

# MARTINA WAY

TOPSFIELD, MASSACHUSETTS

## SHEET INDEX

OWNER OF RECORD:  
GREEN ACRES REALTY INC  
PO BOX 185  
ROCKWOOD, ME 04478



## PERMITTING PLANS

**COVER SHEET**

**DEFINITIVE SUBDIVISION**  
**MARTINA WAY**  
**in**  
**TOPSFIELD, MA**

**Green Acres Realty, Inc.**  
**82 NORTH STREET**  
**TOPSFIELD, MA 01983**

# Marchionda



**Engineering and  
Planning Consultants**

62 Montvale Avenue  
Suite 1  
Stoneham, MA 02180  
TEL: (781) 438-6121  
FAX: (781) 438-9654  
Email: [engineering@marchionda.com](mailto:engineering@marchionda.com)  
Website: [www.marchionda.com](http://www.marchionda.com)

DATE: 11/29/17

H:\886-01\DEFINITIVE\COVER.DWG

|                     |                 |
|---------------------|-----------------|
| M. & A. NO.: 886-01 | SCALE: 1"=600'± |
|---------------------|-----------------|

SHEET 1 OF 12

**REGISTRY USE ONLY**

APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

DATE \_\_\_\_\_

CHK:

DSG:

**DRW:**

|      |                               |          |
|------|-------------------------------|----------|
| 2.   | NO CHANGE THIS SHEET          | 03/20/18 |
| 1.   | 01/31/18 PEER REVIEW COMMENTS | 03/14/18 |
| REV. | DESCRIPTION                   | DATE     |



LEGEND OF PROPOSED SYMBOLS & ABBREVIATIONS

|                                     |              |
|-------------------------------------|--------------|
| FINISH GRADE CONTOUR                | --- 100 ---  |
| PROPOSED SPOT GRADE                 | 212x0        |
| GARAGE FLOOR ELEVATION              | GF=99.10     |
| FIRST FLOOR ELEVATION               | FF=101.20    |
| TOP OF FOUNDATION ELEVATION         | TF=100.00    |
| PROPOSED CONSTRUCTION FENCE         | -----        |
| PROPOSED STRAW WATTLE               | =====        |
| PROPOSED DRAINAGE FLOW ARROW        | ⇒            |
| PROPOSED CENTERLINE                 | --- 1+00 --- |
| PROPOSED STREET SIGN                | →            |
| PROPOSED RIP RAP                    | ▨            |
| PROPOSED OUTLET CONTROL STRUCTURE   | ○ OCS        |
| PROPOSED FLARED END STRUCTURE       | ▶-----       |
| PROPOSED DRAIN LINE                 | -----        |
| PROPOSED DRAIN MANHOLE              | ○-----       |
| PROPOSED CATCHBASIN                 | ○-----       |
| PROPOSED WATER SERVICE W/ CURB STOP | --- w ---●   |
| PROPOSED ROOF DRAIN                 | --- RD ---   |
| PROPOSED SHADE TREE                 | ●            |

|                             |          |
|-----------------------------|----------|
| BITUMINOUS BERM             | BB       |
| BIT. CONC. SIDEWALK/WALKWAY | BCSW/BCW |
| BORDERING VEGETATED WETLAND | BVW      |
| BUFFER ZONE                 | BZ       |
| GRANITE CURB INLET          | CI       |
| EDGE OF PAVEMENT            | EP       |
| NO BUILD ZONE               | NB       |
| VEGETATED BUFFER            | VB       |
| VERTICAL GRANITE CURB       | VGC      |

UTILITY ABBREVIATIONS

|                                |      |
|--------------------------------|------|
| MANHOLE                        | MH   |
| CATCH BASIN                    | CB   |
| DRAIN                          | D    |
| SEWER                          | S    |
| SEWER SERVICE                  | SS   |
| SEWER FORCE MAIN               | FM   |
| WATER SERVICE                  | WS   |
| WATER CURB STOP                | WCS  |
| WATER GATE                     | WG   |
| TELEPHONE/ELECTRIC/CABLE       | TEC  |
| OVERHEAD WIRE                  | OHW  |
| UTILITY POLE                   | UP   |
| HEADWALL                       | HW   |
| FLARED END SECTION             | FES  |
| HIGH DENSITY POLYETHYLENE PIPE | HDPE |
| DUCTILE IRON PIPE              | DIP  |
| POLYVINYLCHLORIDE PIPE         | PVC  |
| REINFORCED CONCRETE PIPE       | RCP  |
| CAST IRON PIPE                 | CIP  |
| CEMENT LINED DUCTILE IRON PIPE | CLDI |
| CORRUGATED METAL PIPE          | CMP  |
| INVERT ELEVATION               | I=   |
| RIM ELEVATION                  | R=   |
| GAS CURB STOP                  | GCS  |
| GAS VALVE                      | GG   |

**NOTE:**  
SOME ITEMS APPEARING IN THE LEGEND AND ABBREVIATIONS LIST MAY NOT BE IN THIS PLAN SET.

LEGEND OF EXISTING SYMBOLS & ABBREVIATIONS

|                       |             |
|-----------------------|-------------|
| EXISTING GRADE        | --- 100 --- |
| EXISTING UTILITY POLE | ⦿           |
| EXISTING TREE LINE    | ~~~~~       |
| EXISTING SPOT GRADE   | x 212.0     |
| EXISTING DWELLING     | ▨           |
| WETLAND FLAG & LINE   | H6          |
| TEST PIT              | TP 6-17     |
| PERC. TEST            | P 6-17      |
| EXISTING WATER MAIN   | =====       |
| EXISTING FENCE        | -----       |
| EXISTING WALL         | =====       |
| EXTENT OF BUFFER ZONE | -----       |
| FIRE HYDRANT          | ⦿           |
| CATCHBASIN            | ⦿           |
| EXISTING TREE         | 14" P 14" T |
| EXISTING MAILBOX      | MB          |
| EXISTING WATER GATE   | ⦿           |

**NOTE:**  
SOME ITEMS APPEARING IN THE LEGEND MAY NOT BE IN THIS PLAN SET.

ZONING SUMMARY:

INNER RESIDENTIAL AND AGRICULTURAL ZONING DISTRICT – IRA

SETBACKS:

|                 |       |
|-----------------|-------|
| FRONT           | – 20' |
| SIDE            | – 15' |
| REAR            | – 40' |
| BUILDING HEIGHT | – 35' |

OTHER:

|                        |               |
|------------------------|---------------|
| MINIMUM AREA           | – 40,000 S.F. |
| MINIMUM FRONTAGE       | – 150'        |
| MINIMUM LOT DEPTH      | – 150'        |
| MINIMUM BUILDABLE AREA | – 30,000 S.F. |

DIMENSIONAL AND DENSITY COMPUTATIONS:

|                                          |       |                     |            |
|------------------------------------------|-------|---------------------|------------|
| TOTAL PARCEL AREA                        | ..... | 4,631,839 FT^2..... | 106.33 Ac. |
| LOT 1 AREA                               | ..... | 62,555 FT^2.....    | 1.44 Ac.   |
| LOT 2 AREA (REMAINING PORTION OF PARCEL) | ..... | 4,545,728 FT^2..... | 104.36 Ac. |

GENERAL NOTES

- 1.) THIS PROJECT SHALL BE GOVERNED BY THE PLANNING BOARD REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF A PRELIMINARY PLAN (MAY 1, 2017) IN ACCORDANCE WITH THE TOWN OF TOPSFIELD "RULES & REGULATIONS GOVERNING THE SUBDIVISION OF LAND" SECTION 4.3.1.
- 2.) THIS PROJECT SHALL BE GOVERNED BY THE ZONING BYLAW IN EFFECT AT THE TIME OF SUBMISSION OF A PRELIMINARY PLAN (MAY 1, 2017) IN ACCORDANCE WITH THE TOWN OF TOPSFIELD "RULES & REGULATIONS GOVERNING THE SUBDIVISION OF LAND" SECTION 4.3.1 AND THE PROVISIONS OF SECTION 6 CHAPTER 40A OF THE GENERAL LAWS OF THE COMMONWEALTH.
- 3.) THIS PROJECT IS SUBJECT TO THE CONDITIONS SET FORTH IN THE ORDER OF RESOURCE AREA DELINEATION ISSUED UNDER DEP FILE #307–0756, DATED OCTOBER 18, 2017.
- 4.) ALL PROPRIETARY PRODUCTS SPECIFIED HEREIN MAYBE SUBSTITUTED WITH AN APPROVED EQUIVALENT AT THE REQUEST OF THE CONTRACTOR AND WITH THE APPROVAL OF THE DESIGN ENGINEER, EXCEPT WHERE EXPLICITLY PROHIBITED BY THE DOCUMENTS LISTED ABOVE.
- 5.) THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY DISCREPENCIES, ERRORS OR OMISSIONS TO THIS PLAN SET OR BETWEEN THIS PLAN SET AND ACTUAL FIELD CONDITIONS.
- 6.) LOCATION OF EXISTING PIPES, CONDUITS, FOUNDATIONS, AND UNDERGROUND OBJECTS ARE NOT WARRANTED TO BE CORRECT AND ARE SHOWN BASED ON EXISTING RECORDS AND THE BEST APPROXIMATION OF THE ACTUAL LOCATION. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES, CONDUITS, ETC. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY DIGSAFE PRIOR TO ANY EXCAVATIONS.
- 7.) EXISTING TOPOGRAPHY BASED ON AN INSTRUMENT SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES, L.P. BETWEEN MAY AND NOVEMBER OF 2017. THE HORIZONTAL DATUM IS MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD83. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).  
BENCHMARKS:  
1. PK NAIL SET IN UTILITY POLE #48/1717 – ALONG PERKINS ROW, NORTH OF INTERSECTION WITH MARTINA WAY ELEVATION = 76.71  
2. PK NAIL SET IN UTILITY POLE #1718/47 – ALONG PERKINS ROW, SOUTH OF INTERSECTION WITH MARTINA WAY ELEVATION = 77.41  
3. PK NAIL SET IN 20" PINE – BEYOND CUL–DE–SAC AT END OF MARTINA WAY ELEVATION = 98.83
- 8.) PROPERTY LINES FROM AN ACTUAL FIELD SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES, L.P.
- 9.) EDGE OF WETLANDS WERE DELINEATED BY NORSE ENVIRONMENTAL SERVICES, INC. WETLAND LINE FROM FLAGS H1 THROUGH H34 AND J58 THROUGH J75 HAVE BEEN CONFIRMED BY THE TOPSFIELD CONSERVATION COMMISSION AND ORAD #307–0756.
- 10.) THIS IS A SUBDIVISION OF THE PROPERTY IDENTIFIED BY MAP 34 PARCEL 78 OF THE TOPSFIELD ASSESSOR'S MAP.
- 11.) BUILDING LOT TO BE SERVICED BY MUNICIPAL WATER.
- 12.) ALL REQUIRED UTILITIES EXCLUSIVE OF TRANSFORMERS SHALL BE PLACED UNDERGROUND. THE DEVELOPER SHALL PROVIDE EASEMENTS FOR TRANSFORMERS WHERE NECESSARY.
- 13.) MONUMENTS SHALL BE INSTALLED AT ALL STREET INTERSECTIONS, AT ALL POINTS OF CHANGE IN DIRECTION, OR CURVATURE OF STREETS, AND AT OTHER POINTS AS SHOWN IN THE DEFINITIVE PLAN AND WHERE, IN THE OPINION OF THE BOARD, PERMANENT MONUMENTS ARE NECESSARY. GRANITE OR REINFORCED CONCRETE MONUMENTS 3 FEET (3') IN LENGTH DRESSED TO 6 INCHES (6") AT THE TOP WITH A PIN OR ⅝-INCH DRILL HOLE IN THE CENTER, AND NOT LESS THAN 6 INCHES (6") SQUARE AT THE BOTTOM SHALL BE SET FLUSH TO FINISH GRADE AS SHOWN ON PLANS. IRON PIPE MARKERS SET IN CONCRETE SHALL BE INSTALLED AT THE INTERSECTION OF ALL LOT LINES WITH STREET LINES. IRON PIPE MARKERS SHALL BE INSTALLED AT ALL OTHER LOT BOUNDARIES AT CORNERS AND CHANGES IN COURSE. THE IRON PIPE SHALL BE THREE FEET (3') LONG AN EXTENDED ABOVE GRADE NOT MORE THAN 6 INCHES (6") OR LESS THAN ONE. IN THE EVENT THAT THE TERRAIN DOES NOT PERMIT THE INSTALLATION OF A MARKER AT A LOT LINE CHANGE, WITNESS MARKERS MAY BE INSTALLED IN LOCATIONS SUBJECT TO THE BOARD APPROVAL.
- 14.) DRIVEWAY ENTRANCES SHALL BE CONSTRUCTED AS TO PREVENT SURFACE WATER ON THE STREET FROM RUNNING ONTO PRIVATE LAND OR PROPOSED LOTS. DRIVEWAYS SHALL ALSO BE CONSTRUCTED AS TO PREVENT SURFACE WATER FROM RUNNING ONTO THE STREET FROM THE PROPOSED DRIVEWAY.
- 15.) OWNER OF RECORD:  
OWNER: GREEN ACRES REALTY  
DEED REFERENCE: SOUTHERN ESSEX REGISTRY OF DEEDS BOOK 04720 PAGE 0264
- 16.) THE ENTIRE AREA WITHIN THE RIGHT-OF-WAY LINES SHALL BE CLEARED AND GRUBBED OF ALL STUMPS, BRUSH, ROOTS, BOULDERS, AND LIKE MATERIALS. ALL ROCK OR MASONRY WITH A MAXIMUM DIMENSION OVER THREE INCHES AND WITHIN SIX INCHES OF THE TOP OF SUBGRADE SHALL BE REMOVED. TREES INTENDED TO BE PRESERVED SHALL BE PROTECTED BY SUITABLE BOXES, FENDERS, OR WELLS AS APPROPRIATE.
- 17.) ALL TOPSOIL, DEFINED AS FERTILE, FRIABLE, NATURAL MATERIAL WHICH HAS DEMONSTRATED VEGETATIVE GROWTH, SHALL BE REMOVED FROM WITHIN THE ROADWAY AREA, AND USED WITHIN THE SUBDIVISION.
- 18.) IN CUT AREAS, ALL UNSUITABLE MATERIAL SUCH AS PEAT, LOAM, ORGANIC MATERIAL, SILT OR CLAY OR ANY MATERIAL THAT, IN THE OPINION OF THE HIGHWAY SUPERINTENDENT IS CONSIDERED TO BE DETRIMENTAL TO THE SUBGRADE, SHALL BE REMOVED TO THE DEPTH AND WIDTH INDICATED BY HIM AND REPLACED WITH ORDINARY BORROW CONFORMING TO M1.03.0 OF THE STANDARD SPECIFICATIONS. TYPE "A" SHALL BE USED WITHIN 12" OF THE TOP SUBGRADE AND TYPE "B" ABOVE, PLACED IN 12" LOOSE LIFTS AND COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM DESIGNATION 1557–70, METHOD D.
- 19.) IN FILL AREAS, THE EMBANKMENT SHALL BE ORDINARY BORROW SPECIFIED AND PLACED AS IN NOTE #18 ABOVE. LOAMING AND SEEDING SHALL CONFORM TO ARTICLE 5.5.4 OF THE RULES & REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF TOPSFIELD.
- 20.) THE SUBGRADE SHALL BE SHAPED TO A TRUE SURFACE CONFORMING TO THE LINES & GRADES INDICATED ON THE APPROVED DEFINITIVE PLAN (CROSS SECTION AND PROFILE) AND WHERE ORIGINAL GROUND, SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY (TO A DEPTH OF 6") AS DETERMINED BY ASTM DESIGNATION 1557–70, METHOD D. A TOLERANCE OF ⅛" ABOVE OR BELOW FINISHED SUBGRADE WILL BE PERMITTED PROVIDED THIS DIFFERENCE IS NOT MAINTAINED OVER 50' AND THE REQUIRED CROWN (CROSS SLOPE) IS MAINTAINED.
- 21.) DUE REGARD MUST BE SHOWN FOR ALL NATURAL FEATURES, SUCH AS TREES, WATERCOURSES, SCENIC POINTS, HISTORIC SPOTS, AND SIMILAR COMMUNITY ASSETS WHICH, IF PRESERVED, WILL ADD ATTRACTIVENESS AND VALUE TO THE COMMUNITY AND THE SUBDIVISION. WHERE TOPSOIL IS STRIPPED FROM THE SITE, IT SHALL BE REPLACED IN ACCORDANCE WITH ARTICLE 5, SECTION 1.4.G OF THE RULES & REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF TOPSFIELD.
- 22.) ANY STORMWATER AND EROSION CONTROL PERMIT ISSUED IN CONJUNCTION WITH A DEFINITIVE PLAN FOR THE SUBDIVISION OF LAND SHALL APPLY TO THE ALTERATION OF THE LAND APPROVED IN SAID PLAN, I.E. ALTERATION ASSOCIATED WITH THE CONSTRUCTION OF THE INFRASTRUCTURE OF THE PROJECT AND ANY GRADING OR FILLING FOR THE CREATION OF INDIVIDUAL LOTS INDICATED ON THE PLAN. SUBSEQUENT OR ADDITIONAL ALTERATION TO INDIVIDUAL LOTS IN THE SUBDIVISION WILL REQUIRE STORMWATER AND EROSION CONTROL PERMITS UNLESS THERE ARE NO CHANGES FROM THOSE APPROVED IN THE DEFINITIVE PLAN OR THE LOTS ARE EXEMPT UNDER THE BYLAW.
- 23.) PROPOSED SHADE TREES SHALL BE 4" CALIPER MEASURED 3' ABOVE THE BASE. SPECIES TO BE SPECIFIED BY THE TREE WARDEN.



PERMITTING PLANS

NOT FOR CONSTRUCTION

REGISTRY USE ONLY

APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

DATE

CHK:

DSG:

DRW:

LEGEND & NOTES

DEFINITIVE SUBDIVISION

MARTINA WAY

in  
TOPSFIELD, MA

Prepared For

GREEN ACRES REALTY, INC.

82 NORTH STREET  
TOPSFIELD, MA 01983



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DATE: 11/29/2017

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M. & A. NO.: 886-01

SCALE: NOT TO SCALE

SHEET 2 OF 12

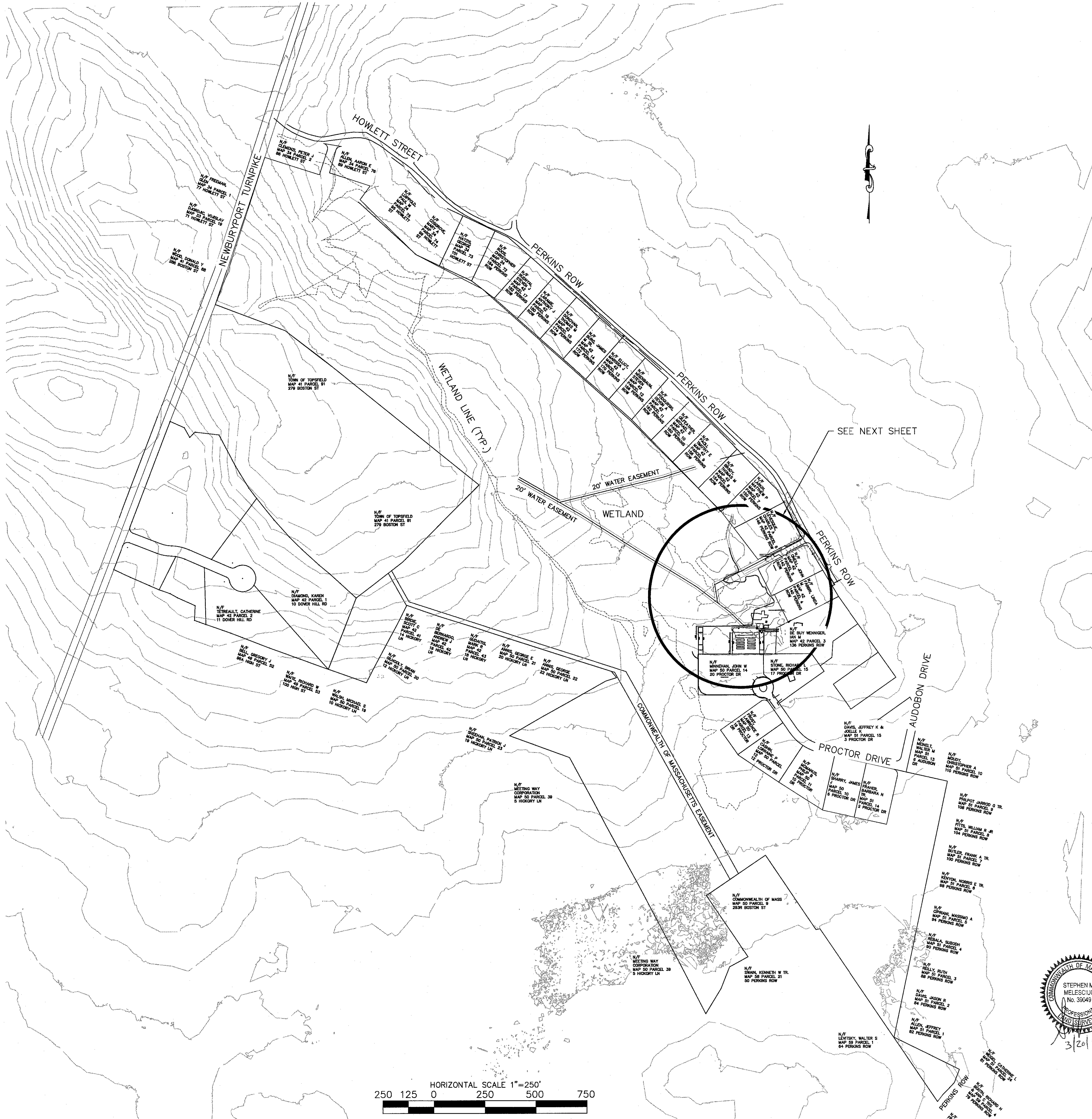


NOTES:

1. WETLANDS FLAGGED BY NORSE ENVIRONMENTAL SERVICES, INC. AND LOCATED BY MARCHIONDA & ASSOCIATES, L.P.
2. WETLAND LINE FROM FLAGS H1 THROUGH H34 AND J58 THROUGH J75 HAVE BEEN CONFIRMED BY THE TOPSFIELD CONSERVATION COMMISSION ORAD #307-0756.
3. OTHER WETLAND LINES SHOWN ARE FOR REFERENCE ONLY AND HAVE NOT BEEN REVIEWED BY THE TOPSFIELD CONSERVATION COMMISSION.
4. PROPERTY LINES FROM AN ACTUAL FIELD SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES INC.
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CHK:

DSC:

DRW:

| REV. | DESCRIPTION          | DATE     |
|------|----------------------|----------|
| 2    | NO CHANGE THIS SHEET | 03/20/18 |
| 1    | NO CHANGE THIS SHEET | 03/14/18 |

EXISTING CONDITIONS PLAN

DEFINITIVE SUBDIVISION

MARTINA WAY

in  
TOPSFIELD, MA

Prepared For

**GREEN ACRES REALTY, INC.**  
82 NORTH STREET  
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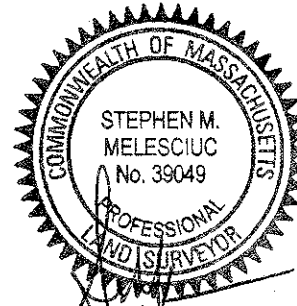
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M. & A. NO.: 886-01

SCALE: 1"=250'

SHEET 3 OF 12



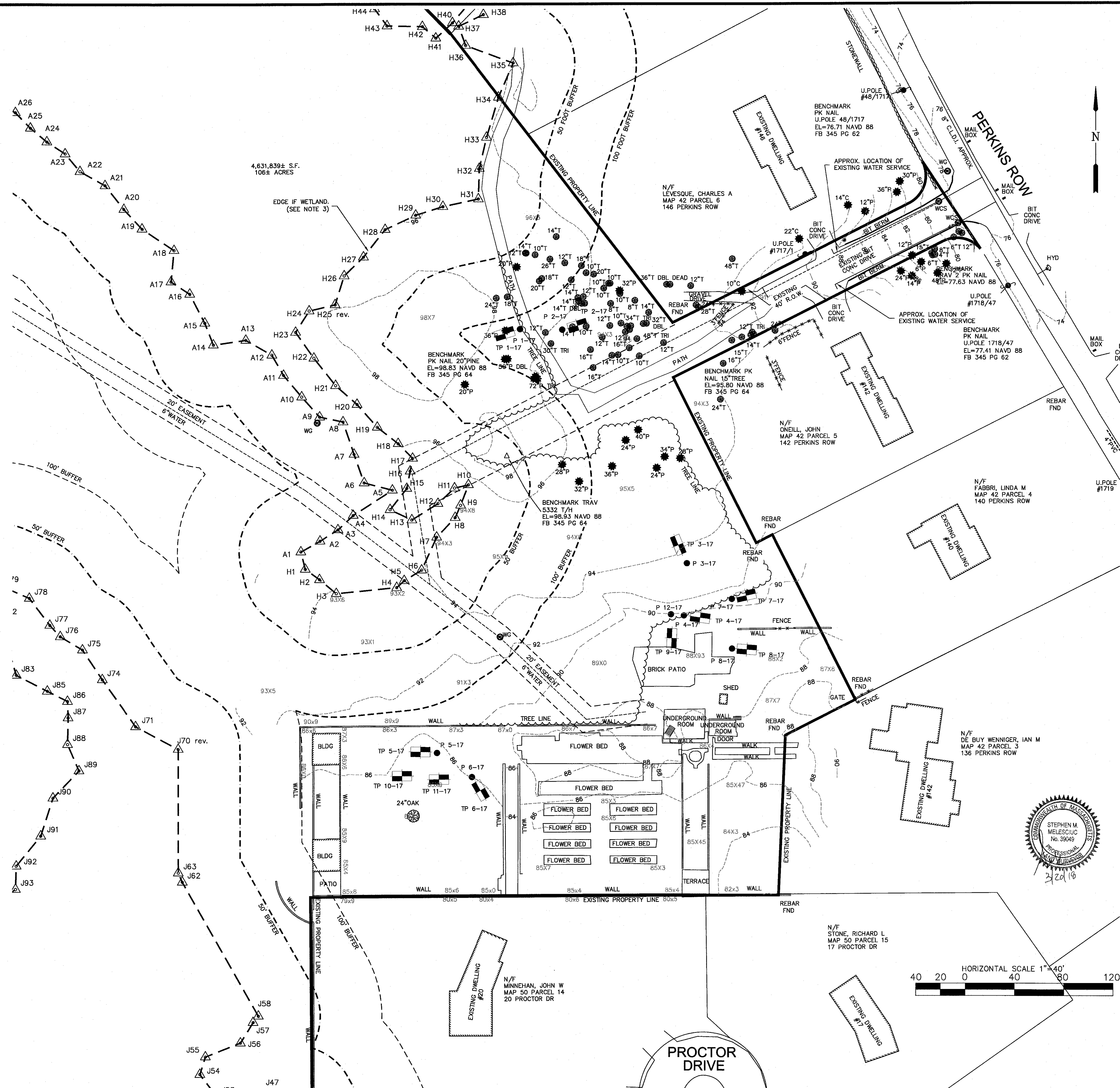
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TE

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## EXISTING CONDITIONS PLAN

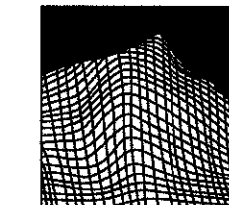
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**MARTINA WAY**  
in  
**TOPSFIELD, MA**

Prepared For

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DATE: 11/29/2017

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M. &amp; A. NO.: 886-0

SCALE: 1"=40'

SHEET 4 OF 12



NOTES:

1. PROPERTY LINES FROM AN ACTUAL FIELD SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES INC.
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6. TEST PITS TP1-17, TP2-17, TP3-17, & TP4-17 PERFORMED WITHOUT TOPSFIELD BOH WITNESS PRESENT. ALL OTHER TEST PITS WITNESSED BY TOPSFIELD BOH REPRESENTATIVE.
7. PERC TESTS P1-17, P2-17, P3-17, & P4-17 PERFORMED WITHOUT TOPSFIELD BOH WITNESS PRESENT. ALL OTHER PERC TESTS WITNESSED BY TOPSFIELD BOH REPRESENTATIVE.

1/7  
ARKIN, MATTHEW P  
MAP 42 PARCEL 7  
50 PERKINS ROW



SOIL TEST DATA

| DEEP TEST             | TP1-17                                                                                      | TP2-17                                                                                   | TP3-17                                                                      | TP4-17                                               | TP5-17                                                                     | TP6-17                                                                                                | TP7-17                                                                                                                 | TP8-17                                                                           | TP9-17                                                                        | TP10-17                                                                                                        | TP11-17                                                                                                          |
|-----------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| DATE                  | 08/22/17                                                                                    | 08/22/17                                                                                 | 08/22/17                                                                    | 08/22/17                                             | 08/22/17                                                                   | 08/22/17                                                                                              | 08/22/17                                                                                                               | 08/22/17                                                                         | 08/22/17                                                                      | 08/22/17                                                                                                       | 08/22/17                                                                                                         |
| GROUND ELEV.          | 97.5                                                                                        | 95.5                                                                                     | 94.0                                                                        | 89.0                                                 | 86.0                                                                       | 86.0                                                                                                  | 91.0                                                                                                                   | 88.0                                                                             | 89.0                                                                          | 86.0                                                                                                           | 86.0                                                                                                             |
| BOTTOM OF PIT ELEV.   | 88.2                                                                                        | 86.2                                                                                     | 84.2                                                                        | 79.7                                                 | 77.8                                                                       | 77.0                                                                                                  | 81.5                                                                                                                   | 80.0                                                                             | 78.7                                                                          | 76.0                                                                                                           | 76.0                                                                                                             |
| OBS. WATER TABLE      | NONE                                                                                        | NONE                                                                                     | NONE                                                                        | NONE                                                 | NONE                                                                       | NONE                                                                                                  | NONE                                                                                                                   | NONE                                                                             | NONE                                                                          | NONE                                                                                                           | NONE                                                                                                             |
| ESTIMATED WATER TABLE | 86"                                                                                         | 90"                                                                                      | 80"                                                                         | 76"                                                  | 56"                                                                        | 80"                                                                                                   | 65"                                                                                                                    | 84"                                                                              | >124"                                                                         | 58"                                                                                                            | 56"                                                                                                              |
| O HORIZON             |                                                                                             |                                                                                          |                                                                             |                                                      |                                                                            |                                                                                                       |                                                                                                                        |                                                                                  |                                                                               |                                                                                                                |                                                                                                                  |
| A HORIZON             | 0-6"<br>10YR 4/3<br>S.L. GRAN.<br>FRIABLE                                                   | 0-12"<br>10YR 4/3<br>S.L. GRAN.<br>FRIABLE                                               | 0-8"<br>10YR 4/3<br>S.L. MASSIVE<br>V. FRIABLE                              | 0-8"<br>10YR 4/3<br>S.L. GRAN.<br>V. FRIABLE         | 0-30"<br>FILL                                                              | 0-7"<br>FILL                                                                                          | 0-8"<br>7.5YR 3/2<br>L.S. GRAN.<br>V. FRIABLE                                                                          | 0-29"<br>FILL                                                                    | 0-48"<br>FILL                                                                 | 0-11"<br>10YR 3/4<br>S.L. GRAN.<br>V. FRIABLE                                                                  | 0-36"<br>FILL                                                                                                    |
| B HORIZON             | 6-20"<br>10YR 7/8<br>S.L. MASSIVE<br>FRIABLE                                                | 12-24"<br>7.5YR 6/8<br>S.L. GRAN.<br>V. FRIABLE                                          | 8-16"<br>10YR 7/8<br>S.L. MASSIVE<br>V. FRIABLE                             | 8-20"<br>2.5Y 7/8<br>S.L. BLOCKY<br>FRIABLE          | NO B<br>HORIZON                                                            | NO B<br>HORIZON                                                                                       | 8-21"<br>10YR 4/6<br>L.S. GRAN.<br>V. FRIABLE                                                                          | Ab 29-34"<br>7.5YR 3/2<br>S.L. BLOCKY<br>FRIABLE                                 | NO B<br>HORIZON                                                               | NO B<br>HORIZON                                                                                                | NO B<br>HORIZON                                                                                                  |
| C1 HORIZON            | 20-112"<br>2.5Y 8/6 L.S.<br>10% GRAVEL<br>10% COBBLES<br>5% BOULDERS<br>SL FIRM IN<br>PLACE | 24-98"<br>2.5Y 8/6<br>GRAVELLY S.L.<br>10% GRAVEL<br>10% COBBLES<br>SL FIRM IN<br>PLACE  | 16-118"<br>2.5Y 8/4 S.L.<br>10% GRAVEL<br>5% COBBLES<br>SL FIRM IN<br>PLACE | 20-112"<br>2.5Y 7/4 S.L.<br>10% GRAVEL<br>5% COBBLES | 30-98"<br>7.5YR 7/8<br>S.L. MASSIVE,<br>SL FIRM IN<br>PLACE<br>10% COBBLES | 7-108"<br>2.5Y 8/4<br>GRAVELLY S.L.<br>10% GRAVEL<br>5% COBBLES<br>SL FIRM IN<br>PLACE<br>10% COBBLES | 21-114"<br>2.5Y 5/6 F.L.S.<br>GRAN. SO.<br>FRIABLE 10%<br>GRAVEL<br>5% COBBLES<br>SMALL ROOTS<br>TO 52"                | 8w 34-41"<br>2.5Y 8/6 S.L.<br>WEAK, FRIABLE<br>SL FIRM IN<br>PLACE <5%<br>GRAVEL | 48-124"<br>10YR 5/6<br>F.L.S.<br>GRAN. FRIABLE<br>FIRM IN PLACE<br>5% COBBLES | 11-120"<br>2.5Y 5/6 S.L.<br>GRAN. FRIABLE<br>FIRM IN PLACE<br>5% GRAVEL<br>5% COBBLES<br>SMALL ROOTS<br>TO 57" | 36-120"<br>10YR 5/8 L.S.<br>GRAN. FRIABLE<br>FIRM IN PLACE<br>10% GRAVEL<br>10% COBBLES<br>SMALL ROOTS<br>TO 52" |
| C2 HORIZON            |                                                                                             | 98-112"<br>2.5Y 7/6<br>GRAVELLY L.S.<br>10% GRAVEL<br>10% COBBLES<br>GRAN. V.<br>FRIABLE |                                                                             |                                                      |                                                                            |                                                                                                       | C 41-108"<br>2.5Y 5/6 F.L.S.<br>GRAN.<br>FRIABLE FIRM<br>IN PLACE<br>5% GRAVEL<br>10% COBBLES<br>SMALL ROOTS<br>TO 66" |                                                                                  |                                                                               | *1 PARTIAL<br>BRICK AT<br>SURFACE, NO<br>OTHER SIGNS<br>OF FILL IN<br>TEST PIT                                 |                                                                                                                  |

WITNESSED BY: J. COULON (ALL TEST PITS EXCEPT TP1-17 THRU TP4-17) CONDUCTED BY: JOHN BARROWS, PE (8/22/17) & CRAIG MARCHIONDA, PE (10/11/17)

| PERCOLATION TEST | P1         | P2         | P3         | P4         | P5         | P6         | P7        | P8         | P12       |
|------------------|------------|------------|------------|------------|------------|------------|-----------|------------|-----------|
| DATE             | 8/22/17    | 8/22/17    | 8/22/17    | 8/22/17    | 8/22/17    | 8/22/17    | 10/11/17  | 10/11/17   | 10/11/17  |
| SATURATION       | 15 MIN.    | 15 MIN.    | 15 MIN.    | 15 MIN.    | 15 MIN.    | 15 MIN.    | 15 MIN.   | 15 MIN.    | 15 MIN.   |
| 12" - 9"         | 73 MIN.    | 95 MIN.    | 66 MIN.    | 33 MIN.    | 27 MIN.    | 26 MIN.    | ABANDONED | 23 MIN.    | ABANDONED |
| 9" - 6"          | 159 MIN.   | 170 MIN.   | 129 MIN.   | 73 MIN.    | 68 MIN.    | 41 MIN.    | N/A       | 90 MIN.    | N/A       |
| STABILIZED RATE  | 56 MIN./IN | 57 MIN./IN | 43 MIN./IN | 25 MIN./IN | 23 MIN./IN | 14 MIN./IN | N/A       | 30 MIN./IN | N/A       |
| DEPTH            | 30"        | 28"        | 26"        | 26"        | 56"        | 30"        | 22"       | 42"        | 24"       |
| GROUND ELEV.     | 96.5±      | 95.5±      | 93.5±      | 90.0±      | 96.0±      | 96.0±      | 90.5±     | 89.0±      | 90.0±     |

WITNESSED BY: J. COULON (ALL PERCS EXCEPT P1-17 THRU P4-17) CONDUCTED BY: JOHN BARROWS, PE (8/22/17) & CRAIG MARCHIONDA, PE (10/11/17)

\* SL DENOTES SANDY LOAM (CLASS II)  
LS DENOTES LOAMY SAND  
TEST PITS TP1-17, TP2-17, TP3-17, & TP4-17 PERFORMED WITHOUT TOPSFIELD BOH WITNESS PRESENT  
PERC TESTS P1-17, P2-17, P3-17, & P4-17 PERFORMED WITHOUT TOPSFIELD BOH WITNESS PRESENT

REGISTRY USE ONLY

APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

DATE

CHK:

DSG:

DRW:

SOIL TESTING PLAN

DEFINITIVE SUBDIVISION

MARTINA WAY

TOPSFIELD, MA

Prepared For  
**GREEN ACRES REALTY, INC.**  
82 NORTH STREET  
TOPSFIELD, MA 01983

**Marchionda**  
& Associates, L.P.  
Engineering and  
Planning Consultants

62 Montvale Avenue  
Suite 1  
Stoneham, MA 02180  
TEL: (781) 438-6121  
FAX: (781) 438-9654  
Email: [engineering@marchionda.com](mailto:engineering@marchionda.com)  
Website: [www.marchionda.com](http://www.marchionda.com)

DATE: 11/29/2017

H:\PROJECTS\886-01\DEFINITIVE\SOIL TESTING PLANDWG

M. & A. NO.: 886-01

SCALE: 1"=40'

SHEET 5 OF 12

PERMITTING PLANS

NOT FOR CONSTRUCTION



- NOTES:
1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE ASSESSORS PARCEL 78 SHOWN ON TOPSFIELD ASSESSOR'S MAP 34 INTO LOT 1 AND LOT 2.
  2. PROPERTY LINES SHOWN FROM A FIELD SURVEY BY MARCHIONDA & ASSOCIATES, L.P. IN JUNE 2017.
  3. ZONING DISTRICT IS IRA.

OWNER OF RECORD:  
GREEN ACRES REALTY, INC  
82 NORTH STREET  
TOPSFIELD, MA 01983

APPLICANT:  
GREEN ACRES REALTY, INC  
82 NORTH STREET  
TOPSFIELD, MA 01983

SITE LOCATION:  
293 BOSTON STREET  
TOPSFIELD, MA

ASSESSORS INFORMATION:  
ASSESSORS MAP 34 PARCEL 78

DEED REFERENCE:  
BOOK 4720 PAGE 264

PLAN REFERENCES

|                                    |                  |
|------------------------------------|------------------|
| PLAN BOOK 97 PLAN 38               | PLAN 358 OF 1972 |
| PLAN BOOK 87 PLAN 67               | PLAN 66 OF 1958  |
| PLAN BOOK 95 PLAN 36               | PLAN 655 OF 1957 |
| PLAN BOOK 305 PLAN 12              | PLAN 514 OF 1972 |
| PLAN BOOK 162 PLAN 90              | PLAN 590 OF 1971 |
| PLAN BOOK 459 PLAN 12              | PLAN 67 OF 1958  |
| PLAN BOOK 397 PLAN 36              | PLAN 412 OF 1972 |
| PLAN BOOK 338 PLAN 89              | PLAN 126 OF 1984 |
| PLAN BOOK 122 PLAN 1               | PLAN 705 OF 1960 |
| PLAN BOOK 416 PLAN 78              | PLAN 706 OF 1951 |
| PLAN BOOK 95 PLAN 33               |                  |
| PLAN BOOK 257 PLAN 5               |                  |
| 1921 M.H.L.O. NEWBURYPORT TURNPIKE |                  |

ZONING SUMMARY:

INNER RESIDENTIAL AND AGRICULTURAL ZONING DISTRICT - IRA

SETBACKS:

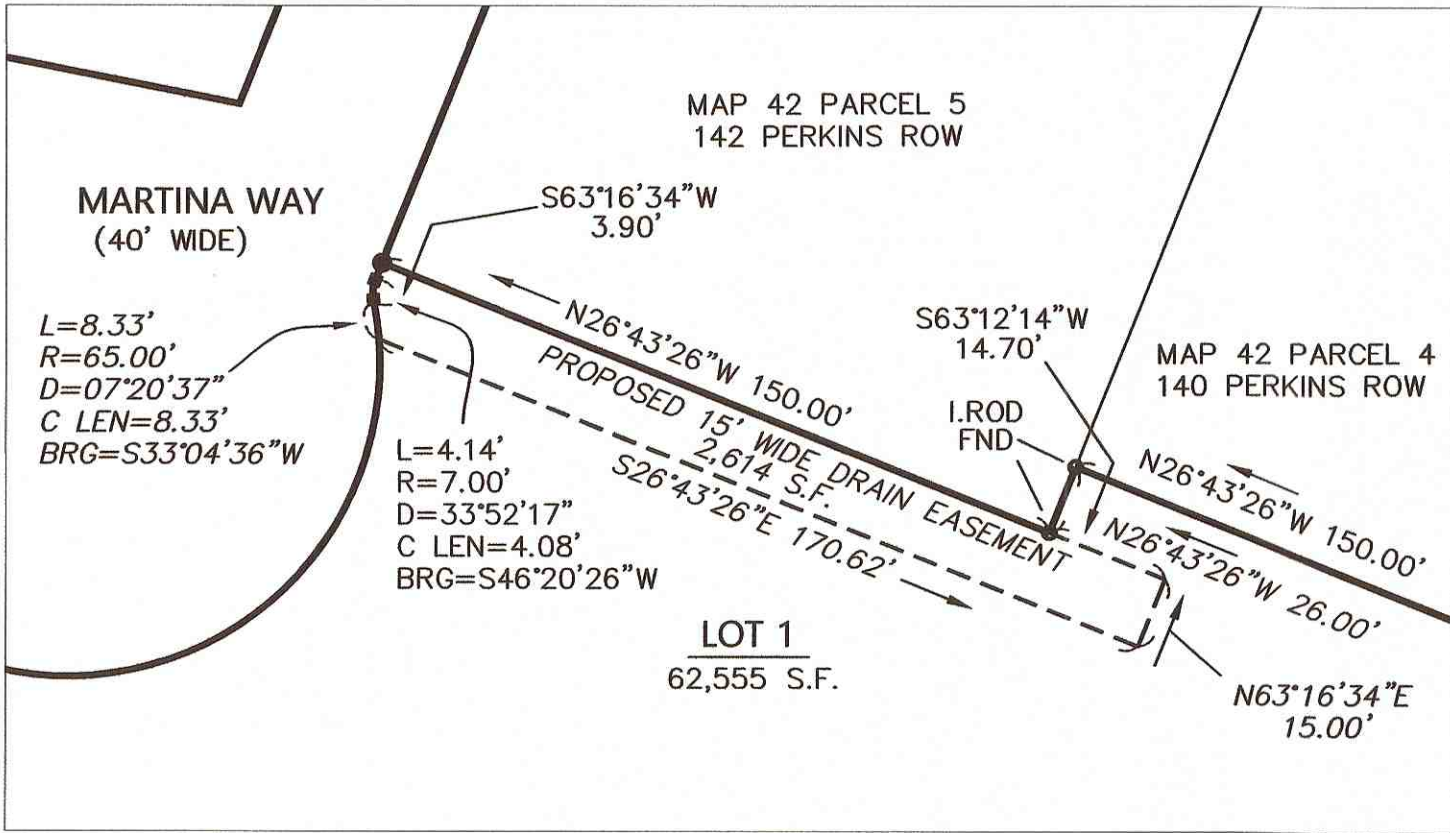
|                 |       |
|-----------------|-------|
| FRONT           | - 20' |
| SIDE            | - 15' |
| REAR            | - 40' |
| BUILDING HEIGHT | - 35' |

OTHER:

MINIMUM AREA - 40,000 S.F.  
MINIMUM FRONTAGE - 150'  
MINIMUM LOT DEPTH - 150'  
MINIMUM BUILDABLE AREA - 30,000 S.F.

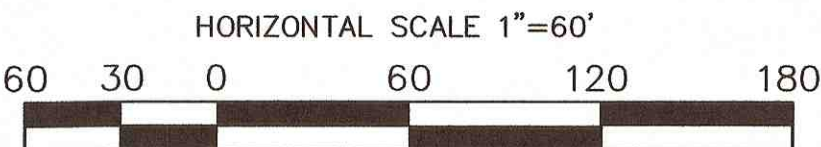
DIMENSIONAL AND DENSITY COMPUTATIONS:

TOTAL PARCEL AREA: 4,631,839 +/- S.F., 106+/- AC.  
LOT 1 AREA: 62,555 S.F., 1.44 AC.  
LOT 2 AREA (NOT A BUILDING LOT) : 4,545,728 +/- S.F., 104+/- AC.



DETAIL 1  
PROPOSED 15' DRAIN EASEMENT  
SCALE: 1"=40'

LEGEND  
■ SBDH TO BE SET (TYP)  
● IRON ROD TO BE SET (TYP)

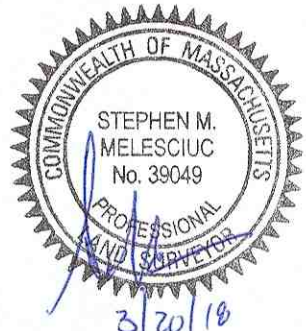


"I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS."

"I CERTIFY THAT THIS PLAN AND THE SURVEY WHICH IT IS BASED UPON MEETS THE TECHNICAL STANDARDS FOR THE PRACTICE OF LAND SURVEYING IN THE COMMONWEALTH OF MASSACHUSETTS."

STEPHEN M. MELESIOUC, P.L.S.

DATE



REGISTRY USE ONLY

APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

DATE

CHK:

DSG:

DRW:

PLAN OF LAND

DEFINITIVE SUBDIVISION

MARTINA WAY

in

TOPSFIELD, MA

Prepared For

GREEN ACRES REALTY, INC.  
82 NORTH STREET  
TOPSFIELD, MA 01983

Marchionda  
& Associates, L.P.

Engineering and  
Planning Consultants

62 Montvale Avenue  
Suite 1  
Stoneham, MA 02180  
TEL: (781) 438-6121  
FAX: (781) 438-9654  
Email: engineering@marichionda.com  
Website: www.marichionda.com

DATE: 11/29/2017

H:\PROJECTS\886-01\SURVEY\PLAN OF LAND 6 OF 12 REV 3-20-18.DWG

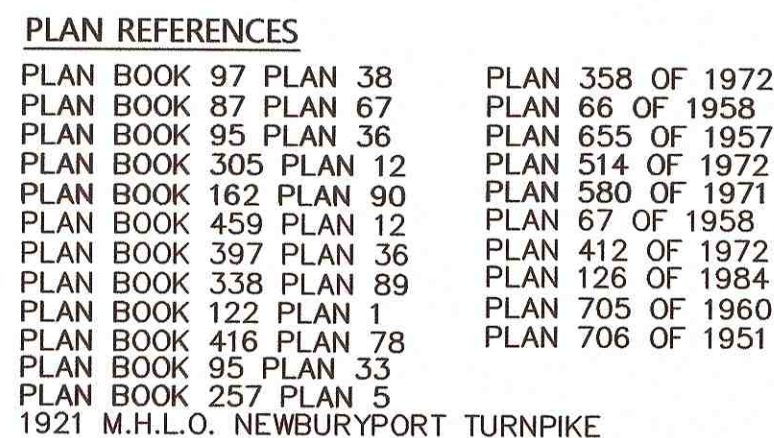
M. & A. NO.: 886-01

SCALE: 1"=60'

SHEET 6 OF 12



1. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE ASSESSORS PARCEL 78 SHOWN ON TOPSFIELD ASSESSORS MAP 34 INTO LOT 1 AND LOT 2.
2. PROPERTY LINES SHOWN FROM A FIELD SURVEY BY MARCHIONDA & ASSOCIATES, L.P. IN JUNE 2017.
3. ZONING DISTRICT IS IRA.



## INNER RESIDENTIAL AND AGRICULTURAL ZONING DISTRICT – IRA

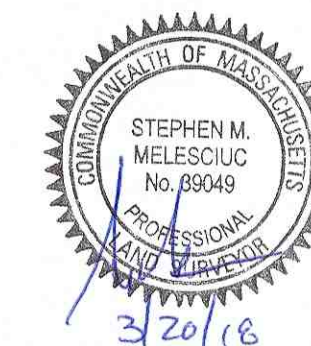
|                 |       |
|-----------------|-------|
| FRONT           | - 20  |
| SIDE            | - 15  |
| REAR            | - 40  |
| BUILDING HEIGHT | - 35' |

MINIMUM AREA - 40,000 S.F.  
MINIMUM FRONTAGE - 150'  
MINIMUM LOT DEPTH - 150'  
MINIMUM BUILDABLE AREA - 30,000 S.F.

TOTAL PARCEL AREA ..... 4,631,839 +/- S.F. .... 106 +/- AC.  
 LOT 1 AREA ..... 62,555 S.F. .... 1.44 AC.  
 LOT 2 AREA (NOT A BUILDING LOT) ..... 4,545,728 +/- S.F. .... 104 +/- AC.

  
STEPHEN M. MELESCIUC, P.L.S.

3/20/18  
DATE



62 Montvale Avenue  
Suite 1  
Stoneham, MA 02180  
TEL: (781) 438-6121  
FAX: (781) 438-9654  
Email: [engineering@marchionda.com](mailto:engineering@marchionda.com)  
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SHEET 7 OF 12

PLAN OF LAND  
DEFINITIVE SUBDIVISION  
MARTINA WAY  
in  
TOPSFIELD, MA

Prepared For  
**GREEN ACRES REALTY, INC.**  
82 NORTH STREET  
TOPSFIELD, MA 01983

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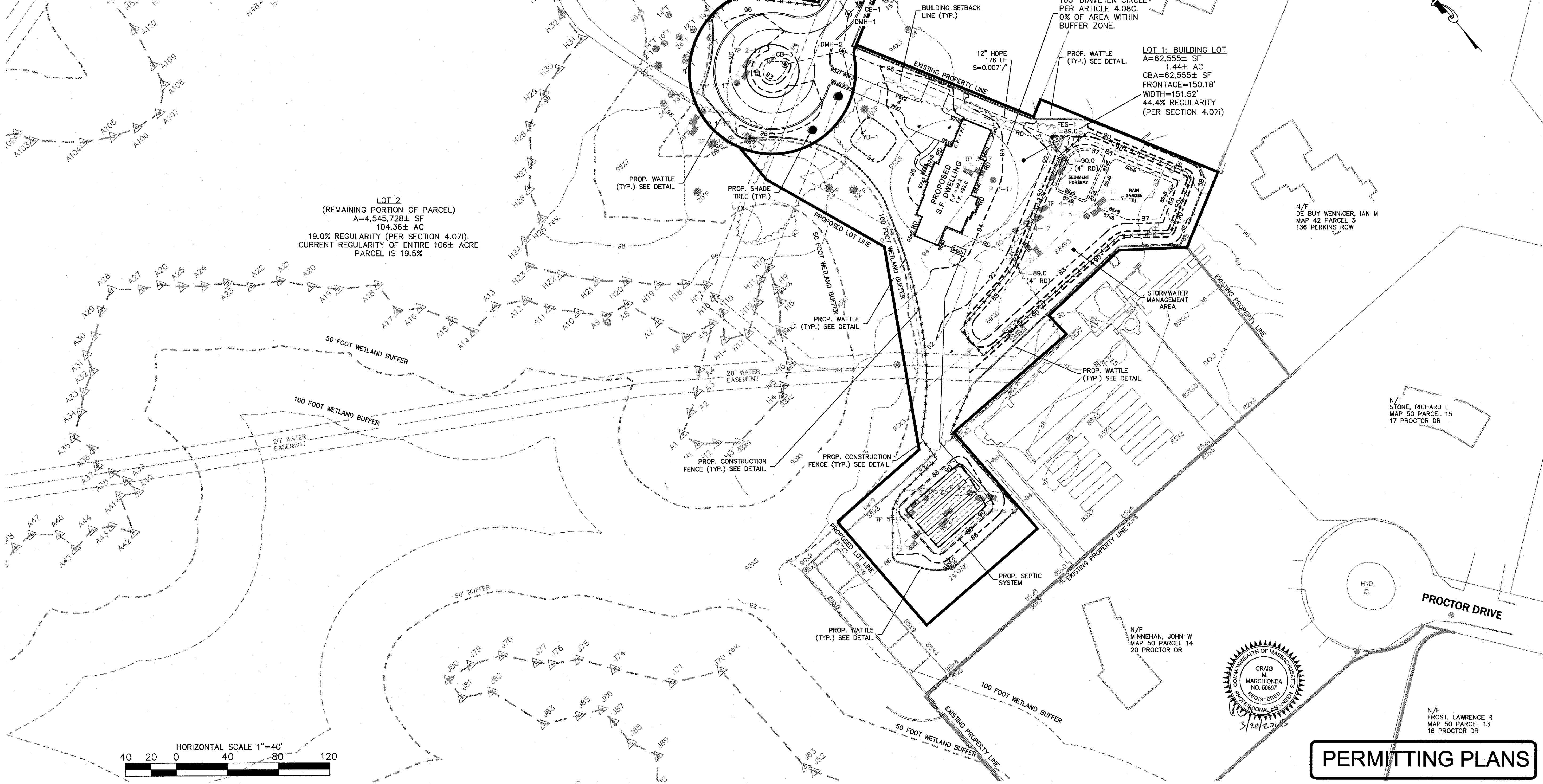
APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

DATE \_\_\_\_\_

REGISTRY USE ONLY



- NOTES:
1. PROPERTY LINES FROM AN ACTUAL FIELD SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES, L.P.
  2. EXISTING TOPOGRAPHY BASED ON AN INSTRUMENT SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES, L.P. BETWEEN MAY AND NOVEMBER OF 2017. THE HORIZONTAL DATUM IS THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD83. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
  3. WETLANDS FLAGGED BY NORSE ENVIRONMENTAL SERVICES, INC. AND LOCATED BY MARCHIONDA & ASSOCIATES, L.P.
  4. WETLAND LINE FROM FLAGS H1 THROUGH H34 AND J58 THROUGH J75 HAVE BEEN CONFIRMED BY THE TOPSFIELD CONSERVATION COMMISSION ORAD #307-0756.
  5. OTHER WETLAND LINES SHOWN ARE FOR REFERENCE ONLY AND HAVE NOT BEEN REVIEWED BY THE TOPSFIELD CONSERVATION COMMISSION.
  6. ALL PROPOSED CATCHBASINS IN THE STREET SHALL HAVE HOODS AND DEEP SUMPS, SEE DETAILS. CATCHBASIN RIMS TO BE SET 1" BELOW FINISHED PAVEMENT.
  7. UNLESS OTHERWISE NOTED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE AND SHALL BE LAID AT A MINIMUM SLOPE OF 0.5% (0.005'/'). ALL JOINTS IN HDPE DRAINAGE PIPE SHALL BE FITTED WITH RUBBER GASKETS UNLESS OTHERWISE NOTED.
  8. PROPOSED SHADE TREES SHALL BE 4" CALIPER MEASURED 3' ABOVE THE BASE. SPECIES TO BE SPECIFIED BY THE TREE WARDEN.



REGISTRY USE ONLY

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TOWN OF TOPSFIELD  
PLANNING BOARD

| DATE |
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|      |

CHK:

DSG:

DRW:

GRADING & DRAINAGE PLAN

**DEFINITIVE SUBDIVISION**  
**MARTINA WAY**  
in  
**TOPSFIELD, MA**

Prepared For  
**GREEN ACRES REALTY, INC.**  
82 NORTH STREET  
TOPSFIELD, MA 01983

**Marchionda**  
& Associates, L.P.  
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Planning Consultants

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DATE: 11/29/2017

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M. & A. NO.: 886-01

SCALE: 1"=40'

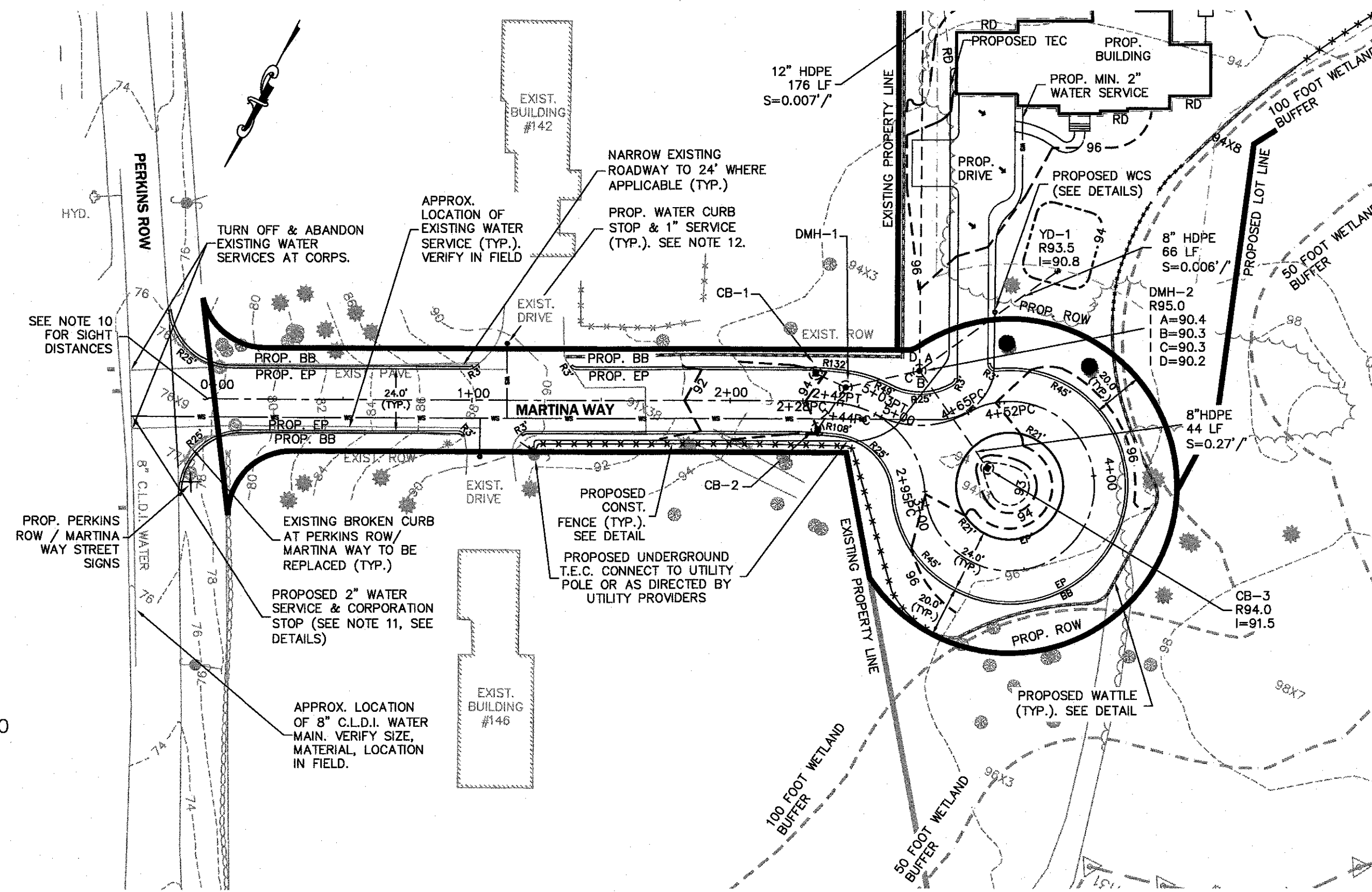
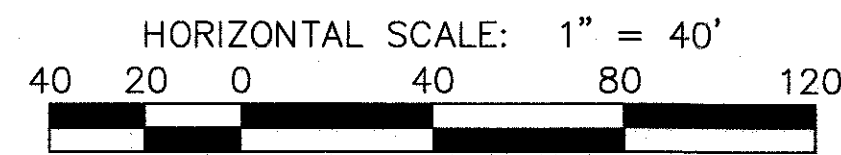
SHEET 8 OF 12

**PERMITTING PLANS**

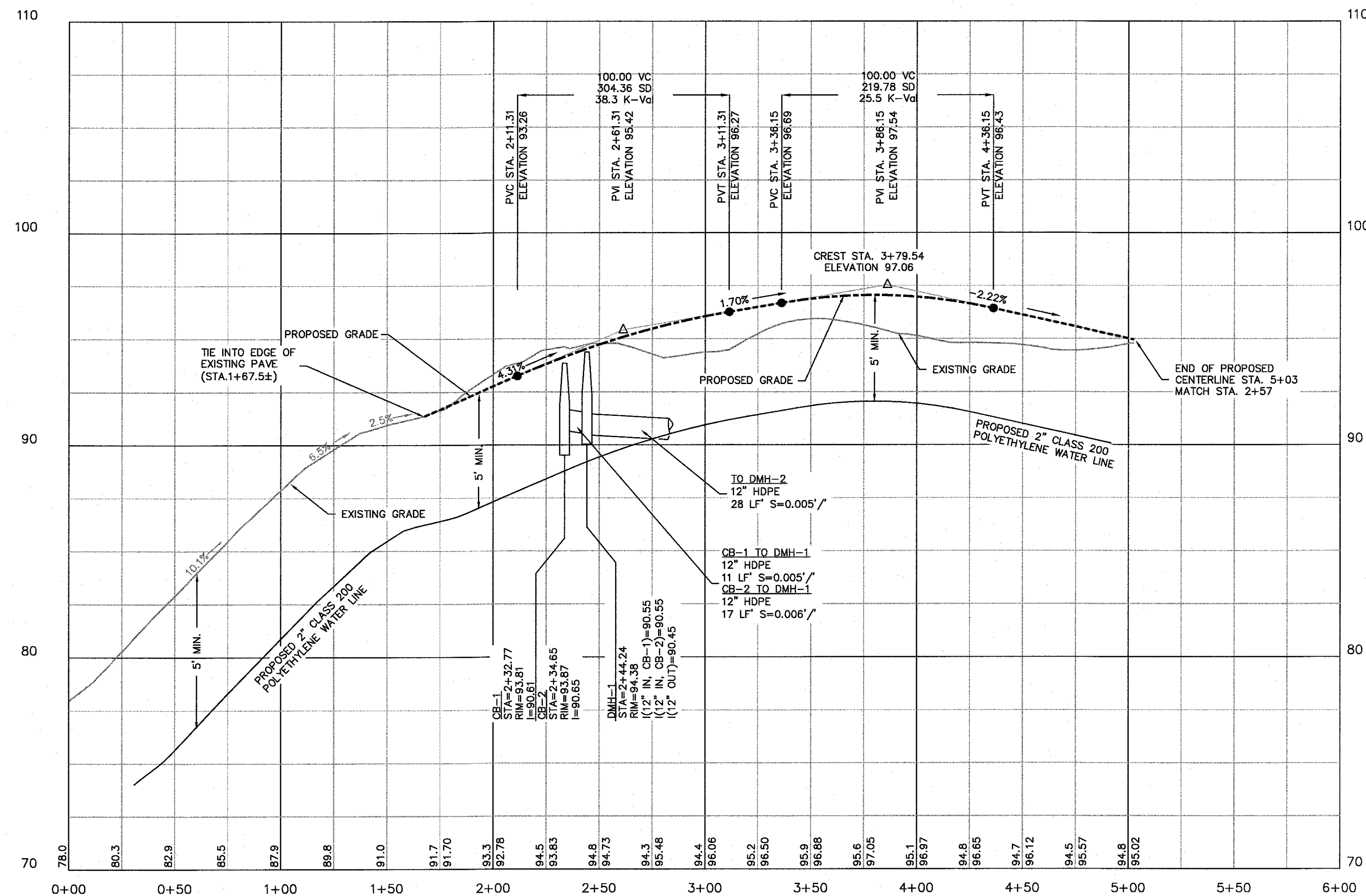
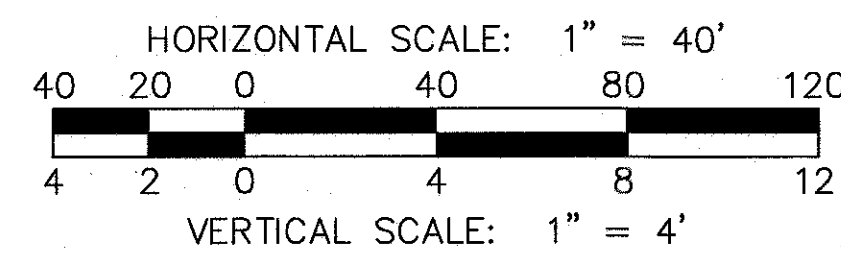
NOT FOR CONSTRUCTION







- NOTES:
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  2. EXISTING TOPOGRAPHY BASED ON AN INSTRUMENT SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES, L.P. BETWEEN MAY AND NOVEMBER OF 2017. THE HORIZONTAL DATUM IS MASSACHUSETTS STATE PLANE COORDINATE SYSTEM NAD83. THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
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  5. OTHER WETLAND LINES SHOWN ARE FOR REFERENCE ONLY AND HAVE NOT BEEN REVIEWED BY THE TOPSFIELD CONSERVATION COMMISSION.
  6. FIRE APPARATUS TURNING RADIUS REPORT:  
CURB TO CURB: R41'-1"  
WALL TO WALL: R45'  
INSIDE TURN: R27'-2"  
TAIL SWING: R39'-1"
  7. PROPOSED CURBING TO BE BITUMINOUS CONCRETE BERM, SEE DETAIL.
  8. ALL PROPOSED CATCHBASINS IN THE STREET SHALL HAVE HOODS AND DEEP SUMPS, SEE DETAILS. CATCHBASIN RIMS TO BE SET 1" BELOW FINISHED PAVEMENT.
  9. UNLESS OTHERWISE NOTED, ALL DRAIN PIPES TO BE LAID AT A MINIMUM SLOPE OF 0.5% (0.005'/').
  10. SIGHT DISTANCE >250' (LOOKING NORTHWEST) AND >400' (LOOKING SOUTHEAST).
  11. WATER STUB ON MARTINA WAY SHALL BE CLASS 200 POLYETHYLENE PIPE, 2" MINIMUM. ACTUAL SIZE TO BE DETERMINED BY FIRE SPRINKLER DESIGNER.
  12. LOCATION OF EXISTING WATER SERVICES FOR 142 & 146 PERKINS ROW TO BE FIELD VERIFIED. NEW CURB STOPS TO BE PROVIDED AT THE PROPERTY LINE OVER THE EXISTING WATER SERVICES. NEW 1" SERVICES FOR THESE DWELLINGS TO BE PROVIDED FROM THE PROPOSED WATER STUB ON MARTINA WAY TO NEW CURB STOPS. EXISTING WATER SERVICE FROM THE DWELLINGS TO THE NEW CURB STOPS SHALL BE MAINTAINED.
  13. PROPOSED STREET SIGN LOCATION/DESIGN SHALL BE ACCEPTABLE TO HIGHWAY SUPERINTENDENT.
  14. EXISTING BROKEN CURBING AT MARTINA WAY / PERKINS ROW SHALL BE REPLACED. REPLACEMENT CURBING TO HAVE A MINIMUM RADIUS OF 25'.



PERMITTING PLANS

NOT FOR CONSTRUCTION

REGISTRY USE ONLY

APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

DATE

CHK:

DSG:

DRW:

ROADWAY PROFILE

DEFINITIVE SUBDIVISION  
MARTINA WAY  
in  
TOPSFIELD, MA

Prepared For  
**GREEN ACRES REALTY, INC.**  
82 NORTH STREET  
TOPSFIELD, MA 01983

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DATE: 11/29/2017

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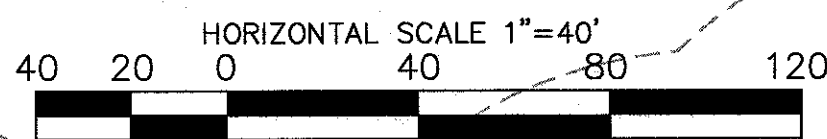
M. & A. NO.: 886-01

SCALE: AS SHOWN

SHEET 9 OF 12



1. PROPERTY LINES FROM AN ACTUAL FIELD SURVEY CONDUCTED BY MARCHIONDA & ASSOCIATES, L.P.
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5. OTHER WETLAND LINES SHOWN ARE FOR REFERENCE ONLY AND HAVE NOT BEEN REVIEWED BY THE TOPSFIELD CONSERVATION COMMISSION.
6. TEMPORARY SEDIMENT TRAP SIZE/LOCATION TO BE ADJUSTED TO FIT CONDITIONS IN FIELD.
7. DURING CONSTRUCTION, EROSION CONTROL AND STORMWATER CONTROLS SHALL BE INSPECTED AT LEAST ONCE EVERY 14 DAYS AND WITHIN 24 HOURS OF THE OCCURRENCE OF A STORM EVENT OF 0.25" OR GREATER. ANY CONTROL NOT WORKING AS DESIGNED SHALL BE REPAIRED OR REPLACED PROMPTLY. ADDITIONAL CONTROLS SHALL BE ADDED IF NEEDED.



**NOT FOR CONSTRUCTION**

APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

DATE \_\_\_\_\_

## EROSION CONTROL PLAN

## DEFINITIVE SUBDIVISION

**MARTINA WAY**  
in  
**TOPSFIELD, MA**

Prepared For

**GREEN ACRES REALTY, INC.**  
82 NORTH STREET  
TOPSFIELD, MA 01983



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DATE: 11/29/2017

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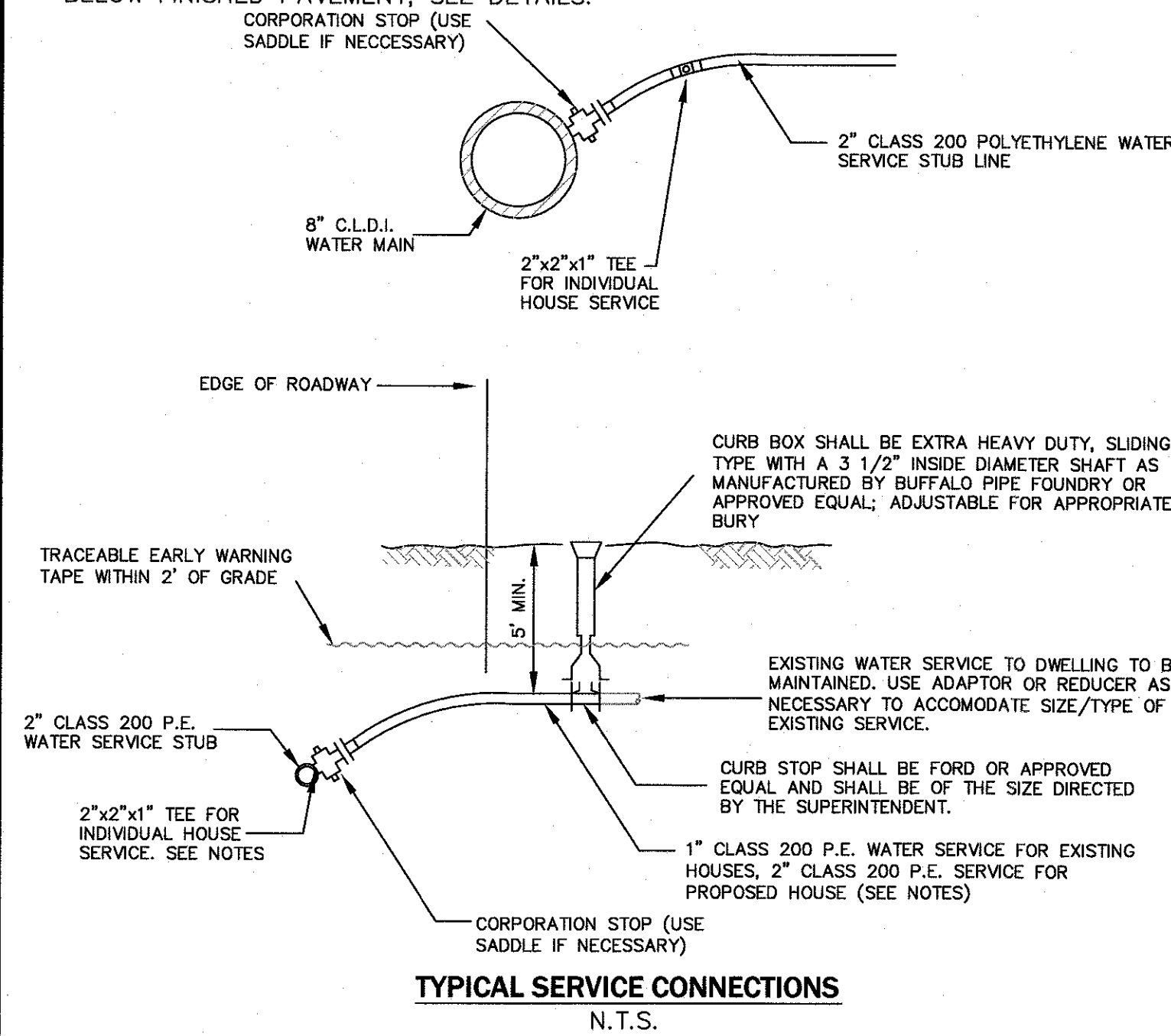
M. & A. NO.: 886-

SCALE: 1"=40'

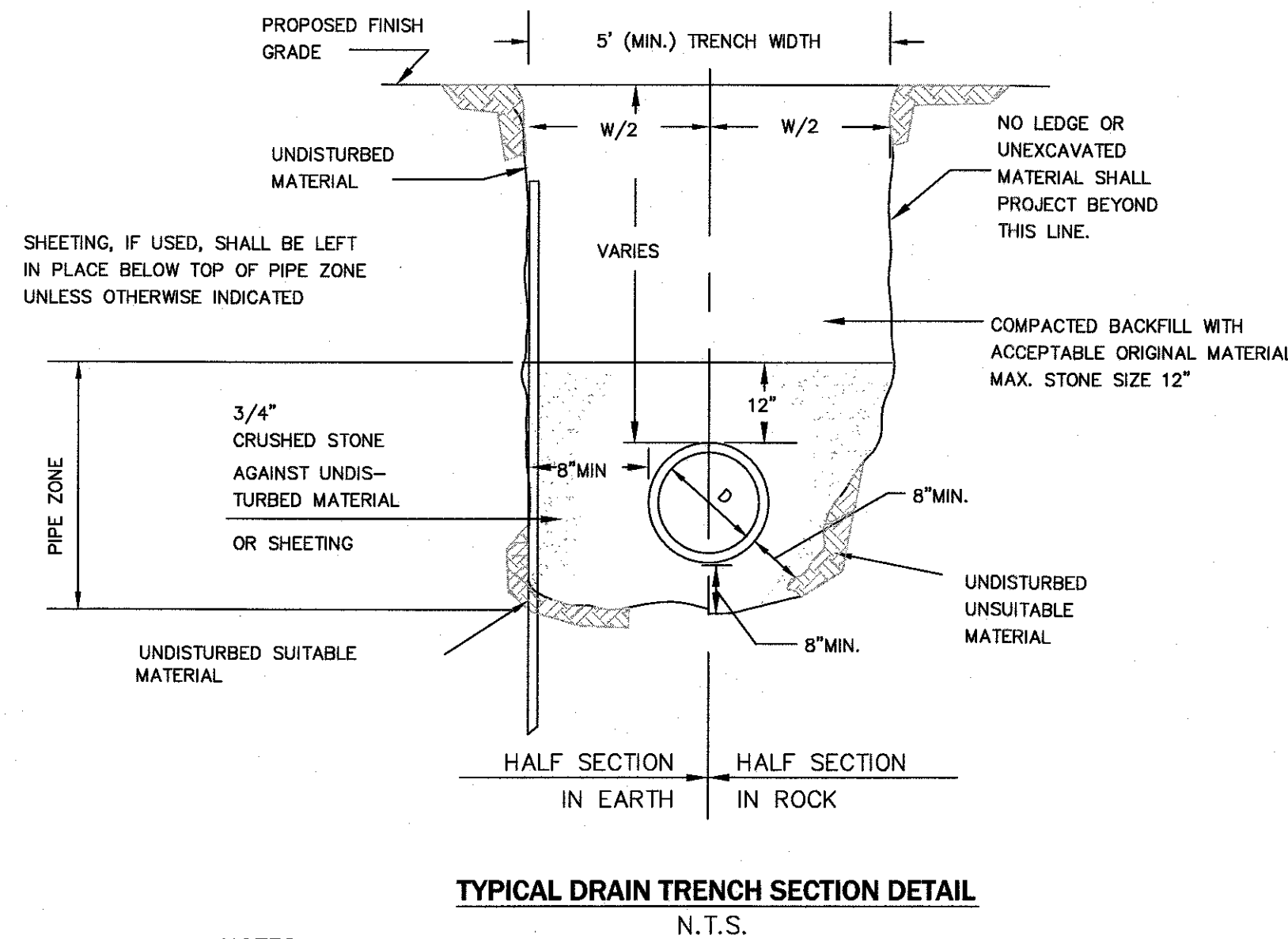
SHEET 10 OF 12



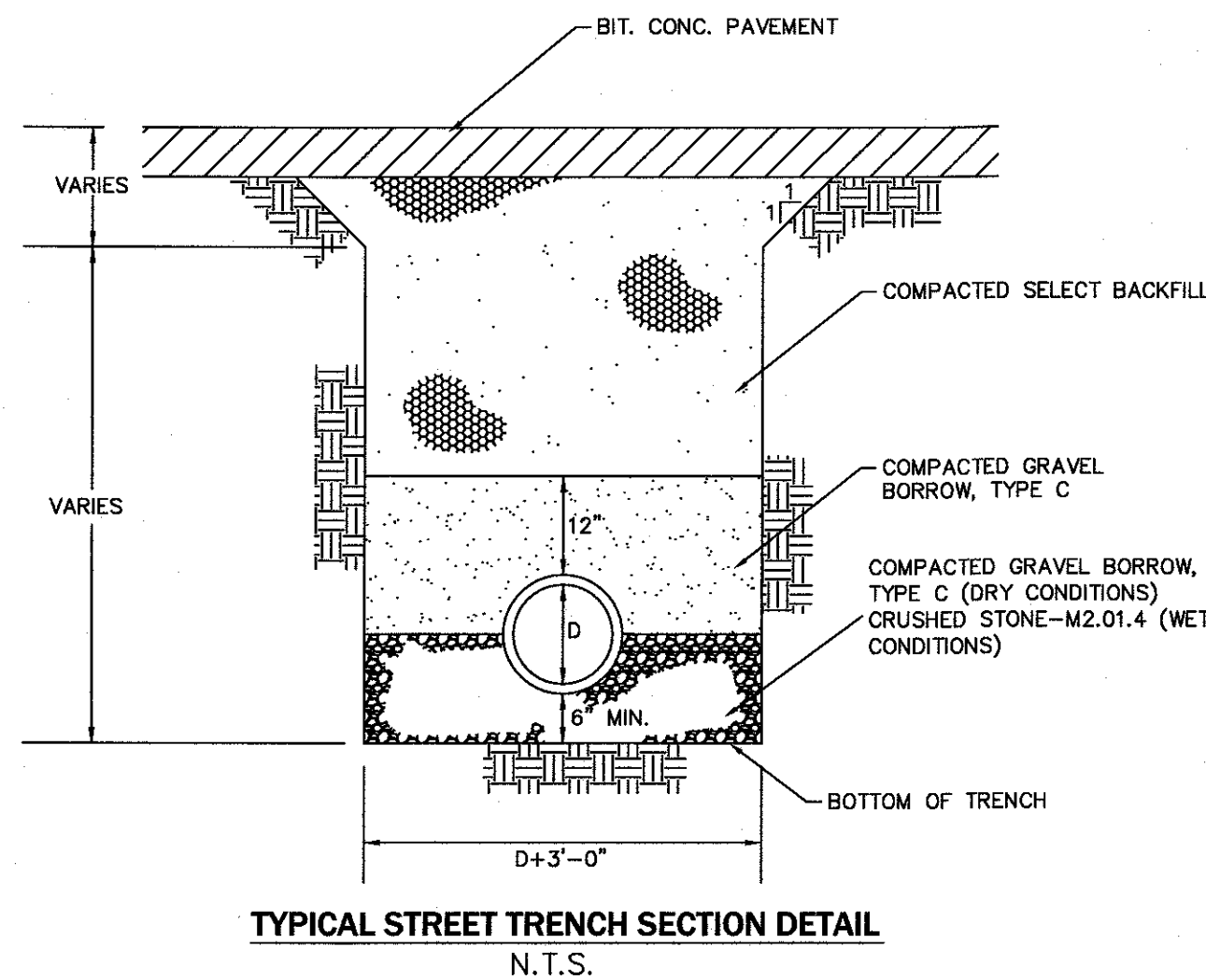
- NOTES:**
1. THE LOCATION OF EXISTING UTILITIES INCLUDING PIPES, CONDUITS, MANHOLES, POLES, AND OTHER UTILITY FEATURES AS SHOWN ON THESE PLANS ARE NOT WARRANTED TO BE CORRECT OR COMPLETE. CONTRACTOR SHALL VERIFY UTILITIES AND NOTIFY DIGSAFE PRIOR TO ANY EXCAVATIONS.
  2. INSTALLATION OF UTILITIES SHALL CONFORM TO ALL APPLICABLE REGULATIONS, CODES, AND STANDARDS, INCLUDING THOSE OF THE TOWN OF TOPSFIELD.
  3. WATER WILL BE SUPPLIED TO THE PROJECT VIA THE MUNICIPAL 8" C.L.D.I. WATER MAIN ALONG PERKINS ROW.
  4. WATER SERVICES FOR EACH HOUSE SHALL BE CLASS 200 POLYETHYLENE UNLESS OTHERWISE NOTED. PROPOSED HOUSE WILL HAVE A MINIMUM 2" SERVICE, SIZE/TYPE TO BE DETERMINED BY FIRE SPRINKLER DESIGNER. EXISTING HOUSES WILL HAVE A 1" SERVICE TO THE NEW CURB STOPS.
  5. A MINIMUM OF 5 FEET OF COVER SHALL BE MAINTAINED OVER WATER SERVICE.
  6. A MINIMUM HORIZONTAL SEPARATION OF 10 FEET SHALL BE MAINTAINED BETWEEN THE PROPOSED WATER SERVICE AND ANY PART OF THE PROPOSED SEPTIC SYSTEM.
  7. UNLESS OTHERWISE NOTED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE AND SHALL BE LAID AT A MINIMUM SLOPE OF 0.5% (0.005'/') ALL JOINTS IN HDPE DRAINAGE PIPE SHALL BE FITTED WITH RUBBER GASKETS UNLESS OTHERWISE NOTED.
  8. ROOF DRAINS SHALL BE HDPE PIPE AND SHALL BE LAID AT A MINIMUM SLOPE OF 0.5% (0.005'/') UNLESS OTHERWISE NOTED.
  9. ALL PROPOSED CATCHBASINS IN THE STREET SHALL HAVE HOODS AND DEEP SUMPS. CATCHBASIN RIMS TO BE SET 1" BELOW FINISHED PAVEMENT, SEE DETAILS.



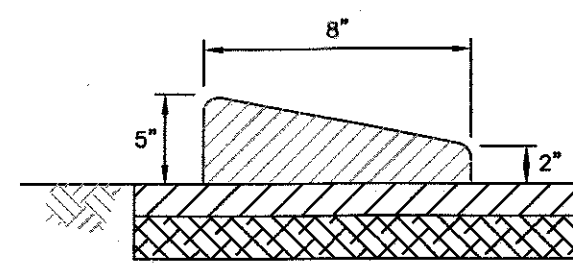
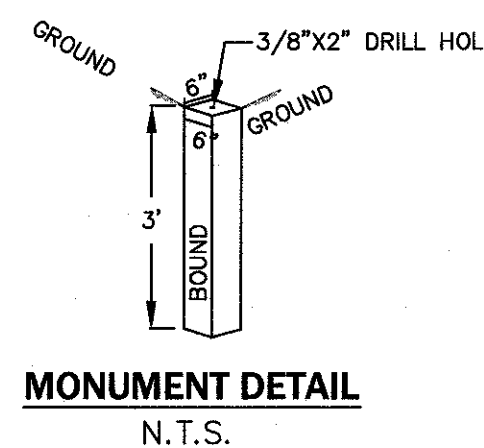
- NOTES:**
1. CORPORATION STOP SHALL BE A BALL VALVE TYPE AND BE EQUAL TO THOSE MADE BY FORD. THE SIZE SHALL BE AS DIRECTED BY THE WATER DEPARTMENT.
  2. SADDLE CLAMP, DIRECT PRESSURE TAPS FOR SERVICE CONNECTIONS ARE PERMITTED FOR DUCTILE IRON CLASS #202 DOUBLE STRAP SERVICE SADDLES OR APPROVED EQUAL FOR FILAMENT WOUND REINFORCED THERMOSETTING RESIN PIPE SADDLE CLAMPS SHALL BE AS RECOMMENDED IN THE MANUFACTURER'S INSTALLATION GUIDE (STAINLESS STEEL WRAP AROUND TYPE).
  3. PLASTIC WATER SERVICE PIPE SHALL BE CLASS 200 POLYETHYLENE WITH STAINLESS STEEL INSERT STIFFENERS AT ALL CONNECTIONS. MINIMUM DIAMETER IS 2", ACTUAL SIZE TO BE DETERMINED BY FIRE SPRINKLER DESIGNER.
  4. TRACEABLE EARLY WARNING TAPE SHALL BE USED TO MARK ALL PLASTIC SERVICE PIPE OVER ITS ENTIRE LENGTH.
  5. DETAILS FOR CONNECTIONS LARGER THAN 1" SHALL BE APPROVED BY THE SUPERINTENDENT.



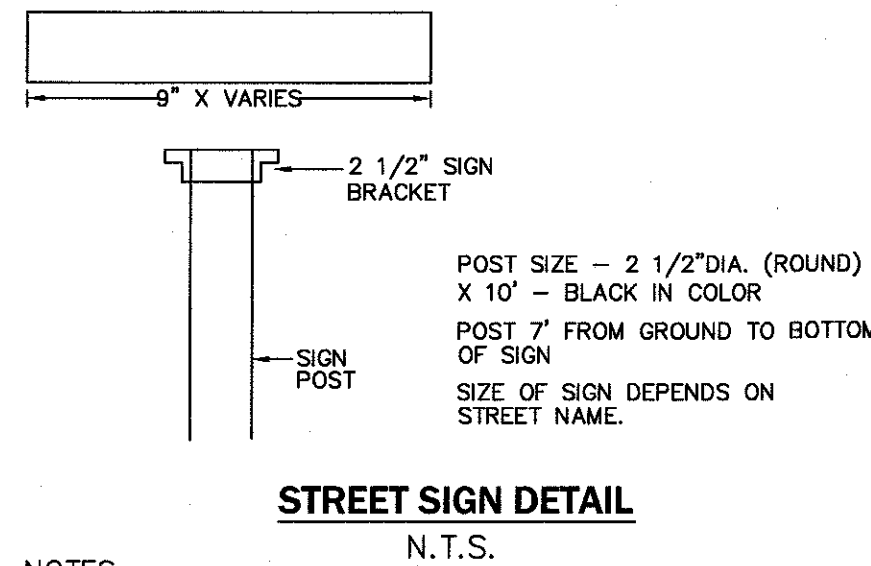
- NOTES:**
1. FOR TRENCHES LOCATED BELOW PAVEMENT REFER TO TYPICAL STREET TRENCH SECTION DETAIL.
  2. DRAINAGE PIPE FOR THE STREET DRAINAGE SYSTEM SHALL BE 12" DIAMETER HIGH DENSITY POLYETHYLENE PIPE UNLESS OTHERWISE NOTED.
  3. ALL FIELD CUTTING OF PIPE SHALL BE DONE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



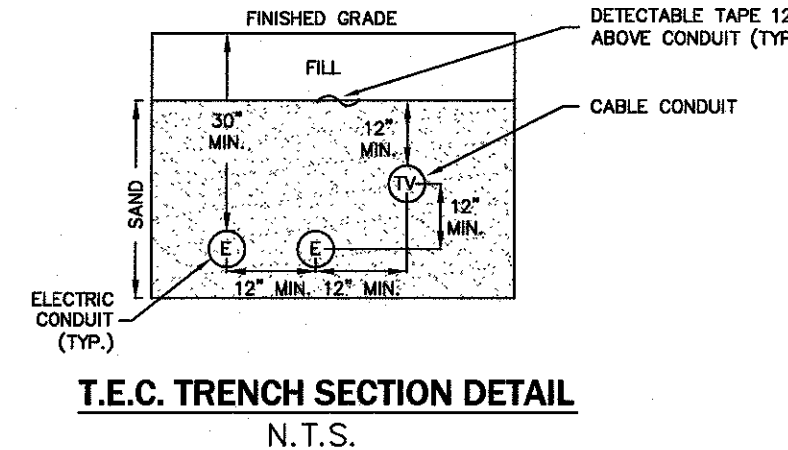
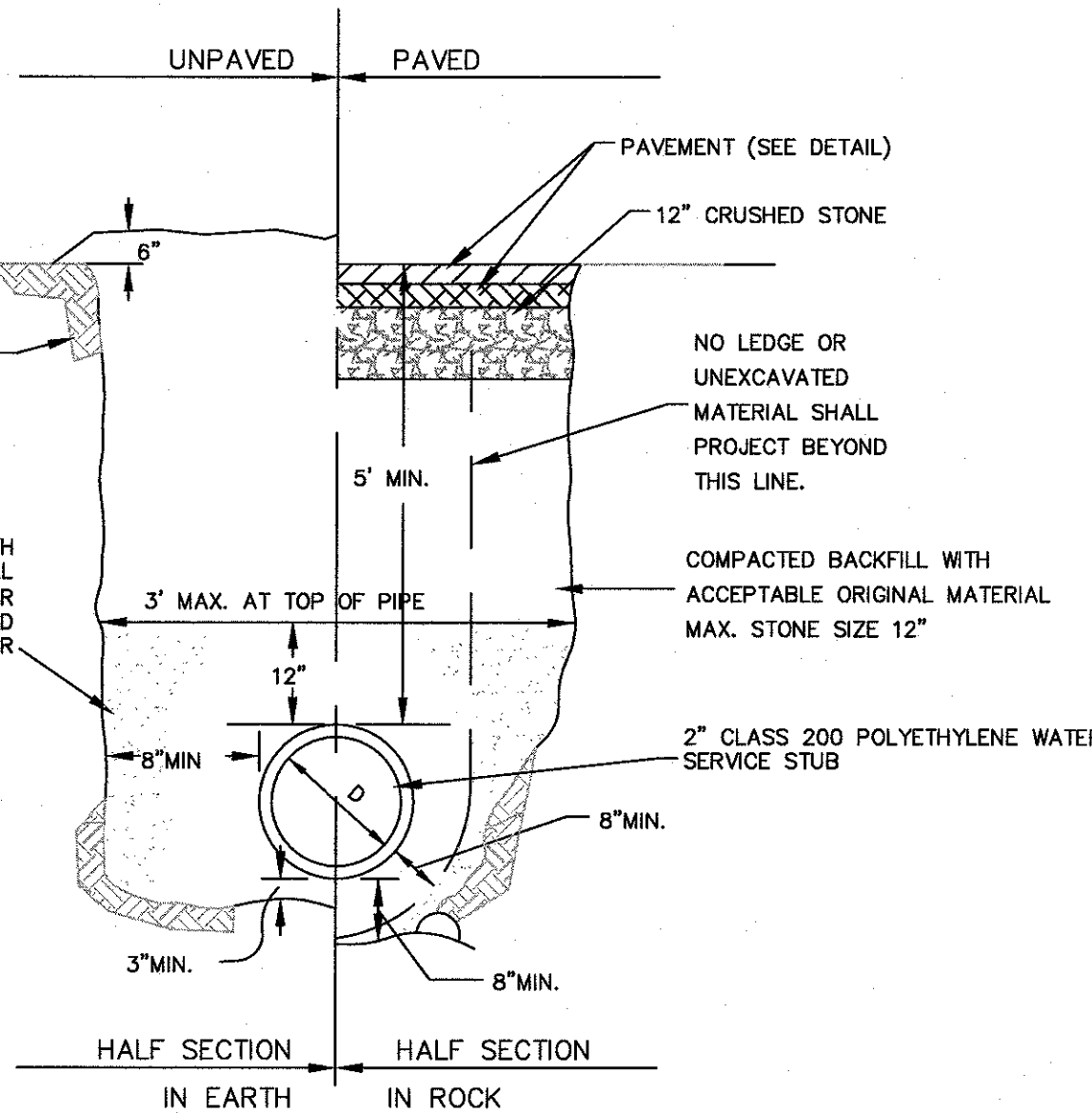
- NOTES:**
1. MONUMENTS SHALL BE IN ACCORDANCE WITH SECTION 5.14.2 OF THE RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF TOPSFIELD.
  2. MONUMENTS SHALL BE GRANITE OR REINFORCED CONCRETE.
  3. MONUMENTS SHALL BE INSTALLED AT ALL STREET INTERSECTIONS, AT ALL POINTS OF CHANGE IN DIRECTION, OR CURVATURE OF STREETS, AND AT OTHER POINTS AS SHOWN ON THE PLANS, AND WHERE, IN THE OPINION OF THE BOARD, PERMANENT MONUMENTS ARE NECESSARY.
  4. TOP OF MONUMENT TO BE SET FLUSH WITH FINAL GRADE.
  5. SEE PLAN OF LAND FOR BOUND LOCATIONS.



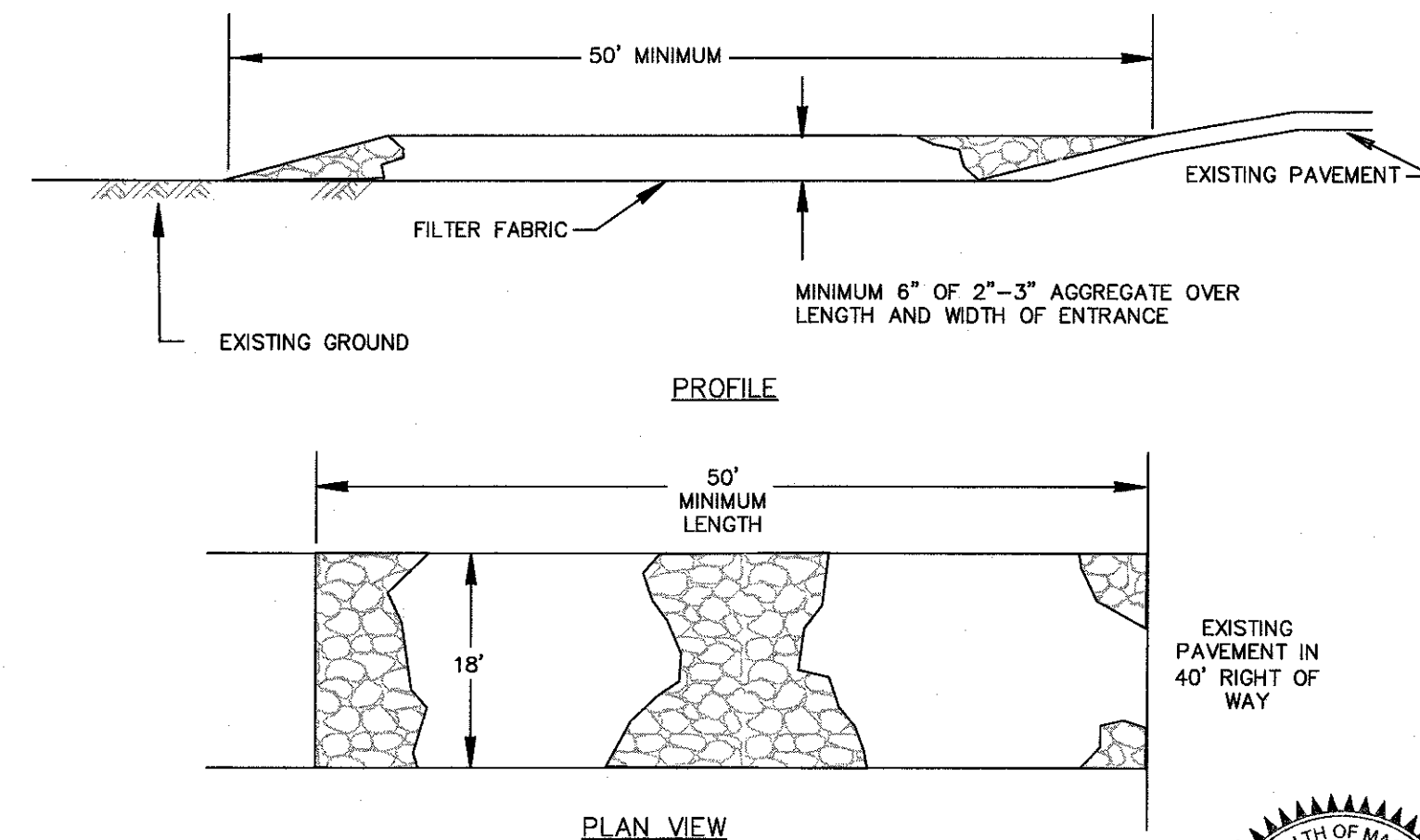
- NOTES:**
1. BITUMINOUS CONCRETE BERM SHALL CONFORM TO THE MATERIALS AND CONSTRUCTION METHODS AS SPECIFIED IN SECTION 470 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH SECTION 5.3 OF THE TOWN OF TOPSFIELD RULES & REGULATIONS GOVERNING THE SUBDIVISION OF LAND.



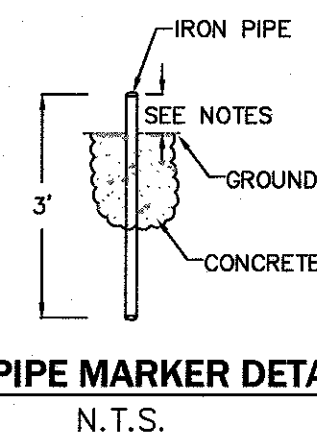
- NOTES:**
1. STREET NAME SIGNS SHALL BE STANDARD TOPSFIELD STREET-NAME SIGNS. STREET SIGNS SHALL BE IN ACCORDANCE WITH SECTION 5.7 OF THE RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF TOPSFIELD, SUBDIVISION STANDARDS.
  2. TYPE AND LOCATION ACCEPTABLE TO THE HIGHWAY SUPERINTENDENT.
  3. SIGNS TO BE FROM VENDOR APPROVED BY HIGHWAY SUPERINTENDENT.
  4. SIGNS TO BE MADE OF EXTRUDED ALUMINUM OR APPROVED EQUAL.



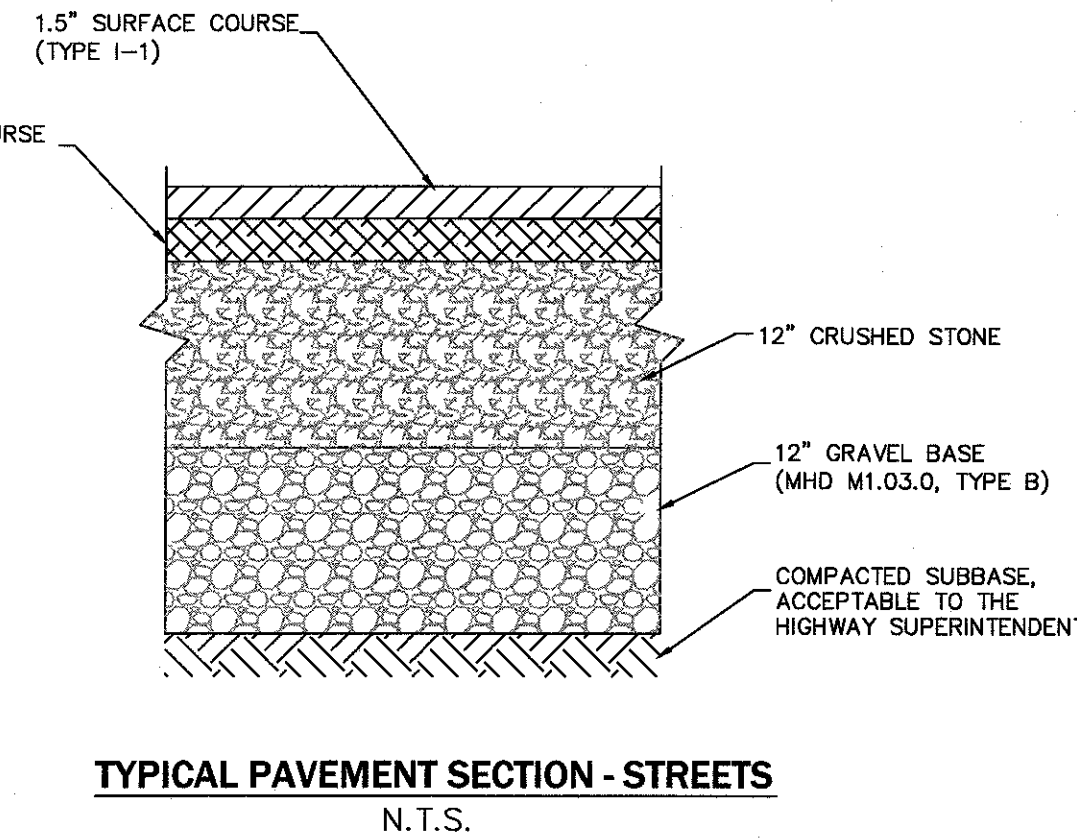
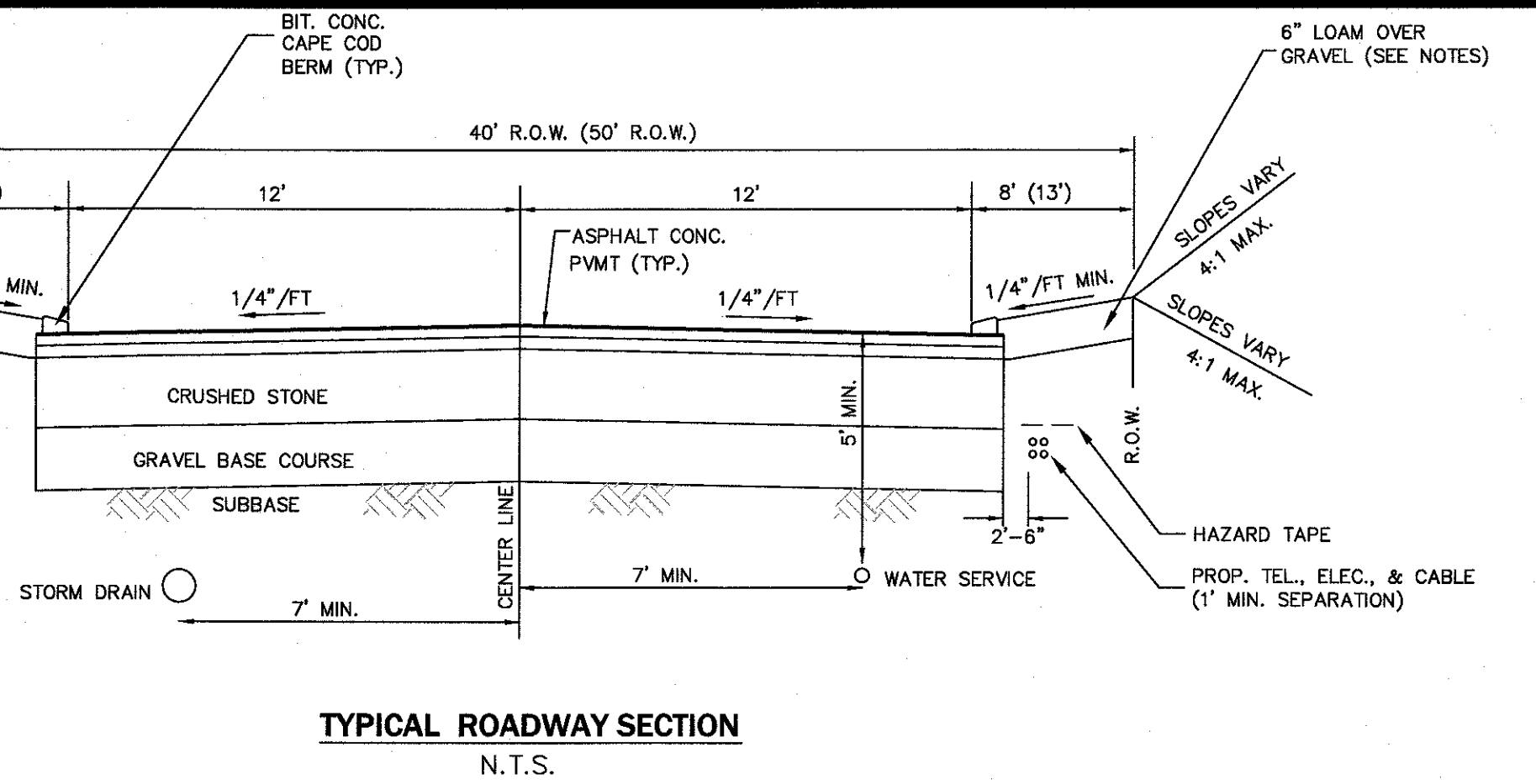
- NOTES:**
1. MINIMUM COVER OVER ELECTRIC CONDUIT IS 30".
  2. DETECTABLE METALLIC WARNING TAPE TO BE PLACED IN EACH TRENCH LOCATED 12" ABOVE HIGHEST CONDUIT.
  3. CONDUIT TO BE SET IN A SAND BED MINIMUM 3" THICK ON THE SIDES, 6" MINIMUM AT TOP & BOTTOM OF CONDUIT.
  4. CRADLE SPACERS TO BE USED IF/WHEN NECESSARY AT 6' INTERVALS.



- NOTES:**
1. RADII AND WIDTH AT THE EXISTING RIGHT OF WAY SHALL BE SUFFICIENTLY SIZED TO ACCOMMODATE ALL CONSTRUCTION VEHICLES/EQUIPMENT WHICH USE THE ENTRANCE.



- NOTES:**
1. IRON PIPE MARKERS SHALL BE IN ACCORDANCE WITH SECTION 5.14.3 OF THE RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF TOPSFIELD.
  2. IRON PIPES SHALL BE THREE (3') FEET LONG AND EXTENDED ABOVE GRADE NOT MORE THAN SIX INCHES (6") OR LESS THAN ONE.



- NOTES:**
1. INSTALLATION OF PAVEMENT SHALL COMPLY WITH ARTICLE 5 OF THE TOWN OF TOPSFIELD SUBDIVISION RULES AND REGULATIONS AND SECTION 400 OF THE STANDARD SPECIFICATIONS.
  2. ALL THICKNESSES INDICATE POST-COMPACTION THICKNESS.
  3. GRAVEL SHALL EXTEND ONE FOOT BEYOND EDGE OF PAVEMENT.
  4. GRAVEL BASE COURSE SHALL BE GRAVEL BORROW (M1.03.0, TYPE B) IN ACCORDANCE WITH SECTION 400 OF THE STANDARD SPECIFICATIONS. THE GRAVEL BASE SHALL BE RAKED SUCH THAT ALL LARGE STONES (NOT TO EXCEED 4") ARE EVENLY DISTRIBUTED THROUGHOUT THE BASE TO AVOID COBBLING. THE SUBGRADE SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY (TO A DEPTH OF 6") AS DETERMINED BY ASTM DESIGNATION 1557-70, METHOD D.
  5. THE CRUSHED STONE BASE SHALL CONSIST OF WASHED STONE NO SMALLER THAN 1" DIAMETER AND NO LARGER THAN 1 1/2" DIAMETER.
  6. THE BINDER COURSE SHALL BE ASPHALT CONCRETE IN ACCORDANCE WITH SECTION 460, CLASS I, BITUMINOUS CONCRETE PAVEMENT, TYPE I-1 (BINDER COURSE MIX) OF THE STANDARD SPECIFICATIONS. THE BINDER COURSE SHOULD BE ALLOWED TO WINTER OVER ONE SEASON AND SHOULD BE SWEEPED CLEAN PRIOR TO THE INSTALLATION OF THE SURFACE COURSE. IF THE BINDER CANNOT BE SWEEPED REASONABLY CLEAN, A TACK COAT MUST BE APPLIED TO ENSURE PROPER BINDING OF THE TWO SURFACES. THE BITUMINOUS CONCRETE SURFACE COURSE SHALL NOT BE INSTALLED UNTIL SUCH TIME AS ALL HEAVY CONSTRUCTION IS COMPLETE. (A LEVELING COURSE MAY BE REQUIRED PRIOR TO THE INSTALLATION OF THE SURFACE COURSE).
  7. THE SURFACE COURSE SHALL BE ASPHALT CONCRETE IN ACCORDANCE WITH SECTION 460, CLASS I, BITUMINOUS CONCRETE PAVEMENT, TYPE I-1 (TOP COURSE MIX) OF THE STANDARD SPECIFICATIONS.
  8. THIS PAVEMENT SECTION ONLY APPLIES TO PROPOSED STREETS. SEE CURB DETAIL FOR CURB CONSTRUCTION REQUIREMENTS AND DRIVEWAY DETAIL FOR DRIVEWAY CONSTRUCTION REQUIREMENTS.
  9. SHOULDERS UP TO THE LIMIT OF WORK SHALL HAVE 6" OF TOPSOIL PLACED OVER GRAVEL IN ACCORDANCE WITH SECTION 5.15.B OF THE TOWN OF TOPSFIELD SUBDIVISION RULES AND REGULATIONS.

REGISTRY USE ONLY

APPROVED BY THE  
TOWN OF TOPSFIELD  
PLANNING BOARD

CHK:

DSG:

DRW:

DETAILS

**DEFINITIVE SUBDIVISION**  
in  
**MARTINA WAY**  
in  
**TOPSFIELD, MA**

Prepared For

**GREEN ACRES REALTY, INC.**  
82 NORTH STREET  
TOPSFIELD, MA 01983

**Marchionda**  
& Associates, L.P.  
Engineering and  
Planning Consultants

62 Montvale Avenue  
Suite 1  
Stoneham, MA 02180  
TEL: (781) 438-6121  
FAX: (781) 438-9654  
Email: [engineering@marichionda.com](mailto:engineering@marichionda.com)  
Website: [www.marichionda.com](http://www.marichionda.com)



**PERMITTING PLANS**

NOT FOR CONSTRUCTION

DATE: 11/29/2017

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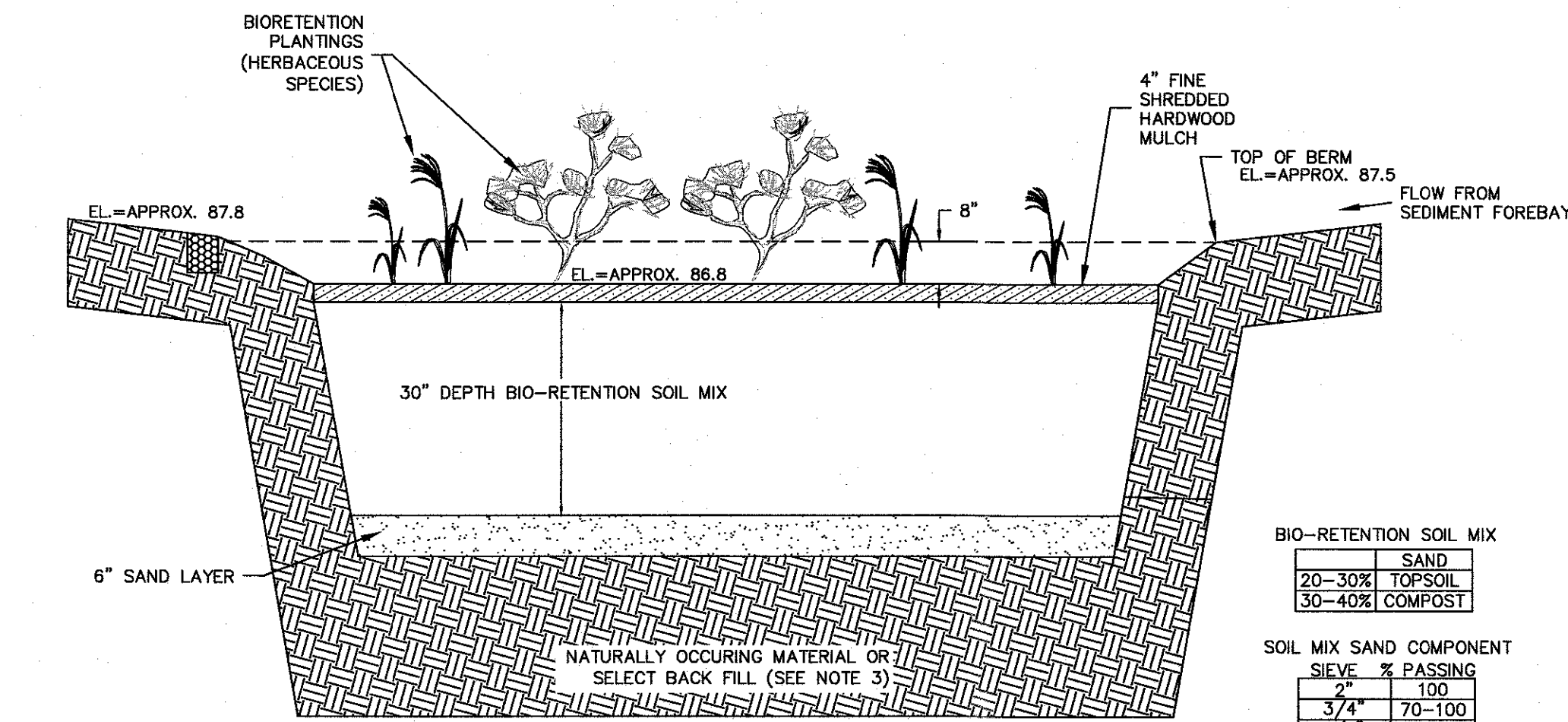
M. & A. NO.: 886-01

SCALE: NOT TO SCALE

SHEET 11 OF 12



- NOTES:
1. THE LOCATION OF EXISTING UTILITIES INCLUDING PIPES, CONDUITS, MANHOLES, POLES, AND OTHER UTILITY FEATURES AS SHOWN ON THESE PLANS ARE NOT WARRANTED TO BE CORRECT OR COMPLETE. CONTRACTOR SHALL VERIFY UTILITIES AND NOTIFY DISSAFE PRIOR TO ANY EXCAVATIONS.
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  7. UNLESS OTHERWISE NOTED ON THE PLANS, ALL DRAINAGE PIPE SHALL BE HDPE AND SHALL BE LAID AT A MINIMUM SLOPE OF 0.5% (0.005'/').
  8. ROOF DRAINS SHALL BE HDPE PIPE AND SHALL BE LAID AT A MINIMUM SLOPE OF 0.5% (0.005'/') UNLESS OTHERWISE NOTED.
  9. ALL PROPOSED CATCHBASINS IN THE STREET SHALL HAVE HOODS, AND DEEP SUMPS. CATCHBASIN RIMS TO BE SET 1" BELOW FINISHED PAVEMENT, SEE DETAILS.
  10. AREAS TO BE USED FOR INFILTRATION SHALL BE SURROUNDED BY CONSTRUCTION FENCE AND PROTECTED FROM EXCESSIVE EQUIPMENT TRACKING.

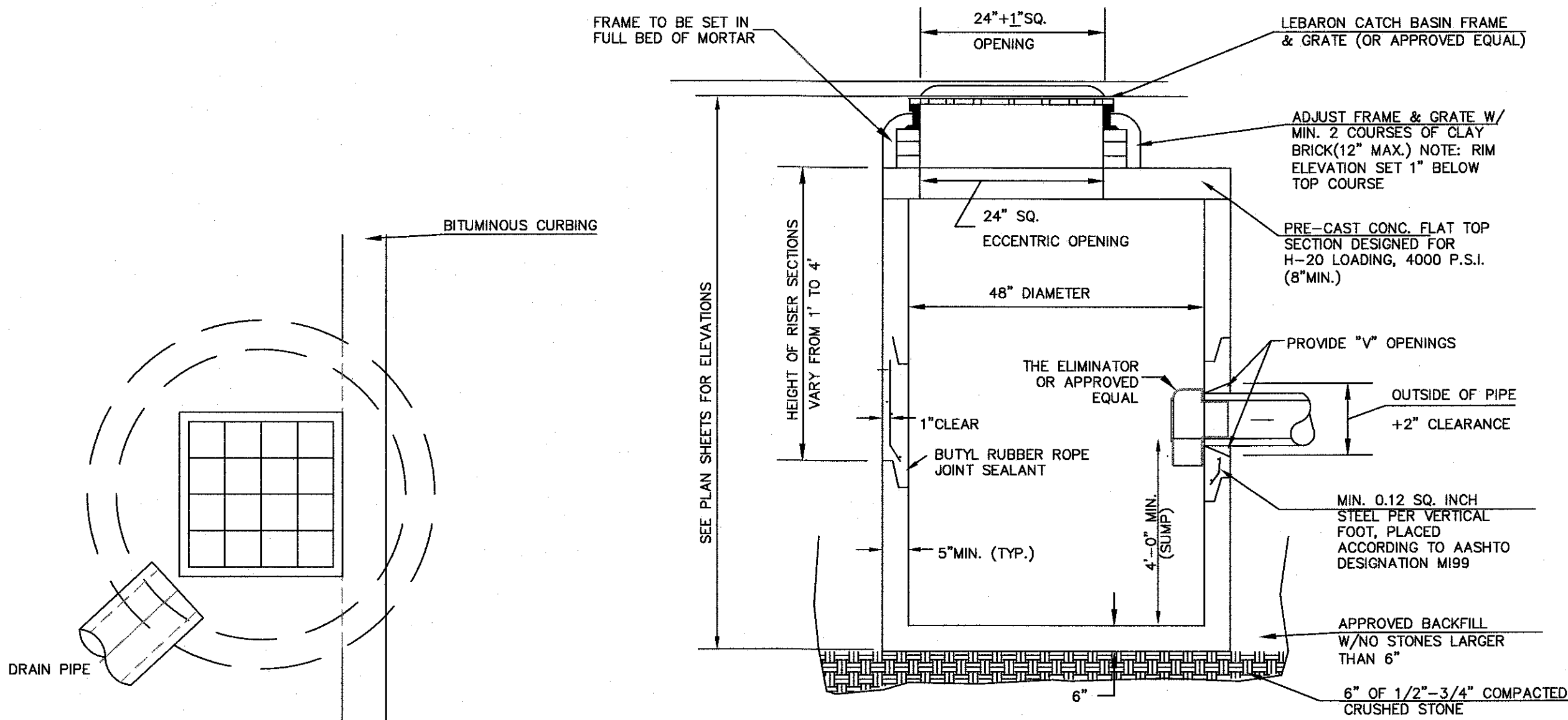


**RAIN GARDEN #1 DETAILS**

N.T.S.

NOTES:

1. THE BIORETENTION HERBACEOUS SPECIES PLANTINGS SHALL BE SELECTED FROM THE RECOMMENDED SPECIES LISTED IN THE DEP STORMWATER MANUAL.
2. THE BIORETENTION SOIL SHOULD HAVE A pH BETWEEN 5.5 AND 6.5. THE SOIL MIX SHOULD BE UNIFORM AND FREE OF STONES, STUMPS, ROOTS OR SIMILAR OBJECTS LARGER THAN 2" IN DIAMETER. CLAY CONTENT SHALL NOT EXCEED 5%.
3. ANY UNSUITABLE FILL MATERIALS (SUCH AS ORGANICS, STUMPS, ETC.) THAT EXIST BELOW THE BIO RETENTION AREA SHALL BE REMOVED TO EXPOSE THE EXISTING SUBGRADE. THE EXCAVATED AREA SHALL BE FILLED WITH CLEAN, ORGANIC FREE, SANDY LOAM, FREE FROM ANY FINES OR DEBRIS. ANY FILL USED SHALL HAVE AN INFILTRATION RATE OF 8 INCHES PER HOUR OR FASTER AFTER PLACEMENT.
4. USE SOILS WITH 1.5% - 3% ORGANIC CONTENT AND MAXIMUM 500-PPM SOLUBLE SALTS.
5. THE TOPSOIL COMPONENT SHALL BE SANDY LOAM, LOAMY SAND OR LOAM TEXTURE.
6. THE COMPOST COMPONENT SHALL NOT CONTAIN BIOSOLIDS.
7. THE BOTTOM OF THE BIO RETENTION SOIL MIX MUST BE A MINIMUM OF 2' ABOVE SEASONAL HIGH WATER OR SUBSURFACE LEDGE.
8. THE BIO-RETENTION AREAS SHALL BE PROTECTED BY STAKED HAYBALES AROUND THE FULL PERIMETER TO PREVENT SEDIMENT CONTAMINATION AND SOIL COMPACTION.
9. PRIOR TO THE PLACEMENT OF ANY STONE OR FILL MATERIAL, THE BOTTOM OF EXCAVATION SHALL BE INSPECTED BY THE DESIGN ENGINEER ACCOMPANIED BY THE APPROPRIATE TOWN REPRESENTATIVE.
10. THE RAIN GARDEN HAS BEEN SIZED IN ACCORDANCE WITH MASSACHUSETTS DEP STANDARDS FOR A FIRST FLUSH RAIN OF 0.5 TO 1.0 INCH.

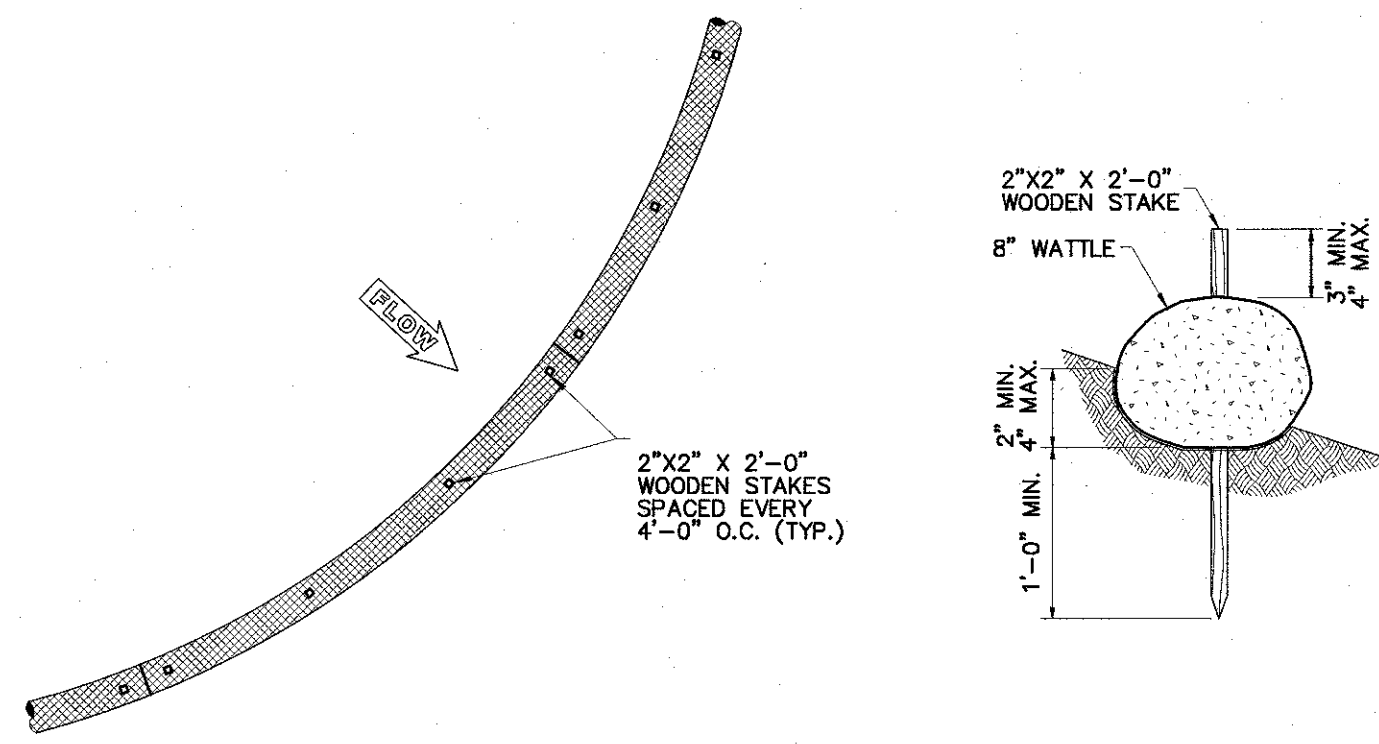


**PRECAST CONCRETE DEEP SUMP CATCH BASIN**

N.T.S.

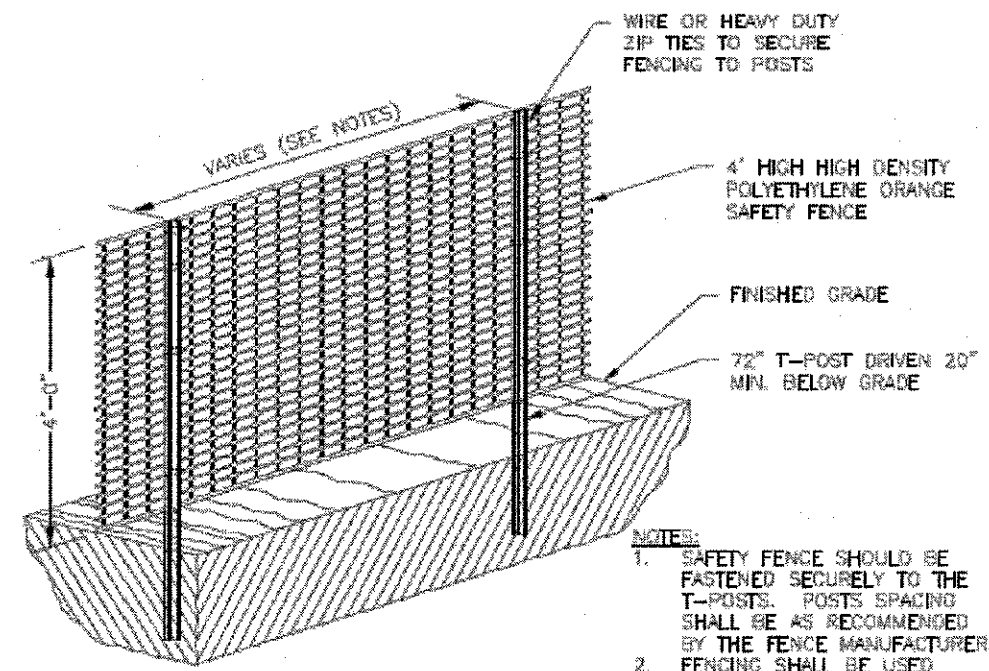
NOTES:

1. IRON CASTINGS FOR CATCHBASIN FRAMES & GRATES SHALL BE IN ACCORDANCE WITH MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS STANDARDS.
2. CATCHBASIN GRATES SHALL BE TYPE A-1 OR A-3.
3. CATCHBASIN FRAME AND GRATE SHALL BE LEBARON LK121 & L245G1 OR EQUIVALENT.
4. PRECAST CONCRETE CATCHBASIN SHALL CONFORM TO ASTM SPEC, NO C 478-82a.
5. CATCH BASIN RIMS ARE TO BE SET 1" BELOW FINISHED PAVEMENT.
6. ALL CATCHBASINS WITHIN ROADWAY TO HAVE HOODS AND DEEP SUMPS.



**STRAW WATTLE EROSION CONTROL DETAILS**

N.T.S.

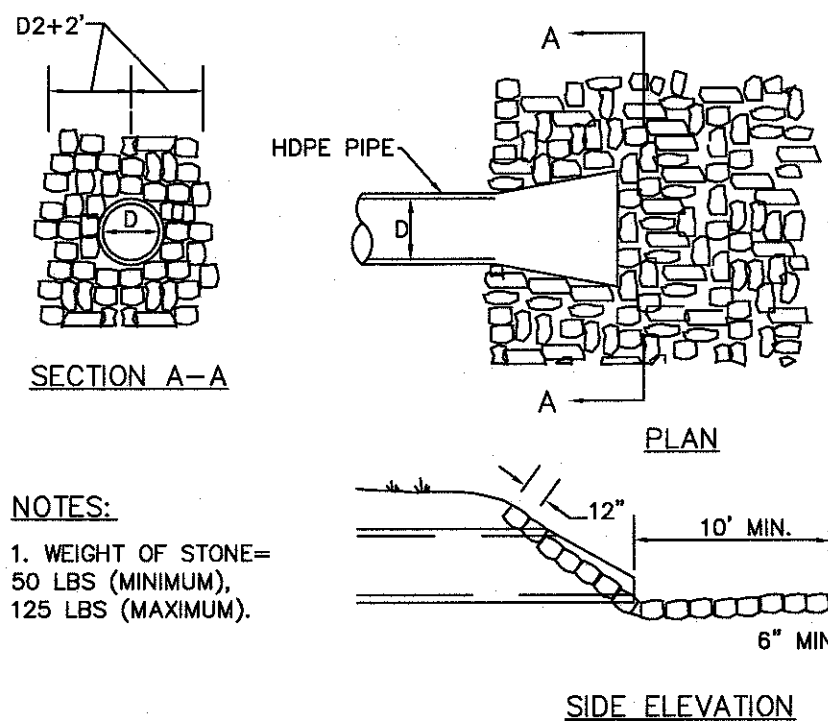


**CONSTRUCTION FENCE DETAIL**

N.T.S.

NOTES:

1. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS. POSTS SPACING SHALL BE AS RECOMMENDED BY THE FENCE MANUFACTURER.
2. FENCING SHALL BE USED DURING ALL PHASES OF CONSTRUCTION, BUT MAY BE ADJUSTED BASED ON THE ACTIVE CONSTRUCTION AREA AT ANY GIVEN TIME.

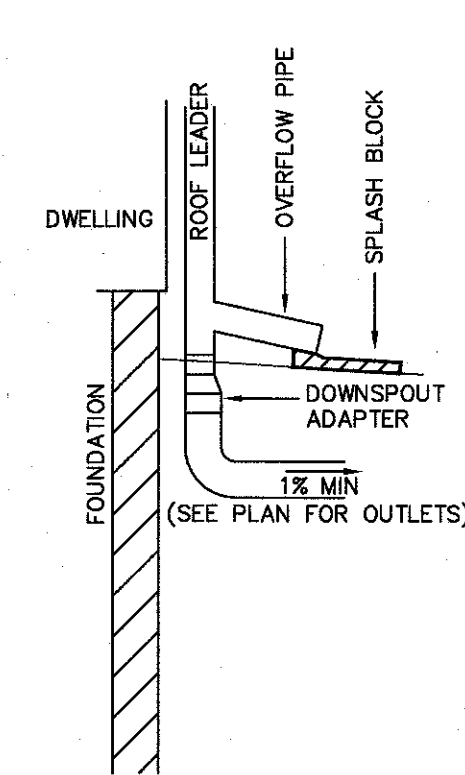


**FLARED END DETAIL**

N.T.S.

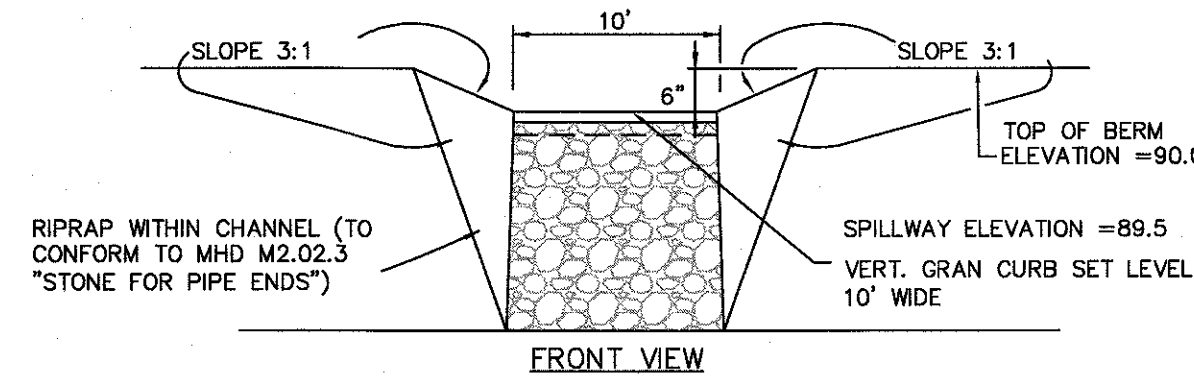
NOTES:

1. WEIGHT OF STONE= 50 LBS (MINIMUM), 125 LBS (MAXIMUM).



**ROOF DRAIN LEADER**

N.T.S.

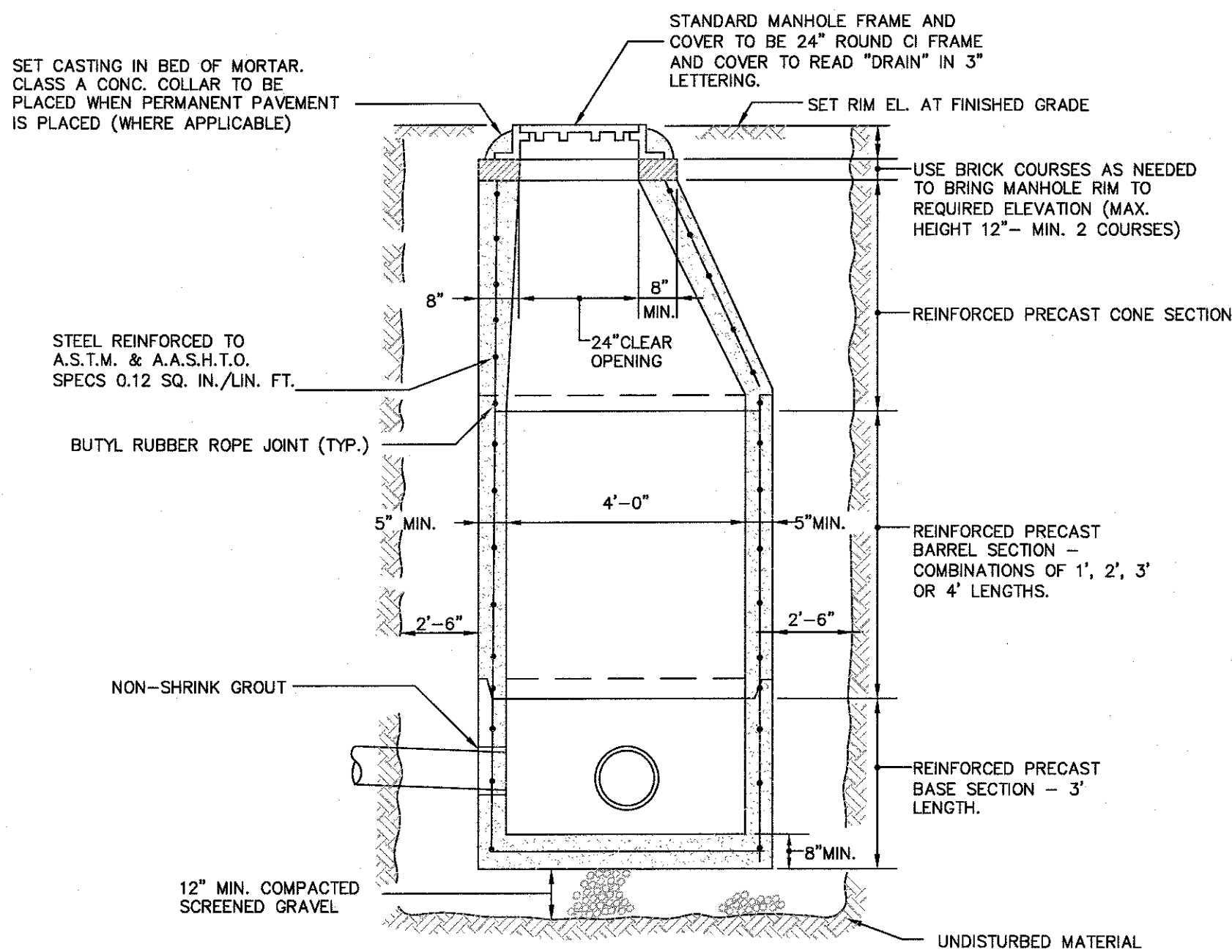


**TYPICAL EMERGENCY SPILLWAY DETAIL**

N.T.S.

NOTES:

1. FILTER FABRIC (MIRAFI 180N OR APPROVED EQUAL) SHALL BE USED TO LINE THE CHANNEL BENEATH THE RIP RAP.



**PRECAST CONCRETE DRAIN MANHOLE**

N.T.S.

NOTES:

1. MANHOLE TO BE RATED FOR H-20 LOADING.
2. IRON CASTINGS FOR MANHOLE FRAMES & COVERS SHALL BE IN ACCORDANCE WITH MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS STANDARDS.
3. FRAME & COVER SHALL BE LEBARON LK 110A OR EQUIVALENT.
4. MANHOLE COVER SHALL HAVE 3-INCH LETTERING TO READ "DRAIN".
5. PRECAST CONCRETE DRAIN MANHOLE SHALL CONFORM TO ASTM SPEC, NO C 478-82a.



**PERMITTING PLANS**

NOT FOR CONSTRUCTION

DETAILS

**DEFINITIVE SUBDIVISION**

MARTINA WAY

TOPSFIELD, MA

Prepared For

**GREEN ACRES REALTY, INC.**

82 NORTH STREET

TOPSFIELD, MA 01983



62 Montvale Avenue  
Suite 1  
Stoneham, MA 02180  
TEL: (781) 438-6121  
FAX: (781) 438-9654  
Email: [engineering@marchionda.com](mailto:engineering@marchionda.com)  
Website: [www.marchionda.com](http://www.marchionda.com)

DATE: 11/29/2017

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SHEET 12 OF 12