

GENERAL NOTES

- ALL ELEVATIONS REFER TO NATIONAL GEODETIC VERTICAL DATUM OF 1988 (NAVD88).
- ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL CONTACT DIGSAFE AT (888) 344-7233 AT LEAST 72 HOURS BEFORE EXCAVATING ON PUBLIC OR PRIVATE PROPERTY.
- ALL WORK SHALL COMPLY WITH TOWN OF STOW HIGHWAY DEPARTMENT REQUIREMENTS FOR WORK CONDUCTED WITHIN THE RIGHT OF WAY OF HARVARD ROAD.
- A DESIGNATED AREA FOR WASHING CONCRETE TRUCKS FOR THE BUILDING FOUNDATION WORK MUST BE POSTED AT THE SITE. THE DESIGNATED AREA SHALL CONSIST OF BEST MANAGEMENT PRACTICE (BMP) FOR CONCRETE WASHOUT AND BE USED TO CONTAIN OR TREAT CONCRETE MATERIALS.
- THE PROJECT SITE ENGINEER SHALL BE CONTACTED FOR PERIODIC INSPECTIONS OF THE SITE. SEE SHEET 2 FOR PROPOSED INSPECTION SCHEDULE.

N/F
WEDGEWOOD PROPERTIES INC.
(WEDGEWOOD PINES CC - GOLF COURSE)

N/F
MASCIA
153 HARVARD RD

N/F
GIORDANO
137 HARVARD RD

PROPOSED STONE OR CONCRETE
BLOCK TERRACED RET. WALLS
HEIGHT < 4-FT

4" PVC INV. = 222.50

4" PVC INV. = 221.25

PROP. (12) CULTEC 330XLHD
24" SUR. CR. STONE
6" CR. ST. BASE
BOT. STONE = 220.0
BOT. CHAMBER = 220.5

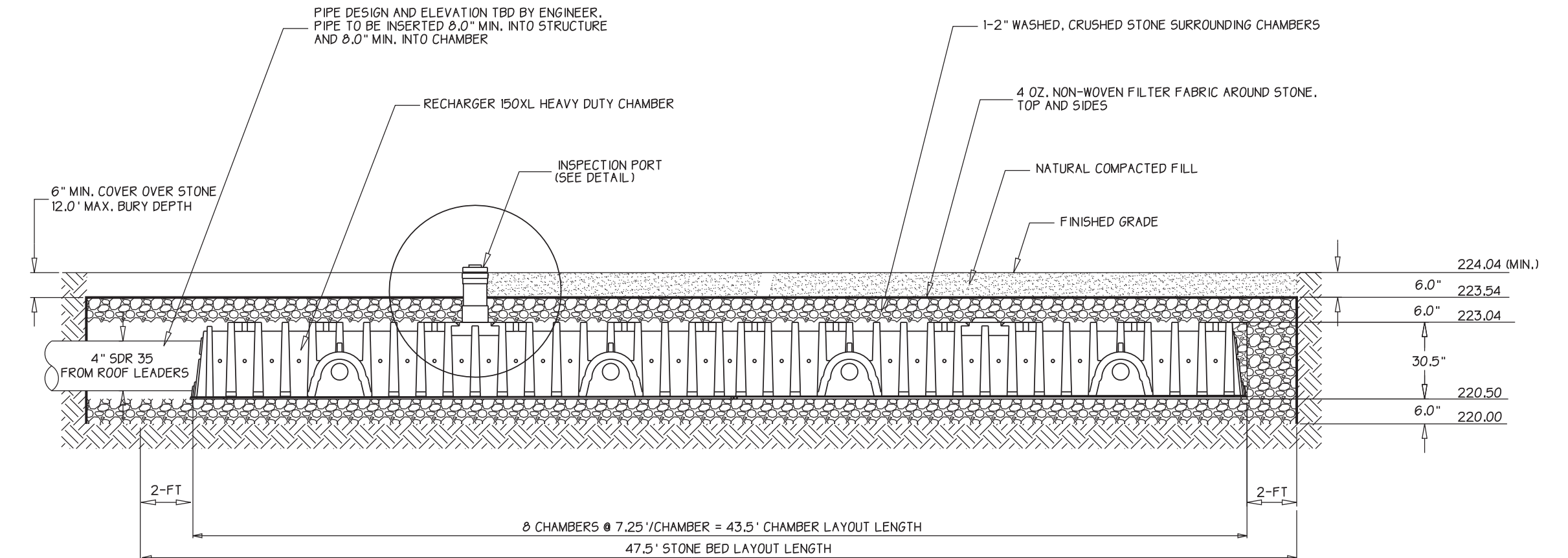
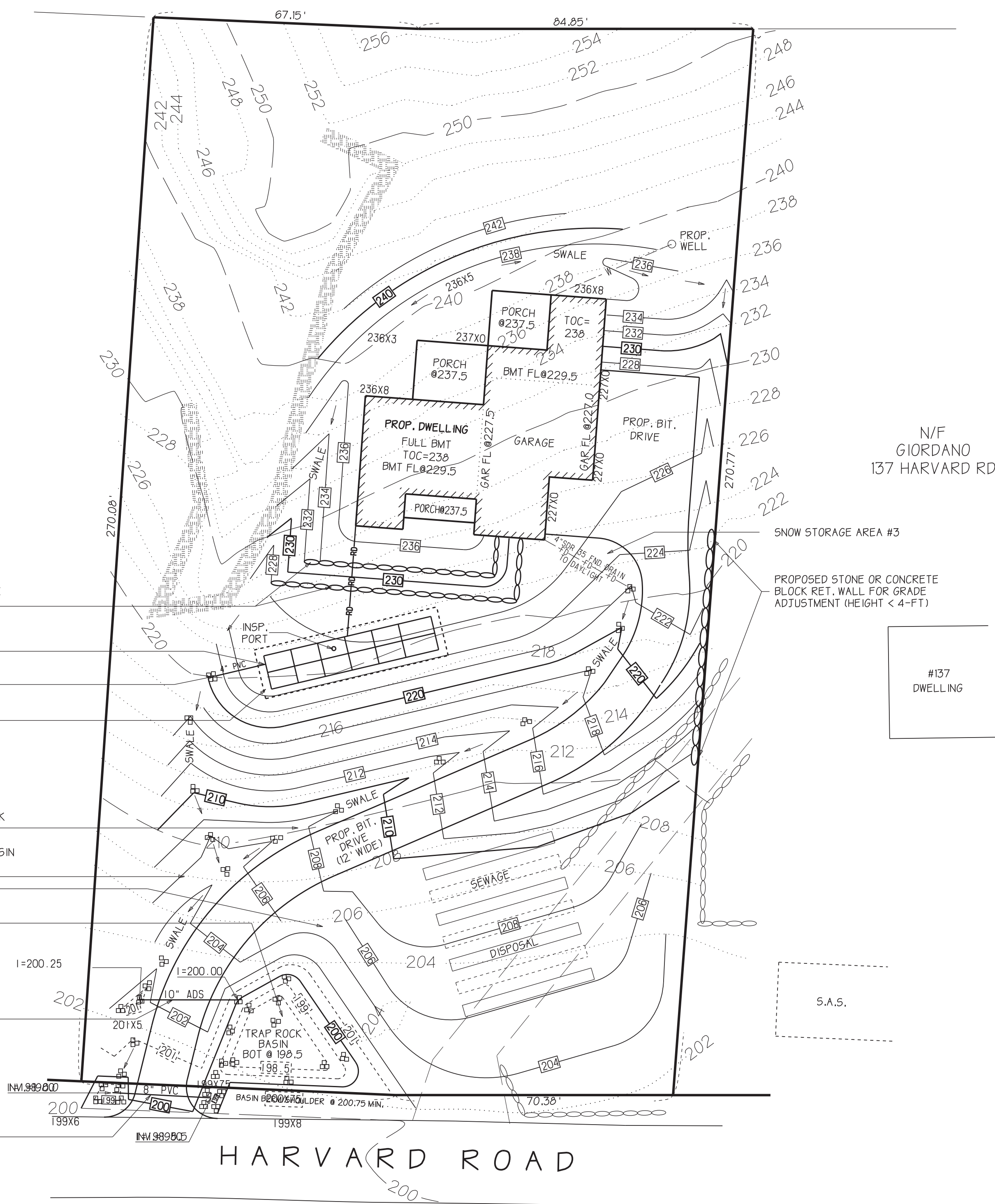
SUPERELEVATE DRIVEWAY TO
DIRECT DRAINAGE TO TRAP ROCK
SWALE ON UPGRADIENT SIDE -
SWALE TO 10" ADS CULVERT
UNDER DRIVE TO TRAP ROCK BASIN

SNOW STORAGE AREA #1
SNOW STORAGE AREA #2

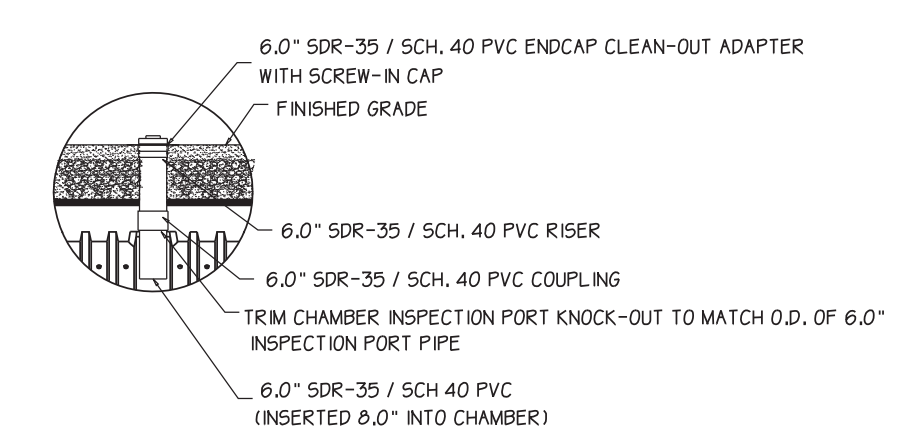
PROP. TRAP ROCK BASIN
BOTTOM @ 199.50
BASIN RM @ 201.00
TRAP ROCK WEIR @ 199.75
(SEE DETAIL)

PROP. 10" ADS CULVERT
L=25' SL=1%

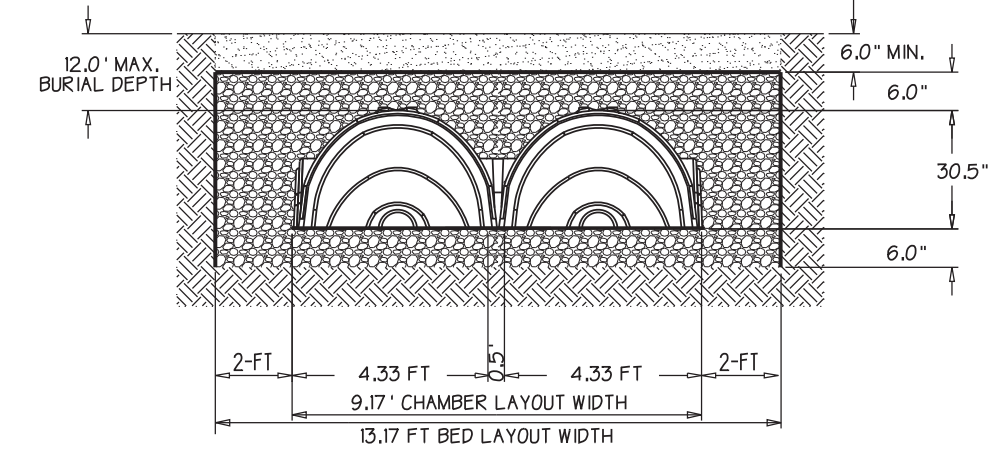
PROP. 8" PVC CULVERT
L=25' SL=2%
(3-5 LB TRAP ROCK @ ENDS)



CULTEC RECHARGER 330XLHD ROOF CHAMBER BED PROFILE
NOT TO SCALE



CHAMBER BED INSPECTION PORT DETAIL
NOT TO SCALE



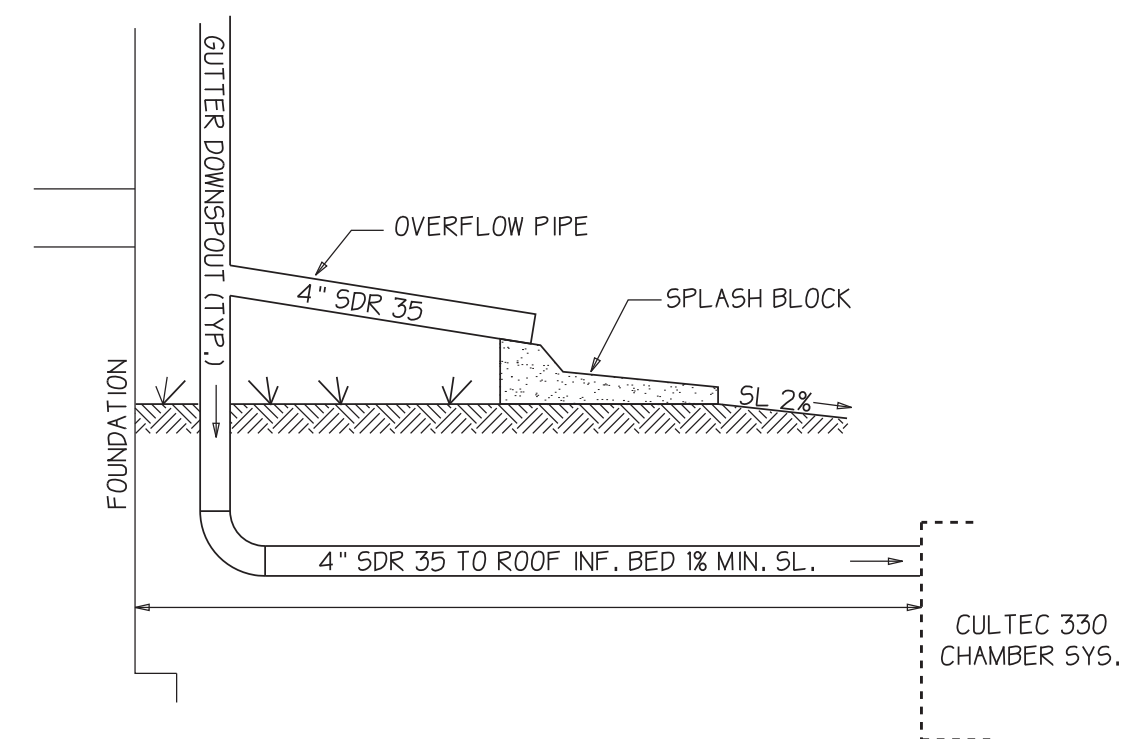
CULTEC RECHARGER 330XLHD CHAMBER BED SECTION
NOT TO SCALE

GENERAL CULTEC RECHARGER NOTES
RECHARGER 330XLHD BY CULTEC, INC. OF BROOKFIELD, CT.
REFER TO CULTEC, INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
MAXIMUM ALLOWED COVER OVER TOP OF UNIT SHALL BE 12'-FT. THE CHAMBER IS DESIGNED TO WITHSTAND TRAFFIC LOADS WHEN INSTALLED ACCORDING TO CULTEC RECOMMENDED INSTALLATION INSTRUCTIONS.

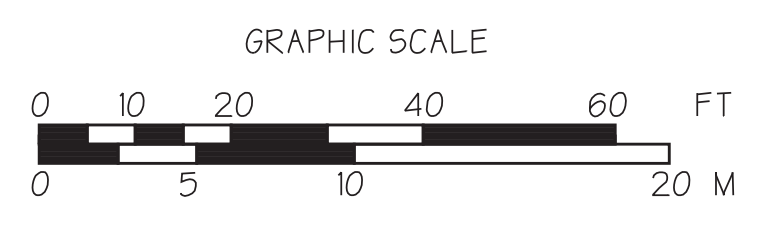
ALL RECHARGER 330XLHD HEAVY DUTY UNITS ARE MARKED WITH A COLORED STRIPE FORMED INTO THE PART ALONG THE LENGTH OF THE CHAMBER.
ALL RECHARGER 330XLHD CHAMBERS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

CULTEC 330 XLHD CONSTRUCTION NOTES

- CRUSHED STONE UTILIZED FOR INFILTRATION BED CONSTRUCTION SHALL BE DOUBLE WASHED.
- IF FILTER FABRIC IS UTILIZED, IT SHALL ONLY BE PLACED OVER THE SYSTEM AND/OR ON THE SIDEWALLS AT THE SOIL STONE INTERFACE. NO FILTER FABRIC SHALL BE PLACED BENEATH THE INFILTRATION BED.
- INFILTRATION BED INSPECTION PORT SHALL BE BROUGHT TO FINISHED GRADE.

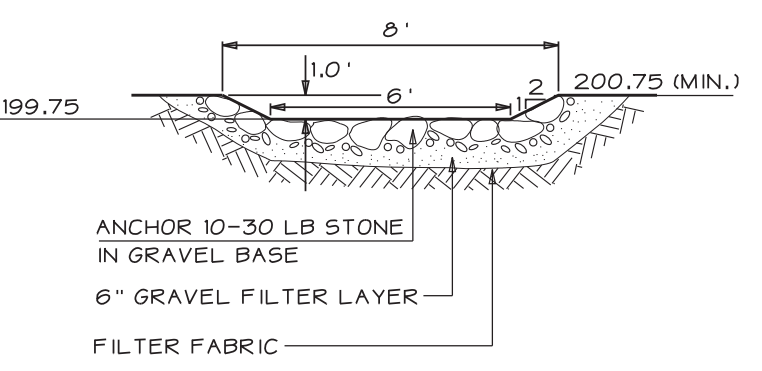


TYPICAL ROOF DOWNSPOUT CONNECTION
NOT TO SCALE
(ALL ROOF DRAINAGE)

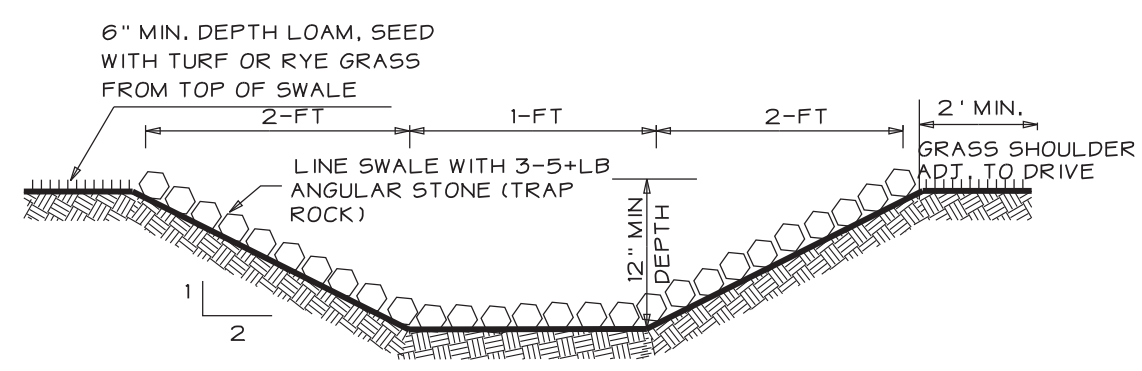


LEGEND

- 210 — EXISTING 10'-FT CONTOUR (TYP.)
- 202 --- EXISTING 2'-FT CONTOUR (TYP.)
- 207 — PROPOSED 10'-FT CONTOUR (TYP.)
- 202 --- PROPOSED 2'-FT CONTOUR (TYP.)
- W --- PROPOSED 1" HDPE WATER LINE
- U --- PROPOSED UNDERGROUND ELECTRIC & TELECOM UTILITIES
- G --- PROPOSED GAS SERVICE
- RD --- PROPOSED 4" SDR 35 FOUNDATION DRAIN



TRAP ROCK BASIN OVERFLOW
NOT TO SCALE



TRAP ROCK DRIVEWAY SWALE
NOT TO SCALE

GRADING & DRAINAGE PLAN

SHEET 1 OF 2

LOCATION:
LOT 2 HARVARD ROAD
STOW, MASSACHUSETTS
ASSESSORS MAP R-09 PARCEL 38

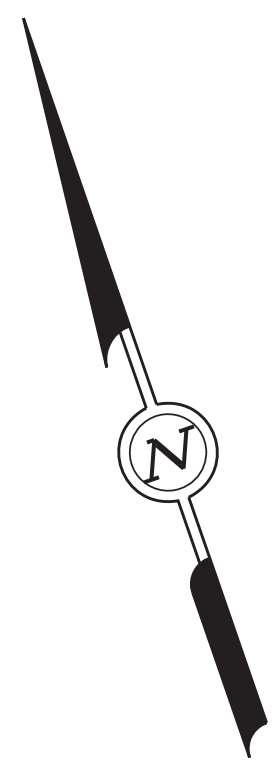
RECORD OWNER:
JOHN P. GIORDANO
30 HERITAGE LANE
STOW, MA 01775
PHONE: (978) 375-3336

DATE: DECEMBER 20, 2022 SCALE: 1"=20'

ENGINEERING
SURVEYING
PLANNING

FORESITE ENGINEERING
16 Gleasondale Road Suite 1-1
Stow, Massachusetts 01775
Phone: (978) 461-2350

N/F
WEDGEWOOD PROPERTIES INC.
(WEDGEWOOD PINES CC - GOLF COURSE)



CONSTRUCTION SEQUENCE

DURING THIS SEQUENCE ALL EROSION CONTROL BARRIERS SHALL BE INSPECTED AND MAINTAINED. ALL DISTURBED AREAS SHALL BE STABILIZED BY WOOD CHIPS, MULCH, SEEDING OR SODDING AS SOON AS POSSIBLE AFTER GRADING IS COMPLETE. ALL EROSION CONTROL BARRIERS SHALL BE REMOVED OR DISPERSED UPON COMPLETION OF FINAL STABILIZATION. SITE SHALL BE CONSTRUCTED IN ONE PHASE.

1. DEMARK LIMITS OF WORK WITH CONSTRUCTION FENCING OR EROSION CONTROL BARRIER AT LOCATIONS SHOWN.
2. CLEAR AND STUMP SITE; STRIP AND STOCKPILE LOAM AND REMOVE ANY DELETERIOUS MATERIALS ENCOUNTERED FROM SITE.
3. INSTALL STABILIZED CRUSHED STONE CONSTRUCTION ENTRANCE.
4. GRADE AND TRAP ROCK BASIN, UTILIZE FOR TEMPORARY SEDIMENTATION UNTIL UPGRADIENT DISTURBED AREAS ARE STABILIZED.
5. GRADE DRIVEWAY AND DRIVEWAY SWALE. PLACE TRAP ROCK.
6. INSTALL DRIVEWAY CULVERTS. PLACE TRAP ROCK AT PIPE ENDS.
7. INSTALL TEMPORARY HAYBALE CHECK DAMS (CD1-CD5).
8. DRILL WATER SUPPLY WELL.
9. EXCAVATE FOUNDATION, CONSTRUCT AND BACKFILL FOUNDATION.
10. INSTALL UNDERGROUND UTILITIES FROM STREET TO FOUNDATION.
11. CONSTRUCT DWELLING.
12. INSTALL ROOF DRYWELL SYSTEM; CONNECT ALL ROOF DOWNSPOUTS TO ROOF SYSTEM.
13. CONSTRUCT SEWAGE DISPOSAL SYSTEM.
14. GRADE AND COMPACT DRIVEWAY BASE, GRADE BASIN, CLEAN ANY ACCUMULATED SEDIMENT FROM TRAP ROCK BASIN.
15. PLACE BINDER COURSE OF DRIVEWAY PAVEMENT.
16. COMPLETE FINAL LANDSCAPING. LOAM AND SEED ALL DISTURBED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.
17. PLACE FINISHED COURSE OF DRIVEWAY PAVEMENT.
18. CONTACT SITE ENGINEER FOR AS-BUILT SURVEY AND INSPECTION.
19. UPON COMPLETION OF SITE CONSTRUCTION AND SATISFACTORY SLOPE STABILIZATION (AS DETERMINED BY THE SITE ENGINEER), REMOVE OR DISPERSE EROSION CONTROL BARRIERS AND CHECK DAMS AND REMOVE TEMPORARY CONSTRUCTION FENCING.
20. FOLLOWING COMPLETION OF CONSTRUCTION, AFTER STABILIZATION HAS BEEN WELL ESTABLISHED, CONTACT SITE ENGINEER FOR FINAL INSPECTION AND CERTIFICATION OF AS-BUILT CONDITIONS.

EROSION CONTROL NOTES

1. PRIOR TO THE START OF CONSTRUCTION THE LIMITS OF CLEARING AND TREES NOT INTENDED FOR REMOVAL SHALL BE CLEARLY MARKED IN THE FIELD WITH FLORESCENT FLAGGING BEARING THE LABEL "LIMIT OF CLEARING" OR "TREE TO BE SAVED", AS APPROPRIATE. ALTERATION OF AREAS BEYOND THE DEMARKED LIMITS OF CLEARING IS PROHIBITED.
2. PRIOR TO THE START OF CONSTRUCTION ALL EROSION CONTROL BARRIERS SHALL BE INSTALLED. THE LOCATIONS SHALL BE STAKED IN THE FIELD BY A REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR.
3. NO WORK SHALL BE DONE WITHIN A RESOURCE AREA OR BUFFER ZONE WITHOUT FIRST OBTAINING AN ORDER OF CONDITIONS FROM THE LOCAL CONSERVATION COMMISSION. THE EROSION CONTROL BARRIER DEMARKS THE LIMIT OF WORK.
4. A MINIMUM OF TEN (10) SURPLUS HAYBALES SHALL BE STACKED ON SITE AND KEPT PROTECTED FROM WEATHER FOR EMERGENCY EROSION CONTROL MEASURES AND UTILIZED AS NECESSARY.
5. A CRUSHED STONE MOUND SHALL BE PLACED THE FULL WIDTH OF THE ENTRANCE WAY, 30 FEET INTO THE SITE AND A MINIMUM OF ONE FOOT DEEP. THIS MOUND SHALL BE MAINTAINED AND REPLACED AS NECESSARY FOR PROPER FUNCTION (REMOVAL OF MUD AND DEBRIS FROM CONSTRUCTION VEHICLES DURING CONSTRUCTION PHASE).
6. EROSION CONTROL BARRIERS SHALL BE INSPECTED AND MAINTAINED REGULARLY.
7. ALL CLEARED AREAS OF THE SITE NOT PLANTED WITH GROUND COVER SHALL BE LOAMED WITH NOT LESS THAN SIX INCHES OF COMPACTED, GOOD QUALITY LOAM AND SEEDED WITH TURF GRASS IN ACCORDANCE WITH GOOD PLANTING PRACTICE.
8. CONTRACTOR SHALL KEEP THE STREET CLEAN OF DIRT AND SEDIMENT THAT IS WASHED INTO THE STREET OR TRACKED INTO THE STREET BY CONSTRUCTION VEHICLES. STREET SHALL BE SWEEPED AT THE END OF EACH DAY OF CONSTRUCTION AS NEEDED.

SLOPE STABILIZATION NOTES

1. DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME, SUCH AS THE INACTIVE WINTER SEASON.
2. TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, LUMPS OF SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS.
3. THE SEED MIX SHALL BE INOCULATED WITHIN 24 HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.

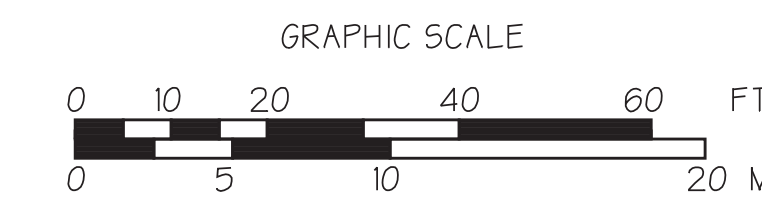
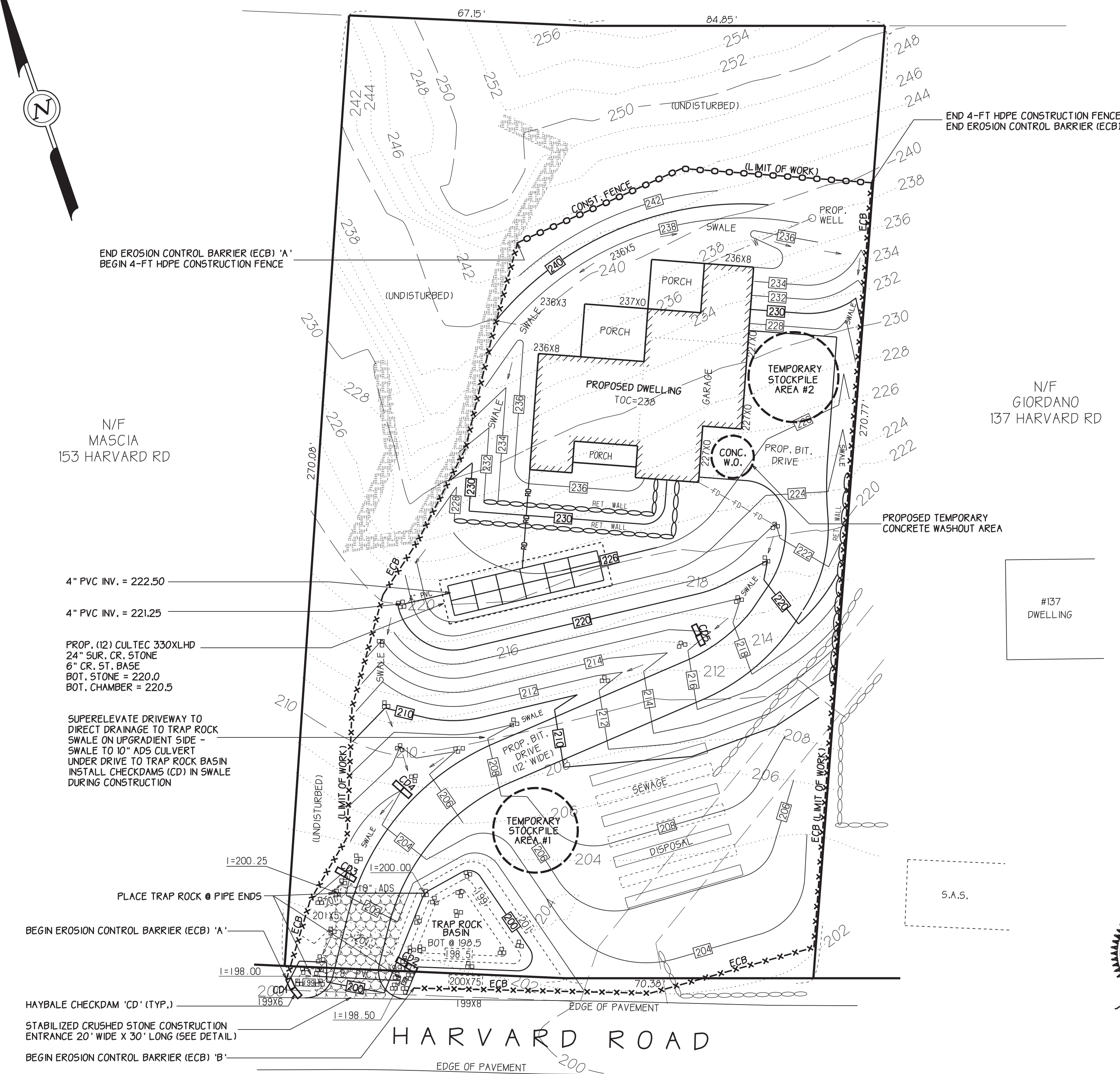
SEED MIXTURES

MOWED AREAS (ALL FLATS AND SLOPES EQUAL TO OR LESS THAN 3:1)

MIXTURE	% BY WEIGHT	SEEDING DATES
RED FESCUE	75	APRIL 1 - JUNE 15
KENTUCKY BLUEGRASS	15	AUGUST 15 - OCTOBER 15
COLONIAL BENTGRASS	5	SPRING OR FALL
PERENNIAL RYEGRASS	5	SPRING OR FALL

UNMOWED AREAS (FLAT SLOPES GREATER THAN 3:1)

MIXTURE	% BY WEIGHT	SEEDING DATES
RED FESCUE	75	APRIL 1 - JUNE 15
KENTUCKY BLUEGRASS	5	AUGUST 15 - OCTOBER 15
COLONIAL BENTGRASS	5	SPRING OR FALL
PERENNIAL RYEGRASS	15	SPRING OR FALL



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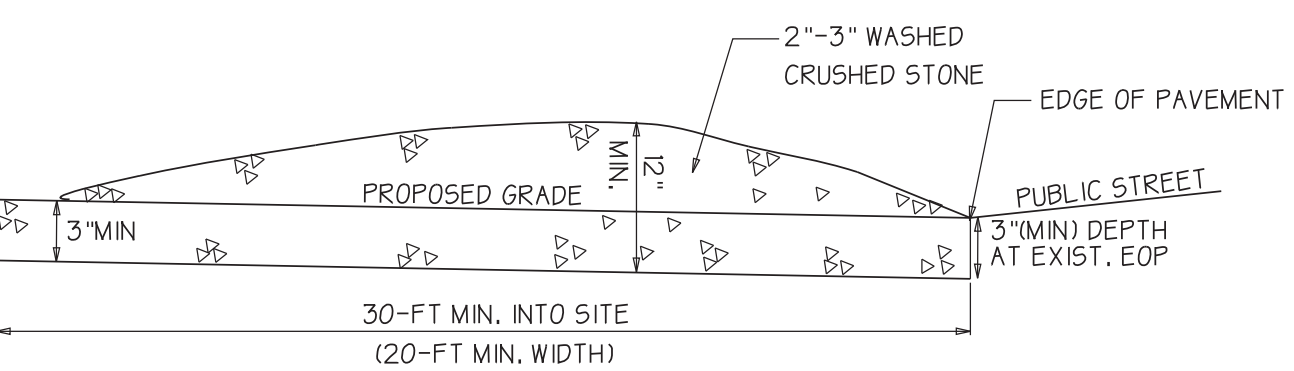
SUPERELEVATE DRIVEWAY TO DIRECT DRAINAGE TO TRAP ROCK SWALE ON UPGRADIENT SIDE - SWALE TO 10" ADS CULVERT UNDER DRIVE TO TRAP ROCK BASIN. INSTALL CHECKDAMS (CD) IN SWALE DURING CONSTRUCTION

PLACE TRAP ROCK @ PIPE ENDS
BEGIN EROSION CONTROL BARRIER (ECB) 'A'

HAYBALE CHECKDAM 'CD' (TYP.)
STABILIZED CRUSHED STONE CONSTRUCTION ENTRANCE 20' WIDE X 30' LONG (SEE DETAIL.)
BEGIN EROSION CONTROL BARRIER (ECB) 'B'

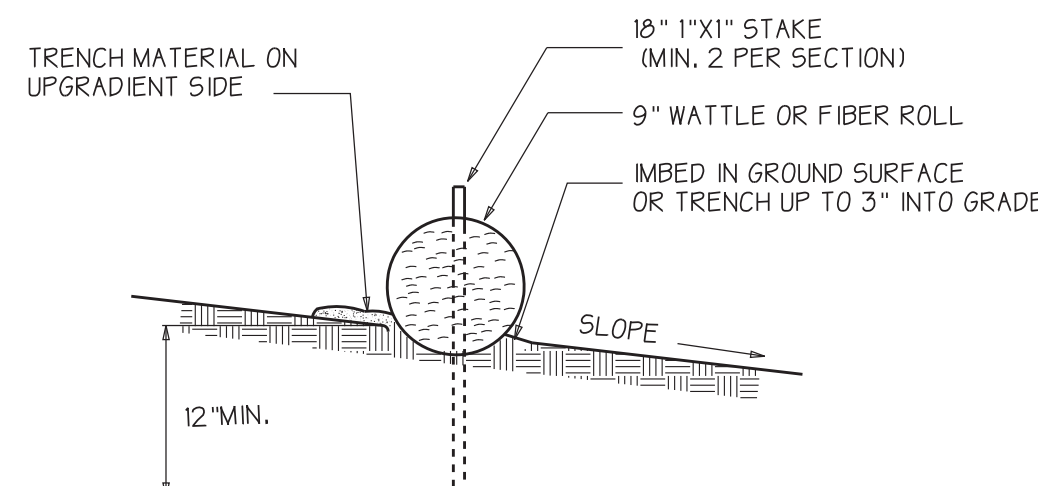
N/F STEPHEN H. HOWARD
150 HARVARD RD

N/F WILLIAM W. & NATALIE L. SHRADER
144 HARVARD RD



TEMPORARY STABILIZED CRUSHED STONE CONSTRUCTION ENTRANCE

NOT TO SCALE
PLACE AT LOCATION SHOWN ON PLAN AT PROPOSED DRIVEWAY ENTRANCE (20-FT MIN. WIDTH X 30-FT MIN. DEPTH INTO SITE, 12" MIN. DEPTH OF STONE)



9" STAKED STRAW WATTLE OR FIBER ROLL EROSION BARRIER

NOT TO SCALE
(SEE PLAN VIEW FOR PROPOSED LOCATIONS)

LEGEND

- 200- EXISTING 10-FT CONTOUR (TYP.)
- 202--- EXISTING 2-FT CONTOUR (TYP.)
- 200- PROPOSED 10-FT CONTOUR (TYP.)
- 202- PROPOSED 2-FT CONTOUR (TYP.)
- U.P. - EXISTING UTILITY POLE
- W-W- PROPOSED WATER LINE
- FD-FD- PROPOSED FOUNDATION DRAIN (4" SDR 35)
- CD X PROPOSED HAYBALE CHECKDAM 'X'
- X-X-X- PROPOSED 9" STRAW WATTLE OR FIBER ROLL EROSION CONTROL BARRIER
- O-O-O- PROPOSED 4-FT MIN. HEIGHT ORANGE HDPE CONSTRUCTION FENCE SECURED WITH STEEL POSTS (POSTS 10' ON CENTER MAX.)
- TRAP ROCK (TYP.) (BASIN, SWALE, PIPE ENDS)

EROSION & SEDIMENT CONTROL PLAN

SHEET 2 OF 2

LOCATION: **LOT 2 HARVARD ROAD**
STOW, MASSACHUSETTS
ASSESSORS MAP R-09 PARCEL 38

RECORD OWNER: **JOHN P. GIORDANO**
30 HERITAGE LANE
STOW, MA 01775
PHONE: (978) 375-3336

DATE: DECEMBER 20, 2022 SCALE: 1"=20'

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SURVEYING
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