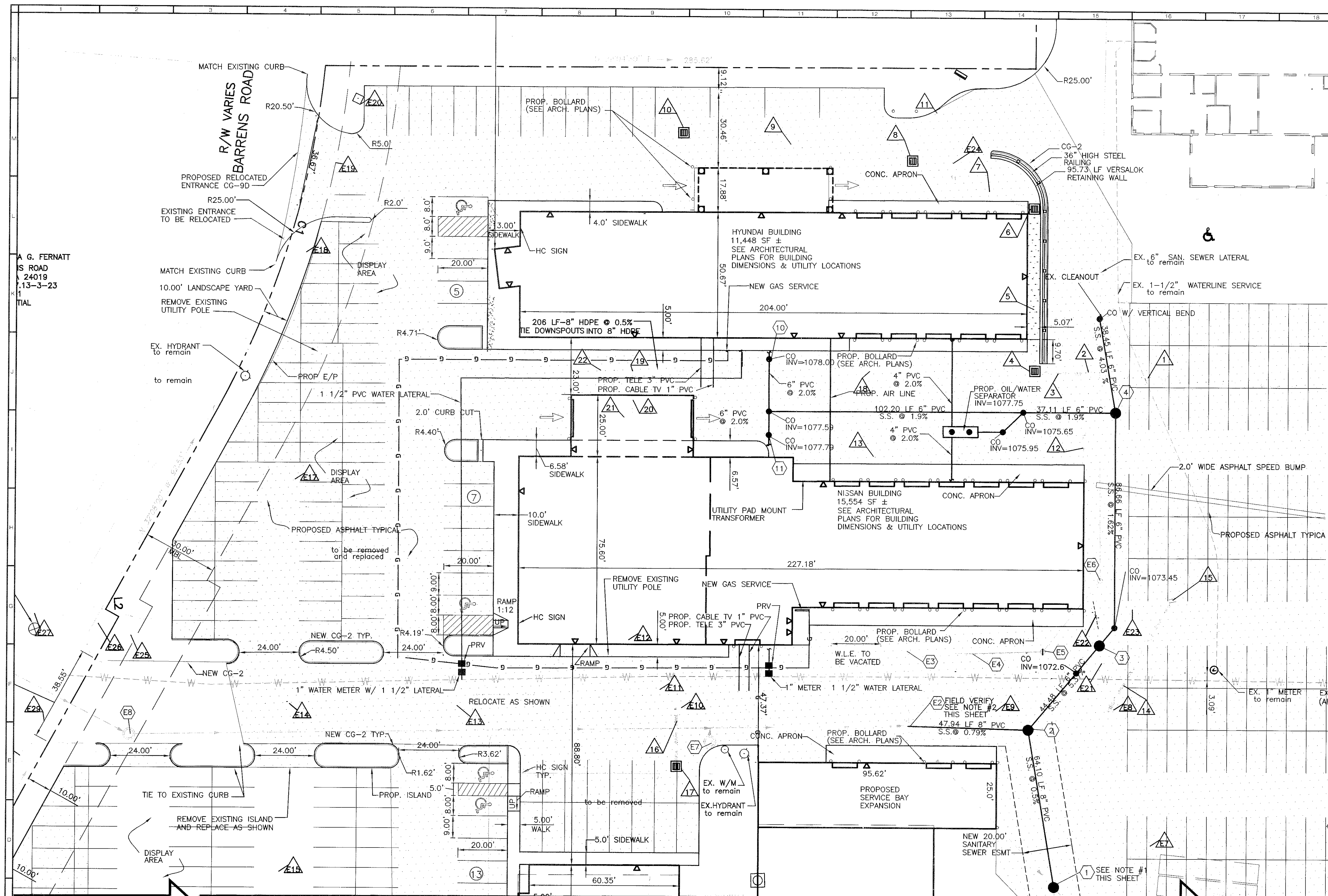




PROPOSED STORM STRUCTURE CHART

- 1 210.91 LF-24" HDPE @ 0.50%
INV IN=1078.05, INV OUT=1077.00
- 2 SDMH TOP=1083.91
- 3 22.05 LF-18" HDPE @ 0.50%
INV IN=1078.26, INV OUT=1078.15
- 4 DI-1 WITH GRATE, TOP=1082.78
- 5 65.42 LF-18" HDPE @ 0.50%
INV IN=1078.69, INV OUT=1078.36
- 6 DI-1 WITH GRATE, TOP=1083.10
- 7 52.99 LF-15" HDPE @ 1.0%
INV IN=1079.32, INV OUT=1078.79
- 8 DI-1 WITH GRATE, TOP=1082.30
- 9 92.21 LF-15" HDPE @ 0.5%
INV IN=1079.88, INV OUT=1079.42
- 10 DI-1 WITH GRATE, TOP=1082.30
- 11 39.67 LF-15" HDPE @ 10.26% WITH EW-1
INV IN=1083.49, INV OUT=1079.42
- 12 35.04 LF-15" HDPE @ 1.54%
INV IN=1078.69, INV OUT=1078.15
- 13 TRENCH DRAIN L=108.00', TOP=1080.70
INV IN=1079.87, INV OUT=1078.79
NEENAH R-4990-DX OR EQUAL
WITH GRATED COVER
- 14 51.71 LF-15" HDPE @ 8.10%
INV IN=1073.59, INV OUT=1069.4
- 15 SDMH TOP=1080.21
- 16 23 LF-15" HDPE @ 1.17%
INV IN=1075.27, INV OUT=1075.00
- 17 DI-1 WITH GRATE, TOP=1079.8

EXISTING STORM STRUCTURE CHART

E1 162 LF 30" RCP	TO REMAIN
E2 STORM MANHOLE TOP = 1067.80 INV = 1064.1 INV = 1064.0	TO REMAIN
E3 90 LF 15" RCP	TO REMAIN
E4 DROP INLET TOP = 1076.12 INV = 1072.7	TO REMAIN
E5 97 LF 15" RCP	TO REMAIN
E6 DROP INLET TOP = 1077.2 INV = 1070.10	TO REMAIN
E7 123 LF 30" RCP	TO REMAIN INV=1064.1
E8 STORM MANHOLE TOP = 1078.90 INV = 1067.5 NEW INV IN = 1069.4	TO BE REPLACED
E9 173 LF 30" RCP	TO REMAIN
E10 DROP INLET TOP = 1077.50 INV = 1069.20 INV = 1069.20	TO BE MODIFIED REPLACE TOP WITH MANHOLE TOP SET TO FINISHED GRADE
E11 35 LF 25" RCP	TO BE REMOVED
E12 DROP INLET TOP = 1079.60 INV = 1070.20	TO BE REMOVED
E13 155 LF 30" RCP	TO REMAIN
E14 DROP INLET TOP = 1081.25 INV = 1071.90 INV = 1071.80	TO REMAIN
E15 138 LF 15" RCP	TO REMAIN
E16 DROP INLET TOP = 1077.90 INV = 1075.00	TO REMAIN
E17 180 LF 24" RCP	TO REMAIN
E18 STORM MANHOLE TOP = 1087.54 INV = 1076.80 INV = 1076.70	TO REMAIN
E19 67 LF 24" RCP	TO REMAIN
E20 DROP INLET TOP = 1086.46 INV = 1082.5	TO BE MODIFIED SET FLUSH TO FINISHED GRADE
E21 40LF 15" RCP	TO BE REMOVED
E22 DROP INLET TOP = 1078.08 INV = 1073.1 INV = 1073.0	TO BE REMOVED
E23 210 LF 15" RCP	TO BE REMOVED REMOVE 32 LF FROM DOWNSTREAM END AND INSTALL STRUCTURE # 15
E24 60 LF 15" RCP	TO BE REMOVED

MATCHLINE SHEET C4

- NOTE
1. BY-PASS PUMPING OF THE SEWER FLOWS MUST ADHERE TO SECTION 02731-3.5 OF THE ROANOKE COUNTY WATER AND SEWER REGULATIONS.
 2. FIELD VERIFY THE LOCATION AND ELEVATION OF THE EXISTING SANITARY SEWER MANHOLE E2. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

STRUCTURE CHART

- 18 159.61 LF-8" HDPE @ 0.5%
INV IN=1079.16, INV OUT=1078.36
- 19 CLEANOUT TOP=1082.0 (TRAFFIC BEARING TOP)
- 20 18.48 LF 8" HDPE @ 4.50%
INV IN=1080.00, INV OUT=1079.16
- 21 TRENCH DRAIN, L=32.0', TOP=1082.00
INV OUT=1080.00, NEENAH R-4990-CX OR EQUAL WITH GRATE COVER
- 22 44.94 LF-8" HDPE @ 0.5%
INV IN=1079.38, INV OUT=1079.16

PROPOSED SANITARY STRUCTURE CHART

- 1 PROPOSED MANHOLE
TOP = 1078.20
INV IN = 1070.40
INV OUT = 1070.30
- 2 PROPOSED MANHOLE
TOP = 1078.45
INV IN = 1070.82
INV IN = 1070.82
INV OUT = 1070.72
- 3 PROPOSED SAMPLING MANHOLE
TOP = 1080.30
INV IN = 1073.31
INV OUT = 1073.21
- 4 PROPOSED MANHOLE
TOP = 1082.00
INV IN = 1074.95

EXISTING SANITARY STRUCTURE CHART

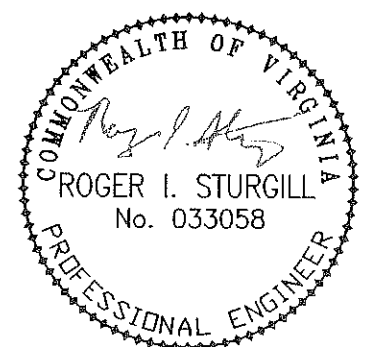
E1 MANHOLE TOP = 1072.1 INV = 1073.00 INV = 1072.90	TO REMAIN
E2 MANHOLE TOP = 1078.79 INV IN = 1072.3 (ABANDON) INV IN = 1071.30 INV OUT = 1071.20	TO REMAIN
E3 MANHOLE	TO BE REMOVED
E4 MANHOLE	TO BE REMOVED
E5 CLEANOUT	TO BE REMOVED
E6 CLEANOUT	TO BE REMOVED
E7 MANHOLE TOP = 1078.35 INV = 1073.00 INV = 1072.90	TO BE MODIFIED ADJUST TOP TO FINISHED GRADE
E8 MANHOLE TOP = 1084.50 INV = 1074.60 INV = 1074.50	TO REMAIN
E9 MANHOLE TOP = 1085.90	TO REMAIN

EXISTING STORM STRUCTURE CHART

E25 83 LF 15" RCP	TO REMAIN
E26 DROP INLET TOP=1085.7 INV IN=1078.2 INV IN=1075.0 INV OUT=1074.9	TO REMAIN
E27 60 LF-15" RCP	TO REMAIN
E28 DROP INLET TOP=1086.0 INV IN=1077.9 INV OUT=1077.8	TO REMAIN
E29 62 LF-15" RCP	TO REMAIN
E30 DROP INLET TOP=1085.4 INV OUT=1080.2	TO REMAIN

LAYOUT & UTILITY PLAN

SCALE: 1"=20'



PLANNERS • ARCHITECTS
ENGINEERS • SURVEYORS

1208 Corporate Circle
Roanoke, Virginia 24018
Phone: 540/772-9580
FAX: 540/772-9090

501 Branchway Road
Richmond, Virginia 23226
Phone: 804/794-0571
FAX: 804/794-2635

880 Technology Park Drive
Suite 200
Chesapeake, Virginia 23059
Phone: 804/553-0132
FAX: 804/553-0133

102 Hubbard Street
Buckhamsburg, Virginia 24060
Phone: 540/961-0961
FAX: 540/961-0962

FIRST TEAM AUTO MALL

LAYOUT & UTILITY PLAN

HOLLINS MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA

DRAWN BY: DRB

DESIGNED BY: SMH

CHECKED BY: RIS

DATE: DEC. 2, 2002

REVISIONS:

12-18-02
01-08-03
01-22-03
02-07-03
02-21-03

SCALE: 20'

SHEET NO.

C3

JOB NO.

RO200107.00