

Planning Department, July 19, 2023

APPLICANT: Spofford Development
(Owner: Watts Auto Salvage)

DEVELOPER: Eric Spofford

PROJECT: NA

LOCATION: Parcel ID 05038-001, 109 Rockingham Road

PURPOSE: The purpose of this site plan is for a mixed-use development to include 23,300 square feet of commercial space, 63 apartments, and 9 townhomes. The property is located in the West Running Brook District.

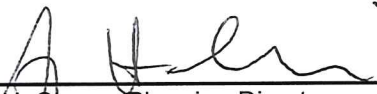
TOWN DEPARTMENT SIGNATURES: All town departments have reviewed and signed the plan.

WAIVERS: See memo dated February 23, 2023, from the Dubai Group, Inc.
Derry Zoning Ordinance-Section 165.32.4.I.2.a. sidewalks along the road frontage.
Derry Zoning Ordinance-Section 165.32.4.I.2.c. two points of entry and egress into the site.
Derry Zoning Ordinance-Section 165.32.4.J.2. allow for (3) studio apartments.

STATE PERMITS: NHDES Alteration of Terrain Permit (pending).

RECOMMENDATION: I would recommend approval of both the waiver requests and site plan application.

BY:



George H. Storas, Planning Director

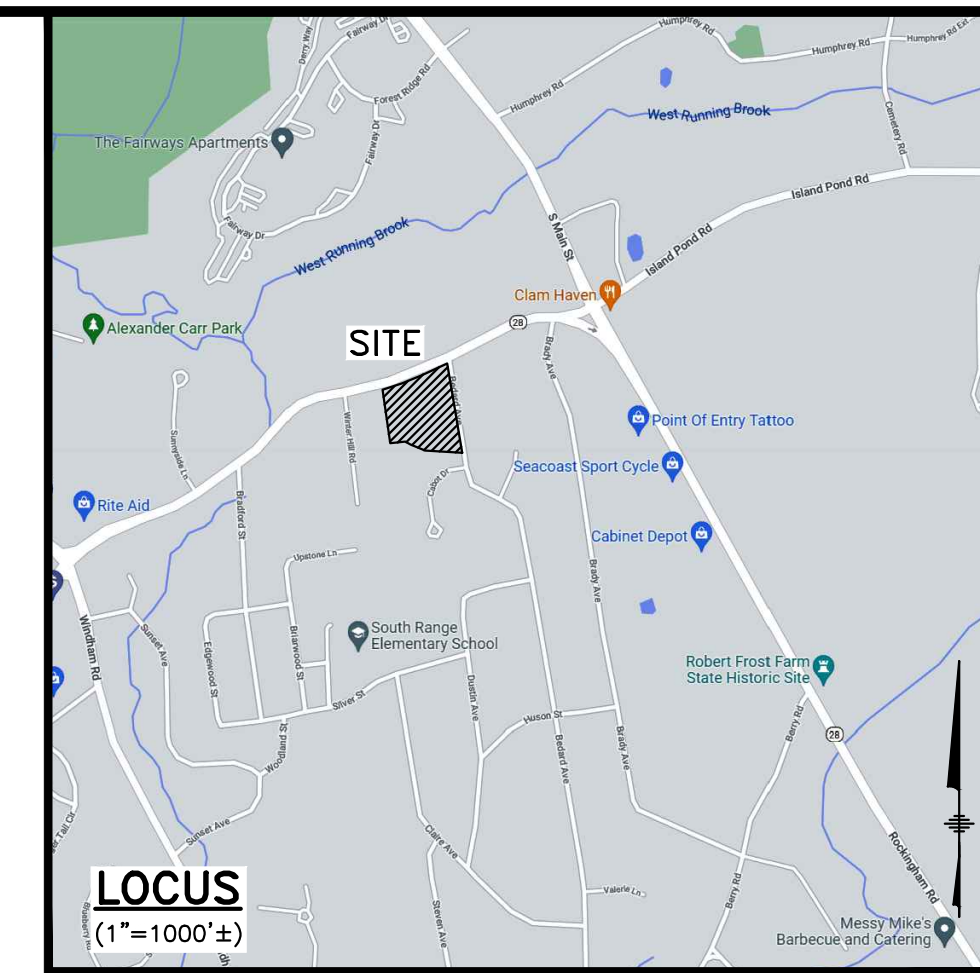
MIXED-USE SITE PLAN

109 ROCKINGHAM ROAD

MAP 5 LOT 38-1
DERRY, NH



ROCKINGHAM ROAD (ROUTE 28)
(PUBLIC - 66' WIDE R.O.W.)

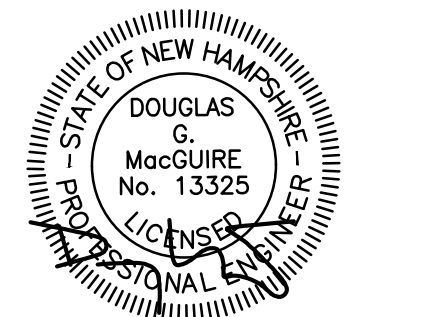


LOCUS
(1"=1000'±)



The Dubay Group, Inc.
136 Harvey Road Bldg B101
Londonderry, NH 03053
603-458-6462

Engineers
Planners
Surveyors
TheDubayGroup.com



SHEET INDEX

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REV.	DATE	COMMENT	BY
1	6/3/22	TRC COMMENTS	SJK
2	10/19/22	REVS PER DRIVEWAY RELOCATION	SJK
3	2/22/23	TOWN COMMENTS	SJK
4	6/13/23	TOWN COMMENTS	SJK

DRAWN BY: SJK
CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE: NTS
FILE: 491-COVER
DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

FOR
ERIC SPOFFORD
6 MANOR PARKWAY
SALEM, NH 03079

OWNER
WATTS AUTO SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:
TITLE SHEET

PROJECT #491 SHEET 1 of 22

TOWN OF DERRY SIGNATURE BLOCK

me v DATE 6/16/23
PUBLIC WORKS DIRECTOR

Ant May DATE 6-21-23
CODE ENFORCEMENT OFFICER

Paul E. Eaton DATE 6/20/23
FIRE DEPARTMENT

NA DATE -
CONSERVATION COMMISSION CHAIR

WML DATE 6/16/23
POLICE DEPARTMENT

OWNER'S SIGNATURE _____ DATE _____

THE DERRY N.H. PLANNING BOARD

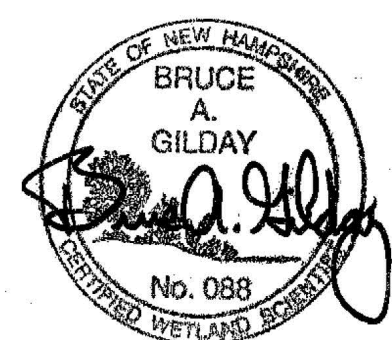
ON DATE: _____

CERTIFIED BY: _____ DATE _____
CHAIRMAN

SECRETARY _____ DATE _____

LEGEND:

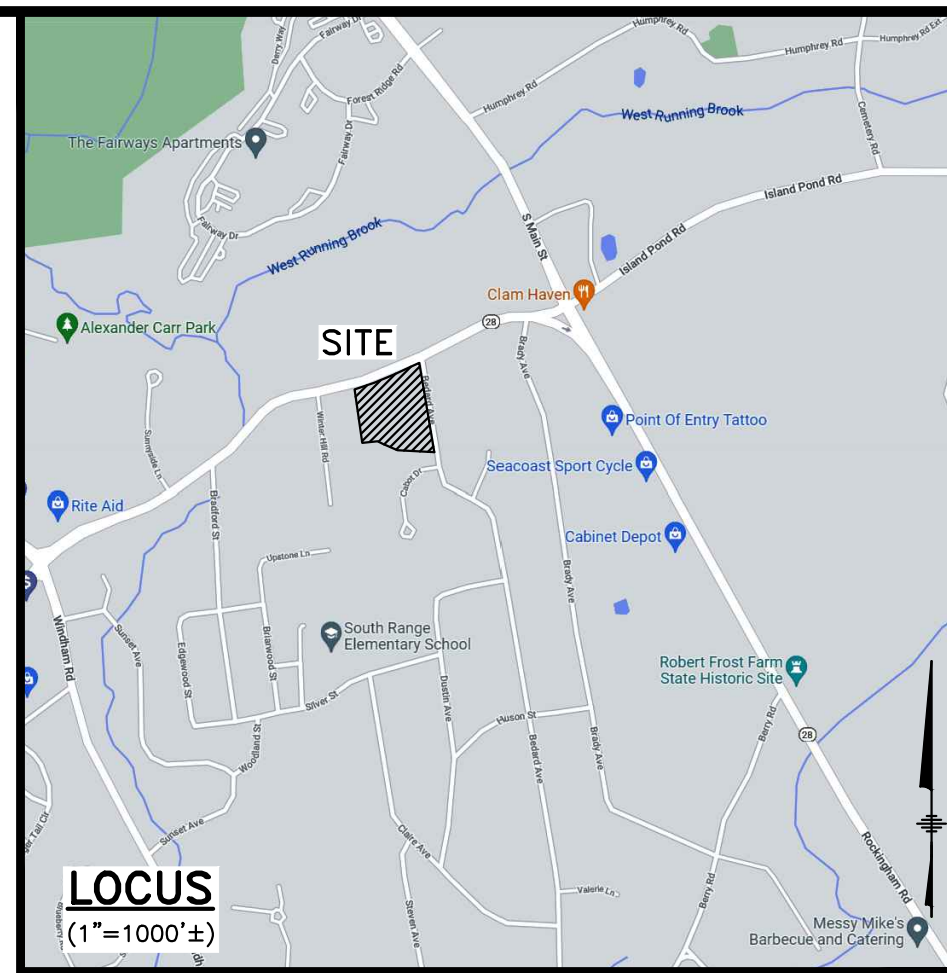
- CCB — EDGE OF CURB
- EOP — EDGE OF PAVEMENT
- FENCE
- SIGN
- UTILITY BOX
- SEWER MANHOLE
- CATCH BASIN
- HYDRANT
- WATER GATE VALVE
- GAS VALVE
- UTILITY POLE
- SEWER LINE
- DRAIN LINE
- WATER LINE
- 176 — CONTOUR
- BUILDING SETBACK
- BOUND FOUND
- PIPE/REBAR FOUND
- DRILL HOLE FOUND
- MAILBOX
- TREE LINE
- WETLANDS



WETLAND NOTES

THE LIMITS OF JURISDICTIONAL WETLANDS AS SHOWN ON THIS PLAN WERE DELINEATED BY BAG LAND CONSULTANTS, INC IN MAY 2022 IN ACCORDANCE WITH:

1. US ARMY CORPS OF ENGINEERS REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH-CENTRAL AND NORTH-EAST REGION, TECHNICAL REPORT ERC/EL TR-12-1, JANUARY 2012, VERSION 2.0.
2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 7.0, UNITED STATES DEPARTMENT OF AGRICULTURE (2010).
3. NORTH AMERICAN DIGITAL FLORA: NATIONAL WETLAND PLANT LIST, CURRENT VERSION.



NOTES:

1. THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF MAP 5 LOT 38-1 BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE BETWEEN AUGUST 11 AND AUGUST 16, 2021.
2. THE BOUNDARY INFORMATION SHOWN HEREON IS BASED ON PLAN REFERENCE 1 AND A FIELD SURVEY BY THIS OFFICE.
3. THE HORIZONTAL DATUM DEPICTED HEREON IS BASED ON NAD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON AUGUST 11, 2021.
4. THE VERTICAL DATUM DEPICTED HEREON IS BASED ON NAVD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON AUGUST 11, 2021.
5. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON RECORD DESIGN PLANS, INFORMATION PROVIDED BY THE TOWN OF DERRY, NH, AND ABOVE GROUND FEATURES LOCATED BY THIS OFFICE. SAID UNDERGROUND UTILITIES ARE NOT WARRANTED TO BE EXACT OR INCLUSIVE OF ALL EXISTING UTILITIES.
6. MAP 5 LOT 38-1 IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP 33015C0343E, WITH AN EFFECTIVE DATE OF MAY 17, 2005.
7. MAP 116 LOT 4149 IS ZONED WEST RUNNING BROOK (WRB) PER THE TOWN OF DERRY ZONING MAP;
 - MIN LOT FRONTAGE: 50FT
 - MIN FRONT YARD: 10FT
 - MIN SIDE YARD: 10FT
 - MIN REAR YARD: 10FT
 - WETLAND SETBACK: 75FT
8. ROCKINGHAM ROAD IS A PUBLIC WAY UNDER THE URBAN COMPACT LIMITS.

REFERENCE PLANS:

1. PLAN ENTITLED "AFTER THE FACT A.O.T. PLAN IN DERRY, NH, SHOWING EXISTING SITE CONDITIONS AT 109 ROCKINGHAM ROAD (ASSESSORS MAP 5 LOT 38-1)", DATED DECEMBER 14, 2016 (REV. 5/3-17); PREPARED BY MILLENNIUM ENGINEERING INC.
2. ROCKINGHAM COUNTY REGISTRY OF DEEDS (R.C.R.D.) PLAN D-2047.
3. R.C.R.D. PLAN D-2805.
4. R.C.R.D. PLAN D-8542.
5. R.C.R.D. PLAN D-12467.
6. R.C.R.D. PLAN D-18839.
7. R.C.R.D. PLAN D-29045.
8. R.C.R.D. PLAN D-34454.
9. R.C.R.D. PLAN B-39342.

CERTIFICATION:

I CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND PRIOR SURVEYS BY THIS OFFICE AND THAT THE SURVEY THAT IT IS BASED ON HAS AN ERROR OF CLOSURE NOT GREATER THAN ONE PART IN TEN THOUSAND.

JOEL A. CONNOLLY, LLS 997

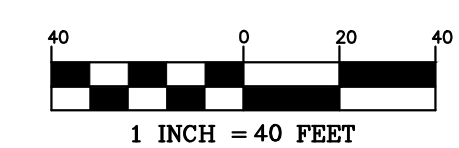
DATE



The Dubai Group, Inc.
136 Harvey Road Bldg B101
Londonderry, NH 03053
603-458-6462

- Engineers
- Planners
- Surveyors

TheDubayGroup.com



REVISIONS:

REV.	DATE	COMMENT	BY
3	2/22/23	TOWN COMMENTS	SJK
4	6/13/23	TOWN COMMENTS	SJK

DRAWN BY: NIG
CHECKED BY: JAC
DATE: NOV 4, 2021
SCALE: 1"=40'
FILE: 491ws
DEED REF: BK 4634 PG 267

PROJECT:

109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

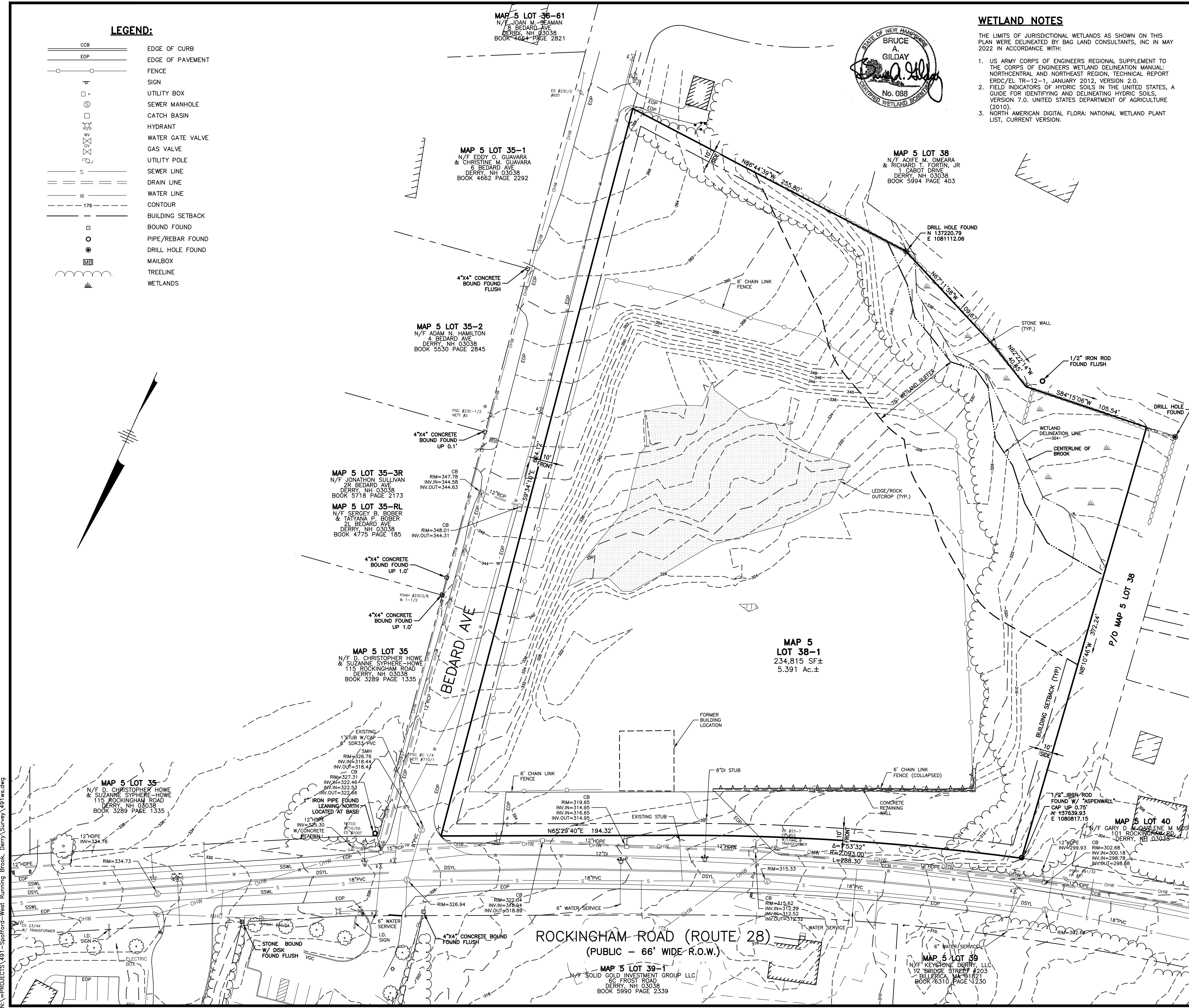
FOR
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6 MANOR PARKWAY
SALEM, NH 03079

OWNER
WATTS AUTO SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:

EXISTING CONDITIONS PLAN

N:\PROJECTS\491-Spofford-West Running Brook_Derry\Survey\491ws.dwg



ROCKINGHAM ROAD (ROUTE 28)
(PUBLIC - 66' WIDE R.O.W.)

MAP 5 LOT 39-1
N/F SOLID GOLD INVESTMENT GROUP LLC
80 FROST ROAD
DERRY, NH 03038
BOOK 5990 PAGE 2339

MAP 5 LOT 39
N/F KEYSTONE DERRY, LLC
10 BRIDGE STREET #203
DILLIERIA, NH 03038
BOOK 6310 PAGE 1330

MAP 5 LOT 35
N/F D. CHRISTOPHER HOWE
& SUZANNE SYMPHERE-HOWE
115 ROCKINGHAM ROAD
DERRY, NH 03038
BOOK 3289 PAGE 1335

MAP 5 LOT 35-3R
N/F JONATHAN SULLIVAN
2R BEDARD AVE
DERRY, NH 03038
BOOK 5718 PAGE 2173

MAP 5 LOT 35-RL
N/F SERGEY B. BOBER
& TATYANA F. BOBER
2L BEDARD AVE
DERRY, NH 03038
BOOK 4775 PAGE 185

MAP 5 LOT 35-2
N/F ADAM N. HAMILTON
4 BEDARD AVE
DERRY, NH 03038
BOOK 5530 PAGE 2845

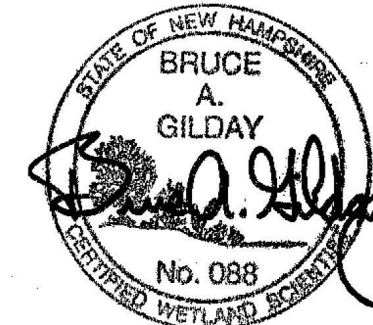
MAP 5 LOT 35-1
N/F EDDY O. GUAVARA
& CHRISTINE M. GUAVARA
6 BEDARD AVE
DERRY, NH 03038
BOOK 4662 PAGE 2292

MAP 5 LOT 36-61
N/F JOAN M. SEAMAN
8 BEDARD AVE
DERRY, NH 03038
BOOK 4664 PAGE 2821

MAP 5 LOT 38
N/F JOE M. OMCARA
& RICHARD T. FORTIN, JR
CABOT DRIVE
DERRY, NH 03038
BOOK 5994 PAGE 403

MAP 5
LOT 38-1
234,815 SF±
5.391 Ac.±

N:\PROJECTS\491-Spoifford-West Running Brook, Derry\DWG\CURRENT\491-SOILS.dwg



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1. US ARMY CORPS OF ENGINEERS REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH-CENTRAL AND NORTHEAST REGION, TECHNICAL REPORT ERDC/EL TR-12-1, JANUARY 2012, VERSION 2.0.
2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 7.0. UNITED STATES DEPARTMENT OF AGRICULTURE (2010).
3. NORTH AMERICAN DIGITAL FLORA: NATIONAL WETLAND PLANT LIST, CURRENT VERSION.

SOIL LEGEND

B SOIL TYPE DESIGNATION
 ——— SOIL BOUNDARY

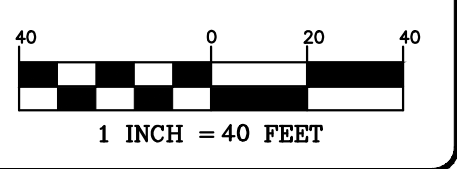
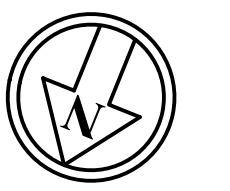
NRCS SOIL MAPPING LEGEND			
NUMBER	SOIL MAP UNIT NAME	DRAINAGE CLASS	HSG
140	CHATFIELD-HOLLIS-CANTON	POORLY DRAINED	C

0-8% A/B
 8-15% C
 15-25% D
 25-35% E



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SHEET TITLE:
SITE SPECIFIC SOIL PLAN

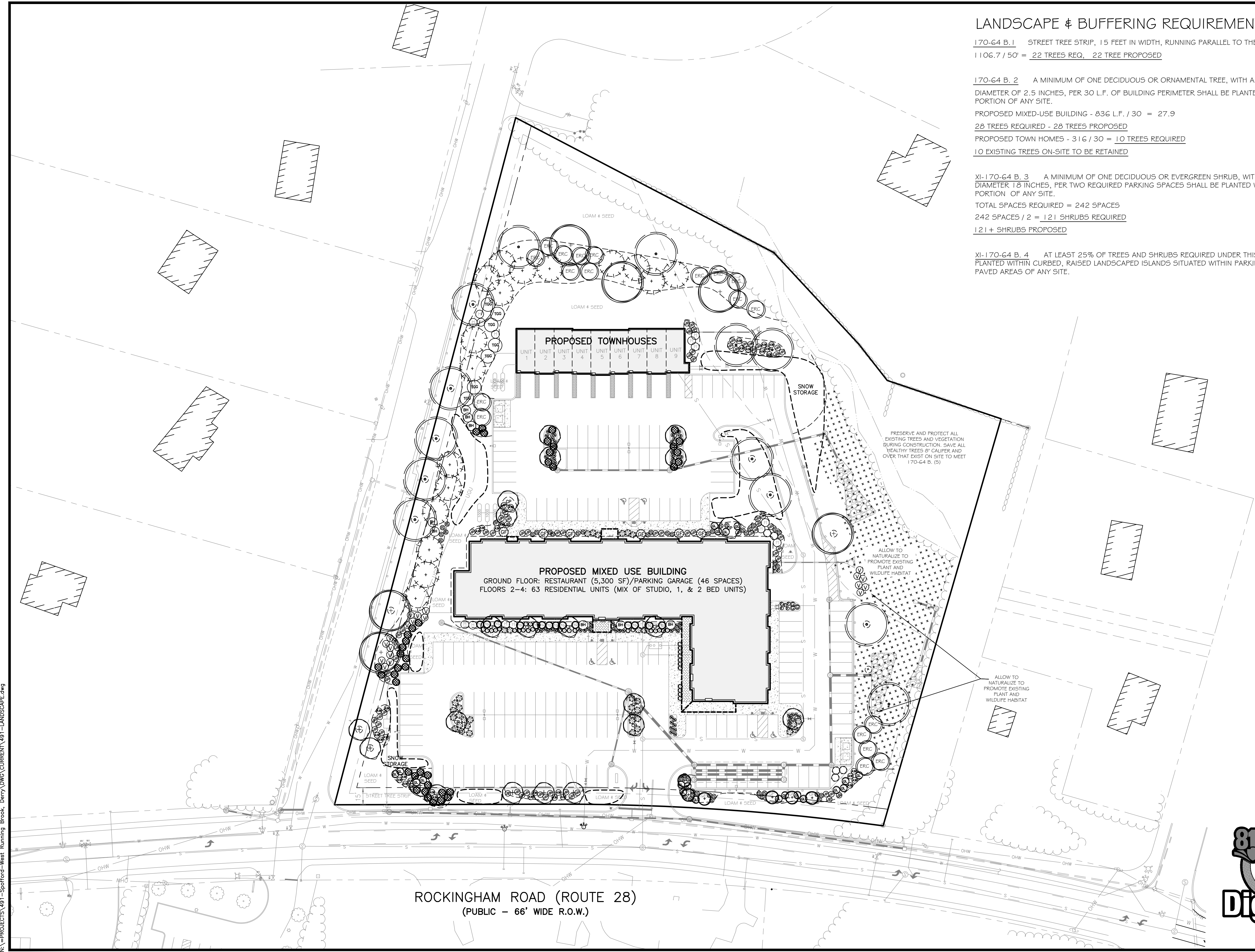
LANDSCAPE & BUFFERING REQUIREMENTS

170-64 B.1 STREET TREE STRIP, 15 FEET IN WIDTH, RUNNING PARALLEL TO THE FRONTAGE
 1106.7 / 50' = 22 TREES REQ, 22 TREE PROPOSED

170-64 B.2 A MINIMUM OF ONE DECIDUOUS OR ORNAMENTAL TREE, WITH A MINIMUM CALIPER DIAMETER OF 2.5 INCHES, PER 30 L.F. OF BUILDING PERIMETER SHALL BE PLANTED WITHIN THE DEVELOPED PORTION OF ANY SITE.
 PROPOSED MIXED-USE BUILDING - 836 L.F. / 30 = 27.9
 28 TREES REQUIRED - 28 TREES PROPOSED
 PROPOSED TOWN HOMES - 316 / 30 = 10 TREES REQUIRED
 10 EXISTING TREES ON-SITE TO BE RETAINED

XI-170-64 B.3 A MINIMUM OF ONE DECIDUOUS OR EVERGREEN SHRUB, WITH A MINIMUM HEIGHT AND DIAMETER 18 INCHES, PER TWO REQUIRED PARKING SPACES SHALL BE PLANTED WITHIN THE DEVELOPED PORTION OF ANY SITE.
 TOTAL SPACES REQUIRED = 242 SPACES
 242 SPACES / 2 = 121 SHRUBS REQUIRED
 121+ SHRUBS PROPOSED

XI-170-64 B.4 AT LEAST 25% OF TREES AND SHRUBS REQUIRED UNDER THIS SECTION SHALL BE PLANTED WITHIN CURBED, RAISED LANDSCAPED ISLANDS SITUATED WITHIN PARKING AREAS OR OTHER PAVED AREAS OF ANY SITE.



ROCKINGHAM ROAD (ROUTE 28)
 (PUBLIC - 66' WIDE R.O.W.)

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1 INCH = 40 FEET

REVISIONS:			
REV.	DATE	COMMENT	BY:
1	6/3/22	TRC COMMENTS	REK
2	10/19/22	REVS PER DRIVEWAY RELOCATION	REK
3	2/22/23	TOWN COMMENTS	SJK

DRAWN BY: SJK
 CHECKED BY: DGM
 DATE: NOV 4, 2021
 SCALE: 1"=40'
 FILE: 491-LANDSCAPE
 DEED REF: -

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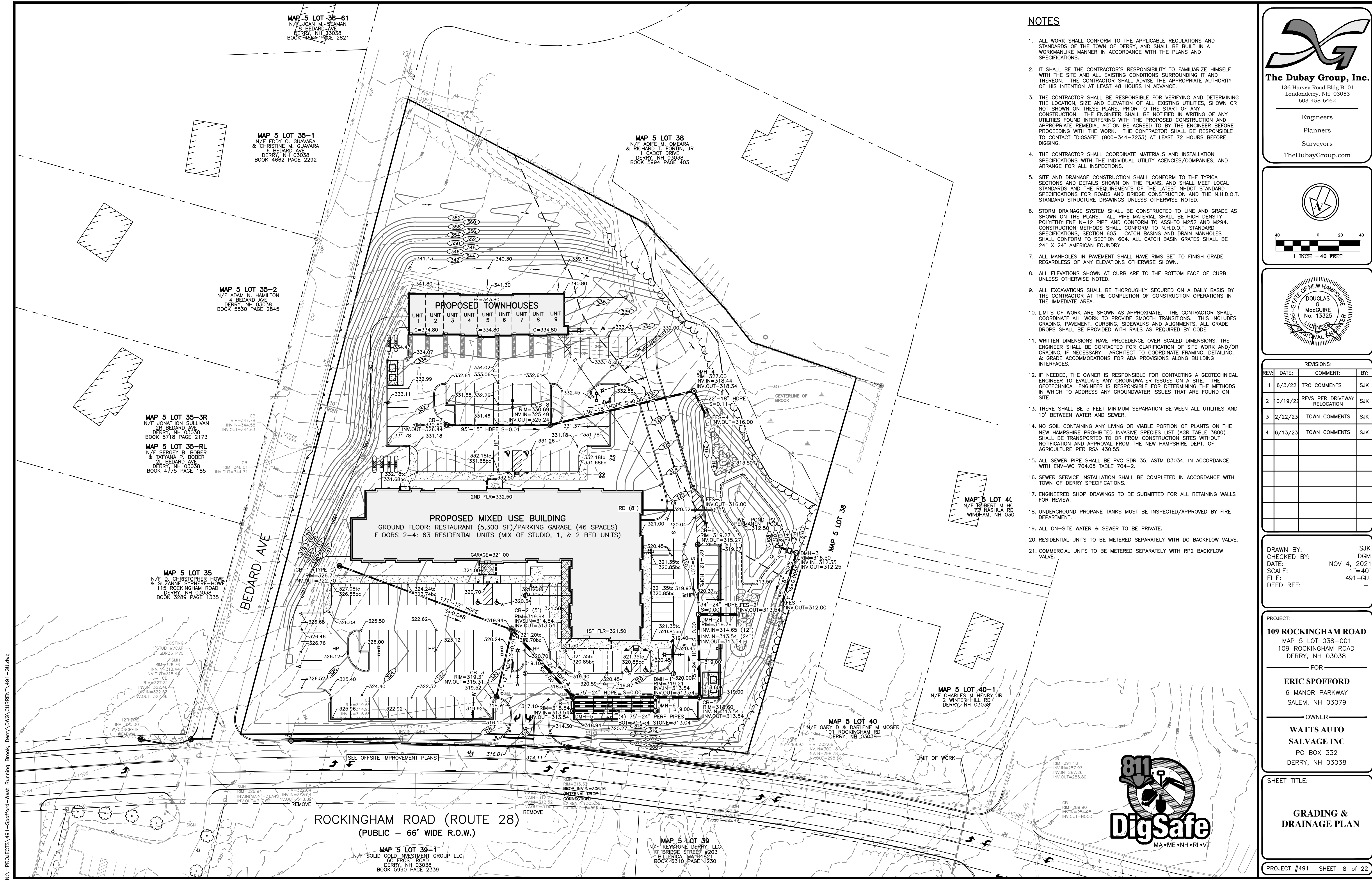
SHEET TITLE:
LANDSCAPE PLAN

PROJECT #491 SHEET 6 of 22



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NOTES

- 1. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF DERRY, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTION AT LEAST 48 HOURS IN ADVANCE.
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 IS AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT 'DIGSAFE' (800-344-7233) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
5. SITE AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE N.H.D.O.T. STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
6. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. ALL PIPE MATERIAL SHALL BE HIGH DENSITY POLYETHYLENE N-12 PIPE AND CONFORM TO ASSHOT M252 AND M294. CONSTRUCTION METHODS SHALL CONFORM TO N.H.D.O.T. STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE 24" X 24" AMERICAN FOUNDRY.
7. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
8. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM FACE OF CURB UNLESS OTHERWISE NOTED.
9. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
10. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS. ALL GRADE DROPS SHALL BE PROVIDED WITH RAILS AS REQUIRED BY CODE.
11. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE ENGINEER SHALL BE CONTACTED FOR CLARIFICATION OF SITE WORK AND/OR GRADING, IF NECESSARY. ARCHITECT TO COORDINATE FRAMING, DETAILING, & GRADE ACCOMMODATIONS FOR ADA PROVISIONS ALONG BUILDING INTERFACES.
12. IF NEEDED, THE OWNER IS RESPONSIBLE FOR CONTACTING A GEOTECHNICAL ENGINEER TO EVALUATE ANY GROUNDWATER ISSUES ON A SITE. THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR DETERMINING THE METHODS IN WHICH TO ADDRESS ANY GROUNDWATER ISSUES THAT ARE FOUND ON SITE.
13. THERE SHALL BE 5 FEET MINIMUM SEPARATION BETWEEN ALL UTILITIES AND 10' BETWEEN WATER AND SEWER.
14. NO SOIL CONTAINING ANY LIVING OR VIABLE PORTION OF PLANTS ON THE NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST (AGR TABLE 3800) SHALL BE TRANSPORTED TO OR FROM CONSTRUCTION SITES WITHOUT NOTIFICATION AND APPROVAL FROM THE NEW HAMPSHIRE DEPT. OF AGRICULTURE PER RSA 430:55.
15. ALL SEWER PIPE SHALL BE PVC SDR 35, ASTM D3034, IN ACCORDANCE WITH ENV-WQ 704.05 TABLE 704-2.
16. SEWER SERVICE INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH TOWN OF DERRY SPECIFICATIONS.
17. ENGINEERED SHOP DRAWINGS TO BE SUBMITTED FOR ALL RETAINING WALLS FOR REVIEW.
18. UNDERGROUND PROPANE TANKS MUST BE INSPECTED/APPROVED BY FIRE DEPARTMENT.
19. ALL ON-SITE WATER & SEWER TO BE PRIVATE.
20. RESIDENTIAL UNITS TO BE METERED SEPARATELY WITH DC BACKFLOW VALVE.
21. COMMERCIAL UNITS TO BE METERED SEPARATELY WITH RP2 BACKFLOW VALVE.



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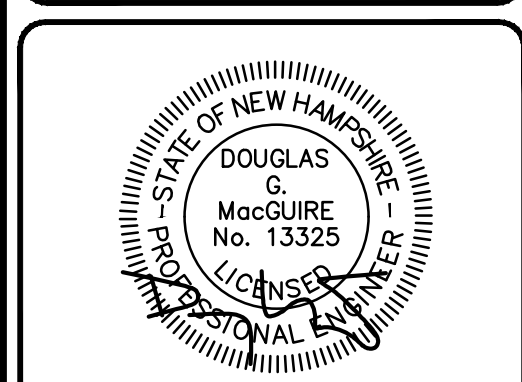
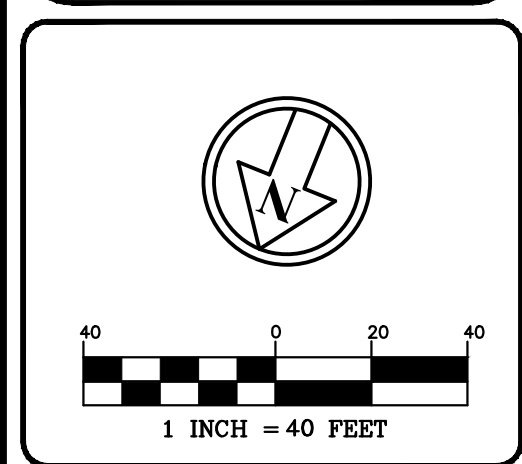


Table with 4 columns: REV, DATE, COMMENT, BY. Contains revision history entries.

DRAWN BY: SJK
CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE: 1"=40'
FILE: 491-GU
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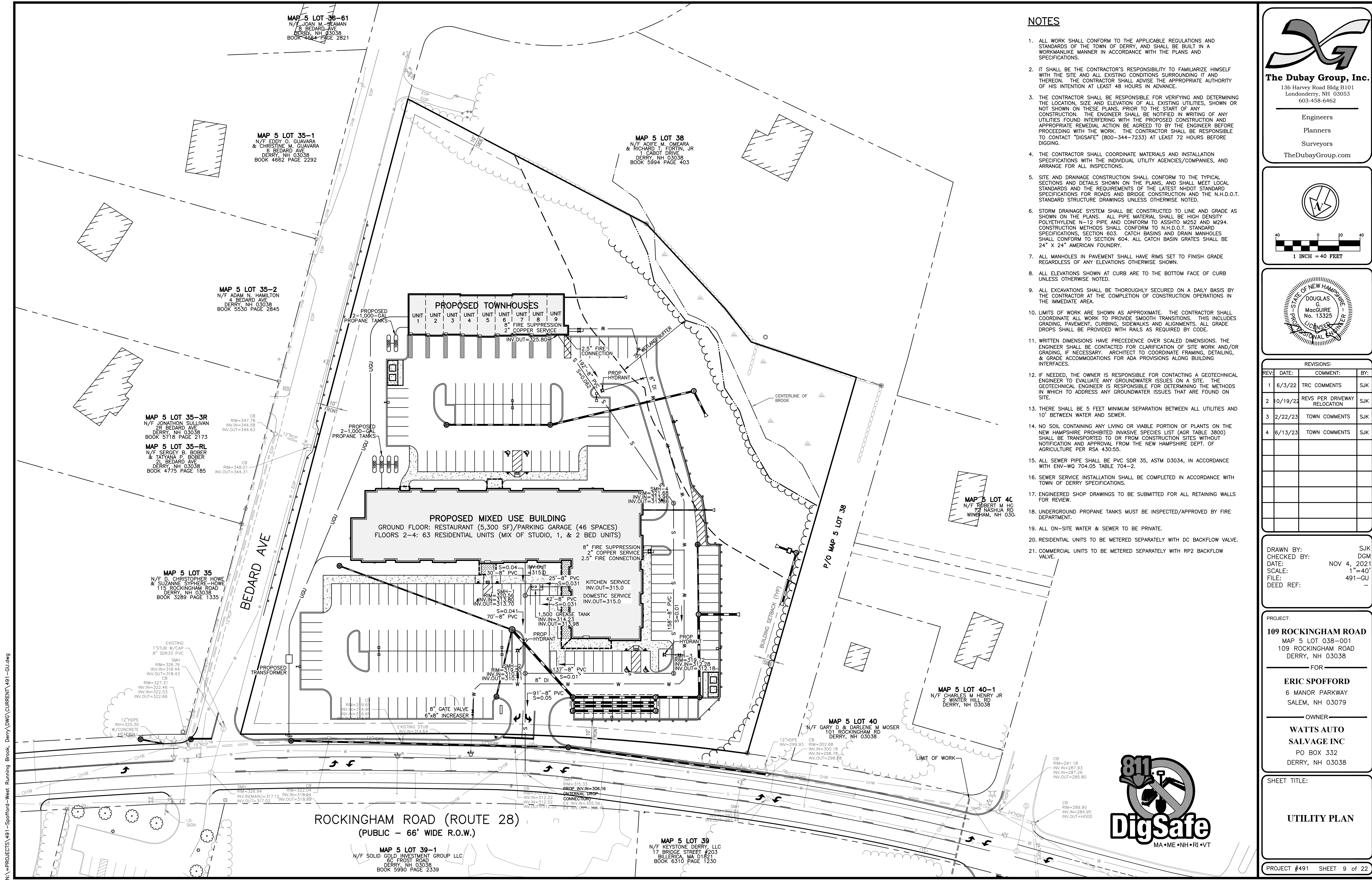
SHEET TITLE:

GRADING & DRAINAGE PLAN

PROJECT #491 SHEET 8 of 22



NA=PROJECTS\491-Spoifford-West Running Brook, Derry\DWG\CURRENT\491-GU.dwg



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6. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. ALL PIPE MATERIAL SHALL BE HIGH DENSITY POLYETHYLENE N-12 PIPE AND CONFORM TO ASSHTO M252 AND M294. CONSTRUCTION METHODS SHALL CONFORM TO N.H.D.O.T. STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE 24" X 24" AMERICAN FOUNDRY.
7. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
8. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM FACE OF CURB UNLESS OTHERWISE NOTED.
9. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
10. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS. ALL GRADE DROPS SHALL BE PROVIDED WITH RAILS AS REQUIRED BY CODE.
11. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE ENGINEER SHALL BE CONTACTED FOR CLARIFICATION OF SITE WORK AND/OR GRADING, IF NECESSARY. ARCHITECT TO COORDINATE FRAMING, DETAILING, & GRADE ACCOMMODATIONS FOR ADA PROVISIONS ALONG BUILDING INTERFACES.
12. IF NEEDED, THE OWNER IS RESPONSIBLE FOR CONTACTING A GEOTECHNICAL ENGINEER TO EVALUATE ANY GROUNDWATER ISSUES ON A SITE. THE GEOTECHNICAL ENGINEER IS RESPONSIBLE FOR DETERMINING THE METHODS IN WHICH TO ADDRESS ANY GROUNDWATER ISSUES THAT ARE FOUND ON SITE.
13. THERE SHALL BE 5 FEET MINIMUM SEPARATION BETWEEN ALL UTILITIES AND 10' BETWEEN WATER AND SEWER.
14. NO SOIL CONTAINING ANY LIVING OR VIABLE PORTION OF PLANTS ON THE NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST (AGR TABLE 3800) SHALL BE TRANSPORTED TO OR FROM CONSTRUCTION SITES WITHOUT NOTIFICATION AND APPROVAL FROM THE NEW HAMPSHIRE DEPT. OF AGRICULTURE PER RSA 430:55.
15. ALL SEWER PIPE SHALL BE PVC SDR 35, ASTM D3034, IN ACCORDANCE WITH ENV-WQ 704.05 TABLE 704-2.
16. SEWER SERVICE INSTALLATION SHALL BE COMPLETED IN ACCORDANCE WITH TOWN OF DERRY SPECIFICATIONS.
17. ENGINEERED SHOP DRAWINGS TO BE SUBMITTED FOR ALL RETAINING WALLS FOR REVIEW.
18. UNDERGROUND PROPANE TANKS MUST BE INSPECTED/APPROVED BY FIRE DEPARTMENT.
19. ALL ON-SITE WATER & SEWER TO BE PRIVATE.
20. RESIDENTIAL UNITS TO BE METERED SEPARATELY WITH DC BACKFLOW VALVE.
21. COMMERCIAL UNITS TO BE METERED SEPARATELY WITH RP2 BACKFLOW VALVE.



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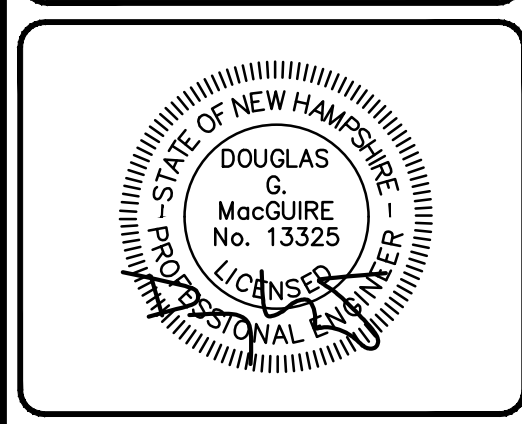
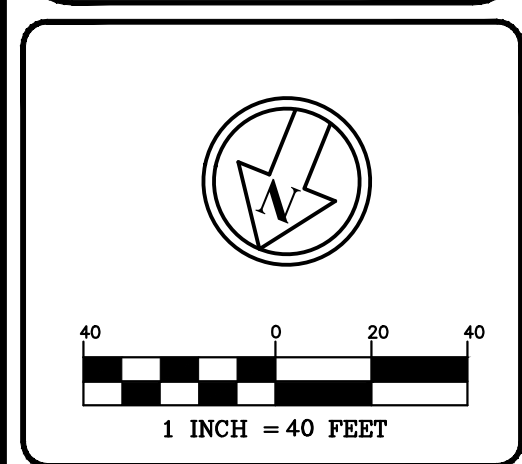


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CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE: 1"=40'
FILE: 491-GU
DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

FOR:
ERIC SPOFFORD
6 MANOR PARKWAY
SALEM, NH 03079

OWNER:
WATTS AUTO
SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:
UTILITY PLAN

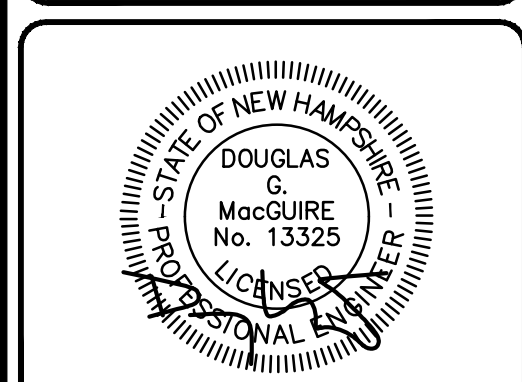
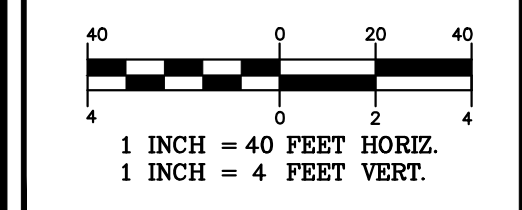
PROJECT #491 SHEET 9 of 22





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REVISIONS:			
REV.	DATE	COMMENT	BY
2	10/19/22	REVS PER DRIVEWAY RELOCATION	SJK
3	2/22/23	TOWN COMMENTS	SJK
4	6/13/23	TOWN COMMENTS	SJK

DRAWN BY: TRL
 CHECKED BY: DGM
 DATE: NOV 4, 2021
 SCALE: 1"=40'
 FILE: 491-SEWER
 DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
 MAP 5 LOT 038-001
 109 ROCKINGHAM ROAD
 DERRY, NH 03038

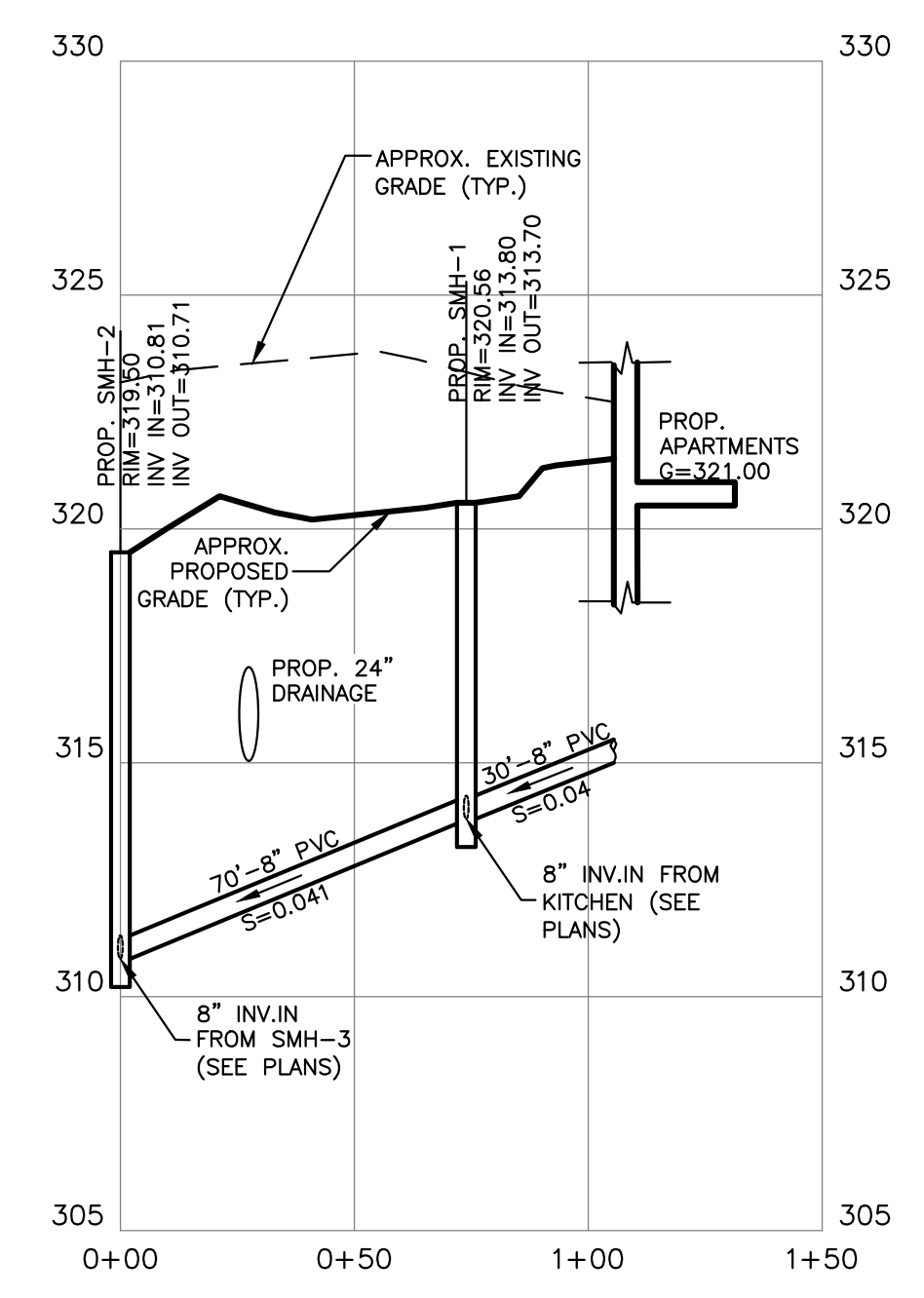
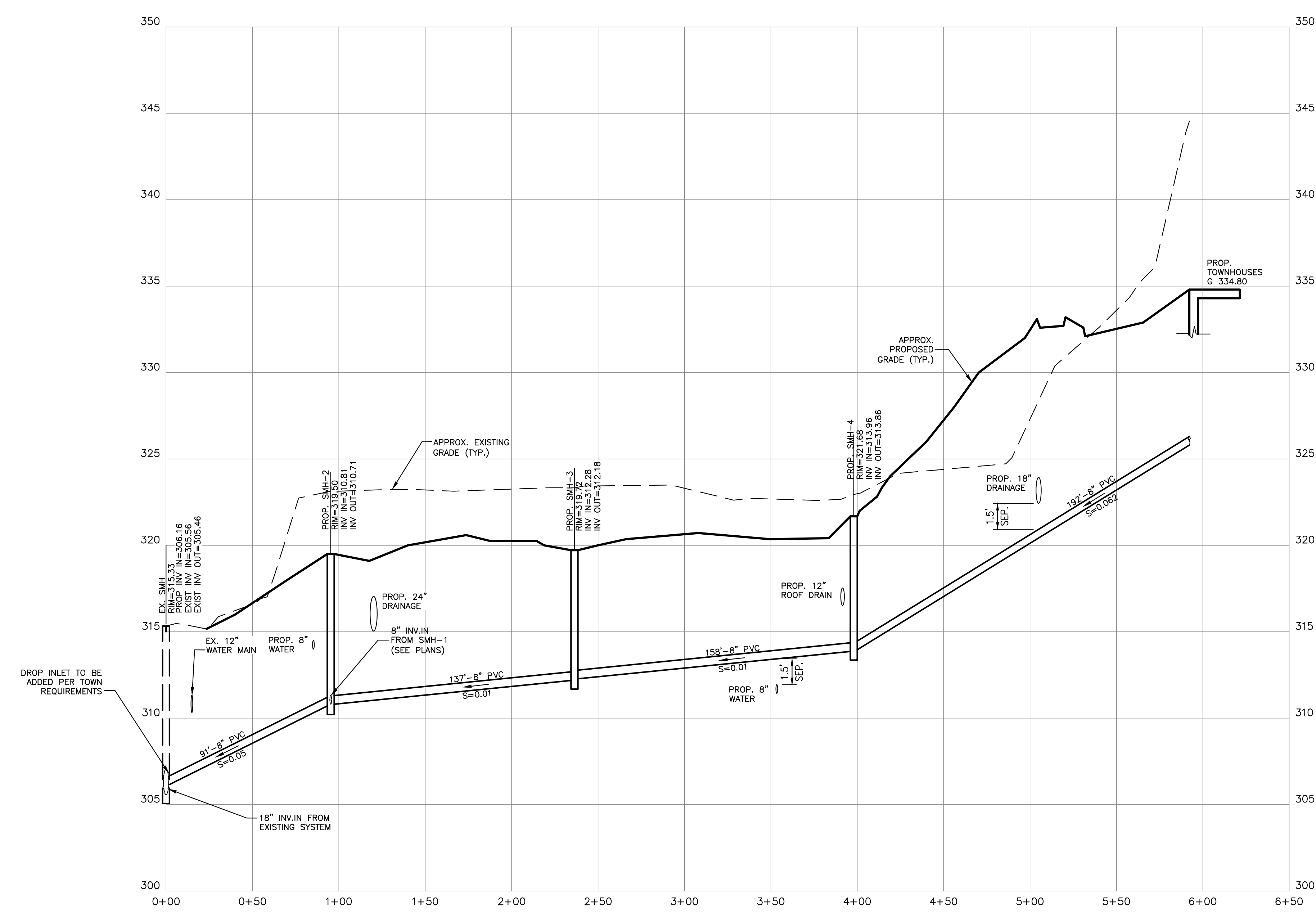
FOR

ERIC SPOFFORD
 6 MANOR PARKWAY
 SALEM, NH 03079

OWNER

WATTS AUTO SALVAGE INC
 PO BOX 332
 DERRY, NH 03038

SHEET TITLE:
SEWER PROFILES



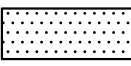

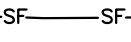
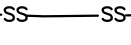
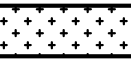
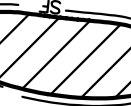
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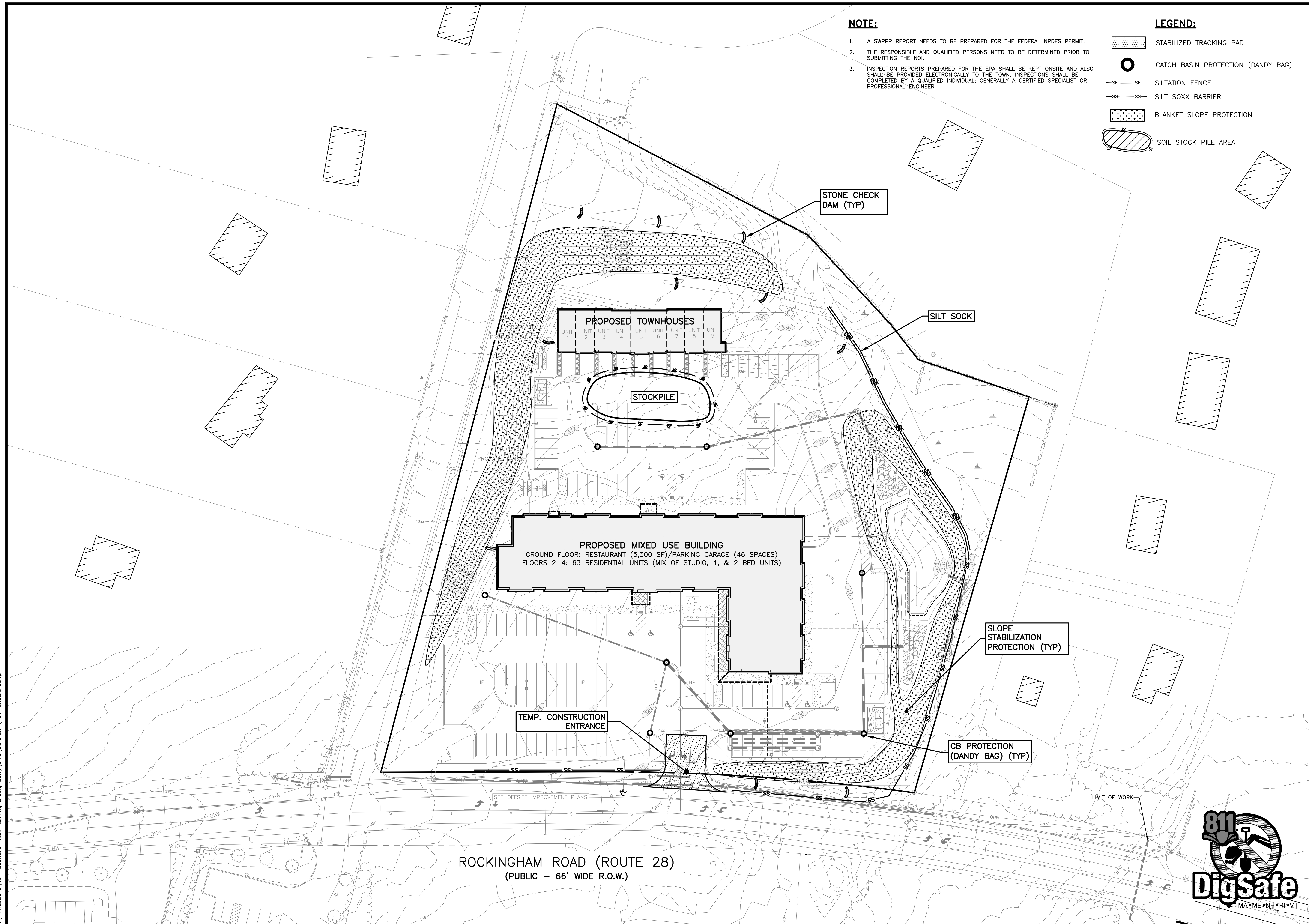
N:\PROJECTS\491-Spofford-West Running Brook_Derry\DWG\CURRENT\491-EROSION.dwg

NOTE:

1. A SWPPP REPORT NEEDS TO BE PREPARED FOR THE FEDERAL NPDES PERMIT.
2. THE RESPONSIBLE AND QUALIFIED PERSONS NEED TO BE DETERMINED PRIOR TO SUBMITTING THE NOI.
3. INSPECTION REPORTS PREPARED FOR THE EPA SHALL BE KEPT ONSITE AND ALSO SHALL BE PROVIDED ELECTRONICALLY TO THE TOWN. INSPECTIONS SHALL BE COMPLETED BY A QUALIFIED INDIVIDUAL; GENERALLY A CERTIFIED SPECIALIST OR PROFESSIONAL ENGINEER.

LEGEND:

-  STABILIZED TRACKING PAD
-  CATCH BASIN PROTECTION (DANDY BAG)
-  SILTATION FENCE
-  SILT SOCK
-  BLANKET SLOPE PROTECTION
-  SOIL STOCK PILE AREA

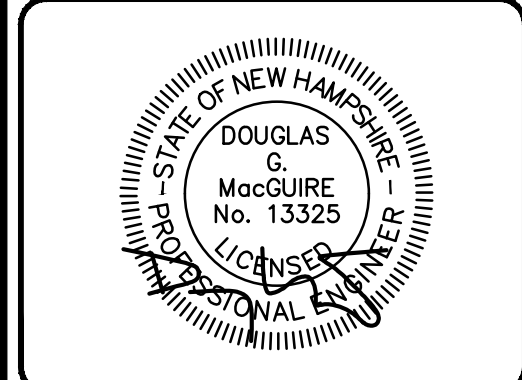
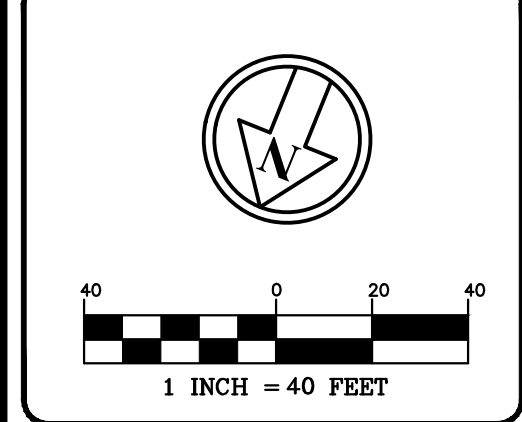


ROCKINGHAM ROAD (ROUTE 28)
(PUBLIC - 66' WIDE R.O.W.)



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REVISIONS:			
REV.	DATE	COMMENT	BY
1	6/3/22	TRC COMMENTS	SJK
2	10/19/22	REVS PER DRIVEWAY RELOCATION	SJK
3	2/22/23	TOWN COMMENTS	SJK

DRAWN BY: SJK
CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE: 1"=40'
FILE: 491-EROSION
DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

FOR
ERIC SPOFFORD
6 MANOR PARKWAY
SALEM, NH 03079

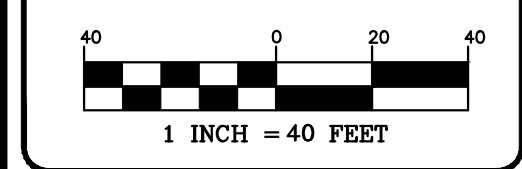
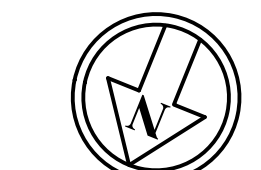
OWNER
WATTS AUTO SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:
EROSION CONTROL PLAN



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PHILIP J. INFURNA
 LIGHTING CONSULTANT
 CELL: 774-212-7981
 EMAIL: pinfurna@gmail.com

REVISIONS:			
REV	DATE	COMMENT	BY
1	6/3/22	TRC COMMENTS	SJK
2	10/19/22	REVS PER DRIVEWAY RELOCATION	SJK
3	2/22/23	TOWN COMMENTS	SJK

DRAWN BY: SJK
 CHECKED BY: DGM
 DATE: NOV 4, 2021
 SCALE: 1"=40'
 FILE: 491-LIGHTING
 DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
 MAP 5 LOT 038-001
 109 ROCKINGHAM ROAD
 DERRY, NH 03038

FOR
ERIC SPOFFORD
 6 MANOR PARKWAY
 SALEM, NH 03079

OWNER
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 DERRY, NH 03038

SHEET TITLE:
LIGHTING PLAN

PROJECT #491 SHEET 13 of 22

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	S1	6	LSI Lighting	MRM-LED-24L-SIL-F1-40-70CRI-IL with 20 ft. Square Steel Pole	Single Full Cut Off Dark Sky Compliant Area Light with Type FT (Forward Throw) Distribution and 20 ft. Pole	1	16438	0.9	176
	S2	4	LSI Lighting	2/MRM-LED-24L-SIL-F1-40-70CRI-IL with 20 ft. Square Steel Pole	Twin Full Cut Off Dark Sky Compliant Area Light with Type FT (Forward Throw) Distribution and 20 ft. Pole	1	16438	0.9	352
	W1	10	LSI Lighting	XWM-FT-LED-08L-40	FullCut Off LED Dark Sky Friendly DLC Listed Outdoor Wall Mounted Luminaire at 12 ft. AFG.	1	8039	0.9	62

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Entire Calculation Area	+	0.8 fc	6.5 fc	0.0 fc	N/A	N/A
Paved Area	✕	2.5 fc	5.4 fc	0.4 fc	13.5:1	6.3:1

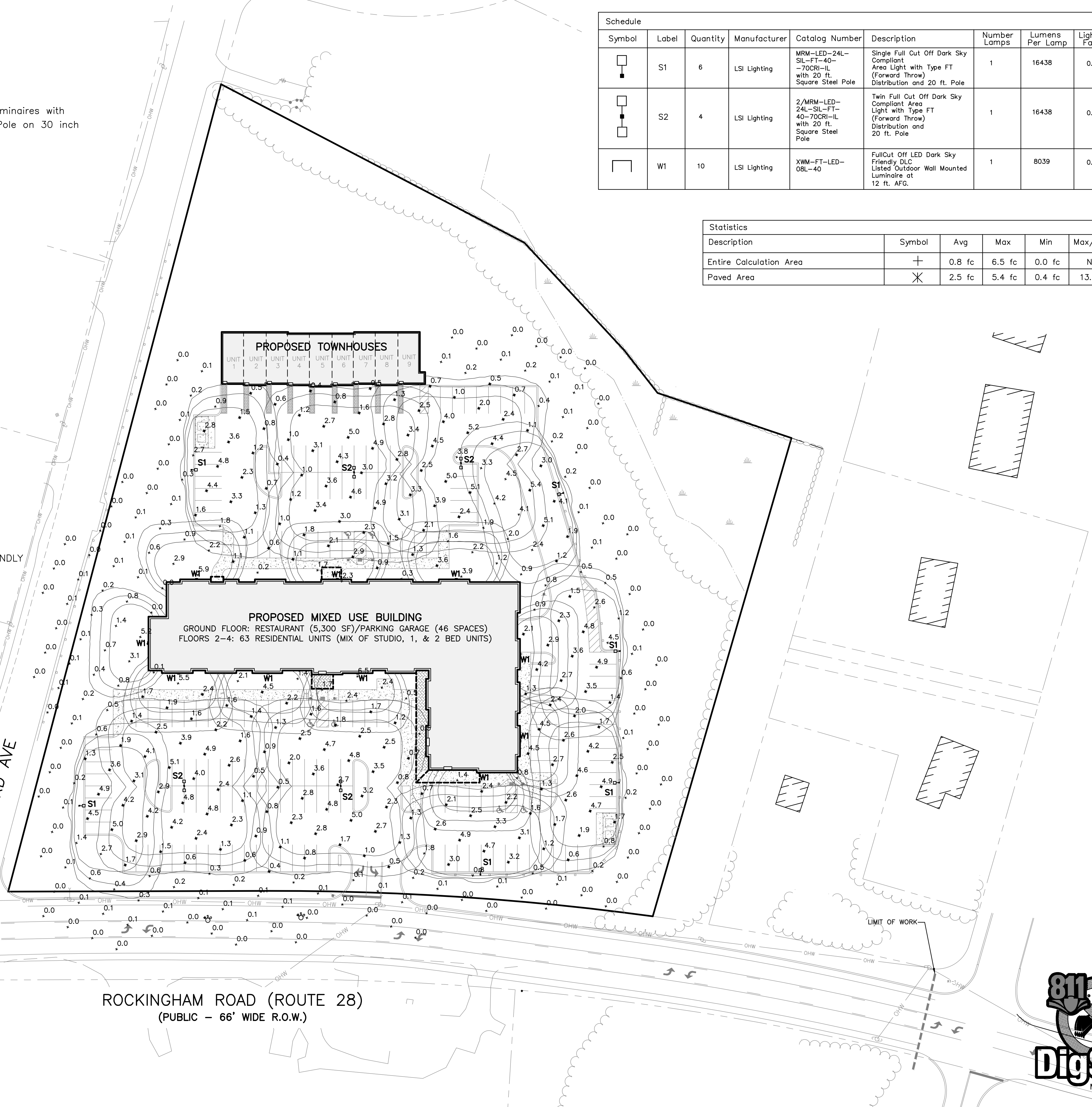
Type S1 and S2
 Single and Double Luminares with
 20 ft. Square Steel Pole on 30 inch
 high Concrete Base



Type W1
 Wall Pack at 12 ft. AFG



NOTE: ALL LUMINAIRES TO BE LED, FULL CUT OFF AND DARK SKY FRIENDLY



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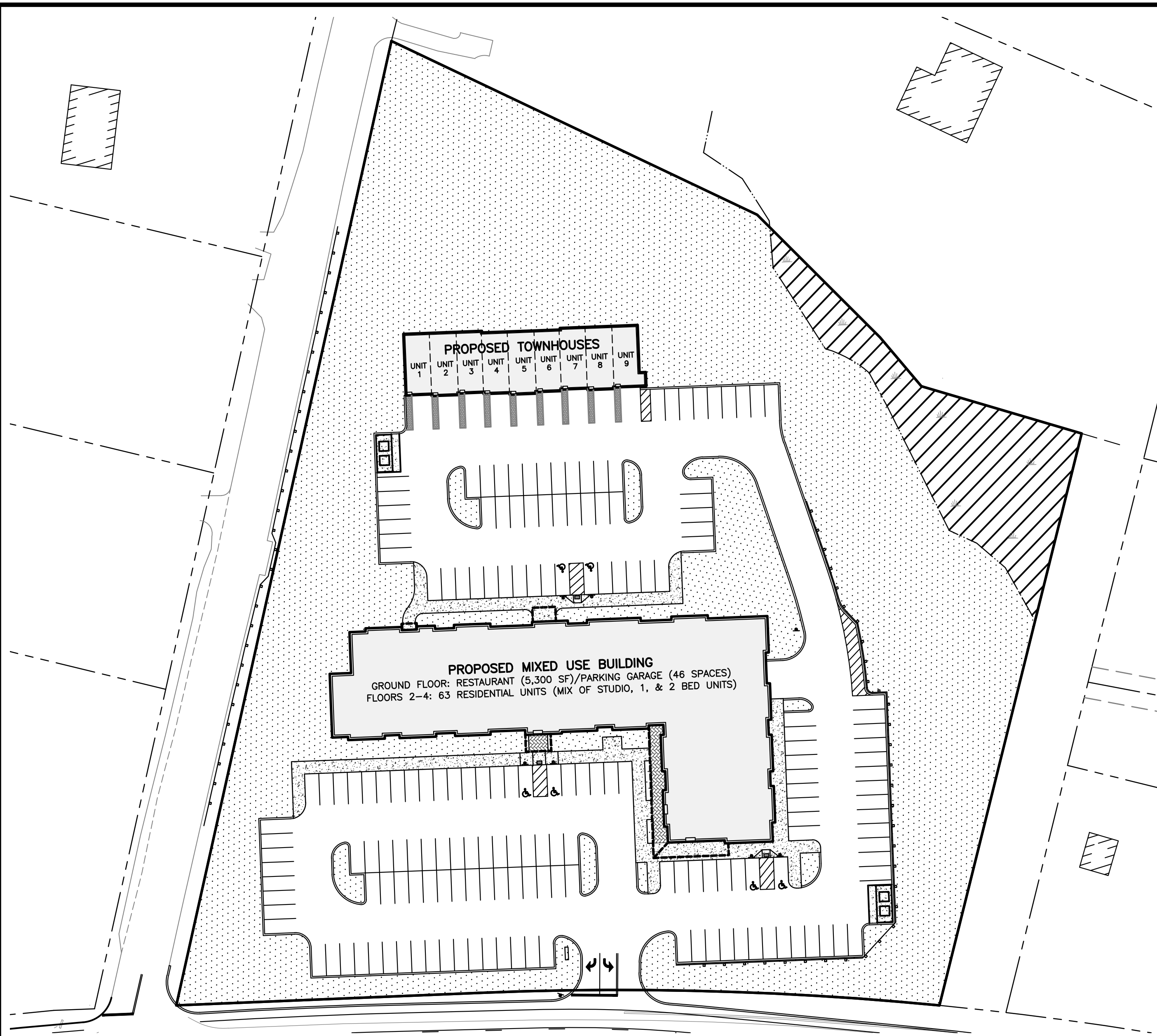
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IMPERVIOUS AREA FIGURE
SCALE: 1"=50'

EXISTING IMPERVIOUS AREA SUMMARY

TOTAL AREA OF LOT = 234,815 SF OR 5.39 AC.
 PERVIOUS AREA = 215,894 SF
 WETLAND AREA = 11,935 SF
 IMPERVIOUS AREA = 6,986 SF
 LOT AREA LESS WETLANDS = 222,880 SF
 GREEN SPACE PERCENT = 215,894 SF/222,880 SF = 97%



IMPERVIOUS AREA FIGURE
SCALE: 1"=50'

PROPOSED IMPERVIOUS AREA SUMMARY

TOTAL AREA OF LOT = 234,815 SF OR 5.39 AC.
 PERVIOUS AREA = 110,217 SF
 WETLAND AREA = 11,935 SF
 IMPERVIOUS AREA = 112,663 SF
 LOT AREA LESS WETLANDS = 222,880 SF
 GREEN SPACE PERCENT = 110,217 SF/222,880 SF = 49%
 MINIMUM REQUIRED = 33% (COMPLIES)

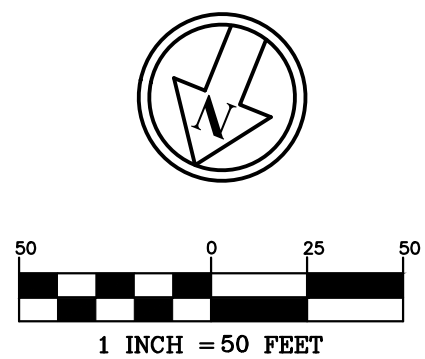
LEGEND

- PERVIOUS AREA
- WETLAND AREA

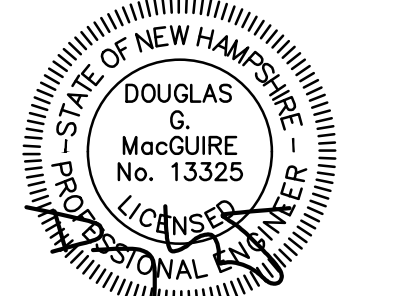


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1 INCH = 50 FEET



REVISIONS:			
REV.	DATE	COMMENT	BY
2	10/19/22	REVS PER DRIVEWAY RELOCATION	SJK
3	2/22/23	TOWN COMMENTS	SJK

DRAWN BY: SJK
 CHECKED BY: DGM
 DATE: NOV 4, 2021
 SCALE: 1"=50'
 FILE: 491-IMPERVIOUS
 DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
 MAP 5 LOT 038-001
 109 ROCKINGHAM ROAD
 DERRY, NH 03038

FOR

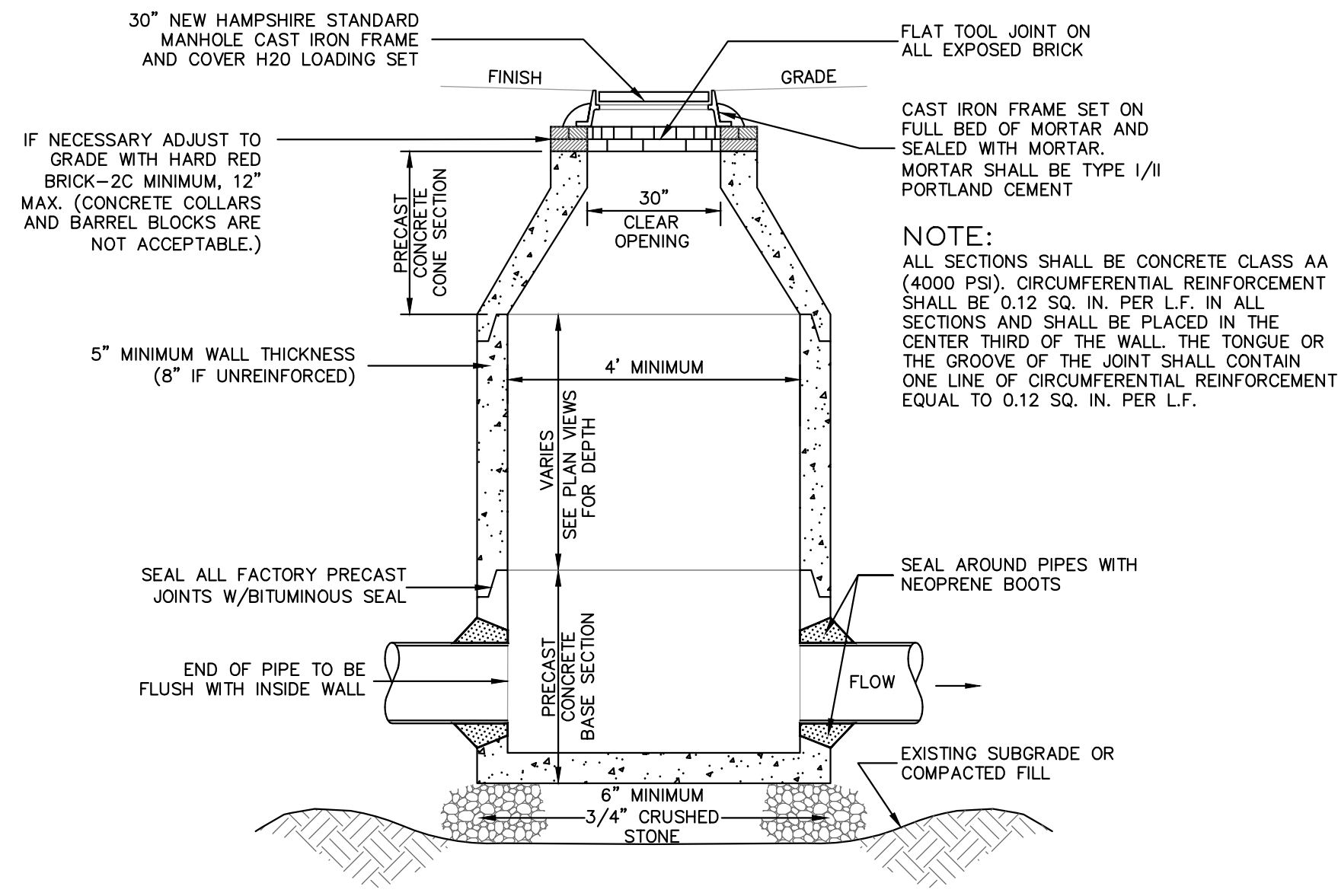
ERIC SPOFFORD
 6 MANOR PARKWAY
 SALEM, NH 03079

OWNER

WATTS AUTO SALVAGE INC
 PO BOX 332
 DERRY, NH 03038

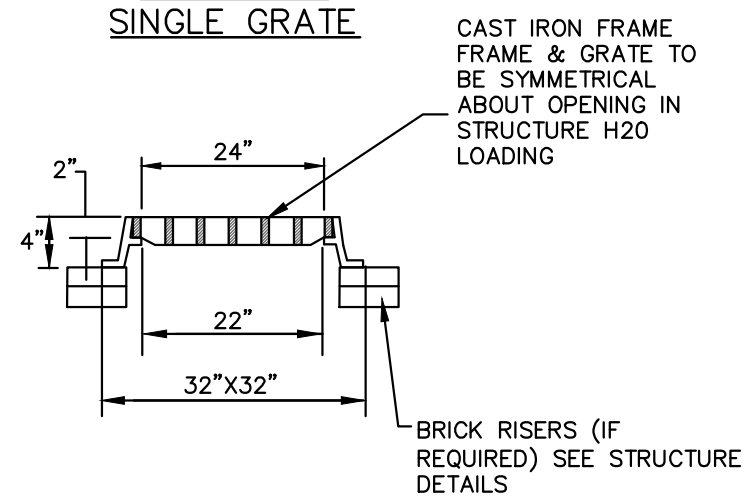
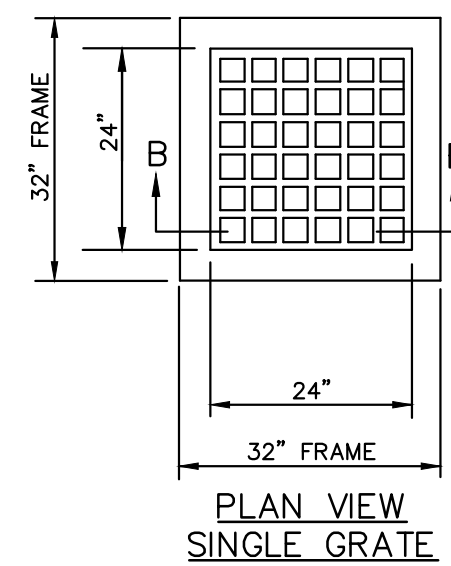
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IMPERVIOUS AREA SUMMARY

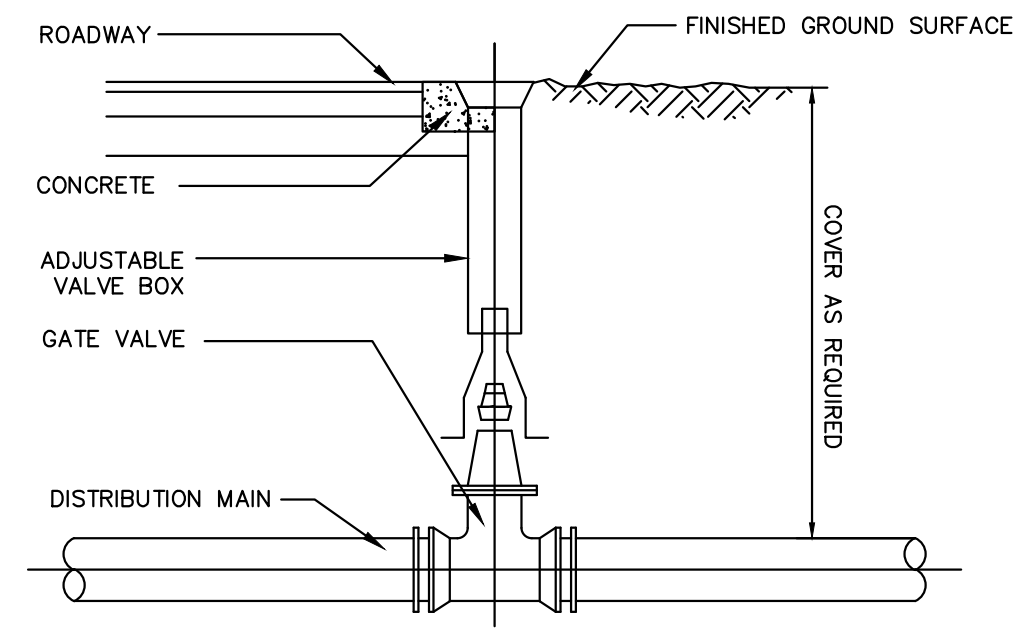


NOTE: ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 AND SHOULD BE DESIGNED TO MEET H-20 LOADING.

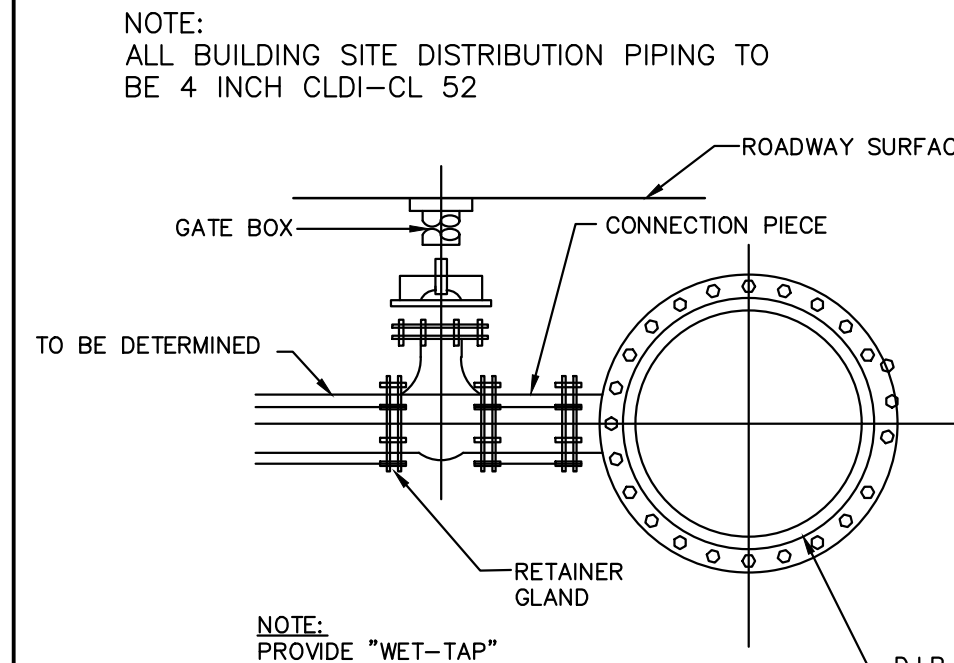
DRAIN MANHOLE DETAIL
NOT TO SCALE



SECTION B-B
FRAME AND GRATE
LEBARON LF244 OR EQUAL
NOT TO SCALE

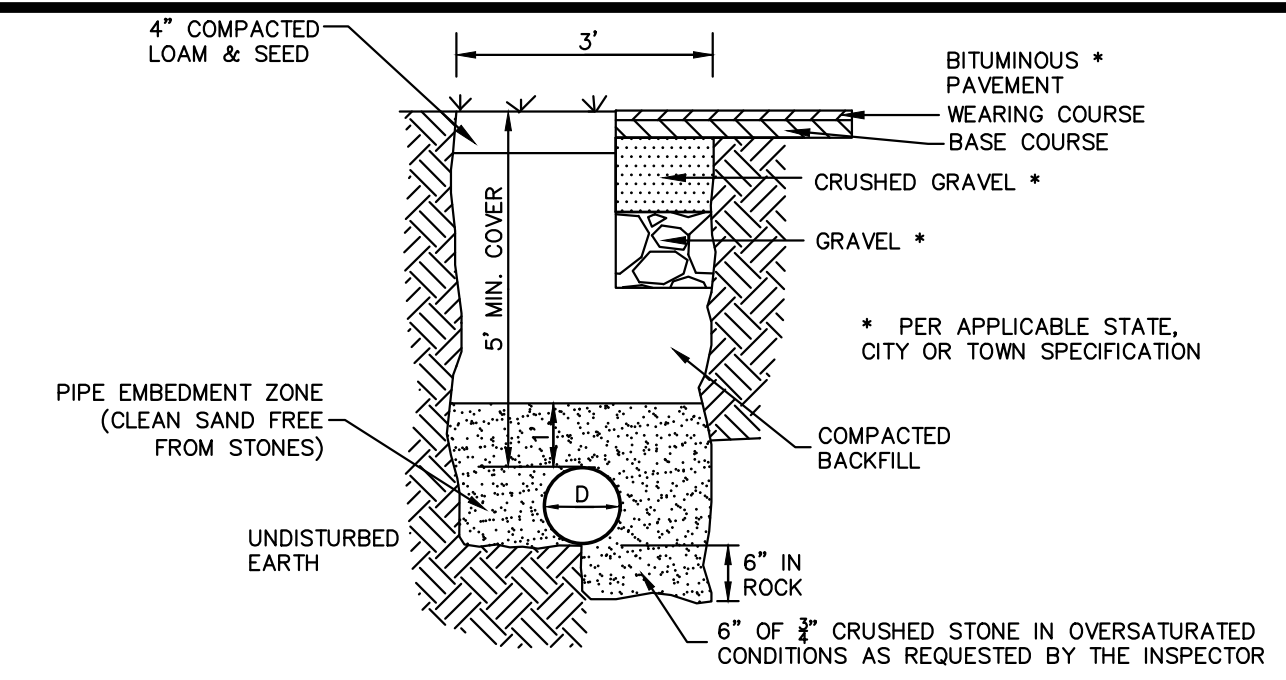


TYPICAL WATER & GAS GATE VALVE
NOT TO SCALE

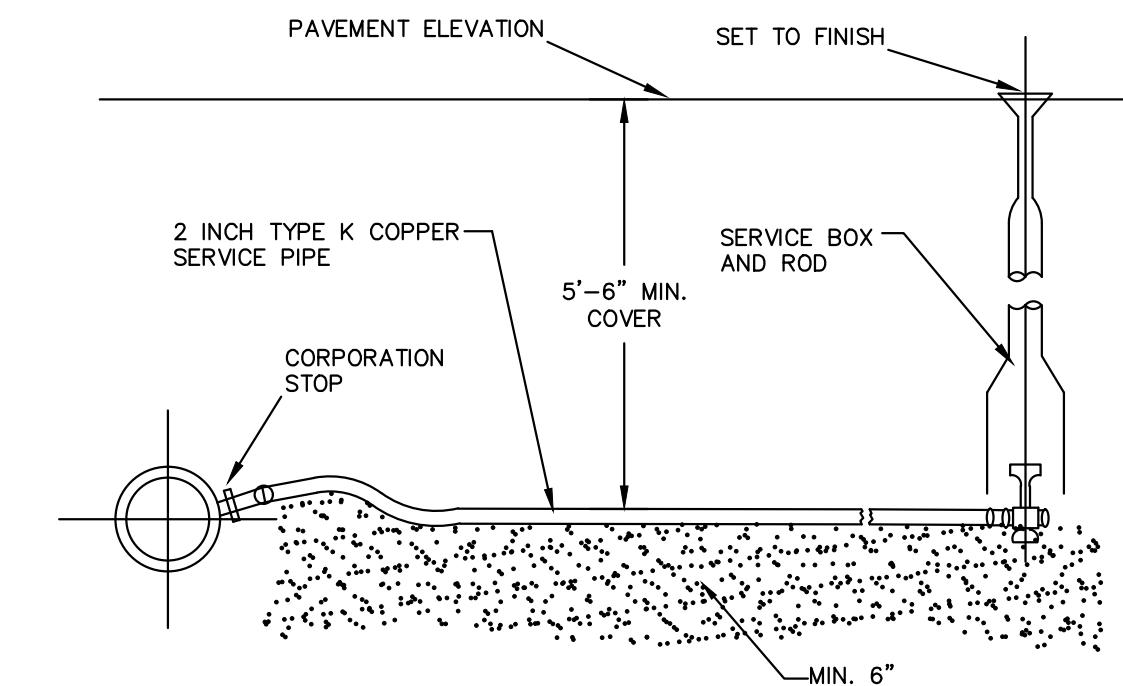


NOTE: PROVIDE "WET-TAP" OR AS APPROVED BY WATER WORKS DEPT.

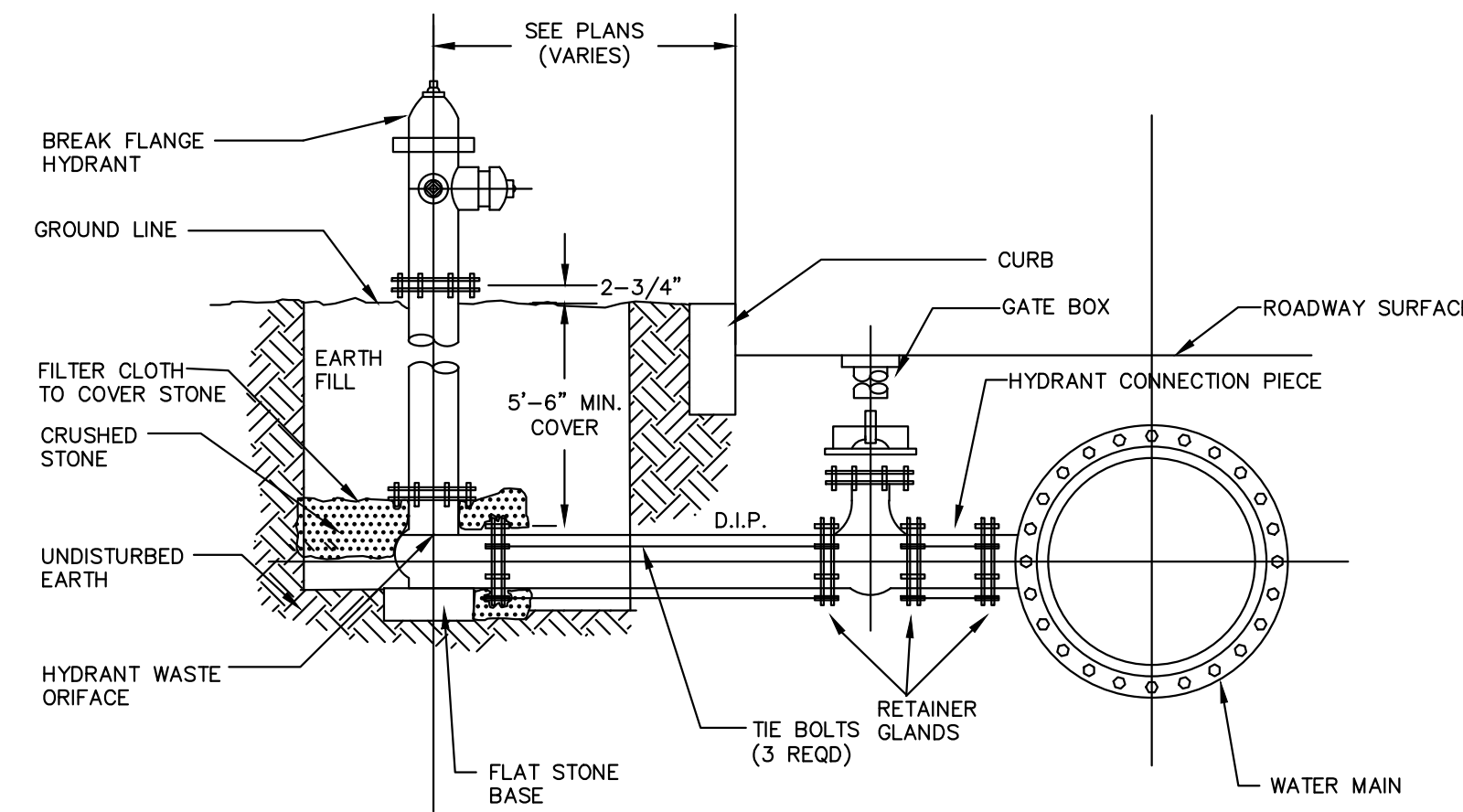
TYPICAL WATER MAIN CONNECTION
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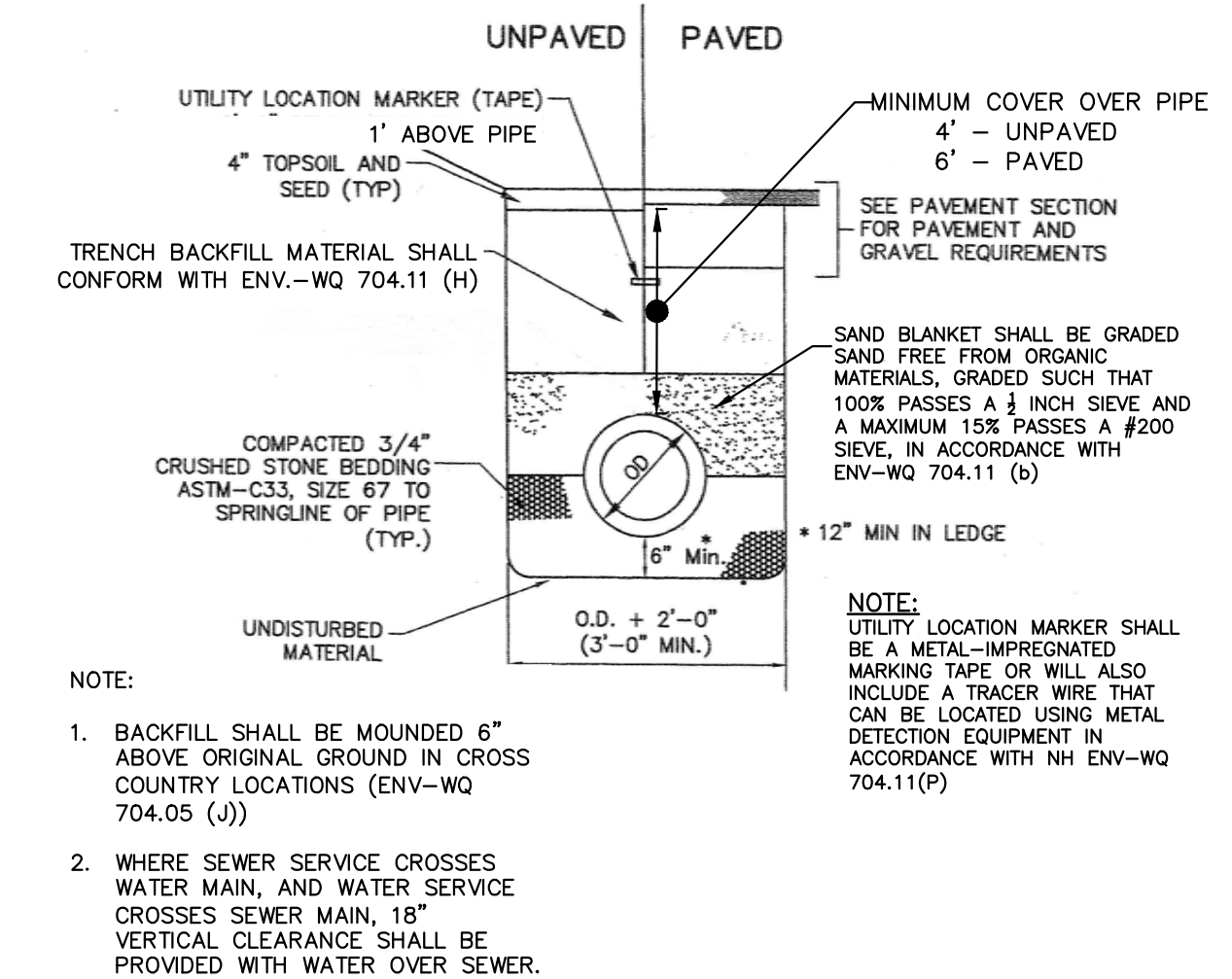
TYPICAL WATER LINE TRENCH DETAIL
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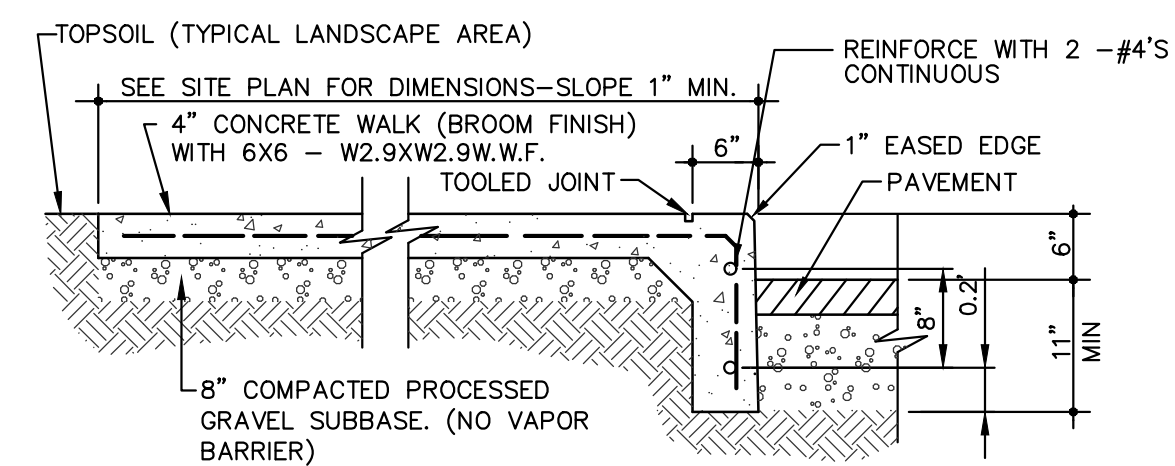
TYPICAL WATER SERVICE CONNECTION
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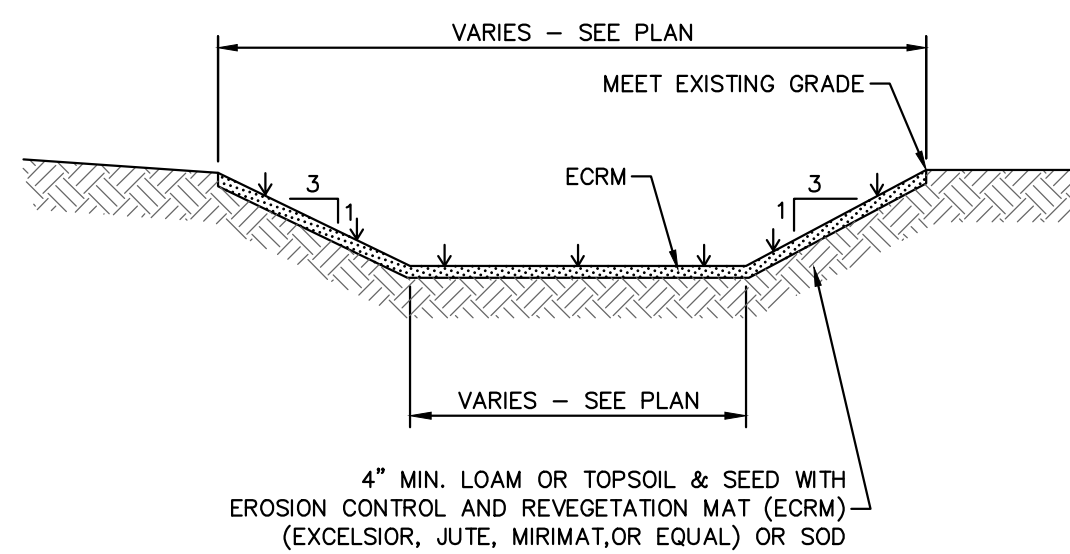
TYPICAL HYDRANT INSTALLATION
AMERICAN DARLING B-84B HYDRANT
NOT TO SCALE



TYPICAL SEWER PIPE TRENCH
NOT TO SCALE



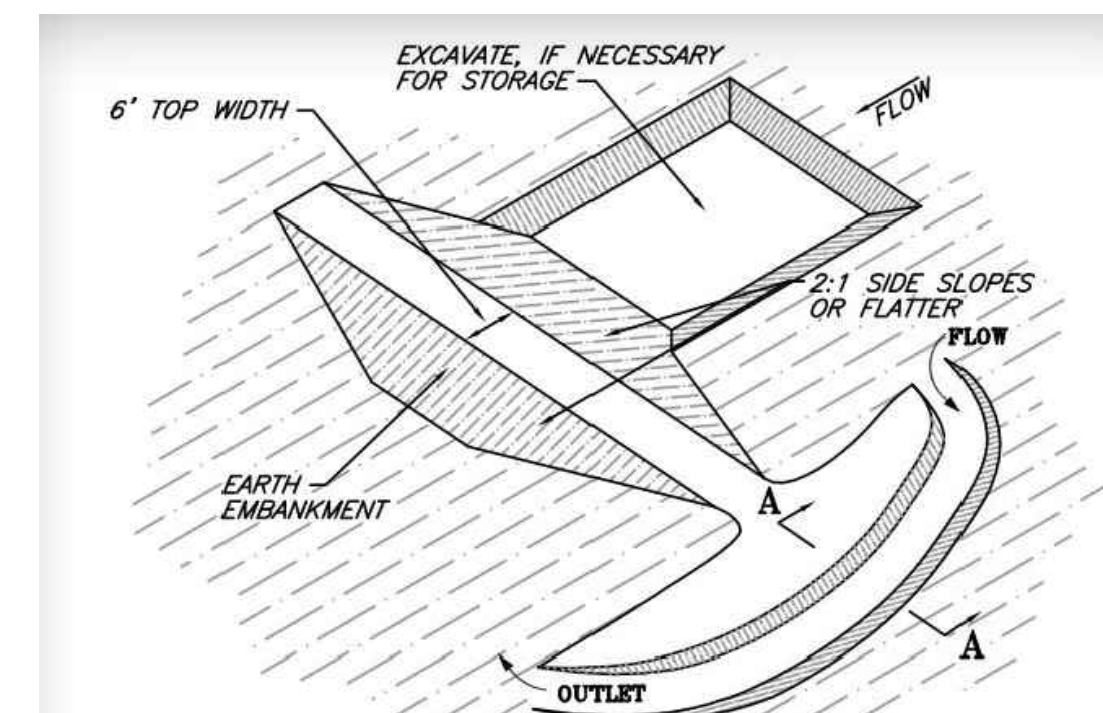
INTEGRAL CONCRETE WALK DETAIL
NOT TO SCALE



NOTES

- AT A MINIMUM, SEDIMENT PONDS MUST PROVIDE STORAGE FOR EITHER (1) THE CALCULATED VOLUME OF RUNOFF FROM THE 2-YEAR, 24-HOUR STORM (SEE CGP APP. H), OR (2) 3,600 CUBIC FEET PER ACRE DRAINED.
- SEDIMENT PONDS MUST ALSO UTILIZE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE, UNLESS INFEASIBLE.
- REFER TO ENV-WQ 1506.10 FOR GUIDANCE AND DESIGN REQUIREMENTS.

TEMPORARY SEDIMENT TRAP
NOT TO SCALE

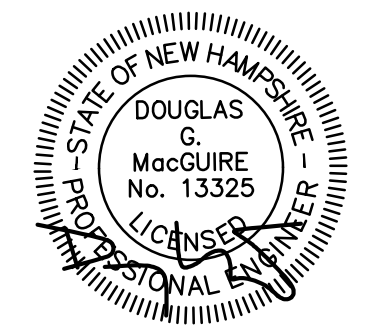


ISOMETRIC VIEW
(SOURCE: NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3)



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3	2/22/23	TOWN COMMENTS	SJK

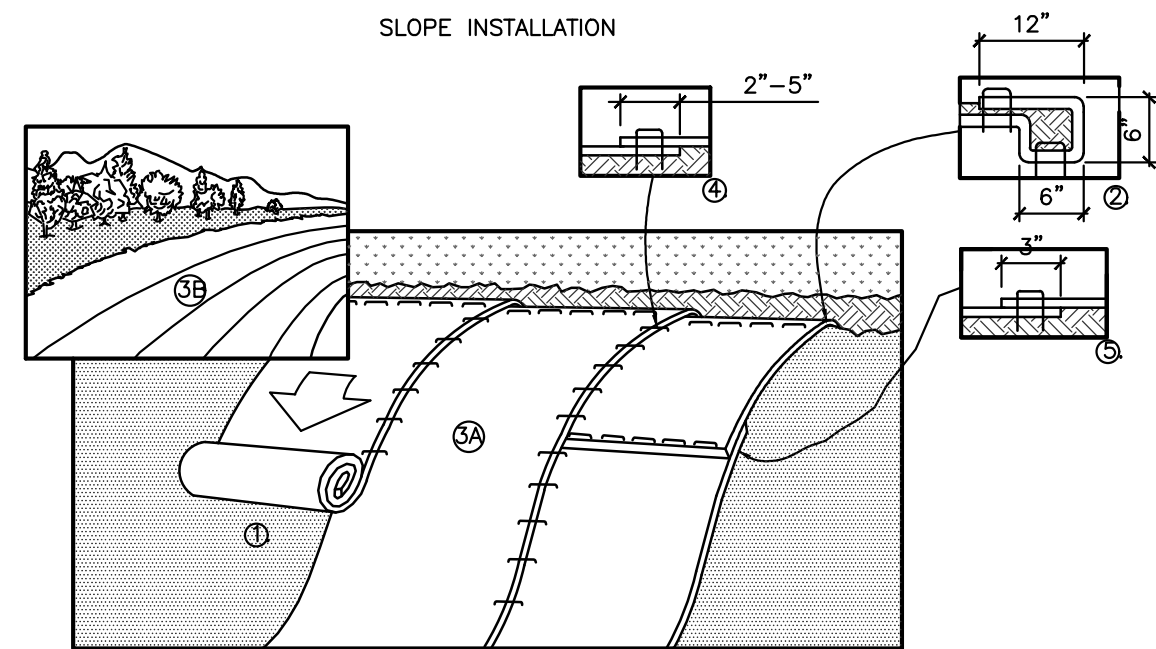
DRAWN BY: SJK
CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE:
FILE: 491-DETAILS
DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

FOR
ERIC SPOFFORD
6 MANOR PARKWAY
SALEM, NH 03079

OWNER
WATTS AUTO SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:
SITE DETAILS - 4

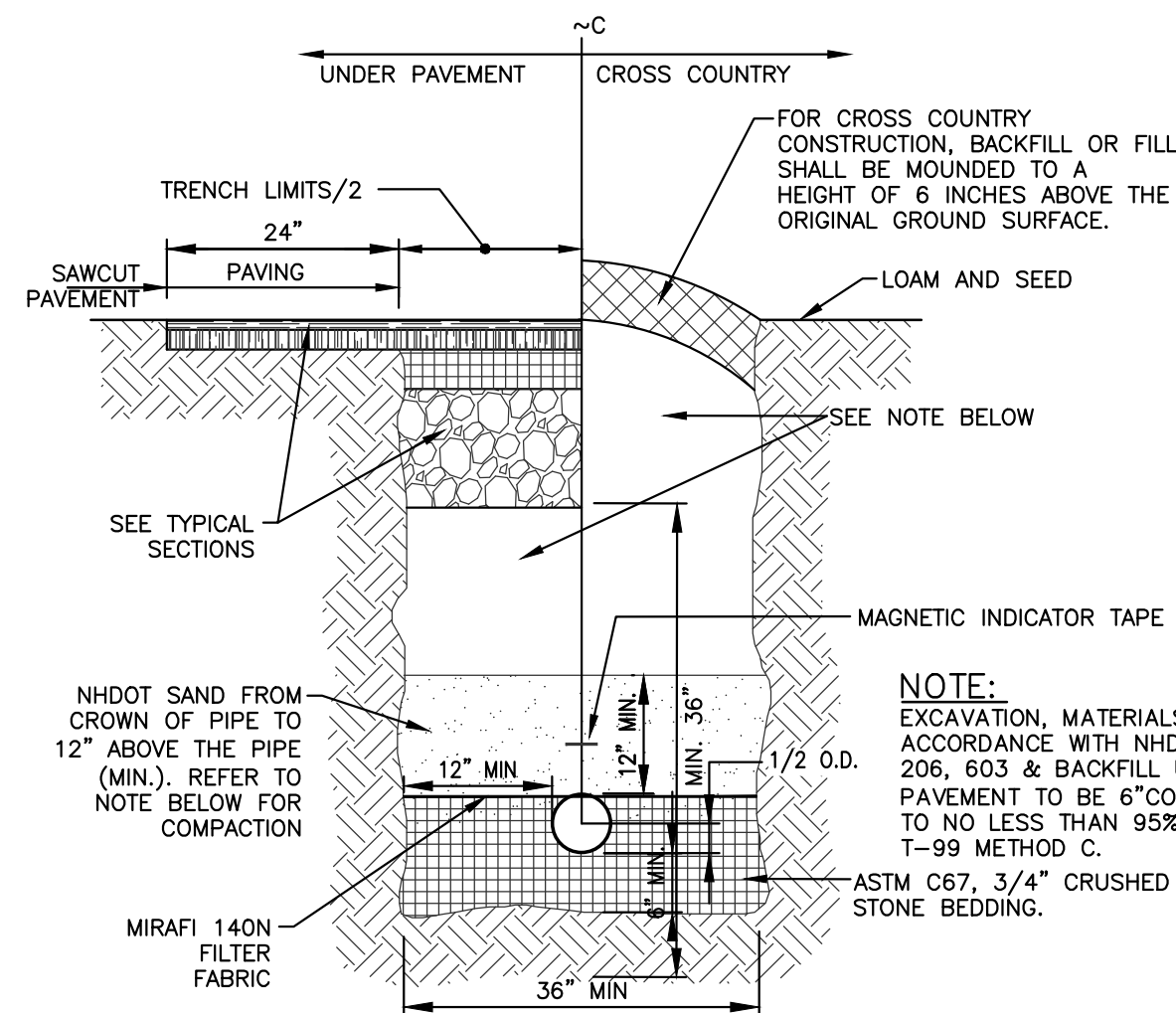


MATTING INSTALLATION NOTES

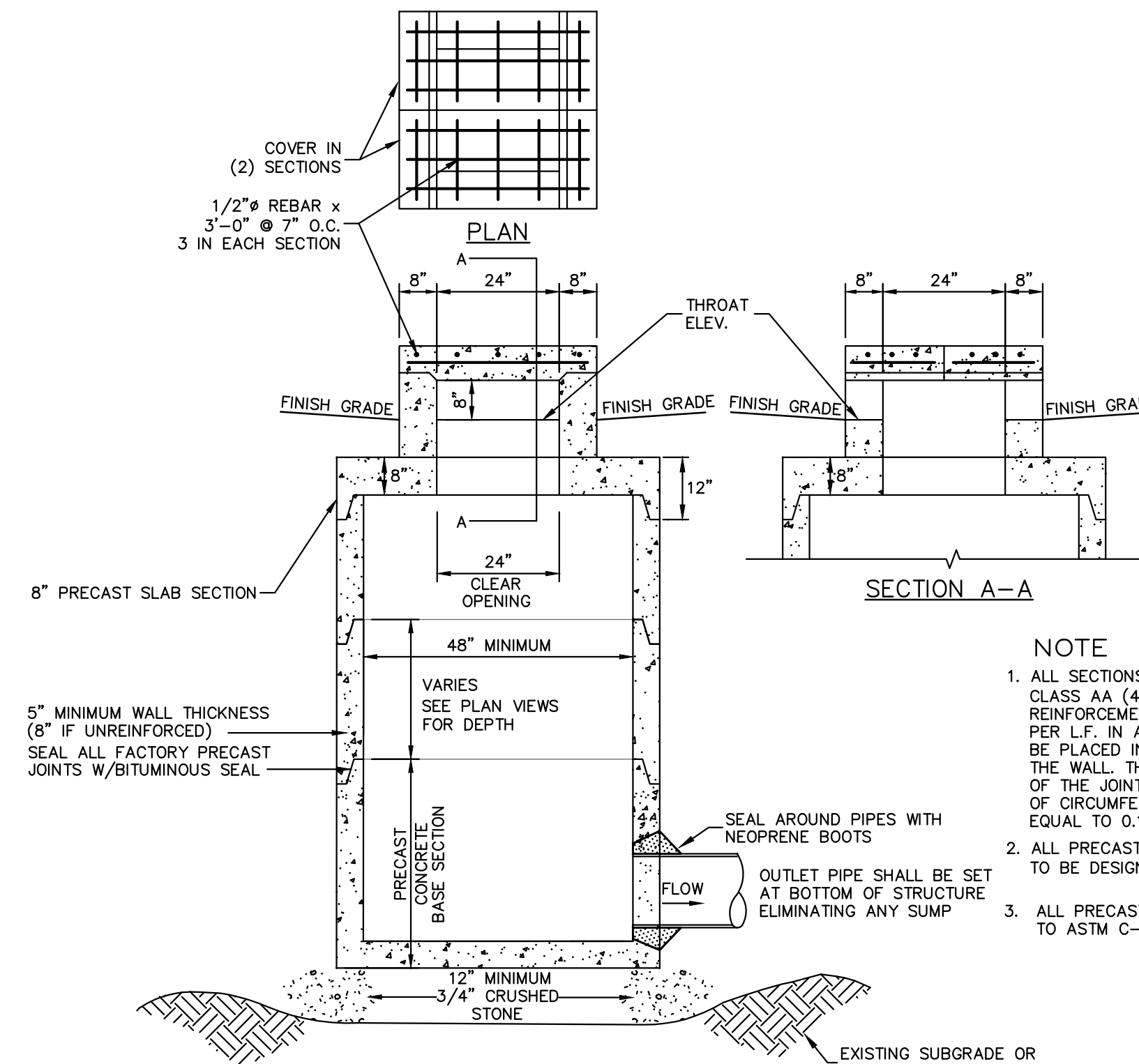
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
7. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
8. AVOID THE USE OF WELDED PLASTIC OR "BIODEGRADABLE PLASTIC" NETTING OR THREAD IN EROSION CONTROL MATTING. THE MATTING USED SHALL BE "WILDLIFE FRIENDLY" OPTIONS SUCH AS WOVEN ORGANIC MATERIAL. THESE OPTIONS INCLUDE CURLEX III FIBRENET AND COCO MATTING.

SLOPE PROTECTION EROSION CONTROL MATTING
NOT TO SCALE



TYPICAL TRENCH DETAIL
NOT TO SCALE
(TYPICAL TO ALL NON-INFILTRATION PIPES)



NHDOT TYPE C CATCH BASIN WITH DROP INLET DETAIL
NOT TO SCALE

NOTE

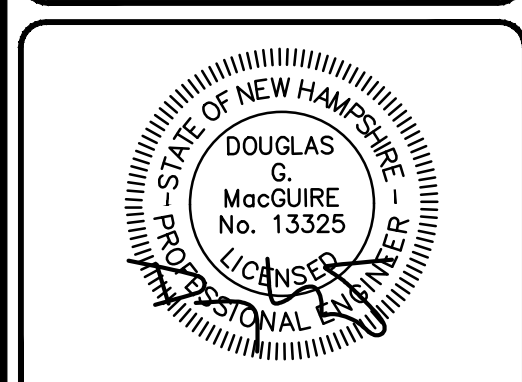
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI). CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER L.F. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER L.F.
2. ALL PRECAST CONCRETE STRUCTURES ARE TO BE DESIGNED TO MEET H-20 LOADING.
3. ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C-478



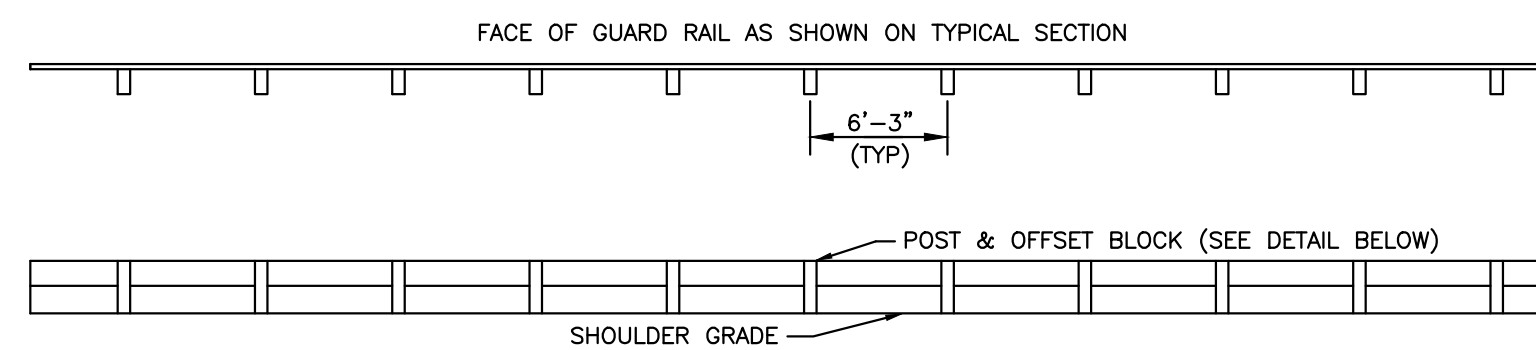
The Dubai Group, Inc.
136 Harvey Road Bldg B101
Londonderry, NH 03053
603-458-6462

Engineers
Planners
Surveyors

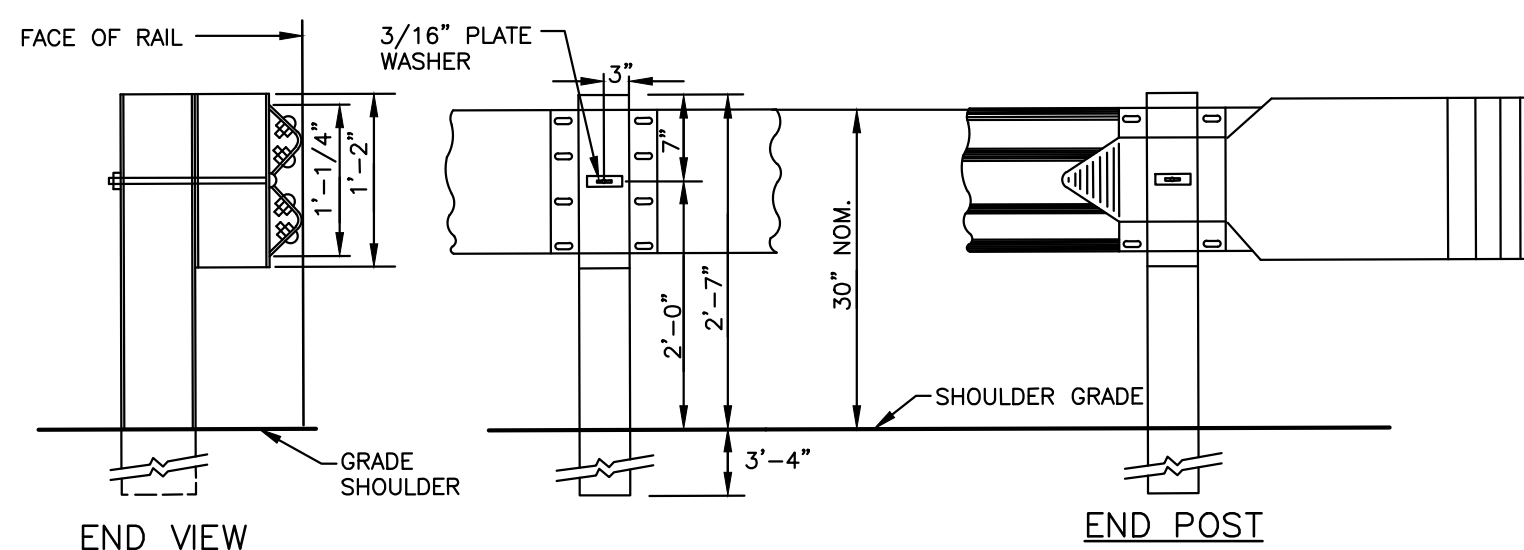
TheDubayGroup.com



REV.	DATE	COMMENT	BY
2	10/19/22	REVS PER DRIVEWAY RELOCATION	SJK
3	2/22/23	TOWN COMMENTS	SJK

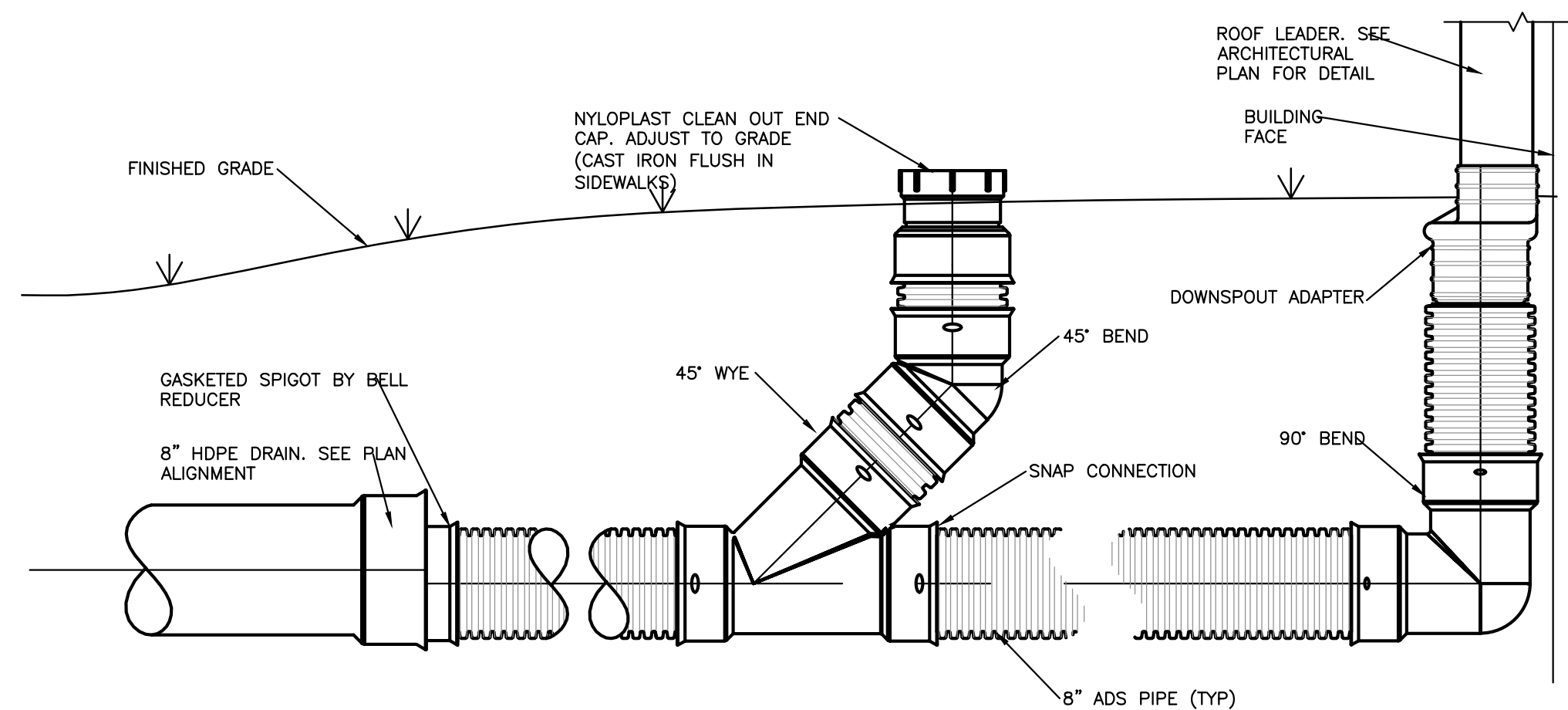


STANDARD SECTION GUARD RAIL
NOT TO SCALE

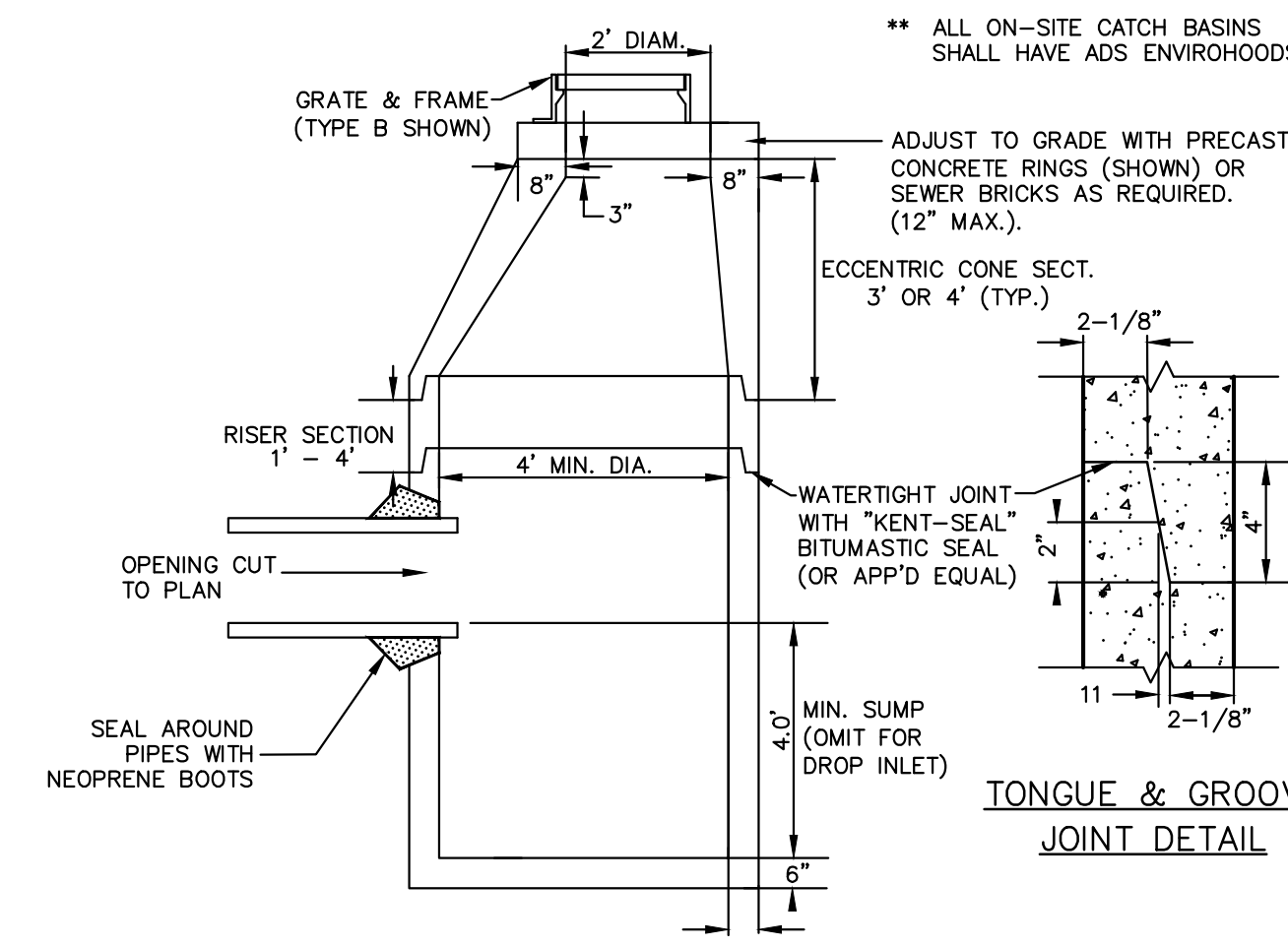


METAL POST GUARDRAIL DETAIL
NOT TO SCALE

- NOTE:**
1. SHOULDER GRADE SHALL BE FACE OF RAIL.
 2. WHEN GUARD RAIL IS SET 0'-4" BEHIND CURB USE FINISHED PAVEMENT GRADE AT FACE OF CURB. WHEN GUARD RAIL IS SET 4" AND BEYOND USE GRADE AT FACE OF GUARD RAIL.



ADS ROOF DRAIN DETAIL
NOT TO SCALE



NOTES:

1. ALL SECTIONS SHALL BE CONCRETE, CLASS AA, (4,000 PSI), CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER L.F. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
2. THE TONGUE OR GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER L.F.
3. RISERS OF 1'-4" MAY BE USED TO REACH THE DESIRED ELEVATION.
4. STEPS ARE NOT ALLOWED.
5. A 6" STONE BEDDING IS REQUIRED.
6. BACKFILL AROUND STRUCTURE SHALL BE 3 IN MINUS SUITABLE MATERIAL.

TYPICAL CATCH BASIN DETAIL
NOT TO SCALE

N:\PROJECTS\491-Spofford-West Running Brook, Berry\DWG\CURRENT\491-DETAILS.dwg

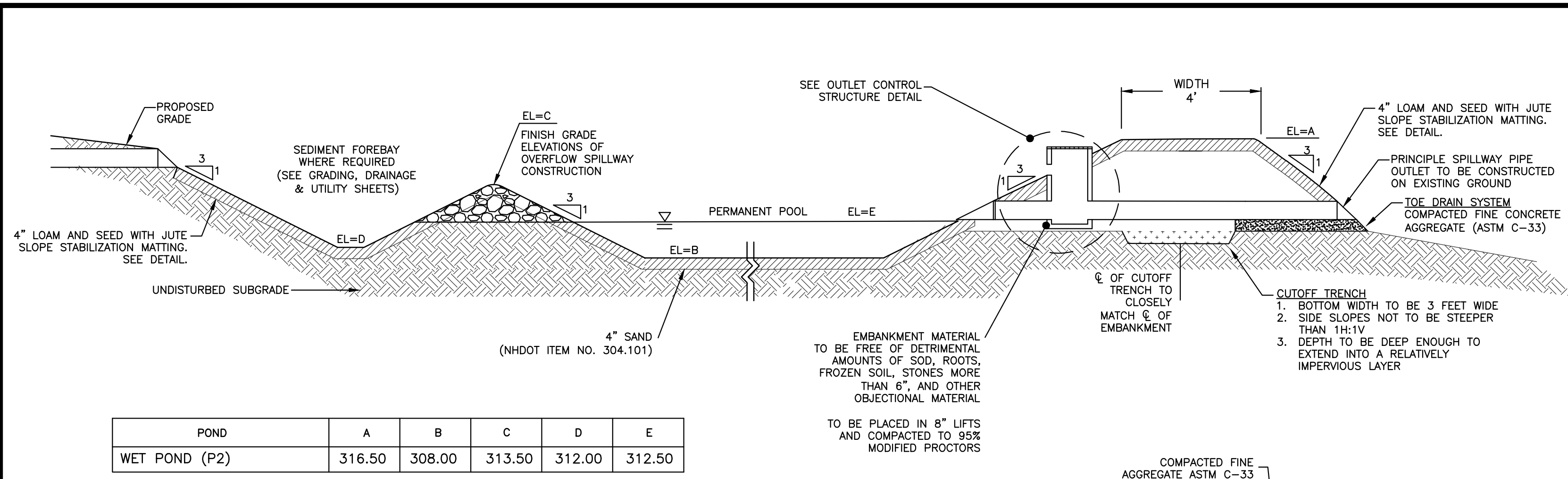
DRAWN BY: SJK
CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE: 491-DETAILS
DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

FOR
ERIC SPOFFORD
6 MANOR PARKWAY
SALEM, NH 03079

OWNER
WATTS AUTO SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:
SITE DETAILS - 5



POND	A	B	C	D	E
WET POND (P2)	316.50	308.00	313.50	312.00	312.50

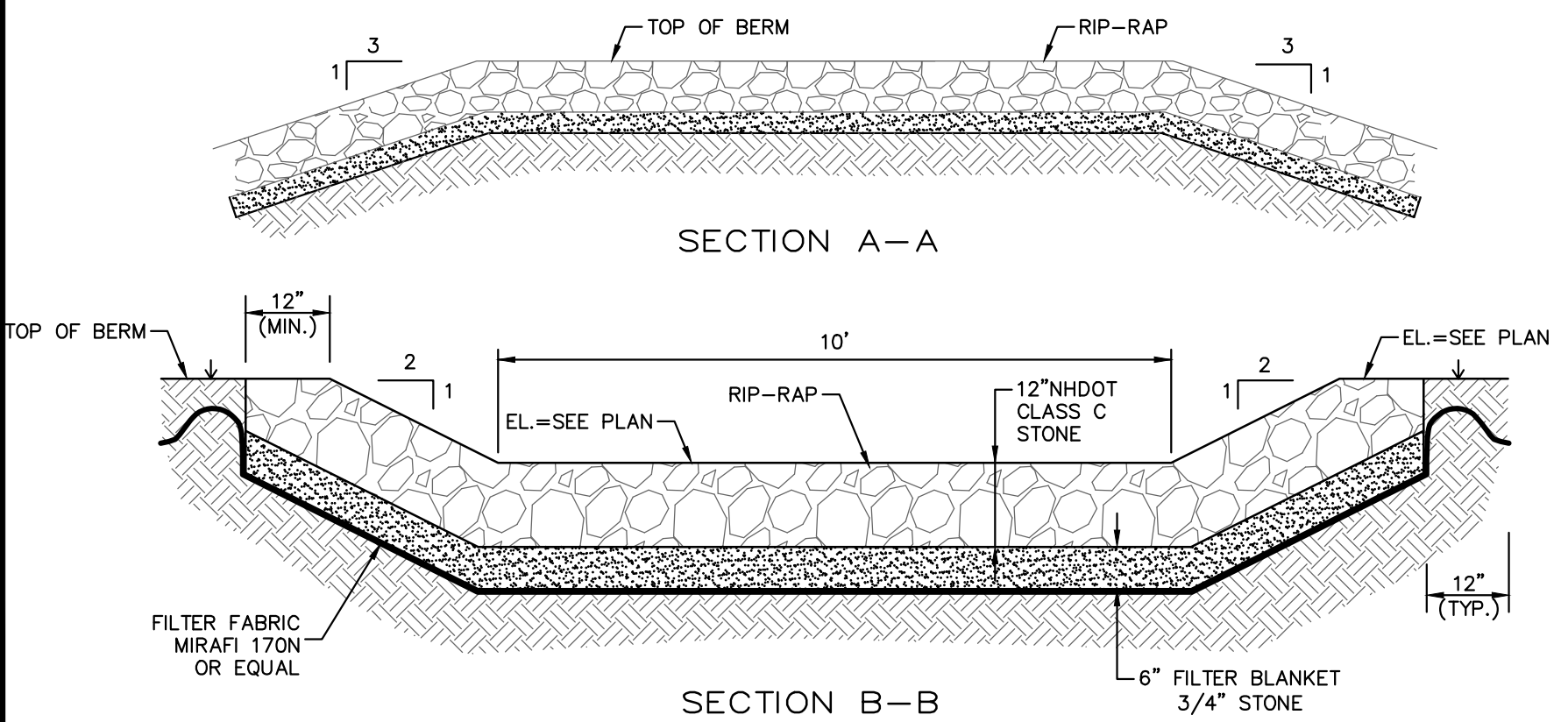
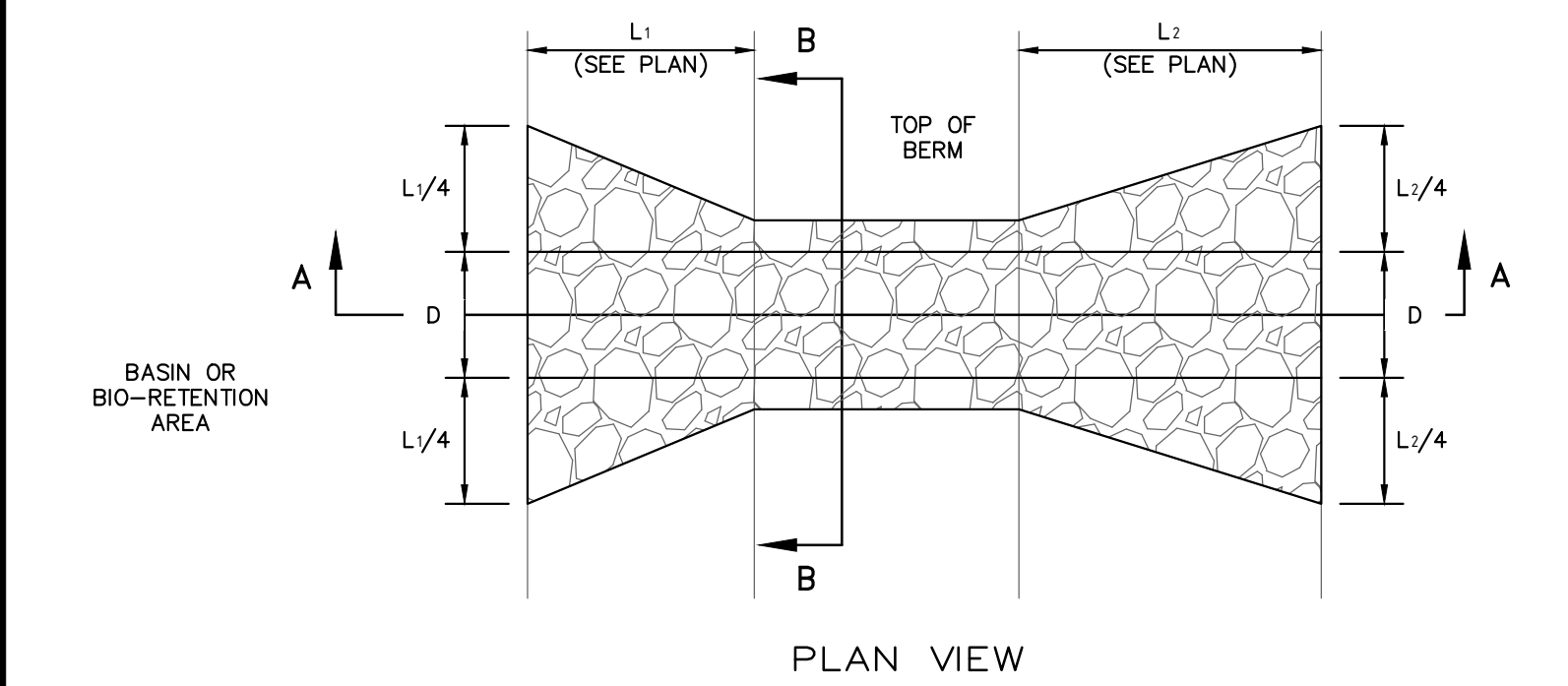
TYPICAL POND SECTION & PRINCIPLE SPILLWAY PROFILE DETAIL
NOT TO SCALE

MAINTENANCE:

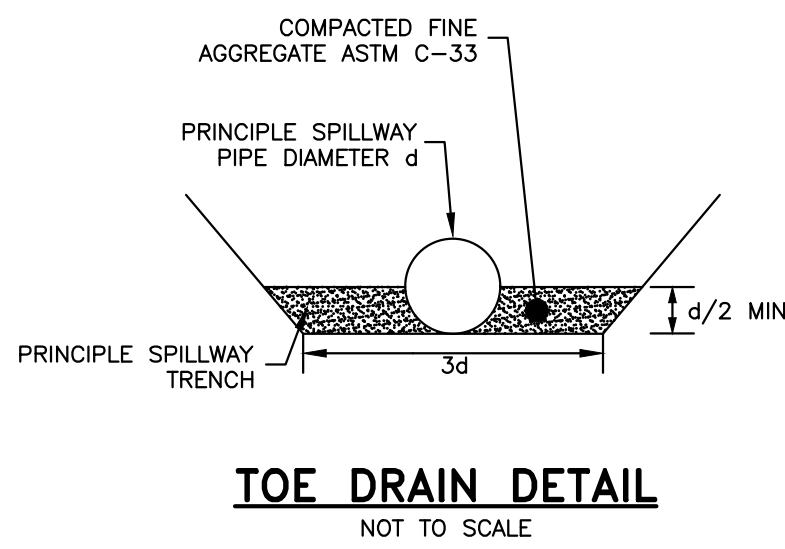
MAINTENANCE IS NECESSARY IF DETENTION/RETENTION BASINS ARE TO CONTINUE TO FUNCTION AS ORIGINALLY DESIGNED. A LOCAL GOVERNMENT, A DESIGNATED GROUP SUCH AS A HOMEOWNERS' ASSOCIATION OR SOME INDIVIDUAL MUST BE ASSIGNED RESPONSIBILITY FOR MAINTAINING THE STRUCTURES AND THE BASIN AREA. A MAINTENANCE PLAN SHOULD BE DEVELOPED THAT OUTLINES THE MAINTENANCE OPERATIONS AND A SCHEDULE FOR CARRYING OUT THE PROCEDURES.

THE FOLLOWING ARE SOME ITEMS WHICH SHOULD BE CONSIDERED IN FORMULATING A MAINTENANCE PLAN.

- EMBANKMENT - THE EMBANKMENT SHOULD BE INSPECTED ANNUALLY TO DETERMINE IF RODENT BURROWS, WET AREAS, OR EROSION OF THE FILL IS TAKING PLACE.
- VEGETATION - THE VEGETATED AREAS OF THE STRUCTURE SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH. LIME AND FERTILIZER SHOULD BE APPLIED AS NECESSARY AS DETERMINED BY SOIL TESTS. TREES AND SHRUBS SHOULD BE KEPT OFF THE EMBANKMENT AND EMERGENCY SPILLWAY AREAS.
- INLETS - PIPE INLETS AND SPILLWAY STRUCTURES SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHOULD BE REMOVED. IF PIPES ARE COATED, THE COATING SHOULD BE CHECKED AND REPAIRED AS NECESSARY.
- OUTLETS - PIPE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE AFFECTED AREA OF THE OUTLET.
- SEDIMENT - SEDIMENT SHOULD BE CONTINUALLY CHECKED IN THE BASIN. WHEN SEDIMENT ACCUMULATIONS REACH THE PREDETERMINED DESIGN ELEVATION, THEN THE SEDIMENT SHOULD BE REMOVED AND PROPERLY DISPOSED OF.
- SAFETY INSPECTIONS - ALL PERMANENT IMPOUNDMENTS SHOULD BE INSPECTED BY A QUALIFIED PROFESSIONAL ENGINEER ON A PERIODIC BASIS. IF THERE IS A POTENTIAL FOR SIGNIFICANT DAMAGE OR LOSS OF LIFE DOWNSTREAM, THEN THE INSPECTION SHOULD BE CARRIED OUT ANNUALLY. THE DESIGNATED INDIVIDUAL OR GROUP SHOULD ALSO MAKE INSPECTIONS AFTER EVERY MAJOR STORM EVENT.

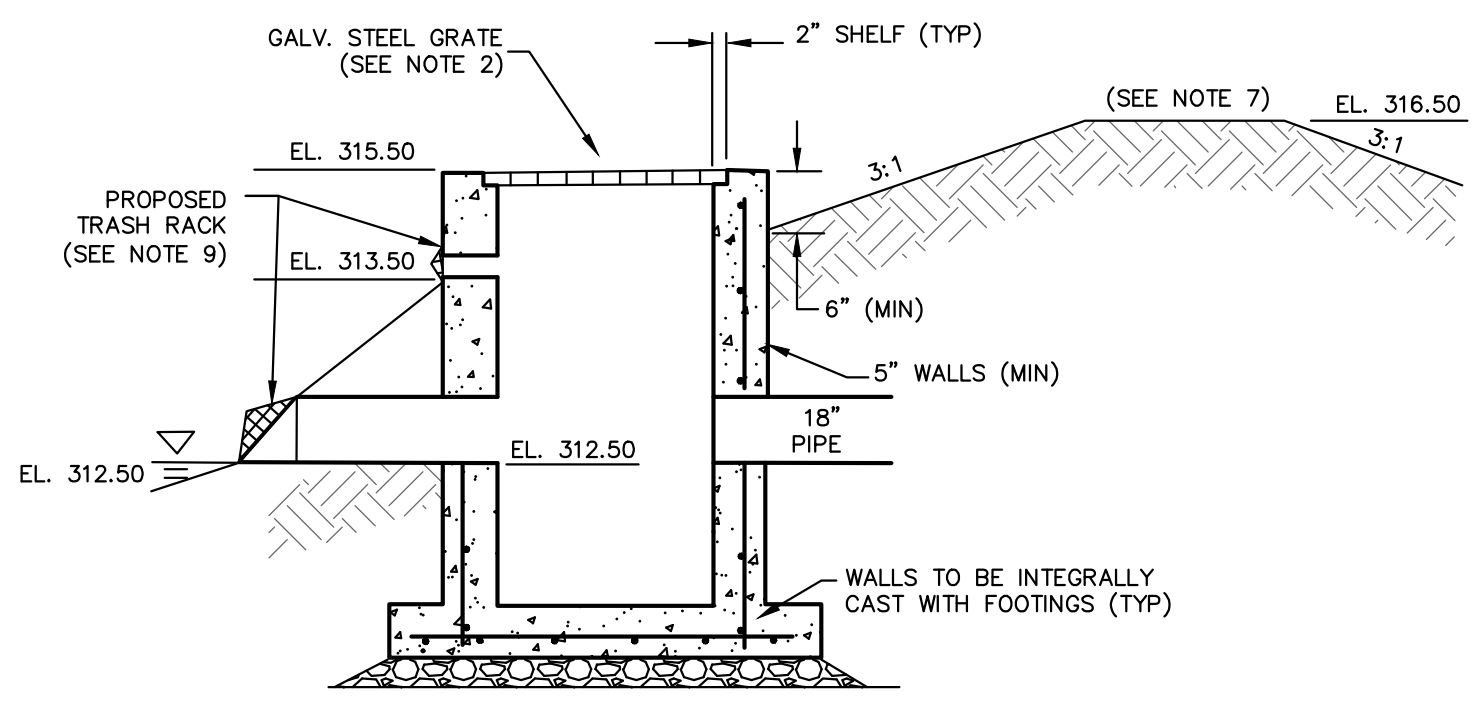
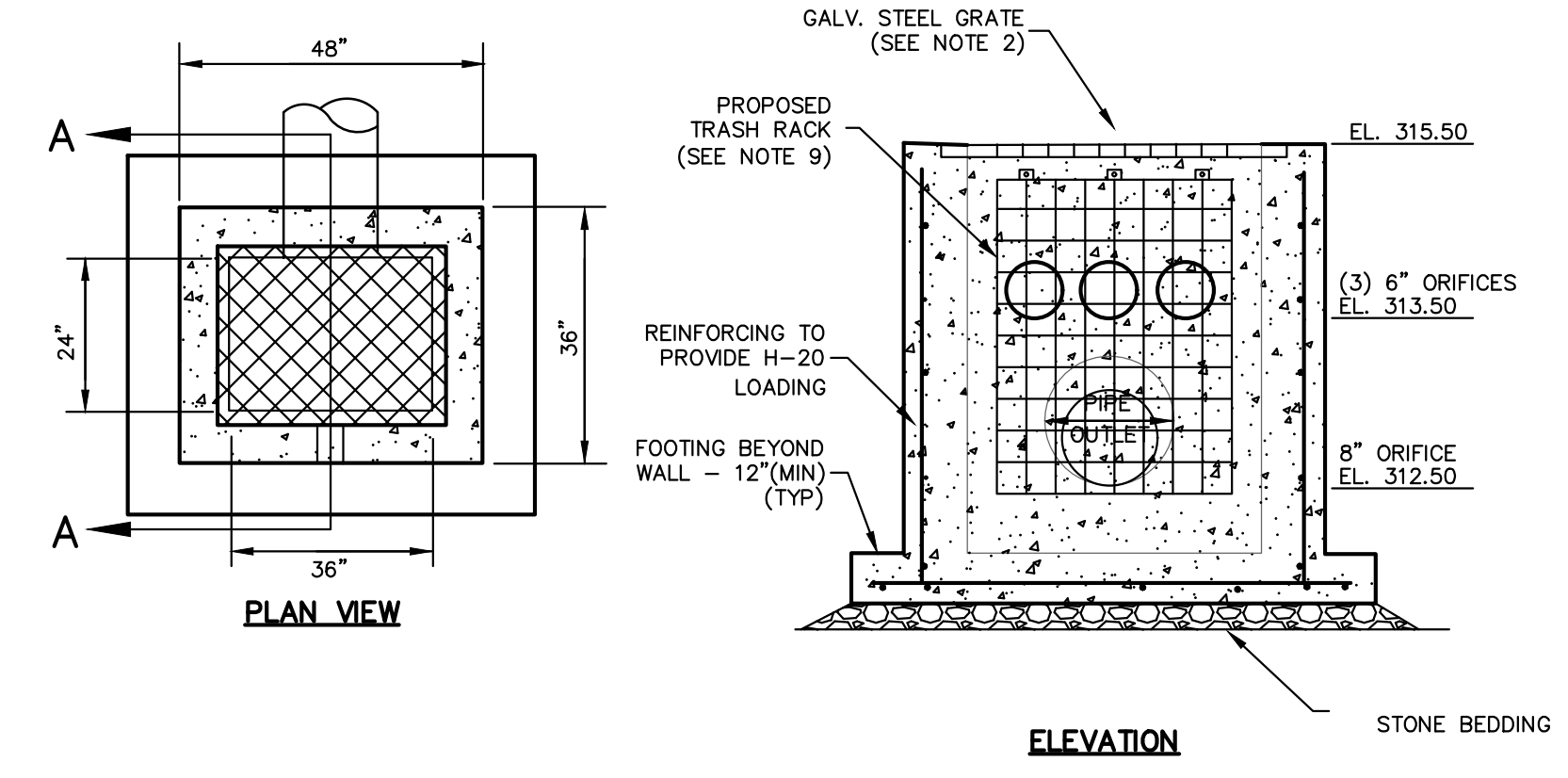


OVERFLOW SPILLWAY
NOT TO SCALE



CONSTRUCTION CRITERIA:

- FOUNDATION PREPARATION - THE FOUNDATION AREA SHALL BE CLEARED OF TREES, LOGS, STUMPS, ROOTS, BRUSH, BOULDERS, SOD, AND RUBBISH. IF NEEDED TO ESTABLISH VEGETATION, THE TOPSOIL AND SOD SHALL BE STOCKPILED AND SPREAD ON THE COMPLETED DAM AND SPILLWAYS. FOUNDATION SURFACES SHALL BE SLOPED NO STEEPER THAN 1:1. THE FOUNDATION AREA SHALL BE THOROUGHLY SCARIFIED BEFORE PLACEMENT OF THE MATERIAL. THE SURFACE SHALL HAVE MOISTURE ADDED OR IT SHALL BE COMPACTED IF NECESSARY SO THAT THE FIRST LAYER OF FILL MATERIAL CAN BE COMPACTED AND BONDED TO THE FOUNDATIONS.
THE CUTOFF TRENCH AND ANY OTHER REQUIRED EXCAVATIONS SHALL BE DUG TO THE LINES AND GRADES SHOWN ON THE PLANS OR AS STAKED IN THE FIELD. IF THEY ARE SUITABLE, EXCAVATED MATERIALS SHALL BE USED IN THE PERMANENT FILL.
EXISTING STREAM CHANNELS IN THE FOUNDATION AREA SHALL BE SLOPED NO STEEPER THAN 1:1 AND DEEPEENED AND WIDENED AS NECESSARY TO REMOVE ALL STONES, GRAVEL, SAND, STUMPS, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND TO ACCOMMODATE COMPACTION EQUIPMENT.
FOUNDATION AREAS SHALL BE KEPT FREE OF STANDING WATER WHEN FILL IS BEING PLACED ON THEM.
- FILL PLACEMENT - THE MATERIAL PLACED IN THE FILL SHALL BE FREE OF DETRIMENTAL AMOUNTS OF SOD, ROOTS, FROZEN SOIL, STONES MORE THAN 6 INCHES IN DIAMETER (EXCEPT FOR ROCK FILLS), AND OTHER OBJECTIONABLE MATERIAL.
SELECTED BACKFILL MATERIAL SHALL BE PLACED AROUND STRUCTURES, PIPE CONDUITS, AND ANTISEEP COLLARS AT ABOUT THE SAME RATE ON ALL SIDES TO PREVENT DAMAGE FROM UNEQUAL LOADING.
THE PLACING AND SPREADING OF FILL MATERIAL SHALL BE STARTED AT THE LOWEST POINT OF THE FOUNDATION AND THE FILL BROUGHT UP IN HORIZONTAL LAYERS OF SUCH THICKNESS THAT THE REQUIRED COMPACTION CAN BE OBTAINED. THE FILL SHALL BE CONSTRUCTED IN CONTINUOUS HORIZONTAL LAYERS EXCEPT WHERE OPENINGS OR SECTIONALIZED FILLS ARE REQUIRED. IN THOSE CASES, THE SLOPE OF THE BONDING SURFACES BETWEEN THE EMBANKMENT IN PLACE AND THE EMBANKMENT TO BE PLACED SHALL NOT BE STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL. THE BONDING SURFACE SHALL BE TREATED THE SAME AS THAT SPECIFIED FOR THE FOUNDATION SO AS TO INSURE A GOOD BOND WITH THE NEW FILL.
THE DISTRIBUTION AND GRADATION OF MATERIALS SHALL BE SUCH THAT NO LENSES, POCKETS, STREAKS, OR LAYERS OF MATERIAL DIFFER SUBSTANTIALLY IN TEXTURE OF GRADATION FROM THE SURROUNDING MATERIAL. IF IT IS NECESSARY TO USE MATERIALS OF VARYING TEXTURE AND GRADATION, THE MORE IMPERVIOUS MATERIAL SHALL BE PLACED IN THE CENTER AND UPSTREAM PARTS OF THE FILL. IF ZONED FILLS OF SUBSTANTIALLY DIFFERING MATERIALS ARE SPECIFIED, THE ZONES SHALL BE PLACED ACCORDING TO THE LINES AND GRADES SHOWN ON THE DRAWINGS. THE COMPLETE WORK SHALL CONFORM TO THE LINES, GRADES, AND ELEVATIONS SHOWN ON THE DRAWINGS OR AS STAKED IN THE FIELD.
- MOISTURE CONTROL - THE MOISTURE CONTENT OF THE FILL MATERIAL SHALL BE ADEQUATE FOR OBTAINING THE REQUIRED COMPACTION. MATERIAL THAT IS TOO WET SHALL BE DRIED TO MEET THIS REQUIREMENT, AND MATERIAL THAT IS TOO DRY SHALL HAVE WATER ADDED AND MIXED UNTIL THE REQUIREMENT IS MET.
- COMPACTION - CONSTRUCTION EQUIPMENT SHALL BE OPERATED OVER THE AREAS OR EACH LAYER OF FILL TO INSURE THAT THE REQUIRED COMPACTION IS OBTAINED. SPECIAL EQUIPMENT SHALL BE USED IF NEEDED TO OBTAIN THE REQUIRED COMPACTION.
IF A MINIMUM REQUIRED DENSITY IS SPECIFIED, EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY.
FILL ADJACENT TO STRUCTURES, PIPE CONDUITS, AND ANTISEEP COLLARS SHALL BE COMPACTED TO A DENSITY EQUIVALENT TO THAT OF THE SURROUNDING FILL BY MEANS OF HAND TAMPING OR MANUALLY DIRECTED POWER TAMPER OR PLATE VIBRATORS. FILL ADJACENT TO CONCRETE STRUCTURES SHALL NOT BE COMPACTED UNTIL THE CONCRETE IS STRONG ENOUGH TO SUPPORT THE LOAD.
- PROTECTION - A PROTECTIVE COVER OF VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, AND BORROW AREA IF SOIL AND CLIMATIC CONDITIONS PERMIT. IF SOIL OR CLIMATIC CONDITIONS PRECLUDE THE USE OF VEGETATION AND PROTECTION IS NEEDED, NON-VEGETATIVE MEANS, SUCH AS MULCHES OR GRAVEL, MAY BE USED. IN SOME PLACES, TEMPORARY VEGETATION MAY BE USED UNTIL CONDITIONS PERMIT ESTABLISHMENT OF PERMANENT VEGETATION. THE EMBANKMENT AND SPILLWAY SHALL BE FENCED IF NECESSARY TO PROTECT THE VEGETATION.
SEEDBED PREPARATION, SEEDING, FERTILIZING, AND MULCHING SHALL COMPLY WITH THE APPROPRIATE VEGETATIVE BMPs.
- CONCRETE - THE MIX DESIGN AND TESTING OF CONCRETE SHALL BE CONSISTENT WITH THE STRENGTH REQUIREMENTS OF THE JOB. MIX REQUIREMENTS OR NECESSARY STRENGTH SHALL BE SPECIFIED. THE TYPE OF CEMENT, AIR ENTRAINMENT, SLUMP, AGGREGATE, OR OTHER PROPERTIES SHALL BE SPECIFIED IF NECESSARY. ALL CONCRETE IS TO CONSIST OF A WORKABLE MIX THAT CAN BE PLACED AND FINISHED IN AN ACCEPTABLE MANNER. NECESSARY CURING SHALL BE SPECIFIED. REINFORCING STEEL SHALL BE PLACED AS INDICATED ON THE PLANS AND SHALL BE HELD SECURELY IN PLACE DURING CONCRETE PLACEMENT. SUBGRADES AND FORMS SHALL BE INSTALLED TO LINE AND GRADE, AND THE FORMS SHALL BE MORTAR TIGHT AND UNYIELDING AS THE CONCRETE IS PLACED.
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO INFILTRATION BASINS.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION BASIN.
- VEGETATION SHOULD BE ESTABLISHED IMMEDIATELY.
- DO NOT PLACE SYSTEMS INTO SERVICE UNTIL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- POND SHALL BE CONTAINED WITH AN IMPERMEABLE LINER, WHICH SHALL BE 6\"/>



NOTES

- ALL CEMENT CONCRETE TO BE 4000 PSI (MIN).
- GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE.
- OUTLET PIPE SHALL NOT BE LESS THAN 15\"/>

OUTLET CONTROL STRUCTURE DETAIL
NOT TO SCALE

OUTFLOW ACCESSORIES

FLARED & MITERED END SECTIONS,
ANIMAL GUARDS & TRASH GUARDS

SIZE	PRODUCT CODE
12\"/>	

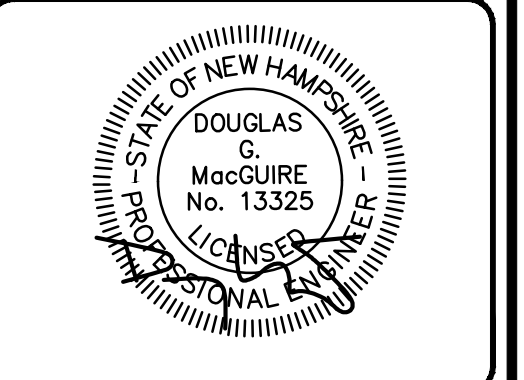
DIAMETER	DESCRIPTION	PRODUCT CODE
12\"/>		

FLARED END SECTION TRASH GUARD DETAIL
NOT TO SCALE



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136 Harvey Road Bldg B101
Londonderry, NH 03053
603-458-6462

Engineers
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REV.	DATE	COMMENT	BY
2	10/19/21	REVS PER DRIVEWAY RELOCATION	SJK
3	2/22/23	TOWN COMMENTS	SJK

DRAWN BY: SJK
CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE:
FILE: 491-DETAILS
DEED REF: -

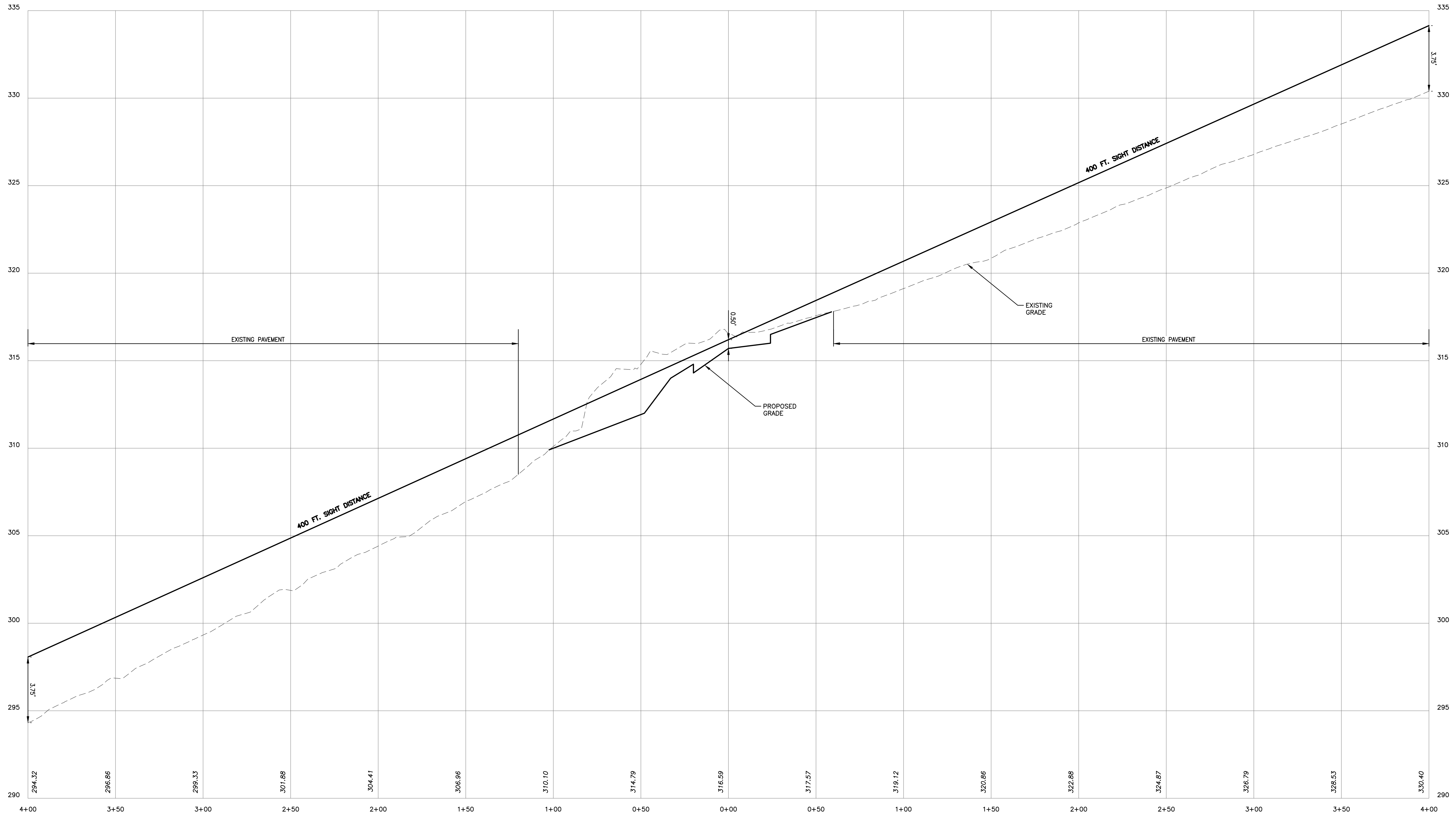
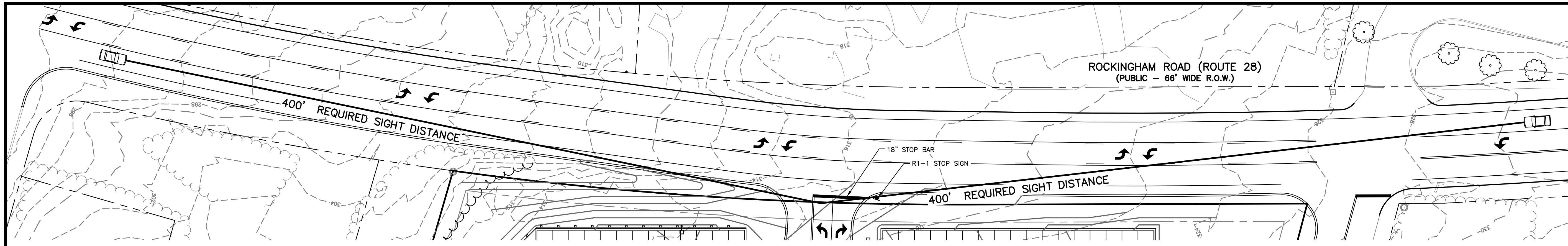
PROJECT:
109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

FOR
ERIC SPOFFORD
6 MANOR PARKWAY
SALEM, NH 03079

OWNER
WATTS AUTO SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:
SITE DETAILS - 7

N:\PROJECTS\491-Spofford-West Running Brook, Derry\DWG\CURRENT\491-DETAILS.dwg



NOTES:

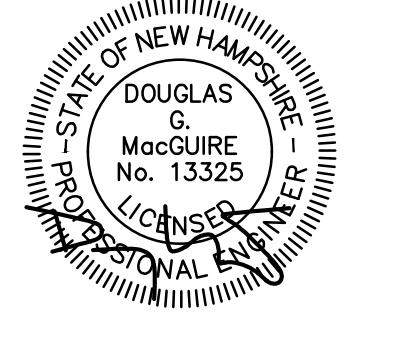
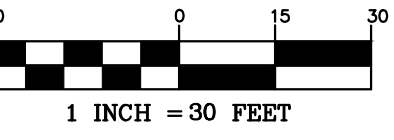
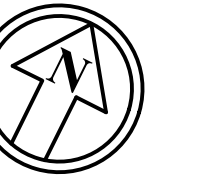
1. SIGHT DISTANCE HAS BEEN DESIGNED IN ACCORDANCE WITH NHDOT STANDARDS.

PROFILE
SCALE: 1"=30'H, 3"V



The Dubai Group, Inc.
136 Harvey Road Bldg B101
Londonderry, NH 03053
603-458-6462

Engineers
Planners
Surveyors
TheDubayGroup.com



REVISIONS:

REV.	DATE:	COMMENT:	BY:

DRAWN BY: SJK
CHECKED BY: DGM
DATE: NOV 4, 2021
SCALE: 1"=30'
FILE: 491-SIGHT DISTANCE
DEED REF: -

PROJECT:
109 ROCKINGHAM ROAD
MAP 5 LOT 038-001
109 ROCKINGHAM ROAD
DERRY, NH 03038

FOR
ERIC SPOFFORD
6 MANOR PARKWAY
SALEM, NH 03079

OWNER
WATTS AUTO SALVAGE INC
PO BOX 332
DERRY, NH 03038

SHEET TITLE:
SIGHT DISTANCE PLAN AND PROFILE

PROJECT #491 SHEET C1 of C1

N:\PROJECTS\491-Spofford-West Running Brook_Derry\DWG\CURRENT\491-SIGHT DISTANCE.dwg



2 Elevation 2 - a
SCALE: 3/32" = 1'-0"

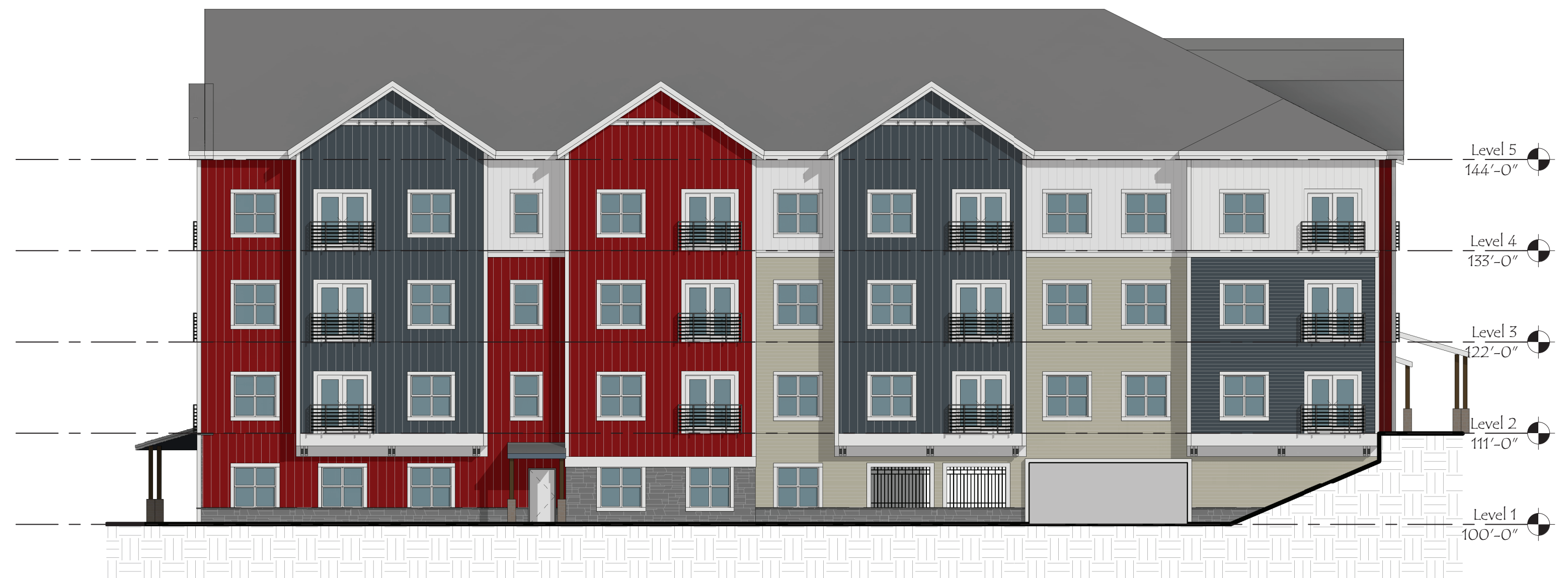


1 Elevation 1 - a
SCALE: 3/32" = 1'-0"

PROJECT NO. 2021063

109 ROCKINGHAM ROAD
EXTERIOR ELEVATIONS

06 JUNE 2023



2 Elevation 3 - a
SCALE: 3/32" = 1'-0"



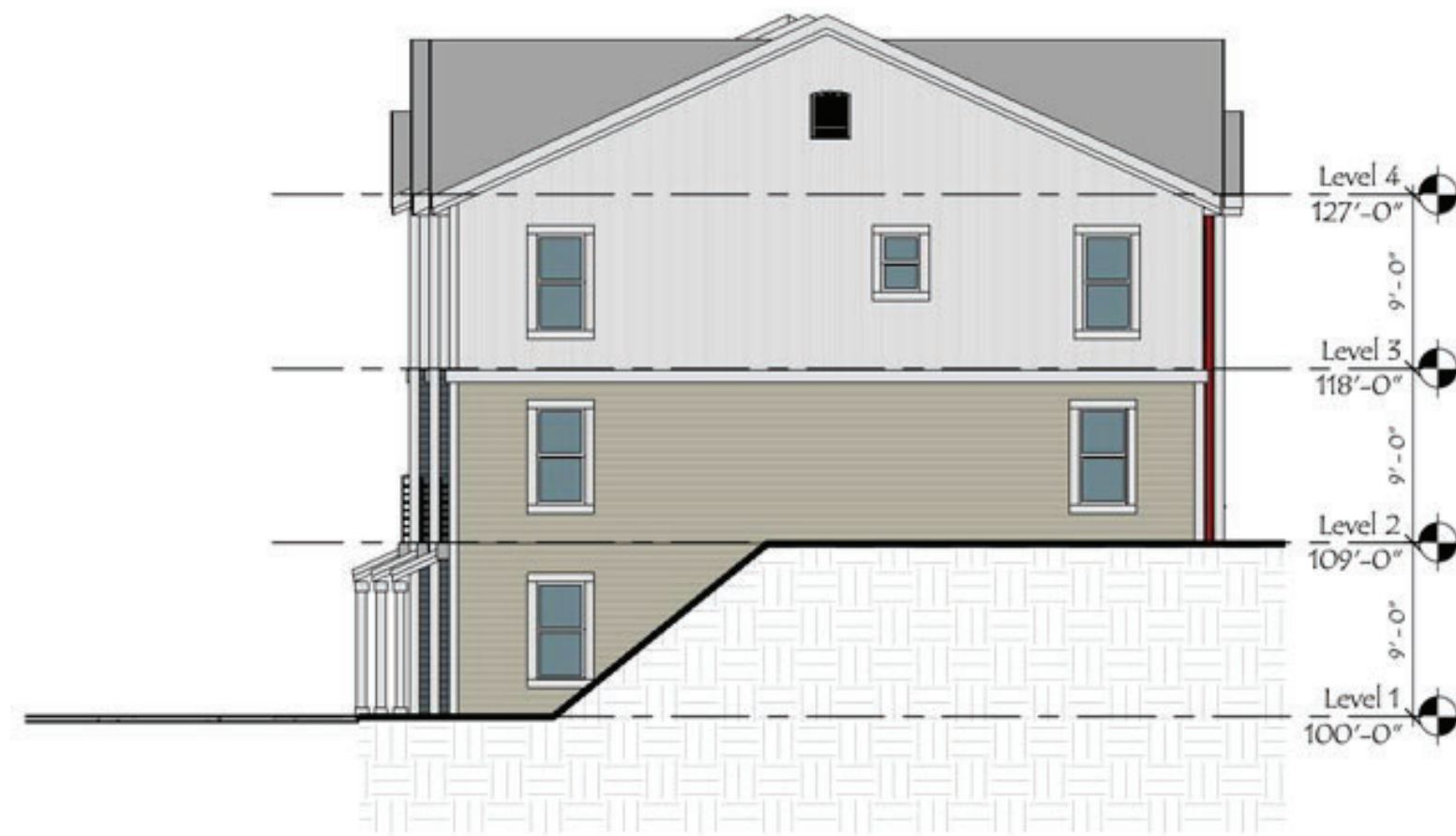
1 Elevation 4 - a
SCALE: 3/32" = 1'-0"

PROJECT NO. 2021063

109 ROCKINGHAM ROAD

EXTERIOR ELEVATIONS

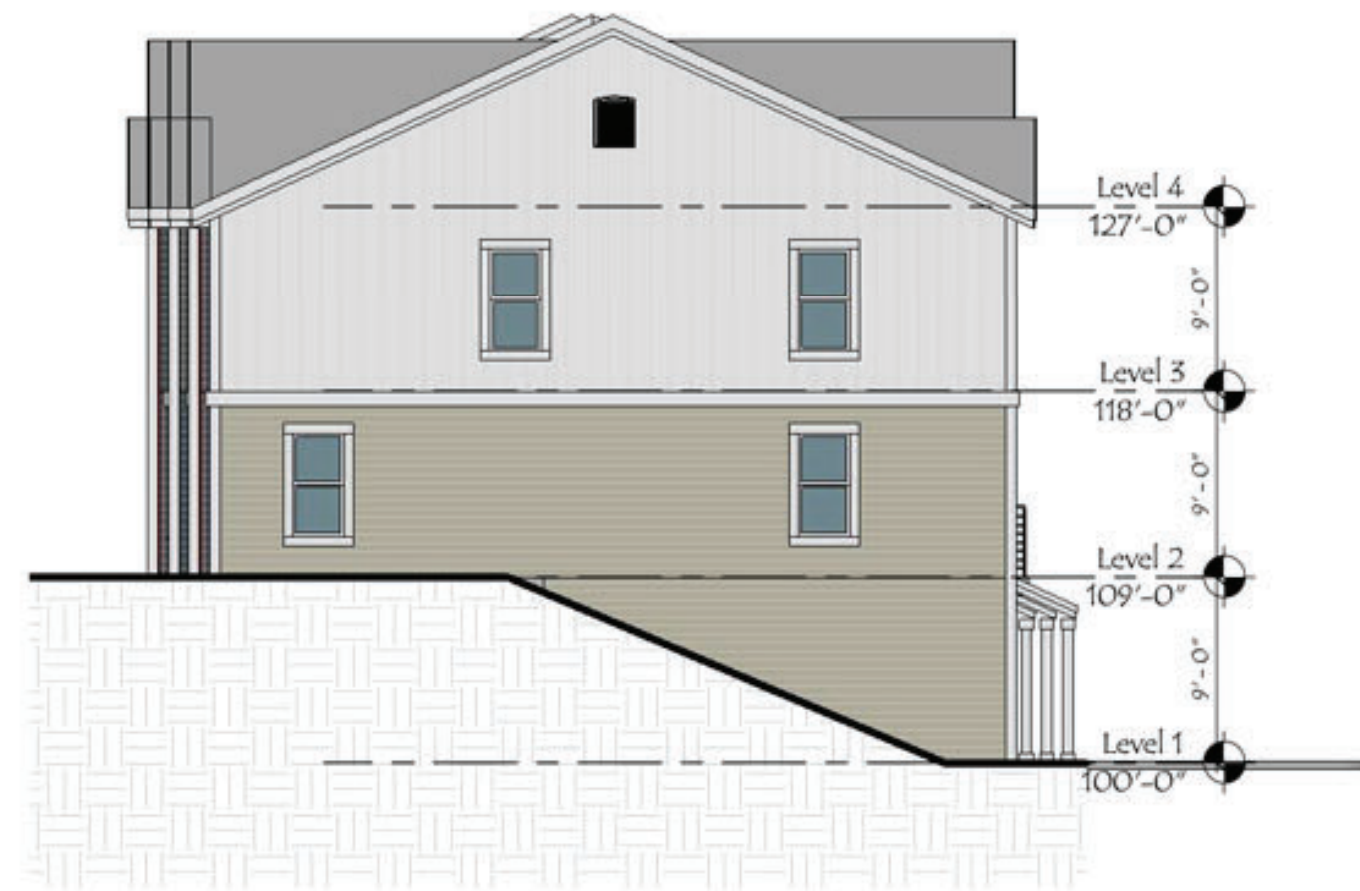
06 JUNE 2023



4 LEFT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



1 REAR ELEVATION
SCALE: 1/8" = 1'-0"



2 RIGHT SIDE ELEVATION
SCALE: 1/8" = 1'-0"



3 FRONT ELEVATION
SCALE: 1/8" = 1'-0"