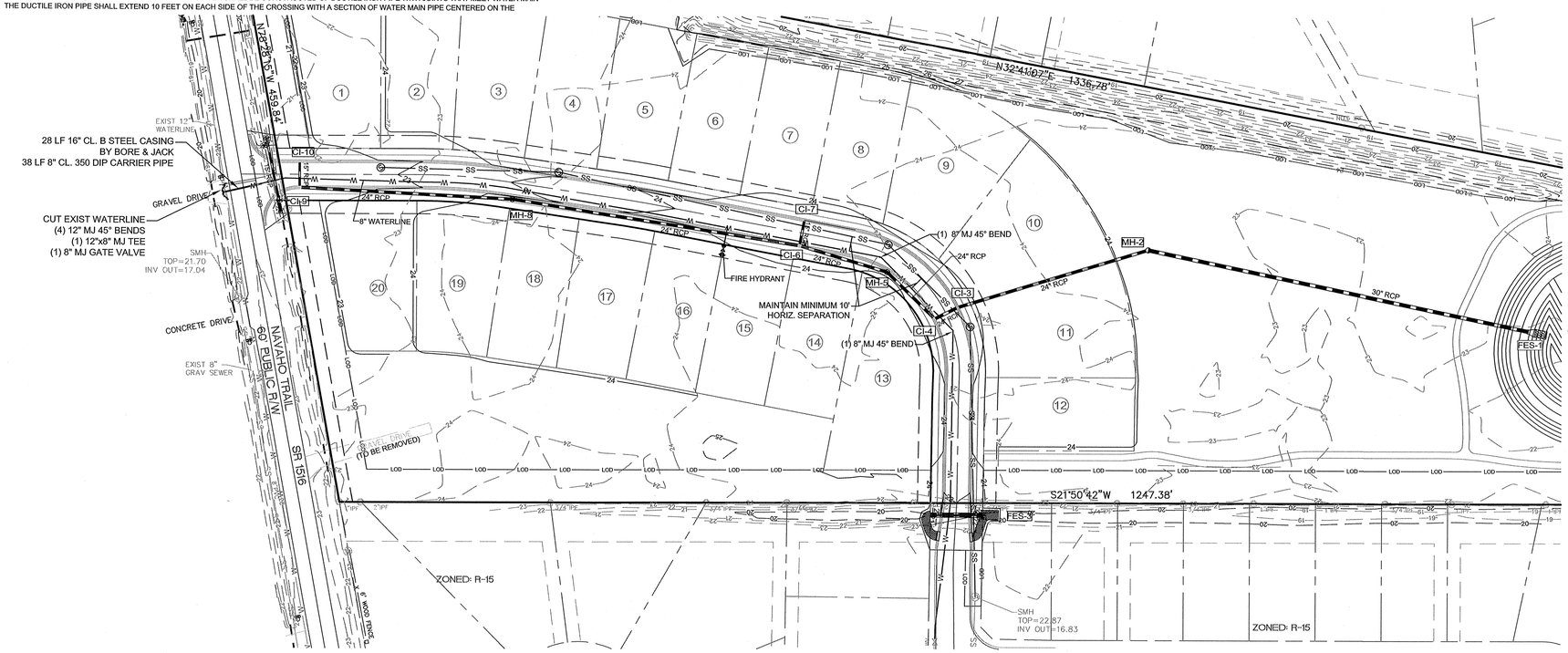
UTILITY NOTES: (NCAC 15A.02T.0305 / T15A.18C.0906)

1. WATER MAINS SHALL BE LAID SO AS TO PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM SEWERS. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, THE WATER MAIN CAN BE INSTALLED AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, EITHER IN A SEPARATE TRENCH, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.

2. WHEN CROSSING A WATER MAIN OVER A SEWER, THE WATER MAIN SHALL BE LAID AT LEAST 18 INCHES ABOVE THE SEWER. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS THAT MEET WATER MAIN STANDARDS. THE DUCTILE IRON PIPE SHALL EXTEND 10 FEET ON EACH SIDE OF THE CROSSING WITH A SECTION OF WATER MAIN PIPE CENTERED ON THE CROSSING.

CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

1. SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
2. SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT R/W LINE. SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
3. ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50, DIP, WITH PROTECTO 401 CERAMIC EPOXY LINING.
4. 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN.
5. NO FLEXIBLE COUPLINGS SHALL BE USED.
6. EACH LOT SHALL HAVE A SINGLE WATER SERVICE LINE.
7. WHEREVER STORM DRAIN CROSSES SANITARY SEWER WITH LESS THAN 12" OF VERTICAL SEPARATION, STRUCTURAL BRIDGING IS REQUIRED. WHEN BETWEEN 12" AND 24" VERTICAL SEPARATION, EITHER STRUCTURAL BRIDGING OR DUCTILE IRON PIPE SHALL BE INSTALLED.
8. WHEREVER WATERLINE CROSSES BELOW STORM STORM DRAIN, CLASS 50 DUCTILE IRON PIPE AND FITTINGS SHALL BE INSTALLED WITH A MINIMUM 18" VERTICAL SEPARATION. SEE DETAIL SHT C-5.11.



FIVE OAKS LANE - PLAN

HORIZONTAL SCALE: 1"=50'

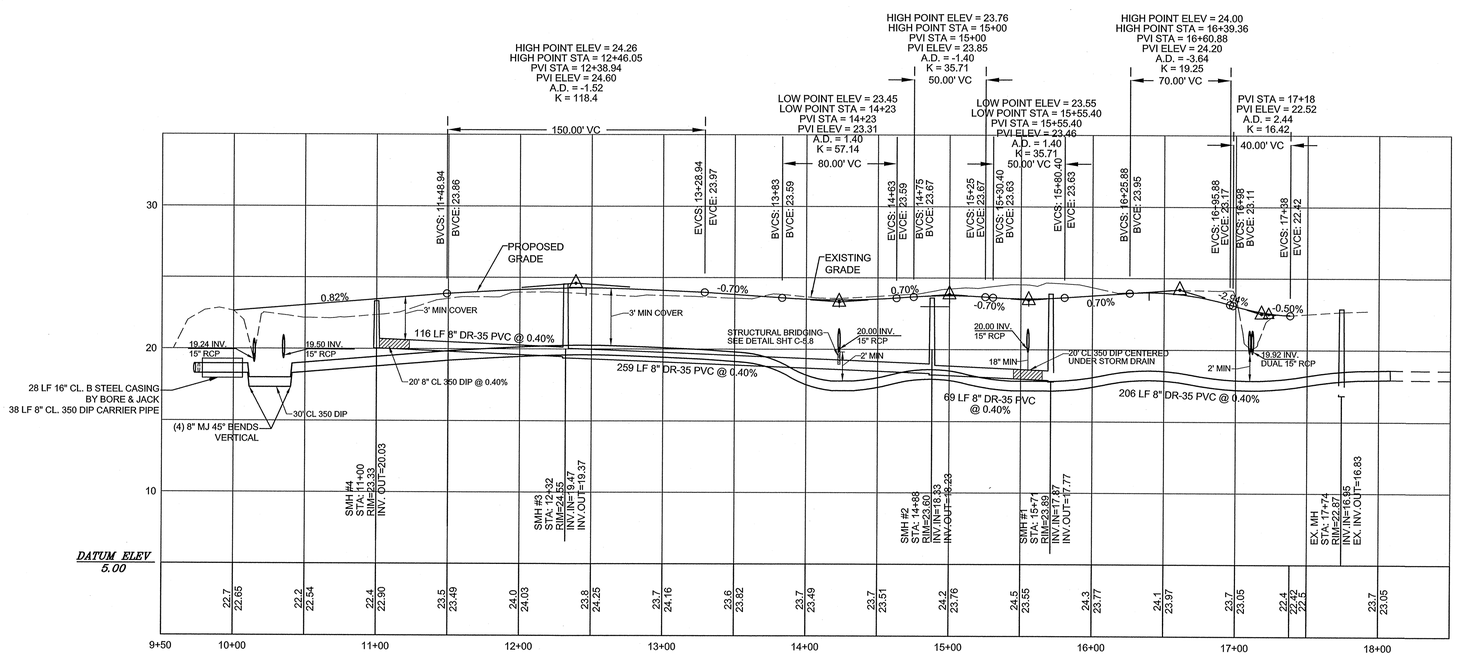
LEGEND

EXISTING

- = SIGN
- = WATER VALVE
- = CLEAN OUT
- = TELEPHONE RISER
- = IRON PIPE FOUND
- = CONCRETE MONUMENT FOUND
- = IRON ROD FOUND
- = EXISTING WETLANDS
- = REMOVE TREE

PROPOSED

- = PROPOSED FIRE HYDRANT
- = PROPOSED WATER VALVE
- = PROPOSED WATER LINE
- = PROPOSED STORM SEWER
- = PROPOSED DRAINAGE INLET
- = PROPOSED SANITARY SEWER MANHOLE
- = PROPOSED SANITARY SEWER
- = PROPOSED OPEN SPACE



FIVE OAKS LANE - PROFILE

HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'

For each open utility cut of City streets, a $325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan

Name Date

Planning _____

Traffic _____

Fire _____

CITY OF WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date:_____ Permit #_____

Signed: _____

NCDENR PWSS WATER PERMIT #: _____

WATER CAPACITY: _____GPD

DWQ SEWER PERMIT #: _____

SEWER CAPACITY: _____GPD

SEWER SHED # AND PLANT: _____

SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:

PER CFPUA COMMENTS	11/7/14

CLIENT INFORMATION:

LOT 2 DEVELOPMENT
1015 ASHES DR., SUITE 202
WILMINGTON, NC 28405

PARAMOUNTE ENGINEERING, INC
5911 Oleander Drive, Suite 201
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)

PLAN & PROFILE

MELTON OAKS SUBDIVISION
WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
FINAL DESIGN:
RELEASED FOR CONST:

DRAWING INFORMATION

DATE:	10/31/14
SCALE:	1"=50'
DESIGNED:	DHW
DRAWN:	GLM
CHECKED:	DHW

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 16729 ENGINEER DAVID B. BOWMAN

C-3.4

PEI JOB#: 14186.PE