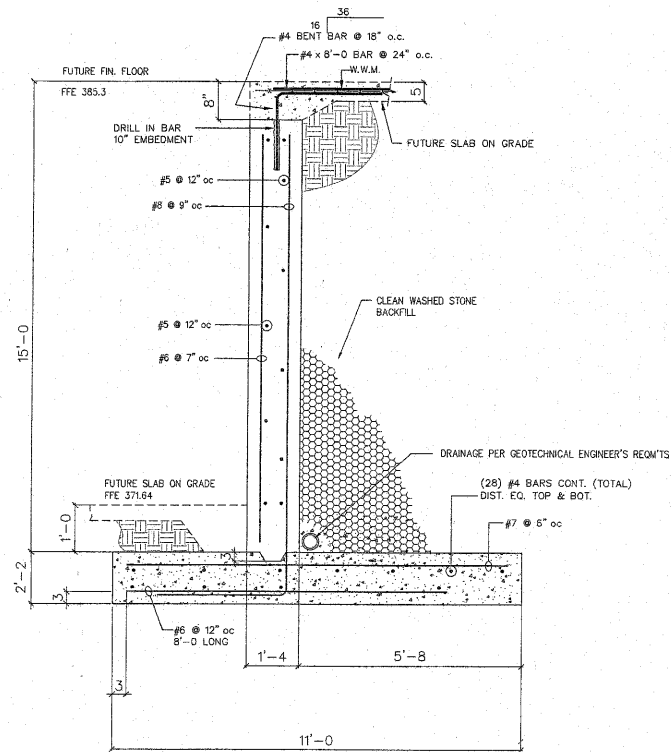


1 SITE CONCRETE RETAINING WALL DETAIL
 WALL TYPES: RW1, RW2, RW3, RW4, & RW5

NOTES:
 1. RETAINING WALL DESIGNED AS A CANTILEVERED WALL ONLY.



2 CONCRETE RETAINING WALL DETAIL AT FUTURE BUILDING
 WALL TYPE: RW6

NOTES:
 1. MAINTAIN 1'-0" OF SOIL ABOVE FOUNDATION AT LOWER LEVEL UNTIL BUILDING CONSTRUCTION BEGINS.
 2. RETAINING WALL DESIGNED AS A CANTILEVERED WALL FOR CONSTRUCTION PHASE AND RETAINED WALL FOR PERMANENT LOADS AFTER BUILDING CONSTRUCTION.

RETAINING WALL DESIGN NOTES

RETAINING WALL DESIGN

- RW1 - RW5 HAVE BEEN DESIGNED AS CANTILEVERED RETAINING WALLS ONLY.
- RW6 HAS BEEN DESIGNED AS CANTILEVERED WALLS FOR CONSTRUCTION PHASE & RETAINED WALL FOR PERMANENT LOADS OF BUILDING.
- UPPER FLOOR SURCHARGE OF 200 PSF HAS BEEN INCLUDED IN DESIGN OF RW6.

SOIL DATA

- SOIL BEARING CAPACITY BASED ON "REPORT OF SUBSURFACE EXPLORATION - SIMSBURY COURT, WESTON PARK - CARY, NC DATED 6/23/97 BY SAME, INC. - PROJECT NO. 1051-97-114. ALLOWABLE BEARING CAPACITY TO BE 3500 PSF.

- ASSUMED SOIL PROPERTIES ARE AS FOLLOWS AND SHALL BE CONFIRMED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. REPORT FINDINGS TO ENGINEER.

SOIL AT-REST COEFFICIENT (K_0) = 0.53
 SOIL ACTIVE COEFFICIENT (K_a) = 0.36
 SOIL PASSIVE COEFFICIENT (K_p) = 2.8
 UNIT WEIGHT OF SOIL (MOIST) = 135 pcf
 SOIL TO FOUNDATION FRICTION COEFFICIENT = 0.35

STRUCTURAL NOTES

- ALL CONCRETE TO BE PROPORTIONED AND PLACED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE ACI 318.
- CONCRETE STRENGTH SHALL BE 3000 PSI AT 28 DAYS.
- CONCRETE REINFORCING SHALL BE GRADE 60.
- ALL RETAINING WALL PANELS ARE TO BE REINFORCED PER TYPICAL DETAILS PROVIDED.
- NO REDUCTION IN WALL THICKNESS (i.e. WALL REVEALS) IS ALLOWED. MINIMUM WALL THICKNESS IS TO BE AS SHOWN.
- CONCRETE SHALL ACHIEVE DESIGN STRENGTH PRIOR TO BACKFILL OPERATIONS.

MARK	RETAINING WALL SCHEDULE						REMARKS
	W	H	FIN	BACKFILL	REINFORCING	REINFORCING	
RW1	<- 15'-0"	2'-2"	5'-8"	1'-4"	11'-0"	#8 @ 8" o.c. #5 @ 12" o.c. #7 BARS @ 8" o.c. 28 - #4 BARS CONT.	#5 @ 12" o.c. - 8'-0" LONG
RW2	<- 12'-0"	1'-6"	4'-6"	1'-0"	8'-6"	#6 @ 12" o.c. #5 @ 12" o.c. #4 @ 12" o.c. #6 BARS @ 6" o.c. 18 - #4 BARS CONT.	#5 @ 12" o.c. - 6'-8" LONG
RW3	<- 9'-0"	1'-2"	3'-0"	1'-0"	6'-0"	#6 @ 12" o.c. #4 @ 12" o.c. #6 BARS @ 12" o.c. 12 - #4 BARS CONT.	#5 @ 12" o.c. - 4'-8" LONG
RW4	<- 7'-0"	1'-0"	1'-0"	1'-0"	4'-6"	#5 @ 12" o.c. #4 @ 12" o.c. #5 BARS @ 12" o.c. 9 - #4 BARS CONT.	#5 @ 12" o.c. - 3'-0" LONG
RW5	<- 5'-0"	1'-0"	1'-3"	1'-0"	3'-6"	#5 @ 12" o.c. #4 @ 12" o.c. #5 BARS @ 12" o.c. 7 - #4 BARS CONT.	#5 @ 12" o.c. - 2'-6" LONG

- VERTICAL CONTROL JOINTS SHALL BE LOCATED AT 20' o.c. MAX.
- SEE DETAIL ABOVE AND FOUNDATION DETAILS FOR ADDITIONAL INFORMATION.
- NO MECHANICALLY TAMPING WITHIN 5'-0" OF RETAINING WALL.
- $F_c = 3000$ psi.
- SEE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- "B" BARS MAY BE STRAIGHT TENSION SPLICED - DEVELOPMENT LENGTH PER ACI.



HagerSmith Design PA

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 Landscape Architecture
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 Interior Design

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 OFFICE BUILDING
 WESTON OAKS COURT
 CARY, NC

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09-SP-045
 APPROVED
 TOWN OF CARY
 Approved by: [Signature] Date: 5-14-07
 Planning: [Signature] Date: 4-14-07
 Engineering: [Signature] Date: 4-14-07

RETAINING WALL

Scale: _____

Number	Description	Date
1	FOR CONSTRUCTION	4/5/07

Drawn By: _____
 Checked By: _____
 Date: 4/5/07

RW2