

STORMWATER SITE PLANS & DRAINAGE SUBCATMENT PLAN

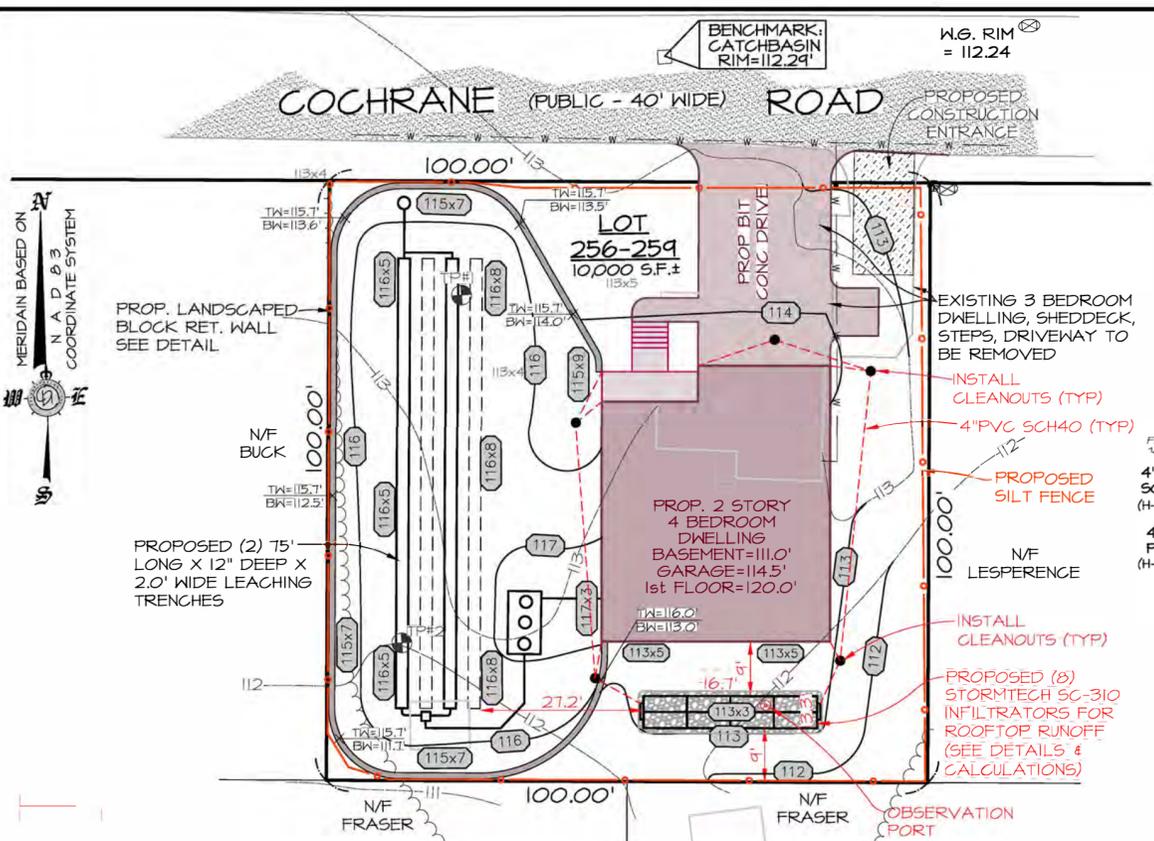
A stormwater design plan ensures that post-development runoff rates and quality are managed to meet regulatory standards, preventing flooding on surrounding properties. It is a comprehensive set of drawings, calculations, and specifications outlining how a development site will manage rainfall runoff to prevent flooding and protect water quality. It includes drainage infrastructure, detention systems, and erosion controls complying with local regulations, prepared to safely direct runoff away from structures.

Key Components of a Stormwater Design Plan:

- Site Layout & Drainage Plan: Maps showing how water flows, including pipes, inlets, and retention/detention basins.
- Hydrologic/Hydraulic Analysis: Calculations defining how the system handles specific design storm intensities.
- Erosion and Sediment Control Plan: Techniques to prevent soil runoff during construction.
- Stormwater Management Report: Documentation demonstrating compliance with local, state, or federal regulations.
- Best Management Practices (BMPs): Features like rain gardens or infiltration systems for water quality treatment.

Commonly Used Elements:

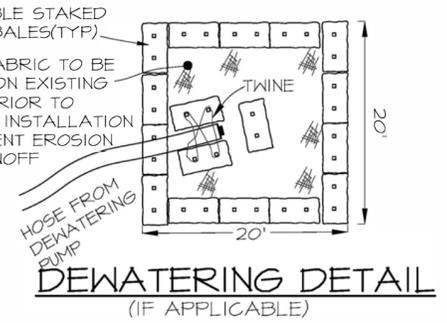
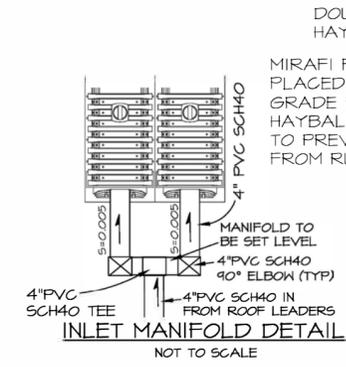
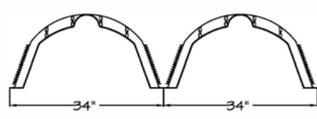
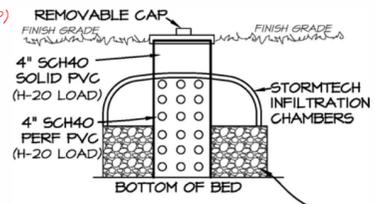
- Pipes & Inlets: Sizes, materials, and locations.
- Detention/Retention Ponds: For storing water and releasing it slowly.
- Low Impact Development (LID): Permeable pavements, bioswales, and green roofs.



SITE PLAN
SCALE: 1"=20'
0 10 20 30 40 50

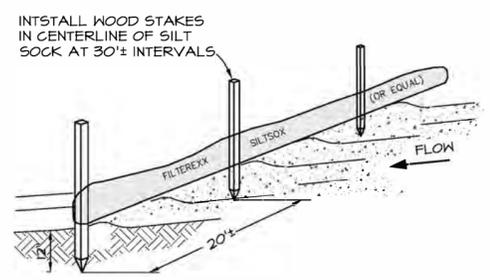
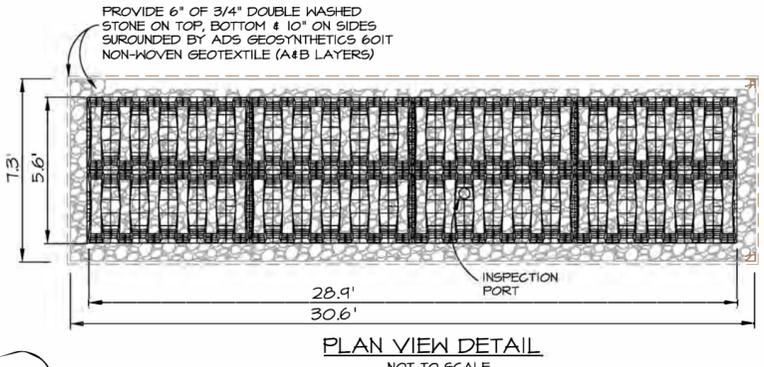
NOTES:

- 1) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES NOR FOR TITLE INSURANCE PURPOSES BUT IS SOLELY TO DEPICT THE EXISTING AND PROPOSED CONDITIONS AND TO DEPICT THE PROPOSED EROSION AND IMPROVE STORMWATER MANAGEMENT & RECHARGE TO GROUNDWATER FOR THE NEW SINGLE FAMILY DEVELOPMENT.
- 3) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF WILMINGTON. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- 4) CONTRACTOR TO RESTORE GROUND SURFACE TO PRE-CONSTRUCTION CONDITIONS AND RESTORE ALL DISTURBED AREAS WITH LOAM AND SEED.
- 5) ALL ROOF RUNOFF TO BE DIRECTED INTO STORMTECH INFILTRATORS.



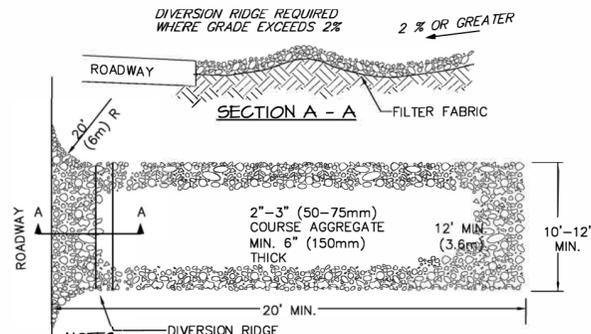
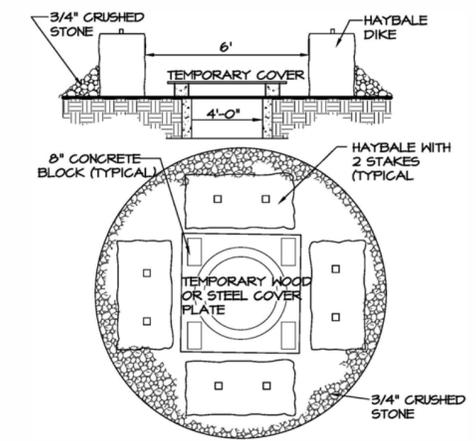
IMPERVIOUS AREA:
TOTAL EXISTING IMPERVIOUS AREA = 1,443 S.F.
TOTAL PROPOSED IMPERVIOUS AREA = 2,410 S.F.
TOTAL INCREASE IN IMPERVIOUS AREA = 1,027 S.F.
(B) INFILTRATION CHAMBERS PROPOSED TO ACCEPT ALL OF THE NEW DWELLING AND PORCH ROOFTOP (1,732 S.F.) DURING A 100 YEAR 24 HOUR STORM EVENT (0.9" OF RAIN IN 24 HOURS) WITH ZERO OUTFLOW. SEE HYDROLOGY CALCULATIONS SITE PLAN, DETAILS, OPERATIONS AND MAINTENANCE MANUAL, AND STORMWATER REPORT.

INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING:
EXFILTRATION RATE:
SAND - HYDRAULIC SOILS CLASS A / R.A.W.L. RATE:
0.9" / HR = 0.00055710 FT./SEC STORMTECH INFILTRATION AREAS: = 30.6' x 7.3' = 224 S.F. X 0.00055710 FT./SEC = 0.125 C.F.S. BOTTOM



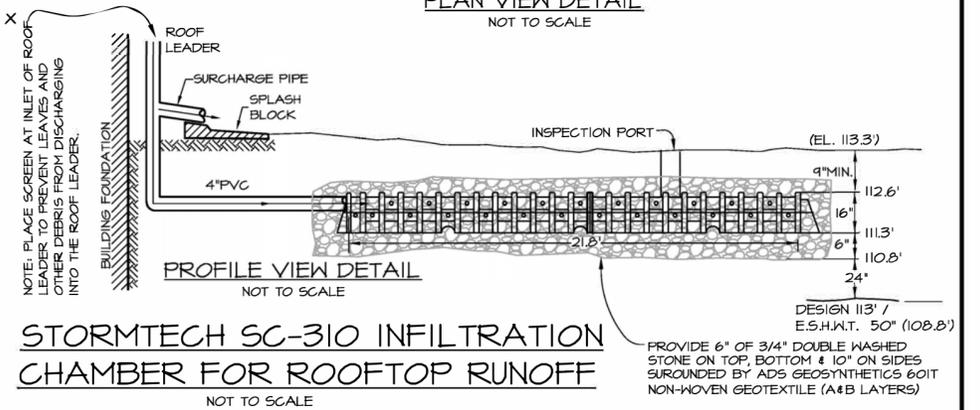
1. SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. CONTRACTOR TO INSPECT AND REPAIR SILT SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

SILT FENCE (SILT SOCK)
NOT TO SCALE



NOTES:
1) 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 DRESSINGS, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2) WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

CONSTRUCTION ENTRANCE
(IF APPLICABLE)



STORMTECH SC-310 INFILTRATION CHAMBER FOR ROOFTOP RUNOFF
NOT TO SCALE

TEST PIT DATA

PERFORMED BY: RICHARD BERUBE, S.E. #162
WITNESSED BY: SHELLY NEWHOUSE WILMINGTON B.O.H.
DATE PERFORMED: 6-24-25

TEST PIT 1			
DEPTH (INCHES)	DESIGN 113' / E.S.H.W.T. 50" (108.8')		
0-44	A/FILL	--	--
44-101	B FINE SAND	10YR 6/4	

TEST PIT 2			
DEPTH (INCHES)	DESIGN 113' / E.S.H.W.T. 50" (108.8')		
0-20	A/FILL	--	--
20-90	B FINE SAND	10YR 6/4	

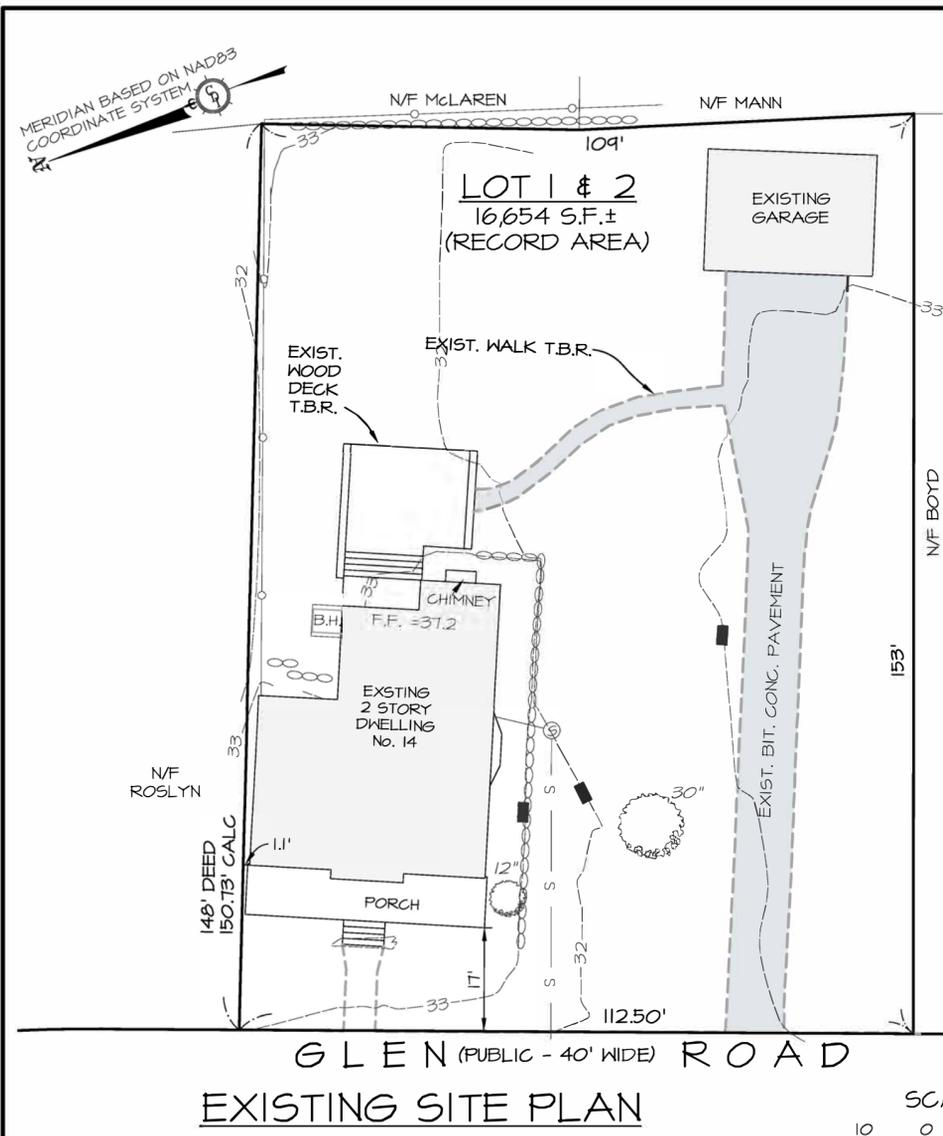
PERCOLATION RESULT = 2 MPI

STORMWATER MANAGEMENT SITE PLAN

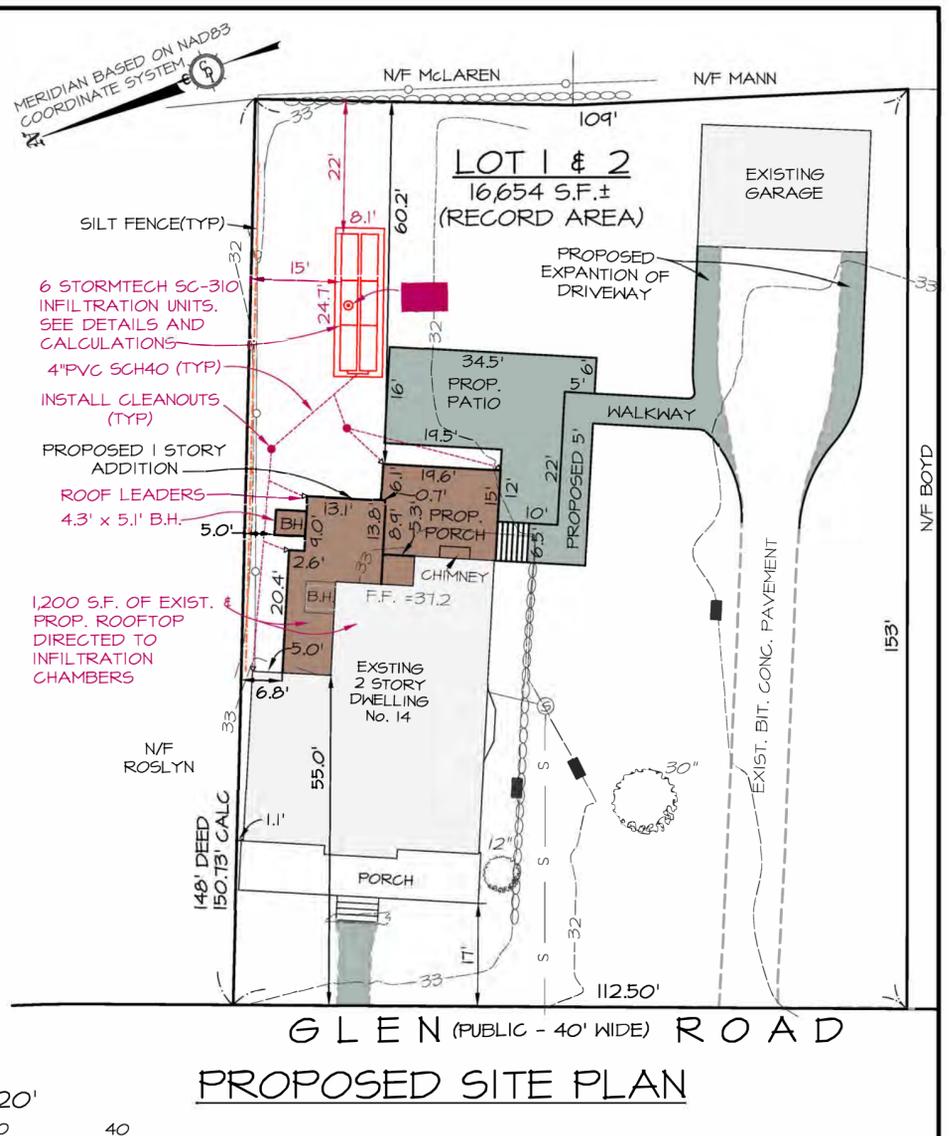
WILMINGTON MASSACHUSETTS
ASSESSOR'S 8-51
PREPARED FOR

PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web. CDISurvey.com
Email info@CDISurvey.com

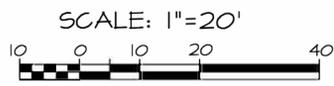
DATE	REVISION DESCRIPTION	DESIGN: KPF	REVIEW: TR



EXISTING SITE PLAN

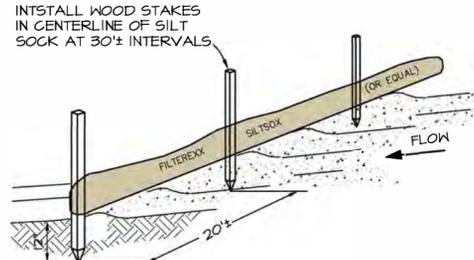
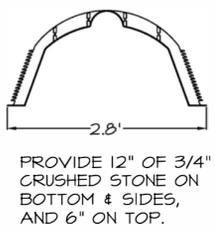
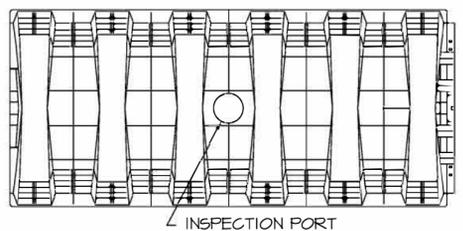


PROPOSED SITE PLAN



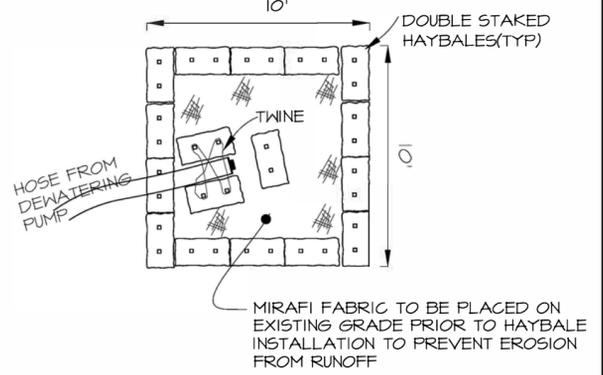
NOTES:

- 1.) THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED CONDITIONS AND TO DEPICT THE PROPOSED EROSION AND DRAINAGE CONTROLS FOR INCREASE OF IMPERVIOUS AREA FROM NEW ADDITION, PORCH, PATIO & WALK.
- 2.) CONTRACTOR TO RESTORE GROUND SURFACE TO PRE-CONSTRUCTION CONDITIONS AND RESTORE ALL DISTURBED AREAS WITH LOAM AND SEED.
- 3.) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS FROM TOPOGRAPHIC FIELD SURVEY BY CYPRUS DESIGN INC., AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF WINCHESTER. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- 4.) THE ENGINEERING DEPARTMENT REQUESTS THE APPLICANT CONDUCT A TEST PIT AT THE LOCATION OF THE PROPOSED INFILTRATION SYSTEM. TEST PIT CONDITIONS TO BE DOCUMENTED BY A CERTIFIED SOIL EVALUATOR AND WITNESSED BY THE WINCHESTER ENGINEERING DEPARTMENT. HYDRAULIC MODEL EXFILTRATION CALCULATION TO BE UPDATED IF SOIL CONDITIONS FROM TEST PIT DIFFER THAN THOSE ASSUMED IN THE MODEL.

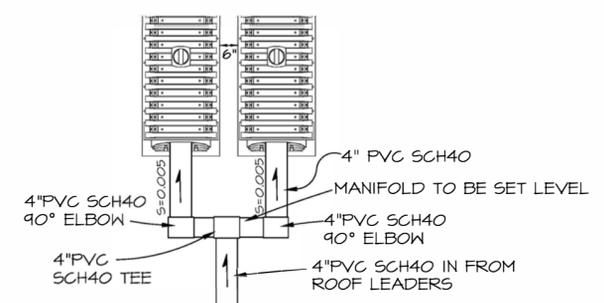
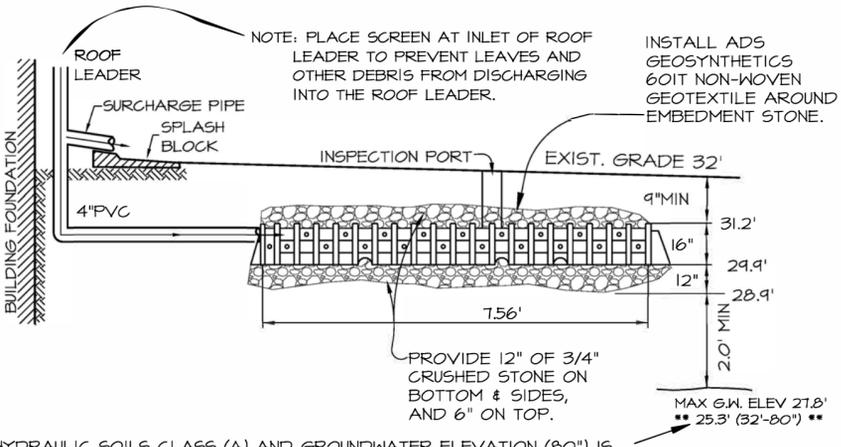


- NOTES:**
1. SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. CONTRACTOR TO INSPECT AND REPAIR SILT SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

SILT SOCK DETAIL
NOT TO SCALE



DEWATERING DETAIL
N.T.S. (IF APPLICABLE)



STORMTECH SC-310 INFLTRATORS INLET MANIFOLD DETAIL
NOT TO SCALE

HYDRAULIC SOILS CLASS (A) AND GROUNDWATER ELEVATION (80") IS BASED ON WEB SOIL SURVEY BY UNITED STATE DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE. CONFIRMATORY SOIL TEST SHOULD TO BE PERFORMED. SEE NOTE 4.

INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING:
EXFILTRATION RATE:
SAND - HYDRAULIC SOILS CLASS A / R.A.W.L
RATE: 8.27"/HR = 0.00019144 FT/SEC
STORMTECH INFILTRATION AREAS: = 200 S.F.
X 0.00019144 FT/SEC = 0.038 C.F.S. BOTTOM

IMPERVIOUS AREA INCREASE:
TOTAL EXISTING IMPERVIOUS AREA = 4,825 S.F.
TOTAL PROPOSED IMPERVIOUS AREA = 5,950 S.F.
TOTAL INCREASE IMPERVIOUS AREA = 1,125 S.F.
1,200 S.F. OF EXIST. & PROP. ROOFTOP DIRECTED TO (6) INFILTRATION CHAMBERS WITH NO OUTFLOW DURING 100YR STORM (8.9" RAINFALL IN 24 HRS).
SEE SITE PLAN, DETAILS & CALCULATIONS.

STORMTECH SC-310 INFLTRATORS FOR ROOFTOP RUNOFF (H-20 LOADING)

NOT TO SCALE

REV. 5-14-21 SYSTEM 15' OFF LOT LINE & 6" BETWEEN CHAMBERS
REV. 5-18-21 INCREASE IMPERVIOUS AREAS (PATIO, WALKWAY, DRIVEWAY) UPDATE PLAN AND HYDROLOGY CALCULATIONS.

SITE PLAN

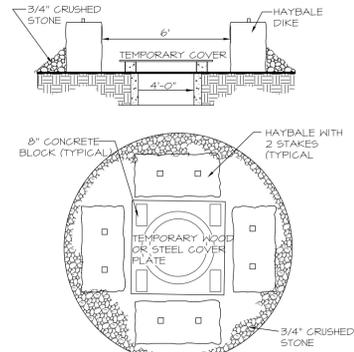
MASSACHUSETTS

PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel: 978.640.1019, Fax: 978.640.1020
Web: CDISurvey.com
Email: Info@CDISurvey.com

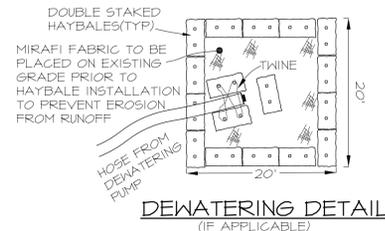
SCALE: 1"=20' SHEET 1 OF 1 DATE: 04-15-21

NOTES:

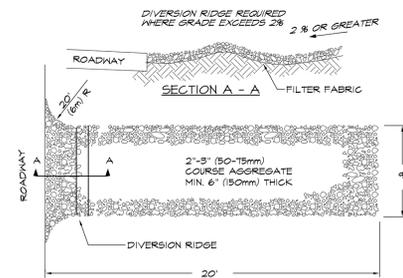
- 1) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES NOR FOR TITLE INSURANCE PURPOSES.
- 2) THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED CONDITIONS AND TO DEPICT THE PROPOSED EROSION CONTROL AND IMPROVE STORMWATER MANAGEMENT & RECHARGE TO GROUNDWATER FOR THE NEW SINGLE FAMILY HOME.
- 3) ACCORDING TO FEMA FLOOD INSURANCE RATE MAP NO. 25017C0313E WITH EFFECTIVE DATE OF 6/4/10 THE PROPERTY IS LOCATED IN ZONE X, AREA OF MINIMAL FLOOD HAZARD.
- 4) THE SUBJECT PROPERTY IS DEPICTED AS PARCEL 342 ON MAP 16, ASSESSOR'S MAP 16.
- 6) CONTRACTOR TO RESTORE GROUND SURFACE TO PRE-CONSTRUCTION CONDITIONS AND RESTORE ALL DISTURBED AREAS WITH LOAM AND SEED.
- 7) ALL ROOF RUNOFF TO BE DIRECTED INTO STORMTECH INFILTRATORS.
- 8) EXISTING CONDITIONS SUCH AS TOPOGRAPHY, LOT LINES, SURVEY MONUMENTATION, EXISTING SITE FEATURES, DWELLING, SHED, BARN, FENCES, WETLANDS, PAVEMENT, SIDEWALK, UTILITIES ARE FROM DIGITAL FILE ENTITLED 'EXISTING CONDITIONS PLAN 15 TEMPLE STREET READING MA DATED APRIL 6, 2021 SCALE: 1"=20' PREPARED BY STEPHEN M. MELISCIU PROFESSIONAL LAND SURVEYOR #39049 514 GAZEBO CIRCLE READING MA 01861 TEL. 781-844-1108 AND PROVIDED TO US BY CLIENT.



CATCH BASIN FILTER DETAIL
(IF APPLICABLE)
NOT TO SCALE

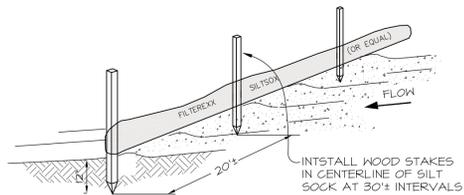


DEWATERING DETAIL
(IF APPLICABLE)



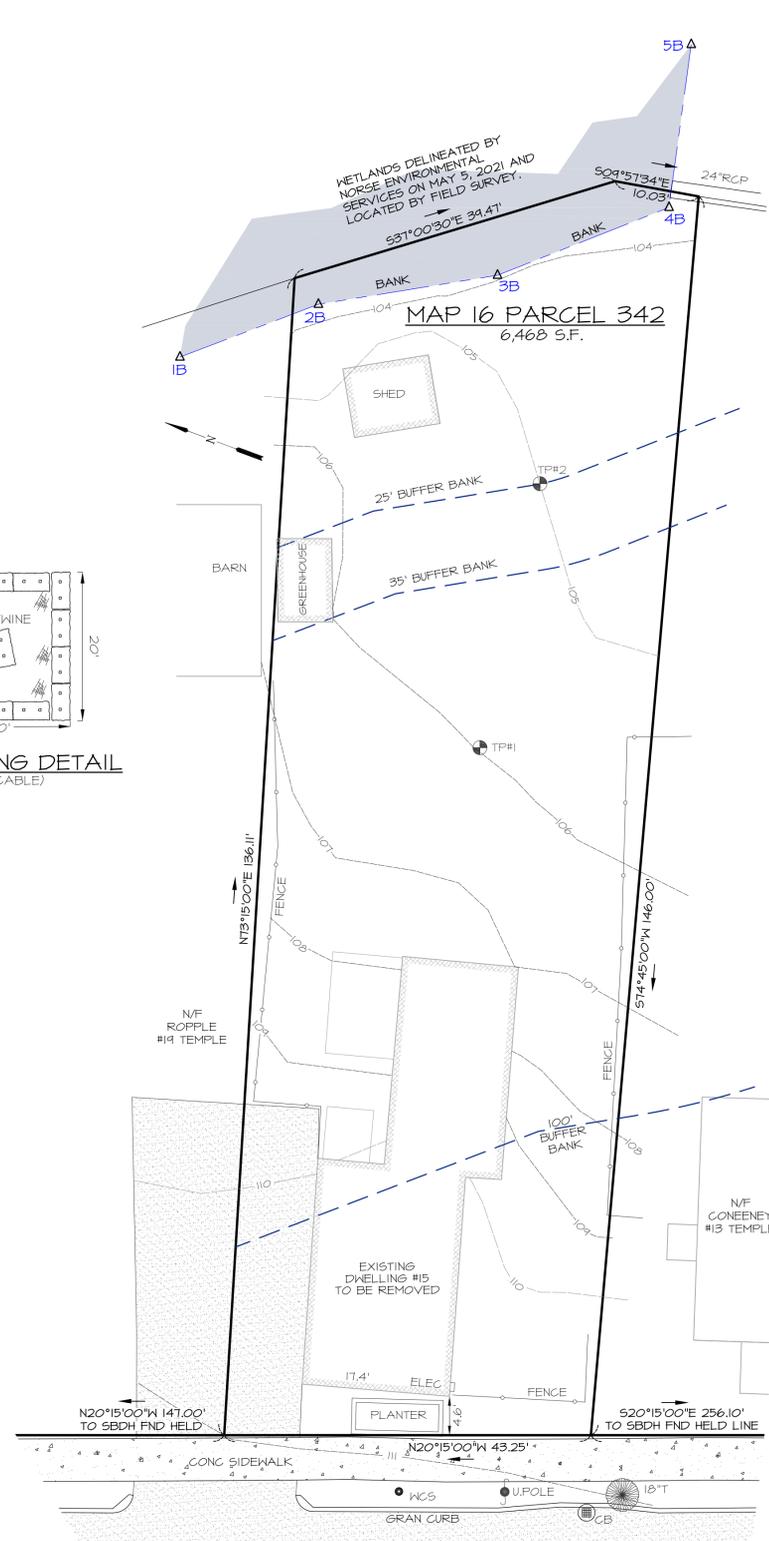
- NOTES:**
- 1) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - 2) WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

CONSTRUCTION ENTRANCE
(IF APPLICABLE)
N.T.S.

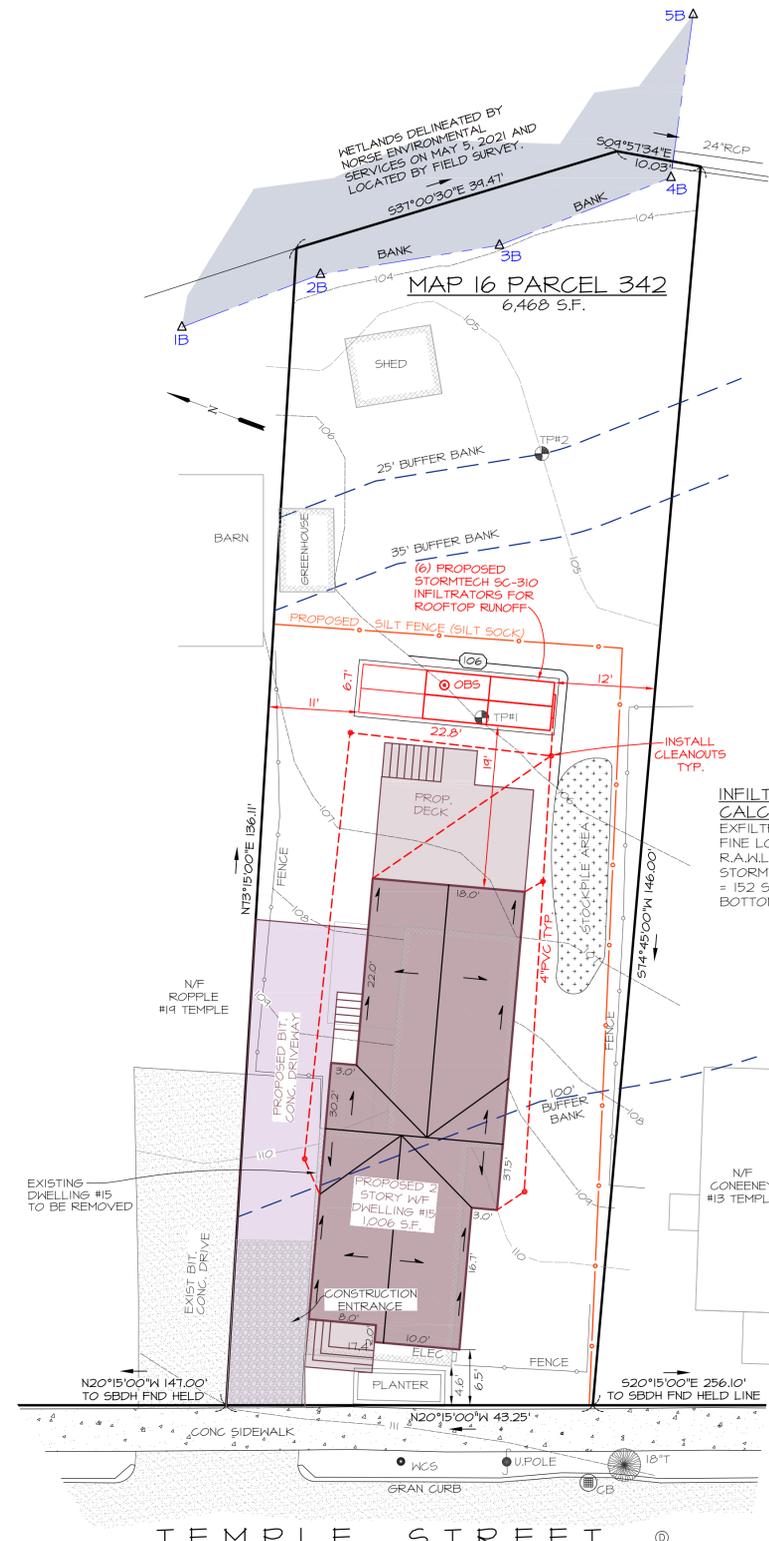


- NOTES:**
1. SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. CONTRACTOR TO INSPECT AND REPAIR SILT SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6\"/>
 - 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

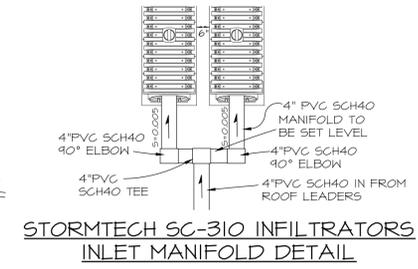
SILT FENCE (SILT SOCK)
NOT TO SCALE



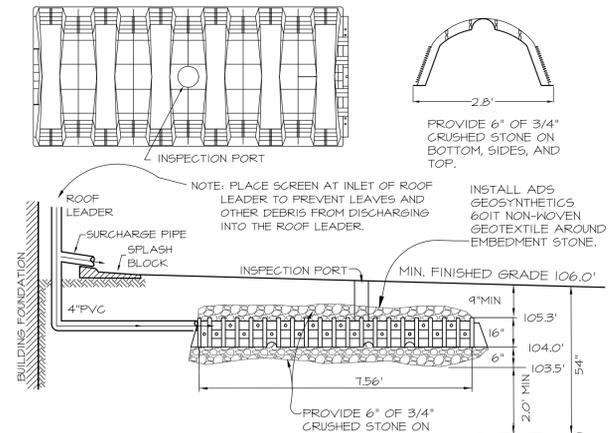
EXISTING SITE PLAN
SCALE: 1"=10'



PROPOSED SITE PLAN
SCALE: 1"=10'



STORMTECH SC-310 INFILTRATORS INLET MANIFOLD DETAIL
NOT TO SCALE



INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING:
EXFILTRATION RATE:
FINE LOAMY SAND - HYDRAULIC SOILS CLASS A / R.A.W.L RATE: 2.41"/HR=0.000055181 FT/SEC
STORMTECH INFILTRATION AREAS: = 22.80' x 6.67' = 152 S.F. x 0.000055181 FT/SEC = 0.0085 C.F.S. BOTTOM

IMPERVIOUS AREA INCREASE:
TOTAL EXISTING IMPERVIOUS AREA = 1,330 S.F.
TOTAL PROPOSED IMPERVIOUS AREA = 1,675 S.F.
TOTAL INCREASE IMPERVIOUS AREA = 345 S.F.
(6) INFILTRATION CHAMBERS PROPOSED TO ACCEPT 100 S.F. OF PROPOSED ROOFTOP RUNOFF WITH NO OUTFLOW DURING (8.5" RAINFALL IN 24 HRS). SEE SITE PLAN, DETAILS & CALCULATIONS.

STORMTECH SC-310 INFILTRATORS FOR ROOFTOP RUNOFF
NOT TO SCALE

TEST PIT DATA
PERFORMED BY: RICHARD BERUBE, S.E. #162
DATE PERFORMED: 5-11-23

TEST PIT 1

DEPTH (INCHES)	ESHA#T 106.0' - 54" = 101.5'		
0-44	Ab	FILL	--
44-84	C	FLS	5Y 6/1

TEST PIT 2

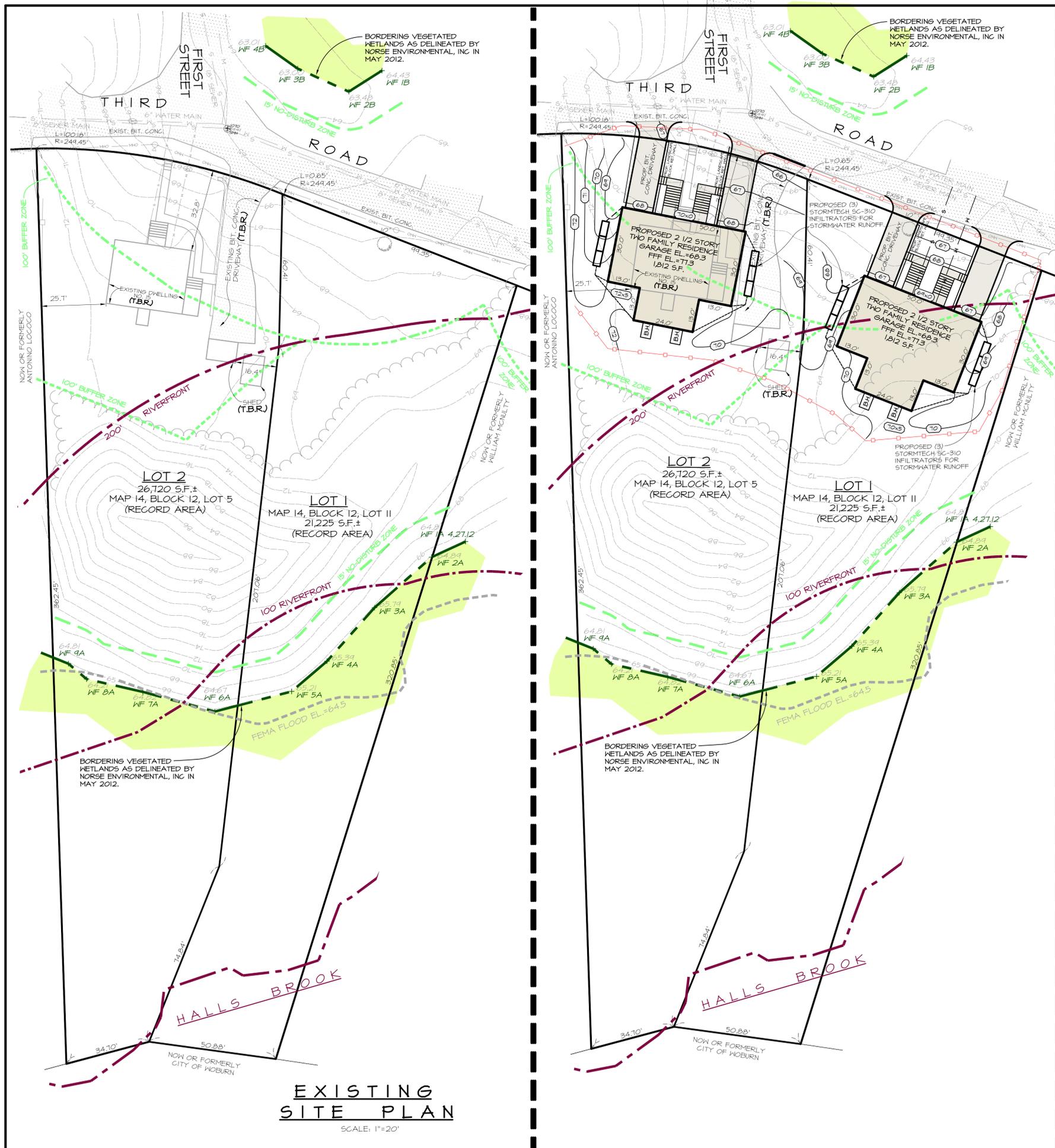
DEPTH (INCHES)	ESHA#T 105.0' - 24" = 103.0'		
0-40	Ab	FILL	--
40-64	C	FLS	5Y 6/1

STORM WATER SITE PLAN

LOCATED AT
ASSESSOR'S MAP 16, PARCEL 342
PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Taunton, MA 01864
Tel. 978-840-1019, Fax. 978-840-1020
Web: CDsurvey.com
Email: info@CDsurvey.com

5 0 5 10 20
SCALE: 1"=10' SHEET 1 OF 1 DATE: 7-12-23

DATE	REVISION DESCRIPTION	DESIGN: LRF	REVIEW: TR



DISTURBANCE CALCULATIONS

LOT 1 BUFFER ZONE DISTURBANCE (B.V.W.):

BUFFER ZONE	EXISTING	PROPOSED	RESULT
0-15'	0 S.F.	0 S.F.	0 S.F. INCREASE
15-150'	5,100 S.F.	7,000 S.F.	1,900 S.F. INCREASE

LOT 1 RIVERFRONT AREA DISTURBANCE:

RIVERFRONT	EXISTING	PROPOSED	RESULT
0-100'	0 S.F.	0 S.F.	0 S.F. INCREASE
100'-200'	1,400 S.F.	3,600 S.F.	1,700 S.F. INCREASE (5,000 S.F. ALLOWED)

LOT 2 BUFFER ZONE DISTURBANCE (B.V.W.):

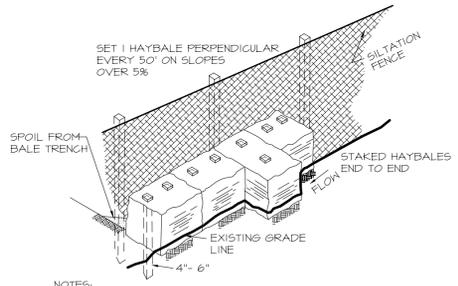
BUFFER ZONE	EXISTING	PROPOSED	RESULT
0-15'	0 S.F.	0 S.F.	0 S.F. INCREASE
15-150'	9,000 S.F.	9,000 S.F.	0 S.F. INCREASE

LOT 2 RIVERFRONT AREA DISTURBANCE:

RIVERFRONT	EXISTING	PROPOSED	RESULT
0-100'	0 S.F.	0 S.F.	0 S.F. INCREASE
100'-200'	1,300 S.F.	1,300 S.F.	0 S.F. INCREASE (5,000 S.F. ALLOWED)

IMPERVIOUS AREA CALCULATIONS:

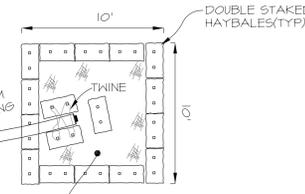
- (LOT 1 & 2)**
- EXISTING CONDITIONS
- 2350 S.F. (EXISTING DWELLING, SHED, WALK & DRIVEWAY)
 - EXISTING IMPERVIOUS AREAS: 2,350 S.F.
- PROPOSED CONDITIONS
- PROPOSED DWELLINGS, DRIVEWAY, PATHS 5,350 S.F.
 - PROPOSED IMPERVIOUS AREAS: 5,350 S.F.
- IMPERVIOUS AREA INCREASE: 3,000 S.F.
- IMPERVIOUS AREA TO BE INFILTRATED: 3,024 S.F. (SEE HYDROLOGY CALCULATIONS ATTACHED)



TYPICAL HAYBALE/SILT FENCE DETAIL

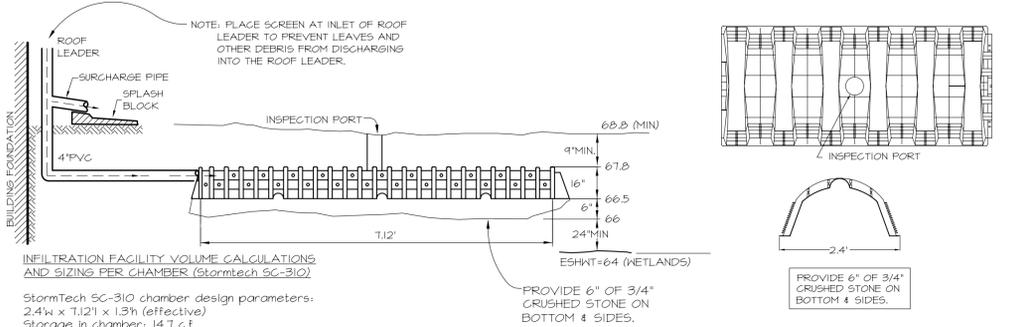
NOTES:

- THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES NOR FOR TITLE INSURANCE PURPOSES.
- THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED SITE FEATURES IN RELATION TO THE EDGE OF BORDERING VEGETATED WETLAND AND TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR CONSERVATION COMMISSION APPROVAL.
- THE SUBJECT PROPERTY IS DEPICTED AS PARCEL 29A ON TOWN OF LEXINGTON ASSESSOR'S MAP 82.
- OWNER OF RECORD IS GARY M. GOZEMBA 25 ROBINSON ROAD LEXINGTON, MASSACHUSETTS.
- EDGE OF BORDERING VEGETATED WETLAND DELINEATED BY WETLANDS AND LAND MANAGEMENT ON 4-30-11 AND LOCATED DURING FIELD SURVEY CONDUCTED IN JUNE 2011 BY CYPRUS DESIGN INC.
- SUBJECT PROPERTY IN ZONE C AS DEPICTED ON THE FEMA FIRM COMMUNITY PANEL #401 OF 656 MAP #2501TC0401E DATED JUNE 4, 2010.
- ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF LEXINGTON. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES NOT DEPICTED PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- SUBJECT PROPERTY IS LOCATED IN ZONING DISTRICT R.O.



DEWATERING DETAIL

(IF APPLICABLE) N.T.S.



STORMTECH SC-310 INFILTRATION CHAMBER FOR ROOFTOP RUNOFF

- ZONING DATA:**
- ZONE: OUTLYING
 - REQUIRED SETBACKS
 - FRONT = 25'
 - SIDE = 12'
 - REAR = 30'
- REFERENCES:**
- DEED 25321, PG 465
 - PL. BK. 229, PL. 22
 - PL. 35 OF 2001

SITE PLAN
(TO ACCOMPANY A NOTICE OF INTENT APPLICATION)

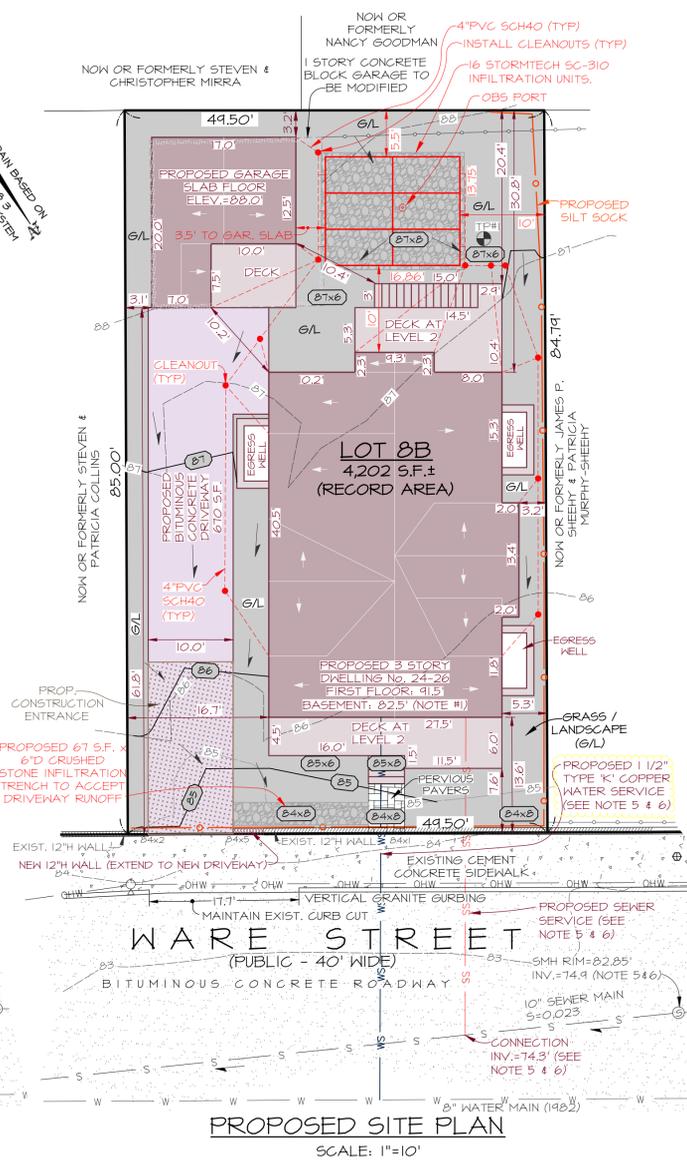
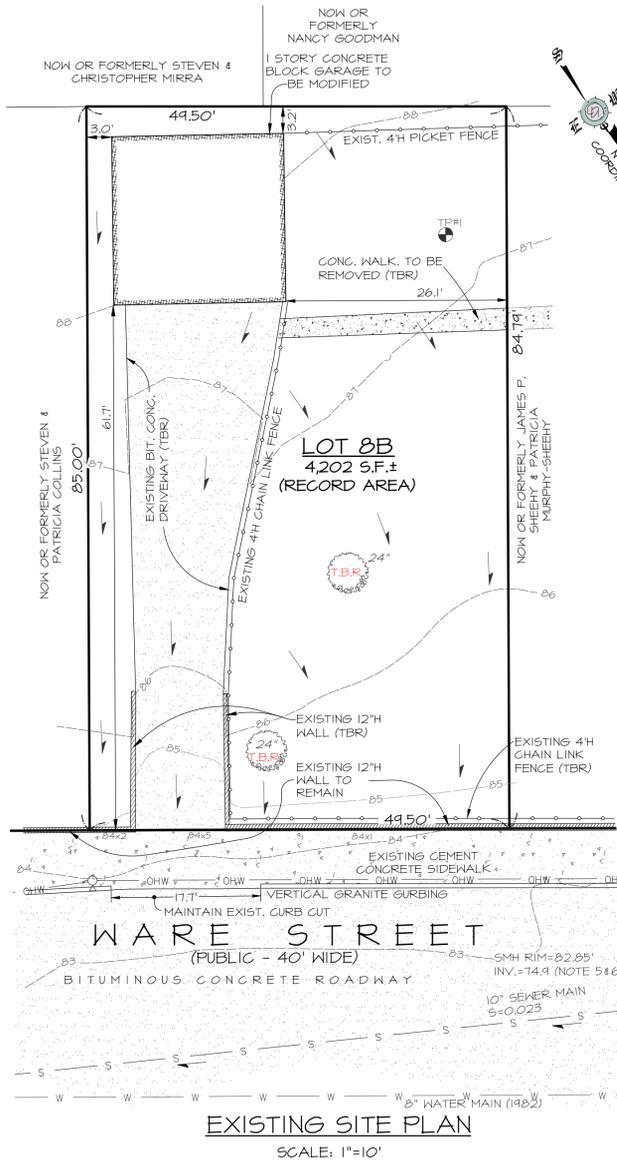
LOCATED AT
(ASSESSOR'S MAP 14, BLOCK 12, LOT 1 & 2)
MAP 14

PREPARED FOR
PREPARED BY
Cyprus Design, Inc.

Land Survey & Civil Engineering Services
4 Burnap Street, Wilmington, MA 01897
Tel: 978-940-0200 Fax: 978-940-0200
Web Page: CyprusDesignInc.com

SHEET 1 OF 1 DATE: 06-06-12

DATE	REVISION DESCRIPTION



- NOTES:**
- MINIMUM 12" SEPARATION FROM E.S.H.W.T. (81.5') TO LOWEST FLOOR REQUIRED PER SOMERVILLE REGULATIONS.
 - THE SOLE INTENT OF THIS PLAN IS TO DEPICT NEW 3 STORY 2 FAMILY HOME ALONG WITH DRIVEWAY, DECKS, PATIOS, SITE GRADES, AND STORMWATER MANAGEMENT SYSTEM.
 - ABUTTERS REFERENCES SHOWN HEREON WERE COMPILED FROM AVAILABLE CITY RECORDS AND DO NOT INDICATE AN OPINION OF TITLE OR OWNERSHIP.
 - THIS PLAN DOES NOT SHOWN ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
 - ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF SOMERVILLE. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF ALL UTILITIES.
 - ALL UTILITY CONNECTIONS AND CONSTRUCTION ACTIVITIES TO CONFORM TO THE CITY OF SOMERVILLE DPW AND ENGINEERING DEPARTMENT STANDARDS, DETAILS AND REGULATIONS.

DIMENSIONAL TABLE (D.T.)

ITEM	REQ.	PROVIDED
LOT WIDTH (FD)	34'	44.50'
LOT DEPTH (FD)	80'	84.19'
LOT FRONTAGE	34' MIN.	44.50'
FRONT SETBACK (M/M)	10'/20'	1.6' (2D) 13.6' (FH)
SIDE SETBACK (FD)	3'	3.1' (PG) 3.2' (FH)
SUM OF SIDE SETBACKS (FD)	12'	32.4' (PG) 14.3' (FH)
REAR SETBACK	20'	20.4' (2D) 30.8' (FH)
MAX. LOT COVERAGE	60%	31.28% (2D) 52.6% (FH)
FRONT PARKING SETBACK	20'	45.1'

IMPERVIOUS AREA CALCULATIONS
TOTAL LOT AREA: 4,202 SF
1,310 S.F. IMPERVIOUS AREA PRE-CONDITIONS
2,842 S.F. GRASS / LANDSCAPED AREA

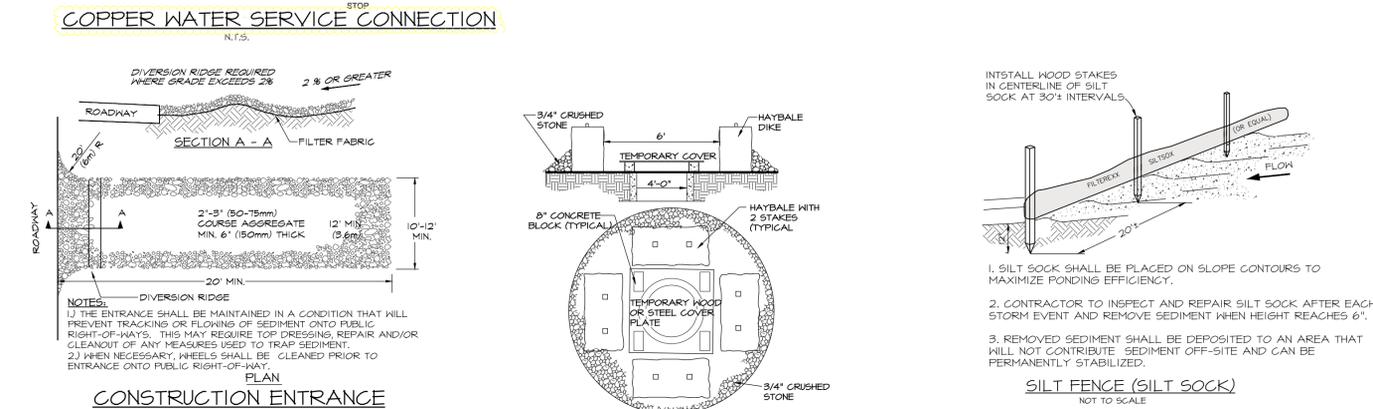
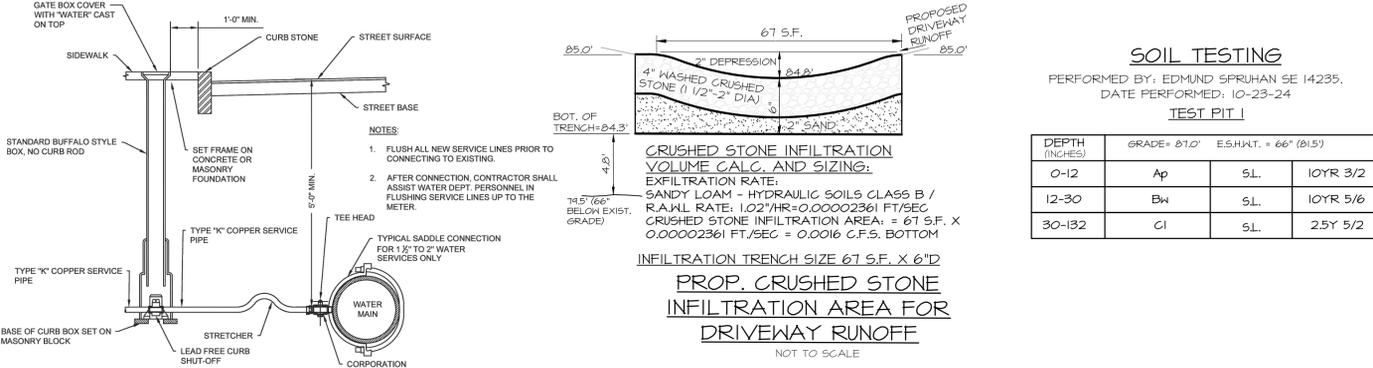
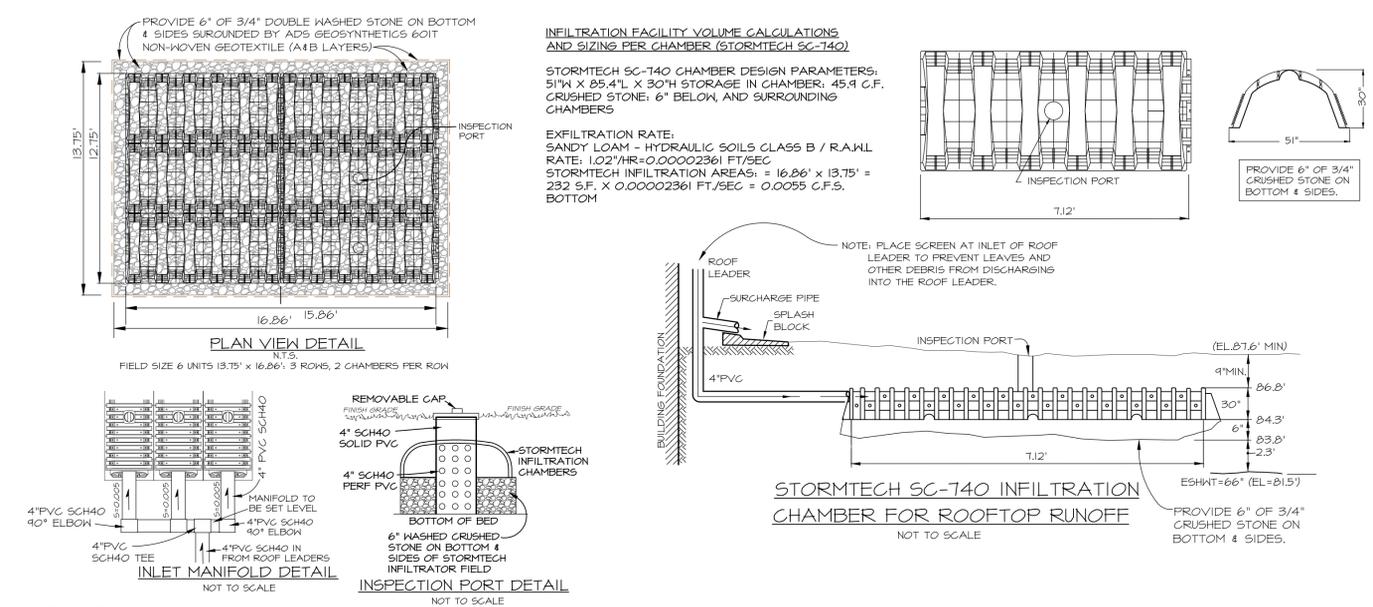
2,560 S.F. IMPERVIOUS AREA POST-CONDITIONS
1,642 S.F. GRASS / LANDSCAPED AREA

IMPERVIOUS AREA INCREASE:
1,310 S.F. IMPERVIOUS AREA PRE-CONDITIONS
2,360 S.F. IMPERVIOUS AREA POST-CONDITIONS

1,250 S.F. IMPERVIOUS AREA INCREASE FREE TO POST CONDITIONS PROPOSED HOUSE AND GARAGE ROOFTOP TO BE DIRECTED TO INFILTRATION CHAMBERS

DRIVEWAY RUNOFF FIRST FLUSH CALCULATION:
PROPOSED DRIVEWAY: 670 S.F. X 3/4" STORM EVENT = 42 C.F. OF INFILTRATION REQUIRED. SEE HYDROLOGY CALCULATIONS

- (D.T.) LEGEND:**
(M/M) MIN/MAX
(FD) FRONT DRIVEWAY ACCESS
(M) ACCESS MINIMUM / IDEAL
(2D) 2ND STORY DECK
(FH) PROPOSED 3 STORY TWO FAMILY HOME
(E) EXISTING
(P) PROPOSED
- RECORD OWNERS:**
JAMES P. SHEEHY & PATRICIA MURPHY-SHEEHY
28-30 WARE STREET
SOMERVILLE, MA
- REFERENCES:**
615 PROPERTY ID: 2656
DEED BOOK 25371, PG 555
PLAN BOOK 204, PLAN #1
PLAN # END OF BOOK 4635
- SYMBOLS LEGEND:**
EXIST. 4 PROP. OVERLAND FLOW DIRECTION
EXISTING SEWER MANHOLE
EXISTING UTILITY POLE W/LIGHT
EXISTING GAS GATE
EXISTING SANITARY SEWER
EXISTING WATER MAIN
EXISTING OVERHEAD WIRES
EXISTING 2' CONTOUR
EXISTING 10' CONTOUR
EXISTING DECIDUOUS TREE
EXISTING CHAIN LINK FENCE TO BE REMOVED
GRASS / LANDSCAPED AREAS
PROPOSED ROOF FLOW DIRECTION
PROPOSED SANITARY SEWER
PROPOSED SEWER SERVICE
PROPOSED WATER SERVICE
PROPOSED CONTOUR
PROPOSED SILTATION FENCE



REVISIONS

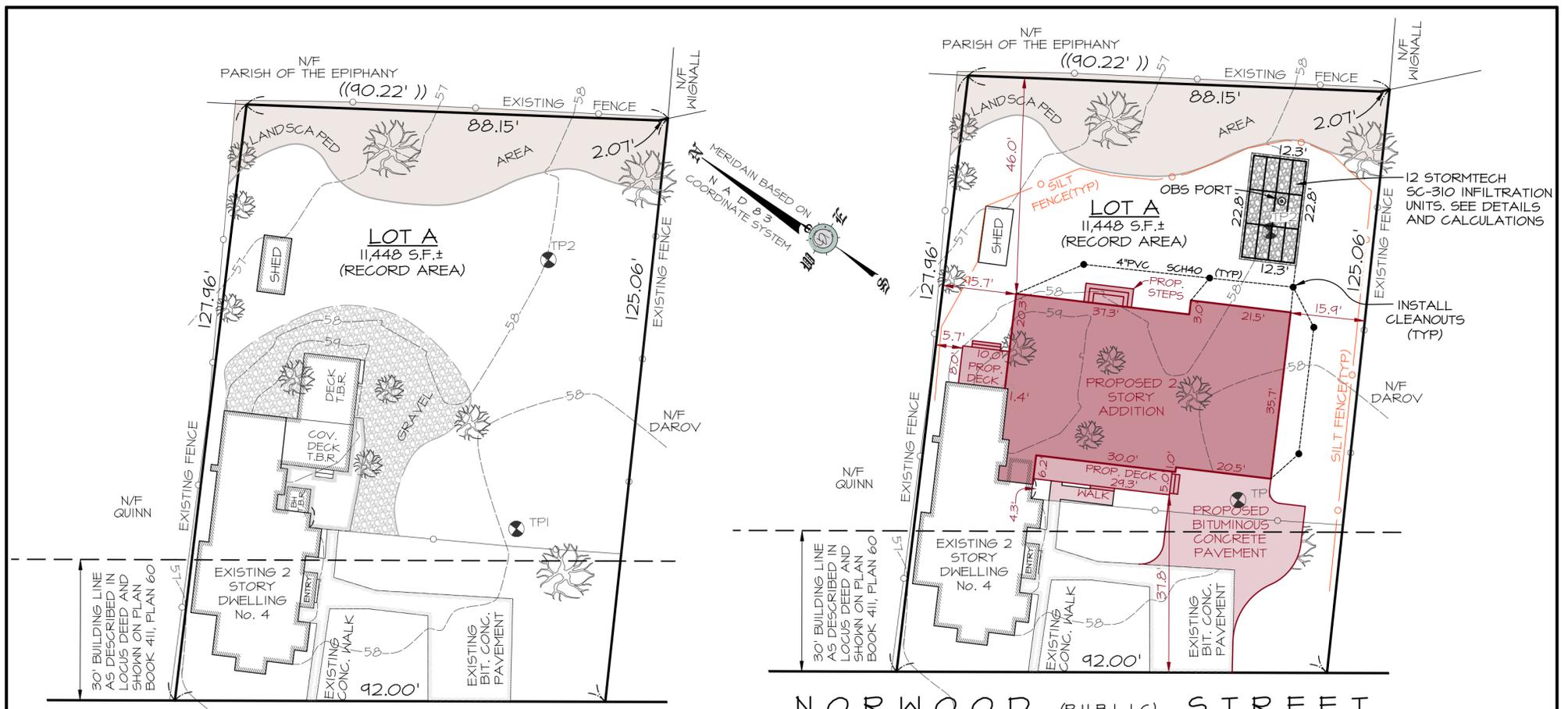
NO.	DATE	REVISION DESCRIPTION	DESIGNER	REVIEWER
1	12-11-24	2-4-25 COPPER WATER SERVICE SIZE ALONG WITH DETAIL	KRF	KED

STORMWATER MANAGEMENT SITE PLAN

MASSACHUSETTS
(ASSESSORS MAP 8, PARCEL 7, GIS ID: 2656)
PREPARED FOR

PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel: 978-640-0101 Fax: 978-640-1020
Web: CDISurvey.com
Email: info@CDISurvey.com

SCALE: 1"=10' SHEET 1 OF 1 DATE: 12-11-24



EXISTING SITE PLAN

PROPOSED SITE PLAN

SCALE: 1"=20'

SCALE: 1"=20'



NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED CONDITIONS, EROSION AND DRAINAGE CONTROLS FOR INCREASE OF IMPERVIOUS AREA FROM NEW DWELLING ADDITION.
2. CONTRACTOR TO PROVIDE SILT BAG FOR ANY CATCH BASINS LOCATED ON NORWOOD STREET IN FRONT OF LOCUS PROPERTY IF APPLICABLE.
3. CONTRACTOR TO RESTORE GROUND SURFACE TO PRE-CONSTRUCTION CONDITIONS AND RESTORE ALL DISTURBED AREAS WITH LOAM AND SEED.
4. ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS FROM TOPOGRAPHIC FIELD SURVEY BY CYPRUS DESIGN INC., AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF WINCHESTER. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
5. EXISTING CONDITIONS FIELD SURVEY CONDUCTED IN SEPTEMBER 2022 BY CYPRUS DESIGN INC.

SOIL TESTING

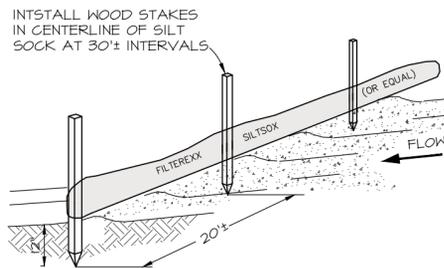
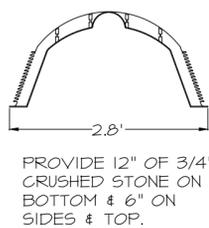
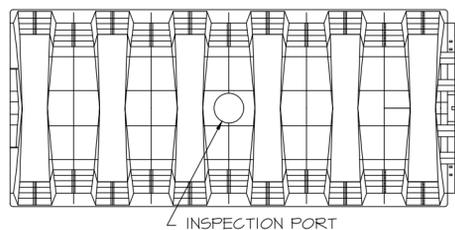
PERFORMED BY: RICHARD BERUBE C.S.E.
 WITNESS BY: WINCHESTER ENGINEERING / D.P.W. DEPT.
 DATE PERFORMED: 9-15-22

TEST PIT 1

DEPTH (INCHES)	E.S.H.M.T. NONE OBSERVED (BOTTOM EXCAV. 118" (48.2'))
0-16	A FSL 10YR 4/2
16-24	B FSL 10YR 5/4
24-60	C1 SAND & GRAVEL 2.5Y 6/3
60-118	C2 MED. COARSE SAND 2.5Y 5/4

TEST PIT 2

DEPTH (INCHES)	E.S.H.M.T. NONE OBSERVED (BOTTOM EXCAV. 120" (48.0'))
0-24	A FSL 10YR 4/2
24-68	C1 SAND & GRAVEL 2.5Y 6/3
68-120	C2 MED. COARSE SAND 2.5Y 5/4

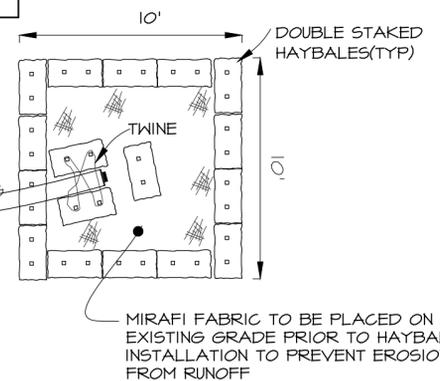


NOTES:

1. SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. CONTRACTOR TO INSPECT AND REPAIR SILT SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

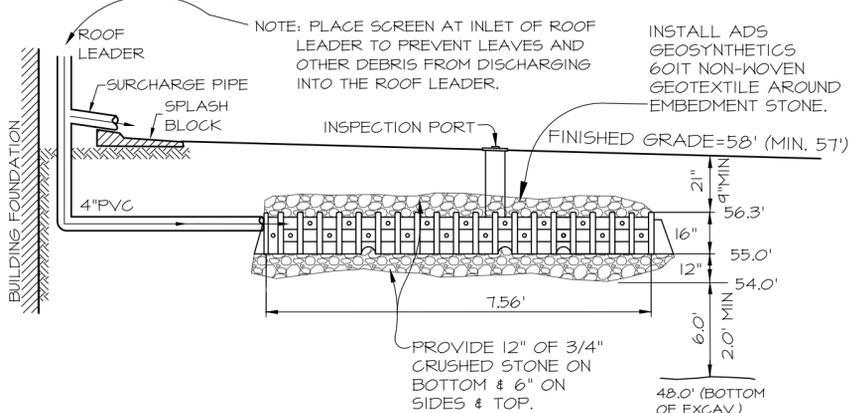
SILT SOCK DETAIL

NOT TO SCALE



DEWATERING DETAIL

N.T.S. (IF APPLICABLE)



IMPERVIOUS AREA INCREASE:
 EXISTING DWELLING, WALKS, & DRIVEWAY: 2,250 S.F.

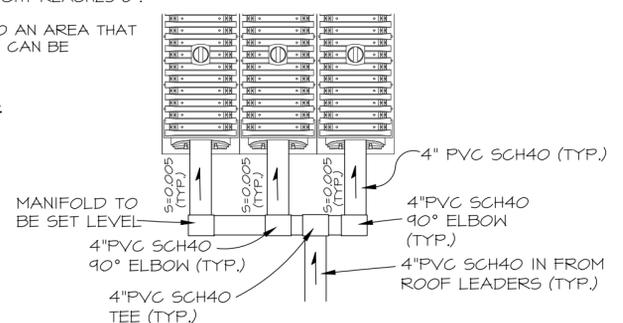
PROPOSED DWELLING, DECKS, PORCH, WALKS & DRIVEWAY: 4,180 S.F.

TOTAL IMPERVIOUS AREA INCREASE: 1,930 S.F.

2,050 S.F. OF PROPOSED ROOFTOP DIRECTED TO (12) INFILTRATION CHAMBERS WITH NO OUTFLOW DURING 100YR STORM (8.9" RAINFALL IN 24 HRS). SEE SITE PLAN, DETAILS & CALCULATIONS.

INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING:

EXFILTRATION RATE:
 SAND - HYDRAULIC SOILS CLASS A / R.A.W.L
 RATE: 8.27"/HR = 0.000191435 FT/SEC
 STORMTECH INFILTRATION AREA: = 280 S.F. X 0.000191435 FT/SEC = 0.054 C.F.S. BOTTOM



STORMTECH SC-310 INFILTRATORS INLET MANIFOLD DETAIL

NOT TO SCALE

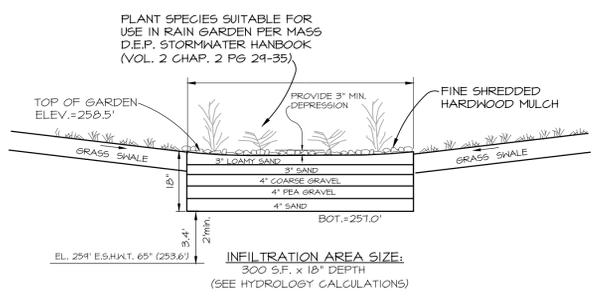
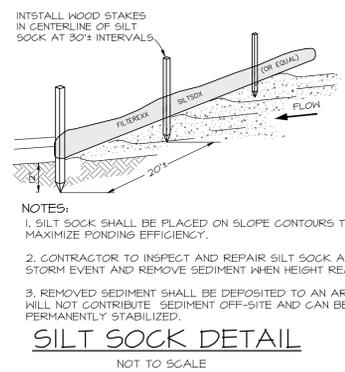
STORMTECH SC-310 INFILTRATORS FOR ROOFTOP RUNOFF (H-20 LOADING)

NOT TO SCALE

SITE PLAN

NORWOOD STREET
 MASSACHUSETTS
 PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web. CDISurvey.com
 Email. Info@CDISurvey.com

SCALE: 1"=20' SHEET 1 OF 1 DATE: 09-28-22

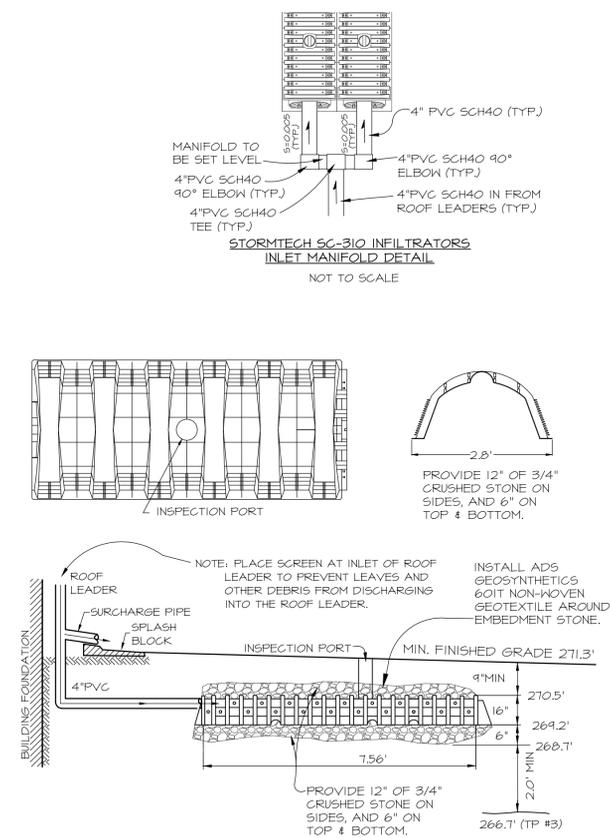


INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING:
 EXFILTRATION RATE: LOAMY SAND - HYDRAULIC SOILS CLASS A / R.A.W.L. RATE: 2.41 INCHES / HOUR = 0.0000558 FT/SEC
 RAIN GARDEN AREA = 300 S.F. X 0.0000558 FT/SEC = 0.0167 C.F.S. BOTTOM

IMPERVIOUS AREA INCREASE:
 EXISTING IMPERVIOUS AREA 4,313 S.F.
 PROPOSED IMPERVIOUS AREA 6,458 S.F.
 TOTAL INCREASE IMPERVIOUS AREAS 2,145 S.F.

MITIGATION BREAKDOWN:
 120 S.F. GARAGE ROOFTOP RUNOFF INTO (6) INFILTRATION CHAMBERS + 1,100 S.F. PROP. DRIVEWAY TO RAIN GARDEN AREA + 1,030 S.F. OF DRIVEWAY AND PROP. ADDITION RUNOFF TO POROUS PAVEMENT INFILTRATION AREA = TOTAL MITIGATION OF 2,250 S.F. IMPERVIOUS AREAS WITH NO OUTFLOW DURING 100YR STORM (8.9\"/>

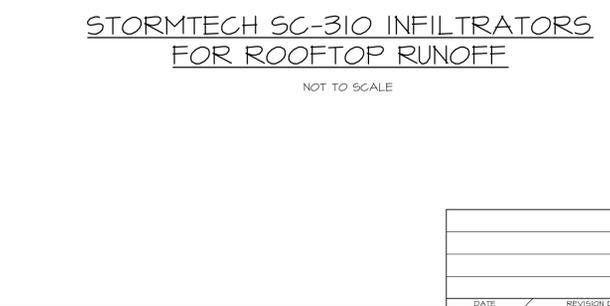
- NOTES:**
- THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES NOR DOES IT REPRESENT A DETERMINATION OF TITLE, BUT IS SOLELY INTENDED TO DEPICT THE EXISTING AND PROPOSED SITE CONDITIONS AND TO DEPICT DRAINAGE SYSTEM(S) TO MITIGATE IMPERVIOUS AREAS FROM PROPOSED GARAGE, DRIVEWAY AND ADDITION.
 - THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPLICABLE, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
 - ELEVATIONS DEPICTED HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
 - CONTRACTOR TO ENSURE THAT GARAGE ROOF RUNOFF ARE PROPERLY ROUTED TO INFILTRATION CHAMBERS AND SITE IS GRADED AS DESIGNED TO DIRECT SURFACE RUNOFF TO RAIN GARDEN AREA AND POROUS PAVEMENT INFILTRATION AREA.
 - RAIN GARDEN INFILTRATION SYSTEM FOR DWELLING IS DESIGNED TO INFILTRATE 8.4\"/>



INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING:
 EXFILTRATION RATE: LOAMY SAND - HYDRAULIC SOILS CLASS A / R.A.W.L. RATE: 2.41 INCHES / HOUR = 0.0000558 FT/SEC
 STORMTECH INFILTRATION AREA = 7.1' x 23.8' = 183 S.F. X 0.0000558 FT/SEC = 0.01 C.F.S. BOTTOM

IMPERVIOUS AREA INCREASE:
 EXISTING IMPERVIOUS AREA 4,313 S.F.
 PROPOSED IMPERVIOUS AREA 6,458 S.F.
 TOTAL INCREASE IMPERVIOUS AREAS 2,145 S.F.

MITIGATION BREAKDOWN:
 120 S.F. GARAGE ROOFTOP RUNOFF INTO (6) INFILTRATION CHAMBERS + 1,100 S.F. PROP. DRIVEWAY TO RAIN GARDEN AREA + 1,030 S.F. OF DRIVEWAY AND PROP. ADDITION RUNOFF TO POROUS PAVEMENT INFILTRATION AREA = TOTAL MITIGATION OF 2,250 S.F. IMPERVIOUS AREAS WITH NO OUTFLOW DURING 100YR STORM (8.9\"/>



SOIL TESTING
 PERFORMED BY: RICHARD BERUBE C.S.E.
 WITNESS BY: WINCHESTER ENGINEERING / D.P.W. DEPT.
 DATE PERFORMED: 10-3-22

TEST PIT 1

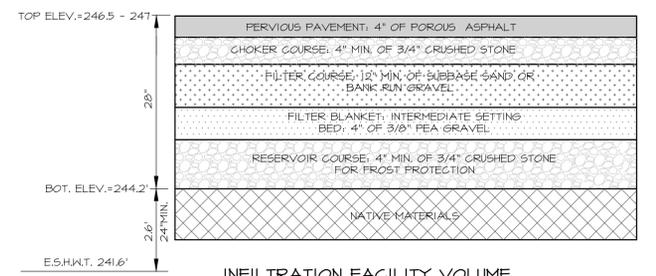
DEPTH (INCHES)	EL. 247 E.S.H.M.T. 65' (241.6)
0-17	FILL GRAVEL --
17-90	C LS 2.5Y 6/4

TEST PIT 2

DEPTH (INCHES)	EL. 259' E.S.H.M.T. 65' (253.6)
0-17	FILL GRAVEL --
17-90	C LS 2.5Y 6/4

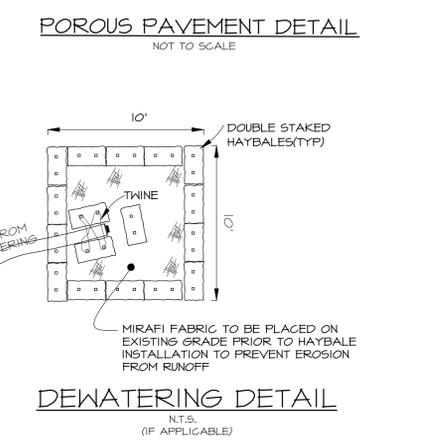
TEST PIT 3

DEPTH (INCHES)	EL. 210' E.S.H.M.T. 40' (266.7)
0-6	A FSL 10YR 3/3
6-24	B LS 10YR 5/8
24-80	C LS 2.5Y 5/6



IMPERVIOUS AREA INCREASE:
 EXISTING IMPERVIOUS AREA 4,313 S.F.
 PROPOSED IMPERVIOUS AREA 6,458 S.F.
 TOTAL INCREASE IMPERVIOUS AREAS 2,145 S.F.

MITIGATION BREAKDOWN:
 120 S.F. GARAGE ROOFTOP RUNOFF INTO (6) INFILTRATION CHAMBERS + 1,100 S.F. PROP. DRIVEWAY TO RAIN GARDEN AREA + 1,030 S.F. OF DRIVEWAY AND PROP. ADDITION RUNOFF TO POROUS PAVEMENT INFILTRATION AREA = TOTAL MITIGATION OF 2,250 S.F. IMPERVIOUS AREAS WITH NO OUTFLOW DURING 100YR STORM (8.9\"/>



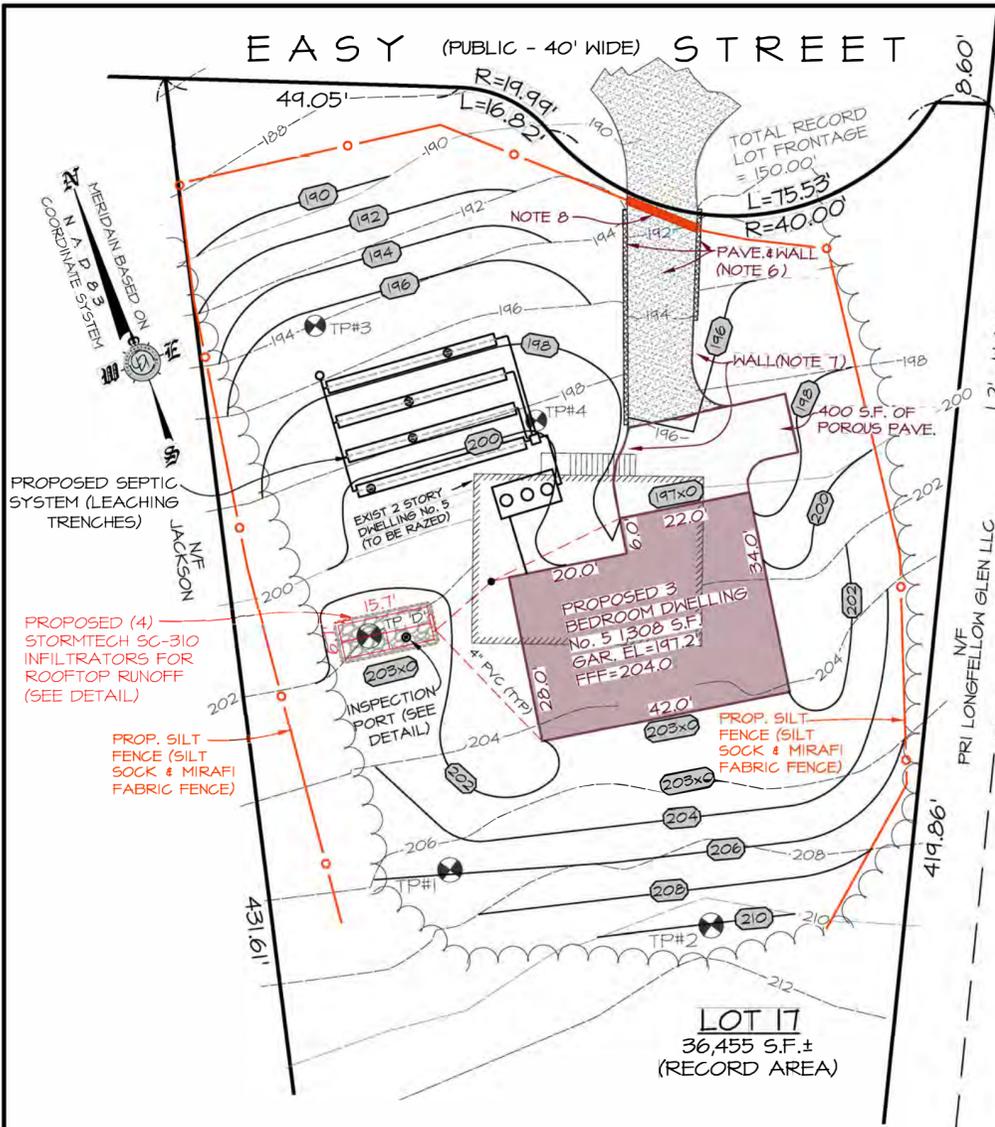
STORMWATER MANAGEMENT PLAN

PREPARED FOR: _____

PREPARED BY:
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel: 978-840-1014 Fax: 978-840-1020
 Web: CDsurvey.com
 Email: info@CDsurvey.com

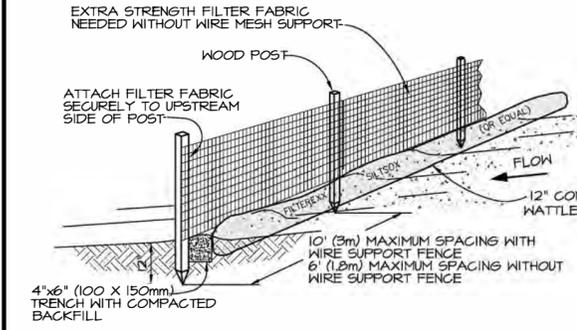
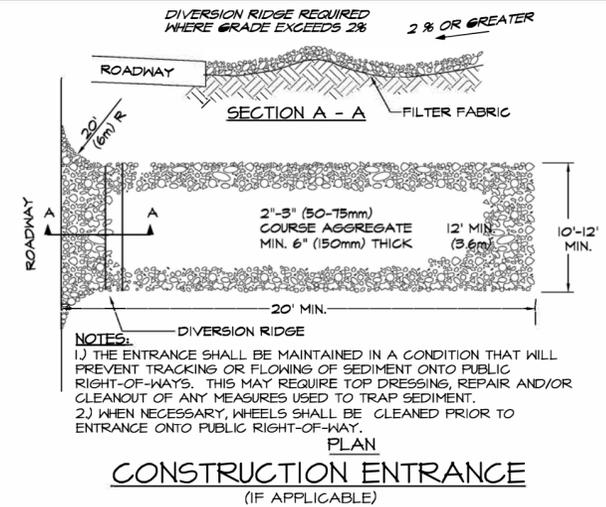
SCALE: 1"=20' SHEET 1 OF 1 DATE: 11-6-22

DATE	REVISION DESCRIPTION	DESIGN: KGF	REVIEW: LR

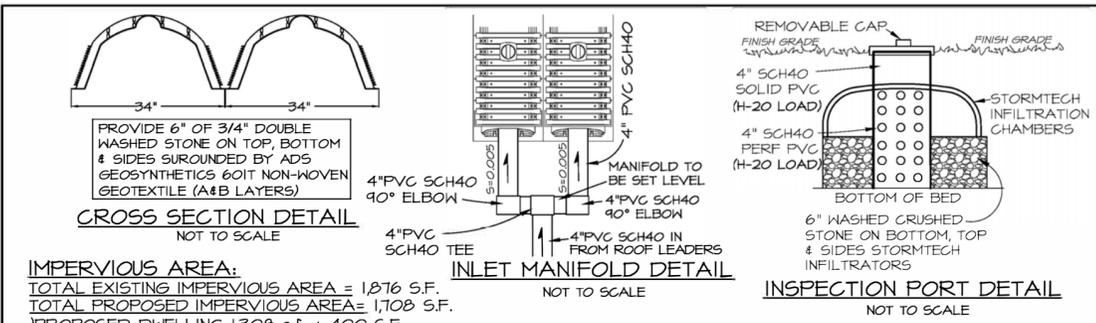
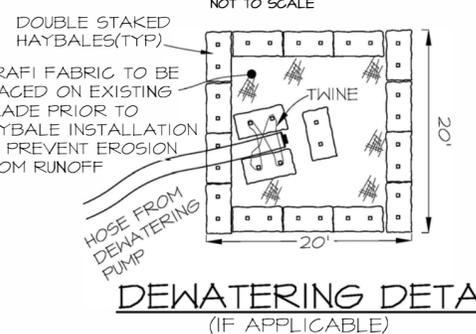
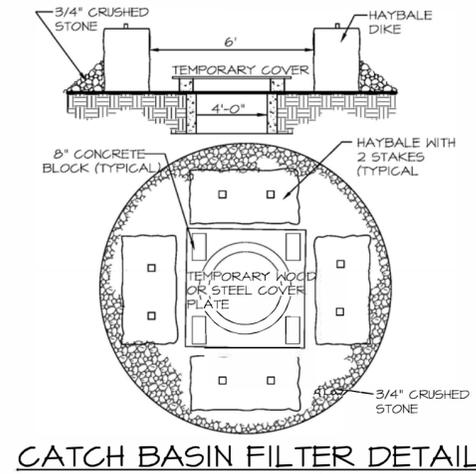


NOTES:

- 1.) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES NOR FOR TITLE INSURANCE PURPOSES BUT IS SOLELY TO DEPICT THE EXISTING AND PROPOSED CONDITIONS AND TO DEPICT THE PROPOSED EROSION AND IMPROVE STORMWATER MANAGEMENT & RECHARGE TO GROUNDWATER FOR THE NEW SINGLE FAMILY DEVELOPMENT.
- 2.) PROPERTY OWNER IS DOMINIC MANGANO 5 EASY STREET SUDBURY, MA.
- 3.) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, POINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF SUDBURY. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- 4.) CONTRACTOR TO RESTORE GROUND SURFACE TO PRE-CONSTRUCTION CONDITIONS AND RESTORE ALL DISTURBED AREAS WITH LOAM AND SEED.
- 5.) ALL ROOF RUNOFF TO BE DIRECTED INTO STORMTECH INFILTRATORS.
- 6.) EXISTING BITUMINOUS CONCRETE DRIVEWAY AND PORTIONS OF EXISTING RETAINING WALLS TO REMAIN AND BE REBUILT IN PLACE AS NECESSARY.
- 7.) EXISTING PORTION OF WALL TO BE REMOVED.
- 8.) PLACE A SILT SOCK ACROSS DRIVEWAY ENTRANCE/EXIT WITH STAKES ON EITHER SIDE OF PAVEMENT TO SECURE FOR SEDIMENT CONTROL. THE SOCK CAN BE MOVED / 'OPENED' BRIEFLY ONLY FOR ENTRY AND EXIT DURING CONSTRUCTION.

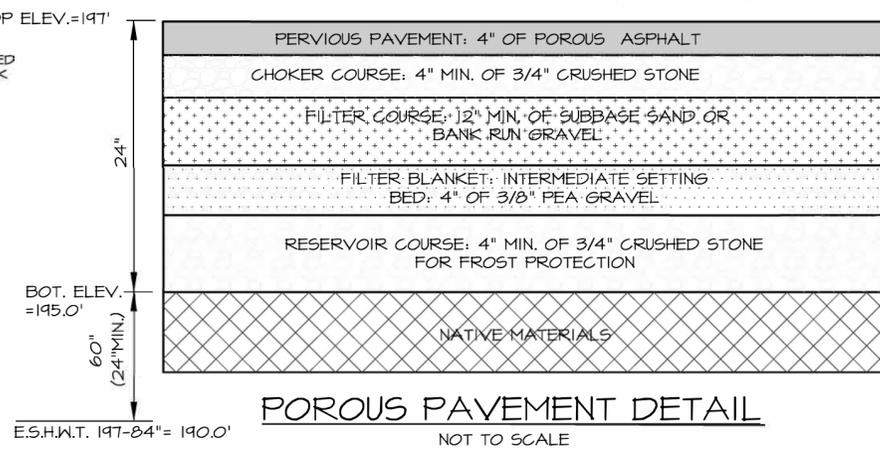
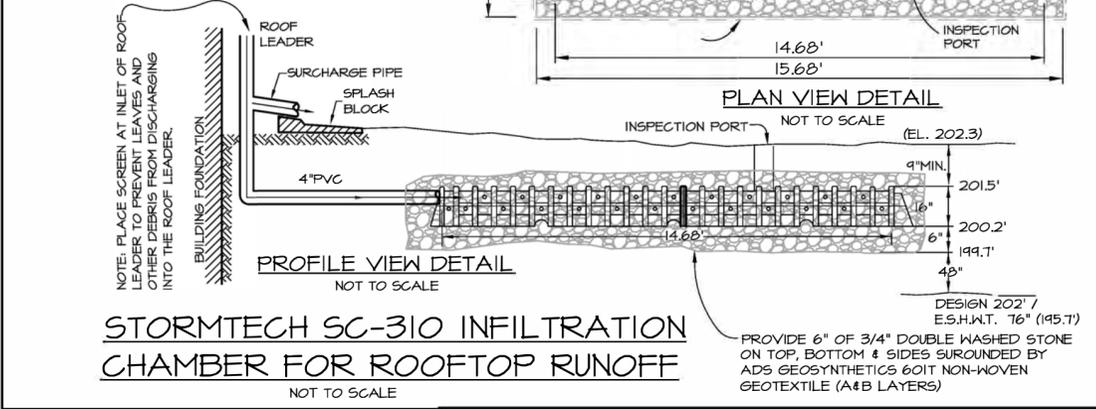
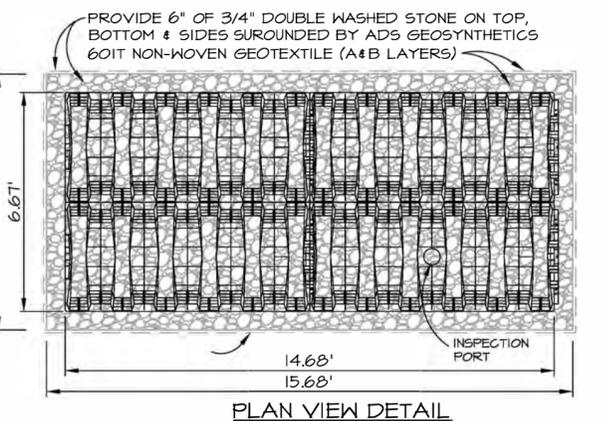


- NOTES:**
1. SILT FENCE AND 12" COMPOST FILLED WATTLE / SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 4" (102mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.



IMPERVIOUS AREA:
TOTAL EXISTING IMPERVIOUS AREA = 1,876 S.F.
TOTAL PROPOSED IMPERVIOUS AREA = 1,708 S.F.
PROPOSED DWELLING 1,308 S.F. + 400 S.F. EXISTING DRIVEWAY REMAINING)
TOTAL DECREASE IN IMPERVIOUS AREA = 168 S.F.
(4) INFILTRATION CHAMBERS PROPOSED TO ACCEPT 1,308 S.F. OF PROP. ROOFTOP RUNOFF. SEE HYDROLOGY CALCULATIONS COMPARING PRE CONDITIONS TO POST CONDITIONS, SITE PLAN, DETAILS & CALCULATIONS.

INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING:
EXFILTRATION RATE:
SAND - HYDRAULIC SOILS CLASS A / R.A.W.L RATE: 8.27"/HR = 0.00019144 FT/SEC
STORMTECH INFILTRATION AREAS: = 15.68' x 6.67' = 105 S.F. X 0.00019144 FT/SEC = 0.02 C.F.S. BOTTOM



STORMWATER MANAGEMENT SITE PLAN

ASSESSOR'S / GIS ID: K05-0217
PREPARED FOR: ...

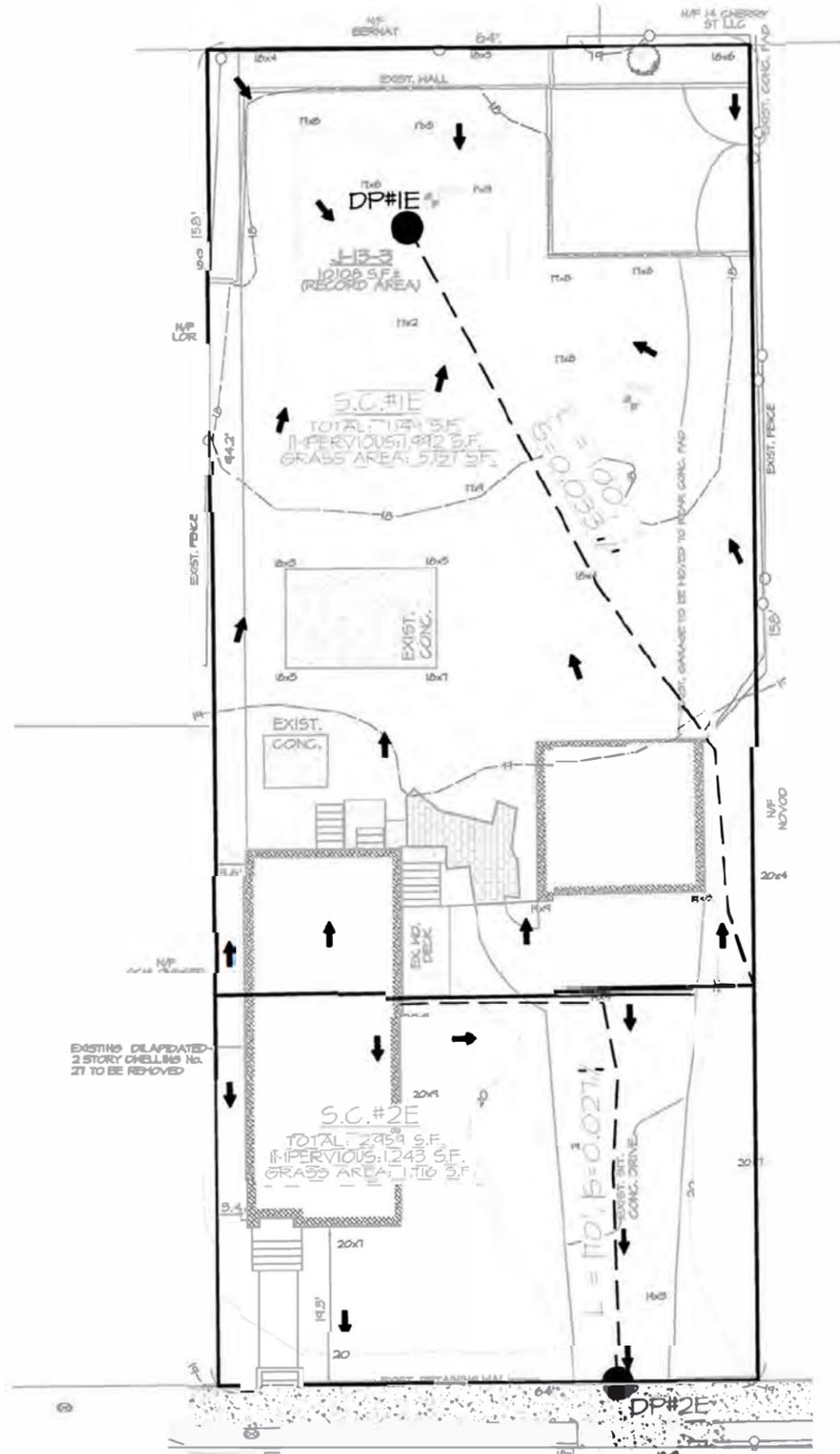
PREPARED BY:
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web: CDISurvey.com
Email: info@CDISurvey.com

SCALE: 1"=20' SHEET 1 OF 1 DATE: 1-4-24

PERFORMED BY: RICHARD BERUBE, S.E. #162 WITNESSED BY: VIVIAN / ROBERT LAZO SUDBURY BOARD OF HEALTH
TEST PIT DATA
PERCOLATION RESULT = 2 MPI

TEST PIT 1				TEST PIT 2				TEST PIT 3				TEST PIT 4			
DATE PERFORMED: 11-16-23				DATE PERFORMED: 11-16-23				DATE PERFORMED: 12-15-23				DATE PERFORMED: 12-15-23			
DEPTH (INCHES)	DESIGN	FSL	IOYR	DEPTH (INCHES)	DESIGN	FSL	IOYR	DEPTH (INCHES)	DESIGN	FSL	IOYR	DEPTH (INCHES)	DESIGN	FSL	IOYR
0-8	A	FSL	10YR 3/2	0-7	A	FSL	10YR 3/2	0-12	A	FSL	10YR 3/2	0-12	A	FSL	10YR 3/2
8-16	Bw	FSL	10YR 6/6	7-16	Bw	FSL	10YR 6/6	12-24	Bw	FSL	10YR 6/6	12-24	Bw	FSL	10YR 6/6
16-108	C	F-M SAND	2.5Y 7/4	16-100	C	F-M SAND	2.5Y 7/4	24-108	C	FINE SAND	2.5Y 7/4	24-108	C	FINE SAND	2.5Y 7/4

DATE	REVISION DESCRIPTION	DESIGN	REVIEW
5-9-24	REVIEW COMMENTS BY HORSLEY WITTEN GROUP & DEPUTY DIRECTOR OF PUBLIC WORKS/TOWN ENGINEER BILL O'ROURKE		
3-28-24	SUDBURY DPW 3-13-24 MEMORANDUM		

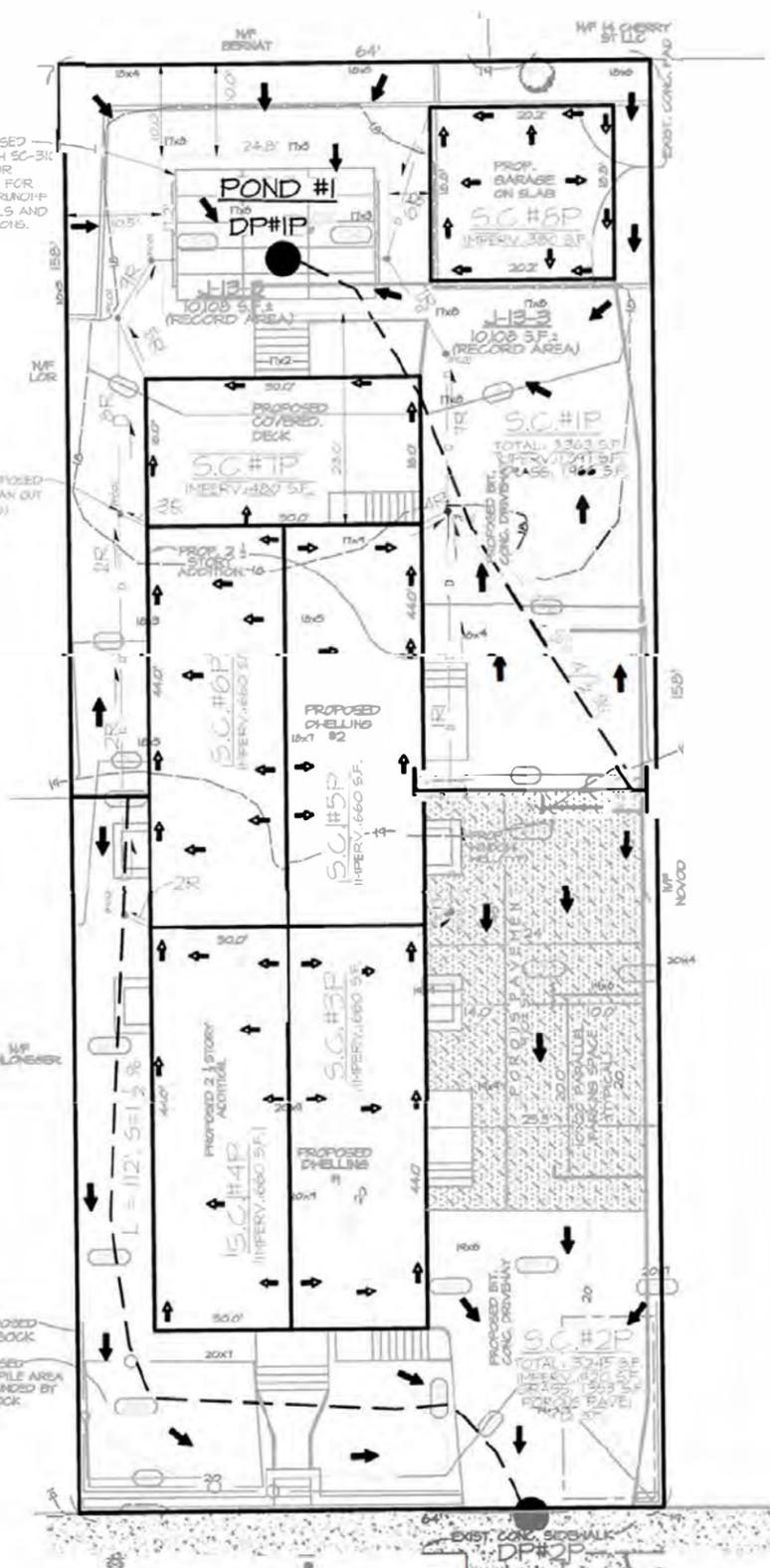


ALMONT STREET
EXISTING DRAINAGE PLAN

SCALE: 1"=20'



(15) PROPOSED STORMTECH SC-3K INFILTRATOR CHAMBERS FOR ROOF TOP RUNOFF SEE DETAILS AND CALCULATIONS.



ALMONT STREET
PROPOSED DRAINAGE PLAN

SCALE: 1"=20'



DRAINAGE PLAN

DATE	REV. DESCRIPTION

LEGEND:

- PIPE FLOW DIRECTION
- ⇨ SURFACE ROOF FLOW DIRECTION
- ⇩ SURFACE LAND FLOW DIRECTION
- L = 90', S = 0.01 OVERLAND FLOWLINE
- S.C.#1E SUBCATCHMENT
- DP 1P DRAINAGE POINT

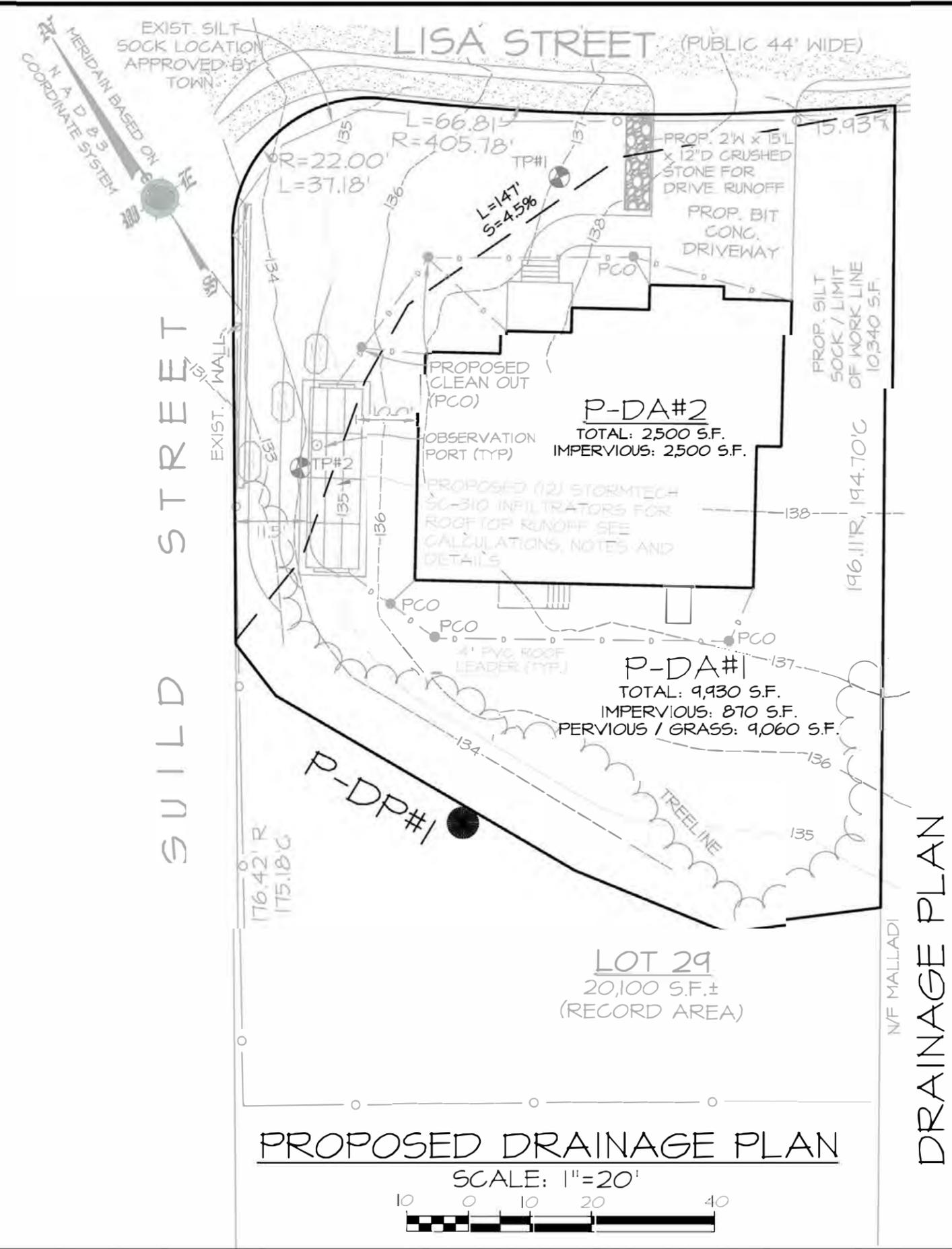
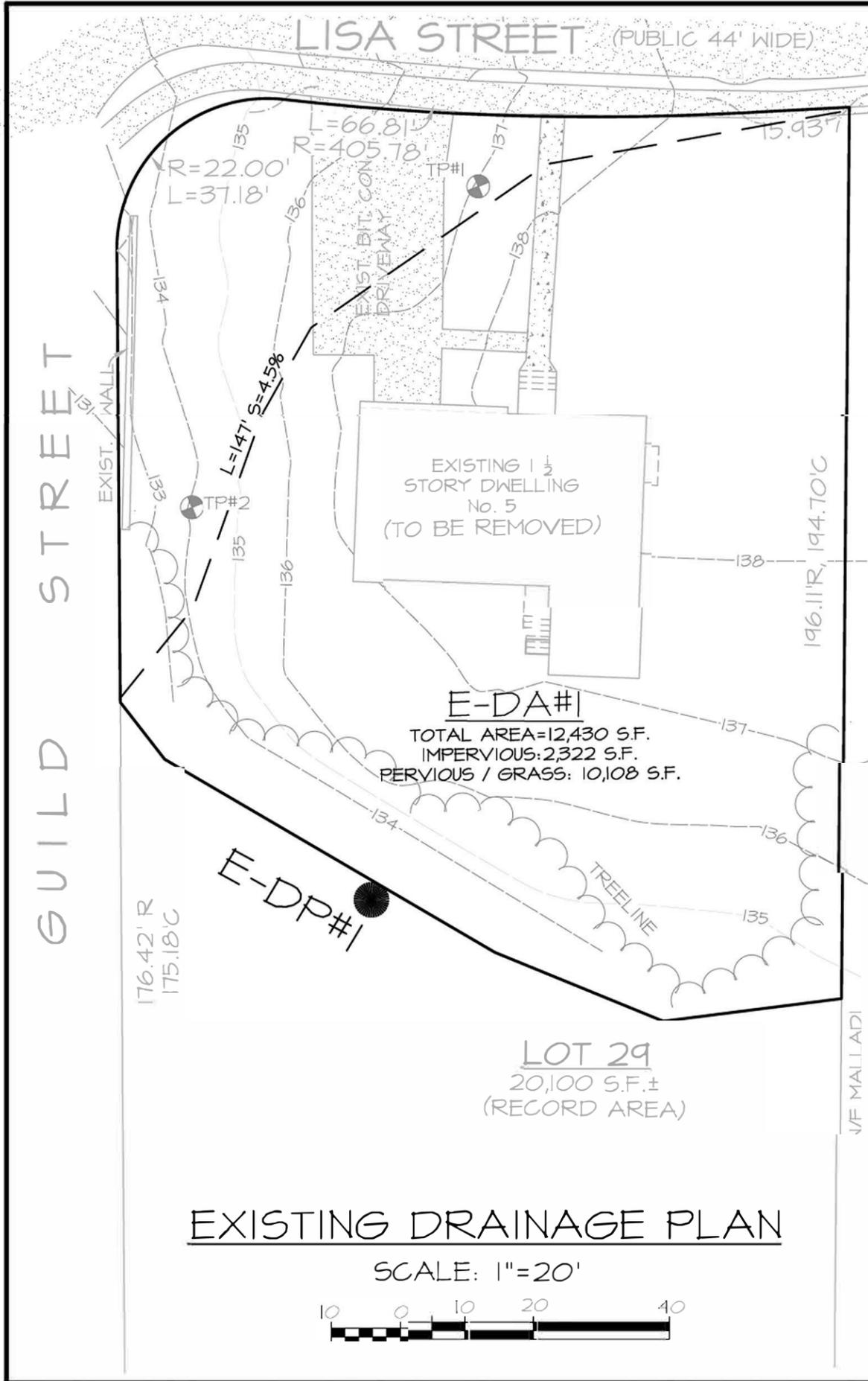
DATE: 12-19-25 DES. KPF / REV. TPR

MASSACHUSETTS

Cyprus Design Inc.

Lord Surveying & Civil Engineering Services
1501 Main Street, Unit 24, Teusbury, MA 01476
Tel: 978.640.1019, Fax: 978.640.1020
Web: CDsurvey.com
Email: info@CDsurvey.com





REVISIONS	
DATE	DESCRIPTION

LEGEND:

↑ OVERLAND FLOW DIRECTION

--- L = 40', S = 0.01' OVERLAND FLOW LINE

S.C.#111 SUBCATCHMENT

D.P. #1 DRAINAGE POINT

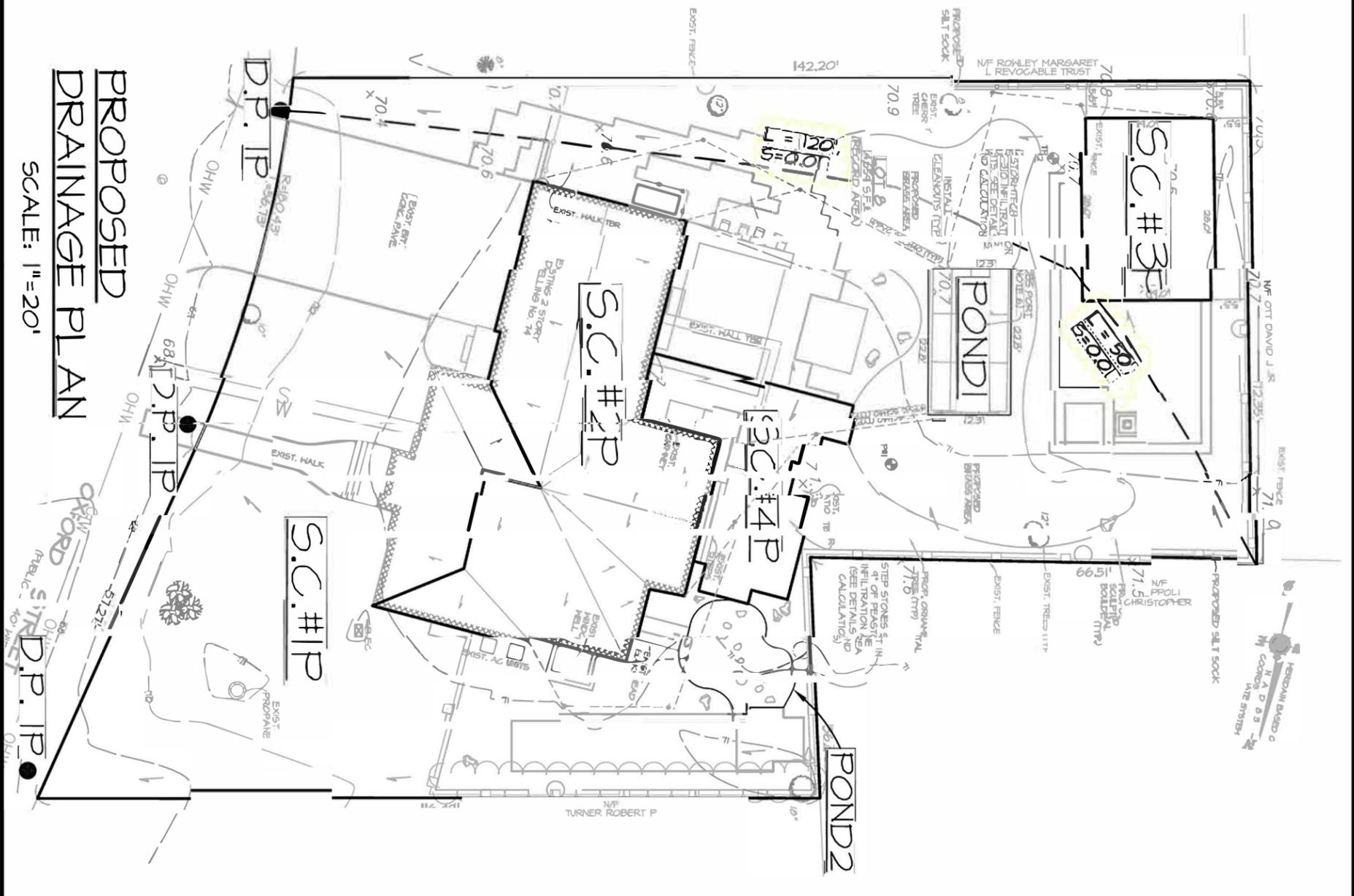
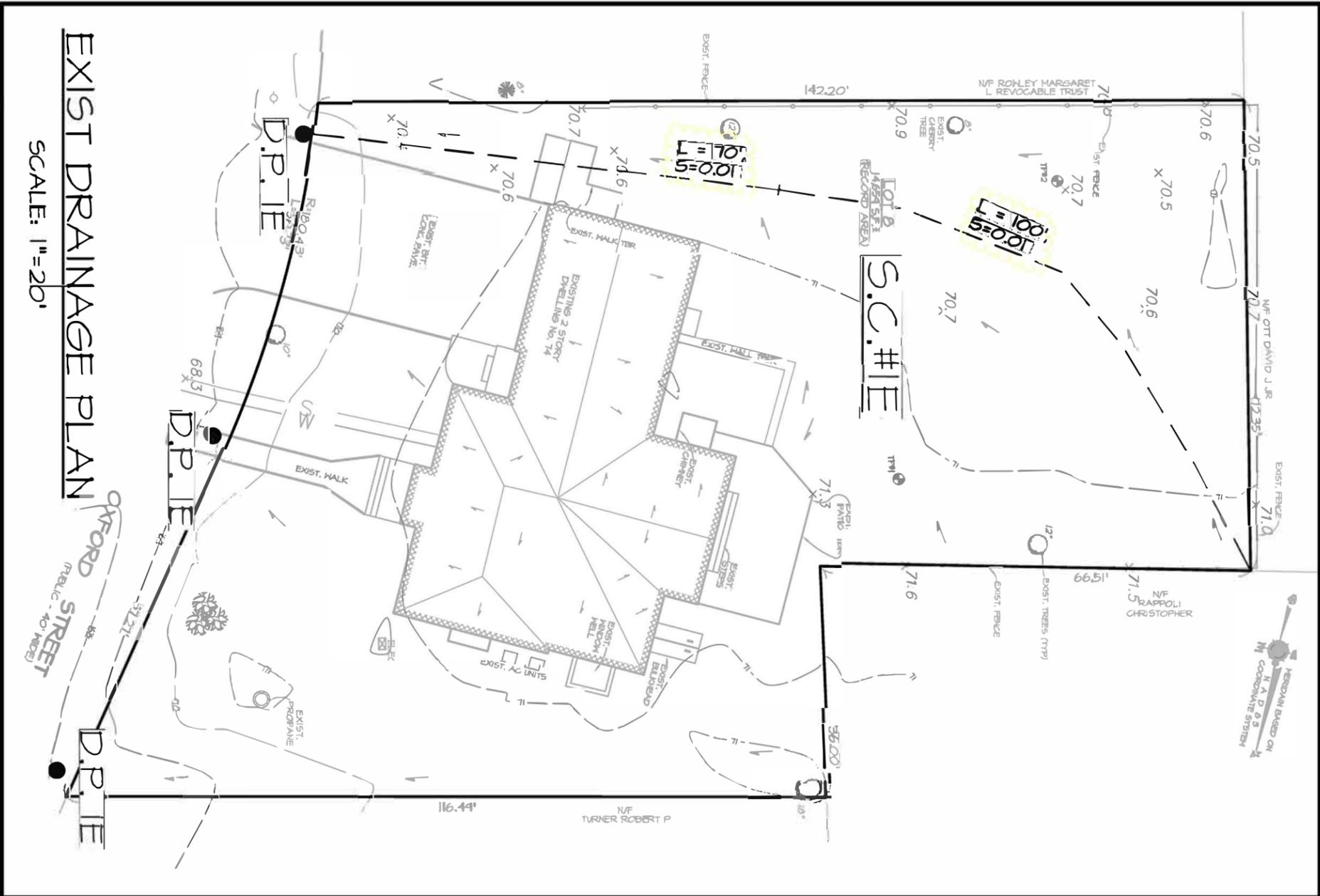
LOCATED AT

MASSACHUSETTS

PREPARED BY

Syrus Design Inc.
Land Surveying & CMI Engineering Services
1501 Main Street, Unit 24 Taunton, MA 01916
Tel. 978-841-1011, Fax 978-841-0100
Web: CDESurvey.com

DRAINAGE PLAN



DRAINAGE PLAN

LOCATED AT

PREPARED BY

Cyprus Design Inc.
 nd Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web. CDISurvey.com
 mail info@CDISurvey.com

REVISIONS	
DATE	DESCRIPTION

LEGEND:

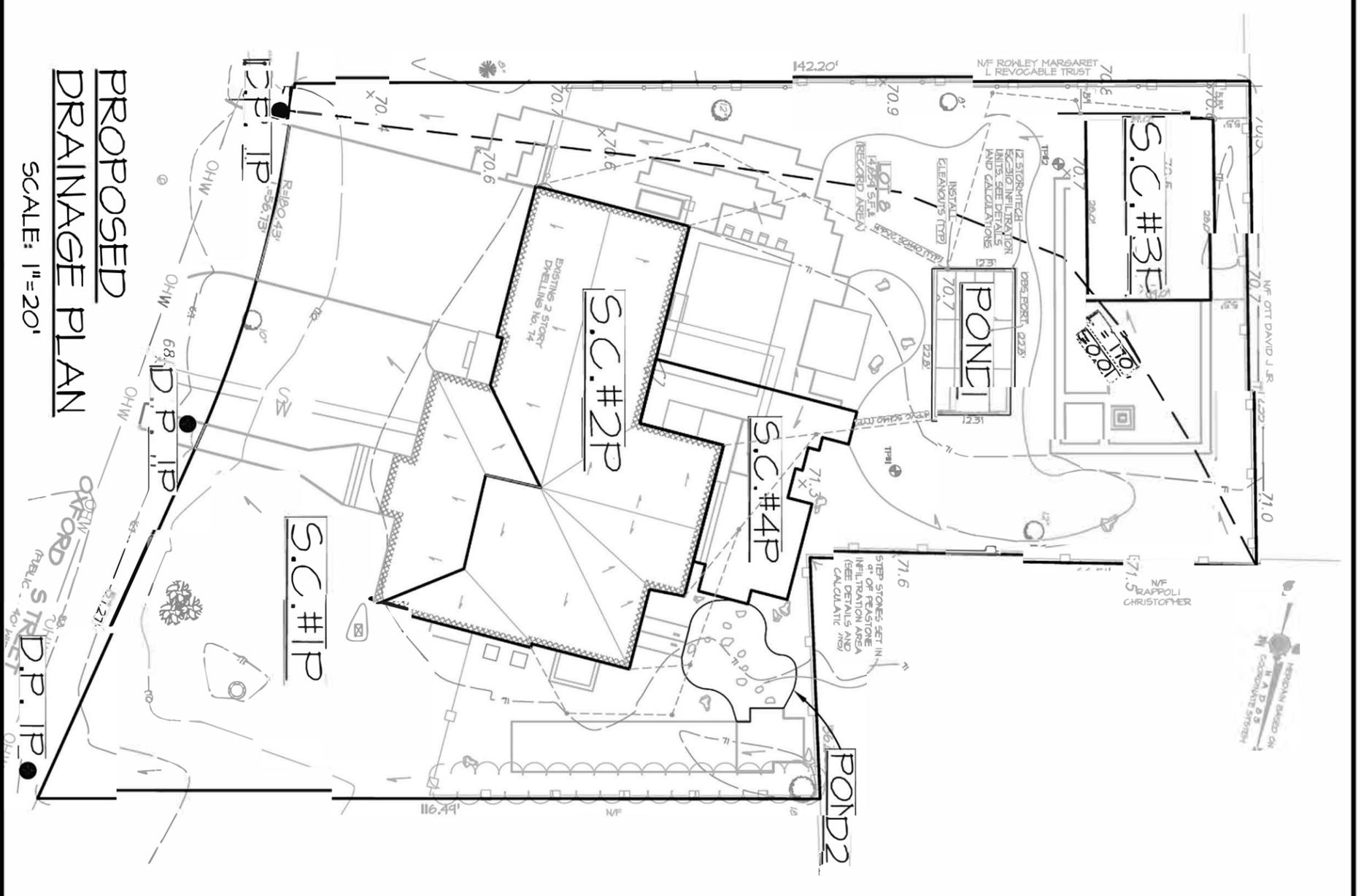
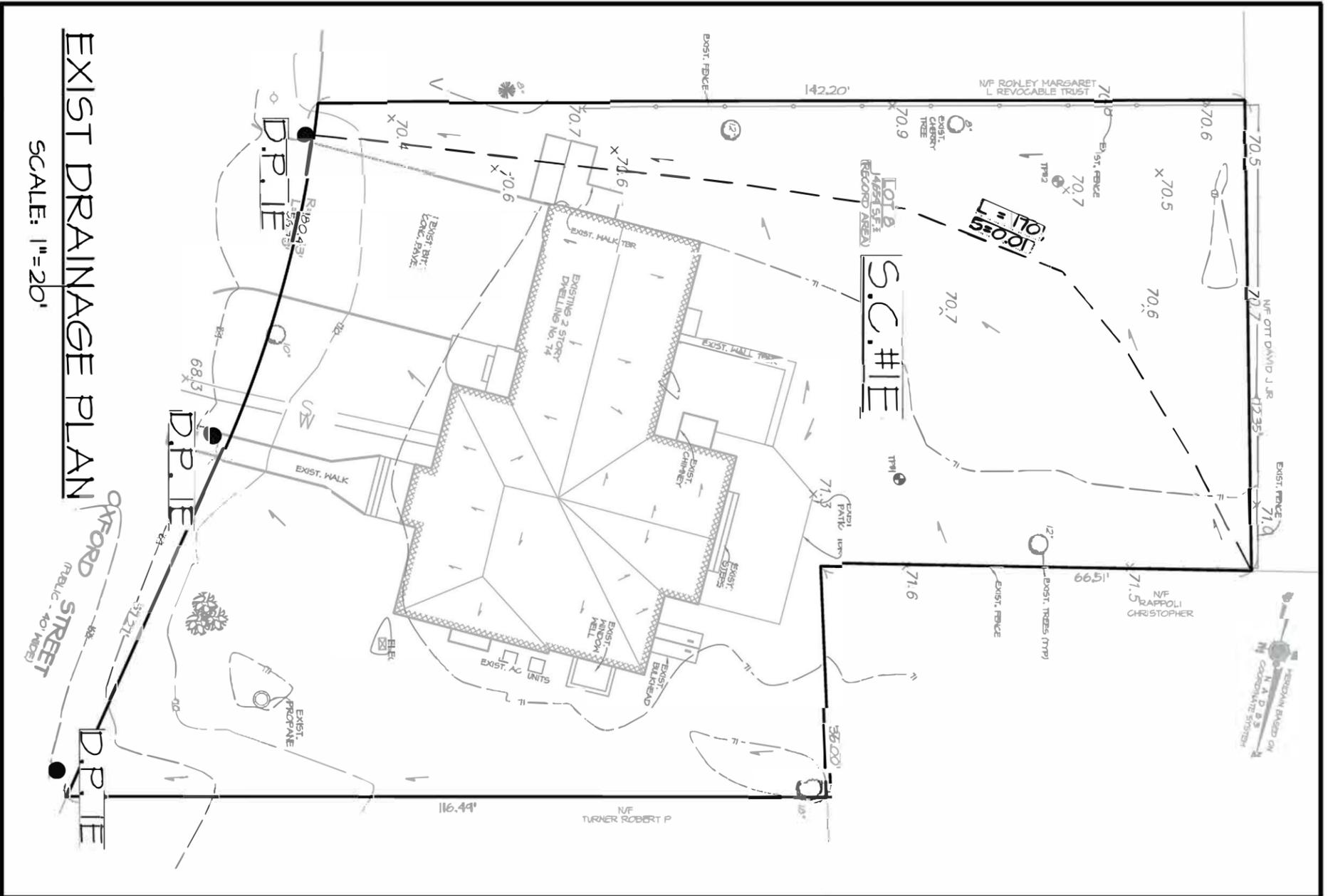
- OVERLAND FLOW DIRECTION
- L = 90', S=0.01 OVERLAND FLOW LINE
- S.C. #IE SUBCATCHMENT
- D.P. #IP DRAINAGE POINT

DATE: 9-12-24 REV. 10-7-24 SHEET 1 OF 1

11

10-7-24

REGISTERED PROFESSIONAL ENGINEER



DRAINAGE PLAN

LOCATED AT
 74 OXFORD STREET
 TOWN OF TOWN, MASSACHUSETTS

PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web. CDISurvey.com
 Email info@CDISurvey.com

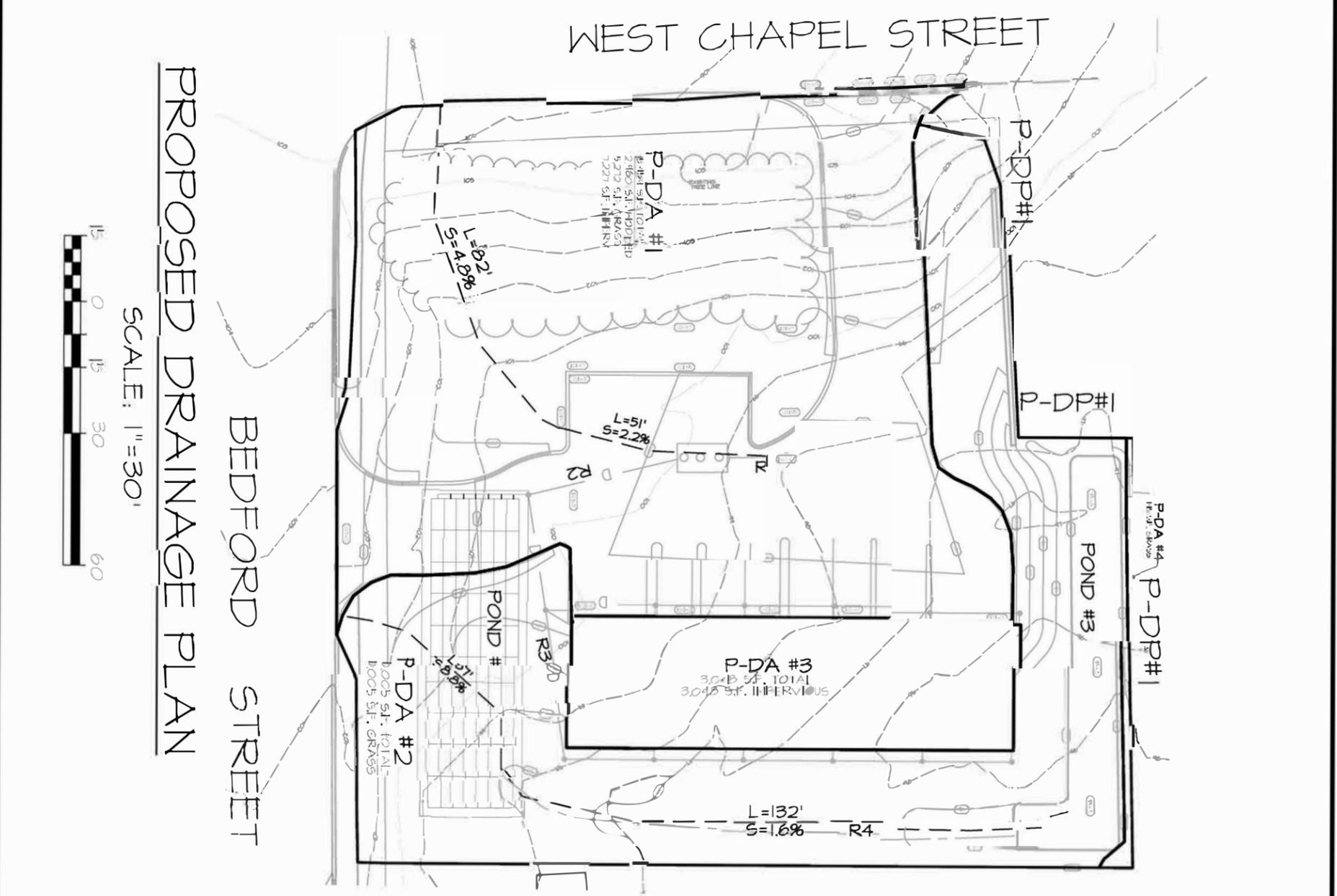
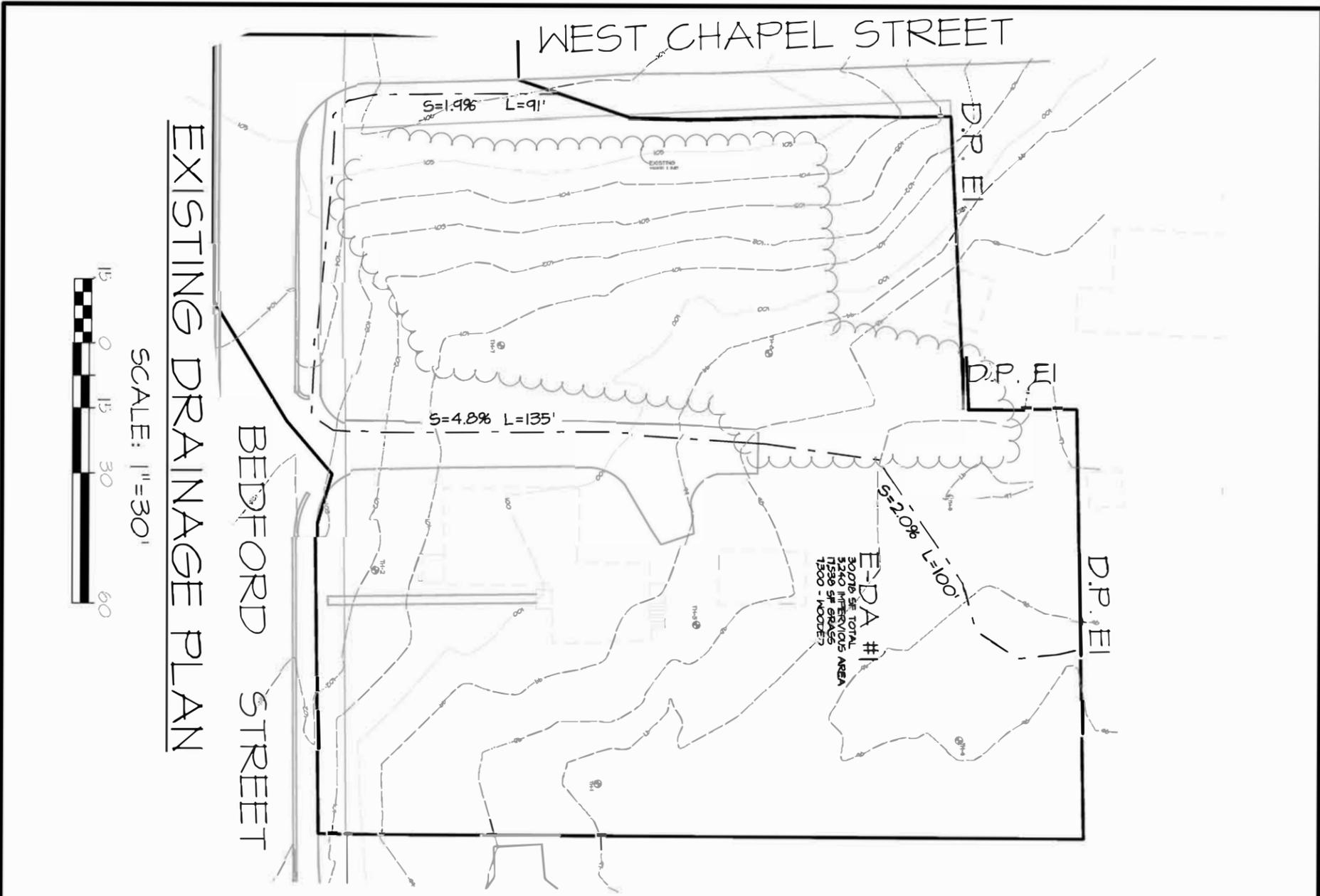
REVISIONS	
DATE	DESCRIPTION

LEGEND:
 → OVERLAND FLOW DIRECTION
 L = 90', S=0.01 OVERLAND FLOW LINE
 S.C.#IE SUBCATCHMENT
 D.P. IP DRAINAGE POINT

DATE: 9-12-24 SHEET 1 OF 1

REGISTERED PROFESSIONAL ENGINEER

9-12-24



DRAINAGE PLAN

LOCATED AT
 1501 HAITH STREET
 ANDOVER, MASSACHUSETTS

PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Haith Street Unit 24, Andover, MA 01876
 Tel: 978.646.1011 Fax: 978.646.1020
 Web: CDISurvey.com
 Email: info@CDISurvey.com

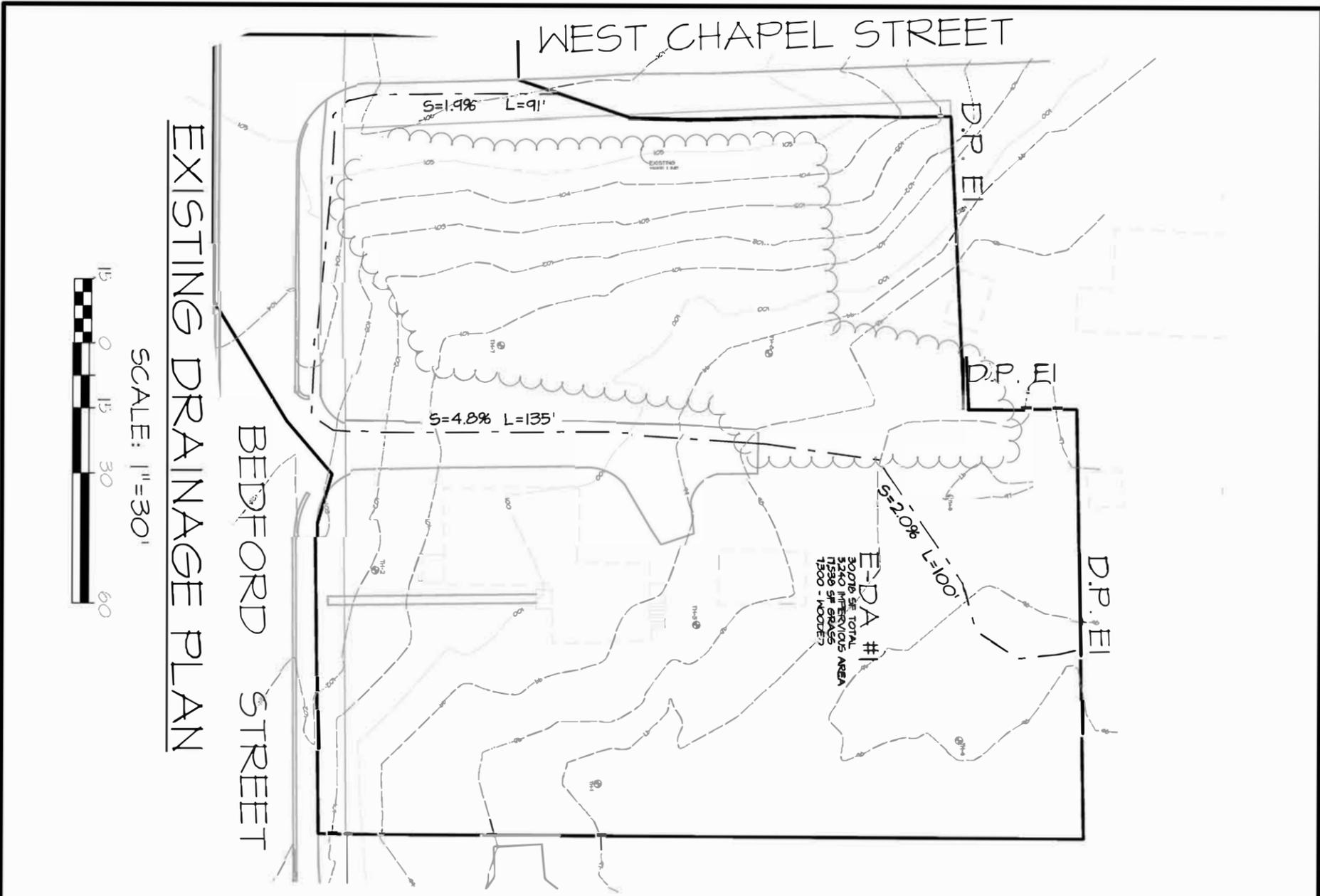
REVISIONS	
DATE	DESCRIPTION

LEGEND:

- OVERLAND FLOW DIRECTION
- OVERLAND FLOW LINE
- PROPOSED SUBCATCHMENT
- EXISTING SUBCATCHMENT
- EXIST. & PROP. DRAINAGE POINT

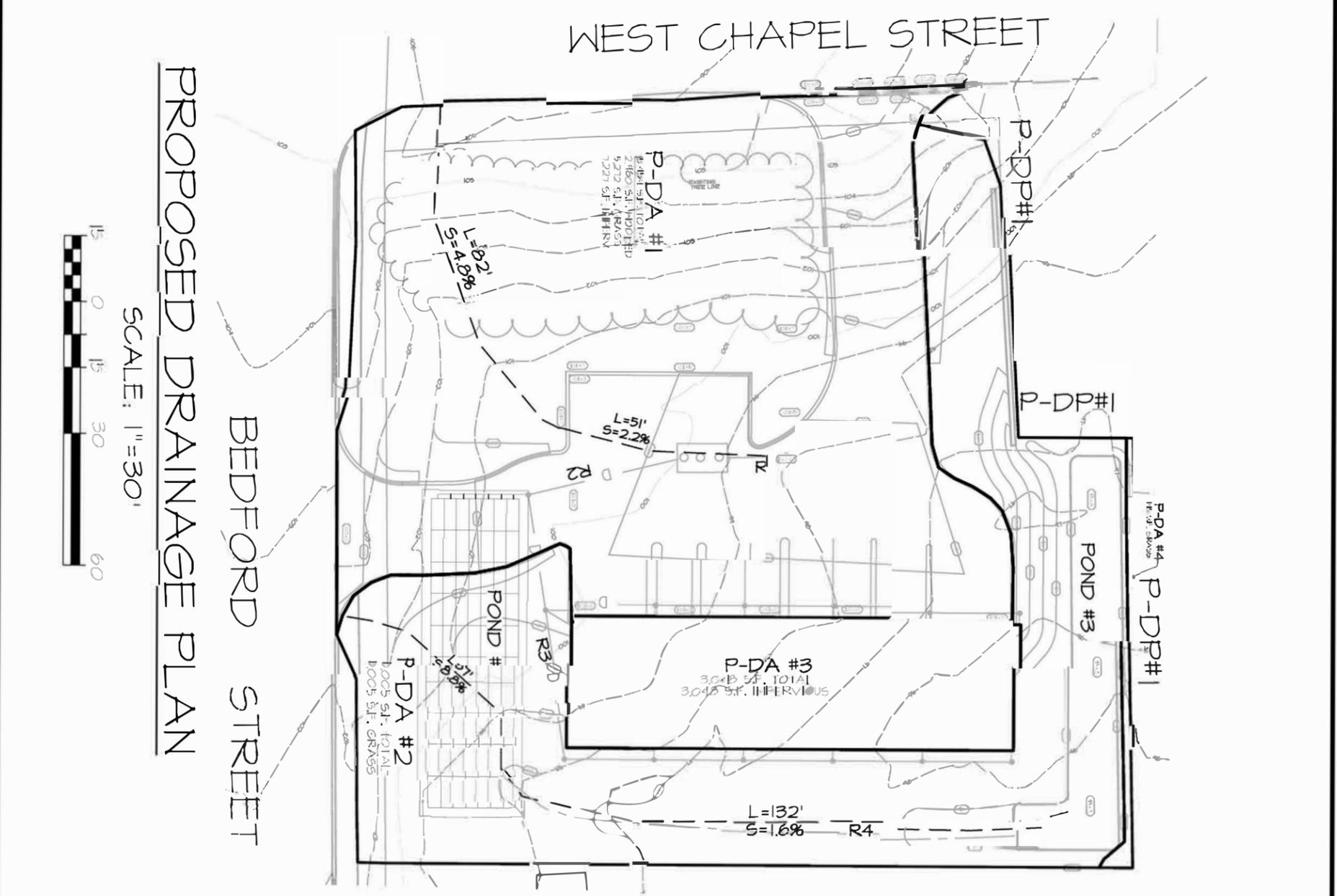
DATE: 3-25-24 SHEET 1 OF 1

REGISTERED PROFESSIONAL ENGINEER



EXISTING DRAINAGE PLAN

SCALE: 1"=30'



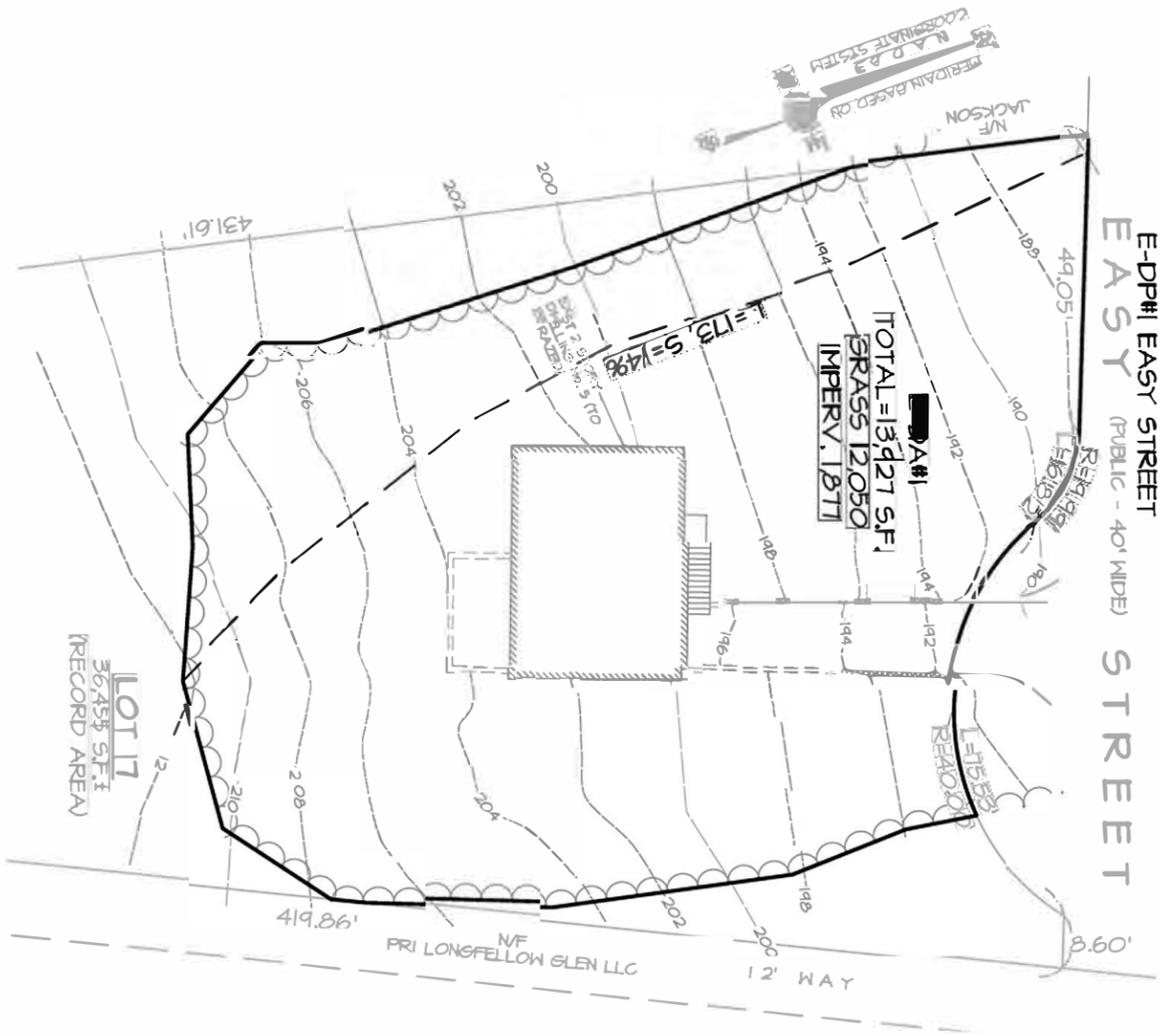
PROPOSED DRAINAGE PLAN

SCALE: 1"=30'



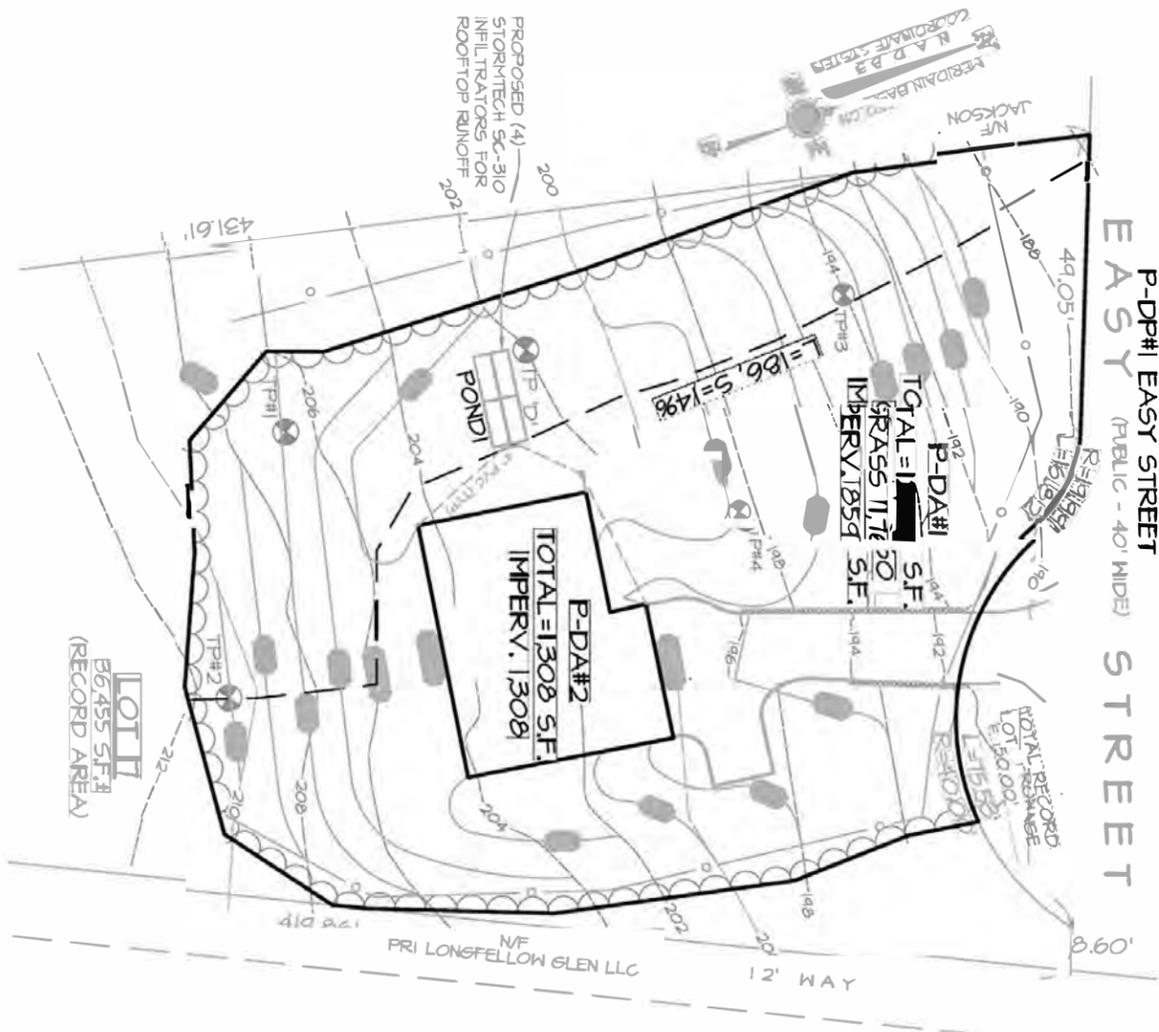
DRAINAGE PLAN

<p>LOCATED AT</p> <p>STREET</p> <p>MASSACHUSETTS</p> <p>PREPARED BY</p> <p>Cyprus Design Inc.</p> <p>Land Surveying & Civil Engineering Services 1501 Main Street Unit 24 Taunton, MA 01976 Tel: 478.646.1011 Fax: 478.646.1020 Web: CDISurvey.com Email: info@CDISurvey.com</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table> <p>LEGEND:</p> <p>→ OVERLAND FLOW DIRECTION</p> <p>--- OVERLAND FLOW LINE</p> <p>P-DA#1-3 PROPOSED SUBCATCHMENT</p> <p>E-DA#1 EXISTING SUBCATCHMENT</p> <p>E-DP#1 / P-DP#1 EXIST. & PROP. DRAINAGE POINT</p> <p>DATE: 3-25-24 SHEET 1 OF 1</p>	DATE	DESCRIPTION			<p style="text-align: right;">5-1-24</p> <p style="text-align: right;">REGISTERED PROFESSIONAL ENGINEER</p>
DATE	DESCRIPTION					



EXISTING DRAINAGE PLAN

SCALE: 1"=30'



PROPOSED DRAINAGE PLAN

SCALE: 1"=30'



DRAINAGE PLAN

LOCATED AT

MASSACHUSETTS

PREPARED BY

Cyprus Design Inc.

Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web: CDISurvey.com
 Email: info@CDISurvey.com



REVISIONS

DATE	DESCRIPTION

LEGEND:

- ➔ OVERLAND FLOW DIRECTION
- - - L = 90', S = 0.01 OVERLAND FLOW LINE
- S.C.#|E SUBCATCHMENT
- D.P. IP DRAINAGE POINT

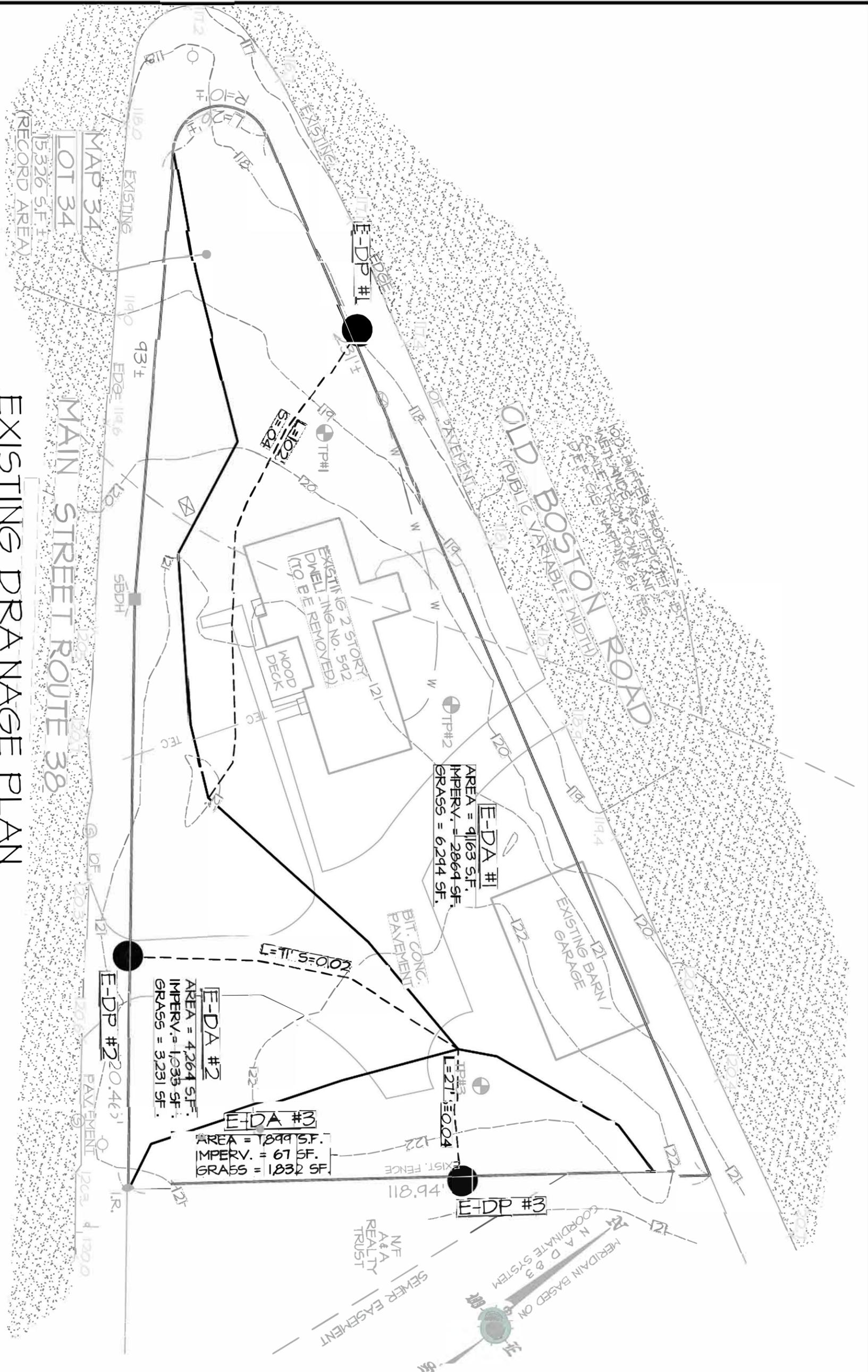
DATE: 3-28-24

SHEET 1 OF 1

REGISTERED PROFESSIONAL ENGINEER

EXISTING DRAINAGE PLAN

SCALE: 1"=20'



EXISTING DRAINAGE PLAN

LOCATED AT

1501 MAIN STREET UNIT 24, TEWKSBURY, MASSACHUSETTS

PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
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 Email: info@CDISurvey.com



REVISIONS

DATE	DESCRIPTION

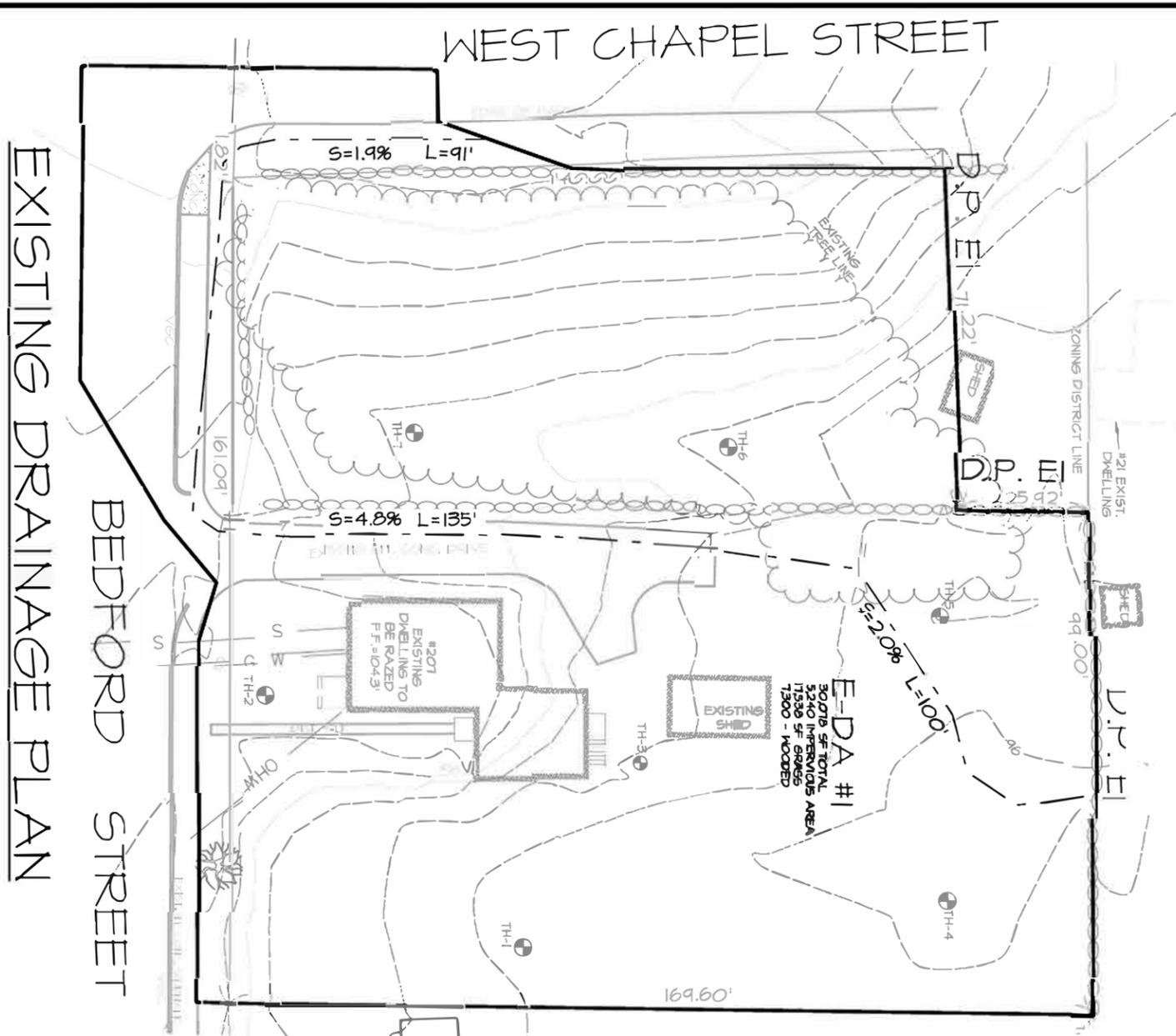
LEGEND:

- OVERLAND FLOW DIRECTION
- OVERLAND FLOW LINE
- SUBCATCHMENT
- D.P. IP DRAINAGE POINT

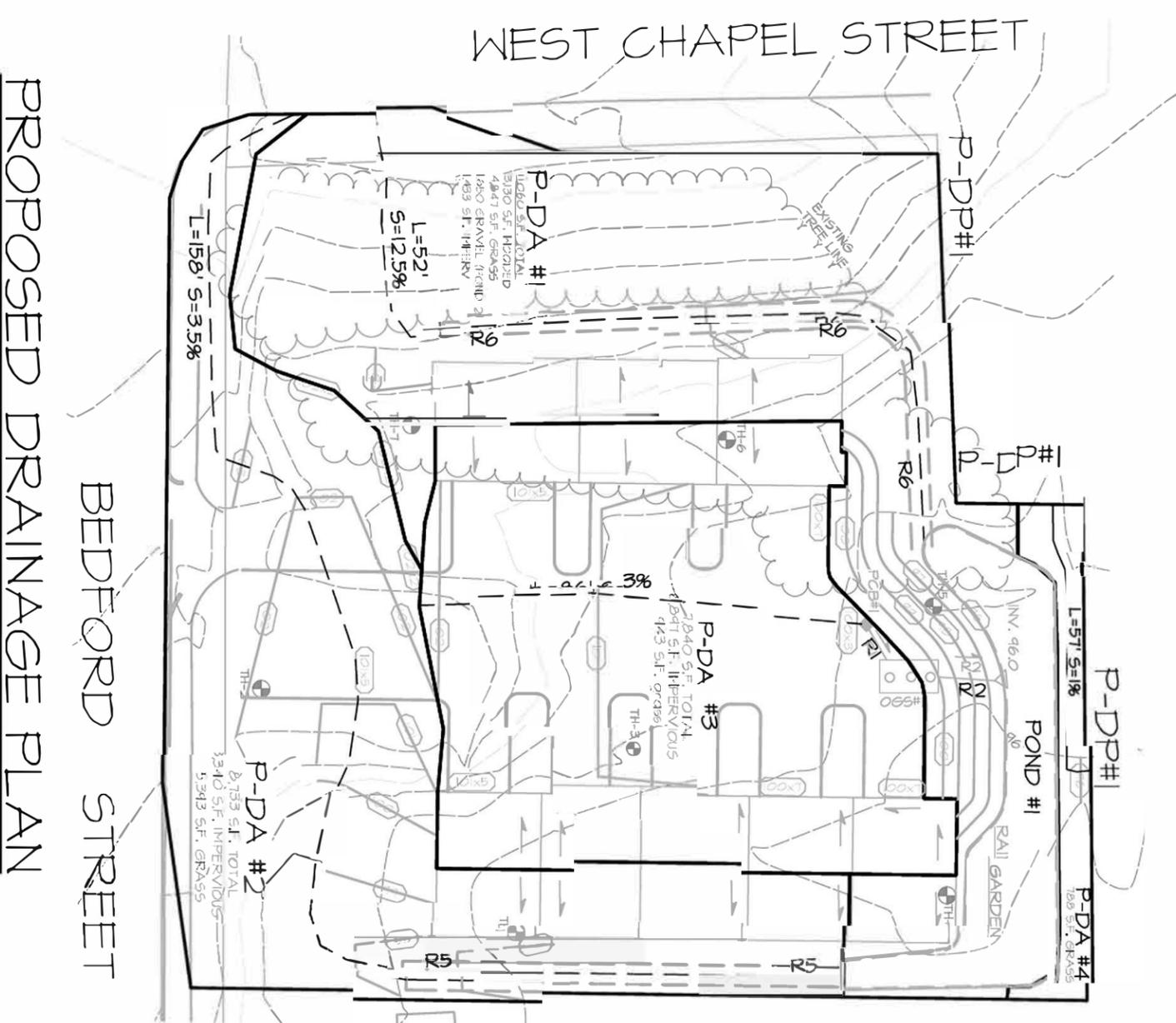
DATE: 7-14-23

SHEET 1 OF 2

REGISTERED PROFESSIONAL ENGINEER



SCALE: 1"=30'



SCALE: 1"=30'



DRAINAGE PLAN

LOCATED AT
 ... STREET
 ... MASSACHUSETTS

PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Taunton, MA 01976
 Tel: 478.640.1041 Fax: 478.640.1020
 Web: CDISurvey.com
 Email: Info@CDISurvey.com

REVISIONS	
DATE	DESCRIPTION

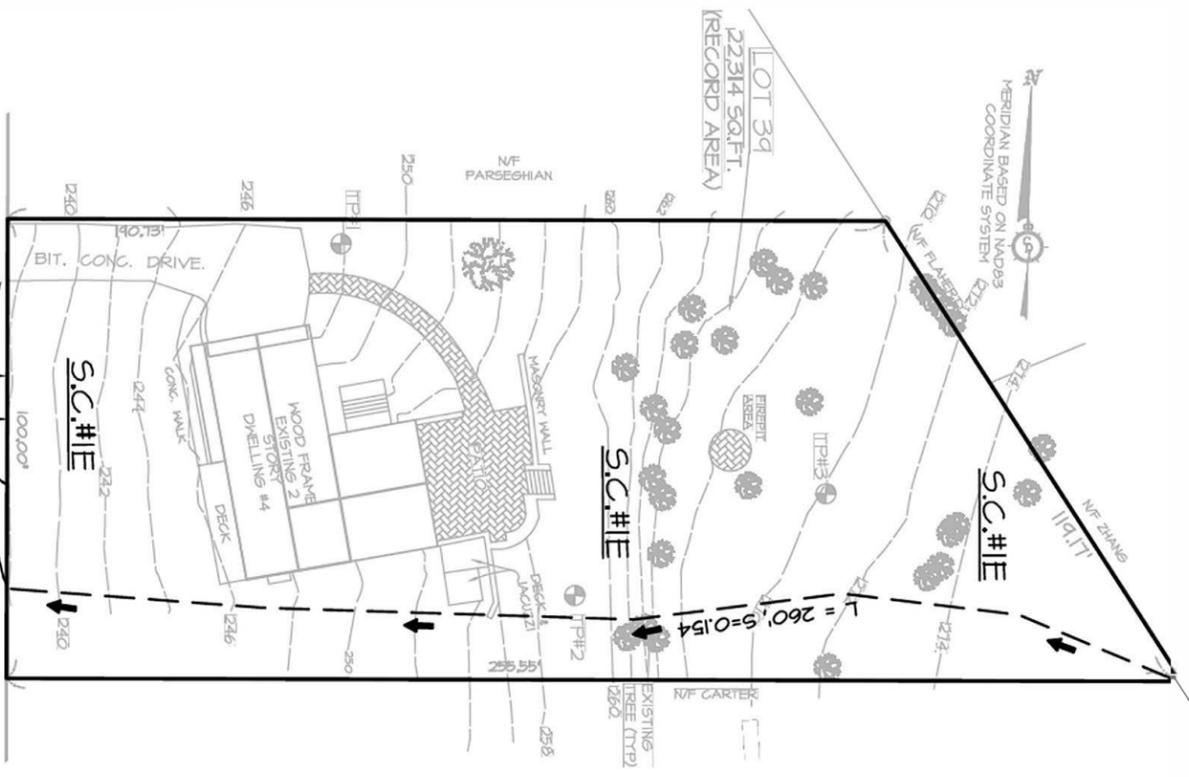
LEGEND:

- OVER LANDFLOW DIRECTION
- OVER LANDFLOWLINE
- PROPOSED SUBCATCHMENT
- EXISTING SUBCATCHMENT
- EXIST. & PROP. DRAINAGE POINT

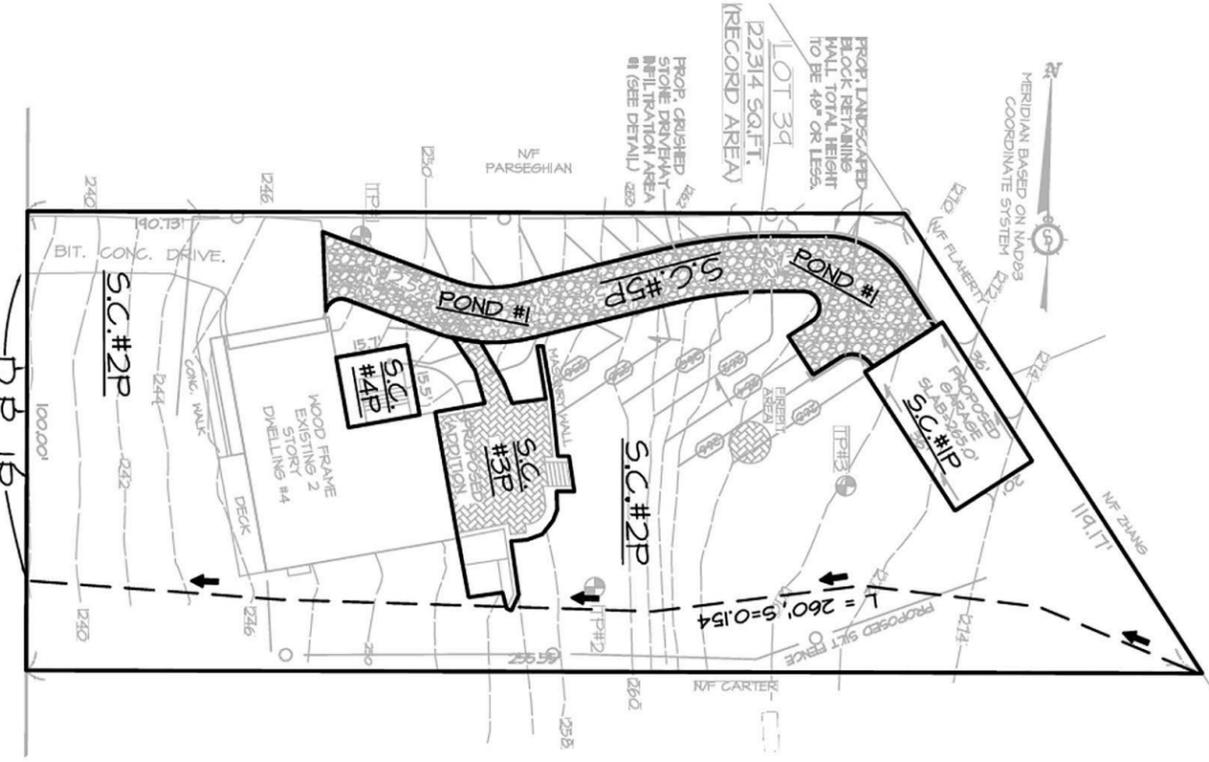
DATE: 10-10-23 SHEET 1 OF 1

REGISTERED PROFESSIONAL ENGINEER

EXISTING DRAINAGE PLAN



PROPOSED DRAINAGE PLAN



STORMWATER SUBCATCHMENT PLAN

LOCATED AT
THORNBERRY ROAD
TENKSBURY, MASSACHUSETTS

PREPARED BY
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 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web. CDISurvey.com
 Email Info@CDISurvey.com

REVISIONS	
DATE	DESCRIPTION

LEGEND:

- OVERLAND FLOW DIRECTION
- $L = 90', S=0.01$ OVERLAND FLOW LINE
- S.C.#1E SUBCATCHMENT
- D.P. #1E DRAINAGE POINT

DATE: 12-23-22 SHEET 1 OF 1

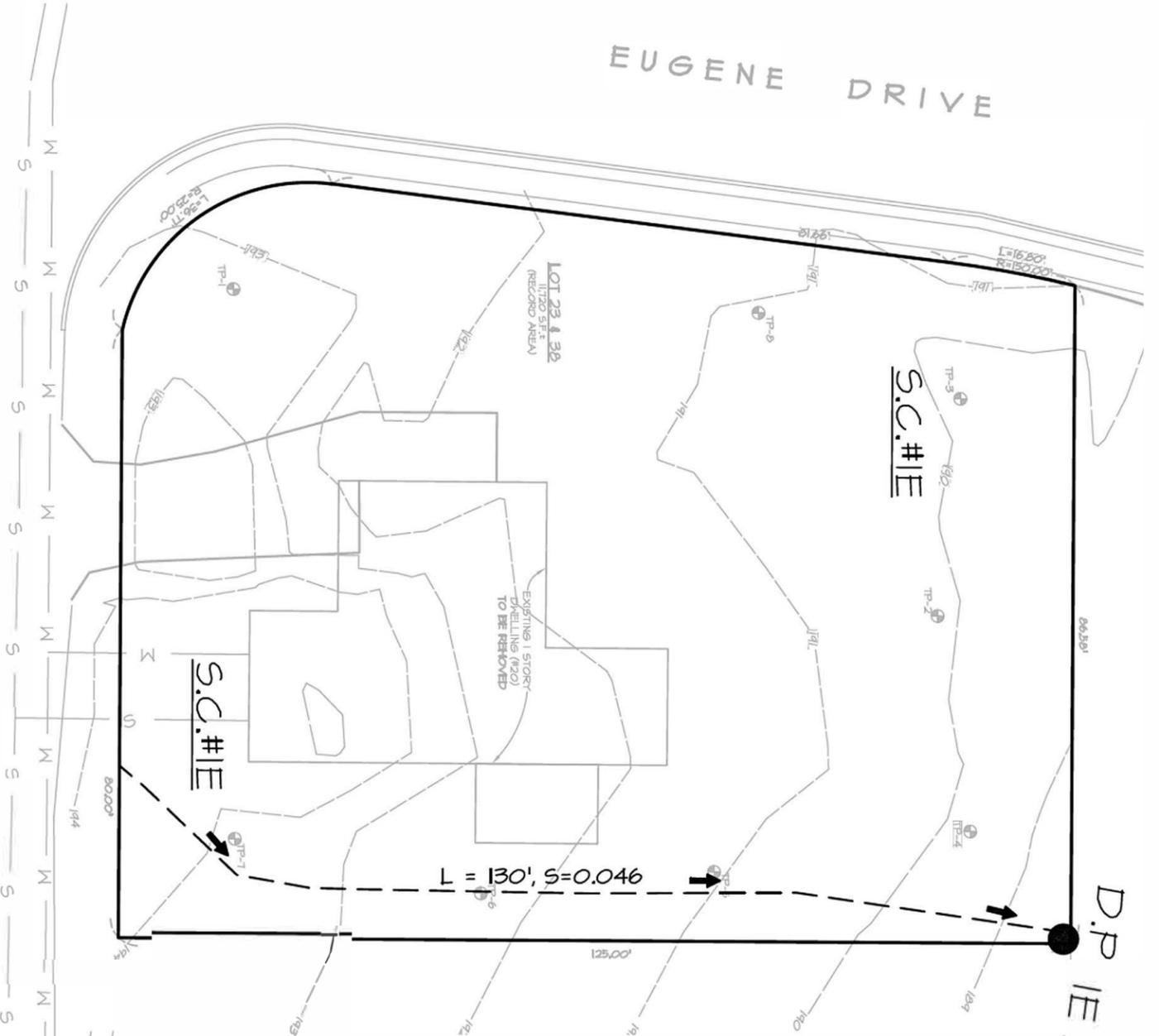
REGISTERED PROFESSIONAL ENGINEER

EXISTING DRAINAGE PLAN

SCALE: 1"=20'



BELLEVUE AVE.

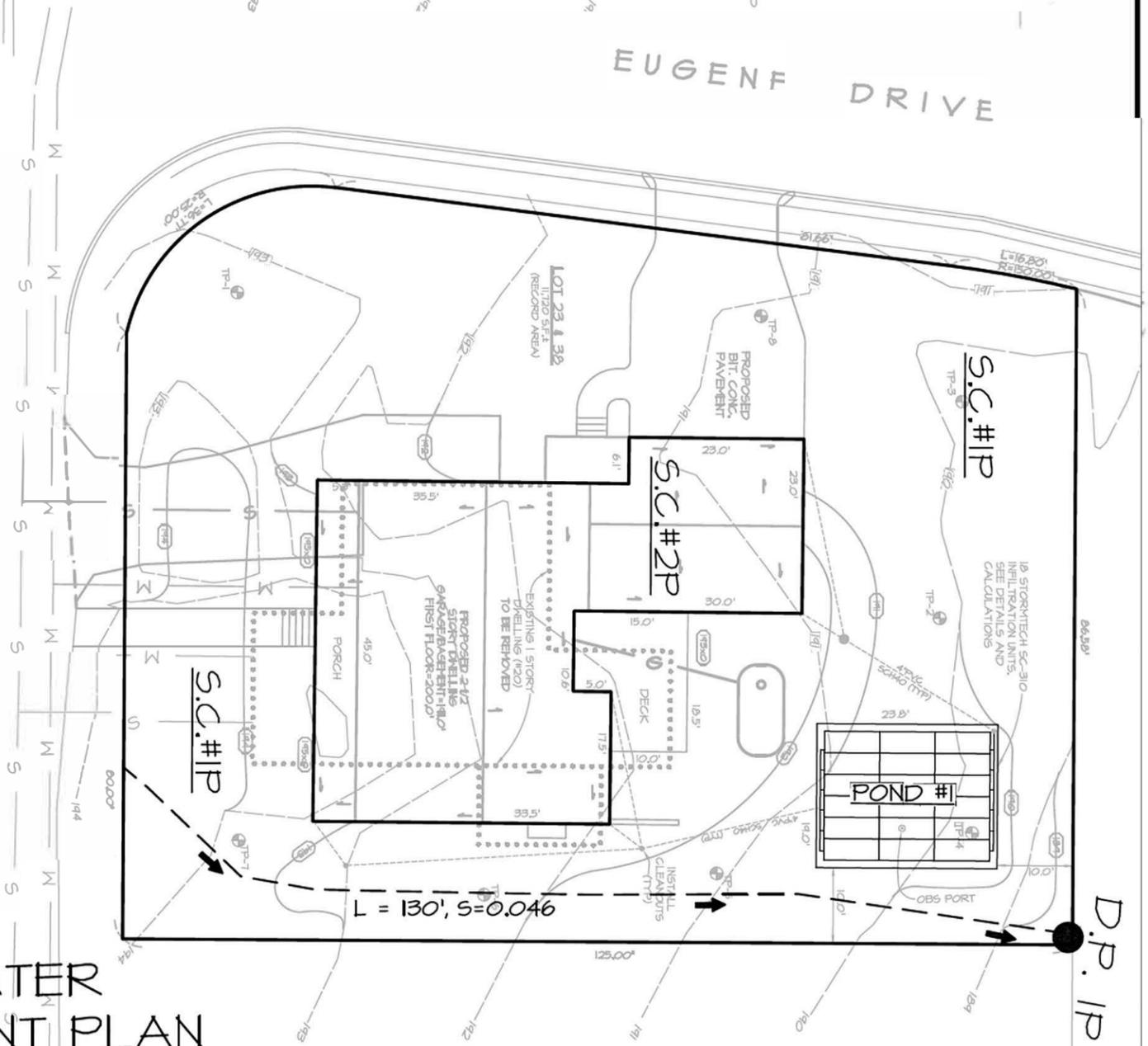


PROPOSED DRAINAGE PLAN

SCALE: 1"=20'



BELLEVUE AVE.



STORMWATER SUBCATCHMENT PLAN

LOCATED AT

MASSACHUSETTS

PREPARED BY

Cyprus Design Inc.
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 Web. CDISurvey.com
 Email. Info@CDISurvey.com



REVISIONS

DATE	DESCRIPTION

LEGEND:

- OVERLAND FLOW DIRECTION
- $L = 90', S = 0.01$ OVERLAND FLOW LINE
- S.C.#1E SUBCATCHMENT
- D.P. IP DRAINAGE POINT

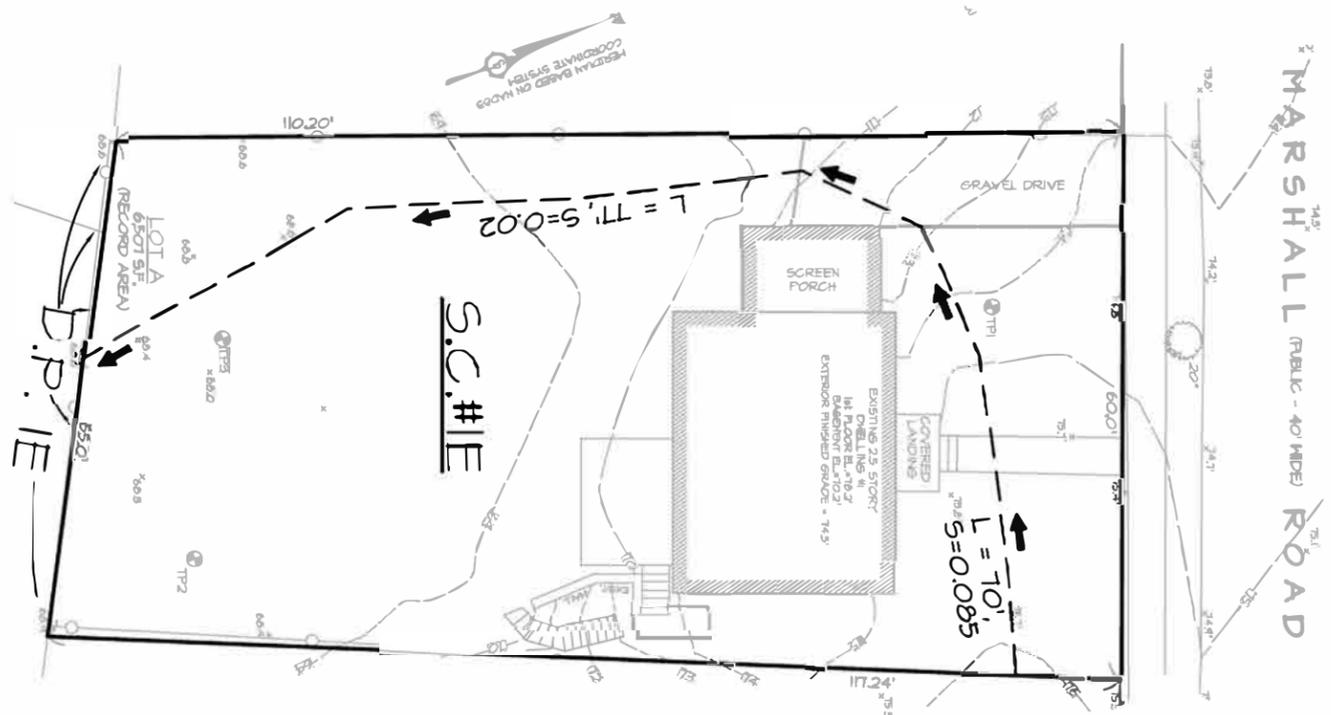
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SHEET 1 OF 1

REGISTERED PROFESSIONAL ENGINEER

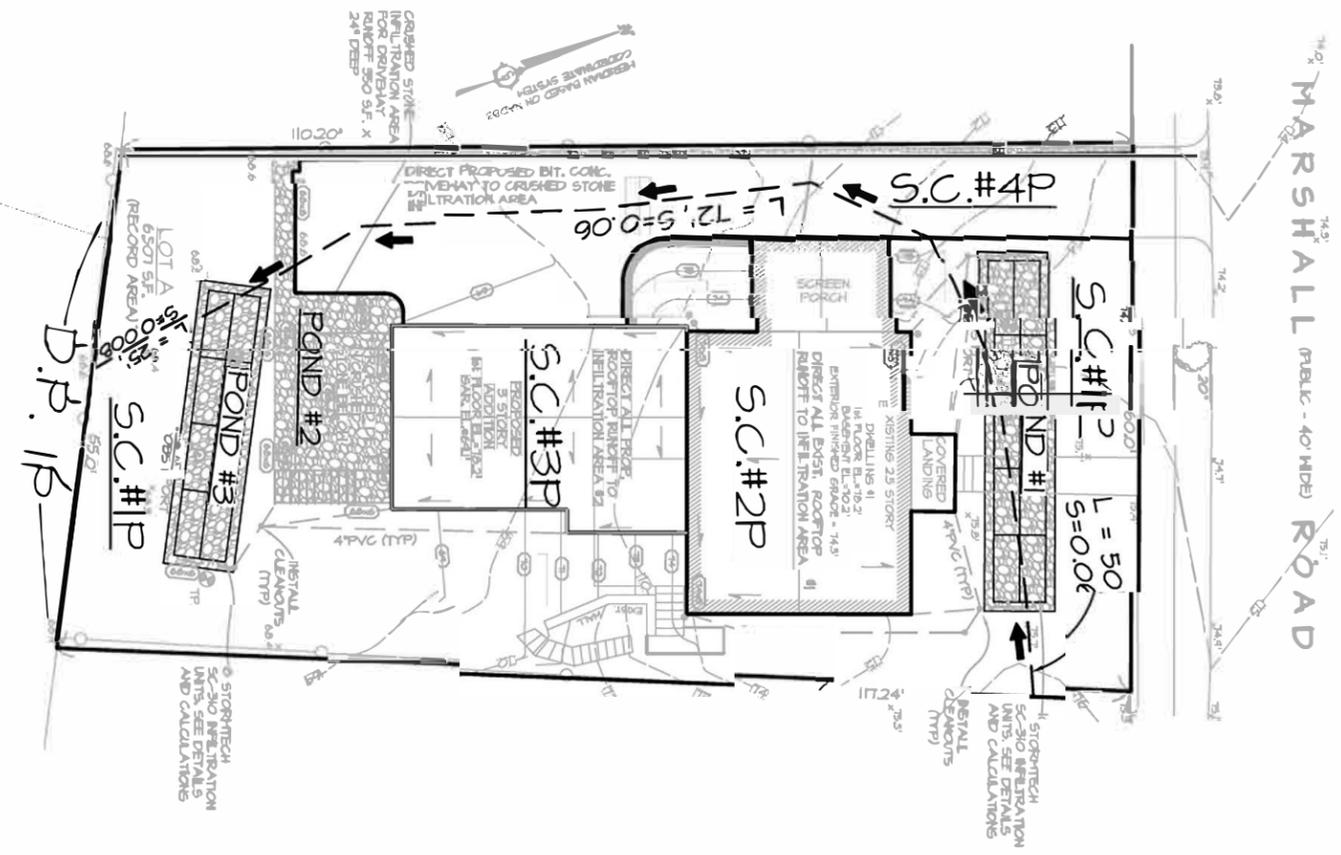
EXISTING DRAINAGE PLAN

SCALE: 1"=20'



PROPOSED DRAINAGE PLAN

SCALE: 1"=20'



STORMWATER SUBCATCHMENT PLAN

LOCATED AT
 MASSACHUSETTS

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 1501 Main Street Unit 24 Tewksbury, MA 01876
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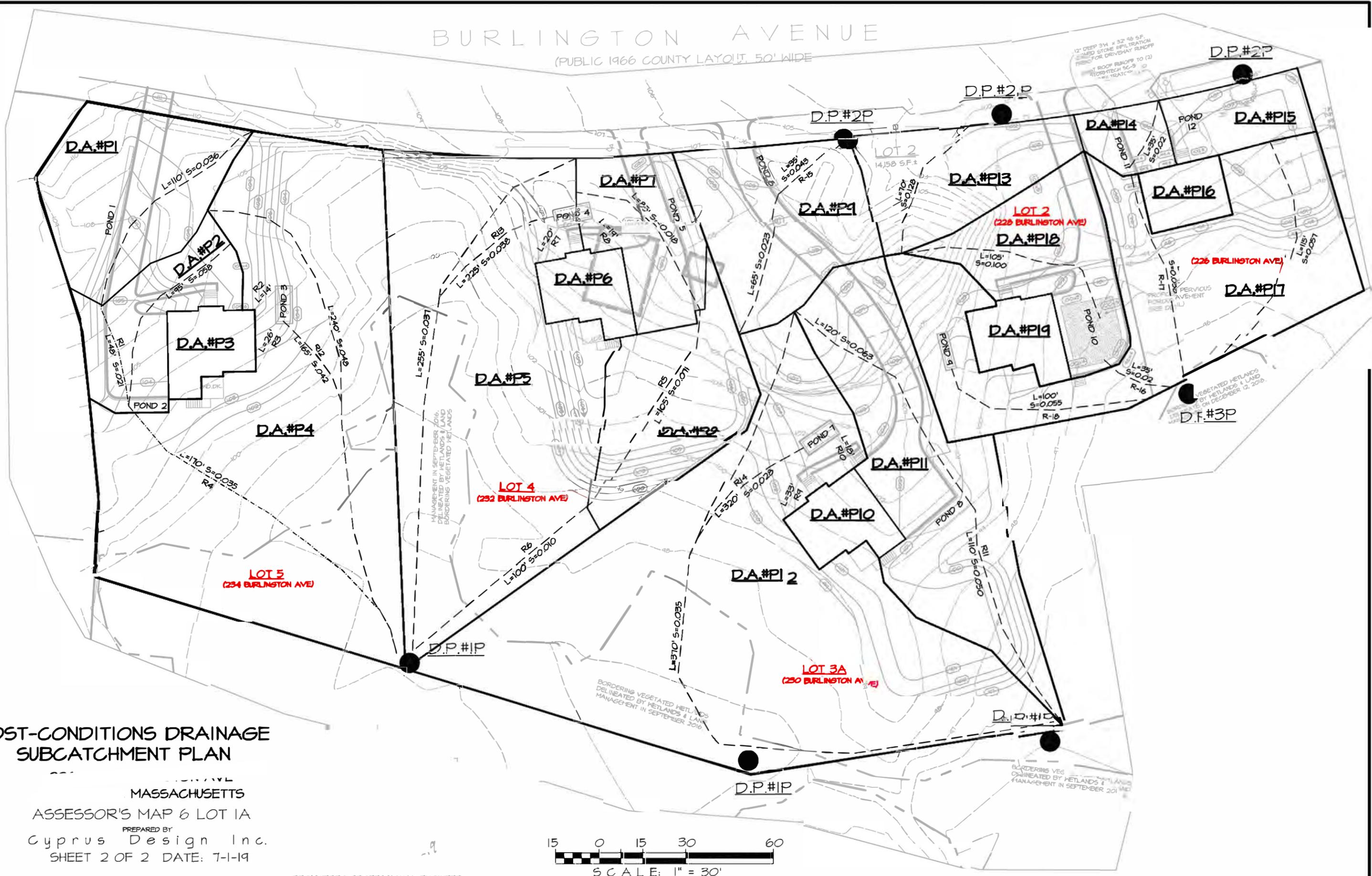
REVISIONS	
DATE	DESCRIPTION

LEGEND:
 OVERLAND FLOW DIRECTION
 L = 90', S=0.01 OVERLAND FLOW LINE
 S.C.#1E SUBCATCHMENT
 D.P. 1P DRAINAGE POINT

DATE: 12-1-22 SHEET 1 OF 1

12-1-22
 REGISTERED PROFESSIONAL ENGINEER

BURLINGTON AVENUE
(PUBLIC 1966 COUNTY LAYOUT, 50' WIDE)



POST-CONDITIONS DRAINAGE
SUBCATCHMENT PLAN

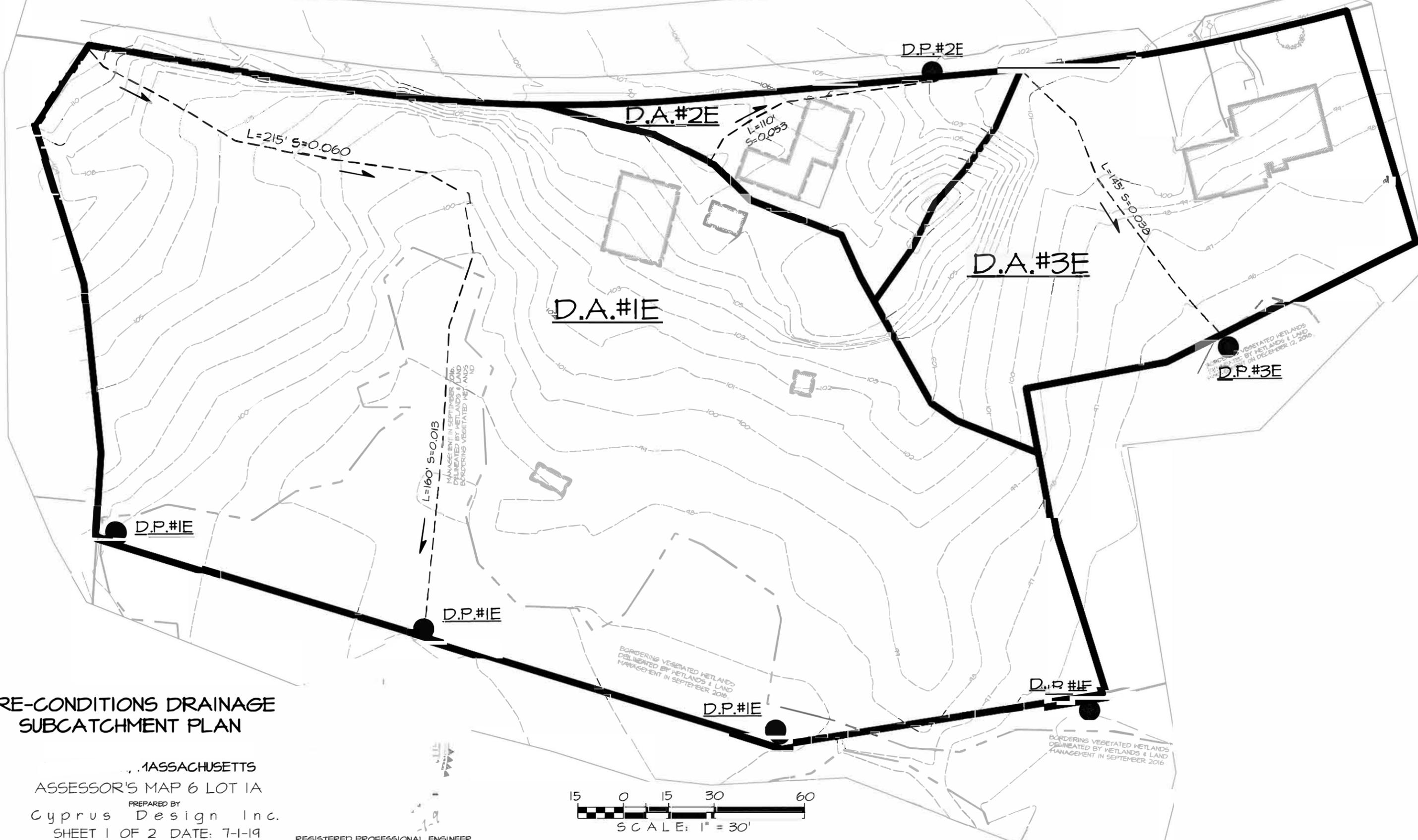
MASSACHUSETTS
ASSESSOR'S MAP 6 LOT 1A
PREPARED BY
Cyprus Design Inc.
SHEET 2 OF 2 DATE: 7-1-19



REGISTERED PROFESSIONAL ENGINEER

BURLINGTON AVENUE

(PUBLIC 1966 COUNTY LAYOUT 50' WIDE)

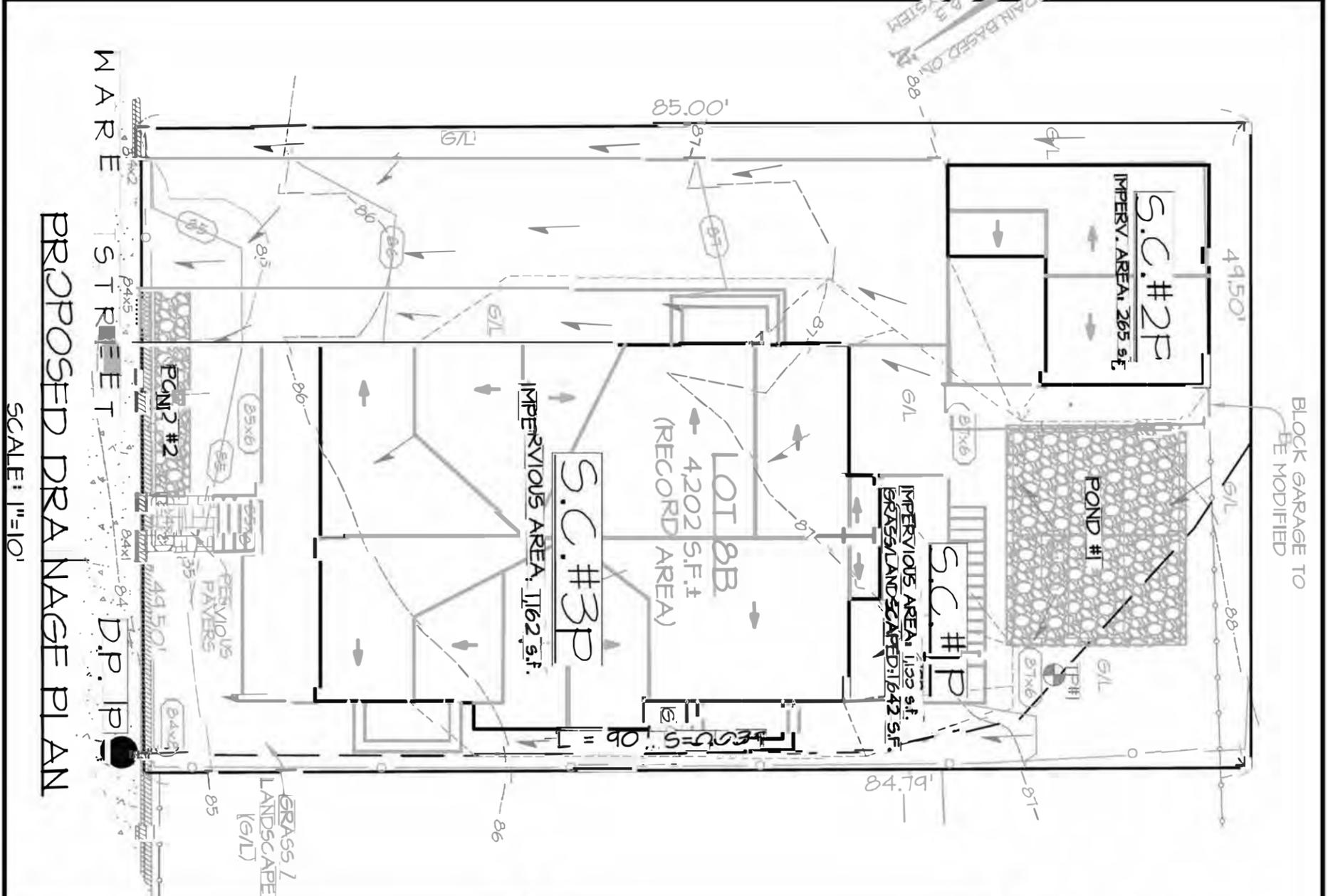
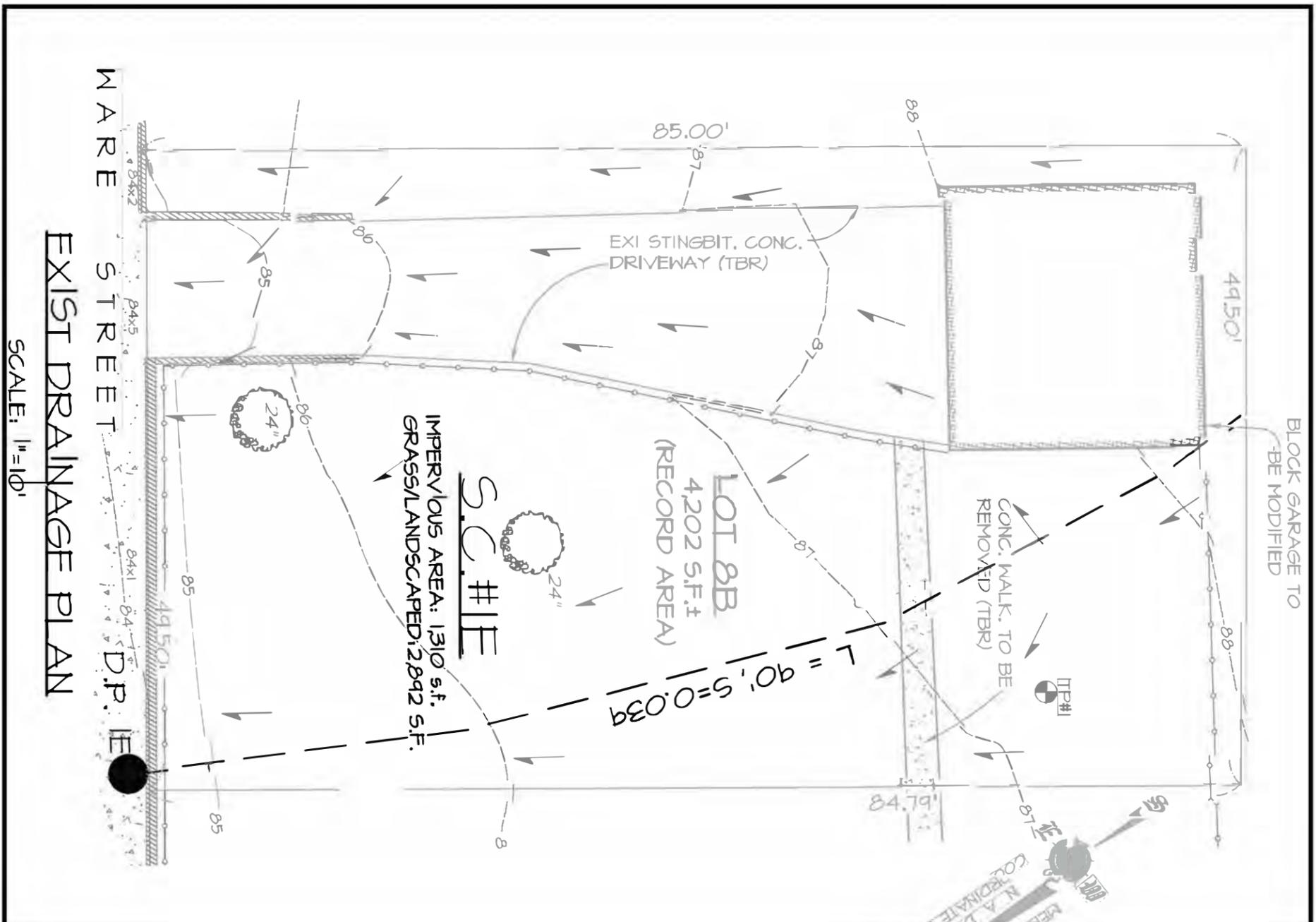


PRE-CONDITIONS DRAINAGE SUBCATCHMENT PLAN

MASSACHUSETTS
ASSESSOR'S MAP 6 LOT 1A
PREPARED BY
Cyprus Design Inc.
SHEET 1 OF 2 DATE: 7-1-19

REGISTERED PROFESSIONAL ENGINEER





DRAINAGE PLAN
 LOCATED AT
 _____ STREET
 _____ MASSACHUSETTS
 PREPARED BY
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 Tel. 978.640.1019, Fax. 978.640.1020
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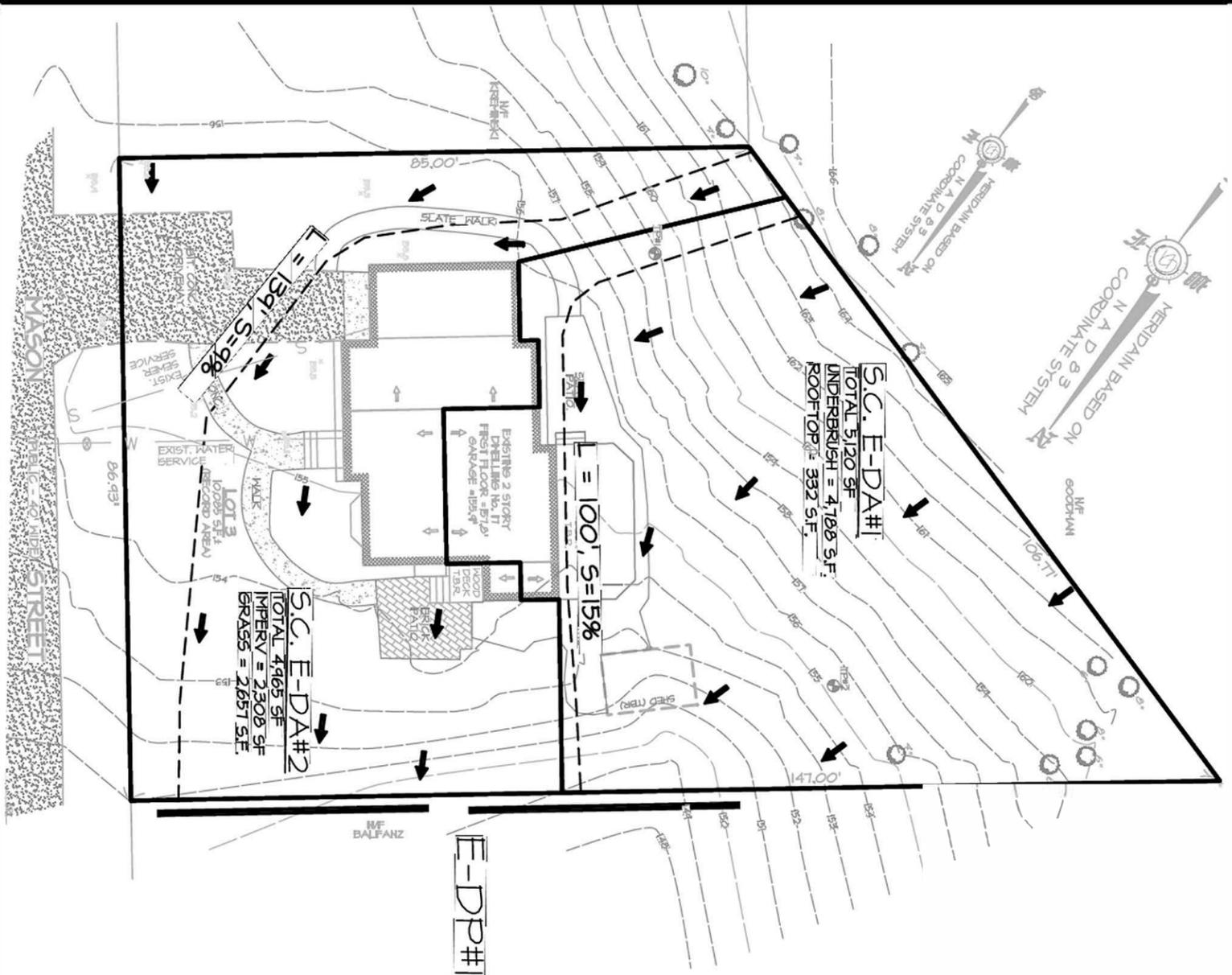
REVISIONS	
DATE	DESCRIPTION

LEGEND:
 → OVERLAND FLOW DIRECTION
 L = 90°, S = 0.01 OVERLAND FLOW LINE
 S.C.#1E SU BCATCHMENT
 D. P. I P DRAINAGE POINT

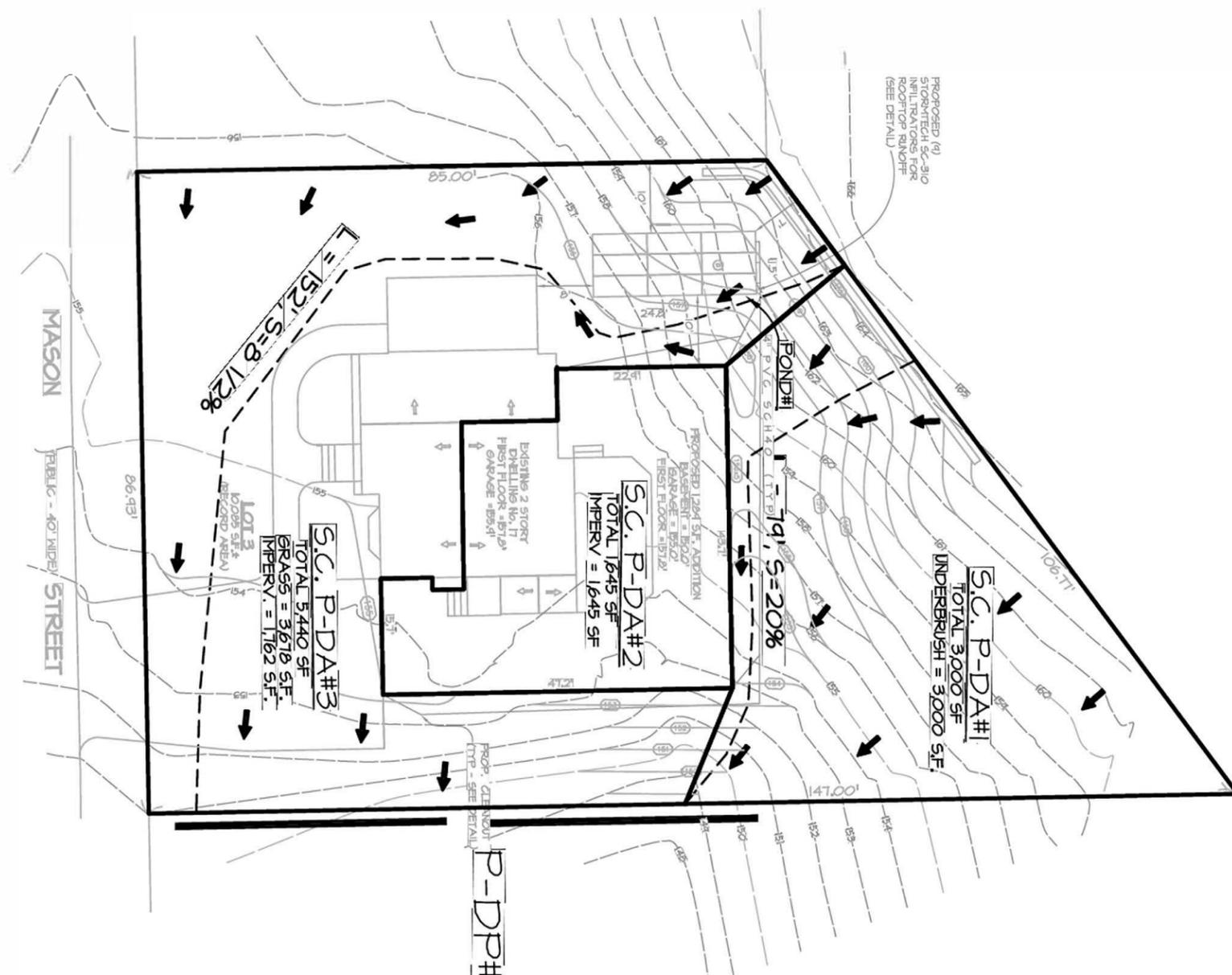
DATE: 12-12-24 SHEET 1 OF 1

REGISTERED PROFESSIONAL ENGINEER

EXISTING DRAINAGE PLAN



PROPOSED DRAINAGE PLAN



DRAINAGE PLAN

LOCATED AT

MASSACHUSETTS

Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web. CDISurvey.com
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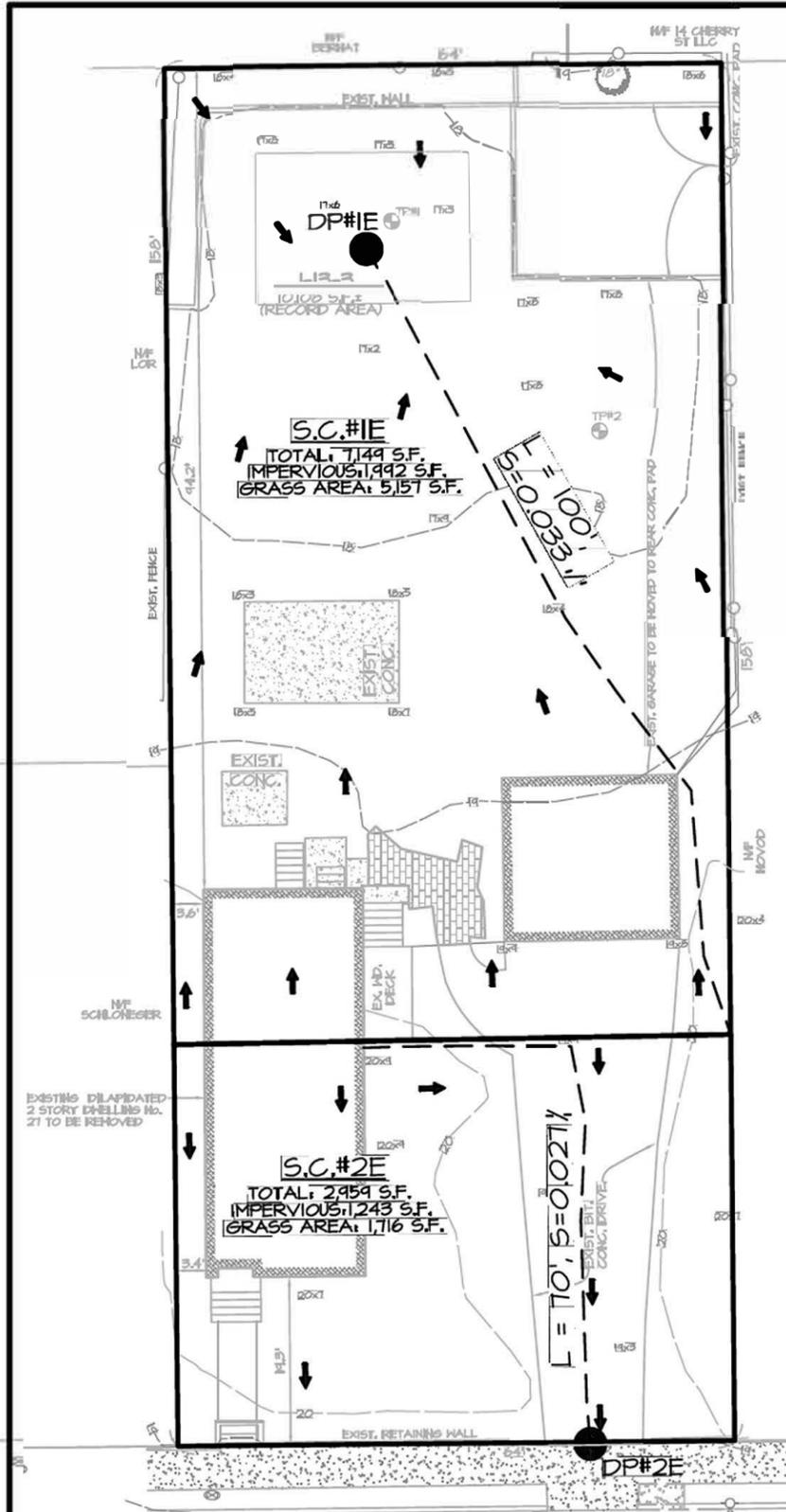


- LEGEND:**
- OVERLAND FLOW DIRECTION
 - $L = 90', S = 0.01$ OVERLAND FLOW LINE
 - E-DA#1 PRE-CONDITIONS SUBCATCHMENT
 - P-DA#1 POST-CONDITIONS SUBCATCHMENT
 - E-DP #1 PRE-CONDITIONS DESIGN POINT
 - P-DP #1 POST-CONDITIONS DESIGN POINT

DATE: 2-24-26

SHEET 1 OF 1

REGISTERED PROFESSIONAL ENGINEER

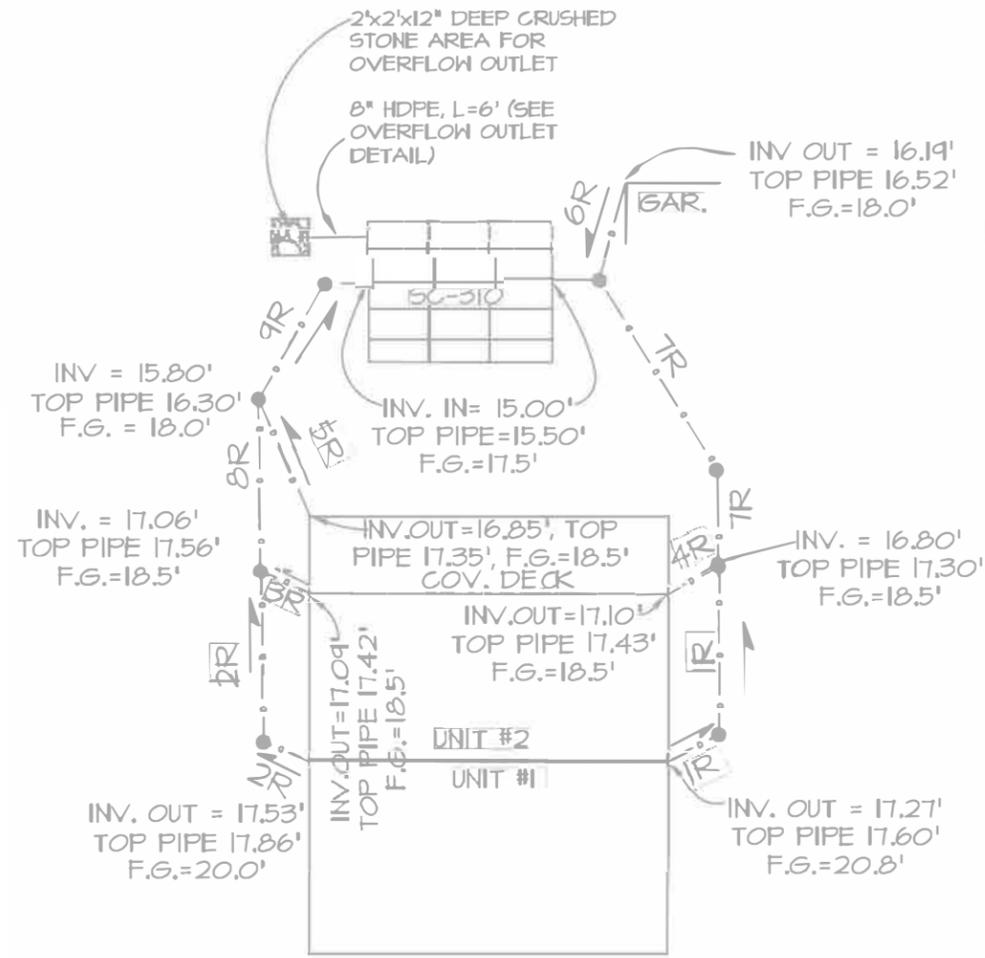


ALMONT STREET
EXISTING DRAINAGE PLAN

SCALE: 1"=20'

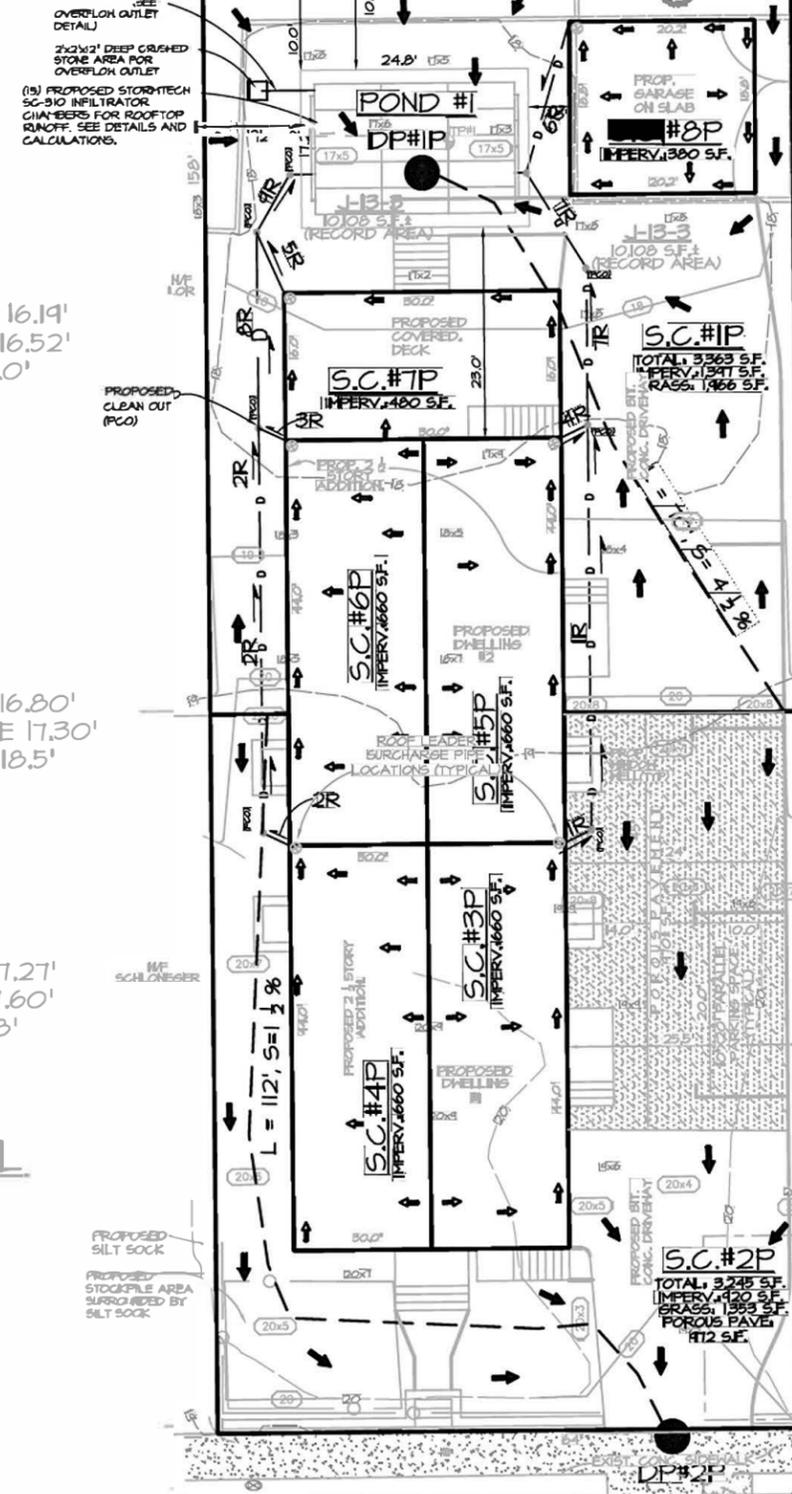


MERIDIAN BASED ON
NAD83
COORDINATE SYSTEM



DRAINAGE PIPING INVERT DETAIL

NOT TO SCALE



ALMONT STREET
PROPOSED DRAINAGE PLAN

SCALE: 1"=20'



DATE	REV. DESCRIPTION

LEGEND:

- PIPE FLOW DIRECTION
- ⇄ SURFACE ROOF FLOW DIRECTION
- ⇄ SURFACE LAND FLOW DIRECTION
- L = 90', S = 0.01 OVERLAND FLOW LINE
- S.C.#1E SUBCATCHMENT
- D.P. 1P DRAINAGE POINT

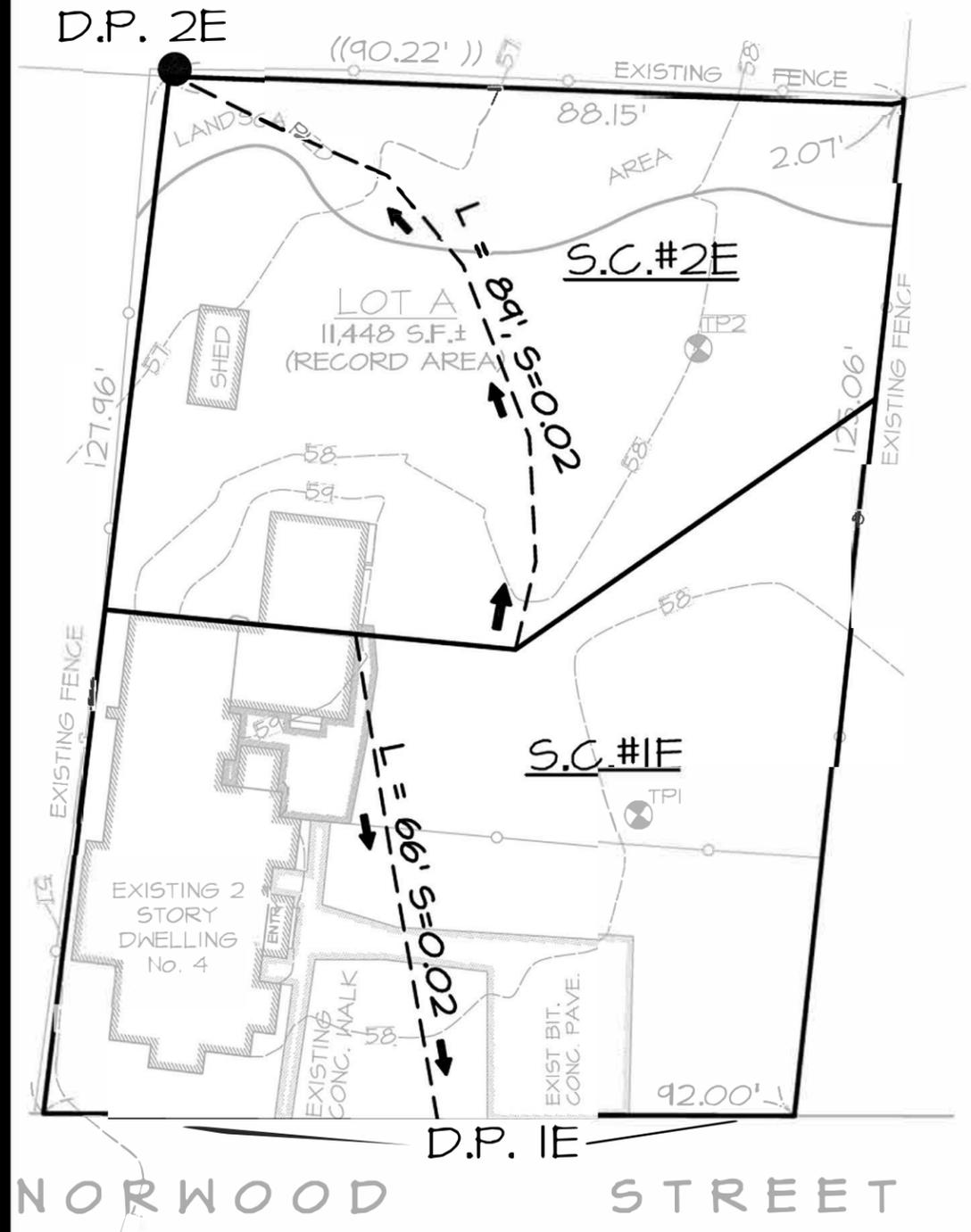
MASSACHUSETTS

PREPARED BY
Cyrus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Taunton, MA 01976
Tel. 978.640.1019, Fax. 978.640.1020
Web. CDISurvey.com
Email. Info@CDISurvey.com

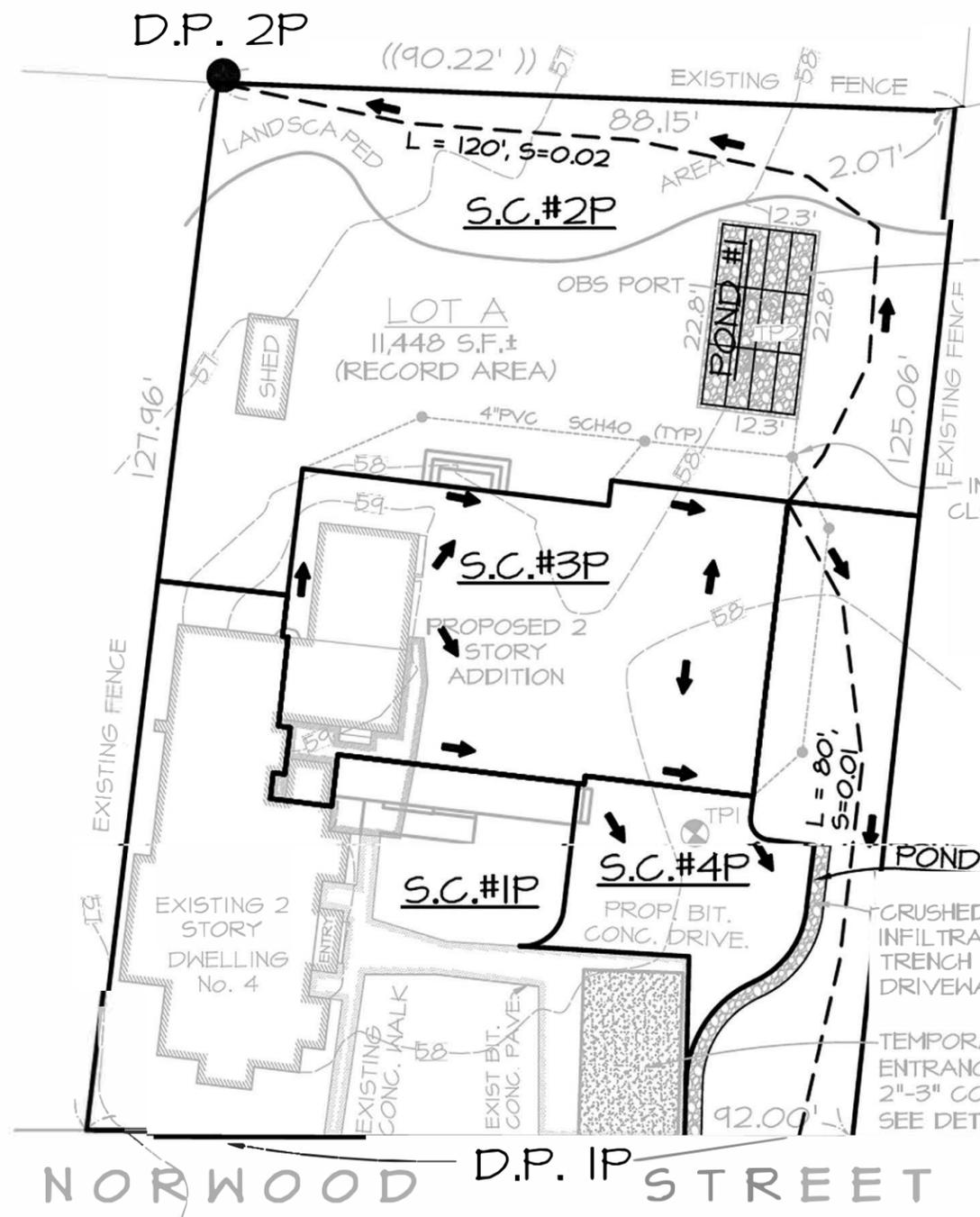
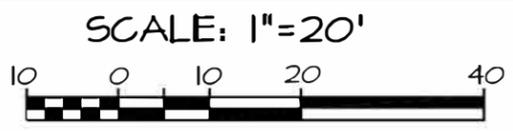


REGISTERED PROFESSIONAL ENGINEER

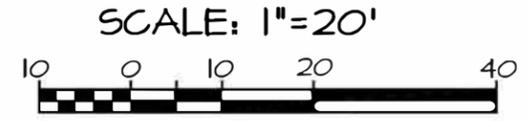
DATE: 12-14-25 DES. KPF / REV. TPR



EXISTING DRAINAGE PLAN



PROPOSED DRAINAGE PLAN



DRAINAGE PLAN

LOCATED AT
STREET
MASSACHUSETTS

PREPARED BY
Cyprus Design Inc.
Land Surveying & CMI Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1014, Fax. 978.640.1020
Web. CDISurvey.com
Email info@CDISurvey.com

REVISIONS	DATE	DESCRIPTION

- LEGEND:**
- OVERLAND FLOW DIRECTION
 - - - L = 90', S = 0.01 OVERLAND FLOW LINE
 - S.C.#1E SUBCATCHMENT
 - D.P. IP DRAINAGE POINT

NOTICE OF INTENT SITE PLANS & ORDER OF CONDITIONS ASBUILT PLANS

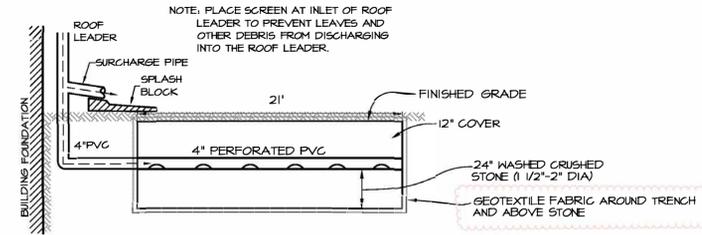
A Notice of Intent (NOI) is a formal application or public notice declaring a party's intent to begin construction, disturb land, or work within protected environmental areas (like wetlands) while adhering to approved permits. It serves as a regulatory notification to comply with environmental regulations, such as NPDES stormwater management, before work begins.

Key Aspects of a Notice of Intent

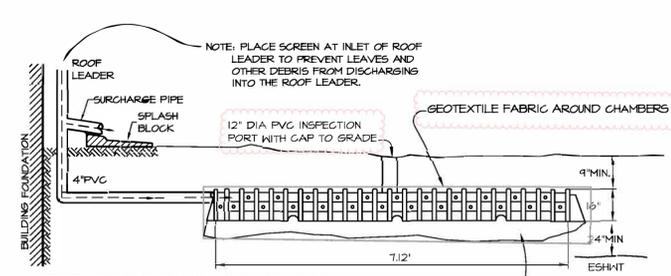
- Purpose: Ensures compliance with pollution prevention plans (SWPPP) and environmental regulations (e.g., wetlands).
 - When it is required: Typically, when a construction project disturbs one acre or more, or when working in a wetland buffer zone.
 - Contents: Detailed project information, including site location, size, owner details, duration, and erosion/sedimentation controls.
 - Permitting Result: In local planning contexts, it can lead to an "Order of Conditions" (OOC), which is a permit allowing specific project work.
 - Submission: Submitted to state (Department of Environmental Protection) and local agencies (Conservation Commission & Engineering Department) to notify them that the developer has prepared a project plan.
- Essentially, the NOI is the initial step to getting authorized for a project, ensuring environmental impact is mitigated and regulated.

NOTES:

1. THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES NOR FOR TITLE INSURANCE PURPOSES.
2. THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED SITE FEATURES IN RELATION TO THE LIMIT OF WETLAND RESOURCE AREA AND TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR CONSERVATION COMMISSION APPROVAL.
3. LIMIT OF WETLAND RESOURCE AREA DELINEATED BY WETLANDS AND LAND MANAGEMENT IN OCTOBER 2008.
4. ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF BILLERICA. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
5. EXISTING CONDITIONS SUCH AS, BUT NOT LIMITED TO, LOT LINES, STRUCTURES, WETLAND LOCATION, TREES, PAVEMENT, TOPOGRAPHY, ELEVATIONS DEPICTED ON THIS PLAN ARE BASED ON PLAN AND ELECTRONIC CAD FILE PROVIDED BY CLIENT PREPARED BY AMERICAN LAND SURVEY INC. ELEVATIONS REFER TO N.G.V.D. 1924.
6. INFILTRATION AREAS MUST BE INSTALLED WITHIN 30 DAYS OF SHEATHING THE ROOF.
7. EXISTING DRYWELLS ON-SITE ARE TO BE INSPECTED AND RESTORED TO WORKING CONDITION AND SHALL BE MAINTAINED BY HOMEOWNER.
8. STRIP OF LAND ON SUBJECT PARCEL BETWEEN THE POND WALL AND FENCE SHALL BE CONVERTED TO A WILDLIFE CORRIDOR AND SHALL BE PLANTED WITH INDIGENOUS, LOW GROWING SHRUBS OR GROUND COVER.



PROPOSED INFILTRATION TRENCH FOR REAR ADDITION RUNOFF



INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING PER CHAMBER (Stormtech SC-310)

StormTech SC-310 chamber design parameters:
 2.4' x 7.12' x 1.3' (effective)
 Storage in chamber: 14.7 c.f.
 Crushed Stone: 6" below, and surrounding chambers

INFILTRATION
 2 MPI (use 1.25 MPI*) = (1inch/1.25min) x (1min/60sec) x (ft/12inches) = 0.0002 FT/Sec
 PER UNIT: 3.4' x 8.1' = 27.5 S.F. x 0.0003 FT/Sec = 0.0005 C.F.S. Bottom

* PERCOLATION RATE OF 2 MPI (SANDS) WAS DETERMINED IN THE FIELD DURING SOIL TESTING. A DESIGN RATE OF 8.21"/HR. (1.25 MIN/INCH) WAS USED BASED ON TABLE 2-1 INFILTRATION RATES FOR VARIOUS SOIL TEXTURES FROM THE HYDROLOGY HANDBOOK FOR CONSERVATION COMMISSIONERS BY D.E.P.

STORMTECH SC-310 INFILTRATION CHAMBER FOR ROOFTOP RUNOFF

650 S.F. DWELLING RUNOFF INTO 3 INFILTRATION CHAMBERS

INFILTRATION CHAMBERS ARE DESIGNED TO MITIGATE (INFILTRATE) 100% OF 359 S.F. RUNOFF FROM DWELLING DURING A 100 YEAR 24 HOUR STORM EVENT WITH NO OUTFLOW (SEE HYDROLOGY CALCULATIONS ATTACHED)

IMPERVIOUS AREA (FOR STORMWATER RUNOFF)

PROPOSED CONDITIONS
 (IMPERVIOUS AREA INCREASE)
 ADDITIONS: 484 S.F.

IMPERVIOUS AREA TO BE INFILTRATED: 359 S.F. + 125 S.F. REAR ADDITION INTO STONE TRENCH

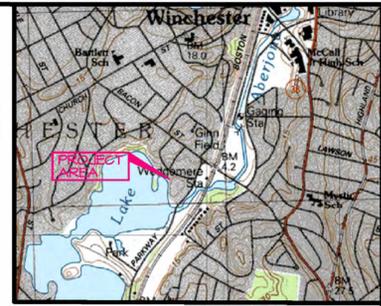
TEST PIT DATA

PERFORMED BY: ALEX PARKER / CYPRUS DESIGN
 WITNESSED BY: WINCHESTER ENGINEERING DEPT.
 DATE PERFORMED: 3-17-04

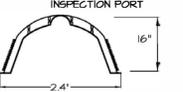
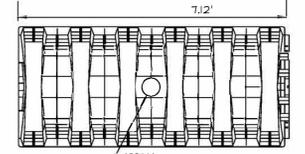
TEST PIT 1 (EL.=22)

DEPTH	ESHKT > 110"		
0-17	Ap	sandy loam	10YR 3/2
17-50	C1	sand	2.5y 4/4
50-110	C2	sand	2.5y 6/4

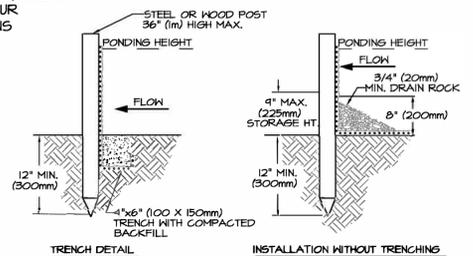
PERCOLATION RESULT = 2 MPI



LOCUS MAP
N.T.S.



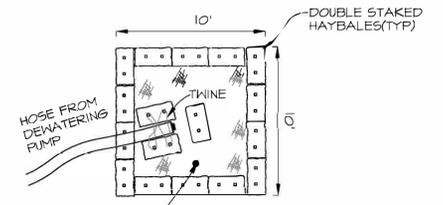
PROVIDE 6" OF 3/4" CRUSHED STONE ON BOTTOM & SIDES.



- NOTES:**
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 4" (20mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

SILT FENCE DETAIL

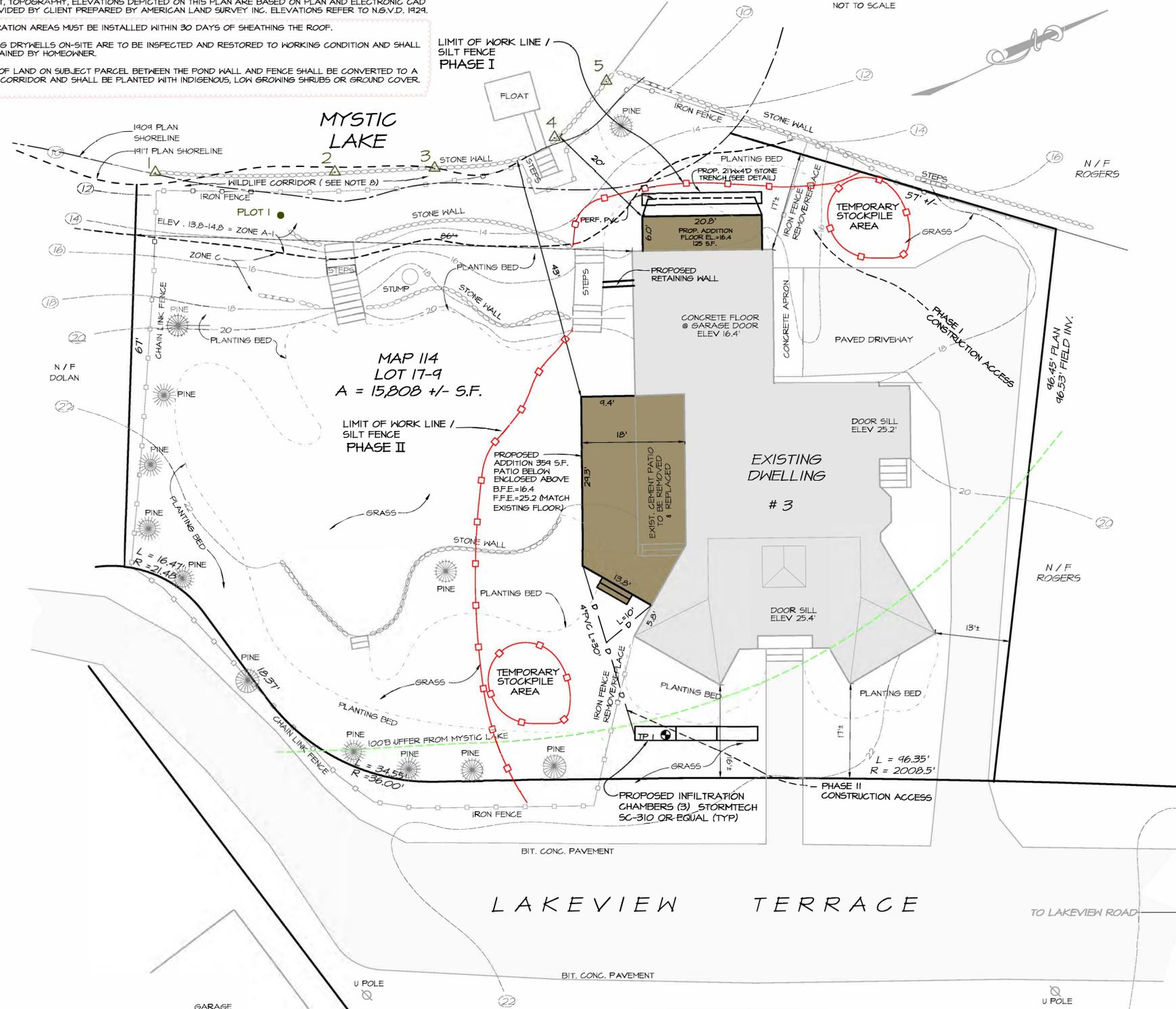
N.T.S.



MIRAFI FABRIC TO BE PLACED ON EXISTING GRADE PRIOR TO HAYBALE INSTALLATION TO PREVENT EROSION FROM RUNOFF

DEWATERING DETAIL

(IF APPLICABLE)
N.T.S.



SITE PLAN

SCALE: 1"=10'



SITE PLAN
(TO ACCOMPANY A NOTICE OF INTENT APPLICATION)

LOCATED AT
 WILMINGTON, MA
 (ASSESSOR'S MAP 114, LOT 17-9)
 PREPARED BY

Cyprus Design, Inc.

Land Survey & Civil Engineering Services
 1501 Main Street, Suite 24 Tewksbury, MA 01876
 Tel: 978-842-0191 Fax: 978-842-0220
 Web Page: CyprusDesignInc.com

SCALE: 1"=10' SHEET 1 OF 1 DATE: 03-24-09

DATE	REVISION/DESCRIPTION
5-11-04	PER CONSERVATION REVIEW
4-23-04	PER CONSERVATION AND ENGINEERING REVIEW
	DATE

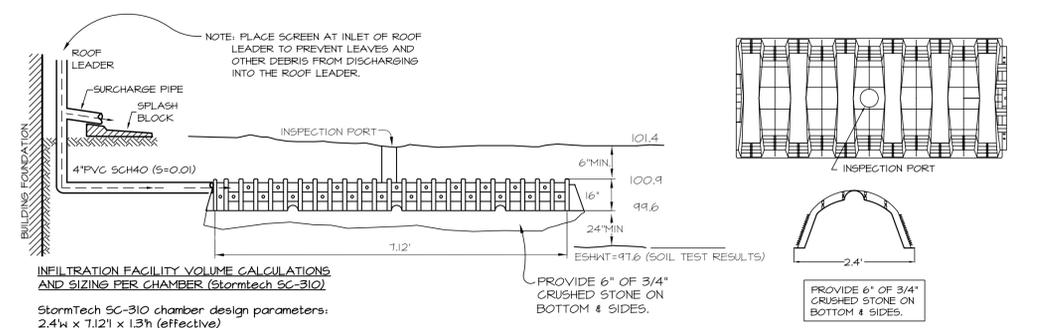
LOAM AND SEEDING NOTES

- LOAMING, SEEDING AND FERTILIZING**
- 1) IF REQUIRED THE CONTRACTOR SHALL FURNISH ALL TOPSOIL OR ADDITIONAL TOPSOIL NEEDED TO COMPLETE THE JOB. IF THE EXISTING TOPSOIL IS SUFFICIENT TO COMPLETE THE JOB, ANY EXCESS TOPSOIL WILL REMAIN ON SITE. AN AREA WILL BE PROVIDED ON SITE FOR FINAL STORAGE.
 - 2) THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED ON THE DESIGNATED AREAS AND IT SHALL BE A MINIMUM DEPTH OF SIX INCHES AFTER FIRING. SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOP SOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SEEDING.
 - 3) AFTER LOAM HAS BEEN PLACED, LIME AND FERTILIZER SHALL BE UNIFORMLY MIXED INTO THE TOP FOUR INCHES OF SOIL BY DISCS, HARROWING OR USING OTHER APPROVED METHODS.
 - 4) ANY UNDULATIONS OR IRREGULARITIES IN THE SURFACE RESULTING FROM FERTILIZING, LIMING, SURFACE ROUGHENING OR OTHER CAUSES SHALL BE LEVELED PRIOR TO SEEDING. FLOODED, WASHED-OUT OR OTHERWISE DAMAGED AREAS SHALL BE RECONSTRUCTED AND ALL GRADES REESTABLISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE DRAWINGS AND/OR OTHER APPLICABLE SPECIFICATIONS.
 - 5) PRIOR TO SEEDING THE SURFACE SHALL BE CLEARED OF ALL TRASH, DEBRIS AND STONES LARGER THAN ONE AND ONE-HALF INCHES IN DIAMETER, AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING OR MAINTENANCE OPERATIONS.
 - 6) BROADCAST SEED AND MULCH. PLACE STRAW AND ANCHOR IT TO TOPSOIL. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDLINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2"-1" EVERY 3-4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED.

- REPAIRS AND MAINTENANCE**
- INSPECT ALL SEEDED AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS AND RE-SEEDINGS WITHIN THE PLANTING SEASON.
- 1) ONCE THE VEGETATION IS ESTABLISHED, THE SITE SHALL HAVE 95% GROUND COVER TO BE CONSIDERED ADEQUATELY STABILIZED.
 - 2) IF THE STAND PROVIDES LESS THAN 40% GROUND COVERAGE, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER, SEEDBED PREPARATION AND SEEDING RECOMMENDATIONS.
 - 3) IF THE STAND PROVIDES BETWEEN 40% AND 94% GROUND COVER AGE, OVER SEEDINGS AND FERTILIZING USING HALF OF THE RATES ORIGINALLY APPLIED MAY BE NECESSARY.

- SURFACE PREPARATION**
- 1) STRIP AND STOCKPILE ALL EXISTING LOAM FROM PROPOSED WORK AREAS. PROTECT LOAM ENCOMPASSING STOCKPILE AREA WITH SILTATION FENCE. ALL LOAM WILL REMAIN ON SITE UNLESS THE OWNER APPROVES OFF SITE REMOVAL.
 - 2) SET FIELD GRADES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. PROVIDE PROPER SURVEY CONTROL AND MAINTAIN THROUGHOUT CONSTRUCTION. PROVIDE ENGINEER WITH COPIES OF ALL SURVEY NOTES AND LOCATIONS OF BOTH VERTICAL AND HORIZONTAL CONTROL.
 - 3) BRING BASE MATERIAL TO FINISH GRADE. PROVIDE ENGINEER WITH AS-BUILT DRAWINGS SHOWING FINISH ELEVATIONS AND CONTOURS PRIOR TO PLACEMENT OF LOAM.
 - 4) SOIL TESTS SHALL BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR BOTH LIME AND FERTILIZER. SOIL TESTS SHALL BE CONDUCTED BY A STATE LABORATORY OR RECOGNIZED COMMERCIAL LABORATORY. PROVIDE ENGINEER WITH COPY OF TEST RESULTS AND RECOMMENDATIONS FOR LIMING AND FERTILIZING.
 - 5) AFTER THE AREAS TO BE TOP SOILED HAVE BEEN APPROVED BY THE OWNER OR ENGINEER, AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY ROUGHENING TO THE DEPTH OF AT LEAST TWO INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL AND TO INCORPORATE THE LIME.
 - 6) ACCEPTANCE SHALL BE GIVEN BY THE OWNER OR ENGINEER UPON SATISFACTORY COMPLETION OF EACH SECTION OR AREA AS INDICATED ON THE DRAWINGS OR AS OTHERWISE SPECIFIED BEFORE PLACEMENT OF TOPSOIL.

- NOTES:**
1. THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED SITE FEATURES IN RELATION TO THE EDGE OF BORDERING VEGETATED WETLAND AND TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR CONSERVATION COMMISSION APPROVAL.
 2. EXISTING CONDITIONS SUCH AS EDGE OF BORDERING VEGETATED WETLANDS, ELEVATIONS, PROPERTY LINES, UTILITIES AND ABOVE GROUND SURFACE FEATURES ARE FROM PLAN ENTITLED PLOT PLAN IN LEXINGTON, MASSACHUSETTS PREPARED FOR JENNIFER RIGHLIN 36 SHERBURNE ROAD PREPARED BY LEBLANC SURVEY ASSOCIATES, INC. 161 HOLTEN STREET DANVERS, MA 01923 (978) 774-6012 JULY 29, 2008 SCALE: 1"=20'.



INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING PER CHAMBER (StormTech SC-310)

StormTech SC-310 chamber design parameters:
 2.4'w x 1.12'l x 1.3'h (effective)
 Storage in chamber: 14.1 c.f.
 Crushed Stone: 6" below, and surrounding chambers

EXFILTRATION
 2 MPF = (linch/2min) x (linch/60sec) x (ft/12inches) = 0.0007 FT/Sec
 PER UNIT: 3.4' x 8.1' = 27.5 S.F. x 0.0007 FT/Sec = 0.02 C.F.S. Bottom

STORMTECH SC-310 INFILTRATION CHAMBER FOR ROOFTOP RUNOFF
NOT TO SCALE

IMPERVIOUS AREA CALCULATIONS:

EXISTING CONDITIONS
 EXISTING IMPERVIOUS AREAS: 3,500 S.F.

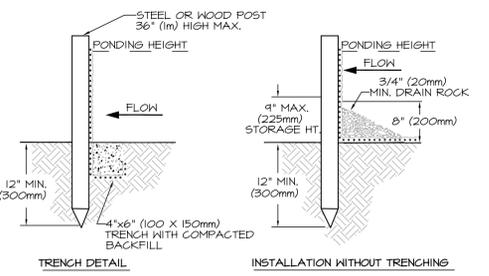
PROPOSED CONDITIONS
 PROPOSED IMPERVIOUS AREAS: 4,700 S.F.

IMPERVIOUS AREA INCREASE: 1,200 S.F.

IMPERVIOUS AREA TO BE INFILTRATED INTO INFILTRATION CHAMBERS:

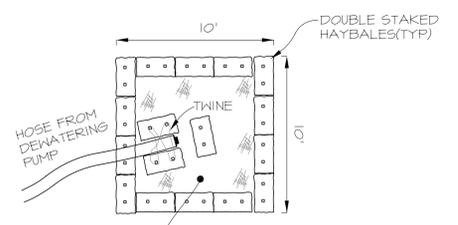
2,100 S.F. (PROPOSED ADDITION & PORTION OF EXISTING DWELLING)

NOTE:
 INFILTRATION CHAMBERS ARE DESIGNED TO MITIGATE (INFILTRATE) 100% OF PROPOSED ADDITION & PORTION OF EXISTING DWELLING (2,300 S.F.) RUNOFF DURING A 100 YEAR 24 HOUR STORM EVENT (SEE HYDROLOGY CALCULATIONS ATTACHED)

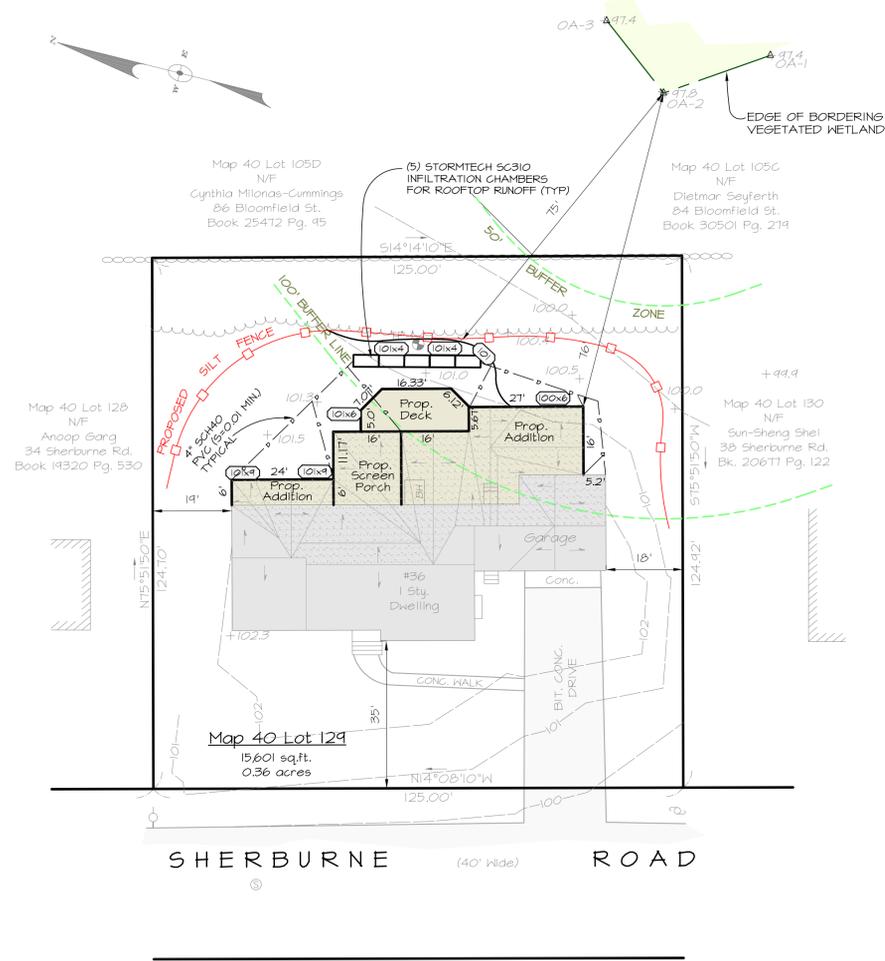


- NOTES:**
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 4" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

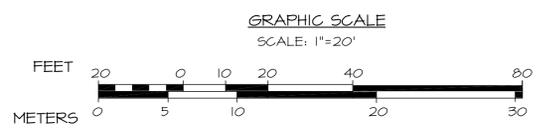
SILT FENCE DETAIL
N.T.S.



DEWATERING DETAIL
 (IF APPLICABLE)
 N.T.S.



SITE PLAN



LEGEND:

- IMPERVIOUS SURFACES TO BE INFILTRATED
- EXISTING DWELLING
- EXISTING PAVEMENT
- EXISTING WETLANDS
- PROPOSED ADDITIONS

RATE	SEWAGE DESCRIPTION

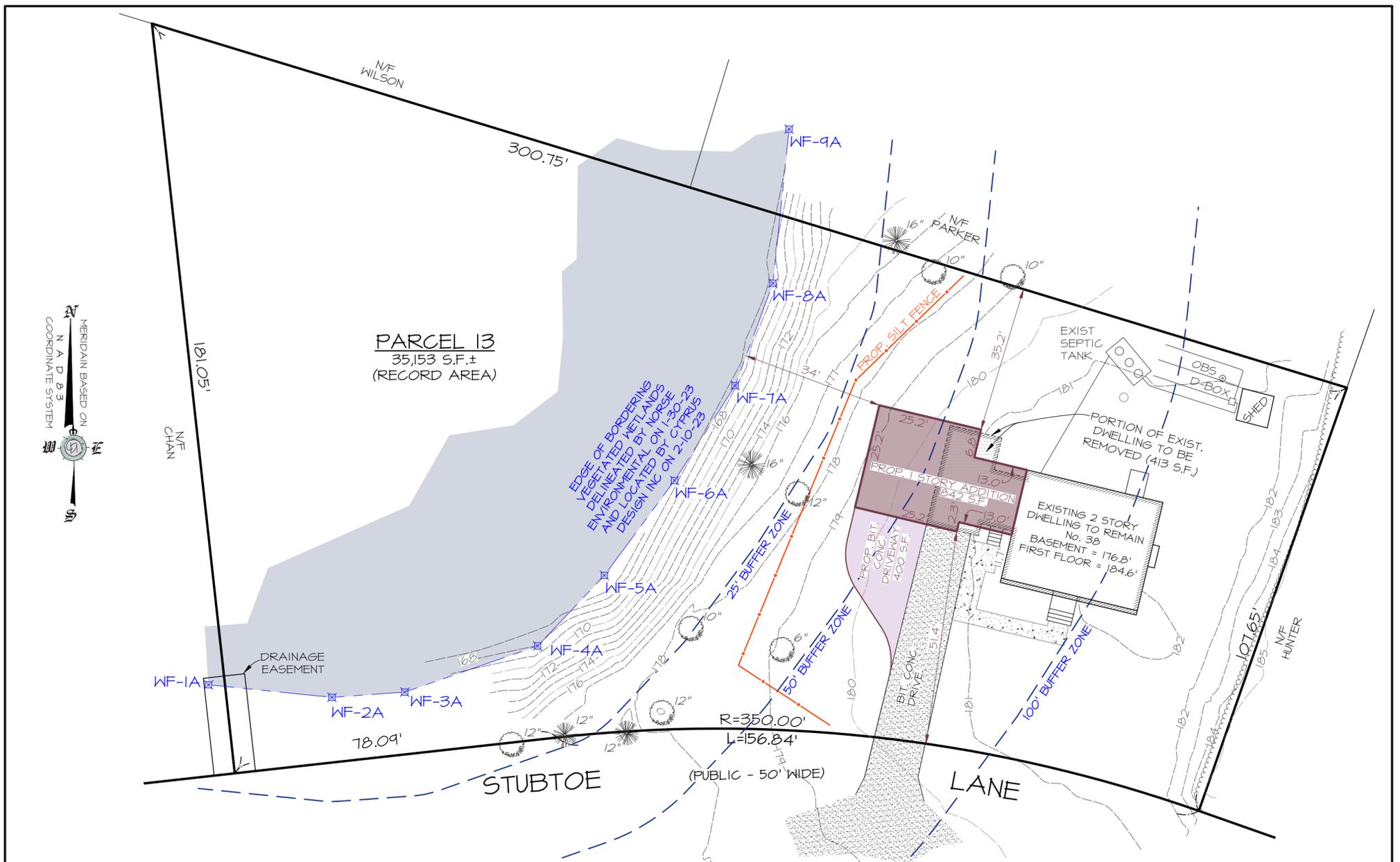
SITE PLAN
 (TO ACCOMPANY A NOTICE OF INTENT APPLICATION)

LOCATED AT
 (ASSESSOR'S MAP 61, LOT 44)

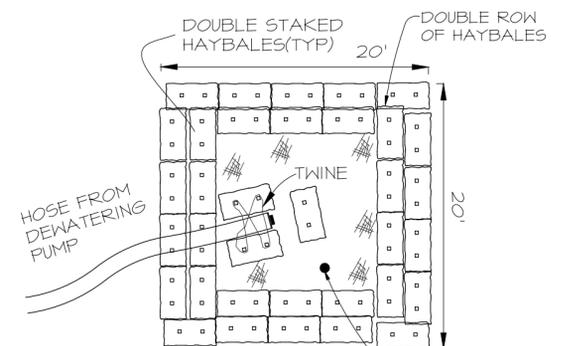
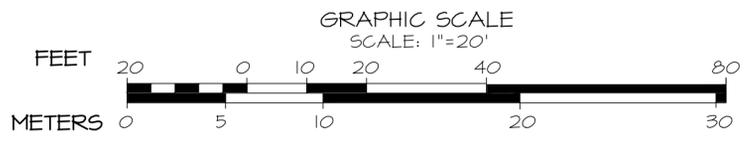
PREPARED FOR

PREPARED BY
Cyprus Design, Inc.
 Land Survey & Civil Engineering Services
 1501 Main Street, Suite 24 Tewksbury, MA 01876
 Tel: 978.640.1011 Fax: 978.640.1020
 Web Page: CyprusDesignInc.com

SCALE: 1"=20' SHEET 1 OF 1 DATE: 08-14-08



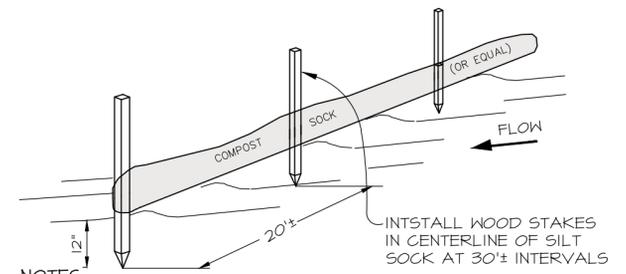
SITE PLAN



MIRAFI FABRIC TO BE PLACED ON EXISTING GRADE PRIOR TO HAYBALE INSTALLATION TO PREVENT EROSION FROM RUNOFF

DEWATERING DETAIL

NTS (IF APPLICABLE)



- NOTES:**
1. COMPOST SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. CONTRACTOR TO INSPECT AND REPAIR COMPOST SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

COMPOST SOCK

NOT TO SCALE

NOTES:

- 1.) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES NOR DOES IT REPRESENT A DETERMINATION OF TITLE, BUT IS SOLELY INTENDED TO THE LOCATION OF EXISTING CONDITIONS AND PROPOSED ADDITIONS TO THE EDGE OF BORDERING VEGETATED WETLANDS AND TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR CONSERVATION COMMISSION APPROVAL.
- 2.) THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- 3.) EXISTING CONDITIONS DEPICTED IS A RESULT OF AN INSTRUMENT SURVEY PERFORMED BY CYPRUS DESIGN INC IN FEBRUARY 2023.
- 4.) THE SUBJECT PROPERTY IS DEPICTED AS ID 606-0813 TOWN OF SUDBURY GIS MAPPING.
- 5.) PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL INSTALL SEDIMENTATION CONTROL DEVICES AND MAINTAIN THEM DURING CONSTRUCTION AS SPECIFIED AND AS REQUIRED TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE CONSTRUCTION SITE TO ADJACENT LAND & RESOURCE AREA.
- 6.) SEDIMENTATION AND EROSION CONTROL MEASURES SHALL CONFORM TO THE REQUIREMENTS OF THE SUDBURY CONSERVATION COMMISSION ORDER OF CONDITIONS. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
- 7.) CONTRACTOR SHALL PROVIDE PERIODIC MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES. ONCE THE SITE HAS BEEN FULLY STABILIZED AGAINST EROSION, REMOVE ALL SEDIMENT CONTROL DEVICES AND ALL ACCUMULATED SILT & DISPOSE OF SILT AND WASTE MATERIALS. REGRADE ALL AREAS DISTURBED DURING THIS PROCESS AND STABILIZE AGAINST EROSION WITH SURFACING MATERIALS AS INDICATED.

REFERENCES:

ASSESSOR'S: 606-0813, DEED: BK 8821, PG 321, PLAN BOOK 1634 OF 1456

ZONING: RESIDENCE RA:

DESCRIPTION	REQUIRED	PROVIDED
FRONT SETBACK	40'	51.4'
SIDE SETBACK	20'	64.5'
REAR SETBACK	30'	35.2'
MAX. BLDG. COV.	40%	5.3%

SITE PLAN

TO ACCOMPANY A NOTICE OF INTENT APPLICATION

PREPARED BY
CYPRUS DESIGN, INC.

Tel: 978.640.1019 Fax: 978.640.1020
Web Page: CyprusDesignInc.com
Email: Info@CyprusDesignInc.com

SCALE: 1" = 20' DATE: 9-19-23

DATE	REVISION DESCRIPTION	DESIGN: KPF	REVIEW: TR

DIMENSIONAL REGULATIONS (P.R.D.)

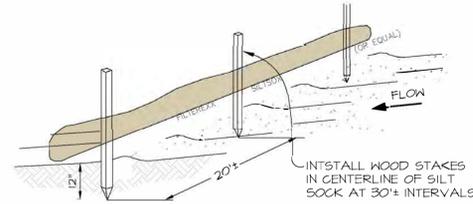
DESCRIPTION	REQUIRED	PROVIDED
TOTAL TRACT AREA	MIN. 125,000 S.F.	154,665 S.F.
COMMON OPEN SPACE	MIN. 40% OF TRACT (61,866 S.F.) OF WHICH: MAX. 50% CAN BE IN WET/FLOOD (30,933 S.F.) MIN. 50% MUST BE UPLAND (30,933 S.F.)	65,000 S.F. 30,000 S.F. 35,000 S.F.
DENSITY	MAX. 5 UNITS PER ACRE (17.8 UNITS ALLOWED)	4 UNITS

REFERENCES:

- ASSESSOR'S MAP 71, LOTS 165, 88, 87
- DEED IN BOOK 21754, PG 76
- DEED IN BOOK 21754 PG 67
- PLAN IN DEED BOOK 11370 PG 284
- PL BK 274, PL. 18
- PLAN No. 208 OF 1968
- SOUTH ROAD LAYOUT 1946

IMPERVIOUS AREA CALCULATIONS:

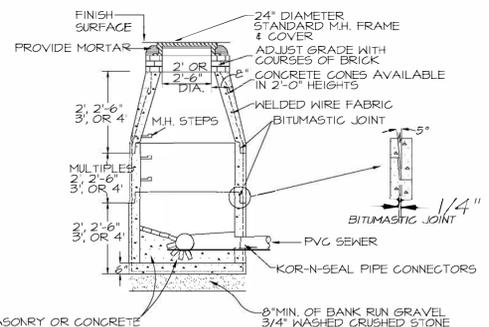
EXISTING CONDITIONS (BUILDINGS): 2,000± S.F.
 PROPOSED CONDITIONS (HOUSES): 15,300 S.F.±
RESULT: 13,300 S.F. INCREASE
 PROPOSED: 15,300 S.F. TO BE INFILTRATED:



- NOTES:**
- SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE FONDING EFFICIENCY.
 - CONTRACTOR TO INSPECT AND REPAIR SILT SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
 - REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

SILT FENCE (SILT SOCK)

NOT TO SCALE



SEWER MANHOLE DETAIL

NOT TO SCALE

- NOTES:**
- MANHOLE DESIGN TO LATEST ASTM C478.
 - REINFORCING STEEL CONFORMS TO LATEST ASTM A 105.
 - CONCRETE COMPRESSIVE STRENGTH 4,000 PSI @ 28 DAYS.
 - ONE POUR MONOLITHIC BASE.
 - WHEN SPECIFIED, MANHOLES WATERPROOF COATED.
 - 5 STEPS-STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC (P52-PF5L M.A. INDUSTRIES, INC.) CONFORMS TO LATEST ASTM C478 PARA-12.
 - BITUMASTIC BUTYL RUBBER FOR JOINTS CONFORM TO LATEST ASTM C443 AND FED 55-5-201A SPEC.
 - KOR-N-SEAL FLEXIBLE PIPE CONNECTORS FROM 3.5" TO 21.25" O.D. ASTM C423, A167.

SOIL TESTING

PERFORMED BY: STEVE ERIGEN, SOIL EVALUATOR / SOIL SCIENTIST
 DATE PERFORMED: 6-11-15

TEST PIT 1

DEPTH (INCHES)	EL. = 118.0 E.S.H.T. = 32' (153)			
0-12	Ap	FSL	10YR 2/2	
12-20	Bw	FSL	10YR 4/4	
20-65	Cl	SAND	5Y 4/4	

TEST PIT 2

DEPTH (INCHES)	EL. = 117.0 E.S.H.T. = 32' (143)			
0-11	Ap	FSL	10YR 2/2	
11-22	Bw	FSL	10YR 4/4	
22-60	Cl	SAND	5Y 5/4	

TEST PIT 3

DEPTH (INCHES)	EL. = 116.3 E.S.H.T. = 32' (136)			
0-12	Ap	FSL	10YR 2/2	
12-28	Bw	FSL	10YR 4/4	
28-48	Cl	SAND	5Y 4/4	

TEST PIT 4

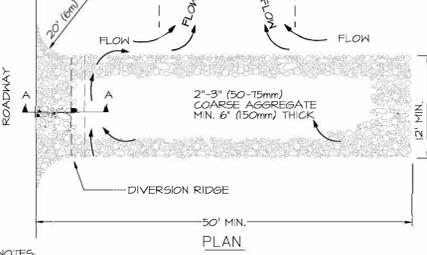
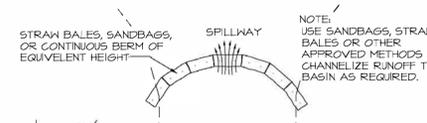
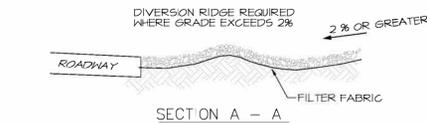
DEPTH (INCHES)	EL. = 116.0 E.S.H.T. = 36' (130)			
0-12	Ap	FSL	10YR 2/2	
12-26	Bw	FSL	10YR 4/4	
26-52	Cl	SAND	5Y 4/4	

TEST PIT 5

DEPTH (INCHES)	EL. = 116.9 E.S.H.T. = 32' (142)			
0-18	Ap	FSL	10YR 2/2	
18-21	Bw	FSL	10YR 4/6	
21-60	Cl	SAND	5Y 4/4	

TEST PIT 6

DEPTH (INCHES)	EL. = 117.4 E.S.H.T. = 36' (144)			
0-20	Ap	FSL	10YR 2/2	
20-60	Cl	SAND	5Y 4/4	



- 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.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

NOT TO SCALE

PROPOSED RAIN GARDEN INFILTRATION AREA FOR IMPERVIOUS AREA RUNOFF

NOT TO SCALE

INFILTRATION AREA SIZE:
 2,250 S.F. x 4" DEPTH
 (SEE HYDROLOGY CALCULATIONS)

INFILTRATION FACILITY VOLUME CALCULATIONS AND SIZING RAIN GARDEN

EXFILTRATION
 Class A soils; Rows 19B2 0.00194 FT/Sec
 Rain Garden: 2,250 S.F. x 0.00194 FT/Sec = 0.43 C.F.S. Bottom

NOTE:
 INFILTRATION AREA IS DESIGNED TO MITIGATE (INFILTRATE) PROPOSED DWELLING RUNOFF (4 UNITS x 100 S.F. = 15,300 S.F.) FOR 5.4" OF RAIN IN A 24 HR PERIOD WITH NO OUTFLOW. (SEE HYDROLOGY CALCULATIONS ATTACHED)

NOTES:

- BORDERING VEGETATED WETLANDS DELINEATED BY NORSE ENVIRONMENTAL AND APPROVED BY BEDFORD CONSERVATION COMMISSION SEE ORDER OF RESOURCE AREA DELINEATION DEP #103-0784.
- SEE ARCHITECTURAL PLANS FOR UNIT SIZE, HEIGHTS, AND DIMENSIONS.
- CONTRACTOR SHALL CONFORM TO ALL BEDFORD ENGINEERING DEPARTMENT REQUIREMENTS FOR SITE INSPECTIONS, AS-BUILT DRAWINGS, FEE PAYMENT & DIGITAL SUBMISSION REQUIREMENTS.
- EXISTING BOUNDARY LINE, TOPOGRAPHIC, AND VISIBLE UTILITIES BASED UPON SURVEY PERFORMED BY CYPRUS DESIGN INC. ELEVATIONS DEPICTED ARE BASED ON NAVD 88 DATUM.
- CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCING WORK.
- IN ACCORDANCE WITH CHAPTER 82 SECTION 40 INCLUDING AMENDMENTS, THE CONTRACTOR SHALL NOTIFY, IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES INCLUDING BEDFORD DEPARTMENT OF PUBLIC WORKS (24 HOUR MINIMUM NOTICE FOR INSPECTIONS REQUIRED) PRIOR TO EXCAVATION WORK AND CALL DIG SAFE AT 1-800-DIG SAFE PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL STATE AND LOCAL GOVERNMENT AGENCIES PRIOR TO, AND THROUGHOUT CONSTRUCTION.
- CONTRACTOR SHALL SECURE THE SITE AT THE END OF EACH WORK DAY.
- CONTRACTOR SHALL DISPOSE OF ALL DEMOLISHED MATERIAL, RUBBISH, AND DEBRIS IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS HAVING JURISDICTION.
- CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE TOWN OF BEDFORD REQUIREMENTS.
- ANY UNDERGROUND UTILITY LOCATIONS DEPICTED HEREON ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF BEDFORD. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- CONTRACTOR TO DIRECT ALL DWELLING ROOFTOP RUNOFF THROUGH SITE GRADING OR ROOF LEADER ROUTING TO THE RAIN GARDEN AREAS.
- ALL UTILITY STRUCTURES AND INSTALLATIONS SHALL CONFORM TO THE TOWN OF BEDFORD D.P.W. STANDARDS. ALL CASTINGS AND VALVE BOXES SHALL BE AMERICAN OR CANADIAN MADE.

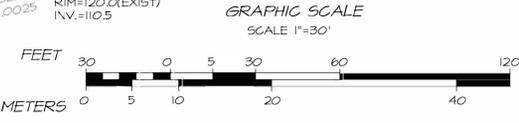
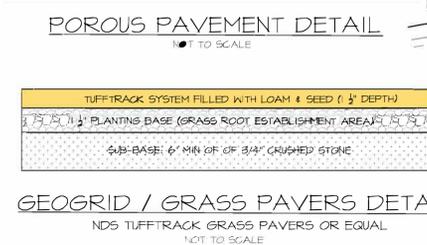
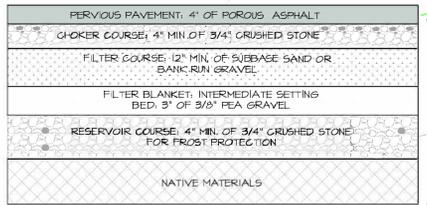
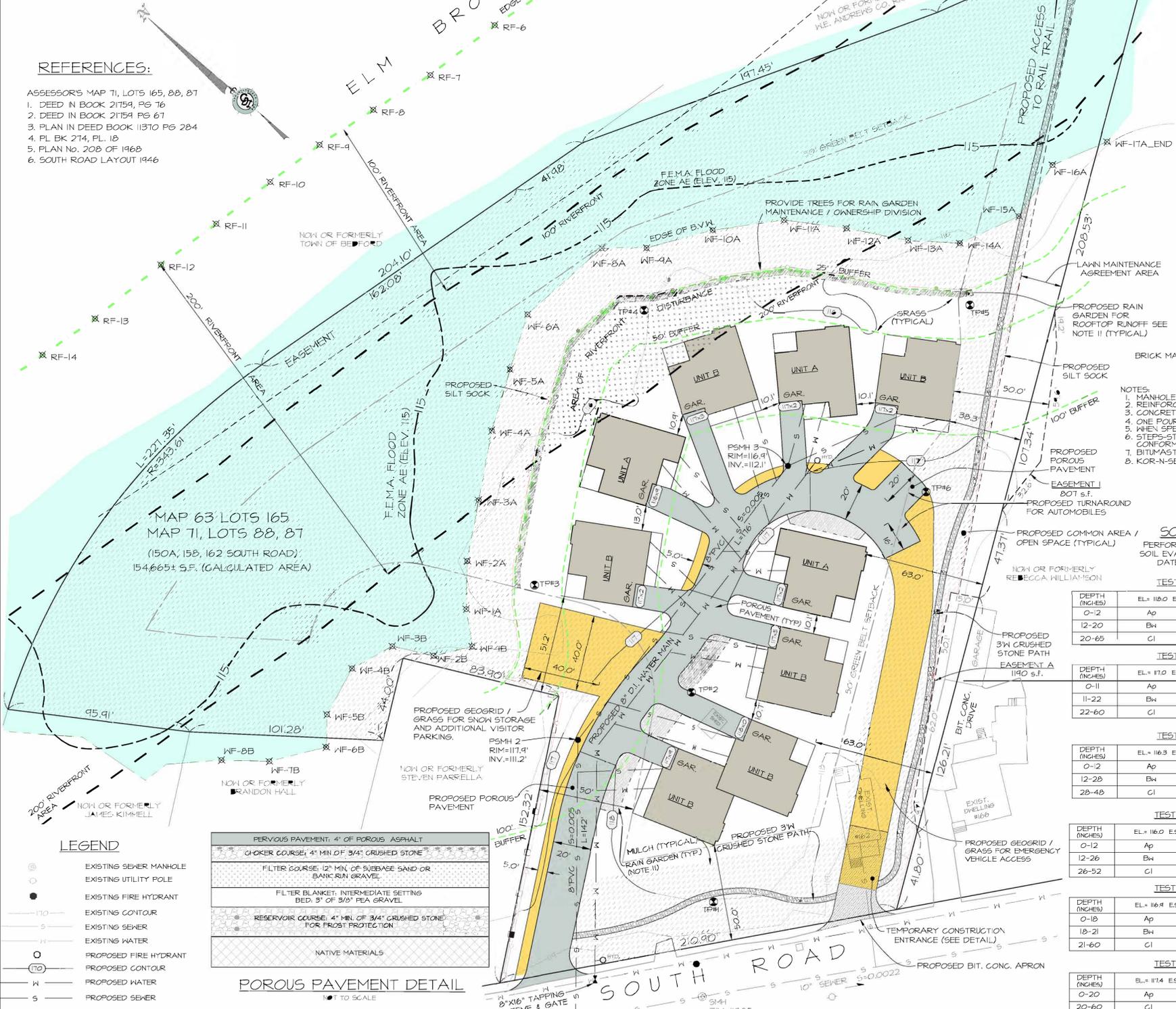
COTTAGES AT DEPOT CROSSING

SITE PLAN

MASSACHUSETTS
 ASSESSOR'S MAP 63, LOT 165,
 MAP 71, LOTS 87 & 88
 PREPARED BY:
 MASSKEY DEVELOPMENT CORP.
 PREPARED BY:
 Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 501 Main Street Unit 24 Taunton MA 01970
 Tel: 418-6401091 Fax: 418-6401020
 Email: CyprusDesignInc.com
 Info: info@CyprusDesignInc.com



SCALE: 1"=30' SHEET 1 OF 1 DATE: 9-03-15



RIVERFRONT AREA:
 TOTAL RIVERFRONT AREA ON LOT = 71,000± S.F.
 RIVERFRONT DISTURBANCE ALLOWED: 71,000 x 10% = 7,100± S.F.
 RIVERFRONT DISTURBANCE PROPOSED: 5,200± S.F.

IMPERVIOUS AREA IN 100' BUFFER ZONE
 IMPERVIOUS AREA IN 100' BUFFER ZONE: 8,500 S.F.
 TOTAL AREA OF 100' BUFFER ZONE: 46,200 S.F.
 8,500 S.F. / 46,200 S.F. = 18%

- LEGEND**
- EXISTING SEWER MANHOLE
 - EXISTING UTILITY POLE
 - EXISTING FIRE HYDRANT
 - EXISTING CONTOUR
 - EXISTING SEWER
 - EXISTING WATER
 - PROPOSED FIRE HYDRANT
 - PROPOSED CONTOUR
 - PROPOSED WATER
 - PROPOSED SEWER
 - EXISTING TREELINE
 - PROPOSED TREELINE
 - PROPOSED GEORGRID / GRASS N.D.S. TUFTTRACK GRASS PAVERS OR EQUAL
 - PROPOSED COMMON AREA / OPEN SPACE (TYPICAL)
 - PROPOSED POROUS PAVEMENT

NOTES:

- 1) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES NOR FOR TITLE INSURANCE PURPOSES.
- 2) THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED SITE FEATURES IN RELATION TO THE EDGE OF BORDERING VEGETATED WETLAND AND TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR CONSERVATION COMMISSION APPROVAL.
- 3) THE SUBJECT PROPERTY IS DEPICTED AS PARCEL 47 ON TOWN OF WILMINGTON ASSESSOR'S MAP 33.
- 4) PROPERTY OWNER STARK GROUP REALTY, LLC, 110 EAMES STREET WILMINGTON, MA
- 5) SUBJECT PROPERTY IS LOCATED WITHIN THE ZONE 2 WELLHEAD PROTECTION AREA AND WITHIN A.E. FLOOD ZONE (ELEVATION 96 - NAVD88 VERTICAL DATUM) AS SHOWN ON FEMA FLOOD MAP 25017C0287F REVISED JULY 6, 2016.
- 6) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF WILMINGTON. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.

LOAM AND SEEDING NOTES

LOAMING, SEEDING AND FERTILIZING

- 1) IF REQUIRED THE CONTRACTOR SHALL FURNISH ALL TOPSOIL OR ADDITIONAL TOPSOIL NEEDED TO COMPLETE THE JOB. IF THE EXISTING TOPSOIL IS SUFFICIENT TO COMPLETE THE JOB, ANY EXCESS TOPSOIL WILL REMAIN ON SITE. AN AREA WILL BE PROVIDED ON SITE FOR FINAL STORAGE.
- 2) THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED ON THE DESIGNATED AREAS AND IT SHALL BE A MINIMUM DEPTH OF SIX INCHES AFTER FIRING. SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SEEDING.
- 3) AFTER LOAM HAS BEEN PLACED, LIME AND FERTILIZER SHALL BE UNIFORMLY MIXED INTO THE TOP FOUR INCHES OF SOIL BY DISCING, HARROWING OR USING OTHER APPROVED METHODS.
- 4) ANY UNDULATIONS OR IRREGULARITIES IN THE SURFACE RESULTING FROM FERTILIZING, LIMING, SURFACE ROUGHENING OR OTHER CAUSES SHALL BE LEVELED PRIOR TO SEEDING, FLOODED, WASHED-OUT OR OTHERWISE DAMAGED AREAS SHALL BE RECONSTRUCTED AND ALL GRADES RE-ESTABLISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE DRAWINGS AND/ OR OTHER APPLICABLE SPECIFICATIONS.
- 5) PRIOR TO SEEDING THE SURFACE SHALL BE CLEARED OF ALL TRASH, DEBRIS AND STONES LARGER THAN ONE AND ONE-HALF INCHES IN DIAMETER, AND OF ALL ROOTS, BRUSH, WIRE, GRADE STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING OR MAINTENANCE OPERATIONS.
- 6) BROADCAST SEED AND MULCH. PLACE STRAW AND ANCHOR IT TO TOPSOIL. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDLINGS WITH ADEQUATE WATER FOR PLANT GROWTH. (1/2"-1" EVERY 3-4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED.

REPAIRS AND MAINTENANCE

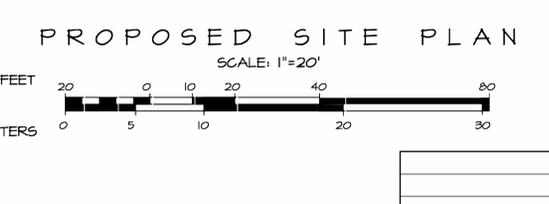
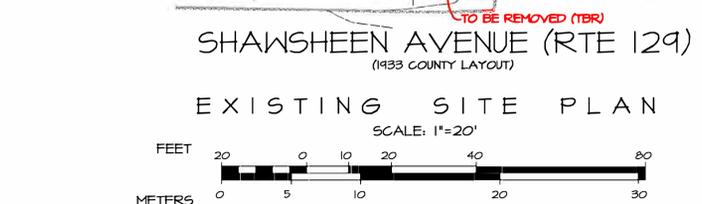
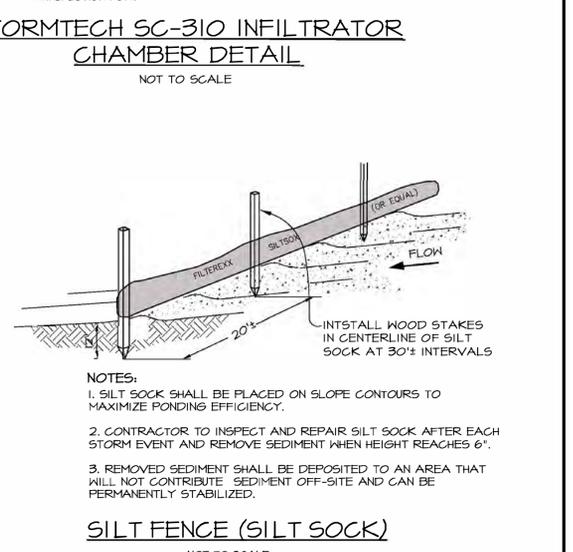
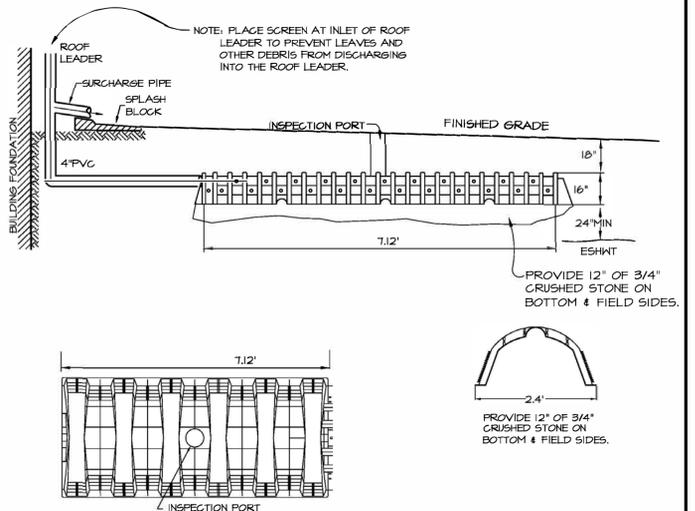
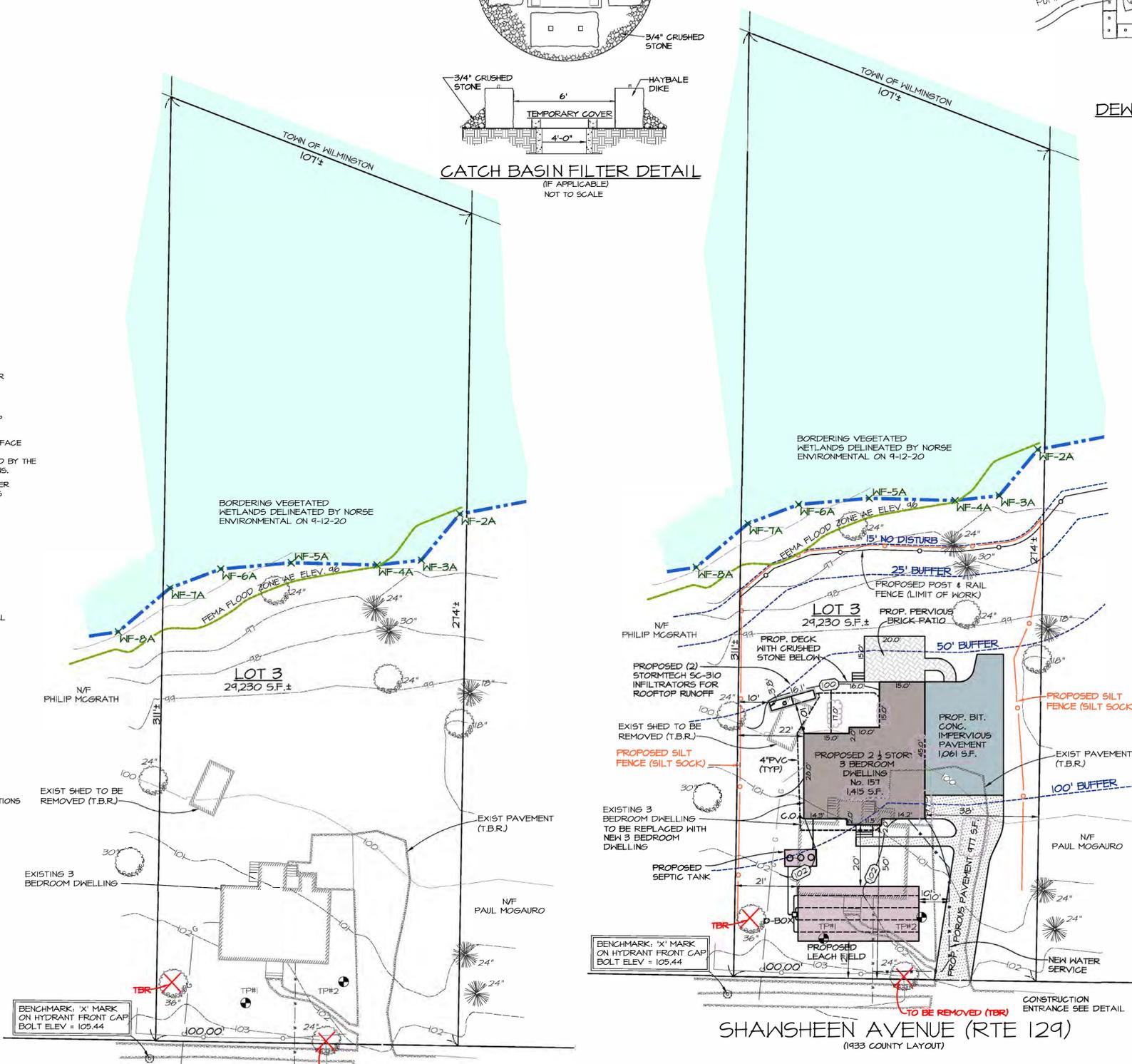
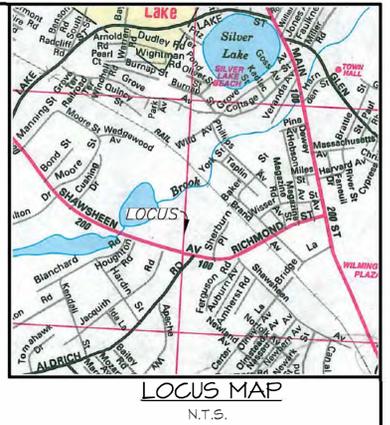
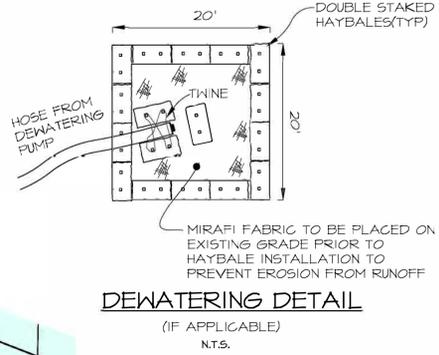
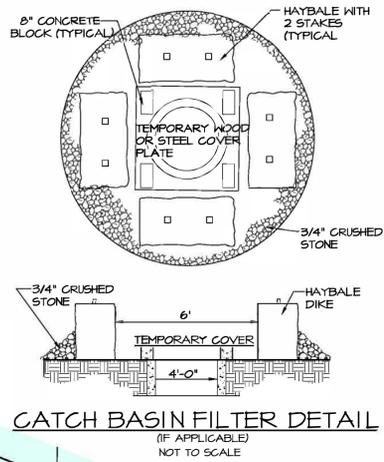
- 1) INSPECT ALL SEEDING AREAS FOR FAILURES AND MAKE NECESSARY REPAIRS, REPLACEMENTS AND RESEEDINGS WITHIN THE PLANTING SEASON.
- 1) ONCE THE VEGETATION IS ESTABLISHED, THE SITE SHALL HAVE 95% GROUND COVER TO BE CONSIDERED ADEQUATELY STABILIZED.
- 2) IF THE STAND PROVIDES LESS THAN 40% GROUND COVERAGE, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER, SEEDBED PREPARATION AND SEEDING RECOMMENDATIONS.
- 3) IF THE STAND PROVIDES BETWEEN 40% AND 94% GROUND COVER AGE, OVERSEEDING AND FERTILIZING USING HALF OF THE RATES ORIGINALLY APPLIED MAY BE NECESSARY.

SURFACE PREPARATION

- 1) STRIP AND STOCKPILE ALL EXISTING LOAM FROM PROPOSED WORK AREAS. PROTECT LOAM FROM EROSION. ALL LOAM WILL REMAIN ON SITE UNLESS THE OWNER APPROVES OFF SITE REMOVAL.
- 2) SET FIELD GRADES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. PROVIDE PROPER SURVEY CONTROL AND MAINTAIN THROUGHOUT CONSTRUCTION. PROVIDE ENGINEER WITH COPIES OF ALL SURVEY NOTES AND LOCATIONS OF BOTH VERTICAL AND HORIZONTAL CONTROL.
- 3) BRING BASE MATERIAL TO FINISH GRADE. PROVIDE ENGINEER WITH AS-BUILT DRAWINGS SHOWING FINISH ELEVATIONS AND CONTOURS PRIOR TO PLACEMENT OF LOAM.
- 4) SOIL TESTS SHALL BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR BOTH LIME AND FERTILIZER. SOIL TESTS SHALL BE CONDUCTED BY A STATE LABORATORY OR RECOGNIZED COMMERCIAL LABORATORY. PROVIDE ENGINEER WITH COPY OF TEST RESULTS AND RECOMMENDATIONS FOR LIMING AND FERTILIZING.
- 5) AFTER THE AREAS TO BE TOPSOILED HAVE BEEN APPROVED BY THE OWNER OR ENGINEER, AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENEED BY ROUGHENING TO THE DEPTH OF AT LEAST TWO INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL AND TO INCORPORATE THE LIME.
- 6) ACCEPTANCE SHALL BE GIVEN BY THE OWNER OR ENGINEER UPON SATISFACTORY COMPLETION OF EACH SECTION OR AREA AS INDICATED ON THE DRAWINGS OR AS OTHERWISE SPECIFIED BEFORE PLACEMENT OF TOPSOIL.

EROSION CONTROL

1. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL INSTALL SEDIMENTATION CONTROL DEVICES AND MAINTAIN THEM DURING CONSTRUCTION AS SPECIFIED AND AS REQUIRED TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE CONSTRUCTION SITE TO ADJACENT LAND & WETLAND AREAS.
2. SEDIMENTATION AND EROSION CONTROL MEASURES SHALL CONFORM TO THE REQUIREMENTS OF THE LYNNFIELD CONSERVATION COMMISSION ORDER OF CONDITIONS.
3. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY. CONTRACTOR SHALL PROVIDE PERIODIC MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES.
4. DRAINAGE STRUCTURES/SLOPE STABILIZATION AREAS SHALL BE INSPECTED PERIODICALLY TO INSURE PROPER FUNCTIONING, REMOVE ANY SEDIMENT ACCUMULATION AND REGRADE OR REPLACE MATERIALS AS REQUIRED.
5. ONCE THE SITE HAS BEEN FULLY STABILIZED AGAINST EROSION, REMOVE ALL SEDIMENT CONTROL DEVICES AND ALL ACCUMULATED SILT & DISPOSE OF SILT AND WASTE MATERIALS. REGRADE ALL AREAS DISTURBED DURING THIS PROCESS AND STABILIZE AGAINST EROSION WITH SURFACING MATERIALS AS INDICATED.



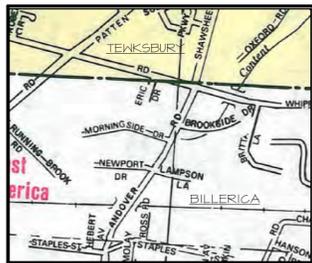
SITE PLAN
TO ACCOMPANY A NOTICE OF INTENT APPLICATION

MASSACHUSETTS
ASSESSOR'S MAP 33 PARCEL 47
PREPARED FOR

PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel: 978-640-1019, Fax: 978-640-1020
Web: CDISurvey.com
Email: info@CDISurvey.com

SCALE: AS NOTED SHEET 1 OF 1 DATE: 4-29-21

ADD 6" DEPTH TO GARAGE FOOTPRINT AND UPDATE PERVIOUS AREA CALC'S
DATE: 4-29-21
DESIGN: CDF / REVIEW: TR



LOCUS MAP
NOT TO SCALE

NOW OR FORMERLY
PAUL CACCIOLA
4 ERIC DRIVE
BILLERICA MA

NOW OR FORMERLY
RANDY D'ARGENIO
350 ANDOVER ROAD
BILLERICA MA

NOW OR FORMERLY
CHERYL CONLEY
6 ERIC DRIVE
BILLERICA MA

NOW OR FORMERLY
JEREMY ANTONUK &
STEVEN MUISE
3 MORNINGSIDE DRIVE
BILLERICA MA

FLOOD ZONE
COMPENSATION
AREA 'B' ELEVATION
100-101 = 90 C.F.

LOT 10
23,160 S.F.±
(RECORD AREA)

(2) STORMTECH SC-310
INFILTRATOR CHAMBERS
OR EQUAL FOR ROOFTOP
RUNOFF (SEE DETAIL)

PROP. GAR. WITH
2ND FLOOR
FAMILY ROOM
GAR. F.F.=99.0'

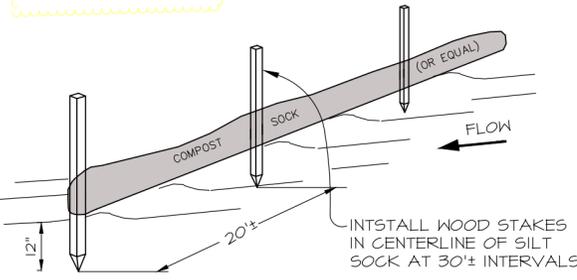
EXISTING 1 1/2 STORY
DWELLING No. 5
EXIST. FIRST FLOOR=105.72'
PROP. GAR. FLOOR=99.0'

PROP. BIT. CONC. DRIVE.

MORNINGSIDE
DRIVE

FLOOD ZONE COMPENSATION AREA 'A'
DRIVEWAY & FRONT YARD GRADING
ELEVATION 99' TO 100' = 115 C.F.

SITE PLAN
SCALE: 1"=20'



COMPOST SOCK
NOT TO SCALE

- NOTES:**
1. COMPOST SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. CONTRACTOR TO INSPECT AND REPAIR COMPOST SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

FLOOD ZONE A.E. COMPENSATION

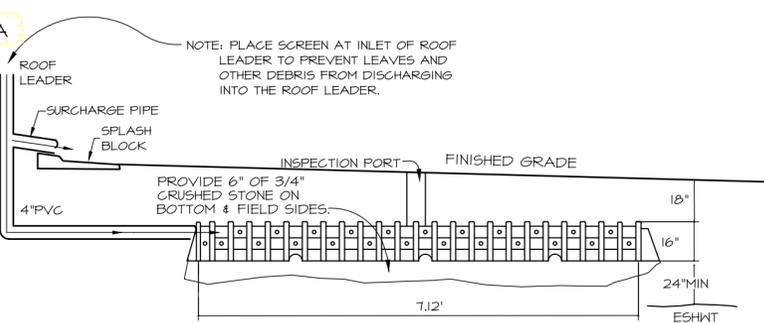
AREA 'A' - FLOOD ZONE AE (B.F.E.=101')
COMPENSATION: FRONT YARD & DRIVEWAY GRADING:
ELEVATION 99' TO 100' = 115 C.F.
ELEVATION 100' TO 101' = 0 C.F.

AREA 'B' - FLOOD ZONE AE (B.F.E.=101')
COMPENSATION: REAR YARD GRADING:
ELEVATION 99' TO 100' = 0 C.F.
ELEVATION 100' TO 101' = 90 C.F.

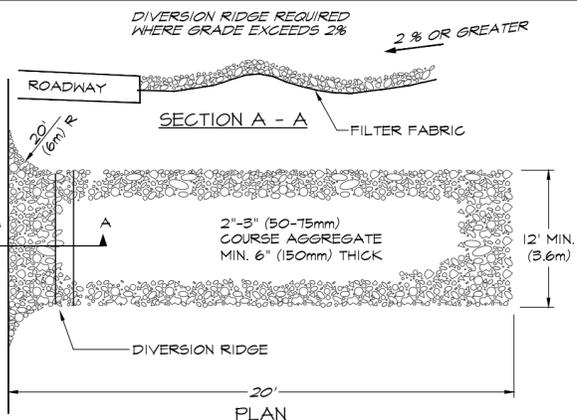
TOTAL COMPENSATION VOLUME
ELEVATION 99' TO 100' = 115 C.F.
ELEVATION 100' TO 101' = 90 C.F.

CONSTRUCTION SEQUENCE:

- Record the Order of Conditions at the Middlesex Registry of Deeds
- Install the erosion controls per the plan.
- Construct the single-family addition/garage and driveway.
- Remove the existing driveway and walkway.
- Grade & stabilize the compensatory storage areas.
- Connect the utilities
- Grade, loam and seed disturbed areas.
- Obtain a Certificate of Compliance.



**STORMTECH SC-310 INFILTRATOR
CHAMBER DETAIL**



- NOTES:**
1. 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.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

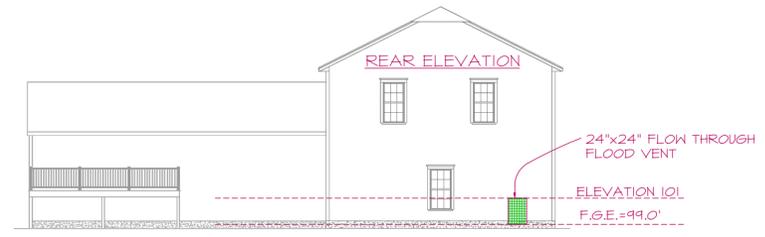
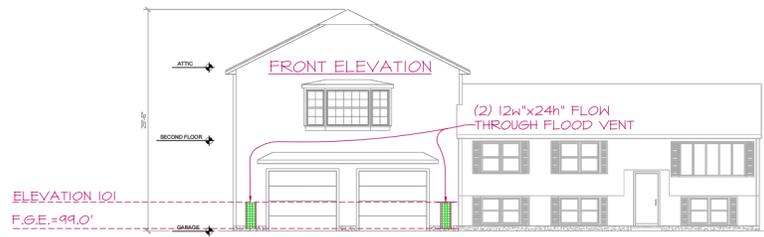
CONSTRUCTION ENTRANCE
NOT TO SCALE

FLOOD ZONE A.E. FILLING

FLOOD ZONE AE (B.F.E.=101') FILLING:
10" CONCRETE FOUNDATION WALLS:
ELEVATION 99' TO 100' 87 S.F. x 0.65'
(100'-99.35') = 57 C.F.
ELEVATION 100' TO 101' = 87 S.F. S.F. x 1.0'
(101.0'-100.0') = 87 C.F.

NOTES:

- 1.) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES NOR DOES IT REPRESENT A DETERMINATION OF TITLE, BUT IS SOLELY INTENDED TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR NEW PROPOSED GARAGE WITH FAMILY ROOM ABOVE, AND TO DEPICT THE EXISTING AND PROPOSED CONDITIONS ALONG WITH FLOOD ZONE A.E. FILL AND COMPENSATION CALCULATIONS.
- 2.) THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- 3.) PROPERTY IS PARTIALLY LOCATED WITHIN GREEN ENGINEERING FLOOD PLAIN AS SHOWN ON 1971 MAPS ON FILE AT THE BILLERICA BOARD OF HEALTH DEPARTMENT AND IS LOCATED ENTIRELY WITHIN FEMA ZONE AE (ELEVATION 101 - NAVD88 DATUM) BASED ON N.F.I.P. FIRM PANEL 02T8F (278 OF 656) MAP NUMBER 2501TC02T8F REVISED DATE JULY 6, 2016.
- 4.) THE SUBJECT PROPERTY IS BOUNDARY ADJACENT TO TOWN OF BILLERICA.
- 5.) PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL INSTALL SEDIMENTATION CONTROL DEVICES AND MAINTAIN THEM DURING CONSTRUCTION AS SPECIFIED AND AS REQUIRED TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE CONSTRUCTION SITE TO ADJUTING LAND & FLOOD AREAS.
- 6.) SEDIMENTATION AND EROSION CONTROL MEASURES SHALL CONFORM TO THE REQUIREMENTS OF THE BILLERICA CONSERVATION COMMISSION ORDER OF CONDITIONS. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
- 7.) CONTRACTOR SHALL PROVIDE PERIODIC MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES. ONCE THE SITE HAS BEEN FULLY STABILIZED AGAINST EROSION, REMOVE ALL SEDIMENT CONTROL DEVICES AND ALL ACCUMULATED SILT & DISPOSE OF SILT AND WASTE MATERIALS. REGRADE ALL AREAS DISTURBED DURING THIS PROCESS AND STABILIZE AGAINST EROSION WITH SURFACING MATERIALS AS INDICATED.
- 8.) PRESERVE EXISTING TREES ON-SITE.



FLOW THROUGH FLOOD VENT DETAIL
NOT TO SCALE

SITE PLAN
(TO ACCOMPANY A NOTICE OF INTENT APPLICATION)

PREPARED FOR: [Redacted]

PREPARED BY:
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel: 978.640.1014, Fax: 978.640.1020
Web: CDISurvey.com
Email: info@CDISurvey.com

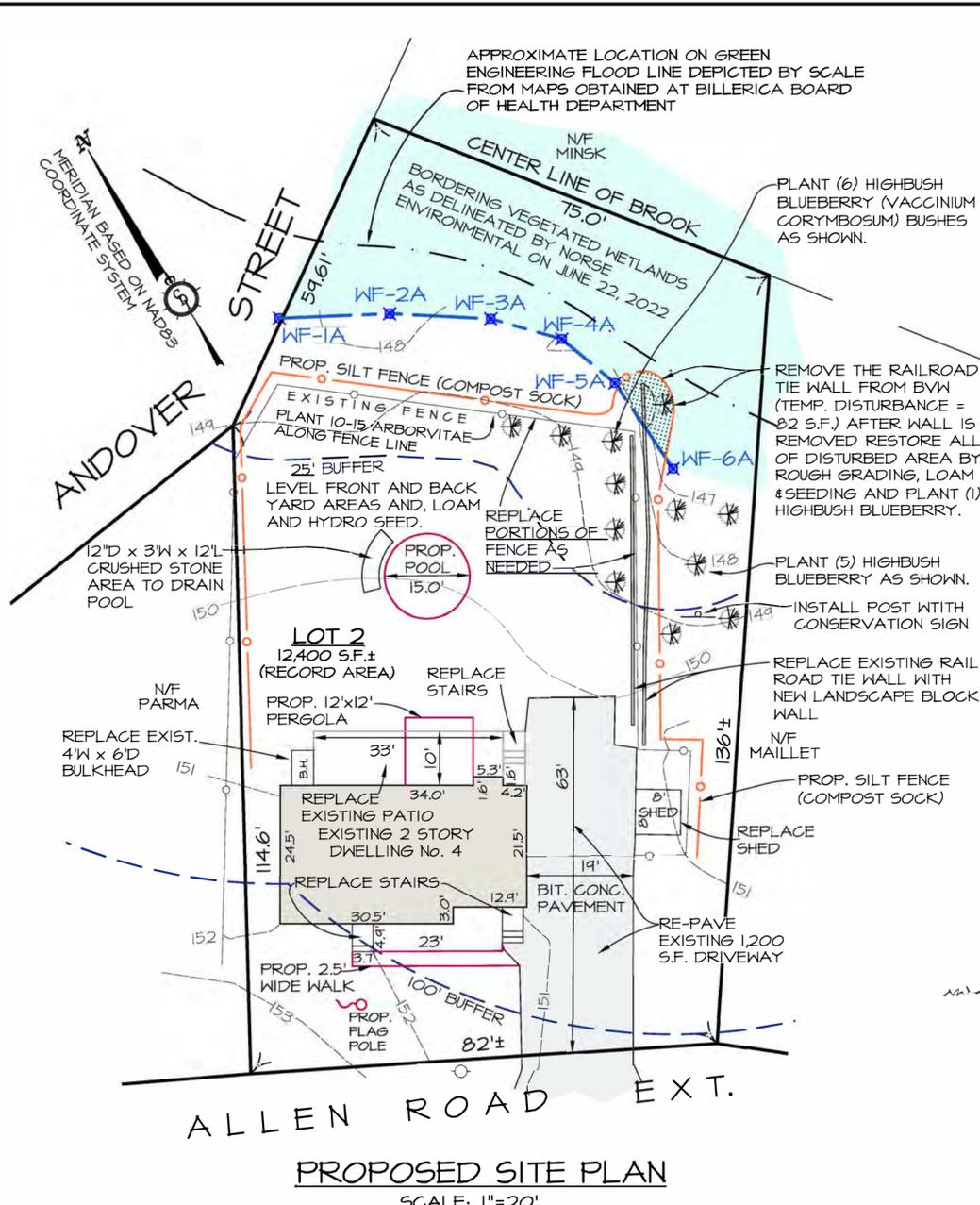
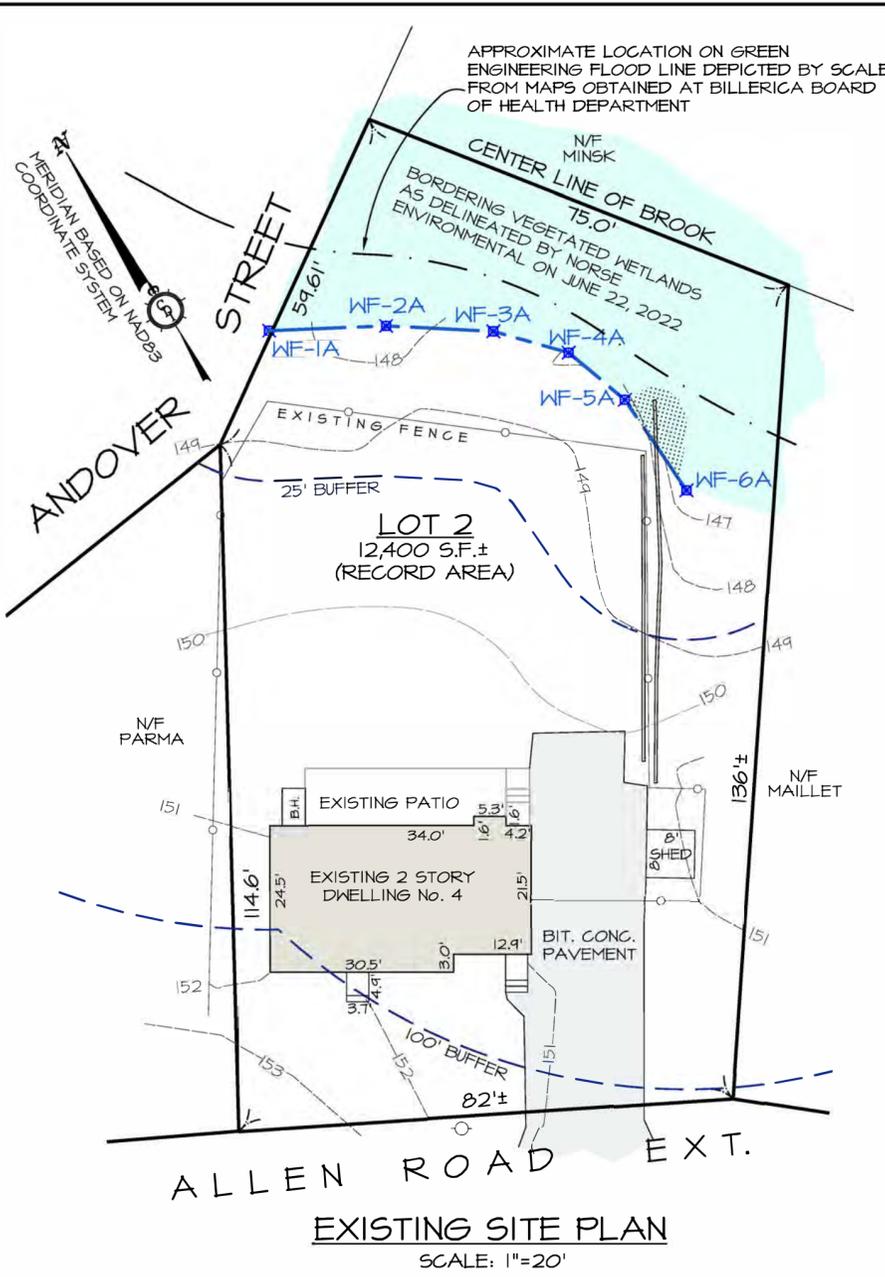
REVISIONS	
DATE	DESCRIPTION
4-27-22	REV. PER CON COM HEARING COMMENTS
DESIGN: K.P.F. / REVIEW: T.P.R.	
DATE: 3-7-22	SHEET 1 OF 1
SCALE: 1" = 20'	

REGISTERED PROFESSIONAL ENGINEER

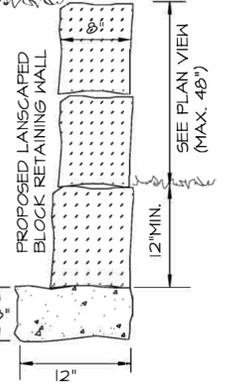
REFERENCES:
ASSESSOR'S: 26-157,
DEED: BK 33555, PG 214,
P.B. 102, PL. 157.

ZONING: VILLAGE RESIDENCE:

DESCRIPTION	REQUIRED	PROPOSED
FRONT SETBACK	35'	43'
SIDE SETBACK	15'	16'
REAR SETBACK	20'	76'
MAX. LOT COV.	25%	10%



- NOTES:**
- 1.) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES NOR DOES IT REPRESENT A DETERMINATION OF TITLE, BUT IS SOLELY INTENDED TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR NEW PROPOSED ADDITION, AND TO DEPICT THE EXISTING AND PROPOSED CONDITIONS ALONG WITH BORDERING VEGETATED WETLANDS AND BUFFER ZONES.
 - 2.) THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
 - 3.) PROPERTY IS PARTIALLY LOCATED WITHIN GREEN ENGINEERING FLOOD PLAIN AS SHOWN ON 1971 MAPS ON FILE AT THE BILLERICA BOARD OF HEALTH DEPARTMENT. PROPERTY IS LOCATED IN ZONE 'X' AS SHOWN ON N.F.I.P. FIRM PANEL 0259F (259 OF 656) MAP NUMBER 2501TC0259F REVISED DATE JULY 7, 2014.
 - 4.) THE SUBJECT PROPERTY IS DEPICTED AS PARCEL 122 ON TOWN OF BILLERICA ASSESSOR'S MAP 42.
 - 5.) PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL INSTALL SEDIMENTATION CONTROL DEVICES AND MAINTAIN THEM DURING CONSTRUCTION AS SPECIFIED AND AS REQUIRED TO PREVENT THE MOVEMENT OF SEDIMENT FROM THE CONSTRUCTION SITE TO ADJUTING LAND & FLOOD AREAS.
 - 6.) SEDIMENTATION AND EROSION CONTROL MEASURES SHALL CONFORM TO THE REQUIREMENTS OF THE BILLERICA CONSERVATION COMMISSION ORDER OF CONDITIONS. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
 - 7.) CONTRACTOR SHALL PROVIDE PERIODIC MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES. ONCE THE SITE HAS BEEN FULLY STABILIZED AGAINST EROSION, REMOVE ALL SEDIMENT CONTROL DEVICES AND ALL ACCUMULATED SILT & DISPOSE OF SILT AND WASTE MATERIALS, REGRADE ALL AREAS DISTURBED DURING THIS PROCESS AND STABILIZE AGAINST EROSION WITH SURFACING MATERIALS AS INDICATED.
 - 8.) PRESERVE EXISTING TREES ON-SITE.
 - 9.) CHICKEN WIRE FENCE TO BE REMOVED IN AREA OF WETLAND FLAG 2A.
 - 10.) EXISTING IMPERVIOUS AREA = 2863 S.F. PROPOSED NEW IMPERVIOUS AREA 300 S.F. OR 10.5% OF NEW IMPERVIOUS AREA WITHIN BUFFER ZONE.
 - 11.) VARIANCE REQUEST: VARIANCE REQUEST FOR THE 25 FT. NO ALTERATION ZONE FOR THE FENCE, RETAINING WALL, PLANTINGS, AND LAWN AREA. FENCELINE AND SIGN POST TO SERVE AS A VISUAL BARRIER.
 - 12.) RELOCATE THE FIREPIT CLOSER TO THE HOUSE.



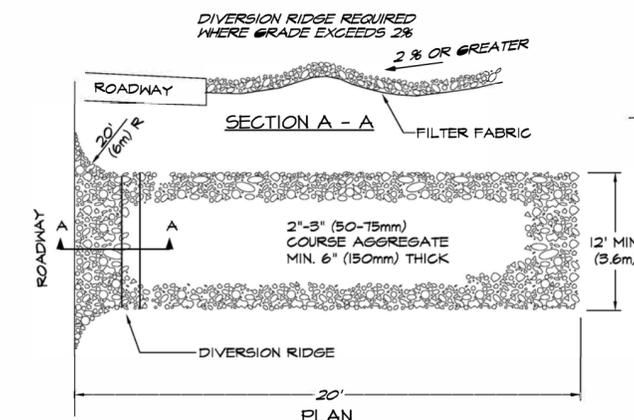
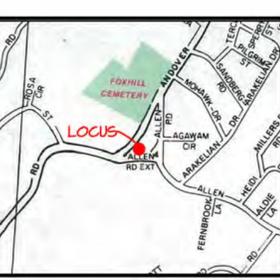
REFERENCES:
ASSESSOR'S: 42-122,
DEED: BK 6051, PG 41,
P.B. 81, PL. 88.

ZONING: NEIGHBORHOOD RESIDENCE:

DESCRIPTION	REQUIRED	PROPOSED
FRONT SETBACK	35'	--
SIDE SETBACK	15'	--
REAR SETBACK	20'	--
MAX. LOT COV.	25%	--

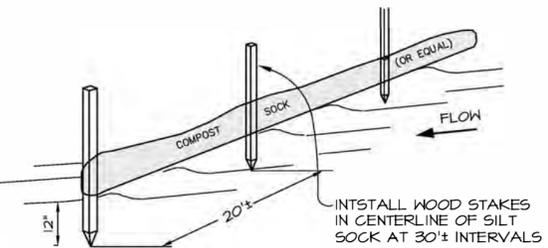
- Construction Sequence:**
- Record the Order of Conditions at the Middlesex Registry of Deeds
 - Install the erosion controls per the plan.
 - Call digsafe.
 - Remove the fence.
 - Remove/Construct the retaining walls. Loam & seed disturbed areas.
 - Remove/Replace the fence, patio, bulkhead & shed.
 - Remove/Replace the driveway.
 - Install the walkway.
 - Install the aboveground pool.
 - Install the plantings.
 - Grade, loam and seed disturbed areas.
 - Obtain a Certificate of Compliance.

LOCUS MAP
NOT TO SCALE



- NOTES:**
1. 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 DRESSINGS, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

CONSTRUCTION ENTRANCE
NOT TO SCALE



- NOTES:**
1. COMPOST SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. CONTRACTOR TO INSPECT AND REPAIR COMPOST SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

COMPOST SOCK
NOT TO SCALE

DATE	REVISION DESCRIPTION	DESIGN: KPF	REVIEW: TR
2-1-23	UPDATES BASED ON COMMISSION COMMENTS		
1-3-23	UPDATES BASED ON HEARING COMMENTS		

SITE PLAN
TO ACCOMPANY A NOTICE OF INTENT APPLICATION

LOCATED AT
ALLEN ROAD EXTENSION
ASSESSOR'S MAP 42-122
BILLERICA, MA

PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web: CDsurvey.com
Email: info@CDsurvey.com

SCALE: 1"=20' SHEET 1 OF 1 DATE: 11-10-22

NOTES:

- 1.) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES NOR FOR TITLE INSURANCE PURPOSES.
- 2.) THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED SITE FEATURES IN RELATION TO THE EDGE OF BORDERING VEGETATED WETLAND AND TO ACCOMPANY A NOTICE OF INTENT APPLICATION FOR CONSERVATION COMMISSION APPROVAL.
- 3.
- 4.) PROPERTY OWNER IS TANG GUANGWEN TRUSTEE, 14 RIDGE ROAD LEXINGTON MA
- 5.) VEGETATED WETLAND SYSTEM 'A' & 'B' DELINEATED BY NORSE ENVIRONMENTAL ON 11-13-24 AND LOCATED DURING INSTRUMENT FIELD SURVEY BY CYPRUS DESIGN INC. IN DECEMBER 2023.
- 6.) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF LEXINGTON. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.

TEST PIT DATA

PERFORMED BY: RICHARD BERUBE, S.E. #162
DATE PERFORMED: 10-23-24

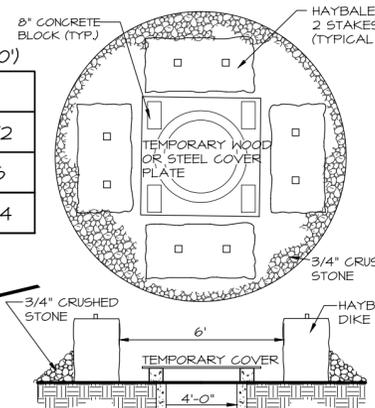
TEST PIT 1
ELEV.190 ESHWT 34"(187.2), REFUSAL 58"(185.2)

DEPTH (INCHES)	SOIL DESCRIPTIONS		
0-9	A	FSL	10YR 3/2
9-22	Bw	FSL	10YR 6/6
22-58	C	FINE SAND	10YR 5/4

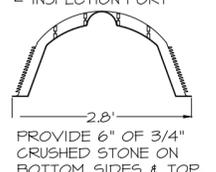
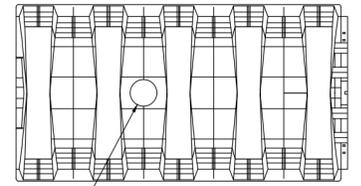
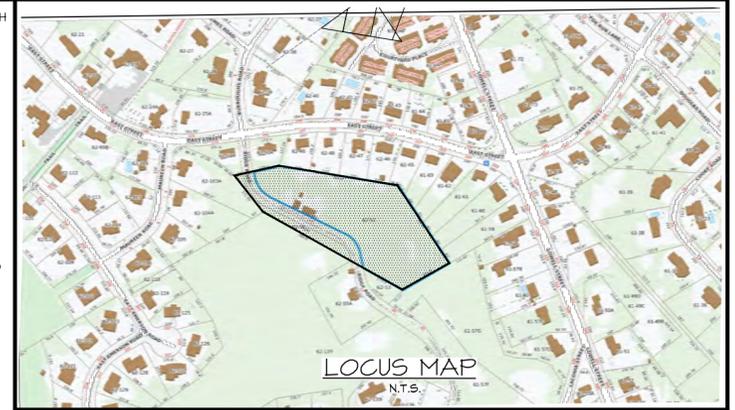
TEST PIT 2

ELEV.191 ESHWT 45"(187.2), REFUSAL 72"(185.0)

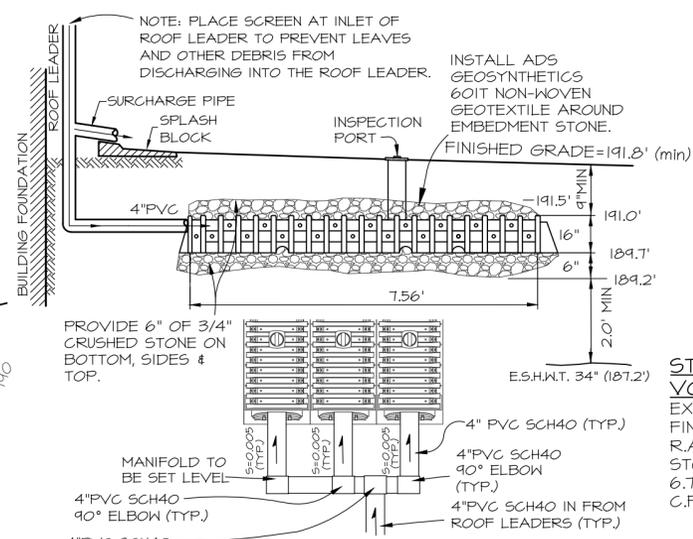
DEPTH (INCHES)	SOIL DESCRIPTIONS		
0-12	A	FSL	10YR 3/2
12-20	Bw	FSL	10YR 6/6
20-72	C	FINE SAND	10YR 5/4



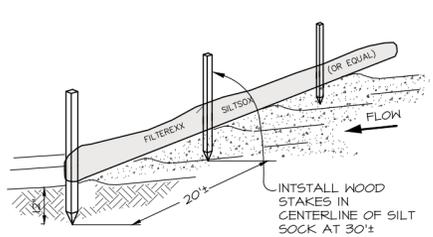
CATCH BASIN FILTER DETAIL
(IF APPLICABLE) NOT TO SCALE



STORMTECH INFILTRATION VOLUME CALC. AND SIZING:
EXFILTRATION RATE:
FINE SAND - HYDRAULIC SOILS CLASS A / R.A.WL RATE: 8.27"/HR = 0.0001914 FT./SEC
STORMTECH INFILTRATION AREA: = 15.7 x 6.7' = 105 S.F. X 0.0001914 FT./SEC = 0.02 C.F.S. BOTTOM

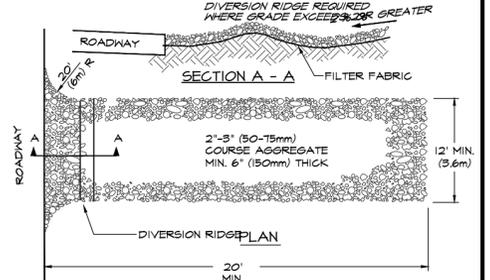


STORMTECH SC-310 INFILTRATORS FOR ROOFTOP RUNOFF
NOT TO SCALE



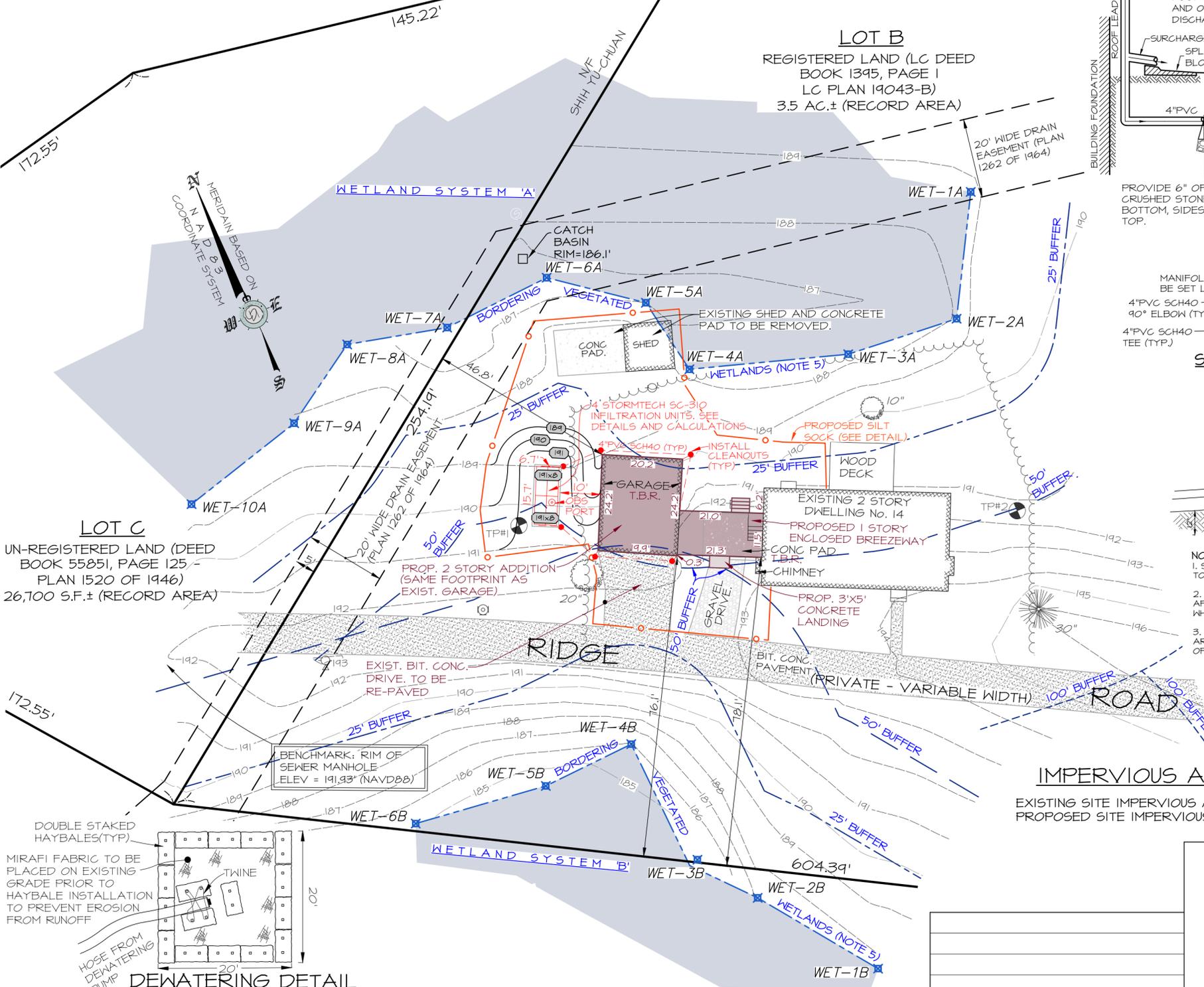
- NOTES:**
1. SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. CONTRACTOR TO INSPECT AND REPAIR SILT SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

SILT FENCE (SILT SOCK)
NOT TO SCALE

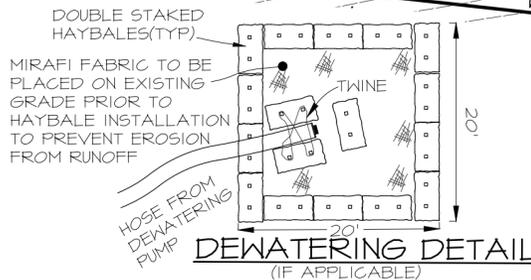


- NOTES:**
- 1) THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - 2) WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

CONSTRUCTION ENTRANCE
(IF APPLICABLE)



IMPERVIOUS AREA:
EXISTING SITE IMPERVIOUS AREA: 5,112 S.F.
PROPOSED SITE IMPERVIOUS AREA: 4,733 S.F.
379 S.F. LESS



DEWATERING DETAIL
(IF APPLICABLE)

SITE PLAN
TO ACCOMPANY A NOTICE OF INTENT APPLICATION

LOCATED AT
14 RIDGE ROAD
LEXINGTON, MA 01846
ASSESSORS MAP 62 - 52

PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web: CDsurvey.com
Email: info@CDsurvey.com

11-12-24

SCALE: 1"=20' SHEET 1 OF 1 DATE: 11-12-24

WATER AND SEWER CONNECTION PLANS

A sewer and water connection plan is a technical, engineered document detailing how a property's plumbing links to municipal water and sanitary sewer mains. It includes site maps, pipe materials, sizes, slopes, and permit requirements, ensuring compliance with local codes, proper gravity flow, and appropriate connection fees.

Key Aspects of Connection Plans:

- **Purpose:** Required for new construction, repairs, or re-routing of water service lines and sewer laterals.
- **Key Components:** Technical drawings showing the path from the building to the street main, including cleanouts, water meters, and backflow prevention devices.
- **Permitting & Fees:** Involves obtaining an S-Permit (Sewer Permit) and paying connection fees based on water meter size or unit type (residential vs. commercial).
- **Standards:** Must follow municipal engineering standards regarding pipe depth (often 4–10 feet) to prevent freezing and ensure proper gravity flow.
- **Responsibilities:** Property owners usually bear all costs for installation and maintenance from the building to the utility main.

THIRD

FIRST STREET

ROAD

BORDERING VEGETATED WETLANDS AS DELINEATED BY NORSE ENVIRONMENTAL, INC IN MAY 2012.

EXIST. SMH
RIM=65.0
INV. 8"= 60.3
INV. 18"=59.3

PROPOSED 6" PVC SEWER SERVICE. L=45, S=0.14

INV.=60.34

INV.=66.64

PROPOSED 2 1/2 STORY TWO FAMILY RESIDENCE GARAGE EL.=68.3
FFF EL.=71.3
1,812 S.F.

PROPOSED (2) STORMTECH SC-310 INFILTRATORS FOR STORMWATER RUNOFF

PROPOSED (2) STORMTECH SC-310 INFILTRATORS FOR STORMWATER RUNOFF

EXISTING DWELLING NO. 15 (T.B.R.)

NOW OR FORMERLY ANTONINO LOCOCO

PROP. EVERGREENS

100' BUFFER ZONE

PROPOSED CONSERVATION RESTRICTION AREA

LOT 2
26,720 S.F.±
MAP 14, BLOCK 12, LOT 5
(RECORD AREA)

LOT 1
MAP 14, BLOCK 12, LOT 11

BORDERING VEGETATED WETLANDS AS DELINEATED BY NORSE ENVIRONMENTAL, INC IN MAY 2012.

PROPOSED SITE PLAN (WATER & SEWER CONNECTIONS)

(ASSESSOR'S MAP 14, BLOCK 12, LOT 5)

PREPARED FOR

PREPARED BY
CYPRUS DESIGN, INC.

Tel. 978.640.1019 Fax: 978.640.1020
Web Page: CyprusDesignInc.com
Email: Info@CyprusDesignInc.com

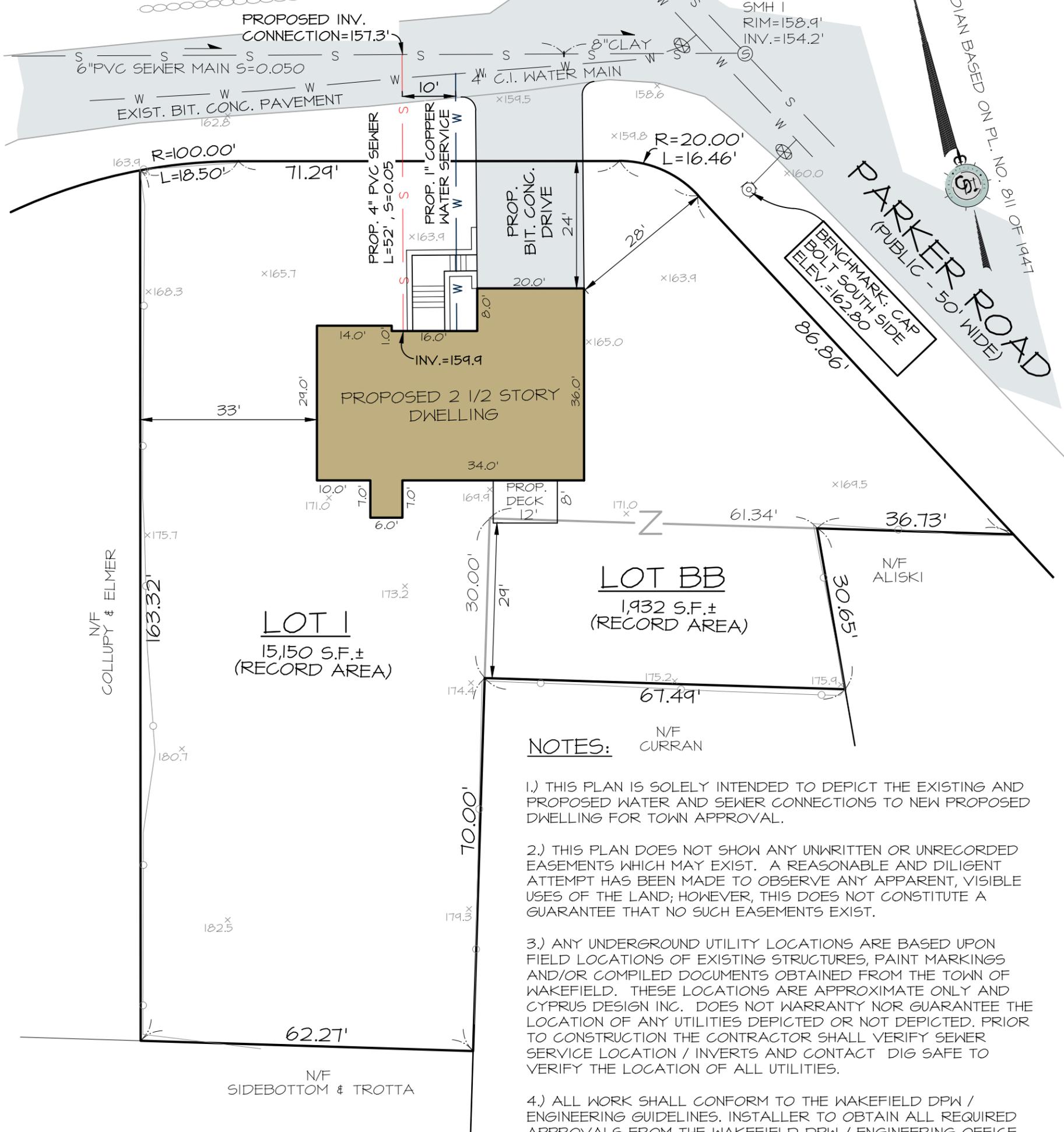
DATE: 11-8-12

SCALE: 1" = 20'

SHEET 1 OF 2

CDI
MERIDIAN IS BASED ON PLAN #35 OF 2001

MILES LANE
(PRIVATE - 30' WIDE)



- NOTES:** N/F CURRAN
- 1.) THIS PLAN IS SOLELY INTENDED TO DEPICT THE EXISTING AND PROPOSED WATER AND SEWER CONNECTIONS TO NEW PROPOSED DWELLING FOR TOWN APPROVAL.
 - 2.) THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
 - 3.) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF WAKEFIELD. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
 - 4.) ALL WORK SHALL CONFORM TO THE WAKEFIELD DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WAKEFIELD DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.

ZONING DATA:

ZONE - S-R

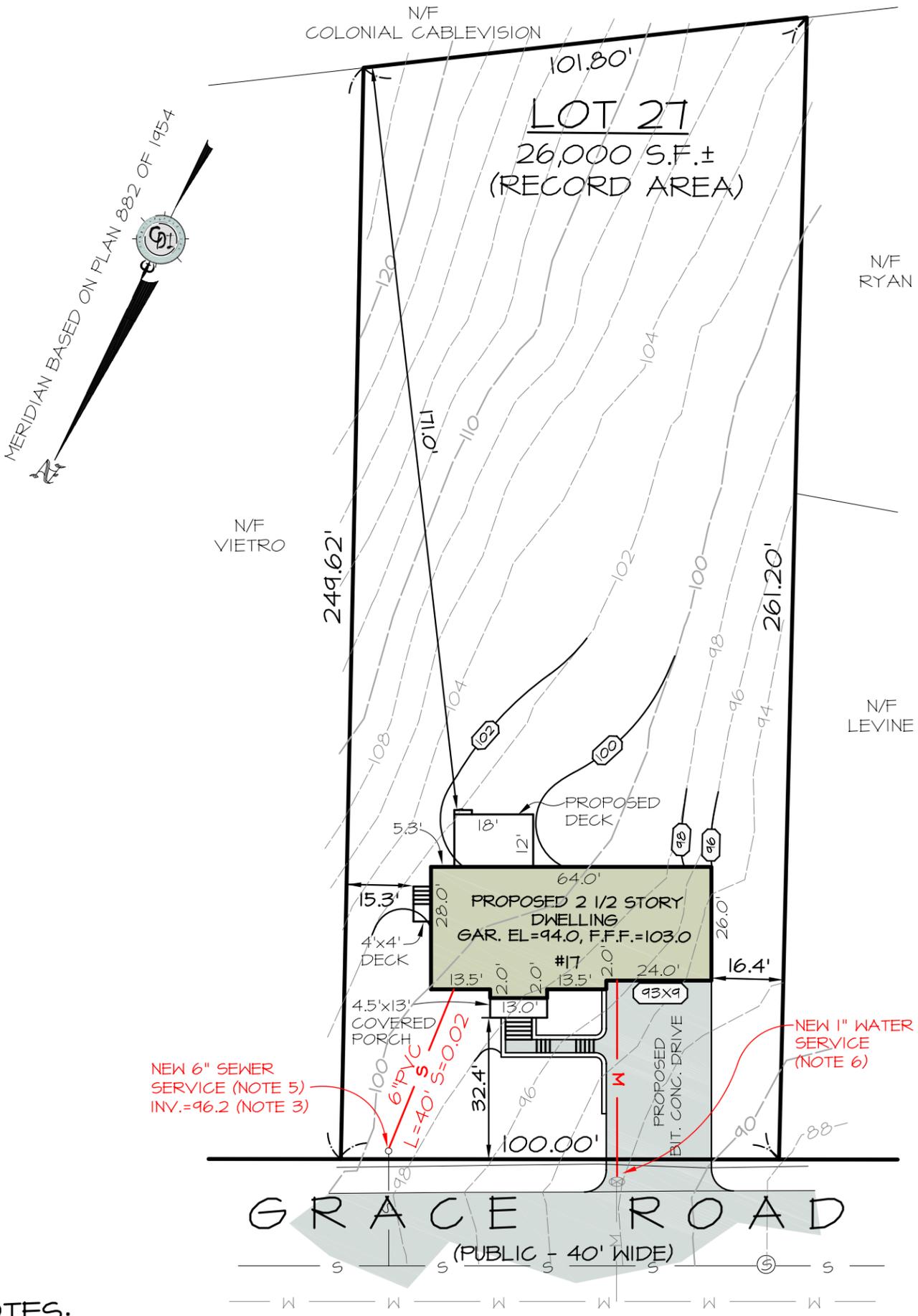
DESCRIPTION	REQUIRED
LOT SIZE	12,000 S.F. (MIN.)
LOT FRONTAGE/WIDTH	100' (MIN.)
MAX. FLOOR AREA RATIO	N/A
MAX. HEIGHT OF BUILDINGS	2 1/2 STORIES 35' (MAX.)
BUILDING COVERAGE	30% (MAX.)
REQUIRED FRONT SETBACK	20' (MIN.)
REQUIRED SIDE SETBACK	15' (MIN.)
REQUIRED REAR SETBACK	25' (MIN.)
OPEN AREA	40% (MIN.)
DISTANCE BETWEEN BUILDINGS	10' (MIN.)

REFERENCES:

ASSESSOR'S 03-054-MIL & BB
DEED BOOK 28053
PAGE 220-222
PLAN NO. 811 OF 1947
PLAN NO. 1136 OF 1952
PLAN NO. 25 OF 1939
PLAN NO. 610 OF 1957

WATER & SEWER CONNECTION

LOCATED AT ASSESSOR'S: 03-054-MIL & BB PREPARED BY Cyprus Design Inc. Land Surveying & Civil Engineering Services 1501 Main Street Unit 24 Tewksbury, MA 01876 Tel. 978.640.1019, Fax. 978.640.1020 Web. CyprusDesignInc.com Email Info@CyprusDesignInc.com	REVISIONS <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>6-22-18</td> <td>REV. HOUSE FOOTPRINT, 4\"SEWER SERVICE, INVERT AT HOUSE</td> </tr> </tbody> </table>	DATE	DESCRIPTION	6-22-18	REV. HOUSE FOOTPRINT, 4\"SEWER SERVICE, INVERT AT HOUSE	REGISTERED PROFESSIONAL ENGINEER
	DATE	DESCRIPTION				
6-22-18	REV. HOUSE FOOTPRINT, 4\"SEWER SERVICE, INVERT AT HOUSE					
DATE: 5-2-18 SHEET 1 OF 1 SCALE: 1" = 20'						



NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED WATER & SEWER CONNECTIONS FOR WOBURN DPW / ENGINEERING APPROVALS.
2. THE SUBJECT PROPERTY IS DEPICTED AS PARCEL 34 ON CITY OF WOBURN ASSESSOR'S MAP 78-08 LOT 101.
3. ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF WOBURN. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
4. SUBJECT PROPERTY IS LOCATED IN R-1 ZONING DISTRICT.
5. NEW 6" SEWER SERVICE TO CONNECT TO EXISTING SERVICE AS SHOWN.
6. NEW 1" WATER SERVICE TO CONNECT TO EXISTING WATER SERVICE AS SHOWN.
7. ALL WORK SHALL CONFORM TO THE WOBURN DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WOBURN DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.
8. CONTRACTOR TO SUBMIT ASBUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.

PROPOSED SITE PLAN

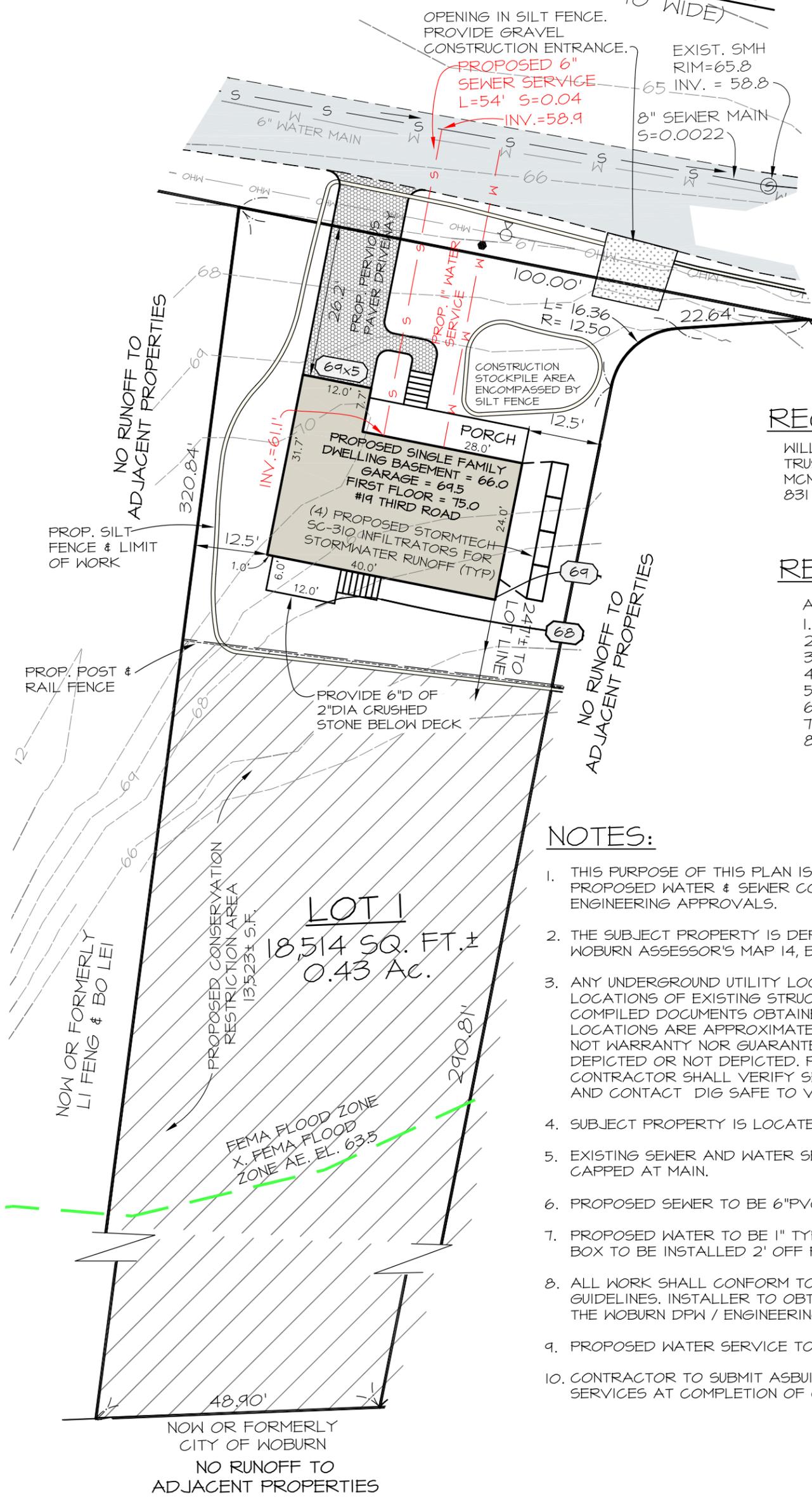
LOCATED AT _____

PREPARED FOR _____

PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web. CyprusDesignInc.com
 Email Info@CyprusDesignInc.com

SCALE: 1"=30' DATE: 11-11-14

THIRD ROAD (PRIVATE 40' WIDE)



RECORD OWNER:

WILLIAM J. MCNULTY,
TRUSTEE OF THE WILLIAM J.
MCNULTY REVOCABLE TRUST
831 MAIN STREET WOBURN MA.

REFERENCES:

- ASSESSOR'S MAP 14, BLOCK 12, LOT 04
- 1. DEED 63938, PG 408
- 2. PL BK. 229, PL. 22
- 3. PL. 1335 OF 1987
- 4. PL. 900 OF 1996
- 5. PL. 35 OF 2001
- 6. PL. 548 OF 2001
- 7. PL. 544 OF 2013
- 8. PL. 550 OF 2013

NOTES:

1. THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED WATER & SEWER CONNECTIONS FOR WOBURN DPW / ENGINEERING APPROVALS.
2. THE SUBJECT PROPERTY IS DEPICTED AS PARCEL 4 ON CITY OF WOBURN ASSESSOR'S MAP 14, BLOCK 12.
3. ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF WOBURN. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
4. SUBJECT PROPERTY IS LOCATED IN R-2 ZONING DISTRICT.
5. EXISTING SEWER AND WATER SERVICE TO BE REMOVED AND CUT & CAPPED AT MAIN.
6. PROPOSED SEWER TO BE 6" PVC (SDR 35).
7. PROPOSED WATER TO BE 1" TYPE 'K' COPPER AND WATER SHUT OFF BOX TO BE INSTALLED 2' OFF PROPERTY LINE.
8. ALL WORK SHALL CONFORM TO THE WOBURN DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WOBURN DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.
9. PROPOSED WATER SERVICE TO BE INSTALLED 2' OUTSIDE LOT LINE.
10. CONTRACTOR TO SUBMIT ASBUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.

SITE PLAN

LOCATED AT
PREPARED FOR
PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web. CyprusDesignInc.com
Email Info@CyprusDesignInc.com

REVISIONS	
DATE	DESCRIPTION

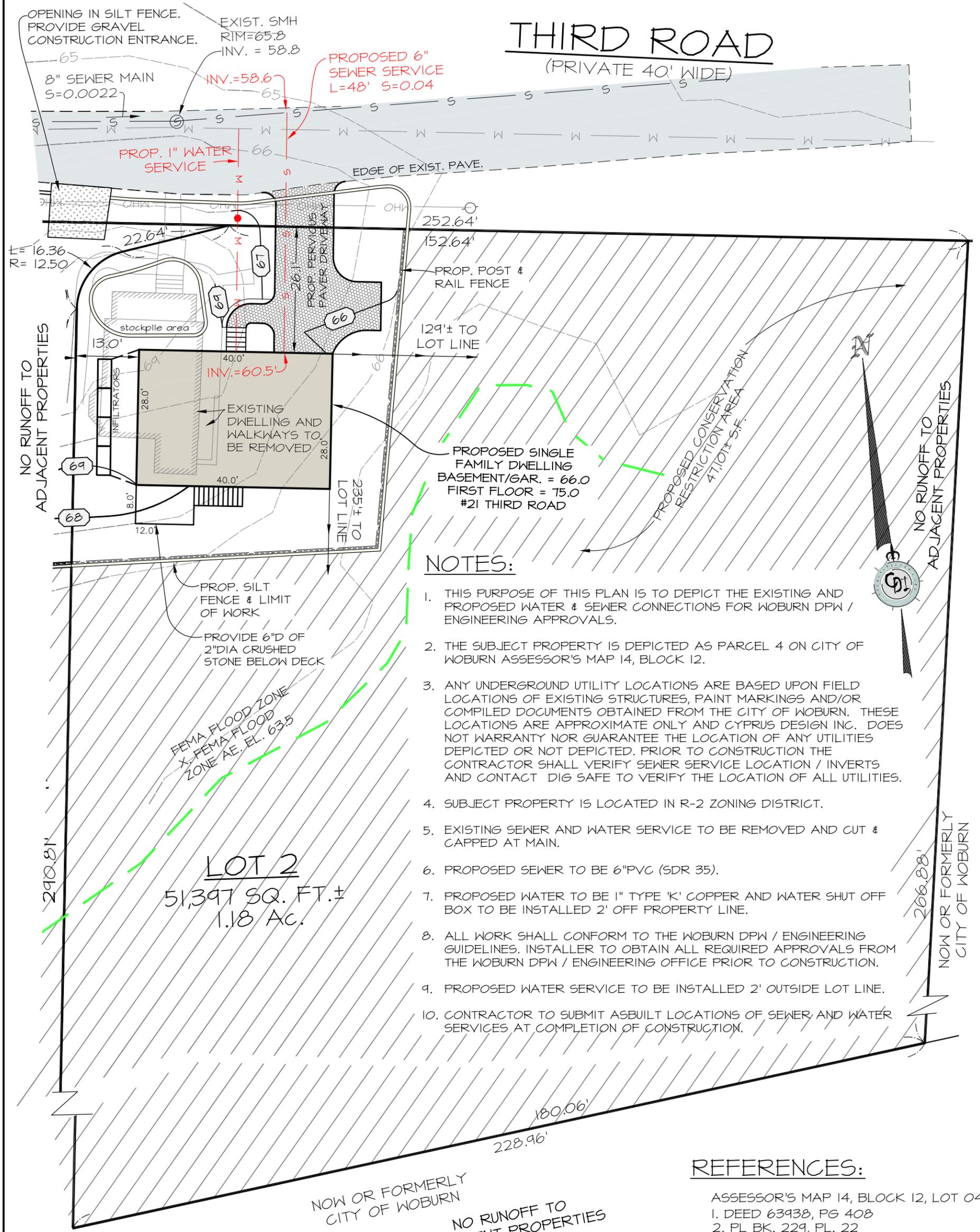
DATE: 04-29-16 SHEET 1 OF 1

SCALE: 1" = 20'

REGISTERED PROFESSIONAL ENGINEER

THIRD ROAD

(PRIVATE 40' WIDE)



NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED WATER & SEWER CONNECTIONS FOR WOBURN DPW / ENGINEERING APPROVALS.
2. THE SUBJECT PROPERTY IS DEPICTED AS PARCEL 4 ON CITY OF WOBURN ASSESSOR'S MAP 14, BLOCK 12.
3. ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF WOBURN. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
4. SUBJECT PROPERTY IS LOCATED IN R-2 ZONING DISTRICT.
5. EXISTING SEWER AND WATER SERVICE TO BE REMOVED AND CUT & CAPPED AT MAIN.
6. PROPOSED SEWER TO BE 6" PVC (SDR 35).
7. PROPOSED WATER TO BE 1" TYPE 'K' COPPER AND WATER SHUT OFF BOX TO BE INSTALLED 2' OFF PROPERTY LINE.
8. ALL WORK SHALL CONFORM TO THE WOBURN DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WOBURN DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.
9. PROPOSED WATER SERVICE TO BE INSTALLED 2' OUTSIDE LOT LINE.
10. CONTRACTOR TO SUBMIT AS-BUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.

REFERENCES:

- ASSESSOR'S MAP 14, BLOCK 12, LOT 04
1. DEED 63938, PG 408
 2. PL BK. 229, PL. 22
 3. PL. 1335 OF 1987
 4. PL. 900 OF 1996
 5. PL. 35 OF 2001
 6. PL. 548 OF 2001
 7. PL. 544 OF 2013
 8. PL. 550 OF 2013

RECORD OWNER:

TRUSTEE OF THE
WELL-FLEXIBLE TRUST
WOBURN, MA

SITE PLAN

LOCATED AT

PREPARED FOR

PREPARED BY

Cyprus Design Inc.

Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web. CyprusDesignInc.com
Email info@CyprusDesignInc.com

REVISIONS

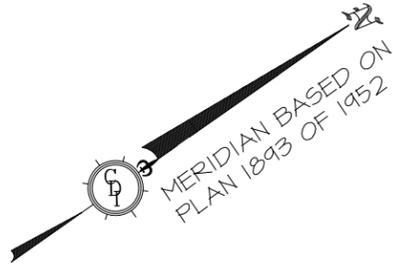
DATE	DESCRIPTION

DATE: 04-29-16 SHEET 1 OF 1



REGISTERED PROFESSIONAL ENGINEER

NO RUNOFF TO ADJACENT PROPERTIES



NO RUNOFF TO ADJACENT PROPERTIES



NOTES:

- 1.) THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED WATER & SEWER CONNECTIONS FOR WOBURN DPW / ENGINEERING APPROVALS.
- 2.)
- 3.) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF WOBURN. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- 4.) SUBJECT PROPERTY IS LOCATED IN R-1 ZONING DISTRICT.
- 5.) EXISTING SEWER AND WATER SERVICE TO BE REMOVED AND CUT & CAPPED AT MAIN.
- 6.) PROPOSED SEWER TO BE 6" PVC (SDR 35).
- 7.) PROPOSED WATER TO BE 1" TYPE 'K' COPPER AND WATER SHUT OFF BOX TO BE INSTALLED 2' OFF PROPERTY LINE.
- 8.) ALL WORK SHALL CONFORM TO THE WOBURN DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WOBURN DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.
- 9.) PROPOSED WATER SERVICE TO BE INSTALLED 2' OUTSIDE LOT LINE.
- 10.) CONTRACTOR TO SUBMIT ASBUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.

ZONING DATA:

ZONE: R-1
 REQUIRED SETBACKS: FRONT= 25'
 SIDE= 12'
 REAR= 30'
 MIN L.S. USABLE OPEN SPACE:
 REQUIRED: 50% PROVIDED: 24%
 MAX. BUILDING GROUND COVERAGE:
 REQUIRED: 25% PROVIDED: 13%

REFERENCES:

ASSESSOR'S 24-06-30
 DEED BOOK 48751
 PAGE 553
 PLAN 1893 OF 1952

S I T E P L A N

LOCATED AT

WOBURN, MASSACHUSETTS

PREPARED FOR

PREPARED BY

Cyprus Design Inc.

Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1019, Fax. 978.640.1020
 Web. CyprusDesignInc.com
 Email Info@CyprusDesignInc.com



R E V I S I O N S

DATE	DESCRIPTION

DATE: 11-2-17

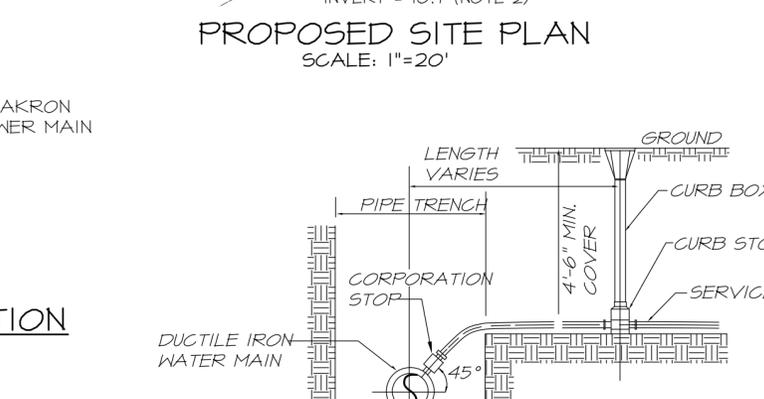
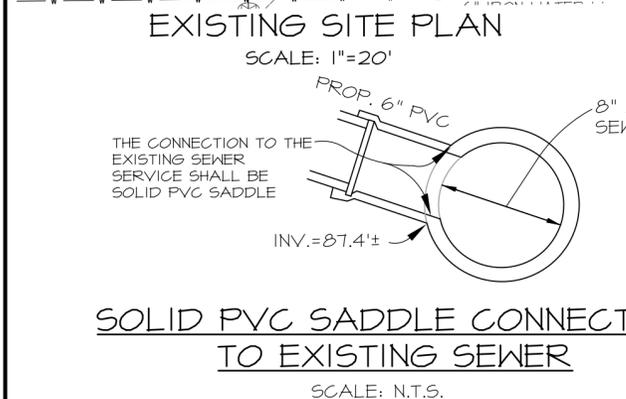
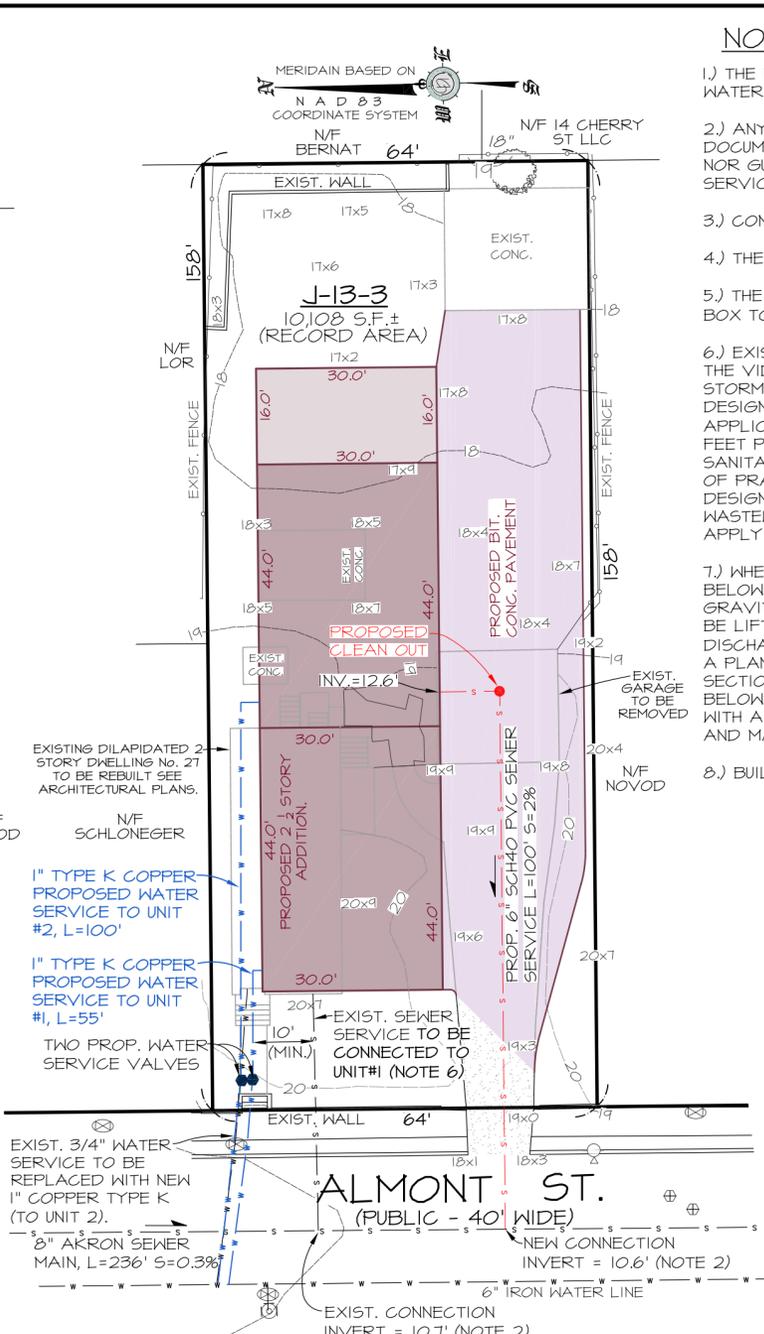
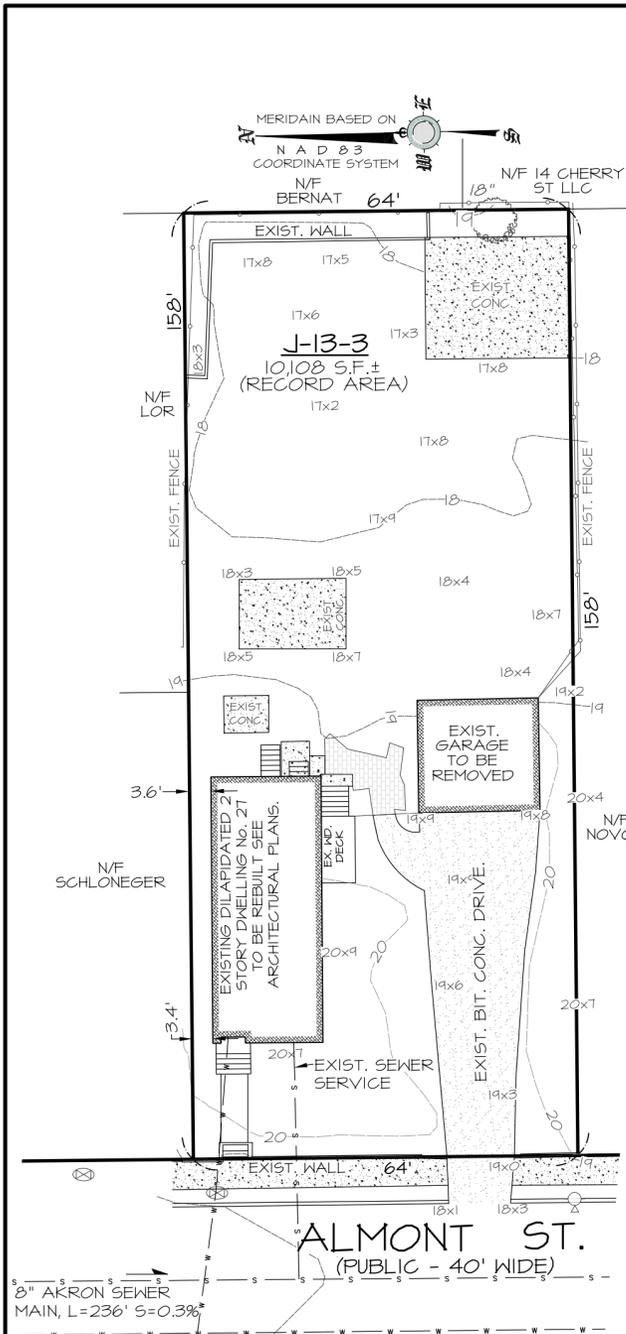
SHEET 1 OF 1

10 0 10 20 40



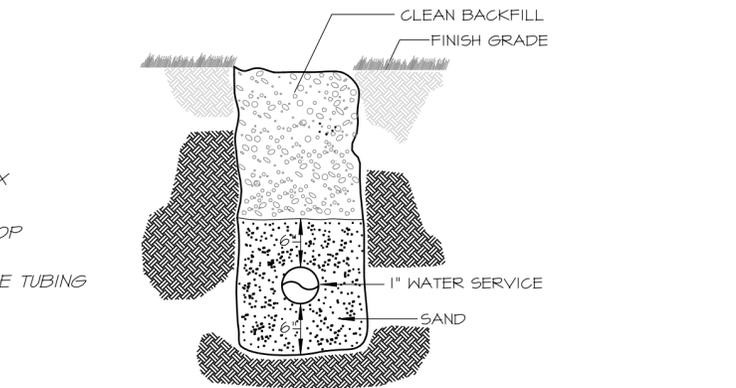
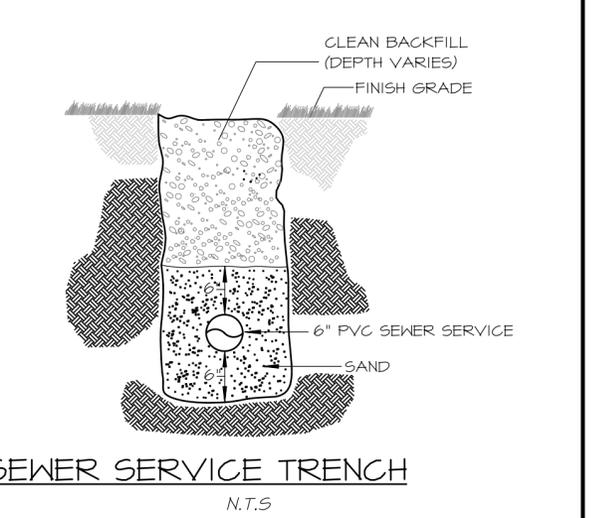
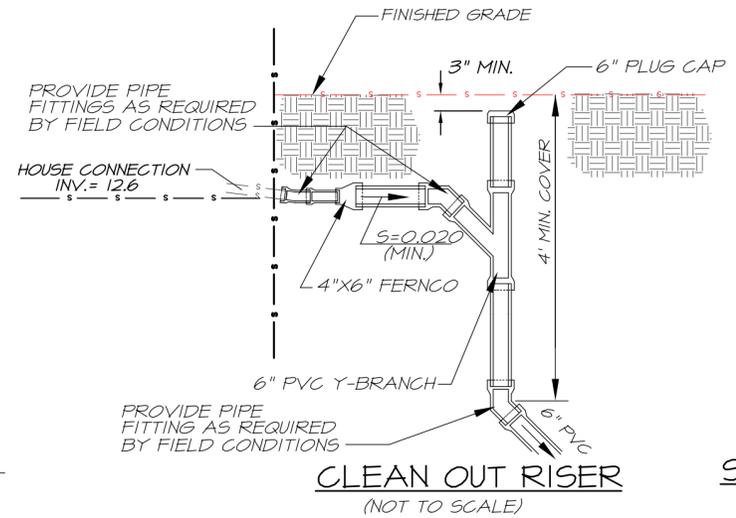
SCALE: 1" = 20'

11-2-17
 REGISTERED PROFESSIONAL ENGINEER



NOTES:

- 1.) THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED WATER AND SEWER SERVICE CONNECTIONS FOR MEDFORD ENGINEERING DEPARTMENT AND WATER DEPARTMENT APPROVALS.
- 2.) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE TOWN OF MEDFORD. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- 3.) CONTRACTOR TO SUBMIT ASBUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.
- 4.) THE EXISTING DWELLING MUST HAVE A 1" TYPE K COPPER LINE FROM THE WATER MAIN TO THE BASEMENT METER.
- 5.) THE FIRST VALVE IN THE CASE OF SERVICE PIPES ONE (1) INCH AND SMALLER IN INSIDE DIAMETER SHALL BE A CORPORATION VALVE WITH A STREET BOX TO BE BURIED WITHIN EIGHTEEN (18) INCHES OF GRADE.
- 6.) EXISTING BUILDING SEWERS TO BE REUSED MUST BE VIDEO INSPECTED AND DOCUMENTED WITH NARRATED VIDEO FOR DPW REVIEW. THE FORMAT OF THE VIDEO SHALL BE SELECTED BY THE COMMISSIONER AND TESTED BY AN APPROVED METHOD ACCORDING TO THE COMMISSIONER TO CONFIRM THAT STORMWATER IS NOT ENTERING THE PUBLIC SANITARY SEWER AND SHALL BE A MINIMUM OF 6" IN DIAMETER COMPRISED OF SMOOTH WALLED PVC PIPE DESIGNED FOR USE IN SANITARY SEWER APPLICATIONS, FREE OF LEAKS, OBSTRUCTIONS, DEFORMITIES, AND DAMAGE, SLOPED TO CONVEY FLOW AT A SPEED BETWEEN TWO (2) AND TEN (10) FEET PER SECOND. IF BENDS GREATER THAN 45° ARE NEEDED THAN AN UPSTREAM CLEANOUT PRIOR TO BENDS IS REQUIRED. CONNECTED TO THE SANITARY MAIN IN A MANNER APPROPRIATE FOR THE EXISTING CONDITION. THE SEWER SERVICES ARE TO BE IN ACCORDANCE WITH ASCE/MPCF MANUAL OF PRACTICE NO. -9 AND CONSTRUCTION OF URBAN STORM WATER MANAGEMENT SYSTEMS AND THE ASCE PUBLICATION GRAVITY SANITARY SEWER DESIGN AND CONSTRUCTION, THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION PUBLICATION TR-16 GUIDES FOR THE DESIGN OF WASTEWATER TREATMENT WORKS; TITLE V OF THE STATE ENVIRONMENTAL CODE; AND THE UNIFORM STATE PLUMBING CODE, 248 CMR 10.00 SHALL APPLY.
- 7.) WHENEVER POSSIBLE, THE BUILDING SEWER SHALL BE BROUGHT TO THE BUILDING AT AN ELEVATION BELOW THE BASEMENT FLOOR. IN ALL BUILDINGS IN WHICH ANY BUILDING DRAIN IS TOO LOW TO PERMIT GRAVITY FLOW TO THE PUBLIC SEWER, THE SANITARY SEWER CARRIED BY SUCH BUILDING DRAIN SHALL BE LIFTED BY A MEANS APPROVED BY THE PLUMBING INSPECTOR AND THE COMMISSIONER AND DISCHARGED BY GRAVITY (I.E., NOT UNDER PRESSURE) TO THE PUBLIC SEWER. PRIOR TO INSTALLING BELOW-GRADE PLUMBING, THE OWNER SHALL SUBMIT A PLAN OF THE PROPOSED PLUMBING TO THE COMMISSIONER FOR REVIEW AND APPROVAL. PLUMBING THAT IS SUBJECT TO THE REQUIREMENTS OF THIS SECTION SHALL INCLUDE FAUCETS, SHOWERS, BATHS, TOILETS AND WASHING MACHINE HOOKUPS. ALL PLUMBING FIXTURES LOCATED AT AN ELEVATION BELOW THE TOP OF THE MANHOLE ON THE PUBLIC SEWER SERVING THE PROPOSED PLUMBING SHALL BE LIABLE TO BACKFLOW AND SHALL BE EQUIPPED WITH A BACKWATER VALVE IN ACCORDANCE WITH 248 CMR 10.15 OF THE UNIFORM STATE PLUMBING CODE. BACKWATER VALVE SHALL BE INSTALLED AND MAINTAINED AT THE OWNER'S EXPENSE.
- 8.) BUILDING SEWER CONNECTIONS SHALL BE LAID AT LEAST TEN FEET APART FROM ANY NEW OR EXISTING WATER SERVICE CONNECTION.



ZONING DATA:		REFERENCES:
REQUIRED:	PROP.	ASSESSOR'S:
FRONT YARD= 15' (MIN)	14.8'	MAP J-13 LOT 3
SIDE YARD= 7.5' (MIN)	8.5'	DEED BOOK 82416
REAR YARD= 15' (MIN)	34.1'	PAGE 234
LOT COVERAGE=35%	30.8%	PL @ END BK 474
MIN. OPEN SPACE:	15%	PB 87, PL. 23
LANDSCAPED=10%	42.8%	PB 413, PL. 96
USABLE=25%		PB 210, PL. 4

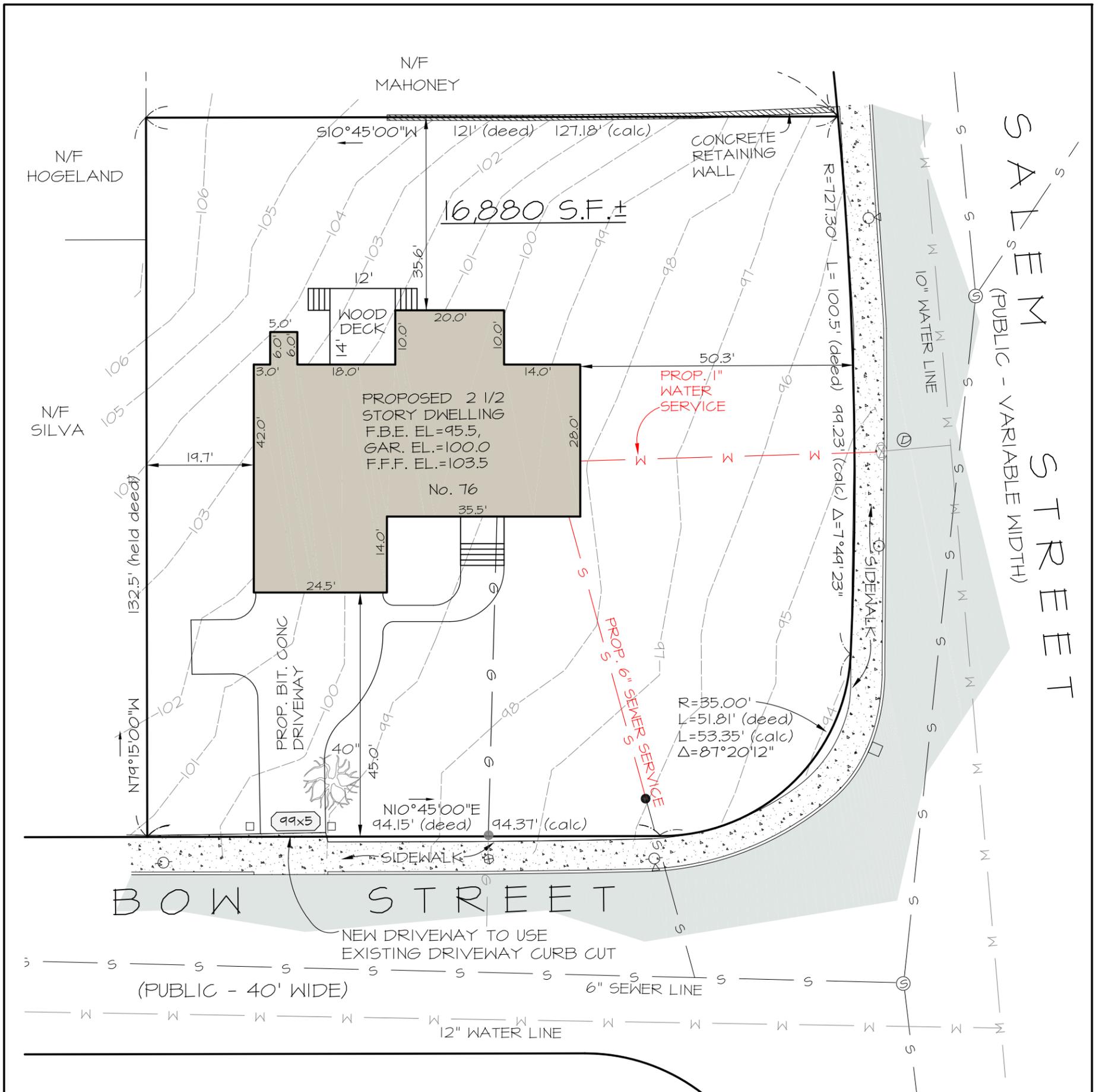
WATER & SEWER CONNECTION PLAN

PREPARED FOR

PREPARED BY
Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web: CDISurvey.com
Email: info@CDISurvey.com

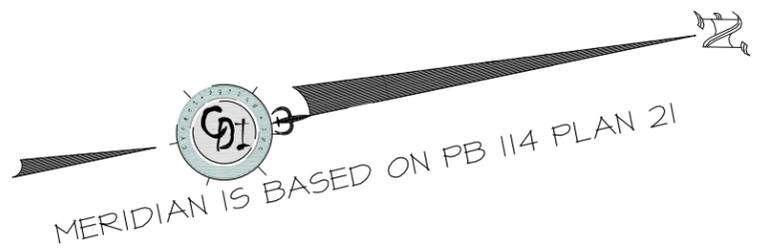
SCALE: 1"=20' DATE: 10-30-25

DATE	REVISION DESCRIPTION	DESIGN: KPF	REVIEW: TR



NOTES:

1. THIS PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING AND PROPOSED WATER & SEWER CONNECTIONS FOR WOBURN DPW / ENGINEERING APPROVALS.
2. WOBURN DPW / ENGINEERING APPROVALS REQUIRED FOR CITY OF WOBURN.
3. ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF WOBURN. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
4. SUBJECT PROPERTY IS LOCATED IN R-1 ZONING DISTRICT.
5. EXISTING SEWER SERVICE INSPECTED BY WOBURN D.P.W. AND FOUND TO BE ADEQUATE FOR NEW 6" SEWER SERVICE CONNECTION AS SHOWN.
6. NEW 1" WATER SERVICE TO CONNECT TO EXISTING WATER SERVICE AS SHOWN.
7. ALL WORK SHALL CONFORM TO THE WOBURN DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WOBURN DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.
8. CONTRACTOR TO SUBMIT ASBUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.



**PROPOSED SITE PLAN
(WATER & SEWER CONNECTIONS)**

LOCATED AT

PREPARED FOR

PREPARED BY

Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web. CyprusDesignInc.com
Email Info@CyprusDesignInc.com



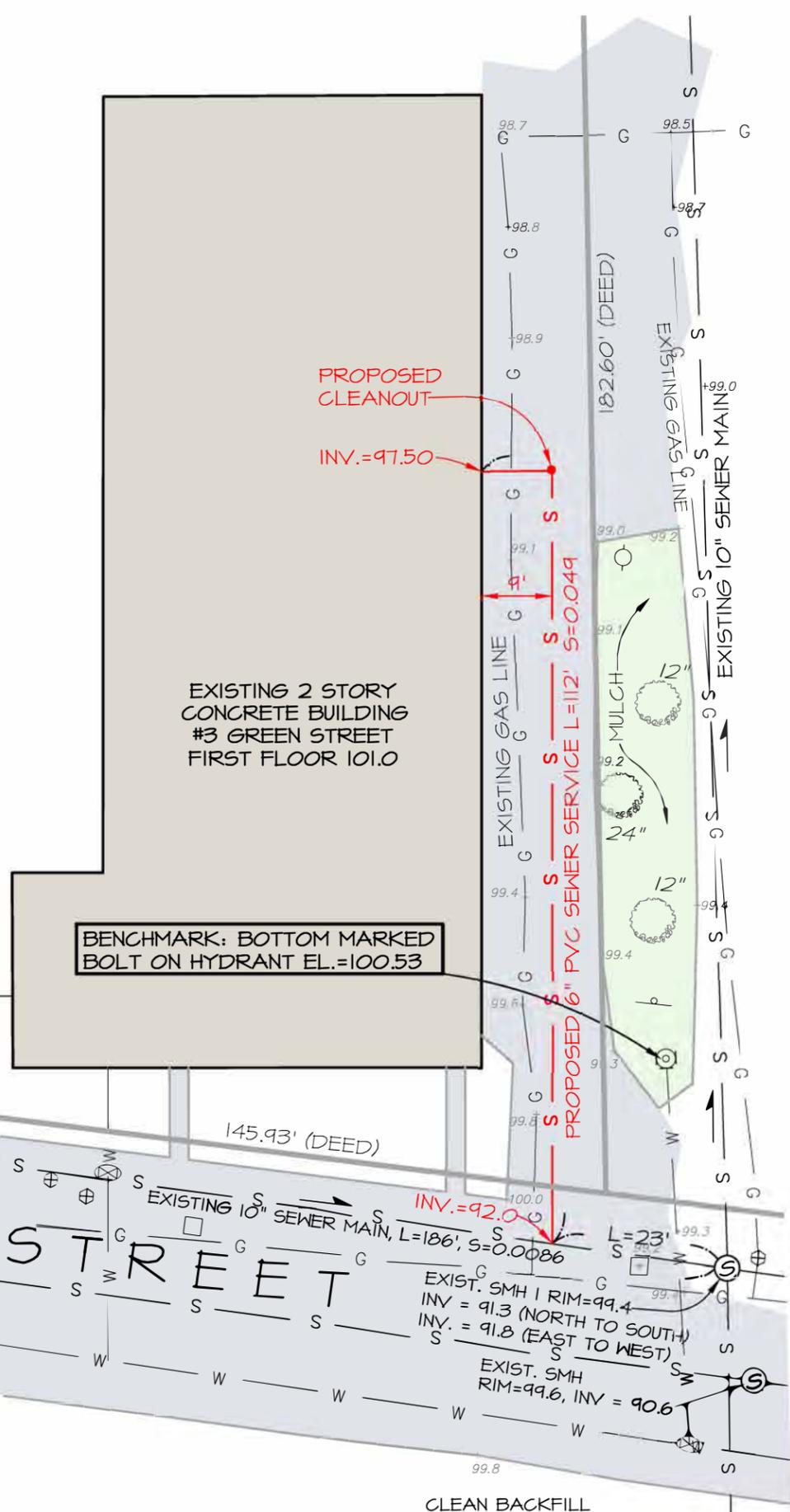
SCALE: 1"=20' DATE: 11-17-15



EXIST. SMH 2
RIM=99.8
INV = 93.4

EXIST. SMH
RIM=99.67
INV = 91.5

GREEN STREET



NOTES:

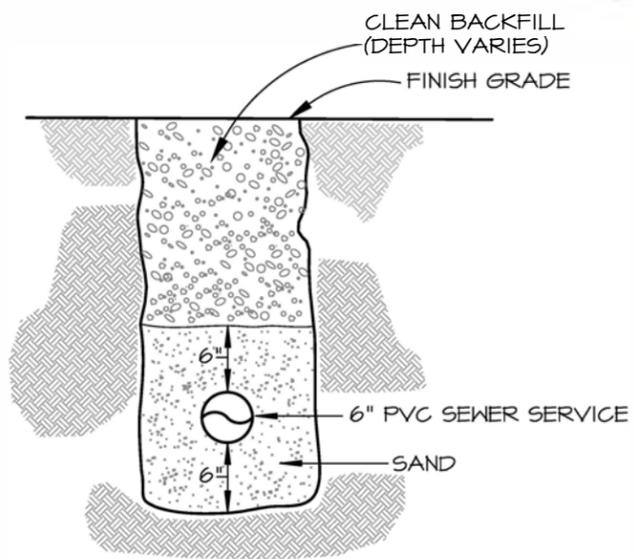
THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING UTILITIES, SITE CONDITIONS IN AREA OF NEW SEWER SERVICE, AND PROPOSED SEWER CONNECTIONS FOR WOBURN DPW / ENGINEERING APPROVALS. THE LOT LINES SHOWN ARE APPROXIMATE AND ARE DEPICTED BY SCALE FROM INFORMATION SUPPLIED BY MISCELANEOUS CITY DEPARTMENTS, CYPRUS DOES NOT CERTIFY TO THE ACCURACY OF LOT LINES SHOW.

ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF WOBURN. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.

NEW 6" SEWER SERVICE TO CONNECT TO EXISTING SERVICE AS SHOWN.

ALL WORK SHALL CONFORM TO THE WOBURN DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WOBURN DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.

CONTRACTOR TO SUBMIT ASBUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.



TYPICAL SEWER SERVICE TRENCH

N.T.S

SEWER SERVICE CONNECTION PLAN

LOCATED AT

MASSACHUSETTS
PREPARED FOR

PREPARED BY

Cyprus Design Inc.
Land Surveying & Civil Engineering Services
1501 Main Street Unit 24 Tewksbury, MA 01876
Tel. 978.640.1019, Fax. 978.640.1020
Web. CyprusDesigninc.com
Email Info@CyprusDesigninc.com

REVISIONS

DATE	DESCRIPTION
7-14-17	LOWERED SEWER INVERT AT BUILDING

DATE: 5-4-17

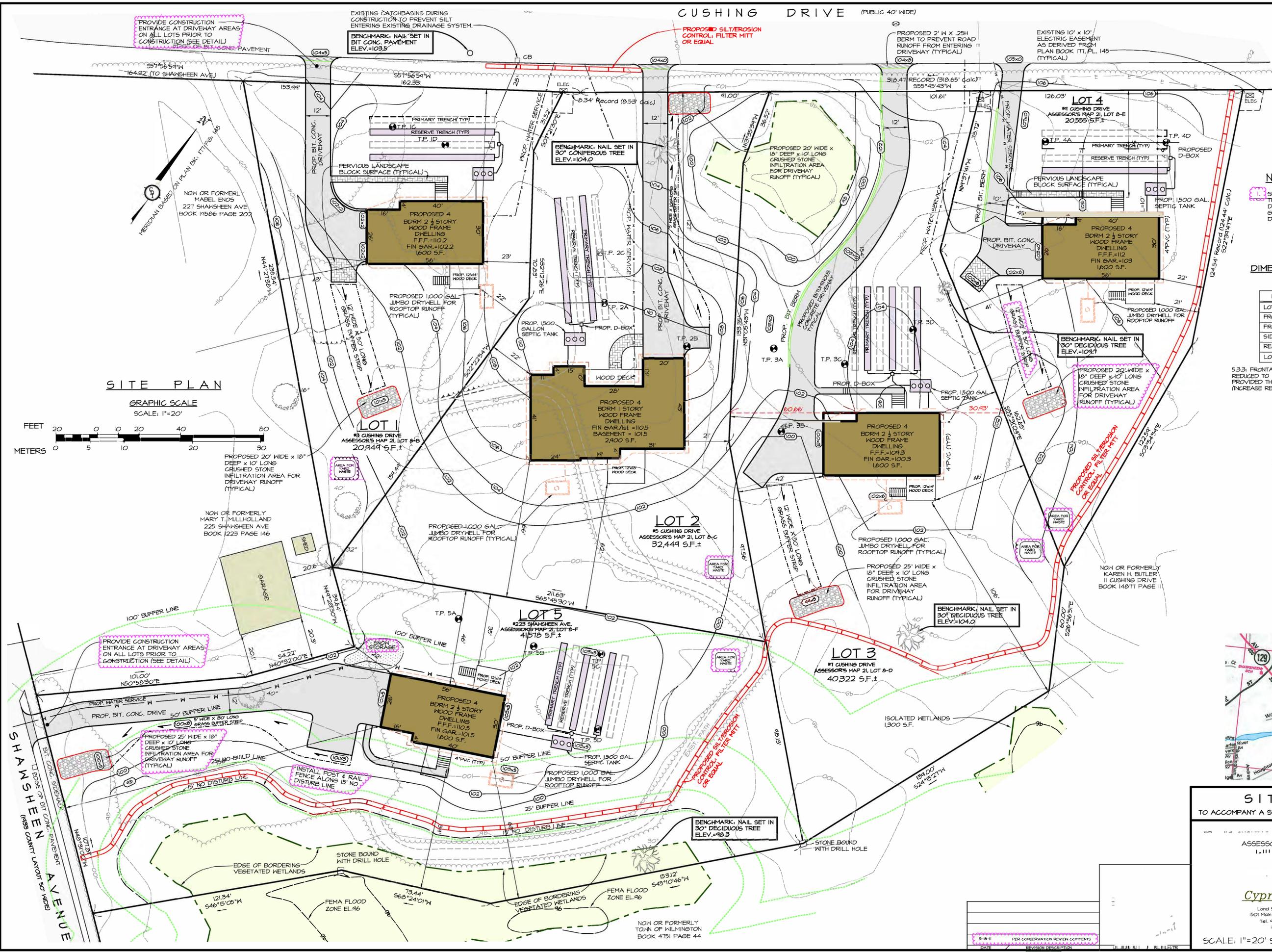
SHEET 1 OF 1



SCALE: 1" = 20'

REGISTERED PROFESSIONAL ENGINEER

MISCELLANEOUS SITE PLANS



NOTE:
 SUBJECT PROPERTY IS LOCATED WITHIN THE DEP ZONE 2 WATER PROTECTION DISTRICT AND THE TOWN OF WILMINGTON GROUND WATER PROTECTION OVERLAY DISTRICT.

DIMENSIONAL REQUIREMENTS

RESIDENTIAL 20
 SEE EXCEPTIONS BELOW

DESCRIPTION	REQUIRED
LOT AREA	20,000 S.F.
FRONTAGE	125'
FRONT SETBACK	40'
SIDE SETBACK	20'
REAR SETBACK	20'
LOT WIDTH	125'

5.3.3. FRONTAGE EXCEPTION LOTS: FRONTAGE CAN BE REDUCED TO 100' (80% OF REQUIRED FRONTAGE) PROVIDED THAT THE MIN. LOT AREA IS MIN. 25,000 S.F. (INCREASE REQUIRED AREA BY 5,000 S.F.)

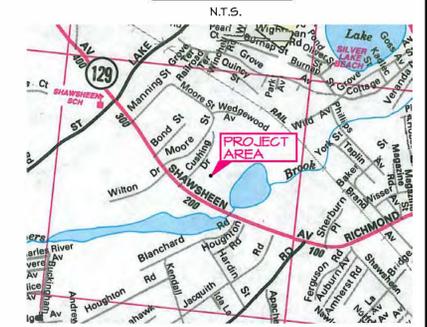
RECORD OWNERS:

- BARRY MULLHOLLAND
 3 CUSHING DRIVE
 BOOK 6243 PAGE 260
 ASSESSOR'S MAP 21, LOT 2B
 (LOT 3 - PL BK 177, PL. 145)
 29,184 S.F.± RECORD AREA
- MARY T. MULLHOLLAND
 225 SHAKSHEEN AVE
 BOOK 1223 PAGE 146
 ASSESSOR'S MAP 21, LOT 2C
 (LOT 4 - PL BK 177, PL. 145)
 126,696 S.F.± RECORD AREA

APPLICANT

MIKE T. KACHUK
 124 FOND ST REET
 WILMINGTON, MA. 01897

LOCUS MAP



SITE PLAN

TO ACCOMPANY A STORMWATER MANAGEMENT APPLICATION

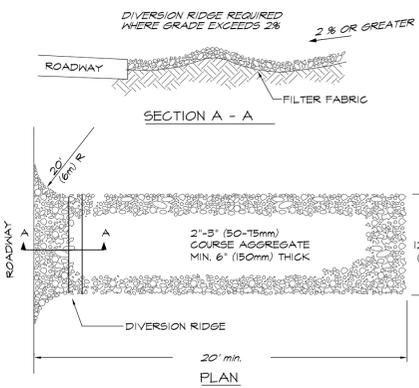
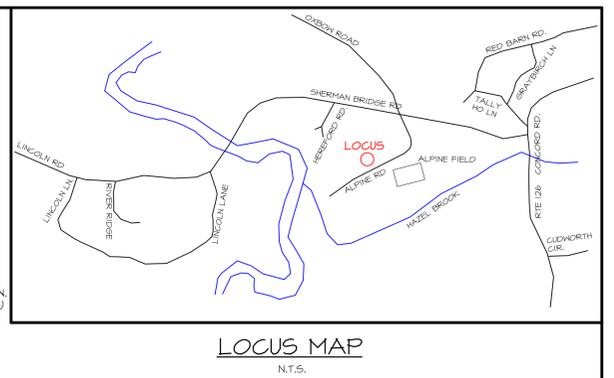
LOCATED AT
 ASSESSOR'S MAP 21, LOTS 2B - 2F
 PREPARED FOR
 PREPARED BY
Cyprus Design, Inc.
 Land Survey & Civil Engineering Services
 1501 Main Street, Suite 24, Tewksbury, MA 01876
 Tel. 978.640.1014 Fax: 978.640.1020
 Web Page: CyprusDesignInc.com

SCALE: 1"=20' SHEET 1 OF 2 DATE: 4-19-11

SITE PLAN

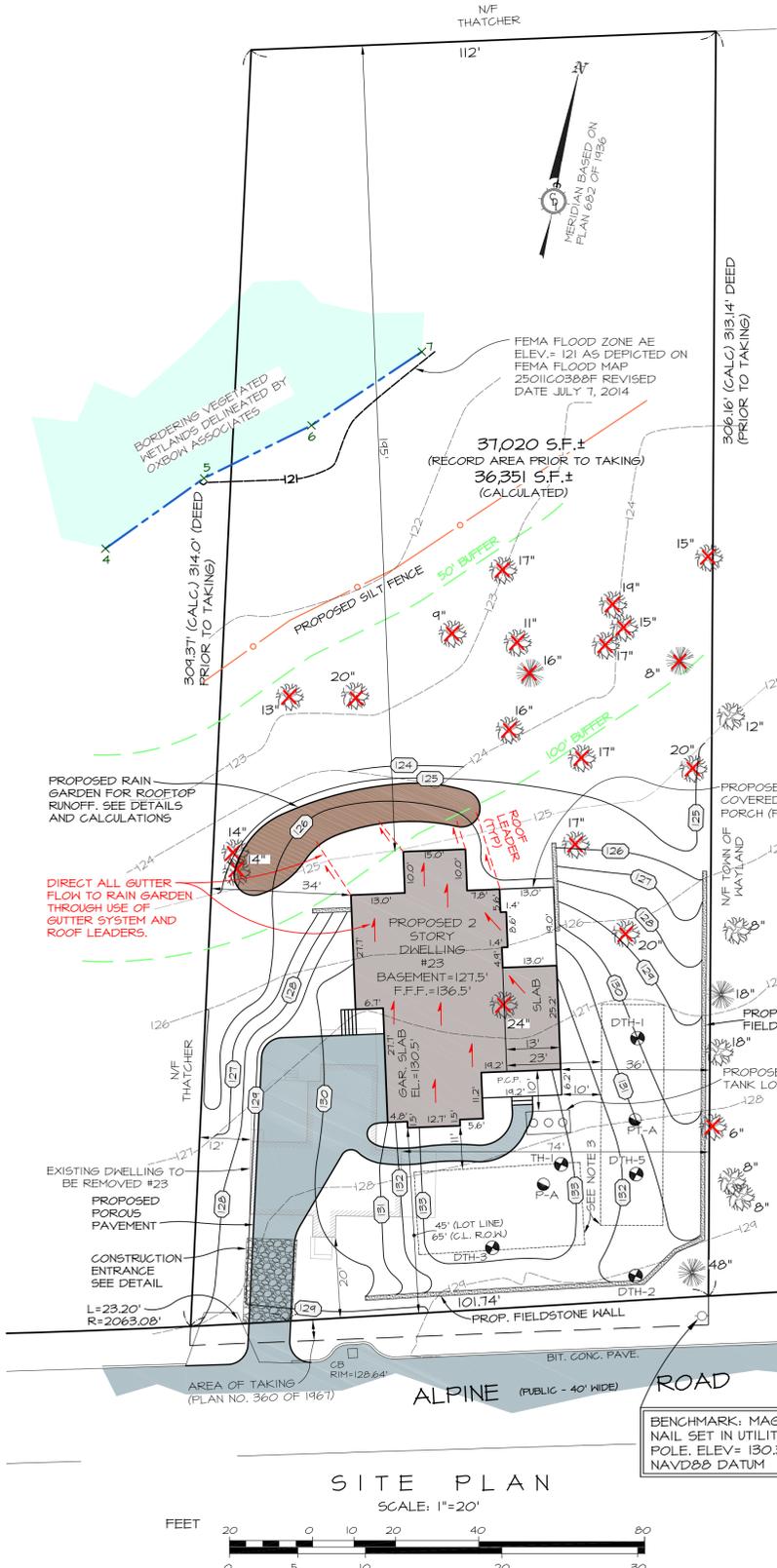
GRAPHIC SCALE
 SCALE: 1"=20'





NOTES:
 1. 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.
 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

CONSTRUCTION ENTRANCE
(IF APPLICABLE)



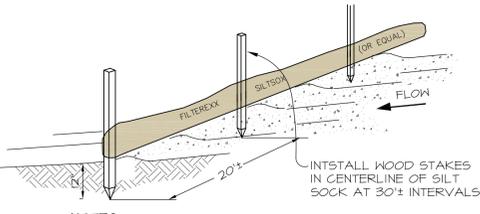
PERCOLATION TESTS

HOLE NO. & DATE	TOP ELEVATION	DEPTH (In.)	SATURATION (Min.)	12"-9" DROP (Min.)	9"-6" DROP (Min.)	PERC. RATE (Min./In.)
PT-A 8/13/19	198.0	57"	15 min.	4 min.	7 min.	3 MIN/IN
P-A 7/18/18	197.5	54"	15 min.	8 min.	7 min.	3 MIN/IN

DEEP OBSERVATION HOLE LOG

NO., DATE	DEPTH (In.)	SOIL HORIZON	TEXTURE (USDA)	COLOR (MUNSELL)	SOIL MOTTLING	OTHER
DTH-1	0-10"	Ap	SANDY LOAM	10YR3/2		
8/13/19	10-22"	Bw	LOAMY SAND	10YR6/8	30"	
197.0	22-59"	C1	FINE SAND	2.5Y6/3		
59-120"	C2	SANDY LOAM	2.5Y5/3			
ESWT AT 18" NO REFUSAL						
DTH-2	0-12"	Ap	SANDY LOAM	10YR3/2		
12-24"	Bw	LOAMY SAND	10YR6/8			
24-46"	C1	LOAMY SAND	10YR6/8			
46-96"	C2	SILT LOAM	2.5Y6/3			
96-120"	C3	SILT CLAY LOAM	2.5Y6/3			
ESWT AT 30" NO REFUSAL						
DTH-3	0-9"	Ap	SANDY LOAM	10YR3/2		
8/13/19	9-25"	Bw	LOAMY SAND	10YR6/8	30"	
198.0	25-61"	C1	FINE SAND	2.5Y6/3		
61-80"	C2	SANDY LOAM	2.5Y5/3			
PARENT MATERIAL: GLACIAL TILL DEPTH TO BEDROCK: - STANDING WATER: - WEeping FROM PIT FACE: -						
DTH-4	0-10"	Ap	SANDY LOAM	10YR3/2		
8/13/19	10-21"	Bw	LOAMY SAND	10YR6/8	37"	
197.7	21-47"	C1	FINE SAND	2.5Y6/3		
47-60"	C2	SANDY LOAM	2.5Y5/3			
PARENT MATERIAL: GLACIAL TILL DEPTH TO BEDROCK: - STANDING WATER: - WEeping FROM PIT FACE: -						
DTH-5	0-9"	Ap	SANDY LOAM	10YR3/2		
8/13/19	9-25"	Bw	LOAMY SAND	10YR6/8	33"	
198.0	25-59"	C1	FINE SAND	2.5Y6/3		
59-82"	C2	SANDY LOAM	2.5Y5/3			
PARENT MATERIAL: GLACIAL TILL DEPTH TO BEDROCK: - STANDING WATER: - WEeping FROM PIT FACE: -						

TESTS CONDUCTED BY: MIKE SULLIVAN
 TESTS OBSERVED BY: DARREN MACCAUGHEY DATE: 8/13/19

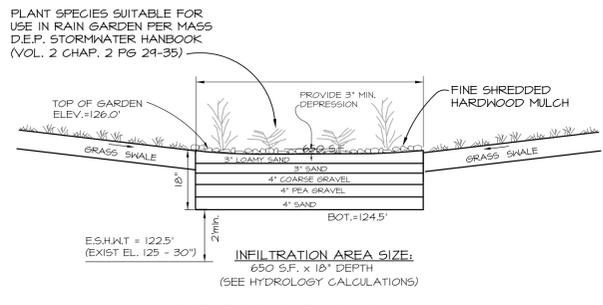


NOTES:
 1. SILT SOCK SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
 2. CONTRACTOR TO INSPECT AND REPAIR SILT SOCK AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN HEIGHT REACHES 6".
 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

SILT FENCE (SILT SOCK)
NOT TO SCALE

REFERENCES:
 ASSESSOR'S MAP 06, LOT 002, DEED: BK 16020, PG 8, PLAN 682 OF 1936
ZONING: RESIDENCE (R40):
 DESCRIPTION REQUIRED PROVIDED
 FRONT SETBACK 55' C.L. R.O.W. 65' C.L. R.O.W.
 SIDE SETBACK 25' 34'
 REAR SETBACK 30' 195'
 MAX. LOT COV. 25% 11%
 MAX. HEIGHT 2 1/2 STY / 35'
 ** SEE ARCHITECTURAL PLANS FOR HEIGHT

IMPERVIOUS AREA CALCULATIONS:
 EXISTING DWELLING (TBR) 460 S.F.
 PROPOSED DWELLING 2,240 S.F.
 PROPOSED IMPERVIOUS AREAS: 2,240 S.F.
IMPERVIOUS AREA INCREASE: 1,280 S.F.
 (SEE HYDROLOGY CALCULATIONS ATTACHED)

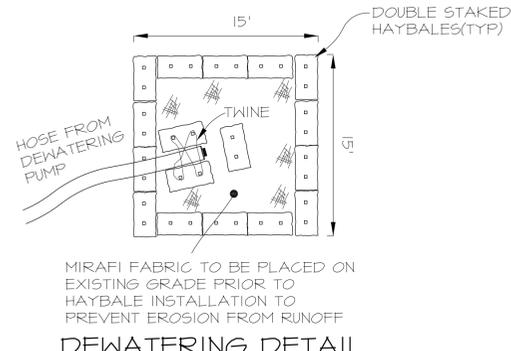


PLANT SPECIES SUITABLE FOR USE IN RAIN GARDEN PER MASS D.E.P. STORMWATER HANDBOOK (VOL. 2 CHAP. 2 PG 29-35)

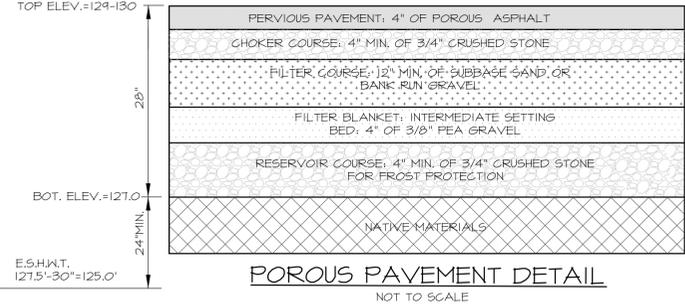
LEGEND:
 FLAGGED CONIFEROUS TREE TO BE REMOVED
 FLAGGED DECIDUOUS TREE TO BE REMOVED
 WETLAND FLAG
 EXISTING CONTOUR LINE
 FEMA FLOOD ZONE EL 121
 PROPOSED GRADING

NOTES:
 1) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES NOR DOES IT REPRESENT A DETERMINATION OF TITLE, BUT IS SOLELY INTENDED TO DEPICT THE EXISTING AND PROPOSED SITE CONDITIONS ALONG WITH OFFSET DIMENSIONS OF THE EXISTING DWELLING (TO BE REMOVED) AND PROPOSED DWELLING TO THE LOT LINES AS DEPICTED ON PLAN RECORDED PLAN 682 OF 1936, AND TO DEPICT DRAINAGE SYSTEM TO MITIGATE IMPERVIOUS AREAS.
 2) THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
 3) PROPOSED LOCATION OF SEPTIC SYSTEM AND RESERVE AREA (BY OTHERS). SEE APPROVED PLAN AT MAYLAND BOARD OF HEALTH DEPARTMENT FOR MORE DETAIL.
 4) TREES TO BE REMOVED HAVE BEEN FLAGGED IN THE FIELD ARE SHOWN WITH RED 'X'.
 5) ELEVATIONS DEPICTED HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
 6) CONTRACTOR TO ENSURE THAT ROOF DRAINS ARE PROPERLY ROUTED TO SYSTEM.
 7) RAIN GARDEN INFILTRATION SYSTEM FOR DWELLING IS DESIGNED TO INFILTRATE 8.4" OF RAIN FOR 3,750 S.F. OF IMPERVIOUS AREAS DURING A 24 HOUR STORM EVENT WITH NO OUTFLOW.
 8) CONTRACTOR TO PLACE TEMPORARY SILT SOCK ON ALL EXISTING CATCH BASIN GRATES. THE SILT SOCK WILL PREVENT THE INTRUSION OF SEDIMENTS INTO THE DRAINAGE SYSTEM AND SHALL REMAIN IN-PLACE UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED OR PAVING AND/OR CONSTRUCTION ARE COMPLETE AND THE TRANSPORT OF SILT/SEDIMENT IS NO LONGER VISIBLY APPARENT.

PROPOSED RAIN GARDEN INFILTRATION AREA FOR IMPERVIOUS AREA RUNOFF
NOT TO SCALE



DEWATERING DETAIL
(IF APPLICABLE)
N.T.S.

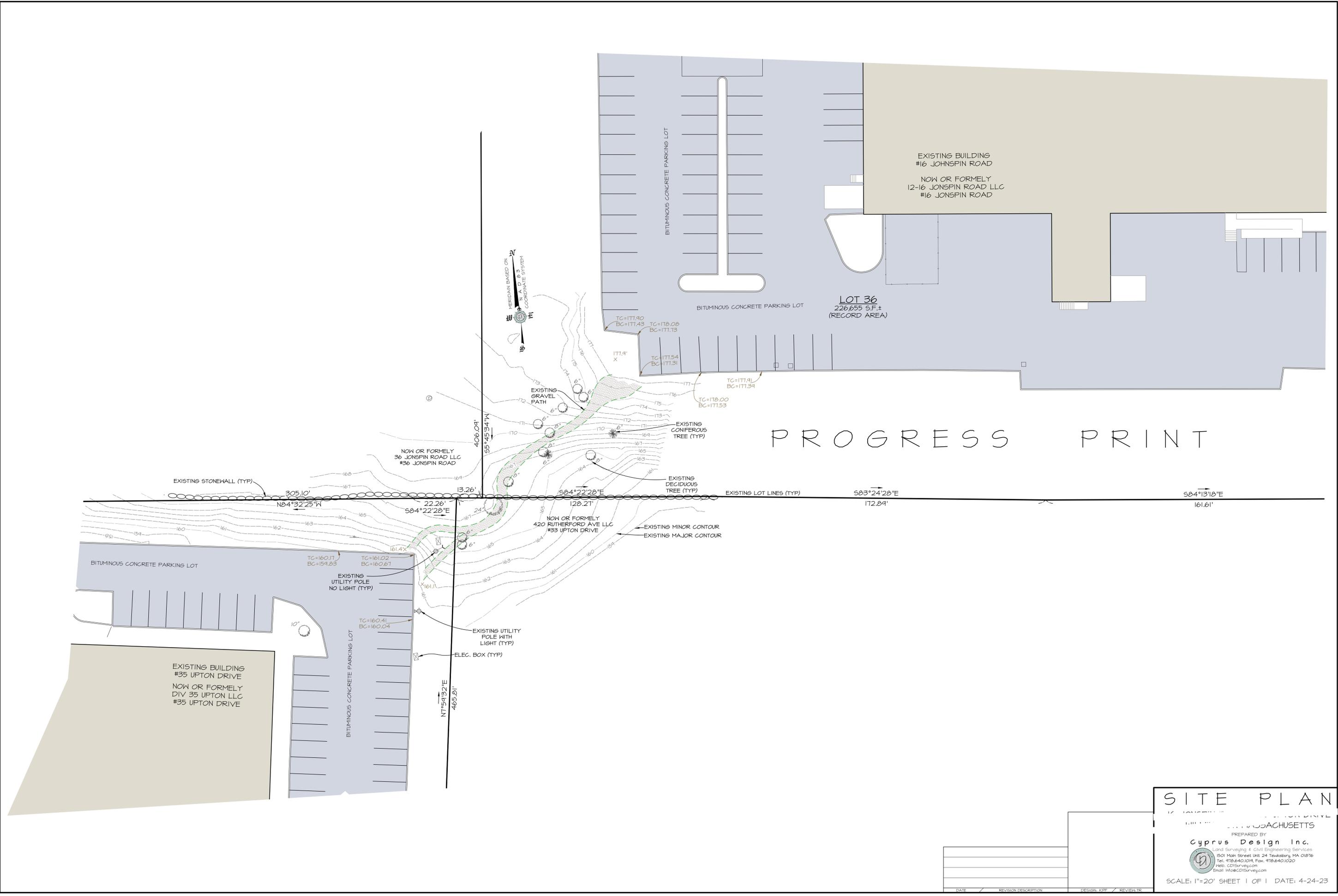


POROUS PAVEMENT DETAIL
NOT TO SCALE

SITE PLAN

MASSACHUSETTS
 (ASSESSOR'S: 06/002)
 PREPARED FOR
 PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
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 Tel: 978.640.1011, Fax: 978.640.1020
 Web: CDISurvey.com
 Email: info@CDISurvey.com

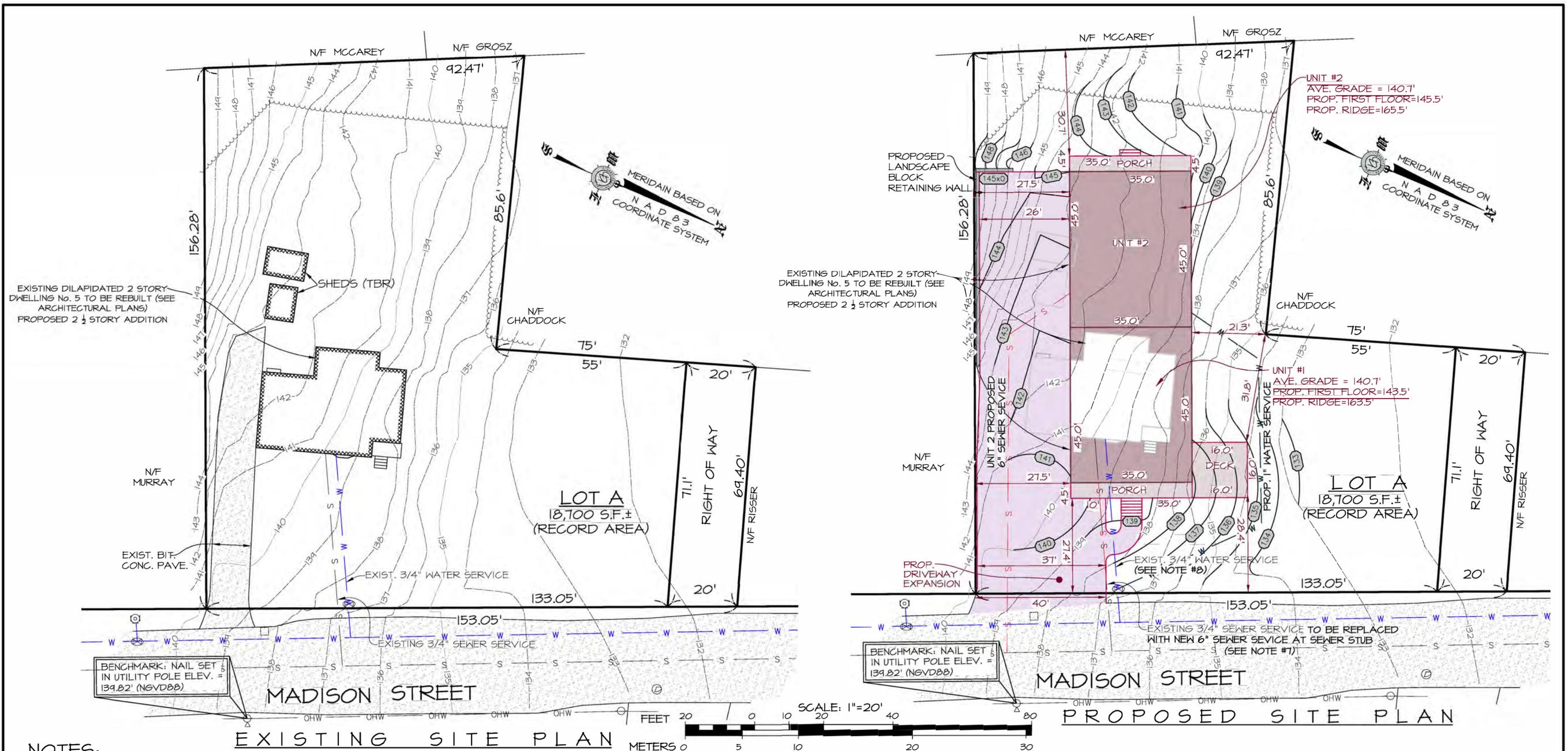
SCALE: 1"=20' SHEET 1 OF 1 DATE: 12-3-20



PROGRESS PRINT

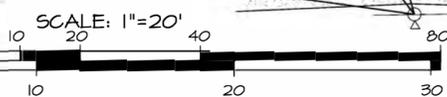
SITE PLAN
 16 JONSPIN ROAD, UPTON DRIVE
 UPTON, MASSACHUSETTS
 PREPARED BY
Cyprus Design Inc.
 Land Surveying & Civil Engineering Services
 1501 Main Street Unit 24 Tauberville, MA 01876
 Tel: 418-640-1091, Fax: 418-640-1020
 Web: CDISurvey.com
 Email: info@CDISurvey.com
 SCALE: 1"=20' SHEET 1 OF 1 DATE: 4-24-23

DATE	REVISION DESCRIPTION	DESIGN: KCF	REVIEW: LR



NOTES:

- 1.) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES NOR DOES IT REPRESENT A DETERMINATION OF TITLE, BUT IS SOLELY INTENDED TO DEPICT THE THE EXISTING AND PROPOSED SITE CONDITIONS AND TO SHOW NEW WATER & SEWER CONNECTIONS FOR WOBURN DPW / ENGINEERING APPROVALS AND TO SHOW OFFSET DIMENSIONS OF THE EXISTING DILAPIDATED 2 STORY DWELLING TO BE RE-BUILT ALONG WITH PROPOSED ADDITIONS TO THE LOT LINES AS DEPICTED ON A PLAN 1266 OF 1952.
- 2.) THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
- 3.) THE EXISTING DRAINAGE PATTERN SLOPES FROM A HIGH ELEVATION OF 149 AT THE SOUTHERLY CORNER OF PROPERTY TO A LOW ELEVATION OF 137.0' AT THE NORTHERLY LOT LINE (AT N/F CHADDOCK) A LOW ELEVATION OF 131.5' AT THE NORTHERLY LOT LINE (AT N/F RISSER) AND WILL NOT BE CHANGED.
- 4.) THE SUBJECT PROPERTY IS DEPICTED AS WOBURN ASSESSOR'S: 60-4-31,
- 5.) ANY UNDERGROUND UTILITY LOCATIONS ARE BASED UPON FIELD LOCATIONS OF EXISTING STRUCTURES, PAINT MARKINGS AND/OR COMPILED DOCUMENTS OBTAINED FROM THE CITY OF WOBURN. THESE LOCATIONS ARE APPROXIMATE ONLY AND CYPRUS DESIGN INC. DOES NOT WARRANT NOR GUARANTEE THE LOCATION OF ANY UTILITIES DEPICTED OR NOT DEPICTED. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY SEWER SERVICE LOCATION / INVERTS AND CONTACT DIG SAFE TO VERIFY THE LOCATION OF ALL UTILITIES.
- 6.) SUBJECT PROPERTY IS LOCATED IN R-2 ZONING DISTRICT.
- 7.) NEW 6" SEWER SERVICE FOR UNIT 2 TO CONNECT TO EXISTING SEWER MAIN IN MADISON STREET AS SHOWN. NEW 6" SEWER SERVICE FOR UNIT #1 TO CONNECT TO EXISTING SERVICE STUB AS SHOWN.
- 8.) NEW 1" WATER SERVICE TO CONNECT TO EXISTING WATER LINE IN MADISON STREET AS SHOWN FOR UNIT #2 AND UPGRADE TO NEW 1" WATER SERVICE AS SHOWN FOR UNIT #1.
- 9.) ALL WORK SHALL CONFORM TO THE WOBURN DPW / ENGINEERING GUIDELINES. INSTALLER TO OBTAIN ALL REQUIRED APPROVALS FROM THE WOBURN DPW / ENGINEERING OFFICE PRIOR TO CONSTRUCTION.
- 10.) CONTRACTOR TO SUBMIT ASBUILT LOCATIONS OF SEWER AND WATER SERVICES AT COMPLETION OF CONSTRUCTION.



SITE PLAN

MASSACHUSETTS.

PREPARED FOR

PREPARED BY

Cyprus Design Inc.

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 1501 Main Street Unit 24 Tewksbury, MA 01876
 Tel. 978.640.1014, Fax. 978.640.1020
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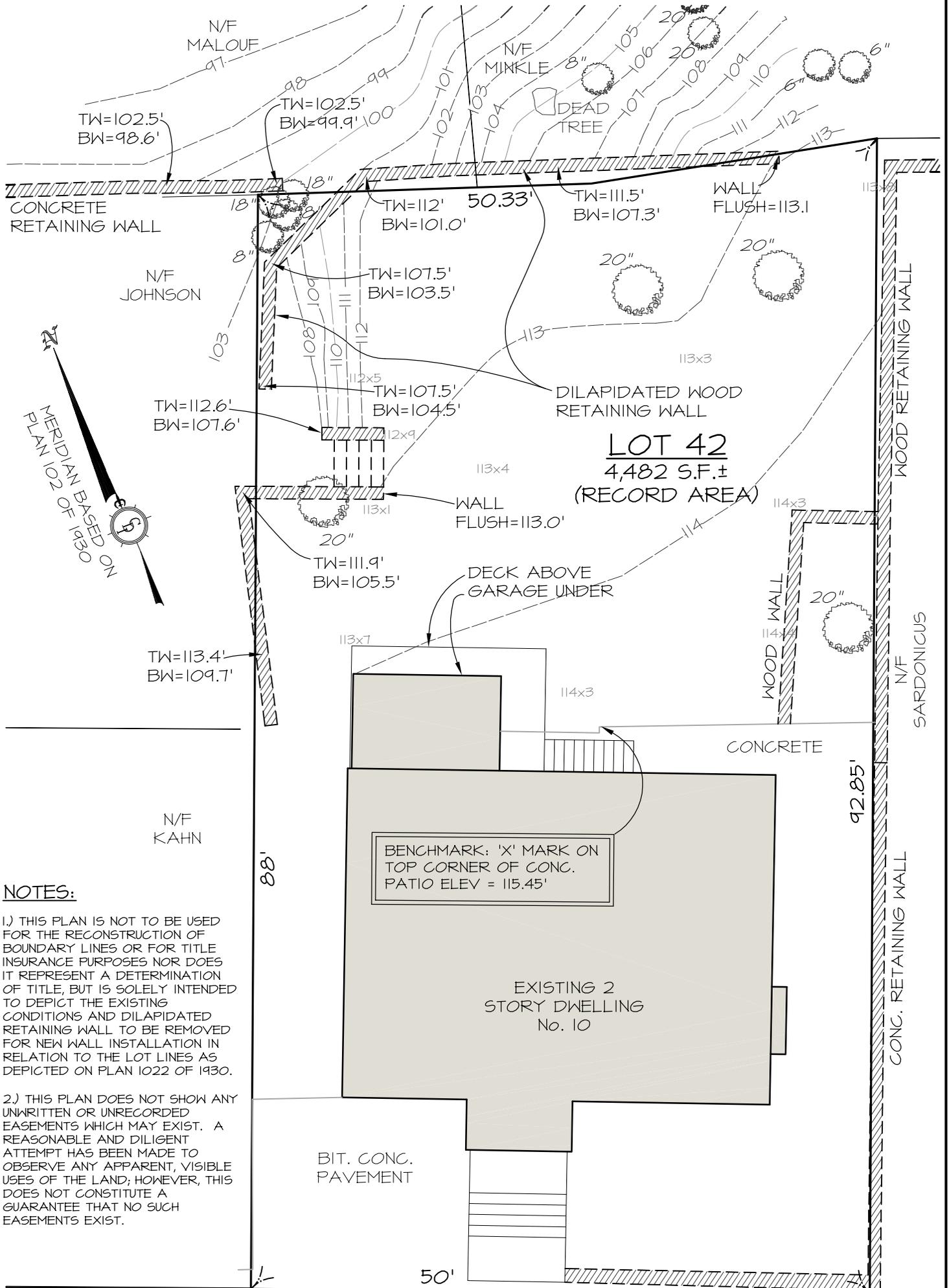
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DATE	REVISION DESCRIPTION	DESIGN: KFF	REVIEW: TR



CYPURUS DESIGN INC.

• CIVIL ENGINEERING • LAND SURVEYING • LAND PLANNING •
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 • TEL. 978-640-1019 • FAX. 978.640.1020 • WEB. CDISURVEY.COM • EMAIL INFO@CDISURVEY.COM •



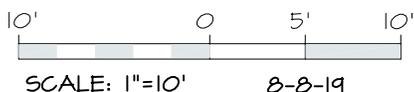
NOTES:

1.) THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES NOR DOES IT REPRESENT A DETERMINATION OF TITLE, BUT IS SOLELY INTENDED TO DEPICT THE EXISTING CONDITIONS AND DILAPIDATED RETAINING WALL TO BE REMOVED FOR NEW WALL INSTALLATION IN RELATION TO THE LOT LINES AS DEPICTED ON PLAN 1022 OF 1930.

2.) THIS PLAN DOES NOT SHOW ANY UNWRITTEN OR UNRECORDED EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.

PLOT PLAN

ASSACHUSETTS.
 PREPARED FOR



REFERENCES:

ASSESSOR'S: 109-780-60, DEED: BK 4 11,
 PG 392, PLAN 1022 OF 1930