

GENERAL STRUCTURAL NOTES

LOADS CODES AND STANDARDS

1. ASCE 7-10 LOADS
2. AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" - ACI 308-14 (ACI)

GENERAL

1. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING TO MAINTAIN THE STABILITY, SAFETY, AND LATERAL LOAD RESISTANCE OF THE BUILDING AND ITS INDIVIDUAL COMPONENTS THROUGHOUT CONSTRUCTION.
2. DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST ARCHITECTURAL DRAWINGS.
3. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES. OPENINGS NOT SPECIFICALLY SHOWN SHALL BE APPROVED BY THE ARCHITECT AND ENGINEER.
4. DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE GENERALLY OBTAINED FROM THE ARCHITECT AND ARE INCLUDED AS INFORMATION COMPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. LAYOUT OF BUILDING FOUNDATIONS OR OTHER ITEMS MAY BE MADE USING THE DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ONLY IF THE CONTRACTOR HAS COMPARED THESE DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS AND HAS RECEIVED CLARIFICATION FROM THE ARCHITECT, RESOLVING ANY ERRORS, INCONSISTENCIES, OR OMISSIONS.
5. DO NOT SCALE DRAWINGS TO OBTAIN INFORMATION.

FOUNDATIONS

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE PRESUMPTIVE VALUES SET FORTH IN THE STATE BUILDING CODE.
2. ALL FOOTINGS SHALL BEAR ON UNDISTURBED, NATURAL MATERIAL OR CONTROLLED STRUCTURAL FILL HAVING AN ALLOWABLE BEARING VALUE OF 2.0 TONS PER SQUARE FOOT.
3. ALL FOOTINGS SHALL BEAR AT LEAST 3'-0" BELOW FINISH GRADE.
4. ELEVATIONS OF THE BOTTOM OF FOOTING SHOWN ON PLANS ARE FOR BIDDING PURPOSES AND REPRESENT THE HIGHEST ALLOWABLE ELEVATION. THE BOTTOM OF FOOTING SHALL BE LOWERED AS REQUIRED TO BEAR ON SUITABLE MATERIAL AS DEFINED ABOVE OR UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL.
5. IF FOOTING ELEVATION IS TO BE LOWERED MORE THAN 1'-0" FROM WHAT IS SHOWN ON PLAN TO MAINTAIN FROST DEPTH OR TO BEAR ON SUITABLE MATERIAL, NOTIFY ENGINEER PRIOR TO CONSTRUCTION.
6. EXISTING UN-CONSOLIDATED FILLS BELOW FOOTINGS SHALL BE REMEDIATED EITHER BY REMOVAL AND REPLACEMENT, OR GRADING IMPROVEMENT DESIGNED TO ACHIEVE 12 TONS PER SQUARE FOOT BEARING CAPACITY.
7. EXCEPT AS NOTED, FOUNDATION WALLS ARE GENERALLY NOT DESIGNED AS FREESTANDING RETAINING WALLS. AS SUCH THEY MUST BE BACKFILLED ON BOTH SIDES EQUALLY OR TEMPORARILY BRACED UNTIL OTHER STRUCTURAL ELEMENTS PROPERLY BRACE THESE WALLS ARE IN PLACE.

REINFORCED CONCRETE

1. ALL CONCRETE SHALL CONFORM WITH REQUIREMENTS OF CHAPTER 4 IN ACI 308 AND BE NORMAL WEIGHT (UNLESS INDICATED AS LIGHT WEIGHT ON PLANS) WITH A MIN. 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI AND A MAXIMUM OF 4."
2. ALL CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL BE AIR ENTRAINED.
3. ALL REINFORCING BARS SHALL BE HIGH STRENGTH DEFORMED BARS CONFORMING TO ASTM A 615 - GRADE 60. EPOXY-COATED REBAR TO BE USED IN LOCATIONS SHOWN ON DRAWINGS.
4. ALL REINFORCING BARS SHALL BE DETAILLED IN ACCORDANCE WITH ACI DETAILING MANUAL. SHOW THE NUMBER AND LOCATION OF ALL BAR SUPPORTS AND ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT IN POSITIONS INDICATED ON THE PLACING DRAWINGS.
5. MINIMUM CLEAR COVER FOR REINFORCEMENT WHEN NOT OTHERWISE INDICATED SHALL BE:

CONCRETE CAST AGAINST EARTH

3"

CONCRETE POURED IN FORMS BUT EXPOSED TO EARTH OR WEATHER

A. BARS 1/2" AND SMALLER

1 1/2"

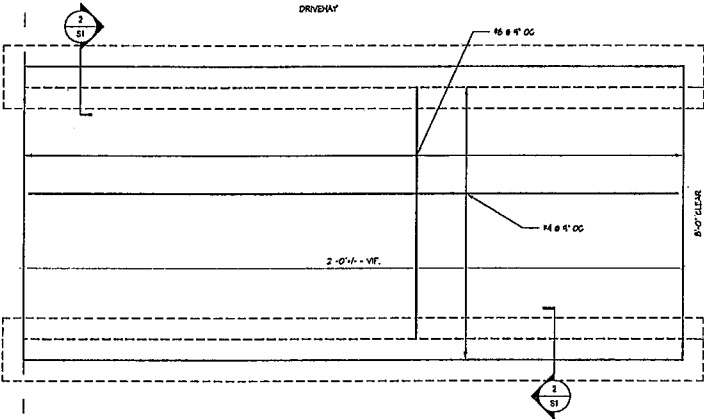
B. BARS LARGER THAN 1/2"

2"

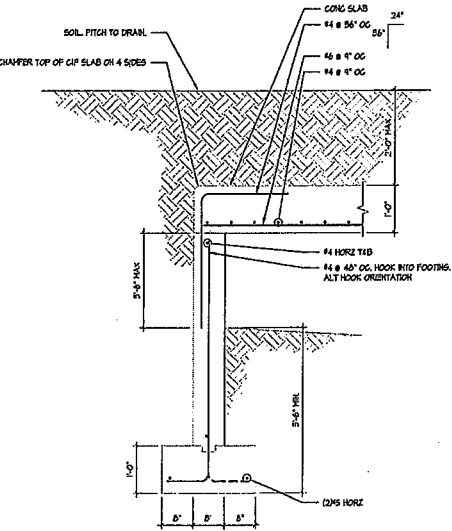
6. NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILLED OR APPROVED BY THE STRUCTURAL ENGINEER. DEVELOPMENT / SPLICE LENGTH SHALL BE AS SHOWN ON THE TABLE IN THE TYPICAL DETAILS UNLESS OTHERWISE NOTED. VALUES SHOWN ARE IN INCHES. MAKE ALL BARS CONTINUOUS AROUND CORNERS.
7. SLABS, BEAMS AND WALLS SHALL HAVE NO JOINTS IN A HORIZONTAL PLANE. ANY STOP IN CONCRETE WORK MUST BE MADE AT CENTER OF SPAN OR AT CENTER OF SUPPORT WITH VERTICAL BULKHEADS, HORIZONTAL KEYS AND REINFORCING CONTINUING THROUGH ALL CONSTRUCTION JOINTS SHALL BE AS DETAILLED OR AS APPROVED BY THE STRUCTURAL ENGINEER.
8. WIRE MESH REINFORCEMENT MUST LAP ONE FULL MESH AT SIDE AND END LAPS, AND SHALL BE WELDED TOGETHER. PROVIDE ADEQUATE SUPPORTS FOR MESH TO ENSURE ITS LOCATION AS SHOWN ON DRAWINGS.

POST-INSTALLED FASTENERS AND ANCHORS

1. ALL HOLES INTO MASONRY OR CONCRETE WALLS FOR PROPRIETARY ANCHORING SYSTEMS SHALL BE DRILLED AND CLEANED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
2. ALL PROPRIETARY ANCHORING SYSTEMS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND USING ALL RECOMMENDED ACCESSORIES AND SUPPLEMENTAL COMPONENTS SUCH AS SCREEN TUBES, WASHERS, ETC.
3. ALL HOLES IN HOLLOW MASONRY SHALL BE DRILLED WITH ROTARY DRILLS. HAND-DRILL DRILLS ARE NOT PERMITTED.
4. ALL EPOXY ADHESIVE SHALL BE HILTI RE-500, SIMPSON ET OR APPROVED EQUAL UNLO.
5. ALL ACRYLIC ADHESIVE SHALL BE HILTI HIT HY200 OR HIT100, SIMPSON ET OR APPROVED EQUAL UNLO.
6. ALL CONCRETE/MASONRY EMBED ANCHORS SHALL BE HILTI HES-H, SIMPSON TITEN, TITEN TAP-CON OR APPROVED EQUAL UNLO.
7. ALL EXPANSION ANCHORS SHALL BE HILTI HIT-K-BOLT, SIMPSON HEDGE-ALL OR APPROVED EQUAL UNLO.



BRIDGE PLAN  
1/2"=1'-0"



SECTION  
3/4"=1'-0"



58 Essex Street  
Deep River, CT 06417  
(860) 532-0312

DRIVEWAY BRIDGE  
PINE RIDGE DRIVE  
ANDOVER, CT

ISSUE	DATE	DESCRIPTION



DATE: 11-4-2021  
SCALE: AS NOTED  
JOB NO: 21058  
DRAWN BY: EAM  
NOTES, PLAN & DETAILS

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