

1 **ADDENDUM NO. 1**
2 ISSUE DATE: **July 7, 2023**

3
4
5 RE: **LAW BUILDING**
6 **4TH FLOOR RENOVATION**
7 **UNIVERSITY OF WISCONSIN - MADISON**
8 **MADISON, WISCONSIN**
9

10
11 UW-Madison Project No. **0430-2209** / UWSA Project No. **A-22-003**
12

13
14 **BID OPENING for MEP BIDDERS: 2:00 P.M., July 18, 2023**
15 **BID OPENING for GENERAL PRIME CONTRACTOR BIDDERS: 2:00 P.M., August 1, 2023**
16

17 FROM: **Dorschner|Associates, Inc.**
18 **122 W Washington Avenue, Ste. 100**
19 **Madison, WI 53703**
20 **608.204.0777**
21

22 TO: Prospective Bidders
23

24 This addendum forms a part of the Contract Documents and modifies the original Contract Documents dated
25 **June 9, 2023** as noted below. Acknowledge receipt of this Addendum by inserting the number and issue date
26 of this addendum in the blank space provided on the Bid Form. Failure to do so may subject the Bidder to
27 disqualification.
28

29 This Addendum consists of **2 pages** and the following attached documents: Division 01 – General
30 Requirements, pages GR-1 through GR-16.
31

32 30”X42” Drawings: G100, G201, D204, D303, D304, A204, M000, M102, M801, E-122, E-601, E-801
33

34 CHANGES TO BIDDING REQUIREMENTS:

35
36 1. None
37

38 CHANGES TO CONDITIONS OF THE CONTRACT:

- 39
40 2. Division 01 – General Requirements
41 a. Replace Division 01 – General Requirements in its entirety with the revised Division 01 –
42 General Requirements.
43 b. Add Article 32. Abatement Protection.
44 c. Revise following Article numbers accordingly.
45

46 CHANGES TO SPECIFICATIONS (DIVISIONS 2 THRU 33):
47

- 48 3. Section 23 82 00 HEATING AND COOLING TERMINAL UNITS
49 a. Page 23 82 00-2, Line 62, add “Fan Coil Noise Level shall not exceed NC 30 within the space
50 it serves”.
51

52 CHANGES TO DRAWINGS:
53

- 54 4. Sheet G100 – COVER SHEET
55 a. Replace sheet G100 in its entirety with revised sheet G100.
56 b. Modified Project Location map.
57 c. Updated rendering.
58

59 5. Sheet G201 – SYMBOLS AND ABBREVIATIONS

1 **DIVISION 1 - GENERAL REQUIREMENTS** (Rev 11/2022)
2 UW-Madison Project No. **0430-2209** / UWSA Project No. **A-22-003**

3
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46
47 **1. DEFINITIONS**

48 In this document, the following terms are defined as:

49
50 (a) "Mechanical, electrical, or plumbing subcontractor" ("MEP Subcontractor") is a contractor that performs
51 mechanical (Heating, Ventilating, and Air Conditioning), electrical, plumbing, or fire protection (fire suppression) work
52 for the Project, and enters into a contract with the General Prime Contractor to perform their division of work.
53

1 (b) "Qualified bidder" means a contractor that DOA certifies under Wis. Stat. s. 16.855(9m)(b)1.
2

3 (c) "Qualified responsible bidder" means a contractor who is a Qualified bidder and who is a Responsible bidder.
4

5 (d) "Responsible bidder" means a contractor that DOA certifies under Wis. Stat. s. 16.855(9m)(b)2.
6

7 (e) "Single prime contracting" means bidding and contracting through a process in which only a general prime
8 contractor has a contractual relationship with the the Owner and all mechanical, electrical, or plumbing subcontractors
9 are identified by the Owner and are subcontractors to the General Prime Contractor.
10

11 (f) "General Prime Contractor" is a contractor that enters into a contract with the Owner to perform all work as
12 required by the Contract Documents and enters into contracts with subcontractors including MEP Subcontractors
13 identified by the Owner.
14

15 (g) "Non-MEP Subcontractor" is a subcontractor to a General Prime Contractor in divisions of work other than
16 mechanical, electrical, plumbing, and fire protection. This includes suppliers and installers to the General Prime
17 Contractor.
18

19 (h) "Subcontractor" is all subcontractors on a project. This includes MEP Subcontractors, subcontractors to the
20 MEP Subcontractors, and Non-MEP Subcontractors.
21

22 (i) "Contractor" is all contractors working on a project regardless of contractual relationship. This includes the
23 General Prime Contractor, MEP Subcontractors, Non-MEP Subcontractors, and all Subcontractors, regardless of tier of
24 subcontract.
25

26 **2. GENERAL**

27 All articles in these General Requirements are applicable to all Divisions and Sections of the Work included herein. The
28 Conditions of the Contract, General and Supplementary General Conditions, and these General Requirements shall
29 apply with equal force and effect to the General Prime Contractor and all Subcontractors engaged in this work.
30

31 Contractor or the Contractor's authorized representative must be present to accept delivery of all equipment and material
32 shipments. The Owner will not knowingly accept, unload or store anything delivered to the site for the Contractor's use.
33 Inadvertent acceptance of delivered items by any representative or employee of the Owner shall not constitute
34 acceptance or responsibility for any of the materials or equipment. It is the Contractor's responsibility to assume liability
35 for equipment or material delivered to the job site.
36

37 **3. SPECIAL SITE CONDITIONS**

38 Confine all operations, equipment, apparatus and storage of materials, to the immediate area of work to the greatest
39 possible extent. Contractor shall ascertain, observe and comply with all rules and regulations in effect on the project
40 site, including but not limited to parking and traffic regulations, use of walks, security restrictions and hours of allowable
41 ingress and egress. Any special traffic control during construction involving lane closures shall be in accordance with
42 the federal standard, Manual of Uniform Traffic Control Devices.
43

44 The Contractor shall take all measures necessary to become acquainted with the location of underground service,
45 utilities, structures, etc., which may be encountered or be affected by the Contractor's work, and shall be responsible for
46 damage caused by neglect to provide proper precautions or protection. As a minimum to become acquainted with such
47 underground appurtenances, the Contractor shall: 1) Observe existing conditions visible at the site immediately prior to
48 commencement of work; 2) Review available site plans incorporated in the contract documents and/or provided by the
49 Owner; 3) Final check with the Owner for additions to or changes from conditions indicated on site plans for the facility;
50 and 4) Obtain input from the "one-call system", the organization composed of all suppliers of utilities/services to or from
51 the site.
52

53 Information pertaining to existing conditions that are described in the specifications or appear on the drawings, is based
54 on available records. While such data has been collected with reasonable care, there is no expressed or implied

1 guarantee that conditions so indicated are entirely representative of those actually existing. This information is provided
2 to inform the Contractor of known, existing conditions so that due diligence is taken by the Contractor to avoid damage.
3 Where site observation or documents indicate existing underground utilities/services in close proximity (within four feet
4 horizontally and/or four feet vertically) to necessary new construction work, the Contractor shall be responsible to test,
5 probe or otherwise determine exact locations so as to prevent damage to such utilities/services.
6

7 Existing pipes, electrical work, and all other utilities encountered, which may interfere with new work, shall be re-routed,
8 capped, cut off, or replaced by the contractor having jurisdiction, in accordance with the Bidding and Contract Documents.
9

10 **Any noisy and disruptive activities will need to be coordinated with the Owner and occur before 9am or after**
11 **4pm, Monday through Friday or between 6am and 6pm on Saturday or Sunday.**
12

13 Limit use of premises to work in the areas indicated. Do not disturb portions of the site beyond areas in which work is
14 indicated. General, confine construction operations to areas defined within Project Limits, unless specifically noted or
15 otherwise and/or approved by Owner. Confine storage of materials and support facilities to designated staging areas.
16

17 Parking at or near the project site is restricted. Contractor's truck or working vehicles will be permitted to drive on
18 premises only for the purpose of loading and unloading materials and equipment for this project and only if keys are
19 removed and all doors locked when not in use. No Contractor's will be allowed to park inside of the construction fence.
20 Free parking passes will not be provided. Contractors may park remotely and carpool to the project site, or may purchase
21 parking permits as space is available from Transportation Services (www.fpm.wisc.edu/trans). Vehicles in violation of
22 University parking regulations are subject to fine.
23

24 Owner will designate an area in a building which can be used by workers for eating lunch and for toilet needs. Toilets
25 used by workers shall be kept clean and sanitary at all times.
26

27 All buildings at this site will be occupied during the construction.
28

29 To ensure the safety of persons at the University, the following safety measures should be observed:

30 Contractor shall instruct their workers not to leave any openings in barricades, or to leave tools, equipment, or
31 materials lying around in any area where persons may traverse. Surfaces of barricades, enclosures, etc., must
32 be smooth with no protruding nails or other sharp projections or edges on side toward existing occupied areas,
33 corridors, connecting links, etc.
34

35 Outdoor lanes for emergency exit from existing buildings which may lie within or adjacent to new construction area must
36 be kept clear of obstructions at all times.
37

38 The Owner reserves the right to occupy and place and install equipment in completed areas of construction. Such
39 placement of equipment and partial occupancy shall not constitute acceptance of the Work. The Owner will prepare a
40 Certificate of Substantial Completion for each specific portion of the work to be occupied before occupancy. Before
41 partial occupancy, mechanical and electrical systems shall be fully operational and required documents and inspections
42 shall be successfully completed. On final completion, the Owner will operate, and maintain mechanical and electrical
43 systems serving occupied portions of the building. On Substantial Completion, the Owner will assume responsibility for
44 maintenance and custodial service for occupied portions of the building.
45

46 **4. INSPECTION OF SURFACES**

47 Contractor shall obtain complete data at the site and inspect surfaces that are to receive the Work before proceeding
48 with fabricating, assembling, fitting or erecting any work under this contract.
49

50 Contractor shall notify the Owner in writing in case of discrepancies between existing work and drawings, and of any
51 defects in such surfaces that are to receive the Contractor's work. The Owner will evaluate the notice and direct what
52 remedial action will be taken.

1 Starting of work implies acceptance of existing work or the work of others. Removal and replacement of work applied to
2 defective surfaces, in order to correct defects, shall be done at the expense of the Contractor who applied work to
3 defective surfaces.
4

5. HAZARDOUS SUBSTANCES - ASBESTOS, LEAD AND POLYCHLORINATED BIPHENYLS (PCB'S)

6 Airborne asbestos fibers, lead, and PCB compounds, if encountered, have been determined to be hazardous to one's
7 health. Compliance with all possible applicable regulations is the Contractor's responsibility. Contractor shall not provide
8 or install any product that contains any amount of asbestos or PCB. See General Requirements, CLEANING AND
9 WASTE DISPOSAL for disposal of hazardous waste, if encountered.
10

11 ASBESTOS

12 Contractor's attention is directed to WAC NR 447, WAC DSS 159 and the Occupational Safety and Health Act (OSHA)
13 in general, part 1926.1101--ASBESTOS in particular. Contractor is responsible for compliance with all applicable
14 regulations when the work includes fastening to or coring through Asbestos Containing Materials (ACM) and disturbance
15 of asbestos containing caulking and mastics. Contractor is responsible for removal and disposal of Category I non-
16 friable ACM that will be disturbed by the work. Unless otherwise indicated, all caulking, sealants, glazing compounds,
17 gaskets, asphalt roofing materials and miscellaneous adhesives are assumed to contain asbestos and are considered
18 to be Category I non-friable ACM as defined in NR 447. Waste material containing Category I non-friable ACM, is
19 regulated as Construction and Demolition (C&D) waste and may be disposed of at a Department of Natural Resources
20 (DNR) approved C & D waste landfill. If Contractor's work methods cause non-friable ACM to become friable, the
21 Contractor is responsible for the disposal of the friable asbestos waste at a landfill specifically approved by DNR to
22 accept friable asbestos. A copy of the signed waste manifest for the disposal of all friable asbestos waste shall be
23 provided to the Owner prior to request for final payment.
24

25 The following building materials have been identified to be ACM.

26 The University of Wisconsin-System, will contract with the Abatement Contractor under separate contract. General Prime
27 Contractor is responsible for coordinating all abatement work with the Abatement Contractor.

28 Carpet Adhesives.

29 Ceramic Baseboard Tile Grout.

30 Ceramic Floor Tile Grout.

31 Ceramic Wall Tile Grout.

32 Floor Tile.

33 Fire Door.

34 Exterior Window Pane Glazing Compound.

35 Chalkboard.

36 Stone Wall Partition.

37 Gray Stone Window Ledge.

38 Plaster.

39 Decorative Wall/Ceiling Plaster.

40 Pipe Insulation.

41 Pipe Fittings.

42 Exterior Duct Paper/Canvas & Adh. On F.G. Ins.

43 Vibration Dampener
44

45 Lead Based Paint

46 Paint is assumed to contain lead. Conform to OSHA and EPA recommended worker safety requirements when removing
47 lead based paint or material bearing lead based paint or material contaminated with lead by the demolition process.
48 Contractor's attention is directed to the Occupational Safety and Health Act (OSHA) in general and particularly to 29
49 CFR 1910 (LEAD STANDARD) and to CFR 1926 (LEAD EXPOSURE IN THE CONSTRUCTION INDUSTRY). Dispose
50 of refuse containing lead based paint or contaminated with lead by the demolition process in conformance with State of
51 Wisconsin Hazardous Waste Regulations set forth by the Department of Natural Resources and in conformance with
52 OSHA and EPA recommended worker safety requirements.
53

1 PCB'S

2 Contractor's attention is directed to Wisconsin Administrative Code, Chapter NR 157 relative to PCB's. Refer to Division
3 26, Electrical within these specifications for work involving PCB's.
4

5 **6. SOIL TEST BORINGS**

6 Not applicable to this project.
7

8 **7. MUTUAL RESPONSIBILITY**

9 Contractor(s) shall coordinate the work with adjacent work and shall cooperate with all other contractors to facilitate the
10 general progress of the work. Each contractors shall afford all other contractors every reasonable opportunity for the
11 installation of their work and for the storage of their material. In no case will the Contractor(s) be permitted to exclude
12 from the premises or work, any other Contractor or employees thereof, or interfere with any other Contractor in the
13 executing or installation of their work.
14

15 Contractor(s) shall arrange the work and dispose of materials so as not to interfere with the work or storage of materials
16 of others and each shall join their work to that of others in accordance with the intent of the drawings and specifications.
17 All Contractors shall work in cooperation with the General Prime Contractor and with each other, and fit their work into
18 the structure as job conditions may demand. All final decisions as to the right-of-way and run of pipe, ducts, etc., shall
19 be made by the Owner at prearranged meetings with responsible representatives of the Contractors involved.
20

21 **8. PROJECT MEETINGS**

22 Project meetings will be held at the time designated by the Owner. Contractor, when requested, shall attend these
23 meetings. If the principal of the firm does not attend meetings, a responsible representative of the Contractor who can
24 bind the Contractor to a decision at the meetings shall attend.
25

26 The Architect/Engineer or a representative thereof will write a report covering all items discussed and decisions reached
27 and copy of such report distributed to all parties involved.
28

29 **9. SLEEVES AND OPENINGS**

30 Each Contractor requiring sleeved openings shall furnish all sleeves required for their penetrations whether or not they
31 responsible for providing the respective openings. Contractors furnishing sleeves to others for installation shall do this
32 in a timely manner so as not to impede the project schedule.
33

34 Openings shown on the structural and/or architectural drawings shall be the responsibility of the General Prime
35 Contractor. Sleeves furnished by other contractors for openings shown on the structural and/or architectural drawings
36 shall be installed by the General Prime Contractor.
37

38 Openings that are required and are not shown on the structural and/or architectural drawings shall be the responsibility
39 of the contractor requiring the openings. The contractor requiring the opening shall install sleeves for these openings
40 or cut openings as needed (including floor openings within chases).
41

42 Individuals skilled in such work shall accomplish installation of sleeves and openings.

43 Each Contractor shall be responsible for coordinating locations of their sleeves with work of other contractors.
44

45 Each Contractor who requires sleeves and/or openings shall submit through the Contractor, to the Owner for review and
46 approval, layout drawings of all such required sleeves and/or openings. Sleeve and opening layout drawings shall be
47 received by the Owner a minimum of two weeks prior to installation of the sleeves and openings. Sleeve and opening
48 sizes and locations shall be dimensioned from column lines and floor elevations or from a point of reference approved
49 by the Owner.
50

51 **10. CUTTING AND PATCHING**

52 Cutting and patching required to access work in existing walls, in chases, above inaccessible ceilings, below floors, etc.,
53 shall be by the Contractor who requires the access, unless shown on the bid documents otherwise or noted otherwise.

1
2 The Contractor shall do all cutting, or fitting of the work as required to make its several parts fit together, or to receive
3 the work of others, as shown or reasonably implied by the drawings or specifications, or as may be directed by the
4 Owner. Holes cut in exterior walls and/or roofs shall be waterproofed.

5
6 The Contractor who cuts shall also be responsible for patching. Where cutting and patching is required, the Contractor
7 shall hire individuals skilled in such work to do cutting and patching.

8
9 The Contractor who removes or relocates building components which leaves a remaining opening shall be responsible
10 for patching the opening.

11
12 Patching includes repairing openings to match adjacent construction and painting the surface to match existing. Painting
13 means covering the entire wall where patching is to be done to nearest break point or corner unless indicated to be done
14 by other contractors.

15
16 Contractor shall not endanger any work by cutting, digging or otherwise and shall not cut or alter the work of others
17 without their consent.

18
19 Do not pierce beams or columns without permission of the Owner and then only as directed in writing. If any ductwork,
20 piping, conduit, etc. is required through walls or floors where no sleeve has been provided, use a core drill or saw cut to
21 prevent damage and structural weakening.

22
23 Wherever any material, finish, or equipment, is damaged, the skilled contractor shall accomplish the repair or
24 replacement, in that particular work and the cost shall be charged to the party responsible for the damage.

25 26 **11. MANUFACTURER'S DIRECTIONS**

27 Contractors shall apply, install, connect, erect, use, clean and condition manufactured articles, materials, and equipment
28 as recommended by the manufacturer, unless specified to the contrary. The manufacturer's latest recommendations at
29 the time of bidding shall be used.

30 31 **12. LAYOUT**

32 The General Prime Contractor shall immediately upon entering the site for purpose of beginning work, locate general
33 reference points and take such action as is necessary to prevent their destruction. Each Contractor shall lay out its work
34 and be responsible for all lines, elevations and measurements of the building and other work executed under its Contract.
35 Each Contractor must exercise proper precaution to verify dimensions on the drawings before laying out work and will
36 be held responsible for any error resulting from failure to exercise such precaution.

37
38 Using datum furnished by the Owner, the lot lines and present levels have been established as shown on the drawings.
39 Other grades, lines, levels and benchmarks, shall be established and maintained by each Contractor, who shall be
40 responsible for them.

41
42 As work progresses, the General Prime Contractor shall lay out on forms and floor, the locations of all partitions, walls
43 and fix column centerlines as a guide to all contractors.

44
45 The General Prime Contractor shall make provision to preserve property line stakes, benchmarks, or datum point. If any
46 are lost, displaced or disturbed through neglect of any Contractor, Contractor's agents or employees, the Contractor
47 responsible shall pay the cost of restoration.

48
49 Each Contractor shall verify grades, lines, levels, locations and dimensions as shown on drawings and report any errors
50 or inconsistencies to the Owner before commencing work. Starting of work by each Contractor shall imply acceptance
51 of existing conditions.

1 **13. SUPERVISION**

2 The General Prime Contractor shall take complete charge of the work under this contract and coordinate the work of all
3 contractors on the project.

4
5 **14. FIELD OFFICES**

6 Not required.

7
8 **15. STAIRS AND SCAFFOLDS**

9 The General Prime Contractor shall:

10 Furnish and maintain equipment such as temporary stairs, fixed ladders, ramps, chutes, runways and the like as required
11 for proper execution of work by all contractors, and shall remove them on completion of the work.

12
13 Erect permanent stair framing as soon as possible. Provide stairs with temporary treads, handrails, and shaft protection.

14
15 Contractors requiring scaffolds shall make arrangements with the General Prime Contractor, or shall provide their own
16 and remove them on completion of the work. Each Contractor shall underlay its interior scaffolds with planking to prevent
17 uprights from resting directly on the floor construction.

18
19 **16. HOISTS, ELEVATORS OR CRANES**

20 Each separate contractor shall provide and pay for its own hoist/crane or other apparatus necessary for unloading/setting
21 or moving their equipment and materials. Installation and removal of equipment for this activity must be accounted for
22 in the Project Schedule.

23
24 Equipment and operations for this activity shall comply with applicable Department of Safety and Professional Services
25 and OSHA requirements. No material hoist may be used to transport personnel unless it meets Department of Safety
26 and Professional Services and OSHA requirements for that purpose.

27
28 Contractors shall provide any protection required, temporary or long term, to prevent damage to work in place or in
29 progress. When hoisting activity results in such damage, the responsible contractor shall pay for cleaning, repair or
30 replacement of material or equipment as determined by the Owner.

31
32 Equipment, that imposes loads of any kind on work in place, shall not be erected without agreement from the Owner.

33
34 At their own discretion, two or more contractors may agree to use common hoisting facilities. Under such arrangements,
35 the allocation of costs, access and scheduling and all other details of the agreement are the responsibility of the
36 contractors involved.

37
38 Existing elevators may be used on a limited basis with the Owner's permission and agreement. Costs of warranty
39 extensions and additional service work required will be paid by the using contractor. Appropriate protection must be
40 provided by the using contractor and that contractor shall be responsible for any structural, mechanical or finish damage
41 to the elevator and its parts and to adjoining building finishes and components.

42
43 **17. SIGNS**

44 No project sign required.

45
46 No individual advertising signs, plaques or credits, temporary or permanent, will be permitted on the building or premises,
47 except the name of the Contractor on Contractor's office or material shed.

48
49 **18. FENCE**

50 Construction Staging Areas/Materials Storage Areas: the Owner will assign required Construction Site Staging Areas
51 and Material Storage Areas as required on this project. The General Prime Contractor shall provide an eight-foot (8'-0")
52 high, temporary chain-link construction fence around the site construction staging/material storage areas as required to
53 secure the staging area(s) and construction materials stored on site. Contractor shall construct of standard studded T-

1 Posts of sufficient length for line posts and spaced not to exceed 8'-0" apart. Corner posts and gate posts are to be
2 galvanized steel pipe of not less than 2 1/2" o.d. and shall be properly braced. Note: Plastic fencing or wooden snow
3 fence is not acceptable. Provide gates, properly constructed and braced, complete with hinges, hasps, and padlocks in
4 number and location required for proper control, delivery and distribution of material and equipment. Gate posts shall
5 be adequately back tied and anchored to insure a rigid installation. All protective fencing shall be maintained in an
6 upright, orderly fashion throughout the construction schedule.

7
8 **19. ROADWAY**

9 Not applicable to this project.

10
11 **20. TOILETS**

12 The General Prime Contractor shall arrange with Owner to use existing toilet facilities at building site. Toilets used by
13 workers shall be kept clean and sanitary at all times.

14
15 **21. TELEPHONES**

16 It is expected that each contractor have access to their own cell phone for their own use. No additional telephone service
17 will be provided.

18
19 **22. WATER SUPPLY**

20 The General Prime Contractor shall arrange with the Owner to use nearby existing water service.

21
22 Toilets and slop sinks used by workers shall be kept clean and sanitary at all times.

23
24 The General Prime Contractor shall supply water required for construction and other purposes from the existing
25 building plumbing system.

26
27 The General Prime Contractor shall prevent waste of water and shall maintain valves, connections, and hoses in
28 perfect condition, at all times. Contractors shall provide their own hose or piping from hose bibs.

29
30 **23. TEMPORARY ELECTRICAL WORK**

31 The existing 208Y/120 volt service is being replaced and the existing lighting and receptacles are being removed
32 throughout the building. Provide a temporary 200 ampere, 208Y/120 volt service to serve lights and receptacles while
33 the existing service is unavailable. Pay utility charges for service. Provide temporary lighting and receptacles throughout
34 the construction area.

35
36 If a Contractor contemplates the use of equipment that requires a different voltage or greater capacity than that specified,
37 then that Contractor must arrange with utility for this additional service and pay for installation of the service and the
38 necessary additional switches and wiring required.

39
40 The Electrical Contractor shall provide, at no cost to others, all lamps, wiring, switches, sockets and similar equipment
41 required for temporary system until substantial completion. Upon completion of the project, the Electrical Contractor
42 shall remove the temporary system.

43
44 The temporary lighting system shall be sufficient to enable all contractors to safely complete their work and to enable the
45 Owner to check all work as it is being done. Illumination shall be 5 foot-candles minimum in all areas and, in addition,
46 shall meet or exceed the requirements of 29 CFR 1926.56 Illumination (OSHA regulations).

47
48 In accordance with the latest issue of the National Electrical Code, all temporary electrical circuits for construction
49 purposes shall be equipped with combination ground fault interrupter and circuit breakers meeting the requirements of
50 UL for Class A, Group 1 devices. The ground fault interrupter portion shall be solid state type, insulated and isolated
51 from the breaker mechanism. A test button shall be provided for checking the device. The breaker mechanism shall
52 provide overload and short circuit protection and shall be operated by a toggle switch with overcenter switching
53 mechanism so that contact cannot be held closed.

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All contractors shall furnish their extension cords and lamps other than those furnished for general lighting.

All contractors and other separate Contractors shall be allowed to use the service provided for general lighting and fractional horsepower hand tools at no cost.

The General Prime Contractor shall be compensated by those requiring three phase and single-phase energy used for equipment other than fractional horsepower hand tools. Arrangements shall be made with the General Prime Contractor before construction equipment is used.

24. COLD WEATHER PROTECTION

All heating and protective covering, required to protect the work from injury due to freezing and moisture during the construction period and prior to enclosure of the building, shall be classed as COLD WEATHER PROTECTION. Such protection shall be provided and paid for by the General Prime Contractor.

Heat required to protect materials from injury due to freezing during the construction period and prior to enclosure, shall be provided by means of portable heating units intended for this purpose.

All heating units must be approved types. Proper ventilation must be provided. The use of temporary units whose product of combustion will damage fresh concrete, mortar or other building materials, will not be allowed. Use of coke or oil salamanders is prohibited.

If electrical power is required for oil or gas portable heating units, it may be taken from the available temporary power source and paid for by the General Prime Contractor.

Heating units and the area surrounding the units shall be kept in a clean and safe condition.

25. ENCLOSURE

The General Prime Contractor should provide approved translucent material for temporary enclosure of exterior wall openings if they have not received final louvers. Plain or reinforced polyethylene film or other suitable translucent material will be acceptable, provided it is installed in or on a well fitting rigid wood frame and kept in good repair. This means of temporary enclosure shall be used for other minor openings in walls.

At the end of day's work, securely close temporary enclosures. Padlock work area doors. The General Prime Contractor shall supervise the effectiveness of enclosures.

26. TEMPORARY HEAT

All heating required after enclosure of the building up to substantial completion shall be classified as TEMPORARY HEAT. Enclosure is defined in the preceding Article.

It shall be the responsibility of the General Prime Contractor to see that every precaution is used to prevent unnecessary escape of heat.

For installations that are not connected to central plant steam or central plant hot water, the General Prime Contractor shall pay the fuel costs for temporary heat for both permanent heating systems used for temporary heat and/or temporary heating systems used for temporary heat.

The General Prime Contractor shall pay for all electrical energy consumed for temporary heat.

The Mechanical Contractor shall provide one of the following systems or a combination thereof, for furnishing temporary heat:

1 Permanent heating system may be used for temporary heating. If permanent system is used, the Mechanical Contractor
2 shall install in their permanent location heating coils or connectors as approved by the Owner, with controls to maintain
3 temperatures required. Temporary filters shall be used in the permanent system. Provide bases, shields, etc., around
4 heating elements to prevent too rapid drying of adjacent concrete, masonry or plaster. Relocation of some of the
5 permanent heating system equipment may be required during construction to prevent interference with new construction.
6 Temporary units may be installed in such areas during the time permanent equipment is not operating due to relocation.

7
8 The distribution piping of the permanent heating system may be utilized for supply and return to unit heaters on each
9 floor in lieu of temporary piping, provided approved connections, controls and protection of such piping is maintained.

10
11 If the permanent air system is used during temporary heating period, temporary filters shall be provided in the system
12 and they shall have efficiency equal to the permanent filters. The return air ductwork shall be protected from construction
13 dirt by temporary filters placed over return openings.

14
15 If the Mechanical Contractor does not have one of the above systems in operation by the time the building is enclosed,
16 then the Mechanical Contractor shall provide, maintain and supervise the operation of temporary portable units with
17 necessary automatic controls to provide required temperatures. Current required may be taken from the temporary
18 electrical service. See "Temporary Electrical Installation". Cost of fuel to operate portable units shall be paid by the
19 General Prime Contractor.

20
21 All electrical wiring required for temporary heating units shall be furnished and installed by Mechanical Contractor, from
22 temporary wiring service. Electrical wiring to permanent equipment used for temporary heating that has been mounted
23 in its permanent location shall be wired by contractors skilled in that work.

24
25 The use of open salamanders as portable heating units will not be approved. All portable temporary heating units shall
26 be properly ventilated to prevent combustion gases from remaining in the heating area.

27
28 The Mechanical Contractor must ascertain if heating equipment will operate on the temporary electrical service available.
29 If service is insufficient to operate equipment, Mechanical Contractor shall make other arrangements.

30
31 The Mechanical Contractor shall be responsible for the proper adjustment and maintenance of the system, and shall
32 supervise and be responsible for the operation of the system used for temporary heating until the Owner occupies the
33 building. Supervision shall include periodic checking of operation as required.

34
35 A minimum temperature of 45 degrees and a maximum temperature of 60 degrees for the building shall be maintained
36 by the Mechanical Contractor, except for a period of at least ten days prior to the placing of interior woodwork and
37 throughout the placing of this and other finish, varnishing, painting, etc., and until substantial completion to provide
38 sufficient heat to insure a temperature in the spaces involved of not less than 70 degrees nor more than 80 degrees.

39
40 The temporary heating system shall be removed by the Mechanical Contractor after the permanent heating system has
41 been installed and operating. Surfaces and structure shall be patched as required. Temporary heating equipment shall
42 be relocated by the Mechanical Contractor as required during construction to prevent interference with new construction.

43
44 At completion of construction work or when temporary heat is no longer required, Mechanical Contractor must repair any
45 damage done to permanent equipment during temporary heating period and also perform the necessary cleaning of all
46 ducts and equipment. The Mechanical Contractor shall provide permanent filters to the complete satisfaction of the
47 Owner.

48 49 **27. FIRE PROTECTION**

50 The General Prime Contractor shall provide and maintain in working order during the entire construction period, a
51 minimum of three (3) fire extinguishers on each floor level, including basement of the building, and one (1) in temporary
52 office. Extinguishers shall be non-freeze type such as A-B-C rated dry chemical, of not less than 10-pound capacity

1 each. In addition, any Subcontractor who maintains an enclosed shed on the site shall provide and maintain, in an
2 accessible location, one or more similar nonfreezing type fire extinguisher in each enclosed shed.
3

4 **28. WATCHPERSONS**

5 Watchpersons will not be furnished by the Owner. The Contractor shall provide such precautionary measures, to include
6 the furnishing of watchpersons if deemed necessary, to protect persons and property from damage or loss where the
7 Contractor's work is involved.
8

9 **29. STORAGE OF MATERIALS**

10 Contractor shall confine equipment, apparatus, storage of materials and operations to limits indicated on the drawings
11 or by specific direction of the Owner and shall not bring material onto the site until they are needed for the progress of
12 the work.
13

14 The storage of materials on the grounds and within the building shall be in strict accordance with the instructions of the
15 Owner. Storage of materials within the building shall at no time exceed the design carrying capacity of the structural
16 system.
17

18 All materials affected by moisture shall be stored on platforms and protected from the weather.
19

20 All materials shall be stored in a manner that prevents release of hazardous material to the environment.
21

22 All hazardous materials, including motor fuels, shall be properly handled and contained to prevent spills or other releases.
23 The General Prime Contractor shall develop and maintain a contingency plan to provide emergency response,
24 containment, and cleanup of spills of hazardous materials resulting from contract activities. All spills and releases shall
25 be reported to the Owner as soon as possible.
26

27 During the construction of this building, materials, construction sheds, and earth stockpiles shall be located so as not to
28 interfere with the installation of the utilities nor cause damage to existing lines.
29

30 The Contractor shall allot space to others for storage of their materials, and erection of their sheds.
31

32 Should it be necessary at any time to move material sheds or storage platforms, the Contractor shall move same at the
33 Contractor's expense, when directed by Owner.
34

35 Repairing of areas used for placing of sheds, offices, and for storage of materials shall be done by the Contractor.
36

37 **30. PROTECTION OF FINISHED CONSTRUCTION**

38 Contractor shall assume the responsibility for the protection of all finished construction under the Contract and shall
39 repair and restore any and all damage of finished work to its original state.
40

41 Wheeling of any loads over any type of floor, either with or without plank protection, will be permitted only in rubber tired
42 wheelbarrows, buggies, trucks or dollies.
43

44 Where structural concrete is also the finished surface, care must be taken to avoid marking or damaging those surfaces.
45

46 **31. PROTECTION IN GENERAL**

47 All structures and equipment shall be constructed, installed and operated with guards, controls and other devices in
48 place.
49

50 Temporary pumps required for pumping water from building excavation or from building proper shall be provided by the
51 General Prime Contractor, including temporary connections. Plumbing Contractor shall install permanent sump basins
52 and piping where and when required. Permanent sump pumps shall not be installed until building is substantially

1 complete and when approved by Owner. The General Prime Contractor shall remove temporary pumps and connections
2 when approved by Owner.

3
4 The General Prime Contractor shall:

5 Provide, erect and maintain all required planking, barricades, guard rails, temporary walkways, etc., of sufficient size and
6 strength necessary for protection of stored material and equipment; paved surfaces, walks, curbs, gutters and drives;
7 streets adjacent to or within project area; adjoining property and all project work to prevent accidents to the public and
8 the workmen at the job site.

9
10 Notify adjacent property owners if their property interferes with the work so that arrangements for proper protection can
11 be made.

12
13 Provide and maintain proper shoring and bracing to prevent earth from caving or washing into the building excavation.
14 Provide temporary protection around openings through floors and roofs, including elevator openings, stairwells, and edge
15 of slabs.

16
17 Provide and maintain proper shoring and bracing for existing underground utilities, sewers, etc., encountered during
18 excavation work, to protect them from collapse or other type of damage until such time as they are to be removed,
19 incorporated into the new work, or can be properly backfilled upon completion of new work.

20
21 Provide protection against rain, snow, wind, ice, storms, or heat to maintain all work, materials, apparatus, and fixtures,
22 incorporated in the work or stored on the site, free from injury or damage. At the end of the day's work, cover all new
23 work likely to be damaged. Remove snow and ice as necessary for safety and proper execution of the work.

24
25 Protect the building and foundations from damage at all times from rain, ground water and back-up from drains or sewers.
26 Provide all equipment and enclosures as necessary to provide this protection.

27
28 Damaged property shall be repaired or replaced in order to return it to its original condition. Damaged lawns shall be
29 replaced with sod.

30
31 Protect materials, work and equipment, not normally covered by above protection, until construction proceeds to a point
32 where the general building protection of the area where located, dispenses with the necessity therefore. Protect work
33 outside of the building lines such as trenches and open excavations, as specified above.

34
35 Take all necessary precautions to protect the Owner's property as well as adjacent property, including trees, shrubs,
36 buildings, sanitary and storm sewers, water piping, gas piping, electric conduit or cable, etc., from any and all damage
37 which may result due to work on this project.

38
39 Repair work outside of property line in accordance with the requirements of the authority having jurisdiction.

40
41 Repair any work, damaged by failure to provide proper and adequate protection, to its original state to the satisfaction of
42 the Owner or remove and replace with new work at the Contractor's expense.

43
44 Protect trees indicated on the drawings to remain and trees in locations that would not interfere with new construction,
45 from all damage. Do not injure trunks, branches, or roots of trees that are to remain. Do cutting and trimming only as
46 approved and as directed by Owner.

47
48 The value of trees destroyed or damaged will be charged against the account of the Contractor responsible for the
49 damage in an amount equal to the expense of replacing the trees with those of similar kind and size.

50
51 **32. ABATEMENT PROTECTION**

52 ***General Prime Contractor is responsible for providing protection for existing conditions on all surfaces along***
53 ***circulation path from the loading dock to Work on 3rd and 4th floors before abatement begins.***

1
2 **33. CLEANING AND WASTE DISPOSAL**

3 Contractor shall be responsible for all cleaning required within the technical sections of the specifications governing work
4 under the Contractor's jurisdiction as well as for keeping all work areas, passageways, ramps, stairs and all other areas
5 of the premises free of accumulation of surplus materials, rubbish, debris and scrap which may be caused by the
6 Contractor's operations or that of the Subcontractors.

7
8 Remove rubbish, debris and scrap promptly upon its accumulation and in no event later than the end of each week.

9
10 Combustible waste shall be removed immediately or stored in fire resistive containers until disposed of in an approved
11 manner.

12
13 No burning of rubbish or debris will be allowed at the site. Rubbish, debris and scrap shall not be thrown through any
14 window or other opening, or dropped from any great height; it shall be conducted to the ground, to waiting truck(s) or
15 removable container(s) by means of approved chutes or other means of controlled conveyance.

16
17 Form and scrap lumber shall have all nails withdrawn or bent over; shall be neatly stacked, placed in trash bins, or
18 removed from the premises.

19
20 Spillages of oil, grease or other liquids which could cause a slippery or otherwise hazardous situation or stain a finished
21 surface, shall be cleaned up immediately.

22
23 Dust, dirt and other foreign matter shall be removed completely from all internal surfaces of all mechanical and electrical
24 units, cabinets, ducts, pipes, etc.

25
26 Dirt, soil, fingerprints, stains and the like, shall be completely removed from all exposed finished surfaces.

27
28 General Prime Contractor shall wash all glass immediately prior to the occupancy of this project. Work shall include the
29 removal of labels, paint splattering, glazing compound and sealant. Surfaces shall include mirrors and both sides of all
30 glass in windows, borrowed lights, partitions, doors and side lights.

31
32 Broken, scratched or otherwise damaged glass shall be replaced by the General Prime Contractor.

33
34 In addition to the above, the General Prime Contractor shall be responsible for the general "broom" cleaning of the
35 premises and for expediting all of the cleaning, washing, waxing and polishing required within the technical sections of
36 the specifications governing work under this Contract. The General Prime Contractor shall also perform "final" cleaning
37 of all exposed surfaces to remove all foreign matter, spots, soil, construction dust, etc., so as to put the project in a
38 complete and finished condition ready for acceptance and use intended.

39
40 If rubbish and debris is not removed, or if surfaces are not cleaned as specified above, the Owner reserves the right to
41 have said work done by others and the related cost(s) will be deducted from monies due the Contractor.

42
43 **34. OPERATING AND MAINTENANCE MANUALS AND INSTRUCTIONS**

44 Contractor shall provide the Owner with two (2) sets of the O&M data for each device, piece of equipment and assembly
45 furnished and/or installed under this contract. Format shall be paper, indexed and labeled and bound in three-ring
46 binders. When duplicate electronic data is available, include electronic media in 3-hole vinyl holders in binders.

47
48 The O&M manuals shall include the following:

- 49
- 50 • Table of Contents
 - 51 • Contact information (including emergency contact number) for installing contractor, original vendor
52 manufacturer and service provider
 - 53 • Copy of approved submittals
 - As-built control drawings and sequences of operations

- 1 • Catalog data or literature with correct model number checked
- 2 • Manufacturer's installation and operation instructions including start-up, break-in, shutdown, seasonal,
- 3 emergency and special operation procedures
- 4 • Manufacturer's maintenance instructions including procedures and instructions for problem corrections,
- 5 preventive maintenance, testing, alignment, adjustment and repair
- 6 • Complete parts list in an exploded view diagram of the equipment
- 7 • Construction Verification Checklists
- 8 • Inspection and testing reports
- 9 • Maintenance records indicating maintenance performed by contractor prior to substantial completion
- 10 • Equipment warranties including terms and conditions and date of inception (substantial completion) and date
- 11 of expiration
- 12 • List of special tools or testing equipment required for the operation, testing or maintenance of the equipment
- 13 • For items assembled by the Contractor for special functions, write operating and maintenance instructions

14 Contractor shall submit to A/E for review, make revisions noted by A/E and provide final O&M data for A/E's review 30
 15 business days prior to training. Any revisions or changes to the systems and/or equipment post delivery of the final O &
 16 M data submittal must be submitted to A/E as an addendum within 30 days of the revision or change.

17
 18 **35. TESTS AND ADJUSTMENTS**

19 The complete installation consisting of the several parts and systems and all equipment installed according to the
 20 requirements of the Contract Documents, shall be ready in all respects for use by the Owner and shall be subjected to a
 21 test at full operating conditions and pressures for normal conditions of use.

22
 23 Contractor shall make all necessary adjustments and replacements affecting the work which is necessary to fulfill Owner
 24 requirements and to comply with the directions and recommendations of the manufacturer of the several pieces of
 25 equipment, and to comply with all codes and regulations which may apply to the entire installation. Contractor shall also
 26 make all required adjustments to comply with all provisions of the drawings and specifications.

27
 28 **36. LOOSE AND DETACHABLE PARTS**

29 Contractor shall retain all loose and small detachable parts of apparatus and equipment furnished under this Contract,
 30 until completion of the work and shall turn them over to Owner designated to receive them. Contractor shall obtain from
 31 the Owner an itemized receipt thereof

32
 33 **37. EROSION CONTROL AND STORM WATER MANAGEMENT**

34 In accordance with state law, where applicable, and what the University of Wisconsin System Administration believes to
 35 be good soil conservation practices and pollution prevention, the General Prime Contractor shall be governed by the
 36 following:

37
 38 The General Prime Contractor hereby covenants to maintain all project grounds, public streets and associated areas,
 39 including fill areas in a manner consistent with state laws and the general policy to conserve soil and soil resources, and
 40 to control and prevent soil erosion and to control and prevent siltation into waters of the state. This clause is to be
 41 liberally construed to further the above stated objectives. The following shall include, but not limit areas in which control
 42 is to be executed:

43
 44 Erosion Control Plan: Implement the erosion control plan developed for the project and maintain erosion control practices
 45 throughout the construction period. Modifications to the erosion control plan, addressing phases of construction shall be
 46 the responsibility of the General Prime Contractor. Erosion control practices that are compromised as the result of
 47 construction activity shall be returned to their functioning state by the end of the current work day. Where applicable,
 48 erosion control practices shall comply with Chapters NR 151 and 216, Wis. Adm. Code.

49
 50 Minimum Stripping: Limit stripping of sod and vegetation and limit land disturbance to an area and a time period that will
 51 expose bare soil to least possibility of erosion that construction requirements will allow.

1 Stockpiling: Materials, including soil, shall be stored and protected in a manner that will prevent runoff of material from
2 the stockpiles into streets, drainage facilities, storm sewer systems, or waters of the state in the event of rain.
3

4 Soil Erosion and Erodible Materials: Take positive measures to prevent soil erosion from the construction area and areas
5 disturbed by construction activities by employing such means as seed and mulch, mulches, intercepting embankments
6 and berms, sedimentation basins, ditch checks, riprap, erosion mats, silt fence, approved polyacrylamides, inlet
7 protection, or other temporary erosion control devices or methods.
8

9 Record Keeping: Maintain a copy of the current erosion control plan on site. Maintain maintenance records and
10 inspection logs on-site for erosion control and storm water management practices. Contractor shall provide Owner with
11 a weekly maintenance and inspection report.
12

13 Street Maintenance: Control the tracking of soil onto street and paved surfaces to a minimum. Any such tracking shall
14 be removed no less than on a daily basis.
15

16 Storm Water Management: Practices installed for post-construction storm water management shall be protected during
17 construction activity, and in the event that their intended function becomes compromised during construction activity,
18 shall be restored and/or repaired according to Chapters NR 151 and 216, Wis. Adm. Code, for post-construction storm
19 water management.
20

21 Erosion control and storm water management practices shall be installed and maintained in accordance with the WDNR
22 approved technical standards available at the following website:

23 <http://dnr.wi.gov/org/water/wm/nps/stormwater/techstds.htm>
24

25 Responsibility and authority for maintaining records for NR 216 is the responsibility of the General Prime Contractor.
26

27 **38. AIR QUALITY MANAGEMENT**

28 In accordance with the Department of Administration's air quality management practice on Ozone Action Days, all
29 contractors shall reduce or limit emissions and particulate matter that adversely affect air quality.
30

31 The General Prime Contractor shall establish the action plan, in cooperation with other contractor(s), concerning
32 implementation of air quality management on Ozone Action Days. This plan shall include suspending work or modifying
33 operations for all activities related to ozone, volatile organic compounds (VOC) and nitrogen oxide emissions. These
34 work activities include but are not limited to the following:

35 Limit equipment and vehicle refueling to after 6 pm.

36 Limit use of gasoline-powered vehicle and equipment.

37 Limit excessive idling of diesel-powered vehicle and equipment.

38 Limit large scale painting with VOC.

39 Limit large scale asphalt roofing and paving.

40 Limit and/or control all dust creating activities.
41

42 For information on air quality readings on Ozone Action Days refer to:

43 1-866-324-5924; or

44 <http://www.dnr.state.wi.us/org/aw/air/wisards/state.htm>
45

46 **39. CONSTRUCTION WASTE MANAGEMENT**

47 See Section 01 74 19 – Construction Waste Management.
48

49 **40. GUARANTEE DOCUMENTS**

50 Upon Substantial Completion of project, the Contractor shall submit such written guarantees and bonds to the Owner.
51

1 **41. RECORD DOCUMENTS**

2 On a suitable set of Contract Documents, the contractor is to maintain a daily record of changes and deviations from the
3 contract. All buried or concealed piping, conduit, or similar items shall be located by dimensions and elevations on the
4 record drawings.

5
6 The daily record of changes shall be the responsibility of Contractor's field superintendent. No arbitrary mark-ups will be
7 permitted.

8
9 Once during the month the Contractor shall present at the project, the job copy showing variations and changes to date
10 to the Architect/Engineer and the Owner for their review.

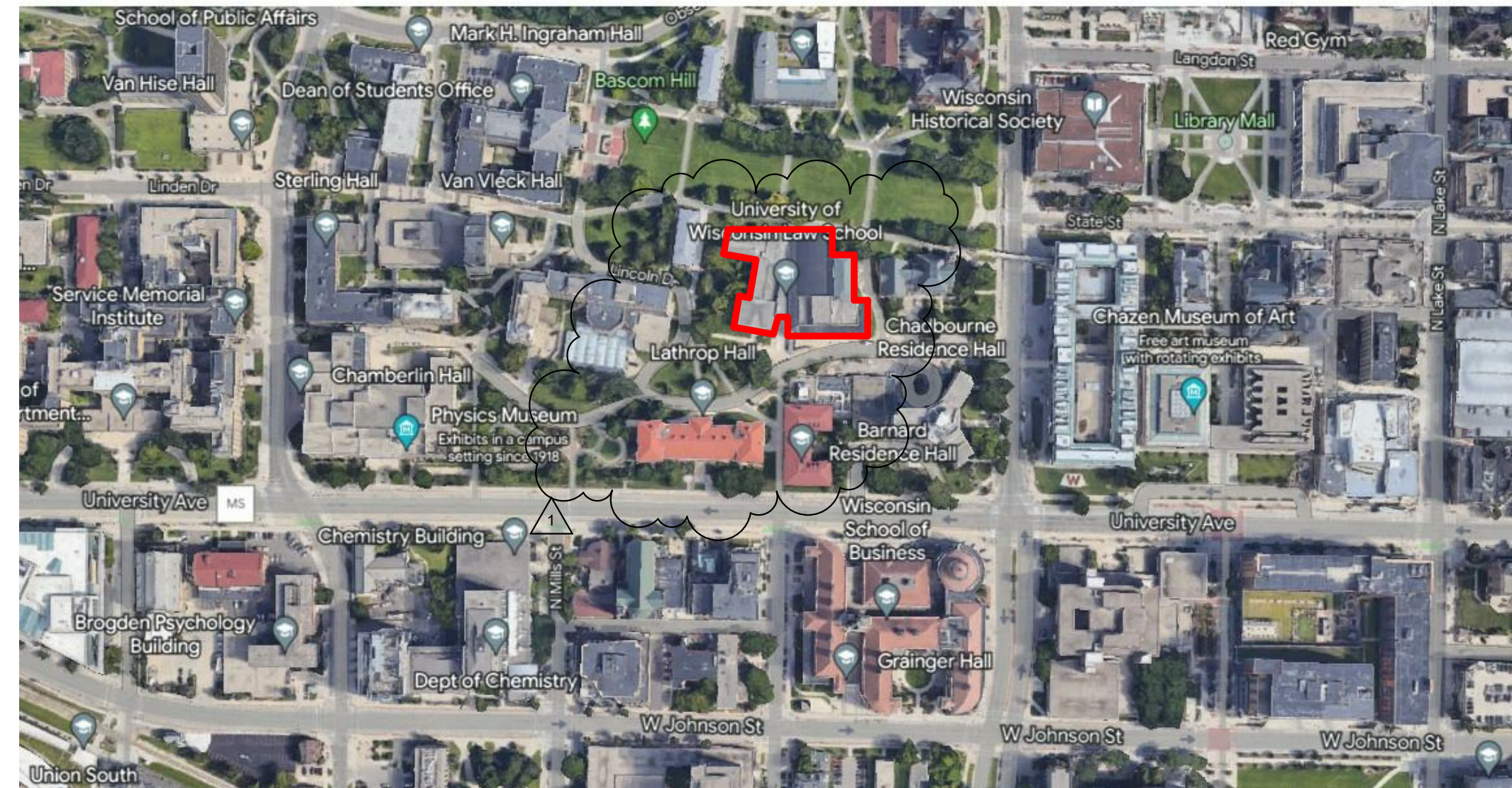
11
12 At substantial completion of the project, the Contractor shall transmit the marked up as-built documents to the
13 Architect/Engineer and copy the Owner on the transmittal of the documents. The A/E will incorporate the contractor
14 marked up as-built drawings into the record drawings.

15 ***
16

LAW BUILDING 4TH FLOOR RENOVATION UW-MADISON MADISON, WI

975 BASCOM MALL MADISON, WI 53706

PROJECT LOCATION

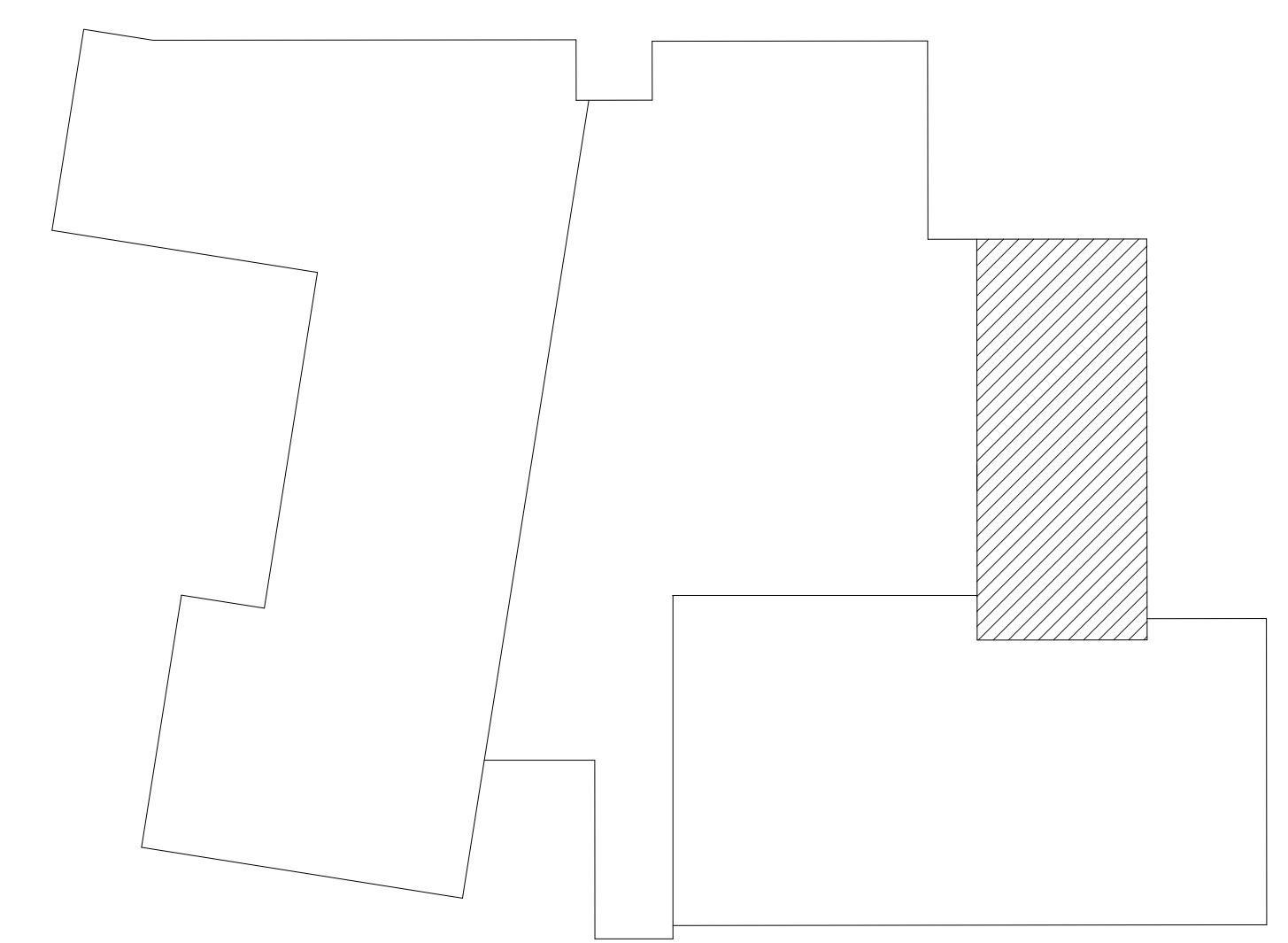


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GENERAL BUILDING INFORMATION

PER IBC 2015 WITH WISCONSIN COMMERCIAL BUILDING CODE MODIFICATIONS, HISTORIC BUILDING
GROSS SQUARE FOOTAGE: 3280 SQ FT
MAJOR USE AND OCCUPANCY CLASSIFICATION: B
CONSTRUCTION TYPE: IB
FIRE PROTECTION: AREA OF WORK NON-SPRINKLERED, MAINTAIN ALL EXISTING FIRE RESISTANCE RATINGS
4 HOUR BUILDING SEPARATION
2 HOUR PRIMARY STRUCTURAL FRAME, BEARING WALLS, FLOOR CONSTRUCTION, AND SECONDARY MEMBERS.



ABBREVIATIONS table with columns for letter and description. Includes entries like AB ANCHOR BOLT, AC AIR CONDITIONING, ADJ ADJACENT, etc.

Table with columns for letter and description. Includes entries like F FLUOR FLUORESCENT, FND FOUNDATION, FOS FACE OF, etc.

Table with columns for letter and description. Includes entries like PERM PERIMETER, PERP PERPENDICULAR, PL PLATE, etc.

GENERAL ARCHITECTURAL SYMBOLS: Section containing various symbols for detail reference, wall section reference, building section reference, call out reference, interior and exterior elevation reference, partition type, existing walls, window types, and accessibility symbols.

HATCH PATTERNS / MATERIAL SYMBOLS: Section showing various hatch patterns and their corresponding material names such as ALUMINUM, BATT INSUL, BRICK, CONCRETE MASONRY UNIT, etc.

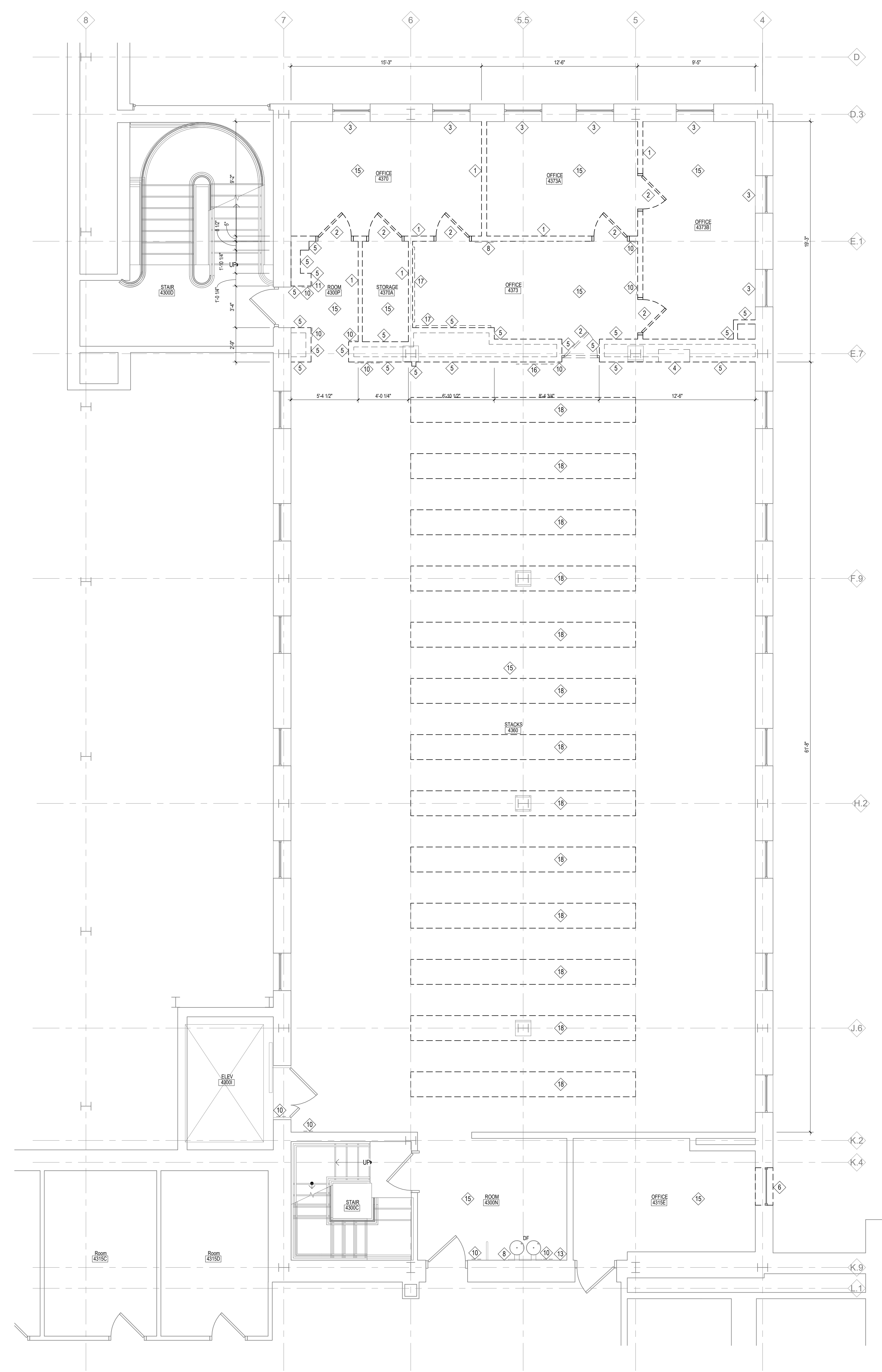
TOILET ACCESSORY SCHEDULE: Table listing abbreviations and standard mounting heights for items like ETD, GB18, and SD.

DEMOLITION FLOOR PLAN GENERAL NOTES

1. NOT ALL KEYNOTES ARE USED ON ALL SHEETS.
2. FOR ALL OPENINGS TO BE PROVIDED IN EXISTING BUILDING COORDINATE SIZE AND LOCATION WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
3. REFER TO MEP FOR ADDITIONAL DEMOLITION.
4. PRIOR TO DEMOLITION, GENERAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION, ENGINEERING AND STRUCTURE FOR OPENINGS INDICATED ON DRAWINGS IN EXISTING BUILDING. REFER TO MECH GENERAL NOTE 2, MECH GENERAL NOTES 4 AND 10.
5. FIELD VERIFY ALL EXISTING CONDITIONS, NOTIFY ARCHITECT OF ALL DISCREPANCIES.
6. PATCH SURFACES DAMAGED BY DEMOLITION TO MATCH EXISTING ADJACENT SURFACES.
7. REMOVE PORTION OF EXISTING SLAB AND PREP FOR INSTALLATION OF FLOOR MOUNT PIVOTS AT DOOR. SEE SPECIFICATION 06 41 26 FLOOR SLAB REQUIRES FIELD VERIFICATION AND SCAN PRIOR TO CUTTING AND PRIOR TO 06 41 26 SHOP DRAWING SUBMITTAL OR ANY FABRICATION.
8. THE UNIVERSITY OF WISCONSIN-MADISON, UNDER SEPARATE CONTRACT, WILL REMOVE NON-FIBERGLASS FIRE INSULATION, HAND PACKED PIPE FITTINGS, F FLOOR TILE, BLACK FLOORING MASTIC, AND PLASTER THAT WILL BE DISTURBED BY THE CONTRACTORS WORK. CONTRACTOR IS TO MARK EXTENT OF THESE MATERIALS TO BE REMOVED AND COORDINATE WORK WITH THE ABATEMENT CONTRACTOR. ALLOW AMPLS TIME IN THE WORK SCHEDULE FOR ASBESTOS ABATEMENT. ABATEMENT CONTRACTOR WILL REQUIRE SOLE OCCUPANCY OF THE WORKSPACE DURING ASBESTOS ABATEMENT WORK.
9. EXISTING WINDOW GLAZING COMPOUND, CALLING AND SEALANTS ARE ASSUMED TO CONTAIN ASBESTOS AND THE REMOVAL OF THESE ITEMS IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR REMOVING EXISTING CALLING, SEALANTS AND/OR WINDOWS SHALL COMPLY WITH WISCONSIN ADMINISTRATIVE CODE CHAPTER DEPARTMENT OF HEALTH SERVICES 109. CERTIFICATION AND TRAINING REQUIREMENTS FOR ASBESTOS ACTIVITIES. WORKERS REMOVING THE EXISTING CALLING, SEALANT AND/OR WINDOWS ON THIS PROJECT SHALL BE ASBESTOS CERTIFIED BY WISCONSIN DHS.

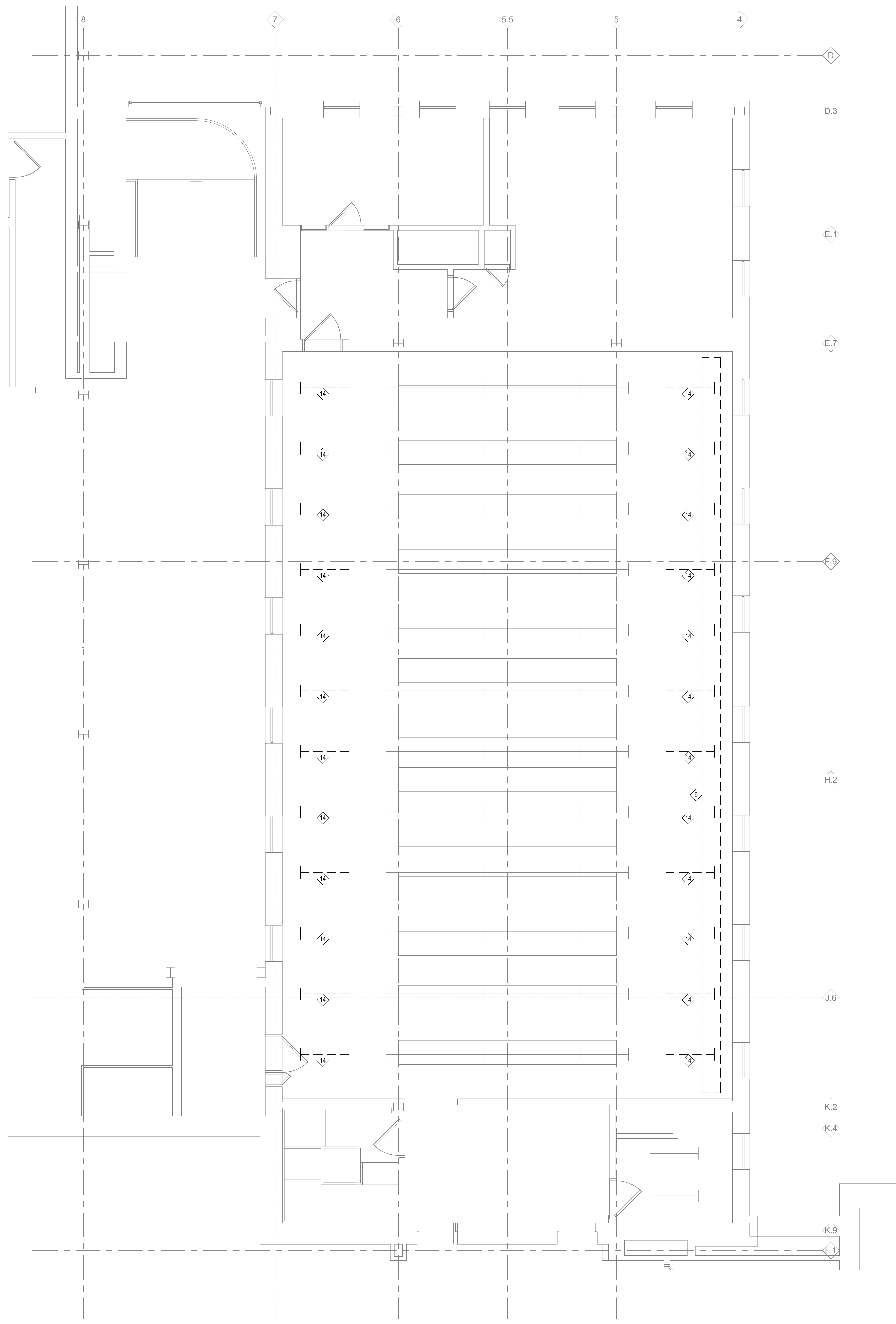
DEMOLITION PLAN KEY NOTES

1. REMOVE STUD WALL, LATH AND PLASTER, 2 SIDES.
2. DEMO WD DOOR AND HW FRAME. REMOVE AND RETURN ALL LOCK CYLINDERS TO LW LOCK SHOP.
3. REMOVE BLINDS, SALVAGE, AND RETURN TO OWNER.
4. DEMO HOSE CABINET IN ITS ENTIRETY.
5. REMOVE STUD WALL, LATH AND PLASTER, 1 SIDE.
6. DEMO AND SALVAGE METAL WINDOW. LW TO STORE WINDOW FOR FUTURE REINSTALLATION.
7. DEMO LIGHT. REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION.
8. REMOVE CLOCK, SALVAGE, AND RETURN TO OWNER.
9. REMOVE CABLE TRAY. REFER TO ELECTRICAL FOR MORE INFORMATION AND RELOCATION OF CABLE TRAY. PATCH HOLES AND MATCH ADJACENT PLASTER.
10. REMOVE AND SALVAGE SIGNAGE FOR REINSTALLATION.
11. REMOVE AND SALVAGE FIRE EXTINGUISHER BRACKET.
12. NOT USED.
13. DEMO 1'-4" x 4" STAINLESS STEEL PANEL.
14. REMOVE AND SALVAGE LIGHT FOR REINSTALLATION. REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION. PATCH HOLES AND MATCH ADJACENT PLASTER.
15. DEMO CARPET AND RESILIENT BASE. REMOVE MASTIC AND PREP FLOOR FOR SCHEDULED FINISH.
16. REMOVE CONCRETE BOARD, SALVAGE, AND RETURN TO OWNER.
17. REMOVE DISPLAY BOARD, SALVAGE AND RETURN TO OWNER.
18. DEMO AND RECYCLE LIBRARY STACKS.

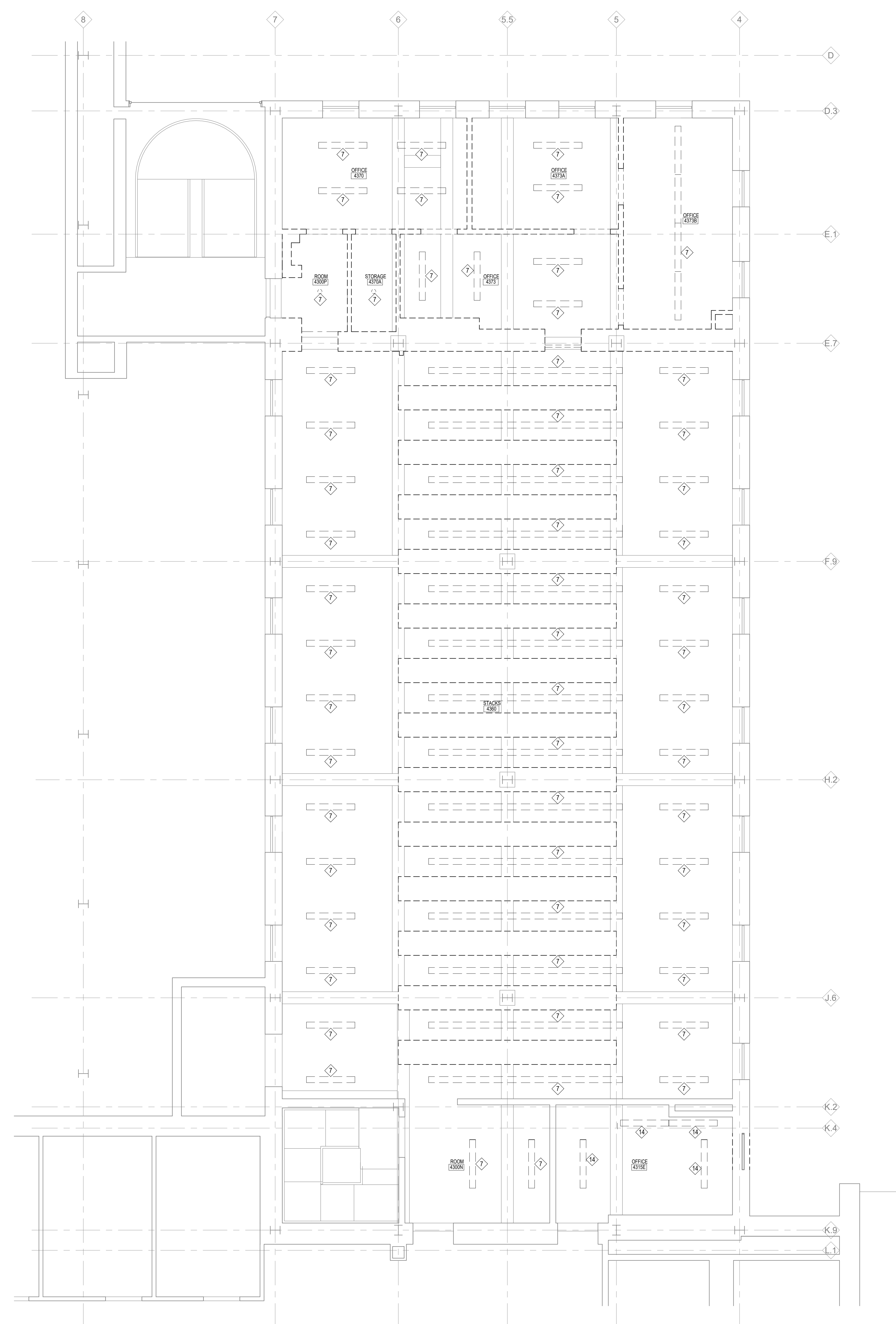


1 FOURTH FLOOR DEMO PLAN
1/4" = 1'-0"

- DEMOLITION RCP PLAN GENERAL NOTES**
1. NOT ALL KEYNOTES ARE USED ON ALL SHEETS.
 2. SEE MECHANICAL AND ELECTRICAL DEMOLITION DRAWINGS FOR ALL EXISTING BUILDING/CEILING MOUNTED DEVICES WHETHER SPECIFICALLY LISTED OR NOT.
 3. REFER TO ELECTRICAL FOR LIGHTING DEMOLITION.
 4. REFER TO MEP FOR ADDITIONAL DEMOLITION REGARDING MEP SYSTEMS.
 5. FIELD VERIFY ALL EXISTING CONDITIONS, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
 6. PATCH SURFACES DAMAGED BY DEMOLITION TO MATCH EXISTING ADJACENT SURFACES.
 7. REFER TO CD04 FOR REMOVAL OF WALLS.
 8. THE UNIVERSITY OF WISCONSIN-MADISON, UNDER SEPARATE CONTRACT, WILL REMOVE NON-FIBERGLASS PIPE INSULATION, HARD PACKED PIPE FITTINGS, FLOOR TILE, BLACK FLOORING, MASTIC, AND PLASTER THAT WILL BE DISTURBED BY THE CONTRACTORS WORK. CONTRACTOR IS TO MARK EXTENT OF THESE MATERIALS TO BE REMOVED AND COORDINATE WORK WITH THE ABATEMENT CONTRACTOR. ALLOW AMPLE TIME IN THE WORK SCHEDULE FOR ASBESTOS ABATEMENT. ABATEMENT CONTRACTOR WILL REQUIRE SOLE OCCUPANCY OF THE WORKSPACE DURING ASBESTOS ABATEMENT WORK.
 9. EXISTING WINDOW GLAZING COMPOUND, CALKING AND SEALANTS ARE ASSUMED TO CONTAIN ASBESTOS AND THE REMOVAL OF THESE ITEMS IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR REMOVING EXISTING CALKING AND/OR SEALANTS SHALL COMPLY WITH WISCONSIN ADMINISTRATIVE CODE CHAPTER DEPARTMENT OF HEALTH SERVICES 100. CERTIFICATION AND TRAINING REQUIREMENTS FOR ASBESTOS ACTIVITIES. WORKERS REMOVING THE EXISTING CALKING, SEALANT AND/OR WINDOWS ON THIS PROJECT SHALL BE ASBESTOS CERTIFIED BY WISCONSIN DHS.
- DEMOLITION PLAN KEY NOTES**
1. REMOVE STUD WALL, LATH AND PLASTER, 2 SIDES.
 2. DEMO W/D DOOR AND HW FRAME. REMOVE AND RETURN ALL LOCK CYLINDERS TO LW LOCK SHOP.
 3. REMOVE BLINDS, SALVAGE, AND RETURN TO OWNER.
 4. DEMO HOSE CABINET IN ITS ENTIRETY.
 5. REMOVE STUD WALL, LATH AND PLASTER, 1 SIDE.
 6. DEMO AND SALVAGE METAL WINDOW. LW TO STORE WINDOW FOR FUTURE REINSTALLATION.
 7. DEMO LIGHT. REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION.
 8. REMOVE CLOCK, SALVAGE, AND RETURN TO OWNER.
 9. REMOVE CABLE TRAY. REFER TO ELECTRICAL FOR MORE INFORMATION AND RELOCATION OF CABLE TRAY. PATCH HOLES AND MATCH ADJACENT PLASTER.
 10. REMOVE AND SALVAGE SIGNAGE FOR REINSTALLATION.
 11. REMOVE AND SALVAGE FIRE EXTINGUISHER BRACKET.
 12. NOT USED.
 13. DEMO 1'-4" x 4" STAINLESS STEEL PANEL.
 14. REMOVE AND SALVAGE LIGHT FOR REINSTALLATION. REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION. PATCH HOLES AND MATCH ADJACENT PLASTER.
 15. DEMO CARPET AND RESILIENT BASE. REMOVE MASTIC AND PREP FLOOR FOR SCHEDULED FINISH.
 16. REMOVE CARPET BOARD, SALVAGE, AND RETURN TO OWNER.
 17. REMOVE DISPLAY BOARD, SALVAGE AND RETURN TO OWNER.
 18. DEMO AND RECYCLE LIBRARY STACKS.



1 THIRD FLOOR DEMOLITION CEILING PLAN
1/4" = 1'-0"



- DEMOLITION RCP PLAN GENERAL NOTES**
1. NOT ALL KEYNOTES ARE USED ON ALL SHEETS.
 2. SEE MECHANICAL AND ELECTRICAL DEMOLITION DRAWINGS FOR ALL EXISTING BUILDING/CEILING MOUNTED DEVICES WHETHER SPECIFICALLY LISTED OR NOT.
 3. REFER TO ELECTRICAL FOR LIGHTING DEMOLITION.
 4. REFER TO MEP FOR ADDITIONAL DEMOLITION REGARDING MEP SYSTEMS.
 5. FIELD VERIFY ALL EXISTING CONDITIONS, NOTIFY ARCHITECT OF ANY DISCREPANCIES.
 6. PATCH SURFACES DAMAGED BY DEMOLITION TO MATCH EXISTING ADJACENT SURFACES.
 7. REFER TO CD04 FOR REMOVAL OF WALLS.
 8. THE UNIVERSITY OF WISCONSIN-MADISON, UNDER SEPARATE CONTRACT, WILL REMOVE NON-FIBERGLASS PIPE INSULATION, HARD PACKED PIPE FITTINGS, FLOOR TILE, BLACK FLOORING, MASTIC, AND PLASTER THAT WILL BE DISTURBED BY THE CONTRACTORS WORK. CONTRACTOR IS TO MARK EXTENT OF THESE MATERIALS TO BE REMOVED AND COORDINATE WORK WITH THE ABATEMENT CONTRACTOR. ALLOW AMPLE TIME IN THE WORK SCHEDULE FOR ASBESTOS ABATEMENT. ABATEMENT CONTRACTOR WILL REQUIRE SOLE OCCUPANCY OF THE WORKSPACE DURING ASBESTOS ABATEMENT WORK.
 9. EXISTING WINDOW GLAZING COMPOUND, CALKING AND SEALANTS ARE ASSUMED TO CONTAIN ASBESTOS AND THE REMOVAL OF THESE ITEMS IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR REMOVING EXISTING CALKING SEALANTS AND/OR WINDOWS SHALL COMPLY WITH WISCONSIN ADMINISTRATIVE CODE CHAPTER DEPARTMENT OF HEALTH SERVICES 100. CERTIFICATION AND TRAINING REQUIREMENTS FOR ASBESTOS ACTIVITIES. WORKERS REMOVING THE EXISTING CALKING, SEALANT AND/OR WINDOWS ON THIS PROJECT SHALL BE ASBESTOS CERTIFIED BY WISCONSIN DHS.
- DEMOLITION PLAN KEY NOTES**
1. REMOVE STUD WALL, LATH AND PLASTER, 2 SIDES.
 2. DEMO W/D DOOR AND H/W FRAME. REMOVE AND RETURN ALL LOCK CYLINDERS TO UW LOCK SHOP.
 3. REMOVE BLINDS, SALVAGE, AND RETURN TO OWNER.
 4. DEMO HOSE CABINET IN ITS ENTIRETY.
 5. REMOVE STUD WALL, LATH AND PLASTER, 1 SIDE.
 6. DEMO AND SALVAGE METAL WINDOW. UW TO STORE WINDOW FOR FUTURE REINSTALLATION.
 7. DEMO LIGHT. REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION.
 8. REMOVE CLOCK, SALVAGE, AND RETURN TO OWNER.
 9. REMOVE CABLE TRAY. REFER TO ELECTRICAL FOR MORE INFORMATION AND RELOCATION OF CABLE TRAY. PATCH HOLES AND MATCH ADJACENT PLASTER.
 10. REMOVE AND SALVAGE SIGNAGE FOR REINSTALLATION.
 11. REMOVE AND SALVAGE FIRE EXTINGUISHER BRACKET.
 12. NOT USED.
 13. DEMO 1'-4" x 4" STAINLESS STEEL PANEL.
 14. REMOVE AND SALVAGE LIGHT FOR REINSTALLATION. REFER TO ELECTRICAL FOR ADDITIONAL INFORMATION. PATCH HOLES AND MATCH ADJACENT PLASTER.
 15. DEMO CARPET AND RESILIENT BASE. REMOVE MASTIC AND PREP FLOOR FOR SCHEDULED FINISH.
 16. REMOVE CORE BOARDS, SALVAGE, AND RETURN TO OWNER.
 17. REMOVE DISPLAY BOARD, SALVAGE AND RETURN TO OWNER.
 18. DEMO AND RECYCLE LIBRARY STACKS.

1 FOURTH FLOOR DEMOLITION CEILING PLAN
1/4" = 1'-0"

PROJECT
LAW BUILDING
4TH FLOOR RENOVATION
UW-MADISON
MADISON, WI

975 BASCOM MALL
MADISON, WI 53706

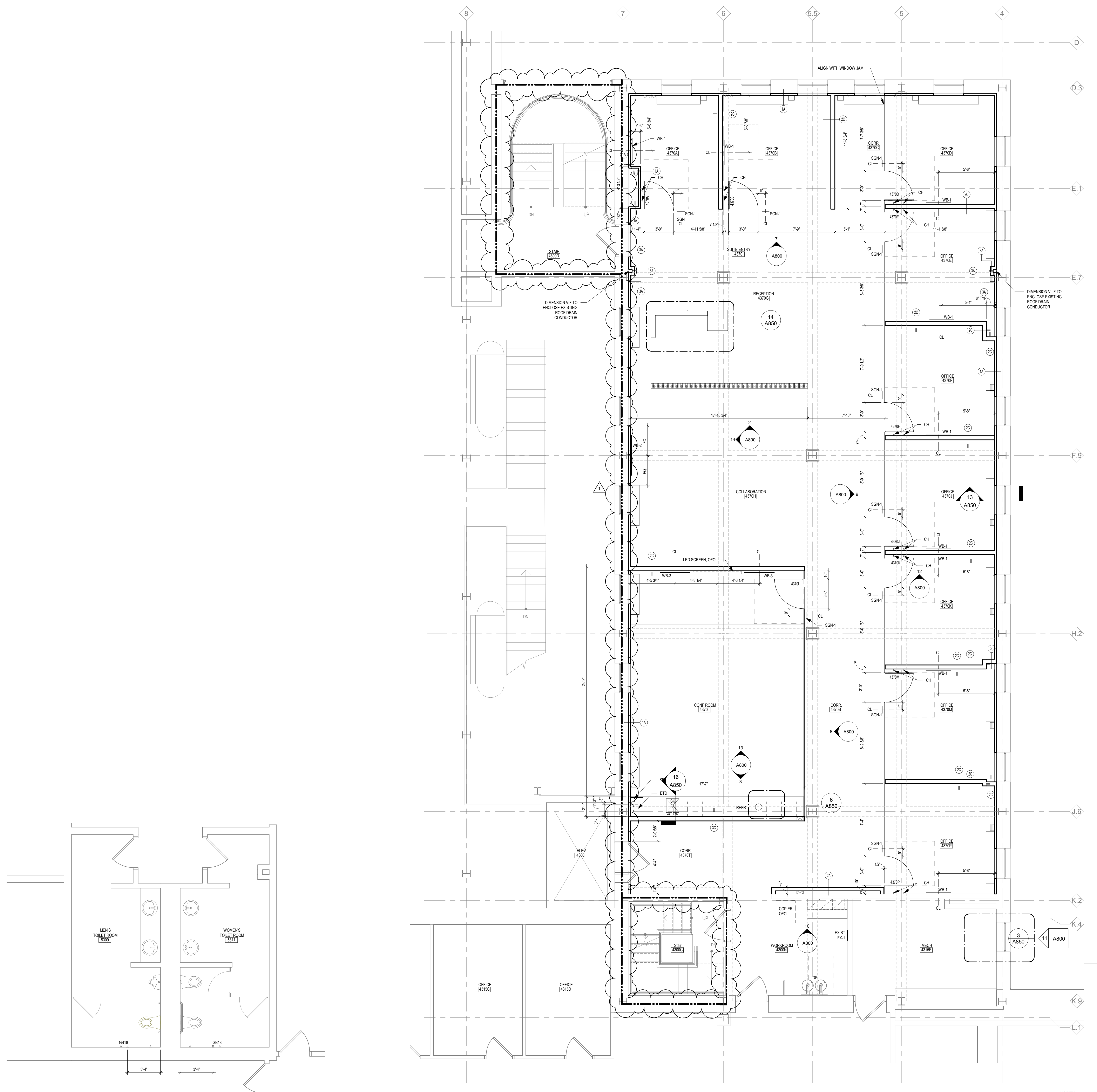
PROJECT NO.
UWSA A-22-003/
MSN 0430-2209

DRAWING
FOURTH FLOOR
REFLECTED CEILING
DEMOLITION PLAN

DATE
06.09.23

FLOOR PLAN GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF PAINTED SURFACE UNLESS NOTED OTHERWISE.
2. MECHANICAL AND ELECTRICAL EQUIPMENT SHOWN HERE FOR REFERENCE ONLY. SEE MEP FOR ADDITIONAL INFORMATION.
3. IF CONDITIONS DIFFER FROM DOCUMENTS REFER TO A/E WITH ANY DISCREPANCIES.
4. EXISTING CONSTRUCTION IS SHOWN SCREENED.
5. ALL DASHED FURNITURE IS OFD AND IS SHOWN FOR INFORMATIONAL PURPOSES ONLY.
6. ADD VERTICAL GRAB BAR FOR MEN'S AND WOMEN'S RESTROOMS FIFTH FLOOR EAST.
7. COAT HOOK DETAIL 12A80 OCCURS IN ALL OFFICES SIM, OR SIM OPP HD.
8. ALL WD-1, WP-1, AND WS-1 HAVE FT-4 FINISH.
9. WINDOW STOOL DETAIL 13A850 OCCURS ON ALL WINDOWS ON THE NORTH AND WEST WALLS EXCEPT ROOM 415E.
10. DIMENSION V.F. FIRE SHUTTERS TO REMAIN, TYP. WEST WINDOW OPENINGS.
11. REFER TO DETAIL 12A80 FOR LOCATION AND SIZE OF OFFICE WHITEBOARDS, TYP.
12. REFER TO DETAIL 15A850 FOR SGN-1 HEIGHT AND DETAILS, TYP.



2 FIFTH FLOOR PARTIAL PLAN
1/4" = 1'-0"

1 FOURTH FLOOR PLAN
1/4" = 1'-0"

PROJECT
LAW BUILDING
4TH FLOOR RENOVATION
UW-MADISON
MADISON, WI

975 BASCOM MALL
MADISON, WI 53706

PROJECT NO.
UWSA A-22-003/
MSN 0430-2209

DRAWING
FOURTH FLOOR AND
PARTIAL FIFTH FLOOR
PLAN

DATE
06.09.23

FAN COIL UNIT SCHEDULE															
UNIT NO.	FCU-4-1	FCU-4-2	FCU-4-3	FCU-4-4	FCU-4-5	FCU-4-6	FCU-4-7	FCU-4-8	FCU-4-9	FCU-4-10	FCU-4-11	FCU-4-12	FCU-4-13	FCU-4-14	FCU-4-15
SERVICE	4370A - OFFICE	4370B - OFFICE	4370C - OFFICE	4370D - OFFICE	4370E - OFFICE	4370F - OFFICE	4370G - OFFICE	4370H - OFFICE	4370J - OFFICE	4371B - RECEIPT	4371C - COLLAB.	4371A - CORR.	4370K - CONF RM	4370K - CONF RM	4371D - CORR.
LOCATION	4370A - OFFICE	4370B - OFFICE	4370C - OFFICE	4370D - OFFICE	4370E - OFFICE	4370F - OFFICE	4370G - OFFICE	4370H - OFFICE	4370J - OFFICE	4371B - RECEIPT	4371C - COLLAB.	4371A - CORR.	4370K - CONF RM	4370K - CONF RM	4371D - CORR.
TYPE	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT	SURFACE MNT
SUPPLY CFM	250	350	600	670	500	550	530	635	535	270	305	230	250	250	215
MIN. OA CFM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EXT. SP (IN WC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUPPLY FAN HP	0.13	0.13	0.22	0.22	0.13	0.22	0.22	0.22	0.22	0.13	0.13	0.13	0.13	0.13	0.13
VOLT / PHASE	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1	115 / 1
SUPPLY FAN TYPE	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM	ECM
FAN SPEED	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW
TOTAL CAPACITY (MBH)	3.63	4.52	7.75	8.67	6.44	7.1	6.8	8.23	6.94	3.5	4	2.9	4	4	2.8
SENSIBLE CAPACITY (MBH)	3.51	4.34	7.75	8.34	6.19	6.85	6.58	7.91	6.68	3.37	3.8	2.93	3.9	3.9	2.66
EAT (°F) DB / WB	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67
LAT (°F) DB / WB	65.9 / 52.6	65.6 / 53.1	68.1 / 63.1	66.2 / 63.1	66.1 / 63.1	65.8 / 63.1	65.8 / 63.1	66.1 / 63.1	65.78 / 63.06	66.52 / 63.06	66.75 / 63.07	66.27 / 63.06	59.79 / 56.51	59.79 / 56.51	66.23 / 63.09
EWT (°F)	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
LWT (°F)	63.1	61.6	59.75	64.02	60.11	63.86	63.81	64	63.78	64.55	64.03	65.1	56	56	66.28
COOLING TYPE	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER	CHILLED WATER
FLUID TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
GPM	0.38	0.51	1	0.86	0.8	0.72	0.69	0.59	0.7	0.34	0.5	0.28	0.67	0.67	0.24
MAX WATER PD (FT)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
MAX. FACE VELOCITY (FPM)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MIN. ROWS / MAX FINS	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10	3 / 10
CAPACITY (BTUH)	7386	8914	17967	10470	7972	9192	8659	9692	8876	4963	5118	5208	4080	4080	4670
TOTAL CAPACITY (MBH)	7.4	8.9	18	10.5	8	9.2	8.7	10	8.9	5	5.1	5.2	4.08	4.08	4.7
EAT (°F) DB / WB	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
LAT (°F) DB / WB	77.24	73.5	77.75	64.41	64.82	65.41	65.1	64.1	65.3	66.95	66.47	71.16	80.03	80.03	70.03
EWT (°F)	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
LWT (°F)	135.5	128.4	131	108.72	117.55	107.38	106.2	107	106.73	120.11	119.5	123.73	123.67	123.67	121.78
HEATING TYPE	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER	HOT WATER
FLUID TYPE	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
GPM	3.29	1.54	4	0.67	0.71	0.56	0.51	0.59	0.53	0.5	0.64	0.5	0.5	0.5	
MAX WATER PD (FT)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MAX. FACE VELOCITY (FPM)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MIN. ROWS / MAX FINS	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10	2 / 10
UNIT WEIGHT (LBS)	97	125	164	155	125	155	155	155	155	97	97	97	97	97	97
REMARKS															

KEYED NOTES:
1. SURFACE MOUNTED UNIT. PROVIDE WITH PIPING END POCKET FOR CHILLED WATER, HOT WATER AND CONDENSATE PIPING. FAN COIL NOISE LEVEL SHALL MAINTAIN AN NC LEVEL 30 WITHIN THE SPACE IT SERVES.

AIR DEVICE SCHEDULE				
UNIT NO.	RG-1	SG-1	SG-2	SG-3
SERVICE	RETURN	SUPPLY	SUPPLY	SUPPLY
FACE STYLE	GRILLE	GRILLE	GRILLE	GRILLE
PATTERN	LOUVERED	LINEAR	DBL DEFL	DBL DEFL
FINISH	WHITE	ANODIZED	WHITE	WHITE
MATERIAL	STEEL	ALUM	STEEL	STEEL
SIZE (FACE/NECK)	14 x 18 / 12 x 16	8 x 4 / 6 x 2	8 x 5 / 6 x 3	19 x 4 / 18 x 3
CFM RANGE	270	15	45	90
MOUNTING	SURFACE	FLOOR	SURFACE	SURFACE
DAMPER	NO	NO	NO	NO
REMARKS				

GENERAL NOTES:
1. CONTRACTOR SHALL VERIFY MOUNTING SURFACE / FRAME REQUIREMENTS.
2. BRANCH DUCT SIZE TO DIFFUSER SHALL BE THE NECK SIZE OF THE DIFFUSER UNLESS NOTED OTHERWISE.
3. SEE SPECIFICATION FOR GRILLE, REGISTER, AND DIFFUSER FINISHES.
4. MAXIMUM STATIC PRESSURE DROP THROUGH GRILLE, REGISTER OR DIFFUSER SHALL NOT EXCEED 0.1".
5. MAXIMUM NC LEVELS FOR GRILLES, REGISTERS OR DIFFUSERS SHALL NOT EXCEED 25.

HOT WATER BOOSTER COIL SCHEDULE	
UNIT NO.	BC-1
SERVICE	ERV-1
AIR FLOW (CFM)	270
COIL FACE SIZE	12x8
EAT (°F)	40.0
LAT (°F)	75.0
CAPACITY (MBH)	10.2
AIR PD (IN WC)	0.15
GPM	0.75
EWT (°F)	160
LWT (°F)	130
MAX WPD (FT)	3.0
TOV TYPE	2-WAY
REMARKS	

KEYED NOTES:

PUMP SCHEDULE			
UNIT NO.	HWCP-1	P-1 (E)	P-2 (E)
SERVICE	BC-1	HW SYS	HW SYS
LOCATION	4315E	MECH RM	MECH
TYPE	CIRC	BASE MNT	BASE MNT
CAPACITY (GPM)	0.75	229 (212)	229 (212)
PRESSURE HEAD (FT)	10	40 (35)	40 (35)
SHUT-OFF PRESSURE HEAD (FT)	-	-	-
MIN. NPSH REQUIRED (FT)	-	-	-
INLET / OUTLET (IN)	3/4" / 3/4"	-	-
IMPELLER DIAMETER	-	6.875 (6.75)	6.875 (6.75)
MIN. EFF. %	-	-	-
RPM	2,650	1,800 (1,800)	1,800 (1,800)
BHP	FRAC	-	-
HP	FRAC	3 (3)	3 (3)
VOLTAGE / PHASE	120/1	460 / 3	460 / 3
VFD	NO	YES (YES)	YES (YES)
UNIT WEIGHT (LBS)	-	-	-
REMARKS		1, 2	1, 2

KEYED NOTES:
1. EXISTING BASE MOUNTED PUMP. SCHEDULE INDICATES NEW CONDITIONS. EXISTING CONDITIONS ARE IN (212).
2. EXISTING PUMP IS A BELL AND GOSSETT 1510, 2-1/2" WITH 6.75" IMPELLER

ENERGY RECOVERY VENTILATOR SCHEDULE	
UNIT NO.	ERV-1
SERVICE	OA-FCU
LOCATION	4315E
SUMMER TOTAL EFFICIENCY (%)	61.5
SUMMER SENSIBLE EFFICIENCY (%)	79.0
WINTER TOTAL EFFICIENCY (%)	79.0
WINTER SENSIBLE EFFICIENCY (%)	78.1
AIRFLOW (CFM)	270
EXT. SP (IN WC)	1.2
TOTAL SP (IN WC)	-
EAT / EWB (°F) SUMMER	96.0 / 75.0
LAT / LWB (°F) SUMMER	79.4 / 67.7
EAT (°F) WINTER	-15.0
LAT (°F) WINTER	51.1
FILTER	2" MERV 8
FAN RPM	-
FAN ECM	YES
BHP	-
HP	-
AIRFLOW (CFM)	270
EXT. SP (IN WC)	1.2
TOTAL SP (IN WC)	-
EAT / EWB (°F) SUMMER	75.0 / 62.4
LAT / LWB (°F) SUMMER	-
EAT (°F) WINTER	70.00
LAT (°F) WINTER	-
FILTER	2" MERV 8
FAN RPM	-
FAN ECM	YES
BHP	-
HP	-
VOLT/PHASE	120 / 1
MCA	10.1
MOCP	15
UNIT WEIGHT (LBS)	1
REMARKS	

KEYED NOTES:
1. PROVIDE STAND FOR UNIT MOUNTING.

LOUVER SCHEDULE	
UNIT NO.	L-1
SERVICE	ERV-1
AIRFLOW (CFM)	540
SIZE (W x H)	36" x 54"
MIN. FREE AREA (FT²)	6.0
MAX. FREE AREA VELOCITY (FPM)	100
MAX. STATIC PRESSURE (IN WC)	0.05
REMARKS	1

KEYED NOTES:
1. VERIFY EXACT LOUVER SIZE WITH EXISTING WINDOW OPENING.

HOT WATER CONVECTOR SCHEDULE	
UNIT NO.	C-4-1
SERVICE	4315E
MOUNTING	WALL
RECESS (IN)	-
SIZE (L x H x D)	44" x 26" x 6"
EAT (°F)	65
CAPACITY (MBH)	7.22
GPM	1.5
EWT / LWT (°F)	160 / 150
TOV TYPE	2-WAY
REMARKS	

KEYED NOTES:
1. UNIT IS SURFACE MOUNTED.

GENERAL SHEET NOTES

- A. CONCEAL ALL CONDUIT.
- B. ALL TELECOM EQUIPMENT OUTLETS ARE TO BE FEED FROM IDF4300A. ROUTE CABLES TO NEW CABLE TRAY ON THIRD FLOOR IN 1" CONDUIT.
- C. USE CAT5E, 4 PAIR, NON-SHIELDED, TWISTED, 24 GAUGE, CABLE TERMINATED AT EACH END WITH STANDARD RJ45 CONNECTOR (STRAIGHT PIN) FOR DATA CABLE.
- D. USE CAT5E, 4 PAIR, NON-SHIELDED, TWISTED, 24 GAUGE, CABLE TERMINATED AT EACH END WITH STANDARD RJ45 CONNECTOR (STRAIGHT PIN) FOR SPEAKER CHANNELS. ALLOW FOR EASIER TERMINATION OF CAT5E & CAT6 WIRES. CUT WIRES HAVE CAUSED SHORTS, AND INTERMITTENT OPEN CONNECTIONS.

SHEET KEYNOTES

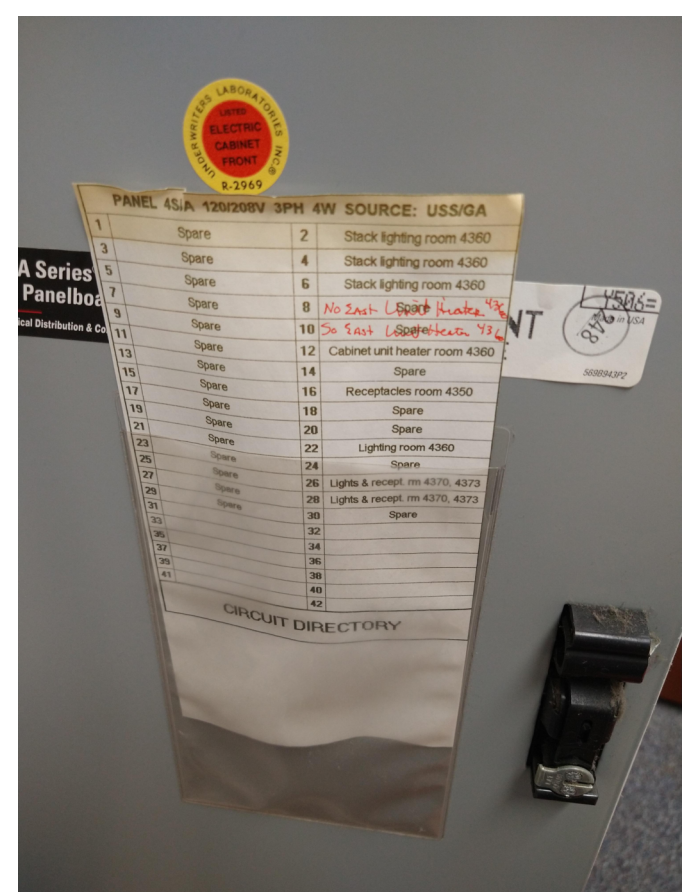
- 03 FEED FROM BELOW. COORDINATE ROUTING WITH MILLWORK CONTRACTOR.
- 05 VERIFY WAP PLACEMENT WITH DOT PROJECT REP PRIOR TO INSTALLING BACKBOX.



1 PHOTO D
NOT TO SCALE



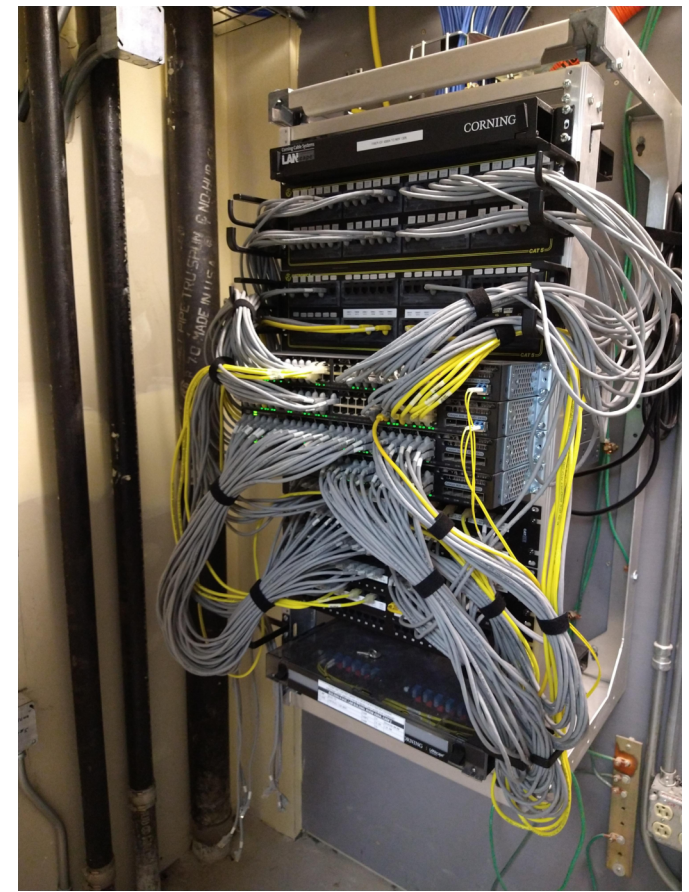
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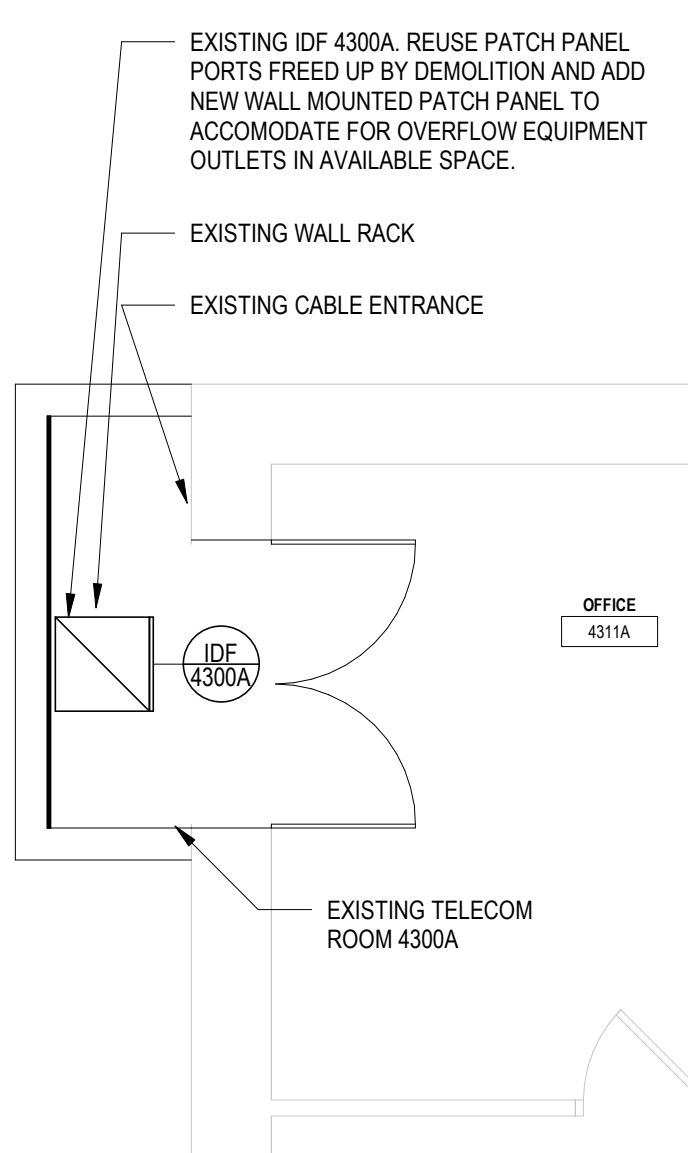
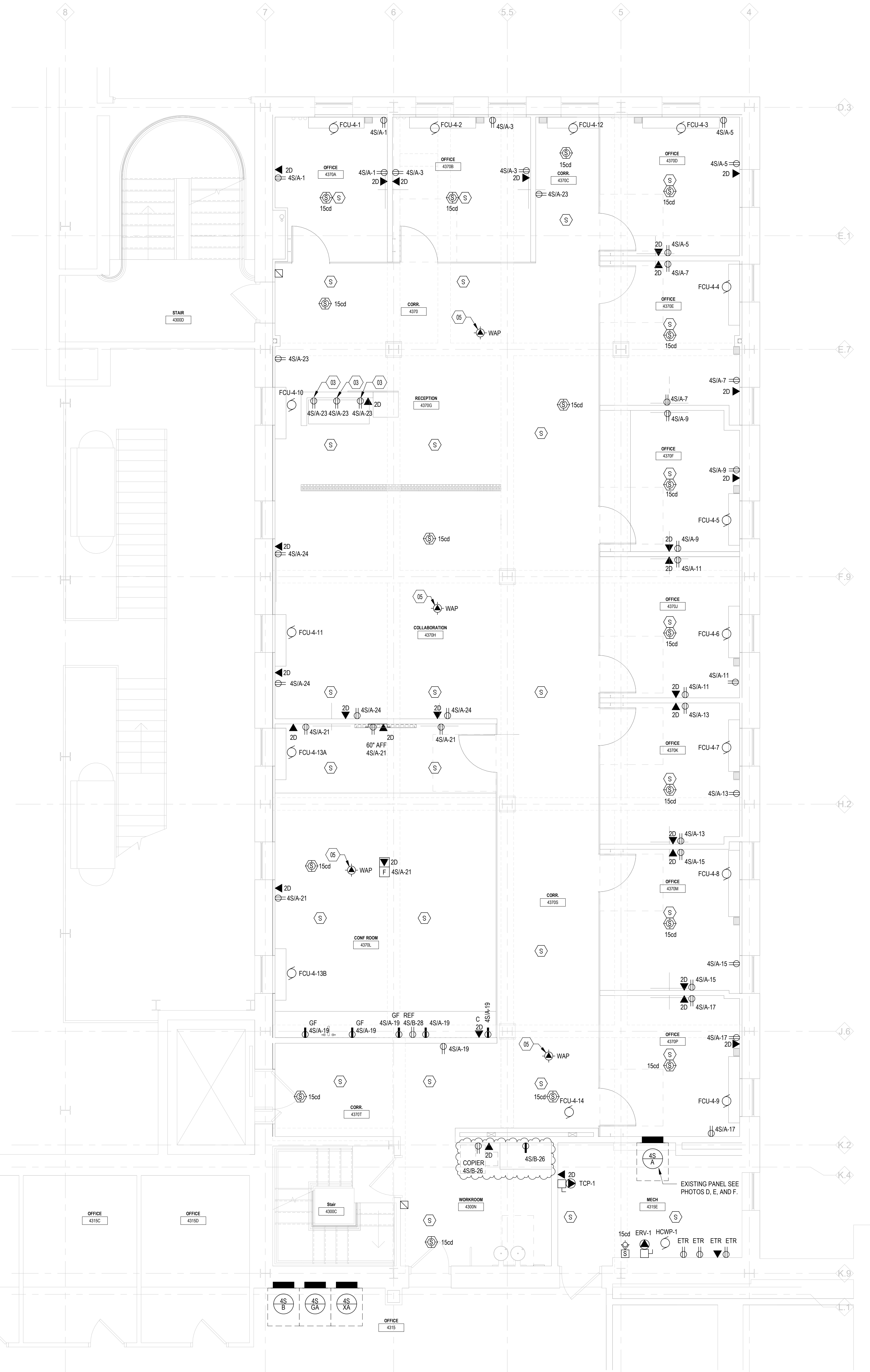
3 PHOTO F
NOT TO SCALE



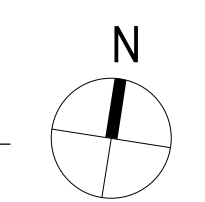
4 EXISTING CABLE ENTRANCE
NOT TO SCALE



5 EXISTING WALL RACK
NOT TO SCALE



A1 FOURTH FLOOR PLAN - POWER & SYSTEMS
1/4" = 1'-0"



PROJECT
LAW BUILDING
4TH FLOOR RENOVATION
UW-MADISON
MADISON, WI

975 BASCOM MALL
MADISON, WI 53706

PROJECT NO.
UWSA A-22-003/
MSN 0430-2209

DRAWING
FOURTH FLOOR PLAN -
POWER & SYSTEMS

DATE
06.01.23

LIGHT FIXTURE SCHEDULE ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS INDICATED HERE ARE USED IN THE SCHEDULE AND MAY NOT APPLY TO CURRENT PROJECT.

ACCESSORIES / DOOR / REFLECTOR / TRIM TYPE

AS = ASYMMETRIC
B = BAFFLE REFLECTOR
CR = CONTINUOUS RUN
D = DIRECT
D/D = DIRECT / INDIRECT
DG = DOUBLE GASKETED DOOR FRAME
EM = REMOTE EMERGENCY DRIVER
ID = INDIRECT
S = SYMMETRIC
SG = SINGLE GASKETED DOOR FRAME
SS = STAINLESS STEEL TRIM AND DOOR FRAME
SR = STANDARD REFLECTOR
TG = TRIPLE GASKETED DOOR FRAME, LENS AND BODY
VR = VANDAL RESISTANT
WG = WIRE GUARD
WW = WALL WASH

COLOR / FINISH

B = BLACK
BZ = BRONZE
C = CLEAR
CU = COPPER
CUS = CUSTOM PAINTED FINISH - COLOR AS SELECTED BY ARCHITECT
DBZ = DARK BRONZE
G = GOLD
GL = GLOSS
M = MATTE
NA = NATURAL ALUMINUM
RAL# = RAL NUMBER
S = SILVER
SSP = SEMI-SPECULAR / HAZE
W = WHITE

DIMMING TYPE

0-10-0-1 = 0-10 V 0-1%
0-10-1 = 0-10 V 1%
0-10-5 = 0-10 V 5%
0-10-10 = 0-10 V 10%
BL = BILEVEL / STEP
E = ELDOLED
FF = FORWARD PHASE
D = DALI
DX = DMX
L = LUTRON
N = NONE
O = OSRAM
P = PHASE
RF = REVERSE PHASE

DRIVER LOCATION

I = INTEGRAL
N = NONE
R = REMOTE

LENS TYPE

C = CLEAR
D = DROP DOWN
F = FLUSH
N = NONE
R = REGRESSED
O = OPTAL
P = POP UP
PA = PATTERN 12 ACRYLIC LENS - .125" MINIMUM THICKNESS

MOUNTING MATERIAL

B = BRICK
C = CONCRETE
CB = CONCRETE BASE
DW = DRYWALL
ES = EXPOSED STRUCTURE
G = GROUND
LG = LAY-IN GRID
M = METAL
PL = PLASTER
S = STONE
T = TILE
V = VARIES
W = WOOD

MOUNTING TYPE

C = COVE
CH = CHAIN - PROVIDE ACCESSORY KIT
CA = CATENARY
MP = MONOPOINT
MPC = MULTIPORT CANOPY
PC = PENDANT - CABLE
PCH = PENDANT - CHAIN
PRS = PENDANT - RIGID STEM
PS = PENDANT - SWAG
PO = POLE
R = RECESSED
S = SURFACE
TC = TRACK - CABLE
TMC = TRACK - MONORAIL - CURVED
TMF = TRACK - MONORAIL - FLEXIBLE
TMS = TRACK - MONORAIL - STRAIGHT
W = WALL

LIGHT FIXTURE SCHEDULE

GENERAL NOTES:

A. SEE SPECIFICATION SECTION FOR ADDITIONAL INFORMATION REGARDING FIXTURE AND INSTALLATION REQUIREMENTS.
B. MANUFACTURERS LISTED AS ACCEPTABLE SHALL MEET ALL REQUIREMENTS AND FEATURES INDICATED. ACCEPTABLE MANUFACTURERS MUST MEET THE PHOTOMETRIC PERFORMANCE OF THE LISTED UNIT. ELECTRICAL CONTRACTOR SHALL ENSURE THE FIXTURE DEPTH / HEIGHT WILL COMPLY WITH ADA REQUIREMENTS AND WILL NOT INTERFERE WITH OTHER TRADES WITHIN THE CEILING CAVITY.
C. ELECTRICAL CONTRACTOR SHALL COORDINATE T-GRID, WOOD AND SPECIALTY CEILING SYSTEMS WITH ARCHITECT PRIOR TO ORDERING.
D. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED PARTS AND PIECES FOR A COMPLETE INSTALLATION.
E. ALL REMOTE DRIVERS SHALL BE LOCATED IN AN ACCESSIBLE LOCATION THAT MEETS THE AMBIENT TEMPERATURE REQUIREMENTS OF THE DRIVER. ELECTRICAL CONTRACTOR SHALL VERIFY WITH SUBMITTED SHOP DRAWING WIRING DIAGRAMS THAT ALL DRIVER LOCATIONS ARE WITHIN MANUFACTURER'S RECOMMENDED DISTANCE...

NOTES:

1. NOT USED

TAG	PERFORMANCE & ELECTRICAL DATA				LIGHT FIXTURE PROPERTIES				OPTIONS & ACCESSORIES				MOUNTING				SEE NOTE
	LUMENS	KELVIN TEMP	LOAD	FIXTURE VOLTAGE	DESCRIPTION	MANUFACTURER	CATALOG SERIES	DEPTH OR HEIGHT	ACCESSORIES / DOOR / REFLECTOR / TRIM TYPE	COLOR / FINISH	DIMMING TYPE	DRIVER LOCATION	LENS TYPE	MATERIAL	TYPE	HEIGHT	
A	3000	3500K	32 VA	120	4" CYLINDER LED PENDANT MOUNT WHITE FINISH	GOTHAM	EV040CC-3530-AR-LSS-MVD-MN-VOLT-G210-JBXC-C120-D-WHAMF	0'-9"	D	W	0-1-10	I	F	DW	PC	7'-0" AFF	
B	4000	3500K	46 VA	120	LED INDIRECT/DIRECT 4" PENDANT MOUNT LENSED WHITE FINISH	AXIS LIGHTING	CUBLED-SL2575-1000-80-35-SO-4-W-UNV-DP-1-CA	0'-2 1/2"	D/D	W	0-1-10	I	C	DW	PRS	7'-0" AFF	
C	4000	3500K	46 VA	120	LED INDIRECT/DIRECT 4" PENDANT MOUNT LOUVER WHITE FINISH	AXIS LIGHTING	CUBLED-SL2575-1000-80-35-PL-4-W-UNV-DP-1-CA	0'-2 1/2"	D/D	W	0-1-10	I	C	DW	PRS	7'-0" AFF	
D	759FT	3500K	7.6W/FT	120	LINEAR LED GRAZING UNIT	AXIS LIGHTING	R2SQSLED-750-90-35-SO-SLW-120-DP-1-S	0'-3"	-	-	0-10-1	I	-	DW	S	-	
XA	-	-	3 VA	120	EXIT SIGN RED CEILING MOUNT	LITHONIA	LGM-S-W-3-R-120-277	1'-0 1/2"	D	W	-	I	-	DW	S	-	

MOTOR WIRING SCHEDULE

GENERAL NOTES:

A. OBTAIN SUPPLIERS SHOP DRAWINGS/WIRING DIAGRAMS TO VERIFY LOCATION AND REQUIREMENTS PRIOR TO ROUGH-IN.
B. FURNISH HACR TYPE BREAKERS FOR ALL HVAC EQUIPMENT.
C. DISCONNECT AND RECONNECT EXISTING PUMPS P-1(E) AND P-2(E). SEE SHEET M801 FOR PUMP DETAILS AND SHEET M301 FOR LOCATION.

NOTE:

1. NOT USED

TAG	DRIVING	POWER			FEED FROM		BREAKER		WIRING			COND.	SEE NOTE
		SPECIFIED SIZE	VOLTAGE	PHASE	ELECTRICAL LOAD	PANEL	CIRCUIT	SIZE	POLES	PHASE & NEUTRAL QTY	NEUTRAL SIZE		
FCU-4.1	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	27	15	1	2	12	12	3/4"
FCU-4.2	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	29	15	1	2	12	12	3/4"
FCU-4.3	FAN COIL UNIT	1/4HP	120 V	1	696 VA	4SA	30	15	1	2	12	12	3/4"
FCU-4.4	FAN COIL UNIT	1/4HP	120 V	1	696 VA	4SA	31	15	1	2	12	12	3/4"
FCU-4.5	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	32	15	1	2	12	12	3/4"
FCU-4.6	FAN COIL UNIT	1/4HP	120 V	1	696 VA	4SA	33	15	1	2	12	12	3/4"
FCU-4.7	FAN COIL UNIT	1/4HP	120 V	1	696 VA	4SA	34	15	1	2	12	12	3/4"
FCU-4.8	FAN COIL UNIT	1/4HP	120 V	1	696 VA	4SA	35	15	1	2	12	12	3/4"
FCU-4.9	FAN COIL UNIT	1/4HP	120 V	1	696 VA	4SA	36	15	1	2	12	12	3/4"
FCU-4.10	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	37	15	1	2	12	12	3/4"
FCU-4.11	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	38	15	1	2	12	12	3/4"
FCU-4.12	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	39	15	1	2	12	12	3/4"
FCU-4.13A	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	40	15	1	2	12	12	3/4"
FCU-4.13B	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	41	15	1	2	12	12	3/4"
FCU-4.14	FAN COIL UNIT	1/8HP	120 V	1	450 VA	4SA	42	15	1	2	12	12	3/4"
HCWP-1	HOT WATER COIL PUMP	3/4HP	120 V	1	1696 VA	4SA	25	25	1	2	10	10	3/4"

SPECIAL PURPOSE OUTLET SCHEDULE

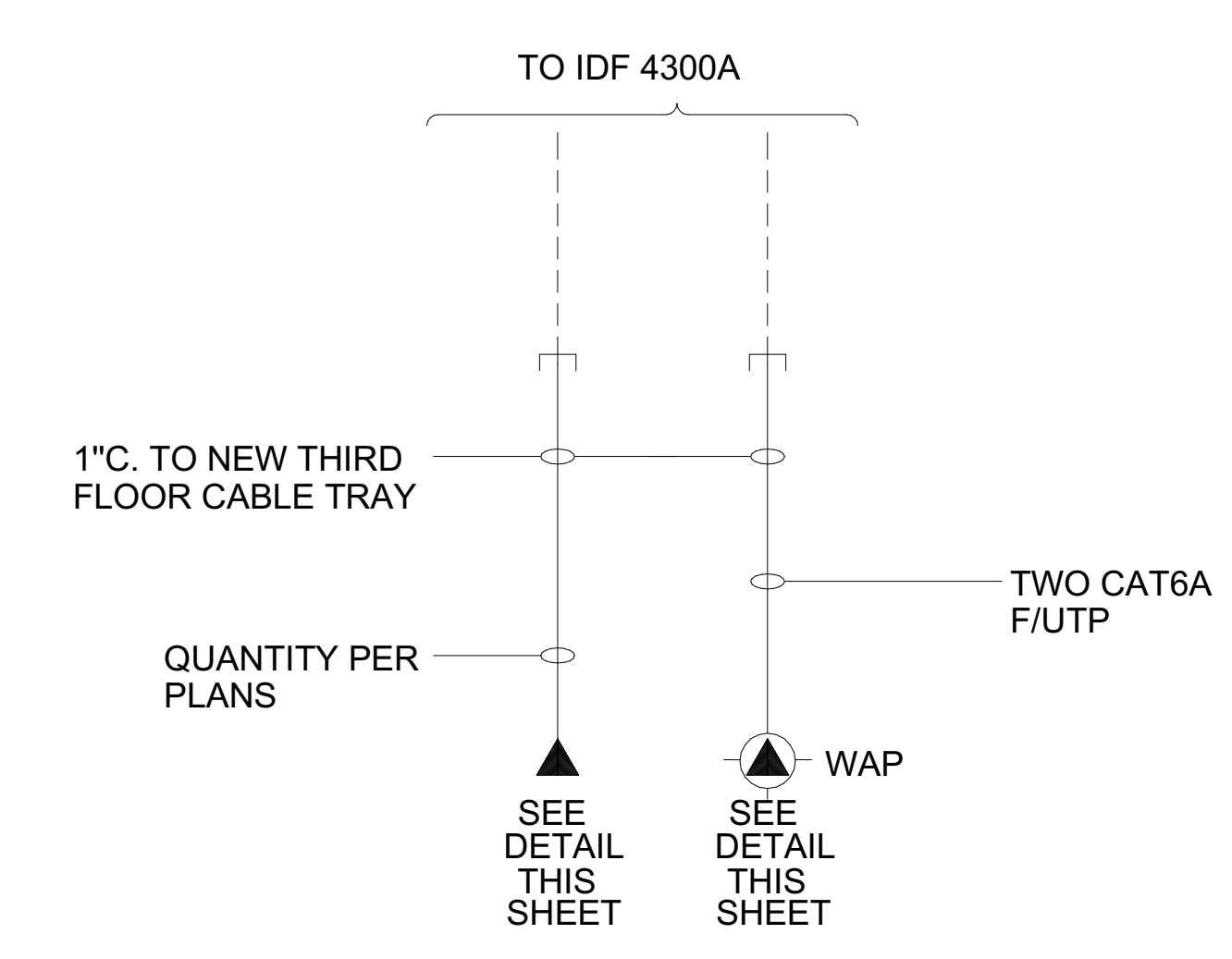
GENERAL NOTE:

A. LOADS SHOWN ON THE SPECIAL PURPOSE OUTLET SCHEDULE MAY REQUIRE EITHER A RECEPTACLE (A PLUG-IN CONTACT DEVICE AS DEFINED BY THE NEC) OR MAY REQUIRE A DIRECT CONNECTION (HARDWIRED) TO THE LOADS BRANCH CIRCUIT. FOR EACH LOAD THE ELECTRICAL CONTRACTOR SHALL CONFIRM THE TYPE OF TERMINATION REQUIRED AS INDICATED ON THE EQUIPMENT MANUFACTURER'S SHOP DRAWINGS. ALL RECEPTACLES, DISCONNECT SWITCHES, OR OTHER DEVICES REQUIRED FOR TERMINATION OF THESE CIRCUITS SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID. LOADS ON THIS SCHEDULE MAY ALSO REQUIRE NON-STANDARD ELECTRICAL ROUGH-IN HEIGHTS. ELECTRICAL CONTRACTOR...
B. ALL MOUNTING HEIGHTS ARE MEASURED FROM ABOVE FINISHED FLOOR OR GRADE TO THE CENTER OF BOX, UNLESS OTHERWISE INDICATED.
C. IF THE NEMA TYPE IS LEFT BLANK IT IS A DIRECT CONNECTION.

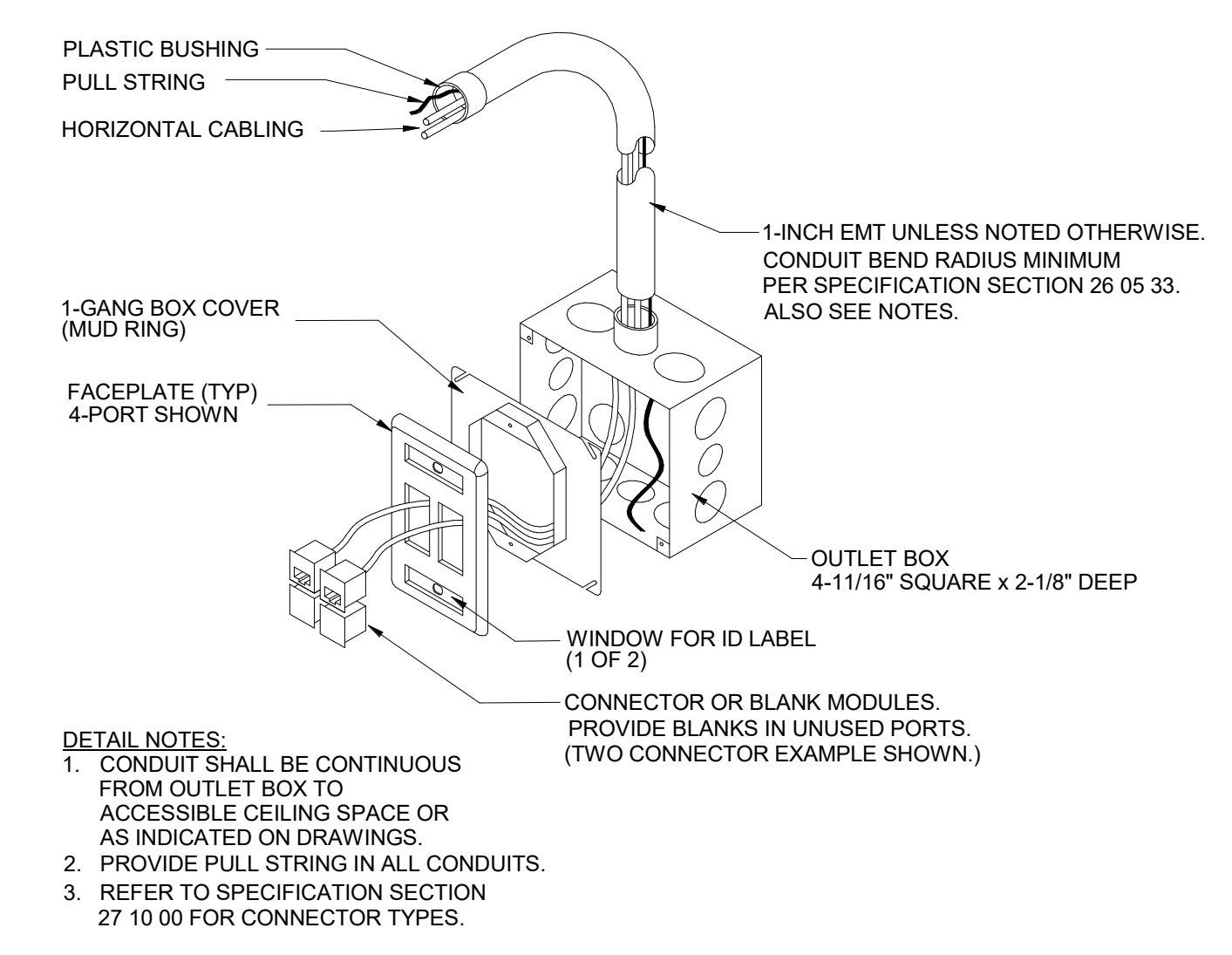
NOTE:

1. NOT USED

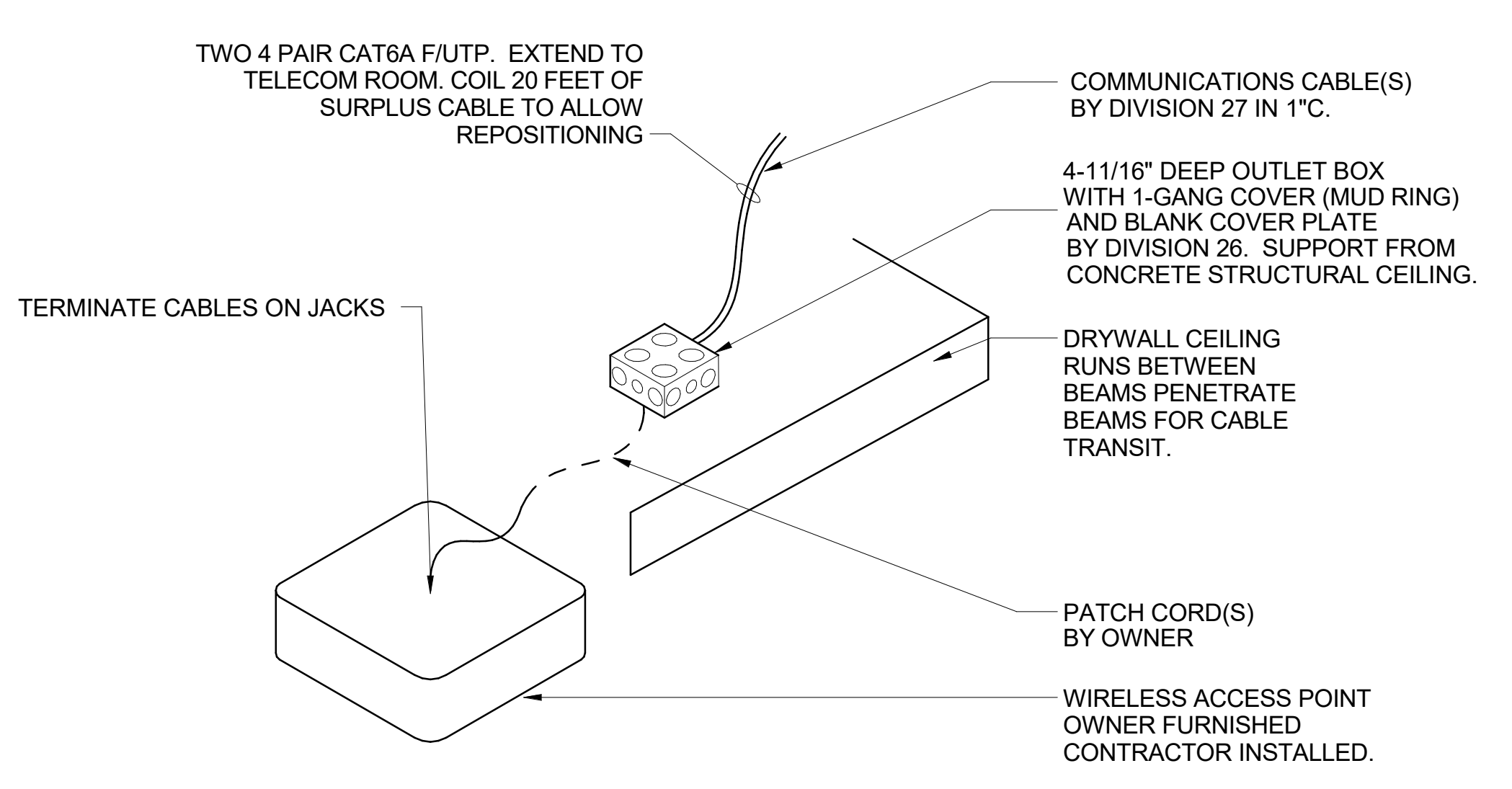
TAG	DRIVING	POWER			FEED FROM		BREAKER		WIRING			COND.	SEE NOTE
		SPECIFIED SIZE	VOLTAGE	PHASE	ELECTRICAL LOAD	PANEL	CIRCUIT	SIZE	POLES	PHASE & NEUTRAL QTY	NEUTRAL SIZE		
ERV-1	ENERGY RECOVERY VENTILATOR	10 AMPS	120 V	1	1200 VA	4SA	18	15	1	2	12	12	3/4"
TCP-1	TEMPERATURE CONTROL PANEL	-	120 V	1	500 VA	4SA	20	20	1	2	12	12	3/4"



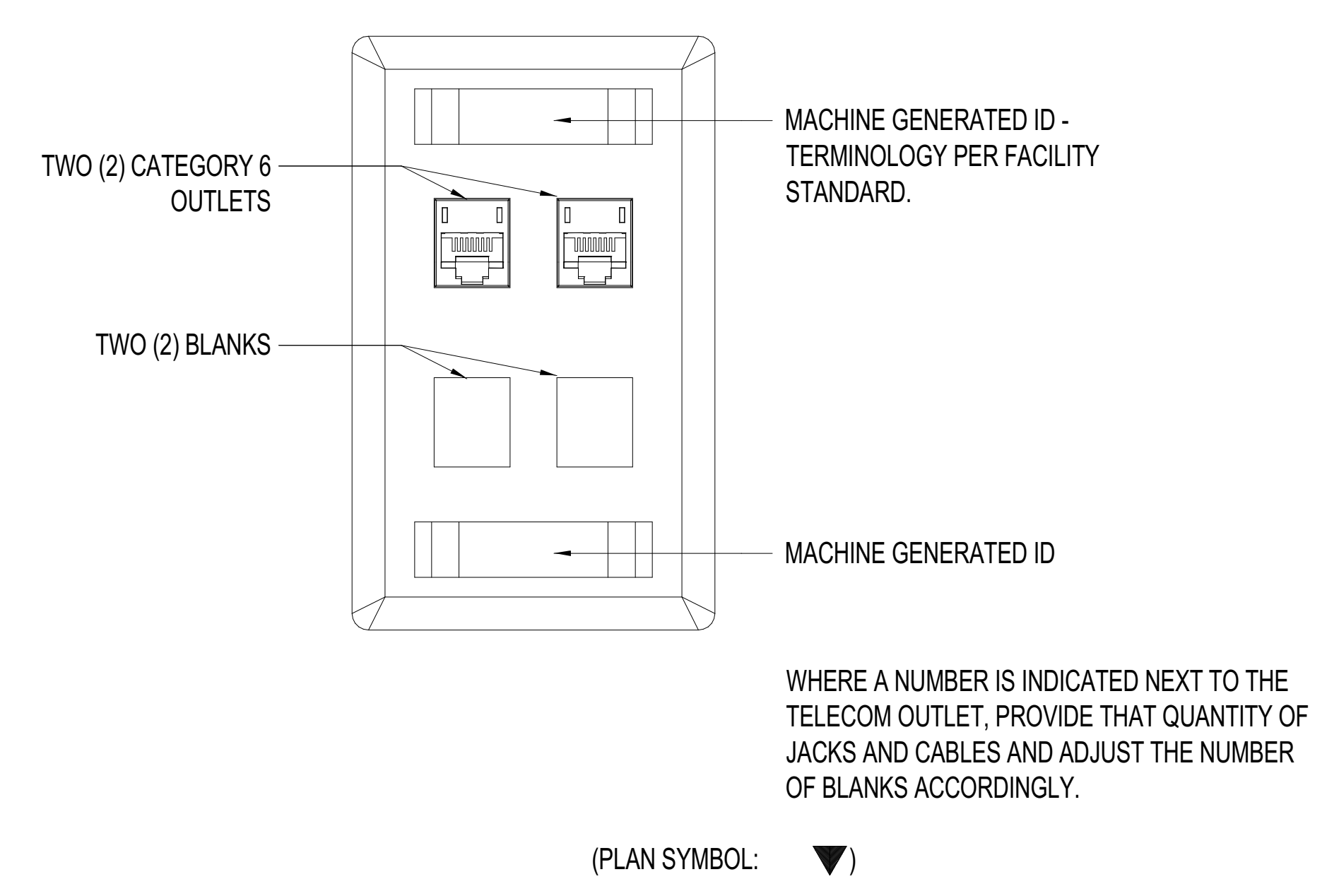
1 CABLING REQUIREMENTS
NOT TO SCALE



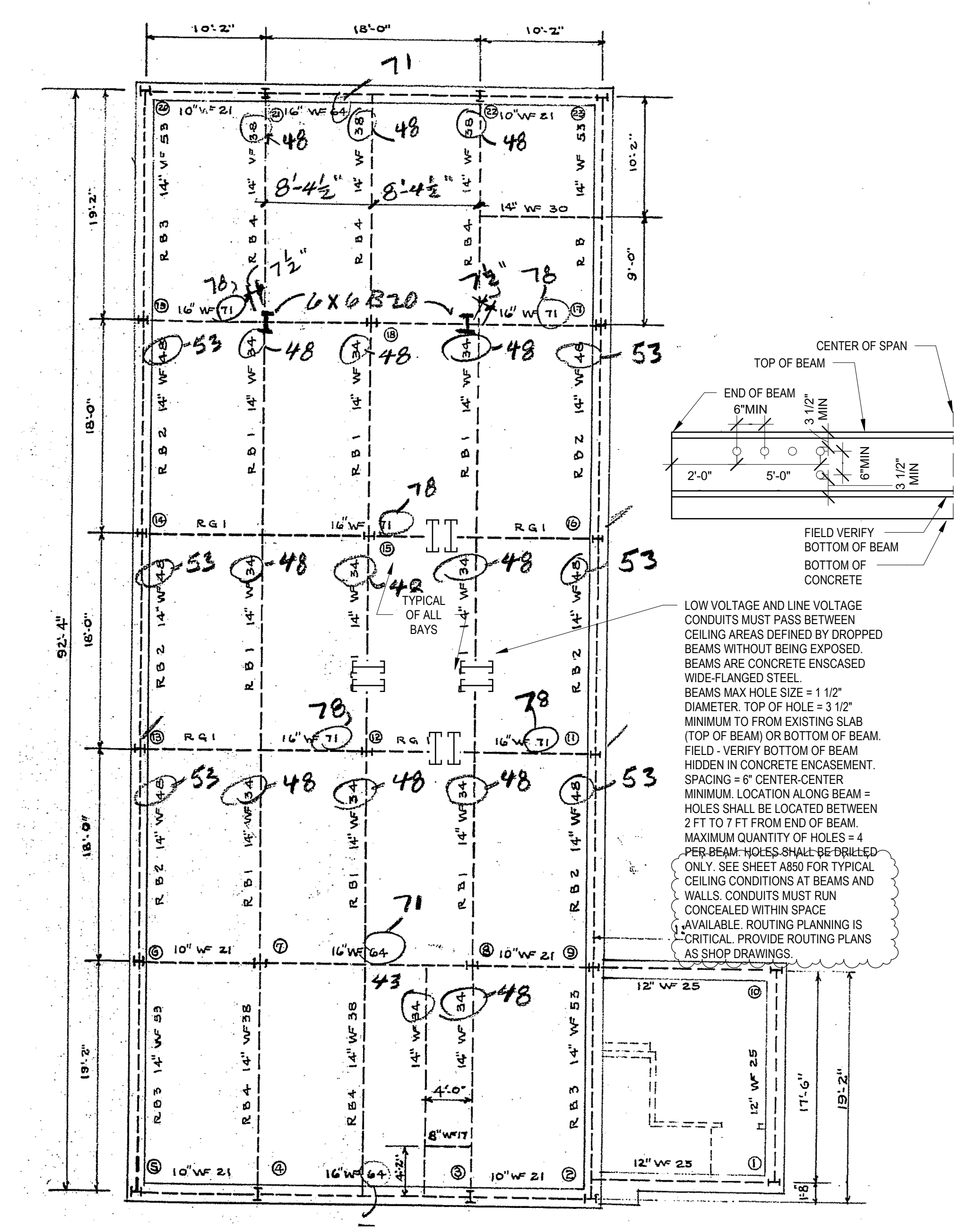
2 COMMUNICATIONS EQUIPMENT OUTLET ROUGH-IN
NOT TO SCALE



3 EQUIPMENT OUTLET FOR WIRELESS ACCESS POINT
NOT TO SCALE



4 TYPICAL TELECOM OUTLET DETAIL
NOT TO SCALE



5 EXISTING FIFTH FLOOR FRAMING PLAN
NOT TO SCALE

PROJECT
LAW BUILDING
4TH FLOOR RENOVATION
WI-MADISON
MADISON, WI

975 BASCOM MALL
MADISON, WI 53706

PROJECT NO.
UWSA A-22-003/
MSN 0430-2209

DRAWING
ELECTRICAL SYSTEMS
WIRING DIAGRAMS

DATE
06.01.23