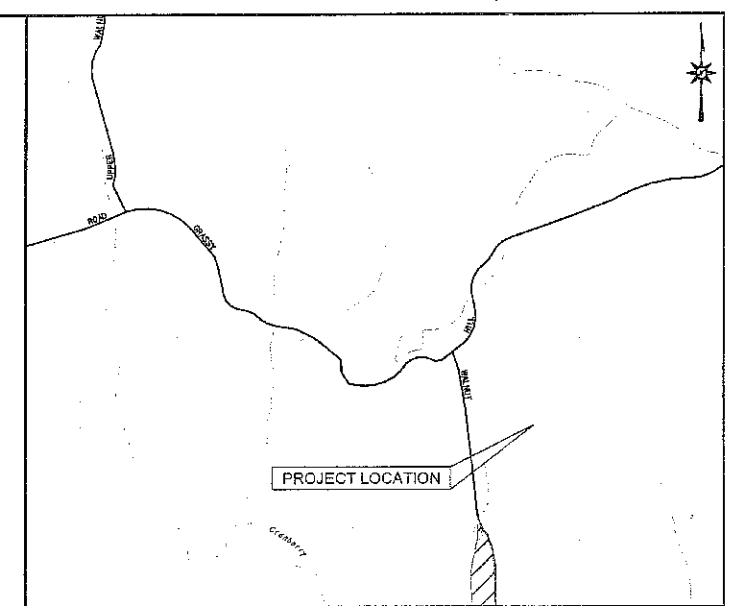


LOCATION MAP
N.T.S.

SUBMISSION TO CONNECTICUT SITING COUNCIL ANTARES SOLAR FIELD GRASSY HILL RD AND WALNUT HILL RD EAST LYME, CT



VICINITY MAP
SCALE: 1"=800'

PREPARED FOR:
GRE 314 EAST LYME, LLC
C/O GREENSKIES RENEWABLE ENERGY, LLC
10 MAIN STREET, SUITE E
MIDDLETOWN, CT 06457

PREPARED BY:



ARCHITECTURE ENGINEERING PLANNING LANDSCAPE ARCHITECTURE
LAND SURVEYING ENVIRONMENTAL SCIENCES

355 RESEARCH PARKWAY
MERIDEN, CONNECTICUT 06450
(203) 630-1406
(203) 630-2615 Fax

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UID-01	UTILITY INTERCONNECTION DIAGRAM
A1	MAINTENANCE BUILDING PLANS & ELEVATIONS

CAD FILE: CV06C1625601

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DEVELOPER: GRE 314 EAST LYME c/o GREENSKIES RENEWABLE ENERGY, LLC 10 MAIN STREET, SUITE E MIDDLETOWN, CT 06457	OWNER: GRE 314 EAST LYME c/o GREENSKIES RENEWABLE ENERGY, LLC 10 MAIN STREET, SUITE E MIDDLETOWN, CT 06457
---	---

DATES ISSUE DATE: OCTOBER 9, 2012	
---	--

LAND AT
40 AND 44 GRASSY HILL ROAD,
89 WALNUT HILL ROAD,
AND WALNUT HILL ROAD REAR
EAST LYME, CONNECTICUT

REVISIONS

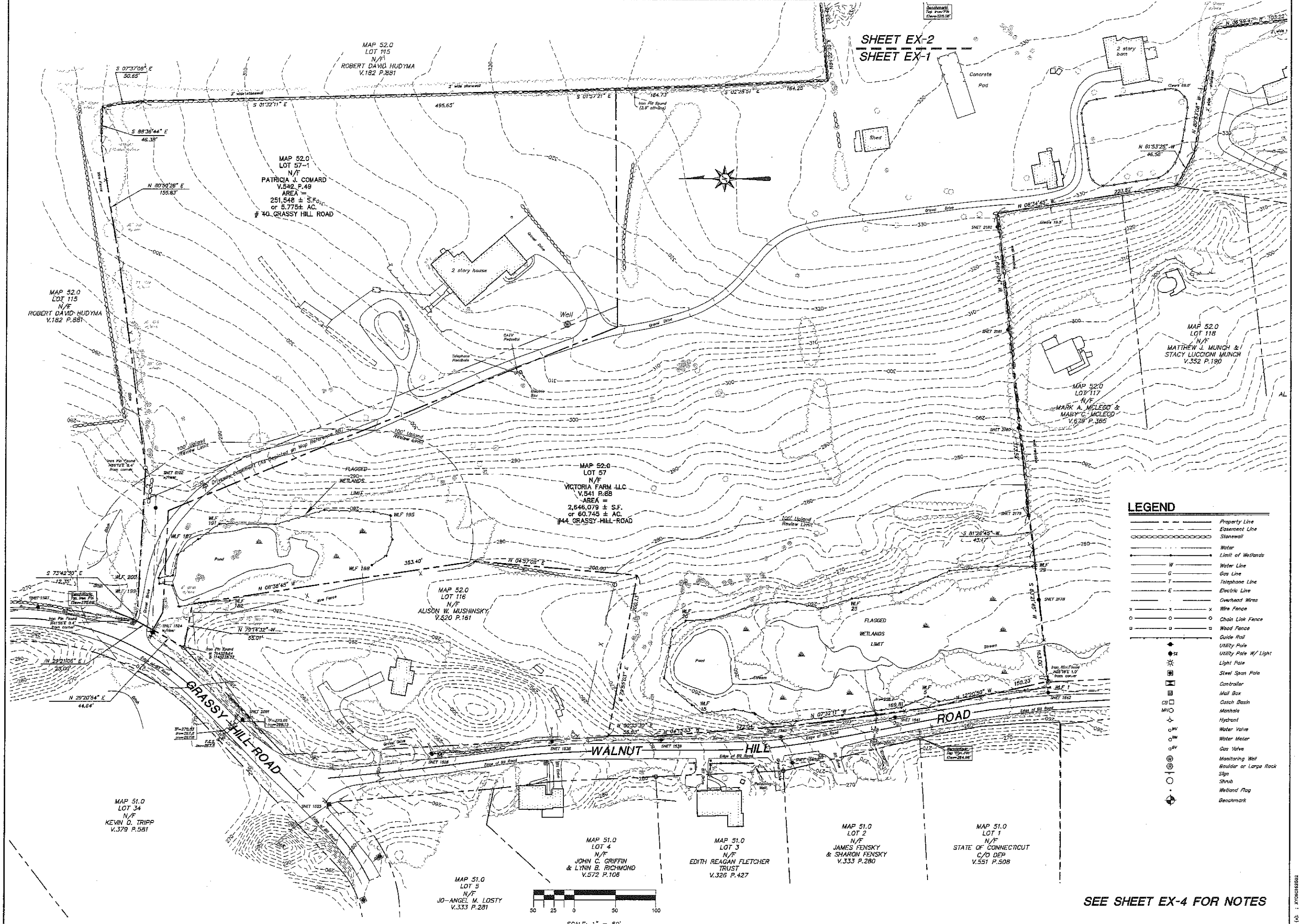
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11-09-08	M.G. J.T. S.S.	D.S.	1"=50'	06C1625	11/09/2008	EX06C162502	405 & 408

Surveyed M.G. J.T. S.S.
Drawn D.S.
Checked J.M.
Approved D.S.
Scale 1"=50'
Project No. 06C1625
Date 11/09/2008
CAD File EX06C162502
Field Book 405 & 408

PROPERTY &
TOPOGRAPHIC
SURVEY

Sheet No. 1 of 5

EX-1



SEE SHEET EX-4 FOR NOTES

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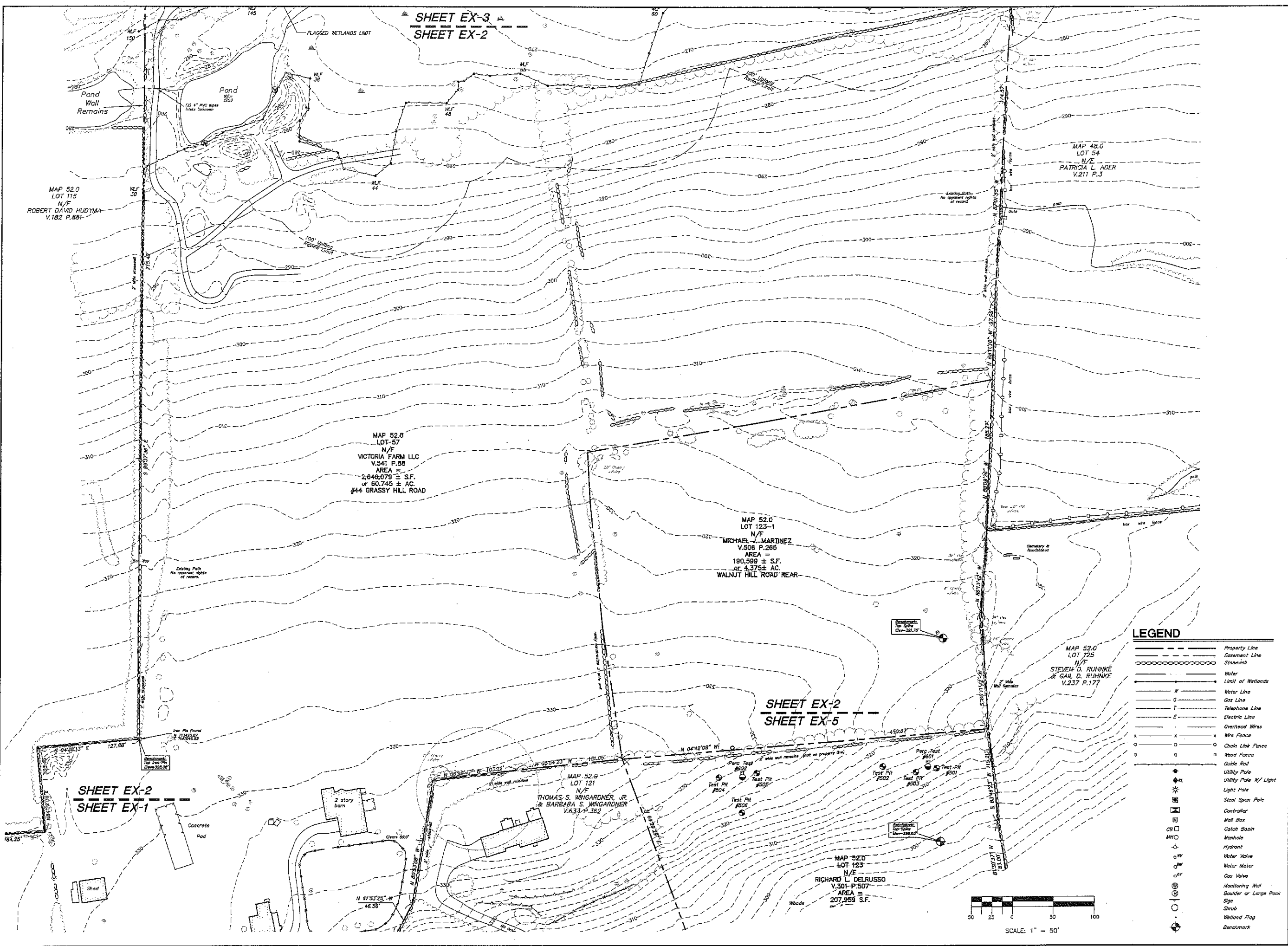
LAND AT
40 AND 44 GRASSY HILL ROAD,
89 WALNUT HILL ROAD,
AND WALNUT HILL ROAD REAR
EAST LYME, CONNECTICUT

REVISIONS
Date: 11-09-08
Drawn: 11-09-08
Checked: 12-29-08
Approved: 10-21-07
Project No. 0601625
Date 11/09/2006
CAD File E:\060162502
Field Book 405 & 406

Surveyed M.G. J.T. S.S.
Drawn D.S.
Checked J.M.
Approved D.S.
Scale 1"=50'
Project No. 0601625
Date 11/09/2006
CAD File E:\060162502
Field Book 405 & 406

Title
PROPERTY &
TOPOGRAPHIC
SURVEY

Sheet No. 2 of 5
EX-2



THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES

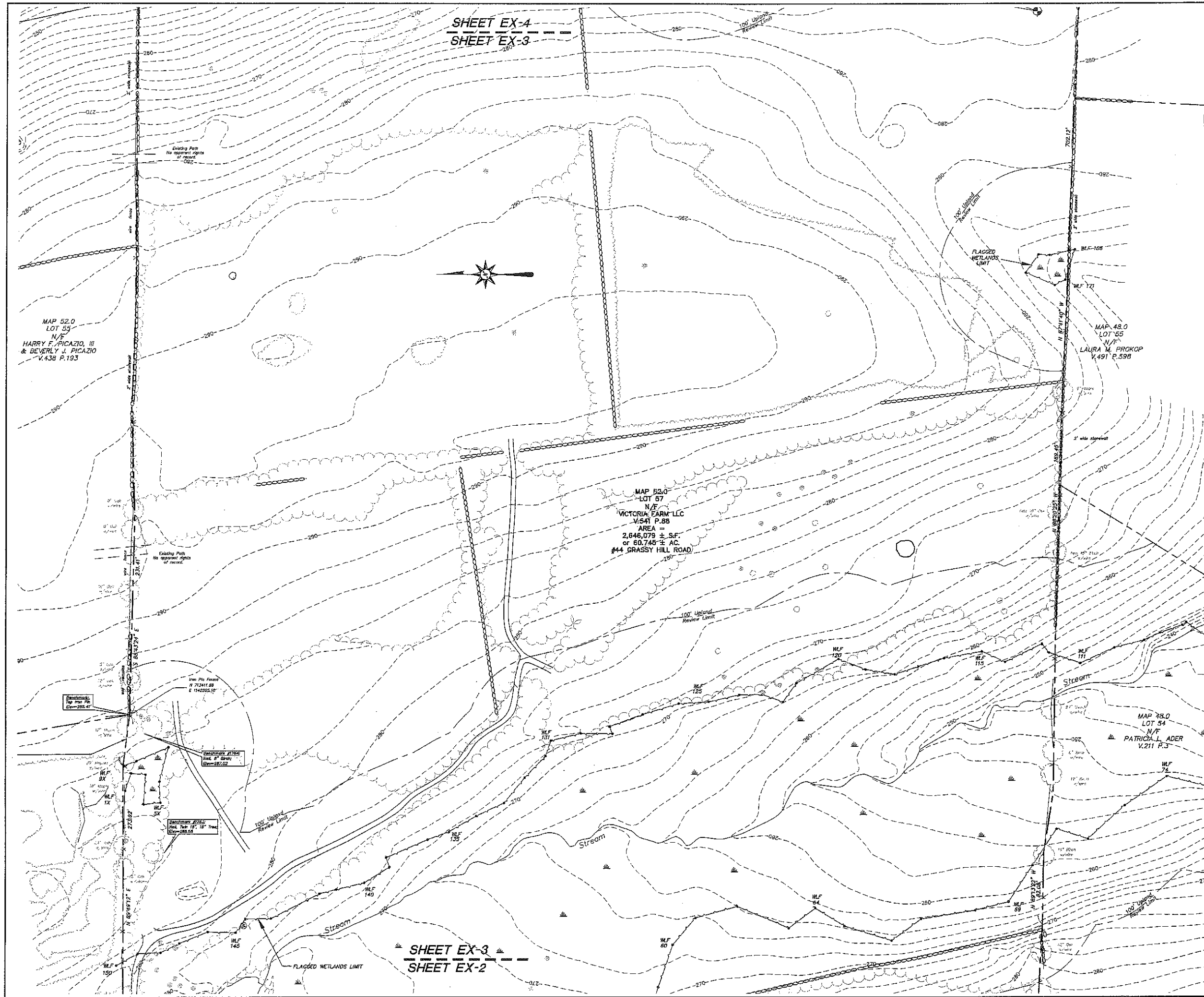


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 (203) 536-2815 Fax

LEGEND

- Property Line
- Easement Line
- Stone Wall
- Water
- Limit of Wetlands
- W --- Water Line
- G --- Gas Line
- T --- Telephone Line
- E --- Electric Line
- Overhead Wires
- x x x --- Wire Fence
- o o o --- Chain Link Fence
- o o o --- Wood Fence
- o o o --- Guide Rail
- o o o --- Utility Pole
- o o o --- Utility Pole w/ Light
- o o o --- Light Pole
- o o o --- Steel Span Pole
- o o o --- Controller
- o o o --- Mail Box
- o o o --- Catch Basin
- o o o --- Manhole
- o o o --- Hydrant
- o o o --- Water Valve
- o o o --- Water Meter
- o o o --- Gas Valve
- o o o --- Monitoring Well
- o o o --- Boulder or Large Rock
- o o o --- Sign
- o o o --- Shrub
- o o o --- Wetland Flag
- o o o --- Benchmark



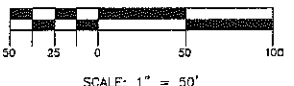
MAP 52.0
 LOT 55
 N/F
 HARRY F. PICAZIO, III
 & BEVERLY J. PICAZIO
 V.438 P.193

MAP 52.0
 LOT 57
 N/F
 VICTORIA FARM LLC
 V.541 P.88
 AREA =
 2,646,079 ± S.F.
 or 60.745 ± AC.
 #44 GRASSY HILL ROAD

MAP 48.0
 LOT 55
 N/F
 LAURA M. PROKOP
 V.491 P.598

MAP 48.0
 LOT 54
 N/F
 PATRICIA L. ADER
 V.211 P.3

SHEET EX-3
 SHEET EX-2



LAND AT
 40 AND 44 GRASSY HILL ROAD,
 89 WALNUT HILL ROAD,
 AND WALNUT HILL ROAD REAR
 EAST LYME, CONNECTICUT

Desc. Remove #63 Walnut Hill Property
 Date 11-08-06
 12-28-06
 10-24-07
 Add Map 52 Lot 123 Boundary & Topo
 as EX-5, Sheet 5 of 5

REVISIONS

No.	Date	Description
1	11-08-06	Remove #63 Walnut Hill Property
2	12-28-06	Add Map 52 Lot 123 Boundary & Topo
3	10-24-07	as EX-5, Sheet 5 of 5

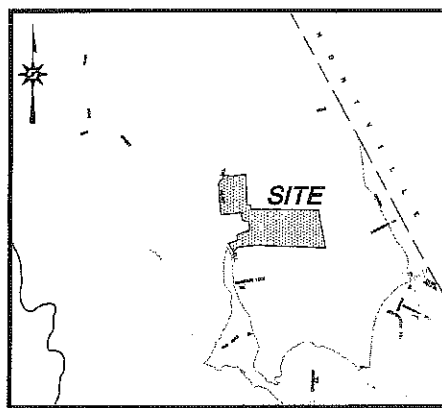
Surveyed M.G. J.T. S.S.
 Drawn D.S.
 Checked J.M.
 Approved D.S.
 Scale 1"=50'
 Project No. 08C1625
 Date 11/09/2006
 CAD File EX08C162502
 Field Book 405 & 408

Title
 PROPERTY &
 TOPOGRAPHIC
 SURVEY

Sheet No. 3 of 5

EX-3

THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BL COMPANIES



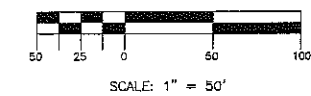
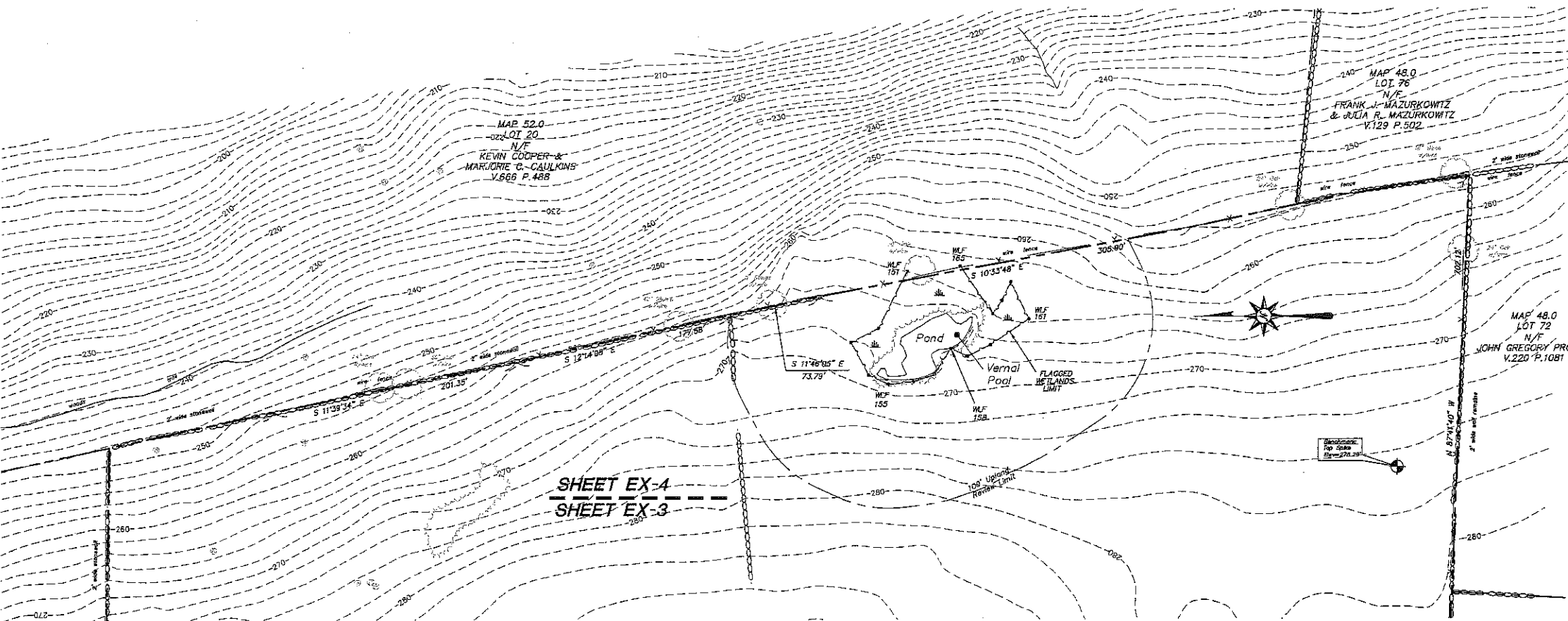
LOCATION MAP
NOT TO SCALE

LEGEND

- Property Line
- Easement Line
- Stonewall
- Water
- Limit of Wetlands
- Water Line
- Gas Line
- Telephone Line
- Electric Line
- Overhead Wires
- Wire Fence
- Chain Link Fence
- Wood Fence
- Guide Rail
- Utility Pole
- Utility Pole W/ Light
- Light Pole
- Steel Span Pole
- Controller
- Mail Box
- Catch Basin
- Manhole
- Hydrant
- Water Valve
- Water Meter
- Gas Valve
- Monitoring Well
- Boulder or Large Rock
- Sign
- Shrub
- Wetland Flag
- Benchmark

GENERAL NOTES

1. A) THIS MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 28, 1996.
- B) THIS PLAN CONFORMS TO HORIZONTAL ACCURACY CLASS A-2 & TOPOGRAPHICAL ACCURACY CLASS T-2.
- C) BOUNDARY DETERMINATION IS BASED UPON A DEPENDENT RESURVEY OF MAP REFERENCE 6A.
- D) THE TYPE OF SURVEY PERFORMED IS A PROPERTY & TOPOGRAPHIC SURVEY AND IS INTENDED TO DEPICT THE POSITION OF THE BOUNDARIES WITH RESPECT TO MONUMENTATION FOUND, STRUCTURES, EASEMENTS, ENCROACHMENTS, VISIBLE UTILITIES, ROADWAYS, ELEVATIONS & CONTOURS.
2. NORTH ARROW AND BEARINGS BASED ON NAD 83 UTILIZING GPS VALUES.
3. ELEVATIONS AND CONTOURS REFER TO N.A.V.D. 1988
4. PARCEL IS LOCATED IN A FLOOD HAZARD AREA "ZONE X" AS DEPICTED ON F.I.R.M. COMMUNITY PANEL NO. 05006B DATED: DECEMBER 5, 1995. AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOODPLAIN.
5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED THOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF EXCAVATION.
6. REFERENCE IS MADE TO THE FOLLOWING MAPS:
 - A. "LAND AT 40 AND 44 GRASSY HILL ROAD, 63A WALNUT HILL ROAD, EAST LYME CONNECTICUT, SCALE 1"=100' DATED 8/2/2006", PREPARED BY BL COMPANIES, INC.
 - B. "MAP SHOWING REVISED PROPERTY LINE 89 WALNUT HILL ROAD & 44 GRASSY HILL ROAD EAST LYME, CT, PREPARED FOR RICHARD L. DELRUSSO & MICHAEL J. MARTINEZ" SCALE 1"=100' AUG. 31, 1999 REV. 9/24/99 BY DAVID M. COONROD L.L.S. NANTIC, CONNECTICUT. (FILED AS "DR5 #634" IN THE EAST LYME CLERKS OFFICE)
 - C. "FINAL SUBDIVISION PLAN PROPERTY OF MICHAEL J. MARTINEZ 44 GRASSY HILL ROAD & WALNUT HILL ROAD EAST LYME, CT." SCALE 1"=100' SEPT. 9, 1999 REV. 9/24/99 REV. 10/31/99 BY DAVID M. COONROD L.L.S. NANTIC, CONNECTICUT. (FILED IN THE EAST LYME CLERKS OFFICE)
 - D. "PROPOSED ADDITIONS TO LOT #25, 32 & 'OTHER LANES OF DAILY' LOCATED AT CARMINAL ROAD, EAST LYME, CONNECTICUT" DATE: JUNE 1996 SCALE: 1"=100' BY JOHN KOPKO, JR. LAND SURVEYOR UNCAVILLE, CONNECTICUT. (FILED AS "DR5 #419" IN THE EAST LYME CLERKS OFFICE)
 - E. "BOUNDARY SURVEY PROPERTY OF ELEANOR P. & HERMAN E. NEFF GRASSY HILL ROAD EAST LYME, CONN. PREPARED FOR POND MEADOW PARTNERSHIP" SCALE 1"=100' JUNE 24, 1988 BY DAVID M. COONROD L.L.S. COLCHESTER, CONN. (FILED AS "DR5 #498" IN THE EAST LYME CLERKS OFFICE)
 - F. "FINAL SUBDIVISION WALNUT HILL FARM PROPERTY OF MILDRED S. ROEHL WALNUT HILL ROAD EAST LYME, CONN. PREPARED FOR W. RONALD O'KEEFE" SCALE: 1"=100' NOV. 21, 1964 REV. NOV. 25, 1984 NOTES ADDED BY J. ROBERT PFANNER & ASSOCIATES P.C. EAST LYME, CONNECTICUT. (FILED AS "DR4 #255" IN THE EAST LYME CLERKS OFFICE)
 - G. "SUBDIVISION PLAN ESTATE OF MARY PROKOP WALNUT HILL ROAD EAST LYME, CONN. PREPARED FOR MARTHA BALOWANS" SCALE 1"=100' SHEET 1 OF 2 AUG. 9, 1983 SEPT. 23, 1983 STREET LINE REV. REV. SEPT. 11, 1984 LOT 1, LOT 2, LOT 3, & PARCEL B CHANGED PARCEL E ADDED REV. OCT. 3, 1984 DIM. ADDED (SH 2 OF 2 BY J. ROBERT PFANNER & ASSOCIATES P.C. EAST LYME, CONNECTICUT. (FILED AS "DR4 #245" IN THE EAST LYME CLERKS OFFICE)
 - H. "PLAN OF LAND SURVEYED FOR JOSEPH KWASNIEWSKI WALNUT HILL ROAD EAST LYME, CONNECTICUT SCALE 1"=20' JULY 20, 1983" BY FINN SURVEY WATERFORD, CONNECTICUT. (FILED AS "DR1 #129" IN THE EAST LYME CLERKS OFFICE)
 - I. "SUBDIVISION PLAN ROLLING HILL ESTATES, GRASSY HILL ROAD AND WALNUT HILL ROAD, EAST LYME, CONN. PREPARED FOR POND MEADOW PARTNERSHIP, SCALE 1"=40'. DATED JUNE 18, 1990". PREPARED BY DAVID M. COONROD.
7. WETLANDS FLAGGED BY ENVIRONMENTAL PLANNING SERVICES AND LOCATED BY BL COMPANIES, INC. MARCH 2006.
8. ASSESSOR LOT 57 SUBJECT TO AN EASEMENT TO CONNECTICUT POWER COMPANY DATED MARCH 10, 1941 AND RECORDED IN VOL. 41 PAGE 332 OF THE TOWN OF EAST LYME LAND RECORDS.
9. ASSESSOR MAP 52 LOT 123 SUBJECT TO RIGHTS OF OWNERS OF LOT #6 (CURRENTLY ASSESSOR MAP 52 LOT 121), TO PASS AND REPASS OVER THE CURRENT DRIVEWAY AS DESCRIBED IN VOL. 301 PAGE 507 OF THE TOWN OF EAST LYME LAND RECORDS.



ZONING INFORMATION

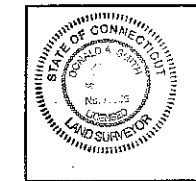
LOCATION: TOWN OF EAST LYME, CONNECTICUT		
ZONE: RU-40		
75 PENT HIGHWAY WALLINGFORD, CT 06492		
ITEM #	ITEM	REQUIREMENTS
1	MINIMUM LOT AREA	40,000 S.F.
2	PROPERTY LINE SETBACK	30'
3	WETLAND SETBACK	25'
4	BUILDING HEIGHT	30'

UTILITY INFORMATION

TELEPHONE: AT&T COMMUNICATIONS INC. 75 PENT HIGHWAY WALLINGFORD, CT 06492	WATER: TOWN OF EAST LYME EAST LYME WATER & SEWER COMMISSION 108 PENNSYLVANIA AVENUE, P.O. BOX 519 NANTIC, CT 06357
ELECTRIC: CONNECTICUT LIGHT & POWER CO. 49 RANDOLPH ROAD MIDDLETOWN, CT 06457 (860) 638-2221	CABLE: EASTERN CONNECTICUT CABLE TELEVISION, INC 81 MYROCK AVENUE WATERFORD, CT 06385

PARCEL AREAS

PARCEL	SQUARE FEET	ACRES
MAP 52.0 LOT 57-1	251,346±	5.775±
MAP 52.0 LOT 57	2,646,079±	60.745±
MAP 52.0 LOT 123-1	190,599±	4.375±
MAP 52.0 LOT 123	207,959±	4.774±
TOTAL AREA	3,296,183±	75.669±



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

Donald A. Smith

DONALD A. SMITH L.S. #70206

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE ORIGINAL SIGNATURE AND EMBOSSED SEAL OF THE ABOVE NAMED LAND SURVEYOR.

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LAND AT
40 AND 44 GRASSY HILL ROAD,
89 WALNUT HILL ROAD,
AND WALNUT HILL ROAD REAR
EAST LYME, CONNECTICUT

REVISIONS

No.	Date	Description
1	11-09-06	Drawn #83 Walnut Hill Property
2	12-28-06	Additional information
3	10-24-07	Add Map 52 lot 123 boundary & topo as EX-5, Sheet 5 of 5, Add Note #9.

Surveyed	M.G. J.T. S.S.
Drawn	D.S.
Checked	J.H.
Approved	D.S.
Scale	1"=50'
Project No.	06C1625
Date	11/09/2006
CAD File	EX06C162502
Field Book	405 & 408

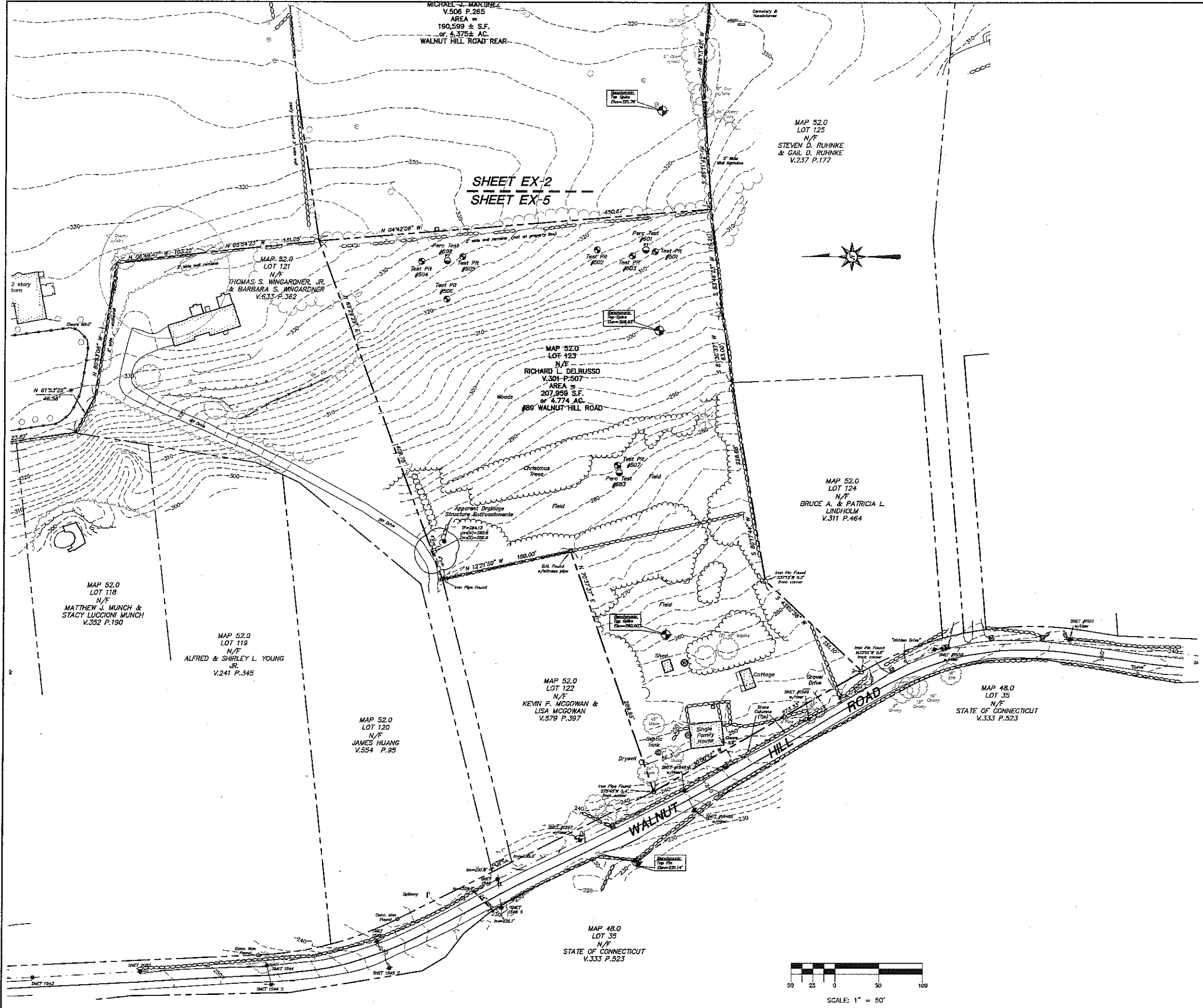
PROPERTY & TOPOGRAPHIC SURVEY

Sheet No. 4 of 5

EX-4

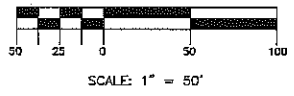
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LAND AT
40 AND 44 GRASSY HILL ROAD,
89 WALNUT HILL ROAD,
AND WALNUT HILL ROAD REAR
EAST LYME, CONNECTICUT



LEGEND

	Property Line
	Easement Line
	Stonewall
	Water
	Limit of Wetlands
	Water Line
	Gas Line
	Telephone Line
	Electric Line
	Overhead Wires
	Wire Fence
	Chain Link Fence
	Wood Fence
	Gate Rail
	Utility Pole
	Utility Pole W/ Light
	Light Pole
	Steel Span Pole
	Controller
	Mail Box
	Catch Basin
	Manhole
	Hydrant
	Water Valve
	Water Meter
	Gas Valve
	Monitoring Well
	Router or Large Rock
	Sign
	Shrub
	Wetland Flag
	Benchmark



REVISIONS
Date
No.

Surveyed M.G. J.T. S.S.
Drawn D.S.
Checked J.M.
Approved D.S.
Scale 1"=50'
Project No. 06C1825
Date 10/24/2007
CAD File EX06C182502
Field Book 405 & 408

Title
**PROPERTY &
TOPOGRAPHIC
SURVEY**

Sheet No. 5 of 5

EX-5

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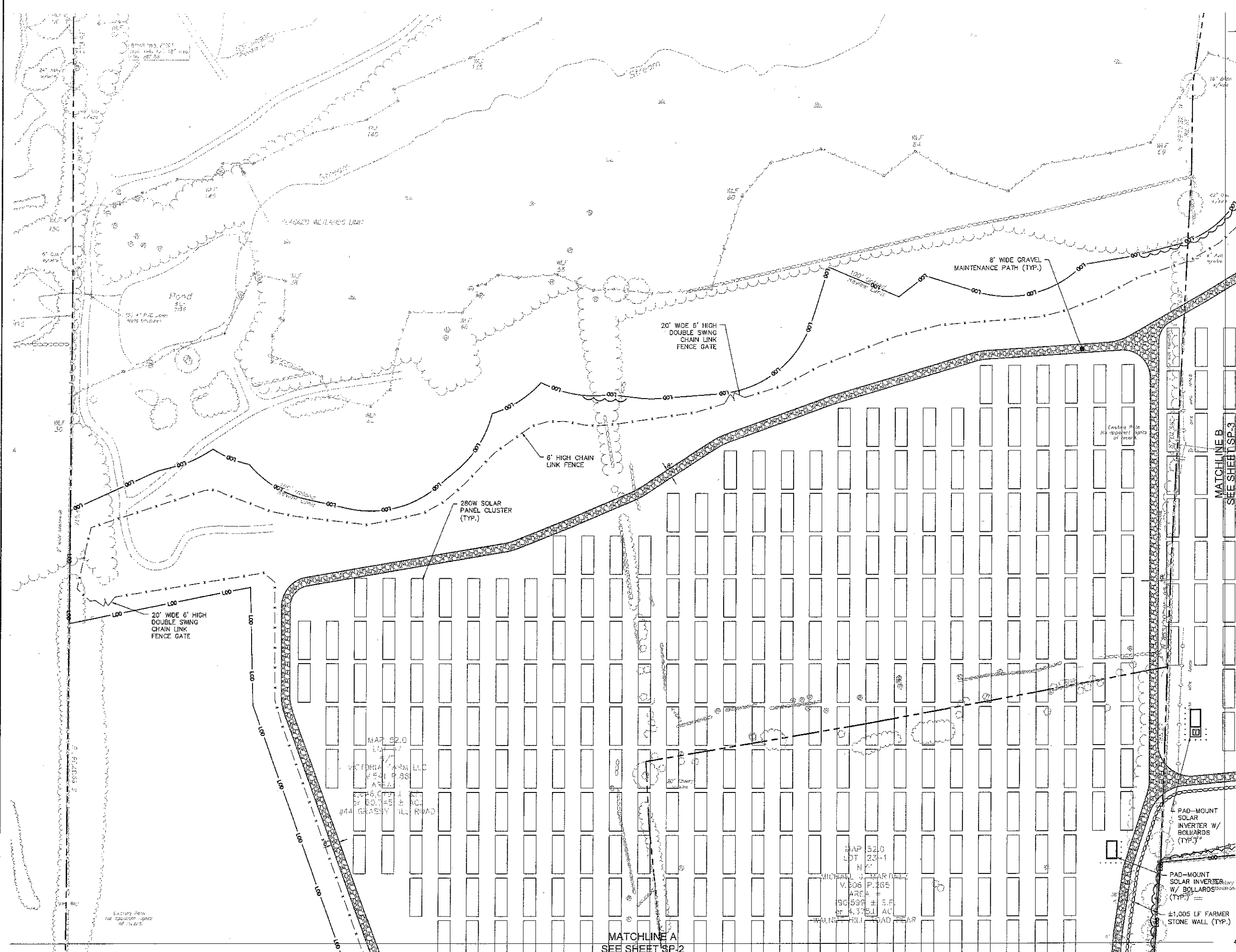


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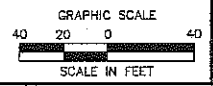


ANTARES SOLAR FIELD
 GRASSY HILL RD AND WALNUT HILL RD
 EAST LYME, CONNECTICUT



MATCHLINE B
 SEE SHEET SP-3

MATCHLINE A
 SEE SHEET SP-2



REVISIONS	
No.	Date

Designed	BKB
Drawn	BKB
Checked	RBG
Approved	
Scale	1"=40'
Project No.	06C1625-G
Date	10/09/12
CAD File	SP06C1625001
Title	SITE PLAN
Sheet No.	SP-1

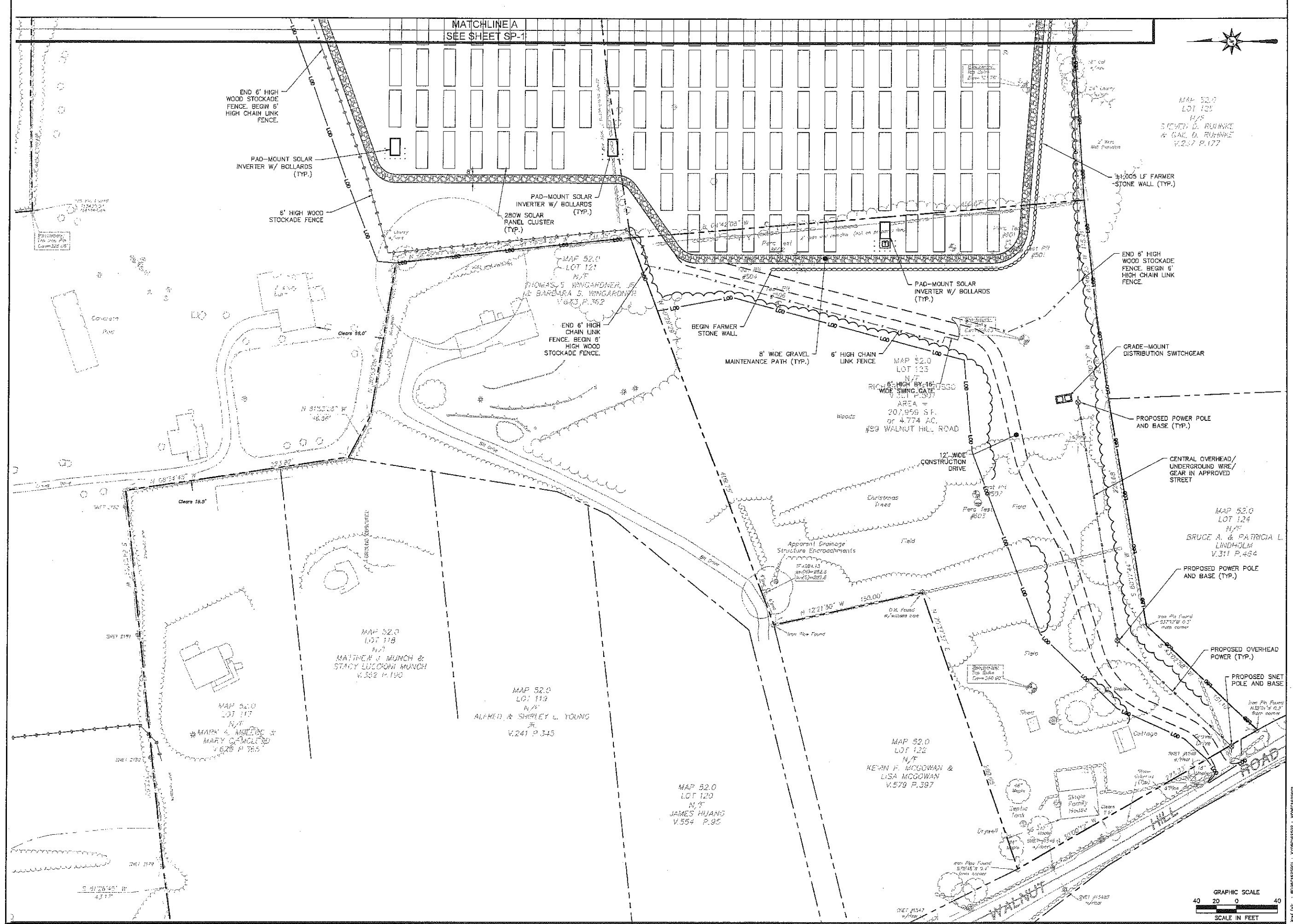
SP-1

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 User: bblvarezde
 Plot: SP-1 24x36 400



ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

REVISIONS	No.	Date	Desc.
Designed	BKB		
Drawn	BKB		
Checked	RBG		
Approved			
Scale	1"=40'		
Project No.	06C1625-G		
Date	10/09/12		
CAD File:	SP08C1625G01		
Title	SITE PLAN		
Sheet No.	SP-2		



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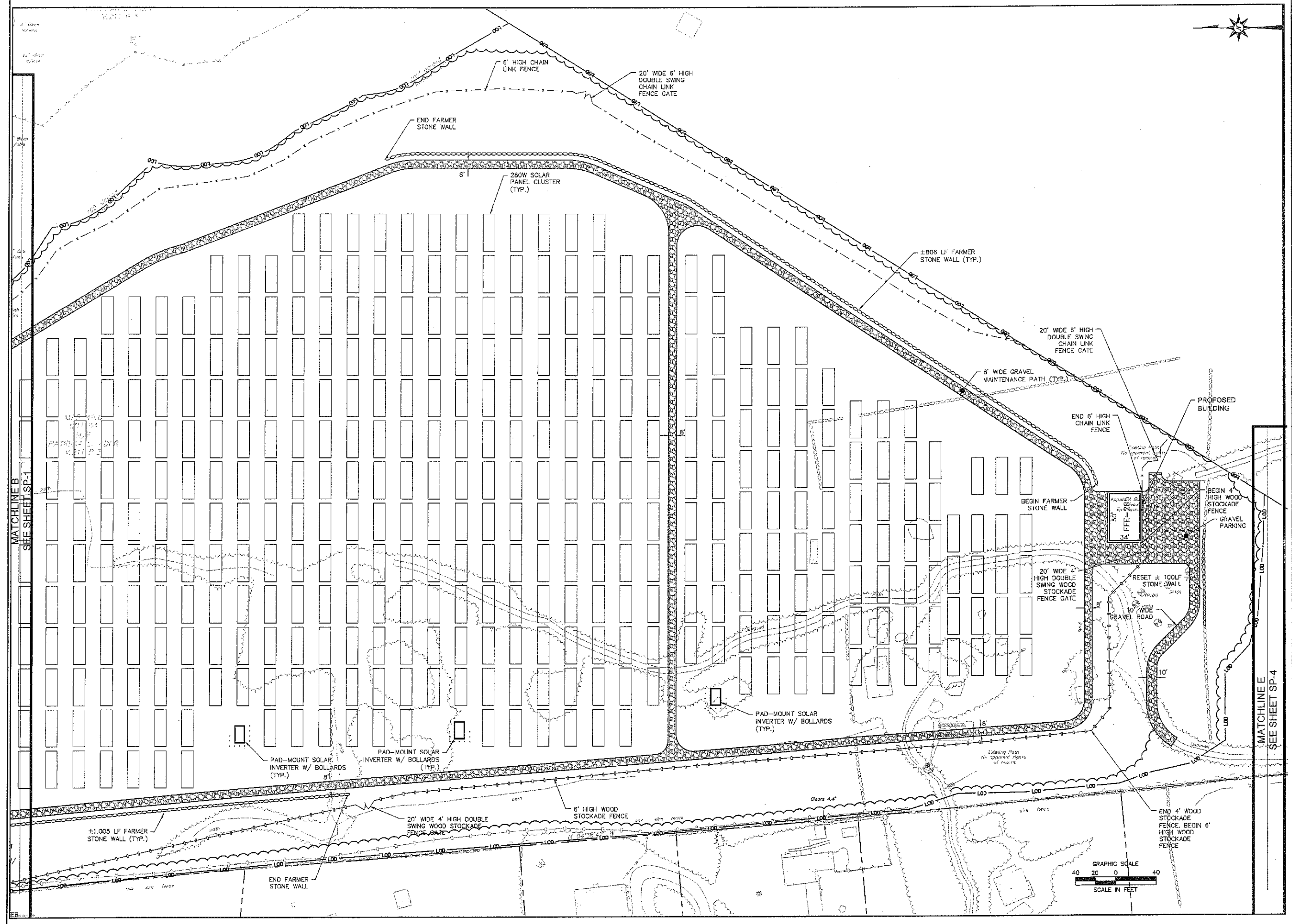
ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

REVISIONS	Date	Drawn
No.		

Designed	SKB
Drawn	SKB
Checked	RBC
Approved	
Scale	1"=40'
Project No.	0601625-G
Date	10/08/12
CAD File	SP0601625001

SITE PLAN

Sheet No.
SP-3



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Layout: SP-3 24x36 4000



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 LAND SURVEYING
 ENVIRONMENTAL SCIENCES

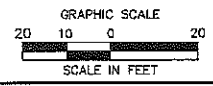
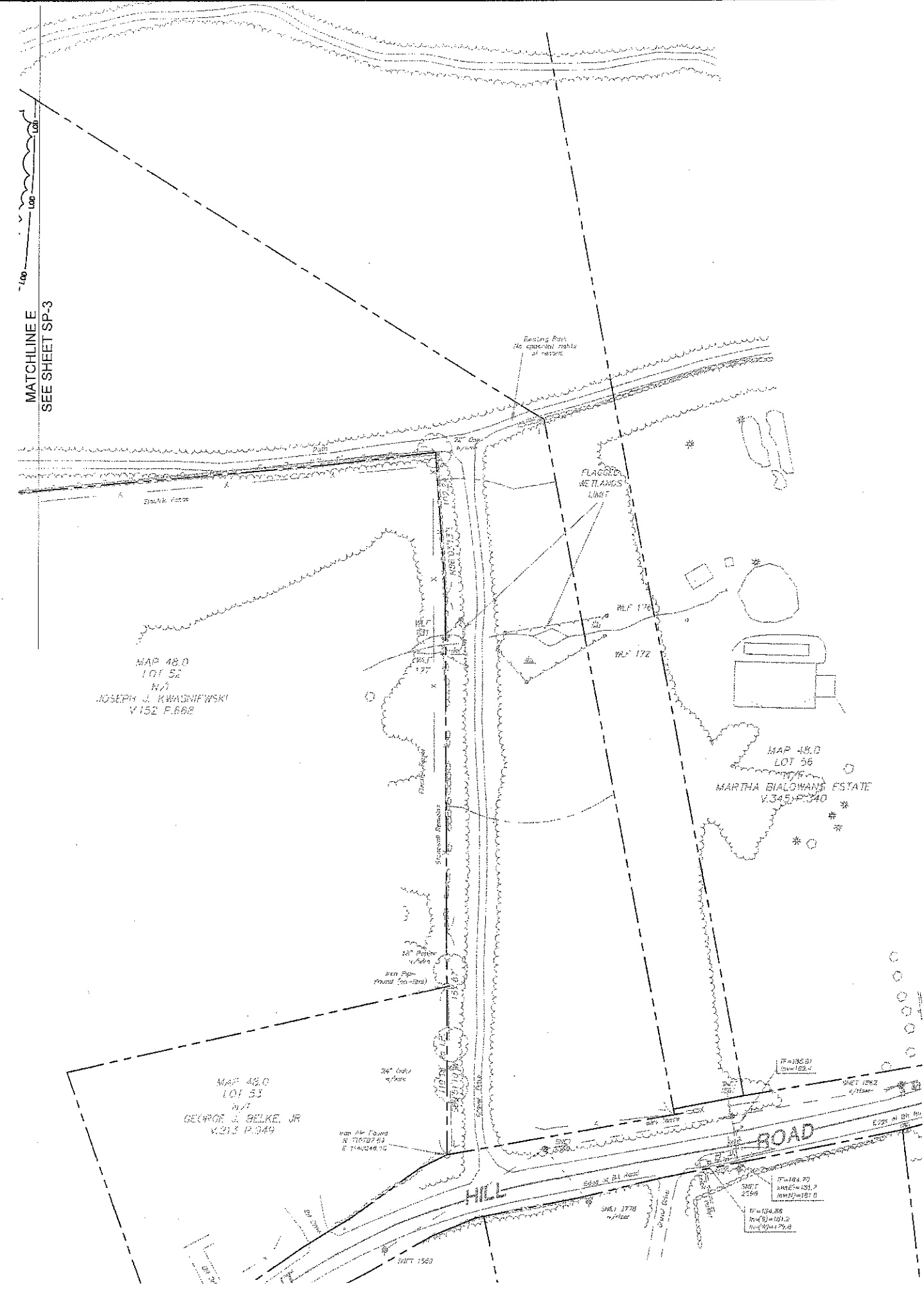
355 Research Parkway
 Meriden, CT 06450
 (203) 238-1478
 (203) 239-2616 Fax



ANTARES SOLAR FIELD
 GRASSY HILL RD AND WALNUT HILL RD
 EAST LYME, CONNECTICUT

REVISIONS	Date	
No.		
Designed	BKB	
Drawn	BKB	
Checked	RBC	
Approved		
Scale	AS SHOWN	
Project No.	06C1625-6	
Date	10/09/12	
CAD File:	SP06C1625001	
Title	SITE PLAN	
Sheet No.		

SP-4



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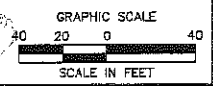
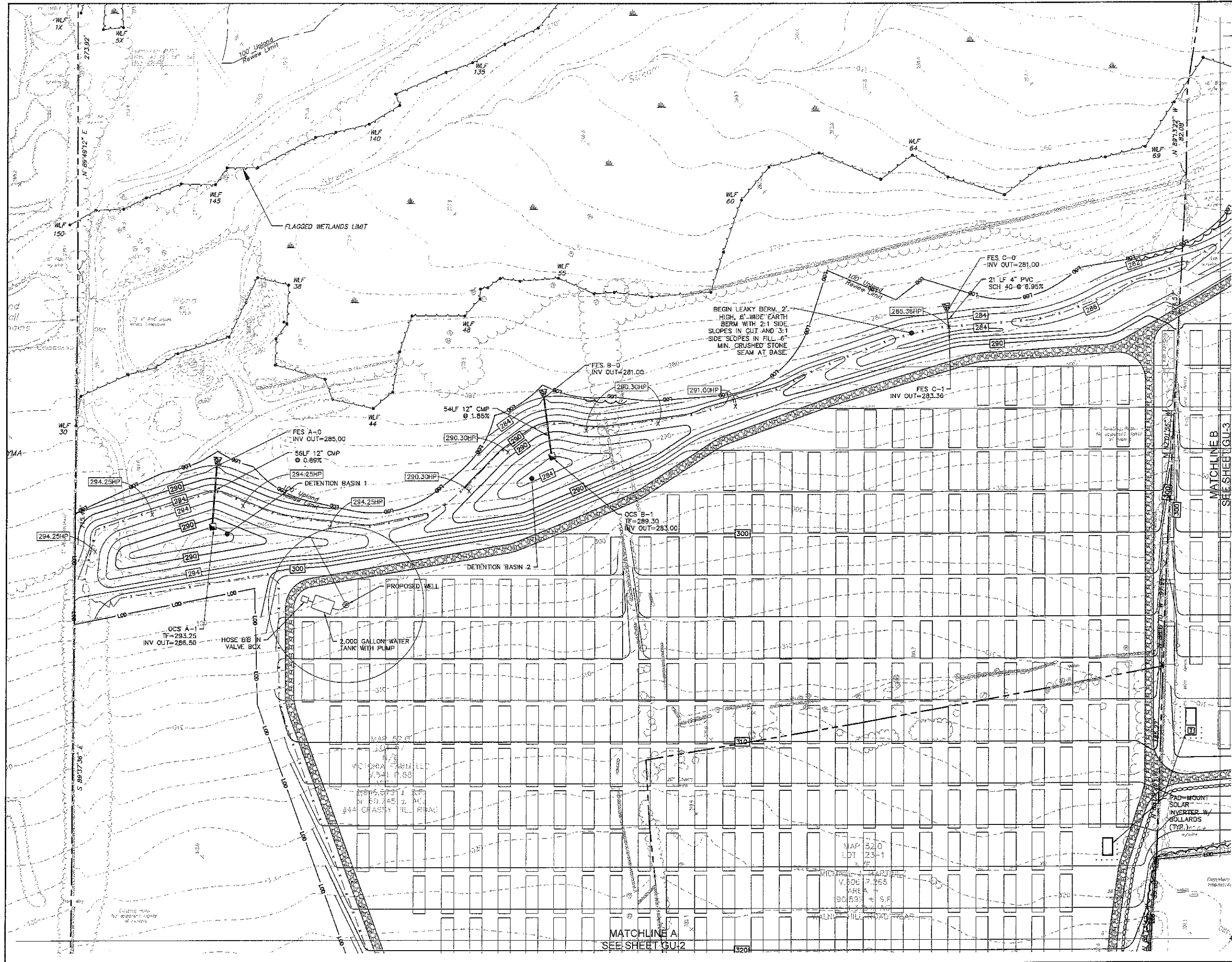


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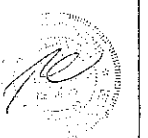
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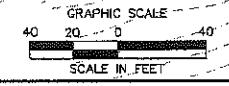
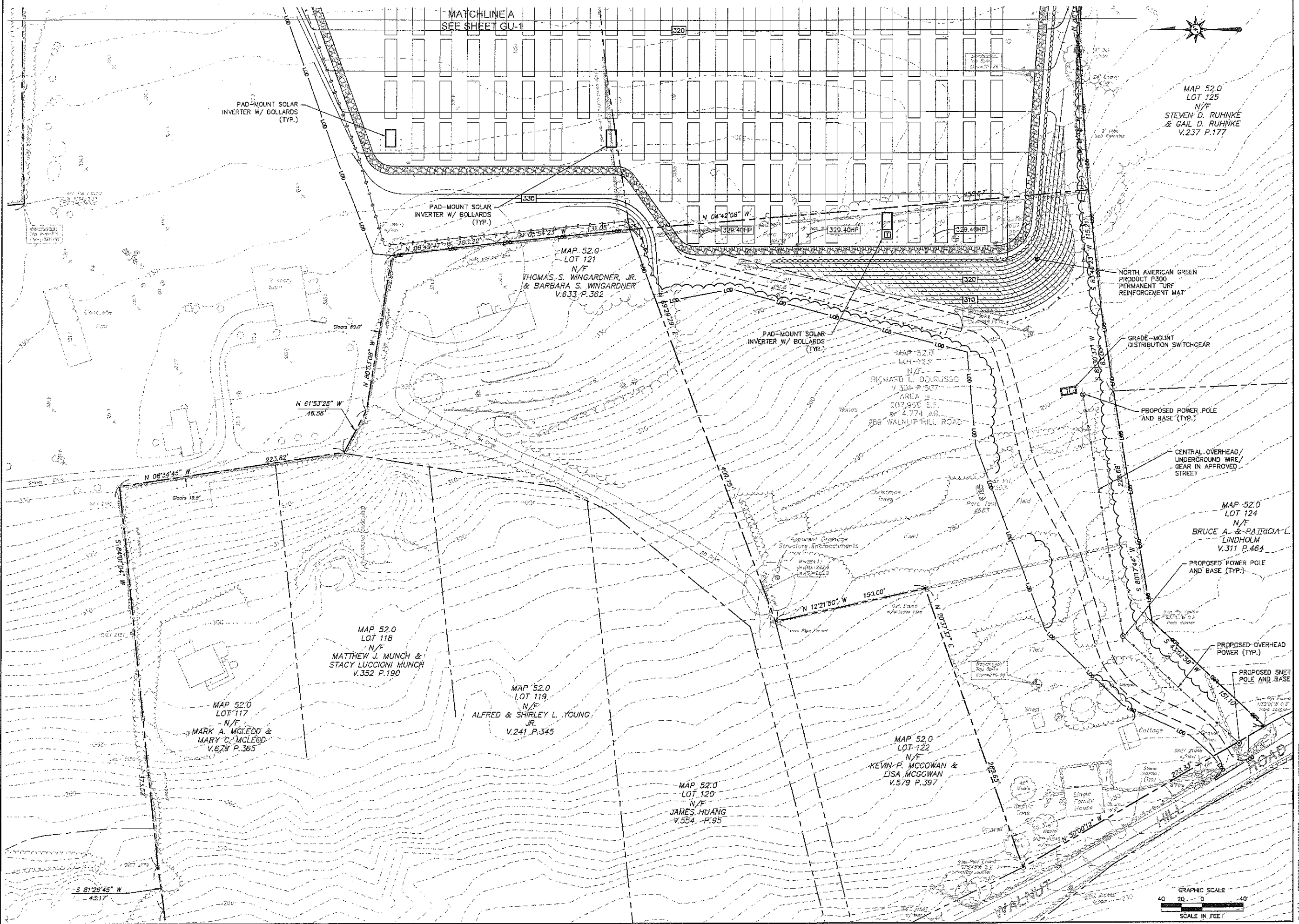
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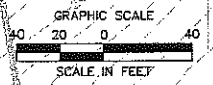
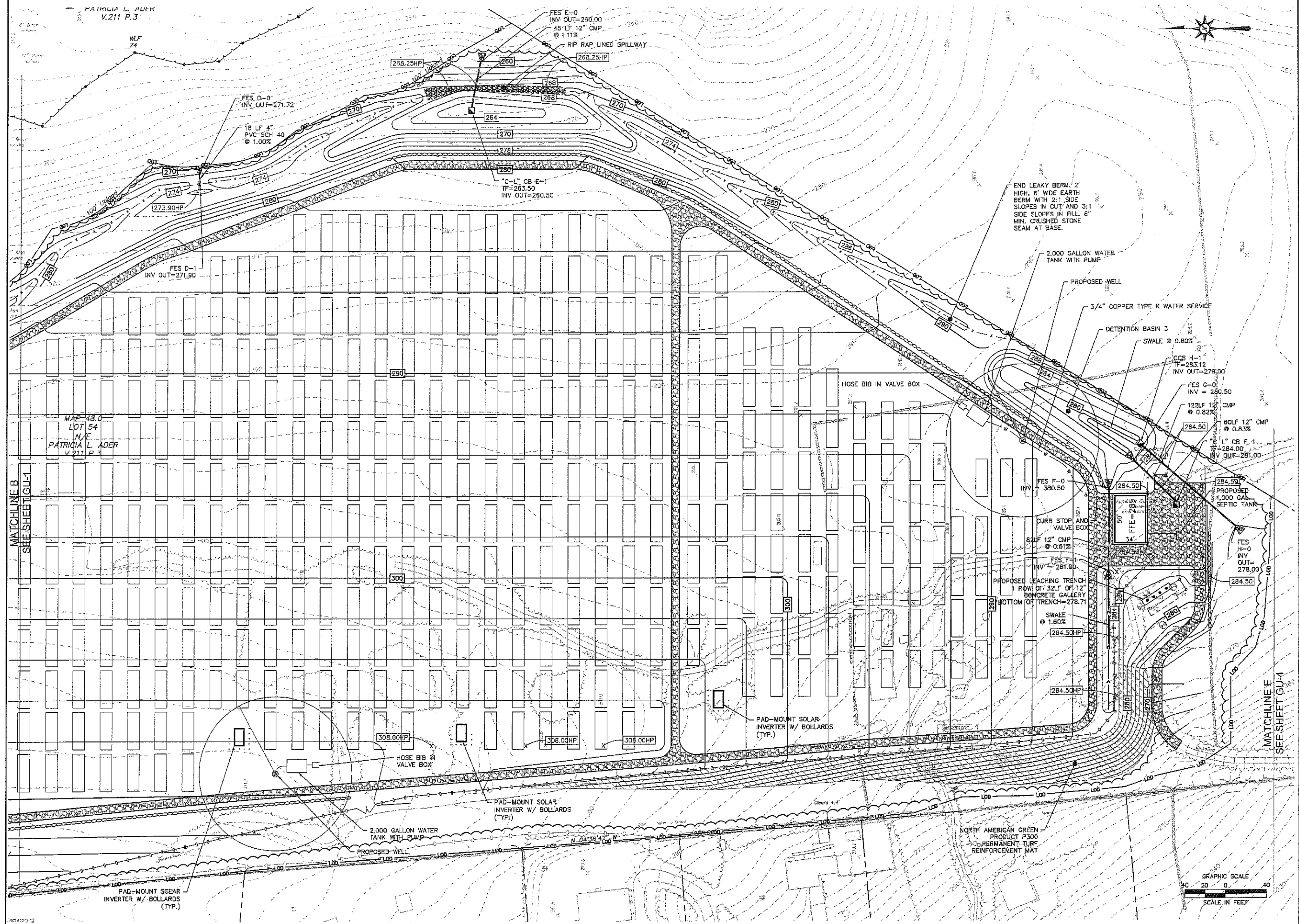
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No. Date

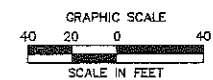
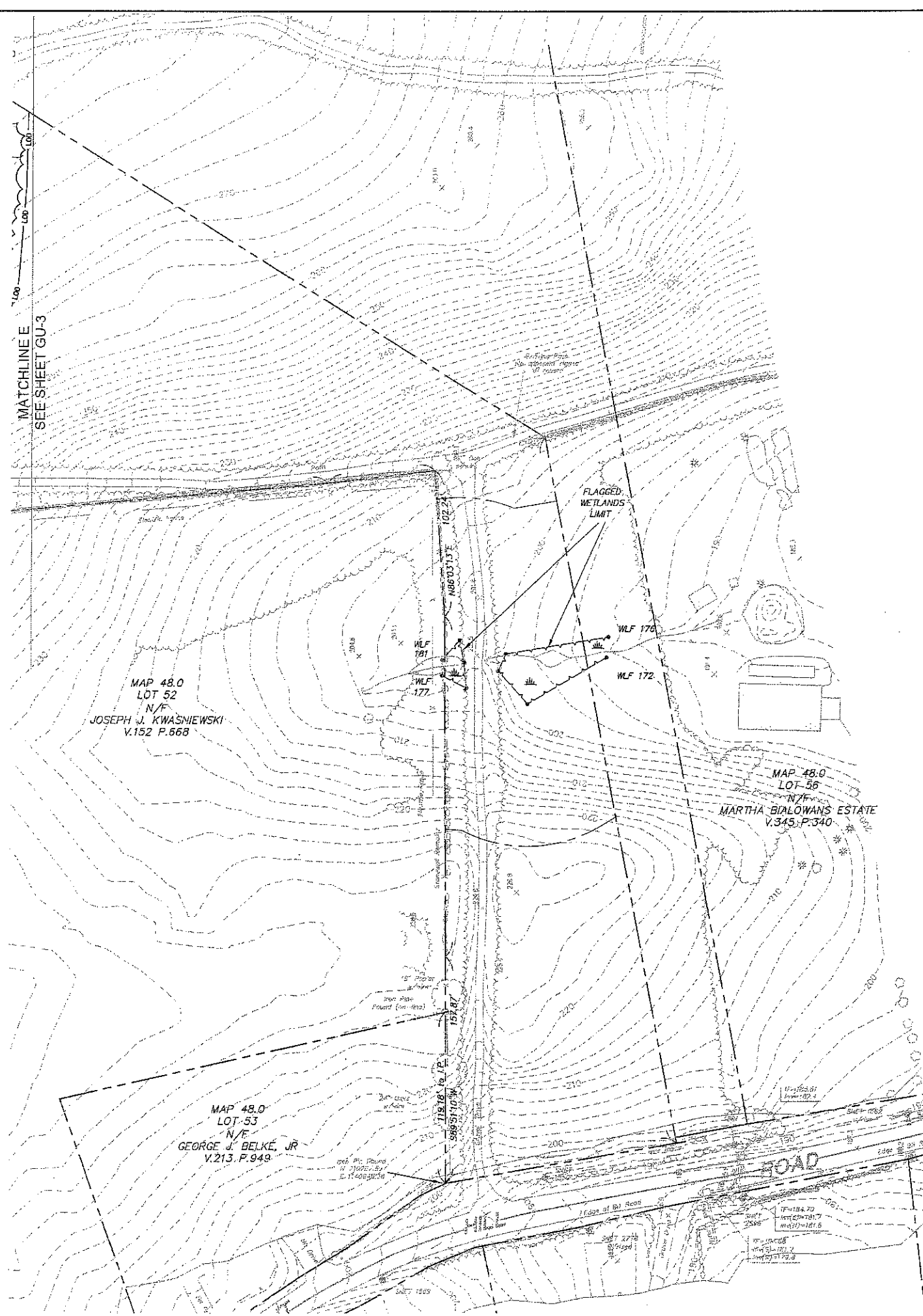
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Date 10/09/12

CAD File: GU08C1625001

Title
GRADING,
DRAINAGE, &
UTILITIES PLAN

Sheet No.

GU-4





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Project No. 08C1625-G
Date 10/09/12

CAD File: GU08C1625G01
Title: SUBSURFACE SEWAGE UTILITIES PLAN

Sheet No.

SS-1

GENERAL NOTES

- ALL CONSTRUCTION TO CONFORM TO THE REQUIREMENTS OF THE PUBLIC HEALTH CODE OF THE STATE OF CONNECTICUT, CURRENT EDITION AND LOCAL HEALTH DISTRICT.
- FIELD TESTING COMPLETED BY: BL COMPANIES, 355 RESEARCH PARKWAY MERIDEN, CONNECTICUT 06450 ON JUNE 19, 2012.
- INSTALLATION APPROVAL AND PROCEDURES SHALL BE AS DIRECTED BY THE LOCAL SANITARIAN.
- EXISTING BOUNDARY AND TOPOGRAPHY IS BASED ON DRAWING ENTITLED LAND AT 40 AND 44 GRASSY HILL ROAD, 89 WALNUT HILL ROAD, AND WALNUT HILL ROAD REAR, DATED 11/9/06 SCALE 1"=50', PREPARED BY BL COMPANIES
- COMPACTION SHALL BE TO AT LEAST 90% OF OPTIMUM THROUGH CAREFUL USE OF ROLLERS, VIBRATION COMPACTORS AND CONSTRUCTION EQUIPMENT.
- THE PERCOLATION RATE OF COMPACTED IN PLACE FILL AND BACKFILL (IF REQUIRED) SHALL BE NO SLOWER THAN THE PERCOLATION RATE FOR THE ORIGINAL LOT AND IN NO CASE SLOWER THAN 20 MINUTES PER INCH. THE ENGINEER OR APPROPRIATE HEALTH AGENCY SHALL BE CONTACTED TO TEST THE MATERIAL PRIOR TO ANY PIPE INSTALLATION OR SUBSTANTIAL MATERIAL PLACEMENT.
- THE SEPTIC TANK SHALL BE CAST WITH INTEGRAL BAFFLES AND AN OUTLET INVERT THAT IS 3 INCHES LOWER THAN THE INLET INVERT.
- IT IS THE RESPONSIBILITY OF THE LICENSED SEPTIC SYSTEM INSTALLER TO CONSTRUCT THE FINAL APPROVED PLAN AND NOT AN UN-APPROVED DESIGN PLAN. ALTERATIONS OF THE APPROVED PLAN WILL ONLY BE ALLOWED AFTER APPROVAL IS GRANTED IN WRITING BY THE LOCAL SANITARIAN PRIOR TO PROCEEDING.
- IF THE LICENSED SEPTIC SYSTEM INSTALLER FINDS ANY MOTTLING OR OTHER FIELD CONDITIONS WORSE THAN SHOWN UNDER THE SYSTEM DESIGN DATA, HE SHALL IMMEDIATELY STOP WORK AND SHALL CONTACT THE LOCAL HEALTH DISTRICT AND THE ENGINEER FOR PLAN REVISIONS.
- ALL DISTURBED AREAS SHALL BE TOPSOILED AND SEEDED AS SOON AS POSSIBLE
- AFTER SYSTEM CONSTRUCTION, ALL AREAS SHALL BE PROTECTED AGAINST EROSION DURING CONSTRUCTION, USING HAY BALES AS REQUIRED.
- NO PART OF THE SUBSURFACE SEWAGE DISPOSAL SYSTEM SHALL BE COVERED WITH BACKFILL PRIOR TO INSPECTION BY THE LEDGE LIGHT HEALTH DISTRICT
- THERE ARE NO WELLS WITHIN 75' OF THE PROPOSED SYSTEM.
- THERE ARE NO FOOTING DRAINS TO THE PROPOSED BUILDING; IT IS A SLAB ON GRADE BUILDING.
- GRAVEL SEPTIC FILL SHALL BE FREE OF LOAM, SILT AND CLAY AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:
 - THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 3-INCHES
 - UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
 - THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND SIEVE ANALYSIS STARTED.
 - THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA.

SIEVE SIZE	NET SIEVE PERCENT PASSING	DRY SIEVE PERCENT PASSING
#4	100	100
#10	70 - 100	70 - 100
#40	10 - 50	10 - 75
#100	0 - 20	0 - 5
#200	0 - 5	0 - 2.5
- A CONNECTICUT LICENSED LAND SURVEYOR AND ENGINEER MUST STAKE OUT SEPTIC SYSTEM PRIOR TO INSTALLATION.

TEST PIT DATA

TEST PIT TP #100 (06/19/12)		TEST PIT TP #102 (06/19/12)	
0' to 9"	Dark Brown Topsoil	0' to 9"	Topsoil
9' to 22"	Brown Loam	9' to 20"	Brown Loam
22" to 48"	Olive Fine Sand	20" to 35"	Olive Fine Sand
48" to 90"	Brown Fine Silt Sand	35" to 86"	Brown Fine Silt Sand
	Ledge - N/A		Ledge - N/A
	Roots - 43"		Roots - 57"
	Ground Water - 72" Seep		Ground Water - 48" (82" Standing)
	Mottling - 32"		Mottling - 24"

TEST PIT TP #101 (06/19/12)

0' to 5"	Dark Brown Topsoil
5' to 29"	Dark Brown Loam/Sandy
29" to 89"	Olive Fine Sand, Trace Gravel and Silt
	Ledge - N/A
	Roots - 53"
	Ground Water - 67" Seep, Some Cobbles and Stones
	Mottling - 30"

PERCOLATION TEST DATA

TAKEN ON June 20, 2012 By B.K.B.

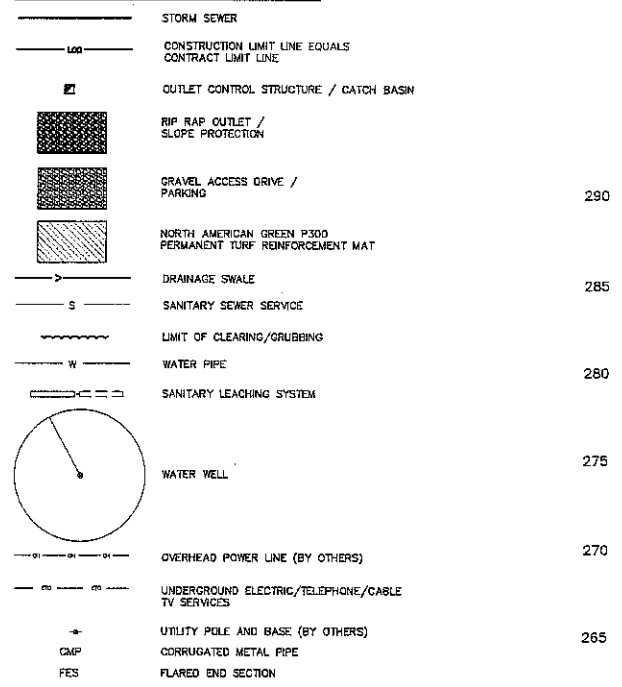
P-100			P-101		
Depth	Drop	Percolation Rate	Depth	Drop	Percolation Rate
0	4.5	22.75"	0	3.5	28"
5	9		5	8.5	
10	11.5		10	12.5	
15	13		15	15.25	
20	14.75		20	18.25	
25	16		25	20	
30	17		30	21.75	
40	19		40	24	
50	21.25		50	25	
60	22.75		60	28	

PERCOLATION RATE=6.67 MIN./INCH PERCOLATION RATE=5 MIN./INCH

PIPE NOTES

- PIPE FROM FOUNDATION TO SEPTIC TANK SHALL BE 6" ASTM D 1785 SCHEDULE 40 WITH A MINIMUM SLOPE OF 1/4" PER FOOT OF RUN (2.08%).
- ALL PIPE DOWN GRADIENT OF THE SEPTIC TANK SHALL BE 4" ASTM D 3034 SDR35 AND SHALL HAVE A SLOPE EQUAL TO OR EXCEEDING 1.00%.
- ALL PIPE SHALL BE INSTALLED STRAIGHT AND TRUE. NO SAGS OR BENDS ARE ALLOWED.

LEGEND

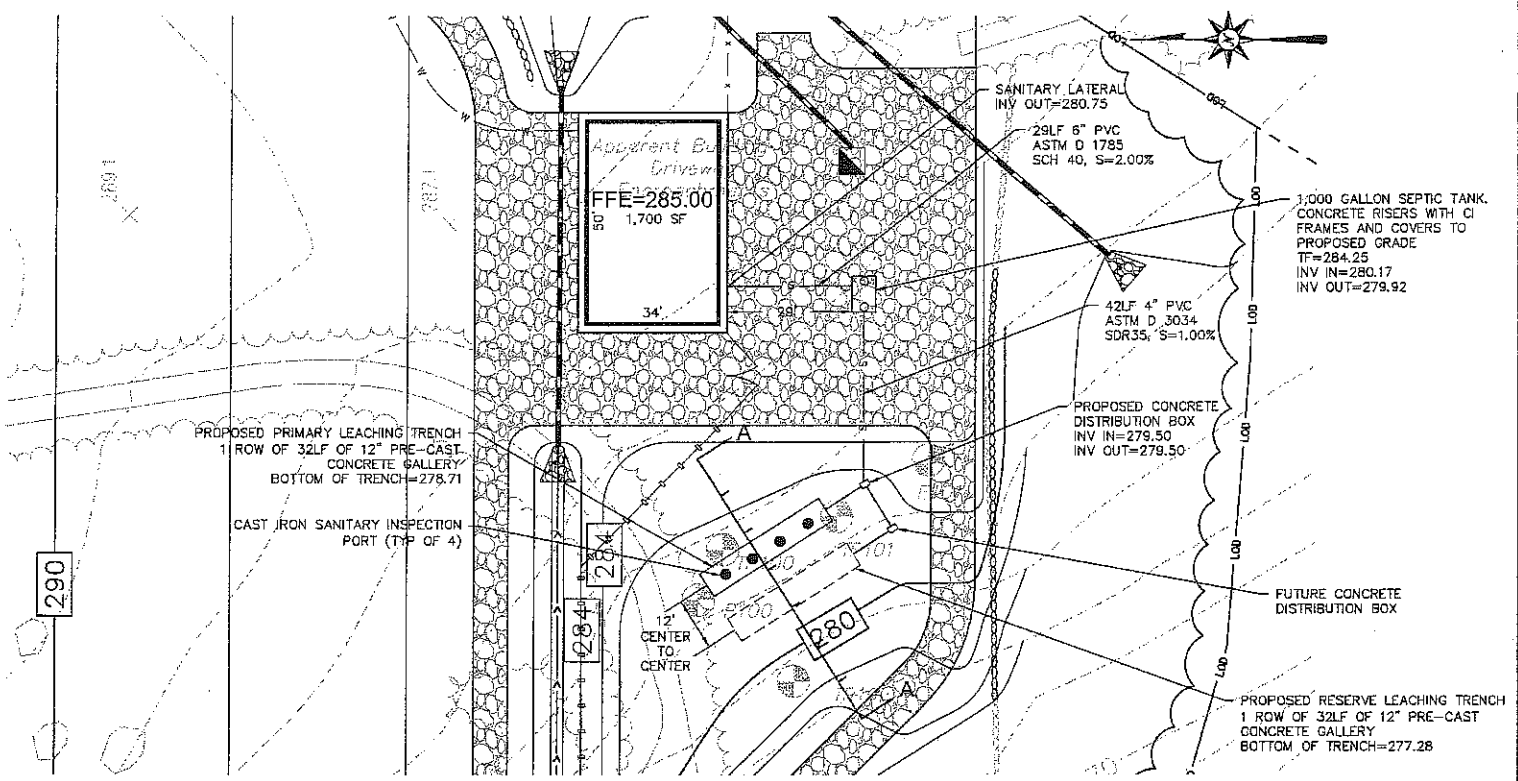


EROSION CONTROL NOTES

- LAND DISTURBANCE SHALL BE KEPT TO A MINIMUM. RE-STABILIZATION SHALL BE SCHEDULED AS SOON AS POSSIBLE. DO NOT WAIT FOR BUILDING CONSTRUCTION TO BE COMPLETED FOR STABILIZATION TO PROCEED.
- SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLANS AND DETAILS AND STAKED INTO PLACE.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" LATEST EDITION.
- ON AREAS TO BE LEFT BARE FOR UP TO 30 DAYS, TEMPORARY SEEDING SHALL BE USED, SUCH AS STRAW MULCH, ANCHORED IN PLACE AS REQUIRED.

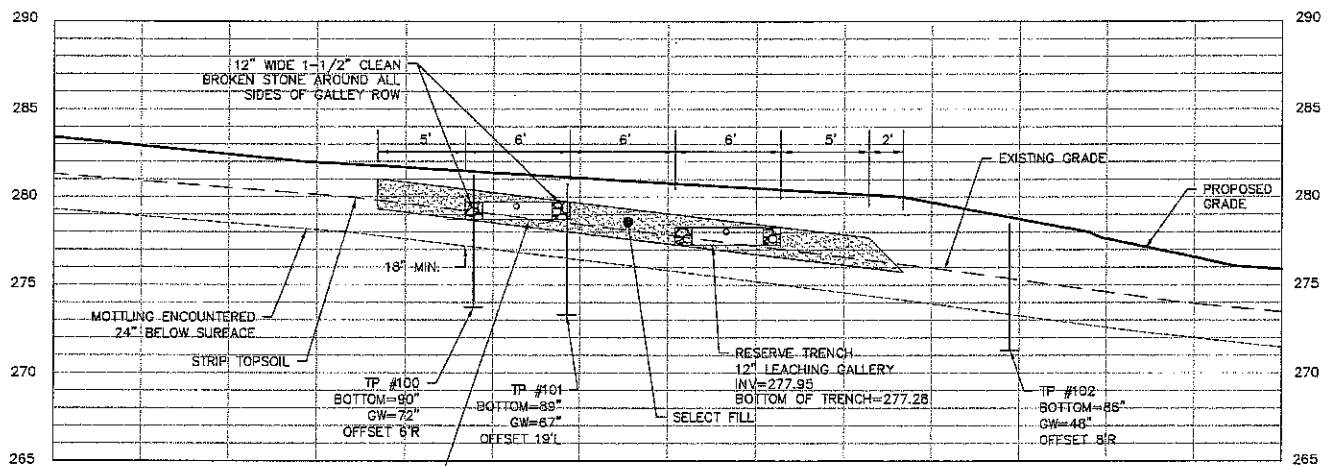
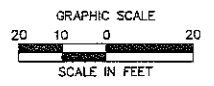
SYSTEM DESIGN DATA

- FROM "CONNECTICUT PUBLIC HEALTH CODE" LATEST EDITION, TABLE 4, USE: INDUSTRIAL 1,700 SF INDUSTRIAL=0.1GPD/SF(1,700 SF)=170 GPD TOTAL DESIGN FLOW =170 GPD
- PERCOLATION RATE EQUALS 6.67 MIN./INCH
- APPLICATION RATE FOR NON-RESIDENTIAL BUILDING WITH PERCOLATION RATE LESS THAN 10.1 MIN./INCH = 1.5 GPD/SF
- THE REQUIRED LEACHING AREA FOR THE SEPTIC SYSTEM EQUALS 113.3 SQ. FT. USING 12" CONCRETE GALLERIES AT 5.9 SF PER LINEAR FOOT REQUIRES 19.2 LF OF TRENCH. 1 TRENCH OF 3 UNITS AT 6 LF. EACH PROVIDES 24 LF. OF TRENCH.
- MINIMUM LEACHING SYSTEM SPREAD (MLSS) MUST BE CONSIDERED BASED ON MOTTLING ENCOUNTERED AT 24". (DEPTH TO RESTRICTIVE LAYER < 60 INCHES).
 HYDRAULIC GRADIENT (% SLOPE)=11.69%
 RECEIVING SOIL DEPTH (INCHES)=24"
 HYDRAULIC FACTOR (HF)=28
 FLOW FACTOR (FF)=DESIGN FLOW (GPD)/300=170 GPD/300=0.567
 PERCOLATION FACTOR (PF)=1.2
 MLSS=HF X FF X PF=28 X .567 X 1.2= 20.8 FT
 MLSS < REQUIRED LEACHING TRENCH LENGTH (OK)
- TEST PIT DATA AND GROUND WATER MONITORING INDICATES THAT THE GROUNDWATER ELEVATION IS >18" BELOW THE BOTTOM OF THE TRENCH.



SUBSURFACE SEWAGE DISPOSAL SYSTEM PLAN

SCALE: 1" = 20'



SUBSURFACE SEWAGE DISPOSAL SYSTEM SECTION A-A

SCALE: 1" = 5' (H) 1" = 5' (V)



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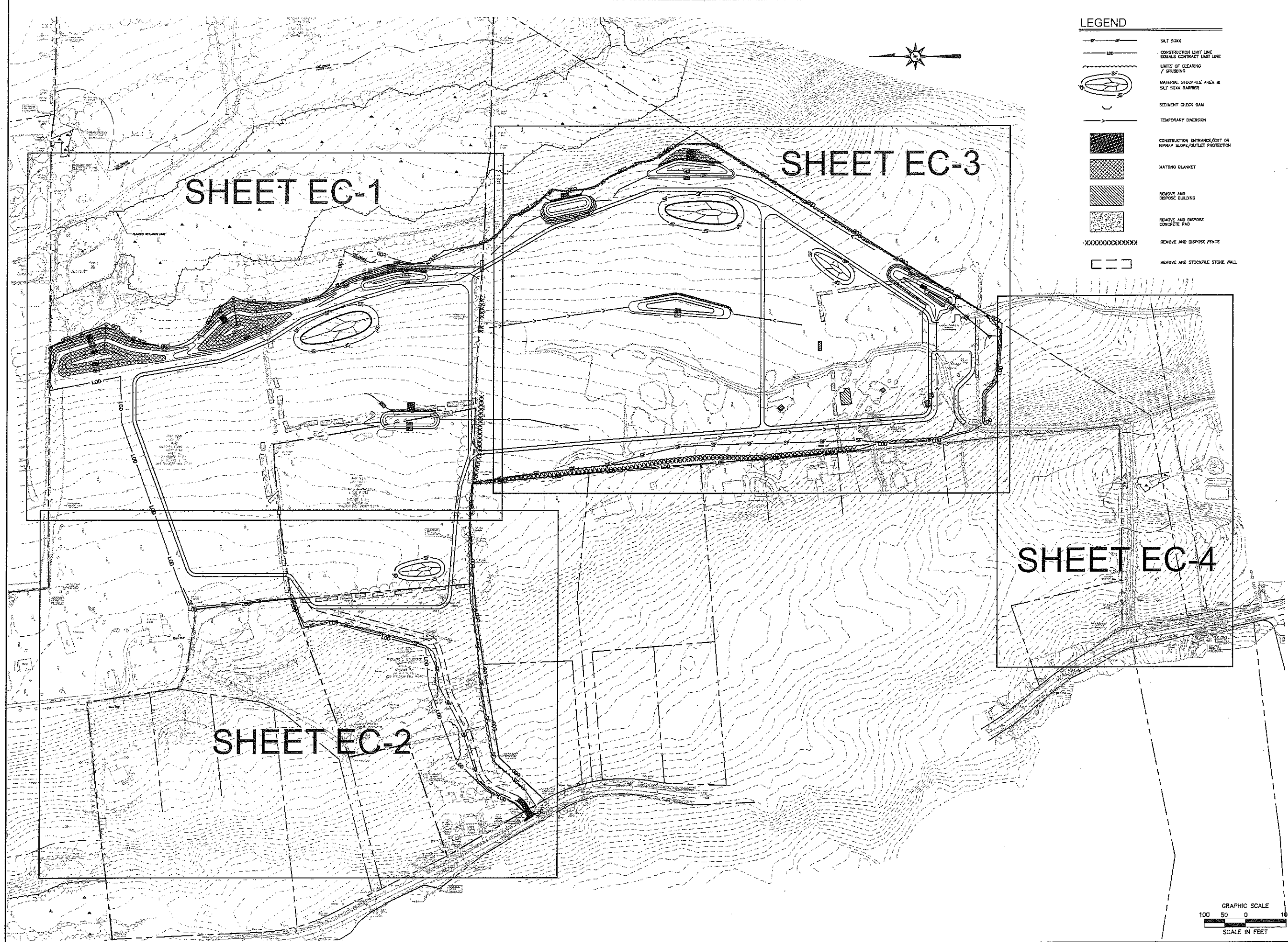
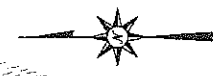
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Title
INITIAL OVERALL
EROSION CONTROL
& DEMOLITION
PLAN

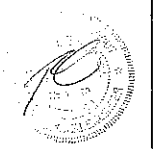
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/ GRUBBING
- MATERIAL STOCKPILE AREA &
SILT SOCK BARRIER
- SEDIMENT CHECK DAM
- TEMPORARY DIVERSION
- CONSTRUCTION ENTRANCE/EXIT OR
REPAIR SLOPE/OUTLET PROTECTION
- MATTING BLANKET
- REMOVE AND
DISPOSE BUILDING
- REMOVE AND DISPOSE
CONCRETE PAD
- REMOVE AND DISPOSE FENCE
- REMOVE AND STOCKPILE STONE WALL

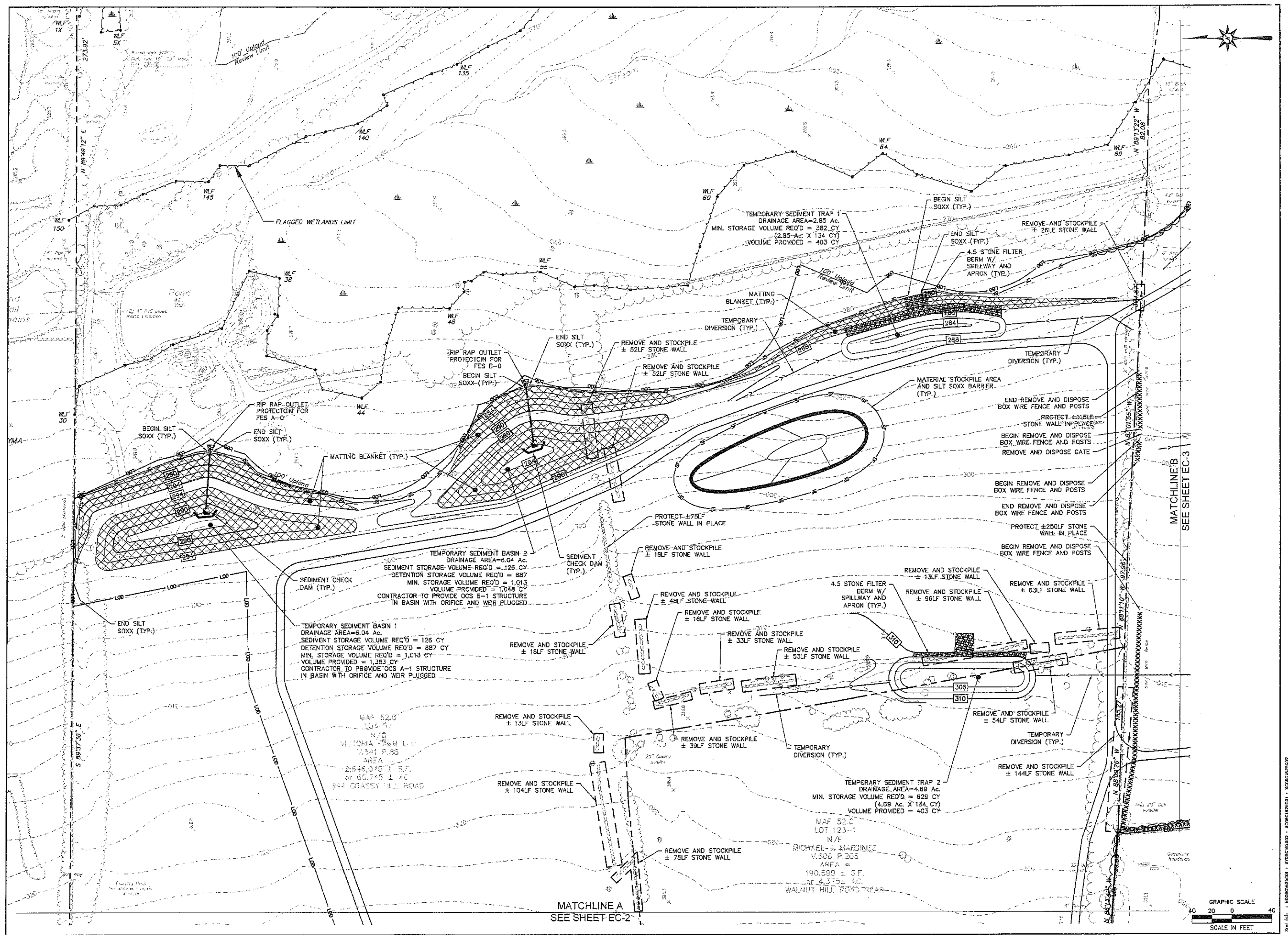


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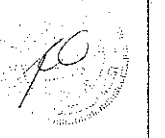


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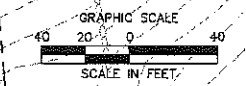
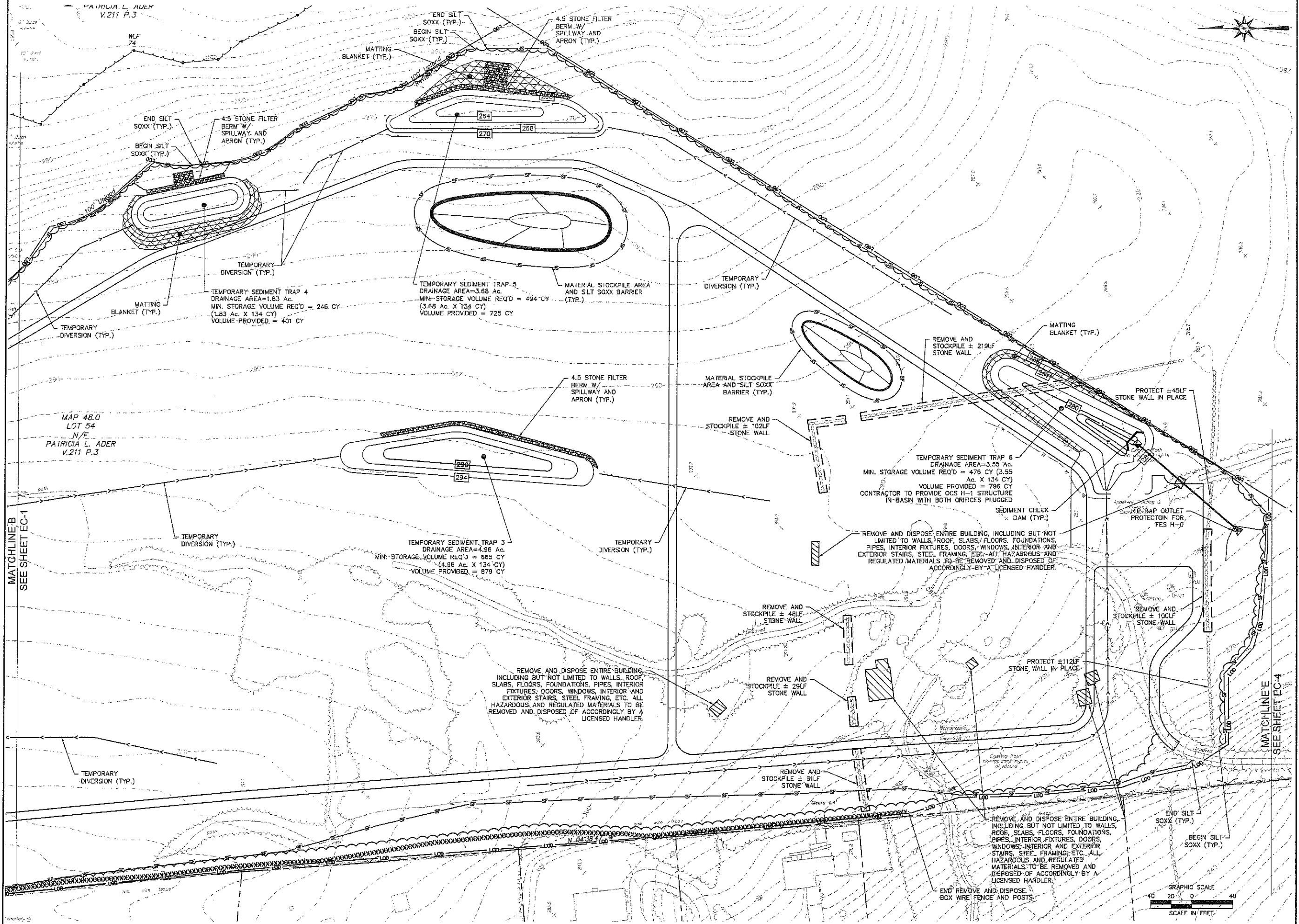


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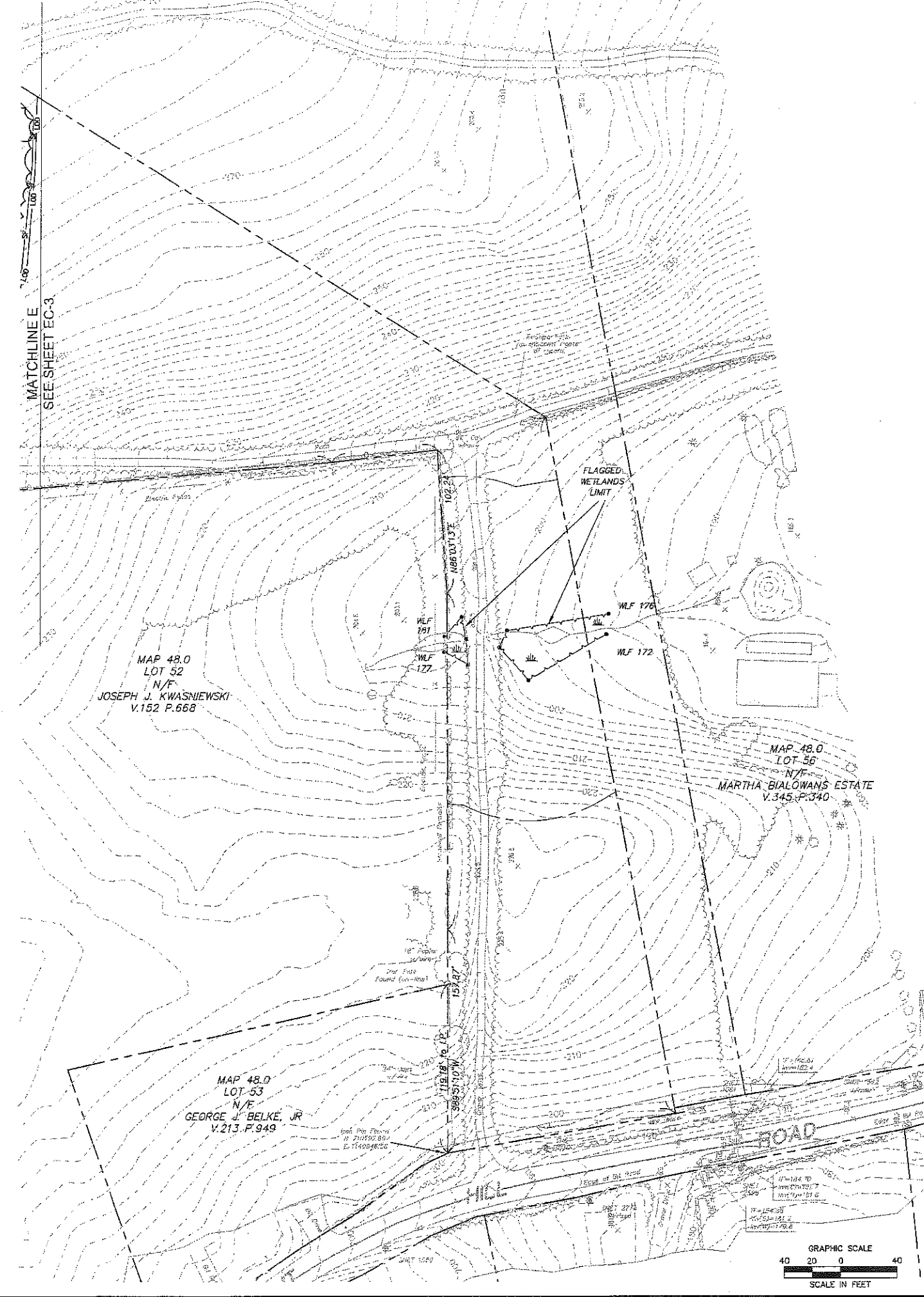
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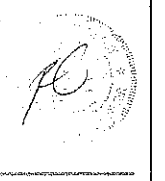
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Title
**EROSION CONTROL
& DEMOLITION
PLAN - INITIAL
PHASE**

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EC-4



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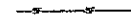
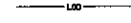
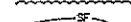
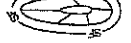

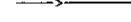




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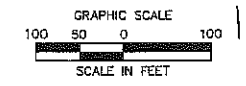
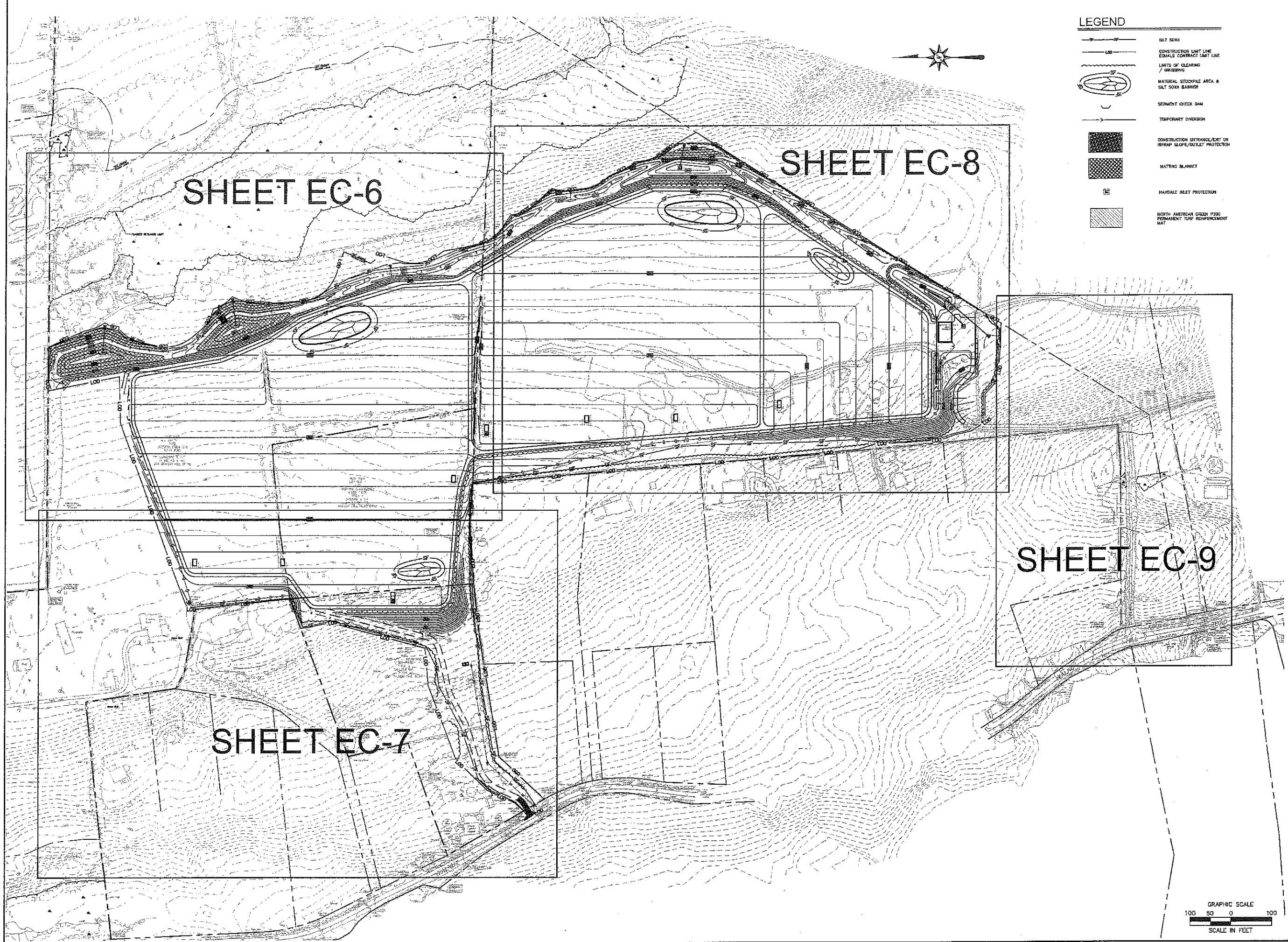
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**FINAL OVERALL
 EROSION CONTROL
 & DEMOLITION
 PLAN**

Sheet No.
EC-5

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-  CONSTRUCTION LIMIT LINE
EQUALS CONTRACT LIMIT LINE
-  LIMITS OF CLEARING
/ GRUBBING
-  MATERIAL STOCKPILE AREA &
SILT SOCK BARRIER
-  SEDIMENT CHECK DAM
-  TEMPORARY DIVERSION
-  CONSTRUCTION ENTRANCE/DITCH OR
RRWAP SLOPE/OUTLET PROTECTION
-  MATTING BLANKET
-  HAYBALE INLET PROTECTION
-  NORTH AMERICAN GREEN P300
PERMANENT TURF REINFORCEMENT
MAT



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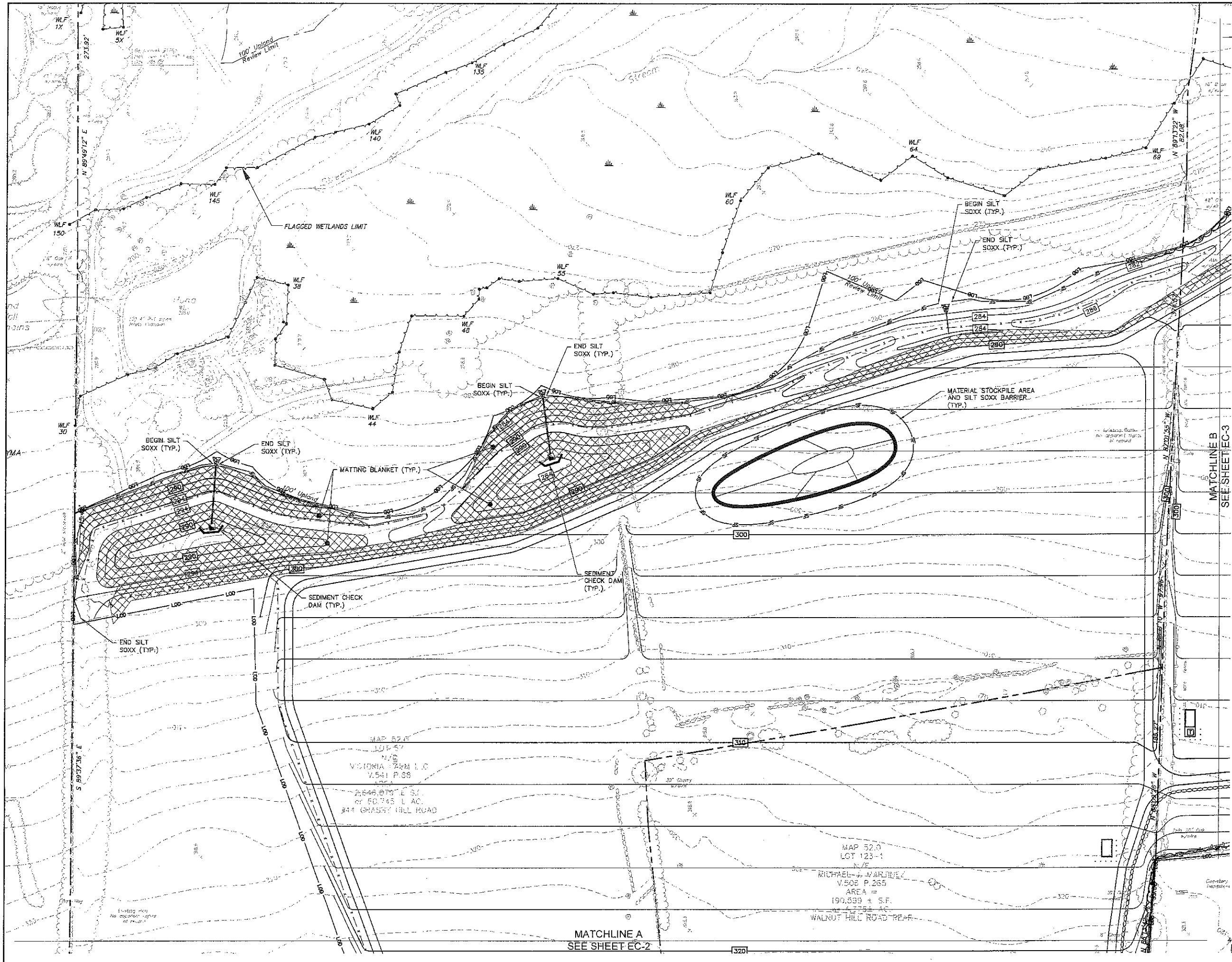
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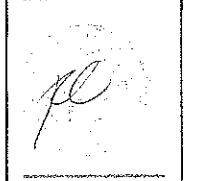
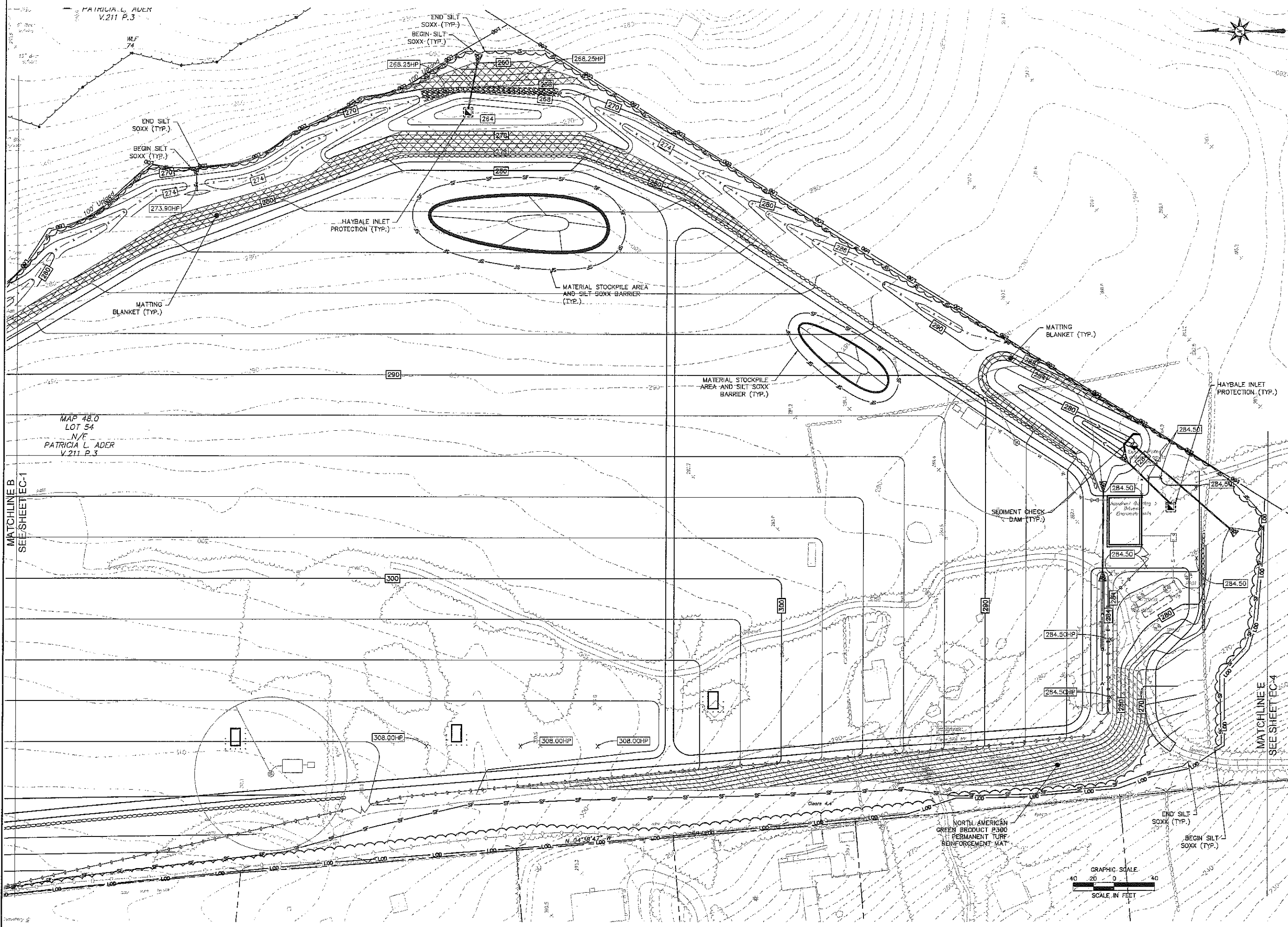
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 PLAN - FINAL
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EC-6



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ANTARES SOLAR FIELD
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 Date: 10/09/12

CAD File: EC06C1625G01

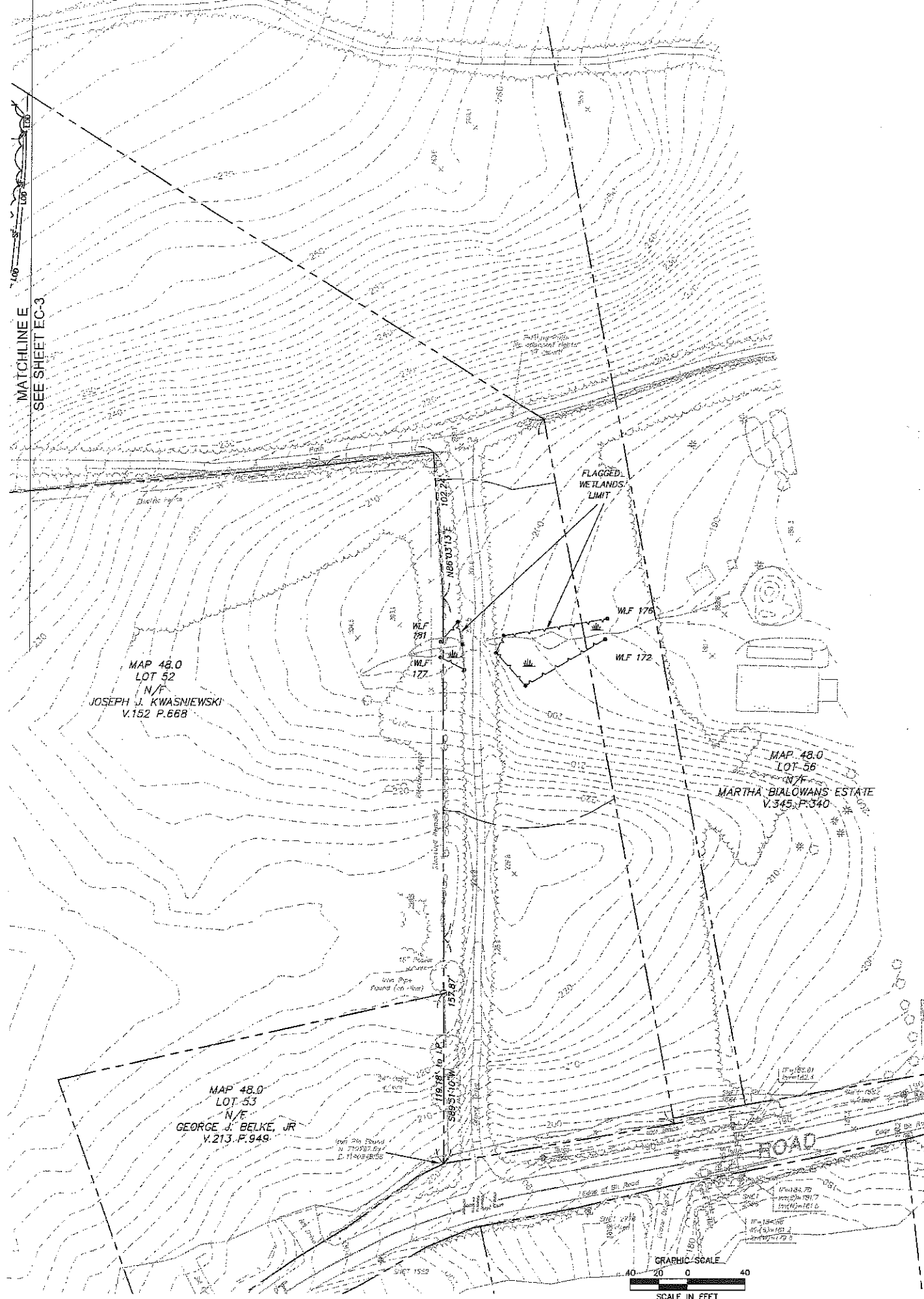
Title: **EROSION CONTROL & DEMOLITION PLAN - FINAL PHASE**

Oct 23, 2012 3:09pm Blinnecore X:\Users\blinnecore\Documents\AntaresSolarField\EC-8.dwg
 Layout: EC-8 2x36 40SC



Handwritten initials/signature

ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

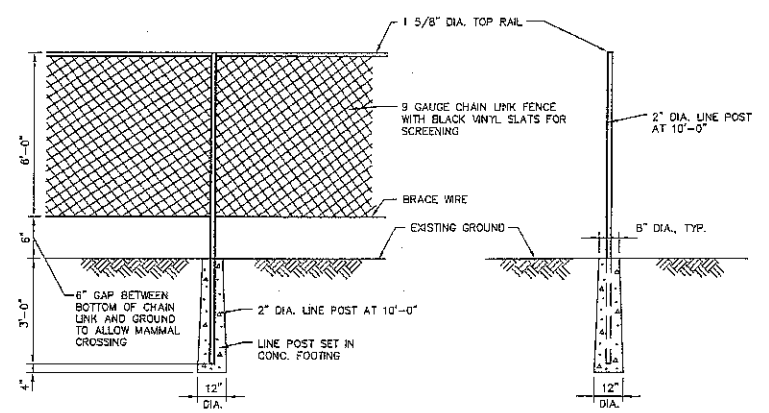


REVISIONS	No.	Date	Drawn

Designed: BKB
Drawn: BKB
Checked: RBG
Approved: AS SHOWN
Scale: AS SHOWN
Project No.: 05C1625-C
Date: 10/09/12
CAD File: EC05C1625G01

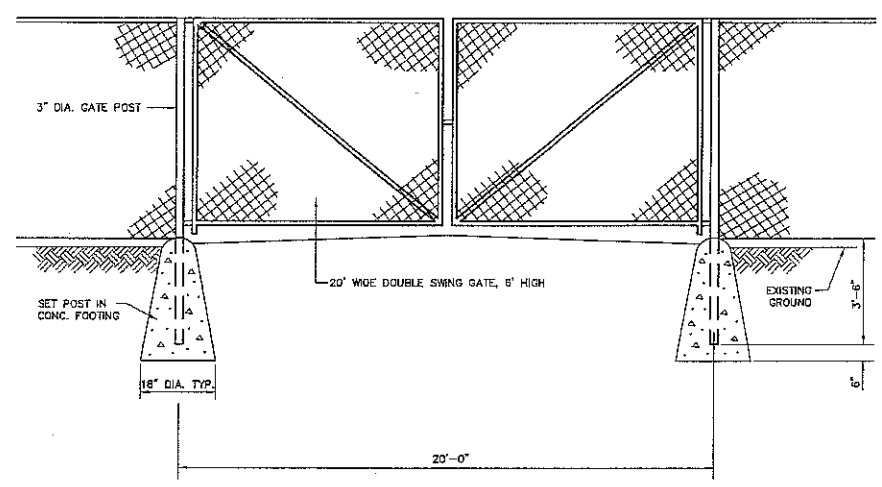
Title:
**EROSION CONTROL
& DEMOLITION
PLAN - FINAL
PHASE**

Sheet No.
EC-9

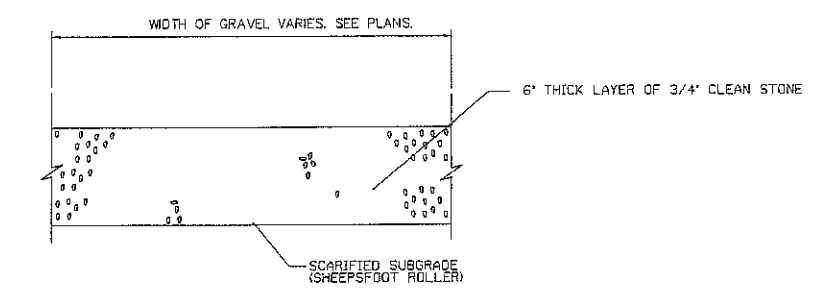


FRONT VIEW SIDE VIEW

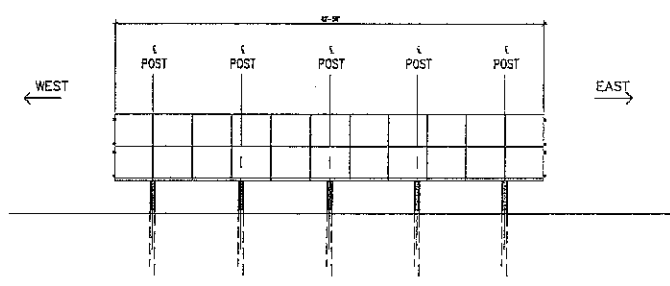
CHAIN LINK FENCE DETAIL
 N.T.S. BLFD-001



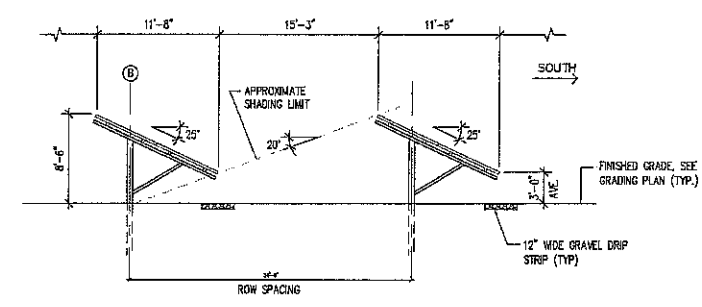
CHAIN LINK FENCE GATE DETAIL
 N.T.S.



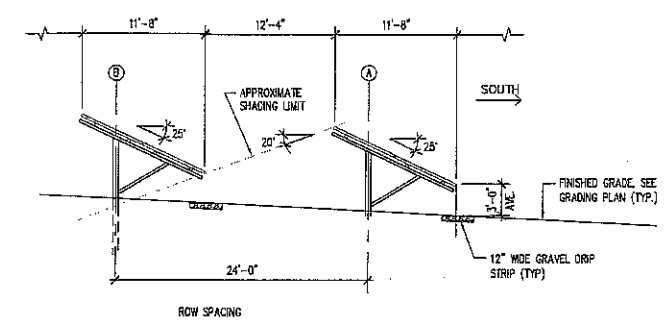
PROPOSED GRAVEL MAINTENANCE PATH/ PARKING AREAS
 N.T.S. BLFD-001



PHOTOVOLTAIC SOUTH ELEVATION

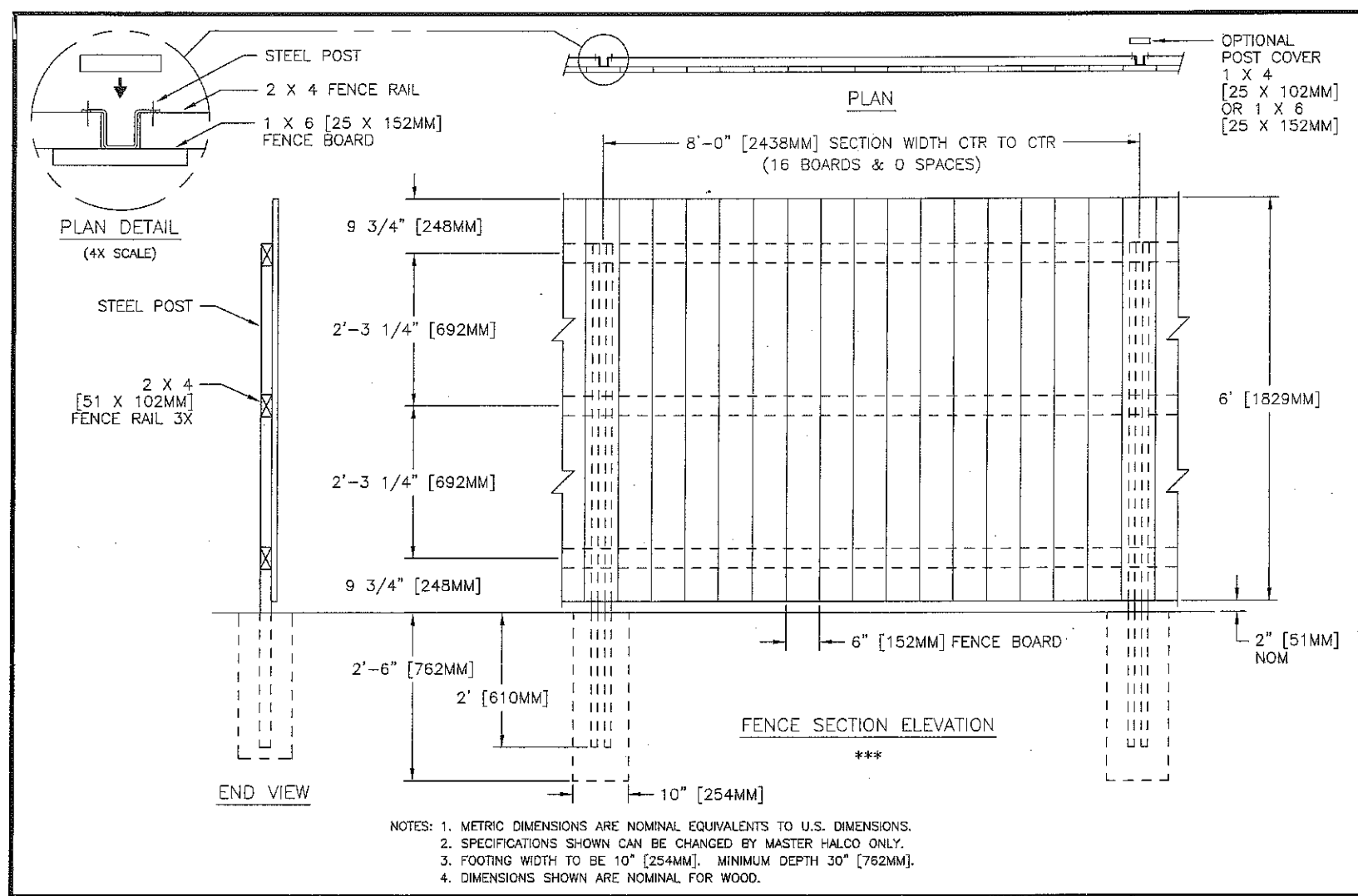


PHOTOVOLTAIC ROW SPACING (FLAT GROUND)



PHOTOVOLTAIC ROW SPACING (5.0% SLOPE)

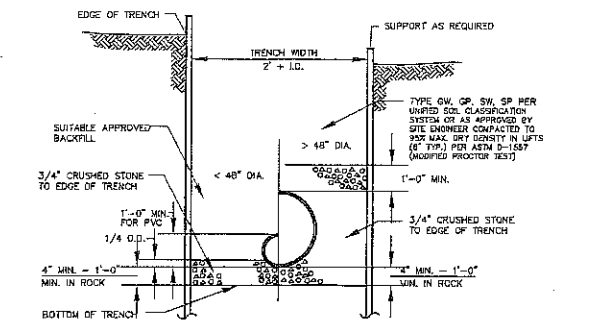
SOLAR PANEL CLUSTER
 N.T.S.



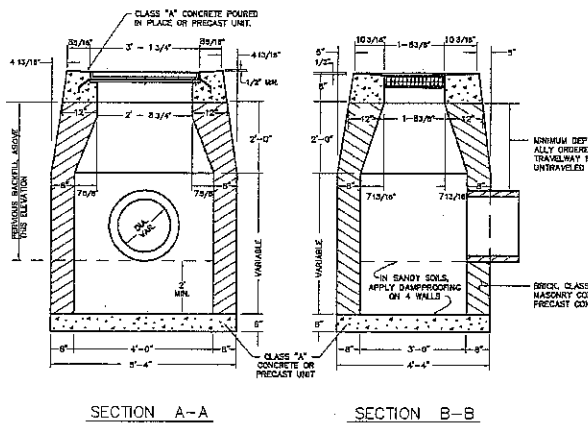
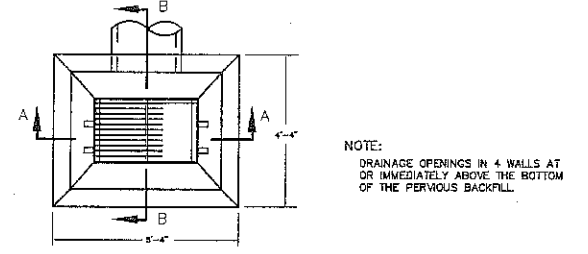
- NOTES: 1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
 2. SPECIFICATIONS SHOWN CAN BE CHANGED BY MASTER HALCO ONLY.
 3. FOOTING WIDTH TO BE 10" [254MM]. MINIMUM DEPTH 30" [762MM].
 4. DIMENSIONS SHOWN ARE NOMINAL FOR WOOD.

MASTER HALCO® <small>COPYRIGHT © 2001-2008 MASTER HALCO, INC. ALL RIGHTS RESERVED.</small>	POSTMASTER STEEL POSTS for Wood Fence Systems by Masier Halco Orange, CA Phone No.: 800-229-5615 www.FenceOnline.com	6' SOLID BOARD FENCE DETAIL STYLE: FLAT TOP NOM 6' [1829MM] FENCE HEIGHT 1 X 6 [25 X 152MM] FENCE BOARDS	BY: JRR DATE: 01-25-99 REV: E REV DATE: 09-22-06	DWG: 10-1100 LAYER: 1 SCALE: 1/2" = 1'-0"
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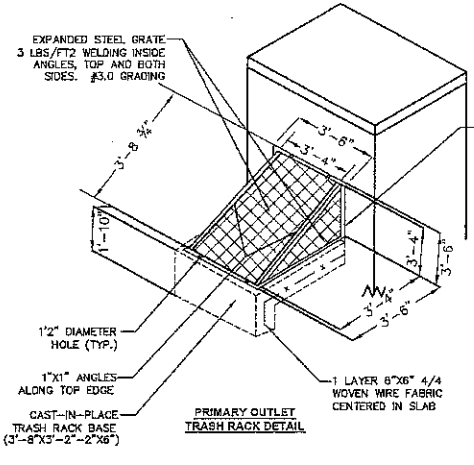
WOOD STOCKADE FENCE DETAIL
 N.T.S.



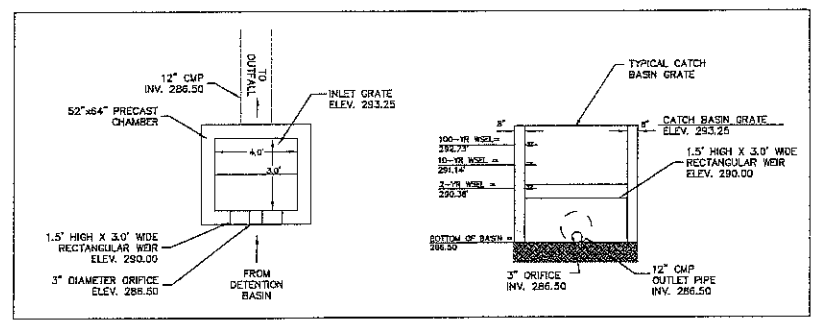
TYPICAL STORM SEWER TRENCH SECTION
 N.T.S. BLD-004



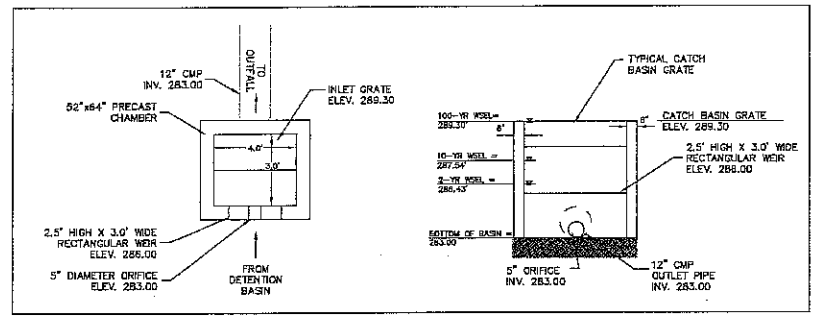
TYPE 'C-L' CATCH BASIN ('C-L' CB)
 N.T.S.



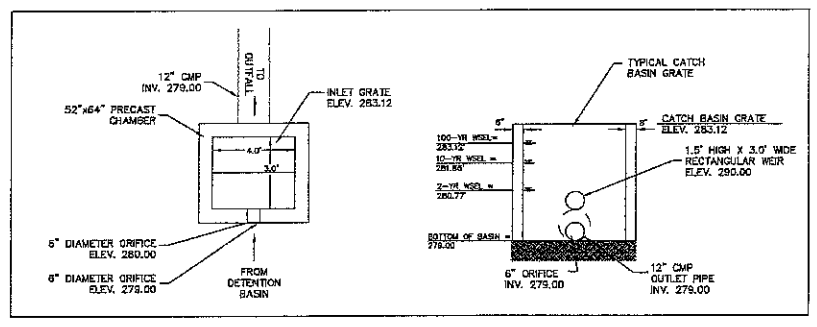
OUTLET CONTROL STRUCTURE TRASH RACK DETAIL
 N.T.S.



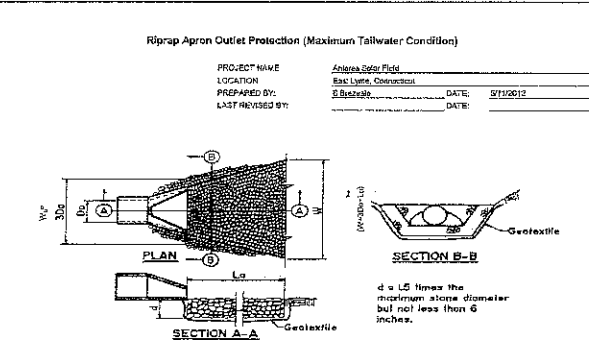
OUTLET CONTROL STRUCTURE OSC A-1 DETAIL
 N.T.S.



OUTLET CONTROL STRUCTURE OSC B-1 DETAIL
 N.T.S.



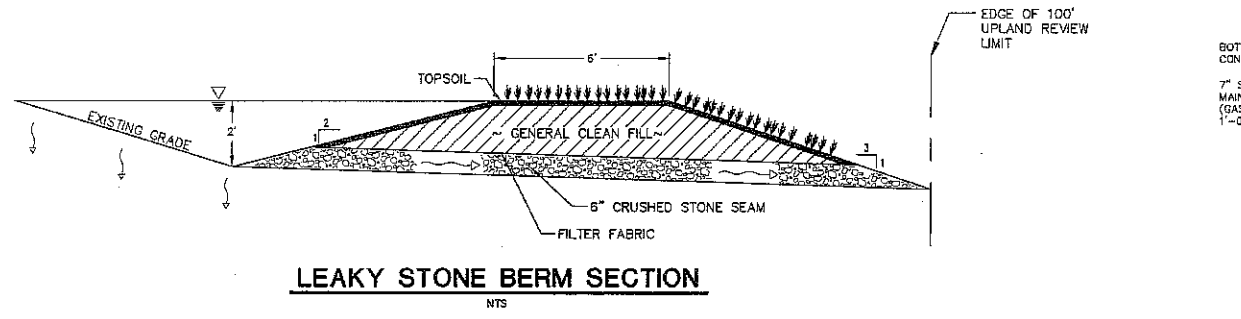
OUTLET CONTROL STRUCTURE OSC H-1 DETAIL
 N.T.S.



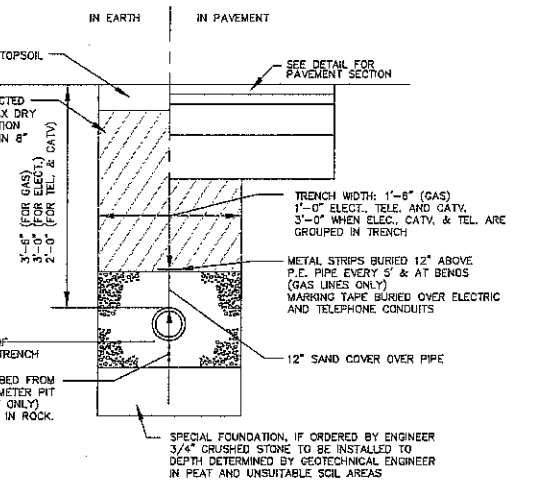
OUTLET NO.	PIPE DIA. (D) (in.)	Q (CFS)	W (ft)	L (ft)	W (ft)	L (ft)	W (ft)	L (ft)	W (ft)	L (ft)	INV.
FES A-0	12	7.25	36	3	2.4	7.2	11.3	1.80	5	286.00	
FES B-0	12	7.25	36	3	2.4	7.2	11.3	1.80	5	282.00	
FES C-0	4	2.00	12	3	3.2	15.0	3.2	1.00	5	281.00	
FES D-0	4	2.00	12	3	3.2	15.0	3.2	1.00	5	271.72	
FES E-0	12	8.75	36	3	3.2	9.9	12.6	1.80	5	280.00	
FES F-1	12	8.75	36	3	3.2	6.9	11.5	1.80	5	281.50	
FES F-0	12	8.75	36	3	3.2	8.3	11.5	1.80	5	284.00	
FES G-0	12	8.75	36	3	3.2	8.3	11.0	1.80	5	280.00	
FES H-0	12	3.00	30	3	1.6	3.8	10.2	1.00	5	278.00	

The design Q used shall be the 25-year storm discharge rate.

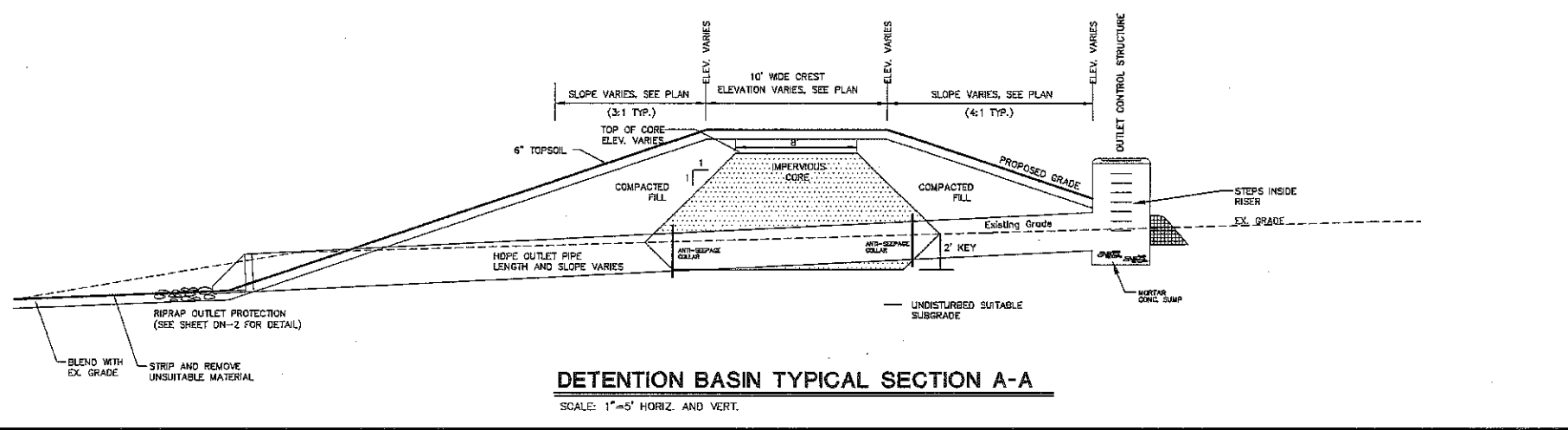
RIP RAP OUTLET PROTECTION
 N.T.S.



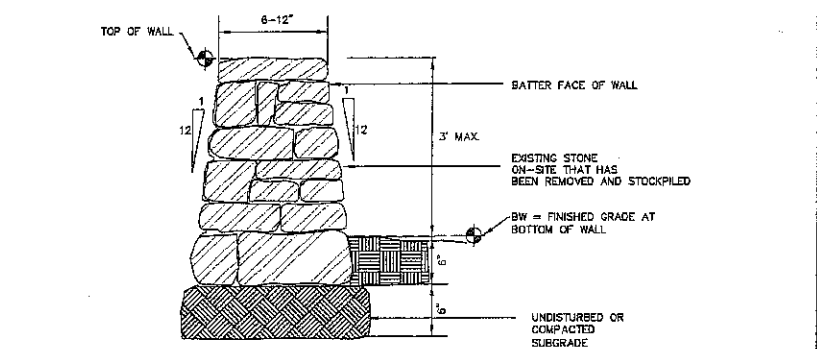
LEAKY STONE BERM SECTION
 N.T.S.



ELECTRICAL TRENCH DETAIL
 N.T.S. BLUD-001



DETENTION BASIN TYPICAL SECTION A-A
 SCALE: 1"=5' HORIZ. AND VERT.



FARMER STONE WALL
 N.T.S.

Oct 30, 2012 3:03pm B:\projects\0601625-G\Drawings\DN-2.dwg
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 Title: DN-2.dwg



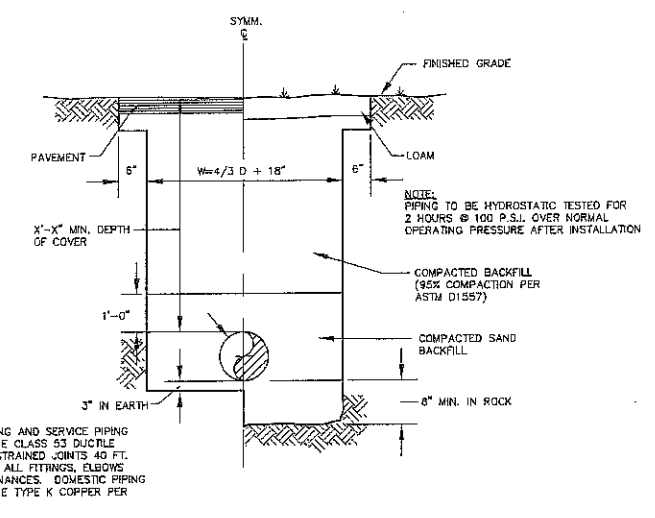
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Checked: BKB
Approved: BKB

Scale: NTS
Project No. 05C1625-G
Date: 10/09/12
CAD File: DN06C1625G01

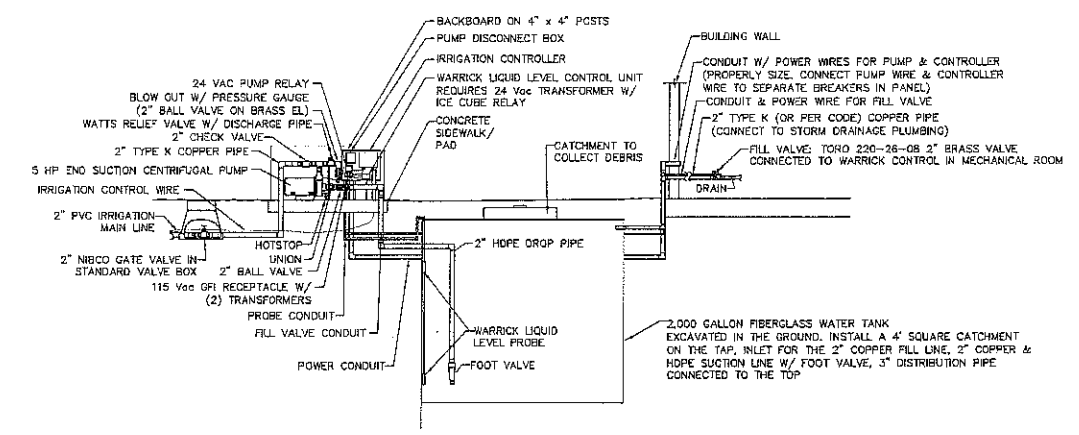
Detail Sheet

Sheet No.

DN-3

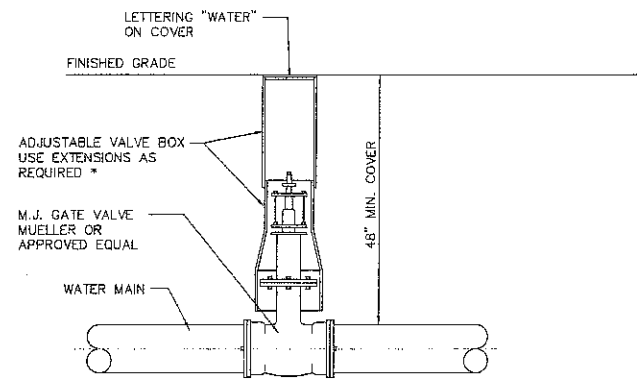


WATER SERVICE TRENCH DETAIL
N.T.S. BLWD-005



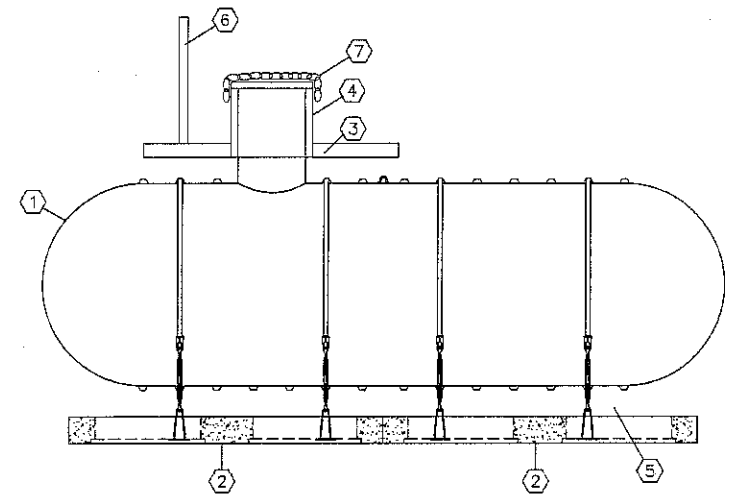
NOTES: FITTINGS AS NECESSARY
THIS IS A CONCEPTUAL, DIAGRAMMATIC REPRESENTATION. CONTRACTOR SHALL ADJUST ACCORDINGLY TO MEET ACTUAL SITE CONDITIONS.
FOLLOW ALL APPLICABLE CODES & LAWS.

WATER SUPPLY AND CONTROLLER
N.T.S.



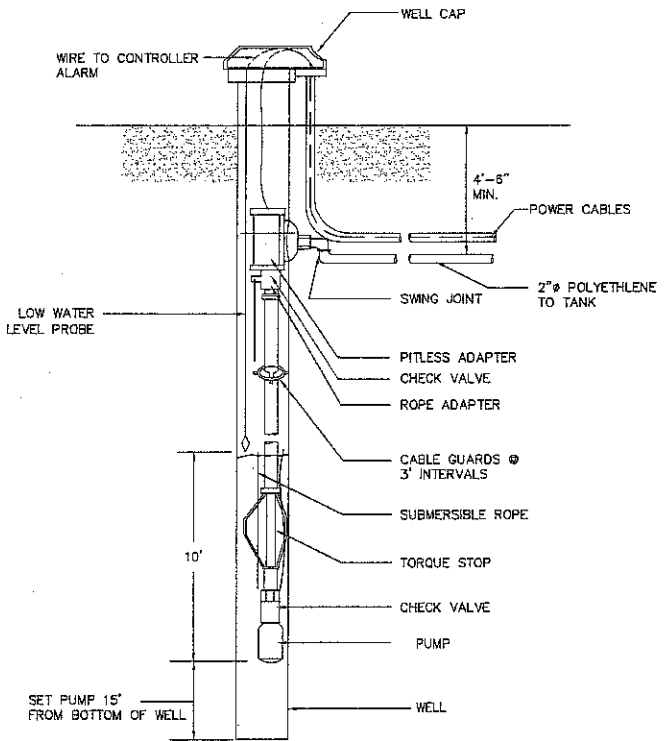
* NOTE: IF EXTENSIONS ARE NECESSARY CONTRACTOR SHALL SET "PLUMB" AND ALIGN PROPERLY FOR ACCESS TO OPERATING NUT.

CURB STOP AND VALVE BOX DETAIL
N.T.S. BLVC-002

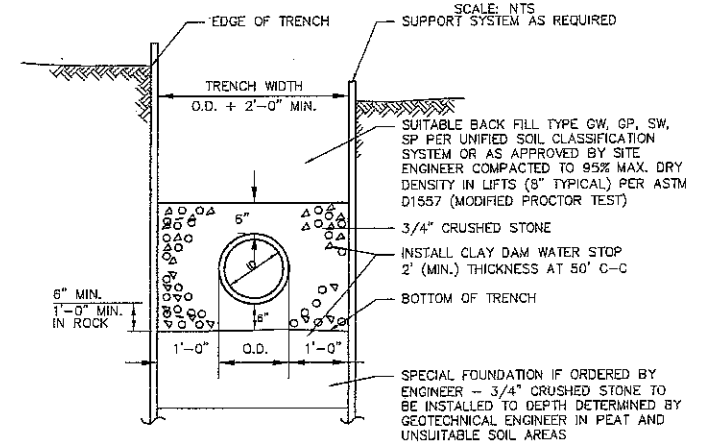


NO.	DESCRIPTION
1	2,000 GALLON SINGLE WALL FRP TANK KORRES CORPORATION OR APPROVED EQUAL
2	PRECAST BEAMAN SYSTEM W/ HOLD DOWN STRAP AND TURNBUCKLE ASSY.
3	8"x8" CONCRETE PAD
4	36" DIA. PRECAST CONCRETE RISER W/ LID (LID 18" ABOVE FINISHED GRADE)
5	SAND BEDDING MATERIAL
6	UTILITY BOLLARD (SEE PLAN) TYPICAL EACH TANK
7	CHAIN & LOCK (BOLTED TO RISER)
8	BACKFILL (PER TANK MANUFACTURERS RECOMMENDATIONS)

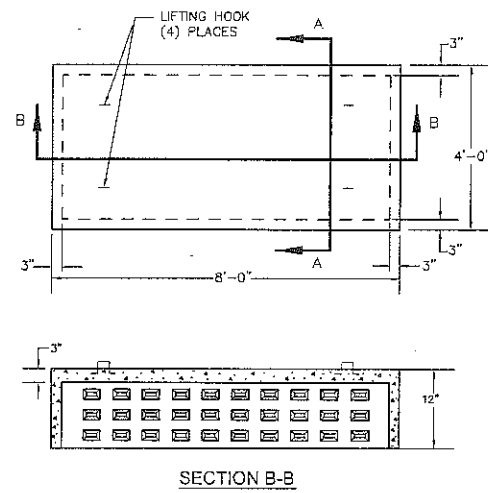
WATER TANK DETAIL
N.T.S.



WATER WELL DETAIL
N.T.S.

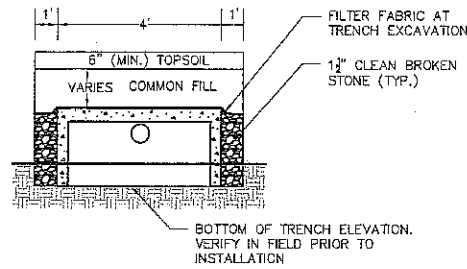


TYPICAL SANITARY SEWER TRENCH SECTION
SCALE: NTS



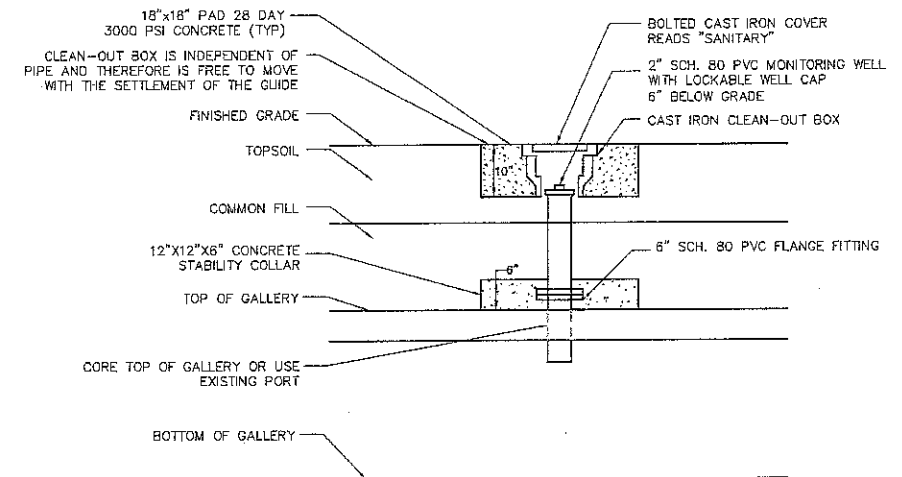
SPECIFICATIONS:

1. CONCRETE 4000 PSI 28 DAYS
2. REINFORCING STEEL DEFORMED BARS CONFORM TO LATEST ASTM SPECIFICATION A615.
3. SECTION MAY BE ADDED TO INCREASE THE CAPACITY REQUIRED.

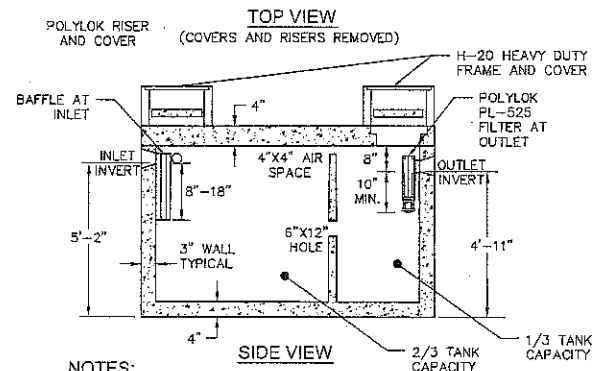
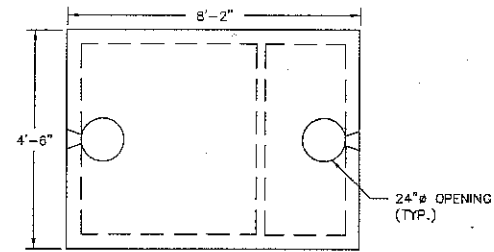


PRE-CAST CONCRETE 12" LEACHING GALLERY

SCALE: NTS



CAST IRON SANITARY INSPECTION PORT FOR LEACHING GALLERY (4 REQUIRED)

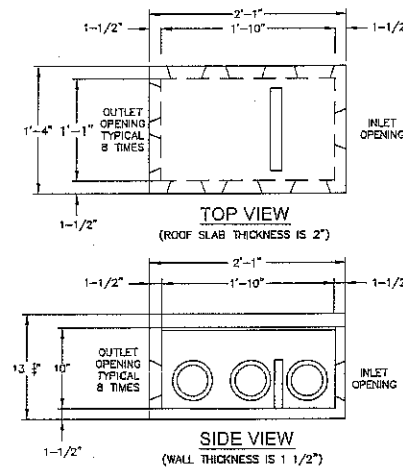
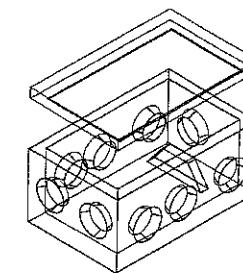


NOTES:

1. JOINT SEALANT IS BUTYL RUBBER MASTIC TYPE SEAL THAT CONFORMS TO AASHTO SPECIFICATION M-198. MEETS FEDERAL SPECIFICATION SS-S 0021(210-A).
2. PIPE INLET AND OUTLET LOCATIONS HAVE POLYLOK PIPE SEALS.
3. REINFORCING STEEL WELDED WIRE FABRIC CONFORMS TO ASTM SPECIFICATION A185.
4. REINFORCING STEEL DEFORMED BARS CONFORM TO ASTM SPECIFICATION A615.
5. CONCRETE COMPRESSIVE STRENGTH - 4000 PSI AT 28 DAYS.
6. METHOD OF MANUFACTURE: WET CAST.
7. SECTIONS ARE MONOLITHIC.
8. APPROXIMATELY WEIGHT - 9,500 LBS.
9. ACCESS TO BE BROUGHT TO GRADE WITH CONCRETE GRADE RINGS WITH 24" DIAMETER CAST IRON FRAMES AND COVERS.
10. EFFLUENT FILTER SHALL BE PER CONNECTICUT PUBLIC HEALTH CODE TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS, SECTION 5.A.2. PROVIDE POLYLOK PL-525 FILTER OR APPROVED EQUAL.

1,000 GALLON SEPTIC TANK DETAIL

SCALE: NTS



NOTES:

1. D-BOX DESIGN SPECIFICATION CONFORMS TO LATEST: ASTM DESIGNATION D313.
2. PIPE INLET AND OUTLET LOCATIONS HAVE POLYLOK PIPE SEALS.
3. CONCRETE COMPRESSIVE STRENGTH - 4000 PSI AT 28 DAYS.
4. METHOD OF MANUFACTURE: WET CAST.
5. SECTION IS MONOLITHIC.
6. KNOCKOUTS TO REMAIN IN UNUSED OPENINGS.

DISTRIBUTION BOX

SCALE: NTS



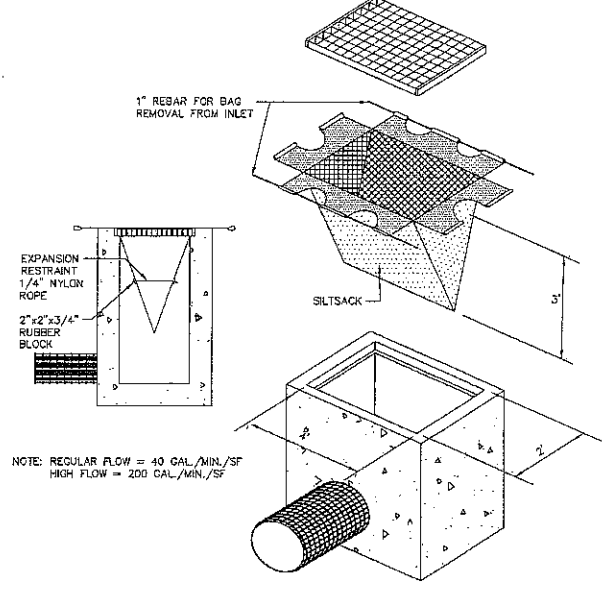
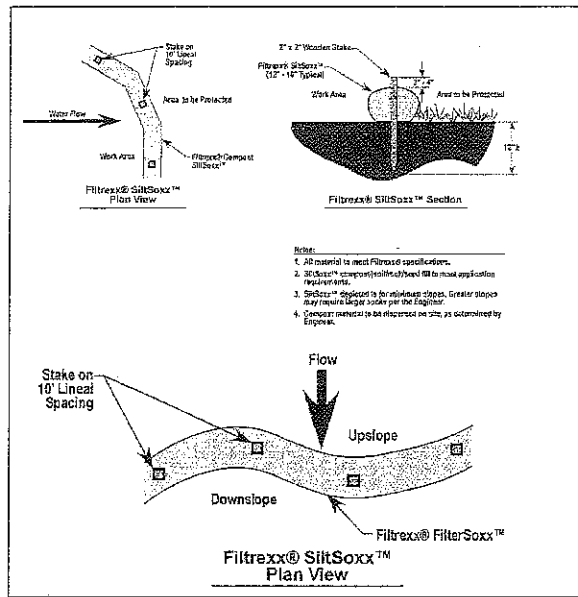
REVISIONS	Date	No.	By

Designed: BKB
Drawn: BKB
Checked: BKB
Approved: BKB
Scale: NTS
Project No: 06C1625-G
Date: 10/09/12
CAD File: DN06C1625G01

DETAIL SHEET

Sheet No.

DN-4



North American Green's permanent turf reinforcement mats (TRMs) allow vegetation to be used in areas where flow conditions exceed the limits of natural vegetation, including severe applications where rock riprap and concrete were once the only suitable alternatives.

The permanent matting structure of our TRMs reinforces the root and stem systems of vegetation against damage and extraction under high shear stress water flow, while the matrix filler material provides immediate to long-term erosion control and matting for enhanced vegetation establishment.

Our TRMs are installed over the prepared seedbed and require no soil filling. This distinction is important because the exposed topsoil of manually soil-filled TRMs must, of course, be protected - typically requiring the costly addition of a temporary erosion control blanket over the TRM and soil layer.

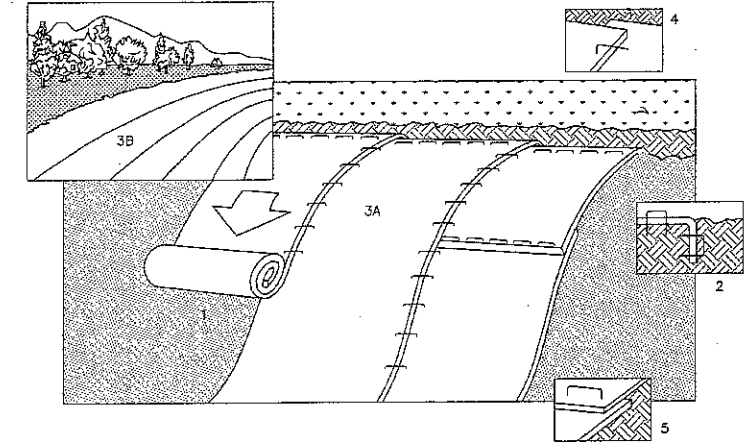
Like our erosion control blankets, North American Green's TRMs are installed in a one-step operation directly over the prepared seedbed which saves time and money and ensures the highest level of erosion control and vegetation reinforcement.

P300® PERMANENT TURF REINFORCEMENT MAT

P300® is constructed of UV stabilized polypropylene fiber stitched with permanent polypropylene thread between heavy weight UV stabilized polypropylene top and bottom nets. Unvegetated P300 reduces soil loss to less than 0.5 inch (12.7 mm) under shear stress up to 3.0 lbs/ft² (144 Pa) and protects vegetation from being washed away or uprooted even when exposed to shear stresses up to 8 lbs/ft² (383 Pa). P300 can be used to protect a wide variety of problem areas, including steep slopes, high-flow channels and pond shorelines.

Material Properties:

- UV stabilized polypropylene
- UV stabilized polypropylene
- UV stabilized polypropylene
- UV stabilized polypropylene

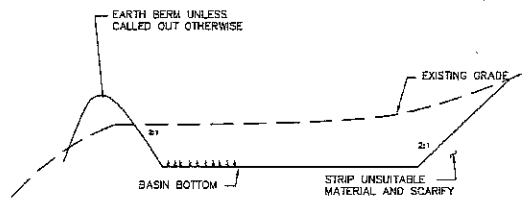


SILT SOXX DETAIL
N.T.S. BLEC-008

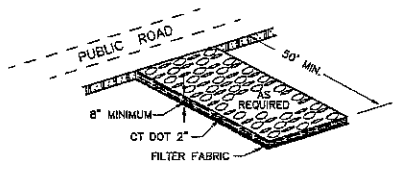
SILT SACK DETAIL
N.T.S. BLEC-005

P300 PERMANENT TURF REINFORCEMENT MAT
N.T.S. NORTH AMERICAN GREEN P300

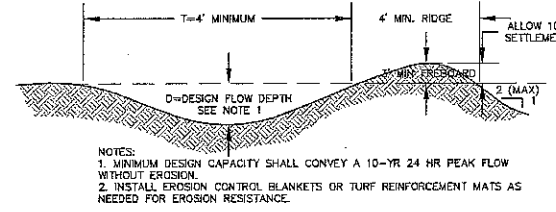
MATTING BLANKET DETAIL
N.T.S. BLEC-010



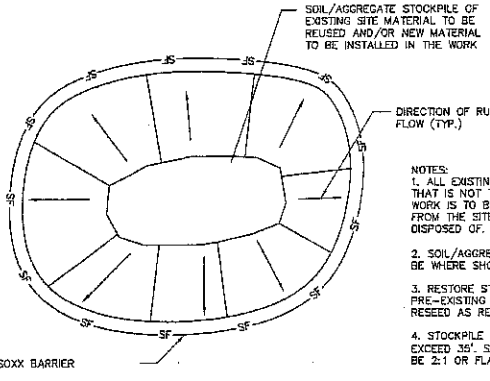
TEMPORARY SEDIMENT TRAP OUTLET (TST)
N.T.S.



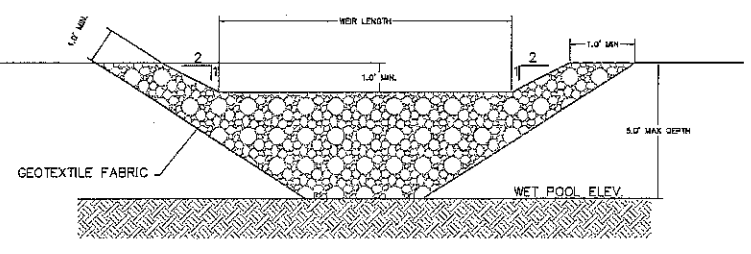
CONSTRUCTION ENTRANCE/EXIT DETAIL
N.T.S. BLEC-006



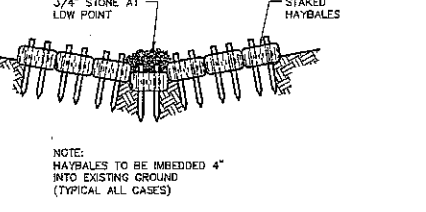
TEMPORARY DIVERSION
N.T.S.



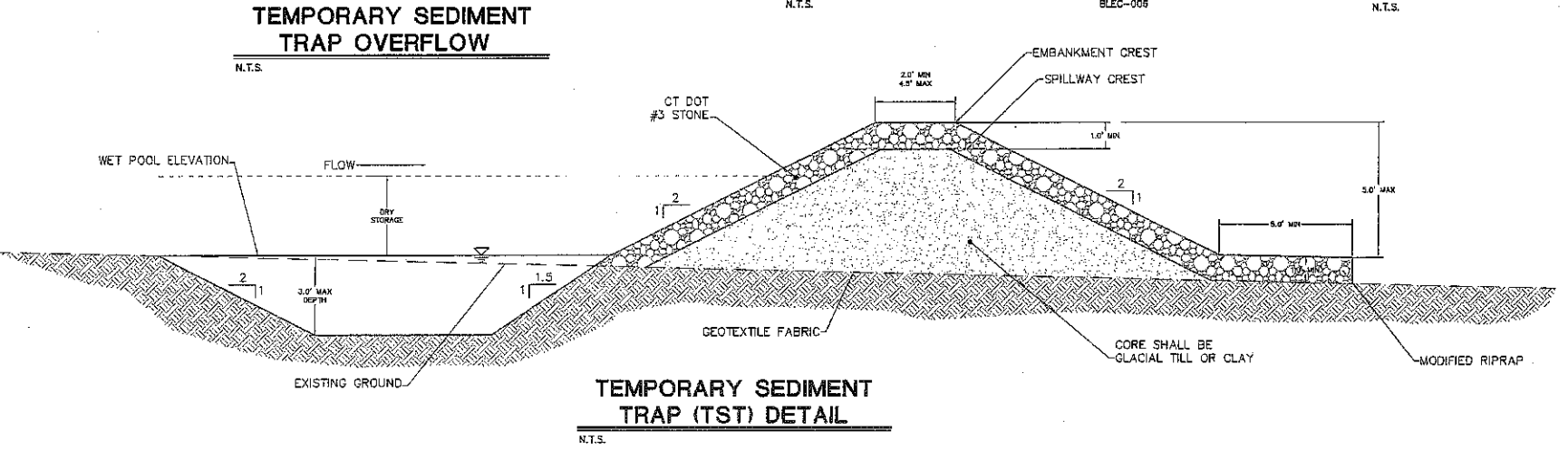
MATERIALS STOCKPILE DETAIL
N.T.S. BLEC-006



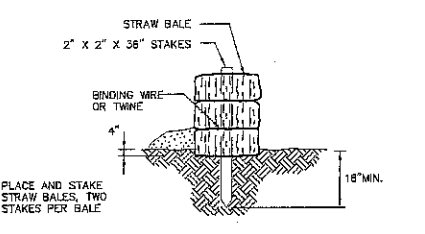
TEMPORARY SEDIMENT TRAP OVERFLOW
N.T.S.



SEDIMENT CHECK DAM
N.T.S. CTEC-004



TEMPORARY SEDIMENT TRAP (TST) DETAIL
N.T.S.



HAY BALE DETAIL
N.T.S. BLEC-007

STRAW BALE BARRIERS SHOULD NOT BE USED FOR MORE THAN 3 MONTHS











SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE ABOVE GROUND HEIGHT OF THE BARRIER.

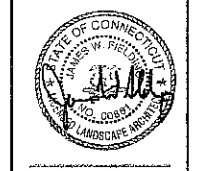
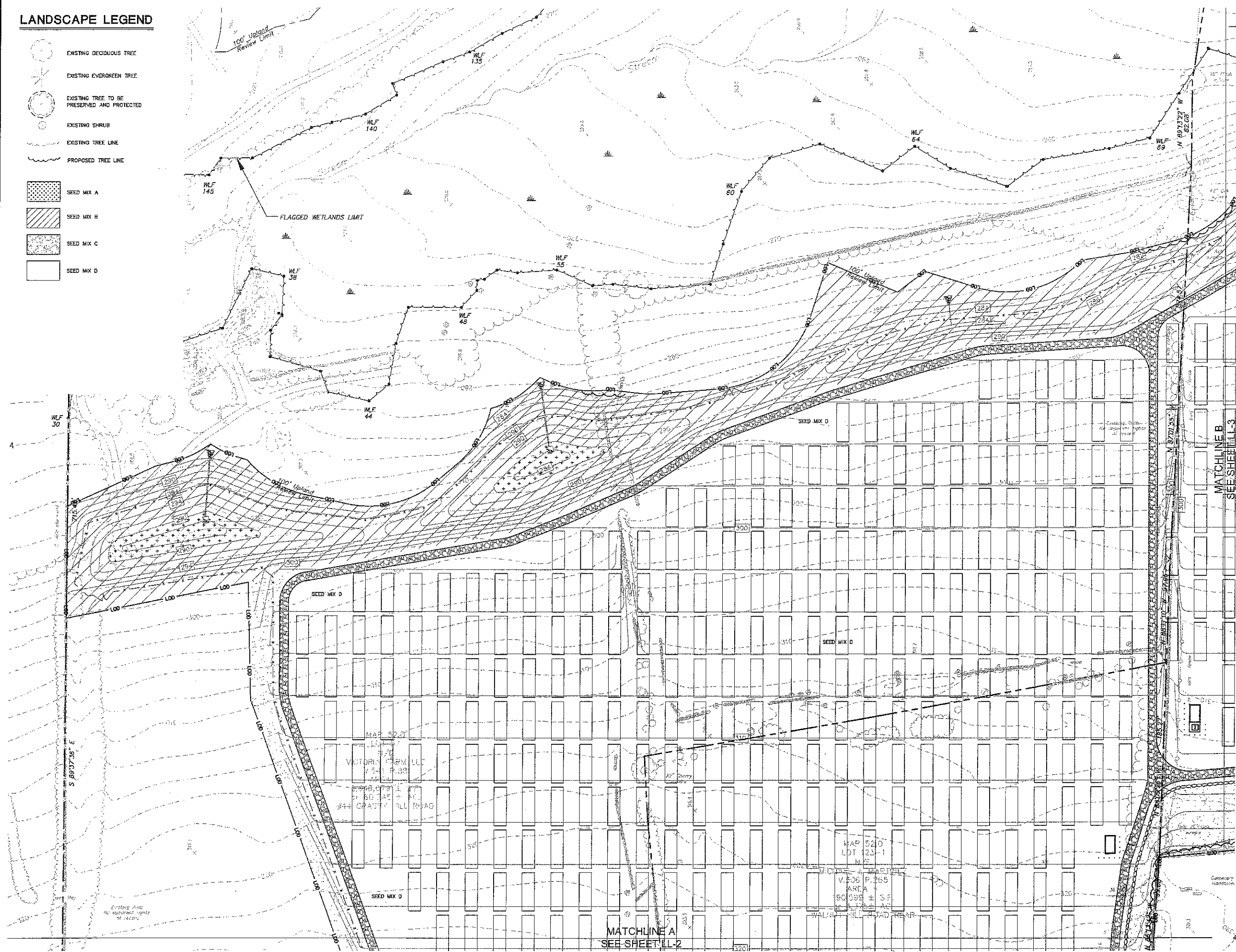
ANY SECTION OF STRAW BALE BARRIER WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET.

Oct 23, 2012 3:04pm B:\Users\k_barron\Projects\08-12\08-12-001\08-12-001.dwg
Layout: 08-12-001 N.T.S.

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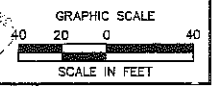
LANDSCAPE LEGEND

-  EXISTING DECIDUOUS TREE
-  EXISTING EVERGREEN TREE
-  EXISTING TREE TO BE PRESERVED AND PROTECTED
-  EXISTING SHRUB
-  EXISTING TREE LINE
-  PROPOSED TREE LINE
-  SEED MIX A
-  SEED MIX B
-  SEED MIX C
-  SEED MIX D



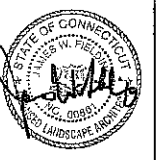
ANTARES SOLAR FIELD
 GRASSY HILL RD AND WALNUT HILL RD
 EAST LYME, CONNECTICUT

REVISIONS	No.	Date	Desc.
Designed			BKB
Drawn			BKB
Checked			RBC
Approved			
Scale			1"=40'
Project No.			08C1625-G
Date			10/09/12
CAD File:			LL08C1625G01
Title			LANDSCAPE PLAN
Sheet No.			



LL-1

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 Layout: LL-1 2x36 4:05



ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

MAP 52.0
LOT 125
N/F
STEVEN D. RUHNKE
& GAIL D. RUHNKE
V.237 P.177

MAP 52.0
LOT 121
N/F
THOMAS S. WINGARDNER, JR.
& BARBARA S. WINGARDNER
V.633 P.362

MAP 52.0
LOT 123
N/F
RICHARD L. DELUSSO
V.101 P.507
AREA =
237,583 S.F.
= 4.774 AC.
188 WALNUT HILL ROAD

MAP 52.0
LOT 124
N/F
BRUCE A. & PATRICIA L.
LINDHOLM
V.311 P.464

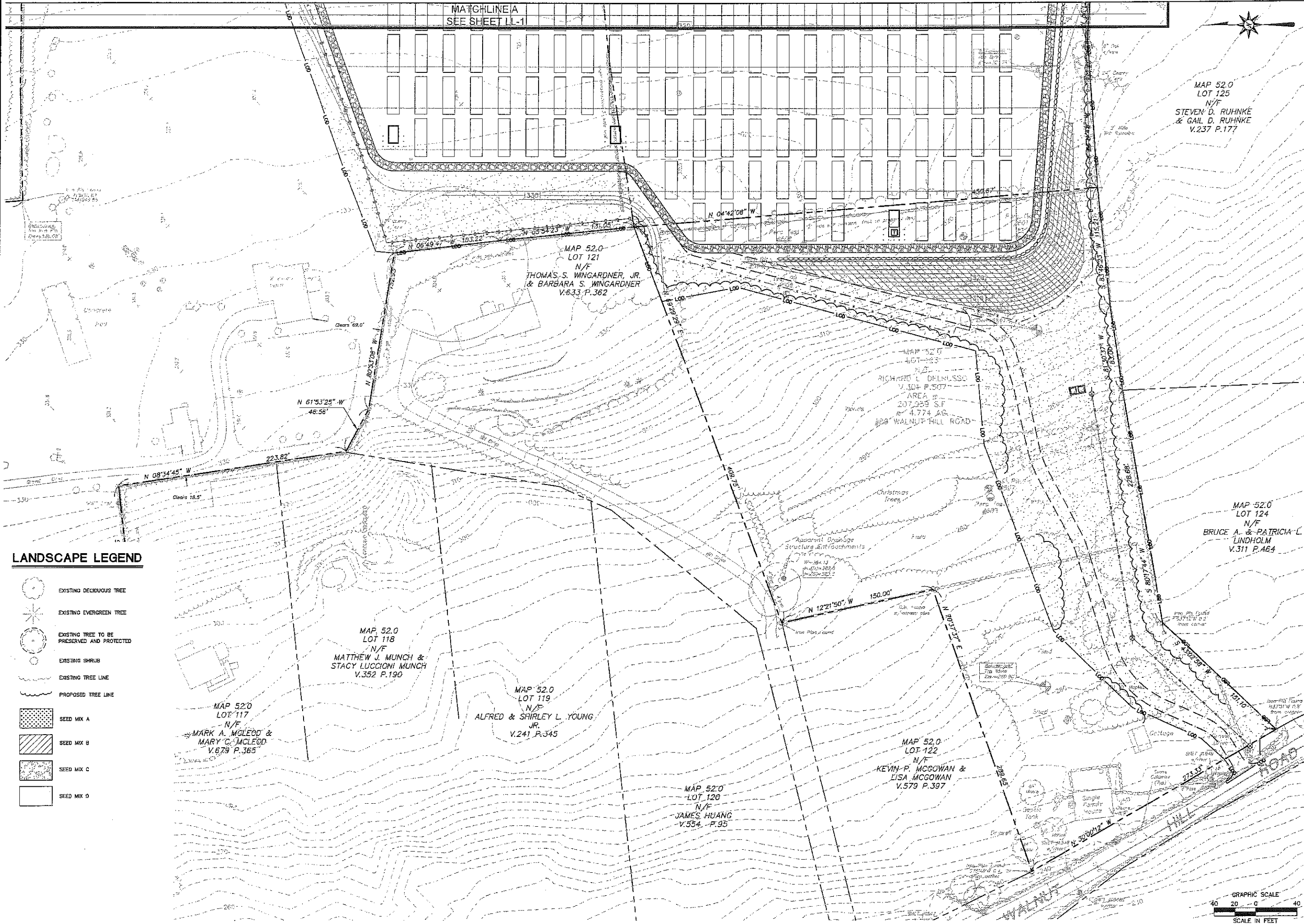
MAP 52.0
LOT 118
N/F
MATTHEW J. MUNCH &
STACY LUCCIONI MUNCH
V.352 P.190

MAP 52.0
LOT 119
N/F
ALFRED & SHIRLEY L. YOUNG,
JR.
V.241 P.345

MAP 52.0
LOT 117
N/F
MARK A. MCLEOD &
MARY C. MCLEOD
V.679 P.365

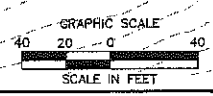
MAP 52.0
LOT 122
N/F
KEVIN P. MCGOWAN &
LISA MCGOWAN
V.579 P.397

MAP 52.0
LOT 120
N/F
JAMES HUANG
V.554 P.95



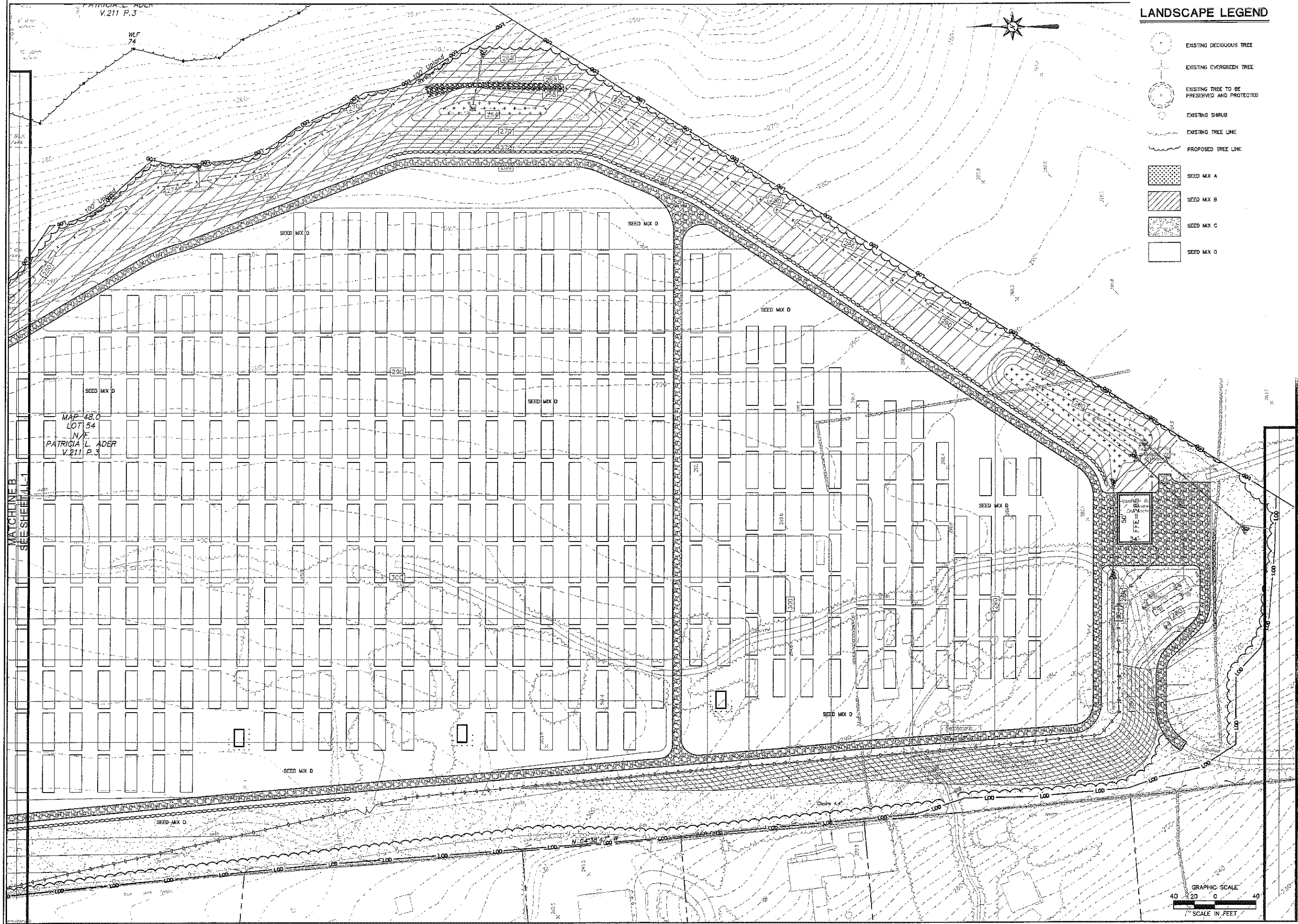
LANDSCAPE LEGEND

- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- EXISTING TREE TO BE PRESERVED AND PROTECTED
- EXISTING SHRUB
- EXISTING TREE LINE
- PROPOSED TREE LINE
- SEED MIX A
- SEED MIX B
- SEED MIX C
- SEED MIX D



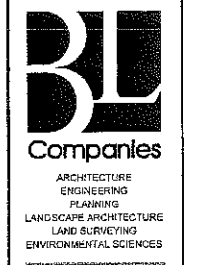
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DRAWN	BKS
CHECKED	RBC
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PROJECT NO.	06C1625-G
DATE	10/09/12
CAD FILE	LL08C1625G01
TITLE	LANDSCAPE PLAN
SHEET NO.	LL-2

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Exported by: K. Vassal



LANDSCAPE LEGEND

- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- EXISTING TREE TO BE PRESERVED AND PROTECTED
- EXISTING SHRUB
- EXISTING TREE LINE
- PROPOSED TREE LINE
- SEED MIX A
- SEED MIX B
- SEED MIX C
- SEED MIX D



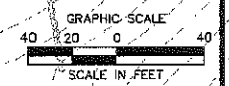
356 Rosetech Parkway
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(203) 530-1498
(203) 630-2615 Fax



ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

REVISIONS	
No.	Date

Designed: BKB
 Drawn: BKB
 Checked: RBG
 Approved:
 Scale: 1"=40'
 Project No: 06C1625-G
 Date: 10/08/12
 CAD File: LL08C1625001
 Title: LANDSCAPE PLAN
 Sheet No.



LL-3

Oct 23, 2012 3:10pm B:\projects\k:\antares\antares-06\dwg\landscape.dwg
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(203) 639-2616 Fax



ANTARES SOLAR FIELD
GRASSY HILL RD. AND WALNUT HILL RD
EAST LYME, CONNECTICUT

REVISONS	No.	Date	Drawn
Designed			MH
Drawn			BKR
Checked			CJA
Approved			
Scale	1"=100'		
Project No.	08C1625-G		
Date	10/09/12		
CAD File:	SE06C1625G01		

Title
**OVERALL SITE
ELECTRICAL
PLAN**

Sheet No.
SE-0

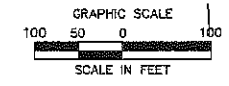


SHEET SE-3

SHEET SE-1

SHEET SE-4

SHEET SE-2



Plot: 21_1215_210gm_08092012.kpl
Project: SE-0_4100_10000



ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

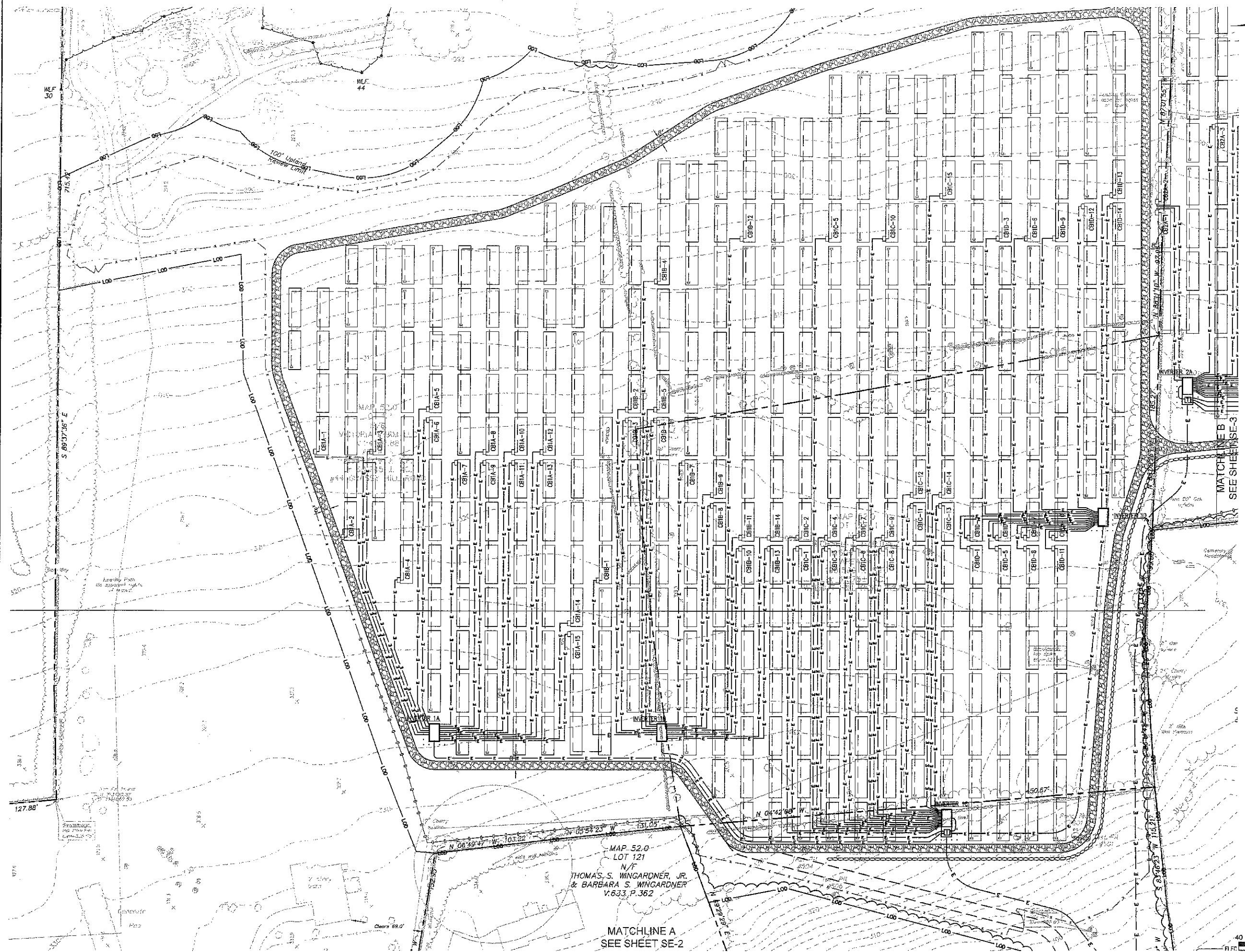
REVISIONS	No.	Date	Desc.
Designed			BKB
Drawn			BKB
Checked			RBG
Approved			
Scale			1"=40'
Project No.			06C1625-G
Date			10/09/12

CAD File: SEDC1625001

TITLE
SITE
ELECTRICAL
PLAN

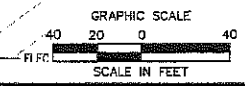
Sheet No.

SE-1



MAP 52.0
LOT 121
N/F
THOMAS S. WINGARDNER, JR.
& BARBARA S. WINGARDNER
V.533 P.362

MATCHLINE A
SEE SHEET SE-2





ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

MAP 52.0
LOT 125
N/F
STEVEN D. RUHNKE
& GAIL D. RUHNKE
V.237 P.177

MAP 52.0
LOT 121
N/F
THOMAS S. WINGARDNER, JR.
& BARBARA S. WINGARDNER
V.633 P.362

MAP 52.0
LOT 123
N/F
RICHARD L. DELUSSO
V.394 P.507
AREA
207,950 S.F.
or 4.774 AC.
#28 WALNUT HILL ROAD

MAP 52.0
LOT 124
N/F
BRUCE A. & PATRICIA L.
LINDHOLM
V.311 P.464

MAP 52.0
LOT 118
N/F
MATTHEW J. MUNCH &
STACY LUCCIONI MUNCH
V.352 P.190

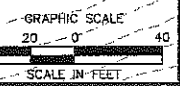
MAP 52.0
LOT 119
N/F
ALFRED & SHIRLEY L. YOUNG
JR.
V.241 P.345

MAP 52.0
LOT 117
N/F
MARK A. MCLEOD &
MARY C. MCLEOD
V.679 P.365

MAP 52.0
LOT 120
N/F
JAMES HUANG
V.554 P.95

MAP 52.0
LOT 122
N/F
KEVIN P. MCGOWAN &
LISA MCGOWAN
V.579 P.397

ELECTRICAL CABINET FOR
SYSTEMS 1 AND 2



REVISIONS	
No.	Date

Designed	MH
Drawn	BKB
Checked	CJA
Approved	
Scale	1"=40'
Project No.	06C1625-G
Date	10/09/12
CAD File:	SE06C1625001
Title	SITE ELECTRICAL PLAN
Sheet No.	SE-2

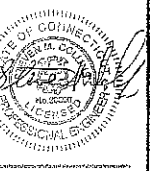
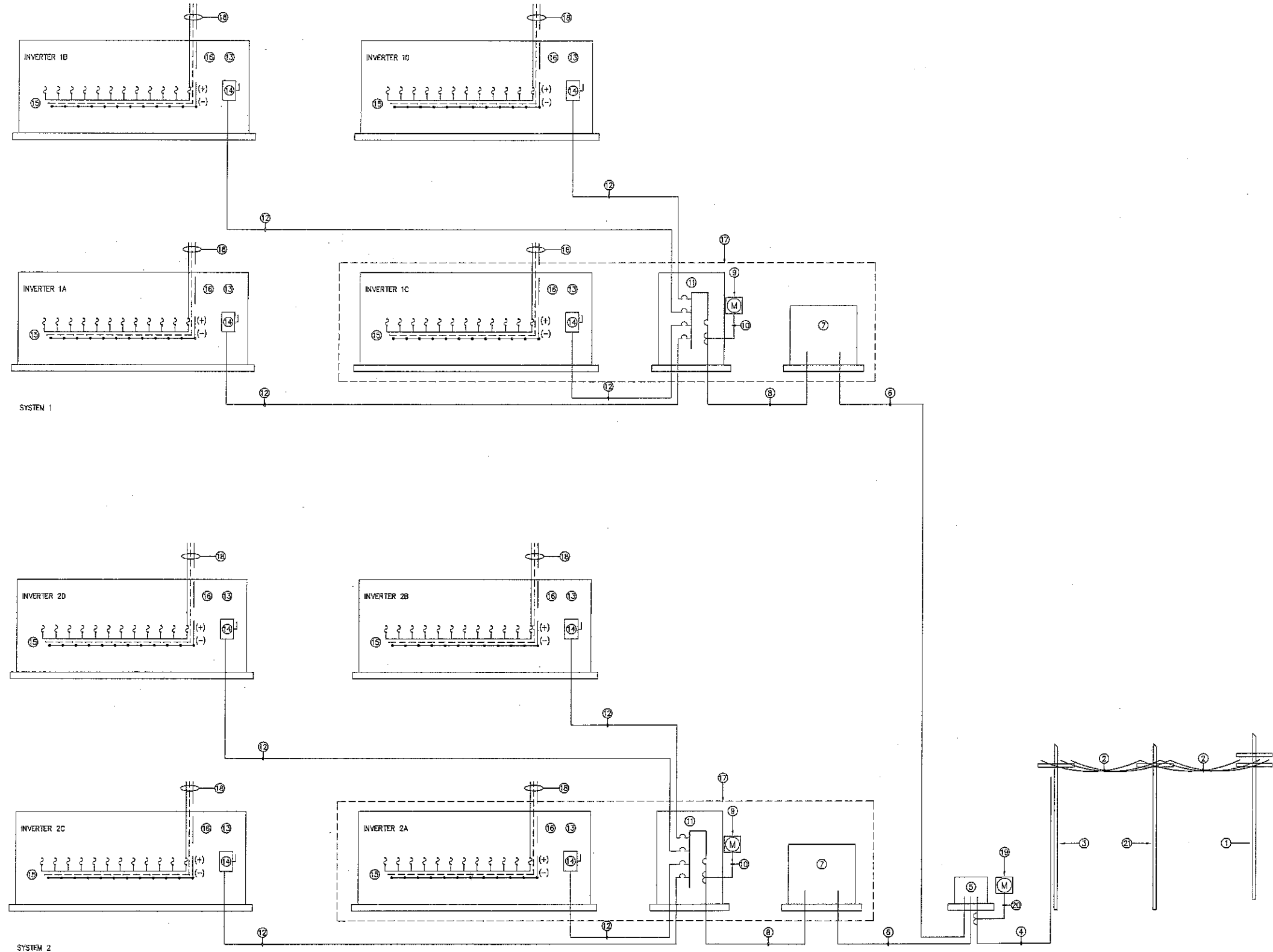
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ELECTRICAL KEY NOTES (PV-3A):

- ① EXISTING UTILITY POLE SNET 1549; PROVIDE ADDITIONAL CROSSARM.
- ② OVERHEAD PRIMARY CONDUCTORS (15kV) BY UTILITY COMPANY.
- ③ UTILITY POLE BY CONTRACTOR; RISER CONDUIT BY CONTRACTOR, RISER CONDUCTORS (15kV) BY UTILITY COMPANY.
- ④ UNDERGROUND SERVICE; CONDUIT BY CONTRACTOR, CONDUCTORS (15kV) BY UTILITY COMPANY.
- ⑤ GRADE-MOUNT DISTRIBUTION SWITCHGEAR SIMILAR TO S&C VISTA 321 25kA SWITCH ASSEMBLY BY UTILITY COMPANY.
- ⑥ UNDERGROUND SERVICE BY CONTRACTOR.
- ⑦ PV SYSTEM OUTPUT TRANSFORMER; 2500kVA; 480V → 13,800V, 3ø; SUITABLE FOR OUTDOOR INSTALLATION.
- ⑧ 480V FEEDER; 3000A; (8) SETS: 3" C - 3-500kcmil, 1#3/0GND.
- ⑨ PHOTOVOLTAIC PRODUCTION METER WITH CAPABILITY OF DISPLAYING TOTAL ACCUMULATED POWER, SIMILAR TO POWER MEASUREMENT ION 7330 DIGITAL METER, OR APPROVED EQUAL; PROVIDE WITH METER SOCKET SEAL AND ALL NECESSARY COMPONENTS.
- ⑩ 1-1/2" RGC - 9#12 (THWN-2).
- ⑪ PV SYSTEM SERVICE DISTRIBUTION PANEL; 3000A, 480V, 3ø, 3W; 3000A-3P MAIN (OUTPUT) CIRCUIT BREAKER; PROVIDE (4) 800A-3P CIRCUIT BREAKERS SUITABLE FOR BACKFEED FOR PV INVERTER SERVICE; PROVIDE WARNING LABEL PER NEC 690.64(B)(7) ADJACENT TO PV SERVICE BREAKERS TO READ, "WARNING: INVERTER OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE."
- ⑫ 480V INVERTER OUTPUT FEEDER; 800A; (2) SETS: 3" C - 3-500kcmil, 1#3/0GND.
- ⑬ PHOTOVOLTAIC SYSTEM INVERTER; SOLECTRIA SGI 500; 500KW, 480VAC, 3ø, 3-WIRE OUTPUT, 97.9% PEAK INVERTER EFFICIENCY; MPT VOLTAGE RANGE 300-500VDC; MAXIMUM DC INPUT CURRENT: 1721A; RATED OUTPUT AC CURRENT: 602A; PROVIDE WITH GROUND FAULT PROTECTION DEVICE AND WARNING LABEL PER NEC 690.5(C) INSTALLED BY MANUFACTURER OR CONTRACTOR ADJACENT TO GROUND FAULT INDICATOR AT A VISIBLE LOCATION; "WARNING: CONDUCTORS MAY BE UNGROUNDED AND ENERGIZED." PROVIDE LABEL WITH RATED AC OUTPUT CURRENT AND NOMINAL AC VOLTAGE (PER NEC 690.53); APPROXIMATE DIMENSIONS FOR FLOOR (SLAB) MOUNTED INVERTER: 108"W X 41"D X 79"H; 5,900LBS.
- ⑭ INTEGRAL 480V, 800A-3P UNFUSED DISCONNECT SWITCH FURNISHED WITH INVERTER; PROVIDE WARNING LABEL PER NEC 690.17 TO READ, "WARNING: ELECTRICAL SHOCK HAZARD, DO NOT TOUCH TERMINALS ON BOTH THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION."
- ⑮ EXTERNAL SUBCOMBINER WITH FEEDER FUSES, 600VDC, LOCATED AT INVERTER; PROVIDE WARNING LABEL TO READ, "WARNING: ELECTRIC SHOCK HAZARD, DO NOT TOUCH TERMINALS ON BOTH THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION." PROVIDE LABEL TO INDICATE PHOTOVOLTAIC SYSTEM'S OPERATING CURRENT, OPERATING VOLTAGE, MAXIMUM SYSTEM VOLTAGE, AND SHORT-CIRCUIT CURRENT (PER NEC 690.53); SEE COMBINER BOX SCHEDULE.
- ⑯ PROVIDE LABEL PER NEC 690.53 ON THE OUTSIDE OF THE INVERTER AS FOLLOWS:
 INVERTER 1A, INVERTER 1C, and INVERTER 2A:
 Imp: 1631.7ADC [7.77 ADC x 210 Strings]
 Vmp: 396.0VDC [36.0 VDC x 11 Panels/String]
 Voc: 597.6VDC [(44.9 x 1.21) VDC x 11 Panels/String] (AT -14°F)
 Isc: 1738.8ADC [8.28 ADC x 210 Strings]

 INVERTER 1B, INVERTER 1D, INVERTER 2B, and INVERTER 2D:
 Imp: 1522.9ADC [7.77 ADC x 196 Strings]
 Vmp: 396.0VDC [36.0 VDC x 11 Panels/String]
 Voc: 597.6VDC [(44.9 x 1.21) VDC x 11 Panels/String] (AT -14°F)
 Isc: 1622.9ADC [8.28 ADC x 196 Strings]

 INVERTER 2C:
 Imp: 1618.2ADC [7.77 ADC x 208 Strings]
 Vmp: 396.0VDC [36.0 VDC x 11 Panels/String]
 Voc: 597.6VDC [(44.9 x 1.21) VDC x 11 Panels/String] (AT -14°F)
 Isc: 1722.2ADC [8.28 ADC x 208 Strings]
- ⑰ PV INVERTER SYSTEM STATION; INCLUDES (1) 500kW INVERTER WITH DISTRIBUTION PANEL AND OUTPUT UTILITY VOLTAGE (MV) TRANSFORMER ON A SKID. REFER TO MANUFACTURER LITERATURE FOR SKID DIMENSIONS.
- ⑱ COMBINER BOX OUTPUT CIRCUIT TO SUBCOMBINER FUSE.
- ⑲ NEW UTILITY NET REVENUE METER (COLD-SEQUENCE); COORDINATE EXACT LOCATION AND REQUIREMENTS WITH LOCAL UTILITY COMPANY PRIOR TO INSTALLATION; LOCAL UTILITY IS CONNECTICUT LIGHT AND POWER (NORTHEAST UTILITIES SYSTEM).
- ⑳ 1-1/2" RGC - 9#12 (THWN-2).
- ㉑ NEW UTILITY POLE(S) BY CONTRACTOR.



ANTARES SOLAR FIELD
 GRASSY HILL RD AND WALNUT HILL RD
 EAST LYME, CONNECTICUT

REVISIONS	
No.	Date

Designed: M.H.
 Drawn: M.H.
 Checked: G.K.
 Approved: C.A.
 Scale: AS NOTED
 Project No: 06C1625-G
 Date: 10/09/12
 CAD File: PV06C1625R03

Title: PHOTOVOLTAIC RISER DIAGRAM



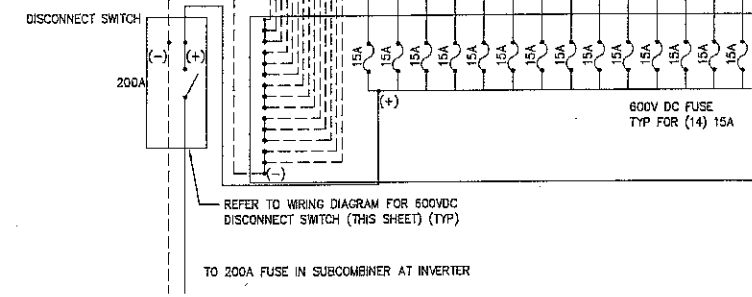
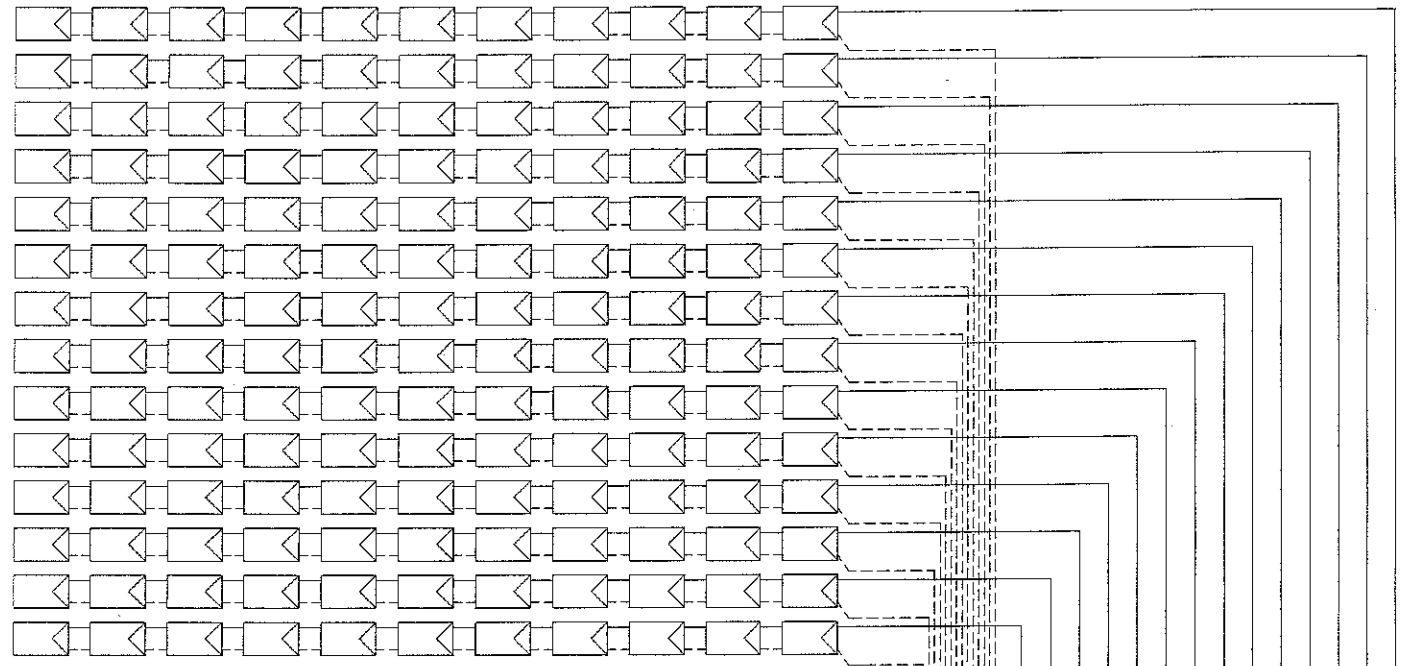
Companies

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355 Research Parkway
Meriden, CT 06460
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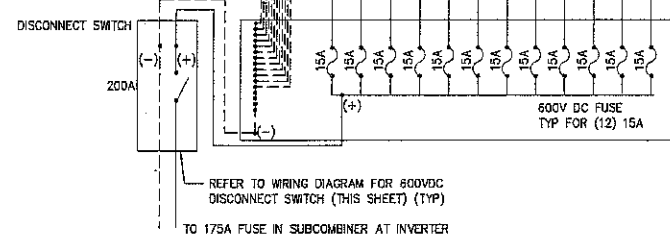
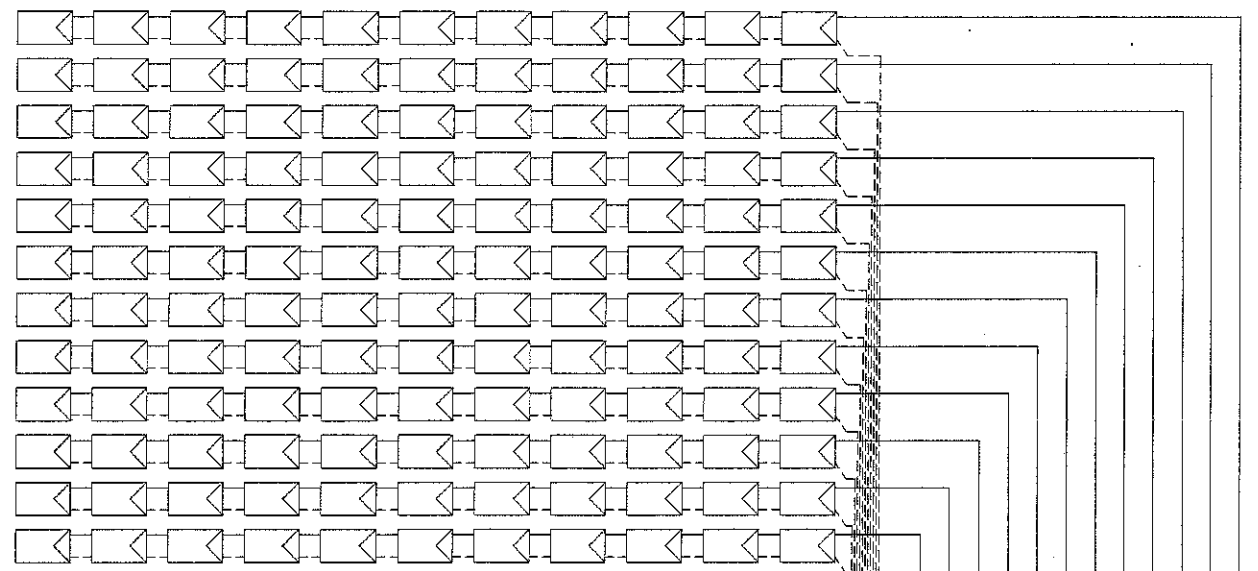


ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT

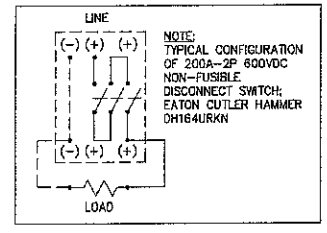


3 WIRING DIAGRAM: 14-CIRCUIT COMBINER BOX
SCALE: N.T.S.

1 WIRING DIAGRAM: 600Vdc DISCONNECT
SCALE: N.T.S.



2 WIRING DIAGRAM: 12-CIRCUIT COMBINER BOX
SCALE: N.T.S.



NOTE:
TYPICAL CONFIGURATION
OF 200A-2P 600VDC
NON-FUSIBLE
DISCONNECT SWITCH;
EATON CUTLER HAMMER
DH164URKN

Dec 10, 2012 11:49am Cabhe K_Vadav's\06C1825-G\DWG\06C1825004.dwg
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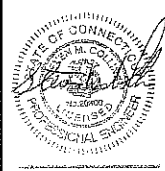
REVISIONS	No.	Date	Desc.
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Drawn			M.H.
Checked			G.K.
Approved			C.A.
Scale			AS NOTED
Project No.			06C1825-G
Date			10/09/12
CAD File:			PV06C1825004
Title			PHOTOVOLTAIC WIRING DIAGRAMS COMBINER BOX
Sheet No.			

PV-2



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ANTARES SOLAR FIELD
 GRASSY HILL RD AND WALNUT HILL RD
 EAST LYME, CONNECTICUT

Desig. _____
 Drawn _____
 Checked _____
 Approved _____
 Scale AS NOTED
 Project No. 06C1625-G
 Date 10/09/12

CAD File: PV06C1625G03
 Title: PHOTOVOLTAIC COMBINER BOX SCHEDULES

Sheet No. _____

PV-3

COMBINER BOX SCHEDULE for 2MW SYSTEM (INVERTER 2A)

COMBINER BOX	PANELS/ STRING	STRINGS/ CIRCUIT	PANEL WATTS	BOX CIRCUITS	PANEL QUANTITY	STRING WATTS	CIRCUIT WATTS	BOX WATTS	PANEL VOLTS	CIRCUIT DC VOLTS	STRING CURRENT	CIRCUIT CURRENT	BOX DC CURRENT	SUBCOMBINER DC FUSE (A)
CB2A-1	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-2	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-3	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-4	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-5	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-6	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-7	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-8	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-9	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-10	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-11	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-12	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-13	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-14	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2A-15	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
TOTALS:			210	2310			646800						1738.8	(loc)

1.21 LOCATION TEMPERATURE FACTOR FOR -14°F (2011 NEC TABLE 690.7)

COMBINER BOX SCHEDULE for 2MW SYSTEM (INVERTER 1A)

COMBINER BOX	PANELS/ STRING	STRINGS/ CIRCUIT	PANEL WATTS	BOX CIRCUITS	PANEL QUANTITY	STRING WATTS	CIRCUIT WATTS	BOX WATTS	PANEL VOLTS	CIRCUIT DC VOLTS	STRING CURRENT	CIRCUIT CURRENT	BOX DC CURRENT	SUBCOMBINER DC FUSE (A)
CB1A-1	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-2	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-3	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-4	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-5	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-6	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-7	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-8	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-9	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-10	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-11	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-12	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-13	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-14	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1A-15	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
TOTALS:			210	2310			646800						1738.8	(loc)

1.21 LOCATION TEMPERATURE FACTOR FOR -14°F (2011 NEC TABLE 690.7)

COMBINER BOX SCHEDULE for 2MW SYSTEM (INVERTER 2B)

COMBINER BOX	PANELS/ STRING	STRINGS/ CIRCUIT	PANEL WATTS	BOX CIRCUITS	PANEL QUANTITY	STRING WATTS	CIRCUIT WATTS	BOX WATTS	PANEL VOLTS	CIRCUIT DC VOLTS	STRING CURRENT	CIRCUIT CURRENT	BOX DC CURRENT	SUBCOMBINER DC FUSE (A)
CB2B-1	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-2	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-3	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-4	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-5	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-6	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-7	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-8	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-9	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-10	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-11	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-12	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-13	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2B-14	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
TOTALS:			196	2156			603680						1622.9	(loc)

1.21 LOCATION TEMPERATURE FACTOR FOR -14°F (2011 NEC TABLE 690.7)

COMBINER BOX SCHEDULE for 2MW SYSTEM (INVERTER 1B)

COMBINER BOX	PANELS/ STRING	STRINGS/ CIRCUIT	PANEL WATTS	BOX CIRCUITS	PANEL QUANTITY	STRING WATTS	CIRCUIT WATTS	BOX WATTS	PANEL VOLTS	CIRCUIT DC VOLTS	STRING CURRENT	CIRCUIT CURRENT	BOX DC CURRENT	SUBCOMBINER DC FUSE (A)
CB1B-1	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-2	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-3	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-4	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-5	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-6	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-7	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-8	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-9	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-10	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-11	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-12	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-13	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB1B-14	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
TOTALS:			199	2159			603980						1622.9	(loc)

1.21 LOCATION TEMPERATURE FACTOR FOR -14°F (2011 NEC TABLE 690.7)

COMBINER BOX SCHEDULE for 2MW SYSTEM (INVERTER 2C)

COMBINER BOX	PANELS/ STRING	STRINGS/ CIRCUIT	PANEL WATTS	BOX CIRCUITS	PANEL QUANTITY	STRING WATTS	CIRCUIT WATTS	BOX WATTS	PANEL VOLTS	CIRCUIT DC VOLTS	STRING CURRENT	CIRCUIT CURRENT	BOX DC CURRENT	SUBCOMBINER DC FUSE (A)
CB2C-1	11	1	280	12	132	3080	3080	36960	36.00	479.2	8.28	8.3	99.4	175
CB2C-2	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-3	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-4	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-5	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-6	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-7	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-8	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-9	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-10	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-11	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-12	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-13	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-14	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
CB2C-15	11	1	280	14	154	3080	3080	43120	36.00	479.2	8.28	8.3	115.9	200
TOTALS:			208	2288			640640						1722.2	(loc)

1.21 LOCATION TEMPERATURE FACTOR FOR -14°F (2011 NEC TABLE 690.7)

COMBINER BOX SCHEDULE for 2MW SYSTEM (INVERTER 1C)

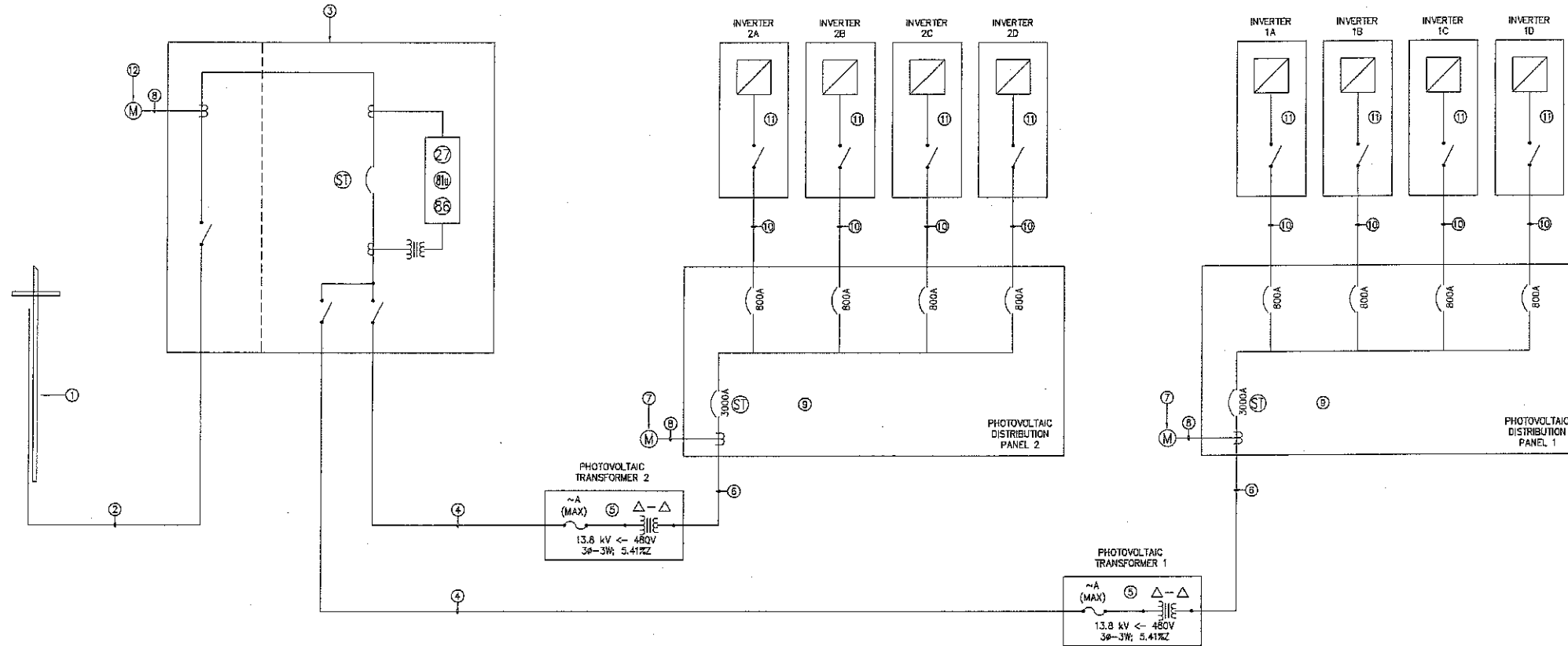
COMBINER BOX	PANELS/ STRING	STRINGS/ CIRCUIT	PANEL WATTS	BOX CIRCUITS
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ELECTRICAL KEY NOTES (UID-01):

- ① UTILITY POLE SNET 1549 BY UTILITY COMPANY; RISER CONDUIT BY CONTRACTOR, RISER CONDUCTORS (15kV) BY UTILITY COMPANY.
- ② UNDERGROUND SERVICE; CONDUIT BY CONTRACTOR, CONDUCTORS (15kV) BY UTILITY COMPANY.
- ③ GRADE-MOUNT DISTRIBUTION SWITCHGEAR SIMILAR TO S&C VISTA 321 25KA SWITCH ASSEMBLY BY CONTRACTOR.
- ④ UNDERGROUND SERVICE BY CONTRACTOR
4FRS - 3C #3#0 (15kV).
- ⑤ PV SYSTEM OUTPUT TRANSFORMER; 2500kVA; 480V -> 13,800V, 3P; SUITABLE FOR OUTDOOR INSTALLATION.
- ⑥ 480V FEEDER; 3000A; (8) SETS: 3" C - 3-500kcmil, 1#3/0GND.
- ⑦ PHOTOVOLTAIC SREC METER WITH CAPABILITY OF DISPLAYING TOTAL ACCUMULATED POWER, SIMILAR TO POWER MEASUREMENT ION 7330 DIGITAL METER, OR APPROVED EQUAL; PROVIDE WITH METER SOCKET SEAL AND ALL NECESSARY COMPONENTS.
- ⑧ 1-1/2" C - 9#12.
- ⑨ PV SYSTEM SERVICE DISTRIBUTION PANEL: 3000A, 480V, 3P, 3W; 3000A-3P MAIN (OUTPUT) CIRCUIT BREAKER; PROVIDE (4) 800A-3P CIRCUIT BREAKERS SUITABLE FOR BACKFEED FOR PV INVERTER SERVICE; PROVIDE WARNING LABEL PER NEC 690.64(B)(7) ADJACENT TO PV SERVICE BREAKERS TO READ, "WARNING: INVERTER OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DEVICE."
- ⑩ 480V INVERTER OUTPUT FEEDER; 800A; (2) SETS: 3" C - 3-500kcmil, 1#3/0GND.
- ⑪ PHOTOVOLTAIC SYSTEM INVERTER; SOLECTRIA SGI 500; 500kW, 480VAC, 3P, 3-WIRE OUTPUT, 97.9% PEAK INVERTER EFFICIENCY; MPPT VOLTAGE RANGE 300-500VDC; MAXIMUM DC INPUT CURRENT: 1721A; RATED OUTPUT AC CURRENT: 602A; PROVIDE WITH GROUND FAULT PROTECTION DEVICE AND WARNING LABEL PER NEC 690.5(C) INSTALLED BY MANUFACTURER OR CONTRACTOR ADJACENT TO GROUND FAULT INDICATOR AT A VISIBLE LOCATION; "WARNING: CONDUCTORS MAY BE UNGROUNDED AND ENERGIZED." PROVIDE LABEL WITH RATED AC OUTPUT CURRENT AND NOMINAL AC VOLTAGE (PER NEC 690.53); APPROXIMATE DIMENSIONS FOR FLOOR (SLAB) MOUNTED INVERTER: 105"W X 41"D X 79"H; 6,950LBS.
- ⑫ NEW UTILITY NET REVENUE METER (COLO-SEQUENCE); COORDINATE EXACT LOCATION AND REQUIREMENTS WITH LOCAL UTILITY COMPANY PRIOR TO INSTALLATION; LOCAL UTILITY IS CONNECTICUT LIGHT AND POWER (NORTHEAST UTILITIES SYSTEM).

NOTES FOR GRADE-MOUNT DISTRIBUTION SWITCHGEAR:

1. SWITCHGEAR SHALL INCLUDE RELAYS TO OPEN INTEGRAL CIRCUIT BREAKER:
A. WHEN ANY PHASE OF THE UTILITY SERVICE FAILS
B. WHEN THE UTILITY SERVICE FREQUENCY DROPS BELOW 57HZ
C. TO PREVENT AUTOMATIC RECLOSING OF BREAKER IF TRIPPED BY A RELAY
2. SWITCHGEAR SHALL INCLUDE PT'S AND CT'S TO ACCOMMODATE UTILITY REVENUE METER.
3. INTEGRAL CIRCUIT BREAKER SHALL INCLUDE SHUNT TRIP MECHANISM TO OPEN BREAKER UPON SIGNAL FROM ANY RELAY.
4. SWITCHGEAR SHALL INCLUDE PARTITIONED SECTIONS WITH UTILITY SECTION WITH UTILITY DISCONNECT SWITCH AND CUSTOMER SECTION WITH CUSTOMER EQUIPMENT DISCONNECT SWITCHES.

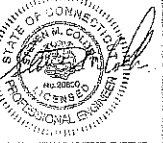


⑩ SHUNT TRIP MECHANISM TO TRIP BREAKER UPON:
 ~ LOSS OF AC (UTILITY) POWER
 ~ AC FREQUENCY BELOW 57HZ



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ANTARES SOLAR FIELD
 GRASSY HILL RD AND WALNUT HILL RD
 EAST LYME, CONNECTICUT

REVISIONS	No.	Date	Disc.

Designed M.H.
 Drawn M.H.
 Checked G.K.
 Approved S.C.
 Scale AS NOTED
 Project No. 08C1625-G
 Date 10/09/12

CAD File: UID061625001

UTILITY INTERCONNECTION DIAGRAM

Sheet No.

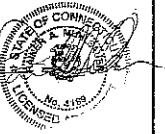
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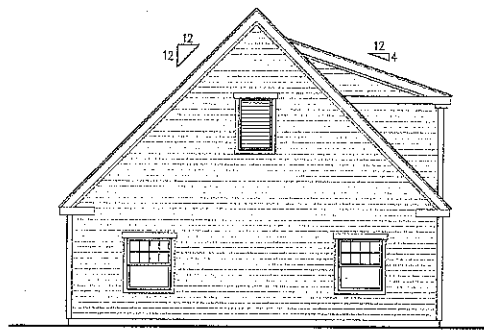
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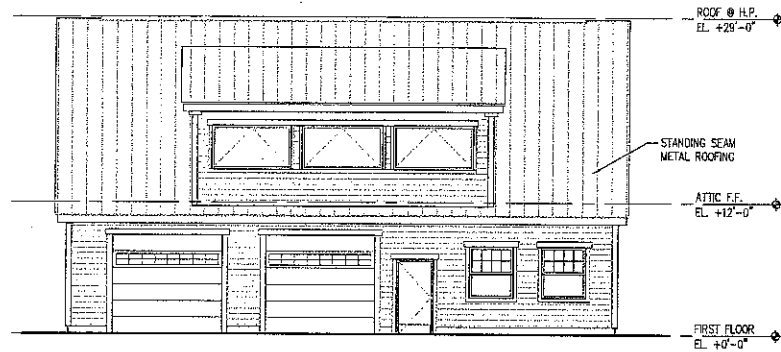
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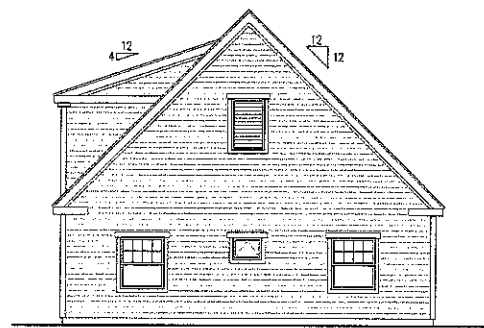
ANTARES SOLAR FIELD
GRASSY HILL RD AND WALNUT HILL RD
EAST LYME, CONNECTICUT



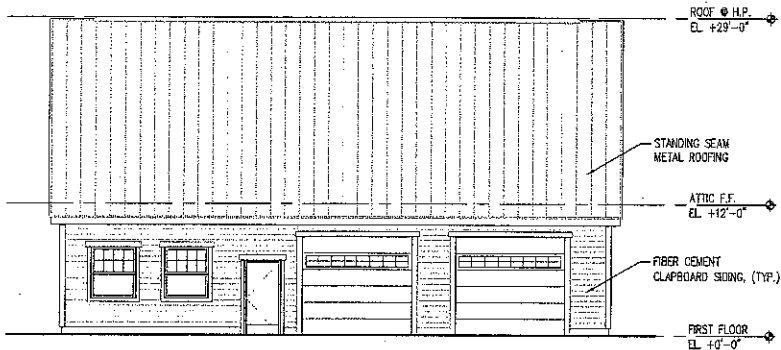
6 EAST ELEVATION
1/8" = 1'-0"



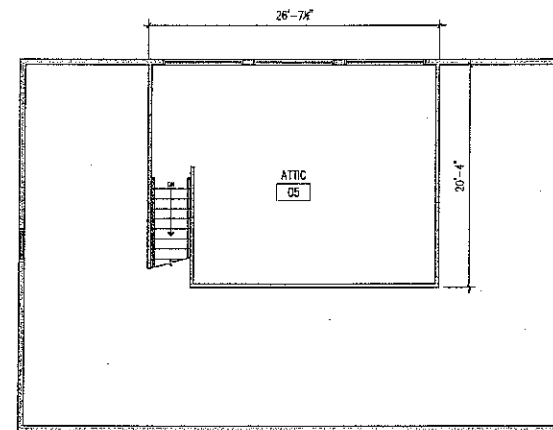
5 NORTH ELEVATION
1/8" = 1'-0"



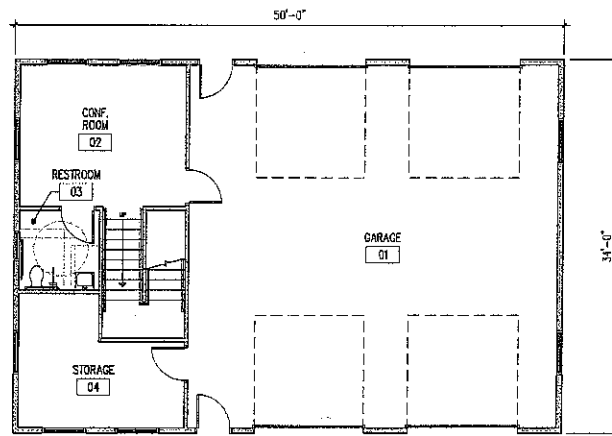
4 WEST ELEVATION
1/8" = 1'-0"



3 SOUTH ELEVATION
1/8" = 1'-0"



2 ATTIC FLOOR PLAN
1/8" = 1'-0"



1 FIRST FLOOR PLAN
1/8" = 1'-0"



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Layout: A1

REVISIONS	No.	Date	Desc.

Designed
 Drawn
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 Approved
 Scale
 Project No. 05C1825-G
 Date 10/09/12
 CAD File: XAD05182501

Title
 CONCEPTUAL
 MAINTENANCE
 BUILDING
 PLANS AND
 ELEVATIONS

Sheet No.

A1