STORM DRAINAGE DESIGN TABLE

PIPE SECTION FROM	TO	A (sub)	A (total)	IMP AREA	GRASS AREA	WOODED AREA	C SUB	Tc (min)	Q(cfs) SUB	Q(cfs) TOTAL	PIPE L (lf)	RIM ELEV	US INV	DS INV	SLOPE %	V fps	I	D req'd	D use (in)	n
SYSTEM 1																				
YI#1	SMH#2	2.12	2.12	1.48	0.44	0.20	0.74	5.0	11.39	11.39	98	397.50	393.50	393.00	0.51	5.34	7.22	20.74	24	0.0125
SMH#2	YI#3	0.00	2.12	0.00	0.00	0.00	0.00	5.0	0.00	11.39	83	401.20	392.90	392.45	0.54	5.50	7.22	20.50	24	0.0125
YI#3	CB#4	0.80	2.92	0.03	0.77	0.00	0.32	5.0	1.87	13.27	70	396.50	392.35	389.85	3.59	14.17	7.22	15.22	24	0.0125
YI#4A	CB#4B	0.17	0.17	0.02	0.15	0.00	0.38	5.0	0.46	0.46	105	397.50	394.00	392.29	1.62	6.96	7.22	5.02	15	0.0125
CB#4B	CB#4	0.32	0.49	0.29	0.03	0.00	0.89	5.0	2.05	2.52	78	396.39	392.19	389.85	3.00	9.47	7.22	8.44	15	0.0125
CB#4	CB#5	0.19	3.60	0.11	0.08	0.00	0.68	5.0	0.93	16.71	92	394.43	389.75	384.55	5.63	17.75	7.22	15.25	24	0.0125
YI#5A	YI#5B	0.29	0.29	0.05	0.24	0.00	0.41	5.0	0.86	0.86	71	388.50	385.35	385.00	0.50	3.85	7.22	7.92	15	0.0125
YI#5B	CB#5	0.17	0.46	0.06	0.11	0.00	0.53	5.0	0.65	1.51	68	388.50	384.90	384.55	0.51	3.91	7.22	9.71	15	0.0125
CB#5	CB#6	0.10	4.16	0.06	0.04	0.00	0.69	5.0	0.50	18.72	224	389.58	384.45	379.77	2.09	10.82	7.22	19.16	24	0.0125
CB#6A	CB#6	0.45	0.45	0.27	0.18	0.00	0.69	5.0	2.24	2.24	68	384.75	380.12	379.77	0.51	3.87	7.22	11.31	15	0.0125
YI#7A	CB#7	0.57	0.57	0.46	0.11	0.00	0.82	5.0	3.39	3.39	61	380.50	376.94	376.18	1.25	6.11	7.22	11.13	15	0.0125
CB#6	CB#7	0.58	5.19	0.42	0.16	0.00	0.77	5.0	3.23	8.86	205	384.45	379.67	376.18	1.70	9.76	7.22	15.05	24	0.0125
CB#7	SMH#17B	0.28	6.04	0.23	0.05	0.00	0.83	5.0	1.69	13.94	96	380.69	376.08	375.60	0.50	5.28	7.22	22.46	24	0.0125
SMH#17B	CB#17	0.00	6.04	0.00	0.00	0.00	0.00	5.0	0.00	13.94	77	379.30	375.50	373.35	2.79	12.50	7.22	16.25	24	0.0125
CB#17A	CB#17	0.64	6.68	0.46	0.18	0.00	0.77	5.0	3.55	17.49	79	377.89	373.25	371.51	2.20	12.87	7.22	18.51	30	0.0125
SYSTEM 2																				
CB#9	CB#10	0.23	0.23	0.12	0.11	0.00	0.64	5.0	1.06	1.06	92	393.15	389.80	385.70	4.46	11.54	7.22	5.67	15	0.0125
CB#10A	CB#10	0.17	0.40	0.16	0.01	0.00	0.91	5.0	1.12	2.18	33	389.31	386.00	385.70	0.92	5.25	7.22	9.98	15	0.0125
CB#10	CB#11	0.41	0.81	0.05	0.36	0.00	0.38	5.0	1.12	3.30	68	389.02	385.60	383.82	2.63	8.87	7.22	9.58	15	0.0125
YI11A	CB#11	0.29	0.29	0.08	0.21	0.00	0.48	5.0	1.00	1.00	32	387.50	384.25	383.82	1.36	6.37	7.22	6.94	15	0.0125
CB#11	CB#12	0.04	1.14	0.04	0.00	0.00	0.95	5.0	0.27	4.58	151	387.78	383.72	379.00	3.13	9.68	7.22	10.48	15	0.0125
YI#12A	CB#12	0.53	0.53	0.24	0.29	0.00	0.59	5.0	2.27	2.27	48	382.50	379.25	379.00	0.52	3.95	7.22	11.28	15	0.0125
CB#12B	CB#12	0.28	0.28	0.22	0.06	0.00	0.81	5.0	1.64	1.64	27	384.11	380.60	380.45	0.56	4.07	7.22	9.86	15	0.0125
CB#12	CB#13	0.18	2.13	0.17	0.01	0.00	0.91	5.0	1.19	9.68	114	384.09	378.90	377.65	1.09	6.45	7.22	16.91	18	0.0125
CB#13	CB#14	0.12	2.25	0.09	0.03	0.00	0.79	5.0	0.68	10.36	66	381.06	377.55	376.45	1.68	8.00	7.22	16.80	18	0.0125
CB#14	CB#15	0.45	2.70	0.38	0.07	0.00	0.85	5.0	2.76	13.12	58	380.60	376.35	375.50	1.46	9.04	7.22	17.94	24	0.0125
CB#15	CB#16A	0.37	3.07	0.30	0.07	0.00	0.83	5.0	2.21	15.33	60	379.45	375.40	374.10	2.17	11.02	7.22	17.66	24	0.0125
CB#16A	CB#16	0.24	3.31	0.18	0.06	0.00	0.79	5.0	1.36	16.70	47	378.05	374.00	372.40	3.43	13.84	7.22	16.74	24	0.0125
YI#8	CB#16	0.34	3.41	0.16	0.18	0.00	0.61	5.0	1.49	1.49	61	377.50	372.79	372.40	0.65	4.41	7.22	9.23	15	0.0125
CB#16	CB#17	0.10	10.19	0.08	0.02	0.00	0.82	5.0	0.59	18.78	148	377.66	372.30	371.51	0.53	7.91	7.22	24.82	42	0.0125
CB#17	CB#18	0.38	10.57	0.25	0.13	0.00	0.73	5.0	2.00	20.77	97	376.36	371.41	370.93	0.49	7.64	7.22	26.11	42	0.0125
YI#18A	CB#18	0.52	0.52	0.08	0.44	0.00	0.40	5.0	1.50	1.50	119	375.50	371.75	370.93	0.69	5.13	7.22	9.16	18	0.0125
CB#18	SMH#19	0.66	11.75	0.18	0.48	0.00	0.48	5.0	2.27	24.55	88	375.60	370.83	370.39	0.50	7.66	7.22	27.77	42	0.0125
SMH#19	FES#20	0.00	11.75	0.00	0.00	0.00	0.00	5.0	0.00	24.55	17	377.00	370.29	370.20	0.53	7.90	7.22	27.45	42	0.0125
RISER 24	LS#25	0.57	12.32	0.11	0.46	0.00	0.42	5.0	1.75	26.29	49	374.50	369.50	367.40	4.30	12.65	7.22	19.10	18	0.0125
CB#21	CB#22	0.94	0.94	0.72	0.22	0.00	0.80	5.0	5.42	5.42	65	373.21	369.80	368.04	2.70	8.98	7.22	11.47	15	0.0125
CB#22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2.06	7.47	47	372.60	367.94	367.70	0.50	4.37	7.22	17.76	18	0.0125

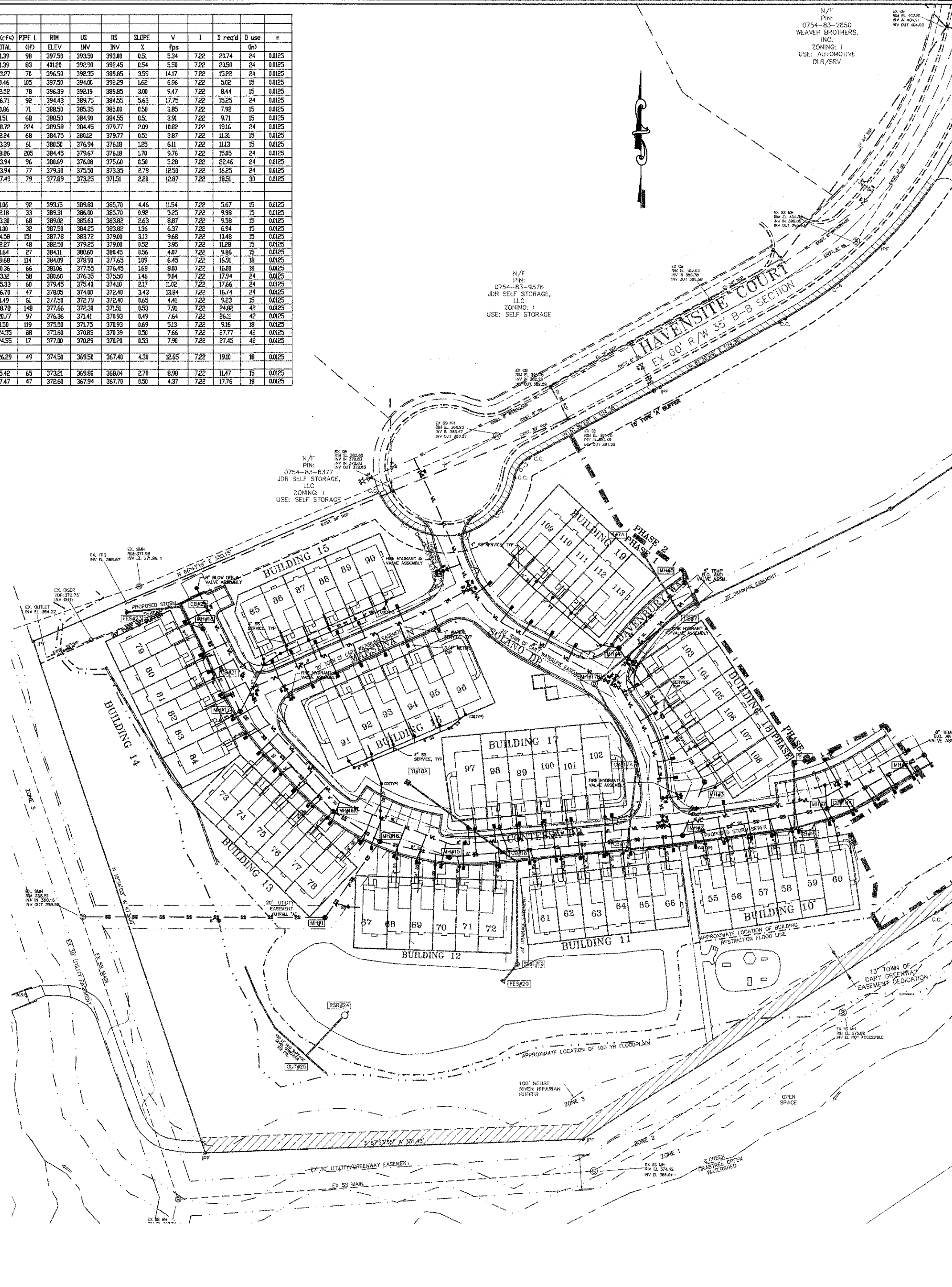
NOTE: ALL RCP PIPE ON SITE SHALL BE RUBBER GASKET

GENERAL CONSTRUCTION NOTES

1. ALL DIMENSIONS SHOWN ARE TO THE BACK OF CURB, UNLESS OTHERWISE INDICATED ON THE PLANS. CONTACT THIS FIRM FOR A LISTING OF COORDINATES FOR ALL PARKING LOTS AND BUILDING CORNERS.
2. ALL CURB AND GUTTER SHOWN WITHIN THE SITE IS STANDARD 18", 30" WITHIN RIGHT– OF WAY.
3. CURBING ALONG FIRE LANES SHALL BE PAINTED YELLOW AND MARKED ACCORDINGLY. AREAS TO BE MARKED AS SUCH SHALL BE DETERMINED BY ONSITE INSPECTION BY THE CARY FIRE DEPARTMENT UPON COMPLETION OF THE PROPOSED IMPROVEMENTS
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF CARY STANDARD SPECIFICATIONS AND DETAILS.
5. ALL EXTERIOR LIGHTING SHALL BE DESIGNED TO PREVENT OFF-SITE GLARE.
6. WATER AND SEWER DEVELOPMENT FEES ARE DUE PRIOR TO ISSUANCE OF BUILDING PERMIT.
7. IT IS THE RESPONSIBILITY OF THE OWNER/ENGINEER TO SECURE THE FOLLOWING PERMIT AFTER TOWN COUNCIL APPROVAL: THE TOWN OF CARY GRADING PERMIT AND OTHER PERMITS THE PROJECT MAY REQUIRE.
8. A CERTIFICATE OF INSURANCE TO VERIFY WORKERS COMPENSATION INSURANCE AND A COMPLIANCE VERIFICATION FORM MUST BE COMPLETED BEFORE AN ENVIRONMENTAL PERMIT WILL BE ISSUED.
9. THIS PROJECT MAY REQUIRE A PRE CONSTRUCTION CONFERENCE BEFORE AN ENVIRONMENTAL PERMIT IS ISSUED
10. THE CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO THE COMMENCEMENT OF GRADING ACTIVITIES. CONTACT ULOCO AT 1-800-632-4949 FOR FIELD LOCATION OF UNDERGROUND UTILITIES.
11. ALL PAVEMENT SHALL BE 2" I-2 & 8" ABC STONE FOR TRAVEL AISLES AND 2" I-2 & 6" ABC STONE FOR PARKING STALLS.
12. UNLESS OTHERWISE NOTED, ALL SPOT ELEVATIONS ARE TOP OF ASPHALT OR FINISH SURFACE.
13. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR BUILDING DIMENSIONS AND FEATURES.
14. SEE PLUMBING PLANS FOR LOCATION AND SIZE OF ROOF DRAINS, WATER LINES AND SEWER LINES.
15. SEWER LATERALS SHALL BE PLACED AT A MINIMUM SLOPE OF 1% ON 4" LINES AND 0.6% ON 6" LINES. CLEANOUTS SHALL BE PLACED AT A MAXIMUM SPACING OF 75' ON 4" LINES AND 100' ON 6" LINES.
16. THE SLOPE OF HANDICAP PARKING SPACES SHALL NOT EXCEED 1/4" PER FOOT.
17. SEE SHEETS 21-24 FOR SITE CONSTRUCTION DETAILS.
18. AN UNUSED DRIVEWAY MUST BE CLOSED IN ACCORDANCE WITH THE TOWN OF CARY'S DRIVEWAY ORDINANCE.
19. ALL VENT PIPES, ETC. EXTENDING ABOVE THE ROOF SURFACE MUST BE PAINTED A COLOR THAT BLENDS WITH THE ROOF COLOR.
20. THERE ARE NO WETLAND ASSOCIATED WITH THIS PROJECT.
21. ALL STORM DRAINS AND HOODS ON SITE SHALL BE STAMPED WITH "DRAINS TO RIVER" IN ACCORDANCE WITH TOWN OF CARY STANDARDS.
22. STREETS IN FRONT OF THIS PROJECT SHALL BE KEPT CLEAN AT ALL TIMES OR A WASH STATION SHALL BE REQUIRED.
23. THIS PROJECT WILL MEET ALL OF THE REQUIREMENTS REALTIVE TO BEST MANAGEMENT PRACTICES AND ENGINEERED STORM WATER CONTROL STRUCTURES AS OUTLINED IN THE TOWN OF CARY UNIFIED DEVELOPMENT ORDINACE (CHAPTER 4, PART 4.6, LDO).
24. IF THERE WILL BE A TRASH COMPACTOR ON THE SITE A CONNECTION TO SANITARY SEWER AND A COVERED DUMPSTER SITE WILL BE REQUIRED.
25. ALL RISER BARREL STRUCTURES AND BARRELS MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.
26. THE WATERSHED FOR THIS SITE IS CRABTREE CREEK.

UTILITY SITE NOTES:

1. ALL STREETS WITHIN THIS PHASE OF THIS DEVELOPMENT SHALL BE PRIVATE.
2. TRASH & RECYCLABLE PICKUP FOR SHALL BE PROVIDED BY THE TOWN OF CARY SOLID WASTE DEPARTMENT. TRASH FOR TYPE TOWNHOMES SHALL ALSO BE PROVIDED BY PROPOSED DUMPSTER AREAS AS SHOWN ON THE SITE LAYOUT PLAN.
3. ALL DUMPSTERS ARE TO BE SCREENED IN ACCORDANCE WITH TOWN OF CARY STANDARDS.
4. LESS THAN 0.10 ACRE OF WETLAND DISTURBANCE WILL BE REQUIRED TO CONSTRUCT THIS PROJECT, THEREFORE CORP. OF ENGINEER PERMITS SHALL NOT BE REQUIRED.
5. ALL SEWER MAINS, SHOWN HERE ON, SHALL BE PRIVATE AND TO BE MAINTAINED BY THE HOME OWNERS ASSOCIATION.
7. ALL CONSTRUCTION SHALL CONFORM TO ALL CURRENT TOWN OF CARY AND NCDOT STANDARD DETAILS AND SPECIFICATIONS.
8. ANY ROADWAY CROSSING OR ENCROACHMENT INTO THE NEUSE RIVER RIPARIAN BUFFER WILL REQUIRE PERMITTING BY NC DWQ.
9. ANY DISTURBANCE OF MORE THAN 0.10 AC OF WETLANDS WILL REQUIRE ISSUANCE OF A NATION WIDE 39 PERMIT BY THE US ARMY CORP. OF ENGINEERS.
10. THE CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES. CONTACT ULOCO AT 1-800-632-4949 FOR FIELD LOCATION OF UNDERGROUND UTILITIES.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING UTILITIES. IF DISCREPANCIES ARE FOUND CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY.
12. CONSTRUCT ALL SANITARY SEWER MANHOLES FLUSH TO FINAL PAVEMENT GRADE OR AS SHOWN IN NON-PAVED AREAS.
13. SEWER LATERALS TO BE PLACED AT A MINIMUM SLOPE OF 1% ON 4" LINES. AND 0.5% ON 6" LINES. CLEANOUTS SHALL BE PLACED AT 50' INTERVALS AND AT BEND POINTS. ALL CLEANOUTS IN PAVED AREAS SHALL BE APPROVED LOAD BEARING TYPE.
14. THE CONTRACTOR IS RESPONSIBLE FOR INSURING POSITIVE DRAINAGE TO ALL STORM STRUCTURES.
15. HOMEOWNERS ASSOCIATION BYLAWS SHALL GRANT UTILITY ACCESS WITHIN PUBLIC OPEN SPACE.



06-SP-101-A
APPROVED
TOWN OF CARY
Approved by DRC Date 1-28-08
Planning Date 4-1-08
Engineering SS ST Date 3/20/08

NORTH CAROLINA PROFESSIONAL SEAL 24081 ENGINEER HAROLD A. YELLE, II
2-13-08

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

SHEET 8 OF 24

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DRAWN BY: ADK
CHECKED BY: HAY
SCALE: 1" = 50'
DATE: 09/20/07
REVISIONS: 11/19/07

OVERALL SITE UTILITY PLAN

WEATHERFIELD TOWNHOMES - PHASE 1 AT HAVEN SITE COURT PDD CARY, NORTH CAROLINA

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