### **DESIGN CRITERIA & GENERAL NOTES**

GENERAL CONSTRUCTION NOTES:

I. THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE AS WELL AS STANDARDS REFERENCED WITHIN

THE STRUCTURE HAS BEEN ANALYZED AND DESIGN TO WITHSTAND DESIGN GRAVITY LOADS IN ACCORDANCE WITH THE REOUIREMENTS SPECIFIED IN SECTION 1606.0 & 1607.0 OF THE INTERNATIONAL BUILDING CODE. REFER TO SCHEDULES ON S002. THE STRUCTURE HAS BEEN ANALYZED TO WITHSTAND WIND AND SEISMIC PRESSURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE. REFER TO SCHEDULES ON S002

WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "2018 INTERNATIONAL BUILDING CODE" AND ALL FEDERALSTATE AND CITY LAWS, BYLAWS, ORDINANCES AND REGULATIONS IN ANY MANNEI AFFECTING THE CONDUCT OF THIS WORK AS WELL AS ALL ORDERS OR DECREES WHICH HAVE BEEN PROMULGATED OR ENACTED BY ANY LEGAL BODIES OR TRIBUNALS HAVING AUTHORITY OR IURISDICTION OVER THE WORK, MATERIALS, EMPLOYEES OR CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PERSONNEL SAFETY ON THE JOBSITE. GUIDELINES FOR CONSTRUCTION SÁFETY SHALL BE IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE CONSTRUCTION INDUSTRY OSHA SAFETY AND HEALTH STANDARDS (1926 STANDARDS), AND ANY LOCAL ORDINANCES OR CODES WHICH MAY BE APPLICABLE. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATION AND THE ARCHITECTURAL AND MECHANICAL DRAWINGS. IF THERE IS A DISCREPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE ARCHITECT PRIOR TO PERFORMING WORK.

5. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, SPECIFICATIONS AND DETAILS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.

SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY AND DRYWALL NON-LOAD BEARING PARTITIONS. CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF THE WALLS LATERALLY FOR

ALL COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO THE CONTRACTOR IMPROPER INSTALLATION OF STRUCTURAL ELEMENTS OR OTHER ITEMS NOT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS SHALL BE AT THE CONTRACTORS EXPENSE.

8. IF THE FIELD CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY AND PROVIDE A SKETCH OF THE CONDITION WITH HIS PROPOSED MODIFICATION OF THE DETAILS GIVEN ON THE CONTRACT DOCUMENTS. DO NOT COMMENCE WORK UNTIL CONDITION IS RESOLVED AND

9. THE CONTRACTOR SHALL COORDINATE PRINCIPAL OPENINGS IN THE STRUCTURE AS INDICATED ON THE CONTRACT DOCUMENTS. REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INSETS, ETC. NOT INDICATED. THE LOCATION OF SLEEVES OR OPENINGS IN STRUCTURAL MEMBERS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.

THE CONTRACTOR SHALL PROVIDE BRACING AS REQUIRED TO MAINTAIN PLUMBNESS AND STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE SHORING TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE. EVALUATION AND COMPLIANCE WITH LOADING RESTRICTIONS FOR MEANS AND METHODS OF CONSTRUCTION AS WELL AS STAGING FOR OTHER TRADES ARE THE

II. METHODS, PROCEDURES AND THE SEQUENCES (OTHER THAN THAT NOTED ON THE DRAWINGS) OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO MAINTAIN AND INSURE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION AND COORDINATION OF WORK WITH MECHANICAL AND ELECTRICAL WORK. 12. WORK NOT INDICATED ON A PART OF THE DRAWINGS BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES SHALL BE PROVIDED BY THE CONTRACTOR AT NO

13. MINOR DETAILS OR INCIDENTAL ITEMS NOT SHOWN OR SPECIFIED, BUT NECESSARY FOR A PROPER AND COMPLETE INSTALLATION SHALL BE INCLUDED AS REQUIRED

14. MISCELLANEOUS WOOD OR COLD FORMED STEEL BLOCKING, FRAMING MEMBERS, ANCHORS, FASTENERS, ETC. SHALL BE PROVIDED AS REQUIRED WHETHER OR NOT SPECIFICALLY INDICATED ON DRAWINGS

IS. THE BUILDING STRUCTURE HAS BEEN DESIGNED FOR THE IN-SERVICE LOADS ONLY. ALL WORK RELATED TO THE STAGING, CONSTRUCTION PRACTICES, AND SAFETY OF THE PROJECT'S WORKERS AND ROPERTY SHALL BE CONSIDERED MEANS AND METHODS AND SHALL BE COMPLETED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE AND ALL CODES AND STANDARDS. VISITS TO THE SITE MADE BY THE ENGINEER ARE FOR THE REVIEW OF THE STRUCTURAL WORK FOR GENERAL CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS AND ARE NOT FOR THE REVIEW OF CONTRACTOR RESPONSIBILITIES, INCLUDING BUT NOT LIMITED TO PROJECT SAFETY AND MEANS AND METHODS OF CONSTRUCTION.

16. ALL WORK SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE REFERENCED BUILDING CODE. SUBMIT ALL REPORTS TO THE ENGINEER OF RECORD FOR REVIEW. AT THE COMPLETION OF THE PROJECT, THE SPECIAL INSPECTION REPORT SHALL BE COMPLETED, SIGNED BY THE SPECIAL INSPECTOR, AND SUBMITTED TO THE ENGINEER OF RECORD FOR RECORD PURPOSES

SCALING OF DRAWINGS TO DETERMINE DIMENSIONS OF ELEMENTS IS NOT PERMITTED.

18. STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED TO CREATE SHOP DRAWINGS OR SHORING DOCUMENTATION WITHOUT EXPRESS WRITTEN CONSENT.

19. ALL DIMENSIONS CONTAINED ON THE STRUCTURAL DRAWINGS WERE DEVELOPED BY OTHER DISCIPLINES FOR THE PURPOSE OF THIS PROJECT. ANY DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHOULD BE COORDINATED WITH THE OTHER DISCIPLINE DRAWINGS.

20. ALL REQUESTED CHANGES IN WORK BY THE CONTRACTOR ARE SUBJECT TO THE APPROVAL OF THE DESIGN TEAM AND OWNER AND ARE CONSIDERED TO BE COMPLETED AT NO ADDITIONAL COST UNLESS SPECIFICALLY APPROVED. APPROVAL OF REQUESTED CHANGES DOES NOT CONSTITUTE APPROVAL OF AN INCREASE IN PROJECT COSTS.

21. REFER TO THE ARCHITECTURAL DOCUMENTATION FOR LOCATION, EXTENT, AND DETAILING OF ALL WATERPROOFING AND FIREPROOFING

I. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS. REQUIRED SHOP DRAWINGS SHALL INCLUDE, BUT ARE NOT LIMITED

ANCHOR BOLT AND CONCRETE EMBEDDED ASSEMBLIES

REINFORCING SHOP DRAWINGS

WOOD TIMBER FRAMING

FOR THIS THE PROJECT

STRUCTURAL STEEL STAIRS, HANDRAILS AND GUARDRAILS

ALL OTHER ADMIXTURES, SEALANTS, HARDENERS AND COATINGS

2. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL WHICH SHALL CONSTITUTE CERTIFICATION THAT THE CONTRACTOR HAS VERIFIED ALL CONSTRUCTION CRITERIA, MATERIALS, AND SIMILAR DATA AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS

3. THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW. ANY REPRODUCTION OF THE ORIGINAL STRUCTURAL DOCUMENTS ON THE SHOP DRAWINGS IS PROHIBITED AND WILL BE AN AUTOMATIC DISAPPROVAL

4. THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER OR ARCHITECT ARE NOT TO BE CONSIDERED CHANGES TO CONTRACT DOCUMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE SURE ITEMS ARE CONSTRUCTED TO CONTRACT DOCUMENTS.

5. ALL SHOP DRAWINGS NOTED ABOVE SHALL BE SUBMITTED IN A TIMELY MANNER TO ALLOW FOR A 10 BUSINESS DAY REVIEW PERIOD BY THE DESIGN TEAM 6. SHOP DRAWINGS MAY BE SUBMITTED ELECTRONICALLY, HOWEVER, A MINIMUM OF ONE (I) HARD COPY SHALL BE PROVIDED FOR ALL SHOP DRAWINGS. IF NO HARD COPY IS PROVIDED, PRINTING AND TIME

COSTS WILL BE CHARGED TO ORGANIZE AND PRINT SHOP DRAWINGS. 7. SHOP DRAWINGS WILL BE MARKED AS NOTED ON THE REVIEW STAMP. SHOP DRAWINGS MARKED "APPROVED AS NOTED" ARE TO BE RE-SUBMITTED FOR RECORD PURPOSES AND WILL NOT BE RE-REVIEWED.

8. Submittals requiring the seal of a professional engineer (i.e. precast concrete, etc.) shall be submitted with calculations and sealed drawings prior to review.

PERFORM ALL FOUNDATION PREPARATION, EXCAVATION, PLACEMENT OF STRUCTURAL FILL AND / OR SOIL IMPROVEMENT WORK IN STRICT ACCORDANCE WITH THE REPORT OF GEOTECHNICAL INVESTIGATION PREPARED BY POULSON & ASSOCIATES LLC (DATED NOVEMBER 29, 2022 - PROJECT NUMBER 22 496). BOTTOM OF FOUNDATIONS SHALL BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 2000 PSF. 2. EXCAVATE THE BUILDING FOUNDATION AREAS TO THE DEPTH AND EXTENT INDICATED IN THE GEOTECHNICAL REPORT AND FOUNDATION DRAWINGS. ALL FOOTING AND SLAB SUBGRADES SHALL BE APPROVED IN WRITING BY THE GEOTECHNICAL ENGINEER PRIOR TO BACKFILLING. SUBMIT ALL REPORTS TO THE ENGINEER OF RECORD FOR RECORD.

BOTTOM OF FOOTING SUBGRADE MUST BE INSPECTED AND APPROVED BY A REGISTERED GEOTECHNICAL ENGINEER BEFORE PLACING ANY CONCRETE FOUNDATIONS. APPROVAL IN WRITING MUST

INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN THE SPECIFIED BEARING PRESSURE. SUBMIT ALL REPORTS TO THE ENGINEER OF RECORD FOR RECORD. 4. BOTTOM OF ALL FOOTINGS SUBJECTED TO FREEZE THAW CONDITIONS SHALL BE A MINIMUM THREE FEET BELOW FINISH GRADE OR TOP OF SLAB ELEVATION WHICHEVER IS LOWER.

5. BACKFILL SHALL NOT BE PLACED AGAINST THE BASEMENT WALLS UNTIL THE FIRST FLOOR FRAMING AND SHEATHING IS IN-PLACE OR THE WALLS HAVE BEEN ADEQUATELY BRACED. BRACING OF WALLS SHALL BE DESIGNED BY AN ENGINEER HIRED DIRECTLY BY THE CONTRACTOR. **EXISTING CONSTRUCTION** 

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, COORDINATION AND INSTALLATION OF SHORING AND STABILIZATION OF EXISTING CONSTRUCTION AS REQUIRED TO PERFORM THE WORK CONTAINED IN THE DRAWINGS AND SPECIFICATIONS

6. ALL NEW FOOTINGS INSTALLED AGAINST EXISTING BASEMENT OR RETAINING WALLS SHALL BE INSTALLED IN SEGMENTS TO MINIMIZE IMPACT TO THE EXISTING CONSTRUCTION.

DIMENSIONS SHOWN REFERRING TO EXISTING STRUCTURES ARE FOR REFERENCE ONLY. ALL DIMENSIONS RELATED TO EXISTING BUILDINGS AND FRAMING SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.

3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY INFORMATION RELATING TO THE EXISTING STRUCTURE THAT HAS BEEN UNCOVERED DUE TO DEMOLITION AND REMOVAL OF FINISHES.

PRIOR TO COMMENCEMENT OF WORK ON EXISTING STRUCTURES TO REMAIN OR ADIACENT STRUCTURES, A STRUCTURAL SURVEY SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE. REPORT SHALL INDICATE AND PHOTOGRAPH ANY EXISTING DAMAGE OR DEFICIENCIES IN THE EXISTING STRUCTURES AS WELL AS THEIR CONDITION. REPORT SHALL BE ISSUED TO THE DESIGN TEAM FOR THEIR RECORD.

NEVER CONNECT NEW FRAMING MEMBERS TO EXISTING BRICK OR OTHER MASONRY VENEER WITHOUT APPROVAL FROM THE ENGINEER OF RECORD. REPLACE ANY REMOVED VENEER TO MATCH EXISTING

6. BASEMENT WALLS SHALL BE BACKFILLED AND COMPACTED WITH MATERIAL PRODUCING A MAXIMUM AT REST EQUIVALENT FLUID LATERAL EARTH PRESSURE OF 45 PSF.

7. RETAINING WALLS SHALL BE BACKFILLED AND COMPACTED WITH MATERIAL PRODUCING A MAXIMUM ACTIVE EQUIVALENT FLUID LATERAL EARTH PRESSURE OF 45 PSF.

8. SITE RETAINING WALLS, LOADING DOCK WALL, BASEMENT WALLS, EXPOSED CONCRETE WALLS SHALL HAVE CONTROL JOINTS A MAXIMUM OF 20 FEET ON CENTER UNLESS OTHERWISE NOTED ON THE WINGS. MASONRY OR CONCRETE WALLS WITH INTEGRAL COLUMN PIERS OR PILASTERS SHALL HAVE A FORMED CONTROL JOINT ON ONE SIDE OF EACH PIER ON THE EXPOSED FACE OF THE WALL. JOINTS SHALL BE FILLED WITH SEALANT AS NOTED ON THE ARCHITECTURAL DRAWINGS.

9. UNDERPINNING, SHEETING, AND SHORING OF EXISTING FOUNDATIONS NOTED ON THE DRAWINGS SHALL BE DESIGNED AND DETAILED BY A REGISTERED PROFESSIONAL ENGINEER WITH A MINIMUM OF 3 YEARS EXPERIENCE IN THE DESIGN OF FOUNDATION SHORING. SUBMIT SIGNED AND SEALED DRAWINGS, CALCULATIONS, AND PHASING PLAN TO THE ENGINEER FOR REVIEW AND RECORD.

CONCRETE SHALL BE DESIGNED AND DETAILED IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI-318-08), THE ACI DETAILING MANUAL (SP-66), AND CONSTRUCTED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)

CONCRETE IN THE FOLLOWING AREAS SHALL HAVE NATURAL SAND FINE AGGREGATE AND NORMAL WEIGHT COARSE AGGREGATES CONFORMING TO ASTM C33, TYPE I PORTLAND CEMENT CONFORMING TO ASTM CI50, AND SHALL HAVE THE FOLLOWING COMPRESSIVE STRENGTH (FC') AT 28 DAYS:

SI AB ON GRADE....

SLAB ON DECK...

AIR ENTRAINMENT 4% TO 6% IN ALL EXPOSED CONCRETE. MAXIMUM AGGREGATE SIZE SHALL BE 1-1/2" FOR FOOTINGS AND 3/4" FOR WALLS AND SLARS CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF DESIGN MIXTURES FOR EACH APPLICATION/LOCATION USED IN CONSTRUCTION AS NOTED ABOVE AND ON THE DRAWINGS.

THE CONCRETE SUPPLIER SHALL SUBMIT MIX DESIGNS FOR REVIEW. COMPRESSIVE STRENGTH MUST BE SUBSTANTIATED BY A SUITABLE EXPERIENCE RECORD OR BY THE METHOD OF LABORATORY TRIA BATCHES. THE PERTINENT CRITERIA OF CHAPTER 4 OF ACI 318-89 SHALL APPLY TO THE PROPORTIONING OF MIX DESIGNS AND TO THE ACCEPTANCE OF CONCRETE PRODUCED FOR THE JOB. IF DURING CONSTRUCTION ANY CLASS CONCRETE FAILS TO MEET THE ACCEPTANCE CRITERIA. THE CONTRACTOR SHALL TAKE SUCH STEPS AS ARE DEEMED NECESSARY BY THE STRUCTURAL ENGINEER TO IMPROVE subsequent test results at no additional cost to the owner. The contractor shall also bear the cost of special investigation, testing, or remedial work necessary because of EVIDENCE OF LOW STRENGTH OR NON-CONFORMING CONCRETE OR WORKMANSHIP.

H. MAXIMUM WATER/CEMENT RATIOS

THE PLACEMENT OF THE SLAB ON GRADE

MASONRY NOTES

A. FOUNDATIONS 0.50 B. INTERIOR SLABS 0.47

FOUNDATIONS....

CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615-85, GRADE 60. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER. LAP ALL BARS MINIMUM 48 BAR DIAMETERS UNLESS OTHERWISE NOTED

6. WELDED WIRE FABRIC WHEN USED SHALL CONFORM TO ASTM A 185. FABRIC SHALL BE SUPPLIED IN FLAT SHEETS. FABRIC SHALL BE LAPPED TWO MESHES AT SPLICES

7. GROUT SHALL BE NONSHRINK GROUT CONFORMING TO ASTM C827, AND SHALL HAVE SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS OF 4000 PSI

MINIMUM CONCRETE COVER PROTECTION FOR REINFORCEMENT BARS SHALL CONFORM WITH THE "MINIMUM CONCRETE COVER FOR REINFORCING BAR" TABLE PROVIDED. (SEE ACI 318-08 SECTION 7.7 FOR

ALL REINFORCEMENT SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS, STIRRUPS OR CHAIRS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT 10. PIPES OR CONDUITS PLACED IN SLABS SHALL NOT HAVE AN OUTSIDE DIAMETER LARGER THAN 1/3 THE SLAB THICKNESS AND SHALL NOT BE SPACED CLOSER THAN 3 DIAMETERS ON CENTER. ALUMINUM

CONDUITS SHALL NOT BE PLACED IN CONCRETE. NO CONDUITS SHALL BE PLACED IN SLABS WITHIN 12 INCHES OF COLUMN FACE OR FACE OF BEARING WALL. NO CONDUITS MAY BE PLACED IN EXTERIOR SLABS 11. MIXING, TRANSPORTING AND PLACING OF CONCRETE SHALL CONFORM TO ACI 301-89.

12. WELDING OF REINFORCEMENT BARS, WHEN APPROVED BY THE STRUCTURAL ENGINEER, SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STANDARD DI.1-94. ELECTRODES FOR SHOP AND FIELD

3. HORIZONTAL JOINTING WILL NOT BE PERMITTED IN CONCRETE CONSTRUCTION EXCEPT AS SHOWN ON THE CONTRACT DOCUMENT. VERTICAL JOINTS SHALL OCCUR AT CENTER OF SPANS AT LOCATIONS

4. REPAIR CONCRETE EXHIBITING VOIDS DUE TO SNAP TIES, "HONEYCOMBS," ROCK POCKETS, AND RUNS, SPALLS OR OTHERWISE DAMAGED SURFACES WITH DRY PACK OR CEMENT GROUT, AND FINISH FLUSH WITH ADJOINING SURFACES. AT THE DISCRETION OF THE STRUCTURAL ENGINEER OR AS QUALIFIED BY LAB TESTING, EXCESSIVE HONEYCOMBS OR EXPOSED REINFORCEMENT THAT JEOPARDIZE THE DESIGN, SHALL

15. PROVIDE TWO (2) #3 X 4'0" AT ALL RE-ENTRANT CORNERS, PLACED ON THE DIAGONAL WITH I I/2" CLEARANCE FROM THE CORNER AND TOP OF SLAB. REFER TO DETAIL.

ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE INDICATED

7. CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT FINISHED SURFACES FROM STAINS OR ABRASIONS. NO FIRE SHALL BE ALLOWED IN DIRECT CONTACT WITH CONCRETE. PROVIDE ADEQUATE

PROTECTION AGAINST INJURIOUS ACTION BY SUN OR WIND. FRESH CONCRETE SHALL BE THOROUGHLY PROTECTED FROM HEAVY RAIN, FLOWING WATER, AND MECHANICAL INJURY 18. THE SLAB-ON-GRADE SHALL BE UNDERLAIN BY A MINIMUM OF FOUR INCHES OF STABLE GRANULAR MATERIAL PER THE GEOTECHINICAL REPORT.

19. CONCRETE SLAB ON GRADE SHALL BE FINISHED TO TOLERANCE FOR FLOOR FLATNESS (Ff) OF 25 AND FLOOR LEVELNESS (FI) OF 20 UNLESS OTHERWISE MANDATED BY ARCHITECTURAL FINISH REQUIREMENTS. ALL CONCRETE SLAB ON GRADE SHALL BE TESTED FOR FLOOR FLATNESS AND LEVELNESS WITHIN 48 HOURS OF THE SLAB ON GRADE PLACEMENT, CONTRACTOR SHALL SUBMIT REPORTS TO THE ENGINEER AND ARCHITECT OF RECORD AND ALL SPECIALTY FLOORING SUB-CONTRACTORS FOR REVIEW. CONTRACTOR SHALL CONDUCT A PRE-INSTALLATION CONFERENCE WITH ALL FLOORING SUB-CONTRACTORS PRIOR TO

20. PROVIDE KEYS IN CONCRETE WALLS, PIERS, GRADE BEAMS AND FOOTINGS AT INTERSECTIONS UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT AT WALL CORNERS AND TEE INTERSECTIONS.

21. CONCRETE SHALL ACHIEVE A MINIMUM OF 70 PERCENT OF THE DESIGN STRENGTH PRIOR TO STEEL ERECTION. WRITTEN CONFIRMATION OF THIS STRENGTH SHOULD BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO THE COMMENCEMENT OF STEEL ERECTION 22. CONSTRUCTION JOINTS IN COMPOSITE STEEL AND CONCRETE SLABS SHALL BE LOCATED AT THE MIDDLE THIRD OF BEAMS AND GIRDERS. DO NOT LOCATE JOINTS ALONG BEAMS AND GIRDERS. SEE

23. CONCRETE SLABS ON DECK SHALL BE PLACED TO A UNIFORM THICKNESS. LASER OR SIMILAR LEVELING INSTRUMENT IS NOT PERMITTED. SURFACE SHALL BE FINISHED TO TOLERANCE FOR FLOOR FLATNESS (F)

DESIGN AND CONSTRUCTION SHALL CONFORM WITH THE NATIONAL CONCRETE MASONRY ASSOCIATION AND THE AMERICAN CONCRETE INSTITUTE (ACI 530) AS WELL AS THE "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY CONSTRUCTION AND COMMENTARY" LATEST EDITION.

CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS INDICATED BY THE ARCHITECTURAL DRAWINGS. PROVIDE FULL BED AND HEAD JOINTS

3. MASONRY UNITS SHALL BE GRADE N, TYPE I, NORMAL WEIGHT HOLLOW CONCRETE UNITS CONFORMING TO THE REQUIREMENTS OF ASTM C90. UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F'm) OF 1500 PSI ON THE NET CROSS SECTIONAL AREA AT 28 DAYS. UNITS SHALL NOT BE INSTALLED PRIOR TO ATTAINING THE REQUIRED 28 DAY STRENGTH. BOND BEAMS SHALL BE PROVIDED AT THE TOPS OF ALL CMU WALLS AND AT HORIZONTAL INTERVALS NOT TO EXCEED EIGHTEEN (18) TIMES THE WALL (CMU) THICKNESS. UNLESS INDICATED ON DRAWINGS

TO ALL BUILDING COLUMNS AT MAXIMUM 48" VERTICAL AND AT ALL BOND BEAMS. 5 MORTAR SHALL CONFORM TO ASTM C270. TYPE M OR S WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS... ALL PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPEI LIME SHALL CONFORM TO ASTMIC207 AND MASONRY CEMENT SHALL CONFORM TO ASTMIC2L. ALL MORTAR SHALL BE FIELD OBTAINED MORTAR CUBES TESTED IN ACCORDANCE WITH ASTMIC270 AND ASTMIC280.

EINFORCE ALL BOND BEAMS WITH A MINIMUM 2 CONTINUOUS #5 BARS WITH MINIMUM 3000 PSI SMALL AGGREGATE CONCRETE (NOTE: MORTAR MIX DOES NOT CONSTITUTE GROUT). PROVIDE WALL ANCHORS

GROUT SHALL CONFORM TO ASTM C476 AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. SLUMP OF GROUT SHALL BE 8 TO 10 INCHES AND THE MAXIMUM AGGREGATE SIZE SHALL BE 3/8" (AGGREGATE GRADED TO PRODUCE FINE GROUT IN CONFORMANCE WITH ASTM C476 AND C404). ALL GROUT SHALL BE FIELD OBTAINED CYLINDERS TESTED IN ACCORDANCE WITH ASTM C1019. 7 HORIZONTAL IOINT REINFORCING: ASTM A82: 9-GAGE TRUSS-TYPE GALVANIZED

8. DEFORMED BAR REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60 AND SHALL BE FULL HEIGHT OF WALLS UNLESS OTHERWISE NOTED. PROVIDE BAR SPACERS AND POSITIONERS AS REQUIRED TO PROPERLY LOCATE AND STABILIZE REINFORCING DURING GROUTING OPERATIONS. GROUT ALL REINFORCED CELLS SOLID WITH GROUT.

HOLLOW CONCRETE UNITS BELOW GRADE AND SLAB ON GRADE SHALL BE NORMAL WEIGHT AND HAVE ALL CELLS GROUTED SOLID.

10. PROVIDE AND INSTALL TEMPORARY BRACING REQUIRED INSURING STABILITY OF ALL WALLS DURING CONSTRUCTION AND UNTIL ERECTION OF ATTACHED STRUCTURAL FRAMING IS COMPLETED. I. PROVIDE GALVANIZED HORIZONTAL JOINT REINFORCEMENT IN ALL WALLS AND PARTITIONS AT 16" O.C. AND 8" O.C IN PARAPETS UNLESS OTHERWISE SHOWN OR NOTED. PROVIDE ONE (I) PIECE

PREFABRICATED UNITS AT 8" O.C. AT ALL WALL CORNERS AND INTERSECTIONS. 12. LAP SPLICES FOR DEFORMED REINFORCING BARS USED IN MASONRY CONSTRUCTION SHALL BE 50 BAR DIAMETERS.

13. ALLOW GROUT IN REINFORCED CMU WALLS TO CURE A MINIMUM OF 48 HOURS BEFORE IMPOSING CONCENTRATED OR OTHER LOADS FROM ABOVE.

14. PROVIDE MASONRY ANCHORS AT 16" O.C. SET ON COURSING AND ATTACHED TO ALL BEAMS, COLUMNS, PARTITIONS, AND WALLS ABUTTING OR EMBEDDED IN MASONRY UNLESS NOTED OTHERWISE ON

5. ALL MASONRY PIERS AND PARTITIONS SHALL BE TOOTHED TO ADJACENT MASONRY WALLS. PROVIDE TIES TO ADJACENT FLOOR AND ROOF CONSTRUCTION IN ACCORDANCE WITH DETAILS ON

16. THE CONTRACTOR SHALL VERIFY ALL OPENINGS BELOW LINTELS INDICATED ARE ADEQUATE TO ACCEPT DOORFRAMES, LOUVERS, ETC. AS SHOWN ON THE ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO LINTEL INSTALLATION.

17. ALL WALL SECTIONS AND PIERS LESS THAN TWO SQUARE FEET IN CROSS-SECTIONAL AREA SHALL BE FULLY GROUTED

VENEER TIES SHOULD BE PROVIDED AT 16" o/c HORIZONTAL AND VERTICAL SPACING.

18. PROVIDE VERTICAL MASONRY CONTROL JOINTS AT MAXIMUM 25'-0" ON CENTER UNLESS DETAILED ON ARCHITECTURAL DRAWINGS, COORDINATE LOCATIONS WITH ARCHITECT.

19. ALL MASONRY SHALL BE INSPECTED BY A QUALIFIED ENGINEER AS NOTED IN THE INTERNATIONAL BUILDING CODE SPECIAL INSPECTIONS REQUIREMENTS FOR THE PROJECT. 20. STAIRTOWERS AND ELEVATOR SHAFTS SHALL BE GROUTED SOLID AND REINFORCED PER THE DRAWINGS WITH A MINIMUM OF #4 @ 48" o/c

21. ALL BRICK MASONRY UNITS SHALL BE GRADE SW IN ACCORDANCE WITH ASTM C216 WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI, BONDED TOGETHER WITH TYPE S MORTAR. GALVANIZED

22. ALL BRICK TIES APPLIED TO PLYWOOD SHEATHING TO BE HOHMANN & BARNARD DW-10HS ANCHORS WITH VEE TIES @ 16" o/c HORIZONTALLY AND VERTICALLY WITH HOT DIP GALVANIZED OR STAINLESS FINISH. WHERE ANCHORS WILL GO THROUGH INSULATION PROVIDE X-SEAL ANCHOR.

### WOOD CONSTRUCTION

. WOOD FRAMING HAS BEEN DESIGNED AND DETAILED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS 2005), AND SHALL BE CONSTRUCTED IN ACCORDANCE GENERALLY ACCEPTED WOOD FRAMED CONSTRUCTION PRACTICES IN ACCORDANCE WITH WOOD FRAMED CONSTRUCTION MANUAL (WFCM 2008). ALL STRUCTURAL TIMBER MUST BE STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION'S "CONSTRUCTION MANUAL".

ALL TIMBER AND TIMBER CONSTRUCTION SHALL COMPLY WITH LATEST EDITIONS OF THE FOLLOWING STANDARDS: AMERICAN INSTITUTE OF TIMBER CONSTRUCTION: TIMBER CONSTRUCTION MANUAL. NATIONAL FOREST PRODUCTS ASSOCIATION: NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, AMERICAN PLYWOOD ASSOCIATION: PLYWOOD DESIGN SPECIFICATION, AMERICAN WOOD-PRESERVERS ASSOCIATION STANDARDS, NATIONAL LUMBER MANUFACTURERS ASSOCIATION: NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENING

1. WOOD FLOOR TRUSSES AND WOOD ROOF TRUSSES ARE TO BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER FOR THE WOOD TRUSS, OR JOIST FABRICATOR SIGNED AND SEALED CALCULATIONS are to be submitted for review and approval. Designs shall reflect the loading shown in the structural documents. Truss fabricator shall provide prefabricated hangers and CONNECTORS AS REQUIRED. ALL STRUCTURAL TIMBER FOR WOOD TRUSS FRAMING SHALL SOUTHERN YELLOW PINE (SYP) #3 MINIMUM STRESS GRADE LUMBER OR APPROVED EQUAL. THE MINIMUM ALLOWABLE PROPERTIES ARE: ALL STRUCTURAL TIMBER FOR WOOD TRUSSES SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES - F6 = 500 PSI, Fv = 175 PSI, E = 1,100,000 PSI, ALL STRUCTURAL TIMBER MUST B STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION'S "CONSTRUCTION MANUAL". WOOD TRUSSES TO BE DESIGNED FOR L/480LIVE LOAD DEFLECTION AND L/280 TOTAL LOAD

5. DESIGN, FABRICATION AND INSTALLATION OF WOOD TRUSSES AND SHEET METAL CONNECTORS SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE FOLLOWING TRUSS PLATE INSTITUTE: standards. Design specification for metal plate connected wood trusses, tp1-85 for roofs. Design specification for metal plate connected parallel chord wood trusses, pct-80 for FLOORS. RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES, DSB-89. HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD

6. ALL PRE-ENGINEERED WOOD JOISTS (TJI,TJL,TJM,TJS,TJW, etc.) AS NOTED ON PLAN SHALL BE AS MANUFACTURED BY WEYERHAEUSER OR APPROVED EQUAL. INSTALL BRACING AND BRIDGING IN ACCORDANCE WOOD FRAMING SHALL BE GRADED BY A RECOGNIZED AGENCY, WITH RULES AND SERVICE COMPLYING WITH REQUIREMENTS OF AMERICAN LUMBER STANDARDS COMMITTEE AND PS 20. GRADING RULES FOR SPECIES OF TIMBER SHALL BE AS FOLLOWS:

8. ALL GRADES OF (SAWN) LUMBER SHALL MEET THE FOLLOWING MINIMUM SPECIFICATIONS FOR SPECIES, STRESS RATINGS, MOISTURE CONTENT AND OTHER PROVISIONS AS SHOWN AND SPECIFIED:

WWPA - WESTERN WOOD PRODUCTS ASSOCIATION

CONVENTIONAL FRAMING (HEM-FIR. NO.2)  $F_V = 150 PS$ 

E = 1,300,000 PSI

Fc = 405 PSI (PERPENDICULAR TO GRAIN) Fc = 1,300 PSI (PARALLEL TO GRAIN)

PRESSURE TREATED FRAMING (SOUTHERN PINE NO.2)

SPIB - SOUTHERN PINE INSPECTION BUREAU

Fb = 1,500 PSI

Fv = 175 PSIFc = 565 PSI (PERPENDICULAR TO GRAIN

 $F_c = 1.650 \text{ PS} \text{ (PARALLEL TO GRAIN)}$ 

40ISTURE CONTENT EXCEPT AS OTHERWISE INDICATED, SAWN LUMBER SHALL BE DRIED TO MAXIMUM MOISTURE CONTENT OF 19%, AND INCLUDE "S-DRY" OR SIMILAR INDICATION IN CERTIFICATION OF GRADE. Dressing sawn lumber shall be dressed on 4 sides (s4s) at mill, prior to grading. Comply with grade sizes.

9. ENGINEERED LUMBER PRODUCTS SHALL BE OF WIDTH AND DEPTH AS SPECIFIED ON DRAWINGS. MULTIPLE PLY MEMBERS SHALL BE ASSEMBLED IN ACCORDANCE WITH THE MANUFACTURERS ASSEMBLY

DETAILS. THE FOLLOWING MINIMUM STRUCTURAL PROPERTIES SHALL

Fb = 2,900 PSI FOR 12'' DEPTH FOR OTHER MULTIPLY BY  $[12/d]^{0.111}$ 

Fc = 750 PSI (PERPENDICULAR TO GRAIN)\ Fc = 2,900 PSI (PARALLEL TO GRAIN) E = 2,000,000 PSI

LVL (MICROLAM 1.9E)  $Fb = 2,600 \text{ PSI FOR } 12^{\circ} \text{ DEPTH FOR OTHER MULTIPLY BY } [12/d]^0.136$ 

Fc = 750 PSI (PERPENDICULAR TO GRAIN) Fc = 2,510 PSI (PARALLEL TO GRAIN) E = 1,800,000 PSI

Fb = 1,700 PSI FOR 12" DEPTH FOR OTHER MULTIPLY BY [12/d]^0.092

Fc = 680 PSI (PERPENDICULAR TO GRAIN) Fc = 1,400 PSI (PARALLEL TO GRAIN)

10. DELIVERY OF CONSTRUCTION MATERIALS SHALL BE COORDINATED WITH INSTALLATION WOOD FRAMING TO AVOID EXTENDED ON-SITE STORAGE. ALL STRUCTURAL WOOD FRAMING SHALL BE protected during delivery, storage, handling and erection. Do not store in areas either excessively high or excessively low humidit

11. WALL, FLOOR & ROOF SHEATHING SHALL BE APA RATED SHEATHING MEETING THE FOLLOWING MINIMUM SPECIFICATIONS, UNLESS OTHERWISE NOTED WITHIN CONSTRUCTION DOCUMENTS:

EXPOSURE 1, 7/16 (1/2" NOMINAL) 32/16 SPAN RATING APA STRUCTURAL I RATED PLYWOOD OR OSB WALL SHEATHING SHALL BE FASTENED TO SUPPORTING MEMBERS WITH 8d COMMON WIRE NAILS AT 6" (EDGES) & 12" O.C. (INTERMEDIATE SUPPORTS **ROOF SHEATHING** 

EXPOSURE 1. 19/32" (5/8" NOMINAL) 32/16 SPAN RATING APA STRUCTURAL I RATED PLYWOOD SHEATHING. ROOF SHEATHING SHALL BE FASTENED TO SUPPORTING MEMBERS 8d COMMON WIRE NAILS AT 6" (EDGES) & 12" O.C. (INTERMEDIATE SUPPORTS). ALL JOINTS IN SHEATHING SHALL BE STAGGERED. FOR ROOF SHEATHING, USE PANEL CLIPS, TONGUE & GROOVE, OR LUMBER BLOCKED EDGE SUPPORTS AS RECOMMENDED BY APA. NAILING SHALL COMPLY WITH APA REQUIREMENTS FOR PLYWOOD FLOOR/ROOF DIAPHRAGMS.

3/4" TONGUE & GROOVE PLYWOOD GLUED AND SCREWED TO WOOD FRAMED FLOOR STRUCTURE. FLOOR SHEATHING SHALL BE FASTERENED TO SUPPORTING MEMBERS WITH #8 WOOD SCREWS AT 6" o/c EDGES

2. NAILED CONNECTIONS FOR WOOD FRAMING MEMBERS SHALL BE IN ACCORDANCE WITH THE WOOD FRAME CONSTRUCTION MANUAL FOR ONE-AND-TWO FAMILY DWELLINGS (WFCM 2005), TABLE 3.1 13. FLOOR JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS BY FULL-DEPTH SOLID WOOD BLOCKING NOT LESS THAN 2 INCHES NOMINAL IN THICKNESS; OR BY ATTACHMENT TO A HEADER, BAND OR RIM

JOIST BRIDGING EXCEEDING A NORMAL 2 INCHES BY 12 INCHES SHALL BE SUPPORTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL), OR A CONTINUOUS 1-INCH-BY-3-INCH GAUGE METAL STRIP NAILED ACROSS THE BOTTOM OF JOISTS PERPENDICULAR TO JOISTS AT INTERVALS NOT EXCEEDING 8 FEET

HOLES / PENETRATIONS WITHIN SOLID LUMBER JOISTS SHALL MEET THE FOLLOWING MINIMUM SPECIFICATIONS: DIAMETER OF HOLE SHALL NOT EXCEED ON-THIRD OF DEPTH OR 4".

JOIST, OR TO AN ADJOINING STUD; OR SHALL BE OTHERWISE PROVIDED WITH LATERAL SUPPORT TO PREVENT ROTATION

EDGE OF HOLES SHALL NOT BE LOCATED CLOSER THAN 2" FROM THE TOP OR BOTTOM OF THE MEMBER EDGE OF MULTIPLE HOLES SHALL NOTE BE LOCATED CLOSER THAN 6" FROM ONE ANOTHER

12. HOLES / PENETRATIONS WITHIN ENGINEERED I-JOISTS / LUMBER SHALL MEET THE FOLLOWING MINIMUM SPECIFICATIONS:

DIAMETER OF HOLE SHALL NOT EXCEED ON-THIRD OF DEPTH OR 4". HOLES SHALL BE LOCATED IN MIDDLE THIRD OF JOIST SPAN.

EDGE OF HOLES SHALL NOT BE LOCATED CLOSER THAN 2" FROM TOP OR BOTTOM OF THE PLYWOOD WEB. 13. MINIMUM BEARING AT THE ENDS OF WOOD FRAMING SHALL MEETING THE FOLLOWING MINIMUM SPECIFICATIONS:

BEAMS / GIRDERS: 3" ON WOOD OR STEEL UNLESS THE USED OF APPROVED JOIST HANGER OR NOTED OTHERWISE ON PLAN ALL SILL PLATE SHALL BE WEYERHAEUSER STRANDGUARD TIMBERSTRAND LSL TREATED SILL PLATE, OR APPROVED EQUAL. SILL PLATES SHALL BE INSTALLED WITH 5/8" DIA. HOOKED ANCHOR BOLTS (16" LONG)

AT 32" O.C. WITH 3"(L)  $\times$  3"(W)  $\times$  5/8"(T) STEEL BEARING PLATES (SIMPSON LBPS5/8), UNLESS NOTED OTHERWISE ON DRAWINGS... 15. ALL TIMBER CONNECTIONS SHALL BE MADE USING PREFABRICATED CONNECTORS. TOE-NAILING IS NOT PERMITTED AS THE FINAL CONNECTION UNLESS OTHERWISE APPROVED BY THE ENGINEER. SUBMIT MANUFACTURER'S DATA FOR REVIEW. FASTENERS SHALL BE AS MANUFACTURED BY SIMPSON STRONGTIE OR APPROVED EQUAL.

HARDWARE IS PROVIDED IT MUST BE AN APPROVED EQUAL PRODUCT AND THE CONTRACTOR MUST SUBMIT THE PRODUCTS SPECIFICATION TO THE ENGINEER OF RECORD 17. ALL GAGE METAL HARDWARE THAT WILL BE EXPOSED TO WEATHER SHALL HAVE "ZMAX" HOT DIP GALVANIZED CODING. IN ADDITION, ALL CONNECTING SCREWS AND NAILS SHALL ALSO BE HOT DIPPED

18. THE TOP CHORD OF ALL STEEL BEAMS SUPPORTING WOOD FRAMING SHALL BE BRACE AGAINST BUCKLING BY A 2X WOOD PLATE ATTACHED TO THE TOP FLANGE OF THE BEAM BY THRU-BOLTS, POWDER

16. ALL SPECIFIED GAGE METAL HANGERS, HOLD-DOWNS, AND OTHER CONNECTOR SHALL BE PROVIDED BY SIMPSON STRONG-TIE AND INSTALLED PER THE MANUFACTURERS SPECIFICATIONS. IF ALTERNATE

actuated fasteners or simpson "tb-screws". Reference typical steel beam bracing detail for additional information. Beams with flanges great than 5/16" contractor must provide THRU-BOLTS CONNECTING THE WOOD PLATE TO THE TOP FLANGE OF THE BEAM.

19. BOLT HEADS AND NUTS BEARING ON WOOD SHALL BE PROVIDED WITH STANDARD CUT WASHERS. 20. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED

21. PROVIDE MINIMUM CONTINUOUS SOLID BLOCKING OR CROSS-BRIDGING LINES AT 8'-0" O/C MAX SPACING FOR ALL WOOD JOISTS AND WOOD RAFTERS, PROVIDE A MINIMUM OF ONE LINE OF BLOCKING OR STAIR CONSTRUCTION:

ALL STAIR CONSTRUCTION SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE, STAIRS DESIGNS SHALL BE COMPLETED BY A SPECIALTY ENGINEER LICENSED IN THE STATE HAVING JURISDICTION

IOISTS: I-I/2" ON WOOD OR STEE

I ALL STRUCTURAL STEEL SHALL BE DETAILED. FABRICATED. AND ERECTED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND THE AISC "ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS". AND AS SUPPLEMENTED BY THESE GENERAL NOTES IN ADDITION TO THE PROIECT ECIFICATIONS. ALL STRUCTURAL STEEL WIDE FLANGE (W) SHAPES SHALL BE ASTM A992 GRADE 50 (V50). ALL STRUCTURAL STEEL S, M, AND HP SHAPES SHALL BE ASTM A572 GRADE 50 (V50). ALL OTHER STRUCTURAL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED

ALL STEEL RECTANGULAR/SQUARE HOLLOW STRUCTURAL SECTIONS SHALL BE ASTM A500 GRADE B, FY=46 KSI. ALL STEEL PIPE SECTIONS SHALL BE ASTM A501 OR ASTM A53, TYPE E OR S GRADE B. ALL STEEL ROUND HOLLOW STRUCTURAL SECTIONS SHALL BE ASTM A500 GRADE B, FY=42 KSI.

3. ALL STEEL SHALL BE THOROUGHLY CLEANED IN ACCORDANCE WITH SSPC- SP3 AND SHALL HAVE A SHOP COAT OF RUST INHIBITIVE PAINT. ALL STEEL SHALL BE UNPAINTED. ALL STEEL TO RECEIVE SPRAYED-ON FIREPROOFING OR CONCRETE ENCASEMENT SHALL REMAIN CLEANED AND UNPAINTED. ALL CONNECTION PLATES, STIFFENERS, AND BOLTS SHOWN ON THE DRAWINGS ARE SCHEMATIC ONLY LINLESS ACTUAL SIZES ARE SPECIFIED. CONTRACTOR SHALL DESIGN ALL CONNECTIONS, SPLICES PLATES, GUSSET PLATES, STIFFENERS, BOLTS, AND WELDS FOR FORCES INDICATED ON DRAWINGS IN ADDITION TO THE REQUIREMENTS OF THE AISC DESIGN SPECIFICATION.

5. ALL SHOP AND FIELD WELDS SHALL BE MADE IN ACCORDANCE WITH THE ANSI/AWS "DL.I. STRUCTURAL WELDING CODE - STEEL", LATEST EDITION, ALL WELDING SHALL USE LOW HYDROGEN PROCESSES.

4 LINI ESS NOTED OTHERWISE ALL ROLTS SHALL RE ASTM A 325-N WITH SUITABLE WASHERS AND NUTS. ALL BOLTS USED FOR THE ANCHORAGE TO CONCRETE AS SPECIFIED ON THE DRAWINGS SHALL CONFORM TO ASTM F1554. ALL TENSION CONTROLLED BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1852 AND F2280. PROVIDE FULL DEPTH DOUBLE ANGLE CONNECTIONS ON ALL GIRDER AND BEAM CONNECTIONS TO COLUMNS. BOLTS SHALL BE AT 3-INCH O/C VERT. ALL BEAM TO GIRDER CONNECTIONS SHALL BE AS DESIGNED BY THE FABRICATOR SUBJECT TO THE ENGINEER'S APPROVAL. FABRICATOR SHALL ADHERE TO ALL OSHA FEDERAL REGISTER STANDARDS SECTION 1926.777 WITH REGARD TO CONNECTION DESIGN.

ALL TENSION CONTROLLED BOLTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1852 AND F2280. 8. ALL STEEL WELDING RODS SHALL BE AS FOLLOWS:

OR ELECTRICAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

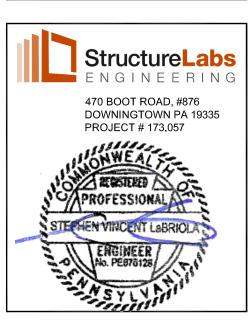
LIMITED TO THE LOCATION, ELEVATION, AND DIMENSIONS OF WALLS AND FRAMING THAT EXIST AT THE TIME OF THE STEEL ERECTION.

E70XX FOR STEEL CONNECTIONS

E60XX FOR STEEL TO METAL STUD CONNECTIONS CUTS, HOLES, COPING, ETC. REQUIRED FOR WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTS OR BURNING OF HOLES IN STRUCTURAL STEEL MEMBERS IN

ALL STRUCTURAL STEEL EMBEDDED IN CONCRETE OR EXPOSED TO THE ELEMENTS, SHALL BE HOT DIPPED GALVANIZED, UNLESS NOTED OTHERWISE. THIS INCLUDES, BUT NOT LIMITED TO, EXETERIOR LINTELS, SHELF ANGLES, DUNNAGE FRAMING, CANOPY FRAMING, SCREEN WALL FRAMING, ETC. ANY POINTS OF WELDING SHALL BE TOUCHED UP IN THE FIELD WITH A ZINC-RICH PAINT BY THE STEEL ERECTOR. II. ALL ADDITIONAL FRAMING REQUIRED TO SUPPORT OR BRACE MECHANICAL OR ELECTRICAL EQUIPMENT OR PIPING NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE SUPPLIED BY THE MECHANICAL

12. MINIMUM 1/4" FILLET WELDS ALL AROUND SHALL BE PROVIDED FOR MAJOR CONNECTION PLATES UNLESS NOTED OTHERWISE. 13. SUBMIT ALL STEEL SHOP DRAWINGS FOR REVIEW PRIOR TO ANY FABRICATION. SUBMIT CALCULATIONS FOR ALL BRACE CONNECTIONS TO COLUMNS (CALCULATIONS NEED NOT BE SIGNED AND SEALED) STEEL FABRICATOR IS SOLELY RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR FOR THE PURPOSE OF SURVEYING AND VERIFICATION OF EXISTING CONDITIONS INCLUDING BUT NOT



04.10.24

**REVISIONS:** FOR PERMIT

DRAWN BY: BAP CHECKED BY: SVL

AS NOTED

PERMIT SET

04.10.24

SCALE:

FOOTING SCHEDULE						
MARK	SIZE	REINFORCING				
F20.12	2'-0" W. x I2" T. (CONT.)	(3) #4 LWB #4 @ 24" SWB				
F30.12	3'-0" W. x 12" T. (CONT.)	(4) #4 LWB #4 @ 16" SWB				
F50.14	5'-0" W. x I4" T. (CONT.)	(6) #6 LWB #6 @ 16" SWB				
F56.14	5'-6" W. x I4" T. (CONT.)	(7) #6 LWB #6 @ I6" SWB				
F30	3'-0" × 3'-0" × 12"	(4) #4 EWB				
F36	3'-6" × 3'-6" × 12"	(4) #4 EWB				
F40	4'-0" × 4'-0" × 12"	(5) #4 EWB				
F46	4'-6" × 4'-6" × 12"	(5) #5 EWB				
F50	5'-0" × 5'-0" × 14"	(6) #6 EWB				
F56	5'-6" × 5'-6" × 14"	(7) #6 EWB				
F60	6'-0" × 6'-0" × 14"	(7) #6 EWB				
F66	6'-6" × 6'-6" × 16"	(7) #7 EWB				
F70	7'-0" × 7'-0" × 16"	(7) #7 EWB				
F76	7'-6" × 7'-6" × 16"	(8) #7 EWB				
F80	8'-0" × 8'-0" × 18"	(8) #8 EWB				
F86	8'-6" x 8'-6" x 18"	(9) #8 EWB				
F90	9'-0" × 9-0" × 20"	(9) #8 EWB				
F100	10'-0" × 10-0" × 22"	(11) #8 EWB				

Н	HEADER SCHEDULE					
MARK	MARK SIZE					
ні	(3) 2×6					
H2	(3) 2×8					
H3	(3) 2×10					
H4	(3) 2×12					
H5	5 1/4 x 9 1/4" PSL					
H6	5 I/4 x II 7/8" PSL					
H7	5 1/4 × 14" PSL					
H8	5 I/4 x I6" PSL					
Н9	5 I/4 x I8" PSL					
H10	5 I/4 x 20" PSL					

	AST LINTEL CHED.)
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STEEL & PRECAST NON-BEARING LINTEL SCHEDULE (4", 8" AND 12" NON-BEARING CMU & BRICK WALLS)							
WIDTH OF OPENING	STEEL FOR EACH 4" OF WALL THICKNESS	REINF. CONC. FOR EACH 4" OF WALL THICKNESS	REMARKS				
UP TO 2'-11"	L 3 1/2 x 3 1/2 x 5/16	(I) #4 TOP & BOTTOM					
3'-0" TO 3'-11"	L 4 x 3 1/2 x 5/16	(I) #4 TOP & BOTTOM					
4'-0" TO 5'-11"	L 5 x 3 1/2 x 5/16	(I) #4 TOP & BOTTOM					
6'-0" TO 8'-0"	6'-0" TO 8'-0"						

NOTES: I) ALL CONCRETE LINTELS SHALL BE 4000 PSI CONCRETE AT 28 DAYS WITH GRADE 60 REINFORCING

2) ALL STEEL LINTELS SHALL BE ASTM A-36.

3) FILL C.M.U. VOIDS SOLID (2) COURSES BELOW LINTEL BEARING.

# OF HEADED

4) ALL LINTELS SHALL HAVE 8" MINIMUM BEARING U.N.O.

TJI JOIST HANGER SCHEDULE							
JOIS	ST	SINGLE JOIST TOP MOUNT	SINGLE JOIST FACE MOUNT				
DEPTH	TJI	HANGER	HANGER				
	110	ITS1.81/9.5	IUS1.81/9.5				
9 1/2"	210	ITS2.06/9.5	IUS2.06/9.5				
	230	ITS2.37/9.5	IUS2.37/9.5				
	110	ITS1.81/11.88	IUS1.81/11.88				
	210	ITS2.06/11.88	IUS2.06/11.88				
11 7/8"	230	ITS2.37/11.88	IUS2.37/11.88				
	360	ITS2.37/11.88	IUS2.37/11.88				
	560	ITS3.56/11.88	IUS3.56/11.88				
	110	ITS1.81/14	IUS1.81/14				
	210	ITS2.06/14	IUS2.06/14				
14"	230	ITS2.37/14	IUS2.37/14				
	360	ITS2.37/14	IUS2.37/14				
	560	ITS3.56/14	IUS3.56/14				
	210	ITS2.06/16	IUS2.06/16				
16"	230	ITS2.37/16	IUS2.37/16				
16	360	ITS2.37/16	IUS2.37/16				
	560	ITS3.56/16	IUS3.56/16				

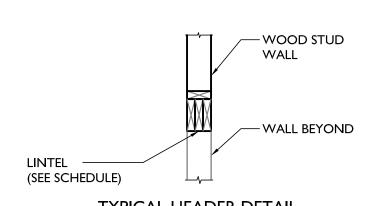
NOTES: SPECIFIED HANGERS ARE MADE BY SIMPSON STRONG-TIE AND ARE BASED ON I-JOIST MANUFACTURER RECOMMENDATIONS.

DESIGN LOAD SCHEDULE (ALL LOADS SHOWN ARE IN PSF)							
COMPONENT	/ FLOOR LEVEL	SLAB ON GRADE	TYPICAL FLOOR	ROOF			
CONCRETE		50					
ROOFING & INSULATION				5			
JOISTS			5	5			
CEILING			5	5			
COLLATERAL			5	5			
PAVERS							
CONC. SLAB ON DECK							
I" GYPSUM TOPPING			10				
TOTAL DEAD LOAD		50	25	20			
TOTAL LIVE LOAD		40	40	30			
TOTAL LOAD		90	65	50			

LINTEL SCHEDULE							
MARK	SECTION						
LI	L4 x 3 1/2 x 5/16 (LLV) FOR EACH 4" THICKNESS OF BRICK						
L2	L6 x 3 1/2 x 5/16 (LLV) FOR EACH 4" THICKNESS OF BRICK						
L3	W8x24 + 3/8" BOTTOM PLATE w/ BPI EACH END						
L4	W8x24 + 3/8" BOTTOM PLATE w/ BPI EACH END						

DESIGN LOA (ALL LOADS SHO				E		2"	2"				
Z T FLOOR LEVEL	SLAB ON GRADE	TYPICAL FLOOR	ROOF		4	2) STUD PL	<u> </u>	WIDTH (VARIES)	SECTIO	∐ `	2) 1/2"Ø HEADED STUD v/ 6" EMBED MIN.
INSULATION	50		5			BEA	RINC	PLATE	SCHE	DULE	
		5	5		MARK	THIC	K	WIDTH		ENGTH	# OF HEADE STUDS
		5	5		ВРІ	1/2"		6"		12"	2*
-		5	5								
ON DEGIC	1				(*) INDICATES			S SHALL BE REP		TH I/2" TH	READED ROD &

(*) INDICATES THAT HEADED STUDS SHALL BE REPLACED WITH 1/2" THREADED ROD &	
HILTI HY 270 ANCHORS FOR EXISTING CONDITIONS.	



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WOOD STUD HEADER SCHEDULE (NON-BEARING WALLS)							
WIDTH OF OPENING WOOD STUD LINTEL JAMB STUDS							
UP TO 8'-0"	(3) 2x8	(2) STUDS					
8'-0" TO 12'-0"	(3) 2×10	(2) STUDS					
12'-0" TO 14'-0"	(3) 2×12	(2) STUDS					

	BEAM HANGER SCHEDULE							
MEMBER SIZE	CONN. TYPE	CONN. TYPE	HANGER NO.					
2x8	FM	LUS28	I 3/4×9 I/4 LVL	TF	LBV1.81/9.25			
(2) 2×8	FM	LUS28-2	(2) I 3/4×9 I/4 LVL	TF	GLTV3.56/9.25			
(3) 2x8	FM	LUS28-3	(3) I 3/4×9 I/4 LVL	TF	GLTV5.50/9.25			
2×10	FM	LUS210	I 3/4×II 7/8 LVL	TF	LBV1.81/11.88			
(2) 2×10	FM	LUS210-2	(2) I 3/4×II 7/8 LVL	TF	GLTV3.56/11.88			
(3) 2×10	FM	LUS210-3	(3) I 3/4×11 7/8 LVL	TF	GLTV5.50/11.88			
2×12	FM	LUS212	I 3/4×I4 LVL	TF	LBVI.81/14			
(2) 2×12	FM	LUS212-2	(2) I 3/4×I4 LVL	TF	GLTV3.56/14			
(3) 2×12	FM	LUS212-3	(3) I 3/4×14 LVL	TF	GLTV5.50/14			
			I 3/4×16 LVL	TF	LBV1.81/16			
			(2) I 3/4×16 LVL	TF	HGLTV3.516			
			(3) I 3/4×16 LVL	TF	HGLTV5.516			

I. CONNECTION TYPE, DESCRIBES TYPE OF CONNECTION USED:

A. (FM) FACE MOUNT HANGER B. (TF) TOP FLANGE HANGER

2. ALL HANGER & FASTENERS EXPOSED TO OUTDOOR ENVIRONMENTS SHALL BE "SST300" STAINLESS STEEL.

SNOW LOAD DESIGN SCHEDULE

2018 INTERNATIONAL BUILDING CODE			
ITEM	VALUE		
GROUND SNOW LOAD (Pg)	30 psf		
SNOW EXPOSURE FACTOR (C <sub>e</sub> )	1.0		
SNOW LOAD IMPORTANCE FACTOR (I)	1.0		
THERMAL FACTOR (Ct)	1.0		
FLAT-ROOF SNOW LOAD (P <sub>f</sub> )	21 psf		

LATERAL LOAD DESIGN SCHEDULE

2018 INTERNATIONAL BUILDING CODE

WIND LOAD DATA				
ITEM	VALUE			
BASIC WIND SPEED (V)	I I 5 mph			
OCCUPANCY CATEGORY	II			
WIND LOAD IMPORTANCE (I <sub>W</sub> )	1.0			
WIND EXPOSURE CATEGORY	В			
MAIN WIND-FORCE PRESSURE (Ps)	20 psf			
COMP./ CLAD. WIND RESISTANCE (P <sub>net</sub> )	VARIES			
SEISMIC LOAD I	DATA			
ITEM	VALUE			
SITE CLASS	D			
mapped spectral response accelration (s <sub>s</sub> )	0.20			
MAPPED SPECTRAL RESPONSE ACCELERATION (I-SECOND RESPONSE) (S)	0.06			
DESIGN SPECTRAL RESPONSE ACCELERATION (SDS)	0.213			
DESIGN SPECTRAL RESPONSE ACCELERATION (I-SECOND RESPONSE) (\$DI)	0.096			
OCCUPANCY CATEGORY	II			
SEISMIC DESIGN CATEGORY	В			
SEISMIC IMPORTANCE FACTOR (I <sub>E</sub> )	1.0			
DESIGN BASE SHEAR	60 kips			
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE			
BASIC STRUCTURAL SYSTEM	BEARING WALL SYSTEMS			
BASIC SEISMIC FORCE RESISTING SYSTEM	WOOD LIGHT-FRAMED SHEAR PANELS / ORDINARY STEEL MOMENT FRAMES			
BASIC SEISMIC RESPONSE COEFFICIENT (C <sub>S</sub> )	0.071			
RESPONSE MOD. FACTOR (R)	3.0			

### SPECIAL INSPECTIONS

GOVERNING BUILDING CODE: IBC 2018

- I. ALL WORK SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE REFERENCED BUILDING CODE. SUBMIT ALL REPORTS TO THE ENGINEER OF RECORD 5. DURING CONSTRUCTION THE INSPECTION PROGRAM SHALL VERIFY: FOR REVIEW. AT THE COMPLETION OF THE PROJECT, THE SPECIAL INSPECTION REPORT SHALL BE COMPLETED, SIGNED BY THE SPECIAL INSPECTOR, AND SUBMITTED 5.2. TO THE ENGINEER OF RECORD FOR RECORD PURPOSES.
- 2. THE OWNER WILL ENGAGE (PER THE CONTACT REQUIREMENTS) ONE OR MORE SPECIAL INSPECTORS (I.E. 3RD PARTY INSPECTOR) AND INSPECTION AGENCIES TO PROVIDE INSPECTIONS DURING THE CONSTRUCTION OF THE WORK INDICATED ON 5.4. THE CONSTRUCTION DOCUMENTS TO THE EXTENT OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND AS OUTLINED BELOW.
- 3. THE SPECIAL INSPECTOR(S) SHALL FURNISH INSPECTION AND TESTING REPORTS TO THE BUILDING OFFICIAL AND THE ENGINEER OF RECORD. REPORTS SHALL INDICATE THAT THE WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. REPORTS SHALL ALSO INDICATE CORRECTED DISCREPANCIES IN THE WORK.
- 4. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED IN A TIMELY MANNER, THE DISCREPANCIES SHALL BE BROUGHT TO THE BUILDING OFFICIAL AND

  8. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR THE ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF THE
- 5. REPORTS SHALL BE PROVIDED WITHIN 7 DAYS OF ALL INSPECTIONS AND SHALL BE PROVIDED TO ALL PARTIES INVOLVED, INCLUDING BUT NOT LIMITED TO THE CONTRACTOR, ARCHITECT OF RECORD., OWNER AND ENGINEER OF RECORD
- 6. EVALUATION AND COMPLIANCE WITH LOADING RESTRICTIONS FOR MEANS AND METHODS OF CONSTRUCTION AS WELL AS STAGING FOR OTHER TRADES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

### INSPECTION OF FABRICATORS (IBC 2018 1704.2):

WHERE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTION OF THE FABRICATED ITEMS SHALL BE REQUIRED BY THIS SECTION AND AS REQUIRED 6. ELSEWHERE IN THIS CODE.

### STEEL INSPECTIONS: REFERENCED AISC, AWS STANDARDS (IBC 2018 1704.3)

- ALL INSPECTIONS ARE PERIOD UNLESS NOTES W/ CONTINUOUS (CONT.) I. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS: I.I. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.
- I.2. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. 2. INSPECTION OF HIGH-STRENGTH BOLTING: SNUG-TIGHT JOINTS.
- PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITH MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS

  3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.
- OF INSTALLATION. 3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:
- 3.1. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360. 5. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM
- STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. 3.3. MANUFACTURER'S CERTIFIED TEST REPORTS.
- 4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS: 4.1. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE
- APPROVED CONSTRUCTION DOCUMENTS. 4.2. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. 5. INSPECTION OF WELDING:
- 5.1. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK: COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS. (CONT.)
- MULTIPASS FILLET WELDS. (CONT.) SINGLE-PASS FILLET WELDS > 5/16" (CONT.)
- PLUG AND SLOT WELDS. (CONT.) SINGLE-PASS FILLET WELDS ≤ 5/16"
- FLOOR AND ROOF DECK WELDS.
- 6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE:
- 6.1. DETAILS SUCH AS BRACING AND STIFFENING. 6.2. MEMBER LOCATIONS.
- 6.3. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

### CONCRETE INSPECTIONS: REFERENCED ACI, ASTM STANDARDS (IBC 2018 1704.4)

- INSPECTION OF REINFORCING STEEL, AND PLACEMENT. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1704.3,
- INSPECTION OF BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR
- WHERE STRENGTH DESIGN IS USED. (CONT.)
- INSPECTION OF ANCHORS INSTALLED IN HARDENED CONCRETE.
- VERIFYING USE OF REQUIRED DESIGN MIX. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH
- TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. (CONT.)
- INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.
- 8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND
- TECHNIQUES.
- VERIFICATION OF IN-SITU CONCRETE STRENGTH, 10. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE
- MEMBER BEING FORMED.

### MASONRY INSPECTIONS - LEVEL 1: REFERENCED ACI, ASTM STANDARDS (IBC 2018 1704.5.1)

- COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED.
- VERIFICATION OF F'M AND F'AAC PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE.
- COLUMN SCHEDULE ANCHOR BOLTS SIZE BASE PLATE (A36) MARK NOTES (FI554 GRADE 36) (4) 3/4" ANCHOR HSS6x6x1/2 3/4"×12"×12" **BOLTS**



- SELF-CONSOLIDATING GROUT. (CONT.) 4. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE
- COMPLIANCE:
- 4.I. PROPORTIONS OF SITE-PREPARED MORTAR. 4.2. CONSTRUCTION OF MORTAR JOINTS.
- 4.3. LOCATION OF REINFORCEMENT, CONNECTORS,
- SIZE AND LOCATION OF STRUCTURAL ELEMENTS. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF
- ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION.
- SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT, ANCHOR BOLTS, AND ANCHORAGES.
- WELDING OF REINFORCING BARS. (CONT.) PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD
- WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 6. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:
- 6.1. GROUT SPACE IS CLEAN. PLACEMENT OF REINFORCEMENT AND CONNECTORS, AND PRESTRESSING
- TENDONS AND ANCHORAGES.
- PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS.
- 7. GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE: (CONT.) PRISMS SHALL BE OBSERVED.

### LIGHT-FRAMED CONSTRUCTION ELEMENTS:

6.4. CONSTRUCTION OF MORTAR JOINTS.

- FABRICATOR QUALIFICATIONS FOR ROOF TRUSSES DESIGNED AND FABRICATED IN
- ACCORDANCE WITH THE BUILDING CODE VERIFICATION OF TEMPORARY AND PERMANENT TRUSS BRACING FOR STANDARD
- TRUSSES OVER 60 FEET AND SCISSOR TRUSSES OVER 30 FEET IN SPAN
- WALL CONNECTIONS TO ROOF AND FLOOR DIAPHRAGMS AND FRAMING (CONT.)
- 4. ROOF AND FLOOR DIAPHRAGM SYSTEMS INCLUDING VERIFICATION OF MEMBER SIZES, SPACINGS, ORIENTATIONS, ETC. 5. FABRICATION AND INSTALLATION OF SYSTEMS OR COMPONENTS REQUIRED TO MEET
- IMPACT RESISTANCE UNLESS SPECIFICALLY LABELED INDICATING COMPLIANCE VERIFICATION OF NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE MAIN SEISMIC OR WIND FORCE RESISTING SYSTEMS
- 7. VERIFICATION OF HOLD DOWN INSTALLATION FOR ALL SHEAR WALL MEMBERS AND WHERE HOLD DOWNS ARE SPECIFIED ON THE CONSTRUCTION DOCUMENTS (CONT.)

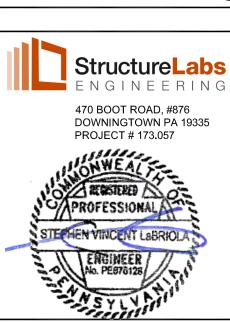
### SOIL SPECIAL INSPECTIONS:

I. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY. 2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER

INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES TO

- 4. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.
- PLACEMENT AND COMPACTION OF COMPACTED FILL. (CONT.)





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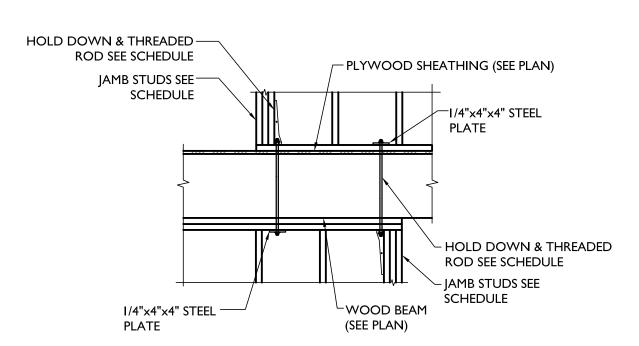
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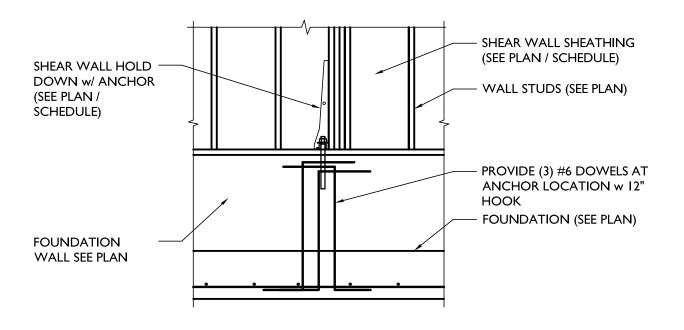
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SHEAR WALL SCHEDULE					
LEVEL	MARK	SWI			
3RD - ROOF SHEATHING AND ATTACHMENT		I/2" BLOCKED PLYWOOD OR OSB SHEATHING (EXTERIOR SIDE ONLY) - 8d NAILS WITH I 3/8" PENETRATION INTO STUD. I2" o/c SPACING IN FIELD AND 6" o/c SPACING AT EDGES			
HOLD DOWN	HOLD DOWN @ 3RD FLOOR	SIMPSON HDU2-SDS2.5 WITH (3) JAMB STUDS WITH I/2" THREADED ROD - DRILL & EPOXY GROUT w/ HILTI HY270 MULTIWYTHE ANCHORS - 6" MIN.			

I. SEE TYP. SHEAR WALL DETAIL THIS SHEET FOR ADDITIONAL INFORMATION.

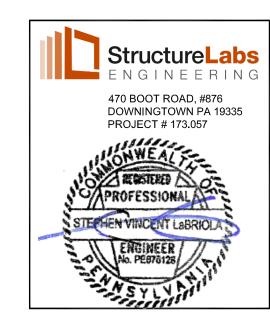


### TYPICAL OFFSET OR STAGGERED HOLD DOWN DETAIL



TYPICAL SHEAR WALL HOLD DOWN @ FOUNDATION DETAIL





SCHEDULE WALL SHEAR

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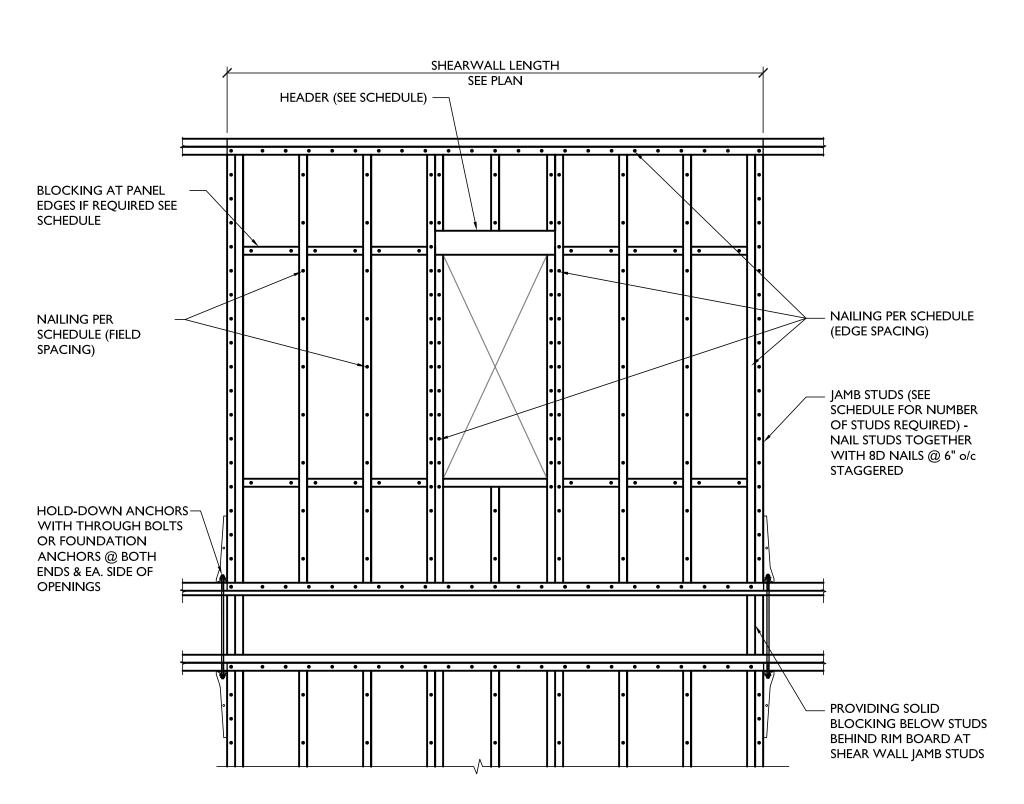
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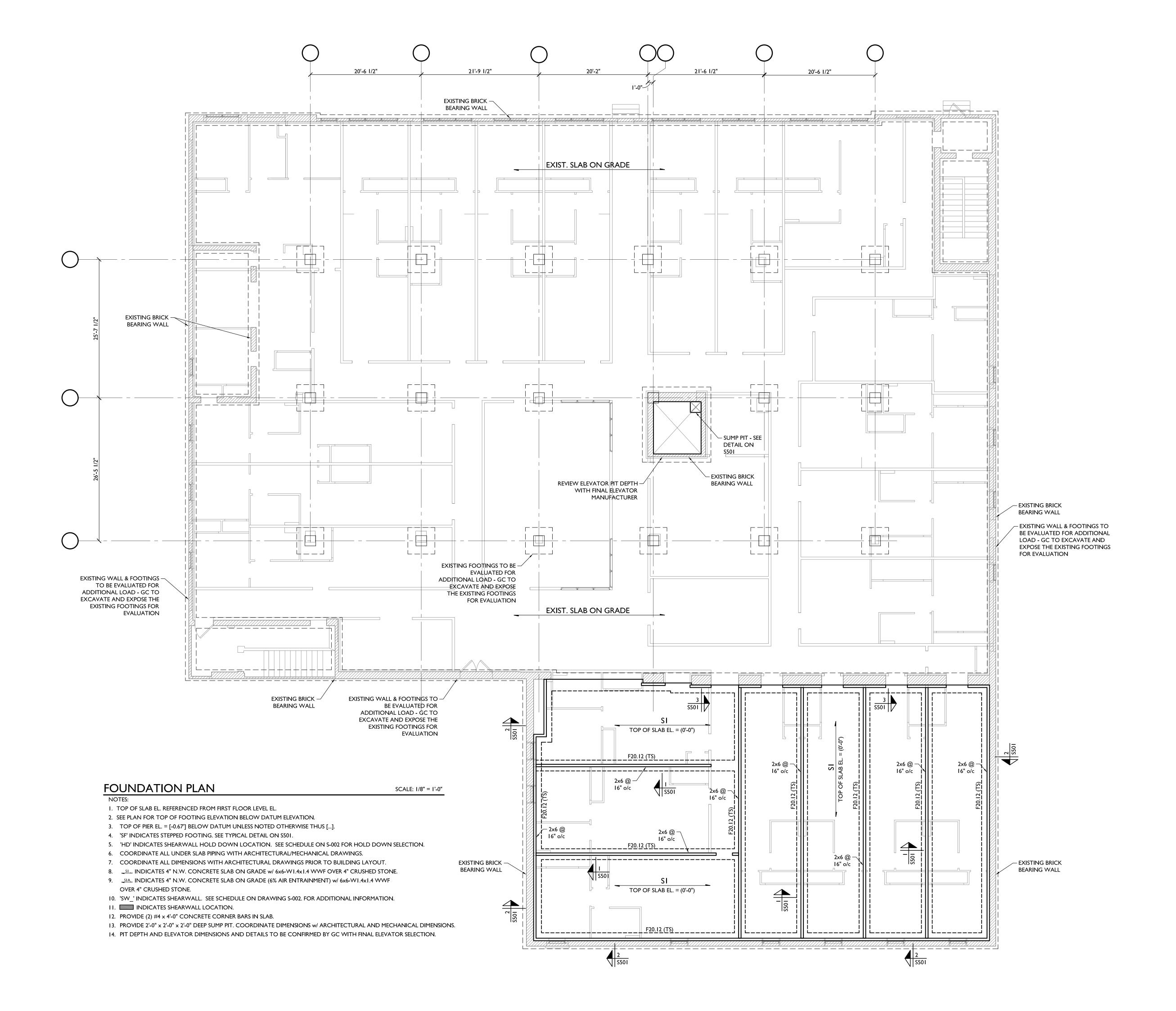
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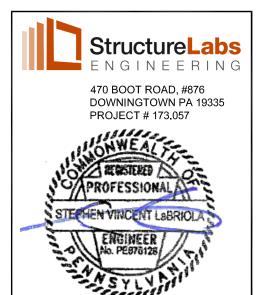


### TYPICAL SHEAR WALL DETAIL

- SHEATHING SHALL BE NAILED DIRECTLY TO WALL STUDS AND BLOCKING. PANEL EDGES INCLUDE EDGES OF SHEATHING AROUND WINDOW AND DOOR OPENINGS.
   IF SHEAR WALL SHEATHING OCCURS ON BOTH SIDES OF WALL, NAILING IS ALSO REQUIRED ON
- BOTH SIDES OF WALL.
- 3. SEE PLAN FOR STUD SIZE & SPACING. 4. SHEATHING TO BE STAGGERED WITH EDGES LAPPED.







# USE BUILDING

OUNDATION

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OJECT

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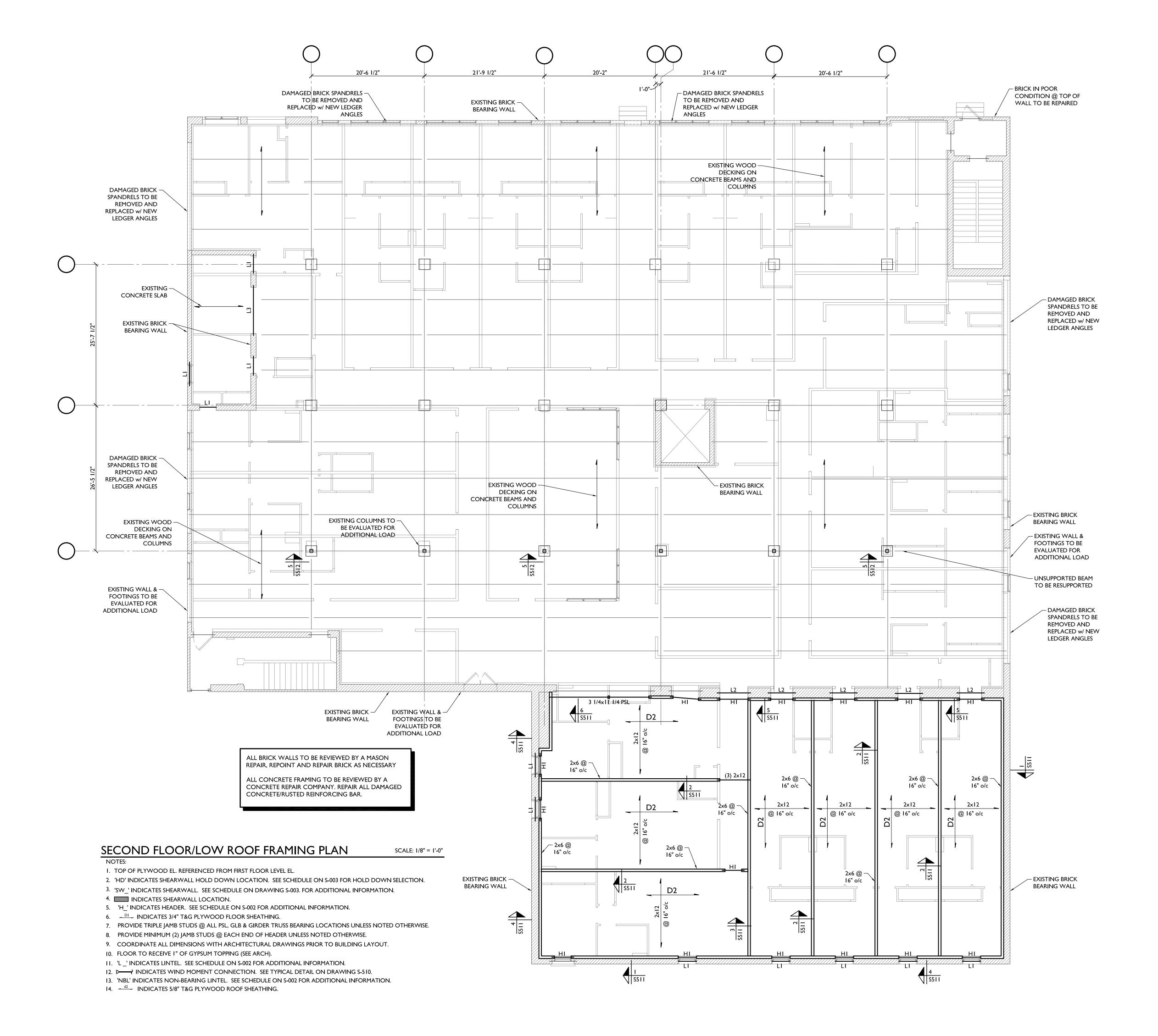
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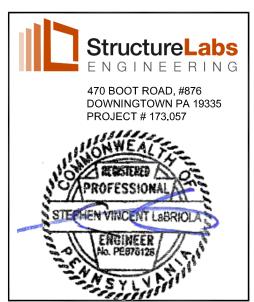
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AS NOTED







ENGINEER No. PESTO128

PROPOSED MIXED USE BUILDIN
2214 W. ONTARIO STREET

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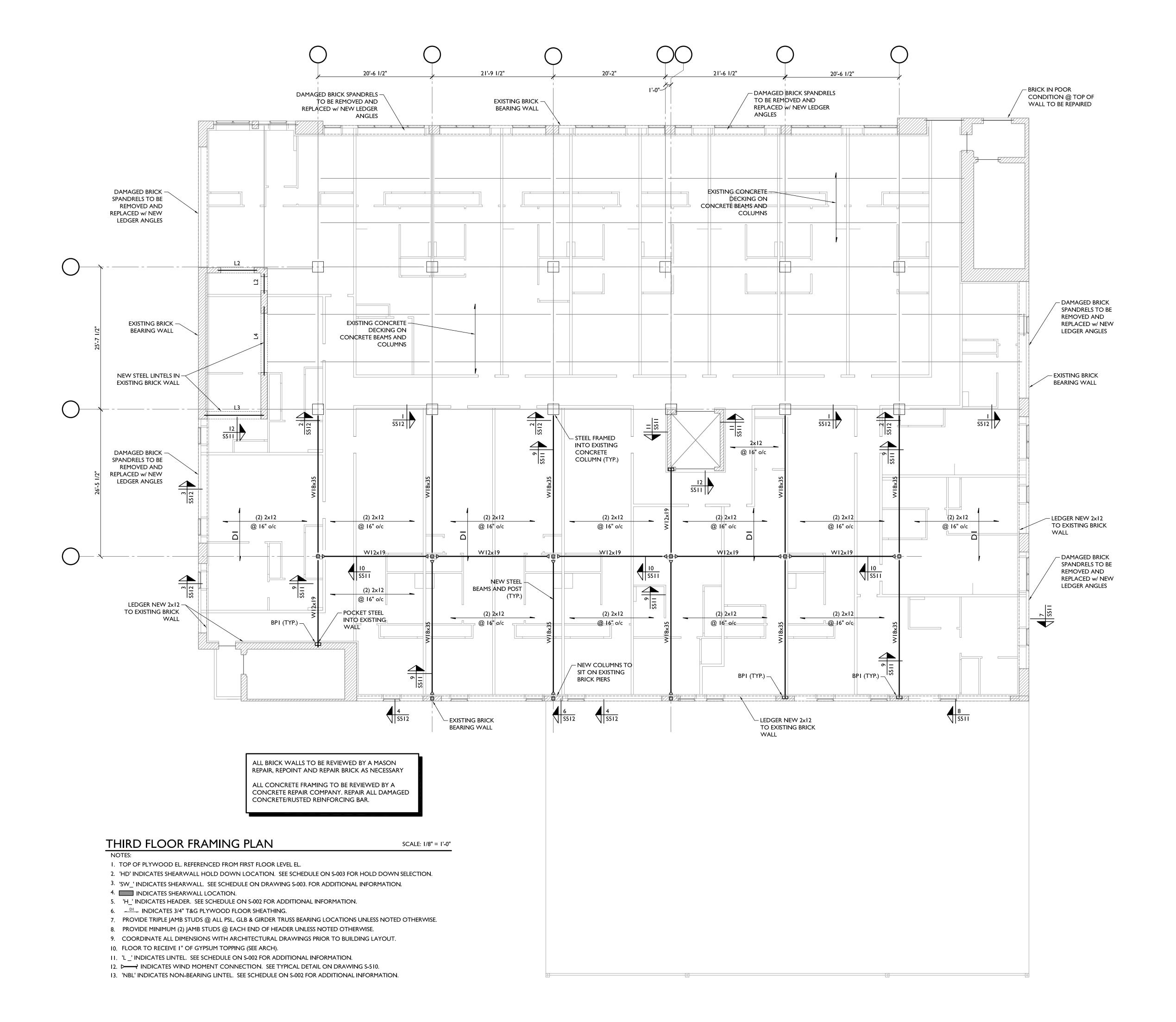
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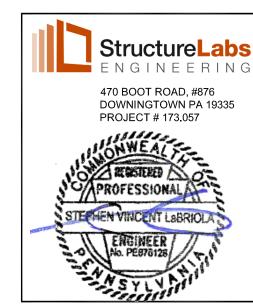
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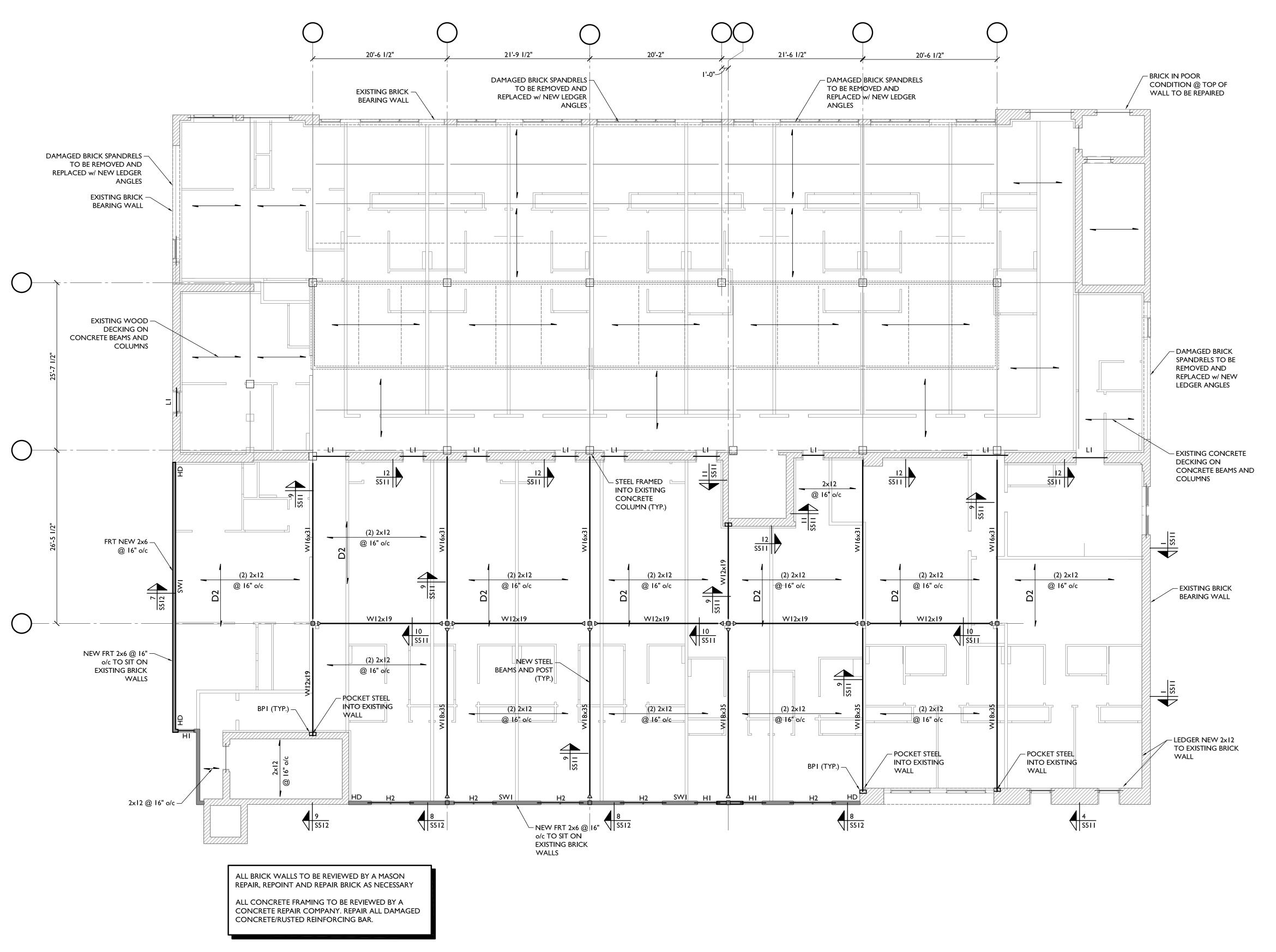
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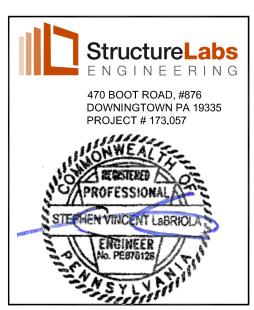
ROOF FRAMING PLAN
NOTES:

SCALE: I/8" = I'-0"

I. TOP OF PLYWOOD EL. REFERENCED FROM FIRST FLOOR LEVEL EL.

- 2. 'HD' INDICATES SHEARWALL HOLD DOWN LOCATION. SEE SCHEDULE ON S-003 FOR HOLD DOWN SELECTION.
- 3. 'SW\_' INDICATES SHEARWALL. SEE SCHEDULE ON DRAWING S-003. FOR ADDITIONAL INFORMATION.
- 4. INDICATES SHEARWALL LOCATION.
- 5. 'H\_' INDICATES HEADER. SEE SCHEDULE ON S-002 FOR ADDITIONAL INFORMATION.
- 6. DI INDICATES 3/4" T&G PLYWOOD FLOOR SHEATHING.
- 7. → D2 INDICATES 5/8" T&G PLYWOOD ROOF SHEATHING.
   8. ► INDICATES WIND MOMENT CONNECTION. SEE TYPICAL DETAIL ON DRAWING S-510.





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ROOF

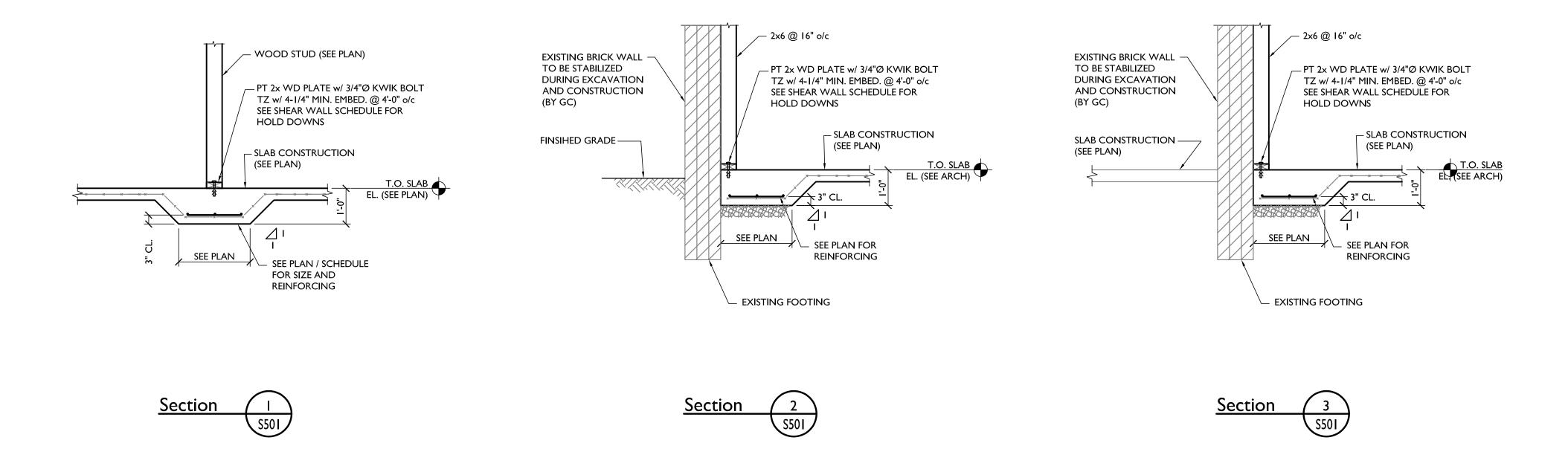
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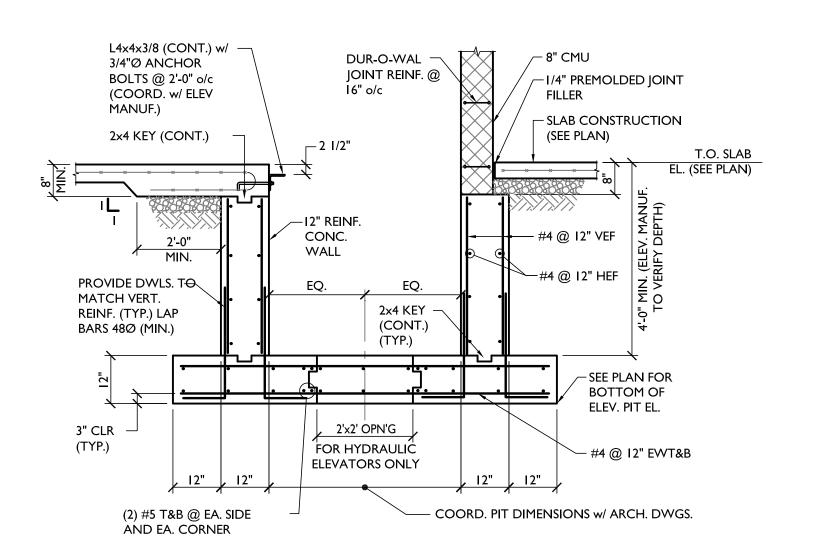
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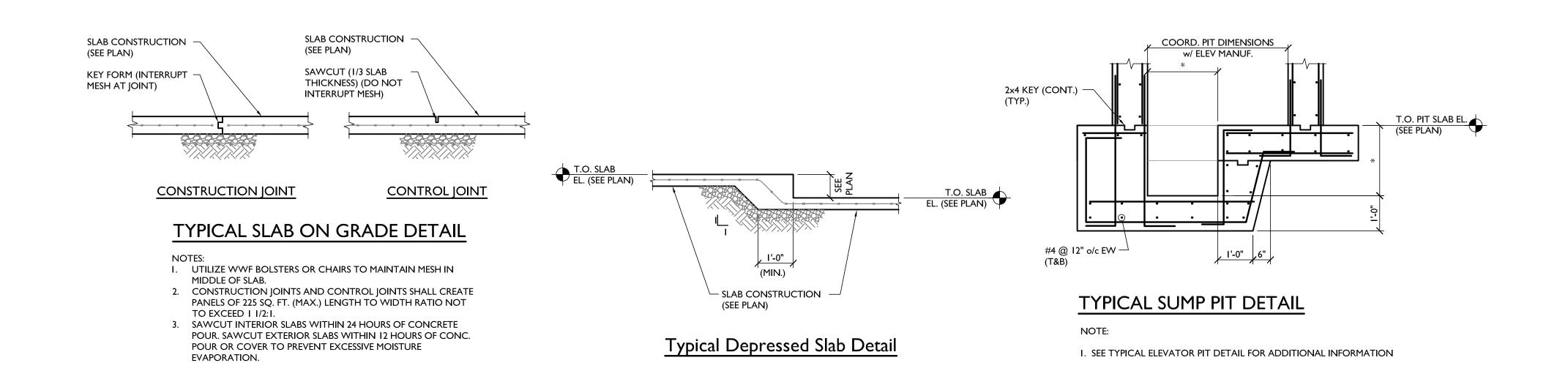
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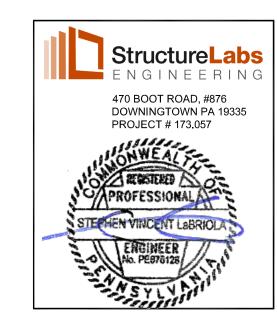




### Typical Elevator Pit Section







# USE BUILDING

FOUNDATION DETAILS

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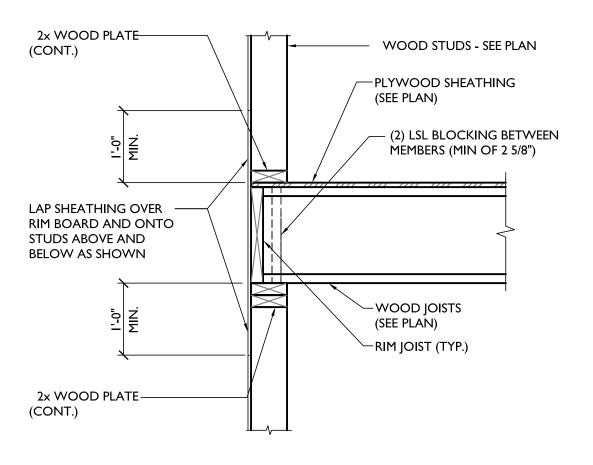
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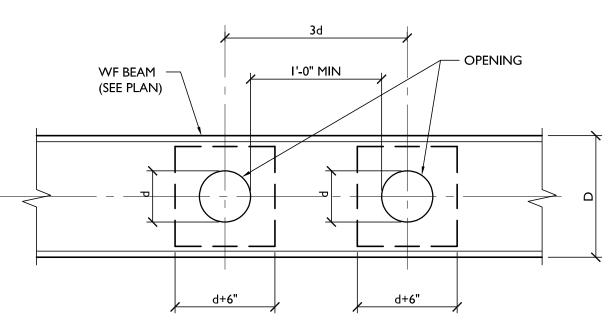
S-501

AS NOTED



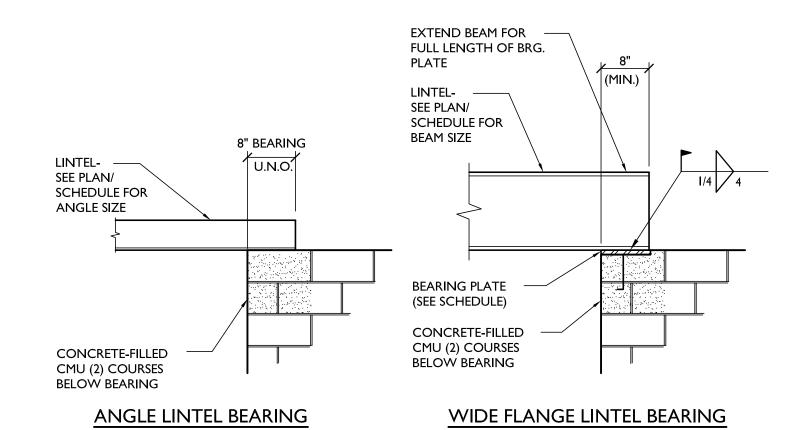
### TYPICAL FLOOR DETAIL

SHEATHING SHALL BE NAILED DIRECTLY TO WALL STUDS AND BLOCKING.
 SEE PLAN FOR STUD AND JOIST SIZE AND SPACING.

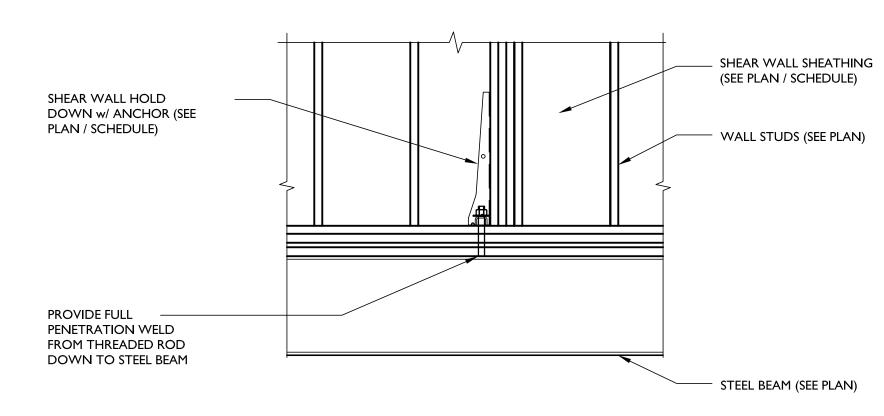


- NOTE: ALL HOLES IF POSSIBLE SHALL BE LOCATED IN THE MIDDLE THIRD OF SPAN.
- I. IF THE OPENING IS IN THE MIDDLE THIRD OF SPAN AND:
  a) "d" IS 1/3"D" OR SMALLER NO REINFORCEMENT IS REQUIRED.
  b) "d" IS LARGER THAN 1/3"D" BUT SMALLER THAN 1/2"D" ADD WEB REINFORCING PLATE
- SAME THICKNESS AS THE WEB ON ONE SIDE ONLY. c) "d" IS LARGER THAN 1/2"D" - CONTACT STRUCTURAL ENGINEER.
- 2. IF THE OPENINGS ARE LOCATED OUT OF THE MIDDLE THIRD OF THE SPAN AND:
  a) "d" IS 1/4"D" OR SMALLER NO REINFORCEMENT IS REQUIRED.
  b) "d" IS LARGER THAN 1/4"D" BUT SMALLER THAN 1/3"D" ADD WEB REINFORCING PLATE SAME THICKNESS AS THE WEB ON ONE SIDE ONLY.
  c) "d" IS LARGER THAN 1/3"D" CONTACT STRUCTURAL ENGINEER.

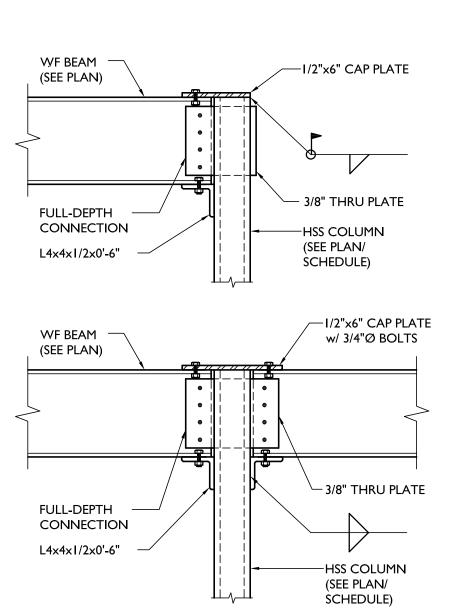
### Typical Detail For Openings In Web Of Steel Beams



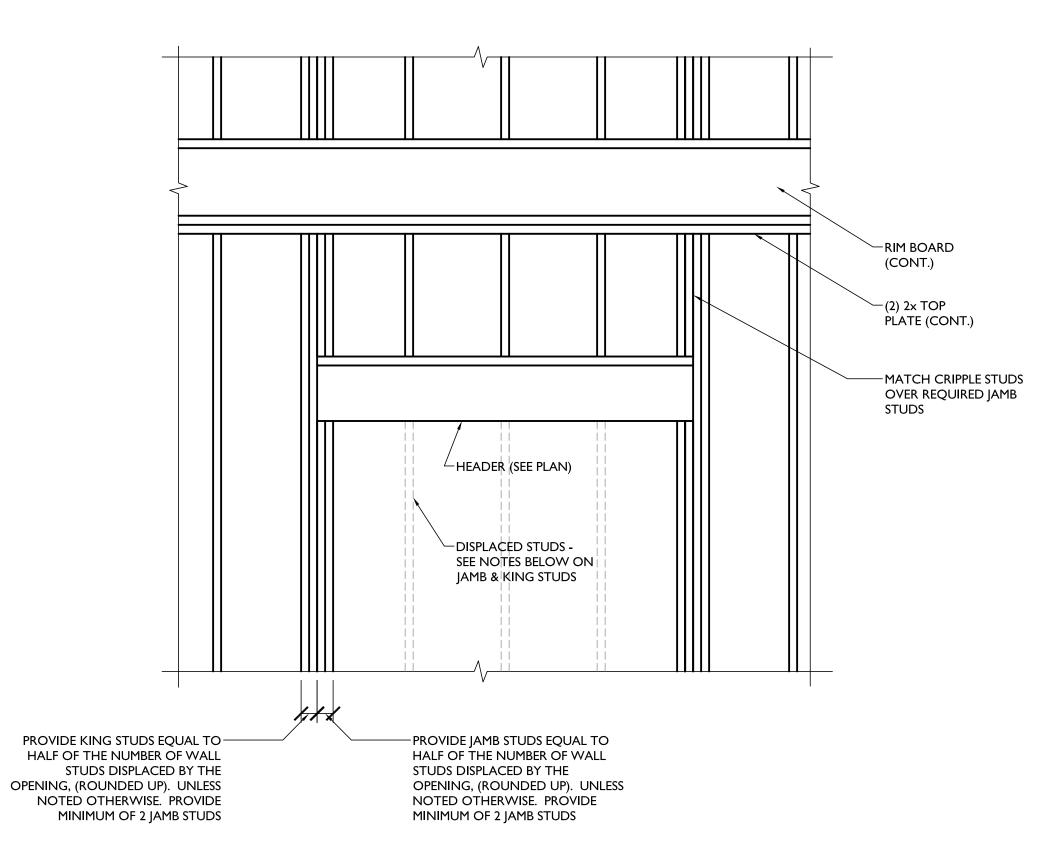
### Typical Lintel Bearing Details



TYPICAL SHEAR WALL HOLD DOWN @ STEEL BEAM

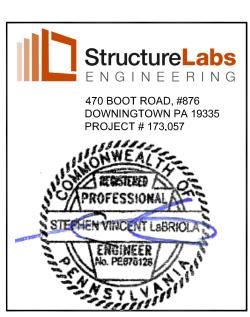


Typical Wind Moment Connection Detail



TYPICAL BEARING WALL OPENING DETAIL





DEOSED MIXED USE E 2214 W. ONTARIO STREET PHILADELPHIA, PENNSYLYA

**FRAMING** 

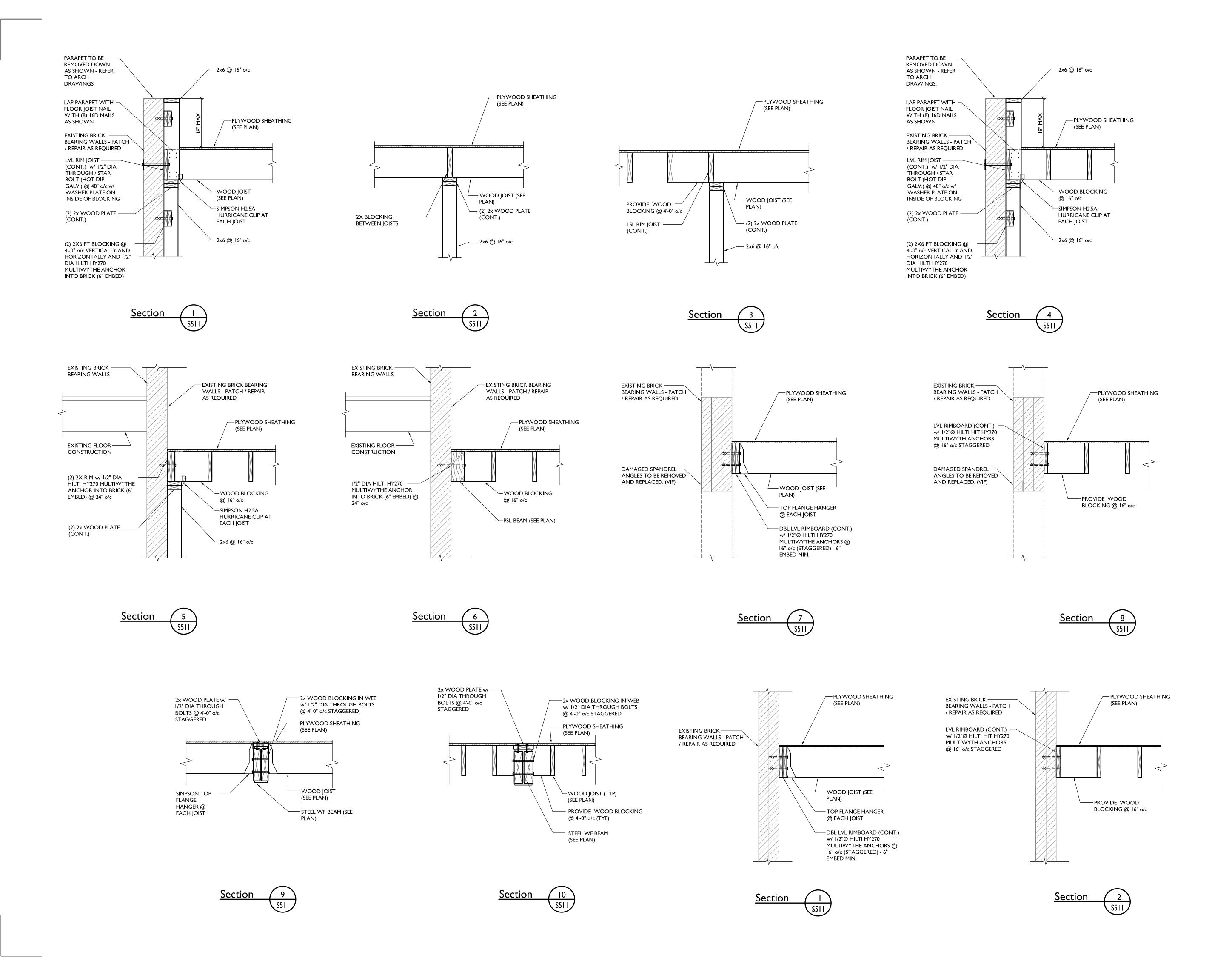
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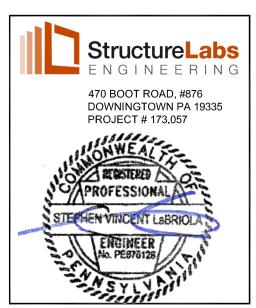
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PERMIT SET 04.10.24







### ENGINEER No. PEGTO128

OFOSED MIXED USE BUILD
2214 W. ONTARIO STREET
PHILADELPHIA, PENNSYLVANIA

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**FRAMING** 

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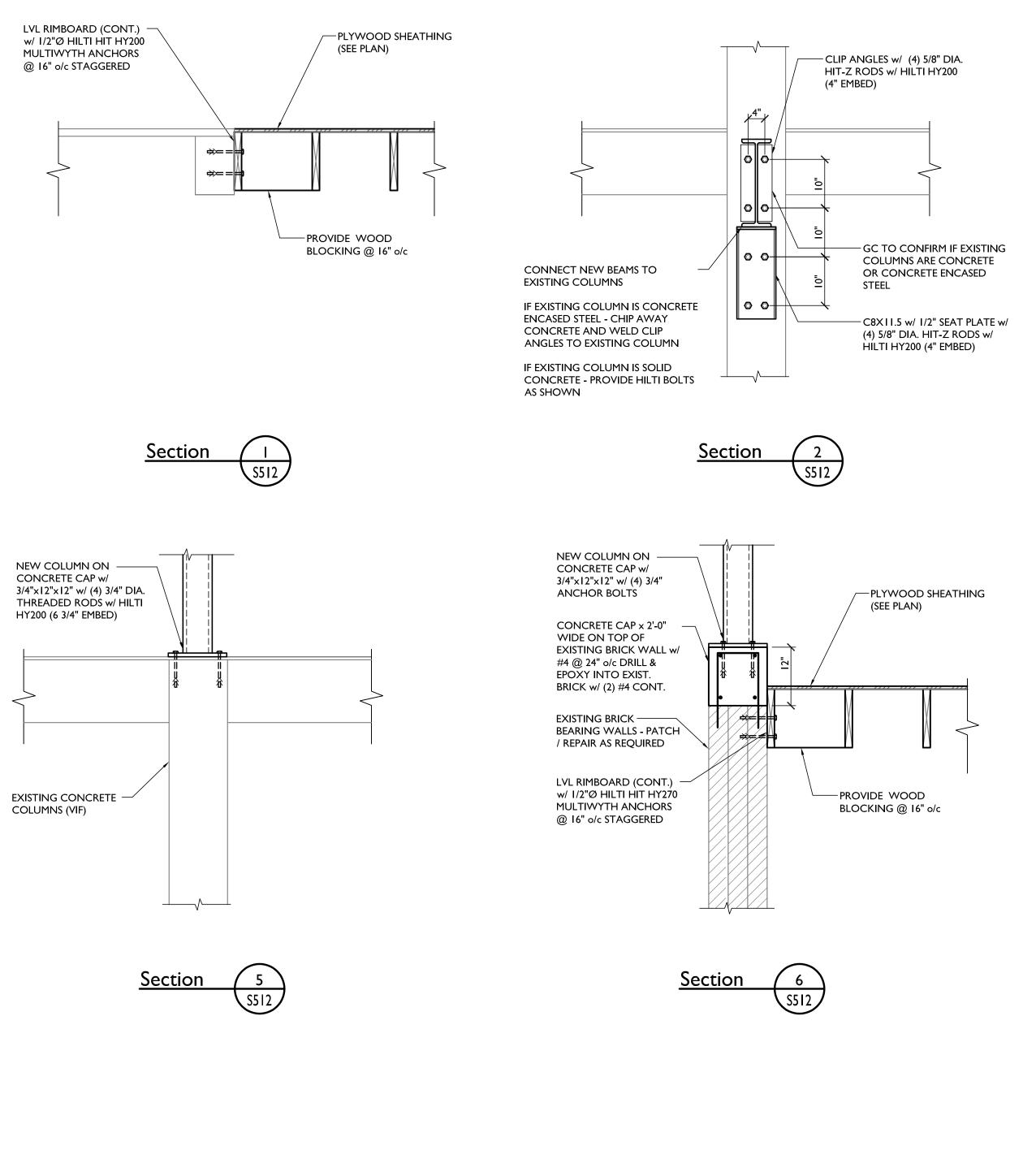
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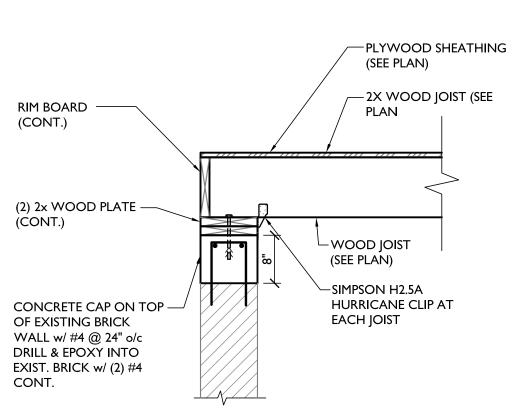
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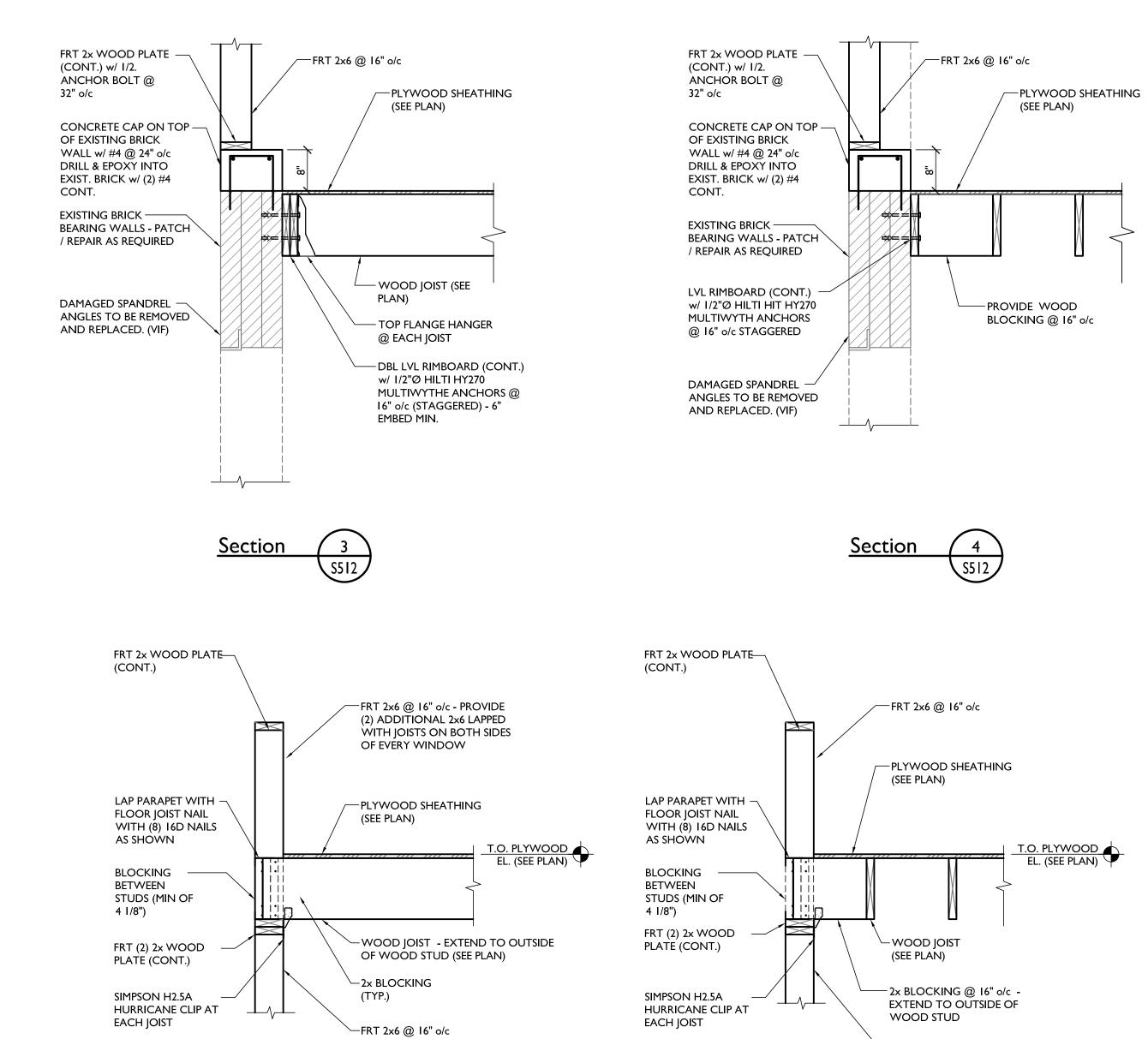
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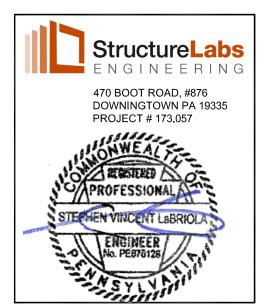


─FRT 2x6 @ 16" o/c

<u>Section</u>

S512





## SOSED MIXED USE BUILDI 2214 W. ONTARIO STREET

PHILADEL FRAMING SECTION

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