STA. 101+06, 44' LT, INSTALL 36 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX.

STA. 101+06, 8' LT, CONNECT TO EXISTING 12" WATER LINE (12"x6" TEE)

511 L.F. 12" DI WATER MAIN. SEE PROFILE THIS SHEET.

STA. 100+79, 26' RT, INSTALL 12" HORIZ. BENDS (22½ DEGREE MJ)

12" BUTTERFLY VALVE & VALVE BOX.

STA. 100+43, 39' RT, CONNECT TO EXISTING 6" WATER LINE (6" TEE, 12"x6" REDUCER, 12" 22½° BEND)

STA. 103+68, 26' RT, CONNECT TO EXISTING 8" WATER LINE (12"x8" CROSS, 8" 11¼ DEGREE MJ)

STA. 103+77, 25' RT, INSTALL 12" HORIZ. BENDS (11¼ DEGREE MJ)

STA. 103+96, 88' LT, INSTALL 94 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX.

STA. 103+96, 6' RT, CONNECT TO EXISTING 12" WATER LINE (12"x6" TEE)

STA. 104+75, 24' RT, INSTALL 12" HORIZ. BENDS (11¼ DEGREE MJ)

INSTALL 15 L.F. 1" WATER SERVICE LINE, 1" WATER METER, BOX & YOKE. (2 TOTAL)

NOTE: CONTRACTOR SHALL CONTACT BILL RUSSELL, CITY TRAFFIC DEPT. (804)520-9371, PRIOR TO EXCAVATING IN VICINITY OF EXISTING ORNAMENTAL LIGHTS.

NOTES: PAVEMENT REPLACEMENT FOR ADJOINING SIDE STREETS SHALL BE IN ACCORDANCE WITH CITY DETAIL CH-12 AND/OR MATCH EXISTING DEPTH, WHICHEVER IS GREATER.

MINIMUM DEPTHS FOR ALL SURFACE REPLACEMENT ON CITY STREETS SHALL BE PER CITY LOCAL ROAD DETAIL.

PARKING LOT SURFACE REPLACEMENT SHALL MATCH EXISTING DEPTH AND MATERIAL FOR SUBGRADE AND SURFACE MATERIAL.

LAFAYETTE AVE.

LEE AVE.

BOULEVARD

MATCH LINE SEE SHEET U2

HORIZ. 20' 0' 20' 40'

VERT. 5' 0'

100+43, 39' RT CONNECT TO EXIST. 6" WATER LINE, 12" HORIZ. BEND 22½ DEGREE, 100+43, 39' RT 12"x6" REDUCER, 100+48, 39' RT 12" BUTTERFLY VALVE

100+79, 26' RT 12" HORIZ. BEND 22½ DEGREE

EXISTING UGT DEPTH APPROXIMATED

EXISTING GAS LINE DEPTH APPROXIMATED

EXISTING UGE DEPTH APPROXIMATED

EXISTING GROUND LINE

PROPOSED GRADE

PROPOSED 12" DI WATER MAIN

103+68, 26' RT CONNECT TO EXIST. 8" WATER LINE, 12"x8" CROSS, 103+77, 25' RT, 12" HORIZ. BEND 11¼ DEGREE

104+75, 24' RT, 12" HORIZ. BEND 11¼ DEGREE

105+54, 44' RT EXIST. WATER METER, 105+58, 44' RT EXIST. WATER METER

MATCH LINE SEE SHEET U2

100 95 90 85

100+00 101+00 102+00 103+00 104+00 105+00

VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
0001-106-126, RW-201, C-501
0001-106-110, RW-201, C-501

WILLIAM S STAGG
Lic. No. 040204201
PROFESSIONAL ENGINEER
COMMONWEALTH OF VIRGINIA

LOCHNER

SUBMITTAL DATE
April 23, 2012

DATE	REVISION
5/7/12	Rev.1: 90% City Comments
7/16/12	Rev.2: 100% City Comments
8/3/12	Rev.3: 100% Const. Plans
1/7/13	Rev.5: Water Line Change

DRAWN CSS
DESIGNED CRL
CHECKED
SCALE 1" = 20'

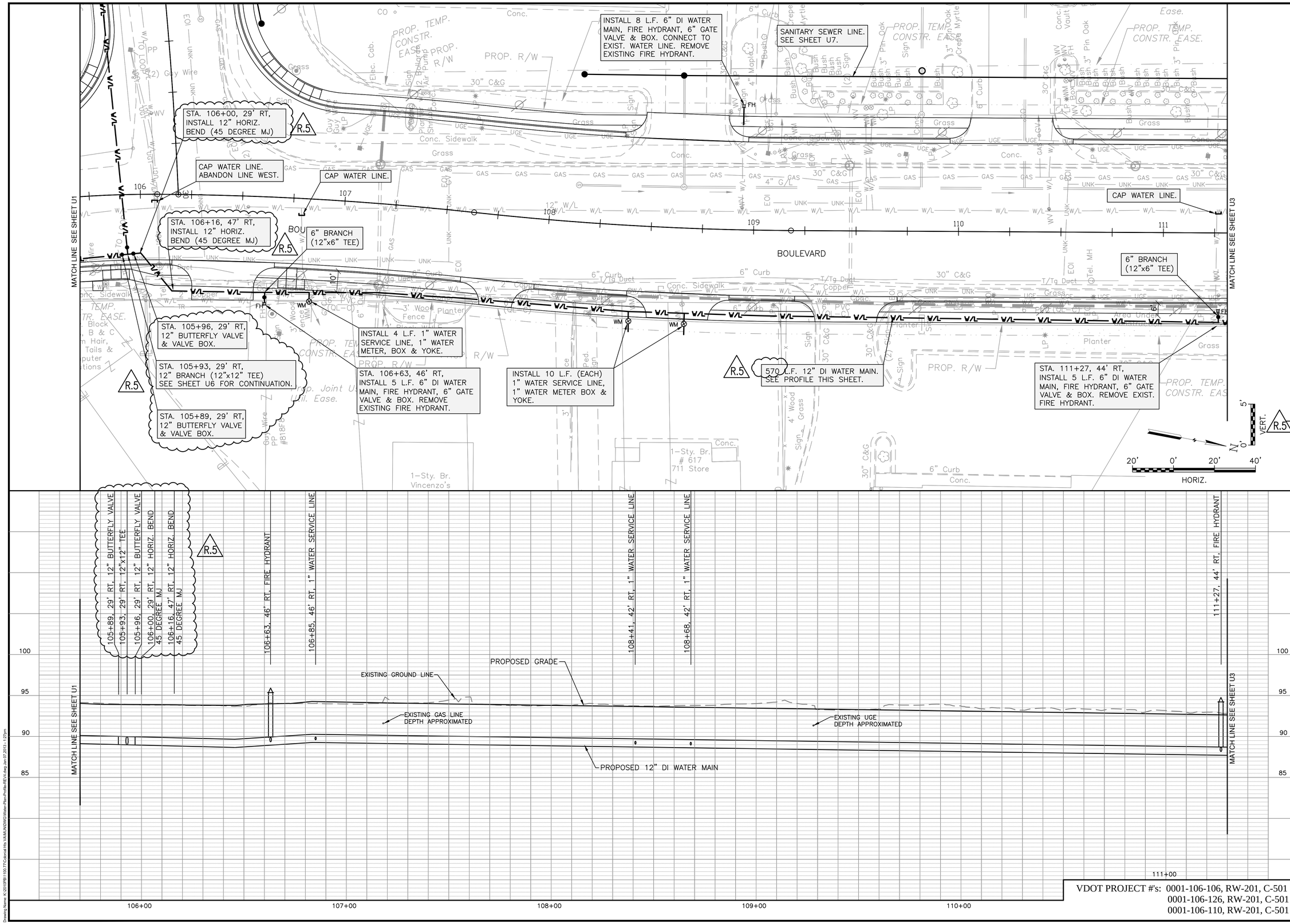
CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

WATER LINE PLAN/PROFILE SHEET

SHEET NO. U1

Drawing Name: K:\2011\PBI\150.77\Colonial Hts VA\MUNDWG\Water-Plan-Profile-REV4.dwg Jan 07,2013 - 1:32pm



VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
0001-106-126, RW-201, C-501
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COMMONWEALTH OF VIRGINIA
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CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS
WATER LINE PLAN/PROFILE SHEET

SHEET NO.
U2

NOTE: CONTRACTOR SHALL REPLACE LANDSCAPING, AND PLANTINGS INCLUDING TREES, BUSHES, MULCH, AND GRASS.

INSTALL 16 L.F. 1" WATER SERVICE LINE, 1" WATER METER BOX & YOKE. CONNECT TO EXIST. WATER LINE. REMOVE EXIST. WATER METER.

SANITARY SEWER LINE. SEE SHEET U8.

STA. 112+44, 10' LT, CONNECT TO EXISTING 12" WATER LINE (12"x12" TEE) VERTICAL BENDS (2-45°) REQUIRED TO MAKE CONNECTION.

STA. 112+44, 42' RT, INSTALL 49 L.F. 12" DI WATER MAIN, 12" BUTTERFLY VALVE & VALVE BOX.

560 L.F. 12" DI WATER MAIN. SEE PROFILE THIS SHEET.

REMOVE & REPLACE 5 L.F. CONCRETE CURB. MATCH EXISTING.

INSTALL 12" HORIZ. BENDS (11¼ DEGREE MJ)
STA. 115+58, 46' RT
STA. 115+84, 41' RT

SAT. 116+10, 41' RT, CONNECT TO EXISTING 6" WATER LINE. (12"x6" TEE)

STA. 116+22, 42' RT, CONNECT TO EXISTING 12" WATER LINE. (12"x12" TEE)

STA. 112+40, 46' RT, 12" BUTTERFLY VALVE & VALVE BOX.

STA. 112+44, 46' RT, 12" BRANCH (12"x12" TEE)

STA. 112+48, 46' RT, 12" BUTTERFLY VALVE & VALVE BOX.

BORE 70 L.F. 12" DI WATER MAIN.
STA. 113+08, 41' RT, TO
STA. 113+78, 41' RT.

ATM NOT TO BE DISTURBED.

DEFLECT WATER LINE AS NECESSARY.

REMOVE & REPLACE 21.0 S.Y. ASPHALT PAVEMENT. MATCH EXISTING.

DEFLECT WATER LINE AS NECESSARY.

BORE 40 L.F. 12" DI WATER MAIN BY EXISTING SIGN.
STA. 114+43, 45' RT, TO
STA. 114+83, 47' RT.

REMOVE & REPLACE 47 S.Y. ASPHALT PAVEMENT AND 20 L.F. PARKING STRIPING. MATCH EXISTING.

REMOVE & REPLACE 5 L.F. CONCRETE CURB. MATCH EXISTING.

6" BRANCH (12"x6" TEE)

STA. 115+82, 41' RT, INSTALL 4 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX.

REMOVE EXIST. FIRE HYDRANT.

MATCH LINE SEE SHEET U2

MATCH LINE SEE SHEET U4

BRUCE AVE.

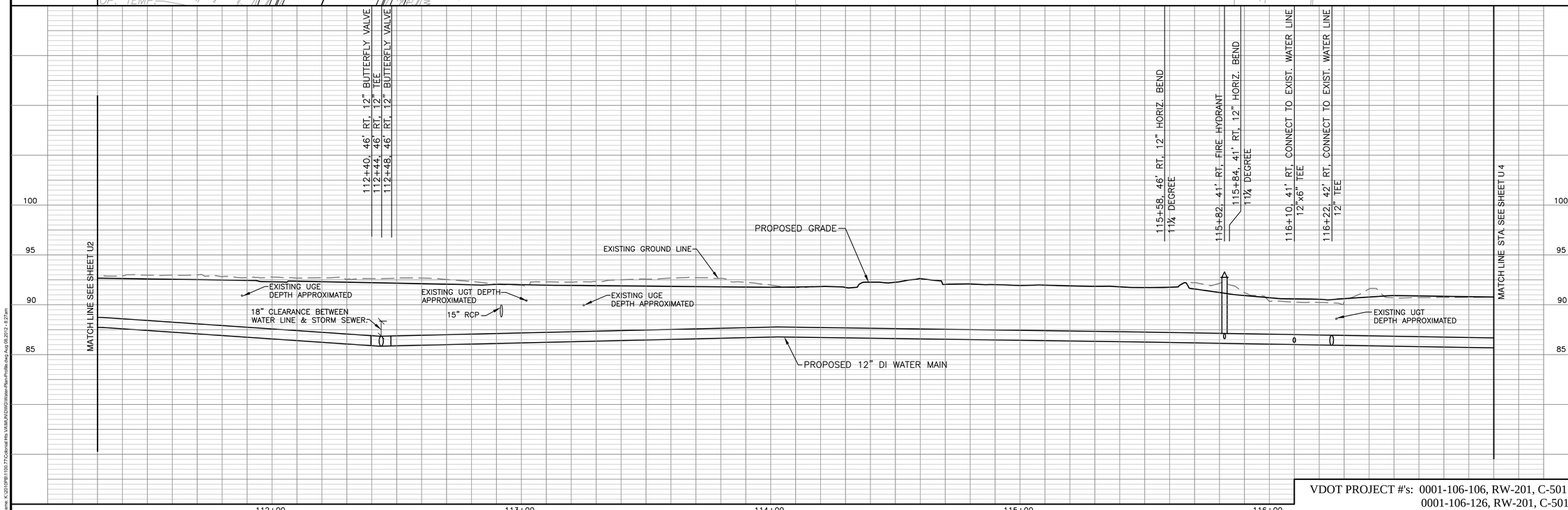
PICKWICK AVE.

LYNCHBURG AVE.

BOULEVARD

HORIZ. 20' 0' 20' 40'

VERT. 5' 0'



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0001-106-126, RW-201, C-501
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DESIGNED CWL
CHECKED
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CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

WATER LINE PLAN/PROFILE SHEET

SHEET NO. U3

Drawing Name: K:\2012\PR\11100.77\Colonial Hts VA\MAIN\DWG\Water-Plan-Profile.dwg Aug 08,2012 - 8:27pm

MATCH LINE SEE SHEET U3

MATCH LINE SEE SHEET U5

WINDSOR AVE.

WRIGHT AVE.

SUFFOLK AVE.

NORFOLK AVE.

BOULEVARD

BOULEVARD

1 – Sty. Br. Jiffy Lube

1–Sty. Block #712 Meineke

1 – Sty. Stucco Tri City Insurance

Prop. Joint Use Util. Ease.

PROP. TEMP. CONSTR. EASE.

PROP. R/W

Conc. Sidewalk

Conc. S/W

Grass

Curb

6" Curb

T/Tg Duct

Rail Road Tie

Bushes

Planter

Shed

Access To Storm Drain

(2) Sign (Conc)

Comb Pole w/ LP # DN33

Comb Pole w/ LP # DN3764

Prop. 5' Joint Use Util. Ease.

20' Ingress/ Egress Ease.

117

118

119

120

121

122

CAP WATER LINE.

STA. 118+97, 38' RT, CONNECT TO EXISTING 4" WATER LINE (12"x4" TEE) VERTICAL BENDS (2–45°) REQUIRED FOR CONNECTION.

6" BRANCH (12"x6" TEE)

6" BRANCH (12"x6" TEE)

REMOVE & REPLACE 108 S.Y. ASPHALT PAVEMENT. MATCH EXISTING.

REMOVE & REPLACE 80 L.F. PARKING STRIPING. MATCH EXISTING.

STA. 118+50, 44' RT, INSTALL 12" HORIZ. BEND (11¼ DEGREE MJ)

STA. 119+01, 38' RT, 12" BUTTERFLY VALVE & VALVE BOX.

STA. 119+28, 35' RT, INSTALL 12" HORIZ. BEND (11¼ DEGREE MJ)

STA. 119+21, 36' RT, INSTALL 3 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX. REMOVE EXIST. FIRE HYDRANT.

560 L.F. 12"DI WATER MAIN. SEE PROFILE THIS SHEET.

STA. 121+35, 38' RT, INSTALL 3 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX. REMOVE EXIST. FIRE HYDRANT.

N

5' VERT.

0'

20' 0' 20' 40'

HORIZ.

117+75, 44' RT, 1¼° VERTICAL BEND AS REQUIRED

118+50, 44' RT, 11¼° HORIZ. BEND

118+97, 38' RT CONNECT TO EXIST. 4" WATER LINE 12"x4" TEE

119+01, 38' RT, 12" BUTTERFLY VALVE

119+21, 36' RT, FIRE HYDRANT

119+28, 35' RT, 11¼° HORIZ. & VERT. BEND

119+71, 35' RT, 11¼° VERTICAL BEND AS REQUIRED

121+35, 38' RT, FIRE HYDRANT

EXISTING UNK DEPTH APPROXIMATED.

19"x30" RCP

PROPOSED GRADE

EXISTING GROUND LINE

15" RCP

18" CLEARANCE BETWEEN WATER LINE & STORM SEWER.

EXISTING UNK DEPTH APPROXIMATED.

PROPOSED 12" DI WATER MAIN

100

95

90

85

117+00

118+00

119+00

120+00

121+00

122+00

VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
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COMMONWEALTH OF VIRGINIA
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CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

WATER LINE PLAN/PROFILE SHEET

SHEET NO.
U4

Drawing Name: K:\2012PBI\1100.77\Colonial Hts VA\MUNI\GIS\Water\Plan-Profile.dwg Aug 08,2012 - 8:28am

MATCH LINE SEE SHEET U4

BOULEVARD

ROANOKE AVE.

W. WESTOVER AVE.

RICHMOND AVE.

12" BUTTERFLY VALVE & VALVE BOX.

STA. 124+67, 40' RT, CONNECT TO EXISTING 6" WATER LINE. (12"x6" TEE)

524 L.F. 12"DI WATER MAIN. SEE PROFILE THIS SHEET.

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

REMOVE & REPLACE 7.5 S.Y ASPHALT PAVEMENT.

STA. 127+45, 38' RT, INSTALL 3 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX.

STA. 127+79, 44' RT, CONNECT TO EXISTING 6" WATER LINE (6" TEE, 12"X6" REDUCER)

6" BRANCH (12"x6" TEE)

STA. 127+50, 38' RT, STA. 127+54, 46' RT, INSTALL 12" HORIZ. BENDS (45 DEGREE)

REMOVE & REPLACE 5.75 S.Y. CONC. SIDEWALK.

1 - Sty. Br. #1018 What A Burger

1 - Sty. Br. #1009 Chords & Keys Music

1 - Sty. Br. #1005 Blondies Beauty & Barber

1 - Sty. Br. #1001 Swearingen Realty Co.

1 - Sty. Br. #905 1/2 State Farm Insurance

905 Auto Glass

1-Sty. Blk. #915 Gas Station

Canopy w/ 4 Gas Pump

HORIZ. 20' 0' 20' 40'

VERT. 5' 0'

N

MATCH LINE SEE SHEET U4

124+67, 40' RT, CONNECT TO EXIST. WATER LINE
12"x6" TEE
124+71, 40' RT, 12" BUTTERFLY VALVE

127+45, 38' RT, FIRE HYDRANT
127+50, 38' RT, 45° HORIZ. BEND
127+54, 46' RT, 45° HORIZ. BEND
127+79, 44' RT, 12"x6" REDUCER
127+79, 44' RT, CONNECT TO EXIST. 6" WATER LINE

PROPOSED GRADE
EXISTING GROUND LINE

15" RCP
15" RCP

EXISTING UGT DEPTH APPROXIMATED
EXISTING 12" RCP

PROPOSED 12" DI WATER MAIN

100 95 90 85

123+00 124+00 125+00 126+00 127+00 128+00

VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
0001-106-126, RW-201, C-501
0001-106-110, RW-201, C-501

COMMONWEALTH OF VIRGINIA
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DRAWN CSS
DESIGNED CWL
CHECKED
SCALE 1" = 20'

CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

WATER LINE PLAN/PROFILE SHEET

SHEET NO.
U5

Drawing Name: K:\2010\PB\1100.77\Colonial Hts VA\MUNDOWS\Water-Plan-Profile.dwg Aug 08,2012 - 8:29am

595 L.F. 12"DI WATER MAIN. SEE PROFILE THIS SHEET.

STA. 33+05, 43' RT, INSTALL 76 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX.

71 L.F. 1" WATER SERVICE LINE, 1" WATER METER, BOX & YOKE.

REMOVE & REPLACE 6' WOODEN PRIVACY FENCE AS REQUIRED.

REMOVE & REPLACE 10 S.Y. ASPHALT PAVEMENT. MATCH EXISTING.

REMOVE & REPLACE 10 L.F. CONCRETE CURB & GUTTER. MATCH EXISTING.

REMOVE & REPLACE 5.75 S.Y. CONCRETE SIDEWALK.

100 L.F. 1" WATER SERVICE LINE, 1" WATER METER BOX & YOKE. METER SHALL BE LOCATED AT EXISTING SERVICE LINE. CONTRACTOR TO FIELD VERIFY LOCATION.

CONTRACTOR TO VERIFY LOCATION OF FUEL STORAGE TANKS PRIOR TO CONSTRUCTION IN THIS AREA.

88 L.F. 1" WATER SERVICE LINE, 1" WATER METER, BOX & YOKE.

SANITARY SEWER LINE. SEE SHEET U9.

STA. 29+54, 25' LT, 12" BRANCH (12"x12" TEE) SEE SHEET U2 FOR CONTINUATION.

STA. 31+49, 31' LT, INSTALL 5 L.F. 6" DI WATER MAIN, FIRE HYDRANT, 6" GATE VALVE & BOX.

CAP WATER LINE. ABANDON LINE WEST.

DUPUY AVE.

BOULEVARD

ABANDON EXIST. 6" WATER LINE

PLUG EXIST. LINE EAST

STA. 35+39, 21' LT, 12" BEND(45 DEGREE)

STA. 35+53, 13' LT, CONNECT TO EXISTING 6" WATER LINE (12" 45 DEGREE & 12"x6" REDUCER)

STA. 35+54, 13' LT, 6" BUTTERFLY VALVE & VALVE BOX.

STA. 34+08, 27' LT. STA. 34+13, 23' LT, 2–12" BENDS (45 DEGREE)

REMOVE & REPLACE 14 S.Y. AGG. PAVEMENT.

REMOVE & REPLACE 78 S.Y. CONCRETE SIDEWALK.

STA. 33+05, 33' LT, 6" BRANCH (12"x6" TEE)

7 L.F. 1" WATER SERVICE LINE, 1" WATER METER, BOX & YOKE.

7 L.F. 1" WATER SERVICE LINE, 1" WATER METER, BOX & YOKE.

DEFLECT WATER LINE AS NECESSARY.

REMOVE & REPLACE 6' WOODEN PRIVACY FENCE AS REQUIRED.

6" BRANCH (12"x6" TEE)

12 L.F. 1" WATER SERVICE LINE, 1" WATER METER, BOX & YOKE.

DEFLECT WATER LINE AS NECESSARY.

STA. 29+58, 25' LT, 12" BUTTERFLY VALVE & VALVE BOX.

HORIZ. 20' 0' 20' 40'

VERT. 5' 0'

35+54, 13' LT, 6" BUTTERFLY VALVE
35+53, 13' LT, CONNECT TO EXIST. WATER LINE 12" 45 DEGREE & 12"x6" RED.
35+39, 21' LT, 12" HORIZ. BEND 45 DEGREE
34+13, 23' LT, 12" HORIZ. BEND 45 DEGREE
34+08, 27' LT, 12" HORIZ. BEND 45 DEGREE
33+63, 30' LT, 1" WATER SERVICE LINE
33+50, 30' LT, 1" WATER SERVICE LINE
33+10,33' LT, 1" WATER SERVICE LINE
33+05, 33' LT, FIRE HYDRANT
32+28, 33' LT, 1" WATER SERVICE LINE
32+23, 33' LT, 1" WATER SERVICE LINE
31+89, 32' LT, 1" WATER SERVICE LINE
31+49, 31' LT, FIRE HYDRANT
30+00 ℄ BOULEVARD
29+58, 25' LT, 12" BUTTERFLY VALVE
29+54, 25' LT, CONNECT TO NEW 12" WATER LINE 12" TEE

PROPOSED GRADE
EXISTING GROUND LINE
EXISTING UGT DEPTH APPROXIMATED
EXISTING UNK DEPTH APPROXIMATED
EXISTING 12" WATER LINE DEPTH APPROXIMATED
PROPOSED 12" DI WATER MAIN
MATCH LINE SEE SHEET U2

100 95 90 85

35+00 34+00 33+00 32+00 31+00 30+00

VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
0001-106-126, RW-201, C-501
0001-106-110, RW-201, C-501

Drawing Name: K:\2012PBR\1100.77\Colonial Hts VA\MUNI\DWG\Water\Plan-Profile.dwg Apr 09,2012 - 8:30am

WILLIAM S STAGG
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COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

LOCHNER

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CITY OF COLONIAL HEIGHTS

DEPARTMENT OF PUBLIC WORKS

ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

WATER LINE PLAN/PROFILE SHEET

SHEET NO.
U6

SMH–D STA. 108+63, 74' LT, 8.34 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER. INV.=85.96, RIM=94.3±

SMH–E STA. 108+12, 72' LT, 8.33 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER. INV.=86.07, RIM=94.4±

* SMH–E AND 44 L.F. OF 8" SEWER INSTALLATION IS DEPENDANT ON VERIFICATION OF NEED BY TELEVISING EXISTING LINE.

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

REMOVE & REPLACE LIGHT POLE AFTER COMPLETION OF SEWER.

EXIST. MH APPROX. 234 L.F. W. OF EXIST. MH INV.=87.29, RIM=92.96

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

STA. 109+82, 78' LT, INSTALL NEW SAMPLING MANHOLE PER CITY STANDARDS. CITY DETAIL MAN–17. INV.=±88.0 (FIELD VERIFY) RIM=±94.0 (MATCH EXIST. GRADE

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

REMOVE & REPLACE 45 S.Y. ASPHALT PAVEMENT.

CONNECT WALGREENS 6" SANITARY SEWER SERVICE LINE.

JACK AND BORE 20 L.F. STA. 110+42 TO STA. 110+62

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

EXIST. MH RIM=92.19 INV.=86.01

SMH–C STA. 112+30, 75' LT, 6.6 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER. INV.=85.00, RIM 91.62

REMOVE & REPLACE 43 S.Y. ASPHALT PAVEMENT.

* REMOVE & REPLACE 84 S.Y. ASPHALT PAVEMENT.

* 44 L.F. 8" PVC SANITARY SEWER PIPE. SEE PROFILE THIS SHEET.

EXIST. MH RIM=93.41 INV.=85.96

REPLACE 60 L.F. PARKING STRIPING. MATCH EXISTING.

REPLACE 20 L.F. PAVEMENT MARKING. MATCH EXISTING.

REMOVE & REPLACE 72 S.Y. ASPHALT PAVEMENT.

CAUTION: WATER SERVICE LINES, WATER METERS AND FIRE HYDRANT LOCATED IN THIS AREA.

REPLACE 120 L.F. PARKING STRIPING & 20 L.F. PED. CROSSING. MATCH EXISTING.

REMOVE & REPLACE 150 S.Y. ASPHALT PAVEMENT.

REMOVE & REPLACE FIRE HYDRANT.

REMOVE & REPLACE 5.75 S.Y. CONCRETE SIDEWALK.

EXIST. MH RIM=91.99 INV.=84.99

* TELEVISE 44 L.F. SANITARY SEWER LINE TO VERIFY EXISTING SERVICES. TO BE COMPLETED PRIOR TO INSTALLATION OF NEW SEWER.

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

359 L.F. 8" PVC SANITARY SEWER PIPE. SEE PROFILE THIS SHEET.

REMOVE EXIST. FRAME/COVER AND MANHOLE DOWN TO TOP OF SUBGRADE ELEVATION (MIN.). FILL SEWER LINE AND MANHOLE WITH FLOWABLE FILL.

REMOVE EXIST. FRAME/COVER AND MANHOLE DOWN TO TOP OF SUBGRADE ELEVATION (MIN.). FILL SEWER LINE AND MANHOLE WITH FLOWABLE FILL.

12" WATER LINE. SEE SHEET U2.

MATCH LINE, SEE SHEET U8

BOULEVARD

BRUCE AVE.

PICKWICK AVE.

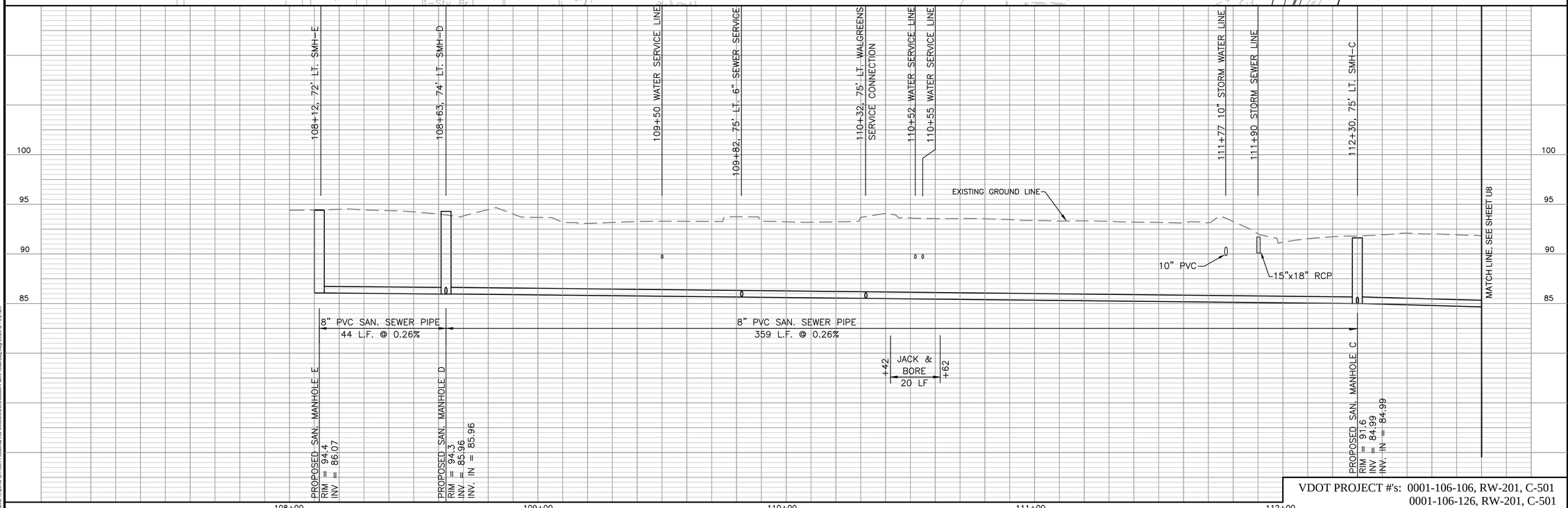
PROP. TEMP. CONSTR. EASE.

NOTE: CONTRACTOR SHALL REPLACE LANDSCAPE PLANTINGS INCLUDING TREES, BUSHES, MULCH, AND GRASS IN ALL DISTURBED AREAS.

NOTE: SANITARY SEWER SERVICE CONNECTIONS ARE TO BE LOCATED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RECONNECTING SERVICES TO NEW SEWER LINE AND REPLACING CLEAN–OUTS AS REQUIRED, AFTER NEW LINE IS TESTED.

HORIZ. 20' 0' 20' 40'

VERT. 5' 0'



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7/16/12	Rev.2: 100% City Comments
8/3/12	Rev.3: 100% Const. Plans

DRAWN CSS
DESIGNED CWL
CHECKED
SCALE 1" = 20'

CITY OF COLONIAL HEIGHTS

DEPARTMENT OF PUBLIC WORKS

ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

SEWER LINE PLAN/PROFILE SHEET

SHEET NO. U7

Drawing Name: K:\2012PBI\1100.77\Colonial Hts VA\MUNI\DWG\Sewer\Plan-Profile.dwg Aug 09,2012 - 9:21am

SMH–C STA. 112+30, 75' LT, 6.6 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER. INV.=85.00, RIM=91.6±

SMH–B STA. 113+10, 56' LT. 7.3 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER. INV.=84.50, RIM=91.8±

REMOVE & REPLACE 292 S.Y. ASPHALT PAVEMENT.

REMOVE & REPLACE 69 S.Y. ASPHALT PAVEMENT.

JACK & BORE 10 L.F. UNDER EXISTING FENCE. STA. 116+27 TO STA. 116+37.

REMOVE & REPLACE 5.75 S.Y. CONCRETE SIDEWALK.

EXIST. MH (337 L.F.) RIM=89.35 INV.=80.95

SMH–A STA. 117+07, 58' LT, 8.2 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER. INV.=82.10, RIM 90.3

REMOVE & REPLACE 11.5 S.Y. CONCRETE PAVEMENT.

REMOVE & REPLACE CHAIN LINK FENCE AS REQUIRED.

JACK & BORE 10 L.F. UNDER EXISTING SIGN. STA. 114+17 TO STA. 114+27

REMOVE & REPLACE 5.75 S.Y. CONCRETE SIDEWALK.

78 L.F. 8" PVC SANITARY SEWER PIPE. SEE PROFILE THIS SHEET.

REPLACE 20 L.F. PARKING STRIPING. MATCH EXISTING.

REPLACE 35 L.F. PARKING STRIPING. MATCH EXISTING.

SMH–AA STA. 115+49, 57' LT, 7.88 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER. INV.=83.32, RIM=91.3

REPLACE 15 L.F. PARKING STRIPING. MATCH EXISTING.

EXIST. MH RIM=90.21 INV.=82.11

393 L.F. 8" PVC SANITARY SEWER PIPE. SEE PROFILE THIS SHEET.

PLUG EXIST. SEWER LINE. ABANDON LINE SOUTH WITH FLOWABLE FILL.

REMOVE & REPLACE 69 S.Y. ASPHALT PAVEMENT.

REMOVE & REPLACE 10 L.F. CONC. CURB & GUTTER.

12" WATER LINE. SEE SHEET U3.

MATCH LINE, SEE SHEET U7

BRUCE AVE.

PICKWICK AVE.

LYNCHBURG AVE.

WINDSOR AVE.

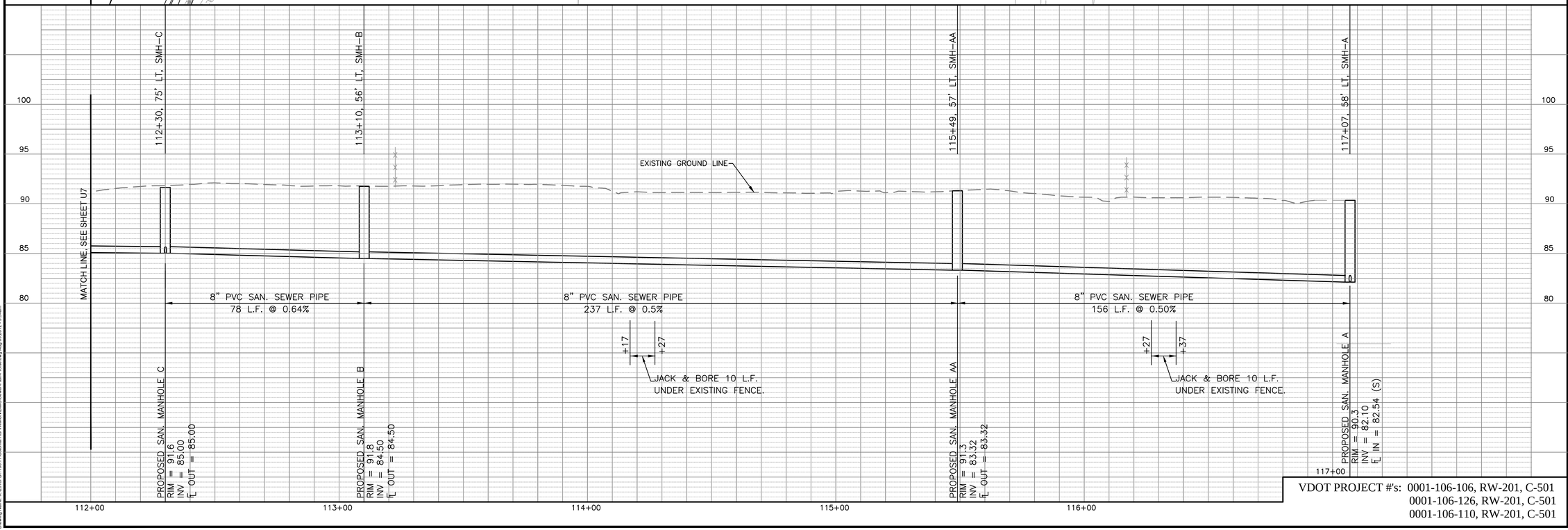
BOULEVARD

NOTE: CONTRACTOR SHALL REPLACE LANDSCAPE PLANTINGS INCLUDING TREES, BUSHES, MULCH, AND GRASS IN ALL DISTURBED AREAS.

NOTE: SANITARY SEWER SERVICE CONNECTIONS ARE TO BE LOCATED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RECONNECTING SERVICES TO NEW SEWER LINE AND REPLACING CLEAN–OUTS AS REQUIRED, AFTER NEW LINE IS TESTED.

HORIZ. SCALE 1" = 20'

VERT. 5' 0'



VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
0001-106-126, RW-201, C-501
0001-106-110, RW-201, C-501

WILLIAM S STAGG
Lic. No. 040204201
PROFESSIONAL ENGINEER
COMMONWEALTH OF VIRGINIA

LOCHNER

SUBMITTAL DATE
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CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

SEWER LINE PLAN/PROFILE SHEET

SHEET NO.
U8

Drawing Name: K:\2015\R\81100.77\Colonial Hts VA\MUNDWG\Sewer-Plan-Profile.dwg Aug 09,2012 - 9:54am

SMH–G STA. 33+61, 29' RT, 5.75 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER.
INV.=86.35, RIM=92.1

140 L.F. 8" PVC SANITARY SEWER PIPE. SEE PROFILE THIS SHEET.

280 L.F. 8" PVC SANITARY SEWER PIPE. SEE PROFILE THIS SHEET.

* SMH–F STA. 30+80, 46' RT, 7.21 L.F. SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER.
INV.=87.49, RIM=94.7

EXIST. MH
RIM=90.52
INV.=80.98

EXIST. MH
RIM=93.79
INV.=88.07

EXIST. MH
RIM=93.79
INV.=UNAVAILAABLE

172°

175°

DUPUY AVE.

BOULEVARD

SMH–H 5.11 L.F. STA. 34+96, 12' RT, SANITARY SEWER MANHOLE, MANHOLE FRAME & COVER.
INV.=85.79, RIM=90.9
* CONTRACTOR TO VERIFY DEPTH OF EXISTING SEWER PRIOR TO ORDERING MANHOLE.

12" WATER LINE. SEE SHEET U6.

REMOVE EXIST. FRAME/COVER AND MANHOLE DOWN TO TOP OF SUBGRADE ELEVATION (MIN.). FILL SEWER LINE AND MANHOLE WITH FLOWABLE FILL.

* TELEVISE 280 L.F. SANITARY SEWER LINE TO VERIFY EXISTING SERVICES. TO BE COMPLETED PRIOR TO INSTALLATION OF NEW SEWER.

NOTE: SANITARY SEWER SERVICE CONNECTIONS ARE TO BE LOCATED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR RECONNECTING SERVICES TO NEW SEWER LINE AND REPLACING CLEAN–OUTS AS REQUIRED, AFTER NEW LINE IS TESTED.

* NOTE: SMH–F LOCATION IS DEPENDANT ON VERIFICATION OF SERVICES BY TELEVISING. IF NO SERVICES ARE REQUIRED THEN SMH–F MAY BE RELOCATED TO STA. 32+06, 35' RT.
INV.=±86.97, RIM=±92.55
CHANGES ARE TO BE APPROVED BY CITY PRIOR TO CONSTRUCTION.

N

20' 0' 20' 40'
HORIZ. SCALE 1" = 20'

5' 0'
VERT.

34+96, 12' RT, SMH–H
33+61, 29' RT, SMH–G
33+58 15" RCP
33+14 WATER SERVICE LINE
33+10 6" WATER LINE
32+29 WATER SERVICE LINE
32+24 WATER SERVICE LINE
STA. 30+80, 46' RT, SMH–F

EXISTING GROUND LINE
PROPOSED GRADE
EXISTING GAS LINE DEPTH APPROXIMATED
PROPOSED 1" WATER SERVICE LINE
EXISTING GAS LINE DEPTH APPROXIMATED
15" RCP
EXISTING GAS LINE DEPTH APPROXIMATED
EXISTING UGE DEPTH APPROXIMATED
EXISTING UGE DEPTH APPROXIMATED
PROPOSED 6" WATER LINE

8" PVC SAN. SEWER PIPE
140 L.F. @ 0.40%

8" PVC SAN. SEWER PIPE
280 L.F. @ 0.40%

PROPOSED SAN. MANHOLE H
RIM = 90.9
INV = 85.79

PROPOSED SAN. MANHOLE G
RIM = 92.1
INV = 86.35

PROPOSED SAN. MANHOLE F
RIM = 94.7
INV = 87.49

100 95 90 85

35+00 34+00 33+00 32+00 31+00 30+00

VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
0001-106-126, RW-201, C-501
0001-106-110, RW-201, C-501

COMMONWEALTH OF VIRGINIA
WILLIAM S STAGG
Lic. No. 040204201
PROFESSIONAL ENGINEER

LOCHNER

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CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS

SEWER LINE PLAN/PROFILE SHEET

SHEET NO.
U9

Drawing Name: K:\2012\PR\1109.77\Colonial Hts VA\MUNDWG\Sewer-Plan-Profile.dwg Aug 09,2012 - 9:23am

WATER MAIN SUMMARY

SHEET NO.	WATER SERVICE LINE	DI WATER MAIN		GATE VALVE & BOX	BUTTERFLY VALVE & VALVE BOX		FIRE HYDRANT	WATER METER BOX & YOKE	BENDS					REDUCER	TEE				CROSS	BORE 12" WATER LINE	REMOVE EXISTING WATER METER	REMOVE EXISTING FIRE HYDRANT	CAP EXISTING LINE	REMOVE & REPLACE ASPHALT PAVEMENT	REMOVE & REPLACE SIDEWALK	REMOVE & REPLACE CURB & GUTTER	REMOVE & REPLACE AGGREGATE PAVEMENT	REMOVE & REPLACE PARKING STRIPING
	1"	6"	12"	6"	6"	12"		1"	12"–11¼°	12"–22½°	12"–45°	8"–11¼°	4"–45°	12"x6"	6"	12"x4"	12"x6"	12"x12"	8"x12"									
	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	EA	EA	EA	SY	SY	LF	SY	LF
U1	30	130	511	2		1	2	2	2	2		1		1	1		2		1	0				0				
U2	24	18	570	3		2	3	3			2						2	1				3	3					
U3	16	4	499	1		3	1	1	2		2						2	3		110	1	1		68		10		20
U4		6	560	2		1	2		4				2			1	2					2	1	108				80
U5		3	524	1		1	1				2			1	1		2							7.5	5.75	10		
U6	285	81	595	2	1	1	2	6			4			1			2						2	10	83.75	10	14	
TOTAL	355	242	3259	11	1	9	11	12	8	2	10	1	2	3	2	1	12	4	1	110	1	6	6	193.5	89.5	30	14	100

R.4 R.5 R.5 R.5 R.5 R.5

SANITARY SEWER SUMMARY

SHEET NO.	SANITARY SEWER PVC PIPE	SANITARY SEWER MANHOLE	MANHOLE FRAME & COVER f&C–1	JACK & BORE	SEWER CLEANOUT		REMOVE & REPLACE ASPHALT PAVEMENT	REMOVE & REPLACE CONCRETE PAVEMENT	REMOVE & REPLACE SIDEWALK	REMOVE & REPLACE CURB & GUTTER	TELEVISE 8" SEWER LINE	REMOVE & REPLACE PARKING STRIPING	ABANDON MANHOLE
	8"				4"	6"							
	LF	LF	EA	LF	EA	EA	SY	SY	SY	LF	LF	LF	EA
U7	383	29.3	4	20			394		5.75	60	44	220	3
U8	451	23.4	3	20			430	11.5	11.5	10		70	
U9	420	18.1	3								280		1
TOTAL	1254	70.8	10	40			824	11.5	17.25	70	324	290	4

R.4

R.4

R.5 1/7/13 Rev.5: Updated Quantities

VDOT PROJECT #'s: 0001-106-106, RW-201, C-501
0001-106-126, RW-201, C-501
0001-106-110, RW-201, C-501

COMMONWEALTH OF VIRGINIA
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12/19/12	Rev.4: Updated Quantities

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CITY OF COLONIAL HEIGHTS
DEPARTMENT OF PUBLIC WORKS
ENGINEERING AND DEVELOPMENT DIVISION

BOULEVARD UTILITY IMPROVEMENTS
WATER MAIN & SAN. SEWER SUMMARY SHEET

SHEET NO.
U10

Drawing Name: K:\2010PB\1100.77\Colonial Hts VA\MUNDWG\U08-Summary.dwg Jan 07,2013 - 11:05am