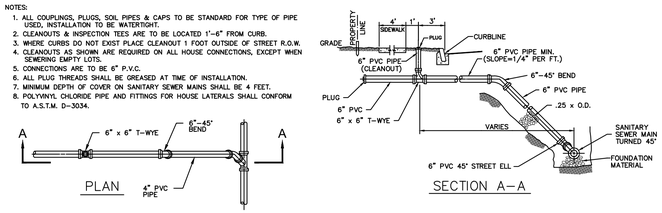
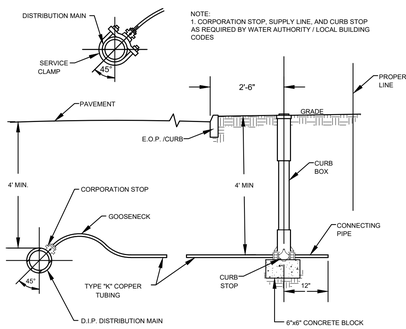
NOTES:
1. ALL COUPLINGS, PLUGS, SOIL PIPES & CAPS TO BE STANDARD FOR TYPE OF PIPE USED, INSTALLATION TO BE WATERTIGHT.
2. CLEANOUTS & INSPECTION TEES ARE TO BE LOCATED 1'-6" FROM CURB.
3. WHERE CURBS DO NOT EXIST PLACE CLEANOUT 1 FOOT OUTSIDE OF STREET R.O.W.
4. CLEANOUTS AS SHOWN ARE REQUIRED ON ALL HOUSE CONNECTIONS, EXCEPT WHEN SEWERING EMPTY LOTS.
5. CONNECTIONS ARE TO BE 6" P.V.C.
6. ALL PLUG THREADS SHALL BE GREASED AT TIME OF INSTALLATION.
7. MINIMUM DEPTH OF COVER ON SANITARY SEWER MAINS SHALL BE 4 FEET.
8. POLYVINYL CHLORIDE PIPE AND FITTINGS FOR HOUSE LATERALS SHALL CONFORM TO A.S.T.M. D-3034.



STANDARD SANITARY HOUSE CONECTION

SCALE: NTS



WATER SERVICE CONNECTION

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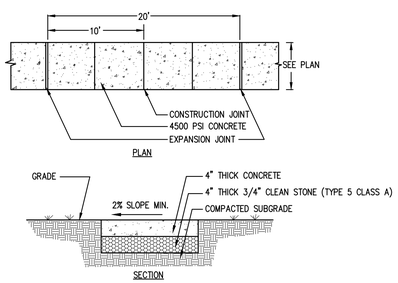
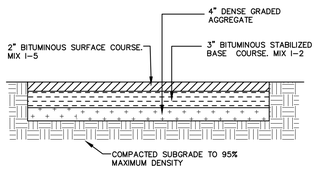


1. ALL CONCRETE SHALL CONFORM TO 2019 STANDARD N.J.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 914 CLASS "B", AIR-ENTRAINED, 4500 P.S.I. MINIMUM AT 28 DAYS. ALL CONCRETE WORK SHALL HAVE A WOOD FLOAT AND TRANSVERCE BROOM FINISH. BROOMING SHALL BE DONE BEFORE INITIAL SET USING A STEEL OR BARN BROOM.
2. SUBBASE AND FORMWORK SHALL BE FIRM AND APPROVED BY THE CITY ENGINEER OR HIS/HER REPRESENTITIVE PRIOR TO POURING.
3. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO NJDOT 2019 STANDARDS, SPECIFICATIONS AND INSPECTIONS.
4. WHEN SIDEWALK ABUTS CURB OR SIDEWALK, A 1/2" THICK NON-EXTRUDABLE, FIBROUS BITUMASTIC EXPANSION JOINT IS REQUIRED.
5. FOR SCORING PATTERN, SIDEWALK SHALL BE DIVIDED INTO TWO LONGITUDINAL SECTIONS.
6. ALL JOINTS SHALL SAW CUT. NO TOOLED JOINTS ARE PERMITTED.

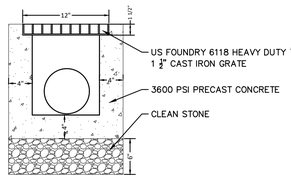
CONCRETE SIDEWALK

SCALE: NTS



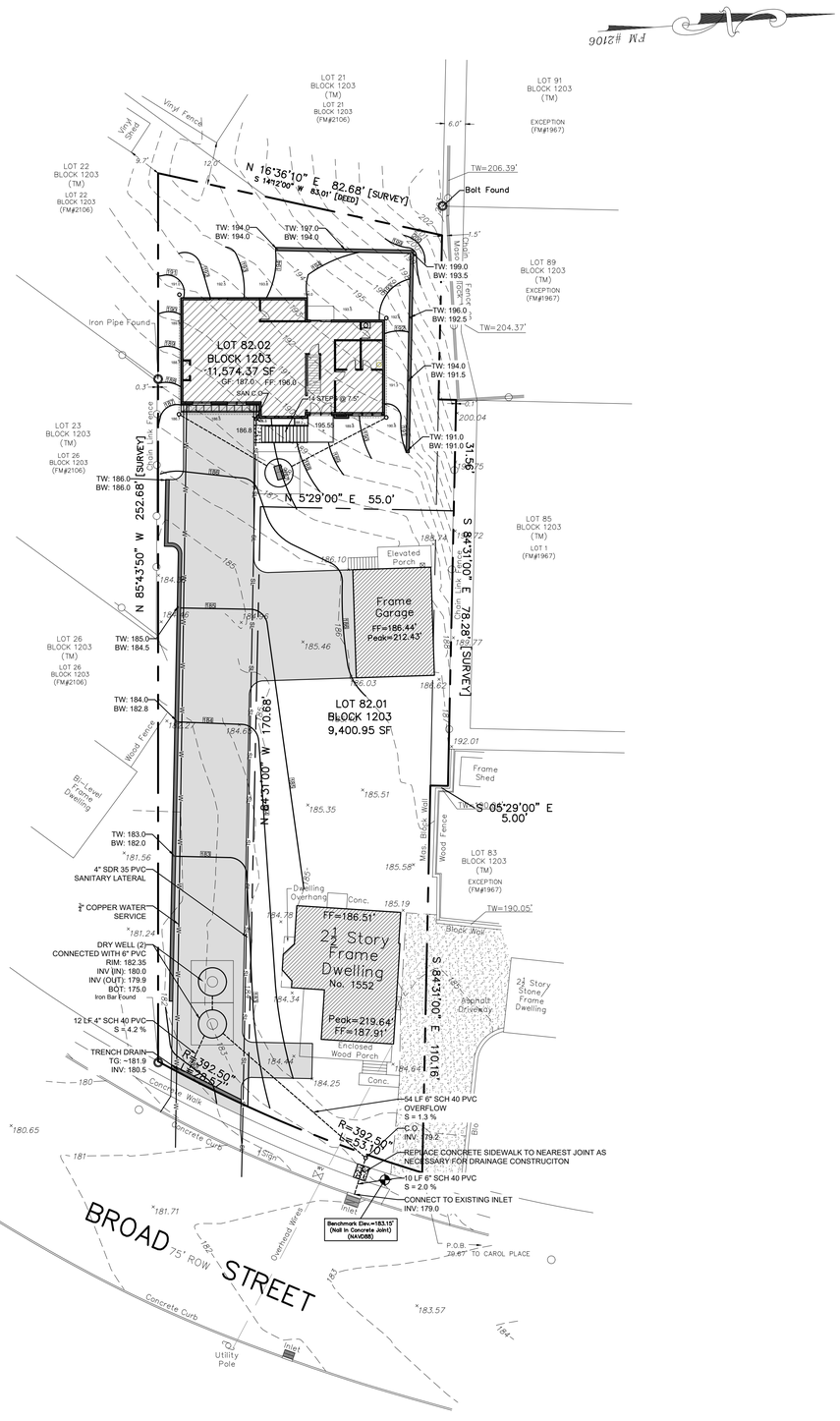
FULL DEPTH PAVEMENT

SCALE: NTS



TRENCH DRAIN DETAIL

SCALE: NTS



AVERAGE GRADE PLANE CALCULATION

191.0+192.5+193.8+194.0+193.5+
192.5+191.3+190.8+189.8+188.2+
186.8+186.8+186.7+189.7+189.9 = 2,857.3

2,857.3/15 = 190.5 = AVERAGE GP

BUILDING HEIGHT CALCULATION

FINISHED FLOOR ELEV = 196.0
AVERAGE GP = 190.5
FF TO PEAK = 25.45

196.0 - 190.5 = 5.5
5.5 + 25.45 = **30.95 FT = BUILDING HEIGHT**

DRYWELL CALCULATIONS:

TOTAL IMPERVIOUS AREA = 7,097.0 SF
$(\frac{2''}{12''})$ RAINFALL * 7,097.0 SF = 1,182.8 CF REQUIRED

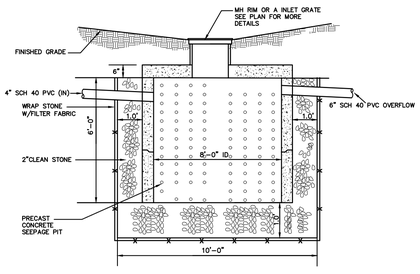
DIMENSIONS: 8' DIAMETER
6' DEPTH
1' CLEAN STONE SIDES
1' CLEAN STONE BASE

DRYWELL:
$1/4\pi(8)^2(6')$ = 301.6 CF

BASE:
10' X 10' = 100 SF
100(1')(.40) = 40.0 CF

SIDES:
10' X 10' = 100 SF (TOTAL AREA OF GRAVEL)
$1/4\pi(9)^2$ = 63.62 SF (DRYWELL + RING AREA)
100-63.62 = 36.38 CF
36.38(6')(.40) = 87.3 CF

TOTAL: 301.6+57.6+87.3 = 446.5 CF
3 DRYWELLS PROPOSED = 1,339.5 CF (> 1,182.8 CF)



DRYWELL DETAIL

SCALE: NTS

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

REFERENCES:

BOUNDARY AND FIELD SURVEY TAKEN FROM LAKELAND SURVEYING, PREPARED BY JEFFREY S. GRUNN PLS ON 3/16/23.

ARCHITECTURAL FOOTPRINT TAKEN FROM PLANS PREPARED BY DANTAS CARRETE ARCHITECTURE, RECIEVED 12/12/23.

811 Know what's below. Call before you dig.

NEW JERSEY STATE LAW REQUIRES NOTIFICATION 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBANCE. CONTRACTOR IS RESPONSIBLE FOR CALLING 811 OR 1-800-272-1000 FOR UTILITY MARKOUTS. UTILITY INFORMATION SHOWN IS PROVIDED BY THE SURVEYOR AND IS CURRENT AT THE TIME OF THE SURVEY. ANDERSON CONSULTING SERVICES IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA.

PAUL W. ANDERSON
N.J. PROFESSIONAL ENGINEER
LIC. NO. 33410
SIGNATURE INVALID WITHOUT RAISED SEAL OF P.E.

Revisions

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CERTIFICATE OF AUTHORIZATION 24GA28182400

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www.pwanderson-cs.com

Proj. No.	BLOOMFIELD BROAD STREET
Date	8-4-23
Drawn by	ET
Designed by	PWA
Checked by	PWA
Scale	AS SHOWN

1552 BROAD STREET
BLOCK 1203, LOT 82
TOWNSHIP OF BLOOMFIELD
ESSEX COUNTY , NEW JERSEY

GRADING & UTILITY PLAN

SP- 2

SHEET 2 OF 2