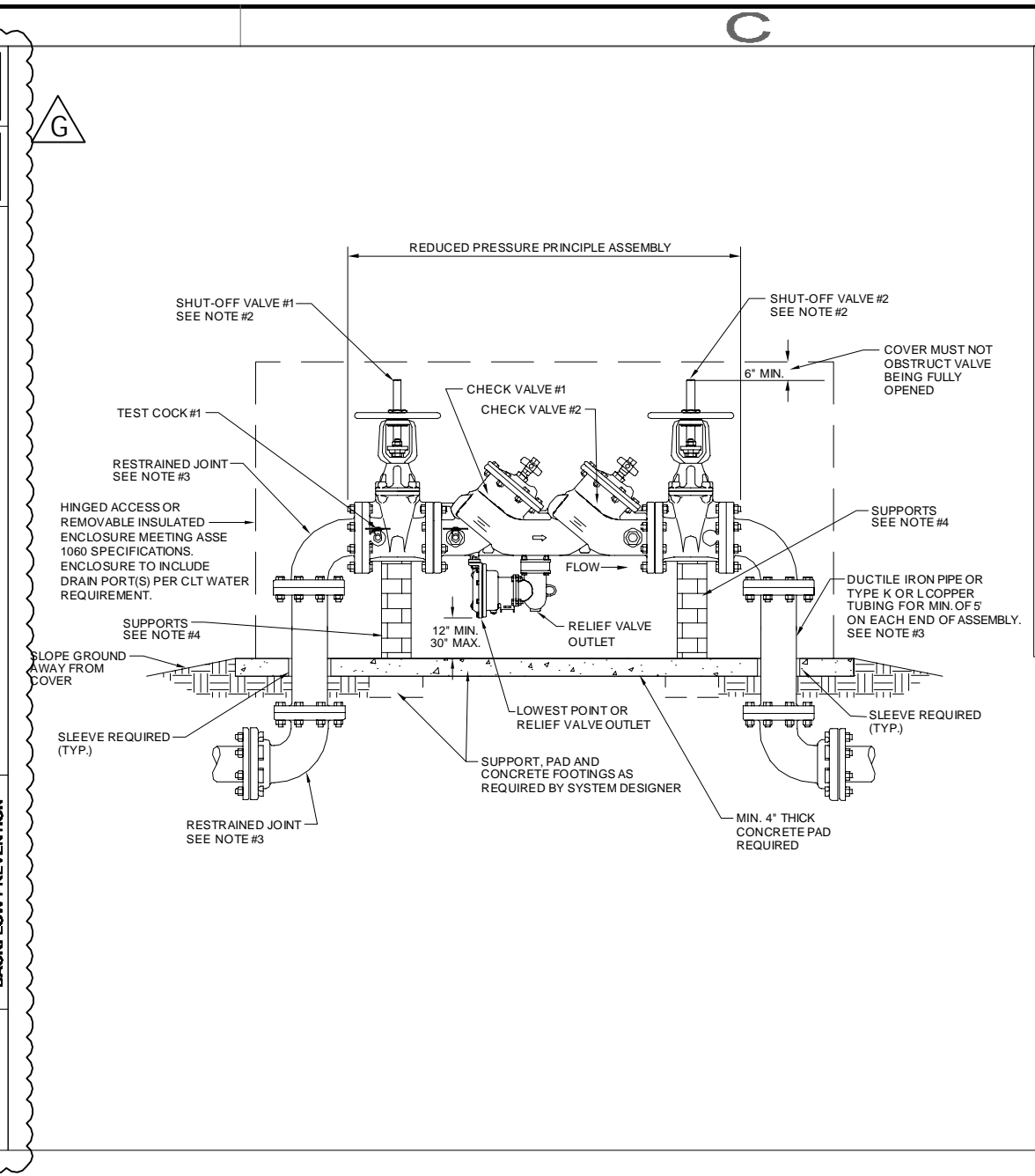


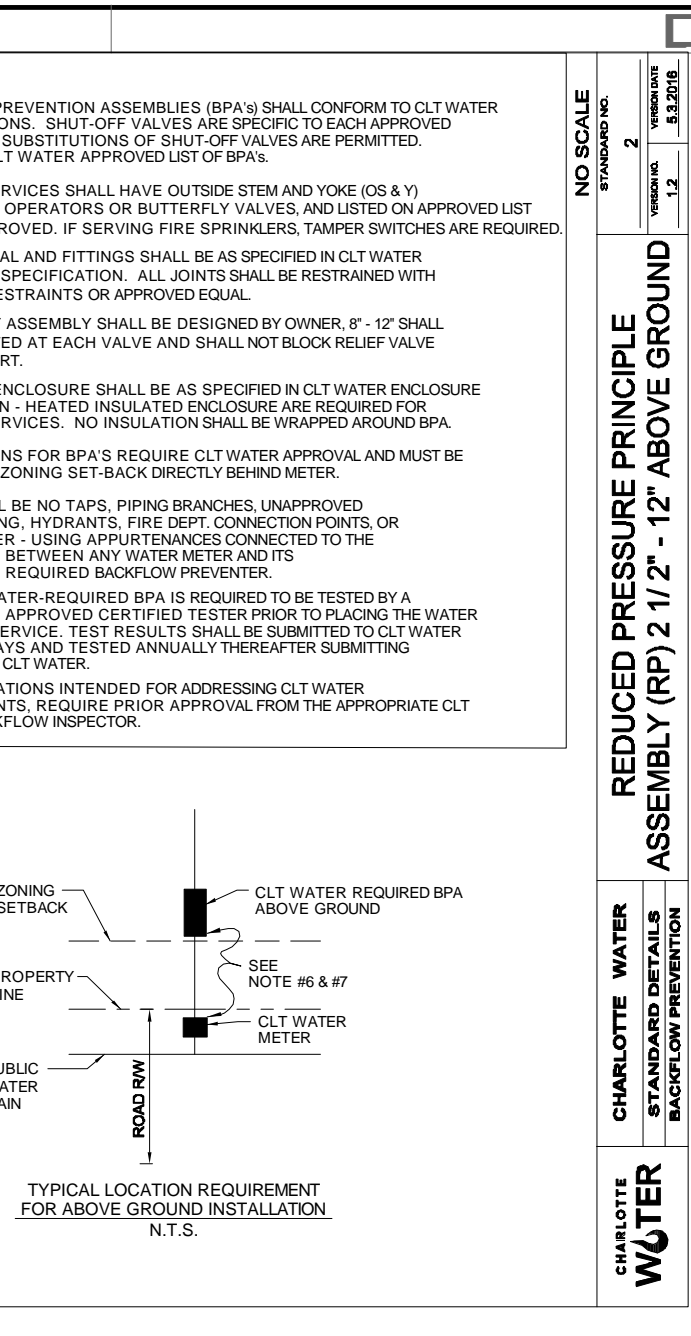
**REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPP) 1 1/2" & 2" ABOVE GROUND**

CHARLOTTE WATER STANDARD SPECIFICATIONS FOR BACKFLOW PREVENTION



**REDUCED PRESSURE PRINCIPLE ASSEMBLY (RPP) 2 1/2" - 12" ABOVE GROUND**

CHARLOTTE WATER STANDARD SPECIFICATIONS FOR BACKFLOW PREVENTION



- ### WATER DISTRIBUTION NOTES
- DOMESTIC WATER METER(S) INSTALLED BY CLT WATER. CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR INSTALLATION.
  - REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY AS APPROVED BY CLT WATER AND INSTALLED BY CONTRACTOR DURING CONSTRUCTION. ASSEMBLY TO BE INSTALLED ABOVE-GROUND WITHIN INSULATED ENCLOSURE PER CLT WATER REQUIREMENTS. ENCLOSURE TO INCLUDE DRAIN PORT(S) FOR DISCHARGE WATER PER CLT WATER REQUIREMENTS. ENCLOSURE TO BE LOCATED OUT OF SETBACK. SEE DETAILS THIS SHEET. ALTERNATIVES TO THESE DETAILS PER OWNER DIRECTIVE ARE ACCEPTABLE AS LONG AS THEY MEET CLT WATER REQUIREMENTS.
  - CONTRACTOR TO LOCATE TIE-INS TO ALL BUILDINGS BASED ON PLUMBING PLANS.
  - BASED ON THE BEST AVAILABLE INFORMATION TO THE DESIGNER, THE BUILDING FIRE PROTECTION SYSTEMS ARE RATED AS MODERATE HAZARD.
  - ALL WATER MAINS 6" AND LARGER SHALL BE PVC IN ACCORDANCE WITH AWWA C-900. THE PIPE SHALL BE PRESSURE CLASS 200 WITH SDR OF 14. DUCTILE IRON PIPE (NO PVC) TO BE USED WITHIN 5 FT. OF BACKFLOW PREVENTION DEVICES.
  - THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS, OR OTHER WATER USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS CLT WATER-REQUIRED BACKFLOW PREVENTER.
  - EACH CLT WATER-REQUIRED BACKFLOW PREVENTION ASSEMBLY IS REQUIRED TO BE TESTED BY A CLT WATER-APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.
  - CONTRACTOR IS RESPONSIBLE FOR OBTAINING AN ENCROACHMENT AGREEMENT PERMIT TO CONSTRUCT UTILITY CONNECTIONS.
  - CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHARLOTTE WATER STANDARD SPECIFICATIONS

### LEGEND

|  |                                    |
|--|------------------------------------|
|  | CONSTRUCTION LIMITS                |
|  | PROPOSED MAJOR CONTOUR             |
|  | PROPOSED MINOR CONTOUR             |
|  | PROPOSED SPOT                      |
|  | PROPOSED GRADING ARROW             |
|  | PROPOSED SWALE                     |
|  | PROPOSED 4" CPP DRAIN              |
|  | PROPOSED 2" PVC IRRIGATION SLEEVES |
|  | PROPOSED SANITARY                  |
|  | FILTER BAG INLET PROTECTION        |

- ### GRADING NOTES
- SEE GENERAL NOTES SHEET C0-2 FOR GRADING NOTES.
  - CONTRACTOR SHALL REVIEW, UNDERSTAND AND IMPLEMENT ALL REQUIRED EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO ANY DISTURBANCE.
  - SEE THE EROSION CONTROL PLANS AND DETAILS FOR THE LOCATION AND SIZING OF ALL RIP-RAP APRONS AND SLOPE AND CHANNEL LININGS.
  - ON ALL SLOPES STEEPER THAN 3:1, CONTRACTOR SHALL INSTALL NORTH AMERICAN GREEN PRODUCT SC150 EROSION CONTROL MATTING. REFER TO NAG FOR INSTALLATION GUIDELINES.
  - ALL SPOT ELEVATIONS ALONG CURB AND GUTTER LINE REPRESENT FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
  - C.O. - PVC CLEAN-OUT WITH TRAFFIC RATED BRASS CAP FLUSH WITH PAVEMENT UNLESS OTHERWISE NOTED.
  - CPP - CORRUGATED PLASTIC PIPE WITH CORRUGATED EXTERIOR/SMOOTH INTERIOR (TYPE S). ASHSTO M294. PVC SCH 40 MAY BE USED AS AN ALTERNATE.
  - RCP - REINFORCED CONCRETE PIPE - CLASS III

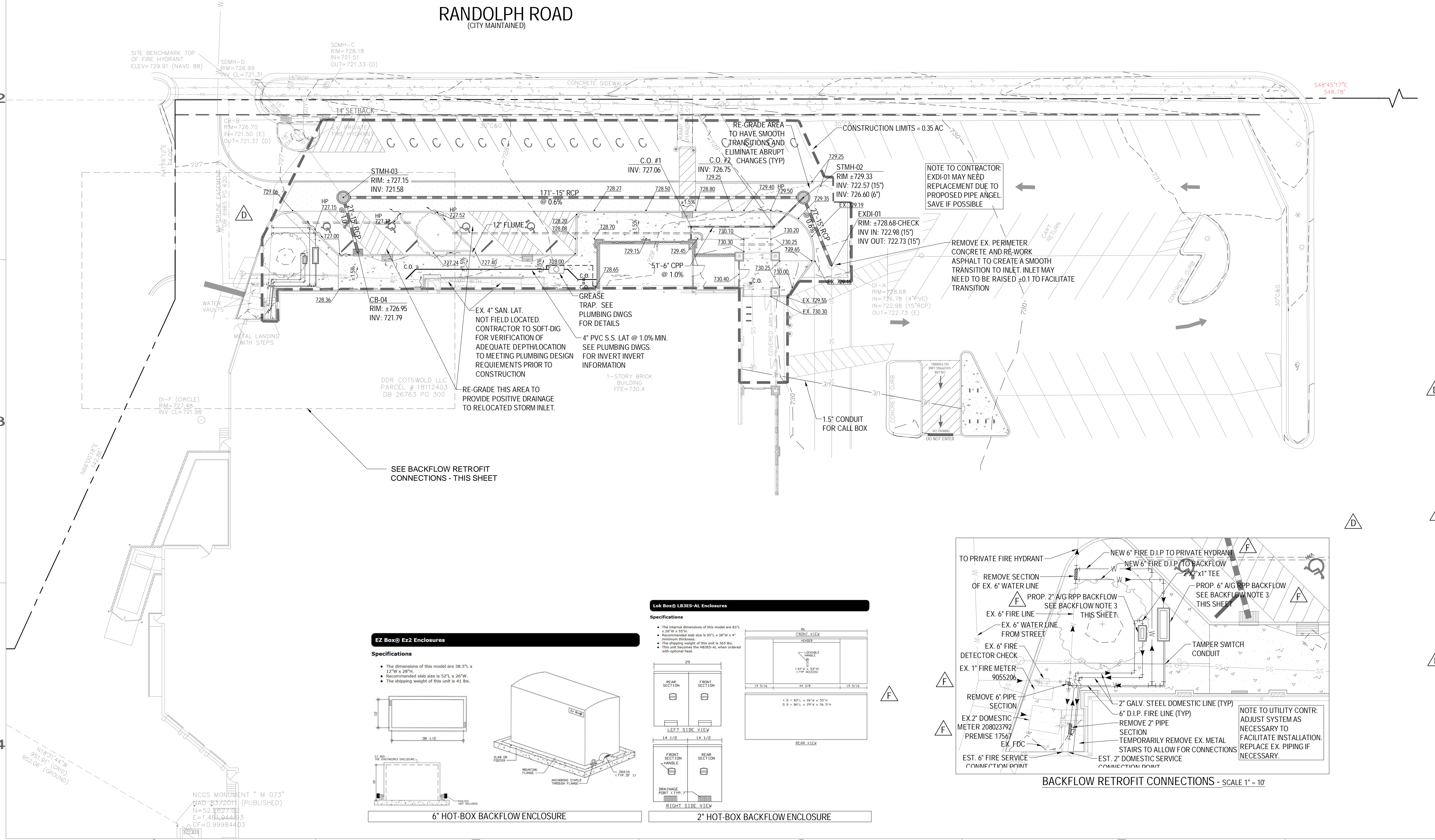
- ### SANITARY SEWER NOTES
- CONTRACTOR TO COORDINATE WITH CMU AND PAY FOR TIE IN TO CMU SANITARY SEWER IF NEW SERVICE IS PROPOSED FOR THIS PROJECT.
  - CONTRACTOR TO LOCATE LATERAL CONNECTIONS TO BUILDING PER PLUMBING PLANS.
  - PLACE CLEAN-OUTS ON SANITARY SEWER LATERALS AS REQUIRED BY PLUMBING CODE.
  - CONTRACTOR IS RESPONSIBLE FOR OBTAINING AN ENCROACHMENT AGREEMENT PERMIT AS REQUIRED TO CONSTRUCT UTILITY CONNECTIONS IF WORK WITHIN THE D.O.T. R.O.W. IS PROPOSED.
  - TRENCHES FOR SEWER LATERALS MUST REMAIN OPEN FOR PLUMBING INSPECTION.

- ### UTILITY NOTES
- SEE GENERAL NOTES SHEET FOR UTILITY PLAN NOTES.
  - ALL CHANGES IN DIRECTION OF THE CONDUIT SHALL UTILIZE STANDARD SWEEPS WITH A MINIMUM BENDING RADIUS LISTED IN THE NEC. NO MORE THAN (2) 90-DEGREE BENDS WILL BE ALLOWED BETWEEN PULLING POINTS, OR A TOTAL OF 180 DEGREES COMBINED IN SEVERAL BENDS. PULL BOXES SHALL BE LOCATED EVERY 400 FEET UNLESS THE COMBINED TOTAL OF BENDS REQUIRE ADDITIONAL MANHOLES.

- ### BACKFLOW NOTES
- THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS, OR OTHER WATER USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS CMU-REQUIRED BACKFLOW PREVENTER.
  - EACH CLT WATER-REQUIRED BACKFLOW PREVENTION ASSEMBLY IS REQUIRED TO BE TESTED BY A CLT WATER-APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.
  - REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY AS APPROVED BY CLT WATER AND INSTALLED BY CONTRACTOR DURING CONSTRUCTION. ASSEMBLY TO BE INSTALLED ABOVE-GROUND WITHIN INSULATED ENCLOSURE PER CLT WATER REQUIREMENTS. ENCLOSURE TO INCLUDE DRAIN PORT(S) FOR DISCHARGE WATER PER CLT WATER REQUIREMENTS. ENCLOSURE TO BE LOCATED OUT OF SETBACK. SEE DETAILS THIS SHEET. ALTERNATIVES TO THESE DETAILS PER OWNER DIRECTIVE ARE ACCEPTABLE AS LONG AS THEY MEET CLT WATER REQUIREMENTS
  - PERMANENT INSULATION SHALL NOT BE INSTALLED ON BACKFLOW ASSEMBLY. BACKFLOW ASSEMBLY INSPECTOR REGARDING HEATING OPTIONS.
  - BACKFLOW ASSEMBLY SERVING A FIRE LINE SHALL BE HEATED TO MAINTAIN A MINIMUM OF 40° F.

**NOTE TO BACKFLOW REVIEWER:**

IRRIGATION SERVICE IS NOT PROPOSED AT THIS TIME AND IS SUBSEQUENTLY NOT SHOWN ON THESE DOCUMENTS. IF FUTURE SERVICE IS DESIRED, IT WILL BE A DEDICATED SERVICE AND NOT TIED TO THE DOMESTIC OR FIRE SERVICES.



|             |          |
|-------------|----------|
| DESIGNED:   | JDB      |
| DRAWN:      |          |
| CHECKED:    |          |
| PROJECT:    | 01014001 |
| DATE:       | 01.13.16 |
| <b>C4-0</b> |          |

**811**  
 Know what's below.  
 Call before you dig.

SCALE: 1"=20'  
 0 10 20 40