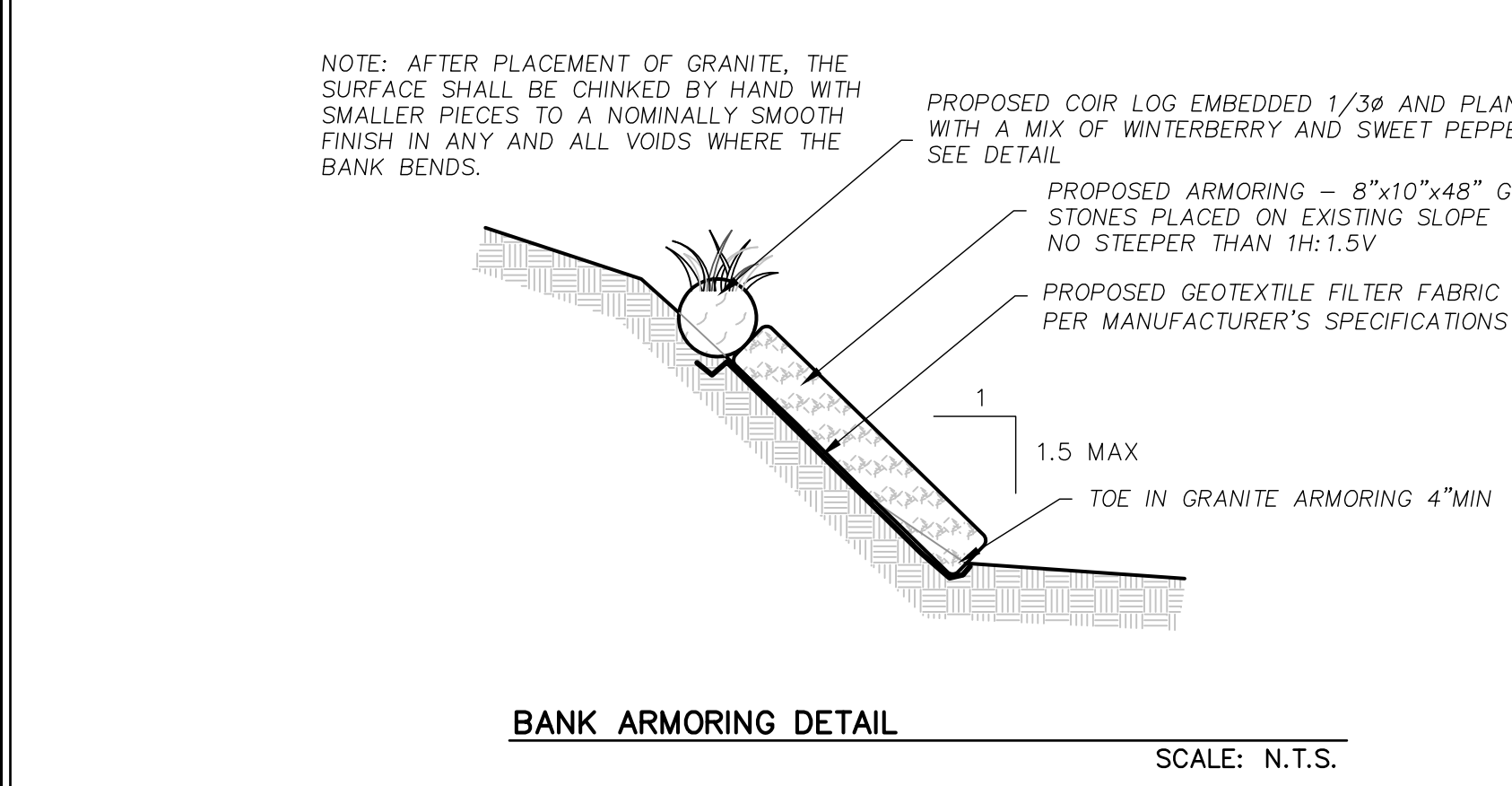
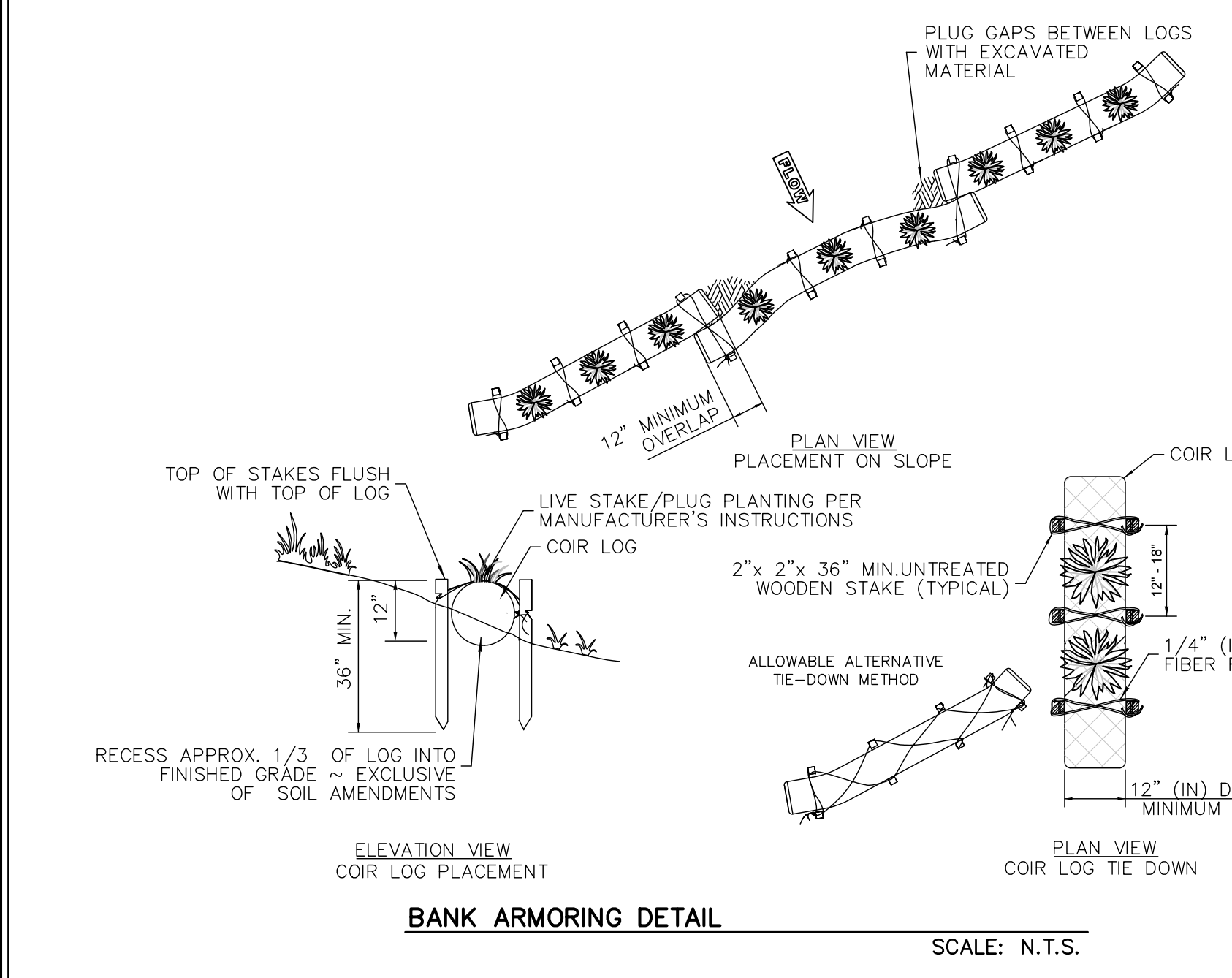


SECTION A-A
SCALE: 1"=2'

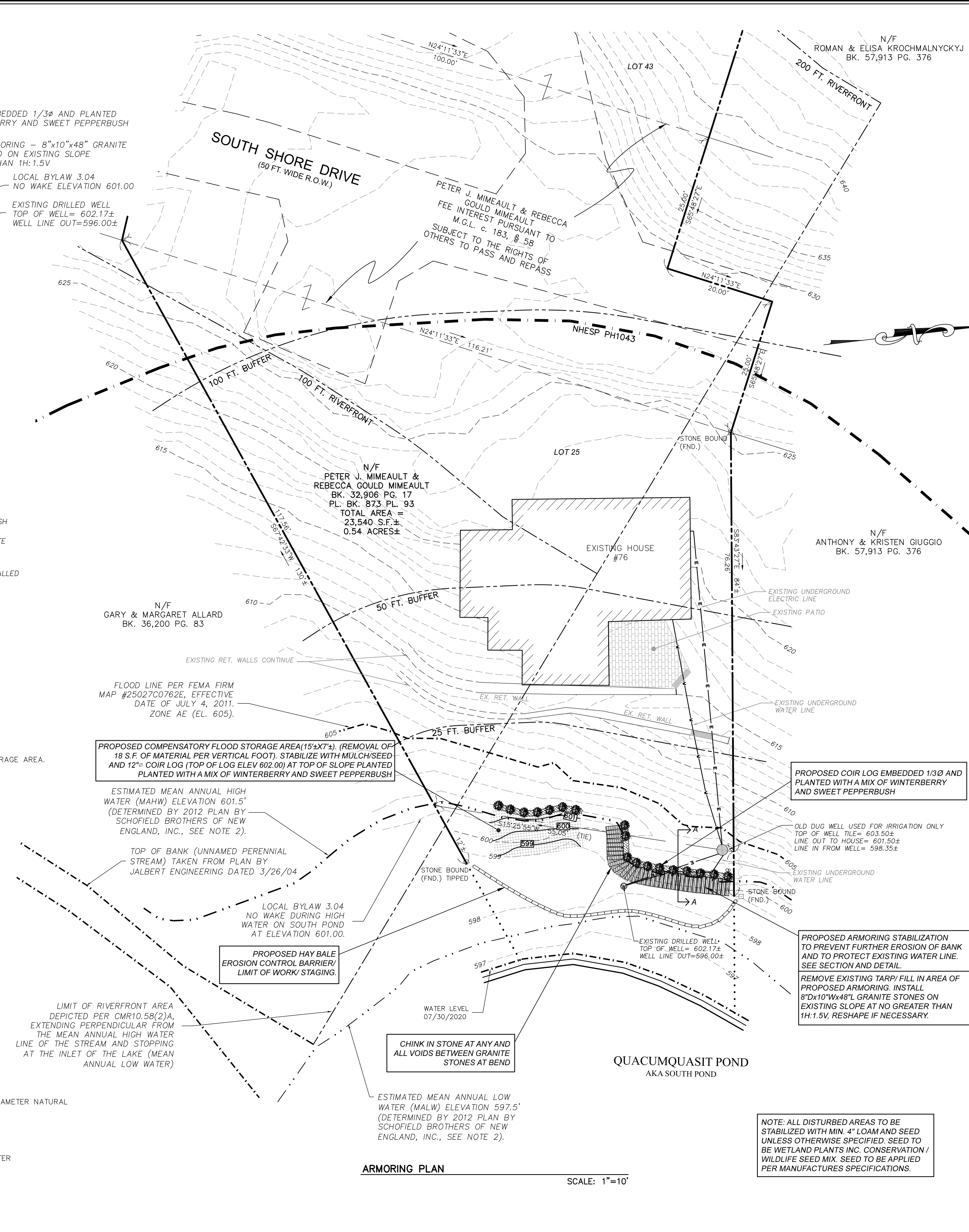


BANK ARMORING DETAIL
SCALE: N.T.S.

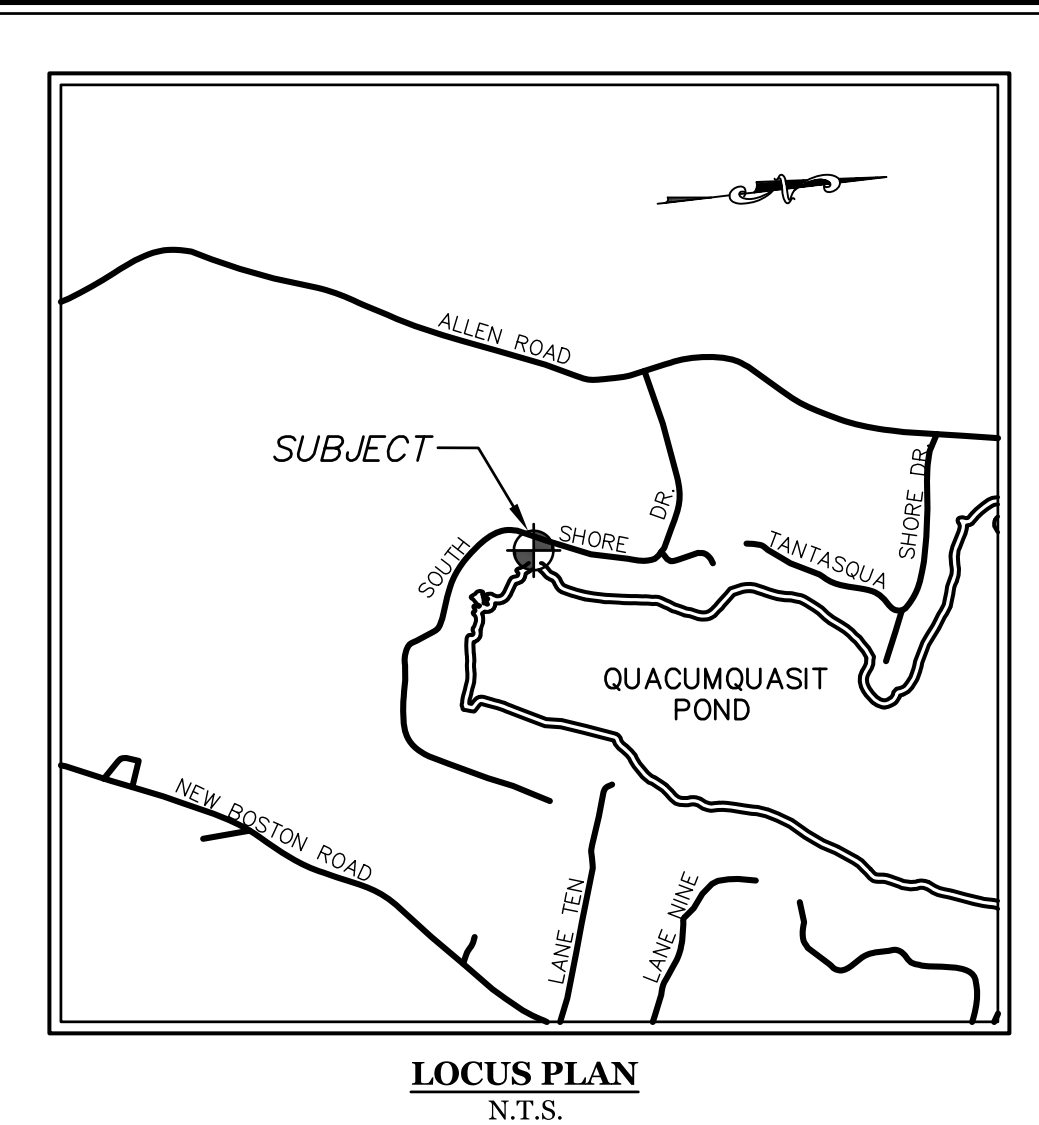
- NOTES**
- COIR LOGS SHALL BE INSTALLED AT THE TOP OF STONE ARMORING AND COMPENSATORY FLOOD STORAGE AREA.
 - ALTERED MATERIAL SHALL BE SPREAD EVENLY ALONG THE UPHILL SLOPE AND COMPACTED BY HAND TAMPING OR OTHER METHODS APPROVED BY THE ENGINEER.
 - OVERLAP COIR LOG ENDS BY 12" (IN) TO PREVENT WATER FROM MOVING BETWEEN LOGS.
 - ALWAYS INSTALL COIR LOG PERPENDICULAR TO SLOPE ALONG CONTOUR LINES. ENDS SHALL ANGLE UPHILL TO PREVENT FLOW AROUND THE COIR LOG.
 - USE AN ADEQUATE NUMBER OF STAKES TO ENSURE LOGS ARE SECURE.



BANK ARMORING DETAIL
SCALE: N.T.S.



ARMORING PLAN
SCALE: 1"=10'



ASSESSORS REFERENCES:
PARCEL ID 598-00615-076

RECORD OWNER:
PETER J. MIMEAULT AND REBECCA GOULD MIMEAULT
76 SOUTH SHORE DRIVE
STURBRIDGE, MA 01566

DEED REFERENCES:
(WORCESTER COUNTY REGISTRY OF DEEDS)
LOCUS DEED:
DEED BOOK 32,906 PAGE 17

PLAN REFERENCES:
(WORCESTER COUNTY REGISTRY OF DEEDS)
LOCUS PLAN:
PLAN BOOK 873 PLAN 93
PLAN BOOK 893 PLAN 73

- NOTES:**
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED LAKEFRONT BANK STABILIZATION IMPROVEMENTS TO PROTECT THE EXISTING WATER SUPPLY LINE FOR THE DRILLED WELL AND DUG IRRIGATION WELL FOR 76 SOUTH SHORE DRIVE, STURBRIDGE, MA 01566
 - LIMITED EXISTING CONDITIONS SURVEY PERFORMED BY MCCLURE ENGINEERING, INC. ON JULY 31, 2020. ADDITIONAL INFORMATION TAKEN FROM PLAN "RIPARIAN RIGHTS, PLAN OF LAND IN STURBRIDGE, MASSACHUSETTS" PREPARED BY SCHOFIELD BROTHERS OF NEW ENGLAND, INC. AND RECORDED IN PLAN BOOK 893 PLAN 73 AT THE WORCESTER DISTRICT REGISTRY OF DEEDS. ADDITIONAL TOPOGRAPHY TAKEN FROM NOAA LIDAR DATA.
 - HORIZONTAL CONTROL IS BASED UPON THE NORTH AMERICAN DATUM OF 1983.
 - ELEVATIONS REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988.
 - PROPERTY LINE INFORMATION IS BASED ON PLANS AND DEEDS OF RECORD, NO PROPERTY LINE SURVEY HAS BEEN PERFORMED AT THIS TIME.
 - THIS PLAN SHOWS THE PROPERTY LINES THAT ARE THE LINES OF EXISTING OWNERSHIP, NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP ARE SHOWN.
 - EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THERE MAY BE EXISTING LINES OTHER THAN THOSE INDICATED. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE PROPER PUBLIC UTILITY ENGINEERING DEPARTMENT SHOULD BE CONSULTED.
 - THE AREA BETWEEN THE HOUSE AND THE DUG WELL WAS PREVIOUSLY DEVELOPED FOR ACCESSORY USE TO A SINGLE FAMILY STRUCTURE ON OR BEFORE 1970.
 - THE AREA BETWEEN THE DUG WELL AND THE DRILLED WELL WAS PREVIOUSLY DEVELOPED FOR ACCESSORY USE TO A SINGLE FAMILY STRUCTURE LAWFULLY EXISTING ON NOVEMBER 1, 1987 AND MAINTAINED SINCE.
 - THE BEACH AREA HAS EXISTED AS LAKE FRONT PROPERTY TO A SINGLE FAMILY STRUCTURE BUILT AND MAINTAINED PRIOR TO APRIL 1, 1983 AND CONTINUALLY MAINTAINED TO PRESENT TIME.
 - A COMPENSATORY FLOOD STORAGE VOLUME OF 2.4 CUBIC YARDS (18 S.F. PER VERTICAL FOOT BETWEEN ELEV. 599-601.5) IS TO BE PROVIDED TO OFFSET THE LOSS IN STORAGE VOLUME DUE TO THE STONE ARMOR FILL PROPOSED TO PROTECT THE UTILITY LINES. REMOVAL OF MATERIAL WILL BE DONE BY HAND AND TRANSPORTED OUTSIDE OF THE 200' RIVERFRONT AREA.

DISTRICT DIMENSIONAL REGULATIONS	
DISTRICT	RURAL RESIDENTIAL
USE	RESIDENTIAL
MIN. LOT SIZE	1 ACRE (43,560 sq.ft.)
MIN. FRONTAGE	150'
MIN. FRONT YARD DEPTH	30'
MIN. SIDE YARD DEPTH	20'
MIN. REAR YARD DEPTH	20'
MAX. BUILDING HEIGHT	35'
MAX. BUILDING STORIES	2

PETER C. ENGLE, P.E.
PROFESSIONAL ENGINEER
MA LIC. NO. 53736

McCLURE ENGINEERING, INC.
119 Worcester Road
Charlton, MA 01507
Tel: (508) 248-2005
Fax: (508) 248-4887
Email: peng@mcclureengineers.com

WATER SUPPLY PROTECTION PLAN
76 SOUTH SHORE ROAD
STURBRIDGE, MA 01566
PREPARED FOR:
PETER AND REBECCA MIMEAULT
76 SOUTH SHORE ROAD
STURBRIDGE, MA 01566

BANK STABILIZATION PLAN
DWG# 76-2020

DISTRICT DIMENSIONAL REGULATIONS

DISTRICT	RURAL RESIDENTIAL
USE	RESIDENTIAL
MIN. LOT SIZE	1 ACRE (43,560 sq.ft.)
MIN. FRONTAGE	150'
MIN. FRONT YARD DEPTH	30'
MIN. SIDE YARD DEPTH	20'
MIN. REAR YARD DEPTH	20'
MAX. BUILDING HEIGHT	35'
MAX. BUILDING STORIES	2

REVISIONS

REV	DATE	DESCRIPTION	MADE BY	APVD BY
1	10/9/20	ADD. COMP. FLOOD STORAGE	AB	PE
2	10/29/20	PER MA DEP COMMENTS	AB	PE

SCALE: 1"=10'
HOR. SCALE IN FEET: 1"=10'

DRAWN BY: MMH
DATE: 9/2/20
CHK BY: PE
SCALE: AS NOTED
PROJ. NO.: 287-2248-L

SHEET 1 OF 2

RESPONSIBILITIES OF OWNER/PERMITEE

- THE OWNER/ PERMITEE SHALL:
 A. PROVIDE THE CONTRACTOR WITH COPIES OF LAND-USE PERMITS THAT THE OWNER HAS ACQUIRED.
 B. INFORM ALL PARTIES INVOLVED WITH THE PROPOSED SITE WORK OF THIS PLAN'S OBJECTIVES AND REQUIREMENTS.

RESPONSIBILITIES OF CONTRACTOR

- THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING EROSION OF THE SITE AND FOR PROTECTING ADJACENT STORM SEWERS AND WATERWAYS FROM SEDIMENTATION. THE CONTRACTOR SHALL:
 A. INSTALL, MONITOR, AND MAINTAIN ALL OF THE SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THIS PLAN
 B. COMPLY WITH ALL PERMIT REQUIREMENTS.

PRE-CONSTRUCTION CONFERENCE

- THE PERMITEE, OWNER-OF-RECORD, CONTRACTOR, ENGINEER, AND THE TOWN SHALL HOLD A "PRE-CONSTRUCTION" CONFERENCE REVIEW THE PROPOSED SOIL EROSION AND SEDIMENT CONTROL MEASURES.

DESCRIPTION AND MAINTENANCE OF EROSION CONTROL MEASURES

TEMPORARY STABILIZATION MEASURES

- STRAW BALES:**
 INSTALL STRAW BALES AT VARIOUS LOCATIONS AS SHOWN ON THE PLANS AND DETAILS. EMBED THE STRAW BALES INTO THE GROUND AND FIRMLY ANCHOR IT AS SHOWN IN THE DETAILS. REMOVE SEDIMENT ONCE LEVELS HAVE REACHED 1/4 OF THE EFFECTIVE HEIGHT. REPAIR AND/OR REPLACE STRAW BALES IMMEDIATELY IF DAMAGED OR DETERIORATED.

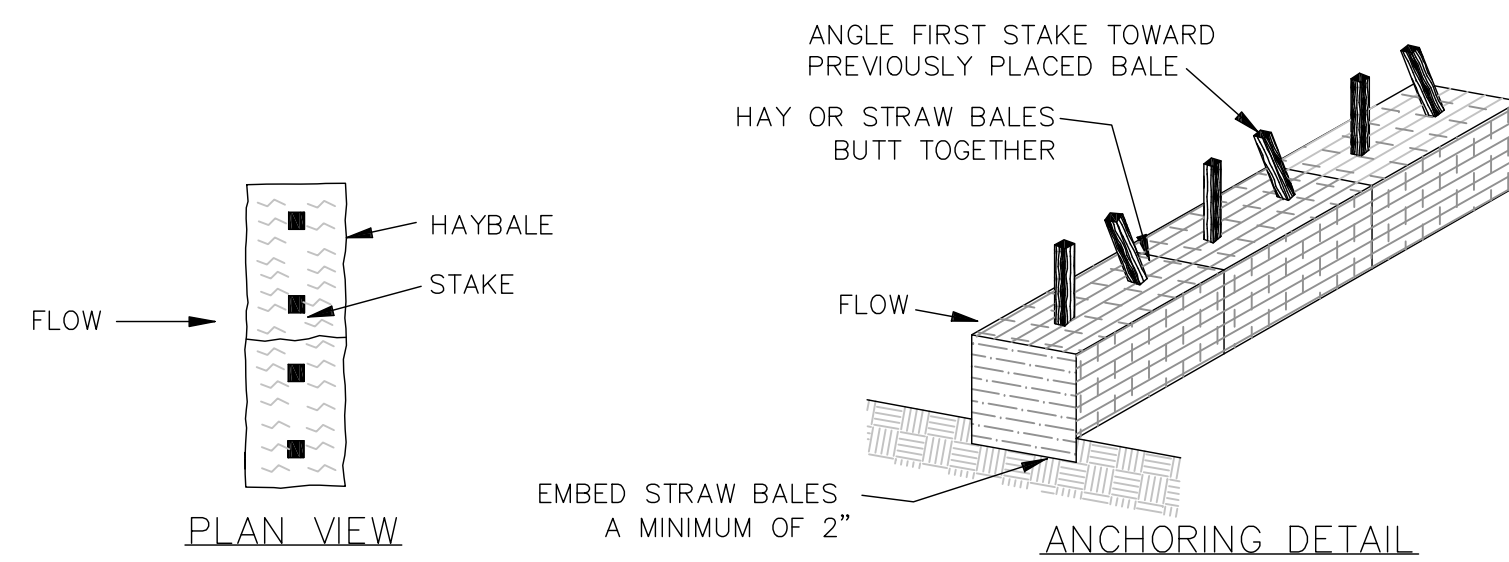
- STOCKPILING OR STORAGE OF EXCAVATED MATERIALS:**
 COMPLETELY SURROUND TEMPORARY MATERIAL STOCKPILES WITH STRAW BALES TO PREVENT TRANSPORTATION OF SEDIMENT.

PERMANENT STABILIZATION MEASURES

- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LANDSCAPED AREAS. IF TOPSOIL, SEED, AND/OR MULCH IS WASHED AWAY BY RAINFALL, THE CONTRACTOR SHALL RESTORE THE AREA.

GENERAL CONDITIONS

- IF EROSION CONTROL MEASURES ARE DAMAGED BY CONSTRUCTION VEHICLES, ACTS OF VANDALISM, OR SEVERE WEATHER CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY REMOVE SEDIMENT IN THE VICINITY OF THE EROSION CONTROL MEASURES AND REPAIR THESE MEASURES TO A FUNCTIONAL CONDITION.
- IF, DURING OR AFTER CONSTRUCTION, IT BECOMES APPARENT THAT EXISTING EROSION CONTROL MEASURES ARE INCAPABLE OF CONTROLLING EROSION, THE ENGINEER OR THE TOWN MAY REQUIRE ADDITIONAL CONTROL MEASURES, INCLUDING BUT NOT LIMITED TO: ADDITIONAL STRAW WATTLES, HAYBALES, SILT FENCE, SEDIMENT BASINS, MECHANICALLY ANCHORED MULCH, OR ENHANCED DEWATERING FILTRATION.
- INSPECTIONS:** EROSION CONTROL SHALL BE INSPECTED DAILY OR AFTER A LEGITIMATE STORM EVENT (0.25 INCH). INSPECTION SHALL BE RECORDED IN A LOG ALONG WITH THE TIME AND DATE. LOG SHALL BE AVAILABLE FOR INSPECTION BY THE TOWN STAFF OR COMMISSIONER.

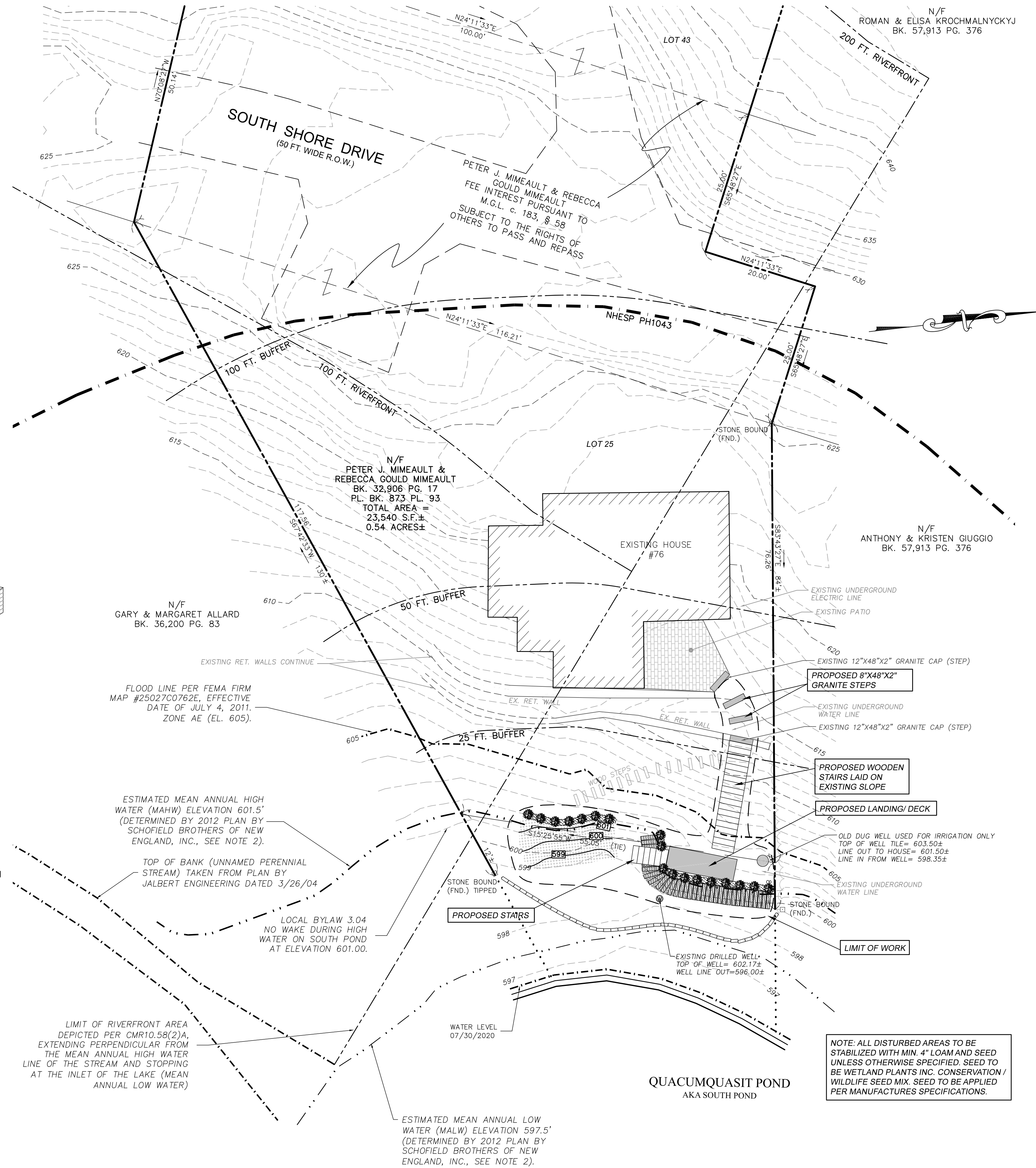


HAYBALE EROSION CONTROL BARRIER
 SCALE: N.T.S.

OPERATION AND MAINTENANCE:

THE OPERATION AND MAINTENANCE FOR THIS PROJECT WILL BE ONGOING UPON COMPLETION OF ALL WORK.

- MAINTAIN STONE ARMORING ON THE BANK OF THE LAKE THAT PROVIDES FROST PROTECTION TO THE WATER SUPPLY-LINE RUNNING PARALLEL TO THE BANK. THE PROTECTION DEPTH SHALL BE A MINIMUM OF 30" MEASURED VERTICALLY DOWN FROM THE BOTTOM OF THE STONE ARMORING AND A MINIMUM OF 40" MEASURED VERTICALLY DOWN FROM THE TOP OF THE STONE ARMORING. MAINTAIN THE POSITION OF EACH STONE TO BE SECURE AGAINST MOVEMENT CAUSED BY EXTREME WAVE ACTION AND EXCESSIVE ICE-PACK CONDITIONS DURING THE YEAR.
- MAINTAIN ROOTED PLANTINGS ALONG THE TOP OF THE STONES AND COMPENSATORY FLOOD STORAGE MITIGATION AREA, WITH THE EXCEPTION OF THE AREA THAT INCLUDES THE PROPOSED ACCESS STAIRWAY TO THE SHORELINE AND BASE OF THE DRILLED-WELL.
- MAINTAIN THE PROPOSED STAIRS AND DECK (LANDING) SURFACE THAT ALLOW OPERATIONAL CHECKS AND SERVICE FROM THE HOUSE TO THE IRRIGATION-WELL AND THE DRILLED-WELL INFRASTRUCTURE FOR ROUTINE MAINTENANCE OF BOTH THE SEASONAL PUMP AND THE SUBMERGED WATER-SUPPLY PUMP LOCATED OVER 50' DOWN IN THE METAL CASING ON THE SHORELINE. THE PATH TO AND FROM THIS EQUIPMENT MUST BE SAFE FOR SERVICE TECHNICIANS TO ACCESS BOTH WELLS DURING HIGH-WATER PERIODS AND WINTER MONTHS.
- MAINTAIN A MULCH COVERING ON THE COMPENSATORY FLOOD STORAGE MITIGATION AREA.



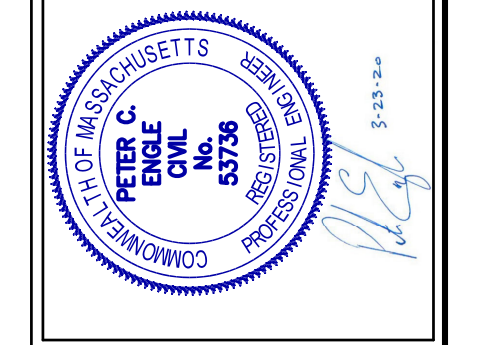
NOTE: ALL DISTURBED AREAS TO BE STABILIZED WITH MIN. 4" LOAM AND SEED UNLESS OTHERWISE SPECIFIED. SEED TO BE WETLAND PLANTS INC. CONSERVATION/ WILDLIFE SEED MIX. SEED TO BE APPLIED PER MANUFACTURES SPECIFICATIONS.

ACCESS PLAN
 SCALE: 1"=10'

HOR. SCALE IN FEET: 1"=10'

REV.	DATE	DESCRIPTION	MADE (APVD)
1	10/9/20	ADD. COMP. FLOOD STORAGE	AB PE
2	10/29/20	PER MA. DEP. COMMENTS	AB PE

PETER C. ENGLE, P.E.
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 MA LIC. NO. 53736



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 Email: pengle@mcclureengineers.com

WATER SUPPLY PROTECTION PLAN
 76 SOUTH SHORE ROAD
 STURBRIDGE, MA 01566
 PREPARED FOR:
 PETER AND REBECCA MIMEAULT
 76 SOUTH SHORE ROAD
 STURBRIDGE, MA 01566

DRAWN BY: MM
 DATE: 9/2/20
 CHK BY: PE
 SCALE: AS NOTED
 PROJ. NO. 287-2248-L

WELL ACCESS PLAN
 DWG# 76-2020