

Single Family House

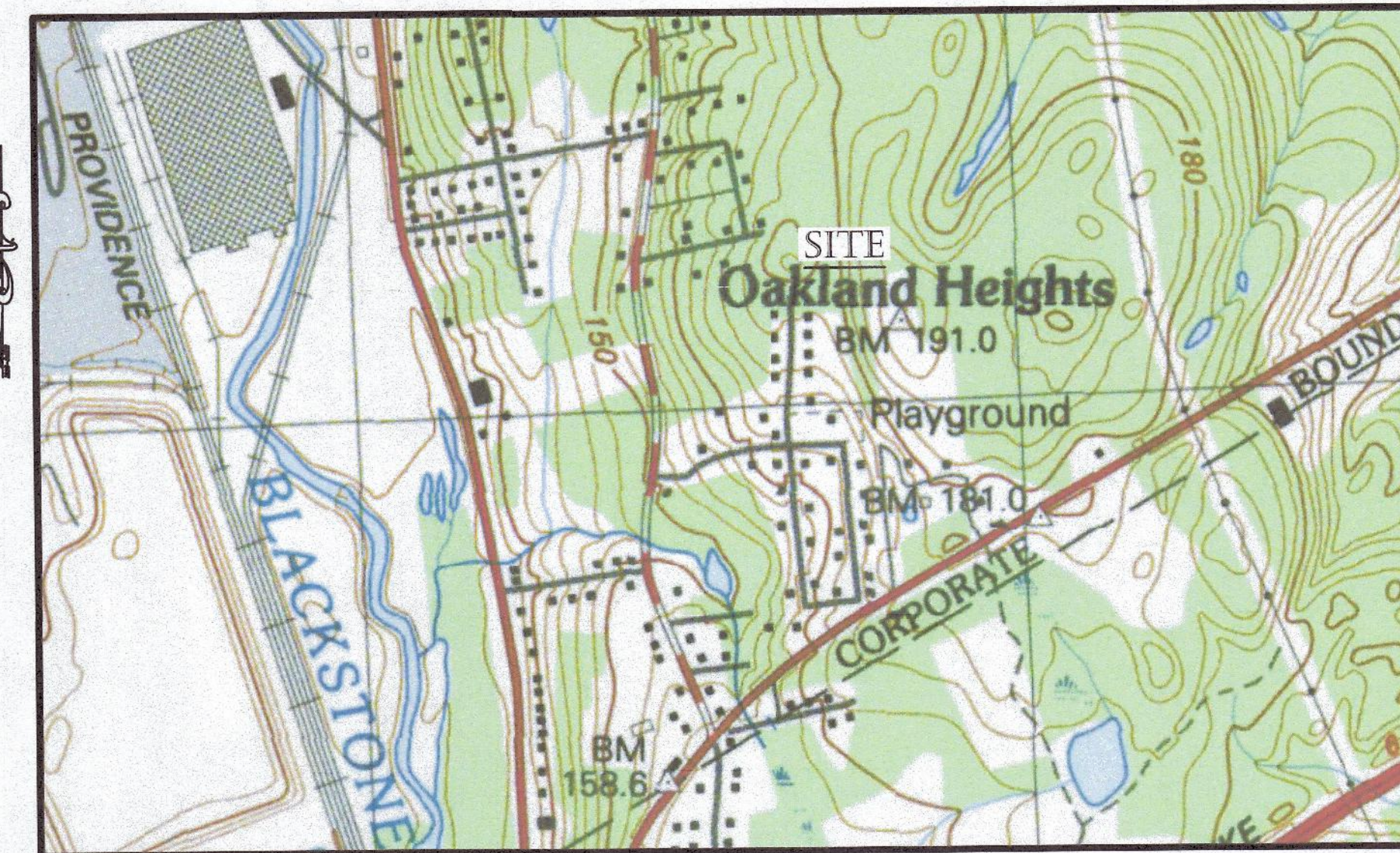
56 Park Hill Avenue
Worcester, MA 01604

D&L Design Group
Civil Engineering & Land Surveying
115 Water Street • Millis, MA 01757
P: (508) 408-2577
www.dandlgroup.com

P.E.	P.L.S.



LOCUS MAP - AERIAL



LOCUS MAP - USGS

DRAWING LIST

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-0.0
EXISTING CONDITIONS & EROSION CONTROL	C-1.0
LAYOUT PLAN	C-2.0
SEPTIC DESIGN	C-3.0
CONSTRUCTION DETAILS	C-4.0

PROPERTY INFORMATION

OWNER OF RECORD: CAROL ANN KUSY
400 GREENWOOD STREET
MILLBURY, MA 01527

WORCESTER ASSESSORS INFORMATION:
MAP 45, PARCEL 15, LOT 2
TOTAL AREA: 24,900 S.F.

DEED REFERENCES:
WORCESTER REGISTRY OF DEEDS: BK. 68258, PG. 155

ZONING INFORMATION: RS-7 -DISTRICT
MIN. AREA - 7,000 S.F.
MIN. FRONTAGE - 65'
FRONT YARD - 20'
SIDE YARD - 8'
REAR YARD - 20'
MAX. BUILDING HEIGHT 2+ STORIES - 35'
MAX. COVERAGE 40%

REVISIONS		
REV.	DATE	DESCRIPTION

PROJECT NO. J-230

DESIGNED BY PML

CHECKED BY MD

DATE 10/8/24

CAD FILE J-230 SITE PLAN

PLAN NO.

OWNER:
Carol Ann Kusy
400 Greenwood Street, Millbury, MA 01527

APPLICANT:
Joseph A. Marinella
56 Park Hill Ave, Worcester Ma
P:(508)-918-9766

TITLE:
Single Family House
56 Park Hill Avenue
Worcester, MA 01604

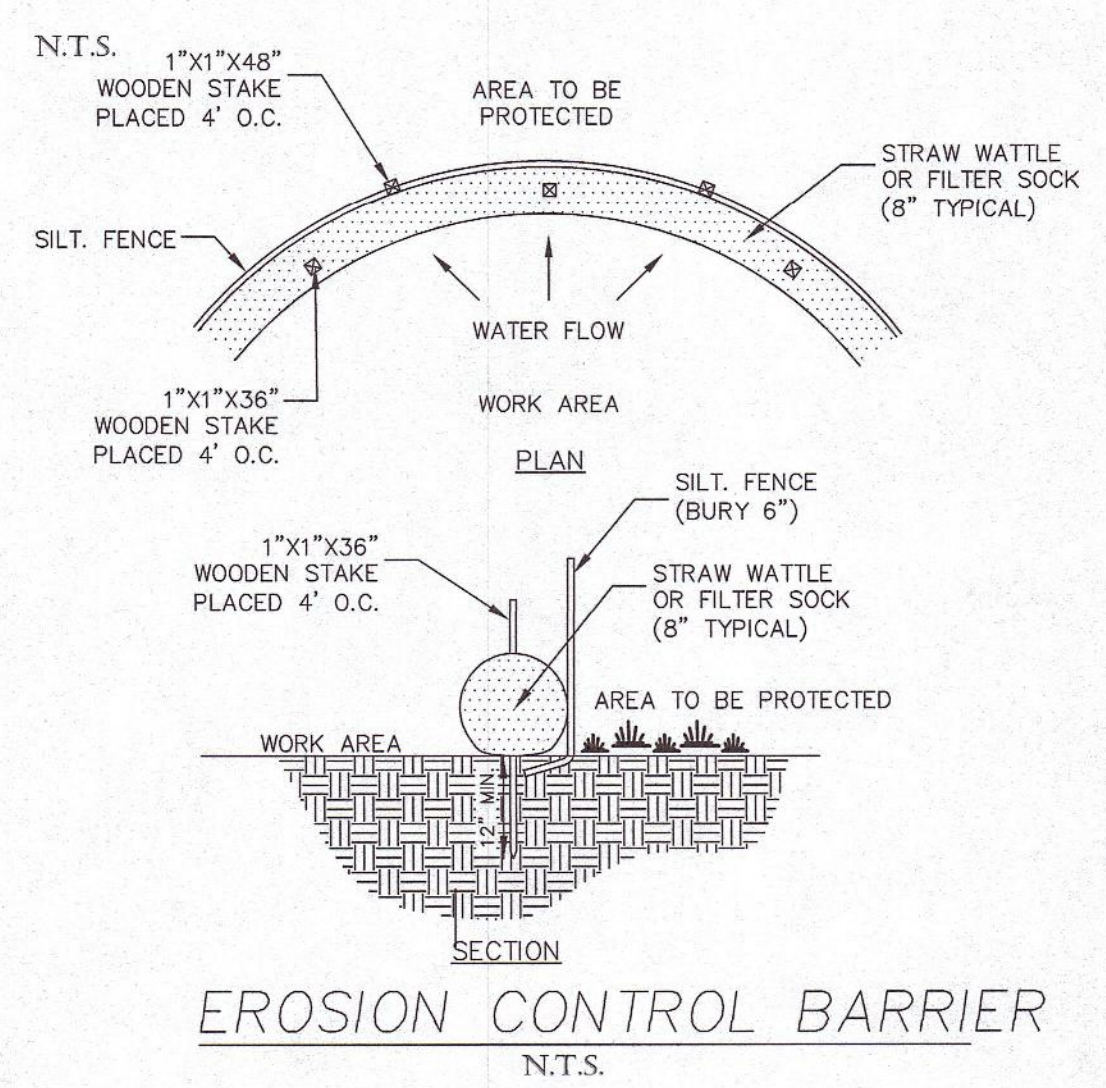
SHEET TITLE
COVER SHEET

SHEET NO.
C-0.0

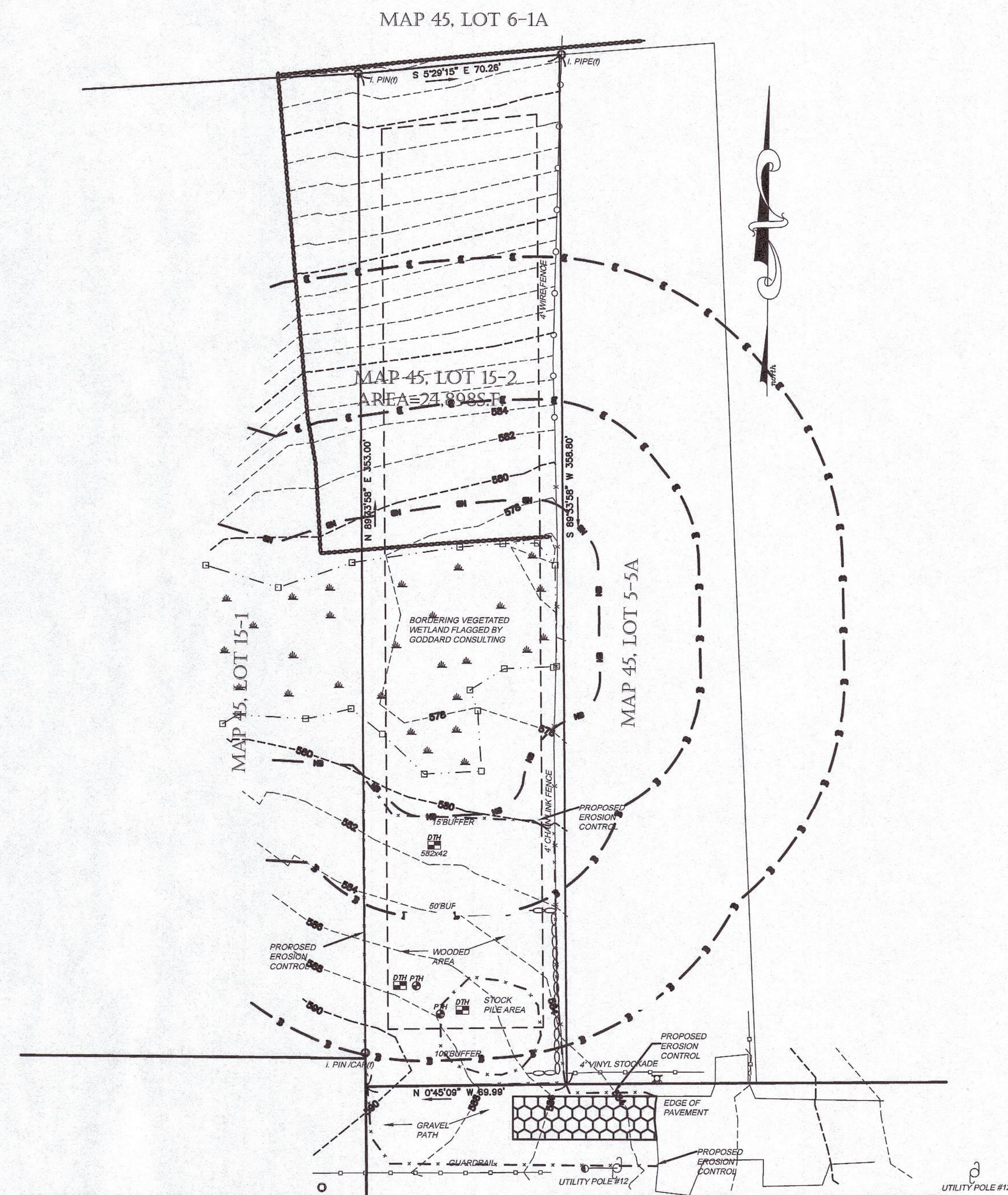


- NOTES
- DEED REFERENCE IN THE WORCESTER REGISTRY OF DEEDS IS DEED 68258, PAGE 155
 - ASSESSOR REFERENCE : 45/0015/002 IN THE CITY OF WORCESTER ASSESSORS MAPS.
 - THE PURPOSE OF THIS PLAN IS FOR THE THE DEVELOPMENT OF THE EXISTING LOT AT 56 PARK HILL AVENUE
 - BENCHMARK TO BE SET PRIOR TO START OF PROJECT.
 - CONTRACTOR TO VERIFY THE WATER IN PARK HILL AVENUE PRIOR TO START OF CONSTRUCTION.
 - LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON FIELD LOCATION OF VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER GATES ETC. AND COMPLYING INFORMATION FROM PLANS SUPPLIED BY VARIOUS UTILITY COMPANIES. CONTRACTOR TO CALL DIG SAFE PRIOR TO START OF PROJECT.
 - VERTICAL DATUM IS BANAV88 SEE PLANS FOR PROJECT BENCHMARKS HORIZONTAL DATUM IS MA STATE PLANE COORDINATES ALL DATUMS DERIVED BY GOS METHODS.

THE SITE IS LOCATED NEAR A ZONE X FLOOD HAZARD AREA (100-YEAR FLOODPLAIN) PER FEMA FLOOD MAP PANEL 25027C0620E. DATED EFFECTIVE 7/4/2011.



LEGEND	
EXISTING CONTOURS	---
PROPOSED CONTOURS	---
EXISTING ELEVATIONS	100.0
PROPOSED ELEVATIONS	100x0
EDGE OF WETLANDS	---
BENCHMARK	B.M.
WATER SERVICE	W
GAS SERVICE	GAS
BENCHMARK	S
SEWER LINE	S
TOP OF CONCRETE	TOC



PARK HILL AVENUE

EXISTING CONDITIONS & EROSION CONTROL PLAN

SCALE: 1"=30'

- NOTE:
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF OTHER CONSTRUCTION ACTIVITIES AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION BY THE APPLICANT TO THE SATISFACTION OF THE COMMISSIONER OF INSPECTIONAL SERVICES.
 - ALL TREE AND STUMP REMOVAL SHALL BE IN ACCORDANCE WITH THE ASIAN LONGHORNED BEETLE PROGRAM REQUIREMENTS AND ALL NEW TREES AND SHRUB PLANTINGS SHALL BE ASIAN LONGHORNED BEETLE AND EMERALD ASH BORER RESISTANT.
 - ALL WORK SHALL CONFORM TO THE CITY OF WORCESTER'S ZONING ORDINANCE, PLANNING BOARD DECISION AND CONDITIONS OF APPROVAL, AND TO THE STANDARDS CONTAINED IN THE CITY OF WORCESTER, DEPARTMENT OF PUBLIC WORKS & PARKS, ENGINEERING DIVISION, CONSTRUCTION MANAGEMENT SECTION, STANDARD SPECIFICATIONS & DETAILS, MOST RECENT EDITION.

DIG SAFE NOTE:

UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 82 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. ALSO, CALL "DIG-SAFE" AT (888)344-7233 [(888)DIG-SAFE].

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

REVISIONS		
REV.	DATE	DESCRIPTION

PROJECT NO.	J-230
DESIGNED BY	PML
CHECKED BY	MD
DATE	9/23/24
CAD FILE	J-230 SITE PLAN
PLAN NO.	

OWNER:
Carol Ann Kusy
400 Greenwood Street, Millbury, MA 01527

APPLICANT:
Joseph A. Marinella
56 Park Hill Ave, Worcester Ma
P:(508)-918-8766

TITLE:

Single Family House
56 Park Hill Lake Avenue
Worcester, MA 01604

SHEET TITLE

EXISTING CONDITIONS PLAN

SHEET NO.

C-1.0

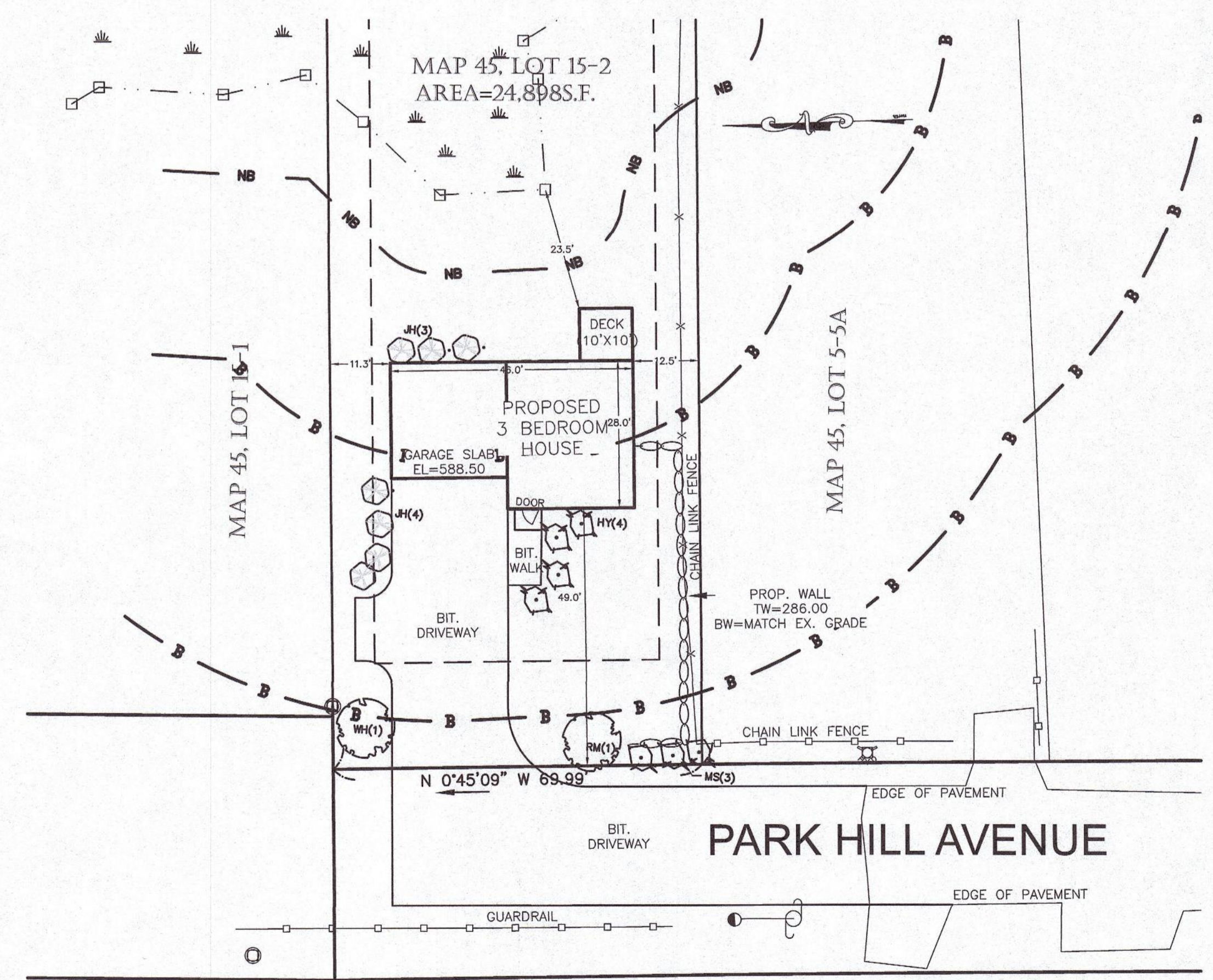


ZONE: RS-7

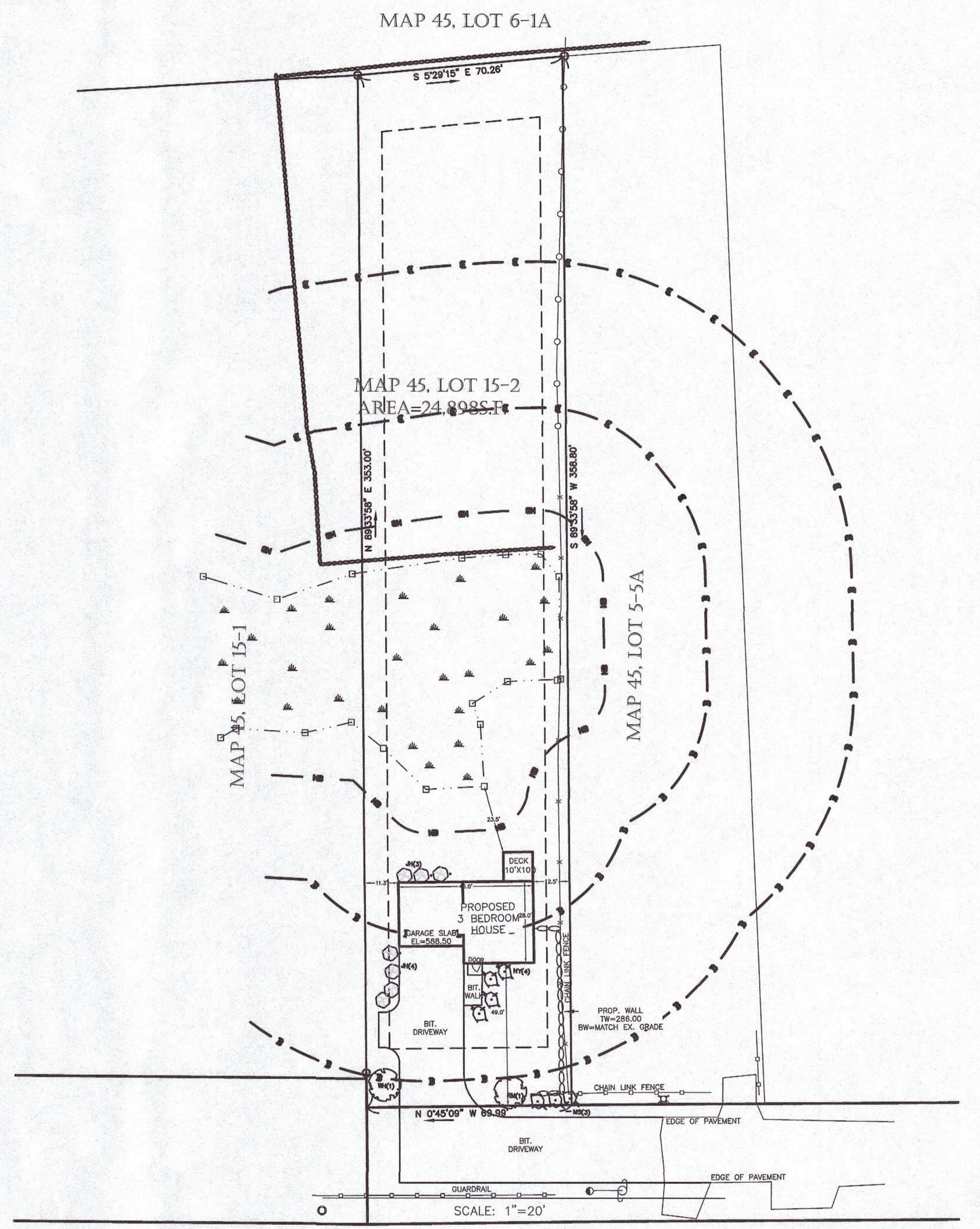
	REQUIRED:	EXISTING	PROPOSED
MIN. FRONTAGE:	65'	69.99'	69.99'
MIN. AREA:	7,000 S.F.	24,900 S.F.	24,900 S.F.
FRONT SETBACK:	20'	N/A	49'
SIDE SETBACK:	8'	N/A	11.3'
REAR SETBACK:	20'	N/A	270.7'
MAXIMUM STORIES:	2+	N/A	2
MAXIMUM IN FT.	35'	N/A	25'
MAXIMUM FRONT YARD IMPERVIOUS 50%		N/A	31%
PARKING SPACES	2 PER UNIT	N/A	4
REGULARITY FACTOR	>0.4	N/A	0.8

Planting Schedule

Qty.	Key	Common Name	Size	Remarks
TREES				
1	WH	Washington Hawthorn	4-5'	B&B
1	RM	Red Maple	4-5'	B&B
SHRUBS				
8	JH	Japanese Holly	2 1/2"-3" Cal.	B&B
4	HY	Hatfield Yew	2 1/2"-3" Cal.	B&B
3	MS	Mixed Shrubs & Grasses	2 1/2"-3" Cal.	B&B



SITE PLAN - 20 SCALE
SCALE: 1" = 20'



PARK HILL AVENUE
PROPOSED SITE PLAN
SCALE: 1" = 30'



DIG SAFE NOTE:
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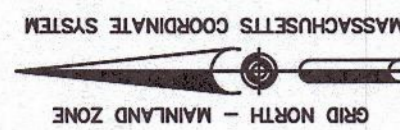
Single Family House
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SHEET TITLE

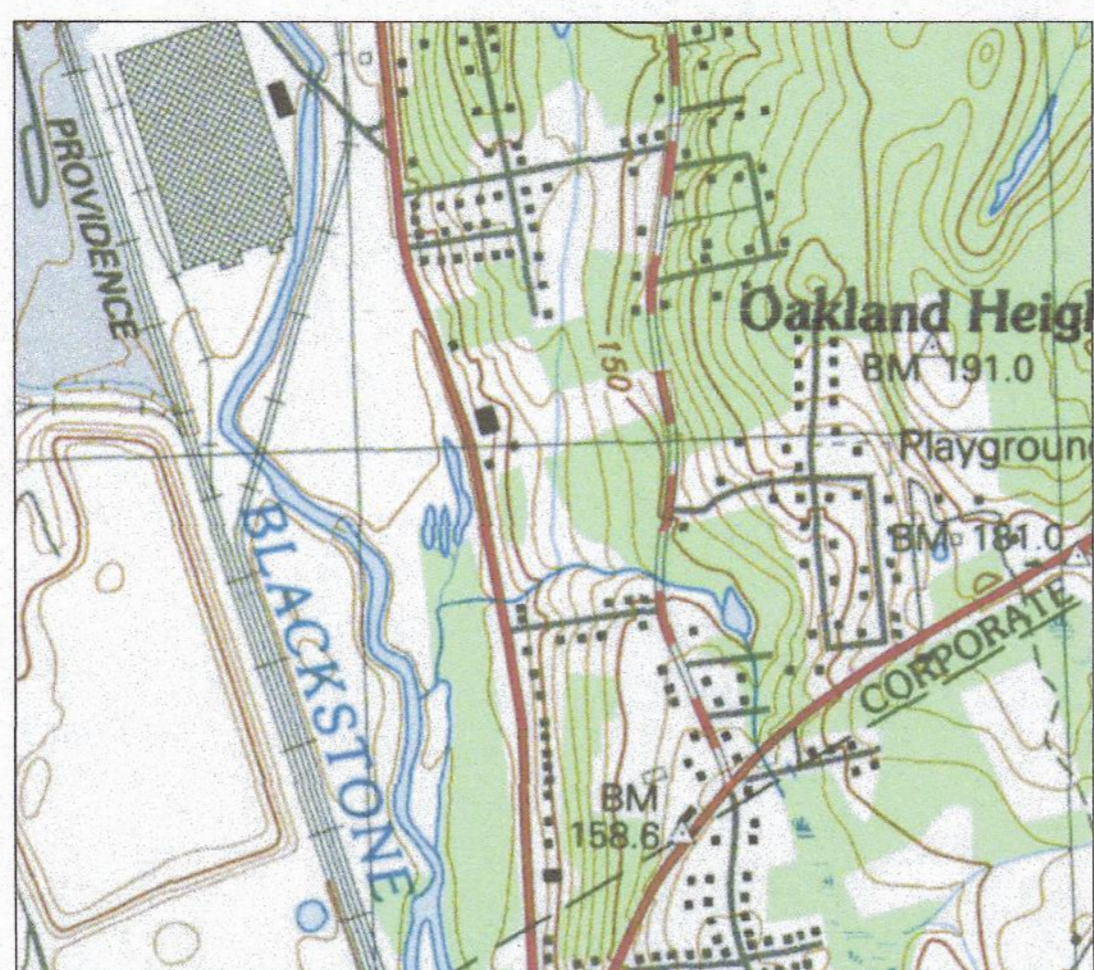
LAYOUT PLAN

SHEET NO.

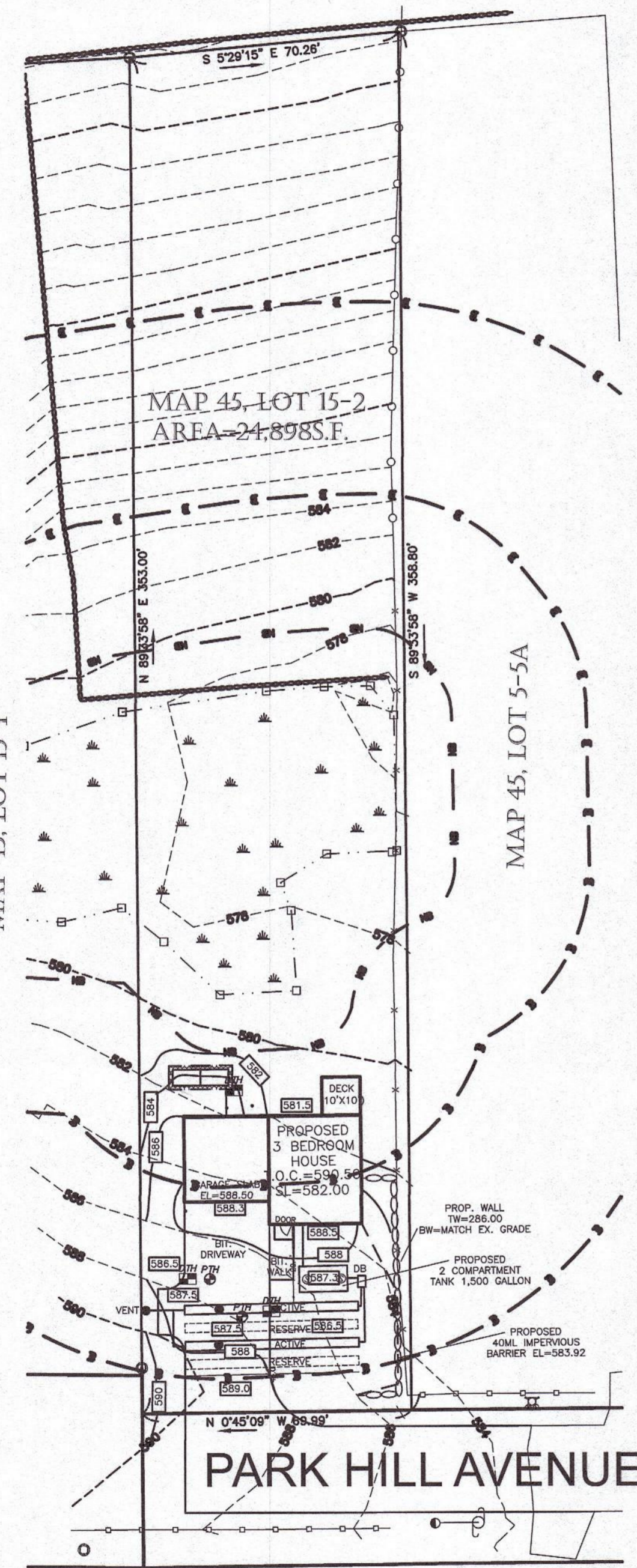
C-2.0



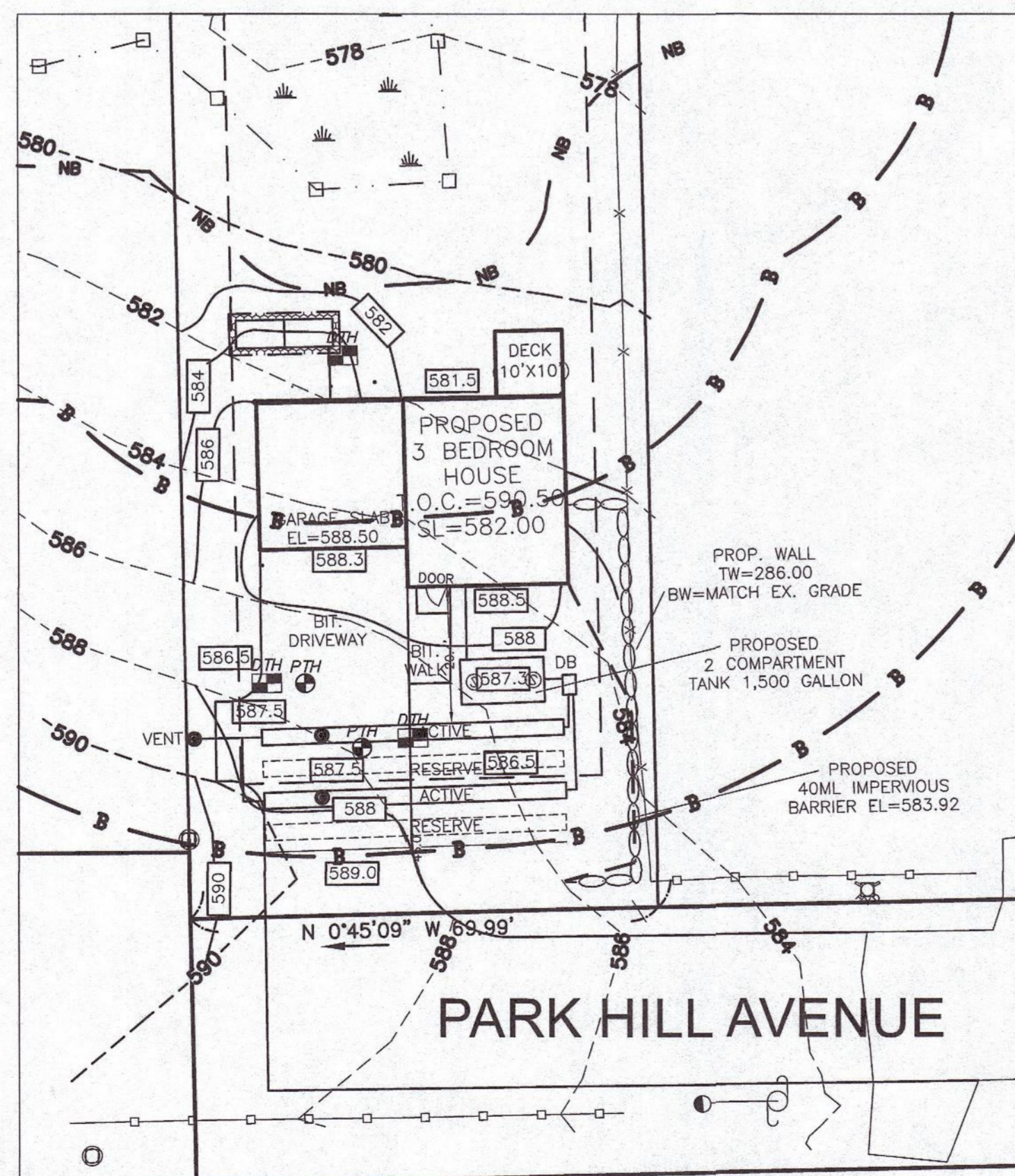
MAP 45, LOT 6-1A



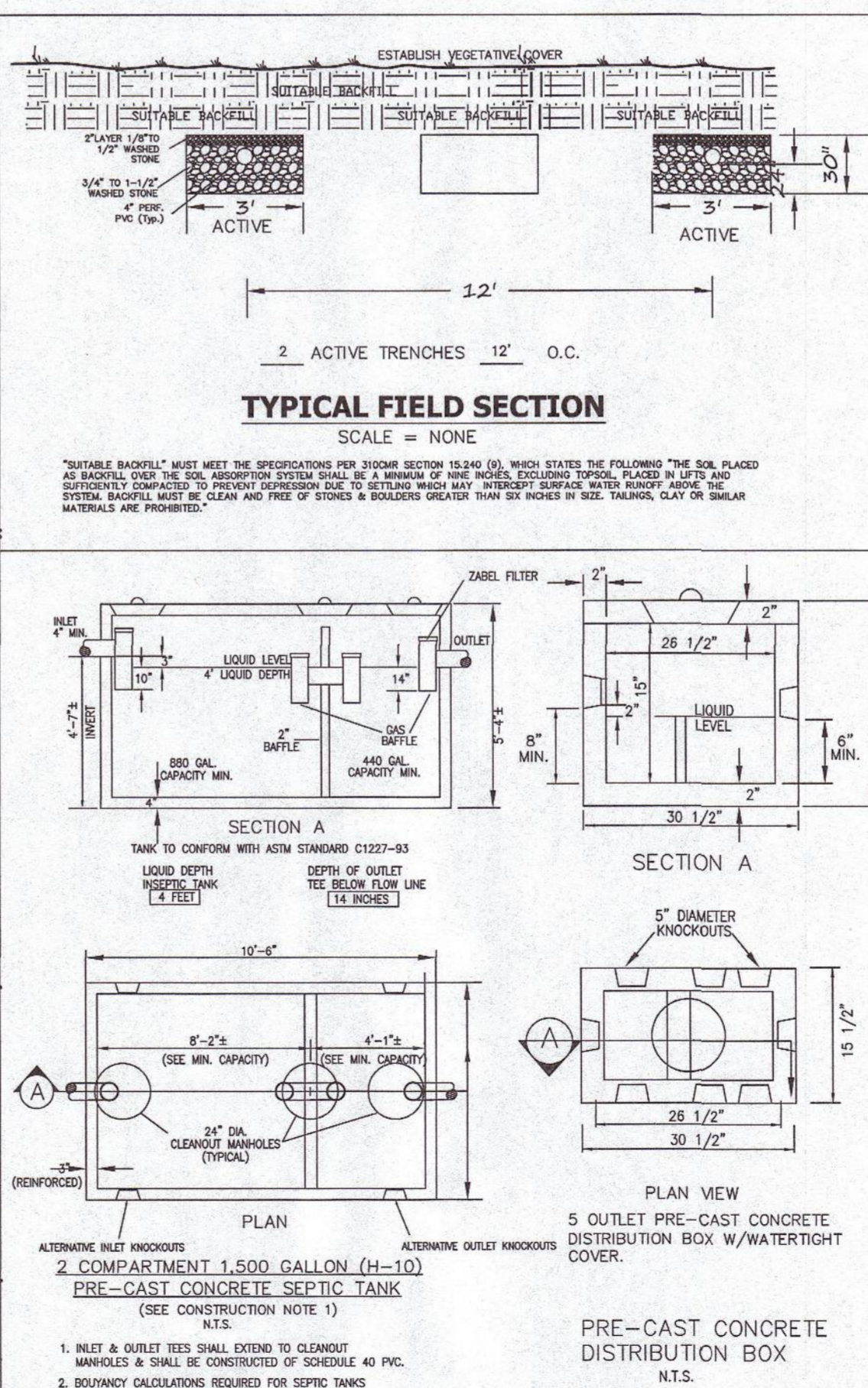
LOCUS MAP
SCALE: N.T.S.



SITE PLAN
SCALE: 1" = 30'



FIELD DETAIL
SCALE: 1" = 20'

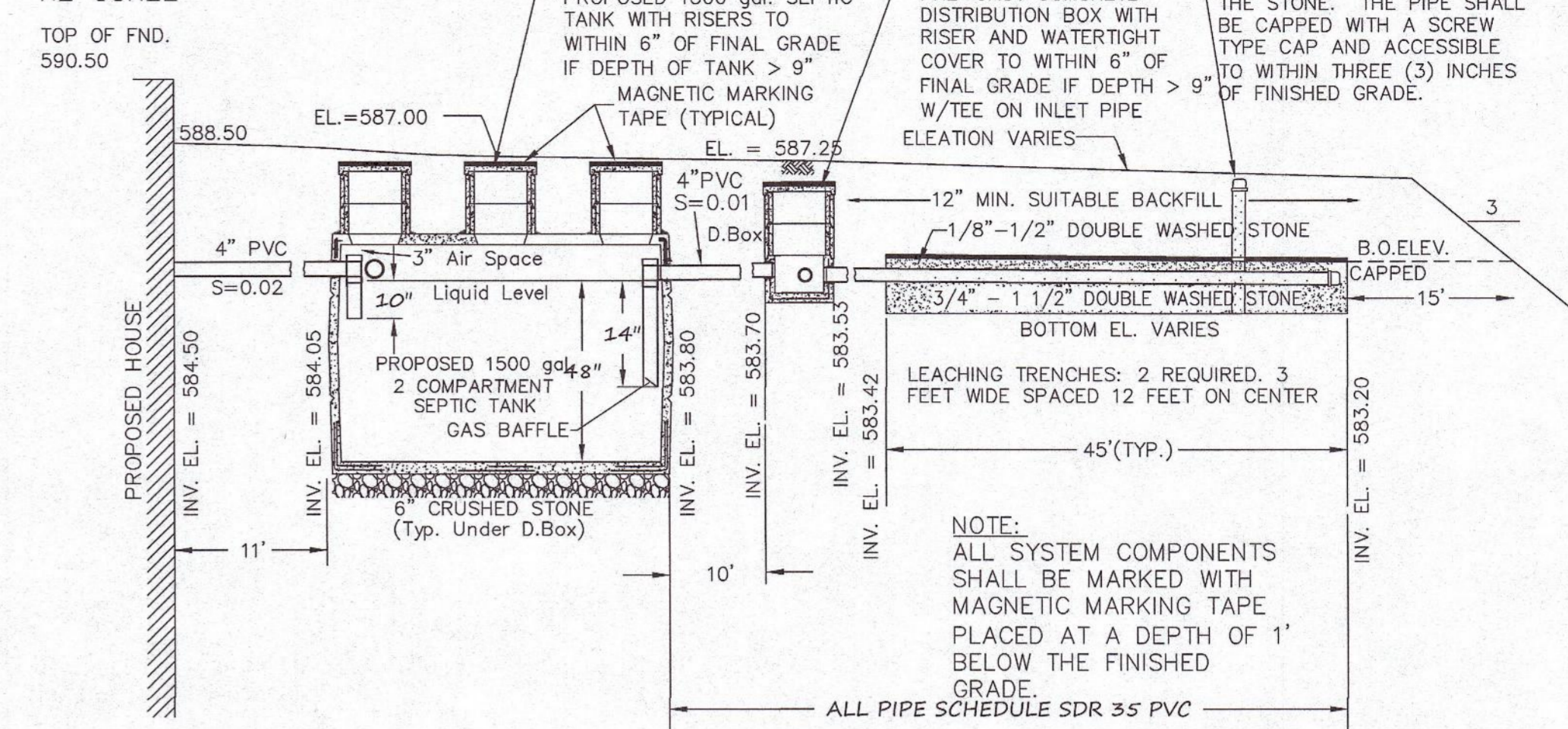


TYPICAL FIELD SECTION
SCALE: NONE

DESIGN ELEVATIONS

TOP OF FOUNDATION	590.50
SLAB ELEVATION	582.00
INV. AT FOUNDATION	584.50
INV. AT SEPTIC TANK INLET	584.05
INV. AT SEPTIC TANK OUTLET	583.80
INV. AT DIST. BOX INLET	583.70
INV. AT DIST. BOX OUTLET	583.53
BREAKOUT ELEVATION	583.92
INV. BEGINNING TRENCH	583.42
INV. END OF TRENCH	583.20
BOTTOM OF TRENCH	581.20
ELEV. OF GROUND WATER	NO GW AT 109"
ELEVATION	577.20

NO SCALE



SYSTEM PROFILE

COMPONENT NOTES

SEPTIC TANK
SEPTIC TANK SHALL BE A PRECAST, REINFORCED CONCRETE TANK MADE WATER TIGHT. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 REQUIREMENTS AND PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE.

TANK/ SYSTEM TO BE VENTED THROUGH THE BUILDING PLUMBING SYSTEM AS REQUIRED BY BUILDING CODE.

TANK SHOULD BE INSPECTED, MAINTAINED AND BE PUMPED OUT WHEN SLUDGE DEPTH IN THE BOTTOM EXCEEDS ONE FOURTH OF THE TOTAL LIQUID DEPTH.

AT LEAST THREE 20" MANHOLES SHALL BE PROVIDED. AT LEAST ONE OF THE MANHOLES SHALL HAVE AN ACCESS PORT ACCESSIBLE TO WITHIN 6" OF FINISH GRADE.

"D" BOX
"D" BOX TO BE MADE WATER TIGHT. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 REQUIREMENTS AND PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE.

"D" BOX OUTLETS SHALL BE INSTALLED LEVEL ("BUILT UP" INVERTS, NOT PERMITTED).

FIRST 2" (MIN.) OF OUTLETS SHALL BE INSTALLED LEVEL TO EQUALIZE FLOW.

THE MINIMUM INSIDE DIMENSIONS OF THE "D" BOX TO BE 12" AND THE MINIMUM WALL THICKNESS TO BE 2".

WHEN INLET PIPE SLOPE EXCEEDS 8%-PVC INLET TEE REQUIRED. CUT LOW END 1" ABOVE OUTLET INVERT.

"D" BOX COVER TO BE SEALED WITH BITUMEN.

LEACH AREA

ALL LOAM, LARGE BOULDERS OR FOREIGN MATERIAL ENCOUNTERED DURING EXCAVATION ARE TO BE REMOVED FROM THE LEACHING AREA.

ALL SOIL INTERFACES SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF STONE.

ALL STONE IN PLACE SHALL BE DURABLE, FREE FROM IRON, FINES AND DUST AND DOUBLE WASHED.

WHEN GRAVEL FILL IS REQUIRED, ALL LOAM AND ORGANIC MATERIAL SHALL BE REMOVED FROM AREA TO BE FILLED. FILL SHALL BE COMPACTED TO MINIMIZE SETTLEMENT AND SHALL BE CLEAN GRANULAR MATERIAL, FREE FROM FINES AND ORGANIC MATERIALS, AND SHALL BE IN ACCORDANCE WITH 310 CMR 15.255(3).

ALL DISTURBED AREAS ARE TO BE LOAMED, SEEDED AND MAINTAINED TO PREVENT EROSION.

AREAS ABOVE THE SOIL ABSORPTION SYSTEM SHALL REMAIN PEROUS UNLESS UNAVOIDABLE. IN SUCH CASES THE SYSTEM SHALL BE VENTED.

SYSTEM IN FILL

IF ANY PORTION OF THE PROPOSED LEACHING AREA IS LOCATED ABOVE EXISTING GRADE OR WITHIN TOPSOIL, SUBSOIL, PEAT OR OTHER UNSUITABLE OR IMPERVIOUS SOIL LAYER, THEN THE PLACEMENT OF FILL IS REQUIRED. PRIOR TO THE PLACEMENT OF FILL, ALL UNSUITABLE OR IMPERVIOUS SOILS SHALL BE EXCAVATED TO A MINIMUM OF FIVE FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE SOIL ABSORPTION SYSTEM TO THE DEPTH OF NATURALLY OCCURRING PERVIOUS MATERIAL. FILL MATERIAL SHALL BE SELECT, ON-SITE OR IMPORTED SOIL, CONSISTING OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES. MIXTURES AND LAYERS OF DIFFERENT SOIL CLASSES SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES. A SIEVE ANALYSIS USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL. UP TO 45% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED IN THE #4 SIEVE. SIEVE ANALYSES SHALL ALSO BE PERFORMED ON THE FRACTION OF FILL SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSES MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE	
	#	
4.75 MM	100%	
0.30 MM	100%-100%	
0.15 MM	0%-20%	
0.075 MM	0%-5%	

ZONING: RS-7

LOT SIZE	REQ'D.	PLAN
AREA:	7,000	24,900
FRONTAGE:	65	70
SETBACKS:		
STREET:	20	49'
SIDE LINE:	8	11.3'
REAR:	20	270.7'

OWNER:

CAROL ANN KUSY
400 GREENWOOD STREET
MILLBURY, MA 01527

DESIGN CRITERIA: PROPOSED SINGLE FAMILY

DESIGN FLOW FOR 3 BEDROOMS
3 Bedrooms x 100 gal./bedroom/day = 330 gallons/day (330 GPD Min.)

THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL. THE USE OF GARBAGE DISPOSALS IS NOT RECOMMENDED WITH SUBSURFACE DISPOSAL FACILITIES.

USE: 4 LINE 3"W X 1" X 27' 5 OUTLET D.B.
Septic Tank Design: 330 GPD x 2 = 660 Gal. (2-1,500 Gal. Min.)

LEACHING FACILITY DESIGN CRITERIA

DESIGN FLOW FOR 3 BEDROOMS
3 Bedrooms x 110 gal./bedroom/day = 330 gallons/day

330 GPD / 0.33 = 1,000 S.F. REQUIRED

Soil: Class I, Loamy Sand, Effluent Loading Rate: 0.53 GPD/SF.

(a) Number of Trenches = 3.
(b) Trench Width = 3'.
(c) Trench Length = 37'.
(d) Stone Depth = 2'.
Sidewall Area = (4) X (37') X (1') X (2 Sides) = 296sf X 0.6GPD/SF = 176.4 GPD
Bottom Area = (4) X (3') X (37') : 444sf X 0.6 GPD/SF = 264.2 GPD.
Total : Area = 740 SF X 0.6 = 444 GPD.

This system is not designed to accommodate a garbage disposal. The use of garbage disposals is not recommended with subsurface disposal facilities.

GENERAL NOTES

- SYSTEM IS DESIGNED TO ACCOMMODATE SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USE AND CONSISTING OF WATER CARRIED PUTRESIBLE WASTE ONLY.
- ALL COMPONENTS OF THE SEWAGE DISPOSAL SYSTEM SHALL BE COVERED BY A MAXIMUM OF 36" OF CLEAN BACKFILL MATERIAL, FREE OF STONES AND BOULDERS GREATER THAN 8" IN SIZE.
- OWNER SHALL VERIFY EFFECTIVE ZONING REGULATIONS PRIOR TO CONSTRUCTION.
- PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON DATE OF TOPOGRAPHY, AND THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. IS NOT INTENDED OR IMPLIED.
- ALL PIPING SHALL BE LAID TRUE TO LINE, GRADE AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- THERE ARE NO EXISTING WELLS WITHIN 100' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM. (50' OF THE SEPTIC TANK)
- THERE ARE NO WELLS WITHIN 100' OF PROPOSED LEACH FIELD. LOT TO BE SERVICED BY TOWN WATER.
- ALL KNOWN WELLS WITHIN 200' OF THE PROPOSED PRIMARY AND EXPANSION LEACH AREAS ARE SHOWN.
- THE DESIGN ENGINEER SHALL BE NOTIFIED PROMPTLY OF ANY PLAN DEFICIENCIES FOUND DUE TO UNFORSEEN SUBSURFACE CONDITIONS OR OTHER REASONS THAT MIGHT AFFECT THE FUNCTION OF THIS DESIGNED SYSTEM.
- DEVIATIONS IN DESIGN OR CONSTRUCTION FROM THIS PLAN OR ANY OF THE CONDITIONS RELATING TO THE USE OR MAINTENANCE OF THE PROPOSED SYSTEM SHALL BE DEEMED TO VOID ANY CERTIFICATION OR REPRESENTATION MADE RELATIVE TO THIS SUBSURFACE SEWAGE DISPOSAL SYSTEM.
- CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY EXCAVATION.
- 1-888-DIG-SAFE (344-7233)
- PRIOR TO ANY CONSTRUCTION A BENCHMARK SHALL BE SET WITHIN 50'-75' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.
- CONSTRUCTION TO CONFORM WITH TITLE 5 OF MA STATE ENVIRONMENTAL CODE (310 CMR 15.000) AND BOH REQUIREMENTS FOR TOWN OF NATICK, MA.
- HYDRAULIC CEMENT TO BE USED ON ALL OUTLET OF SEPTIC TANK AND D-BOX.
- NO HEAVY MACHINERY IS ALLOWED TO PASS OVER LEACHING AREA OR OTHER SEPTIC COMPONENTS ONCE INSTALLED.
- SYSTEM SHOULD NOT BE BACKFILLED UNTIL INSPECTED BY NATICK BOARD OF HEALTH AND THE DESIGN ENGINEER.
- WATER SOFTENERS ARE NOT TO BE CONNECTED TO PROPOSED SEPTIC SYSTEM.
- ONCE SEPTIC SYSTEM COMPONENTS ARE INSTALLED THEY SHALL BE MARKED WITH MAGNETIC TAPE.

MUNICIPALITY: WORCESTER

SEWAGE DISPOSAL SYSTEM
FOR: STREET 56 PARK HILL AVENUE
ASSESSOR'S MAP 45 15-2 PARCEL
TOWN: WORCESTER, MA
DESIGNED FOR
Joseph A. Marinella
SCALE: 1" = 30' 56 Park Hill Ave, Worcester Ma
P: (508) 918-9786
OCTOBER 8, 2024



SCOPE OF WORK
THE CONTRACTORS SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO:
1. ALL LABORS AND MATERIALS TO INSTALL THE SEWAGE DISPOSAL SHOWN, COMPLETE AND PLACED IN SERVICE.
2. INSURING ALL PERMITS HAVE BEEN OBTAINED.
3. PERFORMING ALL WORK IN ACCORDANCE WITH TITLE 5.
4. ANY MEASURES TO PROTECT THE WETLAND, IF ANY.
5. TIMELY EXECUTION OF THE WORK.

MAINTENANCE NOTE
THE STATE ENVIRONMENTAL CODE, STATES: "SEPTIC TANKS SHOULD BE INSPECTED AND CLEANED AT LEAST ANNUALLY."
NO PERMANENT STRUCTURES ARE TO BE ERRECTED IN THE RESERVE AREA.
DO NOT PLANT TREES OVER OR NEAR THE FIELD. AVOID VEHICULAR TRAFFIC OVER SYSTEM.

SOIL LOGS DATE: 8/9/24

TEST PIT #1	EX.	TEST PIT #2	EX.
0-8 Ap SL	101R4/4 585.76	0-8 Ap SL	101R4/4 585.53
8-20 Bw SL	101R5/8 584.76	8-16 Bw SL	101R5/8 584.86
20-40 BC SL	101R6/6 583.09	16-40 BC SL	101R6/6 582.87
40-106 C LS	517/2 577.60	40-109 C SL	517/2 577.20

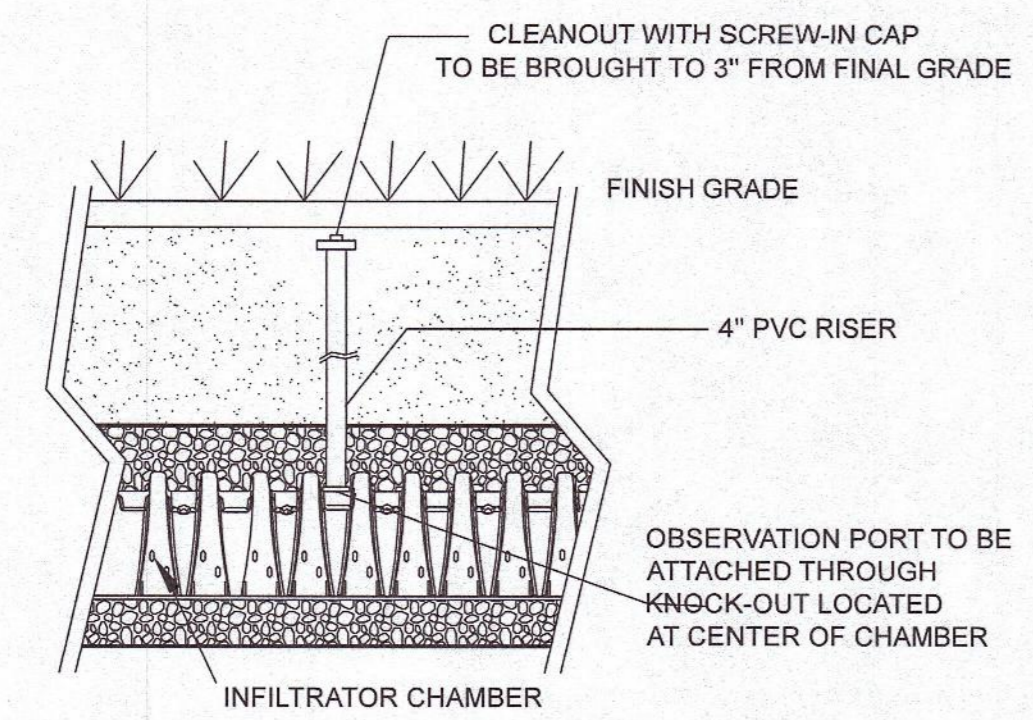
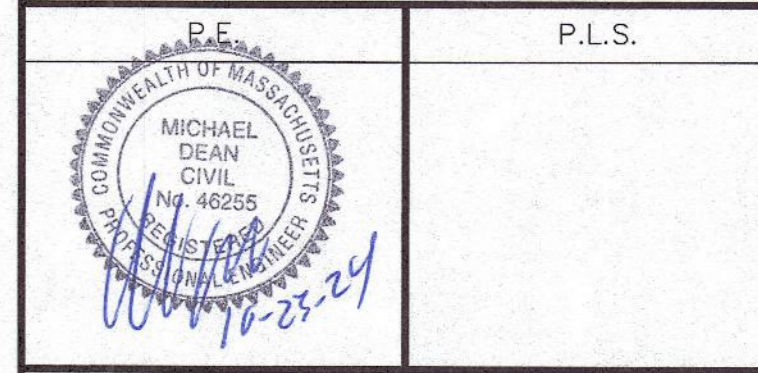
NO MOTTLES AT 106" NO MOTTLES AT 109"

SOIL TESTING
DATE: 8/9/24
PERFORMED BY: PETER LAVOIE, PEL332
WITNESSED BY: CEDRIC RICHARDSON
RESULT:
PERC TEST 1: 10(36-54")
PERC TEST 2: 20(36-54")

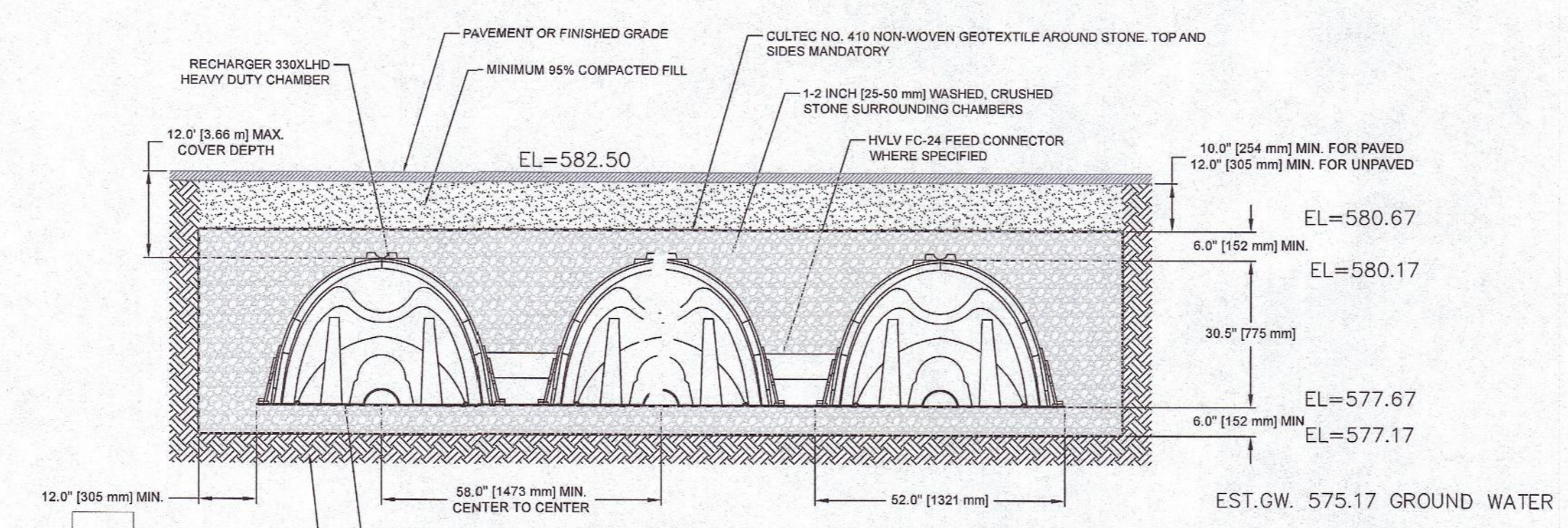
ADDITIONAL NOTES
1. DEED REFERENCE BOOK 59773 PAGE 234
2. WATER SOFTENERS ARE NOT TO BE CONNECTED TO SEPTIC SYSTEM.
3. ALL SEPTIC SYSTEMS WITHIN 150 FEET OF THE PROPOSED SEPTIC ARE SHOWN
4. NO PUBLIC DRINKING WATER SUPPLY WELLS EXIST ON SITE.
5. ON THE GROUND SURVEY PERFORMED BY DAL DESIGN GROUP, INC.
6. EXISTING LOT IS WITHIN THE GROUNDWATER PROTECTION ZONE.
7. EXISTING LOT FALLS WITHIN A NITROGEN SENSITIVE ZONE.

REVISIONS

Rev	Date	Description	Check	Made



**INTEGRATOR CHAMBER
INSPECTION PORT DETAIL**
N.T.S.



- NOTES:**
- THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 'STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS' THE LOAD COMBINATION SHALL INCLUDE:
 - INSTANTANEOUS ASPHALT DESIGN TRUCK LEVEL LOAD AT MINIMUM COVER
 - MAXIMUM PERMANENT 80-YEAR COVER LOAD
 - 1-WEEK PARKED ASPHALT DESIGN TRUCK LOAD
 - THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 'STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS' RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
 - THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE ASPHALT LIFTED BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S
 - THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430
 - THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
 - THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.50

CULTEC RECHARGER 330LXHD
N.T.S.

DTH#1 SOIL LOGS DATE: 8/9/24

TEST PIT #1	EX	EX. 586.43
0-8 Ap SL	10YR4/4	585.76
8-20 Bw SL	10YR5/8	584.76
20-40 BC SL	10YR6/6	583.09
40-106 C LS	5Y7/2	577.60

NO MOTTLER AT 106"

DTH#2

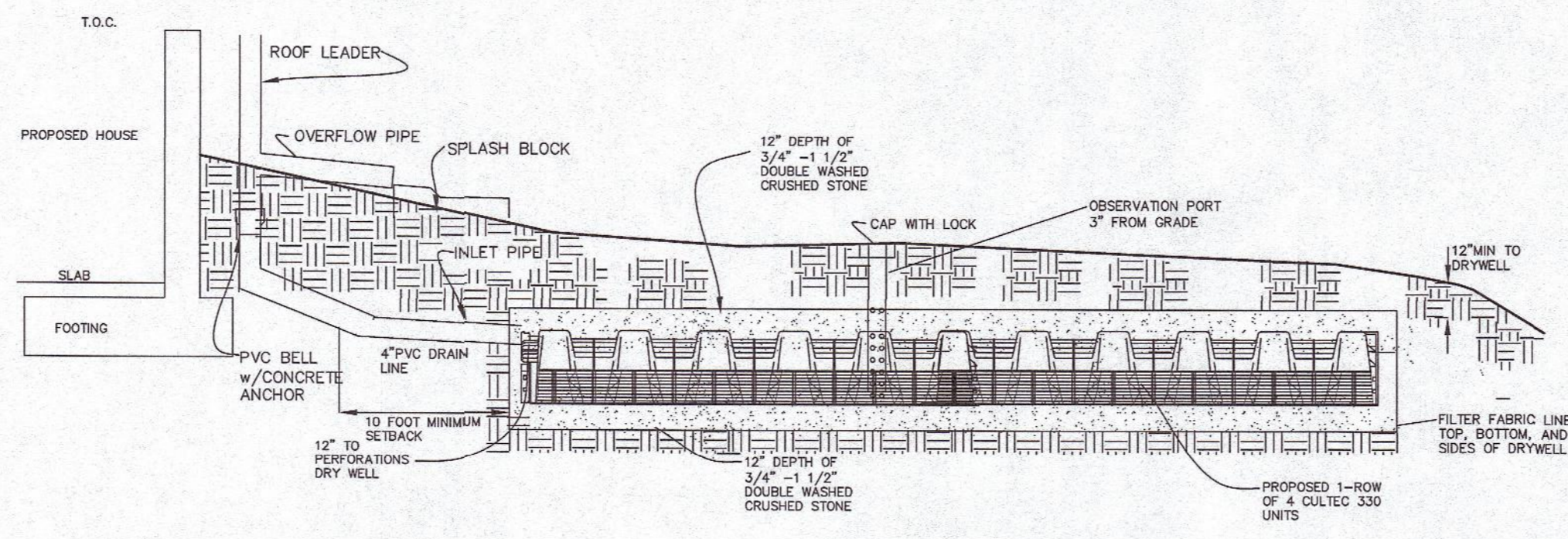
TEST PIT #2	EX	EX. 586.20
0-8 Ap SL	10YR4/4	585.53
8-16 Bw SL	10YR5/8	584.86
16-40 BC SL	10YR6/6	582.87
40-109 C SL	5Y7/2	577.20

NO MOTTLER AT 109"

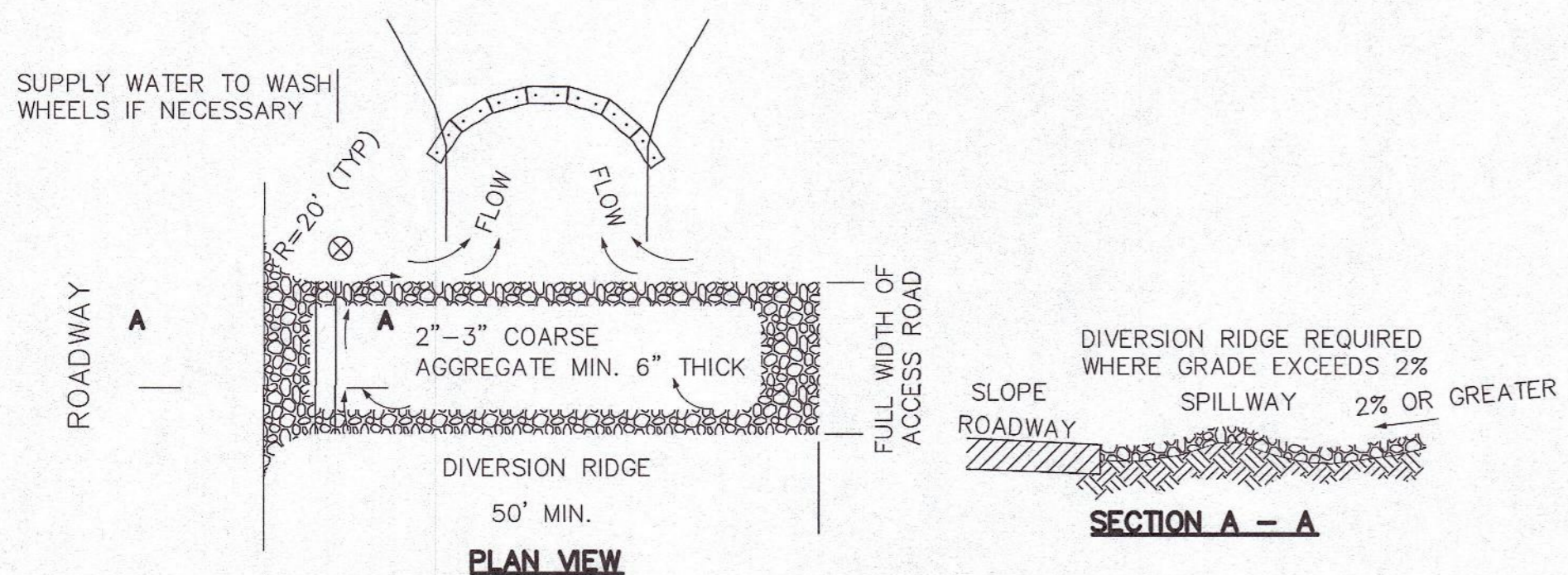
DTH#3

TEST PIT #3	EX	EX. 582.42
0-8 Ap SL	10YR4/4	581.75
8-24 Bw SL	10YR6/6	580.42
24-120 C LS	5Y7/2	572.42

MOTTLER AT 87"

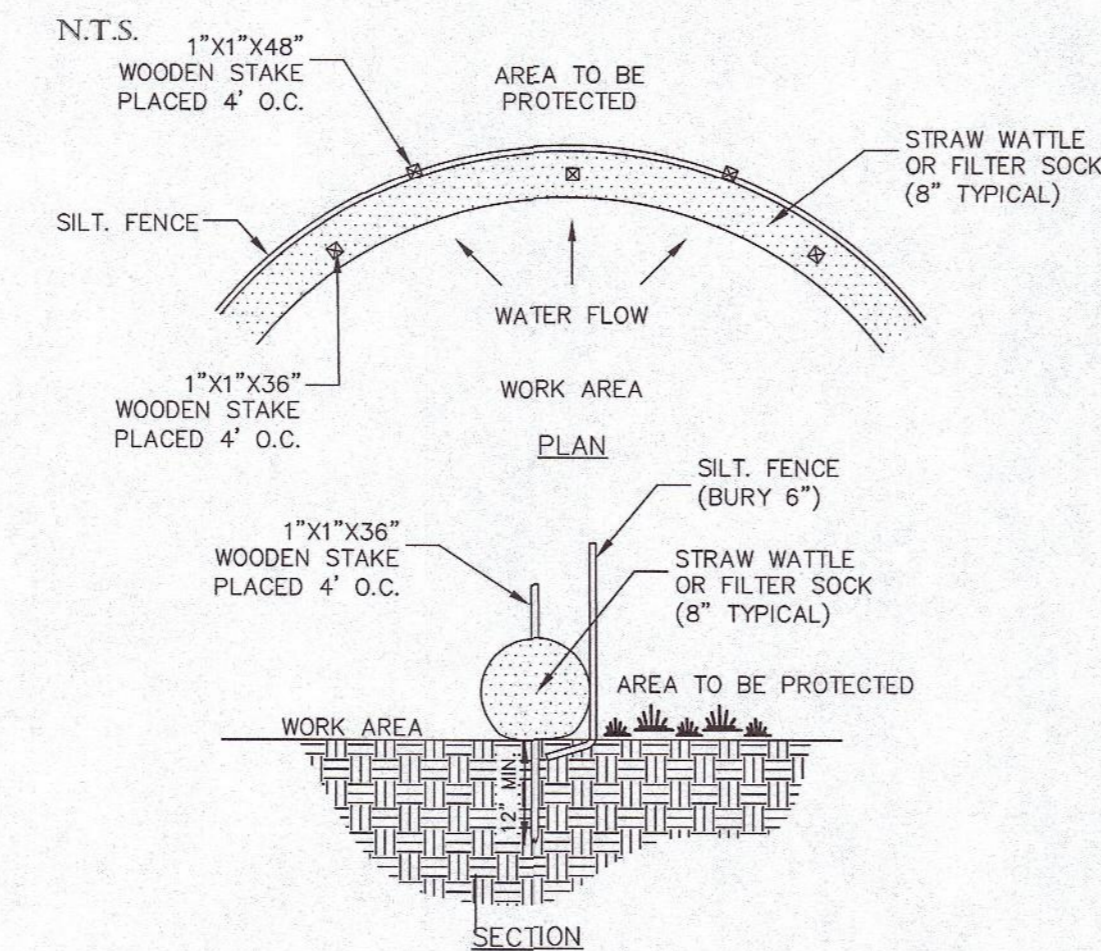


DRAIN DRYWELL DETAIL
N.T.S.

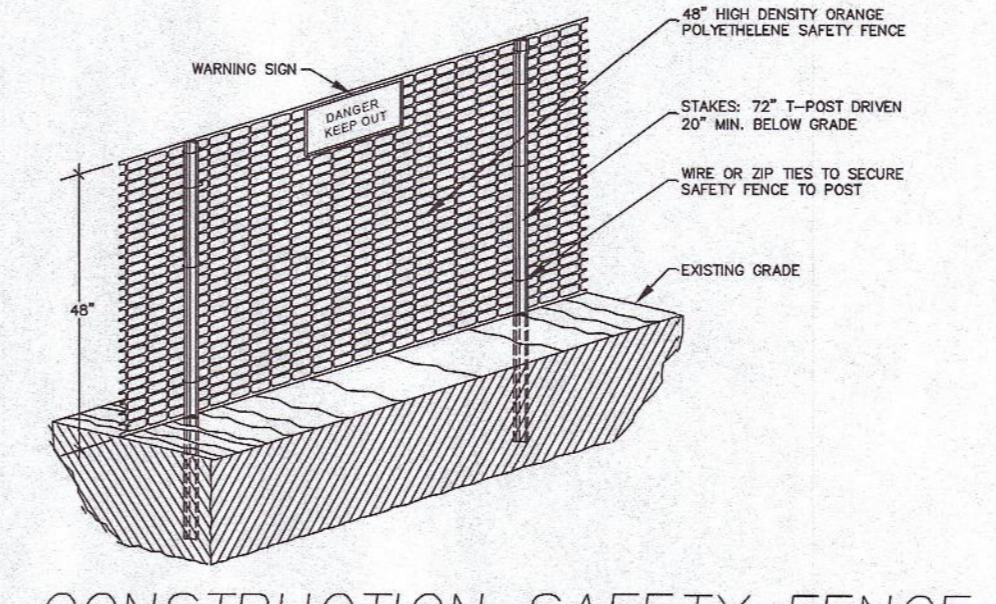


- NOTES:**
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
 - USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.

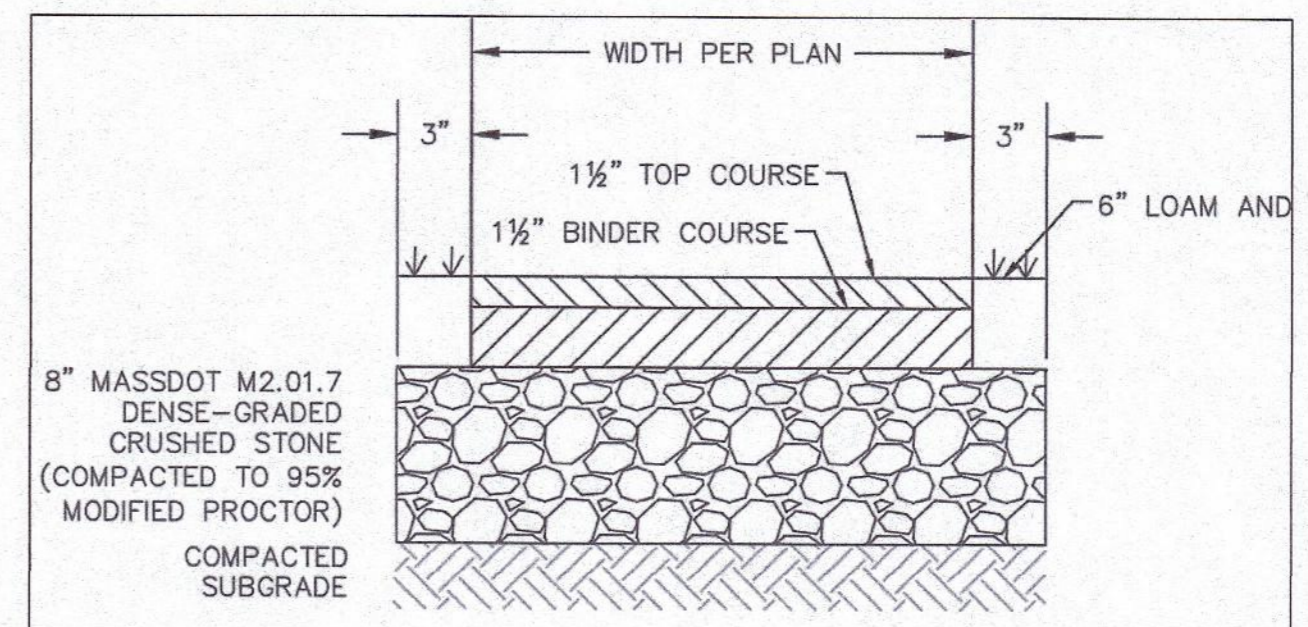
CONSTRUCTION ENTRANCE
N.T.S.



EROSION CONTROL BARRIER
N.T.S.



CONSTRUCTION SAFETY FENCE
N.T.S.



BITUMINOUS WALKWAY SECTION N.T.S.

- NOTES:**
- DO NOT EXTEND BASE GRAVEL AS SHOWN WHEN WALKWAYS AREA ABUTTING ROAD, WALKWAY, OR OTHER HARD SURFACE.
 - BINDER COURSE:** - MASSDOT M3.11.03, TABLE A, "HMA INTERMEDIATE COURSE DENSE BINDER" OR SUPERPAVE INTERMEDIATE COURSE - 19.0MM (MIXTURE DESIGNATION SIC - 19.0).
 - TOP COURSE:** - MASSDOT M3.11.03, TABLE A, "SURFACE COURSE STANDARD TOP" OR SUPERPAVE SURFACE COURSE - 12.5MM (MIXTURE DESIGNATION SSC - 12.5).
 - SIDEWALK:** - SHALL FOLLOW THE WORCESTER DPW REGULATIONS AND PROVIDED 1.5 OF TOP AT DRIVEWAY ENTRANCE.

REVISIONS

REV.	DATE	DESCRIPTION

PROJECT NO. J-230
DESIGNED BY PML
CHECKED BY MD
DATE 10/8/24
CAD FILE J-230 SITE PLAN
PLAN NO.

OWNER:
Carol Ann Kusy
400 Greenwood Street, Millbury, MA 01527

APPLICANT:
Joseph A. Marinella
56 Park Hill Ave, Worcester Ma
P:(508)-918-9766

TITLE:
Single Family House
56 Park Hill Avenue
Worcester, MA 01604

SHEET TITLE
CONSTRUCTION DETAILS

SHEET NO.
C-4.0