GENERAL

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO:
   - 2009 INTERNATIONAL BUILDING CODE, MAINE UNIFORM BUILDING CODE & ENERGY CODE
   - ANSI/ASCE 7-05
   - ACI 318-08 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
   - ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
   - AISC STEEL CONSTRUCTION MANUAL, 13TH EDITION
   - SJI 2005 EDITION STEEL JOIST MANUAL
   - ACI 530-08/ASCE 5-08/TMS 402-08 "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES"

ANY DISCREPANCIES BETWEEN THE ABOVE LISTED CODES AND THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH AFFECTED WORK.

2. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE SUCH TRADE IN THE STATE IN WHICH THE PROJECT IS LOCATED.

3. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS IN ADDITION TO SPECIFICATIONS AND ANY SHOP DRAWINGS PROVIDED BY SUBCONTRACTORS AND SUPPLIERS.

4. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR (G.C.) AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED PART OF WORK.

5. UNLESS OTHERWISE NOTED, DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR DETAILS.

6. THESE DRAWINGS DO NOT SHOW SIZE, LOCATION, OR TYPE OF OPENINGS IN THE FOUNDATION SYSTEM FOR ELECTRICAL, PLUMBING, OR MECHANICAL EQUIPMENT. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING OF THESE ITEMS.

7. ALL SHOP DRAWINGS PROVIDED BY OTHERS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO THE FABRICATION OF MATERIAL OR THE PURCHASE OF NON-RETURNABLE STOCK. QUANTITY AND DIMENSIONAL REVIEW IS THE CONTRACTOR'S RESPONSIBILITY.

8. PERIMETER DRAINS ARE REQUIRED AS SHOWN ON DRAWINGS AND REQUIRED IN GEOTECHNICAL REPORT.

9. ANY AND ALL TEMPORARY BRACING OR SHORING WHICH IS NEEDED TO HOLD THE STRUCTURE IN A SAFE AND STABLE POSITION UNTIL THE BUILDING IS COMPLETE, IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. CONSULT INDEPENDENT ENGINEER IF DESIGN ASSISTANCE OR REVIEW IS NEEDED.

10. THE BUILDING PERMIT APPLICANT (e.g. OWNER, CONTRACTOR) MUST PROVIDE SPECIAL INSPECTIONS PER THE REQUIREMENTS OF CHAPTER 17 OF THE 2009 INTERNATIONAL BUILDING CODE AND FURNISH INSPECTION REPORTS TO THE CODE OFFICIAL AND TO THE ENGINEER OF RECORD. THE TESTING/INSPECTION AGENCY(S) MUST BE APPROVED BY THE ENGINEER OF RECORD. A SCHEDULE OF SPECIAL INSPECTIONS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL, OR PROVIDED BY ENGINEER UPON REQUEST.

DESIGN LOADS

1. THE STRUCTURE IS DESIGNED IN ACCORDANCE WITH IBC 2009 TO CARRY ALL THE DEAD LOADS OF THE VARIOUS STRUCTURAL AND ARCHITECTURAL SYSTEMS AND THE FOLLOWING LIVE LOADS:

<u>LIVE</u>

VEHICLE PARKING = 40 PSF   STAIRS = 100PSF

<u>SNOW</u>

BASIC GROUND SNOW LOAD = 60 PSF
Ce = 1.0
Ct = 1.2
Is = 1.0
Pf = 51 PSF

<u>WIND</u>

WIND SPEED = 100 MPH
EXPOSURE = C
Iw = 1.0

<u>SEISMIC</u>

Ss = 0.314   SDs = 0.324
S1 = 0.077   SD1 = 0.123

SITE CLASS = D
SEISMIC DESIGN CATEGORY B

<u>BASIC SEISMIC FORCE RESISTING SYSTEM-ORDINARY REINFORCED CONCRETE SHEAR WALLS</u>

R = 4.0
Cs = 0.081
Ie = 1.0

SOIL BEARING

1. THE PARKING GARAGE AND MIXED USE BUILDING MAY BE SUPPORTED ON SPREAD FOOTINGS FOUNDED ON PROPERLY PREPARED SUBGRADES. FOOTINGS FOUNDED ON BLASTED BEDROCK SHALL BE CHOKED WITH 3/4" CRUSHED STONE TO FILL VOIDS. FOOTINGS FOUNDED ON UNCONTROLLED FILLS AND NATIVE SANDY SOILS MUST BE IMPROVED WITH RAMMED AGGREGATE PIERS (RAPs). FOOTINGS FOUNDED ON INTACT BEDROCK MAY USE THE HIGHER UNDISTURBED BEDROCK BEARING PRESSURE PROVIDED HEREIN. FOOTINGS FOUNDED ON BLASTED OR DISTURBED BEDROCK MAY BE DESIGNED CONSIDERING THE LOWER BEARING PRESSURE PROVIDED HEREIN. THE UNDERLYING SOILS AND THE STRUCTURAL FILL SHALL HAVE A MINIMUM SAFE LOAD BEARING CAPACITY OF 4000 PSF. FOLLOW RECOMMENDATION OF GEOTECHNICAL REPORT FOR PREPARATION, BACKFILL, COMPACTION, ETC.

2. REMOVE ALL EXISTING TOPSOIL, PAVEMENT, ORGANIC MATERIALS, OR OTHER SOIL THAT APPEAR TO BE UNSUITABLE PRIOR TO PREPARING THE FOOTING GRADE.

3. IF ANY ADVERSE SOIL CONDITIONS ARE ENCOUNTERED WHICH EXTEND BELOW FOOTING LEVEL, SUCH AS THOSE LISTED ABOVE, THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY FOR DETERMINATION OF HOW TO REMEDY THE CONDITION BEFORE CONTINUATION OF THE WORK.

4. NO FOOTINGS SHALL BE PLACED IN WATER OR ON FROZEN GROUND. ALL EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN TO A MINIMUM OF 4'-6" OR 2'-6" WHERE PINNED TO LEDGE FEET BELOW FINISHED, ADJACENT EXTERIOR GRADE.

5. REFER TO GEOTECHNICAL REPORT BY S.W. COLE ENGINEERING, INC, DATED AUGUST 31, 2015 FOR ALL INFORMATION REGARDING EXCAVATION, BACKFILL, SUBGRADE PREPARATION, FILL MATERIALS, DRAINAGE, ETC.

6. REFER TO GEOTECHNICAL REPORT RECOMMENDATIONS FOR SUBGRADES BENEATH FOOTINGS, INTERIOR SLABS, AND EXTERIOR SLABS.

REINFORCING STEEL

1. ALL REINFORCING SHALL BE DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60.

2. WELDED WIRE FABRIC REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A1064. USE FLAT SHEETS ONLY.

3. ALL REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH THE LATEST ACI DETAILING MANUAL.

4. WHERE CONTINUOUS BARS ARE CALLED FOR, INDICATED, REQUIRED, THEY SHALL RUN CONTINUOUSLY AROUND CORNERS, LAPPED AT NECESSARY SPLICES, SPLICES STAGGERED AND HOOKED AT DISCONTINUOUS ENDS. LAP LENGTHS SHALL BE AS SHOWN OR NOTED ON THE DRAWINGS. IF LAP/SPLICE LENGTHS ARE NOT INDICATED FOLLOW ACI STANDARDS.

SLAB-ON-GRADE CONTROL JOINTS

1. CONTROL JOINTS IN CONCRETE SLABS ARE GENERALLY SPACED IN A MANNER TO CONTROL CRACK LOCATIONS OCCURRING DUE TO CURING SHRINKAGE AND THERMAL MOVEMENT OF CONCRETE. WELDED WIRE FABRIC DOES NOT INHIBIT CRACKING, BUT HOLDS CONCRETE TIGHTLY TOGETHER AFTER CRACKING HAS OCCURRED. IN ORDER TO BETTER CONTROL RANDOM CRACKING OF CONCRETE THE FOLLOWING MEASURES ARE RECOMMENDED:
   - A) SUPPLY A WELL COMPACTED AND CONSISTENT SUBGRADE.
   - B) SUPPLY ADEQUATE CURING MEASURES. WET CURE OR USE CURING SEALERS.
   - C) LIMIT JOINT SPACING TO 2 TIMES SLAB THICKNESS IN FEET.

2. SLAB CURLING IS ALSO A PROBLEM WHICH HAS BECOME MORE PREVALENT WITH MODERN CONCRETE MIXES WHICH HAVE HIGHER STRENGTHS. THE FOLLOWING MEASURES IN ADDITION TO THOSE STATED ABOVE ARE RECOMMENDED TO LIMIT CURLING OF CONCRETE SLABS-ON-GRADE:
   - A) CURE THE SLAB PROPERLY.
   - B) USE HIGHER QUANTITY OF COARSE AGGREGATES IN THE MIX.
   - C) USE A LOWER AMOUNT OF CEMENT.

CAST-IN-PLACE-CONCRETE

1. ALL WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318-08) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301)

2. INTERIOR SLABS ON GRADE TO BE OF THICKNESS SHOWN ON DRAWINGS WITH CONCRETE FIBER REINFORCING. DOSAGE TO BE AS RECOMMENDED BY THE MANUFACTURER.

3. MINIMUM CONCRETE PROTECTION FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
   - CONCRETE CAST AGAINST EARTH: 3 INCHES
   - FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
     - 1-1/2 INCHES FOR #5 BARS AND SMALLER
     - 2 INCHES FOR #6 BARS AND GREATER

4. CALCIUM CHLORIDE IS PROHIBITED IN ANY CONCRETE MIX.

5. CONCRETE SHALL BE ADEQUATELY PROTECTED FROM HOT OR COLD WEATHER AS REQUIRED BY ACI PUBLICATIONS 305 AND 306, RESPECTIVELY.

6. CONCRETE SHALL BE CONTROLLD CONCRETE, PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ACI 318 LATEST EDITION

7.FOOTINGS AND FOUNDATION WALLS
A.STRENGTH: 3,500 PSI AT 28 DAYS.
B.AGGREGATE: 3/4"
C.W/C RATIO: 0.55 MAXIMUM
D.ENTRAINED AIR: 6% +/- 1.5%
E.SLUMP: 4" MAXIMUM

8.INTERIOR SLABS ON GRADE AND ELEVATED SLABS:
A.STRENGTH: 3,000 PSI AT 28 DAYS
B.AGGREGATE: 3/4" MINIMUM, 1 1/2" MAXIMUM.
C.W/C RATIO: 0.54 MAXIMUM
D.ENTRAPPED AIR ONLY (NO ENTRAINMENT), 2.5% +/- 1%
E.SLUMP: 4" MAXIMUM

9. EXTERIOR SLABS AND ALL OTHER EXPOSED SITE CONCRETE NOT SPECIFIED ELSEWHERE:
A.STRENGTH: 5,000 PSI AT 28 DAYS
B.AGGREGATE: 3/4"
C.W/C RATIO: 0.40 MAXIMUM
D.ENTRAINED AIR: 6% +/- 1.5%
E.SLUMP: 4" MAXIMUM

NOTES:
A. ADD AIR ENTRAINING ADMIXTURE AT MANUFACTURER'S PRESCRIBED RATE TO RESULT IN CONCRETE AT POINT OF PLACEMENT HAVING THE ABOVE NOTED ARE CONTENT.
B. ADDITIONAL SLUMP MAY BE ACHIEVED BY THE ADDITION OF A MIDRANGE OR HIGH RANGE WATER REDUCING ADMIXTURE, MAXIMUM SLUMP AFTER ADDITION OF ADMIXTURE SHALL BE 6 INCHES AND 8 INCHES RESPECTIVELY.

10. SLAB CONTROL JOINTS, WHERE SHOWN, SHALL BE SAW CUT AND SHALL BE CUT IMMEDIATELY AFTER FINISHING. JOINTS SHALL BE AT MINIMUM 1/4 OF THE THICKNESS OF THE SLAB.

11. WALL CONTROL JOINTS SHALL BE PLACED AS SHOWN ON DRAWINGS OR AT A MAXIMUM OF 40 FEET ON CENTER.

12. BACKFILL INSIDE OF WALL TO SUBGRADE AND OUTSIDE OF WALL NO MORE THAT 1/3 THE WALL HEIGHT UNTIL DECK IS INSTALLED AND CONNECTED.

13. ALL CONCRETE SHALL BE CURED BY AN APPROVED METHOD AS PRESCRIBED BY ACI.

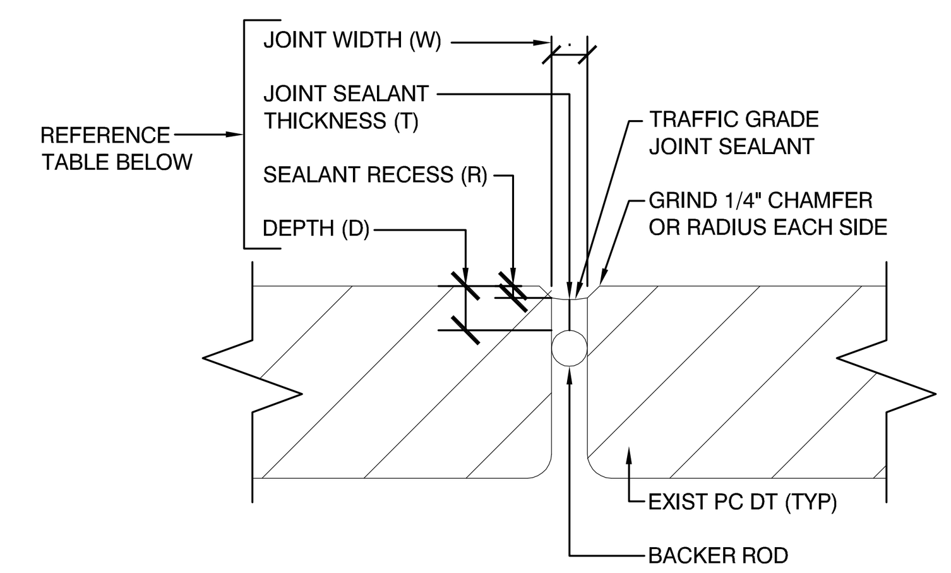
15. REFER TO GEOTECHNICAL REPORT RECOMMENDATIONS FOR SUBGRADE REQUIREMENTS BELOW EXTERIOR SLABS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE AISC MANUAL OF STEEL CONSTRUCTION, 13TH EDITION.
2. STRUCTURAL STEEL WORK SHALL CONFORM TO "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AISC CURRENT EDITION)", "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS (AISC CURRENT EDITION)", AND "STRUCTURAL WELDING CODE (AWS D1.1-04)".
3. STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:
   - a) ROLLED SHAPES AND PLATES - ASTM A36 (EXCEPT AS NOTED BELOW)
   - b) WIDE FLANGE SHAPES - ASTM A992, 50 KSI
   - c) STRUCTURAL TUBES - ASTM A500, GRADE B
   - d) ANCHOR RODS - HEADED RODS CONFORMING TO ASTM F1554, GRADE 36
4. ALL BOLTED CONNECTIONS SHALL USE NEW BOLTS. ALL BOLTS SHALL BE INSTALLED AS BEARING TO A 'SNUG-TIGHTENED' CONDITION, UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL BOLTED CONNECTIONS SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN COMPLIANCE WITH RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", DATED JUNE 23, 2000.
5. VOIDS BENEATH COLUMN BASE PLATES SHALL BE DRY PACKED WITH NON-SHRINK CONSTRUCTION GROUT BEFORE APPLICATION OF LOADS.
6. WELDED CONNECTIONS SHALL BE MADE BY AWS QUALIFIED WELDERS USING FILLER MATERIAL CONFORMING TO E70XX, LOW HYDROGEN.
7. PROVIDE TEMPORARY ERECTION BRACING TO HOLD STRUCTURAL STEEL FRAMING SECURELY IN PLACE. MAINTAIN BRACING UNTIL FLOOR AND ROOF DECKS AND PERMANENT LATERAL BRACING ARE FULLY INSTALLED. TEMPORARY BRACING REQUIREMENTS ARE NOT PROVIDED BY THE E.O.R.
8. STRUCTURAL STEEL SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS ARE FINALLY BOLTED OR WELDED.
9. ALL BOLTS AND FIELD WELDING MUST BE COMPLETED PRIOR TO RELEASING HOISTING CABLES.
10. FIELD CUTTING OF STRUCTURAL STEEL OR ANY MODIFICATIONS SHALL NOT BE MADE WITHOUT APPROVAL BY ENGINEER.
11. ALL CONNECTIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER RETAINED BY THE FABRICATOR. SHOP DRAWINGS AND STAMPED CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. FABRICATOR'S ENGINEER SHALL BE LICENSED IN MAINE AND CARRY PROFESSIONAL LIABILITY INSURANCE WITH A MINIMUM PER INCIDENT AND ANNUAL COVERAGE OF $1,000,000.
12. ALL STEEL SHALL BE HOT DIPPED GALVANIZED PER ASTM A123/A123M (LATEST EDITION).
13. THE STEEL FABRICATOR SHALL BE AISC CERTIFIED, OR BE ABLE TO DEMONSTRATE TO THE ENGINEER'S SATISFACTION THAT ALL AISC PROCEDURES FOR FABRICATION, QUALITY CONTROL, AND RECORD KEEPING ARE STRICTLY ADHERED TO. THE ENGINEER SHALL DETERMINE IF FABRICATOR QUALIFICATIONS ARE ACCEPTABLE. REFERENCE STATEMENT OF SPECIAL INSPECTIONS.
14. SHOP DRAWINGS SHALL BE PREPARED BY FABRICATOR. PHOTO COPIES OF STRUCTURAL DRAWINGS ARE NOT ACCEPTABLE.

PRECAST PRESTRESSED CONCRETE

1. PROVIDE PRECAST/PRESTRESSED CONCRETE DOUBLE TEES AS INDICATED ON STRUCTURAL DRAWINGS.
2. MANUFACTURER MUST BE APPROVED BY ENGINEER, PRIOR TO G.C. AWARDING PRECAST CONTRACT. PRECAST MANUFACTURER SHALL SUBMIT SHOP DRAWINGS, CALCULATIONS, AND ERECTION DRAWINGS, STAMPED BY A MAINE LICENSED ENGINEER, FOR REVIEW AND APPROVAL BY THE GENERAL CONTRACTOR AND ENGINEER, PRIOR TO CASTING.
3. CONFORM TO CURRENT PCI DESIGN HANDBOOK, PCI MNL 120, ACI 318-08 AND OTHER APPLICABLE REQUIREMENTS.
4. PROVIDE ALL WELD PLATES, EMBEDMENTS AND ANCHORING COMPONENTS AS REQUIRED. ALL STEEL ITEMS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL AS NOTED.
5. MINIMUM 28 DAY COMPRESSIVE STRENGTH FOR ALL PRECAST COMPONENTS SHALL BE 5000 PSI.
6. PRECAST MANUFACTURER SHALL BE A CURRENT PCI CERTIFIED PLANT.
7. PROVIDE FIRE RATING AS REQUIRED ON ARCHITECTURAL DRAWINGS FOR ALL PRECAST CONCRETE COMPONENTS.
8. ALL CONCRETE SHALL BE AIR ENTRAINED. MEETING AIR ENTRAINING REQUIREMENTS PER ACI "SPECIFICATION FOR STURCTURAL CONCRETE (ACI 301)", FOR CLASS OF CONCRETE APPLICATION. AIR ENTRAINMENT FOR EXTERIOR CONCRETE: 6% +/-1%.
9. COORDINATE WITH ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATION OF CUTS AND PENETRATIONS. INDICATE LOCATION OF ALL OPENINGS ON SHOP DRAWINGS. INDICATE IF PENETRATIONS ARE SHOP CAST OR FIELD CUT.
10. PRESTRESSING TENDONS SHALL CONFORM WITH ASTM A416, GRADE 250.



TYPICAL JOINT SEALANT DETAIL

JOINT SEALANT NOTES

<u>PREPARATION:</u>
1. JOINT DIMENSIONS: EXISTING PREPARED JOINTS SHALL CONFORM TO TABLE

JOINT DIMENSIONS				
W	D	R	T	PRIMER
<1"	5/8"	1/8"	W/2*	PER MANUF
1" - 1 1/2"	7/8"	1/8"	1/2"	PER MANUF
1 1/2" - 2"	1 1/4"	1/4"	1/2"	PER MANUF
>2"	NOTIFY ENGINEER			

2. ALL EDGES TO RECIEVE SEALANT SHALL HAVE 1/4"± CHAMFER OR RADIUS.
3. ALL JOINT SURFACES MUST BE STRUCTURALLY SOUND, FULLY CURED, CLEAN, FREE OF DIRT, MOISTURE, LOOSE PARTICLES, OIL, GREASE, ASPHALT, TAR, PAINT, WAX, RUST, WATERPROOFING, CURING AND PARTING COMPOUNDS AND MEMBRANE MATERIALS.
4. CLEAN BY GRINDING, SANDBLASTING OR WIRE BRUSHING TO EXPOSE A SOUND SURFACE FREE OF CONTAMINATION AND LAITANCE.
5. ALL JOINTS SHALL BE FREE OF MOISTURE AND/OR RUST.

<u>PRIMER</u>

1. IF PRIMER IS NOT REQUIRED BY MANUFACTURER, PROVIDE WRITTEN STATEMENT FROM MANUFACTURER INDICATING THAT THIS WILL NOT VOID MANUFACTURER'S WARRANTY.
2. PREPARE AND ALLOW FOR PRIMER TO CURE PROPERLY, PRIOR TO INSTALLING SEALANT.
3. PROVIDE A PRIMER APPROVED BY SEALANT MANUFACTURER.
4. INSTALLATION SHALL CONFORM TO MANUFACTURERS REQUIREMENTS.
5. PRIMER SHALL BE APPLIED TO ALL JOINTS 1 1/2" OR GREATER IN WIDTH.

<u>SEALANT INSTALLATION</u>

1. INSPECT ALL SURFACES PRIOR TO INSTALLING SEALANT. INSTALLATION OF SEALANT IMPLIES ACCEPTANCE OF SUBSTRATE CONDITIONS.
2. SUBSTRATE TEMPERATURE SHALL BE BETWEEN 40°F TO 70°F. INSTALLATION OF SEALANT OUTSIDE THIS RANGE SHALL BE PERMITTED ONLY IF WRITTEN INSTALLATION PROCEDURES ARE SUBMITTED FROM SEALANT MANUFACTURER WITH ASSURANCE THAT THIS INSTALLATION WILL NOT VOID MATERIAL & INSTALLATION WARRANTY.
3. INSTALL BACKER ROD AND BOND BREAKER TAPE OVER DT-DT FLANGE CONNECTIONS IF REQUIRED.
4. REFER TO MANUFACTURERS DATA SHEETS AND MATERIAL SAFETY DATA SHEETS FOR ANY NECESSARY PRECAUTIONS REGARDING EXPOSURE TO ALL MATERIALS.
5. MULTIPLE COMPONENT PRODUCTS SHALL BE MIXED IN STRICT ACCORDANCE WITH SEALANT MANUFACTURERS RECOMMENDATIONS. MIX ONLY AS MUCH SEALANT AS CAN BE INSTALLED WITHIN THE SPECIFIED POT-LIFE OF THE MATERIAL.
6. SELECT PROPER NOZZLE FOR JOINT BEING GUNNED AND HOLD GUN AT 45° ANGLE FROM JOINT. PLACE NOZZLE INTO BOTTOM OF JOINT AND FILL ENTIRE JOINT. KEEPING NOZZLE DEEP IN SEALANT, CONTINUE WITH STEADY FLOW OF SEALANT PRECIEING THE NOZZLE TO AVOID AIR ENTRAPMENT.
7. TOOL JOINTS AS REQUIRED WITH A DRY TOOL FREE OF TOOLING AIDS. PROVIDE A CONCAVE SHAPE WITH RECESS AS NOTED IN THE TABLE ABOVE.
8. INSTALL SEALANT EVENLY AND RECESS BELOW SURFACE PER TABLE: <u>DO NOT OVERFILL JOINT.</u>
9. CURING: ALL JOINTS MUST BE PROTECTED FROM TRAFFIC AND TOTAL WATER IMMERSION FOR THE DURATION OF THE MANUFACTURER'S SPECIFIED CURE TIME. SEALANT CONTRACTOR SHALL SUPPLY ALL NECESSARY PROTECTION AGAINST MOISTURE AND ALLOW UNITERRUPTED TRAFFIC FLOW THROUGH THE GARAGE.
10. CLEAN UP SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS AND ALL GOVERNMENTAL REGULATIONS.
11. SELF LEVELING SEALANTS SHALL NOT BE USED ON THIS PROJECT.
12. WATER TEST EACH SEALANT JOINT SURFACE FOR LEAKS FOR A MINIMUM OF 4 HOURS ENSURING FULL COVERAGE OF JOINT SURFACE. REPAIR AND REPEAT WATER TESTS AT LEAKING JOINTS UNTIL SEALANT JOINT INSTALLATION IS WATERTIGHT.

<u>MOCKUP</u>

1. A MOCKUP OF A TYPICAL JOINT SHALL BE COMPLETED PRIOR TO COMMENCING WORK. MOCKUP SHALL BE REVIEWED BY SEALANT MANUFACTURER, SEALANT INSTALLER, ENGINEER AND OWNER. PROVIDE $\frac{1}{2}$ JOINT MOCKUP. CONTRACTOR SHALL ALLOW ENGINEER TO PERFORM ADHESION TESTING (SEE SPECIFICATIONS).

MASONRY NOTES

1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1-LATEST.
2. ALL CONCRETE MASONRY UNITS WALL BE ASTM C90 GRADE N, TYPE I STANDARD WEIGHT BLOCKS INCLUDING STRETCHERS AND CORNER BLOCKS. MINIMUM PRISM STRENGTH OF BLOCK SHALL BE F'M = 1500 PSI IN 28 DAYS.
3. MORTAR SHALL CONFORM TO ASTM SPECIFICAITON C270, TYPE M OR S.
4. GROUT SHALL CONFORM TO ASTM-C476.
5. REINFORCING FOR BOND BEAMS, LINTEL BLOCKS AND VERTICAL WALL REINFORCING SHALL BE BILLET STEEL CONFORMING TO ASTM A615, GRADE 60 .
6. HORIZONTAL JOINT REINFORCING SHALL BE DUR-O-WAL TRUSS DESIGN, STANDARD CLASS MILL GALVANIZED WITH 3/16" DIAMETER SIDE RODS AND 9 GUAGE CROSS TIES, U.N.O. REINFORCING SHALL BE PLACED IN MASONRY WALLS AT EVERY SECOND BLOCK COURSE.
7. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS OTHERWISE NOTED. PROVIDE FULL MORTAR COVERAGE ON ALL WEBS AND FACE SHELLS. PROVIDE CORNER BLOCKS AND END BLOCKS TO FINISH ALL 90 DEGREE CORNERS AND WALL OPENINGS.
8. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS FOR BARS #5 AND SMALLER. PROVIDE MECHANICAL SPLICES RATED FOR 125% THE BAR YIELD STRENGTH FOR BARS #6 AND LARGER. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT.
9. CELLS TO BE GROUTED SHALL BE 2-CELL BLOCK. ALIGN CELLS TO MAINTAIN A CLEAR UNOBSTRUCTED, CONTINUOUS VERTICAL CHASE. CELLS MUST BE KEPT CLEAN OF PROTRUSIONS OR FINS OF MORTAR. FILL CELLS OF MASONRY UNITS AND WALL CAVITIES WHERE INDICATED WITH 2,500 PSI GROUT. MAXIMUM GROUT LIFT WITHOUT CLEAN-OUTS SHALL BE 4'-0". HIGH LIFT GROUTING SHALL CONFORM TO CODE REQUIREMENTS WITH A MINIMUM CEMENT CONTENT OF 8 SACKS PER CUBIC YARD. SUPPORT ALL VERTICAL BARS IN CENTER OF GROUTED CELLS WITH VERTICAL BAR POSITIONER.
10. FIELD PENETRATIONS THROUGH BLOCK WALLS SHALL NOT BE MADE THROUGH BOND BEAMS, LINTELS OR GROUTED CELLS.

BECKER STRUCTURAL ENGINEERS
75 York Street, Portland, Maine 04101
207.879.1838 ▪ beckerstructural.com

OPECHEE CONSTRUCTION CORPORATION
11 CORPORATE DRIVE ▪ BELMONT ▪ NH 03220
PHONE (603) 527-9090 ▪ WWW.OPECHEE.COM

STATE OF MAINE
TODD M. NEAL
NO. 9406
LICENSED PROFESSIONAL ENGINEER

Mixed Use Development

York & High Street
Portland, Maine

REVISION:
03/18/16 BSE CONSTRUCTION MARKUPS

ISSUED:
FOR STRUCTURAL ENGINEER REVIEW 01/21/16
FOR BUILDING PERMIT 02/26/16
03/24/16 FOR CONSTRUCTION PER BSE

project architect: KAK
drawn by: JJD

PRKG. GARAGE STRUCTURAL NOTES

sheet number:
GS0.01

Thursday, March 24, 2016 1:23:37 PM