

LOCATION MAP  
NOT TO SCALE

# RESIDENTIAL SITE PLAN

## PAGE ROCK TOWNHOMES

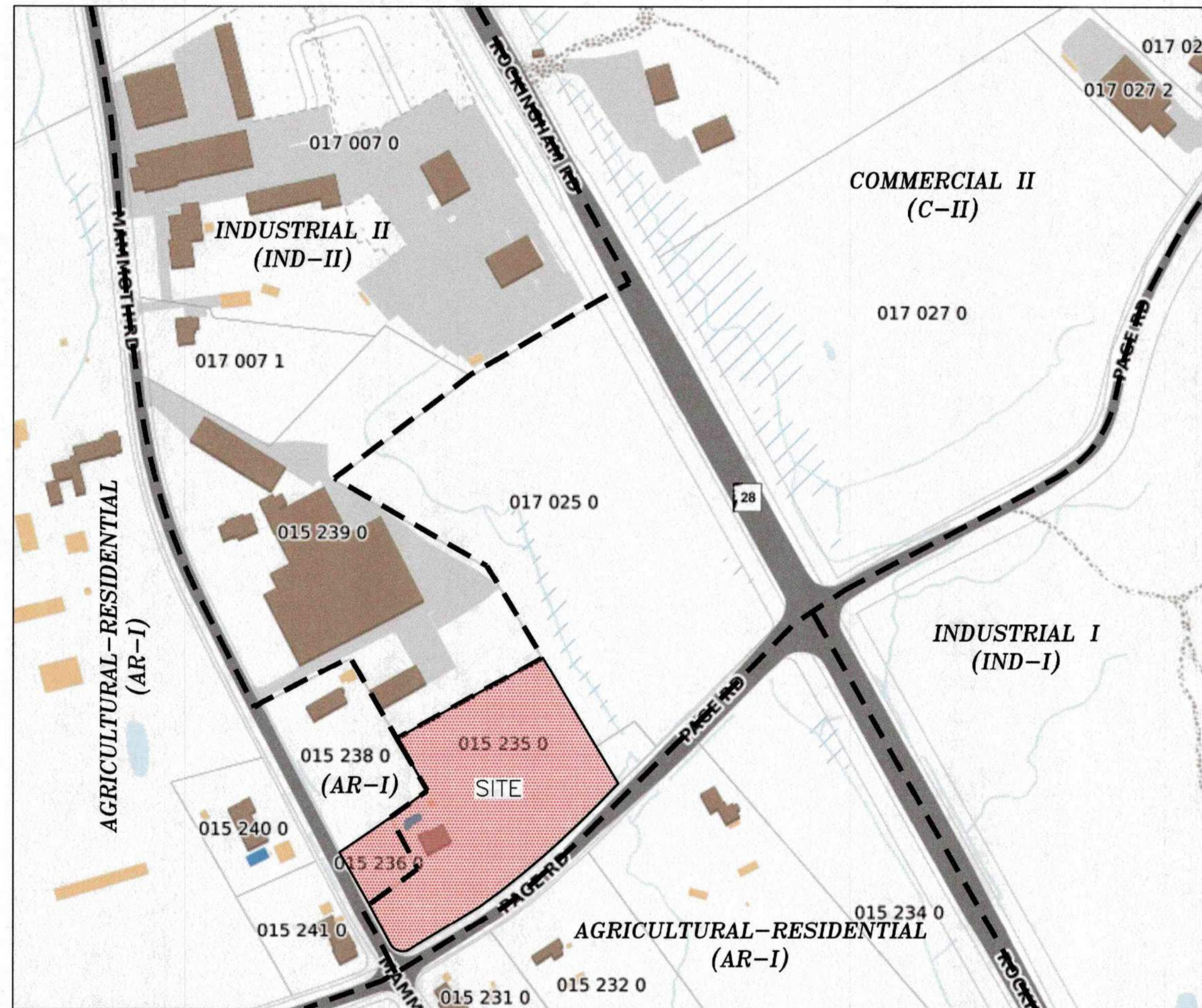
### TAX MAP 15 LOTS 235 & 236 ~ 3 PAGE ROAD

### LONDONDERRY, NEW HAMPSHIRE

TITLE	SHEET No.
PROJECT NOTES	1
EXISTING CONDITIONS PLAN	2
REMOVALS/DEMOLITION PLAN	3
RESIDENTIAL SITE PLAN	4
GRADING & DRAINAGE PLAN	5
EROSION CONTROL PLAN	6
UTILITY PLAN	7
LANDSCAPE PLAN	8
LIGHTING PLAN	9
DRIVEWAY PROFILE	10
SIGHT DISTANCE PLAN & PROFILE	11
SEWER PROFILE	12
TRUCK TURNING PLAN	13
CONSTRUCTION DETAILS	14-22
CONDOMINIUM SITE PLAN	CS1
CONDOMINIUM FLOOR PLAN	CF1-CF2
LOT CONSOLIDATION PLAN	S1
FLOOR PLANS & EXTERIOR ELEVATIONS	A1-A8

VICINITY MAP  
SCALE: 1" = 2,500'±

INDEX OF SHEETS

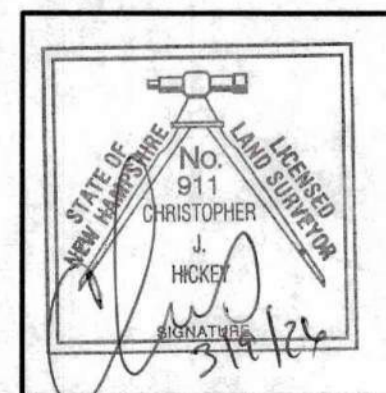


TAX MAP PLAN  
SCALE: 1" = 200'±

**ENGINEER & SURVEYOR:**  
**KEACH-NORDSTROM ASSOCIATES, INC.**  
 10 COMMERCE PARK NORTH, SUITE 3  
 BEDFORD, NEW HAMPSHIRE 03110  
 (603) 627-2881

**WETLAND SCIENTIST:**  
**CHRISTOPHER K. DANFORTH, CWS #077**  
**DANFORTH ENVIRONMENTAL CONSULTING, LLC**  
 654 NEW BOSTON ROAD  
 FRANCETOWN, NH 03043  
 (603) 547-7100

**SOIL SCIENTIST:**  
**LUKE HURLEY, CSS**  
**HURLEY ENVIRONMENTAL AND LAND PLANNING, LLC**  
 PO BOX 356  
 EPSOM, NH 03234  
 (603) 583-1745



**OWNER OF MAP 15 LOT 235**

SIGNATURE: *Deane N. Hill*  
 DATE: 2/16/2026  
 PAGE ROCK LLC

**OWNER OF MAP 15 LOT 236**

SIGNATURE: *Deane N. Hill*  
 DATE: 2/16/2026  
 PAGE ROCK LLC

**UTILITY NOTE**

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

**ZONING NOTE**

THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INTERPRETED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY KEACH-NORDSTROM ASSOCIATES, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUILDER/OWNER MUST CONSULT WITH THE TOWN/CITY TO INSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**COVER SHEET**  
**PAGE ROCK TOWNHOMES**  
 MAP 15 LOTS 235 & 236  
 3 PAGE ROAD  
 LONDONDERRY, NEW HAMPSHIRE  
 ROCKINGHAM COUNTY

LEGEND	BENCHMARK DATA			REVISIONS			APPROVED BY THE LONDONDERRY, NH PLANNING BOARD FOR PHASE _____ ON DATE: _____ CERTIFIED BY: _____
	LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	
— — — — — EXISTING PROPERTY LINE	N:155165.31, E:1054227.35	ELEV.=317.51 (NAVD88)	BENCHMARK #1 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
— — — — — DISTRICT BOUNDARY	N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

**KEACH-NORDSTROM ASSOCIATES, INC.**  
 Civil Engineering Land Surveying Landscape Architecture  
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

PROJ. NO: 21-0113-1  
 DATE: MARCH 20, 2025  
 SCALE: AS SHOWN  
 FILE NO.:  
 SHEET NO. COVER

**CHECKLIST NOTES:**

- THE PURPOSE OF THE PLAN IS TO CONSOLIDATE MAP 15 LOTS 235 AND 236 AND SHOW A PROPOSED 12-UNIT TOWNHOUSE DEVELOPMENT ALONG WITH THE ASSOCIATED SITE IMPROVEMENTS.
- OWNER OF RECORD: PAGE ROCK, LLC, 295 ROCKINGHAM ROAD, LONDONDERRY, N.H. 03053.
- MAP AND LOT NUMBERS REFERENCE THE TOWN OF LONDONDERRY TAX ASSESSORS MAP AND LOT NUMBER.
- THE SUBJECT PROPERTIES, MAP 15 LOTS 235 AND 236, ARE LOCATED IN THE TOWN OF LONDONDERRY'S COMMERCIAL II (C-II) AND AGRICULTURAL-RESIDENTIAL (AR-I) ZONING DISTRICTS, RESPECTIVELY, IN THE COMMERCIAL II DISTRICT, MULTI-FAMILY USES ARE PERMITTED BY OBTAINING A CONDITIONAL USE PERMIT. THE PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF TWO (2), SIX (6) UNIT TOWNHOUSE BUILDINGS CONSISTING OF TWO BEDROOMS PER UNIT.
- AREA OF THE SUBJECT PARCEL AFTER CONSOLIDATION: 130,815 SF OR 2.999 ACRES.
- THE SUBJECT PARCEL IS LOCATED WITHIN THE COMMERCIAL II ZONING DISTRICT (C-II).
- DIMENSIONAL REQUIREMENTS FOR PROPERTIES IN THE C-II DISTRICT ARE AS FOLLOWS:
 

	REQUIRED	PROVIDED
- MINIMUM LOT AREA	1 ACRE	2.999 ACRES (CONSOLIDATED)
- MINIMUM LOT FRONTAGE	150 FT	734.30 FT
MINIMUM BUILDING SETBACKS:		
- FRONT (BUILDING FOOTPRINT 0-75.00 SF)	60 FT	61.6 FT
- SIDE	30 FT	50.6 FT
- REAR	30 FT	30.7 FT
BUILDING HEIGHT	50 FT	30.7 FT
MAXIMUM BUILDING COVERAGE	25%	11.8%
- LANDSCAPE DIMENSIONAL REQUIREMENTS FOR PROPERTIES IN THE C-II DISTRICT:
 

	REQUIRED	PROVIDED
- MINIMUM LANDSCAPE AREA LOT COVERAGE	33%	64.6%
- MINIMUM GREEN AREA WIDTH ALONG FRONTAGE	30 FT	56.4 FT
- MINIMUM GREEN AREA WIDTH		
- SIDE	15 FT	50.6 FT
- REAR	15 FT	30.7 FT
- MAP 15 LOT 235 IS CURRENTLY DEVELOPED WITH A SINGLE FAMILY HOUSE. MAP 15 LOT 236 IS CURRENTLY UNDEVELOPED. THE PROPOSED USE IS MULTI-FAMILY HOUSING AND THE PROJECT WILL BE SERVED BY MUNICIPAL SEWER.
- THE PROJECT WILL BE SERVED BY MUNICIPAL WATER DELIVERED BY MANCHESTER WATER WORKS.
- THE PROPOSED PROJECT IS NOT SUBJECT TO PREVIOUS ZONING VARIANCE REQUESTS, DECISIONS AND RESTRICTION OF CONDITIONS.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF LONDONDERRY, NEW HAMPSHIRE, ROCKINGHAM COUNTY, COMMUNITY PANEL NUMBER 3301500317E PANEL NUMBER 317 OF 681. EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT NO PORTION OF THE SUBJECT PREMISES IS LOCATED WITHIN A DESIGNATED FLOOD ZONE.
- THE FOLLOWING STATE AND LOCAL PERMITS ARE REQUIRED FOR THIS PROJECT:
 

PERMIT TYPE	PERMIT #	APPROVAL DATE	EXPIRATION DATE
LONDONDERRY - DRIVEWAY PERMIT			
LONDONDERRY - STORMWATER PERMIT			
LONDONDERRY - SEWER PERMIT			
LONDONDERRY - CONDITIONAL USE PERMIT FOR MULTIFAMILY RESIDENTIAL USE IN C-II ZONE			
LONDONDERRY - CONDITIONAL USE PERMIT FOR DISTURBANCE IN CO DISTRICT			
NHDES - SEWER CONNECTION PERMIT		REQUIRED PRIOR TO CONSTRUCTION	
NPDES - CONSTRUCTION GENERAL PERMIT		REQUIRED PRIOR TO CONSTRUCTION	
- ALL SHEETS IN THIS PLAN SET ARE ON FILE WITH THE TOWN OF LONDONDERRY.
- IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN.
- IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN OF LONDONDERRY SITE PLAN REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".
- PARKING CALCULATIONS:
 

REQUIRED PARKING:	PROPOSED PARKING:
MULTIFAMILY (3 OR MORE UNITS)	12 GARAGE SPACES + 12 DRIVEWAY SPACES + 10 GUEST SPACES = 34 SPACES
2 SPACES PER DWELLING UNIT X 12 DWELLING UNITS = 24 SPACES	
12 GARAGE SPACES + 12 DRIVEWAY SPACES + 10 GUEST SPACES = 34 SPACES	
- DENSITY FOR LOT 235 IS CALCULATED AS FOLLOWS PER LZO 4.2.2.3(B):
 

UNUSABLE LAND = 0 SF STEEP SLOPES + 2,209 SF WETLANDS + 12,325 SF UTILITY EASEMENTS
USABLE LAND AREA = TOTAL LOT AREA - UNUSABLE LAND AREA = 130,815 SF - 14,534 SF = 116,081 SF
DENSITY = (0.8 X 116,081 SF OF 'USABLE LAND')/7,000-SF PER UNIT = 13.27 OR 13 UNITS

**GENERAL NOTES:**

- HORIZONTAL DATUM IS NAD83, VERTICAL DATUM IS NAVD83 OBTAINED FROM GPS SURVEY METHODS POST PROCESSED THROUGH NOAA-OPUS. NORTH ORIENTATION IS NAD83.
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN JANUARY OF 2022.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTER OF DEEDS. OTHER EASEMENTS, RIGHTS, AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. UTILITIES SHOWN HEREON ARE ONLY THOSE FOUND WITHIN THE AREA OF KNA FIELD SURVEY AND ARE SOLELY BASED UPON VISIBLE SURFACE EVIDENCE. PRIOR TO ANY EXCAVATION ON SITE, THE CONTRACTOR SHALL CONTACT DIG-SAFE AT 811.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK.
- THE SITE SPECIFIC SOIL SURVEY WAS PRODUCED JULY 8, 2022, AND WAS PREPARED BY LUKE HURLEY, CSS #095. THE SURVEY AREA IS LOCATED AT 295 ROCKINGHAM ROAD, LONDONDERRY, NH. SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE # 10, JANUARY 2011. THE NUMERIC LEGEND WAS AMENDED TO IDENTIFY THE CORRECT SOIL COMPONENTS OF THE COMPLEX.
- WETLANDS WERE DELINEATED BY CHRISTOPHER DANFORTH, CWS, #077, USING THE TECHNICAL CRITERIA IN THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (TECHNICAL REPORT Y-87-1, JANUARY 1987).
- REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH-CENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
- FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.2, UNITED STATES DEPARTMENT OF AGRICULTURE (2018).
- NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE, 2020 VERSION 4, FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
- U.S. ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLANT LIST, VERSION 3.5, (2020).
- CONSERVATION OVERLAY SIGNS TO BE INSTALLED ALONG THE CONSERVATION OVERLAY DISTRICT BOUNDARY, AS SHOWN ON THE PLAN.
- THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND, THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA), THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND/OR OWNER IN ORDER TO OBTAIN AND PAY FOR ALL THE NECESSARY LOCAL PERMITS, FEES AND BONDS.
- PRECONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE ARRANGED WITH THE DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES.
- THE PROJECT MUST BE BUILT AND EXECUTED AS SPECIFIED IN THE APPROVED APPLICATION PACKAGE UNLESS MODIFICATIONS ARE APPROVED BY THE PLANNING DEPARTMENT & DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES, OR IF STAFF DEEMS APPLICABLE, THE PLANNING BOARD.
- ALL OF THE DOCUMENTATION SUBMITTED IN THE APPLICATION PACKAGE BY THE APPLICANT AND ANY REQUIREMENTS IMPOSED BY OTHER AGENCIES ARE PART OF THIS APPROVAL UNLESS OTHERWISE UPDATED, REVISED, CLARIFIED IN SOME MANNER, OR SUPERSEDED IN FULL OR IN PART. IN THE CASE OF CONFLICTING INFORMATION BETWEEN DOCUMENTS, THE MOST RECENT DOCUMENTATION AND THIS NOTICE HEREIN SHALL GENERALLY BE DETERMINING.
- IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA §676:13, ALL IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- IT IS THE RESPONSIBILITY OF THE APPLICANT TO OBTAIN ALL OTHER LOCAL, STATE, AND FEDERAL PERMITS, LICENSES, AND APPROVALS WHICH MAY BE REQUIRED AS PART OF THIS PROJECT (THAT WERE NOT RECEIVED PRIOR TO CERTIFICATION OF THE PLANS). CONTACT THE BUILDING DIVISION AT EXTENSION 1 REGARDING BUILDING PERMITS.
- THE OWNER SHALL INSPECT THE ON-SITE STORMWATER MANAGEMENT FACILITIES IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN AND MAINTENANCE REQUIREMENTS LISTED ON THIS PLAN. A COPY OF ALL INSPECTION REPORTS SHALL BE MADE AVAILABLE TO THE TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING.
- IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA §676:12, ALL OFF-SITE IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY (AND/OR THE NHDOT, IF APPLICABLE) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- THE ANTICIPATED DELIVERY VEHICLES FOR THE PROJECT SITE ARE A TYPICAL POSTAL DELIVERY VEHICLE AND AN OCCASIONAL MOVING VAN.
- THE PROPOSED DUMPSTER ENCLOSURE SHALL BE THE ONLY OUTDOOR STORAGE AREA ON SITE.
- THE PROJECT HAS BEEN APPROVED WITH NO CONNECTION TO THE LONDONDERRY SEWER DIVISION.

**EROSION CONTROL NOTES:**

- TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL TITLED "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION", DATED DECEMBER 2008, AS AMENDED FROM TIME TO TIME.
- WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
- APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
- TEMPORARILY INSTALLED EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH PROJECT PLANS. IN ADDITION, SIMILAR MEASURES SHALL BE INSTALLED WHERE AND WHEN THE FIELD CONDITION, OR FIELD OPERATION OF THE INDIVIDUAL SITE CONTRACTOR, MAY WARRANT. ALL TEMPORARY EROSION CONTROL MEASURES USED SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER 0.5" OF RAINFALL OR MORE. THEY SHALL BE CLEANED AND MAINTAINED AND OTHERWISE KEPT IN AN EFFECTIVE OPERATING MANNER THROUGHOUT THE CONSTRUCTION PERIOD.

- MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENTATION.
- OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
- ALL DISTURBED AREAS ARE TO BE TURF, SHALL RECEIVE A MINIMUM APPLICATION OF 4 INCHES OF LOAM (COMPACTED THICKNESS) PRIOR TO FINAL SEEDING AND MULCHING.
- ALL SWALES AND DITCHLINES SHALL BE PERIODICALLY CLEANED OF DEPOSITED SEDIMENT SO AS TO MAINTAIN AN EFFECTIVE GRADE AND CROSS SECTION. ALL SWALES AND DITCHLINES SHALL BE FULLY STABILIZED PRIOR TO HAVING STORMWATER DIRECTED TOWARDS THEM.
- IN THE EVENT THAT CONSTRUCTION OF ANY PORTION OF THIS PROJECT, A WINTER SHUTDOWN IS NECESSARY, THE CONTRACTOR SHALL STABILIZE ALL INCOMPLETE WORK AND PROVIDE FOR SUITABLE METHODS OF DIVERTING RUNOFF IN ORDER TO ELIMINATE SHEET FLOW ACROSS FROZEN SURFACES.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - A BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
  - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
  - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- DUST SHALL BE CONTROLLED BY THE USE OF WATER AS NECESSARY THROUGHOUT THE CONSTRUCTION PERIOD, IN ACCORDANCE WITH THE TOWN OF LONDONDERRY LOCAL PERMITS.
- IN NO WAY ARE THOSE TEMPORARY EROSION CONTROL MEASURES INDICATED ON THESE PLANS TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT IN INSTALLING SUPPLEMENTARY EROSION CONTROL MEASURES WHERE AND WHEN SPECIFIC SITE CONDITIONS AND/OR CONSTRUCTION METHODOLOGIES MAY WARRANT.
- THE TOWN OF LONDONDERRY SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD IT BE NECESSARY.
- AREAS HAVING FINISH GRADE SLOPES OF 3 : 1 OR STEEPER, SHALL BE STABILIZED WITH JUTE MATTING WHEN AND IF FIELD CONDITIONS WARRANT, OR IF SO ORDERED. JUTE MATTING INSTALLED TO CONFORM WITH THE RECOMMENDED BEST MANAGEMENT PRACTICE OUTLINED IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION".
- THE EXPOSURE OF UNSTABILIZED SOILS TO 45 DAYS OR LESS.
- ALL ROADWAY AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
- EXPOSED EARTHWORK SHALL BE CONFINED TO AN AREA AS PRACTICAL AT ANY GIVEN TIME THROUGHOUT CONSTRUCTION. AT NO TIME SHALL MORE THAN FIVE (5) ACRES OF SITE AREA BE IN AN UNSTABLE CONDITION. NO GIVEN AREA OF THE SITE SHALL BE LEFT IN AN UNSTABILIZED CONDITION FOR A PERIOD OF TIME EXCEEDING THIRTY (30) CALENDAR DAYS. SHOULD THE CONTRACTOR REQUEST MORE THAN FIVE (5) AREAS BE DISTURBED AT ONE TIME THEN THE CONTRACTOR SHALL:
  - (1) SUBMIT DOCUMENTATION TO NHDES-AOT AND THE DESIGN ENGINEER, THAT THE REQUIRED AREAS OF EARTH CUTS AND FILLS ARE SUCH THAT AN AREA OF DISTURBANCE OF 5 ACRES OR LESS WOULD UNREASONABLY LIMIT THE CONSTRUCTION SCHEDULE;
  - (2) SUBMIT A CONSTRUCTION SEQUENCE PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST; AND
  - (3) EMPLOY AN ENVIRONMENTAL MONITOR DURING CONSTRUCTION.

**WINTER CONSTRUCTION NOTES:**

- ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED AND INSTALLED WITH EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3 OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON, BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED;
  - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
  - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR
  - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

**CONSTRUCTION NOTES:**

- ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN. THE DOCUMENT SHALL BE KEPT ON-SITE AND UPDATED AS NEEDED.
- CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ON-SITE STUMPS.
- ALL DRAINAGE PIPE SHALL MEET H-20 LOADING REQUIREMENTS AND SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- DRAINAGE STRUCTURE RIM ELEVATIONS ARE APPROXIMATE. ALL RIMS SHALL BE SET FLUSH WITH THE FINAL GRADE.
- PROVIDE 6" PERFORATED UNDERDRAIN AS REQUIRED BY THE TOWN ENGINEER.
- ALL HEADWALLS/RETAINING WALLS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW HAMPSHIRE.
- ALL UTILITIES SHALL BE UNDERGROUND.
- PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY COMPANIES FOR THE EXACT LOCATION, LAYOUT, CONDUIT SIZE ASSOCIATED WITH THE MAIN LINES AND CONNECTION LOCATIONS AT EACH LOT. THE UTILITY LAYOUT PLAN SHALL BE PROVIDED TO THE DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES FOR REVIEW AND APPROVAL.
- ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR TYPICAL DETAILS FOR SITE AND ROADWAY INFRASTRUCTURE, LONDONDERRY, NEW HAMPSHIRE.
- CONSTRUCTION TESTING SERVICES ARE TO BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER RETAINED BY THE CONTRACTOR. TESTING REQUIREMENTS TO BE ESTABLISHED AT THE PRECONSTRUCTION MEETING.

**CONSTRUCTION SEQUENCE:**

THE FOLLOWING CONSTRUCTION SEQUENCE IS A GENERAL GUIDELINE FOR THE CONTRACTOR TO FOLLOW. ADJUSTMENTS SHALL BE MADE DUE TO WEATHER CONDITIONS, PERMIT CONDITIONS AND/OR MARKET CONDITIONS. THE CONSTRUCTION SEQUENCE SHALL ALSO BE ADJUSTED ACCORDING TO THE REQUIREMENTS OF EACH PHASE.

- CONTRACTOR TO NOTIFY DIG-SAFE 72-HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CUT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTENT NECESSARY. ALL BRANCHES, TOPS AND BRUSH TO BE PROPERLY DISPOSED OF BY CONTRACTOR. THIS PROJECT SHALL BE MANAGED TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES.
- PRIOR TO GRUBBING OF CLEARED AREAS, ALL SILTATION BARRIERS DESIGNED FOR USE AS TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED AS CALLED FOR ON PROJECT PLANS. INSTALL STABILIZED CONSTRUCTION EXIT AT LOCATION OF CONSTRUCTION ACCESS AT LOCATION OF INTERSECTION WITH EXISTING PAVEMENT.
- COMPLETE GRUBBING OPERATIONS UNDER THE ROADWAY AND SLOPE SECTIONS. ALL STUMPS AND SIMILAR DEBRIS SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR. ORGANIC MATERIAL SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED IN UPLAND AREAS. ALL STOCKPILES SHALL BE SEEDED WITH WINTER RYE AND, IF NECESSARY, SURROUNDED WITH HAY BALES IN ORDER TO PREVENT LOSS DUE TO EROSION.
- BEGIN ANY CONSTRUCTION IF CALLED FOR IN ACCORDANCE WITH PERMIT REQUIREMENTS.
- CONSTRUCT AND STABILIZE ALL DITCHLINES AND POND(S) PRIOR TO DIRECTING FLOW INTO THEM.
- CONSTRUCT THE DRAINAGE SYSTEM, SEWER SYSTEM AND OTHER SUBSURFACE UTILITIES AS ROUGH GRADES ARE ESTABLISHED.
- COMMENCE CONSTRUCTION OF DRIVEWAY AND PARKING LOT. PERFORM EXCAVATION ACTIVITIES REQUIRED TO ACHIEVE SUBGRADE ELEVATION. ALL EXCAVATED EMBANKMENTS, DITCHES, AND SWALES SHALL BE INSTALLED AND STABILIZED. ALL SWALES AND DITCHLINES SHALL BE PROTECTED FROM EROSION BY IMPLEMENTATION OF TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON PROJECT PLANS. DIVERT STORMWATER RUNOFF THROUGH THE USE OF TEMPORARY CULVERTS, OR OTHER MEANS NECESSARY PRIOR TO THE COMPLETIONS OF A FUNCTIONAL STORM DRAINAGE SYSTEM. SLOPES AND EMBANKMENTS SHALL BE STABILIZED BY TRACKING AND TEMPORARY SEEDING WITH WINTER RYE PRIOR TO TURF ESTABLISHMENT. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO HAVING RUNOFF DIRECTED TO THEM. COMPLETE CONSTRUCTION OF DRIVEWAY AND PARKING LOT EMBANKMENTS BY ADDING APPROPRIATE BASE MATERIALS GRADED TO PROPER ELEVATION.
- APPLY TOPSOIL TO DRIVEWAY AND PARKING LOT SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC MATERIAL, SCREENED SO AS TO BE FREE OF ROOTS, BRANCHES, STONES AND OTHER DELETERIOUS MATERIALS. TOPSOIL SHALL BE APPLIED SO AS TO PROVIDE A MINIMUM OF A 4-INCH COMPACTED THICKNESS. UPON COMPLETION OF TOPSOILING, FINISHED SECTIONS ARE TO BE LIMED, SEEDED AND MULCHED. CONSTRUCTION PERSONNEL SHALL INSPECT COMPLETED SECTIONS OF WORK ON A REGULAR BASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BECOME ESTABLISHED.
- PERFORM FINE GRADING OF DRIVEWAY AND PARKING LOT BASE MATERIALS.
- PAVE DRIVEWAY AND PARKING LOT BINDER COURSE AND PLACE BITUMINOUS CURBING. TEMPORARY PAVEMENT MARKINGS AND SIGNAGE SHALL BE INSTALLED.
- UPON APPROVAL FROM THE TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES, ALL RIMS CAN BE ADJUSTED AND THE WEARING COURSE OF PAVEMENT PLACED.
- MAINTAIN, REPAIR AND REPLACE AS NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE CONSTRUCTION AREA HAS BEEN STABILIZED (A MINIMUM OF ONE WINTER SHALL HAVE PASSED).
- AFTER STABILIZATION, REMOVE AND SUITABLY DISPOSE OF TEMPORARY EROSION CONTROL MEASURES.
- MONITOR CONSTRUCTION ACTIVITIES FOR TO ENSURE CONSTRUCTION ACTIVITIES ARE BEING PERFORMED IN SUCH A WAY AS NOT TO ENDANGER THE INTEGRITY OF THE DRIVEWAY OR EMBANKMENTS, STORMWATER SYSTEMS AND UTILITIES.

**INSPECTIONS:**

- THE APPLICANT'S CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY REPORTS AND OBTAINING THE NECESSARY INSPECTIONS BY THE DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES FOR REQUIRED IMPROVEMENTS DURING CONSTRUCTION. THE NECESSARY INSPECTIONS AND REPORTS ARE AS FOLLOWS:
  - INSPECTION OF DRIVEWAY AND PARKING LOT SUBGRADE AND RELATED IMPROVEMENTS AFTER CLEARING GRUBBING AND EXCAVATION BUT PRIOR TO ANY FILLING; AND
  - INSPECTION OF THE INSTALLATION OF ALL DRAINAGE STRUCTURES, SWALES, AND OTHER DRAINAGE IMPROVEMENTS.
- DRIVEWAY AND PARKING LOT SUBGRADE INSPECTION PRIOR TO IMPORT OF GRAVELS. A COMPACTION TEST REPORT FOR REVIEW AND APPROVAL SHALL BE SUBMITTED IN COMPLIANCE WITH NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION REQUIREMENTS SHALL BE PROVIDED;
- SEVE ANALYSIS REPORTS OF GRAVELS TO BE USED IN SUBBASE IN COMPLIANCE WITH NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION REQUIREMENTS SHALL BE PROVIDED FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT;

- INSPECTION DURING PLACEMENT OF BANKRUN GRAVEL AND CRUSHED GRAVEL AND FINE GRADING PRIOR TO PLACEMENT OF PAVEMENT; COMPACTION TESTS INDICATING THE GRAVELS WERE COMPACTED IN COMPLIANCE WITH NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION REQUIREMENTS SHALL BE PROVIDED;
- INSPECTION OF BASE COURSE AND WEARING COURSE PAVEMENT INSTALLATION;
- INSPECTION OF REMOVAL OF EROSION CONTROL MEASURES;
- FINAL INSPECTIONS AS NECESSARY TO VERIFY PROPER CONSTRUCTION METHODS; AND
- CERTIFICATION STATEMENT(S) ON THE AS-BUILT PLANS VERIFYING THAT EACH ROAD INTERSECTION WAS PROPERLY CONSTRUCTED TO PROVIDE THE REQUIRED SIGHT DISTANCES. THE CERTIFICATION STATEMENT SHALL BE ENDORSED AND STAMPED BY A LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.

**BEST MANAGEMENT PRACTICES FOR BLASTING**

ALL ACTIVITIES RELATED TO BLASTING SHALL FOLLOW BEST MANAGEMENT PRACTICES (BMPs) TO PREVENT CONTAMINATION OF GROUNDWATER INCLUDING PREPARING, REVIEWING AND FOLLOWING AN APPROVED BLASTING PLAN; PROPER DRILLING, EXPLOSIVE HANDLING AND LOADING PROCEDURES; OBSERVING THE ENTIRE BLASTING PROCEDURES; EVALUATING BLASTING PERFORMANCE; AND HANDLING AND STORAGE OF BLASTED ROCK.

- LOADING PRACTICES:
  - THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
    - D. DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWATER CONDITIONS.
    - E. EXPLOSIVE PRODUCTS SHALL BE MANAGED ON SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF SITE DISPOSAL.
    - F. SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF SITE DISPOSAL.
    - G. LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED.
    - H. LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT.
    - I. CONDITIONS PRESENT TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.
  - EXPLOSIVE SELECTION.
    - POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
      - THE EXPLOSIVES ARE USED:
        - A. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION.
        - B. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER.
      - PREVENTION OF MISFIRES.
        - APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.
      - MUCK PILE MANAGEMENT.
        - MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
          - A. REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE.
          - B. MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.
    - SPILL PREVENTION AND SPILL MITIGATION.
      - PILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT. THE MEASURES SHALL INCLUDE AT A MINIMUM:
        - A. THE FUEL STORAGE REQUIREMENTS SHALL INCLUDE:
          - A.1. STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE.
          - A.2. SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY.
          - A.3. LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY.
          - A.4. INSPECT STORAGE AREAS WEEKLY.
          - A.5. COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS.
        - B.3. HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS.
        - B.4. USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES.
        - B.5. PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
      - C. THE TRAINING OF ON SITE EMPLOYEES AND THE ON SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
      - D. THE DESIGN AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT WILL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES [NOTE THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT" OR ITS SUCCESSOR DOCUMENT.

**TOWN OF LONDONDERRY PERMITS & NOTIFICATION FOR BLASTING:**

- A PERMIT TO BLAST MUST BE OBTAINED FROM THE LONDONDERRY FIRE DEPARTMENT PRIOR TO ANY BLASTING.
- PERMITS ARE REQUIRED FOR EACH INDIVIDUAL BLASTER; PERMITS WILL NOT BE ISSUED SOLELY TO BLASTING CORPORATIONS.
- PERMITTEES MUST PROVIDE THE FOLLOWING DOCUMENTATION PRIOR TO A PERMIT BEING ISSUED.
  - A. A VALID STATE OF NH CERTIFICATE OF COMPETENCY
  - B. A VALID STATE OF NH LICENSE TO PURCHASE, USE AND TRANSPORT
  - C. AN INSURANCE BINDER SPECIFICALLY COVERING BLASTING OPERATIONS FOR NOT LESS THAN ONE MILLION DOLLARS.
- NOTIFICATION MUST BE MADE TO THE LONDONDERRY FIRE DEPARTMENT NOT LESS THAN 24 HOURS PRIOR TO ANY BLAST AND NOT MORE THAN 30 MINUTES PRIOR TO EACH BLAST OR SERIES OF BLASTS.
- BLASTING HOURS SHALL BE FROM 8:00AM TO 4PM, MONDAY THROUGH SATURDAY, UNLESS OTHERWISE STATED ON THE PERMIT.
  - 7.a. 3 LONG - 5 MINUTES TO DETONATION
  - 7.b. 2 LONG - 1 MINUTE TO DETONATION
  - 7.c. DETONATE
  - 7.d. 1 LONG - ALL CLEAR
- BLAST LOTS SHALL BE USED TO COVER ALL BLASTS.
- THE PERMITTEE SHALL TAKE ALL REASONABLE PRECAUTIONS, INCLUDING BUT NOT LIMITED TO SIGNAGE, WARNING SIGNALS, FLAGS AND BARRICADES TO ENSURE THE PUBLIC SAFETY.
- WHENEVER A PRE-BLAST INSPECTION IS REQUIRED, A COPY OF THE SEISMIC GRAPH REPORT MUST BE SUBMITTED TO THE LONDONDERRY FIRE DEPARTMENT.

**WAIVER REQUESTS/CONDITIONAL USE PERMITS/VARIANCES:**

- THE FOLLOWING WAIVER IS REQUESTED FROM THE LONDONDERRY SITE PLAN REGULATIONS:
- SECTION 4.12.c.19.viii - TO WAIVE THE REQUIREMENT TO IDENTIFY TREES GREATER THAN 15" IN DIAMETER, AND SPECIES.
- THE FOLLOWING CONDITIONAL USE PERMITS ARE REQUESTED FROM THE LONDONDERRY ZONING ORDINANCE:
- SECTION 4.1.2 - TO ALLOW A MULTIFAMILY RESIDENTIAL DEVELOPMENT IN THE COMMERCIAL (C-II) ZONING DISTRICT
  - SECTION 4.6.1.4 - TO ALLOW APPROXIMATELY 1,400 SF OF DISTURBANCE WITHIN THE CONSERVATION OVERLAY DISTRICT
- THE FOLLOWING VARIANCE IS REQUESTED FROM THE LONDONDERRY ZONING ORDINANCE:
- SECTION 4.3.3.B.2 - TO ALLOW A PROPOSED DRIVEWAY AND SIX (6) PARKING SPACES WITHIN THE REQUIRED 50' LANDSCAPE BUFFER ZONE

**REFERENCE PLANS:**

- "SUBDIVISION PLAN OF LAND OF A.J. & G.Y. HUARD; SUBDIVISION PLAN OF LAND OF MR. & MRS. LEO DUBOIS," SCALE: 1"=50'. DATED: JUNE, 1969. PREPARED BY: P. BRUSQUINI P.E. R.C.R.D. PLAN #1438
- "TOWN OF LONDONDERRY, N.H. MAP 17 PARCEL 25," SCALE: 1"=50'. DATED: JANUARY, 1982. PREPARED BY: EDWARD N. HERBERT ASSOC. INC. R.C.R.D. PLAN #12463
- "RESOLUTION PLAN, OLD PAGE ROAD," SCALE: 1"=40'. DATED: JANUARY 29, 2008. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #36063
- "LOT LINE ADJUSTMENT-MAP 15 LOTS 235 & 239," SCALE: 1"=100'. DATED: JANUARY 15, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #38211
- "LOT 17-7 SUBDIVISION PLAN," SCALE: 1"=60'. DATED: DECEMBER 19, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #40123
- "PLAN OF PROPOSED FEDERAL AID PROJECT" ROCKINGHAM ROAD. SCALE: 1"=50'. LAST REVISED: DECEMBER 22, 1954 N.H. PROJECT NO. P-2979

<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	---

**PROJECT NOTES**

**PAGE ROCK TOWNHOMES**

MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY



REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

PROJ. NO: 21-0113-1

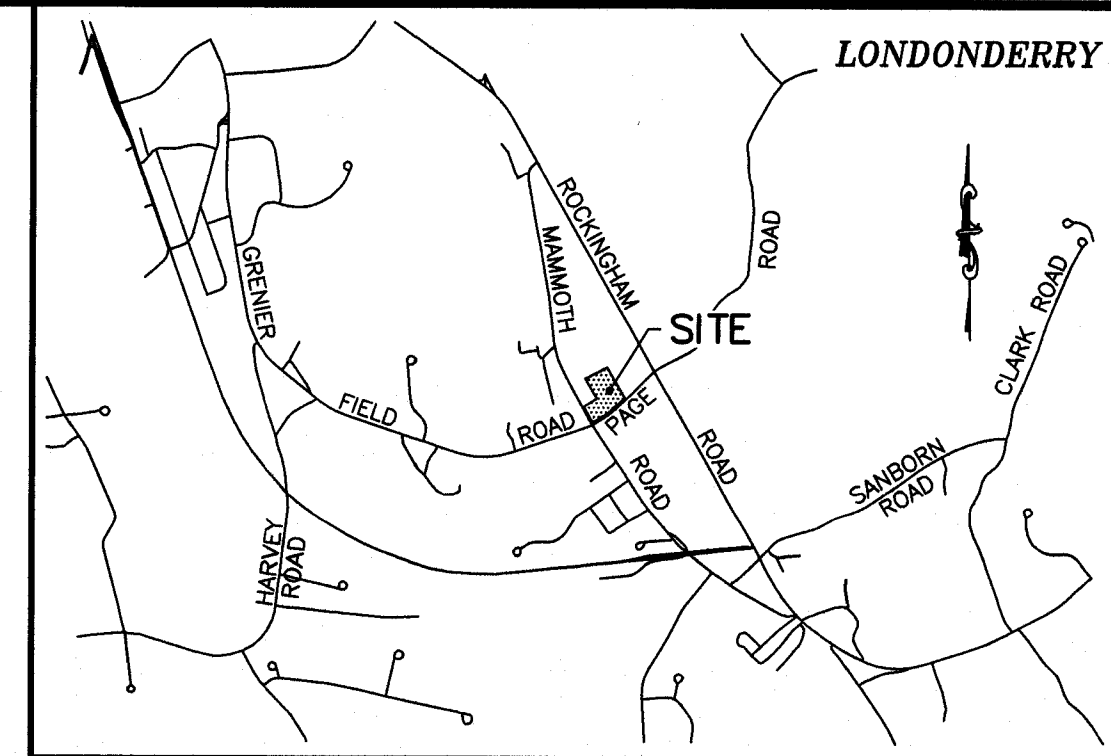
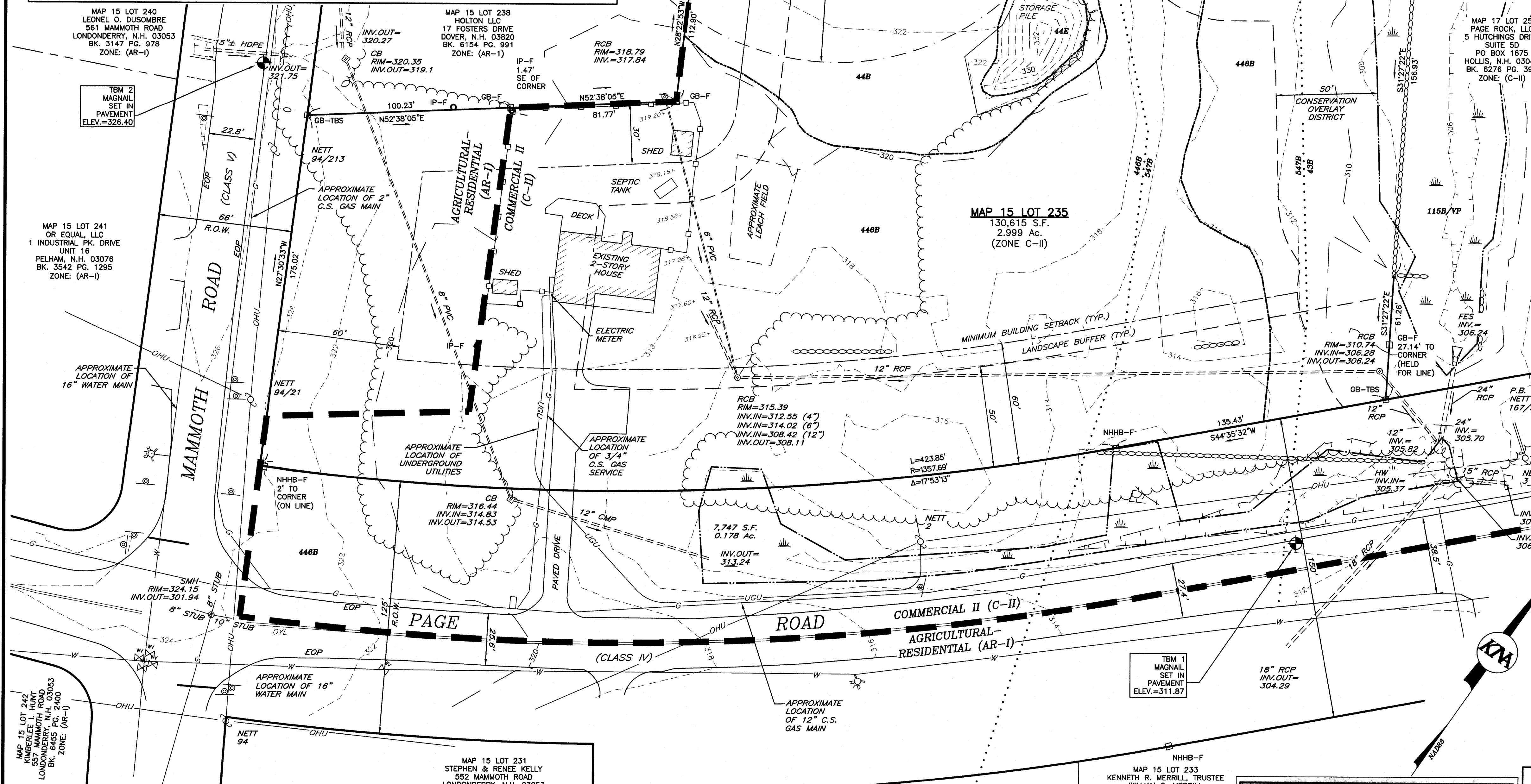
**SITE SPECIFIC SOIL MAP UNIT KEY**

SSS SYMBOL	MAP UNIT	SLOPE CLASS	HISS SYMBOL	DRAINAGE CLASS	HSG
44B	MONTAUK	0-8%	223	WELL DRAINED	C
44E	MONTAUK	25%+	223	WELL DRAINED	C
44BB	SCITUATE-NEWFIELDS COMPLEX	0-8%	323/321	MODERATELY WELL DRAINED	C
44BB	SCITUATE	0-8%	323	MODERATELY WELL DRAINED	C
115B/VP	SCARBORO	0-8%	621	VERY POORLY DRAINED	D

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERNATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP. THE SITE SPECIFIC SOIL SURVEY (SSSS) WAS PRODUCED JULY 8, 2022, AND WAS PREPARED BY LUKE HURLEY, CWS # 095, BSC, INC. THE SURVEY AREA IS LOCATED AT 295 ROCKINGHAM ROAD, LONDONDERRY, NH.

SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH. ISSUE # 10, JANUARY 2011. THE NUMERIC LEGEND WAS AMENDED TO IDENTIFY THE CORRECT SOIL COMPONENTS OF THE COMPLEX.

HYDROLOGIC SOIL GROUP FROM KSAT VALUES FOR NEW HAMPSHIRE SOILS, SOCIETY OF SOIL SCIENTISTS OF NEW ENGLAND, SPECIAL PUBLICATION NO. 5, SEPTEMBER, 2009.

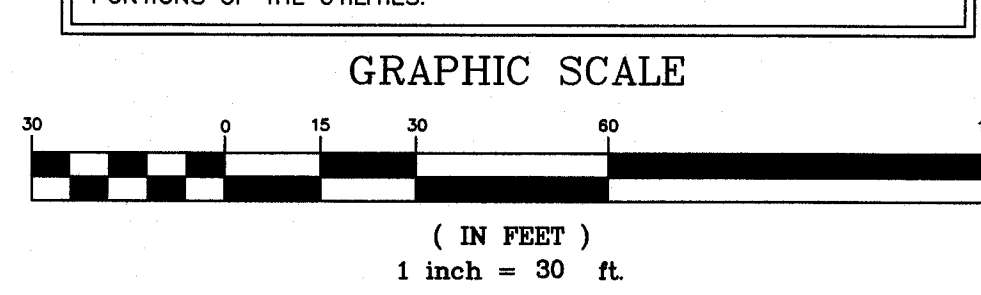


- REFERENCE PLANS:**
- "SUBDIVISION PLAN OF LAND OF A.J. & G.Y. HUARD; SUBDIVISION PLAN OF LAND OF MR. & MRS. LEO DUBOIS" SCALE: 1"=50'. DATED: JUNE, 1969. PREPARED BY: P. BRUSQUINI P.E. R.C.R.D. PLAN #1438
  - "TOWN OF LONDONDERRY, N.H. MAP 17 PARCEL 25." SCALE: 1"=50'. DATED: JANUARY, 1982. PREPARED BY: EDWARD N. HERBERT ASSOC. INC. R.C.R.D. PLAN #D-12463
  - "RESOLUTION PLAN, OLD PAGE ROAD." SCALE: 1"=40'. DATED: JANUARY 29, 2008. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-36063
  - "LOT LINE ADJUSTMENT-MAP 15 LOTS 235 & 239." SCALE: 1"=100'. DATED: JANUARY 15, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-38211
  - "LOT 17-7 SUBDIVISION PLAN." SCALE: 1"=60'. DATED: DECEMBER 19, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-40123
  - "PLAN OF PROPOSED FEDERAL AID PROJECT" ROCKINGHAM ROAD. SCALE: 1"=50'. LAST REVISED: DECEMBER 22, 1954 N.H. PROJECT NO. P-2979

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING CONDITIONS FOR CONSOLIDATED ASSESSOR'S MAP 15 LOT 235 IN LONDONDERRY, NEW HAMPSHIRE.
  - LOT AREA: 130,615 S.F. OR 2,999 ACRES
  - OWNER OF RECORD: PAGE ROCK, LLC 5 HUTCHINGS DRIVE HOLLIS, N.H. 03049 BK: 6276 PG. 399 & 402
  - THE SUBJECT PARCEL LIES WITHIN THE COMMERCIAL II (C-II) ZONING DISTRICT AND IS SUBJECT TO THE FOLLOWING DIMENSIONAL REQUIREMENTS.  
MINIMUM BUILDING SETBACKS:  
- FRONT 60 FT  
- SIDE 30 FT  
- REAR 30 FT
  - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN JANUARY OF 2022.
  - HORIZONTAL DATUM IS NAD83. VERTICAL DATUM IS NAVD88 OBTAINED FROM GPS SURVEY METHODS POST PROCESSED THROUGH NOAA-OPUS. NORTH ORIENTATION IS NAD83.
  - EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF LONDONDERRY, NEW HAMPSHIRE, ROCKINGHAM COUNTY, COMMUNITY PANEL NUMBER 330150C0317E PANEL NUMBER 317 OF 681. EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT NO PORTION OF THE SUBJECT PREMISES IS LOCATED WITHIN A DESIGNATED FLOOD ZONE.
  - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE, THE OWNER OR CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
  - EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
  - THE EXISTING HOUSE IS SERVICED BY AN INDIVIDUAL SEPTIC SYSTEM AND WELL. THE EXISTING WELL WAS NOT DISCOVERED DURING THE COURSE OF THE SURVEY.

**UTILITY NOTE**

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN DRAWN FROM FIELD SURVEY INFORMATION AND/OR PLOTTED FROM EXISTING DRAWINGS. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER, KEACH-NORDSTROM ASSOCIATES, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. KEACH-NORDSTROM ASSOCIATES, INC. HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.



**LEGEND**

NHBB-F	NH HWY BOUND FOUND	PROPERTY LINE
GB-F	GRANITE BOUND FOUND	R.O.W. LINE
IP-F	IRON PIPE FOUND	ZONE LINE
IR-S	IRON ROD SET	TREELINE
GB-TBS	GRANITE BOUND TO BE SET	STOCKADE FENCE
IR-TBS	IRON ROD TO BE SET	OVERHEAD UTILITIES
	BENCHMARK	GAS LINE
	SIGN	WATER LINE
	DRAINAGE MANHOLE	SEWER LINE
	CATCH BASIN	DRAINAGE LINE
	WATER VALVE	EDGE OF PAVEMENT
	HYDRANT	10' CONTOUR
	SEWER MANHOLE	2' CONTOUR
	FLARED END SECTION	STONEWALL
	UTILITY POLE	SCS SOIL LINE
	WELL	SSS SOIL LINE
		BUILDING SETBACK
		EASEMENT
		WETLAND BUFFER
		LANDSCAPE BUFFER

**SCS SOILS LEGEND**

43B	
44BB	SCITUATE-NEWFIELDS COMPLEX 3 TO 8 PERCENT SLOPES
547B	

SOURCE: USDA-SCS WEB SOIL SURVEY ROCKINGHAM COUNTY

**BENCHMARK DATA**

LOCATION	DATUM	DESCRIPTION
N:155165.31, E:1054227.35	ELEV.=317.51 (NAVD88)	BENCHMARK #1 - MAGNAIL SET
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET

MAP 15 LOT 231  
STEPHEN & RENEE KELLY  
552 MAMMOTH ROAD  
LONDONDERRY, N.H. 03053  
BK. 5216 PG. 2719  
ZONE: (AR-I)

MAP 15 LOT 232  
KAYLEEN M. STOWELL, TRUSTEE  
KAYLEEN M. STOWELL  
REVOCABLE TRUST  
395 MAMMOTH ROAD  
LONDONDERRY, N.H. 03053  
BK. 4887 PG. 1663  
ZONE: (AR-I)

MAP 15 LOT 233  
130,615 S.F.  
2,999 Ac.  
(ZONE C-II)

MAP 15 LOT 233  
KENNETH R. MERRILL, TRUSTEE  
WILLIAM O. MERRILL  
REVOCABLE TRUST  
569 MAMMOTH ROAD  
LONDONDERRY, N.H. 03053  
BK. 5459 PG. 2024  
ZONE: (AR-I)

**WETLAND CERTIFICATION:**

JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED IN JANUARY OF 2022 BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES: A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE 2020 NATIONAL WETLAND PLANT LIST, NWPL 2020 VERSION 3.5 HTTP://WETLAND-PLANTS.USACE.ARMY.MIL

**SURVEYOR'S CERTIFICATION:**

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE DURING JANUARY OF 2022. SAID SURVEY HAS A RELATIVE ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) OR BETTER.

*Christopher K. Danforth*  
3/9/26  
LICENSED LAND SURVEYOR DATE

**OWNER OF MAP 15 LOT 235**

SIGNATURE: *Deane Nuel*  
PAGE ROCK LLC  
DATE: 2/16/2026

**OWNER OF MAP 15 LOT 236**

SIGNATURE: *Deane Nuel*  
PAGE ROCK LLC  
DATE: 2/16/2026

**REVISIONS**

NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**LOT 235 OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 50  
HOLLIS, N.H. 03049

**LOT 236 OWNER**  
PAGE ROCK, LLC  
PO BOX 1675  
HOLLIS, N.H. 03049

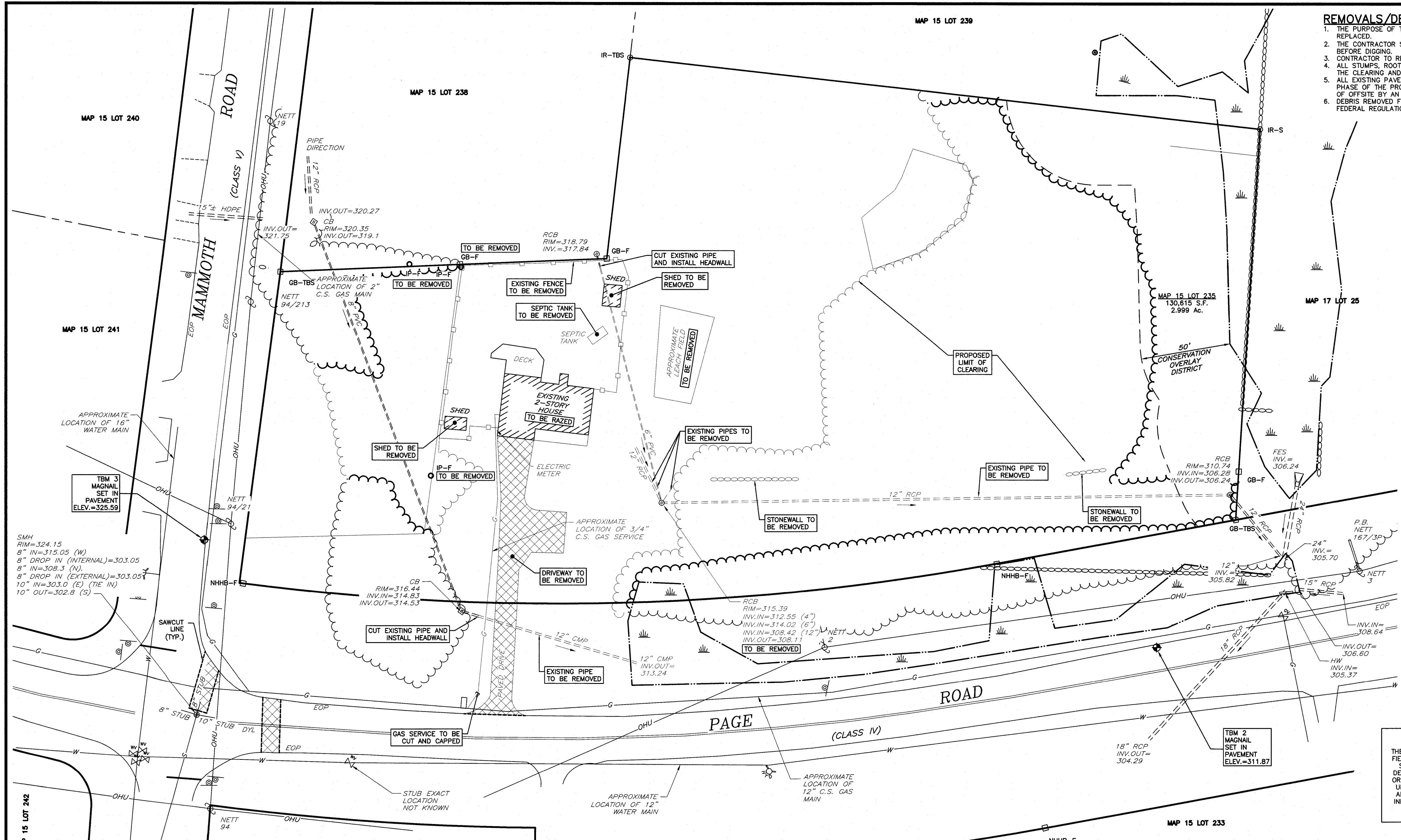
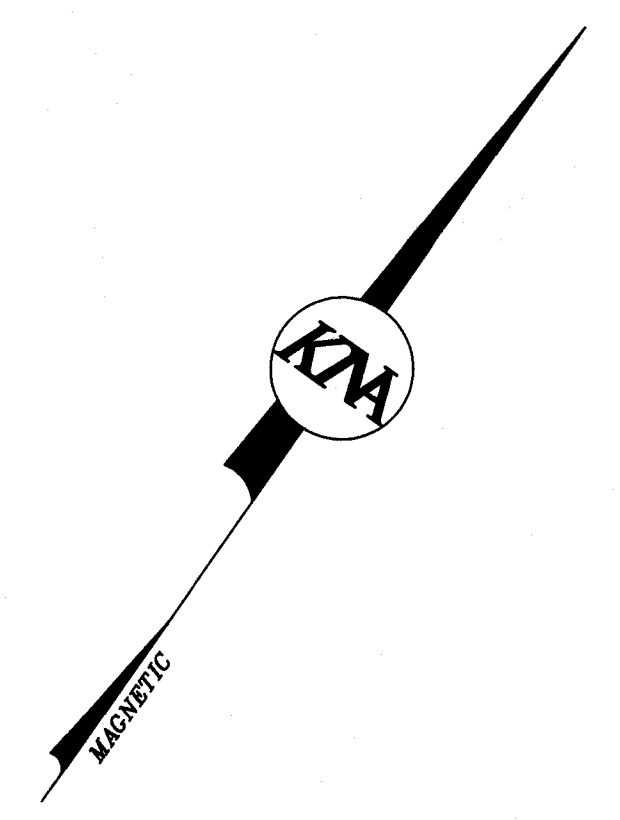
**EXISTING CONDITIONS PLAN**  
**PAGE ROCK TOWNHOMES**

MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: 1" = 30'  
FILE NO.:  
SHEET NO. 2 OF 22

**KEACH-NORDSTROM ASSOCIATES, INC.**  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

- REMOVALS/DEMOLITION NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING FEATURES ON SITE TO BE REMOVED, SALVAGED OR REPLACED.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
  3. CONTRACTOR TO REMOVE AND SALVAGE ITEMS SHOWN.
  4. ALL STUMPS, ROOTS, BRANCHES, BRUSH, WOODS AND OTHER PERISHABLE MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF BY AN APPROVED METHOD.
  5. ALL EXISTING PAVEMENT WITHIN THE CROSS HATCHED AREA IS TO BE REMOVED DURING THE DEMOLITION PHASE OF THE PROJECT. EXCESS MATERIAL FROM THESE AREAS SHALL BE APPROPRIATELY DISPOSED OF OFFSITE BY AN APPROVED METHOD.
  6. DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.



SEE COVER FOR NOTES AND REFERENCE PLANS

**UTILITY NOTE**  
 THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

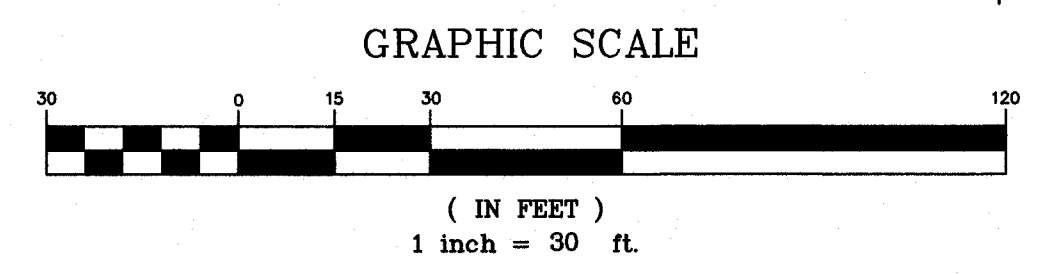
<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**REMOVALS/DEMOLITION PLAN**  
**PAGE ROCK TOWNHOMES**  
 MAP 15 LOTS 235 & 236  
 3 PAGE ROAD  
 LONDONDERRY, NEW HAMPSHIRE  
 ROCKINGHAM COUNTY

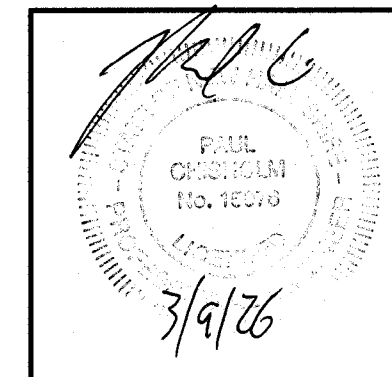
<b>KMA</b> KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881	PROJ. NO: 21-0113-1 DATE: MARCH 20, 2025 SCALE: 1" = 30' FILE NO.: SHEET NO. 3 OF 22
---	--

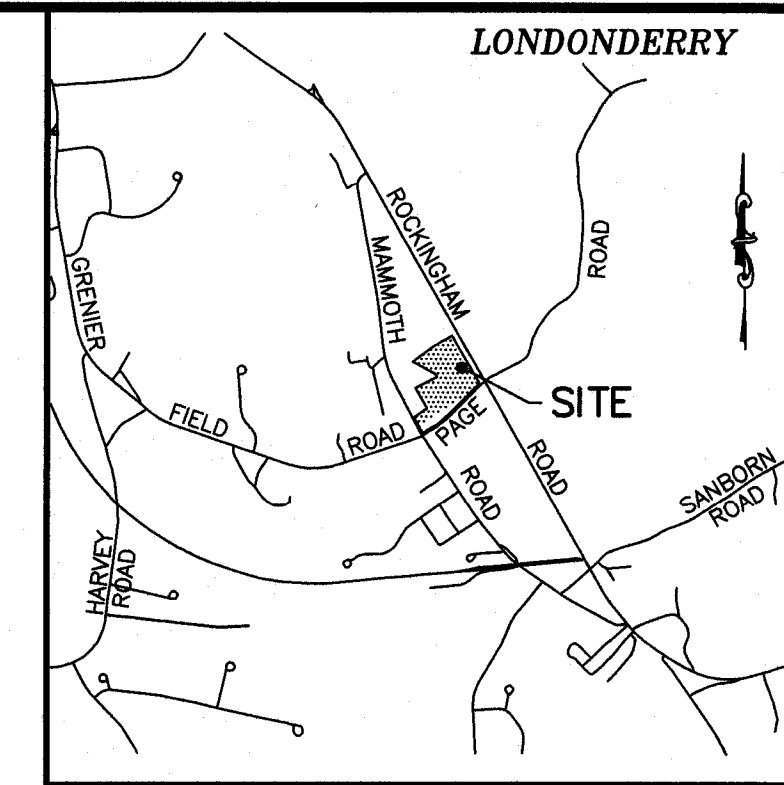
**LEGEND**

NH-HB-F	NH HWY BOUND FOUND	PROPERTY LINE
GB-F	GRANITE BOUND FOUND	R.O.W. LINE
IP-F	IRON PIPE FOUND	TREELINE
IR-S	IRON ROD SET	OVERHEAD UTILITIES
GB-TBS	GRANITE BOUND TO BE SET	EDGE OF PAVEMENT
IR-TBS	IRON ROD TO BE SET	STONEWALL
BENCHMARK		BUILDING SETBACK
SIGN		EASEMENT
DRAINAGE MANHOLE		WETLAND BUFFER
CATCH BASIN		LANDSCAPE BUFFER
WATER VALVE		PROPOSED TREELINE
HYDRANT		SAWCUT LINE
SEWER MANHOLE		PAVEMENT TO BE REMOVED
FLARED END SECTION		
UTILITY POLE		
WELL		

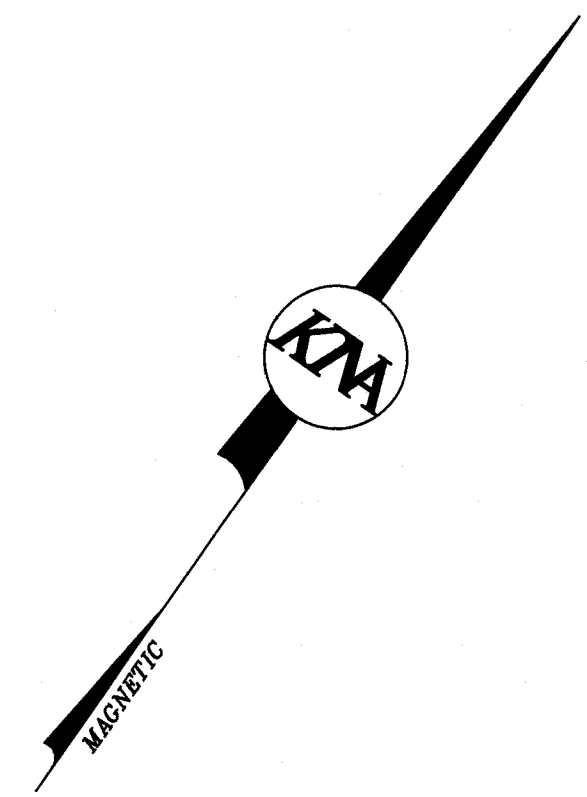


BENCHMARK DATA			REVISIONS			
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM





VICINITY MAP  
SCALE: 1" = 2,500'±



**OWNER OF MAP 15 LOT 235**  
 SIGNATURE: *Deane Nihil*  
 PAGE ROCK, LLC  
 DATE: 2/16/2026

**OWNER OF MAP 15 LOT 236**  
 SIGNATURE: *Deane Nihil*  
 PAGE ROCK, LLC  
 DATE: 2/16/2026

SEE COVER FOR NOTES  
AND REFERENCE PLANS

**ZONING NOTE**  
 THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INTERPRETED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY KEACH-NORDSTROM ASSOCIATES, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY, SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUILDER/OWNER MUST CONSULT WITH THE TOWN/CITY TO INSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

**LOT 235 OWNER/APPLICANT:**  
 PAGE ROCK, LLC  
 5 HUTCHINGS DRIVE, SUITE 5D  
 HOLLIS, N.H. 03049

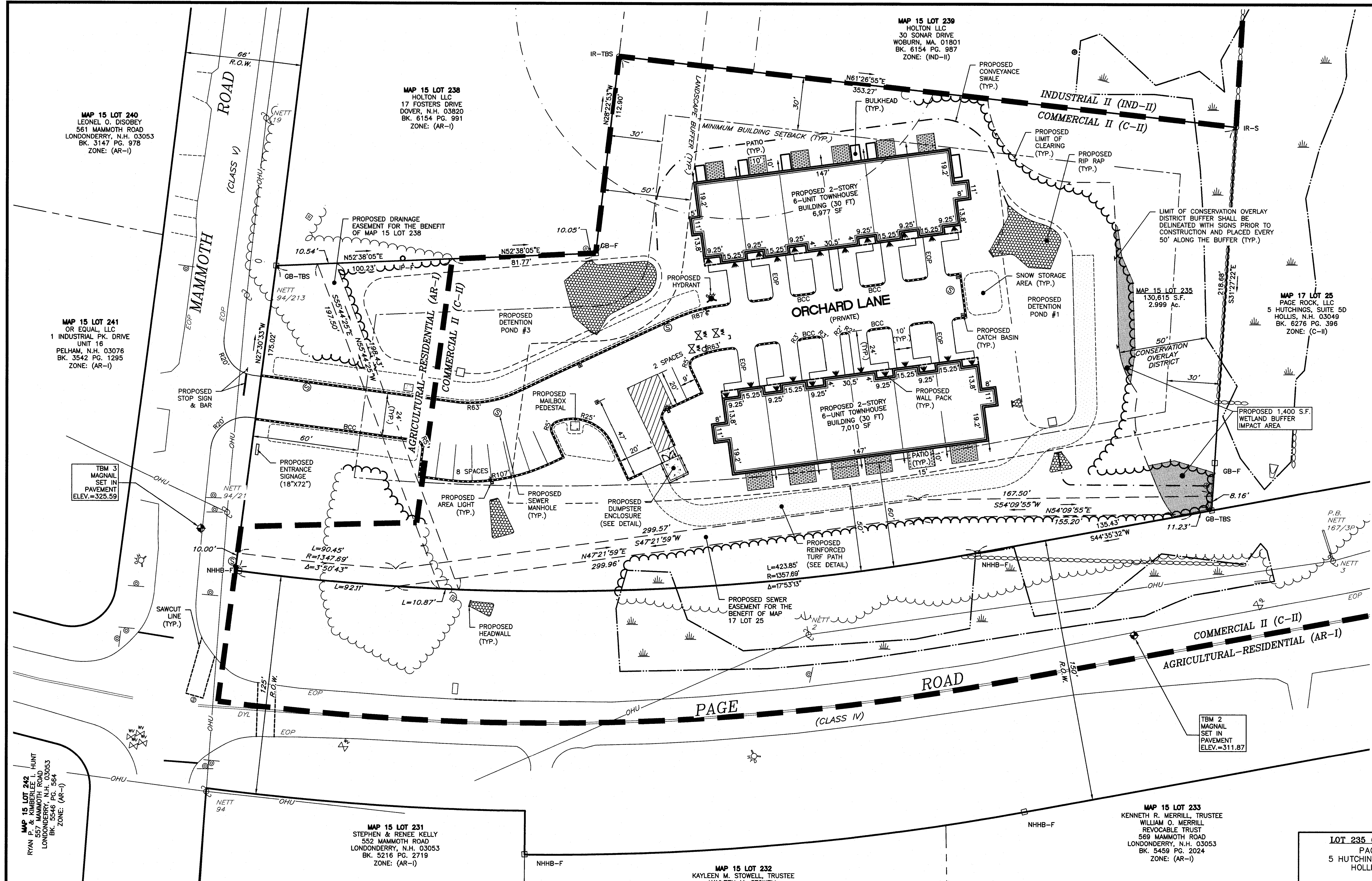
**LOT 236 OWNER:**  
 PAGE ROCK, LLC  
 PO BOX 1675  
 HOLLIS, N.H. 03049

**RESIDENTIAL SITE PLAN**

**PAGE ROCK TOWNHOMES**

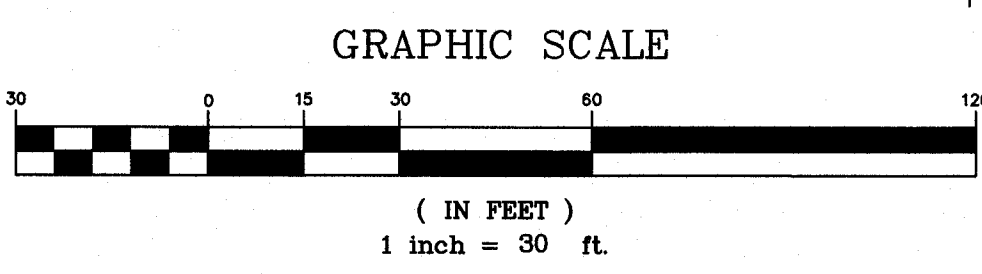
MAP 15 LOTS 235 & 236  
 3 PAGE ROAD  
 LONDONDERRY, NEW HAMPSHIRE  
 ROCKINGHAM COUNTY

**PROJ. NO:** 21-0113-1  
**DATE:** MARCH 20, 2025  
**SCALE:** 1" = 30'  
**FILE NO.:**  
**SHEET NO.** 4 OF 22



**LEGEND**

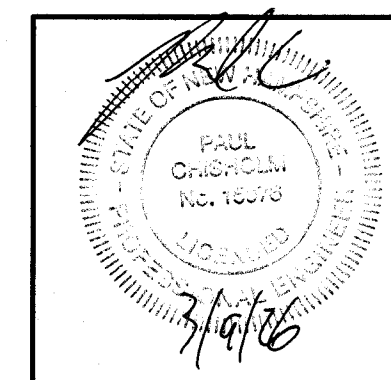
NH-HB-F	NH HWY BOUND FOUND	---	PROPERTY LINE
GB-F	GRANITE BOUND FOUND	---	R.O.W. LINE
IP-F	IRON PIPE FOUND	---	ZONE LINE
IR-S	IRON ROD SET	---	TREELINE
GB-TBS	GRANITE BOUND TO BE SET	---	OVERHEAD UTILITIES
IR-TBS	IRON ROD TO BE SET	---	EDGE OF PAVEMENT
BENCHMARK	BENCHMARK	---	STONEWALL
SIGN	SIGN	---	BUILDING SETBACK
DRAINAGE MANHOLE	DRAINAGE MANHOLE	---	EASEMENT
CATCH BASIN	CATCH BASIN	---	WETLAND BUFFER
WATER VALVE	WATER VALVE	---	LANDSCAPE BUFFER
HYDRANT	HYDRANT	---	PROPOSED TREELINE
SEWER MANHOLE	SEWER MANHOLE	---	PROPOSED EOP
FLARED END SECTION	FLARED END SECTION	---	PROPOSED BIT, CURB
UTILITY POLE	UTILITY POLE	---	PROPOSED RET. WALL
WELL	WELL	---	PROPOSED GUARDRAIL
		---	PROPOSED SWALE
		---	SNOW STORAGE AREA
		---	PROPOSED RIP RAP

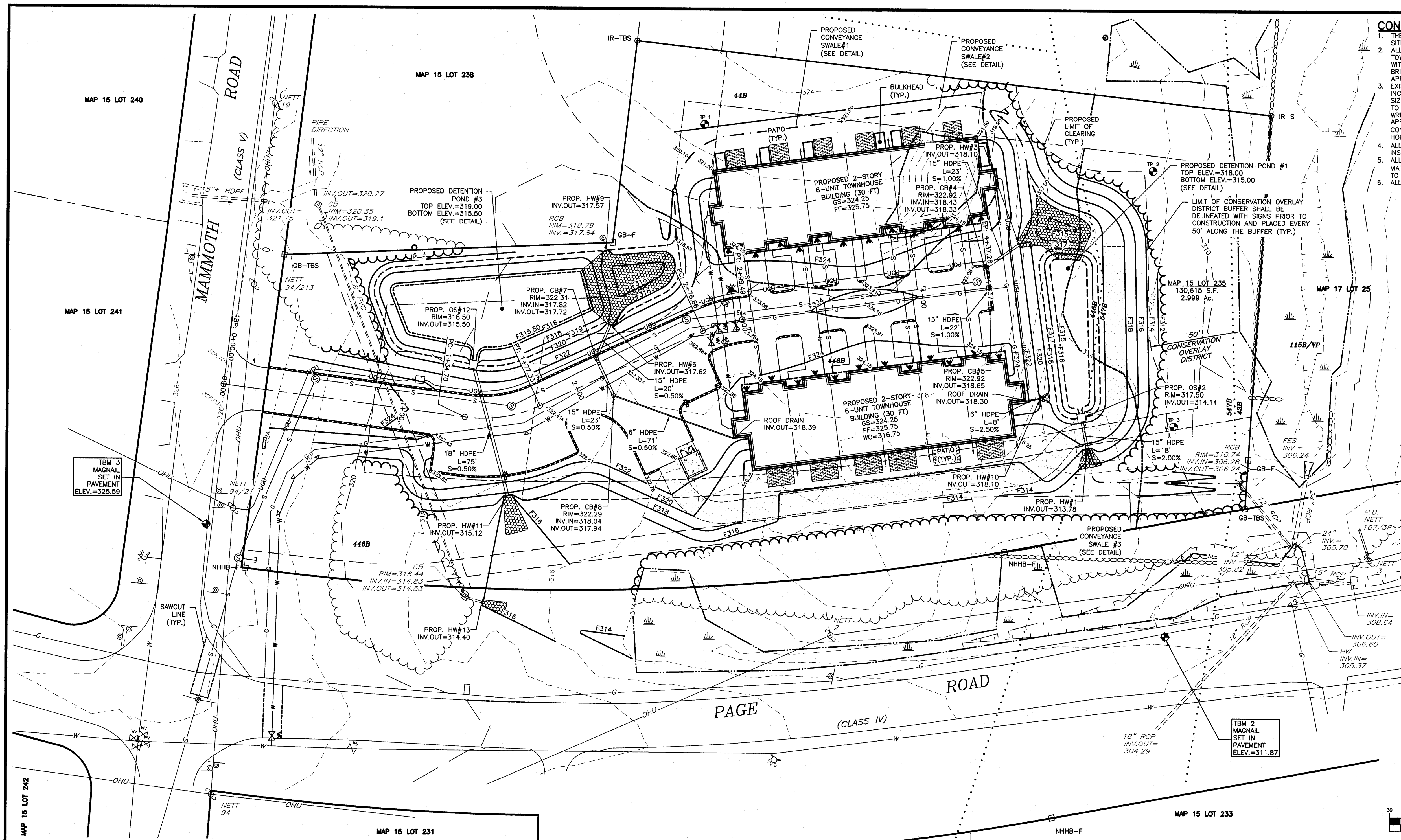


**BENCHMARK DATA**

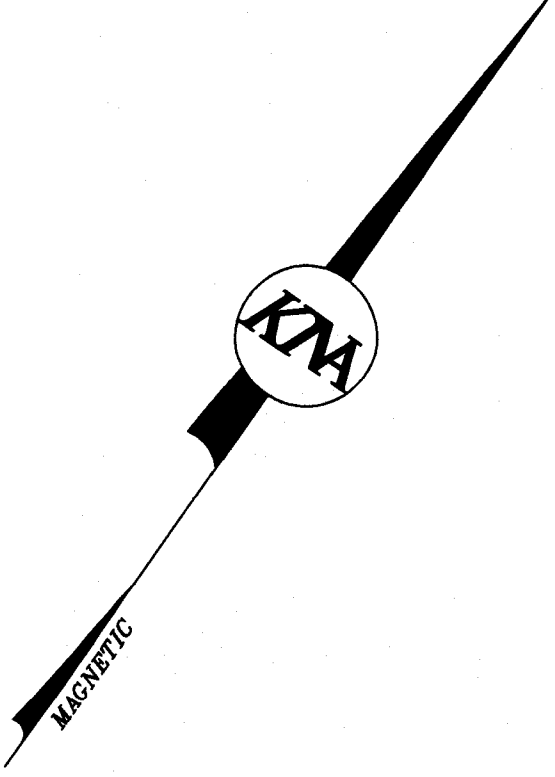
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:154442.42, E:1054087.85	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

APPROVED BY THE LONDONDERRY, NH PLANNING BOARD FOR PHASE \_\_\_\_\_  
 ON DATE: \_\_\_\_\_  
 CERTIFIED BY: \_\_\_\_\_



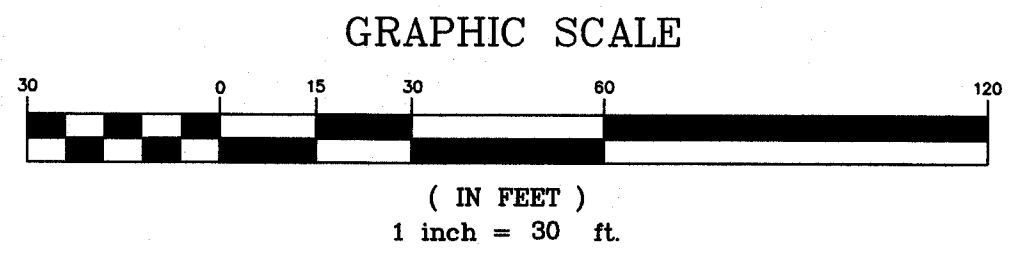


- CONSTRUCTION NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING AND DRAINAGE FOR THIS SITE.
  2. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
  3. EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE IN LOCATION AND POSSIBLY INCOMPLETE. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT SIZE, LOCATION, DEPTH AND EXISTENCE OF ALL EXISTING UNDERGROUND UTILITIES THAT ARE TO BE ACCESSED OR CROSSED DURING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND THE APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
  4. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  5. ALL FILL EMBANKMENT SLOPES SHALL BE PROPERLY PREPARED AND CONSTRUCTED WITH FILL MATERIAL CONFORMING TO NHDOT ITEM NO. 203.6 (EMBANKMENT IN PLACE) AND COMPACTED TO 92% OF MAX.
  6. ALL DISTURBED AREAS ARE TO BE LOAMED AND SEED.



- SCS SOILS LEGEND**
- 43B** CANTON FINE SANDY LOAM  
0 TO 8 PERCENT SLOPES, VERY STONY
  - 446B** SCITUATE-NEWFIELDS COMPLEX  
3 TO 8 PERCENT SLOPES
  - 547B** WALPOLE VERY FINE SANDY LOAM  
3 TO 8 PERCENT SLOPES, VERY STONY
- SOURCE: USDA-SCS WEB SOIL SURVEY  
ROCKINGHAM COUNTY

**LOAM & SEED ALL DISTURBED AREAS UNLESS OTHERWISE SPECIFIED (TYP.)**



**LEGEND**

NHHB-F	NH HWY BOUND FOUND	---	DRAINAGE LINE
GB-F	GRANITE BOUND FOUND	---	EDGE OF PAVEMENT
IP-F	IRON PIPE FOUND	---	TREELINE
IR-S	IRON ROD SET	---	10' CONTOUR
GB-TBS	GRANITE BOUND TO BE SET	---	2' CONTOUR
IR-TBS	IRON ROD TO BE SET	---	STONEWALL
⊙	BENCHMARK	---	SCS SOIL LINE
⊙	SIGN	---	SSS SOIL LINE
⊙	DRAINAGE MANHOLE	---	BUILDING SETBACK
⊙	CATCH BASIN	---	EASEMENT
⊙	WATER VALVE	---	WETLAND BUFFER
⊙	HYDRANT	---	LANDSCAPE BUFFER
⊙	SEWER MANHOLE	---	PROPOSED UG UTILITIES
⊙	FLARED END SECTION	---	PROPOSED GAS LINE
⊙	UTILITY POLE	---	PROPOSED WATER LINE
⊙	WELL	---	PROPOSED SEWER LINE
---	PROPERTY LINE	---	PROPOSED DRAINAGE LINE
---	R.O.W. LINE	---	PROPOSED TREELINE
---	OVERHEAD UTILITIES	---	PROPOSED EOP
---	GAS LINE	---	PROPOSED BIT. CURB
---	WATER LINE	---	PROPOSED 2' CONTOUR
---	SEWER LINE	---	PROPOSED SWALE
		---	PROPOSED RET. WALL
		---	PROPOSED GUARDRAIL
		---	PROPOSED RIP RAP

**SITE SPECIFIC SOIL MAP UNIT KEY**

SYMBOL	MAP UNIT	SLOPE CLASS	DRAINAGE CLASS	HSG
44B	MONTAUK	0-8%	WELL DRAINED	C
446B	SCITUATE-NEWFIELDS COMPLEX	0-8%	MODERATELY WELL DRAINED	C
115B/VP	SCARBORO VERY POORLY DRAINED	0-8%	VERY POORLY DRAINED	D

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR INFILTRATION REQUIREMENTS BY THE NH DES ALTERATION OF TERRAIN BUREAU. IT WAS PRODUCED BY A PROFESSIONAL SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A REPORT THAT ACCOMPANIES THIS MAP.

THE SITE SPECIFIC SOIL SURVEY (SSSS) WAS PRODUCED JULY 8, 2022, AND WAS PREPARED BY LUKE HURLEY, CWS # 095, BSC, INC. THE SURVEY AREA IS LOCATED AT 295 ROCKINGHAM ROAD, LONDONDERRY, NH.

SOILS WERE IDENTIFIED WITH THE NEW HAMPSHIRE STATE-WIDE NUMERICAL SOILS LEGEND, USDA NRCS, DURHAM, NH, ISSUE # 10, JANUARY 2011. THE NUMERIC LEGEND WAS AMENDED TO IDENTIFY THE CORRECT SOIL COMPONENTS OF THE COMPLEX.

HYDROLOGIC SOIL GROUP FROM KSAT VALUES FOR NEW HAMPSHIRE SOILS, SOCIETY OF SOIL SCIENTISTS OF NEW ENGLAND, SPECIAL PUBLICATION NO. 5, SEPTEMBER, 2009.

**UTILITY NOTE**

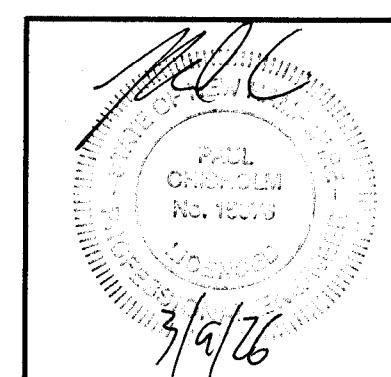
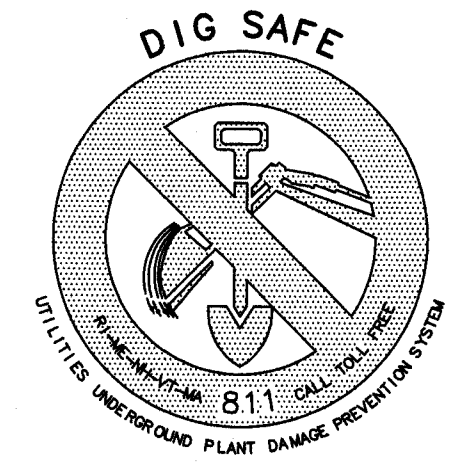
THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

**BENCHMARK DATA**

LOCATION	DATUM	DESCRIPTION	NO.	DATE
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26

**REVISIONS**

DESCRIPTION	BY
ENGINEERING & DRC REVISIONS	PCM
ENGINEERING REVS	PCM



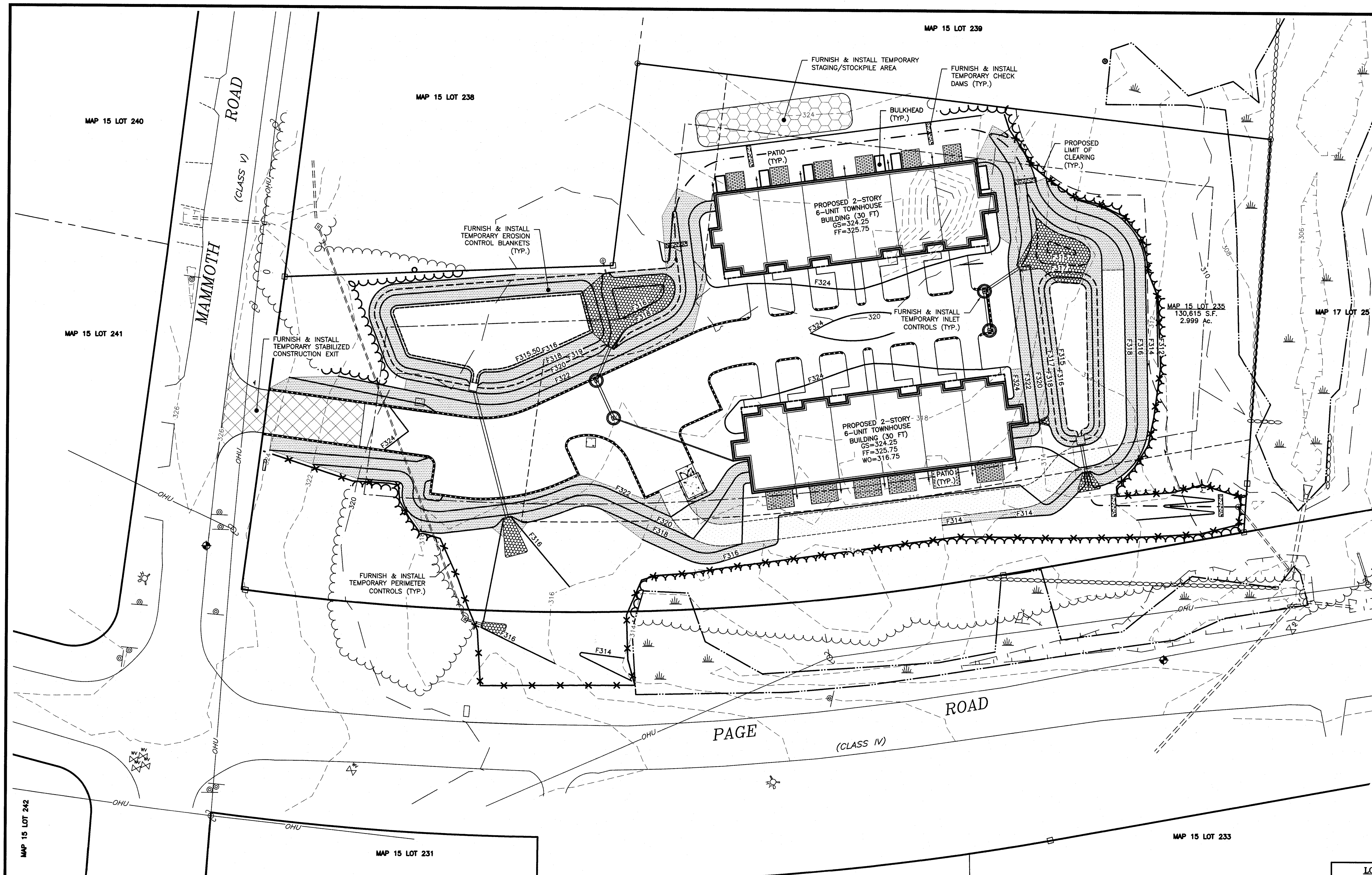
**LOT 235 OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049

**LOT 236 OWNER:**  
PAGE ROCK, LLC  
PO BOX 1675  
HOLLIS, N.H. 03049

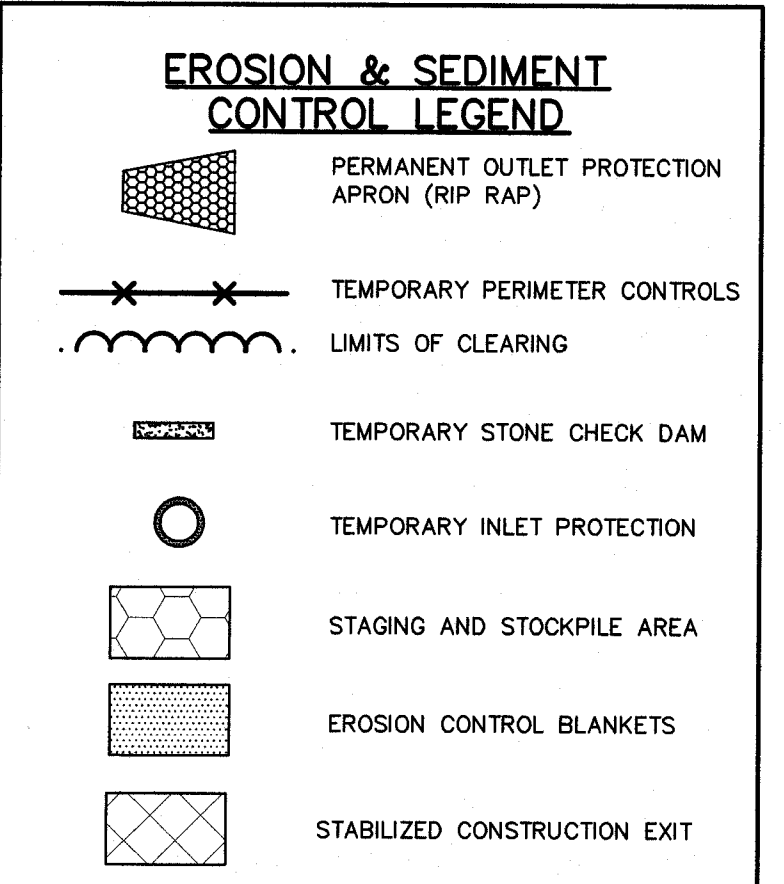
**GRADING & DRAINAGE PLAN**  
**PAGE ROCK TOWNHOMES**  
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**KMA KEACH-NORDSTROM ASSOCIATES, INC.**  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: 1" = 30'  
FILE NO.:  
SHEET NO. 5 OF 22



- EROSION CONTROL NOTES:**
1. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL TITLED "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION," DATED DECEMBER 2008, AS AMENDED FROM TIME TO TIME.
  2. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION.
  3. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
  4. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
  5. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES.
  6. OFFSITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
  7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
  8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
  9. THE OWNER IS RESPONSIBLE FOR FINAL STABILIZATION OF ALL SLOPES GREATER THAN 3:1 TO THE SATISFACTION OF LONDONDERRY DPW.
  10. THE TOWN OF LONDONDERRY SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.



**LOAM & SEED ALL DISTURBED AREAS (TYP.)**

**LEGEND**

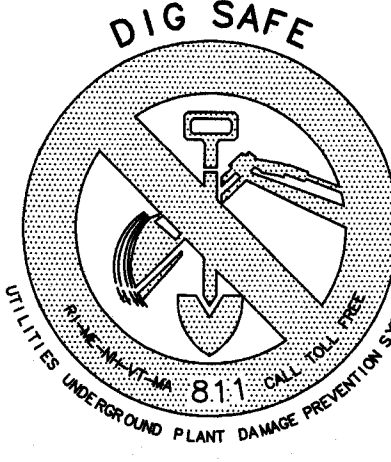
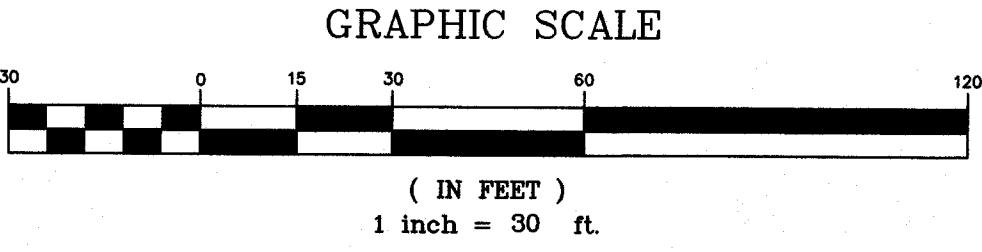
▣ NHHB-F	NH HWY BOUND FOUND	—	PROPERTY LINE
▣ GB-F	GRANITE BOUND FOUND	—	R.O.W. LINE
○ IP-F	IRON PIPE FOUND	—	DRAINAGE LINE
○ IR-S	IRON ROD SET	—	OVERHEAD UTILITIES
⊕	BENCHMARK	—	EDGE OF PAVEMENT
⊙	SIGN	—	10' CONTOUR
⊙	DRAINAGE MANHOLE	—	2' CONTOUR
⊙	CATCH BASIN	—	STONEWALL
⊙	WATER VALVE	—	TREELINE
⊙	HYDRANT	—	BUILDING SETBACK
⊙	SEWER MANHOLE	—	WETLAND BUFFER
⊙	FLARED END SECTION	—	LANDSCAPE BUFFER
⊙	UTILITY POLE	—	PROPOSED TREELINE
⊙	WELL	—	PROPOSED EOP
		—	PROPOSED BIT. CURB
		—	PROPOSED RET. WALL
		—	PROPOSED 2' CONTOUR
		—	PROPOSED SWALE
		—	PROPOSED GUARDRAIL

**BENCHMARK DATA**

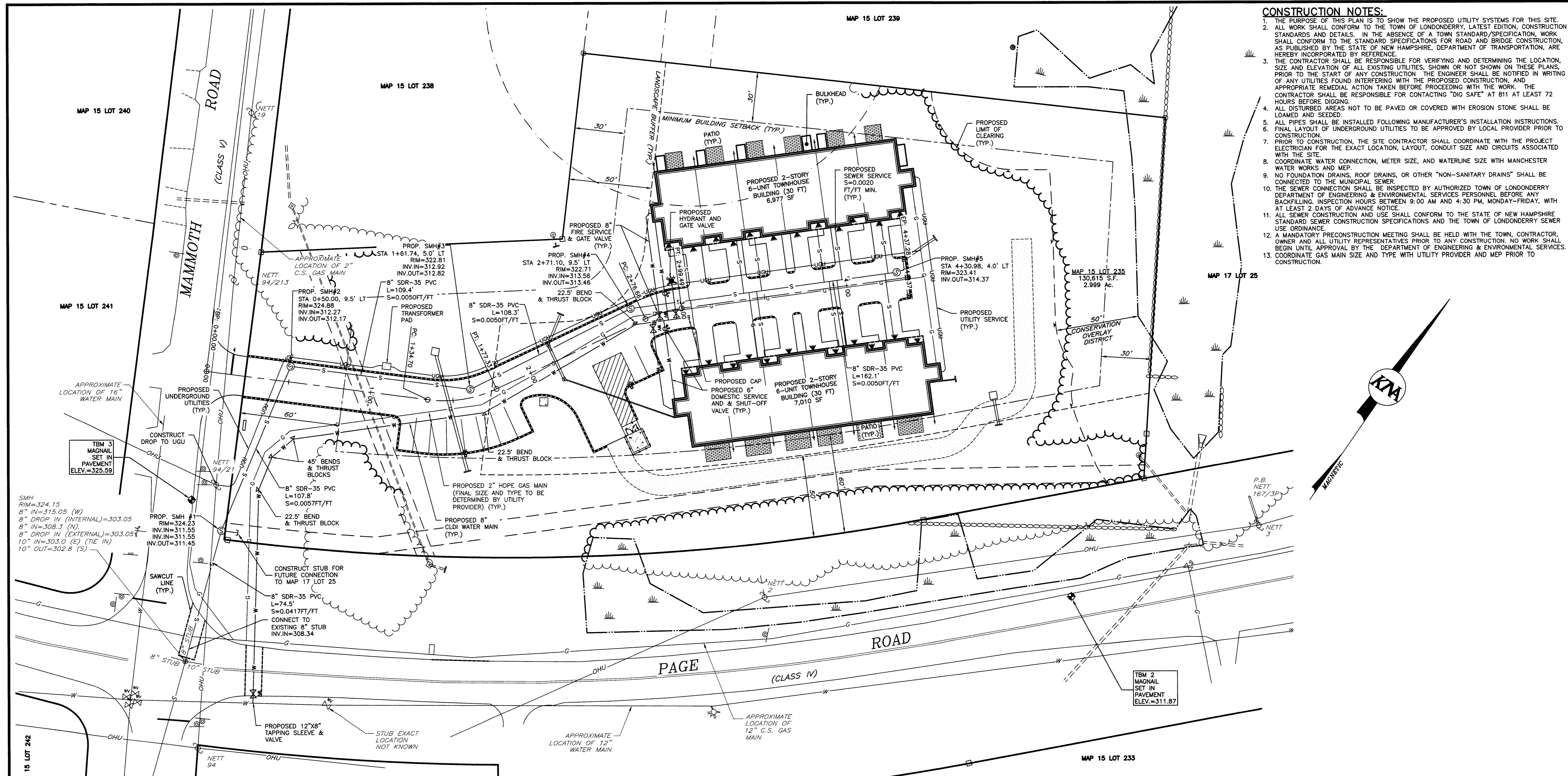
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

**REVISIONS**

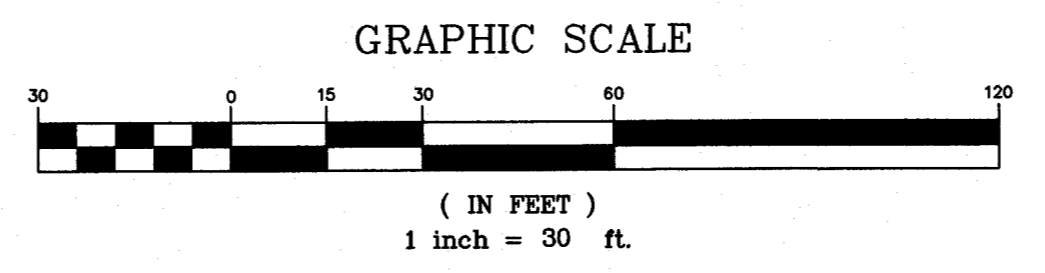
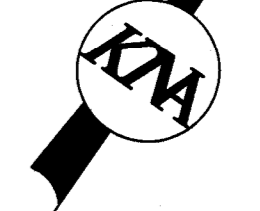
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM



<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 3 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
<b>EROSION CONTROL PLAN</b> <b>PAGE ROCK TOWNHOMES</b> MAP 15 LOTS 235 & 236 3 PAGE ROAD LONDONDERRY, NEW HAMPSHIRE ROCKINGHAM COUNTY	
<b>KEACH-NORDSTROM ASSOCIATES, INC.</b> Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881	
PROJ. NO: 21-0113-1	DATE: MARCH 20, 2025
SCALE: 1" = 30'	FILE NO.:
SHEET NO. 6 OF 22	



- CONSTRUCTION NOTES:**
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED UTILITY SYSTEMS FOR THIS SITE.
  2. ALL WORK SHALL CONFORM TO THE TOWN OF LONDONDERRY, LATEST EDITION, CONSTRUCTION STANDARDS AND DETAILS. IN THE ABSENCE OF A TOWN STANDARD/SPECIFICATION, WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS PUBLISHED BY THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, ARE HEREBY INCORPORATED BY REFERENCE.
  3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
  4. ALL DISTURBED AREAS NOT TO BE PAVED OR COVERED WITH EROSION STONE SHALL BE LOAMED AND SEEDED.
  5. ALL PIPES SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  6. FINAL LAYOUT OF UNDERGROUND UTILITIES TO BE APPROVED BY LOCAL PROVIDER PRIOR TO CONSTRUCTION.
  7. PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ELECTRICIAN FOR THE EXACT LOCATION, LAYOUT, CONDUIT SIZE AND CIRCUITS ASSOCIATED WITH THE SITE.
  8. COORDINATE WATER CONNECTION, METER SIZE, AND WATERLINE SIZE WITH MANCHESTER WATER WORKS AND MEP.
  9. NO FOUNDATION DRAINS, ROOF DRAINS, OR OTHER "NON-SANITARY DRAINS" SHALL BE CONNECTED TO THE MUNICIPAL SEWER.
  10. THE SEWER CONNECTION SHALL BE INSPECTED BY AUTHORIZED TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES PERSONNEL BEFORE ANY BACKFILLING. INSPECTION HOURS BETWEEN 9:00 AM AND 4:30 PM, MONDAY-FRIDAY, WITH AT LEAST 2 DAYS OF ADVANCE NOTICE.
  11. ALL SEWER CONSTRUCTION AND USE SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE STANDARD SEWER CONSTRUCTION SPECIFICATIONS AND THE TOWN OF LONDONDERRY SEWER USE ORDINANCE.
  12. A MANDATORY PRECONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN, CONTRACTOR, OWNER AND ALL UTILITY REPRESENTATIVES PRIOR TO ANY CONSTRUCTION. NO WORK SHALL BEGIN UNTIL APPROVAL BY THE DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES.
  13. COORDINATE GAS MAIN SIZE AND TYPE WITH UTILITY PROVIDER AND MEP PRIOR TO CONSTRUCTION.



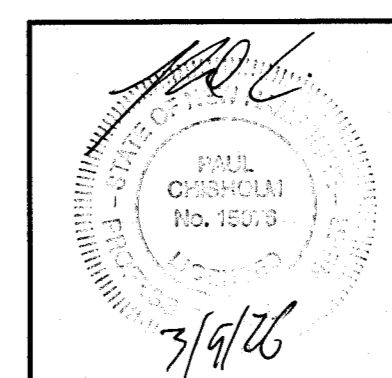
**UTILITY NOTE**

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.

**LEGEND**

▣ NHFB-F	NH HWY BOUND FOUND	— S —	SEWER LINE
▣ GB-F	GRANITE BOUND FOUND	— D —	DRAINAGE LINE
○ IP-F	IRON PIPE FOUND	— E —	EDGE OF PAVEMENT
○ IR-S	IRON ROD SET	— S —	STONEWALL
⊕	BENCHMARK	— T —	TREELINE
⊕	SIGN	— B —	BUILDING SETBACK
⊕	DRAINAGE MANHOLE	— E —	EASEMENT
⊕	CATCH BASIN	— W —	WETLAND BUFFER
⊕	WATER VALVE	— L —	LANDSCAPE BUFFER
⊕	HYDRANT	— U —	PROPOSED UG UTILITIES
⊕	SEWER MANHOLE	— G —	PROPOSED GAS LINE
⊕	FLARED END SECTION	— W —	PROPOSED WATER LINE
⊕	UTILITY POLE	— S —	PROPOSED SEWER LINE
⊕	WELL	— D —	PROPOSED DRAINAGE LINE
—	PROPERTY LINE	— T —	PROPOSED TREELINE
—	R.O.W. LINE	— E —	PROPOSED EOP
— OHU —	OVERHEAD UTILITIES	— B —	PROPOSED BIT. CURB
— G —	GAS LINE	— W —	PROPOSED RET. WALL
— W —	WATER LINE	— G —	PROPOSED GUARDRAIL
		— R —	PROPOSED RIP RAP

BENCHMARK DATA				REVISIONS			
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY	
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM	
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM	

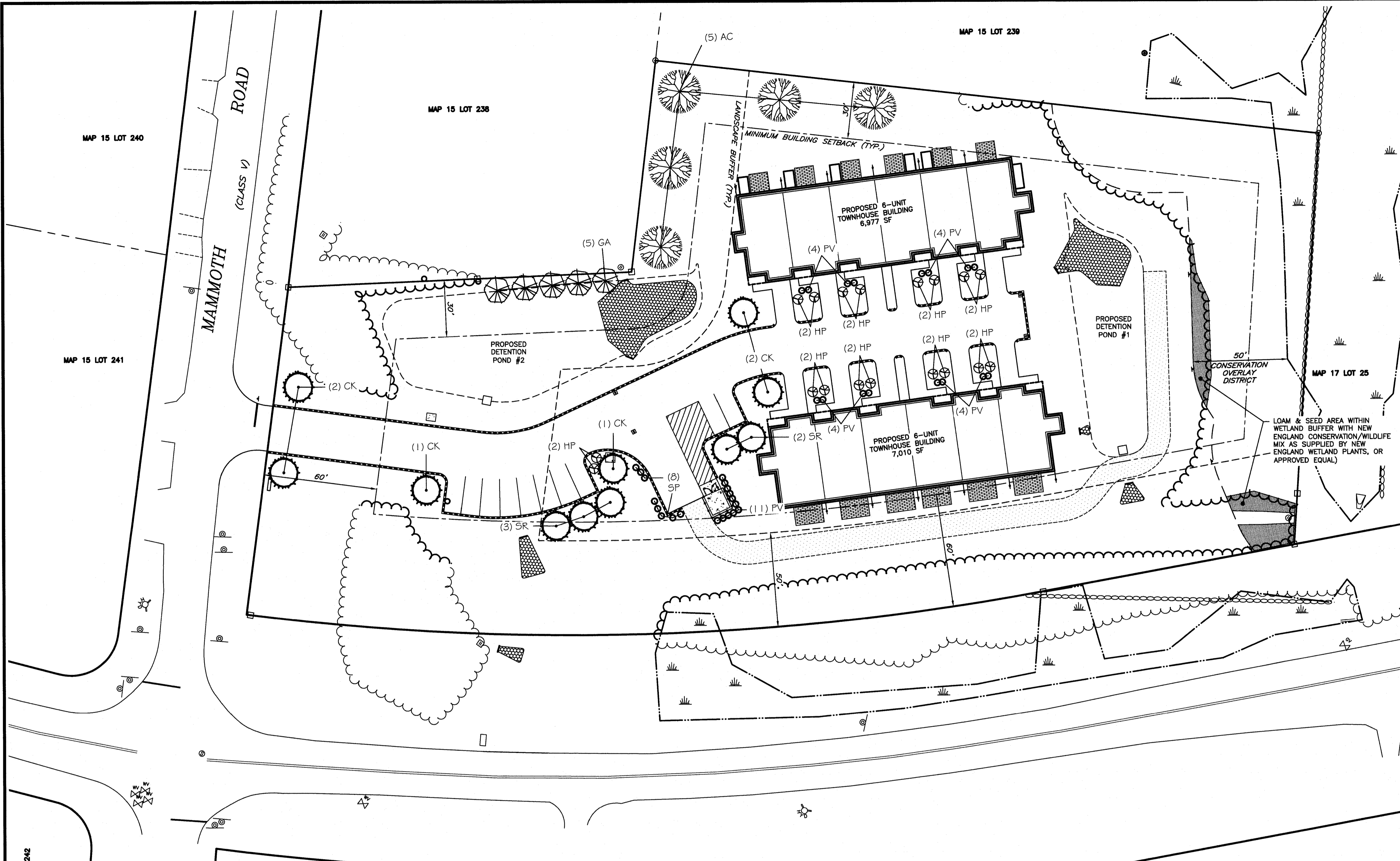


<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**UTILITY PLAN**  
**PAGE ROCK TOWNHOMES**  
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**KMA** KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 687-2881

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: 1" = 30'  
FILE NO.:  
SHEET NO. 7 OF 22

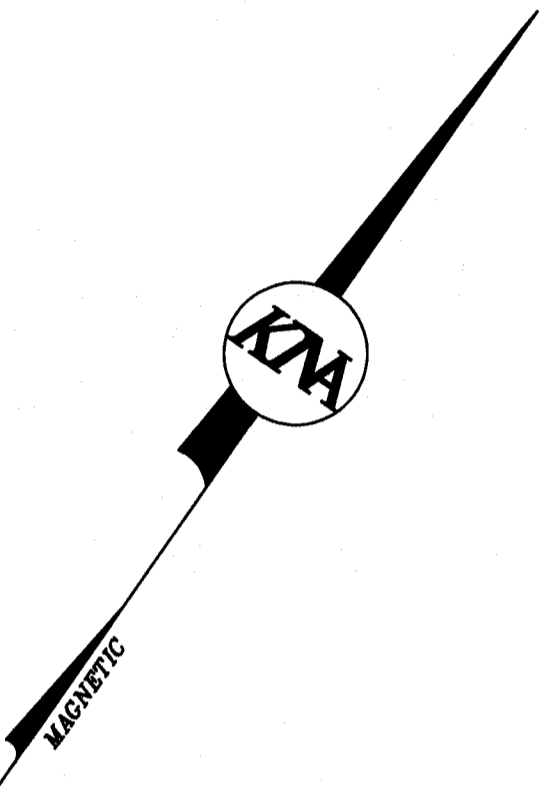


**LANDSCAPE NOTES:**

- THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE LANDSCAPE WHICH PROVIDES CLIMATIC RELIEF AND AESTHETIC APPEAL.
- ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DIES OR DOES NOT SHOWN HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE; WITH SAME WARRANTY REQUIREMENTS AS THE ORIGINAL WARRANTIES TYPICALLY DO NOT COVER LOSS DUE TO INSECT INFESTATION OR MECHANICAL DAMAGE (I.E. SNOW STORAGE).
- IF THE SOIL CONDITIONS ARE EXTREMELY SANDY, ALL TREES SHALL HAVE A 6" LAYER OF COMPACTED TOPSOIL PLACED IN THE BASE OF THE PLANT PIT AS A MOISTURE RETENTION LAYER. THE PLANT PIT SIDEWALLS SHALL BE OVER EXCAVATED BY AN ADDITIONAL 12" BEYOND THE NORMAL OUTSIDE RADIUS OF THE HOLE. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWS: ORGANIC TOPSOIL, AMENDED WITH 10% WOOD ASH, 10% MANURE, 30% COMPOST AND A GRANULAR HYDROGEL TO ABSORB AND RETAIN WATER.
- PLANTING BEDS AND SAUCERS SHALL RECEIVE A 4" MINIMUM THICKNESS OF PINE/HEMLOCK BARK MULCH OVER A 5oz. POLYPROPYLENE WEED CONTROL FABRIC.
- PAVEMENT AND ROAD BASE MATERIAL ENCOUNTERED IN ANY LAWN OR PLANTING BED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SUITABLE AMENDED SOIL INSTALLED AS SPECIFIED IN THE TURF ESTABLISHMENT SCHEDULE.
- NO PLANTINGS SHALL CONFLICT WITH SNOW STORAGE AREAS, LIGHT FIXTURES, UNDERGROUND UTILITIES, OR SIGHT DISTANCE.

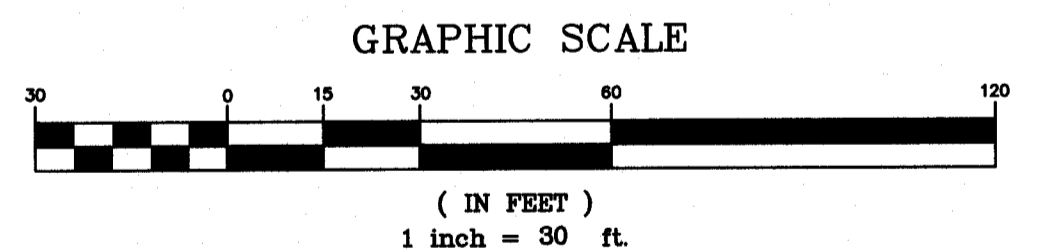
**LANDSCAPE CALCULATIONS**

- INTERIOR GREEN SPACE:**  
REQUIRED: SIDE (8x) = 760 SF PARKING = 61 SF REQUIRED  
PROVIDED = 780 SF PROPOSED
- INTERNAL PARKING:**  
REQUIRED = 1 DECIDUOUS SHADE TREE/15 SPACES  
= 4 SPACES/15 = 0.27 OR 1 DECIDUOUS SHADE TREE REQUIRED
- PERIMETER:**  
REQUIRED = 1 SHADE TREE/20' PARKING LOT PERIMETER  
= 155'/20' = 8 SHADE TREES REQUIRED
- TOTAL:**  
REQUIRED = 1 SHADE TREE + 8 SHADE TREES = 10 SHADE TREES  
PROVIDED = 16 SHADE TREES



**OWNER OF MAP 15 LOT 235**  
 SIGNATURE: *Deane Nuel*  
 PAGE ROCK LLC  
 DATE: 2/16/2026

**OWNER OF MAP 15 LOT 236**  
 SIGNATURE: *Deane Nuel*  
 PAGE ROCK LLC  
 DATE: 2/16/2026



**LOT 235 OWNER/APPLICANT:**  
 PAGE ROCK, LLC  
 5 HUTCHINGS DRIVE, SUITE 5D  
 HOLLIS, N.H. 03049

**LOT 236 OWNER**  
 PAGE ROCK, LLC  
 PO BOX 1675  
 HOLLIS, N.H. 03049

**LANDSCAPE PLAN**  
**PAGE ROCK TOWNHOMES**  
 MAP 15 LOTS 235 & 236  
 3 PAGE ROAD  
 LONDONDERRY, NEW HAMPSHIRE  
 ROCKINGHAM COUNTY

PROJ. NO: 21-0113-1  
 DATE: MARCH 20, 2025  
 SCALE: 1" = 30'  
 FILE NO.:  
 SHEET NO. 8 OF 22

**PLANTING SCHEDULE**  
 Botanical Name/ Common Name

Botanical Name/ Common Name	Size	Label	Quantity	Mature Height
<b>Trees</b>				
<i>Abies concolor</i> / White Fir	6-7' B&B	AC	5	30-40'
<i>Cornus kousa</i> / Kousa Dogwood	2.5-3" CAL.	CK	6	20-30'
<i>Syringa reticulata</i> / Japanese Lilac Tree	2.5-3" CAL.	SR	5	20-30'
<b>Shrubs</b>				
<i>Hydrangea paniculata</i> 'Little Quick Fire' / Little Quick Fire Panicle Hydrangea	2-2.5'	HP	18	2-3'
<i>Thuja occidentalis</i> 'Elegantissima' / Gold-tipped Arborvitae	5-6' B&B	GA	5	15-20'
<i>Syringa Patula</i> 'Miss Kim' / Miss Kim Lilac	#7	SP	11	6'-8'
<b>Grasses</b>				
<i>Panicum virgatum</i> 'Shenandoah' / Shenandoah Switch Grass	#2 Gal.	PV	24	3-4'



**LEGEND**

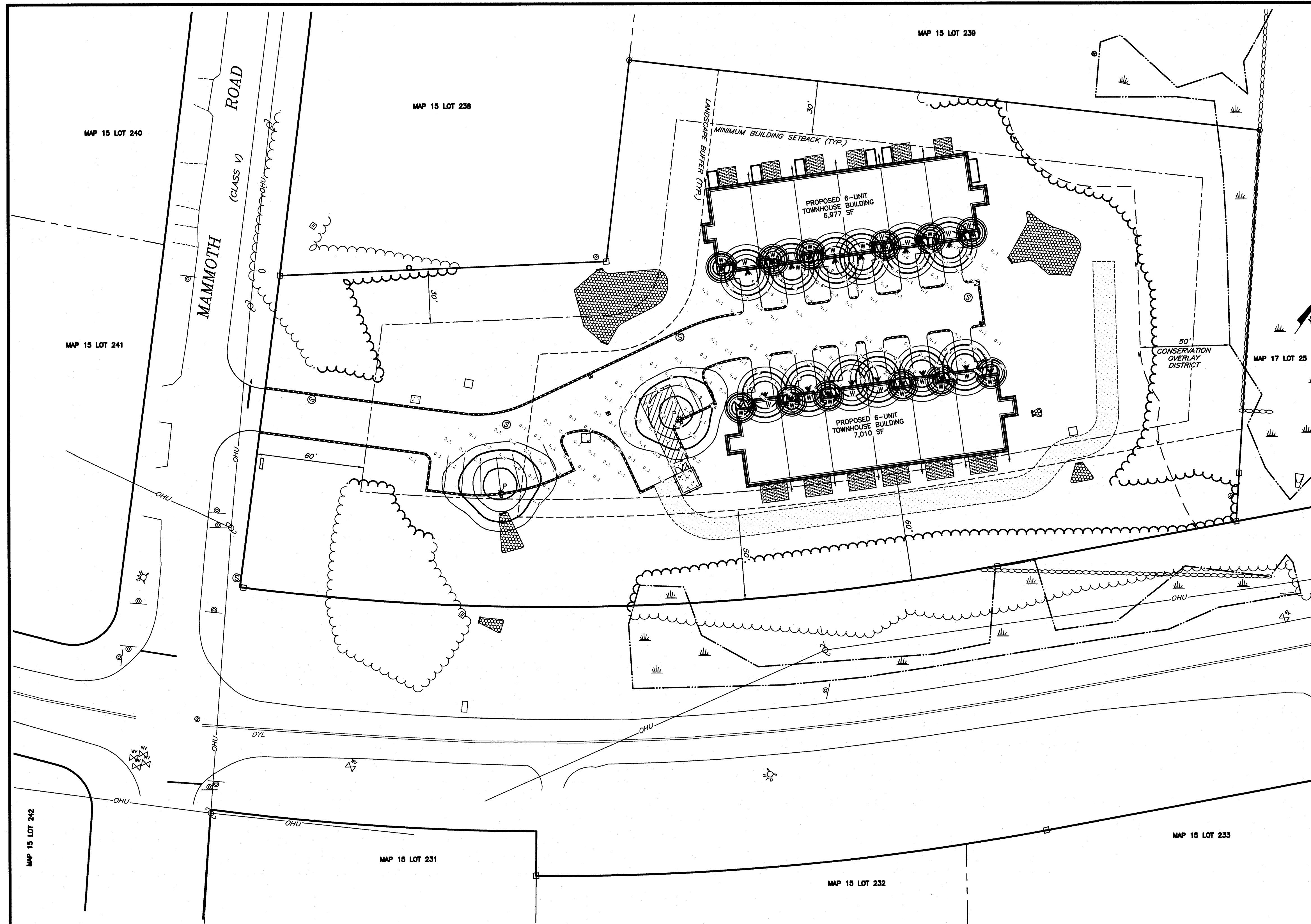
NH HB-F	NH HWY BOUND FOUND	PROPERTY LINE
GB-F	GRANITE BOUND FOUND	R.O.W. LINE
IP-F	IRON PIPE FOUND	OVERHEAD UTILITIES
IR-S	IRON ROD SET	EDGE OF PAVEMENT
BENCHMARK		STONEMALL
SIGN		BUILDING SETBACK
DRAINAGE MANHOLE		EASEMENT
CATCH BASIN		WETLAND BUFFER
WATER VALVE		LANDSCAPE BUFFER
HYDRANT		PROPOSED TREELINE
SEWER MANHOLE		PROPOSED EOP
FLARED END SECTION		PROPOSED BIT. CURB
UTILITY POLE		PROPOSED RIP RAP
WELL		

**BENCHMARK DATA**

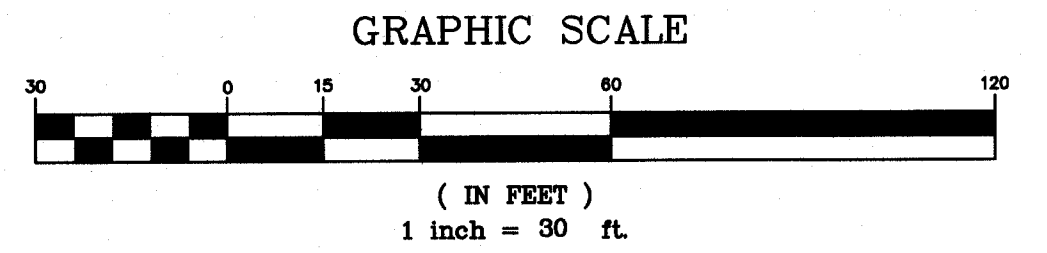
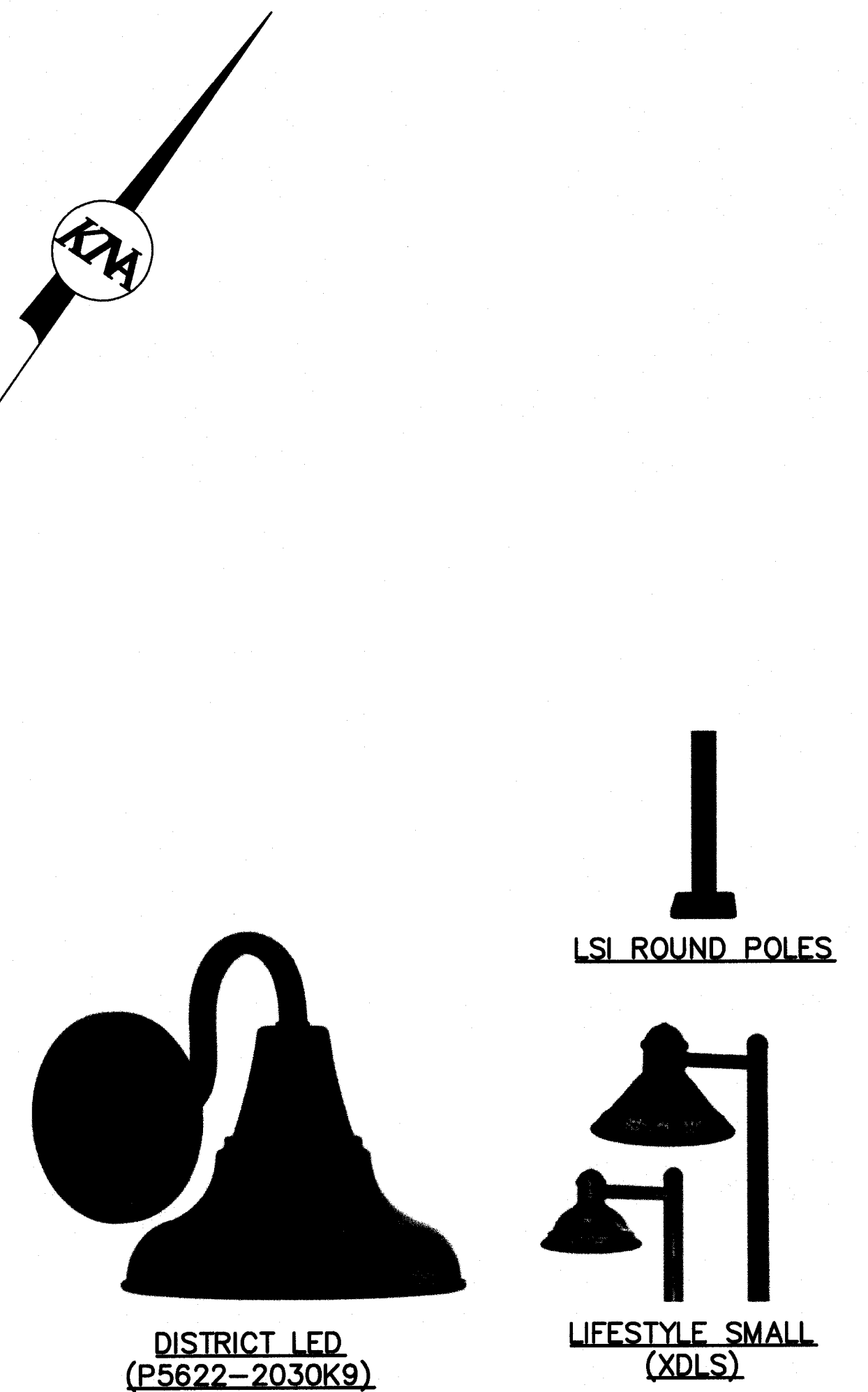
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:155165.31, E:1054227.35	ELEV.=317.51 (NAVD88)	BENCHMARK #1 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

APPROVED BY THE LONDONDERRY, NH PLANNING BOARD FOR PHASE \_\_\_\_\_  
 ON DATE: \_\_\_\_\_  
 CERTIFIED BY: \_\_\_\_\_

**KMA**  
 KEACH-NORDSTROM ASSOCIATES, INC.  
 Civil Engineering Land Surveying Landscape Architecture  
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 887-2881



- LIGHTING NOTES:**
1. ALL LIGHTS/FIXTURES SHALL BE AS SPECIFIED BY EXPOSURE LIGHTING.
  2. ALL PROPOSED FIXTURES ARE TO BE FULL CUTOFF.
  3. POLE MOUNTED FIXTURES SHALL BE MOUNTED AT HEIGHTS SPECIFIED IN TABLE.
  4. ALL FINAL SITE LIGHTING AND CONDUIT LAYOUT SHALL BE COORDINATED WITH LOCAL UTILITY PROVIDER.
  5. PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ELECTRICIAN FOR THE EXACT LOCATION, LAYOUT, CONDUIT SIZE AND CIRCUITS ASSOCIATED WITH THE SITE LIGHTING.
  6. SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION REGARDING LIGHT INSTALLATION AND WIRING REQUIREMENTS.
  7. ALL LIGHTING MUST COMPLY WITH THE TOWN OF LONDONDERRY DEVELOPMENT REGULATIONS.



**IN ASSOCIATION WITH:**

**EXPOSURE** KENNETH SWEENEY | Applications Engineer  
 15 SCOTT'S LANE, HAMPSHIRE, NH 03842 | 603.601.8900  
 EXPOSURELIGHTING.COM & ESS-LLC.US

<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**LIGHTING PLAN**  
**PAGE ROCK TOWNHOMES**  
 MAP 15 LOTS 235 & 236  
 3 PAGE ROAD  
 LONDONDERRY, NEW HAMPSHIRE  
 ROCKINGHAM COUNTY

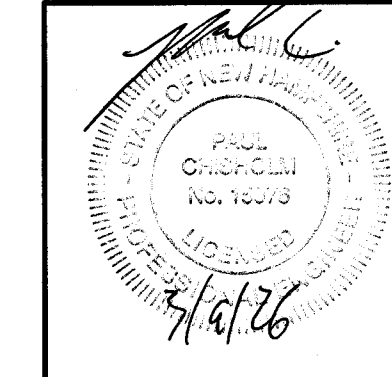
**LEGEND**

NHBB-F	NH HWY BOUND FOUND	PROPERTY LINE
GB-F	GRANITE BOUND FOUND	R.O.W. LINE
IP-F	IRON PIPE FOUND	OVERHEAD UTILITIES
IR-S	IRON ROD SET	EDGE OF PAVEMENT
⊕	BENCHMARK	STONEWALL
⊕	SIGN	BUILDING SETBACK
⊕	DRAINAGE MANHOLE	EASEMENT
⊕	CATCH BASIN	WETLAND BUFFER
⊕	WATER VALVE	LANDSCAPE BUFFER
⊕	HYDRANT	PROPOSED TREELINE
⊕	SEWER MANHOLE	PROPOSED EOP
⊕	FLARED END SECTION	PROPOSED BIT. CURB
⊕	UTILITY POLE	PROPOSED RIP RAP
⊕	WELL	

**LUMINAIRE SCHEDULE**

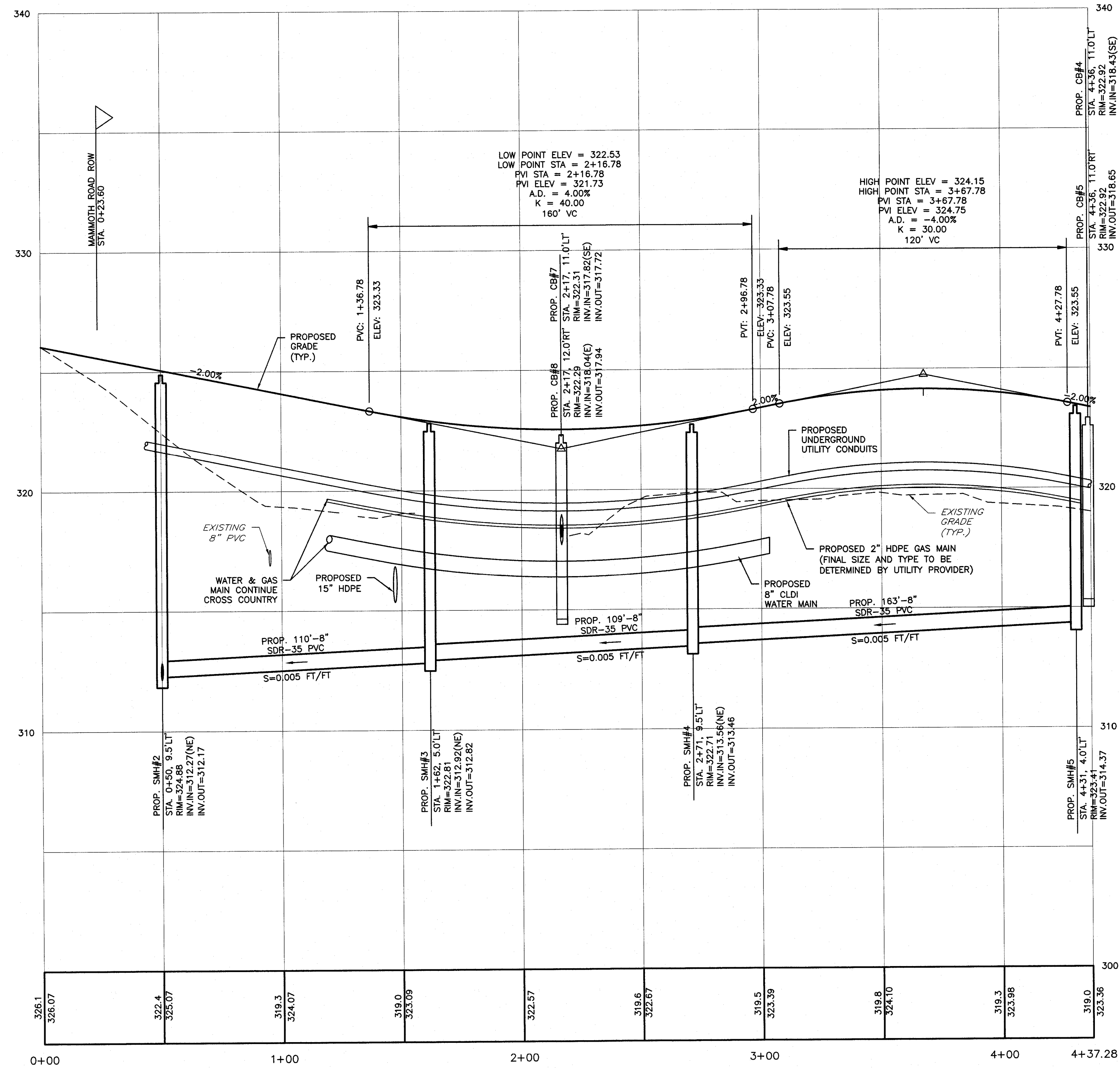
SYMBOL	QTY.	LABEL	ARRANGEMENT	DESCRIPTION	MANUFAC	MOUNTING HEIGHT
⊕*	2	P	SINGLE	XDLSB-3L-3W-UNV-30K8-BLK-CH / 4RP-1-S10G-14-BLK / 4 GBC (70 CRI CW, 80 CRI NW AND WW)	LSI INDUSTRIES, INC.	14' POLE
▶	24	W	SINGLE	945622-2030K9 (90 CRI)	PROGRESS	WALL MOUNTED 6" AFG AT DOORS & 8' AFG AT GARAGES

BENCHMARK DATA				REVISIONS		
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:155165.31, E:1054227.35	ELEV.=317.51 (NAVD88)	BENCHMARK #1 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

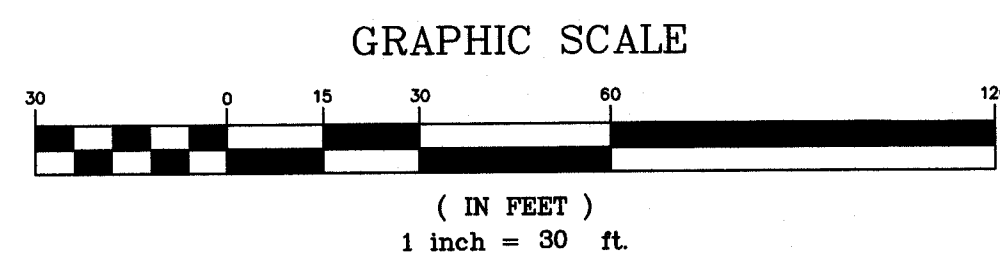


**KMA** KEACH-NORDSTROM ASSOCIATES, INC.  
 Civil Engineering Land Surveying Landscape Architecture  
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

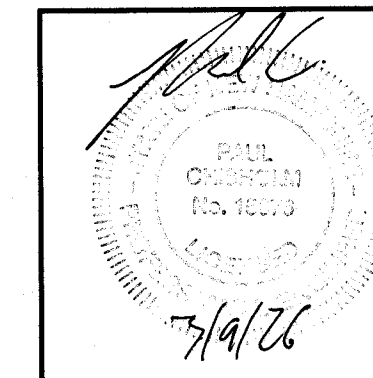
PROJ. NO: 21-0113-1  
 DATE: MARCH 20, 2025  
 SCALE: 1" = 30'  
 FILE NO.:  
 SHEET NO. 9 OF 22



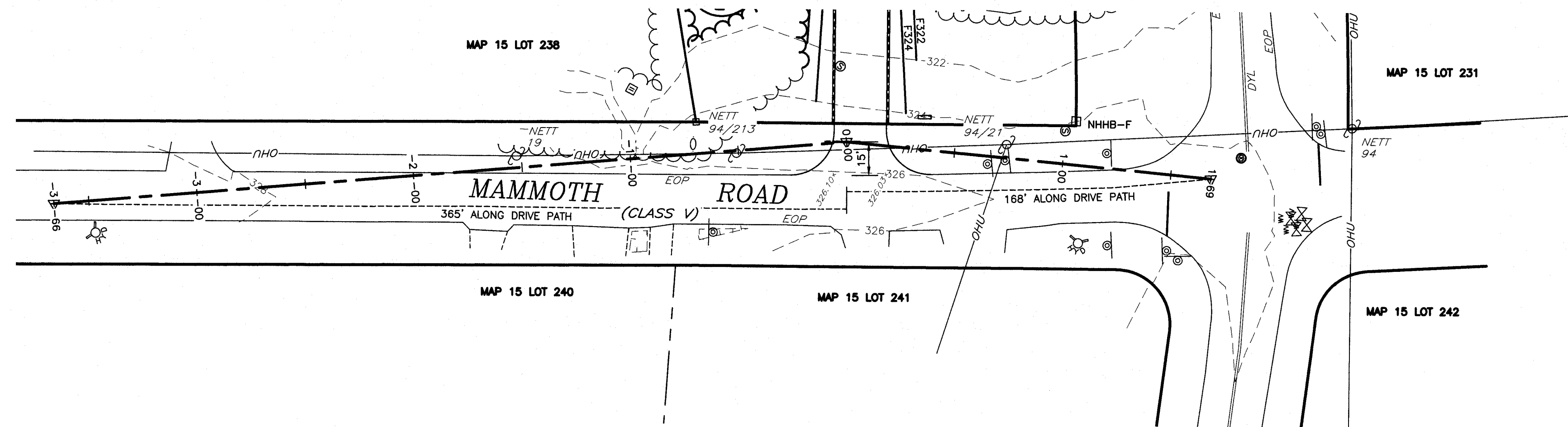
**DRIVEWAY PROFILE**  
 SCALE: 1" = 30' (HORIZ.)  
 1" = 3' (VERT.)



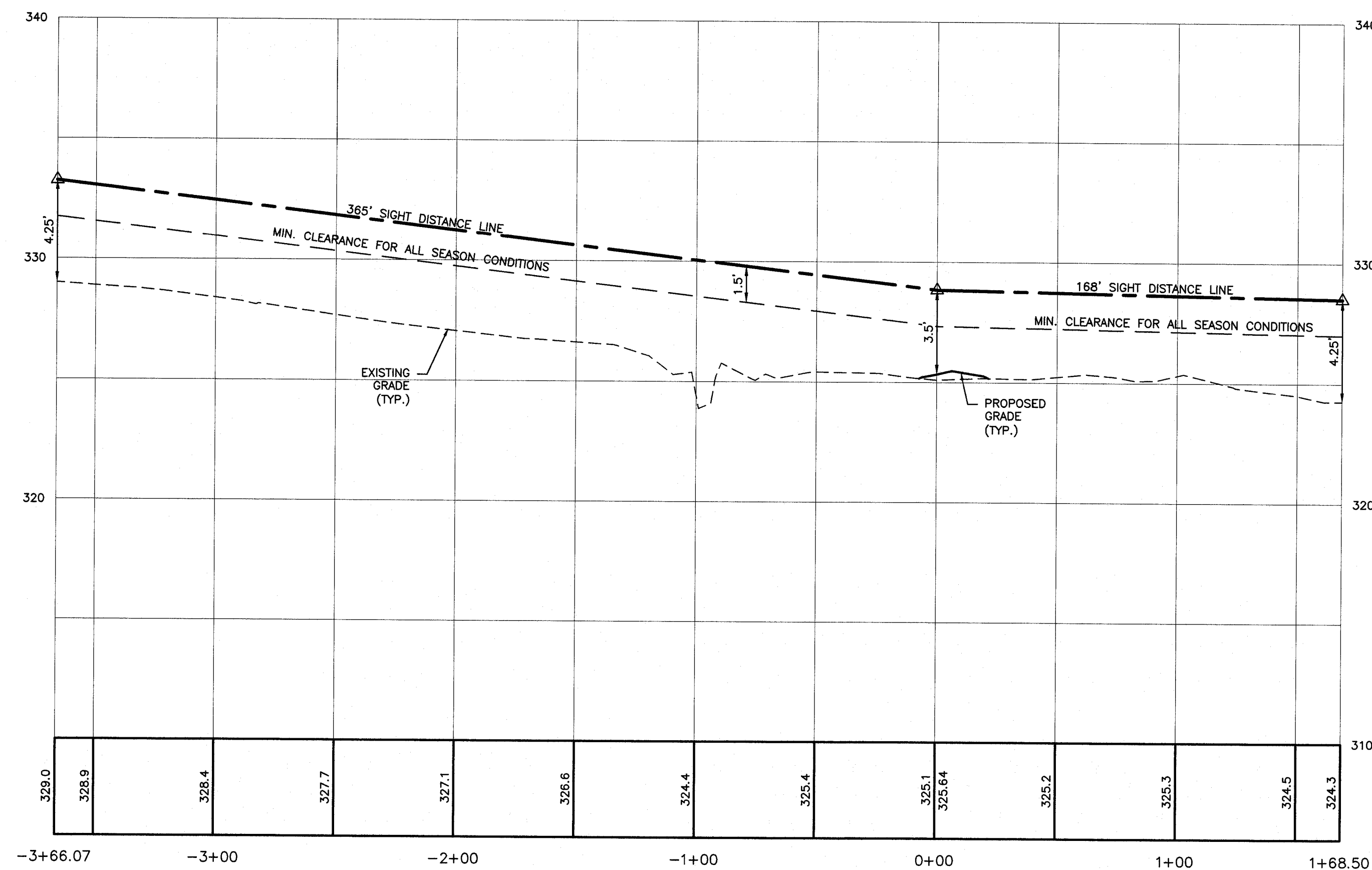
REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM



<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
<b>DRIVEWAY PROFILE</b> <b>PAGE ROCK TOWNHOMES</b>  MAP 15 LOTS 235 & 236 3 PAGE ROAD LONDONDERRY, NEW HAMPSHIRE ROCKINGHAM COUNTY	
<small>Civil Engineering Land Surveying Landscape Architecture          10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881</small>	
PROJ. NO: 21-0113-1 DATE: MARCH 20, 2025 SCALE: 1" = 30' FILE NO.: SHEET NO. 10 OF 22	



**SIGHT DISTANCE PLAN**  
SCALE: 1" = 40'



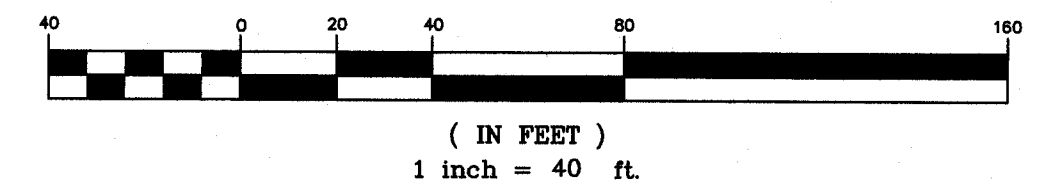
**SIGHT DISTANCE PROFILE**  
SCALE: 1" = 40' (HORIZ.)  
1" = 4' (VERT.)

**SIGHT DISTANCE NOTES:**

1. THE PURPOSE OF THIS PLAN IS TO ILLUSTRATE THE AVAILABLE SIGHT DISTANCE AT THE PROPOSED DRIVEWAY AND HARVEY ROAD.
2. THE CONTRACTOR SHALL REMOVE ALL OBSTRUCTIONS BETWEEN THE DRIVEWAY AND THE SIGHT LINES TO ACHIEVE VISIBILITY.
3. THE OWNER SHALL MAINTAIN SIGHT LINES VISIBILITY AND REMOVE ALL OBSTRUCTIONS BETWEEN THE DRIVEWAY AND THE SIGHT LINES TO ACHIEVE VISIBILITY.



**GRAPHIC SCALE**



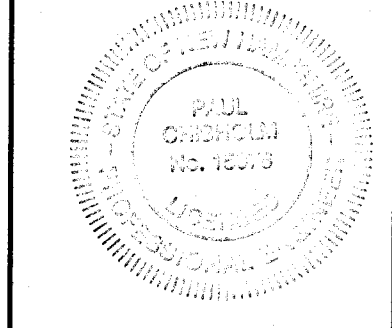
LEGEND	
▣ NHHB-F	NH HWY BOUND FOUND
▣ GB-F	GRANITE BOUND FOUND
● IP-F	IRON PIPE FOUND
⊙ IR-S	IRON ROD SET
⊕	BENCHMARK
⊕	SIGN
⊕	DRAINAGE MANHOLE
⊕	CATCH BASIN
⊕	WATER VALVE
⊕	HYDRANT
⊕	SEWER MANHOLE
⊕	FLARED END SECTION
⊕	UTILITY POLE
⊕	WELL
—	PROPERTY LINE
—	R.O.W. LINE
— OHU	OVERHEAD UTILITIES
—	EDGE OF PAVEMENT
---	10' CONTOUR
---	2' CONTOUR
—	STONEWALL
—	BUILDING SETBACK
—	WETLAND BUFFER
—	LANDSCAPE BUFFER
—	PROPOSED TREELINE
—	PROPOSED EOP
—	PROPOSED BIT. CURB
—	PROPOSED RET. WALL
—	PROPOSED 2' CONTOUR
—	PROPOSED SWALE

BENCHMARK DATA				REVISIONS		
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

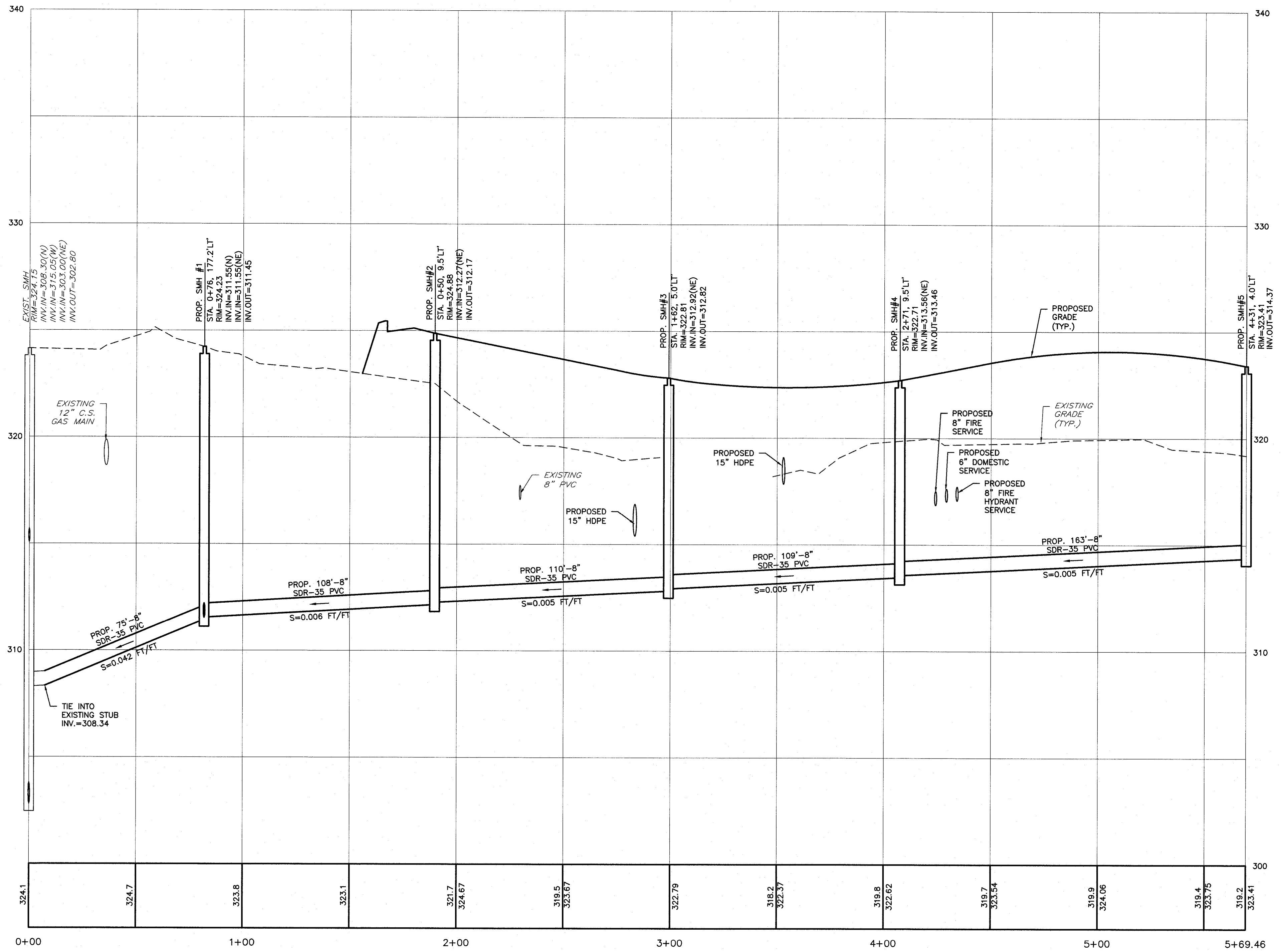
KEACH-NORDSTROM ASSOCIATES, INC. HEREBY CERTIFIES THAT THE ALL SEASON SAFE SIGHT DISTANCE, AS REQUIRED BY THE TOWN OF LONDONDERRY, IS ACHIEVED UPON COMPLETION OF THE IMPROVEMENTS SHOWN ON THIS PLAN.

*APL*  
PROFESSIONAL ENGINEER

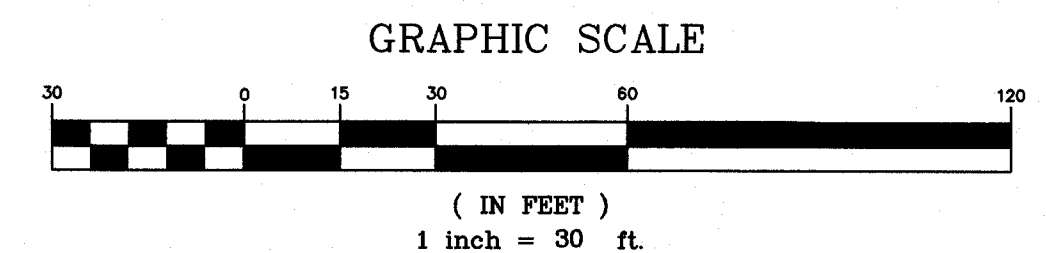
2/4/26  
DATE



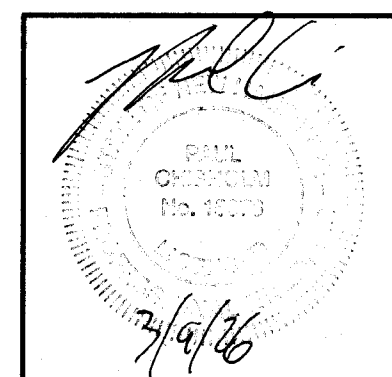
<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
<b>SIGHT DISTANCE PLAN &amp; PROFILE</b> <b>PAGE ROCK TOWNHOMES</b>  MAP 15 LOTS 235 & 236 3 PAGE ROAD LONDONDERRY, NEW HAMPSHIRE ROCKINGHAM COUNTY	
 <b>KEACH-NORDSTROM ASSOCIATES, INC.</b> Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881	
PROJ. NO: 21-0113-1	DATE: MARCH 20, 2025
SCALE: 1" = 40'	FILE NO.:
SHEET NO. 11 OF 22	



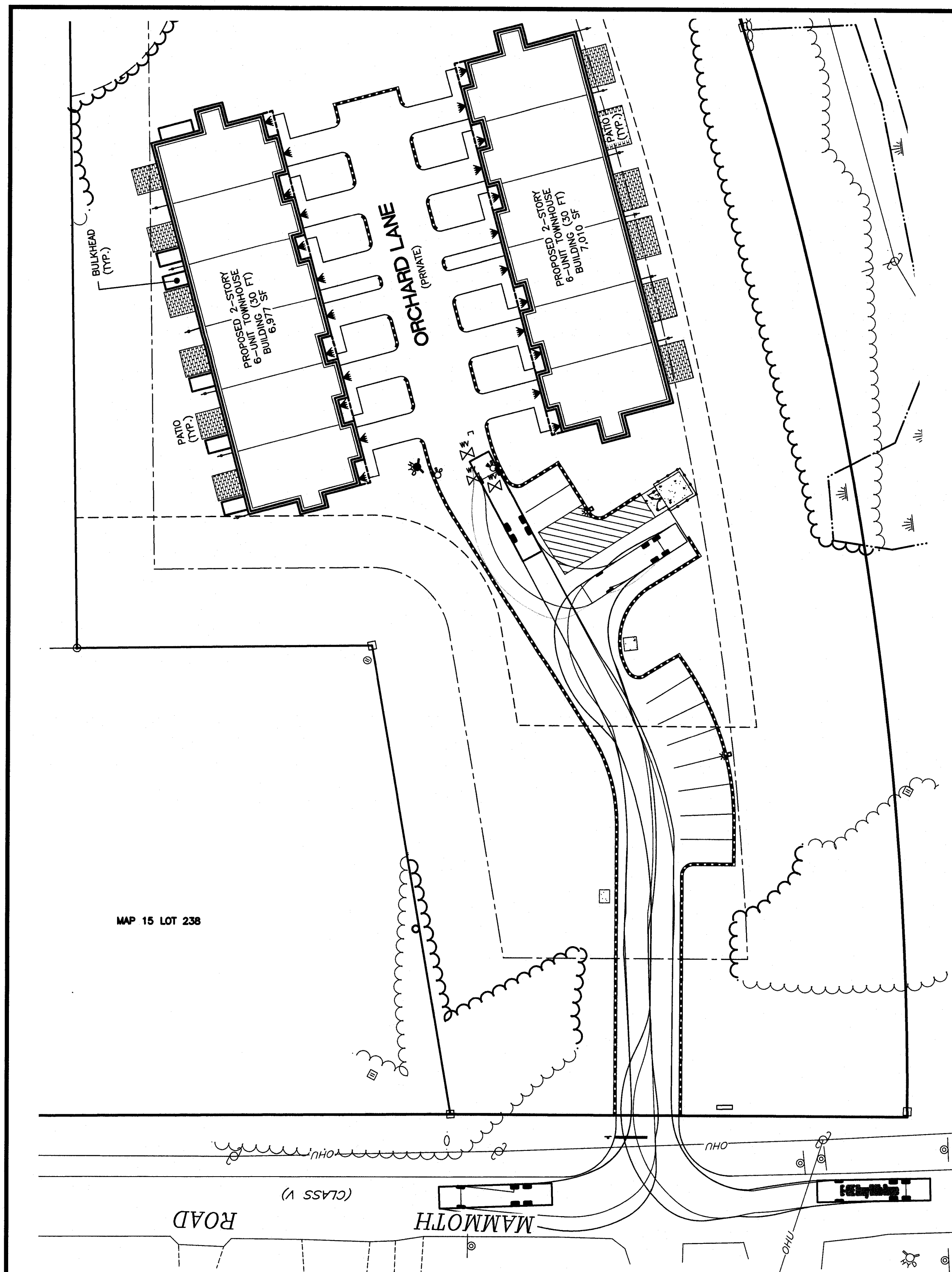
**SEWER PROFILE**  
 SCALE: 1" = 30' (HORIZ.)  
 1" = 3' (VERT.)



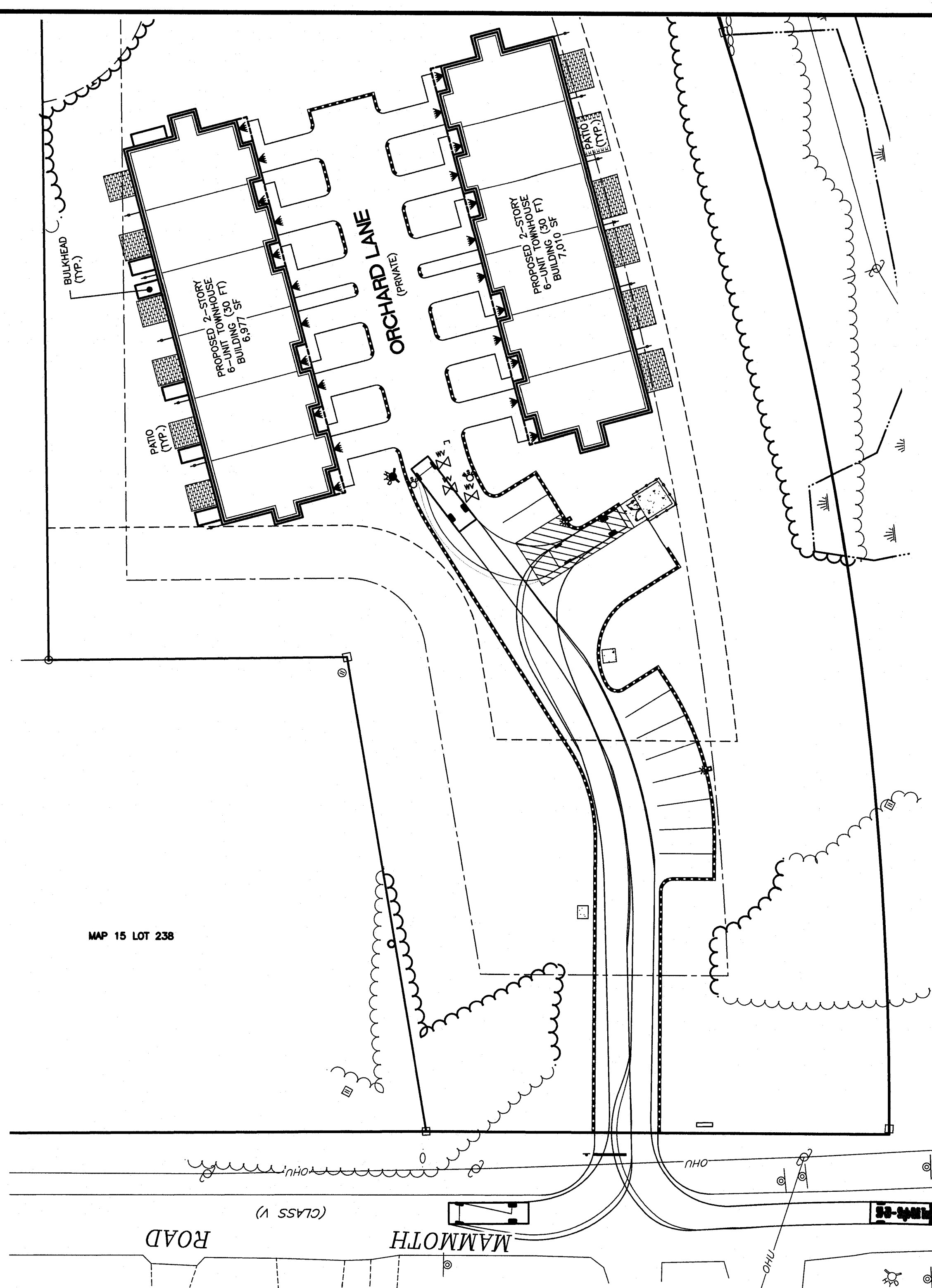
REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM



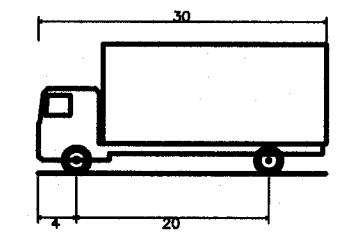
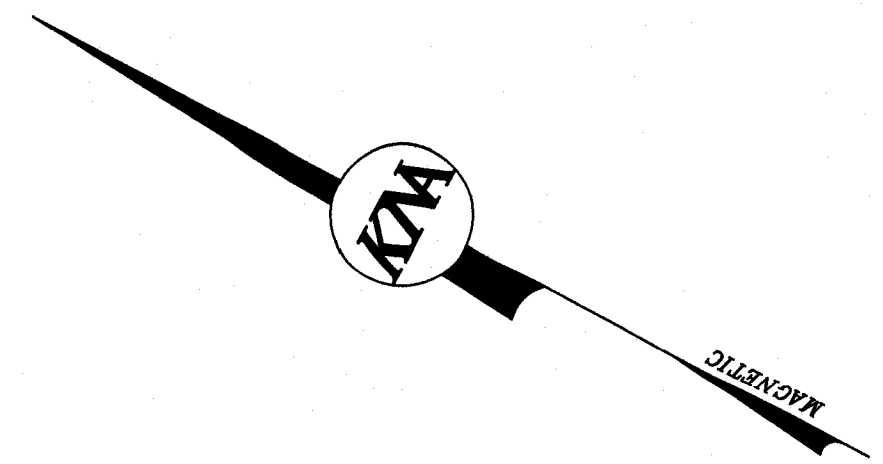
<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
<b>SEWER PROFILE</b> <b>PAGE ROCK TOWNHOMES</b>  MAP 15 LOTS 235 & 236 3 PAGE ROAD LONDONDERRY, NEW HAMPSHIRE ROCKINGHAM COUNTY	
PROJ. NO: 21-0113-1	DATE: MARCH 20, 2025
SCALE: 1" = 30'	FILE NO.:
SHEET NO. 12 OF 22	



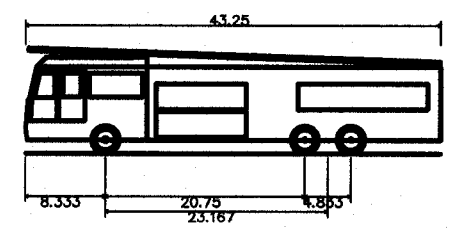
43' FIRE TRUCK TURNING PLAN



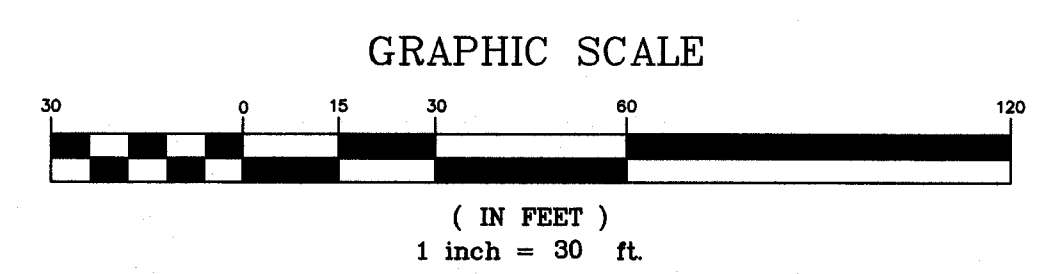
MOVING/DELIVERY TRUCK TURNING PLAN



SU-30 - Single Unit Truck  
 Overall Length 30.000ft  
 Overall Width 8.000ft  
 Overall Body Height 13.500ft  
 Min Body Ground Clearance 3.67ft  
 Track Width 8.000ft  
 Lock-to-lock time 8.00s  
 Max Steering Angle (Virtual) 31.80°



E-ONE Heavy Walkin Rescue  
 Overall Length 43.250ft  
 Overall Width 8.333ft  
 Overall Body Height 11.000ft  
 Min Body Ground Clearance 1.393ft  
 Track Width 8.333ft  
 Lock-to-lock time 6.00s  
 Max Wheel Angle 45.00°



LOT 235\_OWNER/APPLICANT: PAGE ROCK, LLC  
 5 HUTCHINGS DRIVE, SUITE 5D  
 HOLLIS, N.H. 03049

LOT 236\_OWNER: PAGE ROCK, LLC  
 5 HUTCHINGS DRIVE, SUITE 5D  
 HOLLIS, N.H. 03049

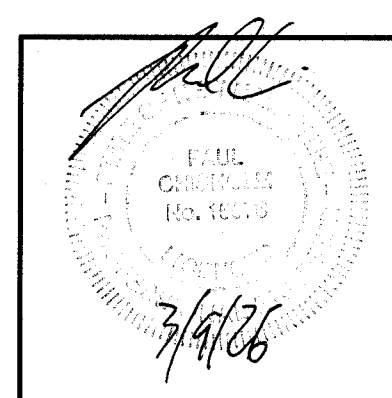
TRUCK TURNING PLAN  
 PAGE ROCK TOWNHOMES

MAP 15 LOTS 235 & 236  
 3 PAGE ROAD  
 LONDONDERRY, NEW HAMPSHIRE  
 ROCKINGHAM COUNTY

**LEGEND**

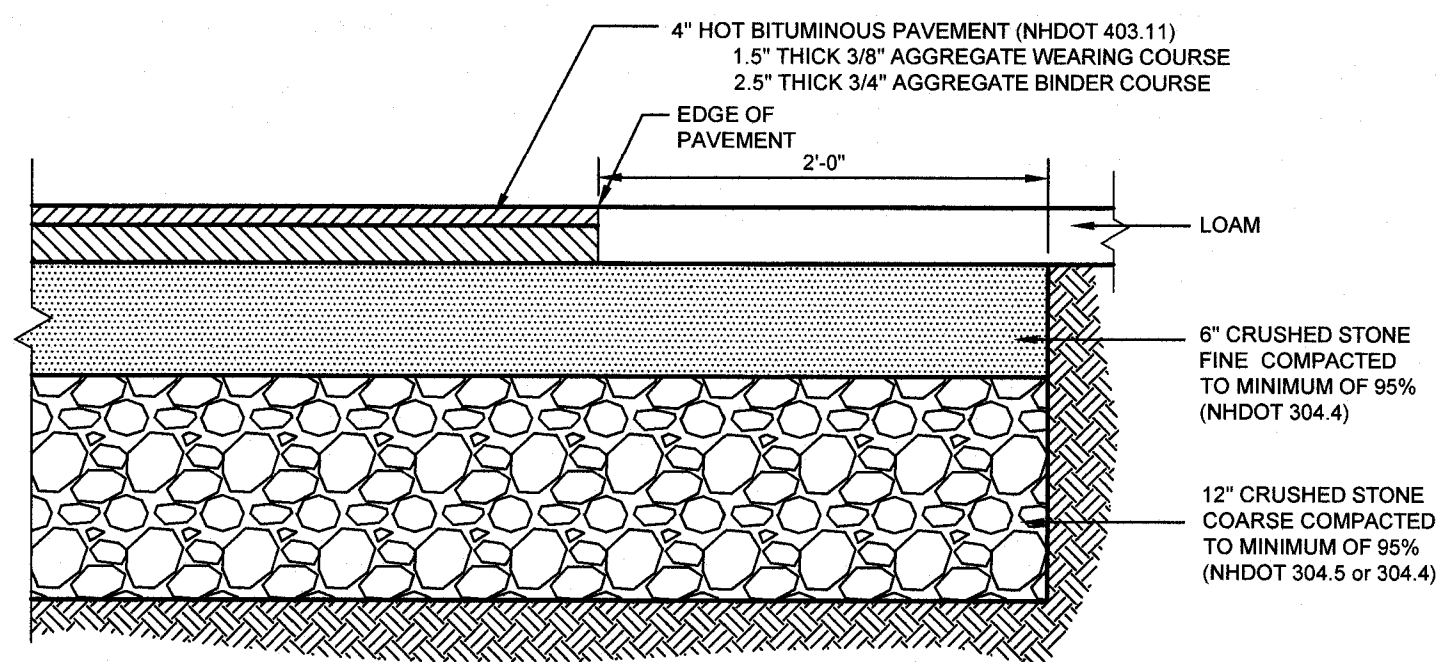
NHBB-F	NH HWY BOUND FOUND	UTILITY POLE
GB-F	GRANITE BOUND FOUND	WELL
IP-F	IRON PIPE FOUND	PROPERTY LINE
IR-S	IRON ROD SET	R.O.W. LINE
GB-TBS	GRANITE BOUND TO BE SET	TREELINE
IR-TBS	IRON ROD TO BE SET	OVERHEAD UTILITIES
	BENCHMARK	EDGE OF PAVEMENT
	SIGN	STONEWALL
	DRAINAGE MANHOLE	BUILDING SETBACK
	CATCH BASIN	EASEMENT
	WATER VALVE	WETLAND BUFFER
	HYDRANT	LANDSCAPE BUFFER
	SEWER MANHOLE	PROPOSED TREELINE
	FLARED END SECTION	PROPOSED EOP
		PROPOSED BIT. CURB
		PROPOSED RET. WALL
		PROPOSED GUARDRAIL

BENCHMARK DATA				REVISIONS		
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

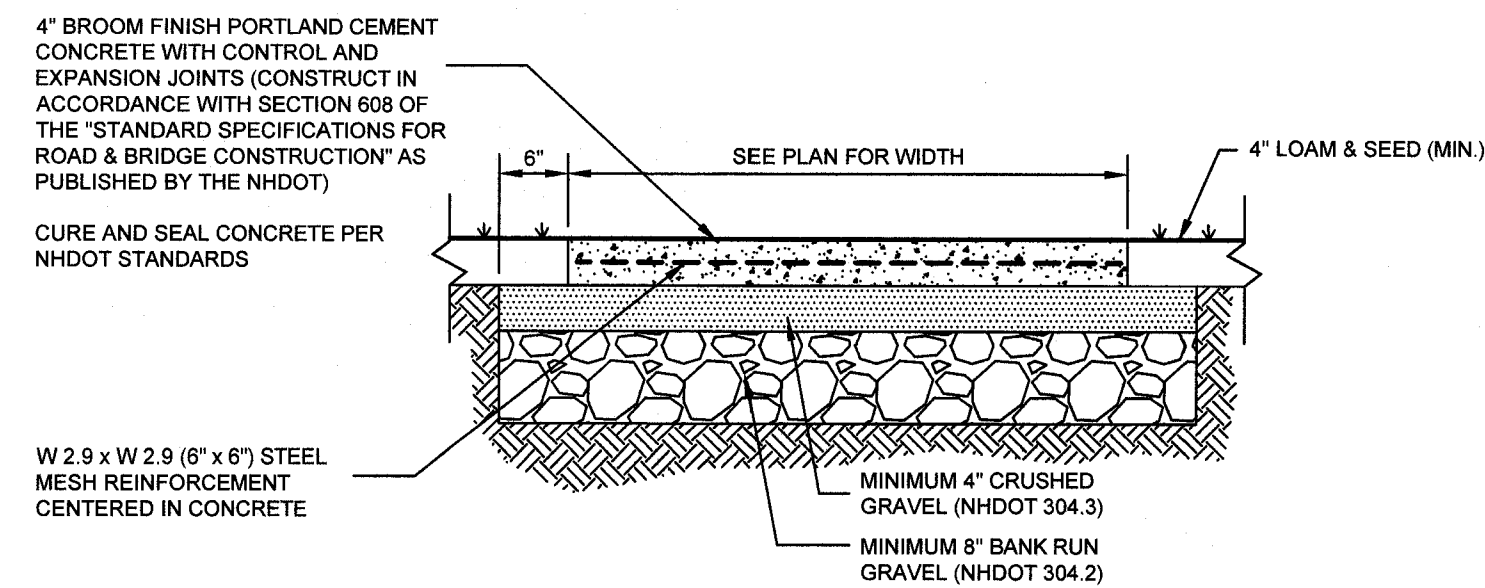


**KNA** KEACH-NORDSTROM ASSOCIATES, INC.  
 Civil Engineering Land Surveying Landscape Architecture  
 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

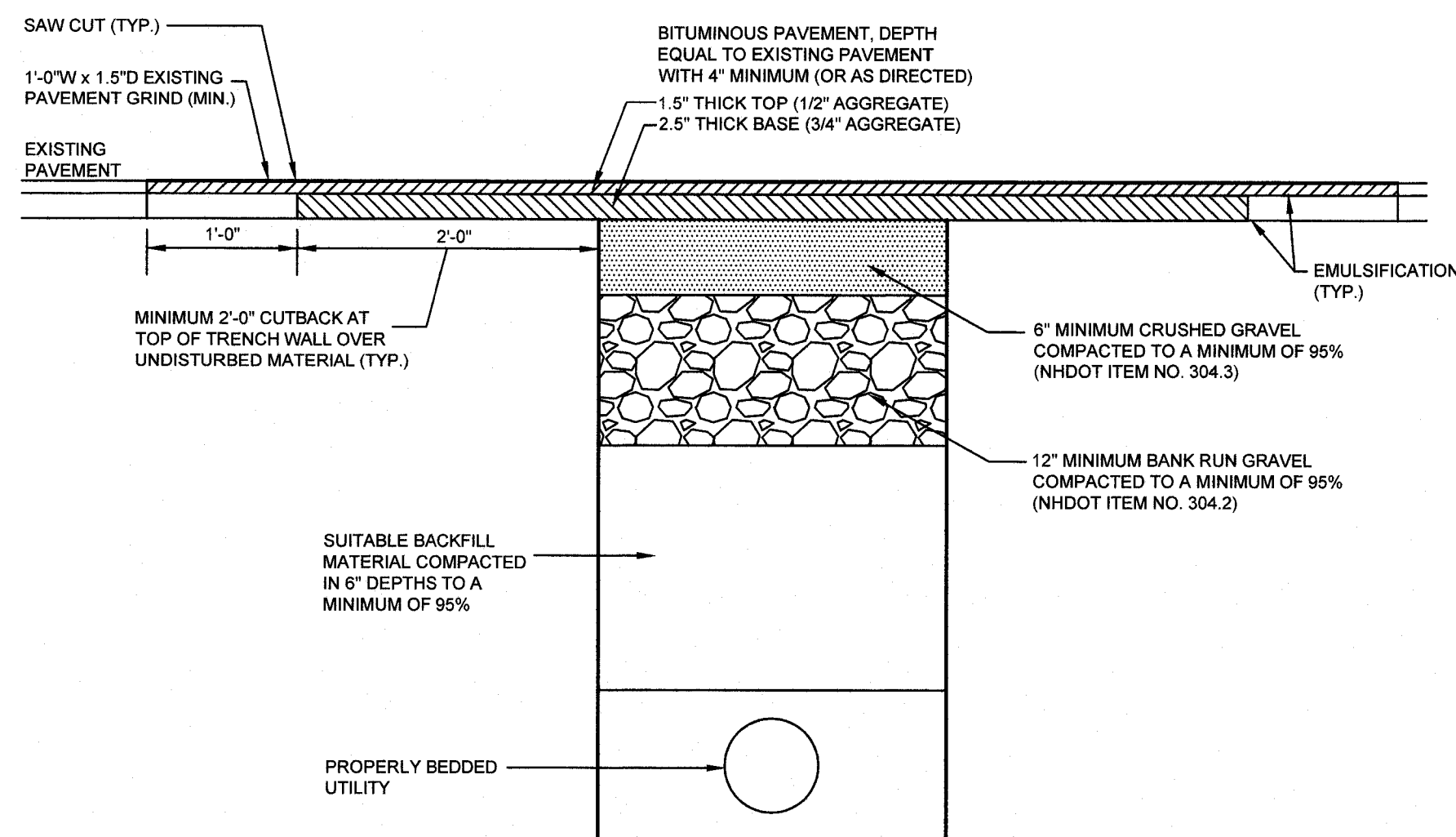
PROJ. NO: 21-0113-1  
 DATE: MARCH 20, 2025  
 SCALE: 1" = 30'  
 FILE NO.:  
 SHEET NO. 13 OF 22



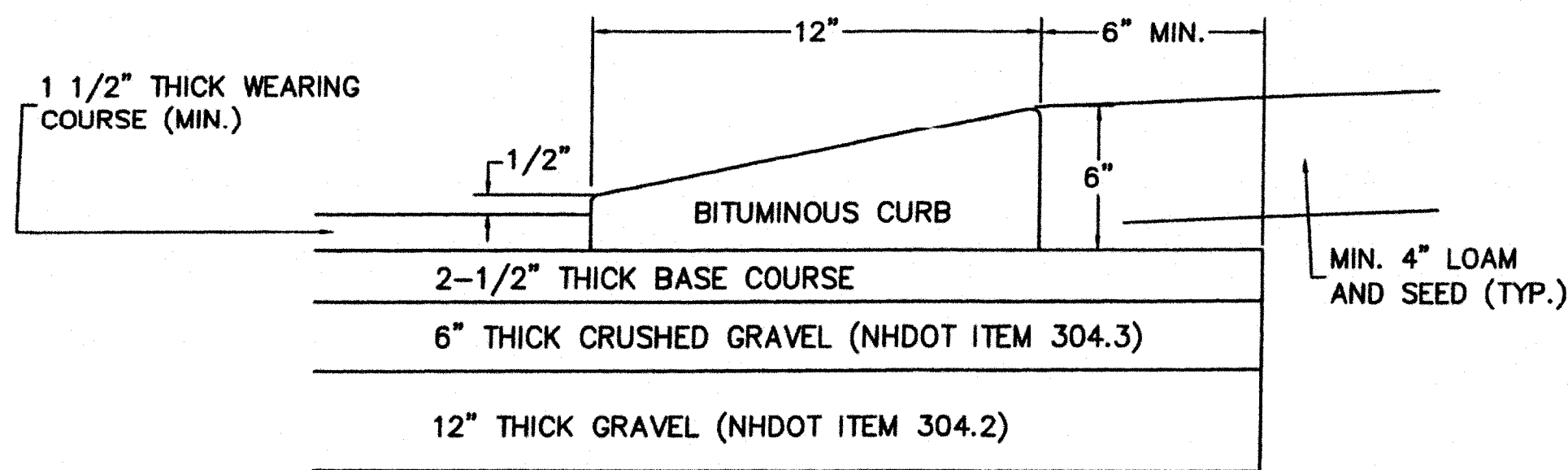
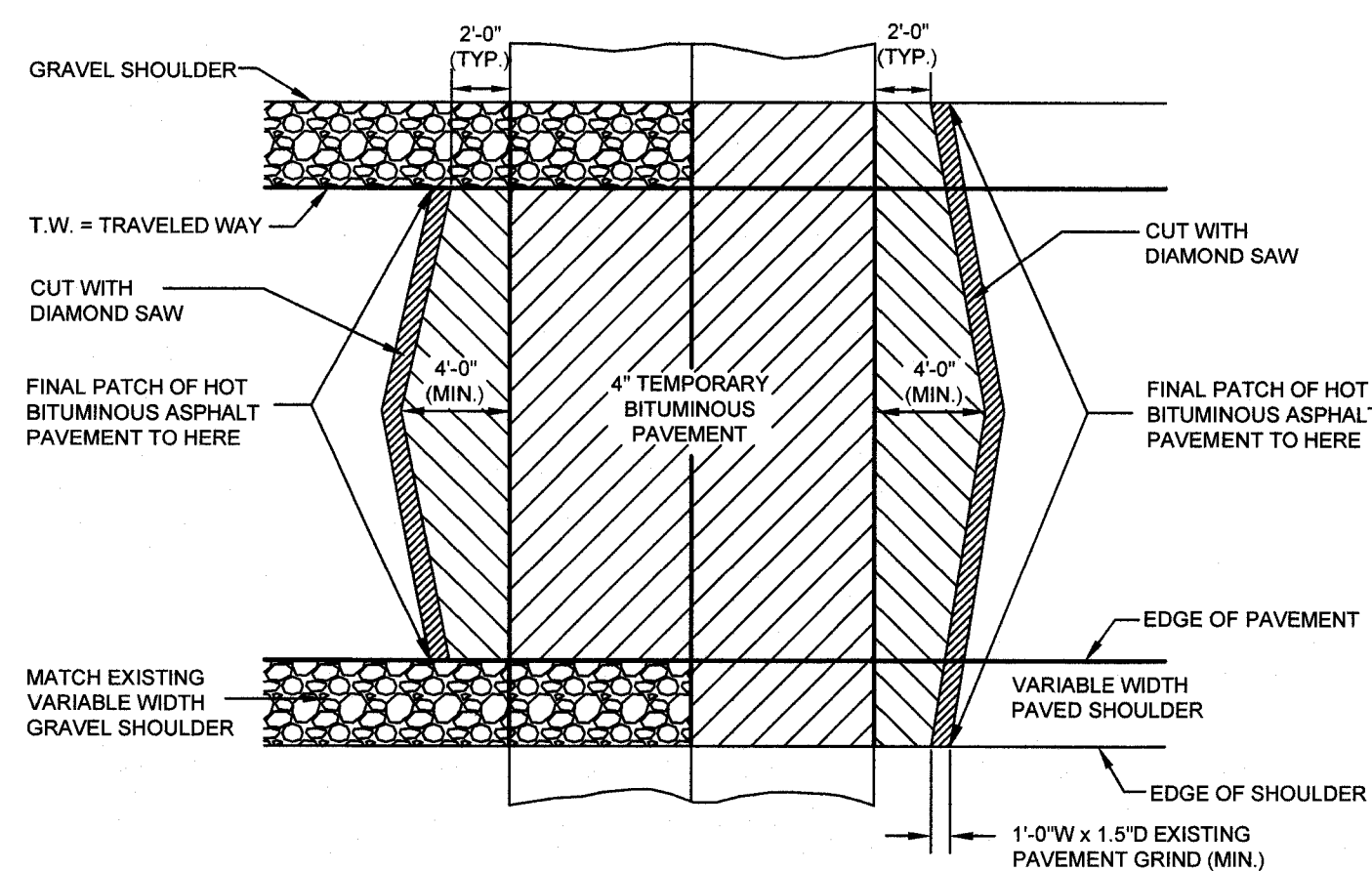
**DRIVEWAY AND PARKING LOT SECTION**  
NOT TO SCALE



**CONCRETE PAD DETAIL**  
NOT TO SCALE  
(MARCH 2008)



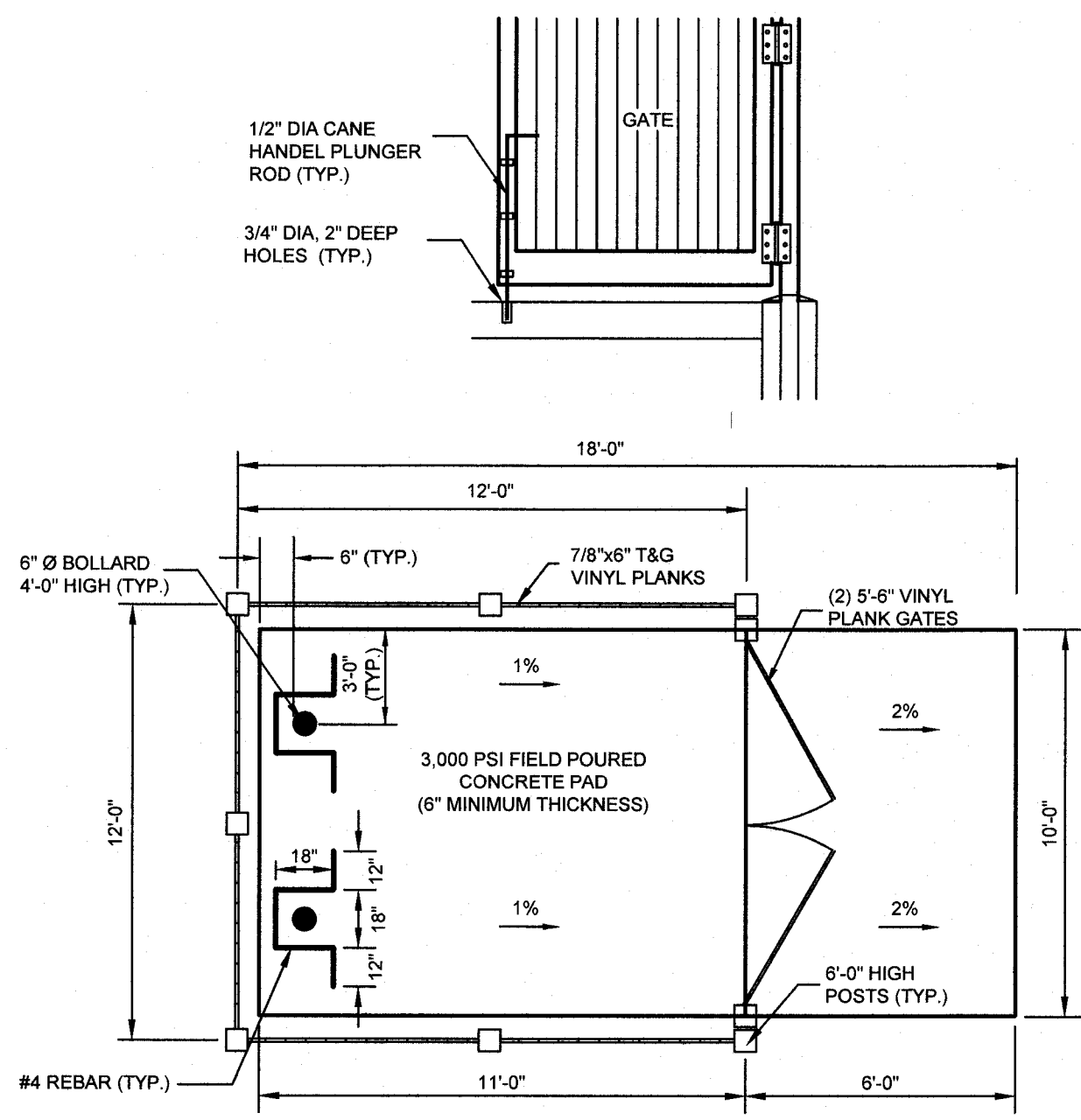
**PERMANENT PAVEMENT REPAIR**  
NOT TO SCALE  
(MARCH 2008)



**NOTES:**

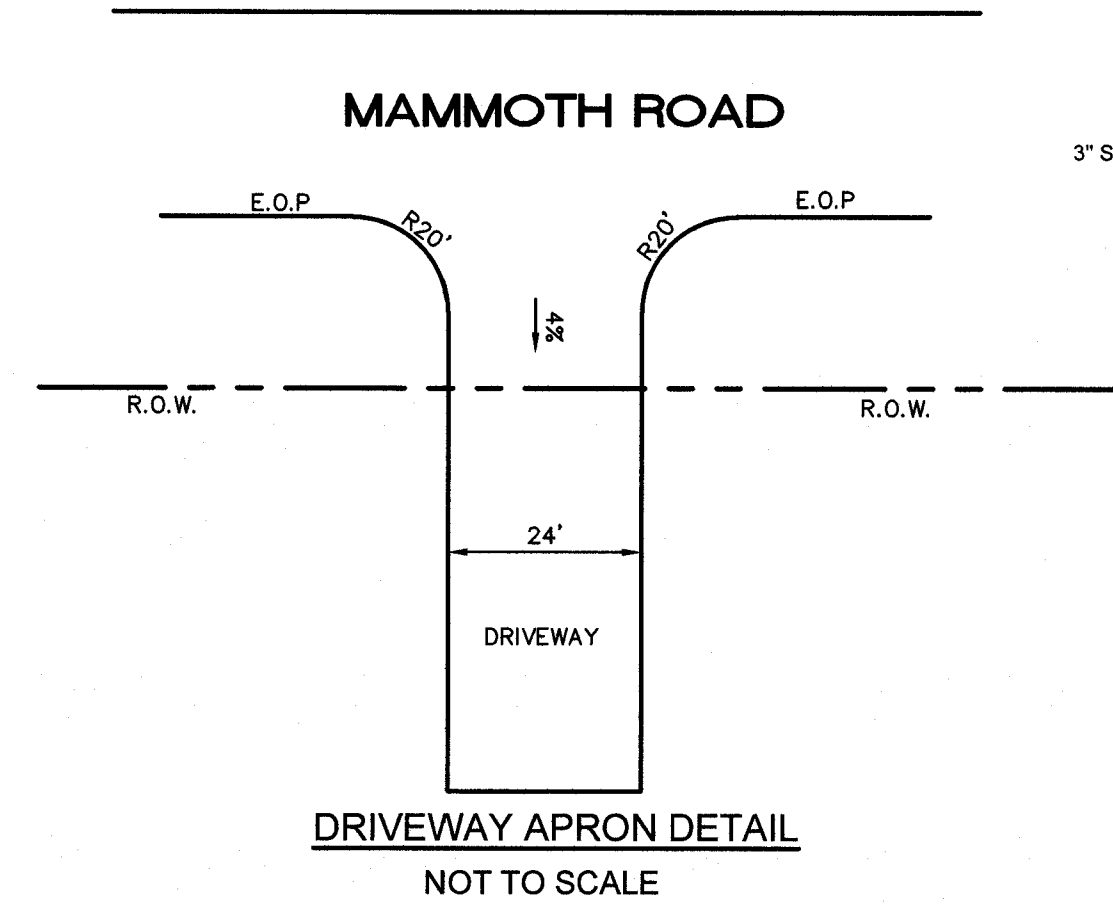
1. APPLY TACK COAT PRIOR TO PLACEMENT OF CURB
2. BITUMINOUS CURB MATERIAL SHALL MEET THE REQUIREMENTS OF NHDOT SECTION 609.
3. CAPE COD BERM DIMENSIONS SHALL MATCH THOSE GIVEN IN THIS DETAIL.

**TYPICAL CAPE COD BERM**  
NOT TO SCALE  
EXHIBIT R104

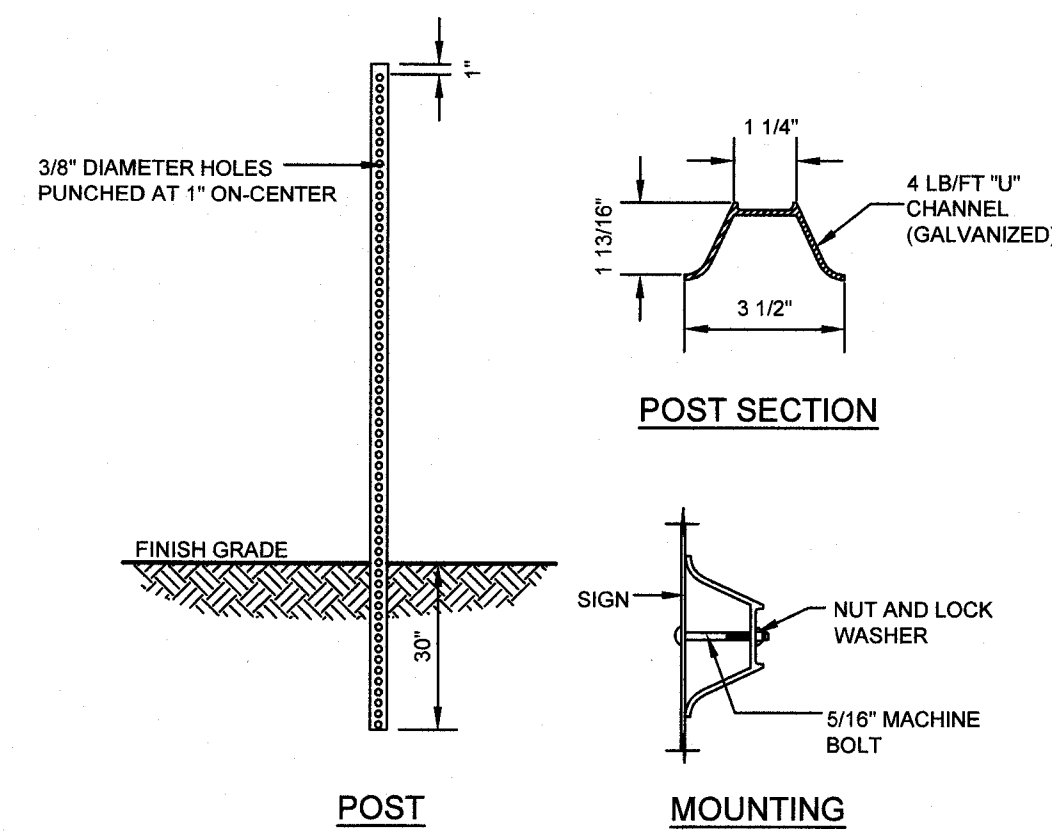


**NOTE:**  
THIS DUMPSTER ENCLOSURE WILL ACCOMMODATE MOST 2, 4, 6 AND 8 CY DUMPSTERS.

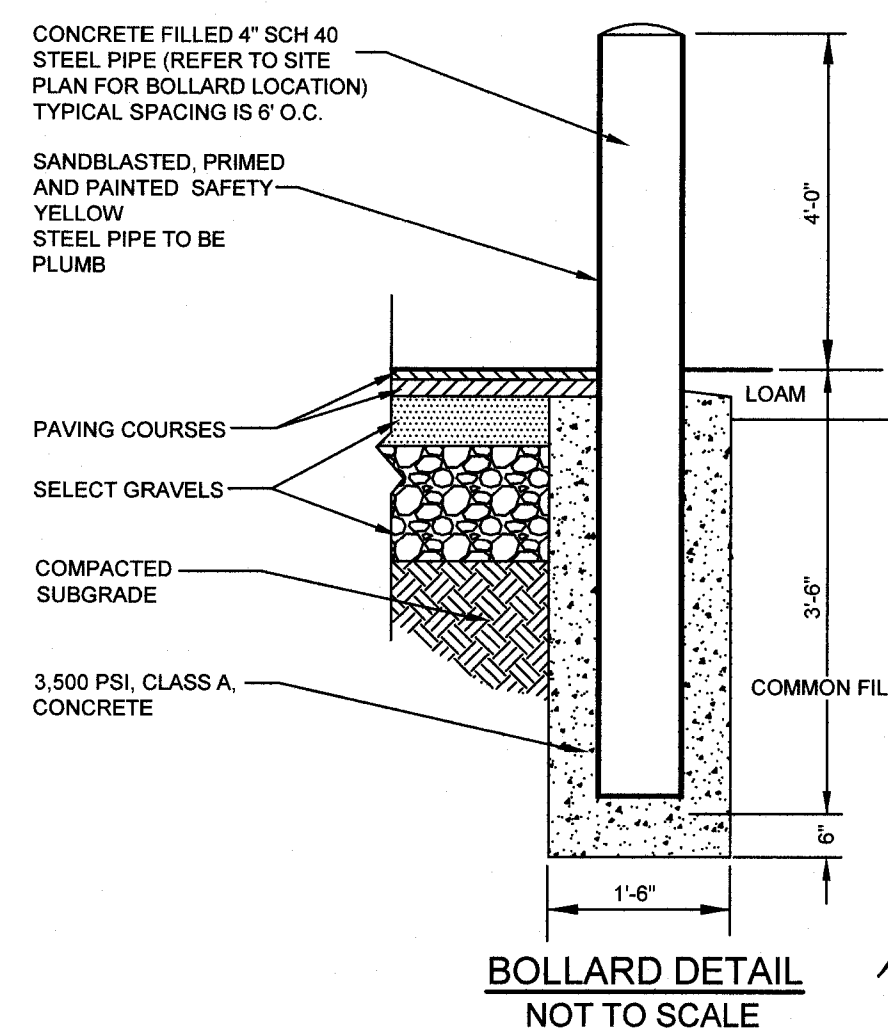
**VINYL TRASH ENCLOSURE DETAIL**  
NOT TO SCALE  
(MARCH 2008)



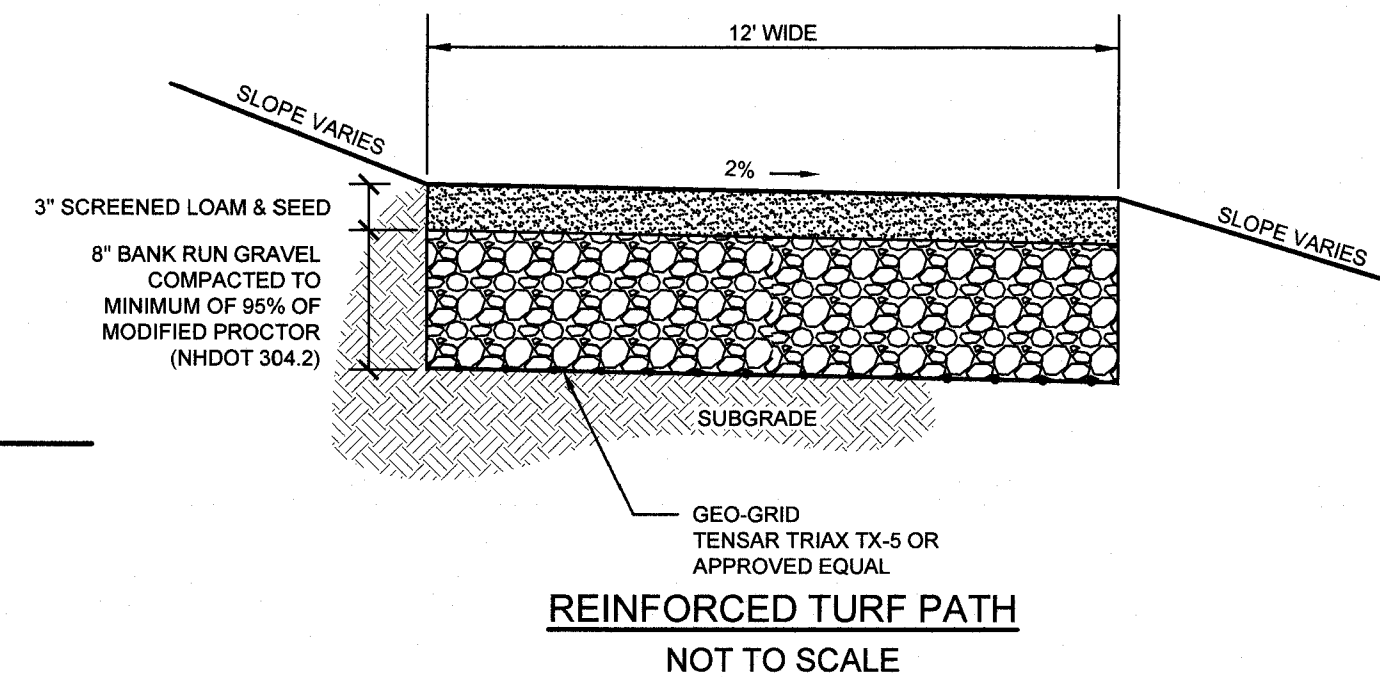
**DRIVEWAY APRON DETAIL**  
NOT TO SCALE



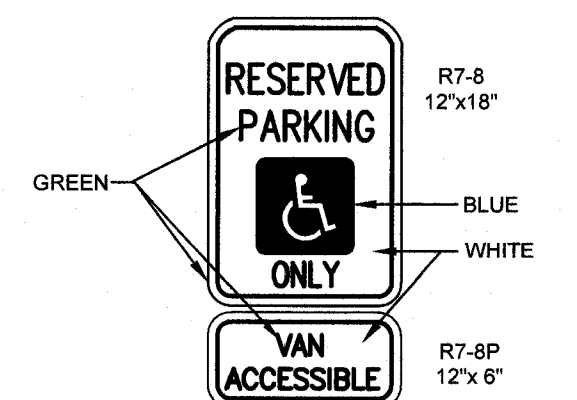
**STEEL SIGN POST DETAIL**  
NOT TO SCALE  
(MARCH 2008)



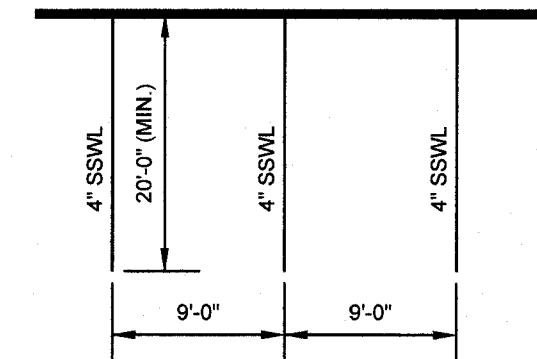
**BOLLARD DETAIL**  
NOT TO SCALE



**REINFORCED TURF PATH**  
NOT TO SCALE



**VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL**  
NOT TO SCALE  
(NOVEMBER 2016)



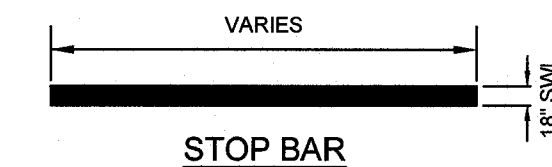
**STANDARD STRIPING DETAIL**  
NOT TO SCALE

**ON SITE STRIPING NOTES:**

1. ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THESE STANDARDS AND THE CURRENT EDITION OF MUTCD.
2. WIDTH OF LINES SHALL VARY NO MORE THAN 1/4 INCH FROM THAT SPECIFIED.
3. THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED.
4. OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.
5. BROKEN LINES SHALL BEGIN AND END WITH THE NEAREST FULL CYCLE OF BROKEN LINE.
6. SOLID LONGITUDINAL LINES SHALL BEGIN AND END WITHIN + 2 INCHES OF A LAYOUT SYMBOL INDICATING THE END OF THE LINE, OR WITH A FULL CYCLE OF BROKEN LINE (IF APPROPRIATE).



**STOP SIGN DETAIL**  
NOT TO SCALE  
(MARCH 2008)



**STOP BAR**

**TRAFFIC SIGN NOTES:**

1. ALL TRAFFIC SIGN FACES AND SHAPES SHALL CONFORM WITH THE MUTCD.
2. ALL SIGN POST MOUNTS SHALL CONFORM WITH THE AASHTO AND NHDOT SPECIFICATIONS.



**NO PARKING FIRE LANE**  
R7-18  
18 inch x 24 inch

**LOT 235 OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049

**LOT 236 OWNER:**  
PAGE ROCK, LLC  
PO BOX 1675  
HOLLIS, N.H. 03049

**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**

MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

*[Signature]*  
3/19/26

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**K&A**  
KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-8881

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: AS SHOWN  
FILE NO.:  
SHEET NO. 14 OF 22

**TURF ESTABLISHMENT SCHEDULE**

**PURPOSE:**  
TO ESTABLISH AND MAINTAIN PERMANENT AND TEMPORARY TURF AREAS, RESTORE GROWTH TO EXISTING TURF AREAS DISTURBED DURING CONSTRUCTION AND CONTROL SOIL EROSION.

**PREPARATION AND EXECUTION:**

1. RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STONES LARGER THAN 1 INCH.
2. PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.
3. FINE GRADE SURFACE AND SUPPLEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNIFORM SURFACE ACCORDING TO THE FINISH GRADES INDICATED. TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE SUBGRADE IS EXCESSIVELY WET OR FROZEN.
4. IF THE PH OF THE SOIL NEEDS TO BE RAISED, APPLY LIME EVENLY OVER LOAM SURFACE AND THOROUGHLY INCORPORATE LIME INTO THE LOAM BY HEAVY RAKING TO AT LEAST ONE-HALF THE DEPTH OF THE LOAM.
5. APPLY FERTILIZER AND MIX WITH THE UPPER 2 INCHES OF LOAM.
6. DETERMINE APPROPRIATE MIXTURE FOR AREA TO BE SEEDED BASED ON EXAMINATION OF PROJECT PLANS. UNIFORMLY SPREAD THE SEED BY BROADCASTING OR HYDROSEEDING. IF BROADCASTING, LIGHTLY RAKE INTO THE PREPARED SURFACE AND ROLL. IF HYDROSEEDING, USE 4 TIMES THE RECOMMENDED RATE OF INOCULANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITH A FINE SPRAY.
7. SEEDING AND INITIAL FERTILIZING SHALL BE DONE BETWEEN APRIL 1 AND JUNE 1 OR BETWEEN AUGUST 15 AND OCTOBER 14, OR AS PERMITTED. SEEDING SHALL NOT BE DONE DURING WINDY WEATHER OR WHEN THE GROUND IS FROZEN, EXCESSIVELY WET OR OTHERWISE UNTILLABLE.
8. WITHIN 24 HOURS AFTER SEEDING OPERATION, UNIFORMLY MULCH THE AREA WITH STRAW ANCHOR MULCH ON ALL SLOPES EXCEEDING 3:1 USING MULCH NETTING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER.
9. PROTECT AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGRADED AND RESEEDED.
10. WHEN IT IS IMPRACTICAL TO ESTABLISH PERMANENT GROWTH ON DISTURBED EARTH BY OCTOBER 14, A TEMPORARY SEED MIXTURE SHALL BE USED. WHEN TEMPORARY SEEDING CANNOT ESTABLISH VISIBLE GROWTH, THE DISTURBED AREA SHALL BE COVERED WITH SIX INCHES OF MULCH FOR THE WINTER.

**MAINTENANCE:**

ALL SEEDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH HEALTHY UNIFORM GROWTH OVER THE ENTIRE SEEDED AREA. MAINTAIN SEEDED AREAS IN AN APPROVED CONDITION UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE REPAIRS FOR DAMAGE CAUSED BY EROSION.

**APPLICATION RATES:**

1. LOAM SHALL BE APPLIED AT A MINIMUM COMPACTED THICKNESS OF 4 INCHES.
2. LIME SHALL BE USED WHEN NECESSARY TO RAISE THE PH OF THE SOIL AND APPLIED AT ONE OF THE FOLLOWING RATES:

EXISTING SOIL Ph	TONS/ACRE	POUNDS/CUBIC YARD
4.0 - 4.4	3	12
4.5 - 4.9	2	8
5.0 - 5.4	1	4

3. FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:

INITIAL APPLICATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-10-10	20.0	1.0
15-15-15	13.4	1.5
19-19-19	10.5	1.9

REFERTILIZATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-3-6	20.0	1.0
12-2-8	16.7	1.2
12-4-8	16.7	1.2

4. MULCH SHALL BE APPLIED AT A RATE OF 13 CUBIC YARDS PER 1,000 S.F. OF LANDSCAPE BED.

**MATERIALS:**

1. LOAM SHALL CONSIST OF LOOSE, FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE OF VIABLE PARTS OF PROHIBITED INVASIVE PLANTS AND BE GENERALLY FREE OF STONES, LUMPS, STUMPS AND SIMILAR OBJECTS LARGER THAN 2 INCHES IN GREATEST DIAMETER. SUBSOIL, ROOTS AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.6.
2. LIME SHALL BE A CALCIUM OR CALCIUM LIME AGRICULTURAL LIMESTONE CONTAINING NOT LESS THAN 95% OF EITHER CALCIUM OR MAGNESIUM CARBONATE, OR BOTH. IT SHALL CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND SHALL COMPLY WITH ALL STATE AND FEDERAL RULES AND REGULATIONS.
3. FERTILIZER SHALL BE STANDARD COMMERCIAL GRADE FERTILIZER CONFORMING TO ALL STATE AND FEDERAL RULES AND REGULATIONS AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. EXCEPT AS PERMITTED, THE ANALYSIS RATIO SHALL BE 1:1:1 FOR INITIAL APPLICATION AND 3:1:2 FOR REFERTILIZATION APPLICATION.
4. GRASS SEED SHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE AGRICULTURAL AND VEGETABLE SEED LAWS AND SHALL INCLUDE NO "PRIMARY NOXIOUS WEED SEEDS."
5. SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF THE FOLLOWING:

KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMANATION (%)	POUNDS/ACRE (TOTAL 120 POUNDS)
CREeping RED FESCUE	96	85	40
PERENNIAL RYEGRASS	96	90	50
KENTUCKY BLUEGRASS	97	85	25
REDTOP	95	80	5

6. SEED MIXTURE FOR SLOPE AREAS SHALL CONSIST OF THE FOLLOWING:

KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMANATION (%)	POUNDS/ACRE (TOTAL 95 POUNDS)
CREeping RED FESCUE	96	85	35
PERENNIAL RYEGRASS	96	90	30
REDTOP	95	80	5
ALSIKE CLOVER	97	90	5
BIRDSFOOT TREFLOIL	98	80	5
LANCE-LEAVED COREOPSIS	95	80	4
OXEYE DAISY	95	80	3
BLACKEYED SUSAN	95	80	4
WILD LUPINE	95	80	4

7. TEMPORARY SEEDING MIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 SF AND SHALL BE AN APPROVED CONSERVATION MIX OR CONSIST OF THE FOLLOWING:

- 15% BLACKWELL OR SHELTER SWITCHGRASS
- 30% NIAGRA OR KAW BIG BLUESTEM
- 30% CAMPER OR BLAZE LESTER
- 15% NE-27 OR BLAZE SAND LOVEGRASS
- 10% VIKING BIRDSFOOT TREFLOIL

INOCULUM SPECIFIC TO BIRDSFOOT TREFLOIL MUST BE USED WITH THIS MIXTURE. IF SEEDING BY HAND, A STICKING AGENT SHALL BE USED. IF SEEDING WITH A HYDROSEEDER, USE FOUR TIMES THE RECOMMENDED AMOUNT OF INOCULUM.

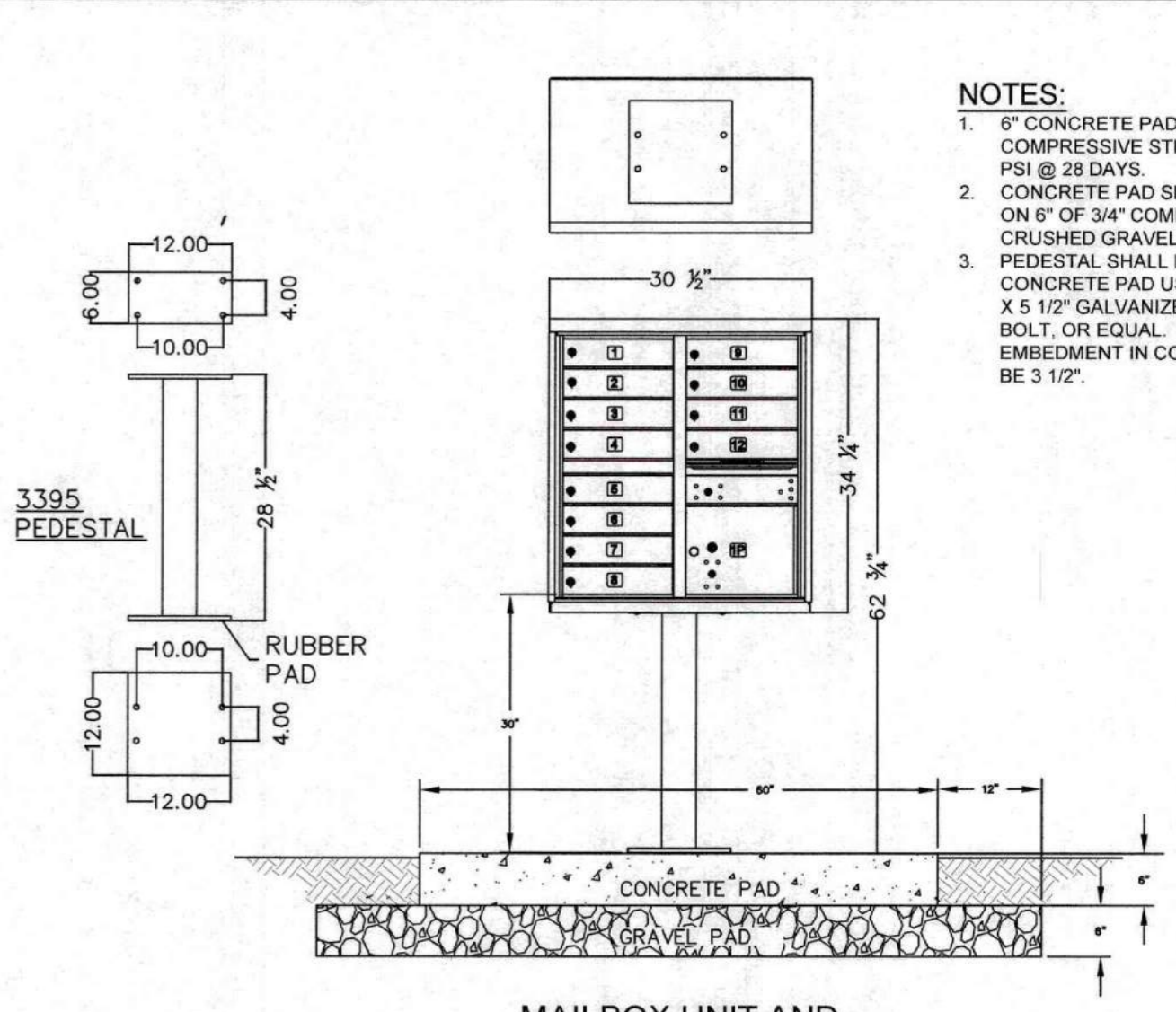
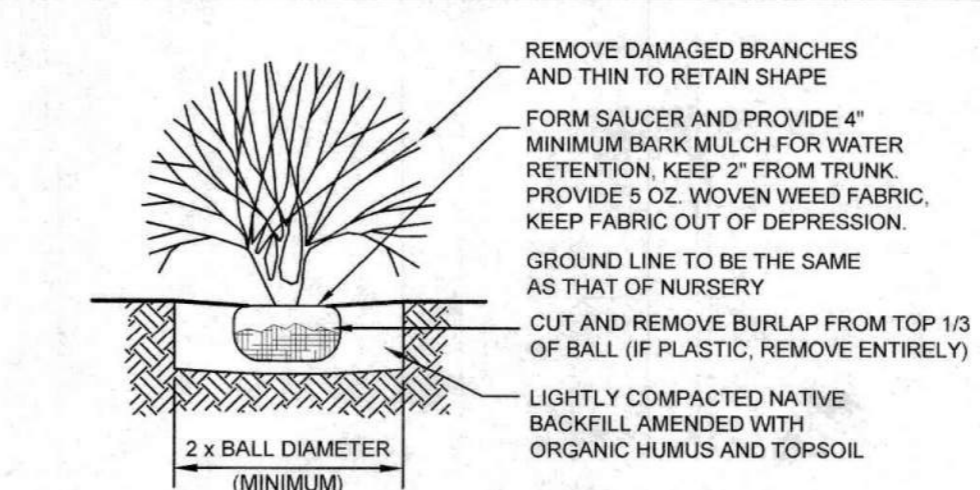
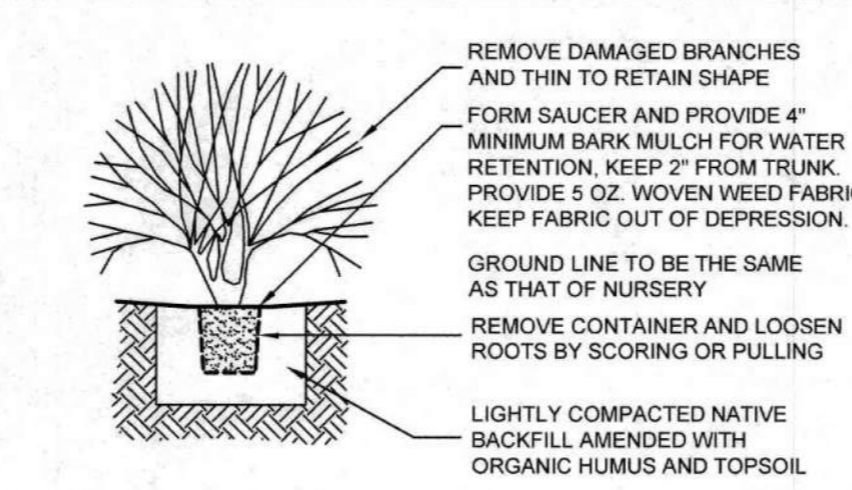
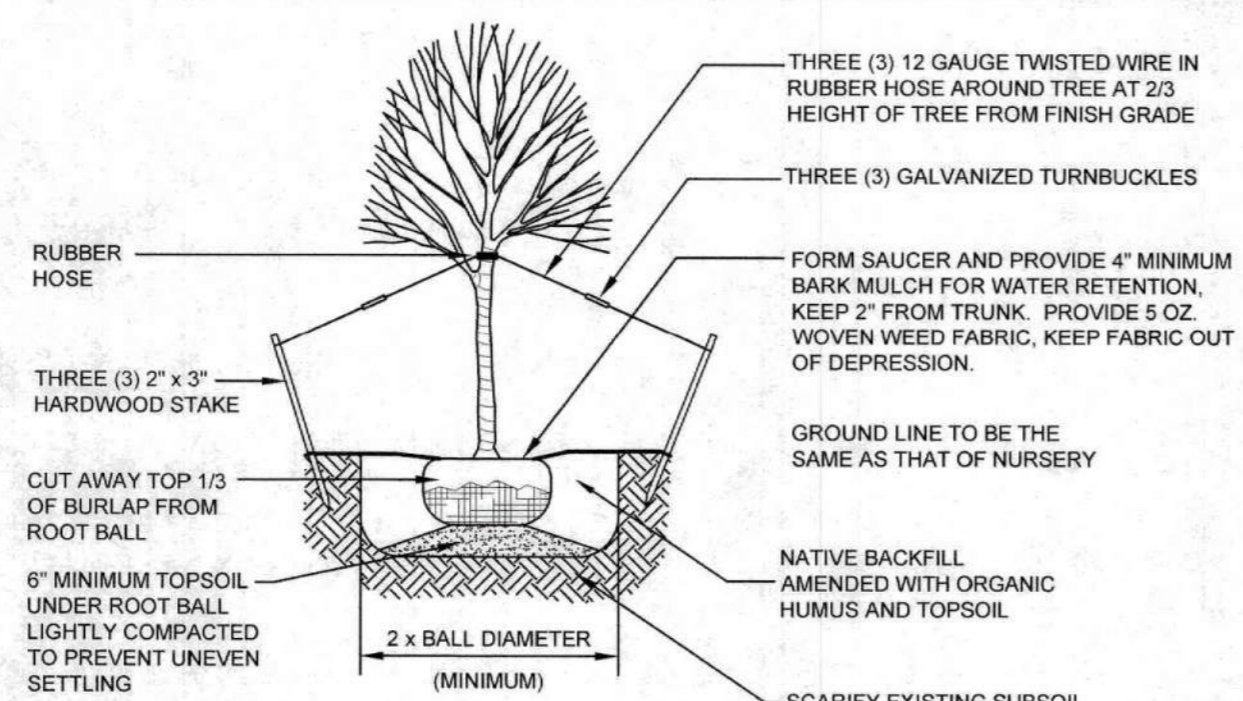
8. SEED MIXTURE FOR STORMWATER MANAGEMENT AREAS, INCLUDING DETENTION BASINS AND VEGETATED TREATMENT SWALES, SHALL BE APPLIED AT A RATE OF 70 POUNDS PER ACRE OR 1.6 POUNDS PER 1,000 SF, AND SHALL CONSIST OF THE FOLLOWING:

- 25% CREeping RED FESCUE
- 15% SWITCH GRASS
- 15% FOX SEDGE
- 15% CREeping BENTGRASS
- 10% FLATPEA
- 20% WILDFLOWER VARIETY

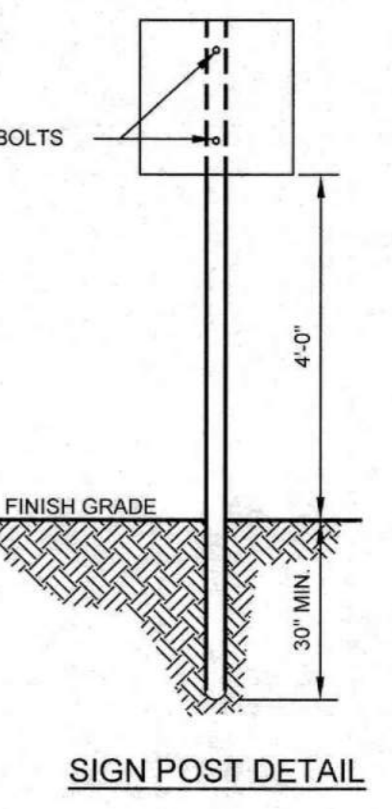
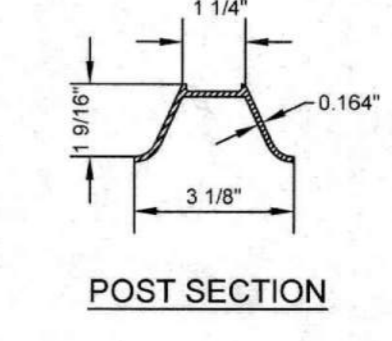
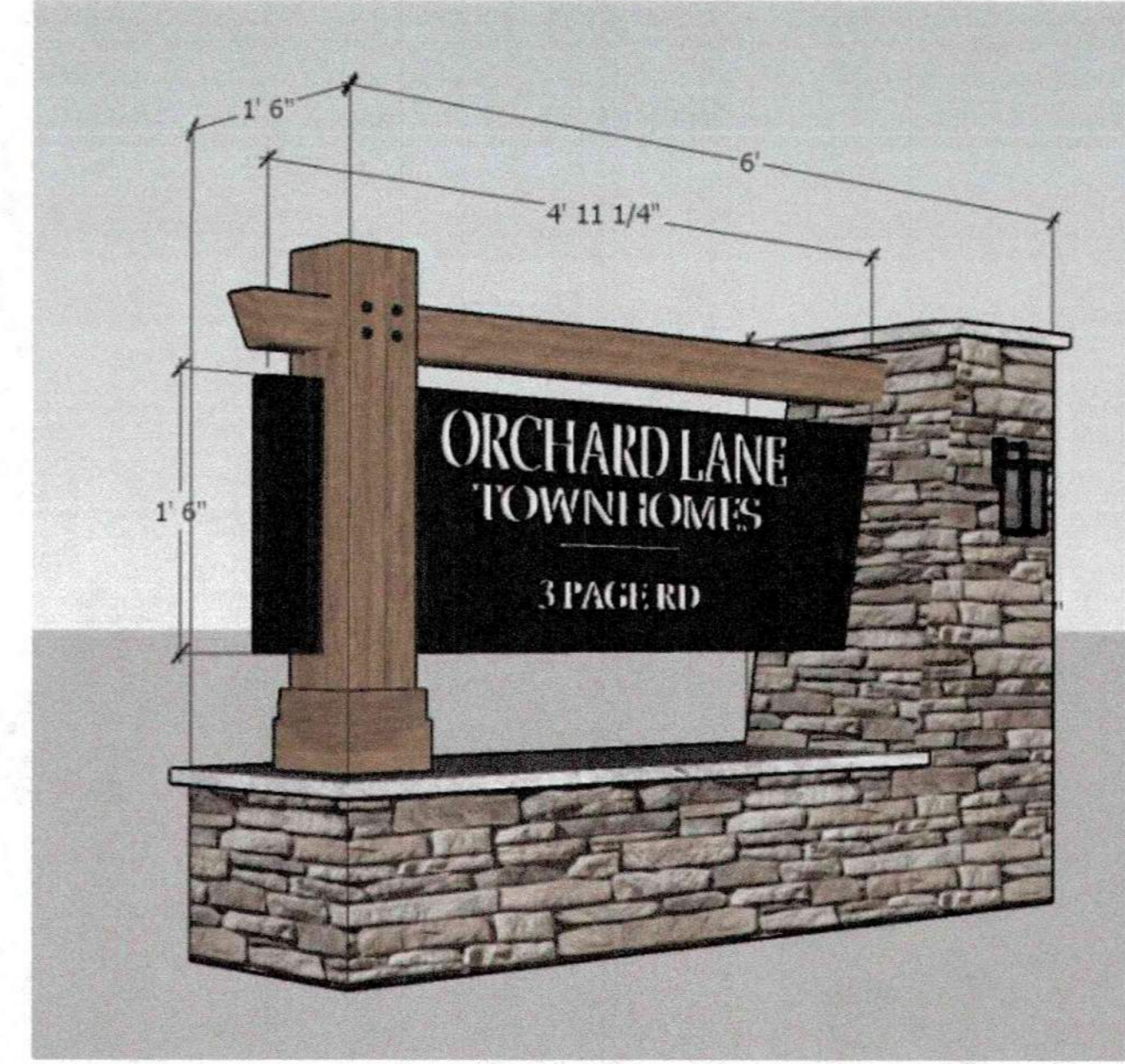
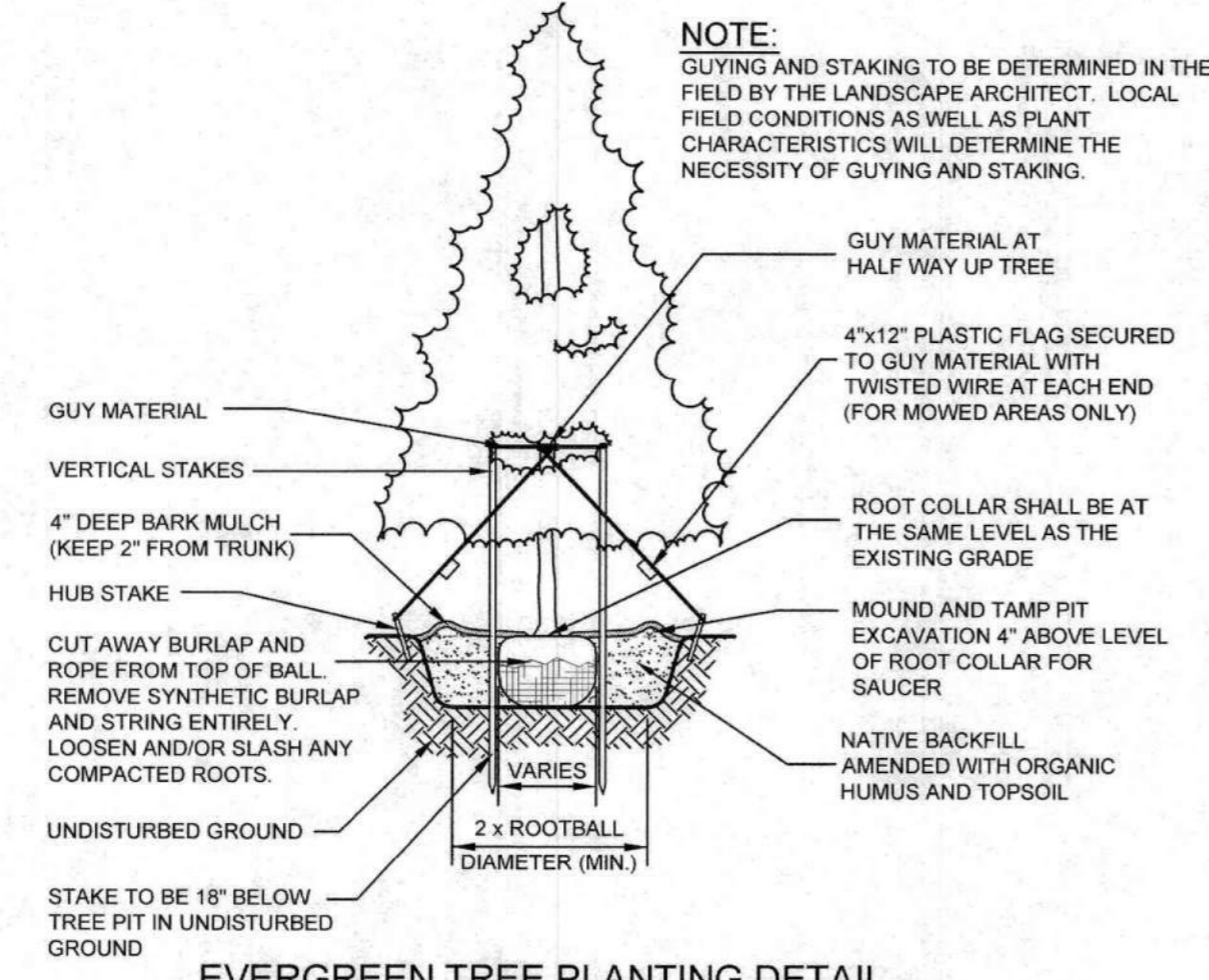
9. STRAW USED FOR MULCH SHALL CONSIST OF MOWED AND PROPERLY CURED GRASS OR LEGUME MOWINGS, FREE FROM WEEDS, TWIGS, DEBRIS, INVASIVE SPECIES OR OTHER DELETERIOUS MATERIAL AND ROT OR MOLD.

**SOD SPECIFICATIONS:**

1. SOD SHALL BE PROVIDED WITH A STRONG ROOT SYSTEM, NOT LESS THAN TWO YEARS OLD AND SHALL BE FREE OF ANY UNDESIRABLE NATIVE GRASSES OR WEEDS.
2. SOD SHALL BE MACHINE CUT TO A THICKNESS NOT LESS THAN 3/4", EXCLUDING THATCH, AND SHALL BE CAPABLE OF VIGOROUS GROWTH WHEN PLANTED.
3. SOD PADS SHALL BE OF UNIFORM SIZE AND COMPOSED OF AT LEAST TWO LOCAL GRASS VARIETIES.
4. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS, DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. TAMP SOD TO ENSURE CONTACT WITH WITH SOIL.
5. WATER WITHIN ONE HOUR OF PLANTING WITH A FINE SPRAY.



- NOTES:**
1. 6" CONCRETE PAD SHALL HAVE COMPRESSIVE STRENGTH OF 3,000 PSI @ 28 DAYS.
  2. CONCRETE PAD SHALL BE POURED ON 6" OF 3/4" COMPACTED CRUSHED GRAVEL.
  3. PEDESTAL SHALL BE MOUNTED TO CONCRETE PAD USING A 1/2" DIA X 5 1/2" GALVANIZED HILTI KWIK BOLT, OR EQUAL. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 3 1/2".



LENGTH: P-12, 12'-0"; P-14, 14'-0"; P-16, 16'-0"  
WEIGHT PER LINEAR FOOT: 2.50 LBS. (MIN.)  
HOLES: 3/8" DIA. 1" C-C FULL LENGTH  
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-575 (GRADE 1070-1080)  
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN, BAKED ON OR AIR DRIED. PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

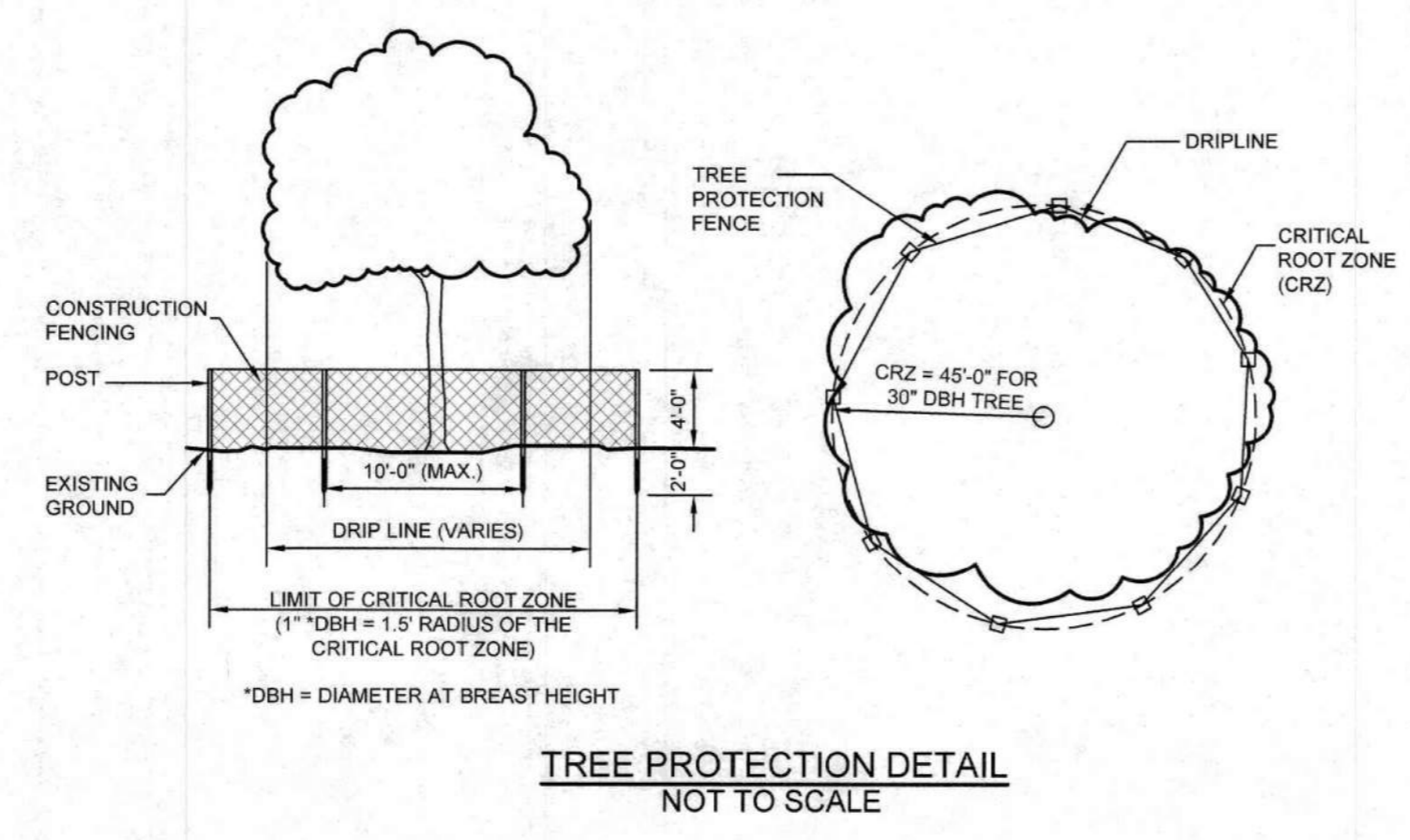
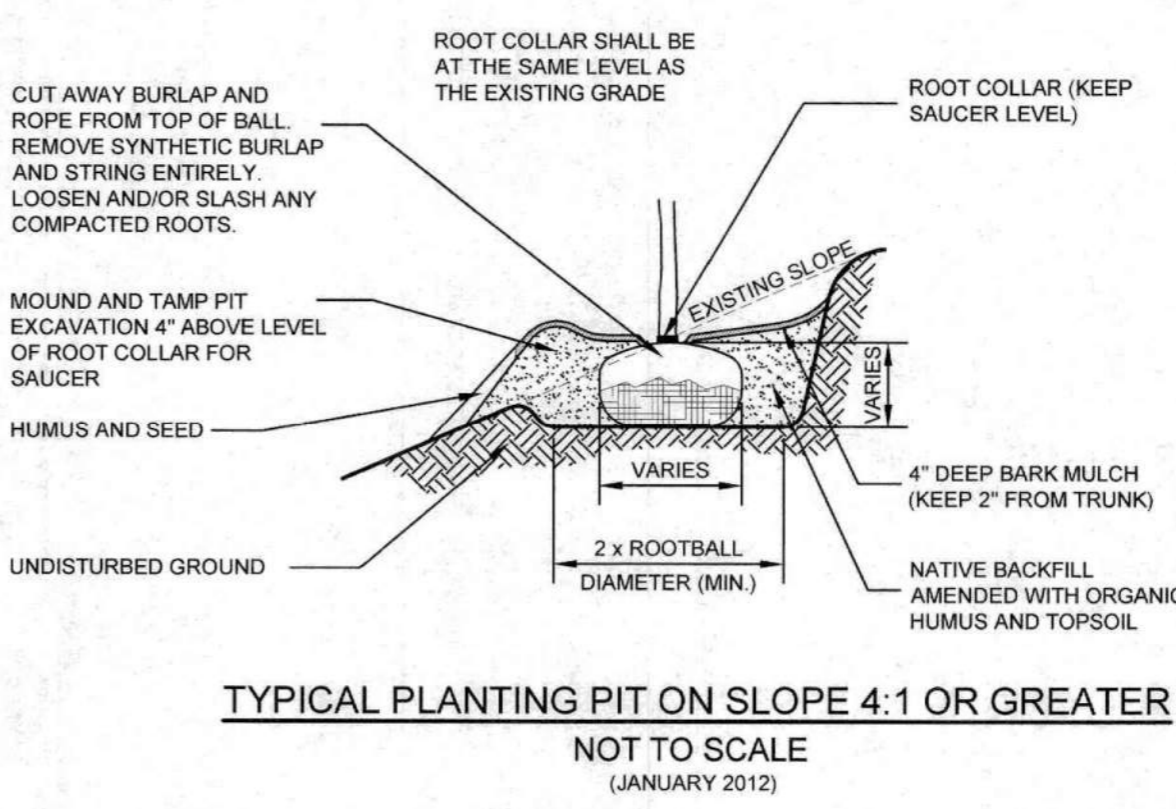
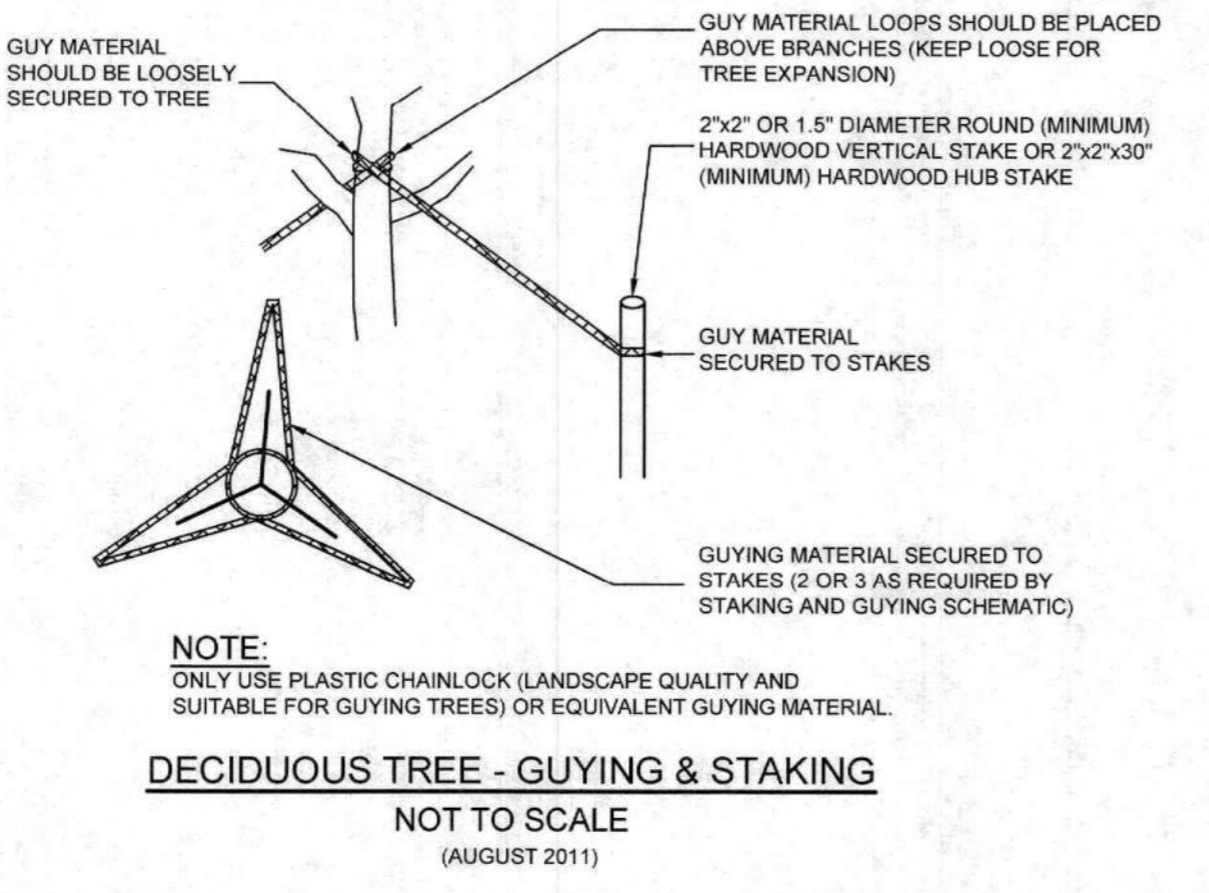
**POST NOTES:**

1. POSTS SHALL BE PLUMB; ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH, AFTER INSERTING POSTS, THE HOLES SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NOT TO EXCEED 6" DEEP THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED AND, AFTER DRIVING, THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS-SECTIONAL DIMENSION AS THE BODY OF THE POST; BATTERED HEADS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. SIGNS SHALL BE ERECTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
6. WHEN SIGN IS IN PLACE, NO PART OF POST SHALL EXTEND ABOVE THE SIGN.
7. DIMENSIONS SHOWN ARE NOMINAL.
8. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.

**SIGN NOTE:**

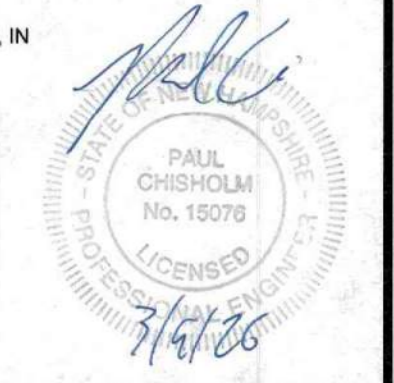
TAGS SHALL BE PLACED IN NEAREST TREE ALONG 50 FOOT WETLANDS BUFFER AS SHOWN, IN AREAS WHERE THERE ARE NO TREES, SIGN POSTS SHALL BE USED AND INSTALLED.

**CONSERVATION OVERLAY SIGNAGE DETAIL**  
NOT TO SCALE



**PROTECTED CONSERVATION AREA**  
DO NOT DISTURB SOILS OR VEGETATION  
VIOLATORS WILL BE PROSECUTED

FOR INFORMATION OR TO REPORT A VIOLATION CALL THE CODE ENFORCEMENT OFFICER AT 603-1100, EXT. 129



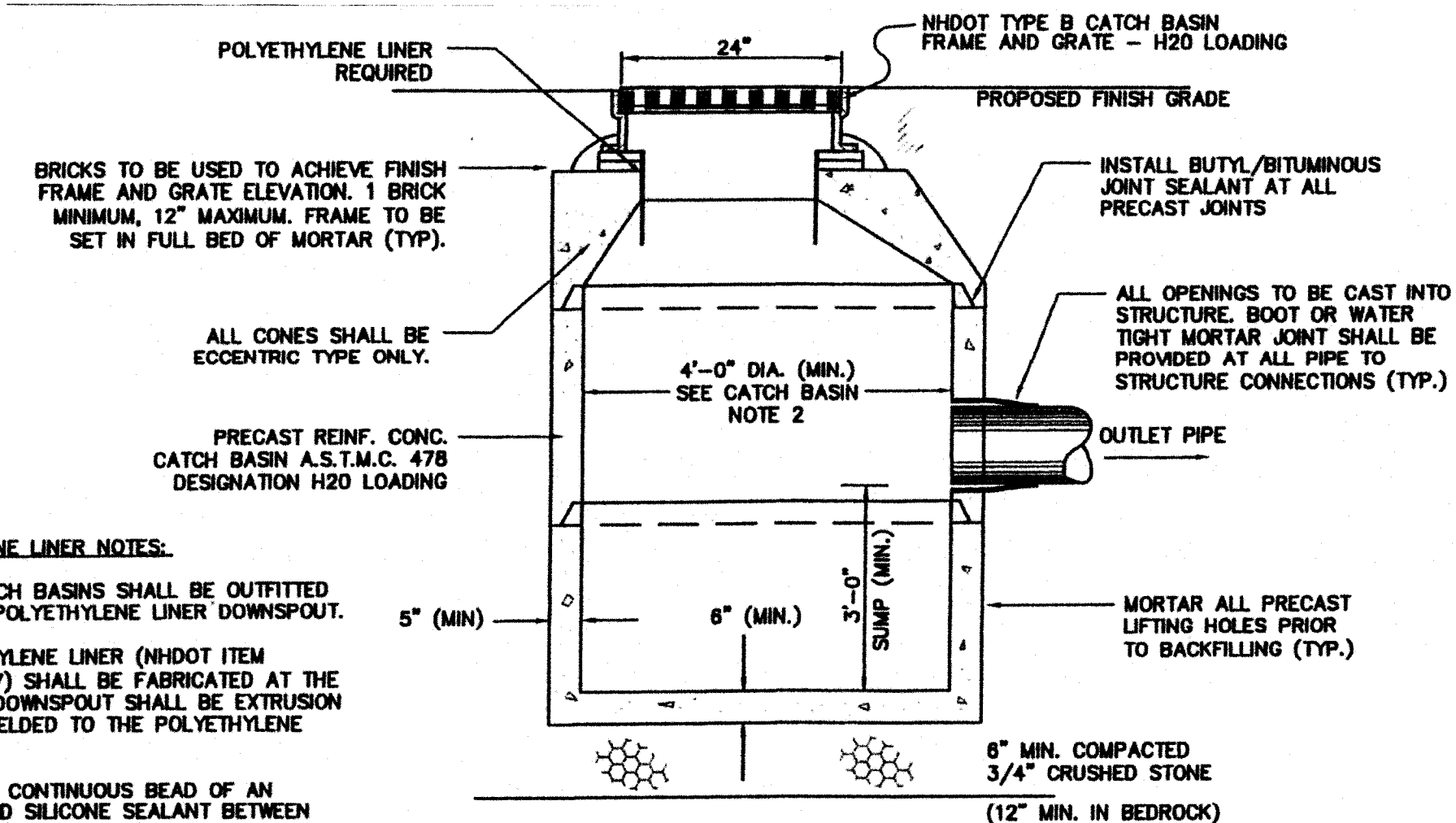
<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**  
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**KMA** KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2861

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: AS SHOWN  
FILE NO.:  
SHEET NO. 15 OF 22



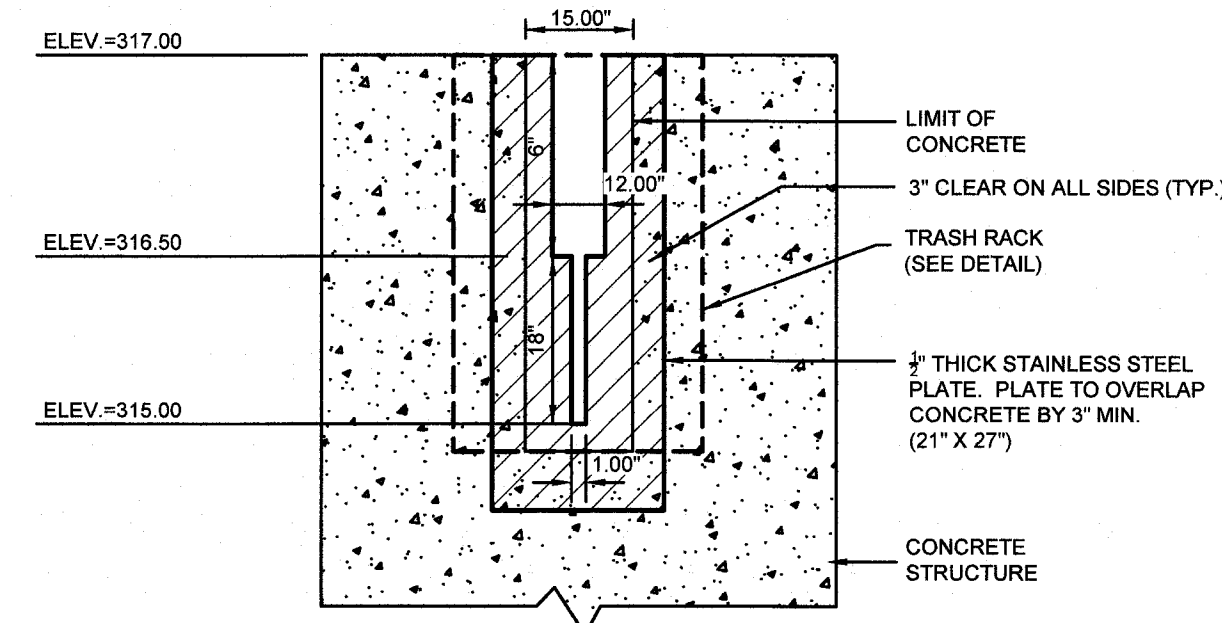
**POLYETHYLENE LINER NOTES:**

1. ALL CATCH BASINS SHALL BE OUTFITTED WITH A POLYETHYLENE LINER DOWNSPOUT.
2. POLYETHYLENE LINER (NHDOT ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
3. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT BETWEEN FRAME AND POLYETHYLENE SHEET.
4. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE).
5. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH CURB).
6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 3" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.

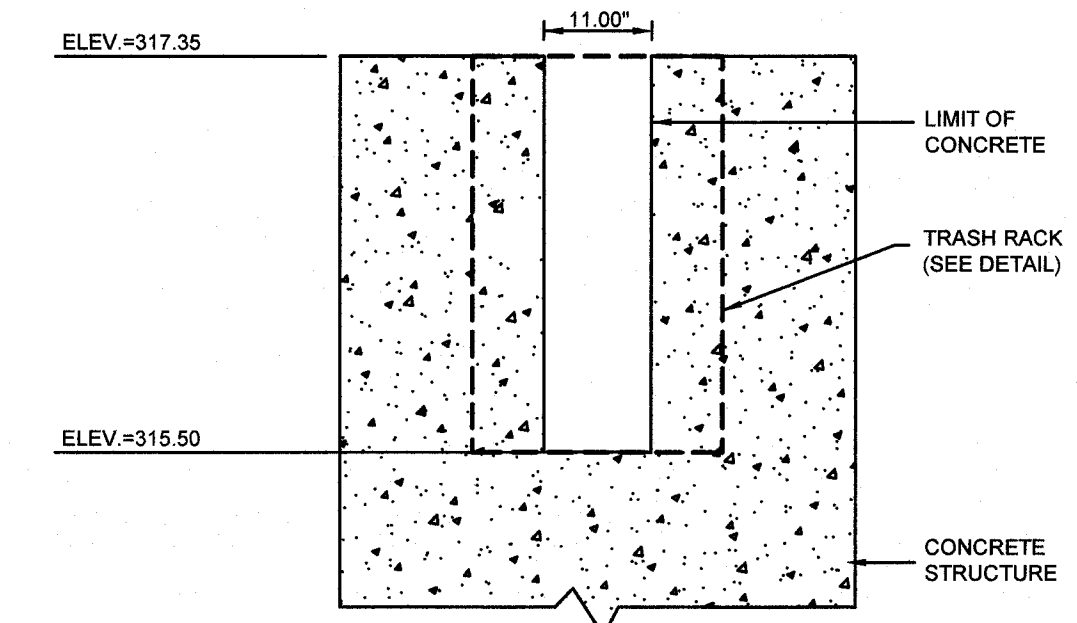
**CATCH BASIN NOTES:**

1. WHERE DEPTH EXCEEDS 12 FT, USE 5'-0" DIAMETER (MIN.) MAXIMUM DEPTH = 18 FEET
2. MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS AND SEALANTS SHALL BE IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS

**CATCH BASIN DETAIL**  
NOT TO SCALE  
**EXHIBIT D104**



**OS#2 WEIR PLATE DETAIL**  
NOT TO SCALE

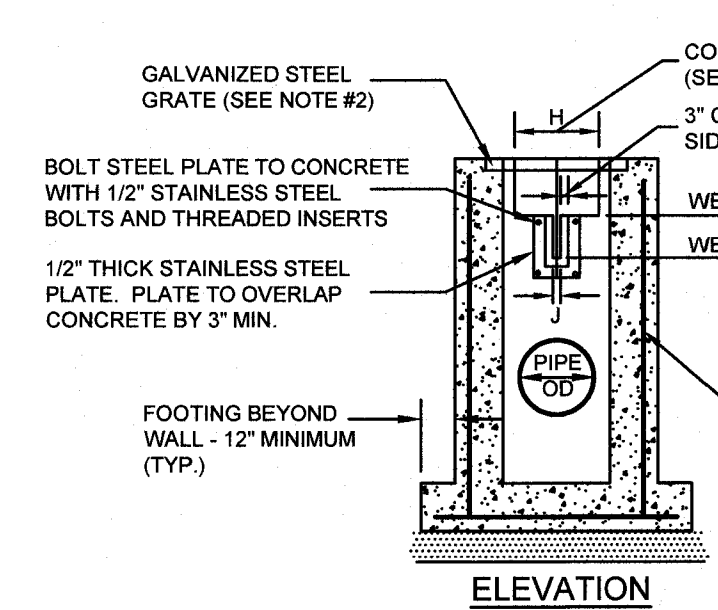


**OS#12 WEIR DETAIL**  
NOT TO SCALE

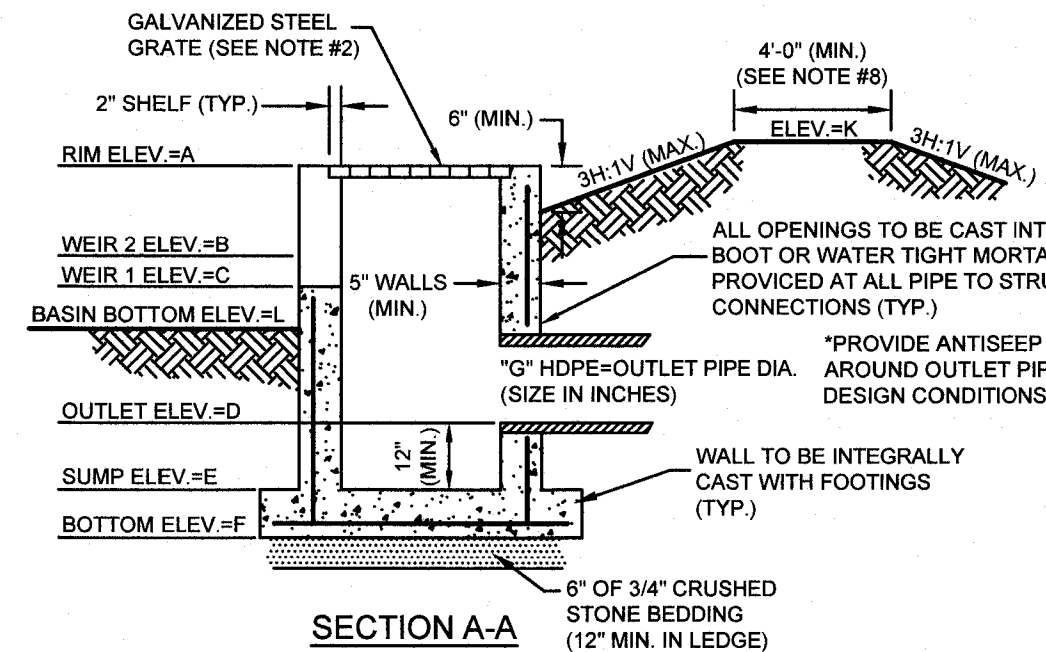
POND	OUTLET STRUCTURE	ELEVATION/DIMENSIONS											
		A	B	C	D	E	F	G	H	J	K	L	GRATE SIZE
DETENTION POND #1	OS#2	317.50	316.50	315.00	314.14	313.00	312.50	15"	12.00"	1.00"	318.00	315.00	4'x4'
DETENTION POND #2	OS#12	318.50	N/A	315.50	315.50	314.50	314.00	15"	11.00"	11.00"	319.00	315.50	4'x4'

**NOTES**

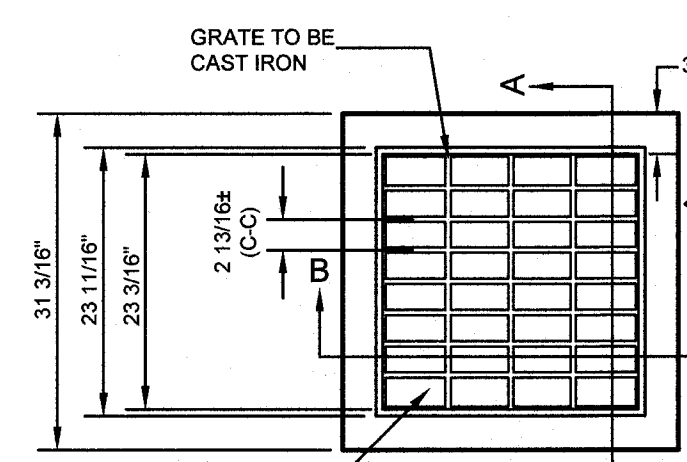
1. ALL CEMENT CONCRETE TO BE 4,000 PSI MINIMUM.
2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE WITH 1/2" STAINLESS STEEL BOLTS AND THREADED INSERTS.
3. OUTLET PIPE SHALL NOT BE LESS THAN 15" DIAMETER AND SHALL BE SIZED FOR A 50-YEAR STORM.
4. ALL OPENINGS SHALL BE CAST IN AS REQUIRED. MINIMUM CONCRETE WEIR WIDTH SHALL BE 2 INCHES.
5. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING.
6. CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY THE REGULATIONS AND IN ACCORDANCE WITH THE APPROVED DRAINAGE CALCULATIONS. STAINLESS STEEL PLATE SHALL BE USED FOR CONTROL WEIRS LESS THAN 2 INCHES WIDE.
7. ALL STAINLESS STEEL SHALL BE GRADE 316.
8. MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE 50-YEAR STORM ELEVATION.
9. PROVIDE TRASH RACK ON ALL WEIRS SMALLER THAN 6" IN DIAMETER.



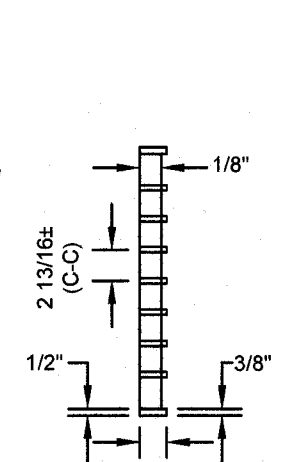
**DOUBLE WEIR OUTLET STRUCTURE**  
NOT TO SCALE



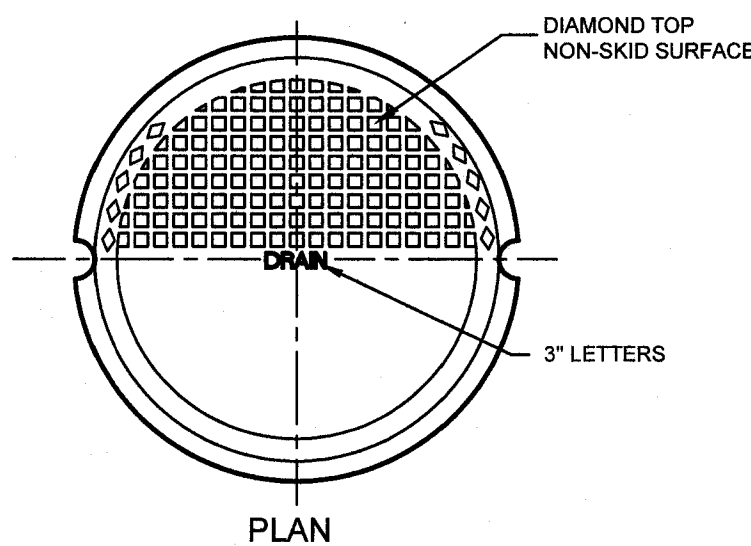
**SECTION A-A**



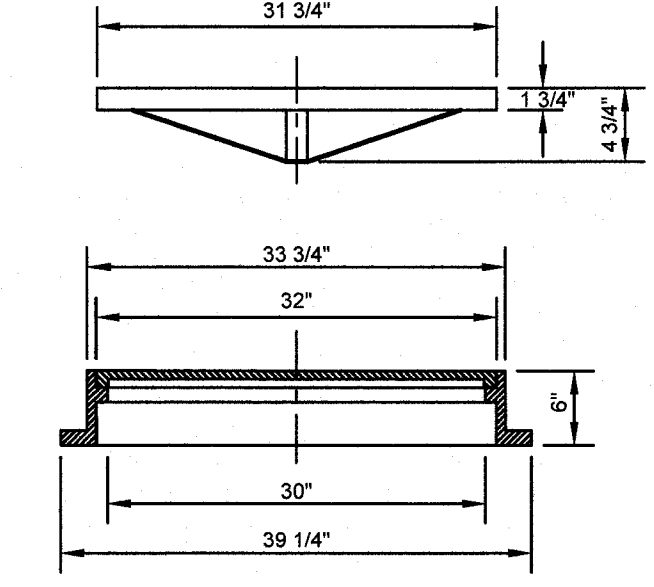
**PLAN VIEW (SINGLE GRATE)**



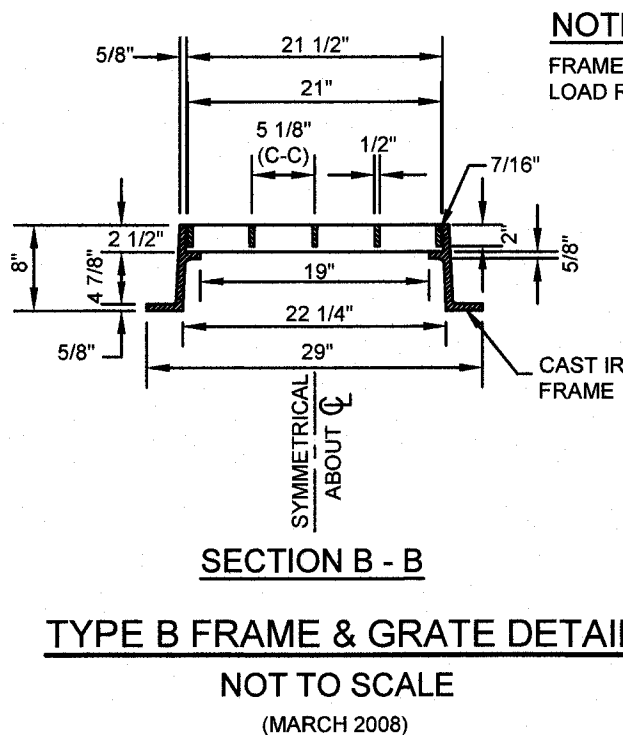
**SECTION A - A**



**PLAN**

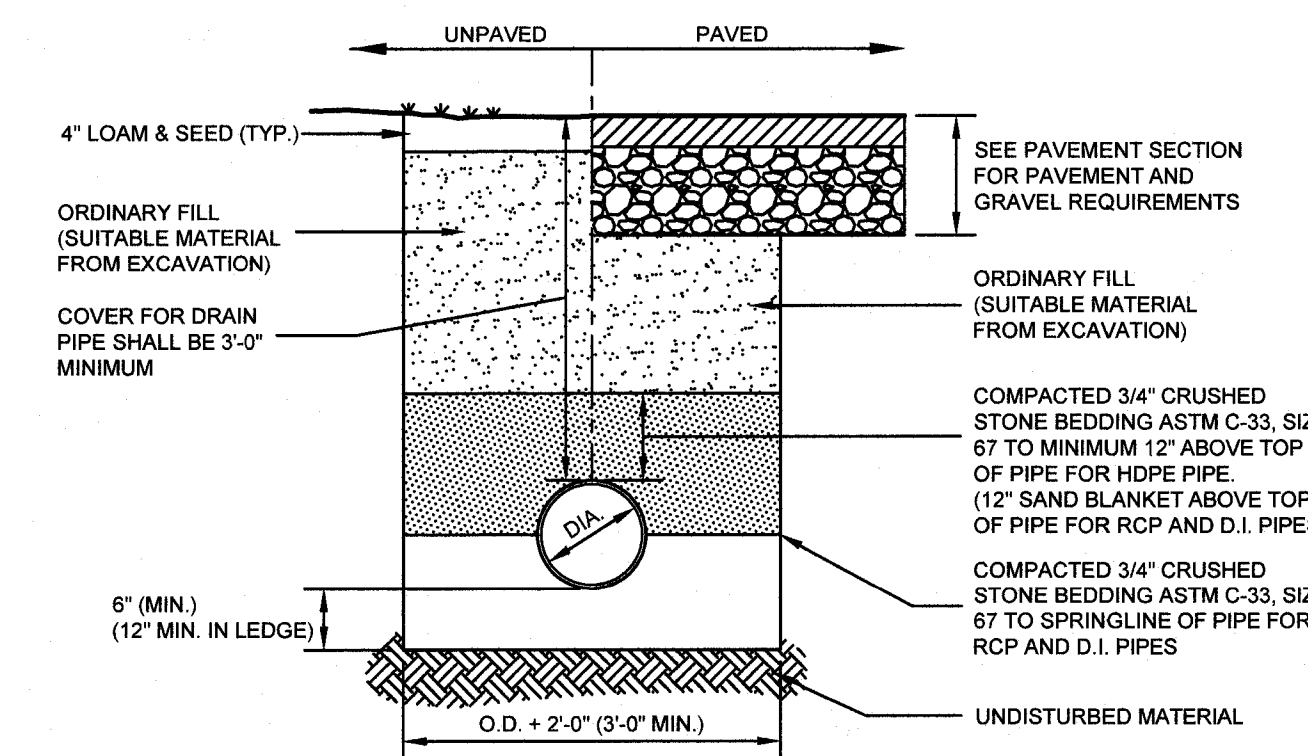


**SECTION**



**SECTION B - B**  
**TYPE B FRAME & GRATE DETAIL**  
NOT TO SCALE  
(MARCH 2008)

**DRAIN MANHOLE FRAME AND COVER DETAIL**  
NOT TO SCALE  
(JANUARY 2012)

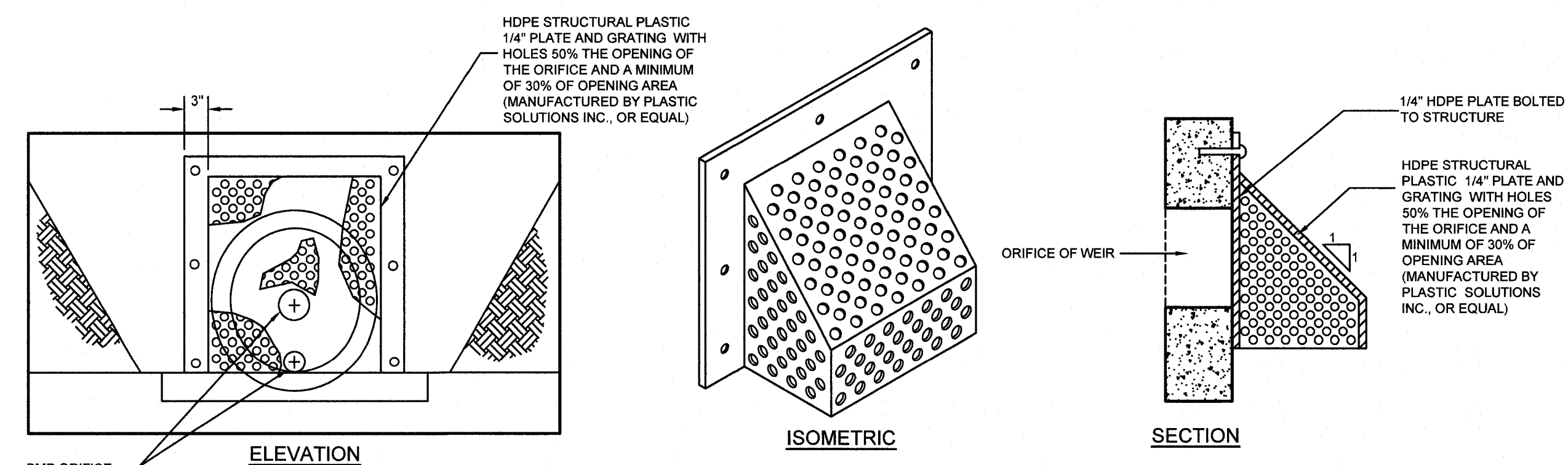


**NOTES**

1. DRAIN PIPE SHALL BE 15" DIAMETER MINIMUM.
2. PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORRUGATED EXTERIOR, SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H20 LOADING.

**TYPICAL DRAIN PIPE TRENCH**  
NOT TO SCALE

**PRECAST DRAIN MANHOLE DETAIL**  
NOT TO SCALE  
**EXHIBIT D103**



**ELEVATION**

**ISOMETRIC**

**SECTION**

**TRASH RACK DETAIL**  
NOT TO SCALE

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

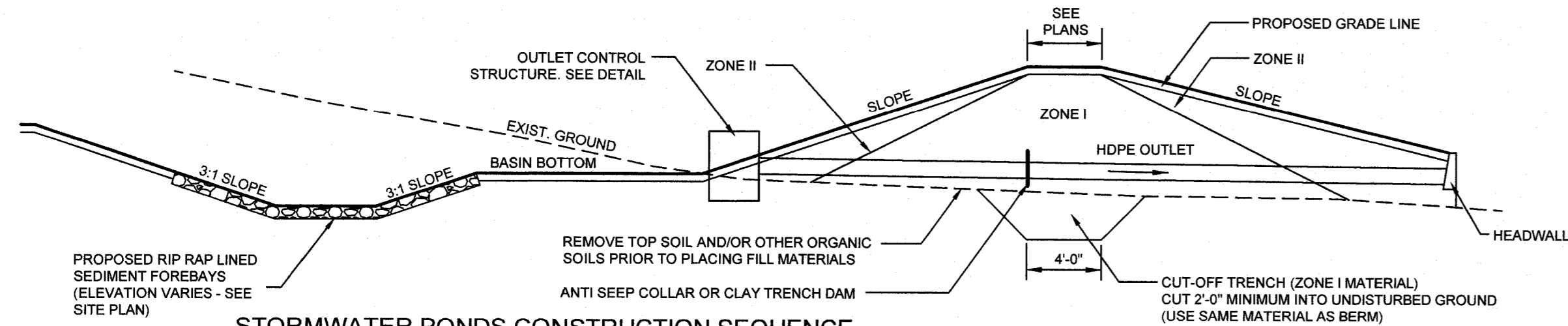
<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**

MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**KMA** KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: AS SHOWN  
FILE NO.:  
SHEET NO. 16 OF 22



**STORMWATER PONDS CONSTRUCTION SEQUENCE**

- CONTRACTOR TO NOTIFY DIG-SAFE 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CUT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTENT NECESSARY. ALL BRANCHES, TOPS AND BRUSH TO BE PROPERLY DISPOSED OF BY CONTRACTOR.
- PRIOR TO GRUBBING OF CLEARED AREAS, ALL SILTATION BARRIERS DESIGNED FOR USE AS TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED AS CALLED FOR ON PROJECT PLANS.
- COMPLETE GRUBBING OPERATIONS. ALL STUMPS AND SIMILAR DEBRIS SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR. ORGANIC MATERIAL SUITABLE FOR USE AS TOPSOIL SHALL BE STOCKPILED IN UPLAND AREAS. ALL STOCKPILES SHALL BE SEED WITH WINTER RYE AND, IF NECESSARY, SURROUNDED WITH HAY BALES IN ORDER TO PREVENT LOSS DUE TO EROSION.
- CONSTRUCT TEMPORARY CULVERTS AS NECESSARY TO FACILITATE CONSTRUCTION ACTIVITIES. ALL SUCH CROSSINGS SHALL BE PROTECTED WITH HAY BALE BARRIERS TO LIMIT EROSION.
- CONSTRUCT CUT-OFF TRENCH (PART OF ZONE I).
- CONSTRUCT OUTLET AND OVERFLOW STRUCTURE, CULVERT, ANTI SEEP COLLARS, HEADWALL, AND RIP RAP OUTLET PROTECTION AS SHOWN ON PLANS.
- CONSTRUCT ZONE I PORTION OF EARTH EMBANKMENT.
- CONSTRUCT ZONE II PORTION OF EARTH EMBANKMENT.
- APPLY TOPSOIL TO SLOPES AND OTHER AREAS DISTURBED BY CONSTRUCTION. TOPSOIL USED MAY BE NATIVE ORGANIC MATERIAL SCREENED SO AS TO BE FREE OF ROOTS, BRANCHES, STONES, AND OTHER DELETERIOUS MATERIALS. TOPSOIL SHALL BE APPLIED SO AS TO PROVIDE A MINIMUM OF A 4-INCH COMPACTED THICKNESS. UPON COMPLETION OF TOPSOILING, FINISHED SECTIONS ARE TO BE LIMEDED, SEEDDED AND MULCHED. CONSTRUCTION PERSONNEL SHALL INSPECT COMPLETED SECTIONS OF WORK ON A REGULAR BASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BECOME ESTABLISHED.
- MAINTAIN, REPAIR, AND REPLACE AS NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL SUCH TIME AS THE ENTIRE CONSTRUCTION AREA HAS BEEN STABILIZED (A MINIMUM OF ONE WINTER SHALL HAVE PASSED).
- AFTER STABILIZATION, REMOVE AND SUITABLY DISPOSE OF TEMPORARY EROSION CONTROL MEASURES.
- MONITOR CONSTRUCTION ACTIVITIES TO INSURE CONSTRUCTION ACTIVITIES ARE BEING PERFORMED IN SUCH A WAY AS NOT TO ENDANGER THE INTEGRITY OF EARTH EMBANKMENTS, STORMWATER CONTROL STRUCTURE, CULVERT AND RIP RAP OUTLET PROTECTION.

**MATERIAL TYPE/SPECIFICATIONS**

- ZONE I**  
WELL GRADED MIXTURE OF GRAVEL, SAND, SILT OR CLAY WITH MAX. 6-INCH SIZE STONE AND GEADATION AS INDICATED BELOW. PLACE IN THICK LIFTS TO 95% OF MAX. DRY DENSITY IN ACCORDANCE WITH ASTM D1557.  
SCARIFY SURFACE PRIOR TO PLACING SUBSEQUENT LIFT. IN ADDITION, REMOVE ORGANIC SOILS.
- ZONE II**  
DRAINAGE LAYER: PLACE IN MAX. 12-INCH THICK LIFTS TO 95% OF MAX. DRY DENSITY IN ACCORDANCE WITH ASTM D1557.
- SIEVE SIZE PERCENT BY WEIGHT PASSING  
6-INCH 100  
NO. 4 50 TO 100  
NO. 40 30 TO 70  
NO. 200 20 TO 40
- SIEVE SIZE PERCENT BY WEIGHT PASSING  
1-INCH 100  
NO. 4 70-100  
NO. 200 0-12 (IN SAND PORTION ONLY)

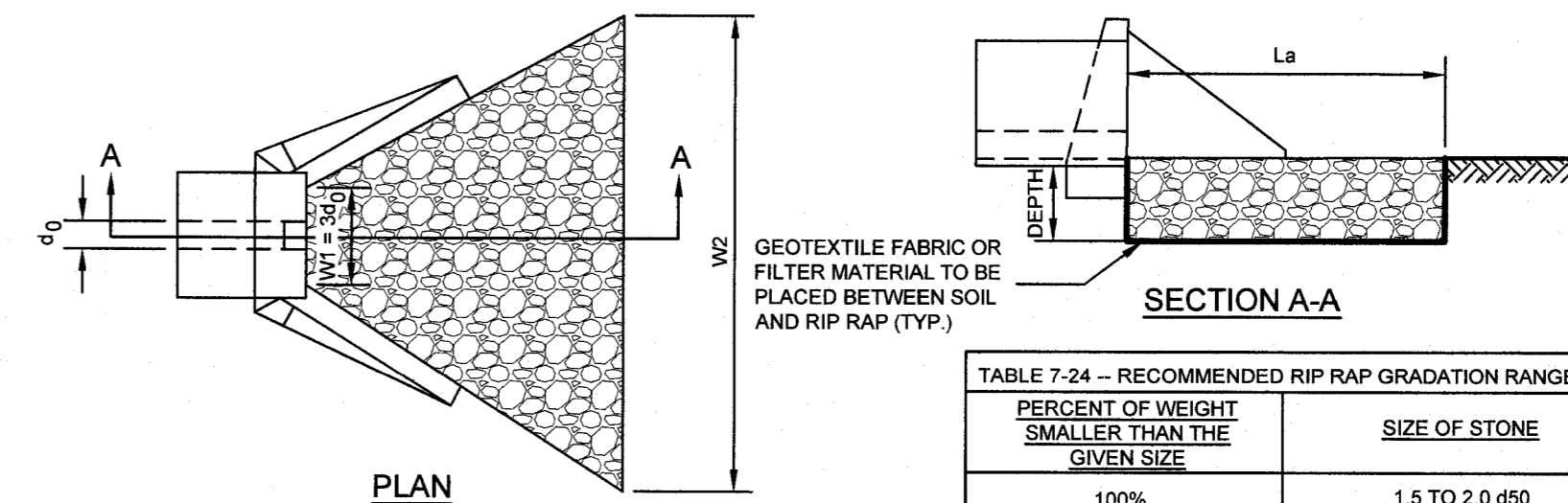


TABLE 7-24 - RECOMMENDED RIP RAP GRADATION RANGES

PERCENT OF WEIGHT SMALLER THAN THE GIVEN SIZE	SIZE OF STONE
100%	1.5 TO 2.0 d50
85%	1.3 TO 1.8 d50
50%	1.0 TO 1.5 d50
15%	0.3 TO 0.5 d50

LOCATION	La	W1	W2	d50	DEPTH
HW #1	10'	4'	14'	3"	8"
HW #3	10'	4'	14'	3"	8"
HW #6	15'	4'	10'	3"	8"
HW #9	14'	2'	7'	3"	8"
HW #10	5'	2'	6'	3"	8"
HW #11	21'	5'	13'	3"	8"
HW #13	13'	3'	8'	3"	8"

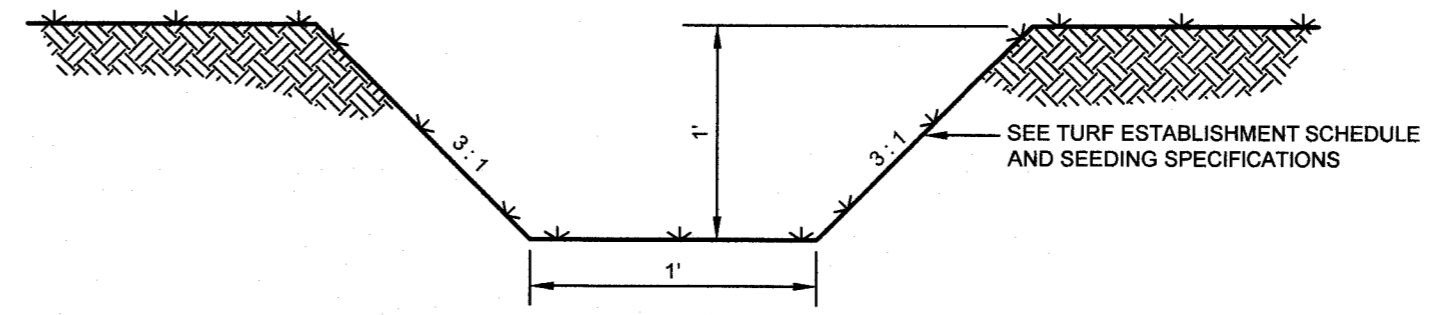
PIPE OUTLET PROTECTION NOT TO SCALE

**DETENTION POND EMBANKMENT DETAIL**

TP #1	TP #2	TP #3
<p>LOGGED BY CKD DATE: 6-1-2022 E.S.H.W.T @ 55" ROOTS @ 33" SEEPS NONE @ 72" REFUSAL NONE @ 72"</p>	<p>LOGGED BY CKD DATE: 6-1-2022 E.S.H.W.T @ 20" ROOTS @ 36" SEEPS @ 40" REFUSAL NONE @ 70"</p>	<p>LOGGED BY CKD DATE: 6-1-2022 E.S.H.W.T @ 34" ROOTS @ 38" SEEPS NONE @ 72" REFUSAL NONE @ 72"</p>
<p>0" 10YR 5/4 LOAMY SANDY, GRANULAR, VERY FRIABLE</p> <p>12" 2.5Y 6/4 SANDY LOAM, GRANULAR, FRIABLE</p> <p>30" 2.5Y 6/3 SANDY LOAM, FRIABLE, SUB ANGULAR BLOCKY, PLATY</p> <p>55" 5Y 5/3 SANDY LOAM, PLATY, VERY FIRM, HARD PAN</p> <p>72" BOTTOM OF HOLE</p>	<p>0" 10YR 2/2 SANDY LOAM, GRANULAR, FRIABLE, COURSE ROOTS</p> <p>8" 10YR 5/4 SANDY LOAM, MASSIVE, FRIABLE</p> <p>17" 2.5Y 5/2 SANDY LOAM, SUB ANGULAR BLOCKY, FIRM, RESTRICTIVE</p> <p>37" REDOX @ 20 CONCENTRATE 7.5YR 5/6 DEPLETION 2.5Y 7/2</p> <p>70" BOTTOM OF HOLE</p>	<p>0" 10YR 2/2 SANDY LOAM, GRANULAR, FRIABLE</p> <p>13" 10YR 5/4 LOAMY COURSE SAND, MASSIVE, 5% GRAVELS</p> <p>34" 2.5Y 5/4 LOAMY SAND, SUB ANGULAR BLOCKY, FIRM, RESTRICTIVE</p> <p>72" BOTTOM OF HOLE</p>

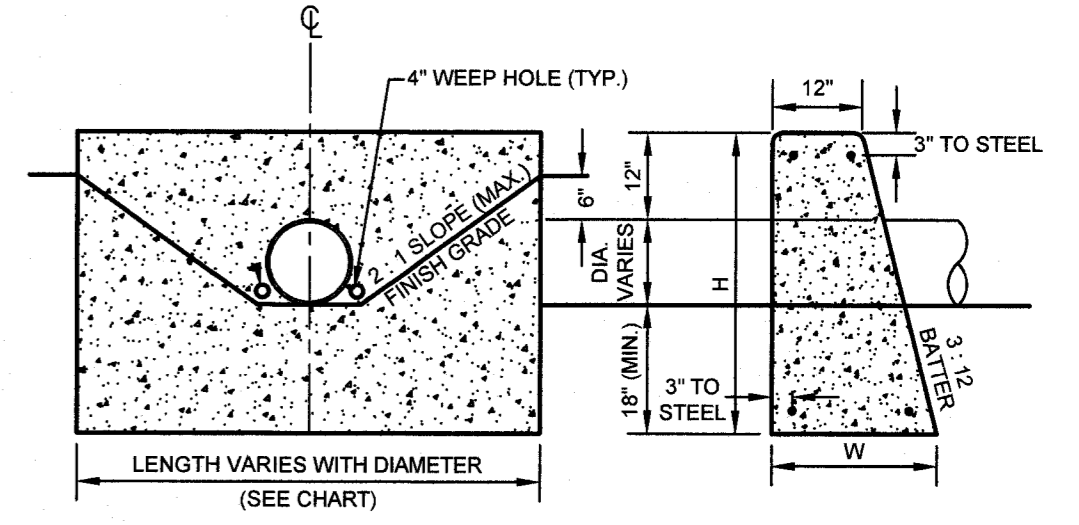
**POST CONSTRUCTION STORMWATER MAINTENANCE REQUIREMENTS:**  
THE FOLLOWING STANDARDS WILL BE MET AFTER CONSTRUCTION IS COMPLETE.

- DOCUMENTATION:**  
A MAINTENANCE LOG WILL BE KEPT SUMMARIZING INSPECTIONS, MAINTENANCE, AND ANY CORRECTIVE ACTIONS TAKEN. THE LOG WILL INCLUDE THE DATE ON WHICH EACH INSPECTION OR MAINTENANCE TASK WAS PERFORMED, A DESCRIPTION OF THE INSPECTION FINDINGS OR MAINTENANCE COMPLETED, AND THE NAME OF THE INSPECTOR OR MAINTENANCE PERSONNEL PERFORMING THE TASK. IF A MAINTENANCE TASK REQUIRES THE CLEAN OUT OF ANY SEDIMENTS OR DEBRIS, THE LOCATION WHERE THE SEDIMENT AND DEBRIS WAS DISPOSED AFTER REMOVAL WILL BE INDICATED. THE MAINTENANCE LOG SHALL BE SENT TO THE TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS ON A YEARLY BASIS AND SHALL BE MADE AVAILABLE TO NHDES UPON REQUEST.
- MAINTENANCE REQUIREMENTS:**  
**INFILTRATION POND:**  
• SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EVENT EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.  
• TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION.  
• VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.
- OUTLET PROTECTION:**  
• INSPECT THE OUTLET PROTECTION ANNUALLY FOR DAMAGE AND DETERIORATION. REPAIR DAMAGES IMMEDIATELY.
- GENERAL:**  
• IF ANY INVASIVE SPECIES BEGIN TO GROW IN THE STORMWATER MANAGEMENT PRACTICES THE SPECIE SHALL BE DISPOSED OF IN AN APPROPRIATE MANNER THAT WILL NOT ALLOW THE PEST TO SURVIVE OR SPREAD. THE DISPOSAL OF SUCH SPECIES SHALL BE WITNESSED OR APPROVED BY A STATE INSPECTOR. METHODS FOR DISPOSAL MAY INCLUDE, BUT NOT BE LIMITED TO:  
• ENCAPSULATING THE PLANT(S) IN PLASTIC BAGS AND DISPOSING OF THE PLANT MATERIAL IN ONE OF THE FOLLOWING WAYS:  
• TRASH PICKUP;  
• DISCARDING;  
• OPEN BURNING;  
• INCINERATION; OR  
• BURIAL OF INFESTED NURSERY.



CONVEYANCE SWALE DETAIL NOT TO SCALE

LOCATION	SWALE LENGTH	SWALE SLOPE
SWALE #1	135'	0.0150 FT/FT
SWALE #2	140'	0.0285 FT/FT
SWALE #3	100'	0.0300 FT/FT



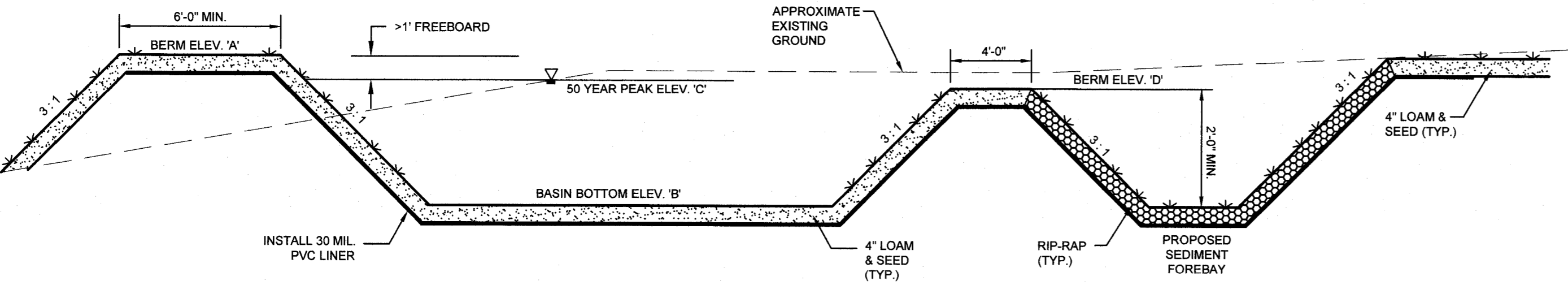
REINFORCED CONCRETE

DRAIN PIPE DIAMETER	15"	18"	24"
LENGTH	4'-6"	5'-6"	7'-6"
HEIGHT (H)	3'-9"	4'-0"	4'-6"
BOTTOM WIDTH (W)	1'-11.25"	2'-0"	2'-1.5"
CONCRETE (CU.YD.)	0.85	1.13	1.78
STEEL (LBS.)	11	14	20

ALL STEEL SHALL BE #4 BARS, MEETING NHDOT REQUIREMENTS

- NOTES:**
- ALL CONCRETE SHALL BE CLASS A.
  - ALL HEADWALLS SHALL MEET NHDOT REQUIREMENTS. FOR LARGER PIPE DIAMETERS, USE THE NHDOT STANDARD PLANS.

CONCRETE HEADWALL NOT TO SCALE

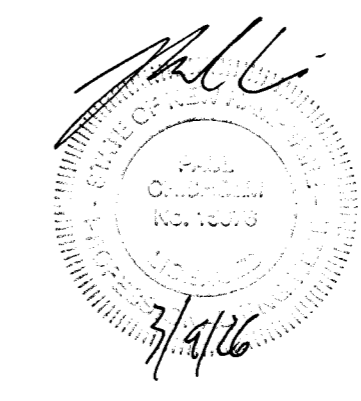


LOCATION	ELEV. 'A'	ELEV. 'B'	ELEV. 'C'	ELEV. 'D'
DETENTION POND #1	318.00	315.00	316.89	317.00
DETENTION POND #2	319.00	315.50	317.67	318.00

PROPOSED DETENTION POND CROSS-SECTION NOT TO SCALE

**REVISIONS**

NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM



**LOT 235 OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049

**LOT 236 OWNER**  
PAGE ROCK, LLC  
PO BOX 1675  
HOLLIS, N.H. 03049

**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**  
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**REVISIONS**

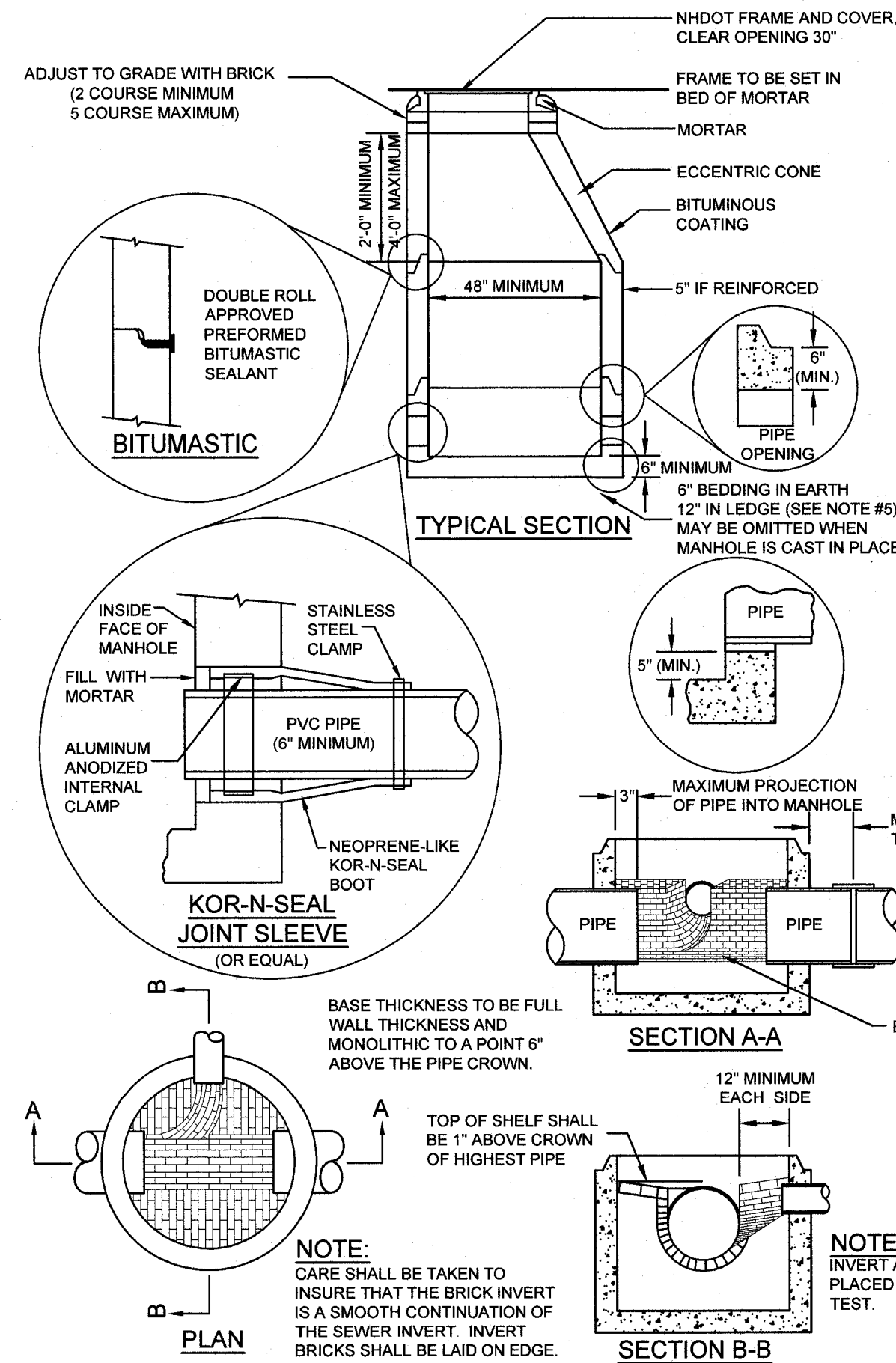
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**PROJ. NO:** 21-0113-1  
**DATE:** MARCH 20, 2025  
**SCALE:** AS SHOWN  
**FILE NO.:**  
**SHEET NO. 17 OF 22**

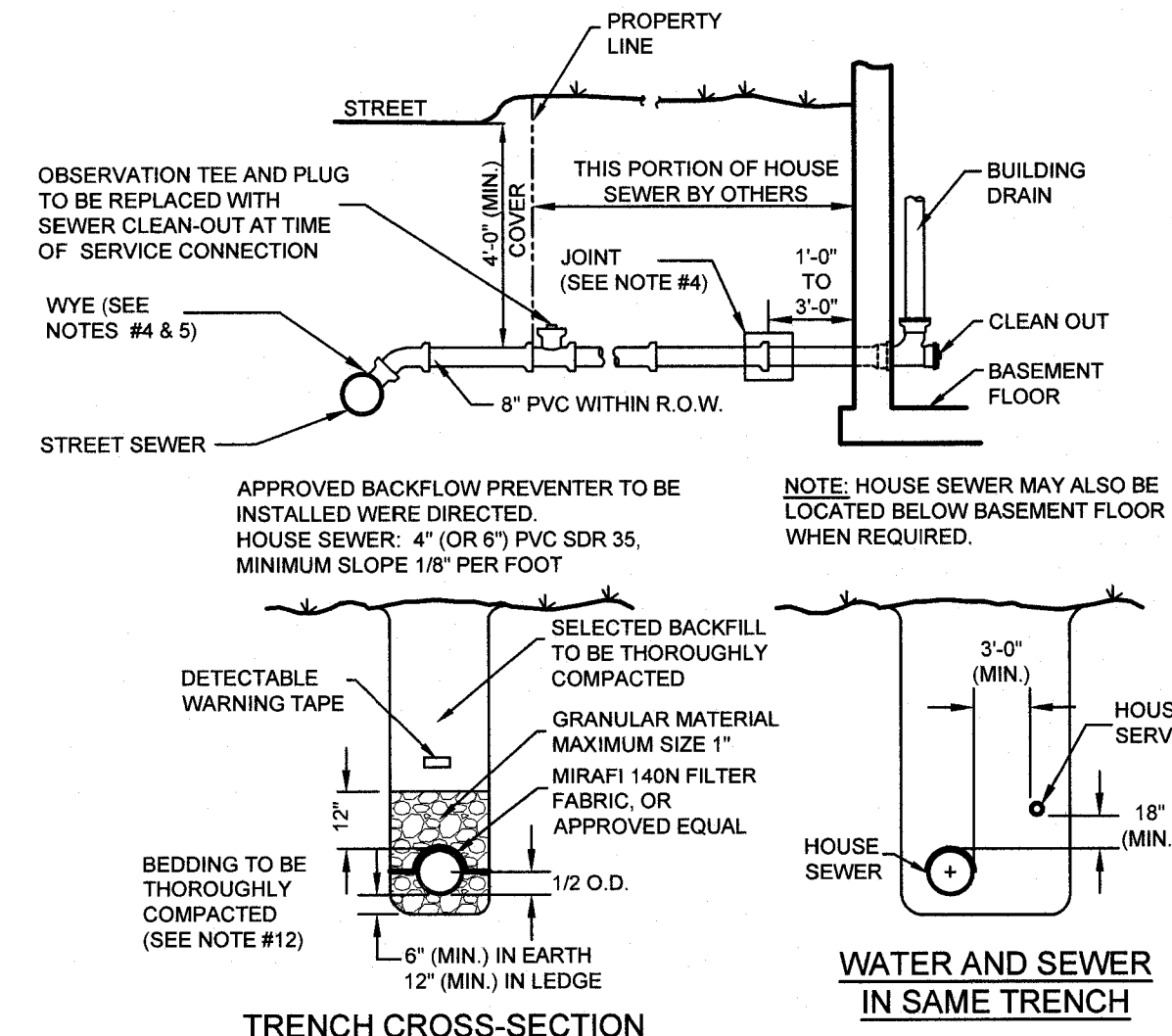
**KMA**  
KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

**NOTES: (NHDES ENV WQ700 - 2008)**

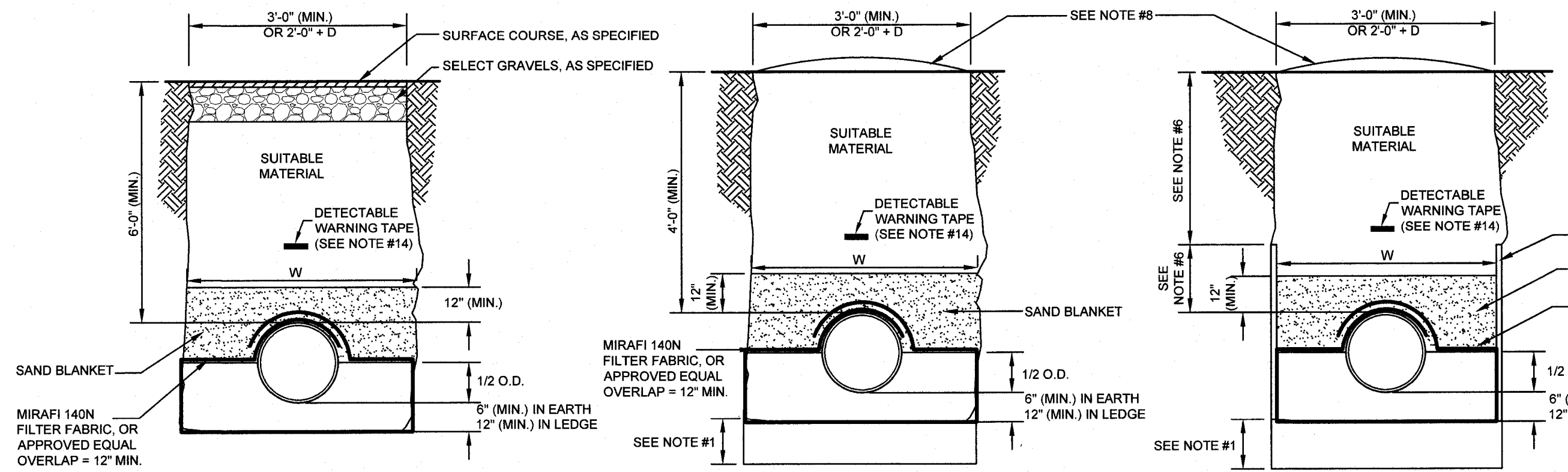
- ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE AND SPACE NECESSARY FOR THE INTENDED SERVICE.
- MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY OF AT LEAST 25 YEARS.
- MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND HS-20 LOADING AND SHALL NOT LEAK IN EXCESS OF ONE GPD PER VERTICAL FOOT OF MANHOLE FOR THE LIFE OF THE STRUCTURE.
- BARRELS, CONE SECTIONS, AND CONCRETE GRADE RINGS SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATER-TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
- PIPE TO MANHOLE JOINTS SHALL BE AS FOLLOWS:
  - ELASTOMERIC RUBBER SLEEVE WITH WATER-TIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES;
  - CAST INTO THE WALL OR SECURED WITH STAINLESS STEEL CLAMPS;
  - ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING; AND
  - NON-SHRINK GROUTED JOINTS WHERE WATER-TIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
- MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
- ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
- ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
- MANHOLES THAT ARE NOT REPRESENTED ON EXISTING MANHOLE SLAB COVERS MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE SLAB HAS AN ECCENTRIC ENTRANCE OPENING AND BE CAPABLE OF SUPPORTING HS-20 LOADS.
- THE MINIMUM INTERNAL DIAMETER OF MANHOLES SHALL BE 48 INCHES.
- MATERIALS OF CONSTRUCTION FOR MANHOLES SHALL BE AS FOLLOWS:
  - CONCRETE FOR CAST-IN-PLACE BASES OR COMPLETE MANHOLES SHALL CONFORM TO THE REQUIREMENTS FOR CLASS AA CONCRETE IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";
  - REINFORCING FOR CAST-IN-PLACE CONCRETE SHALL BE STEEL OR STRUCTURAL FIBERS THAT CONFORM TO THE REQUIREMENTS OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";
  - PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-06;
  - THE MANHOLE FRAME AND COVER SHALL PROVIDE A 30-INCH DIAMETER CLEAR OPENING;
  - THE MANHOLE COVER SHALL HAVE THE WORD "SEWER" IN 3-INCH LETTERS CAST INTO THE TOP SURFACE;
  - THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HIPS AND DEFECTS;
  - CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;
  - CASTINGS SHALL BE EQUAL TO CLASS 30, CONFORMING TO ASTM A48/48M-03;
  - BRICK MASONRY FOR SHELFS, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, OR GRADE S'S HARD BRICK;
  - MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION;
  - PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
    - 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
    - 4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PARTS HYDRATED LIME;
  - CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05;
  - HYDRATED LIME SHALL BE TYPE S CONFORMING TO THE ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES";
  - SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO THE ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES";
  - CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE REQUIREMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION";
  - BELOW, A FLEXIBLE PIPE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION:
    - WITHIN 48-INCHES FOR REINFORCED CONCRETE (RC) PIPE; AND
    - WITHIN 60-INCHES FOR PVC PIPE LARGER THAN 15-INCH DIAMETER;
  - NO FLEXIBLE JOINTS FOR SHELFS, INVERT AND GRADE ADJUSTMENT OR FOR PVC PIPE UP THROUGH 15-INCH DIAMETER; AND
  - WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED IN LIEU OF A CONE SECTION, PROVIDED THE SLAB HAS AN ECCENTRIC ENTRANCE OPENING AND IS CAPABLE OF SUPPORTING HS-20 LOADS.
- MANHOLE STEPS SHALL:
  - BE OMITTED ONLY AT THE REQUEST OF THE SYSTEM OWNER;
  - BE MANUFACTURED OF STAINLESS, PLASTIC-COVERED STEEL OR PLASTIC;
  - BE SHAPED SO THAT THEY CANNOT BE PULLED OUT OF THE CONCRETE WALL INTO WHICH THEY ARE SECURED;
  - MEET THE REQUIREMENTS OF ASTM C478-06 FOR LOAD CARRYING CAPACITY AND PULL-OUT RESISTANCE;
  - NOT BE SECURED WITH MORTAR;
  - BE APPROXIMATELY 14-INCHES BY 10-INCHES IN DIMENSION;
  - HAVE A DROP SECTION OR RAISED ABUTMENTS TO PREVENT SIDEWAYS SLIPPAGE OFF THE STEP; AND
  - HAVE NON-SKID SAFETY SERRATIONS ON THE FOOT CONTACT SURFACES.
- MANHOLE TESTING:
  - MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST.
  - THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
    - THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg; AND
    - THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH Hg PRESSURE DROP TO 9 INCH Hg SHALL BE:
      - NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH;
      - NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND
      - NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
  - THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B) ABOVE.
  - FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENTS TO GRADE.



**SANITARY SEWER MANHOLE**  
NOT TO SCALE  
(MARCH 2011)



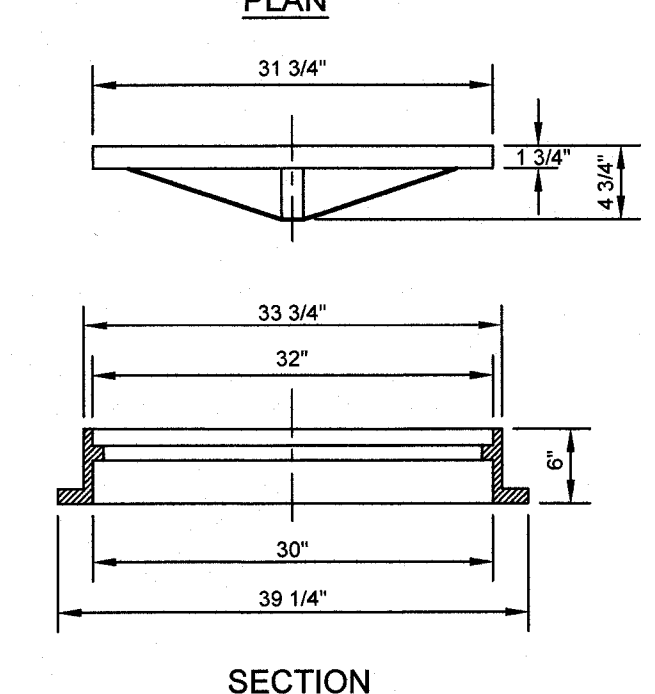
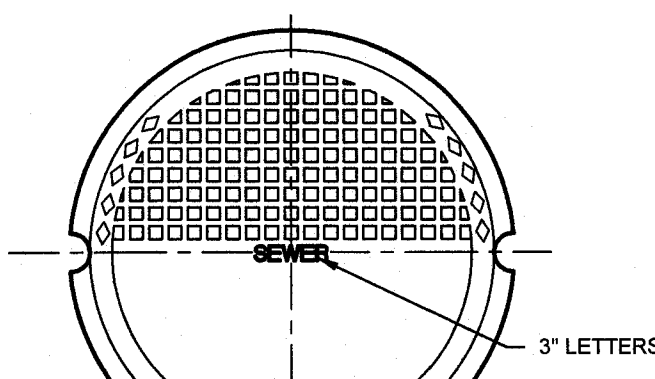
**SANITARY SEWER SERVICE DETAIL**  
NOT TO SCALE  
(JUNE 2015)



**SANITARY SEWER TRENCH DETAIL**  
NOT TO SCALE  
(NOVEMBER 2016)

**NOTES:**

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE. REFILL WITH BEDDING MATERIAL. ALSO SEE NOTE #7.  
BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33/C33M STONE SIZE NO. 67.  
100% PASSING 1 INCH SCREEN  
90 - 100% PASSING 3/4 INCH SCREEN  
20 - 55% PASSING 3/8 INCH SCREEN  
0 - 10% PASSING # 4 SIEVE  
0 - 5% PASSING # 8 SIEVE  
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, GRADED CRUSHED STONE 1/2 INCH TO 1 1/2 INCHES SHALL BE USED.
- SAND BLANKET: GRADED CLEAN SAND FREE FROM ORGANIC MATTER, SO THAT 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A # 200 SIEVE. BLANKET MAY BE OMITTED FOR CAST IRON, DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED, HOWEVER, THAT NO STONE LARGER THAN 2 INCHES IS IN CONTACT WITH THE PIPE.
- MIRAFI 140 N FILTER FABRIC, OR APPROVED EQUAL, SHALL BE INSTALLED ABOVE PIPE.
- SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL AND ALL ROCKS OVER 6 INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION.  
IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT IF HE/SHE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER WILL BE PRESERVED FOR MAINTENANCE AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY.
- BASE COURSE, IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE "LATEST" EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE, DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS."
- WOOD SHEETING, IF REQUIRED, WHERE PLACED ALONGSIDE THE PIPE AND EXTENDING BELOW MID-DIAMETER, SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE, WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES DESIGN STANDARDS REQUIRE 10 FEET OF SEPARATION BETWEEN WATER AND SEWER. HOWEVER, SHOULD CONSTRUCTION REVEAL OR EXPOSE A WATERLINE (MAIN OR SERVICE) RUNNING APPROXIMATELY PARALLEL AND LESS THAN 10 FEET HORIZONTALLY FROM THE PROPOSED SEWER INSTALLATION AND WHERE IT IS NOT PRACTICAL TO RELOCATE THE SEWER, A DUCTILE IRON PIPE SHALL BE INSTALLED IN THE TRENCH TO MAINTAIN THE SEWER IN ACCORDANCE WITH THE FORCE MAIN CONSTRUCTION REQUIREMENT SPECIFIED BELOW.
  - FORCE MAINS SHALL BE CONSTRUCTED FROM DUCTILE IRON, HIGH DENSITY POLYETHYLENE, OR PVC PER ENV-HQ 754.06(8).
  - PVC SHALL CONFORM TO ASTM D2241-05 OR ASTM D1785-05.
  - HDPE SHALL CONFORM TO ASTM D3035-03a.
  - IT SHALL BE CORROSION PROTECTED IN CORROSIVE ENVIRONMENTS.
- WHERE WATER LINES AND SEWER LINES CROSS, THEY SHOULD CROSS AS PERPENDICULAR AS POSSIBLE AND THE WATER MAIN SHALL CROSS AT LEAST 18" INCHES ABOVE THE SEWER. FURTHER, THE SEWER JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATER MAIN.
- ALL SEWERS AT 8 PERCENT SLOPE, OR GREATER, SHALL HAVE IMPERVIOUS TRENCH DAMS CONSTRUCTED EVERY 300 FEET.
- UNLESS OTHERWISE NOTED, ALL GRANULAR MATERIAL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR TEST.
- WHERE WATER MAINS CROSS UNDER SEWER MAINS, BOTH THE SEWER AND WATER MAINS SHALL BE PRESSURE RATED PIPE PER ENV-WQ 704.06 AND TESTED PER AWWA C500-05 AT 1.5 TIMES DESIGN PRESSURE OR 100 PSI, WHICHEVER IS GREATER, WITH NO JOINTS WITHIN 9 FEET OF THE CROSSING POINT AND 18" MINIMUM VERTICAL SEPARATION.
- ALL SEWERS SHALL BE MARKED USING METAL IMPREGNATED MARKING TAPE OR TRACER WIRE THAT CAN BE LOCATED USING METAL DETECTION EQUIPMENT.
- GRAVITY PIPE SEWER TESTING:
  - ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.
  - LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:
    - ASTM F1417-92(2005) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR;" OR
    - UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE" (1996).
  - ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER IN THE SEWER AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.
  - ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING INSTALLATION.
  - THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 PERCENT OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANDREL WITH A DIAMETER OF AT LEAST 95 PERCENT OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.



**SEWER MANHOLE FRAME AND COVER DETAIL**  
NOT TO SCALE  
(MARCH 2008)

- NOTES:**
- NEW HAMPSHIRE MAINTAINS A CLEAR OPENING DESIGNATION OF 30" FOR ITS MANHOLE CASTINGS.
  - FEATURES:
    - 3" LETTERING
    - COVERS MARKED SEWER
    - NONROCKING COVER
    - DIAMOND SURFACE DESIGN
  - SPECIFICATIONS:
    - FULLY MACHINED FRAME AND COVER
    - H-20 LOAD RATED
    - GRAY CAST IRON MEETS ASTM A48 CLASS 30

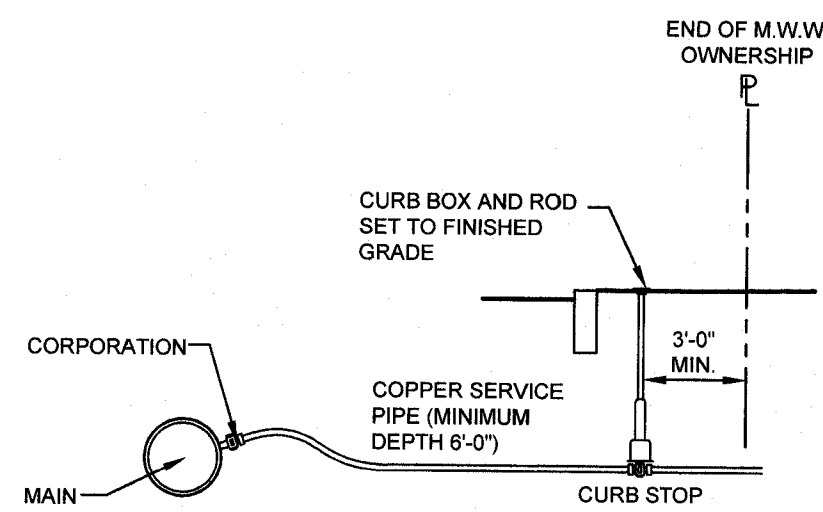
<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**  
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

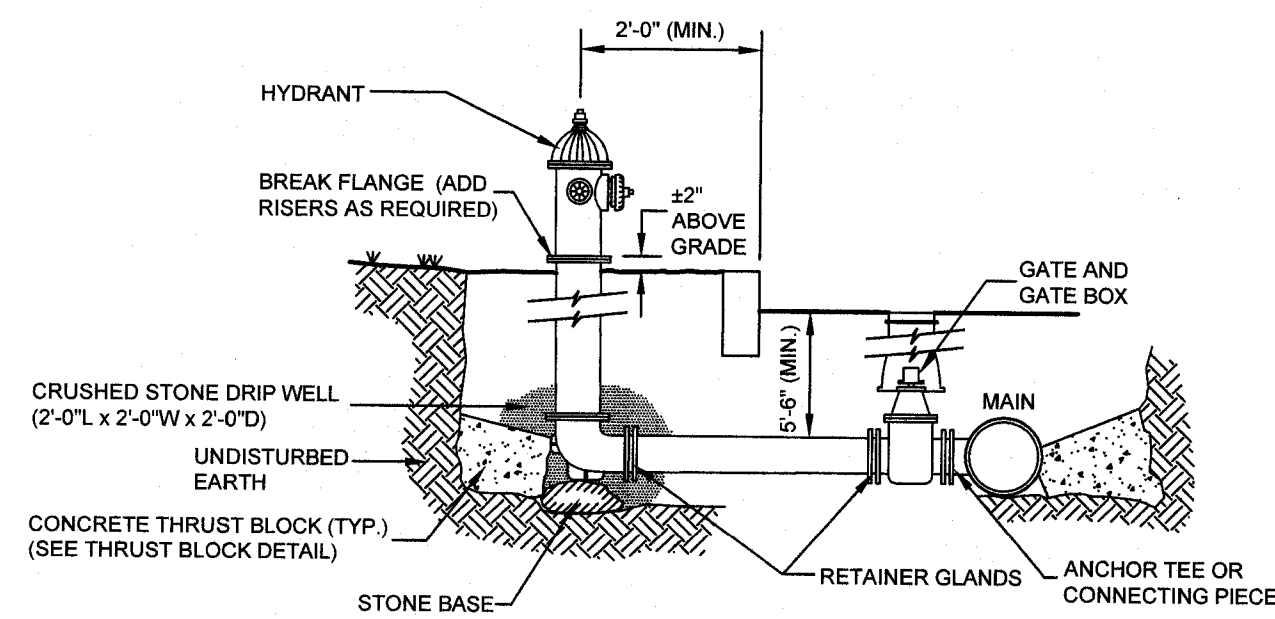
**PROJ. NO:** 21-0113-1  
**DATE:** MARCH 20, 2025  
**SCALE:** AS SHOWN  
**FILE NO.:**  
**SHEET NO. 18 OF 22**

**KM KEACH-NORDSTROM ASSOCIATES, INC.**  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-8881



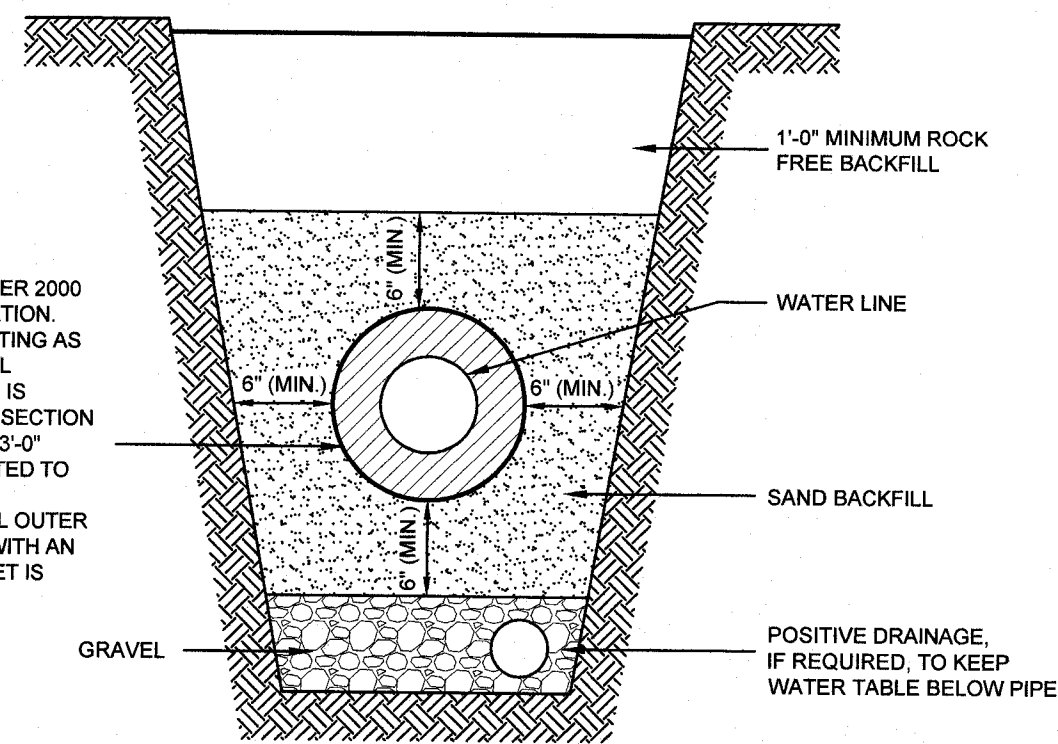
- CORPORATIONS SHALL BE TAPPED DIRECTLY TO THE MAIN IN SIZES UP TO 1" DIAMETER (INCLUSIVE).
- CORPORATIONS 1 1/2" DIAMETER AND GREATER SHALL BE INSTALLED USING A TAPPING SADDLE AND SHELL CUTTER.

**SERVICE CONNECTION**  
NOT TO SCALE  
(MARCH 2008)



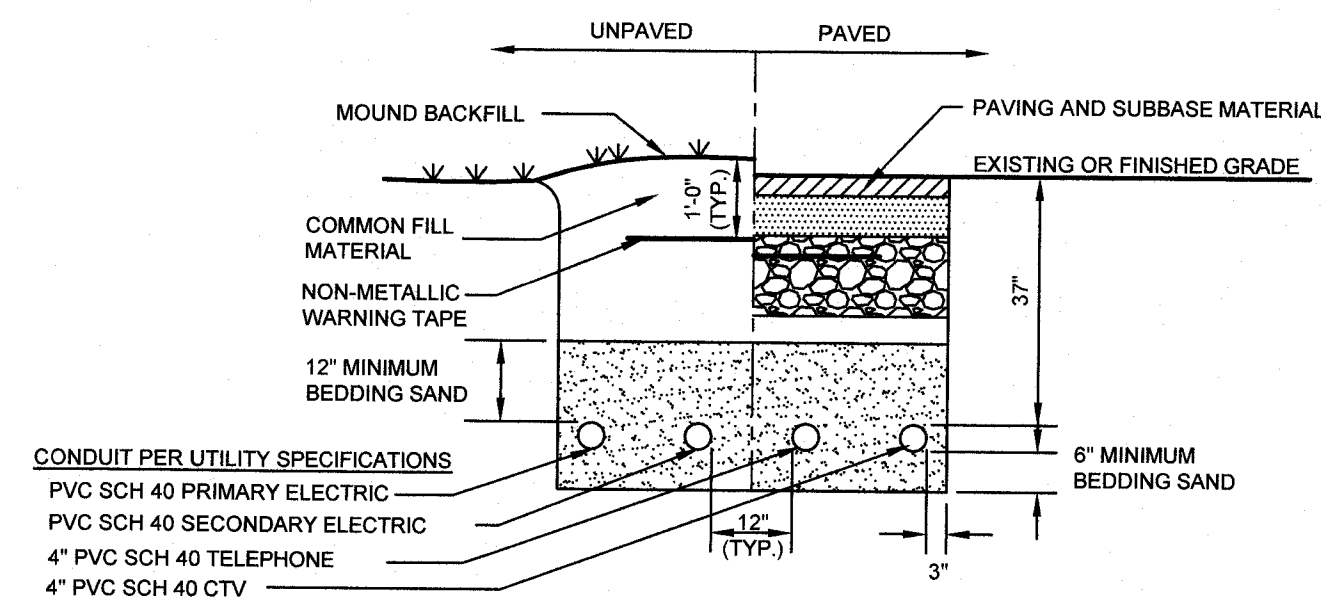
**HYDRANT INSTALLATION**  
NOT TO SCALE  
(MARCH 2008)

3" MINIMUM THICKNESS DOW TRYMER 2000 POLYISOCYANURATE FOAM INSULATION MATERIAL AND INSUL-WRAP JACKETING AS MANUFACTURED BY DOW CHEMICAL COMPANY, OR EQUAL. INSULATION IS APPLIED IN A FULL ROUND HINGED SECTION CONSISTING OF TWO HALF ROUND 3'-0" LONG SECTIONS FACTORY LAMINATED TO AN INSUL-WRAP JACKETING. THE JACKETING IS APPLIED TO THE FULL OUTER CIRCUMFERENCE OF INSULATION WITH AN EXTENDED 2" OVERLAP. THE JACKET IS SEALED BY SELF-SEALING LAP.



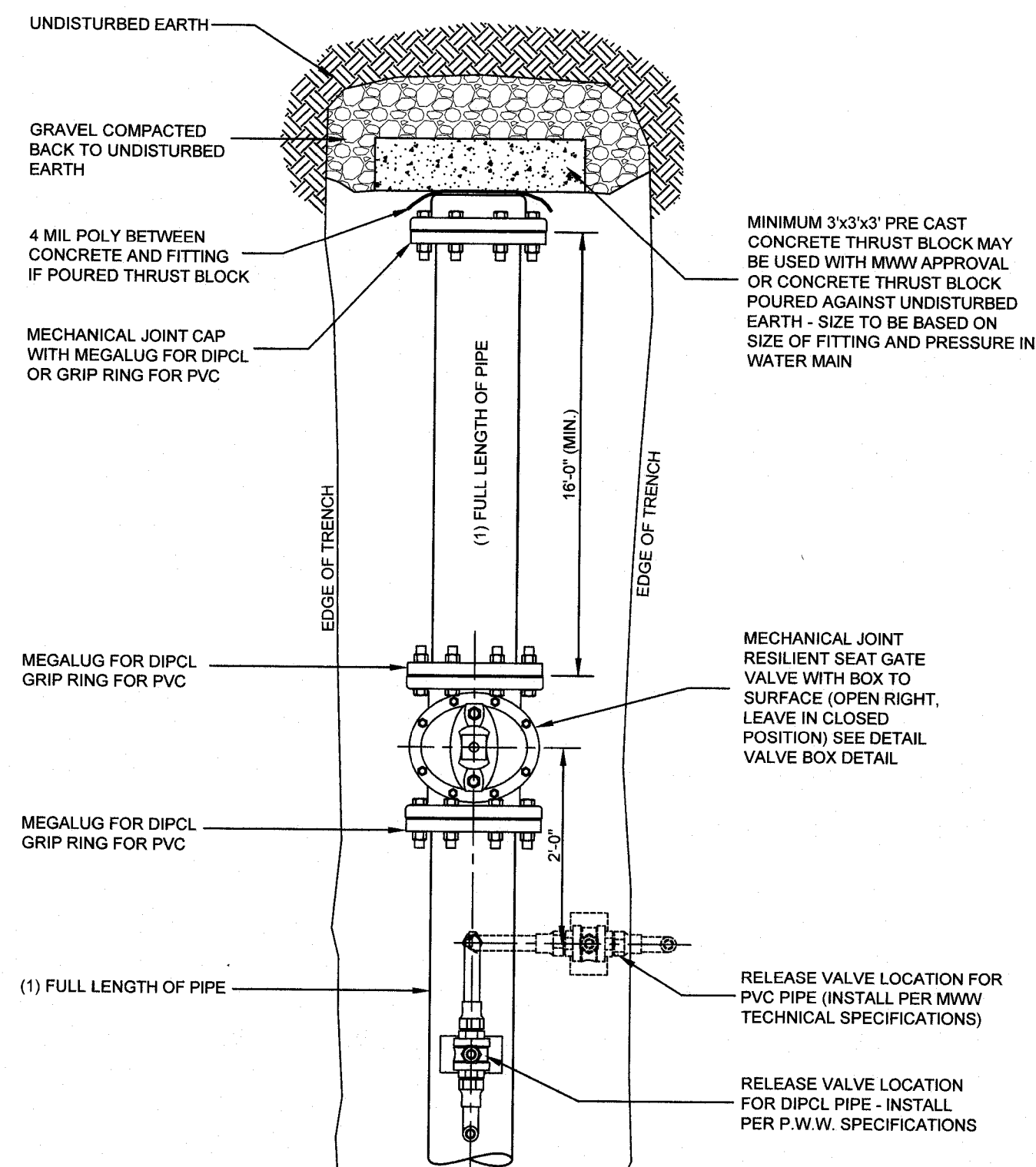
- WATERLINE CONSTRUCTION NOTES:**
- ALL WATER PIPE WITH LESS THAN 5' OF COVER SHALL BE INSULATED.
  - PIPE INSULATION TO BE INSTALLED IN ALL LOCATIONS WHERE MINIMUM COVER REQUIREMENT CANNOT BE ACHIEVED.

**WATER LINE INSULATION DETAIL**  
NOT TO SCALE  
(MARCH 2008)



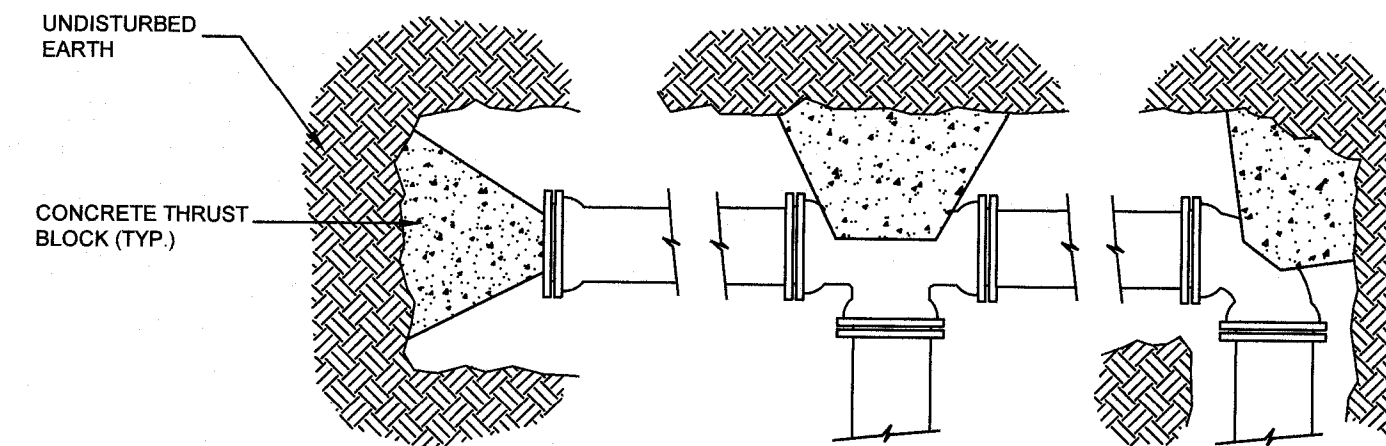
**NOTE:** INSTALLATION AND MATERIALS OF UNDERGROUND UTILITIES SHALL CONFORM TO LOCAL UTILITY COMPANY SPECIFICATIONS.

**UTILITY TRENCH DETAIL**  
NOT TO SCALE  
(MARCH 2008)

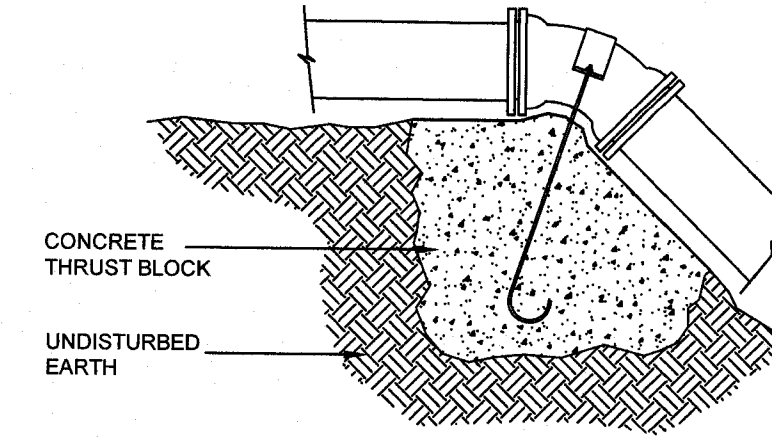


- NOTES:**
- ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO MANCHESTER WATER WORKS TECHNICAL SPECIFICATIONS.
  - ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-6" FROM TOP OF PIPE TO FINISH GRADE.

**END OF MAIN INSTALLATION**  
NOT TO SCALE  
(MARCH 2008)



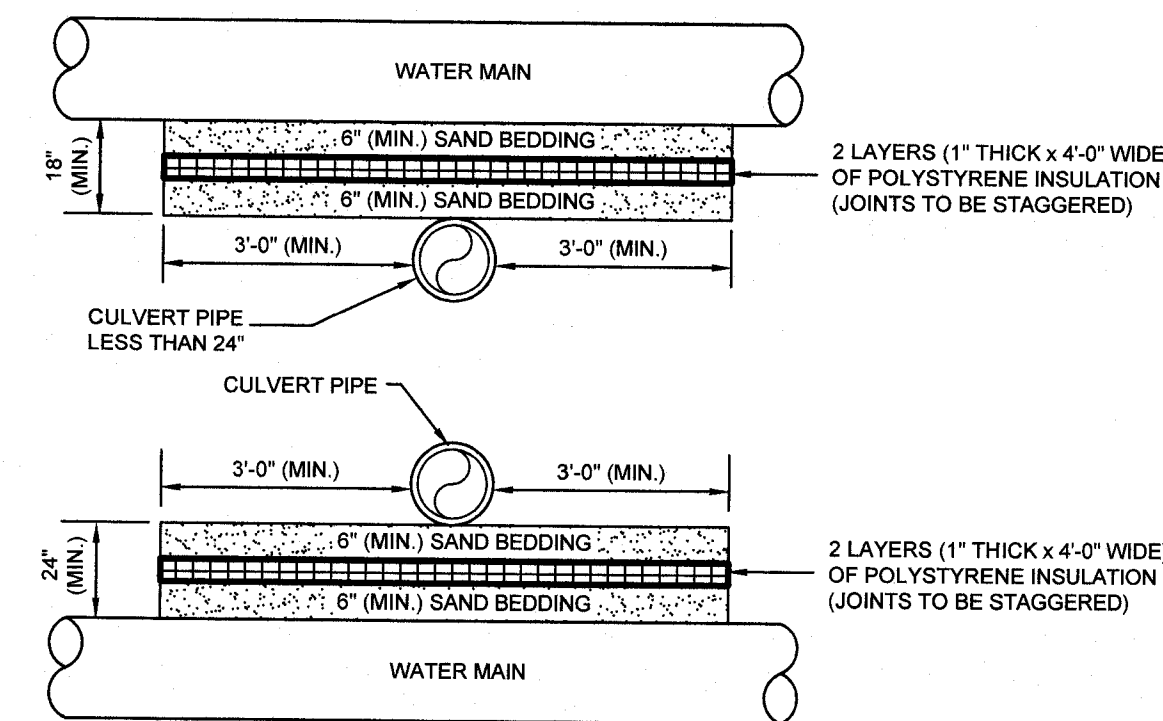
**PLAN - HORIZONTAL BENDS, TEES AND PLUGS**



**ELEVATION - VERTICAL BENDS**

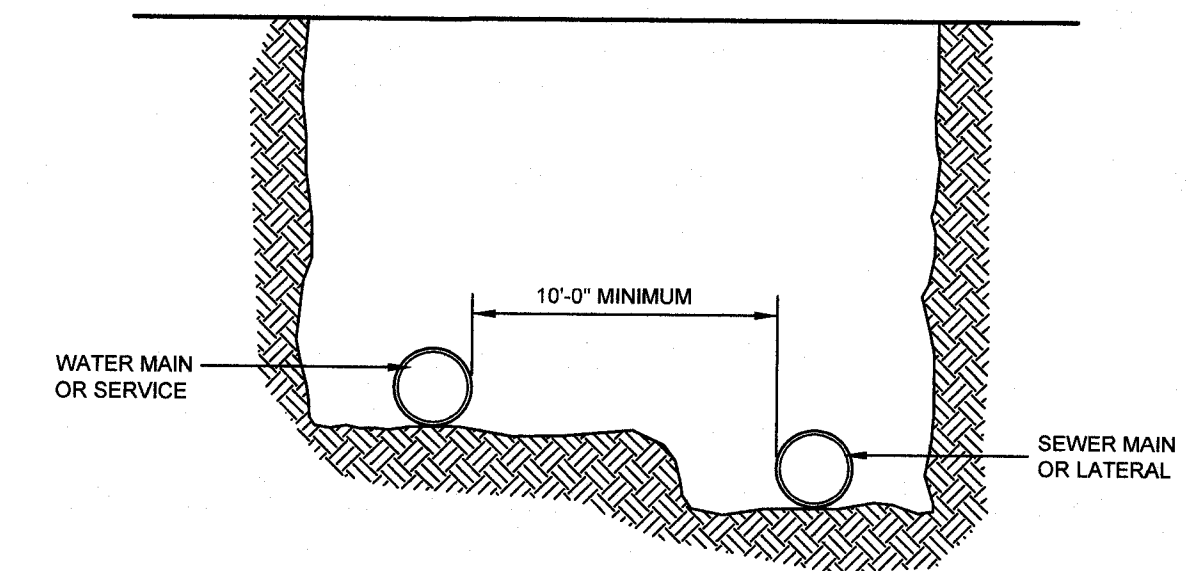
- NOTES:**
- THRUST BLOCK DIMENSIONS TO BE DETERMINED IN FIELD BY ENGINEER BASED ON PIPE SIZE, WATER PRESSURE AND SOIL TYPE.
  - STONE BACKING MAY BE SUBSTITUTED FOR CONCRETE THRUST BLOCKS PROVIDED THE STONE(S) ARE OF EQUAL SIZE AND BEAR ON UNDISTURBED EARTH.
  - USE OF JOINT RESTRAINT SYSTEMS SHALL NOT ELIMINATE THRUST BLOCK REQUIREMENTS (WHERE POSSIBLE).

**THRUST BLOCKS**  
NOT TO SCALE  
(MARCH 2008)

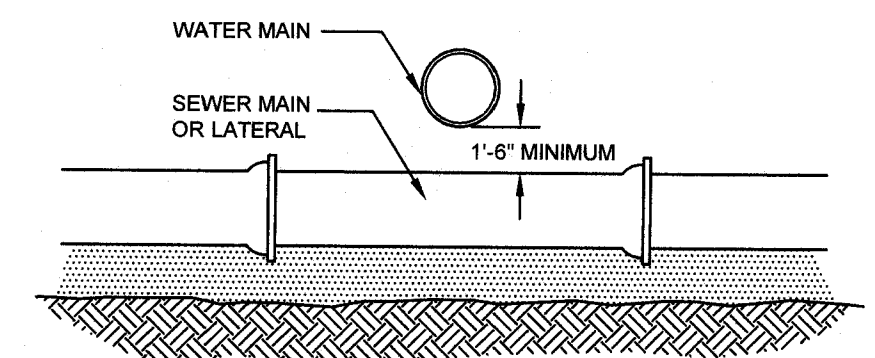


- NOTES:**
- INSULATION TO BE USED WHERE PIPE SEPARATION IS 24" OR LESS.

**WATER PIPE CROSSING INSULATION DETAIL**  
NOT TO SCALE  
(JUNE 2012)

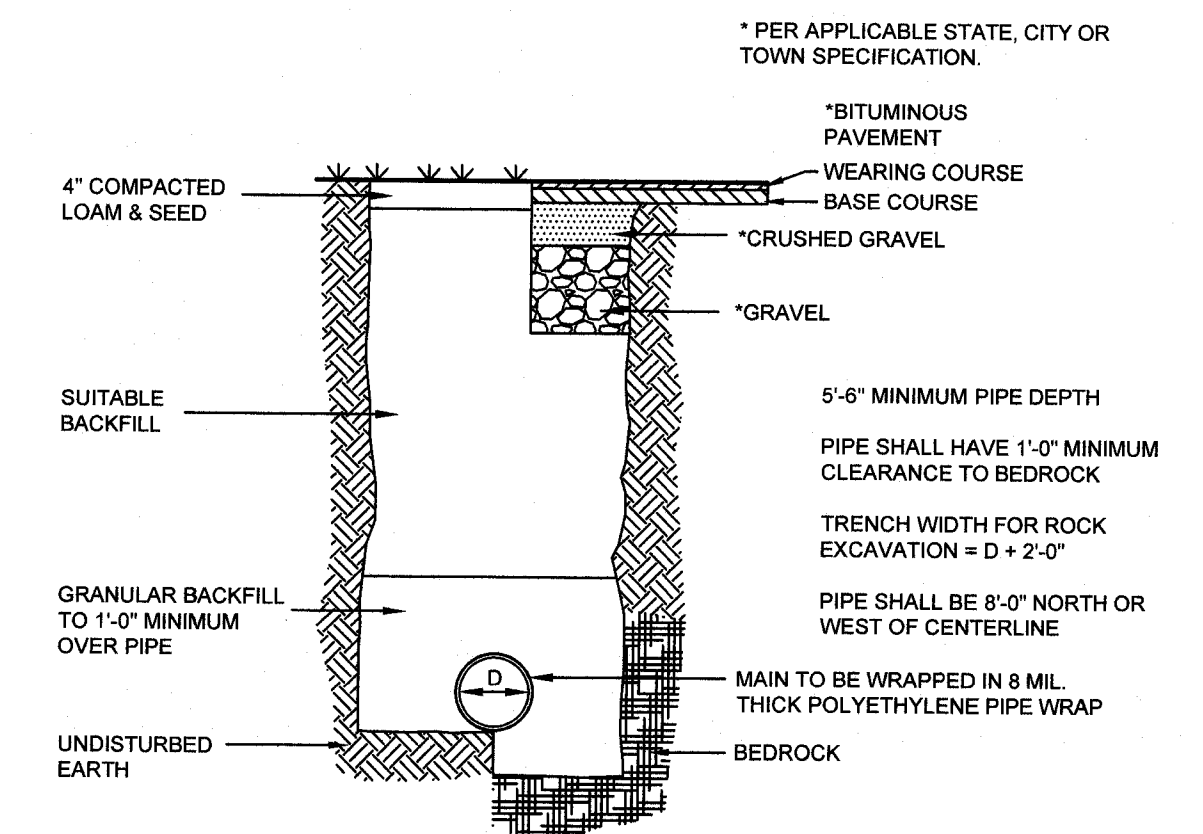


**PARALLEL INSTALLATION**

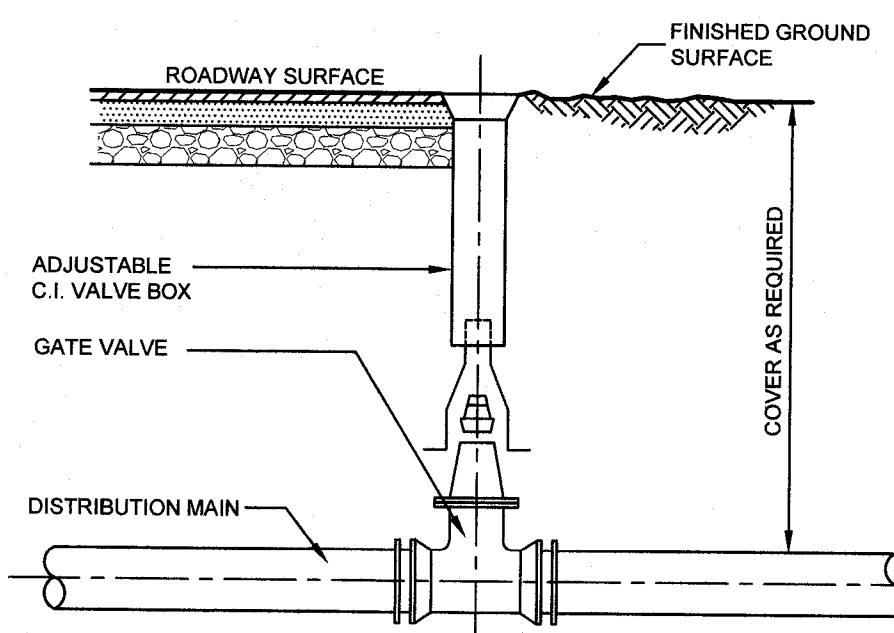


**MAIN CROSSINGS**

**WATER MAIN/SEWER MAIN SEPARATION**  
NOT TO SCALE  
(AUGUST 2011)



**TYPICAL WATER LINE TRENCH DETAIL**  
NOT TO SCALE  
(AUGUST 2011)



**WATER AND GAS GATE VALVE**  
NOT TO SCALE  
(MARCH 2008)

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**LOT 235 OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049

**LOT 236 OWNER:**  
PAGE ROCK, LLC  
PO BOX 1675  
HOLLIS, N.H. 03049

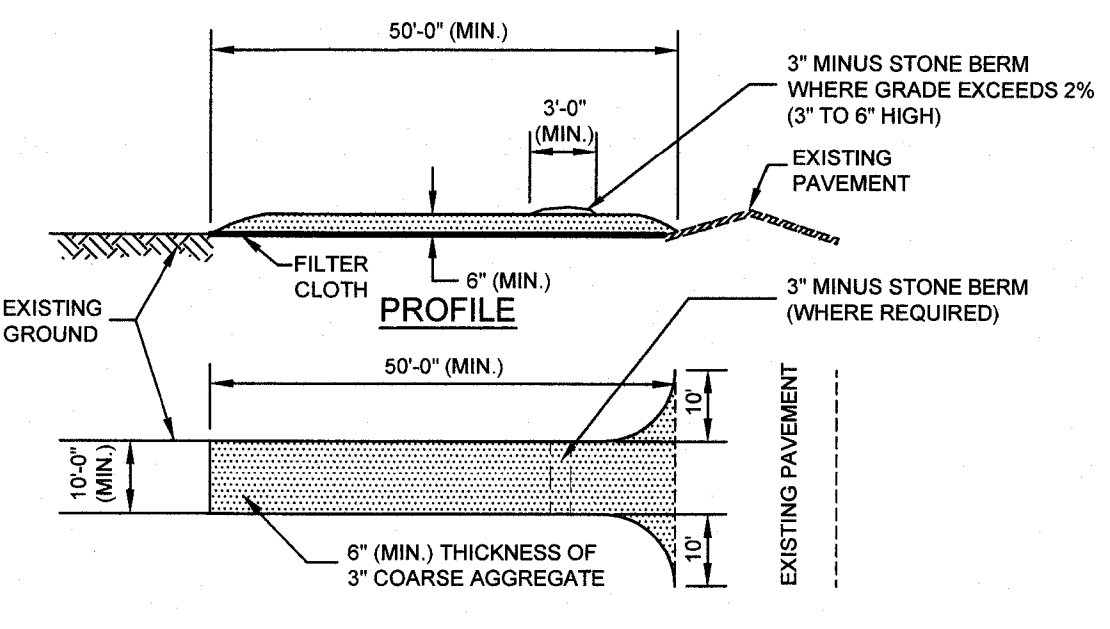
**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**

MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**K/A**  
**KEACH-NORDSTROM ASSOCIATES, INC.**  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: AS SHOWN  
FILE NO.:  
SHEET NO. 19 OF 22

*Handwritten signature and date: 3/19/26*

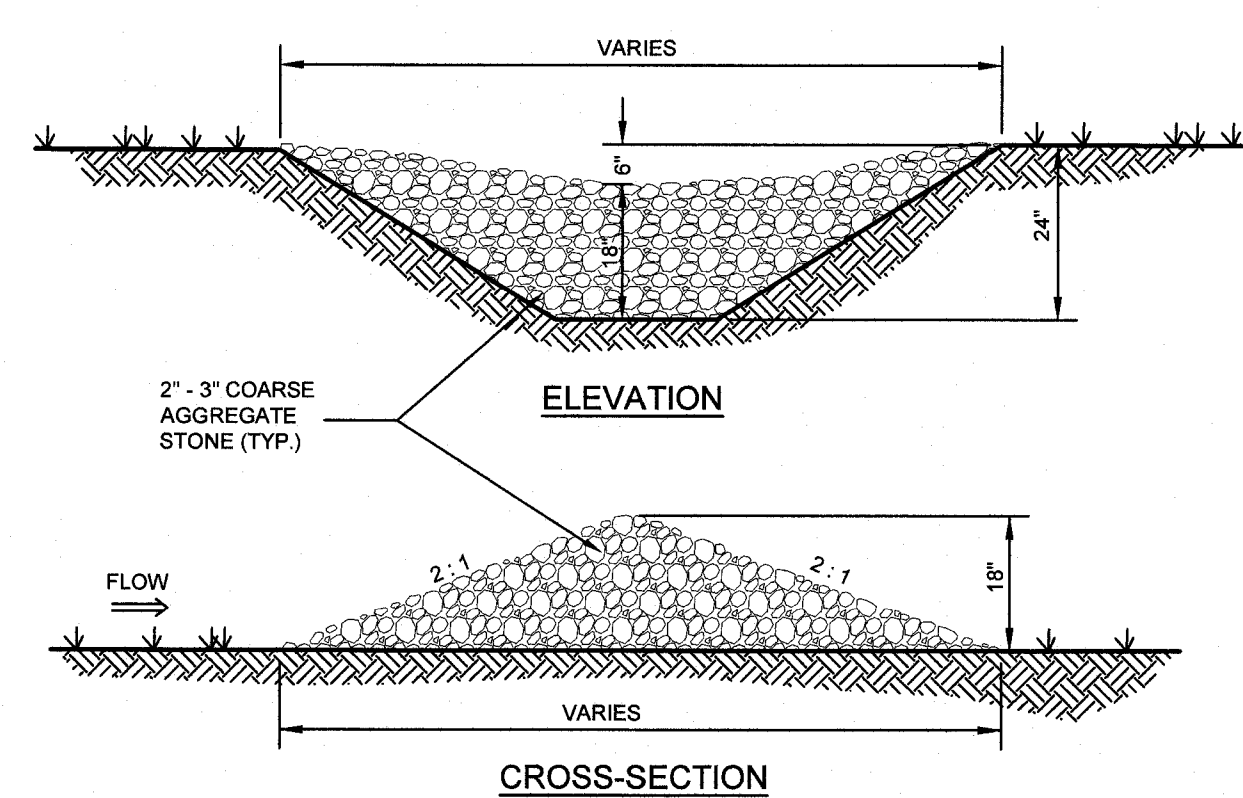
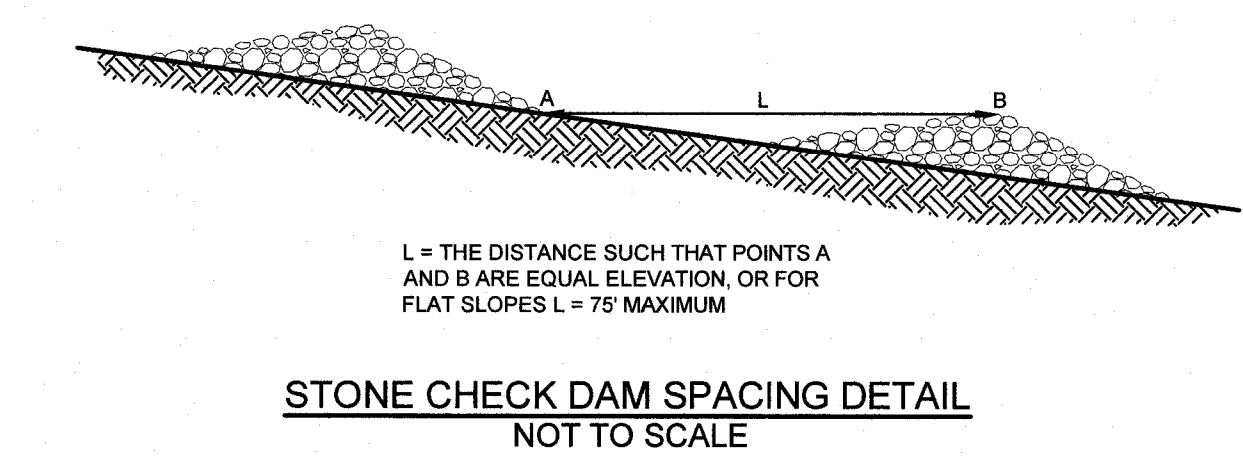


**MAINTENANCE:**  
MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW CRUSHED STONE OR COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

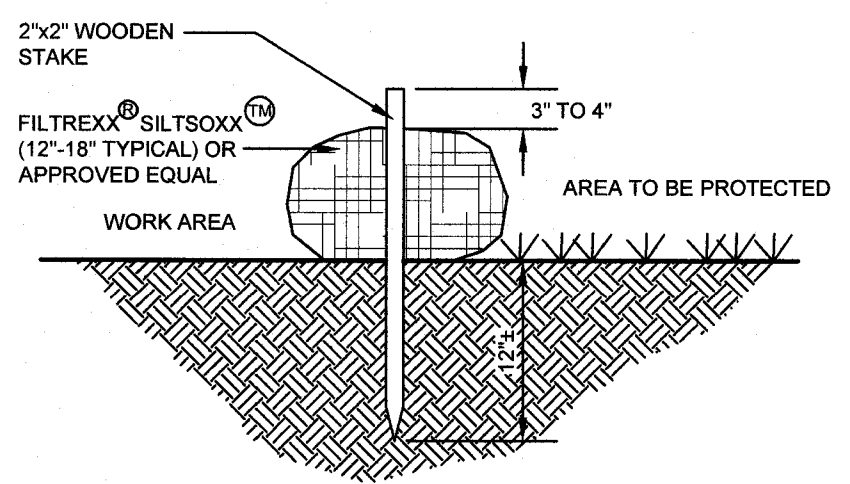
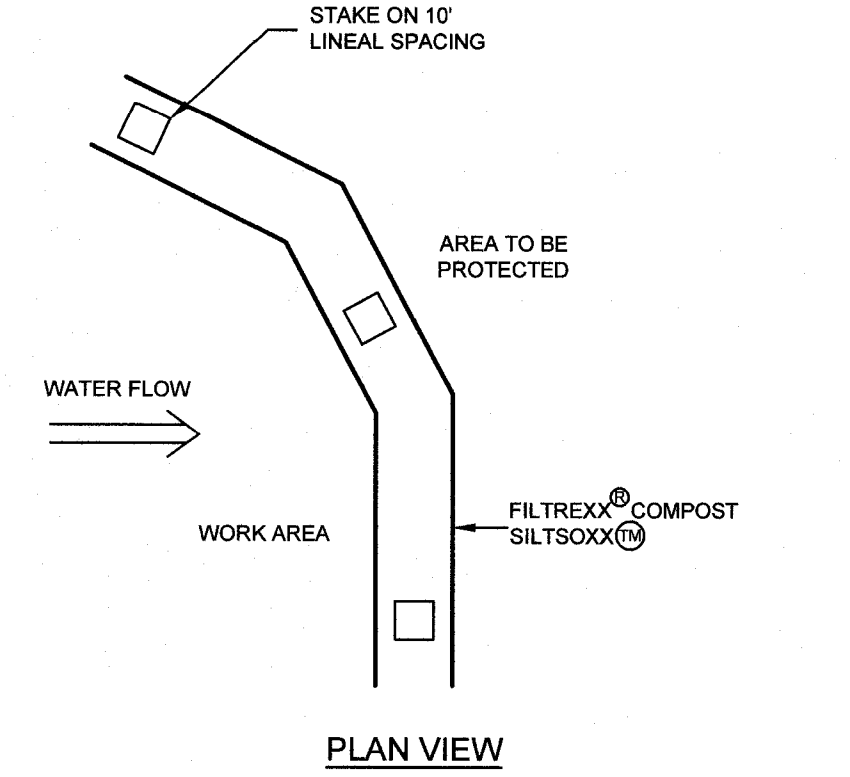
IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

- CONSTRUCTION SPECIFICATIONS:**
- STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 3 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
  - THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
  - THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT BE LESS THAN 6 INCHES.
  - THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
  - GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
  - ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
  - THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.
  - WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

**STABILIZED CONSTRUCTION EXIT DETAIL**  
NOT TO SCALE

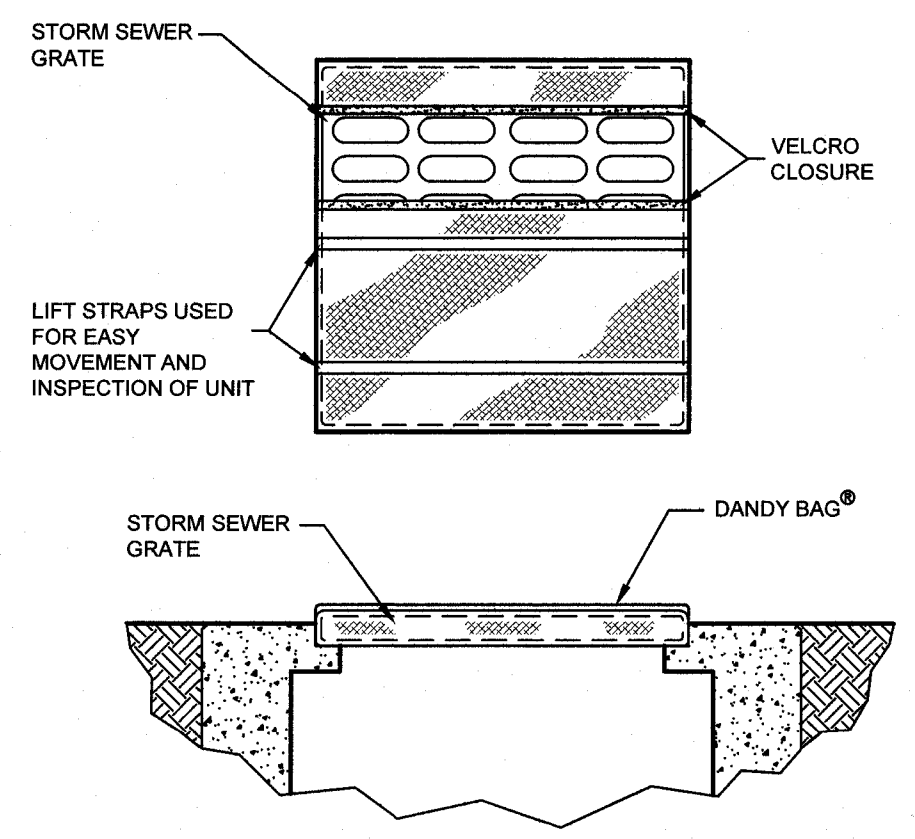


**STONE CHECK DAM DETAIL**  
NOT TO SCALE



**FILTREXX® SILTSOXX® DETAIL**  
NOT TO SCALE

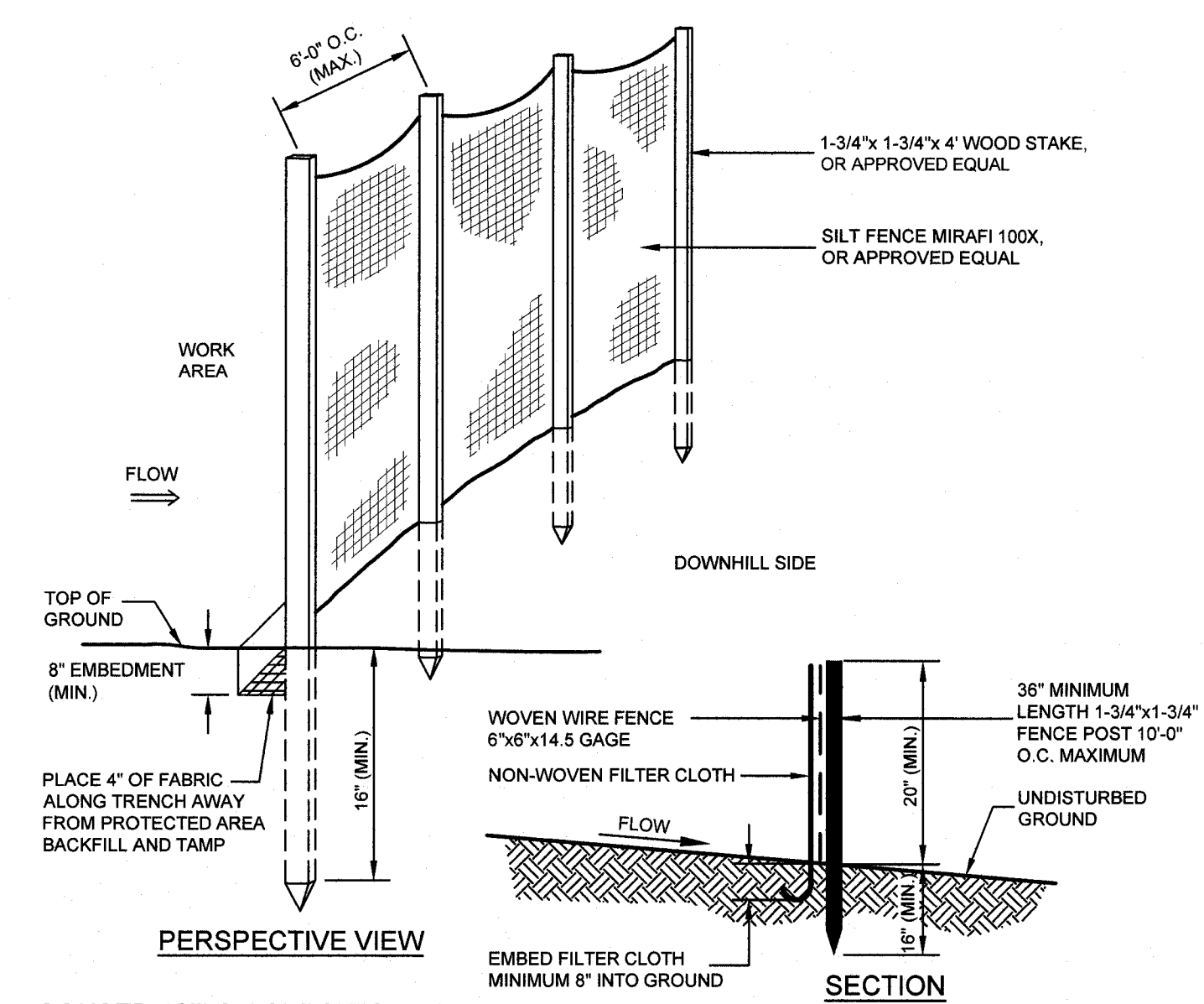
- NOTES:**
- ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
  - SILTSOXX® COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
  - SILTSOXX® DEPICTED IS FOR MINIMUM SLOPES. GREAT SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
  - COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
  - MAY BE USED IN PLACE OF SILT FENCE OR IN COMBINATION WITH SILT FENCE.



**HIGH-FLOW DANDY BAG® (SAFETY ORANGE)**

MECHANICAL PROPERTIES	TEST METHOD	UNITS	MARV
GRAB TENSILE STRENGTH	ASTM D 4632	kN (lbs)	1.62 (365) x 0.89 (200)
GRAB TENSILE ELONGATION	ASTM D 4632	%	24 x 10
PUNCTURE STRENGTH	ASTM D 4633	kN (lbs)	0.40 (90)
MULLEN BURST STRENGTH	ASTM D 3786	kPa (psi)	3097 (450)
TRAPEZOID TEAR STRENGTH	ASTM D 4533	kN (lbs)	0.51 (115) x 0.33 (75)
UV RESISTANCE	ASTM D 4355	%	90
APPARENT OPENING SIZE	ASTM D 4751	Mm (US Std Sieve)	0.425 (40)
FLOW RATE	ASTM D 4491	1/min/m <sup>2</sup> (gal/min/ft <sup>2</sup> )	5907 (145)
PERMITTIVITY	ASTM D 4491	Sec <sup>-1</sup>	2.1

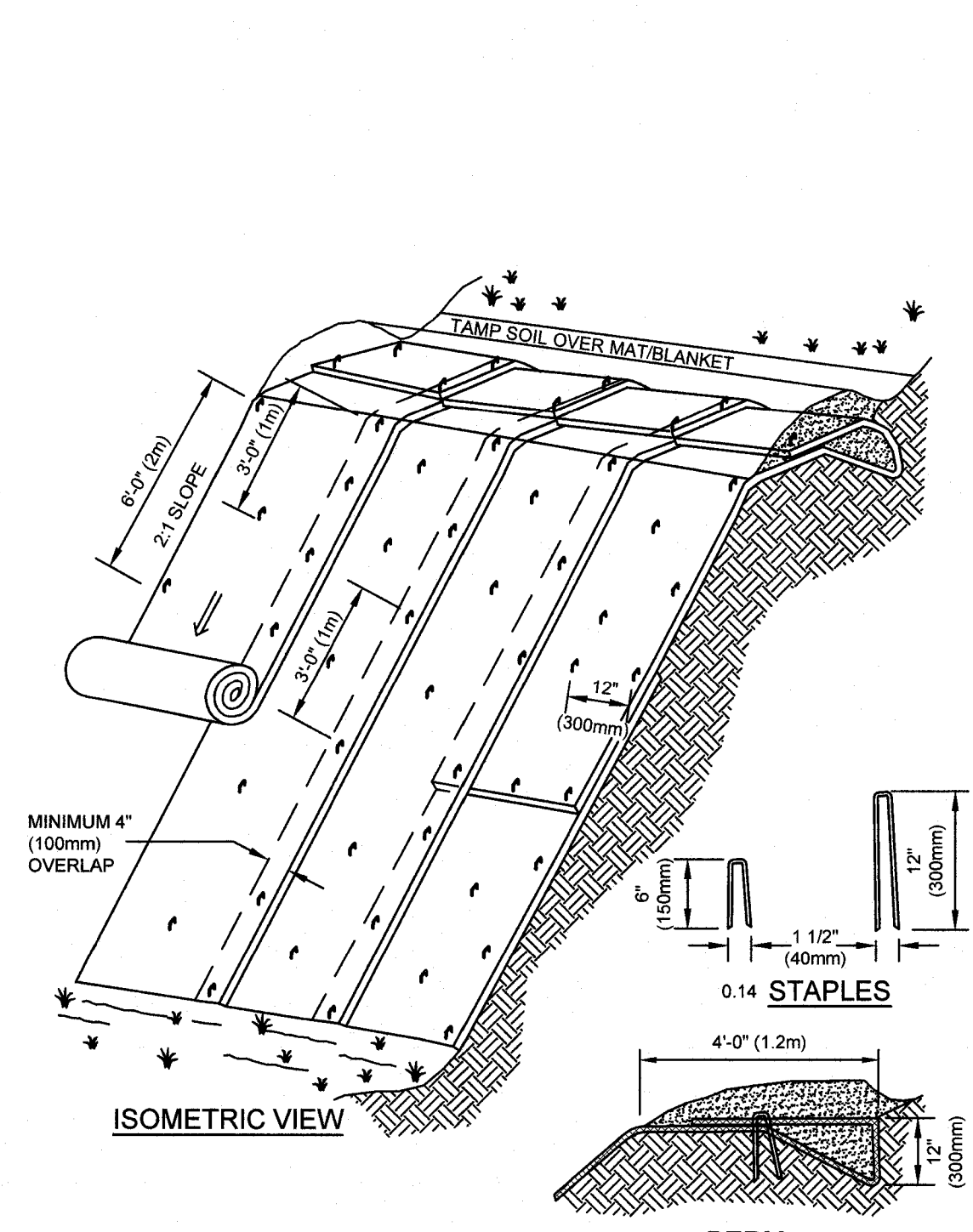
**DANDY BAG®**  
NOT TO SCALE  
(APRIL 2010)



- CONSTRUCTION SPECIFICATIONS:**
- THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
  - THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
  - WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIE OR STAPLES WHERE NOTED OR AS DIRECTED BY DESIGN ENGINEER.
  - FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MIDSECTION AND BOTTOM.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 8 INCHES, FOLDED AND STAPLED.
  - FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

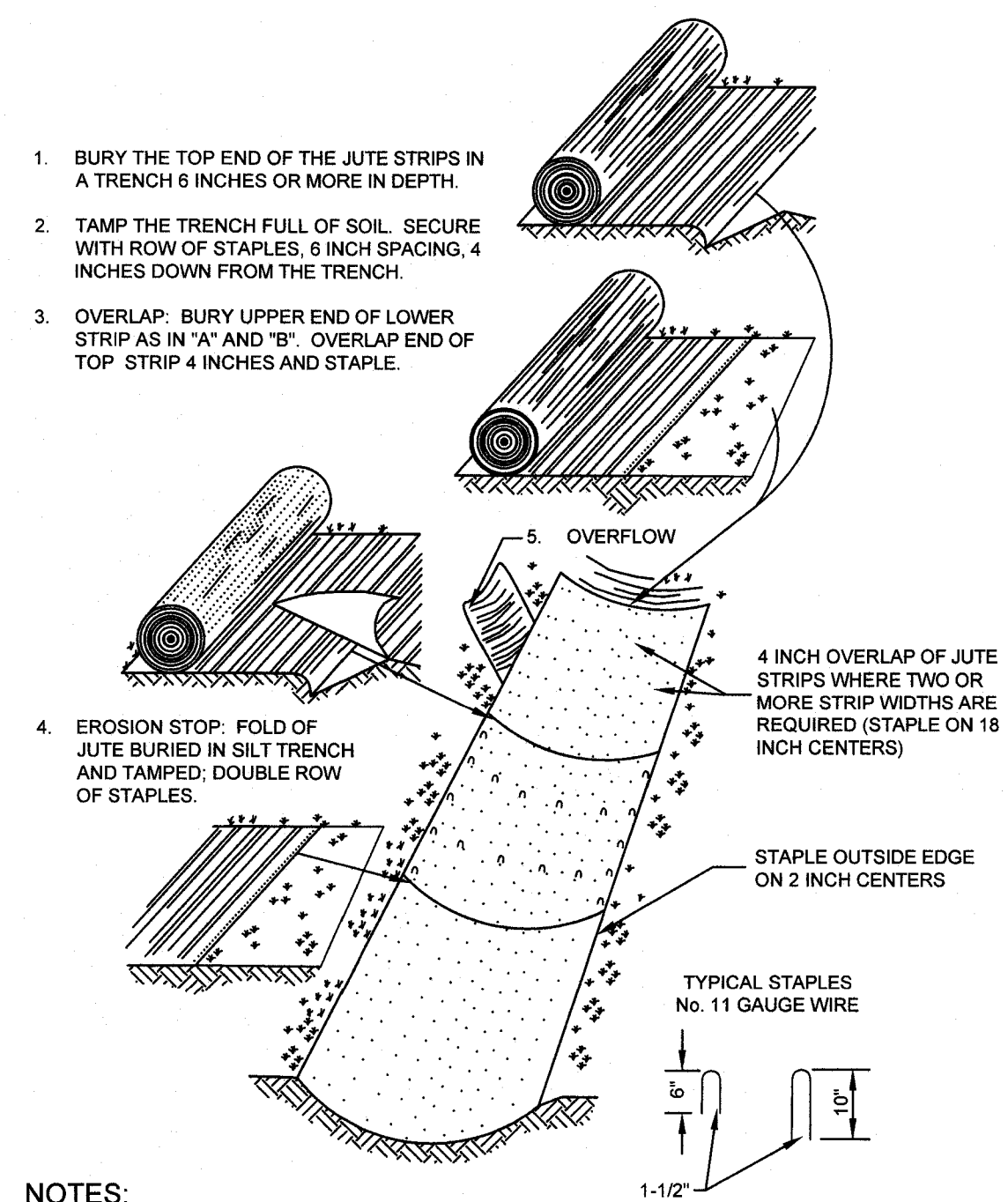
- MAINTENANCE:**
- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
  - IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
  - SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
  - SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

**SILT FENCE DETAIL**



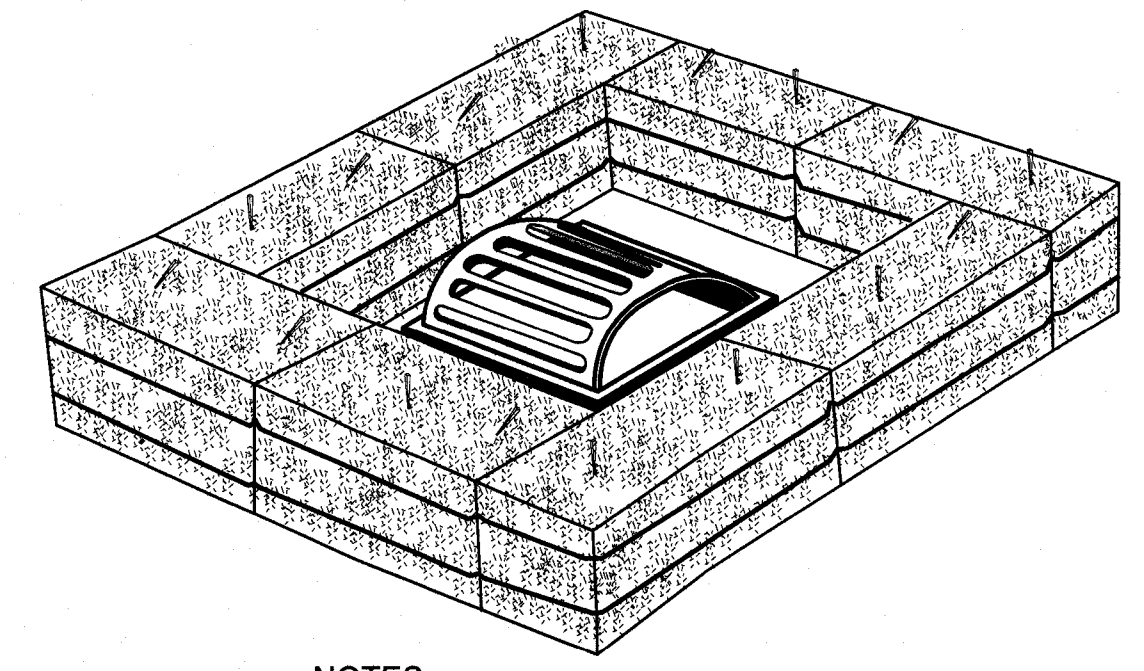
- NOTES:**
- MATS/BLANKETS SHALL BE DOUBLE NET BIODEGRADABLE EROSION CONTROL BLANKETS BY NORTH AMERICAN GREEN OR EQUAL.
  - SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
  - APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
  - MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.
  - LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
  - THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/2 INCHES MATERIAL UTILIZED (NOT APPLICABLE TO TURF REINFORCEMENT MATS).
  - TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.

**EROSION CONTROL BLANKETS - SLOPE INSTALLATION**  
NOT TO SCALE



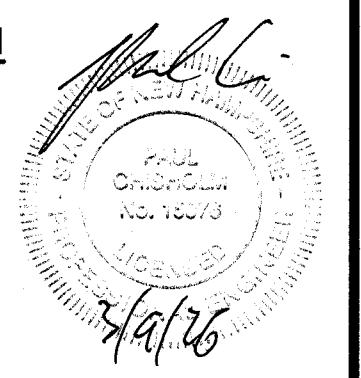
- NOTES:**
- THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/2 INCHES MATERIAL UTILIZED (NOT APPLICABLE TO TURF REINFORCEMENT MATS).
  - TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.

**EROSION CONTROL BLANKETS - SWALE INSTALLATION**  
NOT TO SCALE



- NOTES:**
- BARRIER TO REMAIN UNTIL GRASS IS GROWING IN ALL SEEDING AREA.
  - PROVIDE HAY BALES ON ALL SIDES OF CATCH BASIN FROM WHICH FLOW APPROACHES.

**HAY BALE BARRIER AT DITCH GRATE CATCH BASIN**  
NOT TO SCALE



<b>LOT 235 OWNER/APPLICANT:</b> PAGE ROCK, LLC 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049	<b>LOT 236 OWNER:</b> PAGE ROCK, LLC PO BOX 1675 HOLLIS, N.H. 03049
--	--

**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**  
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**KMA** KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 827-2881

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: AS SHOWN  
FILE NO.:  
SHEET NO. 20 OF 22



### Pre-wetting

NH Best Management Practices

**PRE-WETTING?**  
Pre-wetting is the process of covering a solid divider with a liquid before it is applied to a roadway.

**WHY PRE-WET?**  
Dissolving chemicals, used from a bin, but they can freeze on the road. Pre-wetting your divider with a liquid before it is applied to a roadway.

**Getting Started**  
Wet the pile! There are two ways to pre-wet your de-icing chemicals. The easiest way to get started with pre-wetting is to spread your salt pile, spray it with pre-wetting liquid, mix it around, and re-pile it. More advanced truck mounted pre-wetting systems can be installed on your trucks if you decide to make the investment.

**Pre-wetting Liquids**  
You have a few options for pre-wetting liquids. The most commonly used is a 22% sodium chloride brine solution. Calcium chloride at 32% solution is also used, as well as Magic Minus Zero™ and other patented products.

**Truck Mounted Systems**  
These systems are mounted in the truck bed and control the de-icer with liquid as it comes off the conveyor/luger onto the spinner. These systems have the benefit of applying liquid only to the material you use as you use it. However, these systems must be installed on every truck that will be used to spread pre-wetted material.

**Reduced Rates**  
If you are pre-wetting don't forget to reduce your application rate accordingly. Reductions in the range of 15-20% are typical.

**How Much Liquid?**  
A good rule of thumb is to use 8-10 gallons of pre-wetting liquid for every ton of de-icer. For water sensitive, such as magnesium chloride, consult your supplier for application rates.

Produced in partnership with: **DOT** Technology Transfer Center

### Brine Making

NH Best Management Practices

**GET THE LOWEST FREEZE POINT**  
When salt brines are 22% salt measured with a hydrometer, 1.170, or with a salinometer, 0.513, it has the lowest freeze point possible (about -7°F).

**BRINE STORAGE**  
22% brine solution may be stored outside, however if temperatures get below 0°F the brine may freeze. A circulation pump will mix the brine in the tank. If possible, store brine indoors to eliminate risk of freezing.

**COST OF BRINE**  
Calcium chloride brine costs about 7¢ per gallon, depending on the supplier. Sodium chloride brine costs about 4¢ per gallon. Have your equipment setup to use the brine you want.

**MULTIPLE USES**  
Brine can be used directly for pre-wetting salt as it is dispensed from your truck, or pre-wetted salt before it is loaded into your truck. Brine can be safely stored for up to a year, however, the concentration should be tested before use.

**Quality Control & Documentation**  
Make sure that you record the date when you create each batch of brine and document who mixed it and checked the concentration. It is also a good idea to record the final concentration. These records should be kept for at least two years to protect your group in the event of litigation.

Produced in partnership with: **DOT** Technology Transfer Center

### Hydraulic-Run Spreader Calibration

NH Best Management Practices

**WHY CALIBRATE?**  
You can't reduce your salt use if you don't know how much you're actually spreading. You need to know how much material you are putting down on a roadway per passing but for every setting on your truck that you use. This is why calibrating your equipment is the first step in reducing salt use and saving money.

**REMEMBER:**  
Each truck must be individually calibrated for each material it will be used to spread. Use salt calibration charts for the different materials the spreader can use.

**CALCULATIONS:**  
There are a few simple calculations you must perform in order to complete the calibration. Once all of the necessary data is recorded, head back inside and enter our data into the online calculator. You will receive a calibration chart for each material.

**Step 1: Load the Truck**  
Partially load the truck with material. Half of a full load should be more than adequate for calibration purposes.

**Step 2: Set Your Controls**  
Gate Height: Set the gate height to its lowest practical setting (1-7). This should be kept constant throughout the calibration process. If you find that not enough material is dispensed with this setting, by 2.5 to 5. Engine Speed: Drive the truck and set the engine at the speed you see during spreading (approximately 2000 rpm).

**Step 3: Measure Spread Width**  
Measure the width that the material covers during spreading. Round your numbers to the nearest half foot and record them in column "W" of the calibration chart (see reverse side).

**Step 4: Collect & Weigh Material**  
To get the most accurate results, you will need either a scale of known weight, or a bucket to collect the material that is dispensed from the spreader, as well as a scale. Weigh the bucket you are using to collect the material, and record that value in the weight above the discharge rate column. Collect material for 1 minute. Weigh the collected material and subtract the weight of the tarp/container. Record this value in the first part of the calibration chart. This value is the first part of the calibration chart. This value is the first part of the calibration chart. This value is the first part of the calibration chart.

**Step 5: Perform Calculations**  
Multiply the spread width from column "W" by 0.28 and record the answer in column "B". For each gate setting, add column "B" and column "C" together. Divide the result by 2 and record column "D". To get the average discharge rate, to find the pounds of material discharged per 1000 square feet, you will need to know the "W" value for each gate setting and the "D" value for each gate setting. The "W" value for each gate setting is shown here:

**Step 6: Distribute Completed Calibration Cards!**  
Go back and calculate your discharge rate using the calibration chart for each truck speed and conveyor/luger setting you normally use. Refer to the reverse side of this sheet for calculation instructions. The formula you will be using is shown below:

$$D = \frac{B \times C}{A}$$

### Calibration Chart (Hydraulic Type)

Truck/Spreader ID: \_\_\_\_\_

Material: \_\_\_\_\_

Setting	W (Spread Width)	B (Weight)	C (Weight)	D (Discharge Rate)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Produced in partnership with: **DOT** Technology Transfer Center

### Pony Motor-Run Spreader Calibration

NH Best Management Practices

**WHY CALIBRATE?**  
You can't reduce your salt use if you don't know how much you're actually spreading. You need to know how much material you are putting down on a roadway per passing but for every setting on your truck that you use. This is why calibrating your equipment is the first step in reducing salt use and saving money.

**REMEMBER:**  
Each truck must be individually calibrated for each material it will be used to spread. Use salt calibration charts for the different materials the spreader can use.

**CALCULATIONS:**  
There are a few simple calculations you must perform in order to complete the calibration. Once all of the necessary data is recorded, head back inside and enter our data into the online calculator. You will receive a calibration chart for each material.

**Step 1: Load the Truck**  
Partially load the truck with material. Half of a full load should be more than adequate for calibration purposes.

**Step 2: Set Your Controls**  
Gate Height: Set the gate height to its lowest practical setting to start (approximately 7 to 10). After the truck is calibrated for the lowest gate setting, adjust the gate height to each 10% increment greater than the lowest setting. Continue until all gate settings you use are calibrated. Engine Speed: Set the engine speed to the maximum setting, or to the setting you would normally use.

**Step 3: Measure Spread Width**  
Measure the width that the material covers during spreading. Round your numbers to the nearest half foot and record them in column "W" of the calibration chart (see reverse side).

**Step 4: Collect & Weigh Material**  
To get the most accurate results, you will need either a scale of known weight, or a bucket to collect the material that is dispensed from the spreader, as well as a scale. Weigh the bucket you are using to collect the material, and record that value in the weight above the discharge rate column. Collect material for 1 minute. Weigh the collected material and subtract the weight of the tarp/container. Record this value in the first part of the calibration chart. This value is the first part of the calibration chart. This value is the first part of the calibration chart.

**Step 5: Perform Calculations**  
Multiply the spread width from column "W" by 0.28 and record the answer in column "B". For each gate setting, add column "B" and column "C" together. Divide the result by 2 and record column "D". To get the average discharge rate, to find the pounds of material discharged per 1000 square feet, you will need to know the "W" value for each gate setting and the "D" value for each gate setting. The "W" value for each gate setting is shown here:

**Step 6: Distribute Completed Calibration Cards!**  
Go back and calculate your discharge rate using the calibration chart for each truck speed and gate setting you normally use. Refer to the reverse side of this sheet for calculation instructions. The formula you will be using is shown below:

$$D = \frac{B \times C}{A}$$

### Calibration Chart (Pony Motor Type)

Truck/Spreader ID: \_\_\_\_\_

Material: \_\_\_\_\_

Setting	W (Spread Width)	B (Weight)	C (Weight)	D (Discharge Rate)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Produced in partnership with: **DOT** Technology Transfer Center

**Example: Step #1, blank calibration form**  
See the References and Resources section for a full size form to copy for calibration. This is how the empty form looks. Keep a stock of these on a clipboard when ready to begin the calibration.

**Calibration Chart for Auger or Conveyor Systems**

DATE: 8-Aug-15    Spreader #: A4219    Material: Rock Salt

Setting	Pounds per Minute	5 MPH (x12)	10 MPH (x6)	15 MPH (x4)	20 MPH (x3)
1					
2					
3					

Figure 10: Blank calibration form

**Example: Step #2, calibration form filled out during calibration**  
Fill in the header information and column 2, the discharge weight per setting.

**Calibration Chart for Auger or Conveyor Systems**

DATE: 8-Aug-15    Spreader #: A4219    Material: Rock Salt

Setting	Pounds per Minute	5 MPH (x12)	10 MPH (x6)	15 MPH (x4)	20 MPH (x3)
1	10	120	60	40	30
2	22	264	132	88	66
3	34	408	204	136	102

Figure 11: Example calibration form with discharge and header information filled out

**Example: Step #3, calibration form ready to put in truck for road application**  
Back in the shop, do the calculations to fill in the rest of the blanks. Multiply the weight in column 2 with the multiplier in the top row. This provides the pounds per mile that needed to fill in the table.

**Calibration Chart for Auger or Conveyor Systems**

DATE: 8-Aug-15    Spreader #: A4219    Material: Rock Salt

Setting	Pounds per Minute	5 MPH (x12)	10 MPH (x6)	15 MPH (x4)	20 MPH (x3)
1	10	120	60	40	30
2	22	264	132	88	66
3	34	408	204	136	102

Figure 12: Example calibration form with pounds per lane mile filled out

**Some fish species are affected by concentrations of less than 1000 ppm NaCl, about 1 to 1.5 tablespoons of salt in 5 gallons of water.**

**Example: Step #4, calibration form ready to tip to the hand spreader or put in truck for parking lot application.**  
Divide by 63 to convert pounds per lane mile to pounds per 1,000 square feet. This is very useful for parking lot or sidewalk applications.

Figure 13: Example calibration form with pounds per 1000 sq. ft. filled out

**Calibration Chart for Auger or Conveyor Systems**

DATE: 8-Aug-15    Spreader #: A4219    Material: Rock Salt

Setting	Pounds per Minute	5 MPH (x12)	10 MPH (x6)	15 MPH (x4)	20 MPH (x3)
1	10	120	60	40	30
2	22	264	132	88	66
3	34	408	204	136	102

Figure 13: Example calibration form with pounds per 1000 sq. ft. filled out

**Gravity Flow Equipment**  
This is applicable for equipment that does not have a motorized delivery system such as an auger. This type of equipment might be a pickup mounted spreader, glider mounted spreader or a hand push spreader. Gravity flow equipment is typically controlled by gate opening and speed of application.

**Step 1: Calculate discharge rate**

- Mark out a 10-foot stretch of pavement. (By increasing the size of the test area i.e., the longer the test area, the more accurate the results will be).
- Sweep it clean of sand or any other material.
- Using a constant speed, apply one pass of material to the test area.
- Measure the width the material is spread or bounces, in feet.
- Sweep up and weigh the material that is within the marked 10-foot stretch.
- Record the lever position/settings for the gate/shute. If there are no numbers for the positions, make permanent marks on the equipment to identify the positions.
- To improve accuracy, repeat this two more times and calculate the average weight of material applied.
- Record results in columns A, B, C, and D (Figure 14).

**Step 2: Repeat step #1 for various settings.**

**Step 3: Fill out chart.**

- Fill out columns E, F, and G (Figure 14).
- If using more than one type of material, repeat the test for each material.
- Place the completed calibration chart with the equipment.

**Shortcuts:**

- Put down a tarp over the application area; this makes it quicker to recover and weigh material.
- After the first pass, put a bag around spreader to catch discharge material. The first pass is needed to determine the spread width.

**Calculate application rate:**

Equipment: \_\_\_\_\_ Material: \_\_\_\_\_ Date: \_\_\_\_\_

A	B	C	D	E	F	G
Speed	Lever position or gate setting	Feet	Coverage area in sq. ft. (D x 10)	Application rate in lbs./lane mile (12' width) (F x 63.4)	Application rate in lbs./lane mile (12' width) (F x 63.4)	Application rate in lbs./lane mile (12' width) (F x 63.4)

Figure 14: Example calibration chart for gravity flow equipment

**What if calibration is not a practice?**  
Even without calibrating the equipment, the amount of material to use can be determined but will take more time to calculate. Know the material, the size of the area to be treated, and the pavement temperature, then consult the application rate chart (application rate section) and do the math. Without calibration, the way to evenly distribute the recommended amount across the maintenance area must be determined by the professional. This approach may work well for treating sidewalks using the "chicken feed" method. For example:

- 20° degrees pavement temperature and rising
- Using dry salt
- Sidewalk is 2,000 square feet
- Table recommends 2.25 lbs. per 1,000 square feet (for this situation)
- Measure about 4.5 lbs. of salt
- Figure out a way to spread it evenly over the 2,000 sq. ft. surface

**Sand fills in lake bottoms, accelerating the aging process of lakes. Lakes get shallower as they age, some eventually becoming wetlands.**

**Calibration Charts**

**Calibration Chart for Gravity Flow Equipment**

Vehicle or spreader number: \_\_\_\_\_ Date: \_\_\_\_\_

Material Type: \_\_\_\_\_ Calibrated by: \_\_\_\_\_

Setting	A	B	C	D	E
1					
2					
3					
4					
5					
6					

Figure 15: Blank calibration chart for gravity flow equipment

**Calibration Chart for Auger or Conveyor Systems**

DATE: \_\_\_\_\_ Spreader #: \_\_\_\_\_ Material: \_\_\_\_\_

Setting	Pounds per Minute	5 MPH (x12)	10 MPH (x6)	15 MPH (x4)	20 MPH (x3)
1					
2					
3					
4					
5					
6					

Figure 16: Blank calibration chart for auger or conveyor manual controlled spreaders

**Hiring a NH Certified Green SnowPro as your snow removal contractor will help protect you and your company from slip and fall claims arising from snow and ice conditions.**

**What can you do?**  
Look for a certified salt applicator at <http://des.nh.gov/organization/divisions/water/wmb/was/salt-reduction-information/salt-applicator-certification.htm> or ask your current contractor to take the Green SnowPro course and become certified.

**How can your organization benefit from the certification?**

**Reduce Your Liability**  
Under RSA 508:22, certified applicators and those who hire them are granted liability protection from claims arising from snow and ice conditions (slip and fall claims).

**Certified Green SnowPros**  
NH Certified Green SnowPros are leaders in the snow removal industry who are trained in the most up to date technologies and snow management practices to ensure a high level of service and safety to their customers.

**Reduce Impacts to Local Waterbodies**  
Once in our water supplies, there is no practical way to remove salt. Certified Green SnowPros are trained in salt reduction practices to help ensure clean water for future generations.

**Why is salt reduction important?**  
As of 2014, 46 water bodies in New Hampshire are polluted with chloride due to road salt application. In several watersheds analyzed in the southern I-93 corridor, more than 50% of the salt load comes from private roads and parking lots. The other major sources are state and local roads and highways.

**Training**  
For upcoming Green SnowPro Training dates go to <http://t2.unh.edu/greensnowpro-training-and-certification>

**For more information:**  
Visit <http://www.des.nh.gov> and see "Road Salt Reduction" under the A-Z list.

Contact: Patrick Woodbury  
patrick.woodbury@des.nh.gov  
(603) 271-5329

**ATTACHMENT B – SMART SALTING PRACTICES**  
A checklist for snow and ice maintenance contractors.

Recommended practice	Already do	Will do	Might do	Will not do	If "will not do," why not?
Use an application rate chart.					
Calibrate equipment each year.					
Learn about the deicer ingredients and use the appropriate one for the condition.					
Look for reasons if and why materials are leaking or spilling from vehicles and fix them (e.g. gaps, overfilling, etc.)					
Develop a comprehensive winter maintenance policy. Follow your policy.					
Measure and use pavement temperatures.					
Use anti-icing appropriately prior to the storm.					
Plow before applying deicers.					
Use wet materials (pre-wet or pre-treated).					
Don't apply sodium chloride (road salt) for pavement temperatures below 15°F.					
Don't apply deicers for pavement temps under 10°F. If it's too cold, separate salt and sand. Use salt for melting. Use sand for traction.					
Apply deicers in the center of the road or on the high side of the curve.					
Store the salt in a building or under a secure cover.					
Store salt away from water flow and direct the water away from storage areas.					
Store snow away from lakes, ponds and wetlands.					
Sweep up sand, dispose of properly.					
For each event, document what you did and how well it worked. Use this information to make improvements.					

Checklist is adapted from materials created by Tetric Consulting as a part of the Minnesota Pollution Control Agency Smart Salting Initiative Certification Program.

**LOT 235 OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049

**LOT 236 OWNER**  
PAGE ROCK, LLC  
PO BOX 1675  
HOLLIS, N.H. 03049

**CONSTRUCTION DETAILS**  
**PAGE ROCK TOWNHOMES**

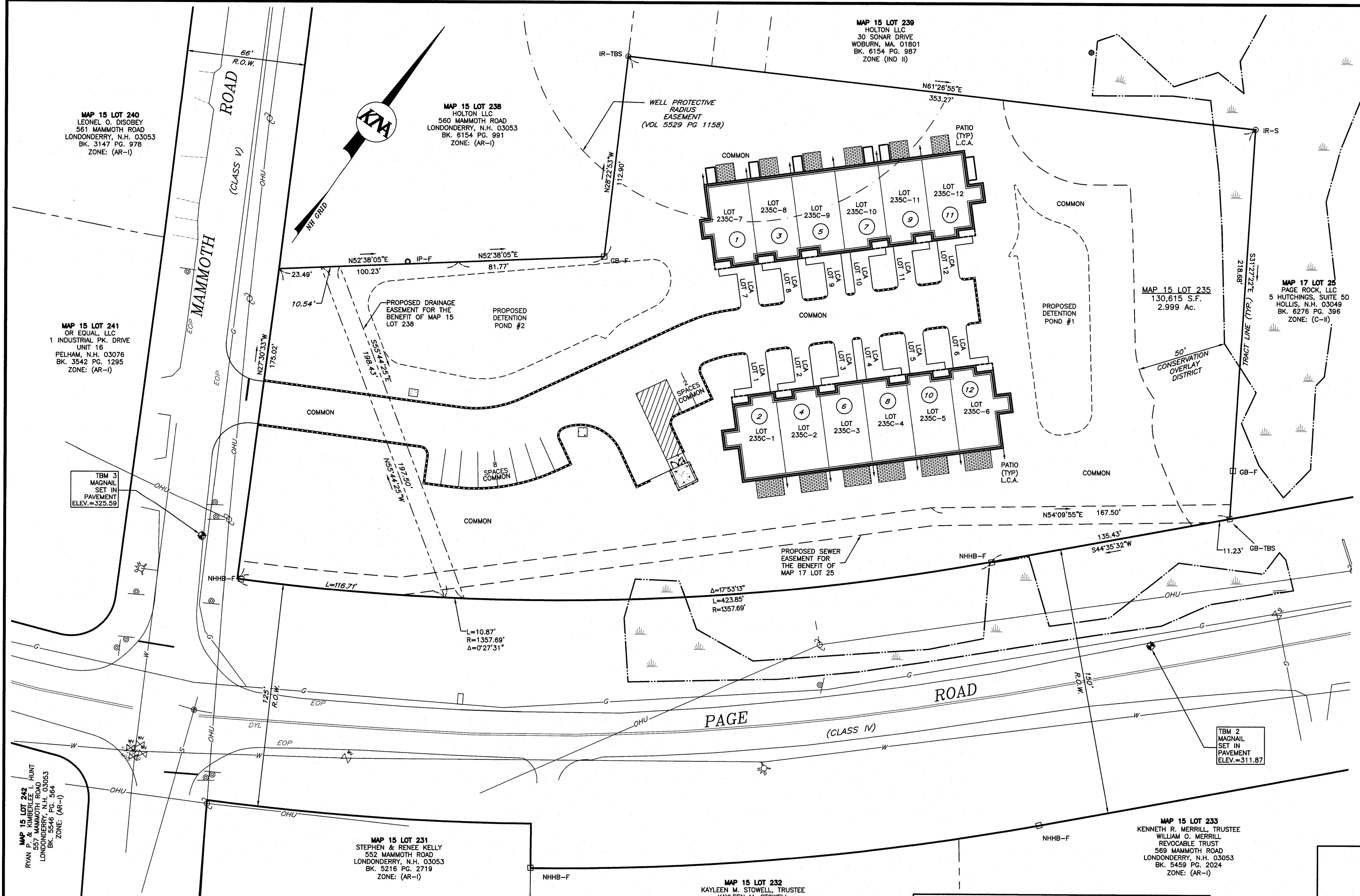
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**REVISIONS**

NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**PROJ. NO:** 21-0113-1  
**DATE:** MARCH 20, 2025  
**SCALE:** AS SHOWN  
**FILE NO.:**  
**SHEET NO.** 22 OF 22

**KEACH-NORDSTROM ASSOCIATES, INC.**  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881



- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO CONVERT THE EXISTING MULTI-FAMILY RESIDENTIAL SITE PLAN FOR TAX MAP 15 LOT 235, 3 PAGE ROAD INTO A CONDOMINIUM CONSISTING OF 12 UNITS WITH 2 BEDROOMS EACH.
  - EXISTING AREA OF PARCEL = 130,615 S.F. OR 2.999 ACRES.
  - THE SUBJECT PARCEL IS LOCATED ENTIRELY WITHIN COMMERCIAL II (C-II) ZONING DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:
    - FRONT 60 FT
    - SIDE 30 FT
    - REAR 30 FT
    - LANDSCAPE BUFFER 50 FT
    - CONSERVATION OVERLAY DISTRICT 50 FT FROM DELINEATED WETLANDS
    - 100 FT FROM NAMED STREAMS
  - BOUNDARY INFORMATION SHOWN HEREON IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN JANUARY OF 2022.
  - HORIZONTAL DATUM IS NAD83. VERTICAL DATUM IS NAVD88 OBTAINED FROM GPS SURVEY METHODS POST PROCESSED THROUGH NOAA-OPUS. NORTH ORIENTATION IS NAD83.
  - EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF LONDONDERRY N.H., ROCKINGHAM COUNTY, MAP NUMBER 33015C0317E, PANEL 317 OF 681, EFFECTIVE DATE: MAY 17, 2005 INDICATES THAT NO PORTION OF THE SUBJECT PARCEL IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD ZONE.
  - THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR OR OWNER SHALL CONTACT DIG-SAFE AT 811.
  - EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
  - THIS SITE WILL BE SERVICED BY MUNICIPAL SEWER AND MANCHESTER WATER WORKS WATER.
  - THERE ARE NO STATE PERMITS REQUIRED FOR THE CONDOMINIUM CONVERSION.
  - THIS PLAN SET CONTAINS A TOTAL OF 2 SHEETS, ALL SHEETS ARE RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AND ARE ON FILE AT THE TOWN OF LONDONDERRY PLANNING DEPARTMENT.

- REFERENCE PLANS:**
- "SUBDIVISION PLAN OF LAND OF A.J. & G.Y. HUARD; SUBDIVISION PLAN OF LAND OF MR. & MRS. LEO DUBOIS." SCALE: 1"=50'. DATED: JUNE, 1969. PREPARED BY: P. BRUSQUINI P.E. R.C.R.D. PLAN #1438
  - "TOWN OF LONDONDERRY, N.H. MAP 17 PARCEL 25." SCALE: 1"=50'. DATED: JANUARY, 1982. PREPARED BY: EDWARD N. HERBERT ASSOC. INC. R.C.R.D. PLAN #D-12463.
  - "RESOLUTION PLAN, OLD PAGE ROAD." SCALE: 1"=40'. DATED: JANUARY 29, 2008. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-36063.
  - "LOT LINE ADJUSTMENT-MAP 15 LOTS 235 & 239." SCALE: 1"=100'. DATED: JANUARY 15, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-36211.
  - "LOT 17-7 SUBDIVISION PLAN." SCALE: 1"=60'. DATED: DECEMBER 19, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-40123.
  - "PLAN OF PROPOSED FEDERAL AID PROJECT ROCKINGHAM ROAD." SCALE: 1"=50'. LAST REVISED: DECEMBER 22, 1954. N.H. PROJECT NO. P-2979.
  - "RESIDENTIAL SITE PLAN, PAGE ROCK TOWNHOMES, TAX MAP 15 LOTS 235 & 236, 3 PAGE ROAD, LONDONDERRY, NEW HAMPSHIRE." SCALE: 1"= 30'. DATED: MARCH 20, 2025. PREPARED BY: THIS OFFICE.

**OWNER OF MAP 15 LOT 235**  
 SIGNATURE: *Deane Nihil*  
 PAGE ROCK LLC  
 DATE: 2/16/2026

**OWNER OF MAP 15 LOT 236**  
 SIGNATURE: *Deane Nihil*  
 PAGE ROCK LLC  
 DATE: 2/16/2026

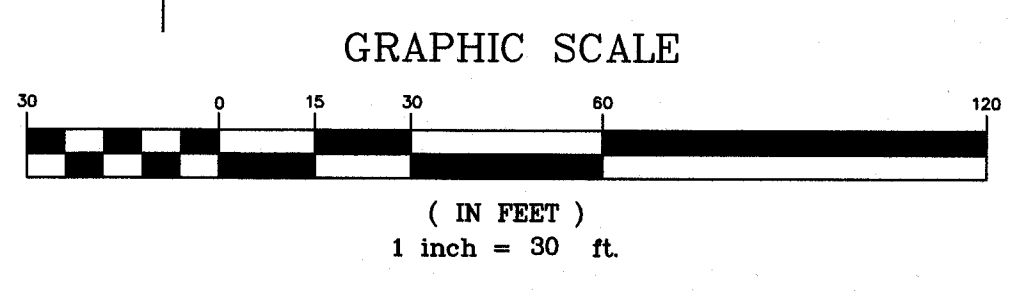
**OWNER/APPLICANT:**  
 PAGE ROCK, LLC  
 5 HUTCHINGS DRIVE, SUITE 5D HOLLIS, N.H. 03049  
 R.C.R.D. BOOK 6276 PAGE 399  
 R.C.R.D. BOOK 6276 PAGE 402

**CONDOMINIUM SITE PLAN**  
**PAGE ROCK TOWNHOMES,**  
**A CONDOMINIUM**  
 MAP 15 LOT 235  
 3 PAGE ROAD  
 LONDONDERRY, NEW HAMPSHIRE  
 ROCKINGHAM COUNTY

PROJ. NO: 21-0113-1  
 DATE: APRIL 2, 2025  
 SCALE: 1" = 30'  
 FILE NO.:  
 SHEET NO. CS1

**LEGEND**

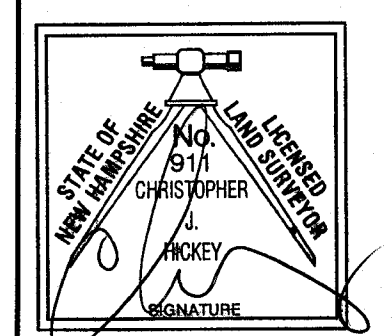
NHHB-F	NH HWY BOUND FOUND	---	EDGE OF PAVEMENT
GB-F	GRANITE BOUND FOUND	-----	STONEWALL
IP-F	IRON PIPE FOUND	-----	BUILDING SETBACK
IR-S	IRON ROD SET	-----	EASEMENT
GB-TBS	GRANITE BOUND TO BE SET	-----	WETLAND BUFFER
IR-TBS	IRON ROD TO BE SET	-----	LANDSCAPE BUFFER
BM	BENCHMARK	-----	PROPOSED EOP
SIGN	SIGN	-----	PROPOSED BIT. CURB
DM	DRAINAGE MANHOLE	-----	PROPOSED RET. WALL
CB	CATCH BASIN	-----	
WV	WATER VALVE	-----	
HYD	HYDRANT	-----	
SM	SEWER MANHOLE	-----	
FES	FLARED END SECTION	-----	
UP	UTILITY POLE	-----	
W	WELL	-----	



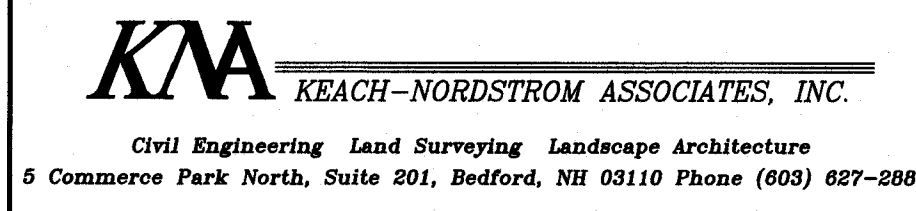
BENCHMARK DATA				REVISIONS		
LOCATION	DATUM	DESCRIPTION	NO.	DATE	DESCRIPTION	BY
N:154442.42, E:1054087.65	ELEV.=311.87 (NAVD88)	BENCHMARK #2 - MAGNAIL SET	1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
N:154187.05, E:1053618.44	ELEV.=325.59 (NAVD88)	BENCHMARK #3 - MAGNAIL SET	2	2/20/26	ENGINEERING REVS	PCM

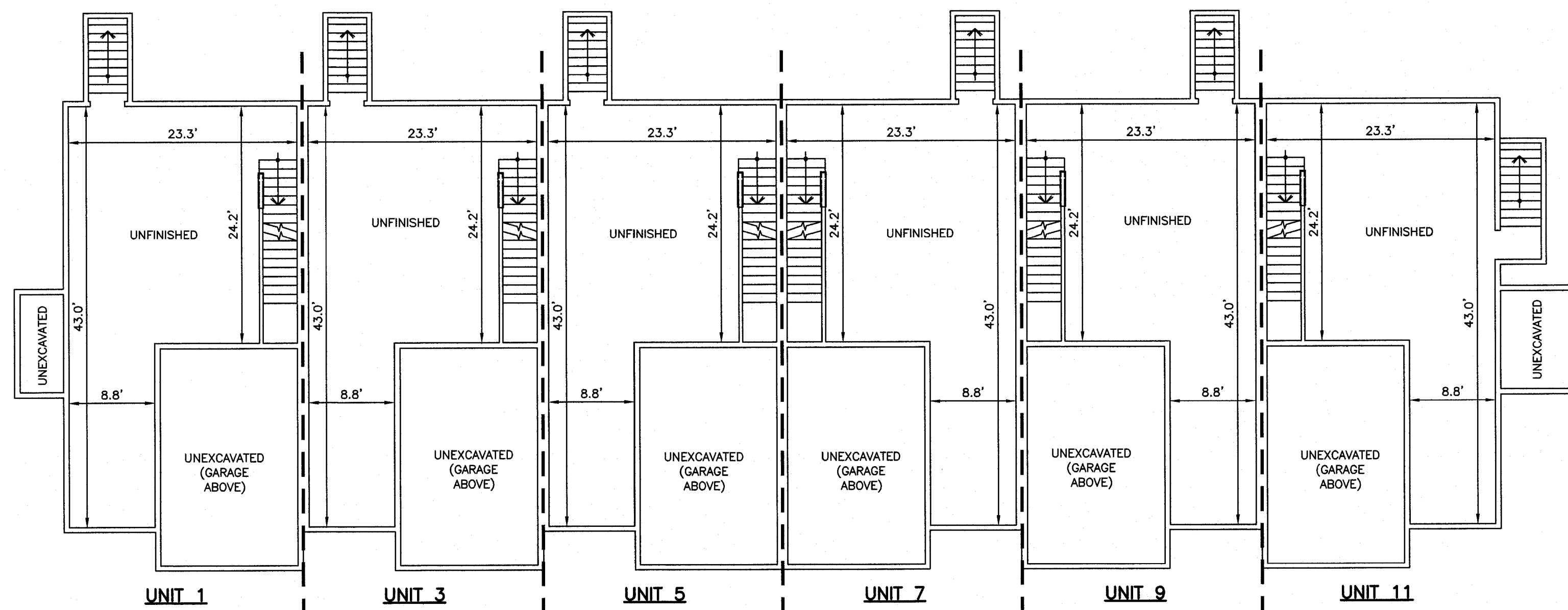
**CERTIFICATIONS**  
 I HEREBY CERTIFY THAT THIS PLAN IS ACCURATE; THAT IT COMPLIES WITH THE PROVISIONS OF NEW HAMPSHIRE RSA 356-B:20, I & V, AND ALL UNITS SHOWN ARE "NOT YET BEGUN."  
 THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION, FURTHER, THE BOUNDARY INFORMATION IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN JANUARY OF 2022.

*Chris*  
 LICENSED LAND SURVEYOR  
 DATE: 3/9/26

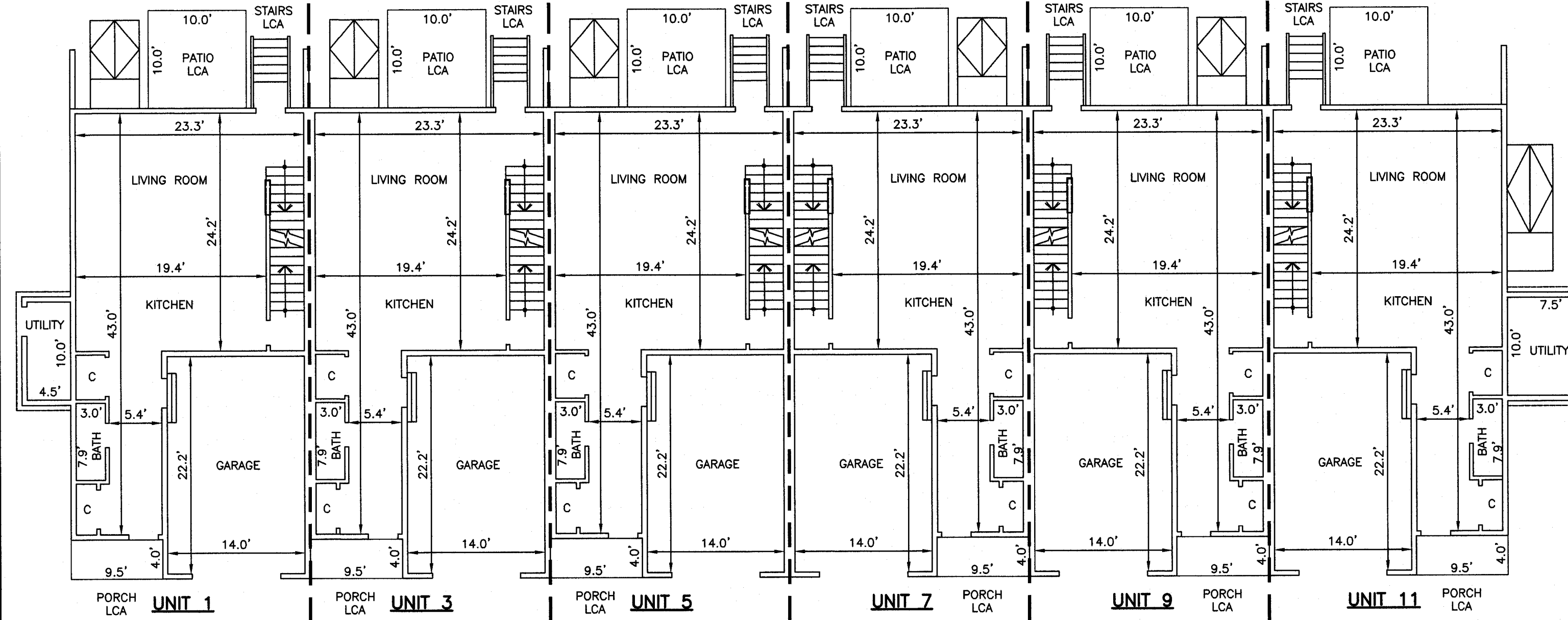


APPROVED BY THE LONDONDERRY, NH PLANNING BOARD FOR PHASE \_\_\_\_\_  
 ON DATE: \_\_\_\_\_  
 CERTIFIED BY: \_\_\_\_\_

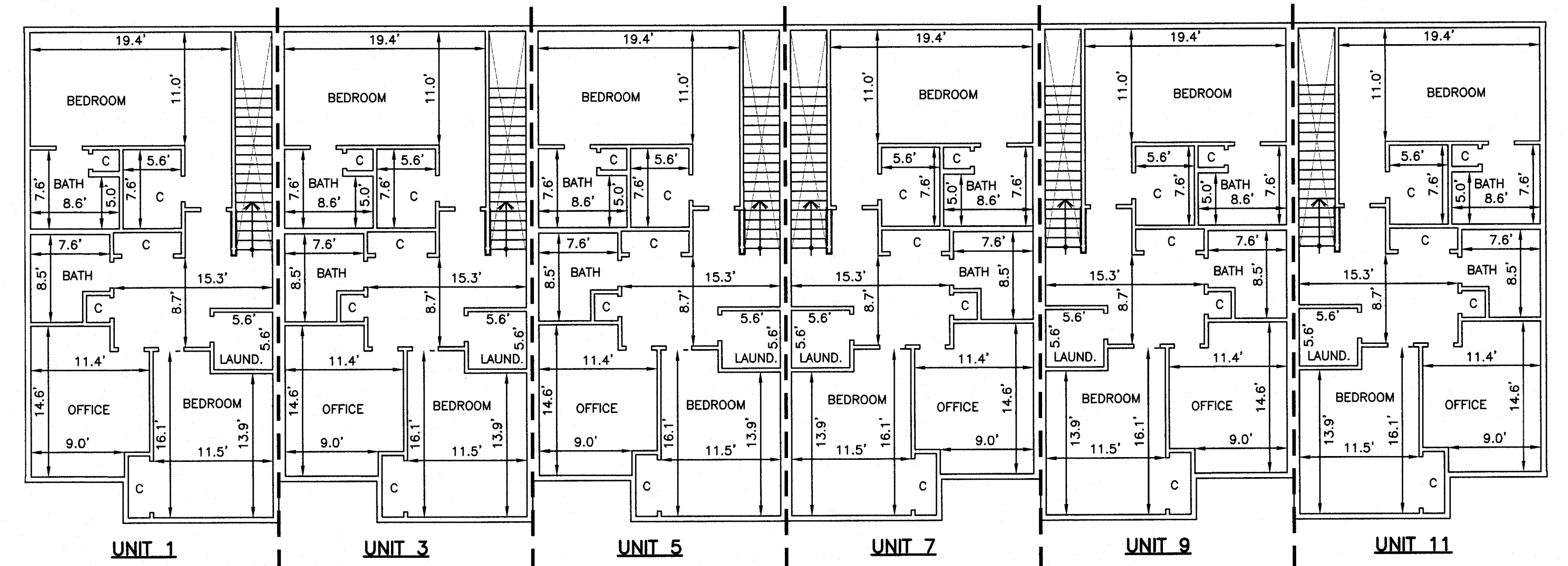




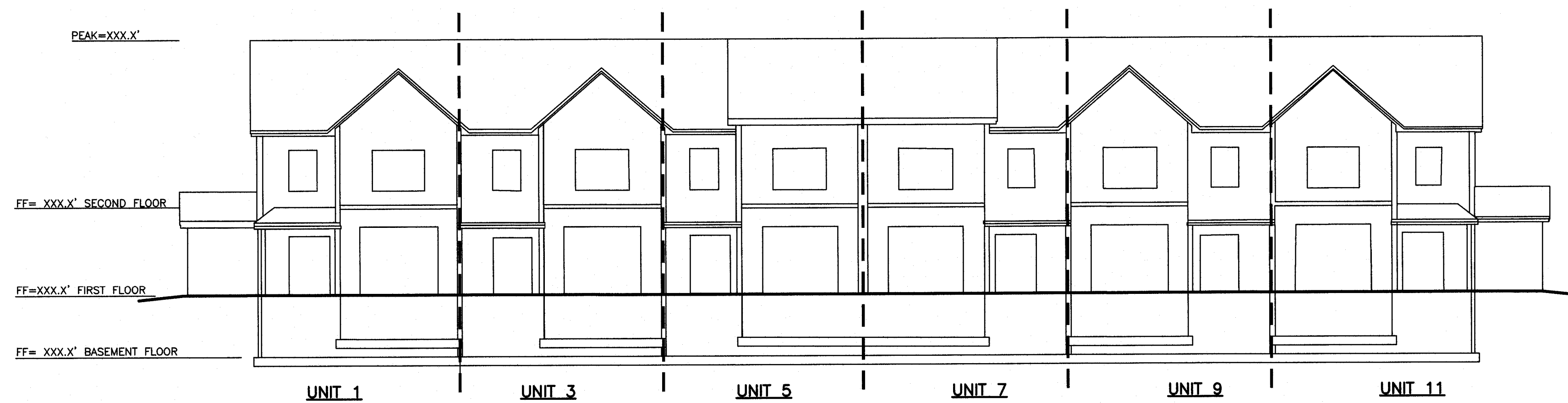
**BASEMENT**  
(1"=10')



**FIRST FLOOR**  
(1"=10')



**SECOND FLOOR**  
(1"=10')



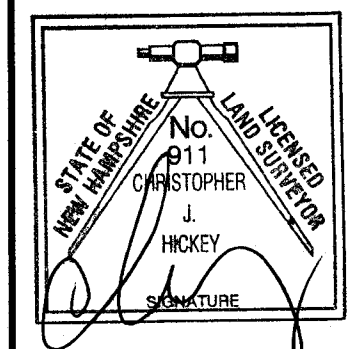
**ELEVATION VIEW**  
(NOT TO SCALE)

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

APPROVED BY THE LONDONDERRY, NH PLANNING BOARD FOR PHASE \_\_\_\_\_  
ON DATE: \_\_\_\_\_  
CERTIFIED BY: \_\_\_\_\_

**CERTIFICATIONS**  
I HEREBY CERTIFY THAT THIS PLAN IS ACCURATE; THAT IT COMPLIES WITH THE PROVISIONS OF NEW HAMPSHIRE RSA 356-B:20, II AND ALL UNITS SHOWN ARE "NOT YET BEGUN."

*Christopher J. Hickey*  
LICENSED LAND SURVEYOR  
DATE: 3/8/26

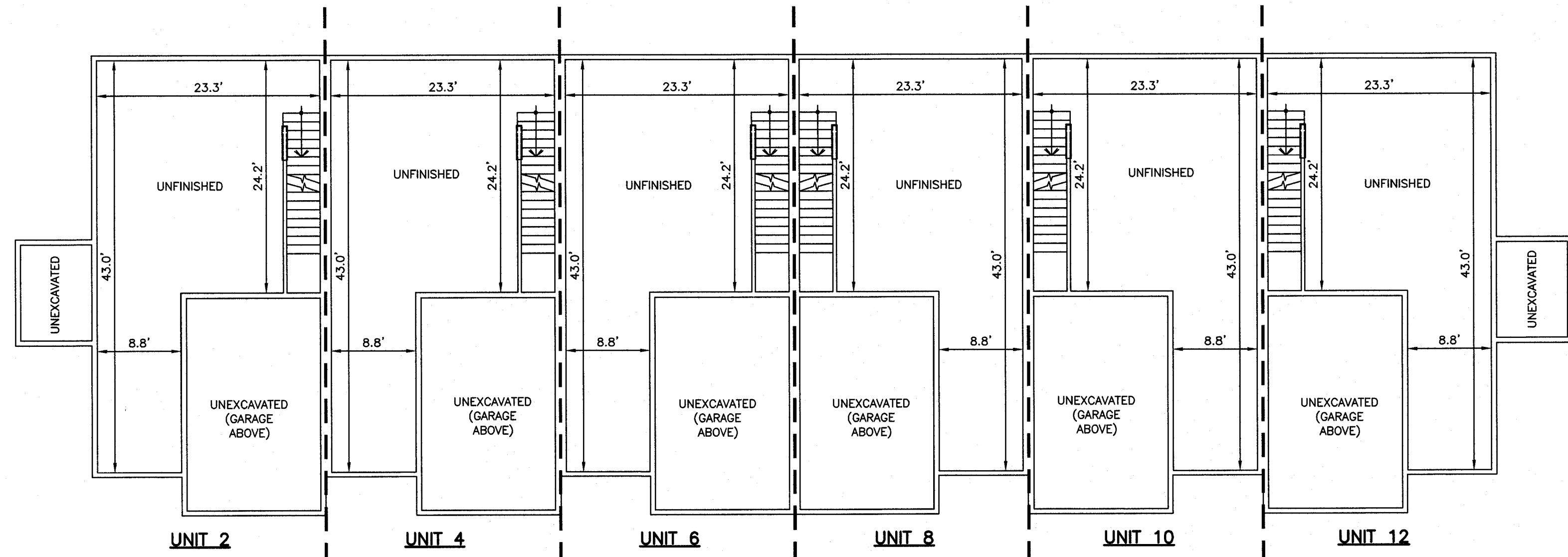


**OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049

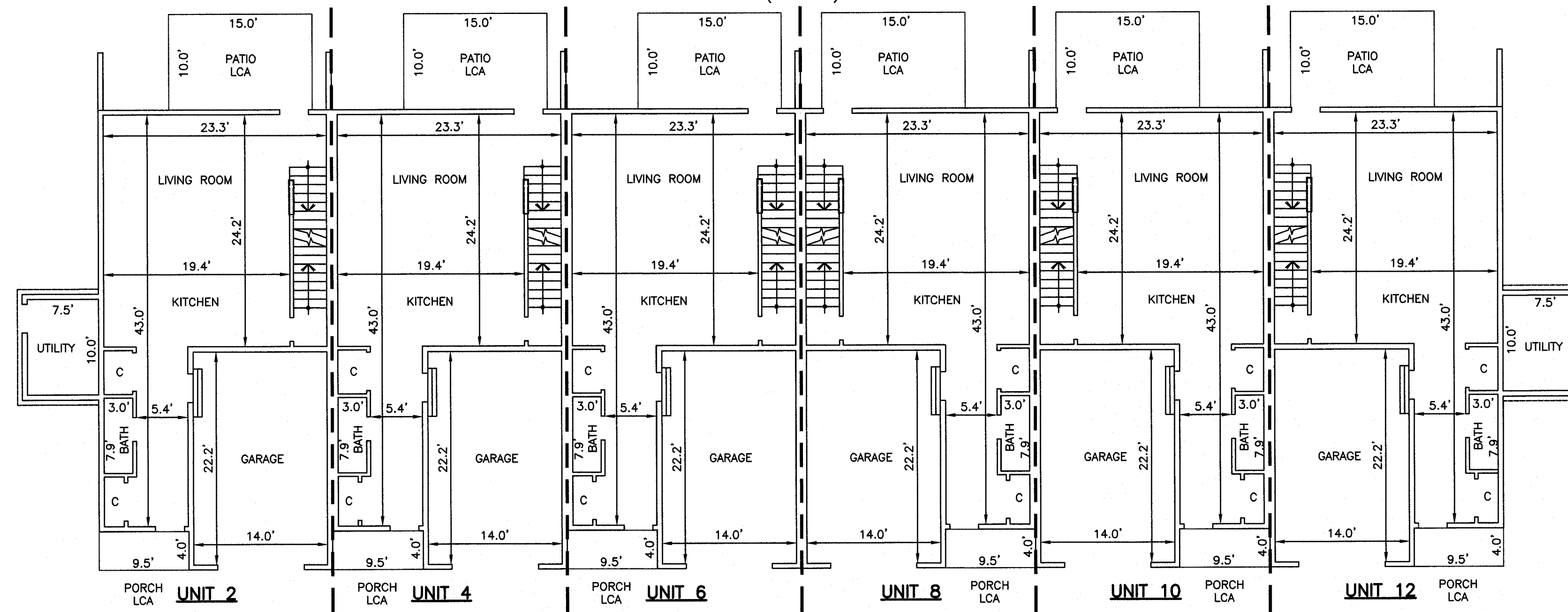
**CONDOMINIUM FLOOR PLAN**  
**PAGE ROCK TOWNHOMES,**  
**A CONDOMINIUM**  
MAP 15 LOT 235  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**KM**  
KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
5 Commerce Park North, Suite 201, Bedford, NH 03110 Phone (603) 827-2881

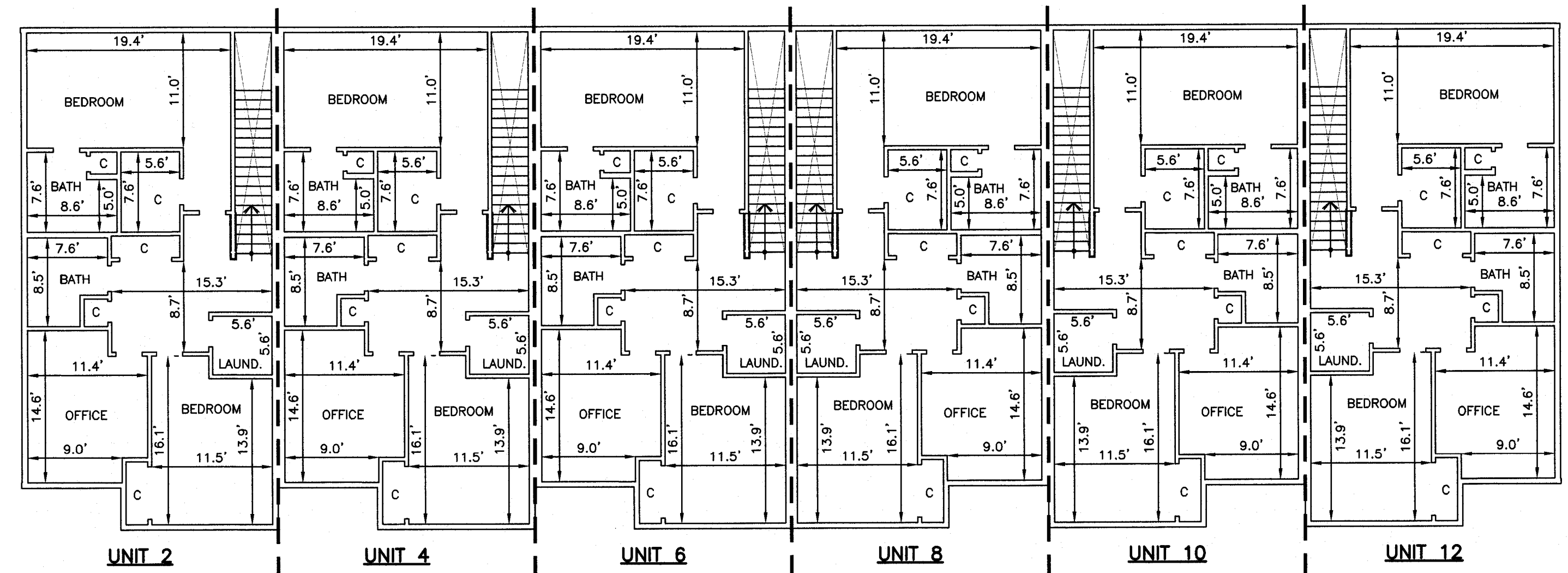
PROJ. NO: 21-0113-1  
DATE: APRIL 2, 2025  
SCALE: AS-SHOWN  
FILE NO.:  
SHEET NO. CF1



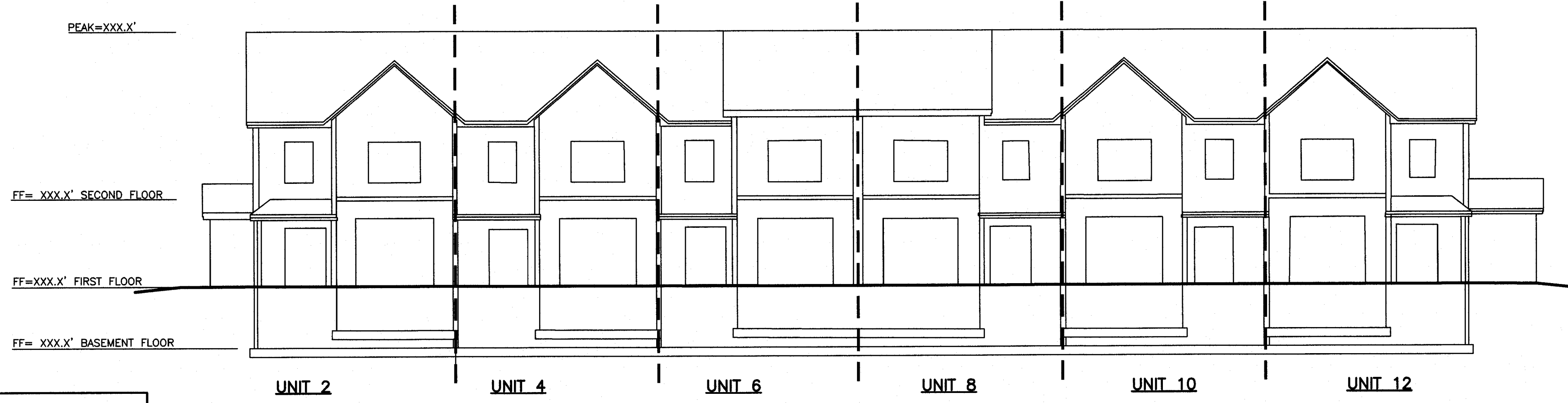
**BASEMENT**  
(1"=10')



**FIRST FLOOR**  
(1"=10')



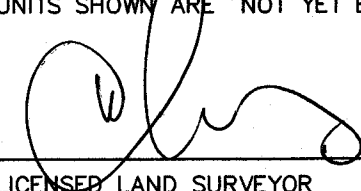
**SECOND FLOOR**  
(1"=10')

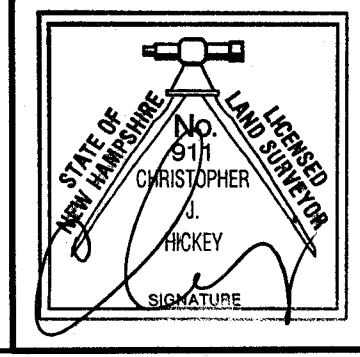


**ELEVATION VIEW**  
(NOT TO SCALE)

REVISIONS			
NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

APPROVED BY THE LONDONDERRY, NH PLANNING BOARD FOR PHASE \_\_\_\_\_  
ON DATE: \_\_\_\_\_  
CERTIFIED BY: \_\_\_\_\_

**CERTIFICATIONS**  
I HEREBY CERTIFY THAT THIS PLAN IS ACCURATE, THAT IT COMPLIES WITH THE PROVISIONS OF NEW HAMPSHIRE RSA 356-B:20, II AND ALL UNITS SHOWN ARE "NOT YET BEGUN."  
  
 3/9/26  
 LICENSED LAND SURVEYOR DATE



**OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049

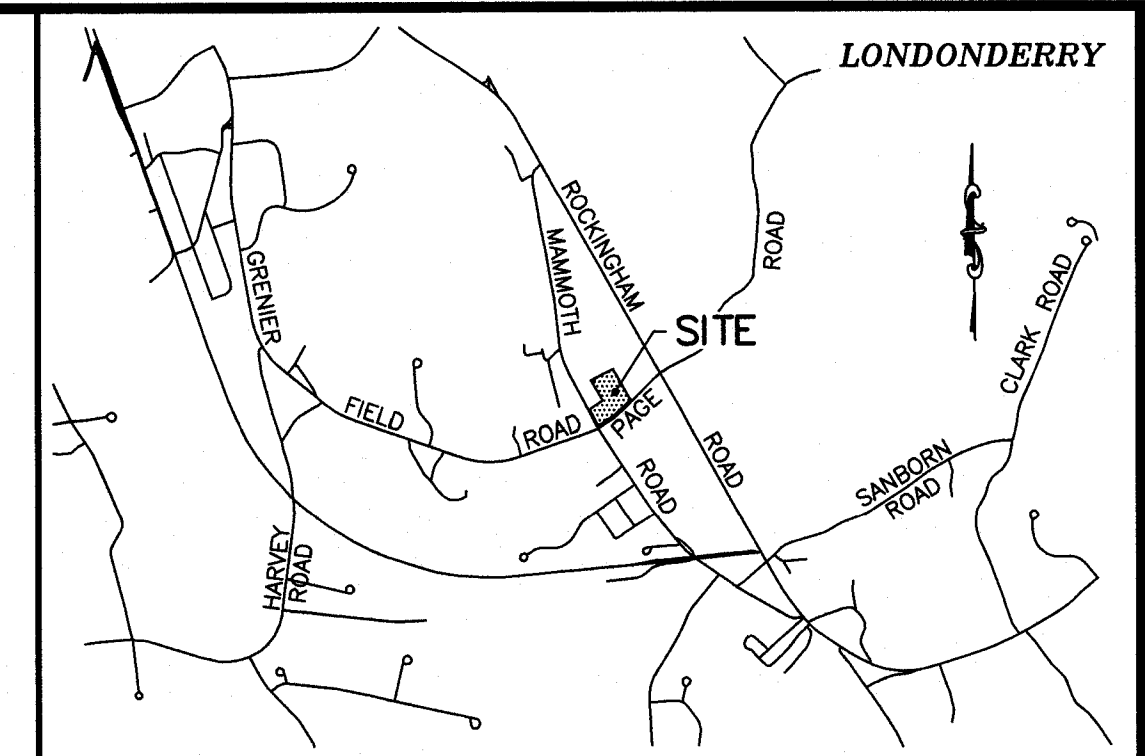
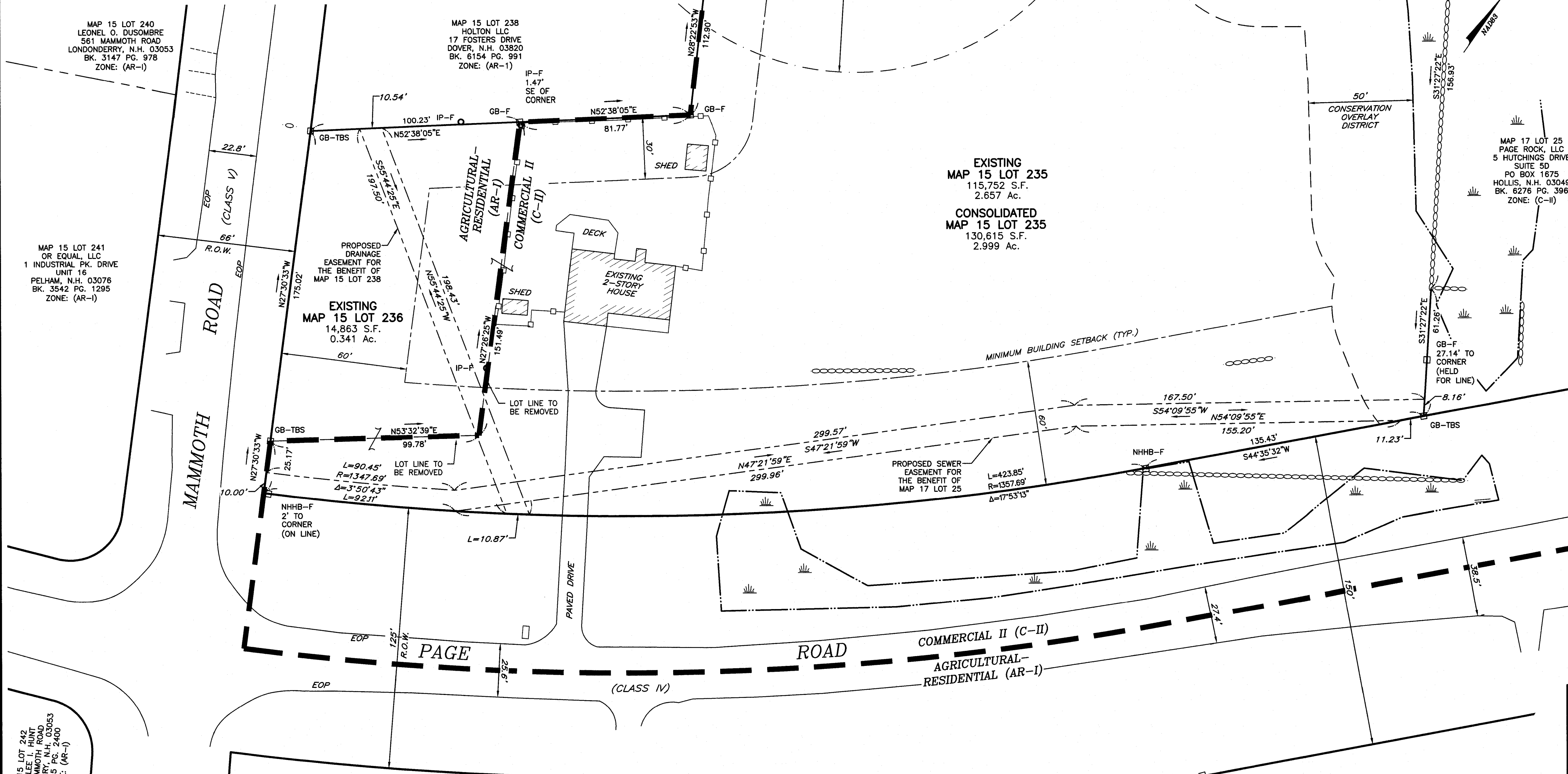
**CONDOMINIUM FLOOR PLAN**  
**PAGE ROCK TOWNHOMES,**  
**A CONDOMINIUM**  
MAP 15 LOT 235  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**KM** KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
5 Commerce Park North, Suite 201, Bedford, NH 03110 Phone (603) 827-2881

PROJ. NO: 21-0113-1  
DATE: APRIL 2, 2025  
SCALE: AS-SHOWN  
FILE NO.:  
SHEET NO. CF2

**REFERENCE PLANS:**

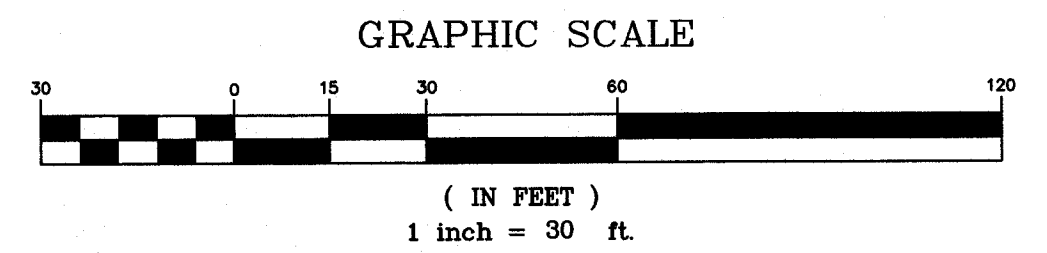
- "SUBDIVISION PLAN OF LAND OF A.J. & G.Y. HUARD; SUBDIVISION PLAN OF LAND OF MR. & MRS. LEO DUBOIS." SCALE: 1"=50'. DATED: JUNE, 1969. PREPARED BY: P. BRUSQUINI P.E. R.C.R.D. PLAN #1438
- "TOWN OF LONDONDERRY, N.H. MAP 17 PARCEL 25." SCALE: 1"=50'. DATED: JANUARY, 1982. PREPARED BY: EDWARD N. HERBERT ASSOC. INC. R.C.R.D. PLAN #D-12463
- "RESOLUTION PLAN, OLD PAGE ROAD." SCALE: 1"=40'. DATED: JANUARY 29, 2008. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-36063
- "LOT LINE ADJUSTMENT-MAP 15 LOTS 235 & 239." SCALE: 1"=100'. DATED: JANUARY 15, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-38211
- "LOT 17-7 SUBDIVISION PLAN." SCALE: 1"=60'. DATED: DECEMBER 19, 2014. PREPARED BY: MERIDIAN LAND SERVICES, INC. R.C.R.D. PLAN #D-40123
- "PLAN OF PROPOSED FEDERAL AID PROJECT" ROCKINGHAM ROAD. SCALE: 1"=50'. LAST REVISED: DECEMBER 22, 1954 N.H. PROJECT NO. P-2979



**VICINITY MAP**  
SCALE: 1" = 2,500'±

**NOTES:**

- THE PURPOSE OF THIS PLAN IS TO CONSOLIDATE LONDONDERRY TAX MAP 15 LOTS 235 & 236 INTO ONE LOT TO BE KNOWN AS LOT 235 WITH 130,615 SF OR 2.999 ACRES.
- EXISTING LOT AREAS  
LOT 235: 115,752 S.F. OR 2.657 ACRES  
LOT 236: 14,863 S.F. OR 0.341 ACRES
- THE SUBJECT PARCEL LIES WITHIN THE COMMERCIAL II (C-II) ZONING DISTRICT AND IS SUBJECT TO THE FOLLOWING DIMENSIONAL REQUIREMENTS.  
MINIMUM BUILDING SETBACKS:  
- FRONT 60 FT  
- SIDE 30 FT  
- REAR 30 FT
- BOUNDARY INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN JANUARY OF 2022.
- HORIZONTAL DATUM IS NAD83, VERTICAL DATUM IS NAVD88 OBTAINED FROM GPS SURVEY METHODS POST PROCESSED THROUGH NOAA-OPUS, NORTH ORIENTATION IS NAD83.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE TOWN OF LONDONDERRY, NEW HAMPSHIRE, ROCKINGHAM COUNTY, COMMUNITY PANEL NUMBER 33015C0317E PANEL NUMBER 317 OF 681, EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT NO PORTION OF THE SUBJECT PREMISES IS LOCATED WITHIN A DESIGNATED FLOOD ZONE.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE, THE OWNER OR CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.



MAP 15 LOT 241 OR EQUAL, LLC  
1 INDUSTRIAL PK. DRIVE UNIT 16  
PELHAM, N.H. 03076  
BK. 3542 PG. 1295  
ZONE: (AR-I)

MAP 15 LOT 240  
LEONEL O. DUSOMBRE  
561 MAMMOTH ROAD  
LONDONDERRY, N.H. 03053  
BK. 5147 PG. 978  
ZONE: (AR-I)

MAP 15 LOT 238  
HOLTON LLC  
17 FOSTERS DRIVE  
DOVER, N.H. 03820  
BK. 6154 PG. 991  
ZONE: (AR-I)

MAP 15 LOT 235  
115,752 S.F.  
2.657 Ac.

EXISTING  
MAP 15 LOT 236  
14,863 S.F.  
0.341 Ac.

MAP 17 LOT 25  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE  
SUITE 5D  
PO BOX 1875  
HOLLIS, N.H. 03049  
BK. 6276 PG. 396  
ZONE: (C-II)

MAP 15 LOT 231  
STEPHEN & RENEE KELLY  
552 MAMMOTH ROAD  
LONDONDERRY, N.H. 03053  
BK. 5216 PG. 2719  
ZONE: (AR-I)

MAP 15 LOT 232  
KAYLEEN M. STOWELL, TRUSTEE  
KAYLEEN M. STOWELL  
REVOCABLE TRUST  
395 MAMMOTH ROAD  
LONDONDERRY, N.H. 03053  
BK. 4887 PG. 1663  
ZONE: (AR-I)

MAP 15 LOT 233  
KENNETH R. MERRILL, TRUSTEE  
WILLIAM O. MERRILL  
REVOCABLE TRUST  
569 MAMMOTH ROAD  
LONDONDERRY, N.H. 03053  
BK. 5459 PG. 2024  
ZONE: (AR-I)

APPROVED BY THE LONDONDERRY, NH PLANNING BOARD FOR PHASE \_\_\_\_\_  
ON DATE: \_\_\_\_\_  
CERTIFIED BY: \_\_\_\_\_

**LOT 235 OWNER/APPLICANT:**  
PAGE ROCK, LLC  
5 HUTCHINGS DRIVE, SUITE 5D  
HOLLIS, N.H. 03049  
R.C.R.D. BOOK 6276 PAGE 399

**LOT 236 OWNER:**  
PAGE ROCK, LLC  
PO BOX 1875  
HOLLIS, N.H. 03049  
BOOK 6276 PAGE 402

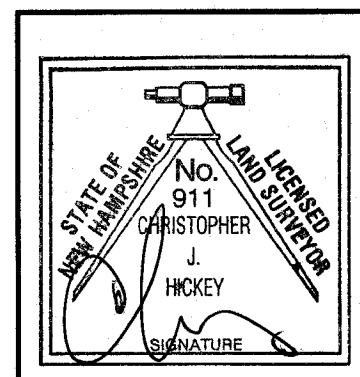
**LOT CONSOLIDATION PLAN**  
**PAGE ROCK TOWNHOMES**  
MAP 15 LOTS 235 & 236  
3 PAGE ROAD  
LONDONDERRY, NEW HAMPSHIRE  
ROCKINGHAM COUNTY

**LEGEND**

□ NHHB-F	NH HWY BOUND FOUND	⊕	HYDRANT
□ GB-F	GRANITE BOUND FOUND	⊕	SEWER MANHOLE
⊕ IP-F	IRON PIPE FOUND	⊕	FLARED END SECTION
⊕ IR-S	IRON ROD SET	⊕	UTILITY POLE
⊕ GB-TBS	GRANITE BOUND TO BE SET	⊕	WELL
⊕ IR-TBS	IRON ROD TO BE SET	⊕	EDGE OF PAVEMENT
⊕	BENCHMARK	⊕	STONEWALL
⊕	SIGN	⊕	BUILDING SETBACK
⊕	DRAINAGE MANHOLE	⊕	EASEMENT
⊕	CATCH BASIN	⊕	WETLAND BUFFER
⊕	WATER VALVE	⊕	LANDSCAPE BUFFER
		⊕	ZONE LINE

**UTILITY NOTE**

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN DRAWN FROM FIELD SURVEY INFORMATION AND OR PLOTTED FROM EXISTING DRAWINGS. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER, KEACH-NORDSTROM ASSOCIATES, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. KEACH-NORDSTROM ASSOCIATES, INC. HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.



**SURVEYOR'S CERTIFICATION:**

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE DURING JANUARY OF 2022. SAID SURVEY HAS A RELATIVE ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) OR BETTER.

*Christopher J. Hickey*  
3/9/26  
LICENSED LAND SURVEYOR DATE

**OWNER OF MAP 15 LOT 235**

SIGNATURE: *DANE NIEL*  
PAGE ROCK LLC  
DATE: 2/16/2026

**OWNER OF MAP 15 LOT 236**

SIGNATURE: *DANE NIEL*  
PAGE ROCK LLC  
DATE: 2/16/2026

**REVISIONS**

NO.	DATE	DESCRIPTION	BY
1	11/25/25	ENGINEERING & DRC REVISIONS	PCM
2	2/20/26	ENGINEERING REVS	PCM

**KMA**  
KEACH-NORDSTROM ASSOCIATES, INC.  
Civil Engineering Land Surveying Landscape Architecture  
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

PROJ. NO: 21-0113-1  
DATE: MARCH 20, 2025  
SCALE: 1" = 30'  
FILE NO.:  
SHEET NO. S1