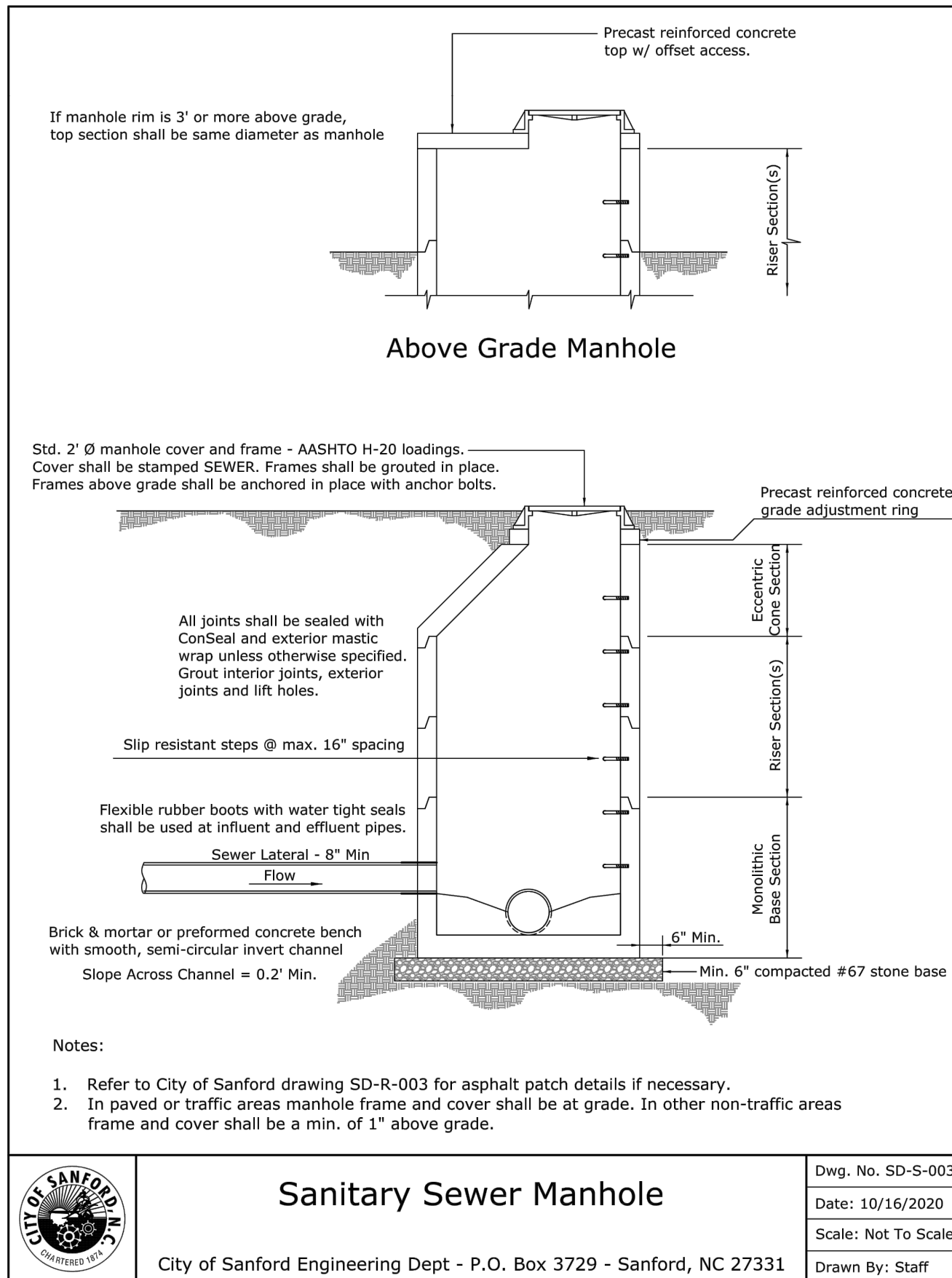


- Notes:
1. Please contact the City of Sanford @ 919-777-1122 for specifications for commercial applications or laterals over 6" Ø.
 2. Refer to City of Sanford drawing SD-R-003 for asphalt patch details if necessary.
 3. All work within the street ROW shall be performed by a licensed utility contractor.
 4. All sewer cleanout structures installed in asphalt or concrete shall be constructed with DIP risers and fittings, a traffic-rated cast iron assembly, and corrosion resistant bronze cap. Cleanout assemblies installed in non-paved surfaces shall be either DIP (as specified above, non-traffic-rated) or PVC.

Residential Sewer Tap

Dwg. No. SD-S-001
Date: 10/16/2020
Scale: Not To Scale
Drawn By: Staff

City of Sanford Engineering Dept - P.O. Box 3729 - Sanford, NC 27331

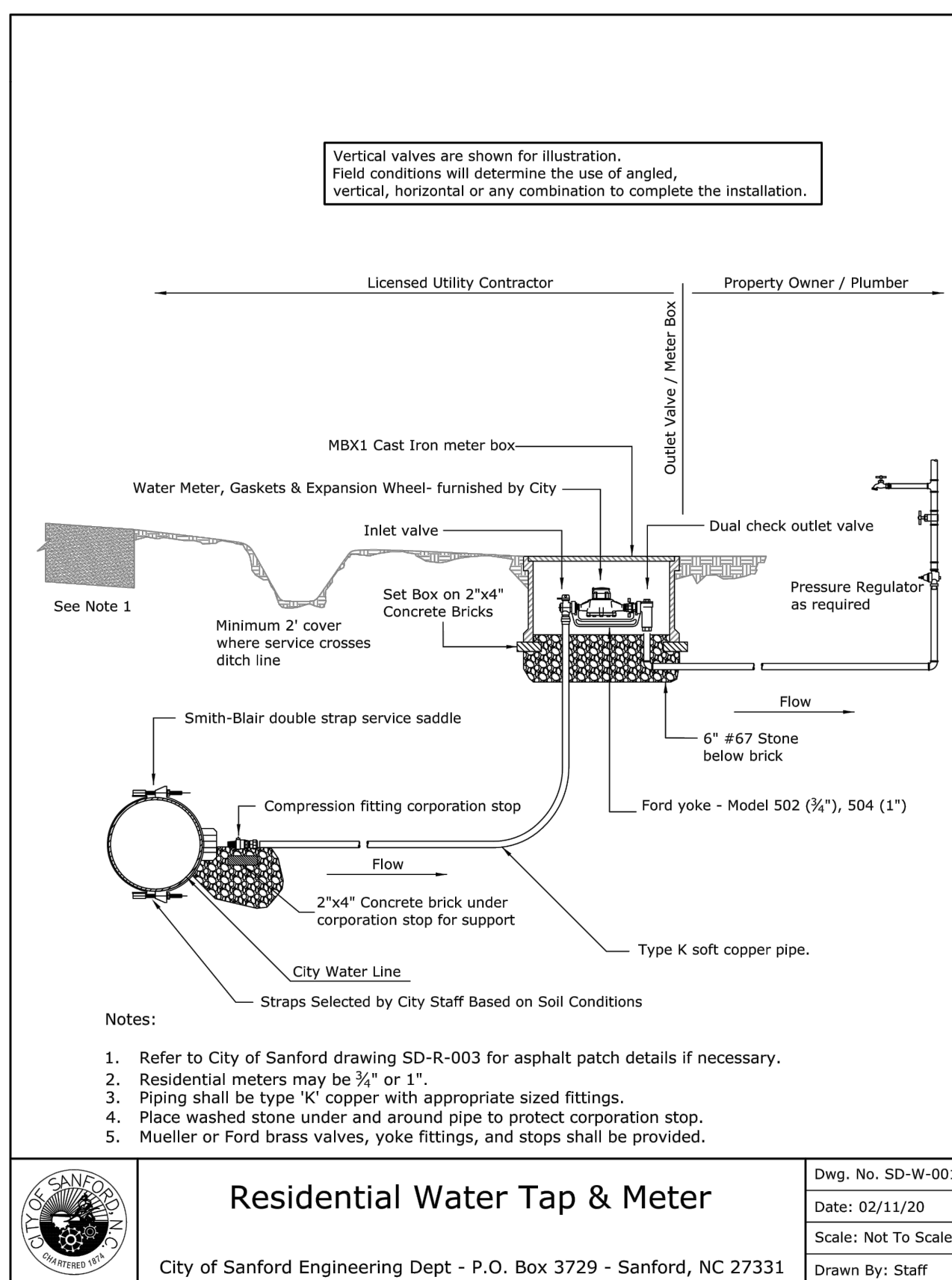


- Notes:
1. Refer to City of Sanford drawing SD-R-003 for asphalt patch details if necessary.
 2. In paved or traffic areas manhole frame and cover shall be at grade. In other non-traffic areas frame and cover shall be a min. of 1" above grade.

Sanitary Sewer Manhole

Dwg. No. SD-S-003
Date: 10/16/2020
Scale: Not To Scale
Drawn By: Staff

City of Sanford Engineering Dept - P.O. Box 3729 - Sanford, NC 27331



- Notes:
1. Refer to City of Sanford drawing SD-R-003 for asphalt patch details if necessary.
 2. Residential meters may be 3/4" or 1".
 3. Piping shall be type 'K' copper with appropriate sized fittings.
 4. Place washed stone under and around pipe to protect corporation stop.
 5. Mueller or Ford brass valves, yoke fittings, and stops shall be provided.

Residential Water Tap & Meter

Dwg. No. SD-W-001
Date: 02/11/20
Scale: Not To Scale
Drawn By: Staff

City of Sanford Engineering Dept - P.O. Box 3729 - Sanford, NC 27331

mcgill

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License No. C-0459

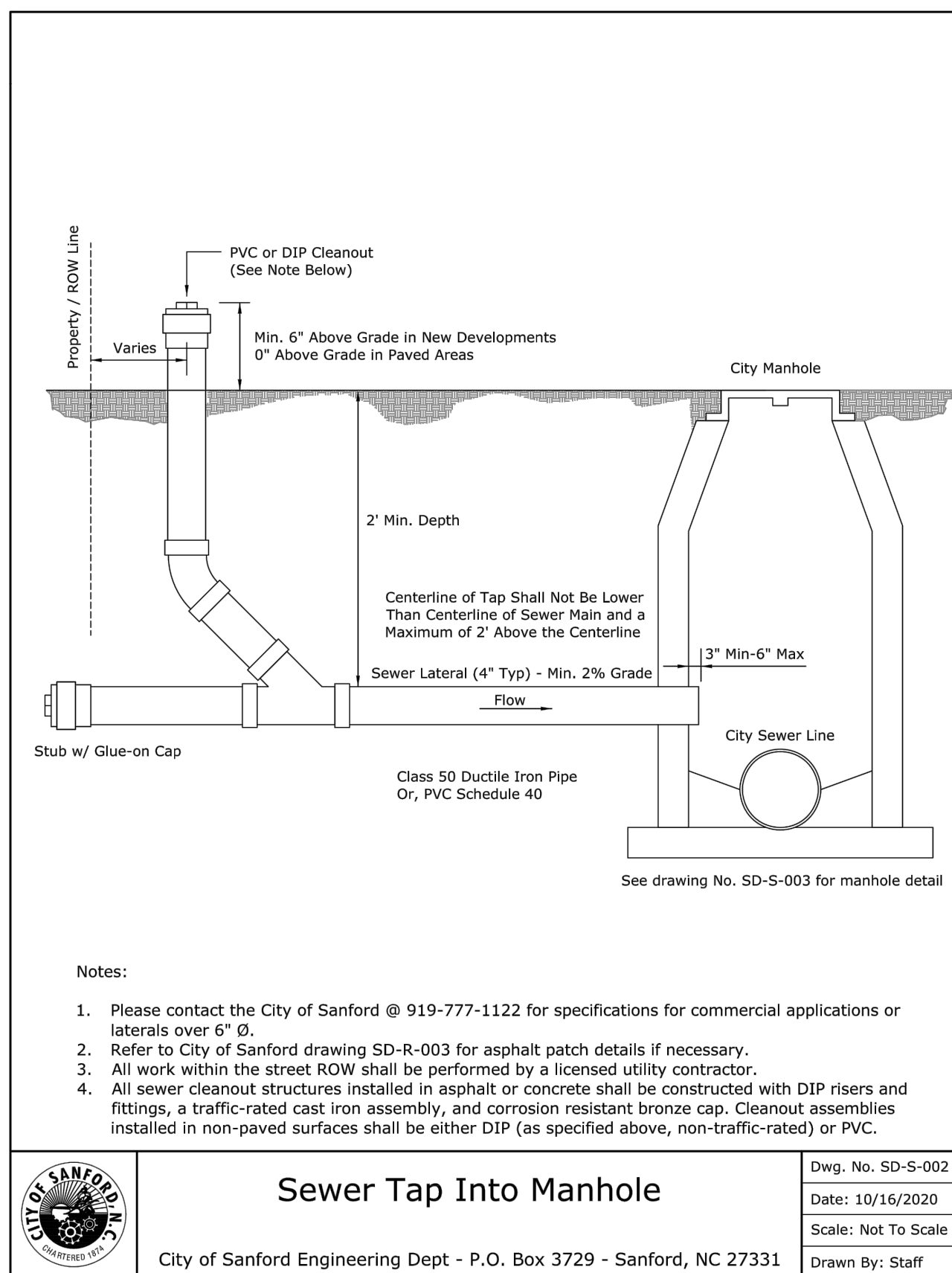
PROJECT REFERENCE NO. R-3830
SHEET NO. UC-3B

DESIGNED BY: DLH
DRAWN BY: WW, MJ, BB
CHECKED BY: DLH
APPROVED BY: [Signature]
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

REVISIONS



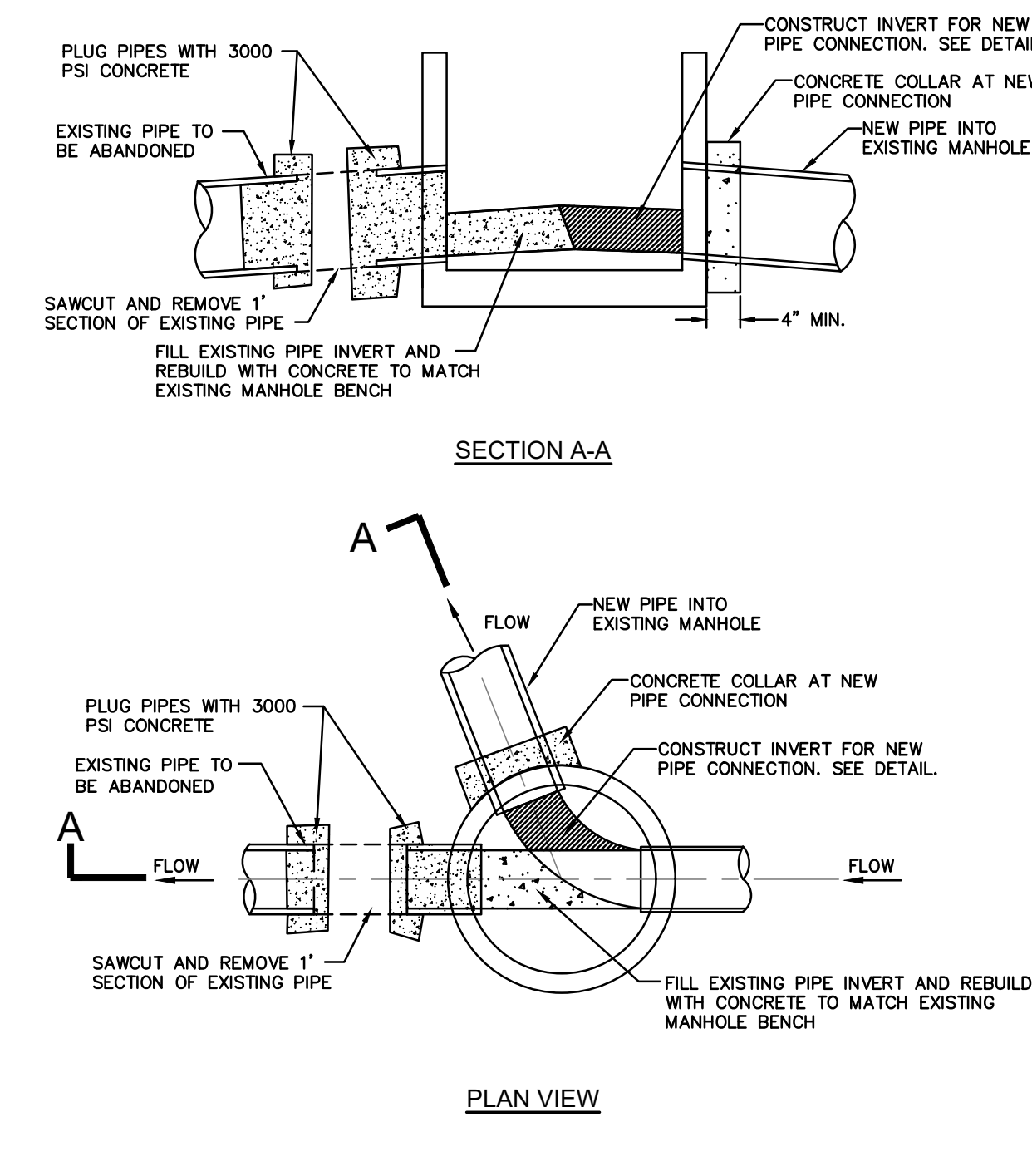
- Notes:
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 2. Refer to City of Sanford drawing SD-R-003 for asphalt patch details if necessary.
 3. All work within the street ROW shall be performed by a licensed utility contractor.
 4. All sewer cleanout structures installed in asphalt or concrete shall be constructed with DIP risers and fittings, a traffic-rated cast iron assembly, and corrosion resistant bronze cap. Cleanout assemblies installed in non-paved surfaces shall be either DIP (as specified above, non-traffic-rated) or PVC.

Sewer Tap Into Manhole

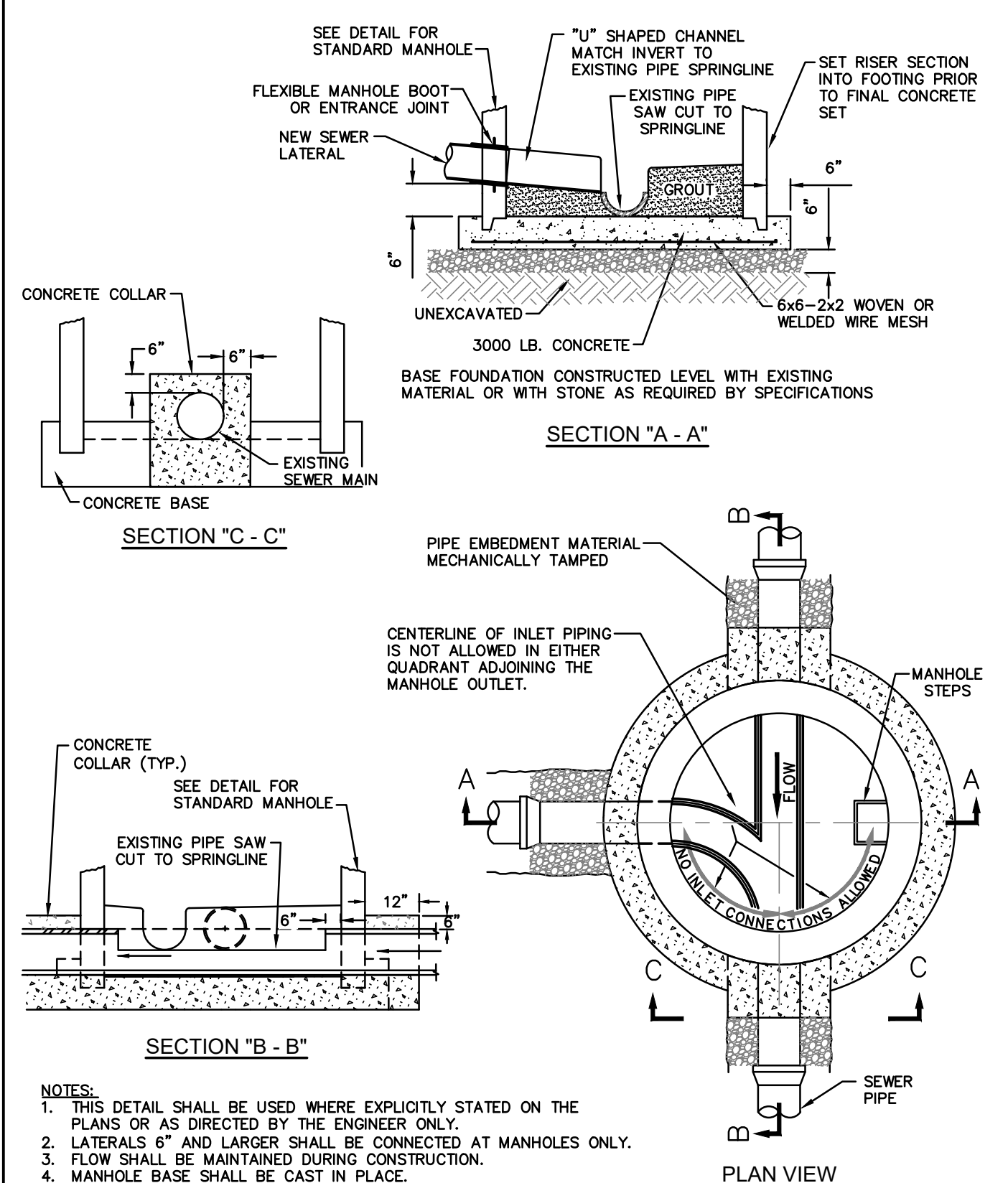
Dwg. No. SD-S-002
Date: 10/16/2020
Scale: Not To Scale
Drawn By: Staff

City of Sanford Engineering Dept - P.O. Box 3729 - Sanford, NC 27331

- GENERAL SEWER NOTES**
UPDATED MARCH, 2017
1. ALL CONSTRUCTION OUTSIDE RIGHTS-OF-WAY SHALL TAKE PLACE WITHIN THE PERMANENT AND TEMPORARY ACCESS EASEMENTS SHOWN.
 2. CONTRACTOR SHALL REPAIR ALL DISTURBED AREAS TO EQUAL OR BETTER CONDITION THAN THE ORIGINAL SITE, OR AS NOTED.
 3. LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE ONLY. EXACT LOCATIONS ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR. AT LEAST THREE DAYS PRIOR TO CONSTRUCTION, CONTRACTOR MUST NOTIFY EXISTING UTILITY OWNERS. CALL 811 BEFORE YOU DIG.
 4. ALL WORK NEAR AND AROUND WATERWAYS MUST CONFORM TO THE RULES OF THE STATE OF NORTH CAROLINA.
 5. CONTRACTOR MUST PROVIDE EROSION CONTROL DEVICES TO CONTROL RUNOFF FROM THE CONSTRUCTION SITE. CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES THAT MAY BE LEVIED DUE TO POLLUTION CREATED DURING CONSTRUCTION.
 6. CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL HEALTH AND SAFETY REGULATIONS PERTAINING TO CONSTRUCTION OPERATIONS.
 7. SEWER FORCE MAINS AND WATER LINES SHALL HAVE 3'-0" MINIMUM COVER UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
 8. WATER AND SEWER LINES SHALL HAVE A MINIMUM 10' HORIZONTAL SEPARATION OR A MINIMUM 18" VERTICAL SEPARATION WITH THE WATER OVER SEWER, OR BOTH WATER AND SEWER LINES SHALL BE DUCTILE IRON PIPE 10' EITHER SIDE OF THE CROSSING.
 9. SEWER AND STORM SEWER LINES SHALL HAVE A MINIMUM 24" SEPARATION. IF 24" SEPARATION IS NOT OBTAINABLE, DUCTILE IRON PIPE SHALL BE USED FOR THE SEWER LINE OR A SUPPORTING MATERIAL SUCH AS FLOWABLE FILL SHALL BE INSTALLED BETWEEN THE PIPES.
 10. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 11. UNLESS OTHERWISE NOTED, ALL BURIED PIPE SHALL BE INSTALLED WITH PUSH-ON JOINTS AND EXPOSED PIPING SHALL BE FLANGED JOINT.
 12. LEGAL DESCRIPTIONS FOR PROPOSED EASEMENTS BY OTHERS.
 13. SITE TOPOGRAPHIC AND BOUNDARY SURVEY PROVIDED BY SURVEYOR NOTED ON PLANS.
 14. CONTRACTOR SHALL NOTIFY THE PROPER LOCAL AUTHORITIES 24 HOURS PRIOR TO ANY ROAD BEING CLOSED FOR CONSTRUCTION, INCLUDING BUT NOT LIMITED TO LOCAL NEWSPAPER, RADIO STATION, FIRE DEPARTMENT, COUNTY SHERIFF'S DEPARTMENT, AMBULANCE, AND COUNTY EMERGENCY AGENCY. ALL TRAFFIC CONTROL SHALL CONFORM TO THE REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION.
 15. CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER EXISTING BURIED UTILITIES HAVE BEEN LOCATED AND 24 HOURS PRIOR TO CONSTRUCTION.
 16. LOCATIONS SHOWN FOR SANITARY SEWER SERVICES ARE ASSUMED. COORDINATE LOCATIONS OF ALL PROPOSED SEWER SERVICE CONNECTIONS WITH PROPERTY OWNER PRIOR TO CONSTRUCTION.
 17. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED MANHOLE TOP ELEVATIONS AND EXISTING MANHOLE INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES. CONTRACTOR SHALL ADJUST ALL PROPOSED SEWER STRUCTURES TO MATCH FINISHED PAVEMENT ELEVATIONS. COSTS OF RAISING STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO OTHER WORK ON THE PROJECT.
 18. MANHOLES AND CASTINGS SHALL MEET THE REQUIREMENTS OF OWNER AS WELL AS THE PROJECT SPECIFICATIONS.
 19. 4" SANITARY SEWER SERVICE LINES SHALL BE INSTALLED AT 2.0% MINIMUM SLOPE AND SHALL BE DUCTILE IRON IN PAVED AREAS.
 20. ALL FENCE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIALS IN A WORKMANLIKE MANNER AND IN ACCORDANCE WITH STANDARD FENCE CONSTRUCTION PRACTICES AT THE CONTRACTOR'S EXPENSE.
 21. CONTRACTOR SHALL FIELD LOCATE ALL BURIED TELEPHONE LINE IN CONFLICT WITH THE PROPOSED UTILITY LINE. WHERE NECESSARY, EXISTING BURIED TELEPHONE LINE SHALL BE TEMPORARILY MOVED DURING CONSTRUCTION OF THE PROPOSED UTILITY LINE AND RE-LAID AT NO ADDITIONAL COST TO THE OWNER.
 22. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS DURING CONSTRUCTION AND SHALL REPAIR ROADS PER REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION. NO OPEN CUTS OF EXISTING ROADS SHALL BE ALLOWED EXCEPT WHERE INDICATED ON THE DRAWINGS OR WHERE SPECIFIC PERMISSION IS GRANTED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION. SAND OR A SIMILAR MATERIAL APPROVED BY THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SHALL BE PLACED ON THE ROAD TO AID IN THE CLEAN UP AFTER CONSTRUCTION. A MINIMUM OF 2" OF SAND SHALL BE PLACED ON THE ROAD PRIOR TO STOCKPILING SPOIL MATERIAL ON THE ROAD SURFACE TO FACILITATE CLEANUP.
 23. CONTRACTOR SHALL MAINTAIN SEWAGE FLOW IN SEWER SYSTEM AT ALL TIMES AND SHALL PROVIDE BYPASS PUMPING AND/OR PIPING AS REQUIRED. NO SANITARY SEWER OVERFLOWS ARE PERMITTED.



MANHOLE LINE ABANDONMENT
UPDATED MARCH, 2017
NOT TO SCALE



- NOTES:
1. THIS DETAIL SHALL BE USED WHERE EXPLICITLY STATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER ONLY.
 2. LATERALS 6" AND LARGER SHALL BE CONNECTED AT MANHOLES ONLY.
 3. FLOW SHALL BE MAINTAINED DURING CONSTRUCTION.
 4. MANHOLE BASE SHALL BE CAST IN PLACE.

NEW MANHOLE CONSTRUCTED OVER EXISTING SEWER PIPE
UPDATED MARCH, 2017
NOT TO SCALE