

GENERAL NOTES:

PART 1 GENERAL

- 1.01 GENERAL
A. NO PROVISIONS HAVE BEEN MADE FOR ANY TEMPORARY CONDITIONS THAT MAY ARISE DURING CONSTRUCTION PRIOR TO THE COMPLETION OF THE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS, SHORING AND TEMPORARY BRACING DURING THE PROGRESS OF THE PROJECT.
B. PRINCIPAL OPENINGS THROUGH THE FOUNDATION ARE NOT SHOWN ON THESE DRAWINGS. THE GENERAL CONTRACTOR SHALL EXAMINE THE DRAWINGS TO DETERMINE THE REQUIRED OPENINGS, AS HE SHALL PROVIDE FOR ALL OPENINGS AND SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH OTHER PROJECT REQUIREMENTS. ANY DEVIATION FROM THE OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR APPROVAL.
C. ALTERNATE CONNECTION DETAILS MAY BE USED IF SUCH DETAILS ARE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND ACCEPTANCE IS GRANTED. HOWEVER, THE STRUCTURAL ENGINEER SHALL BE THE SOLE JUDGE OF ACCEPTABILITY AND THE CONTRACTOR'S BID SHALL ANTICIPATE THE USE OF THOSE SPECIFIC DETAILS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ANY ALTERNATE DETAILS, WHICH HE PROPOSES.
D. WORK NOT INDICATED ON A PART OF THE DRAWINGS, BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES SHALL BE INCLUDED.
E. THE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR THE SAFETY OF ADJACENT STRUCTURES, PROPERTY, AND THE PUBLIC. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS.
F. ANY MODIFICATION OR ALTERATION OF THESE CONSTRUCTION DOCUMENTS OR CHANGES IN CONSTRUCTION FROM THE INTENT OF THESE DOCUMENTS BY THE CONTRACTOR WITHOUT WRITTEN APPROVAL OF THE ENGINEER SHALL REMOVE ALL PROFESSIONAL AND LIABLE RESPONSIBILITY ON THE PART OF THE ENGINEER.
G. ALL CONTRACTORS ARE REQUIRED TO EXAMINE THE DRAWINGS AND SPECIFICATIONS CAREFULLY, VISIT THE SITE AND FULLY INFORM THEMSELVES AS TO ALL EXISTING CONDITIONS AND LIMITATIONS, PRIOR TO SUBMITTING THE PROPOSAL. FAILURE TO VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS AND LIMITATIONS WILL IN NO WAY RELIEVE THE SUCCESSFUL BIDDER FROM FURNISHING ANY MATERIALS OR PERFORMING ANY WORK IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS WITHOUT ADDITIONAL COST TO THE OWNER.
H. DO NOT SCALE FROM DRAWINGS.
I. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
J. CONTRACTOR TO VERIFY BUILDING DRAWING DIMENSIONS WITH MANUFACTURER BUILDING DRAWING DIMENSIONS AND/OR ARCHITECTURAL DRAWINGS.
K. INTERIOR FLOOR DRAIN LOCATIONS AND OUTFALLS TO BE DETERMINED BY OTHERS.

DESIGN LOADING

PART 1 - LOADING

- 1.01 DESIGN SOIL BEARING PRESSURE
A. THE DESIGN SOIL BEARING PRESSURE IS ASSUMED TO BE 2,500 PSF.
1.02 DEAD LOAD
A. STAIRS=10 PSF
1.03 LIVE LOAD
A. STAIRS=100 PSF
1.04 WIND LOAD
A. DESIGN WIND SPEED=90 MPH

CONCRETE NOTES

PART 1 - GENERAL

- 1.01 GENERAL
A. ADHERE TO ACI COLD WEATHER CONCRETE SPECIFICATIONS, WHEN APPLICABLE.
B. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK
C. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO MAINTAIN STABILITY AND PREVENT UNDERMINING OF EXISTING FOUNDATIONS AT ALL TIMES.
D. NO FOUNDATIONS SHALL BE PLACED IN WATER OR ON FROZEN GROUND.
E. ALL FOOTINGS ARE TO BE EXCAVATED USING A BUCKET WITH A SMOOTH TOOTHLESS CUTTING EDGE. FOOTING EXCAVATIONS ARE TO BE FINISHED BY HAND FOR NOT LESS THAN THE LAST SIX INCHES.
F. ALL FINISHED FOUNDATION EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE STRUCTURAL ENGINEER OR HIS DESIGNATEE BEFORE ANY CONCRETE IS PLACED.
G. THE OWNER, THE STRUCTURAL ENGINEER AND THEIR CONSULTANTS ASSUME NO RESPONSIBILITY FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED ON THE DRAWINGS, SPECIFICATIONS, TEST BORINGS OR TEST PITS.
H. DETAILING OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI 315 - "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," LATEST EDITION.

PART 2 - PRODUCTS

- 2.01 MATERIAL
A. REINFORCING:
1. SHALL BE GRADE 60, NEW DEFORMED BARS AND SHALL CONFORM TO ASTM A615. ALL REINFORCING BARS TO BE WELDED SHALL CONFORM TO ASTM A706.
2. REINFORCING BARS MAY NOT BE WELDED EXCEPT WHERE DESIGNATED BY THE STRUCTURAL ENGINEER.
3. ALL WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM 185. W.W.F. SHALL BE PROVIDED IN FLAT SHEETS.
4. ALL LAPS IN W.W.F. SHALL BE ONE MESH PLUS TWO INCHES AT SPLICES. W.W.F. SHALL BE 6X6/MIL #XW1.4 (TYP., UNO)
5. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE PROVIDED AS FOLLOWS:
A. SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH - 3 INCHES (CLEAR)
B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER
1. #6 THROUGH #18 BARS - 2 INCHES
2. #5 BARS & SMALLER 1 1/2 INCHES
C. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER SLABS, WALLS, JOISTS - 2 INCHES
D. BEAMS, COLUMNS - 2 INCHES
6. ALL HOOKS SHOWN ON DRAWINGS SHALL BE STANDARD HOOKS UNLESS NOTED OTHERWISE.
7. WHERE CONTINUOUS BARS ARE CALLED FOR, THEY SHALL RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES, OR HOOKED AT DISCONTINUOUS ENDS. LAP LENGTHS SHALL BE AS GIVEN IN THE SPLICE AND DEVELOPMENT TABLE. LAP BEAM TOP BARS AT MID-SPAN AND BEAM BOTTOM BARS AT SUPPORTS, UNLESS NOTED OTHERWISE.
B. FOUNDATION WALLS & FOOTING MIX DESIGN:
1. 3000 PSI
2. 3/4" STONE
3. SLUMP 4" +/- 1"
4. 6 % AIR ENTRAINMENT
5. SEE DETAILS FOR REINFORCING
C. EXTERIOR SLAB MIX DESIGN:
1. 3000 PSI
2. 3/4" STONE
3. SLUMP 5" +/- 1"
4. 6 % AIR ENTRAINMENT
5. SEE DETAILS FOR REINFORCING
6. LIGHT BROOM FINISH

PART 3 - EARTHWORK

- 3.01 EARTHWORK
A. SITE WORK AND CONCRETE CONTRACTORS ARE REQUIRED TO REVIEW THE ONSITE SUBSURFACE SOIL CONDITIONS WITH THE OWNER AT THE START OF INITIAL CONSTRUCTION. SITE CONTRACTOR WILL NOTIFY ENGINEER AFTER EXCAVATION HAS STARTED AND PRIOR TO THE PLACEMENT OF ANY STRUCTURAL FOUNDATIONS.
B. REMOVE ALL TOPSOIL AND UNCONTROLLED FILL FOR THE AREAS RECEIVING BUILDING FOUNDATIONS.
C. BACK FILL TO THE NECESSARY SUBGRADES REQUIRED ON THE STRUCTURAL FOUNDATION PLANS WITH CONTROLLED STRUCTURAL FILL MATERIAL MEETING THE FOLLOWING GRADATION:
PERCENT PASSING SCREEN OR SIEVE SIZE
6 100
3 90-100
NO. 4 35-70
NO. 40 5-35
NO. 200 0-5
D. PLACE CONTROLLED STRUCTURAL FILL IN UNIFORM LIFTS AND COMPACT TO A MINIMUM DENSITY IN ACCORDANCE WITH ASTM D1557 "MODIFIED PROCTOR DENSITY".
E. PROVIDE SITE GRADING AROUND THE PERIMETER OF THE BUILDING TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION DURING AND AFTER CONSTRUCTION.
F. MAINTAIN THE INTEGRITY OF NATURAL SOLIDS AND CONTROLLED STRUCTURAL FILLS DURING CONSTRUCTION. PROTECT FOOTING AND STRUCTURE SUBGRADES AGAINST FREEZING AND EXCESSIVE WETTING. REMOVE AND REFILL FROZEN SUBGRADES, MOISTURE CONDITION, OR REPLACE EXCESSIVELY WET SUBGRADE MATERIALS.
G. NOTIFY ENGINEER TO OBSERVE SUBGRADES PRIOR TO PLACING FOOTINGS. FOOTINGS ARE DESIGNED FOR A MIN. SOIL BEARING CAPACITY OF 2500PSF, OR FOR BEARING ON SOUND LEDGE.
H. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER IF LEDGE IS ENCOUNTERED TO DETERMINE PINNING REQUIREMENTS.
I. ALL FOOTINGS SHALL EXTEND A MINIMUM OF 4"-6" BELOW EXTERIOR FINISHED GRADE, OR BE DOWELED TO LEDGE.
J. PROOF ROLL SUBGRADE PRIOR TO SLAB CONSTRUCTION. PROVIDE STRUCTURAL FILL MEETING THE GRADATION SPECIFIED HEREIN FOR FILL MATERIALS BELOW THE SLAB, MAXIMUM PERCENT PASSING 200 SIEVE = 7%
K. COMPACT CONTROLLED STRUCTURAL FILLS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND ASTM D1557. USE ONLY HAND-OPERATED EQUIPMENT ADJACENT TO WALLS. FILL BOTH SIDES OF WALLS TO EQUAL ELEVATIONS BEFORE COMPACTING.
DEGREE OF COMPACTION: COMPACT TO THE FOLLOWING MINIMUM DENSITIES:
FILL AND BACK FILL LOCATION DENSITY
UNDER STRUCTURE FOUNDATIONS 95% OF MAX
TOP 2 FEET UNDER PAVEMENT 95%
TRENCHES THROUGH UNPAVED AREAS 90%
EMBANKMENTS 90%
PIPE BEDDING 92%
BESIDE STRUCTURE FOUNDATION WALLS, TANK WALLS AND RETAINING WALLS 90%
UNDER DRAIN FILTER SAND 92%
MAXIMUM DENSITY: ASTM 1557, MODIFIED.
FIELD DENSITY TESTS: ASTM 1556 (SAND CONE), ASTM2167 (RUBBER BALLOON), OR ASTM2922 (NUCLEAR METHODS).
L. CONTRACTOR IS REQUIRED TO CONFORM TO OSHA (29 PART 1926.650-652) SUBPART P "CONSTRUCTION STANDARD FOR EXCAVATIONS".
K. COMPACT CONTROLLED STRUCTURAL FILLS IN ACCORDANCE WITH THE FOLLOWING SCHEDULE AND ASTM D1557. USE ONLY HAND-OPERATED EQUIPMENT ADJACENT TO WALLS. FILL BOTH SIDES OF WALLS TO EQUAL ELEVATIONS BEFORE COMPACTING.
DEGREE OF COMPACTION: COMPACT TO THE FOLLOWING MINIMUM DENSITIES:

- FILL AND BACK FILL LOCATION DENSITY
UNDER STRUCTURE FOUNDATIONS 95% OF MAX
TOP 2 FEET UNDER PAVEMENT 95%
TRENCHES THROUGH UNPAVED AREAS 90%
EMBANKMENTS 90%
PIPE BEDDING 92%
BESIDE STRUCTURE FOUNDATION WALLS, TANK WALLS AND RETAINING WALLS 90%
UNDER DRAIN FILTER SAND 92%
MAXIMUM DENSITY: ASTM 1557, MODIFIED.
FIELD DENSITY TESTS: ASTM 1556 (SAND CONE), ASTM2167 (RUBBER BALLOON), OR ASTM2922 (NUCLEAR METHODS).
L. CONTRACTOR IS REQUIRED TO CONFORM TO OSHA (29 PART 1926.650-652) SUBPART P "CONSTRUCTION STANDARD FOR EXCAVATIONS".

PART 3 - EXECUTION

- 3.01 SUBGRADE
A. ALL GRADING SHALL BE ACHIEVED AT SUBGRADE TO PROVIDE A CONSTANT THICKNESS OF CONCRETE.
B. STRUCTURAL FILL SHALL BE COMPACTED IN 6" LIFTS TO 95% OF ITS MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D1557.
C. SUBGRADE TO CONSIST OF AT LEAST 12" OF COMPACTED SAND OR GRAVEL. THIS MATERIAL SHALL BE
SCREEN OR SIEVE SIZE PERCENT FINER BY WEIGHT
4" 100%
1/2" 35% - 75%
3/4" 25% - 60%
NO. 40 0-5%
NO. 200 0-5%
D. DRAINAGE STONE SHALL CONSIST OF CLEAN ANGULAR FRAGMENTS OF QUARRIED ROCK WITH UNIFORM QUALITY AND BE GRADED AS FOLLOWS:
SCREEN OR SIEVE SIZE PERCENT FINER BY WEIGHT
2 1/2" 100%
2" 95% - 100%
1" 0 - 30%
1/2" 0 - 5%

3.02 PLACEMENT

- A. CONCRETE SLAB ON GRADE SHALL BE PLACED IN ONE CONTINUOUS PLACEMENT, WITH NO COLD JOINTS. IF COLD JOINTS ARE DESIRED, CONTRACTOR MUST PROVIDE PLACEMENT SEQUENCE AND JOINT DETAIL FOR ENGINEERS APPROVAL, PRIOR TO PLACEMENT.
B. APPLY CONCRETE SEALER, IF SPECIFIED AFTER THE SLAB HAS CURED FOR 30 DAYS.
C. VAPOR BARRIERS WILL BE USED UNDER SLAB TO PREVENT MOISTURE MIGRATION INTO THE SLAB, AND TO PROVIDE A BARRIER TO RADON PENETRATION.
D. VAPOR BARRIER:
1. 6 MIL POLYETHYLENE
2. PERMEANCE LESS THAN 0.3 PERMS DETERMINED IN ACCORDANCE WITH ASTM E 96.
3. BARRIER SHOULD NOT BE PUNCTURED DURING CONSTRUCTION ACTIVITIES.
4. EDGES SHOULD BE LAPPED A MINIMUM OF 6", TAPPED, AND SHOULD BE CAREFULLY FITTED AROUND OPENINGS.
E. ALL CONCRETE EXPOSED TO THE WEATHER SHALL CONTAIN 5% - 7% AIR ENTRAINMENT ADMIXTURE.
F. ALL FOOTINGS SHALL BE PLACED MONOLITHICALLY.
G. PIPES OR CONDUITS PLACED IN SLABS ON GRADE SHALL NOT BE PLACED CLOSER THAN 3 DIAMETERS ON CENTER AND SHALL HAVE AN OUTSIDE DIAMETER LESS THAN 1/3 OF THE SLAB THICKNESS. ALUMINUM COMPONENTS SHALL NOT BE PLACED IN CONCRETE. NO CONDUITS SHALL BE PLACED IN SLABS ON METAL DECK.
H. AT LOCATIONS WHERE ANY PART OF FOOTING BEARS DIRECTLY ON LEDGE, SUFFICIENT LEDGE SHALL BE REMOVED TO PROVIDE A LEVEL-BEARING SURFACE IN ALL DIRECTIONS. THOROUGHLY CLEAN LEDGE SURFACE PRIOR TO PLACING CONCRETE.
I. WHERE FOUNDATION ELEMENTS ARE TO HAVE FILL ON BOTH SIDES, EACH SIDE SHALL BE FILLED SIMULTANEOUSLY, MAINTAINING A COMMON ELEVATION.
J. CONTRACTOR SHALL PROVIDE CONTINUOUS DRAINAGE BY MECHANICAL METHODS TO CONTROL SURFACE AND UNDERGROUND WATER AS REQUIRED. DURING CONSTRUCTION, SO THAT ALL EXCAVATIONS ARE DRY.(E.I)
K. ALL LOCATIONS WHERE BEDROCK IS REMOVED SHALL BE FREE DRAINING SO THAT NO POCKETS OF UNDERGROUND WATER COLLECT.
L. ALL EXPOSED EDGES OF CONCRETE MEMBERS SHALL BE CHAMFERED 3/4" UNLESS SHOWN OTHERWISE ON DRAWINGS.
M. INTERIOR CONCRETE SLABS SHALL BE MOIST CURED CONTINUOUSLY FOR 7 DAYS BY PLACING WATER OVER SLAB AFTER FREE WATER HAS DISAPPEARED FROM EXPOSED SURFACES. PLACE MOISTURE RETAINING COVER OVER THE ENTIRE SLAB. PROVIDE PROTECTION AS REQUIRED TO PREVENT DAMAGE TO EXPOSED SURFACES.
N. CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES F, AND IN MOIST CONDITION FOR AT LEAST THE FIRST SEVEN DAYS AFTER PLACEMENT.
O. ALL EMBEDMENTS IN CONCRETE, INCLUDING ANCHOR BOLTS, SHALL BE FIRMLY SECURED BY THE WIRE TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT.
P. CONSOLIDATE ALL CONCRETE WITH A VIBRATOR OR OTHER MEANS RECOMMENDED BY ACI 301. HONEYCOMBED SURFACES WILL NOT BE PERMITTED.
Q. SEE ARCHITECTURAL DRAWINGS FOR DOOR AND WINDOW OPENINGS, DRIPS, WASHES, REGLETS, CONCRETE FINISHES, MASONRY ANCHORS, AND FOR MISCELLANEOUS EMBEDDED PLATES, BOLTS, ANCHORS, ANGLES, ETC. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF DRAINS. SLOPE SLABS UNIFORMLY TO DRAINS.
R. LIGHTWEIGHT GYPCRETE IS TO BE INSTALLED AFTER THE INSTALLATION OF THE INTERIOR WALL FRAMING AND RADIAN HEATING. THE GYPCRETE DOES NEED TO BE INSTALLED BEFORE THE INSTALLATION OF THE GYPSUM SHEATHING ON THE WALLS IN ORDER TO ELIMINATE MOLD DEVELOPMENT IN SHEATHING. FOLLOW THE MANUFACTURERS RECOMMENDATIONS FOR FURTHER INSTALLATION REQUIREMENTS.

3.03 CONTROL JOINTS

- A. PLACE CONTROL JOINTS WHERE SHOWN ON THE PLANS. SLAB SECTIONS FORMED WITH CONTROL JOINTS SHOULD BE SQUARE OR NEARLY SQUARE.
B. SAW CUT JOINTS IN CONCRETE, AT EACH CONTROL JOINT LOCATION, AS SOON AS SLAB WILL SUPPORT THE WEIGHT OF THE SOFF-CUT SAW AND OPERATOR. (NORMALLY WITHIN 2 HOURS AFTER FINISHING AT CONTROL JOINT LOCATION). THE DEPTH OF CUT SHALL BE 1" TO 1 1/4". USE 3/8" DIAMETER SONOFLOAM CLOSED CELL BACKER-ROD AND SONOLASTIC SL 2 SEALANT.
C. SEAL CONTROL JOINTS TO PREVENT SPALLING OF THE CONCRETE.

3.04 CONCRETE TESTING

- A. FOUR CONCRETE TEST CYLINDERS TO BE SET ASIDE FOR LABORATORY TESTING EITHER EVERY 50 CUBIC YARDS FOR ONE CONTINUOUS PLACEMENT OR EACH NEW DAY PLACEMENT, WHICH EVER PRODUCES THE MOST CYLINDERS.
B. THE TESTING FOR THE FOUR CONCRETE CYLINDERS ARE TO CONSIST OF A (1) 7-DAY TEST, (2) 28-DAY TESTS, AND (1) HOLD CYLINDER. THE TESTS SHALL INCLUDE TESTING OF THE WET AND DRY DENSITY OF THE CONCRETE AND THE COMPRESSIVE STRENGTH OF EACH SPECIMEN.
C. ALL TESTING SHALL BE PERFORMED BY A LABORATORY IN COMPLIANCE WITH ASTM C495.

STRUCTURAL STEEL NOTES

PART 1 - GENERAL

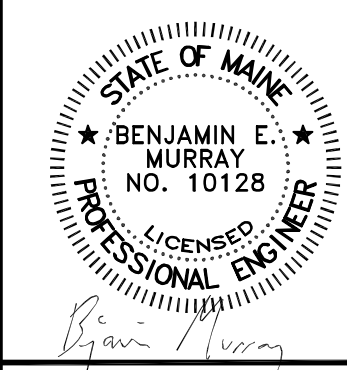
- 1.01 STANDARD SPECIFICATIONS:
A. FABRICATION, ERECTION AND WELDING IN ACCORDANCE WITH THE SPECIFICATIONS SET FOR IN THE STEEL CONSTRUCTION MANUAL THIRTEENTH EDITION ADOPTED 2005 INCLUDING ALL PUBLISHED SUPPLEMENTS.
B. WELDING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY "STRUCTURAL WELDING CODE", AWS D1.1 (LATEST EDITION). ALL WELDING 1/4" FILLET OR LARGER.
C. BOLTING OF STRUCTURAL JOINTS SHALL BE IN ACCORDANCE WITH "AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" (LATEST EDITION).
D. NO CHANGE IN SIZE OR POSITION OF THE STRUCTURAL ELEMENTS SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
1.02 SUBMITTALS:
A. SUBMIT SHOP DRAWINGS FOR REVIEW.
1.03 PRODUCT HANDLING:
A. STORE STRUCTURAL STEEL MEMBERS AT THE PROJECT SITE ABOVE GROUND ON PLATFORMS, SKIDS, OR OTHER SUPPORTS.
B. PROTECT STEEL FROM CORROSION.

PART 2 - PRODUCTS

- 2.01 MATERIALS:
A. STEEL SHAPES WILL BE ASTM A992 GRADE 50.
B. STEEL BARS, ANGLES, AND PLATES WILL BE ASTM A-36.
C. STRUCTURAL TUBING AND COLUMNS WILL BE ASTM 500, GRADE B.
D. ANCHOR BOLTS WILL BE ASTM A-307, GRADE A.
E. HIGH STRENGTH BOLTS WILL BE ASTM A-325, TYPE 1 OR 2.
F. WELDING WILL BE PERFORMED WITH 70 KSI WIRE OR ELECTRODES.
G. SHOP PAINT TO BE TMECE 88 RED METAL PRIMER, OR EQUIVALENT APPROVED BY THE ENGINEER.
H. NON-SHRINK GROUT SHALL BE 7000 PSI (MIN.) COMPRESSIVE STRENGTH.
I. PLACE NON-SHRINK GROUT UNDER ALL COLUMN BASE PLATES BEFORE ADDING ANY VERTICAL LOADS.
J. ALL WORK AND MATERIALS PERTAINING TO METAL DECK SHALL CONFORM TO STEEL DECK INSTITUTE CODES, SPECIFICATIONS AND RECOMMENDATIONS. METAL DECK SHALL BE GALVANIZED.

PART 3 - EXECUTION

- 3.01 FABRICATION:
A. FABRICATE STRUCTURAL STEEL IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS.
B. SHOP PAINT SURFACES OF ALL STEEL WORK WITH FABRICATOR'S STANDARD RUST INHIBITIVE PAINT, MINIMUM 2.0 MIL THICK.
C. SHOP CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE MADE BY WELDING.
D. ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED EXCEPT THAT STRUCTURAL STEEL TO BE FIREPROOFED SHALL NOT BE PRIMED.
E. CONNECTIONS SHOWN ON THESE DRAWINGS ARE GENERALLY SCHEMATIC. THEY ARE INTENDED TO DEFINE THE SPATIAL RELATIONSHIP OF THE FRAMED MEMBERS AND SHOW A FEASIBLE METHOD OF MAKING THE CONNECTION. A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MAINE SHALL BE RETAINED BY THE FABRICATOR SHALL DESIGN ANY CONNECTION THAT IS NOT SHOWN, OR IS NOT COMPLETELY DETAILED ON THE STRUCTURAL DRAWINGS.
F. SUBSTANTIAL ALTERATIONS OF SCHEMATIC CONNECTION DETAILS MAY IMPACT ARCHITECTURAL CONCEPT AND SHALL NOT BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
G. MINIMUM CONNECTION PLATE THICKNESS SHALL BE 1/4 INCH.
H. FOR ALL NON-COMPOSITE BEAMS, THE BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTION SHALL DEVELOP THE END REACTION OF THE CONNECTED BEAM. THE END REACTION OF THE CONNECTED BEAM SHALL BE ASSUMED EQUAL TO ONE-HALF THE UNIFORM LOAD CARRYING CAPACITY OF THE BEAM ASSUMING FULL LATERAL SUPPORT, AS GIVEN IN PART 2 (BEAMS AND GIRDERS) OF AISC MANUAL, 9TH EDITION. A MINIMUM SHEAR CAPACITY OF 12 KIPS SHALL BE PROVIDED FOR ALL BEAMS GREATER THAN 8" DEEP AND 8 KIPS FOR BEAMS 8" DEEP OR LESS.
I. 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 THE FIELD WILL NOT BE PERMITTED, UNLESS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.
J. ALL BEAMS AND COLUMNS ENCASED IN MASONRY OR CONCRETE SHALL BE COVERED WITH A COAL TAR EPOXY COATING, 1/8" THICK, OR SHALL BE GALVANIZED.
3.02 ERECTION:
A. THE STRUCTURAL STEEL SHALL BE ERECTED PLUMB AND TRUE TO THE LINES AND ELEVATIONS INDICATED ON THE DRAWINGS.
B. ERECTION TOLERANCES SHALL BE WITHIN THE LIMITS SPECIFIED IN THE "AISC CODE OF STANDARD PRACTICE" (LATEST EDITION).
C. TEMPORARY CONNECTIONS SHALL BE ADEQUATE TO SAFELY SUPPORT ALL DEAD LOAD AND ERECTION IMPOSED STRESSES.
D. TEMPORARY BRACING SHALL BE PROVIDED, WHEREVER NECESSARY TO OLD THE STEEL IN A HORIZONTAL AND VERTICAL PLANE UNTIL PERMANENT BOLTING HAS BEEN COMPLETED.
E. BOLTS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND BROUGHT TO SNUG TIGHT CONDITION. ENLARGEMENT OF HOLES BY BURNING WITH A TORCH SHALL NOT BE ALLOWED. ALL STEEL WITH BURNT HOLE ENLARGEMENTS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
G. STRUCTURAL STEEL WEB PENETRATIONS SHALL NOT EXCEED 2" DIAMETER. PENETRATIONS SHALL BE DRILLED.



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Table with columns for DATE, REVISIONS, NO.

NOTES
DRAWN BY: JPK
CHECKED BY: BEM
DATE: AUGUST 20, 2013

CLIENT & PROJECT: 53 BAXTER BOULEVARD 51 BAXTER LLC
LOCATION: 53 BAXTER BOULEVARD
TOWN: PORTLAND COUNTY: CUMBERLAND STATE: MAINE

PROJ. NO. 2013-169

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