

WASTEWATER SYSTEM NOTES:

1. WASTEWATER INSTALLATION SHALL BE IN ACCORDANCE WITH TEN STATES STANDARDS, SCDHEC. REGULATIONS AND NORTH CHARLESTON SEWER DISTRICT'S "GUIDELINES FOR THE DESIGN OF WASTEWATER COLLECTION SYSTEMS" AS FOUND AT www.ncsd.sc.gov/engineering.
2. CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE IN THE PRESENCE OF A NCSD REPRESENTATIVE. CONTRACTOR SHALL NOTIFY NCSD AT LEAST 48 HOURS BEFORE CONNECTION BEGINS.
3. EXISTING GRAVITY AND FORCE MAIN SEWER MAINLINES MAY BE ACTIVE AND IN USE. IF ANY SHUTDOWNS ARE ANTICIPATED, A BYPASS SEWER PUMPING OPERATION SHALL BE ESTABLISHED, INCLUDING GENERATOR BACKUP FOR 24-HOUR OPERATION. BYPASS PUMPING SHALL BE DISCHARGED IN A LEGAL MANNER INTO THE EXISTING SANITARY SEWER SYSTEM.
4. CONTRACTOR SHALL COORDINATE SHUTDOWNS AND SERVICE INTERRUPTIONS WITH OWNERS AND UTILITY PROVIDERS TO MINIMIZE DOWNTIME.
5. ROUGH GRADING SHALL BE DONE PRIOR TO INSTALLATION OF WASTEWATER MAINS.
6. NO MANHOLE COVERS ARE ALLOWED IN CURBING. MANHOLES SHALL BE LOCATED OUTSIDE CONCRETE AND ASPHALT PAVING WHENEVER POSSIBLE. ALL SANITARY MANHOLES OR CLEANOUTS WITHIN ASPHALT OR CONCRETE PAVEMENT SHALL BE FLUSH WITH THE FINISHED PAVEMENT SURFACE.
7. ALL FINISHED FLOOR ELEVATIONS SHALL BE ONE (1) FOOT HIGHER THAN THE RIM ELEVATION OF THE DOWNSTREAM SANITARY SEWER MANHOLE.
8. CONNECTIONS TO GRAVITY LINES AND MANHOLES SHALL BE EQUAL TO OR GREATER THAN 90' TO THE DOWNSTREAM LINE.
9. CONTRACTOR SHALL INSTALL WATERTIGHT RINGS AND COVERS ON ALL MANHOLES.
10. ALL 6" SEWER SERVICES SHALL BE SDR 26 PVC AND LAID ON A MINIMUM SLOPE OF 1.08% UNLESS OTHERWISE STATED. THE SERVICES SHALL BE CONNECTED TO MANHOLES WHERE REASONABLY POSSIBLE.
11. ALL GRAVITY MAINS SHALL BE SDR 26 PVC UNLESS CONDITIONS REQUIRE PVC C900, C905, OR DUCTILE IRON PIPE.
12. DIP OR PVC C900/C905 FOR WASTEWATER SHALL BE USED:
 - WITH LESS THAN 3' OF COVER OR GREATER THAN 20' OF COVER;
 - CROSSING OVER STORM DRAINAGE PIPE WITH LESS THAN 2' OF CLEARANCE;
 - CROSSING UNDER STORM DRAINAGE PIPE WITH LESS THAN 3' OF CLEARANCE;
 - CROSSING WATER MAINS WITH LESS THAN 18" CLEARANCE;
 - WITHIN CASINGS.
13. ALL DIP SHALL BE DIP CLASS 52, 100% SOLIDS EPOXY PROTECTIVE COATING, 431 PERMA-SHIELD, OR EQUIVALENT. ALL DIP SHALL BE ENCASED IN LINEAR LOW DENSITY 8 MILS GREEN POLYETHYLENE.
14. SLEEVES SHALL BE USED TO TRANSITION BETWEEN PVC AND DIP. FERNCO OR SIMILAR COUPLINGS ARE NOT ALLOWED.
15. WHERE WATER AND SANITARY SEWER LINES CROSS, THE LINE LAID LAST SHALL HAVE A FULL LENGTH OF PIPE INSTALLED WITH ITS MIDPOINT VERTICALLY IN LINE WITH THE OTHER LINE. THE CROSSING SHALL BE AT NOT LESS THAN A 45' ANGLE.
16. ALL MATERIAL SHALL CONFORM TO NCSD SPECIFICATIONS AS TO TYPE, DESIGN, AND MANUFACTURER.
17. DEVELOPER'S ENGINEER SHALL INSPECT PROJECT WEEKLY TO PROVIDE WRITTEN WEEKLY UPDATES AND TO CERTIFY THE CORRECTNESS OF THE WASTEWATER PORTION OF CONTRACTOR'S RECORD DRAWINGS.
18. DEVELOPER SHALL TAKE NECESSARY MEASURES TO PROTECT NCSD'S WASTEWATER SYSTEM DURING THE TIME BETWEEN THE COMMISSIONING INSPECTION AND THE 2-YEAR MAINTENANCE BOND INSPECTION.
19. JUST PRIOR TO COMMISSIONING, CONTRACTOR, AT HIS EXPENSE, SHALL TELETYPE IN CUES-GRANITE NET OR NASSCO EXCHANGE DATABASE FORMAT ALL SEWER MAINS AND SERVICES FOR NCSD'S RECORDS.
20. ALL GRAVITY MAINS SHALL BE AIR AND MANDREL TESTED PRIOR TO ACCEPTANCE.
21. NORTH CHARLESTON SEWER DISTRICT IS SEPARATE FROM THE CITY OF NORTH CHARLESTON. AS SUCH, NCSD NEEDS TO INSPECT THE ENTIRE SANITARY SEWER SERVICE FROM THE BUILDING TO THE TAP.
22. DEVELOPER/CONTRACTOR SHALL PROVIDE FINAL SANITARY SEWER AS-BUILTS TO NCSD AFTER INSPECTIONS ARE COMPLETE.
23. COOLING SYSTEM DISCHARGE SHALL NOT BE CONNECTED TO THE SANITARY SEWER SYSTEM.

NCSD WASTEWATER SYSTEM NOTES

N.T.S.



7255 STALL ROAD, NORTH CHARLESTON, SC 29406
PH: (843) 764-3072 FAX: (843) 764-2655

NC.S.D. STANDARD DETAILS

REV. DATE:	JUNE 2019	DWG#:	SS-000
------------	-----------	-------	--------