Proposed Historical Restoration/Renovation for Rochester College

800 West Avon Road, Rochester Hills, MI 48307

1. Provide all labor, materials, equipment, and services and provide all

operations required to accomplish the work as indicated and/or implied by the drawings and these general notes and specifications. CODES, ORDINANCES, PERMITS, & TESTS:

1. All construction to comply with all local codes including the local

building, plumbing, mechanical, and electrical codes, ordinances and 2. REFERENCE CODE: MICHIGAN REHABILITATION CODE FOR EXISTING BUILDINGS 2015 3. Obtain and pay for all required permits, inspections, and tests.

a) All re-inspection fees for work not ready or in compliance with local codes to be paid for by Contractor. 4. Plans, notes, and specifications are done to the reference code

EXAMINATION OF EXISTING CONDITIONS:

above as of the date originally prepared.

1. Before submitting proposals for the work, the Contractor shall be held to have examined the site and satisfied as to the existing conditions under which he will be obliged to operate in performance of the work. He shall inform the Owner of any probable contingencies which may influence the execution of the work with his bid. No extras will be allowed to the Contractor because of his failure to make this specified examination or neglect to include all materials and labor required in his work. Contractor to notify Architect of any hidden conditions for which an extra time or money is going to be requested prior to proceeding with the work. Failure to notify may result in denial of the extra expense.

DAMAGE TO ADJACENT WORK:

1. The Contractor shall be responsible for all damage done by his workmen to adjacent property and shall bear the expense of repairs that are required due to his workmen.

1. All work executed shall be performed in a first class and safe. workmanlike manner in accordance with the latest accepted standards and practice for the work involved. The workmanship shall be subject to the approval of the Owner at all times.

1. The Contractor shall review and verify all dimensions on the drawings before commencing with the work. If dimensional errors occur, the Contractor shall notify the Architect before proceeding with the work. DO NOT SCALE DRAWINGS. Any Contractor that scales a drawing to determine a location for any part of the work improperly located.

2. Any errors, omissions, or conflicts between various elements on the drawings and/or in these general notes shall be brought to the attention of the Architect before proceeding with the work. Failure to do so shall result in the Contractor taking full responsibility and

liability for the work as installed. 3. The structure is designed to be self-supporting and stable after it is fully completed. It is the Contractor's sole responsibility to determine erection procedure and sequence, and to ensure the safety of the structure and its component parts during erection, including shoring of existing conditions and/or new work. 4. Contractor to call MISS DIG prior to any underground excavations. 5. Site to be kept clean and free of construction debris at all times.

6. Architect is not responsible for job site safety or other conditions

including means, methods, and scheduling. 7. Architect's review/approval of shop drawings is for adherence to design concept only. General and sub-contractors, suppliers, and fabricators to field verify all dimensions and site conditions for compliance with shop drawing requirements prior to release for fabrication. Architect to be given 10 days minimum to review all required shop drawings and/or selections. 8. When allowable for site signage to be located on-site Contractor to include Architect's name/logo and phone number in similar fashion to theirs on job. When standard real estate signage is used, Architect will provide Contractor with sign to be placed in

similar location to Contractor's.

EARTHWORK:

1. When a soils investigation report is available for the proposed project. Follow the recommendations of the report and any supplemental reports or addenda, unless specifically directed in writing by a competent, on-site Soils Engineer based on field

2. In absence of a soils investigation report, footings are designed for an assumed soil pressure of 3000 psf. If soil of this capacity is not found at the elevations indicated, footings shall be enlarged or lowered at the direction of a Soils Engineer. Verification of foundation soil bearing pressure to be done in field by a qualified testing lab. When Contractor has any concern that soil bearing capacity may not be sufficient, Contractor to arrange for soils test to be made verifying minimum soil bearing capacity or as directed to by the Owner, Architect, or Building Official. 3. Fill areas shall be stripped of topsoil and filled with suitable material compacted to a minimum of 95% maximum density. Fills shall be in lifts thin enough to be compacted uniformly to this density.

No fills to be made on frozen ground. 4. All excavation shall be accomplished in accordance with MIOSHA standards. Excavations undertaken below the water table are to be kept in a virtually dry and workable condition by pumping 5. The excavation outside the foundation shall be backfilled with soil that is free of organic material, construction debris, and large rocks. The backfill shall be placed in lifts and compacted in a manner which

dampproofing material. 6. Provide necessary sheeting, shoring, bracing, etc., as required during excavation and backfill work to protect sides of excavations, and the construction.

does not damage the foundation, the waterproofing or the

1. Footings to be constructed at or below a frost penetration depth of three feet, six inches (3'-6") or deeper as required to obtain solid bearing on undisturbed soil.

2. Where new footings abut existing foundations, carefully hand excavate and place bottom of new footing at the same elevation as the existing (minimum depth shall be 3'-6" below grade at exterior), unless alternative anchorage and/or under pinning detail is provided. 3. At top of all foundation walls, provide ½" x 12" anchor bolts at 6'-0" o.c. or equivalent mechanical strap anchors (i.e., Simpson) installed per manufacturer's specifications to meet current reference

4. All footings on sloped soil to be stepped.

CONCRETE:

1. All concrete work and placement shall conform to the latest recommendations of ACI.

2. Minimum concrete strength to be 3000 psi at 28 days, UNO; concrete for garage floors, exterior slabs, porches and carports, etc., shall be 3500 psi minimum with $6\% \pm 1\%$ entrained air. The minimum cement content of concrete mixtures for exterior porches, carport slabs and steps shall be 520 pounds of cement meeting ASTM C 150 or C 595 per cubic yard of concrete. 3. All reinforcing bars, dowels, and ties shall conform to ASTM A615 Grade 60. Reinforcing steel shall be fabricated and placed in accordance with ACI U+2013 315 latest editions. Reinforcing steel shall be continuous and shall have minimum 36 bar diameter lap. All bars to be tied.

4. Welded wire fabric: ASTM A-185, size as specified on plans. Do not deviate except with written consent by the Architect. 5. Slabs without welded wire fabric crack reinforcement shall be constructed with control joints having a depth of at least one-fourth the slab thickness and joints shall be spaced at intervals not more than 30 feet in each direction and slabs not rectangular in shape shall have control joints across the slab at points of offset, if offset is in excess of 10'. 6. All enclosed concrete floor slabs shall be provided with approved vapor barrier (6 mil visqueen, min.) unless approved otherwise by the local Building Official, based on local

7. All concrete slabs on exterior to be broom finished. Interior concrete slabs to be trowel finished, UNO. 8. Slabs on grade shall be placed over a base course not less than 4 inches in thickness that consists of clean graded sand, gravel, crushed stone, or blast-furnace slag that passes through a 2" sieve.

ROUGH FRAMING MATERIAL:

1. Wood construction shall be governed by the latest editions of the AITC manual and NDS (National Design Standards as published by the American Forest and Paper Association). 2. All wood sheathing shall be APA approved, exposure 1 plywood complying with DOC PSI, or oriented strand board (OSB) complying with APA PRP 108 or DOC PS 2, and shall be fastened in accordance with the latest APA recommendations and code requirements for the specific item

being installed (most stringent) UNO. 3. All wood framing and wood sheathing which rests on exterior foundation walls and are less than 8" from exposed earth shall be of approved naturally-durable or pressure treated wood. 4. Sleepers and sills on a concrete or masonry slab which is in direct contact with earth shall be of approved naturally-durable or pressure

5. All structural dimensional lumber, joists, and headers are to meet the minimum properties of Hem-Fir #2 for design purposes as listed below, BASE VALUES Fb = 850 for single members

Fc = 1300 (parallel to grain) Moisture content = 19% maximum Douglas-Fir-Larch #2 may be used as an acceptable alternate 6. All studs are to be "stud" grade or better and are to meet the minimum properties of Spruce-Pine-Fir, listed below, UNO:

Fb = 675 for single members

Fc = 405 (perpendicular to grain)

E = 1,200,000Fc = 425 (perpendicular to grain)

Fc = 725 (parallel to grain) Moisture content = 19% maximum

Exterior wall studs in 10'-0" and higher walls shall be 2 x 6 #1/#2 SPF(n) grade @ 16" o.c., UNO 7. Laminated Veneer Lumber (LVL), unless specified otherwise on plans, shall have the following minimum properties: LVL BASE VALUES

E = 1,900,000

E = 1,300,000

Fv = 150

Laminated veneer lumber shall be designed, fabricated, and identified in accordance with applicable APA standards. Top loaded multiple LVL members shall be

properly fastened together per the manufacturer's specifications, but not less than (2) rows 16d nails per @ 12" o.c. for members 12" deep and less. (3) rows for 14" and 16" deep members and (4) rows for larger members. Side loaded multiple LVL members shall be fastened together as per the manufacturer's specifications for the specific loading condition. 8. Laminated wood beams shall have the following minimum properties and shall be produced in accordance with AITC requirements, 24F U+2013

LAMINATED BEAM BASE VALUES E = 1,900,000

9. Provide sufficient material for posts at concentrated loads to extend to solid bearing. Repeat posts on lower floors below upper posts (UNO). Provide solid blocking below all posts to solid bearing below. 10. Connections not noted on the drawings shall be made with pre-fabricated steel hangers sized for the carried load and member size and

installed in accordance with the manufacturer's specifications (i.e., a double 2" x 10" must have a Simpson U-210-2 hanger or equal, etc.). All engineered wood product systems for floors and roofs to be designed and

provided by system supplier. 11. Pressure treatment and preservation a) All structural lumber in contact with concrete or masonry, at or below

grade, less than 8" above grade, or exposed to weather, shall be pressure treated with ACQ, or approved equal treatment. b) All hardware, flashings, fastners, ect. in contact with treated lumber must be compatible, i.e. Simpson Z-MAX or stainless steel. c) All treatment lumber which is cut, drilled or notched shall be field

treated (brushed on exposed surfaces) by one of the preservatives listed 12. All floor sheathing/boards to match existing. 13. All roof sheathing to be 7/16" OSB. Supply with aluminum roof clips

to maintain required spacing between sheets for large section to be

14. Provide wind/moisture barrier for all new exterior stud walls as noted

replaced. Individual boards to be replaced with similar.

GENERAL FRAMING (CARPENTRY):

5. Sheathing to cover all corners and bonds.

1. Anchor sill plate on moisture resistant sill sealer to foundation wall with anchors per foundation notes 2. Install all flush framing connections with "Simpson" or equal post caps, joist and beam hangers, framing anchors, and rafter anchors. Fill ALL nail holes with appropriate nails per manufacturer's

3. All main floor interior partition walls to be 3 ½", UNO. 4. All dimensions are for rough lumber (stud to stud interior stud to exterior sheathing or masonry on exterior walls).

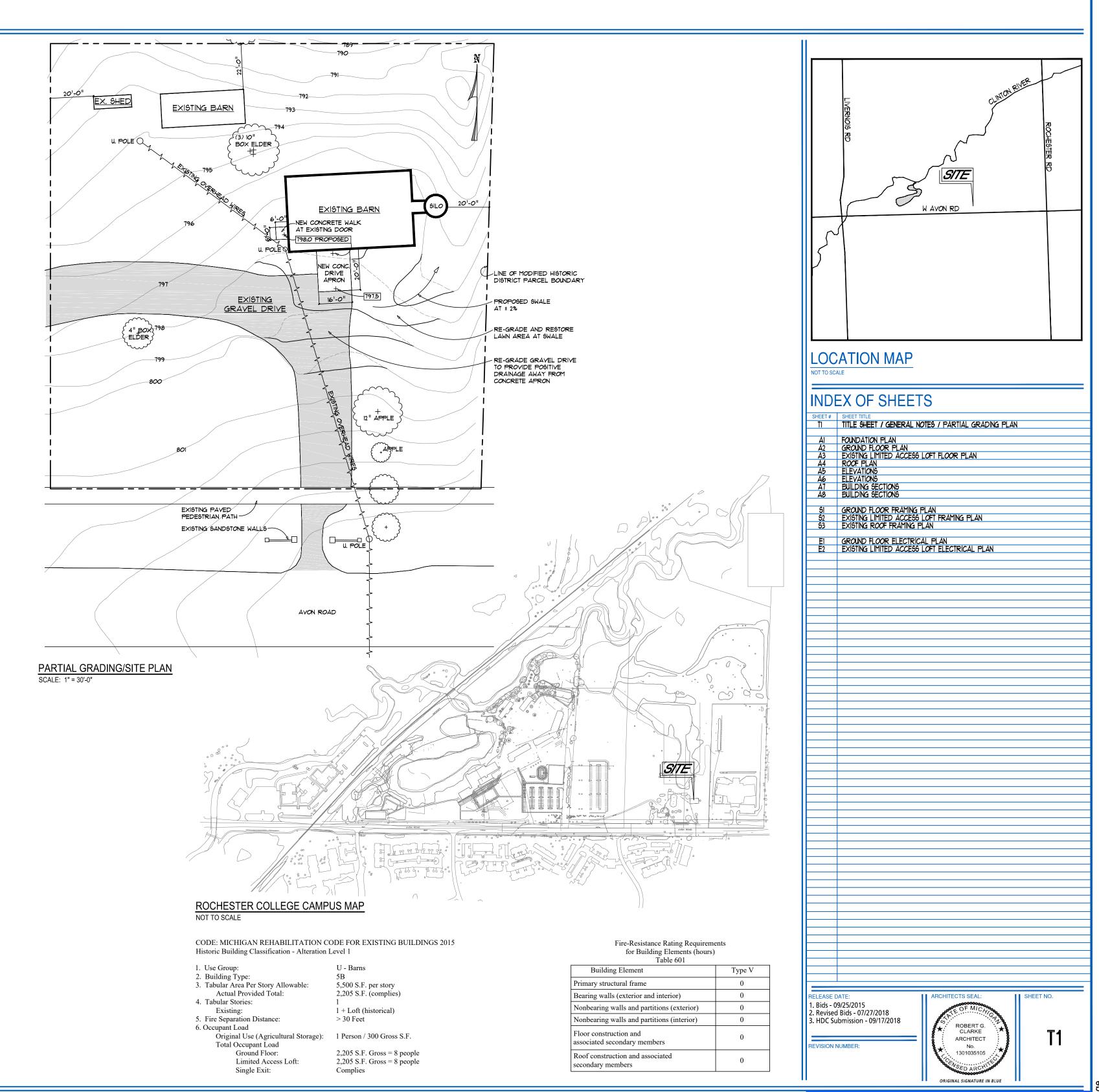
6. Use aluminum plywood clips on roof sheathing (clips required to ensure plywood spacing use, even when not required structurally for sheeting being 7. Frame carpenter to install drip cap over all windows and doors in areas of siding also being installed by frame carpenter. 8. Frame carpenter to install "Z" flashing over all horizontal wood trim with

siding, including starter board flashings as required. 9. Carpenter to verify all exterior trim and wood siding is back primed prior to 10. Carpenter to install wind and moisture barrier in strict accordance with manufacturer's instructions: a) Tyvek or equivalent (see details)

11. All wood to be solid blocked from point of load to foundation or steel

1. Thermal insulation to be fiberglass batt to fill cavity to required r-value. 2. Provide vapor barrier to warm side of space when using fiberglass batt 3. Walls - R-13

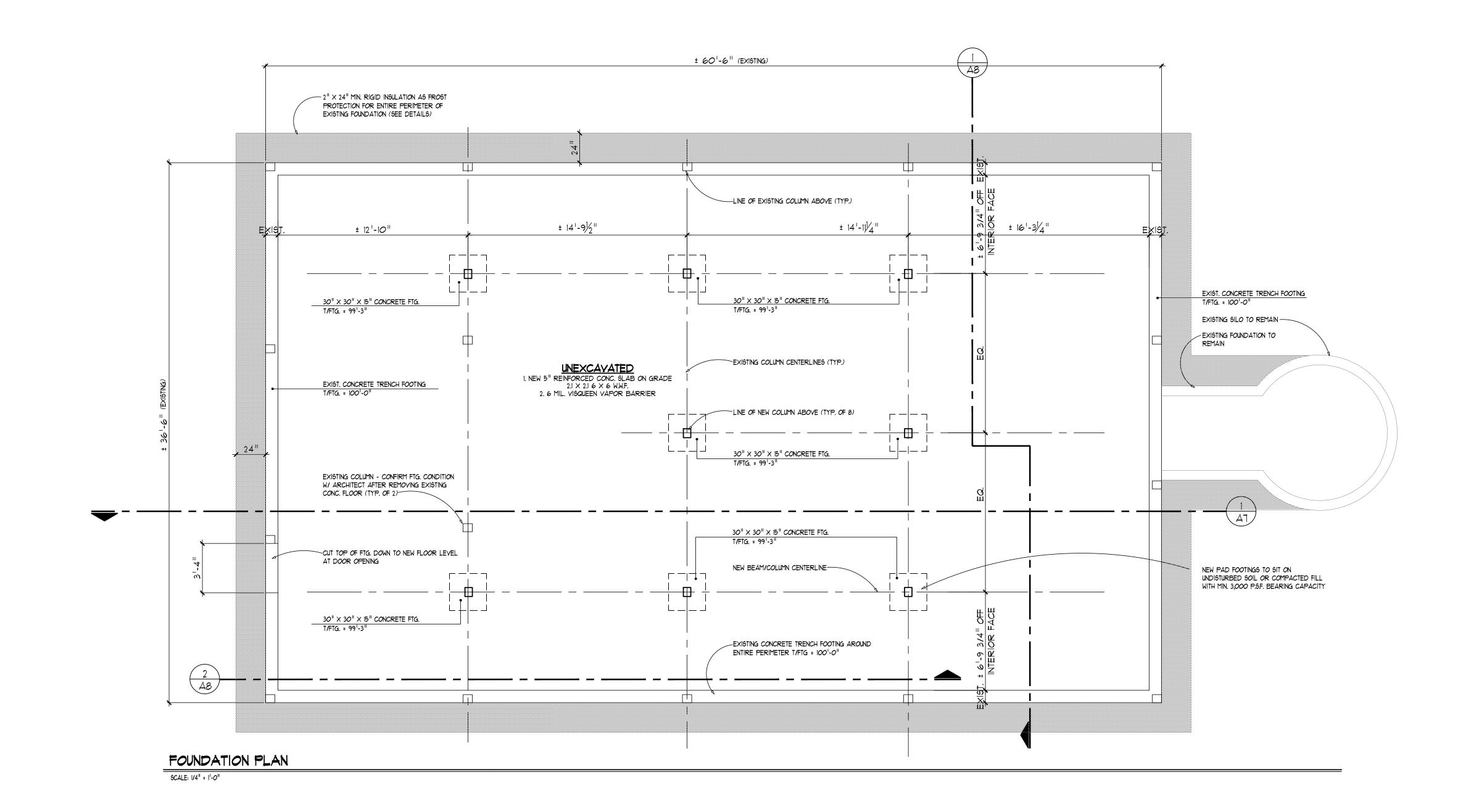
4. Ceiling in heated area only - R-30



ROJECT CONTACTS:

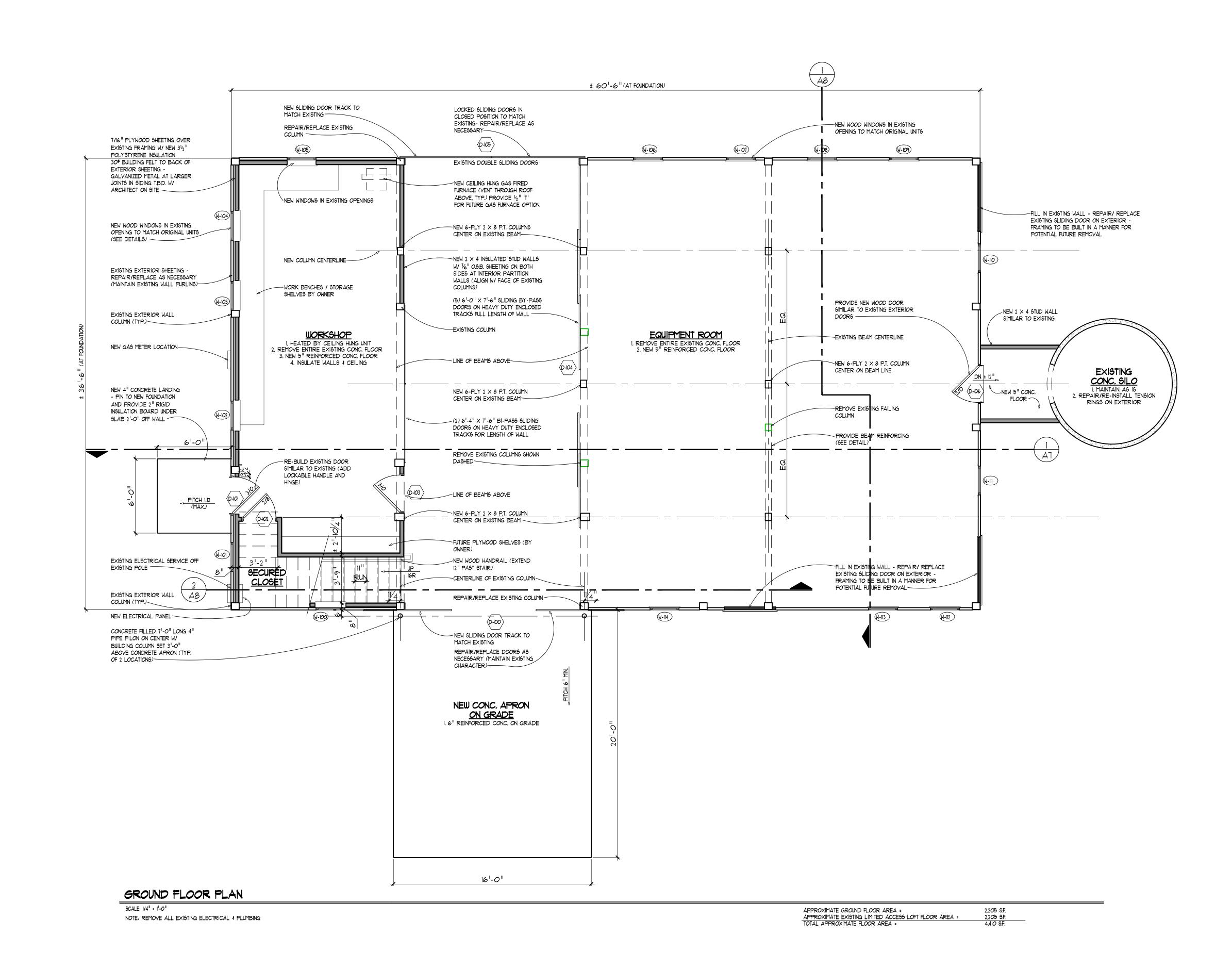
STRUCTURAL ENGINEER: CBI Design Professionals, Inc 838 W. Long Lake Road Suite 110 Bloomfield Hills, MI 48302 Marty Klein, P.E.



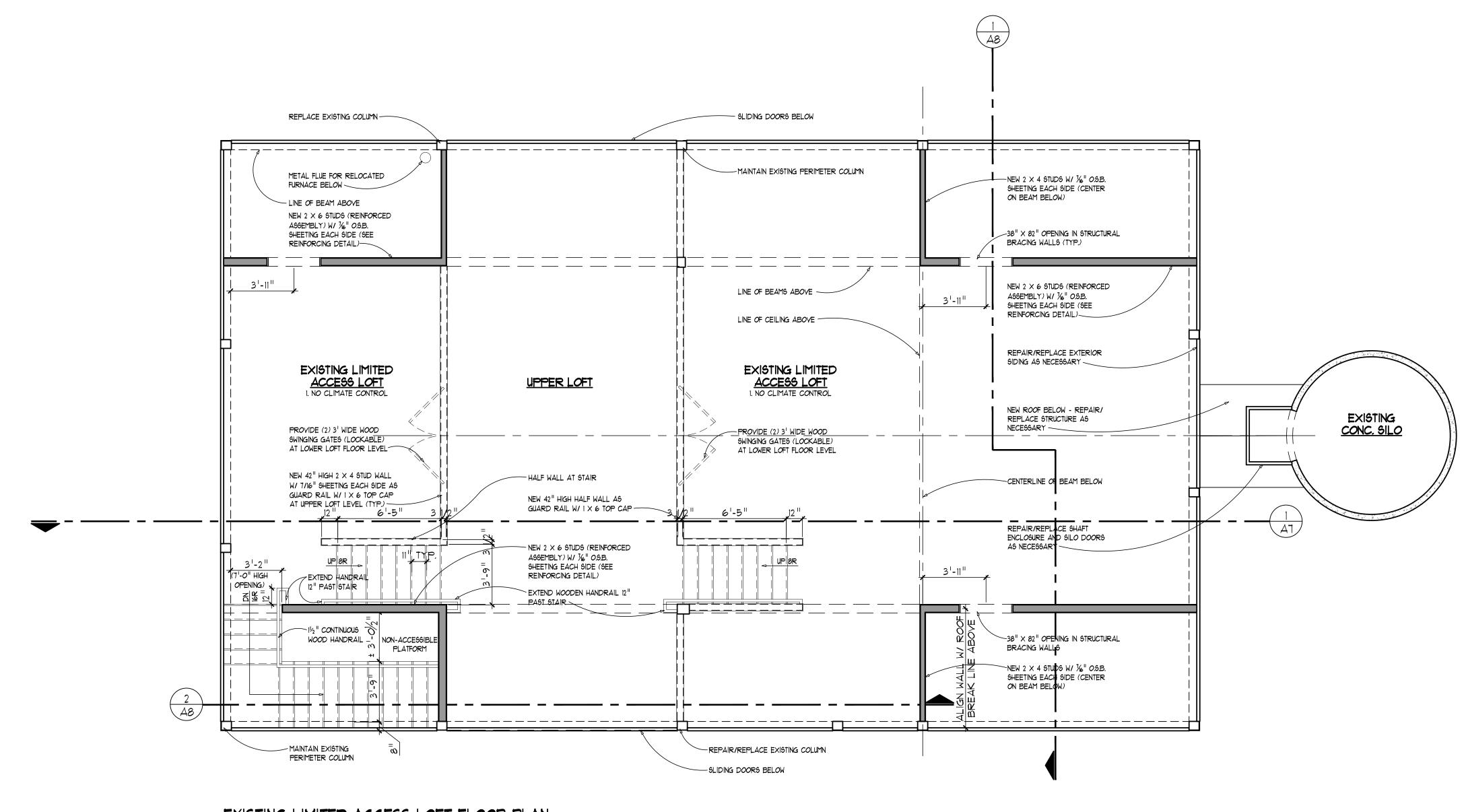


CBI Design Professionals

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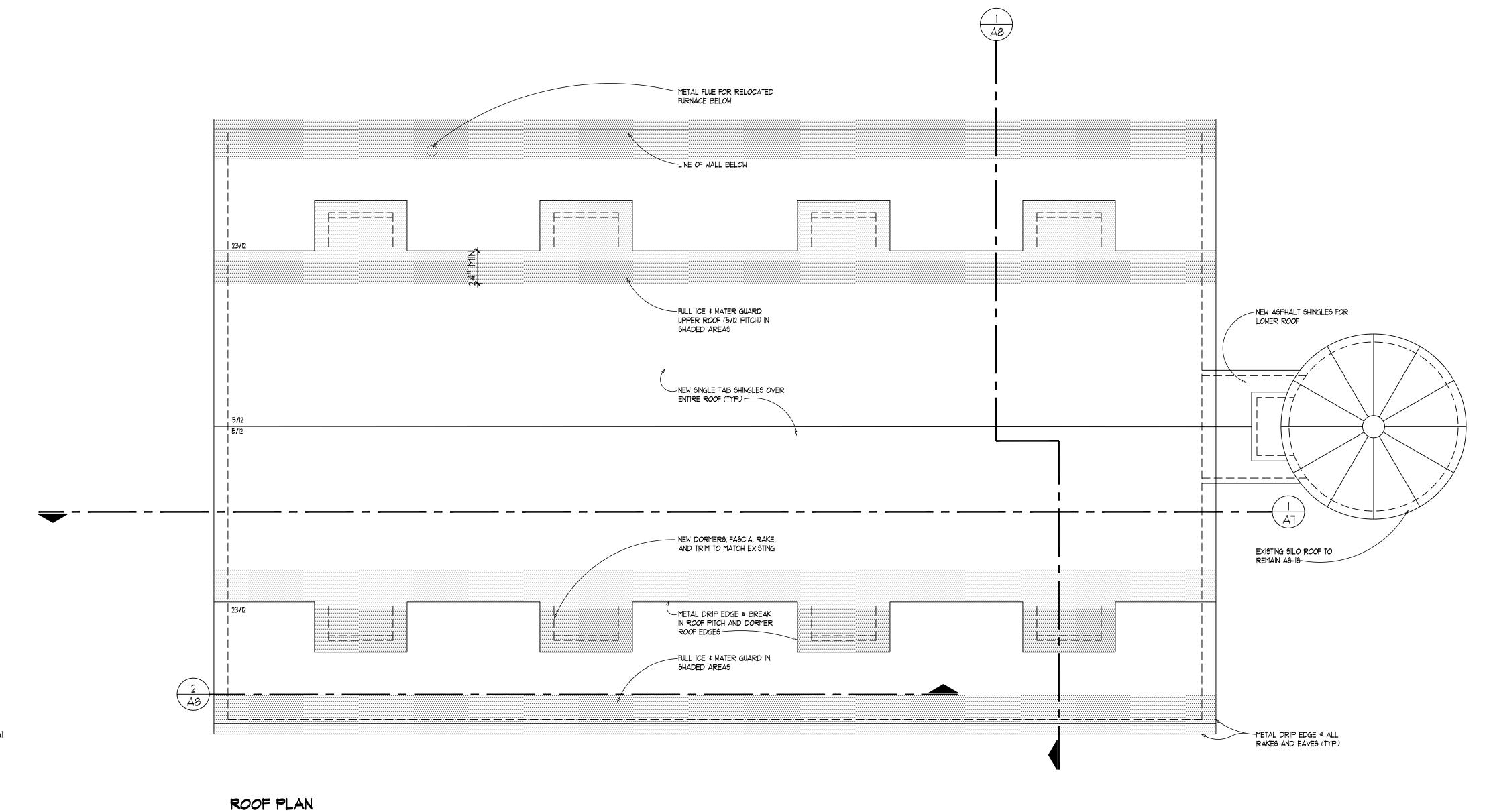
Existing limited access loft floor plan

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

EXISTING LIMITED ACCESS LOFT FLOOR AREAS =

2,2*0*5 S.F.

CBI Design Professionals



ASPHALT ROOFING:

1. Provide shingles installed in strict compliance with manufacturer's requirements, including fasteners (nails only, no staples).

Hatteras Designer Shingles:

- Oversized extra-heavy fiberglass mat with dual stripes of CertaSeal
- Plus advanced modified sealant Deep shadow lines create look of natural slate
- 235 lbs. per square • UL Class A fire resistance rating
- UL certified to meet ASTM D3462 • UL certified to meet ASTM D3018 Type 1
- ASTM D3161, Class F, 110 mph wind resistance
- Miami-Dade Product Control Acceptance • Conforms to CSA standard A123.5
- 2. "Ice and water guard" by W.R. Grace or approved equivalent at wall to roof intersections, dormers, and other locations where noted. 3. Provide "ice and water guard" by W.R. Grace or approved equivalent under shingles at all eaves to 24" minimum inside interior wall line of exterior walls.

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

- 4. Use 30# roofing felt under all main roof shingles. Lap at 2", end lap 6". 5. Painted aluminum drip edges at all eaves (match wood trim color).
- 6. Painted aluminum strip flashing at siding locations.
- 7. Alternates to flashings to be approved by Architect.
- 8. All flashing to be installed in accordance with the Asphalt Roofing Manufacturers Associations most recent recommendations and publications.

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NEW RAKE TO MATCH EXISTING

(SEE DETAIL)



-EXISTING METAL ROOFING TO REMAIN (EVALUATE CONDITION

REPAIR/REPLACE CHUTE SIDING AND STRUCTURE AS NECESSARY

NEW RAKE TO MATCH EXISTING

W/ ARCHITECT)

(SEE DETAIL)

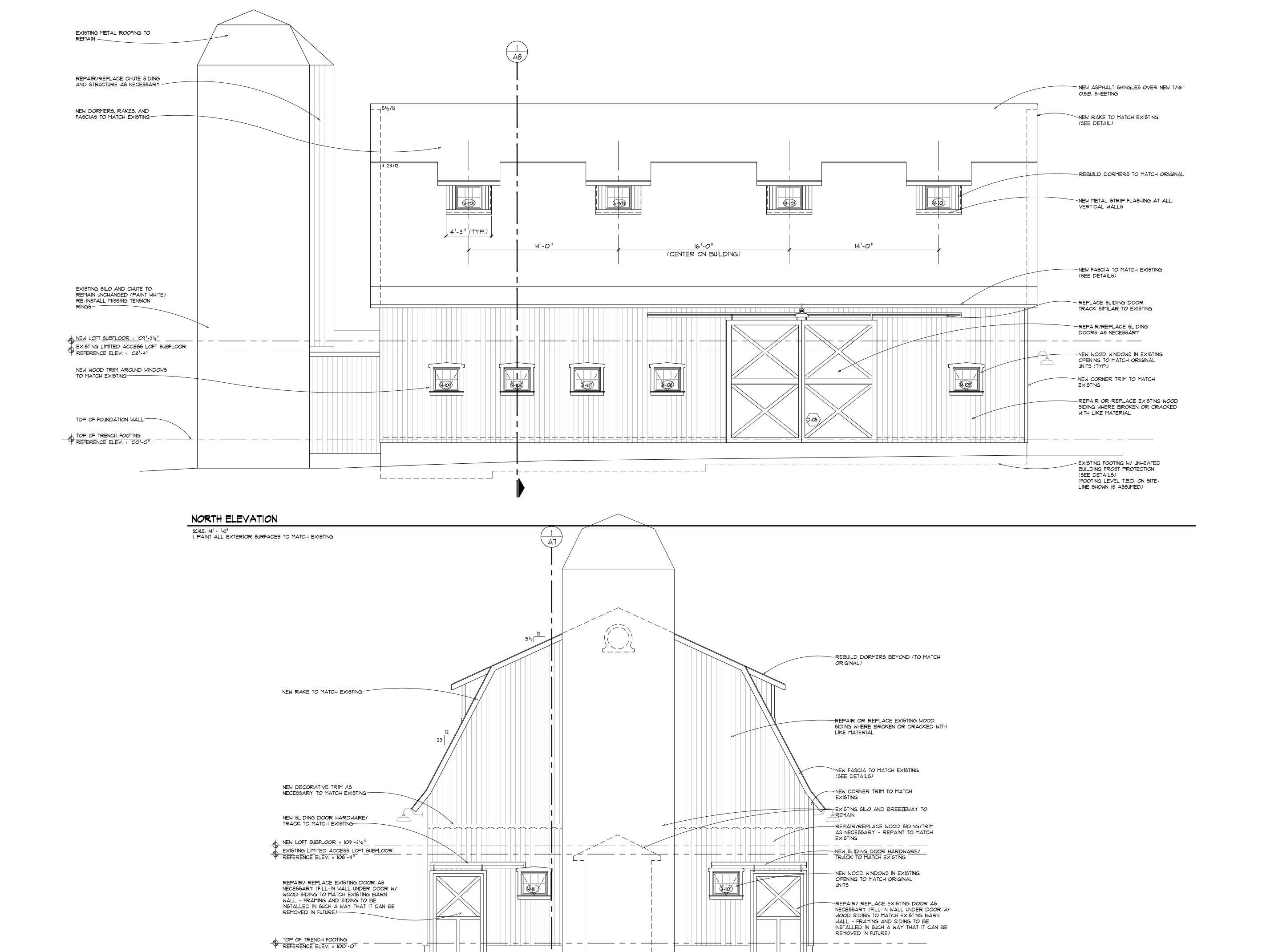
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1. Bids 2. Revis 3. HDC

ARCHITECTS SEAL

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