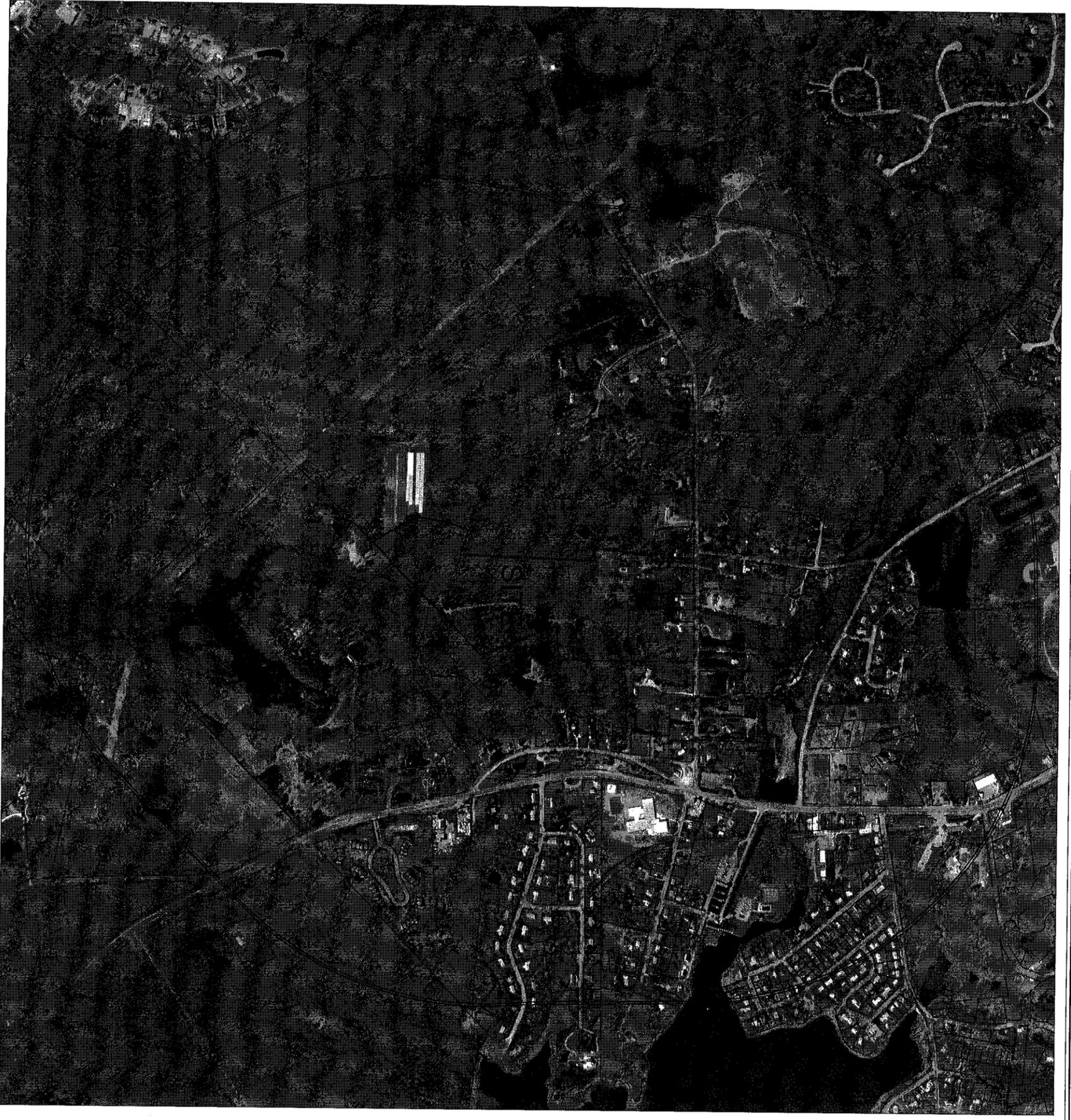


LOCUS MAP  
NOT TO SCALE



1/2 MILE AERIAL RADIUS MAP  
SCALE: 1" = 400'

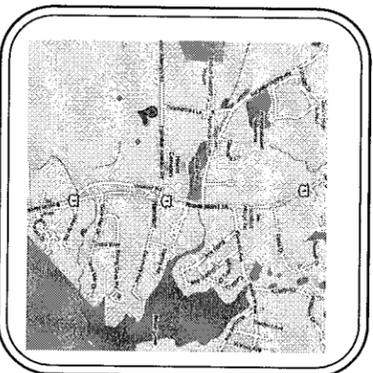
Sheet  
of 1 sheets  
1

**AMERICAN ENGINEERING, INC.**  
 DANIEL R. COTTA Professional Engineer / Professional Land Surveyor  
 400 South County Trail - Suite A 201  
 Exeter, Rhode Island 02822  
 Phone (401) 294-4090 / Fax (401) 294-3625

DANIEL R. COTTA  
 NO. 1918  
 PROFESSIONAL  
 LAND SURVEYOR

Drawn By: <i>MjC</i>	Checked By: <i>DrC</i>		
Scale: 1" = 400'	Date: 6/20/2007		
REVISIONS			
NO.	REVISION	BY	DATE

*Aerial Plan*  
 FOR  
**HAMILTON ALLEN ESTATES**  
 OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC  
 567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822  
 BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES  
 LOCATED AT  
 170 HAMILTON-ALLEN TON ROAD, NORTH KINGSTOWN, R.I.



LOCUS MAP  
NOT TO SCALE

**OWNER / APPLICANT:**  
HAMILTON ALLEN ASSOCIATES, LLC  
567 SOUTH COUNTY TRAIL  
SUITE 111  
EXETER, RI 02822

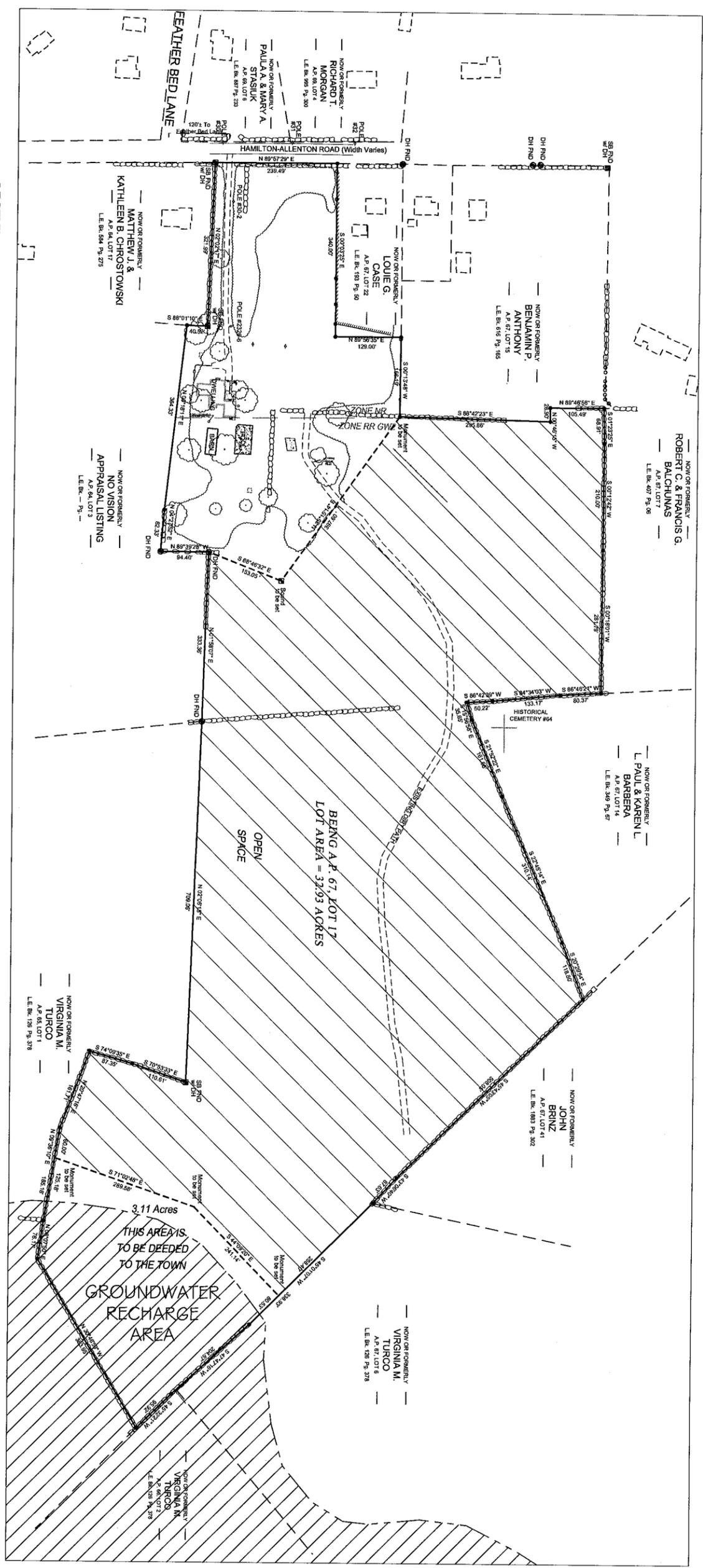
**PARCEL ZONING:**  
ZONE: NR/RR GW2  
PARTIALLY NEIGHBORHOOD RESIDENTIAL  
& PARTIALLY RURAL RESIDENTIAL IN GW2  
MINIMUM AREA: 40,000 S.F.  
FRONTAGE: 180 FEET  
FRONT SETBACK: 25 FEET  
SIDE SETBACK: 35 FEET  
REAR SETBACK: 35 FEET

**REFERENCES:**

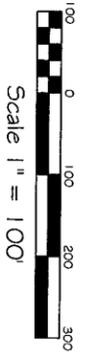
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "BEING A.P. 67, LOTS 39 & 41 PLAN OF LAND FOR AFFILIATED REALTY LLC LOCATED AT WEAVERS ROAD NORTH KINGSTOWN, RI SCALE 1" = 60' AUG. 1996 BY AMERICAN ENGINEERING, SAID PLAN BEING RECORDED IN THE TOWN OF NORTH KINGSTOWN AS PLAT 1508 OR HF 160.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "PROPERTY LINE & TOPOGRAPHY FEATHERED ESTATES IN NORTH KINGSTOWN, RI FOR ELAINE ENTERPRISES, INC. BY ALPHA KINGSSTOWN AS PLAT 1151 NOV. OCT. 1994 SAID PLAN BEING RECORDED IN THE TOWN OF NORTH KINGSTOWN AS PLAT 1151.
- REFERENCE IS HEREBY MADE TO THAT PLAN ENTITLED "HAMILTON ACRES NORTH KINGSTOWN, RIODE ISLAND SE-LEE CORPORATION, OWNER - SCALE 1" = 40' FEB. 1973 SCZSPONK - BRISTOL, SAID PLAN BEING RECORDED IN THE TOWN OF NORTH KINGSTOWN AS PLAT 399.

**AREA CHART:**

Total Area = 32.93 Acres  
Area to be deeded to the Town = 3.11 Acres  
Area of Open Space = 24.01 Acres  
Remaining Area = 5.81 Acres



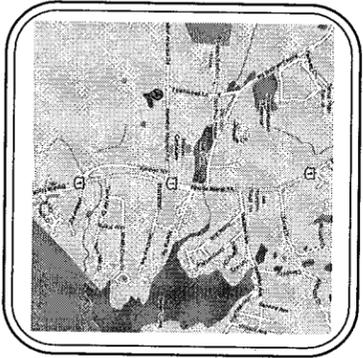
- LEGEND**
- UTILITY POLE FOUND
  - STONE BOUND FOUND
  - DRILLHOLE FOUND
  - FENCE POST FOUND
  - ANGLE POINT
  - STONEWALL FOUND
  - FENCE FOUND



THE PERIMETER SURVEY AND PLAN CONFORMS TO A CLASS I STANDARD AS OCCURRED UNDER THE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.  
BY: \_\_\_\_\_ REGISTERED PROFESSIONAL LAND SURVEYOR DATE: \_\_\_\_\_

THIS PLAN IS TO BE INDEXED UNDER THE FOLLOWING ROADS:  
1. HAMILTON ALLEN ROAD  
2. FEATHER BED LANE

<p><b>AMERICAN ENGINEERING, INC.</b> DANIEL R. COTTA Professional Engineer / Professional Land Surveyor 400 South County Trail - Suite A 201 Exeter, Rhode Island 02822 Phone (401) 294-4090 / Fax (401) 294-3625</p>		<p>Drawn By: <i>MjC</i>      Checked By: <i>DrC</i> Scale: 1" = 100'      Date: 12/08/2010</p>	<p><b>SURVEY PLAN</b> FOR <b>HAMILTON ALLEN ESTATES</b></p>	<p>OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC 567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822 BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES LOCATED AT 170 HAMILTON-ALLEN ROAD, NORTH KINGSTOWN, R.I.</p>																
<p>Sheet <b>1</b> of <b>1</b> sheets</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>REVISION</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				REVISIONS				NO.	REVISION	BY	DATE								
REVISIONS																				
NO.	REVISION	BY	DATE																	



LOCUS MAP  
SCALE: 1"=200'



Preliminary Set  
FOR

# HAMILTON ALLEN ESTATES

HAMILTON-ALLENTON ROAD  
NORTH KINGSTOWN, R.I.

BEING A.P. 67, LOT 17  
LOT AREA = 32.93 ACRES

OWNER / APPLICANT:  
HAMILTON ALLEN ASSOCIATES, LLC  
567 SOUTH COUNTY TRAIL  
SUITE 111  
EXETER, RI 02822

PARCEL ZONING:  
ZONE: NR/RR GW2  
PARTIALLY NEIGHBORHOOD RESIDENTIAL  
& PARTIALLY RURAL RESIDENTIAL IN GW2  
MINIMUM AREA: 40,000 S.F.  
FRONTAGE: 180 FEET  
FRONT SETBACK: 25 FEET  
SIDE SETBACK: 35 FEET  
REAR SETBACK: 35 FEET  
DUPLIX CONFIGURATION (11 UNITS TOTAL)

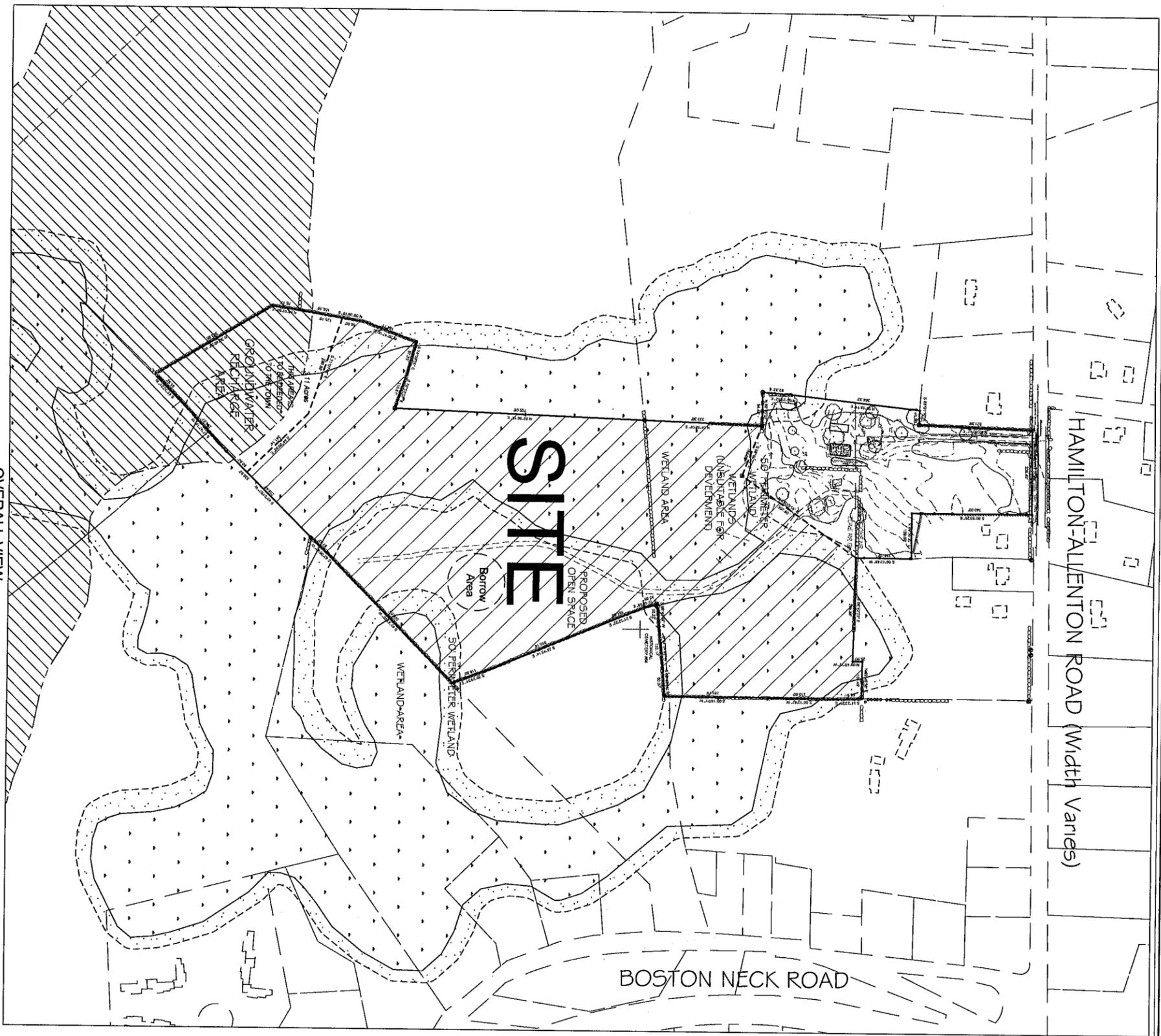
- NOTES:
1. THIS CONFIGURATION PROPOSES 3 DUPLEXES AND 1 TRIPLEX TO BE CONSTRUCTED UTILIZING PRIVATE WELLS AND PRIVATE ON-SITE WASTEWATER TREATMENT SYSTEMS.
  2. THIS SITE PRESENTLY HAS ONE EXISTING SINGLE-FAMILY DWELLING, ONE BARN AND ONE IN-GROUND POOL. THE EXISTING DWELLING IS TO BECOME A DUPLEX AND UPGRADED AS REQUIRED PER CURRENT CODES. THE BARN AND POOL ARE TO BE ELIMINATED.
  3. SITES LIGHTLY TO MODERATELY WOODED, WITH LARGE CLEARED AREAS.
  4. SITES NOT LOCATED IN THE FOLLOWING AREAS:  
• NATURAL HERITAGE AREA  
• SCENIC CORRIDOR  
• NARROW RIVER SPECIAL AREA MANAGEMENT PLAN  
• FLOOD PLAN.
  5. SITE IS LOCATED WITHIN THE FOLLOWING AREAS:  
• PORTION LOCATED WITHIN THE ANNAQUATUCKET WETLAND PROTECTION AREA, ZONE 1 AND REMAINDER LOCATED WITHIN ZONE 2.
  6. THERE ARE NO EASEMENTS, OTHER THAN SHOWN, ON THE SUBJECT PARCEL.

LOT AREAS CHART		
AREA DESCRIPTION	TOTAL AREA	UNLAND AREA
DEVELOPMENT AREA	8.81 ACRES	5.9 ACRES
OPEN SPACE AREA	24.07 ACRES	10.0 ACRES
AREA TO BE DEDED TO THE TOWN	3.11 ACRES	1.9 ACRES

- SHEET INDEX:
- Sheet 1: Existing Conditions / Proposed Open Space Plan
  - Sheet 2: Proposed Conditions Plan
  - Sheet 3: Plan and Profile
  - Sheet 4: OUV'S Details
  - Sheet 5: Soil and Erosion Control Plan
  - Sheet 6: Drainage Basin Details
  - Sheet 7: General Standard Details

Approvals:  
1. Professional Attention - Permit for RIDEM on 10/09/2010.  
2. Preliminary Subdivision Suitability for RIDEM on 11/09/2010.

NOTE:  
THE WETLAND AREAS ON THIS SHEET WERE PROVIDED BY THE TOWN OF NORTH KINGSTOWN.  
**Borrow Area Note:**  
No material is to be brought to or removed from the site. All required material is to be taken from the Borrow Area.



OVERALL VIEW  
SCALE: 1" = 150'

Sheet 1 of 7 sheets

**AMERICAN ENGINEERING, INC.**  
DANIEL R. COTTA Professional Engineer / Professional Land Surveyor  
400 South County Trail - Suite A 201  
Exeter, Rhode Island 02822  
Phone (401) 294-4090 / Fax (401) 294-3625

DANIEL R. COTTA  
NO. 1916  
PROFESSIONAL LAND SURVEYOR

DANIEL R. COTTA  
NO. 5147  
REGISTERED PROFESSIONAL ENGINEER

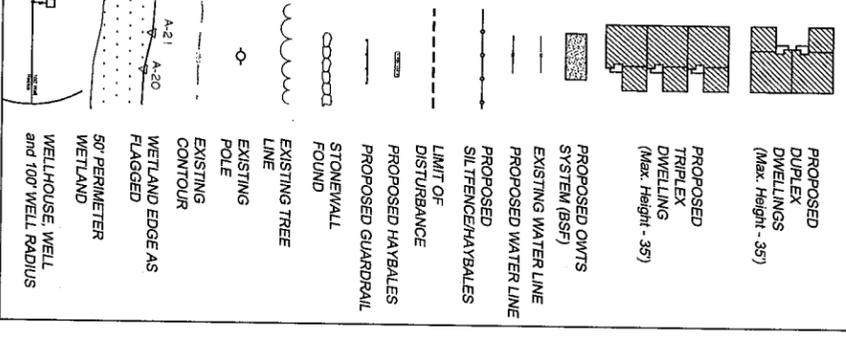
Drawn By: ERM Checked By: DrC  
Scale: 1" = 150' Date: 6/24/2010

REVISIONS			
NO.	REVISION	BY	DATE
1	REVISED PER WETLAND COMMENTS	MC	8/31/10

Existing Conditions / Proposed Open Space Plan  
FOR  
**HAMILTON ALLEN ESTATES**

OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC  
567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822  
BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES  
LOCATED AT  
170 HAMILTON-ALLENTON ROAD, NORTH KINGSTOWN, R.I.

**LEGEND**



**KEY**

- A Programmable Logic Controller (w/Heater)
- B Septic Tank
- C Septic Tank Processor Tank
- D Septic Tank Air Intake Muffler
- E Bottomless Sand Filter

**NOTE:**  
THE WETLAND AREAS ON THIS SHEET WERE FLAGGED IN DECEMBER OF 2008 BY ECOLOGICAL ASSOCIATES.

**FEMA DETERMINATION:**  
ZONE "C" - AREA OF MINIMAL FLOODING  
PANEL NO. - 44504 0017 D  
REVISED - JUNE 16, 1992

**OWTS SYSTEMS:**  
ALL DWELLINGS WILL UTILIZE AN INNOVATIVE SEPTIC TANK PROCESSOR IN CONJUNCTION WITH A BOTTOMLESS SAND FILTER.

**Design Criteria:**  
4-Bedroom Residential Usage @ 115 gpd/day = 690 gpd/day  
4-Bedroom Residential Usage @ 115 gpd/day = 460 gpd/day

**Design Calculations:**  
System "A" - Septic Tank #8 - Soil Category 9 - Loading Rate Factor = 1.5  
Required: 690 / 1.5 (factor) = 460 gpd  
Provided: Bottomless Sand Filter  
10' x 46' system = 460 gpd Total

System "B" - Septic Tank #7 - Soil Category 9 - Loading Rate Factor = 1.5  
Required: 690 / 1.5 (factor) = 460 gpd  
Provided: Bottomless Sand Filter  
10' x 46' system = 460 gpd Total

System "C" - Septic Tank #11 - Soil Category 9 - Loading Rate Factor = 1.5  
Required: 690 / 1.5 (factor) = 460 gpd  
Provided: Bottomless Sand Filter  
14' x 22' system = 308 gpd Total

**NOTE:**  
THE PROPOSED WELLS AS SHOWN DO NOT REQUIRE A WELL VARIANCE.

**TESTHOLE & PERCOLATION DATA**

TH-1 - SOIL EVALUATION @ LESS THAN 24" (0623-1242)  
TH-2 - SOIL EVALUATION @ LESS THAN 24" (0623-1242)  
TH-3 - SOIL EVALUATION @ 24" (0623-1242)  
TH-4 - SOIL EVALUATION @ 33" FROM ORIGINAL GRADE(0623-1242) w/10" OF FILL  
TH-5 - SOIL EVALUATION @ 24" (0623-1242)  
TH-6 - SOIL EVALUATION @ 24" (0623-1242)  
TH-7 - SOIL EVALUATION @ 24" (0623-1242)  
TH-8 - SOIL EVALUATION @ LESS THAN 24" (0623-1242)  
TH-9 - SOIL EVALUATION @ LESS THAN 24" (0623-1242)  
TH-10 - SOIL EVALUATION @ 48" (0623-1242)  
TH-11 - SOIL EVALUATION @ 48" (0623-1242)

SOIL CATEGORY 9 USING A LOADING RATE FACTOR OF 1.5 GAL/SF/DAY

- NOTES:**
1. THIS SITE DOES NOT FALL WITHIN A CRITICAL RESOURCE AREA AS DEFINED IN SD 19.00.
  2. THERE ARE NO EXISTING ONSITE WASTEWATER TREATMENT SYSTEMS WITHIN 100' OF THE LIMIT OF DISTURBANCE, EXCEPT AS SHOWN ON PLAN.
  3. THERE ARE NO EXISTING DRAINS WITHIN 100' OF THE LIMIT OF DISTURBANCE EXCEPT AS SHOWN ON PLAN.
  4. THERE ARE NO EXISTING OR PROPOSED PRIVATE WELLS WITHIN 200' OF THE LIMIT OF DISTURBANCE, EXCEPT AS SHOWN ON PLAN.
  5. THERE ARE NO EXISTING OR PROPOSED PUBLIC WELLS WITHIN 400' OF THE LIMIT OF DISTURBANCE, EXCEPT AS SHOWN ON PLAN.
  6. THERE ARE NO WETLANDS IN THE AREA OF PROPOSED LOTS, EXCEPT AS SHOWN ON PLAN.
  7. BASEMAP AND PHYSICAL DATA TAKEN FROM A TOPOGRAPHIC FIELD SURVEY CONDUCTED IN AUGUST OF 2006, WITH A HORIZONTAL ACCURACY OF +/- 1" AND A VERTICAL ACCURACY OF +/- 1".
  8. WETLAND FLAGS WERE LOCATED WITH A POSITIONAL ACCURACY OF +/- 1" CLASS I STANDARD.
  9. THE PERIMETER SURVEY WAS PERFORMED TO CONFORM TO THE ACCURACY OF A CLASS I STANDARD.
  10. ALL BENCHMARKS ARE TO BE SET WITHIN 150' OF EACH SYSTEM AT TIME OF CONSTRUCTION.
  11. THE LOCATION OF ALL PROPOSED UTILITIES TO BE UNDERGROUND SHALL BE DETERMINED BY THE RESPECTIVE UTILITY COMPANIES FOR UNDERGROUND ELECTRIC, CABLE, AND TELEPHONE SERVICES ARE PROPOSED FOR THIS SUBDIVISION.

**SYSTEM "A" (6-BED)**

**SYSTEM CONFIGURATION**

Design Flow: 690 gpd

**Septic Tank Controller**  
Model: M200  
Elev.: 200.35  
Invert at Building (Units A1 & A2): 201.50  
Invert at Septic Tank: 200.88  
4" PVC Lateral to Septic Tank: 201.91  
4" PVC Lateral to Processor Tank: 201.91

**Septic Tank Settings**  
2000 gallon  
Elev.: 201.91  
Invert at Septic Tank: 199.25  
Elev.: 199.25  
Invert at Outlet End of Septic Tank: 201.91  
4" PVC Lateral to Processor Tank: 201.91

**Septic Tank Capacity**  
2000 gallon  
Elev.: 201.91  
Invert at Septic Tank: 199.25  
Elev.: 199.25  
Invert at Outlet End of Septic Tank: 201.91  
4" PVC Lateral to Processor Tank: 201.91

**Discharge Pump Settings**  
Model: LSP303M  
1.4/2"  
PVC Transport Line to Filter: 1.10 gal/minute  
Maximum Design Flow: 27.50 gal/minute  
Design Change: Transport  
Time On: 75 Seconds  
Time Interval: 3000 Seconds

**Bottomless Sand Filter Settings**  
Filter Length: 46'  
Filter Width: 10'  
Number of Layers: 4  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Elev.: 202.57  
Elev.: 202.57  
Elev.: 202.57  
Elev.: 202.57  
Elev.: 202.57  
Elev.: 198.50  
Elev.: 198.50

**SYSTEM "B" (6-BED)**

**SYSTEM CONFIGURATION**

Design Flow: 690 gpd

**Septic Tank Controller**  
Model: M200  
Elev.: 199.38  
Invert at Building (Units B1 & B2): 200.53  
Invert at Septic Tank: 198.90  
4" PVC Lateral to Septic Tank: 201.91  
4" PVC Lateral to Processor Tank: 201.91

**Septic Tank Settings**  
2000 gallon  
Elev.: 200.66  
Invert at Septic Tank: 198.50  
Elev.: 198.50  
Invert at Outlet End of Septic Tank: 201.91  
4" PVC Lateral to Processor Tank: 201.91

**Septic Tank Capacity**  
2000 gallon  
Elev.: 200.66  
Invert at Septic Tank: 198.50  
Elev.: 198.50  
Invert at Outlet End of Septic Tank: 201.91  
4" PVC Lateral to Processor Tank: 201.91

**Discharge Pump Settings**  
Model: LSP303M  
1.4/2"  
PVC Transport Line to Filter: 5.77 gal/minute  
Maximum Design Flow: 27.50 gal/minute  
Design Change: Transport  
Time On: 90 Seconds  
Time Interval: 3000 Seconds

**Bottomless Sand Filter Settings**  
Filter Length: 46'  
Filter Width: 10'  
Number of Layers: 4  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Elev.: 202.17  
Elev.: 201.72  
Elev.: 202.00  
Elev.: 202.00  
Elev.: 198.50  
Elev.: 198.50

**Redesign of Approved Application #0623-1242 APPV. SYS. "D" (4-BED)**

**SYSTEM "C" (6-BED)**

**SYSTEM CONFIGURATION**

Design Flow: 690 gpd

**Septic Tank Controller**  
Model: M200  
Elev.: 198.75  
Invert at Building (Units C1 & C2): 200.53  
Invert at Septic Tank: 198.15  
4" PVC Lateral to Septic Tank: 201.18  
4" PVC Lateral to Processor Tank: 201.18

**Septic Tank Settings**  
2000 gallon  
Elev.: 201.18  
Invert at Septic Tank: 198.15  
Elev.: 198.15  
Invert at Outlet End of Septic Tank: 201.18  
4" PVC Lateral to Processor Tank: 201.18

**Septic Tank Capacity**  
2000 gallon  
Elev.: 201.18  
Invert at Septic Tank: 198.15  
Elev.: 198.15  
Invert at Outlet End of Septic Tank: 201.18  
4" PVC Lateral to Processor Tank: 201.18

**Discharge Pump Settings**  
Model: LSP303M  
1.4/2"  
PVC Transport Line to Filter: 1.10 gal/minute  
Maximum Design Flow: 27.50 gal/minute  
Design Change: Transport  
Time On: 75 Seconds  
Time Interval: 3000 Seconds

**Bottomless Sand Filter Settings**  
Filter Length: 46'  
Filter Width: 10'  
Number of Layers: 4  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Elev.: 202.20  
Elev.: 201.85  
Elev.: 199.83  
Elev.: 199.83  
Elev.: 198.50  
Elev.: 198.50

**SYSTEM CONFIGURATION**

Design Flow: 460 gpd

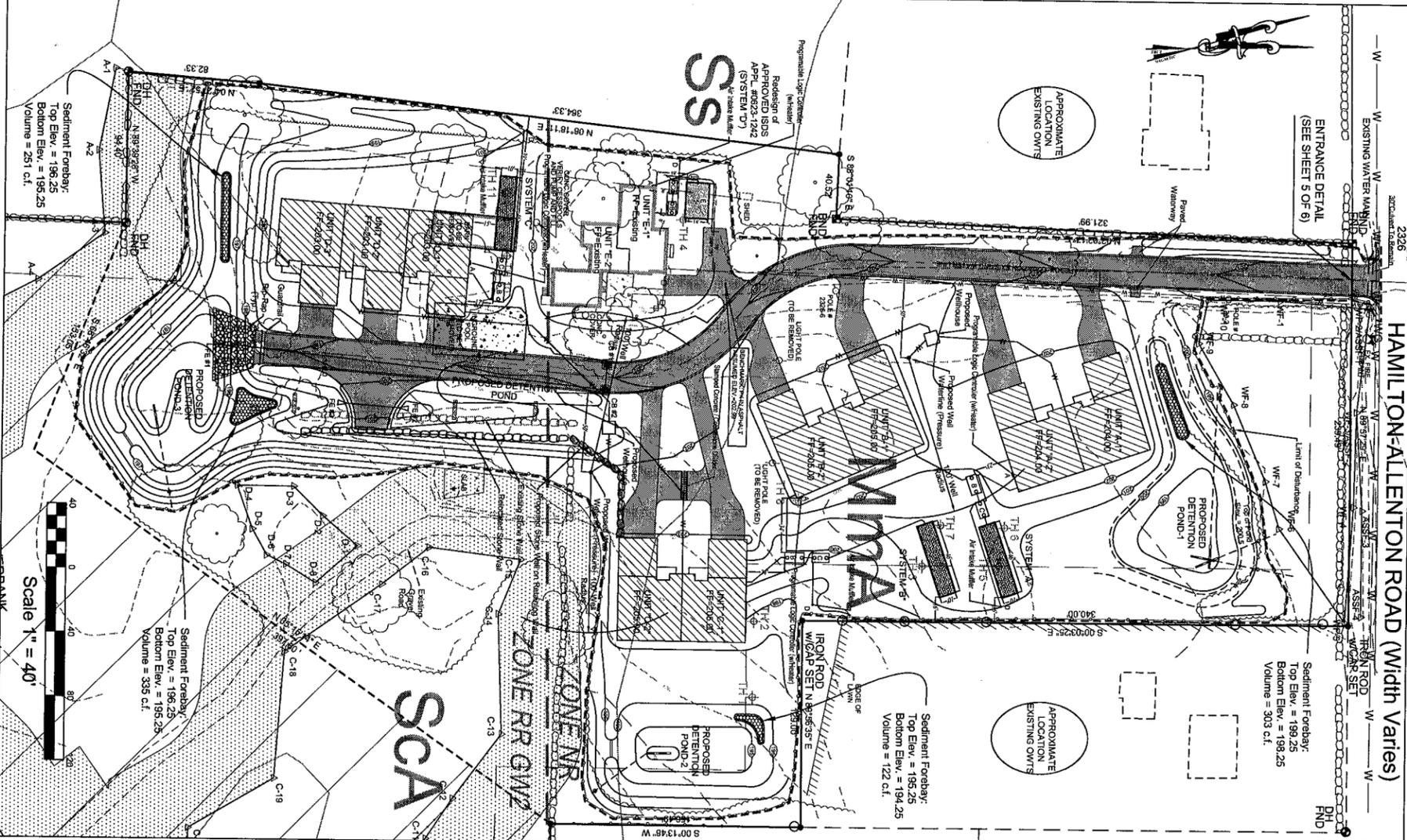
**Septic Tank Controller**  
Model: M200  
Elev.: 202.94  
Invert at Building (Units E1 & E2): 201.50  
Invert at Septic Tank: 201.50  
4" PVC Lateral to Septic Tank: 204.51  
4" PVC Lateral to Processor Tank: 204.51

**Septic Tank Settings**  
1000 gallon  
Elev.: 204.51  
Invert at Septic Tank: 201.50  
Elev.: 201.50  
Invert at Outlet End of Septic Tank: 204.51  
4" PVC Lateral to Processor Tank: 204.51

**Septic Tank Capacity**  
1000 gallon  
Elev.: 204.51  
Invert at Septic Tank: 201.50  
Elev.: 201.50  
Invert at Outlet End of Septic Tank: 204.51  
4" PVC Lateral to Processor Tank: 204.51

**Discharge Pump Settings**  
Model: LSP303M  
1.4/2"  
PVC Transport Line to Filter: 1.10 gal/minute  
Maximum Design Flow: 19.22 gal/minute  
Design Change: Transport  
Time On: 90 Seconds  
Time Interval: 3000 Seconds

**Bottomless Sand Filter Settings**  
Filter Length: 22'  
Filter Width: 12'  
Number of Layers: 4  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Lateral Spacing: 2.0  
Number of Orifices: 2.0  
Elev.: 203.59  
Elev.: 203.17  
Elev.: 202.82  
Elev.: 202.82  
Elev.: 199.82  
Elev.: 199.82



**Proposed Conditions Plan**  
FOR  
**HAMILTON ALLEN ESTATES**

OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC  
567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822  
BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES

LOCATED AT  
170 HAMILTON-ALLEN ROAD, NORTH KINGSTOWN, R.I.

Drawn By: ERM      Checked By: DrC  
Scale: 1" = 40'      Date: 6/24/2010

**REVISIONS**

NO.	REVISION	BY	DATE

**DANIEL R. COTTA**  
Professional Engineer / Professional Land Surveyor

NO. 1918      NO. 5147  
PROFESSIONAL LAND SURVEYOR      REGISTERED PROFESSIONAL ENGINEER

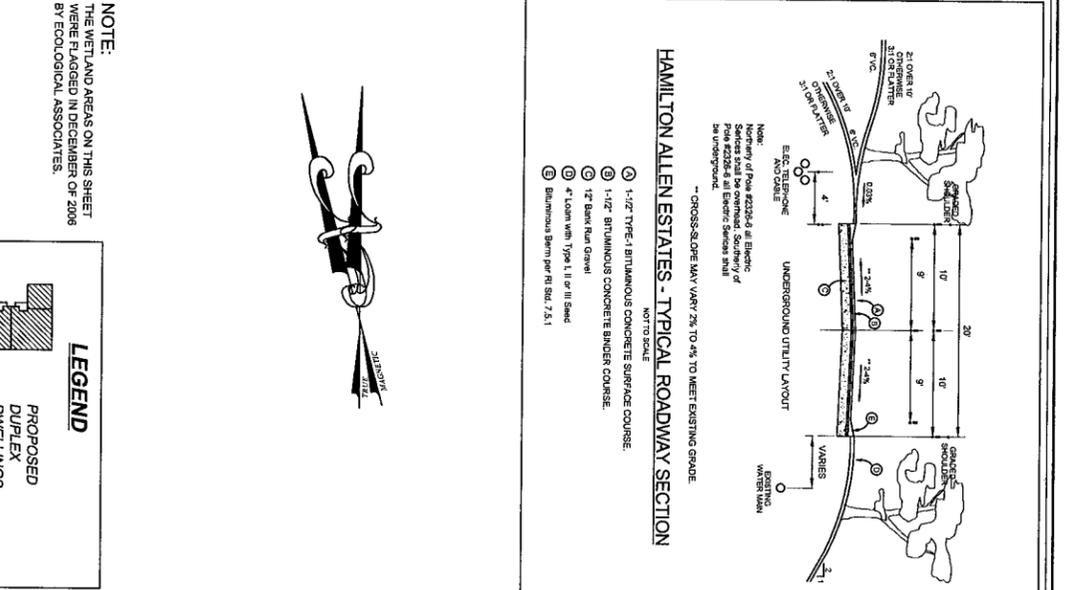
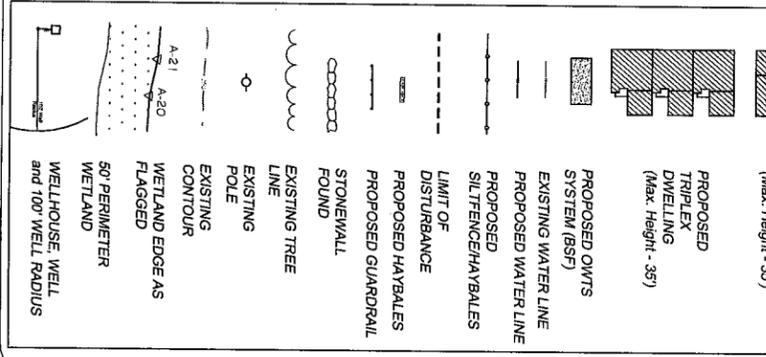
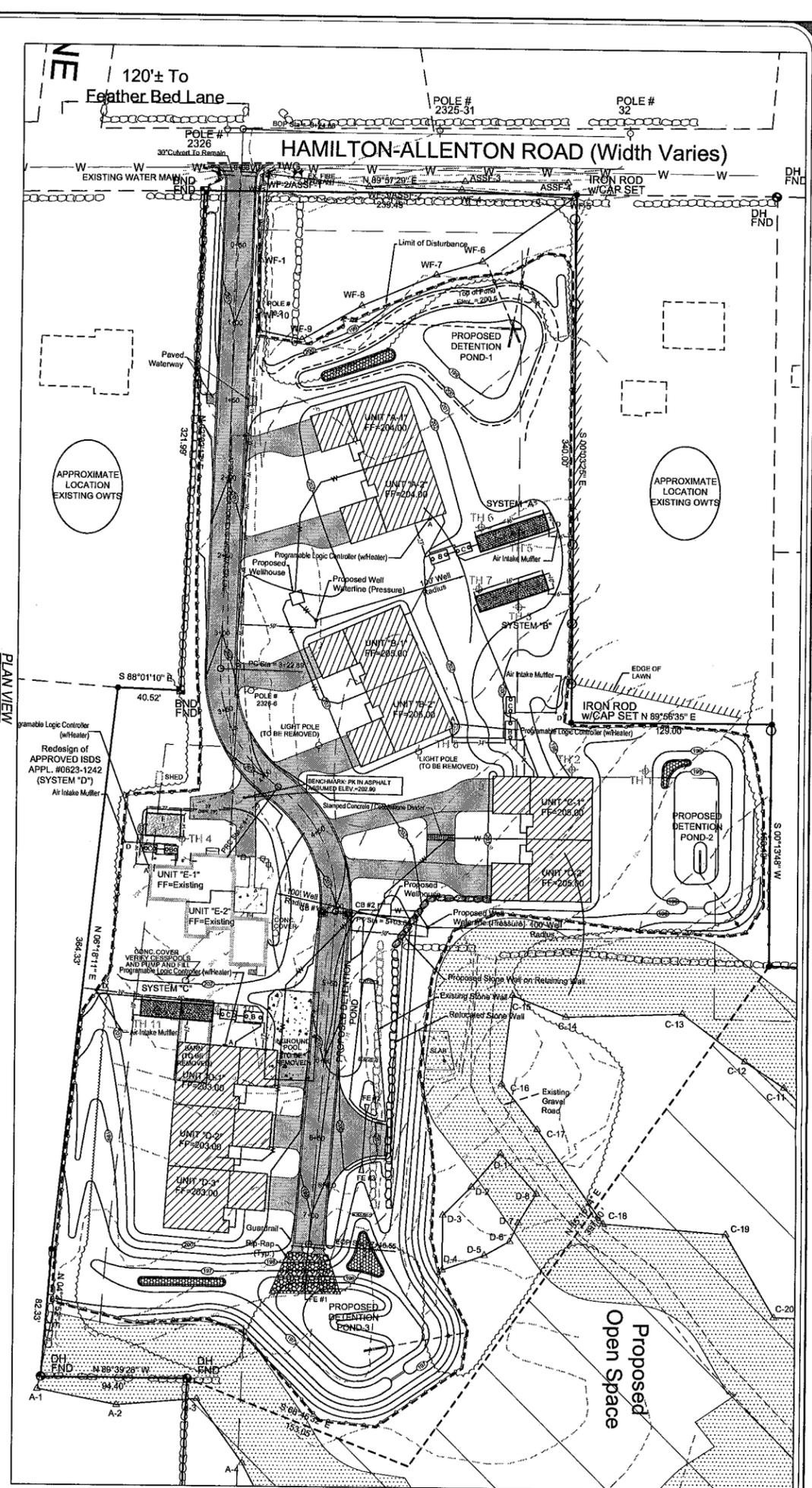
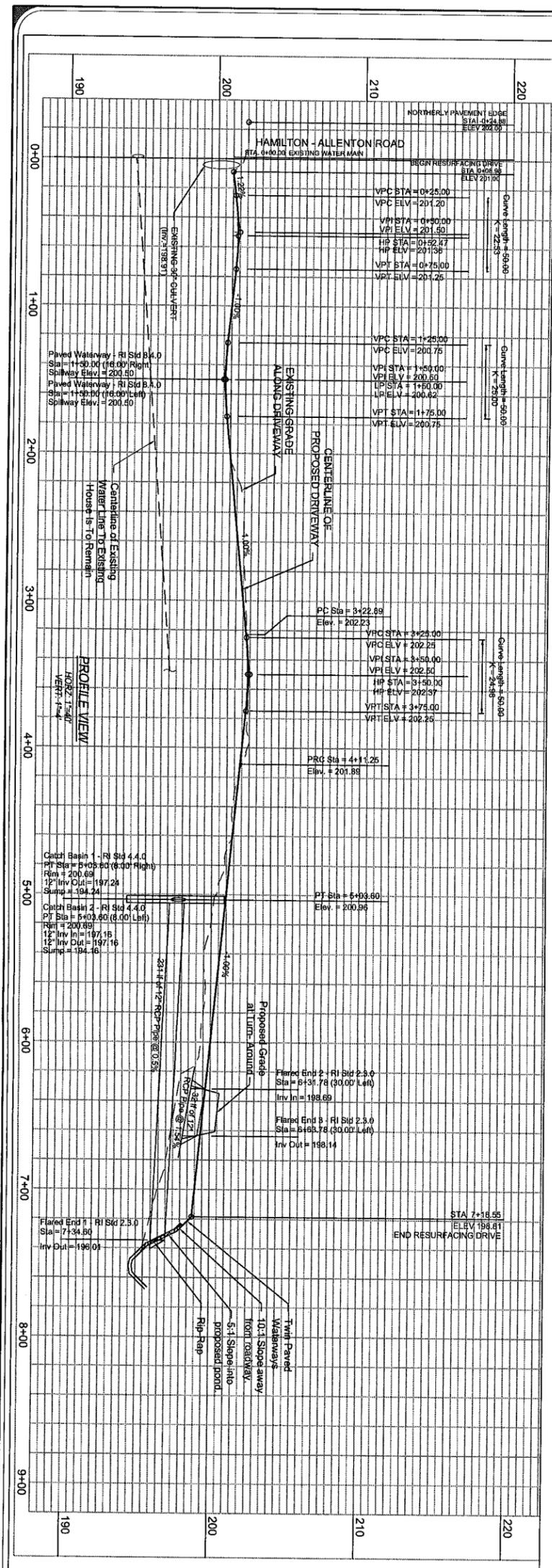
**AMERICAN ENGINEERING, INC.**  
DANIEL R. COTTA Professional Engineer / Professional Land Surveyor

400 South County Trail - Suite A 201  
Exeter, Rhode Island 02822

Phone (401) 294-4090 / Fax (401) 294-3625

Sheet **2** of **7** sheets

Drawing No. \_\_\_\_\_  
Dr. \_\_\_\_\_



Sheet **3** of 7 sheets

**AMERICAN ENGINEERING, INC.**  
DANIEL R. COTTA Professional Engineer / Professional Land Surveyor  
400 South County Trail - Suite A 201  
Exeter, Rhode Island 02822  
Phone (401) 294-4090 / Fax (401) 294-3625

DANIEL R. COTTA  
NO. 5147  
REGISTERED PROFESSIONAL ENGINEER

Drawn By: ERM Checked By: DrC  
Scale: 1" = 40' Date: 6/24/2010

NO.	REVISION	BY	DATE

Plan and Profile FOR **HAMILTON ALLEN ESTATES**

OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC  
567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822  
BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES  
LOCATED AT  
170 HAMILTON-ALLENTON ROAD, NORTH KINGSTOWN, R.I.



**EROSION CONTROL & SOIL STABILIZATION PROGRAM**

1. DETAILED SCHEDULES SHALL NOT BE LATE FOR EXCESSIVE PERIODS OF TIME AS THE WINTER SEASON.
2. ALL DISTURBED AREAS SHALL BE PROTECTED FROM EROSION PRIOR TO OCCUPANCY OF THE PROJECT BY THE OWNER.
3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
4. THE DESIGN WILL BE COMPLETED BY THE FOLLOWING:
  - A. MOVED AREA: ALL FLAT OR SLOPES LESS THAN 2:1
  - B. UNMOVED AREA: ALL FLAT OR SLOPES GREATER THAN 2:1

PERMANENT SEEDING MIXTURES	% BY WT.	SEEDING DATES
GRASS	75	APRIL 1 - JUNE 15
LEGUMES	25	AUG. 15 - OCT. 15
CERAMIC COATED SEEDS	5	
TOTAL FERTILIZER		

PERMANENT SEEDING MIXTURES	% BY WT.	SEEDING DATES
GRASS	75	APRIL 1 - JUNE 15
LEGUMES	25	AUG. 15 - OCT. 15
CERAMIC COATED SEEDS	5	
TOTAL FERTILIZER		

1. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
2. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
4. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
6. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
7. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
9. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
10. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

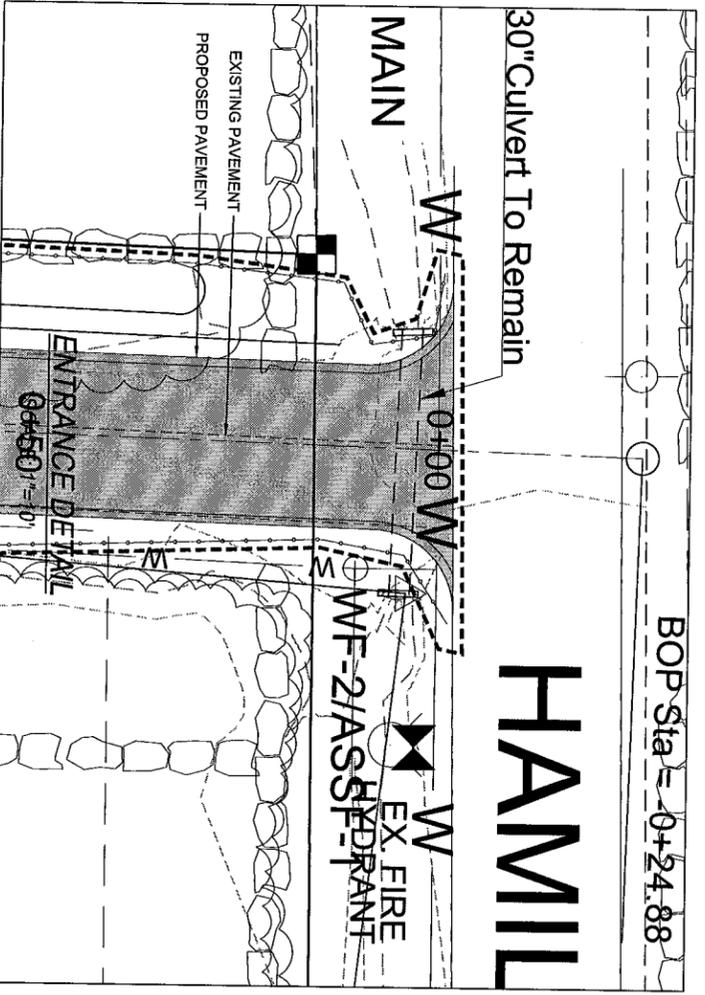
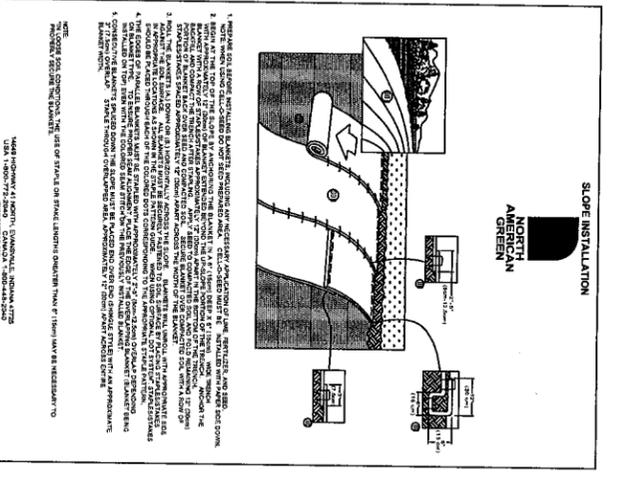
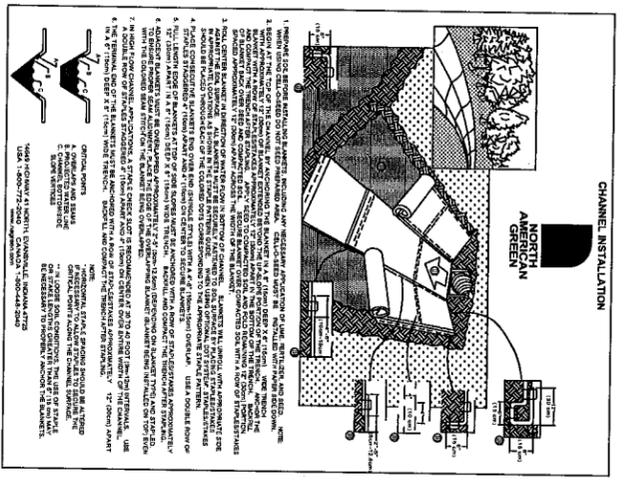
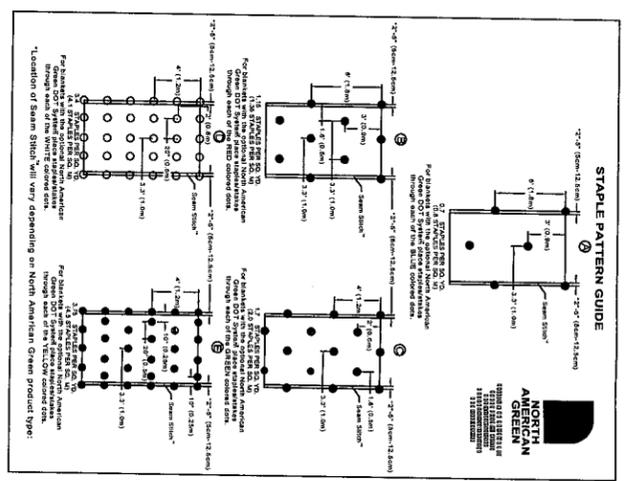
- GENERAL NOTES**
1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY THE STATE OF RHODE ISLAND AND THE MUNICIPALITY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  2. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  4. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  6. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  7. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  8. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  9. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  10. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

**MAINTENANCE AND RESPONSIBILITY**

1. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
2. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
4. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

- ORDER OF PROCEDURE**
1. IMMEDIATELY UPON COMPLETION OF THE CLEANING AND GRUBBING OPERATION AND PRIOR TO ANY OTHER CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  2. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

- CHAIN NOTES**
1. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  2. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
  3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.



**Soil and Erosion Control Plan**  
 FOR  
**HAMILTON ALLEN ESTATES**  
 OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC  
 567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822  
 BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES  
 LOCATED AT  
 170 HAMILTON-ALLEN TOWN ROAD, NORTH KINGSTOWN, R.I.

Drawn By: ERM	Checked By: DRC		
Scale: AS SHOWN	Date: 6/22/2010		
REVISIONS			
NO.	REVISION	BY	DATE

DANIEL R. COTTA  
 NO. 5147  
 REGISTERED PROFESSIONAL ENGINEER

**AMERICAN ENGINEERING, INC.**  
 DANIEL R. COTTA Professional Engineer / Professional Land Surveyor  
 400 South County Trail - Suite A 201  
 Exeter, Rhode Island 02822  
 Phone (401) 294-4090 / Fax (401) 294-3625

Sheet  
 of 7 sheets  
 Drawing No. Dr. Sh.

**3. VAL BASIN NOTES**

3. VAL BASIN SHALL BE MAINTAINED ACCORDING TO THE SCHEDULE.

3.1. SHRUBS AND STUMPS SHOULD BE REMOVED FROM THE (BERM) SIDE OF THE BASIN.

3.2. SHRUBS SHOULD NOT BE PLANTED ON ANY IMPOUNDING AREA (I.E. BERMS OR BERM) WITHIN THE BASIN. SUCH SHRUBS SHOULD BE PLANTED AT THE PERIPHERY OF THE BASIN TO PREVENT ROOT DECAY AND SILT INFILTRATION. GRASSES ARE CONSIDERED THE ONLY ACCEPTABLE PLANTING AND STABILIZING IMPOUNDING EVENTS.

3.3. THESE BASINS MUST BE STABILIZED WITH A DENSE LAYER OF VEGETATION. THE ADDITION OF 4.5 INCHES OF LOAMY SOIL, WITHIN THE GOOD VEGETATIVE GROWTH AND INFILTRATION, THE LOAMY SOIL TO THE BASIN MUST BE FACTORED INTO THE VOLUME REQUIREMENT. THE BASIN SHALL BE SEEDING WITH E.T. FALL RESCUES OR SIMILAR.

3.4. DETENTION BASINS SHALL ALSO BE UTILIZED AS TEMPORARY BERM CONSTRUCTION. THESE BASINS SHALL BE CLEANED OF SEDIMENT AND THE BOTTOM SCARIFIED PRIOR TO VEGETATION STABILIZATION. FAILURE TO DO SO WILL CAUSE QUANTITIES OF SEDIMENTS TO REMAIN IN THE BASIN, NECESSITATING MORE FREQUENT CLEANING OF THE SYSTEM.

3.5. MINIMUM ALLOWABLE SLOPE LEADING TO THE BASIN IS 3:1 (3 HORIZONTAL TO 1 VERTICAL) TO FACILITATE MAINTENANCE OPERATIONS.

3.6. FOR OUTLET WEIR SHALL BE CLASS 'A' 3000 PSI ALL EGGS SHALL HAVE 3/4" CHAMFERS. REINFORCING STEEL GRADE 60.

**3. DETENTION BASIN MAINTENANCE PLAN**

3.1. THE DETENTION BASIN (D.B.) SHALL BE MAINTAINED AS FOLLOWS:

3.1.1. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.2. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.3. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.4. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.5. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.6. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.7. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.8. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.9. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.10. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.11. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.12. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.13. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.14. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.15. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.16. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.17. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.18. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.19. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.20. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.21. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.22. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.23. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.24. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.25. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.26. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.27. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.28. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.29. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.30. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.31. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.32. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.33. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.34. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.35. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.36. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.37. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.38. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.39. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.40. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.41. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.42. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.43. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.44. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.45. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.46. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.47. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.48. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.49. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.50. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.51. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.52. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.53. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.54. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.55. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.56. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.57. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.58. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.59. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.60. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.61. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.62. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.63. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.64. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.65. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.66. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.67. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.68. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.69. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.70. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.71. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.72. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.73. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.74. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.75. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.76. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.77. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.78. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.79. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.80. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.81. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.82. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.83. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.84. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.85. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.86. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.87. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.88. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.89. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.90. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.91. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.92. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.93. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.94. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.95. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

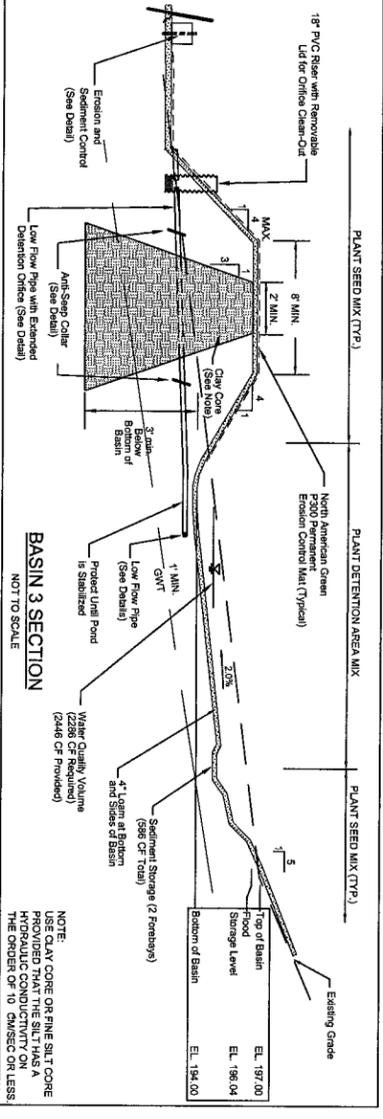
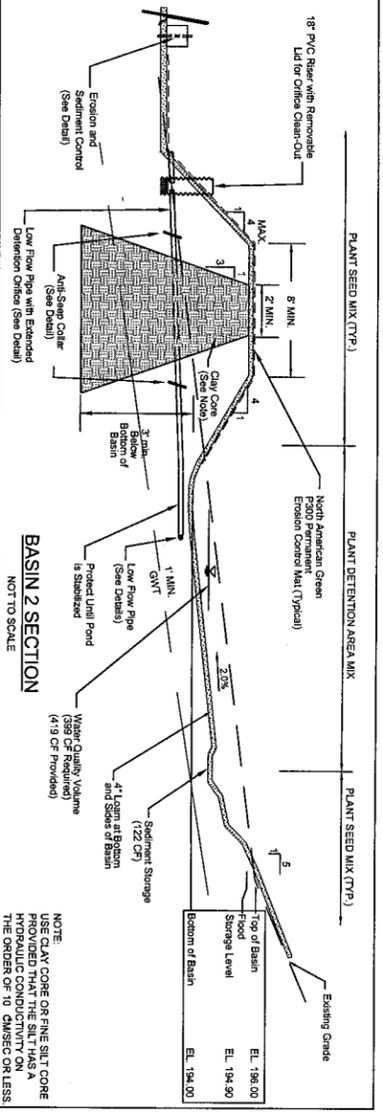
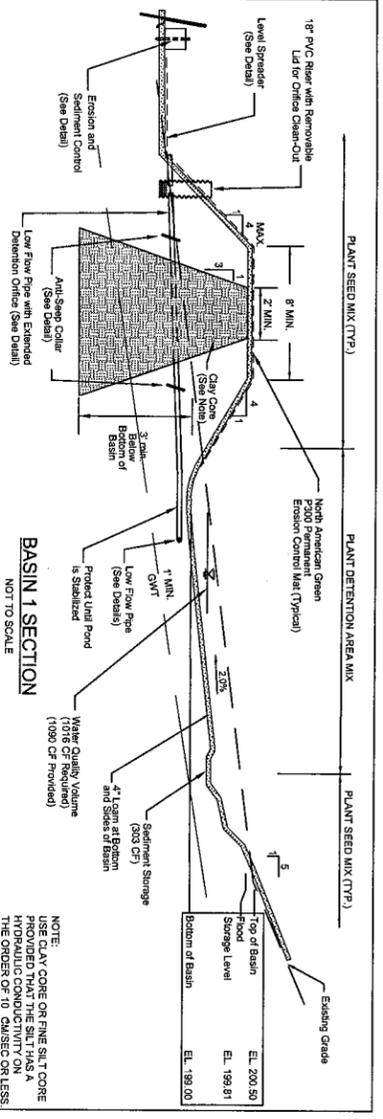
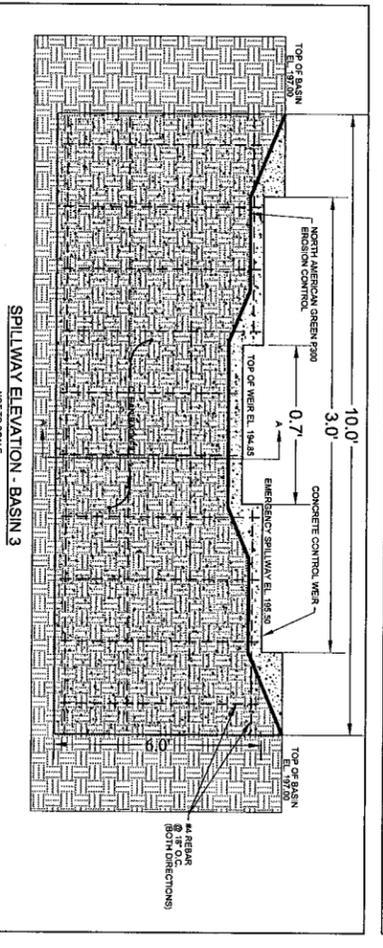
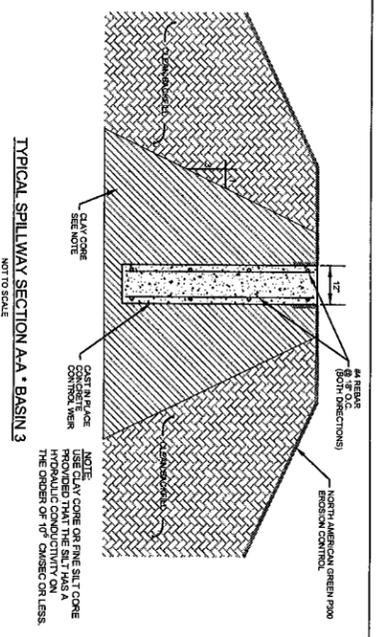
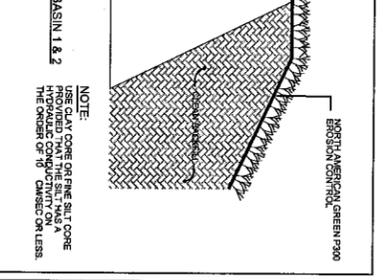
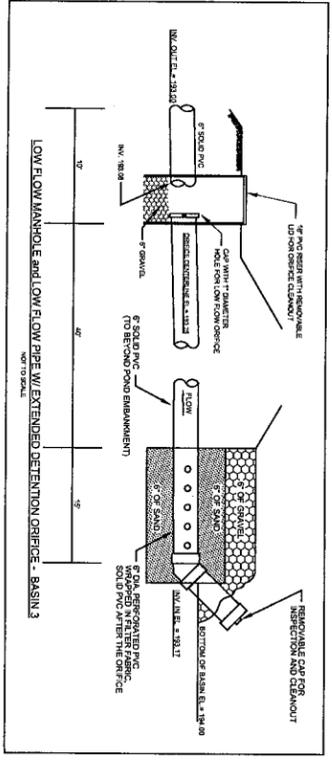
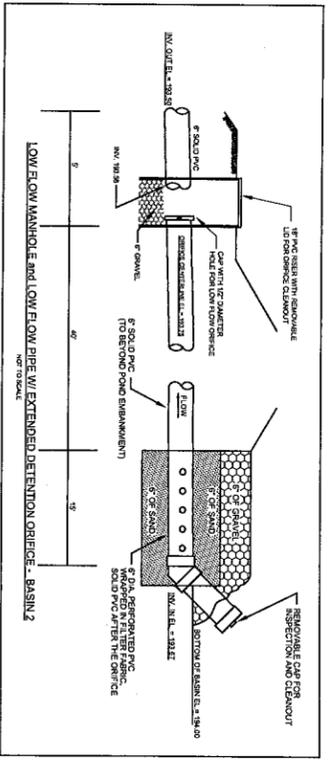
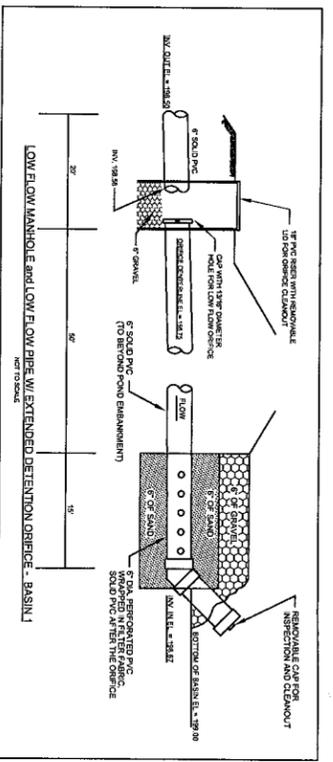
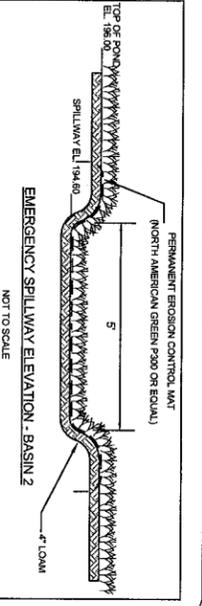
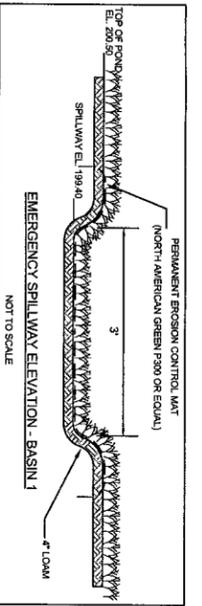
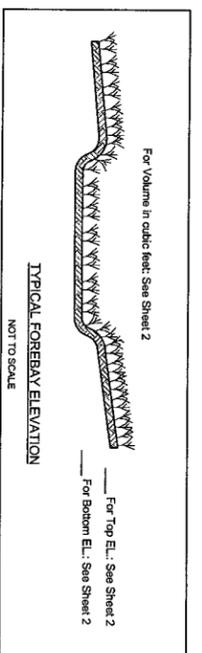
3.1.96. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.97. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.98. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.99. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:

3.1.100. THE DETENTION BASIN SHALL BE MAINTAINED AS FOLLOWS:



**Drainage Basin Details**  
FOR  
**HAMILTON ALLEN ESTATES**

OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC  
567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822  
BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES  
LOCATED AT  
170 HAMILTON-ALLEN TON ROAD, NORTH KINGSTOWN, R.I.

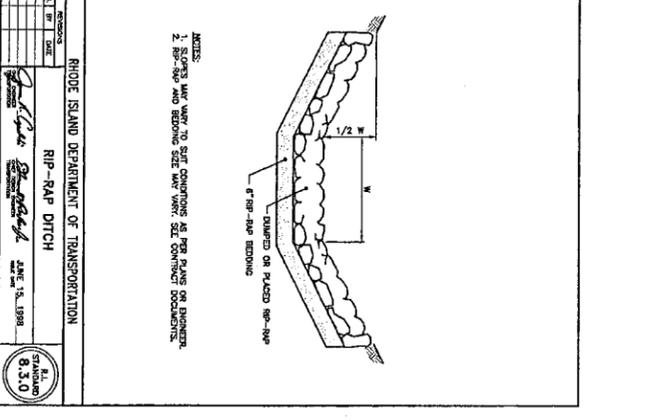
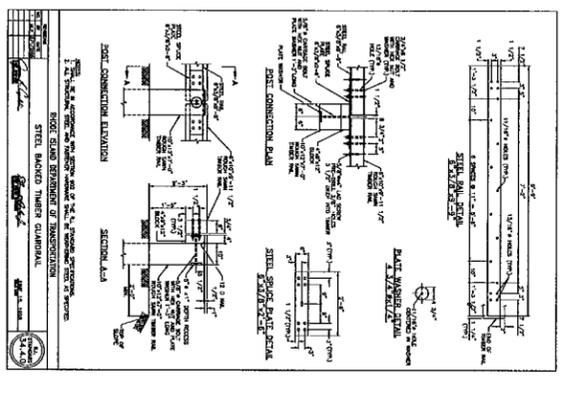
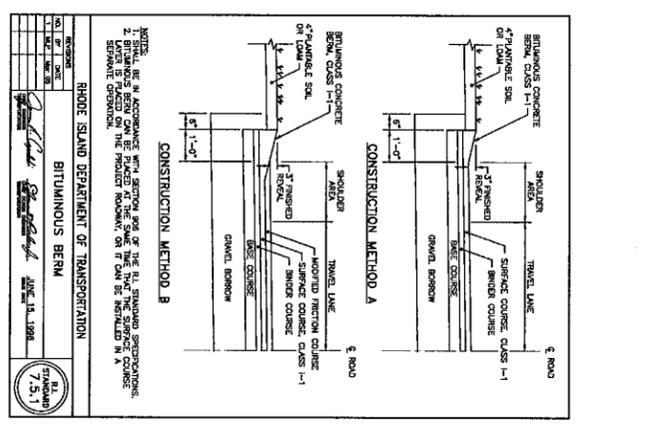
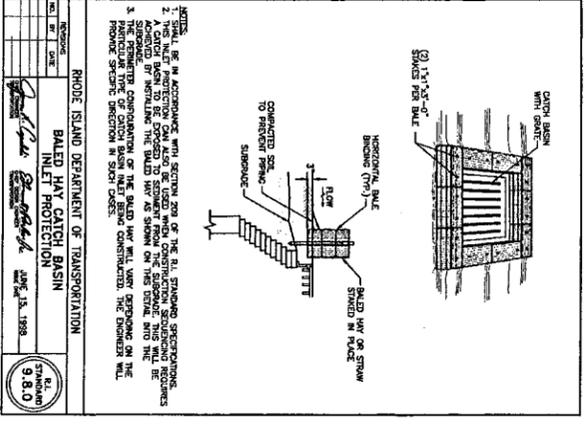
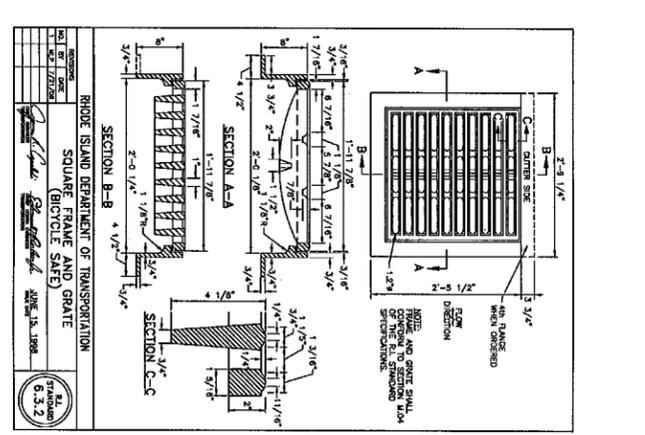
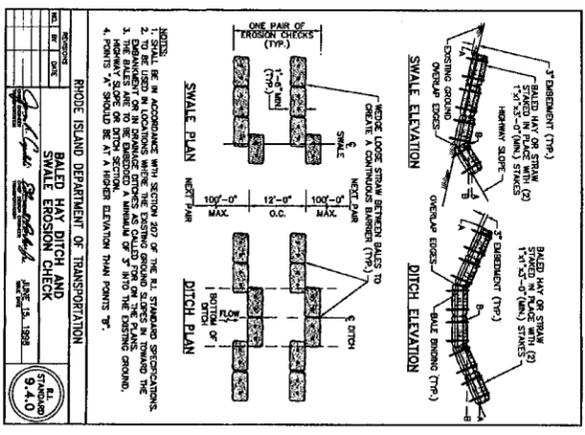
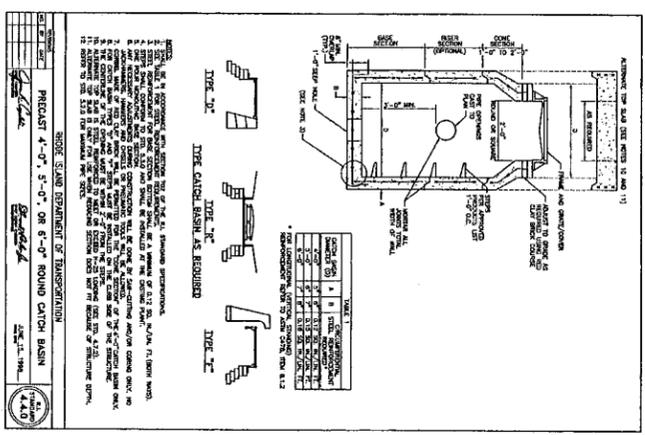
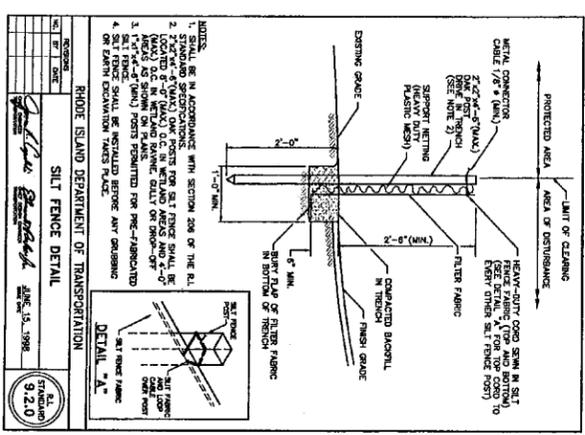
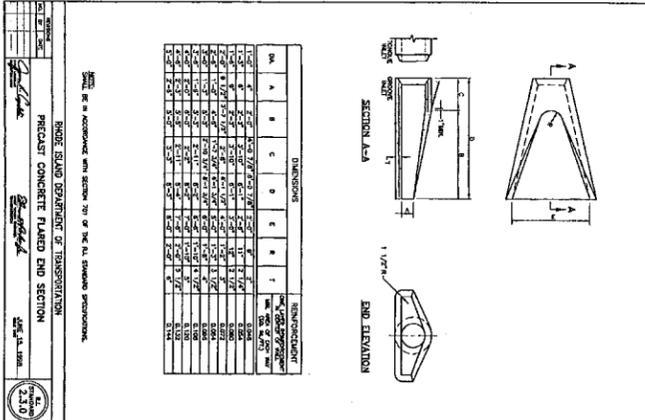
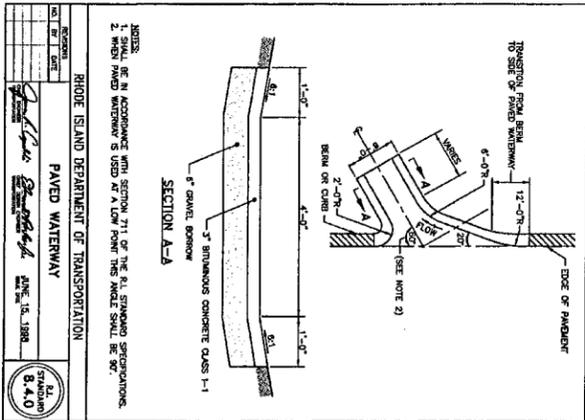
Drawn By: ERM Checked By: DrC  
Scale: AS SHOWN Date: 6/24/2010

REVISIONS			
NO.	REVISION	BY	DATE

DANIEL R. COTTA  
NO. 5147  
REGISTERED PROFESSIONAL ENGINEER

**AMERICAN ENGINEERING, INC.**  
DANIEL R. COTTA Professional Engineer / Professional Land Surveyor  
400 South County Trail - Suite A 201  
Exeter, Rhode Island 02822  
Phone (401) 294-4090 / Fax (401) 294-3625

Sheet  
of 7 sheets  
6



Sheet  
of 7 sheets  
Drawing No. Dr. 514

**AMERICAN ENGINEERING, INC.**  
DANIEL R. COTTA Professional Engineer / Professional Land Surveyor  
400 South County Trail - Suite A 201  
Exeter, Rhode Island 02822  
Phone (401) 294-4090 / Fax (401) 294-3625

DANIEL R. COTTA  
NO. 5147  
REGISTERED PROFESSIONAL ENGINEER

Drawn By: ERM  
Scale: AS SHOWN  
Checked By: DrC  
Date: 6/24/2010

REVISIONS			
NO.	REVISION	BY	DATE

General Standard Details  
FOR  
**HAMILTON ALLEN ESTATES**  
OWNER / APPLICANT: HAMILTON ALLEN ASSOCIATES, LLC  
567 SOUTH COUNTY TRAIL SUITE 111 EXETER, RI 02822  
BEING A.P. 67, LOT 17 - LOT AREA = 32.93 ACRES  
LOCATED AT  
170 HAMILTON-ALLEN TON ROAD, NORTH KINGSTOWN, R.I.