





TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

L.S. NO. 9344

NOT VALID WITHOUT A LIVE

ASSOCIATES, INC

SIGNATURE AND EMBOSSED SEAL

CIVIL ENGINEERS WINDSOR, CONNECTICUT WILSON M. ALFORD, JR., P.E.& L.S.

DATE: JULY 25, 2013

SCALE: 1 IN. = 40 FT.

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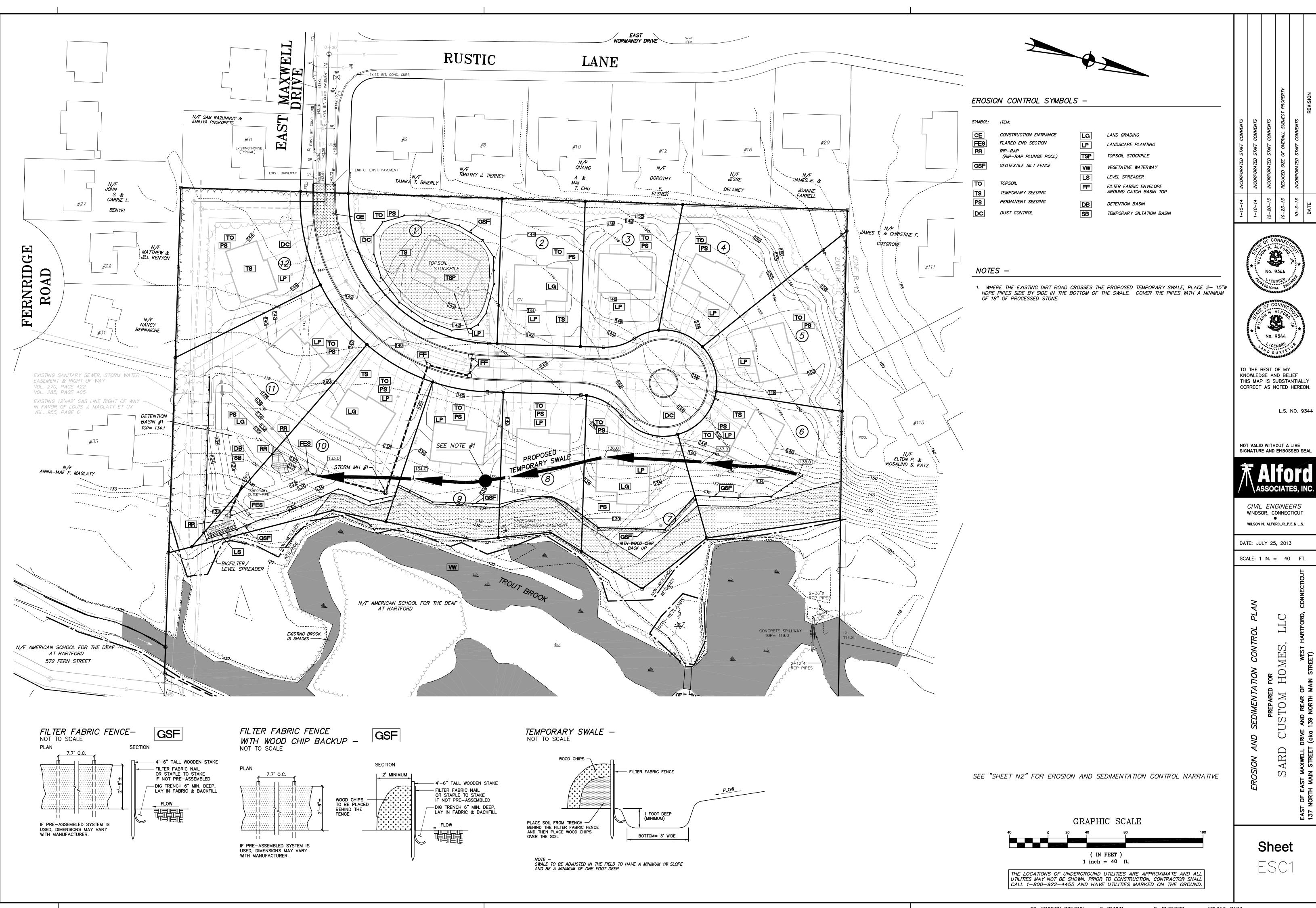
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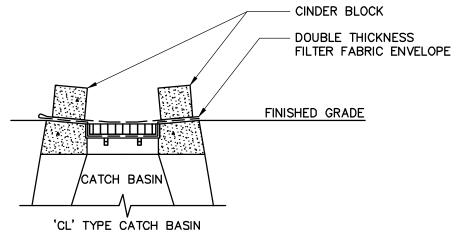
P: S13031 D: S13031SD

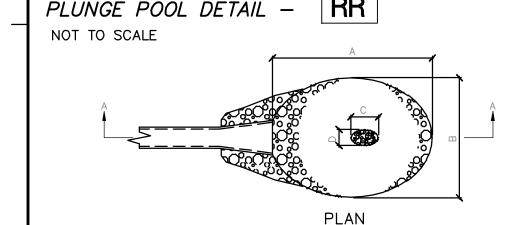
SS: GRADING

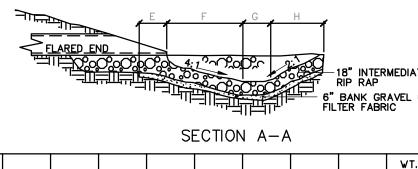
FOLDER: SARD



SS: EROSION CONTROL P: S13031 D: S13031SD FOLDER: SARD







PIPE	A	В	С	ם	E	F	G	н	WT TON
12"	10′	7′	1-1/2'	1′	1′	4-1/2'	1-1/2′	3′	6
15"	10′	7′	1-1/2'	1′	1′	4-1/2'	1-1/2′	3′	6
18"	12'	8′	2′	1′	1′	5′	2′	4'	8
21"	15′	9′	2-1/2'	1-1/2′	1′	7′	2-1/2'	4-1/2'	12
24"	17′	10′	2-1/2'	1-1/2′	1′	8′	2-1/2'	5-1/2′	15
30″	20′	13′	3′	2′	2′	9′	3′	6′	22
36 ′	24′	16′	3-1/2′	2′	2′	9-1/2′	3-1/2′	7′	33
4' FLIP	17′	10′	2-1/2'	1-1/2'	1'	8′	2-1/2'	5-1/2'	15

TREE PROTECTION DETAIL -

NOT TO SCALE

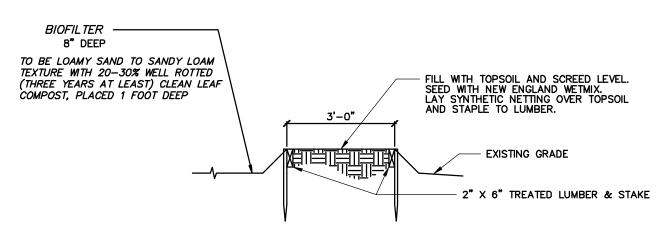
DRIP LINE -

CONSTRUCTION FENCE

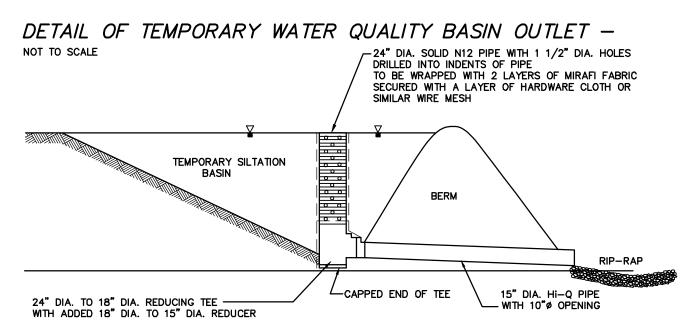
LIMITS OF CLEARING -AND GRADING, SURROUND ENTIRE GROUP OF TREES

OR TREE, SEE PLANS

BIOFILTER AND LEVEL SPREADER DETAIL NOT TO SCALE

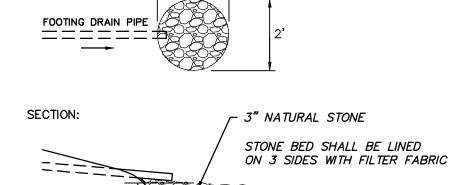


SEED BIOFILTER AND LEVEL SPREADER WITH NEW ENGLAND WETMIX AT A RATE OF 1 LB./2500 SQUARE FEET.



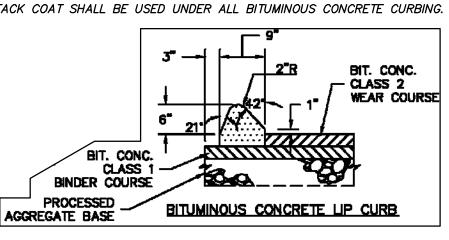
FOOTING DRAIN OUTLET WITH STONE DISCHARGE PAD -NOT TO SCALE

NOTE- FOOTING DRAIN PIPE TO DISCHARGE AT GRADE ON TO THE EXISTING GROUND. AREA FOR STONE PAD TO BE EXCAVATED.

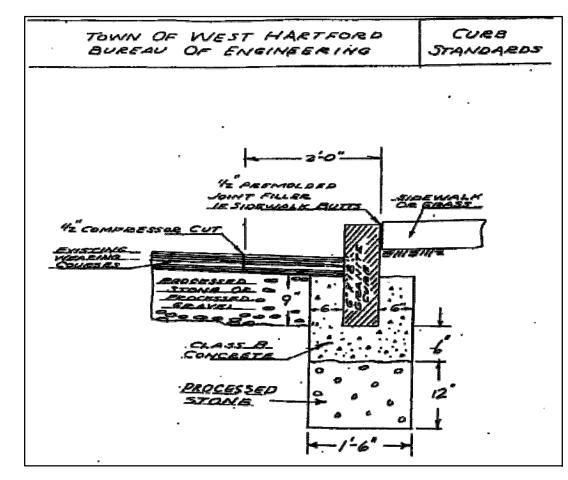


BITUMINOUS CONCRETE LIP CURB NOT TO SCALE





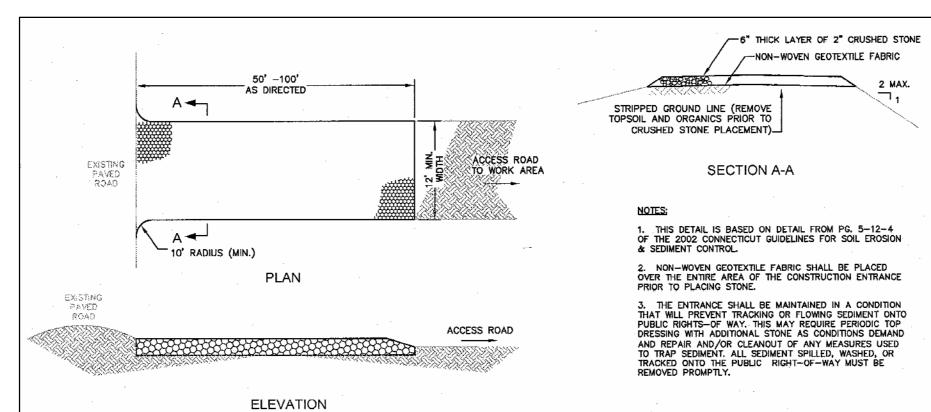
TYPICAL RADIUS GRANITE CURB INSTALLATION NOT TO SCALE



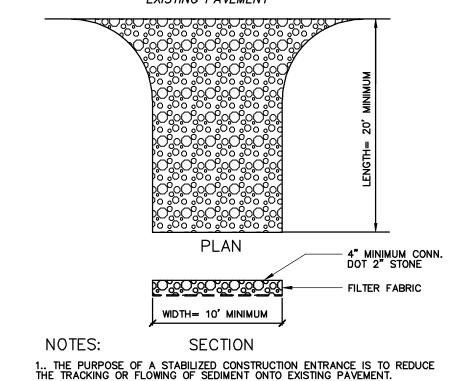
CE CONSTRUCTION ENTRANCE NOT TO SCALE

MIN. 5'

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CONSTRUCTION ENTRANCE PAD FOR INDIVIDUAL DRIVEWAYS -NOT TO SCALE EXISTING PAVEMENT



3. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO EXISTING PAVEMENT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND.

EROSION AND SEDIMENTATION CONTROL NARRATIVE FOR CONSTRUCTION OF HOMES -

- A. INSTALL GEOTEXTILE SILT FENCE.
- B. INSTALL CONSTRUCTION ENTRANCE.
- C. STRIP AND STOCKPILE TOPSOIL. SILT FENCE IS TO BE PLACED AROUND PILES AND OR TEMPORARY VEGETATION IF PILES ARE TO REMAIN IN PLACE FOR AN EXTENDED PERIOD OF TIME.
- D. EXCAVATE FOR FOUNDATION. GRADE AND PREPARE DRIVEWAY BASE. STOCKPILE EXCESS MATERIAL.
- E. CONSTRUCT HOUSE AND DRIVEWAY. INSTALL ASSOCIATED UTILITIES.
- F. FINE GRADE LOT. REMOVE EXCESS MATERIAL.
- G. LOAM AND SEED FOR PERMANENT COVER. SEE VEGETATIVE COVER SCHEDULE.
- H. THE DEVELOPER OF THE LOT AND/OR LOT OWNER SHALL BE RESPONSIBLE FOR THE INSTALLATION/ MAINTENANCE/REPAIR/REPLACEMENT OF ALL EROSION CONTROL MEASURES.
- 1. PROPOSED GRADE AT BASEMENT WINDOW SILLS SHALL BE LOW ENOUGH TO ELIMINATE THE NEED FOR FOR WINDOW WELLS.
- 2. MINIMUM SLOPES FOR SWALES SHALL BE 2.0%.

STORM WATER MANAGEMENT PRACTICES

SUMMARY OF CONSERVATION PRACTICES

A SUMMARY OF THE CONSERVATION PRACTICES TO BE USED TO PREVENT POLLUTION FROM GETTING INTO THE WETLANDS ARE AS FOLLOWS:

TEMPORARY MEASURES DURING CONSTRUCTION

- 1. MIRAFI FABRIC SILT FENCE TO BE PLACED ALONG PROPOSED DISTURBED AREAS
- 2. CONSTRUCTION ENTRANCE PAD
- 3. MIRAFI FABRIC FENCE AND/OR VEGETATION FOR STOCKPILE AREAS
- 4. DUST CONTROL BY USE OF CALCIUM CHLORIDE AND/OR WATER
- 5. DETENTION BASIN WILL FUNCTION AS A TEMPORARY SILTATION BASIN DURING CONSTRUCTION
- 6. ALL LITTER AND DEBRIS TO BE PICKED UP ON A DAILY BASIS.
- 7. ANY DISCARDED CONSTRUCTION MATERIALS SHALL BE DISPOSED OF IN A PROPER MANNER.

PERMANENT MEASURES ONCE SITE IS DEVELOPED

- 1. ALL DISTURBED AREAS WITHOUT BUILDING OR PAVED AREAS SHALL BE LOAMED AND SEEDED TO ESTABLISHED PERMANENT GRASS COVER.
- 2. WHERE THERE IS A POSSIBILITY FOR CONCENTRATED SURFACE WATER OR POTENTIAL EROSION PROBLEMS, AN EROSION CONTROL MAT OR NETTING SHALL BE PLACED.
- 3. BIOFILTER/LEVEL SPREADER AREA.
- 4. RIP-RAP PLUNGE POOL AT ALL STORM DRAINAGE OUTLETS.
- NOTES -
- A. REFER TO THE ENTIRE SET OF PLANS AND THE EROSION & SEDIMENTATION CONTROL NARRATIVE AND NOTES FOR A COMPLETE DESCRIPTION OF CONSERVATION PRACTICES.
- EROSION CONTROL MEASURES TO BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER. IT IS THE RESPONSIBILITY OF THE DEVELOPER TO REPAIR OR REPLACE ANY EROSION CONTROL MEASURE FOUND TO BE DEFICIENT.

STORM DRAINAGE AND MAINTENANCE SCHEDULE

MAINTENANCE OF THE STORM DRAINAGE WITHIN EAST MAXWELL DRIVE, INCLUDING CATCH BASINS #1, #2 AND #3 AND THE PIPES BETWEEN THESE 3 CATCH BASINS, SHALL BE THE RESPONSIBILITY OF THE TOWN OF WEST HARTFORD.

MAINTENANCE OF THE STORM DRAINAGE OUT OF CATCH BASIN #3 AND INTO THE DETENTION BASIN, THE STORM DRAINAGE OUT OF THE DETENTION BASIN, THE LEVEL SPREADER AND THE DETENTION BASIN SHALL BE THE RESPONSIBILITY OF THE HOMEOWNER'S ASSOCIATION.

MAINTENANCE OF THE COMMON COLLECTOR DRAIN SHALL BE THE RESPONSIBILITY OF THE HOMEWNER'S ASSOCIATION. A HOLD HARMLESS AGREEMENT IS REQUIRED FROM EACH PROPERTY THAT IS CONNECTED TO THE TOWN'S STORM DRAINAGE SYSTEM.

MAINTENANCE SCHEDULE: TO BE PERFORMED YEARLY

- CATCH BASIN SUMPS TO BE CLEANED
- ACCUMULATED SAND, DIRT AND DEBRIS SHALL BE DISPOSED OF OFF-SITE IN A PROPER
- DETENTION BASIN, BIOFILTER/LEVEL SPREADER, STORM DRAINAGE STRUCTURES AND LINES SHALL BE KEPT IN PROPER WORKING CONDITION
- REMOVE TRASH AND DEBRIS FROM EACH OUTLET
- ALL PAVEMENT AREAS SHALL BE SWEPT OF SAND AND DEBRIS, AFTER THE SNOW FALL, BETWEEN APRIL 1st AND MAY 1st
- MAINTENANCE OF THE DETENTION BASIN AREA SHALL BE DONE ON A YEARLY BASIS AND SHALL CONSIST OF:
- a) REMOVAL OF WOODY PLANTS AND ANIMAL BURROWS FROM THE DETENTION BASIN BERM AREAS
- b) THE AREA, USED FOR ACCESS FROM EAST MAXWELL DRIVE TO THE BASIN, SHALL BE MOWED
- c) THE DETENTION BASIN SHALL BE INSPECTED FOR ACCUMULATED SEDIMENT. SEDIMENT SHOULD BE REMOVED AND DISPOSED OF OFF-SITE IN A PROPER MANNER.

VEGETATIVE COVER SCHEDULE-



ALL DISTURBED AREAS NOT PAVED OR LANDSCAPED SHALL BE LOAMED WITH 4" MINIMUM OF TOPSOIL. SEED AS INDICATED BELOW. CONDITION SOIL WITH FERTILIZER AND LIMESTONE AS INDICATED BY SOIL TEST.

A BIODEGRADABLE EROSION CONTROL BLANKET SHALL BE PLACED ON PROPOSED PERMANENT SLOPES GREATER THAN 3:1. BLANKET TO BE PLACED PER MANUFACTURER'S SPECIFICATIONS.

PERMANENT VEGETATIVE COVER:

SEEDING DATES: APRIL 1 TO JUNE 15 & SEPTEMBER 1 TO OCTOBER 15

APPLY 1.1 LBS./1000 S.F.

USE THE FOLLOWING MIXTURE OR EQUAL AS APPROVED BY DESIGN ENGINEER: KENTUCKY BLUEGRASS 45% CREEPING RED FESCUE 45% PERENNIAL RYEGRASS 10% APPLY 1-3 LBS./1000 S.F.

USE THE FOLLOWING MIXTURE OR EQUAL AS APPROVED BY DESIGN ENGINEER: CREEPING RED FESCUE 46.6% NE US WILDFLOWER SEED MIXTURE 50.0% REDTOP 4.8% OR CHEWING FESCUE 25.0% SHEEP FESCUE TALL FESCUE 47.6% 25.0%

APPLY AT 6 LBS./ACRE

EROSION AND SEDIMENTATION CONTROL NARRATIVE

- 1. THE SUBJECT PROPERTY IS A 5.53 ACRE PARCEL LOCATED TO THE EAST OF EAST MAXWELL DRIVE, IN WEST HARTFORD. CONNECTICUT. PARCEL IS ALSO WEST OF THE AMERICAN SCHOOL FOR THE DEAF FACILITY LOCATED AT 137 NORTH MAIN STREET. TROUT BROOK IS LOCATED EAST OF THE SUBJECT PARCEL BUT IS NOT LOCATED ON THE PARCEL. THERE ARE WETLANDS ASSOCIATED WITH THE BROOK. HOWEVER, EXCEPT FOR A VERY SMALL AREA OF WETLANDS LOCATED AT THE SOUTH OF THE SUBJECT PARCEL, THERE ARE NO OTHER WETLANDS LOCATED ON THE PARCEL. THE PARCEL IS MOSTLY WOODED WITH DECIDUOUS TREES. THERE ARE NO BUILDINGS LOCATED ON THE PARCEL. THE PARCEL IS ZONED "R-10".
- 2. THE PROPOSAL A TWELVE (12) LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION. EAST MAXWELL DRIVE WILL BE EXTENDED APPROXIMATELY 450 FEET AND WILL END WITH A NEW CUL-DE-SAC. THE HOMES WILL BE SERVED BY MDC WATER AND SANITARY SEWER.
- 3. THE ANTICIPATED START OF CONSTRUCTION IS PLANNED FOR THE SPRING OF 2014.

SEQUENCE OF GRADING AND CONSTRUCTION ACTIVITIES -

- A. INSTALL CONSTRUCTION ENTRANCE PAD WHERE THE PROPOSED ROAD CONNECTS TO THE END OF EAST MAXWELL DRIVE.
- B. INSTALL GEOTEXTILE SILT FENCE ("GSF") ALONG THE EAST PORTION OF THE PROPERTY, AS SHOWN.
- C. CLEAR CUT TREES REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED HOUSES, ROADWAY AND DETENTION BASIN (INCLUDING ASSOCIATED DRAINAGE). EXCEPT FOR CLEARING FOR DRAINAGE TO AND FROM STORM MH #1, THE AREA EAST OF THE PROPOSED TEMPORARY SWALE SHALL BE LEFT UNDISTURBED UNTIL THE TIME OF INDIVIDUAL HOME CONSTRUCTION.

* PLEASE NOTE *

THE DETENTION BASIN MUST BE CONSTRUCTED AND THE TEMPORARY SWALE SHOULD BE CREATED PRIOR TO STUMPING FOR THE ENTIRE ROAD AND PROPOSED HOUSES.

D. CONSTRUCT DETENTION BASIN AND BIOFILTER/LEVEL SPREADER AREA.

- STRIP TOPSOIL AND STOCKPILE ON LOT 1 PLACE TEMPORARY EROSION CONTROL MEASURES FOR STOCKPILED MATERIAL. MIRAFI FABRIC FENCE IS TO BE PLACED ALONG PILES AND/OR TEMPORARY VEGETATION IF PILES ARE TO REMAIN IN PLACE FOR AN EXTENDED PERIOD OF TIME.

- EXCAVATE, GRADE AND SEED DETENTION BASIN.

THE FOUNDATION AREA OF THE DETENTION BASIN BERM SHALL BE CONSTRUCTED OF CLEAN FILL AND BE COMPACTED TO 95% DENSITY.

DETENTION BASIN SHALL BE USED AS A TEMPORARY SILTATION BASIN DURING CONSTRUCTION. INSTALL A TEMPORARY OUTLET PIPE. TEMPORARY SILTATION BASIN SHALL REMAIN IN PROPER WORKING ORDER UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.

BASIN SHALL BE STABILIZED AND VEGETATION ESTABLISHED PRIOR TO STARTING ADJACENT CONSTRUCTION.

ONCE TEMPORARY SILTATION BASIN IS NO LONGER NEEDED, REMOVE ACCUMULATED SILT AND SEDIMENT AND TEMPORARY OUTLET PIPE. INSTALL FOREBAY AND PERMANENT BASIN OUTLET.

- E. CREATE TEMPORARY SWALE. SWALE TO BE DIRECTED INTO THE DETENTION BASIN (TEMPORARY SILTATION BASIN).
- F. STUMP AND REMOVE UNSUITABLE MATERIAL WWITH IN THE AREA WEST OF THE TEMPORARY SWALE.
- G. STRIP THE TOPSOIL WITHIN THE AREA TO BE DEVELOPED WEST OF THE TEMPORARY SWALE. STOCKPILE TOPSOIL ON LOT 1.
 - PLACE TEMPORARY EROSION CONTROL MEASURES FOR STOCKPILED MATERIAL. MIRAFI FABRIC FENCE IS TO BE PLACED ALONG PILES AND/OR TEMPORARY VEGETATION IF PILES ARE TO REMAIN IN PLACE FOR AN EXTENDED PERIOD OF TIME.
- H. GRADE ENTIRE AREA, TO BE DEVELOPED WEST OF THE TEMPORARY SWALE, TO APPROXIMATE FINISHED GRADE. BOX OUT ROADWAY. EXCEPT FOR THE ROADWAY BOX, TOPSOIL AND SEED THE DISTURBED
- I. INSTALL STORM DRAINAGE. PLACE MIRAFI FABRIC AROUND CATCH BASIN TOPS.
- J. INSTALL OTHER UTILITIES.
- K. ALL GEOTEXTILE SILT FENCE AND/OR TEMPORARY VEGETATIVE COVER TO BE INSPECTED AND MAINTENANCE PERFORMED, IF REQUIRED TO INSÚRE PROPER WORKING ORDER OR WHEN DIRECTED BY THE TOWN STAFF.
- L. INSTALL ROAD BASE MATERIAL.
- M. PAVE ROAD.
- N. ALL SIDE SLOPES OF ROADWAY TO BE LOAMED AND SEEDED AS STATED IN THE VEGETATIVE COVER
- O. CONSTRUCT HOMES. SEE "EROSION AND SEDIMENTATION NARRATIVE FOR CONSTRUCTION OF HOMES'.
- P. LOAM AND SEED FOR PERMANENT COVER. SEE VEGETATIVE COVER SCHEDULE.

AREAS ARE TO BE LOAMED AND SEEDED TO ESTABLISH PERMANENT COVER.

- Q. GEOTEXTILE SILT FENCE IS TO REMAIN IN PROPER WORKING ORDER UNTIL ALL VEGETATIVE COVER HAS
- BEEN ESTABLISHED. IT IS TO BE INSPECTED AND MAINTAINED THROUGHOUT CONSTRUCTION. R. BEFORE REMOVAL OF ANY SILT FENCE, EXISTING ACCUMULATED SILT IS TO BE REMOVED. ALL DISTURBED
- S. THE CONTRACTOR AND/OR OWNER SHALL BE RESPONSIBLE FOR THE INSPECTION/MAINTENANCE/REPAIR/ REPLACEMENT OF ALL EROSION CONTROL MEASURES UNTIL CONTRIBUTING AREAS HAVE BEEN STABILIZED. CONTACT NAME: JEFF SARD, TEL. NO. 860-678-1400

GENERAL NOTES -

- 1. THE TOWN ENGINEER SHALL BE NOTIFIED PRIOR TO ANY CONSTRUCTION.
- 2. SEDIMENT REMOVED FROM CONTROL STRUCTURES SHALL BE DISPOSED OF IN A MANNER WHICH IS CONSISTENT WITH THE INTENT OF THE PLAN.
- 3. SILT FENCE SHALL BE REMOVED AND DISPOSED OF OFF-SITE AFTER ALL CONTRIBUTING DISTURBED AREAS ARE SEEDED AND STABILIZED.
- 4. MAINTAIN DUST CONTROL BY USE OF CALCIUM CHLORIDE AND/OR WATER AT ALL TIMES DURING
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING OF NEARBY STREETS OF ANY DEBRIS AND SEDIMENTS FROM THE CONSTRUCTION ACTIVITIES.
- 6. EROSION AND SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL, DEP BULLETIN 34.
- 7. THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS. THE TOWN RESERVES THE RIGHT TO AMEND THE EROSION AND SEDIMENTATION CONTROL MEASURES AS FIELD CONDITIONS WARRANT.
- 8. STOCKPILES OF HAY BALES, MIRAFI FABRIC FENCE, CRUSHED STONE, STAKES, INC. ARE TO BE MAINTAINED ON THE SITE FOR UNSEEN EROSION AND SEDIMENTATION PROBLEMS THAT

TEMPORARY VEGETATIVE COVER:

SEEDING DATES: MARCH 1 TO JUNE 15 & AUGUST 1 TO OCTOBER 15 USE THE FOLLOWING SEED OR EQUAL AS APPROVED BY DESIGN ENGINEER -

ANNUAL RYEGRASS 100% APPLY 1 LB./1000 S.F.

IF FINAL GRADING IS FINISHED TOO LATE IN THE SEASON FOR ESTABLISHMENT OF VEGETATIVE COVER, AREAS DISTURBED TO BE ROUGH GRADED, COVERED WITH HAY MULCH, THEN EROSION CONTROL FABRIC OR BLANKET TO BE PLACED ON TOP OF THE HAY. EROSION CONTROL FABRIC OR BLANKET TO BE PLACED PER MANUFACTURER'S SPECIFICATIONS.





TO THE BEST OF MY

KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

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CIVIL ENGINEERS WINDSOR, CONNECTICUT WILSON M. ALFORD, JR., P.E.& L.S.

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Sheet

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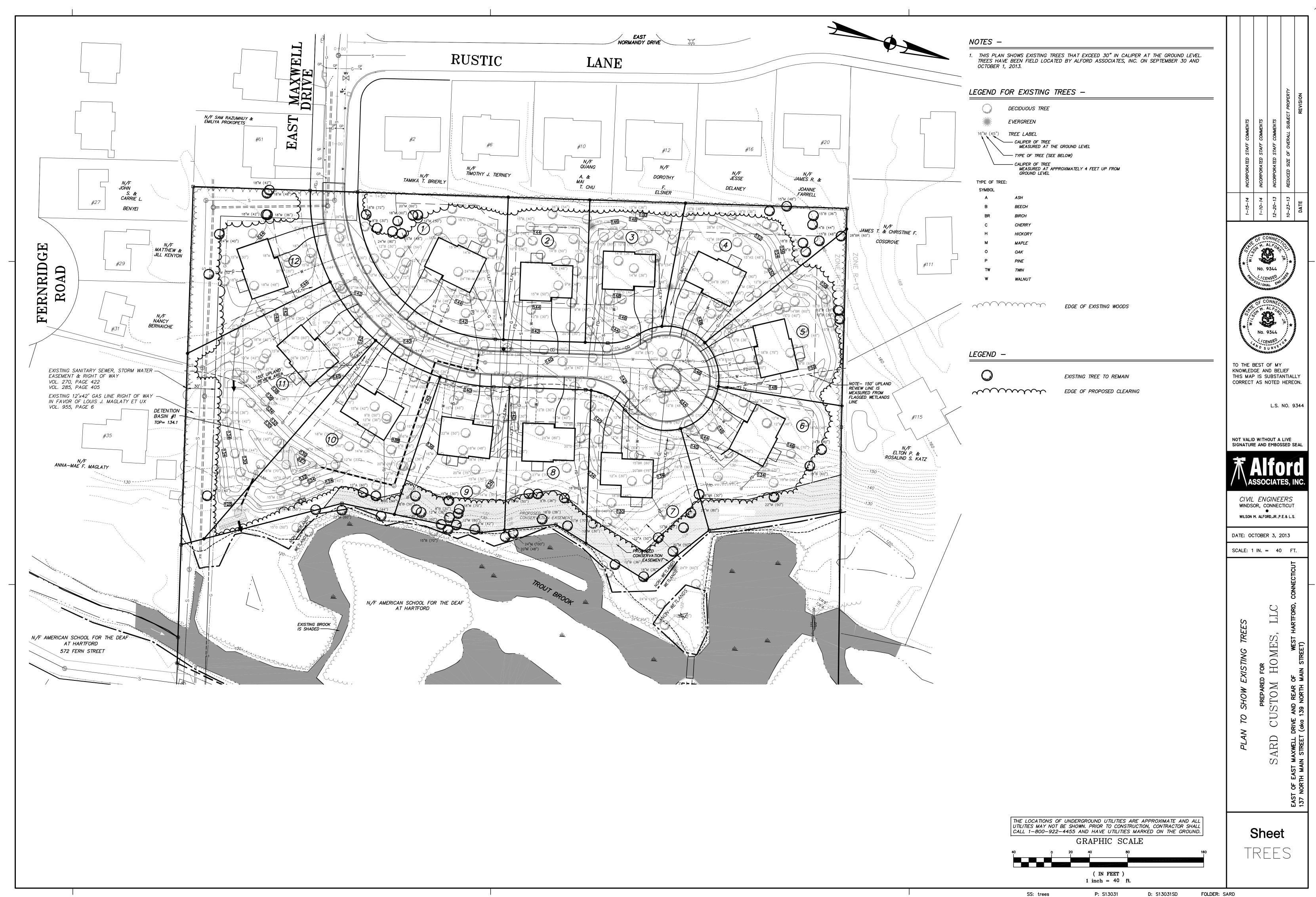
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