

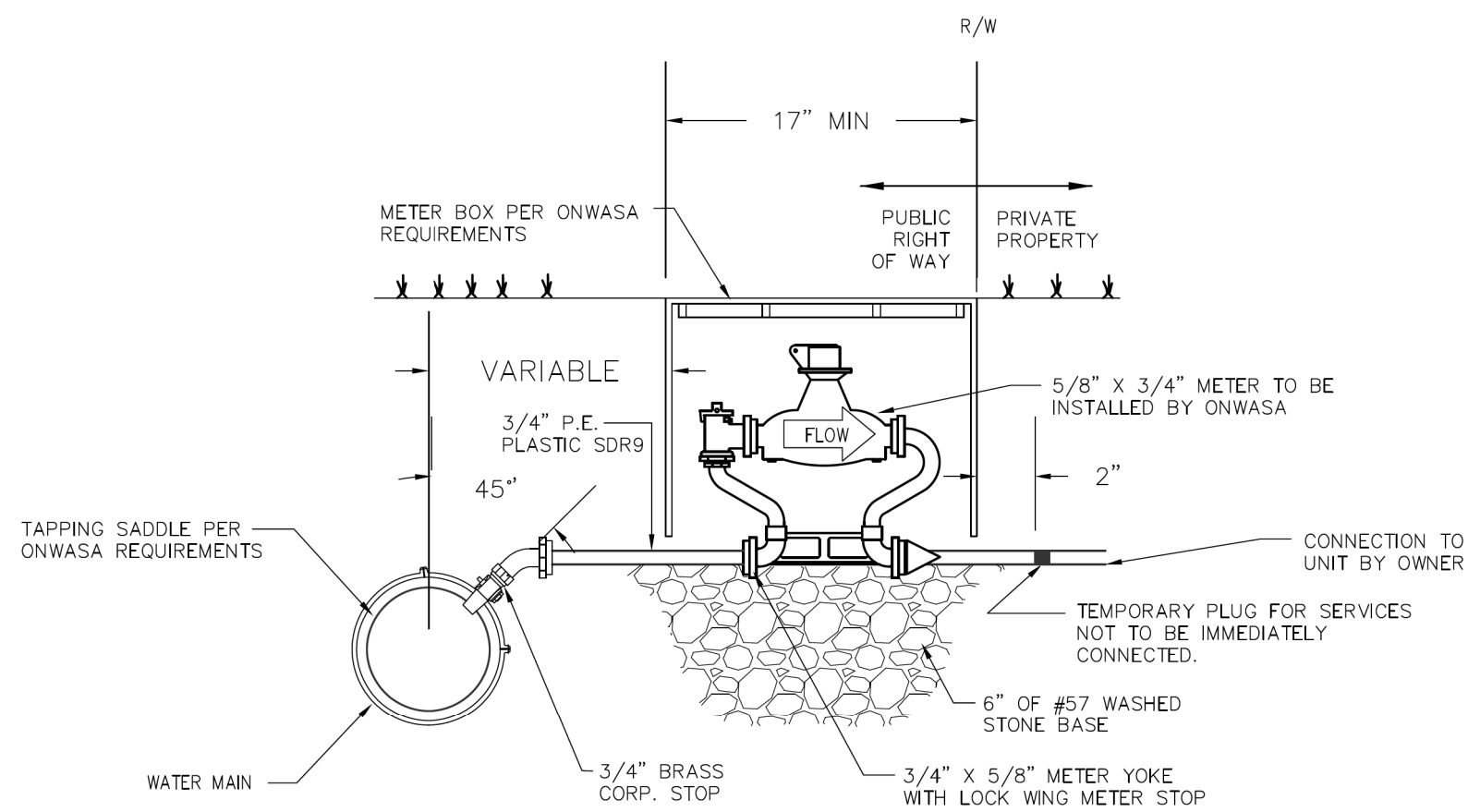
North Carolina Plumbing Code Section 608 requires a gate valve, backflow prevention and a pressure reducing valve on all connections with the Public Water Supply.

1. A gate valve and a pressure reducing valve **MUST** be installed directly behind the meter (see diagram above).
2. An additional gate valve located near the house is recommended, but not required.
3. All materials shall be pressure rated to one hundred-fifty (150 psi).
4. The water meter will be locked upon installation. Please contact the Onslow Water and Sewer Authority (ONWASA) twenty-four (24) hours in advance to schedule the inspection of the valves.
5. All valves **MUST** be installed prior to unlocking the meter.

Meter Placement Note:

Place the blue flag approximately thirty (30) feet from the center of the road Utility Right of Way for proper placement of ONWASA's water meter. All efforts will be made to install the meter where it is marked; however, ONWASA reserves the right to place the meter in the most feasible location to all parties involved. If the blue flag is not placed in a feasible location, it may result in a delay of installation.

3/4" TO 1" METER INSTALLATION
NOT TO SCALE



NOTE: METER BOX TO BE SUPPORTED ON BRICK OR BLOCK

3/4" TO 1" SERVICE CONNECTION AND METER
NOT TO SCALE

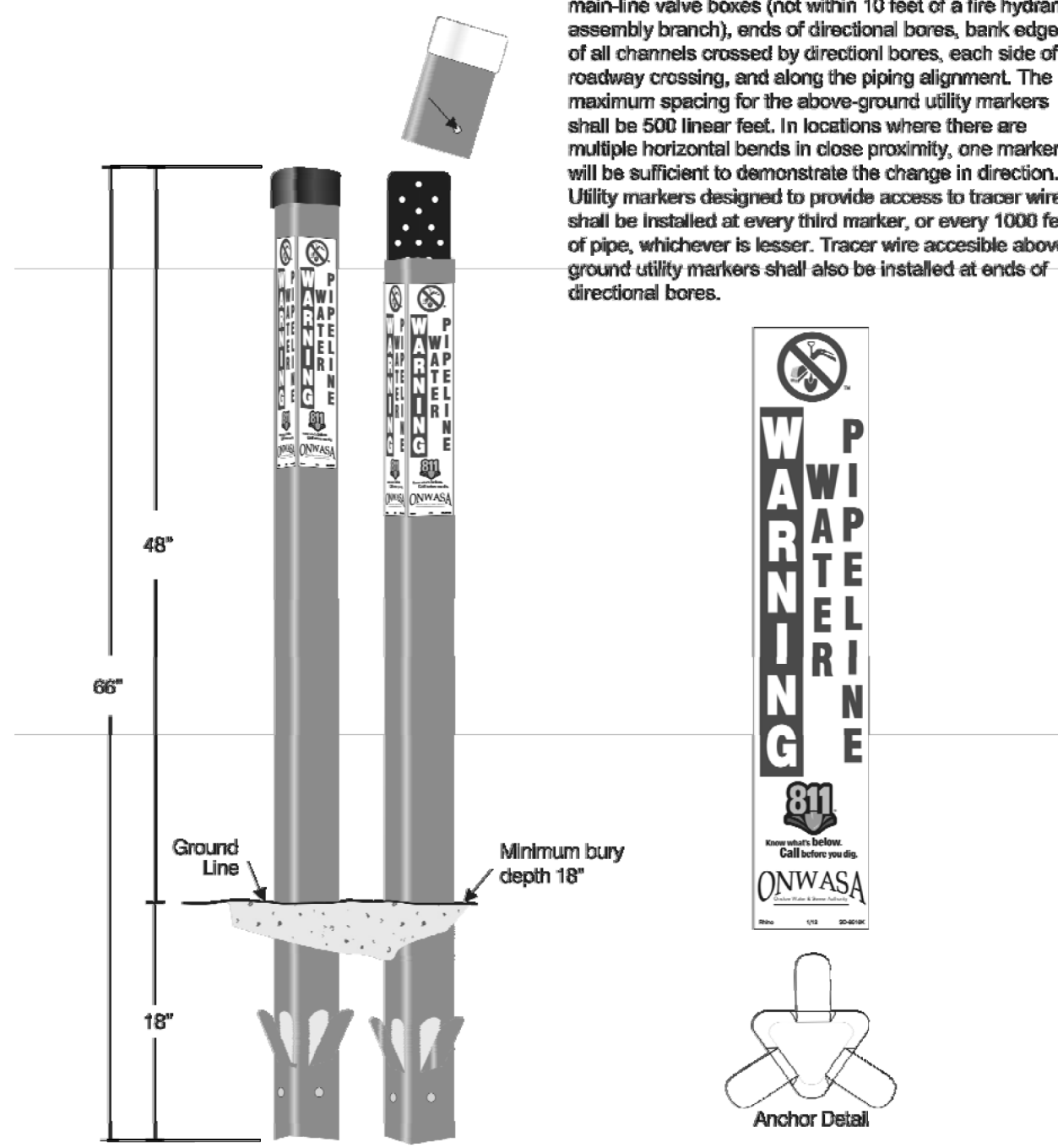
- Parts List**
- 1 - Rhino # TVF86UB - Rhino TriView Flex™, 66" Blue with Black Cap OR
 - 1 - Rhino # TVT86UW2 - Rhino TriView™ Teet Station, 66", 2 Inside Terminals, Blue with White Cap
 - 1 - Cap Lock - TS-LOOK for Teet Stations
 - 3 - Decal # SD-8516K Custom Decals

NOTES:

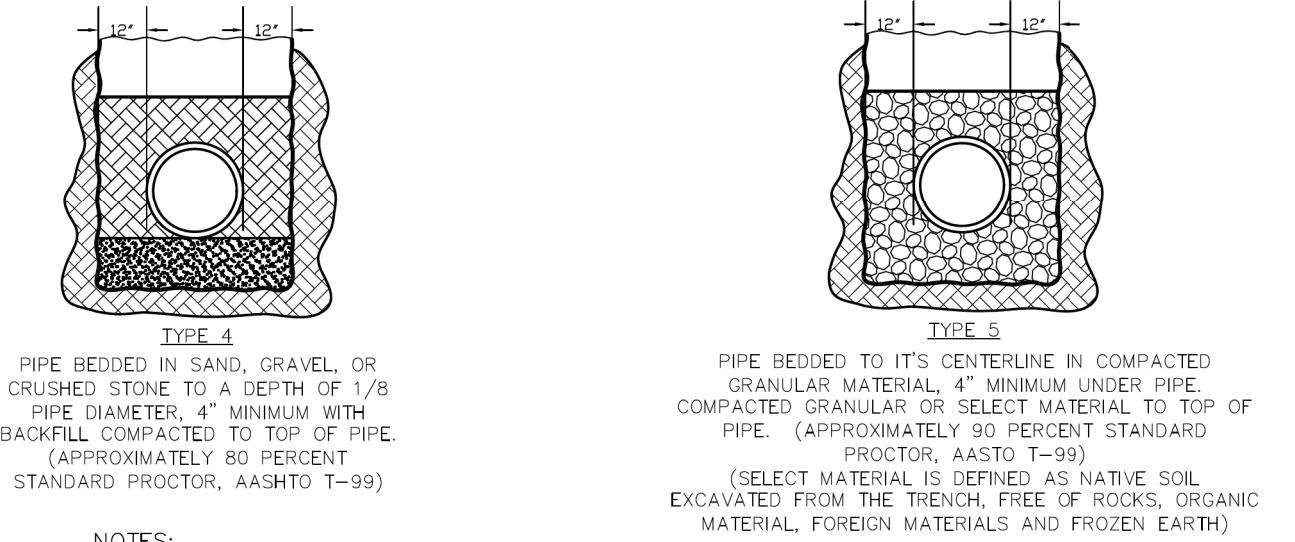
The TriGrip Anchor Flaps™ shall be extended prior to burial of the post. Soil shall be compacted during placement of marker post.

All materials shall be provided by Rhino Marking & Protection Systems, Inc.

Install above-ground utility markers at horizontal bends, main-line valve boxes (not within 10 feet of a fire hydrant assembly branch), ends of directional bores, bank edge of all channels crossed by directional bores, each side of a roadway crossing, and along the piping alignment. The maximum spacing for the above-ground utility markers shall be 500 linear feet. In locations where there are multiple horizontal bends in close proximity, one marker will be sufficient to demonstrate the change in direction. Utility markers designed to provide access to tracer wire shall be installed at every third marker, or every 1000 feet of pipe, whichever is lesser. Tracer wire accessible above-ground utility markers shall also be installed at ends of directional bores.



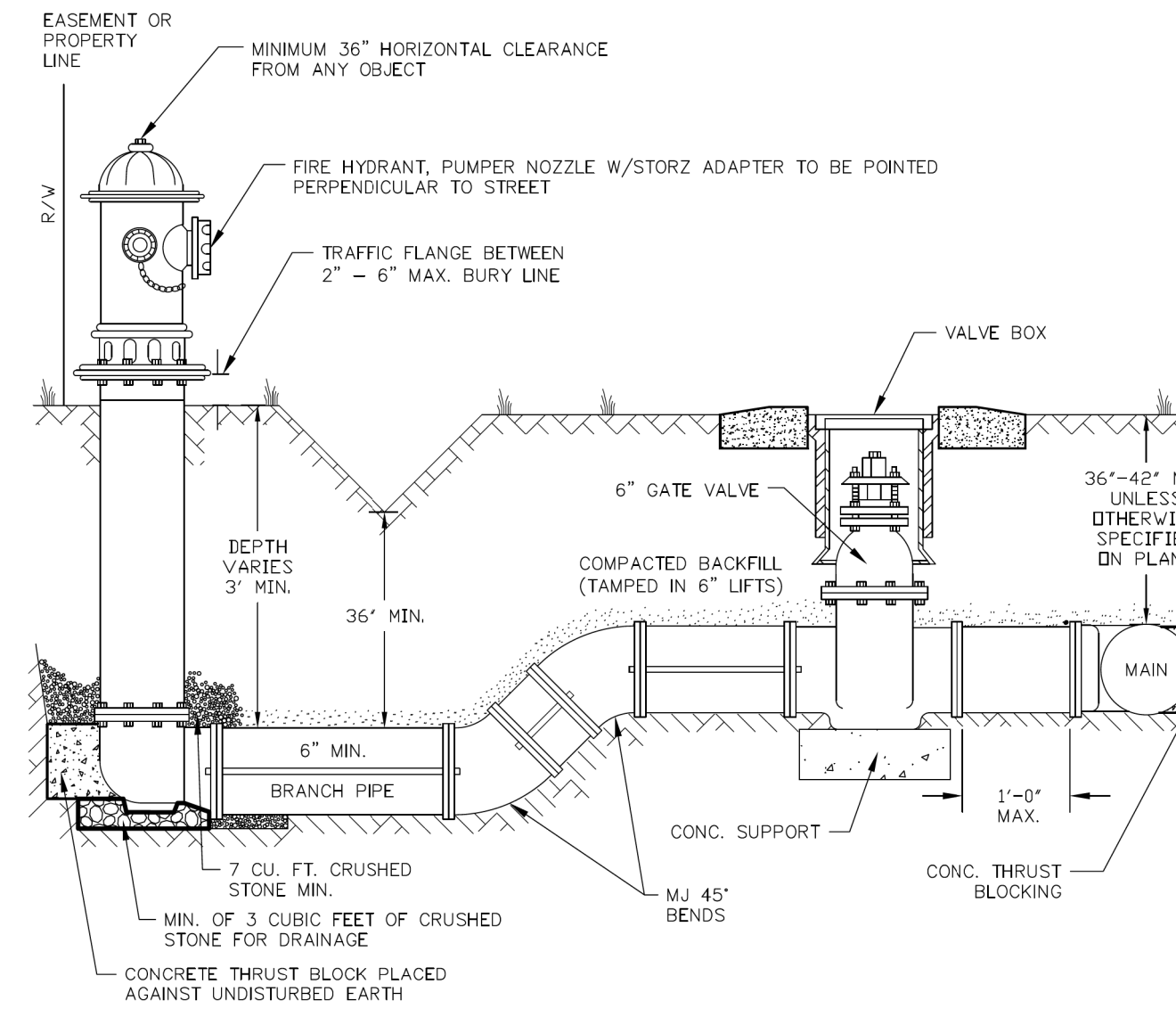
STANDARD UTILITY MARKER FOR WATER MAIN
NOT TO SCALE



NOTES:

1. FOR NORMAL PIPE SIZES 14 INCH AND LARGER, CONSIDERATION SHOULD BE GIVEN TO THE USE OF LAYING CONDITIONS OTHER THAN TYPE 1.
2. CONSIDERATION OF THE PIPE-ZONE EMBEDMENT CONDITIONS INCLUDED IN THIS FIGURE MAY BE INFLUENCED BY FACTORS OTHER THAN PIPE STRENGTH. FOR ADDITIONAL INFORMATION ON PIPE BEDDING AND BACKFILL, SEE ANSI/AWWA C600.

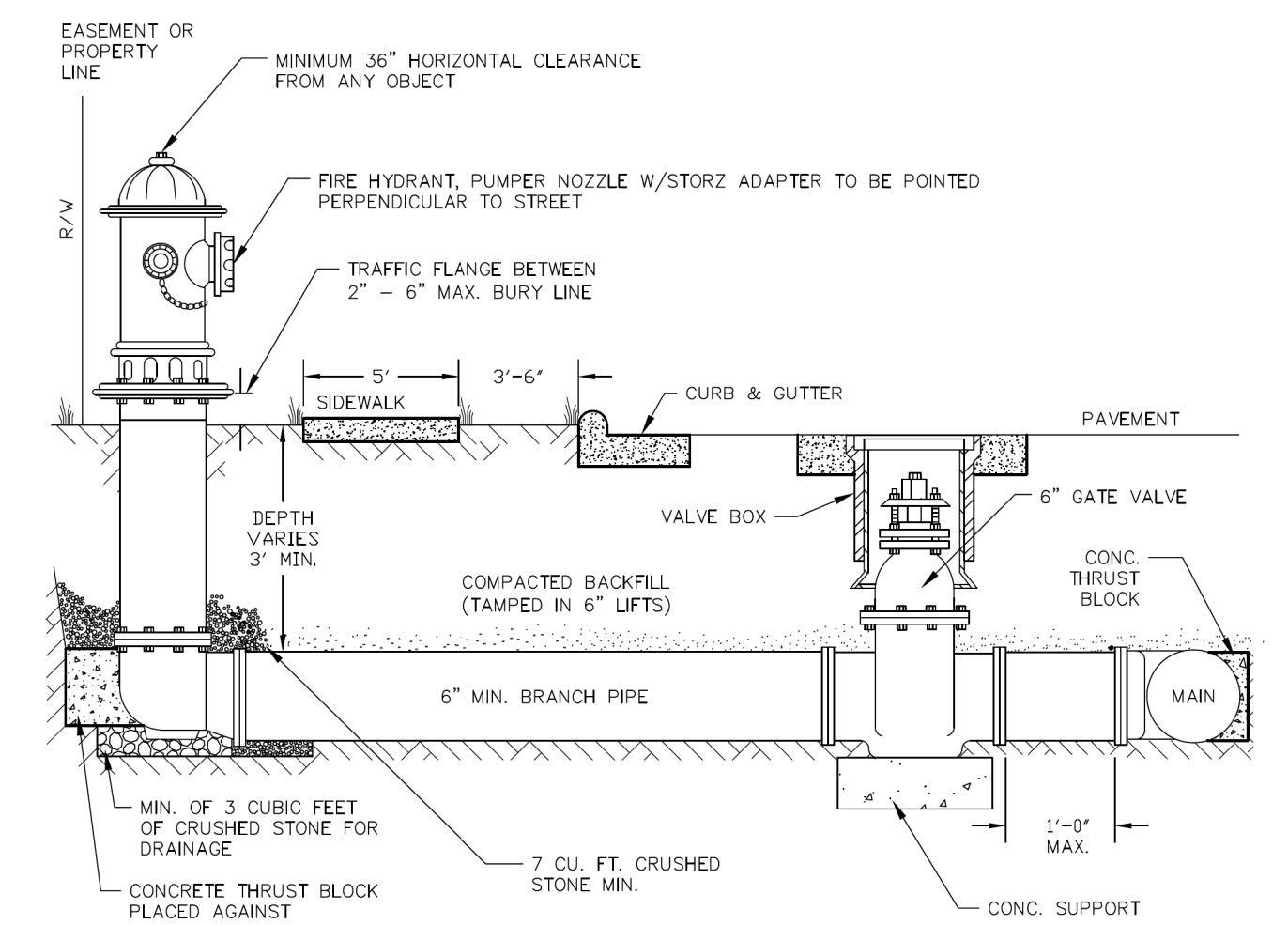
WATER MAIN EMBEDMENT DETAILS
NOT TO SCALE



- NOTES:**
1. FIRE HYDRANT MANUFACTURER SHALL BE AS REQUIRED BY PROJECT SPECIFICATIONS.
 2. FIRE HYDRANT SHALL BE INSTALLED USING HYDRANT TEE.
 3. BRANCH PIPE SHALL BE DUCTILE IRON.
 4. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION.
 5. ALL JOINTS ON FIRE HYDRANT ASSEMBLIES SHALL BE RESTRAINED.
 6. ALL FIRE HYDRANTS SHALL BE LOCATED WITHIN DEDICATED STREET RIGHT-OF-WAY OR A 20-FOOT PUBLICLY DEDICATED PERMANENT UTILITY EASEMENT TO ONWASA.
 7. INSTALL BOLLARD GUARD POST AS PER DRAWINGS OR CONDITIONS MANDATE.
 8. HYDRANT SHALL NOT BE INSTALLED SO THAT THE FINISHED ELEVATION OF SURROUNDING AREA (INCLUDING LANDSCAPING, MULCH, GRAVEL, ETC.) IS ABOVE THE MAXIMUM BURY LINE OF THE HYDRANT.
 9. MAXIMUM PERMISSIBLE EXTENSION LENGTH IS 2'-FEET.
 10. IF HYDRANT LEG IS LESS THAN 10'-FEET LONG, THE HYDRANT SHALL BE RODDED BACK TO THE VALVE.

ANYTIME SITE WORK, CONSTRUCTION, ROAD WORK, OR ANY OTHER WORK CHANGES THE GRADE OF THE FIRE HYDRANT, THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE FIRE HYDRANT TO STAY WITHIN COMPLIANCE.

FIRE HYDRANT ASSEMBLY SHOULDER/DITCH SECTION
NOT TO SCALE



NOTES:

1. FIRE HYDRANT MANUFACTURER SHALL BE AS REQUIRED BY PROJECT SPECIFICATIONS.
2. FIRE HYDRANT SHALL BE INSTALLED USING HYDRANT TEE.
3. BRANCH PIPE SHALL BE DUCTILE IRON.
4. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION.
5. ALL JOINTS ON FIRE HYDRANT ASSEMBLIES SHALL BE RESTRAINED.
6. ALL FIRE HYDRANTS SHALL BE LOCATED WITHIN DEDICATED STREET RIGHT-OF-WAY OR A 20-FOOT PUBLICLY DEDICATED PERMANENT UTILITY EASEMENT TO ONWASA.
7. INSTALL BOLLARD GUARD POST AS PER DRAWINGS OR CONDITIONS MANDATE.
8. HYDRANT SHALL NOT BE INSTALLED SO THAT THE FINISHED ELEVATION OF SURROUNDING AREA (INCLUDING LANDSCAPING, MULCH, GRAVEL, ETC.) IS ABOVE THE MAXIMUM BURY LINE OF THE HYDRANT.
9. MAXIMUM PERMISSIBLE EXTENSION LENGTH IS 2'-FEET.
10. IF HYDRANT LEG IS LESS THAN 10'-FEET LONG, THE HYDRANT SHALL BE RODDED BACK TO THE VALVE.

ANYTIME SITE WORK, CONSTRUCTION, ROAD WORK, OR ANY OTHER WORK CHANGES THE GRADE OF THE FIRE HYDRANT, THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING THE FIRE HYDRANT TO STAY WITHIN COMPLIANCE.

FIRE HYDRANT ASSEMBLY CURB AND GUTTER SECTION
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-4906	UC-3E
DESIGNED BY: SHF	
DRAWN BY: SHF	
CHECKED BY: KCZ	
APPROVED BY: KCZ	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 UTILITY CONSTRUCTION PLANS ONLY	
UTILITY CONSTRUCTION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Weston Sampson WSE of North Carolina, PC 598 East Chatham Street Suite 137 Cary, NC 27511 Phone: 919.297.0220 NC License: C-4647 Fax: 919.297.0221	