

# **GENERAL NOTES**

A. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT TO ALL SUBCONTRACTORS AND SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS.

B. THE GENERAL CONTRACTOR SHALL COMPARE ALL CONTRACT DRAWINGS AND REPORT ANY DISCREPANCY BETWEEN DISCIPLINES AND WITHIN A GIVEN DISCIPLINE TO THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND ERECTION.

C. IF A CONFLICT EXISTS AMONG THE STRUCTURAL DRAWINGS, GENERAL NOTES, OR THE SPECIFICATIONS, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE ENGINEER, SHALL

D. ALL DIMENSIONS, ELEVATIONS, AND ANY OTHER CONDITIONS OF ANY EXISTING STRUCTURES OR OTHER FEATURES SHALL BE VERIFIED BY THE GENERAL CONTRACTOR AND ANY DISCREPANCIES WITH THE CONTRACT DRAWINGS REPORTED TO THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. DURING THE CONSTRUCTION PROCESS, IT SHALL BE SOLELY THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE AND TO PROTECT FROM DAMAGE ANY PORTIONS THAT ARE TO REMAIN.

E. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS AND METHODS AND FOR SAFETY PRECAUTIONS AND PROGRAMS.

F. BRITT, PETERS & ASSOCIATES, INC. SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSION OF THE CONTRACTOR OR FOR THEIR FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

G. THE BUILDING OWNER SHALL PROVIDE PERIODIC MAINTENANCE TO INSURE STRUCTURAL INTEGRITY. SUCH MAINTENANCE SHALL INCLUDE BUT NOT LIMITED TO PAINTING OF STEEL, PROTECTIVE COATING FOR CONCRETE, SEALANTS, CAULKED JOINTS, EXPANSION JOINTS, CONTROL JOINTS, SPALLS AND CRACKS IN CONCRETE, AND PRESSURE WASHING OF EXPOSED STRUCTURAL ELEMENTS.

### II. DESIGN CRITERIA

A. THE CONTRACT DOCUMENTS ARE BASED ON THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE.

B. DEAD LOADS TYPICAL ROOF SYSTEMS: 10 PSF TOTAL C. LIVE LOADS 10 PSF TOTAL TYPICAL ROOF SYSTMES:

D. DESIGN SNOW LOAD: GROUND SNOW LOAD, FLAT ROOF SNOW LOAD, 10 PSF EXPOSURE FACTOR, CE SNOW THERMAL FACTOR, 1.0 SNOW IMPORTANCE FACTOR, 1.0 RAIN ON SNOW SURCHARGE 5 PSF

E. DESIGN WIND LOADS: BASIC WIND SPEED, 90 MPH (3 SECOND GUST) WIND IMPORTANCE FACTOR,

EXPOSURE F. SEISMIC LOADS:

SHORT PERIOD SPECTRAL RESPONSE ACCELERATION, 0.556 0.150 1-SEC PERIOD SPECTRAL RESPONSE ACCELERATION, SHORT PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION, SDS 0.503 1-SEC PERIOD DESIGN SPECTRAL RESPONSE ACCELERATION, 0.220

#### III. FOUNDATIONS

A. AN ALLOWABLE BEARING CAPACITY OF 1,500PSF HAS BEEN ASSUMED AND SHALL BE CONFIRMED BY A QUALIFIED SOILS ENGINEER PRIOR TO PLACEMENT OF CONCRETE

B. ALL SOILS WORK, INCLUDING BACKFILL OF UTILITY TRENCHES AND THE VERIFICATION OF BEARING CAPACITY OF SAME SHALL BE UNDER THE DIRECTION OF A QUALIFIED SOILS ENGINEER. PROXIMITY OF UTILITY TRENCHES TO BUILDING FOUNDATION SYSTEM SHALL BE AS APPROVED BY THE SOILS ENGINEER TO INSURE INTEGRITY OF THE BEARING SOILS. C. ALL FOOTINGS SHALL BEAR ON UNDISTURBED EARTH OR ENGINEERED FILL AT ELEVATIONS SHOWN ON PLANS AND DETAILS.

D. NO FOUNDATION CONCRETE SHALL BE INSTALLED UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ALL CONFLICTS THAT EXIST BETWEEN FOOTINGS AND

UTILITIES. E. ALL FOUNDATIONS OR PORTIONS THEREOF, BELOW GRADE MAY BE EARTH FORMED BY NEAT EXCAVATIONS. F. UNLESS OTHERWISE SHOWN, ALL FOOTINGS SHALL BE CENTERED ON WALLS AND/OR

COLUMNS. G. THE CONTRACTOR SHALL DETERMINE THE EXTENT OF CONSTRUCTION DEWATERING REQUIRED FOR THE EXCAVATION. THE CONTRACTOR SHALL SUBMIT TO THE GEOTECHNICAL ENGINEER FOR REVIEW THE PROPOSED PLAN FOR CONSTRUCTION

DEWATERING, PRIOR TO EXCAVATION. H. FOOTINGS SHALL NOT BE PLACED ON FROZEN SUBGRADE OR IN STANDING WATER.

A. CONCRETE SHALL CONFORM TO THE FOLLOWING REQUIREMENTS: CONCRETE 28 DAY COMPRESSIVE STRENGTH AND DENSITY REQUIREMENTS: STRENGTH CONC.

a. ALL CONCRETE NOT OTHERWISE SPECIFIED

1. NWT = NORMAL WEIGHT CONCRETE 2. ALL CONCRETE SHALL HAVE ALLOWABLE UNIT SHRINKAGE OF 0.045% AT 28 DAYS.

3. EXTERIOR CONCRETE SLABS SHALL HAVE 4% TO 6% ENTRAINED AIR B. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE CURRENT "ACI MANUAL OF

G. NO HOLES OR OPENINGS THROUGH FOUNDATION WALLS AND/OR FOOTINGS WITHOUT

3000

CONCRETE PRACTICE". C. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR II. D. ALL AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM C 33. E. ALL REINFORCEMENT SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

 ALL REINFORCING, UNO: ASTM A615 GRADE 60 F. REINFORCEMENT DETAILING: 1. REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315.

ENGINEER'S APPROVAL H. ALUMINUM SHALL NOT BE EMBEDDED IN ANY CONCRETE.

#### V. STRUCTURAL STEEL

A. ALL HOT ROLLED STEEL PLATES, SHAPES, SHEET PILING, AND BARS SHALL BE NEW STEEL CONFORMING TO ASTM

SPECIFICATION A6-98A. B. STRUCTURAL STEEL SHALL BE AS FOLLOWS, U.N.O.:

1. STRUCTURAL RECTANGULAR TUBING ASTM A500 GRADE B FY = 46 KSI

2. ALL OTHER STRUCTURAL STEEL ASTM A36

3. CONNECTION MATERIALS: a. ALL CONNECTION MATERIAL, U.N.O.: ASTM A36 UNLESS A HIGHER GRADE OF STEEL IS REQUIRED BY STRENGTH AND PROVIDED THE RESULTING SIZES ARE COMPATIBLE WITH THE CONNECTED MEMBERS.

C. STRUCTURAL STEEL SHALL MEET THE LATEST AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". D. THE CENTERLINES OF ALL COLUMNS AND BEAMS SHALL BE LOCATED ON COLUMN LINES UNLESS OTHERWISE SHOWN.

1. BOLTS SHALL BE A325N TYPE 1, UNLESS OTHERWISE INDICATED.

2. ALL BOLTS SHALL BE SNUG TIGHT U.N.O. BOLTS SHALL BE TIGHTENED UNTIL ALL PLIES OF THE JOINT ARE IN FIRM CONTACT

3. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 36, UNLESS NOTED OTHERWISE.

4. THREADED RODS SHALL CONFORM TO ASTM A36 5. WELDING SHALL CONFORM TO THE STANDARDS SET FORTH IN AWS PUBLICATION, "WELDING IN BUILDING

CONSTRUCTION". 6. UNLESS NOTED OTHERWISE, ELECTRODES FOR WELDING SHALL CONFORM TO E70XX (SMAW), F7XX-EXXX (SAW),

ER70S-X (GMAW), OR E7XT-X (FCAW). 7. FIELD WELD REQUIREMENTS AND WHICH ARE APPLICABLE TO THE SPECIFIC CONDITIONS SHOWN.

8. ALL ERECTION DRAWINGS SHALL SHOW ALL FIELD WELDS REQUIRED. F. GROUT BELOW BASE PLATES SHALL BE NON-METALLIC, NON-SHRINK GROUT WITH A MINIMUM STRENGTH OF 6000 PSI WHEN BEARING ON 3000 PSI CONCRETE OR LESS, STRENGTH OF 8000 PSI WHEN BEARING ON CONCRETE BETWEEN

#### VI. DEMOLITION

A. REMOVE STRUCTURE FROM TOP DOWN. DO NOT ALLOW DEBRIS TO PILE UP OR FALL ON SLABS WHICH ARE TO REMAIN IN PLACE. PROVIDE PLYWOOD AND/OR PLANKING TO CUSHION AND PROTECT SLABS FROM DAMAGE. REPAIR OR REPLACE DAMAGED SLABS, BEAMS, OR GIRDERS AS DIRECTED BY OWNER.

B. THESE DRAWINGS ARE INTENDED TO DEFINE LIMITS OF REMOVAL OF STRUCTURAL ELEMENTS AND PRECAUTIONS TO BE TAKEN TO PREVENT DAMAGE TO STRUCTURE WHICH WILL REMAIN. THE GUIDELINES LISTED ARE TO BE FOLLOWED IN THE REMOVAL OF STEEL MEMBERS:

1. IN ORDER TO PREVENT DAMAGE TO COLUMNS WHEN REMOVING ANY BEAMS OR GIRDERS CONNECTED TO A COLUMN WHICH IS TO REMAIN, DO NOT BURN OFF CONNECTION TO COLUMN AT THE FACE OF COLUMN FLANGE OR WEB. OUTSTANDING LEGS OF CONNECTION ANGLES MAY BE BURNED OFF, BUT ANY LEG OR PLATE IN CONTACT WITH THE COLUMNS (WELDED OR BOLTED) SHALL NOT BE BURNED. SUCH MATERIAL SHALL BE LEFT IN PLACE, AND WILL BE COVERED BY FIREPROOFING MATERIAL.

2. SIMILARLY, WHERE BEAMS WHICH ARE TO BE REMOVED, ARE CONNECTED TO GIRDERS OR OTHER BEAMS WHICH WILL REMAIN, DO NOT BURN OFF CONNECTIONS AT THE FACE OF THE MEMBER WHICH WILL REMAIN.

3. BOLTED CONNECTIONS MAY BE REMOVED BY WITHDRAWING BOLTS AFTER SUPPORTED MEMBERS HAVE BEEN REMOVED. 4. ANY QUESTIONABLE LOCATIONS OR SPECIAL CONDITIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE

STRUCTURAL ENGINEER FOR CLARIFICATION. C. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND SUBMIT A WRITTEN REPORT TO THE ENGINEER FOR REVIEW AND/OR INSTRUCTION OF ACTUAL FIELD CONDITIONS, WHICH MAY VARY FROM INFORMATION, INDICATED ON DRAWINGS.

D. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING OF STRUCTURE AS REQUIRED. E. THE DETAILS AND ENGINEERING OF SHORING, BRACING AND OTHER CONSTRUCTION REQUIRED FOR SUCH WORK AND THE PHASING, STAGING, AND SEQUENCE OF SUCH OPERATION SHALL BE PREPARED IN THE FORM OF SHOP OR DETAIL DRAWINGS BY A PROFESSIONAL ENGINEER, RETAINED BY THE CONTRACTOR OR SUB-CONTRACTOR. THE DRAWINGS SHALL BE PROVIDED TO THE REGISTERED ARCHITECT OR PROFESSIONAL ENGINEER RESPONSIBLE FOR THE INSPECTION OF SUCH WORK, WHO SHALL REPORT TO THE OWNER ANY DEVIATIONS OBSERVED DURING HIS INSPECTION.

#### VII. SUBMITTALS

A. THE GENERAL CONTRACTORS SHALL REVIEW AND STAMP ALL SHOP DRAWINGS BEFORE SUBMITTING FOR REVIEW. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND/OR ENGINEER AND HAVE THE ENGINEER'S SHOP DRAWING STAMP AFFIXED PRIOR TO FABRICATION. FABRICATION AND ERECTION SHALL BE FROM REVIEWED SHOP DRAWINGS.

B. A RECORD SET OF APPROVED SHOP DRAWINGS SHALL BE KEPT IN THE FIELD BY THE GENERAL CONTRACTOR.

C. ANY DEVIATION FROM, ADDITION TO, SUBSTITUTION FOR, OR MODIFICATION TO THE STRUCTURE OR ANY PART OF THE STRUCTURE DETAILED ON THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN-WRITING" UNLESS IT IS CLEARLY NOTED THAT SPECIFIC

CHANGES ARE BEING SUGGESTED. D. THE CONTRACTOR SHALL PREPARE A LIST AND SCHEDULE OF ALL STRUCTURAL SUBMITTALS

PRIOR TO CONSTRUCTION. E. THE FOLLOWING SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR FOR THE

1. STRUCTURAL STEEL, SHOP AND ERECTION DRAWINGS (1, 3)

ROOF METAL DECK 3. ITEMS MARKED (1) SHALL HAVE SHOP DRAWINGS SEALED BY A REGISTERED ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED. ITEMS MARKED (2) SHALL BE SUBMITTED TO ENGINEER FOR OWNER'S RECORD ONLY AND WILL NOT HAVE THE ENGINEER'S SHOP DRAWING STAMP AFFIXED. ITEMS MARKED (3) SHALL HAVE DESIGN CALCULATIONS SEALED BY A REGISTERED ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED.

4. CONTRACTOR SHALL SUBMIT ONE SET OF REPRODUCIBLES AND TWO SETS OF PRINTS FOR ALL SHOP DRAWINGS SPECIFIED TO BE RETURNED BY THE ENGINEER. 5. THE OMISSION FROM THE SHOP DRAWINGS OF ANY MATERIALS REQUIRED BY THE CONTRACT

DOCUMENTS TO BE FURNISHED SHALL NOT RELIEVE THE CONTRACTOR OF THE

RESPONSIBILITY OF FURNISHING AND INSTALLING SUCH MATERIALS, REGARDLESS OF WHETHER THE SHOP DRAWINGS HAVE BEEN REVIEWED AND APPROVED. F. 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,

VIII. SPECIAL INSPECTION AND TESTING (CHAPTER 17)

ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON.

A. ALL TESTS AND INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT TESTING AND INSPECTION AGENCY. THE SPECIAL INSPECTOR FROM THIS TESTING AGENCY SHALL OBSERVE

THE WORK FOR CONFORMANCE TO THE DESIGN DRAWINGS AND SPECIFICATIONS. B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND ALL OTHER DESIGNATED INDIVIDUALS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF NOT CORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.

C. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS, SPECIFICATIONS, SOILS REPORT AND APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.

D. MASONRY WORK SHALL HAVE SPECIAL INSPECTION AS DEFINED BY THE AFOREMENTIONED BUILDING CODE.

BRITT PETERS ASSOCIATES consulting engineer

101 W. Camperdown W Greenville, SC 2960 (864) 271-8869 (864) 233-5140 Fax www.brittpeters.com



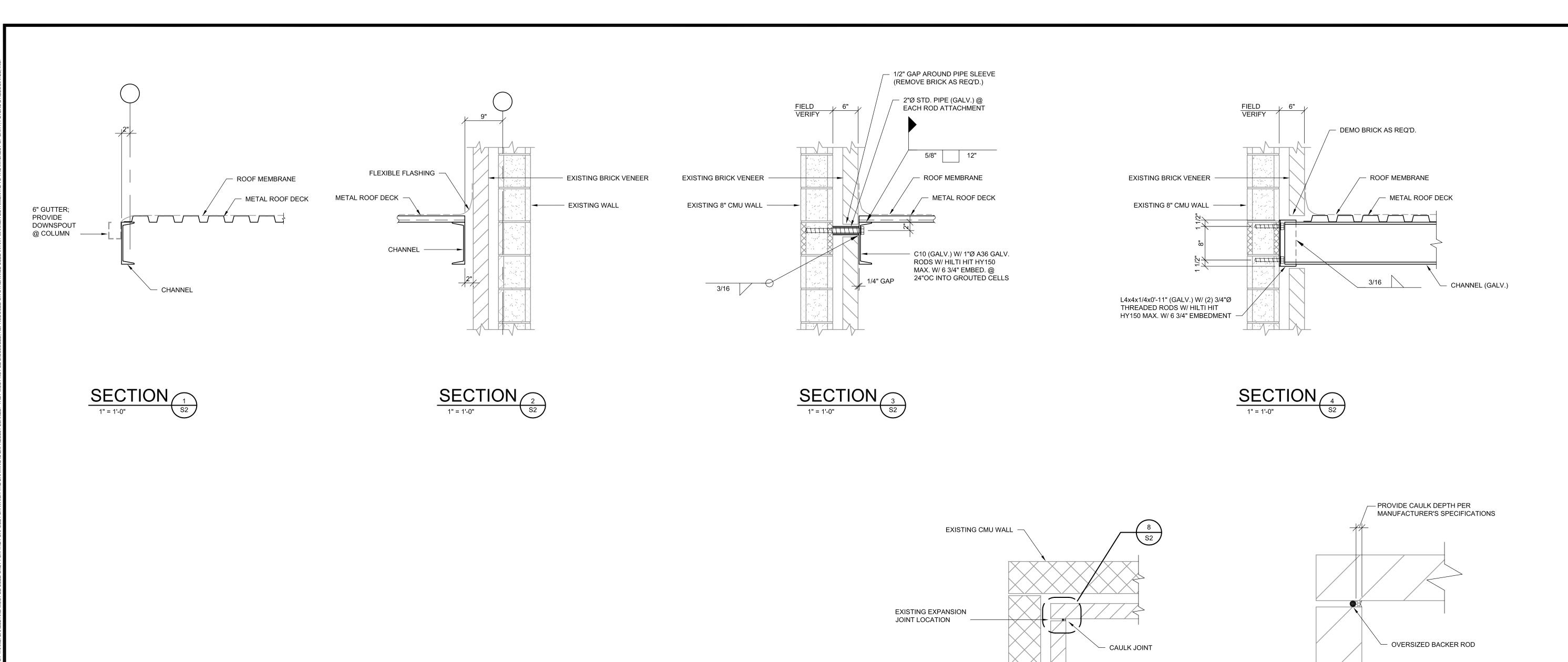


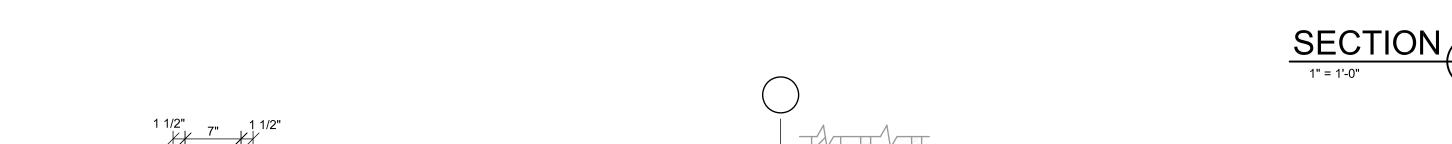
Sheet Title

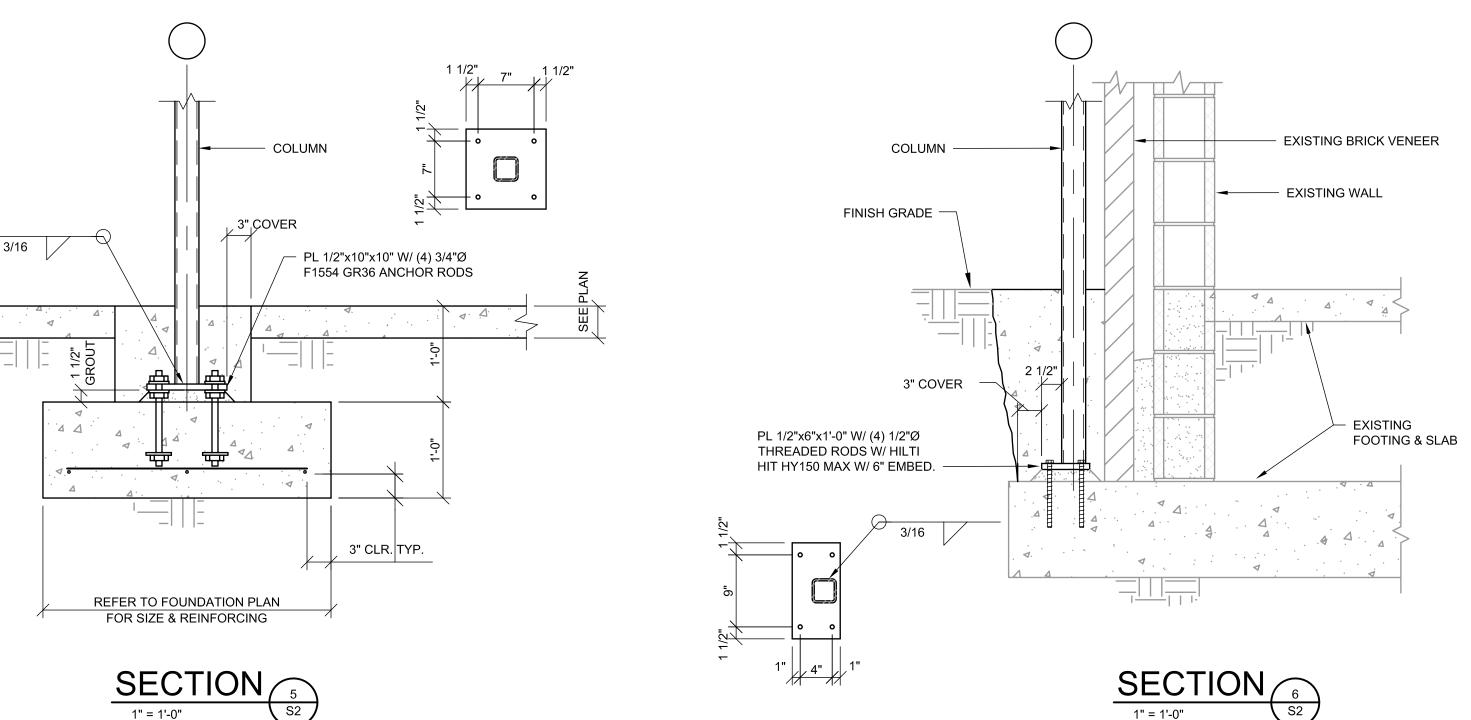
Foundation 8

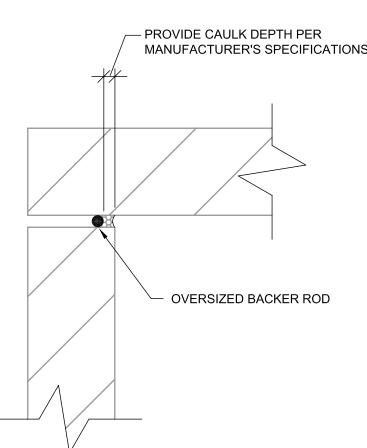
Designed Checked Date 2/19/13 13068 Job No.

Sheet No.









## SURFACE PREPARATION STEPS:

EXISTING BRICK VENEER

THOROUGHLY AND COMPLETELY REMOVE EXISTING CAULK AND BACKER ROD.
 CLEAN & PREPARE SUBSTRATE TO RECEIVE NEW CAULKING MATERIAL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

## REPAIR PROCEDURE:

SPECIFICATIONS.

- INSTALL NEW BACKER ROD, WHEN REQUIRED, PER SPECIFICATIONS.
   INSTALL PRIMER AS REQUIRED BY CAULKING MANUFACTURER'S
- SPECIFICATIONS. CAULK JOINTS SUBJECT TO TRAFFIC REQUIRE USE OF APPROPRIATE PRIMER.

  3. PROTECT CAULKING UNTIL FULLY CURED PER MANUFACTURERS

<u>NOTE</u>: REFER TO JOB SPECIFICATIONS FOR FURTHER REPAIR INFORMATION AND GUIDELINES.

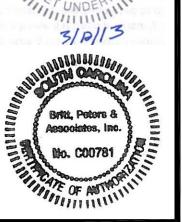




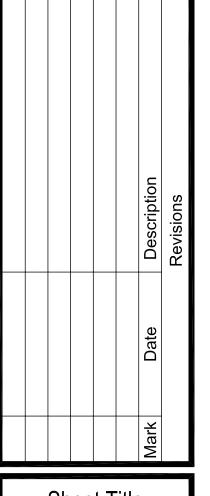
101 W. Camperdown Way Suite 601 Greenville, SC 29601 (864) 271-8869 (864) 233-5140 Fax

www.brittpeters.com



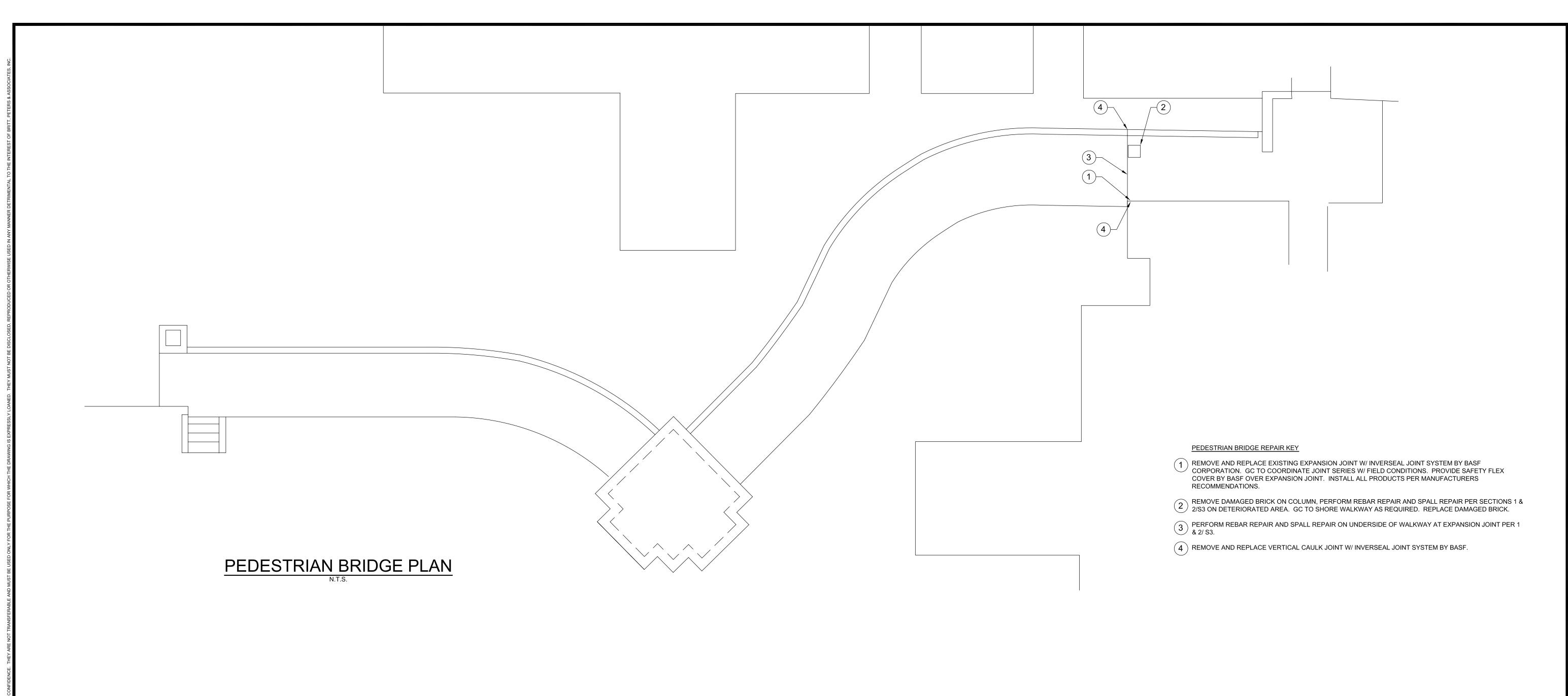


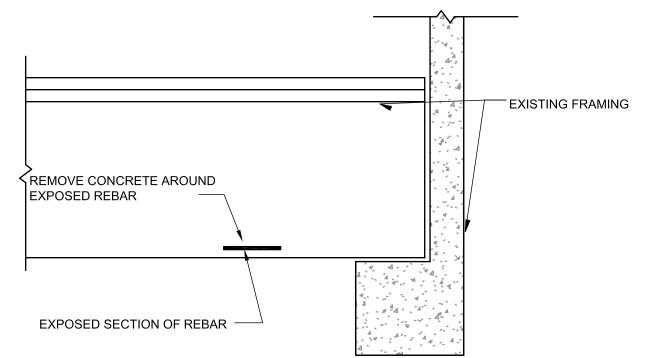
olumbia,



Sheet Title Sections

Drawn	KK
Designed	WBU
Checked	WBU
Date	2/19/13
Job No.	13068
Sheet No.	





### SURFACE PREPARATION STEPS:

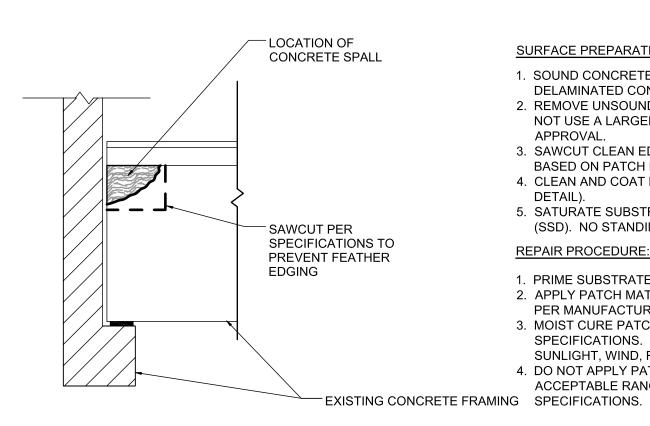
- 1. REMOVE CONCRETE SUROUNDING STEEL IN ACCORDANCE WITH PATCH MATERIAL MANUFACTURERS SPECIFICATION. (REFER TO SPALL REPAIR DETAIL)
- 2. INSPECT DAMAGED REINFORCING TO DETERMINE IF REPLACEMENT IS REQUIRED (NOTIFY ENGINEER TO CONFIRM IF REINFORCING NEEDS REPLACEMENT) 3. CLEAN REINFORCING WITH WIRE BRUSH.
- 4. PREPARE CONCRETE SURFACE (REFER TO SPALL REPAIR DETAIL).

#### REPAIR PROCEEDURE:

- 1. INSPECT REINFORCING TO DETERMINE IF BARS NEED TO BE REPLACED OR SUPPLEMENTED. 2. IF REPLACEMENT/SUPPLEMENTATION IS REQUIRED,
- CONSULT ENGINEER OF RECORD FOR APPROPRIATE SOLUTION. 3. APPLY SIKA ARMATEC 110 PROTECTIVE COATING TO
- REINFORCING. 4. PATCH AREA IN ACCORDANCE WITH SPALL REPAIR
- DETAIL.

<u>NOTE:</u> REFER TO JOB SPECIFICATIONS AND ACI CONCRETE REPAIR GUIDE (ACI 546R-04) FOR ADDITIONAL INFORMATION.





#### SURFACE PREPARATION STEPS:

- 1. SOUND CONCRETE AROUND SPALLED AREA TO ENSURE ALL DELAMINATED CONCRETE IS REMOVED.
- 2. REMOVE UNSOUND CONCRETE WITH A 15 LB CHIPPING HAMMER. DO NOT USE A LARGER HAMMER WITHOUT ENGINEER'S WRITTEN
- 3. SAWCUT CLEAN EDGES AT SPALL LOCATIONS TO A SUITABLE DEPTH BASED ON PATCH MATERIAL SPECIFICATIONS. 4. CLEAN AND COAT EXPOSED REINFORCING (REFER TO REBAR REPAIR
- 5. SATURATE SUBSTRATE TO A SATURATED SURFACE DRY CONDITION
- (SSD). NO STANDING WATER SHALL BE PRESENT. REPAIR PROCEDURE:
- 1. PRIME SUBSTRATE PER MANUFACTURER'S RECOMMENDATIONS. 2. APPLY PATCH MATERIAL. IF MULTIPLE LIFTS ARE REQUIRED, APPLY
- PER MANUFACTURER'S SPECIFICATIONS. 3. MOIST CURE PATCH MATERIAL AS DIRECTED BY MANUFACTURER'S
- SPECIFICATIONS. PROTECT NEWLY APPLIED MATERIAL FROM SUNLIGHT, WIND, RAIN AND FROST.
- 4. DO NOT APPLY PATCH MATERIAL AT TEMPERATURES OUTSIDE THE ACCEPTABLE RANGES NOTED IN THE MANUFACTURER'S



REFER TO JOB SPECIFICATIONS AND ACI RAP-3 OR RAP-6 FOR FURTHER REPAIR INFORMATION AND GUIDLINES

TYP. SPALL REPAIR DETAIL

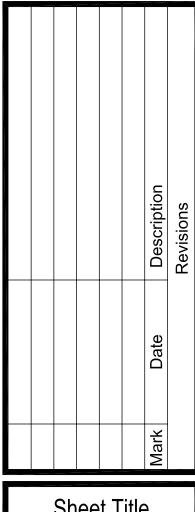
3/4" = 1'-0"



101 W. Camperdown Way Suite 601 Greenville, SC 29601 (864) 233-5140 Fax www.brittpeters.com







Sheet Title Pedestrian

Drawn	KK
Designed	WBU
Checked	WBU
Date	2/19/13
Job No.	13068
Sheet No.	