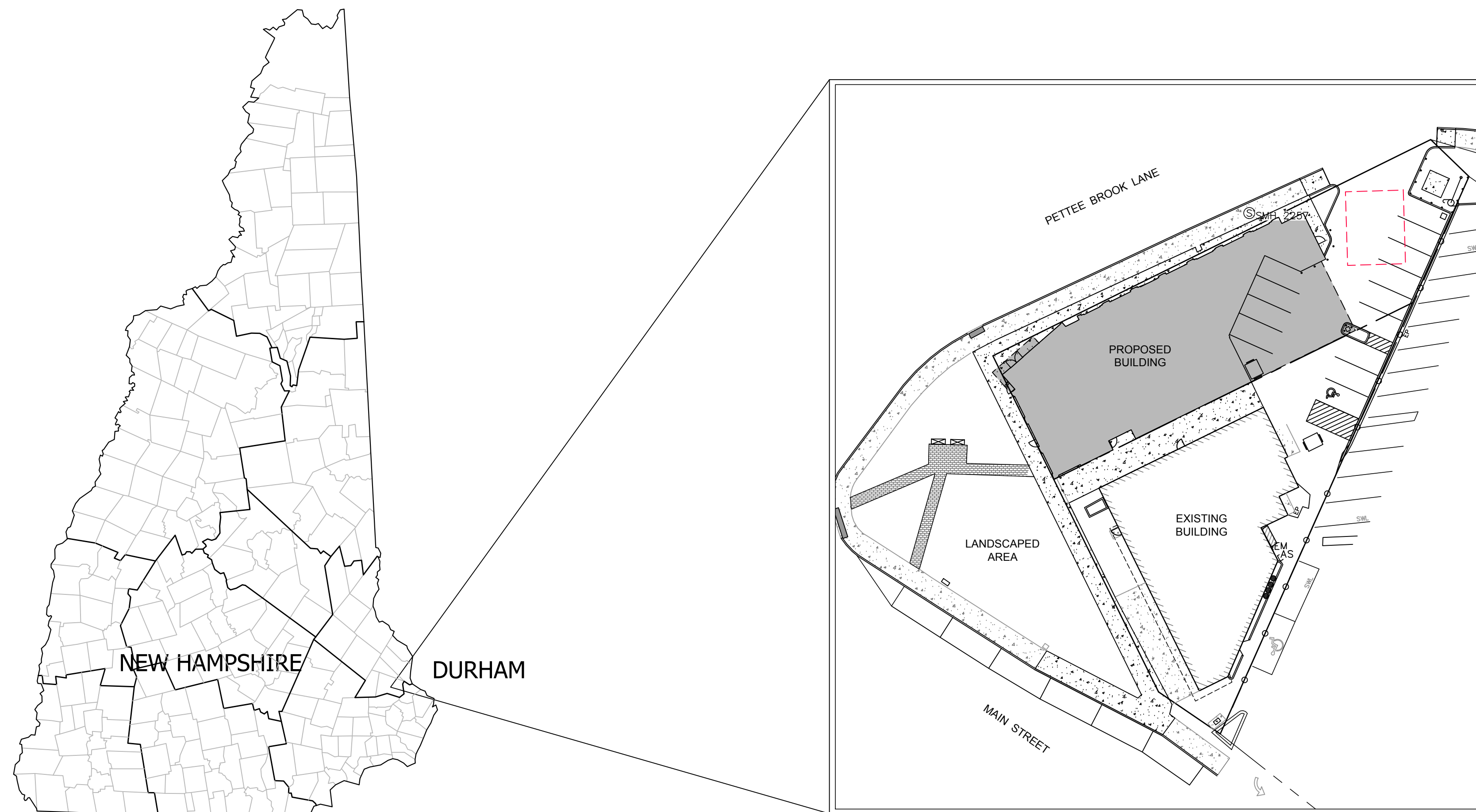


CLARK PROPERTIES, LLC

74 MAIN STREET

DURHAM, NH
3 MARCH 2021



LOCATION PLAN

OWNER:

CLARK PROPERTIES, LLC
28 CEDAR POINT ROAD
DURHAM, NH 03824

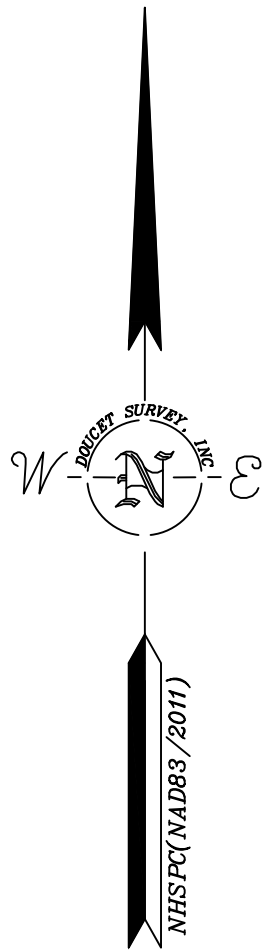
ENGINEER:

horizons
Engineering

5 RAILROAD STREET
NEWMARKET, NH 03857
(603) 444-4111

SURVEYOR:

DOUCET SURVEY, INC.
102 KENT PL
NEWMARKET, NH 03857
(603) 659-6560



LOCATION MAP (n.t.s.)

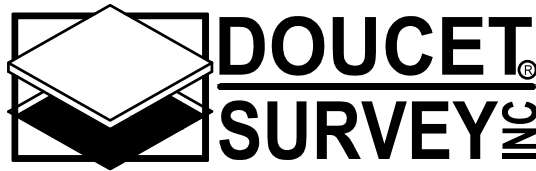
- LEGEND**
- EXISTING LOT LINE
 - PROPOSED LOT LINE
 - CHAIN LINK FENCE
 - OVERHEAD WIRE
 - SEWER LINE
 - DRAIN LINE
 - CONCRETE
 - BRICK
 - UTILITY POLE
 - UTILITY POLE & GUY WIRE
 - SIGN
 - GROUND LIGHT
 - LIGHT POLE W/ARM
 - BOLLARD
 - WATER GATE VALVE
 - HAND HOLE
 - CATCH BASIN
 - IRRIGATION CONTROL VALVE
 - BOUND FOUND
 - IRON ROD/PIPE FOUND
 - 5/8" REBAR OR OTHER SUITABLE MONUMENT TO BE SET
 - IRON PIPE FOUND
 - STEEL STAKE FOUND
 - MAILBOX
 - ACCESSIBLE PARKING SPACE
 - FINISHED FLOOR
 - AUTO SPRINKLER
 - ELECTRIC METER
 - EDGE OF PAVEMENT
 - VERTICAL GRANITE CURB
 - SLOPED BITUMINOUS BERM
 - VERTICAL BITUMINOUS BERM
 - SINGLE WHITE LINE



TOPOGRAPHIC PLAN
FOR
TOWN & CAMPUS, INC.
OF
TAX MAP 2 LOT 14-1
72 MAIN STREET
DURHAM, NEW HAMPSHIRE

1	08/21/18	REVISIONS PER TOWN PLANNER	J.F.K.
NO.	DATE	DESCRIPTION	BY

DRAWN BY:	W.D.C.	DATE:	AUGUST 28, 2018
CHECKED BY:	J.F.K.	DRAWING NO.:	5549B
JOB NO.:	5549	SHEET	1 OF 1

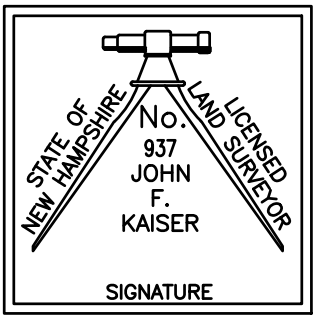


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102 Kent Place, Newmarket, NH 03857 (603) 659-6560
2 Commerce Drive (Suite 202) Bedford, NH 03110 (603) 614-4060
10 Storer Street (Riverview Suite) Kennebunk, ME (207) 502-7005
<http://www.doucetsurvey.com>

- NOTES:**
- REFERENCE: TAX MAP 2, LOT 14-1
 - TOTAL PARCEL AREA: 18,879 SQ. FT. OR 0.433 AC.
 - OWNER OF RECORD: TOWN & CAMPUS, INC.
105 PERKINS ROAD
MADBURY, NH 03823
S.C.R.D. BOOK 838, PAGE 056
 - ZONE: CB
DIMENSIONAL REQUIREMENTS:
MIN. LOT AREA N/A
MIN. FRONTAGE 50 ft.
MIN. FRONT SETBACK SEE DEVELOPMENT STANDARDS FOR CB ZONE
MIN. SIDE/REAR SETBACK SEE DEVELOPMENT STANDARDS FOR CB ZONE
- ZONING INFORMATION LISTED HEREON IS BASED ON THE TOWN OF DURHAM ZONING ORDINANCE DATED 4/16/18 AS AVAILABLE ON THE TOWN WEBSITE ON 5/25/18. ADDITIONAL REGULATIONS APPLY, AND REFERENCE IS HEREBY MADE TO THE EFFECTIVE ZONING ORDINANCE. THE LAND OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE MUNICIPAL, STATE AND FEDERAL REGULATIONS.
- FIELD SURVEY PERFORMED BY J.P.E. & P.J.M. DURING MAY 2018 USING A TRIMBLE S7 TOTAL STATION WITH A TRIMBLE TSC3 DATA COLLECTOR. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
 - HORIZONTAL DATUM BASED ON NEW HAMPSHIRE STATE PLANE(2800) NAD83(2011) DERIVED FROM REDUNDANT GPS OBSERVATIONS UTILIZING THE KEYNET GPS VRS NETWORK.
 - VERTICAL DATUM IS BASED ON NAVD88 PER DISK "UNH 13".
 - UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON OBSERVABLE PHYSICAL EVIDENCE AND PAINT MARKS FOUND ON-SITE.
 - THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT LEGAL DESCRIPTION, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.
- THE INTENT OF THIS PLAN IS ALSO TO SUBDIVIDE THE EXISTING TAX MAP 2, LOT 14-1 INTO TWO PARCELS OF APPROXIMATELY EQUAL SQUARE FOOTAGE.
- ALL ELECTRIC, GAS, TEL. WATER, SEWER AND DRAIN SERVICES ARE SHOWN IN SCHEMATIC FASHION, THEIR LOCATIONS ARE NOT PRECISE OR NECESSARILY ACCURATE. NO WORK WHATSOEVER SHALL BE UNDERTAKEN ON THIS SITE USING THIS PLAN TO LOCATE THE ABOVE SERVICES. CONSULT WITH THE PROPER AUTHORITIES CONCERNED WITH THE SUBJECT SERVICE LOCATIONS FOR INFORMATION REGARDING SUCH. CALL DIG-SAFE AT 1-888-DIG-SAFE.
 - THE BUILDINGS ON THE PARCEL ARE SERVICED BY MUNICIPAL WATER AND SEWER. THE SEWER IS BELIEVED TO BE SERVICED FROM PETTEE BROOK LANE AS INDICATED HEREON. THE WATER IS BELIEVED TO BE SERVICED FROM MAIN STREET. THE EXACT LOCATIONS OF THE SERVICES WAS NOT OBSERVED DURING THE SURVEY. FURTHERMORE THE TOWN ENGINEERING DEPARTMENT DID NOT HAVE THIS INFORMATION AVAILABLE.
 - FOR MORE INFORMATION ABOUT THIS SUBDIVISION, OR TO SEE THE COMPLETE PLAN SET, CONTACT THE TOWN OF DURHAM PLANNING DEPARTMENT, 8 NEWMARKET ROAD, DURHAM, NH. (603) 868-8064.

- REFERENCE PLANS:**
- "BOUNDARY LINE ADJUSTMENT MAIN ST. & PETTEE BROOK RD. DURHAM, STRAFFORD COUNTY, NEW HAMPSHIRE, BETWEEN TOWN & CAMPUS, INC. & TOWN OF DURHAM" DATED APRIL 16, 1987 BY THOMAS F. MORAN INC. S.C.R.D. PLAN 28A-118.
 - "BOUNDARY LINE ADJUSTMENT PLAN GAMMA THETA CORP., MAIN STREET DURHAM, N.H." DATED 12-15-03 WITH A REVISION DATE OF 1-9-04 BY CAMMETT ENGINEERING. S.C.R.D. PLAN 74-56.

- EASEMENT NOTES:**
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- RIGHTS GRANTED TO NET&T FROM TOWN & CAMPUS, INC. TO ABANDON UNDERGROUND CABLES ON THE PREMISES. SAID RIGHTS DO NOT ALLOW GRANTEE TO PLACE ADDITIONAL CABLE ON THE PREMISES. EASEMENT RECORDED IN S.C.R.D. BOOK 1061, PAGE 652.
 - NO RECORDED EASEMENT WAS FOUND FOR THE EXISTING POLES AND ANCHORS ON THE PREMISES.
 - EXISTING PARKING SPACES ARE SHOWN ON THIS PLAN BOTH AT THE FRONT OF THE NEW NORTHERLY LOT AND IN THE TOWN'S PROPERTY NEAR MAIN STREET. IT IS UNDERSTOOD THAT NO EASEMENT TO PROVIDE ACCESS TO THESE SPACES IS BEING ESTABLISHED AS PART OF THIS SUBDIVISION.
 - EASEMENTS ARE TO BE RECORDED HEREWITH TO DEFINE ITEMS INCLUDING BUT NOT LIMITED TO PARKING, ACCESS, UTILITIES AND MAINTENANCE.



I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY ME OR BY THOSE UNDER MY DIRECT SUPERVISION AND FALLS UNDER THE URBAN SURVEY CLASSIFICATION OF THE NH CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. I CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. RANDOM TRAVERSE SURVEY BY TOTAL STATION, WITH A PRECISION GREATER THAN 1:15,000.

_____.L.L.S. #937
_____.DATE

THE CERTIFICATIONS SHOWN HEREON ARE INTENDED TO MEET REGISTRY OF DEED REQUIREMENTS AND ARE NOT A CERTIFICATION TO TITLE OR OWNERSHIP OF PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE ACCORDING TO CURRENT TOWN ASSESSORS RECORDS.

NOTES:

1. REFERENCE:

TAX MAP 2, LOT 14-1
2. TOTAL PARCEL AREA:

18,879 SQ. FT. OR 0.433 AC.
3. OWNER OF RECORD:

TOWN & CAMPUS, INC.
105 PERKINS ROAD
MADBURY, NH 03823
S.C.R.D. BOOK 838, PAGE 056
4. ZONE: CB

DIMENSIONAL REQUIREMENTS:

MIN. LOT AREA

N/A

MIN. FRONTAGE

50 ft.

MIN. FRONT SETBACK

SEE DEVELOPMENT STANDARDS FOR CB ZONE

MIN. SIDE/REAR SETBACK

SEE DEVELOPMENT STANDARDS FOR CB ZONE

ZONING INFORMATION LISTED HEREON IS BASED ON THE TOWN OF DURHAM ZONING ORDINANCE DATED 4/16/18 AS AVAILABLE ON THE TOWN WEBSITE ON 5/25/18. ADDITIONAL REGULATIONS APPLY, AND REFERENCE IS HEREBY MADE TO THE EFFECTIVE ZONING ORDINANCE. THE LAND OWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE MUNICIPAL, STATE AND FEDERAL REGULATIONS.

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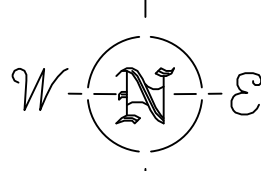
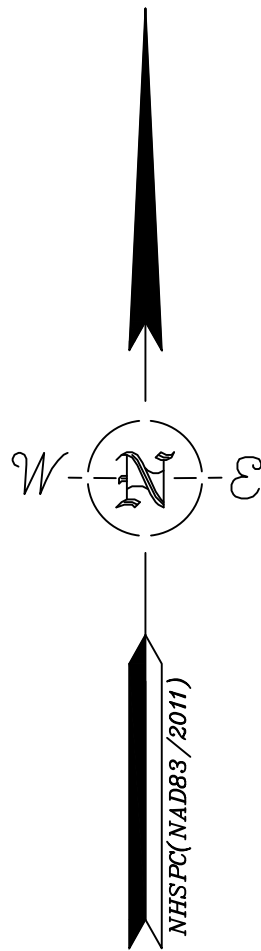
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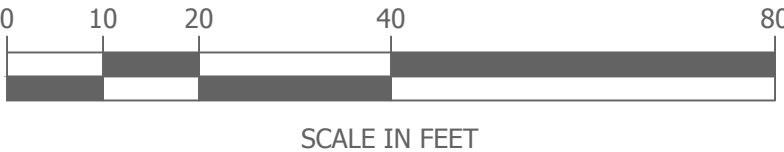
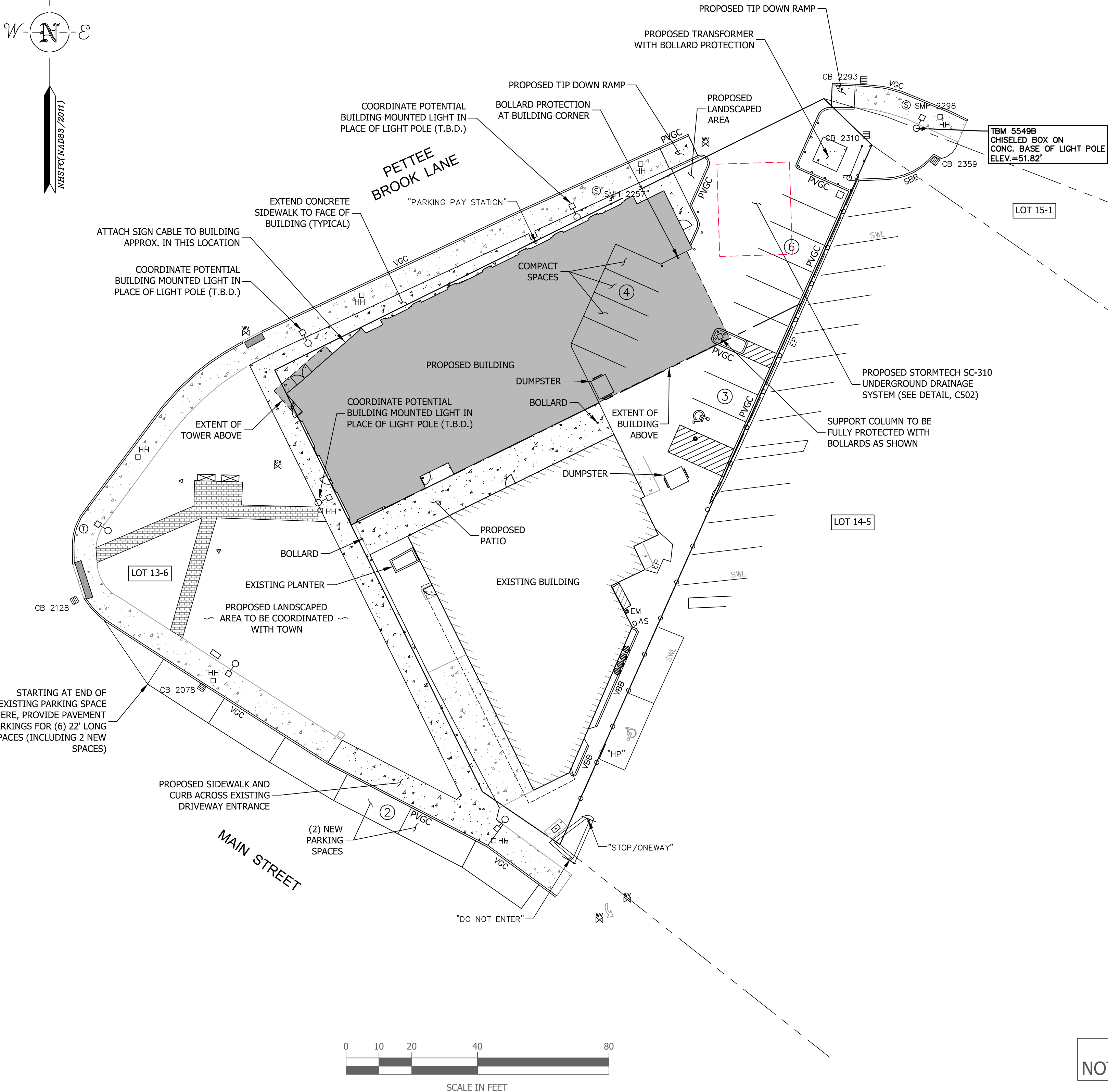
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- D) EASEMENTS ARE TO BE RECORDED HEREWITH TO DEFINE ITEMS INCLUDING BUT NOT LIMITED TO PARKING, ACCESS, UTILITIES AND MAINTENANCE.



NHSPK (NAD83/2011)



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MARCH 03 2021
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CLARK PROPERTIES, LLC

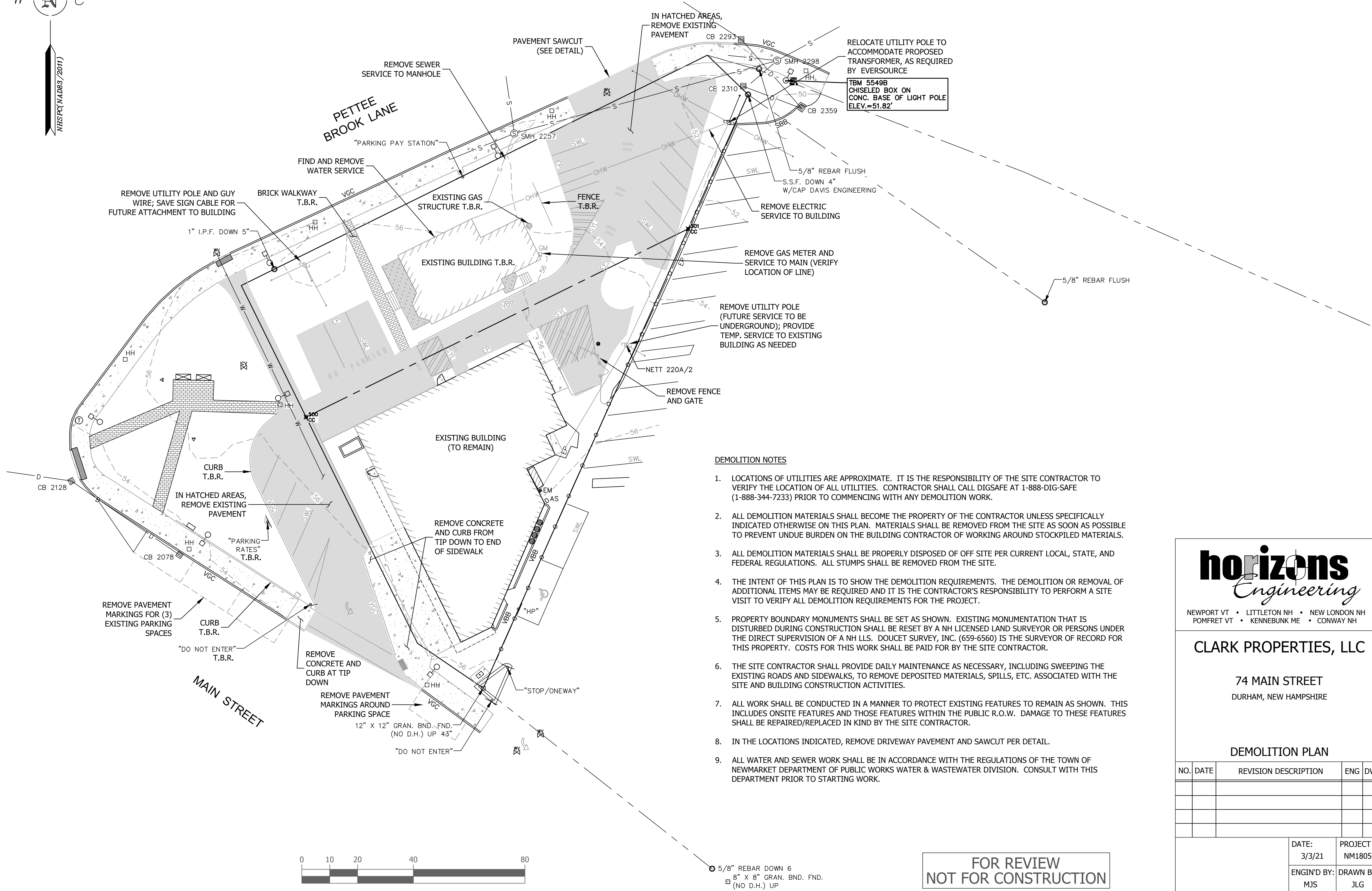
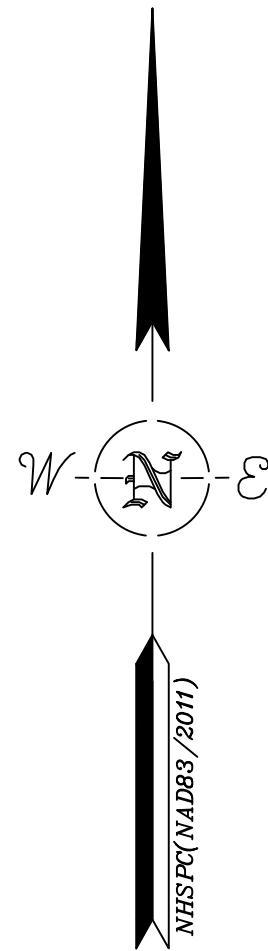
74 MAIN STREET
DURHAM, NEW HAMPSHIRE

SITE PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: 3/3/21	PROJECT #: NM18054
ENG'N'D BY: MJS	DRAWN BY: JLG
CHECK'D BY: MJS	ARCHIVE #: H-__

C101



DEMOLITION NOTES

1. LOCATIONS OF UTILITIES ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE SITE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES. CONTRACTOR SHALL CALL DIGSAFE AT 1-888-DIG-SAFE (1-888-344-7233) PRIOR TO COMMENCING WITH ANY DEMOLITION WORK.
2. ALL DEMOLITION MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS SPECIFICALLY INDICATED OTHERWISE ON THIS PLAN. MATERIALS SHALL BE REMOVED FROM THE SITE AS SOON AS POSSIBLE TO PREVENT UNDUE BURDEN ON THE BUILDING CONTRACTOR OF WORKING AROUND STOCKPILED MATERIALS.
3. ALL DEMOLITION MATERIALS SHALL BE PROPERLY DISPOSED OF OFF SITE PER CURRENT LOCAL, STATE, AND FEDERAL REGULATIONS. ALL STUMPS SHALL BE REMOVED FROM THE SITE.
4. THE INTENT OF THIS PLAN IS TO SHOW THE DEMOLITION REQUIREMENTS. THE DEMOLITION OR REMOVAL OF ADDITIONAL ITEMS MAY BE REQUIRED AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A SITE VISIT TO VERIFY ALL DEMOLITION REQUIREMENTS FOR THE PROJECT.
5. PROPERTY BOUNDARY MONUMENTS SHALL BE SET AS SHOWN. EXISTING MONUMENTATION THAT IS DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A NH LICENSED LAND SURVEYOR OR PERSONS UNDER THE DIRECT SUPERVISION OF A NH LLS. DOUCET SURVEY, INC. (659-6560) IS THE SURVEYOR OF RECORD FOR THIS PROPERTY. COSTS FOR THIS WORK SHALL BE PAID FOR BY THE SITE CONTRACTOR.
6. THE SITE CONTRACTOR SHALL PROVIDE DAILY MAINTENANCE AS NECESSARY, INCLUDING SWEEPING THE EXISTING ROADS AND SIDEWALKS, TO REMOVE DEPOSITED MATERIALS, SPILLS, ETC. ASSOCIATED WITH THE SITE AND BUILDING CONSTRUCTION ACTIVITIES.
7. ALL WORK SHALL BE CONDUCTED IN A MANNER TO PROTECT EXISTING FEATURES TO REMAIN AS SHOWN. THIS INCLUDES ONSITE FEATURES AND THOSE FEATURES WITHIN THE PUBLIC R.O.W. DAMAGE TO THESE FEATURES SHALL BE REPAIRED/REPLACED IN KIND BY THE SITE CONTRACTOR.
8. IN THE LOCATIONS INDICATED, REMOVE DRIVEWAY PAVEMENT AND SAWCUT PER DETAIL.
9. ALL WATER AND SEWER WORK SHALL BE IN ACCORDANCE WITH THE REGULATIONS OF THE TOWN OF NEWMARKET DEPARTMENT OF PUBLIC WORKS WATER & WASTEWATER DIVISION. CONSULT WITH THIS DEPARTMENT PRIOR TO STARTING WORK.

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CLARK PROPERTIES, LLC

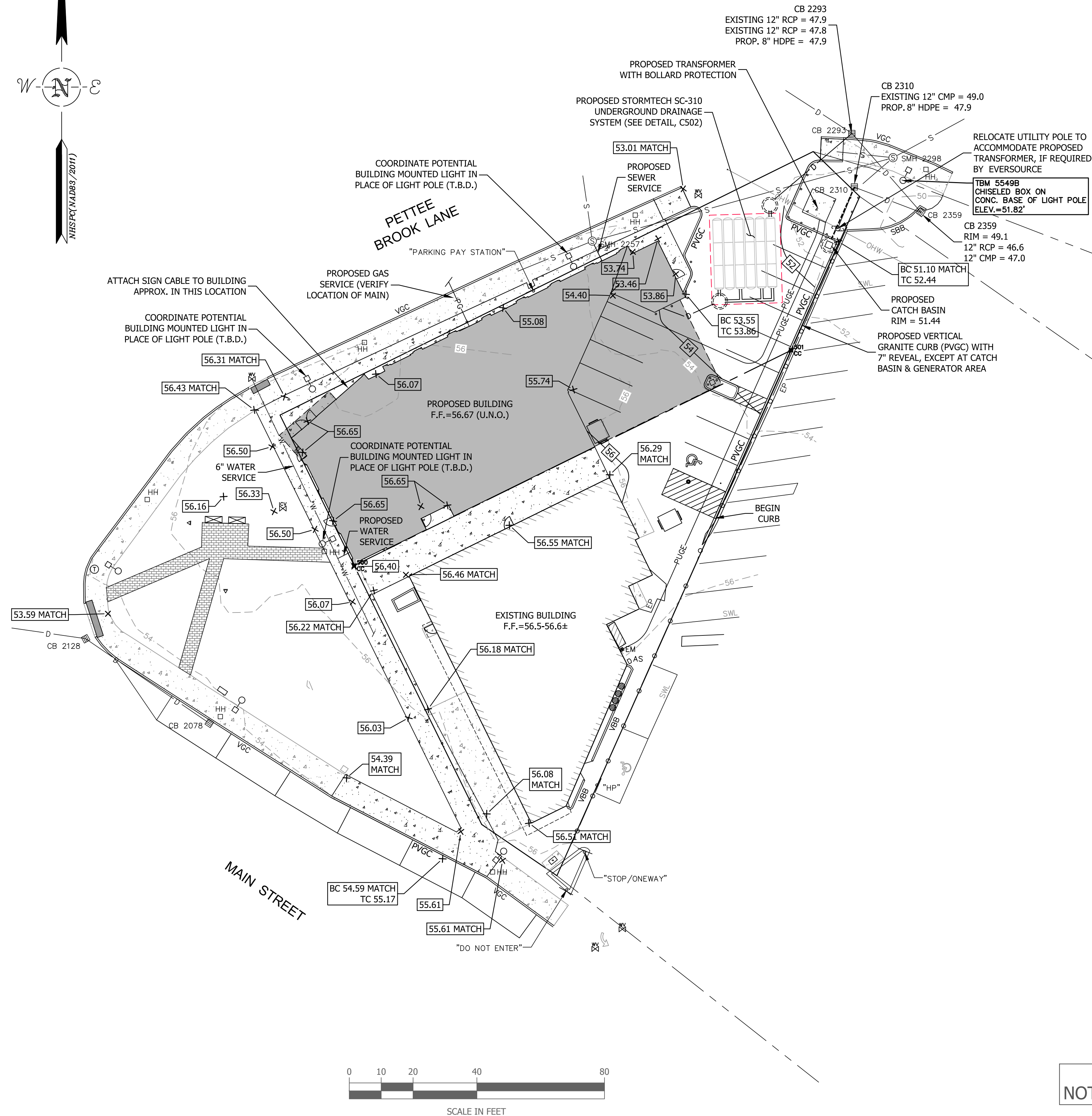
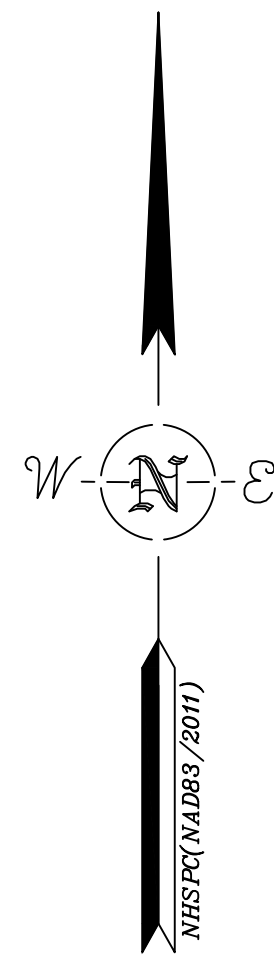
74 MAIN STREET
DURHAM, NEW HAMPSHIRE

DEMOLITION PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: 3/3/21	PROJECT #: NM18054
ENG'D BY: MJS	DRAWN BY: JLG
CHECK'D BY: MJS	ARCHIVE #: H-__

C102



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CLARK PROPERTIES, LLC

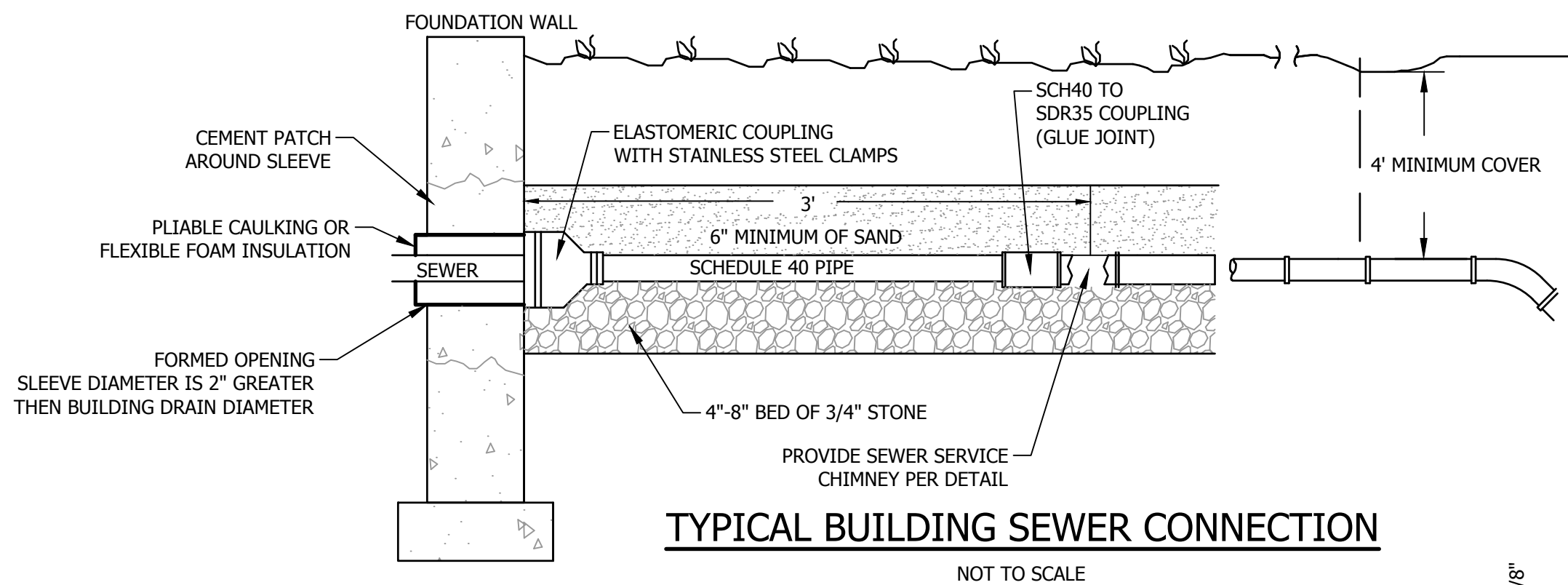
74 MAIN STREET
DURHAM, NEW HAMPSHIRE

GRADING, DRAINAGE,
AND UTILITIES PLAN

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

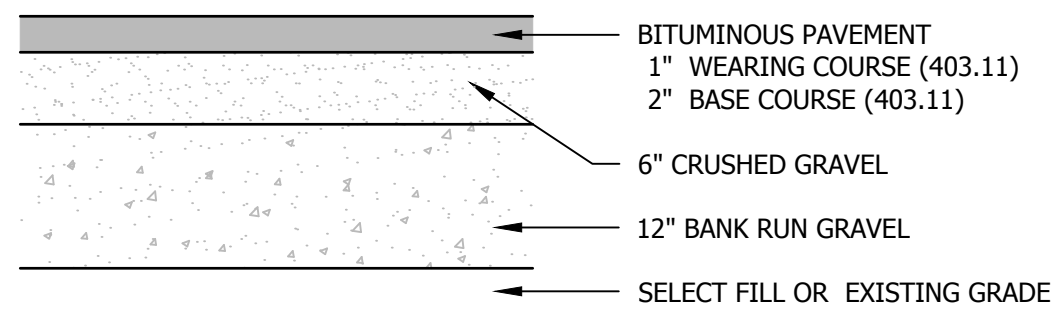
DATE: 3/3/21	PROJECT #: NM18054
ENGINE'D BY: MJS	DRAWN BY: JLG
CHECK'D BY: MJS	ARCHIVE #: H-__

C103



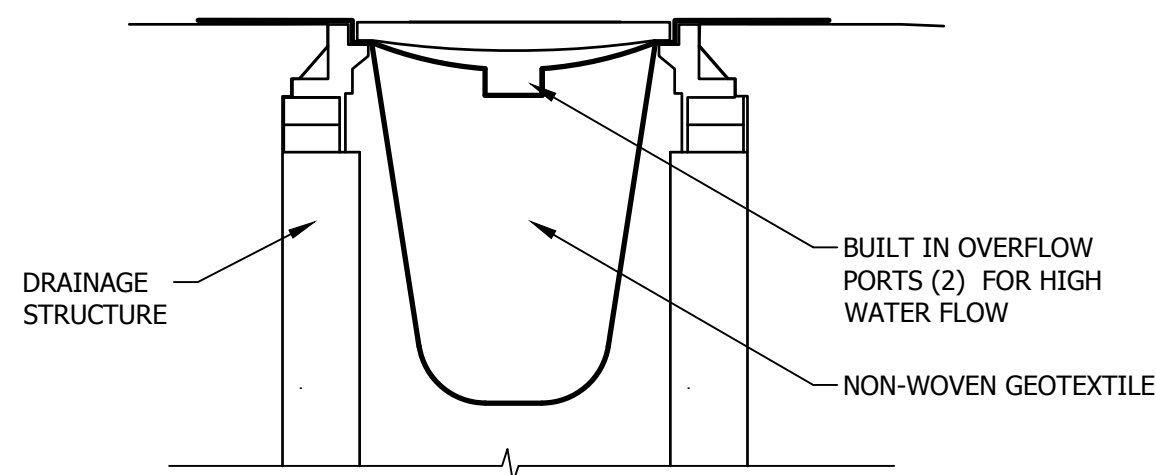
TYPICAL BUILDING SEWER CONNECTION

NOT TO SCALE



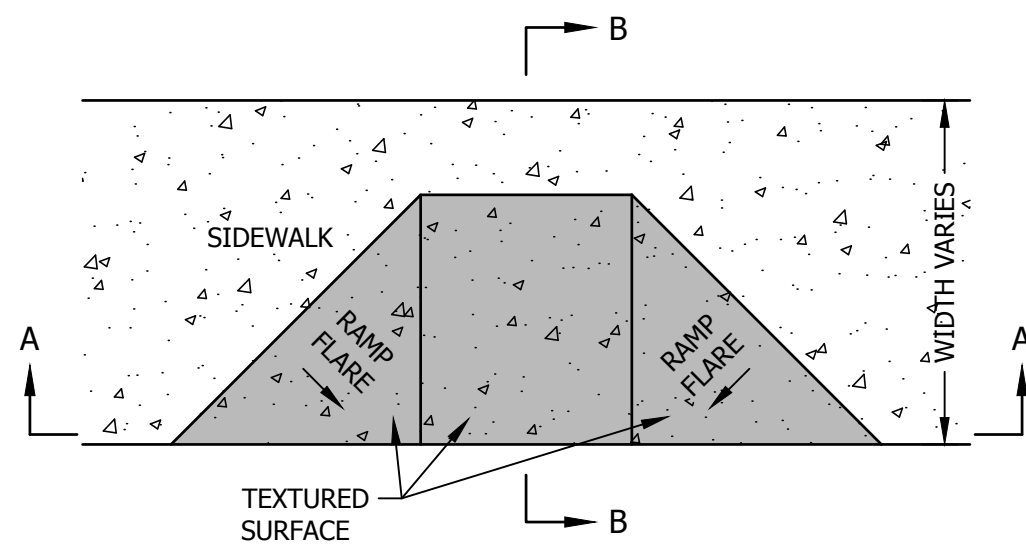
TYPICAL PAVEMENT SECTION

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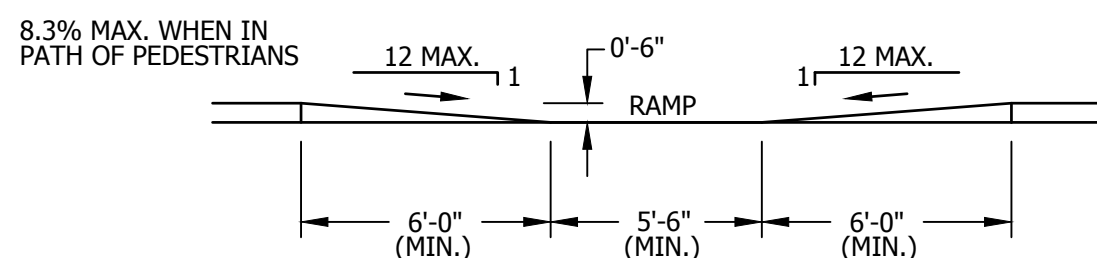


**CATCH BASIN PROTECTION
INSERT TYPE**

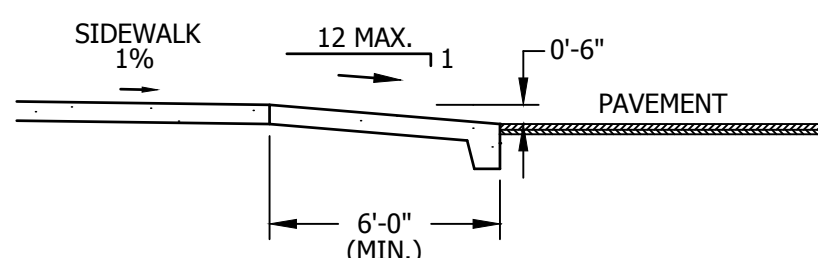
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PLAN



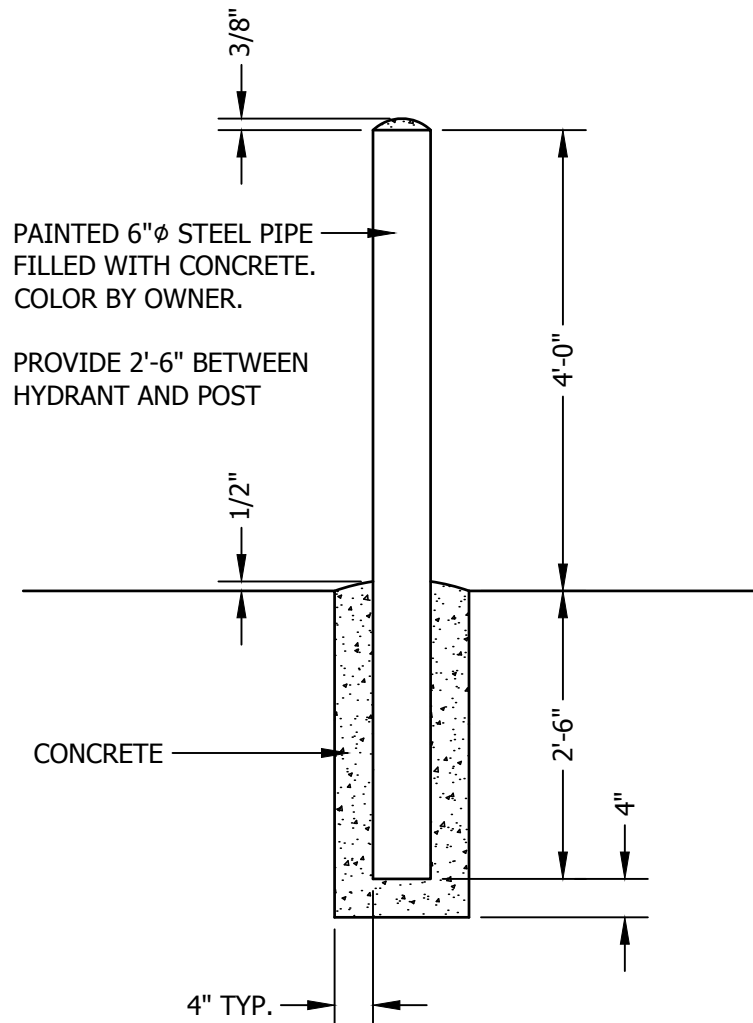
SECTION A - A



SECTION B - B

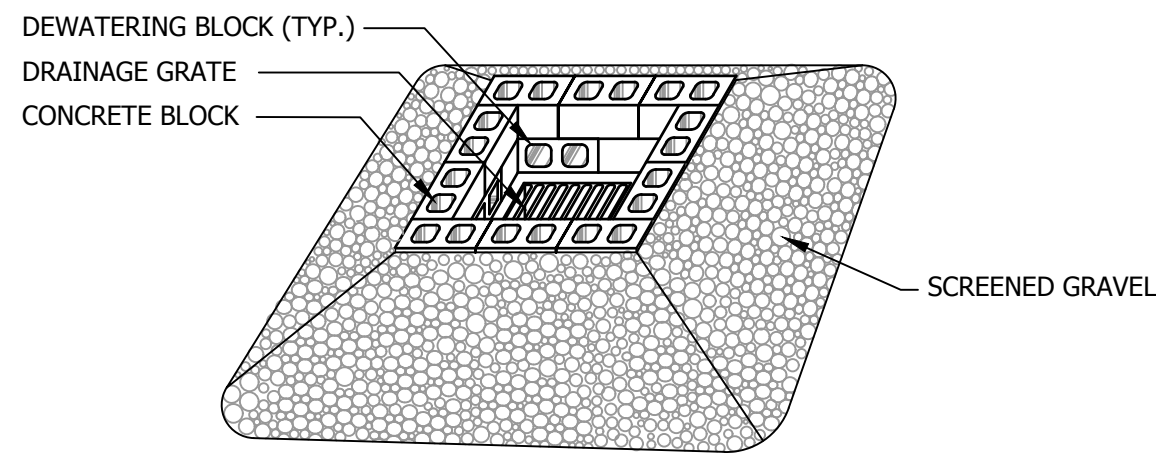
SIDEWALK RAMP DETAIL

NOT TO SCALE

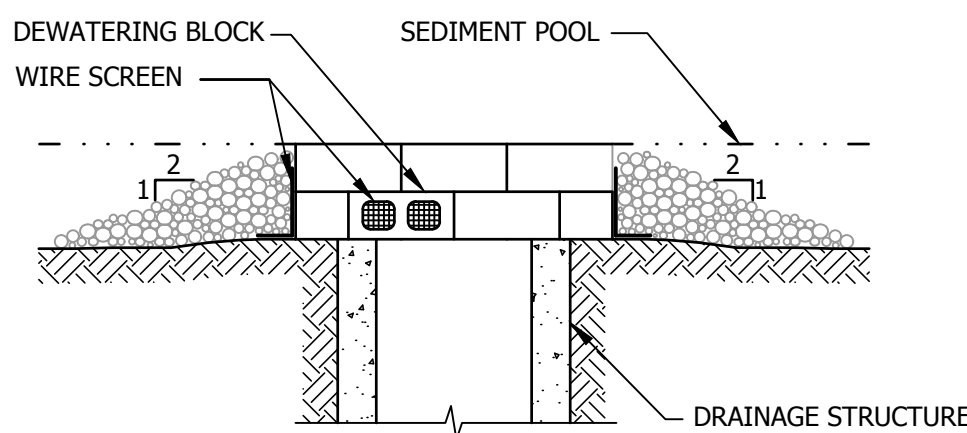


CONCRETE FILLED BOLLARD DETAIL

NOT TO SCALE



PERSPECTIVE VIEW



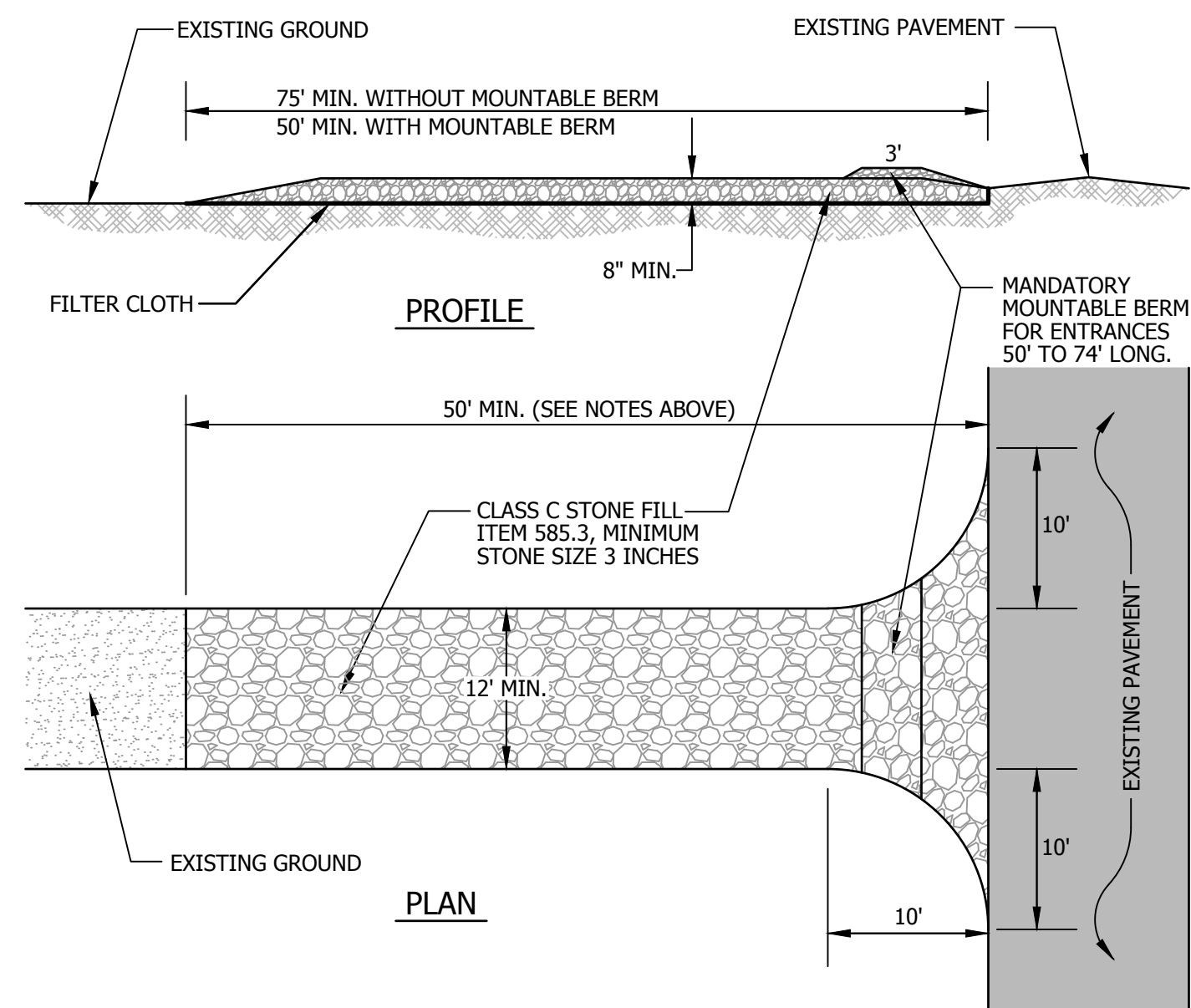
SECTION

- MATERIALS SPECIFICATIONS:**
1. CONCRETE BLOCKS: HOLLOW LOAD BEARING CONCRETE MASONRY UNITS, 8" x 8" x 16" DIMENSION.
 2. WIRE SCREEN: HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2" OPENINGS.
 3. SCREENED GRAVEL: UNIFORMLY GRADED 3/8" TO 1-1/2" DIA. STONE.

- CONSTRUCTION SPECIFICATIONS:**
1. INSTALL BLOCK AND GRAVEL INLET PROTECTION WHERE INDICATED OR WARRANTED.
 2. EXCAVATE FOUNDATION 2" BELOW RIM OF STORM DRAIN.
 3. PLACE BOTTOM ROW OF BLOCKS AGAINST EDGE OF STORM DRAIN WITH ONE BLOCK ON EACH SIDE OF THE ROW BEING LAID ON ITS SIDE. PLACE TOP ROW OF BLOCKS.
 4. INSTALL WIRE SCREEN OVER ALL DEWATERING BLOCKS.
 5. PLACE SCREENED GRAVEL AROUND EXTERIOR OF BLOCK BARRIER TO 1" BELOW THE TOP OF THE BLOCKS.

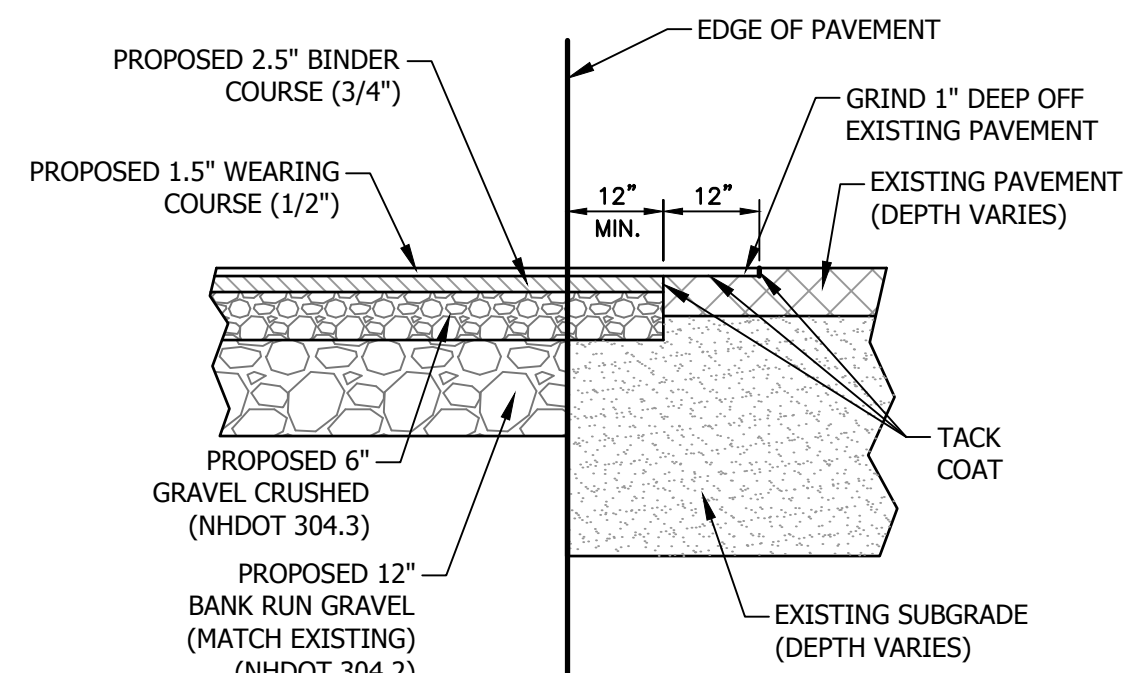
CATCH BASIN INLET PROTECTION DETAIL

NO SCALE



STABILIZED CONSTRUCTION ENTRANCE

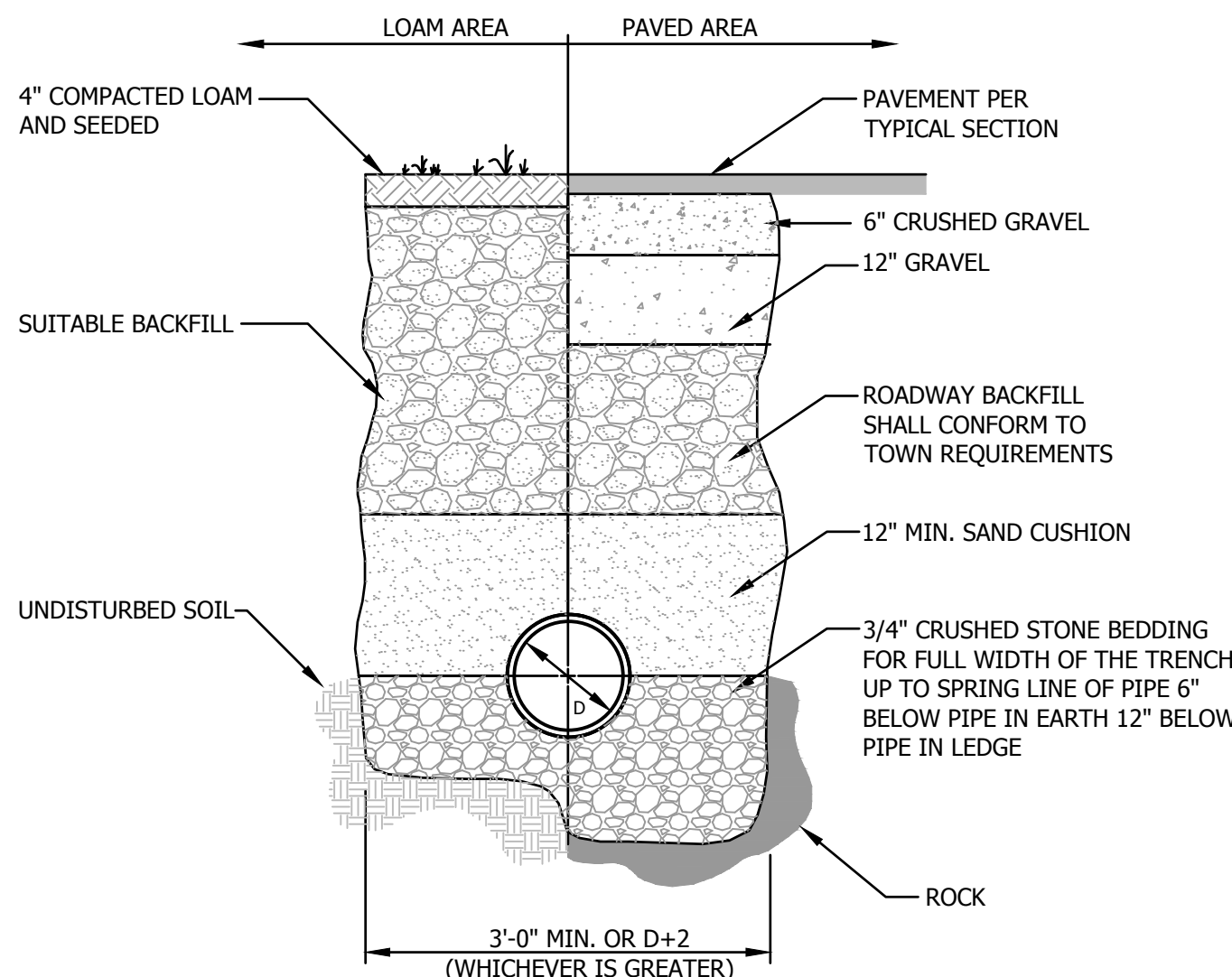
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TYPICAL PAVEMENT SAWCUT DETAIL

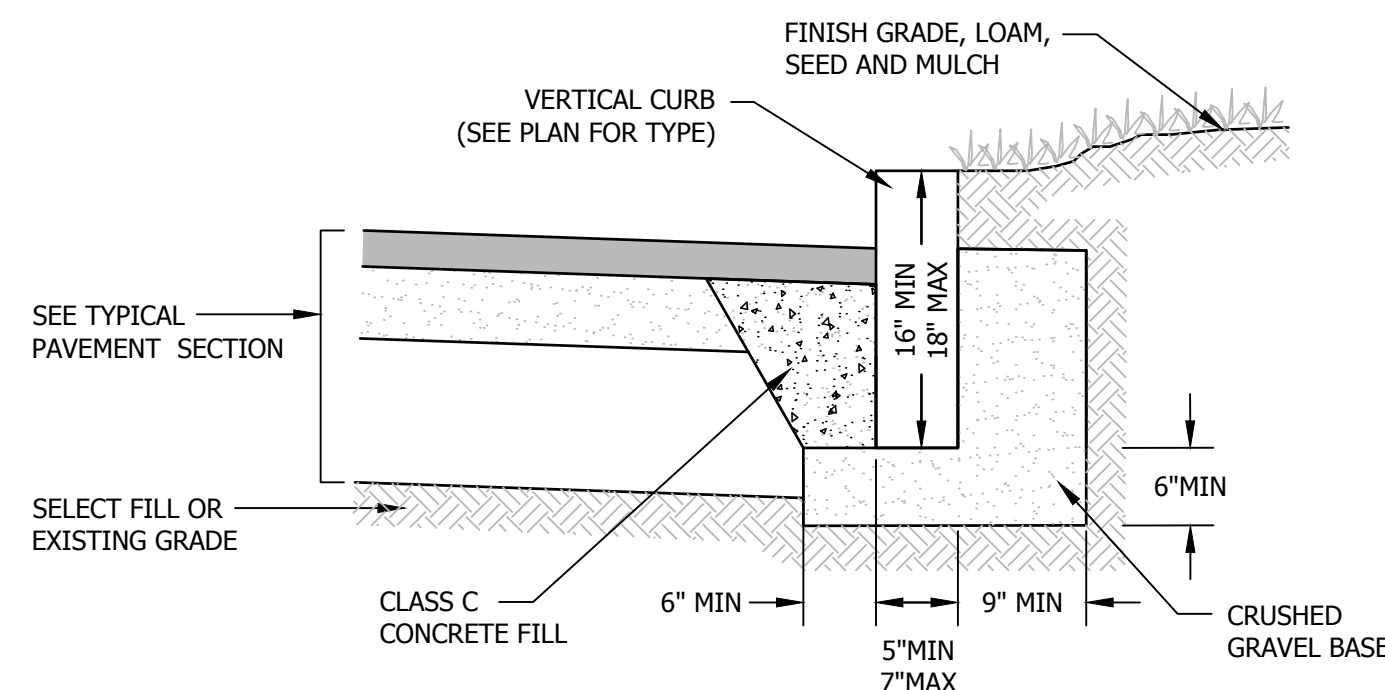
NOT TO SCALE

- PAVEMENT SAWCUT NOTES:**
1. SAWCUT THROUGH DEPTH OF PAVEMENT AT LEAST 1 FT. FROM EDGE OR GREATER IF REQUIRED BY NHDOT.
 2. INSTALL AND COMPACT CRUSHED GRAVEL TO GRADE.
 3. PLACE BINDER COURSE.
 4. GRIND EXISTING PAVEMENT 1 FT. WIDE TO A DEPTH NECESSARY TO PROPERLY MATCH NEW WEARING COURSE PAVEMENT.
 5. TACK COAT ALL EXISTING PAVEMENT SURFACES WITH EMULSIFIED ASPHALT (MS-1) PRIOR TO PLACING NEW PAVEMENT.



TYPICAL DRAINAGE TRENCH DETAIL

NOT TO SCALE



TYPICAL VERTICAL CURB DETAIL

NOT TO SCALE

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74 MAIN STREET
DURHAM, NH

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ENGINE'D BY: MJS	DRAWN BY: MCS
CHECK'D BY: MJS	ARCHIVE #: H-___

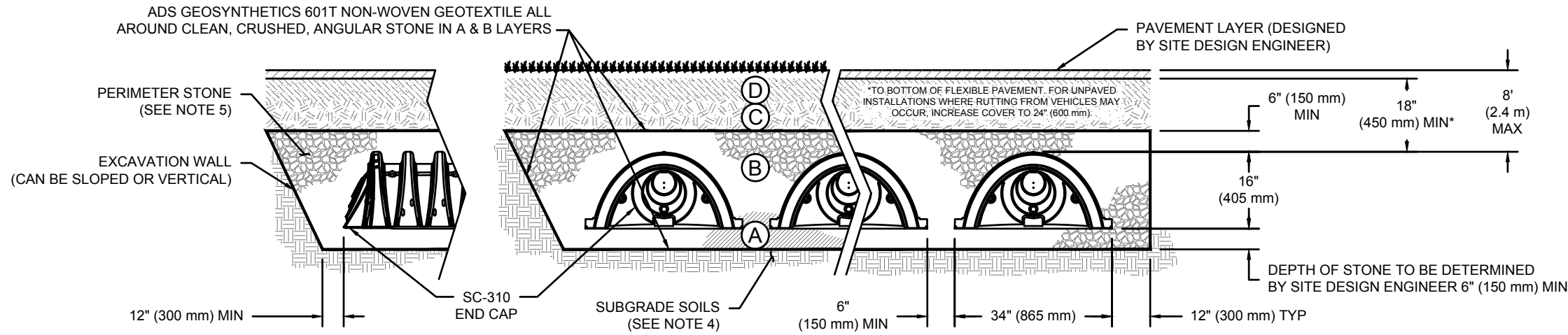
C501

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2.4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:

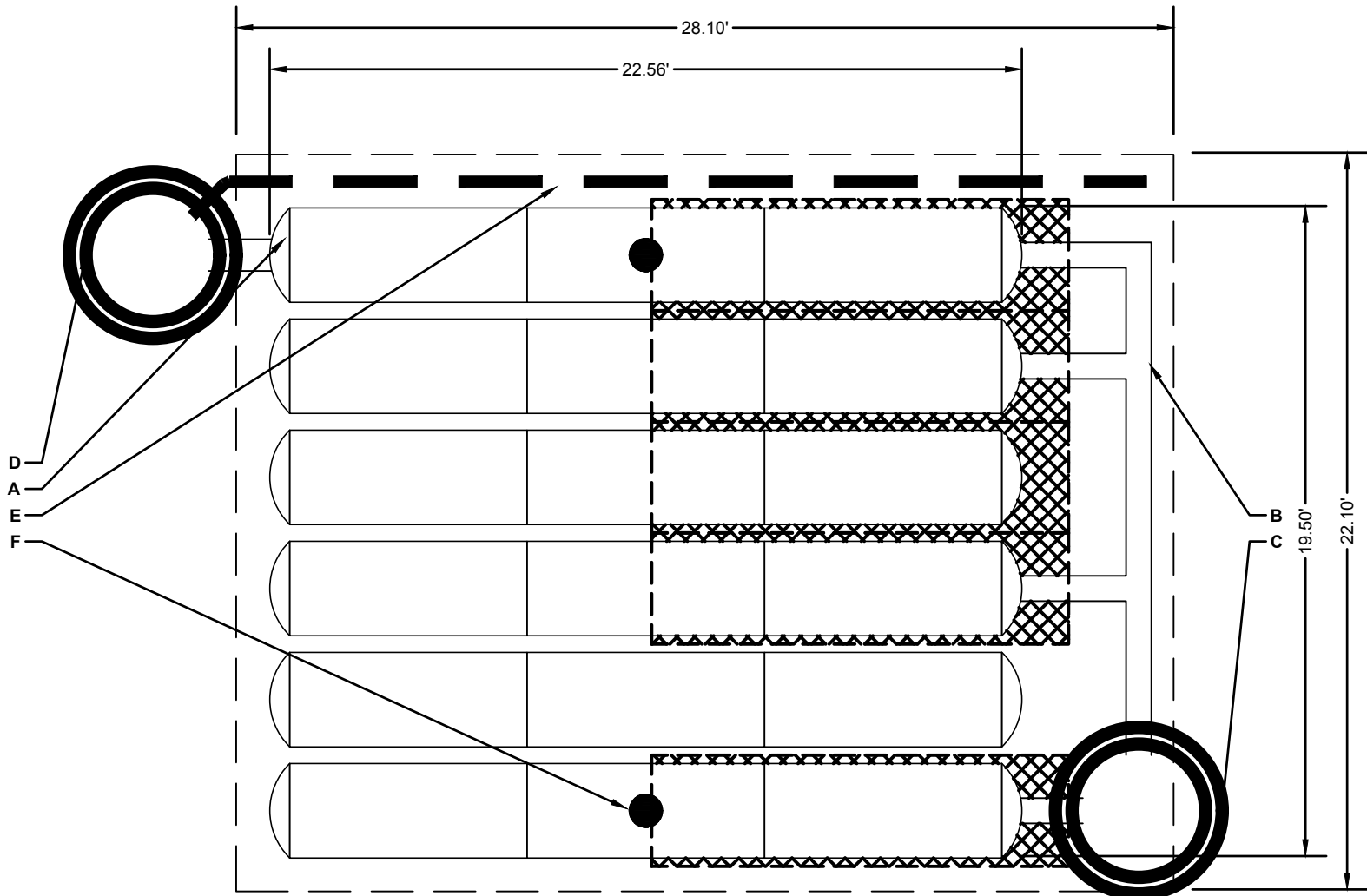
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418-16a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/IN/IN AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

PROPOSED LAYOUT	PROPOSED ELEVATIONS	PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT	MAX FLOW
12 STORMTECH SC-310 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT UNPAVED):	58.33				
8 STORMTECH SC-310 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	52.33	MANIFOLD			
6 STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	51.83	NYLOPLAST (INLET W/ISO PLUS ROW)	A 8" x 8" BOTTOM MANIFOLD, MOLDED FITTINGS	0.60'	
6 STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	51.83		B 30" DIAMETER (24.00" SUMP MIN)		2.5 CFS IN
40 STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	51.83	NYLOPLAST (OUTLET)	C 30" DIAMETER (DESIGN BY ENGINEER)		
505 INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)	TOP OF STONE:	50.83	UNDERDRAIN	D 4" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		0.7 CFS OUT
COVER STONE INCLUDED)	TOP OF SC-310 CHAMBER:	50.33				
(BASE STONE INCLUDED)	8" x 8" BOTTOM MANIFOLD INVERT:	49.05				
427 SYSTEM AREA (SF)	8" BOTTOM CONNECTION INVERT:	49.05				
66.3 SYSTEM PERIMETER (ft)	BOTTOM OF SC-310 CHAMBER:	49.00				
	UNDERDRAIN INVERT:	48.50				
	BOTTOM OF STONE:	48.50				

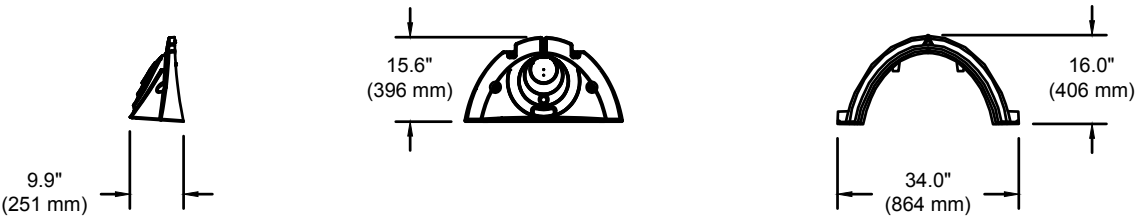
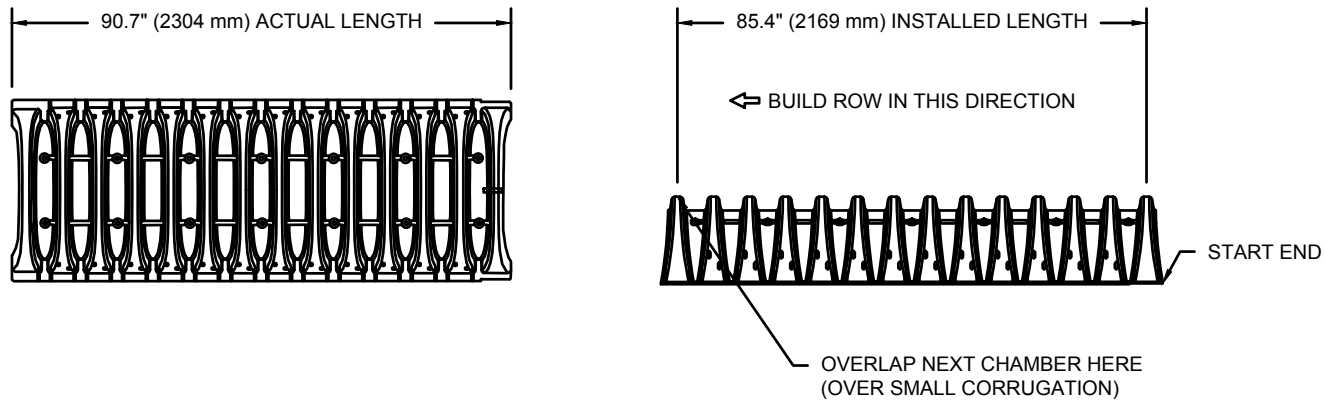


NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

SC-310 TECHNICAL SPECIFICATION

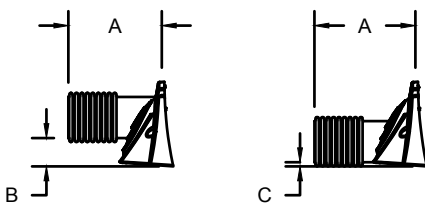
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS



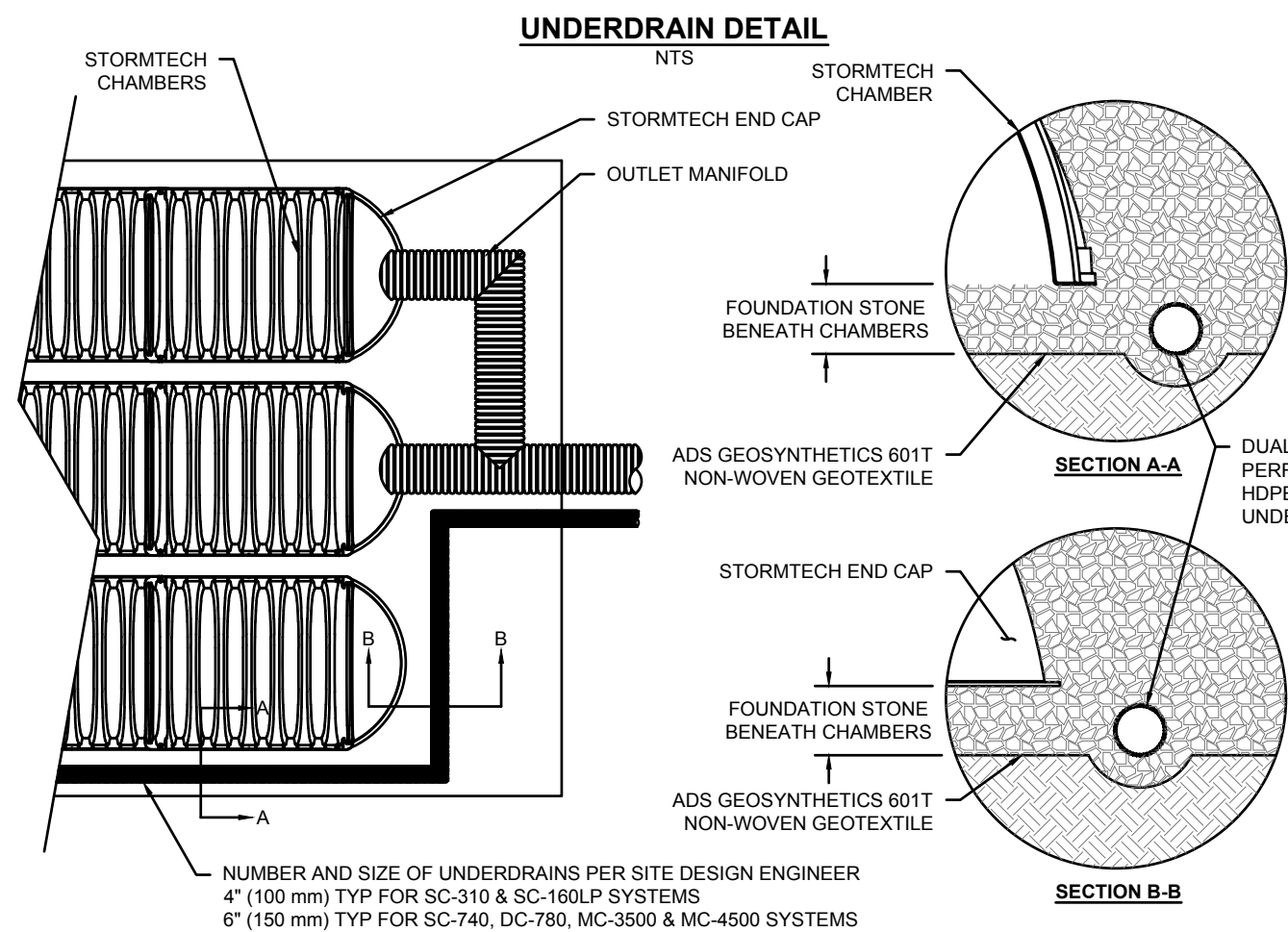
PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE08TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE08B / SC310EPE08BPC	---	---	3.5" (89 mm)	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	---	0.6" (15 mm)
SC310EPE08B / SC310EPE08BPC	---	---	1.4" (36 mm)	---
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	---	0.7" (18 mm)
SC310EPE10B / SC310EPE10BPC	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)
SC310EPE12B	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)
SC310EPE12BR	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310EPE12B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310EPE12B THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL



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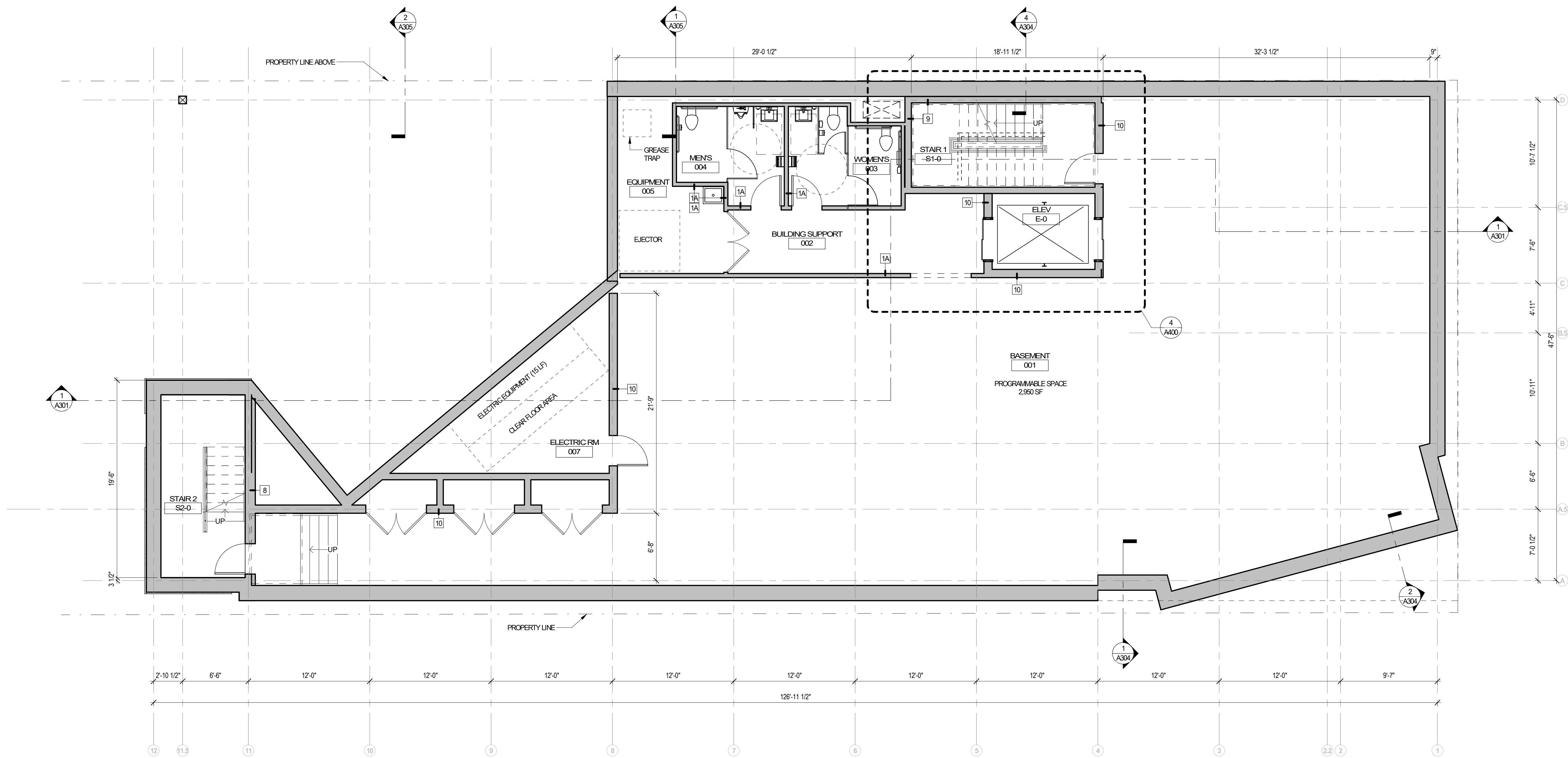
74 MAIN STREET
DURHAM, NH

CONSTRUCTION DETAILS

NO.	DATE	REVISION DESCRIPTION	ENG	DWG

DATE: 3/3/21	PROJECT #: NM18054
ENGINE'D BY: MJS	DRAWN BY: MCS
CHECK'D BY: MJS	ARCHIVE #: H-___

C502



1 BASEMENT - CONSTRUCTION PLAN OVERALL
3/16" = 1'-0"

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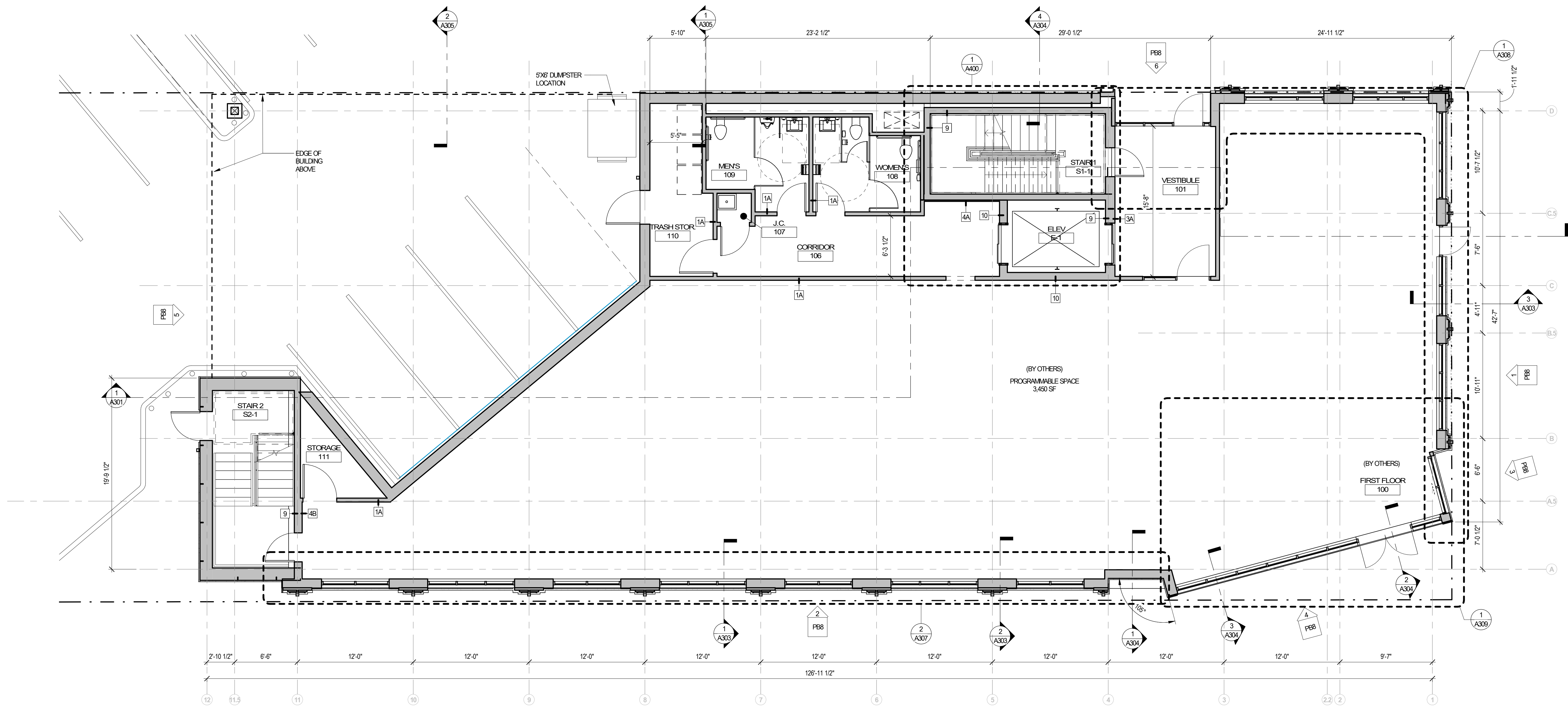
74 MAIN STREET

Durham, NH

BASEMENT

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PB1



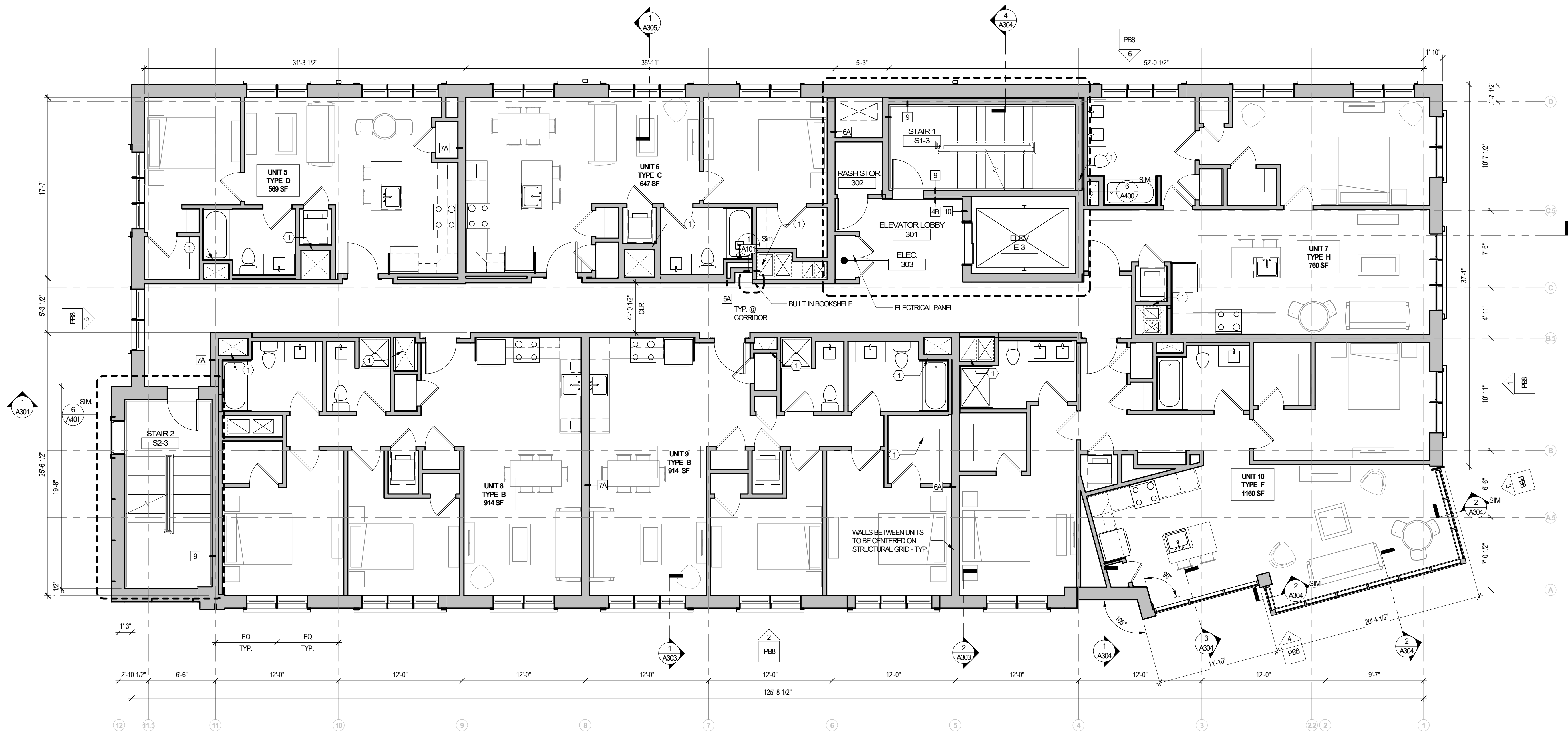
1 FIRST FLOOR - CONSTRUCTION PLAN OVERALL
3/16" = 1'-0"

Durham, NH

SECOND FLOOR

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REVIEWED BY:	Check
JOB NO:	19096

PB3



1 THIRD FLOOR - CONSTRUCTION PLAN OVERALL
3/16" = 1'-0"

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74 MAIN STREET

Durham, NH

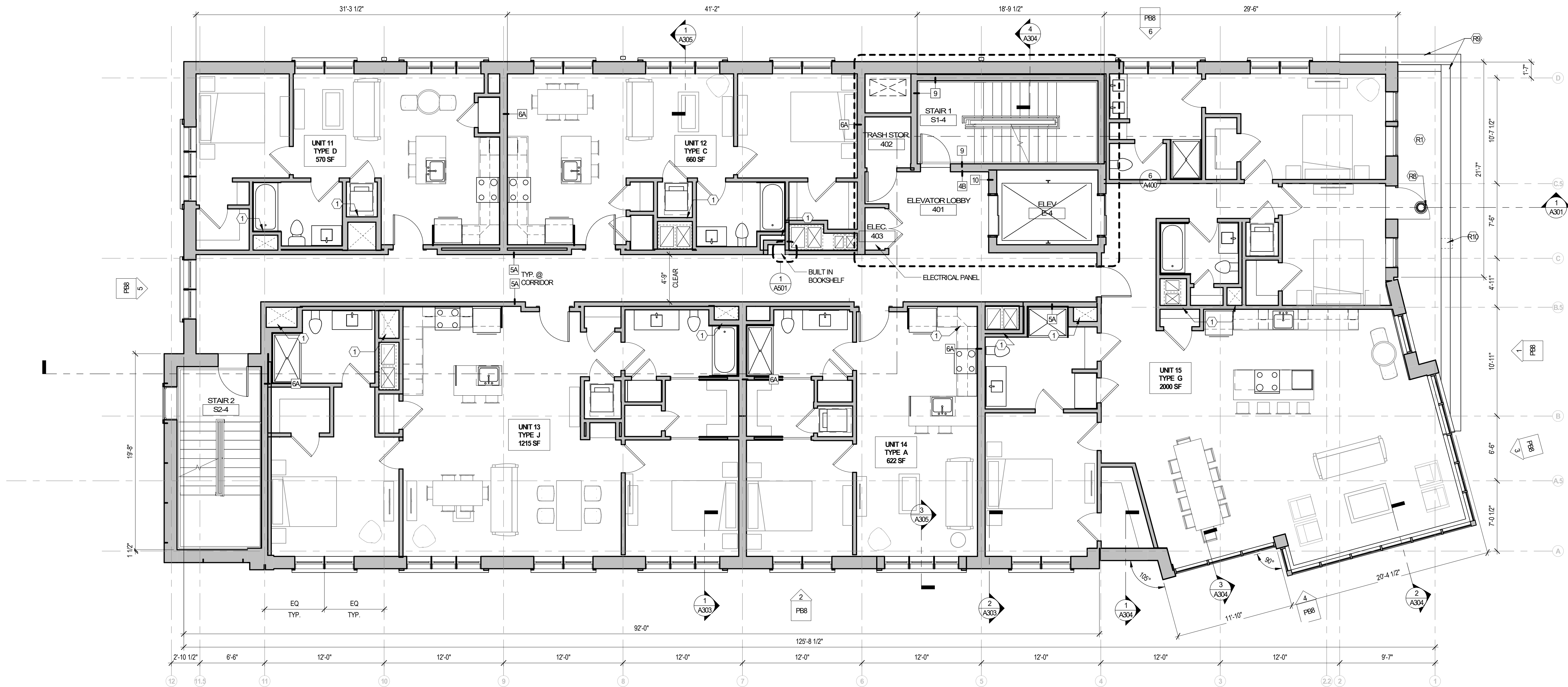
THIRD FLOOR

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PB4



1 FOURTH FLOOR - CONSTRUCTION PLAN OVERALL
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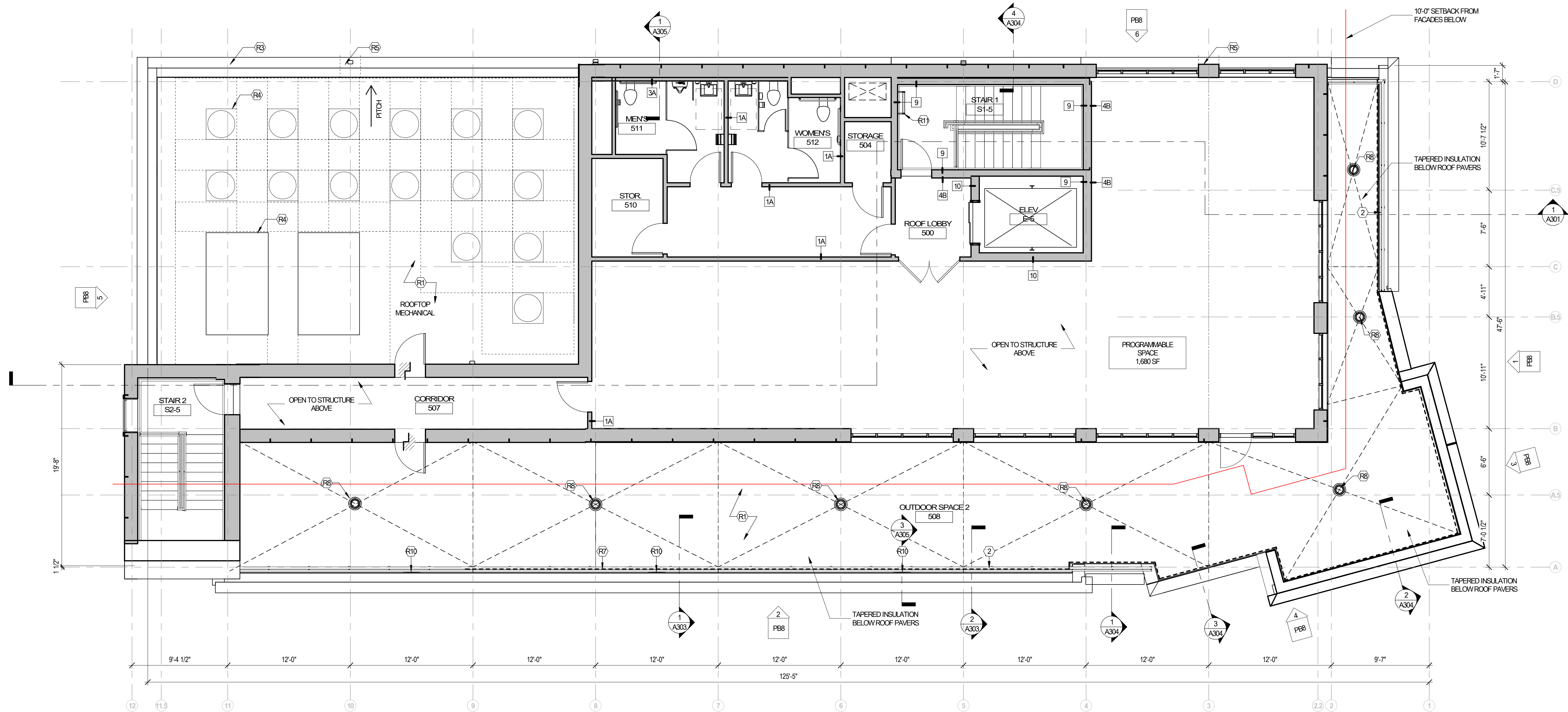
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FOURTH FLOOR

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PB5



1 FIFTH FLOOR - CONSTRUCTION PLAN OVERALL
3/16" = 1'-0"

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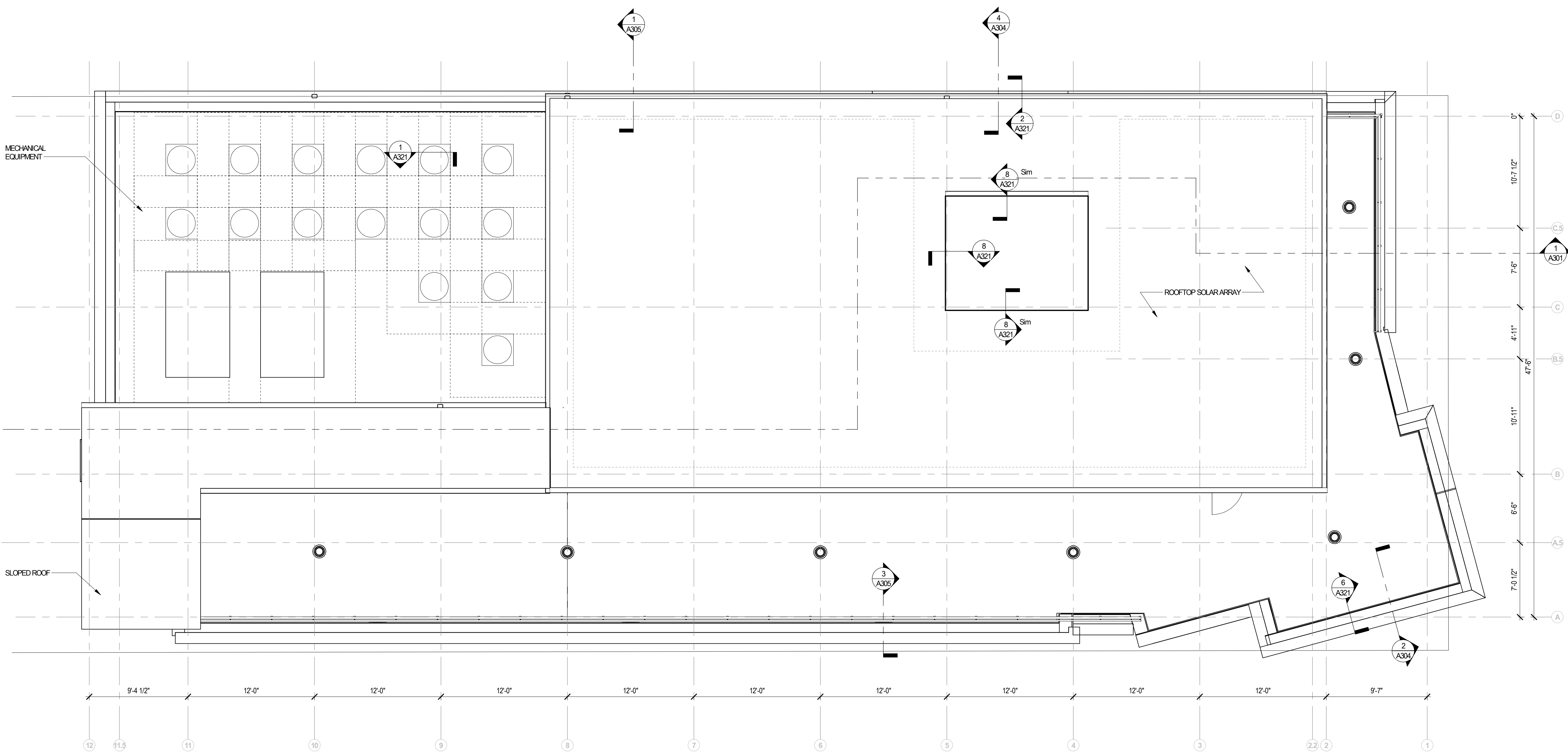
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FIFTH FLOOR

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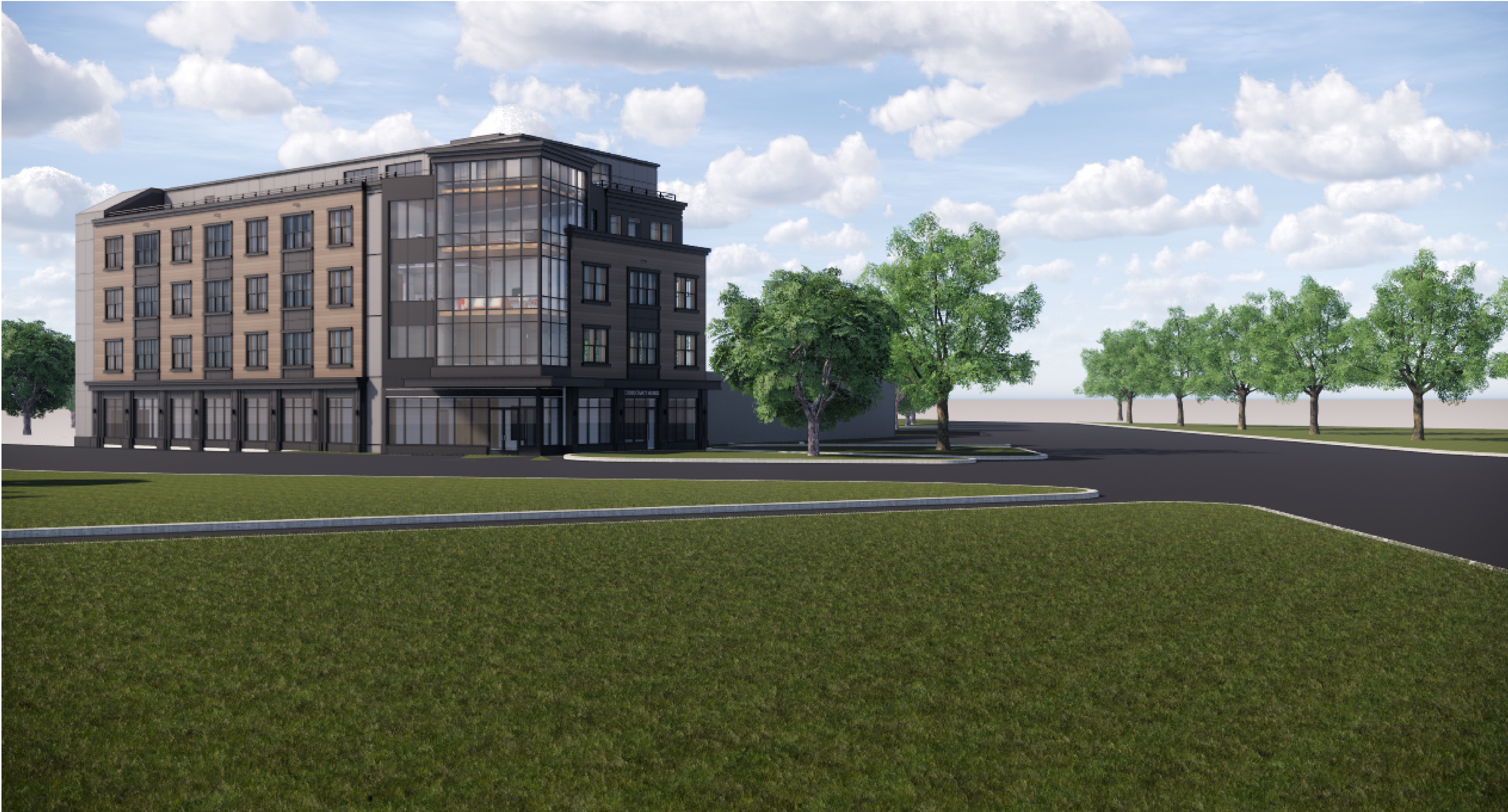
PB6



1 PH ROOF - CONSTRUCTION PLAN OVERALL
3/16" = 1'-0"

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UPPER ROOF			
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RENDERINGS

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PB9



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PB10