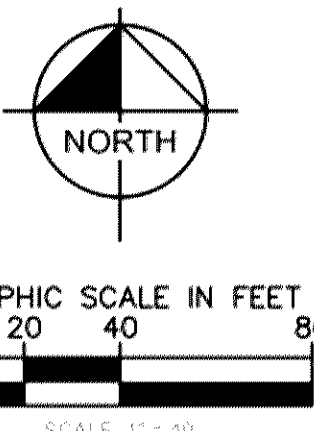




1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
 - A. 8" AND SMALLER SCHWEDLE 40, OR EQUIVALENT PER ASTM D 3034
 - B. 12" P.V.C. SCHWEDLE 40, OR EQUIVALENT PER ASTM D 3034
 - C. 16" AND LARGER SCHWEDLE 40, OR EQUIVALENT PER ASTM D 3034
 - D. 24" SCHWEDLE 40, OR EQUIVALENT PER ASTM D 3034
 - E. DUCTILE IRON PIPE PER AWWA C150
3. WATER LINES SHALL BE AS FOLLOWS:
 - A. 8" AND LARGER DUCTILE IRON PIPE PER AWWA C150
 - B. 12" AND SMALLER CLASS 150
4. A MINIMUM OF 1/2" M.L.P. POLYURETHANE IS REQUIRED ON ALL DIP
5. MINIMUM TRENCH WIDTH SHALL BE 2' FEET.
6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS.
7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING: 18" VERTICAL CLEARANCE, OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE.
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 6" COVER ON ALL WATERLINES.
9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM SEWERS, ETC. THE CONTRACTOR SHALL PROPOSED. THE SANITARY LINE SHALL BE SCH. 40 OR C900 WITH MECHANICAL JOINTS AT LEAST 18" FEET ON BOTH SIDES OF THE SANITARY LINE. THE STORM SEWER OR MECHANICAL JOINTS SHALL BE LOCATED WITH THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANS 21.10 AND 21.11 (AWWA C150, CLASS 50).
10. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND AND PAVED AREAS, WITH WATER TIGHT LIDS.
12. ALL CONCRETE FOR ENCLOSURES SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN ON ALL UTILITIES.
15. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS MAY NOT BE THE SAME AS THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD SHALL BE USED TO VERIFY THE LOCATION AND/OR ELEVATION. IF THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE ALL UTILITIES TO THE LOCATIONS WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
16. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR SURVEYS REQUIRED BY THE CITY OF BLOOMINGTON UTILITY SERVICE COMPANIES.
17. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
18. REFER TO BUILDING PLANS FOR SEATING/ELECTRIC PLAN.
19. BACKFLOW DEVICES (DOCV AND PR2 ASSEMBLIES) AND METERS ARE LOCATED IN THE INTERIOR OF THE BUILDING REF. ARCH. PLANS.
20. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITY BACKFLOWING WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
21. ALL ONSITE WATERMANS AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED.
22. BUILDING STUDIOS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKS TO PREVENT OVERSTRESSING OF THE BUILDING STRUCTURE.
23. HOPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATER TIGHT MATERIALS UTILIZING AN ALUM OR WATERSTOP (CASKE) OR BOOT. CASKE OR BOOT MUST BE REQUIRED BY THE CITY OF BLOOMINGTON UTILITY SERVICE COMPANIES.
24. TAPS OF LIVE WATER MAINS ARE DONE BY CITY FORCES AND PAID FOR AND COORDINATED WITH THE CONTRACTOR.
25. WATER AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER AND SEWER SERVICE PIPES INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION.
26. ALL COMPONENTS OF THE WATER SYSTEM UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT MUST UTILIZE PROTECTIVE INTERIOR COATING MEETING CURRENT REQUIREMENTS FOR CORROSION RESISTANCE TO ALL WEATHERS OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED PIPE IS NOT ALLOWED.
27. ALL USED WATER SERVICES MUST BE PROPERLY ABANDONED AT THE MAIN. ALL UNUSED SANITARY SERVICE SERVICES MUST BE PROPERLY ABANDONED AT THE PROPERTY LINE.
28. UTILITY PERMITS ARE REQUIRED FOR CONNECTIONS TO THE PUBLIC STORM, SANITARY, AND WATER SYSTEM. CONTACT CITY OF BLOOMINGTON UTILITIES DEPARTMENT (952-363-8777 FOR PERMITTING INFORMATION).
29. RESTORE UTILITY TRENCHES PER STANDARDS LISTED IN ARTICLES CH. 17 OF THE BLOOMINGTON CITY CODE (SEE UTILITY DETAILS).
30. INTERIOR CHIMNEY SAILS SHALL BE INSTALLED ON ALL SANITARY MANHOLES.

Revisions		
No.	Date	Description

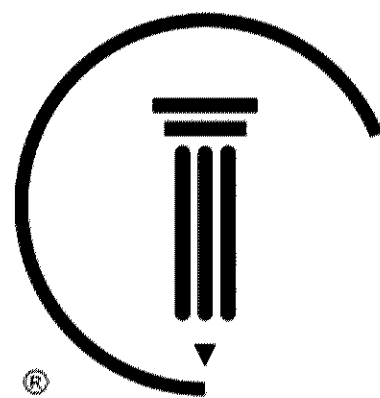
Project Information	
Phase: Development Application	Date: 01/15/2020
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Sheet Title
UTILITY PLAN

Sheet Number Current Revision

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