



STRUCTURAL GENERAL NOTES

1. MATERIAL DESIGN STRENGTHS:
ALL CAST-IN-PLACE CONCRETE..... $f'_m = 4,000$ PSI
REINFORCING STEEL, DEFORMED (GRADE 60)..... $f_y = 60,000$ PSI
STRUCTURAL STEEL (ASTM A36)..... $F_y = 36,000$ PSI
STEEL P.P.E..... $F_y = 36,000$ PSI
2. ACI 318-83 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ALSO "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, NOVEMBER 1, 1978", VIRGINIA UNIFORM STATEWIDE BUILDING CODE (BOOK 1987)
3. BACKFILLING ADJACENT TO FOUNDATION WALLS SHALL NOT OCCUR UNTIL CONCRETE HAS REACHED 70 PERCENT OF ITS 28-DAY DESIGN COMPRESSIVE STRENGTH.
4. CHAMFER ALL EXPOSED EDGES OF CONCRETE 1 INCH.
5. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 318-80 UNLESS OTHERWISE NOTED. ALL SPLICES SHALL BE CLASS C TENSION UNLESS OTHERWISE NOTED. SPLICES NOT INDICATED MAY BE PROVIDED IF PROPERLY DETAILED ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER. EMBEDMENT LENGTHS SHALL BE EQUAL TO TENSION DEVELOPMENT LENGTHS UNLESS OTHERWISE NOTED. DONNELLS IN WALLS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCING BARS UNLESS OTHERWISE NOTED. CONCRETE PROTECTION FOR REINFORCEMENT SHALL CONFORM TO ACI 301-84 (REVISED 1989) AND SHALL BE INDICATED ON THE SHOP DRAWINGS.
6. MAJOR CONSTRUCTION JOINTS ARE SHOWN. INTERMEDIATE JOINTS IN WALLS AND SLABS ARE NOT SHOWN UNLESS REQUIRED BY THE DESIGN. CONSTRUCTION JOINTS MAY BE OMITTED OR RELOCATED IF PROPERLY DETAILED ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER.
7. STRUCTURAL STEEL WORK SHALL MEET THE REQUIREMENTS OF AISC SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND AWS CODE D1.1. MAJOR MEMBERS AND CONNECTIONS FOR ANY PORTION OF THE STRUCTURE NOT INDICATED ON THE DRAWINGS SHALL BE COMPLETED BY THE FABRICATOR. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.
8. STRUCTURAL STEEL INCLUDING NONHEADED ANCHOR BOLTS SHALL MEET REQUIREMENTS OF ASTM A 36. SPECIFICATION FOR STRUCTURAL STEEL. HIGH STRENGTH STEEL BOLTS AND NUTS SHALL MEET THE REQUIREMENTS OF ASTM A 325.
9. CONNECTIONS NOT INDICATED ON THE DRAWINGS SHALL BE ALSO STANDARD FRAMED BEAM CONNECTIONS AS SHOWN IN THE "MANUAL OF STEEL CONSTRUCTION" PUBLISHED BY THE AISC. FIELD CONNECTIONS SHALL BE BOLTED USING HIGH STRENGTH BOLTS.
10. ALL GRATING AND HANDRAIL SHALL BE ALUMINUM. ALL ALUMINUM IN CONTACT WITH CONCRETE SHALL BE COATED WITH BITUMASTIC.
11. ALL EXPOSED STEEL AND HIGH STRENGTH BOLTS SHALL BE GALVANIZED PER ASTM A525, G90 AS INDICATED, EXCEPT WHERE STAINLESS STEEL IS INDICATED.



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DESIGN	DATE	DESCRIPTION	BY	APP.
DSO	SPH	GLADSTONE NEIGHBORHOOD IMPROVEMENTS DRAINAGE, WATER, SEWER, STREET IMPROVEMENTS		
DRAWN	JBR	DETAILS: OUTLET STRUCTURE.		
CHECK	SMH	DETENTION BASIN		
		TOWN OF VINTON, VIRGINIA		
		SCALE: AS NOTED	REV. R27D	
CONSULTING ENGINEERS SURVEYORS		DATE: JULY, 1989	SHEET 20C	
		DRAWN: JBR		