	±10'-4"	6
C134	CORRIDOR	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
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EVICT				<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>
	ING BUILDING 'A'	ì		1	147.7	147.4		2 :	14014"	
A129	STORAGE	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
A130	DINING/GREAT ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	4
A131	FAMILY ROOM	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
B132	KITCHEN	F-4	B-3	W-1	W-1	W-1	W-1	C-1	±10'-4"	-
									<u> </u>	
		-							+	1

F-2 2X2 CERAMIC TILE

F-3 VINYL COMPOSITION TILE

F-4 1x4 HARDWOOD FLOORING F-5 UNFINISHED CONCRETE-CLEANED F-6 8X8 QUARRY TILE-SEALED

WALLS: W-1 PAINTED GYP. BOARD

CERAMIC TILE WAINSCOT.

W-2 4X4 CERAMIC TILE (5'-0" HIGH WAINSCOT)

W-3 GYPSUM BOARD UNPAINTED

INTERIOR FINISH SCHEDULE NOTES:

W-4 8' HIGH FIBER REINFORCED PLASTIC (FRP) PANELS

1. PROVIDE METAL EDGE AT CARPET AND VINYL COMPOSITION TILE TRANSITION OR TRANSITION TO CONCRETE INSIDE. 2. PROVIDE DROPPED GYP. BD. CLG. IN TOILET ROOMS AND ALCOVES INTO TOILET ROOMS-TYPICAL.

3. PREFABRICATED SHOWER UNITS-SEE INFORMATION AND SPECIFICATION INFORMATION, THIS SHEET. 4. PREFABRICATED FIREPLACE UNITS-SEE INFORMATION AND SPECIFICATION INFORMATION, THIS SHEET. 5. PROVIDE PAINTED GYP. BD. ABOVE CERAMIC TILE WAINSCOT & FRP PANELS.

6. PROVIDE CERAMIC TILE WAINSCOT AROUND 3 SIDES OF FLOOR SINK-PROVIDE PAINTED GYP. BD. ABOVE

BASE:

B-1 RESILIENT BASE

B-2 4" HIGH CERAMIC TILE

C-1 PAINTED GYP. BOARD-TEXTURED

C-2 GYPSUM BOARD UNPAINTED

C-3 EXPOSED STRUCTURE

B-3 HARDWOOD BASE B-4 NO BASE

Donald L.

Welch

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THESE DRAWINGS ARE AVAILABLE FOR LIMITED REVIEW AND EVALUATION BY CLIENTS CONSULTANTS, CONTRACTORS, GOVERNMENT AGENCIES, VENDORS, AND OFFICE PERSONNEI DNLY IN ACCORDANCE WITH THIS NOTICE.

consultant:

project: Tenant Finish Brighton Recovery

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016

revisions

JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL JANUARY 6, 2017 ∠2 ADDENDUM #2-BUILDING 'C' JANUARY 17, 2017 4 Addendum #4-Building 'B' FEBRUARY 24, 2017

 ∆ ADDENDUM #7—BUILDING 'A data project no: drawn by: checked by:

Finish **Schedules**

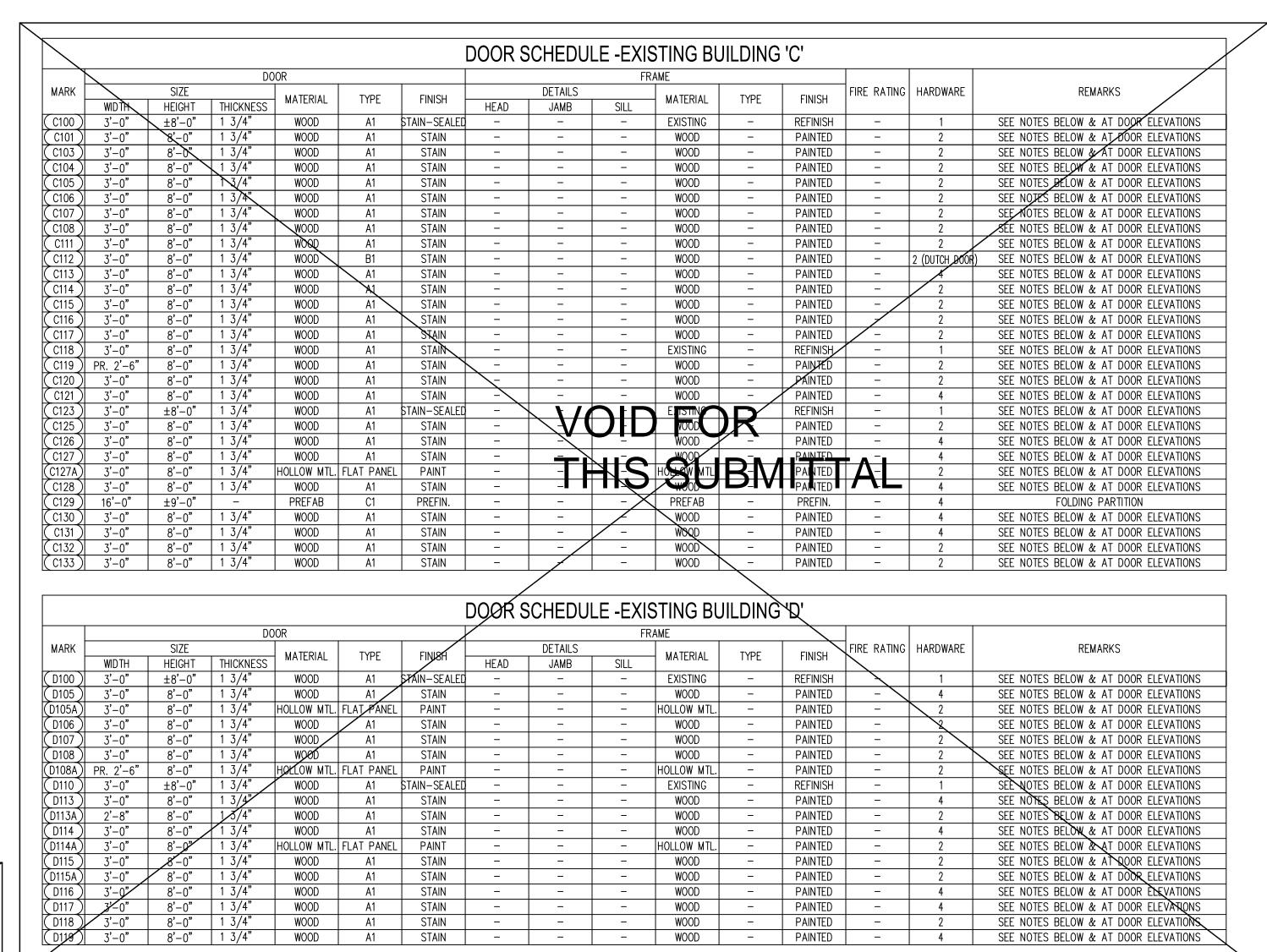
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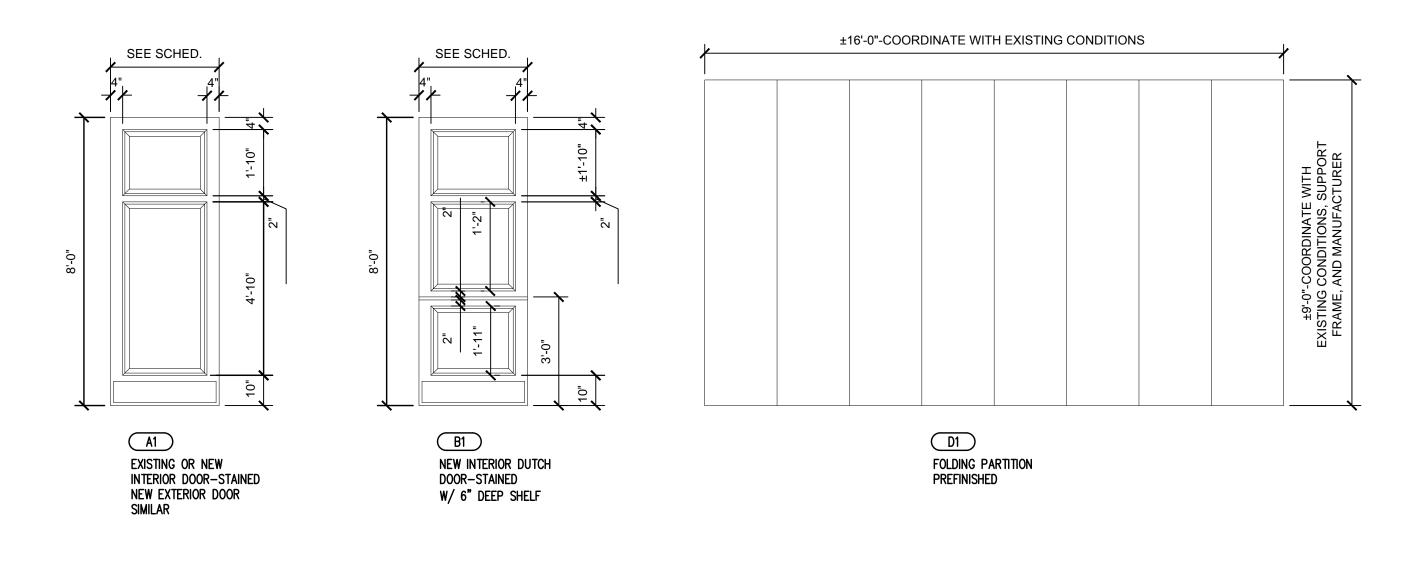
A6 1A

			DC	OOR					FF	RAME						
ARK	WIDTH	SIZE	THIOKNESS	MATERIAL	TYPE	FINISH	LIEAD	DETAILS	CILL	MATERIAL	TYPE	FINISH	FIRE RATING	HARDWARE	REMARKS	
00	3'-0"	HEIGHT	THICKNESS 1 3/4"	WOOD	A 1	CTAIN CEALED	HEAD _	JAMB	SILL _	EVICTING		DEFINICIT	_	1	CEE MOTES DELOW & AT DOOD ELEVATIONS	
\prec +	3'-0"	±8'-0" 8'-0"	1 3/4"	WOOD	A1	STAIN-SEALED		_		EXISTING		REFINISH		1	SEE NOTES BELOW & AT DOOR ELEVATION	
)1)			1 3/4"	WOOD	A1	STAIN STAIN		_	_	WOOD		PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATION	
)2)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_	_	WOOD		PAINTED		2	SEE NOTES BELOW & AT DOOR ELEVATION:	
)3)	3'-0"	8'-0"	1 3/4"	WOOD	A1			_		WOOD		PAINTED	_	9	SEE NOTES BELOW & AT DOOR ELEVATION:	
3A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED		7	SEE NOTES BELOW & AT DOOR ELEVATION	
3B)	3'-0" 3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN STAIN		_	_ -	WOOD		PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATION	
)4)		8'-0"	1 3/4"	WOOD	A1			_		WOOD		PAINTED		2	SEE NOTES BELOW & AT DOOR ELEVATION	
4A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_		WOOD	=	PAINTED	-	<u>Z</u>	SEE NOTES BELOW & AT DOOR ELEVATIONS	
4B)	3'-0"	8'-0"		WOOD	A1	STAIN	_	_	_	WOOD		PAINTED	-	<u>3</u>	SEE NOTES BELOW & AT DOOR ELEVATION:	
)5)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD		PAINTED	-	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
5A)	3'-0"	8'-0"	1 3/4"	HOLLOW MTL.		PAINT		_	_	HOLLOW MTL.	_	PAINTED	-	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
07)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		-		WOOD		PAINTED	-	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
7 <u>A)</u>	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_	_	WOOD		PAINTED	-	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
7B)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		-	_	WOOD	_	PAINTED	-	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
)8)	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN		_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATION:	
9)	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN		-	_	WOOD		PAINTED	-	3	SEE NOTES BELOW & AT DOOR ELEVATION	
0)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD		PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATION:	
(AC	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	-	_	WOOD		PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
OB)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	-	-	WOOD	-	PAINTED	-	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
\rightarrow	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	-	-	WOOD	_	PAINTED	-	3	SEE NOTES BELOW & AT DOOR ELEVATION:	
11)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATION:	
1A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
1B)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD		PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
1C)	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATION:	
2A)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	-	WOOD	-	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
16)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
18)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
8A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	=	_	=	WOOD	=	PAINTED	-	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
8B)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
8C)	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
9)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATION:	
9A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	-	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
9B)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	-	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATION:	
22	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_	_	WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
2A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
2B)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATION	
24)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
25)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATION:	
5A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD		PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
5B)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD		PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
26)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
6A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_		WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATION:	
6B)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATION:	
27)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	J 1	SEE NOTES BELOW & AT DOOR ELEVATION:	
28)	3'-0"	±8'-0"	1 3/4"	WOOD		STAIN-SEALED				EXISTING	_	REFINISH		7	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	

						[DOOR S	CHEDUL	E -EXIS	STING BU	JILDING	'B'				
			DC	OOR					FR	AME						
MARK		SIZE		MATERIAL	TYPE	FINISH -		DETAILS		MATERIAL	TYPE	FINISH	FIRE RATING	HARDWARE	REMARKS	
(5,112)	WIDTH	HEIGHT	THICKNESS				HEAD	JAMB	SILL							
(B100)	3'-0"	±8'-0"	1 3/4"	WOOD	A1	STAIN-SEALED	_	-		EXISTING	_	REFINISH	_	1	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B101)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B102)	3'-0"	8'-0"	13/4"	WOOD	A1	STAIN	_	-		WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B103)	PR. 2'-0"	8'-0"	1 3/4	WOOD	A1	STAIN		_		WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B104)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B104A)	3'-0"	8'-0"	1 3/4"	MOOD	A1	STAIN	_	_		WOOD	_	PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B104B)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD	_	PAINTED	_		SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B105)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	-	_		WOOD	_	PAINTED		4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B105A)	3'-0"	8'-0"	1 3/4"	WOOD	AT	STAIN	_	_		WOOD	_	PAINTED		2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B105B)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_	_	WOOD	_	PAINTED		3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B106)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_	_		WOOD	_	PAINTED	-	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B108)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD	_	PAINTED	_	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B108A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B108B)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD	/_	PAINTED	-	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B108C)	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN				WOOD	/-	PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B109)	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	-			WOOD		PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B110)	PR. 1'-6"	8'-0"	1 3/4"	WOOD	A1	STAIN	- \ 	$\Delta H B$				PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B111)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN	_ \ \\		\ -\	WOOD	_	PAINTED	-	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B111A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_	$\rightarrow \times$	WOOD WOOD		PAINTED	-	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B111B)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN	-Ť I	HIC			+TT	PAINTED PAINTED	-	3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B111C)	PR. 1'-6"	8'-0"		WOOD	A1	STAIN			3 L		+	PANTED PANTED	-	ე ე	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B112A)	2'-8"	8'-0"	1 3/4"	WOOD	A1	STAIN				WOOD			-	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B117)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		-		WOOD		PAINTED	-	4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B117A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD	$\overline{}$	PAINTED	-	<u>Z</u>	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B117B)	2'-8"	8'-0"	1 3/4"	WOOD WOOD	A1	STAIN	<u>/-</u>	_		WOOD	- \	PAINTED	_	J 7	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B117C)	PR. 1'-6"	8'-0" 8' 0"			A1	STAIN		_				PAINTED	_	J 7	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B118) (B119)	PR. 1'-6"	8'-0" 8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD WOOD		PAINTED PAINTED		3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B119A)	3'-0"		1 3/4"	WOOD	A1 /	_		_			_			4	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B119A)	3'-0" 2'-8"	8'-0"	1 3/4"	WOOD WOOD	AI	STAIN STAIN		_		WOOD WOOD		PAINTED PAINTED		3	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B119B)		8'-0" 8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	7	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
	PR. 1'-6"		1 3/4"	HOLLOW MTL.		PAINT		_		HOLLOW MTL.			_	~~	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B120)	3'-0" 3'-0"	8'-0" 8'-0"	1 3/4"	WOOD WOLL		STAIN		_		WOOD WOOD		PAINTED PAINTED	_	2		
(B121)	3'-0"	8 -0 8'-0"	1 3/4"	WOOD	A1 A1	STAIN		_		WOOD		PAINTED	_	<u> </u>	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B122A)	3'-0"	8 -0 8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B122B)	3'-0"	8'-0" 2	1 3/4"	WOOD	A1	STAIN		<u> </u>		WOOD		PAINTED	_	3	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B123)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	1	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B123A)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	2	SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B123B)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	<u>۷</u>	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B123B)	9R 2 -0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD		PAINTED	_	ე ე	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B124)	3'-0"	8'-0"	1 3/4"	WOOD	A1	STAIN		_		WOOD	<u> </u>	PAINTED	_	<u> </u>	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
(B125)	3'-0"		1 3/4"	WOOD	A1	STAIN-SEALED		_		EXISTING		REFINISH	_	1	SEE NOTES BELOW & AT DOOR ELEVATIONS SEE NOTES BELOW & AT DOOR ELEVATIONS	
[Jun 20]	J = 0	T0 -0	' ''	1 11000	Λ1	PININ SEALED				LAISTING		IVELLINIOLI	<u> </u>	ı	JEE NOTES BELOW & AT DOON ELEVATIONS	

- FIELD VERIFY ALL DOOR DIMENSIONS-COORDINATE WITH OWNER AND ARCHITECT
- COORDINATE WITH OWNER AND ARCHITECT FOR FINAL DOOR TYPES, DOOR DIMENSIONS, DOOR MATERIAL TYPES & COLOR TYPES & FINISH TYPES.
- FIELD VERIFY ALL CONDITIONS, OPENING SIZES, ETC. BEFORE FABRICATION, MANUFACTURING, OR INSTALLATION OF ALL DOORS.
- COORDINATE WITH LOCAL JURISDICTION FOR TEMPERED GLASS REQUIREMENTS FOR WINDOWS ADJACENT TO DOORS, SPECIFICALLY, THE DIMENSION FROM DOOR TO WINDOW DISTANCE.
- 5. ALL DOOR HARDWARE TO BE ADA TYPE LEVER HARDWARE AS REQUIRED BY LOCAL JURISDICTION AND PER IBC REQUIREMENTS COORDINATE WITH OWNER FOR TYPE AND LOCATION OF PRIVACY AND/PASSAGE TYPE HARDWARE FOR EACH DOOR.
- 6. DOOR NUMBERS CORRESPOND TO THE ROOM NUMBERS ASSOCIATED WITH.





DOOR TYPE ELEVATIONS SCALE: 3/8" = 1'-0"

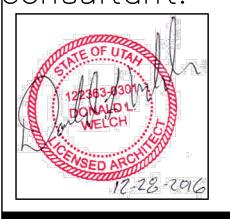
NOTE: ALL INTERIOR DOORS PLACED WITHIN A 30 MINUTE FIRE RATED WALL CONSTRUCTION SHALL BE A 20 MINUTE RATED DOOR.

Welch Donald

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consultant:



project: Tenant Finish

Brighton Recovery Campus

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016

revisions

JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL ∠2 ADDENDUM #2-BUILDING '(

4 ADDENDUM #4-BUILDING 'B'

FEBRUARY 24, 2017

ADDENDUM #7-BUILDING 'A' data

project no: drawn by:

checked by:

Door Schedule

sheet

				Н	IARD	WAR	E SC	HEDL	JLE									
ARDWARE SET	CARD KEY LOCK		ALARM W/ KEY CARD		PRIVACY SET	PASSAGE SET	VIEWER	PANIC BAR	DOOR CLOSER	HINGES	MAGNETIC LOCK	DOOR SWEEP	SMOKE SEALS	DOOR STOP	REMARKS	HARDWARE SET	NO	TES
1	*	*	*					HANDLE *	*						3 PAIR OF DOOR HINGES - SEE NOTE 1 W/ WEATHER SEAL - SEE NOTE 2	-	1.	1-1/2 PAIR SPRING HINGES.
2				*	*									*	3 PAIR OF DOOR HINGES	2		
3						*								*	3 PAIR OF DOOR HINGES	3	2.	ALL DOORS W/ CLOSERS TO HAVE
4						*			*					*	3 PAIR OF DOOR HINGES - SEE NOTE 2	4		BALL BEARING HINGES.
5																5	3.	WEATHER PROOF CARD KEY LOCK
6																6		TO BE MOUNTED ON DOOR STYLE.
8															W/ WEATHER SEAL - SEE NOTE 2	8	_ 4.	PROVIDE 2 REVERSE VIEWERS - 1 @ 60" A.F.F. AND 1 @ 42" A.F.F.
9															3 PAIR OF DOOR HINGES - SEE NOTE 2	9		@ 60 A.F.F. AND I @ 42 A.F.F.
10															3 PAIR OF DOOR HINGES - SEE NOTE 2	10	– 5.	COORDINATE WITH DOOR
11															MOTION SENSOR - PER MANUFACTURER	11		MANUFACTURER SO CARD
12															MOTION SENSOR - PER MANUFACTURER	12		OVERRIDE WHEN VESTIBULE SIDE
13															PUNCH PAD ACCESS - SEE NOTE 2	13		MOTION SENSOR IS OFF. LOBBY
14															3 PAIR OF DOOR HINGES - SEE NOTE 2	14		SIDE MOTION SENSOR TO REMAIN
15															3 PAIR OF DOOR HINGES	15		ACTIVE AT ALL TIMES.
16															3 PAIR OF DOOR HINGES	16		
17															3 PAIR OF DOOR HINGES	17		

NOTES: 1. ALL DOOR HARDWARE SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE.

- 2. VERIFY REQUIREMENTS WITH LOCAL CODES-PROVIDE 20 MINUTE DOORS @ GUEST ROOMS, IF LOCAL JURISDICTION REQUIRES IT..
- 3. EXTERIOR H. METAL FRAMES SHALL BE 14 GAUGE, UNLESS NOTED OTHERWISE.
- 4. WHERE SMOKE DOOR IS REQUIRED BY LOCAL AUTHORITIES, A MAGNETIC HOLD OPEN DEVICE SHALL BE USED WHICH IS COORDINATED WITH THE FIRE ALARM SYSTEM.

5.	NOI	Į
_		_

- 6. ALL EXTERIOR DOORS TO HAVE THRESHOLDS, DOOR SWEEPS, & WEATHER SEALS.
- 7. CONTRACTOR TO VERIFY ALL DOOR FRAME THROAT DIMENSIONS.
- 8. CONTRACTOR TO VERIFY KEY SCHEDULE WITH OWNER PRIOR TO PURCHASING LOCKS.

HARDWARE MANUFACT	TIDEDS	
<u>Hardware Item</u>	Base Manufacturer	Acceptable Equivalents
Spring Hinges	Hager	Stanley
Hinges	Hager	Stanley, McKinney
Lockset (Standard Type)	Schlage	Sargent, Yale
Lockset (Electronic	KABA/ILCO System E-760	Onity, Vingcard
System)	TO LES CYSTOM E 700	Officy, Viligodia
Closer	LCN	Sargent, Dorma
Stops, Flush Bolts	lves	Rockwood, Quality, Taymor
Weatherstrip, Door	1700	rtoottvood, Quanty, raymor
Sweeps, Thresholds	NGP, Stanley	Pemko, Zero, Door and Hardware
отторо, т.т.оттопис	, , , , , , , , , , , , , , , , , , ,	Systems
Exit Devices	Sargent	Adams-Rite, Von Duprin
Peep Sight	lves	Quality
Door Guard	lves	Quality, Door & Hardware
		Systems, Inc.
Surface Bolts	lves	Quality
Frame Smoke Seals	DSHI #105 "Cush N Seal" by:	None
	Door & Hardware	
	System (716) 235-8543	
	, ,	
Door Silencers	Glynn-Johnson	Door & Hardware
		Systems, Inc.
Electric Strike	Folger Adams	None
	_	
CYLINDERS AND KEYIN	G	
Keying System: Mas	ster keying must be in accordanc	e with the National Hardware Council's
recommendations for	r hotels.	
For Manual Locks:		
Equip locks with	n manufacturer's standard 6-pin t	umbler cylinders.
=qs.p .5500 With		

Equip locks with manufacturer's interchangeable core cylinders operable by a control

manufacturer key symbol, and notation "DO NOT DUPLICATE". Key Material: Provide keys of nickel silver only. Key Quantity: Furnish three change keys for each lock; five master keys for each master system; and five grandmaster keys for each grandmaster system. Deliver keys to Owner's representative. For Electronic Locks: Provide card keys as required to comply with master keying. Provide one system controller. Provide one spare lock with keys. General: Supplier will supply three reusable card keys per lock (or three keys for standard locks) and three sets of master keys. Keying shall be as follows: Each room shall be keyed separately. A master key for all guest rooms. A master key for all rooms. A master key to open guest room deadbolts. Room keys shall open exterior doors. Keying Schedule – Submit keying schedule to Owner for approval prior to fabrication. Keying to have 3 levels of security.

Comply with Owner's instructions for master keying and, except as otherwise indicated, provide

Permanently inscribe each key with number or lock that identifies cylinder

individual change key for each lock which is not designated to be keyed alike with a group.

PART 3 - EXECUTION

Verify that doors and frames are ready to receive work and dimensions, are as indicated on Shop Drawings, and as instructed by the manufacturer.

Beginning of installation means acceptance of existing conditions.

INSTALLATION

Install each hardware item in compliance with manufacturer's instructions and recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way, install each item completely and then remove and store in a secure place during the finish application. After completion of the finished, reinstall each item. Do not install surface-mounted items until finishes have been completed on the substrate.

Conform to ANSI A117.1 and ADAAG for positioning requirements for the Disabled.

All door closers shall be installed out of public sight wherever possible. All doors off corridors and all communicating doors to have frame-mounted smoke seals.

Furnish proper screws, hex bolts, through bolts, etc., as required to make secure attachment of each item to the material it is installed on.

PROTECTION AND CLEANING

After installation, clean metal surfaces on both interior and exterior of all mortar, plaster, paint and other contaminants. After cleaning, protect work against damage.

FINAL ADJUSTMENT

Whenever hardware is installed more than one month prior to acceptance or occupancy of a space or area, return during the week prior to acceptance or occupancy and make a final check and adjustment of all hardware items in such space or area. At the completion of the project, manufacturers' suppliers or representatives shall inspect

their hardware and make any corrections required due to errors or improper installation.

PART 4 - HARDWARE SCHEDULE

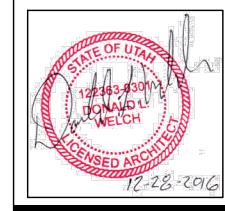
See door and hardware schedule on drawings

Welch rchitect Donald

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consultant:



project: Tenant Finish Brighton Recovery Campus

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016

FEBRUARY 24, 2017

revisions

JANUARY 3, 2017 SECOND SUBMITTAL FOR EACH SEPERATE BUILDING PARCEL

JANUARY 6, 2017 2 ADDENDUM #2-BUILDING 'C' JANUARY 17, 2017 4 ADDENDUM #4-BUILDING 'B'

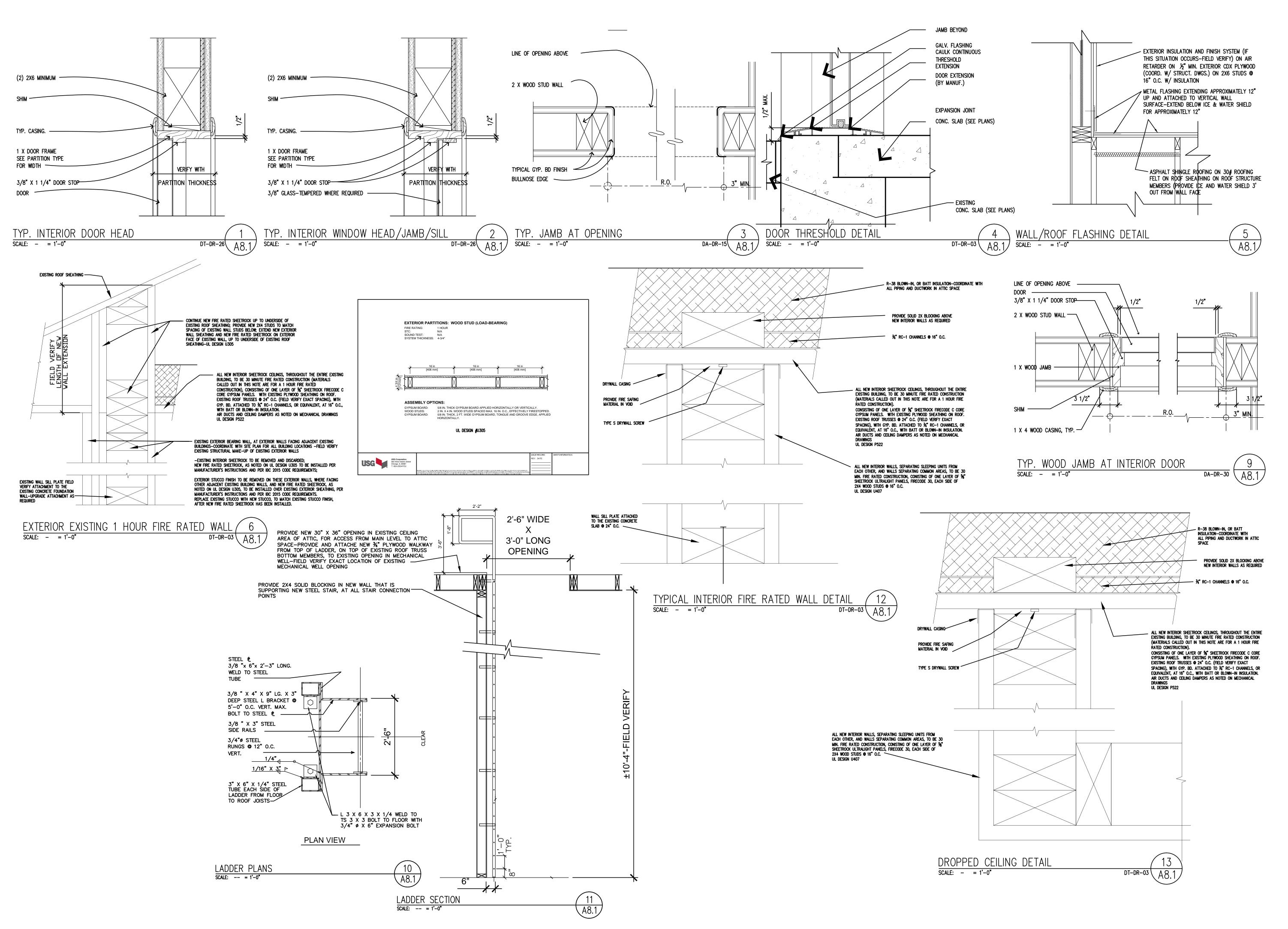
 $\sqrt{7}$ Addendum #7-Building 'a' data

project no: drawn by: checked by:

title **Door Hardware**

A7 1C

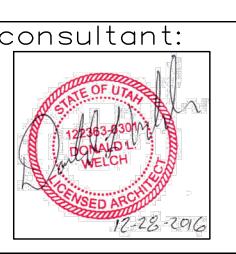
& Specs. sheet



Donald L. Welch
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midvale utah 84047

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project:
Tenant Finish
for

Brighton Recovery Campus

4905, 4911, 4915, 4925, 4931, 4953 South 900 East Salt Lake County, Utah

date

DECEMBER 28, 2016

revisions

JANUARY 3, 2017
SECOND SUBMITTAL FOR
EACH SEPERATE BUILDING PARCEL

JANUARY 6, 2017
ADDENDUM #2-BUILDING 'C'

JANUARY 17, 2017
ADDENDUM #4-BUILDING 'B'
FEBRUARY 24, 2017
ADDENDUM #7-BUILDING 'A'
BUILDING 'F', 'B', 'C', 'D', 'E'

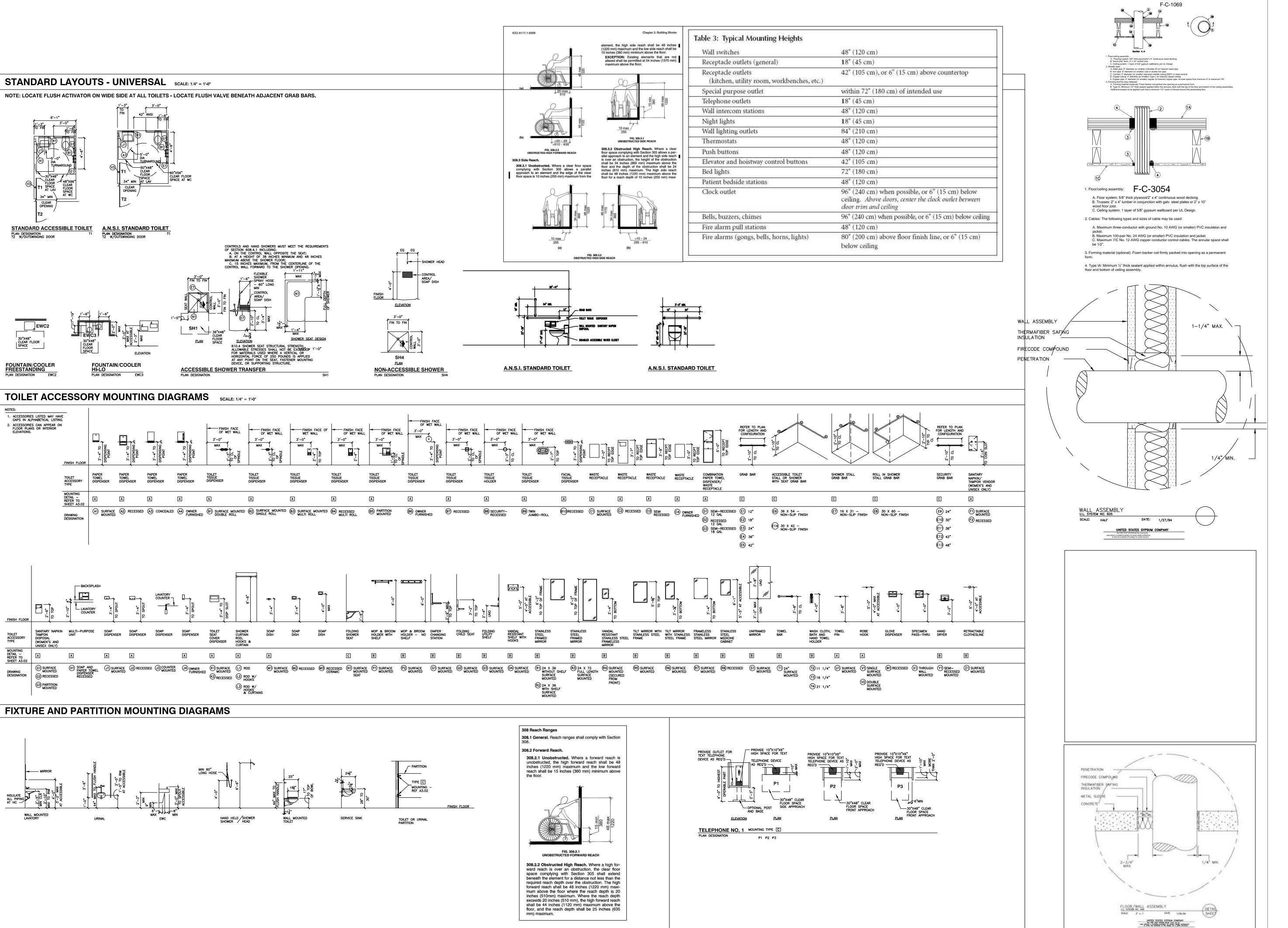
MARCH 20, 2017

8 ADDENDUM #8-BUILDING 'A
BUILDING 'F

project no:
drawn by:
checked by:
title

ARCHITECTURAL DETAILS

A8 1



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BUILDING 'F', 'B', 'C', 'D', 'E'

MARCH 20, 2017

8 ADDENDUM #8-BUILDING 'A'
BUILDING 'F'

project no:
drawn by:
checked by:

ACCESSIBLE &
FIRE PENETRATION
DETAILS

sheet

A8 2

SYMBOL LEGEND					
DESCRIPTION					
HOT WATER SUPPLY					
HOT WATER RETURN					
TEMPERED WATER SUPPLY					
CHILLED WATER SUPPLY					
CHILLED WATER RETURN					
REFRIGERANT LIQUID					
REFRIGERANT SUCTION					
CONDENSER WATER SUPPLY					
CONDENSER WATER RETURN					
DRAIN LINE					
EXISTING PIPE					
EXISTING PIPE TO BE REMOVED					

ABBREVIATIONS

	NOTE: ALL ABBREVIATI	ONS
AD	ACCESS DOOR	МС
AIR	AIR CONDITION(-ING,-ED)	MF
COND	,	IIM
APD	AIR PRESSURE DROP	N/A
BD	BALANCING DAMPER	NC
BHP	BRAKE HORSE POWER	NC
BTU	BRITISH THERMAL UNIT	NIC
BTUH	BTU/HOUR	NC
CFH	CUBIC FEET PER HOUR	NP
CFM	CUBIC FEET PER MINUTE	NT
CLG	COOLING	OA
COMP	COMPONENT	
COND	CONDENS(-ER, -ING, -ATION)	OZ
CV	CONTROL VALVE	PD
CW	COLD WATER	PG
DIA	DIAMETER	PH
DISCH	DISCHARGE	PP
DP	DEPTH OR DEEP	PR
DB	DRY BULB TEMPERATURE	PS
(E)	EXISTING	PS
EER	ENERGY EFFICIENCY RATIO	PS
EFF	EFFICIENCY	PS
EG	ETHYLENE GLYCOL	R.
ELEC	ELECTRIC	RA
ELEV	ELEVATION	RE
ENT	ENTERING	RE
EVAP	EVAPORAT(-E, -ING, -ED, -OR)	RE
EWT		RP
EXT	EXTERNAL	RW
(F)	FUTURE	SA
F	FAHRENHEIT	SC

FLEXIBLE CONNECTION

FIRE DAMPER

FULL LOAD AMPS

FEET PER MINUTE

FEET PER SECOND

FIRE SMOKE DAMPER

GALLONS PER HOUR

GALLONS PER MINUTE

FINS PER INCH

FEET

HEAD

HOUR

INCH

KILOWATT

POUNDS

LENGTH

LEAVING

LATENT HEAT

HEIGHT

MERCURY

HEATING

HOT WATER

HORSE POWER

HERTZ(FREQUENCY)

LOCKED ROTOR AMPS

LEAVING WATER TEMP

THOUSAND BTU PER HOUR

LEAVING AIR TEMPERATURE

INSIDE DIAMETER

GALLON(S)

FSD

GPM

HD

HG

HR

ID

ΚW

LG

LH

LRA LVG

LWT

MBH

NOTE: ALL ABBREVIATIONS MAY NOT BE USED MINIMUM CIRCUIT AMPS MANUFACTURER MINIMUM NOT APPLICABLE NORMALLY CLOSED NOISE CRITERIA NOT IN CONTRACT NORMALLY OPEN NET POSITIVE SUCTION HEAD NOT TO SCALE OUTSIDE AIR OUTSIDE DIAMETER OUNCE PRESSURE DROP OR DIFF. PROPYLENE GLYCOL PHASE PARTS PER MILLION PRESSURE POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PSI ABSOLUTE **PSI GAUGE** THERMAL RESISTANCE RETURN AIR RECIRCULATE REFRIGERATION REQUIRED REVOLUTIONS PER MINUTE RAINWATER SUPPLY AIR SHADING COEFFICIENT SOFT COLD WATER SAFETY FACTOR SENSIBLE HEAT SEA LEVEL STATIC PRESSURE SPEC(S) SPECIFICATION(S) SQUARE SQ STD STANDARD TEMP TEMPERATURE TSTAT THERMOSTAT VACUUM VARIABLE AIR VOLUME VAV VELOCITY VEL VENT, VENTILATION VENT VARIABLE FREQUENCY DRIVE VFD WC WATER COLUMN WATER GAUGE WG WATER PRESSURE DROP WPD WET BULB

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS TO MAKE THE ITEM FULLY OPERATIONAL."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

SY	MBOL LEGEND
SYMBOL	DESCRIPTION
VALVES, METER	S, AND GAUGES
	- SHUT OFF VALVE
	- GATE VALVE
	- CHECK VALVE
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	– AUTO 2-WAY VALVE
——————————————————————————————————————	– AUTO 3-WAY VALVE
	- GLOBE VALVE
Φ	BALL VALVE
<u></u>	- RELIEF VALVE
	- CHAIN OPERATED GATE VALVE
	PRESSURE REDUCING VALVE
	- BUTTERFLY VALVE
<u> </u>	SOLENOID VALVE
	ANGLE VALVE
	- VENTURI
	- BALANCING OR PLUG COCK
—————————————————————————————————————	- FLOW SETTER
—————————————————————————————————————	– EXPANSION VALVE (REFRIG.)
	TEMPERATURE SENSOR
ŢMAV	_ MANUAL AIR VENT
——————————————————————————————————————	- STRAINER
	GAUGE COCK
φ	- FLEXIBLE CONNECTION PRESSURE GAUGE
<u>'</u>	
<u> </u>	THERMOMETER
	- VICTAULIC COUPLING
	- REDUCER CONCENTRIC
	- REDUCER ECCENTRIC
<u> </u>	- REFRIGERANT SITE GLASS
	- REFRIGERANT STRAINER
	- REFRIGERANT FILTER DRIER
	90° ELBOW DOWN
	90° ELBOW DOWN
	- 90° TEE UP - 90° TEE DOWN
	- UNION
	CAPPED PIPE
X	- ANCHOR
	- FLOAT AND THERMOSTATIC TRAP
HVAC SYMBOLS	1
(T)	THERMOSTAT
<u> </u>	TEMPERATURE SENSOR
<u> </u>	HUMIDISTAT
PLUMBING SYME	BOLS
C.B.	CATCH BASIN
	MANHOLE
————— W.H.	WALL HYDRANT
— Н.В.	HOSE BIBB
— ф	CLEANOUT TO GRADE
—ф	FLOOR CLEANOUT
	WALL CLEANOUT

SYMBOL	MBOL LEGE DESCRIPTION	
DUCTWORK		
SINGLE LINE	DOUBLE LINE	DESCRIPTION
———		RECTANGULAR SUPPLY DUCT UP
<u> </u>	X	RECTANGULAR SUPPLY DUCT DOWN
——		RECTANGULAR RETURN DUCT UP
\		RECTANGULAR RETURN DUCT DOWN
\		RECTANGULAR EXHAUS DUCT UP
}		RECTANGULAR EXHAUS DUCT DOWN
\		ROUND DUCT UP
		ROUND DUCT DOWN
<u></u>		ACOUSTICALLY LINED RECTANGULAR DUCT
		90° RECTANGULAR ELBOW WITH TURNING VANES
		90° RADIUS ELBOW R=1
├		DUCT SIZE OR SHAPE TRANSITION
├		OPPOSED BLADE BALANCING DAMPER (O.B.D.) IN RECT DUCT
├		BUTTERFLY BALANCING DAMPER IN ROUND DUCTS
}		COMBINATION TEE
}		SPLITTER DAMPER
		SQUARE OR RECTANGULAR CEILING DIFFUSER
\		ROUND CEILING DIFFUSER
		SIDEWALL REGISTER SUPPLY OR RETURN
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		ROUND FLEXIBLE DUCT
\		RETURN GRILLE
<b>\</b>		EXHAUST GRILLE
} FSD	<b>♠</b> FSD	FIRE/SMOKE DAMPER
} FD	FD	FIRE DAMPER
}	FC	FLEXIBLE CONNECTION
>		EXISTING DUCT
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		DUCT TO BE REMOVED

# GENERAL MECHANICAL NOTES

1. ALL CEILING DIFFUSERS SHOWN AS SUCH ARE CD-1, CFM AS NOTED, UNLESS OTHERWISE NOTED.

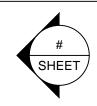
2. ALL CEILING RETURN GRILLES SHOWN AS SUCH ARE RG-1 UNLESS OTHERWISE NOTED. PROVIDE SOUND BOOT

- 4. DO NOT ROUTE DUCTS AND PIPES ABOVE ELECTRICAL PANELS. ALL ELECTRICAL PANELS MUST HAVE CLEAR ACCESS SPACE IN FRONT OF PANEL 4'-0" DEEP AND 6'-6" HIGH. DO NOT ROUTE DUCTS AND PIPES IN ELECTRICAL ROOMS, EXCEPT DUCTS AND PIPES SERVING THE ROOM OR WITHIN APPROPRIATE ENCLOSURE.
- WITH ARCHITECTURAL REFLECTED CEILING PLANS.
- 6. ALL DUCT DIMENSIONS ARE INSIDE FREE AREA DIMENSIONS. ADJUST
- 7. ALL FIRE DAMPERS SHOWN ARE 1-1/2 HOUR UNLESS OTHERWISE
- 8. IF CONTRACTOR ENCOUNTERS MATERIAL WHICH MAY CONTAIN ASBESTOS IMMEDIATELY STOP WORK IN THIS AREA AND NOTIFY THE
- 9. PROVIDE CEILING ACCESS PANELS AS REQUIRED WHERE MECHANICAL EQUIPMENT, VALVES, HEAT PUMPS, FIRE DAMPERS, ETC. ARE LOCATED ABOVE INACCESSIBLE CEILINGS. ACCESS PANELS TO BE LISTED AND FIRE RATED EQUAL TO OR GREATER THAN THE RATING OF THE
- 10. ALL DUCT AND FLUE PENETRATIONS THRU 1 HOUR ROOF ASSEMBLY TO BE ENCLOSED WITH 2 SHEET ROCK LAYERS FROM SHEET ROCK AT
- 12. THE EQUIPMENT INSTALLER IS TO APPLY AND SIGN A CERTIFICATION LABEL TO EACH GAS-FIRED APPLIANCE, STATING THE APPLIANCE HAS BEEN ADJUSTED OR MODIFIED PER MANUFACTURER'S REQUIREMENTS FOR OPERATION AT THE PROJECT ALTITUDE AND WITH THE BTU-CONTENT OF THE AVAILABLE FUEL-GAS.

# SYMBOL LEGEND

SHEET /

DETAIL INDICATOR: # INDICATES DETAIL NUMBER, SHEET INDICATES DRAWING SHEET WHERE DETAIL IS



SECTION IS SHOWN.



ELEVATION OR SECTION INDICATOR, INTERIOR: #

 SHEET
TYPE CFM SIZE

DIFFUSER/GRILLE INDICATOR.

CFM SIZE	
TYPE SIZE	

DIFFUSER/GRILLE INDICATOR. NEW CONNECTION POINT TO

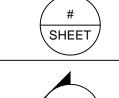
EXISTING

- 3. ALL CEILING EXHAUST GRILLES SHOWN AS SUCH ARE EG-1, CFM AS NOTED, UNLESS OTHERWISE NOTED.
- 5. COORDINATE EXACT LOCATIONS OF CEILING DIFFUSERS AND GRILLES
- SHEET METAL DIMENSION FOR LINED DUCT.

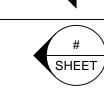
- ASSEMBLY THEY ARE INSTALLED IN.
- BOTTOM OF ROOF TRUSSES TO ROOF DECK.
- 11. STEEL ROOF DECK SHALL NOT BE USED TO SUPPORT LOADS FROM PIPING, DUCTWORK OR EQUIPMENT, UNLESS NOTED OTHERWISE. HANGER LOADS LESS THAN 50 LBS. MAY BE HUNG FROM THE STEEL ROOF DECK IN CASES WHEN HANGING FROM THE STEEL ROOF DECK CANNOT BE AVOIDED; THE ATTACHMENT METHOD MUST DISTRIBUTE THE LOAD ACROSS THE DECK AS APPROVED BY THE STRUCTURAL ENGINEER.

SYMBOL DESCRIPTION

REFERENCE AND LINE SYMBOLS



ELEVATION OR SECTION INDICATOR, EXTERIOR: # INDICATES ELEVATION OR SECTION NUMBER, SHEET INDICATES DRAWING SHEET WHERE ELEVATION OR



INDICATES ELEVATION OR SECTION NUMBER, SHEET INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.

•	SHEET
	TYPE CFM SIZE

CFM SIZE	
TYPE SIZE	

MECH/PLUMB SHEET INDEX SHEET NO | SHEET TITLE MECHANICAL GENERAL NOTES & LEGEND MECHANICAL EQUIPMENT SPECIFICATIONS MECHANICAL SCHEDULES MECHANICAL DETAILS MECHANICAL DETAILS PLUMBING GENERAL NOTES & LEGEND PLUMBING EQUIPMENT SPECIFICATIONS PLUMBING SCHEDULES PLUMBING DETAILS PLUMBING DETAILS MP1A MECH/PLUMB ROOF PLAN - BUILDING 'A'

MECHANICAL PLAN - BUILDING 'A' PLUMBING PLAN - BUILDING 'A'

broject:

Donald L. Welch

Architect

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CONSULTANTS, CONTRACTORS, GOVERNMENT

DNLY IN ACCORDANCE WITH THIS NOTICE.

03-21-2017

BENJAMIN .

SCHLUP/

|consultant:

for New Brighton Recover Campus 4905, 4911, 4915, 4925, 4931, & 4953 South 900 East

| Salt Lake County

date

February 24, 2017

revisions

PERMIT SET-December 28, 2016 ADDENDUM #1-January 04, 2017 √ADDENDUM #3-January 11, 2017 4 ADDENDUM #4-January 17, 2017 5 ADDENDUM #5—January 20, 2017 7 ADDENDUM#7—February 24, 2017

drawn by:

checked by:

MECHANICAL

GENERAL NOTES & LEGEND sheet

BUILDING 'A'

MECHANICAL SCOPE OF WORK NEW CONSTRUCTION NOTES:

ELECTRIC UNIT HEATERS WILL BE PLACED WATER ENTRY ROOMS AND MAIN BUILDING ENTRY LOCATIONS.

ROOFTOP UNITS ARE TO BE INSTALLED WITHIN EXISTING EQUIPMENT WELLS ON ROOF OF EACH BUILDING. SUPPLY AND RETURN DUCTWORK IS TO ROUTE THROUGH EXISTING TRUSS SYSTEM. TERMINAL SUPPLY AND RETURN GRILLES ARE TO INCORPORATE INTEGRAL BALANCING DAMPERS.

CLOTHES DRYER AND BATHROOM EXHAUST DUCTWORK IS TO TERMINATE AT UNDERSIDE OF EXISTING BUILDING OVERHANGS.

THE NEW SYSTEM COMPONENTS WILL ALLOW FOR FUTURE OFFICE & TEMPORARY RESIDENT SPACES.

# GENERAL MECHANICAL NOTES

THESE DRAWINGS AND SPECIFICATIONS ARE FOR THE DIVISION 23 CONTRACTOR TO ENGINEER. DESIGN. BID AND INSTALL A HEATING, AIR CONDITIONING AND VENTILATION SYSTEM PER THE DESIGN INTENT SHOWN.

ALL EQUIPMENT, PIPING, DUCTWORK, COMPONENT AND ACCESSORY SIZES,

- CAPACITIES, AND TYPES SHOWN IN THESE DRAWINGS AND SPECIFICATIONS SHALL BE ADHERED TO.
- THE DIVISION 23 CONTRACTOR SHALL DESIGN AND INSTALL A COMPLETE AND FULLY OPERATIONAL SYSTEM.
- DESIGN AND AS-BUILT DRAWINGS SHOWING ALL EQUIPMENT, COMPONENTS, PIPING. AND CONTROLS SHALL BE PREPARED TO THE SAME SCALE AS THESE DRAWINGS. COPIES SHALL BE PROVIDED TO THE OWNER AND ARCHITECT/ENGINEER
- PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT A COMPLETE, OPERATIONAL HVAC SYSTEM FOR THE ENTIRE PROJECT AS SHOWN ON THESE DRAWINGS, INCLUDING ALL NECESSARY FEES AND PERMITS.
- THE ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY ADOPTED BUILDING CODE, MECHANICAL CODE, PLUMBING CODE, ELECTRICAL CODE, AND ALL OTHER APPLICABLE CITY, COUNTY, SCHOOL DISTRICT STATE AND FEDERAL CODES AND REGULATIONS IN EFFECT AT THE DATE OF THE BID. CONFORM TO ANY CODES, RULES, REGULATIONS AND REQUIREMENTS THAT THE PROJECT OWNER HAS
- PRIOR TO FABRICATION AND INSTALLATION, COORDINATE THE INSTALLATION OF ALL HVAC PIPING, DUCTWORK, AND EQUIPMENT WITH PLUMBING PIPING, PLUMBING FOLIPMENT REFRIGERATION TRENCHES AND PIPING FIRE PROTECTION PIPING AND ALL OTHER TRADES INCLUDING BUT NOT LIMITED TO: THE MECHANICAL CONTRACTOR, REFRIGERATION CONTRACTOR, ELECTRICAL CONTRACTOR, FIRE PROTECTION CONTRACTOR, GENERAL CONTRACTOR, AND ANY CONTRACTOR HIRED DIRECTLY BY THE OWNER. WHERE CONFLICTS MAY OCCUR, THEY SHALL BE RESOLVED PRIOR TO INSTALLATION.
- THE DRAWINGS SHOW THE GENERAL DESIGN, ARRANGEMENTS AND THE EXTENT OF THE SYSTEM. IT SHALL BE THE WORK OF THE CONTRACTOR TO MAKE SUCH SLIGHT ALTERATIONS AS MAY BE NECESSARY TO MAKE THE SYSTEM COMPLETE AND OPERATIONAL IN ACCORDANCE WITH THE DESIGN INTENT. MAJOR DEVIATIONS SUCH AS CHANGES IN COMPONENT SIZES, WEIGHTS, QUANTITIES, OR MATERIAL REQUIRE PRIOR APPROVAL BY THE CONSULTING ENGINEER.
- ALL HVAC INFORMATION IS NOT SHOWN ON THE HVAC DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS.
- 10. THE WORKING DRAWINGS ARE DIAGRAMMATIC. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR HVAC EQUIPMENT AND PIPING SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL, MECHANICAL, STRUCTURAL AND ELECTRICAL DRAWINGS.
- SPACE ABOVE ALL CEILINGS IS LIMITED. CAREFUL COORDINATION IS REQUIRED WITH ALL TRADES BEFORE ANY PIPE, DUCT, OR EQUIPMENT IS ORDERED AND/OR INSTALLED. ANY CONFLICTS AND/OR CHANGES FOUND DURING INSTALLATION THAT RESULT FROM LACK OF COORDINATION BY THE CONTRACTORS DURING THE SHOP DRAWING PROCESS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 12. 1/8" SCALE SHOP DRAWINGS (SUBMITTED FOR APPROVAL) ARE REQUIRED FOR ALL DUCTWORK AND PIPING SYSTEMS.
- 13. THE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH THE ITEMS SHOWN ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN BOTH.
- 14. DETAILS: THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND USE WHERE APPROPRIATE ALL OF THE MECHANICAL DETAILS SHOWN ON THE DRAWINGS. DETAILS MAY OR MAY NOT BE CALLED OUT ON THE DRAWINGS WITH SYMBOLS OR KEYED NOTES. ANY CHANGES RESULTING FROM FAILURE TO INSTALL THE MECHANICAL SYSTEM WITHOUT USING THE INCLUDED DETAILS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 15. PIPING SCHEMATICS: THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE PIPING SCHEMATICS INCLUDED WITH THE DRAWINGS FOR PIPING CONNECTIONS TO ALL MECHANICAL EQUIPMENT. THE PIPING SCHEMATICS SHOW DETAILED CONNECTIONS INCLUDING NECESSARY VALVES, FITTINGS, PRESSURE AND TEMPERATURE GAUGES, ETC., THAT ARE NOT SHOWN ON THE PIPING PLANS. ANY CHANGES RESULTING FROM FAILURE TO INSTALL THE MECHANICAL SYSTEM WITHOUT USING THE INCLUDED PIPING SCHEMATICS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- THE STRUCTURE SHOWN ON ALL DETAILS MAY OR MAY NOT PERTAIN TO A PORTION OR ANY PORTION OF THE BUILDING. COORDINATE MOUNTING REQUIREMENTS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- ANY PART OF THIS INSTALLATION THAT FAILS, IS UNFIT, OR BECOMES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- 18. COORDINATE THE RETURN OF ALL MECHANICAL EQUIPMENT REMOVED DURING DEMOLITION WITH THE OWNER'S REPRESENTATIVE
- 19. ALL EQUIPMENT SHALL PROVIDE THE SCHEDULED PERFORMANCE AT THE SITE ALTITUDE.
- 20. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS. TRANSITIONS, VALVES, DAMPERS, AND OTHER DEVICES AND ACCESSORIES REQUIRED FOR A COMPLETE, WORKABLE INSTALLATION.
- THE DIVISION 23 CONTRACTOR SHALL FURNISH ALL REQUIRED MOTORS. ALL MOTOR STARTING EQUIPMENT, WHEN NOT A PART OF THE EQUIPMENT, WILL BE FURNISHED BY THE ELECTRICAL CONTRACTOR.
- 22. EXISTING INTERIOR PIPING, EQUIPMENT, AND DUCTWORK HAS BEEN LOCATED IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL VERIFY LOCATIONS AND POINTS OF CONNECTION AND PIPE ROUTING THROUGH EXISTING CONDITIONS PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL PERFORM THE WORK IN A MANNER THAT WILL CAUSE A MINIMUM DISRUPTION TO BUILDING TENANT USE AND SHALL COORDINATE THE WORK WITH THE BUILDING OWNER'S REPRESENTATIVE.
- 23. THE CONTRACTOR IS RESPONSIBLE FOR HVAC EQUIPMENT CHECK-IN, SAFEKEEPING, AND DAMAGE
- 24. DO NOT ROUTE DUCTS AND PIPES ABOVE ELECTRICAL PANELS. ALL ELECTRICAL PANELS MUST HAVE CLEAR ACCESS SPACE IN FRONT OF PANEL 4'-0" DEEP AND 6'-6" HIGH. DO NOT ROUTE DUCTS AND PIPES IN ELECTRICAL ROOMS, EXCEPT DUCTS AND PIPES SERVING THE ROOM OR IF PROPER ENCLOSURE IS PROVIDED
- 25. COORDINATE EXACT LOCATIONS OF CEILING DIFFUSERS AND GRILLES WITH ARCHITECTURAL REFLECTED CEILING PLAN.
- 26. ALL FIRE DAMPERS SHOWN ARE 1-1/2 HOUR UNLESS OTHERWISE NOTED.
- 27. IF CONTRACTOR ENCOUNTERS MATERIAL WHICH MAY CONTAIN ASBESTOS. IMMEDIATELY STOP WORK IN THIS AREA AND NOTIFY THE OWNER.
- 28. PROVIDE CEILING ACCESS PANELS AS REQUIRED WHERE MECHANICAL EQUIPMENT, VALVES, VAV BOXES, FIRE DAMPERS, ETC. ARE LOCATED ABOVE INACCESSIBLE CEILINGS.
- 29. ENCLOSE ALL DUCT AND FLUE PENETRATIONS THROUGH 1 HOUR ROOF ASSEMBLIES WITH 2 SHEET ROCK LAYERS FROM SHEET ROCK CEILING AT BOTTOM OF ROOF TRUSSES TO ROOF DECK

ACROSS THE DECK AS APPROVED BY THE STRUCTURAL ENGINEER.

30. DO NOT USE STEEL ROOF DECK TO SUPPORT LOADS FROM PIPING, DUCTWORK OR EQUIPMENT. HANGER LOADS LESS THAN 50 LBS. MAY BE HUNG FROM THE STEEL ROOF DECK IN CASES WHERE HANGING FROM THE STEEL ROOF DECK CANNOT BE AVOIDED. THE ATTACHMENT METHOD MUST DISTRIBUTE THE LOAD

# GENERAL MECHANICAL NOTES

- I. PROPERLY LUBRICATE ALL PIECES OF EQUIPMENT BEFORE TURNING THE SYSTEM OVER TO THE OWNER.
- 2. PREPARE SUBMITTALS IN AN INDEXED, LABELED FOLDER CONTAINING FULL PERFORMANCE, MATERIAL AND INSTALLATION INFORMATION ABOUT ALL FOUIPMENT, PIPING, COMPONENTS AND ACCESSORIES TO BE USED. SUBMITTALS WILL BE CHECKED AT MOST TWICE. TIME SPENT ON SUBSEQUENT SUBMITTALS WILL BE BILLED TO THE CONTRACTOR BY THE ENGINEER AT ITS CURRENT HOURLY RATES.
- 3. TWO OPERATING AND MAINTENANCE MANUALS SHALL BE PROVIDED IN HARD BACK LOOSE LEAF BINDERS. MANUALS SHALL CONTAIN PRODUCT CUT SHEETS AND OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL EQUIPMENT. ACCESSORIES, FIXTURES, VALVES, ETC., PROVIDED FOR THE PROJECT.
- 34. UPON COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS AND RUBBISH. MAKE ALL REQUIRED PATCHING AND REPAIRS OF OTHER TRADES' WORK DAMAGED BY THE CONTRACTOR, AND LEAVE THE PREMISES IN A CLEAN ORDERLY CONDITION.
- . THE CONTRACTOR SHALL OPERATE THE SYSTEM AND DEMONSTRATE ALL ASPECTS TO THE ENGINEER AND/OR OWNER, TO PROVE ITS OPERATION. ALL FILTERS USED DURING CONSTRUCTION SHALL BE REPLACED PRIOR TO THE TEST
- RUN PERIOD THE CONTRACTOR SHALL GUARANTEE THE HVAC SYSTEM FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- . THE CONTRACTOR SHALL, DURING CONSTRUCTION, MAINTAIN A SET OF AS-BUILT REDLINED RECORD DRAWINGS AT THE PROJECT SITE. ALL CHANGES IN LAYOUT. ROUTING, EQUIPMENT, COMPONENTS, AND ACCESSORIES SHALL BE RECORDED. THESE REDLINES SHALL BE GIVEN TO THE ARCHITECT/ENGINEER AFTER THE

# MECHANICAL SUBMITTAL NOTES

- MECHANICAL SUBMITTAL SHALL BE SUBMITTED AS A COMPLETE ELECTRONIC PACKAGE ASSEMBLED BY SPECIFICATION DIVISIONS.
- ASSEMBLE COMPLETE ELECTRONIC SUBMITTAL PACKAGE INTO A SINGLE INDEXED FILE INCORPORATING SUBMITTAL REQUIREMENTS OF A SINGLE SPECIFICATION SECTION AND TRANSMITTAL FORM WITH LINKS ENABLING NAVIGATION TO EACH ITEM:
- a. LITERATURE SHALL INCLUDE REFERENCE TO EQUIPMENT CALL-OUT AND SPECIFICATION SECTION.
- b. FILE NAME SHALL USE PROJECT IDENTIFIER AND SPECIFICATION SECTION NUMBER FOLLOWED BY A DECIMAL POINT AND THEN A SEQUENTIAL NUMBER (E.G., LNHS-061000.01). RE-SUBITTALS SHALL INCLUDE AN ALPHABETIC SUFFIX AFTER ANOTHER DECIMAL POINT (E.G., INHS-061000.01.A).
- c. PROVIDE MANUFACTURER'S CATALOG DATA SHEETS FOR EACH MANUFACTURED ITEM LISTED ON THE DRAWINGS AND SPECIFICATIONS.
- d. INCLUDE MANUFACTURER'S CATALOG DATA OF EACH MANUFACTURED ITEM AND ENOUGH INFORMATION TO SHOW COMPLIANCE WITH CONTRACT DOCUMENT REQUIREMENTS.
- e. LITERATURE SHALL SHOW CAPACITIES AND SIZE OF EQUIPMENT USED AND BE MARKED INDICATING EACH SPECIFIC ITEM WITH APPLICABLE DATA UNDERLINED.
- f. INCLUDE NAME, ADDRESS, AND PHONE NUMBER OF EACH SUPPLIER.
- g. DEVIATIONS AND ADDITIONAL INFORMATION: ON AN ATTACHED SEPARATE SHEET, PREPARED ON CONTRACTOR'S LETTERHEAD, RECORD RELEVANT INFORMATION, REQUESTS FOR DATA, REVISIONS OTHER THAN THOSE REQUESTED BY ENGINEER CONTRACT DOCUMENTS, INCLUDING MINOR VARIATIONS AND LIMITATIONS. INCLUDE SAME IDENTIFICATION INFORMATION AS RELATED SUBMITTAL

#### PRODUCT DATA:

- a. COLLECT INFORMATION INTO A SINGLE SUBMITTAL FOR EACH ELEMENT OF CONSTRUCTION AND TYPE OF PRODUCT OR EQUIPMENT.
- b. IF INFORMATION MUST BE SPECIALLY PREPARED FOR SUBMITTAL BECAUSE STANDARD PUBLISHED DATA ARE NOT SUITABLE FOR USE, SUBMIT AS SHOP DRAWINGS, NOT AS PRODUCT DATA.
- c. MARK EACH COPY OF EACH SUBMITTAL TO SHOW WHICH PRODUCTS AND OPTIONS ARE APPLICABLE.
- d. INCLUDE THE FOLLOWING INFORMATION, AS APPLICABLE:
- e. MANUFACTURER'S CATALOG CUTS.
- f. MANUFACTURER'S PRODUCT SPECIFICATIONS.
- g. STANDARD COLOR CHARTS.
- h. STATEMENT OF COMPLIANCE WITH SPECIFIED REFERENCED STANDARDS.
- i. TESTING BY RECOGNIZED TESTING AGENCY.
- j. APPLICATION OF TESTING AGENCY LABELS AND SEALS.
- k. NOTATION OF COORDINATION REQUIREMENTS.
- I. AVAILABILITY AND DELIVERY TIME INFORMATION.
- m. FOR EQUIPMENT, INCLUDE THE FOLLOWING IN ADDITION TO THE ABOVE, AS APPLICABLE:
- n. WIRING DIAGRAMS SHOWING FACTORY-INSTALLED WIRING.
- o. PRINTED PERFORMANCE CURVES.
- p. OPERATIONAL RANGE DIAGRAMS.
- q. CLEARANCES REQUIRED TO OTHER CONSTRUCTION, IF NOT INDICATED ON ACCOMPANYING SHOP DRAWINGS.
- PROCESSING TIME: ALLOW TIME FOR SUBMITTAL REVIEW, INCLUDING TIME FOR RESUBMITTALS, AS FOLLOWS. TIME FOR REVIEW, INCLUDING TIME FOR RESUBMITTALS, AS FOLLOWS. TIME FOR REVIEW SHALL COMMENCE ON ENGINEERS RECEIPT OF SUBMITTAL. NO EXTENSION OF THE CONTRACT TIME WILL BE AUTHORIZED BECAUSE OF FAILURE TO TRANSMIT SUBMITTALS ENOUGH IN ADVANCE OF THE WORK TO PERMIT PROCESSING, INCLUDING RESUBMITTALS.
- a. INITIAL REVIEW: ALLOW 15 DAYS FOR INITIAL REVIEW OF MECHANICAL
- b. RESUBMITTALS REVIEW: ALLOW 15 DAYS FOR REVIEW OF EACH RESUBMITTAL.
- DEVIATIONS AND ADDITIONAL INFORMATION: ON AN ATTACHED SEPARATE SHEET PREPARED ON CONTRACTOR'S LETTERHEAD, RECORD RELEVANT INFORMATION, REQUESTS FOR DATA, REVISIONS OTHER THAN THOSE REQUESTED BY DESIGN ENGINEER ON PREVIOUS SUBMITTALS, AND DEVIATIONS FROM REQUIREMENTS IN THE CONTRACT DOCUMENTS. INCLUDING MINOR VARIATIONS AND LIMITATIONS. INCLUDE SAME IDENTIFICATION INFORMATION AS RELATED SUBMITTAL.

# MECH. PIPING GENERAL NOTES

- CAULK AROUND ALL PIPING THAT PASSES THROUGH FIRE RATED PARTITIONS WITH A NON-HARDENING CAULKING SIMILAR TO 3M "FIRE BARRIER".
- PROVIDE PROPER PROVISIONS FOR EXPANSION OR MOVEMENT OF ALL PIPING. PROVIDE LARGE ENOUGH PIPE SLEEVES THROUGH WALLS OR FLOORS TO ALLOW FOR ANTICIPATED DEFERENTIAL MOVEMENTS.
- AT VERTICAL RISERS SUPPORT THE WEIGHT OF THE RISER AT A POINT OR POINTS ABOVE THE CENTER OF GRAVITY OF THE RISER. PROVIDE LATERAL GUIDES AT THE TOP AND BOTTOM OF THE RISER, AND AT THE INTERMEDIATE POINTS NOT TO EXCEED 30'-0" ON CENTER.
- ALL PIPING SHALL BE SUPPORTED WITH TYPE I STEEL CLEVIS PIPE HANGERS.
- ALL STEEL CLEVIS HANGERS USED TO SUPPORT PLASTIC PIPING SHALL BE PLASTIC COATED
- ALL STEEL HANGERS USED TO SUPPORT COPPER PIPING SHALL BE COPPER PLATED OR PLASTIC COATED.
- PERFORATED METAL OR PLASTIC STRAPPING (PLUMBERS TAPE) IS NOT AN ACCEPTABLE MATERIAL FOR HANGING OR SECURING PIPE. PROVIDE PIPE HANGERS WITHIN 18 INCHES OF ALL 90 DEGREE ELBOWS.
- GREATER THAN 45 DEGREES. ALL PIPING SHALL BE INSTALLED IN A NEAT ARRANGEMENT PARALLEL TO

# **DUCT CONSTRUCTION NOTES**

PROVIDE SWAY BRACING ON PIPING 4" AND LARGER AT CHANGES IN DIRECTION

- ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL, EXCEPT WHERE INDICATED OTHERWISE.
- 2. SHEET METAL DUCT STATIC PRESSURE CLASSIFICATION: SUPPLY AIR DUCT: 2" W.C. 2" W.C. (NEGATIVE) RETURN AIR DUCT: EXHAUST AIR DUCT: 2" W.C. (NEGATIVE) OUTSIDE AIR DUCT:

BUILDING STRUCTURE.

- 3. SEAL ALL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS TO SMACNA SEAL CLASS B.
- 4. DO NOT USE GRAY DUCT TAPE, FOIL BACKED TAPE, OIL BASED CAULKING AND GLAZING COMPOUNDS TO SEAL METAL DUCTS.

2" W.C.

- CROSS-BREAK DUCT SURFACES 19" THROUGH 60". USE ANGLE REINFORCING FOR DUCTS SURFACES OF 60".
- 6. ALL METAL LONGITUDINAL SEAMS SHALL BE PITTSBURGH OR OTHER LISTED SMACNA LISTED SEAM. DO NOT USE BUTTON PUNCH SNAP-BACK 7. SUSPEND METAL DUCTWORK NOT EXCEEDING 30" LONGEST SIDE AT
- EVERY JOINT. DO NOT EXCEED 10'-0" HANGER SPACING. USE 1" X 18 GAGE GALVANIZED STRAPS (MINIMUM) ATTACHED TO BOTTOM AND SIDES OF
- 8. SUSPEND METAL DUCTWORK EXCEEDING 30" LONGEST SIDE AT MAXIMUM 8'-0" SPACING USING ANGLES AND RODS. 9. SUPPORT DUCTWORK FROM STRUCTURAL MEMBERS. ATTACHMENT TO
- ROOF DECK IS NOT ACCEPTABLE. 10. DUCT SIZES SHALL BE VERIFIED FOR CLEARANCES AT THE JOB SITE PRIOR TO FABRICATION. DIMENSIONS MAY BE CHANGED TO ACCOMMODATE
- CONSTRUCTION CLEARANCES, FREE AREA OF DUCT SHALL BE MAINTAINED

11. DUCT TRANSITIONS SHALL BE CONSTRUCTED WITH SLOPE OF 1/4.

- PROVIDE ELBOWS AND CHANGES IN DIRECTION WITH SINGLE VANE TURNING VANES.
- 13. ALL JOINTS SHALL BE MADE AIRTIGHT BY APPROVED METHODS, INCLUDING TAPES, MASTICS, GASKETS OR OTHER APPROVED CLOSURE SYSTEMS.
- 14. TAPE ALONE CANNOT BE SUBSTITUTED FOR MECHANICAL FASTENERS.
- 15. TAPES AND MASTICS USED TO SEAL DUCTWORK MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A AND SHALL BE MARKED "181A-P" FOR PRESSURE-SENSITIVE TAPE, "181A-M" FOR MASTIC OR "181A-H" FOR HEAT SENSITIVE TAPE.
- 16. TAPES AND MASTICS USED TO SEAL FLEXIBLE AIR DUCTS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED "181B-FX" FOR PRESSURE SENSITIVE TAPE, OR "181B-M" FOR MASTIC.
- 17. MECHANICAL FASTENERS USED WITH FLEXIBLE NON-METALLIC AIR DUCTS SHALL COMPLY WITH UL 181 AND SHALL BE MARKED "181B-".
- 18. FLEXIBLE CONNECTORS SHALL NOT BE USED.
- 19. HIGH EFFICIENCY TAKE-OFF FITTINGS WITH MANUAL DAMPER SHALL HAVE 2" STAND OFF BRACKET.
- 20. ALL BRANCH TAKE-OFFS TO INDIVIDUAL AIR INLET OR AIR OUTLET SHALL BE PROVIDED WITH MANUAL DAMPER.
- 21. ALL DUCTWORK SHALL BE A MINIMUM 26 GAUGE GALVANIZED SHEET

# **TEST AND BALANCE NOTES**

- THE MINIMUM REQUIREMENT FOR TESTING, ADJUSTING, AND BALANCING (TAB) OF THE HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) DISTRIBUTION SYSTEMS SHALL BE AS FOLLOWS.
- CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TESTING ADJUSTING AND BALANCING FOR THIS PROJECT THE MECHANICAL SYSTEMS SHALL BE TESTED, ADJUSTED AND BALANCED, INCLUDING SUPPLY AIR SYSTEM, RETURN AIR SYSTEM, EXHAUST AIR SYSTEM,
- OUTSIDE AIR SYSTEM AND ALL ASSOCIATED EQUIPMENT. CONTRACTOR PERFORMING TESTING ADJUSTING AND BALANCING WORK SHALL
- BE EITHER AABC OR NEBB CERTIFIED. TESTING ADJUSTING AND BALANCING SHALL BE PERFORMED IN ACCORDANCE
- WITH THE NEBB OR AABC TEST PROCEDURES. TESTING ADJUSTING AND BALANCING REPORT FORMS SHALL BE STANDARD FORMS FROM EITHER AABC OR NEBB.
- CONTRACTOR SHALL VERIFY QUANTITIES AND LOCATIONS OF ALL BALANCING DEVICES. CONTRACTOR SHALL VERIFY THAT THESE BALANCING DEVICES ARE ACCESSIBLE AND APPROPRIATE FOR BALANCING AND FOR EFFICIENT SYSTEM AND EQUIPMENT OPERATION PRIOR TO COMMENCING WORK.
- MECHANICAL AIR AND WATER SYSTEMS SHALL BE ADJUSTED TO WITHIN THE FOLLOWING TOLERANCES. PLUS 5 TO PLUS 10 PERCENT PLUS 5 TO PLUS 10 PERCENT
- DOM. HW FLOW RATES: ZERO TO MINUS 10 PERCENT FINAL BALANCE REPORT SHALL INCLUDE THE FOLLOWING. TEST CONDITIONS FOR FANS SYSTEM DIAGRAMS

AIR OUTLETS AND INLETS: ZERO TO MINUS 10 PERCENT

EQUIPMENT WITH FANS: PLUS 5 TO PLUS 10 PERCENT

EXHAUST FANS: PLUS 5 TO PLUS 10 PERCENT

AIR TERMINAL DEVICE REPORTS

AIR CONDITIONING UNIT TEST REPORTS FAN TEST REPORTS

# PENETRATION FIRESTOPPING NOTES

- 1. FIRE RATED PENETRATIONS DETAILS SHOWN ON THE CONSTRUCTIONS DOCUMENTS SHOW GENERAL METHOD OF MECHANICAL (HVAC) AND PLUMBING PENETRATION FIRESTOPPING.
- 2. CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND PROVIDE SPECIFIC FIRESTOPPING DETAILS FROM A SPECIFIC FIRESTOPPING MANUFACTURER FOR EACH MECHANICAL (HVAC) AND PLUMBING PIPE OR DUCT PENETRATION FOR EACH FIRE RATED ASSEMBLY.
- 3. PROVIDE PENETRATION FIRESTOPPING THAT IS PRODUCED AND INSTALLED TO RESIST SPREAD OF FIRE ACCORDING TO REQUIREMENTS INDICATED, RESIST PASSAGE OF SMOKE AND OTHER GASES, AND MAINTAIN ORIGINAL FIRE-RESISTANCE RATING OF CONSTRUCTION

PENETRATING ITEMS IF ANY.

- 4. PENETRATION FIRESTOPPING SYSTEMS SHALL BE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS, AND WITH
- 5. PENETRATIONS IN FIRE-RESISTANCE-RATED WALLS: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER ASTM E 814 OR UL 1479, BASED ON TESTING AT A POSITIVE PRESSURE DIFFERENTIAL
- 6. PENETRATION FIRESTOPPING PRODUCTS SHALL BEAR UL, ETL OR FM GLOBAL CLASSIFICATION MARKING OF QUALIFIED TESTING AND INSPECTING AGENCY.
- 7. DO NOT INSTALL PENETRATION FIRESTOPPING WHEN AMBIENT OR SUBSTRATE TEMPERATURES ARE OUTSIDE LIMITS PERMITTED BY PENETRATION FIRESTOPPING MANUFACTURERS OR WHEN SUBSTRATES ARE WET BECAUSE OF RAIN, FROST, CONDENSATION, OR OTHER CAUSES.
- 8. COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT PENETRATION FIRESTOPPING IS INSTALLED ACCORDING TO SPECIFIED REQUIREMENTS.
- 9. COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE PENETRATION FIRESTOPPING. 10. INSTALL PENETRATION FIRESTOPPING TO COMPLY WITH

MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND PUBLISHED

IN THE POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND

- DRAWINGS FOR PRODUCTS AND APPLICATIONS INDICATED. 11. INSTALL FORMING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND
- 12. IDENTIFY PENETRATION FIRESTOPPING WITH PREPRINTED METAL OR PLASTIC LABELS. ATTACH LABELS PERMANENTLY TO SURFACES ADJACENT TO AND WITHIN 6 INCHES OF FIRESTOPPING EDGE SO LABELS WILL BE VISIBLE TO ANYONE SEEKING TO REMOVE PENETRATING ITEMS

DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.

# **SMOKE DETECTOR NOTES**

- 1. SMOKE DETECTORS SHALL BE PHOTOELECTRIC TYPE AND SHALL BE "SYSTEM SENSOR" DH100ACDCLP
- 2. SMOKE DETECTORS SHALL BE INSTALLED IN THE RETURN AIR DUCT OF ALL AIR HANDLING UNITS WITH CAPACITY GREATER THAN 2,000 CFM.
- PROVIDE SMOKE DETECTORS WHERE MULTIPLE AIR-HANDLING SYSTEMS SHARE COMMON SUPPLY OR RETURN AIR DUCTS OR PLENUMS WITH A COMBINED DESIGN CAPACITY GREATER THAN 2,000 CFM.
- 4. THE SMOKE DETECTORS SHALL BE INSTALLED TO MONITOR THE ENTIRE AIRFLOW CONVEYED BY THE SYSTEM INCLUDING RETURN AIR AND EXHAUST OR RELIEF AIR.
- 5. PROVIDE ACCESS TO ALL SMOKE DETECTORS FOR INSPECTION AND MAINTENANCE.
- 6. SMOKE DETECTOR SHALL BE INTERLOCKED WITH SUPPLY FAN. ELECTRICAL STARTER TO SHUT DOWN SUPPLY AIR FAN(S) ON SENSING
- 7. SMOKE DETECTOR SHALL BE INTERLOCKED WITH FIRE ALARM SYSTEM.

8. THE ACTUATION OF A DUCT SMOKE DETECTOR SHALL ACTIVATE A VISIBLE

- AND AUDIBLE SUPERVISORY SIGNAL AT A CONSTANTLY ATTENDED 9. IN ADDITIONAL TO INTERLOCKING THE SMOKE DETECTOR TO THE FIRE ALARM SYSTEM, THE SMOKE DETECTOR SHALL BE CONNECTED TO A
- TESTING PURPOSES. 10. MULTI-SIGNALLING ANNUNCIATOR PANEL (SYSTEM SENSOR SSK 451) SHALL BE INSTALLED AS SHOWN ON DRAWING AND AS REQUIRED BY BUILDING OFFICIAL FOR TESTING.

# MECHANICAL SPECIFICATIONS

MULTI-SIGNALLING ANNUNCIATOR PANEL (SYSTEM SENSOR SSK 451) FOR

# 230100 - BASIC MECHANICAL REQUIREMENTS

- COORDINATE THE LOCATION OF ALL NEW ROOF OPENINGS AND THE LOCATION OF ALL NEW AND RELOCATED ROOF MOUNTED EQUIPMENT WITH THE EXISTING STRUCTURE AND ARCHITECTURAL PLANS PRIOR TO ANY INSTALLATION.
- V-BELT DRIVES SHALL BE OF FABRIC AND RUBBER CONSTRUCTION. BELT GUARDS SHALL BE PROVIDED FOR ALL EXPOSED BELTS AND DRIVES. PROVIDE 6" CONCRETE HOUSEKEEPING PADS UNDER ALL FLOOR MOUNTED EQUIPMENT.
- PROPERLY LUBRICATE ALL PIECES OF EQUIPMENT BEFORE TURNING THE SYSTEM OVER TO THE INSTALL DUCT MOUNTED SUPPLY AND RETURN AIR SMOKE DETECTORS IN ALL ROOFTOP, FAN-COIL. AIR-HANDLING, AND OTHER SUPPLY AIR SYSTEMS, WITH A CAPACITY GREATER THAN 2000 CFM. SMOKE DETECTORS ARE PURCHASED AND WIRED BY THE ELECTRICAL CONTRACTOR.

- 230500 BASIC PIPING MATERIALS & METHODS CORE CUT ALL PIPE PENETRATION OF EXISTING MASONRY OR CONCRETE WALLS AND FLOORS. SLEEVE ALL PENETRATIONS THROUGH NEW WALLS AND FLOORS. SEAL ALL PENETRATIONS WATER TIGHT WITH SILICONE SEALANT. USE FIRE RATED SEALANT (3M "FIRE BARRIER" OR EQUAL ) FOR 1
- **HOUR OR 2 HOUR PENETRATIONS** CAULK AROUND ALL PIPING THAT PASSES THROUGH FIRE-RATED PARTITIONS WITH A NON-HARDENING CAULKING SIMILAR TO 3M "FIRE BARRIER".

# 230523 - VALVES

SEAL ALL PIPING THROUGH WALLS AIR TIGHT

PROVIDE VALVES OF THE TYPE AND QUANTITY SHOWN ON THE DRAWINGS. VALVES OF THE SAME TYPE TO BE BY ONE MANUFACTURER.

# 230548 - VIBRATION ISOLATION AND SEISMIC BRACING

- ALL MECHANICAL EQUIPMENT DUCTWORK AND PIPING MUST BE VIBRATION ISOLATED AND SEISMICALLY BRACED FOR THE SITE SPECIFIC SEISMIC DESIGN CATEGORY AND SEISMIC USE GROUP, IN ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE IBC, UBC, ASHRAE, AND SMACNA. PROVIDE SEISMIC PRODUCTS BY AMBER-BOOTH OR MASON INDUSTRIES
- IN GENERAL PROVIDE SPRING MOUNTS TO ATTENUATE LOW FREQUENCY SOUND AND VIBRATION AND NEOPRENE PADS TO ATTENUATE HIGH FREQUENCY SOUND AND VIBRATION. SEISMIC BRACING/MOUNTING CAN BE COMBINED WITH VIBRATION ISOLATION AS APPLICABLE.
- CONTRACTOR MANUFACTURED SEISMIC BRACING/RESTRAINT METHODS ARE NOT ACCEPTABLE. PROVIDE A SIGNED AND STAMPED LETTER FROM A PROFESSIONAL ENGINEER CERTIFYING THAT THE SUPPLIED PRODUCTS ARE CORRECT FOR THE APPLICATION AND THAT THE INSTALLATION IS IN COMPLIANCE WITH ALL APPLICABLE CODES.

# MECHANICAL SPECIFICATIONS

PLASTIC TAPE: PROVIDE MANUFACTURER'S STANDARD COLOR-CODED

230553 - MECHANICAL IDENTIFICATION

- PRESSURE-SENSITIVE (SELF ADHESIVE) VINYL TAPE, NOT LESS THAN 3 MILS THICK. 1-1/2" WIDE TAPE MARKERS ON PIPES WITH OUTSIDE DIAMETERS LESS THAN 6" (INCLUDING INSULATION, IF ANY); 2-1/2" WIDE TAPE FOR LARGER PIPES
- DUCT MARKERS PROVIDE MANUFACTURER'S STANDARD LAMINATED PLASTIC; COLOR CODED DUCT MARKERS.
- . COLOR: COMPLY WITH ANSI A13.1

WEATHERPROOF FIT

233113 - METAL DUCTWORK

- **LETTERING** MANUFACTURER'S STANDARD PRE-PRINTED NOMENCLATURE WHICH BEST DESCRIBES PIPING OR DUCT SYSTEM IN EACH INSTANCE OR AS SELECTED BY ARCHITECT OR ENGINEER IN CASES OF VARIANCE WITH NAMES AS SHOWN
- PRINT EACH MARKER WITH ARROWS INDICATING DIRECTION OF FLOW.
- VALVE TAGS: PROVIDE PLASTIC LAMINATE VALVE TAGS: MANUFACTURER'S STANDARD 3/32" THICK ENGRAVED TAGS WITH PIPING SYSTEM ABBREVIATION IN 1/4" HIGH LETTERS AND SEQUENCED VALVE NUMBERS 1/2" HIGH, WITH 5/32" HOLE FOR FASTENER. PROVIDE 1-1/2" SQUARE BLACK TAGS WITH WHITE LETTERING
- VALVE TAG FASTENERS: PROVIDE MANUFACTURER'S STANDARD SOLID BRASS CHAIN (WIRE LINK OR BEADED TYPE), OR SOLID BRASS S-HOOKS OF THE SIZED REQUIRED FOR PROPER ATTACHMENT OF TAGS TO VALVES, AND MANUFACTURED SPECIFICALLY FOR THAT PURPOSE.

# 230593 - TESTING, ADJUSTING, AND BALANCING

OBTAIN THE SERVICES OF AN INDEPENDENT TESTING AND BALANCING AGENCY TO BALANCE AND ADJUST THE SYSTEM. THIS SHALL BE DONE BY PERSONS FULLY FAMILIAR WITH SYSTEMS OF THIS TYPE. BALANCING SHALL BE DONE IN ACCORDANCE TO AABC OR NEBB STANDARDS. ALL DATA SHALL BE RECORDED AND A REPORT SUBMITTED TO THE ENGINEER PRIOR TO JOB

## 230700 - MECHANICAL INSULATION

- PIPE INSULATION TO BE SNAP-ON GLASS FIBER TYPE WITH VAPOR JACKET. SEAL ALL ENDS AND JOINTS TO PROVIDE A COMPLETELY SEALED SYSTEM. ALTERNATIVELY, USE FLEXIBLE UNICELLULAR ASTM 534 TYPE 1 INSULATION. USE 1" THICKNESS FOR PIPE UP TO 2"Ø. AND 1 1/2" FOR PIPE OVER 2"Ø
- WRAP ALL SUPPLY AND RETURN DUCTWORK WITH 1-1/2" THICK FOIL FACED FIBERGLASS INSULATION. WRAP INSULATION TIGHTLY ON THE DUCT WITH ALL CIRCUMFERENTIAL JOINTS BUTTED AND LONGITUDINAL JOINTS OVERLAPPED A MIN. OF 2". COVER ALL JOINTS WITH FOIL-REINFORCED 'KRAFT' TAPE. 3" WIDE. DUCTWORK INTERIOR TO BUILDING ENVELOPE
- WITH A MINIMUM R-5 WHILE EXTERIOR DUCTWORK INSULATION SHALL BE MINIMUM R-12. NO RETURN AIR DUCT INSULATION IS REQUIRED IF THE RETURN AIR AND PLENUM
- TEMPERATURE DIFFERENCE IS LESS THAN 10°F OUTDOOR DUCTWORK EXPOSED TO THE WEATHER SHALL HAVE 2" INSULATION AND SHALL BE FITTED WITH 0.016 EMBOSSED ALUMINUM JACKET POP-RIVITED FOR A TIGHT

ALL DUCTWORK SHALL BE CONSTRUCTED, ERECTED, AND TESTED IN ACCORDANCE WITH

THE MOST RESTRICTIVE OF LOCAL REGULATIONS AND PROCEDURES DETAILED IN THE

#### ASHRAE HANDBOOK OF FUNDAMENTALS, OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION.

- TRANSITION ALL NEW DUCTWORK TO CONNECT TO EXISTING, AS REQUIRED. DUCTWORK SHALL BE GALVANIZED STEEL THROUGHOUT, FABRICATED AND INSTALLED SO THAT NO VIBRATION OR NOISE RESULTS. IT SHALL BE MADE FROM THE BEST GRADE OF GALVANIZED MILLED STEEL SHEETS OF U.S. STANDARD GAUGE AND BE FREE FROM BLISTERS, SLIVERS, AND PITS. ALL SEAMS SHALL BE AIRTIGHT, THE CONSTRUCTION OF AL DUCTWORK INCLUDING GALIGES OF METAL BRACING LAYOUT ETC. SHALL BE IN
- AN EXTENSION OF THE FIRE WALL SHALL BE 10 GAUGE STEEL SEAL DUCTWORK ACCORDING TO THE FOLLOWING SMACNA DUCT SEALING CLASS:

ACCORDANCE WITH SMACNA. SLEEVES FOR FIRE DAMPERS AND DUCT SECTIONS FORMING

CERE BOOTWORK ROOOKBING TO TI	TIE I OLLOWII	TO OWN TOTAL	JOOT OL/ILI	140 01/100		
DUCT LOCATION	DUCT TYPE					
	SUPPLY EXHAUST RETU					
	<2in. Wg.	>2in. Wg.	EXHAUST	RETURN		
OUTDOORS	Α	Α	Α	Α		
UNCONDITIONED SPACES	В	Α	В	В		
CONDITIONED SPACES	С	В	В	В		
(CONCEALED DUCTWORK)						
CONDITIONED SPACES	Α	Α	В	В		
(EXPOSED DUCTWORK)						

HANGERS FOR DUCTS UP TO 18" IN WIDTH OR DIAMETER SHALL BE PLACED ON NOT MORE

DIAMETER. HANGERS SHALL EXTEND DOWN SIDES AND A MINIMUM OF 1" UNDER RECTANGULAR DUCTS, AND WRAP COMPLETELY AROUND ROUND DUCTS. ALL DUCTS SHALL BE RIGIDLY SUPPORTED.

THAN 8 FOOT CENTERS. DUCTS 19" AND OVER IN WIDTH OR DIAMETER SHALL BE

SUPPORTED ON NOT MORE THAN 4 FOOT CENTERS. DUCT HANGERS SHALL BE

ALL DUCTWORK SHALL BE CLEANED PRIOR TO THE INSTALLATION OF CEILING AND DIFFUSERS. OPERATE FANS TO BLOW OUT DUCTWORK RECTANGULAR LOW-PRESSURE SUPPLY AND RETURN AIR DUCTWORK SHALL BE LINED

WITH 1" FACED FIBERGLASS INSULATION SECURELY BUTTONED OR LAPPED AND SEALED.

CONSTRUCTED OF GALVANIZED BAND IRON 1-1/8" FOR DUCTS UP TO 36" IN WIDTH OR

- OUTDOOR DUCTWORK EXPOSED TO THE WEATHER SHALL BE LINED WITH MINIMUM R-8 FACED FIBERGLASS INSULATION SECURELY BUTTONED OR LAPPED AND SEALED. AND SHALL BE FITTED WITH A 0.016 EMBOSSED ALUMINUM JACKET POP RIVETED FOR A WEATHERPROOF FIT
- JOHN-MANSVILLE OR SCHULLER INTERNATIONAL CLASS I KITCHEN EXHAUST HOOD DUCT SYSTEMS:

DUCT DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE CLEAR AREA AND SHALL BE

INCREASED TO ACCOMMODATE INSULATION, DUCT LINER TO BE BY KNAUF GmbH.

- A TYPE LCOMMERCIAL HOOD AND GREASE DUCT SHALL MEET CLEARANCE REQUIREMENTS FROM COMBUSTIBLE AND NONCOMBUSTIBLE CONSTRUCTION IN ACCORDANCE TO 2012 IMC SECTION 507.9 AND ASTM E23-36. B. CONSTRUCT EXHAUST DUCT OF WELDED 16 GAGE CARBON STEEL SHEETS FOR
- CONCEALED DUCTS, AND WELDED OR FLANGED 18 GAGE STAINLESS STEEL FOR EXPOSED DUCTS C. SLOPE HORIZONTAL DUCT AT 1/4" PER FOOT TOWARD HOOD.

PROVIDE ACCESS DOORS AT EACH CHANGE OF DIRECTION.

**INSULATION SHALL BE 1-1/2 POUND DENSITY** 

CLEANOUT F. ALL SEAMS, JOINTS AND PENETRATIONS SHALL HAVE A LIQUID-TIGHT, CONTINUOUS. EXTERNAL WELD. G. PROVIDE AND INSTALL ONE OF THE FOLLOWING SYSTEMS: DUCT ENCLOSURE WITH 2-HR IRE RESISTIVE CONSTRUCTION OR, A DUCT WRAP SYSTEM - 3M FIREMASTER GREASE

DUCT SYSTEM - METAL FAB MODEL "NO CHASE IPIC". OR APPROVED EQUAL.

ADMINISTRATIVE AUTHORITY AND STATE FIRE MARSHALL.

WHICHEVER METHOD IS CHOSEN MUST HAVE APPROVAL FROM THE

DUCT FIRE PROTECTION SYSTEM, OR APPROVED EQUAL, OR, A PREFABRICATED GREASE

. PROVIDE RESIDUE TRAP AT THE BASE OF EACH VERTICAL RISER, WITH PROVISIONS FOR

# MECHANICAL SPECIFICATIONS 233300 - DUCTWORK ACCESSORIES

- LEXIBLE DUCTWORK: THE FINAL 5 FOOT CONNECTION TO GRILLES AND DIFFUSERS IN LAY-IN CEILINGS, OR TO FLOOR MOUNTED GRILLES, MAY BE MADE WITH FLEXIBLE DUCT,
- FLEXMASTER TYPE 5M ONLY. ENDS SHALL BE SEALED. SQUARE/RECTANGULAR ELBOWS SHALL BE PROVIDED WITH TURNING VANES.
- PROVIDE FLEXIBLE CONNECTIONS NOT LESS THAN 4" WIDE CONSTRUCTED OF HEAVY, WATERPROOF, WOVEN PLASTIC COATED GLASS FABRIC AT SUPPLY AND RETURN CONNECTIONS TO HEAT PUMPS, AIR HANDLING, ROOFTOP, MAKE-UP AIR OR FAN-COIL UNITS CORNERS SHALL BE SEWN TIGHT. CONNECTIONS SHALL BE 20 OUNCE VENTFABRICS OF
- COMBINATION FIRE AND SMOKE DAMPERS. SMOKE DAMPERS. OR FIRE DAMPERS. IN DUCTWORK THROUGH ALL FLOORS AND FIRE WALLS SHALL BE FURNISHED AND INSTALLED AS REQUIRED TO CONFORM TO THE LATEST NFPA BULLETIN CONCERNING THIS TYPE OF BUILDING AND SHALL BE LISTED AND LABELED IN ACCORDANCE WITH THE STANDARDS AND EQUIREMENTS OF UL555 AND UL555S. DAMPERS, COMPLETE WITH MOUNTING ANGLES, SHALL BE MULTI-BLADE, FUSIBLE LINK, SPRING ACTING WITH 11 GAUGE SLEEVE. FUSIBLE LINK SHALL BE RATED AT 165°F. CONTROLLED BY AUTOMATIC SMOKE DETECTION IN DUCT OR AREA OF SMOKE DISPERSION.
- DUCT MOUNTED BALANCING DAMPERS SHALL BE USED TO CONTROL SUPPLY AIR TO EACH DIFFUSER AND GRILLE. AN OPERATING HEAD SHALL BE PLACED ON THE SIDE OF THE DUC WITH A POSITIVE LOCKING QUADRANT. DAMPERS SHALL BE PROVIDED IN RETURN AND EXHAUST AIR DUCTS WHERE SHOWN ON DRAWINGS. COORDINATE THE LOCATION OF

PROVIDE CEILING ACCESS DOORS AT ALL LOCATIONS OF BALANCING DAMPERS, FIRE DAMPERS, FIRE/SMOKE DAMPERS, VALVES, ETC., WHERE THERE IS NOT A LIFT-OUT TYPE CEILING. ACCESS DOORS SHALL BE HINGED OF METAL CONSTRUCTION WITH SCREWDRIVER LATCHES. ACCESS DOORS TO BE LISTED AND FIRE RATED EQUAL TO OR GREATER THAN THE

AT FIRE DAMPERS, A DUCT MOUNTED SHEET METAL HINGED DOOR SHALL BE PROVIDED AND INSTALLED WITH POSITIVE LOCKING HANDLE. WHERE DUCTS ARE INSULATED, COVERS SHALL BE INSULATED. FIRE DAMPERS SHALL BE LISTED AND LABELED IN ACCORDANCE WIT THE STANDARDS AND REQUIREMENTS OF UL555. CONTROLLED BY FIRE DETECTOR, FUSABLE LINK OR FLECTRICAL FUSABLE LINK PROVIDE 1 1-1/2 OR 3 HR FIRE RATED MATERIALS AT ALL PENETRATIONS OF FIRE BARRIERS BY DUCTS. SYSTEM APPROVED BY ASTM E 814 OR

GRAVITY OR BACKDRAFT DAMPERS SHALL BE ALL ALUMINUM CONSTRUCTION. INTERCON-

NECTED AND BLADED, PRESSURE DROP THROUGH DAMPERS SHALL NOT EXCEED 0.04" W.

FIRE ALARM CONTRACTOR SHALL TEST FOR FIRE/SMOKE DAMPERS AS REQUIRED BY LOCAL

# 233416 - FANS

RATING ASSEMBLY THEY ARE INSTALLED IN

- ROOF MOUNTED EXHAUST FANS SHALL BE COMPLETE WITH BACKDRAFT DAMPERS. A DISCONNECT SWITCH SHALL BE PROVIDED AT THE FAN. THE DISCONNECT SWITCH SHALL TURN OFF THE FAN WITH THE ACTIVATION OF SMOKE
- THE FAN SHALL BE COMPLETE WITH INSECT SCREEN AND PREFABRICATED ROOF CURB MATCHING THE FAN SIZE

BUILDING OFFICIAL AND FIRE AUTHORITY PRIOR TO OCCUPANCY

CEILING MOUNTED EXHAUST FANS SHALL BE COMPLETE WITH LOUVERED GRILLE BACKDRAFT DAMPER, AND WALL CAP OR ROOF CAP, SEE PLANS. FANS FOR GREASE HOOD APPLICATIONS SHALL BE UPBLAST TYPE, LISTED AND

LABELED FOR GREASE HOOD USE AND INSTALLED PER APPLICABLE CODES.

UTILITY FAN SETS SHALL BE BELT DRIVEN, CENTRIFUGAL FANS CONSISTING OF WEATHER PROOF HOUSING, WHEEL FAN SHAFT, BEARINGS, MOTOR, DISCONNECT SWITCH, DRIVE ASSEMBLY, DRAIN CONNECTION AND ACCESSORIES.

# MANUFACTURERS: COOK, ILG, PENN, GREENHECK, & BROAN 233713 - GRILLES, DIFFUSER AND LOUVERS

LAYOUT, AND ARCHITECTURAL ELEVATIONS.

ALL GRILLES, DIFFUSERS, AND REGISTERS SHALL BE COMPLETE WITH FRAMES AND RUBBER GASKETS. FINISH FOR ALL REGISTERS, DIFFUSERS, AND GRILLES SHALL BE

LOUVERS SHALL HAVE MINIMUM FREE AREA AND MAXIMUM PRESSURE DROP AS

LISTED IN THE SCHEDULES. LOUVER SHALL HAVE FRAME AND SILLS COMPATIBLE

INSTALLATION. LOUVERS SHALL BE COMPLETE WITH 1/2" MESH ANODIZED ALUMINUM

COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN, ELECTRICAL LIGHTING

WITH ADJACENT SUBSTRATE AND FIT ACCURATELY FOR WEATHERPROOF

Welch Donald

Architect

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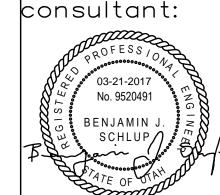
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4925, 4931, & 4953

South 900 East

|Salt Lake County

date

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√ADDENDUM #1-January 04, 2017

 $\sqrt{\mathsf{ADDENDUM}}$  #3-January 11, 2017 4\ADDENDUM #4-January 17, 2017 YADDENDUM #5-January 20, 2017 7\ADDENDUM#7-February 24, 2017

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drawn by:

sheet

checked by: MECHANICAL **EQUIPMENT** SPECIFICATIONS

	ELECTRIC UNIT HEATER SCHEDULE																						
					ELECTRICAL		OPERATING		40050000150														
SYMBOL		MANUFACTURER AND MODEL NO.	LOCATION	LOCATION ARRANGEM	LOCATION	ARRANGEMENT	CFM	KW	MOTOR	MOTOR	]]		],,,,,,,,,,			].,,,,	]	I I		I	WEIGHT	NOTES	ACCESSORIES AND REMARKS
	AND MODEL NO.				T.VV	H.P.	VOLI	PHASE	(LBS.)	3.)	AND REWARKS												
EUH-1	TRANE UHEC03	WATER ENTRIES	VERTICAL	400	3.3	1/125	208	1	132	3	WALL HUNG												
EUH-2	TRANE UHCA02	EXIT DOORS	HORIZONTAL	-	2.0	-	208	1	-	1,2	RECESSED, CEILING MOUNTED												
EUH-3	TRANE UHAA15	CUSTODIAN	VERTICAL	-	1.5	-	208	1	22	1,2	RECESSED, WALL MOUNTED												

(1) UNIT MOUNTED TAMPERPROOF THERMOSTAT

(2) UNIT MOUNTED DISCONNECT SWITCH

(3) PROVIDE WALL MOUNTED LINE VOLTAGE THERMOSTAT AND TAMPERPROOF WALL BRACKET

DIFFUSER AND GRILLE SCHEDULE								
SYMBOL	MANUFACTURER AND MODEL NO.	LOCATION	CFM	OVERALL SIZE	NOTES	ACCESSORIES AND REMARKS		
SG-1	TITUS 300R	CEILING	SEE PLANS	14 X 6 10 X 6	3,5	CEILING SUPPLY GRILLE W/ FIRE DAMPER		
CD-1	7 TITUS PAS-FR	CEILING	SEE PLANS	24 X 24 12 X 12	2,5	CEILING DIFFUSER W/ FIRE DAMPER		
RG-1	TITUS PAR-FR	CEILING	SEE PLANS	24 X 24 16 X 16	2,5	RETURN GRILLE W/ FIRE DAMPER		
EG-1	TITUS 63F	EXTERIOR EXHAUST TERMINATION	SEE PLANS	8X6	4	EXHAUST DISCHARGE GRILLE, ALUMINUM		
DG-1	TITUS CT-700L	DOOR TRANSFER	SEE PLANS	18 X 12	1	DOOR GRILLE		

FIRE RATING NOTE: ALL CEILING DUCTWORK & DIFFUSER PENETRATIONS TO HAVE UL CLASSIFIED FIRE DAMPERS TO MAINTAIN FIRE RATING. (TYPICAL)

(1) PROVIDE AUXILIARY FRAME FOR TO ALLOW FOR FINISHED LOOK ON BOTH SIDES OF DOOR. (2) PROVIDE FRAME AND BALANCING DAMPER ACCESSIBLE THROUGH GRILLE FOR HARDLID CEILING APPLICATIONS AS REQUIRED.

(3) PROVE DOUBLE DEFLECTION GRILLE WITH INTEGRAL BALANCING DAMPER. (4) PROVIDE NECESSARY FRAME TO ALLOW FOR INSTALLATION ON BOTTOM SIDE OF EXISTING EXTERIOR OVERHANG.

(5) PROVIDE UL CLASSIFIED <u>FIRE RATED</u> CEILING DIFFUSER ASSEMBLY. 

	EXHAUST FAN SCHEDULE											
	MANUFACTURER			FAN			ELECTRICAL		OPERATING	CONTROL	ACCESSORIES	
SYMBOL	AND MODEL NO.	LOCATION	TYPE	CFM	ESP	H.P.	TOR WATTS	VOLT	PHASE	WEIGHT (LBS.)	METHOD	AND REMARKS
EF-1	PANASONIC FV-05-11VKS1	PRIVATE UNIT BATHROOMS	CEILING	110	0.5	-	57	115	1	27	1	CEILING MOUNTED W/ WHITE GRILLE

CONTROL METHOD: (1) CONTROLLED BY WALL SWITCH (2) FAN RUNS CONTINUOUSLY DURING BUILDING OCCUPANCY (3) CONTROLLED BY LINE VOLTAGE SPACE THERMOSTAT

ACCESSORIES: (1) STANDARD DISCONNECT NEMA 1 (2) BACKDRAFT DAMPER

(3) FLEX DUCT CONNECTION

(4) FAN SPEED CONTROLLER 5A 120V PREWIRED

(5) RUBBER ISOLATOR SET (4)
(6) PROVIDE UL LISTED CÉILING RADIATION DAMPER TO MATCH FAN TYPE (PANASONIC-RD05C3)

	ROOFTOP UNIT SCHEDULE (2-STAGE HEATING/COOLING)													
SYMBOL	MANUFACTURER	MODEL#	CFM	ESP	VOLT/PH	EER	COOLING CAP HEATING INPUT	ELECTRICAL		DIMENSIONS	WEIGHT (LBS)	COMMENTS		
				(BTUH)	(BTUH)	VOLT/PH	MCA (AMPS)	MAX FUSE	HXWXL					
RTU-1	TRANE	4YCZ6036	1200	1.0	208/3	16.0	36,000	96,000	208/3	19.1	30 A	48" X 45" X 52"	550	HORIZONTAL SUPPLY/RETURN
RTU-2	TRANE	YHC047E3	1600	1.0	208/3	16.0	50,500	120,000	208/3	28.9	40 A	41" X 53" X 88"	800	HORIZONTAL SUPPLY/RETURN

(1) PROVIDE DIGITAL REMOTE PROGRAMMABLE THERMOSTAT IN LOCKABLE COVER.

(2) 0-25% MANUAL FRESH AIR DAMPER (BUILDING B RTUS) (3) 0-100% HORIZONTAL ECONOMIZER (BUILDINGS A & C THRU F RTUS)

(4) 13" HIGH ROOF CURB/PLATFORM (5) CRANKCASE HEATER FOR LOW AMBIENT COOLING

(6) PROVIDE INSULATED DUCT SHROUD ON ALL EXTERIOR DUCTWORK

(7) GAS PRESSURE REGULATOR & ISOLATION VALVE (8) 120 V CONVENIENCE OUTLET INTEGRAL TO UNIT

(9) CONDENSER COIL HAIL GUARD

(10) NON-FUSED DISCONNECT INTEGRAL TO UNIT

(11) GAS & ELECTRIC FEEDS TO ENTER THROUGH BASE OF UNIT

	DUCTLESS SPLIT SYSTEM HEAT PUMP													
SYMBOL	MANUFACTURER		INDOOR UNIT		COOLING CAPACITY		OUTDOOR UNIT					COMMENTS		
STIVIBUL	WANOFACTORER	MODEL#	CFM	VOLT/PH	RLA (AMPS)	(BTUH)	CAPACITY (BTUH)	SYMBOL	VOLT/PH	MCA (AMPS)	MODEL#	HSPF	SEER	CONNIVIENTS
DSS-1	LENNOX	MS8-HI-24P	590	208/1	0.24	25,000	26,000	CU-1	208/1	16.0	MS8-HO-24P	10.20	18.00	HIGH SIDEWALL STYLE (BLDGS. A, B, D, E & F)
DSS-2	LENNOX	MS8-HI-30P	705	208/1	0.40	30,000	33,000	CU-2	208/1	20.0	MS8-HO-30P	8.20	16.00	HIGH SIDEWALL STYLE (BLDG. C)

(1) PROVIDE REMOTE PROGRAMMABLE THERMOSTAT. BUILDINGS A, B, D, E & F MAX TEMP 85F (ADJ.) BUILDING C COOLING SETPOINT 70F (ADJ.) MAINTAIN 50F HEATING SETPOINT (ADJ)

(2) BUILT IN CONDENSATE PUMP / DISCHARGE CONDENSATE TO APPROVED LOCATION

(3) MULTI-SPEED FAN (4) DEFROST CONTROL

(5) COMPRESSOR OVERCURRENT PROTECTION

(6) PROVIDE MANUFACTURER'S WALL CHANNEL (SPEEDICHANNEL SYSTEM) TO CONCEAL ALL REFRIGERANT PIPING EXPOSED TO VIEW AND EXTERIOR CONDITIONS.

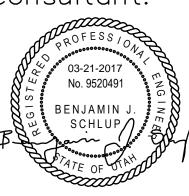
(7) PROVIDE MANUFACTURER'S CONDENSER PAD 18 X 36 X 2

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| Salt Lake County,

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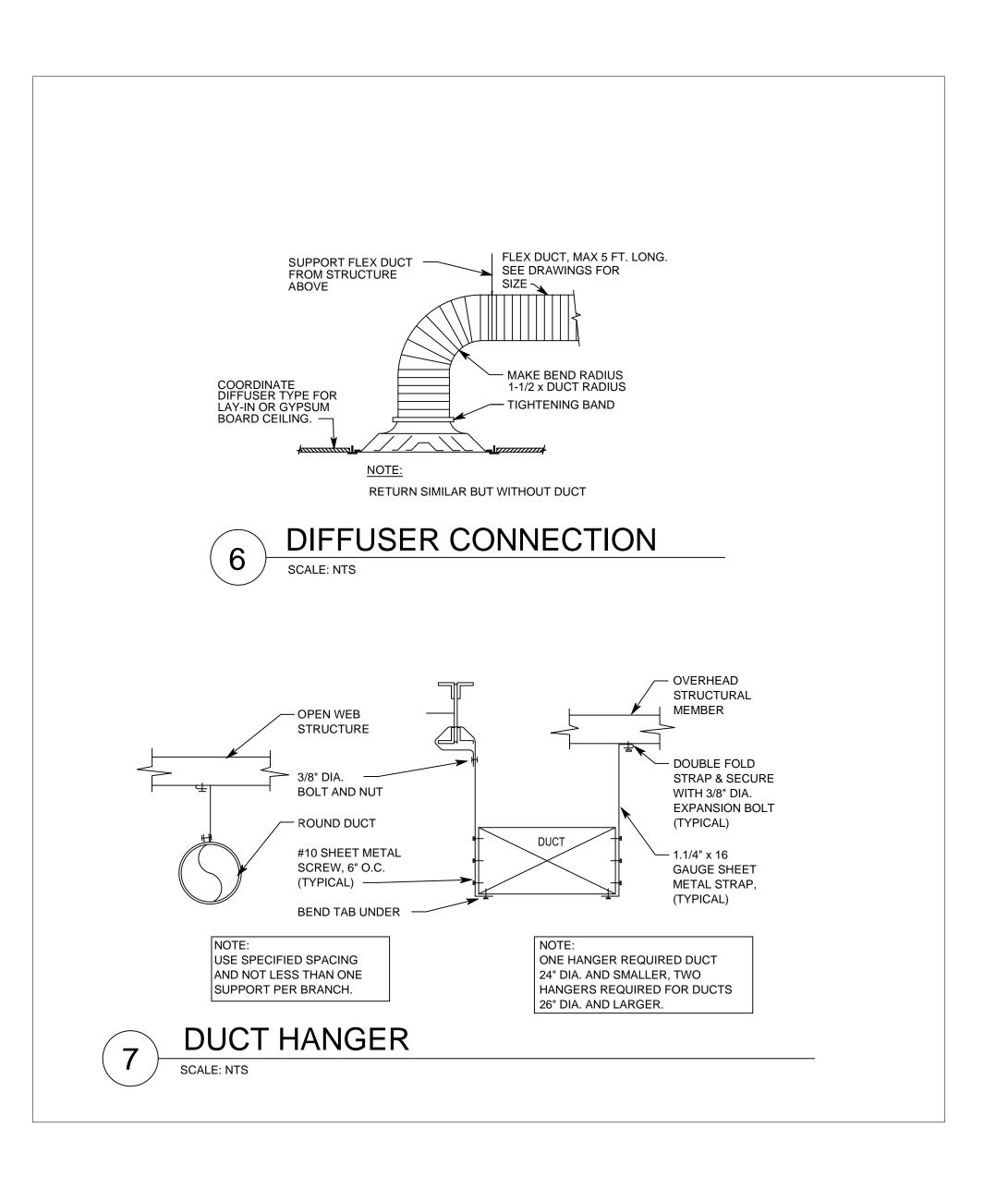
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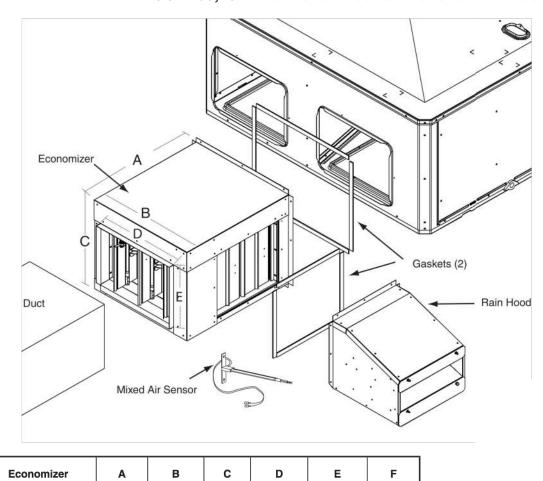
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M12

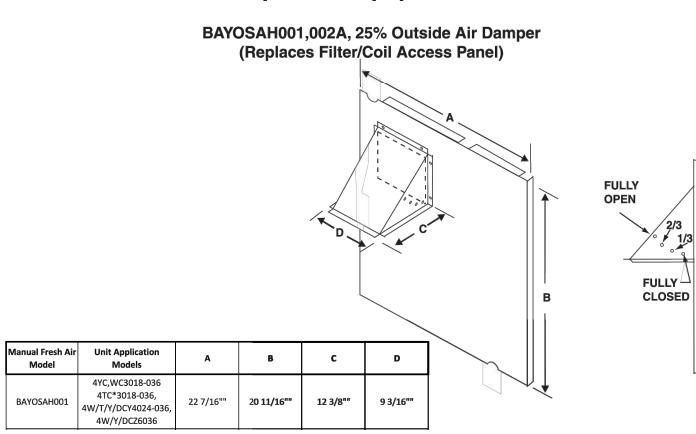
# BAYECON203,204A Horizontal Economizer and Rain Hood



HORIZONTAL ECONOMIZER DETAIL (3 TON)

20" | 16 7/8 | 15 11/16 | 11 11/16 | 15

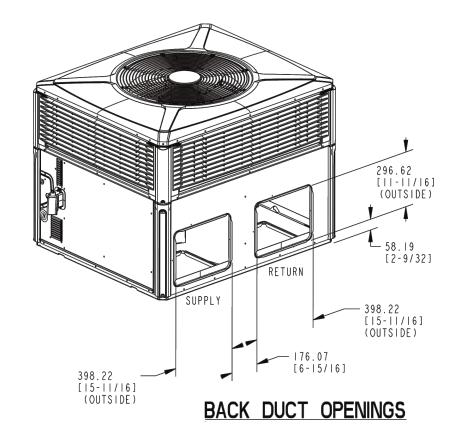
# **Optional Equipment**

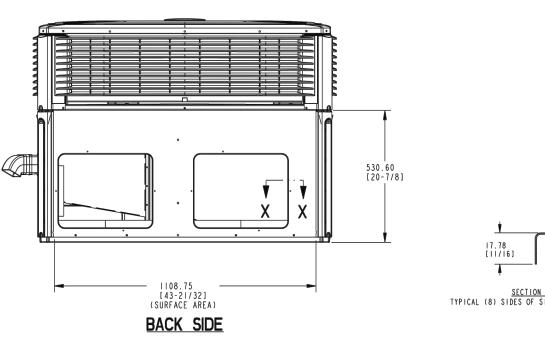


25% OUTSIDE AIR DAMPER (3 TON)
SCALE: NTS

#### BACK SIDE 304.8 [12] 762.0 [30] 914.4 [36] RIGHT SIDE 914.4 [36] FRONT SIDE 1066.8 [42]

CLEARANCE TO COMBUST	IBLE MATERIAL MM/IN.
воттом	0
BACK SIDE	25.4 [1]
LEFT SIDE	152.4 [6]
RIGHT SIDE	304.8 [12]
FRONT SIDE	304.8 [12]
TOP	914.4 [36]





ROOFTOP UNIT DETAIL (3 TON)

## Stainless Steel Drain Pan

For excellent corrosion and oxidation resistance, the optional stainless steel drain pan provides a cleanable surface that complement other IAQ solutions such as high efficiency filtration (MERV 8 or 13), demand control ventilation (CO₂), and hot gas reheat.

### Powered or Unpowered Convenience



This option is a GFCI, 120V/15amp, 2 plug, convenience outlet, either powered or unpowered. This option can only be ordered when Through the Base Electrical with either the Disconnect Switch or Circuit Breaker option is ordered. Note: Not available on 460V/575V units.

# Through-the-Base Electrical Utility Access



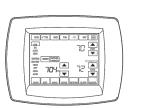
both control and main power connections inside the curb and through the base of the unit. Option will allow for field installation of liquidtight conduit and an external field

installed disconnect switch.



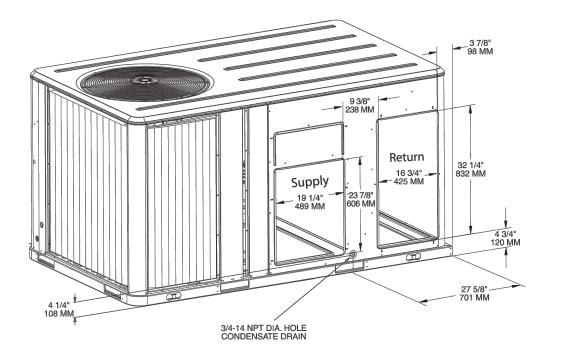
An electrical service entrance shall be Factory provided through the base openings simple provided allowing electrical access for wiring and piping. Because these utility openings frequently minimize the number of roof penetration integrity of roofing materials is enhanced.

#### **Touchscreen Programmable** Thermostat (2H/2C)



Two Heat/Two Cool programmable thermostat with touch screen digital display. Menu-driven programming. Effortless set-up. Program each day separately with no need to copy multiple days. All programming can be done on one screen. Easy to read and use. Large, clear backlit digital display.





ROOFTOP UNIT DETAIL (4 TON)

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BUILDING 'A'

6 RTU ACCESSORY & INSTALLATION DETAIL

SCALE: NTS

SYMBOL LEGEND								
SYMBOL	DESCRIPTION							
PLUMBING PIPING								
W	SOIL, WASTE - ABOVE GRADE							
	SOIL, WASTE - BELOW GRADE							
GW	GREASE WASTE - ABOVE GRADE							
GW	GREASE WASTE - BELOW GRADE							
	VENT							
	COLD WATER							
	HOT WATER							
	HOT WATER CIRCULATE							
ST	STORM - ABOVE GRADE							
—st—— ——	STORM - BELOW GRADE							
	OVERFLOW STORM ABOVE GRADE							
ost	OVERFLOW STORM BELOW GRADE							
VTR	VENT THRU ROOF							
(E)	EXISTING PIPE							
<i>чинини</i> .(E) <i>чинини</i> .	EXISTING PIPE TO BE REMOVED							
G	GAS							

	MBOL LEGEND
SYMBOL	DESCRIPTION  AND CALIGES
VALVES, METERS	
NT4	SHUT OFF VALVE
	GATE VALVE
	CHECK VALVE
	AUTO 2-WAY VALVE
	AUTO 3-WAY VALVE
	GLOBE VALVE
Φ	BALL VALVE
	RELIEF VALVE
	CHAIN OPERATED GATE VALVE
	PRESSURE REDUCING VALVE
<u>_</u>	BUTTERFLY VALVE
	SOLENOID VALVE
$ \uparrow $	ANGLE VALVE
	VENTURI
————	BALANCING OR PLUG COCK
	FLOW SETTER
—————————————————————————————————————	EXPANSION VALVE (REFRIG.)
——————————————————————————————————————	GAS COCK
	MANUAL AIR VENT
	STRAINER
<u> </u>	GAUGE COCK
	FLEXIBLE CONNECTION
φ	PRESSURE GAUGE
	THERMOMETER
	VICTAULIC COUPLING
$-\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$	REDUCER CONCENTRIC
	REDUCER ECCENTRIC
	REFRIGERANT SITE GLASS
	REFRIGERANT STRAINER
	REFRIGERANT FILTER DRIER
	90° ELBOW UP
	90° ELBOW DOWN
	90° TEE UP
	90° TEE DOWN
	UNION
	CAPPED PIPE
X	ANCHOR
	FLOAT AND THERMOSTATIC TRAP
PLUMBING SYMBO	
C.B.	CATCH BASIN
○ м.н.	MANHOLE
———— W.H.	WALL HYDRANT
Н.В.	HOSE BIBB
<b>—</b> ф	CLEANOUT TO GRADE
—ф	FLOOR CLEANOUT
<u> </u>	WALL CLEANOUT
	1/2 GRATE
	3/4 GRATE
	FULL GRATE

# **ABBREVIATIONS**

NOTE: ALL ABBREVIATIONS MAY NOT BE USED AIR CONDITION(-ING,-ED) APD AIR PRESSURE DROP BALANCING DAMPER BRAKE HORSE POWER BTU BRITISH THERMAL UNIT BTU/HOUR CFH CUBIC FEET PER HOUR CUBIC FEET PER MINUTE CLG COOLING COMP COMPONENT COND CONDENS(-ER, -ING, -ATION) OD CONTROL VALVE CW COLD WATER DIAMETER DISCH DISCHARGE DEPTH OR DEEP DRY BULB TEMPERATURE EXISTING EER ENERGY EFFICIENCY RATIO PSI EFF **EFFICIENCY** ETHYLENE GLYCOL ELEC ELECTRIC ELEV **ELEVATION ENTERING** EVAPORAT(-E, -ING, -ED, -OR) REFR EWT ENTERING WATER TEMP EXT EXTERNAL **FUTURE FAHRENHEIT** FLEXIBLE CONNECTION FIRE DAMPER FULL LOAD AMPS FINS PER INCH

FEET PER MINUTE

FEET

GALLON(S)

MERCURY

HOUR

INCH

KILOWATT

POUNDS

LENGTH

LEAVING

MAXIMUM

SYMBOL

LATENT HEAT

HEIGHT

HEATING

HORSE POWER

HERTZ(FREQUENCY)

LOCKED ROTOR AMPS

LEAVING WATER TEMP

THOUSAND BTU PER HOUR

INSIDE DIAMETER

HOT WATER

FEET PER SECOND

FIRE SMOKE DAMPER

GALLONS PER HOUR

GALLONS PER MINUTE

FPM

FPS

FSD FT

GPH GPM HD

HG

LBS

LWT

MAX

PRESS REQD STM TOT TSTAT VERT LEAVING AIR TEMPERATURE | WG

MINIMUM CIRCUIT AMPS MANUFACTURER MINIMUM NOT APPLICABLE NORMALLY CLOSED NOISE CRITERIA NOT IN CONTRACT NORMALLY OPEN NET POSITIVE SUCTION HEAD NOT TO SCALE OUTSIDE AIR OUTSIDE DIAMETER OUNCE

PRESSURE DROP PROPYLENE GLYCOL PARTS PER MILLION PRESSURE POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PSI ABSOLUTE PSI GAUGE

THERMAL RESISTANCE RETURN AIR RECIRC RECIRCULATE REFRIGERATION REQUIRED REVOLUTIONS PER MINUTE SUPPLY AIR SHADING COEFFICIENT SOFT COLD WATER SAFETY FACTOR SENSIBLE HEAT SEA LEVEL

STATIC PRESSURE SPECIFICATION SQUARE STANDARD STEAM **TEMPERATURE** TEMP. DROP OR DIFF. TOTAL THERMOSTAT

VACUUM VARIABLE AIR VOLUME VELOCITY VENT, VENTILATION VERTICAL VOLUME WATER COLUMN WATER GAUGE WATER PRESSURE DROP

WET BULB TEMP

WATER

WEIGHT

# SYMBOL LEGEND

WTR

EFERENCE AND	LINE SYMBO	)L

DESCRIPTION

KEFEKENCE AND	LINE STIVIBULS
# SHEET	DETAIL INDICATOR: # INDICATES DETAIL NUMBER, SHEET INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
100	ROOM OR SPACE NUMBER.
1	KEYNOTE INDICATOR.
	REVISION INDICATOR.
CU-1	EQUIPMENT INDICATOR.
P-	PLUMBING FIXTURE INDICATOR.
TYPE CFM SIZE	DIFFUSER/GRILLE INDICATOR.
TYPE SIZE	DIFFUSER/GRILLE INDICATOR.
	BREAK, STRAIGHT
ζ	BREAK, ROUND.
MATCH LINE SEE XX/X-XXX	MATCH LINE INDICATOR
	HIDDEN FEATURES LINE: HIDDEN, THIN LINE.
	CONTRACT LIMIT LINE: DASHDOT, WIDE LINE.

NEW CONNECTION POINT TO

# PLUMBING SCOPE OF WORK

#### **DEMOLITION NOTES:**

PLUMBING CONTRACTOR TO UTILIZE SELECTIVE DEMOLITION APPROACH. MANY AREAS INCLUDE PLUMBING EQUIPMENT AND ACCESSORIES LOCATED ABOVE HARDLID CEILINGS OR WITHIN INACCESSIBLE SPACES. FIELD TRACING OF DEMOLITION IS REQUIRED.

ALL EXISTING PLUMBING FIXTURES AND ACCESSORIES ARE TO BE REMOVED TO ALLOW FOR NEW TENANT SPACES. ALL PLUMBING EQUIPMENT, FIXTURES, PIPING, AND ACCESSORIES THAT ARE CURRENTLY ABANDONED IN PLACE ARE TO BE REMOVED.

ALL STORM WATER / ROOF DRAINAGE PIPING WITHIN THE BUILDING IS TO REMAIN UNCHANGED.

EXISTING GAS METERS TO REMAIN. EXISTING GAS PIPING SEGMENTS MAY BE REUSED IF SIZING AND ROUTING ARE SIMILAR TO NEW PIPING LAYOUT. PUBLIC UTILITY COMPANY TO VERIFY NATURAL GAS CAPACITIES AND ASSOCIATED PRESSURES.

CAP/REPLACE ALL WASTE AND VENT LINES BACK TO NEAREST MAIN TO ALLOW FOR FUTURE CONNECTIONS.

NEW CONSTRUCTION NOTES:

NEW WATER ENTRIES WILL BE INSTALLED AS INDICATED ON PLANS.

ALL DOMESTIC COLD WATER AND FIRE WATER PIPING SEGMENTS EXPOSED TO ENVIRONMENT ARE TO BE INSULATED AND HEAT TRACED FOR FREEZE

ALL EXISTING STORM DRAIN TERMINATIONS ARE TO CONNECT TO CIVIL DRAINAGE SYSTEM.

ALL GREASE WASTE PIPING DESIGNATED TO SERVE FUTURE WARMING KITCHEN WILL TIE INTO NEW GREASE INTERCEPTOR AS SHOWN ON CIVIL DRAWINGS. A VENT LINE FOR THE GREASE INTERCEPTOR WILL BE PROVIDED AND WILL TERMINATE THROUGH ROOF OF BUILDING 'D'.

THE NEW SYSTEM COMPONENTS WILL ALLOW FOR FUTURE OFFICE AND TEMPORARY RESIDENT SPACES AS INDICATED ON PLANS.

DOMESTIC WATER, WASTE, AND GREASE WASTE LINES (AS APPLICABLE) WILL BE PROVIDED TO EACH BUILDING AS INDICATED.

HEATING OF DOMESTIC WATER WILL BE PROVIDED BY INDIVIDUAL BUILDING WATER HEATERS.

DOMESTIC COLD WATER SUBMETERS TO BE INSTALLED IN EACH BUILDING'S WATER ENTRY ROOM. VERIFY NEED WITH OWNER PRIOR TO INSTALLATION.

# FIRE PROTECTION SCOPE OF WORK

NEW CONSTRUCTION NOTES:

DRAWING SET.

NEW FIRE ENTRIES TO BE INSTALLED AS INDICATED ON PLANS.

FIRE PROTECTION LINES TO BE ROUTED ON WARM SIDE OF BUILDING INSULATION. INSTALL FIRE PROTECTION SYSTEM PER NOTES INDICATED ON P02 OF THIS

ALL BREEZEWAY SOFFITS TO INCORPORATE DRY PIPE FIRE PROTECTION SYSTEM FED FROM FIRE ENTRY ROOM PIPING AS REQUIRED.

IN THE EVENT THAT ROUTING MAY PROVE DIFFICULT DUE TO EXISTING CONDITIONS A DRY-PIPE SYSTEM SHOULD BE EVALUATED. LOCATE AIR

COMPRESSOR IN ASSOCIATED FIRE ENTRY ROOM AS REQUIRED.

SEE SHEET P02 (SPEC SECTION 221316) AND SHEET P13 FOR FURTHER SYSTEM REQUIREMENTS & DETAILS.

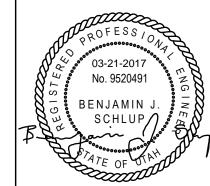
DIVISION 26 CONTRACTOR TO PROVIDE POWER TO ASSOCIATED SYSTEM FLOW

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# PLUMBING SPECIFICATIONS

#### 220100 - BASIC PIPING MATERIALS & METHODS

- CORE CUT ALL PIPE PENETRATION OF EXISTING MASONRY OR CONCRETE WALLS AND FLOORS. SLEEVE ALL PENETRATIONS THROUGH NEW WALLS AND FLOORS. SEAL ALL PENETRATIONS WATER TIGHT WITH SILICONE SEALANT. USE FIRE RATED SEALANT (3M "FIRE BARRIER" OR EQUAL) FOR 1 HOUR OR 2 HOUR PENETRATIONS.
- 2. CAULK AROUND ALL PIPING THAT PASSES THROUGH FIRE-RATED PARTITIONS WITH A NON-HARDENING CAULKING SIMILAR TO 3M "FIRE BARRIER".
- 3. SEAL ALL PIPING THROUGH WALLS AIR TIGHT.

#### 220533 - HEAT TRACING CABLE

- 1. PROVIDE RAYCHEM ELECTRIC SELF REGULATING HEATING CABLE WITH ALL NECESSARY ACCESSORIES TO MAINTAIN THE TEMPERATURE IN THE TRACED PIPE SYSTEM AT 45°F.
- 2. FOR DOMESTIC HOT WATER USE, THE CABLE SHALL BE DESIGNED, MANUFACTURED AND U.L. LISTED FOR DOMESTIC HOT WATER TEMPERATURE MAINTENANCE.
- CABLE SHALL CONSIST OF TWO (2) 16-AWG NICKEL-COATED COPPER BUS WIRES EMBEDDED IN A RADIATION-CROSSLINKED CONDUCTIVE POLYMER CORE. IT SHALL BE COVERED BY A RADIATION-CROSSLINKED, POLYOLEFIN, DIELECTRIC JACKET SURROUNDED BY A POLYMER-COATED ALUMINUM WRAP, AND ENCLOSED IN A TINNED COPPER BRAID OF 14 AWG EQUIVALENT WIRE SIZE. THE BRAID SHALL BE COVERED WITH A (NOMINAL) 40-MIL POLYOLEFIN OUTER JACKET, COLOR CODED FOR EASY IDENTIFICATION.

#### 220548 - VIBRATION ISOLATION AND SEISMIC

- 1. ALL PLUMBING EQUIPMENT AND PIPING MUST BE VIBRATION ISOLATED AND SEISMICALLY BRACED FOR THE SITE SPECIFIC SEISMIC DESIGN CATEGORY AND SEISMIC USE GROUP, IN ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE BUILDING CODES AND ASHRAE. PROVIDE SEISMIC PRODUCTS BY AMBER-BOOTH OR MASON INDUSTRIES.
- 2. IN GENERAL, PROVIDE SPRING MOUNTS TO ATTENUATE LOW FREQUENCY SOUND AND VIBRATION. PROVIDE NEOPRENE PADS TO ATTENUATE HIGH FREQUENCY SOUND
- 3. VIBRATION: SEISMIC BRACING/MOUNTING CAN BE COMBINED WITH VIBRATION ISOLATION AS APPLICABLE.
- 4. CONTRACTOR MANUFACTURED SEISMIC BRACING/RESTRAINT METHODS ARE NOT ACCEPTABLE.
- 5. PROVIDE A SIGNED AND STAMPED LETTER FROM A PROFESSIONAL ENGINEER CERTIFYING THAT THE SUPPLIED PRODUCTS ARE CORRECT FOR THE APPLICATION AND THAT THE INSTALLATION IS IN COMPLIANCE WITH ALL APPLICABLE CODES.

#### 220719 - INSULATION

- 1. PIPE INSULATION: SNAP-ON GLASS FIBER TYPE WITH VAPOR JACKET. SEAL ALL ENDS AND JOINTS TO PROVIDE A COMPLETELY SEALED SYSTEM. ALTERNATIVELY, FOR INTERIOR WATER PIPING, USE FLEXIBLE UNICELLULAR ASTM 534 TYPE 1 INSULATION. USE 1" THICKNESS FOR PIPE UP TO 2"Ø AND 1-1/2" FOR PIPE OVER 2"Ø
- 2. PROVIDE ADA COMPLIANT FIXTURES WITH SNAP ON ADA ARTICLE 4.19 22FF COMPLIANT WHITE INSULATION. TRUEBRO LAV GUARD, BASIN GUARD OR LAV SHIELD.
- 3. THERMAL AND SOUND INSULATION AND COVERING WHICH ARE INSTALLED AND EXPOSED SPACES AND COVERING PIPE AND TUBING SHALL BE TESTED IN ACCORDANCE WITH ASTM E 84 AND HAVE A FLAME SPREAD OF 0-25 AND A SMOKE INDEX OF 0-450.
- 4. THERMAL AND SOUND INSULATION AND COVERING OVER PIPE AND TUBING WHICH ARE INSTALLED IN CONCEALED PLENUM SPACES SHALL BE TESTED IN ACCORDANCE WITH ASTM E 84 AND HAVE A FLAME SPREAD OF 0-25 AND A SMOKE INDEX OF 0-50.

### 221116 - WATER DISTRIBUTION PIPING

1. UNDERGROUND WATER PIPING:

2" AND SMALLER:
ASTM 88 TYPE "K" COPPER WITH A MINIMUM NUMBER OF SOLDERED
JOINTS. USE 95-5 TIN ANTIMONY COPPER SOLDER.

2-1/2" AND LARGER:
PVC AWWA 900 CLASS 100 WITH SOLVENT CEMENTED JOINTS, OR PB
PLASTIC PIPE ASTM D3309 SDR 11 WITH HEAT FUSION JOINTS.

- 2. NO TYPE "M" OR "DWV" COPPER IS TO BE USED IN THIS PROJECT.
- 3. ALL ABOVE GROUND HOT AND COLD WATER PIPING:
  ASTM B 88 TYPE "L" COPPER, WITH WROUGHT COPPER FITTINGS AND
  SOLDERED WITH 95-5 TIN-ANTIMONY SOLDER.
- I. INSTALL PIPE HANGERS WITH THE FOLLOWING MINIMUM ROD SIZES AND MAXIMUM SPACING. UPON COMPLETION OF HANGER INSTALLATION, ALL ADJUSTMENTS HAVING THE POSSIBILITY OF TURNING SHALL BE LOCKED SECURELY IN PLACE BY DOUBLE NUTTING AT THE HANGER ROD ATTACHMENT TO THE STRUCTURE, AND AT THE PIPE HANGER.

NOM. PIPE	MAX	MIN. ROD
SIZE-INCHES	SPAN-FT.	SIZE-INCHES
1	7	3/8
1-1/2	9	3/8
2	10	3/8
3	12	1/2
4	14	5/8
6	17	3/4

- 5. ALL PIPE HANGERS AND EQUIPMENT SUPPORTS SHALL BE LOCATED A MINIMUM DISTANCE OF 2" FROM ANY REFRIGERANT PIPE.
- 6. ALL PLUMBING FIXTURES CONNECTED TO A POTABLE WATER SYSTEM WITH HOSE CONNECTIONS ON THE OUTLET SIDE AND OWNER FURNISHED EQUIPMENT WITH DIRECT CONNECTIONS, SHALL BE PROVIDED WITH BACKFLOW PREVENTION.

# PLUMBING SPECIFICATIONS

#### 221316 - DRAINAGE AND VENT SYSTEMS

 UNDERGROUND BUILDING DRAIN PIPE AND FITTINGS:
 A. NO HUB ABS OR PVC PLASTIC PIPE AND FITTINGS PER ASTM D2661 WITH ASTM D2235 SOLVENT

B. ASTM A74 SERVICE WEIGHT, HUB AND SPIGOT CAST IRON SOIL PIPE, OR ASTM A888 (OR CISPI 301) HUBLESS CAST IRON SOIL PIPE WITH ASTM C564 HEAVY DUTY SHIELDED STAINLESS STEEL

- A. NO ASTM D2729 PIPE SHALL USED UNDERGROUND.
- 2. ABOVE GROUND SANITARY DRAINAGE AND VENT PIPING, IN ALL AREAS EXCEPT AIR PLENUMS AND EXCEPT IN A FIRE RATED BUILDING, SHALL BE ABS TYPE DWV PLASTIC PIPE AND FITTINGS PER ASTM D2661 WITH ASTM D2255 SOLVENT, OR PVC PLASTIC PIPE AND FITTINGS PER ASTM D2665 WITH ASTM D2564 SOLVENT, OR SERVICE WEIGHT, NO HUB CAST IRON COUPLED PIPE AND FITTINGS WITH COMPRESSION TYPE NEOPRENE GASKETS AND STAINLESS STEEL BANDS.
- FORCE SEWER MAINS UP TO 4" SHALL BE TYPE L HARD COPPER TUBE WITH WROUGHT COPPER PRESSURE FITTINGS AND SOLDERED JOINTS, OR DUCTILE IRON PIPE AND FITTINGS WITH MECHANICAL JOINTS.
- 4. ALL SANITARY DRAINAGE AND VENT PIPING INSIDE AIR PLENUMS AND ANYWHERE IN A FIRE RATED BUILDING SHALL BE NO HUB SERVICE WEIGHT CAST IRON COUPLED PIPE AND FITTINGS WITH COMPRESSION TYPE NEOPRENE GASKETS AND STAINLESS STEEL BANDS. ASTM B306 COPPER PIPE MAY BE USED WITH SOLDERED JOINTS FOR PIPE 3" AND SMALLER.
- 5. ABOVE GROUND ROOF DRAIN LINES, EXCEPT IN AIR PLENUMS AND ANYWHERE IN A FIRE RATED BUILDING, SHALL BE ABS TYPE DWV PLASTIC PIPE AND FITTINGS PER ASTM D2661 WITH ASTM D2255 SOLVENT, OR PV C PLASTIC PIPE PER ASTM D2665 WITH ASTM D2564 SOLVENT.
- 6. ALL ROOF DRAIN LINES INSIDE AIR PLENUMS, OR ANYWHERE IN A FIRE RATED BUILDING, SHALL BE SERVICE WEIGHT CAST IRON PIPE TO CISPI STANDARD 301.
- 7. ALL ROOF DRAIN LINES SHALL BE FULLY INSULATED.
- 8. OVERFLOW ROOF DRAINS SHALL DAYLIGHT 18" ABOVE THE SURROUNDING HORIZONTAL AREA.
- 9. INSTALL SANITARY DRAIN LINES 2-1/2" AND LESS WITH A SLOPE OF 2%. INSTALL SANITARY DRAIN LINES 3"-6" WITH A SLOPE OF NOT LESS THAN 1%.
- 10. SLOPE ROOF DRAIN LINES DOWN IN DIRECTION OF FLOW, 1/8" PER FOOT (1%).
- 11. CLEANOUTS
- A. FINISHED WALL CLEANOUTS: SMITH FIGURE 4472 COMPLETE WITH CAST BRONZE TAPER THREADED PLUG, STAINLESS STEEL COVER
- AND SCREW.

  B. FLOOR CLEANOUTS (UNFINISHED AREAS): SMITH FIGURE 4223 DUCO CAST IRON CLEANOUT WITH ROUND ADJUSTABLE SCORIATED SECURED CAST IRON TOP, TAPER THREADED BRONZE PLUG AND
- SPIGOT OUTLET.

  C. FINISHED FLOOR CLEANOUTS (CONCRETE FLOORS): SMITH FIGURE 4023 DUCO CAST IRON CLEANOUT WITH ADJUSTABLE SCORIATED SECURED NICKEL BRONZE TOP, TAPER THREADED CAST BRONZE
- PLUG AND SPIGOT OUTLET.

  D. FINISHED FLOOR CLEANOUTS (CARPETED FLOORS): SMITH FIGURE 4023-Y SAME AS CONCRETE FLOORS WITH CARPET MARKER.

  E. FINISHED FLOOR CLEANOUTS (TILE FLOORS): SMITH FIGURE 4163 DUCO CAST IRON CLEANOUT WITH SQUARE ADJUSTABLE SECURED
- PLUG AND SPIGOT OUTLET.

  F. EXTERIOR CLEANOUTS (CLEANOUT TO GRADE): SMITH FIGURE 4253
  DUCO CAST IRON CLEANOUT AND DOUBLE FLANGED HOUSING WITH
  HEAVY DUTY SECURED SCORIATED CAST IRON COVER WITH LIFTING
  DEVICE, TAPER THREADED BRONZE PLUG AND SPIGOT OUTLET.

NICKEL BRONZE TOP WITH 1/8" RECESS, TAPER THREADED BRONZE

## 12. FLOOR DRAINS:

FD-1 FLOOR DRAIN: SMITH FIGURE 2010-BP CAST IRON BODY AND FLASHING COLLAR WITH PROTECTIVE CAP AND SQUARE NICKEL BRONZE ADJUSTABLE STRAINER HEAD WITH SECURED SQUARE HOLE GRATE, AND TRAP PRIMER CONNECTION.

FD-2 MECHANICAL ROOM DRAIN: SMITH FIGURE 2110-NB MEDIUM DUTY FLOOR DRAIN. CAST IRON BODY AND FLASHING COLLAR WITH NICKEL BRONZE BAR GRATE.

13. ROOF DRAINS (AS REQUIRED IF REPLACEMENT IS NECESSARY)

RD-1 ROOF DRAIN: SMITH FIGURE 1010-ERC CAST IRON BODY WITH COMBINED FLASHING CLAMP AND CAST IRON GRAVEL STOP, CAST IRON DOME, EXTENSION, SUMP RECEIVER AND UNDERDECK CLAMP.

ORD-1 OVERFLOW ROOF DRAIN: SMITH FIGURE 1080-ERC CAST IRON BODY WITH FLASHING CLAMP, GRAVEL STOP, CAST IRON DOME, 2" HIGH CAST IRON WATER COLLAR, EXTENSION, SUMP RECEIVER AND UNDERDECK CLAMP.

<u>DSN-1</u> DOWNSPOUT NOZZLE:SMITH FIGURE 1770 DOWNSPOUT NOZZLE:CAST BRONZE BODY AND FLANGE. PROVIDE BRONZE BOLTS TO SECURE NOZZLE TO WALL. INSTALL 12" ABOVE FOUNDATION UNLESS NOTED OTHERWISE.

14. FIRE/WATER ENTRIES

FIRE ENTRY: WATTS 757DCDA OSY OR EQUAL. DOUBLE CHECK DETECTOR ASSEMBLY. TWO INDEPENDENTLY OPERATING TRI-LINK CHECK VALVES, TWO SHUTOFF VALVES, AND FOUR TEST COCKS. STAINLESS STEEL HOUSING AND SLEEVE. MAXIMUM WORKING PRESSURE: 175PSI. PROVIDE FLOW SWITCH WITH LINE VOLTAGE POWER.

DOMESTIC WATER ENTRY: WATTS LF909 OR EQUAL. LEAD FREE REDUCED PRESSURE ZONE ASSEMBLY. HORIZONTAL OR VERTICAL (UP OR DOWN) INSTALLATION, TEMPERATURE RANGE: 33°F – 140°F, MAXIMUM WORKING PRESSURE: 175PSI, TEMPERATURE RANGE: 33°F – 210°F, MAXIMUM WORKING PRESSURE: 175PSI (FOR MAIN SERVICE WATER ENTRY APPLICATIONS)

DOMESTIC WATER DOUBLE CHECK: WATTS LF719 OR EQUAL. LEAD FREE DOUBLE CHECK VALVE ASSEMBLY. SEPARATE ACCESS, TOP ENTRY CHECK VALVE, REVERSIBLE SEAT DISC RUBBER, VALVE TEST COCKS, TEMPERATURE RANGE: 33°F – 180°F, MAXIMUM WORKING PRESSURE: 175PSI (FOR APPLICATIONS DOWNSTREAM OF WATER ENTRY PRESSURE REDUCING VALVE)

# PLUMBING SPECIFICATIONS

#### 221613 - NATURAL GAS SYSTEMS

- NATURAL GAS PIPING ABOVE GROUND OR INSIDE BUILDINGS: SCHEDULE 40 BLACK STEEL WITH WELDED OR MALLEABLE IRON FITTINGS.
- 2. UNDERGROUND GAS PIPE: EITHER POLYETHYLENE ASTM D2513, OR SCHEDULE 40 BLACK STEEL PRIMED AND WRAPPED IN ACCORDANCE WITH LOCAL GAS COMPANY REQUIREMENTS.
- 3. GAS MAINS INSIDE BUILDINGS ARE SIZED FOR 2 PSIG PRESSURE. LOCATE PRESSURE REGULATORS AS SHOWN ON THE DRAWINGS TO REDUCE PRESSURE FROM 2 PSIG TO 7" W.C. PROVIDE FULL SIZE VENT LINES FROM GAS PRESSURE REGULATORS AND EXTEND TO OUTSIDE OR THROUGH ROOF. FLASH PENETRATIONS AND MAKE WATER TIGHT. INSTALL VENTLESS GAS REGULATOR AS ALTERNATE.
- 4. PROVIDE GAS SHUT OFF VALVE AT EACH PIECE OF GAS UTILIZING EQUIPMENT.
- 5. THE EQUIPMENT INSTALLER SHALL APPLY AND SIGN A CERTIFICATION LABEL TO EACH GAS-FIRED APPLIANCE, STATING THE APPLIANCE HAS BEEN ADJUSTED OR MODIFIED PER MANUFACTURER'S REQUIREMENTS FOR OPERATION AT THE PROJECT ALTITUDE AND WITH THE BTU-CONTENT OF THE AVAILABLE FUEL-GAS.

#### 223000 - WATER HEATERS

ELECTRICAL CODE.

- 1. INSTALL UNITS PLUMB AND LEVEL AND FIRMLY ANCHORED PER SEISMIC REQUIREMENTS. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES. ORIENT SO CONTROLS AND DEVICES NEEDING SERVICING ARE ACCESSIBLE.
- CONNECT HOT AND COLD WATER PIPING TO UNITS WITH SHUT-OFF VALVES AND UNIONS. CONNECT HOT WATER CIRCULATING PIPING TO UNIT WITH SHUT-OFF VALVE, CHECK VALVE AND UNION.
- 3. USE DIELECTRIC FITTINGS AND UNIONS WHERE PIPING CONNECTIONS ARE DISSIMILAR METALS.
- 4. INSTALL VACUUM RELIEF VALVE IN COLD WATER INLET PIPING. EXTEND RELIEF VALVE DISCHARGE TO CLOSEST FLOOR DRAIN. INSTALL DRAIN AS INDIRECT WASTE TO SPILL INTO OPEN DRAIN OR OVER FLOOR
- PROVIDE AND INSTALL EXPANSION TANK AS SCHEDULED IN DRAWINGS.
- EXPANSION TANK: DIAPHRAGM TYPE, PRE- PRESSURIZED STEEL TANK WITH RELIEF VALVE SETTING @ 120 PSI MAXIMUM PRESSURE.
- 6. CONNECT GAS SUPPLY PIPING TO BURNER WITH DRIP LEG, TEE, GAS COCK, AND UNION, MINIMUM SIZE SAME AS INLET CONNECTION. INSTALL GAS PRESSURE REGULATORS WHERE INDICATED.
- CONNECT OIL PIPING TO OIL BURNER WITH SHUT-OFF VALVE AND

UNION IN SUPPLY AND CHECK VALVE AND UNION IN RETURN PIPING.

- 8. ELECTRICAL CONNECTIONS: POWER WIRING AND DISCONNECT SWITCHES ARE SPECIFIED IN DIVISION 16. CONNECT UNIT COMPONENTS TO GROUND IN ACCORDANCE WITH THE NATIONAL
- 9. VENT CONNECTIONS: CONNECT GAS FIRED WATER HEATER DRAFT HOOD TO VENT SYSTEM. UNLESS OTHERWISE INDICATED, PROVIDE VENT SAME SIZE AS OUTLET ON HEATER. COMPLY WITH GAS UTILITY REQUIREMENTS.
- 10. CONNECT OIL-FIRED WATER HEATER VENT AND DRAFT REGULATOR TO VENT SYSTEM. PROVIDE VENT AND DRAFT REGULATOR SAME SIZE AS OUTLET ON HEATER.
- 11. PROVIDE SEALED COMBUSTION SYSTEMS WITH CONNECTIONS FOR OUTSIDE COMBUSTION AIR.
- 12. PROVIDE CONCENTRIC VENT TERMINATION KIT FOR ROOF OR WALL APPLICATIONS.
- 13. PROVIDE PVC COMBUSTION AIR AND VENT PIPING FROM WATER HEATER TO TERMINATION KIT.
- 14. PROVIDE CONDENSATE DRAIN FROM WATER HEATER OR VENT AS REQUIRED.

# PLUMBING SPECIFICATIONS

#### 224213 - PLUMBING FIXTURES

- PROVIDE AND INSTALL CARRIERS AS REQUIRED FOR FLOOR OR WALL MOUNTED PLUMBING FIXTURES. INSTALL ALL FIXTURES WITH ACCESSORIES AS REQUIRED TO PROVIDE A COMPLETE, WORKABLE INSTALLATION.
- 2. PLUMBING FIXTURES SHALL INCLUDE COMPRESSION STOPS ABOVE FLOOR IN SUPPLIES TO ALL FIXTURES AND A MINIMUM 17 GAUGE P-TRAP.
- 3. ALL LAVATORIES AND HAND SINKS WILL HAVE A COMBINATION FAUCET OR PREMIXING FAUCET CAPABLE OF SUPPLYING WARM WATER FOR A MINIMUM OF 10 SECONDS.
- 4. ALL JANITORIAL SINK FAUCETS MUST BE PROVIDED WITH AN APPROVED BACKFLOW PREVENTION DEVICE.
- FLOOR DRAINS AND FLOOR SINKS ARE SHOWN IN THE APPROXIMATE LOCATION. COORDINATE FINAL LOCATION WITH EQUIPMENT AND DRAINAGE REQUIREMENTS. PROVIDE BLOCKOUTS AS NECESSARY.

# PENETRATION FIRESTOPPING NOTES

- CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND PROVIDE SPECIFIC FIRESTOPPING DETAILS FROM A SPECIFIC FIRESTOPPING MANUFACTURER FOR EACH MECHANICAL (HVAC) AND PLUMBING PIPE OR DUCT PENETRATION FOR EACH FIRE RATED ASSEMBLY.
- 2. PROVIDE PENETRATION FIRESTOPPING THAT IS PRODUCED AND INSTALLED TO RESIST SPREAD OF FIRE ACCORDING TO REQUIREMENTS INDICATED, RESIST PASSAGE OF SMOKE AND OTHER GASES, AND MAINTAIN ORIGINAL FIRE-RESISTANCE RATING OF CONSTRUCTION PENETRATED.
- 3. PENETRATION FIRESTOPPING SYSTEMS SHALL BE COMPATIBLE WITH ONE ANOTHER, WITH THE SUBSTRATES FORMING OPENINGS, AND WITH PENETRATING ITEMS IF ANY.
- 4. PENETRATIONS IN FIRE-RESISTANCE-RATED WALLS: PROVIDE PENETRATION FIRESTOPPING WITH RATINGS DETERMINED PER ASTM E 814 OR UL 1479, BASED ON TESTING AT A POSITIVE PRESSURE DIFFERENTIAL OF 0.01-INCH WG
- 5. PENETRATION FIRESTOPPING PRODUCTS SHALL BEAR UL, ETL OR FM GLOBAL CLASSIFICATION MARKING OF QUALIFIED TESTING AND INSPECTING AGENCY.
- 6. DO NOT INSTALL PENETRATION FIRESTOPPING WHEN AMBIENT OR SUBSTRATE TEMPERATURES ARE OUTSIDE LIMITS PERMITTED BY PENETRATION FIRESTOPPING MANUFACTURERS OR WHEN SUBSTRATES ARE WET BECAUSE OF RAIN, FROST, CONDENSATION, OR OTHER CAUSES.
- 7. COORDINATE CONSTRUCTION OF OPENINGS AND PENETRATING ITEMS TO ENSURE THAT PENETRATION FIRESTOPPING IS INSTALLED ACCORDING TO SPECIFIED REQUIREMENTS.
- 8. COORDINATE SIZING OF SLEEVES, OPENINGS, CORE-DRILLED HOLES, OR CUT OPENINGS TO ACCOMMODATE PENETRATION FIRESTOPPING.
- 9. INSTALL PENETRATION FIRESTOPPING TO COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND PUBLISHED DRAWINGS FOR PRODUCTS AND APPLICATIONS INDICATED.
- 10. INSTALL FORMING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT FILL MATERIALS DURING THEIR APPLICATION AND IN THE POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.
- 11. IDENTIFY PENETRATION FIRESTOPPING WITH PREPRINTED METAL OR PLASTIC LABELS. ATTACH LABELS PERMANENTLY TO SURFACES ADJACENT TO AND WITHIN 6 INCHES OF FIRESTOPPING EDGE SO LABELS WILL BE VISIBLE TO ANYONE SEEKING TO REMOVE PENETRATING ITEMS OR FIRESTOPPING.

# FIRE SPRINKLER SYSTEM REQUIREMENTS (NFPA-13)

THESE DRAWINGS AND SPECIFICATIONS ARE FOR THE FIRE PROTECTION CONTRACTOR TO ENGINEER, DESIGN, BID AND INSTALL A COMPLETE AND OPERATIONAL FIRE PROTECTION SYSTEM, PER THE DESIGN INTENT AS SHOWN.

- . CONTRACTOR TO PROVIDE A HYDRAULICALLY-DESIGNED, FUSIBLE LINK, FULLY SPRINKLED, WET PIPE FIRE PROTECTION SYSTEM FOR BUILDING SPACES NOT
- SUBJECT TO FREEZING.

  2. CONTRACTOR TO PROVIDE A HYDRAULICALLY-DESIGNED, FUSIBLE LINK, FULLY SPRINKLED, DRY PIPE OR GLYCOL FIRE PROTECTION SYSTEM BUILDING SPACES SUBJECT TO FREEZING, INCLUDING PARKING GARAGES, ENTRANCE CANOPIES AND
- 3. ALL DESIGN SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE BUILDING CODE, FIRE CODE, MECHANICAL CODE, PLUMBING CODE, AND ANY OTHER LOCAL, STATE, OR FEDERAL REGULATIONS AND CODES, AS WELL AS INSTRUCTIONS FROM THE AUTHORITY HAVING JURISDICTION.
- 4. SUBMIT FIRE PROTECTION LAYOUT DRAWINGS AND CALCULATIONS TO THE ENGINEER FOR GENERAL APPROVAL OF SYSTEM LAYOUT, LOCATION OF COMPONENTS ETC. THEN SUBMIT TO THE FIRE MARSHALL HAVING JURISDICTION AND OBTAIN APPROVAL. CONTRACTOR TO PAY ALL PERMIT/APPROVAL/PLANCHECK FEES AND COSTS INVOLVED.
- 5. SYSTEM DESIGN SHALL BE BASED ON THE FOLLOWING CRITERIA:
- I. LIGHT HAZARD IN ALL AREAS; EXCEPT ORDINARY HAZARD GROUP 1 IN THE KITCHEN AREA.
- 5.2. DESIGN THE SYSTEM USING THE AREA/DENSITY METHOD IN NFPA 13.
  5.3. FLOW TEST DATA TO BE DETERMINED BY THE FIRE PROTECTION CONTRACTOR.
- 6. PROVIDE COVERAGE FOR A SINGLE FIRE ZONE.
- 7. PROVIDE INSPECTOR'S TEST CONNECTION IN A LOCATION APPROVED BY THE OWNER AND THE FIRE MARSHALL.
- 8. DUE CONSIDERATION SHALL BE GIVEN TO THE LOCATION OF BUILDING ELEMENTS. (I.E. BEAMS, COLUMNS, LIGHT FIXTURES, ETC.) IN DETERMINING SPRINKLER HEAD SPACING AND ARRANGEMENT. THE STRUCTURE SHOWN ON ALL DETAILS MAY OR MAY NOT PERTAIN TO A PORTION OR ANY PORTION OF THE BUILDING. COORDINATE MOUNTING REQUIREMENTS WITH ARCHITECTURAL DRAWINGS AND STRUCTURAL
- 9. ALL EQUIPMENT, PIPING, COMPONENT, AND ACCESSORY SIZES, CAPACITIES AND TYPES SHOWN IN THESE DRAWINGS AND SPECIFICATIONS SHALL BE ADHERED TO.
- 10. AUXILIARY DRAINS SHALL BE INCLUDED AS NECESSARY TO DRAIN ALL SPRINKLER SYSTEM DISTRIBUTION LINES AND BRANCHES DOWNSTREAM OF THE RISER CHECK
- 11. AUTOMATIC AIR RELEASE VALVES SHALL BE FURNISHED AS NECESSARY TO VENT THE DRY PIPE SPRINKLER SYSTEM. THE VALVES SHALL BE MADE SEPARABLE FROM THE SYSTEM WITH APPROPRIATELY SIZED GATE VALVES.
- 12. THE CONTRACTOR SHALL THOROUGHLY TEST, DISINFECT, AND FLUSH THE PIPING SYSTEM ACCORDING TO APPLICABLE CODES AND STANDARDS.
- 13. ANY DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONNECTIONS REQUIRED FOR INSTALLATION.
- 14. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL BUILDING INFORMATION SUCH AS ATTIC SPACES, CONSTRUCTION MATERIALS, SPECIAL USE SPACES, BUILDING SECTIONS, ETC.
- 15. SPRINKLER HEADS:
- A. SPRINKLER HEADS FOR LIGHT HAZARD CLASSIFICATION SHALL BE QUICK RESPONSE TYPE PER NFPA 13. ALL OTHER CLASSIFICATIONS SHALL BE STANDARD RESPONSE TYPE.
- B. GENERAL: ALL HEADS SHALL BE FACTORY MUTUAL APPROVED FOR APPLICATION AND INSTALLATION. WET OR DRY TYPE AS REQUIRED. CEILING ESCUTCHEONS MAY BE PLASTIC OR METAL 2 PIECE TYPE
- EXPOSED HEADS IN CEILING: SEMI-RECESSED TYPE WITH SATIN CHROME-PLATED ESCUTCHEON CUP, WHEREVER HEADS ARE ADJACENT TO SURFACE-MOUNTED LIGHTS OR OBSTRUCTIONS, USE EXTENDED PENDENT HEAD WITH SHALLOW FRICTION ADJUSTABLE ESCUTCHEON WITH SATIN CHROME-PLATED FINISH. COORDINATE EXTENDED PENDENT HEAD USE WITH ARCHITECT PRIOR TO PURCHASE OR INSTALLATION.

- EXPOSED HEADS IN SOLID CEILINGS: SEMI-RECESSED TYPE WITH SHALLOW FRICTION ADJUSTABLE ESCUTCHEON WITH SATIN CHROME-PLATED FINISH.
- EXPOSED HEADS IN FINISHED METAL CEILING AREAS: SEMI-RECESSED TYPE WITH SATIN BRASS-PLATED ESCUTCHEON CUP, OF COLOR MATCH METAL CEILING.
- CONCEALED HEADS AND THOSE AREAS WITHOUT CEILINGS: UPRIGHT OR PENDANT TYPE WITH ROUGH BRASS FINISH.

  SPRINKLER HEADS IN ALL AREAS SHALL OPEN AT 160°-165°F, EXCEPT THAT

HEADS IN BAKERY, DELI, ELECTRICAL TRANSFORMER ROOMS, AND

- PHONE/EMS ROOMS SHALL BE RATED AT 212°F.

  HEADS IN FREEZER/COOLER BOXES SHALL BE DRY PENDANT TYPE, AND SHALL BE OF COLOR TO MATCH CEILING.
- PENDANT HEADS ON DRY SPRINKLER SYSTEM SHALL BE DRY PENDANT TYPE AND SHALL BE OF COLOR TO MATCH CEILING.
- TO DRY PENDENT

  17. RECORD DESIGN DRAWINGS SHOWING ALL EQUIPMENT, COMPONENTS, PIPING AND CONTROLS SHALL BE PREPARED TO THE SAME SCALE AS THESE DRAWINGS. DRAWINGS SHALL BE ON MYLAR AND BE DRAWN IN AUTOCAD. DISK COPIES SHALL BE PROVIDED TO THE OWNER AND ARCHITECT/ENGINEER.
- 18. DESIGN FOR SEISMIC DESIGN CATEGORY AND SEISMIC USE GROUP, IN ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE IBC, UBC, ASHRAE, AND SMACNA
- 19. CONTRACTOR SHALL LOCATE P.I.V., RISERS, INCOMING SERVICE, ZONE VALVES AND FEED AND BRANCH MAINS IN LOCATIONS SHOWN ON THESE DRAWINGS.
- 20. THE WORKING DRAWINGS ARE DIAGRAMMATIC. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR FIRE PROTECTION ITEMS SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL, MECHANICAL, STRUCTURAL, AND ELECTRICAL
- 21. THE FIRE PROTECTION CONTRACTOR DOES NOT HAVE PRIORITY ON PIPE ROUTING. ALL PIPING TO BE FULLY COORDINATED WITH ALL HVAC, PLUMBING, ELECTRICAL, AND ARCHITECTURAL REQUIREMENTS AND TRADES. RESOLVE POTENTIAL CONFLICTS BEFORE PROCEEDING WITH INSTALLATION. IN ALL CASES, GRADED PIPE RUNS TAKE FIRST PRIORITY ON ROUTING. GENERALLY, DUCTWORK TAKES SECOND PRIORITY.
- 22. UPON COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS AND RUBBISH. MAKE ALL REQUIRED PATCHING AND REPAIRS OF OTHER TRADES' WORK DAMAGED BY THIS CONTRACTOR, AND LEAVE THE PREMISES IN A CLEAN, ORDERLY
- 23. THE CONTRACTOR SHALL GUARANTEE THE ENTIRE FIRE PROTECTION SYSTEM FOR

A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.

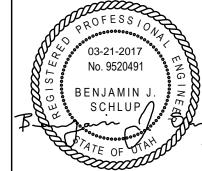
- 24. ALL ALLOWABLE SPRINKLER SYSTEM COMPONENTS SHALL BE PRIMED AND PAINTED RED, SYSTEM COMPONENTS WHICH MAY BE INACCESSIBLE AFTER INSTALLATION SHALL BE PAINTED BEFORE INSTALLATION.
- 25. IN AREAS WITH LAY-IN CEILINGS. LOCATE HEADS IN THE CENTER OF THE CEILING TILE. PROVIDE ALL NECESSARY ELBOWS IN BRANCH LINES, TO ACHIEVE THIS.

Donald L. Welch
Architect
Sandy Land Land

THE DESIGNS SHOWN AND DESCRIBED HEREIN NCLUDING ALL TECHNICAL DRAWINGS, GRAPHIC REPRESENTATION & MODELS THEREOF, ARE PROPRIETARY & CAN NOT BE COPIED, DUPLICATED, OR COMMERCIALLY EXPLOITED IN WHOLE OR IN PART WITHOUT THE SOLE AND EXPRESS WRITTEN PERMISSION FROM DONALD L. WELCH

THESE DRAWINGS ARE AVAILABLE FOR LIMITED REVIEW AND EVALUATION BY CLIENTS CONSULTANTS, CONTRACTORS, GOVERNMENT AGENCIES, VENDORS, AND OFFICE PERSONNEL ONLY IN ACCORDANCE WITH THIS NOTICE.

consultant:



broject:

Tenant Finis
for New
Brighton

Campus 4905, 4911, 4915, 4925, 4931, & 4953 South 900 East

| Salt_Lake_County

date

February 24, 2017

revisions

PERMIT SET-December 28, 2016

1 ADDENDUM #1-January 04, 2017

3 ADDENDUM #3-January 11, 2017

4 ADDENDUM #4-January 17, 2017

5 ADDENDUM #5-January 20, 2017

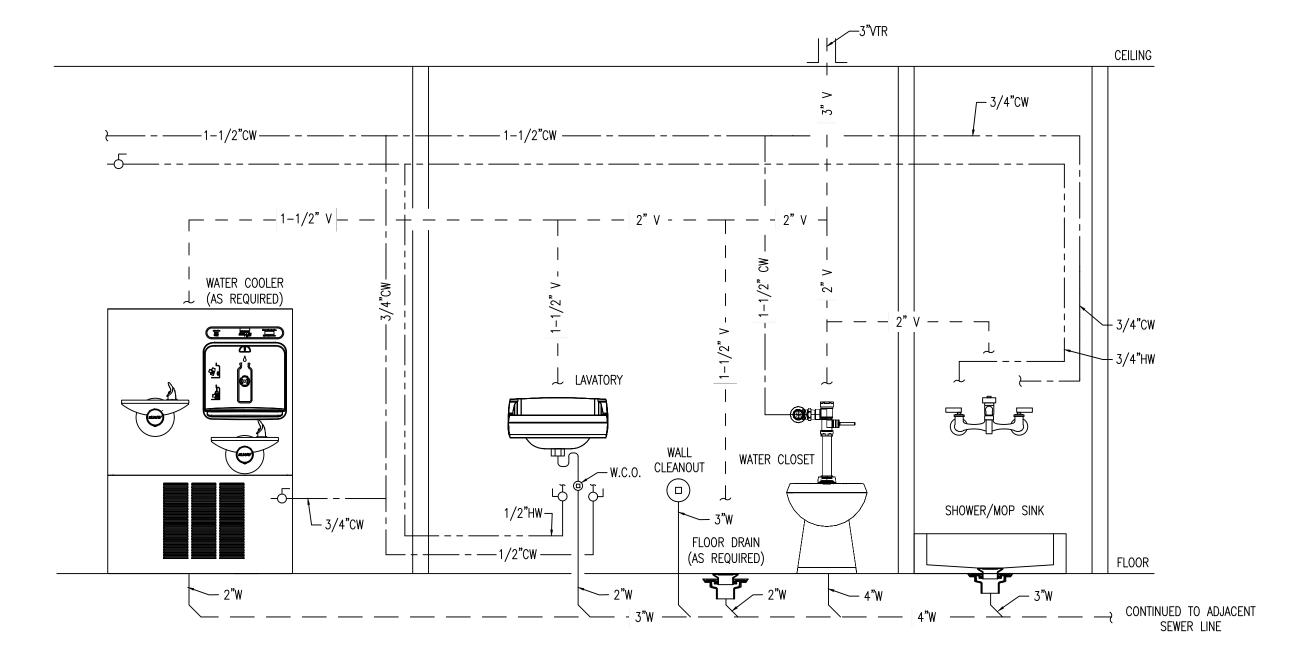
7\ADDENDUM#7-February 24, 2017

project no:
drawn by:
checked by:

sheet

title
PLUMBING
EQUIPMENT
SPECIFICATIONS

P02



# 1 PLUMBING SCHEMATIC

### DECEMBER 1997  ### DECEMBER		PLU	MBING FIXTUR	E SC	HEDI	JLE (	COO	RDINATE MOUNTING HEIGHTS WITH ARCH. PLANS)
### BOURDEROW WITH BUTCH AND A STATE AND A	SYMBOL	FIXTURE				WASTE	VENT	ACCESSORIES AND REMARKS
Section   Sect		FLOOR DRAINS		-	-	OR	OR	REFERENCE SHEET P02. FLOOR DRAINS IN FINISHED SPACES TO BE <u>FD-1</u> (2"). ALL WATER ENTRY DRAINS TO BE <u>FD-2</u> (4"). INSTALL PROVENT TRAP GUARD OR EQUAL IN EACH DRAIN TYPE.
Section Modern   Sec		CHECK & BACKFLOW	SEE PUZ	1	-	-	-	REFERENCE SHEET P02. MAKE/MODELS FOR FIRE/WATER ENTRY BACKFLOW PREVENTER AND DOUBLE CHECK DETECTOR ASSEMBLIES INDICATED. 4" FIRE ENTRY LINE WHERE INDICATED. BUILDINGS C & D TO INCORPORATE A 1-1/2" WATER SERVICE. BUILDINGS A, B, E, F TO HAVE 2" DOMESTIC WATER SERVICE. LOCATE FIRE CONTROL PANEL AT EACH FIRE ENTRY.  ELECTRICAL: PROVIDE LINE VOLTAGE POWER (115V CIRCUITS) TO FIRE ENTRY FLOW SWITCH & AIR COMPRESSOR
MACH NATER MEATER   PROPOSITION OF THE CONTROL SHAPE   PROPOSITION OF THE CONTROL SH	SH-1		SEE ARCHITECTURAL	1/2"	1/2"	2"	1-1/2"	REFERENCE ARCHITECTURAL SHEET A6.1A. SPECIFICATIONS FOR SHOWER INSERT, DRAIN, SHOWERHEAD, VALVES, & ASSOCIATED ACCESSORIES ARE INDICATED.
GAS WATER HEATER   BRADFORD WHITE   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1-102"   1	GWH-1			1-1/2"	1-1/2"	-	-	
GAS WATER HEATER (FLOOR MOUNTED)    GAS WATER HEATER (FLOOR MOUNTED)   GAS WATER HEATER (FLOOR MOUNTED)   GAS WATER HEATER   G	GWH-2			1-1/2"	1-1/2"	-	-	
GAS WATER HEATER   BRADFORD WHITE   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1-1/2"   1	GWH-3		_	3/4"	3/4"	-	-	DIMENSIONS: 67" H X 22" DIA 205 LB SHIPPING WEIGHT. PROVIDE 3" (PVC, CPVC, OR ABS) VERTICAL VENTING. TERMINATE THROUGH ROOF WITH CONCENTRIC VENT KIT PER MANUFACTURER'S RECOMMENDATIONS.
HWCP-1   CIRCULATION PUMP   GRUNDFOS UP10-16BNS/TLC   .   1/2"   .   .   ELECTRICAL 115V PULIO IN TYPE. (6 FT LINE CORD)	GWH-4		l .	1-1/2"	1-1/2"	-	-	
HWCP-2   CIRCULATION PUMP   SRUNDFOS UP25-645F   1/2'   1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1-1/2'   1	HWCP-1		GRUNDFOS UP10-16BN5/TLC	-	1/2"	-	-	RECIRCULATION PUMP WITH MANUAL TIMER TO ALLOW FOR OPERATION DURING BUSINESS HOURS. INTEGRAL CHECK VALVE. ELECTRICAL: 115V PLUG IN TYPE. (6 FT LINE CORD)
MSB-1   MOP SINK BASIN   FLORESTONE MSR-2424   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/4"   3/	HWCP-2		GRUNDFOS UP25-64SF	-	1/2"	-	-	·
FS-1	MSB-1	MOP SINK BASIN	FLORESTONE MSR-2424	3/4"	3/4"	3"	1-1/2"	KOHLER K-8928, SERVICE SINK FAUCET, 3" THREADED THREADED SPOUT FOR HOSE CONNECTION, RUBBER HOSE WITH WALL
WM-2  WM-2  WM-2  WATER METER (SUB-METERING)  (GR APPROVED EQUAL)  WATTS MODEL M120 & M170 (OR APPROVED EQUAL)  MODEL M120 & M170 (OR APPROVED EQUAL)  WATTS MODEL SD-2 (OR APPROVED EQUAL)  1/2	FS-1	FLOOR SINK	l .	-	-	3"	1-1/2"	
BACKFLOW PREVENTER			MODEL M120 & M170	-		-	-	LEAD FREE BRONZE ALLOW DISC METER (MATCH BUILDING WATER ENTRY SIZE 1-1/2" OR 2"), COMPLIES WITH AWWA STANDARD C700, 150 PSI MAX OPERATING PRESSURE.
KITCHEN SINK (ADA)   KOHLER K-3996-4 & KOHLER FORTE K-10445   1/2"   1-1/2"   1-1/2"   1-1/2"   33X22X6 DUAL BOWL TOP-MOUNT ADA SINK, 4 HOLE, 18 GAUGE SS, 4" FAUCET CENTERS, 18 GAUGE SS, 4" FAUCET: PULL-OUT SPRAY, 1.8 GPM, LEVER HANDLES, (ADA), 7-3/4" SPOUT REACH, 4 HOLES.	BFP-1	BACKFLOW PREVENTER		1/2"	-	-	-	BACKFLOW PREVENTER FOR CARBONATED BEVERAGE MACHINES. DUAL CHECK DESIGN FOR PROTECTION OF WATER SUPPLY FROM CARBON DIOXIDE GAS AND CARBONATED WATER. ANSI/NSF STD 18 CERTIFIED, ASSE 1032 APPROVED DUAL CHECK VALVE, 316 STAINLESS STEEL BODY. MAX PRESSURE: 200 PSI, MAX TEMP: 110°F. PROVIDE RECOMMENDED STRAINER.
KS-1	GD-1	FOOD WASTE DISPOSER	INSINKERATOR EVOLUTION	-	-	1-1/2"	-	ANTI-VIBRATION MOUNT, 34.6 OZ. CAPACITY, 12-1/4" HEIGHT. <u>ELECTRICAL</u> : 120 V, 3/4 HP, 8.1 AMPS
UR-1 UR-1 UR-2 URINAL (ADA)  WATER CLOSET, FLOOR MOUNT (ADA)  WC-1 WC-2 LAVATORY (ADA)  LAVATORY (ADA)  LAVATORY (ADA)  EACH OF SPUE K-10445  EAUCET: PULL-OUT SPRAY, 1.8 GPM, LEVER HANDLES, (ADA), 7-3/4" SPOUT REACH, 4 HOLES.  FAUCET: PULL-OUT SPRAY, 1.8 GPM, LEVER HANDLES, (ADA), 7-3/4" SPOUT REACH, 4 HOLES.  TOP SPUD WALL HUNG, STANDARD WASHDOWN URINAL, VITREOUS CHINA  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  SINGLE HOLE BATHROOM FAUCET (ADA) LESS POP-UP TAIL PIECE, 1.2 GPM, 4-3/8" REACH. PROVIDE BDT VARIATION  SINGLE HOLE BATHROOM FAUCET (ADA) LESS POP-UP TAIL PIECE, 1.2 GPM, 4-3/8" REACH. PROVIDE BDT VARIATION	VC 4			1/2"	1/2"	1-1/2"	1-1/2"	33X22X6 DUAL BOWL TOP-MOUNT ADA SINK, 4 HOLE, 18 GAUGE SS, 4" FAUCET CENTERS, 18 GAUGE SS,
UR-1 UR-2 (ADA)  WATER CLOSET, FLOOR MOUNT (ADA)  L-1 LAVATORY (ADA)  L-1 LAVATORY (ADA)  WATER CLOSET, FLOOR MOUNT (ADA)  L-1 LAVATORY (ADA)  L-1	NO-1			172	1/2	1 1/2	1 1/2	FAUCET: PULL-OUT SPRAY, 1.8 GPM, LEVER HANDLES, (ADA), 7-3/4" SPOUT REACH, 4 HOLES.
WC-1 WC-2 WATER CLOSET, FLOOR MOUNT (ADA)  LAVATORY (ADA)  LAVATORY (ADA)  WATER CLOSET, FLOOR MOUNT (ADA)  SLOAN SS-3001  (ADA)  SLOAN SS-3001  (ADA)  WETS-2450.1301 & T-1/2"  A" 2" VITREOUS CHINA, ELONGATED BOWL, 1-1/2" TOP SPUD, COMMERCIAL TOILET SEAT, & BOLT CAP ACCESSORY (INC.)  1.28 GPF MANUAL FLUSHOMETER. PROVIDE WITH WATER HAMMER ARRESTOR.  1.28 GPF MANUAL FLUSHOMETER. PROVIDE WITH OVERFLOW.  SINGLE HOLE BATHROOM FAUCET (ADA) LESS POP-UP TAIL PIECE, 1.2 GPM, 4-3/8" REACH. PROVIDE BDT VARIATION (INC.)  SINGLE HOLE BATHROOM FAUCET (ADA) LESS POP-UP TAIL PIECE, 1.2 GPM, 4-3/8" REACH. PROVIDE BDT VARIATION	_		&	1"	-	1-1/2"	1-1/2"	
LAVATORY (ADA) (AD		FLOOR MOUNT	WETS-2450.1301 &	1-1/2"		4"	2"	VITREOUS CHINA, ELONGATED BOWL, 1-1/2" TOP SPUD, COMMERCIAL TOILET SEAT, & BOLT CAP ACCESSORY
BEGN THERMOSTATIC MIXING VALVE (GET WATER TEMP TO THOT) TROVIDE GROENTER THING INSCLATION	L-1	LAVATORY (ADA)	SLOAN SS-3001 &	1/2"	1/2"	1-1/2"	1-1/2"	19.5"X16.5" VITREOUS CHINA UNDERMOUNTED WITH OVERFLOW.  SINGLE HOLE BATHROOM FAUCET (ADA) LESS POP-UP TAIL PIECE, 1.2 GPM, 4-3/8" REACH. PROVIDE BDT VARIATION BELOW
	L-2	LAVATORY (ADA)	&	1/2"	1/2"	2"	1-1/2"	20 3/4"X18 1/4" VITREOUS CHINA WALL MOUNTED LAVATORY, SINGLE HOLE.  SINGLE HOLE BATHROOM FAUCET (ADA) LESS POP-UP TAIL PIECE, 1.2 GPM, 4-3/8" REACH. PROVIDE BDT VARIATION BELOW
KOHLER VAULT SINK K-5286  1/2" 1/2" 1-1/2"  1-1/2"  SINK K-5286  1/2" 1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"  1-1/2"	S-1	SINK	KOHLER VAULT K-5286 UNDER-MOUNT	1/2"	1/2"	1-1/2"	1-1/2"	FAUCET: KOHLER CORALAIS KITCHEN SINK FAUCET MODEL K-15888-K WRISTBLADE LEVER HANDLED FAUCET (ADA), 9"
SINK K-3349-2 1/2" 1/2" 1-1/2" 15"X15" 19-GAUGE STAINLESS STEEL, SINGLE BOWL, 2 FAUCET HOLES, 7-9/16-INCH DEPTH	S-2	(ADA)	KOHLER VAULT K-3349-2 TOP MOUNT	1/2"	1/2"	1-1/2"	1-1/2"	15"X15" 19-GAUGE STAINLESS STEEL, SINGLE BOWL, 2 FAUCET HOLES, 7-9/16-INCH DEPTH  FAUCET: KOHLER CORALAIS KITCHEN SINK FAUCET MODEL K-15888-K WRISTBLADE LEVER HANDLED FAUCET (ADA), 9"
DF-1 DRINKING FOUTAIN ELKAY ECDFPW314C 1/2" - 2" 1-1/2" ADA HEIGHT DRINKING FOUNTAIN, WALL MOUNT, FULLY EXPOSED. 304 STAINLESS STEEL WITH SATIN FINISH.	DF-1	DRINKING FOUTAIN		1/2"	-	2"	1-1/2"	

1. ALL FIXTURE FINISHES TO BE REVIEWED BY ARCHITECT PRIOR TO ORDERING.
2. PROVIDE WATER HAMMER ARRESTORS @ ALL ICE MACHINES, WASHING MACHINES, & DISHWASHERS.

Donald L. Welch
Architect
533 Sandy Land Lane
Iidvale, Utah 84047

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consultant:



project:

Ienant Finish
for New
Brighton
Recovery
Campus
4905, 4911, 4915,
4925, 4931, & 4953
South 900 East
Salt Lake County,

date

February 24, 2017

revisions

PERMIT SET-December 28, 2016

1 ADDENDUM #1-January 04, 2017

3 ADDENDUM #3-January 11, 2017

4 ADDENDUM #4-January 17, 2017

5 ADDENDUM #5-January 20, 2017

7 ADDENDUM#7-February 24, 2017

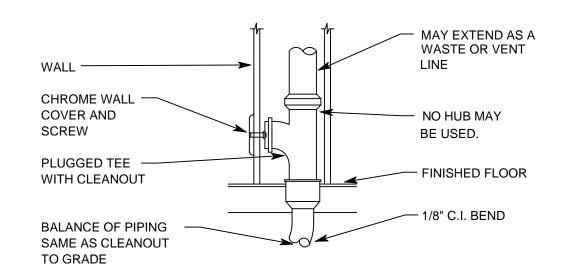
data

project no: drawn by: checked by:

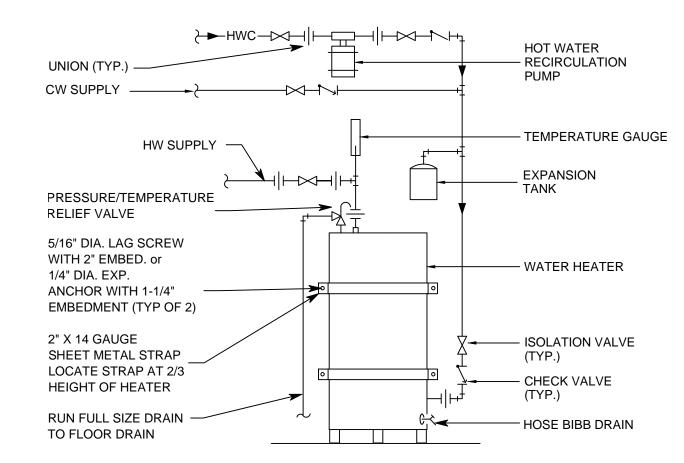
title

PLUMBING SCHEDULES & DETAILS sheet

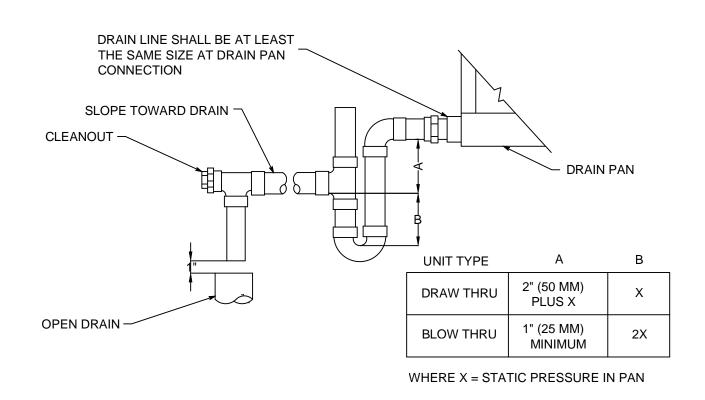
P11



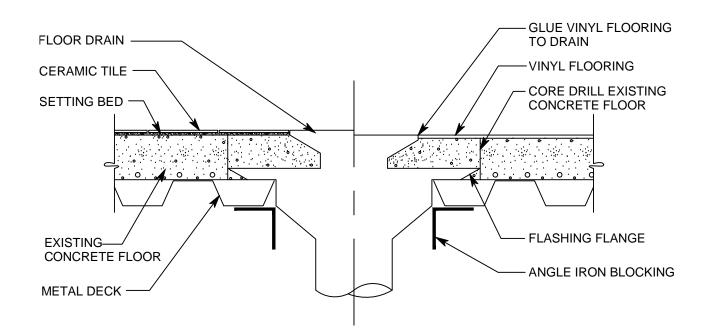




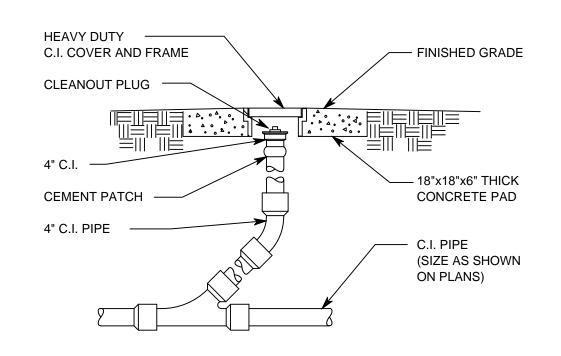




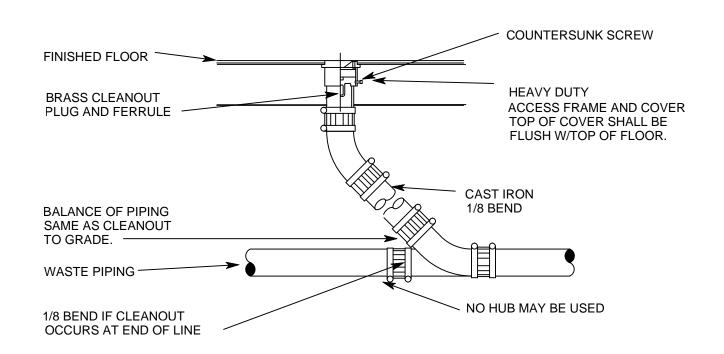




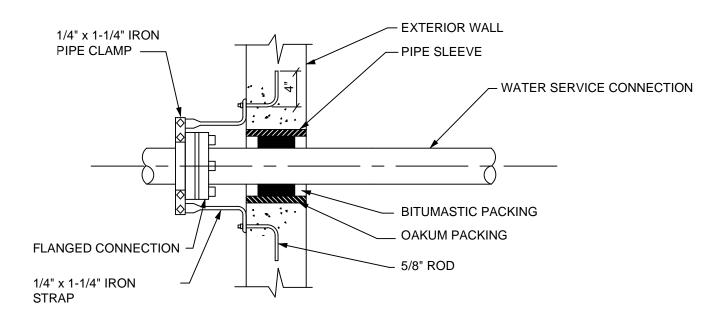
# FLOOR DRAIN DETAIL SCALE: NTS



# 5 CLEANOUT TO GRADE SCALE: NTS

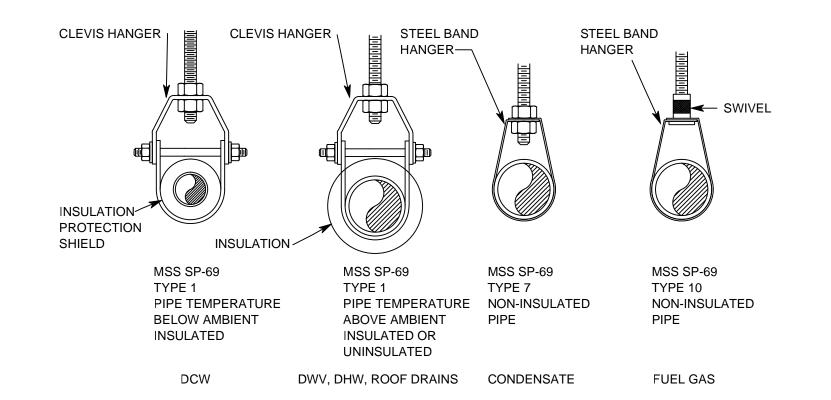




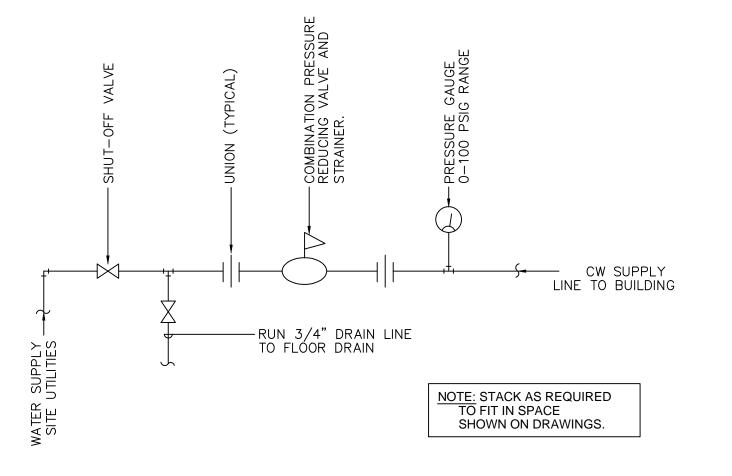


NOTE:
WATER SERVICE CONNECTION
THROUGH FLOOR TO BE ANCHORED
IN SIMILAR MANNER.

# COLD WATER SERVICE ANCHORING









Donald L. Welch

Architect
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dwelch5977@msn.com

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COnsultant:

ROFESS/ONA

O3-21-2017

No. 9520491

BENJAMIN J.

SCHLUP

SCHLUP

project:

Tenant Finish
for New
Brighton
Recovery
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4905, 4911, 4915,
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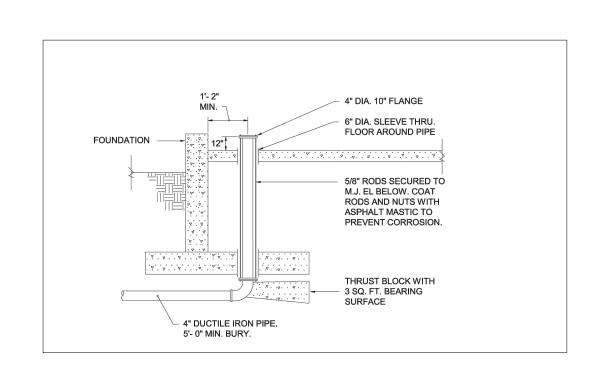
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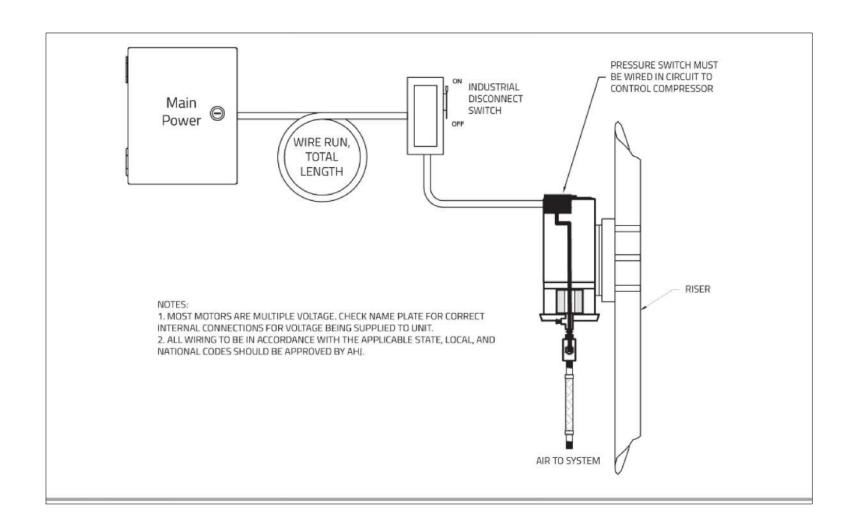
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PLUMBING DETAILS

sheet

P12







ADJUSTABLE CLAMPS (TYPICAL) —

**ROOF MEMBRANES -**

ROOF INSTALLATION —

-SANITARY VENT PIPING, TERMINATE 610mm (24") ABOVE ROOF (MIN.)

PATE OR EQUAL STEPPED POLYVINYLCHLORIDE BOOT

BASE SET IN MASTIC / SEAL

— PATE OR EQUAL SPUN ALUMINUM

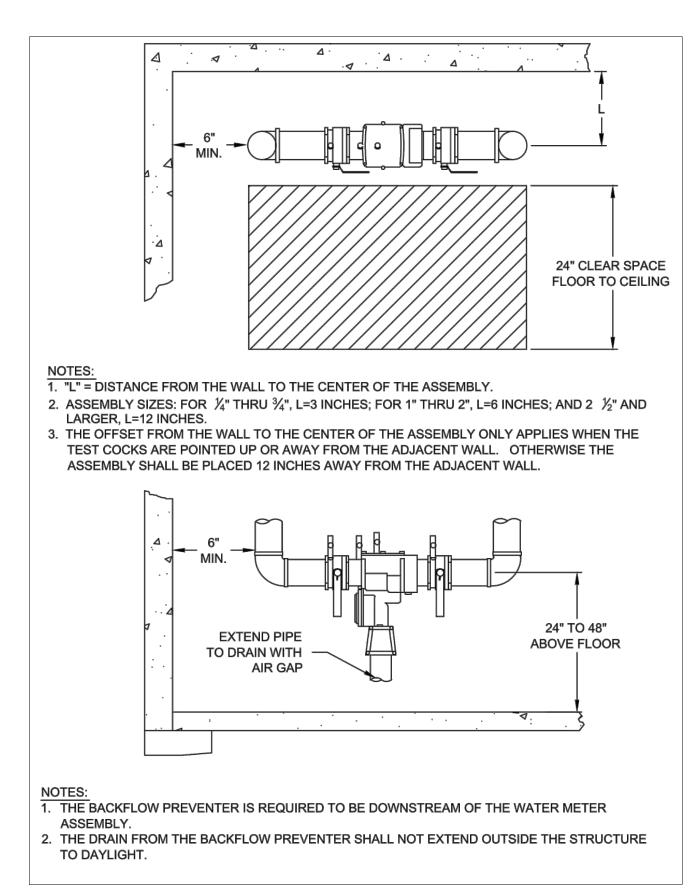
CLAMPED TO BASE

— STAINLESS STEEL CLAMP & SCREW (TYP.)

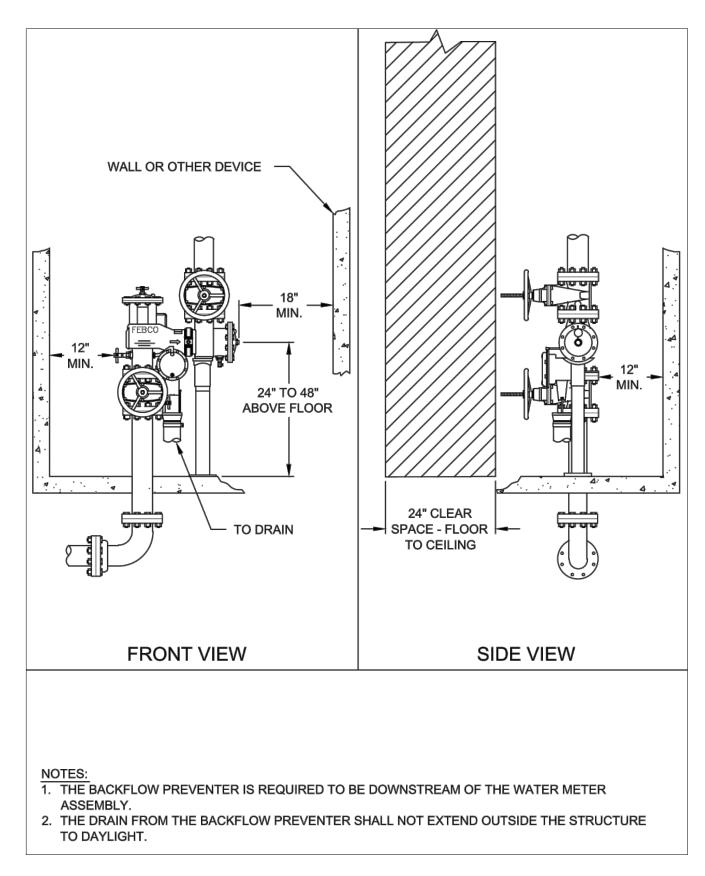
# 5 FIRE SPRINKLER ENTRY DETAIL SCALE: NOT TO SCALE

DRY PIPE FIRE SPRINKLER AIR COMPRESSOR DETAIL

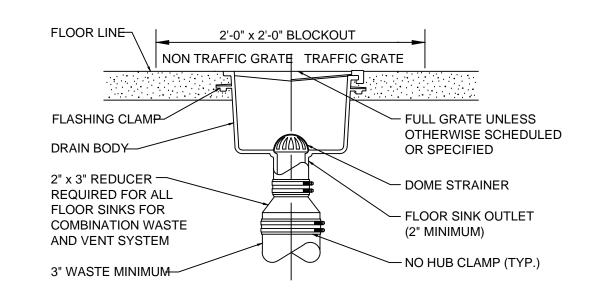
SCALE: NOT TO SCALE



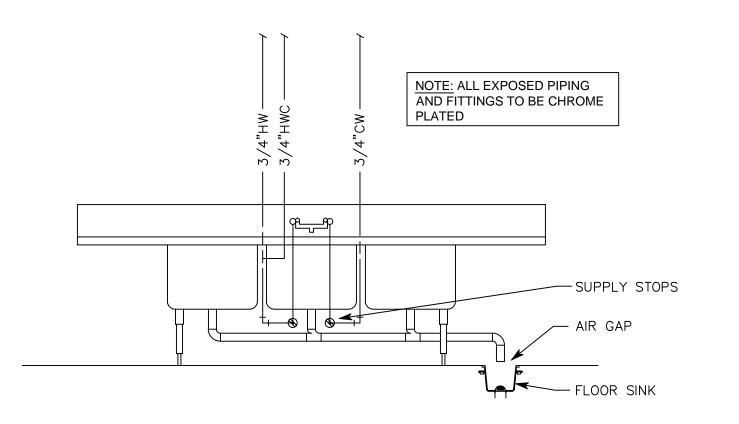
DOMESTIC REDUCED PRESSURE BACKFLOW PREVENTER



FIRE VERTICAL BACKFLOW PREVENTER







3-COMPARTMENT SINK DETAIL

SCALE: NTS
NOTE: PROVIDE HOT WATER CIRCULATION LINE AS NOTED ON PLAN VIEW.
DISHWASHER TO DRAIN INTO FLOOR SINK BELOW 3-COMP SINK.



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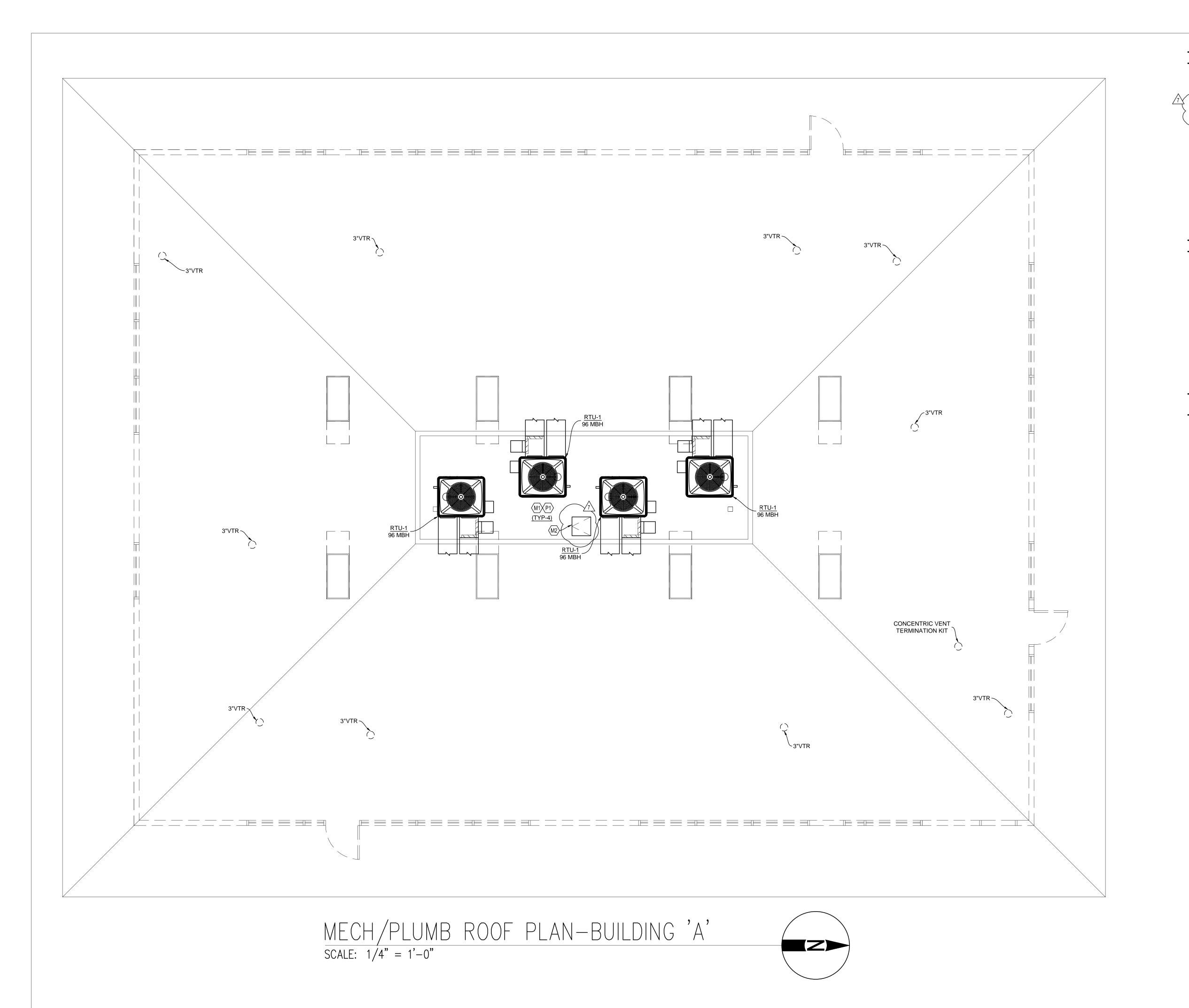
title PLUMBI

PLUMBING DETAILS

sheet

P13

BUILDING 'A'



KEYED NOTES

MECHANICAL

LOCATION OF NEW ROOFTOP UNIT. COORDINATION FINAL LOCATION WITH EXISTING STRUCTURE. PROVIDE FLEXIBLE CONNECTION ON SUPPLY AND RETURN DUCTWORK TO MINIMIZE VIBRATION. PROVIDE FOLIPMENT CURB WITH RTU

EQUIPMENT CURB WITH RTU.

LOCATION OF ROOF ACCESS HATCH. REFERENCE ARCHITECTURAL

PLANS FOR INSTALLATION DETAILS AND DIMENSIONS.

PLUMBING

ROUTE NEW GAS LINE TO UNDERSIDE OF ROOFTOP UNIT. PROVIDE GAS PRESSURE REGULATOR AND ISOLATION VALVE PER MANUFACTURER'S RECOMMENDATIONS.

## GENERAL NOTES

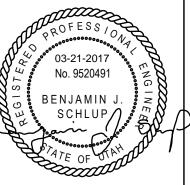
- PROVIDE NECESSARY EQUIPMENT CURBS/PLATFORMS FOR ALL EXTERIOR MECHANICAL EQUIPMENT.
- EXISTING PRIMARY AND OVERFLOW ROOF DRAINS TO REMAIN. COORDINATE LOCATIONS OF ROOFTOP UNITS ACCORDINGLY. REPLACE DAMAGED ROOF DRAINS AS REQUIRED.
- 3. PROVIDE NECESSARY CLEARANCES TO ALLOW FOR SERVICE TO ALL ROOFTOP EQUIPMENT. COORDINATE RTU LOCATIONS WITH ROOF ACCESS HATCHES.
- 4. ALL GAS PIPING SIZED PER TABLE 402.4(2) 2015 IFGC. GAS PRESSURE DOWNSTREAM OF METER IS LESS THAN 2 PSI.
- 5. EXISTING VENT-THRU-ROOF LOCATIONS TO BE REUSED WHERE POSSIBLE. PROVIDE NEW VERTICAL VENT EXTENSIONS AS REQUIRED.

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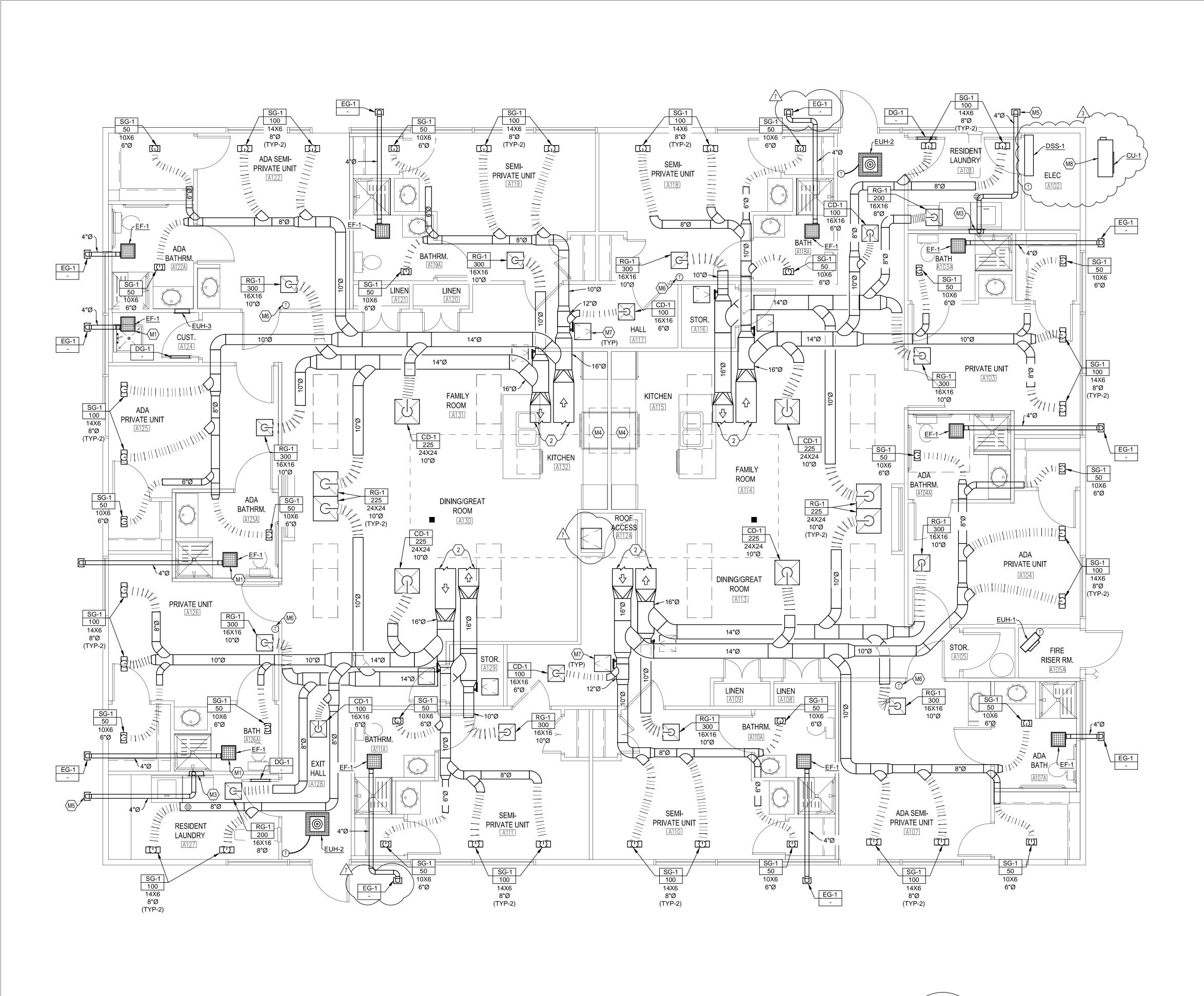
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MECH/PLUMB ROOF PLAN BUILDING 'A' sheet

MP1A

BUILDING 'A'



## KEYED NOTES

- INSTALL EXHAUST FAN AT THIS LOCATION. CONTINUE EXHAUST DUCT TO TERMINATE AT UNDERSIDE OF BUILDING OVERHANG AS INDICATED. COORDINATE LOCATION WITH OVERHEAD PLUMBING.
- SEE ROOF PLAN FOR CONTINUATION OF SUPPLY AND
- OVERHANG AS INDICATED.
- LOCATION.
- ACCESS PANEL TO ALLOW FOR ADJUSTMENT TO ABOVE

## GENERAL NOTES

- PROVIDE BALANCING DAMPERS ON ALL GRILLES, REGISTERS, & DIFFUSERS CONNECTED TO A ROOFTOP UNIT. ALLOW FOR ADJUSTMENT BY REMOVAL OF EXHAUST GRILLES OR BY PROVIDING ACCESS PANELS. (TYPICAL)
- PENETRATE EXTERIOR ROOFING/WALL ASSEMBLIES.
- 4. PROVIDE (R-12 MIN.) INSULATION ON ALL ABOVE CEILING DUCTWORK ROUTED IN UNCONDITIONED SPACE.
- 8. PROVIDE FIRE-RATED DAMPERS AT ALL CEILING DIFFUSERS AND GRILLES TO MAINTAIN FIRE-RATED ASSEMBLY.

RETURN AIR DUCTWORK.

LOCATION OF RECESSED DRYER VENT BOX. CONTINUE 4"Ø DRYER DUCT TO TERMINATE AT UNDERSIDE OF BUILDING

RE-CIRCULATING KITCHEN HOOD.

PROVIDE TERMINATION KIT FOR DRYER EXHAUST AT THIS

LOCATION FOR DIGITAL THERMOSTAT WITHIN LOCKING

CEILING BALANCING DAMPER.

LOCATE OUTDOOR CONDENSING UNIT AS REQUIRED. PROVIDE CONCRETE EQUIPMENT PAD AS NECESSARY. SEE EQUIPMENT SCHEDULE FOR NECESSARY ACCESSORIES. CONCEAL ALL REFRIGERANT PIPING.

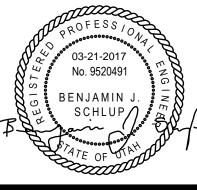
- ROUTE SUPPLY AND RETURN AIR DUCTWORK THROUGH STRUCTURE AS REQUIRED. PROVIDE NECESSARY
  TRANSITIONS TO ALLOW FOR CLEAN PATH THE TERMINAL AIR
- 3. PROVIDE WATER TIGHT SEAL ON ALL DUCTWORK AS IT
- 5. COORDINATE LOCATIONS OF CEILING GRILLES, REGISTERS, AND DIFFUSERS WITH OVERHEAD PLUMBING PIPING ROUTING.
- 6. VENTILATION PROVIDED BY RTU ECONOMIZER SET TO 20%
- MIN. OSA. ENVIRONMENTAL FANS SHALL NOT TERMINATE CLOSER THAN 3 FEET ADJACENT TO BUILDING OPENINGS.

Donald L. Welch Architect

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MECHANICAL PLAN

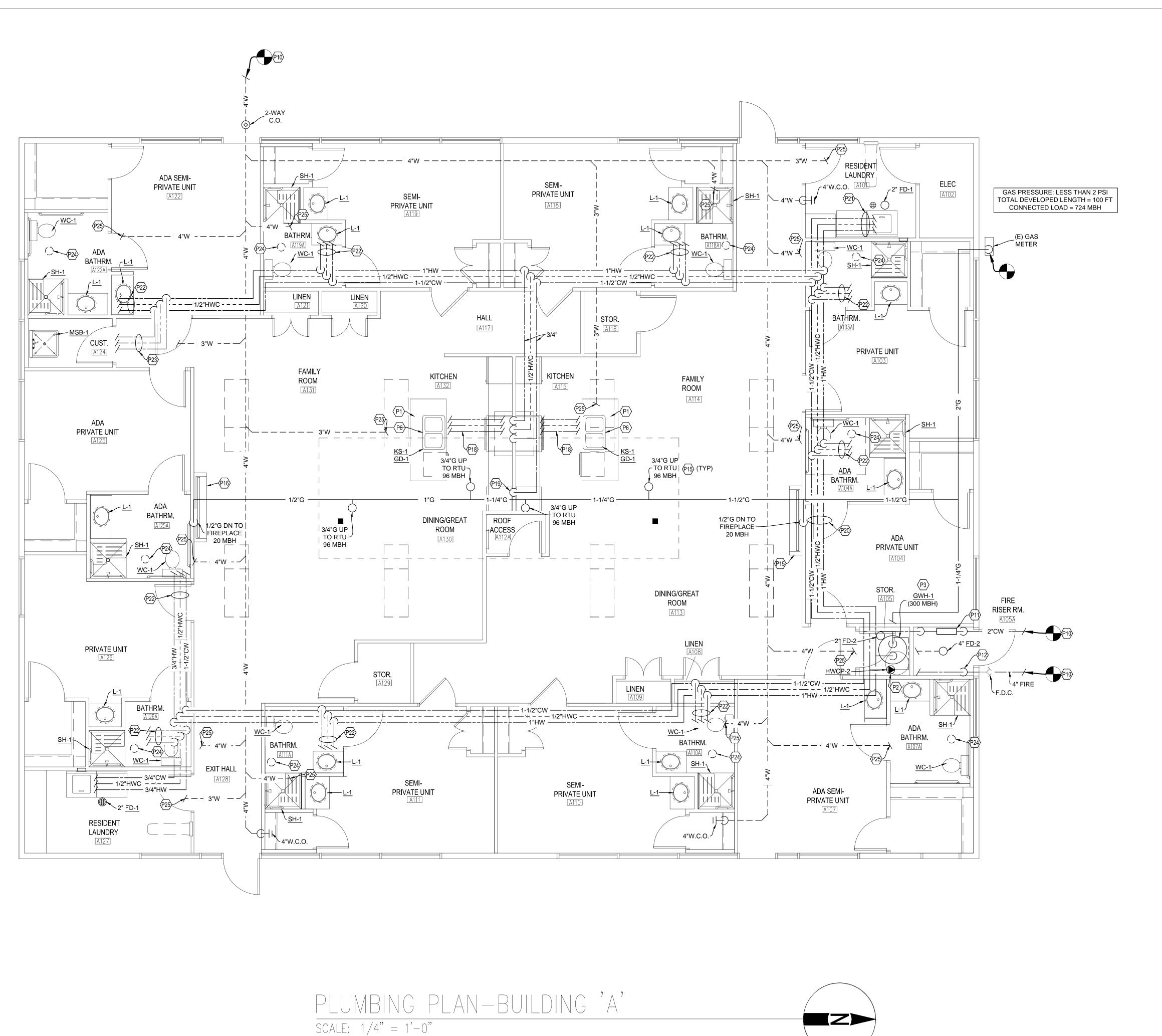
BUILDING 'A' sheet

M1A

BUILDING 'A'

MECHANICAL PLAN-BUILDING 'A'

SCALE: 1/4" = 1'-0"



## KEYED NOTES

CIRCULATION.

- PROVIDE AIR ADMITTANCE VALVE WITHIN CABINETS AT THIS LOCATION. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- LOCATION OF HOT WATER CIRCULATION PUMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE CIRCUIT SETTERS AT FIXTURES AS REQUIRED TO ALLOW FOR HOT WATER
- NEW WATER HEATER. DIRECT T&P VALVE INTO FLOOR DRAIN.
  CONTINUE TO NEW FIXTURES AND PROVIDE ISOLATION VALVES AT EACH FIXTURE. PROVIDE GAS LINE ISOLATION VALVE AND SEISMIC BRACING. PROVIDE FLUE AND INTAKE PIPING PER SCHEDULE AND TERMINATE THROUGH ROOF WITH CONCENTRIC VENT KIT.
  - NEW URINAL. TIE INTO NEW WASTE, VENT, AND DOMESTIC COLD WATER PIPING. SEE PLUMBING SCHEDULE FOR FIXTURE PIPING
- NEW SINK. TIE INTO NEW WASTE, VENT, AND DOMESTIC HOT/COLD WATER PIPING. SEE PLUMBING SCHEDULE FOR FIXTURE PIPING
- NEW KITCHEN SINK. TIE INTO NEW WASTE, VENT, AND DOMESTIC HOT/COLD WATER PIPING. SEE PLUMBING SCHEDULE FOR FIXTURE PIPING SIZES. PROVIDE RECESSED WALL BOX FOR REFRIGERATOR COLD WATER CONNECTION. PROVIDE HOT WATER CONNECTION TO SERVE DISHWASHER.
- LOCATION OF NEW WATER CLOSET. PROVIDE WATER, WASTE, & VENT CONNECTION. SEE PLUMBING SCHEDULE FOR FIXTURE PIPING
- LOCATION OF NEW LAVATORY. PROVIDE WATER, WASTE, & VENT CONNECTION. SEE PLUMBING SCHEDULE FOR FIXTURE PIPING SIZES.
- LOCATION OF NEW FLOOR DRAIN. PROVIDE WASTE & VENT CONNECTION. SEE PLUMBING SCHEDULE FOR FIXTURE PIPING
- SEE CIVIL PLANS FOR CONTINUATION.
- PROVIDE COLD WATER ENTRY WITH BACKFLOW PREVENTER. REFERENCE SHEET P02 FOR DEVICE MAKE/MODEL.
- PROVIDE 4" FIRE ENTRY DOUBLE CHECK DETECTOR ASSEMBLY.
  REFERENCE SHEET P02 FOR DEVICE MAKE/MODEL. PROVIDE
  POWER (115V) FOR RISER MOUNTED COMPRESSOR & PRESSURE
  SWITCH. REFERENCE SHEET P13 FOR DETAILS. INSTALL
  COMPRESSOR ABOVE HEIGHT OF DOOR HEADER TO KEEP OUT OF
  TRAVEL PATH.
- PROVIDE 3" VENT THROUGH ROOF.
- P14 PROVIDE WALL CLEANOUT AT THIS LOCATION.
- PROVIDE GAS LINE WITH VENTLESS REGULATOR AND ISOLATION VALVE. CONNECT TO UNDERSIDE OF NEW RTU. NO ROOF PENETRATION REQUIRED WITH RTU MODEL SPECIFIED.
- P16 PROVIDE GAS LINE TO FLUELESS DECORATIVE FIREPLACE (20 MBH). INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - PROVIDE EMERGENCY FUEL SHUTOFF SWITCH NEAR KITCHEN HOOD. SWITCH TO CLOSE GAS LINE SOLENOID VALVE ASSOCIATED WITH ALL GAS-FIRED APPLIANCES IN KITCHEN.
- P18 ROUTE 1/2" CW, HW, & HWC LINES BELOW FLOOR TO ISLAND KITCHEN SINK AT THIS LOCATION. EXTEND 1/2" HW LINE TO ADJACENT DISHWASHER.
- ROUTE CW LINE TO REFRIGERATOR WATER CONNECTION. PROVIDED RECESSED WALL BOX WITH ISOLATION VALVE.
- PROVIDE PIPING TRANSITIONS UNDER STRUCTURAL BEAM AS
- REQUIRED. (TYPICAL)
- P21 ROUTE CW, HW, & HWC LINES TO CLOTHES WASHER WALL BOX. PROVIDE INTEGRAL ISOLATION VALVES AND WATER HAMMER ARRESTOR.
- ROUTE 1-1/2" CW, 3/4" HW, & 1/2" HWC LINES TO BATHROOM GROUP. PROVIDE HOT AND COLD WATER ISOLATION VALVES AT LAVATORIES.
- ROUTE 3/4" CW, 3/4" HW, & 1/2" HWC LINES TO MOP SINK/SINK.
- COMBINE VENT PIPING FROM BATHROOM FIXTURE AND TERMINATE THROUGH ROOF AT THIS LOCATION. MULTIPLE BATHROOMS GROUPS CAN BE GROUPED TO MINIMIZE ROOFING PENETRATIONS IF NEEDED. ALL VENT THROUGH ROOF PENETRATIONS TO BE 3"
- CONTINUE WASTE LINE TO ADJACENT FIXTURE GROUPS.
  REFERENCE PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL
  FIXTURE WASTE LINE SIZES.

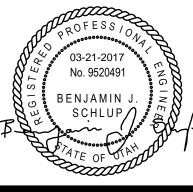
Donald L. Welch Architect

Architect 533 Sandy Land La Aidvale, Utah 840 801.548-6391

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checked by: title

PLUMBING PLAN BUILDING 'A' sheet

P1A

BUILDING 'A'



Project Building A Brighton Recovery Center

Energy Code: 2015 IECC

Location: Salt Lake County, Utah

Construction Type: **Multi-family** Project Type: **Alteration** 

Orientation: Bldg. faces 0 deg. from North

Climate Zone: 5 (5999 HDD)

Permit Date: Permit Number:

Construction Site: 4915 S 900 E

Salt Lake County, Utah

Owner/Agent:

Designer/Contractor: Spectrum Engineering Inc. Salt Lake City, Utah

2017-03-06

Compliance: Passes using prescriptive requirements for alteration projects

### **Envelope Assemblies**

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Ceiling: Flat or Scissor Truss Exemption: Framing cavity filled with insulation					
Wall: Wood Frame, 16in. o.c. Orientation: Unspecified Exemption: Framing cavity filled with insulation					
Window: Metal, Thermal Break, Double Pane Orientation: Unspecified Exemption: Glazing replacement in existing sash or frame.					
Door: Glass Orientation: Unspecified Exemption: Glazing replacement in existing sash or frame.					
Floor: Unheated Slab-On-Grade Insulation depth: 2.0'	280		10.0	0.767	215

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2015 IECC requirements in REScheck Version 5.5.0 and to comply with the mandatory requirements listed in the REScheck Inspection/Checklist.

Benjamin J. Schlup - Project Engineer

Name - Title

Bignature Say

### TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT®

 MATE ONE	FENESTRATION U-FACTOR ^b	SKYLIGHT ^b <i>U</i> -FACTOR	GLAZED FENESTRATION SHGC ^{b, ©}	CEILING R-VALUE	WOOD FRAME WALL <i>R</i> -VALUE	MASS WALL <i>R</i> -VALUE	FLOOR R-VALUE		SLAB ^d R-VALUE & DEPTH	CRAWL SPACE° WALL R-VALUE
and rine 4	0.32	0.55	NR	49	20 or 13 + 5 ^h	13/17	30 ^g	15/19	10, 2 ft	15/19

Project Title: Building A Brighton Recovery Center Report date: 03/06/17

Data filename: Page 1 of 9



Requirements: 94.0% were addressed directly in the REScheck software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] ¹	Construction drawings and documentation demonstrate energy code compliance for the building envelope. Thermal envelope represented on construction documents.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
103.1, 103.2, 403.7 [PR3] ¹	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
302.1, 403.7 [PR2] ²	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr Cooling: Btu/hr	Heating: Btu/hr Cooling: Btu/hr	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

**Additional Comments/Assumptions:** 

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
			•		

Project Title: Building A Brighton Recovery Center Data filename:

Report date: 03/06/17 Page 2 of 9

Section # & Req.ID	Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.2 [FO1] ¹	Slab edge insulation R-value.	R Unheated	R Unheated	□Complies □Does Not	See the Envelope Assemblies table for values.
•		Heated	Heated	□Not Observable □Not Applicable	
402.1.2 [FO3] ¹	Slab edge insulation depth/length.	ft	ft	□Complies □Does Not	See the Envelope Assemblies table for values.
•		 		□Not Observable □Not Applicable	
303.2.1 [FO11] ²	A protective covering is installed to protect exposed exterior insulation and extends a			□Complies □Does Not	<b>Exception:</b> Requirement is not applicable.
•	minimum of 6 in. below grade.			□Not Observable □Not Applicable	
403.9 [FO12] ²	Snow- and ice-melting system controls installed.			□Complies □Does Not	<b>Exception:</b> Requirement is not applicable.
•				□Not Observable □Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.1, 402.3.3, 402.3.6, 402.5 [FR2] ¹	Glazing U-factor (area-weighted average).	U	U	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.1.3 [FR4] ¹	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			□Complies □Does Not □Not Observable □Not Applicable	
402.4.1.1 [FR23] ¹	Air barrier and thermal barrier installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
402.4.3 [FR20] ¹	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
402.4.5 [FR16] ²	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			□Complies □Does Not □Not Observable □Not Applicable	<b>Exception:</b> Requirement is not applicable.
403.2.1 [FR12] ¹	Supply and return ducts in attics insulated >= R-8 where duct is >= 3 inches in diameter and >= R-6 where < 3 inches. Supply and return ducts in other portions of the building insulated >= R-6 for diameter >= 3 inches and R-4.2 for < 3 inches in diameter.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
403.3.3.5 [FR15] ³	Building cavities are not used as ducts or plenums.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.4 [FR17] ²	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R-3.	R	R	□Complies □Does Not □Not Observable □Not Applicable	<b>Exception:</b> Requirement is not applicable.
403.4.1 [FR24] ¹	Protection of insulation on HVAC piping.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	<b>Exception:</b> Requirement is not applicable.
403.5.3 [FR18] ²	Hot water pipes are insulated to ≥R-3.	R	R	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
403.6 [FR19] ²	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

### Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Building A Brighton Recovery Center Data filename:

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] ²	All installed insulation is labeled or the installed R-values provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.1.1, 402.2.5, 402.2.6 [IN3] ¹	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R	R Wood Mass Steel	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] ¹	Wall insulation is installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

**Additional Comments/Assumptions:** 

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.2, 402.2.6 [FI1] ¹	Ceiling insulation R-value.	R Wood Steel	R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.1.1.1, 303.2 [FI2] ¹	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft ² .			☐Complies ☐Does Not ☐Not Observable	Requirement will be met.
402.2.3 [FI22] ²	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			□ Not Applicable □ Complies □ Does Not □ Not Observable □ Not Applicable	Requirement will be met.
402.2.4 [FI3] ¹	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R	R	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.4.1.2 [FI17] ¹	Blower door test @ 50 Pa. <=5 ach in Climate Zones 1-2, and <=3 ach in Climate Zones 3-8.	ACH 50 =	ACH 50 =	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
403.2.3 [FI4] ¹	Duct tightness test result of <=4 cfm/100 ft2 across the system or <=3 cfm/100 ft2 without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection.	cfm/100 ft ²	cfm/100 ft²	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
403.3.2 [FI27] ¹	Ducts are pressure tested to determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the system including the manufacturer's air handler enclosure if installed at time of test. Postconstruction test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the entire system including the manufacturer's air handler enclosure.	cfm/100	cfm/100 ft ²	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
403.3.2.1 [FI24] ¹	Air handler leakage designated by manufacturer at <=2% of design air flow.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.1.1 [FI9] ²	Programmable thermostats installed for control of primary heating and cooling systems and initially set by manufacturer to code specifications.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.1.2 [FI10] ²	Heat pump thermostat installed on heat pumps.			□Complies □Does Not □Not Observable □Not Applicable	<b>Exception:</b> Requirement is not applicable.
403.5.1 [FI11] ²	Circulating service hot water systems have automatic or accessible manual controls.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
	1 High Impact (Tier	1) 2 Medium	Impact (Tier 2)	3 Low Impact (Ti	ier 3)

# & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.6.1 [FI25] ²	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
103.2 Fl26] ²	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	<b>Exception:</b> Requirement is not applicable.
403.5.1.1 FI28] ²	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermossyphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
403.5.1.2 FI29] ²	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
103.5.2 FI30] ²	Water distribution systems that have recirculation pumps that pump water from a heated water supply pipe back to the heated water source through a cold water supply pipe have a demand recirculation water system. Pumps have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to $104^{\circ}F$ .			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
103.5.4 FI31] ²	Drain water heat recovery units tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers.			□Complies □Does Not □Not Observable □Not Applicable	<b>Exception:</b> Requirement is not applicable.
104.1 FI6] ¹	75% of lamps in permanent fixtures or 75% of permanent fixtures have high efficacy lamps. Does not apply to low-voltage lighting.			□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
104.1.1 [FI23] ³	Fuel gas lighting systems have no continuous pilot light.			☐Complies ☐Does Not ☐Not Observable	<b>Exception:</b> Requirement is not applicable.

Project Title: Building A Brighton Recovery Center Data filename:

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
401.3 [FI7] ²	Compliance certificate posted.			□Complies □Does Not	Requirement will be met.
				□Not Observable □Not Applicable	
303.3 [FI18] ³	Manufacturer manuals for mechanical and water heating			□Complies □Does Not	Requirement will be met.
	systems have been provided.			□Not Observable □Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

www.provident-energy.com/ × O Climate Zone Number 5 | Op





i www.provident-energy.com/documents/2015%20IECC%







### RESIDENTIAL ENERGY EFFICIENCY

In the column entitled MASS WALL R-VALUE a new footnote j is added as follows: "j, Log walls complying with the ICC400 and with a minimum average wall thickness of 5" or greater shall be permitted in Zones 5-8 when overall window glazing is .31 U-factor or lower, minimum heating equipment efficiency is 90 AFUE (gas) or 84 AFUE (oil), and all other requirements are met."

shall not include an R-value for other building materials or air films. Where insulated siding is used for the purpose of complying with the continuous insulation requirements of Table R402.1.2, the manufacturer's labeled R-value for insulated siding shall be reduced by R-0.6.

R402.1.4 U-factor alternative. An assembly with a U-factor equal to or less than that specified in Table R402.1.4 shall be permitted as an alternative to the R-value in Table R402.1.2.

R402.1.5 Total UA alternative. If the total building thermal envelope UA (sum of U-factor times assembly area) is less than or equal to the total UA resulting from using the U-factors in Table R402.1.4 (multiplied by the same

assembly area as in the proposed building), the building shall be considered in compliance with Table R402.1.2. The UA calculation shall be done using a method consistent with the ASHRAE Handbook of Fundamentals and shall include the thermal bridging effects of framing materials. The SHGC requirements shall be met in addition to UA compliance.

R402.2 Specific insulation requirements (Prescriptive). In addition to the requirements of Section R402.1, insulation shall meet the specific requirements of Sections R402.2.1 through R402.2.13.

R402.2.1 Ceilings with attic spaces. Where Section R402.1.2 would require R-38 insulation in the ceiling,

### TABLE R402.1.2 INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

CLIMATE	FENESTRATIO		GLAZED FENESTRATION SHGCb, o	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT° WALL R-VALUE	SLAB ^d R-VALUE & DEPTH	CRAWL SPACE ⁶ WALL R-VALUE
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0,35	0.55	0.25	38	20 or 13+5h	8/13	19	5/13 ^f	0	5/13
4 except Marine	0.35	0.55	0.40	49	20 or 13+5h	8/13	19	10 /13	10, 2 ft	10/13
5 and Marine 4	0.32	0.55	NR	49	20 or 13+5h	13/17	30 ^g	15/19	10, 2 ft	15/19
6	0.32	0.55	NR	49	20+5 or 13+10h	15/20	30 ^g	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20+5 or 13+10h	19/21	38 ^g	15/19	10, 4 ft	15/19

- a. R-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation the installed *R*-value of the insulation shall not be less than the *R*-value specified in the table.
- b. The fenegration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in climate zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
- "15/19" means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall, "15/19" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the home. "10/13 means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall.
- d. R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.
- There are no SHGC requirements in the Marine Zone.
- Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table R301.1.
- Of insulation sufficient to fill the framing cavity, R-19 minimum.
- The first value is cavity insulation, the second value is continuous insulation, so "13+5" means R-13 cavity insulation plus R-5 continuous insulation.
  - the second R-value applies when more than half the insulation is on the interior of the mass wall.

### TABLE R402.1.4 EQUIVALENT U-FACTORS

			EGUIVAL	LIVI D-FACT	Ono			
CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING U-FACTOR	FRAME WALL U-FACTOR	MASS WALL U-FACTOR ^b	FLOOR U-FACTOR	BASEMENT WALL U-FACTOR	CRAWL SPACE WALL U-FACTOR
1	0.50	0.75	0.035	0.084	0.197	0.064	0.360	0.477
2	0.40	0.65	0.030	0.084	0.165	0.064	0.360	0.477
3	0.35	0.55	0.030	0.060	0.098	0.047	0.091°	0.136
4 except Marine	0.35	0.55	0.026	0.060	0.098	0.047	0.059	0.065
5 and Marine 4	0.32	0.55	0.026	0.060	0.082	0.033	0.050	0.055
6	0.32	0.55	0.026	0.045	0.060	0.033	0.050	0.055
7 and 8	0.32	0.55	0.026	0.045	0.057	0.028	0.050	0.055

- a. Nonfenestration U-factors shall be obtained from measurement, calculation or an approved source
- b. When more than half the insulation is on the interior, the mass wall U-factors shall be a maximum of 0.17 in Climate Zone 1, 0.14 in Climate Zone 2, 0.12 in Climate Zone 3, 0.087 in Climate Zone 4 except Marine, 0.065 in Climate Zone 5 and Marine 4, and 0.057 in Climate Zones 6 through 8.

c. Basement wall U-factor of 0.360 in warm-humid locations as defined by Figure R301.1 and Table R301.1.



### **Review Comments #2**

Project:Brighton Recovery Campus-Building AFrom:Jason WorthenProject No:20160686Date:March 20,2017

DISCIPLINES
Mechanical Engineering
Electrical Engineering
Technology Design
Acoustical Engineering
Lighting Design
Theatre Design
Fire Protection Engineering
Building Commissioning

### **BUILDING A RESPONSES**

E2. Please address the following.

A. Locations of main disconnect panel.

PC2: Sheet EP601:Per NEC 225.32 the main panel in each building is required to have a disconnecting means located at the point of entrance of the building. It appears that each of the building panels are provided with main lugs only. Please provide a disconnect for each panel. This comment also applies to sheets EP602 and EP603.

Response: All branch panels will be changed to have main circuit breakers.

### **BUILDING A DRAWINGS**

### EP601 (see attached sheet)

- 1. Changed all branch circuit panels from main lugs only to main circuit breaker panels.
  - 2. Added panel LE2.

### EP602 (see attached sheet)

- 1. Added panel AIC ratings to panel schedules.
- 2. Changed branch panels to have main circuit breakers.
- 3. Updated panel schedules.

### EP603 (see attached sheet)

- 1. Added panel AIC ratings to panel schedules.
- 2. Changed branch panels to have main circuit breakers.
- 3. Updated panel schedules.
- 4. Added panel schedule for panel LE2.

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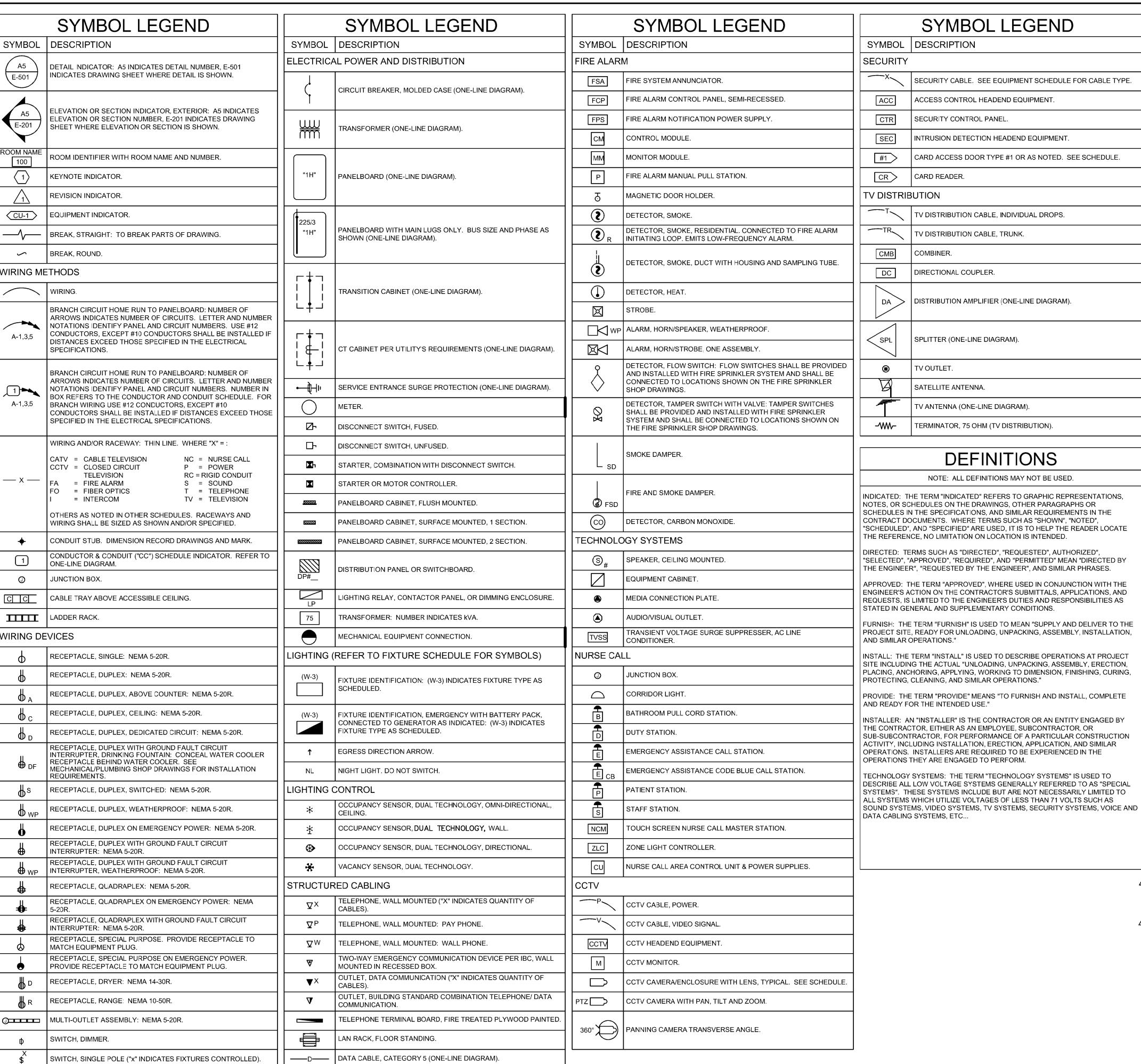
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fax: 480-621-3445

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VOICE CABLE, CATEGORY 3 (ONE-LINE DIAGRAM).

REQUIRES (2) DATA DROPS PER DEVICE WAP DATA CONNECTION: WIRELESS ACCESS POINT (WAP). REQUIRES (2) DATA DROPS PER DEVICE

DATA CONNECTION: WIRELESS ACCESS POINT (WAP).

SWITCH, THREE-WAY ("x" INDICATES FIXTURES CONTROLLED).

SYMBOL LEGEND SYMBOL DESCRIPTION SECURITY SECURITY CABLE. SEE EQUIPMENT SCHEDULE FOR CABLE TYPE. ACCESS CONTROL HEADEND EQUIPMENT. SECURITY CONTROL PANEL. INTRUSION DETECTION HEADEND EQUIPMENT CARD ACCESS DOOR TYPE #1 OR AS NOTED. SEE SCHEDULE. CR CARD READER. TV DISTRIBUTION TV DISTRIBUTION CABLE, INDIVIDUAL DROPS TV DISTRIBUTION CABLE, TRUNK. COMBINER.

DIRECTIONAL COUPLER.

SPLITTER (ONE-LINE DIAGRAM)

TV ANTENNA (ONE-LINE DIAGRAM).

TERMINATOR, 75 OHM (TV DISTRIBUTION).

**DEFINITIONS** 

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS,

"SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE

"SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY

APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND

REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE

PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION,

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT

SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION,

PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING,

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY

SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR

THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR

OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO

ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS

SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO

THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE

CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED".

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED",

THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

OPERATIONS THEY ARE ENGAGED TO PERFORM.

AND SIMILAR OPERATIONS."

AND READY FOR THE INTENDED USE."

DATA CABLING SYSTEMS, ETC...

TV OUTLET.

SATELLITE ANTENNA

DISTRIBUTION AMPLIFIER (ONE-LINE DIAGRAM)

СМВ

SPL

### GENERAL ELECTRICAL NOTES

- CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.
- OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.
- A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.
- B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES. AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.
- C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.
- EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.
- SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.
- REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.
- ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.

**ELECTRICAL SHEET INDEX** 

	OTTAIONE OTTEET HADEN
SHEET NO	SHEET TITLE
EE001	SYMBOL SCHEDULE, SHEET INDEX
ES101	ELECTRICAL SITE PLAN
EP11A	POWER PLAN - BUILDING 'A'
EP401	TYPICAL POWER PLANS
EP501	DETAILS
EP502	DETAILS
EP503	DETAILS
EP601	ONE LINE DIAGRAM
EP602	PANEL SCHEDULES
EP603	PANEL SCHEDULES
EL11A	LIGHTING PLAN - BUILDING 'A'
EL601	LIGHTING FIXTURE SCHEDULE
EY11A	AUXILIARY PLAN - BUILDING 'A'
EY601	AUXILIARY RISER DIAGRAMS
EY602	AUXILIARY RISER DIAGRAMS
EY603	AUXILIARY RISER DIAGRAMS
FA11A	FIRE ALARM PLAN - BUILDING 'A'
FA601	FIRE ALARM RISER DIAGRAM

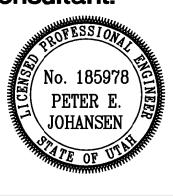
Welch

Architect Donald

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for New **Brighton** Recovery Campus 4905, 4911, 4915, 4925, 4931, & 4953 South 900

Salt Lake County, Utah

January 04, 2017

revisions

PERMIT SET-December 28, 2016 **⊈**ADDENDUM #2-January 06, 2017 ADDENDUM #4-January 17, 2017 ADDENDUM #7-February 24, 2017

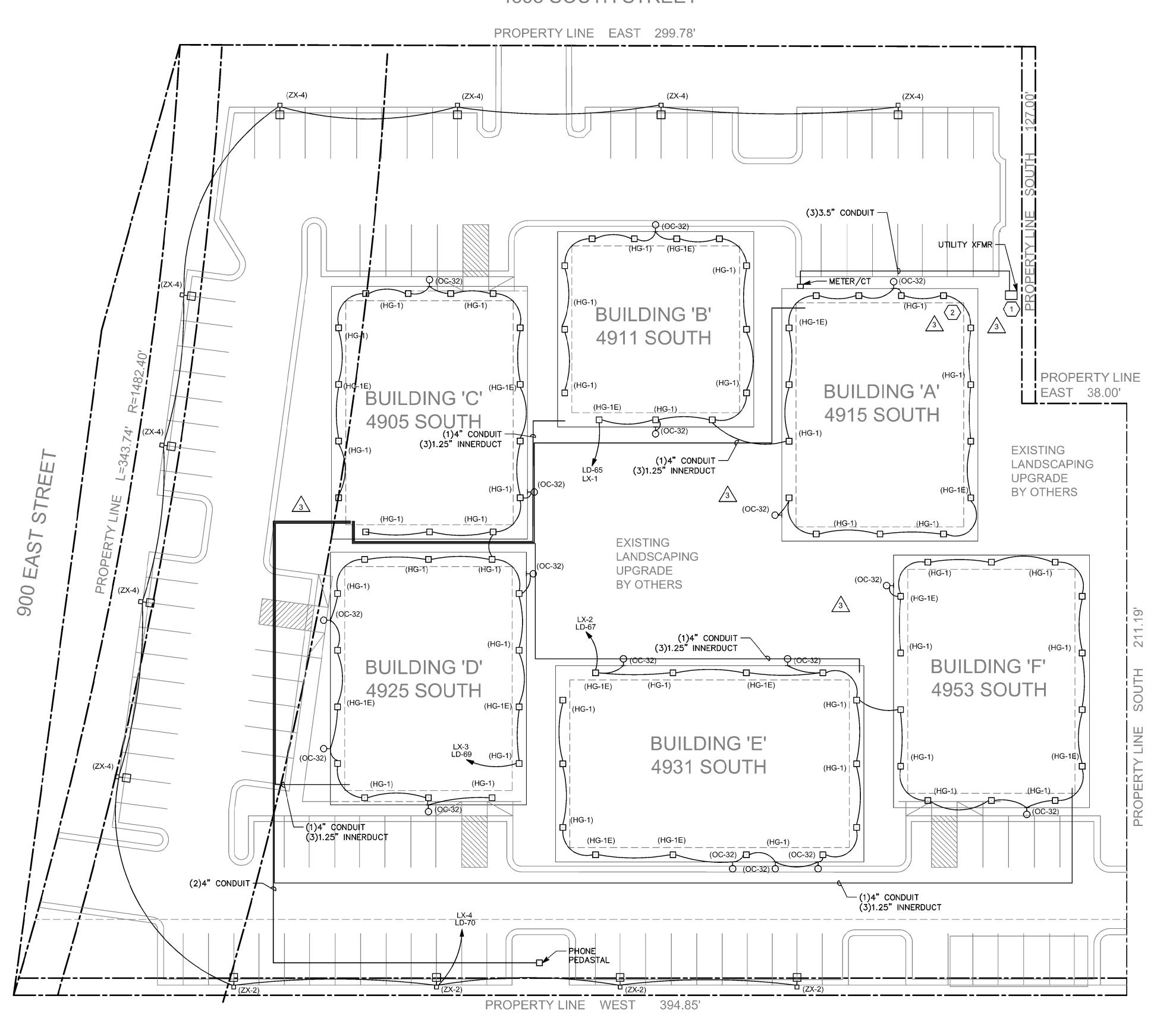
ADDENDUM #8-March 20, 2017

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SCHEDULE SHEET INDEX

sheet

## 4895 SOUTH STREET



# GENERAL SHEET NOTES

# ○SHEET KEYNOTES

- 1. EXISTING ROCKY MOUNTAIN TRANSFORMER. COORDINATE WITH ROCKY MOUNTAIN POWER TO DETERMINE IF THE EXISTING TRANSFORMER NEEDS TO BE REPLACED.
- THE EXISTING ELECTRICAL ROOM IS LOCATED IN NORTHEAST CORNER OF BUILDING A. ALL OF THE ELECTRICAL EQUIPMENT IN THIS ROOM IS TO BE DEMOLISHED, INCLUDING THE ELECTRICAL PANEL AND METER CENTER. REMOVE ALL ASSOCIATED WIRING BACK TO THE UTILITY TRANSFORMER.

Donald L. Welch
Architect
533 Sandy Land Landidvale, Utah 8404

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Tenant Finish
for New
Brighton
Recovery
Campus
4905, 4911, 4915, 4925,
4931, & 4953 South 900

Salt Lake County, Utah

late

January 04, 2017

revisions

PERMIT SET—December 28, 2016
ADDENDUM #2—January 06, 2017
ADDENDUM #3—January 11, 2017
ADDENDUM #4—January 17, 2017
ADDENDUM #5—January 19, 2017
ADDENDUM #7—February 24, 2017
ADDENDUM #8—March 20, 2017

data

project no: drawn by: checked by:

title

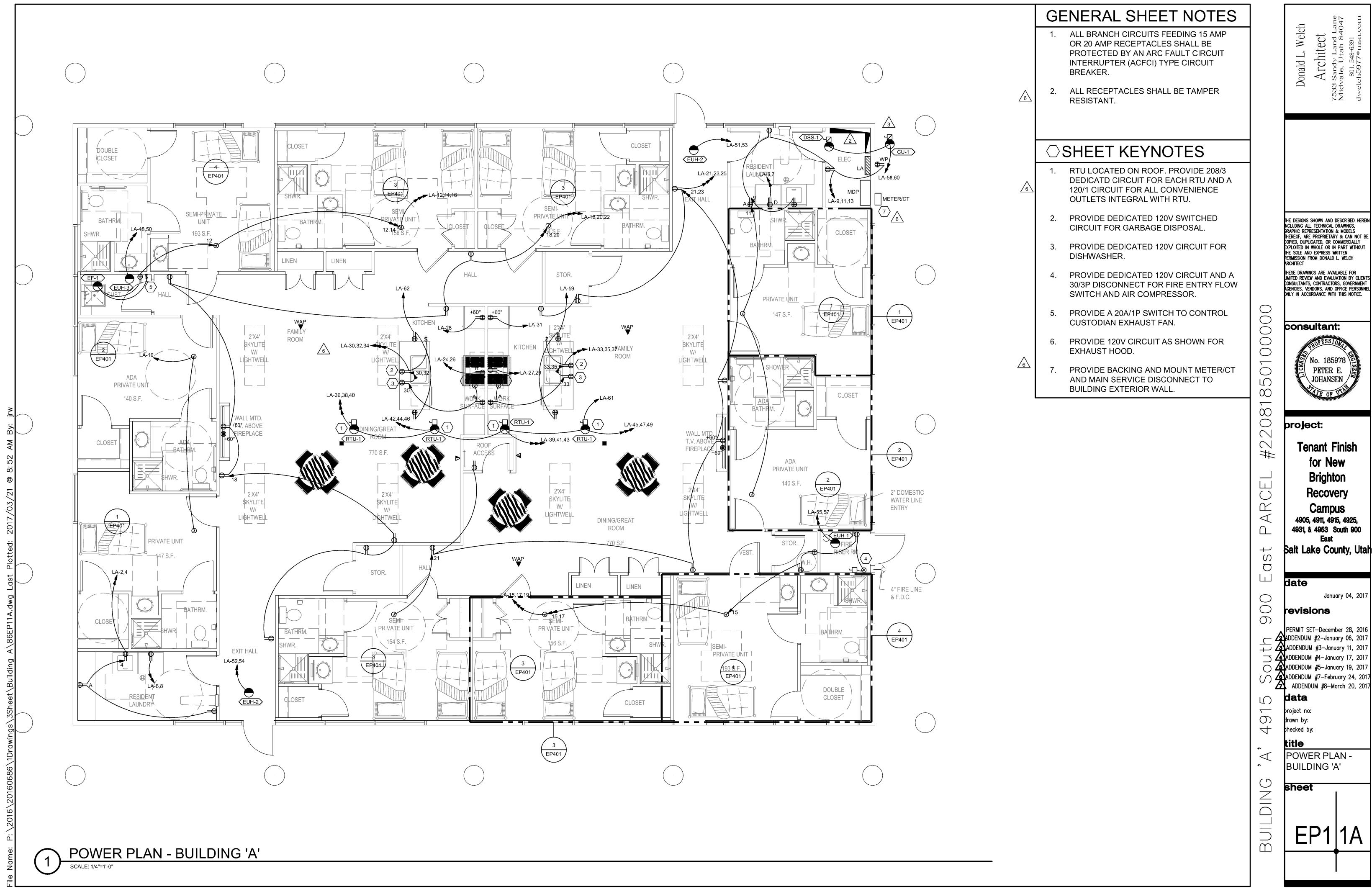
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ELECTRICAL SITE PLAN

ES1 01

1 ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

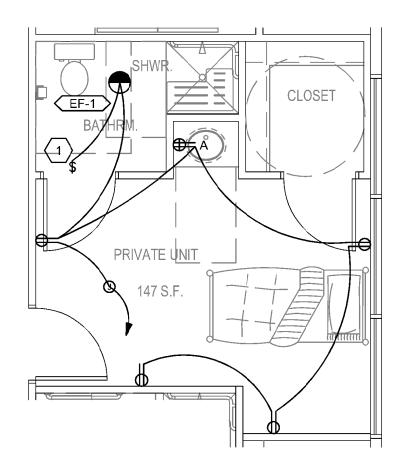


## GENERAL SHEET NOTES

- 1. ALL BRANCH CIRCUITS FEEDING 15 AMP OR 20 AMP RECEPTACLES SHALL BE PROTECTED BY AN ARC FAULT CIRCUIT INTERRUPTER (ACFCI) TYPE CIRCUIT BREAKER.
- 2. ALL RECEPTACLES SHALL BE TAMPER RESISTANT.

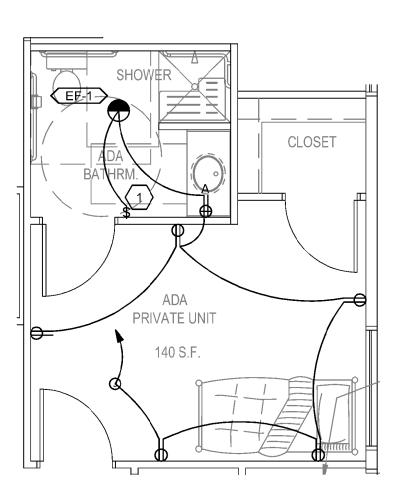
## ○SHEET KEYNOTES

1. PROVIDE A 20A/1P SWITCH TO CONTROL BATHROOM EXHAUST FAN.



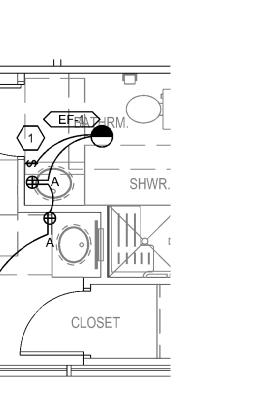
TYPICAL PRIVATE UNIT
POWER PLAN

SCALE: 1/4"=1'-0"



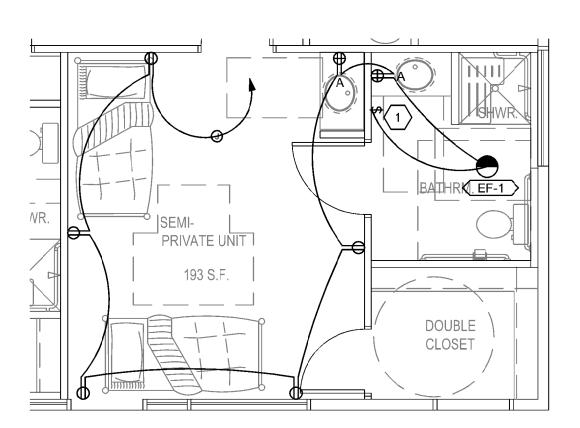
TYPICAL ADA PRIVATE
UNIT POWER PLAN

SCALE: 1/4"=1'-0"



TYPICAL SEMI-PRIVATE
UNIT POWER PLAN

SCALE: 1/4"=1'-0"



TYPICAL ADA SEMI-PRIVATE
UNIT POWER PLAN

SCALE: 1/4"=1'-0"

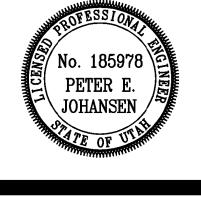
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THE DESIGNS SHOWN AND DESCRIBED HEREIN

Donald L. Welch

Architect

consultant:



project:

5010

20818

#2

Tenant Finish
for New
Brighton
Recovery
Campus
4905, 4911, 4915, 4925,
4931, & 4953 South 900

Salt Lake County, Utah

late

January 04, 2017

revisions

PERMIT SET—December 28, 2016
ADDENDUM #2—January 06, 2017
ADDENDUM #3—January 11, 2017
ADDENDUM #4—January 17, 2017
ADDENDUM #5—January 19, 2017
ADDENDUM #7—February 24, 2017
ADDENDUM #8—March 20, 2017

data

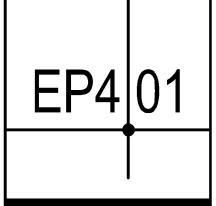
roject no: rawn by: necked by:

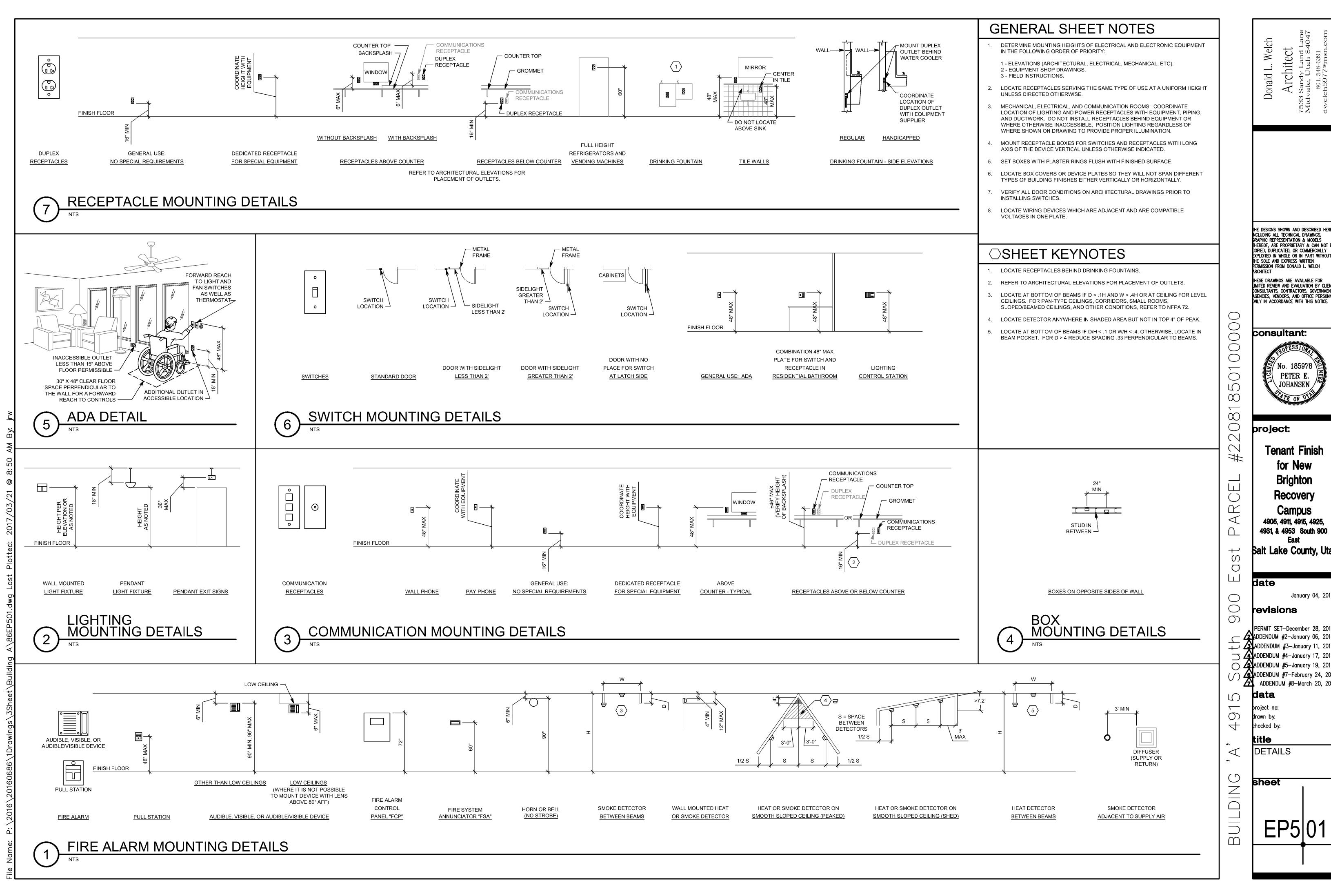
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TYPICAL POWER PLANS

sheet

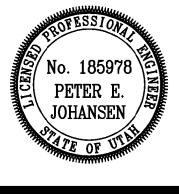
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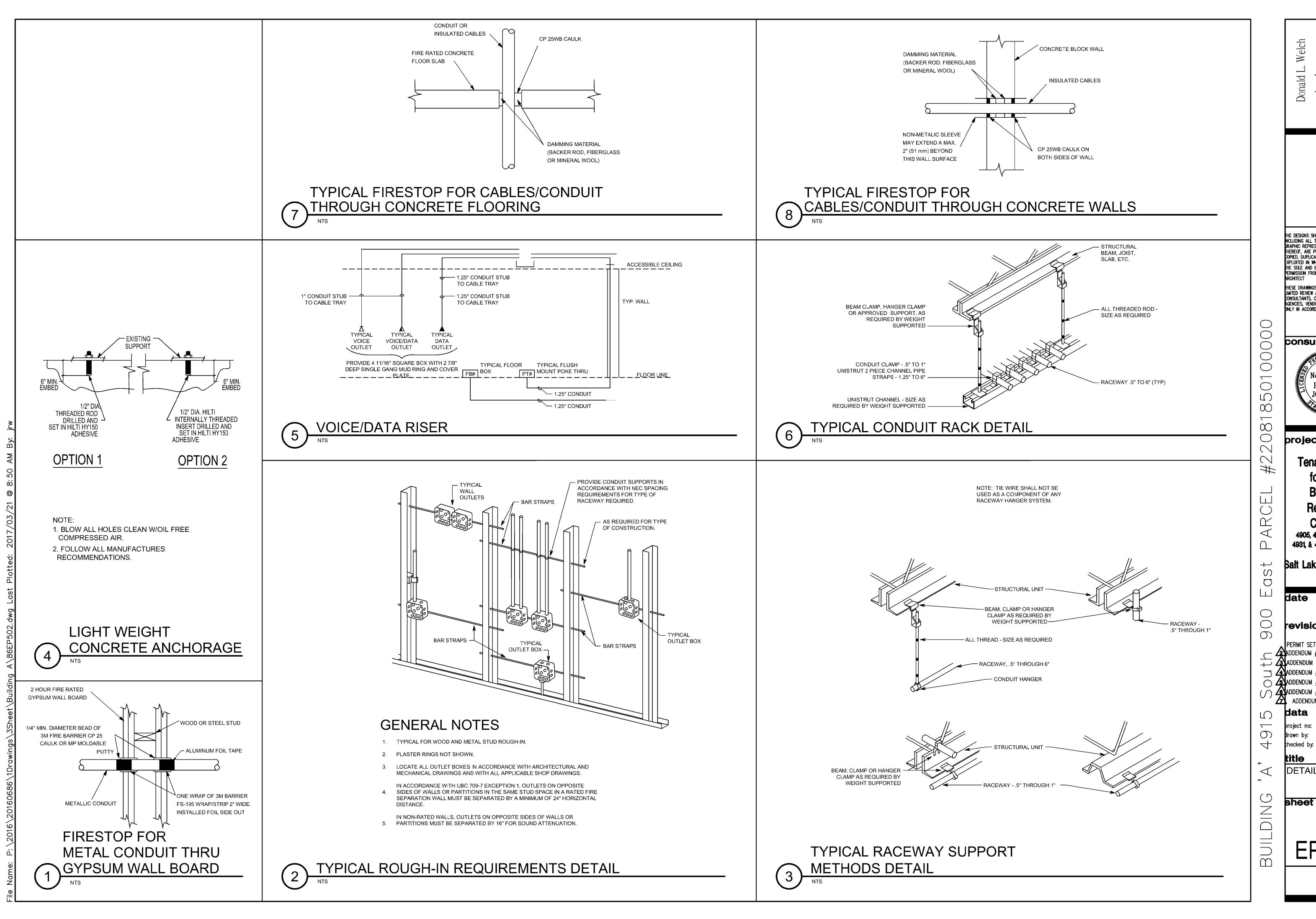
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for New **Brighton** Recovery Campus 4905, 4911, 4915, 4925, 4931, & 4953 South 900

Salt Lake County, Utah

ADDENDUM #2-January 06, 201 ADDENDUM #3-January 11, 201 ADDENDUM #7-February 24, 2017 ADDENDUM #8-March 20, 2017

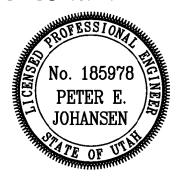


Donald L. Welch Architect

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consultant:



project:

for New **Brighton** Recovery Campus 4905, 4911, 4915, 4925,

Salt Lake County, Utah

4931, & 4953 South 900

date

January 04, 2017

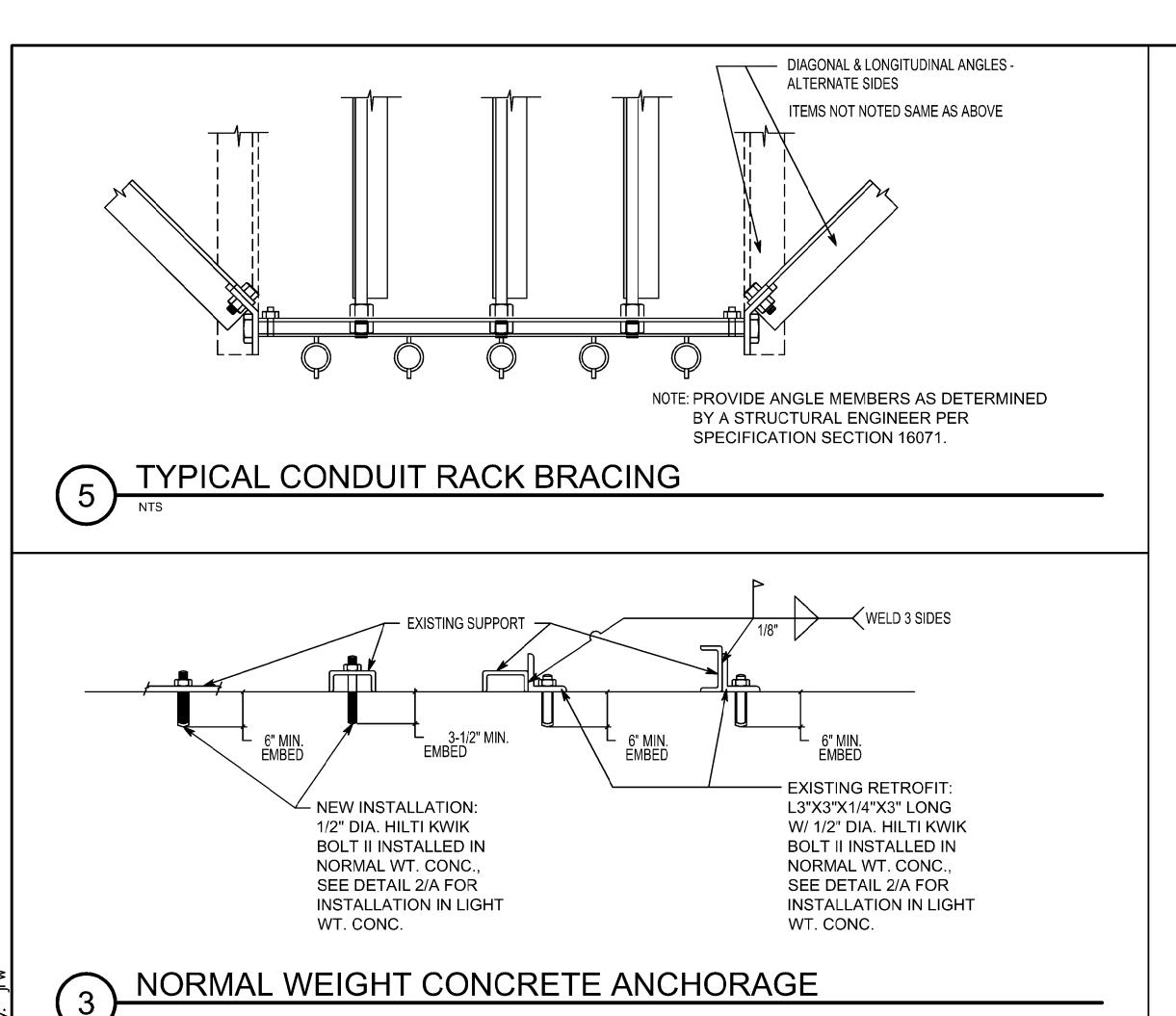
revisions

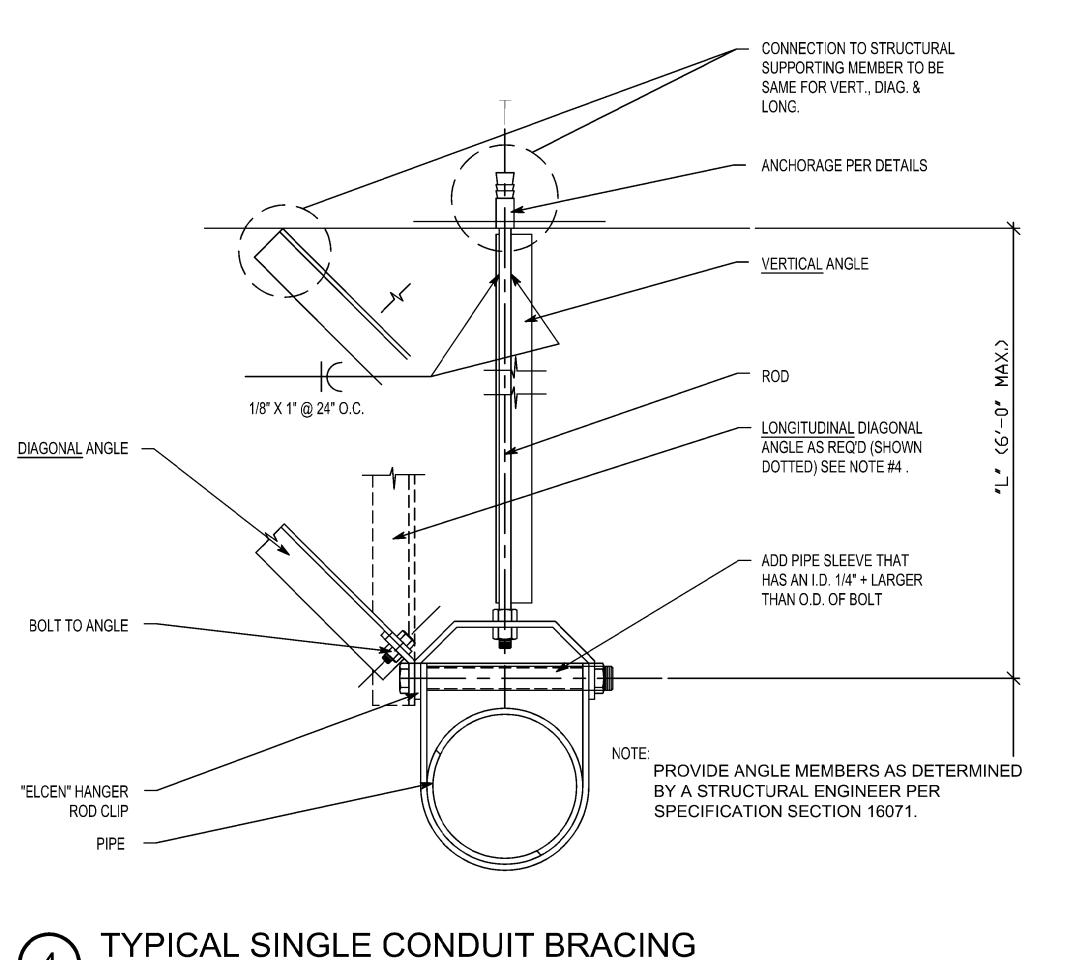
PERMIT SET-December 28, 2016 ADDENDUM #2-January 06, 2017 ADDENDUM #3-January 11, 2017 ADDENDUM #4-January 17, 2017 ADDENDUM #5-January 19, 2017 ADDENDUM #7-February 24, 2017

, ADDENDUM #8-March 20, 2017 data

drawn by: checked by:

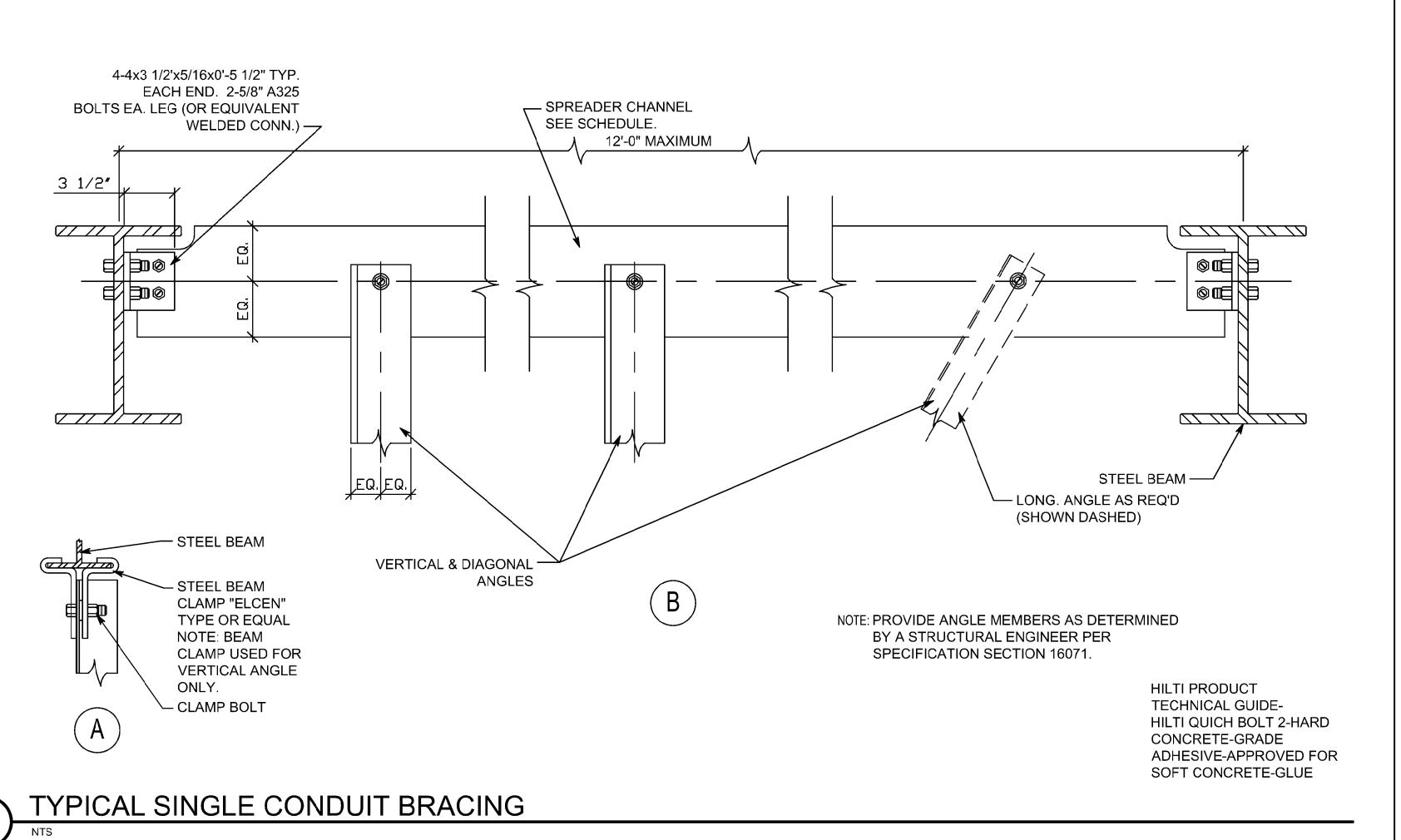
DETAILS

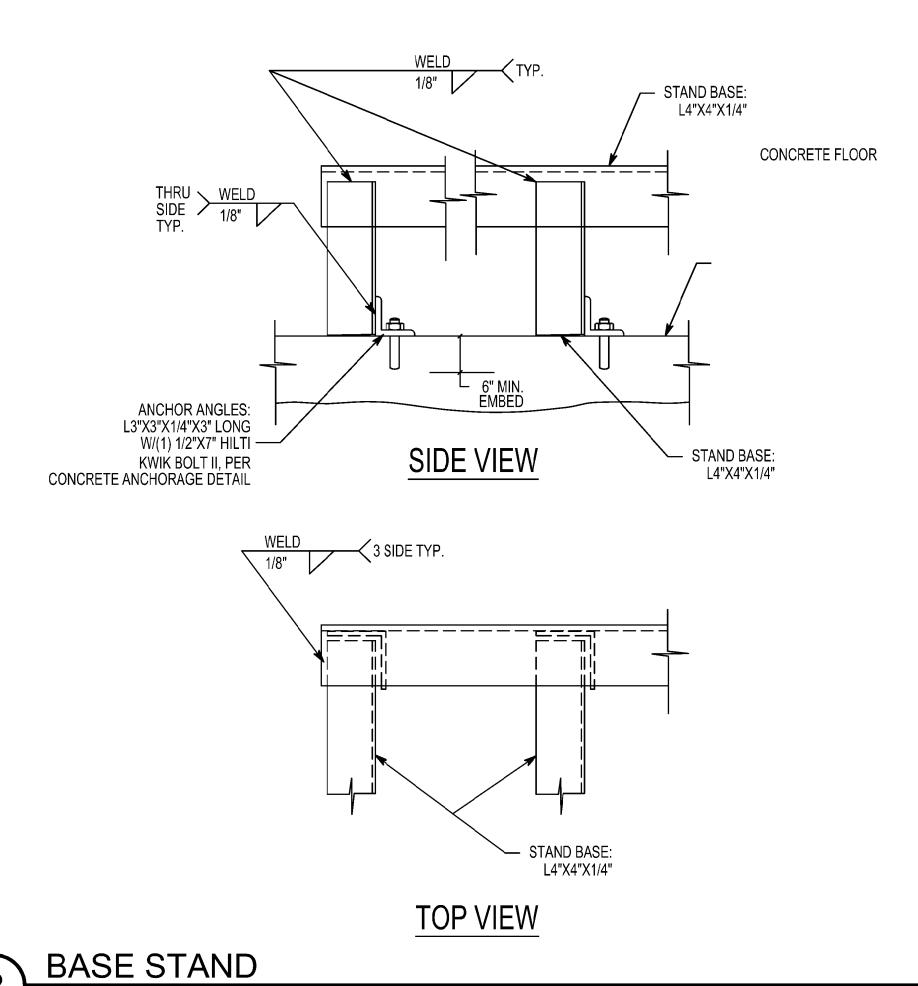




## SEISMIC BRACING GENERAL NOTES

- 1. BRACE ALL CONDUIT WITH 2 1/2" I.D. AND LARGER, AND ALL BUSWAY, CABLE TRAY AND CONDUIT RACKS.
- 2. DETAILS SHOWN PROVIDE A LATERAL BRACING SYSTEM. A TYPICAL VERTICAL SUPPORT SYSTEM MUST ALSO BE USED. HOWEVER, WHERE BRACE OCCURS THE VERTICAL ANGLE SHOWN MAY REPLACE A TYPICAL VERTICAL SUPPORT.
- TRANSVERSE BRACING AT 30'-0" O.C. MAX.
- 4. LONGITUDINAL BRACINGS AT 60'-0" O.C. MAX.
- TRANSVERSE BRACING FOR ONE CONDUIT OR BUSWAY SECTION MAY ALSO ACT AS LONGITUDINAL BRACING FOR THE CONDUIT OR BUSWAY SECTION CONNECTED PERPENDICULAR TO IT, IF THE BRACING IS INSTALLED WITHIN 24" OF THE ELBOW OR TEE AND SIMILAR SIZE.
- 6. DO NOT USE BRANCH LINES TO BRACE MAIN LINES.
- PROVIDE FLEXIBILITY IN JOINTS WHERE PIPES PASS THROUGH BUILDING SEISMIC OR EXPANSION JOINTS, OR WHERE RIGIDLY SUPPORTED PIPES CONNECT TO EQUIPMENT WITH VIBRATION ISOLATORS.
- AT VERTICAL CONDUIT AND BUSWAY RISERS, WHEREVER POSSIBLE, SUPPORT OF WEIGHT OF THE RISER AT A POINT OR POINTS ABOVE THE CENTER OF GRAVITY OF THE RISER. PROVIDE LATERAL GUIDES AT THE TOP AND BOTTOM OF THE RISER, AND AT INTERMEDIATE POINTS NOT TO EXCEED 30'-0" ON CENTER.
- PROVIDE LARGE ENOUGH CONDUIT SLEEVES THROUGH WALLS OR FLOORS TO ALLOW FOR ANTICIPATED DIFFERENTIAL MOVEMENTS.
- 10. DO NOT FASTEN ONE RIGID CONDUIT OR BUSWAY SYSTEM TO TWO DISSIMILAR PARTS OF A BUILDING THAT MAY RESPOND IN A DIFFERENT MODE DURING AN EARTHQUAKE: FOR EXAMPLE, A WALL AND A ROOF.
- 11. REFER TO SPECIFICATIONS AND MANUFACTURER'S LITERATURE FOR ADDITIONAL REQUIREMENTS.





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date January 04, 2017

Donald L. Welch

Architect

HE DESIGNS SHOWN AND DESCRIBED HEREI

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for New

**Brighton** 

Recovery

Campus

4905, 4911, 4915, 4925, 4931, & 4953 South 900

Salt Lake County, Utah

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project:

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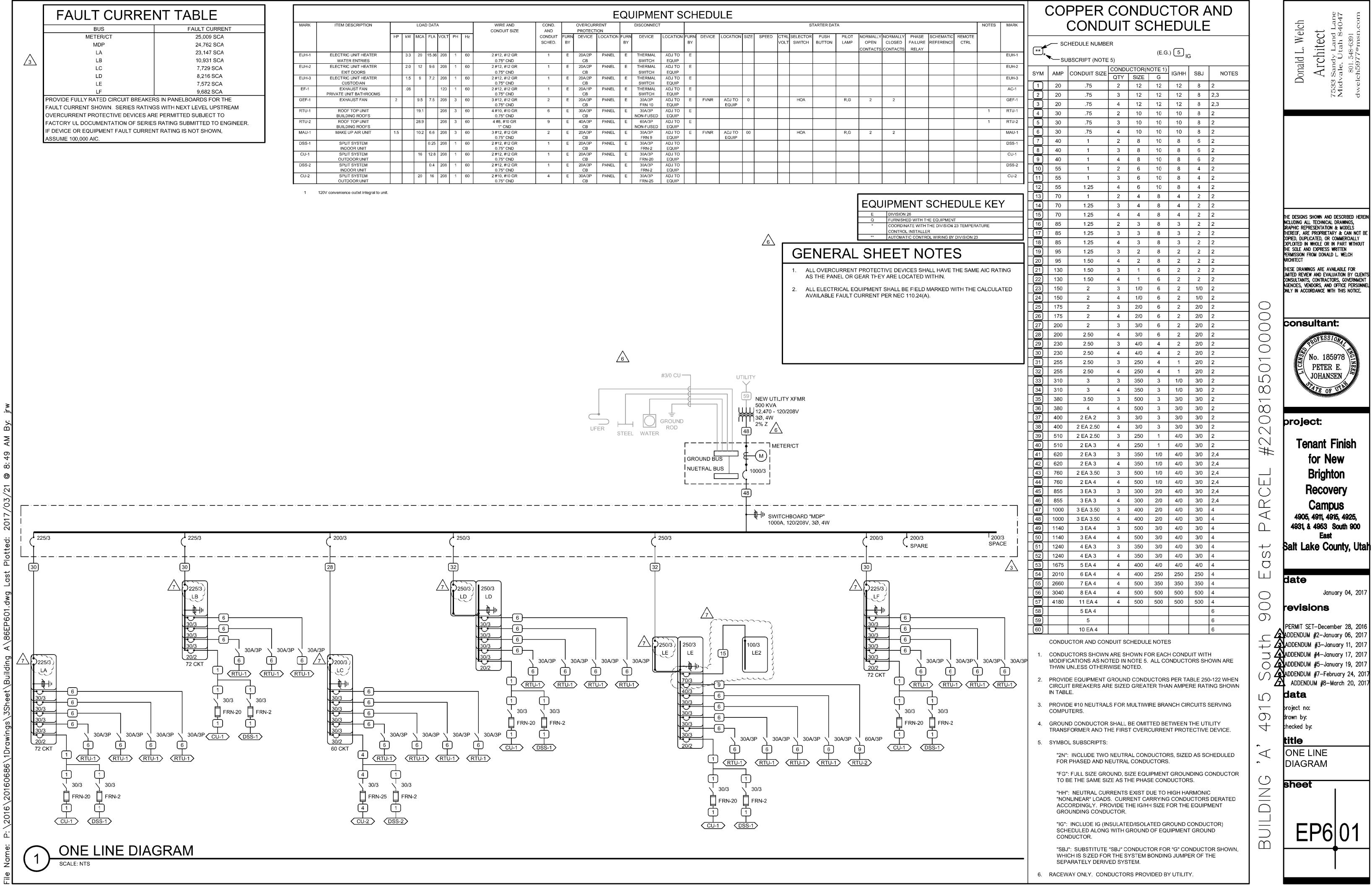
PERMIT SET-December 28, 201

data

drawn by: checked by:

DETAILS

sheet



						<b>△DISTRIBUTI</b>	ÔÑ	ÎΡ	ÂÑ	ÎĒL	BC	DARD "ME	)P")						
VOLT	S/PHA	SE/WIR	 !E:			MAIN SIZE & TYPE:	LOCA	TION:			<u>~~</u>	AIC RATING:	NOTES:						
120/2	08 V, 3	PH 4 W	VIRE			1000 AMP MAIN LUGS	BUILE	DING A				30,000 AIC							
ACCE	SSORI	ES:	IDEN	TIFICA	TION, (	GROUNDING BAR, INSULATED GROU	JND BA	.R											
CKT	OCP	ı	LC	DAD (k'	VA)	PANEL / EQUIPMENT	LCL	PH/	ASE LO	DAD	LCL	PANEL / EQUIPN	/IENT	LC	AD (k\	/A)	OCP	1	CKT
NO	AMP	POLE	LTG	CO	PWR		kVA	Α	В	С	kVA			LTG	CO	PWR	AMP	POLE	NO
1	200	3	1.6	7.7	17.3	LA	27.0	59.6			33.7	LD		2.9	10.9	19.2	200	3	2
-	-	-	1.5	7.9	18.5	-	28.2		54.4		27.3	-		2.9	10.1	13.6	-	-	-
-	-	-	0.0	4.8	20.8	-	25.6			58.7	33.9	-		3.0	9.6	20.5	-	-	-
3	200	3	1.3	5.9	16.9	LB	24.4	57.8			34.1	LE		1.7	9.8	22.2	200	3	4
-	-	-	1.6	6.2	14.6	-	22.8		60.3		38.3	-		1.5	10.2	26.2	-	-	-
-	-	-	0.0	6.2	20.6	-	26.8			61.0	34.5	-		1.0	7.9	25.3	-	-	-
5	200	3	1.5	9.2	10.9	LC	22.0	48.3			27.2	LF		1.8	6.2	18.7	200	3	6
-	-	-	1.2	6.6	13.4	-	21.5		48.4		27.6	-		1.6	6.5	19.1	-	-	-
-	-	-	1.4	6.8	11.7	-	20.3			46.3	26.4	-		0.0	7.5	18.9	-	-	-
7	200	3			$oxed{oxed}$	SPARE	0.0	0.0			0.0	SPACE					-	3	8
		-			$oxed{oxed}$	-	0.0		0.0		0.0	-					-		-
		-			$oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{oldsymbol{ol}}}}}}}}}}}}}}}}}}$	-	0.0			0.0	0.0	-					-		-
TOTA	LS:					CONNECTED kVA PER F	PHASE	166	163	166				CONN	ECTE	ATOT (	L kVA	495	
						CONNECTED AMPS PER F	PHASE	1381	1360	1383		CONI	NECTED AVE	RAGE	AMPS	PER P	HASE	1375	
NEC I		SIFIED I IGHTIN			ULATIO 125% =		ΑΠ	OTHE	RIOA	DS @10	00% =	328 kVA		וח	VFRSI	FIED T	OTAL	kVA =	436
		PTACLE		_						ST MO		0 kVA		AVER/					1212
		AINDEF		_						_	-	•					-		-

						^	<del>,</del>			~~	~~ <u>`</u>							
						<u></u>	PA	NA	EL	"L	<b>A</b> "}	$\frac{\sqrt{3}}{3}$						
VOLT	S/PHAS	SE/WIF	 RE:			PANEL SIZE & TYPE:	TMAIN	SIZE 8	TYPE:	<u></u>		LOCATION:	AIC R	ATING	:	NOTE	S:	
	08 V, 3					22" W x 6" D, BOLT-ON		МР МА					42,000					
ACCE	SSORI	ES:	PANE	L DIRE		Y, IDENTIFICATION, GROUNDING BA	AR, INSU	JLATE	D GRO	UND B	AR		<u> </u>					
СКТ	OCP			AD (kV		DESCRIPTION	LCL		ASE LC		LCL	DESCRIPTION	LC	AD (k\	/A)	OCP		CKT
NO	AMP	POLE	LTG	CO	PWR		kVA	Α	В	С	kVA		LTG	CO	PWR	AMP	POLE	NO
1	20	1	1.3			LIGHTING	1.6	2.3			1.0	WASHER LAUNDY A127		1.0		20	1	2
3	20	1	1.5			LIGHTING	1.9		1.9		0.4	CO LAUNDRY A127		0.4		20	1	4
5	30	2			1.3	DRYER LAUNDRY A101	1.3			2.6	1.3	DRYER LAUNDRY A127			1.3	30	2	6
7	-	-			1.3	-	1.3	2.6			1.3	-			1.3	-	-	8
9	20	1		1.0		WASHER LAUNDY A101	1.0		2.6		1.6	ROOMS A126, A125		1.4	0.2	20	1	10
11	20	1		1.4	0.2	ROOMS A103, A104	1.6			1.9	0.3	CUSTODIAN		0.2	0.1	20	1	12
13	20	1		8.0		CO ROOMS A101, A102	0.8	2.0			1.2	RM A122		1.1	0.1	20	1	14
15	20	1		0.6	0.6	WH/PUMP/FIRE COMP.	1.2		2.4		1.2	RM A119		1.1	0.1	20	1	16
17	20	1		1.1	0.1	RM A107	1.2			1.8	0.6	CO STORAGE/DINING A130		0.6		20	1	18
19	20	1		1.1	0.1	RM A110	1.2	2.1			0.9	CO FAMILY ROOM A131		0.9		20	1	20
21	20	1		1.1	0.1	RM A111	1.2		2.4		1.2	RM A118		1.1	0.1	20	1	22
23	20	1		0.9		CO RF ACCS, DINING A113	0.9			3.3	2.4	RANGE KITCHEN A132			2.4	50	2	24
25	20	1		0.6		CO FAMILY ROOM/STOR.	0.6	3.0			2.4	-			2.4	-	-	26
27	50	2			2.4	RANGE KITCHEN A115	2.4		3.4		1.0	REFRIGERATOR A132		1.0		20	1	28
29	-	-			2.4	-	2.4			2.6	0.2	CO KITCHEN A132		0.2		20	1	30
31	20	1		1.0		REFRIGERATOR A115	1.0	2.0			1.0	DISWASHER A132			1.0	20	1	32
33	20	1		0.2		CO KITCHEN A115	0.2		1.2		1.0	GARBAGE DISP. A132			1.0	20	1	34
35	20	1			1.0	DISHWASHER A115	1.0			2.9	1.9	RTU-1			1.9	30	3	36
37	20	1			1.0	GARBAGE DISP. A115	1.0	2.9			1.9	-			1.9	-	-	38
39	30	3			1.9	RTU-1	1.9		3.8		1.9	-			1.9	-	-	40
41	-	-			1.9	-	1.9			3.8	1.9	RTU-1			1.9	30	3	42
43	-	-			1.9	-	1.9	3.8			1.9	-			1.9	-	-	44
45	30	3			1.9	RTU-1	1.9		3.8		1.9	-			1.9	-	-	46
47	-	-			1.9	-	1.9			2.7	0.8	EUH-3			0.8	20	2	48
49	-	-			1.9	-	1.9	2.7			0.8	<u>-</u>			0.8	-	-	50
51	20	1			1.0	EUH-2	1.0		2.0		1.0	EUH-2			1.0	20	2	52
53	20	1			1.0	-	1.0			2.0	1.0	<u>-</u>			1.0	-	-	54
55	20	1			1.7	EUH-1	1.7	2.0			0.4	EGRESS LIGHTING	0.3			20	1	56
57	20	1			1.7	-	1.7		3.4		1.7	CU-1/DSS-1			1.7	20	2	58
59	20	1		0.4		KITCHEN ISLAND CO	0.4			2.1	1.7	-			1.7	-	-	60
61	20	1		0.8		RTU CO's	8.0	1.2			0.4	KITCHEN ISLAND CO		0.4		20	1	62
63	20	1			1.0	SMOKE DETECTORS	1.0		1.0		0.0	SPARE				20	1	64
65	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	66
67	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	68
69	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	70
71	20	1				SPARE	0.0			0.0	0.0	SPARE		<u> </u>		20	1	72
TOTA	LS:					CONNECTED kVA PER I		27	28	26			CONN				80	
				<u> </u>		CONNECTED AMPS PER	PHASE	221	232	213		CONNECTED AV	/ERAGE	AMPS	PER P	HASE	222	
NEC [	DIVERS												_	<b>_</b>				
			ING 3k	_		4 kVA			R LOAI	_		57 kVA		IVERSI				77
	RECEP			_		10 kVA	259	% OF L	ARGES	ST MO	IOR =	2 kVA	AVER	AGE AI	MPS PE	R PHA	SE =	215
	REM	IAINDE	ER 10k\	VA @	50% =	5 kVA												

		SE/WIF PH 4 V				PANEL SIZE & TYPE: 22" W x 6" D, BOLT-ON		SIZE 8 MP MA		:		LOCATION:	AIC R	ATING	í:	NOTE	S:	
	SSOR			I DIDE	CTOD	Y, IDENTIFICATION, GROUNDING B				IIND B	AD SI	IREEED LUGS	22,00	U AIC				-
CKT				AD (k\		DESCRIPTION	LCL		ASE LO		LCL	DESCRIPTION	1 10	DAD (k\	<u></u>	ОСР	,	-
NO		POLE	_	CO	PWR	DESCRIPTION	kVA	A	В	С	kVA	DESCRIPTION	LTG		PWR	AMP		-
1	20	1	1.3	- 00	FVVIX	LIGHTING	1.6	2.6	Ь .		1.3	DRYER LAUNDRY B125	1 - 10		1.3	30	2	_
3	20	1	1.3			LIGHTING	1.6	2.0	2.6		1.3	DRIER LAUNDRI B125			1.3	30		-
5	30	2	1.5		1.3	DRYER LAUNDRY B101	1.3		2.0	1.7	0.4	CO LAUNDRY B125		0.4	1.3	20	1	-
7	30				1.3	DICTER EAGINDICT BTOT	1.3	2.3		1.7	1.0	WASHER B125		1.0	+	20	1	-
9	20	1		1.4	0.2	ROOMS B104, B105	1.6	2.5	3.2		1.6	ROOMS B12, B123		1.4	0.2	20	1	-
11	20	1		1.0	0.2	WASHER LAUNDRY B101	1.0		3.2	2.3	1.3	WH/PUMP/FIRE COMP		1.3	10.2	20	1	-
13	20	1		0.8		CO ROOMS B101, B102	0.8	2.0		2.0	1.2	ROOM B119		1.1	0.1	20	<u> </u>	-
15	20	1		0.2	0.1	CO & EF-1 CUST B106	0.3	2.0	1.5		1.2	ROOM B117		1.1	0.1	20	1	-
17	20	1		1.1	0.1	ROOM B108	1.2		1.0	2.2	1.0	REFRIGERATOR B129		1.0	<del>  0.1</del>	20	1	-
19	20	1		1.1	0.1	ROOM B111	1.2	1.7		2.2	0.5	CO DINING B127		0.5	$\vdash$	20	<u> </u>	-
21	20	1		0.5	0.1	CO FAMILY RM B114	0.5	1.7	1.3		0.8	CO FAMILY/STOR. B128,B121		0.8	_	20	1	-
23	20	1		0.8		CO DINING RM B113	0.8		1.0	3.2	2.4	RANGE B129		0.0	2.4	50	2	-
25	20	1		1.0		REFRIGERATOR B115	1.0	3.4		0.2	2.4	-			2.4		<del>-</del>	-
27	50	2		1.0	2.4	RANGE B115	2.4	0.4	3.4		1.0	GARBAGE DISP.			1.0	20	1	-
29	_	-			2.4	-	2.4		0.7	3.4	1.0	DISHWASHER B129			1.0	20	1	-
31	20	1		0.2	2.7	CO KITCHEN B115	0.2	0.4		0.4	0.2	CO KITCHEN B129		0.2	<del>                                     </del>	20	<u> </u>	-
33	20	1		0.2	1.0	DISHWASHER B115	1.0	0.4	2.9		1.9	RTU-1		0.2	1.9	30	3	-
35	20	1			1.0	GARBAGE DISP. B115	1.0		2.0	2.9	1.9				1.9	_	<del>-</del>	-
37	30	3			1.9	RTU-1	1.9	3.8		2.0	1.9	_			1.9	_	<u> </u>	-
39	-	_			1.9	-	1.9	0.0	2.9		1.0	EUH-2			1.0	20	2	
41	<u> </u>	_			1.9	_	1.9			2.9	1.0	_			1.0		<del>-</del>	-
43	30	3			1.9	RTU-1	1.9	2.7			0.8	EUH-3			0.8	20	2	-
45	-	_			1.9	-	1.9		2.7		0.8	_			0.8		<del>-</del>	-
47	_	_			1.9	-	1.9			3.6	1.7	EUH-1			1.7	20	<del> </del>	-
49	20	2			0.8	EUH-3	0.8	2.5		0.0	1.7	_			1.7	-	_	-
51	-	-			0.8	-	0.8		1.1		0.4	EGRESS LIGHTING	0.3			20	1	-
53	20	2			1.0	EUH-2	1.0			2.7	1.7	CU-1/DSS-1			1.7	20	2	-
55	-	-			1.0	-	1.0	2.7			1.7	-			1.7	-	-	-
57	20	1		0.4		KITCHEN ISLAND CO	0.4		0.8		0.4	KITCHEN ISLAND CO		0.4		20	1	-
59	20	1		0.6		RTU CO'S	0.6			1.6	1.0	SMOKE DETECTORS			1.0	20	1	-
61	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	
63	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	
65	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	
67	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	
69	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	
71	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	
ТОТА	LS:					CONNECTED kVA PER	PHASE	24	22	26			CONN	ECTE	D TOTA	L kVA	73	
						CONNECTED AMPS PER	PHASE	201	187	221		CONNECTED AV	ERAGE	AMPS	PER F	HASE	203	3
NEC [	DIVERS	SIFIED	LOAD	CALCL	JLATIO	NS												•
		LIGHTI	NO SIA	/A @4	050/	4 kVA		OTI IE	D I O ( )	DS @10	000/	52 kVA		N/EDO	IEIED T	OTAL I	L-3. / A	

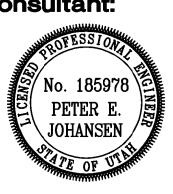
						<u>/₇\</u>	KP/		<u>L</u> L	"L	<b>じ</b> "}	2						
VOLT	S/PHAS	SE/WIF	RE:			PANEL SIZE & TYPE:	MAIN	SIZE &	TYPE:	:		LOCATION:	AIC R	ATING	:	NOTE	S:	
120/20	08 V, 3	PH 4 V	VIRE			22" W x 6" D, BOLT-ON	200 A	MP MA	IN CB				10,000	O AIC				
ACCE	SSORI	ES:	PANE	L DIRE	CTORY	/, IDENTIFICATION, GROUNDING B	AR, INSU	JLATE	O GRO	UND B	AR, SU	BFEED LUGS						
CKT	OCP		LO	AD (kV	'A)	DESCRIPTION	LCL	PH/	ASE LC	)AD	LCL	DESCRIPTION	LC	AD (k\	/A)	OCP		Ck
NO	AMP	POLE	LTG	CO	PWR		kVA	Α	В	С	kVA		LTG	CO	PWR	AMP	POLE	N
1	20	1	1.5			LIGHTING	1.9	2.3			0.8	CO FIRE RM/FIRE COMP		0.2	0.6	20	1	2
3	20	1	1.2			LIGHTING	1.5		2.0		0.8	GROUP ROOM C127		0.8		20	1	4
5	20	1	1.0			LIGHTING	1.3			1.8	0.8	GROUP ROOM C126		0.8		20	1	6
7	20	1		8.0		CO RECPTION C122	0.8	2.0			1.2	GROUP ROOM C130,128		1.2		20	1	8
9	20	1		1.6		CO OFFICES C117, C116	1.6		2.4		8.0	GROUP ROOM C131		0.8		20	1	10
11	20	1		1.4		CO OFFICES C115, C114	1.4			2.4	1.0	WH/PUMP/CO CUST C133		0.2	0.8	20	1	12
13	20	1		8.0		CO CUBICLES	0.8	1.6			8.0	CO CUBICLES		0.8		20	1	14
15	20	1		8.0		CO OFFICE C106	0.8		1.8		1.0	COPIER COPY C121		1.0		20	1	16
17	20	1		1.4		CO OFFICES C107, C108	1.4			2.8	1.4	CO C129, C125, C132		1.2	0.2	20	1	18
19	20	1		1.0		REFRIGERATOR C113	1.0	2.4			1.4	CO CORR C118, 109, 102		1.4		20	1	20
21	20	1		0.2		CO BREAK ROOM C113	0.2		2.1		1.9	RTU-1			1.9	30	3	2
23	20	1		0.2		CO BREAK ROOM C113	0.2			2.1	1.9	-			1.9	-	-	2
25	20	1		1.0		CO MEDS C112	1.0	2.9			1.9	-			1.9	-	-	20
27	20	1		0.4		CO MEDS C112	0.4		2.3		1.9	RTU-1			1.9	30	3	28
29	20	1		8.0		CO BREAK ROOM C113	0.8			2.7	1.9	-			1.9	-	-	30
31	20	1		0.4		CO LAB C111	0.4	2.3			1.9	-			1.9	-	-	32
33	20	1		0.2		CO LAB C111	0.2		1.2		1.0	EUH-2			1.0	20	2	34
35	20	1		1.0		REFRIGERATOR C111	1.0			2.0	1.0	-			1.0	-	-	36
37	30	3			1.9	RTU-1	1.9	3.6			1.7	EUH-1			1.7	20	2	38
39	-	-			1.9	-	1.9		3.6		1.7	-			1.7	-	1	40
41	-	-			1.9	-	1.9			2.3	0.5	EGRESS LIGHTING	0.4			20	1	42
43	30	3			1.9	RTU-1	1.9	2.5			0.6	CO ELEC C115A		0.6		20	1	44
45	-	-			1.9	-	1.9		4.0		2.1	CU-2/DSS-2			2.1	30	2	46
47	-	-			1.9	-	1.9			4.0	2.1	-			2.1	-	-	48
49	20	2			1.0	EUH-2	1.0	1.6			0.6	RTU CO'S		0.6		20	1	50
51	-	-			1.0	<del>-</del>	1.0		2.4		1.4	CO CUBICLES		1.4		20	1	5
53	20	1				SPARE	0.0			1.4	1.4	CO CUBICLES		1.4		20	1	54
55	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	56
57	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	58
59	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	60
TOTA	LS:					CONNECTED KVA PER CONNECTED AMPS PER			22 182	21 179	ARC	CONNECTED AV	CONN ERAGE					
	DIVERS	LIGHTI TACLE	NG 4k\ ES 10k\	/A @12 /A @10	25% =		ALL	OTHE	R LOAI	DS @1	00% =	36 kVA 0 kVA	DI AVERA		FIED T MPS PE			58 16

#2208185 ARCEL ast 900 491  $\checkmark$ BUILDING

Donald L. Welch Architect s Sandy Land L vale, Utah 840 801. 548-6391 lch5977@msn.c

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consultant:



project:

for New **Brighton** Recovery Campus 4905, 4911, 4915, 4925, 4931, & 4953 South 900

Salt Lake County, Utah

January 04, 2017

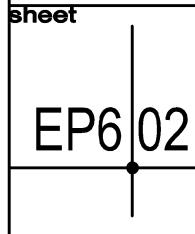
revisions

PERMIT SET-December 28, 2016
ADDENDUM #2-January 06, 2017 ADDENDUM #3-January 11, 2017 ADDENDUM #4-January 17, 2017
ADDENDUM #5-January 19, 2017 ADDENDUM #7-February 24, 2017
ADDENDUM #8-March 20, 2017

data

drawn by: checked by:

PANEL SCHEDULES



VOLT	S/PHA	SE/WIF	RE:			PANEL SIZE & TYPE:	MAIN	SIZE 8	TYPE	:		LOCATION:	AIC R	ATING	i:	NOTE	S:	
120/2	08 V, 3	PH 4 V	VIRE			22" W x 6" D, BOLT-ON	100 A	MP MA	IN LUC	S			10,000	O AIC				
	SSOR		PANE	L DIRE	CTOR	Y, IDENTIFICATION, GROUNDING B	AR, INSI	JLATE	O GRO	UND B	AR, SL	JBFEED LUGS						
CKT	OCP		_	AD (k\		DESCRIPTION	LCL	PH	ASE LC	DAD	LCL	DESCRIPTION		AD (k	<del>,                                    </del>	OCP		СКТ
NO	-	POLE	LTG	CO	PWR		kVA	Α	В	С	kVA		LTG	co	PWR		POLE	
1	20	2			0.8	EUH-3	0.8	1.0			0.2	CO SERVING E140		0.2		20	1	2
3	-	-			0.8	-	0.8		1.0		0.2	CO SERVING E140		0.2		20	1	4
5	20	2			1.0	EUH-2	1.0			2.0	1.0	REFRIGERATOR E140		1.0		20	1	6
7	-	-			1.0	-	1.0	2.1			1.1	GATHERING/LEARN E136		1.1		20	1	8
9	20	2			0.8	EUH-3	0.8		1.6		0.8	CO A/V E139		0.8		20	1	10
11	-	-			0.8	-	0.8			0.8	0.0	SPARE				20	1	12
13	20	2			0.8	EUH-3	0.8	0.8			0.0	SPARE				20	1	14
15	-	-			0.8	-	0.8		8.0		0.0	SPARE				20	1	16
17	20	2			1.7	EUH-1	1.7			1.7	0.0	SPARE				20	1	18
19	-	-			1.7	-	1.7	1.7			0.0	SPARE				20	1	20
21	20	2			1.0	EUH-2	1.0		1.0		0.0	SPARE				20	1	22
23	-	-			1.0	-	1.0			1.0	0.0	SPARE				20	1	24
25	20	1		0.2	0.6	CO FIRE E135/FIRE COMP.	0.8	0.8			0.0	SPARE				20	1	26
27	20	1		1.0		DRINKING FOUNTAIN	1.0		1.0		0.0	SPARE				20	1	28
29	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	30
31	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	32
33	20	1				SPARE	0.0		0.0		0.0	SPARE				20	1	34
35	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	36
TOTA	LS:					CONNECTED kVA PER	PHASE	6	5	6			CONN	ECTE	ATOT C	L kVA	17	
						CONNECTED AMPS PER	PHASE	53	45	46		CONNECTED AV	/ERAGE	AMPS	PER P	HASE	48	
1EC I	RECE	LIGHT EPTACI	LOAD ( ING 0k) LES 5k) DER 0k)	VA @1 VA @1	25% = 00% =	NS 0 kVA 5 kVA 0 kVA		OTHE		_		13 kVA 0 kVA	DI AVERA		IFIED T MPS PI			17 48

				LIGHTING	CONTROL PANEL	SCHEDULE				
LX										
			AUTOMA	TI¢ CONTROL			OVERRIDE CON	TROL OT	HER	
RELAY	CIRCUIT	VOLTS	LOAD DESCRIPTION	ON	OFF	SCHEDULE	ON	OFF	CONTROLS	REMARKS
1	LD	120	BLDG A & B CANOPY LTG	EPC	EPC				EPC	
2	LD	120	BLDG E & F CANOPY LTG	EPC	EPC				EPC	
3	LD	120	BLDG C & D CANOPY LTG	EPC	EPC				EPC	
4	LD	120	PARKING LOT LIGHTING	EPC	EPC				EPC	
5		120	SPARE							
6		120	SPARE							
		•					•	-	•	

BH = BUSINESS HOURS PER SCHEDULE (EXAMPLE SCHEDULE 1: ON AT 6:00 AM / OFF AT 8:00 PM) - UP TO 6 SCHEDULES PER PANEL AVAILABLE AS SELECTED BY OWNER

SCHEDULE BH-1: LIGHTS ON 7:00 AM / LIGHTS OFF 9:00 PM/MONDAY - FRIDAY EXCLUDING HOLIDAYS

SCHEDULE BH-2: LIGHTS ON 7:00 AM / LIGHTS OFF 10:00 PM / MONDAY - FRIDAY EXCLUDING HOLIDAYS SCHEDULE BH-3: LIGHTS ON 7:00 AM/LIGHTS OFF 11:PM / 7 DAYS/WEEK

SCHEDULE BH-4: ON CONTROL BY EPC / OFF 11:00 PM

SCHEDULE BH-5: LIGHT ON 7:00 AM CONTROLLED BY IPC OFF 7:00 PM

SCHEDULE BH-6: NOT USED EPC = EXTERIOR PHOTO CELL

IPC(XXX) = INTERIOR PHOTO CELL. PROVIDE DIMMING CONTROL

LC - OVERRIDE CONTROL WALL SWITCH CONTROL; PUSH ON TURNS CIRCUIT ON FOR AUTO OFF AFTER 30 MINUTES

						<u>/</u> 7\	<u> </u>	<u> </u>	$\overline{}$	$\overline{}$	<u> </u>	<u>/</u> 3\						
		SE/WIF 3 PH 4 V				PANEL SIZE & TYPE: 22" W x 6" D, BOLT-ON		SIZE & MP MA				LOCATION:	AIC R.	ATING DAIC		NOTE	S:	
ACCE	SSOF	IES:	PANE	L DIRE	CTOR'	Y, IDENTIFICATION, GROUNDING BA	AR, INSI	JLATEI	O GRO	UND B	AR, SU	BFEED LUGS						
СКТ	OCI	)	LO	AD (kV	/A)	DESCRIPTION	LCL	PHA	ASE LC	AD	LCL	DESCRIPTION	LO	AD (k\	/A)	OCP		СКТ
NO	AMP	POLE	_		PWR		kVA	A	В	С	kVA		LTG	<u> </u>		AMP	POLE	NO
1	20	T 1	1.2			LIGHTING	1.5	2.2		-	1.0	WASHER LAUNDRY E127		1.0		20	1	2
3	20	1	1.5			LIGHTING	1.9		2.8		1.3	DRYER LAUNDRY E127			1.3	30	2	4
5	20	1	1.0			LIGHTING	1.3			2.3	1.3	-			1.3	-		6
7	30	2			1.3	DRYER LAUNDRY E101	1.3	2.0			0.7	CO E134, E127		0.6	0.1	20	1	8
9	_	<del>                                     </del>			1.3	-	1.3		2.9		1.6	ROOMS E125,E126		1.4	0.2	20	1	10
11	20	1		1.4	0.2	ROOMS E103, E104	1.6			2.8	1.2	ROOM E119		1.1	0.1	20	1	12
13	20	<del>                                     </del>		1.0	0.2	WASHER LAUNDRY E101	1.0	2.2		2.0	1.2	ROOM E122		1.1	0.1	20	1	14
15	20	1		0.6		CO ROOMS E101,E102	0.6	2.2	0.9		0.3	CO/EF-1 CUSTODIAN E124		0.2	0.1	20	1	16
17	20	<del>                                     </del>		0.0	0.8	WH/PUMP/CO STORAGE	1.0		0.0	2.2	1.2	ROOM E118		1.1	0.1	20	1	18
19	20	<del>                                     </del>		1.1	0.0	ROOM E107	1.2	2.1		2.2	0.9	CO FAMILY ROOM E131	+	0.9	0.1	20	1	20
21	20	<del>                                     </del>		1.1	0.1	ROOM E110	1.2	2.1	1.8		0.6	CO DINING ROOM E130	+	0.6		20	1	22
23	20	1 1		1.1	0.1	ROOM E111	1.2		1.0	2.2	1.0	REFRIGERATOR E132	+	1.0		20	1	24
25	20	1		1.0	U. I	CO DINING E113	1.0	1.2		۷.۷	0.2	CO KITCHEN E132	+	0.2		20	1	26
25	20	1		0.6		CO DINING E113  CO FAMILY E114	0.6	1.2	3.0		2.4	RANGE E132	+	U.Z	2.4	<u>∠∪</u> 50	2	28
29	20	1		1.0		REFRIGERATOR E115	1.0		ა.0	3.4	2.4	RANGE E 132	+		2.4	υU		30
		<u> </u>		1.0	2.4			2.4		3.4		- DICUMA CHED E422				- 20	-	
31	50	2			2.4	RANGE E115	2.4	3.4	0.4		1.0	DISHWASHER E132			1.0	20	1	32
33	-	-			2.4	-	2.4		3.4		1.0	GARBAGE DISP E132			1.0	20	1	34
35	20	1			1.0	GARBAGE DISPOSAL	1.0			2.9	1.9	RTU-1			1.9	30	3	36
37	20	1			1.0	DISWASHER E115	1.0	2.9			1.9	-			1.9	-	-	38
39	20	1		0.2		CO KITCHEN E115	0.2		2.1		1.9	-			1.9	-	-	40
41	30	3			1.9	RTU-1	1.9			3.8	1.9	RTU-1			1.9	30	3	42
43	-	-			1.9	-	1.9	3.8			1.9	-			1.9	-	-	44
45	-	-			1.9	-	1.9		3.8		1.9	-			1.9	-	-	46
47	30	3			1.9	RTU-1	1.9			3.8	1.9	RTU-2			1.9	40	3	48
49	-	-			1.9	-	1.9	3.8			1.9	-			1.9	-	-	50
51		-			1.9	-	1.9		3.8		1.9	-			1.9	-	-	52
53	20	2			0.8	EUH-3	0.8			1.8	1.0	EUH-2			1.0	20	2	54
55	-	-			0.8	-	0.8	1.8			1.0	-			1.0	-	-	56
57	20	2			1.0	EUH-2	1.0		1.8		8.0	EUH-3			8.0	20	2	58
59	-	-			1.0	-	1.0			1.8	0.8	-			0.8	-	-	60
61	20	1	0.5			EGRESS LIGHTS	0.6	0.9			0.4	KITCHEN ISLAND CO		0.4		20	1	62
63	20	2			1.7	CU-1/DSS-1	1.7		2.7		1.0	SMOKE DETECTORS			1.0	20	1	64
65	_	-			1.7	-	1.7			1.7	0.0	SPARE				20	1	66
67	20	1		1.0		RTU CO'S	1.0	1.0			0.0	SPARE				20	1	68
69	20	1		0.4		KITCHEN ISLAND CO	0.4		0.4		0.0	SPARE				20	1	70
71	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	72
73	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	74
75	20	1				SPARE	1.7		0.0		0.0	SPARE				20	1	76
77	20	1				SPARE	1.7			0.0	0.0	SPARE				20	1	78
79	20	1				SPARE	0.0	6.4			6.4	LE2		1.5	4.9	70	3	80
81	20	1				SPARE	0.0		8.5		8.5	-	1	5.1	3.4	-	-	82
83	20	1				SPARE	0.0			5.5	5.5	-		1	4.5	-	-	84
TOTA		1	1			CONNECTED kVA PER	PHASE	34	38	34			CONN	ECTED		L kVA	106	ı
	•					CONNECTED AMPS PER			316	285		CONNECTED AV						
NEC	DIVER	SIFIED	LOAD	CALCU	JLATIO													
		LIGHT				5 kVA	ALL	OTHE	R LOAE	OS @10	00% =	74 kVA	DI	VERSI	FIED T	OTAL I	VA =	98
	RECE	PTACLI		_		10 kVA		% OF L		_		0 kVA	AVER/					
				/A @ :		9 kVA								• •				- · <b>-</b>

120/2	S/PHAS 08 V, 3 SSORI	PH 4 W	/IRE	DIRE	CTOR	PANEL SIZE & TYPE: 22" W x 6" D, BOLT-ON Y, IDENTIFICATION, GROUNDING BA	225 A	SIZE & MP MA JLATEI	IN CB		AR	LOCATION: 6	AIC R 10,00	ATING 0 AIC	:	NOTE	S:	
CKT	OCP			AD (kV		DESCRIPTION	TLCL		ASE LC		LCL	DESCRIPTION	Τ ι	DAD (k\	/A)	OCP		СК
NO		POLE			PWR	DESCRIPTION	kVA	<b>—</b>	В	С	kVA	DESCRIPTION	LTG	<del>, `</del>	PWR	AMP		NO
	_	PULE		CO	FVVK	LICHTING		Α	Ь		_	DDVED LAUNDDV E407	LIG					
1	20	1	1.5			LIGHTING	1.9	2.8			1.3	DRYER LAUNDRY F127			1.3	30	2	2
3	20	1	1.6		4.0	LIGHTING	2.0		2.9		1.3	-		4.4	1.3	-	-	4
5	30	2			1.3	DRYER LAUNDRY F101	1.3	0.0		2.9	1.6	ROOMS F125,F126		1.4	0.2	20	1	6
7	-	-		4.4	1.3	-	1.3	2.3			1.0	WASHER LAUNDRY F127		1.0		20	1	8
9	20	1		1.4	0.2	ROOMS F103,F104	1.6		2.0	- 0	0.4	CO LAUNDRY F127		0.4	0.4	20	1	10
11	20	1		1.0		WASHER LAUNDRY F101	1.0	4.0		2.2	1.2	ROOM F119		1.1	0.1	20	1	12
13	20	1		0.6	0.4	CO ROOMS F101,F102	0.6	1.8	4.5		1.2	ROOM F122		1.1	0.1	20	1	14
15	20	1		1.1	0.1	ROOM F110	1.2		1.5		0.3	CO/EF-1 CUST. F124		0.2	0.1	20	1	16
17	20	1		1.1	0.1	ROOM F107	1.2			2.1	0.9	CO DINING F130		0.9		20	1	18
19	20	1		0.6	0.6	WH/PUMP/FIRE COMP.	1.2	1.8			0.6	CO FAMILY F131		0.6	- 1	20	1	20
21	20	1		1.1	0.1	ROOM F111	1.2		2.4	4.0	1.2	ROOM F118		1.1	0.1	20	1	22
23	20	1		0.6		CO DINING F113	0.6			1.6	1.0	REFRIGERATOR F132		1.0		20	1	24
25	20	1		0.9		CO FAMILY F114	0.9	3.3			2.4	RANGE F132			2.4	50	2	26
27	20	1		1.0		REFRIGERATOR F115	1.0		3.4		2.4	-			2.4	-	-	28
29	50	2			2.4	RANGE F115	2.4			3.4	1.0	GARBAGE DISP. F132			1.0	20	1	30
31	-	-			2.4	ı	2.4	3.4			1.0	DISHWASHER F132			1.0	20	1	32
33	20	1			1.0	GARBAGE DISP. F115	1.0		1.2		0.2	KITCHEN CO F132		0.2		20	1	34
35	20	1			1.0	DISHWASHER F115	1.0			2.9	1.9	RTU-1			1.9	30	3	36
37	20	1		0.2		CO KITCHEN F115	0.2	2.1			1.9	-			1.9	-	-	38
39	30	3			1.9	RTU-1	1.9		3.8		1.9	ı			1.9	-	-	40
41	-	-			1.9	1	1.9			3.8	1.9	RTU-1			1.9	30	3	42
43	-	-			1.9	-	1.9	3.8			1.9	-			1.9	-	-	44
45	30	3			1.9	RTU-1	1.9		3.8		1.9	-			1.9	-	-	46
47	-	-			1.9	-	1.9			2.9	1.0	EUH-2			1.0	20	2	48
49	-	-			1.9	-	1.9	2.9			1.0	-			1.0	-	-	50
51	20	2			1.7	EUH-1	1.7		2.5		0.8	EUH-3	1		0.8	20	2	52
53	-	-			1.7	<u>-</u>	1.7			2.5	0.8	-			0.8	-	-	54
55	20	2			1.0	EUH-2	1.0	1.3			0.4	EGRESS LIGHTS	0.3			20	1	56
57	-	-			1.0	-	1.0		2.7		1.7	CU-1/DSS-1			1.7	20	2	58
59	20	1		0.4		KITCHEN ISLAND CO	0.4			2.1	1.7	-			1.7	-	-	60
61	20	1		8.0		RTU CO'S	0.8	1.2			0.4	KITCHEN ISLAND CO	1	0.4		20	1	62
63	20	1				SPARE	0.0		1.0		1.0	SMOKE DETECTORS			1.0	20	1	64
65	20	1				SPARE	0.0			0.0	0.0	SPARE	1			20	1	66
67	20	1				SPARE	0.0	0.0			0.0	SPARE				20	1	68
69	20	1				SPARE	0.0		0.0		0.0	SPARE	1			20	1	70
71	20	1				SPARE	0.0			0.0	0.0	SPARE				20	1	72
TOTA	LS:					CONNECTED KVA PER CONNECTED AMPS PER		27	27	26			CONN	IECTE	ATOT (	L kVA	80	

25% OF LARGEST MOTOR = 0 kVA

RECEPTACLES 10kVA @100% =

REMAINDER 10kVA @ 50% =

10 kVA

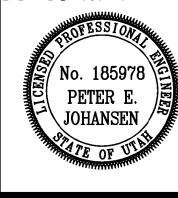
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Architect

Donald L. Welch

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consultant:



project:

for New **Brighton** Recovery Campus 4905, 4911, 4915, 4925, 4931, & 4953 South 900

Salt Lake County, Utah

January 04, 2017

PERMIT SET-December 28, 2016 ADDENDUM #3-January 11, 2017 ADDENDUM #4-January 17, 2017

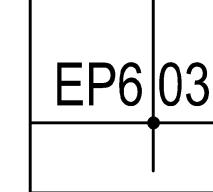
ADDENDUM #5-January 19, 2017 ADDENDUM #7-February 24, 2017
ADDENDUM #8-March 20, 2017

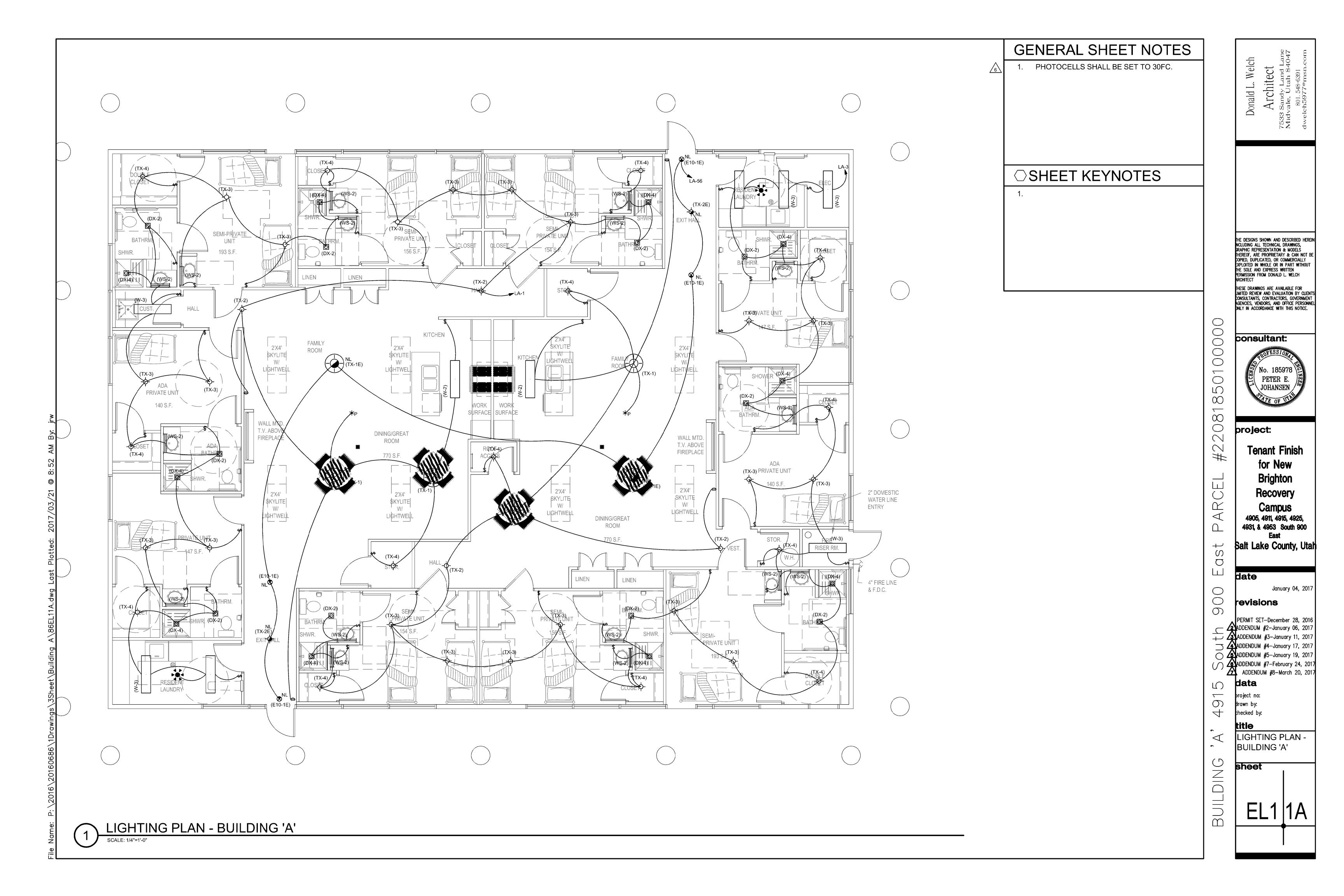
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SCHEDULES

sheet

AVERAGE AMPS PER PHASE = 211





## LIGHTING FIXTURE SCHEDULE

NOTE TO BIDDERS: COMPLY WITH THE SPECIFICATIONS. REFER TO SPECIFICATIONS FOR IMPORTANT TECHNICAL REQUIREMENTS FOR LIGHTING FIXTURES, BALLASTS, AND LAMPS. THE CATALOG NUMBERS LISTED BELOW HAVE BEEN CAREFULLY PREPARED TO ASSIST BIDDERS IN SELECTING PRODUCTS TO ACHIEVE THE DESIGN CONCEPT, HOWEVER, PRIOR TO BIDDING, EACH MANUFACTURER SHALL COMPARE THE CATALOG NUMBERS SHOWN WITH THE DESCRIPTION AND REQUIREMENTS ON THE DRAWINGS, AND SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. SPECIFICALLY INCLUDED IN THIS EVALUATION SHALL BE THE VERIFYING OF PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS. NO ALLOWANCE OR REDRESS WILL BE ALLOWED FOR DISCREPANCIES THAT WERE NOT REPORTED TO THE ARCHITECT/ENGINEER IN TIME FOR CORRECTION OR CLARIFICATION BEFORE THE BID. THE REPORTING OF ANY AMBIGUITY IS THE RESPONSIBILITY OF THE BIDDER. PROVIDE UNIT PRICES AND FIXTURE BRAND SELECTED FOR ADD/DELETE CHANGES FOR EACH FIXTURE TYPES SHOWN WITHIN 48 BUSINESS HOURS OF THE BID DATE. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY DISQUALIFY THE PRODUCTS AND EMPOWER THE ENGINEER TO DETERMINE FAIR VALUE FOR FIXTURE AND INSTALLATION CHANGES, WITHOUT FURTHER INPUT FROM THE CONTRACTOR OR INSTALLER. SUBMITTAL PACKAGE SHALL INCLUDE LAMP MANUFACTURER AND CATALOG NUMBER ON EACH FIXTURE SHEET. ON ALL PENDANT MOUNTED FIXTURES, PROVIDE A SECOND SET OF PENDANTS, OF A DIFFERENT LENGTH, AS DIRECTED BY THE ARCHITECT/ENGINEER, PROVIDED AND INSTALLED AT NO ADDITIONAL CHARGE. ALL FIXTURES SHALL BE APPROVED BY UL OR ANOTHER ACCEPTABLE TESTING LAB FOR THE PURPOSE INTENDED AND WITH THE LAMP AND BALLAST PROPOSED. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES. UNIVERSAL VOLTAGE (120/277)

	BALLAST	S REQUIRED	UNLESS NOTED OTHERWISE. DIMENSION	SEQUENCE =	(LENGTH	X WIDTH X D	EPTH) IN INCHES.			
			FIXTURE CHARACTERISTICS							
			BODY / AIR / MOUNTING / DOOR							
	SYMBOL	MARK	LENS/LOUVER/REFLECTOR/OTHER	LAMP	WATTS	VOLTS	MANUFACTURER	CATALOG NUMBER	NO	TES
		DX	LED DOWNLIGHT; THERMALLY PROTECT	ED HOUSING	S: TO ACCO	MMODATE M	IULTIPLE TRIMS AND	REFLECTOR ASSEMBLIES		
			FOR LAMPS AS LISTED BELOW; ELECTRO	ONIC BALLAS	TS; LOW IR	IDESCENT R	EFLECTOR FINISH (E'	VEN IF NOT SHOWN IN CATALOG #);		
			SELF FLANGING TRIM UNLESS NOTED.							
		DX-1	RECESSED DOWNLIGHT; VERTICAL,	1500 LU	27W	120/277V	PEACHTREE	6BLRD-IC-18-35K-80-SH-TRW-120		
7			FULL ON AT 0 VOLTS CONTROL INPUT	3500k				OR EQUIVALENT		
			6"							
			3500 K							
			DIMMALE 0-10V							

DX-2	RECESSED DOWNLIGHT; VERTICAL,	2000 LI	54W	120/277V	PEACHTREE	6BLRD-IC-20-35K-80-SH-RCA-120
	FULL ON AT 0 VOLTS CONTROL INPUT	3500k				OR EQUIVALENT
	6"					
	3500K, 90 CRI					
	2000 LUMENS					
	DIMMABLE 0-10V					
	DAMP LOCATION					
DX-4	RECESSED DOWNLIGHT; LED	1250 L	27W	120/277V	PEACHTREE	6BLRD-IC-13-35K-80-SH-RCA-WL-120
	6" SHOWER LIGHT	3500k			EATON	SLD612-80-35-WH WITH H7ICAT HOUSING
	4000k					OR EQUIVALENT

Е	E SUFFIX INDICATES THAT FIXTURE IS PROVIDED WITH AN EMERGENCY BATTERY PACK TO PROVIDE POWER LED LAMPS,
	TO PROVIDE 90 MINUTES OF EMERGENCY POWER TO FIXTURE. MINIMUM LIGHT OUTPUT FOR TYPICAL 4' LAMP SHALL
	BE 1100 LUMENS OR HIGHER;UNIVERSAL TRANSFORMER FOR 120 OR 277 VOLTS; LOW VOLTAGE PROTECTION, COMBINATION
	TEST SWITCH AND AC "ON" INDICATOR; 10 YEAR PRO-RATA WARRANTY; INSTALL TEST SWITCH IN A MANNER THAT REQUIRES
	NO DIGAGOEMBLY FOR TECTINO

	TEST SWITCH AND AC "ON" INDICATOR; 10 YEAR PRO	-RATA WAF	RRANTY; INS	TALL TEST SWITCH IN	I A MANNER THAT REQ
	NO DISASSEMBLY FOR TESTING.				
E	EMERGENCY BATTERY PACK.	3W	120/277V	DUAL-LITE	UFO 6WI
	self testing ballasts			BODINE	REDITEST
				LITHONIA	PS1400QD SD
				EMERGILITE	EDDI/II

		EVENLINT	BAL1400
E10	EXIT SIGN: METAL HOUSING; CEILING MOUNT, SEE DRAWINGS; ARROWS PER	PLANS; LED LAMPS;	EDGE LIGHTED CLEAR
	LENS; GREEN LETTERS ON CLEAR BACKGROUND. MUST MEET NFPA ILLUMIN	IATION STANDARDS. U	JNITS SHOWN ARE CEILING
	MOUNT MODELS. CONTRACTOR TO PROVIDE MATCHING LOW LEVEL WALL M	OUNTED UNITS WHER	RE REQUIRED.

	MOUNT MODELS. CONTRACTOR TO PROV	IDE MATCHIN	IG LOW LE	/EL WALL M	OUNTED UNITS WHEF	RE REQUIRED.
E10-1E	SINGLE FACE:	LED	2W	120/277V	DUAL-LITE	LECSGWA
	WITH EMERGENCY BATTERY PACK				MCPHILBEN	45VL-1-GC-XX
					EELP	EDG 1 GC W EM
					LITHONIA	LRP W 1 GC XX 120/277
					EVENLITE	SOV-AC-G-1M WH XX UC
					ISOLITE	EDGL-S-S-G-BK (BLACK HOUSING)
					CHLORIDE	STDLX-X-1-GC-X
					LIGHTOLIER	LEAC1GCX
E10-2E	DUAL FACE:	LED	2W	120/277V	DUAL-LITE	LECDGWA
	WITH EMERGENCY BATTERY PACK				MCPHILBEN	45VL-2-GM-XX
					EELP	EDG 2 GC W EM
					LITHONIA	LRP W 2 GMR XX 120/277
					EVENLITE	SOV AC G 2M WH XX UC
					ISOLITE	EDGL-D-S-G-BK (BLACK HOUSING)
					CHLORIDE	STDLX-X-2-GC-X
					LIGHTOLIER	LEAC2GC7

EXTERIOR CANOPY FIXTURES

HG-1

RECESSED SQUARE LED CANOPY LIGHT,	LED	50W	120/277V	MCGRAW EDISON	LRC-B16-1-LED-E1-WST	
BRONZE FINISH, WIDE DISTRIBUTION	3000K	3800 LU				

OCATION
(

OC-32	LED WALL PACK, TYPE IV OPTICS BRONZE FINISH	LED 3500K	24W 1600 LU	120/277V	LITHONIA	WST-LED-1-10A700-35K-SR4-MVOLT

3500K

	BITOTIZZET INTOTT	000011	1000 20			
TX	SPECIAL FIXTURES AS INDICATED. MEET	ALL REQUIR	EMENTS OF	SPECIFICA	TIONS AND FIXTURE	SCHEDULE. VISUAL AND
	FINISH APPROVAL REQUIRED.					
TX-1	Surface Mounted Drum	LED	100W	120/277V	SHAPER	122-36-L7-UNV-SN
	36" Diameter	3500K			SPI	AIC11866-L100.4WDML-PT04-120-277V-3500K-FB01
TX-2	Surface Mounted Drum	LED	37W	120/277V	SHAPER	122-24-L5-UNV-SN
	24" Diameter	3500K			SPI	AIC11865-L46.6WDML-PT04-120-277V-3500K-FB01
TV 2	Curfosa Mauratad	LED	2414/	120/277/	DETACAL CO	FIEDO 60 4200 2500V DC 6N
TX-3	Surface Mounted	LED	24W	120/277V	BETACALCO	FIERO-60 1200-3500K-PC-SN
	Bedroom Light	3500K				
TX-4	Surface Mounted	LED	22W	120/277v	METALUX	FM-15-W-R-30-R
	Closet Light	3000K				
TX-5	PENDANT	LED	21W	120/277V	SPI	SIP11783-2F21-120-F-AC1

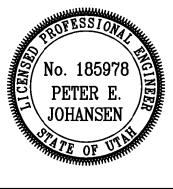
W	LOW PROFILE WRAPAROUND: SURFAC ACRYLIC PRISMATIC DIFFUSER; WHITE					
W-2	NARROW BODY WRAPAROUND; APPROX; 3" X 12" X 48" X 48". 5500 LUMENS	LED 3500K	57W	277/120V	EATON	DSI-WD-3-L35-1-D-UNV-SU-JB-4-STD-FC-W
W-3	NARROW BODY WRAPAROUND;	LED	48W	277/120V	LITHONIA	LBL4 LP840
	APPROX; 3" X 10" X 48"	3500K			COLUMBIA	LWC4 40 ML EU
	X 48".				METALUX	WNLED LD1 41 1 UNV L835 CD1 U
	4800 LUMENS				DAYBRITE	OWL450L835UNV
WS	WALL MOUNTED LED LOCATED ABOVE	WALL ELEME	ENT (MIRROR	/WHITEBOAF	RD, ETC.): AS INDIC	CATED ON DRAWINGS;
WS-2	36" LED VANITY LIGHT	LED	19W	120/277V	EDGE LIGHT	TW12 S11 1RE 36" 30k CH
	SATIN CHROM FINISH	3500K			EUREKA	3541 35 LED 17.40 120/277 SC WH
	2.25" WIDE				LBL	LW496 OP XX LED 277
ZX	OUTDOOR AREA LIGHT. SINGLE HEAD BELOW; RATED 100 MPH WITH 1.3 GUS		S SHOWN ON	DRAWINGS	. WET LABEL. LED	LIGHT ENGINE, OPTICS AND DRIVERS ACCESSIBLE FROM
ZX-2	LED POLE MOUNTED AREA LIGHT,	LED	72W	120/277V	LITHONIA	DSX0-LED-20C-1000-35K-T2M-MVOLT-HS
	TYPE II OPTICS, BRONZE FINISH	3500K	3500 LU			
	HOUSE SIDE SHIELD					
	9' SSS POLE, FINISH TO MATCH FIXTUR	RE				
ZX-4	LED POLE MOUNTED AREA LIGHT,	LED	72W	120/277V	LITHONIA	DSX0-LED-20C-1000-35K-T4M-MVOLT-HS
	TYPE IV OPTICS, BRONZE FINISH	3500K	3500 LU			
	211 31 1133, Brianizz 1 1111311					
	HOUSE SIDE SHIELD					

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Donald L. Welch

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### consultant:



## project:

**Brighton** 4905, 4911, 4915, 4925, 4931, & 4953 South 900

Salt Lake County, Utah

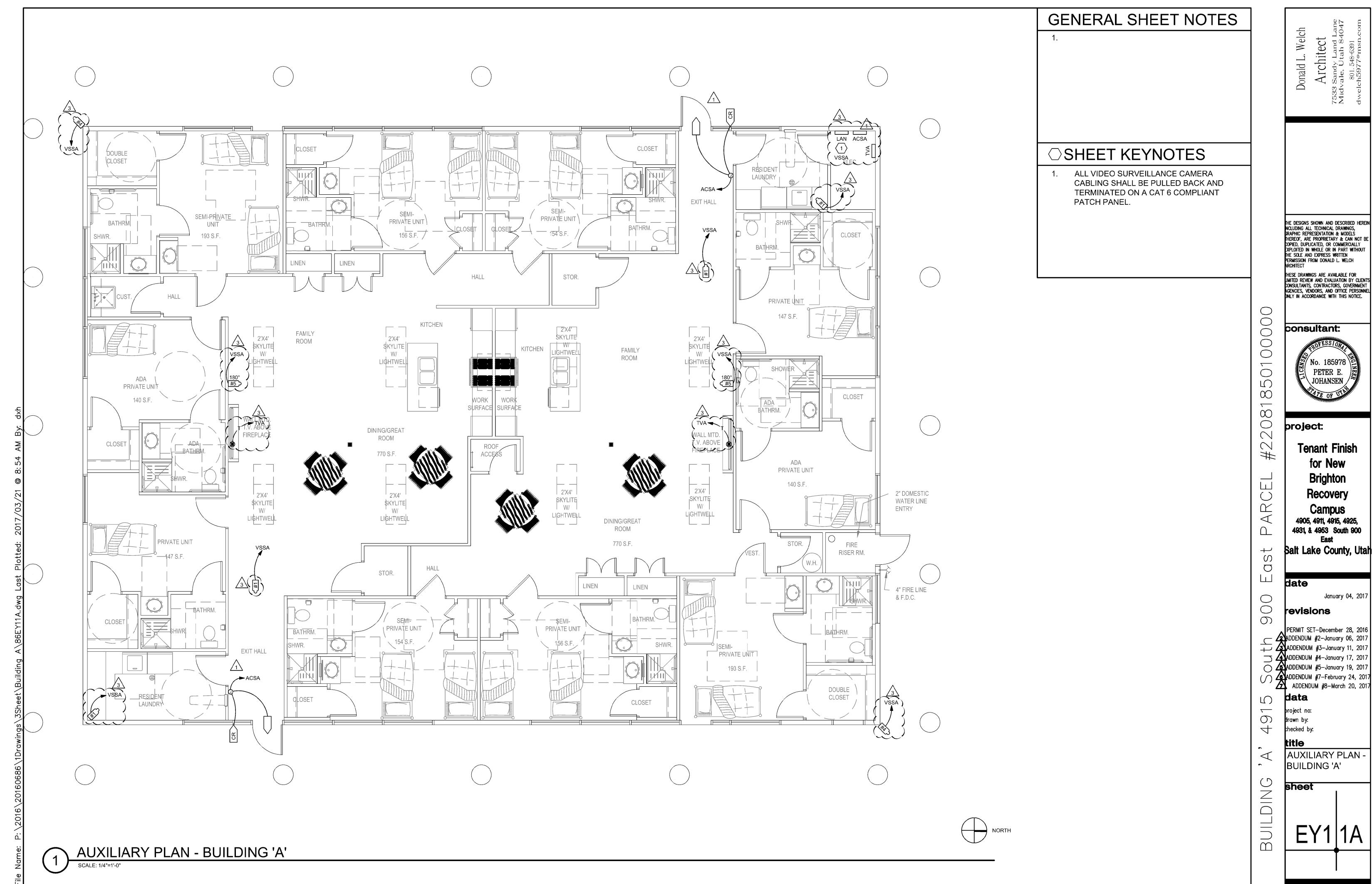
January 04, 2017

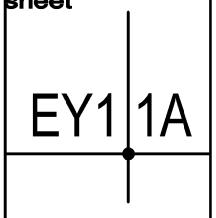
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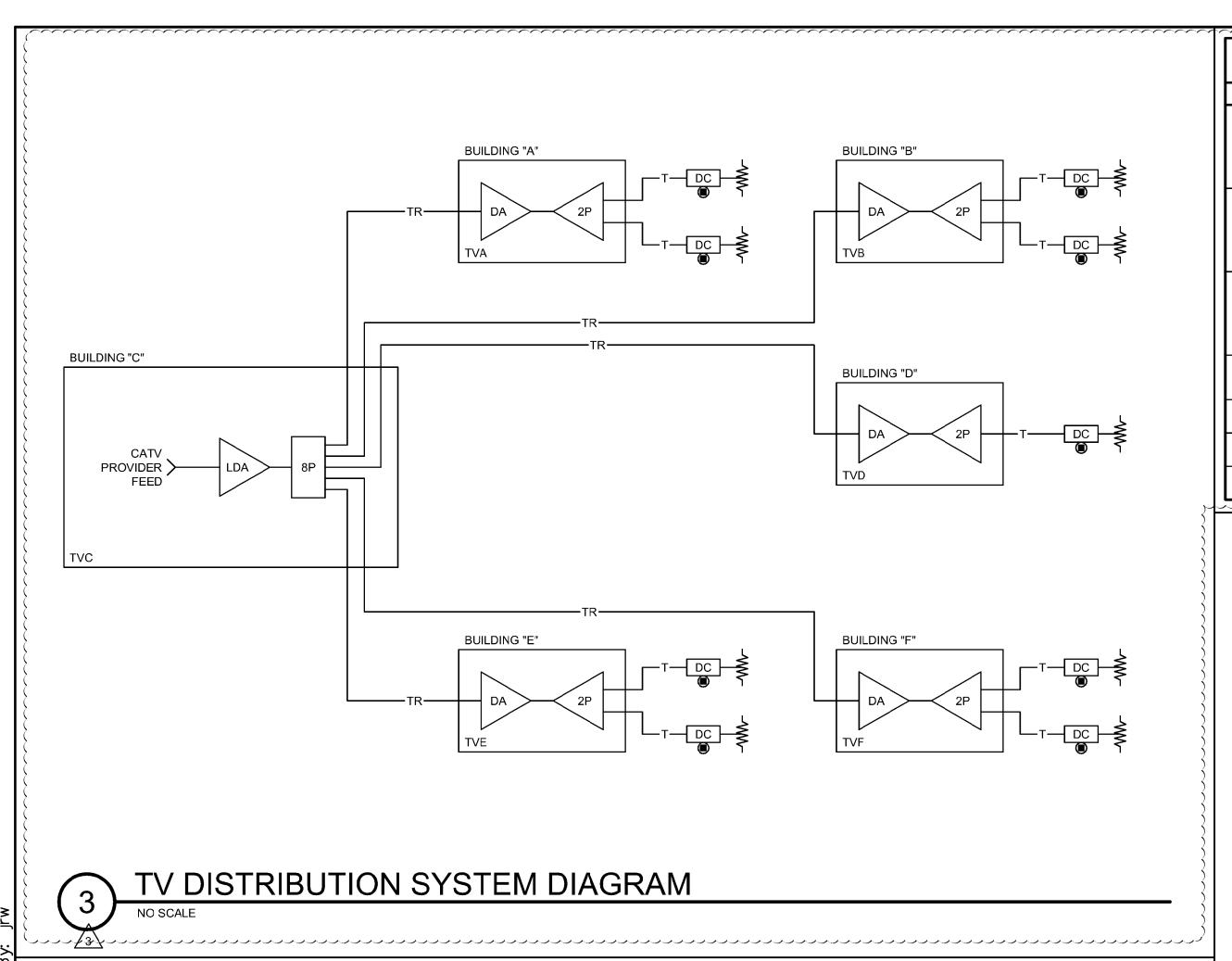
PERMIT SET-December 28, 2016 ADDENDUM #2-January 06, 2017 ADDENDUM #3-January 11, 2017 ADDENDUM #5-January 19, 2017 ADDENDUM #7-February 24, 2017 ADDENDUM #8-March 20, 2017

FIXTURE SCHEDULE

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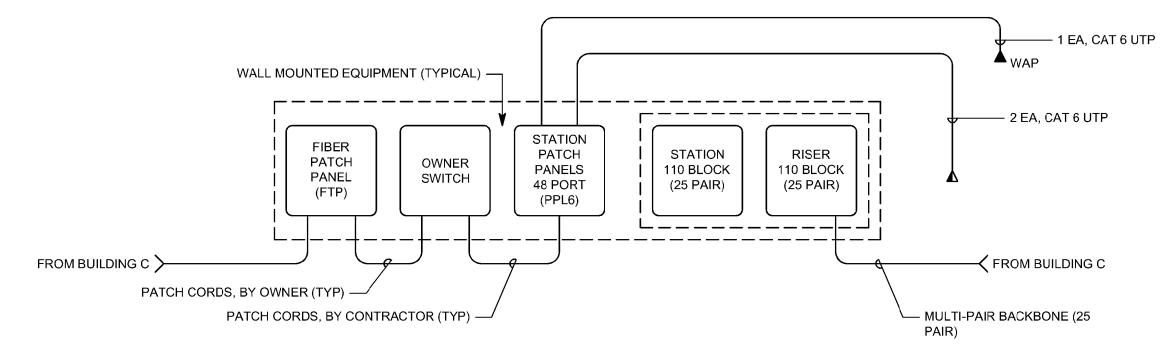




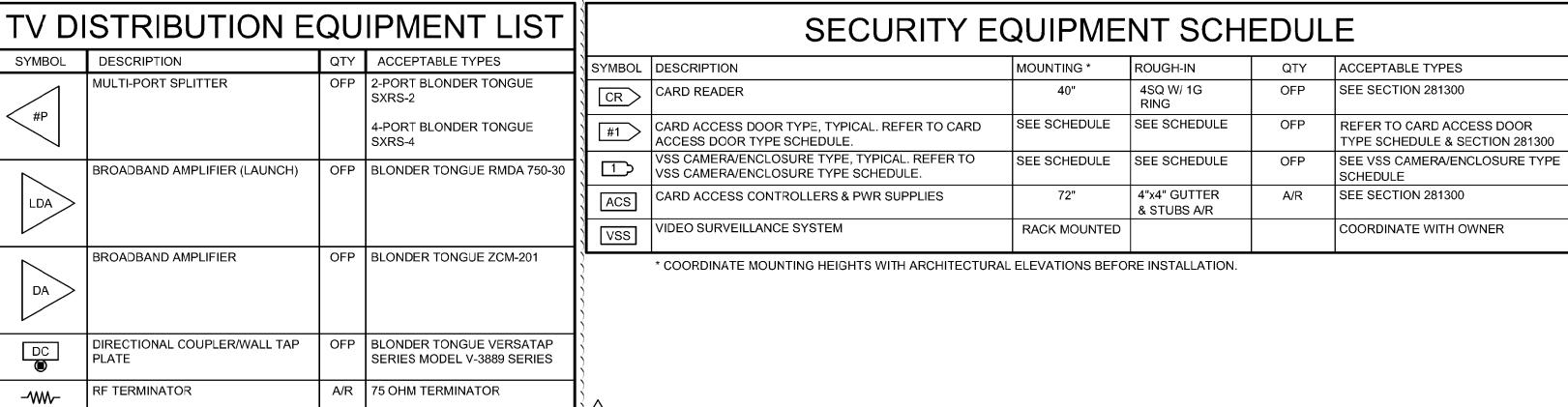


## STRUCTURED CABLING SYSTEM NOTES

- 1. REFER TO EP SERIES SHEETS FOR VOICE/DATA OUTLET QUANTITIES AND LOCATIONS.
- PROVIDE PLENUM RATED CABLE IN ALL AIR PLENUMS. IF A PLENUM RATED CABLE IS NOT SPECIFIED, PROVIDE THE PLENUM RATED EQUIVALENT TO THE SPECIFIED CABLE.
- 3. ALL CABLE, REGARDLESS OF LENGTH, INSTALLED UNDER THIS CONTRACT ARE TO BE LABELED.
- 4. UNLESS OTHERWISE NOTED, INSTALL ALL CABLE INSIDE RACEWAY SYSTEMS. WHERE RACEWAY SYSTEMS HAVE NOT BEEN PROVIDED OR SPECIFIED, INSTALL CABLE THROUGH THE SPECIFIED "CADDIE" CLIPS INSTALLED ABOVE ACCESSIBLE CEILINGS AT THE MINIMUM INTERVALS IDENTIFIED IN THE SPECIFICATIONS. SUPPORT "CADDIE" CLIPS DIRECTLY FROM THE BUILDING STRUCTURE, NOT FROM OTHER BUILDING SYSTEM SUPPORT WIRES OR
- 5. GROUND ALL EQUIPMENT AS DETAILED. COORDINATE GROUNDING WITH ELECTRICAL CONTRACTOR.
- 6. ALL CABLE, FIBER, AND UTP TO TERMINATED ON BOTH ENDS.
- 7. ALL VOICE/DATA SYSTEMS CABLE IS TO BE INSTALLED INSIDE MINIMUM 1" CONDUIT. STUB CONDUIT FROM JUNCTION BOX LOCATION TO CABLE MANAGEMENT SYSTEM SPECIFIED FOR ACCESSIBLE CEILING.
- 8. INSTALL ALL ELECTRONIC SYSTEMS EQUIPMENT IN COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, SEISMIC CODES, AND INDUSTRY WIDE ACCEPTED PRACTICES. SUPPORT EQUIPMENT WEIGHT FROM BUILDING STRUCTURE. DURING THE SUBMITTAL PROCESS, PROVIDE SHOP DRAWINGS WHICH DETAIL PROPOSED MOUNTING FOR ALL SUCH EQUIPMENT.



HORIZONTAL
WALL MOUNT DIAGRAM (TYP. FOR BUILDINGS A, B, D, E, & F)

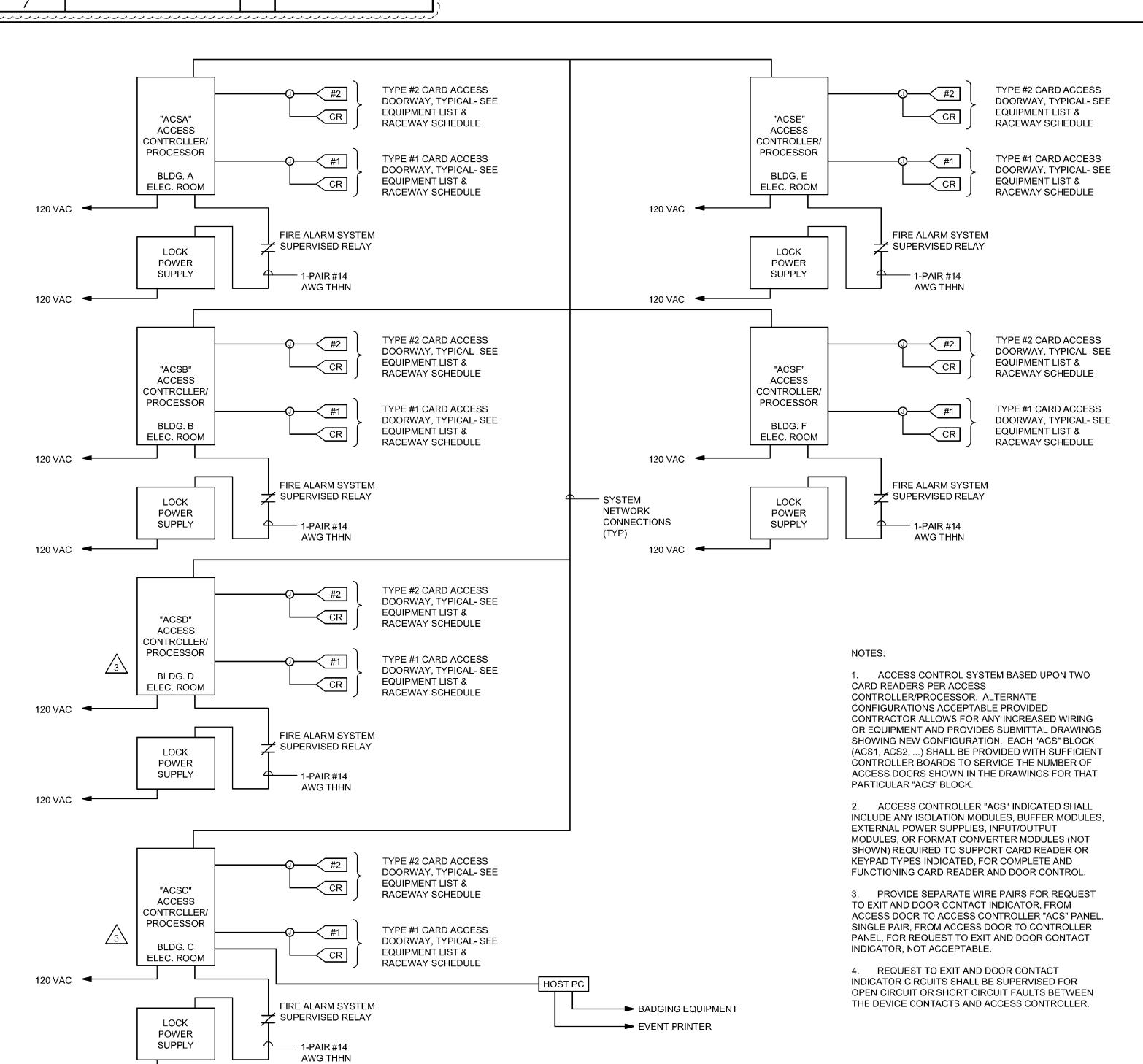


COAXIAL CABLE, HORIZONTAL DROP | A/R | RG-6 (SEE SPECIFICATIONS)

A/R RG-11 (SEE SPECIFICATIONS)

ACCESS CARD SYSTEM (ACS) RISER DIAGRAM

COAXIAL CABLE, TRUNK



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consultant:



project:

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Tenant Finish for New Brighton Recovery Campus

4931, & 4953 South 900 East

**Salt Lake County, Utah** 

4905, 4911, 4915, 4925,

date

January 04, 2017

revisions

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ADDENDUM #8-March 20, 2017

data

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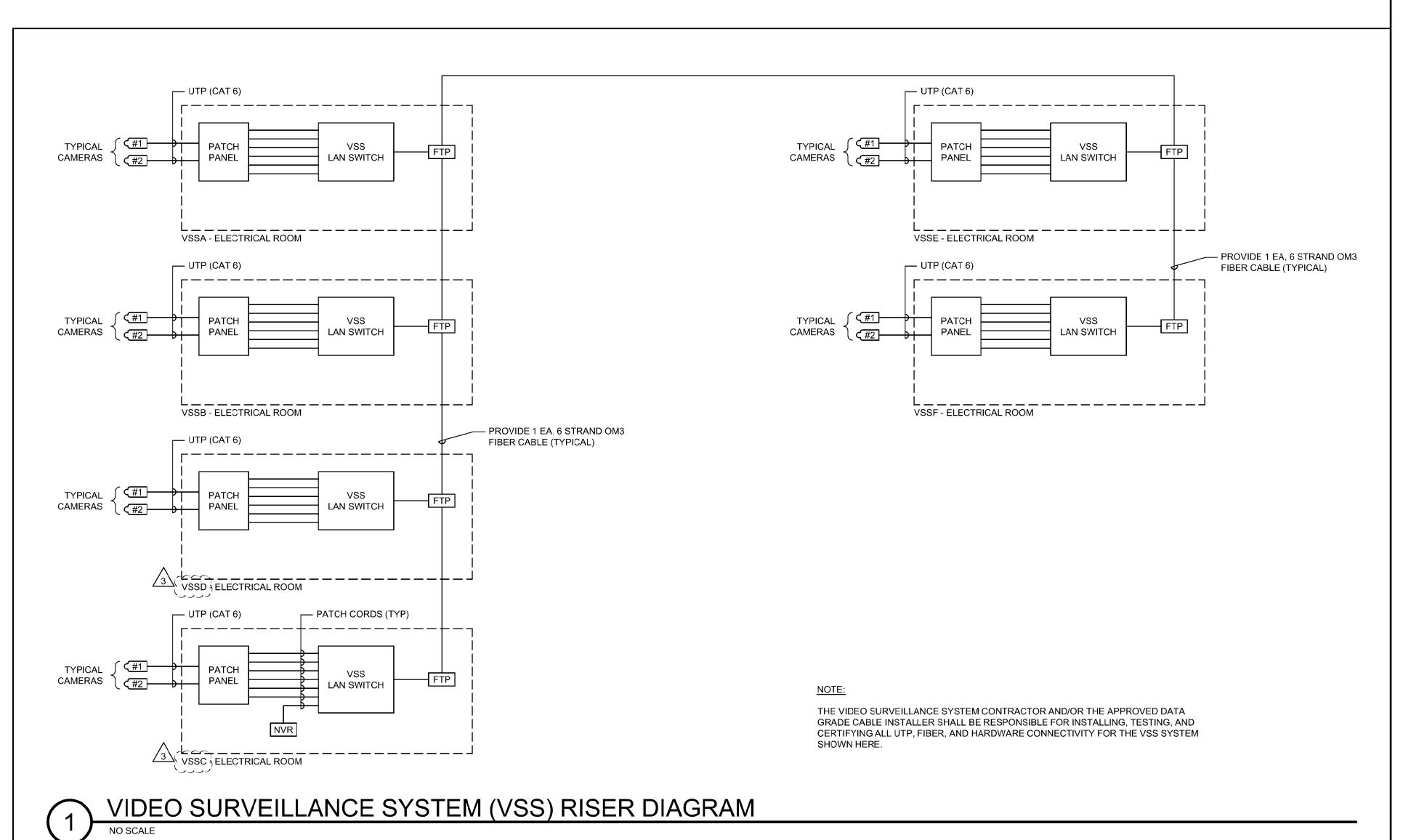
AUXILIARY RISER DIAGRAMS

sheet

EY6 01

VSS CAMERA/ENCLOSURE TYPE SCHEDULE									
CAMERA TYPE NUMBER	SYMBOL	DESCRIPTION	INCLUDES						
TYPE 1	#1	INTERIOR CAMERA - FIXED DOME (CEILING MOUNTED UNLESS J-BOX SHOWN)							
	vss		PROVIDE AVIGILON 1.0C-H4A-DC1 OR APPROVED EQUAL.						
YPE 2	#2	INTERIOR CAMERA - FIXED DOME (WALL MOUNTED)	* CAMERA/ENCLOSURE-SURFACE MOUNTED * CAT6 SIGNAL CABLE AS INDICATED TO HEADEND (VSS) * POE * WALL MOUNT HARDWARE						
	vss		PROVIDE AVIGILON 1.0C-H4A-D1 OR APPROVED EQUAL.						
ГҮРЕ 3	#3 VSS	EXTERIOR CAMERA - MULTI SENSOR (WALL PENDANT MOUNTED)	* CAMERA/ENCLOSURE-SURFACE MOUNTED  * CAT6 SIGNAL CABLE AS INDICATED TO HEADEND (VSS)  * POE  * ENVIRONMENTAL ASSEMBLY  * 180°						
			PROVIDE AVIGILON 9W-H3-3MH-DP1 OR APPROVED EQUAL. WALL MOUNT - AVIGILON MNT-PEND-WALL CORNER MOUNT - AVIGILON MNT-AD-CORNER						
TYPE 4	#4 VSS	EXTERIOR CAMERA - MULTI-SENSOR (CORNER PENDANT MOUNTED)	* CAMERA/ENCLOSURE-SURFACE MOUNTED * CAT6 SIGNAL CABLE AS INDICATED TO HEADEND (VSS) * POE * ENVIRONMENTAL ASSEMBLY * 270°						
			PROVIDE AVIGILON 9W-H3-3MH-DP1 OR APPROVED EQUAL. WALL MOUNT - AVIGILON MNT-PEND-WALL CORNER MOUNT - AVIGILON MNT-AD-CORNER						
YPE 5	#5	INTERIOR CAMERA - MULTI-SENSOR (CEILING MOUNTED)	* CAMERA/ENCLOSURE-FLUSH MOUNTED * CAT6 SIGNAL CABLE AS INDICATED TO HEADEND (VSS) * POE * 180° - 270°						
	VSS		PROVIDE AVIGILON 9W-H3-3MH-DC1 OR APPROVED EQUAL.						
TYPE 6	#6	EXTERIOR CAMERA - FIXED BULLET (WALL MOUNTED)	* CAMERA/ENCLOSURE-SURFACE MOUNTED * CAT6 SIGNAL CABLE AS INDICATED TO HEADEND (VSS) * POE * ENVIRONMENTAL ASSEMBLY						
	vss		PROVIDE AVIGILON 2.0C-H4A-B02-IR OR APPROVED EQUAL.						

		VIDEO SURVEILLANCE E	SURVEILLANCE EQUIPMENT SCHEDULE							
	SYMBOL	DESCRIPTION	ACCEPTABLE TYPES							
	POE	POE NETWORK SWITCH	NETGEAR							
$\wedge$	NVR	NETWORK VIDEO RECORDER	SEE SPECIFICATION 282300							
<u>/</u> 3\	[#1 <b>)</b>	VIDEO CAMERA	SEE VSS CAMERA SCHEDULE							
	CABLE	4 PAIR, CAT 6, UTP PLENUM	SEE SPECIFICATIONS							
	OFP = OBTAIN FROM PLANS; A/R = AS REQUIRED									



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1idvale, Utah 84047
801. 548-6391

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Tenant Finish
for New
Brighton
Recovery
Campus
4905, 4911, 4915, 4925,
4931, & 4953 South 900

Salt Lake County, Utah

date

January 04, 2017

revisions

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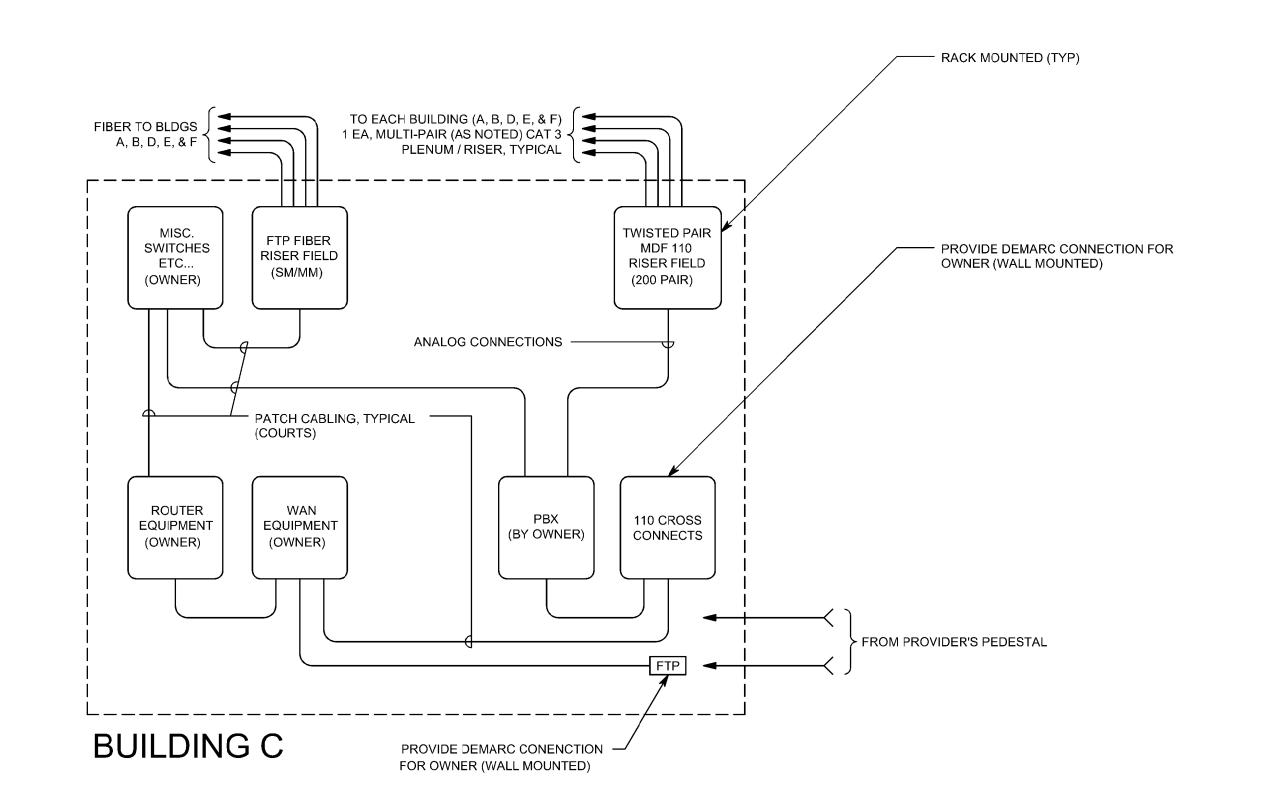
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AUXILIARY RISER DIAGRAMS

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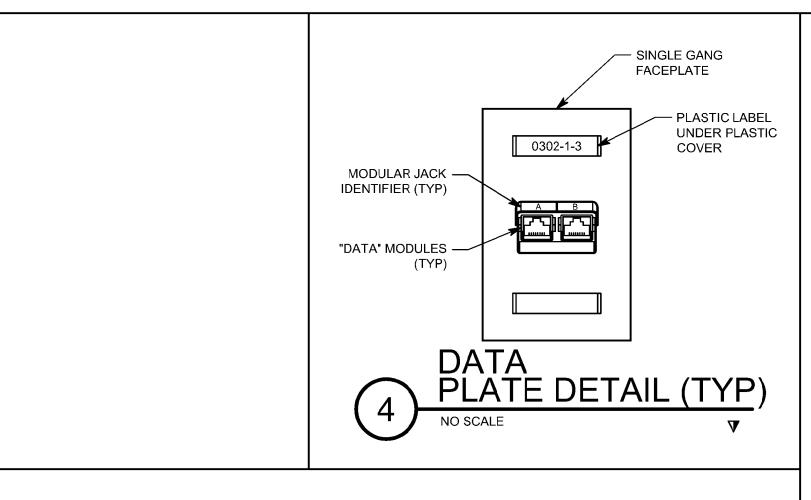
## VOICE/DATA EQUIPMENT/CABLE LIST

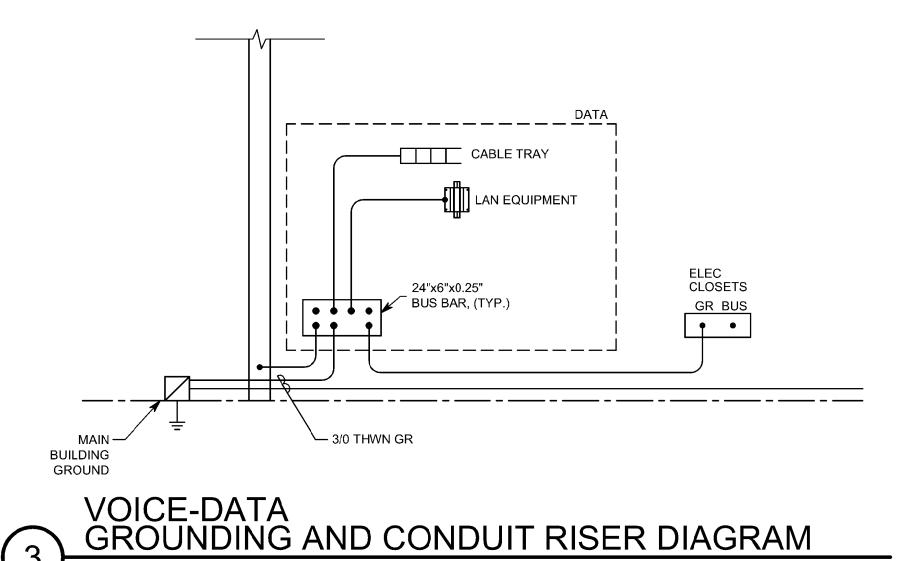
GENERAL NOTE:
THIS REPRESENTS ITEMS OF SIGNIFICANCE USED DURING THE DESIGN OF THE CABLING INSTALLATION, WHILE THE ITEMS INDICATED BELOW SHALL NOT BE CONSTRUED AS A "BILL OF MATERIALS". FURNISH ALL MISCELLANEOUS HARDWARE AND SUPPORTS WHICH MAY NOT BE LISTED HERE FOR A COMPLETE INSTALLATION. COMPARE CATALOG NUMBERS WITH DESCRIPTION AND PRIOR TO PURCHASING ANY EQUIPMENT OR CABLE. REFER TO SECTION 16741 FOR ADDITIONAL INFORMATION. NOTIFY ENGINEER OF DISCREPANCIES PRIOR TO BID AND PROVIDE COMPLETE SUBMITTAL FOR APPROVAL

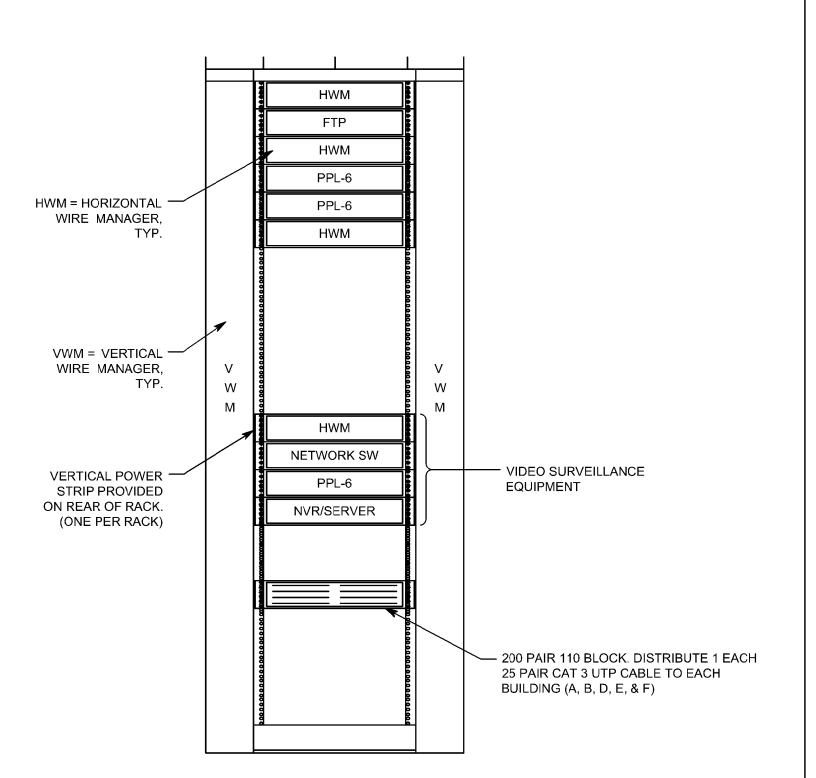
SYMBOL	ITEM DESCRIPTION	COMMENTS				
	4 PAIR 24 GAUGE CAT 6 UTP, PLENUM CABLE	SEE SPECIFICATIONS				
	6 STRAND FIBER PLENUM CABLE, MULTI-MODE (OM3)	SEE SPECIFICATIONS				
PPL6-48	48-PORT PATCH PANEL WITH CAT 6 RJ45 JACKS; MOUNTED IN RACK.	PROVIDE FOR QUANTITY OF PORTS SHOWN ON DRAWINGS, PLUS 20%				
FTP	SC TYPE CONNECTOR PANEL - PORTS AS REQUIRED	PROVIDE MODULAR TYPE WITH ADAPTOR PLATES.				
	DATA RACK, FLOOR MOUNTED	OPEN RACK, STANDARD 19", PROVIDE RACKS AS SHOWN IN ROOM LAYOUT DETAILS. SEE SPECIFICATIONS.				
▼ ▼ WAP	DATA JACK, 2 CAT 6 CABLES EACH	PROVIDE WITH CAT 6 COMPLIANT RJ45 MODULAR CONNECTORS. SEE DETAIL.				
PATCH CORDS	PATCH CORDS, CAT 6	PROVIDE 1 EACH FOR EVERY CABLE TERMINATED FROM HORIZONTAL CABLING OUTLETS.				
	110 STYLE PUNCHDOWN BLOCKS (DUAL SIDED - 1 SIDE STATION, 1 SIDE RISER)	PROVIDE QUANTITY OF PAIRS NEEDED. A 100 PAIR CABLE WOULD NEED 100 PAIR FOR EACH SIDE OF THE BLOCK				

NIC = NOT IN CONTRACT

MAIN NETWORK ROOM SINGLE LINE DIAGRAM W/UTILITY DEMARC INFORMATION

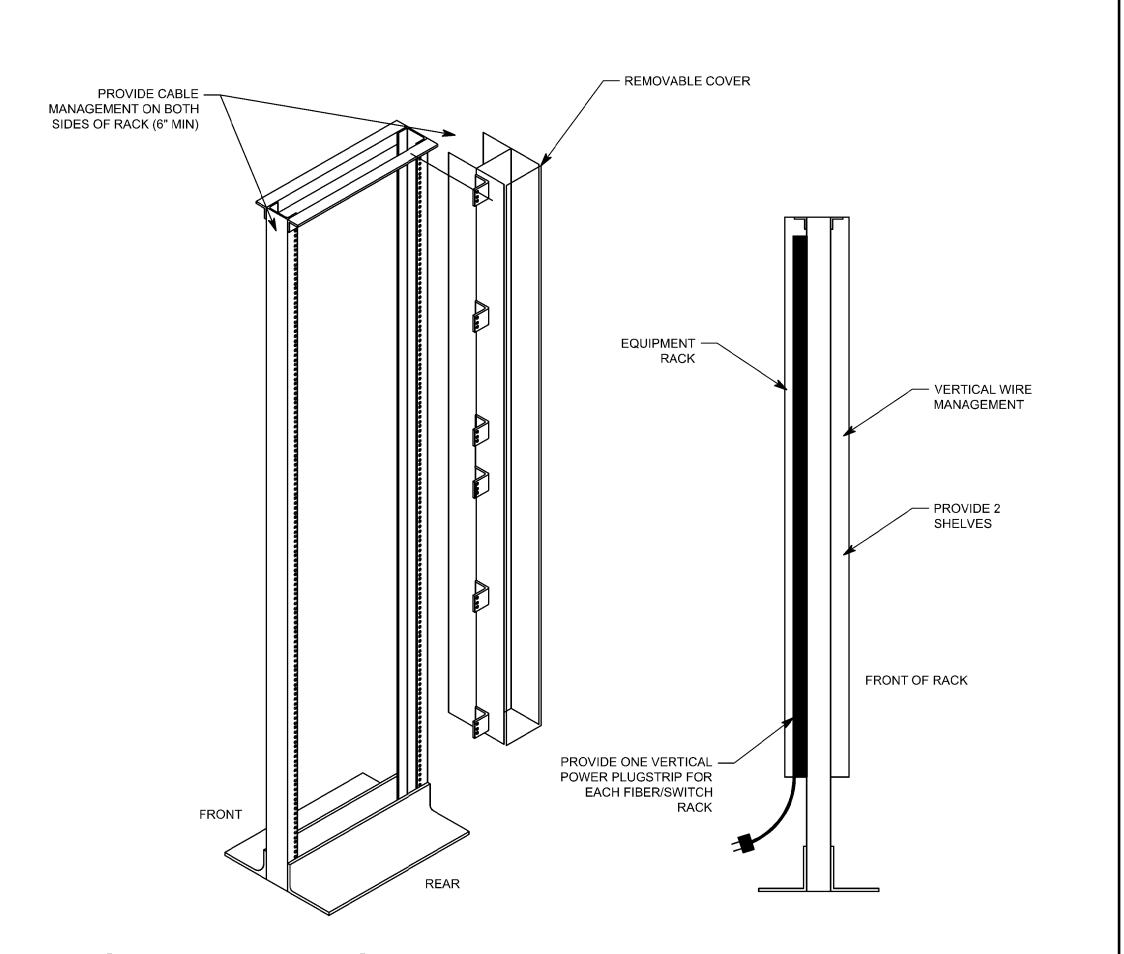






- RACK LAYOUTS ARE FOR COORDINATION PURPOSES. ALL FINAL RACK LAYOUTS ARE TO BE COORDINATED WITH OWNER PERSONNEL.
- 2. PROVIDE ALL WIRE MANAGEMENT ACCESSORIES SHOWN.

HORIZONTAL TERMINATION RACK ELEVATION - BUILDING C



OPEN FRAME EQUIPMENT RACK/RACEWAY MOUNTING DETAILS

Donald L. Welch Architect

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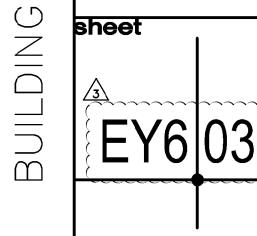
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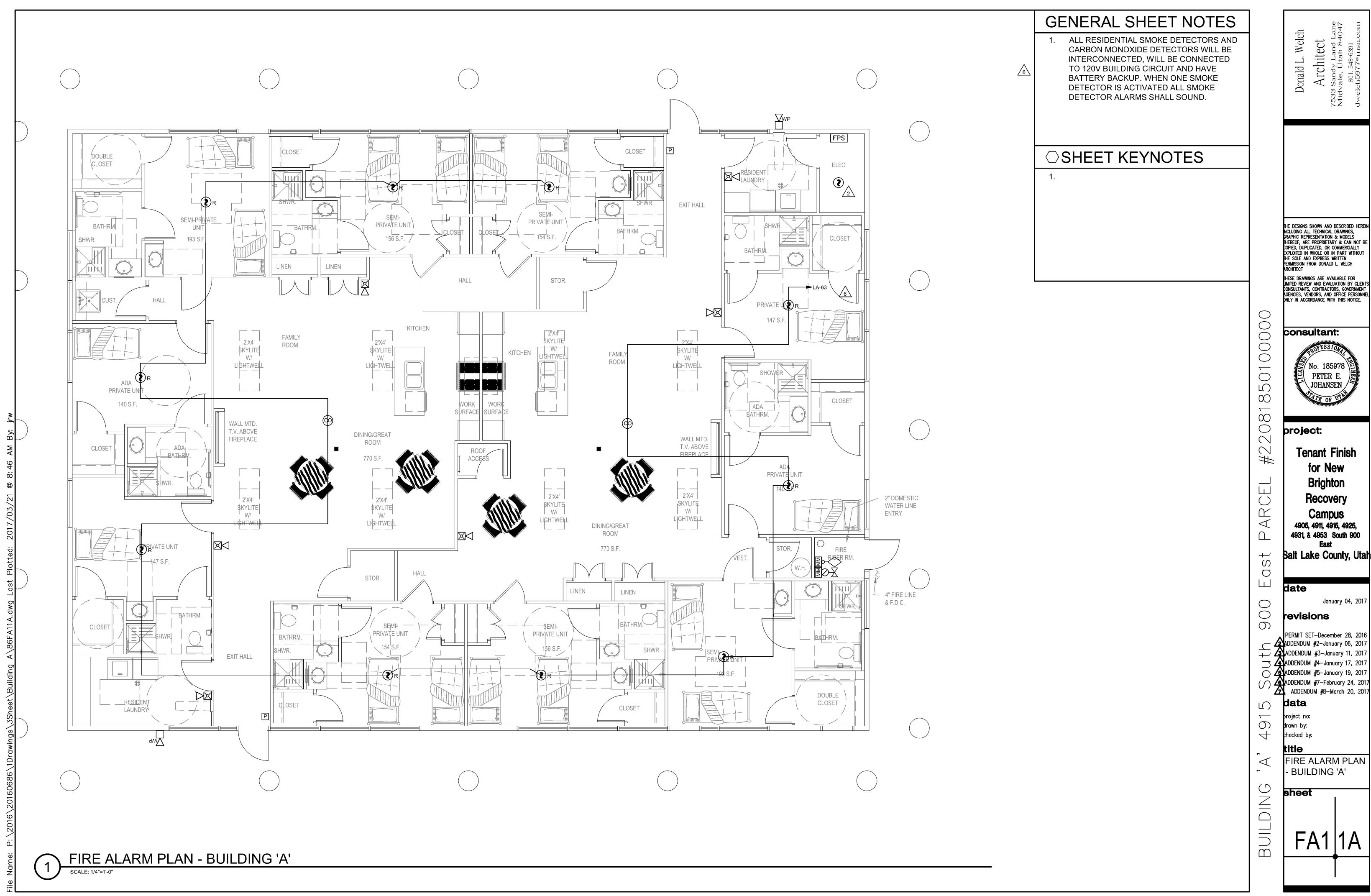
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**AUXILIARY RISER** DIAGRAMS

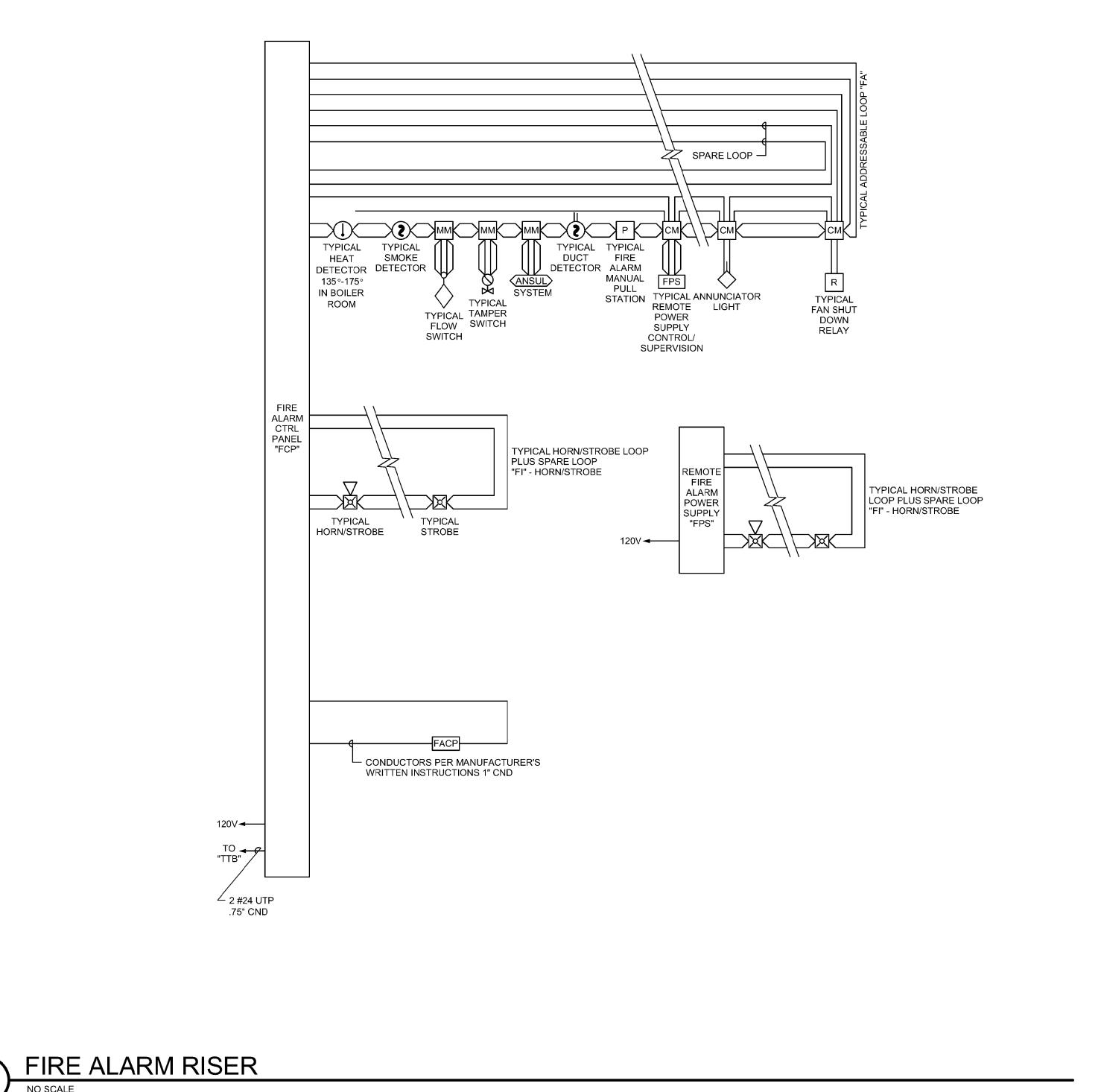
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WIRING SCHEDULE									
FUNCTION	< 500'	< 1000'	1000'-3000'	> 3000'					
ADDRESSABLE LOOP	#18 TSP	#18 TSP	#16 TSP	#14 TSP					
POWER LOOP	#14 THWN	#14 THWN	#12 THWN	#10 THWN					
SPARE LOOP	#14 THWN	#14 THWN	#12 THWN	#10 THWN					
STROBE HORNS	#14 THWN	#14 THWN	#12 THWN	#10 THWN					
MAGNETIC DOOR HOLDER	#12 THWN	#10 THWN							
SPEAKERS	#16 TSP	#16 TSP	#14 TSP	#14 TSP					

			<u> </u>	OUTDUT DE VOE									
				OUTPUT DEVICES									I
FIRE ALARM INPUT/OUTPUT MATRIX		GENERAL ALARM BLDG 'A'	GENERAL ALARM BLDG 'B'	GENERAL ALARM BLDG 'C'	GENERAL ALARM BLDG 'D'	GENERAL ALARM BLDG 'E'	GENERAL ALARM BLDG 'F'	TROUBLE ALARM	SUPERVISORY ALARM	FAN SHUTDOWN	FIRE DAMPER	NOTES	
	RISER BLDG 'A' FLOW			0	0	0	0	0		-	LL.	Ш	
	2	RISER BLDG 'A' TAMPER	•						•	•	•		
	3	RISER BLDG 'B' FLOW		•					•	•			
	4	RISER BLDG 'B' TAMPER									•		
	5	RISER BLDG 'C' FLOW			•				•	•			
ES	6	RISER BLDG 'C' TAMPER									•		
INITIATING DEVICES	7	RISER BLDG 'D' FLOW				•			•	•			
	8	RISER BLDG 'D' TAMPER									•		
	9	RISER BLDG 'E' FLOW					•		•	•			
<u>Z</u>	10	RISER BLDG 'E' TAMPER									•		
	11	RISER BLDG 'F' FLOW						•	•	•			
	12	RISER BLDG 'F' TAMPER									•		
	13	BLDG 'A' INITIATING LOOP	•						•	•			
	14	BLDG 'B' INITIATING LOOP		•					•	•			
	15	BLDG 'C' INITIATING LOOP			•				•	•			
	16	BLDG 'D' INITIATING LOOP				•			•	•			
	17	BLDG 'E' INITIATING LOOP					•		•	•			
	18	BLDG 'F' INITIATING LOOP						•	•	•			
	19	CIRCUIT TROUBLE							•				
	20	AC POWER LOSS							•				
	21	LOW BATTERY POWER							•				
	22	SYSTEM TROUBLE							•				
	23	REMOTE POWER SUPPLY TROUBLE							•				



# **GENERAL**

# SHEET NOTES

- 1. PLANS ARE BASED UPON 99 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP. OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.
- 2. PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN. WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION.
- 3. FLOW AND TAMPER CONFIGURATION BASED UPON FIRE SPRINKLER DESIGN CONCEPT. FIELD VERIFY ACTUAL REQUIREMENTS. INCLUDE ANY ADDITIONAL MONITOR MODULES REQUIRED BY ACTUAL DESIGN REQUIREMENTS.
- 4. BATTERY CAPACITY TO BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.
- 5. VFD REQUIRES TWO RELAYS, ONE FOR SMOKE CONTROL, ONE SPARE.
- 6. RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 40% AREA FILL OF CONDUITS.
- 7. PROVIDE DUCT DETECTORS FOR SUPPLY AND RETURN AIR SYSTEMS OVER 2000 CFM.
- 8. PROVIDE MANUAL PULL STATIONS IN BOILER ROOMS AND KITCHENS.
- 9. PROVIDE ONE YEAR OFF SITE MONITORING INCLUDING ALL INTERFACE DEVICES AND MONITORING CHARGES. COORDINATE WITH BUILDING OWNER'S OFF SITE MONITORING COMPANY.
- 10. LOCATE SMOKE DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS.
- 11. PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.
- 12. INITIATING AND INDICATING LOOPS SHALL NOT SERVE AN AREA OF GREATER THAN 22,500 SQUARE FEET. PROVIDE ADDITIONAL LOOPS FOR AREAS LARGER THAN THIS.
- 13. ALL OUTPUT DEVICES ARE DESIGNED ON SYSTEMS WITH 2 AMP POWER SUPPLY.
- 14. HORN/STROBE BASED ON 120 MILLIAMPS,
- DOOR HOLDERS BASED ON 70 MILLIAMPS.

15. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS AND PROVIDE ADDITIONAL DUCT DETECTORS DEPENDING UPON FINAL DUCT ARRANGEMENT.

Donald L. Welch

Architect

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## data

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FIRE ALARM RISER DIAGRAM

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