

NOTES:

1. ALL WATER AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED.
3. SANITARY SEWER MATERIAL SHALL BE PVC, SDR 35, EXCEPT AS NOTED, OR APPROVED EQUAL.
4. WATER LINE MAIN MATERIAL SHALL BE C900 PVC, DR14, EXCEPT AS NOTED, OR APPROVED EQUAL.
5. THE WORKING PRESSURE FOR WATER MAINS WITHIN THE BOUNDARIES OF THIS SUBDIVISION IS LESS THAN 100 PSI.
6. WET TAPS TO THE EXISTING WATER MAIN ARE TO BE PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY AFTER THE CONTRACTOR HAS PERFORMED EXCAVATION AND SHORING PER OSHA REGULATIONS. THE CONTRACTOR SHALL FURNISH AND INSTALL THE TAPPING SLEEVE AND TAPPING VALVE.
7. NEW SANITARY SEWER MANHOLES No. 1 and No. 10 TO BE SET ON THE EXISTING SANITARY SEWER LINE WILL REQUIRE BYPASS PUMPING OF THE EXISTING SANITARY SEWER FLOWS PER THE CONDITIONS OF SECTION 3.5 OF SPECIFICATION 02201 OF THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS. A WESTERN VIRGINIA WATER AUTHORITY INSPECTOR MUST BE ON-SITE DURING INSTALLATION OF THE NEW MANHOLES.
8. THE CONTRACTOR IS RESPONSIBLE FOR ANY REPAIRS FOR DAMAGE TO EXISTING STRUCTURES AS A RESULT OF CONSTRUCTION IN ACCORDANCE WITH VDOT, WESTERN VIRGINIA WATER AUTHORITY, AND/OR ROANOKE COUNTY STANDARDS AND SPECIFICATIONS.
9. LIGHT POLES TO BE INSTALLED BY AEP. LIGHT POLE LOCATIONS TO BE 10.5 FEET OFF BACK OF CURB ON THE LEFT SIDE OF GANDER WAY AND 6.5 FEET OFF BACK OF CURB ON THE RIGHT SIDE OF GANDER WAY. LIGHTS POLES SHALL BE SITUATED SUCH THAT ALL FIXTURES AND OVERHANGS ARE LOCATED OUTSIDE THE PUBLIC RIGHT OF WAY.

SANITARY SEWER MAIN BEARINGS AND DISTANCES		
LINE	BEARING	DISTANCE
1 TO 2	S 58° 51' 31" W	36.40'
2 TO 3	S 58° 51' 31" W	135.00'
3 TO 4	S 58° 50' 59" W	324.64'
4 TO 5	S 79° 08' 07" W	209.43'
5 TO 6	S 53° 15' 20" W	258.50'
6 TO 7	N 36° 44' 40" W	253.16'
7 TO 8	N 36° 44' 40" W	262.00'
8 TO 9	S 68° 22' 02" W	98.90'
9 TO 10	S 63° 12' 05" W	213.75'

FIRE HYDRANT FLOW AND PRESSURE INFORMATION			
HYDRANT LOCATIONS	STATIC PRESSURE	FLOW	RESIDUAL PRESSURE
ALL HYDRANTS ALONG GANDER WAY	75 PSI	1650 GPM	20 PSI

FIRE FLOW INFORMATION IS BASED ON A WATERCAD COMPUTER SIMULATION ASSUMING THAT THE HYDRAULIC GRADE LINE FOR BOTH CONNECTION POINTS IS EQUAL TO ELEVATION 1338. AN ESTIMATION OF EXISTING DEMANDS ON THE SYSTEM ALONG WITH FUTURE DEMANDS AS PROPOSED BY THIS DEVELOPMENT, AND CONVERSATIONS WITH THE WESTERN VIRGINIA WATER AUTHORITY. THIS INFORMATION HAS NOT BEEN FIELD VERIFIED.

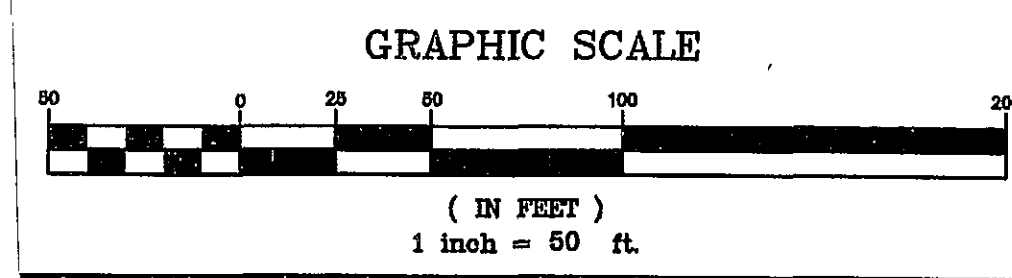
TINKERDALE ROAD
(STATE RTE. 1800, 50' R/W)

ENON DRIVE
(STATE RTE. 1800, 50' R/W)

10' TEMP. CONST. EASEMENT
15' D.E.

24" ES-1 WITH OUTLET PROTECTION, CLASS 1 RIP RAP FOR 14 LF OF TYPE "C" DITCH
24" MINIMUM THICKNESS UNDERLAIN WITH FILTER FABRIC
STA 174-61.78, 775.20' LT

TAX MAP # 027.06-02-01
ROANOKE COUNTY BOARD OF SUPERVISORS
D.B. 1236, PG. 180



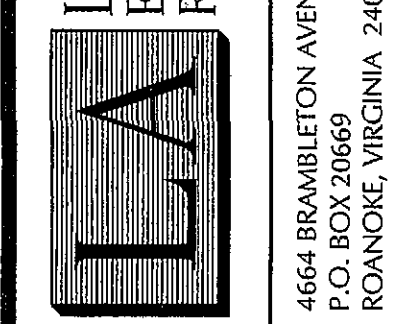
STORMWATER MANAGEMENT MAINTENANCE DRAIN NOTE:
ALL MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE IN ACCORDANCE WITH THE STORMWATER MANAGEMENT MAINTENANCE AGREEMENT EXECUTED AS A PART OF THE APPROVAL OF THESE DEVELOPMENT PLANS BY ROANOKE COUNTY. IN ADDITION, ALL MAINTENANCE OF EACH STORMWATER MANAGEMENT FACILITY SHALL BE IN ACCORDANCE WITH DOR STANDARDS. IF DRAINING OF ONE OF THE STORMWATER MANAGEMENT FACILITIES IS REQUIRED, AN INSPECTION OF THE WATER WITHIN THE FACILITY SHALL BE PERFORMED PRIOR TO DRAINING. IF THE WATER WITHIN THE FACILITY IS SEDIMENT LADEN, THEN THE MAINTENANCE DRAIN SHALL NOT BE UTILIZED. THE FACILITY THEN SHALL BE DRAINED BY MEANS OF PUMPING AND THE WATER MUST BE FILTERED IN ACCORDANCE WITH DOR STANDARDS THROUGH SUCH METHODS AS DESCRIBED IN DOR'S ESC HANDBOOK, STANDARD AND SPECIFICATION 3.26 - DEWATERING STRUCTURE.

MATCH LINE (SHEETS 6 & 9)
MATCH LINE (SHEETS 5 & 8)

AS-BUILT
4-18-2008
MNRK SINK
CONTRACTOR'S SET

GANDER WAY

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA



COMMONWEALTH OF VIRGINIA
THOMAS C. DALE
Lic. No. 033002
PROFESSIONAL ENGINEER

DIMENSIONAL LAYOUT

OVERALL SITE INFRASTRUCTURE AND MASS GRADING DEVELOPMENT PLANS FOR THE OPIDAN RETAIL CENTER
PREPARED FOR
OPIDAN INVESTMENT COMPANY
HOLLINS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

REVISIONS		DESCRIPTION
NO.	DATE	DESCRIPTION
1	6/26/07	ADDED NOTES FOR SWM MAINTENANCE TO ALLOW OPEN CUT OF ENON DRIVE
2	9/7/07	DEVELOPER REVISIONS
3	10/1/07	ADDED SWM REVISIONS
4	11/14/07	ADJUSTED WATER LINE TIE AT STATIONS 15+77 AND 20+44
5		

DATE: June 5, 2007
SCALE: 1" = 50'
COMMISSION NO.: 2006-2240
SHEET 5 OF 23