# DEFINITIVE SUBDIVISION PLAN

# JOANNE DRIVE

A PLANNED CONSERVATION DEVELOPMENT STOW, MASSACHUSETTS

AUGUST 4, 2017 REVISED FEBRUARY 15, 2018 REVISED SEPTEMBER 24, 2018 REVISED DECEMBER 3, 2018

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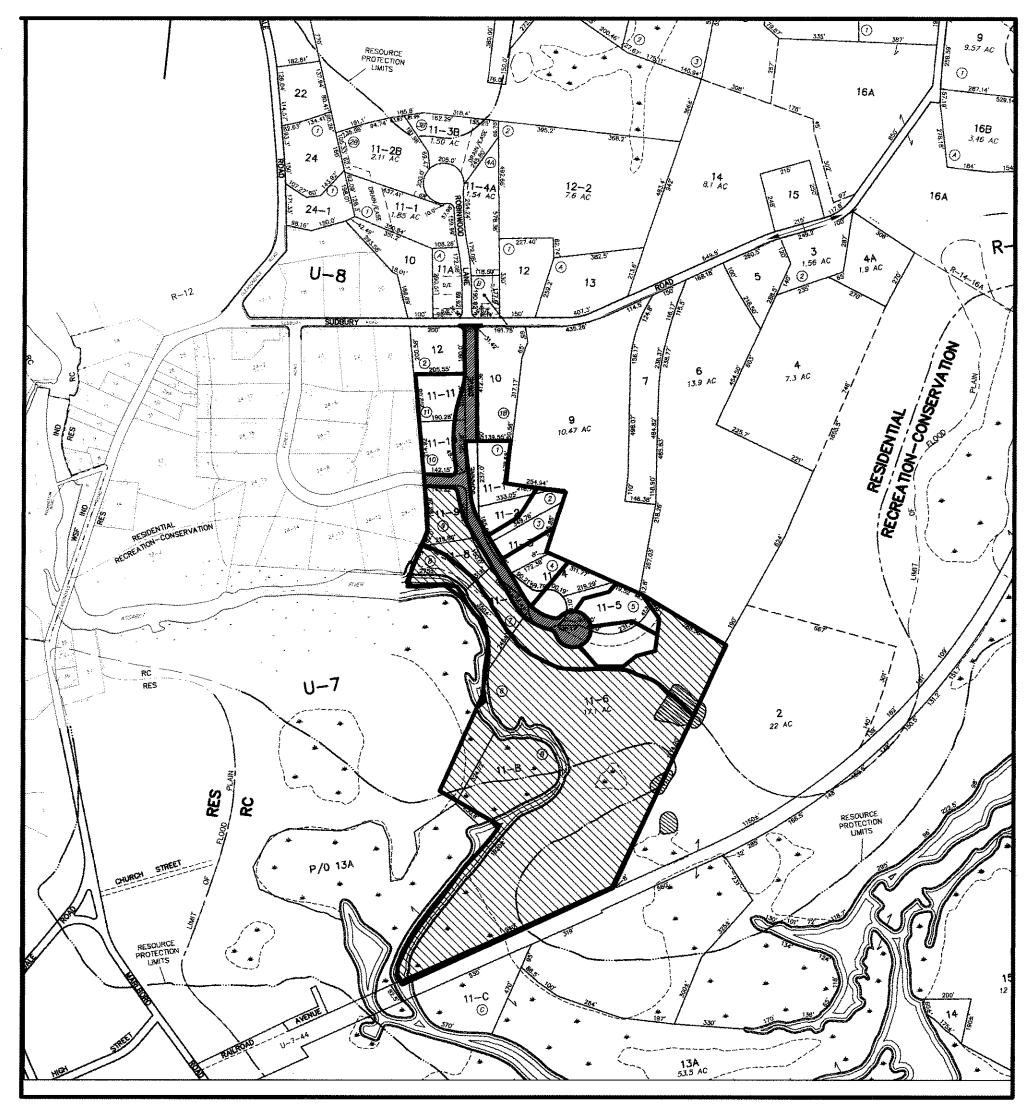
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LOCUS MAP SCALE: 1"=400'

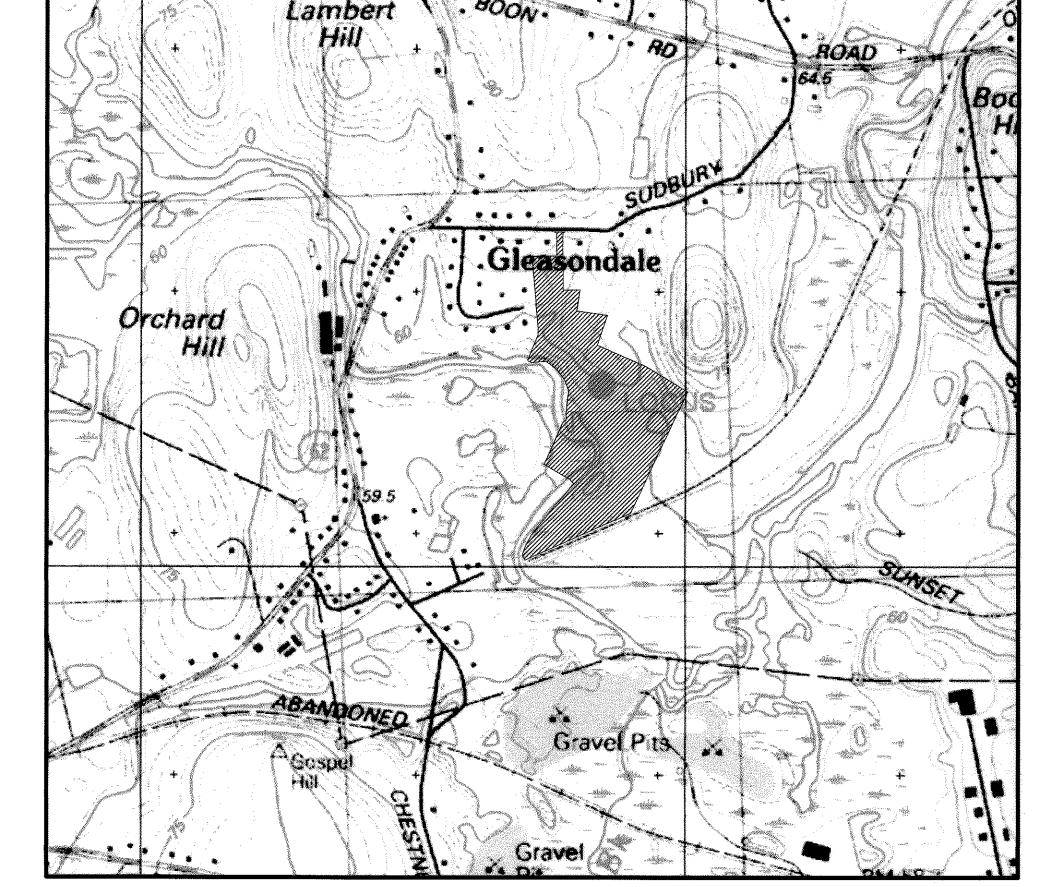
# STOW PLANNING BOARD Sori Clert Agren Sollekes Sollekes Sollekes Aurganel Steels

APPROVAL DATE: 12.12.2017

ENDORSEMENT DATE: 8,20,2019

I, CLERK OF THE TOWN OF STOW, MASSACHUSETTS HEREBY CERTIFY THE NOTICE OF THE APPROVAL OF THIS PLAN BY THE STOW PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

Judio E Hathaway
TOWN CLERK



LOCUS MAP
SCALE: 1"=1000'

### RECORD OWNER/APPLICANT

LUNDY STARMER, INC. 25 ORCHARD DRIVE NATICK, MA 01760

### **ENGINEER/SURVEYOR**

STAMSKI AND MCNARY, INC. 1000 MAIN STREET ACTON, MA 01720 (978) 263-8585



### **ZONING DISTRICT:**

RESIDENTIAL
RECREATION/CONSERVATION
FLOOD PLAIN
WATER RESOURCE PROTECTION OVERLAY

### REFERENCE

MIDDLESEX REGISTRY OF DEEDS SOUTH DISTRICT DEED BOOK 11045 PAGE 326 PLAN No. 1416 OF 1963 PLAN No. 1015 OF 1973 PLAN No. 1211 OF 1971

TOWN OF STOW ASSESSOR
MAP R13
PARCELS 11-1 THRU 11-11;

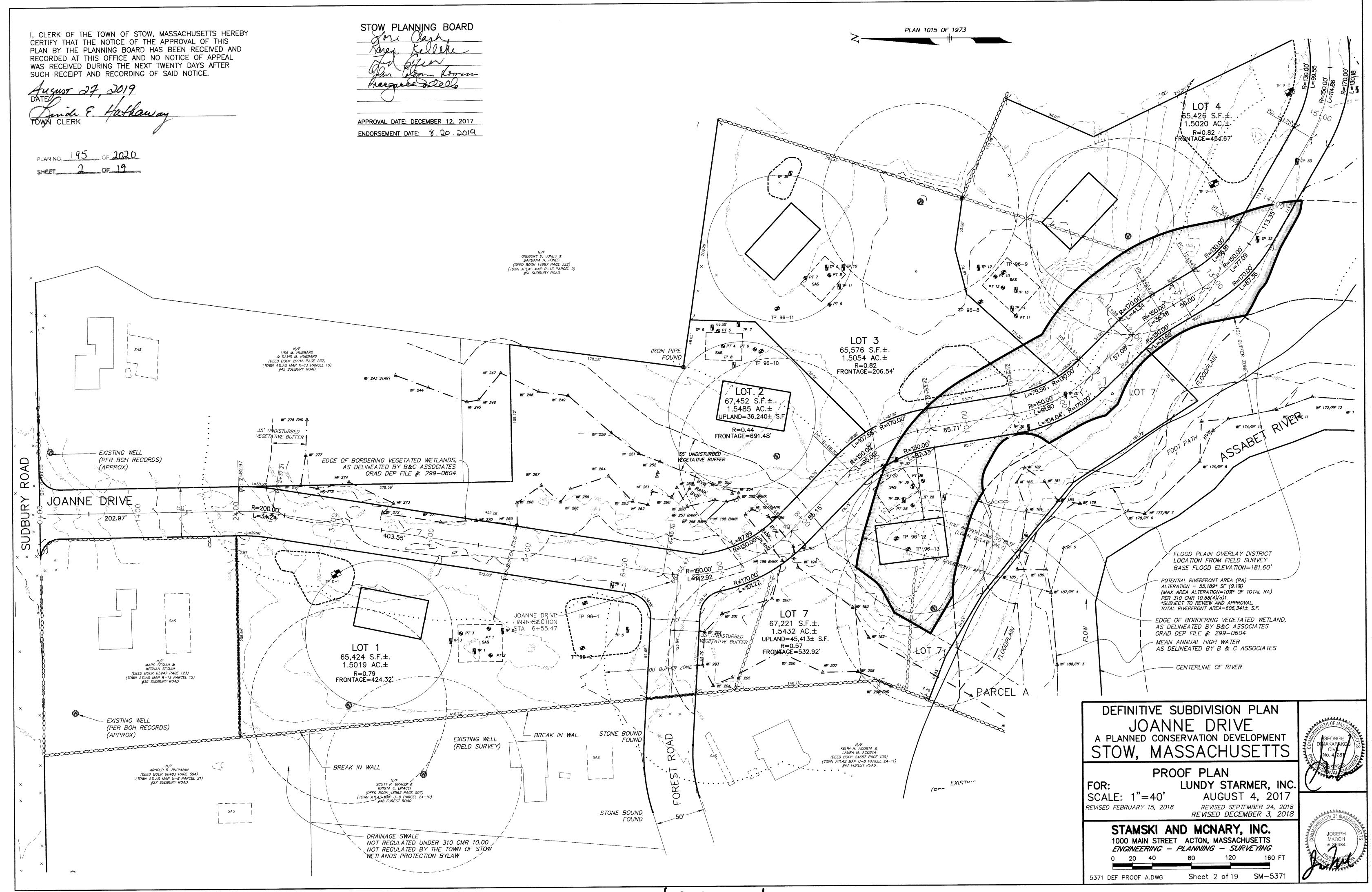
PARCELS 11-1 THRU 11-11; 11-B & JOANNE DRIVE

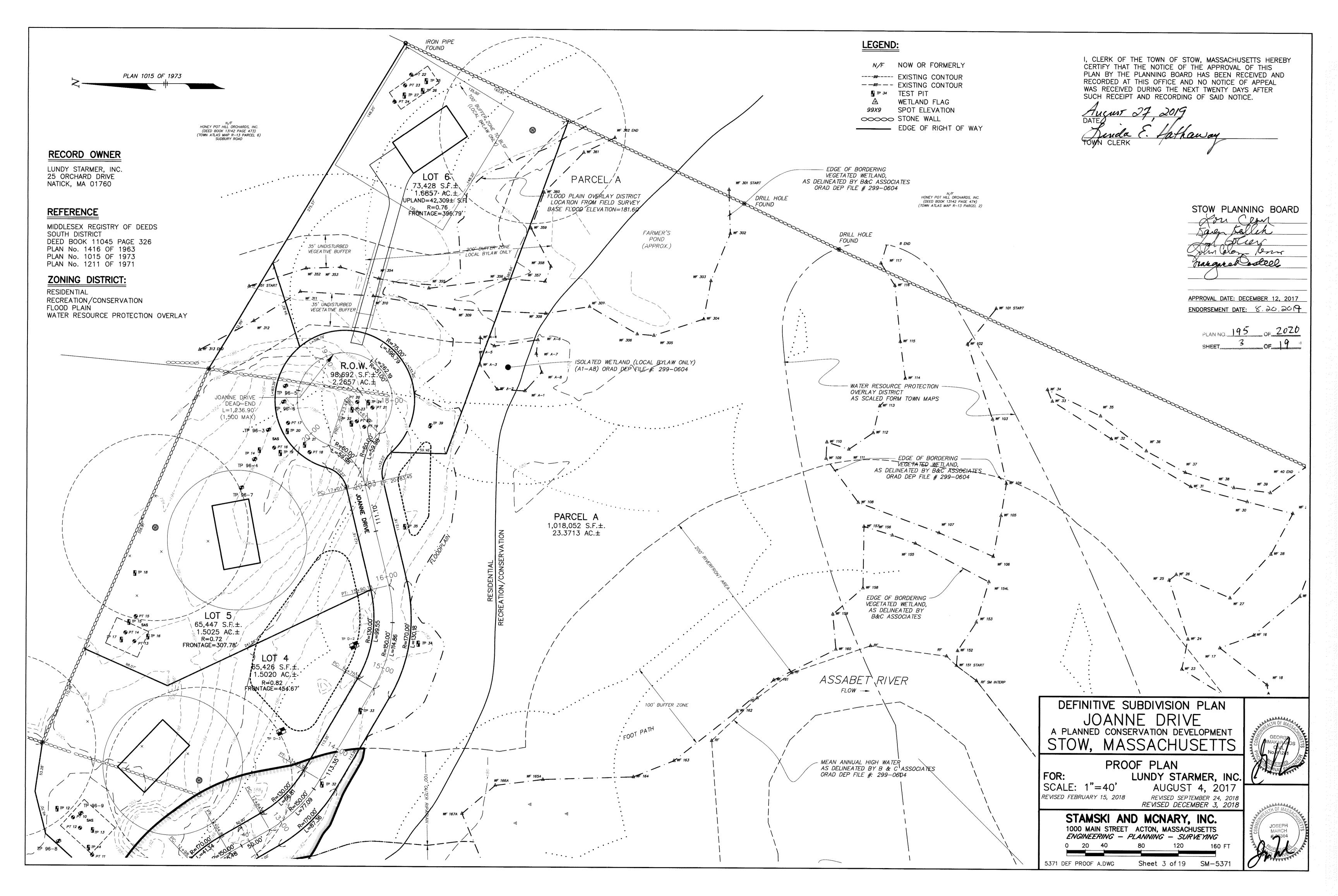
Middlesex Registry of Deeds,
Southern District
Cambridge, Massachusetts
Plan No. 195 1/19 of 2020
Rec'd 3-11 2020
at 12 H 06 M P M

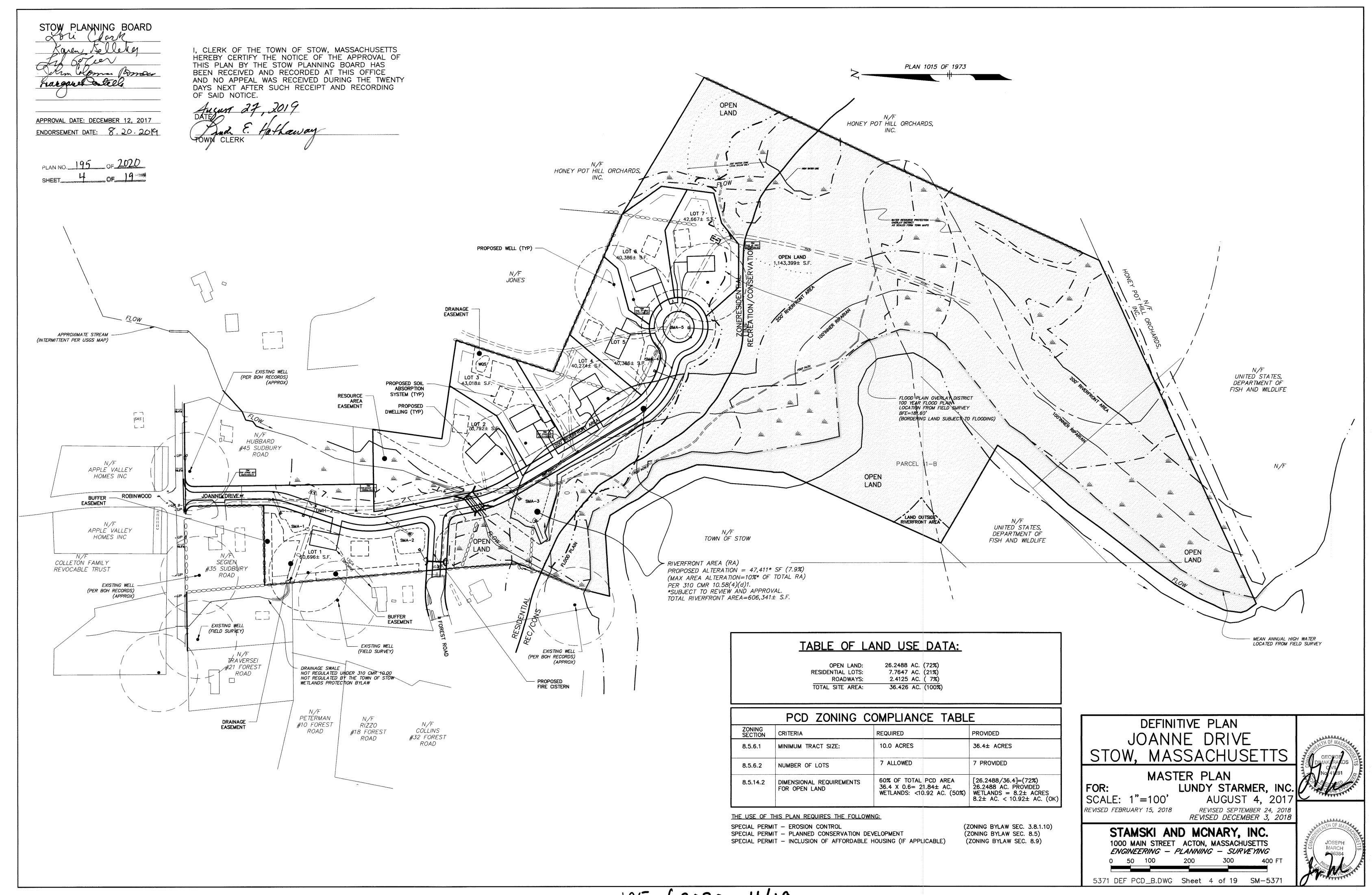
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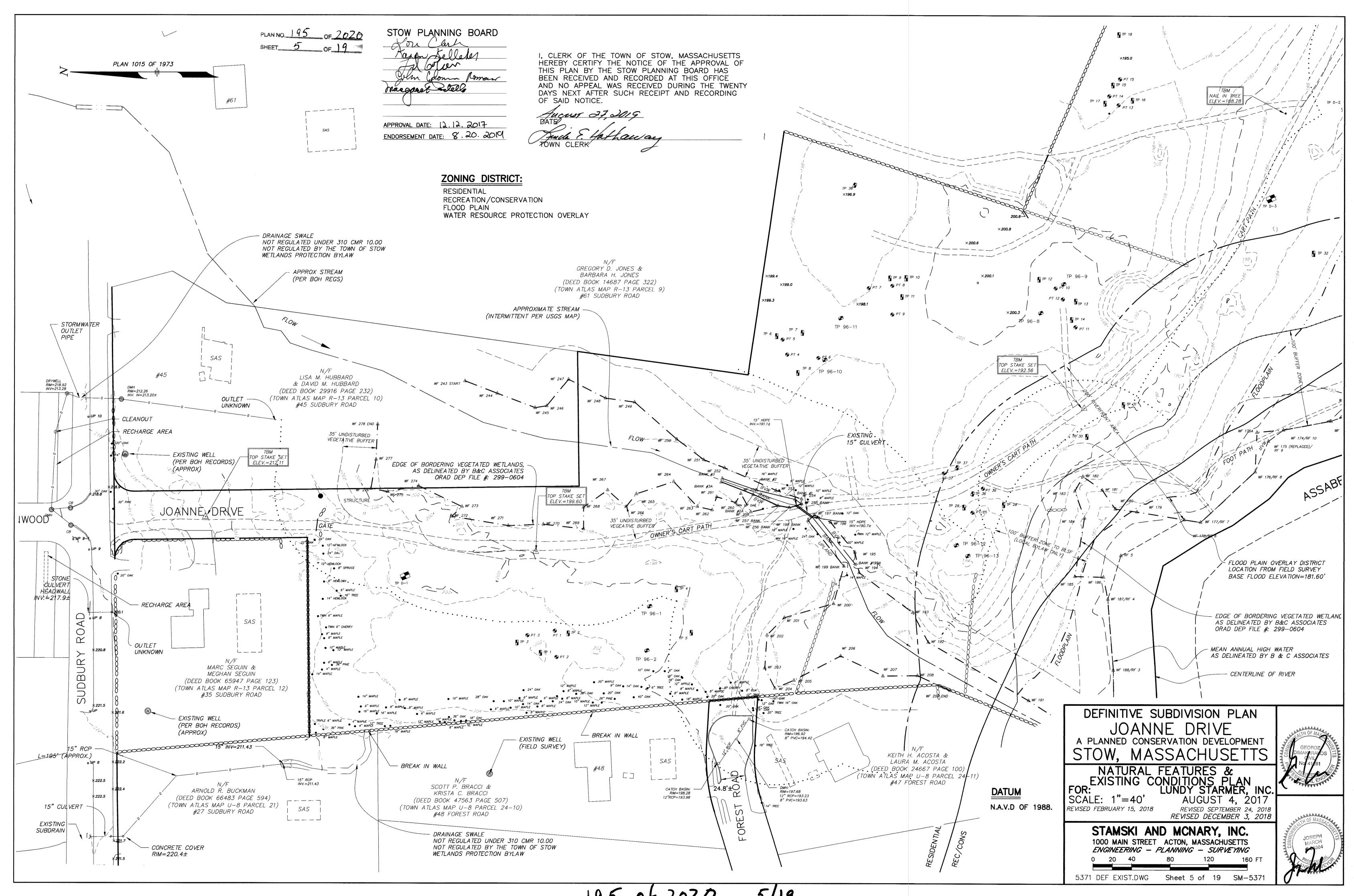
Mar C. Culture

Register

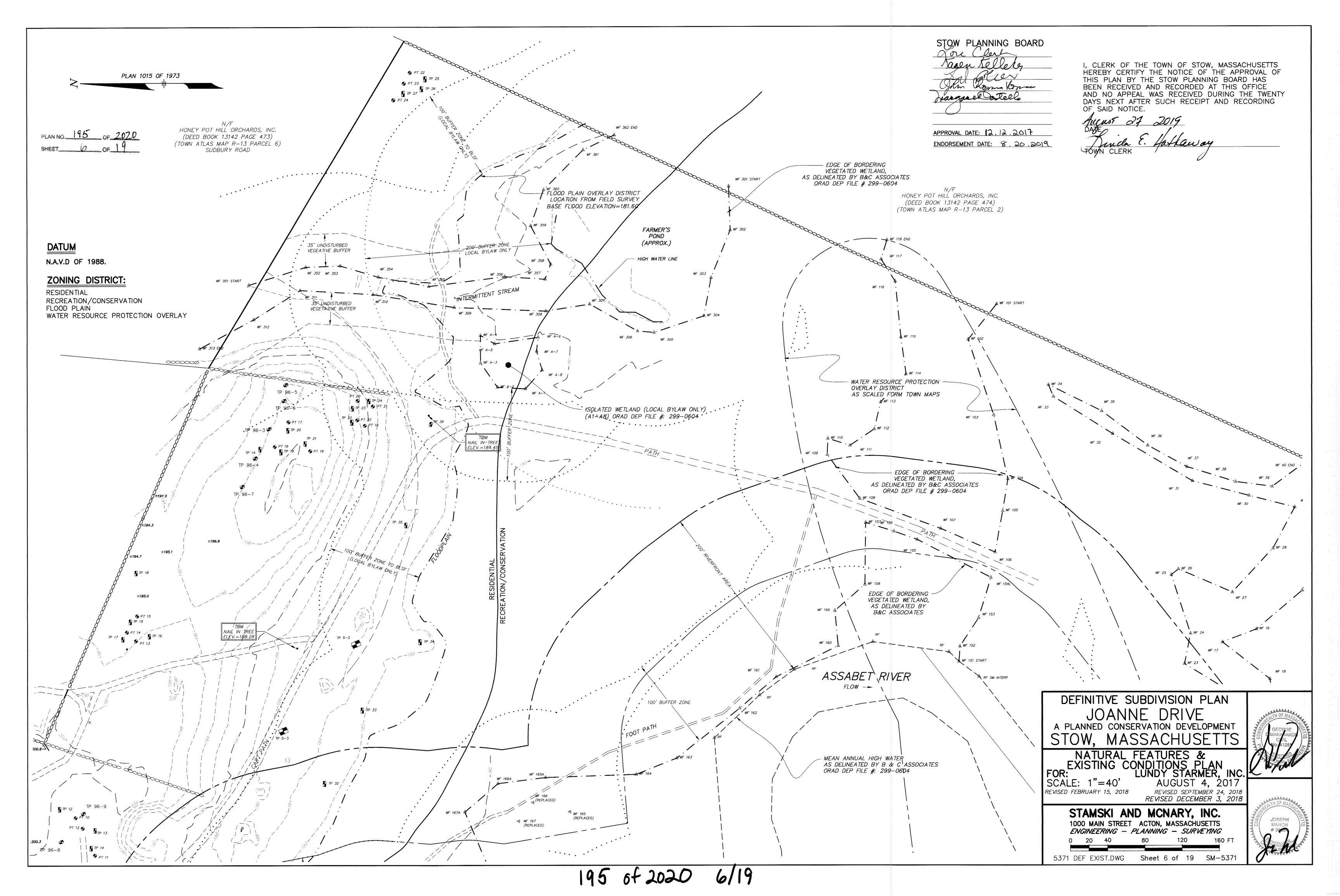


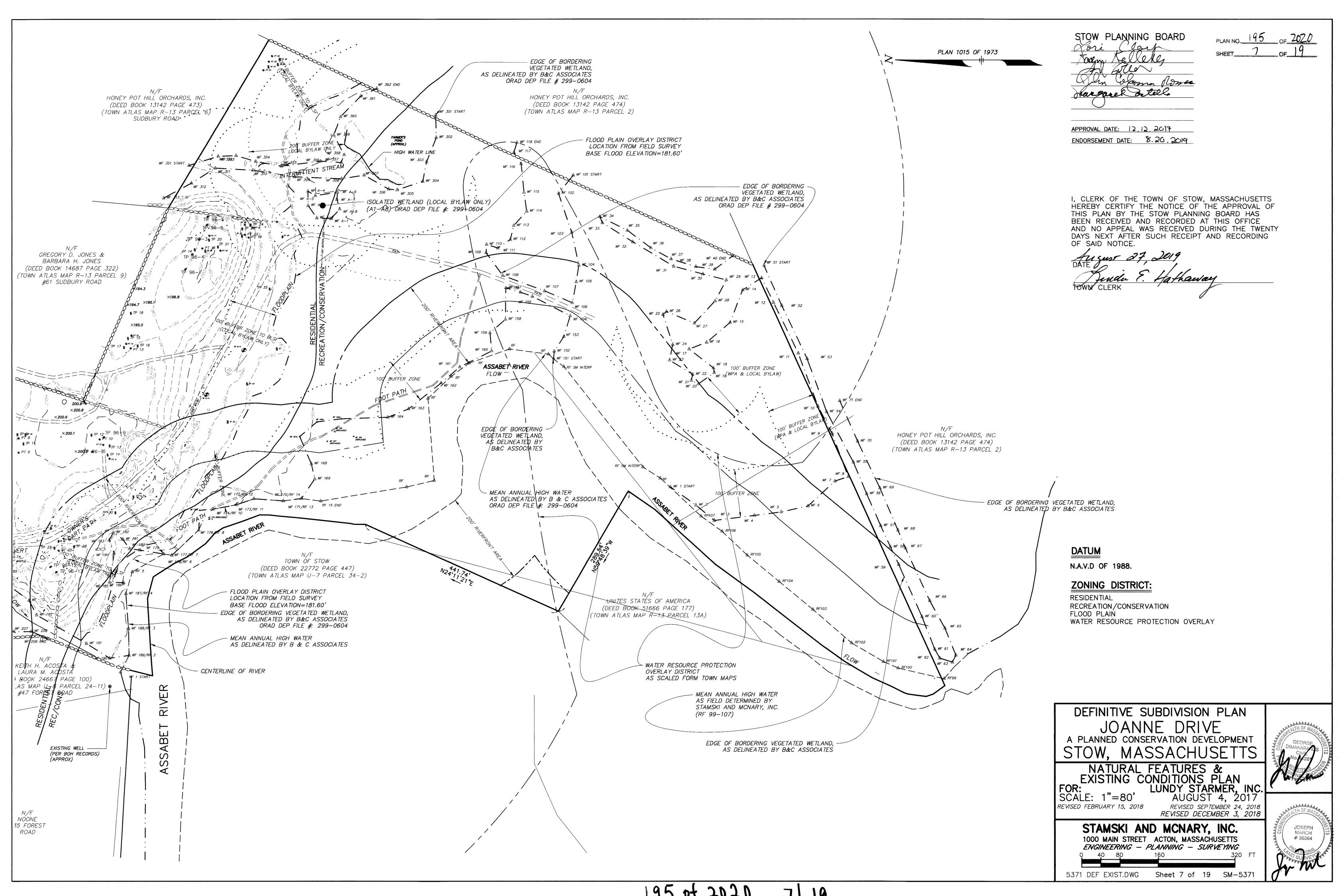


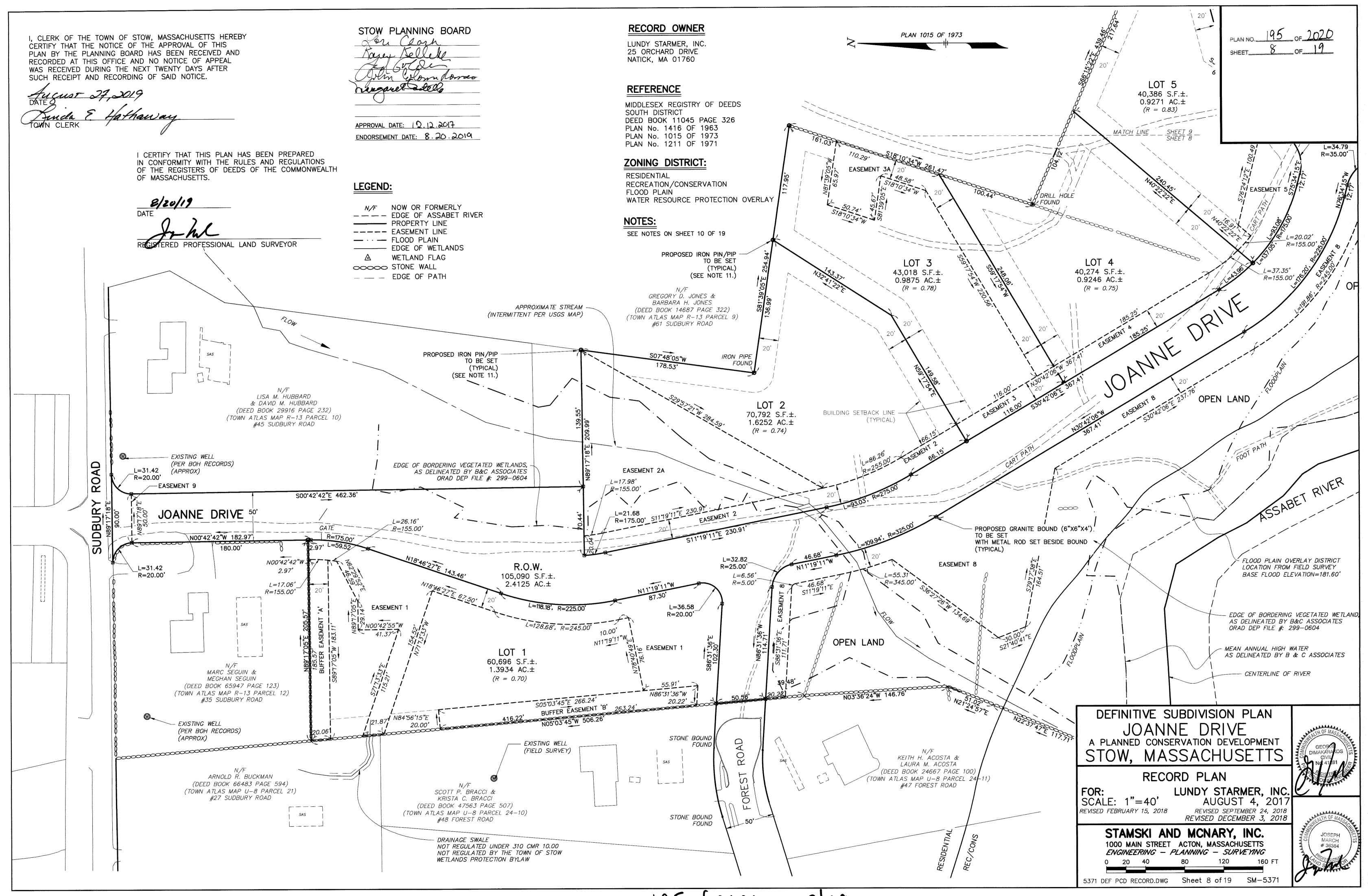


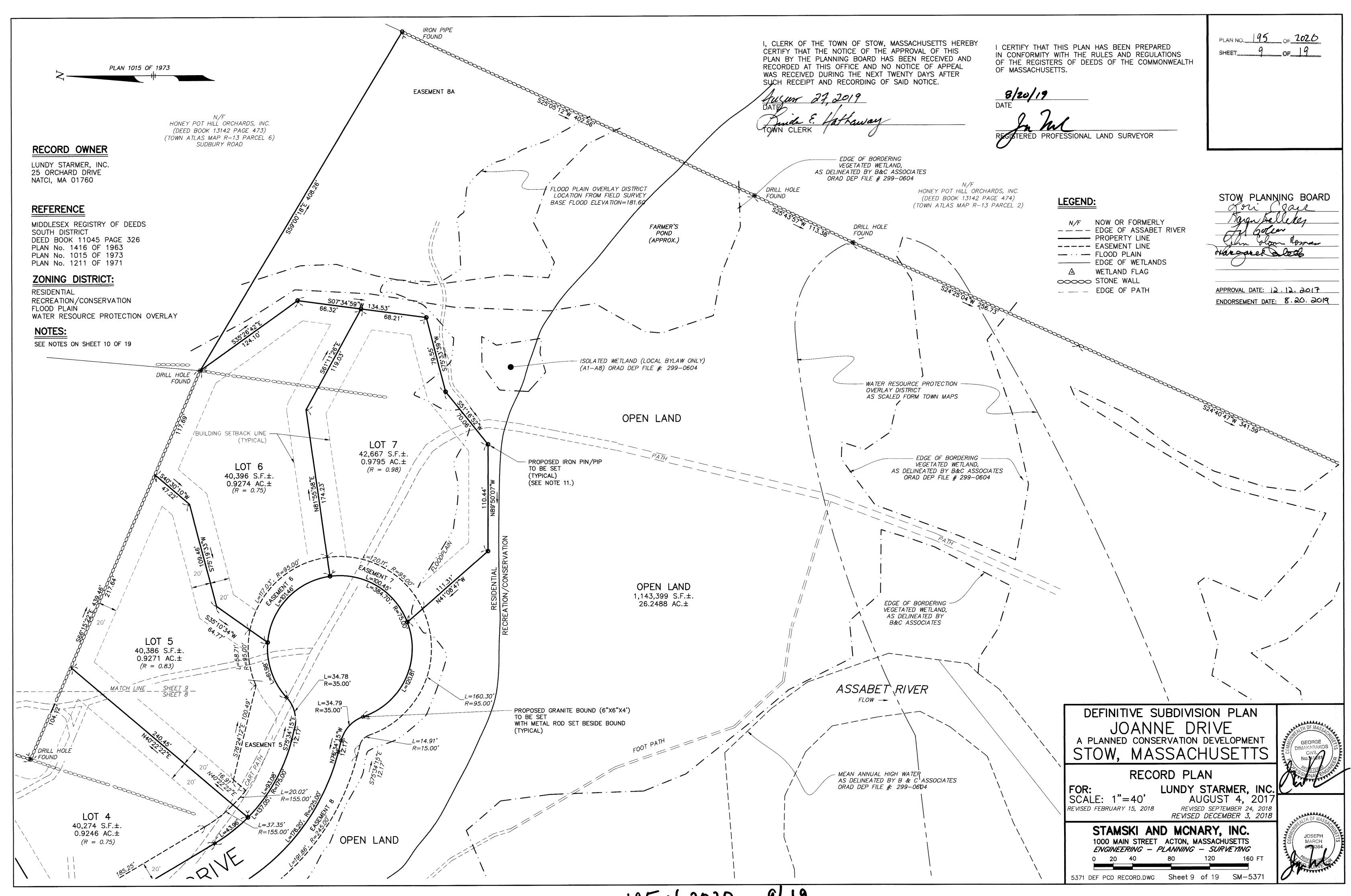


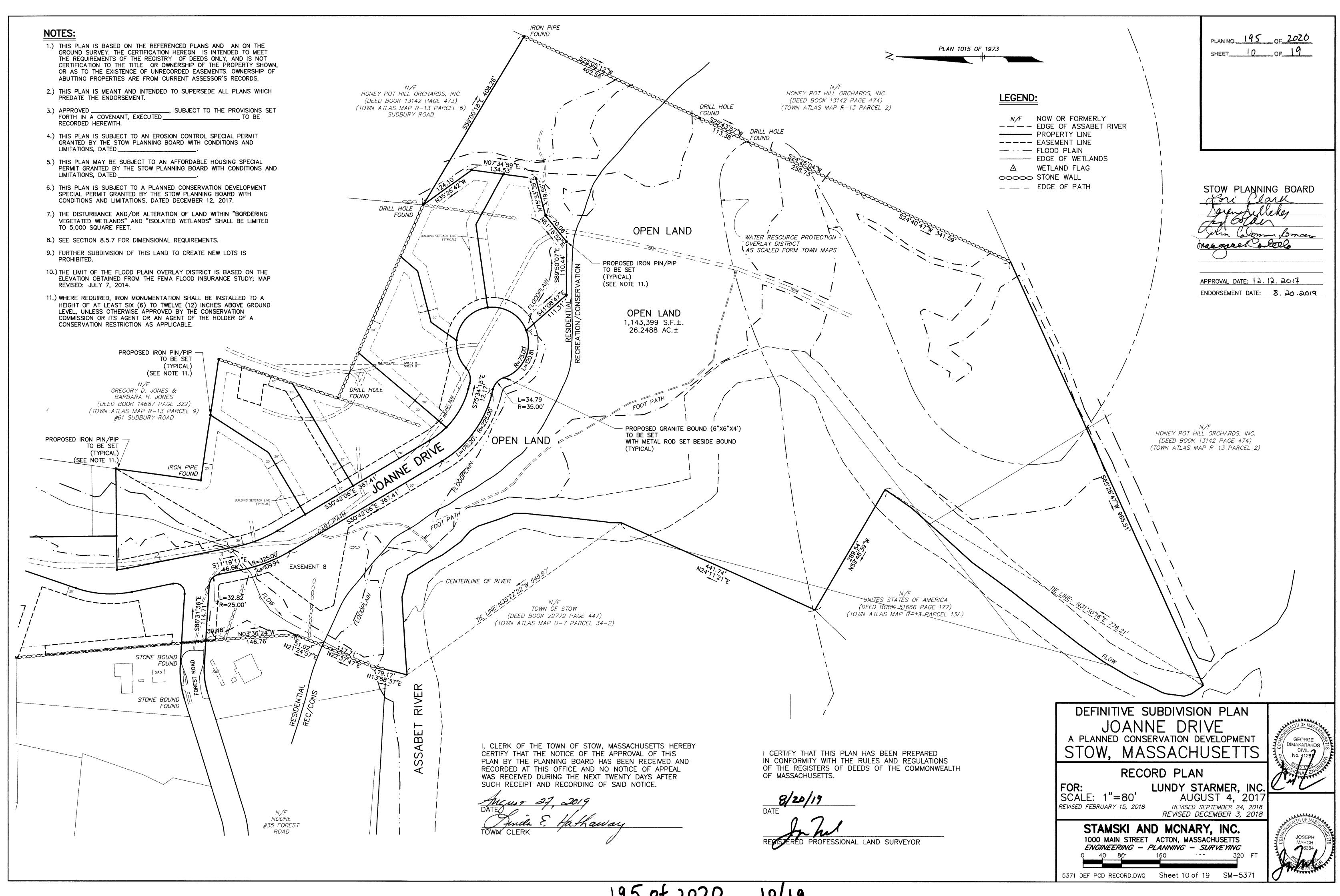
195 of 2020 5/1

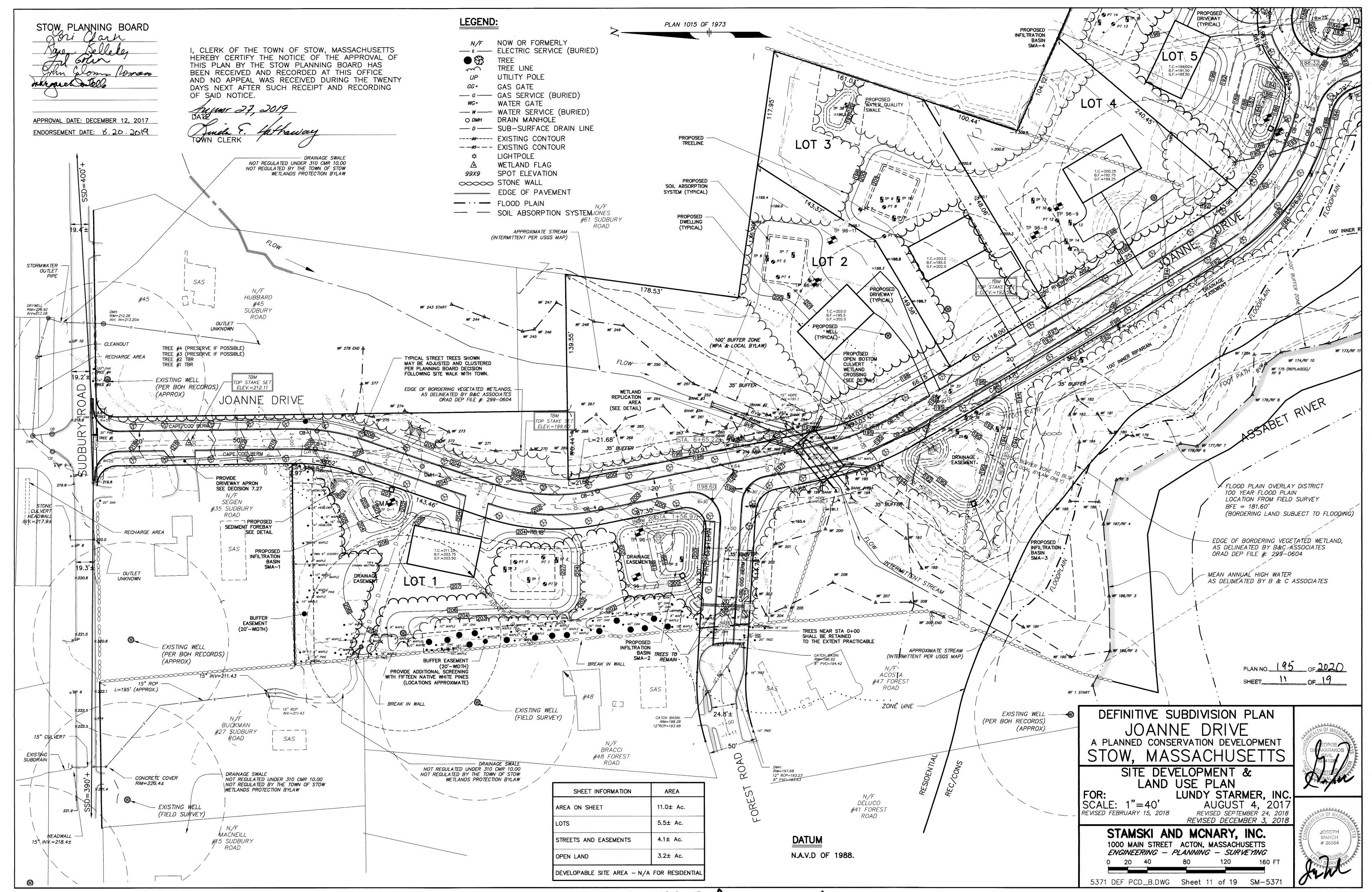


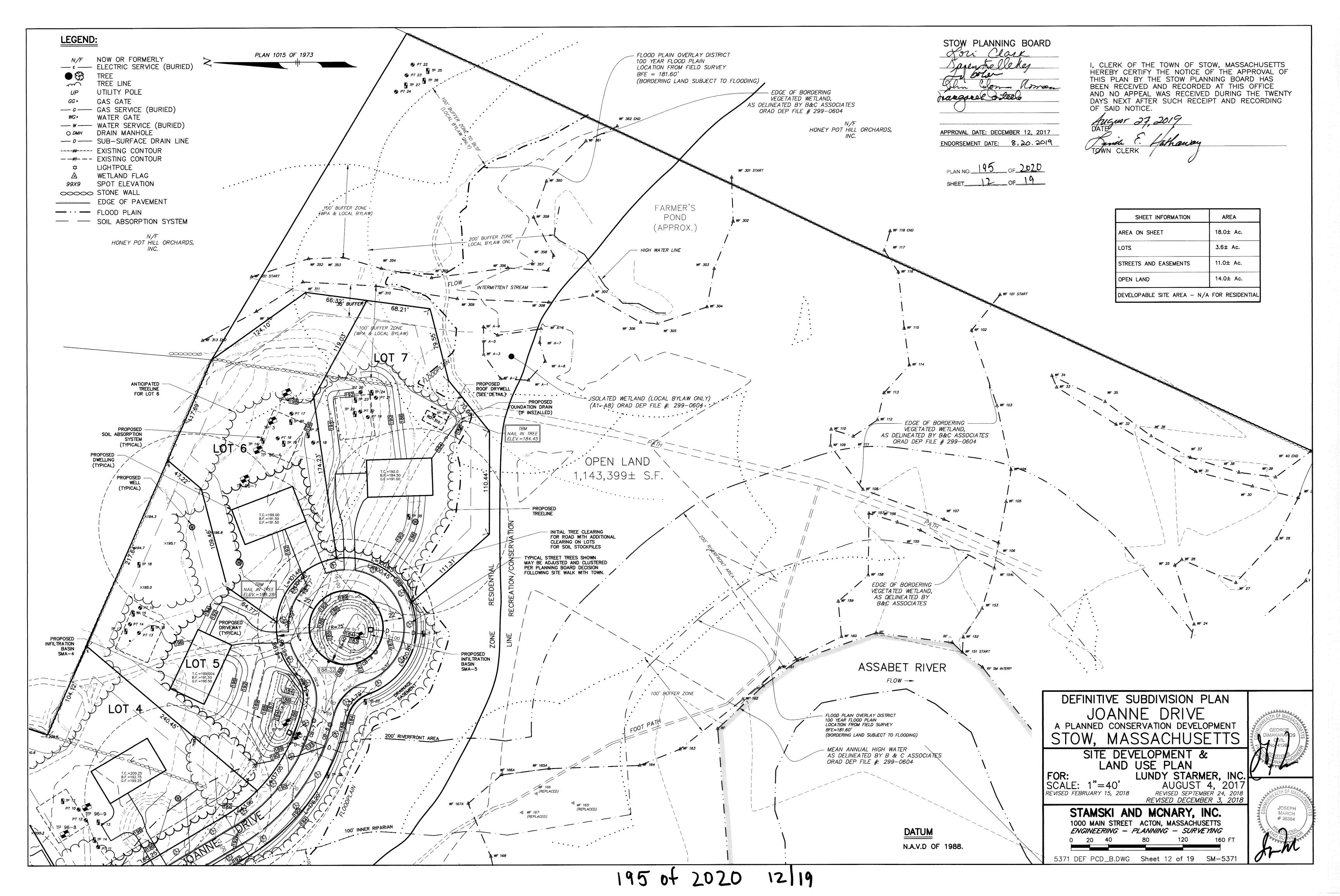


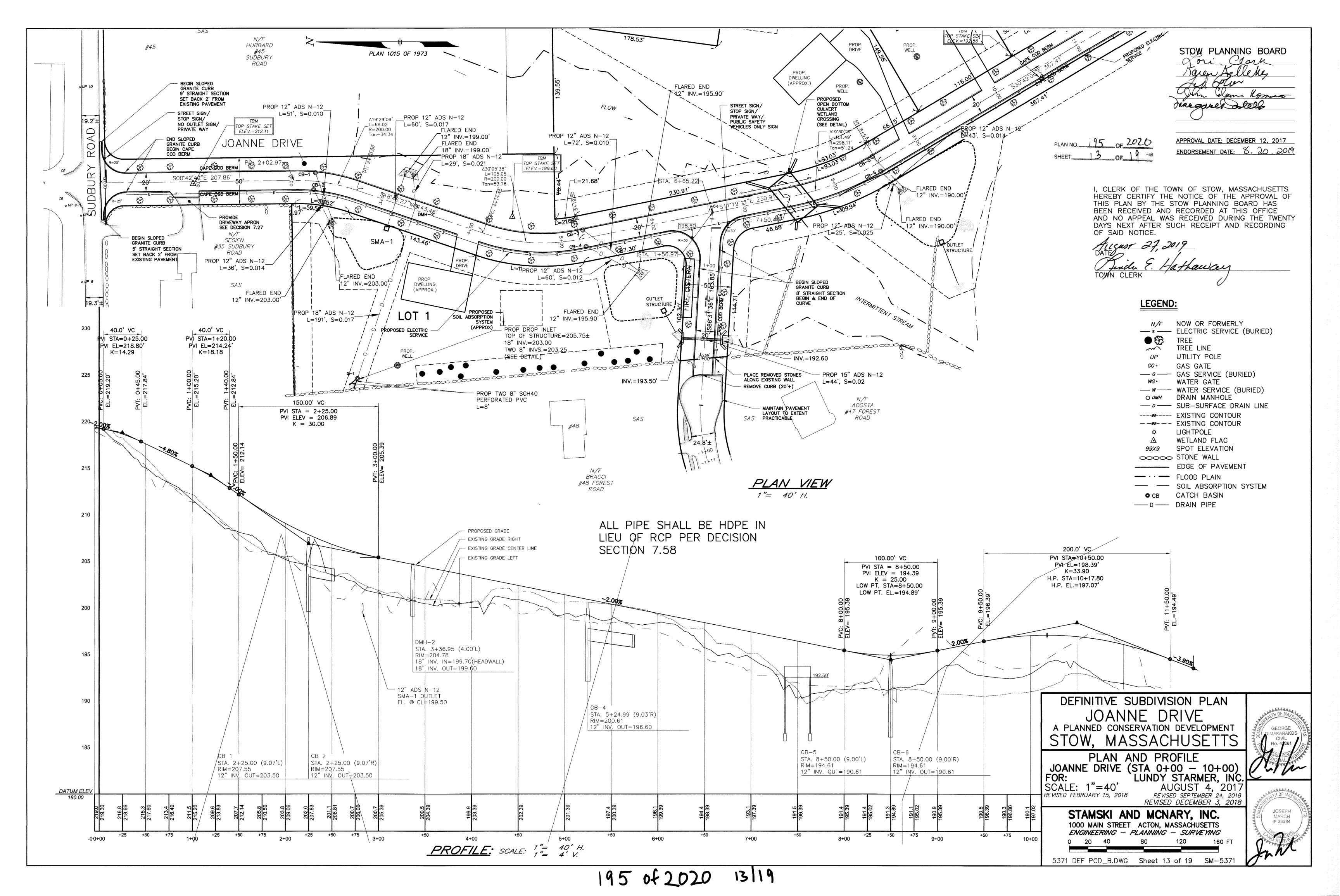


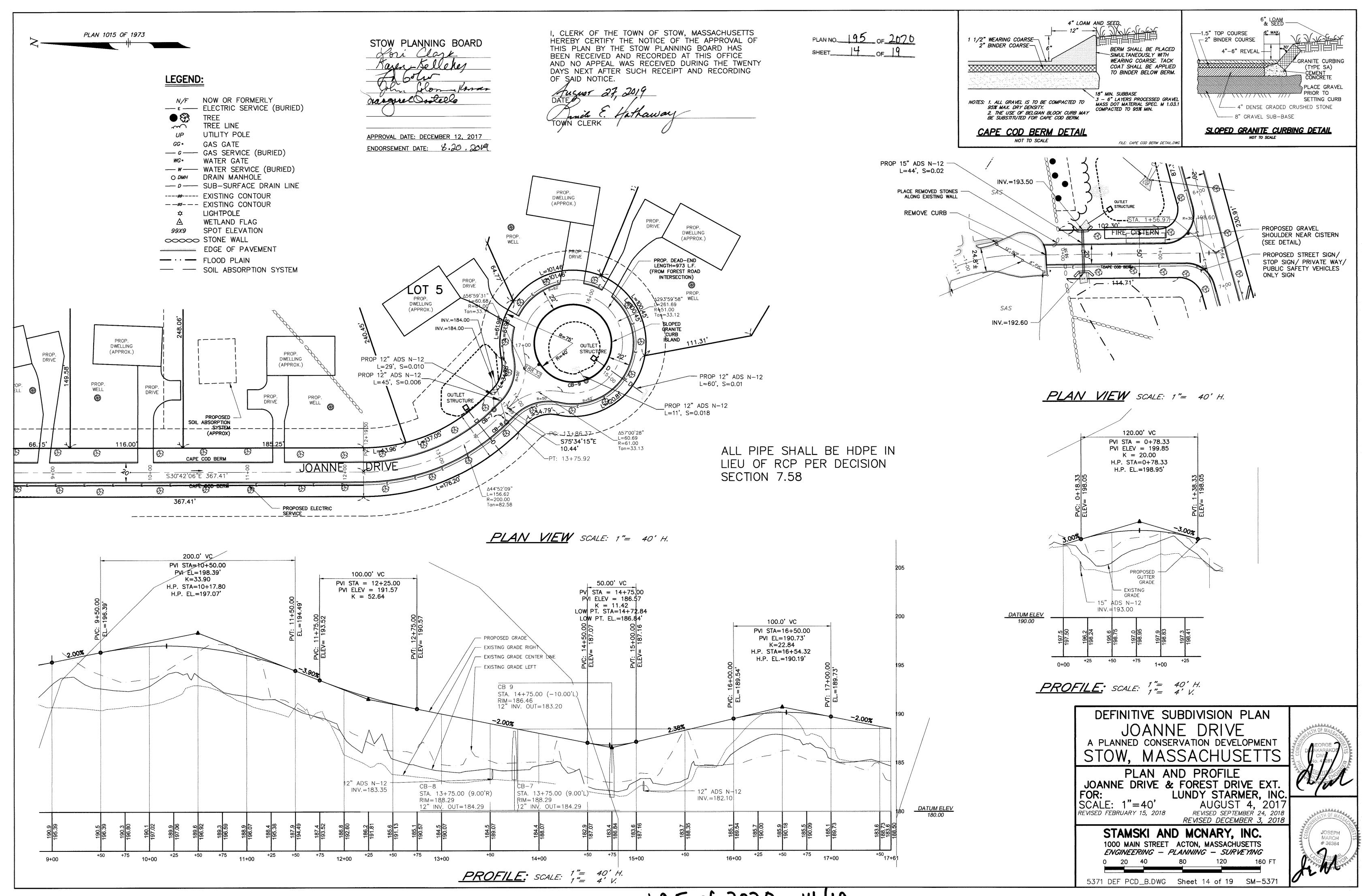












- NO WORK ON THE SITE SHALL BEGIN PRIOR TO THE ENDORSEMENT AND RECORDING OF THE PLAN. A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED WITH THE TOWN OF STOW ENGINEERING CONSULTANT. WRITTEN NOTICE SHALL BE SENT BY CERTIFIED MAIL TO THE TOWN OF STOW PLANNING BOARD ADVISING
- THE BOARD THAT CONSTRUCTION WITHIN AN APPROVED SUBDIVISION SHALL COMMENCE NOT SOONER THAN (7) DAYS FROM THE DATE THAT SUCH NOTICE IS MAILED TO THE BOARD. SUCH NOTICE SHALL BE SIGNED BY THE APPLICANT, SUBDIVIDER, DEVELOPER, OR OTHER AUTHORIZED REPRESENTATIVE OF THE RECORD
- 4. ALL UNDERGROUND UTILITIES SHOWN HERE WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED BEFORE EXCAVATING, BLASTING, INSTALLING, BACK FILLING, GRADING OR PAVEMENT RESTORATION OR REPAIR. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST BE CONTACTED, INCLUDING THOSE IN CONTROL OF UTILITIES. SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE PLANNING FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. THE CONTRACTOR SHALL NOTIFY PUBLIC UTILITIES COMPANIES, IN WRITING, AT LEAST 72 HOURS PRIOR TO
- DIGGING OR EXCAVATING ON PUBLIC OR PRIVATE PROPERTY. DIG SAFE TEL. NO. 1-888-344-7233 5. ALL SUPPLEMENTARY DATA SUBMITTED UNDER THE [SUBDIVISION] RULES ARE AN INTEGRAL PART OF THE DEFINITIVE PLAN AND THAT NONCOMPLIANCE WITH THE PLAN AND PROFILES, UTILITIES, LAYOUTS, AND RESTRICTIVE COVENANTS WILL VOID THE APPROVAL STATUS; UNLESS, A WAIVER IS SPECIFICALLY APPROVED
- BY THE [PLANNING] BOARD IN WRITING. UNLESS OTHERWISE SPECIFIED ON THESE PLANS, ALL CONSTRUCTION METHODS AND MATERIALS SHALL COMPLY WITH SPECIFICATIONS OUTLINED IN THE TOWN OF STOW SUBDIVISION RULES AND REGULATIONS AS MOST RECENTLY AMENDED PRIOR TO THIS PLAN, EXCEPT AS WAIVED. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE TERMS OF THIS APPROVAL, AND SHALL CONFORM WITH AND BE LIMITED TO THE
- IMPROVEMENTS SHOWN ON THE ENDORSED PLAN. UNLESS OTHERWISE SPECIFIED ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO MASS. DOT STANDARD DETAILS AND SPECIFICATIONS AS AMENDED.

- THE LIMITS OF WORK FOR EACH PHASE SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF
- CONSTRUCTION OR SITE CLEARING. 9. EXCEPT DURING THE PERIOD OF INITIAL CLEARING AND GRUBBING, NO CONSTRUCTION OR CONTRACTOR'S VEHICLES SHALL BE PARKED ON PUBLIC STREETS DURING THE ENTIRE TIME OF CONSTRUCTION OF THE PROPOSED SUBDIVISION AND HOMES.
- 10. THE ENTIRE AREA OF THE STREET SHALL BE CLEARED OF ALL
- TREES, STUMPS, BRUSH, ROOTS, BOULDERS, AND LIKE MATERIAL
- ALL TREE STUMPS AND CONSTRUCTION DEBRIS SHALL BE PROPERLY REMOVED FROM THE SITE. 12. ALL LOAM AND OTHER YIELDING MATERIAL SHALL BE REMOVED FROM THE ROADWAY AREA OF THE STREET
- AND REPLACED WITH SUITABLE MATERIAL. PROVISIONS SHALL BE MADE FOR DUST CONTROL. 13. ANY FILL MATERIAL USED SHALL BE FREE OF HAZARDOUS MATERIALS AND CONSTRUCTION DEBRIS.
- 14. TRANSPORTATION OF FILL OR EARTH OR CONSTRUCTION DEBRIS TO OR FROM THE SITE SHALL BE RESTRICTED TO DAYTIME HOURS (7 AM TO 4 PM) MONDAY THROUGH FRIDAY. CONSTRUCTION VEHICLES ARE PROHIBITED
- 14A. EXTERIOR CONSTRUCTION ACTIVITY SHALL TAKE PLACE ONLY BETWEEN THE HOURS OF 7:00 A.M. AND 5:00 P.M., MONDAY THROUGH FRIDAY, AND 8:00 A.M. TO 12:00 P.M. SATURDAYS, UNLESS SPECIFIC APPROVAL IS
- 15. ALL TREES WITHIN THE RIGHT-OF-WAY SHALL BE REMOVED AND STREET TREES SHALL BE PROVIDED. THE PROPOSED LIMITS OF CLEARING, HOUSE LOCATIONS, AND SEPTIC SYSTEM LOCATIONS ON THE PROPOSED LOTS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY AND MAY BE SUBJECT TO CHANGE. THE HOUSE LOCATIONS MAY VARY FROM WHAT IS SHOWN ON THE PLAN WITHIN THE APPROVED SETBACKS.
- 16. STREET AND STOP SIGNS ONLY SHALL BE ERECTED AT INTERSECTION WITH JOANNE DRIVE AND FOREST ROAD. A SIGN "PRIVATE WAY" SHALL REMAIN UNTIL ACCEPTANCE BY THE TOWN OF STOW.
- 16A. NO DEBRIS, JUNK, RUBBISH, OR OTHER NON BIODEGRADABLE WASTE MATERIALS SHALL BE BURIED ON ANY LAND IN THE SUBDIVISION OR LEFT ON ANY LOT OR ON THE STREET RIGHT-OF-WAY, AND REMOVAL OF SAME SHALL BE REQUIRED PRIOR TO FINAL RELEASE OF ANY COVENANTS OF SECURITY. BURIAL OF BIODEGRADABLE MATERIALS ON THE SITE SHALL BE SUBJECT TO APPROVAL OF THE BOARD OF HEALTH. THE BURIAL LOCATIONS AND DESCRIPTION OF BURIED MATERIALS SHALL BE NOTED ON THE AS-BUILT PLAN.
- STREET AND RIGHT-OF-WAY 17. ALL STREET MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH THE CURRENT EDITION OF "MASSACHUSETTS HIGHWAY DEPARTMENT, STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES" AND THE APPLICABLE STANDARD CROSS SECTIONS.
- 18. CLEARING AND GRUBBING OF RIGHT-OF-WAY ALL TREES NOT INTENDED FOR PRESERVATION, BRUSH, STUMPS, ROOTS, BOULDERS, AND LIKE MATERIALS SHALL BE REMOVED FROM THE FULL LENGTH AND WIDTH OF THE STREET RIGHT-OF-WAY.
- 19. LOAM AND OTHER YIELDING MATERIAL ALL LOAM OR OTHER YIELDING MATERIAL SHALL BE REMOVED FROM THE ENTIRE LENGTH AND WIDTH OF THE STREET RIGHT-OF-WAY AND REPLACED WITH SUITABLE MATERIAL PROVISIONS SHALL BE MADE FOR DUST CONTROL.
- 20. FINISH GRADE ALL STREETS SHALL BE BROUGHT TO FINISH GRADE AS SHOWN ON THE PROFILES OF THE DEFINITIVE PLAN WITH AT LEAST THE TOP TWELVE (12) INCHES CONSISTING OF TWO (2) FOUR INCH (4") LAYERS OF WELL-DRAINED GRAVEL MEETING MHD 1.03.0, UNDER A FOUR INCH (4") LAYER OF DENSE GRADED BASE MEETING MHD M.2.01.7 COMPACTED THICKNESS ONE FOOT WIDER ON EACH SIDE THAN THE REQUIRED PAVEMENT AND TO BE LOCATED WITHIN THE RIGHT-OF-WAY AS SHOWN ON THE PLAN.

### PAVEMENT:

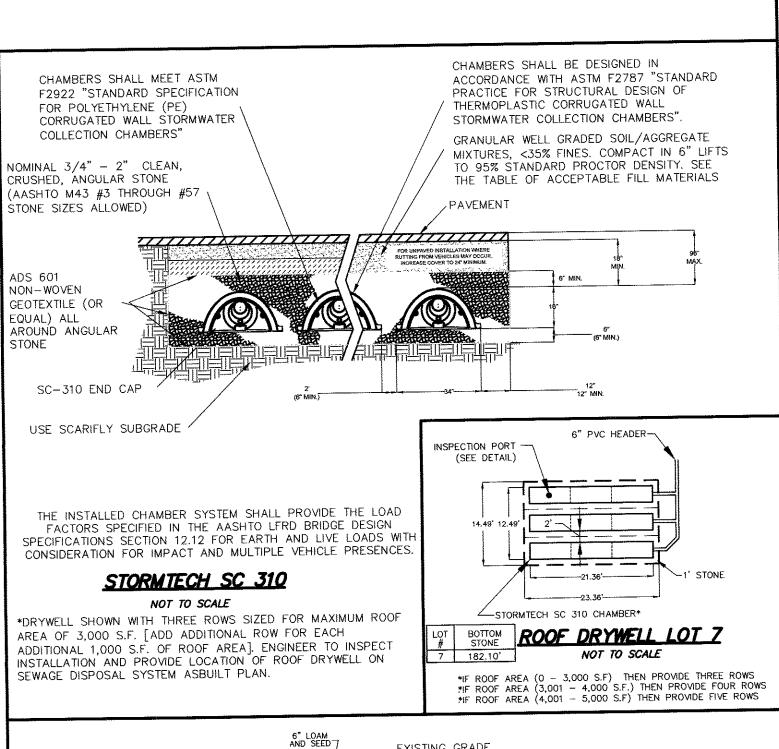
- 21. A BINDER COURSE OF CLASS I, TYPE 1, BITUMINOUS CONCRETE PAVEMENT WITH A ROLLED DEPTH OF TWO
- INCHES (2") APPLIED IN ONE COURSE, SHALL BE INSTALLED OVER THE GRAVEL BASE. 22. THE BINDER COURSE SHALL BE EXPOSED TO ONE WINTER SEASON PRIOR TO THE APPLICATION OF THE
- WEARING SURFACE WITH CATCH BASIN AND MANHOLE RIMS SET TO BINDER GRADE. 23. PRIOR TO INSTALLATION OF THE WEARING SURFACE, THE BINDER SHALL BE SWEPT CLEAN, DRIED IF NECESSARY, AND TREATED WITH AN ASPHALT EMULSION OR TACK COAT TO ENSURE A SATISFACTORY BOND
- BETWEEN PAVEMENT COURSES. RIMS SHALL ALSO BE RESET FROM BINDER GRADE TO FINISH GRADE. 24. THE BINDER COURSE SHALL BE TREATED FOR THE FULL WIDTH OF THE ROADWAY WITH A WEARING SURFACE OF ONE AND ONE HALF (1-1/2") INCHES OF CLASS I, TYPE 1, BITUMINOUS CONCRETE PAVEMENT APPLIED IN IN ONE COURSE IN ORDER TO MINIMIZE DAMAGE TO THE WEARING SURFACE, THE WEARING COURSE SHALL NOT BE APPLIED UNTIL ALL CONSTRUCTION ON LOTS SERVED BY THE SUBDIVISION STREETS IS IN THE
- OPINION OF THE BOARD COMPLETED OR SUBSTANTIALLY COMPLETED. 25. FOLLOWING THE INSTALLATION OF THE WEARING SURFACE, NO EXCAVATIONS SHALL BE PERMITTED IN THE ROAD SURFACE FOR A PERIOD OF FIVE (5) YEARS EXCEPT IN EMERGENCY CASES. ANY SUCH EXCAVATION SHALL BE REPAIRED WITH INFRARED PATCHING EQUIPMENT OR OTHER METHOD APPROVED BY THE BOARD. 25A. NO PAVING SHALL TAKE PLACE FROM NOVEMBER 15TH TO MARCH 15TH OF ANY YEAR WITHOUT PRIOR
- PLANNING BOARD APPROVAL. 26. ALL UTILITIES INCLUDING SERVICES TO THE STREET LINE OR PROPERTY LINE SHALL BE INSTALLED, UPON COMPLETION OF THE SUBGRADE AND PRIOR TO THE PLACEMENT OF GRAVEL. ALL UTILITY LINES SHALL BE INSTALLED UNDERGROUND. DESIGN AND LOCATION OF UTILITIES MUST BE APPROVED BY EACH PERTINENT
- 26A. THE FIRE CISTERN DESIGNATED TO SERVE THE PROPOSED ROAD SHALL BE FULLY OPERATIONAL AND TESTED PRIOR TO OCCUPANCY OF THE FIRST HOUSE ON THAT RESPECTIVE ROAD OR PHASE.
- 27. STREET MONUMENTS SHALL BE INSTALLED AT ALL STREET INTERSECTIONS, AT ALL POINTS OF CHANGE IN DIRECTION OR CURVATURE OF STREETS. SUCH MONUMENTS SHALL BE OF GRANITE, SIX (6) INCHES SQUARE BY FOUR FEET (4') LONG AND SHALL BE SET FLUSH WITH THE FINISHED GRADE. NO PERMANENT MONUMENTS SHALL BE INSTALLED UNTIL ALL CONSTRUCTION WHICH WOULD DISTURB OR DESTROY THE MONUMENTS IS COMPLETED. OPEN LAND MONUMENTS SHALL BE SET WITH A TWELVE INCH (12") REVEAL AT ALL
- 28. PLACEMENT AND LOCATION OF ALL MONUMENTS SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR AFTER INSTALLATION OF THE STREET, AND SHALL BE SHOWN ON THE AS-BUILT PLAN.
- 29. WHEN A DRIVEWAY MEETS THE STREET, THERE SHALL BE A PAVED AREA OF AT LEAST TWELVE FEET (12') EXTENDING FROM THE EDGE OF THE PUBLIC WAY OF NOT LESS THAN TWO INCHES (2") OF BITUMINOUS CONCRETE TO PREVENT UNSTABLE DRIVEWAY MATERIAL FROM WASHING OUT ONTO THE STREET. A LIP OF NOT LESS THAN TWO INCHES (2") SHALL BE CONSTRUCTED AT THE EDGE OF THE DRIVEWAY TO FACILITATE DRAINAGE ALONG THE DRIVEWAY.
- 30. A CONTINUOUS CAPE COD BERM SHALL BE PROVIDED AS AN INTEGRAL PART OF ALL NEW STREETS AS A MINIMUM. THE BOARD MAY REQUIRE ALTERNATE CURB MATERIALS DEPENDING ON LOCAL CONDITIONS AND THE PURPOSE OF THE CURB.
- 31. SLOPED GRANITE CURBS, TYPE SA AS DEFINED IN SECTION M9.04.2 OF THE MASS. D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SHALL BE REQUIRED AS FOLLOWS: AT THE POINT OF INTERSECTION WITH THE EXISTING ROAD AND AT INTERSECTIONS ALONG THE ROADWAY FOR THE DISTANCE OF THE ARCS OF THE CURVE PLUS A STRAIGHT SECTION AT EACH END OF AT LEAST EIGHT FEET (8') IN LENGTH, AND SURROUNDING STREET ISLANDS OR CHOKERS WITHIN STREETS INCLUDING LANDSCAPED ISLANDS IN CUL-DE-SAC STREETS. AT INTERSECTION WITH AN EXISTING ROADWAY, THE CURBING SHALL BE SET BACK 2' FROM THE EXISTING EDGE OF PAVEMENT TO PREVENT PLOW DAMAGE.
- 32. SEE DETAILS FOR "CAPE COD BERM" AND "SLOPED GRANITE CURB"

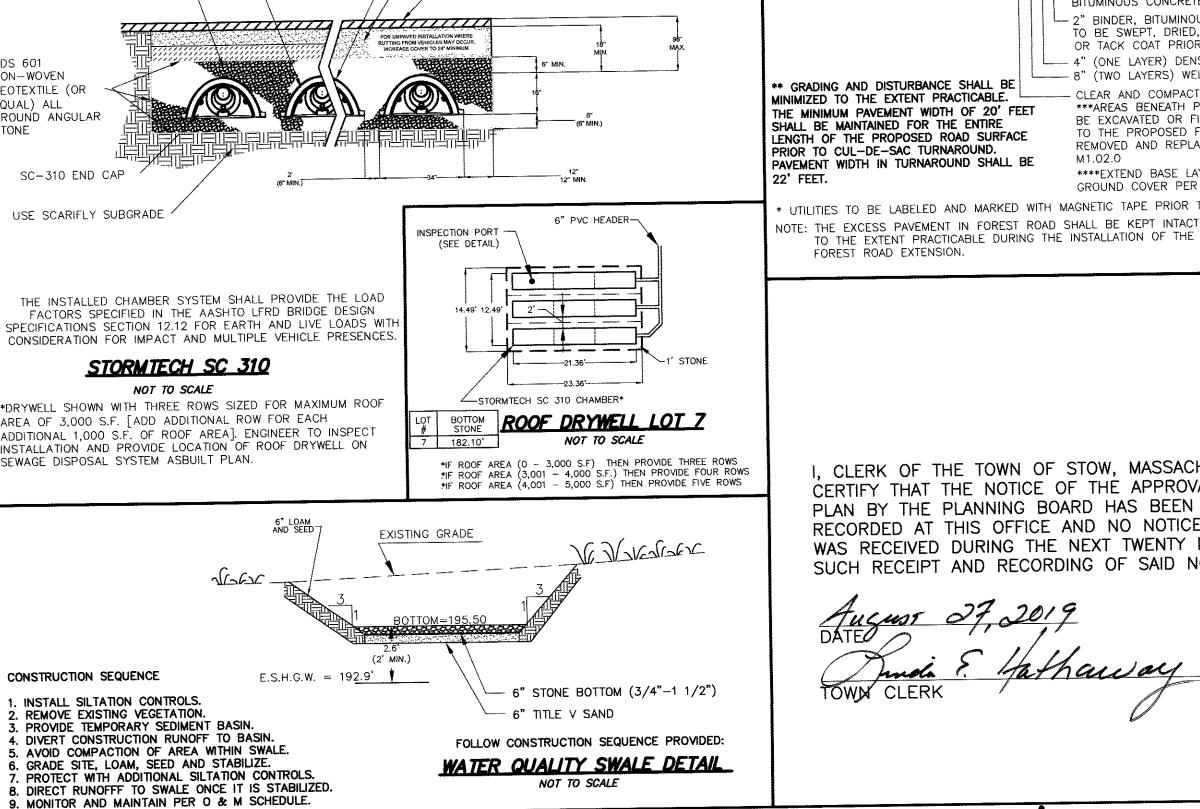
### DRAINAGE SYSTEM NOTES:

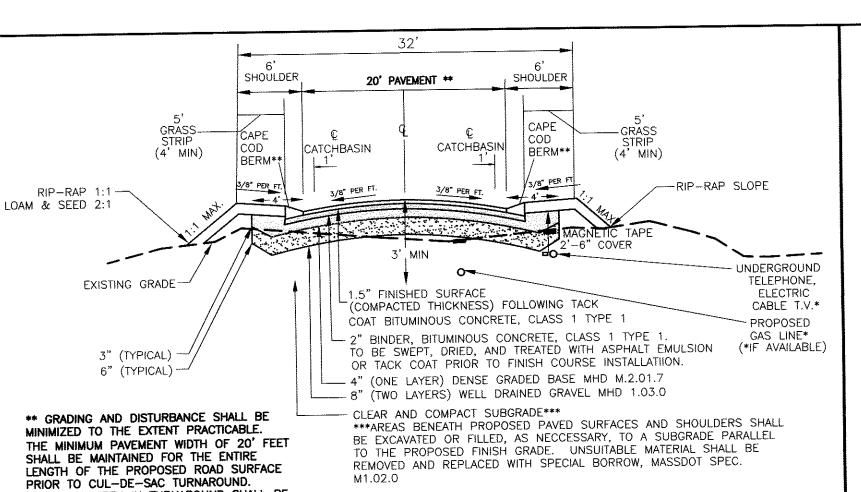
- 33. RIP RAP SHALL CONSIST OF HARD DURABLE STONE, ANGULAR IN SHAPE, THAT IS WELL GRADED WITHIN THE 25# TO 125# RANGE. THE RIP RAP SHALL BE PLACED OVER A 12" BASE OF COARSE BANK RUN GRAVEL. FILTER FABRIC SHALL BE PLACED UNDER THE RIP RAP TO PREVENT THE UNDERLYING SOIL FROM WASHING OUT. 34. ALL DRAIN PIPES SHALL BE CLASS III HDPE (PER DECISION SECTION 7.58) PIPE, AS DESCRIBED IN THE MASS.
- HIGHWAY DEPT. STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES. 35. DRAIN PIPES AND RELATED EQUIPMENT, SUCH AS MANHOLES AND CATCH BASINS, SHALL BE CONSTRUCTED
- IN CONFORMITY WITH SPECIFICATIONS OF THE "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES", DEPARTMENT OF PUBLIC WORKS, COMMONWEALTH OF MASSACHUSETTS, 1988, AS AMENDED.
- MAINTENANCE & INSPECTION NOTES: 36. CATCH BASIN SUMPS AND STORM WATER BASINS SHALL BE CLEANED FOLLOWING COMPLETION OF CONSTRUCTION AND IN ACCORDANCE WITH THE OPERATION AND MAINTENANCE PLAN THEREAFTER. REFER TO THE STORM WATER MANAGEMENT HANDBOOK PROVIDED BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 37. THE DEVELOPER SHALL BE DILIGENT IN COMPLYING WITH THE EROSION AND SEDIMENTATION CONTROL PLAN. 38. PRIOR TO THE ACCEPTANCE OF ANY PROPOSED ROADWAYS AS PUBLIC WAYS BY THE TOWN OF STOW, THE RESPONSIBILITY FOR PLOWING AND MAINTENANCE OF ALL STREETS IN THE PROPOSED SUBDIVISION SHALL BE
- THAT OF THE DEVELOPER, OR THE NEW HOMEOWNERS AND NOT THE TOWN OF STOW. 38A. THE APPLICANT SHALL SUBMIT AN "AS-BUILT" PLAN FOR THE ROADS AND APPURTENANT DRAINAGE STRUCTURES PRIOR TO FINAL RELEASE OF THE RESTRICTIVE COVENANT OR SUBSEQUENT PERFORMANCE GUARANTEE.
- 39. FOLLOWING ACCEPTANCE OF THE STREETS, THE TOWN OF STOW MAINTENANCE RESPONSIBILITIES SHALL FOLLOW STANDARD PROCEDURES FOR TOWN STREETS AND WAYS. THEY SHALL BE LIMITED TO THE IMPROVEMENTS LOCATED WITHIN THE STREET LAYOUTS AND ASSOCIATED WITH THEIR FUNCTION AS A STREET AND TO ANY IMPROVEMENTS ASSOCIATED WITH STREET DRAINAGE LOCATED WITHIN DESIGNATED UTILITY EASEMENTS. THE MAINTENANCE OF ALL PRIVATE UTILITIES AND SERVICES LOCATED WITHIN OR OUTSIDE THE STREET LAYOUT OR SAID EASEMENTS AND OF ANY PRIVATE DRAINAGE FACILITIES FEEDING INTO DRAINAGE STRUCTURES WITHIN THE STREET LAYOUTS OR EASEMENTS SHALL NOT BE THE RESPONSIBILITY OF THE TOWN OF STOW. THE RESPONSIBILITY FOR THEIR MAINTENANCE AND RELATED EASEMENTS SHALL BE ASSIGNED TO
- THE BENEFITING LANDOWNERS. 40. IT WILL BE THE SUBDIVIDER'S RESPONSIBILITY TO REQUEST INSPECTION BY AN AUTHORIZED INSPECTOR PROVIDED BY THE STOW PLANNING BOARD AT THE FOLLOWING PROGRESS STEPS, AT A REASONABLE HOUR: (TOWN OF STOW RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, SECTION 10.5.3)
  - SEC 10.5.3.1 FOLLOWING THE INSTALLATION OF ALL UNDERGROUND DRAINAGE UTILITIES, PRIOR TO BACKFILLING. SEC 10.5.3.2 FOLLOWING PREPARATIONS OF THE STREET SUBGRADE AND SHOULDERS. SEC 10.5.3.3 FOLLOWING SPREADING AND COMPACTION OF THE GRAVEL BASE, PRIOR TO APPLICATION OF THE
- BINDER COURSE ON THE STREET. SEC 10.5.3.4 DURING THE APPLICATION OF THE BINDER COURSE ON THE STREET TO ASSURE PROPER DEPTH OF PAVEMENT
- SEC 10.5.3.5 IMMEDIATELY PRIOR TO AND DURING THE APPLICATION AND COMPACTION OF THE SURFACE COURSE
- SEC 10.5.3.6 FOLLOWING THE COMPLETION OF ALL IMPROVEMENTS AND INSTALLATION OF BOUNDS. SEC 10.5.3.7 BEFORE ACCEPTANCE BY THE TOWN AT ANNUAL TOWN MEETING. SEC 10.5.3.8 AT SUCH OTHER INTERVALS AS MAY BE DEEMED NECESSARY TO ASSURE PROPER CONSTRUCTION
- OF IMPROVEMENTS SEC 10.5.3.9 WORK NOT INSPECTED AS REQUIRED HEREIN SHALL BE EXPOSED FOR PROPER INSPECTION.

- 41. STREET LIGHTS SHALL NOT BE REQUIRED WITHIN PROJECT. 42. NO EXTERNAL LIGHTING SHALL SHINE ON ADJACENT PROPERTIES OR TOWARDS ANY STREET IN SUCH A MANNER AS TO CREATE A NUISANCE OR HAZARD. ALL EXTERIOR LIGHTING SHALL COMPLY WITH SECTION 3.8.1.5 OF THE ZONING BYLAW. ALL LIGHT FIXTURES WITH A RATED OUTPUT OF 2,000 LUMENS OR MORE MUST BE FULL CUTOFF FIXTURES.
- 43. A PHOSPHOROUS FERTILIZER RESTRICTION SHALL BE REQUIRED ON ALL LOTS. SAID RESTRICTION SHALL BE NOTED IN THE DEEDS OF THE PROPERTIES CREATED.
- 44. CONSTRUCTION TRAFFIC SHALL BE DIRECTED TOWARDS SUDBURY ROAD.
- 45. FILL SHALL BE COMPATIBLE WITH THE ONSITE SOIL TYPES WITHIN THE SUBDIVISION
- 46. THE MINING OF MATERIAL BENEATH THE STORMWATER BASINS IS PROHIBITED. 47. USE OF PHOSPHORUS MINERALS SHALL BE RESTRICTED DUE TO TMDL LIMITATIONS ASSOCIATED WITH THE ASSABET

48. IN THE EVENT THAT A TRAIL SYSTEM IS PROPOSED ON THE OPEN LAND, THE TRAIL LOCATION AND DESIGN SHALL BE REVIEWED AND APPROVED BY THE STOW CONSERVATION COMMISSION PRIOR TO COMMENCEMENT OF TRAIL CONSTRUCTION.







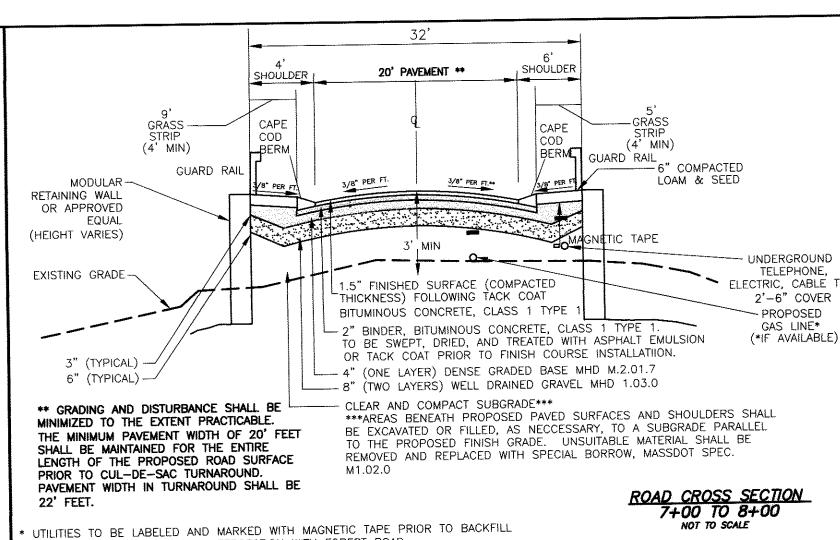
PAVEMENT WIDTH IN TURNAROUND SHALL BE \* UTILITIES TO BE LABELED AND MARKED WITH MAGNETIC TAPE PRIOR TO BACKFILL \*\*SLOPED GRANIT CURBING AT ENTRANCE ROUNDING

STA 0+00 TO 2+75 NOT TO SCALE

SHOULDER

- GRASS STRIP

(4' MIN)



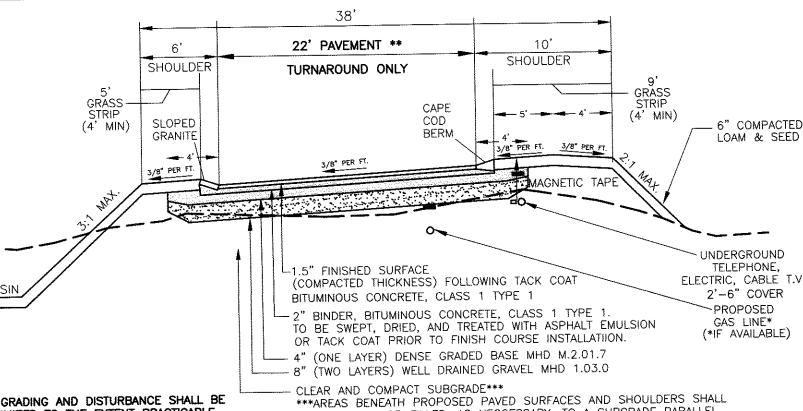
SHOULDER SHOULDER 20' PAVEMENT 1 CATCHBASIN CATCHBASIN BERM LOAM & SEED UNDERGROUND TELEPHONE EXISTING GRADE-5" FINISHED SURFACE (COMPACTED THICKNESS) FOLLOWING TACK COAT BITUMINOUS CONCRETE, CLASS 1 TYPE 1 PROPOSED BINDER, BITUMINOUS CONCRETE, CLASS 1 TYPE 1 (\*IF AVAILABLE) TO BE SWEPT, DRIED, AND TREATED WITH ASPHALT EMULSION OR TACK COAT PRIOR TO FINISH COURSE INSTALLATIION. 6" (TYPICAL) \_\_ 4" (ONE LAYER) DENSE GRADED BASE MHD M.2.01.7 \_\_\_\_\_8" (TWO LAYERS) WELL DRAINED GRAVEL MHD 1.03.0 CLEAR AND COMPACT SUBGRADE\*\*\* \*\* GRADING AND DISTURBANCE SHALL BE \*\*\*AREAS BENEATH PROPOSED PAVED SURFACES AND SHOULDERS SHALL MINIMIZED TO THE EXTENT PRACTICABLE. BE EXCAVATED OR FILLED, AS NECCESSARY, TO A SUBGRADE PARALLEL THE MINIMUM PAVEMENT WIDTH OF 20' FEET TO THE PROPOSED FINISH GRADE. UNSUITABLE MATERIAL SHALL BE SHALL BE MAINTAINED FOR THE ENTIRE REMOVED AND REPLACED WITH SPECIAL BORROW, MASSDOT SPEC. ENGTH OF THE PROPOSED ROAD SURFACE M1.02.0 RIOR TO CUL-DE-SAC TURNAROUND. ROAD CROSS SECTION STA 2+75 TO 7+00 PAVEMENT WIDTH IN TURNAROUND SHALL BE

\*\* GRADING AND DISTURBANCE SHALL BE MINIMIZED TO THE EXTENT PRACTICABLE. THE MINIMUM PAVEMENT WIDTH OF 20' FEET SHALL BE MAINTAINED FOR THE ENTIRE LENGTH OF THE PROPOSED ROAD SURFACE PRIOR TO CUL-DE-SAC TURNAROUND. PAVEMENT WIDTH IN TURNAROUND SHALL BE

\*\*MAINTAIN GUTTERN THROUGH INTERSECTION WITH FOREST ROAD

SHOULDER 20' PAVEMENT \*\* SHOULDER CATCHBASIN ATCHBASIN (4' MIN) LOAM & SEEI UNDERGROU TFI FPHONE EXISTING GRADE -ELECTRIC, CABLE 5" FINISHED SURFACE (COMPACTED THICKNESS) FOLLOWING TACK 2'-6" COVER COAT BITUMINOUS CONCRETE, CLASS 1 TYPE PROPOSED ' BINDER, BITUMINOUS CONCRETE, CLASS 1 TYPE 1 GAS\_LINE\* TO BE SWEPT, DRIED, AND TREATED WITH ASPHALT EMULSION (\*IF AVAILABLE) 3" (TYPICAL) OR TACK COAT PRIOR TO FINISH COURSE INSTALLATIION. 6" (TYPICAL) -\_\_\_\_ 4" (ONE LAYER) DENSE GRADED BASE MHD M.2.01.7 \_\_\_\_\_8" (TWO LAYERS) WELL DRAINED GRAVEL MHD 1.03.0 - CLEAR AND COMPACT SUBGRADE\*\*\* \*\*\*AREAS BENEATH PROPOSED PAVED SURFACES AND SHOULDERS SHALL BE EXCAVATED OR FILLED, AS NECCESSARY, TO A SUBGRADE PARALLEL TO THE PROPOSED FINISH GRADE. UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SPECIAL BORROW, MASSDOT SPEC.

UTILITIES TO BE LABELED AND MARKED WITH MAGNETIC TAPE PRIOR TO BACKFILL \*\*MAINTAIN GUTTERN THROUGH INTERSECTION WITH FOREST ROAD



GRADING AND DISTURBANCE SHALL BE MINIMIZED TO THE EXTENT PRACTICABLE. THE MINIMUM PAVEMENT WIDTH OF 20' FEET SHALL BE MAINTAINED FOR THE ENTIRE LENGTH OF THE PROPOSED ROAD SURFACE PRIOR TO CUL-DE-SAC TURNAROUND. PAVEMENT WIDTH IN TURNAROUND SHALL BE

BE EXCAVATED OR FILLED, AS NECCESSARY, TO A SUBGRADE PARALLEL O THE PROPOSED FINISH GRADE. UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH SPECIAL BORROW, MASSDOT SPEC. м1.02.0 ROAD CROSS SECTION
CULDESAC: STA 14+00 TO 17+89

UTILITIES TO BE LABELED AND MARKED WITH MAGNETIC TAPE PRIOR TO BACKFILL

REVISED FEBRUARY 15, 2018

ROAD CROSS SECTION STA 8+00 TO 14+00

ROAD CROSS SECTION FOREST ROAD EXTENSION

NOT TO SCALE

6" COMPACTED

LOAM & SEED

EXTEND GRAVEL

UNDERGROUND

TELEPHONE.

2'-6" COVER

-PROPOSED

GAS LINE\*

(\*IF AVAILABLE)

ELECTRIC, CABLE T

, CLERK OF THE TOWN OF STOW, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF THE APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE NEXT TWENTY DAYS AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

UTILITIES TO BE LABELED AND MARKED WITH MAGNETIC TAPE PRIOR TO BACKFILL

TO THE EXTENT PRACTICABLE DURING THE INSTALLATION OF THE

\* UTILITIES TO BE LABELED AND MARKED WITH MAGNETIC TAPE PRIOR TO BACKFILL

SHOULDER

BERM

(4' MIN)

GRADING AND DISTURBANCE SHALL BE

THE MINIMUM PAVEMENT WIDTH OF 20' FEET

ENGTH OF THE PROPOSED ROAD SURFACE

MINIMIZED TO THE EXTENT PRACTICABLE.

SHALL BE MAINTAINED FOR THE ENTIRE

FOREST ROAD EXTENSION.

20' PAVEMENT \*\*

.5" FINISHED SURFACE

CAPE COD

COMPACTED THICKNESS) FOLLOWING TACK COAT

BINDER, BITUMINOUS CONCRETE, CLASS 1 TYPE

O BE SWEPT, DRIED, AND TREATED WITH ASPHALT EMULSION

\*\*\*AREAS BENEATH PROPOSED PAVED SURFACES AND SHOULDERS SHALL

GROUND COVER PER DIRECTION OF FIRE CHIEF AT TIME OF INSTALLATION.

BE EXCAVATED OR FILLED, AS NECCESSARY, TO A SUBGRADE PARALLEL

TO THE PROPOSED FINISH GRADE. UNSUITABLE MATERIAL SHALL BE

REMOVED AND REPLACED WITH SPECIAL BORROW, MASSDOT SPEC.

\*\*\*\*EXTEND BASE LAYER UNDER 10' SHOULDER AT FIRE CISTERN.

OR TACK COAT PRIOR TO FINISH COURSE INSTALLATIION.

4" (ONE LAYER) DENSE GRADED BASE MHD M.2.01.7\*\*\*\*

-8" (TWO LAYERS) WELL DRAINED GRAVEL MHD 1.03.0\*\*\*\*

BITUMINOUS CONCRETE, CLASS 1 TYPE 1

CLEAR AND COMPACT SUBGRADE\*\*\*

BERM

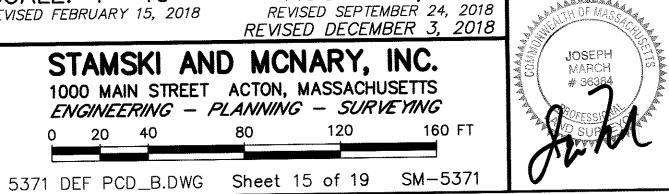
STOW PLANNING BOARD

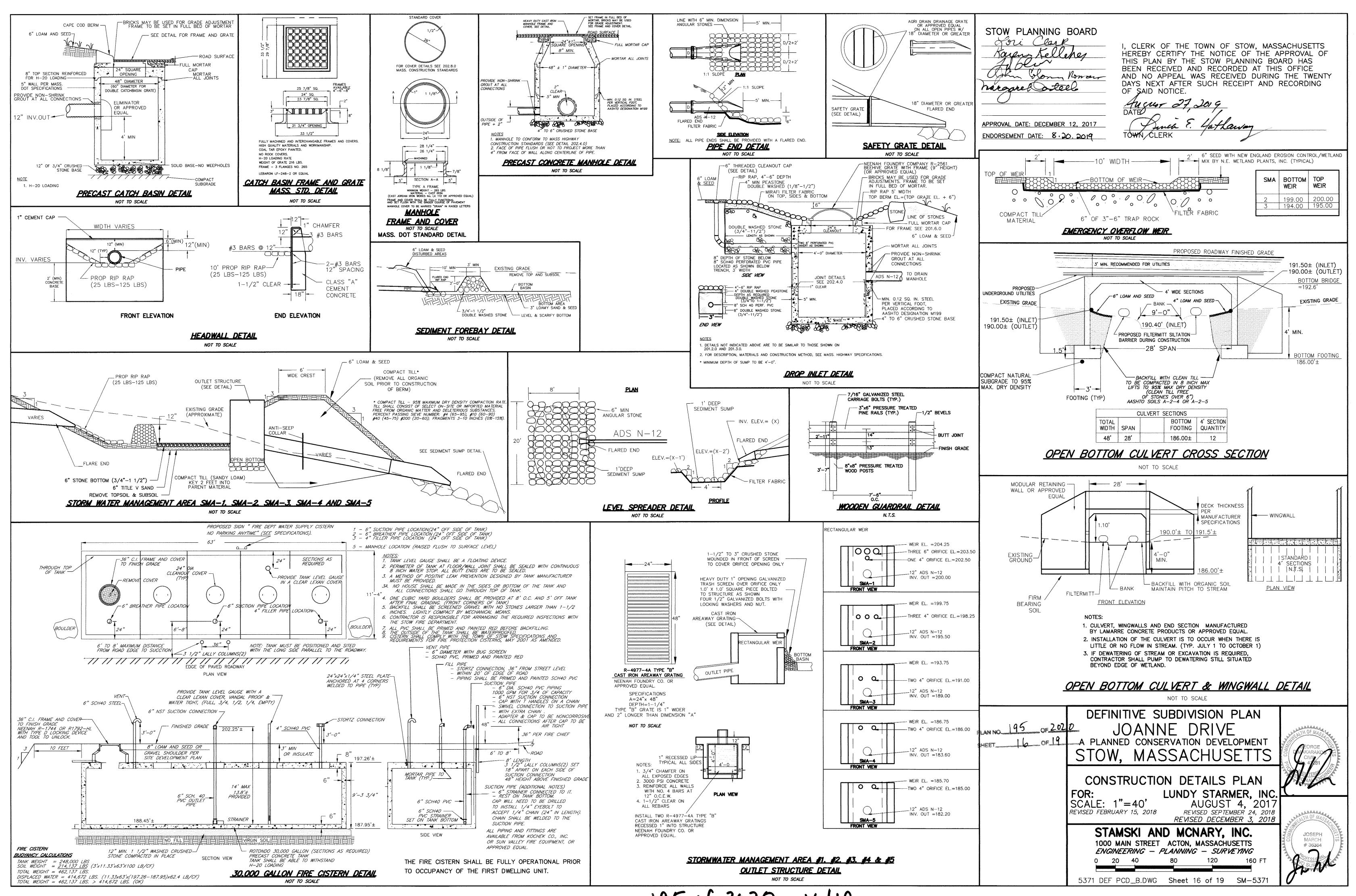
APPROVAL DATE: しんしは、2017 ENDORSEMENT DATE: 8, 20, 2019

DEFINITIVE SUBDIVISION PLAN JOANNE DRIVE A PLANNED CONSERVATION DEVELOPMENT STOW, MASSACHUSET

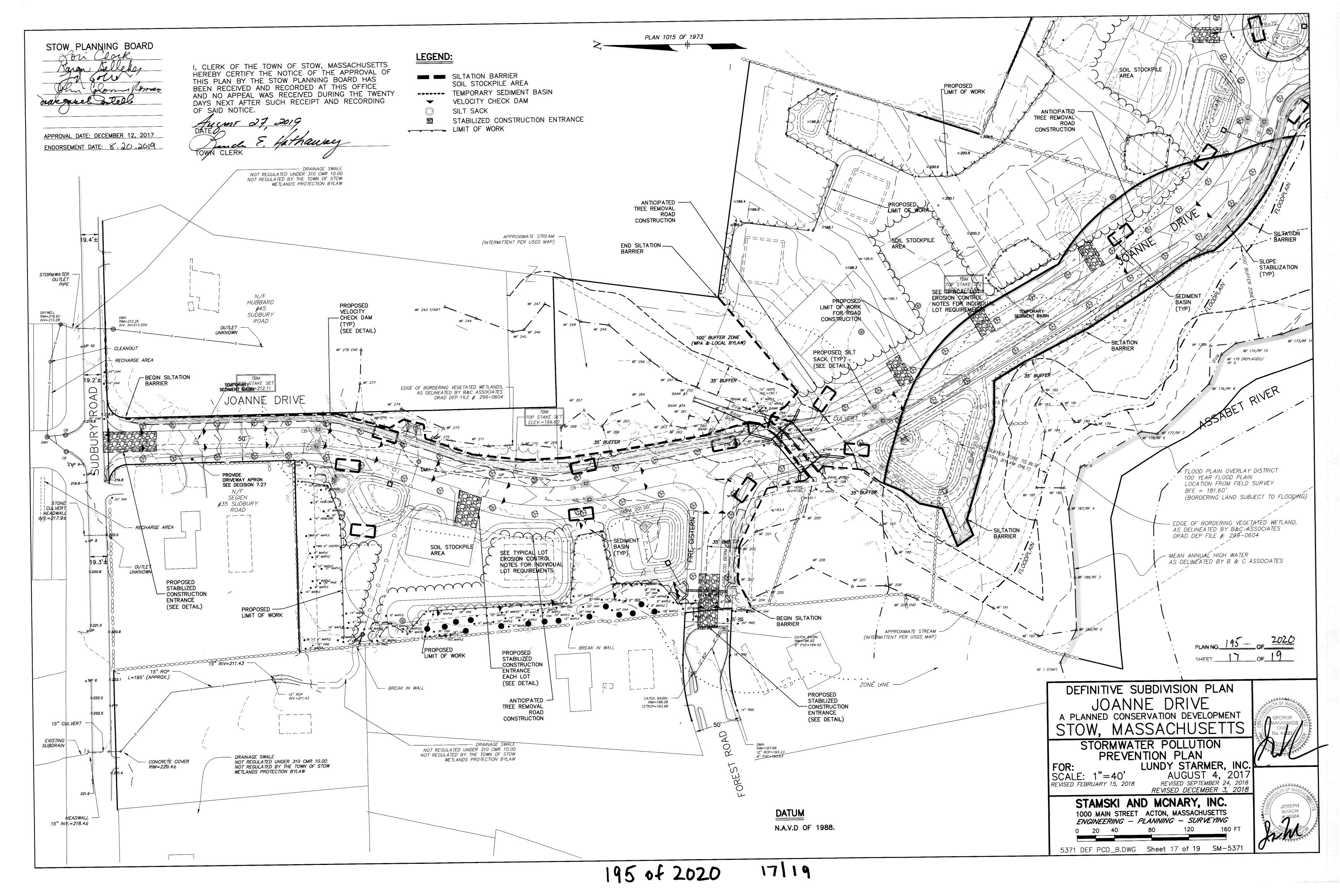
CONSTRUCTION DETAILS PLAN LUNDY STARMER, INC. AUGUST 4, 2017 SCALE: 1"=40' REVISED SEPTEMBER 24, 2018

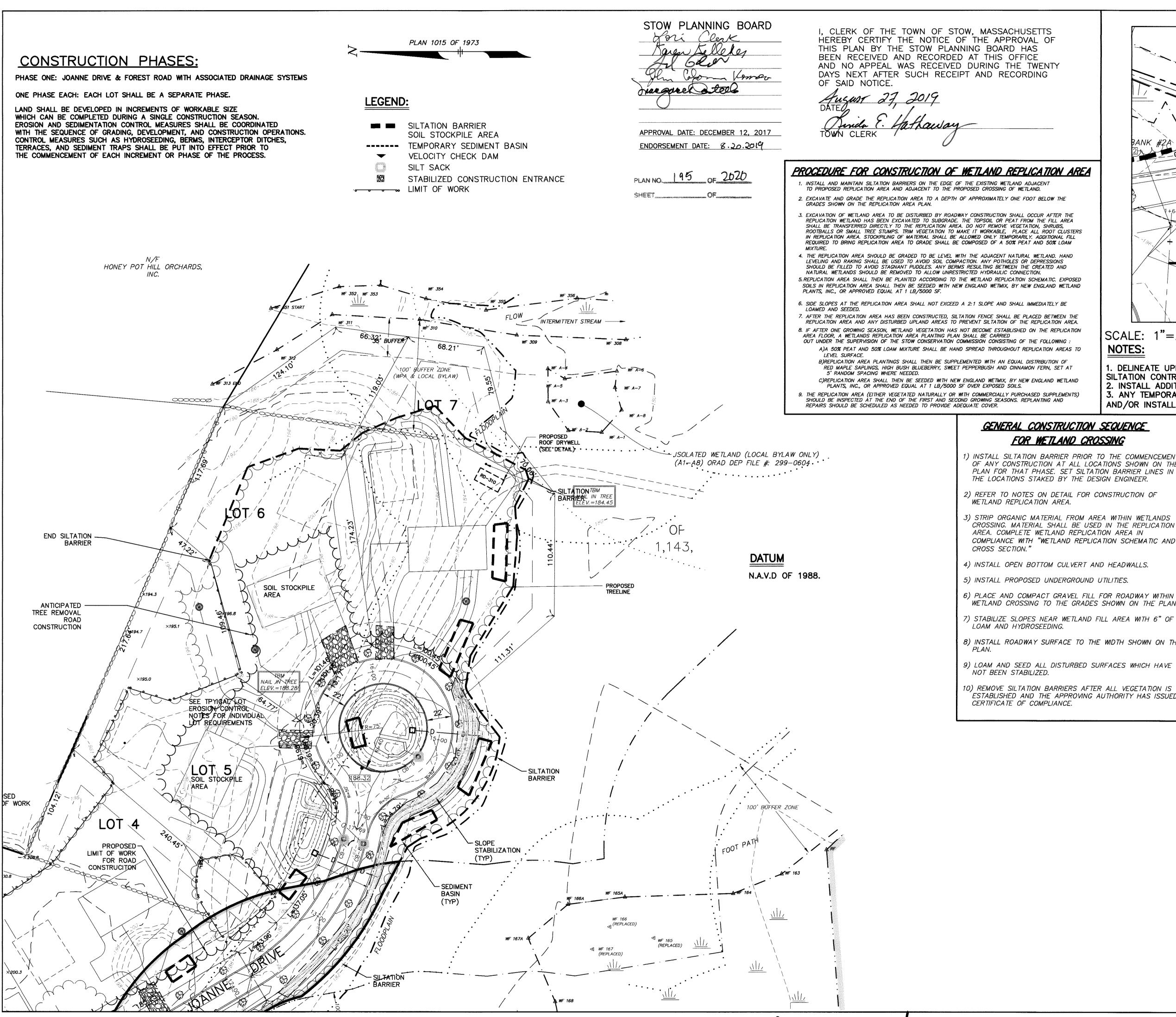
REVISED DECEMBER 3. 2018 1000 MAIN STREET ACTON, MASSACHUSETTS ENGINEERING - PLANNING - SURVEYING 160 FT 20





195 of 2020 16/19





I, CLERK OF THE TOWN OF STOW, MASSACHUSETTS HEREBY CERTIFY THE NOTICE OF THE APPROVAL OF THIS PLAN BY THE STOW PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING

### PROCEDURE FOR CONSTRUCTION OF WETLAND REPLICATION AREA

- 1. INSTALL AND MAINTAIN SILTATION BARRIERS ON THE EDGE OF THE EXISTING WETLAND ADJACENT TO PROPOSED REPLICATION AREA AND ADJACENT TO THE PROPOSED CROSSING OF WETLAND.
- 3. EXCAVATION OF WETLAND AREA TO BE DISTURBED BY ROADWAY CONSTRUCTION SHALL OCCUR AFTER THE REPLICATION WETLAND HAS BEEN EXCAVATED TO SUBGRADE. THE TOPSOIL OR PEAT FROM THE FILL AREA SHALL BE TRANSFERRED DIRECTLY TO THE REPLICATION AREA. DO NOT REMOVE VEGETATION. SHRUBS. ROOTBALLS OR SMALL TREE STUMPS. TRIM VEGETATION TO MAKE IT WORKABLE, PLACE ALL ROOT CLUSTERS IN REPLICATION AREA. STOCKPILING OF MATERIAL SHALL BE ALLOWED ONLY TEMPORARILY. ADDITIONAL FILL REQUIRED TO BRING REPLICATION AREA TO GRADE SHALL BE COMPOSED OF A 50% PEAT AND 50% LOAM
- 4. THE REPLICATION AREA SHOULD BE GRADED TO BE LEVEL WITH THE ADJACENT NATURAL WETLAND. HAND LEVELING AND RAKING SHALL BE USED TO AVOID SOIL COMPACTION. ANY POTHOLES OR DEPRESSIONS SHOULD BE FILLED TO AVOID STAGNANT PUDDLES. ANY BERMS RESULTING BETWEEN THE CREATED AND NATURAL WETLANDS SHOULD BE REMOVED TO ALLOW UNRESTRICTED HYDRAULIC CONNECTION. 5. REPLICATION AREA SHALL THEN BE PLANTED ACCORDING TO THE WETLAND REPLICATION SCHEMATIC. EXPOSED SOILS IN REPLICATION AREA SHALL THEN BE SEEDED WITH NEW ENGLAND WETMIX, BY NEW ENGLAND WETLAND
- 6. SIDE SLOPES AT THE REPLICATION AREA SHALL NOT EXCEED A 2:1 SLOPE AND SHALL IMMEDIATELY BE
- 7. AFTER THE REPLICATION AREA HAS BEEN CONSTRUCTED, SILTATION FENCE SHALL BE PLACED BETWEEN THE REPLICATION AREA AND ANY DISTURBED UPLAND AREAS TO PREVENT SILTATION OF THE REPLICATION AREA.
- 8. IF AFTER ONE GROWING SEASON, WETLAND VEGETATION HAS NOT BECOME ESTABLISHED ON THE REPLICATION AREA FLOOR, A WETLANDS REPLICATION AREA PLANTING PLAN SHALL BE CARRIED OUT UNDER THE SUPERVISION OF THE STOW CONSERVATION COMMISSION CONSISTING OF THE FOLLOWING
  - B)REPLICATION AREA PLANTINGS SHALL THEN BE SUPPLEMENTED WITH AN EQUAL DISTRIBUTION OF RED MAPLE SAPLINGS, HIGH BUSH BLUEBERRY, SWEET PEPPERBUSH AND CINNAMON FERN, SET AT
  - C)REPLICATION AREA SHALL THEN BE SEEDED WITH NEW ENGLAND WETMIX, BY NEW ENGLAND WETLAND
- 9. THE REPLICATION AREA (EITHER VEGETATED NATURALLY OR WITH COMMERCIALLY PURCHASED SUPPLEMENTS) SHOULD BE INSPECTED AT THE END OF THE FIRST AND SECOND GROWING SEASONS. REPLANTING AND REPAIRS SHOULD BE SCHEDULED AS NEEDED TO PROVIDE ADEQUATE COVER.

# 35' BUFFER PROPOSED WETLAND REPLICATION AREA=379 S.F. (126%) (SEE DETAIL) WETLAND FILES AREA=300 S.F. BANK #199A

SCALE: 1"=20' STREAM CROSSING DETAIL **NOTES:** 

. DELINEATE UPLAND EDGE OF BVW/BANK LINE PRIOR TO TREE REMOVAL AND INSTALL

SILTATION CONTROLS ALONG EDGE OF RESOURCE AREA. 2. INSTALL ADDITIONAL TEMPORARY SILTATION CONTROLS WITHIN RESOURCE AREA.

3. ANY TEMPORARY DISTURBANCE TO RESOURCE AREAS RESULTING FROM VEGETATION REMOVAL

AND/OR INSTALLATION OF CULVERT SHALL BE RETURNED TO EXISTING GRADES.

### GENERAL CONSTRUCTION SEQUENCE FOR WETLAND CROSSING

- 1) INSTALL SILTATION BARRIER PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION AT ALL LOCATIONS SHOWN ON THE PLAN FOR THAT PHASE. SET SILTATION BARRIER LINES IN THE LOCATIONS STAKED BY THE DESIGN ENGINEER.
- 2) REFER TO NOTES ON DETAIL FOR CONSTRUCTION OF WETLAND REPLICATION AREA.
- 3) STRIP ORGANIC MATERIAL FROM AREA WITHIN WETLANDS CROSSING. MATERIAL SHALL BE USED IN THE REPLICATION AREA. COMPLETE WETLAND REPLICATION AREA IN COMPLIANCE WITH "WETLAND REPLICATION SCHEMATIC AND CROSS SECTION."
- 4) INSTALL OPEN BOTTOM CULVERT AND HEADWALLS.
- 5) INSTALL PROPOSED UNDERGROUND UTILITIES.
- WETLAND CROSSING TO THE GRADES SHOWN ON THE PLAN.
- 7) STABILIZE SLOPES NEAR WETLAND FILL AREA WITH 6" OF LOAM AND HYDROSEEDING.
- 8) INSTALL ROADWAY SURFACE TO THE WIDTH SHOWN ON THE
- 9) LOAM AND SEED ALL DISTURBED SURFACES WHICH HAVE NOT BEEN STABILIZED.
- 10) REMOVE SILTATION BARRIERS AFTER ALL VEGETATION IS ESTABLISHED AND THE APPROVING AUTHORITY HAS ISSUED CERTIFICATE OF COMPLIANCE.

### TYPICAL LOT EROSION CONTROL NOTES.

. EACH LOT IS SUBJECT TO THE REQUIREMENTS AND COMPLIANCE WITH THE EROSION CONTROL SPECIAL PERMIT REGARDLESS OF ITS LOCATION ON THE SITE. ADDITIONAL CONDITIONS MAY APPLY TO LOTS WITH PROPOSED WORK WITHIN THE BUFFER ZONE OF AN AREA SUBJECT TO PROTECTION BY THE WETLANDS PROTECTION ACT AND/OR THE STOW WETLANDS PROTECTION BYLAW.

2. EACH LOT SHALL COMPLY WITH THE FOLLOWING:

- A. LIMIT OF WORK SHALL BE MARKED ON THE LOT PRIOR TO CLEARING AND CONSTRUCTION. B. STRAWBALE SILTATION BARRIERS SHALL BE INSTALLED IF REQUIRED WITHIN BUFFER ZONE.
- C. SILTATION BARRIER SHALL BE INSTALLED ALONG THE FRONTAGE OF ACTIVE LOTS DURING WINTER. (SEE NOTE 3K) D. SILTATION FENCE SHALL BE INSTALLED ALONG DOWN GRADIENT LIMIT OF WORK LINE.
- E. UPGRADIENT LIMIT OF WORK LINE SHALL BE MARKED WITH FLAGGING. F. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT DRIVEWAY (SEE DETAIL).
- G. A STRAWBALE SILTATION FENCE SHALL BE INSTALLED ALONG DISTURBED STREET FRONTAGE. H. A CRUSHED STONE BERM SHALL BE PROVIDED IF RUNOFF IS CONCENTRATED TOWARDS STREET.
- I. ALL DISTURBED AREAS SHALL RECEIVE 6" OF LOAM AND SHALL BE SEEDED. J. STRAW MULCH OR EROSION MATS SHALL BE USED ALONG SLOPES DURING WINTER K. SEDIMENT SUMPS SHALL BE PROVIDED ON LOT.
- L. SEDIMENT SHALL BE REMOVED FROM ROAD DAILY. M. EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED UNTIL VEGETATION IS ESTABLISHED AND APPROVED.
- WINTER PREPARATION EROSION CONTROL NOTES
- STRAW MULCH ALL UNVEGETATED CUT AND FILL SLOPES OR PROVIDE EROSION CONTROL MATS.
- INSTALL STRAWBALES AND/OR EARTHEN BERMS ALONG TOP OF UNVEGETATED SLOPES TO DIVERT RUNOFF. PROVIDE ADDITIONAL TEMPORARY SEDIMENT SUMPS ALONG BASE OF SLOPES IF AVAILABLE.
- COVER ROAD SHOULDERS (10' WIDTH) WITH EROSION CONTROL MATS. REMOVE ALL EXISTING SEDIMENT FROM CATCH BASINS AND DRAINAGE BASINS TO MAXIMIZE SEDIMENT STORAGE
- PROVIDE ADDITIONAL SEDIMENT FOREBAYS ON LOTS TO MINIMIZE RUNOFF CONCENTRATIONS.
- MAINTAIN EXISTING VEGETATION ON LOTS THROUGH WINTER SEASON. REFRESH ALL EXISTING EXISTING EROSION CONTROL MEASURES.

ALONG FRONTAGE TO LIMIT ACCESS TO THE CONSTRUCTION ENTRANCE

- PROVIDE CRUSHED STONE BERMS UPGRADIENT OF CATCH BASINS (IF PAVED).
- PROVIDE CRUSHED STONE BERMS WITHIN EXISTING SWALES AND SHOULDERS. PRIOR TO ONSET TO OF WINTER ON ACTIVE LOTS, EROSION CONTROLS SHALL BE INSTALLED
- \*APPLY ADDITIONAL CONTROL MEASURES AS DIRECTED BY PLANNING BOARD OR REPRESENTATIVE.

PLAN NO. 195 OF 2020 SHEET 6

DEFINITIVE SUBDIVISION PLAN JOANNE DRIVE A PLANNED CONSERVATION DEVELOPMENT STOW, MASSACHUSE

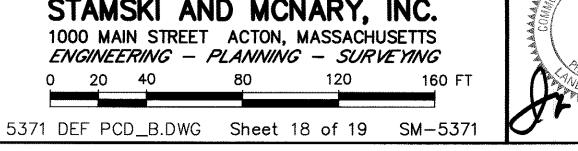
STORMWATER POLLUTION PREVENTION PLAN

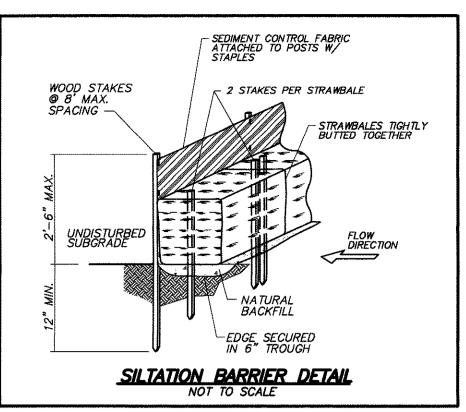
SCALE: 1"=40' REVISED FEBRUARY 15, 2018

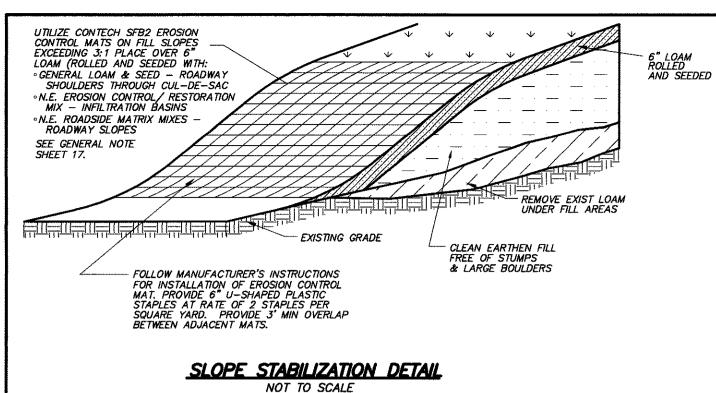
LUNDY STARMER, INC. AUGUST 4, 2017 REVISED SEPTEMBER 24, 2018 REVISED DECEMBER 3, 2018

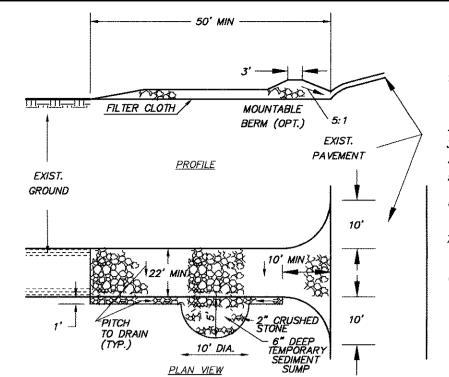
STAMSKI AND MCNARY, INC. 1000 MAIN STREET ACTON, MASSACHUSETTS

ENGINEERING - PLANNING - SURVEYING









Typico (a

EXIST.

PAVEMENT

MOUNTABLE

BERM (OPT.)

FILTER CLOTH

EXIST.

GROUND

### CONSTRUCTION SPECIFICATIONS

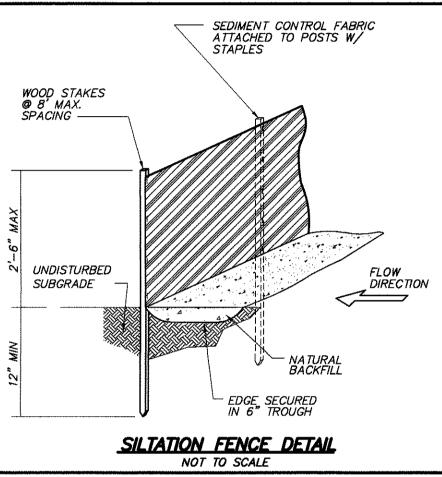
THE ENTRANCE OF THE PROPOSED ROAD SHALL INITIALLY HAVE 6" OF 2" CRUSHED STONE LAID DOWN AS A TRAFFIC SEDIMENT CONTROL SURFACE AS SHOWN IN THE STABILIZED CONSTRUCTION ENTRANCE DETAIL. THIS STONE PACK SHALL BE PLACED OVER THE ROADWAY FOR A MINIMUM DISTANCE OF 50 FEET FROM THE EDGE OF PAVEMENT AND SHALL BE REMOVED AND REPLACED WITH ROADWAY GRAVEL PRIOR TO THE PLACEMENT OF PAVEMENT.

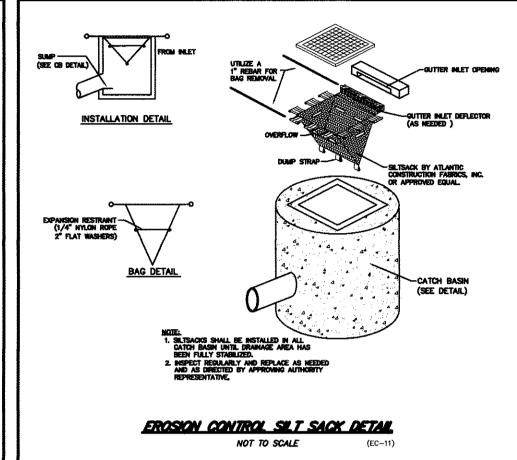
3. WIDTH - TWENTY TWO (22) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS OF INGRESS OR EGRESS. 4. FILTER CLOTH — WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE. 5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED NEAR CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

MAINTENANCE — THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT—OF—WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS WHEN WASHING IS DONE IT SHALL BE DONE ON STABILIZED ENTRANCE WITH STONE AND WHICH DRAINS INTO THE

8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

### STABILIZED CONSTRUCTION ENTRANCE





### <u>CONSTRUCTION SPECIFICATIONS</u>

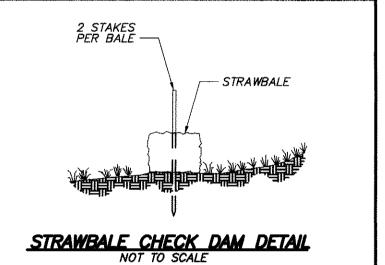
THE ENTRANCE ONTO EACH PROPOSED LOT SHALL INITIALLY HAVE 6" OF 2" CRUSHED STONE LAID DOWN AS A TRAFFIC SEDIMENT CONTROL SURFACE AS SHOWN IN THE INDIVIDUAL LOT STABILIZED CONSTRUCTION ENTRANCE DETAIL. THIS STONE PACK SHALL BE PLACED OVER THE DRIVEWAY LOCATION FOR A MINIMUM DISTANCE OF 50 FEET FROM THE EDGE OF PAVEMENT AND SHALL BE REMOVED AND REPLACED WITH DRIVEWAY GRAVEL PRIOR TO THE PLACEMENT OF PAVEMENT.

3. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS OF INGRESS OR EGRESS.

4. FILTER CLOTH — WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO THE PLACEMENT OF STONE. 5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED NEAR CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED. 6. MAINTENANCE — THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PROPOSED ROAD. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

7. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

### INDIVIDUAL LOT STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

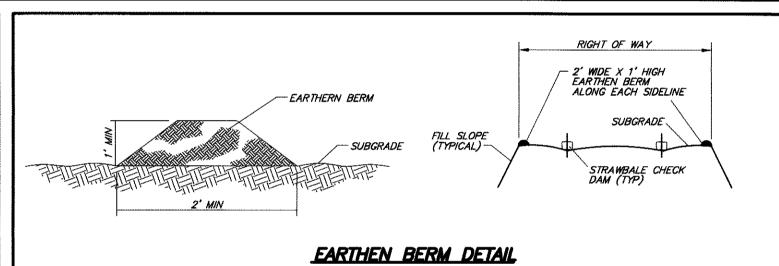


PLAN VIEW

W X

10' DIA.

2" CRUSHED STONE



NOT TO SCALE

### Street Trees and other Vegetation:

Deciduous shade street trees shall be planted approximately 10 feet from the street sideline where trees are lacking. Where there is a sidewalk provided in the street layout, the street trees—shall be planted in the green strip that is provided between the edge of pavement and the sidewalk. Trees shall be planted on both sides of the street at not more than 40 foot intervals along the entire length of the subdivision roads.

A. Species — The species of street trees shall be selected from deciduous shade trees of Zone 4 hardiness and shall be of licensed nursery stock with good root development and branching characteristics. Existing trees may be preserved as street trees if inspected and approved by the Stow Tree Warden.

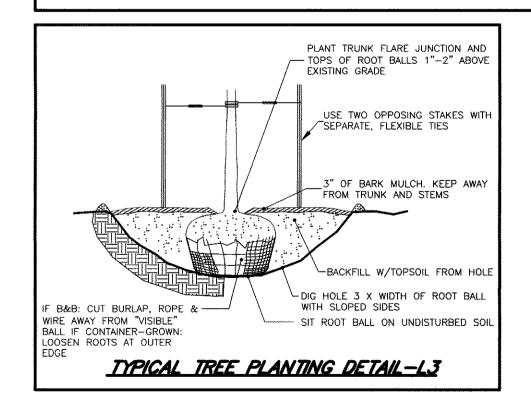
**B.** Size — Street trees shall be a minimum of two and one-half inches (2 1/2) in caliper measured four feet (4') above the ground, and shall be ten (10') to twelve feet (12') of height in place.

C. Planting — Street trees shall be planted at their previous depth in good quality topsoil and shall be securely staked.

D. Slopes — All cut and fill slopes within or contiguous to the street right—of—way shall be planted with suitable, well-rooted, low growing plant materials as determined by the Board. Wood chips, mulch, seeding or sodding shall be used to eliminate erosion. The Board may require alternative measures, appropriate in the opinion of the Board, for slopes equal to or greater than 3:1.

E. Cleared Areas - All cleared areas of the street right-of-way, not to be planted with groundcover, and all disturbed area within public easements, shall be loamed with not less than six inches (6") compacted depth of good quality loam and seeded with turf grass seed in accordance with good planting practice.

### LANDSCAPING DETAILS-L1



### **GENERAL NOTE:**

-GENERAL LOAM AND SEED: SEED MIX TO BE LOCATED WITHIN ROADWAY SHOULDERS THROUGH THE CUL-DE-SACS, AND TO CONFORM TO THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, SECTION M6.03.0 SEED. -NEW ENGLAND EROSION CONTROL/RESTORATION MIX: SEED MIX TO BE LOCATED WITHIN

THE BOTTOM AND SIDE SLOPES OF THE INFILTRATION BASINS, AS SUPPLIED BY NEW ENGLAND WETLAND PLANTS, INC., OR APPROVED EQUAL. SEED MIX TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.

-NEW ENGLAND ROADSIDE MATRIX MIX: SEED MIX TO BE LOCATED ON ROADWAY SIDE SLOPES, AS SUPPLIED BY NEW ENGLAND WETLAND PLANTS, INC., OR APPROVED EQUAL. SEED MIX TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.

### POLLUTTION PREVENTION STANDARDS

- 1. ALL CONSTRUCTION AND DOMESTIC WASTE SHALL BE DISPOSED OFOFFSITE AT AN APPROVED LOCATION. WASTE CONTAINERS SHALL BE PROVIDED AT THE START OF CONSTRUCTION. ON WORK DAYS, CLEAN UP AND DISPOSE OF WASTE IN DESIGNATED WASTE CONTAINERS. ANY OVERFLOW SHALL BE CLEANED UP IMMEDIATELY.
- 2. PORTABLE TOILETS SHALL BE LOCATED ON SECURE GROUND IN AN AREA NOT PRONE TO FLIPPING OR BEING KNOCKED OVER.
- 3. ALL CONCRETE AND OTHER MATERIAL WASTEWATER MUST BE DIRECTED INTO LEAK-PROOF CONTAINERS. DO NOT DUMP LIQUID WASTE INTO STORM DRAINS. DISPOSE OF WASTE PROPERLY. LOCATE ALL WASHOUT AREAS AS FAR FROM ANY SURFACE WATERS AND STORMWATER INLETS AS POSSIBLE. (SEE NOTE 4)
- 4. ALL AMENITIES SHALL BE LOCATED PRIOR TO THE START OF EACH PHASE OF CONSTRUCTION. ALL AMENITIES SHALL BE LOCATED OUTSIDE OF ANY BUFFER ZONES OR RIVERFRONT AREA.

STOW PLANNING BOARD 1/Omala

APPROVAL DATE: 12, 12, 2017 ENDORSEMENT DATE: 8. 20. 20 9

I, CLERK OF THE TOWN OF STOW, MASSACHUSETTS HEREBY CERTIFY THE NOTICE OF THE APPROVAL OF THIS PLAN BY THE STOW PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

PLAN VIEW

FRONT MEW

DEWATERING STILL DETAIL

H DEWATERING STILL SHALL BE INSTALLED WHEREVER NATER IS ENCOUNTERED SO AS TO PROVIDE AN AREA FO

## EROSION AND SEDIMENTATION CONTROL NOTES

- THE SITE IS SUBJECT TO THE PERMIT REQUIREMENTS OF THE EPA NPDES PROGRAM. THE DEVELOPER SHALL SUBMIT COPIES OF SAID PERMIT AND REPORTING REQUIREMENTS TO THE PLANNING BOARD AS A CONDITION OF THE EROSION CONTROL SPECIAL PERMIT ISSUED BY THE PLANNING BOARD. DEVELOPER SHALL COMPLY WITH ANY ADDITIONAL EROSION CONTROL MEASURES IDENTIFIED BY THE NPDES PROGRAM NOT INDICATED ON THIS PLAN, IF THEY SO EXIST.
- 1A. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED FOR EACH PHASE PRIOR TO ANY CONSTRUCTION OCCURRING ON SITE.
- 2. DURING DEVELOPMENT AND CONSTRUCTION, ADEQUATE PROTECTIVE MEASURES SHALL BE PROVIDED TO MINIMIZE DAMAGE FROM SURFACE WATER TO THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACE OF FILLS. THE PLANNING BOARD RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES IF PROBLEMS ARE NOTED BY A REPRESENTATIVE OF THE TOWN OR APPOINTED CONSULTANT.
- 3. LAND SHALL BE DEVELOPED IN INCREMENTS OF WORKABLE SIZE WHICH CAN BE COMPLETED DURING A SINGLE CONSTRUCTION SEASON. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH THE SEQUENCE OF TRADING, DEVELOPMENT, AND CONSTRUCTION, OPERATIONS. CONTROL MEASURES SUCH AS HYDROSEEDING, BERMS, INTERCEPTOR DITCHES, TERRACES, AND SEDIMENT TRAPS SHALL BE PUT INTO EFFECT PRIOR TO THE COMMENCEMENT OF EACH INCREMENT OF THE DEVELOPMENT/CONSTRUCTION PROCESS.
- THE CONTRACTOR'S INSPECT AND REPAIR ALL EROSION CONTROL DEVICES. IF INTENSE RAINFALL IS PREDICTED. THE CONTRACTOR'S REPRESENTATIVE SHALL INSPECT THE CONSTRUCTION SITE AT LEAST EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5 INCHES OR MORE. AREAS WITH SITES THAT HAVE BEEN FINALLY STABILIZED MUST BE INSPECTED AT LEAST ONCE A MONTH.
- ALL SOIL STOCK PILES SHALL HAVE EROSION CONTROL MEASURES AROUND THEIR EDGES AT ALL TIMES. SOIL STOCK PILES SHALL BE COVERED WITH TEMPORARY VEGETATION OR FASTENED TARPAULIN SHEETS.
- DURING ROAD CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A ONE FOOT HIGH BY TWO FOOT WIDE EARTHEN BERM ALONG THE EDGES OF THE ROADWAY TO DIVERT RUNOFF TO A SEDIMENT BASIN. STRAWBALES MAY BE UTILIZED TO DIVERT RUNOFF FROM THE ROADWAY LOW POINTS TO THE SEDIMENT BASIN DURING CONSTRUCTION UNTIL THE DRAINAGE SYSTEM IS INSTALLED (SEE EARTHEN BERM DETAIL.)
- ALL CATCH BASIN AND MANHOLE RIMS SHALL BE COVERED WITH SILTATION FABRIC DURING CONSTRUCTION. CATCH BASIN GRATES ARE TO BE SET AT BINDER GRADE UNTIL IT IS TIME TO APPLY THE PAVEMENT WEARING COURSE.
- ALL CATCH BASIN SUMPS AND DRAINAGE BASINS SHALL BE CLEANED DURING AND FOLLOWING CONSTRUCTION. THEREAFTER REFER TO OPERATION AND MAINTENANCE PLAN FILED WITH NOTICE OF INTENT.
- SEDIMENT BASINS (DEBRIS, BASINS, DE-SILTING BASINS, OR SILT TRAPS) SHALL BE INSTALLED IN CONJUNCTION WITH THE INITIAL GRADING OPERATIONS AND MAINTAINED THROUGH THE DEVELOPMENT PROCESS TO REMOVE SEDIMENT FROM RUNOFF WATERS DRAINING FROM LAND UNDERGOING DEVELOPMENT.
- 10. THE DEVELOPER IS REQUIRED TO CLEAN UP ANY SAND, DIRT, OR DEBRIS WHICH ERODES FROM THE SUBDIVISION ONTO ANY PUBLIC STREET OR PRIVATE PROPERTY, AND TO REMOVE SILT OR DEBRIS THAT ENTERS ANY EXISTING DRAINAGE SYSTEM INCLUDING CATCH BASIN SUMPS, PIPE LINES, MANHOLES AND
- VELOCITY CHECK DAMS STRAWBALES WILL BE USED AROUND THE CATCH BASINS ON THE PROPOSED STREETS TO PROTECT THEM FROM THE ERODING SOILS AND PROVIDE A CHECK DAM\* TO SLOW THE RUNOFF DURING THE CONSTRUCTION. THE DEVELOPER SHALL PROVIDE VELOCITY CHECK DAMS\* IN ALL UNPAVED STREET AREAS AT THE INTERVALS INDICATED BELOW:

INTERVALS BETWEEN CHECKDAMS
100 FEET LESS THAN 4% 4% TO 10% 50 FEET OVER 10% 25 FEET

THE DEVELOPER SHALL PROVIDE VELOCITY CHECK DAMS\* IN ALL UN-VEGETATED OR UNPAVED CHANNELS AT THE INTERVALS INDICATED BELOW:

GRADE OF THE CHANNEL INTERVALS BETWEEN CHECK DAMS LESS IMAN 3% IUU FEE 3% TO 6% 50 FEET

25 FEET

OVER 6%

- 12. ALL CUT AND FILL SLOPES SHALL BE IMMEDIATELY COVERED WITH 6" LOAM AND SEEDED DURING THE GROWING SEASON (APRIL 1 TO NOVEMBER 1) OR COVERED WITH A STRAW MULCH DURING THE NON-GROWING SEASON (NOVEMBER 1 TO APRIL 1). IN AREAS SUBJECT TO THE WETLANDS PROTECTION ACT, THE STRAW MULCH AND/OR REQUIRED MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION IS
- 13. DISTURBED AREAS WHERE CONSTRUCTION HAS PERMANENTLY OR TEMPORARILY CEASED MUST BE STABILIZED WITHIN 14 DAYS OF THE LAST DISTURBANCE. AREAS WHICH WILL BE REDISTURBED WITHIN 21 DAYS DO NOT HAVE TO BE STABILIZED.
- 14. \*CHECK DAMS IN UNPAVED STREETS AND UN-VEGETATED OR UNPAVED GRADED CHANNELS BE CONSTRUCTED OF STAKED STRAW BALES OR OTHER EROSION RESISTANT MATERIALS APPROVED BY THE BOARD. THE CHECK DAMS SHALL BE INSTALLED AT THE END OF EACH WORKING DAY, AND IN THE EVENT OF RAINFALL BEING PREDICTED. THE STRAW BALES SHOULD BE SECURELY STAKED TO PREVENT OVERTURNING, FLOATATION, OR DISPLACEMENT. THEY SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. ALSO, A VELOCITY CHECK DAM SHALL BE PROVIDED ALONG THE ENTRANCE OF THE LOT TO PROTECT THE PUBLIC STREETS AND ADJACENT PROPERTIES FROM THE HAZARDS OF EROSION. ALL CHECK DAMS SHALL BE CLEANED OUT OF ALL DEBRIS AND SILT PERIODICALLY.
- 15. ADDITIONAL EROSION CONTROL MEASURES SHALL BE STOCK-PILED ON-SITE, INCLUDING BUT NOT LIMITED TO CRUSHED STONE, STRAW BALES, SILT FENCE AND EROSION CONTROL MATS.
- 16. THE SEDIMENT SHALL BE REMOVED BEHIND ALL STRAW BALES AND SILT FENCES IF DEPTH EXCEEDS 6". SEDIMENT SHALL BE REMOVED TO OUTSIDE THE BUFFER ZONE OF THE WETLANDS WHERE APPLICABLE.
- 17. THE EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL ALL TRIBUTARY SURFACES ARE STABILIZED.

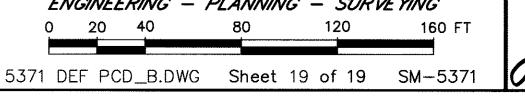
### DEFINITIVE SUBDIVISION PLAN JOANNE DRIVE A PLANNED CONSERVATION DEVELOPMENT STOW, MASSACHUSETTS

### STORMWATER POLLUTION PREVENTION PLAN

FOR: SCALE: 1"=40' REVISED FEBRUARY 15, 2018

LUNDY STARMER, INC. AUGUST 4, 2017 REVISED SEPTEMBER 24, 2018 REVISED DECEMBER 3, 2018

1000 MAIN STREET ACTON, MASSACHUSETTS ENGINEERING - PLANNING - SURVEYING



JOSEPH

# 36384

195 of 2020 19/19