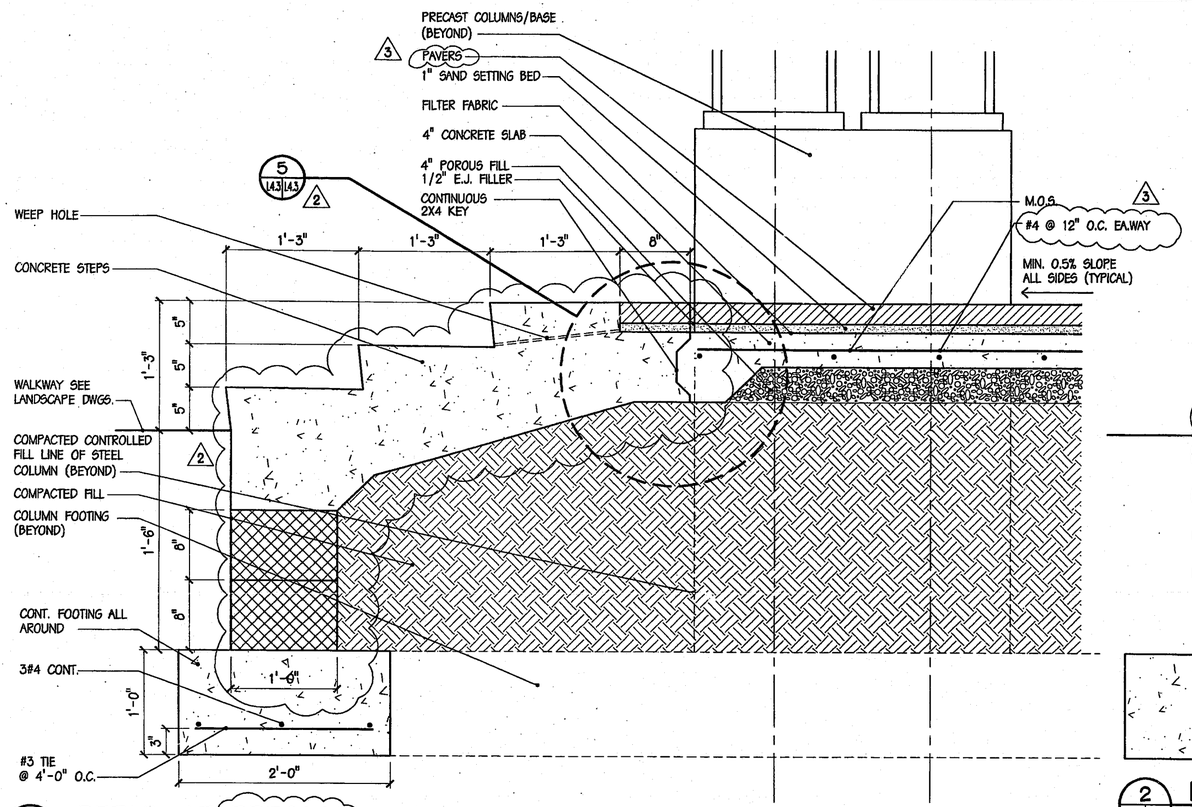
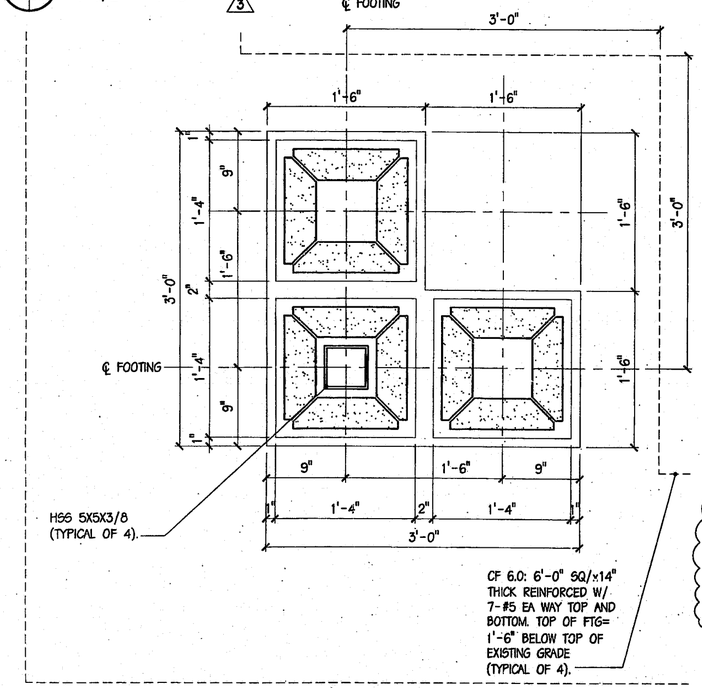
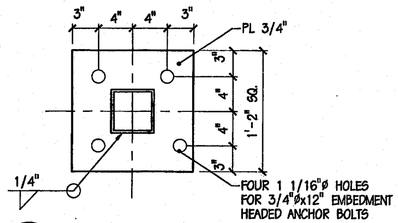


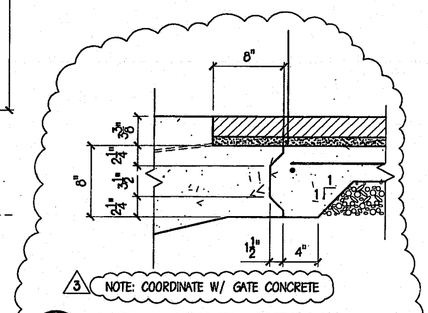
1 DETAIL AT PRECAST STEPS
L4.1 L4.3 — 1 1/2" = 1'-0"



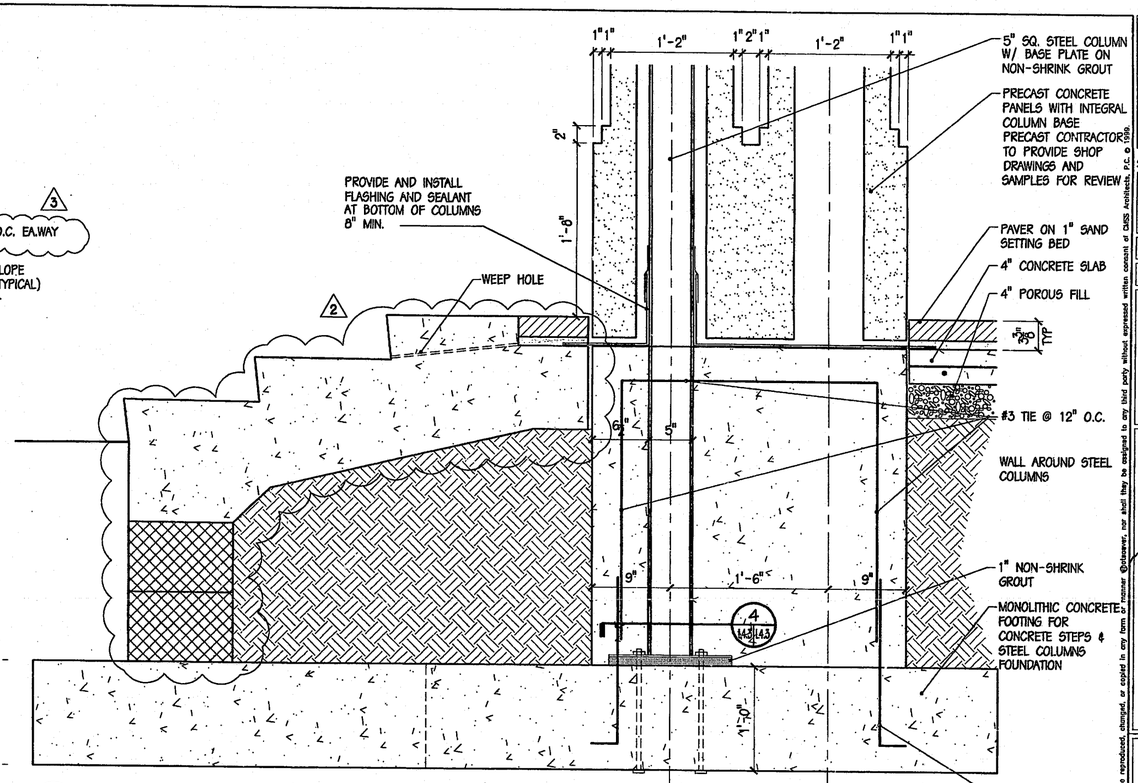
3 PLAN DETAIL AT COLUMN/BASE
L4.1 L4.3 — 1 1/2" = 1'-0"



4 BASE PLATE DETAIL
L4.3 L4.3 — 1 1/2" = 1'-0"



5 KEY JOINT DETAIL
L4.3 L4.3 — 1 1/2" = 1'-0"



2 DETAIL AT COLUMN/STEPS FOOTING
L4.1 L4.3 — 1 1/2" = 1'-0"

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, AND ADDITIONAL ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.

2. THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE NORTH CAROLINA STATE BUILDING CODE 1988 EDITION.

3. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL PERMANENT SUPPORTS ARE IN PLACE.

4. LIVE LOADS USED IN THE DESIGN (OF THIS STRUCTURE) ARE AS FOLLOWS:

SLAB-ON-GRADE ..... 100 PSF

ROOF ..... 20 PSF

ROOF SNOW LOAD DESIGN CRITERIA

GROUND SNOW LOAD (Pg) ..... 15 PSF
SNOW EXPOSURE FACTOR (Ce) 0.7
SNOW LOAD IMPORTANCE FACTOR (I) 1.0

WIND DESIGN CRITERIA

BASIC WIND SPEED ..... 80 MPH
IMPORTANCE FACTOR (I) 1.00
WIND EXPOSURE CATEGORY (MAIN WINDFORCE-RESISTING SYSTEM) C
WIND EXPOSURE CATEGORY (COMPONENTS AND CLADDING) C

5. FOUNDATIONS FOR THIS STRUCTURE HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL EXPLORATION REPORT, PREPARED BY S&ME, DATED JUNE 12, 1999.

6. FOUNDATIONS HAVE BEEN DESIGNED FOR A BEARING PRESSURE OF 2000 PSF.

7. PRIOR TO PLACING FOUNDATION CONCRETE, ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER TO EXPLORE THE EXTENT OF LOOSE, SOFT OR OTHERWISE UNSATISFACTORY SOIL MATERIAL AND TO VERIFY DESIGN BEARING PRESSURE. THE GEOTECHNICAL ENGINEER WILL PROVIDE DIRECTION FOR CORRECTIVE ACTION WHERE REQUIRED.

8. CONCRETE SHALL BE NORMAL AND SHALL OBTAIN 28 DAY COMPRESSIVE STRENGTHS AS FOLLOWS:

A) SLAB-ON-GRADE.....3500 PSI

B) CONCRETE NOT OTHERWISE NOTED.....3000 PSI

9. REINFORCING MATERIALS SHALL BE AS FOLLOWS:

A) REINFORCING BARS - ASTM A 615, GRADE 60, DEFORMED.

10. ALL REINFORCING STEEL AND EMBEDDED SHALL BE ACCURATELY PLACED IN THE POSITIONS SHOWN AND ADEQUATELY TIED AND SUPPORTED BEFORE CONCRETE IS PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES.

11. MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS INDICATED ON THE DRAWINGS SHALL GOVERN WHEN IN CONFLICT WITH ACI 318-95.

12. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING SPECIFICATIONS:

A) MISCELANEOUS STRUCTURAL STEEL SHAPES, - ASTM A 36, Fy = 36 KSI.

B) STRUCTURAL STEEL BEAMS - ASTM A 572, GRADE 50, Fy = 50 KSI

C) HOLLOW STRUCTURAL SHAPES (HSS) - ASTM A 500, GRADE B, Fy = 46 KSI FOR SQUARE AND RECTANGULAR SHAPES

D) ANCHOR BOLTS - ASTM A 307, Fy = 36 KSI

13. UNLESS OTHERWISE NOTED, ALL CONNECTIONS SHALL BE AISC TYPE 2 "STANDARD FRAMED BEAM CONNECTIONS" WITH ASTM A 325 BOLTS, DESIGNED FOR THE UNIFORM LOAD CONSTANTS FOR LATERALLY SUPPORTED BEAMS GIVEN IN PART 2 OF THE "MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN".

14. WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1, "STRUCTURAL WELDING CODE STEEL". WELD ELECTRODES SHALL BE E70XX. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS FILLET WELDS WITH MINIMUM SIZE REQUIRED BY TABLE J2.4 OF THE "MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN".

15. ROUGH CARPENTRY FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION (NFPA) "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION."

16. UNLESS OTHERWISE NOTED, ALL NAILING SHALL CONFORM TO TABLE 1705.1 - FASTENING SCHEDULE OF THE NORTH CAROLINA STATE BUILDING CODE, 1991 EDITION.

17. WOOD FRAMING MEMBERS SHALL COMPLY WITH PS 20 "AMERICAN SOFTWOOD LUMBER STANDARD" AND THE FOLLOWING REQUIREMENTS:

A) MOISTURE CONTENT - SEASONED, WITH 19 PERCENT MAXIMUM MOISTURE CONTENT.

B) GRADE - STRUCTURAL NO. 2.

C) SPECIES - ANY SOFTWOOD SPECIES OF SPECIFIED GRADE SOUTHERN PINE GRADED UNDER SPIB RULES.

18. CONSTRUCTION PANELS SHALL COMPLY WITH PS 1 "U.S. PRODUCT STANDARD FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD" FOR PLYWOOD CONSTRUCTION PANELS AND THE FOLLOWING REQUIREMENTS:

A) ROOF SHEATHING: APA RATED SHEATHING, EXTERIOR EXPOSURE DURABILITY CLASSIFICATION.

19. ALL WOOD FRAMING MEMBERS PERMANENTLY EXPOSED TO THE WEATHER AND ALL SILL PLATES AROUND THE BUILDING PERIMETER SHALL BE PRESERVATIVE-TREATED IN ACCORDANCE WITH THE SPECIFICATIONS.

20. STEEL PLATE CONNECTORS SHALL COMPLY WITH ASTM A 36 SPECIFICATIONS (Fy= 36 KSI). BOLTS CONNECTING WOOD MEMBERS SHALL COMPLY WITH ASTM A 307 COMMON STEEL BOLTS, AND SHALL BE 3/4" DIAMETER UNLESS OTHERWISE SPECIFIED.

21. METAL FRAMING ANCHORS SHALL COMPLY WITH ASTM A 446 GRADE A (STRUCTURAL QUALITY). ANCHORS SHALL BE CAPABLE OF SUPPORTING THE REACTIONS SHOWN.

22. PROVIDE BRIDGING FOR ALL ROOF RAFTERS. MAXIMUM SPACING SHALL BE 8'-0" UNLESS OTHERWISE NOTED.

23. UNLESS OTHERWISE NOTED, ATTACH BLOCKING AND NAILERS TO STEEL FRAMING USING 3/16" DIAMETER POWDER ACTUATED FASTENERS AT 24" ON CENTER OR 1/2" DIAMETER BOLTS AT 48" ON CENTER. STAGGER FASTENERS TO ALTERNATE SIDES OF BEAM WEB.

24. WHERE MULTIPLE FRAMING MEMBERS ARE INDICATED, SCAB CONTINGENT MEMBERS TOGETHER WITH 16d NAILS AT 12" ON CENTER, ALTERNATING AT 2 INCHES FROM EACH EDGE.

25. STRUCTURAL GLUED LAMINATED UNITS FOR THIS STRUCTURE SHALL BE DESIGNED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) "STRUCTURAL GLUED LAMINATED TIMBER" AITC A 190.1.

26. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA FOR THE DESIGN OF STRUCTURAL GLUED LAMINATED UNITS, INCLUDING DESIGN LOADINGS AND REACTIONS APPLIED TO THE SUPPORTING STRUCTURE.

27. MEMBERS SIZES SHOWN ARE APPROXIMATE ONLY AND SHALL BE ADJUSTED TO SUIT ACTUAL STRESS AND DEFLECTION CRITERIA.

4. CONNECTION DETAILS SHOWN ARE SCHEMATIC ONLY. ALL CONNECTIONS SHALL BE DEVELOPED BY THE GLULAM MANUFACTURER TO SUIT THE SPECIFIED LOADS. DETAIL ALL CONNECTIONS ON SHOP DRAWINGS.

5. IN ADDITION TO THEIR OWN DEAD WEIGHT AND THE DEAD LOADS SHOWN, GLULAM MEMBERS SHALL BE DESIGNED TO SUPPORT THE LIVE LOADS INDICATED IN THE GENERAL NOTES.

6. STRUCTURAL GLUED LAMINATED LUMBER SHALL COMPLY WITH AITC 190.1. SEE SPECIFICATIONS FOR COMBINATION SYMBOL, ALLOWABLE STRESSES, APPEARANCE GRADE, ADHESIVES, AND OTHER REQUIREMENTS.

CMSS ARCHITECTS
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DES. MU DR. PW CHK. JJC

DATE MAR. 31, 2000

REVISIONS
2 05/22/00
3 6/1/00

BURRELL F. SAUNDERS REGISTERED ARCHITECT 4835 NORTH CAROLINA VIRGINIA BEACH, VA
2/16/01

00-SP-0060-A
APPROVED
ES 4/10/01
TM 4.12.01

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CENTRAL PARK AT CENTREGREEN
900 CENTREGREEN WAY
CARY, NORTH CAROLINA

DETAILS

PROJECT NO. 99-137

L4.3
HARDSCAPE PLAN

SHEET OF