

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Electronic Approval: This approval is being issued electronically, this approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval
Raleigh Water Review Officer

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's **Public Sewer System** as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

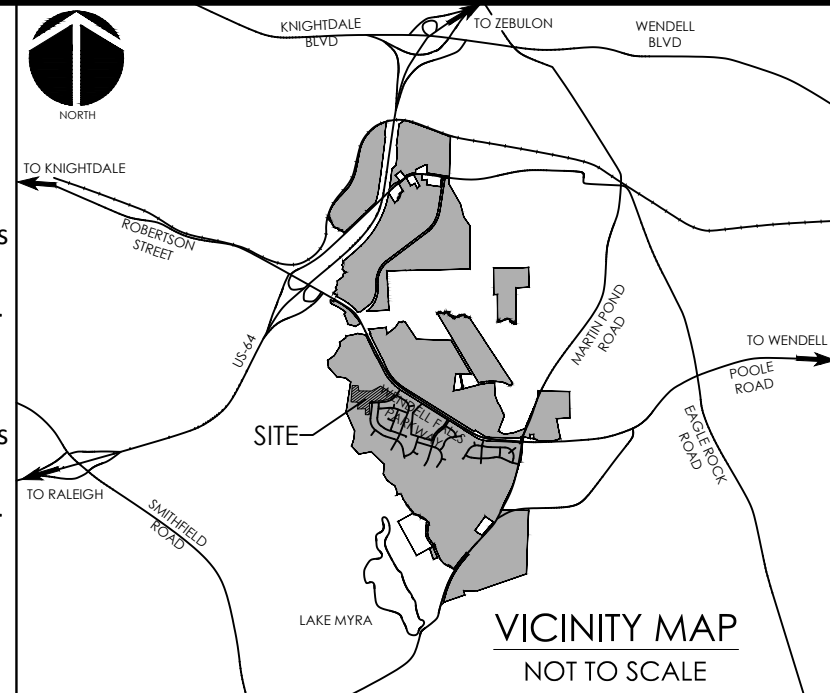
City of Raleigh Public Utilities Department Permit # S-4708

The City of Raleigh consents to the connection and extension of the City's **Public Water System** as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit # W-3713

The City of Raleigh consents to the connection to its public sewer system and extension of the **private sewer collection** system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit #



CITY OF RALEIGH UTILITY NOTES:

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- UTILITY SEPARATION REQUIREMENTS:
 - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
 - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS
 - 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER
 - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 24" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED, SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & S-49).
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- A 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL **3\"/>**

GENERAL UTILITY NOTES:

- MANHOLES SHALL BE SPACED A MAXIMUM DISTANCE OF 400 FEET APART.
- MANHOLES SHALL BE INSTALLED AT EACH DEFLECTION OF LINE AND/OR GRADE WITH A MINIMUM DROP OF 0.2 FEET. MANHOLES FOR SEWERS GREATER THAN 15 INCHES IN DIAMETER SHALL BE 5 FOOT MANHOLES. MANHOLES FOR SEWERS 12 FEET OR DEEPER SHALL BE MINIMUM 5 FOOT DIAMETER. MANHOLE TOPS SHALL BE SET FLUSH WITH PAVEMENT WHERE INSTALLED IN A STREET.
- ALL SANITARY SEWER LINES ARE 8\"/>

LEGEND

- NEW RIGHT OF WAY
- NEUSE RIVER RIPARIAN BUFFER
- ZONE 1
- NEUSE RIVER RIPARIAN BUFFER
- ZONE 2
- PHASE BOUNDARY/LOD
- BMP MAINTENANCE & ACCESS EASEMENT
- PUBLIC DRAINAGE EASEMENT
- SANITARY SEWER EASEMENT
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING SEWER MAIN
- PROPOSED SEWER MAIN & MANHOLE
- PROPOSED FIRE HYDRANT ASSEMBLY
- STREET LIGHT

- NOTE:
- ALL UTILITY MAIN SIZES AND LOCATIONS ARE PRELIMINARY AND ARE SUBJECT TO CHANGE BASED ON DESIGN REQUIREMENTS.
 - ALL SEWER MAINS ARE 8\"/>

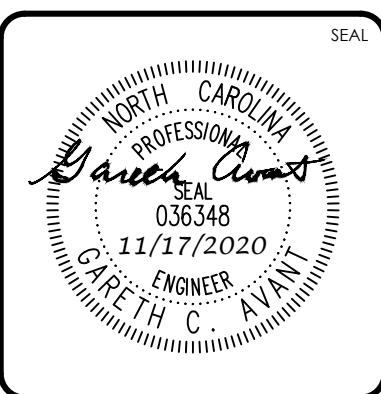
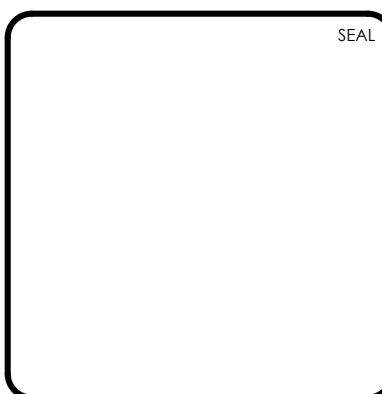
| UTILITY QUANTITIES: | |
|---------------------|----------|
| SEWER | |
| 8" PVC = | 3,350 LF |
| 8" DIP = | 194 LF |
| WATER | |
| 12" DIP = | 454 LF |
| 8" DIP = | 2,150 LF |
| 6" DIP = | 503 LF |



SCALE: 1"=50' (Horiz.)

TYPICAL S.F. LOT UTILITY SERVICES
NOT TO SCALE

| REV | NO | DESCRIPTION | DATE |
|-----|----|--|------------|
| C | 1 | ADDED TEMPORARY CONSTRUCTION EASEMENT | 2020.11.17 |
| B | 1 | REVISED SEWER AT DOUGLAS FALLS/COTTONSPRINGS DRIVE | 2020.11.06 |
| A | 1 | ISSUED FOR CONSTRUCTION | 2020.09.16 |



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WENDELL FALLS®
BY
NEWLAND®

**WENDELL FALLS PHASE 12
CONSTRUCTION DOCUMENTS
WENDELL, NORTH CAROLINA**

**PHASE 12 UTILITY PLAN
(ENLARGEMENT)**

| | | | |
|--|----------------------------|----------------------|----------------|
| DATE: JUNE 16, 2020 | SCALE: HORIZONTAL: 1"=200' | SCALE: VERTICAL: N/A | SCALE: C2.1 |
| MCE PROJ. #: 02735-0274 | DESIGNED: DCR | CHECKED: GCA | PROJ. MGR: CHS |
| STATUS: FINAL DRAWINGS ISSUED FOR CONSTRUCTION | REVISION: C | | |