EXISTING CONDITIONS

- A. THE GENERAL CONTRACTOR MUST VERIFY ALL DIMENSIONS, ELEVATIONS AND OTHER CONDITIONS OF THE EXISTING BUILDING NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING. THE GENERAL CONTRACTOR MUST REPORT ANY DISCREPANCIES FROM ASSUMED CONDITIONS SHOWN ON THE DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION AND ERECTION OF
- B. WORK SHOWN ON THE DRAWINGS IS NEW, UNLESS NOTED AS EXISTING. C. EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS WERE OBTAINED FROM LIMITED SITE
- D. DEMOLITION, CUTTING, DRILLING, ETC. OF EXISTING WORK MUST BE PERFORMED WITH GREAT CARE SO AS NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE EXISTING BUILDING. IF ANY

ARCHITECTURAL, CIVIL, STRUCTURAL, OR MEP MEMBERS NOT DESIGNATED FOR REMOVAL

- INTERFERE WITH THE NEW WORK, THE ARCHITECT MUST BE NOTIFIED IMMEDIATELY AND APPROVAL OBTAINED PRIOR TO REMOVAL OF THOSE MEMBERS. E. THE CONTRACTOR MUST SAFELY SHORE EXISTING CONSTRUCTION WHEREVER EXISTING SUPPORTS ARE REMOVED TO ALLOW THE INSTALLATION OF NEW WORK. ALL SHORING METHODS AND SEQUENCING OF DEMOLITION MUST BE THE RESPONSIBILITY OF THE CONTRACTOR AND
- A. EXISTING CONSTRUCTION HAS NOT BEEN VERIFIED FOR CONFORMANCE WITH REQUIREMENTS OF THE APPLICABLE BUILDING CODE EXCEPT FOR AREAS DIRECTLY AFFECTED BY MODIFICATIONS INDICATED IN THESE DRAWINGS B. DESIGN IS BASED ON THE FOLLOWING EXISTING STRUCTURE MATERIAL PROPERTIES
- a. SMASONRY WALL COMPRESSIVE STRENGTH (F'm)......1,500 PSI A. THE FACE OF ALL CONCRETE SURFACES CUT FROM EXISTING CONCRETE MUST BE THOROUGHLY CLEANED. ALLOW SURFACE TO COMPLETELY DRY, COAT WITH AN APPROVED BONDING AGENT AND FINISH WITH AN APPROVED PATCHING COMPOUND. EXPOSED REINFORCEMENT MUST BE CUT OFF, GROUND FLUSH TO THE NEW CONCRETE SURFACE AND FINISHED WITH AN EPOXY

MISCELLANEOUS

DRAWING CONFLICTS

- A. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS, FABRICATION OF ANY STRUCTURAL MEMBERS, AND ERECTION IN THE FIELD.
- B. OPENINGS THROUGH FLOORS, ROOFS, AND WALLS FOR DUCTS, PIPING, AND/OR CONDUIT MUST BE COORDINATED BY THE CONTRACTOR. CONTRACTOR MUST VERIFY SIZES AND LOCATIONS OF HOLES AND OPENINGS WITH THE MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS AND THE RESPECTIVE SUBCONTRACTORS. STRUCTURAL FRAMING MUST BE PROVIDED AT ROOF OPENINGS AS REQUIRED BY THESE DRAWINGS. C. WHERE MEMBER LOCATIONS ARE NOT SPECIFICALLY DIMENSIONED, MEMBERS ARE EITHER
- LOCATED ON COLUMNS LINES OR ARE EQUALLY SPACED BETWEEN LOCATED MEMBERS. D. IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR SPECIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS, THEIR CONSTRUCTION MUST BE OF THE SAME CHARACTER AS SHOWN OR SPECIFIED IN SIMILAR CONDITIONS.
- A. THE GENERAL CONTRACTOR MUST COMPARE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCY BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE ARCHITECT AND ENGINEER PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.
- RESPONSIBILITY OF THE CONTRACTOR FOR STABILITY OF THE STRUCTURE DURING CONSTRUCTION A. ALL STRUCTURAL ELEMENTS OF THE PROJECT HAVE BEEN DESIGNED BY THE STRUCTURAL ENGINEER TO RESIST THE REQUIRED CODE FORCES THAT COULD OCCUR IN THE FINAL COMPLETED STRUCTURE ONLY. THE CONTRACTOR MUST SUPERVISE AND DIRECT THE WORK AND MUST BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES AND SEQUENCE.
- 4. RESPONSIBILITY OF THE CONTRACTOR FOR CONSTRUCTION LOADS A. THE STRUCTURE HAS BEEN DESIGNED FOR THE LOADS IDENTIFIED WITHIN THESE STRUCTURAL DRAWINGS THAT ARE ANTICIPATED TO BE APPLIED TO THE FINAL STRUCTURE ONCE COMPLETED AND OCCUPIED. THE CONTRACTOR MUST BE RESPONSIBLE FOR CHECKING THE ADEQUACY OF THE STRUCTURE TO SUPPORT ANY APPLIED CONSTRUCTION LOADS, INCLUDING THOSE DUE TO CONSTRUCTION VEHICLES OR EQUIPMENT, MATERIAL HANDLING OR STORAGE, SHORING OR RESHORING, OR ANY OTHER CONSTRUCTION ACTIVITY THAT ARE IN EXCESS OF THE STATED

SUBMITTALS, RFIs AND SUBSTITUTIONS

- 1. SUBMITTAL REQUIREMENTS A. ALL SHOP DRAWINGS MUST BE REVIEWED AND ELECTRONICALLY STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL. B. CONTRACTOR MUST PROVIDE THE SUBMITTAL IN ELECTRONIC PORTABLE DOCUMENT FORMAT
- (PDF) PER THE SPECIFICATIONS C. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIAL REQUIRED BY THE CONTRACT DOCUMENTS TO BE FURNISHED MUST NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED.
- D. THE ARCHITECT/ENGINEER MUST NOT BE RESPONSIBLE FOR DELAYS CAUSED BY REJECTION OF INADEQUATE OR INCORRECT SHOP DRAWINGS, AND THIS RESPONSIBILITY MUST LIE SOLELY WITH THE CONTRACTOR
- 2. REPRODUCTION A. THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATES THEMSELVES TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.
- 3. SUBMITTAL AND RFI COMMENTS AND RESPONSES A. UNLESS ACCOMPANIED BY A FORMAL CHANGE ORDER, RESPONSES TO QUESTIONS AND RFI'S. COMMENTS MADE DURING THE REVIEW OF SUBMITTALS, AND DIRECTIVES PROVIDED IN ANY FORM, BY THE ENGINEER TO THE CONTRACTOR DURING THE CONSTRUCTION PROCESS ARE CLARIFICATIONS OF THE CONTRACT DOCUMENTS UNLESS STATED OTHERWISE. SUCH CLARIFICATIONS AND CORRECTIONS ARE NOT INTENDED TO REPRESENT A CHANGE IN COST OF THE PROJECT TO THE OWNER AND ARE CONSIDERED TO BE INFERABLE FROM THE CONTENT OF THE CONTRACT DRAWINGS OR CONSISTENT WITH INDUSTRY STANDARDS OF CONSTRUCTION. IF THE CONTRACTOR DETERMINES THAT SUCH CLARIFICATIONS AND CORRECTIONS HAVE AN IMPACT ON THE COST OF THE PROJECT TO THE OWNER, THE CONTRACTOR MUST SUBMIT A CHANGE ORDER REQUEST WITH DETAILED PRICING INFORMATION TO THE ARCHITECT BEFORE PURCHASING, DETAILING, FABRICATING OR INSTALLING ANY COMPONENT RELATED TO SUCH CLARIFICATIONS AND CORRECTIONS.
- 4. CONTRACTOR SUBSTITUTIONS A. SUBSTITUTION REQUESTS FOR MATERIALS OR PRODUCTS SPECIFIED IN THE STRUCTURAL DRAWINGS MUST BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER-OF-RECORD AND MUST INCLUDE THE FOLLOWING: a. AN INTERNATIONAL CODE COUNCIL (ICC) REPORT THAT COMPLIES WITH THE BUILDING CODE
 - UNDER WHICH THE PROJECT IS PERMITTED 1. ICC REPORTS THAT HAVE BEEN DISCONTINUED AT THE TIME OF PRODUCT INSTALLATION WILL NOT BE ACCEPTED. b. COMPREHENSIVE INSTALLATION INSTRUCTIONS.
 - c. CALCULATIONS DEMONSTRATING THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING EQUIVALENT PERFORMANCE (MINIMUM) VALUES TO THE PRODUCTS SPECIFIED. d. A DOCUMENT OF THE COST SAVINGS TO THE OWNER.

FOUNDATIONS

- BEARING PRESSURES A. FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING
- B. PRIOR TO PLACING FOUNDATION CONCRETE, ALL FOUNDATION EXCAVATIONS MUST BE INSPECTED BY THE SPECIAL INSPECTOR TO EXPLORE THE EXTENT OF LOOSE, SOFT, EXPANSIVE OR OTHERWISE UNSATISFACTORY SOIL MATERIAL AND TO VERIFY DESIGN BEARING PRESSURE. DIRECTION FOR CORRECTIVE ACTION WILL BE PROVIDED WHERE REQUIRED.
- 2. MISCELLANEOUS A. UNBALANCED BACKFILLING MUST NOT BE DONE AGAINST MASONRY OR CONCRETE WALLS UNLESS WALLS ARE SECURELY BRACED AGAINST OVERTURNING, EITHER BY TEMPORARY
- CONSTRUCTION BRACING OR BY PERMANENT CONSTRUCTION. B. THE CONTRACTOR MUST BE SOLELY RESPONSIBLE FOR CONTROL OF GROUNDWATER AND SURFACE RUNOFF THROUGHOUT THE CONSTRUCTION PROCESS. INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES WHICH RESULT IN DETERIORATION OF BEARING MUST BE PREVENTED.

CONCRETE

3. MISCELLANEOUS

- A. CONCRETE MUST BE IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318) AND SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI) 301. MATERIALS
- A. REINFORCING a. BARS - ASTM A615, GRADE 60, DEFORMED.

INTERIOR SLABS ON GRADE..

TENSION SPLICES, UNLESS OTHERWISE NOTED.

23"

27"

30"

34"

- b. WELDED STEEL WIRE ASTM A1064; SHEET TYPE, ROLL TYPE IS NOT ACCEPTABLE B. CONCRETE
- a. MUST BE NORMAL WEIGHT, UNLESS NOTED OTHERWISE b. MUST OBTAIN 28 DAY COMPRESSIVE STRENGTHS AS FOLLOWS SHALLOW FOUNDATIONS....
- A. ALL EMBEDDED ITEMS MUST BE PROPERLY PLACED, ACCURATELY POSITIONED AND MAINTAINED SECURELY IN PLACE PRIOR TO AND DURING CONCRETE PLACEMENT. B. REINFORCING STEEL MUST BE CONTINUOUS UNLESS OTHERWISE NOTED. LAP SPLICES IN CONTINUOUS REINFORCING STEEL MUST CONFORM TO THE REQUIREMENTS OF ACI 318 FOR

..3,500 PSI

- C. MINIMUM CONCRETE COVER FOR REINFORCING STEEL MUST BE AS INDICATED. REINFORCING COVER MUST NOT BE LESS THAN THE REQUIREMENTS OF ACI 301. a. CONCRETE DEPOSITED AGAINST THE GROUND... b. CONCRETE EXPOSED TO EARTH OR WEATHER.. ..2 INCHES c. INTERIOR BEAMS... ...1 1/2 INCHES
- ..3/4 INCHES TOP & BOT d. INTERIOR REINFORCED SLABS. e. TOP REINFORCING, PARKING GARAGE SLABS.. ...1 1/2 INCHES . COLUMN AND WALLS.. ...1 1/2 INCHES D. LAP ALL REINFORCEMENT AS FOLLOWS UNLESS NOTED OTHERWISE:

| CONCRETE LAP LENGTHS | | | | | | | | |
|----------------------|-----------------------|---------------------------|----------|---------------|----------|--|--|--|
| BAR | COMPRESSION SPLICE | LAP SPLICE DIMENSION (IN) | | | | | | |
| SIZE | | f'c =3000 psi | | f'c =4000 psi | | | | |
| | | OTHER | TOP BARS | OTHER | TOP BARS | | | |
| #3 | 12" | 22" | 29" | 19" | 25" | | | |
| #4 | 15" | 29" | 38" | 25" | 32" | | | |
| #5 | 10" | 36" | 46" | 31" | 40" | | | |

43"

63"

72"

81"

CONCRETE MASONRY

#6

#7

#8

#9

A. CONCRETE MASONRY MATERIALS AND CONSTRUCTION MUST BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES (TMS402)

56"

81"

94"

105"

38" 49"

71"

81"

55"

63"

70"

- A. CONCRETE MASONRY UNITS MUST CONFORM TO ASTM C 90 AND MUST BE MADE WITH LIGHTWEIGHT (105 PCF) AGGREGATE. MINIMUM NET AREA COMPRESSIVE STRENGTH OF
- MASONRY UNITS MUST BE 2.000 PSI AT 28 DAYS. B. MORTAR MUST BE PORTLAND CEMENT/LIME TYPE M OR S CONFORMING TO ASTM C270
- PROPORTIONS SPECIFICATION. AGGREGATE FOR MORTAR MUST COMPLY WITH ASTM C144. C. REINFORCING STEEL MUST COMPLY WITH ASTM A615, GRADE 60. SHOP FABRICATE REINFORCING BARS WHICH ARE SHOWN TO BE BENT OR HOOKED.
- D. GROUT MUST COMPLY WITH ASTM C476 AND MUST BE PROPORTIONED TO OBTAIN A DOCUMENTED 28 DAY COMPRESSIVE STRENGTH OF 2,500 PSI.
- E. HORIZONTAL JOINT REINFORCING MUST BE LADDER TYPE AND COMPLY WITH ASTM A951. DESIGN
- A. BASED ON THE UNIT STRENGTH METHOD, THE DESIGN MASONRY ASSEMBLAGE STRENGTH IS fm = 2000 PSI.
- 4. GROUTING AND REINFORCEMENT A. ALL BOND BEAMS, REINFORCED CELLS, CELLS BELOW GRADE AND CELLS WITH EMBED PLATES
- OR ANCHORS MUST BE GROUTED SOLID. GROUT PROCEDURE MUST COMPLY WITH ACI 530.1. B. ALL REINFORCED CMU WALLS MUST HAVE REINFORCMENT CONTINUOUSLY FROM FOUNDATION TO TOP OF WALL. WHERE REINFORCING IS INTERRUPTED, OFFSET AND LAP ADDITIONAL BARS.
- C. PROVIDE REINFORCING STEEL DOWELS OF THE SAME SIZE AND SPACING AS VERTICAL REINFORCING FROM THE SUPPORTING STRUCTURE. DOWELS MUST HAVE STANDARD ACI HOOKS. D. LAP ALL REINFORCING AS FOLLOWS UNLESS NOTED OTHERWISE:

| LAP LENGTHS | | | | | | |
|-------------|---------------------------------------|----------------------|--------|---------|--|--|
| BAR SIZE | REINFORCING EACH FACE ¹ | REINFORCING CENTERED | | | | |
| | | 6" CMU | 8" CMU | 12" CMU | | |
| #4 | 22" | 18" | 18" | 18" | | |
| #5 | 34" | 28" | 22" | 22" | | |
| #6 | 64" | 53" | 38" | 34" | | |
| #7 | 87" | 73" | 52" | 40" | | |
| #8 | 131" | 114" | 79" | 53" | | |

1. ASSUMES 2" CLEAR MASONRY COVER STRUCTURAL STEEL

- A. STRUCTURAL STEEL MUST BE IN ACCORDANCE WITH THE 15TH EDITION OF AISC 360 "THE SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" AND THE 2016 EDITION OF AISC 303 "CODE
- OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
- A. ALL HOT ROLLED STRUCTURAL SHAPES, PLATES AND BARS MUST BE NEW STEEL CONFORMING B. UNLESS NOTED OTHERWISE ON THE DRAWINGS, STRUCTURAL STEEL SHAPES MUST CONFORM
- TO THE FOLLOWING: A. M, S, C, MC AND L SHAPESASTM A36 ...ASTM A36, Fy=36 KSI B. PLATES AND BARS.... ASTM A563 C NUTS D. WASHERS... ASTM F436 .. THREADED RODS.....ASTM A36 (UNLESS NOTED OTHERWISE) F. HEADED STUD ANCHORS......ASTM A29, Fu=65 KSI
- G. WELDING ELECTRODES.....E70XX, LOW HYDROGEN MEMBERS

ITEMS, AND ITEMS NOTED OTHERWISE IN THE DRAWINGS.

PRIOR APPROVAL BY THE ENGINEER.

- A. STEEL MEMBERS MUST BE SPLICED ONLY WHERE INDICATED. 4. GALVANIZING A. THE FOLLOWING MUST BE HOT-DIP GALVANIZED AND MUST CONFORM TO ASTM A123 OR A153.
 - GALVANIZE AFTER FABRICATION WHERE PRACTICAL. REPAIR DAMAGED GALVANIZED COATING USING ASTM A780 ZINC-RICH PAINT. a. ANGLES AND PLATES SUPPORTING MASONRY IN EXTERIOR WALLS
 - b. LINTELS AND LINTEL ASSEMBLIES SUPPORTING MASONRY IN EXTERIOR WALLS c. ALL STEEL EXPOSED TO WEATHER IN THE FINAL CONDITION
- d. ITEMS IDENTIFIED AS GALVANIZED ON ARCHITECTURAL OR STRUCTURAL DRAWINGS MISCELLANEOUS
- WELDERS CERTIFIED FOR THE WELDS TO BE MADE.
- A. SHOP AND FIELD WELDING MUST CONFORM TO AWS STANDARDS AND MUST BE PERFORMED BY B. FIELD-CUTTING OF STRUCTURAL STEEL MEMBERS BY ANY TRADE IS NOT PERMITTED WITHOUT

C. PAINT ALL STRUCTURAL STEEL WITH ONE COAT OF RUST INHIBITIVE PAINT, EXCEPT EMBEDDED

DESIGN CRITERIA

BUILDING CODE

a. ROOF MEMBER

LIVE LOAD...

TOTAL LOAD...

DEAD + LIVE LOAD...

b. MEMBERS SUPPORTING MASONRY

| | | THE 2010 EDITION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMON DESIGN LOADS | | | |
|--|----------|---|--|--|--|
| | | AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7). | | | |
| | E LO | | | | |
| | | DF20 PSF | | | |
| B. | HAN | IDRAILS AND GUARDRAILS | | | |
| | Α. | THE HANDRAIL AND GUARDRAIL SYSTEMS MUST BE DESIGNED TO RESIST A SINGLE | | | |
| | | CONCENTRATED LOAD OF 200 POUNDS OR 50 POUNDS PER LINEAR FOOT APPLIED IN ANY | | | |
| | | DIRECTION AT ANY POINT ON THE HANDRAIL OR TOP RAIL TO PRODUCE THE MAXIMUM LOAD | | | |
| | | EFFECT ON THE ELEMENT BEING CONSIDERED AND TO TRANSFER THIS LOAD THROUGH THE | | | |
| | | | | | |
| | | SUPPORTS TO THE STRUCTURE. THESE LOADS NEED NOT BE ASSUMED TO ACT | | | |
| | | CONCURRENTLY. | | | |
| | | IG RISK CATEGORYII | | | |
| | | OADS | | | |
| A. | WIN | ID PRESSURES ARE BASED ON THE FOLLOWING CRITERIA: | | | |
| | a. | ULTIMATE DESIGN WIND SPEED, 3 SECOND GUSTVult=115 MPH | | | |
| | | WIND EXPOSURE CATEGORYC | | | |
| | | INTERNAL PRESSURE COEFFICIENT (GCPI)+/-0.18 | | | |
| | | DESIGN WIND BASE SHEAR | | | |
| | | | | | |
| | | PLAN EAST-WEST DIRECTION (TOTAL)16.2 KIPS PLAN LOOPTH COURT DIRECTION (TOTAL) | | | |
| | | PLAN NORTH-SOUTH DIRECTION (TOTAL)73.3 KIPS | | | |
| | | FOR COMPONENT AND CLADDING PRESSURES, REFER TO THE WIND LOAD DIAGRAMS AND | | | |
| | | LEGEND. | | | |
| SNO | J WC | LOADS | | | |
| A. | SNC | OW LOADS ARE BASED ON THE FOLLOWING CRITERIA: | | | |
| | | GROUND SNOW LOAD (PG)20 PSF | | | |
| | h. | SNOW LOAD IMPORTANCE FACTOR (I)1.0 | | | |
| | D. | SNOW EXPOSURE EACTOR (CE) | | | |
| | ر. ما | SNOW EXPOSURE FACTOR (CE) | | | |
| 0-1 | | THERMAL FACTOR (CT)1.0 | | | |
| | | FORCES | | | |
| A. | | STRUCTURE AND COMPONENTS OF THE BUILDING HAVE BEEN DESIGNED FOR SEISMIC | | | |
| | | RCES BASED ON THE FOLLOWING CRITERIA: | | | |
| | a. | 0.2 SECOND SPECTRAL ACCELERATION (SS) 0.131 G | | | |
| | | 1 SECOND SPECTRAL ACCELERATION (S1) | | | |
| | | SITE CLASSD | | | |
| | | SITE COEFFICIENT, SHORT PERIOD (Fa)1.6 | | | |
| | | SITE COEFFICIENT, 1 SECOND PERIOD (FV)2.4 | | | |
| | | 0.2 SECOND SPECTRAL RESPONSE COEFFICIENT (SDS)0.139 G | | | |
| | | | | | |
| | g. | 1 SECOND SPECTRAL RESPONSE COEFFICIENT (SD1)0.07 G | | | |
| | | IMPORTANCE FACTOR | | | |
| | i. | ANALYTICAL PROCEDURE | | | |
| | | EQUIVALENT LATERAL FORCE PROCEDURE | | | |
| | j. | LATERAL SYSTEM | | | |
| | - | ORDINARY PLAIN MASONRY SHEAR WALLS | | | |
| | k. | RESPONSE MODIFICATION FACTORR = 1.5 | | | |
| | | SYSTEM OVER STRENGTH FACTOROMEGA = 2.5 | | | |
| | | DEFLECTION AMPLIFICATION FACTORCd = 1.25 | | | |
| | | SEISMIC DESIGN CATEGORYB | | | |
| | | | | | |
| | 0. | BUILDING HEIGHTHn = 13.25 FT | | | |
| | p. | FUNDAMENTIAL PERIODT =0.152 SEC | | | |
| | q. | SEISMIC RESPONSE COEFFICIENT0.093 | | | |
| | r. | EFFECTIVE SEISMIC WEIGHT719 KIPS | | | |
| | | DESIGN SEISMIC BASE SHEAR67 KIPS | | | |
| BUILDING MOVEMENT AND DEFLECTION LIMITS | | | | | |
| A. THE FOLLOWING PROVISION MUST BE MADE FOR LOAD DEFLECTION IN THE DESIGN, FABRICATION | | | | | |
| ٨. | | D INSTALLATION OF THE BUILDING CLADDING, PARTITIONS, GLASS WALLS AND OTHER | | | |
| | | | | | |
| | | MENTS SUPPORTED AND ATTACHED TO THE STRUCTURE. | | | |
| | a. | ROOF MEMBER | | | |

A. THE CONSTRUCTION DOCUMENTS ARE BASED ON THE REQUIREMENTS OF THE FOLLOWING

b. THE 2018 VIRGINIA EXISTING BUILDING CODE.

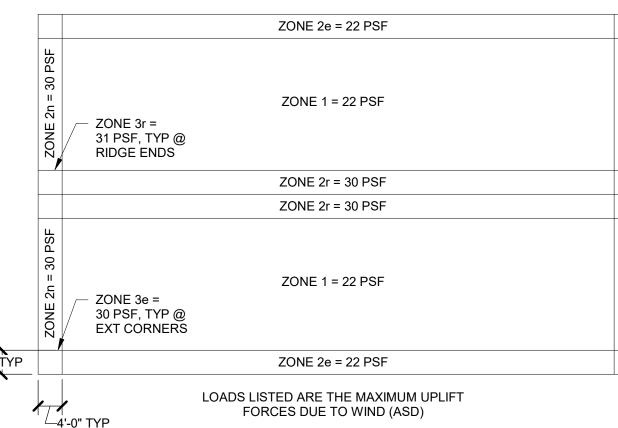
a. THE 2018 VIRGINIA CONSTRUCTION CODE [FOR THE NEW PORTIONS OF THE BUILDING] .

c. THE 2016 EDITION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS

ROOF PLAN UPLIFT FORCES

...L/180

...L/600



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REVISION

GENERAL

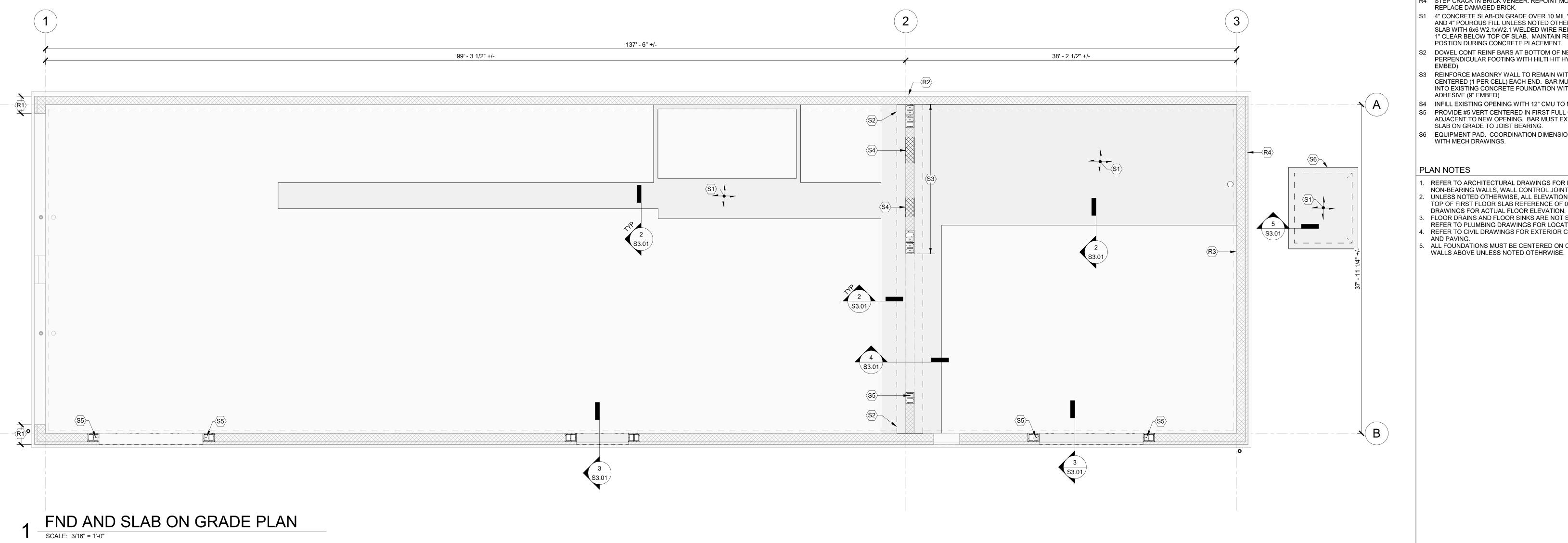
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06/01/2023

FOUNDATION, SLAB AND ROOF FRAMING PLANS

137' - 6" +/-99' - 3 1/2" +/-38' - 2 1/2" +/-EXHAUST HOOD 1100 LBS MAX MC8X22.8 C8X11.5 MC8X22.8 MC8X22.8 MC8X22.8 2 ROOF FRAMING PLAN
|SCALE: 3/16" = 1'-0"



PLAN KEY NOTES

- F1 (2)L3x3x1/4 BACK TO BACK SPACED TO ALLOW FOR THREADED RÓD FROM HOOD (6 LOCATIONS TOTAL). CONNECT TO BOTTOM FLANGE OF JOISTS WITH 3/16" FILLET WELD, TYP.
- R1 EXISTING BRICK VENEER IS PULLING AWAY FROM WALL. REMOVE AND REBUILT BRICK VEENER TO MATCH EXIST.
- R2 SIGNIFICANT DISPLACEMENT OF CMU AT EXTERIOR. REMOVE AND REBUILD DISPLACED AND CRACKED BLOCK TO MATCH EXISTING. REPOINT CRACKED MORTAR JOINTS. R3 SIGNIFICANT STEP CRACK AT TOM OF CMU WALL AND SEPARATION BETWEEN BLOCKS. REMOVE AND REBUILD BLOCK
- MORTAR JOINTS. R4 STEP CRACK IN BRICK VENEER. REPOINT MORTAR JOINT AND

TO PROVIDE 1/2" MAX MORTAR JOINTS. REPOINT CRACKED

- REPLACE DAMAGED BRICK. S1 4" CONCRETE SLAB-ON GRADE OVER 10 MIL VAPOR RETARDER AND 4" POUROUS FILL UNLESS NOTED OTHERWISE. REINFORCE
- SLAB WITH 6x6 W2.1xW2.1 WELDED WIRE REINFORCING PLACED 1" CLEAR BELOW TOP OF SLAB. MAINTAIN REINFORCEMENT IN POSTION DURING CONCRETE PLACEMENT.
- S2 DOWEL CONT REINF BARS AT BOTTOM OF NEW FTG INTO EXIST PERPENDICULAR FOOTING WITH HILTI HIT HY 200 ADHESIVE (9"
- S3 REINFORCE MASONRY WALL TO REMAIN WITH (3)#6 VERT CENTERED (1 PER CELL) EACH END. BAR MUST BE DOWELED
- INTO EXISTING CONCRETE FOUNDATION WITH HILTI HIT HY 200 ADHESIVE (9" EMBED) S4 INFILL EXISTING OPENING WITH 12" CMU TO MATCH EXIST S5 PROVIDE #5 VERT CENTERED IN FIRST FULL CELL IMMEDIATELY
- ADJACENT TO NEW OPENING. BAR MUST EXTEND FROM TOP OF SLAB ON GRADE TO JOIST BEARING. S6 EQUIPMENT PAD. COORDINATION DIMENSIONS AND LOCATION
- WITH MECH DRAWINGS.

PLAN NOTES

- 1. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO NON-BEARING WALLS, WALL CONTROL JOINTS AND OPENINGS. 2. UNLESS NOTED OTHERWISE, ALL ELEVATIONS ARE BASED ON A TOP OF FIRST FLOOR SLAB REFERENCE OF 0'-0". REFER TO CIVIL
- DRAWINGS FOR ACTUAL FLOOR ELEVATION. 3. FLOOR DRAINS AND FLOOR SINKS ARE NOT SHOWN ON PLAN. REFER TO PLUMBING DRAWINGS FOR LOCATIONS. 4. REFER TO CIVIL DRAWINGS FOR EXTERIOR CONCRETE SLABS
- AND PAVING. 5. ALL FOUNDATIONS MUST BE CENTERED ON COLUMNS AND

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WALL SECTION

EXIST MASONRY WALL

3/16 1@6 3/16 1@6

STEEL PL3/16x1'-5"xCONT

THRU-BOLTS, REF ELEVATION

STEEL CHANNEL, REF PLAN

ELEVATION

/ _/—0' - 4" / __0' - 4" ___0' - 2"

EXIST MASONRY

BEARING WALL

STEEL CHANNEL, REF PLAN -

STEEL PL REF SECTIONS -

NEW VERT REINF. ONLY -

OPENINGS ALONG GRIDLINE B:

3/4"Ø THRU BOLTS AT 1'-4" OC STAGGERED (8" NET SPACING) OPENINGS ALONG GRIDLINE 2:

3/4"Ø THRU BOLTS AT 4'-0" OC

STAGGERED (2'-0" NET SPACING) AT 6FT AND 16FT OPENINGS:

(4)3/4"Ø THRU BOLTS, TYP EA END AT 12FT OPENINGS:

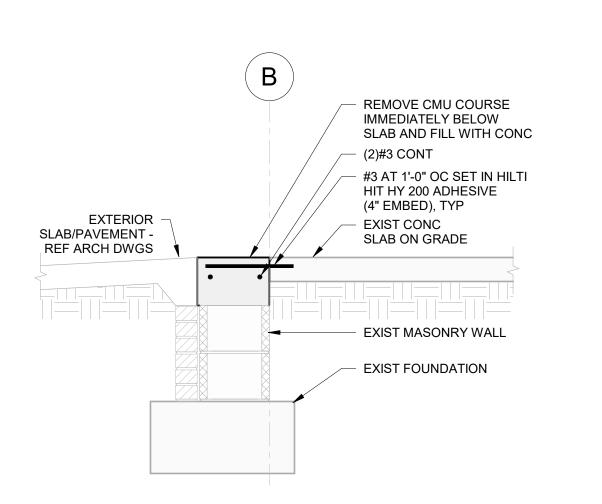
(6)3/4"Ø THRU BOLTS, TYP EA END

TYPICAL STEEL LINTEL DETAIL

TYP EXTERIOR

WALL SECTION @

GARAGE DOOR



EXIST MASONRY WALL -

THRU-BOLTS, REF ELEVATION -

STEEL CHANNEL, REF PLAN. – NOTCH CMU AND ALIGN TOE OF CHANNEL WITH INSIDE

FACE OF CMU AS SHOWN.

GROUT BOTTOM COURSE -SOLID FULL LENGTH OF LINTEL

STEEL PL3/16x1'-7 1/2"xCONT -

3/16 \ 1@6

3/16 1@6

 SAWCUT 1" DEEP AT PERIMETER OF AREA TO BE REMOVED AND BREAK OUT EXIST SLAB CLEAN SURAFCE AND -APPLY BONDING COMPOUND #3x1'-6" AT 1'-0" OC SETIN HILTI HIT HY 200 ADHSIVE (4" EMBED) - SLAB ON GRADE - REF PLAN

TYP EXTERIOR

WALL SECTION

1/8" SAWED JOINT-SLAB ON GRADE - REF PLAN __T = SLAB THICKNESS POUROUS FILL -REF PLAN

NOTES:
1. SAWED JOINTS MUST BE CUT WITHIN 24 HOURS OF SLAB POUR

 REMOVE CMU COURSE IMMEDIATELY BELOW SLAB AND FILL WITH CONCRETE - (2)#3 CONT CONC SLAB ON GRADE -REF PLAN EXIST MASONRY WALL, GROUT SOLID BELOW GRADE AT OPENING IF HOLLOW - #4 AT 24" OC, TYP EA SIDE - #4 TRANS AT 24" OC SET IN HILTI HIT HY 200 ADHESIVE (6" EMBED), TYP EA SIDE 8" MIN 0'-4" CLR 8" MIN TYP (3)#6 CONT EA SIDE (6 TOTAL), TOP & BOT EXIST FOUNDATION.
 CLEAN SURFACE AND
 APPLY BONDING
 COMPOUND. 4 SECTION

SCALE: 3/4" = 1'-0"

- #5 CONT TOP & BOT

CONC SLAB ON GRADE - REF PLAN

5 SECTION

SCALE: 3/4" = 1'-0"

-x---x---x---x---x

3 SECTION

SCALE: 3/4" = 1'-0"

TYPICAL SLAB REMOVAL AND 2 REPLACEMENT DETAIL

SCALE: 3/4" = 1'-0"

EXIST MASONRY WALL -

3/16 1@6 3/16 1@6

STEEL PL3/16x1'-11"xCONT -

THRU-BOLTS, REF ELEVATION

STEEL CHANNEL, REF PLAN -

TYPICAL SLAB ON GRADE SAWED JOINT DETAIL

SCALE: 3/4" = 1'-0"

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REVISION

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