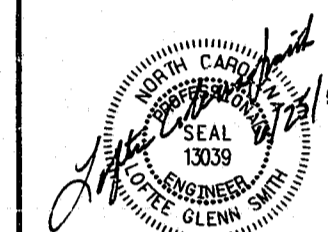


111 MacKenan Drive
Cary, N.C. 27511
PHONE: 919-468-3340
FAX: 919-467-6008

SEALS



DRAWING TITLE

**UTILITY,
GRADING,
STORM
DRAINAGE,
& EROSION
CONTROL
PLAN**

PROJECT TITLE 98043

**CENTREGREEN PARK
AT WESTON**

(FORMERLY
WESTON COMMONS
TRACT 6A)

REVISIONS

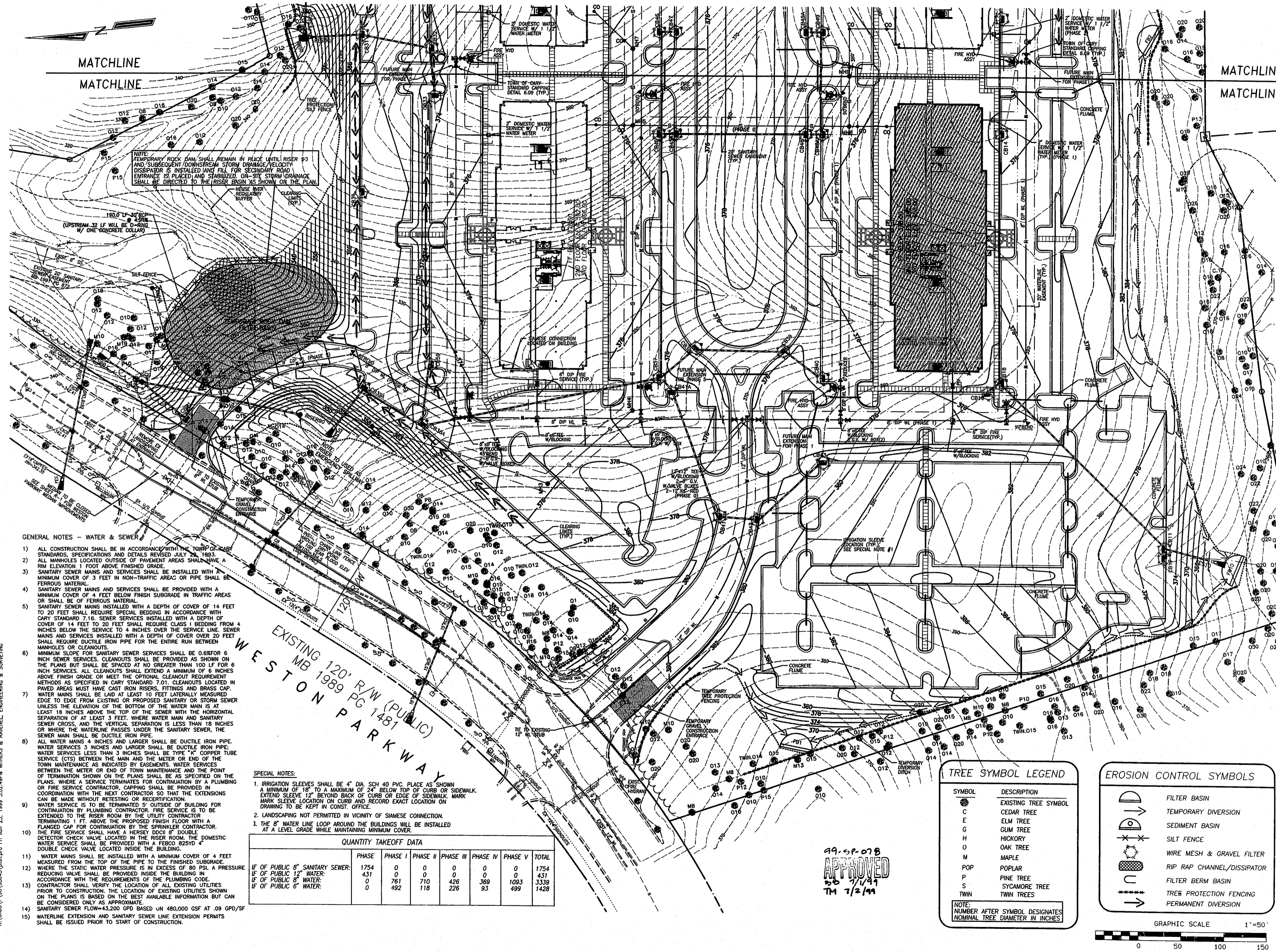
NUMBER	DESCRIPTION	DATE
1	PER T.O.C. FIRST REVIEW	5/26/98
2	PER T.O.C. SECOND REVIEW	6/23/98
3	PER T.O.C. THIRD REVIEW	7/27/98
4	ADDENDUM #1 REVISIONS	8/14/98
5	NRB OPTIONS	8/20/98
6	ADDENDUM #2 REVISIONS	2/17/99
7	ADDENDUM #3 REVISIONS	4/1/99
8	RESUBMIT TO TOWN OF CARY	4/12/99
9	PER T.O.C. FIRST RE-REVIEW	5/10/99
10	REVISE STORM DRAINAGE	6/25/99

DRAWN BY DW
CHECKED BY LGS
DATE ISSUED 4/13/1998
SCALE 1"=50'

SHEET NO.

3A

OF



NOTE: TEMPORARY ROCK DAM SHALL REMAIN IN PLACE UNTIL RISER P0 AND SUBSEQUENT DOWNSTREAM STORM DRAINAGE VELOCITY DISSIPATOR IS INSTALLED AND FILL FOR SECONDARY ROAD ENTRANCE IS PLACED AND STABILIZED. ON-SITE STORM DRAINAGE SHALL BE DIRECTED TO THE RISER BASINS SHOWN ON THE PLAN.

GENERAL NOTES - WATER & SEWER

- 1) ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF CARY STANDARDS, SPECIFICATIONS AND DETAILS REVISED JULY 22, 1993.
- 2) ALL MANHOLES LOCATED OUTSIDE OF PAVEMENT AREAS SHALL HAVE A RIM ELEVATION 1 FOOT ABOVE FINISHED GRADE.
- 3) SANITARY SEWER MAINS AND SERVICES SHALL BE INSTALLED WITH A MINIMUM COVER OF 3 FEET IN NON-TRAFFIC AREAS OR PIPE SHALL BE FERROUS MATERIAL.
- 4) SANITARY SEWER MAINS AND SERVICES SHALL BE PROVIDED WITH A MINIMUM COVER OF 4 FEET BELOW FINISH SUBGRADE IN TRAFFIC AREAS OR SHALL BE FERROUS MATERIAL.
- 5) SANITARY SEWER MAINS INSTALLED WITH A DEPTH OF COVER OF 14 FEET TO 20 FEET SHALL REQUIRE SPECIAL BEDDING IN ACCORDANCE WITH CARY STANDARD 7.16. SEWER SERVICES INSTALLED WITH A DEPTH OF COVER OF 14 FEET TO 20 FEET SHALL REQUIRE CLASS 1 BEDDING FROM 4 INCHES BELOW THE SERVICE TO 4 INCHES OVER THE SERVICE LINE. SEWER MAINS AND SERVICES INSTALLED WITH A DEPTH OF COVER OVER 20 FEET SHALL REQUIRE DUCTILE IRON PIPE FOR THE ENTIRE RUN BETWEEN MANHOLES OR CLEANOUTS.
- 6) MINIMUM SLOPE FOR SANITARY SEWER SERVICES SHALL BE 0.6% FOR 6 INCH SEWER SERVICES. CLEANOUTS SHALL BE PROVIDED AS SHOWN ON THE PLANS BUT SHALL BE SPACED AT NO GREATER THAN 100 LF FOR 6 INCH SERVICES. ALL CLEANOUTS SHALL EXTEND A MINIMUM OF 6 INCHES ABOVE FINISH GRADE OR MEET THE OPTIONAL CLEANOUT REQUIREMENT METHODS AS SPECIFIED IN CARY STANDARD 7.01. CLEANOUTS LOCATED IN PAVED AREAS MUST HAVE CAST IRON RISERS, FITTINGS AND BRASS CAP.
- 7) WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY MEASURED EDGE TO EDGE FROM EXISTING OR PROPOSED SANITARY OR STORM SEWER UNLESS THE ELEVATION OF THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER WITH THE HORIZONTAL SEPARATION OF AT LEAST 3 FEET. WHERE WATER MAIN AND SANITARY SEWER CROSS, AND THE VERTICAL SEPARATION IS LESS THAN 18 INCHES OR WHERE THE WATERLINE PASSES UNDER THE SANITARY SEWER, THE SEWER MAIN SHALL BE DUCTILE IRON PIPE.
- 8) ALL WATER MAINS 4 INCHES AND LARGER SHALL BE DUCTILE IRON PIPE. WATER SERVICES 3 INCHES AND LARGER SHALL BE DUCTILE IRON PIPE. WATER SERVICES LESS THAN 3 INCHES SHALL BE TYPE "C" COPPER TUBE SERVICE (CTS) BETWEEN THE MAIN AND THE METER OR END OF THE TOWN MAINTENANCE AS INDICATED BY EASEMENTS. WATER SERVICES BETWEEN THE METER AND END OF TOWN MAINTENANCE AND THE POINT OF TERMINATION SHOWN ON THE PLANS SHALL BE AS SPECIFIED ON THE PLANS. WHERE A SERVICE TERMINATES FOR CONTINUATION BY A PLUMBING OR FIRE SERVICE CONTRACTOR, CAPPING SHALL BE PROVIDED IN COORDINATION WITH THE NEXT CONTRACTOR SO THAT THE EXTENSIONS CAN BE MADE WITHOUT RETESTING OR RECERTIFICATION.
- 9) WATER SERVICE IS TO BE TERMINATED 5' OUTSIDE OF BUILDING FOR CONTINUATION BY PLUMBING CONTRACTOR. FIRE SERVICE IS TO BE EXTENDED TO THE RISER ROOM BY THE UTILITY CONTRACTOR TERMINATING 1 FT. ABOVE THE PROPOSED FINISH FLOOR WITH A FLANGED CAP FOR CONTINUATION BY THE SPRINKLER CONTRACTOR.
- 10) THE FIRE SERVICE SHALL HAVE A HERSEY DDC" 8" DOUBLE DETECTOR CHECK VALVE LOCATED IN THE RISER ROOM. THE DOMESTIC WATER SERVICE SHALL BE PROVIDED WITH A FERRO 825VD 4" DOUBLE CHECK VALVE LOCATED INSIDE THE BUILDING.
- 11) WATER MAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF 4 FEET MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED SUBGRADE.
- 12) WHERE THE STATIC WATER PRESSURE IS IN EXCESS OF 80 PSI, A PRESSURE REDUCING VALVE SHALL BE PROVIDED INSIDE THE BUILDING IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLUMBING CODE. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS IS BASED ON THE BEST AVAILABLE INFORMATION BUT CAN BE CONSIDERED ONLY AS APPROXIMATE.
- 13) SANITARY SEWER FLOW=43,000 GPD BASED ON 480,000 GSF AT .09 GPD/SF
- 14) WATERLINE EXTENSION AND SANITARY SEWER LINE EXTENSION PERMITS SHALL BE ISSUED PRIOR TO START OF CONSTRUCTION.

SPECIAL NOTES:

1. IRRIGATION SLEEVES SHALL BE 4" DIA. SCH 40 P.V.C. PLACED AS SHOWN A MINIMUM OF 18" TO A MAXIMUM OF 24" BELOW TOP OF CURB OR SIDEWALK. EXTEND SLEEVE 12" BEYOND BACK OF CURB OR EDGE OF SIDEWALK. MARK SLEEVE LOCATION ON CURB AND RECORD EXACT LOCATION ON DRAWING TO BE KEPT IN CONST. OFFICE.
2. LANDSCAPING NOT PERMITTED IN VICINITY OF SIAMSE CONNECTION.
3. THE 8" WATER LINE LOOP AROUND THE BUILDINGS WILL BE INSTALLED AT A LEVEL GRADE WHILE MAINTAINING MINIMUM COVER.

QUANTITY TAKEOFF DATA

	PHASE I	PHASE II	PHASE III	PHASE IV	PHASE V	TOTAL
LF OF PUBLIC 8" SANITARY SEWER:	1754	0	0	0	0	1754
LF OF PUBLIC 12" WATER:	431	0	0	0	0	431
LF OF PUBLIC 8" WATER:	0	761	710	426	369	1093
LF OF PUBLIC 6" WATER:	0	492	118	226	93	499

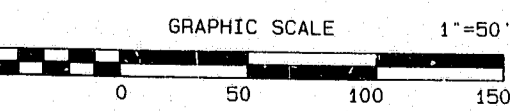
TREE SYMBOL LEGEND

SYMBOL	DESCRIPTION
(Circle with dot)	EXISTING TREE SYMBOL
C	CEDAR TREE
E	ELM TREE
G	GUM TREE
H	HICKORY
O	OAK TREE
M	MAPLE
POP	POPLAR
P	PINE TREE
S	STYCAMORE TREE
TWIN	TWIN TREES

NOTE: NUMBER AFTER SYMBOL DESIGNATES NOMINAL TREE DIAMETER IN INCHES

EROSION CONTROL SYMBOLS

(Dashed line)	FILTER BASIN
(Arrow pointing right)	TEMPORARY DIVERSION
(Circle with cross-hatch)	SEDIMENT BASIN
(X symbol)	SILT FENCE
(Star symbol)	WIRE MESH & GRAVEL FILTER
(Hatched area)	RIP RAP CHANNEL/DISSIPATOR
(U-shape)	FILTER BERM BASIN
(Dashed line with cross-hatch)	TREE PROTECTION FENCING
(Arrow pointing right with cross-hatch)	PERMANENT DIVERSION



99-50-07B
APPROVED
5/5 7/1/99
TM 7/2/99

K:\CADD\98\98043.dwg Fri Jun 25, 1999 3:02:49PM WITHERS & RAVENEL ENGINEERING & SURVEYING