

ANGLERS ROAD COMMONS APARTMENTS

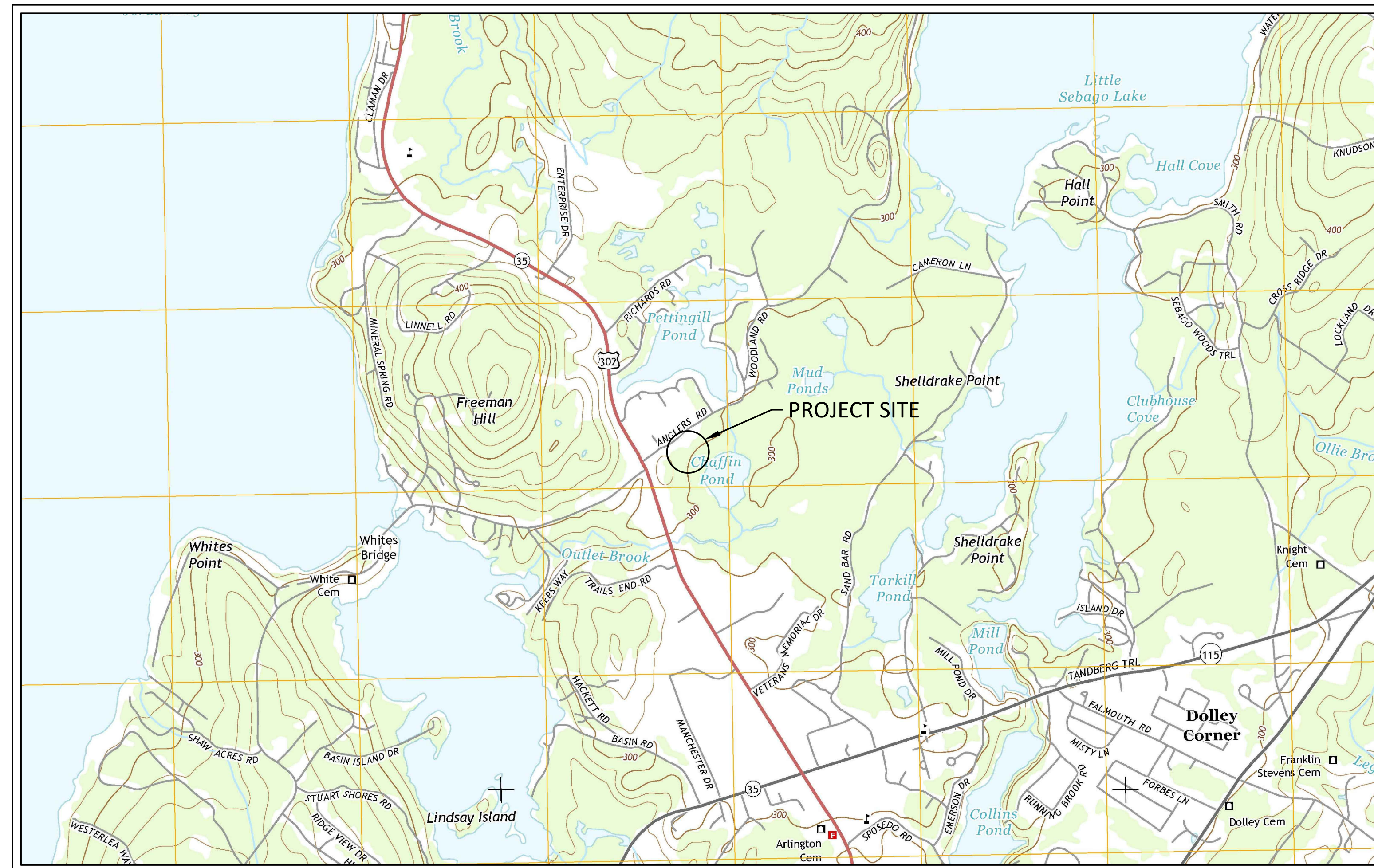
ANGLERS ROAD
WINDHAM, MAINE

CONSULTANTS

CIVIL ENGINEER DM ROMA CONSULTING ENGINEERS

LAND SURVEYOR MAIN-LAND DEVELOPMENT CONSULTANTS, INC.

GEOLOGIST SUMMIT GEOENGINEERING SERVICES



PROJECT VICINITY MAP

ISSUED FOR PERMITTING - NOT FOR CONSTRUCTION
FEBRUARY 4, 2019

PREPARED BY:

DM ROMA

CONSULTING ENGINEERS

P.O. BOX 1116
WINDHAM, ME 04062
(207) 310 - 0506

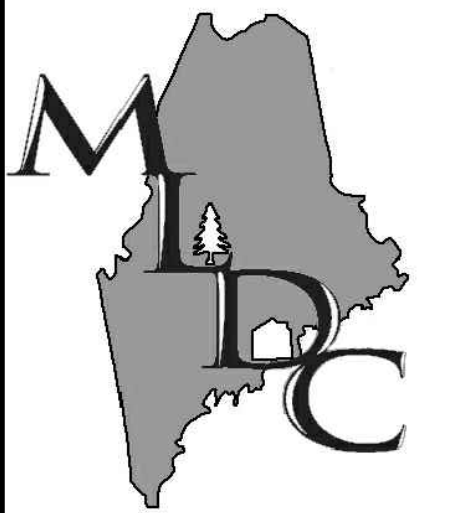
APPLICANT:

TIM CLINTON
P.O. BOX 87
SCHITUATE, MA 02066

ANGLERS ROAD COMMONS APARTMENTS

DRAWING SHEET INDEX

PAGE NO.	DESCRIPTION
1	TITLE SHEET
2	SUBDIVISION PLAN (MAIN-LAND CONSULTANTS)
3	SUBDIVISION PLAN
4	PLAN AND PROFILE: STA. -0+50 THRU 4+25
5	PLAN AND PROFILE: STA. 4+25 THRU 8+58
6	PLAN AND PROFILE: ANGLERS ROAD
7	STORMWATER POND PLAN
8	DETAILS
9	DETAILS
10	DETAILS



MAIN-LAND
DEVELOPMENT
CONSULTANTS, INC.

69 MAIN ST. LIVERMORE FALLS, MAINE
PH: (207) 897-6752 FAX: (207) 897-5404
WWW.MAIN-LANDDC.COM

PLAN SHOWING
ANGLERS ROAD DEVELOPMENT

ROUTE 302, TOWN OF WINDHAM,
COUNTY OF CUMBERLAND,
STATE OF MAINE

OWNER OF RECORD
**WINDHAM ECONOMIC
DEVELOPMENT
CORPORATION**
8 SCHOOL ROAD,
WINDHAM, MAINE 04062

MADE FOR
**WINDHAM ECONOMIC
DEVELOPMENT
CORPORATION**
8 SCHOOL ROAD,
WINDHAM, MAINE 04062

DRAWING SCALE:
50 0 25 50
(IN FEET)
1 INCH = 50 FT

REVISION NOTES:

PROJ. MGR: CLB
DRAWN BY: CLB
CHECKED BY: TJC
REVISION NO: N/A
SURVEY DATE: 2015-05-05
ISSUE DATE: 2018-11-26
ISSUED FOR: FINAL

**SUBDIVISION
PLAN**

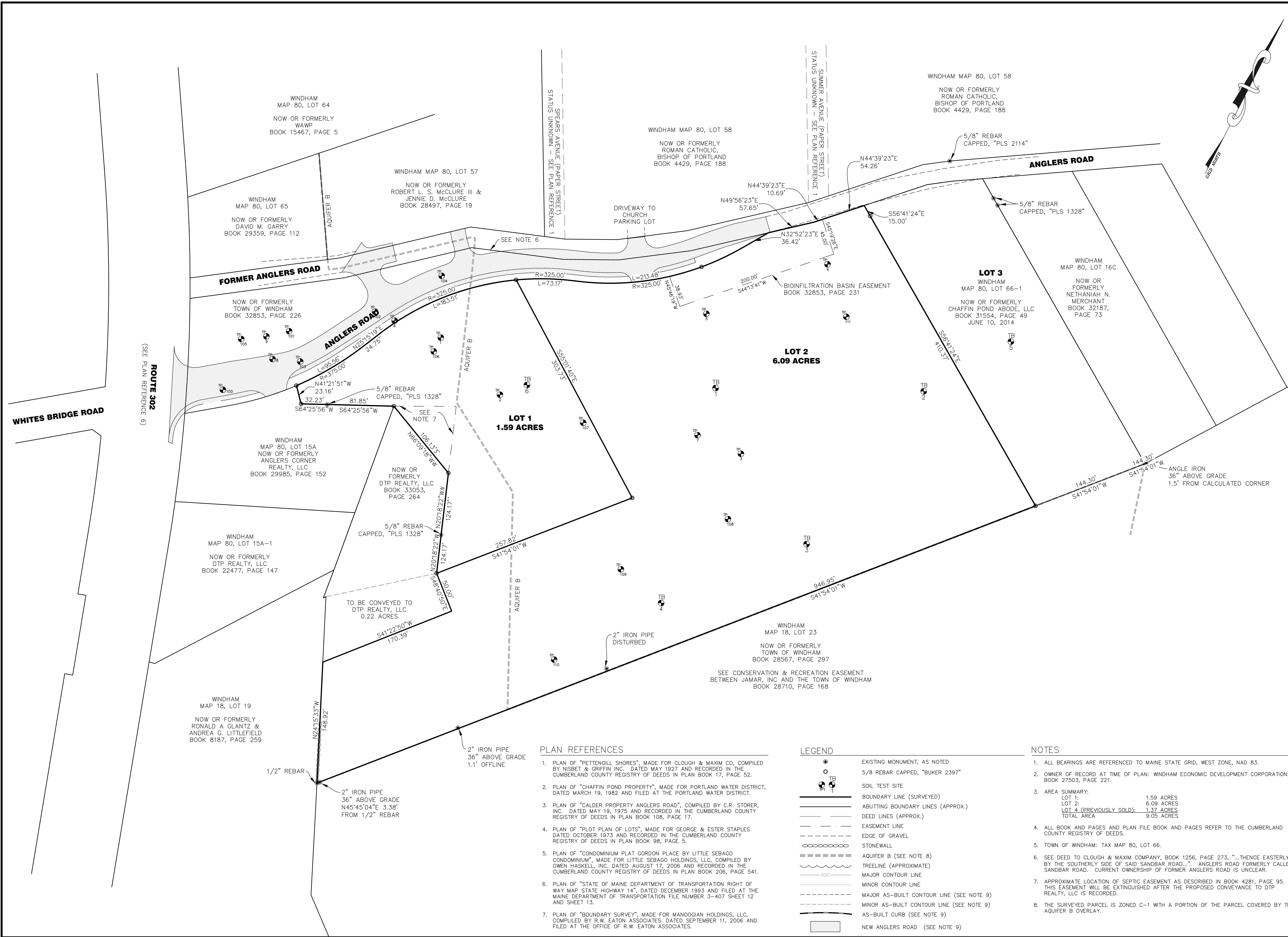
SEAL:

DRAFT

CHARLES L. BUKER PLS #2397
DRAWING NO.

S1.1

MLDC No. 18-245 1 OF 1



PLAN REFERENCES

- 1. PLAN OF "PETTENGILL SHORES", MADE FOR CLOUGH & MAXIM CO, COMPILED BY NISBET & GRIFFIN INC. DATED MAY 1927 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 17, PAGE 52.
- 2. PLAN OF "CHAFFIN POND PROPERTY", MADE FOR PORTLAND WATER DISTRICT, DATED MARCH 19, 1982 AND FILED AT THE PORTLAND WATER DISTRICT.
- 3. PLAN OF "CALDER PROPERTY ANGLERS ROAD", COMPILED BY C.R. STORER, INC. DATED MAY 19, 1975 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 108, PAGE 17.
- 4. PLAN OF "PLOT PLAN OF LOTS", MADE FOR GEORGE & ESTER STAPLES DATED OCTOBER 1973 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 98, PAGE 5.
- 5. PLAN OF "CONDOMINIUM PLAT GORDON PLACE BY LITTLE SEBAGO CONDOMINIUM", MADE FOR LITTLE SEBAGO HOLDINGS, LLC, COMPILED BY OWEN HASKELL, INC. DATED AUGUST 17, 2006 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 206, PAGE 541.
- 6. PLAN OF "STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP STATE HIGHWAY 14", DATED DECEMBER 1993 AND FILED AT THE MAINE DEPARTMENT OF TRANSPORTATION FILE NUMBER 3-407 SHEET 12 AND SHEET 13.
- 7. PLAN OF "BOUNDARY SURVEY", MADE FOR MANOOGIAN HOLDINGS, LLC, COMPILED BY R.W. EATON ASSOCIATES. DATED SEPTEMBER 11, 2006 AND FILED AT THE OFFICE OF R.W. EATON ASSOCIATES.

LEGEND

- EXISTING MONUMENT, AS NOTED
- 5/8" REBAR CAPPED, "BUKER 2397"
- SOIL TEST SITE
- BOUNDARY LINE (SURVEYED)
- ABUTTING BOUNDARY LINES (APPROX.)
- DEED LINES (APPROX.)
- EASEMENT LINE
- EDGE OF GRAVEL
- STONEWALL
- AQUIFER B (SEE NOTE 8)
- TREELINE (APPROXIMATE)
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- MAJOR AS-BUILT CONTOUR LINE (SEE NOTE 9)
- MINOR AS-BUILT CONTOUR LINE (SEE NOTE 9)
- AS-BUILT CURB (SEE NOTE 9)
- NEW ANGLERS ROAD (SEE NOTE 9)

NOTES

- 1. ALL BEARINGS ARE REFERENCED TO MAINE STATE GRID, WEST ZONE, NAD 83.
- 2. OWNER OF RECORD AT TIME OF PLAN: WINDHAM ECONOMIC DEVELOPMENT CORPORATION: BOOK 27503, PAGE 221.
- 3. AREA SUMMARY:
LOT 1: 1.59 ACRES
LOT 2: 6.09 ACRES
LOT 4 (PREVIOUSLY SOLD): 1.37 ACRES
TOTAL AREA: 9.05 ACRES
- 4. ALL BOOK AND PAGES AND PLAN FILE BOOK AND PAGES REFER TO THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
- 5. TOWN OF WINDHAM: TAX MAP 80, LOT 66.
- 6. SEE DEED TO CLOUGH & MAXIM COMPANY, BOOK 1256, PAGE 273, "...THENCE EASTERLY BY THE SOUTHERLY SIDE OF SAID SANDBAR ROAD..." ANGLERS ROAD FORMERLY CALLED SANDBAR ROAD. CURRENT OWNERSHIP OF FORMER ANGLERS ROAD IS UNCLEAR.
- 7. APPROXIMATE LOCATION OF SEPTIC EASEMENT AS DESCRIBED IN BOOK 4281, PAGE 95. THIS EASEMENT WILL BE EXTINGUISHED AFTER THE PROPOSED CONVEYANCE TO DTP REALTY, LLC IS RECORDED.
- 8. THE SURVEYED PARCEL IS ZONED C-1 WITH A PORTION OF THE PARCEL COVERED BY THE AQUIFER B OVERLAY.

GENERAL NOTES:

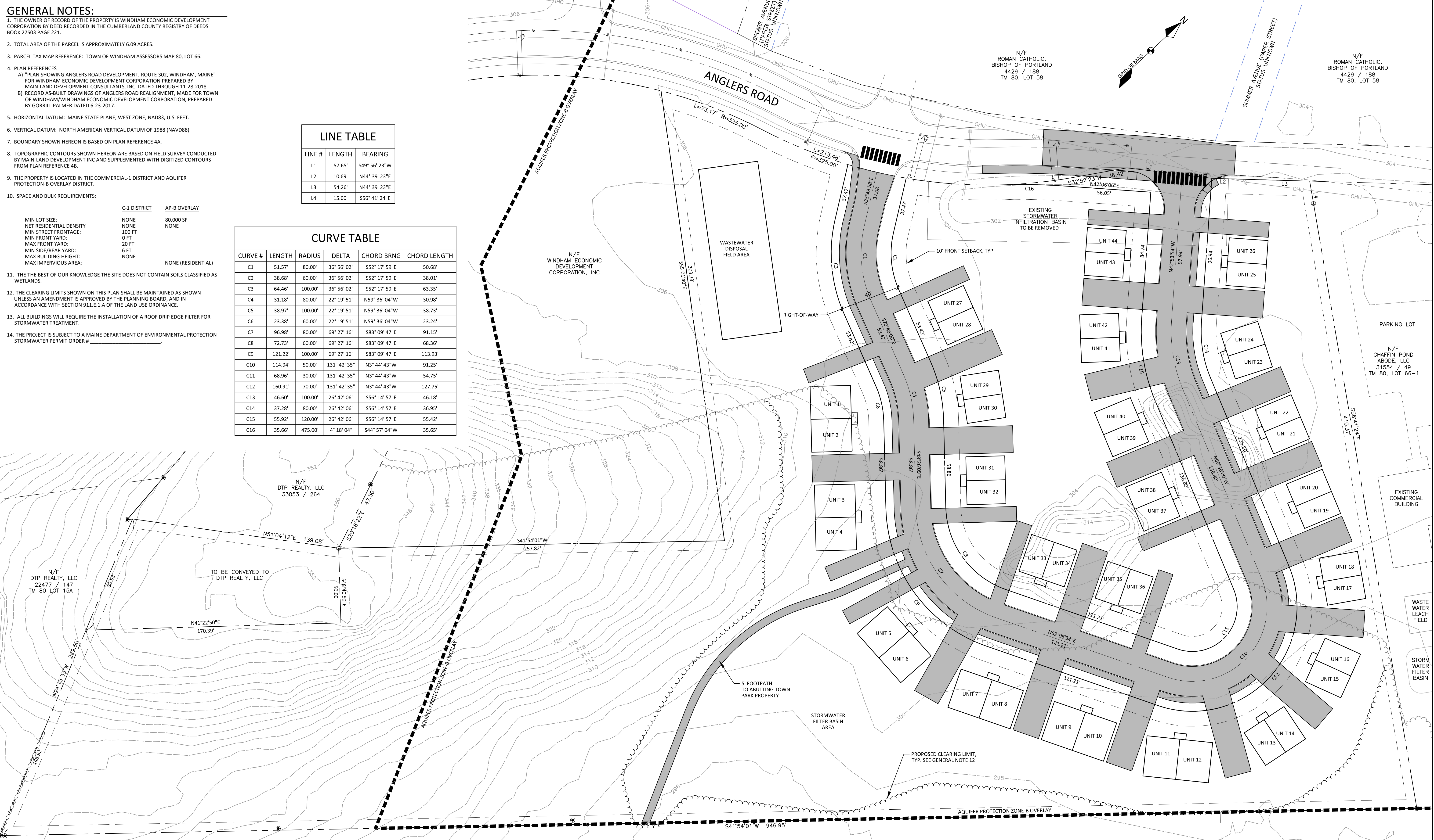
1. THE OWNER OF RECORD OF THE PROPERTY IS WINDHAM ECONOMIC DEVELOPMENT CORPORATION BY DEED RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 27503 PAGE 221.
2. TOTAL AREA OF THE PARCEL IS APPROXIMATELY 6.09 ACRES.
3. PARCEL TAX MAP REFERENCE: TOWN OF WINDHAM ASSESSORS MAP 80, LOT 66.
4. PLAN REFERENCES:
 A) "PLAN SHOWING ANGLERS ROAD DEVELOPMENT, ROUTE 302, WINDHAM, MAINE" FOR WINDHAM ECONOMIC DEVELOPMENT CORPORATION PREPARED BY MAIN-LAND DEVELOPMENT CONSULTANTS, INC. DATED THROUGH 11-28-2018.
 B) RECORD AS-BUILT DRAWINGS OF ANGLERS ROAD REALIGNMENT, MADE FOR TOWN OF WINDHAM/WINDHAM ECONOMIC DEVELOPMENT CORPORATION, PREPARED BY GORRILL PALMER DATED 6-23-2017.
5. HORIZONTAL DATUM: MAINE STATE PLANE, WEST ZONE, NAD83, U.S. FEET.
6. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
7. BOUNDARY SHOWN HEREON IS BASED ON PLAN REFERENCE 4A.
8. TOPOGRAPHIC CONTOURS SHOWN HEREON ARE BASED ON FIELD SURVEY CONDUCTED BY MAIN-LAND DEVELOPMENT INC AND SUPPLEMENTED WITH DIGITIZED CONTOURS FROM PLAN REFERENCE 4B.
9. THE PROPERTY IS LOCATED IN THE COMMERCIAL-1 DISTRICT AND AQUIFER PROTECTION-B OVERLAY DISTRICT.
10. SPACE AND BULK REQUIREMENTS:

LINE TABLE		
LINE #	LENGTH	BEARING
L1	57.65'	S49° 56' 23"W
L2	10.69'	N44° 39' 23"E
L3	54.26'	N44° 39' 23"E
L4	15.00'	S56° 41' 24"E

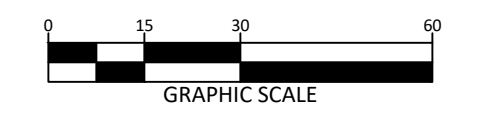
CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BRNG	CHORD LENGTH
C1	51.57'	80.00'	36° 56' 02"	S52° 17' 59"E	50.68'
C2	38.68'	60.00'	36° 56' 02"	S52° 17' 59"E	38.01'
C3	64.46'	100.00'	36° 56' 02"	S52° 17' 59"E	63.35'
C4	31.18'	80.00'	22° 19' 51"	N59° 36' 04"W	30.98'
C5	38.97'	100.00'	22° 19' 51"	N59° 36' 04"W	38.73'
C6	23.38'	60.00'	22° 19' 51"	N59° 36' 04"W	23.24'
C7	96.98'	80.00'	69° 27' 16"	S83° 09' 47"E	91.15'
C8	72.73'	60.00'	69° 27' 16"	S83° 09' 47"E	68.36'
C9	121.22'	100.00'	69° 27' 16"	S83° 09' 47"E	113.93'
C10	114.94'	50.00'	131° 42' 35"	N3° 44' 43"W	91.25'
C11	68.96'	30.00'	131° 42' 35"	N3° 44' 43"W	54.75'
C12	160.91'	70.00'	131° 42' 35"	N3° 44' 43"W	127.75'
C13	46.60'	100.00'	26° 42' 06"	S56° 14' 57"E	46.18'
C14	37.28'	80.00'	26° 42' 06"	S56° 14' 57"E	36.95'
C15	55.92'	120.00'	26° 42' 06"	S56° 14' 57"E	55.42'
C16	35.66'	475.00'	4° 18' 04"	S44° 57' 04"W	35.65'

	C-1 DISTRICT	AP-B OVERLAY
MIN LOT SIZE:	NONE	80,000 SF
NET RESIDENTIAL DENSITY:	NONE	NONE
MIN STREET FRONTAGE:	100 FT	NONE
MIN FRONT YARD:	0 FT	NONE
MAX FRONT YARD:	20 FT	NONE
MIN SIDE/REAR YARD:	6 FT	NONE
MAX BUILDING HEIGHT:	NONE	NONE (RESIDENTIAL)
MAX IMPERVIOUS AREA:	NONE	NONE (RESIDENTIAL)

11. THE THE BEST OF OUR KNOWLEDGE THE SITE DOES NOT CONTAIN SOILS CLASSIFIED AS WETLANDS.
12. THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE MAINTAINED AS SHOWN UNLESS AN AMENDMENT IS APPROVED BY THE PLANNING BOARD, AND IN ACCORDANCE WITH SECTION 911.E.1.A OF THE LAND USE ORDINANCE.
13. ALL BUILDINGS WILL REQUIRE THE INSTALLATION OF A ROOF DRIP EDGE FILTER FOR STORMWATER TREATMENT.
14. THE PROJECT IS SUBJECT TO A MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STORMWATER PERMIT ORDER # _____



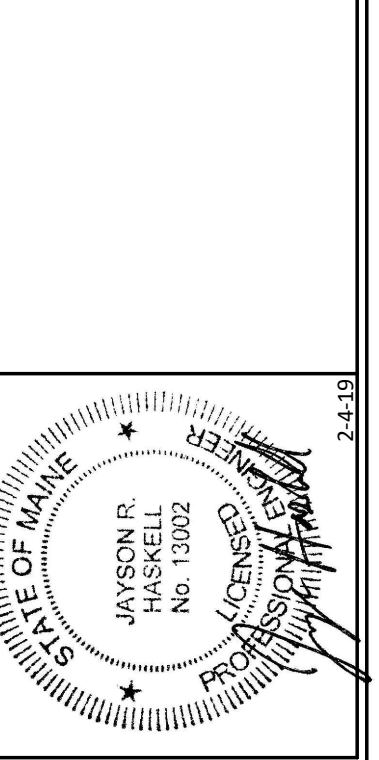
LEGEND	
EXISTING	PROPOSED



N/F TOWN OF WINDHAM 28567 / 297 TM 18, LOT 23

APPROVED - WINDHAM PLANNING BOARD:

CHAIRPERSON	DATE

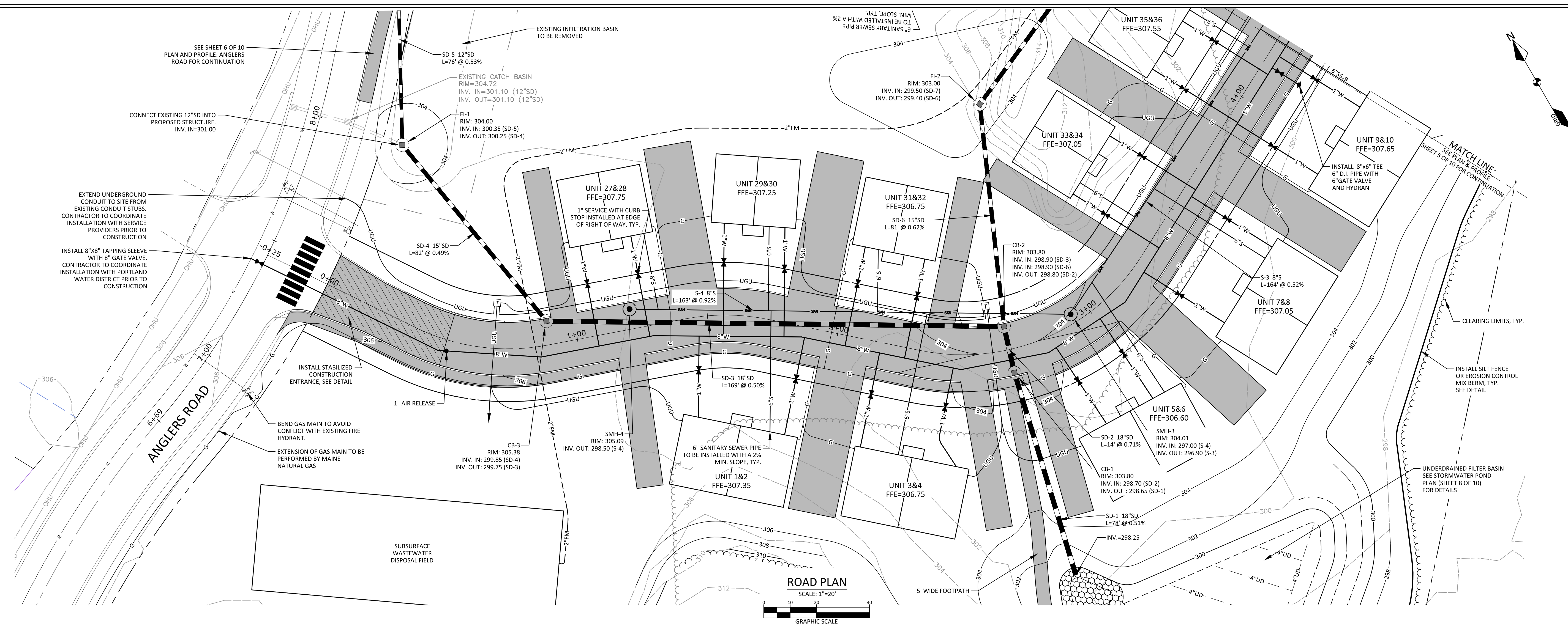


DM ROMA
 CONSULTING ENGINEERS
 P.O. BOX 1116
 WINDHAM, ME 04062
 (207) 310-0506

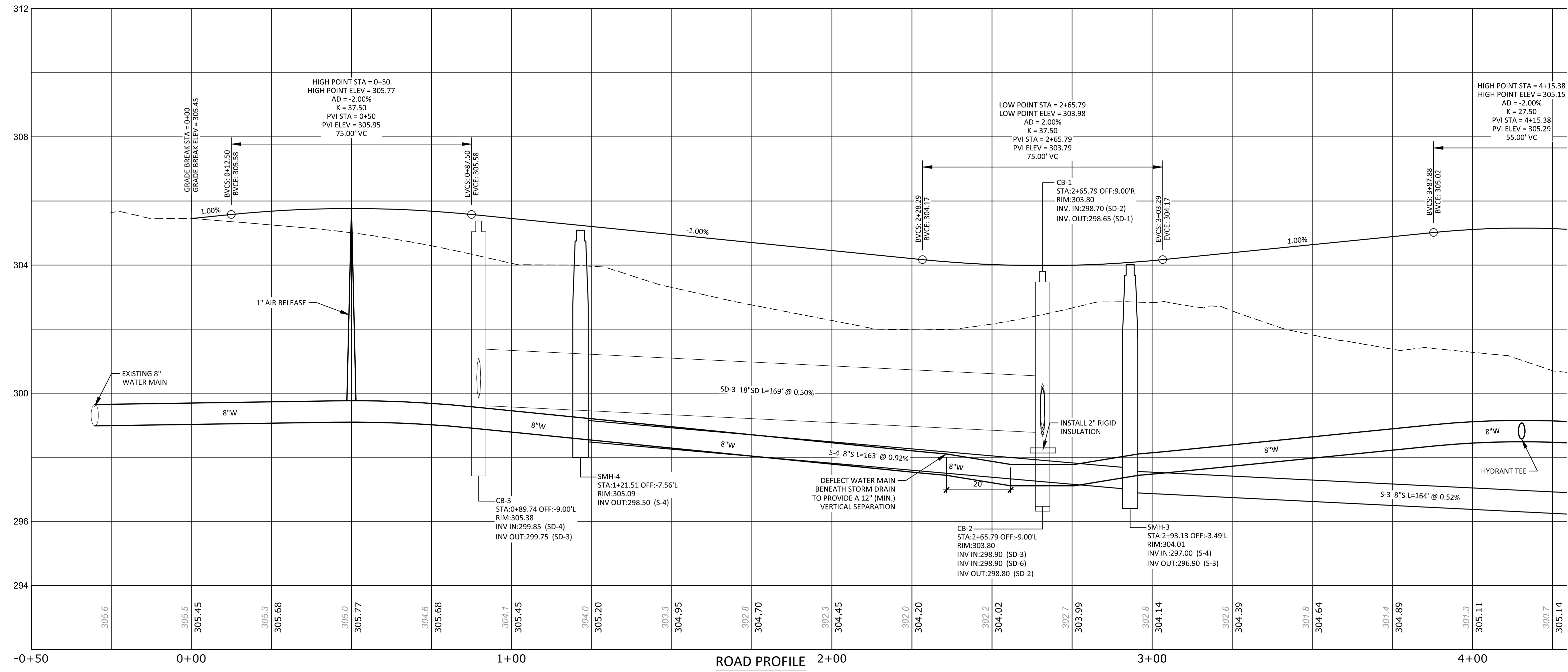
REV	DATE	BY	DESCRIPTION
A	2-4-19	DMR	ISSUED FOR PERMITTING

SUBDIVISION PLAN
 ANGLERS ROAD COMMONS APARTMENTS
 WINDHAM, MAINE
 FOR: TIMOTHY CLINTON
 PROJECT NO. 18-0206

18093
JOB NUMBER:
1" = 30'
SCALE:
2-4-2019
DATE:
SHEET 3 OF 10
SB-1

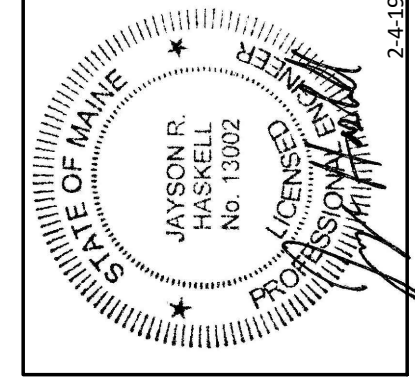


ROAD PLAN
SCALE: 1"=20'
GRAPHIC SCALE



ROAD PROFILE
SCALE: HORIZ.: 1"=20'
VERT.: 1"=2'

- LEGEND**
- | EXISTING | | PROPOSED | |
|-----------|-----------------------|-----------|-----------------------|
| - - - - - | PROPERTY LINE/R.O.W. | - - - - - | PROPERTY LINE/R.O.W. |
| - - - - - | ABUTTER PROPERTY LINE | - - - - - | ABUTTER PROPERTY LINE |
| - - - - - | SETBACK | - - - - - | SETBACK |
| - - - - - | EASEMENT LINE | - - - - - | EASEMENT LINE |
| - - - - - | CENTERLINE | - - - - - | CENTERLINE |
| - - - - - | BUILDING | - - - - - | BUILDING |
| - - - - - | EDGE OF PAVEMENT/CURB | - - - - - | EDGE OF PAVEMENT/CURB |
| - - - - - | EDGE OF GRAVEL | - - - - - | EDGE OF GRAVEL |
| - - - - - | EDGE OF CONCRETE | - - - - - | EDGE OF CONCRETE |
| - - - - - | CONTOUR LINE | - - - - - | CONTOUR LINE |
| - - - - - | TREELINE | - - - - - | TREELINE |
| | CATCH BASIN | | CULVERT/STORM DRAIN |
| | UNDERDRAIN | | SEWER MANHOLE |
| | SANITARY SEWER PIPE | | FORCE MAIN |
| | WATER MAIN | | WATER VALVE |
| | HYDRANT | | UTILITY POLE |
| | OVERHEAD UTILITIES | | UNDERGROUND UTILITIES |
| | TRANSFORMER PAD | | GAS MAIN |
| | GAS VALVE | | RIPRAP |
| | SILT FENCE | | |

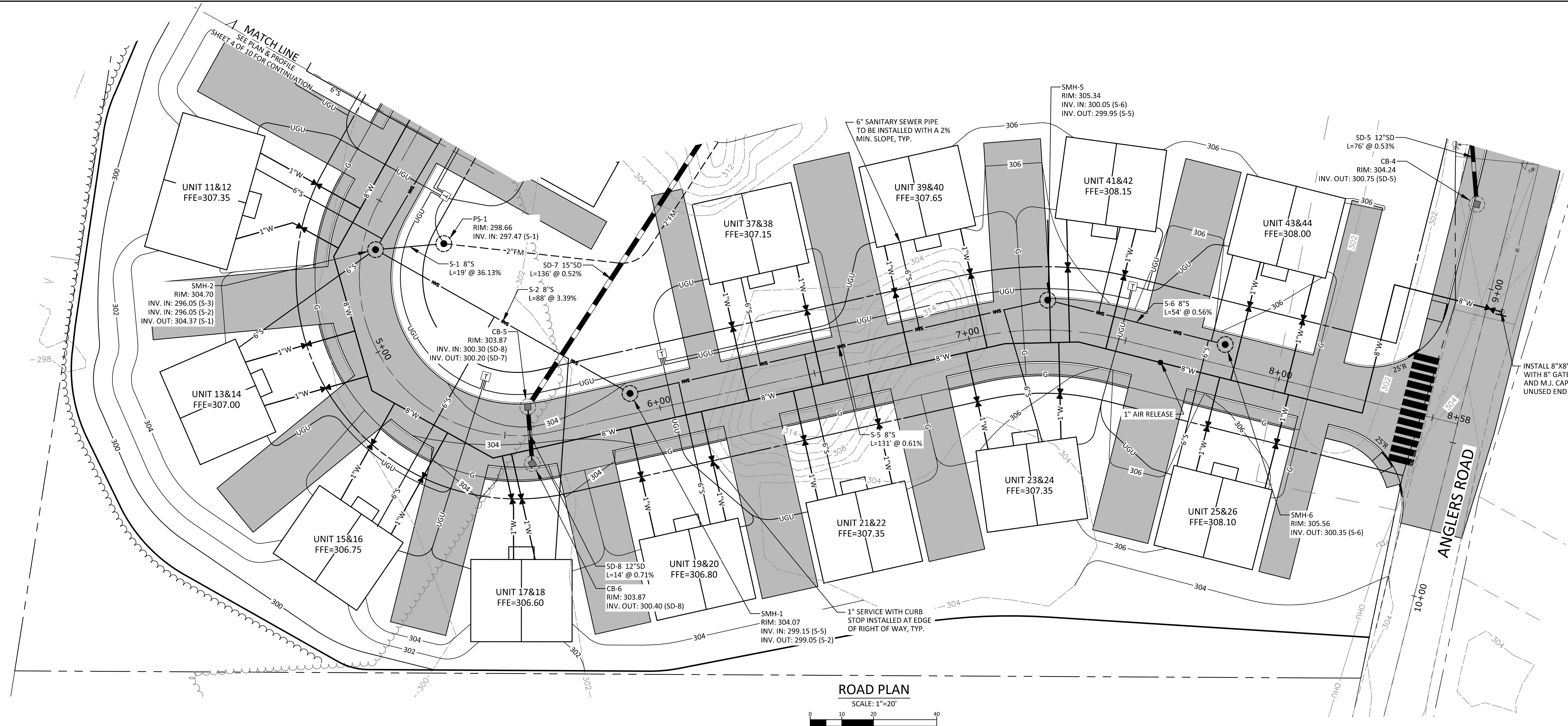


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

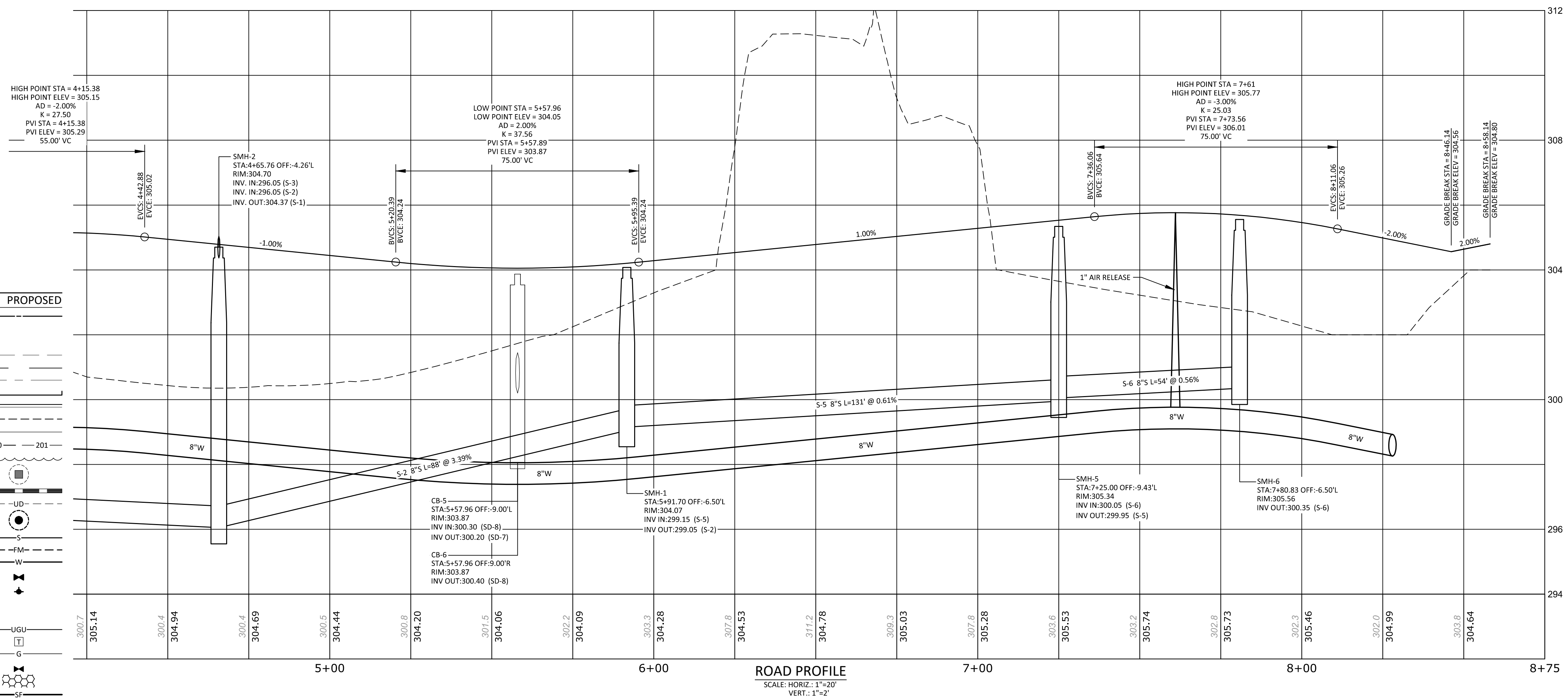
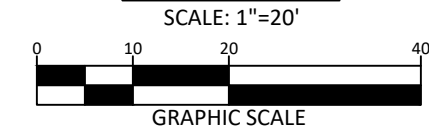
REV	DATE	BY	DESCRIPTION
A	2-14-19	DMR	ISSUED FOR PERMITTING

ROADWAY PLAN & PROFILE STA. 0+50 THRU STA. 4+25
ANGLERS ROAD COMMONS APARTMENTS
WINDHAM, MAINE
FOR:
TIM CLINTON
P.O. BOX 1116
WINDHAM, ME 04062

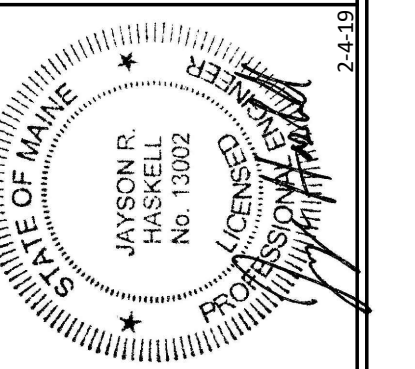
18093
JOB NUMBER:
AS NOTED
SCALE:
2-4-2019
DATE:
SHEET 4 OF 10
PP-1



ROAD PLAN



LEGEND	
EXISTING	PROPOSED

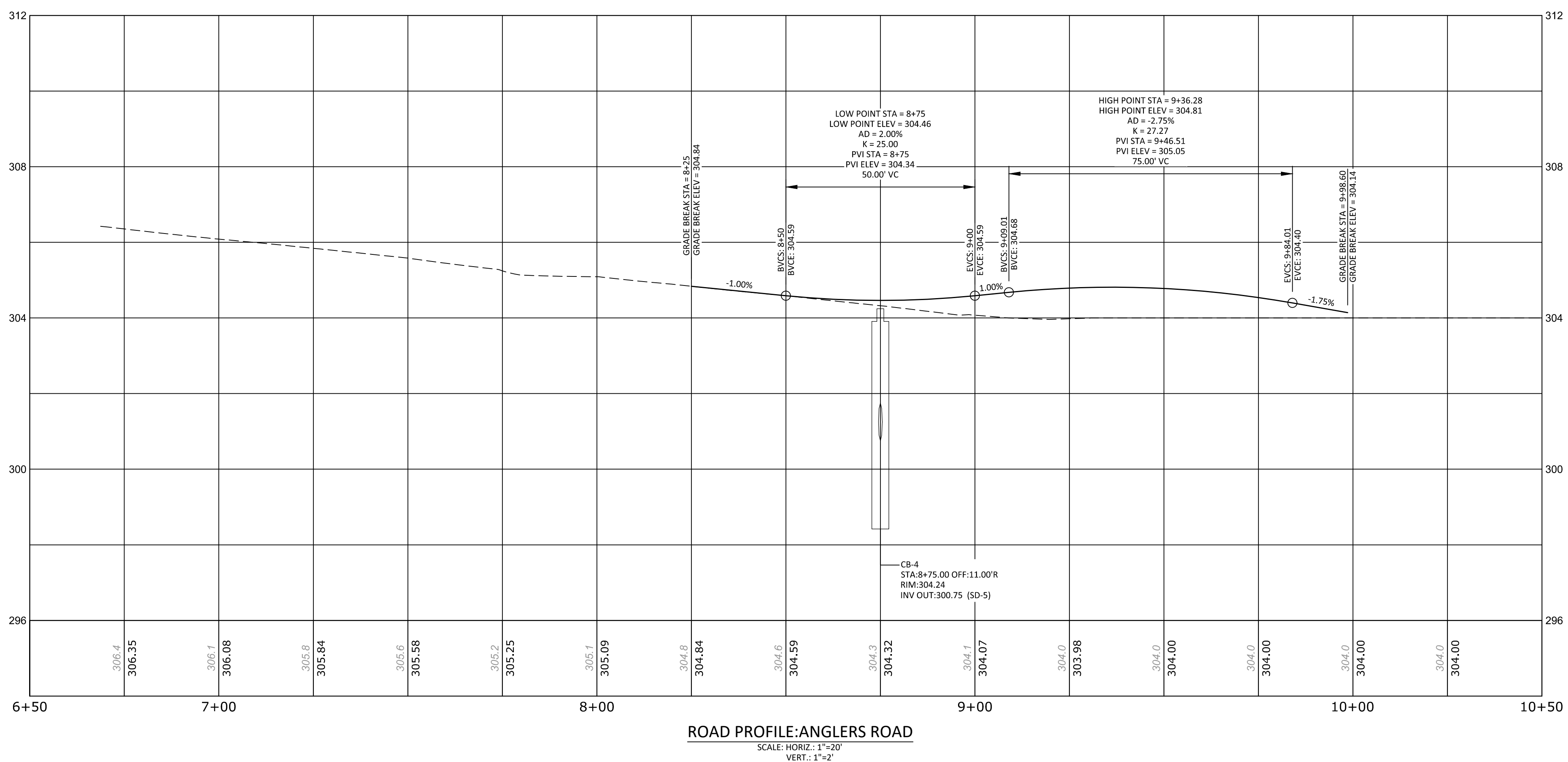
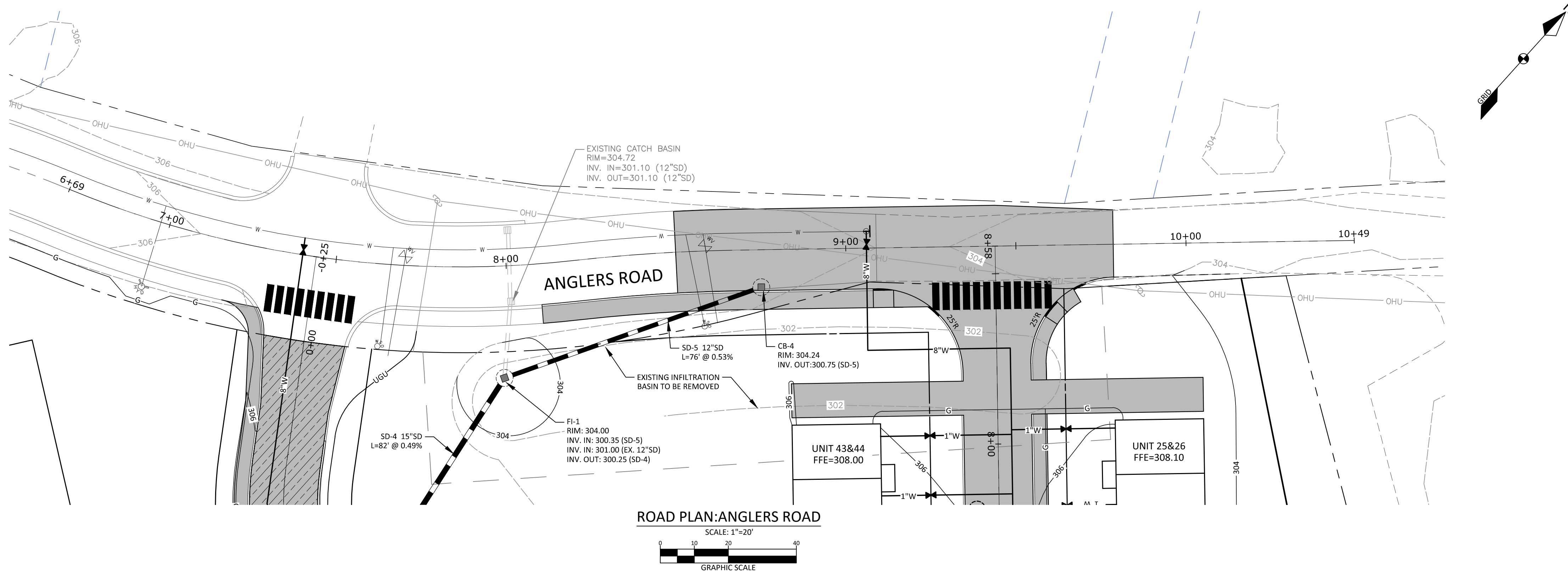


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	2-4-19	DMR	ISSUED FOR PERMITTING

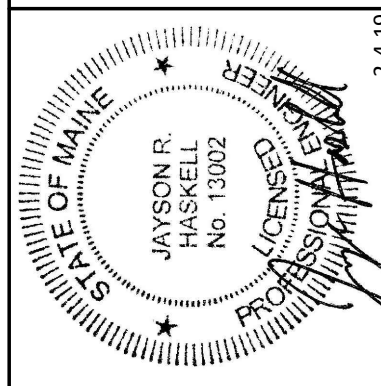
ROADWAY PLAN & PROFILE STA. 4+25 THRU STA. 8+58
ANGLERS ROAD COMMONS APARTMENTS
WINDHAM, MAINE
FOR: TIM CLINTON
P.O. BOX 87
SOUTH BATE, ME 02066

18093
JOB NUMBER:
AS NOTED
SCALE:
2-4-2019
DATE:
SHEET 5 OF 9
PP-2



LEGEND

EXISTING	PROPOSED
(---) PROPERTY LINE/R.O.W.	(---) PROPERTY LINE/R.O.W.
(---) ABUTTER PROPERTY LINE	(---) ABUTTER PROPERTY LINE
(---) SETBACK	(---) SETBACK
(---) EASEMENT LINE	(---) EASEMENT LINE
(---) CENTERLINE	(---) CENTERLINE
(---) BUILDING	(---) BUILDING
(---) EDGE OF PAVEMENT/CURB	(---) EDGE OF PAVEMENT/CURB
(---) EDGE OF GRAVEL	(---) EDGE OF GRAVEL
(---) EDGE OF CONCRETE	(---) EDGE OF CONCRETE
(---) CONTOUR LINE	(---) CONTOUR LINE
(---) TREE LINE	(---) TREE LINE
(■) CATCH BASIN	(■) CATCH BASIN
(---) CULVERT/STORMDRAIN	(---) CULVERT/STORMDRAIN
(---) UNDERDRAIN	(---) UNDERDRAIN
(○) SEWER MANHOLE	(○) SEWER MANHOLE
(---) SANITARY SEWER PIPE	(---) SANITARY SEWER PIPE
(---) FORCE MAIN	(---) FORCE MAIN
(---) WATER MAIN	(---) WATER MAIN
(---) WATER VALVE	(---) WATER VALVE
(---) HYDRANT	(---) HYDRANT
(---) UTILITY POLE	(---) UTILITY POLE
(---) OVERHEAD UTILITIES	(---) OVERHEAD UTILITIES
(---) UNDERGROUND UTILITIES	(---) UNDERGROUND UTILITIES
(---) TRANSFORMER PAD	(---) TRANSFORMER PAD
(---) GAS MAIN	(---) GAS MAIN
(---) GAS VALVE	(---) GAS VALVE
(---) RIPRAP	(---) RIPRAP
(---) SILT FENCE	(---) SILT FENCE

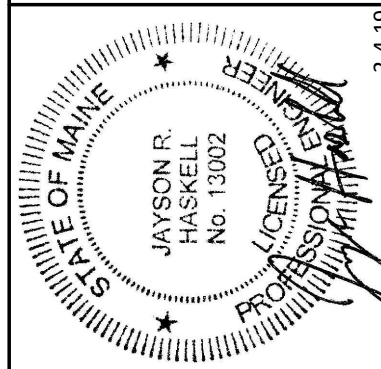


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

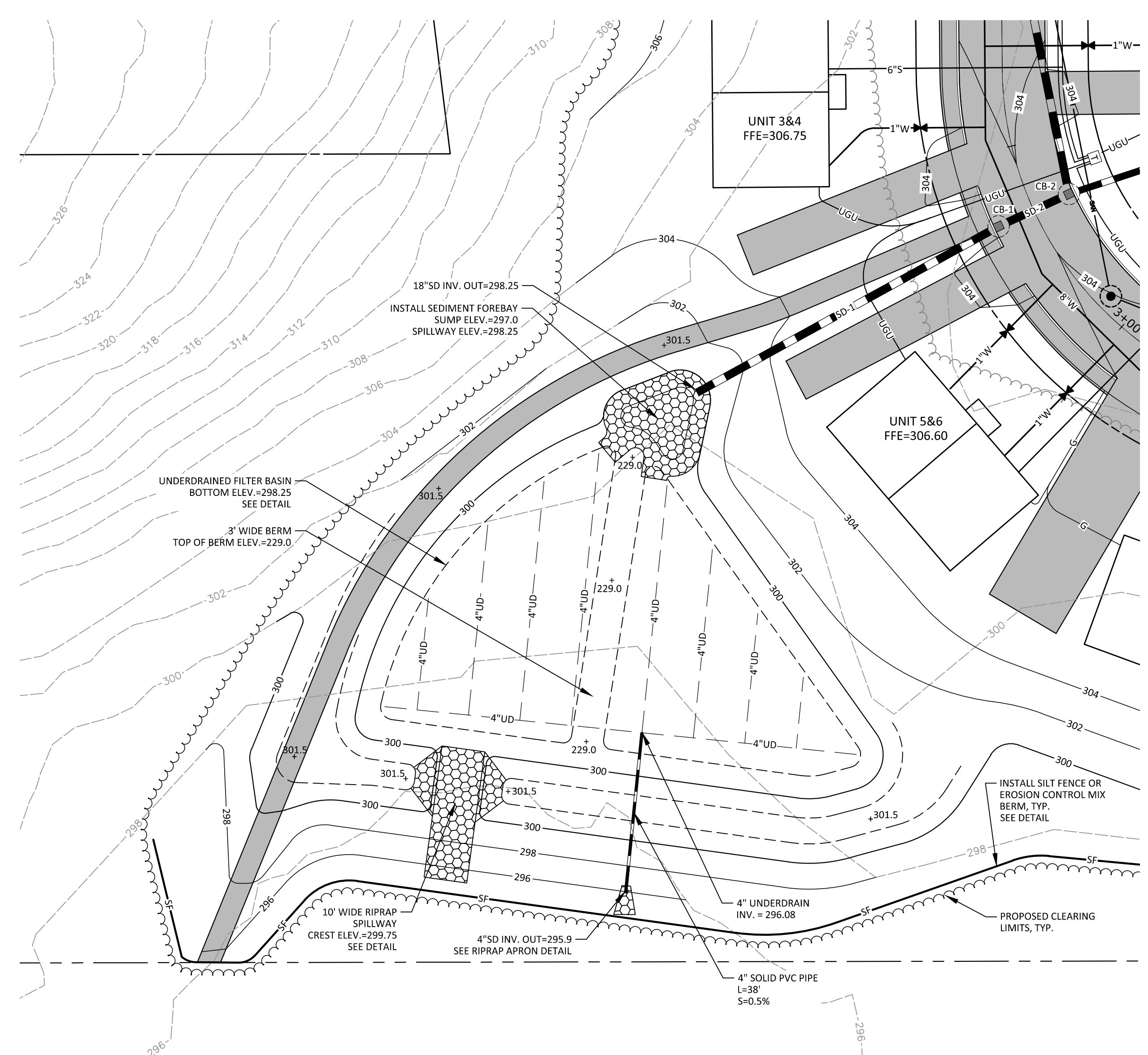
REV	DATE	BY	DESCRIPTION
A	2-4-19	DMR	ISSUED FOR PERMITTING

ROADWAY PLAN & PROFILE ANGLER'S ROAD
ANGLERS ROAD COMMONS APARTMENTS
WINDHAM, MAINE
FOR: TIM CLINTON
P.O. BOX 87
SCHUBERT, ME 02066

18093 JOB NUMBER:
AS NOTED SCALE:
2-4-2019 DATE:
SHEET 6 OF 10
PP-2



DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506



UNDERDRAINED FILTER BASIN PLAN VIEW

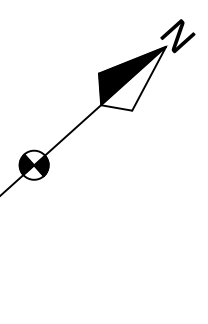
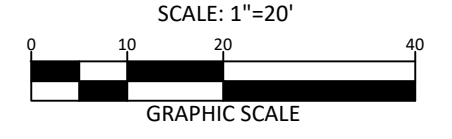


TABLE 7.1 UNDERDRAIN 703.22 TYPE "B"

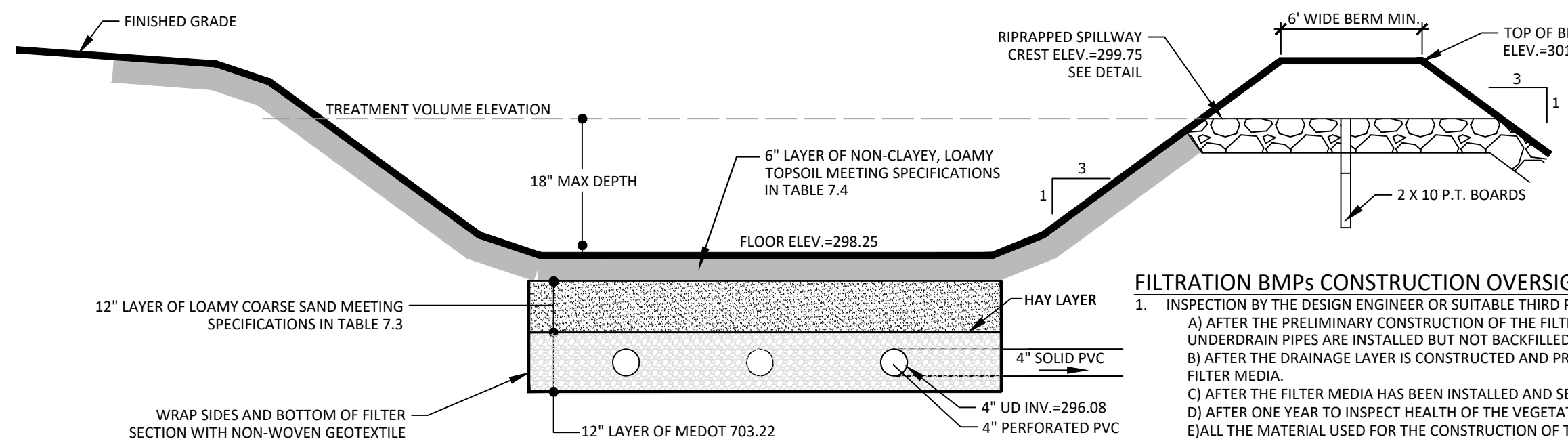
SIEVE SIZE	% PASSING BY WEIGHT
1"	90-100
1/2"	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

TABLE 7.3 LOAMY COARSE SAND

SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100
#60	15-40
#200	8-15
200 CLAY	<2.0

TABLE 7.4 SANDY LOAM

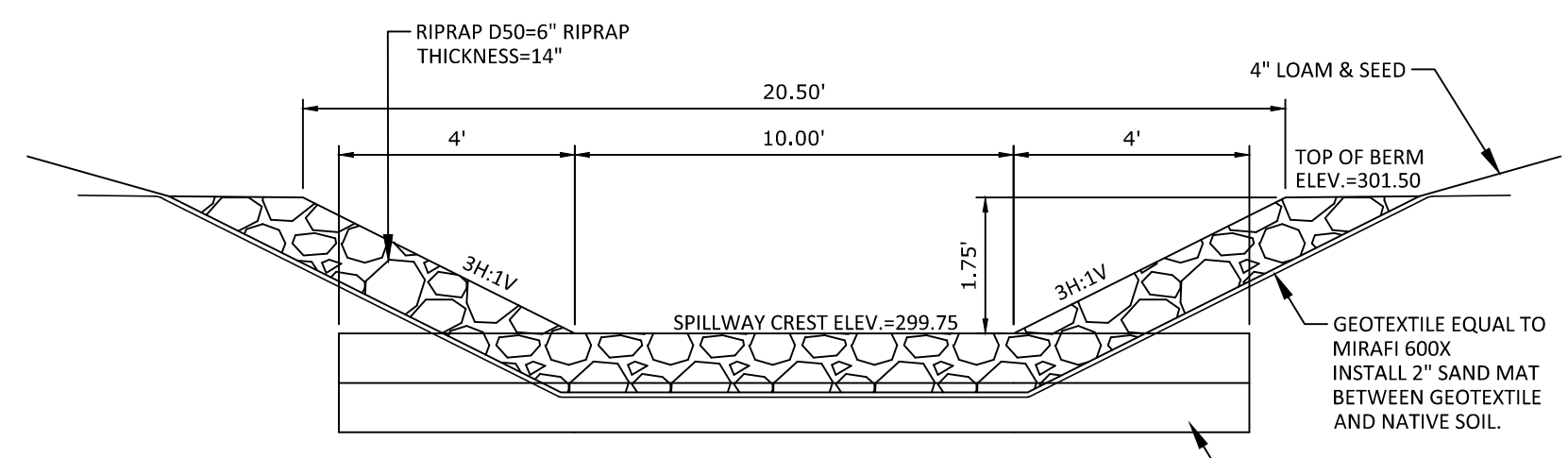
SIEVE SIZE	% PASSING BY WEIGHT
#4	75-95
#10	60-90
#40	35-85
#200	20-70
200 CLAY	<2.0



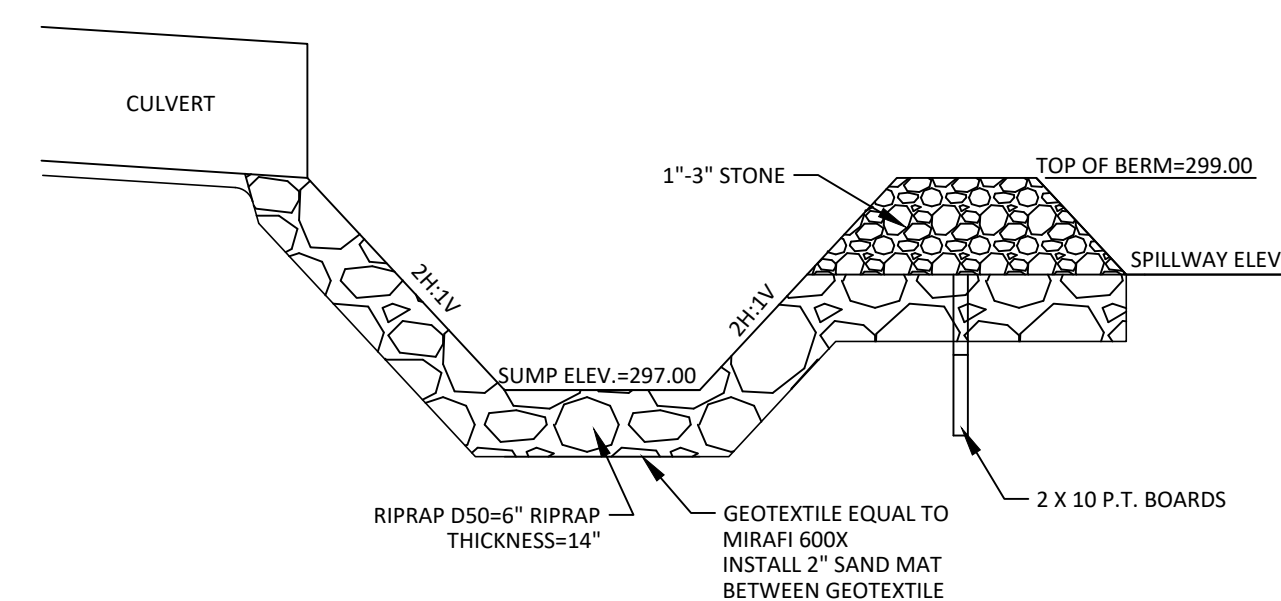
GENERAL NOTES:

1. CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE. 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
2. COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST TWO LIFTS TO PREVENT POCKETS OF LOOSE MEDIA.

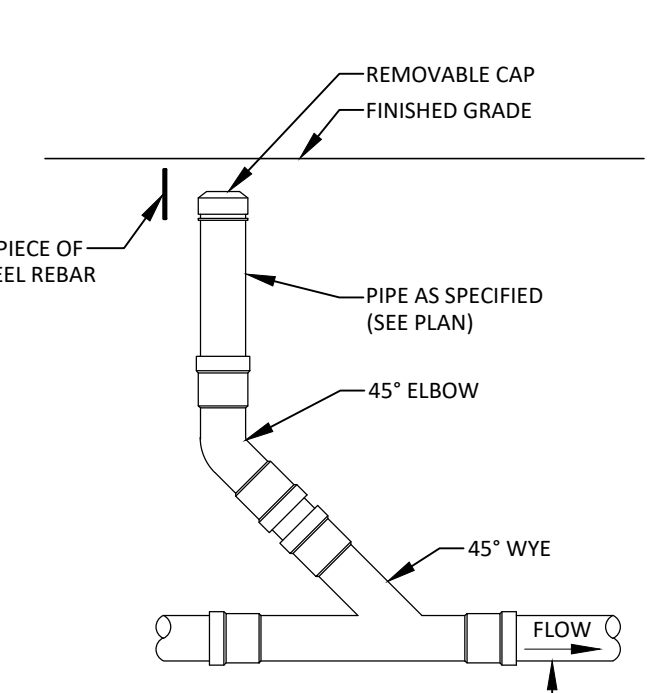
UNDERDRAINED FILTER BASIN SECTION
NOT TO SCALE



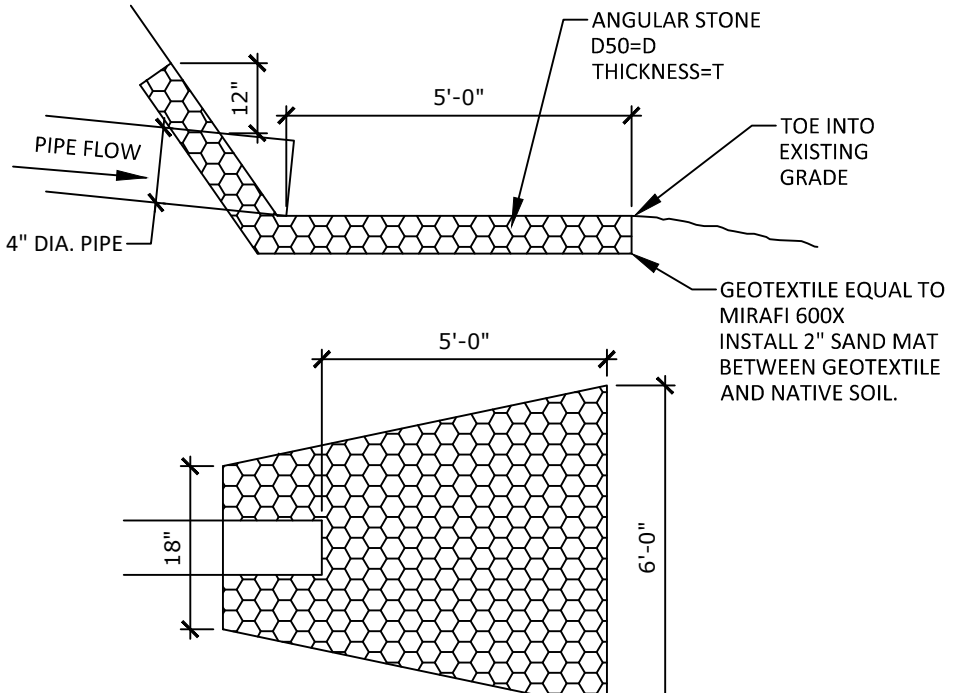
SPILLWAY CROSS SECTION
NOT TO SCALE



SEDIMENT FOREBAY
NOT TO SCALE



UNDERDRAIN CLEANOUT DETAIL
NOT TO SCALE



RIPRAP APRON AT PIPE
NOT TO SCALE

LEGEND

EXISTING	PROPOSED		
	PROPERTY LINE/R.O.W.		PROPOSED
	ABUTTER PROPERTY LINE		CENTERLINE
	BUILDING		EDGE OF PAVEMENT/CURB
	EDGE OF GRAVEL		CONTOUR LINE
	TREELINE		CATCHBASIN
	DRAINAGE MANHOLE		UNDERDRAIN
	CULVERT/STORMDRAIN		SEWER MANHOLE
	SANITARY SEWER PIPE		WATER MAIN
	WATER MAIN		WATER VALVE
	WATER VALVE		OVERHEAD UTILITIES
	OVERHEAD UTILITIES		UNDERGROUND UTILITIES
	UNDERGROUND UTILITIES		TRANSFORMER PAD
	TRANSFORMER PAD		GAS MAIN
	GAS MAIN		RIPRAP
	RIPRAP		SILT FENCE

REV	DATE	BY	DESCRIPTION
A	2-4-19	DMR	ISSUED FOR PERMITTING

STORMWATER POND PLAN
ANGLERS ROAD COMMONS APARTMENTS
WINDHAM, MAINE

FOR:
TIM CLINTON
PO BOX 87
SACONNET, MA 02066

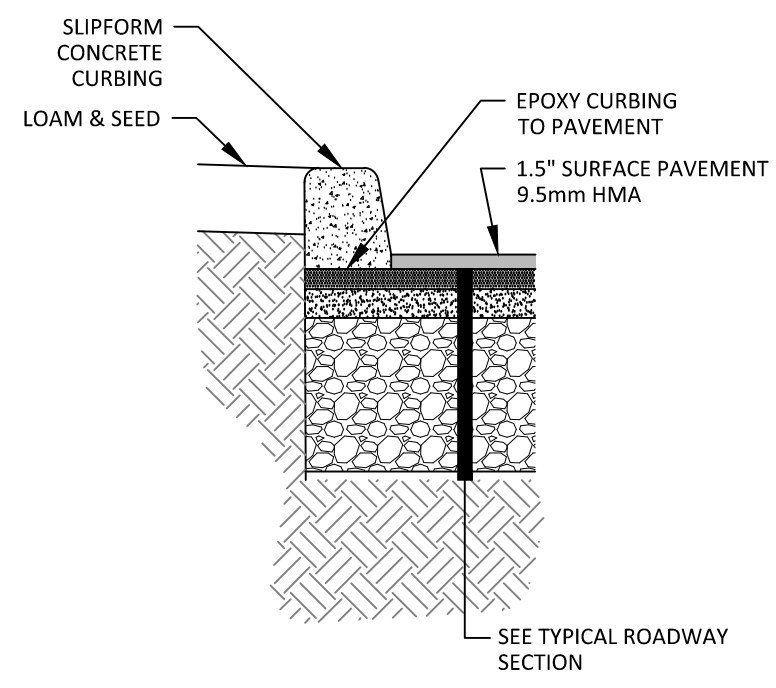
18093
JOB NUMBER:

AS NOTED
SCALE:

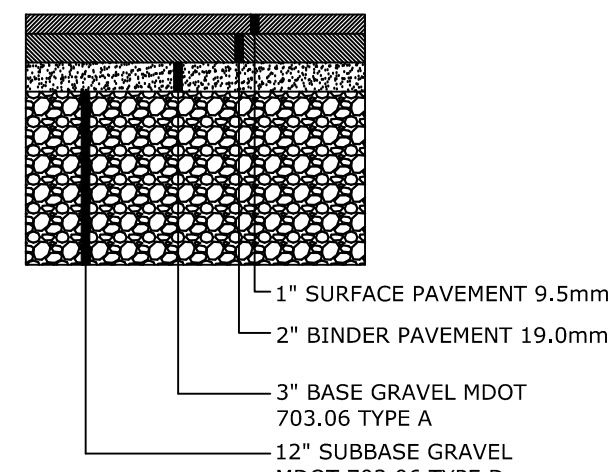
2-4-2019
DATE:

SHEET 7 OF 10

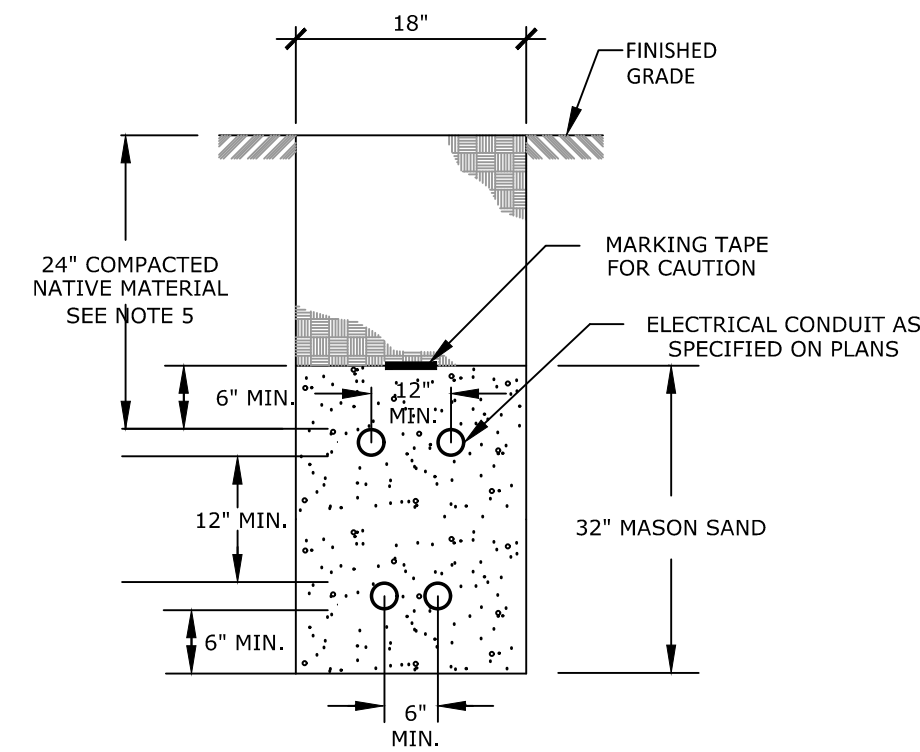
SP-1



TYPICAL CURB SECTION
NOT TO SCALE

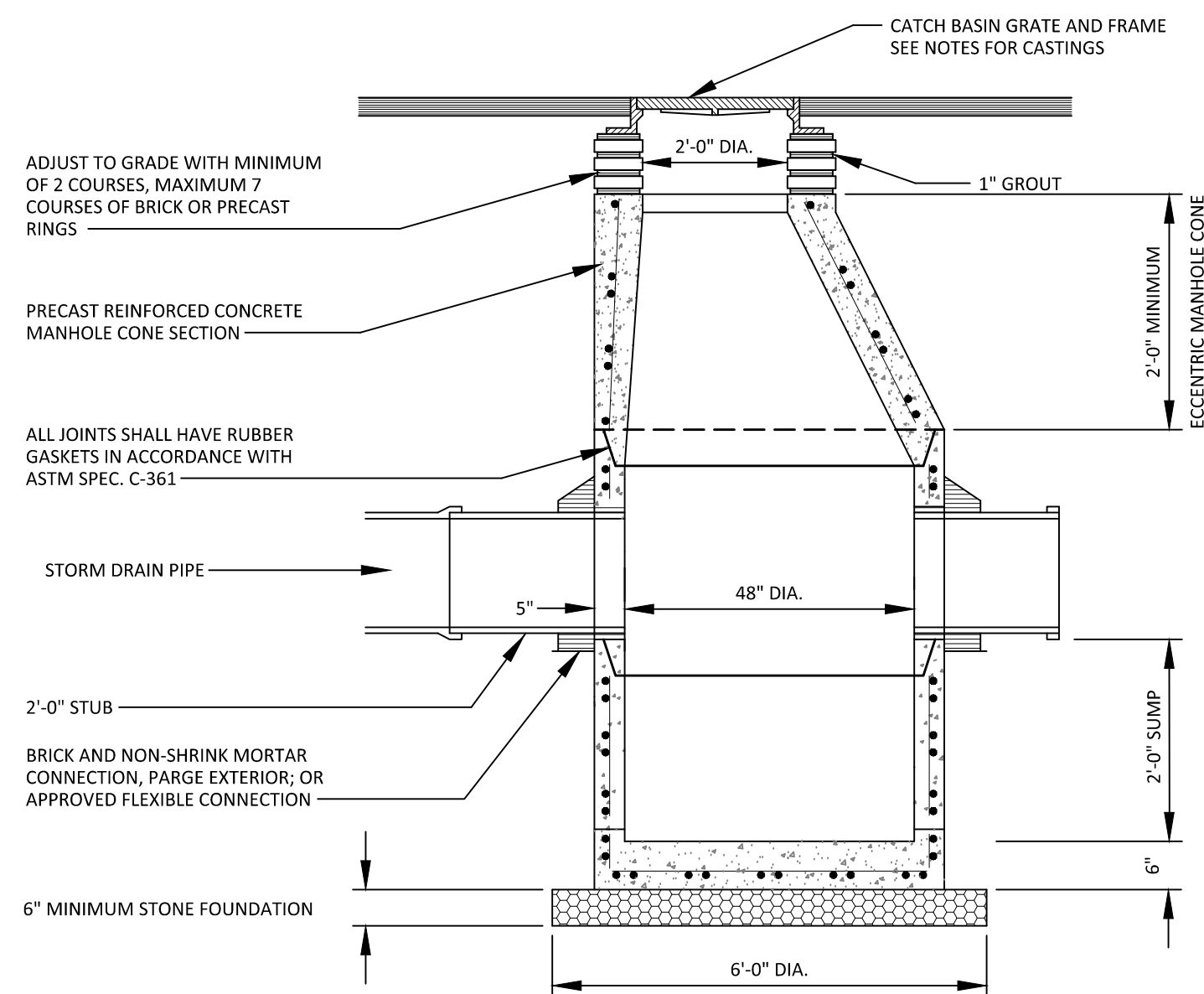


TYPICAL DRIVEWAY PAVING SECTION
NOT TO SCALE



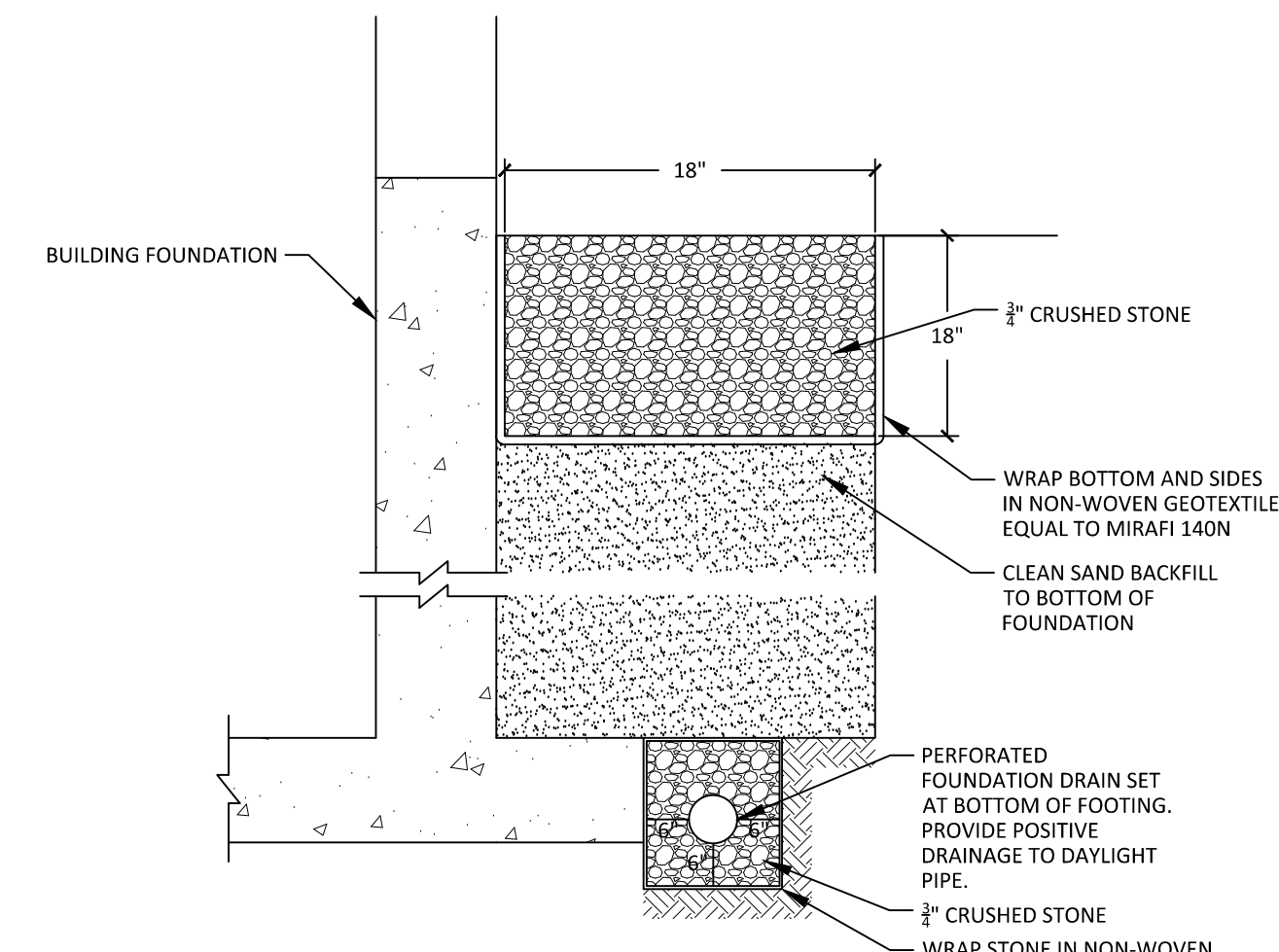
TRENCH DETAIL - ELECTRICAL CONDUIT
NOT TO SCALE

- NOTES:
- ALL CONDUITS SHALL BE 4" DIA. PVC SCH 40 EXCEPT FOR ROAD CROSSINGS SHALL BE PVC SCH 80
 - INSTALLATION SHOULD NOT ALLOW THE INTER-TWINGING OF CABLES.
 - BEDDING AND BACKFILL SHALL BE FREE OF ROOTS, STUMPS AND OTHER DEBRIS.
 - COMMUNICATION CABLE AND POWER CABLE SHALL HAVE NO LESS THAN 12 INCHES OF RADIAL SEPARATION.
 - WHERE CONDUIT CROSSES DRAINAGE SWALES, DEPRESS CONDUIT 6" TO PROVIDE 30" OF COVER.



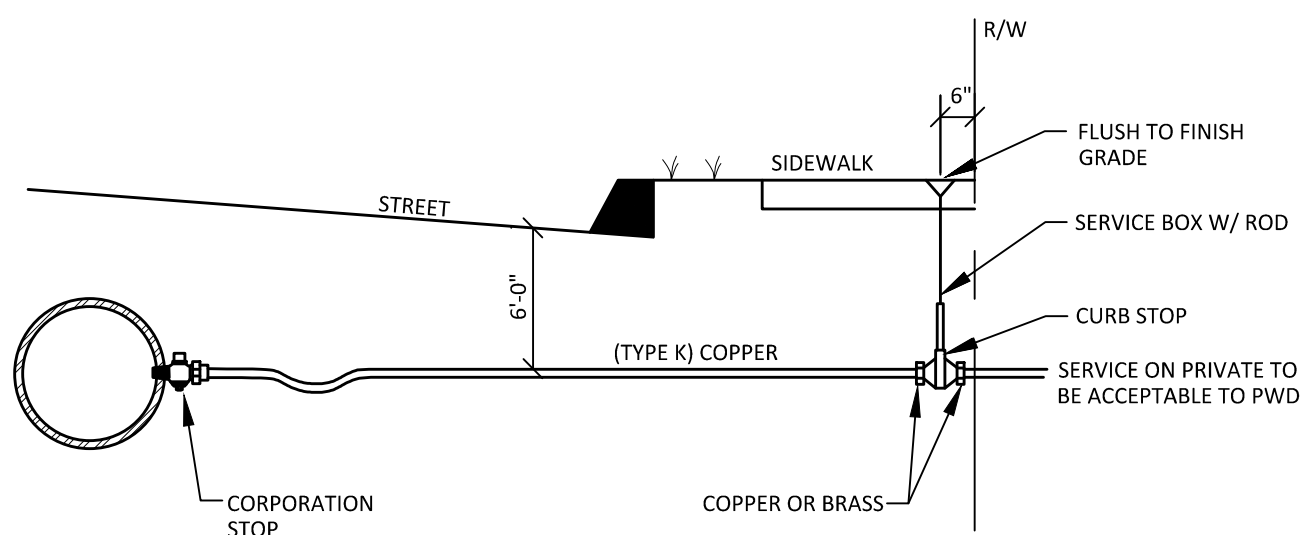
- NOTES:
- LARGER DIAMETER STRUCTURES MAY BE REQUIRED DUE TO SIZE OR GEOMETRY OF PIPE CONNECTIONS AT MANHOLE. WALL THICKNESS TO INCREASE BY 1" FOR EACH 1'-0" DIA. INCREASE. PROVIDE SHOP DRAWINGS.
 - DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
 - CAST IRON GRATES SHALL BE EQUAL TO EAST JORDAN IRON WORKS, PRODUCT NO. 00552052807, HEAVY DUTY CASCADE GRATE. SUBMIT CATALOG SHEETS TO ENGINEER FOR APPROVAL.

PRECAST CONCRETE CATCH BASIN
48" DIA. DRAINAGE STRUCTURE
NOT TO SCALE

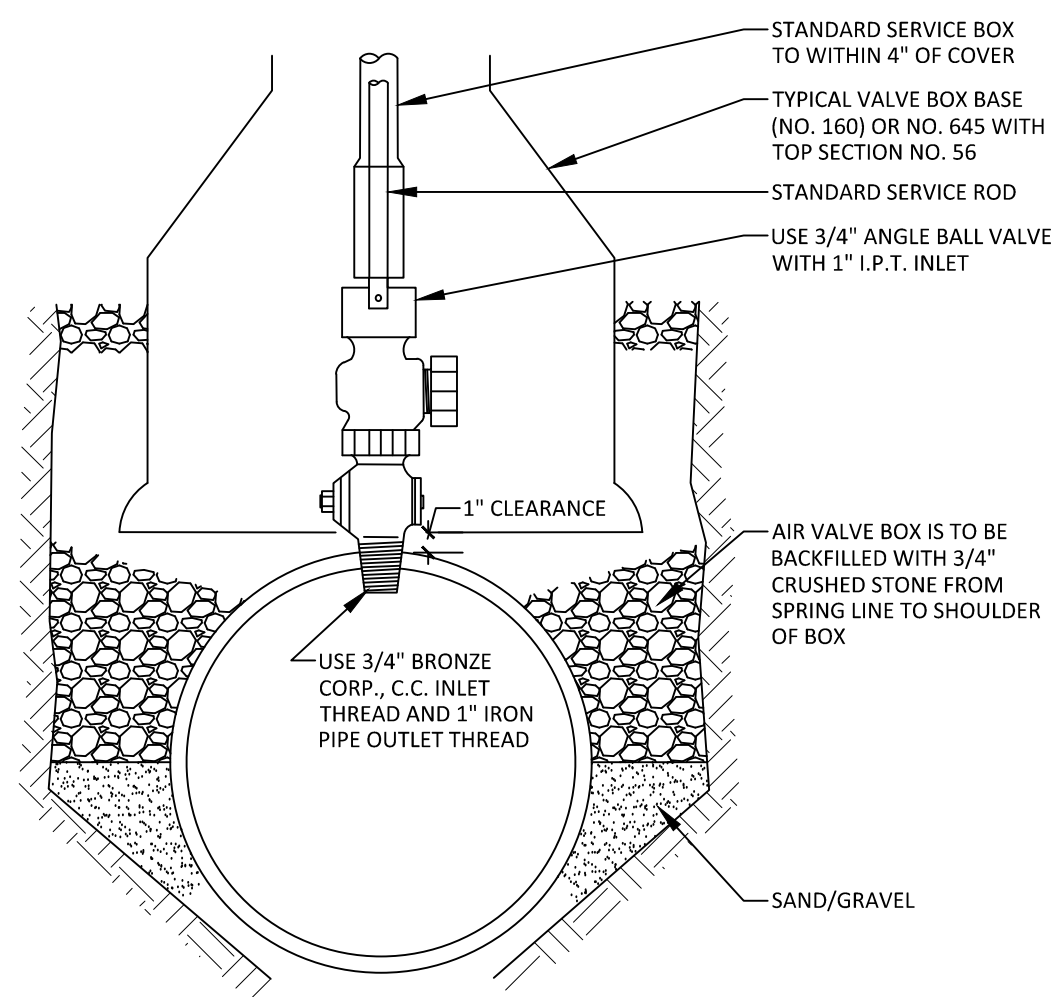


ROOF DRIP EDGE
NOT TO SCALE

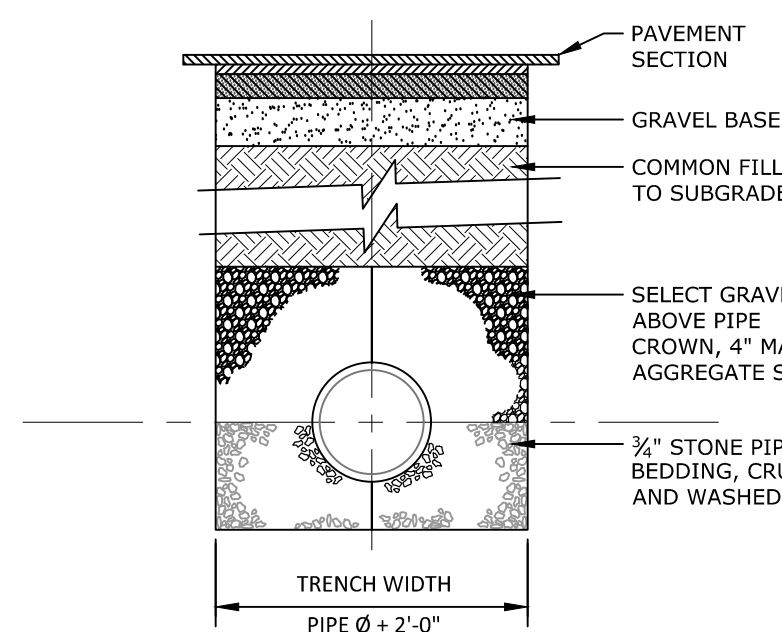
- NOTES:
- ALL NEW BUILDINGS REQUIRE ROOF DRIP EDGES



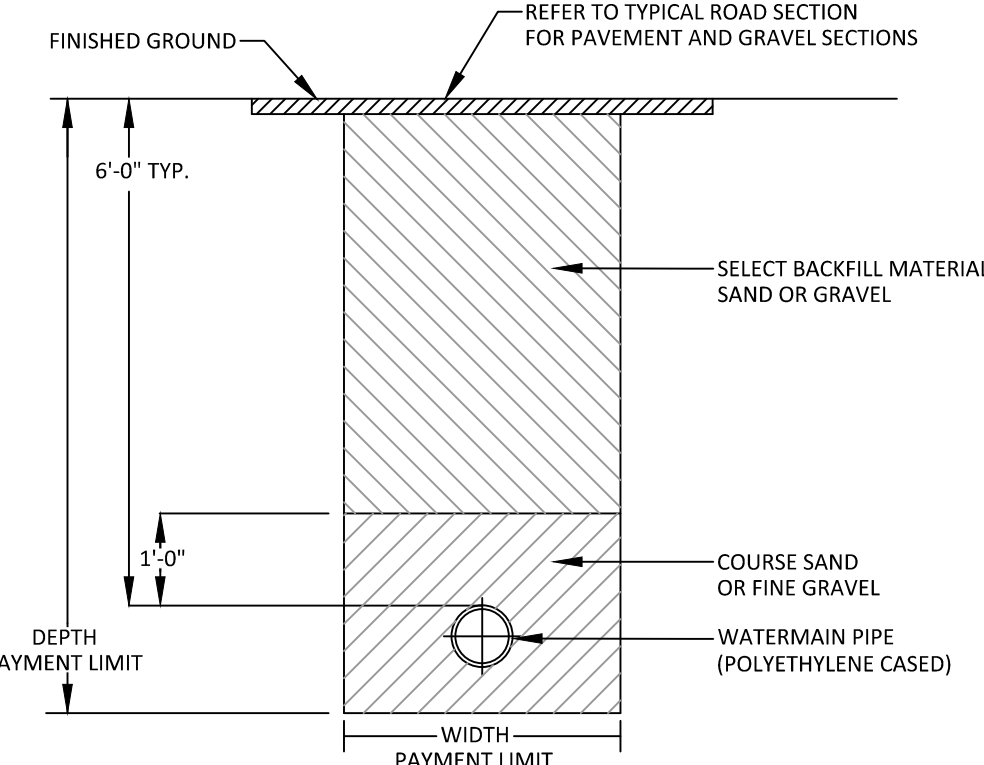
TYPICAL SERVICE CONNECTION
NOT TO SCALE



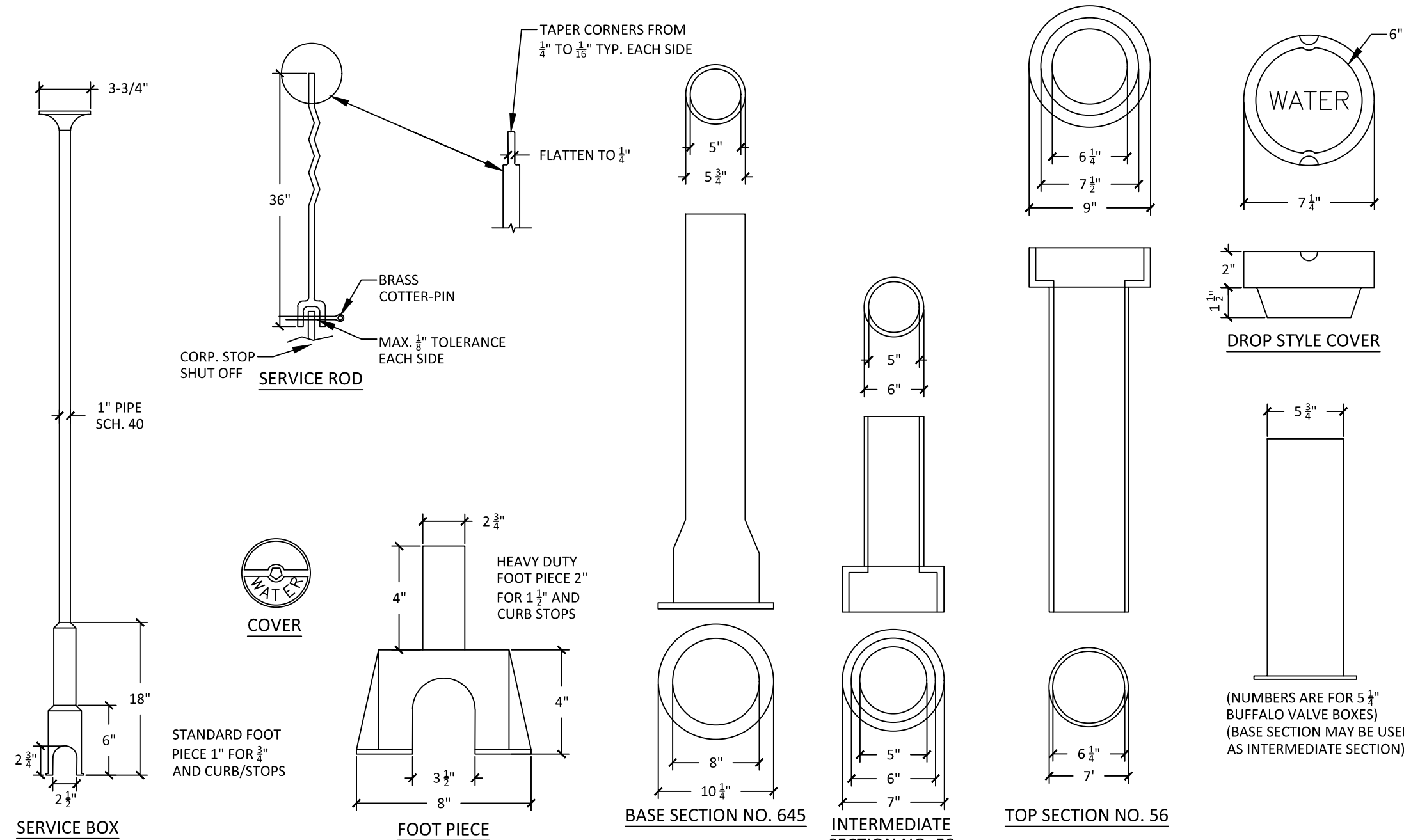
TYPICAL AIR VALVE (1")
NOT TO SCALE



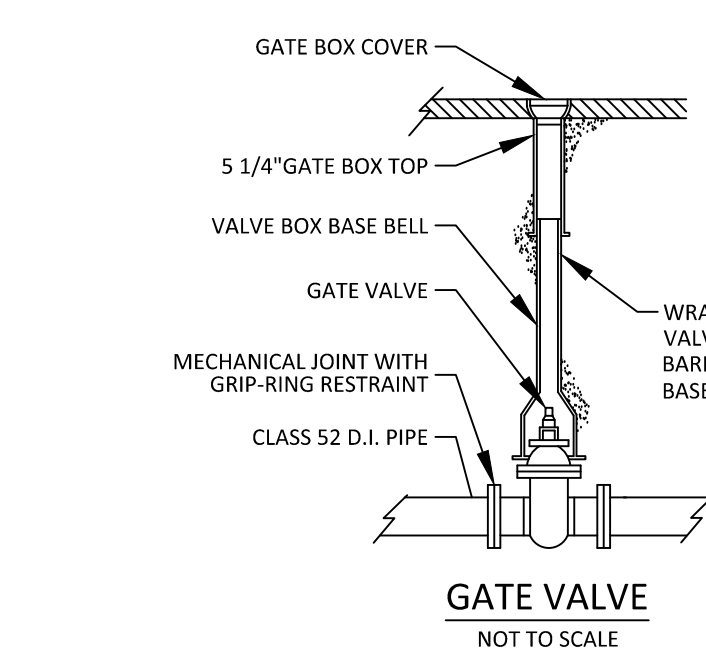
TYPICAL TRENCH SECTION
NOT TO SCALE



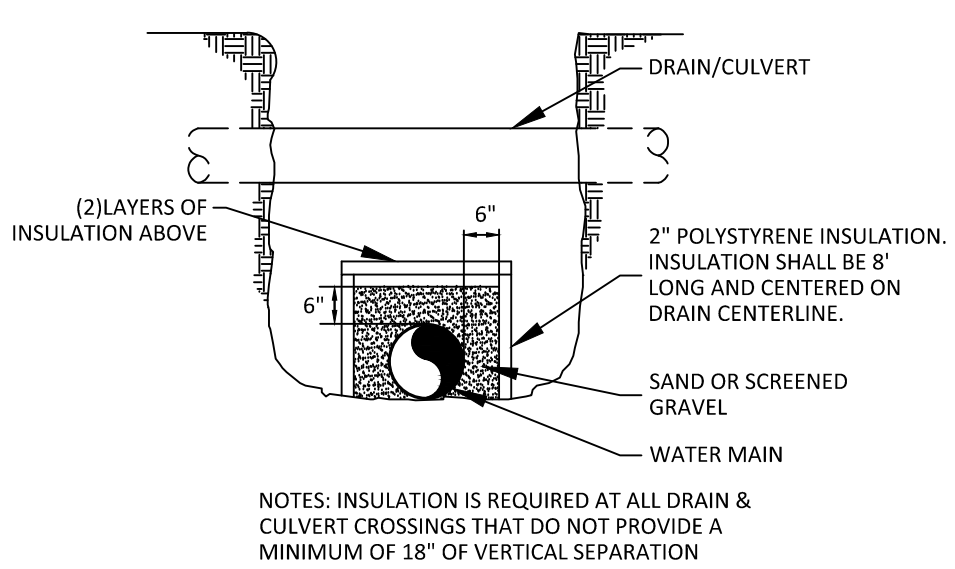
WATERMAIN TYPICAL TRENCH CROSS-SECTION
NOT TO SCALE



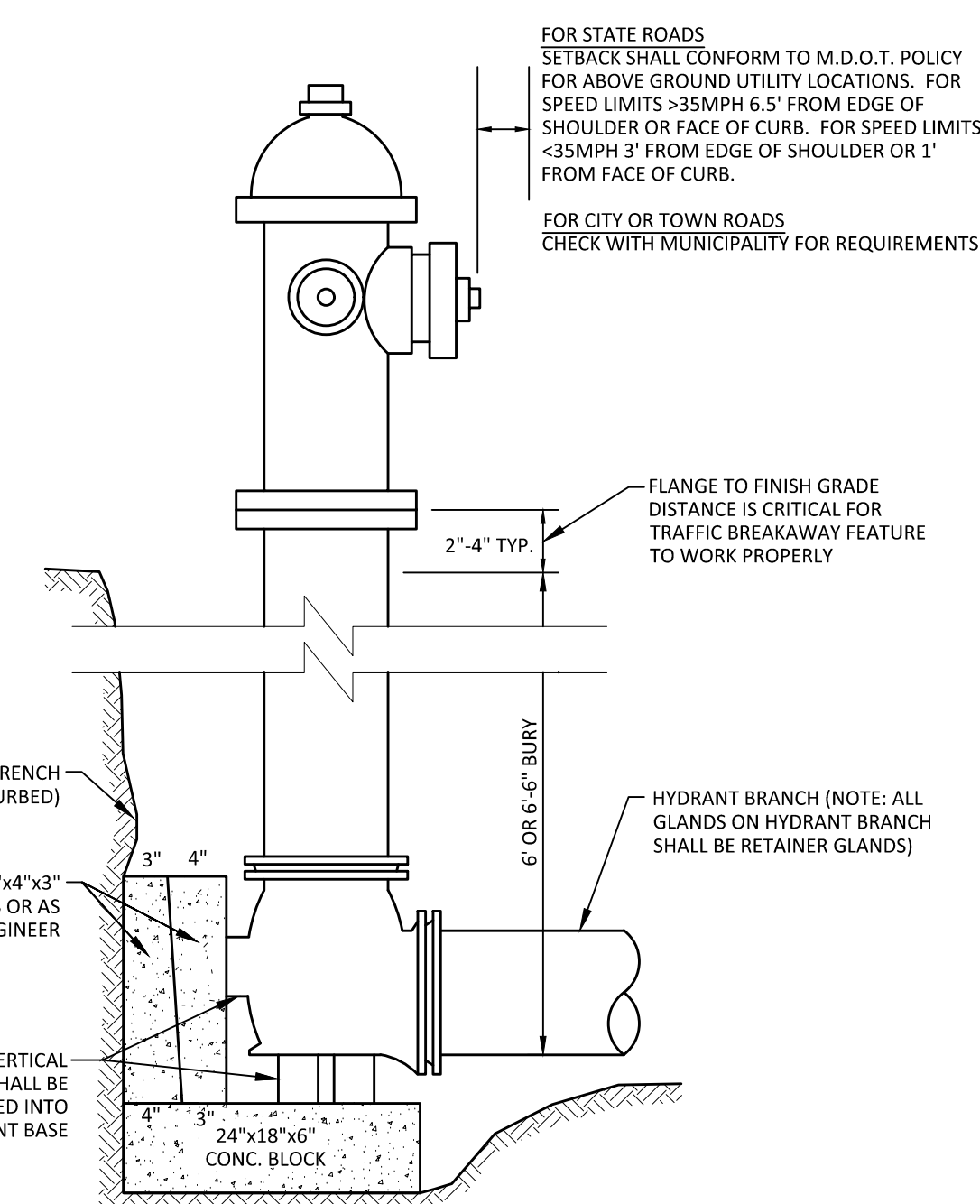
VALVE BOX & COVER
NOT TO SCALE



GATE VALVE
NOT TO SCALE



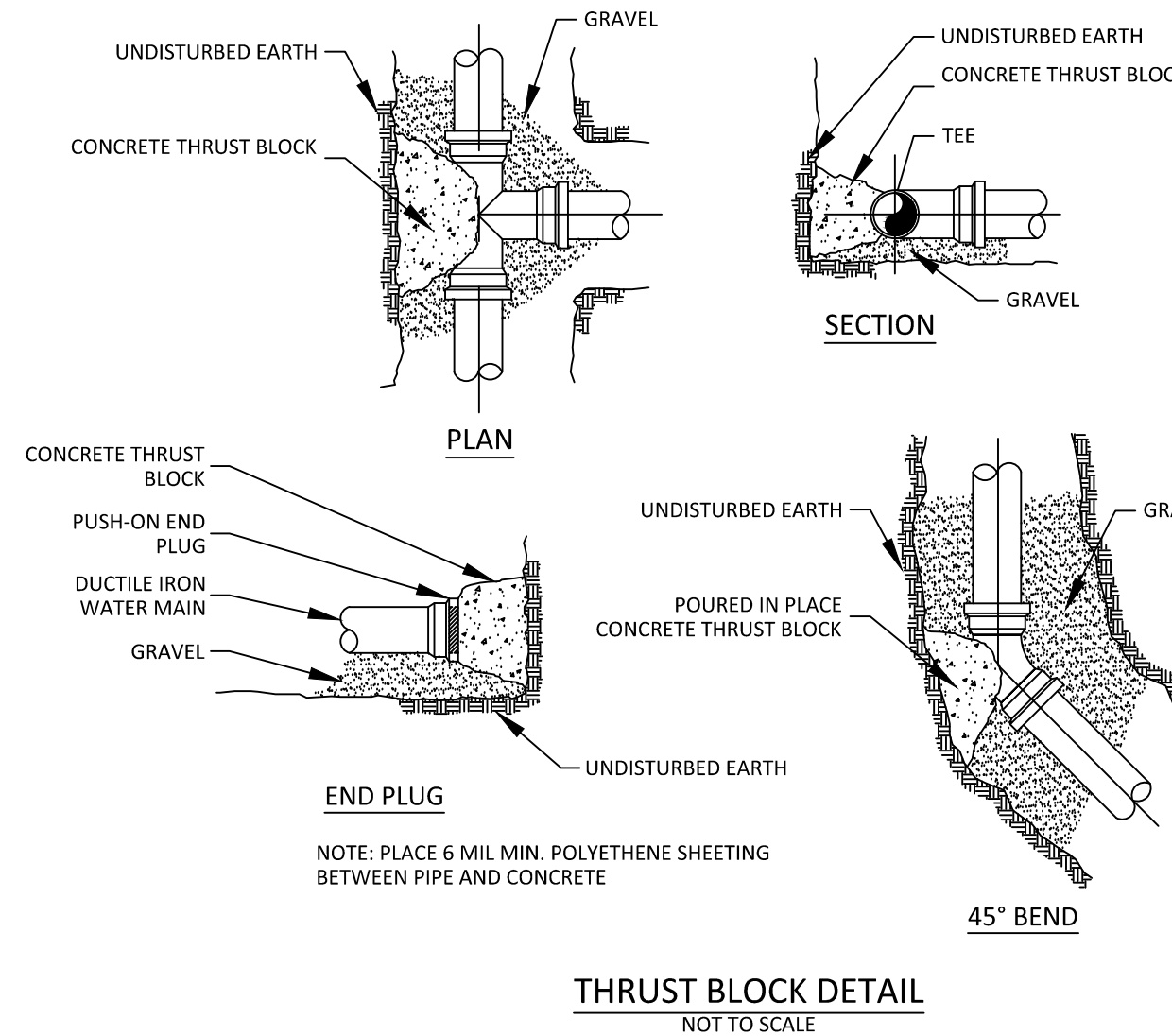
INSULATION DETAIL
NOT TO SCALE



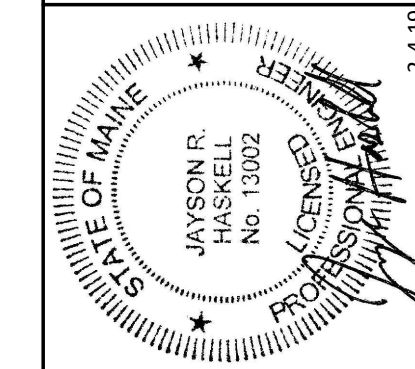
TYPICAL HYDRANT INSTALLATION DETAIL
NOT TO SCALE

CONCRETE THRUST BLOCK SIZE REQUIREMENTS				
SQ. FT. OF BEARING ON UNDISTURBED SOIL				
FITTINGS	90° BENDS	45° BENDS	TEES AND PLUGS	
PIPE SIZE	6"	4.0	2.0	3.0
	8"	8.0	4.0	6.0
	12"	15	9	12
	16"	26	14	19
	20"	40	22	28

BASED ON SOIL BEARING PRESSURE OF 2000PSF AND 100PSI LINE PRESSURE. COMPACT COURSE TO FINE SANDS AND CLAYS REQUIRE ENGINEERED BLOCKS. ENGINEERED BLOCKS WILL TYPICALLY REQUIRE REINFORCING STEEL OF #5 AT 12".



THRUST BLOCK DETAIL
NOT TO SCALE

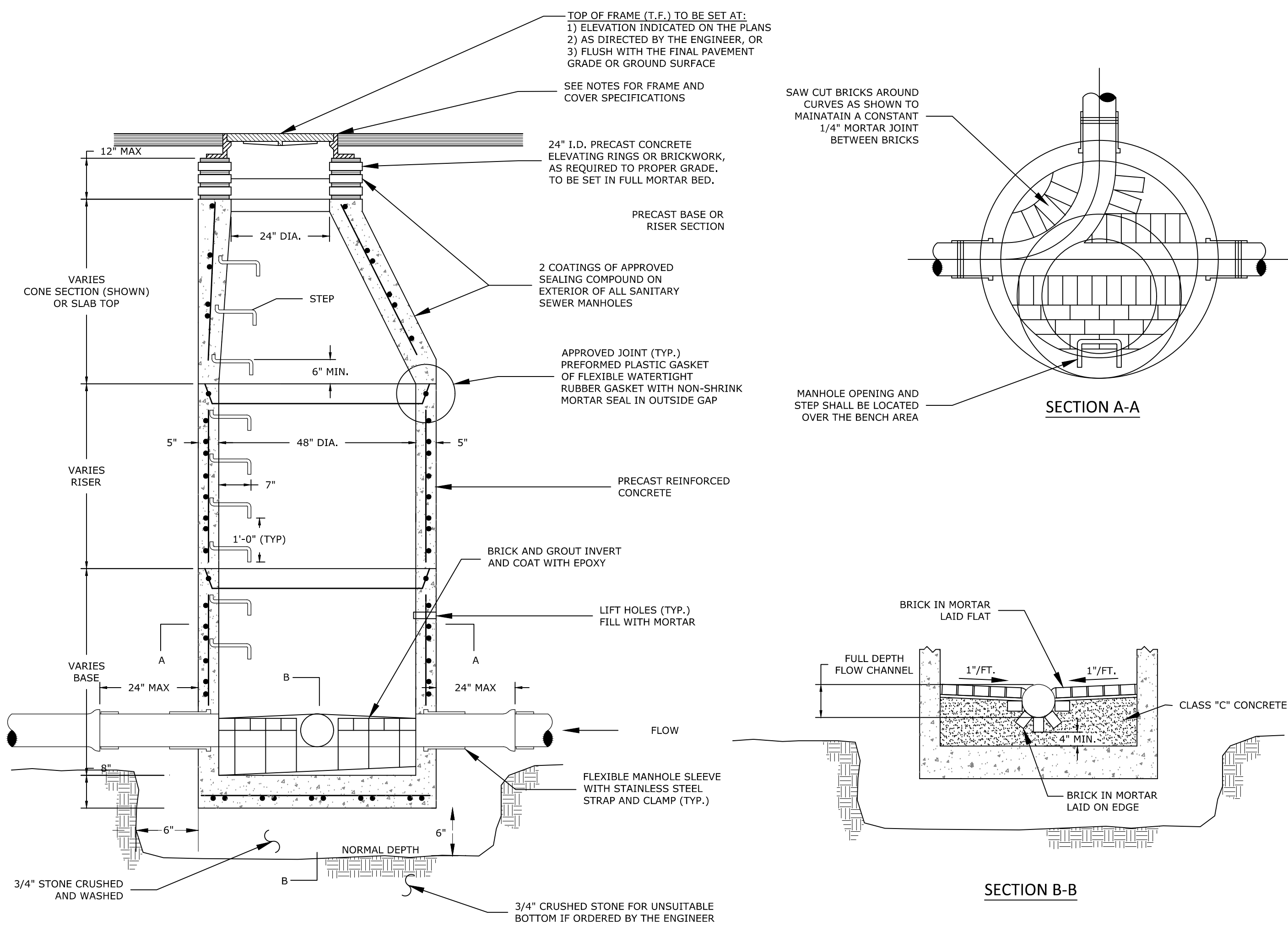
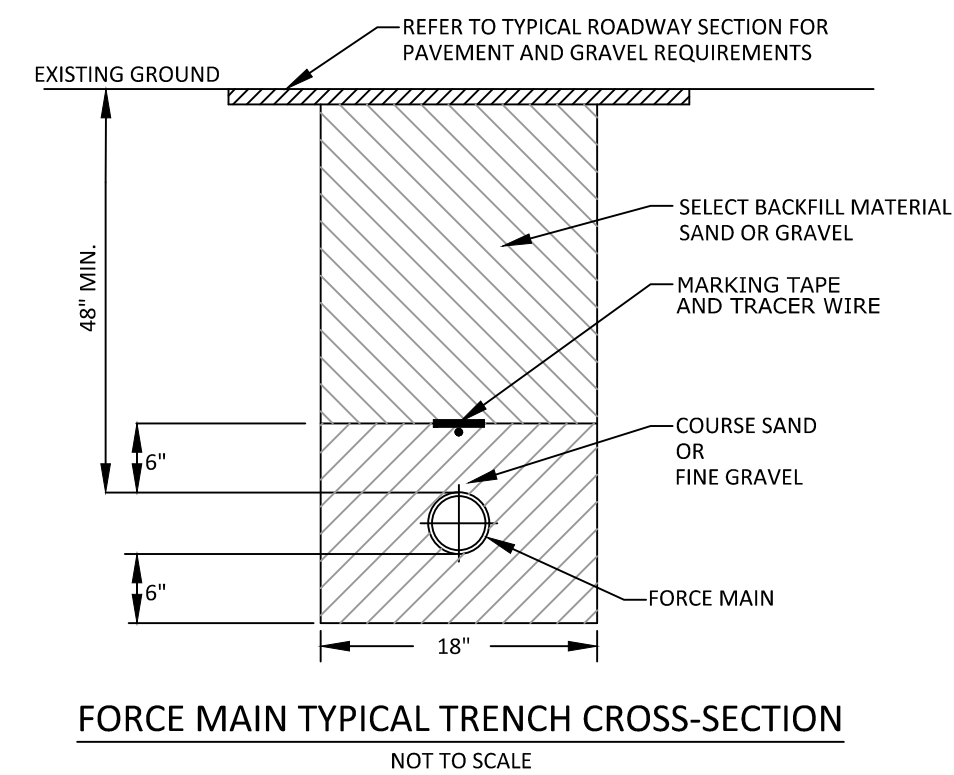
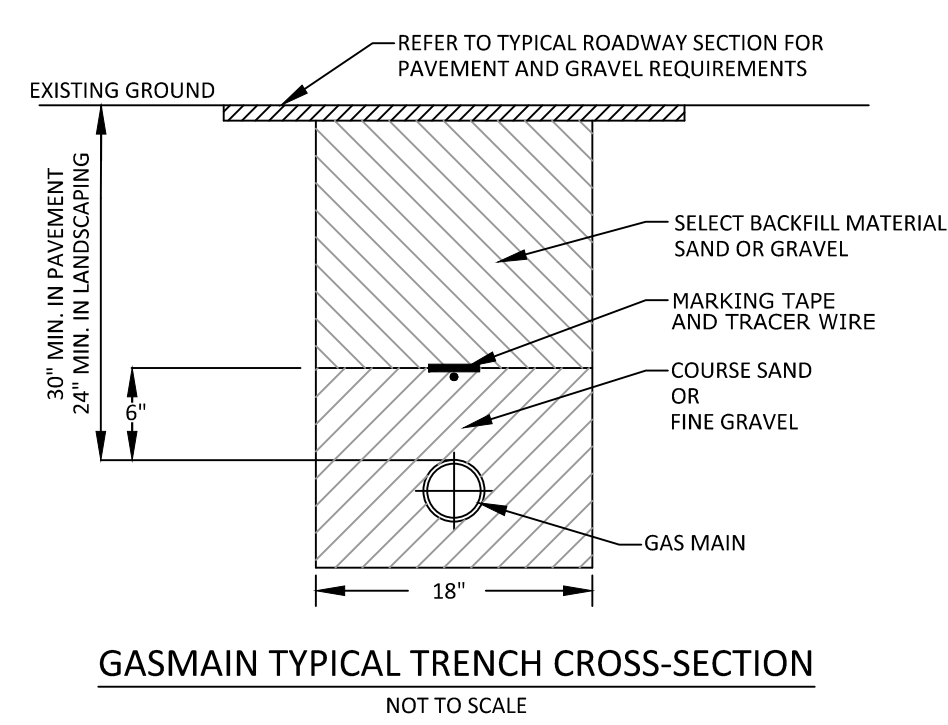


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	2-14-19	DMR	ISSUED FOR PERMITTING

DETAILS
ANGLERS ROAD COMMONS APARTMENTS
WINDHAM, MAINE
FOR: TIM CLINTON
P.O. BOX 87
SOUTHDALE, MA 02066

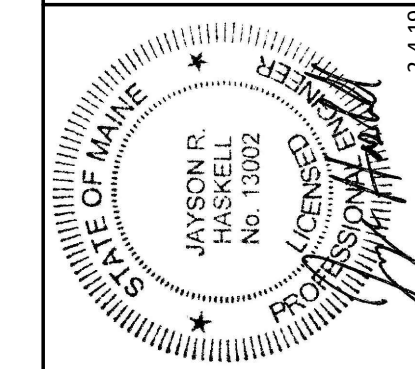
18093
JOB NUMBER:
AS NOTED
SCALE:
2-4-2019
DATE:
SHEET 9 OF 10
D-2



NOTES:

1. FRAME AND COVER TO BE PAMREX PRODUCT NUMBER 62113-1 OR APPROVED EQUAL AND SHALL BE MARKED "SEWER"
2. CONNECTIONS TO EXISTING SANITARY MANHOLES TO BE APPROVED BY SEWER DISTRICT AND CORE DRILLED WITH FLEXIBLE BOOT
3. MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILT ON A SMOOTH RADIUS. IF SIDE PIPES ENTER CHANNEL, SHAPE TO RECEIVE ADDED SIDE FLOW (SEE SECTION A-A).
4. USE FLAT SLAB TOP MANHOLE WHEN THE DIFFERENCE BETWEEN INVERT AND RIM IS LESS THAN 6'-0" AND WHEN MANHOLE DIAMETER IS GREATER THAN 4'-0".
5. AVERAGE STRENGTH OF CONCRETE TO BE 4,000 PSI AT 28 DAYS. STRUCTURE TO BE DESIGNED FOR H-20 LOADING.

PRECAST CONCRETE SANITARY MANHOLE
NOT TO SCALE

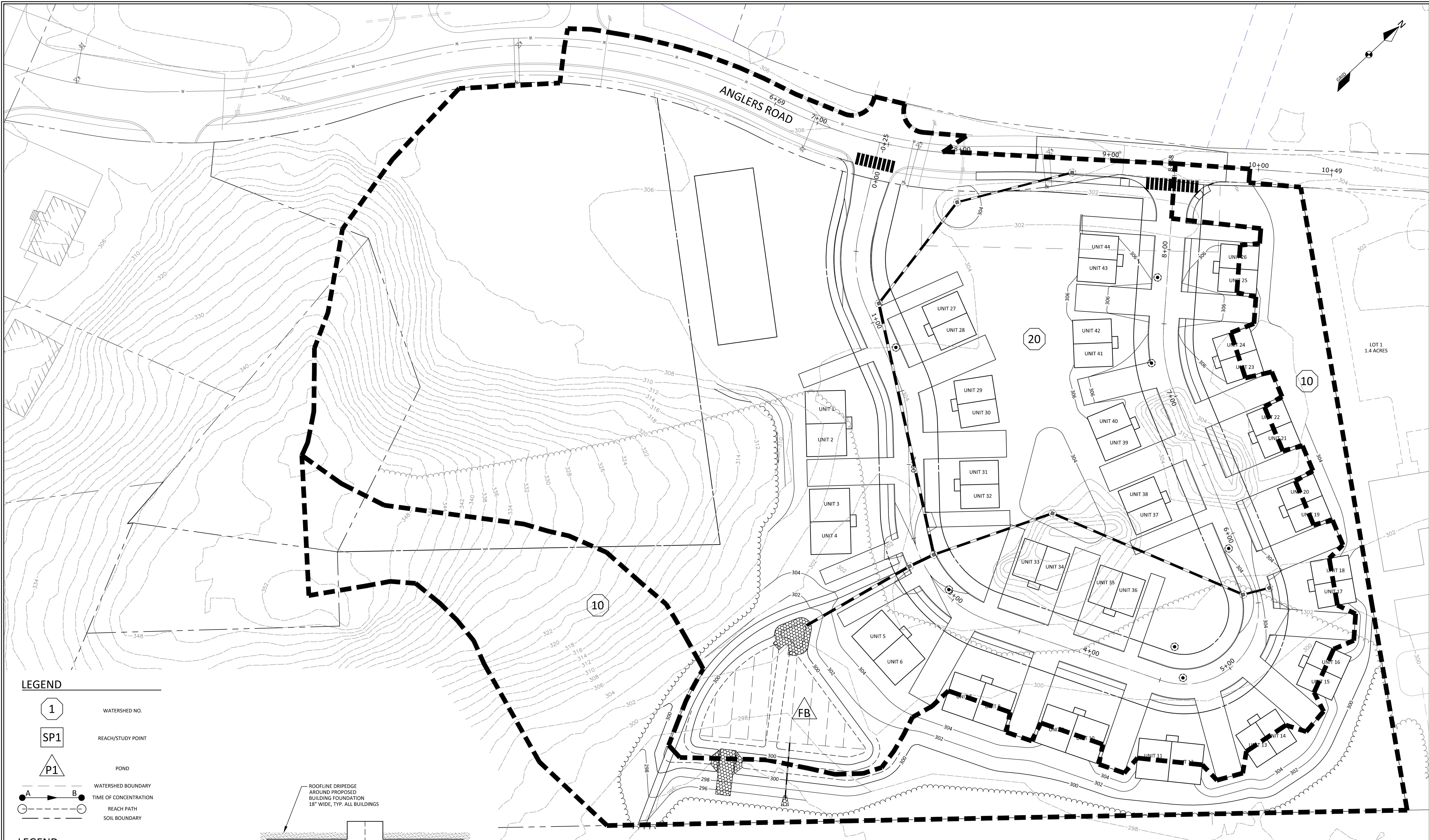


DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	2-4-19	DMR	ISSUED FOR PERMITTING

DETAILS
ANGLERS ROAD COMMONS APARTMENTS
WINDHAM, MAINE
FOR: **TIM CLINTON**
P.O. BOX 87
SOUTHGATE, MA 02066

18093 JOB NUMBER:
AS NOTED SCALE:
2-4-2019 DATE:
SHEET 10 OF 10
D-3

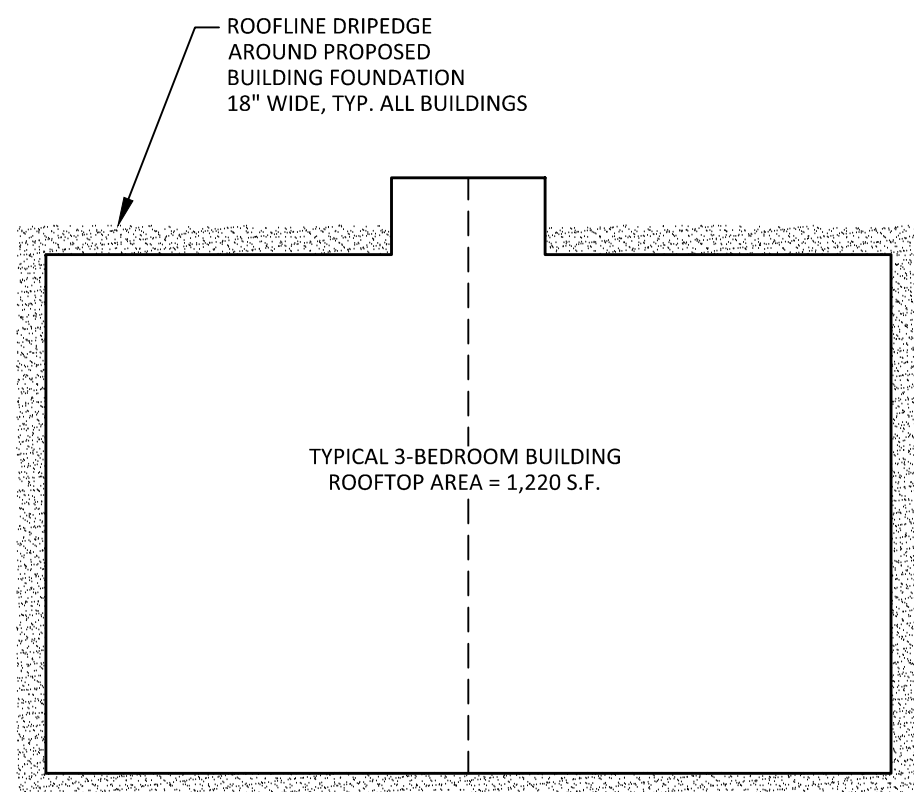


LEGEND

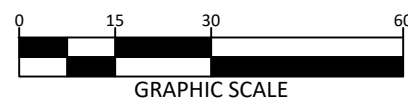
- 1 WATERSHED NO.
- SP1 REACH/STUDY POINT
- P1 POND
- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH PATH
- SOIL BOUNDARY

LEGEND

- | EXISTING | PROPOSED |
|---|--|
| PROPERTY LINE/R.O.W. | ABUTTER PROPERTY LINE |
| SETBACK | EASEMENT LINE |
| GRANITE MONUMENT | IRON PIN/DRILL HOLE |
| CENTERLINE | BUILDING |
| EDGE OF PAVEMENT/CURB | CONTOUR LINE |
| CATCHBASIN | DRAINAGE MANHOLE |
| CULVERT/STORMDRAIN | SEWER MANHOLE |
| UTILITY POLE | OVERHEAD UTILITIES |



DRIPEDGE SIZING DIAGRAM
SCALE: 1"=10'



Stormwater Treatment Table
Anglers Road Residential Apartments

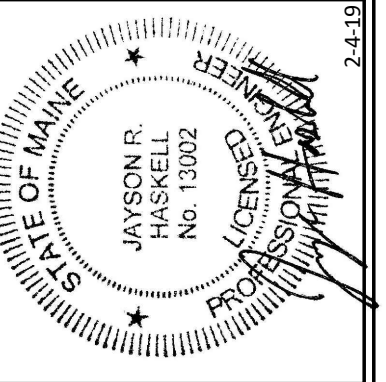
	Total Watershed Area (SF)	New Paved Impervious Area (SF)	New Building Area (SF)	New Landscaped Area (SF)**	Existing/Offsite Impervious Area (SF)*	Existing/Offsite Landscaped Area (SF)**	Existing Undeveloped Area (SF)	Treatment Provided	New Impervious Area Treated In Treatment Device (SF)	New Landscaped Area Treated In Treatment Device (SF)	Treatment Device
WS-10	68,237	733	4,604	28,793	409	242	33,368	No	43,070	85,604	FB
WS-20	238,080	43,070	16,450	85,604	10,963	2,919	79,074	Yes	43,070	85,604	FB
Total		43,803	21,144	114,395					43,070	85,604	

* All new buildings shall install a roofline drip edge to provide treatment for the rooftop impervious surface. The building's impervious area is included in the watershed and overall treatment calculations below, but not included in the BMP sizing calculations for each treatment device.

** The project is not taking credit for the existing or offsite impervious and landscaped areas, but are included in the BMP sizing calculations for each treatment device.

New Impervious Area = 64,947 sf
 Impervious Area Requiring Treatment (95%) = 61,700 sf
 Impervious Area Treatment Provided = 64,214 sf
 99% New Impervious Area Treated

New Developed Area = 179,342 sf
 Developed Area Requiring Treatment (80%) = 143,474 sf
 Developed Area Treatment Provided = 149,818 sf
 84% New Developed Area Treated



DM ROMA
CONSULTING ENGINEERS
P.O. BOX 1116
WINDHAM, ME 04062
(207) 310-0506

REV	DATE	BY	DESCRIPTION
A	2-4-19	DMR	ISSUED FOR PERMITTING

STORMWATER PLAN
ANGLERS ROAD COMMONS APARTMENTS
WINDHAM, MAINE

FOR: **TIM CLINTON**
P.O. BOX 87
SACONNET, ME 02066

18093
JOB NUMBER:
1" = 30'
SCALE:
2-4-2019
DATE:

SHEET 1 OF 1
SWP-1