OWNER'S ADOPTION

Commonwealth of Pennsylvania:
County of Butler

We, First United Methodist Church of the land shown on the Crossfire Expansion, hereby adopt his plan as our land development and irrevocably dedicate all streets and other property identified for dedication on the plan to the public. This adoption and dedication shall be binding upon our heirs, executors and assigns.

Robert Pohan — Signature and Title of Officer Witnessing

Signature and Title of Authorized Officer: CHAIRMAN OF THE BOARD OF TRUSTEES

Date: APRIL 14, 2015

Sworn and subscribed before me me this day.

WITNESS MY HAND AND NOTARIAL SEAL this 14th day of APRIL, 2015

My Commission Expires the 11th day of March 2016

SEAL

Notary Public: Kathy J Kennedy

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Kathy J. Kennedy, Notary Public
City of Butler, Butler County
My Commission Expires March 11, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

ACKNOWLEDGMENT OF NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF BUTLER:
Before me, the undersigned notary public in and for the Commonwealth of Pennsylvania and County of Butler, personally appeared the TOM HOLMAN of the First United Methodist Church, and acknowledged the foregoing adoption and dedication to be (his, her, their) act.

WITNESS My hand and notarial seal this 14TH day of APRIL, 2015

My commission expires the 11th day of March, 2016

SEAL

Notary Public: Kathy J Kennedy

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Kathy J. Kennedy, Notary Public
City of Butler, Butler County
My Commission Expires March 11, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

CERTIFICATION OF TITLE

I, Tom Holman, A Board of Trustee of the First United Methodist Church do hereby certify that the title of this property is in the name of First United Methodist Church as recorded in Instrument #201502260003956, Recorder of Deeds Office.

Witness — (Tom Holman) — Date: APRIL 14, 2015

I, an Officer of Huntington Bank mortagee of the property embraced in this plan or subdivision, Crossfire Expansion Site Plan for Recording do hereby consent to the recording of said plan in the Recorders Office of Butler County, Pennsylvania and to the dedications and covenants appearing hereon.

Witness — Bank Officer — Date: 04/21/15

MUNICIPAL DECLARATIONS

The Center Township Planning Commission has reviewed and approves this land development plan on this 25th day of February, 2015

Secretary — Chairman, Board of Supervisors

The Board of Supervisors of the Township of Center, hereby gives notice that in approving this plan for recording, the Township of Center has not accepted dedication of any streets, land or public facilities and has no obligation to improve or maintain such streets, land or facilities.

The Center Township Board of Supervisors has reviewed and approves this land development plan on this 30th day of April, 2015

Secretary — Chairman, Board of Supervisors

STORMWATER MANAGEMENT DECLARATIONS

I, Jonathan E. Garczewski, hereby certify that the Stormwater Management Plan meets all Design Standards and Criteria of the Center Township Stormwater Management Ordinances.

Jonathan E. Garczewski, P.E. — Date: 2015-04-14

I, an Authorized Officer, of First United Methodist Church, Owner of the land shown on the Crossfire Expansion Site Plan for Recording hereby acknowledge that stormwater management BMP's are fixtures that cannot be altered or removed without prior approval by Center Township.

CHAIR BRD TRUSTEES — Signature of Authorized Officer — Date: APRIL 14, 2015

I, Ronald Olsen, have reviewed this Stormwater Management Plan in accordance with the Design Standards and Criteria of the Center Township Stormwater Management Ordinance.

Ronald Olsen, Township Engineer — Date: APRIL 22, 2015

Reg. No. 26400 E

BUTLER COUNTY PLANNING COMMISSION

Reviewed by the Butler County Planning Commission at a meeting held this 19th day of Nov, 2014

Secretary — Chairman, Planning Commission

BUTLER COUNTY PLANNING COMMISSION

PROOF OF RECORDING

Recorded in the Office for the Recording of Deeds, Plats, etc., in Butler County, in Plan Book Volume 348, Page 1-2

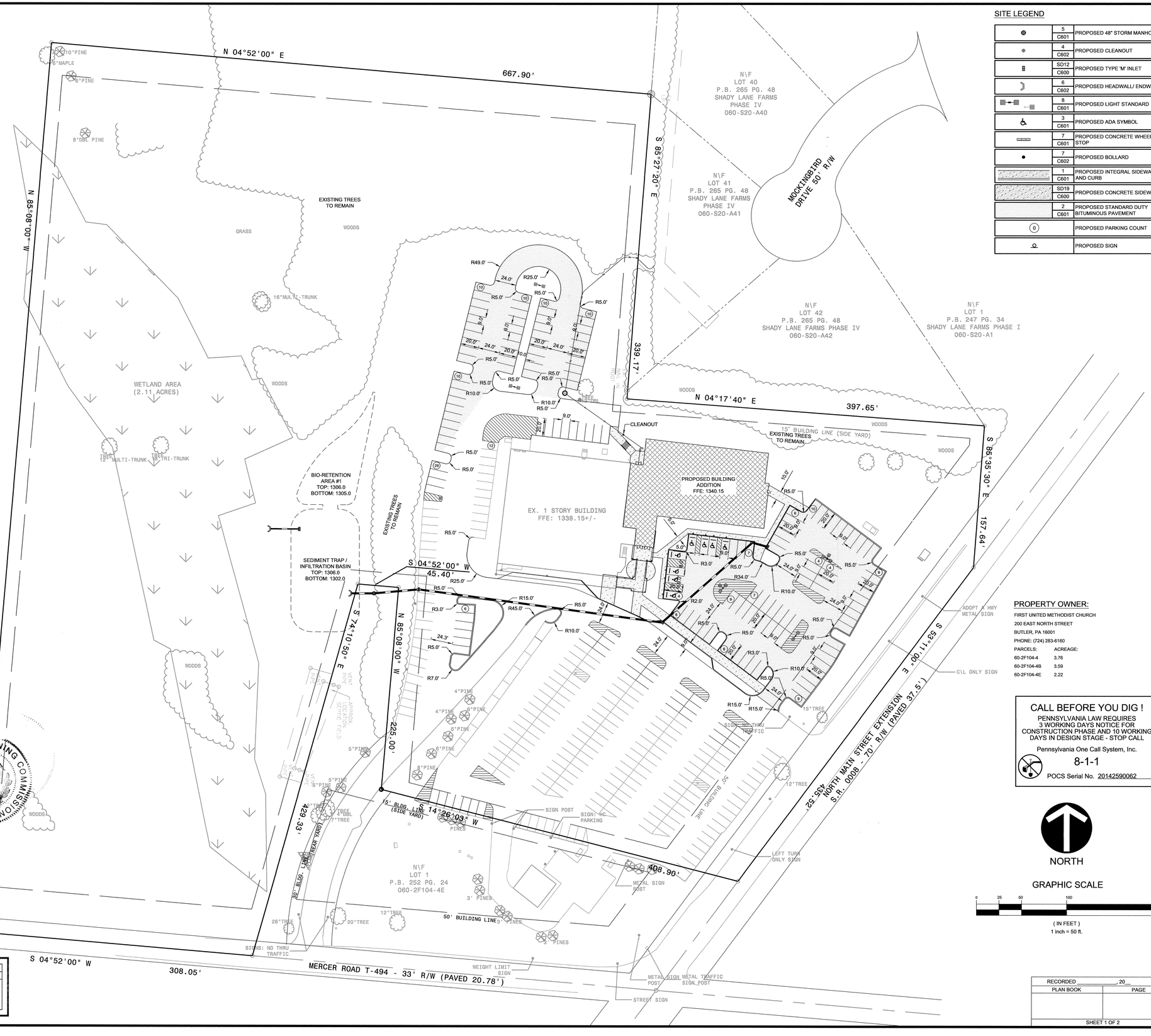
Given under my hand and seal this 12th day of May, 2015

RECORDER OF DEEDS

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016
BUTLER COUNTY, PA.

Instr: 201505120010001 05/12/2015
Pages: 2 F: $85.00 2:12PM
Michele Mustello T20150008052
Butler County Recorder PL

PLAN BOOK	PAGE
348	1



SITE LEGEND

	5 / C601	PROPOSED 48" STORM MANHOLE
	4 / C602	PROPOSED CLEANOUT
	SD12 / C600	PROPOSED TYPE 'M' INLET
	6 / C602	PROPOSED HEADWALL/ ENDWALL
	8 / C601	PROPOSED LIGHT STANDARD
	3 / C601	PROPOSED ADA SYMBOL
	7 / C601	PROPOSED CONCRETE WHEEL STOP
	7 / C602	PROPOSED BOLLARD
	1 / C601	PROPOSED INTEGRAL SIDEWALK AND CURB
	SD19 / C600	PROPOSED CONCRETE SIDEWALK
	2 / C601	PROPOSED STANDARD DUTY BITUMINOUS PAVEMENT
(0)		PROPOSED PARKING COUNT
		PROPOSED SIGN

PROPERTY OWNER:

FIRST UNITED METHODIST CHURCH
200 EAST NORTH STREET
BUTLER, PA 16001
PHONE: (724) 283-6160

PARCELS:	ACREAGE:
60-2F104-4	3.76
60-2F104-4B	3.59
60-2F104-4E	2.22

CALL BEFORE YOU DIG !
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
Pennsylvania One Call System, Inc.
8-1-1
POCS Serial No. 20142590062

NORTH

GRAPHIC SCALE
0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

RECORDED	, 20
PLAN BOOK	PAGE

SHEET 1 OF 2

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gatewayengineers.com
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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JONATHAN EDWARD GARCZEWSKI
ENGINEER
PE079459

REVISION RECORD

No	Date	
01	2015-01-07	REVISED PER THE BASA REVIEW LETTER DATED 2014-12-19
02	2015-01-23	BID SET
03	2015-03-13	ISSUED FOR CONSTRUCTION
04	-	-
05	-	-
06	-	-
07	-	-
08	-	-

CROSSFIRE EXPANSION
1802 N. MAIN STREET EXT.
BUTLER, PA 16001

PREPARED FOR:
FIRST UNITED METHODIST CHURCH
200 E. NORTH STREET
BUTLER, PA 16001

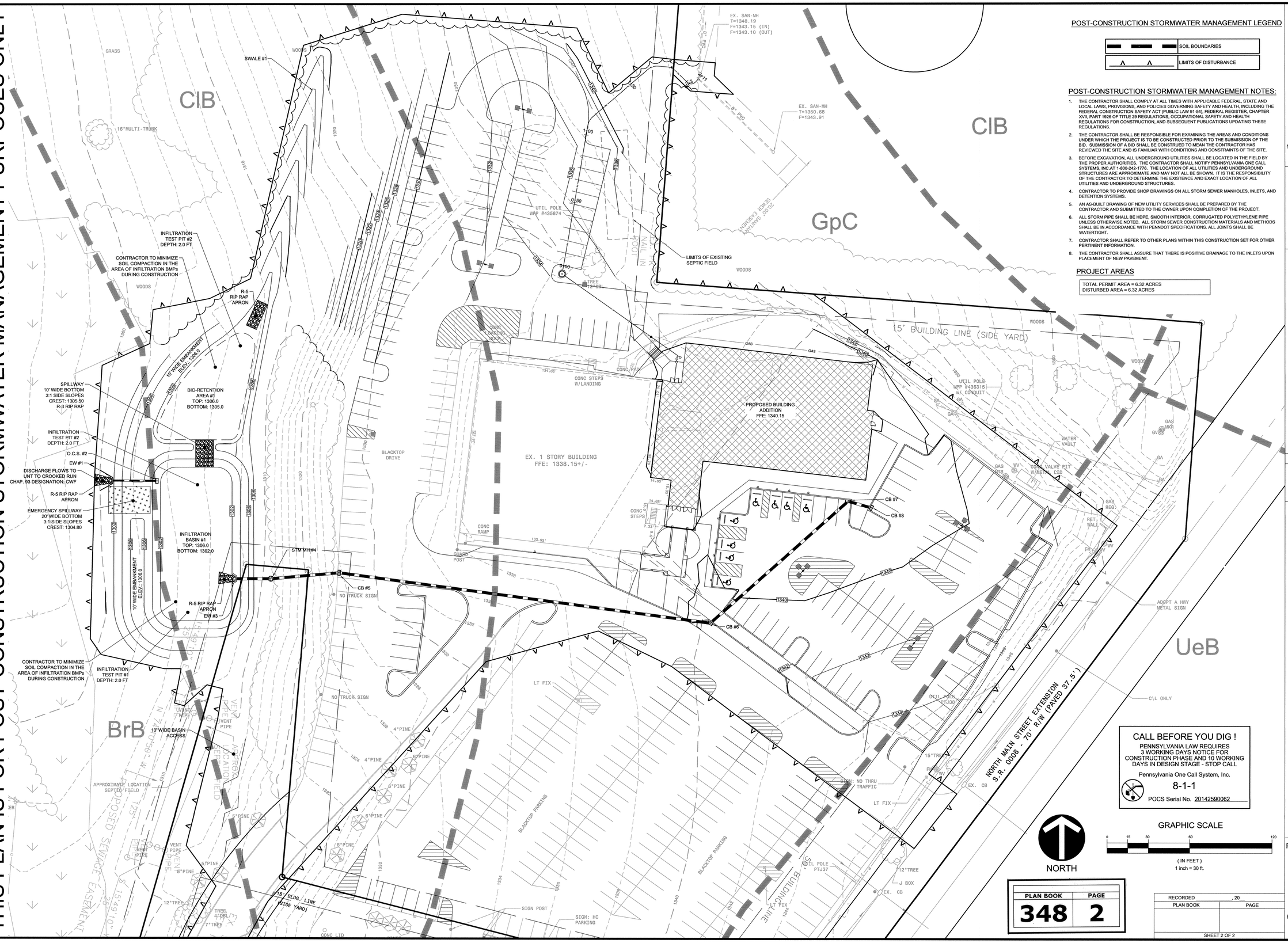
OVERALL SITE PLAN

Project Number: C-18806-0003
Drawing Scale: 1" = 50'
Date Issued: 2014-11-05
Index Number: PENDING
Drawn By: CEM/LPW/MTT
Checked By: ---
Project Manager: JEG

C101

[Path & Filename=R:\Projects\18000\18806 Crossfire\4-0003 Expansion LD\Dwg\02-Sheet\118806 C100_Site_LNL_Grade.dwg
Plot Date=4/13/2015 3:52 PM Lucas P. Wassam
Save Date=4/13/2015 3:45 PM
15.01

THIS PLAN IS FOR POST-CONSTRUCTION STORMWATER MANAGEMENT PURPOSES ONLY



POST-CONSTRUCTION STORMWATER MANAGEMENT LEGEND

	SOIL BOUNDARIES
	LIMITS OF DISTURBANCE

POST-CONSTRUCTION STORMWATER MANAGEMENT NOTES:

1. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF THE BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
3. BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PENNSYLVANIA ONE CALL SYSTEMS, INC.AT 1-800-242-1776. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
4. CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER MANHOLES, INLETS, AND DETENTION SYSTEMS.
5. AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
6. ALL STORM PIPE SHALL BE HDPE, SMOOTH INTERIOR, CORRUGATED POLYETHYLENE PIPE UNLESS OTHERWISE NOTED. ALL STORM SEWER CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH PENNDOT SPECIFICATIONS. ALL JOINTS SHALL BE WATERTIGHT.
7. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
8. THE CONTRACTOR SHALL ASSURE THAT THERE IS POSITIVE DRAINAGE TO THE INLETS UPON PLACEMENT OF NEW PAVEMENT.

PROJECT AREAS

TOTAL PERMIT AREA = 6.32 ACRES
DISTURBED AREA = 6.32 ACRES

CALL BEFORE YOU DIG !
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE - STOP CALL
Pennsylvania One Call System, Inc.
8-1-1
POCS Serial No. 20142590062

NORTH

GRAPHIC SCALE
0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

PLAN BOOK	PAGE
348	2

RECORDED _____, 20__
PLAN BOOK | PAGE

SHEET 2 OF 2

REVISION RECORD

No	Date
01	2015-01-07 REVISED PER THE BASA REVIEW LETTER DATED 2014-12-19
02	2015-01-23 BID SET
03	2015-03-27 ISSUED FOR CONSTRUCTION
04	-
05	-
06	-
07	-
08	-

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JONATHAN EDWARD GARCZEWSKI
ENGINEER
PE079450

CROSSFIRE EXPANSION
1802 N. MAIN STREET EXT.
BUTLER, PA 16001

PREPARED FOR:
FIRST UNITED METHODIST CHURCH
200 E. NORTH STREET
BUTLER, PA 16001

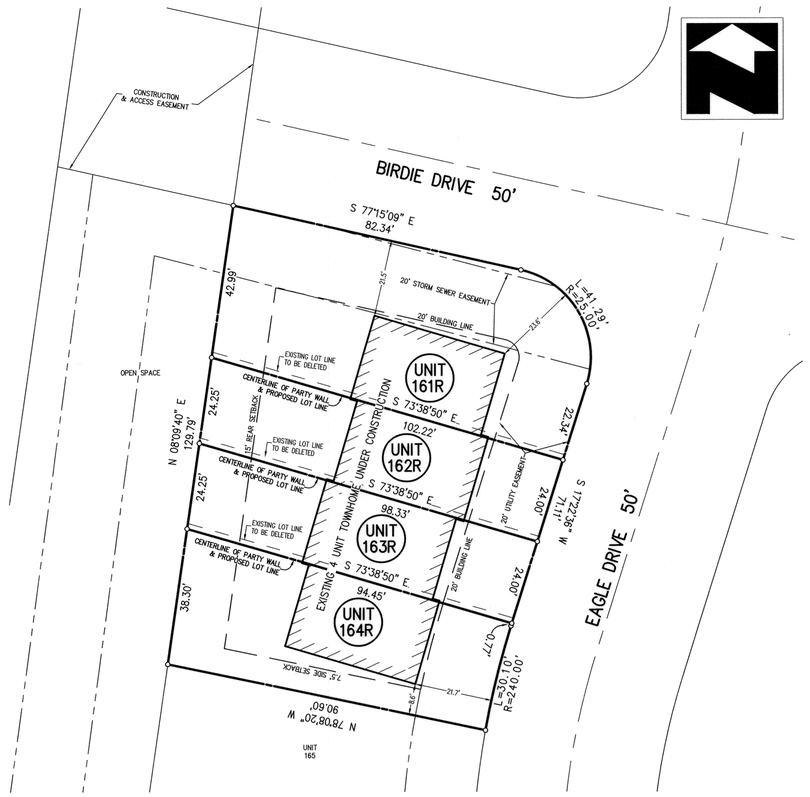
POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN

Project Number: C-18806-0003
Drawing Scale: 1" = 30'
Date Issued: 2014-11-05
Index Number: PENDING
Drawn By: CEMILPWMTT
Checked By: ---
Project Manager: JEG

C702

[Path & Filename=R:\Projects\18000\18806 Crossfire\0003 Expansion LD\Dwg\02-Sheet\18806 C400 & 700_ES & PCSM.dwg
Plot Date=4/13/2015 3:33 PM Lucas P. Wassam
Save Date=4/13/2015 3:51 PM
15.01

Instr 201505190010256 05/15/2015
Pages: 1 F $45.00 8:49AM
Michele Mustello T20150008282
Butler County Recorder FL



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

ZONING INFORMATION:

AFFECTED ZONING DISTRICT:	PRD/R3
PROPOSED USE:	PRD-TOWNHOMES
MINIMUM LOT SIZE:	N/A
MINIMUM LOT WIDTH:	PER RESOLUTION (TOWNHOMES) – 24.00 FEET
MINIMUM FRONT SETBACK:	PER RESOLUTION (TOWNHOMES) – 20.00 FEET
MINIMUM REAR SETBACK:	PER RESOLUTION – 10.00 FEET
MINIMUM SIDE SETBACK:	PER RESOLUTION – 7.5 FEET

GENERAL PLAN NOTES:

a. THIS PLAN IS A REVISION TO LOTS 161 – 164 OF THE LINKS OF CRANBERRY TOWNSHIP – DAVIS PRD REVISED PHASE 1 PLAN AS RECORDED IN PLAN BOOK 343, PAGES 48-50.

b. THE PURPOSE OF THIS PLAN IS TO REVISE THE LOT LINES TO ALIGN WITH THE CENTERS OF THE EXISTING PARTY WALLS AS SHOWN BASED ON THE AS-BUILT CONDITION.

c. THIS PLAN IS SUBJECT TO ANY AND ALL CONDITIONS OF THE PREVIOUSLY APPROVED AND RECORDED PLANS AFFECTING THE SUBJECT PROPERTY.

OWNERSHIP REFERENCE

PROPERTY OWNER: DAN RYAN BUILDERS MID ATLANTIC, INC.
100 EMERSON DRIVE
BRIDGEVILLE, PA 15017

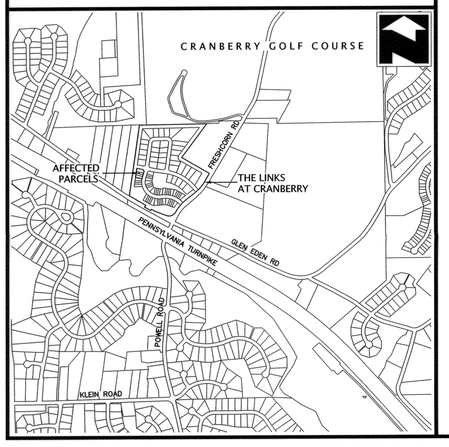
DEED REFERENCE: INSTRUMENT NO. 201501210001351
AFFECTED TAX PARCELS:

LOT 161	130-S42-A161
LOT 162	130-S42-A162
LOT 163	130-S42-A163
LOT 164	130-S42-A164

LOT AREAS:

161	3,176.375 SQ.FT.	0.073 ACRES
162	2,313.358 SQ.FT.	0.053 ACRES
163	2,406.569 SQ.FT.	0.055 ACRES
164	4,710.405 SQ.FT.	0.108 ACRES
TOTAL AREA:	12,606.707 SQ.FT.	0.289 ACRES

LOCATION MAP 1" = 1000'



TOWNSHIP ENGINEER

REGISTERED SURVEYOR

CRANBERRY TWP BOARD OF SUPERVISORS

BUTLER COUNTY PLANNING COMMISSION

BUTLER COUNTY RECORDER OF DEEDS

PLAN BOOK	PAGE
348	3

BUILDER/DEVELOPER:
DAN RYAN BUILDERS

BY RESOLUTION APPROVED ON THE 23rd DAY OF April 2015, THE BOARD OF DIRECTORS OF DAN RYAN BUILDERS MID ATLANTIC, INC, INCORPORATED IN THE STATE OF MARYLAND, OWNER OF THE LAND SHOWN ON THE LINKS OF CRANBERRY AMENDMENT NO. 1 – LOTS 161–164 REVISED ADOPTED THIS PLAN AS ITS PLAN OF LOTS AND IRREVOCABLY DEDICATED ALL STREETS AND OTHER PROPERTY IDENTIFIED FOR DEDICATION THE PLAN TO THE PUBLIC. THIS ADOPTION AND DEDICATION SHALL BE BINDING UPON THE CORPORATION AND UPON ITS SUCCESSORS AND ASSIGNS.

(SEAL)

Kathy Cooper
SIGNATURE AND TITLE OF OFFICER WITNESSING

4/23/2015
DATE

DAN RYAN BUILDERS MID ATLANTIC, INC

SCMPr, Vice President
SIGNATURE AND TITLE OF AUTHORIZED OFFICER

BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA AND COUNTY OF BUTLER, PERSONALLY APPEARED Shawn M Snyder DAN RYAN BUILDERS MID ATLANTIC, INC.. WHO STATED THAT HE IS AUTHORIZED TO EXECUTE THE ABOVE ADOPTION AND DEDICATION ON BEHALF OF THE CORPORATION AND WAS PRESENT AT THE MEETING AT WHICH THE ACTION OF THE CORPORATION WAS TAKEN TO ADOPT THE PLAN AND DEDICATE PUBLIC PROPERTY CONTAINED THEREIN TO THE PUBLIC.

WITNESS MY HAND AND NOTARIAL SEAL THIS 23rd DAY OF April 2015

(SEAL)

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Lori Sue Deal, Notary Public
South Fayette Twp., Allegheny County
My Commission Expires November 04, 2017

NOTARY PUBLIC

I, Shawn M Snyder HEREBY CERTIFY THAT THE TITLE TO THE PROPERTY CONTAINED IN THE LINKS OF CRANBERRY AMENDMENT NO. 1 – LOTS 161–164 REVISED IS IN THE NAME OF DAN RYAN BUILDERS MID ATLANTIC INC., AND IS RECORDED AT INSTRUMENT NO. 201501210001351.

Kathy Cooper
SIGNATURE OF WITNESS

SCMPr, Vice President
SIGNATURE AND TITLE OF AUTHORIZED OFFICER

WE, SUSQUEHANNA BANK MORTGAGEE OF THE PROPERTY SHOWN HEREON, DO HEREBY CERTIFY TO THE RECORDING OF SAID PLAN AND TO THE DEDICATIONS AND ALL OTHER MATTERS APPEARING ON THE PLAN.

Ellen Roberts
SIGNATURE OF WITNESS

Patricia J Bollinger
SIGNATURE OF AUTHORIZED OFFICER

PATRICIA J. BOLLINGER, VP
PRINTED NAME AND TITLE

I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN HEREON ARE CORRECT AND ACCURATE TO THE STANDARDS REQUIRED.

4/9/15
DATE

James A Sperdute
JAMES A. SPERDUTE, R.S. # 24457-E

JASON KRATSAS A REGISTERED PROFESSIONAL ENGINEER, THE TOWNSHIP ENGINEER OF THE TOWNSHIP OF CRANBERRY, DO HEREBY CERTIFY THAT THIS SUBDIVISION PLAN MEETS ALL ENGINEERING AND DESIGN REQUIREMENTS OF THE TOWNSHIP SUBDIVISION AND ZONING ORDINANCE EXCEPT AS DEPARTURES HAVE BEEN AUTHORIZED BY THE APPROVAL AUTHORITY.

5/13/15
DATE

SIGNATURE
REGISTRATION NO. PE071353

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF CRANBERRY BY ORDINANCE/RESOLUION NO. 2015-28 EFFECTIVE THIS 13 DAY OF MAY 20 15

TOWNSHIP MANAGER

CHAIRPERSON

I, JERRY ANDREE, TOWNSHIP MANAGER FOR THE TOWNSHIP OF CRANBERRY CERTIFY THAT THE CONDITIONS FOR FINAL APPROVAL OUTLINED IN ORDINANCE/RESOLUTION NO. 2015-28 HAVE BEEN MET IN ACCORDANCE WITH SECTION 22-305 AND 22-307 OF THE TOWNSHIP CODE OF ORDINANCES OF 4/2/15

TOWNSHIP MANAGER

REVIEWED BY THE BUTLER COUNTY PLANNING COMMISSION ON THIS 12TH DAY OF MARCH 20 15

SECRETARY

CHAIRPERSON

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF THE COUNTY OF BUTLER, COMMONWEALTH OF PENNSYLVANIA, IN PLAN BOOK 348 PAGE 3

GIVEN UNDER MY HAND AND SEAL THIS 16TH DAY OF May 20 15

RECORDER OF DEEDS

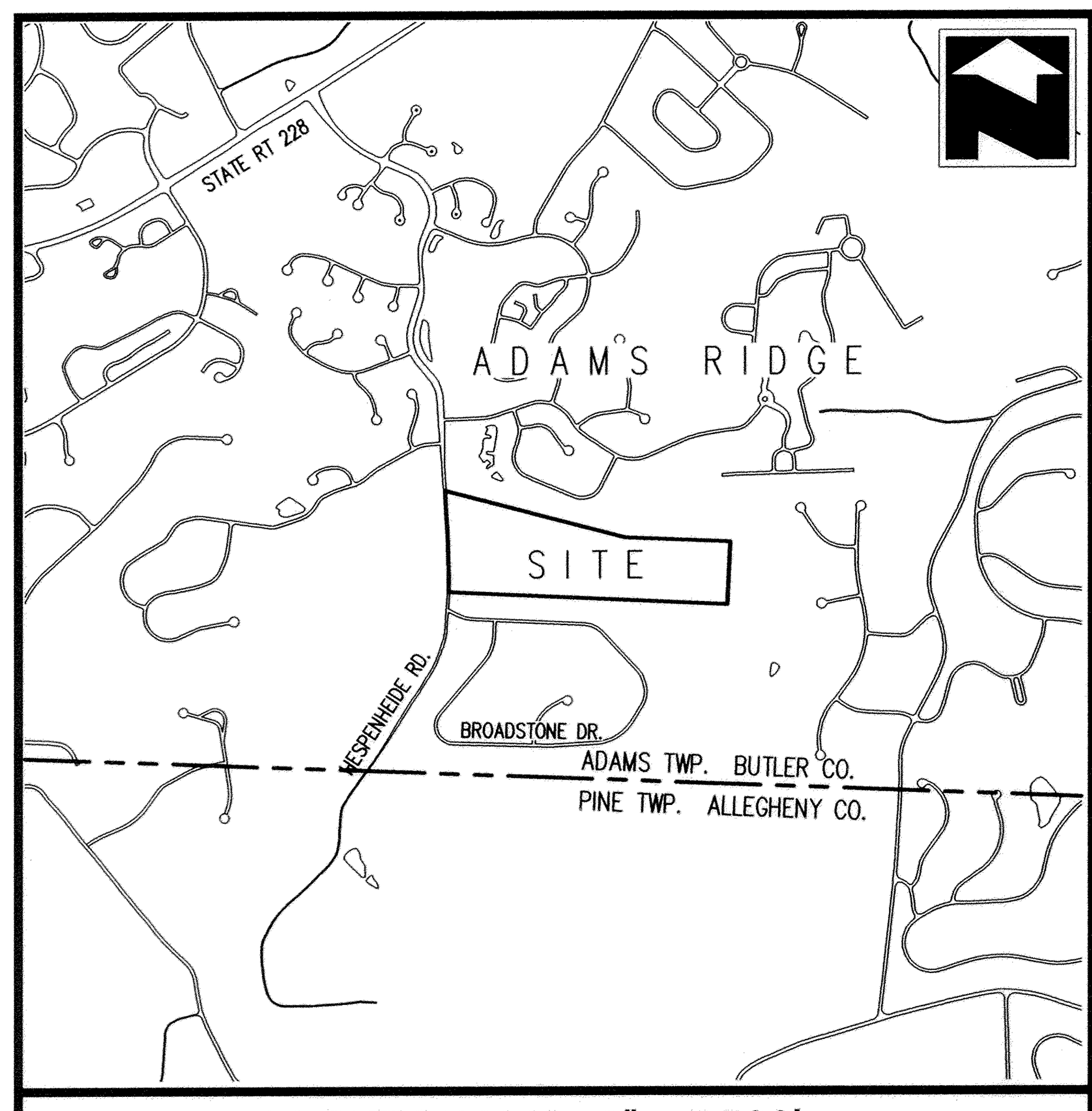
MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

DRAWING NUMBER:	1004-1514763
DRAWING SCALE:	1"=20'
DATE:	MARCH 6, 2015
DRAWN BY:	JSS
REVISIONS:	

THE LINKS OF CRANBERRY AMENDMENT NO. 1 LOTS 161 -164 REVISED

BEING A REVISION TO LOTS 161 – 164 OF THE LINKS OF CRANBERRY – DAVIS PRD REVISED PHASE 1 PRD RECORDING PLAN
CRANBERRY TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

SPERDUTE LAND SURVEYING
SLS
HARMONY, PA
724-452-4362
SLS1@zoominternet.net
CONSULTING LAYOUT • TOPOGRAPHY • LAND DEVELOPMENT SURVEYS



LOCATION MAP 1" = 1500'

PROPERTY OWNER:

LINDA SANTA
248 HESPENHEIDE ROAD
MARS, PA 16046

TAX PARCEL 010-4F37-5B
DEED BOOK 1048, PAGE 645

BEING LOT 2 OF THE SANTA PLAN OF LOTS
PLAN BOOK 212, PAGE 28

MICHAEL J. & LESLIE M. SANTA
211 HESPENHEIDE ROAD
MARS, PA 16046

TAX PARCEL 010-4F37-5BA
INSTRUMENT NO. 201211140032779

BEING LOT 1 OF THE SANTA PLAN OF LOTS
PLAN BOOK 212, PAGE 28

TOTAL PROPERTY AFFECTED 33.546 ACRES

CONTOURS HAVE BEEN TAKEN FROM THE PENNSYLVANIA SPATIAL DATA ACCESS SYSTEM.
VERTICAL DATUM : NAVD88

CURRENT ZONING : R-3 RESIDENTIAL

MINIMUM REQUIREMENTS IN THE R-3 ZONING DISTRICT

- MINIMUM LOT AREA 43,560 SQ.FT. (1 ACRE)
- MINIMUM LOT WIDTH AT FRONT SETBACK 125.00 FEET
- MINIMUM FRONT SETBACK 50.00 FEET
- MINIMUM SIDE SETBACK 15.00 FEET
- MINIMUM REAR SETBACK 25.00 FEET

BOTH CURRENT HOMES HAVE EXISTING SEWAGE AND WATER SERVICE.

LOT 102 WILL BE SERVED BY BREAKNECK CREEK REGIONAL AUTHORITY AND UTILIZE AN ON LOT WELL.

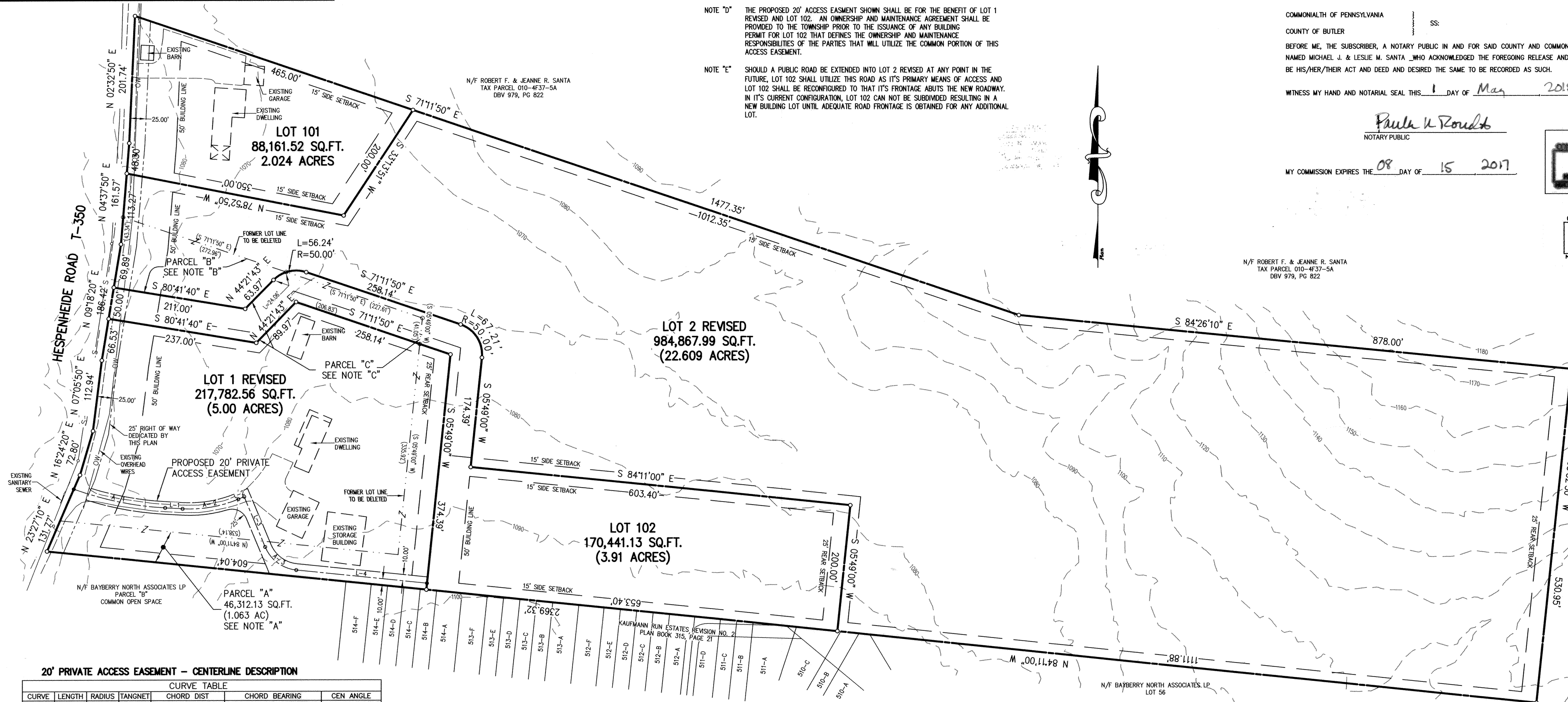
NOTE "A" PARCEL "A", WHICH IS PART OF THE ORIGINAL LOT 2 IS TO BE CONVEYED TO AND BECOME AN INTEGRAL PART OF THE ADJOINING LANDS OF LOT 1 REVISED AND IS NOT TO BE CONSIDERED A SEPARATE BUILDING LOT.

NOTE "B" PARCEL "B", WHICH IS PART OF THE ORIGINAL LOT 1 IS TO BE CONVEYED TO AND BECOME AN INTEGRAL PART OF THE ADJOINING LANDS OF LOT 2 REVISED AND IS NOT TO BE CONSIDERED A SEPARATE BUILDING LOT.

NOTE "C" PARCEL "C", WHICH IS PART OF THE ORIGINAL LOT 1 IS TO BE CONVEYED TO AND BECOME AN INTEGRAL PART OF LOT 102 AND IS NOT TO BE CONSIDERED A SEPARATE BUILDING LOT.

NOTE "D" THE PROPOSED 20' ACCESS EASMENT SHOWN SHALL BE FOR THE BENEFIT OF LOT 1 REVISED AND LOT 102. AN OWNERSHIP AND MAINTENANCE AGREEMENT SHALL BE PROVIDED TO THE TOWNSHIP PRIOR TO THE ISSUANCE OF ANY BUILDING PERMIT FOR LOT 102 THAT DEFINES THE OWNERSHIP AND MAINTENANCE RESPONSIBILITIES OF THE PARTIES THAT WILL UTILIZE THE COMMON PORTION OF THIS ACCESS EASEMENT.

NOTE "E" SHOULD A PUBLIC ROAD BE EXTENDED INTO LOT 2 REVISED AT ANY POINT IN THE FUTURE, LOT 102 SHALL UTILIZE THIS ROAD AS IT'S PRIMARY MEANS OF ACCESS AND LOT 102 SHALL BE RECONFIGURED TO THAT IT'S FRONTAGE ABUTS THE NEW ROADWAY. IN IT'S CURRENT CONFIGURATION, LOT 102 CAN NOT BE SUBDIVIDED RESULTING IN A NEW BUILDING LOT UNTIL ADEQUATE ROAD FRONTAGE IS OBTAINED FOR ANY ADDITIONAL LOT.



20' PRIVATE ACCESS EASEMENT – CENTERLINE DESCRIPTION

CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGNET	CHORD DIST	CHORD BEARING	CEN ANGLE
A- 1	148.66'	500.00'	74.88'	148.11'	S78°16'58"E	17°02'07"
A- 2	90.37'	200.00'	45.97'	89.61'	N80°15'16"E	25°53'24"
A- 3	64.40'	60.00'	35.69'	61.35'	S53°26'13"E	61°29'34"

LINE TABLE		
LINE	LENGTH	BEARING
L-1	27.59'	S 86°48'02" E
L-2	10.00'	N 67°18'34" E
L-3	86.03'	S 22°41'26" E
L-4	207.78'	S 84°11'00" E

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

KNOW ALL MEN BY THESE PRESENTS THAT WE, MICHAEL J. & LESLIE M. SANTA OF THE TOWNSHIP OF ADAMS, COUNTY OF BUTLER, COMMONIALTH OF PENNSYLVANIA FOR OURSELVES, OUR HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS, DO HEREBY ADOPT THIS AS OUR PLAN OF SUBDIVISION OF OUR PROPERTY SITUATE IN THE TOWNSHIP OF ADAMS, COUNTY OF BUTLER, COMMONIALTH OF PENNSYLVANIA, AND FOR DIVERS ADVANTAGES ACCRUING TO US, DO HEREBY DEDICATE FOREVER, FOR PUBLIC USE FOR HIGHWAY, DRAINAGE, SEWAGE AND UTILITY PURPOSES, ALL DRIVES, ROADS, LANDS, RIGHTS OR WAY, EASEMENTS, WAYS, AND OTHER PUBLIC HIGHWAYS SHOWN UPON THE PLAN, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN OPENED THROUGH LEGAL PROCEEDINGS AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAN AND ANY FUTURE ACCEPTANCE OF SAID PUBLIC HIGHWAYS, RIGHTS OF WAY AND EASEMENTS BY THE TOWNSHIP OF ADAMS, WE, MICHAEL J. & LESLIE M. SANTA HEREBY AGREE TO AND BY THESE PRESENTS DO RELEASE AND FOREVER DISCHARGE THE TOWNSHIP OF ADAMS, ITS SUCCESSORS OR ASSIGNS FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS, AND OTHER PUBLIC USES AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON MICHAEL J. & LESLIE M. SANTA OUR HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND PURCHASERS OF LOTS IN THIS PLAN.

IN WITNESS WHEREOF,I HEREUNTO SET OUR HANDS AND SEALS THIS 1 DAY OF May, 2015.

ATTEST:

MICHAEL J. SANTA LESLIE M. SANTA

THE FOREGOING ADOPTION IS MADE BY MICHAEL J. & LESLIE M. SANTA WITH THE FULL UNDERSTANDING AND AGREEMENT THAT THE APPROVAL OF THE TOWNSHIP BOARD OF SUPERVISORS OF ADAMS TOWNSHIP, IF ATTACHED HERETO, WILL BECOME NULL AND VOID UNLESS THIS PLAN IS RECORDED IN THE RECORDER OF DEEDS OFFICE OF BUTLER COUNTY WITHIN NINETY (90) DAYS OF SAID APPROVAL.

I ALSO CERTIFY THAT THE TITLE TO OUR PROPERTY AS SHOWN HEREON IS IN THE NAME OF MICHAEL J. & LESLIE M. SANTA AS RECORDED IN THE BUTLER COUNTY RECORDER OF DEEDS OFFICE AT INSTRUMENT NO. 201211140032779.

MICHAEL J. SANTA LESLIE M. SANTA

COMMONIALTH OF PENNSYLVANIA } SS:
COUNTY OF BUTLER }

BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND COMMONIALTH, PERSONALLY APPEARED THE ABOVE NAMED MICHAEL J. & LESLIE M. SANTA WHO ACKNOWLEDGED THE FOREGOING RELEASE AND DEDICATION AND PLAN OF SUBDIVISION TO BE HIS/HER/THEIR ACT AND DEED AND DESIRED THE SAME TO BE RECORDED AS SUCH.

WITNESS MY HAND AND NOTARIAL SEAL THIS 1 DAY OF May, 2015

NOTARY PUBLIC

MY COMMISSION EXPIRES THE 08 DAY OF 15, 2017.

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Paula K. Rouda, Notary Public
Adams Twp., Butler County
My Commission Expires Aug. 15, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

KNOW ALL MEN BY THESE PRESENTS THAT I, LINDA SANTA OF THE TOWNSHIP OF ADAMS, COUNTY OF BUTLER, COMMONIALTH OF PENNSYLVANIA FOR OURSELVES, OUR HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS, DO HEREBY ADOPT THIS AS MY PLAN OF SUBDIVISION OF OUR PROPERTY SITUATE IN THE TOWNSHIP OF ADAMS, COUNTY OF BUTLER, COMMONIALTH OF PENNSYLVANIA, AND FOR DIVERS ADVANTAGES ACCRUING TO US, DO HEREBY DEDICATE FOREVER, FOR PUBLIC USE FOR HIGHWAY, DRAINAGE, SEWAGE AND UTILITY PURPOSES, ALL DRIVES, ROADS, LANDS, RIGHTS OR WAY, EASEMENTS, WAYS, AND OTHER PUBLIC HIGHWAYS SHOWN UPON THE PLAN, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN OPENED THROUGH LEGAL PROCEEDINGS AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAN AND ANY FUTURE ACCEPTANCE OF SAID PUBLIC HIGHWAYS, RIGHTS OF WAY AND EASEMENTS BY THE TOWNSHIP OF ADAMS, I, LINDA SANTA HEREBY AGREE TO AND BY THESE PRESENTS DO RELEASE AND FOREVER DISCHARGE THE TOWNSHIP OF ADAMS, ITS SUCCESSORS OR ASSIGNS FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS, AND OTHER PUBLIC USES AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON LINDA SANTA OUR HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND PURCHASERS OF LOTS IN THIS PLAN.

IN WITNESS WHEREOF,I HEREUNTO SET OUR HANDS AND SEALS THIS 1 DAY OF MAY 2015.

ATTEST:

LINDA SANTA

THE FOREGOING ADOPTION IS MADE BY LINDA SANTA WITH THE FULL UNDERSTANDING AND AGREEMENT THAT THE APPROVAL OF THE TOWNSHIP BOARD OF SUPERVISORS OF ADAMS TOWNSHIP, IF ATTACHED HERETO, WILL BECOME NULL AND VOID UNLESS THIS PLAN IS RECORDED IN THE RECORDER OF DEEDS OFFICE OF BUTLER COUNTY WITHIN NINETY (90) DAYS OF SAID APPROVAL.

I ALSO CERTIFY THAT THE TITLE TO OUR PROPERTY AS SHOWN HEREON IS IN THE NAME OF LINDA SANTA AS RECORDED IN THE BUTLER COUNTY RECORDER OF DEEDS OFFICE AT DEED BOOK 1048, PAGE 645.

LINDA SANTA

COMMONIALTH OF PENNSYLVANIA } SS:
COUNTY OF BUTLER }

BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND COMMONIALTH, PERSONALLY APPEARED THE ABOVE NAMED LINDA SANTA WHO ACKNOWLEDGED THE FOREGOING RELEASE AND DEDICATION AND PLAN OF SUBDIVISION TO BE HIS/HER/THEIR ACT AND DEED AND DESIRED THE SAME TO BE RECORDED AS SUCH.

WITNESS MY HAND AND NOTARIAL SEAL THIS 1 DAY OF May 2015

NOTARY PUBLIC

MY COMMISSION EXPIRES THE 08 DAY OF 15 2017.

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Paula K. Rouda, Notary Public
Adams Twp., Butler County
My Commission Expires Aug. 15, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF ADAMS HEREBY GIVES PUBLIC NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING PURPOSES ONLY, THE TOWNSHIP OF ADAMS ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESSED OR IMPLIED EITHER TO ACCEPT SAID STREETS AS TOWNSHIP STREETS OR ROADS OR GRADE, PAVE AND CURB THE STREETS IN SAID PLAN, OR TO CONSTRUCT SEWERS THEREIN OR TO INSTALL ANY OTHER SUCH SERVICE ORDINARILY INSTALLED IN TOWNSHIP STREETS OR ROADS.

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF ADAMS THIS 27th DAY OF April 2015

SECRETARY, ADAMS TOWNSHIP SUPERVISORS ADAMS TOWNSHIP SUPERVISOR

CHAIRMAN, ADAMS TOWNSHIP SUPERVISORS ADAMS TOWNSHIP SUPERVISOR

ADAMS TOWNSHIP SUPERVISOR

APPROVED BY THE ADAMS TOWNSHIP PLANNING COMMISSION THIS 1 DAY OF April 2015

SECRETARY, ADAMS TWP. PLANNING COMM. CHAIRPERSON, ADAMS TWP. PLANNING COMM.

I, JAMES A SPERDUTE, PLS PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE,INFORMATION AND BELIEF, THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS, AND HIGHWAYS AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

DATE 4/28/15

JAMES A. SPERDUTE, R.S. # 24457-E

I, RONALD OLSEN, A REGISTERED PROFESSIONAL ENGINEER FOR THE TOWNSHIP OF ADAMS, DO HEREBY CERTIFY THAT THIS SUBDIVISION PLAN MEETS ALL THE ENGINEERING AND DESIGN REQUIREMENTS OF THE ADAMS TOWNSHIP SUBDIVISION AND ZONING ORDINANCES.

DATE 5-6-15 REG # 26400E

REVIEWED BY THE BUTLER COUNTY PLANNING COMMISSION THIS 18TH DAY OF FEB 2015

SECRETARY, BUTLER CO. PLANNING CHAIRPERSON, BUTLER CO. PLANNING

COMMONWEALTH OF PENNSYLVANIA)
)SS:
COUNTY OF BUTLER)

RECORDED IN THE RECORDERS OFFICE FOR THE RECORDING OF DEEDS, PLANS, ETC IN SAID COUNTY IN PLAN BOOK VOLUME 348, PAGE 4.

GIVEN UNDER MY HAND AND SEAL THIS 15 DAY OF May, 2015

BUTLER COUNTY RECORDER OF DEEDS

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

REGISTERED SURVEYOR | TOWNSHIP ENGINEER | ADAMS TWP PLANNING COMMISSION | ADAMS TWP BOARD OF SUPERVISORS | BUTLER COUNTY PLANNING COMMISSION | BUTLER COUNTY RECORDER OF DEEDS

Instr:201505150010267 05/15/2015
Pages:1 F:$45.00 9:34AM
Michele Mustello T20150008291
Butler County Recorder FL

PLAN BOOK	PAGE
348	4

811 Know what's below Call before you dig.

DRAWING NUMBER:	1001-1313372
DRAWING SCALE:	1"=100'
DATE:	FEBRUARY 2, 2015
DRAWN BY:	JSS
REVISIONS:	
03/20/2015....PER TWP. REVIEW	
04/28/2015...ADD OWNERS INFO	

PLAN OF SUBDIVISION FOR:

THE SANTA PLAN OF LOTS NUMBER 2

BEING A REVISION AND SUBDIVISION OF LOTS 1 & 2 OF THE SANTA PLAN NO. 1
RECORDED AT PLAN BOOK 212, PAGE 28
ADAMS TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

SPERDUTE LAND SURVEYING SLS HARMONY, PA 724-452-4362 SLS1@zoominternet.net

INDIVIDUAL ADOPTION

KNOW ALL MEN BY THESE PRESENTS, THAT OR CHARLES J. VRABEL, PRESIDENT OF BRICKYARD PARK HOLDINGS LLC, OF THE TOWNSHIP OF WEST DEER COUNTY OF ALLEGHENY STATE OF PENNSYLVANIA FOR MYSELF MY HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS, DO HEREBY ADOPT THIS AS MY PLAN OF SUBDIVISION OF MY PROPERTY, SITUATE IN THE TOWNSHIP OF ADAMS, COUNTY OF BUTLER, COMMONWEALTH OF PENNSYLVANIA, AND FOR DIVERS ADVANTAGES ACCRUING TO ME, DO HEREBY DEDICATE FOREVER, FOR PUBLIC USE FOR HIGHWAY, DRAINAGE, SEWAGE AND UTILITY PURPOSES, ALL DRIVES, ROADS, LANDS, RIGHTS-OF-WAY, EASEMENTS, WAYS AND OTHER PUBLIC HIGHWAYS SHOWN UPON THE PLAN, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN OPENED THROUGH LEGAL PROCEEDINGS AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAN AND ANY FUTURE ACCEPTANCE OF SAID PUBLIC HIGHWAYS, RIGHTS-OF-WAY AND EASEMENTS BY THE TOWNSHIP OF ADAMS, I, CHARLES J. VRABEL, OWNER HEREBY AGREE TO AND BY THESE PRESENTS DO RELEASE AND FOREVER DISCHARGE THE TOWNSHIP OF ADAMS, ITS SUCCESSORS OR ASSIGNS FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS, AND OTHER PUBLIC USES AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON CHARLES J. VRABEL JR., PRESIDENT OF CHASE V. HOLDINGS LLC, MY HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND PURCHASERS OF LOTS IN THIS PLAN.

IN WITNESS WHEREOF, I HEREUNTO SET MY HAND AND SEAL THIS 3rd DAY OF November A.D. 2014.

ATTEST:

Rebecca C Dewey — NOTARY PUBLIC   Charles J Vrabel — PRESIDENT

MY COMMISSION EXPIRES THE 3rd DAY OF February A.D., 2016.

THE FOREGOING ADOPTION AND DEDICATION IS MADE BY CHARLES J. VRABEL, PRESIDENT OF BRICKYARD PARK HOLDINGS LLC, WITH THE FULL UNDERSTANDING AND AGREEMENT THAT THE APPROVAL OF THE TOWNSHIP BOARD OF SUPERVISORS OF THE TOWNSHIP OF ADAMS, IF HERETO ATTACHED, WILL BECOME NULL AND VOID UNLESS THIS PLAN IS RECORDED IN THE RECORDER OF DEEDS OFFICE OF BUTLER COUNTY, COUNTY COURT HOUSE, BUTLER, PENNSYLVANIA, WITHIN NINETY (90) DAYS OF DATE OF SAID APPROVAL.

Charles J Vrabel — PRESIDENT

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Rebecca C. Dewey, Notary Public
West Deer Twp., Allegheny County
My Commission Expires Feb. 3, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

INDIVIDUAL ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA } SS:
COUNTY OF ~~BUTLER~~ Allegheny }

BEFORE ME. THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND COMMONWEALTH, PERSONALLY APPEARED THE ABOVE NAMED CHARLES J. VRABEL, PRESIDENT OF BRICKYARD PARK HOLDINGS LLC, WHO ACKNOWLEDGED THE FOREGOING RELEASE AND DEDICATION AND PLAN OF SUBDIVISION TO BE HIS, ACT AND DEED AND DESIRED THE SAME TO RECORDED AS SUCH: WITNESS MY HAND AND NOTARIAL SEAL THIS 3rd DAY OF November, 2014.

Rebecca C Dewey — NOTARY PUBLIC

MY COMMISSION EXPIRES THE 3rd DAY OF February 2016.

OWNERS ACCEPTANCE OF RESPONSIBILITY FOR PROVIDED STORMWATER DRAINAGE FACILITIES AND CONTROL OF STORMWATER DRAINAGE

KNOW ALL MEN BY THESE PRESENTS, THAT I, CHARLES J. VRABEL, PRESIDENT OF BRICKYARD PARK HOLDINGS LLC,, OF THE TOWNSHIP OF WEST DEER, COUNTY OF ALLEGHENY, COMMONWEALTH OF PENNSYLVANIA, FOR OURSELVES, OUR HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS, AND FOR OUR GRANTEES AND THEIR SUBSEQUENT PURCHASERS, DO HEREBY ACCEPT FULL AND COMPLETE RESPONSIBILITY, LIABILITY, EXPENSE AND PROVISION OF FACILITIES FOR THE CONTROL OF STORMWATER DRAINAGE OVER, ACROSS AND THROUGH THIS LAND DEVELOPMENT PLAN UNTIL SUCH TIME AS, MY HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS CONSTRUCT STORMWATER DRAINAGE FACILITIES IN ACCORDANCE WITH TOWNSHIP'S SPECIFICATIONS AND REQUIREMENTS AND THE SAME IS OFFICIALLY ACCEPTED BY ACTION OF THE TOWNSHIP BOARD OF SUPERVISORS, ADAMS TOWNSHIP, AND UNTIL SUCH FORMAL ACCEPTANCE I FOR OURSELVES, OUR HEIRS, EXECUTORS, ADMINISTRATORS, AND ASSIGNS DO HEREBY RELEASE THE TOWNSHIP OF ADAMS FROM ANY RESPONSIBILITY IN CONNECTION THEREWITH. THIS ACCEPTANCE OF RESPONSIBILITY SHALL BE BINDING UPON OUR HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS, AND ALL PURCHASERS OF LOTS IN THIS PLAN OF SUBDIVISION.

IN WITNESS WHEREOF, WE HEREUNTO SET OUR HANDS AND SEALS THIS 3rd DAY OF November A.D. 2014.

Charles J Vrabel — OWNER

WITNESS MY HAND AND NOTARIAL SEAL THIS 3rd DAY OF November A.D., 2014.

Rebecca C Dewey — (NOTARY PUBLIC)

MY COMMISSION EXPIRES THE 3rd DAY OF February A.D., ~~2014.~~ 2016

TOWNSHIP PLANNING APPROVAL

THIS PLAT OF LAND DEVELOPMENT HAS BEEN APPROVED BY THE PLANNING COMMISSION OF THE TOWNSHIP OF ADAMS, BUTLER COUNTY, PENNSYLVANIA, THIS 4th DAY OF December, ~~2014.~~ 2013

SECRETARY   PRESIDENT

APPROVAL BY TOWNSHIP OF ADAMS

THE TOWNSHIP BOARD OF SUPERVISORS OF THE TOWNSHIP OF ADAMS, BUTLER COUNTY, PENNSYLVANIA, HEREBY GIVES PUBLIC NOTICE THAT IT IS APPROVING THIS PLAN OF LAND DEVELOPMENT FOR RECORDING PURPOSES ONLY. THE APPROVAL OF THIS LAND DEVELOPMENT PLAN BY THE TOWNSHIP OF ADAMS DOES NOT CONSTITUTE AN ACCEPTANCE OF THE ROADS, STREETS, ALLEYS, STORMWATER AND SANITARY SEWAGE DRAINAGE FACILITIES, EASEMENTS OR RIGHTS-OF-WAY, WATER MAINS OR ANY OTHER SERVICES OR IMPROVEMENTS SHOWN ON THIS PLAN NOR AN ASSUMPTION OF MAINTENANCE RESPONSIBILITY, NOR WILL THE SAME BE ACCEPTED OR MAINTAINED UNTIL CONSTRUCTED IN ACCORDANCE WITH ALL TOWNSHIP SPECIFICATIONS AND REQUIREMENTS AND OFFICIALLY ACCEPTED BY ACTION OF THE TOWNSHIP BOARD OF SUPERVISORS.

THIS PLAT OF SUBDIVISION APPROVED BY RESOLUTION OF THE TOWNSHIP BOARD OF SUPERVISORS OF THE TOWNSHIP OF ADAMS, BUTLER COUNTY. PENNSYLVANIA ON THIS 9th DAY OF December, A.D. ~~2014.~~ 2013.

ATTEST:

Janet L Lukhart — (SECRETARY OF BOARD OF SUPERVISORS)   Donald E. Aiken — (CHAIRMAN OF BOARD OF SUPERVISORS)   Thomas J Franceschini — ADAMS BOARD

ADAMS BOARD   ADAMS BOARD   Edward L Vogel — ADAMS BOARD

PROFESSIONAL LAND SURVEYOR CERTIFICATE

I, MARK B. SCHMIDT A PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN SHOWN HEREON IS BASED UPON ACTUAL FIELD SURVEY OF THE LAND DESCRIBED AND THAT ALL ANGLES, DISTANCES, AND COURSES ARE CORRECTLY SHOWN, THAT THE MONUMENTS AND MARKERS AS SHOWN ON THE PLAT HAVE BEEN, OR WILL BE SET, AND TO THE BEST OF MY KNOWLEDGE, THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS, AND HIGHWAYS AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

MARK B. SCHMIDT   SU-036950-E (REGISTRATION NO.)   8/19/2014 (DATE)

TOWNSHIP ENGINEERS APPROVAL

APPROVED BY THE TOWNSHIP ENGINEER OF ADAMS TOWNSHIP, THIS 10 DAY OF April A.D. ~~2014~~ 2015.

SIGNATURE   26400 E (REGISTRATION NO.)

BUTLER COUNTY PLANNING COMMISSION REVIEW

REVIEWED WITH COMMENTS BY THE BUTLER COUNTY PLANNING COMMISSION. LETTER TO ADAMS TOWNSHIP BOARD OF SUPERVISORS DATED 2-19, 2014.

~~EXECUTIVE DIRECTOR~~ SEC   CHAIR.

PROOF OF RECORDING

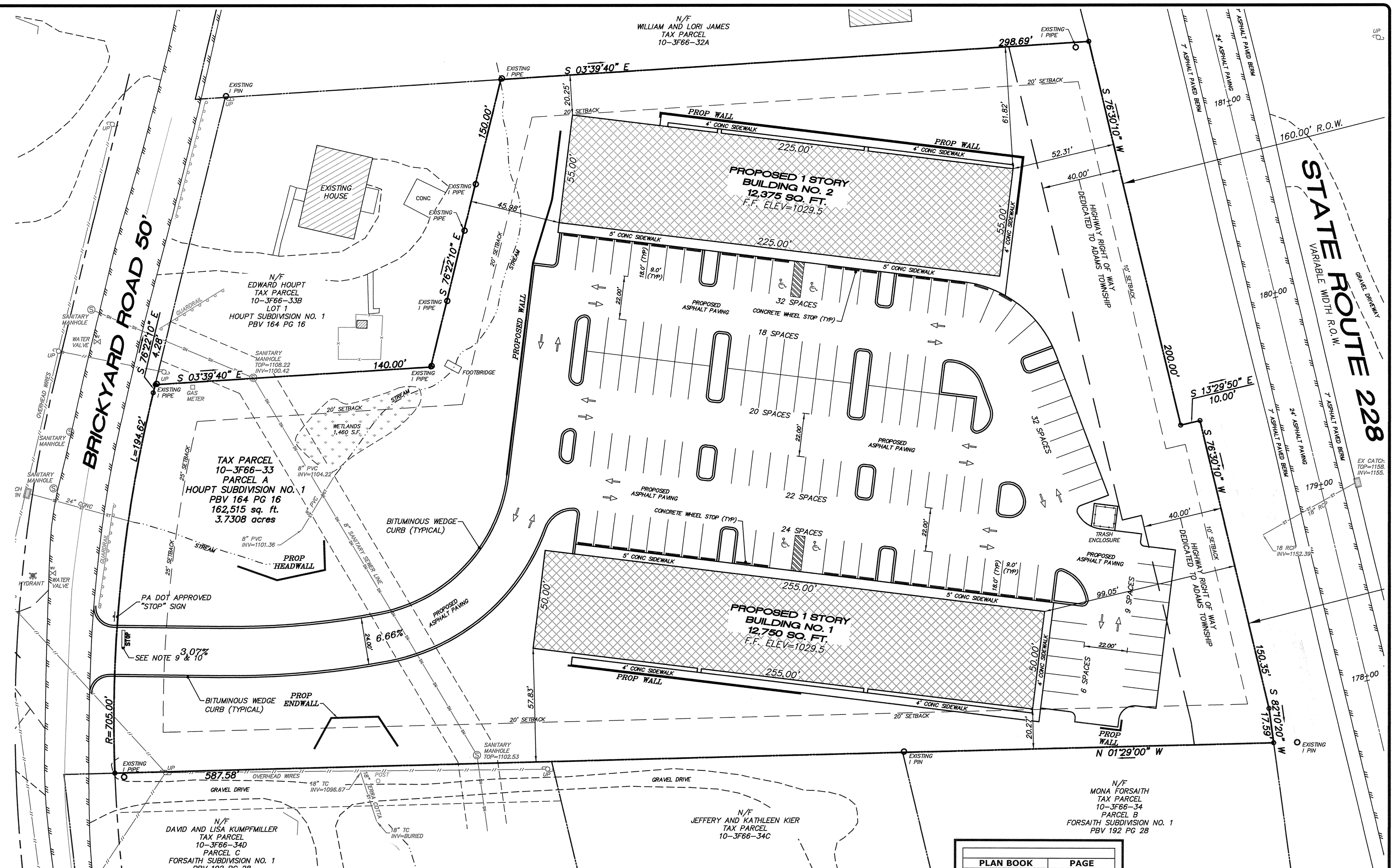
COMMONWEALTH OF PENNSYLVANIA } SS
COUNTY OF BUTLER }

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, PLATS, ETC., IN SAID COUNTY, IN PLAN BOOK VOLUME 348 PAGE(S) 5

GIVEN UNDER MY HAND AND SEAL THIS 18th DAY OF May A.D. ~~2014~~ 2015

Michele M Mustello — RECORDER OF DEEDS

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016



ZONING = T-3 TRANSITIONAL OVERLAY	
SITE DESIGN STANDARDS	
	TRANSITIONAL
PRIMARY ACCESS	PUBLIC ACCESS ROAD
MINIMUM LOT AREA	NO MINIMUM
MINIMUM LOT WIDTH	NO MINIMUM
MINIMUM BUILDING SETBACKS	
BUILDING SETBACK FROM PROPERTY LINE PARALLEL WITH ROUTE 228 RIGHT-OF-WAY (FEET)	10
SIDE YARD SETBACK (FEET)	20
REAR SETBACK FROM ACCESS RIGHT-OF-WAY (FEET)	25
REAR PROPERTY LINE (FEET)	15
EDGE OF PAVED SURFACE TO PROPERTY LINE (SIDE AND REAR YARDS) (FEET)	10
MINIMUM ACCESS ROAD RIGHT-OF-WAY (INCLUDING BUFFERYARD) (FEET)	85
MINIMUM RIGHT-OF-WAY WITH BUFFERYARD, NO ACCESS ROAD (FEET)	40
MAXIMUM IMPERVIOUS COVERAGE	
WITHOUT GRADING OPTION	60%
WITH GRADING OPTION	70%

BUILDING APPEARANCE	
	TRANSITIONAL
PLAIN CONCRETE BLOCK, COMPOSITION BOARD SIDING PROHIBITED	
WALL MATERIALS	STONE, WOOD, BRICK, METAL
ROOFLINE	GABLE, HIPPED, GAMBREL, MANSARD
BUILDING HEIGHT	3 STORIES
WALL DELINEATION, MAXIMUM CONTINUOUS MATERIAL	LESS THAN 6,000 SQUARE FEET; ONE MATERIAL
WALL DELINEATION, MAXIMUM CONTINUOUS MATERIAL	6,000 SQUARE FEET OR GREATER – TWO MATERIALS; 20%
STRUCTURAL LAYOUTS, GENERAL (SEE 192-47A)	ALL STRUCTURES REGARDLESS OF SIZE

PARKING TABULATION
SPECIALTY RETAIL – 1 SPACE PER 200 SQUARE FEET OFFICE SPACE – 1 SPACE PER 250 SQUARE FEET
PROPOSED BUILDING 1 – 12,750 SQUARE FEET PROPOSED BUILDING 2 – 12,375 SQUARE FEET TOTAL BUILDING AREA – 25,125 SQUARE FEET
SPACES REQUIRED PER SPECIALTY RETAIL = 126
SPACES PROVIDED = 131

Instr:201505180010437 05/18/2015
Pages:1 F:$45.00 10:36AM
Michele Mustello T20150008425
Butler County Recorder FL

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

STATE PLANE SOUTH

ISSUES & REVISIONS				
NO.	DESCRIPTION	DATE	DR.	CH.
1	REVISIONS PER ENG. REVIEW LTR	11-14-13	J.N.	C.S.
2	REV OWNER NAME	8-19-14	J.N.	C.S.

MAXIMUM IMPERVIOUS COVERAGE	
WITHOUT GRADING OPTION	60%
WITH GRADING OPTION	70%
PROPOSED IMPERVIOUS COVERAGE	51.13%

PERMITTED USE = SPECIALTY RETAIL:
PROPOSED USE = SPECIALTY RETAIL
PERMITTED USE = OFFICE
PROPOSED USE = OFFICE

REAPPROVAL BY TOWNSHIP OF ADAMS

THIS SITE PLAN PLAT WAS REAPPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF ADAMS, BUTLER COUNTY, PENNSYLVANIA ON THIS 27th DAY OF April, 20~~14~~15

Janet L Lukhart — (SECRETARY OF BOARD OF SUPERVISORS)   Donald E. Aiken — (CHAIRMAN OF BOARD OF SUPERVISORS)   Thomas J Franceschini — ADAMS BOARD

ADAMS BOARD   ADAMS BOARD   Edward L Vogel — ADAMS BOARD

PLAN BOOK	PAGE
348	5

NOTES:

1. OWNER/DEVELOPER
CHARLES J. VRABEL
13 DEWEY LANE
GIBSONIA, PA 15044

2. MATERIALS AND METHODS ARE TO CONFORM WITH CONSTRUCTION STANDARDS, OF TOWNSHIP OF ADAMS, BUTLER COUNTY PA.

3. ALL UTILITIES TO BE INSTALLED IN ACCORDANCE TO THE UTILITY COMPANY STANDARDS.

4. PROPOSED DRIVEWAY TO BE INSTALLED IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION STANDARDS.

5. CONTRACTOR TO FURNISH WALL DESIGN SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER PRIOR TO CONSTRUCTION FOR ANY WALL OVER 4' IN HEIGHT.

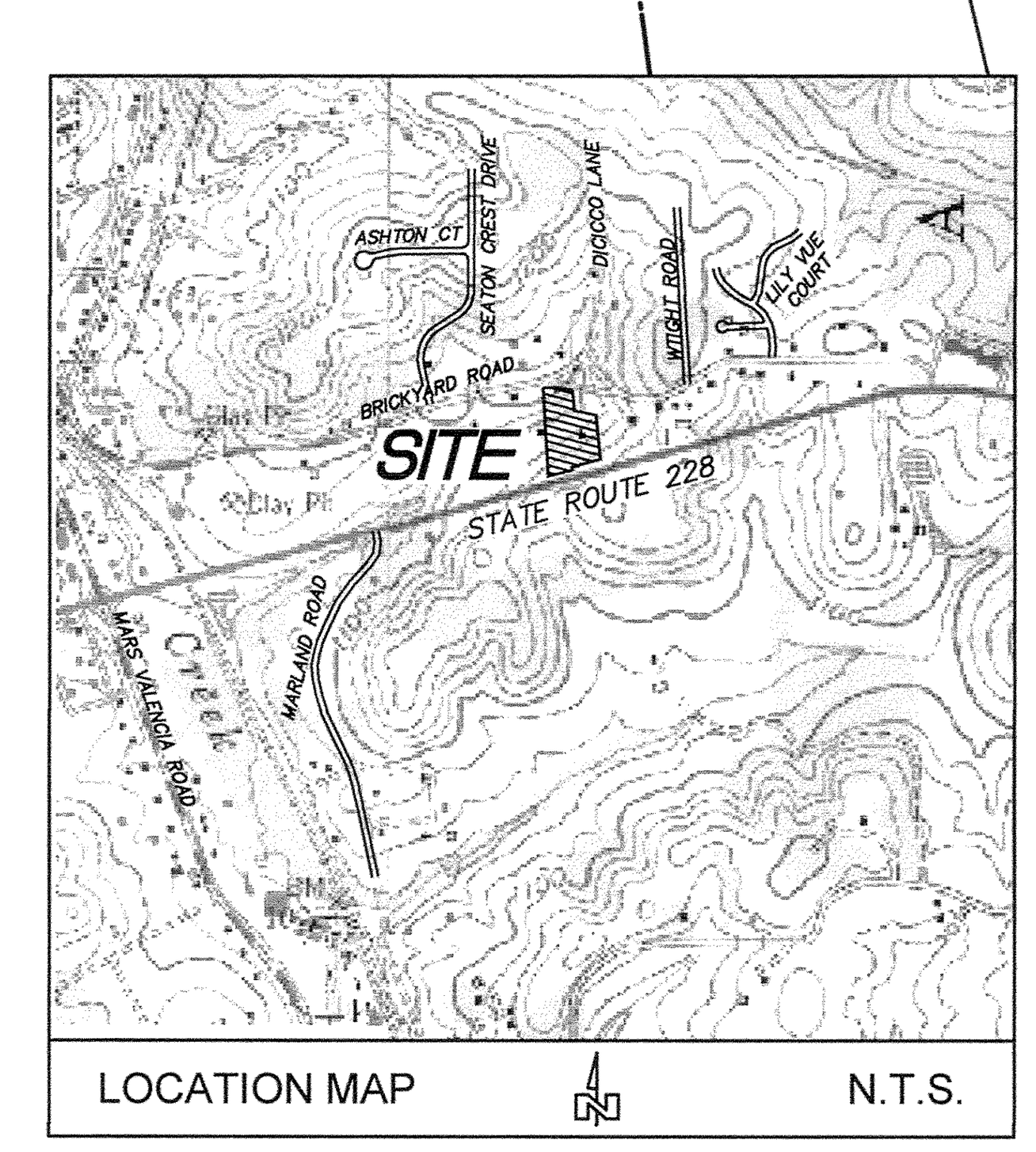
6. FENCING OR AN OTHER TYPE OF PROTECTIVE BARRIER SHALL BE INSTALLED ON TOP OF THE PROPOSED WALL THAT EXCEEDS 6' IN HEIGHT.

7. A PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION/ARMY CORPS OF ENGINEERS PERMIT MUST BE OBTAINED FOR THE PROPOSED CULVERT INSTALLATION.

8. DIRECTIONAL PAVEMENT PAINTING TO BE YELLOW.

9. STOP BARS TO BE 18" WIDE BY LANE WIDTH.

10. PAVEMENT PARKING PAINTING TO BE WHITE WITH 5" MINIMUM WIDTH



LOCATION MAP N.T.S.

RECORDER OF DEEDS BUTLER COUNTY, PA — RECORDER OF DEEDS

BUTLER COUNTY PLANNING — BUTLER PLANNING

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — MARK B. SCHMIDT — LAND SURVEYOR 36950-E

HAMPTON TECHNICAL ASSOCIATES, INC.
ENGINEERING LAND SURVEYORS
ESTABLISHED 1960
www.Hampton-Technical.com
email@hampton-technical.com

☒ Corporate Office
Etna Technical Center
35 Wilson Street, Suite 201
Pittsburgh, PA 15223
PHONE: (412) 781-9660
FAX: (412) 781-5904

☐ Mars Office
123 Ridge Road, Suite B
Valencia, PA 16059
PHONE: (724) 625-4544
FAX: (724) 625-4549

DRAWN BY:	J.N.
CHECKED BY:	M.B.S.
APPROVED BY:	M.B.S.
CAD FILE:	12-9873.dwg

TITLE: BRICKYARD PARK HOLDINGS NO. 4
RECORDED SITE PLAN
ADAMS TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

CLIENT: CHARLES J. VRABEL
13 DEWEY LANE
GIBSONIA, PA 15044

DATE ISSUED:	6-25-13
HORIZONTAL SCALE:	1"=30'
VERTICAL SCALE:	
SHEET:	C-3
HTA PROJECT #:	12-9873

Z:\PROJECTS\14-XXXX Jobs\14-9800 Jobs\14-9873\Dwg\13-9873.dwg, REC SITE PLAN C-3, 8/19/2014 11:00 AM, Jerry Nist

NOTE: THIS MAP MAY NOT SHOW ALL UTILITIES, EASEMENTS AND RIGHTS OF WAY.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE--STOP CALL
PA1 SYSTEM, INC. 1-800-242-1776
POCS SERIAL NUMBER _____

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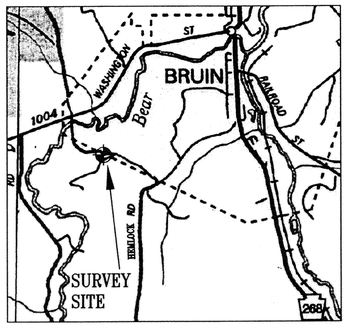
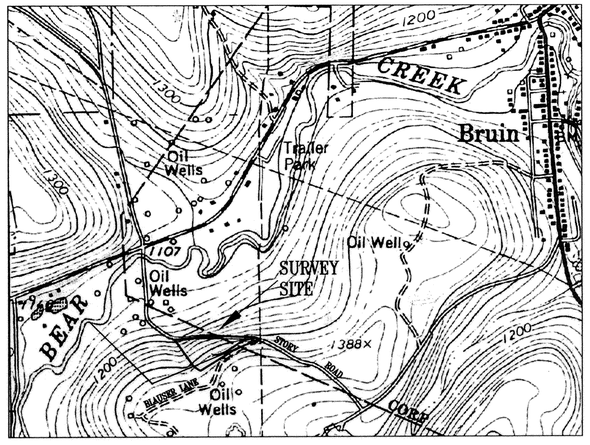


REFERENCES: DEEDS OF RECORD; PARKER TOWNSHIP ASSESSMENT MAP;
SURVEY MAP DATED 03/14/2008 BY JOHN E. DUSHECK, PLS OF MAP #260-1F53-13F;
MAP DATED 11/20/1991 BY LOUIS R. TROUT, PLS OF PROPERTY OF KENNETH D. BLAUSER.



LOCATION MAP - PARKER QUADRANGLE
SCALE: 1" = 1000'

NAME/ADDRESS OF OWNER:
FAWNWOOD ENERGY, INC. (JERRY MACURAK - PRESIDENT)
BOX 157 - DAUBENSPECK ROAD
BRUIN, PA. 16022
(724) 753-0041 (JUSTIN JEROME MACURAK)

NOTE: Total acreage of conveyance is 4.49 cares.

LINE	BEARING	DISTANCE
L1	S 82°39'23" E	77.61'
L2	S 87°38'42" E	362.76'
L3	S 81°05'15" E	169.36'
L4	S 79°49'08" E	211.04'
L5	S 75°29'14" E	135.66'
L6	S 61°14'11" E	25.96'

Parcel to be conveyed from
FAWNWOOD ENERGY INC.
to
JUSTIN JEROME MACURAK
containing: 175658.2 sq.feet or 4.03 acres

existing lands of
FAWNWOOD ENERGY INC.
Map #260-1F53-13F
Instr.#200801250001693
Containing: 20.69 acres by survey & 16.66 acres after outsell

existing lands of
DAVID R. BODEN &
ROBERT S. BODEN
Map #260-1F53-13G
DB 2582 P 276
Containing: 18.22 acres

existing lands of
DAVID R. BODEN & MARY L. BODEN and
ROBERT S. BODEN & DEBORAH A. BODEN
Map #260-1F53-21B
Instr. #200011020026092
Containing: 11.62 acres by deed & 11.16 acres after outsell

Parcel to be conveyed from
DAVID R. BODEN, ETAL
to
JUSTIN JEROME MACURAK
containing: 19939.9 sq.feet or 0.46 acres

◉ indicates 5/8"rebar w/cap set by this survey
⊙ indicates calc. corner in road
◎ indicates exist. i.pipe found in place

I, James F. Werner, a Professional Land Surveyor, registered by the Commonwealth of Pennsylvania, do hereby certify that this plan as shown hereon is based upon actual field survey of the land described and that all angles, courses and distances are correctly shown, that the monuments and markers as shown on the plat have been, or will be set, and to the best of my knowledge, that this plan correctly represents the lots, lands, streets and highways as surveyed and plotted by me for the owners or agents.

This 12 day of MARCH, 2015.

James F. Werner, PLS

Instr:201505180010568 05/18/2015
Pages:1 F:$45.00 3:14PM
Michele Mustello T20150008492
Butler County Recorder FL

MUNICIPAL REVIEW

Reviewed by the Township of Parker this 2nd day of April, 2015.

(Secretary) (Chairman) Supervisor
SEAL

RECORDER OF DEEDS BUTLER COUNTY, PA

COMMONWEALTH OF PENNSYLVANIA: SS:
COUNTY OF Butler:

Recorded in the office for the recording of deeds, plats and plans in said county, in Plan Book Volume 348 Page(s) 6.

Given under my hand and seal ths 18 day of May, 2015.

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016
(Recorder of Deeds)

PLAN BOOK	PAGE
348	6

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA:
SS:
COUNTY OF Venango:

Before me, the subscriber, a Notary Public in and for said State and County personally came and acknowledged the foregoing release and dedication and Plan to be their act and deed and desired the same to be recorded as such:
WITNESS MY HAND & SEAL this 18th day of May, 2015.

Notary Seal SEAL

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Jeannette L. Bolash, Notary Public
Emlenton Boro, Venango County
My Commission Expires Oct. 3, 2017

MY Commission Expires the 3rd day of October, 2017

OWNERS ADOPTION Fawnwood Energy, Inc. & David R. Boden, et al

Know All Men By these Presents, that (I or We) Fawnwood Energy, Inc. & David R. Boden, et al of (Name of Owner or Owners) the Parker Township, of Butler, of the Comm. of Pennsylvania (City, Borough, Township) (County) (Commonwealth of or State) for (myself, ourselves), (my, our) heirs, executors, administrators and assign, do hereby adopt this as (my, our) Plan of Subdivision of (my, our) property, situated in the Parker Township, County of Butler, Commonwealth of (City, Borough, Township) (County) Pennsylvania, and for diver advantages accruing to (me, us), do hereby dedicate forever, for public use for highway, drainage, sewage and utility purposes, all drives, roads, lands, rights-of-way, easements, ways and other public highways shown upon the plan, with the same force and effect as if the same had been opened through legal proceedings and in consideration of the approval of said plan and any future acceptance of said public highways, rights-of-way and easements by the Parker Township, of Butler, (I or We) _____ (City, Borough, Township) (County) Fawnwood Energy, Inc. & David R. Boden, et al (Name of Owner or Owners) hereby agree to an d by these presents do release and forever discharge the Parker Township, of Butler, (City, Borough, Township) (County) their successors or assigns from any liability for damages arising and to arise from the appropriation of said ground for public highways, and other public uses and the physical grading thereof to any grades that may be established. This dedication and release shall be binding upon Fawnwood Energy, Inc. & David R. Boden, et al (Name of Owner or Owners) (my, our) heirs, executors, administrators and assigns and purchasers of lots in this plan.

IN WITNESS WHEREOF, (I or We) hereunto set (my, our) hand(s) and seal(s) this _____ day of _____, A.D. 20_____.

ATTEST:
(Owner or Owners) (SEAL)
(Owner or Owners) (Owner or Owners) (SEAL)
(Owner or Owners) (SEAL)
(Notary Public)

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Christine G. Hodale, Notary Public
Williamsburg Boro, Allegheny County
My Commission Expires March 29, 2018

MUNICIPAL REVIEW

Reviewed by the Borough of Bruin this 13th day of April, 2015.

(Secretary) (Mayor)
SEAL

BUTLER COUNTY PLANNING COMMISSION APPROVAL

Approved by the Butler County Planning Commission this 2ND day of MARCH, 2015.

(Secretary) (Chairman)
See Comments On File at the Butler County Planning Commission
Plan Number: 15960
SEAL

0' 100' 200' 300'

Fike Associates, Inc.
Surveying & Consulting
22830 Route 68 Clarion, PA 16214
PHONE: (814) 226-7880

Plat of Survey Prepared For
FAWNWOOD ENERGY INC. &
DAVID R. BODEN ET AL
showing conveyance to
JUSTIN JEROME MACURAK

SITUATED IN
PARKER TOWNSHIP BUTLER COUNTY
PENNSYLVANIA

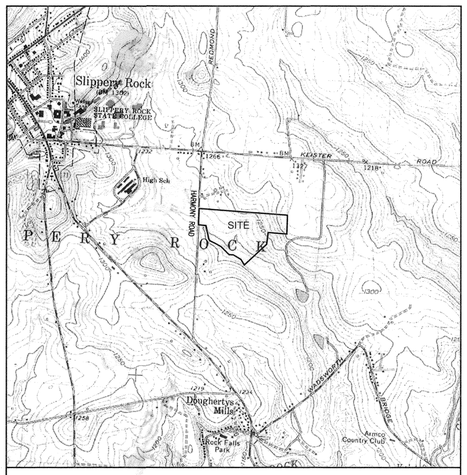
DATE: FEBRUARY 19, 2015 JOB NO.: macurakjerry
SCALE: 1"= 100' DRAWN BY: JFW

REVISIONS
03/02/15 - added approx. municipal prop. line; added block for Township of Parker review; added references.

COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL JAMES F. WERNER
03-12-15

REVISED FINAL
LAND DEVELOPMENT PLANS
for
THE GROVE AT SLIPPERY ROCK

145 Harmony Road
Township of Slippery Rock, County Of Butler
Commonwealth Of Pennsylvania



PORTION OF THE SLIPPERY ROCK, PA U.S.G.S.
SCALE: 1"=2000'

NOTES:

1. GEOTECHNICAL INVESTIGATION AND REPORT COMPLETED BY TERRACON CONSULTANTS, INC., DATED SEPTEMBER 21, 2012. FRANK B. TAYLOR ENGINEERING SHALL ASSUME NO RESPONSIBILITY FOR ADDITIONAL WORK REQUIRED DUE TO SUBSURFACE CONDITIONS.

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1.0 SPACE PER MAX. LEGAL OCCUPANCY PER UNIT, PLUS
1.0 VISITOR SPACE PER EACH FIVE (5) UNITS, AND
1.0 SPACE PER EMPLOYEE OR STAFF ON EACH SHIFT.

DESCRIPTION	REQUIRED	PROVIDED
STUDENT HOUSING	603	640
VISITORS	41	41
EMPLOYEES	0	0
TOTAL	644	681

ZONING DISTRICT – R-2 MULTI-FAMILY RESIDENTIAL AND SUBURBAN DENSITY OVERLAY		
	REQUIRED	PROPOSED
Min. Lot Area	One (1) acre	54.07 Acres
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Min. Side Yard	25 feet for the first unit plus 3 feet per unit thereafter to a maximum of 60 feet.	60 Feet
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Max. Building Height	Principal Use – thirty-five (35) feet	35 feet
Max. Dwelling Unit Per Acre	Maximum of four (4) dwelling units per acre.	203 Units
Max. Dwelling Unit Per Building	Eight (8)	Eight (8)
Max. lot Coverage	30 Percent	All buildings – approx. 6.33 percent
Parking Lot Internal Landscaping Total 131, 434.12 sq.ft. Imp.	8% = 10,314.73 sq.ft.	15,409.93 sq.ft.

UTILITY COMPANIES

SLIPPERY ROCK TOWNSHIP
SLIPPERY ROCK MUNICIPAL AUTHORITY
Slippery Rock Township Municipal Building
PO Box 207
Slippery Rock, PA 16057
Phone: (724) 794-2369
Fax: (724) 794-9244

ARMSTRONG CABLE
123 Industrial Drive
Grove City, PA 16127
Contact: Dick Ross, Jr.
Phone: (724) 458-7165 ext 224
Fax: (724) 364-4600

PEOPLES NATURAL GAS COMPANY
5600 Community Center Drive
Gibsonia, PA 15044
Contact: Deborah S. Kushon
Phone: (724) 444-3221

WEST PENN POWER/ALLEGHENY POWER (KP)
1465 Greenville Pike
Clarion, PA 16214
Contact: Brian E. Manville
Phone: (814) 226-0920

CENTURY LINK FORMERLY EMBARQ (TW)
160 Unionville Road

Campus Crest at Slippery Rock, LLC
2100 Rexford Road, Suite 414
Charlotte, North Carolina 28211
Tax Parcel Number 280-S14-A35
Instrument Number 201304230011505

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE-STOP CALL
Serial No. 2011-347-1487
Pennsylvania One Call System Inc.
1-800-242-1776

Instr: 201505190010701 05/19/2015
Pages:4 F:$165.00 2:11PM
Michele Mustello T20150008610
Butler County Recorder FL

SCHEDULE OF DRAWINGS

SHEET NUMBER	DESCRIPTION	SCALE	NO. OF PAGES
CS-1	Cover Sheet	N.T.S.	1
EX-1	Existing Conditions Plan / Demolition	1"=100'-0"	1
EX-2	Existing Conditions Plan / Demolition	1"=20'-0"	1
OSP-1	Overall Site Plan	1"=100'-0"	1
SP-1, SP1A AND SP-2	Site Plans/Utility Plans	VARIES	3
ADA-1	ADA Pedestrian Accessibility Route	1"=60'-0"	1
LSP-1	Landscape Plan	1"=50'-0"	1
LP-1 TO LP-2	Lighting Plans	1"=50'-0"	2
VA-1 TO VA-2	Vehicular Access Plan & Profiles	1"=50'-0"	2
AM-1	Amenities Plan	1"=10'-0"	1
PCSM-1 to PCSM-4	Post Construction Stormwater Management Plans (PCSM)/ Grading	1"=100'-0" 1"=40'-0"	4
ESPC-1 TO ESPC-4	Erosion & Sediment Control Plans (ESPC)	1"=100'-0" 1"=40'-0"	4
ESPC-5	Pump Station ESPC	1"=40'-0"	1
SS-1 TO SS-3	Sanitary Sewer Plan & Profiles	1"=60'-0"	3
PS-1	Pump Station Plan	1"=10'-0"	1
FM-1 TO FM-3	Sanitary Forcemain Plan & Profile	Varies	3
PC-1	United Precast Ind., LLC Wetwell Detail	NTS	1
60-2318	Gorman Rupp Pump Station Enclosure	NTS	1
E100	Pump Station Electrical Plan	Varies	1
ST-1 TO ST-7	Storm Sewer Profiles	1"=30'-0"	7
DET-1 TO DET-19	Details	NTS	19
UT-1 TO UT-2	Water Laterals and Sleeve Locations	1" = 50'	2

PLAN BOOK	PAGE
348	7

OWNERS CERTIFICATION

BEFORE ME THE SUBSCRIBER A NOTARY PUBLIC IN AND FOR THE STATE OF NORTH CAROLINA, COUNTY OF Mecklenburg PERSONALLY APPEARED ~~DONALD L. DOBBS, JR.~~ SCOTT R. ROCHON WHO ACKNOWLEDGED HIMSELF TO BE THE MANAGER OF CAMPUS CREST PROPERTIES, LLC, THE MANAGER OF CAMPUS CREST AT SLIPPERY ROCK, LLC, A LIMITED LIABILITY COMPANY, AND THAT HE AS SUCH BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE LIMITED LIABILITY COMPANY BY HIMSELF AS MANAGER OF THE MANAGER.

MANAGER
SIGNATURE AND TITLE

WITNESS MY HAND AND SEAL THIS 17 DAY OF April 2015

Shuntale Smith
NOTARY PUBLIC SIGNATURE

MY COMMISSION EXPIRES 02/08/2020 DATE

SHUNTALE SMITH NOTARY PUBLIC ROWAN COUNTY, NC

TOWNSHIP PLANNING COMMISSION RECOMMENDATION FOR APPROVAL

THIS PLAN HAS BEEN RECOMMENDED FOR APPROVAL BY THE PLANNING COMMISSION OF THE TOWNSHIP OF SLIPPERY ROCK, BUTLER COUNTY, COMMONWEALTH OF PENNSYLVANIA ON THIS 11th DAY OF May, 2015.

Vonni Idoss — SECRETARY
Tom Allen — CHAIRMAN

BOARD OF SUPERVISORS FINAL APPROVAL CERTIFICATE

THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF SLIPPERY ROCK HEREBY GIVES PUBLIC NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING PURPOSES ONLY, THE TOWNSHIP OF SLIPPERY ROCK ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESSED OR IMPLIED, EITHER TO ACCEPT SAID STREETS AS TOWNSHIP STREETS, OR ROADS, OR GRADES, PAVE AND CURB THE STREETS IN SAID PLAN, OR TO CONSTRUCT SEWERS THEREIN OR TO INSTALL ANY OTHER SUCH SERVICE ORDINARILY INSTALLED IN TOWNSHIP STREETS OR ROADS.

THIS PLAN APPROVED BY ACTION OF THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF SLIPPERY ROCK, BUTLER COUNTY, PENNSYLVANIA ON THIS 11th DAY OF May, 2015.

Vonni Idoss — SECRETARY
Paul A Dick — CHAIRMAN, BOARD OF SUPERVISORS

SEAL

PROOF OF RECORDING

COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, PLATS, ETC. IN SAID COUNTY AT INSTRUMENT NUMBER 201505190010701. BK 348 PG 7-10

GIVEN UNDER MY HAND AND SEAL THIS 19th DAY OF May, 2015.

RECORDER

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

PROFESSIONAL LAND SURVEYOR CERTIFICATE

I, J. ROSS TAYLOR, A PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN SHOWN HEREON IS BASED UPON ACTUAL FIELD SURVEY OF THE LAND DESCRIBED AND THAT ALL ANGLES, DISTANCES, AND COURSES ARE CORRECTLY SHOWN, THAT THE MONUMENTS AND MARKERS AS SHOWN ON THE PLAT HAVE BEEN SET, AND TO THE BEST OF MY KNOWLEDGE, THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS, AND HIGHWAYS AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

4-16-15
DATE

J. ROSS TAYLOR — SURVEYOR'S NAME
26145-E
REGISTRATION NO.

SEAL — COMMONWEALTH OF PENNSYLVANIA J. ROSS TAYLOR 26145-E PROFESSIONAL LAND SURVEYOR

RECORDER OF DEEDS BUTLER COUNTY, PA.

BUTLER COUNTY PLANNING COMMISSION

BUTLER COUNTY PLANNING COMMISSION CERTIFICATE

REVIEWED WITH OR WITHOUT COMMENTS BY THE BUTLER COUNTY PLANNING COMMISSION THIS 17TH DAY OF JUNE, 2015.

SEC — DIRECTOR
CHAIR

RECEIVED
APR 23 2015
BY:

Frank B. Taylor Engineering
149 Taylor Drive
New Castle, PA 16101
(724) 654-6141

DRAWN BY	CHK'D	APP'VD	SCALE	DATE	PROJECT NO.
BLK	BLK	BLK	As Shown	APRIL 15, 2015	2190

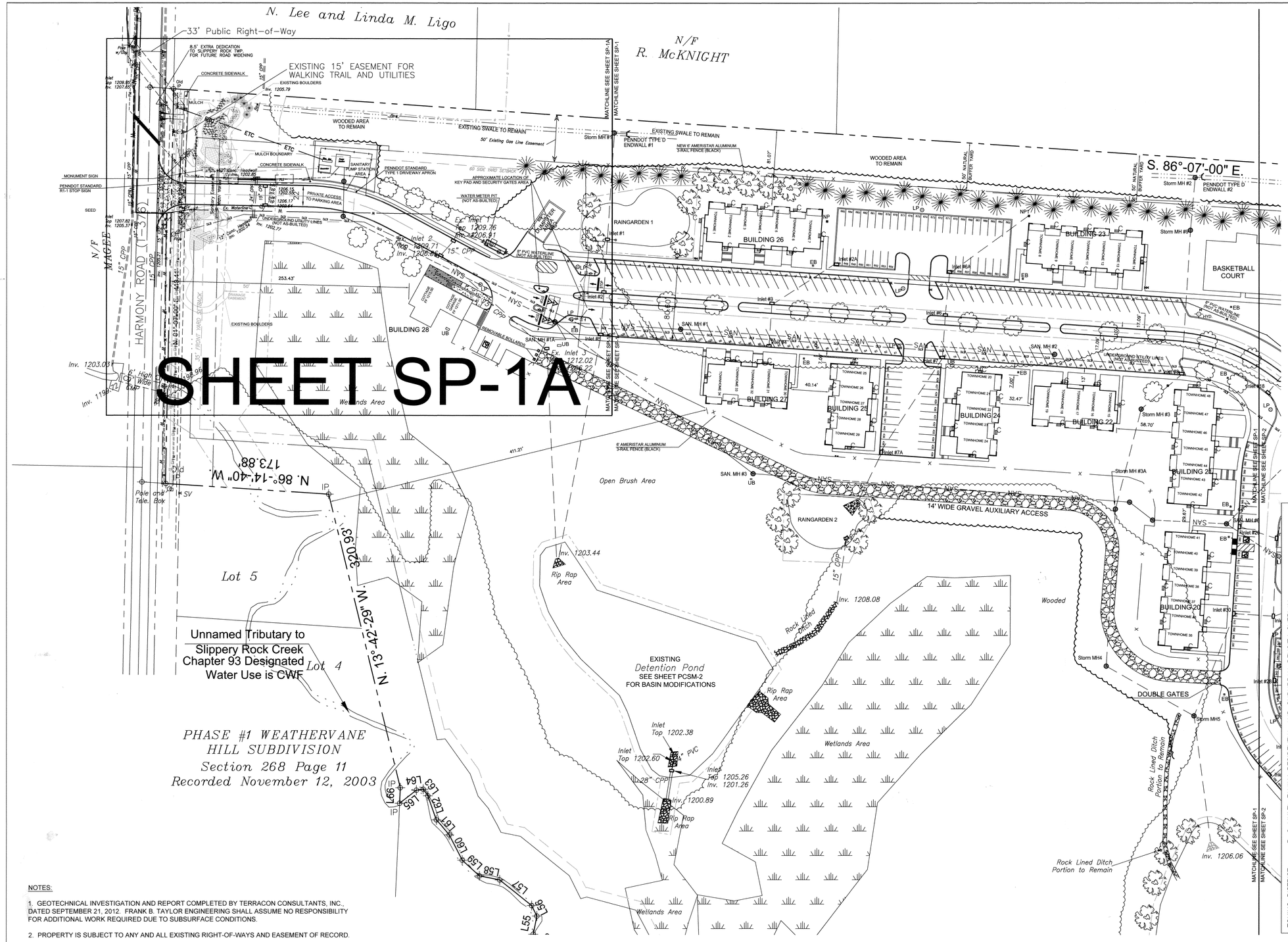
REVISIONS:	NO.	DATE

REVISED FINAL LAND DEVELOPMENT PLAN
CAMPUS CREST STUDENT HOUSING
SLIPPERY ROCK TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Prepared for:
CAMPUS CREST @ SLIPPERY ROCK, LLC
DEVELOPER
2100 REXFORD ROAD, SUITE 414
CHARLOTTE, NC 28211, Phone: 704-496-2500

COVER SHEET

DRAWING NO.
CS-1



LEGEND

- CONSERVATION EASEMENT AREA
- PROPERTY BOUNDARY
- EX. 10' CONTOUR
- EX. 2' CONTOUR
- EX. WATERWAY
- DRAINAGE EASEMENT BOUNDARY
- EX. WETLAND
- EX. WOODLINE
- EX. GRAVEL BOUNDARY
- EX. RIPRAP
- EX. RIGHT-OF-WAY
- EX. GAS LINE
- EX. WATERLINE
- EX. ELECTRIC LINE
- EX. 4" SEWER FORCEMAIN
- EX. FIRE HYDRANT/WATER VALVE
- EX. SANITARY VALVE
- EX. UTILITY POLE
- NATURAL BUFFER AREA BOUNDARY
- NEW WOODED BOUNDARY
- NEW SANITARY LINE
- NEW ELECTRIC, CABLE, PHONE LINE
- NEW WATERLINE
- NEW STORM SEWER LINE
- NEW SANITARY SEWER EASEMENT
- NEW SANITARY MANHOLE
- NEW STORM INLET
- NEW STORM MANHOLE
- NEW NYLOPLAST YARD INLET
- NEW LIGHT FIXTURE W/ POLE
- NEW PERIMETER FENCE
- EB — NEW ELECTRIC BOX
- UB — NEW UTILITY BOX
- LP — NEW LIGHT POST w/CONC. BASE

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VISITORS	41	41
EMPLOYEES	0	0
TOTAL	644	681

ZONING DISTRICT – R-2 MULTI-FAMILY RESIDENTIAL AND SUBURBAN DENSITY OVERLAY	REQUIRED	PROPOSED
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Max. Building Height	Principal Use – thirty-five (35) feet	35 feet
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Max. Dwelling Unit Per Building	Eight (8)	Eight (8)
Max. lot Coverage	30 Percent	All buildings – approx. 6.33 percent
Parking Lot Internal Landscaping	8% = 10,314.73 sq.ft. Total 131, 434.12 sq.ft. Imp.	15,409.93 sq.ft.

NOTES:

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PLAN BOOK	PAGE
348	8

50 0 50 150
GRAPHIC SCALE

GENERAL SITE NOTE:
An attempt has been made to locate existing utilities, however, any utilities encountered at the site not shown on drawings are the responsibility of the contractor to protect from disturbance. Any damaged to existing utilities will be repaired by the contractor at his expense.

Campus Crest at Slippery Rock, LLC
2100 Rexford Road, Suite 414
Charlotte, North Carolina 28211
Tax Parcel Number 280-S14-A35
Instrument Number 201304230011505

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL.
Serial No. 2011-347-1487
Pennsylvania One Call System Inc.
1-800-242-1776

FTB
Frank B. Taylor Engineering
149 Taylor Drive
New Castle, PA 16101
(724) 654-6141

DRAWN BY	CHK'D	APP'D	SCALE	DATE	PROJECT NO.
BLK	BLK	BLK	1" = 50'	APRIL 15, 2015	2190

NO.	DATE	REVISIONS:

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CAMPUS CREST STUDENT HOUSING
SLIPPERY ROCK TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Prepared for:
CAMPUS CREST @ SLIPPERY ROCK, LLC
DEVELOPER
2100 REXFORD ROAD, SUITE 414
CHARLOTTE, NC 28211

SITE PLAN

DRAWING NO. SP-1

RECEIVED
APR 23 2015
BY:

EXISTING 15' EASEMENT FOR WALKING TRAIL AND UTILITIES

EXISTING BOULDERS

MULCH

WOODED AREA TO REMAIN

EXISTING SWALE TO REMAIN

50' Existing Gas Line Easement

MULCH BOUNDARY

60 SIDE YARD SETBACK

PRIVATE ACCESS TO PARKING AREA

UNDERGROUND UTILITY LINES (NOT AS-BUILTED)

8" PVC WATERLINE (NOT AS-BUILTED)

DUMPSTER AREA

Storm MH #1

Inlet #2

Inlet #5

SAN. MH #1A

BUILDING 28

COTTAGE FF 1215.50

COTTAGE GARAGE FF 1211.50

Wetlands Area

DRAINAGE EASEMENT

35' FRONT YARD SETBACK

HARMONY ROAD (T-376)

N 01° 07' 00" E 419.44'

198.96

6' High Wide CMP

Old IP

Pole

Elec. Box

Pump Station

Generator

12" Conc. Headwall Inv. 1202.85

Inlet Top 1206.15 Inv. 1202.55

Inlet Top 1206.17 Inv. 1202.64

Ex. Inlet 1 Top 1209.76 Inv. 1206.91

Ex. Inlet 2 Top 1209.71 Inv. 1206.86

Ex. Inlet 3 Top 1212.02 Inv. 1206.22

12" Conc. Headwall Inv. 1202.54

Inv. 1202.77

Inv. 1205.79

Inv. 1205.21

209.95
207.65
207.82
205.37

MATCHLINE SEE SHEET SP-1A

MATCHLINE SEE SHEET SP-1

LEGEND

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- EX. 2' CONTOUR
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- EX. GRAVEL BOUNDARY
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- EX. WATERLINE
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- UB — NEW UTILITY BOX
- LP — NEW LIGHT POST w/CONC. BASE

SEE SITE PLAN, SHEET SP-1, FOR GENERAL NOTES.

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20 0 20 60
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149 Taylor Drive
New Castle, PA 16101
(724) 654-6141

DRAWN BY BLK | CHK'D BLK | APP'D BLK | SCALE 1" = 20' | DATE APRIL 15, 2015 | PROJECT NO. 2190

REVISIONS:

NO.	DATE

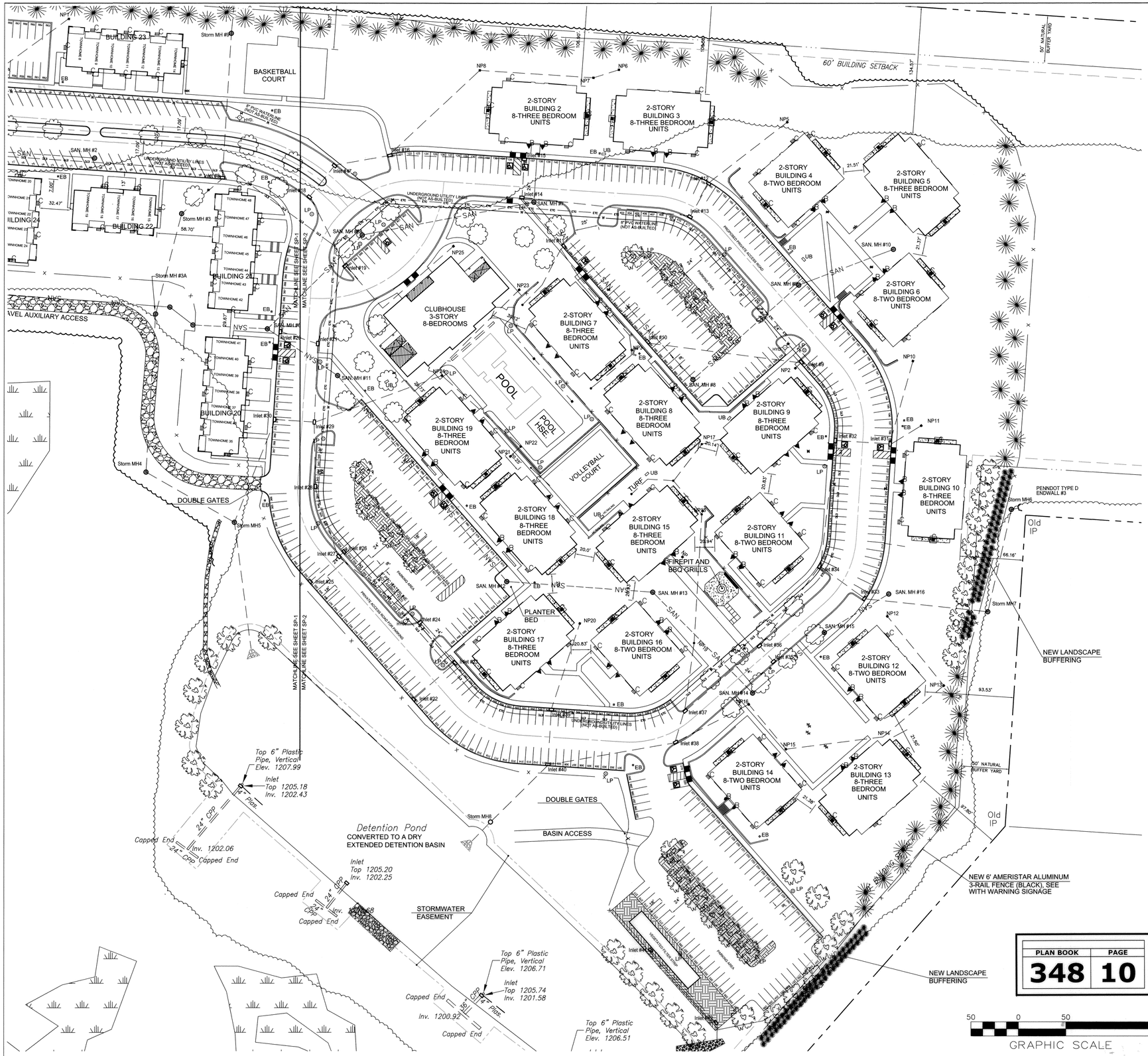
REVISED/FINAL LAND DEVELOPMENT PLAN
CAMPUS CREST STUDENT HOUSING
SLIPPERY ROCK TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Prepared for:
CAMPUS CREST @ SLIPPERY ROCK, LLC
DEVELOPER
2100 REXFORD ROAD, SUITE 414
CHARLOTTE, NC 28211

SITE PLAN

DRAWING NO. SP-1

RECEIVED
APR 23 2015
BY:



LEGEND

- CONSERVATION EASEMENT AREA
- PROPERTY BOUNDARY
- EX. 10' CONTOUR
- EX. 2' CONTOUR
- EX. WATERWAY
- DRAINAGE EASEMENT BOUNDARY
- EX. WETLAND
- EX. WOODLINE
- EX. GRAVEL BOUNDARY
- EX. RIPRAP
- EX. RIGHT-OF-WAY
- EX. GAS LINE
- EX. WATERLINE
- EX. ELECTRIC LINE
- EX. 4" SEWER FORCEMAIN
- EX. FIRE HYDRANT/WATER VALVE
- EX. SANITARY VALVE
- EX. UTILITY POLE
- NATURAL BUFFER AREA BOUNDARY
- NEW WOODED BOUNDARY
- NEW SANITARY LINE
- NEW ELECTRIC, CABLE, PHONE LINE
- NEW WATERLINE
- NEW STORM SEWER LINE
- NEW SANITARY SEWER EASEMENT
- NEW SANITARY MANHOLE
- NEW STORM INLET
- NEW STORM MANHOLE
- NEW NYLOPLAST YARD INLET
- NEW LIGHT FIXTURE W/ POLE
- NEW PERIMETER FENCE
- EB = NEW ELECTRIC BOX
- UB = NEW UTILITY BOX
- LP = NEW LIGHT POST w/CONC. BASE

PARKING REQUIREMENTS:
MULTI-FAMILY STUDENT DWELLING UNITS:
1.0 SPACE PER MAX. LEGAL OCCUPANCY PER UNIT, PLUS
1.0 VISITOR SPACE PER EACH FIVE (5) UNITS, AND
1.0 SPACE PER EMPLOYEE OR STAFF ON EACH SHIFT.

DESCRIPTION	REQUIRED	PROVIDED
STUDENT HOUSING	603	640
VISITORS	41	41
EMPLOYEES	0	0
TOTAL	644	681

ZONING DISTRICT – R-2 MULTI-FAMILY RESIDENTIAL AND SUBURBAN DENSITY OVERLAY

	REQUIRED	PROPOSED
Min. Lot Area	One (1) acre	54.07 Acres
Min. Front Yard	35 Feet	35 Feet
Min. Side Yard	25 feet for the first unit plus 3 feet per unit thereafter to a maximum of 60 feet.	60 Feet
Min. Rear Yard	40 feet plus 1 foot per unit thereafter to a maximum of 60 feet.	60 Feet
Max. Building Height	Principal Use – thirty-five (35) feet	35 feet
Max. Dwelling Unit	Maximum of four (4) dwelling units per acre.	203 Units
Max. Dwelling Unit Per Building	Eight (8)	Eight (8)
Max. lot Coverage	30 Percent	All buildings – approx. 6.33 percent
Parking Lot Internal Landscaping	8% = 10,314.73 sq.ft. Total 131, 434.12 sq.ft. Imp.	15,409.93 sq.ft.

PLAN BOOK	PAGE
348	10

GENERAL SITE NOTE:
An attempt has been made to locate existing utilities, however, any utilities encountered at the site not shown on drawings are the responsibility of the contractor to protect from disturbance. Any damaged to existing utilities will be repaired by the contractor at his expense.

Campus Crest at Slippery Rock, LLC
2100 Rexford Road, Suite 414
Charlotte, North Carolina 28211
Tax Parcel Number 280-S14-A35
Instrument Number 201304230011505

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE-STOP CALL.
Serial No. 2011-347-1487
Pennsylvania One Call System Inc.
1-800-242-1776

GRAPHIC SCALE 50 0 50 150

RECEIVED
APR 23 2015
BY:

Frank B. Taylor Engineering
149 Taylor Drive
New Castle, PA 16101
(724) 654-6141

DRAWN BY	CHK'D	APP'D	DATE	SCALE	PROJECT NO.
BLK	BLK	BLK	APRIL 15, 2015	1" = 50'	2190

NO.	DATE	REVISIONS:

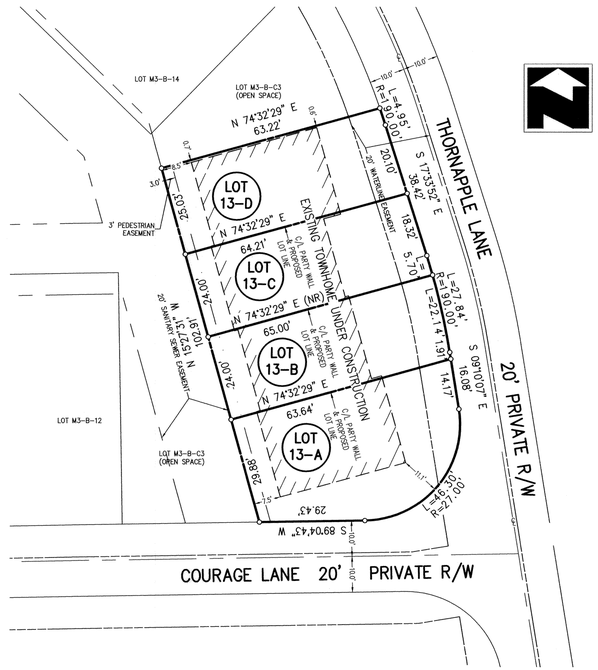
REVISED/FINAL LAND DEVELOPMENT PLAN
CAMPUS CREST STUDENT HOUSING
SLIPPERY ROCK TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

CAMPUS CREST @ SLIPPERY ROCK, LLC
DEVELOPER
2100 REXFORD ROAD, SUITE 414
CHARLOTTE, NC 28211, Phone: 704-496-2500

SITE PLAN 1

DRAWING NO.
SP-1

Instr:201505190010706
Pages: 1 F:$45.00 05/19/2015
Michele Mustello 3:27PM
Butler County Recorder T20150008632
FL



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

OWNERSHIP REFERENCE

PROPERTY OWNER: NVR, INC.
ONE PENN CENTER WEST, SUITE 220
PITTSBURGH, PA 15276

DEED REFERENCE: INSTRUMENT NO. 201502090002660
TAX PARCEL: 130-4F108-16B3DB13

LOT AREAS:

13-A	2,094.78 SQ.FT.	0.048 ACRES
13-B	1,550.28 SQ.FT.	0.036 ACRES
13-C	1,551.37 SQ.FT.	0.036 ACRES
13-D	1,595.48 SQ.FT.	0.036 ACRES
TOTAL AREA:	6,791.91 SQ.FT.*	0.156 ACRES

*TOTAL LOT AREA ERRONEOUSLY SHOWN AS 6,783.21 SQ.FT. ON PREVOUS PLAN.

GENERAL PLAN NOTES:

a. THIS PLAN IS A RE-SUBDIVISION OF PARCEL M3-B-13 OF THE PARK PLACE CCD PHASE M-3 REVISION NO. 2 AS RECORDED IN PLAN BOOK 340, PAGE 14.

b. THIS PLAN IS SUBJECT TO ANY AND ALL CONDITIONS OF THE PREVIOUSLY APPROVED AND RECORDED PLANS.

c. BEARINGS LABELED AS (NR) ARE NON-RADIAL TO THE INTERSECTING RIGHT OF WAY LINE.

ZONING INFORMATION :

AFFECTED ZONING CLASSIFICATION:	PRD/CCD
PROPOSED USE	CCD
• MINIMUM LOT SIZE	PER PATTERN BOOK
• MINIMUM LOT WIDTH	PER PATTERN BOOK
• MINIMUM FRONT SETBACK	PER PATTERN BOOK
• MINIMUM REAR SETBACK	PER PATTERN BOOK
• MINIMUM SIDE SETBACK	PER PATTERN BOOK
• MAXIMUM BUILDING HEIGHT	PER PATTERN BOOK

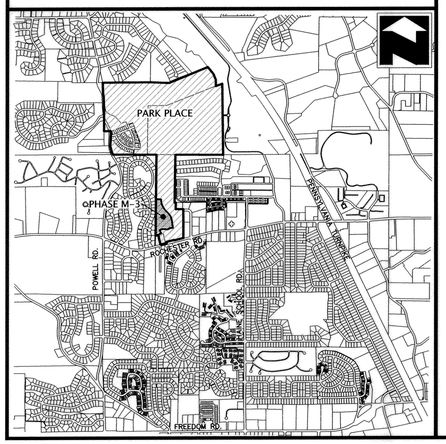
PATTERN BOOK REQUIREMENTS AFFECTING THE LOTS SHOWN:
ALL UNITS BEING BUILT AND TO BE BUILT ON THE LOTS SHOWN SHALL HAVE FRONT LOAD GARAGES AND THE FOLLOWING SETBACKS APPLY:

FRONT SETBACK : EACH TOWNHOME SHALL HAVE A FRONT SETBACK OF 6 TO 20 FEET FROM THE FRONT PROPERTY LINE. THIS AREA IS DEFINED AS THE FRONT FACADE ZONE.

SIDE SETBACK: THERE IS NO MINIMUM SIDE SETBACK, HOWEVER THERE SHALL BE A MINIMUM 12 FOOT SEPARATION BETWEEN TOWNHOME BUILDINGS.

REAR SETBACK: EACH LOT SHALL HAVE A MINIMUM 3 FOOT SETBACK FROM THE REAR PROPERTY LINE.

LOCATION MAP 1" = 2000'



BY RESOLUTION APPROVED ON THE 11 DAY OF MAY 2015 THE BOARD OF DIRECTORS OF NVR,, INCORPORATED IN THE COMMONWEALTH OF PENNSYLVANIA, OWNER OF THE LAND SHOWN ON THE PARK PLACE CCD AMENDMENT NO. 7 PLAN ADOPTED THIS PLAN AS ITS PLAN OF LOTS AND IRREVOCABLY DEDICATED ALL STREETS AND OTHER PROPERTY IDENTIFIED FOR DEDICATIONON THE PLAN TO THE PUBLIC. THIS ADOPTION AND DEDICATION SHALL BE BINDING UPON THE CORPORATION AND UPON ITS SUCCESSORS AND ASSIGNS.

(SEAL)

NVR, INC.
NAME OF CORPORATION

SIGNATURE AND TITLE OF OFFICER WITNESSING

V.P.
SIGNATURE AND TITLE OF AUTHORIZED OFFICER

MAY 11, 2015
DATE

BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA AND COUNTY OF BUTLER, PERSONALLY APPEARED PETE ROBERTSON OF NVR, INC. WHO STATED THAT HE IS AUTHORIZED TO EXECUTE THE ABOVE ADOPTION AND DEDICATION ON BEHALF OF THE CORPORATION AND WAS PRESENT AT THE MEETING AT WHICH THE ACTION OF THE CORPORATION WAS TAKEN TO ADOPT THE PLAN AND DEDICATE PUBLIC PROPERTY CONTAINED THEREIN TO THE PUBLIC.

WITNESS MY HAND AND NOTARIAL SEAL THIS 11 DAY OF May 2015

(SEAL)

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Tina M. Nagode, Notary Public
Robinson Twp., Allegheny County
My Commission Expires July 31, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

NOTARY PUBLIC

I, PETE ROBERTSON HEREBY CERTIFY THAT THE TITLE TO THE PROPERTY CONTAINED IN THE PARK PLACE CCD, AMENDMENT NO. 7 IS IN THE NAME OF NVR, INC. AND IS RECORDED AT INSTRUMENT NO. 201502090002660 . I FURTHER CERTIFY THAT THERE IS NO MORTGAGE, LIEN OR OTHER ENCUMBRANCE AGAINST THIS PROPERTY.

SIGNATURE OF WITNESS

V.P.
SIGNATURE AND TITLE OF AUTHORIZED OFFICER

I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN HEREON ARE CORRECT AND ACCURATE TO THE STANDARDS REQUIRED.

5/11/15
DATE

JAMES A. SPERDUTE, R.S. # 24457-E

I, JASON KRATOVIL A REGISTERED PROFESSIONAL ENGINEER, THE TOWNSHIP ENGINEER OF THE TOWNSHIP OF CRANBERRY, DO HEREBY CERTIFY THAT THIS SUBDIVISION PLAN MEETS ALL ENGINEERING AND DESIGN REQUIREMENTS OF THE TOWNSHIP SUBDIVISION AND ZONING ORDINANCE EXCEPT AS DEPARTURES HAVE BEEN AUTHORIZED BY THE APPROVAL AUTHORITY.

5/12/15
DATE

SIGNATURE
REGISTRATION NO. PE071353

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF CRANBERRY BY ORDINANCE/RESOLUION NO. 2015-34 EFFECTIVE THIS 15th DAY OF MAY, 20 15.

TOWNSHIP MANAGER

CHAIRPERSON

I, JERRY ANDREE, TOWNSHIP MANAGER FOR THE TOWNSHIP OF CRANBERRY CERTIFY THAT THE CONDITIONS FOR FINAL APPROVAL OUTLINED IN ORDINANCE/RESOLUTION NO. 2015-34 HAVE BEEN MET IN ACCORDANCE WITH SECTION 22-305 AND 22-307 OF THE TOWNSHIP CODE OF ORDINANCES OF 5/7/15.

TOWNSHIP MANANGER

REVIEWED BY THE BUTLER COUNTY PLANNING COMMISSION ON THIS 15TH DAY OF APRIL, 20 15

SECRETARY

CHAIRPERSON

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF THE COUNTY OF BUTLER, COMMONWEALTH OF PENNSYLVANIA, IN PLAN BOOK 348 PAGE 11

GIVEN UNDER MY HAND AND SEAL THIS 19TH DAY OF May, 20 15

RECORDER OF DEEDS

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

TOWNSHIP ENGINEER

REGISTERED SURVEYOR
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
JAMES ANTHONY SPERDUTE
SURVEYOR
No. 24457-E

CRANBERRRY TWP BOARD OF SUPERVISORS

BUTLER COUNTY PLANNING COMMISSION

BUTLER COUNTY RECORDER OF DEEDS
RECORDER OF DEEDS
BUTLER COUNTY, PA.

PLAN BOOK	PAGE
348	11

DEVELOPER / PROPERTY OWNER:
NVR
ONE PENN CENTER WEST, SUITE 220
PITTSBURGH, PA 15276
BUILT BY:
Ryan Homes

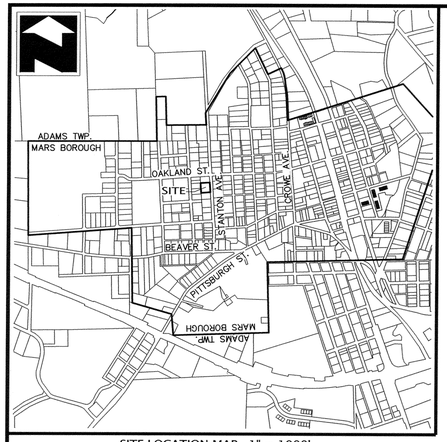
DRAWING NUMBER:	1004-1514847
DRAWING SCALE:	1"=20'
DATE:	APRIL 2, 2015
DRAWN BY:	JSS
REVISIONS:	

PARK PLACE CCD AMENDMENT NO. 7

BEING A RE-SUBDIVISION OF PARCEL M3-B-13 OF THE PARK PLACE CCD PHASE M-3 REVISION NO. 2 AS RECORDED IN PLAN BOOK 340, PG 14

CRANBERRY TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

SURVEYOR'S LAND SERVICES
SLS
HARMONY, PA
724-452-4362
SLS1@zoominternet.net



SITE LOCATION MAP 1" = 1000'

SURVEYOR

BUTLER COUNTY PLANNING COMMISSION

MARS BOROUGH PLANNING COMMISSION

MARS BOROUGH BOARD OF SUPERVISORS

BUTLER COUNTY RECORDER OF DEEDS

CURRENT ZONING : R-1	
MINIMUM LOT AREA:	10,000 SQ.FT.
MINIMUM LOT WIDTH AT SETBACK:	75.00 FEET
MIMIMUM FRONT SETBACK:	35.00 FEET
MINIMUM SIDE SETBACK:	15.00 FEET
MINIMUM REAR SETBACK:	25.00 FEET

GENERAL PLAN NOTES:

PROPERTY OWNERS: ALLEN G. KLINE
616 STANTON AVENUE
MARS, PA 16046

OWNERSHIP REFERENCE: TAX PARCEL 450-S1-B215
200907140016254

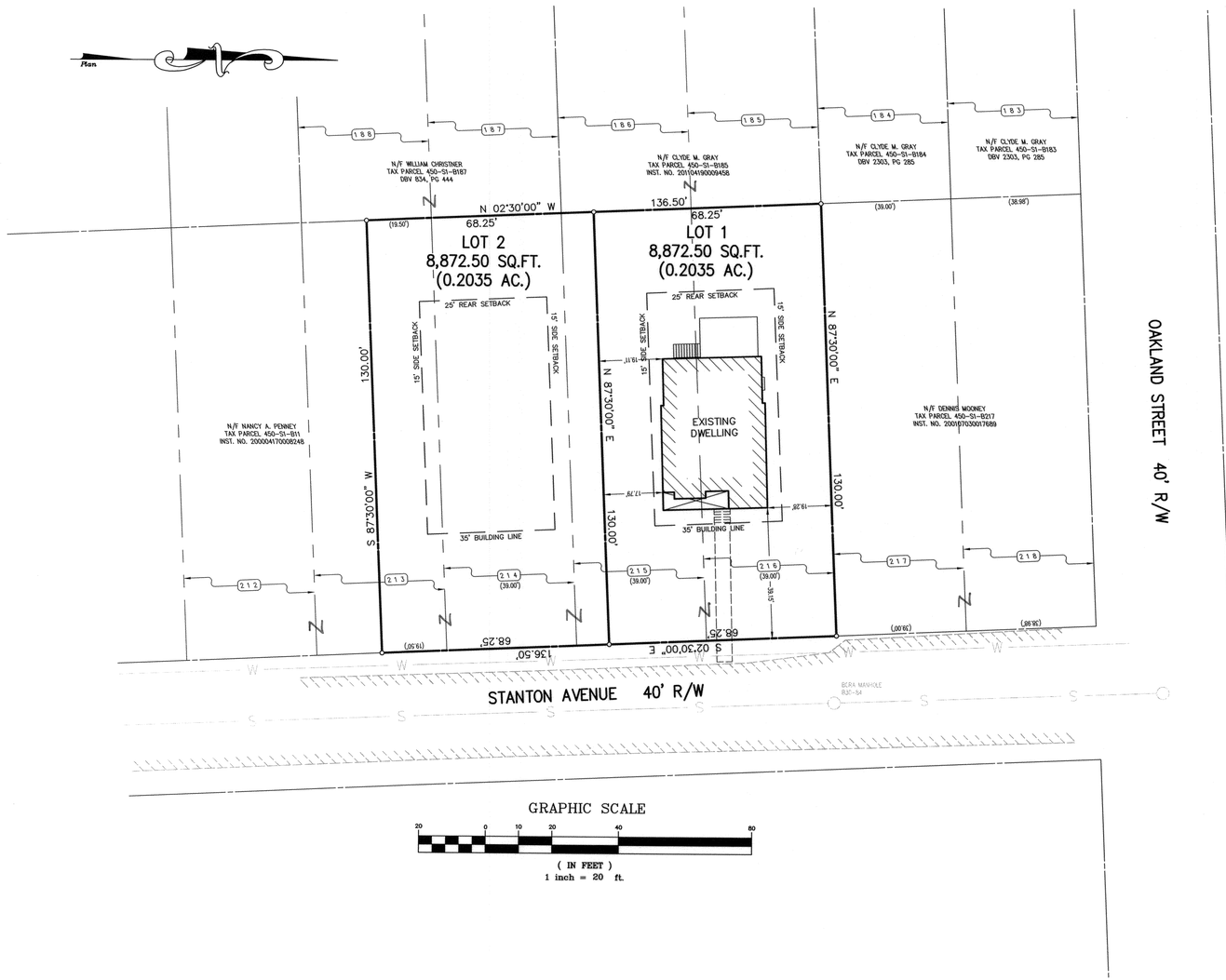
TOTAL PROPERTY: 17,745.00 SQ.FT. (0.407 ACRES)

PROPOSED WATER SOURCE: MARS BOROUGH WATER

PROPOSED SEWAGE SERVICE: BREAKNECK CREEK REGIONAL AUTHORITY

THIS PLAN IS A SUBDIVISION OF TAX PARCEL 450-S1-B215 WHICH CONTAINS A PORTION OF LOT 213 AND ALL OF LOTS 214, 215 & 216 OF THE SARAH JANE CROW PLAN AS RECORDED IN PLAN BOOK 3, PAGE 20.

Plan



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

KNOW ALL MEN BY THESE PRESENTS THAT, I, ALLEN G. KLINE OF THE BOROUGH OF MARS , COUNTY OF BUTLER AND COMMONWEALTH OF PENNSYLVANIA, FOR OURSELVES, MY EXECUTORS, ADMINISTRATORS AND ASSIGNS, DO HEREBY ADOPT THIS AS MY PLAN OF SUBDIVISION OF MY PROPERTY SITUATE IN THE BOROUGH OF MARS , COUNTY OF BUTLER, COMMONWEALTH OF PENNSYLVANIA, AND FOR DIVERS ADVANTAGES ACCRUING TO US, DO HEREBY DEDICATE FOREVER, FOR PUBLIC USE FOR HIGHWAY, DRAINAGE, SEWAGE AND UTILITY PURPOSES, ALL DRIVES, ROADS, LANDS, RIGHTS OF WAY, EASEMENTS, WAYS AND OTHER PUBLIC HIGHWAYS UPON THE PLAN, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN OPENED THROUGH LEGAL PROCEEDINGS AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAN AND ANY FUTURE ACCEPTANCE OF SAID PUBLIC HIGHWAYS, RIGHTS OR WAY AND EASEMENTS BY THE BOROUGH OF MARS , I , ALLEN G. KLINE HEREBY AGREE TO AND BY THESE PRESENTS DO RELEASE AND DISCHARGE THE BOROUGH OF MARS , ITS SUCCESSORS OR ASSIGNS FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS, AND OTHER PUBLIC USES AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON ALLEN G. KLINE MY HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND PURCHASERS OF LOTS IN THIS PLAN.

IN WITNESS WHEREOF, I, ALLEN G. KLINE DO SET MY HANDS AND SEALS THIS 15 DAY OF APRIL 2015 A.D.

ATTEST:

Allen G. Kline

ALLEN G. KLINE

THE FOREGOING ADOPTION AND DEDICATION IS MADE BY ALLEN G. KLINE WITH THE FULL UNDERSTANDING AND AGREEMENT THAT THE APPROVAL OF THE BOROUGH COUNCIL OF THE BOROUGH OF MARS , IF ATTACHED , WILL BECOME NULL AND VOID UNLESS THIS PLAN IS RECORDED IN THE RECORDER OF DEEDS OFFICE OF BUTLER COUNTY, COUNTY COURTHOUSE, BUTLER PENNSYLVANIA WITHIN 90 (NINETY) DAYS OF THE DATE OF APPROVAL.

COMMONWEALTH OF PENNSYLVANIA }
}SS
COUNTY OF BUTLER }

BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE COUNTY OF BUTLER AND COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED THE ABOVE NAMED ALLEN G. KLINE WHO ACKNOWLEDGED THE FOREGOING RELEASE AND DEDICATION AND PLAN OF SUBDIVISION TO BE THEIR ACT AND DEED AND DESIRED THE SAME TO BE RECORDED AS SUCH:

WITNESS MY HAND AND NOTARIAL SEAL THIS 15th DAY OF April 2015 A.D.

Christine Chittler

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Christine Chittler, Notary Public
Butler County, Mayor Cran County
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

MY COMMISSION EXPIRES ON THE 27th DAY OF November 27, 2016 A.D.

WE, ALLEN G. KLINE HEREBY CERTIFY THAT THE TITLE TO THE PROPERTY SHOWN HEREON IS IN THE NAME OF ALLEN G. KLINE AS RECORDED IN THE BUTLER COUNTY RECORDER OF DEEDS OFFICE AT INSTRUMENT NO. 200907140016254.

Allen G. Kline

ALLEN G. KLINE

WE, No Mortgage MORTGAGEE OF THE PROPERTY SHOWN ON THE ALLEN G. KLINE PLAN OF LOTS HEREBY CONSENT TO THE RECORDING OF THIS PLAN AND ALL OTHER MATTERS APPEARING HEREON.

PRINTED NAME & TITLE

AUTHORIZED SIGNATURE

THE BOROUGH COUNCIL OF THE BOROUGH OF MARS HEREBY GIVES PUBLIC NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING PURPOSES ONLY, THE BOROUGH OF MARS ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESSED OR IMPLIED EITHER TO ACCEPT SAID STREETS AS BOROUGH STREETS OR ROADS OR GRADE, PAVE AND CURB THE STREETS IN SAID PLAN, OR TO CONSTRUCT SEWERS THEREIN OR TO INSTALL ANY OTHER SUCH SERVICE ORDINARILY INSTALLED IN BOROUGH STREETS OR ROADS.

APPROVED BY THE BOROUGH COUNCIL OF THE BOROUGH OF MARS THIS 11 DAY OF May 2015

Cathy Talento
SECRETARY

CHAIRPERSON

APPROVED BY THE MARS BOROUGH PLANNING COMMISSION THIS 13 DAY OF MAY 2015

Cathy Talento
SECRETARY

CHAIRPERSON

I, JAMES A SPERDUTE, PLS PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE,INFORMATION AND BELIEF, THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS, AND HIGHWAYS AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

JAMES A. SPERDUTE, R.S. # 24457-E

DATE 4/9/15

APPROVED
~~REVIEWED~~ BY THE BUTLER COUNTY PLANNING COMMISSION THIS 30TH DAY OF APRIL 2015

SECRETARY, BUTLER COUNTY PLANNING COMMISSION

CHAIRPERSON, BUTLER COUNTY PLANNING COMMISSION

COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER

RECORDED IN THE RECORDERS OFFICE FOR THE RECORDING OF DEEDS, PLANS, ETC IN SAID COUNTY IN PLAN BOOK VOLUME 348 PAGE 12

GIVEN UNDER MY HAND AND SEAL THIS 20th DAY OF May 20 15

BUTLER COUNTY RECORDER OF DEEDS

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

Instr 201505200010781 05/20/2015
Pages: 1 F: $45.00 1:45PM
Michele Mustello T20150008693
Butler County Recorder PL

PLAN BOOK	PAGE
348	12

ALLEN G. KLINE
PLAN OF LOTS
BOROUGH OF MARS, BUTLER COUNTY, PENNSYLVANIA

PREPARED FOR:
ALLEN G. KLINE
616 STANTON AVENUE
MARS, PA 16046

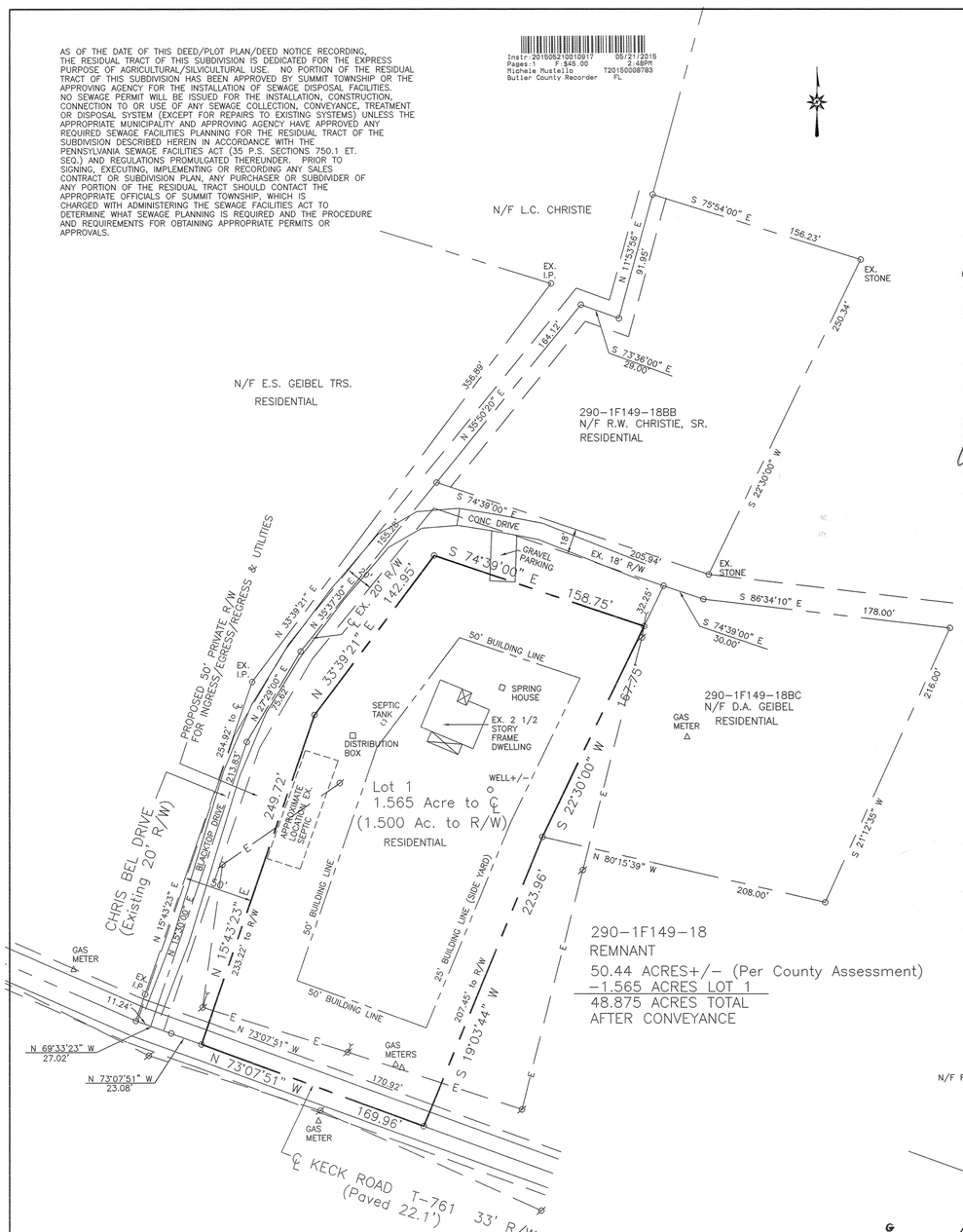
SCALE: 1 " = 20'
NOVEMBER 19, 2013
DWG # 1011-1313024

SPERDUTE LAND SURVEYING
JAMES A. SPERDUTE, R.S.
108 DEER LANE
HARMONY, PA 16037
724-452-4362
724-452-9357 FAX
SLS1@ZOOMINTERNET.NET

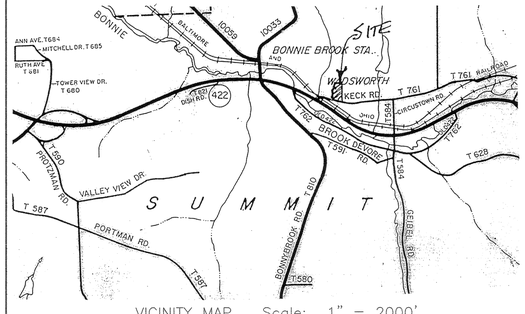
REVISIONS	SHEET No.
02.28.2014....revise setbacks	RC1

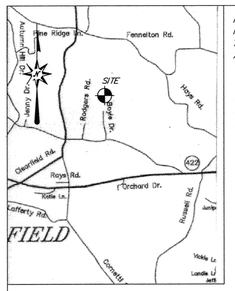
AS OF THE DATE OF THIS DEED/PLOT PLAN/DEED NOTICE RECORDING, THE RESIDUAL TRACT OF THIS SUBDIVISION IS DEDICATED FOR THE EXPRESS PURPOSE OF AGRICULTURAL/SILVICULTURAL USE. NO PORTION OF THE RESIDUAL TRACT OF THIS SUBDIVISION HAS BEEN APPROVED BY SUMMIT TOWNSHIP OR THE APPROVING AGENCY FOR THE INSTALLATION OF SEWAGE DISPOSAL FACILITIES. NO SEWAGE PERMIT WILL BE ISSUED FOR THE INSTALLATION, CONSTRUCTION, CONNECTION TO OR USE OF ANY SEWAGE COLLECTION, CONVEYANCE, TREATMENT OR DISPOSAL SYSTEM (EXCEPT FOR REPAIRS TO EXISTING SYSTEMS) UNLESS THE APPROPRIATE MUNICIPALITY AND APPROVING AGENCY HAVE APPROVED ANY REQUIRED SEWAGE FACILITIES PLANNING FOR THE RESIDUAL TRACT OF THE SUBDIVISION DESCRIBED HEREIN IN ACCORDANCE WITH THE PENNSYLVANIA SEWAGE FACILITIES ACT (35 P.S. SECTIONS 750.1 ET. SEQ.) AND REGULATIONS PROMULGATED THEREUNDER. PRIOR TO SIGNING, EXECUTING, IMPLEMENTING OR RECORDING ANY SALES CONTRACT OR SUBDIVISION PLAN, ANY PURCHASER OR SUBDIVIDER OF ANY PORTION OF THE RESIDUAL TRACT SHOULD CONTACT THE APPROPRIATE OFFICIALS OF SUMMIT TOWNSHIP, WHICH IS CHARGED WITH ADMINISTERING THE SEWAGE FACILITIES ACT TO DETERMINE WHAT SEWAGE PLANNING IS REQUIRED AND THE PROCEDURE AND REQUIREMENTS FOR OBTAINING APPROPRIATE PERMITS OR APPROVALS.

Instr:201509210010917 05/21/2015
Pages:1 F:$45.00 2:48PM
Michele Mustello T20150008783
Butler County Recorder FL



290-1F149-18
REMNANT
50.44 ACRES+/- (Per County Assessment)
-1.565 ACRES LOT 1
48.875 ACRES TOTAL
AFTER CONVEYANCE


BONNIE
ANN AVE. T684
MITCHELL DR. T685
RUTH AVE. T681
TOWER VIEW DR. T680
BALTIMORE
I0059
I0059
SITE
BONNIE BROOK STA.
WOODWORTH
LAKECK RD.
T 761
RAILROAD
ROUTE 422
BUS. RT. 422
T 761
CIRCUITTOWN RD.
T 628
T 628
T 628



LOCATION MAP

NOTE: NO ABSTRACT OF TITLE, NOR TITLE COMMITMENT, NOR RESULTS OF A TITLE SEARCH WERE FURNISHED TO THE SURVEYOR THERE MAY EXIST OTHER DOCUMENTS OF RECORD THAT WOULD AFFECT THIS SURVEYED PARCEL.

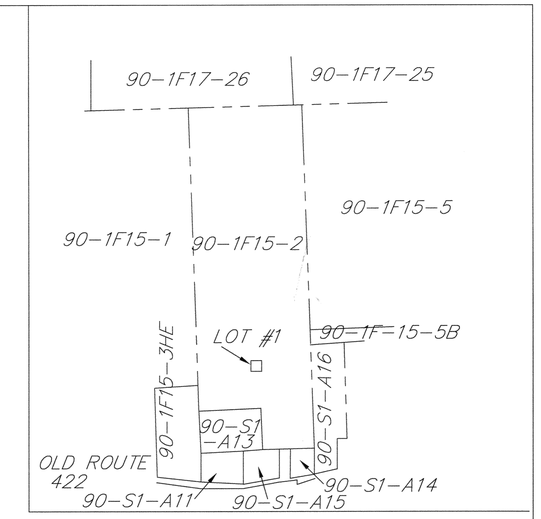
SUBJECT TO :
EASEMENTS, SERVITUDES, RIGHTS-OF-WAY, LEASES, EXCEPTIONS, RESERVATIONS, RESTRICTIONS, ECT., IF ANY THAT MAY APPEAR EITHER RECORDED OR UNRECORDED.

BUILDING SETBACK LINES:
FRONT 40' FROM R\W
SIDE & REAR 20'

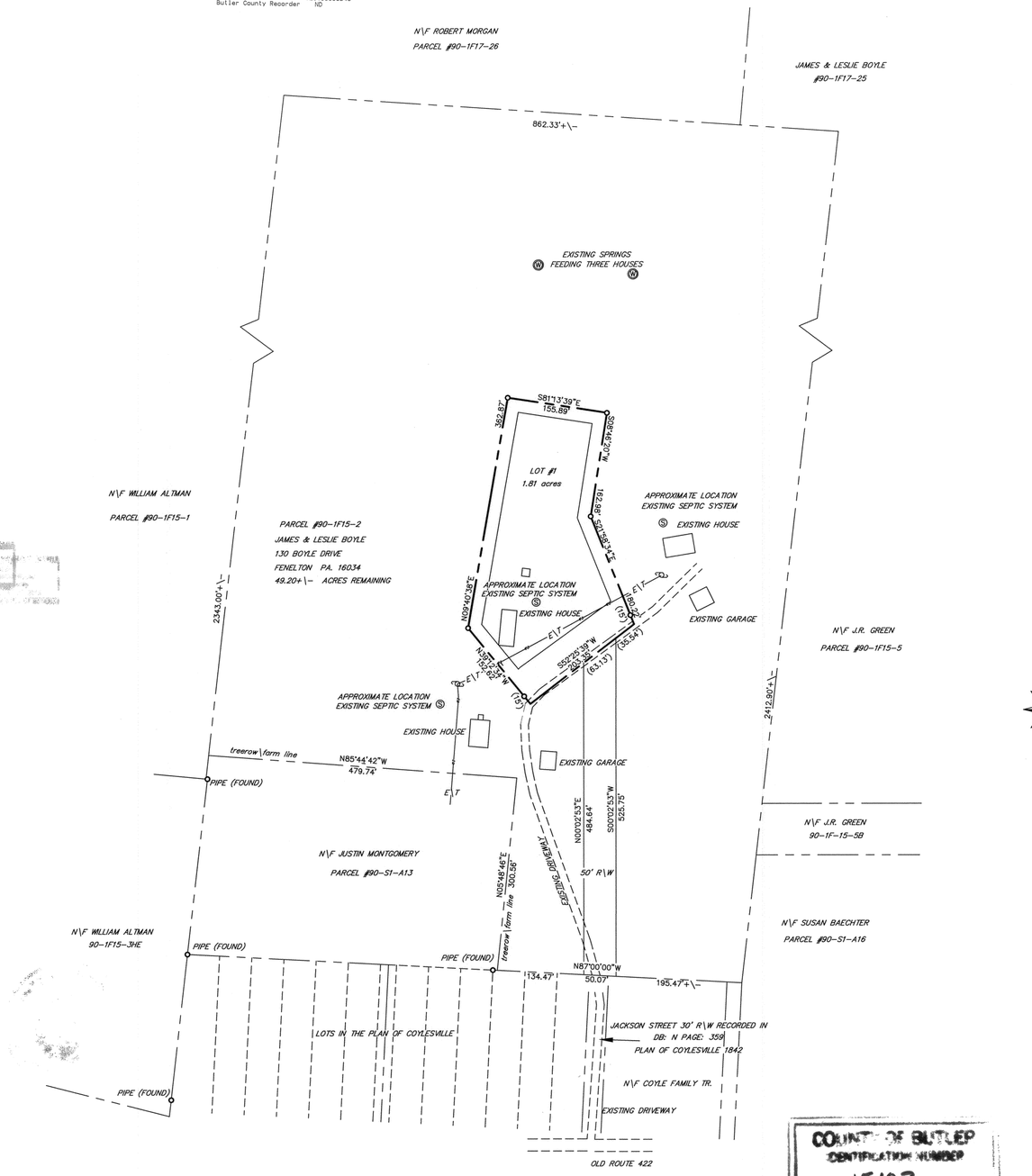
O = IRON PIN

NOTE:
MAINTENANCE OF THE EXISTING DRIVEWAY AND THE 50' R\W SHALL BE SHARED BY THE OWNERS OF LOT #1, AND THE OWNERS OF THE REMAINING PARCEL

Instr:201505250011126 05/26/2015
Pages: 1 $45.00 1:36PM
Michele Mustello T20150008940
Butler County Recorder ND



PARENT TRACT



Landowners Declaration of Intent

We, James & Leslie Boyle, being duly affirmed according to the law, depose that we are the owner of record of the lands shown herein being considered for subdivision approval. In addition, we have reviewed the plans and are in agreement with what is presented for approval.

Deceased
Signature of property owner

Leslie E. Boyle
Signature of property owner

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF BUTLER
on this 7th day of May, 2015 Before me a Notary Public
in and for said state and county personally came
Leslie Boyle known to be the person whose name is
subscribed to the within instrument.
In witness whereof I have here unto set my name and offical seal.

Notary Public

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Christopher Coyle, Notary Public
City of Butler, Butler County
My Commission Expires April 7, 2019
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Final approval by the Clearfield Twp. Supervisors

THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF CLEARFIELD HEREBY GIVES PUBLIC NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING PURPOSES ONLY, THE TOWNSHIP ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESSED OR IMPLIED, EITHER TO ACCEPT SAID STREETS AS TOWNSHIP STREETS OR ROADS, OR TO GRADE, PAVE AND CURB THE STREETS IN SAID PLAN, OR TO CONSTRUCT SEWERS THEREIN, OR TO INSTALL ANY OTHER SUCH SERVICE ORDINARILY INSTALLED IN TOWNSHIP STREETS OR ROADS.

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF CLEARFIELD

THIS 11th DAY OF May, 2015

Secretary Seal Chairman

Final approval by the Clearfield Twp. Planning Commission

this 4th day of May 2015

Secretary Chairman

Reviewed by the Butler County Planning Commission

this 15TH day of APRIL, 2015

Secretary Seal Chairman

BUTLER COUNTY PLANNING COMMISSION

Certification by Professional Land Surveyor

I, Richard D.Sedwick, a Professional Land Surveyor, registered by the Commonwealth of Pennsylvania,do hereby certify that the plan as shown hereon is based upon actual field survey of the land described and that all angles,distances and courses are correctly stated, that the monuments and markers have been set as shown on this plat, and that this plan correctly represents the lots, land, streets and easements surveyed by me for the owner(s)

MARCH 2015
DATE

SEAL

COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
RICHARD D. SEDWICK
LAND
SU-055081-E
Surveyor

BUTLER COUNTY PENNSYLVANIA
Recorded in the Recorder's office
of the said County on this 26th day
of MAY 20 15
In Misc. Index PLAN BOOK 348-14
No.
Witness my hand and the seal of said office.
Michele J. Mustello RECORDER

RECORDER OF DEEDS
BUTLER COUNTY PA.

MICHELE J. MUSTELLO
RECORDER OF DEEDS
Commission Expires First Monday in January 2016

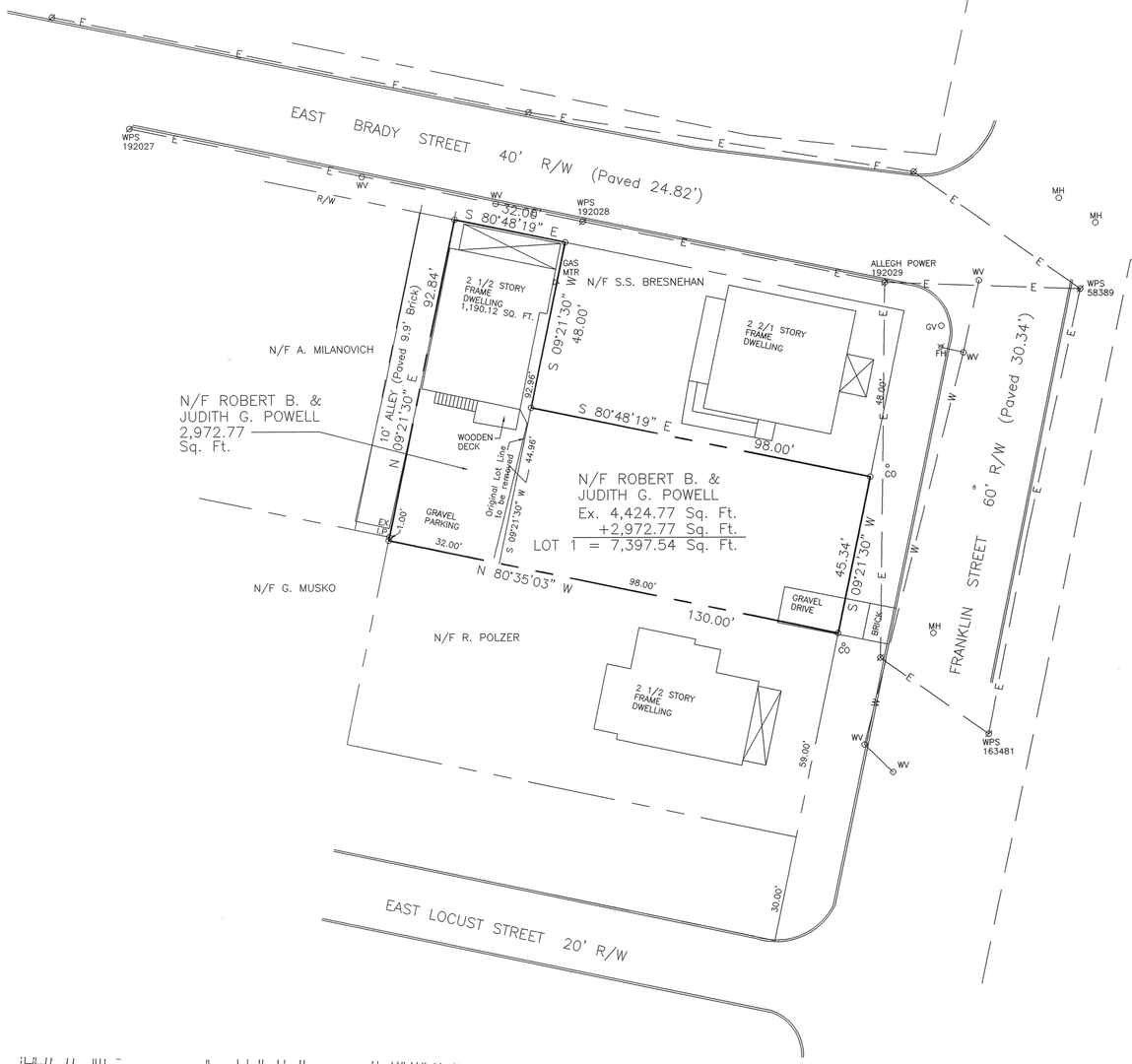
COUNTY OF BUTLER
CERTIFICATION NUMBER
15103

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

PLAN BOOK	PAGE
348	14

DRAWN BY: R.D.S.	SUBDIVISION PLAN
CHECKED BY D.R.D.	MADE FOR
SCALE: 1"=100'	James & Leslie Boyle
DATE: MARCH 2015	130 BOYLE DRIVE
DRAWING NO: 90-1F15-2	CLEARFIELD TWP. FENELTON PA. 16034 BUTLER CO.
	R.D.SEDWICK P.L.S. 326 CONERTY RD. CHICORA,PA. 724-355-9302

Instr. 201505290011298 05/29/2015
Pages: 1 F:$45.00 S:$505
Michele Mustello T20150009078
Butler County Recorder FL



NOTES:

SUBJECT TO ANY AND ALL EXISTING RIGHTS-OF-WAY AND EASEMENTS OF RECORD.

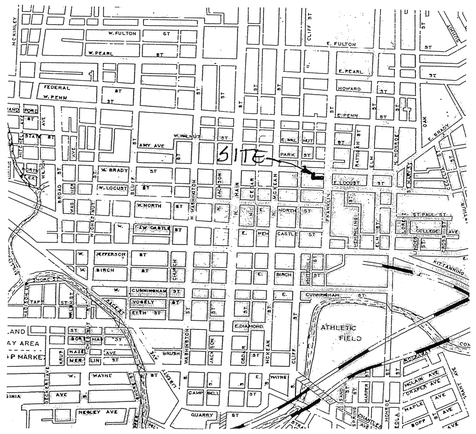
ACCORDING TO THE FLOOD INSURANCE RATE MAP PREPARED FOR THE CITY OF BUTLER, THIS PROPERTY LIES IN ZONE C – AREAS OF MINIMAL FLOODING.

PROPERTY OWNERS: ROBERT B. & JUDITH G. POWELL
763 UNIONVILLE ROAD
PROSPECT, PA 16052

ZONING: R-3; HIGH DENSITY RESIDENTIAL DISTRICT

THE PURPOSE OF THE PLAN IS TO COMBINE TWO ADJOINING PARCELS INTO ONE LOT.

0' 20' 40' 60'



VICINIY MAP

KNOW ALL MEN BY THESE PRESENTS, That we, Robert B. and Judith G. Powell, of the City of Butler, of the County of Butler, Commonwealth of Pennsylvania, for ourselves, our heirs, executors, administrators and assigns, do hereby adopt this plan as our Plan of Lots of our property, situate in City of Butler, Butler County, Pennsylvania, and for divers advantages accruing to me, do hereby dedicate forever, for public use for highway purposes all slope areas and all drives, roads, streets, lanes, ways and other public highways shown upon the plan, with the same force and effect as if the same had been opened through legal proceedings, and in consideration of the approval of said plan, and any future acceptance of said public highways by the said Commonwealth of Pennsylvania, County of Butler, and City of Butler, we hereby covenant and agree to and by these presents do release and forever discharge said Commonwealth of Pennsylvania, County of Butler and City of Butler, their successors or assigns from any liability for damages arising and to arise from any appropriation of said ground for public highways and the physical grading thereof to any grades that may be established hereafter at any time. This dedication and release shall be binding upon Robert B. and Judith G. Powell, our heirs, executors, administrators and assigns and purchasers of lots of this plan.

IN WITNESS WHEREOF, we hereunto set our hands and seals this 22nd day of May, 2015.

ATTEST:

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Christopher Coyle, Notary Public
City of Butler, Butler County
My Commission Expires April 7, 2019
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Robert B. Powell
OWNER

Judith Gay Powell
OWNER

COMMONWEALTH OF PENNSYLVANIA]SS:
COUNTY OF BUTLER]

Before me, the subscriber, a Notary Public in and for said Commonwealth and County, personally appeared the above named Robert B. and Judith G. Powell, and acknowledged the foregoing release and dedications and plan to be their act and deed and desired the same to be recorded as such.

Sworn to and subscribed before me this day.

WITNESS MY HAND AND NOTARIAL SEAL this 22nd day of May, 2015.

My commission expires this 7th day of April, 2019.

SEAL

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Christopher Coyle, Notary Public
City of Butler, Butler County
My Commission Expires April 7, 2019
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
Cheryl A. Hughes
LAND SURVEYOR
SU-32490-E
PENNSYLVANIA

I, Cheryl A. Hughes, a Registered Professional Land Surveyor of the Commonwealth of Pennsylvania, do hereby certify that this plan as shown hereon is based upon actual field survey of the land described and that all angles, distances and courses are correctly shown, that the monuments and markers have been set as shown on the plan, and that this plan correctly represents the lots, lands, streets and highways as surveyed and plotted by me for the owners or agents.

DATE May 7, 2015

SIGNATURE OF LAND SURVEYOR
REGISTRATION NUMBER SU-32490-E

The City Council of the City of Butler hereby gives public notice that in approving this plan for recording purposes only, the City of Butler assumes no obligations, legal or otherwise, expressed or implied either to accept said streets as City streets or roads or grade, pave and curb the streets in said plan, or to construct sewers therein or to install any other such service ordinarily installed in City streets or roads.

CITY CLERK SEAL MAYOR Thomas P. Donaldson

Approval by the City Council of the City of Butler this 21ST day of May, 2015.

CITY CLERK SEAL MAYOR Thomas P. Donaldson

Approved by the Butler City Planning Commission this 19th day of May, 2015.

SECRETARY SEAL CHAIRMAN Joseph W. Cozzens

Approved by the Butler County Planning Commission this 26TH day of May, 2015.

SECRETARY SEAL CHAIRMAN

BUTLER COUNTY PLANNING COMMISSION

COMMONWEALTH OF PENNSYLVANIA]SS:
COUNTY OF BUTLER]

Recorded in the Recorder's Office for the recording of deeds, plans, etc., in said County in Plan Book Volume 348 page 15.

Given under my hand and seal this 28TH day of May, 2015.

SEAL

RECORDER

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

RECORDER OF DEEDS BUTLER COUNTY, PA

PLAN BOOK	PAGE
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Land Surveyors, Inc.
523 North Main Street
P.O. Box 1061
Butler, PA 16003-1061
(724) 287-6865
Cheryl A. Hughes, PLS Owner

LOT LINE REVISION

FOR: ROBERT B. & JUDITH G. POWELL

SITUATE: CITY OF BUTLER, BUTLER CO., PA

Date 05/07/15	Scale 1" = 20'	Dwn By BEC	Ckd By CAH
Parcel No. 564-9-122, 124		Db-Pg 1458-958	Service No. 15-026
Address		Instr # 201412010028460	

I, June Walowen owner of the Walowen Plan
do hereby certify that the title of this property is in the name of
June Walowen as recorded in Deed Book Volume 772 Page 14,
Recorder of Deeds Office,I further certify that there is no mortgage,
lien or encumbrance against this property.

Witness — June Walowen

KNOW ALL MEN BY THESE PRESENTS, that we June Welowen of the Township of Butler of the County of Butler, Commonwealth of Pennsylvania, for ourselves, our heirs, executors, administrators and assigns, do hereby adopt this plan as our Plan of Lots of our property, situate in Butler Township, and do hereby dedicate forever for public use for highway and utility purposes , all drives, roads, lanes,ways, rights-of-ways and other public highways shown upon the plan, and we release, remise and discherge the Township of Butler, its successor or assigns, of and from all liabilty, courses of action, claims or damages arising from or pertaining to in any manner said roads and right - of-way.

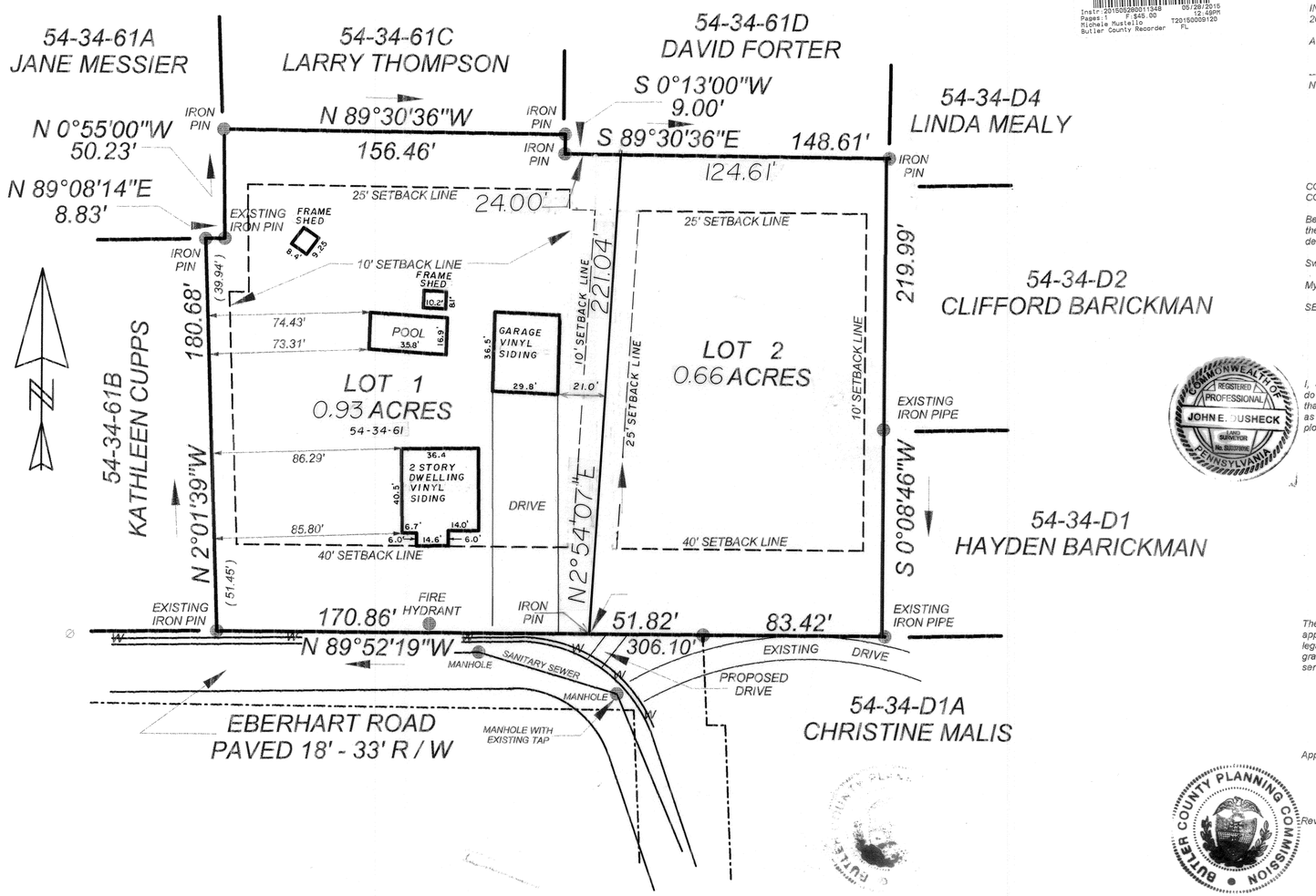
We further agree that the said plan is approved by the Township of Butler for " Planning Purposes Only " and that the said township shall not issue any " Building permits " for lots contained herein, nor shall any lots be deeded until all of said roads and improvements in accordance with Butler Township Ordinance.....and all other applicable ordinances have been completed and accepted by the said townshipor until the township has approved a bond with sufficient surely to guarantee construction of the same.

IN WITNESS WHERE, we hereunto set our hand (s) and seal (s) this 25th day of February 20 15

ATTEST:

NOTARY PUBLIC — June Walowen OWNER — OWNER

Instr:201502260011348 02/26/2015 12:48PM
Pages:1 F:$45.00 T20150009120
Michele Mustello
Butler County Recorder FL



COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

Before me, the subscriber, a Notary Public in and for said Commonwealth and County, personally appeared the above named June Walowen and acknowledged the foregoing release and dedication and plan to be their act and deed and desired the same to be recorded as such.

Sworn to and subscribed before me this 25th day of February, 2015

My Commission expires the 06th day of MARCH 2016

SEAL

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Darrin J. Nichter, Notary Public
Center Twp., Butler County
My Commission Expires March 6, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

NOTARY PUBLIC

I, John E. Dusheck a Registered Professional Land Surveyor of the Commonwealth of Pennsylvania, do hereby certify that the plan as shown hereon is based upon actual field survey of the land described and that all angles, distances and courses are correctly shown, that the monuments and markers have been set as shown on the plat, and that this plan represents the lots, land, streets and highways as surveyed and plotted by me for the owners or agents.

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN E. DUSHECK — LAND SURVEYOR — No. SU-073089E

Feb. 24, 2015 — SEALS
DATE — REGISTRATION NO. SU - 073089E

The Board of Commissioners of the Township of Butler hereby gives public notice that, in approving this plan for recording purposes only, the Township of Butler assumes no obligations, legal or otherwise, expressed or implied, either to accept said streets or roads, or to grade, pave and curb the streets in said plan, or to construct sewers therein or to install any other such service ordinarily installed in Township streets or roads.

Theresa Giesler — SECRETARY
PRESIDENT

Approved by the Butler Twp., Planning Commission this 7th day of April, 2015.

Ernest R Osterling — SECRETARY
CHAIRMAN

BUTLER COUNTY PLANNING COMMISSION

Reviewed by the Butler County Planning Commission this 26TH day of FEB, 2015.

SECRETARY — CHAIRMAN

Approved by the Board of Commissioners of the Township of Butler this 20th day of April, 2015.

Theresa Giesler — Secretary
President of Board

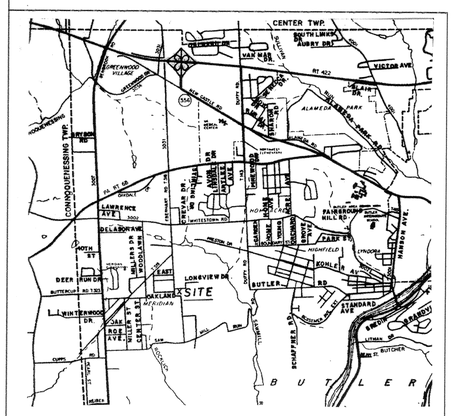
COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

Recorded in the Records Office for the Recording of deeds, plans, etc., in said County in Plan Book Volume 348 Page 16

Given under my hand and seal this 28 day of May, 2015.

SEAL — MICHELE M. MUSTELLO — RECORDER OF DEEDS — My Commission Expires First Monday in January 2016

RECORDER



LOCATION MAP

PLAN BOOK	PAGE
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NOTICE TO SUBDIVIDERS:
UPON THE APPROVAL OF A FINAL PLAT, THE DEVELOPER SHALL WITHIN 90 DAYS OF SUCH FINAL APPROVAL, OR 90 DAYS AFTER THE DATE OF DELIVERY OF AN APPROVED PLAT SIGNED BY THE GOVERNING BODY, FOLLOWING COMPLETION OF CONDITIONS IMPOSED FOR SUCH APPROVAL , WHICHEVER IS LATER, RECORD SUCH PLAT IN THE OFFICE OF THE RECORDER OF DEEDS OF THE COUNTY IN WHICH THE MUNICIPALITY IS LOCATED. WHENEVER SUCH PLAT APPROVAL IS REQUIRED BY A MUNICIPALITY, THE RECORDER OF DEEDS OF THE COUNTY SHALL NOT ACCEPT ANY PLAT FOR RECORDING, UNLESS SUCH PLAT OFFICIALLY NOTES THE APPROVAL OF THE GOVERNING BODY AND REVIEW BY THE COUNTY PLANNING AGENCY. IF ONE EXISTS.

OWNER / SUBDIVIDER
JUNE WALOWEN
475 EBERHART ROAD
BUTLER PA., 16001

NOTES:
1). SUBJECT TO ANY AND ALL RIGHTS OF WAYS AND EASEMENTS OF RECORD.
2). ACCORDING TO THE FLOOD INSURANCE RATE MAP PREPARED FOR THIS TOWNSHIP , THIS PROPERTY IS NOT IN A FLOOD PRONE AREA.
3). ZONED R - 1. (BUILDING LINES)
40' FRONT YARD LINE
10' SIDE YARD LINE
25' REAR YARD LINE

TOTAL AREA = 1.59 ACRES.

0 15' 30' 60' 90'

JOHN E. DUSHECK
SURVEYOR
BOX 1755
BUTLER PA. 16003
(724) 287-7825

Date : 1 / 20 / 2015	PROPERTY SUBDIVISION FOR: JUNE WALOWEN
Scale : 1 " = 30'	SITUATE BUTLER TWP., BUTLER CO., PA
Dwn. By : SAB	
REVISED : 4/1/2015 Revised: 4/16/2015	

KNOW ALL MEN BY THESE PRESENTS; THAT PAUL E. & KATHY S. RIHEL, DO HEREBY ADOPT THIS PLAN AS ITS PLAN OF LOTS OF ITS PROPERTY SITUATE IN CLAY TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA, AND FOR DIVERS ADVANTAGES ACCRUING TO IT, DOES HEREBY DEDICATE FOREVER, FOR PUBLIC USE FOR HIGHWAY PURPOSES ALL SLOPE AREAS AND ALL DRIVES, ROADS, STREETS, LANES, WAYS AND OTHER PUBLIC HIGHWAYS SHOWN UPON THE PLAN, WITH THE SAME FORCE AND EFFECT AS IF THE SAME HAD BEEN THROUGH LEGAL PROCEEDINGS, AND IN CONSIDERATION OF THE APPROVAL OF SAID PLAN, AND ANY FUTURE ACCEPTANCE OF SAID PUBLIC HIGHWAYS BY THE COMMONWEALTH OF PENNSYLVANIA, COUNTY OF BUTLER, AND TOWNSHIP OF CLAY, PAUL E. & KATHY S. RIHEL, HEREBY COVENANTS AND AGREES TO AND BY THESE PRESENTS DOES RELEASE AND FOREVER DISCHARGE SAID COMMONWEALTH OF PENNSYLVANIA, COUNTY OF BUTLER, AND TOWNSHIP OF CLAY, THEIR SUCCESSORS OR ASSIGNS FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON PAUL E. & KATHY S. RIHEL, OUR SUCCESSORS AND ASSIGNS AND PURCHASERS OF LOTS IN THIS PLAN.

IN WITNESS WHEREOF, WE, HEREUNTO SET OUR HAND AND SEAL THIS 4th DAY OF May 20 15.

ATTEST:

Deborah J. Mendelsohn — WITNESS
Paul E. Rihel — OWNER

Deborah J. Mendelsohn — WITNESS
Kathy S. Rihel — OWNER

COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR SAID COMMONWEALTH AND COUNTY, _____ PERSONALLY APPEARED ABOVED NAMED PAUL E. & KATHY S. RIHEL AND ACKNOWLEDGED THE FOREGOING RELEASE AND DEDICATION AND PLAN TO BE OUR ACT AND DEED AND DESIRE THE SAME TO BE RECORDED AS SUCH.

SWORN AND SUBSCRIBED BEFORE ME THIS DAY.

WITNESS MY HAND AND SEAL THIS 4th DAY OF May 20 15
MY COMMISSION EXPIRES THE 22 DAY OF May 2015

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Deborah J. Mendelsohn, Notary Public
Clay Twp., Butler County
My Commission Expires May 22, 2015
Member, Pennsylvania Association of Notaries

Deborah J. Mendelsohn
NOTARY PUBLIC

REVIEWED BY THE CLAY TOWNSHIP PLANNING COMMISSION THIS 19th DAY OF May, 20 15.

Michelle Mundis — SECRETARY
Richard K. Geyer — CHAIRMAN

THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF CLAY HEREBY GIVES PUBLIC NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING PURPOSES ONLY, THE TOWNSHIP OF CLAY ASSUMES NO OBLIGATIONS, LEGAL OR OTHERWISE, EXPRESSED OR IMPLIED, EITHER TO ACCEPT SAID STREETS AS TOWNSHIP STREETS, OR ROADS, OR GRADES, PAVE AND CURB THE STREETS IN SAID PLAN, OR TO CONSTRUCT SEWERS THEREIN OR TO INSTALL ANY OTHER SUCH SERVICE ORDINARILY INSTALLED IN TOWNSHIP STREETS OR ROADS.

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF CLAY, THIS 19th DAY OF May, 20 15.

James W. Kluko — SECRETARY
David C. Beachem — CHAIRMAN , BOARD OF SUPERVISORS

_____ — SUPERVISOR

I, _____, A REGISTERED PROFESSIONAL ENGINEER FOR THE TOWNSHIP OF CLAY, DO HEREBY CERTIFY THAT THIS SUBDIVISION PLAN MEETS ALL THE ENGINEERING REQUIREMENTS OF THE TOWNSHIP OF CLAY SUBDIVISION AND ZONING ORDINANCES, EXCEPT AS DEPARTURES HAVE BEEN AUTHORIZED BY THE APPROVAL AUTHORITY.

_____ DATE
_____ REG. NO.

I, GREGORY B. JONES, A PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY, TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS, AND HIGHWAYS AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS AND OR AGENTS.

4-26-2015 DATE
Greg B. Jones REG. NO. SU-052331-E

REVIEWED BY THE BUTLER COUNTY PLANNING COMMISSION THIS 27th DAY OF APRIL 20 15.

_____ SECRETARY
_____ CHAIRMAN

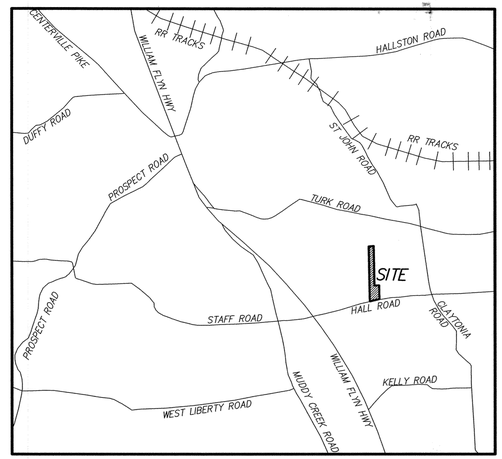
COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

RECORDED IN THE RECORDERS OFFICE FOR THE RECORDING OF DEEDS, PLANS, ETC. IN SAID COUNTY IN PLAN BOOK VOLUME 348 PAGE 17
GIVEN UNDER MY HAND AND SEAL THIS 29 DAY OF May 20 15.

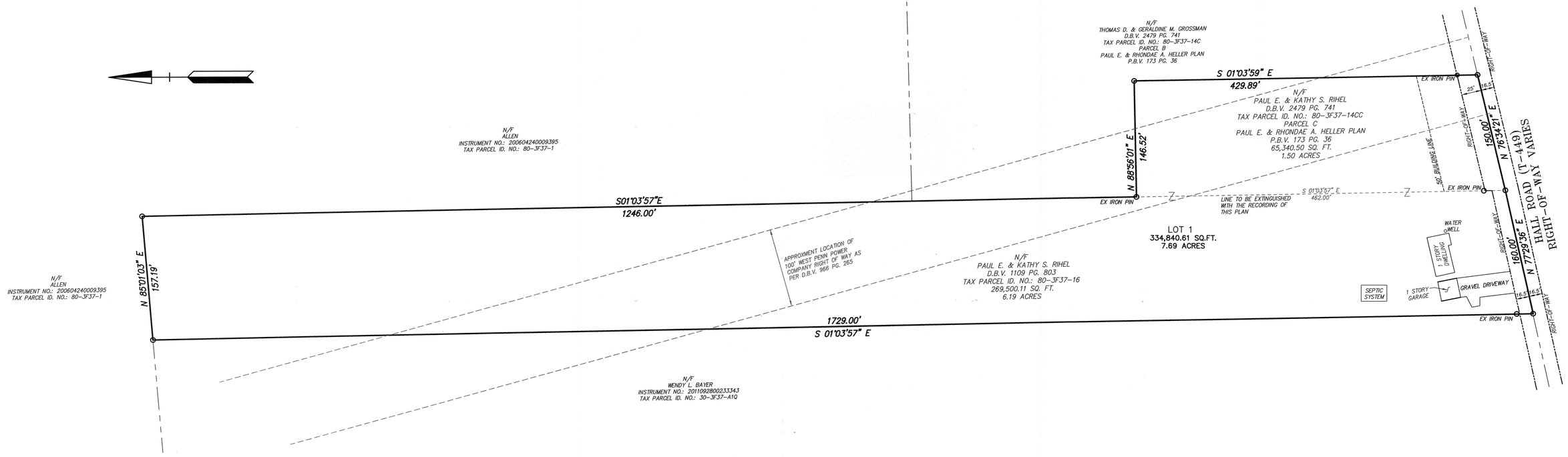
Michele M. Mustello

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

Instr:201505290011426 05/29/2015 10:08AM
Pages:1 Mustello F:$45.00 T20150009184
Michele Mustello FL
Butler County Recorder



LOCATION MAP



PLAN BOOK	PAGE
348	17

OWNER:
Paul & Kathy Rihel
201 Hall Road
Slippery Rock, PA 16057

60 0 30 60 120 240
1 inch = 60 ft.

NOTE: THE BEARING SYSTEM USED ON THIS PLAN IS BASED ON THE NORTH AMERICAN DATUM (NAD) 1983.

Rihel Consolidation Plan

Situate in

Clay Township
Butler County, Pennsylvania

Prepared For

Paul & Kathy Rihel

Prepared By:
Greg Jones Surveying
752 Harmony Road
Slippery Rock, Pa. 16057
(724) 421-6163

Scale: 1" = 60'
Date: April 18, 2015
DWG: RIHEL-CONSOLIDATION-PLAN
DRAWN BY: MAM
CHECKED BY: GBJ

SHEET 1 OF 1

Notary Public

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL GREGORY B. JONES LAND SURVEYOR SU-052331-E
Registered Surveyor

Clay Township Planning Commission

Clay Township Board of Supervisors

Clay Township Engineer

BUTLER COUNTY PLANNING COMMISSION
Butler County, Pa. Planning Commission

RECORDER OF DEEDS BUTLER COUNTY, PA.
Butler County, Pa. Recorder of Deeds

PROFESSIONAL LAND SURVEYOR CERTIFICATE

I, WILLIAM D. MOHNEY, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THIS PLAN SHOWN HEREON IS BASED UPON ACTUAL FIELD SURVEY OF THE LAND DESCRIBED AND THAT ALL ANGLES, DISTANCES AND COURSES ARE CORRECTLY SHOWN, THAT THE MONUMENTS AND MARKERS AS SHOWN ON THE PLAT HAVE BEEN, OR WILL BE SET, AND TO THE BEST OF MY KNOWLEDGE, THAT THIS PLAN CORRECTLY REPRESENTS THE LOTS, LANDS, STREETS AND HIGHWAYS AS SURVEYED AND PLOTTED BY ME FOR THE OWNERS OR AGENTS.

WILLIAM D. MOHNEY
PLS# 16237-E

SEAL

(SURVEYOR)

2/20/15
(DATE)

OWNERS ADOPTION

KNOW ALL MEN BY THESE PRESENTS, THAT WE, SUZEE A. BEBLO OF THE TOWNSHIP OF JEFFERSON, AND TONI M. DEMATTEIS-TICHE OF THE TOWNSHIP OF MARION, BOTH OF THE COUNTY OF BUTLER, OF THE COMMONWEALTH OF PENNSYLVANIA, FOR OURSELVES, OUR HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGN, DO HEREBY ADOPT THIS AS OUR LOT LINE REVISION OF OUR PROPERTY, SITUATE IN THE TOWNSHIP OF MARION, OF BUTLER COUNTY, OF THE COMMONWEALTH OF PENNSYLVANIA, AND DO HEREBY DEDICATE FOREVER, FOR PUBLIC USE FOR HIGHWAY, AND UTILITY PURPOSES, ALL DRIVES, ROADS, LANDS, RIGHTS-OF-WAYS, EASEMENTS, WAYS AND OTHER PUBLIC HIGHWAYS SHOWN UPON THE PLAN, AND WE HEREBY RELEASE AND FOREVER DISCHARGE THE COUNTY OF BUTLER, IT'S SUCCESSOR OR ASSIGNS, FROM ANY LIABILITY, COURSE OF ACTION, CLAIMS OR DAMAGES ARISING FROM OR PERTAINING TO IN ANY MANNER SAID ROADS AND RIGHTS OF WAY. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON THE ABOVE NAMED PROPERTY OWNERS, THERE HEIRS, EXECUTORS, ADMINISTRATORS AND ASSIGNS AND PURCHASERS OF LOTS IN THIS REVISION.

IN WITNESS WHEREOF, WE HEREUNTO SET OUR HAND AND SEAL THIS 21 DAY OF April, 2015

Suzee A Beblo
OWNER - SUZEE A. BEBLO

Toni M DeMatteis-Tiche
OWNER - TONI M. DEMATTEIS-TICHE

ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA)
) SS
COUNTY OF BUTLER)

BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR SAID STATE AND COUNTY, PERSONALLY CAME SUZEE A. BEBLO AND TONI M. DEMATTEIS-TICHE AND ACKNOWLEDGED THE FOREGOING RELEASE AND DEDICATION AND PLAN TO BE THERE ACT AND DEED AND DESIRED THE SAME TO BE RECORDED AS SUCH.

WITNESS MY HAND AND NOTARY SEAL

THIS 21 DAY OF April, 2015.

MY COMMISSION EXPIRES THE 06 DAY OF June 2017 ~~2015~~.

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Paula J. Riggs, Notary Public
Center Twp., Butler County
My Commission Expires June 6, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Paula J Riggs
NOTARY PUBLIC

BUTLER COUNTY PLANNING COMMISSION APPROVAL

REVIEWED
APPROVED BY THE BUTLER COUNTY PLANNING COMMISSION THIS 24TH DAY OF APRIL, 2015.

BUTLER COUNTY PLANNING COMMISSION SEAL

(SECRETARY)

(CHAIRMAN)

SEE COMMENTS ON FILE AT THE BUTLER COUNTY PLANNING COMMISSION

PLAN NUMBER: 15107

MUNICIPAL SUPERVISORS APPROVAL

REVIEWED AND APPROVED BY THE SUPERVISORS OF MARION TOWNSHIP THIS 11 DAY OF May, 2015.

SEAL

(SECRETARY)

(CHAIRMAN)

PROOF OF RECORDING

COMMONWEALTH OF PENNSYLVANIA)
) SS
COUNTY OF BUTLER)

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, PLATS, ETC., IN SAID COUNTY, IN PLAN BOOK VOLUME 348 PAGE(S) 18 AND/OR INSTRUMENT NUMBER 201505290011428.

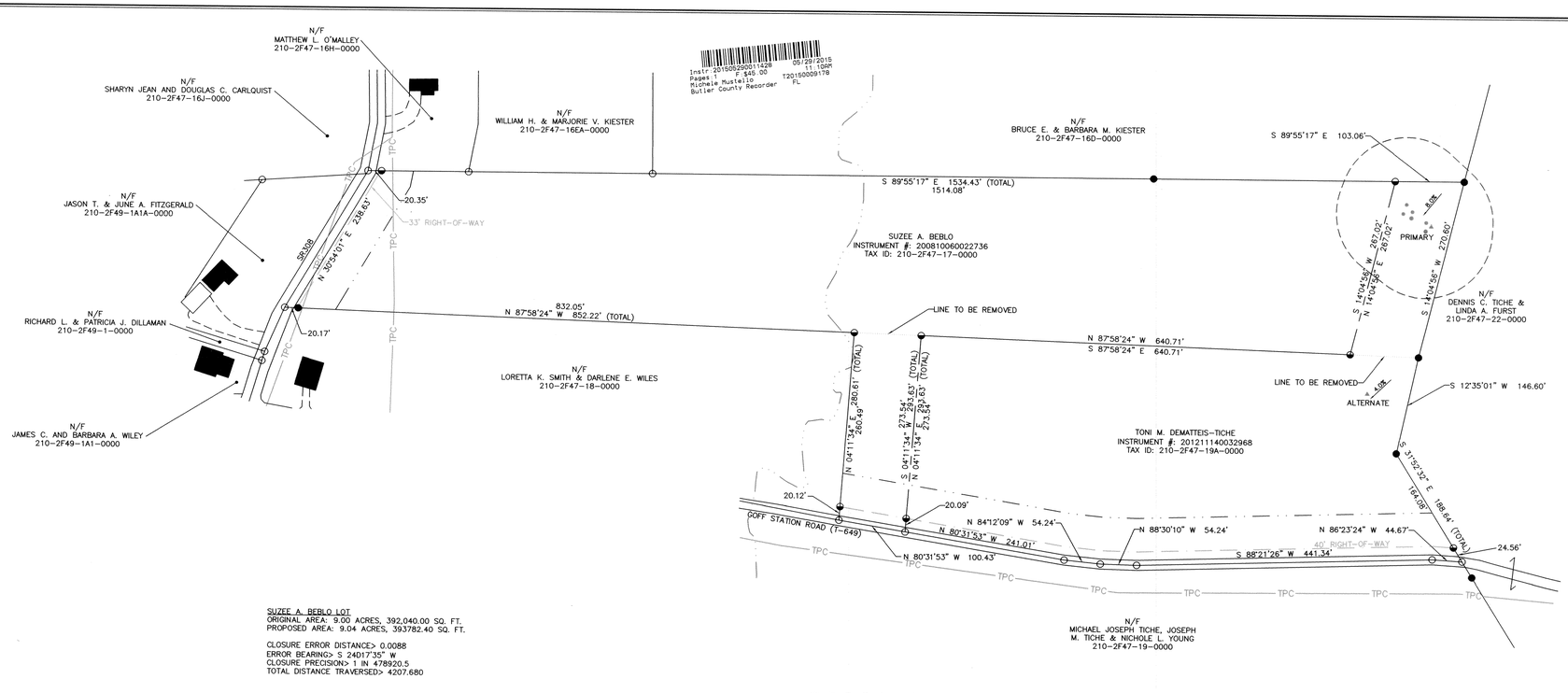
GIVEN UNDER MY HAND AND SEAL THIS 29 DAY OF May, 2015.

RECORDER OF DEEDS SEAL

(RECORDER OF DEEDS)

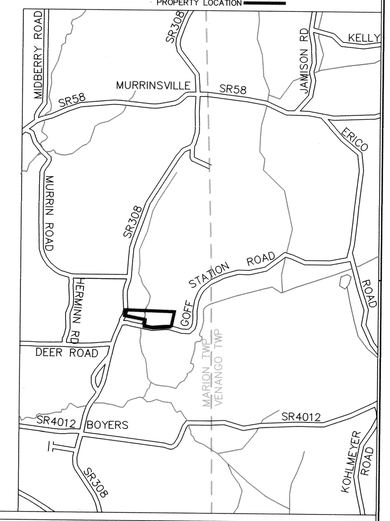
MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

PLAN BOOK	PAGE
348	18



LOCATION MAP

MARION TOWNSHIP
BUTLER COUNTY
SCALE: 1" = 1/2 MILE
PROPERTY LOCATION



SUZEE A. BEBLO LOT

ORIGINAL AREA: 9.00 ACRES, 392,040.00 SQ. FT.
PROPOSED AREA: 9.04 ACRES, 393782.40 SQ. FT.

CLOSURE ERROR DISTANCE> 0.0088
ERROR BEARING> S 24D17'35" W
CLOSURE PRECISION> 1 IN 478920.5
TOTAL DISTANCE TRAVERSED> 4207.680

TONI M. DEMATTEIS-TICHE LOT

ORIGINAL AREA: 6.12 ACRES, 266587.20 SQ. FT.
PROPOSED AREA: 6.07 ACRES, 264409.20 SQ. FT.

CLOSURE ERROR DISTANCE> 0.0087
ERROR BEARING> S 53°34'11" E
CLOSURE PRECISION> 1 IN 315930.7
TOTAL DISTANCE TRAVERSED> 2745.760

LOT YARD AND HEIGHT REQUIREMENTS (SINGLE FAMILY)

MINIMUM AREA (SQ. FT):	30,000 SQ. FT. PER DWELLING UNIT
MINIMUM YARD WIDTH AT BUILDING LINE:	100 FT.
MINIMUM FRONT YARD SETBACK:	50 FT.
MAXIMUM HEIGHT:	3 STORIES

NOTES:

1. THE PURPOSE OF THIS LOT LINE REVISION IS TO REVISE THE EXISTING PROPERTY LINES BETWEEN THE TONI M. DEMATTEIS-TICHE AND SUZEE A. BEBLO LOTS.
2. THE TONI M. DEMATTEIS-TICHE LOT IS ALSO KNOWN AS LOT 1 IN THE MINOR SUBDIVISION FOR MICHAEL J. TICHE AND BRADLEY D. TICHE AND RECORDED IN THE RECORDER OF DEEDS OFFICE OF BUTLER COUNTY AS PLAN BOOK VOLUME 331, PAGE 1, INSTRUMENT NO. 201208210023826.
3. LOTS SUBJECT TO AND TOGETHER WITH ANY AND ALL EXISTING RIGHTS-OF-WAY, EASEMENTS AND CONDITIONAL CLAUSES OF RECORD OR ESTABLISHED BY DUE PROCESS.

LEGEND

- PROPERTY BOUNDARY
- RIGHT OF WAY LINE
- PROPOSED LOT BOUNDARIES
- 50' BUILDING SETBACK LINE
- FOUND IRON PIN
- PROPERTY CORNER
- 5/8" REBAR TO BE SET
- TPC — TELEPHONE, POWER OR CABLE LINE
- STREAM
- HOUSE OR DWELLING
- BARN, GARAGE, OR SHED
- PERCOLATION TEST HOLE
- SOIL PROFILE TEST PIT
- 0% — TEST AREA SLOPE (from Appendix A)
- 100' WATER WELL ISOLATION AREA

LOT LINE REVISION BETWEEN TONI M. DEMATTEIS-TICHE & SUZEE A. BEBLO

COUNTY: BUTLER COUNTY
MUNICIPALITY: MARION TOWNSHIP
DRAWN BY: bcr
DATE: FEBRUARY 2015
SCALE: 1" = 100'

W.D. Mohney & Associates
Hiser Engineering, Inc.

Jonathan K. Hiser, PE - President
P.O. Box 339
Worthington, PA 16262
Phone: (724) 297-5321
Fax: (724) 297-5462
E-mail: office@hiserengineering.com

CURRENT OWNERS:
TONI M. DEMATTEIS-TICHE
PO BOX 242
BOYERS, PA 16020

SUZEE A. BEBLO
270 GREAT BELT ROAD
BUTLER, PA 16002

EXHIBIT: LOT LINE REVISION
ACAD FILE NAME: toni dematteis lot line revision.dwg

● KNOW ALL MEN BY THESE PRESENTS That I, Gilbert Verner, of the Township of West Franklin, County of Armstrong and State of Pennsylvania for myself, my heirs, executors, administrators and assigns, do hereby adopt this as my plan of lots of my property, situate in the Township of Clearfield and West Franklink Townships, County of Butler and Armstrong, respectively and State of Pennsylvania, and for divers advantages accruing to me, do hereby dedicate forever, for public use for highway purposes, all drives, roads, streets, lanes and ways, and other public highways shown upon the plan, with the same force and effect as if the same had been opened through legal proceedings, and I hereby release and forever discharge the Township of Clearfield, their successors and assigns from any liability for damage caused by any grading thereof to any grades hereafter at anytime thereof according to such established grades. This dedication and release shall be binding upon the above named property owner, her heirs, executors, administrators and assigns and purchasers of lots in this plan.

IN WITNESS WHEREOF, I hereunto set my hand and seal this 22nd day of MAY 2015.

Gilbert Verner
Owner

● COMMONWEALTH OF PENNSYLVANIA : SS
COUNTY OF Allegheny :

Before me, the subscriber, a Notary Public in and for said State and County, personally came Gilbert Verner, ~~Executrix~~ and acknowledged the foregoing release and dedication and plan to be their act and deed and desired the same to be recorded as such.

WITNESS MY HAND AND NOTARIAL SEAL this 22 day of May 2015.

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Michelle V. Pugliese, Notary Public
Harrison Twp., Allegheny County
My Commission Expires Feb. 23, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Michelle V. Pugliese
Notary Public

● Reviewed by the Clearfield Township Planning Commission this 29 day of MAY 2015.

Secretary — Chairman

● Reviewed by the Butler County Planning Commission this 20TH day of MAY 2015.

BUTLER COUNTY PLANNING COMMISSION
Seal

Secretary — Chairman

● I, Jeffrey A. Horneman, a Registered Professional Surveyor of the Commonwealth of Pennsylvania, do hereby certify, to the best of my knowledge, that this plan as shown hereon is based upon actual field survey of the land described and that all angles, distances and courses are correctly shown, that the monuments and markers have been set as shown on the plan, and that this plan correctly represents the lots, lands, streets and highways as surveyed and plotted by me for the owners or agents.

18 April 2015 — Date

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JEFFREY ALAN HORNEMAN
LAND SURVEYOR
051092-E
18 APRIL 2015

Jeffrey Alan Horneman
P.L.S. #051092-E

● The Board of Supervisors of the Township of Clearfield, hereby gives public notice that in approving this plan for recording purposes only, the Township of Clearfield assumes no obligations, legal or otherwise, expressed or implied either to accept said streets as Township streets or roads or grade, pave and curb the streets in said plan, or to construct sewers therein or to install any other such service ordinarily installed in Township streets or roads.

Approved by the Supervisors of the Township of Clearfield this 29th day of May 2015.

Seal

Secretary — Chairman

Instr:201505290011456 05/29/2015
Pages:2 F:$85.00 2:30PM
Michele Mustello T20150009207
Butler County Recorder ND

● COMMONWEALTH OF PENNSYLVANIA : SS
COUNTY OF BUTLER :

Recorded in the Recorder's Office for the recording of deeds, plans, etc., in said County in Plan Book Volume 348 Page 19 & 20

Given under my hand and seal this 29th day of May 2015.

Recorder

RECORDER OF DEEDS
BUTLER COUNTY, PA
Seal

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

PLAN BOOK	PAGE
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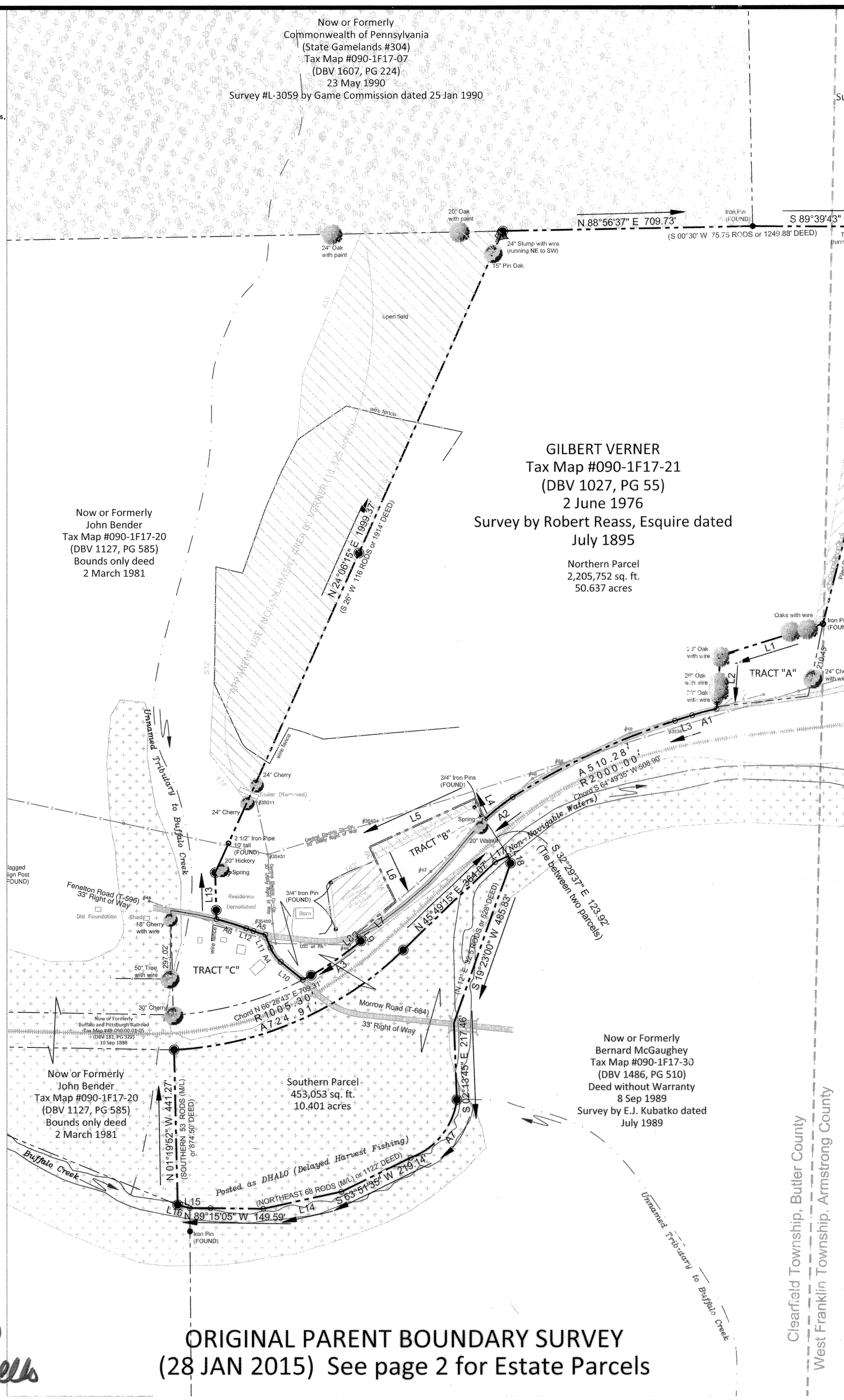


LINE TABLE:

NORTHERN PARCEL
L1 S 72°47'28" W 304.73' (N 71° 50' 30" W DEED)
L2 S 03°56'58" W 152.26' (N 03° E 146.05' DEED)
A1 Arc 71.74' Radius 600.00' Chord S 75°33'39" W 71.70'
L3 S 72°08'08" W 51.28'
A2 Arc 101.92' Radius 575.00' Chord S 50°57'49"W 101.79'
L4 N 24°48'22" W 66.00' (NORTH DEED) 45.45' McGARVEY SURVEY
L5 S 65°11'38" W 330.00' (N 90° W DEED) 461.23' McGARVEY SURVEY
L6 S 24°48'22" E 174.87' (S 0° E 198' DEED) 168.55' McGARVEY SURVEY
L7 S 50°40'15" W 148.43'
L8 S 40°15'45" E 5.73' (to centerline road)
L9 S 40°15'45" E 19.27'
A3 Arc 198.45' Radius 904.30' Chord S 56°23'59" W 198.06'
L10 N 50°35'22" W 80.53'
A4 Arc 50.00' Radius 100.00' Chord N 36°16'00" W 49.48'
L11 N 21°56'38" W 39.67'
A5 Arc 35.34', Radius 300.00' Chord N 73°03'02" W 35.32'
L12 N 69°40'33" W 21.34'
A6 Arc 88.67', Radius 900.00' Chord N 72°29'54" W 88.63'
L13 N 01°23'45" W 135.95' (S 00°30' W 160.88' DEED)

SOUTHERN PARCEL
A7 Arc 221.40', Radius 204.61' Chord S 38°28'00" W 210.76'
L14 S 77°37'10" W 226.92'
L15 S 89°59'30" W 58.74'
L16 N 75°02'27" W 35.86'
L17 N 64°47'55" E 41.58'
L18 S 16°49'45" E 22.00'

OWNERSHIP KEY:

A: N/F James McArthur, Tax Map #090-1F17-20A
DBV 2541, PG 218 (13 July 1995)

B: N/F Mark Adams, Tax Map #090-1F1-21A
Instrument #20020718002147 (16 July 2002)
Also see referenced Boundary Agreement (Oct 2000)

C: N/F Nathan Strong, Tax Map #090-1F17-22A
Instrument #200706220016200 (16 June 2007)

ORIGINAL PARENT BOUNDARY SURVEY
(28 JAN 2015) See page 2 for Estate Parcels

UTILITIES

Central Electric Cooperative in Pennsylvania.
Email: info@central.coop
Outage or Emergency: 1-800-282-8610
Member Service: 1-800-521-0570
Fax: 724-399-2300
Address:
P.O. Box 329, Parker, PA 16049
Or
716 Route 368, Parker, PA 16049

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

DEP - RESIDUAL TRACT WAIVER

"As of the date of this plot plan recording, the residual tracts of this subdivision is dedicated for the express purpose of vacant land and/or agricultural use. No portion of the residual tracts of this subdivision has been approved by the municipality or the Department of Environmental Protection for the installation of sewage disposal facilities. No sewage permit will be issued for the installation, construction, connection to or use of any sewage collection, conveyance, treatment, or disposal system (except repairs to existing systems) unless approved by the municipality or the Department of Environmental Protection for the installation of sewage. The municipality and DEP have approved sewage facilities planning for the residual tracts of the regulations promulgated thereunder. Prior to signing, executing, implementing, or recording any sales contract or subdivision plan, any purchaser or subdivider of any portion of this residual tracts should contact the municipality which is charged with administering the sewage facilities act to determine what sewage facilities planning is required and the procedure and requirements for obtaining appropriate permits or approvals.

NORTHERN PARCEL:
Closure error distance: 0.01'
Closure Precision: 1:598,524

SOUTHERN PARCEL:
Closure error distance: 0.006'
Closure Precision: 1:501,859

GENERAL NOTES:

1. A FIELD SURVEY OF THE SITE WAS PERFORMED BY HORNEMAN SURVEYING IN NOVEMBER, 2014 PER CLIENT'S INSTRUCTIONS, USING A COMBINATION OF VRS GPS TECHNIQUES (AVERAGE RMS: 0.10' OR 95% HORIZONTAL PRECISION of 0.16"), AND CONVENTIONAL TOTAL STATION WITH CLOSURE LOOPS COMPLETED AS FEASIBLE.

2. THIS SITE IS CURRENTLY NOT ZONED, ACCORDING TO CLEARFIELD TOWNSHIP.

3. UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:

A. RIGHTS OR INTERESTS OF THE UNITED STATES OF AMERICA OR COMMONWEALTH OF PENNSYLVANIA OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE, OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL AGENCY.

B. BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.

C. ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS, INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.

4. A. THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE.

B. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.

C. IN ACCORDANCE WITH PA ACT 287 OF 1974 AS AMENDED BY PA ACT 121 OF 2008. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES WITHIN THE WORK AREA VIA THE PENNSYLVANIA ONE CALL SYSTEM, INC. (800-242-1776) A MINIMUM OF 3 WORKING DAYS BEFORE THE START OF EXCAVATION.

D. THE CONTRACTOR SHALL VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.

5. THE WORD "CERTIFY" AS USED IN ITS VARIOUS FORMS HEREON, IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE SURVEYOR, WHICH IS BASED ON HIS/HER BEST KNOWLEDGE, INFORMATION AND BELIEF. AS SUCH, IT CONSTITUTES NEITHER A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.

6. THE SITE IN QUESTION IS SHOWN ON FLOOD INSURANCE RATE MAP#42019C0455D (PRELIMINARY MARCH 12, 2010), WHICH DOES NOT SHOW A BASE FLOOD ELEVATION, ONLY A GRAPHICAL DEPICTION OF ZONE "A" WHICH IS SHOWN HEREON.

7. WETLAND INFORMATION PER THE NATIONAL WETLAND INVENTORY GIS DATA ONLY, WITH NO NATIONAL WETLAND AREAS WITHIN THE PROJECT BOUNDARY. A FIELD INVESTIGATION OF WETLAND AREAS HAS NOT BEEN PERFORMED ON THIS PROJECT WHICH MAY IDENTIFY ADDITIONAL WETLAND AREAS.

8. BASIS OF PROPERTY BEARING BASED ON PA COORDINATE SYSTEM-SOUTH ZONE NAD83 COORDINATES SHOWN HEREON BASED ON PA SOUTH ZONE, US SURVEY FEET, NAD83 (EPOCH 2010).

9. THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT.

10. IRON PINS SHOWN AS "SET" ARE 1/2" DIAMETER 18" LONG REBAR WITH AN ORANGE PLASTIC CAP ENGRAVED WITH "HORNEMAN SURVEYING" CORNERS AT THE CENTERLINE OF ROADS ARE OFFSET 25'.

11. ACREAGE OF RECORDED DEED MATHEMATICALLY CALCULATES TO 70 ACRES (INCLUDING ALL EXCEPTIONS AND RIGHTS OF WAYS), ALTHOUGH STATED AS 64.125 MINUS 5.5 ACRES FOR EXCEPTIONS FOR 58.625 TOTAL. THE NORTHERN PARCEL BY SURVEY IS 50.637 ACRES AND THE SOUTHERN PARCEL BY SURVEY IS 10.401 ACRES FOR A GROSS ACREAGE OF 61.038 TOTAL.

12. SEE PENNSYLVANIA NATURAL DIVERSITY INVENTORY (PNDI) #20150215485971, DATED FEBRUARY 15, 2015. POTENTIAL SPECIES AFFECTED BY ANY FUTURE DEVELOPMENT INCLUDE THE INDIANA BAT, NORTHERN LONG-EARED BAT AND EASTERN MASSASAGUA. (USFWS #2015-0395, PAFBC SIR#43963, PAGC)

LEGEND

PROPERTY LINE
STREAMS
FLOOD ZONES
RIGHT OF WAY
OVERHEAD UTILITIES
RAILROAD
PAVED ROADS
ORIGINAL DEED LINE
POSSIBLE ENCROACHMENT AREA
IRON PIN (FOUND)
IRON PIN (SET)
IRON PIPE (FOUND)
TREE
WIRE FENCE
PROPERTY CORNER (NOT SET)

NOTES

HORIZONTAL DATUM BASED ON STATE PLANE COORDINATES (PENNSYLVANIA, SOUTH ZONE) - NORTH AMERICAN DATUM (NAD 83) EPOCH 2010.

VERTICAL DATUM IS NAVD 88.

PROPOSED LAND USE REMAINS THE SAME AS EXISTING USE (Agricultural).

NO PUBLIC WATER OR SEWAGE ARE AVAILABLE WITHIN THE EXISTING PROJECT AREA.

LANDOWNER ADDRESS

Gilbert Verner
924 Worthington-Slate Lick Road
Worthington, PA 16262

0' 200' 400' 600'
SCALE: 1"=200'

Professional Land Surveying (PA/WV/NY)

GIS Professional (GISP)

Land Development Planning and Consulting

Natural Resource Recovery Consulting (Coal, Oil/Gas)

HORNEMAN Surveying & Cartography

1110 Dallas Avenue, Natrona Heights, PA 15065
(412) 592-4126

REFERENCES:

Aerial PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey, Ground conition date April 26, 2006. The maximum permissible RMSE for 95% of the horizontal check points for the mapping product is 5 feet or better. See complete metada published for this dataset at www.PASDA.psu.edu

LIDAR (2' Contours) PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey, Ground conition date April 26, 2006. The maximum permissible RMSE for 95% of the horizontal check points for the mapping product is 5 feet or better. The vertical accuracy will meet the requirements of NSSDA at the 95% confidence interval (1.96 x RMSE). See complete metada published for this dataset at www.PASDA.psu.edu

Survey by E.J. Kubatko for Bessemer and Lake Erie Railroad Company, drawing #S89-670, dated July 1989

Survey by the Pennsylvania Game Commission for State Game Lands #304 L-3059, Grantor: Gloria J. Haller, dated 26 January 1990

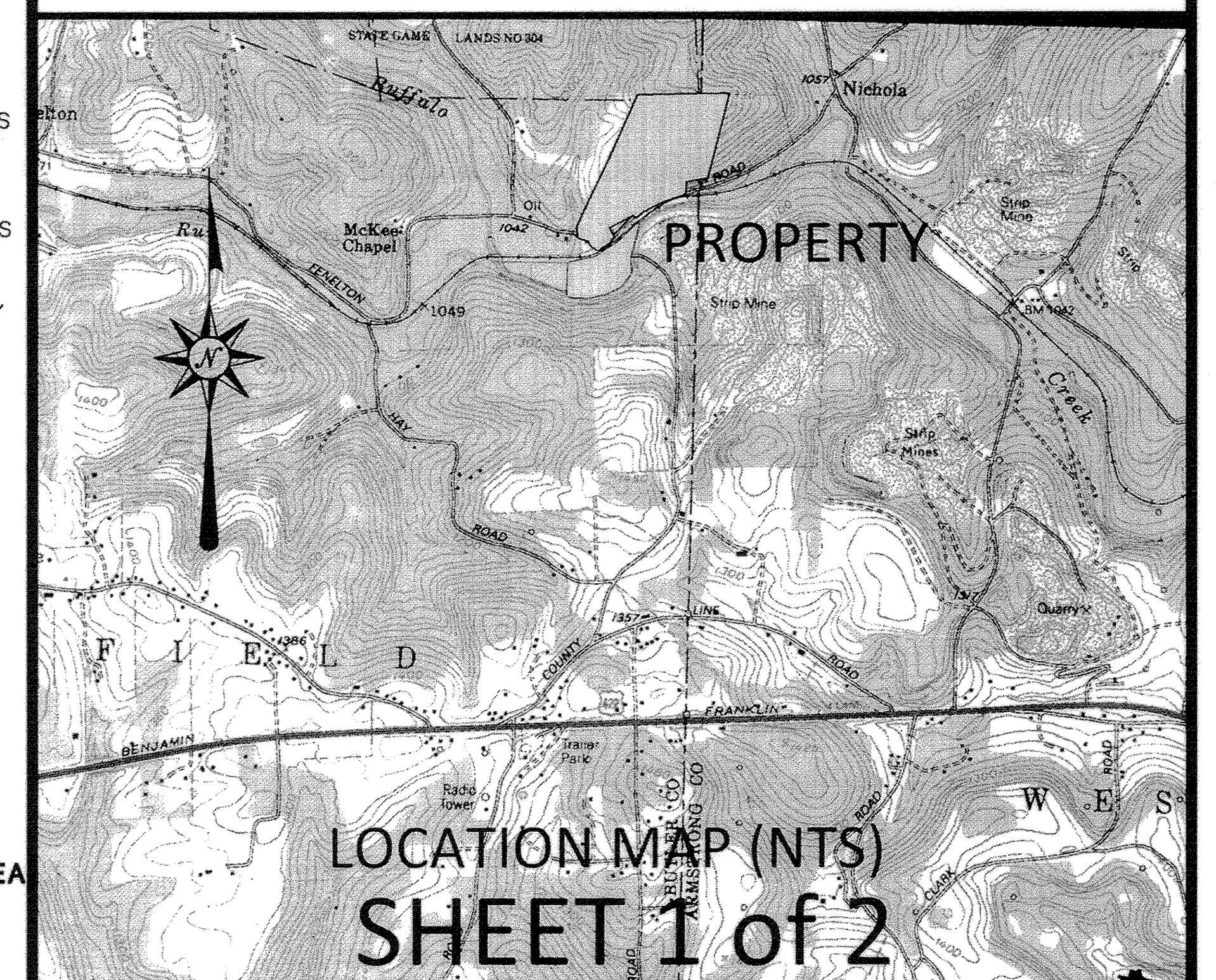
Historical Aerial photography found at Penn Pilot Photographs dated 1938, 1958, 1967, and 1993, found at www.pennpilot.psu.edu

County and Municipality borders per PADOT GIS datasets, and considered approximate.

Requests for Valuation and Track Maps from Bessemer and Lake Erie Railroad were ignored since June 2014.

Warrant Survey to Samuel Milligan dated 6 NOV 1836.

Boundary Agreement Survey by W.J. McGarvey for Jackie Slater dated October 2000, signed by Loretta Ray and Gilbert Verner.



LOCATION MAP (NTS)
SHEET 1 of 2

REVISION HISTORY

#	DATE	BY	FOR	REASON
1	18 APR 15	JAH	Twp. Planning Comm	Title change/Lot 3 non-build note
2	12 MAY 15	JAH	Co. Planning Comm	Renumber Lots

VERNER PLAN #1

MINOR SUBDIVISION (Agricultural)

FIELD SURVEY: JDD/JAH/DJH FIELD SURVEY DATE: NOV 2014	CHECKED: JEFFREY A. HORNEMAN DATE CHECKED: 17 MAR 2015
DRAWN/DESIGN: J. HORNEMAN DATE DRAWN/DESIGNED: 22 DEC 2014	APPROVED: JEFFREY A. HORNEMAN DATE APPROVED: 17 MAR 2015

CLEARFIELD and WEST FRANKLIN TOWNSHIPS
BUTLER and ARMSTRONG COUNTIES, PENNSYLVANIA

DEP - RESIDUAL TRACT WAIVER

"As of the date of this plot plan recording, the residual tracts of this subdivision is dedicated for the express purpose of vacant land and/or agricultural use. No portion of the residual tracts of this subdivision has been approved by the municipality or the Department of Environmental Protection for the installation of sewage disposal facilities. No sewage permit will be issued for the installation, construction, connection to or use of any sewage collection, conveyance, treatment, or disposal system (except repairs to existing systems) unless approved by the municipality or the Department of Environmental Protection for the installation of sewage. The municipality and DEP have approved sewage facilities planning for the residual tracts of the regulations promulgated thereunder. Prior to signing, executing, implementing, or recording any sales contract or subdivision plan, any purchaser or subdivider of any portion of this residual tracts should contact the municipality which is charged with administering the sewage facilities act to determine what sewage facilities planning is required and the procedure and requirements for obtaining appropriate permits or approvals.

UTILITIES

Central Electric Cooperative in Pennsylvania
Email: info@centralcoop
Outage or Emergency: 1-800-282-8610
Member Service: 1-800-521-0570
Fax: 724-399-2300
Address:
P.O. Box 329, Parker, PA 16049
Or
716 Route 368, Parker, PA 16049

PENNSYLVANIA ONE CALL SYSTEM, INC. 811 PENNSYLVANIA LAW REQUIRES YOU TO CALL BEFORE YOU DIG

Now or Formerly
John Bender
Tax Map #090-1F17-20
(DBV 1127, PG 585)
Boundary only deed
2 March 1981

Now or Formerly
Commonwealth of Pennsylvania
(State Gamelands #304)
Tax Map #090-1F17-07
(DBV 1607, PG 224)
23 May 1990
Survey #L-3059 by Game Commission dated 25 Jan 1990

Now or Formerly
Bernard McGaughey
Tax Map #49-090.00-01-03.002
(DBV 1096, PG 121)
15 April 1991
Survey by Kubatko (Jan 1986, Revised 1991)
Plan Book 3, Page 442

Now or Formerly
Bernard McGaughey
Tax Map #090-1F17-30
(DBV 1486, PG 510)
Deed without Warranty
8 Sep 1989
Survey by E.J. Kubatko dated July 1989

N/F James McArthur,
Tax Map #090-1F17-20A
DBV 2541, PG 218
(13 July 1995)

N/F Nathan Strong
Tax Map #090-1F17-22A
Instrument#200706220016200
(16 June 2007)

N/F Mark Adams
Tax Map #090-1F17-21A
Instrument #200702180021161 (16 July 2002)
Also see referenced Boundary Agreement of Oct 2000

Proposed Private Access (Version - Level 1)
(See attached Private Road Maintenance Agreement)

APPARENT (NO USE) OVERLAP BY McGAUGHEY (1.709 acres)

LOT 1A — 8.106 acres
LOT 1B — 1.883 acres
LOT 1C — 0.183 acres (non-buildable)
LOT 1D — 4.366 acres
LOT 2 — 11.643 acres
LOT 3 — 17.471 acres
LOT 4 — 16.075 acres

Additional Road Right of Way Dedication 1: 0.074 acres
Additional Road Right of Way Dedication 2: 0.066 acres
Additional Road Right of Way Dedication 3: 0.071 acres
Additional Road Right of Way Dedication 4: 0.091 acres
Additional Road Right of Way Dedication 5: 0.145 acres

Morrow Road (T-664) — 33' Right of Way
Fenelton Road (T-696) — 50' Right of Way
Bridge

Unnamed Tributary to Buffalo Creek
Buffalo Creek
Creek Posted as DHALO (Delayed Harvest Fishing)

Now or Formerly
Buffalo and Pittsburgh Railroad
Tax Map #49-090.00-01-05
(DBV 183, PG 82)
10 Nov 1988

LINE TABLE:

PARENT TRACT:
L1 N 24°48'22" W 66.00' (NORTH DEED) 45.45' McGARVEY SURVEY
L2 S 50°40'15" W 148.43'
L3 S 40°15'45" E 5.73' (to centerline road)
L4 S 40°15'45" E 19.27'
L5 Arc 198.45' Radius 904.30' Chord S 56°23'59" W 198.06'
L6 Arc 50.00' Radius 100.00' Chord N 36°16'00" W 49.48'
L7 N 21°56'38" W 39.67'
L8 Arc 35.34', Radius 300.00' Chord N 73°03'02" W 35.32'
L9 N 69°40'33" W 21.34'
L10 Arc 88.67' Radius 900.00' Chord N 72°29'54" W 88.63'

SUBDIVISION TRACTS:
LA Arc 98.33' Radius 925.00' Chord N 72°43'22" W 98.28'
LB N 69°40'33" W 21.34'
LC Arc 67.76' Radius 275.00' Chord N 76°43'59" W 67.56'
LD N 83°47'35" W 25.00'
LE N 83°47'35" W 25.00'
LF Arc 151.17' Radius 904.30' Chord S 56°10'59" W 150.99'
LG N 50°35'22" W 90.85'
LH Arc 32.54' Radius 75.00' Chord N 38°09'42" W 32.28'
LI S 83°47'35" E 99.12'
LJ Arc 118.48' Radius 285.00' Chord N 84°17'56" E 117.63'

Clearfield Township, Butler County
West Franklin Township, Armstrong County

PLAN BOOK PAGE 348 20

ACREAGE TABULATION
Parent Tract/Original Parcel (Including 33' Township Road Right of Ways)

Northern Tract:	50.637 acres
Southern Tract:	10.401 acres
	61.038 acres

Proposed Tracts:

Lot 1A	8.106 acres	
Lot 1B	1.883 acres	Lots 1A, 1B, 1C, and 1D combine to 1 lot
Lot 1C	0.183 acres	Non-Buildable due to negative setbacks
Lot 1D	4.366 acres	
Lot 2	11.643 acres	
Lot 3	17.471 acres	
Lot 4	16.075 acres	
Proposed 8.5' Dedication 1	0.074 acres	Morrow Road (South ROW)
Proposed 8.5' Dedication 2	0.066 acres	Morrow Road (North ROW)
Proposed 8.5' Dedication 3	0.071 acres	Morrow Road (North) Fenelton Road (South)
Proposed 8.5' Dedication 4	0.091 acres	Fenelton Road (North ROW)
Proposed 8.5' Dedication 5	0.145 acres	Fenelton Road (North ROW)
Existing 33' Road ROW	0.865 acres	Fenelton and Morrow Roads
	61.038 acres	

North based on NAD 83/2010

0' 100' 200' 300'

SCALE: 1"=100'

SHEET 2 of 2

REFERENCES:

Aerial PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey, Ground conition date April 26, 2006. The maximum permissible RMSE for 95% of the horizontal check points for the mapping product is 5 feet or better. See complete metada published for this dataset at www.PASDA.psu.edu

LIDAR (2' Contours) PAMAP Program, PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey, Ground conition date April 26, 2006. The maximum permissible RMSE for 95% of the horizontal check points for the mapping product is 5 feet or better. The vertical accuracy will meet the requirements of NSSDA at the 95% confidence interval (1.96 x RMSE)
See complete metada published for this dataset at www.PASDA.psu.edu

Survey by E.J. Kubatko for Bessemer and Lake Erie Railroad Company, drawing #589-670, dated July 1989

Survey by the Pennsylvania Game Commission for State Game Lands #304L-3059, Grantor: Gloria J. Heller, dated 26 January 1990

Historical Aerial photography found at Penn Pilot Photographs dated 1938, 1956, 1967, and 1993, found at www.pennpilot.psu.edu

County and Municipality borders per PADOT GIS datasets, and considered approximate.

Requests for Valuation and Track Maps from Bessemer and Lake Erie Railroad were ignored since June 2014.

Warrant Survey to Samuel Milligan dated 6 NOV 1838

Boundary Agreement Survey by W.J. McGarvey for Jackie Slater dated October 2000, signed by Loretta Roy and Gilbert Varner.

LEGEND

- PARENT TRACT
- STREAMS
- FLOOD ZONES
- EXISTING RIGHT OF WAYS
- OVERHEAD UTILITIES
- RAILROAD
- PAVED ROADS
- ORIGINAL DEED LINE
- POSSIBLE ENCROACHMENT AREA
- IRON PIN (FOUND)
- IRON PIN (SET)
- IRON PIPE (FOUND)
- TREE
- WIRE FENCE
- PROPERTY CORNER (NOT SET)
- PROPOSED PROPERTY LINES
- ROAD RIGHT OF WAY DEDICATION
- PROPOSED EASEMENT
- ADJOINING PROPERTY LINES
- PROPOSED SETBACK LINES

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JEFFREY ALAN HORNEMAN LAND SURVEYOR 3048

Professional Land Surveying (PA/WV/NY)

GIS Professional (GISP)

Land Development Planning and Consulting

Natural Resource Recovery Consulting (Coal, Oil/Gas)

HORNEMAN Surveying & Cartography

1110 Dallas Avenue, Natrona Heights, PA 15065
(412) 592-4126

REVISION HISTORY

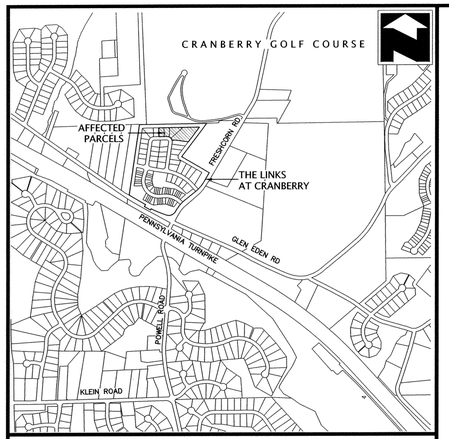
#	DATE	BY	FOR	REASON
1	18 APR 15	JAH	Twp. Planning Comm	Title change/Lot 3 non-build note
2	12 MAY 15	JAH	Co. Planning Comm	Renumber Lots

VERNER PLAN #1

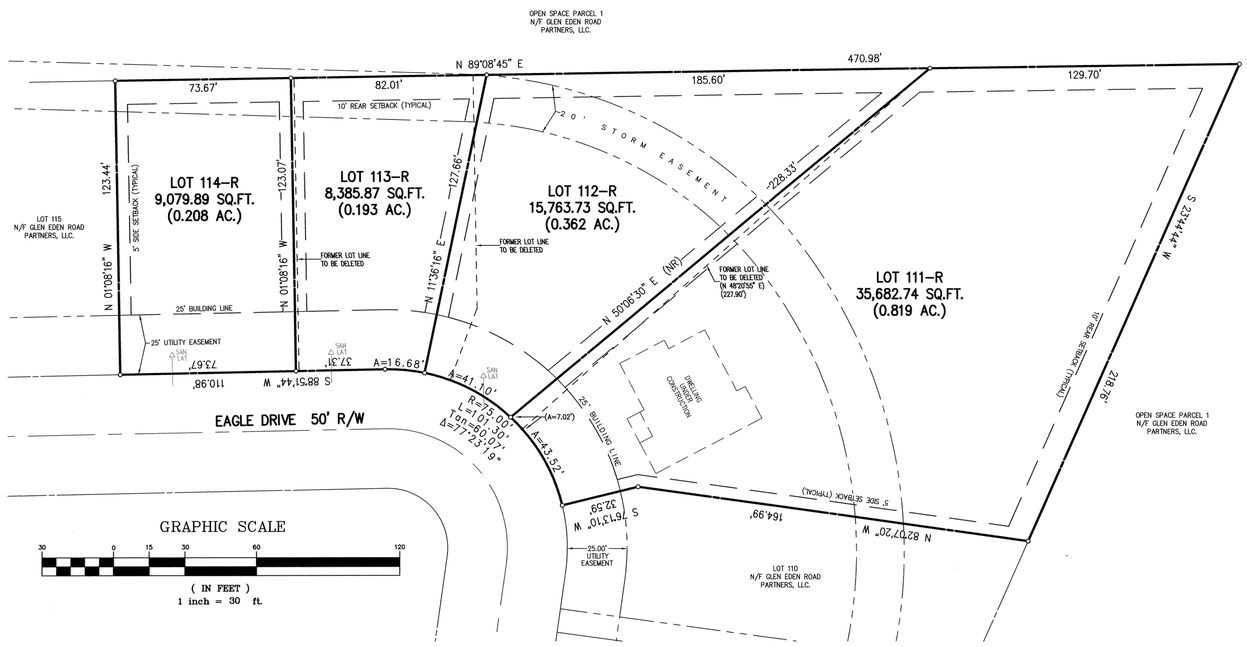
MINOR SUBDIVISION (Agricultural)

FIELD SURVEY: JDD/JAH/DJH
FIELD SURVEY DATE: NOV 2014
CHECKED: JEFFREY A. HORNEMAN
DATE CHECKED: 17 MAR 2015
DRAWN/DESIGN: J. HORNEMAN
DATE DRAWN/DESIGNED: 22 DEC 2014
APPROVED: JEFFREY A. HORNEMAN
DATE APPROVED: 17 MAR 2015

CLEARFIELD and WEST FRANKLIN TOWNSHIPS
BUTLER and ARMSTRONG COUNTIES, PENNSYLVANIA



LOCATION MAP 1" = 1000'



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

GLEN EDEN ROAD PARTNERS, LLC, OWNER OF THE LAND SHOWN ON THE LINKS OF CRANBERRY REVISION 2 PLAN HEREBY ADOPTS THIS PLAN AS ITS PLAN OF LOTS AND IRREVOCABLY DEDICATES ALL STREETS AND OTHER PROPERTY IDENTIFIED FOR DEDICATION ON THE PLAN TO THE PUBLIC. THIS ADOPTION AND DEDICATION SHALL BE BINDING UPON THE PARTNERSHIP AND UPON ITS HEIRS, EXECUTORS AND ASSIGNS.

SIGNATURE OF WITNESS

James W. McCarthy
SIGNATURE OF OWNER
JAMES W. McCARTHY
AUTHORIZED MEMBER
OWNERS PRINTED NAME AND TITLE

MAY 14, 2015
DATE

BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA AND COUNTY OF ALLEGHENY, PERSONALLY APPEARED THE ABOVE NAMED JAMES W. McCARTHY AUTHORIZED MEMBER OF THE FIRM GLEN EDEN PARTNERS, LLC, AND ACKNOWLEDGED THE FOREGOING ADOPTION AND DEDICATION TO BE THE ACT OF THE PARTNERSHIP.

WITNESS MY HAND AND NOTARIAL SEAL THIS 14th DAY OF May 2015.

(SEAL)

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Rose M. Susa, Notary Public
Carnegie Boro, Allegheny County
My Commission Expires July 8, 2015
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

WE HEREBY CERTIFY THAT THE TITLE TO THE PROPERTY CONTAINED IN THE LINKS OF CRANBERRY REVISION 2 PLAN IS IN THE NAME OF GLEN EDEN PARTNERS, LLC AND IS RECORDED AT INSTRUMENT NO. 201103280007624.

WITNESS

OWNERS SIGNATURE
JAMES W. McCARTHY
AUTHORIZED MEMBER

WASHINGTON FINANCIAL BANK, MORTGAGEE OF THE PROPERTY CONTAINED IN THE LINKS OF CRANBERRY REVISION 2 PLAN CONSENTS TO THE RECORDING OF SAID PLAN AND TO THE DEDICATIONS AND ALL OTHER MATTERS APPEARING ON THE PLAN.

WITNESS

SIGNATURE OF AUTHORIZED OFFICER

John Wishart V.P.
PRINTED NAME AND TITLE

PLAN NOTES:

PROPERTY OWNERS:

DAN RYAN BUILDERS MID ATLANTIC, INC.
100 EMERSON LANE, SUITE 1503
BRIDGEVILLE, PA 15017

LOT 111
INSTRUMENT NO. 201502270004048
TAX PARCEL 130-S42-A111

GLEN EDEN ROAD PARTNERS, LLC.
550 WASHINTON AVENUE
CARNEGIE, PA 15106

LOTS 112 THROUGH 114
INSTRUMENT NO. 201103280007624

LOT 112 – TAX PARCEL 130-S42-A112
LOT 113 – TAX PARCEL 130-S42-A113
LOT 114 – TAX PARCEL 130-S42-A114

a. THIS PLAN IS SUBJECT TO ALL PREVIOUS CONDITIONS OF APPROVAL FOR THE LINKS OF CRANBERRY AS RECORDED IN PLAN BOOK 343, PAGES 48 – 50.

b. THE PURPOSE OF THIS PLAN IS TO REVISE THE EXISTING LOT LINE BETWEEN LOTS 111, 112, 113 & 114 OF THE LINKS OF CRANBERRY RECORDED IN PLAN BOOK 343, PAGES 48-50.

c. TOTAL PROPERTY AFFECTED BY THIS PLAN : 68,912.20 SQ.FT. or 1.582 ACRES

LOT SETBACK REQUIREMENTS PER DAVIS PRD PATTERN BOOK

MINIMUM LOT WIDTH:	65'	(SINGLE FAMILY) PER RESOLUTION
MINIMUM FRONT SETBACK:	25'	(SINGLE FAMILY) PER RESOLUTION
MINIMUM REAR SETBACK:	10'	PER RESOLUTION
MINIMUM SIDE SETBACK:	5'	PER RESOLUTION

BY RESOLUTION APPROVED ON THE 13TH DAY OF MAY 2015 THE BOARD OF DIRECTORS OF DAN RYAN BUILDERS MID ATLANTIC, INC, INCORPORATED IN THE STATE OF MARYLAND, OWNER OF THE LAND SHOWN ON THE THE LINKS OF CRANBERRY REVISION 2, ADOPTED THIS PLAN AS ITS PLAN OF LOTS AND IRREVOCABLY DEDICATED ALL STREETS AND OTHER PROPERTY IDENTIFIED FOR DEDICATION THE PLAN TO THE PUBLIC. THIS ADOPTION AND DEDICATION SHALL BE BINDING UPON THE CORPORATION AND UPON ITS SUCCESSORS AND ASSIGNS.

(SEAL)

SHAWN M. SEYDOR
DAN RYAN BUILDERS MID ATLANTIC, INC

SIGNATURE AND TITLE OF OFFICER WITNESSING

SIGNATURE AND TITLE OF AUTHORIZED OFFICER

5/13/2015
DATE

BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA AND COUNTY OF BUTLER, PERSONALLY APPEARED SHAWN M. SEYDOR DAN RYAN BUILDERS MID ATLANTIC, INC.. WHO STATED THAT HE IS AUTHORIZED TO EXECUTE THE ABOVE ADOPTION AND DEDICATION ON BEHALF OF THE CORPORATION AND WAS PRESENT AT THE MEETING AT WHICH THE ACTION OF THE CORPORATION WAS TAKEN TO ADOPT THE PLAN AND DEDICATE PUBLIC PROPERTY CONTAINED THEREIN TO THE PUBLIC.

WITNESS MY HAND AND NOTARIAL SEAL THIS 13TH DAY OF MAY 2015.

(SEAL)

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Lori Sue Deal, Notary Public
South Fayette Twp, Allegheny County
My Commission Expires November 04, 2017

NOTARY PUBLIC

I, SHAWN M. SEYDOR HEREBY CERTIFY THAT THE TITLE TO THE PROPERTY CONTAINED IN THE LINKS OF CRANBERRY REVISION 2 PLAN IS IN THE NAME OF DAN RYAN BUILDERS MID ATLANTIC INC.. AND IS RECORDED AT INSTRUMENT NO. 201502270004048

SIGNATURE OF WITNESS

SIGNATURE AND TITLE OF AUTHORIZED OFFICER

WE, SUSQUEHANNA BANK MORTGAGEE OF THE PROPERTY SHOWN HEREON, DO HEREBY CERTIFY TO THE RECORDING OF SAID PLAN AND TO THE DEDICATIONS AND ALL OTHER MATTERS APPEARING ON THE PLAN.

SIGNATURE OF WITNESS

SIGNATURE OF AUTHORIZED OFFICER

PRINTED NAME AND TITLE

I CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY AND PLAN SHOWN HEREON ARE CORRECT AND ACCURATE TO THE STANDARDS REQUIRED.

5/20/15
DATE

JAMES A. SPERDUTE, R.S. # 24457-E

I, A REGISTERED PROFESSIONAL ENGINEER, THE TOWNSHIP ENGINEER OF THE TOWNSHIP OF CRANBERRY, DO HEREBY CERTIFY THAT THIS SUBDIVISION PLAN MEETS ALL ENGINEERING AND DESIGN REQUIREMENTS OF THE TOWNSHIP SUBDIVISION AND ZONING ORDINANCE EXCEPT AS DEPARTURES HAVE BEEN AUTHORIZED BY THE APPROVAL AUTHORITY.

May 29, 2015
DATE

SIGNATURE
REGISTRATION NO. PE071353

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF CRANBERRY BY ORDINANCE/RESOLUION NO. 2015-35 EFFECTIVE THIS 28th DAY OF MAY 2015.

CHAIRMAN

I, JERRY ANDREE, TOWNSHIP MANAGER FOR THE TOWNSHIP OF CRANBERRY CERTIFY THAT THE CONDITIONS FOR FINAL APPROVAL OUTLINED IN ORDINANCE/RESOLUTION NO. 2015-35 HAVE BEEN MET IN ACCORDANCE WITH SECTION 22-305 AND 22-307 OF THE TOWNSHIP CODE OF ORDINANCES OF 5/4/15.

TOWNSHIP MANAGER

REVIEWED BY THE BUTLER COUNTY PLANNING COMMISSION ON THIS 12TH DAY OF MARCH 2015

SECRETARY

CHAIRPERSON

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF THE COUNTY OF BUTLER, COMMONWEALTH OF PENNSYLVANIA, IN PLAN BOOK 348 PAGE 21

GIVEN UNDER MY HAND AND SEAL THIS 2nd DAY OF June 2015.

RECORDER OF DEEDS

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

TOWNSHIP ENGINEER

REGISTERED SURVEYOR

CRANBERRY TWP BOARD OF SUPERVISORS

BUTLER COUNTY PLANNING COMMISSION

BUTLER COUNTY RECORDER OF DEEDS

Instr:201506020011762
Pages:1 F:$45.00
Michele Mustello
Butler County Recorder PA
06/02/2015 3:31PM
720150009457

PLAN BOOK	PAGE
348	21

Know what's below Call before you dig.

DRAWING NUMBER:	1004-1514763
DRAWING SCALE:	1"=30'
DATE:	APRIL 2, 2015
DRAWN BY:	JSS
REVISIONS:	05.13.2015...PER TWP COMMENTS

THE LINKS OF CRANBERRY TOWNSHIP REVISION 2

BEING A REVISION TO LOTS 111 THROUGH 114 OF THE LINKS OF CRANBERRY TOWNSHIP PLAN RECORDED IN PLAN BOOK 343, PAGES 48-50
CRANBERRY TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

SPERDUTE LAND SURVEYING
SLS
HARMONY, PA
724-452-4362
SLS1@comcastnet.net
SURVEYING • LEVELING • TOPOGRAPHIC MAPPING
CONSTRUCTION & LAND DEVELOPMENT CONSULTANTS

KNOW ALL MEN BY THESE PRESENTS That, Woodbrook Builders, Inc. by virtue of a Resolution of the Board of Directors, thereof does hereby adopt this as its Plan of Subdivision of its Property, situate in the Township of Penn, County of Butler and the Commonwealth of Pennsylvania, and for divers advantages accruing to it, does hereby dedicate forever, for public use for highway purposes, drainage, sewage and utility purposes, all drives, roads, streets, lanes, rights-of-way easements, ways and other public highways shown upon the plan, with the same force and effect as if the same had been opened through legal proceedings, and in the consideration of the approval of said plan, and any future acceptance of said public highways, rights-of-way and easements by said County of Butler and Township of Penn, Woodbrook Builders, Inc hereby covenant and agrees to and by these presents does release and forever discharge said County of Butler and Township of Penn, their successors and assigns from any liability for damages arising and to arise from any appropriation of said ground for public highways and the physical grading thereof to any grades that may be be established hereafter. This dedication and release shall be binding upon Woodbrook Builders, Inc. its successors and assigns and purchasers of lots in this plan.

IN WITNESS WHEREOF, the said Corporation has caused its Corporate Seal to be affixed by the hand of its President and same to be attested by its Secretary, this 20TH day of MAY 2015.

Attest
Thomas D Brucker
Secretary

Thomas D Brucker
President

COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

Before me, the subscriber, a Notary Public in and for the Commonwealth of Pennsylvania and County of Butler, personally appeared the above named THOMAS D BRUCKER and acknowledged the foregoing release and dedication of plan to be their act and deed and desired the same to be recorded as such. Sworn to and subscribed before me this day.

Witness my hand and notarial seal this 20TH day of MAY 2015.
My commission expires the 17TH day of FEBRUARY 2019

Notary Public (Seal)

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
DEBRA L. JEFFCOAT, NOTARY PUBLIC
JEFFERSON TWP., BUTLER COUNTY
MY COMMISSION EXPIRES Feb. 17, 2019

I, Stanley D. Graff, a Registered Surveyor of the Commonwealth of Pennsylvania, do hereby certify, to the best of my knowledge, that this plan as shown hereon is based upon actual field survey of the land described and that all angles, distances and courses are correctly shown, that the monuments and markers have been set as shown on the plan, and that this plan correctly represents the lots, lands, streets and highways as surveyed and plotted by me for the owners or agents.

20TH MAY '15
Date (Seal)

Stanley D Graff P.L.S. # SU-030161-E

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL STANLEY D. GRAFF LAND SURVEYOR NO. 30161-E

The Board of Supervisors of the Township of Penn, hereby gives public notice that in approving this plan for recording purposes only, the Township of Penn assumes no obligations, legal or otherwise, expressed or implied either to accept said streets as Township streets or roads or grade, pave and curb the streets in said plan, or to construct sewers therein or to install any other such service ordinarily installed in Township streets or roads.

Approved by the Board of Supervisors of the Township of Penn this 26 day of May 2015.

Linda A Zeefoss
Secretary (Seal)

Chairman

Reviewed by the Planning Commission of the Township of Penn, this 26th day of May 2015.

Secretary

Chairman

Reviewed by the Butler County Planning Commission on this 11TH day of May 2015.

Secretary (Seal)

Chairman

BUTLER COUNTY PLANNING COMMISSION

COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

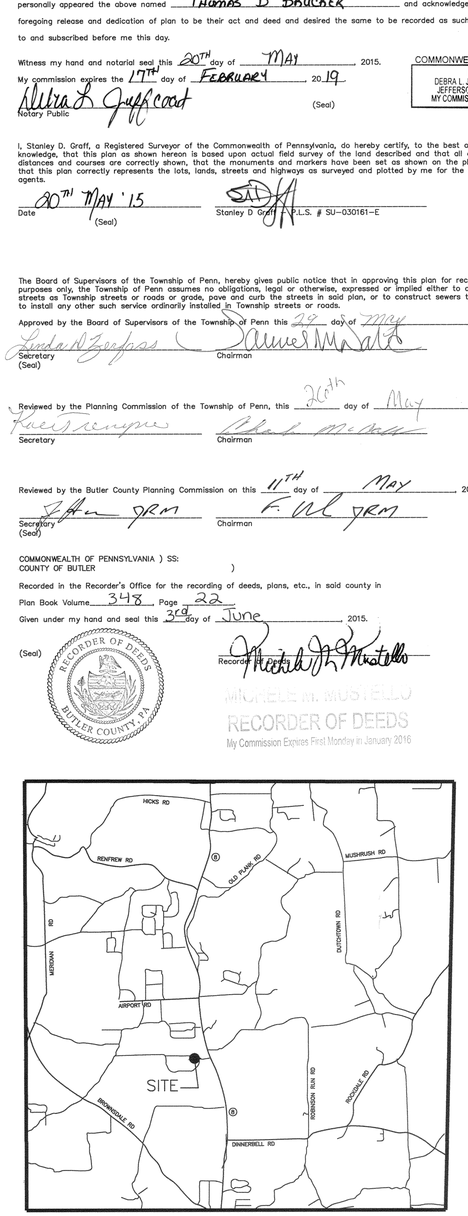
Recorded in the Recorder's Office for the recording of deeds, plans, etc., in said county in Plan Book Volume 348 Page 22
Given under my hand and seal this 3rd day of June 2015.

(Seal)

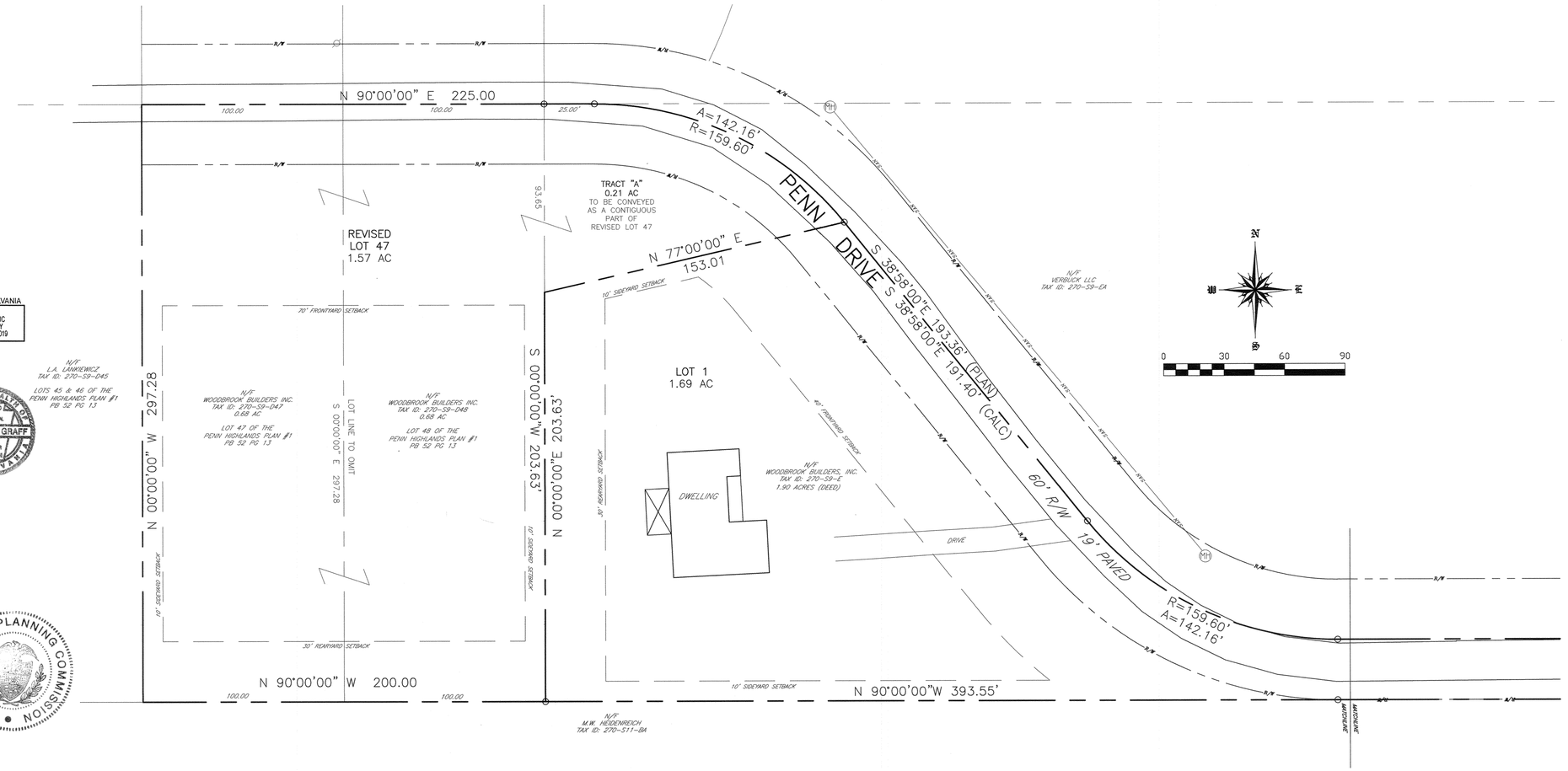
Recorder of Deeds

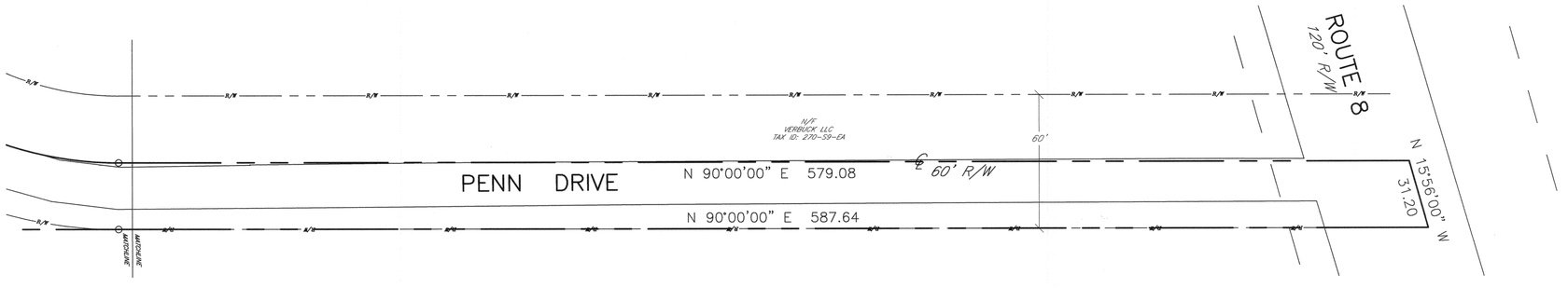
RECORDER OF DEEDS BUTLER COUNTY, PA.

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016



Vicinity Map





AREA – TOTALS

ORIGINAL	
ORIG S9-E	1.90 AC
+ORIG LOT 47	0.68 AC
+ORIG LOT 48	0.68 AC
ORIGINAL TOTAL	3.26 AC
REVISED	
LOT 1	1.69 AC
+REVISED LOT 47	1.57 AC
REVISED TOTAL	3.26 AC

AREA – REVISED LOTS

LOT 1	
ORIG 270-S9-E	1.90 AC
-TRACT A	0.21 AC
LOT 1	1.69 AC
REVISED LOT 47	
ORIG LOT 47	0.68 AC
+ORIG LOT 48	0.68 AC
+TRACT A	0.21 AC
REVISED LOT 47	1.57 AC

PENN TOWNSHIP
ZONING: R-1 / LOW DENSITY SINGLE FAMILY RESIDENTIAL
SETBACKS (MINIMUM)
FRONT YARD – 40' FROM R/W OR 65' FROM CENTERLINE
SIDE YARD – 10'
REAR YARD – 30'

NOTES:

1) OWNER: WOODBROOK BUILDERS, INC.
2) PROPERTY USE: RESIDENTIAL
3) ZONING: R-1 LOW DENSITY RESIDENTIAL
4) REFERENCES:
PENN HIGHLANDS PLAN #1
PLAN BOOK 52 PAGE 13

NOTE: SUBJECT TO AND TOGETHER WITH ANY AND ALL EXISTING RIGHTS-OF-WAY, EASEMENTS AND CONDITIONAL CLAUSES OF RECORD OR ESTABLISHED BY DUE PROCESS.

RECORDED JUNE 3 2015

PLAN BOOK	PAGE
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SHEET 1 of 1

Instr 201506030011800 06/03/2015
Pages:1 F $45.00 11:26AM
Michele Mustello T20150009824
Butler County Recorder FL

REV	DESCRIPTION	BY	DATE

GRAFF SURVEYING

S. D. GRAFF PROFESSIONAL SURVEYING
PO BOX 521 | SAXONBURG, PA 16056
P: 724-352-3811 F: 724-352-1059
INFO@GRAFFSURVEYING.COM
WWW.GRAFFSURVEYING.COM

PROJECT DESCRIPTION

WOODBROOK PLAN

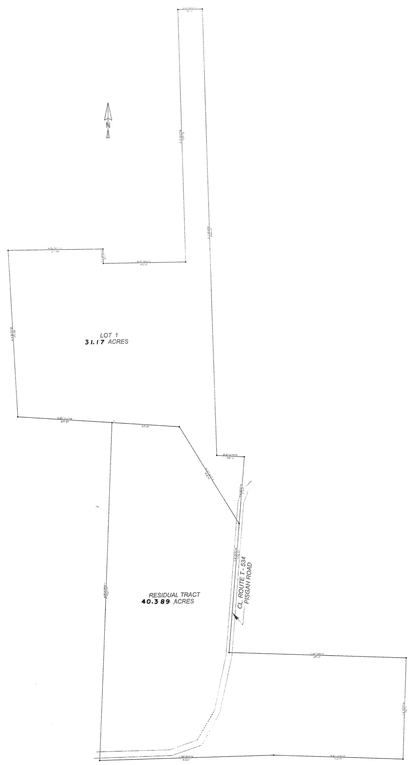
BEING A

LOT LINE REVISION
FOR
WOODBROOK
BUILDERS, INC

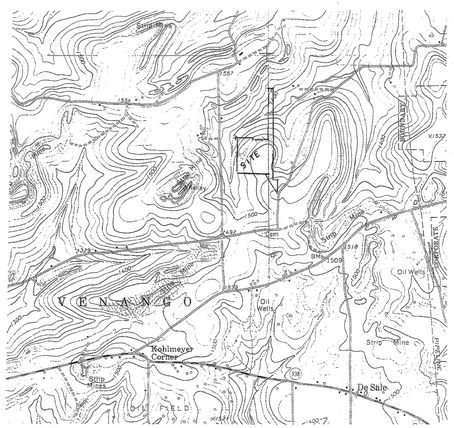
SITUATE
TOWNSHIP OF PENN
BUTLER COUNTY, PENNSYLVANIA

DATE	DRAWN	CHECKED	SCALE
04/28/15	SDG	Sdg	1" = 30'

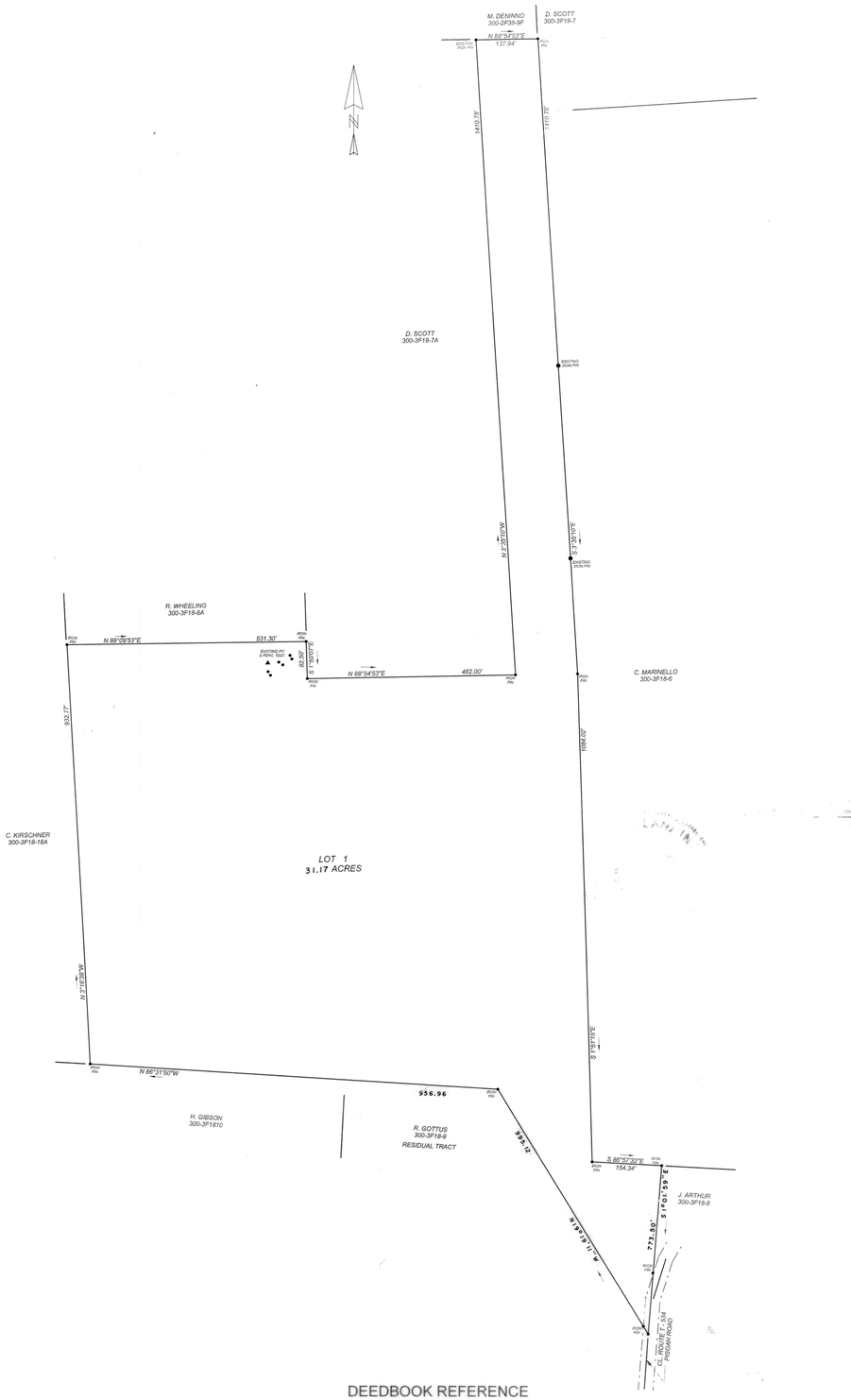
PROJECT NO.	TAX PARCEL NO.	REVISION
15-057	270-S9-D47, D48 & E	-



VICINITY MAP - 1" = 400'



LOCATION MAP



DEEDBOOK REFERENCE
2485 - PAGE 330

NOTES:
1). SUBJECT TO ANY AND ALL RIGHTS OF WAYS AND EASEMENTS OF RECORD.

0 75' 150' 300' 450'

Instr:201508030011892 08/03/2015
Pages:1 F:$45.00 1:46PM
Michele Mustello
Butler County Recorder FL T20150009561

KNOW ALL MEN BY THESE PRESENTS, that Randall Gottus of the Township of Venango of the County of Butler, Commonwealth of Pennsylvania, for ourselves, our heirs, executors, administrators and assigns, do hereby adopt this plan as our Plan of Lots of our property, situate in Venango Township, Butler County, Pennsylvania, and for diverse advantages accruing to us, do hereby dedicate forever, for highway purposes, all streets and ways shown upon the plan, with the same force and effect as if the same had been opened through legal proceedings (and do hereby dedicate forever, for public use, the designated land areas on the plan for recreation and other purposes as specified on the plan) and in consideration of the approval of said plan, and any future acceptance of said public highways by the said Commonwealth of Pennsylvania, County of Butler and Township of Venango we hereby covenant and agree to and by these presents do release and forever discharge said Commonwealth of Pennsylvania, County of Butler and Township of their successors or assigns from any liability for damages arising and to arise from any appropriation of said ground for public highways and the physical grading thereof to any grades that may be established hereafter at any time. This dedication and release shall be binding upon Randall Gottus our heirs, executors, administrators and assigns and purchasers of lots in this plan.

IN WITNESS WHERE, we hereunto set our hand (s) and seal (s) this 07th day of MAY, 2015 .

ATTEST:

Randall D Gottus

NOTARY PUBLIC *OWNER*

COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

Before me, the subscriber, a Notary Public in and for said Commonwealth and County, personally appeared the above named Randall Gottus and acknowledged the foregoing release and dedication and plan to be their act and deed and desired the same to be recorded as such.

Sworn to and subscribed before me this 07th day of MAY, 2015.

My Commission expires the 05th day of MARCH, 2016

SEAL

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Darrin J. Richter, Notary Public
Center Twp., Butler County
My Commission Expires March 6, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
JOHN E. DUSHECK
LAND SURVEYOR
No. SU073089E

I, John E. Dusheck a Registered Professional Land Surveyor of the Commonwealth of Pennsylvania, do hereby certify that the plan as shown hereon is based upon actual field survey of the land described and that all angles, distances and courses are correctly shown, that the monuments and markers have been set as shown on the plat, and that this plan represents the lots, land, streets and highways as surveyed and plotted by me for the owners or agents.

May 26, 2015 SEALS
DATE *REGISTRATION NO. SU - 073089E*

Reviewed by the Venango Twp ,, Board of Supervisors this 2nd day of JUNE, 2015.

SECRETARY *CHAIRMAN*

Approved by the Butler County Planning Commission this 1ST day of JUNE, 2015.

SECRETARY *CHAIRMAN*

BUTLER COUNTY PLANNING COMMISSION

COMMONWEALTH OF PENNSYLVANIA) SS:
COUNTY OF BUTLER)

Recorded in the Records Office for the Recording of deeds, plans, etc., in said County in Plan Book Volume 348 Page 23 .

Given under my hand and seal this 3rd day of June, 2015.

SEAL

RECORDER OF DEEDS
BUTLER COUNTY, PA.

RECORDER OF DEEDS

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

NOTICE TO SUBDIVIDERS:

UPON THE APPROVAL OF A FINAL PLAT, THE DEVELOPER SHALL WITHIN 90 DAYS OF SUCH FINAL APPROVAL, OR 90 DAYS AFTER THE DATE OF DELIVERY OF AN APPROVED PLAT SIGNED BY THE GOVERNING BODY, FOLLOWING COMPLETION OF CONDITIONS IMPOSED FOR SUCH APPROVAL , WHICHEVER IS LATER, RECORD SUCH PLAT IN THE OFFICE OF THE RECORDER OF DEEDS OF THE COUNTY IN WHICH THE MUNICIPALITY IS LOCATED. WHENEVER SUCH PLAT APPROVAL IS REQUIRED BY A MUNICIPALITY, THE RECORDER OF DEEDS OF THE COUNTY SHALL NOT ACCEPT ANY PLAT FOR RECORDING, UNLESS SUCH PLAT OFFICIALLY NOTES THE APPROVAL OF THE GOVERNING BODY AND REVIEW BY THE COUNTY PLANNING AGENCY, IF ONE EXISTS.

OWNER / SUBDIVIDER
RANDALL GOTTUS
14 MCARTHUR WAY
MCKEES ROCKS PA., 15136
412-875-6014

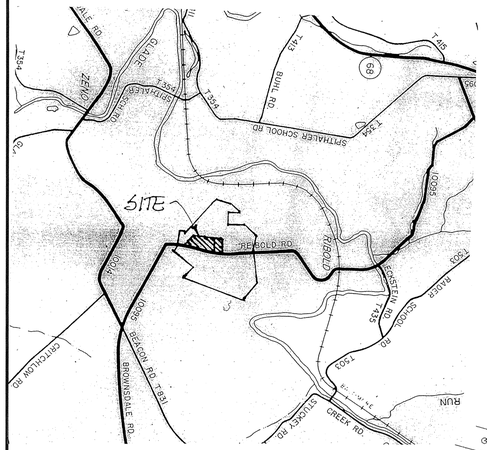
RECORDED June 3, 2015	
PLAN BOOK	PAGE
348	**23**

TOTAL AREA = 71.559 ACRES .

(FINAL PLAN)

JOHN E. DUSHECK
SURVEYOR
140 LARAY DRIVE
BUTLER PA. 16001
(724) 287-7825

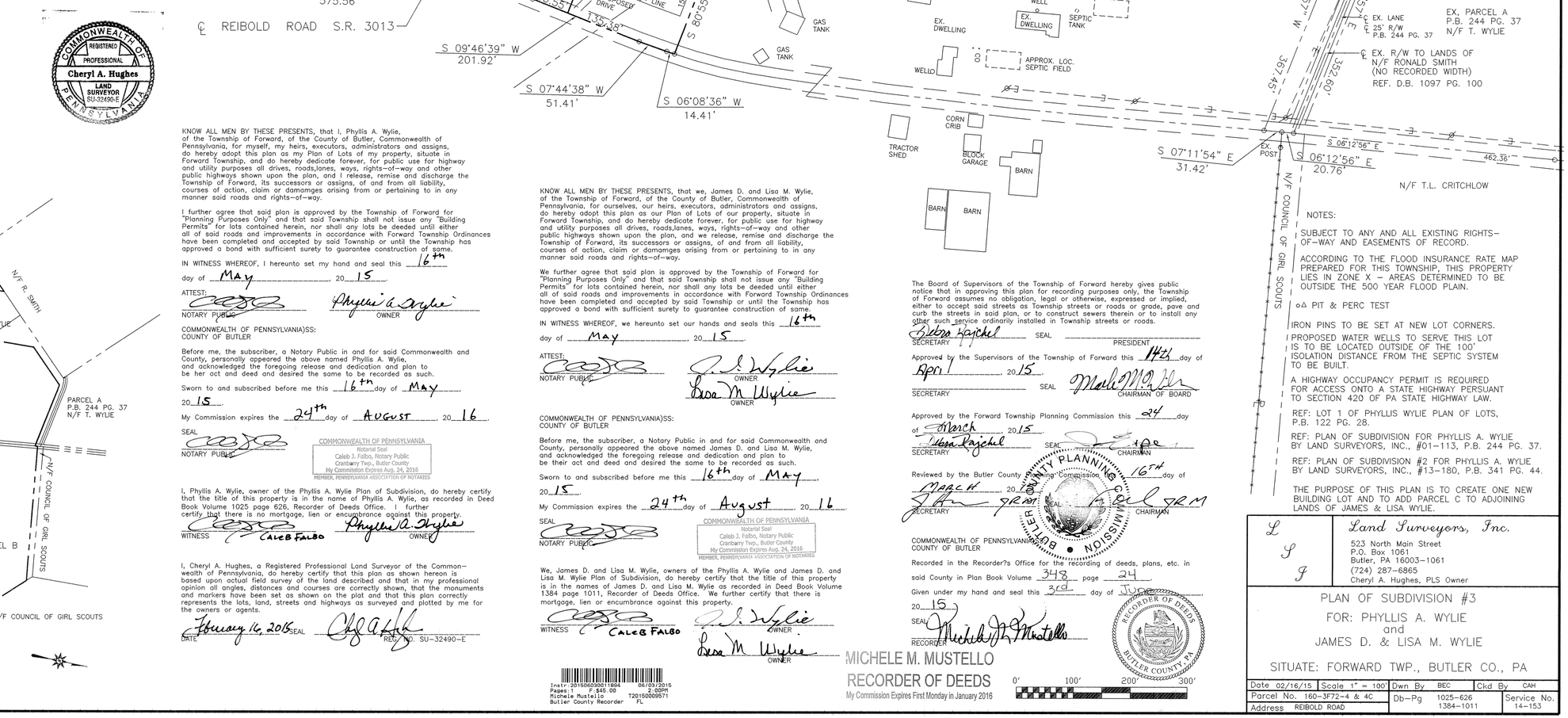
Date : 4 / 22 / 2015	***PROPERTY SUBDIVISION FOR: RANDALL GOTTUS***
Scale : 1 " = 150'	*SITUATE: VENANGO TWP., BUTLER CO., PA*
Dwn. By :SAB	

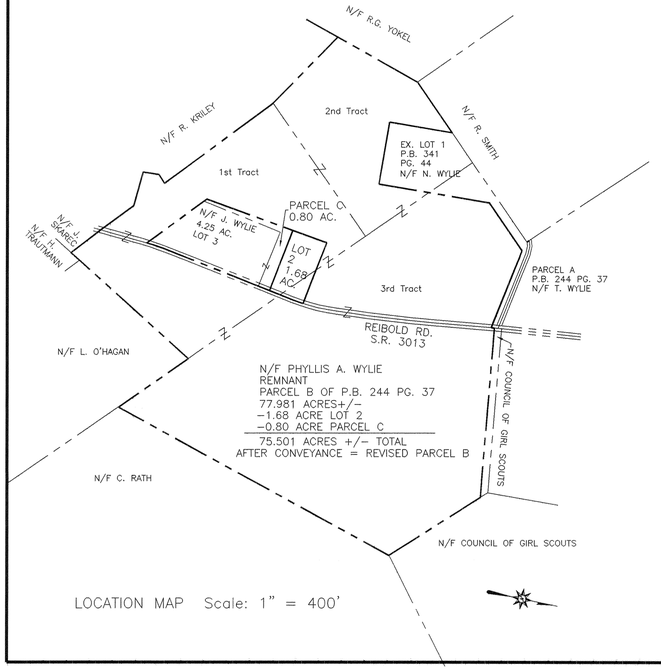


VICINITY MAP Scale: 1" = 2000'

PLAN BOOK	PAGE
348	24

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
Cheryl A. Hughes
LAND SURVEYOR
SU-32490-E
PENNSYLVANIA





LOCATION MAP Scale: 1" = 400'

KNOW ALL MEN BY THESE PRESENTS, that I, Phyllis A. Wylie, of the Township of Forward, of the County of Butler, Commonwealth of Pennsylvania, for myself, my heirs, executors, administrators and assigns, do hereby adopt this plan as my Plan of Lots of my property, situate in Forward Township, and do hereby dedicate forever, for public use for highway and utility purposes all drives, roads,lanes, ways, rights-of-way and other public highways shown upon the plan, and I release, remise and discharge the Township of Forward, its successors or assigns, of and from all liability, courses of action, claim or damamges arising from or pertaining to in any manner said roads and rights-of-way.

I further agree that said plan is approved by the Township of Forward for "Planning Purposes Only" and that said Township shall not issue any "Building Permits" for lots contained herein, nor shall any lots be deeded until either all of said roads and improvements in accordance with Forward Township Ordinances have been completed and accepted by said Township or until the Township has approved a bond with sufficient surety to guarantee construction of same.

IN WITNESS WHEREOF, I hereunto set my hand and seal this 16th day of May, 20 15

ATTEST:

NOTARY PUBLIC — Phyllis A. Wylie OWNER

COMMONWEALTH OF PENNSYLVANIA)SS:
COUNTY OF BUTLER

Before me, the subscriber, a Notary Public in and for said Commonwealth and County, personally appeared the above named Phyllis A. Wylie, and acknowledged the foregoing release and dedication and plan to be her act and deed and desired the same to be recorded as such.

Sworn to and subscribed before me this 16th day of May, 20 15.

My Commission expires the 24th day of AUGUST, 20 16.

SEAL

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Caleb J. Falbo, Notary Public
Cranberry Twp., Butler County
My Commission Expires Aug. 24, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

I, Phyllis A. Wylie, owner of the Phyllis A. Wylie Plan of Subdivision, do hereby certify that the title of this property is in the name of Phyllis A. Wylie, as recorded in Deed Book Volume 1025 page 626, Recorder of Deeds Office. I further certify that there is no mortgage, lien or encumbrance against this property.

WITNESS Caleb Falbo — Phyllis A. Wylie OWNER

I, Cheryl A. Hughes, a Registered Professional Land Surveyor of the Commonwealth of Pennsylvania, do hereby certify that this plan as shown hereon is based upon actual field survey of the land described and that in my professional opinion all angles, distances and courses are correctly shown, that the monuments and markers have been set as shown on the plat and that this plan correctly represents the lots, land, streets and highways as surveyed and plotted by me for the owners or agents.

February 16, 2015 DATE SEAL — Cheryl A. Hughes REG. NO. SU-32490-E

KNOW ALL MEN BY THESE PRESENTS, that we, James D. and Lisa M. Wylie, of the Township of Forward, of the County of Butler, Commonwealth of Pennsylvania, for ourselves, our heirs, executors, administrators and assigns, do hereby adopt this plan as our Plan of Lots of our property, situate in Forward Township, and do hereby dedicate forever, for public use for highway and utility purposes all drives, roads,lanes, ways, rights-of-way and other public highways shown upon the plan, and we release, remise and discharge the Township of Forward, its successors or assigns, of and from all liability, courses of action, claim or damamges arising from or pertaining to in any manner said roads and rights-of-way.

We further agree that said plan is approved by the Township of Forward for "Planning Purposes Only" and that said Township shall not issue any "Building Permits" for lots contained herein, nor shall any lots be deeded until either all of said roads and improvements in accordance with Forward Township Ordinances have been completed and accepted by said Township or until the Township has approved a bond with sufficient surety to guarantee construction of same.

IN WITNESS WHEREOF, we hereunto set our hands and seals this 16th day of May, 20 15.

ATTEST:

NOTARY PUBLIC — OWNER — OWNER

COMMONWEALTH OF PENNSYLVANIA)SS:
COUNTY OF BUTLER

Before me, the subscriber, a Notary Public in and for said Commonwealth and County, personally appeared the above named James D. and Lisa M. Wylie, and acknowledged the foregoing release and dedication and plan to be their act and deed and desired the same to be recorded as such.

Sworn to and subscribed before me this 16th day of May, 20 15.

My Commission expires the 24th day of August, 20 16.

SEAL

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Caleb J. Falbo, Notary Public
Cranberry Twp., Butler County
My Commission Expires Aug. 24, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

We, James D. and Lisa M. Wylie, owners of the Phyllis A. Wylie and James D. and Lisa M. Wylie Plan of Subdivision, do hereby certify that the title of this property is in the names of James D. and Lisa M. Wylie as recorded in Deed Book Volume 1384 page 1011, Recorder of Deeds Office. We further certify that there is mortgage, lien or encumbrance against this property.

WITNESS Caleb Falbo — OWNER — Lisa M. Wylie OWNER

Instr:201506030011884 06/03/2015
Pages:1 F:$45.00 2:00PM
Michele Mustello T20150009571
Butler County Recorder FL

The Board of Supervisors of the Township of Forward hereby gives public notice that in approving this plan for recording purposes only, the Township of Forward assumes no obligation, legal or otherwise, expressed or implied, either to accept said streets as Township streets or roads or grade, pave and curb the streets in said plan, or to construct sewers therein or to install any other such service ordinarily installed in Township streets or roads.

Debra Rachel SECRETARY SEAL PRESIDENT

Approved by the Supervisors of the Township of Forward this 14th day of April, 20 15.

SECRETARY SEAL Mark D. Mustello CHAIRMAN OF BOARD

Approved by the Forward Township Planning Commission this 24 day of March, 20 15.

Debra Rachel SECRETARY SEAL CHAIRMAN

Reviewed by the Butler County Planning Commission 16TH day of March, 20 15.

SECRETARY SEAL CHAIRMAN

COMMONWEALTH OF PENNSYLVANIA)SS:
COUNTY OF BUTLER

Recorded in the Recorder?s Office for the recording of deeds, plans, etc. in said County in Plan Book Volume 348 page 24

Given under my hand and seal this 3rd day of June, 20 15

SEAL

RECORDER

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

RECORDER OF DEEDS BUTLER COUNTY, PA

0' 100' 200' 300'

NOTES:

SUBJECT TO ANY AND ALL EXISTING RIGHTS-OF-WAY AND EASEMENTS OF RECORD.

ACCORDING TO THE FLOOD INSURANCE RATE MAP PREPARED FOR THIS TOWNSHIP, THIS PROPERTY LIES IN ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN.

⌂⌂ PIT & PERC TEST

IRON PINS TO BE SET AT NEW LOT CORNERS.

PROPOSED WATER WELLS TO SERVE THIS LOT IS TO BE LOCATED OUTSIDE OF THE 100' ISOLATION DISTANCE FROM THE SEPTIC SYSTEM TO BE BUILT.

A HIGHWAY OCCUPANCY PERMIT IS REQUIRED FOR ACCESS ONTO A STATE HIGHWAY PERSUANT TO SECTION 420 OF PA STATE HIGHWAY LAW.

REF: LOT 1 OF PHYLLIS WYLIE PLAN OF LOTS, P.B. 122 PG. 28.

REF: PLAN OF SUBDIVISION FOR PHYLLIS A. WYLIE BY LAND SURVEYORS, INC., #01-113, P.B. 244 PG. 37.

REF: PLAN OF SUBDIVISION #2 FOR PHYLLIS A. WYLIE BY LAND SURVEYORS, INC., #13-180, P.B. 341 PG. 44.

THE PURPOSE OF THIS PLAN IS TO CREATE ONE NEW BUILDING LOT AND TO ADD PARCEL C TO ADJOINING LANDS OF JAMES & LISA WYLIE.

Land Surveyors, Inc.
523 North Main Street
P.O. Box 1061
Butler, PA 16003-1061
(724) 287-6865
Cheryl A. Hughes, PLS Owner

PLAN OF SUBDIVISION #3
FOR: PHYLLIS A. WYLIE and JAMES D. & LISA M. WYLIE

SITUATE: FORWARD TWP., BUTLER CO., PA

Date 02/16/15	Scale 1" = 100'	Dwn By BEC	Ckd By CAH		
Parcel No. 160-3F72-4 & 4C		Db-Pg 1025-626 1384-1011		Service No. 14-153	
Address REIBOLD ROAD					

LAND OWNERS ADOPTION

Know All Men By these Presents, that (I or We) John J. DeRunk, Sr. and Patricia J. DeRunk do hereby adopt this as our land development plan of our Property subject to surface lease agreement recorded in the Butler County 201312060034444, situate in the Township of Oakland, County of Butler, (Instrument No.) and Commonwealth of Pennsylvania, and do hereby dedicate forever, for public use for highway and utility purposes, all drives, roads, lanes, rights-of-way, ways, and other public highways shown upon the plan, and we hereby release and forever discharge the Township of Oakland, its successor or assigns, from any liability, courses of action, claims or damages arising form or pertaining to in any manner said roads and rights-of-way. This dedication and release shall be binding upon the above named property owner, their heirs, executors, administrators and assigns and parties in this surface lease agreement.

IN WITNESS WHEREOF, (I or We) hereunto set (my, our) hand(s) and seal(s) this 1st day of April, A.D. 2015.

ATTEST:

(Owner or Owners) _____ (SEAL)

(Owner or Owners) _____ (SEAL)

INDIVIDUAL ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA }
COUNTY OF Allegheny } SS:

Before me, the subscriber, a Notary Public in and for said County and Commonwealth, personally appeared the above named

John J. DeRunk, Sr. and Patricia J. DeRunk who acknowledged the foregoing (Name of Owner or Owners) release and dedication and plan of subdivision to be (his, her, their) act and deed and desired the same to recorded as such:
WITNESS MY HAND AND NOTARIAL SEAL this 1st day of April, 2015.

_____ SEAL
Notary Public

My Commission Expires the 8th day of December, 2018.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Stewart R. West, Notary Public
O'Hara Twp., Allegheny County
My Commission Expires Dec. 8, 2018
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

STATION OWNERS ADOPTION

Know all men by these presents:
That Axip Producer Services – Marcellus I, LLC, as the operator of the compressor station, does hereby adopt this land development plan of the surface lease area of property of Mr. and Mrs. DeRunk as recorded in Butler County instrument 201312060034444, situate in the Township of (Instrument No.) Oakland, County of Butler and Commonwealth of Pennsylvania, and do hereby dedicate forever, for public use for highway and utility purposes, all drives, roads, lanes, rights-of-way, and other public highways shown upon the plan, and we hereby release and forever discharge the Township of Oakland, its successor or assigns, from any liability, courses of action, claims or damages arising from or pertaining to in any manner said roads and rights-of-way. This dedication and release shall be binding upon the above named property owner, their heirs, executors, administrators and assigns and parties in this surface lease agreement.

IN WITNESS WHEREOF, (I or We) hereunto set (my, our) hand(s) and seal(s) this 13 day of April, A.D. 2015.

ATTEST:

_____ (SEAL)
(Company Representative)

Director Producer Services (SEAL)
(Title)

Jeri L. Howell (SEAL)
(Notary Public)

JERI L HOWELL NOTARY PUBLIC STATE OF TEXAS EXPIRES 12-05-2015

My commission expires the 5 day of December A.D., 2015

PROFFESSIONAL LAND SURVEYOR CERTIFICATE

I, JAMES M. WAGNER, a Professional Land Surveyor of the Commonwealth of Pennsylvania, do hereby certify that this plan shown hereon is based upon actual field survey of the land described and that all angles, distances, and courses are correctly shown, that the monuments and markers as shown on the plat have been, or will be set, and to the best of my knowledge, that this plan correctly represents the lots, lands, streets, and highways as surveyed and plotted by me for the owners or agents.

JAMES M. WAGNER SEAL
(Surveyor's Name)

SU-040402-E
(Surveyor's Registration No.)

April 30, 2015
(Date)

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JAMES M. WAGNER LAND SURVEYOR SU040402-E

BUTLER COUNTY PLANNING COMMISSION APPROVAL

Reviewed by the Butler County Planning Commission this 21ST day of AUG, 2015.

(Secretary) (Chairman)

BUTLER COUNTY PLANNING COMMISSION

See comments on file at the Butler County Planning Commission
Plan Number: # 14163 SEAL

MUNICIPAL APPROVAL

Approved by Oakland Township this 6th day of May, 2015.
(City, Borough, Township)

(Secretary) (Chairman)
SEAL

PROOF OF RECORDING

COMMONWEALTH OF PENNSYLVANIA }
COUNTY OF BUTLER } SS:

Recorded in the office for the recording of deeds, plats and plans in said County, in Plan Book Volume 348 Page(s) 25-44.

Given under my hand and seal this 4 day of JUNE, 2015.

(Recorder of Deeds)

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

RECORDER OF DEEDS BUTLER COUNTY, PA

Instr:201506040011939 06/04/2015
Pages:20 F:$805.00 8:49AM
Michele Mustello T20150009601
Butler County Recorder ND

CORPORATION ADOPTION

KNOW ALL MEN BY THESE PRESENTS:
That EM Energy ~~Pipeline~~ Pennsylvania, LLC (Name of Corporation) by virtue of a Resolution of its Board of directors, does herby hereby adopt this Plan of development of the property, situated in the Township of Oakland, County of Butler, and the Commonwealth of Pennsylvania, and for diver advantages accruing to it, does hereby dedicate forever, for public use for highway, drainage, sewage and utility purposes, all drives, roads, lands, rights-of-way, easements, ways and other public highways shown upon the plan, with the same force and effect as if the same had been opened through legal proceedings and in consideration of the approval of said plan and any future acceptance of said public highways, rights-of-way and easements by the Township of Oakland, County of Butler. EM Energy ~~Pipeline~~ Pennsylvania, LLC (Name of Corporation) hereby covenants and agrees to and by these presents do release and forever discharge the Township of Oakland, County of Butler, its successors or assigns from any liability for damages arising and to arise from the appropriation of said ground for public highways, and other public uses and the physical grading thereof to any grades that may be established. This dedication and release shall be binding upon EM Energy ~~Pipeline~~ Pennsylvania, LLC (Name of Corporation) its successors and assigns and purchasers of facilities described herein.

IN WITNESS WHEREOF, the said Corporation has caused its Corporate seal to be affixed by the hand of its ~~President~~ CFO and same to attested Secretary, this 6TH day of MAY, A.D. 2015.

_____ (SEAL)
(Name of Corporation)

ATTEST:

Secretary (SEAL)

President CFO (SEAL)

CORPORATION ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA }
COUNTY OF ~~BUTLER~~ WASHINGTON } SS:

On this 6TH day of MAY, A.D. 2015 before me, a Notary Public and for said County and Commonwealth, personally appeared BRIAN McCURRIE, CFO (Name and Title of Officer) of EM ENERGY PENNSYLVANIA, LLC (Name of Corporation) who being duly sworn, deposes and says that he was personally present at the execution of the adoption, release and dedication and saw the common and corporate seal of the said Corporation duly sign and sealed by and as for the act and deed of the said EM ENERGY PENNSYLVANIA, LLC (Name of Corporation) for the uses and purposes therein mentioned, and that the name of this deponent subscribed to the said released and dedication ALAN SHEPARD, SECRETARY (Name and Title of Officer) of EM ENERGY PENNSYLVANIA, LLC (Name of Corporation) in attestation of the due execution and delivery of said release and dedication of this deponent's own and proper and respective handwriting.

_____ (SEAL)
(Name of Officer)

_____
(Title of Officer)

Sworn to and subscribed before me the day and date above written.
WITNESS ~~MY HAND~~ AND NOTARIAL SEAL this 6TH day of MAY, 2015.

_____ SEAL
Notary Public

My Commission Expires the 26TH day of JANUARY, 2016.

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Joseph Paul Kelly, Notary Public
Scott Township, Allegheny County
My Commission Expires January 26, 2016

PLAN BOOK	PAGE
348	25

DRAWINGS FOR EROSION AND SEDIMENT CONTROL PLAN

DRACO WELL PAD & CONSTELLATION COMPRESSOR STATION

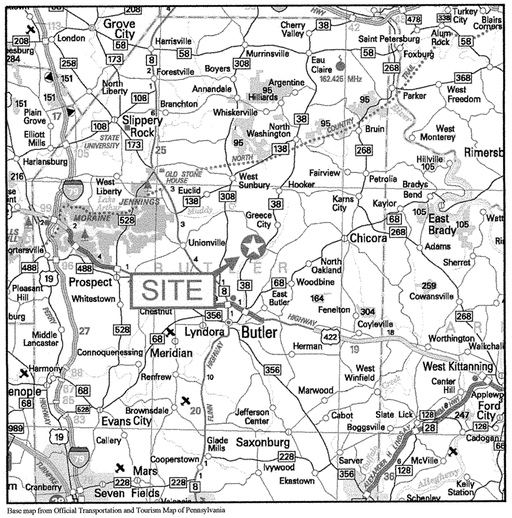
OAKLAND TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

MARCH 2014

REVISED MAY 2014

LIST OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	TOTAL PROJECT AREA PLAN
2A	DRAINAGE AND SOILS PLAN
2B	TEMPORARY DRAINAGE AND SOILS PLAN
3	ACCESS ROAD PLAN AND PROFILE (SHEET 1 OF 3)
4	ACCESS ROAD PLAN AND PROFILE (SHEET 2 OF 3)
5	ACCESS ROAD PLAN AND PROFILE (SHEET 3 OF 3)
6	WELL PAD, COMPRESSOR PAD & IMPOUNDMENT GRADING PLAN
7A	WELL PAD DETAILS
7B	COMPRESSOR PAD DETAILS
8A	IMPOUNDMENT DETAILS (SHEET 1 OF 3)
8B	IMPOUNDMENT DETAILS (SHEET 2 OF 3)
8C	IMPOUNDMENT DETAILS (SHEET 3 OF 3)
9	E&S DETAILS (SHEET 1 OF 4)
10	E&S DETAILS (SHEET 2 OF 4)
11	E&S DETAILS (SHEET 3 OF 4)
12	E&S DETAILS (SHEET 4 OF 4)



Base map from Official Transportation and Tourism Map of Pennsylvania

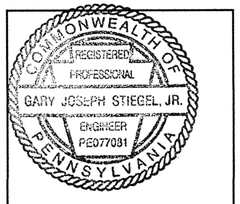
VICINITY MAP

SCALE: 1" = 5 Miles

PENNSYLVANIA ONE CALL SYSTEM

PA. ACT 187 OF 1974 AS AMENDED BY ACT 121 OF 2008
REQUIRES THREE WORKING DAYS NOTICE

DURING DESIGN, ARM GROUP INC. PERFORMED A PA ONE CALL INQUIRY FOR THE PROPOSED PROJECT AREA. ALL UNDERGROUND UTILITY OWNERS THAT RESPONDED TO THE PA ONE CALL HAVE BEEN CONTACTED AND THEIR REPORTED UTILITIES ADDED TO PLANS BASED ON INFORMATION PROVIDED BY THE UTILITY. HOWEVER, IN VIOLATION OF LAWS OF THE COMMONWEALTH OF PENNSYLVANIA, NOT ALL UNDERGROUND UTILITY OWNERS ARE REGISTERED WITH THE PA ONE CALL SYSTEM. NEITHER THE PERMIT OPERATOR, ARM GROUP INC., NOR THE PROFESSIONAL ENGINEER SIGNING THESE PLANS CERTIFIES THAT THE FOLLOWING DEPICTS UNDERGROUND UTILITIES OWNED BY THOSE NOT REGISTERED WITH THE PA ONE CALL SYSTEM.



This Drawing shall not be used for tender or construction unless sealed.

I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMP's are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

GARY JOSEPH STIEGEL, JR., PE - 077081

PLAN BOOK	PAGE
348	26



Base map from the following USGS 7½ minute quadrangles: Mount Chestnut dated 1993; East Butler dated 1972.

LOCATION MAP

SCALE: 1" = 2000'

PREPARED FOR:

EdgeMarc

EM Energy Pennsylvania, LLC
601 Technology Drive, Suite 300
Cannonsburg, Pennsylvania 15317
(412) 564-1300

PREPARED BY:

ARM Group Inc.
Earth Resource Engineers and Consultants
www.armgroup.net

1000 Town Center Way, Suite 130 • Cannonsburg, PA 15317
Ph: (724) 743-5793 Fax: (724) 743-5792

HEADQUARTERS:

1129 West Governor Road • Hershey, PA 17033-0797
Ph: (717) 533-8600 Fax: (717) 533-8605

This drawing, its contents, and each component of this drawing are the property of and proprietary to ARM Group Inc. and shall not be reproduced or used in any manner except for the purpose identified on the Title Block, and only by or on behalf of this client for the identified project unless otherwise authorized by the express, written consent of ARM Group Inc.

ARM Group Inc.
Earth Resource Engineers and Consultants
www.armgroup.net

No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

designed	DLL	scale AS NOTED
checked	GJS	date 03/14/2014
drawn	TMZ	project no. C12104-1-34
graphic scale		

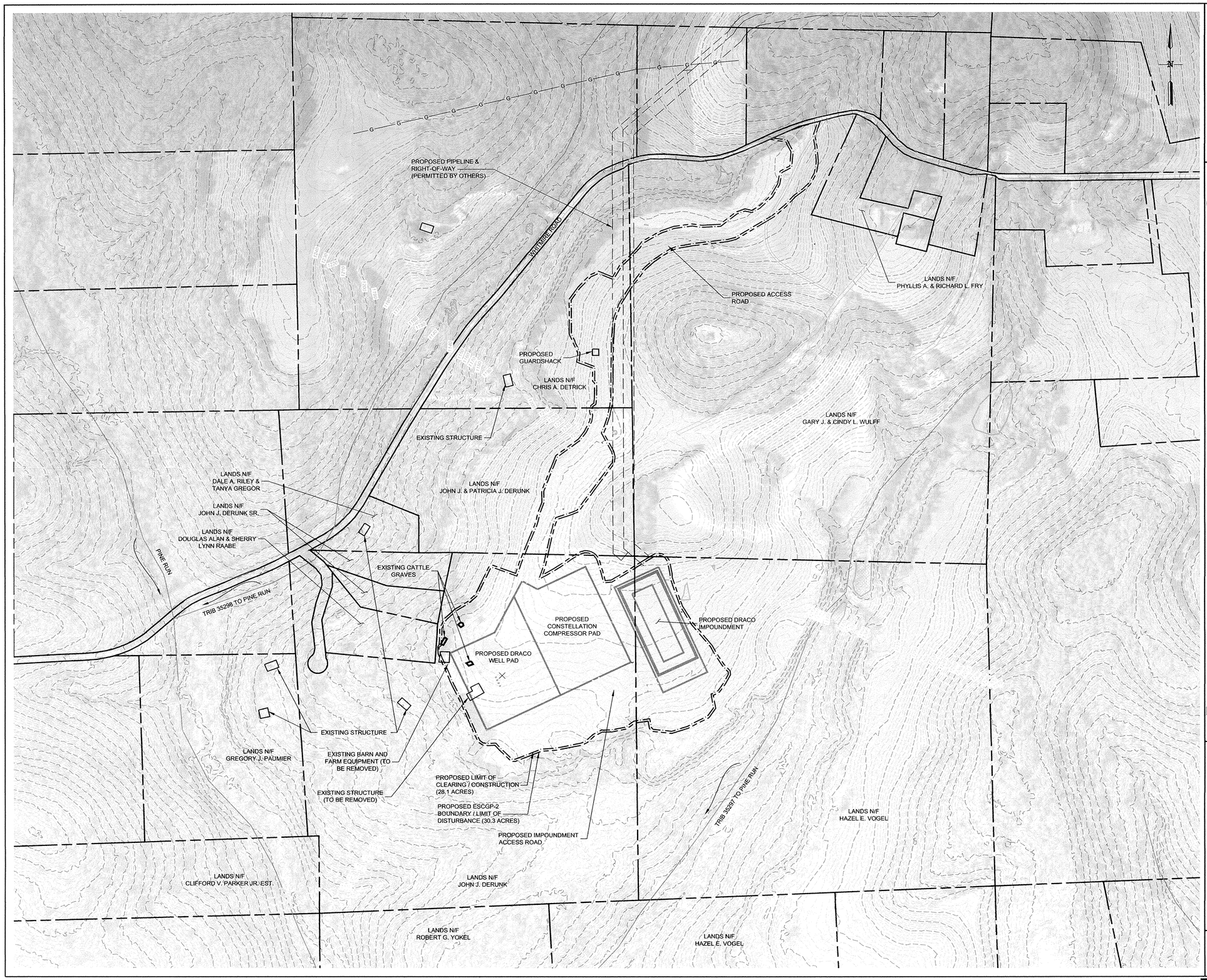
drawing title
COVER SHEET
EROSION AND SEDIMENT CONTROL PLAN

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

project title
DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

Sheet 1

P:\EdgeMarc\C12104-1-34\Draco Well Pad\Prop\Permitted\E&S Construction Drwgs_Revised\C12104-1-34-ESCvr001.dwg Printed: May 12, 2014



NOTES:

1. THE BASE MAP HAS BEEN CREATED USING AVAILABLE AERIAL PHOTOGRAPHY PROVIDED BY PAMAP TILES 60001380PAS. EXISTING TOPOGRAPHY HAS BEEN CREATED USING LIDAR CONTOURS PROVIDED BY PAMAP TILES 60001380PAS.
2. PROPERTY LINES AND OWNER INFORMATION ARE TAKEN FROM BUTLER COUNTY TAX ASSESSMENT MAPS AND RECORDS. THIS BASEMAP IS NOT THE RESULT OF AN ACTUAL FIELD SURVEY OF PROPERTIES SHOWN AND SHOULD NOT BE USED AS SUCH.
3. THE LOCATION AND EXTENT OF ABANDONED SURFACE AND DEEP MINE WORKINGS DEPICTED ON THIS MAP ARE NOT TAKEN FROM A FINAL CERTIFIED MINE MAP. UNKNOWN OR UNMAPPED MINES MAY EXTEND PAST DEPICTED BOUNDARIES AND MAY CONTAIN ABANDONED MINE POOLS AS WELL AS OTHER SAFTEY HAZARDS.
4. ALL TEST HOLE LOCATIONS AND ELEVATIONS ARE BASED ON FIELD SURVEY.
5. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE SOUTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.

LEGEND

NOTE: LEGEND IS TYPICAL, NOT ALL OBJECTS IN LEGEND APPEAR IN PLAN.

- EXISTING CONTOURS
- EXISTING WETLANDS
- EXISTING PROPERTY LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE EASEMENT
- EXISTING TREELINE
- EXISTING MAPPED WATERCOURSE
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING UTILITY POLE AND GUY WIRE
- PROPOSED CONTOURS
- PROPOSED ROAD
- PROPOSED GAS PIPELINE
- PROPOSED WATER PIPELINE
- PROPOSED 12" FILTER SOCK
- PROPOSED 18" FILTER SOCK
- PROPOSED 18" STACKED FILTER SOCK
- PROPOSED 24" FILTER SOCK
- PROPOSED 32" FILTER SOCK
- PROPOSED FILTER SOCK TURNOUT
- PROPOSED EROSION CONTROL PRODUCT
- PROPOSED STOCKPILE
- PROPOSED CHANNEL
- PROPOSED TOP-OF-SLOPE BERM
- PROPOSED POST AND WIRE FENCE
- PROPOSED WELL/COMPRESSOR PAD SURFACE
- PROPOSED OUTSIDE EDGE OF PERIMETER CONTAINMENT BERM
- PROPOSED WELL/COMPRESSOR PAD PERIMETER CONTAINMENT TRENCH
- PROPOSED EXCLUSION FENCE (CONSTRUCTION FENCE)
- PROPOSED LIMIT OF CLEARING / CONSTRUCTION
- PROPOSED ESCGP-2 PERMIT BOUNDARY / LIMIT OF DISTURBANCE
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED CULVERT
- PROPOSED SLOPE
- PROPOSED GAS WELL
- PROPOSED POST AND EXCLUSION FENCE
- PROPOSED GAS VENT
- PROPOSED ROCK CHECK DAM
- DRAINAGE AREA
- EXISTING SOIL BOUNDARY AND DESCRIPTOR

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — GARY JOSEPH STIEGEL JR. — ENGINEER — PE077691

This Drawing shall not be used for tender or construction unless sealed.

I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

This drawing, its contents, and each component of this drawing are the property of and proprietary to ARM Group Inc. and shall not be reproduced or used in any manner except for the purpose identified on the Title Block, and only by or on behalf of this client for the identified project unless otherwise authorized by the express, written consent of ARM Group Inc.

ARM Group Inc.
Earth Resource Engineers and Consultants
www.armgroup.net

No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	AEM

scale	1" = 200'
date	03/14/2014
project no.	C12104-1-34
designed	DLL
checked	GJS
drawn	TMZ

SCALE IN FEET: 0, 200, 400

TOTAL PROJECT AREA PLAN
EROSION AND SEDIMENT CONTROL PLAN

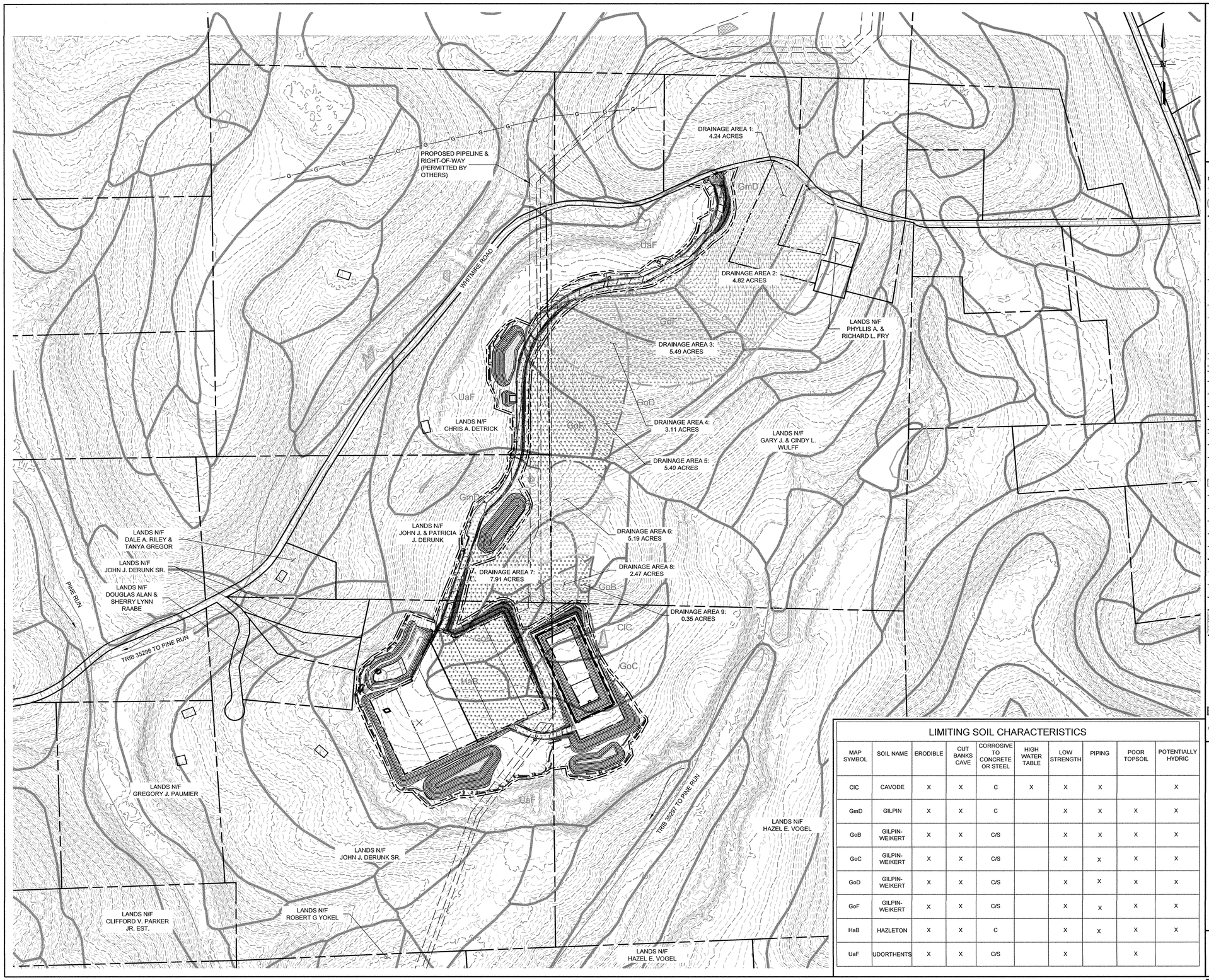
OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

Sheet 2

PLAN BOOK	PAGE
348	27

T:\ArgMaps\12104-1-34\Misc\DRAFTing\Drawings\EM Construction Group_Revised\C12104-1-34-ESCP2.dwg, Revised May 12, 2014



NOTES:

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4. ALL TEST HOLE LOCATIONS AND ELEVATIONS ARE BASED ON FIELD SURVEY.
5. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE SOUTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.

LEGEND

NOTE: LEGEND IS TYPICAL, NOT ALL OBJECTS IN LEGEND APPEAR IN PLAN.

- 1550 — EXISTING CONTOURS
- EXISTING WETLANDS
- EXISTING PROPERTY LINE
- OE — OE — EXISTING OVERHEAD ELECTRIC LINE
- UE — UE — EXISTING UNDERGROUND ELECTRIC LINE
- G — G — EXISTING GAS LINE
- W — W — EXISTING WATER LINE
- EXISTING ELECTRIC LINE EASEMENT
- EXISTING TREELINE
- EXISTING MAPPED WATERCOURSE
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING UTILITY POLE AND GUY WIRE
- 1490 — PROPOSED CONTOURS
- PROPOSED ROAD
- G — G — PROPOSED GAS PIPELINE
- W — W — PROPOSED WATER PIPELINE
- 12 — 12 — 12 — PROPOSED 12" FILTER SOCK
- 18 — 18 — 18 — PROPOSED 18" FILTER SOCK
- 18/18 — 18/18 — 18/18 — PROPOSED 18" STACKED FILTER SOCK
- 24 — 24 — 24 — PROPOSED 24" FILTER SOCK
- 32 — 32 — 32 — PROPOSED 32" FILTER SOCK
- 12 — 12 — PROPOSED FILTER SOCK TURNOUT
- PROPOSED EROSION CONTROL PRODUCT
- PROPOSED STOCKPILE
- PROPOSED CHANNEL
- DIV — DIV — PROPOSED TOP-OF-SLOPE BERM
- PROPOSED POST AND WIRE FENCE
- PROPOSED WELL/COMPRESSOR PAD SURFACE
- PROPOSED OUTSIDE EDGE OF PERIMETER CONTAINMENT BERM
- PROPOSED WELL/COMPRESSOR PAD PERIMETER CONTAINMENT TRENCH
- PROPOSED EXCLUSION FENCE (CONSTRUCTION FENCE)
- PROPOSED LIMIT OF CLEARING / CONSTRUCTION
- PROPOSED ESCGP-2 PERMIT BOUNDARY / LIMIT OF DISTURBANCE
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED CULVERT
- 2H:1V — PROPOSED SLOPE
- PROPOSED GAS WELL
- PROPOSED POST AND EXCLUSION FENCE
- PROPOSED GAS VENT
- PROPOSED ROCK CHECK DAM
- DRAINAGE AREA
- WeB — EXISTING SOIL BOUNDARY AND DESCRIPTOR

LIMITING SOIL CHARACTERISTICS

MAP SYMBOL	SOIL NAME	ERODIBLE	CUT BANKS CAVE	CORROSIVE TO CONCRETE OR STEEL	HIGH WATER TABLE	LOW STRENGTH	PIPING	POOR TOPSOIL	POTENTIALLY HYDRIC
CIC	CAVODE	X	X	C	X	X	X		X
GmD	GILPIN	X	X	C		X	X	X	X
GoB	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
GoC	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
GoD	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
GoF	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
HaB	HAZLETON	X	X	C		X	X	X	X
UaF	UDORTHENTS	X	X	C/S		X		X	

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — GARY JOSEPH STIEGEL, JR. — ENGINEER — PE077081

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ARM Group Inc.
Earth Resource Engineers and Consultants
www.armgroup.net

No.	Description	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	AAM

drawn	DLL
designed	DLL
checked	CJS
approved	TMZ
scale	1" = 200'
date	03/14/2014
project no.	C12104-1-34

0 200 400 600 SCALE IN FEET

DRAINAGE AND SOILS PLAN
EROSION AND SEDIMENT CONTROL PLAN

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

plotting date

Sheet 2A

P:\Eagle\files\C12104-1-34\Draco Well Pad\Dwg\Production\E&S Construction Drwgs_R\revised\C12104-1-34 ESCAD2A.dwg Plotted: May 12, 2014

PLAN BOOK	PAGE
348	28

PROPOSED PIPELINE & RIGHT-OF-WAY (PERMITTED BY OTHERS)

WHITMIRE ROAD

TEMPORARY DRAINAGE AREA 1: 1.11 ACRES

TEMPORARY DRAINAGE AREA 2A: 2.71 ACRES

TEMPORARY DRAINAGE AREA 2B: 1.93 ACRES

LANDS N/F CHRIS A. DETRICK

LANDS N/F JOHN J. & PATRICIA J. DERUNK

LANDS N/F PHYLLIS A. & RICHARD L. FRY

LANDS N/F GARY J. & CINDY L. WULFF

GmD

UaF

GoF

GoD

GoB

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LEGEND

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- EXISTING WETLANDS
- EXISTING PROPERTY LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE EASEMENT
- EXISTING TREELINE
- EXISTING MAPPED WATERCOURSE
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING UTILITY POLE AND GUY WIRE
- PROPOSED CONTOURS
- PROPOSED ROAD
- PROPOSED GAS PIPELINE
- PROPOSED WATER PIPELINE
- PROPOSED 12" FILTER SOCK
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- PROPOSED CULVERT
- PROPOSED SLOPE (2H:1V)
- PROPOSED GAS WELL
- PROPOSED POST AND EXCLUSION FENCE
- PROPOSED GAS VENT
- PROPOSED ROCK CHECK DAM
- DRAINAGE AREA
- EXISTING SOIL BOUNDARY AND DESCRIPTOR (WeB)

LIMITING SOIL CHARACTERISTICS

MAP SYMBOL	SOIL NAME	ERODIBLE	CUT BANKS CAVE	CORROSIVE TO CONCRETE OR STEEL	HIGH WATER TABLE	LOW STRENGTH	PIPING	POOR TOPSOIL	POTENTIALLY HYDRIC
CIC	CAVODE	X	X	C	X	X	X		X
GmD	GILPIN	X	X	C		X	X	X	X
GoB	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
GoC	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
GoD	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
GoF	GILPIN-WEIKERT	X	X	C/S		X	X	X	X
HaB	HAZLETON	X	X	C		X	X	X	X
UaF	UDORTHENTS	X	X	C/S		X		X	

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
PE077081

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

scale	1" = 100'
date	03/14/2014
project no.	C12104-1-34
designed	DLL
cad/cad	GJS
plans	TMZ
graphic scale	0, 100, 200, 300 SCALE IN FEET

TEMPORARY DRAINAGE AND SOILS PLAN
EROSION AND SEDIMENT CONTROL PLAN

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

drawing title
project title
DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

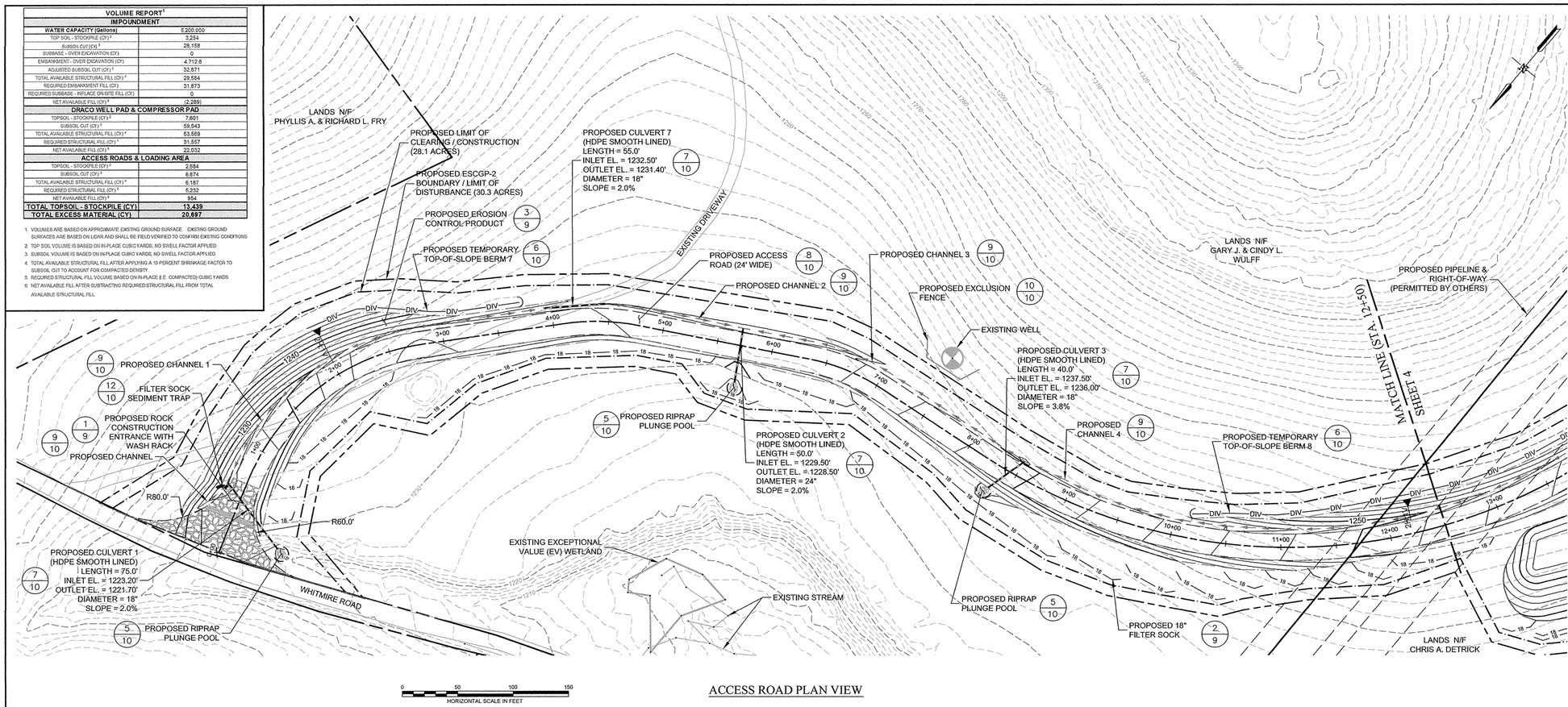
Sheet 2B

PLAN BOOK	PAGE
348	29

P:\Agdata\C12104-1-34\Dwgs\Production\E&S Construction Drwgs_Revised\C12104-1-34-E&S-Const03.dwg - Printed: May 12, 2014

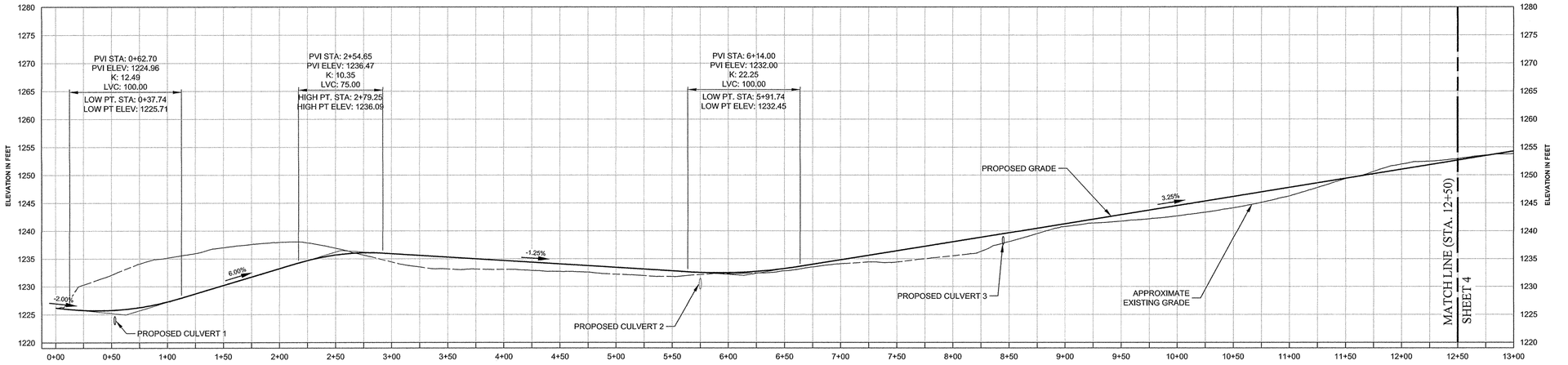
VOLUME REPORT[1]	
IMPOUNDMENT	
WATER CAPACITY (Gallons)	8,200,000
TOP SOIL - STOCKPILE (CY) [2]	5,254
SUBSOIL CUT (CY) [3]	28,158
SUBBASE - OVER EXCAVATION (CY)	0
EMBANKMENT - OVER EXCAVATION (CY)	4,712.8
ADJUSTED SUBSOIL CUT (CY) [4]	32,871
TOTAL AVAILABLE STRUCTURAL FILL (CY) [4]	29,584
REQUIRED EMBANKMENT FILL (CY)	31,873
REQUIRED SUBBASE - INPLACE ON-SITE FILL (CY)	0
NET AVAILABLE FILL (CY) [5]	(2,289)
DRACO WELL PAD & COMPRESSOR PAD	
TOPSOIL - STOCKPILE (CY) [2]	7,601
SUBSOIL CUT (CY) [3]	59,543
TOTAL AVAILABLE STRUCTURAL FILL (CY) [4]	53,569
REQUIRED STRUCTURAL FILL (CY) [5]	31,557
NET AVAILABLE FILL (CY) [6]	22,032
ACCESS ROADS & LOADING AREA	
TOPSOIL - STOCKPILE (CY) [2]	2,584
SUBSOIL CUT (CY) [3]	6,874
TOTAL AVAILABLE STRUCTURAL FILL (CY) [4]	6,187
REQUIRED STRUCTURAL FILL (CY) [5]	5,232
NET AVAILABLE FILL (CY) [6]	954
TOTAL TOPSOIL - STOCKPILE (CY)	**13,439**
TOTAL EXCESS MATERIAL (CY)	**20,897**

1. VOLUMES ARE BASED ON APPROXIMATE EXISTING GROUND SURFACE. EXISTING GROUND SURFACES ARE BASED ON LIDAR AND SHALL BE FIELD VERIFIED TO CONFIRM EXISTING CONDITIONS
2. TOP SOIL VOLUME IS BASED ON IN-PLACE CUBICY YARDS, NO SWELL FACTOR APPLIED
3. SUBSOIL VOLUME IS BASED ON IN-PLACE CUBIC YARDS, NO SWELL FACTOR APPLIED.
4. TOTAL AVAILABLE STRUCTURAL FILL AFTER APPLYING A 15 PERCENT SHRINKAGE FACTOR TO SUBSOIL CUT TO ACCOUNT FOR COMPACTED DENSITY.
5. REQUIRED STRUCTURAL FILL VOLUME BASED ON IN-PLACE (I.E. COMPACTED) CUBIC YARDS
6. NET AVAILABLE FILL AFTER SUBTRACTING REQUIRED STRUCTURAL FILL FROM TOTAL AVAILABLE STRUCTURAL FILL



0 50 100 150
HORIZONTAL SCALE IN FEET

ACCESS ROAD PLAN VIEW



0 50 100 150
HORIZONTAL SCALE IN FEET

ACCESS ROAD PROFILE VIEW

0 10 20 30
VERTICAL SCALE IN FEET

NOTES:

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- PROPOSED OUTSIDE EDGE OF PERIMETER CONTAINMENT BERM
- PROPOSED WELL/COMPRESSOR PAD PERIMETER CONTAINMENT TRENCH
- PROPOSED EXCLUSION FENCE (CONSTRUCTION FENCE)
- PROPOSED LIMIT OF CLEARING / CONSTRUCTION
- PROPOSED ESCGP-2 PERMIT BOUNDARY / LIMIT OF DISTURBANCE
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED CULVERT
- 2H:1V PROPOSED SLOPE
- PROPOSED GAS WELL
- PROPOSED POST AND EXCLUSION FENCE
- PROPOSED GAS VENT
- PROPOSED ROCK CHECK DAM
- DRAINAGE AREA
- WeB EXISTING SOIL BOUNDARY AND DESCRIPTOR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
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PLAN BOOK	PAGE
348	30

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

scale	AS NOTED
date	03/14/2014
project no.	C12104-1-34
designed	DLL
checked	GJS
drawn	TMZ
pmpfile.mdb	

drawing title
ACCESS ROAD PLAN & PROFILE (SHEET 1 OF 3)
EROSION AND SEDIMENT CONTROL PLAN

project title
DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Sheet 3

F:\Applied\C12104-1-34\Basin 1\Well Pad\Engr\Produced\EA Construction\Dwgs_Revised\C12104-1-34-ESC-C101.dwg Plotted: Sep 12, 2014

VOLUME REPORT[1]	
IMPOUNDMENT	
WATER CAPACITY (Gallons)	3,200,000
TOP SOIL - STOCKPILE (CY)[2]	3,254
SUBSOIL CUT (CY)[3]	28,158
SUBBASE - OVER EXCAVATION (CY)	0
EMBANKMENT - OVER EXCAVATION (CY)	4,712.8
ADJUSTED SUBSOIL CUT (CY)[4]	32,871
TOTAL AVAILABLE STRUCTURAL FILL (CY)[5]	29,584
REQUIRED EMBANKMENT FILL (CY)	31,873
REQUIRED SUBBASE - (IMPORT OR SITE FILL (CY)	0
NET AVAILABLE FILL (CY)[6]	(2,289)
DRACO WELL PAD & COMPRESSOR PAD	
TOPSOIL - STOCKPILE (CY)[2]	7,601
SUBSOIL CUT (CY)[3]	59,543
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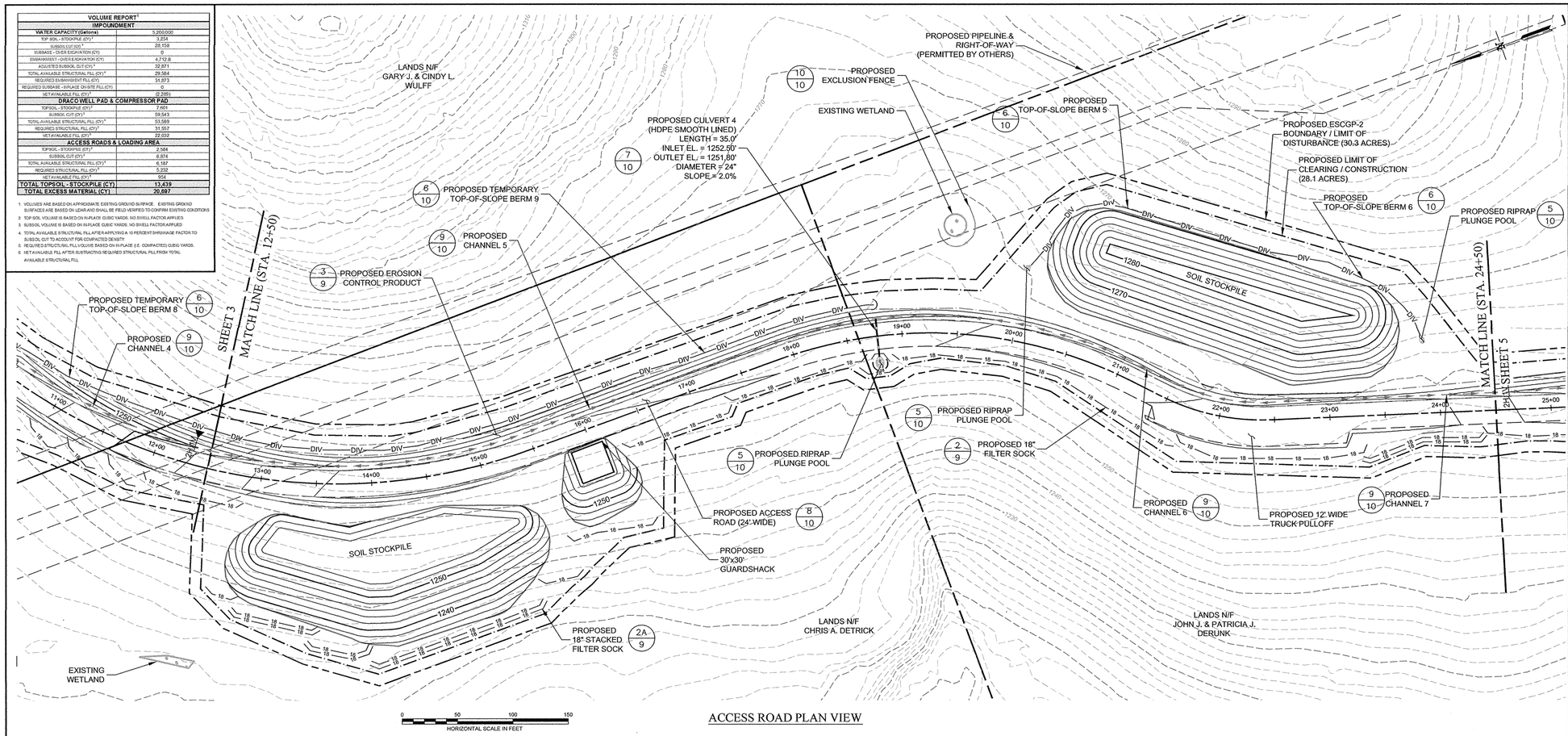
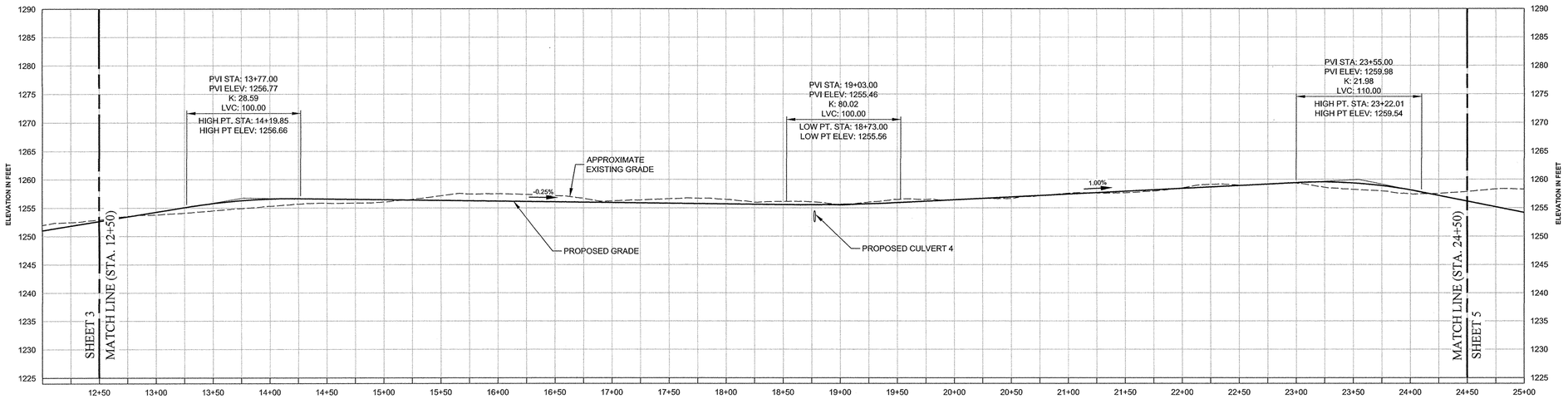
3. SUBSOIL VOLUME IS BASED ON IN PLACE CUBIC YARDS. NO SWELL FACTOR APPLIED
4. TOTAL AVAILABLE STRUCTURAL FILL AFTER APPLYING A 10 PERCENT SHRINKAGE FACTOR TO SUBSOIL CUT TO ACCOUNT FOR COMPACTED DENSITY
5. REQUIRED STRUCTURAL FILL VOLUME BASED ON IN PLACE (I.E. COMPACTED) CUBIC YARDS.
6. NET AVAILABLE FILL AFTER SUBTRACTING REQUIRED STRUCTURAL FILL FROM TOTAL AVAILABLE STRUCTURAL FILL



ACCESS ROAD PLAN VIEW



ACCESS ROAD PROFILE VIEW

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- EXISTING SOIL BOUNDARY AND DESCRIPTOR

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
PE077081

This Drawing shall not be used for tender or construction unless sealed.

I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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ARM Group Inc.
Earth Resource Engineers and Consultants
www.armgroup.net

No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

scale: AS NOTED
date: 03/14/2014
project no.: C12104-1-34

designed: DLL
detailed: GJS
drawn: TMZ
graphic scale:

drawing title: ACCESS ROAD PLAN & PROFILE (SHEET 2 OF 3) EROSION AND SEDIMENT CONTROL PLAN

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

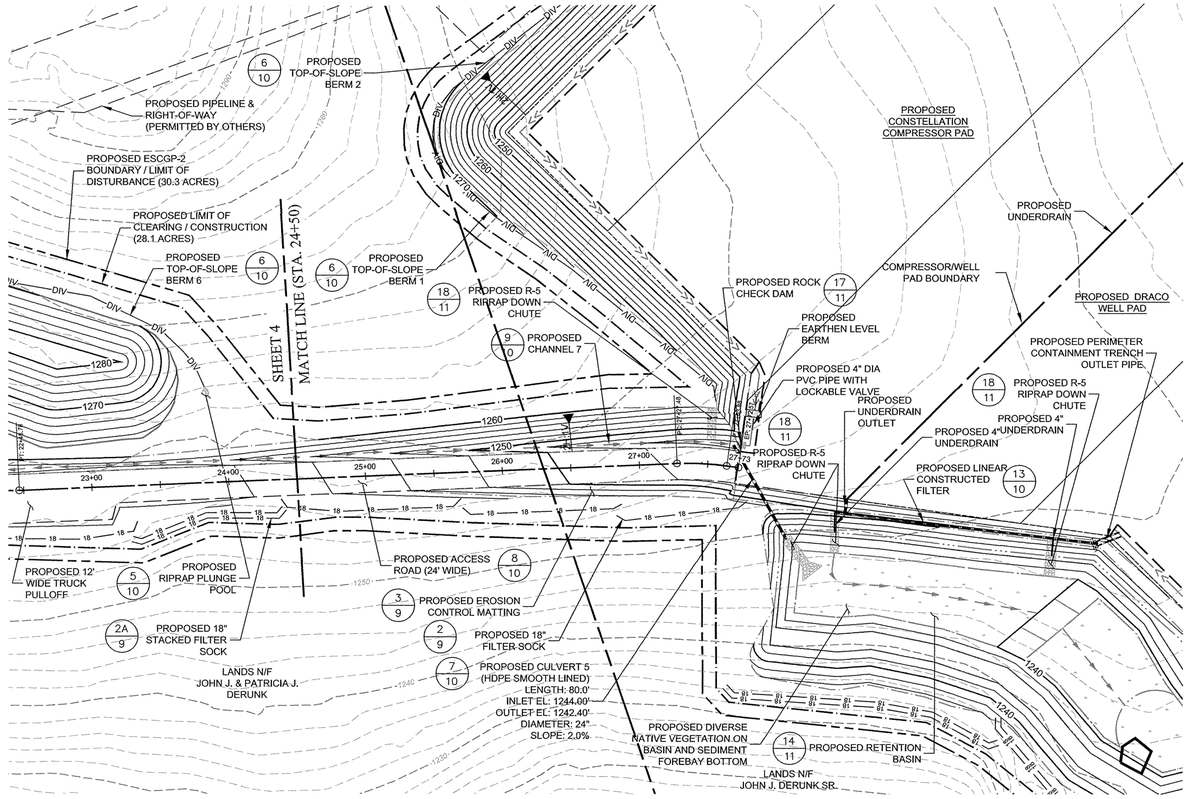
Sheet 4

PLAN BOOK	PAGE
348	31

T:\ProjDat\C12104-1-34\Draco Well Pad\Plans\Detailed\E&S Construction Dwgs_Revised\C12104-1-34-E&S-Const.dwg Plotted: Mar 12, 2014

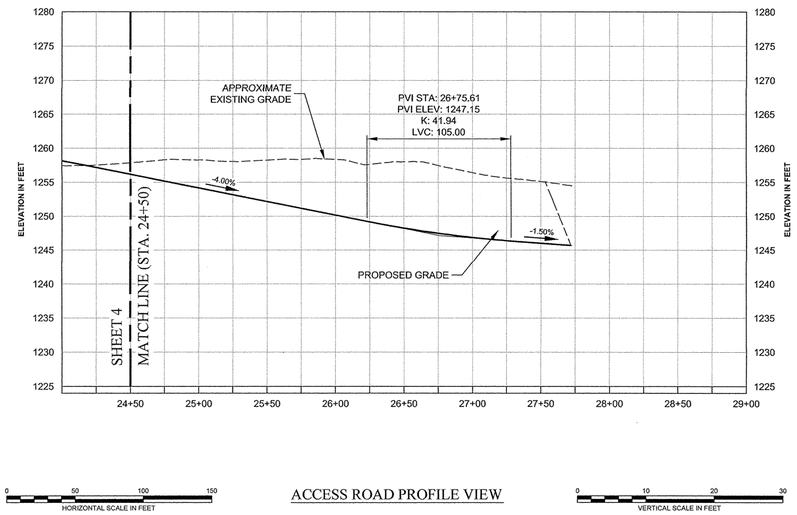
VOLUME REPORT[1]	
IMPOUNDMENT	
WATER CAPACITY (Gallons)	5,200,000
TOP SOIL - STOCKPILE (CY) [2]	3,254
SUBSOIL CUT (CY) [3]	28,158
SUBBASE - OVER EXCAVATION (CY)	0
EMBANKMENT - OVER EXCAVATION (CY)	4,712.8
ADJUSTED SUBSOIL CUT (CY) [3]	32,871
TOTAL AVAILABLE STRUCTURAL FILL (CY) [4]	29,584
REQUIRED EMBANKMENT FILL (CY)	31,873
REQUIRED SUBBASE - INPLACE ON-SITE FILL (CY)	0
NET AVAILABLE FILL (CY) [5]	(2,289)
DRACO WELL PAD & COMPRESSOR PAD	
TOPSOIL - STOCKPILE (CY) [2]	7,601
SUBSOIL CUT (CY) [3]	59,543
TOTAL AVAILABLE STRUCTURAL FILL (CY) [4]	53,589
REQUIRED STRUCTURAL FILL (CY) [5]	31,557
NET AVAILABLE FILL (CY) [5]	22,032
ACCESS ROADS & LOADING AREA	
TOPSOIL - STOCKPILE (CY) [2]	2,584
SUBSOIL CUT (CY) [3]	6,874
TOTAL AVAILABLE STRUCTURAL FILL (CY) [4]	6,187
REQUIRED STRUCTURAL FILL (CY) [5]	5,232
NET AVAILABLE FILL (CY) [5]	954
TOTAL TOPSOIL - STOCKPILE (CY)	**13,439**
TOTAL EXCESS MATERIAL (CY)	**20,697**

1. VOLUMES ARE BASED ON APPROXIMATE EXISTING GROUND SURFACE. EXISTING GROUND SURFACES ARE BASED ON LIDAR AND SHALL BE FIELD VERIFIED TO CONFIRM EXISTING CONDITIONS
2. TOP SOIL VOLUME IS BASED ON IN-PLACE CUBIC YARDS; NO SWELL FACTOR APPLIED.
3. SUBSOIL VOLUME IS BASED ON IN-PLACE CUBIC YARDS; NO SWELL FACTOR APPLIED.
4. TOTAL AVAILABLE STRUCTURAL FILL AFTER APPLYING A 10 PERCENT SHRINKAGE FACTOR TO SUBSOIL CUT TO ACCOUNT FOR COMPACTED DENSITY.
5. REQUIRED STRUCTURAL FILL VOLUME BASED ON IN-PLACE (I.E. COMPACTED) CUBIC YARDS.
6. NET AVAILABLE FILL AFTER SUBTRACTING REQUIRED STRUCTURAL FILL FROM TOTAL AVAILABLE STRUCTURAL FILL.



ACCESS ROAD PLAN VIEW

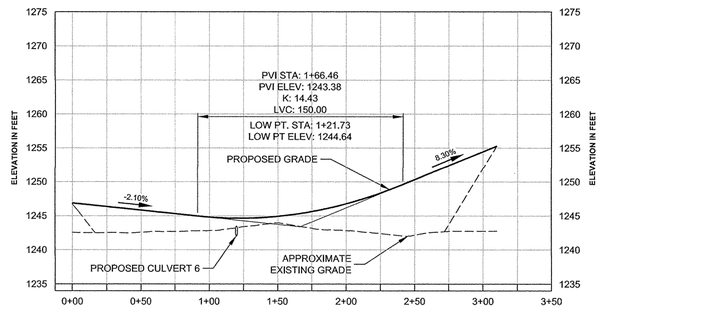
0 50 100 150
HORIZONTAL SCALE IN FEET



0 50 100 150
HORIZONTAL SCALE IN FEET

ACCESS ROAD PROFILE VIEW

0 10 20 30
VERTICAL SCALE IN FEET



0 50 100 150
HORIZONTAL SCALE IN FEET

IMPOUNDMENT ROAD PROFILE VIEW
(SEE SHEET 6 FOR PLAN VIEW)

0 10 20 30
VERTICAL SCALE IN FEET

NOTES:

1. THE BASE MAP HAS BEEN CREATED USING AVAILABLE AERIAL PHOTOGRAPHY PROVIDED BY PAMAP TILES 60001380PAS. EXISTING TOPOGRAPHY HAS BEEN CREATED USING LIDAR CONTOURS PROVIDED BY PAMAP TILES 60001380PAS.
2. PROPERTY LINES AND OWNER INFORMATION ARE TAKEN FROM BUTLER COUNTY TAX ASSESSMENT MAPS AND RECORDS. THIS BASEMAP IS NOT THE RESULT OF AN ACTUAL FIELD SURVEY OF PROPERTIES SHOWN AND SHOULD NOT BE USED AS SUCH.
3. THE LOCATION AND EXTENT OF ABANDONED SURFACE AND DEEP MINE WORKINGS DEPICTED ON THIS MAP ARE NOT TAKEN FROM A FINAL CERTIFIED MINE MAP. UNKNOWN OR UNMAPPED MINES MAY EXTEND PAST DEPICTED BOUNDARIES AND MAY CONTAIN ABANDONED MINE POOLS AS WELL AS OTHER SAFTEY HAZARDS.
4. ALL TEST HOLE LOCATIONS AND ELEVATIONS ARE BASED ON FIELD SURVEY.
5. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE SOUTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.

LEGEND

NOTE: LEGEND IS TYPICAL, NOT ALL OBJECTS IN LEGEND APPEAR IN PLAN.

- 1550 — EXISTING CONTOURS
- EXISTING WETLANDS
- EXISTING PROPERTY LINE
- OE — OE — EXISTING OVERHEAD ELECTRIC LINE
- UE — UE — EXISTING UNDERGROUND ELECTRIC LINE
- G — G — EXISTING GAS LINE
- W — W — EXISTING WATER LINE
- EXISTING ELECTRIC LINE EASEMENT
- EXISTING TREELINE
- EXISTING MAPPED WATERCOURSE
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING UTILITY POLE AND GUY WIRE
- 1490 — PROPOSED CONTOURS
- PROPOSED ROAD
- G — G — PROPOSED GAS PIPELINE
- W — W — PROPOSED WATER PIPELINE
- 12 — 12 — 12 — PROPOSED 12" FILTER SOCK
- 18 — 18 — 18 — PROPOSED 18" FILTER SOCK
- 18 18 — 18 18 — 18 18 — PROPOSED 18" STACKED FILTER SOCK
- 24 — 24 — 24 — PROPOSED 24" FILTER SOCK
- 32 — 32 — 32 — PROPOSED 32" FILTER SOCK
- 12 — 12 — PROPOSED FILTER SOCK TURNOUT
- PROPOSED EROSION CONTROL PRODUCT
- PROPOSED STOCKPILE
- PROPOSED CHANNEL
- DIV — DIV — PROPOSED TOP-OF-SLOPE BERM
- PROPOSED POST AND WIRE FENCE
- PROPOSED WELL/COMPRESSOR PAD SURFACE
- PROPOSED OUTSIDE EDGE OF PERIMETER CONTAINMENT BERM
- PROPOSED WELL/COMPRESSOR PAD PERIMETER CONTAINMENT TRENCH
- PROPOSED EXCLUSION FENCE (CONSTRUCTION FENCE)
- PROPOSED LIMIT OF CLEARING / CONSTRUCTION
- PROPOSED ESCGP-2 PERMIT BOUNDARY / LIMIT OF DISTURBANCE
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED CULVERT
- 2H:1V — PROPOSED SLOPE
- PROPOSED GAS WELL
- PROPOSED POST AND EXCLUSION FENCE
- PROPOSED GAS VENT
- PROPOSED ROCK CHECK DAM
- DRAINAGE AREA
- WeB — EXISTING SOIL BOUNDARY AND DESCRIPTOR

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL GARY JOSEPH STIEGEL, JR. ENGINEER PE077081

This Drawing is not valid for construction unless sealed.

I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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Earth Resource Engineers and Consultants
www.armgroup.net

No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	06/12/14	ARM

scale	AS NOTED
date	03/14/2014
project no.	C12104-1-34
designed	DLL
calculated	GJS
drawn	TMZ
graphic scale	

drawing title: ACCESS ROAD PLAN & PROFILE (SHEET 3 OF 3) EROSION AND SEDIMENT CONTROL PLAN

project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Sheet 5

PLAN BOOK	PAGE
348	32

P:\Eng\Mxd\C12104-1-34-Draco Well Pad\Dwg Files\Autocad\E&S Construction Drwgs_Revised\C12104-1-34-E&C-05.dwg Printed: May 12, 2014

VOLUME REPORT[1]	
IMPOUNDMENT	
WATER CAPACITY (Gallons)	5,202,000
TOP SOIL - STOCKPILE (CY)	3,054
SUBSOIL CUT (CY)[2]	29,155
SUBSOIL - OVER EXCAVATION (CY)	0
EMBANKMENT - OVER EXCAVATION (CY)	4,712.5
ADJUSTED SUBSOIL CUT (CY)[3]	32,871
TOTAL AVAILABLE STRUCTURAL FILL (CY)[4]	29,564
REQUIRED EMBANKMENT FILL (CY)	31,675
REQUIRED SUBSOIL - (PLUS 5% WASTE FILL (CY)	0
NET AVAILABLE FILL (CY)[5]	-2,111
DRACO WELL PAD & COMPRESSOR PAD	
TOPSOIL - STOCKPILE (CY)	7,601
SUBSOIL CUT (CY)	59,543
TOTAL AVAILABLE STRUCTURAL FILL (CY)[4]	53,559
REQUIRED STRUCTURAL FILL (CY)[6]	31,557
NET AVAILABLE FILL (CY)[5]	22,002
ACCESS ROADS & LOADING AREA	
TOPSOIL - STOCKPILE (CY)	2,564
SUBSOIL CUT (CY)[2]	6,974
TOTAL AVAILABLE STRUCTURAL FILL (CY)[4]	6,167
REQUIRED STRUCTURAL FILL (CY)[6]	5,232
NET AVAILABLE FILL (CY)[5]	934
TOTAL TOP SOIL - STOCKPILE (CY)	**13,419**
TOTAL EXCESS MATERIAL (CY)	**20,697**

1. VOLUMES ARE BASED ON APPROXIMATE EXISTING GROUND SURFACE. EXISTING GROUND SURFACES ARE BASED ON LIDAR AND SHALL BE FIELD VERIFIED TO CONFIRM EXISTING CONDITIONS
2. TOP SOIL VOLUME IS BASED ON IN-PLACE CUBIC YARDS. NO SWELL FACTOR APPLIED.
3. SUBSOIL VOLUME IS BASED ON IN-PLACE CUBIC YARDS. NO SWELL FACTOR APPLIED.
4. TOTAL AVAILABLE STRUCTURAL FILL AFTER APPLYING A 10 PERCENT SHRINKAGE FACTOR TO SUBSOIL CUT TO ACCOUNT FOR COMPACTED DENSITY.
5. REQUIRED STRUCTURAL FILL VOLUME IS BASED ON IN-PLACE (I.E. COMPACTED) CUBIC YARDS.
6. NET AVAILABLE FILL AFTER SUBTRACTING REQUIRED STRUCTURAL FILL FROM TOTAL AVAILABLE STRUCTURAL FILL.

NOTES:

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LEGEND

NOTE: LEGEND IS TYPICAL, NOT ALL OBJECTS IN LEGEND APPEAR IN PLAN.

- EXISTING CONTOURS
- EXISTING WETLANDS
- EXISTING PROPERTY LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE EASEMENT
- EXISTING TREELINE
- EXISTING MAPPED WATERCOURSE
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING UTILITY POLE AND GUY WIRE
- PROPOSED CONTOURS
- PROPOSED ROAD
- PROPOSED GAS PIPELINE
- PROPOSED WATER PIPELINE
- PROPOSED 12" FILTER SOCK
- PROPOSED 18" FILTER SOCK
- PROPOSED 18" STACKED FILTER SOCK
- PROPOSED 24" FILTER SOCK
- PROPOSED 32" FILTER SOCK
- PROPOSED FILTER SOCK TURNOUT
- PROPOSED EROSION CONTROL PRODUCT
- PROPOSED STOCKPILE
- PROPOSED CHANNEL
- PROPOSED TOP-OF-SLOPE BERM
- PROPOSED POST AND WIRE FENCE
- PROPOSED WELL/COMPRESSOR PAD SURFACE
- PROPOSED OUTSIDE EDGE OF PERIMETER CONTAINMENT BERM
- PROPOSED WELL/COMPRESSOR PAD PERIMETER CONTAINMENT TRENCH
- PROPOSED EXCLUSION FENCE (CONSTRUCTION FENCE)
- PROPOSED LIMIT OF CLEARING / CONSTRUCTION
- PROPOSED ESCGP-2 PERMIT BOUNDARY / LIMIT OF DISTURBANCE
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- PROPOSED CULVERT
- 2H:1V PROPOSED SLOPE
- PROPOSED GAS WELL
- PROPOSED POST AND EXCLUSION FENCE
- PROPOSED GAS VENT
- PROPOSED ROCK CHECK DAM
- DRAINAGE AREA
- WeB EXISTING SOIL BOUNDARY AND DESCRIPTOR

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — GARY JOSEPH STIEGEL, JR. — ENGINEER — PE077051

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

designed	DLL
checked	GJS
drawn	TMZ
project no.	C12104-1-34
date	03/14/2014
scale	1" = 50'

SCALE IN FEET: 0, 50, 100, 150

design title: WELL PAD, COMPRESSOR PAD & IMPOUNDMENT GRADING PLAN
EROSION AND SEDIMENT CONTROL PLAN

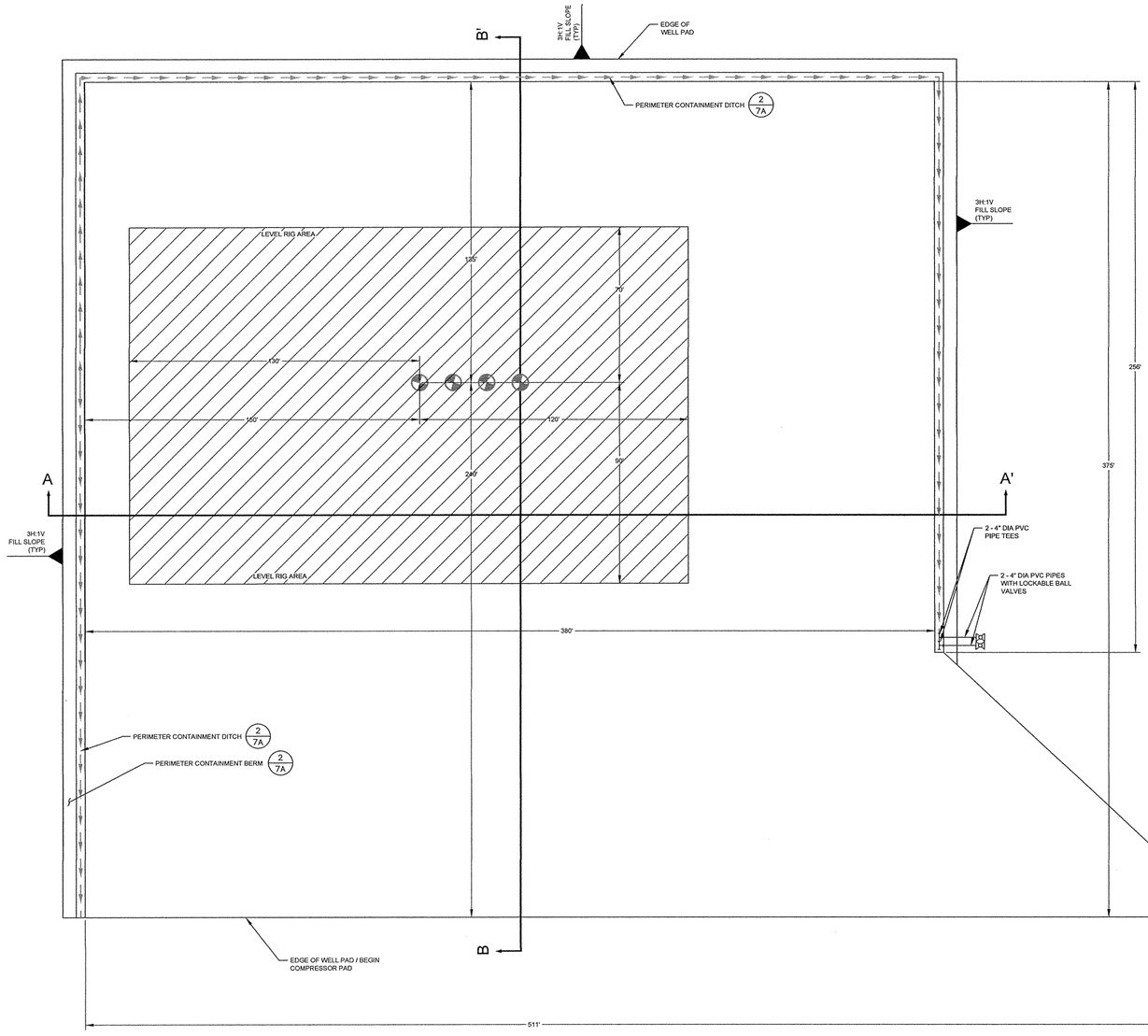
project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

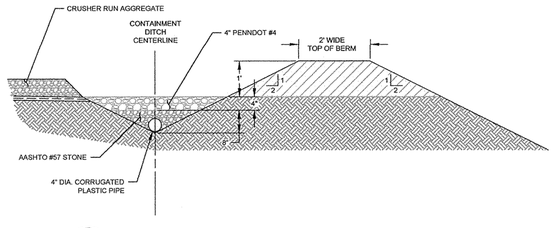
Sheet 6

PLAN BOOK	PAGE
348	33

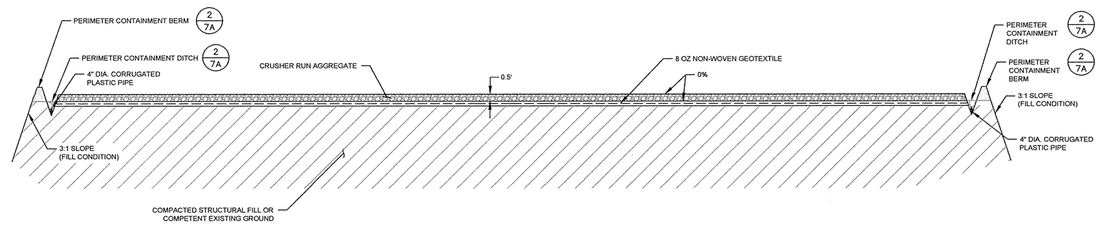
T:\Eng\Data\C12104-1-34\Dgn\Draco Well Pad\Dwg\Production\Add Commission Info\Eng_Revised\C12104-1-34-ESCP-Dwg - Plotted: May 12, 2014



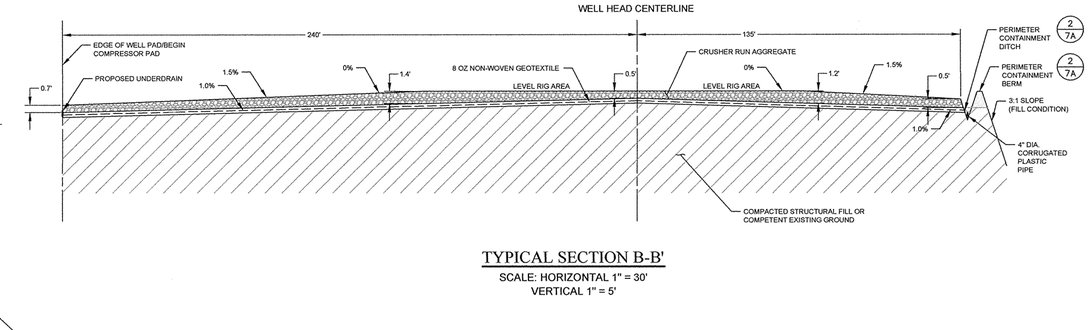
1/6 DETAIL
TYPICAL WELL PAD
1" = 30'



2/7A DETAIL
PERIMETER CONTAINMENT TRENCH & BERM DETAIL
SCALE: 1" = 2'



TYPICAL SECTION A-A'
SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 5'



TYPICAL SECTION B-B'
SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 5'

WELL PAD NOTES:

1. INSTALL ALL EROSION AND SEDIMENTATION BEST MANAGEMENT PRACTICES (BMPS) IN ACCORDANCE WITH PROPER INSTALLATION PROCEDURES AND THE EROSION & SEDIMENT CONTROL PLAN PRIOR TO PAD GRADING.
2. STRUCTURAL FILL SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM D2487 (UNIFIED SOILS CLASSIFICATION). A MINIMUM OF 3 SAMPLES MUST BE CLASSIFIED. ACCEPTABLE SOILS ARE LIMITED TO GC, GM, SC, CL OR ML. THESE SOILS MUST ALSO CONTAIN A MINIMUM OF 20% OF PLUS NO. 200 SIEVE MATERIAL.
3. ALL COMPACTION MUST BE DONE WITH A MINIMUM OF 5 PASSES OF A SHEEPSFOOT OR PAD ROLLER. MAXIMUM LOOSE LIFT THICKNESS OF 9 INCHES MUST BE MAINTAINED.
4. COMPACTION MUST BE TESTED TO 95% COMPACTION OF THE MAXIMUM DRY DENSITY BASED ON THE STANDARD PROCTOR (ASTM D1557). IF COMPOSITION OF NATIVE STRUCTURAL FILL IS NOT CONDUCIVE TO STANDARD PROCTOR TESTING AND/OR FIELD DENSITY MEASUREMENTS WITH A NUCLEAR DENSITY GAUGE DUE TO PERCENTAGE AND SIZE OF COARSE FRAGMENTS, AS DETERMINED BY THE ENGINEER, THEN SATISFACTORY DENSIFICATION SHALL BE DETERMINED BY THE ENGINEER BASED ON FIELD OBSERVATION OF EQUIPMENT PASSES AND CORRESPONDING DEFLECTION OF THE FILL.
5. WHERE A SHEEPSFOOT ROLLER IS USED FOR COMPACTION, THE CONTRACTOR SHALL SCRAPE OR OTHERWISE FLATTEN/MAKE SMOOTH THE TEST LOCATIONS FOR CQA PERSONNEL TO ALLOW FOR PROPER USE OF NUCLEAR GAUGE DENSITY METHODS.
6. 6 INCHES OF CRUSHER RUN AGGREGATE SHALL BE USED TO TOP DRESS THE WELL PAD SURFACE. SEE SECTIONS A-A' AND B-B'.
7. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION.
8. TIE CUT SLOPES TO EXISTING GROUND SURFACE AT 2H:1V; TIE FILL SLOPES TO EXISTING GROUND SURFACE AT 3H:1V.
9. PAD AREAS SHALL BE RECLAIMED TO APPROXIMATE EXISTING CONDITIONS AFTER DRILLING OPERATIONS. SEE SITE RESTORATION PLAN FOR DETAILS.

PLAN BOOK	PAGE
348	34

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
PE077091

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No.	Revision	Date	By

designed	DLL
checked	GJS
drawn	TMZ
graphic scale	
date	01/21/2014
project no.	C12104-1-34
scale	AS NOTED

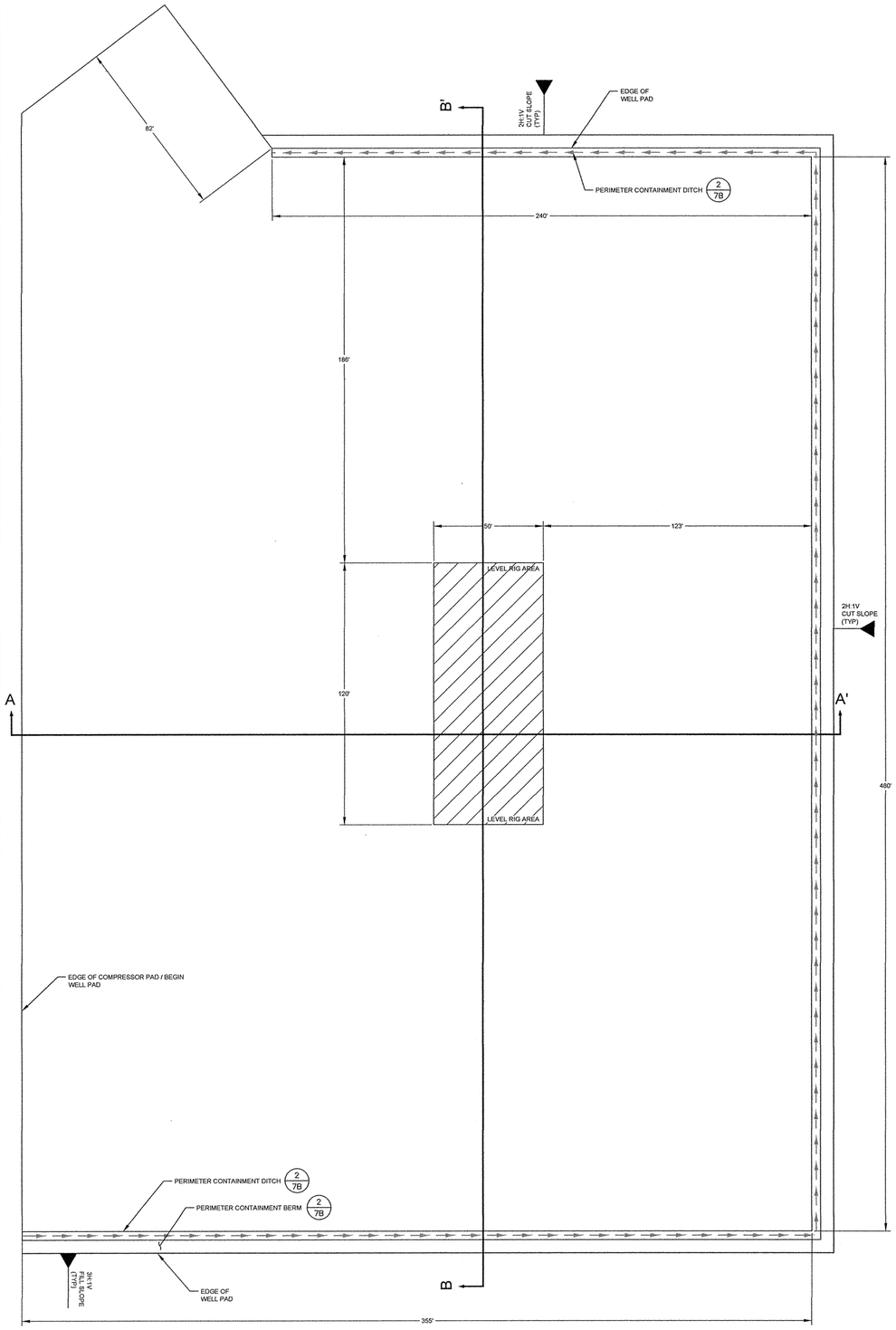
drawing title
WELL PAD DETAILS
EROSION AND SEDIMENT CONTROL PLAN

project title
DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

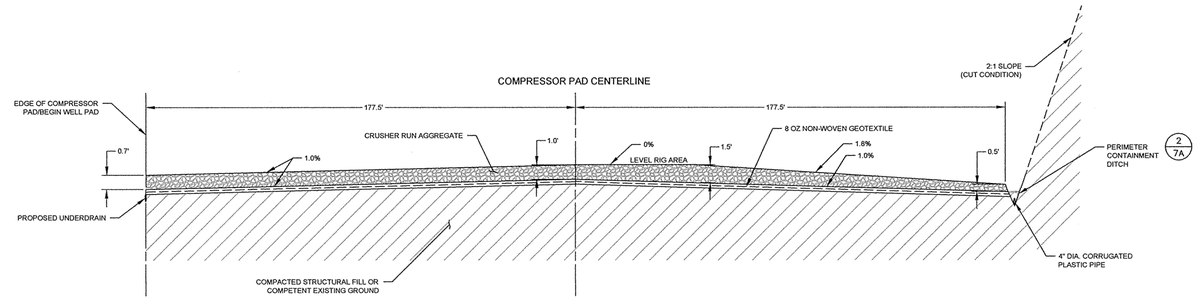
OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Sheet 7A

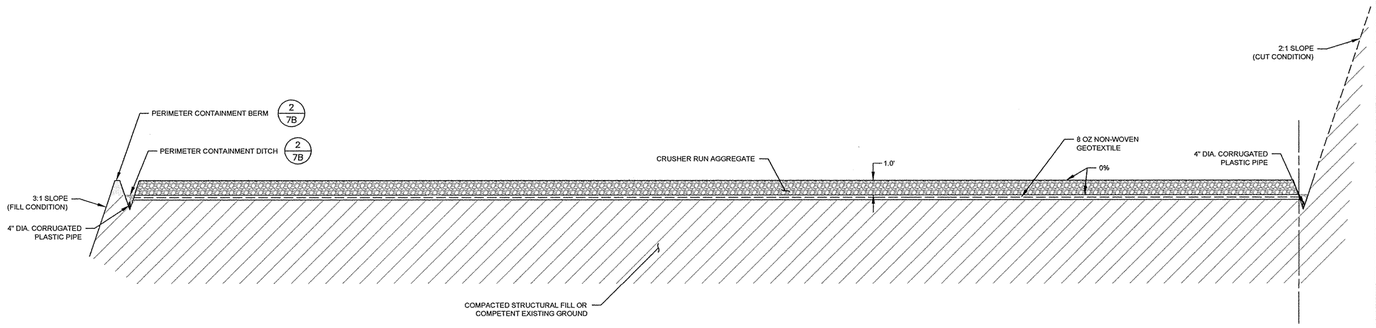
P:\Jobs\C12104-1-34\Draw Well Pad\Drawings\Well Pad Construction Dwgs_Revised\C12104-1-34-EC-07A.dwg Plotted: Mar 12, 2014



1/6 DETAIL
TYPICAL COMPRESSSOR PAD
1" = 30'



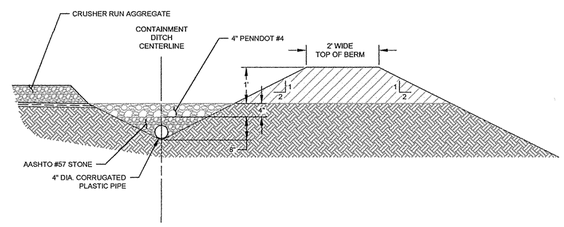
TYPICAL SECTION A-A'
SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 5'



TYPICAL SECTION B-B'
SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 5'

COMPRESSOR PAD NOTES:

1. INSTALL ALL EROSION AND SEDIMENTATION BEST MANAGEMENT PRACTICES (BMPS) IN ACCORDANCE WITH PROPER INSTALLATION PROCEDURES AND THE EROSION & SEDIMENT CONTROL PLAN PRIOR TO PAD GRADING.
2. STRUCTURAL FILL SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM D2487 (UNIFIED SOILS CLASSIFICATION). A MINIMUM OF 3 SAMPLES MUST BE CLASSIFIED. ACCEPTABLE SOILS ARE LIMITED TO GC, GM, SC, CL OR ML. THESE SOILS MUST ALSO CONTAIN A MINIMUM OF 20% OF PLUS NO. 200 SIEVE MATERIAL.
3. ALL COMPACTION MUST BE DONE WITH A MINIMUM OF 5 PASSES OF A SHEEPSFOOT OR PAD ROLLER. MAXIMUM LOOSE LIFT THICKNESS OF 8 INCHES MUST BE MAINTAINED.
4. THE BOTTOM OF THE EXCAVATION SHALL BE THOROUGHLY SCARIFIED (MIN. 6"), WITH WATER ADDED TO RAISE THE MOISTURE CONTENT TO AT LEAST 3 PERCENTAGE POINTS ABOVE OPTIMUM, AND RE-COMPACT TO A DENSITY IN THE RANGE OF 95% TO 100% OF STANDARD PROCTOR.
5. COMPACTION MUST BE TESTED TO 98% COMPACTION OF THE MAXIMUM DRY DENSITY BASED ON THE STANDARD PROCTOR (ASTM D698). IF COMPOSITION OF NATIVE STRUCTURAL FILL IS NOT CONDUCIVE TO STANDARD PROCTOR TESTING AND/OR FIELD DENSITY MEASUREMENTS WITH A NUCLEAR DENSITY GAUGE DUE TO PERCENTAGE AND SIZE OF COARSE FRAGMENTS, AS DETERMINED BY THE ENGINEER, THEN SATISFACTORY DENSIFICATION SHALL BE DETERMINED BY THE ENGINEER BASED ON FIELD OBSERVATION OF EQUIPMENT PASSES AND CORRESPONDING DEFLECTION OF THE FILL.
6. WHERE A SHEEPSFOOT ROLLER IS USED FOR COMPACTION, THE CONTRACTOR SHALL SCRAPE OR OTHERWISE FLATTEN/MAKE SMOOTH THE TEST LOCATIONS FOR CQA PERSONNEL TO ALLOW FOR PROPER USE OF NUCLEAR GAUGE DENSITY METHODS.
7. 6 INCHES OF CRUSHER RUN AGGREGATE SHALL BE USED TO TOP DRESS THE WELL PAD SURFACE. SEE SECTIONS A-A' AND B-B'.
8. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION.
9. TIE CUT SLOPES TO EXISTING GROUND SURFACE AT 2H:1V; TIE FILL SLOPES TO EXISTING GROUND SURFACE AT 3H:1V.



2/7B DETAIL
PERIMETER CONTAINMENT TRENCH & BERM DETAIL
SCALE: 1" = 2'

PLAN BOOK	PAGE
348	35

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STRUB JR.
ENGINEER
PE077051

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No.	Revision	Date	By

drawing title: COMPRESSOR PAD DETAILS
EROSION AND SEDIMENT CONTROL PLAN

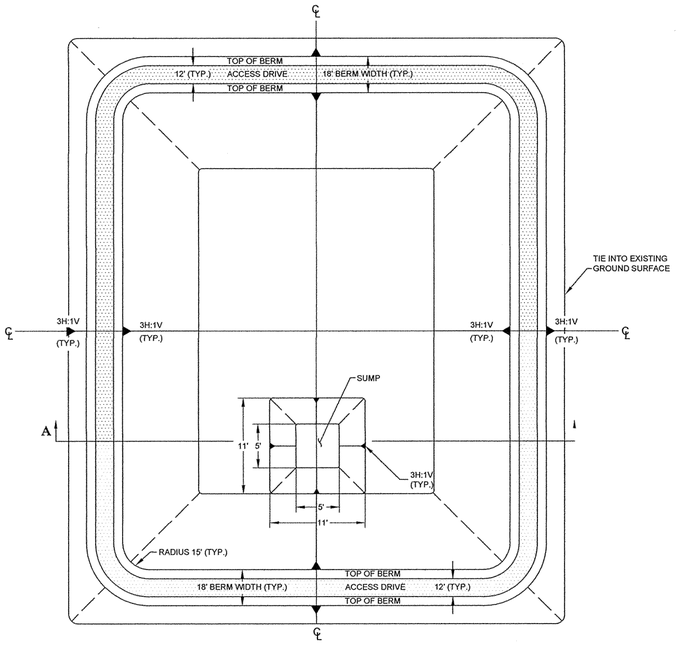
project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

designed	DLL
checked	GJS
drawn	TMZ
graphic scale	
scale	AS NOTED
date	01/21/2014
project no.	C12104-1-34

Sheet 7B

P:\Eng\Acad\C12104-1-34\Draw\WellPad\Dwg\Production\E&S Construction Dwg_Revised\C12104-1-34-ESCP07B.dwg Plotted: May 12, 2014



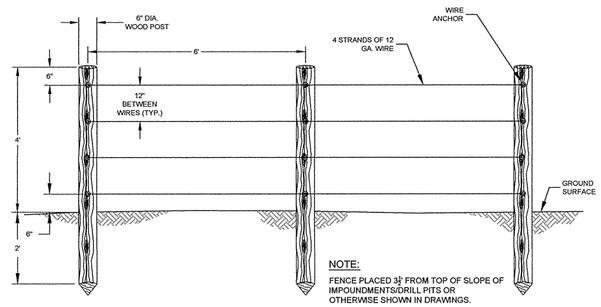
1/6 DETAIL
TYPICAL STORAGE IMPOUNDMENT LAYOUT
NOT TO SCALE

IMPOUNDMENT NOTES:

1. INSTALL ALL EROSION AND SEDIMENTATION BEST MANAGEMENT PRACTICES (BMPS) IN ACCORDANCE TO PROPER INSTALLATION PROCEDURES AND THE EROSION & SEDIMENT CONTROL PLAN PRIOR TO IMPOUNDMENT GRADING.
2. STRUCTURAL FILL SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM D2487 (UNIFIED SOILS CLASSIFICATION). A MINIMUM OF 3 SAMPLES MUST BE CLASSIFIED. ACCEPTABLE SOILS ARE LIMITED TO GC, GM, SC, CL OR ML. THESE SOILS MUST ALSO CONTAIN A MINIMUM OF 20% OF PLUS NO. 200 SIEVE MATERIAL.
3. THE FOUNDATION OF ANY FILL EMBANKMENT MUST BE STRIPPED AND GRUBBED TO A DEPTH OF 2 FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTH FILL.
4. ALL COMPACTION FOR EMBANKMENTS MUST BE DONE WITH A MINIMUM OF 5 PASSES OF A SHEEPSFOOT OR PAD ROLLER. MAXIMUM LOOSE LIFT THICKNESS OF 9 INCHES MUST BE MAINTAINED.
5. COMPACTION MUST BE TESTED TO 95% COMPACTION OF THE MAXIMUM DRY DENSITY BASED ON THE STANDARD PROCTOR (ASTM D698). IF COMPOSITION OF NATIVE STRUCTURAL FILL IS NOT CONDUCIVE TO STANDARD PROCTOR TESTING AND/OR FIELD DENSITY MEASUREMENTS WITH A NUCLEAR DENSITY GAUGE DUE TO PERCENTAGE AND SIZE OF COARSE FRAGMENTS, AS DETERMINED BY THE ENGINEER, THEN SATISFACTORY DENSIFICATION SHALL BE DETERMINED BY THE ENGINEER BASED ON FIELD OBSERVATION OF EQUIPMENT PASSES AND CORRESPONDING DEFLECTION OF THE FILL.
6. WHERE A SHEEPSFOOT ROLLER IS USED FOR COMPACTION, THE CONTRACTOR SHALL SCRAPE OR OTHERWISE FLATTEN/MAKE SMOOTH THE TEST LOCATIONS FOR CQA PERSONNEL TO ALLOW FOR PROPER USE OF NUCLEAR DENSITY GAUGE METHODS.
7. TOP 6 INCHES OF IMPOUNDMENT SURFACE SHALL BE 0.75-INCH MINUS MATERIAL WITH GRADATION ANALYSIS PROVIDED. ANY OVERSIZED ROCKS SHALL BE HAND PICKED ON THE SURFACE OF THE DRILL PIT SLOPES PRIOR TO PLACEMENT OF GEOTEXTILE AND GEOMEMBRANE LINER. VOIDS SHALL BE FILLED WITH SOIL AND COMPACTED. A SUBBASE APPROVAL FORM MUST BE SIGNED BY BOTH THE LINER INSTALLER AND EARTHWORK FOREMAN PRIOR TO THE INSTALLATION OF GEOTEXTILE.
8. 10 OZ/SY NONWOVEN GEOTEXTILE (PROPEX, GSE, MIRAFI, SKAPS OR PRE-APPROVED EQUIVALENT MEETING GRI-GT12 SPECIFICATIONS) SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS WITH QUALITY ASSURANCE MONITORING OF INSTALLATION (OVERLAPS & SEWN SEAMS) PROVIDED BY THE ENGINEER. MANUFACTURER MUST PROVIDE IN-PLANT QA/QC TESTING RESULTS AND ROLL LIST FOR EACH SPECIFIC RUN OF MATERIAL TO BE SUPPLIED TO THE PROJECT PRIOR TO SHIPMENT. GEOTEXTILE SHALL BE SEWN PER MANUFACTURER'S SPECIFICATIONS.
9. 40-MIL (MIN.), TEXTURED, HDPE GEOMEMBRANE LINER (GSE, POLYFLEX, AGRU AMERICA, OR PRE-APPROVED EQUIVALENT MEETING GRI-GM13 SPECIFICATIONS) SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS WITH QUALITY ASSURANCE MONITORING PROVIDED BY THE ENGINEER. ON-SITE QA SHALL INCLUDE (AT A MINIMUM), TRIAL WELD TESTING (PER GRI-GM19), PANEL PLACEMENT, OVERLAP VERIFICATION, AIR TESTING OF SEAMS, DESTRUCTIVE SEAM TESTING (PER GRI-GM19), AND EXTRUSION WELD VACUUM TESTING, ALL PERFORMED BY THE INSTALLER. MANUFACTURER MUST PROVIDE IN-PLANT QA/QC TESTING RESULTS AND ROLL LIST FOR EACH SPECIFIC RUN OF MATERIAL TO BE SUPPLIED TO THE PROJECT PRIOR TO SHIPMENT.
10. FENCE SHALL BE PLACED AROUND THE PERIMETER OF THE IMPOUNDMENT TO PREVENT VANDALISM AND DAMAGE TO THE LINER FROM WILDLIFE. FENCE SHALL BE 6' DIAMETER WOOD POSTS SPACED AT 6FT.
11. APPROPRIATE SECURITY SIGNS SHALL BE POSTED ALONG SECURITY FENCE TO DISCOURAGE TRESPASSING, INCLUDING, BUT NOT LIMITED TO "DANGER - AUTHORIZED PERSONNEL ONLY" AND "DANGER - NO SMOKING, NO OPEN FLAMES".
12. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION.
13. TIE OUTSIDE BERM INTO EXISTING GROUND SURFACE (VIA CUT) AT 2H:1V, OR FILL AT 3H:1V.

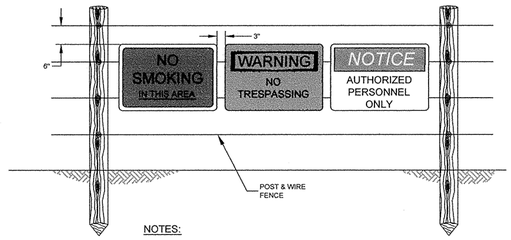
DAM EMBANKMENT NOTES:

1. SOILS USED FOR DAM EMBANKMENT CONSTRUCTION MUST BE CLASSIFIED IN ACCORDANCE WITH ASTM D-2487 (UNIFIED SOILS CLASSIFICATION). A MINIMUM OF THREE SAMPLES MUST BE CLASSIFIED.
2. SOILS ACCEPTABLE FOR DAM EMBANKMENT CONSTRUCTION ARE LIMITED TO GC, GM, SC, SM, CL, OR ML. SOILS MUST CONTAIN A MINIMUM OF 20% OF PLUS NO. 200 SIEVE MATERIALS.
3. THE FOUNDATION OF THE DAM EMBANKMENT MUST BE STRIPPED AND GRUBBED TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHFILL.
4. ANY SPRINGS ENCOUNTERED IN THE FOUNDATION AREA OF A DAM EMBANKMENT SHOULD BE DRAINED TO THE OUTSIDE/DOWNSTREAM TOE OF THE DAM EMBANKMENT WITH A DRAIN SECTION TWO FEET BY TWO FEET IN DIMENSION CONSISTING OF PENNDOT TYPE A SAND, COMPACTED BY HAND TAMPER. NO GEOTEXTILES ARE TO BE USED AROUND THE SAND. THE LAST THREE FEET OF THIS DRAIN AT THE OUTSIDE/DOWNSTREAM SLOPE MUST BE CONSTRUCTED WITH AASHTO #8 MATERIAL.
5. ALL DAM EMBANKMENTS MUST BE COMPACTED BY SHEEPSFOOT OR PAD ROLLER. THE LOOSE LIFT THICKNESS MUST BE NINE INCHES OR LESS AND THE MAXIMUM PARTICLE SIZE IS SIX INCHES. FIVE PASSES OF THE COMPACTION EQUIPMENT OVER THE ENTIRE SURFACE OF EACH LIFT IS REQUIRED. DAM EMBANKMENT COMPACTION TO VISIBLE NON-MOVEMENT IS REQUIRED.
6. A MINIMUM DAM EMBANKMENT TOP WIDTH OF 12 FEET IS REQUIRED OR AS NOTED.
7. MINIMUM OUTSIDE AND INSIDE SIDESLOPES OF 3H:1V ARE REQUIRED FOR DAM EMBANKMENTS.
8. ALL EXPOSED DAM EMBANKMENT SLOPES MUST BE LIMED, FERTILIZED, SEEDED AND MULCHED. PERMANENT VEGETATIVE GROUND COVER IN COMPLIANCE WITH PA. CODE CHAPTER 102.22 MUST BE ESTABLISHED UPON COMPLETION OF DAM CONSTRUCTION.
9. A MINIMUM OF TWO FEET OF FREEBOARD MUST BE MAINTAINED AT ALL TIMES DURING THE OPERATION OF ALL DAMS.
10. ALL LINER MATERIALS FOR DAM IMPOUNDMENTS MUST MEET THE REQUIREMENTS OF PA. CODE CHAPTER 78.56-78.63. LINERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
11. DAM EMBANKMENTS MUST BE MAINTAINED WITH A GRASSY VEGETATIVE COVER, FREE OF BRUSH AND TREES.



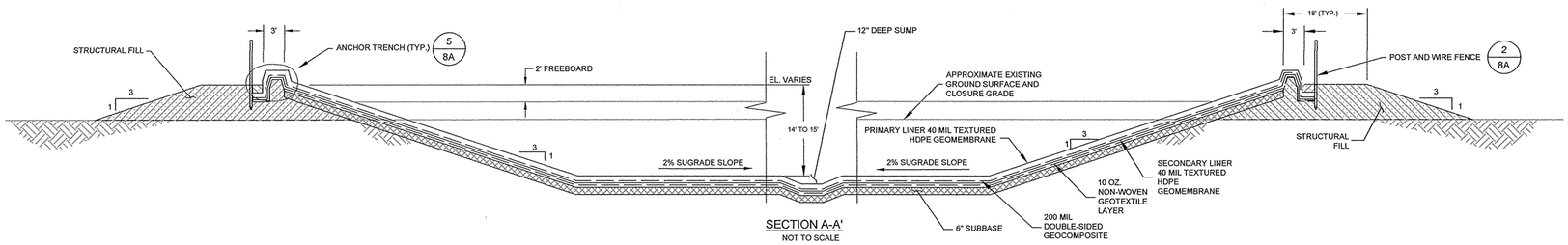
NOTE:
FENCE PLACED 3' FROM TOP OF SLOPE OF IMPOUNDMENTS/DRILL PITS OR OTHERWISE SHOWN IN DRAWINGS.

2/8A DETAIL
POST AND WIRE FENCE
NOT TO SCALE

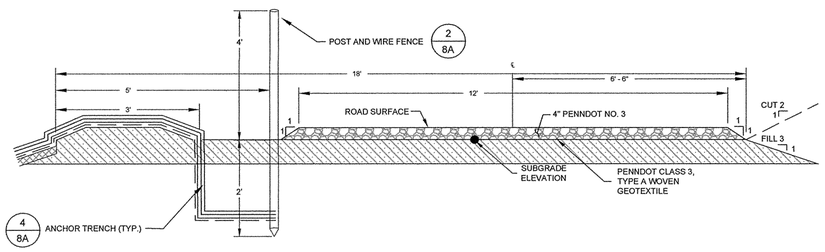


NOTES:
1. EACH SIGN SHALL BE MADE OF ALUMINUM AND BE 7"X10".
2. SIGNS SHALL BE PLACED ON FENCING AROUND CENTRALIZED IMPOUNDMENT SYSTEM AT EVERY ENTRANCE/EXIT LOCATION AND AT 200-FEET ON CENTER.

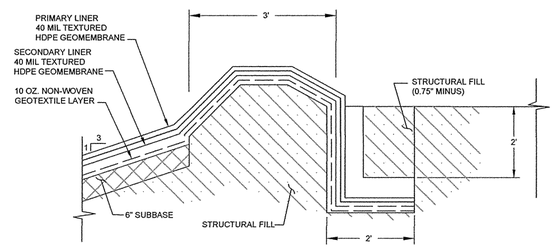
3/8A DETAIL
TYPICAL SIGNAGE
NOT TO SCALE



SECTION A-A'
NOT TO SCALE

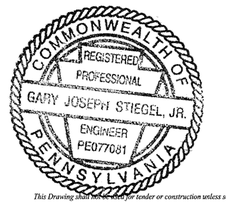


4/8A DETAIL
TYPICAL ROAD SECTION ON IMPOUNDMENT BERM
NOT TO SCALE



4/8A DETAIL
ANCHOR TRENCH
NOT TO SCALE

PLAN BOOK	PAGE
348	36



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I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

scale	AS NOTED
date	03/14/2014
project no.	C12104-1-34
designed	DLL
checked	GJS
drawn	TMZ
graphic scale	

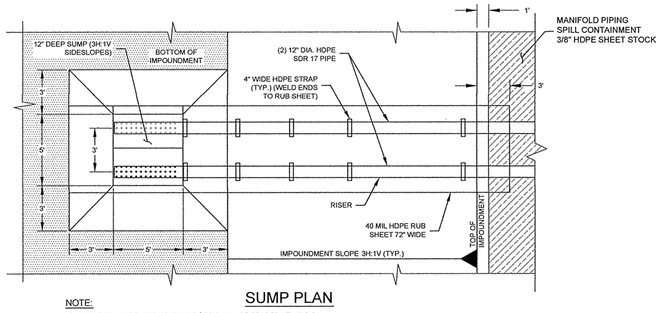
drawing title: IMPOUNDMENT DETAILS (SHEET 1 OF 3) EROSION AND SEDIMENT CONTROL PLAN

project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

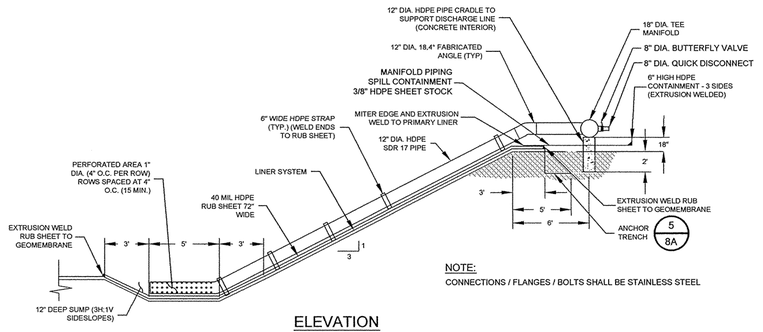
Sheet 8A

P:\Eng\Misc\C12104-1-34-Draco Well Pad\Dwg\Production\E&S Construction Dwgs_Revised\C12104-1-34-ESC-SHA.dwg Plotted: May 12, 2014



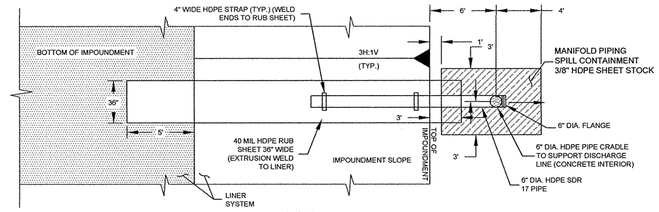
SUMP PLAN

NOTE:
IF ADJACENT SUMPS, WITHDRAWAL PIPES SHALL BE SPACED AT 11' O.C.



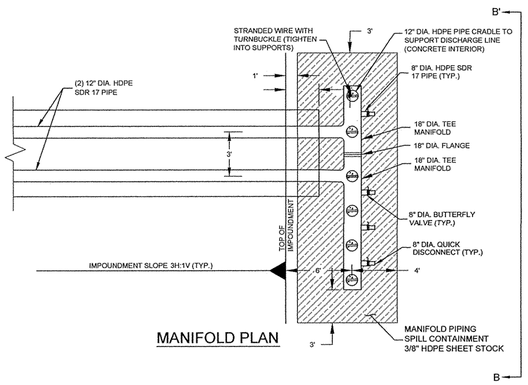
ELEVATION

NOTE:
CONNECTIONS / FLANGES / BOLTS SHALL BE STAINLESS STEEL

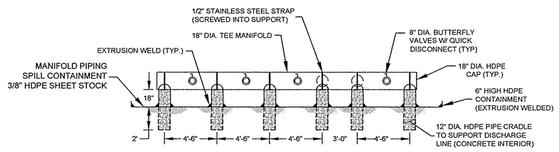


PLAN

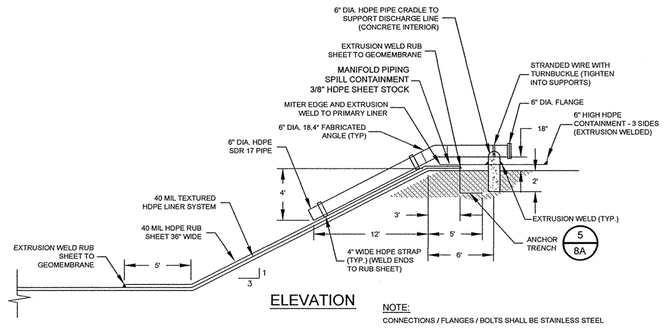
NOTES:
1. CONTRACTOR SHALL CONNECT COUPLING TO FRESHWATER PIPING (FLANGE CONNECTION).
2. OFFSET DISCHARGE PIPE 10' FROM IMPOUNDMENT PIPING AND SUMP PIPING.



MANIFOLD PLAN



SECTION B-B'



ELEVATION

NOTE:
CONNECTIONS / FLANGES / BOLTS SHALL BE STAINLESS STEEL

6/8B DETAIL
IMPOUNDMENT PIPING AND SUMP
NOT TO SCALE

7/8B DETAIL
DISCHARGE PIPING
NOT TO SCALE

PLAN BOOK	PAGE
348	37

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
PE077081

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

designed DLL
checked GJS
drawn TMZ
scale AS NOTED
date 03/14/2014
project no. C12104-I-34

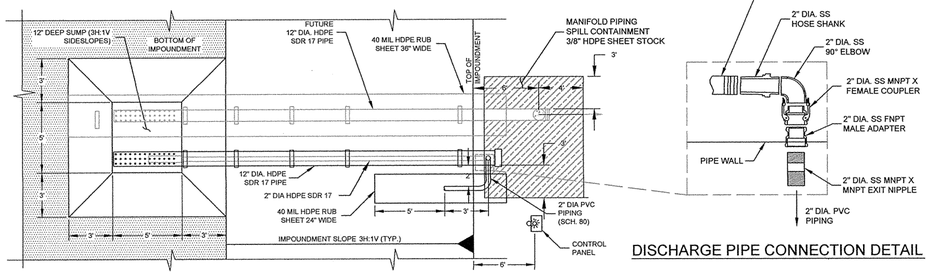
drawing title
IMPOUNDMENT DETAILS (SHEET 2 OF 3)
EROSION AND SEDIMENT CONTROL PLAN

project title
DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

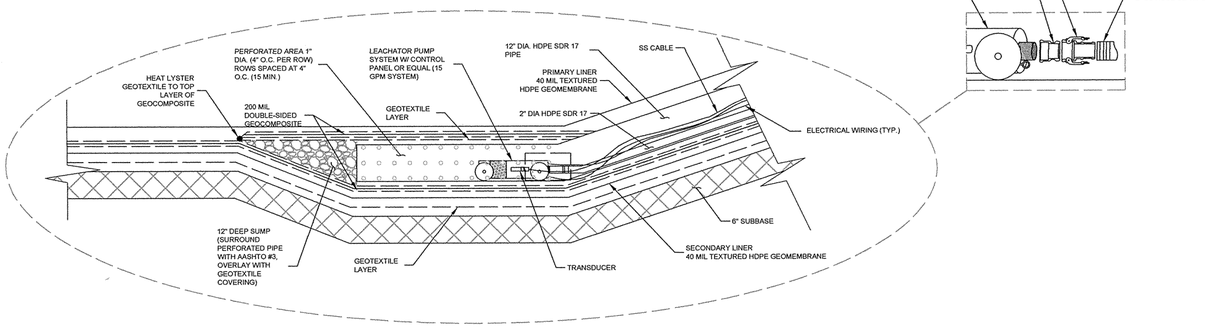
Sheet 8B

P:\Projects\C12104-I-34-Draco Well Pad\Eng\Production\E&S Construction Drwgs_Revised\C12104-I-34-E&S-C-0008.dwg Plotted: May 12, 2014

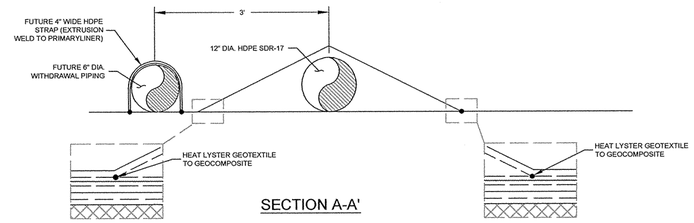


PLAN

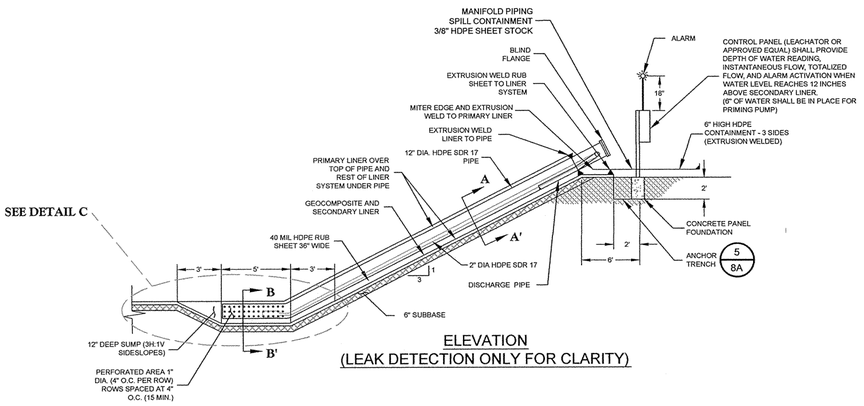
DISCHARGE PIPE CONNECTION DETAIL



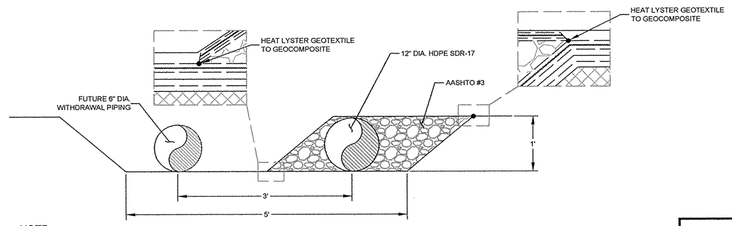
DETAIL C



SECTION A-A'



ELEVATION
(LEAK DETECTION ONLY FOR CLARITY)



SECTION B-B'

NOTE:
IF SUMPS ARE ADJACENT, WITHDRAWAL PIPES SHALL BE SPACED AT 11' O.C.

8 / 8C DETAIL
WITHDRAWAL AND LEAK DETECTION SUMP AND PIPING SYSTEM
NOT TO SCALE

PLAN BOOK	PAGE
348	38

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
PE077081

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

scale: AS NOTED
date: 03/14/2014
project no.: C12104-1-34

designed: DLL
checked: GJS
drawn: TMZ
graphic code:

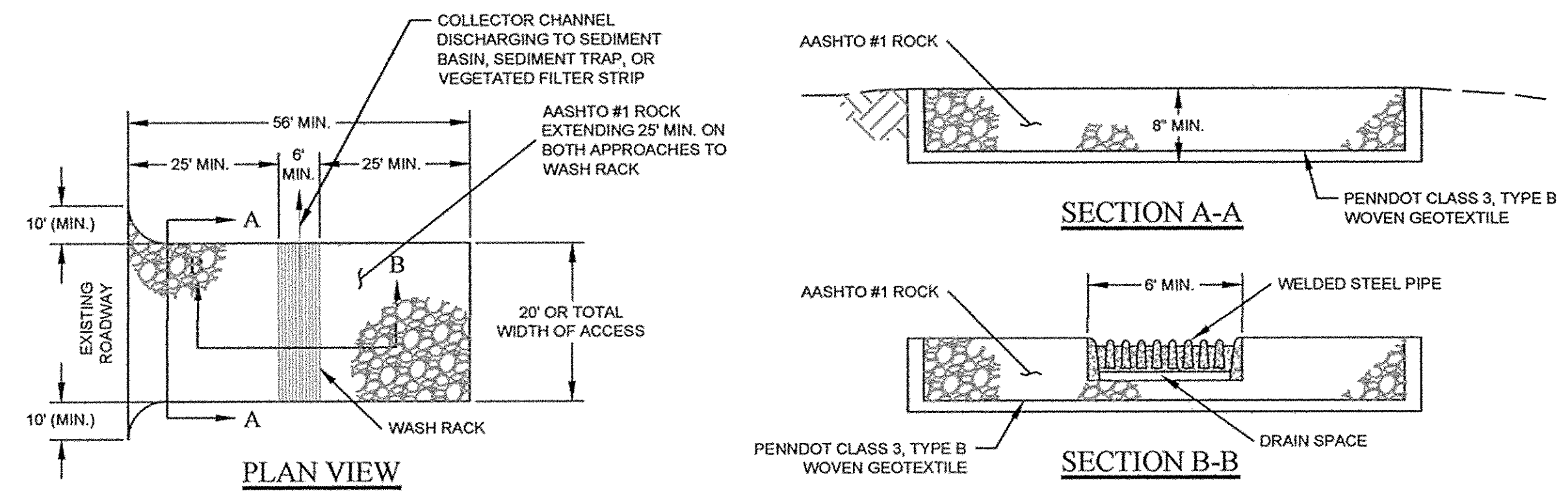
drawing title: IMPOUNDMENT DETAILS (SHEET 3 OF 3) EROSION AND SEDIMENT CONTROL PLAN

project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Sheet 8C

P:\Eng\Mast\C12104-1-34\Draco Well Pad\Dwg\Production\E&S Construction Dwgs_Revised\C12104-1-34-ESCONC.dwg Plotted: May 12, 2014



REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

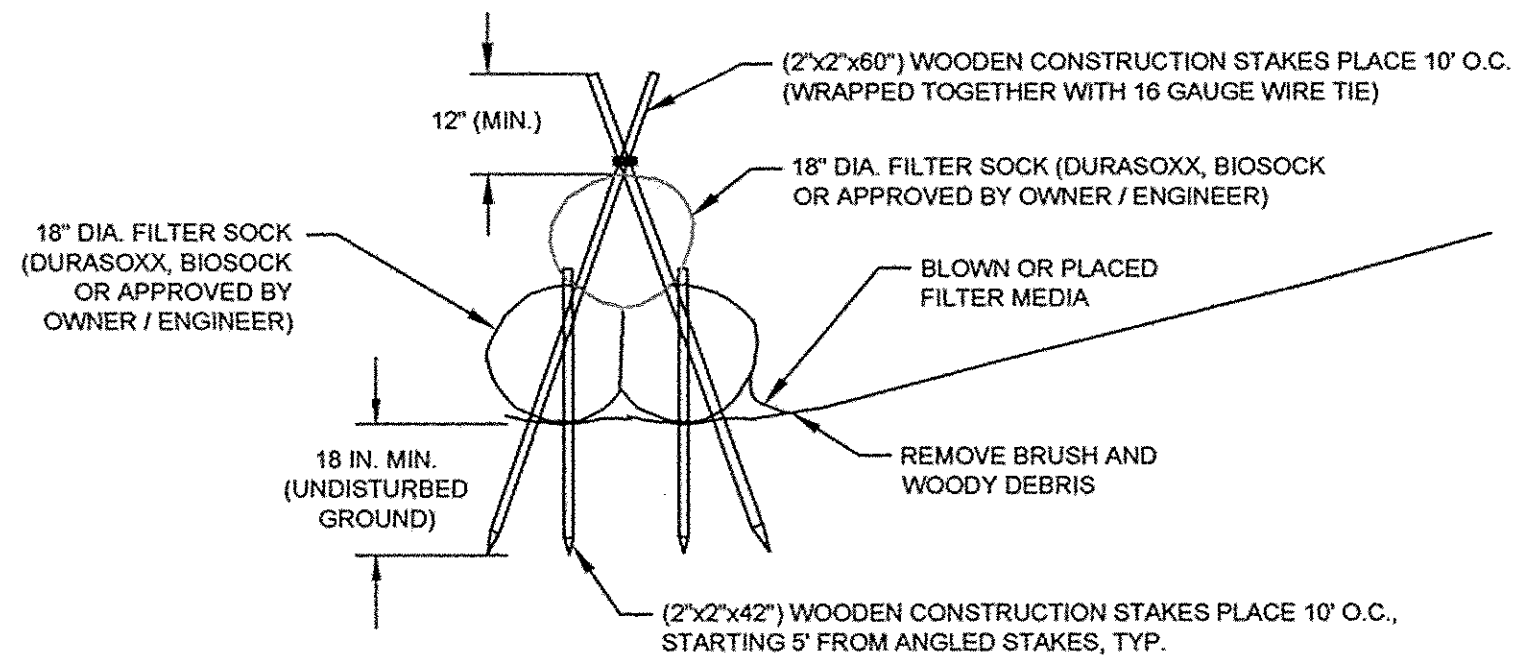
WASH RACK - SHALL BE 20 FEET WIDE MINIMUM, DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICLE TRAFFIC, AND HAVE A WATER SUPPLY AVAILABLE TO WASH THE WHEELS OF VEHICLES LEAVING THE SITE.

PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK ALL SEDIMENT DEPOSITS ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER COURSES IN NOT ACCEPTABLE.

WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

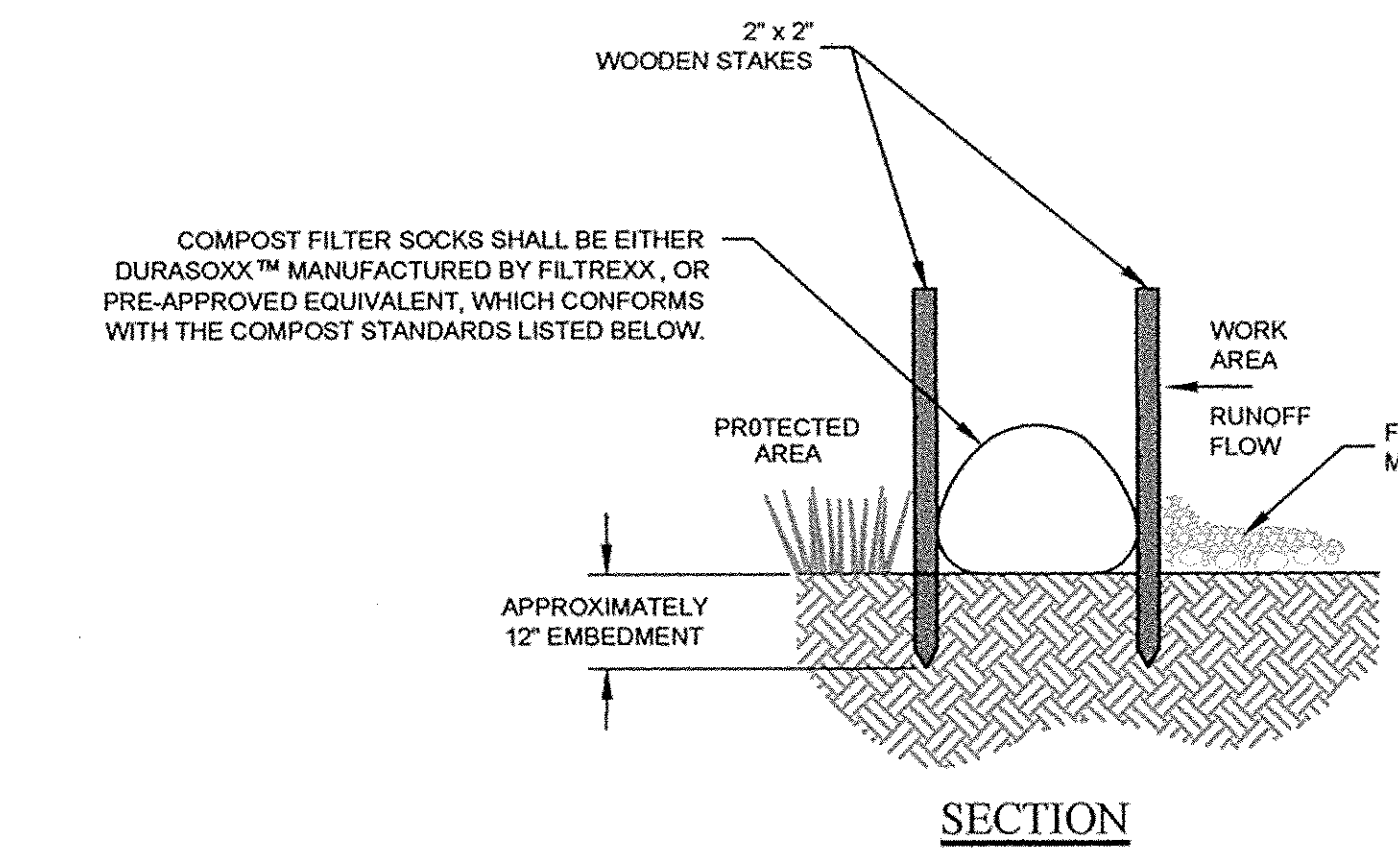
1/3 DETAIL
ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
NOT TO SCALE

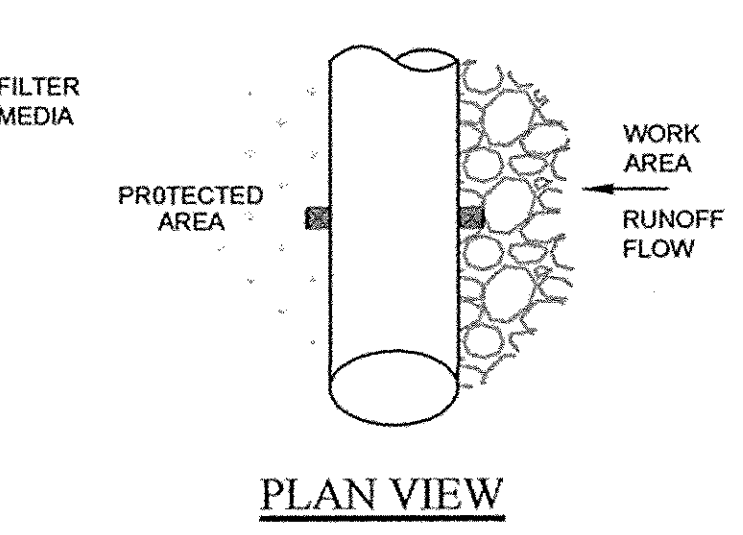


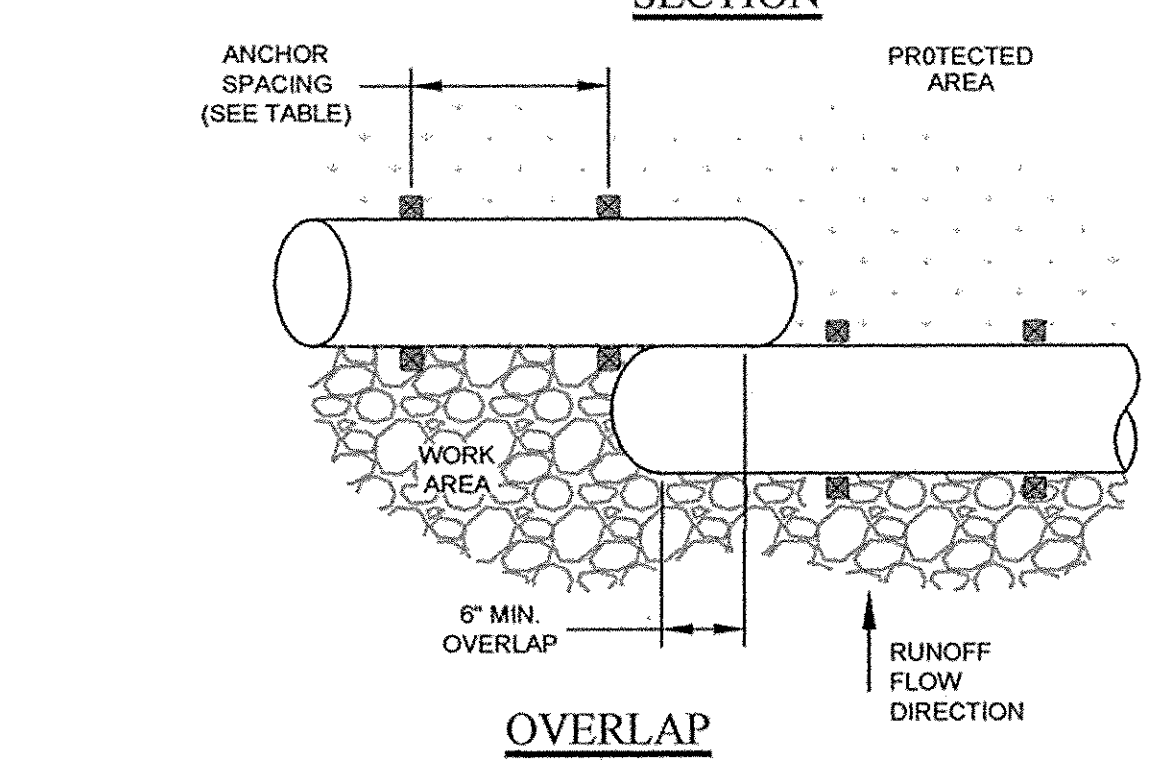
NOTES:

1. SEDIMENT ACCUMULATION SHALL NOT EXCEED 1/3 THE TOTAL HEIGHT OF THE TRAP.
2. ENDS OF THE TRAP SHALL BE A MINIMUM OF 1 FOOT HIGHER IN ELEVATION THAN THE MID-SECTION, WHICH SHALL BE LOCATED AT THE POINT OF DISCHARGE.
3. SINGLE 32" FILTER SOCK MAY BE USED AS EQUIVALENT.

2A DETAIL
STACKED 18" FILTER SOCK
NOT TO SCALE
3,4,5,6







SLOPE GRADIENT	ANCHOR SPACING
<3:1	10'
>3:1 TO 2:1	5'
SOCKS NOT USED >2:1	

COMPOST STANDARDS	
ORGANIC MATTER CONTENT	25%-100% (DRY WEIGHT BASIS)
ORGANIC PORTION	FIBROUS AND ELONGATED
PH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 DS/M (MMHOS/CM) MAXIMUM

NOTES:

1. FILTER SOCKS SHALL BE PLACED PARALLEL TO CONTOURS WITH BOTH ENDS OF THE SOCK EXTENDED UPSLOPE AT A 45 DEGREE ANGLE TO THE REST OF THE SOCK FOR A MINIMUM OF 8 FEET TO PREVENT END-AROUNDS. STAKES SHOULD BE PLACED ON THE DOWNSTREAM SIDE OF THE SOCK AT INTERVALS RECOMMENDED BY THE MANUFACTURER. WHERE SOCKS ARE PLACED ON PAVED SURFACES, CONCRETE BLOCKS SHOULD BE USED IMMEDIATELY DOWNSLOPE OF THE SOCKS TO HELP HOLD THE SOCK IN PLACE.
2. PROPER SITE PREPARATION IS ESSENTIAL TO ENSURE COMPLETE CONTACT OF THE FILTER SOCK WITH THE SOIL.
3. FILTER SOCKS SHALL BE FILLED WITH WELL-DECOMPOSED ORGANIC MATERIAL (TYPICALLY COMPOSTED WOOD MULCH) IN ACCORDANCE WITH THE COMPOST STANDARDS LISTED ABOVE.
4. REMOVE ALL ROCKS, CLODS, VEGETATION, OR OTHER OBSTRUCTIONS SO THAT THE INSTALLED FILTER SOCK WILL HAVE DIRECT CONTACT WITH THE SOIL.
5. THE ENDS OF ADJACENT FILTER SOCK SHOULD BE TIGHTLY ABUTTED SO THAT NO OPENING EXISTS FOR WATER OR SEDIMENT TO PASS THROUGH. ALTERNATELY, FILTER SOCK MAY BE OVERLAPPED 6" MINIMUM TO PREVENT SEDIMENT PASSING THROUGH THE FIELD JOINT.
6. WOODEN STAKES SHOULD BE USED TO SECURE THE FILTER SOCK TO THE SOIL AS ILLUSTRATED. WOODEN STAKES SHOULD BE PLACED 6" FROM THE FILTER SOCK END.
7. CARE SHALL BE TAKEN DURING INSTALLATION SO AS TO AVOID DAMAGE OCCURRING TO THE FILTER SOCK AS A RESULT OF THE INSTALLATION PROCESS. SHOULD THE FILTER SOCK BE DAMAGED DURING INSTALLATION, A WOODEN STAKE SHALL BE PLACED ON EITHER SIDE OF THE DAMAGED AREA TERMINATING THE LOG SEGMENT.
8. FIELD MONITORING SHALL BE PERIODICALLY PERFORMED BY THE ENGINEER TO VERIFY THAT THE PLACEMENT DOES NOT DAMAGE THE FILTER SOCK. ANY FILTER SOCK DAMAGED DURING PLACEMENT SHALL BE REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
9. THE ANTICIPATED FUNCTIONAL LIFE OF A BIODEGRADABLE FILTER SOCK SHOULD BE 6 MONTHS; FOR PHOTODEGRADABLE SOCKS 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. PROJECTS WITH DISTURBANCES ANTICIPATED TO LAST LONGER THAN THE FUNCTIONAL LIFE OF A SOCK SHOULD PLAN TO REPLACE THE SOCKS PERIODICALLY OR USE ANOTHER TYPE OF BMP.
10. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
11. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
12. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
13. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.
14. WHERE THE LIMIT OF CLEARING / CONSTRUCTION AND FILTER SOCK ARE ADJACENT, PLACE THE SOCK ON THE EDGE OF LIMIT OF CLEARING / CONSTRUCTION.

2 DETAIL
FILTER SOCK
NOT TO SCALE
3,4,5,6

HYDRAULICALLY APPLIED EROSION CONTROL PRODUCT (HECP)

SPECIFICATION: 31 25 14.13 - HIGH PERFORMANCE-FLEXIBLE GROWTH MEDIUM

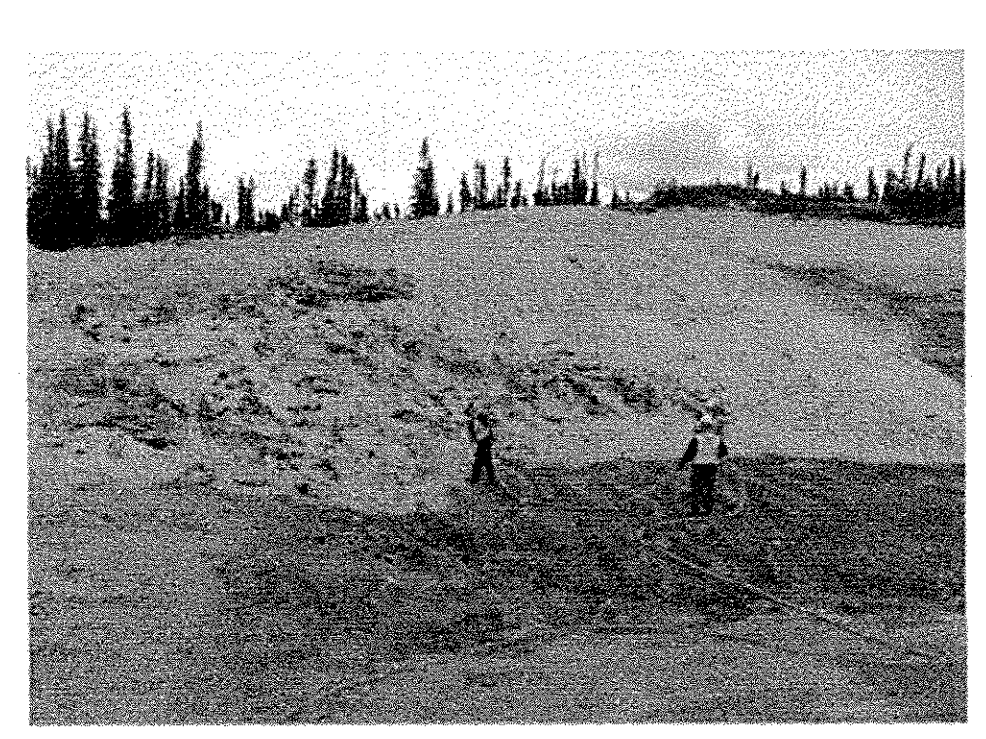
THIS SECTION SPECIFIES A HYDRAULICALLY-APPLIED, 100% BIODEGRADABLE, HIGH PERFORMANCE-FLEXIBLE GROWTH MEDIUM (HP-FGM) THAT IS MANUFACTURED IN THE UNITED STATES AND IS COMPOSED OF 100% RECYCLED THERMALLY REFINED (WITHIN A PRESSURE VESSEL) WOOD FIBERS, CRIMPED INTERLOCKING MAN-MADE BIODEGRADABLE FIBERS, MICRO-PORE GRANULES, NATURALLY DERIVED CROSSLINKED BIOPOLYMERS AND WATER ABSORBENTS. THE HP-FGM IS PHYTOSANITIZED, FREE FROM PLASTIC NETTING, REQUIRES NO CURING PERIOD AND UPON APPLICATION FORMS AN INTIMATE BOND WITH THE SOIL SURFACE TO CREATE A CONTINUOUS, POROUS, ABSORBENT AND FLEXIBLE EROSION RESISTANT BLANKET THAT ALLOWS FOR RAPID GERMINATION AND ACCELERATED PLANT GROWTH. ALL COMPONENTS OF THE FGM SHALL BE PRE-PACKAGED BY THE MANUFACTURER TO ASSURE BOTH MATERIAL PERFORMANCE AND COMPLIANCE WITH THE FOLLOWING VALUES. NO CHEMICAL ADDITIVES WITH THE EXCEPTION OF FERTILIZER, LIMING AND BIOSTIMULANT MATERIALS SHOULD BE ADDED TO THIS PRODUCT.

1. THERMALLY PROCESSED (WITHIN A PRESSURE VESSEL) WOOD FIBER - 80% ±3% - HEATED TO A TEMPERATURE GREATER THAN 380 DEGREES FAHRENHEIT (193 DEGREES CELSIUS) FOR 5 MINUTES AT A PRESSURE GREATER THAN 50 PSI (345 KPA) CROSSLINKED BIOPOLYMERS AND WATER ABSORBENTS - 10% ±1% CRIMPED, MAN-MADE BIODEGRADABLE INTERLOCKING FIBERS - 5% ±1% MICRO-PORE GRANULES - 5% ±1%

INSTALLATION

STRICTLY COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. USE APPROVED HYDRO-SPRAYING MACHINES WITH FAN-TYPE NOZZLE (50-DEGREE TIP). TO ACHIEVE OPTIMUM SOIL SURFACE COVERAGE, APPLY HP-FGM FROM OPPOSING DIRECTIONS TO SOIL SURFACE. ROUGH SURFACES (ROCKY TERRAIN,CAT TRACKS AND RIPPED SOILS) MAY REQUIRE HIGHER APPLICATION RATES TO ACHIEVE 100% COVER. SLOPE INTERRUPTION DEVICES OR WATER DIVERSION TECHNIQUES ARE RECOMMENDED WHEN SLOPE LENGTHS EXCEED 100 FEET (30 M). MAXIMUM SLOPE LENGTH IS FOR PRODUCT APPLICATIONS ON A 3H:1V SLOPE FOR APPLICATION ON STEEPER SLOPES, SLOPE INTERRUPTION LENGTHS MAY NEED TO BE DECREASED BASED ON ACTUAL SITE CONDITIONS. NOT RECOMMENDED FOR CHANNELS OR AREAS WITH CONCENTRATED WATER FLOW. NO CHEMICAL ADDITIVES WITH THE EXCEPTION OF FERTILIZER, LIMING AND BIOSTIMULANT MATERIALS SHOULD BE ADDED TO THIS PRODUCT: TO ENSURE PROPER APPLICATION RATES, MEASURE AND STAKE AREA. FOR MAXIMUM PERFORMANCE, APPLY HP-FGM IN A TWO-STEP PROCESS AS FOLLOWS:

1. STEP ONE: APPLY FERTILIZER WITH SPECIFIED PRESCRIPTIVE AGRONOMIC FORMULATIONS AND 50% OF SEED WITH A SMALL AMOUNT OF HP-FGM FOR VISUAL METERING.
2. STEP TWO: MIX BALANCE OF SEED AND APPLY HP-FGM AT A RATE OF 50 LB PER 125 GALLONS (23 KG/475 LITERS) OF WATER OVER FRESHLY SEEDED SURFACES. CONFIRM LOADING RATES WITH EQUIPMENT MANUFACTURER. DO NOT LEAVE SEEDED SURFACES UNPROTECTED, ESPECIALLY IF PRECIPITATION IS IMMINENT.

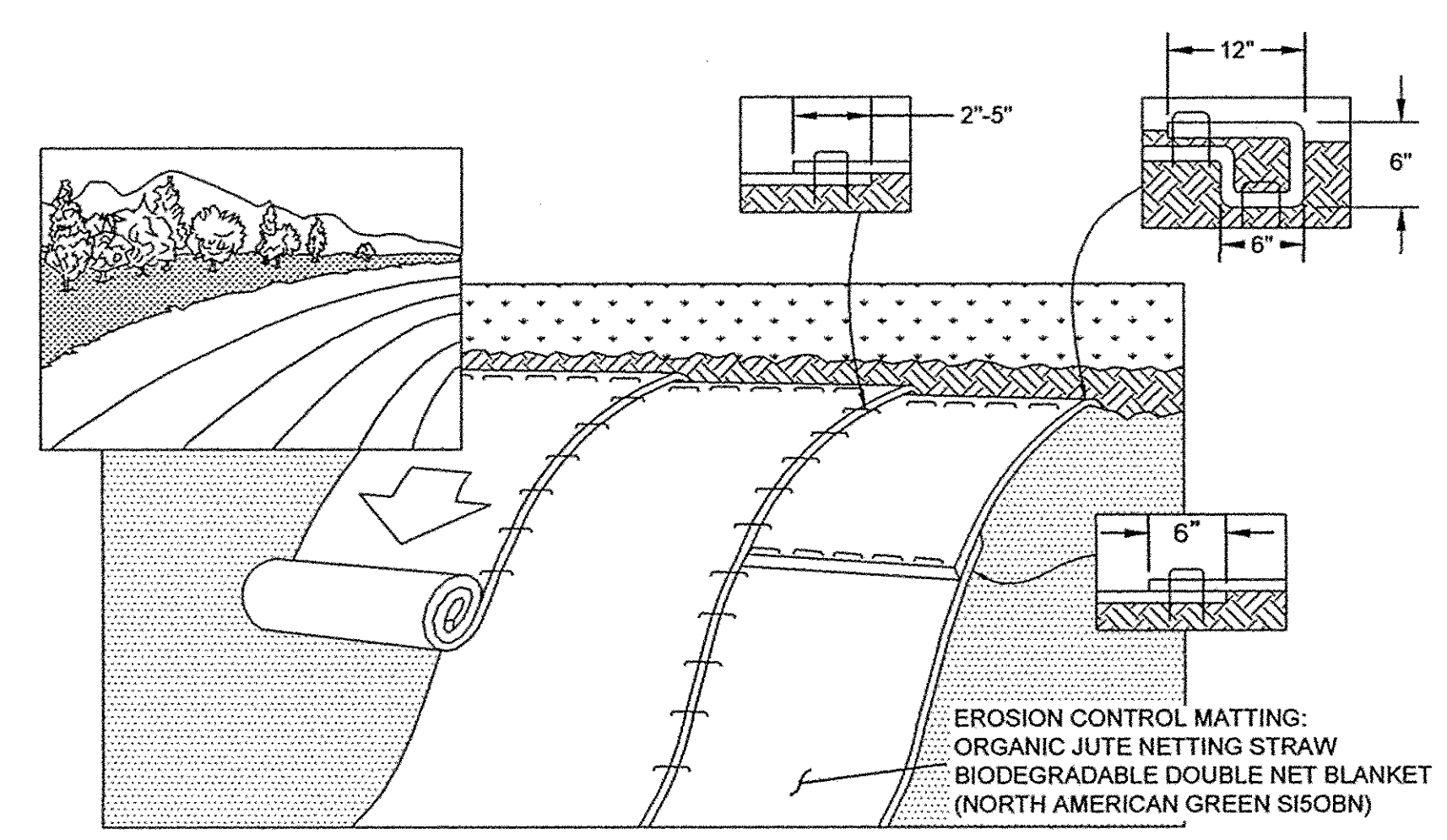


APPLICATION RATES

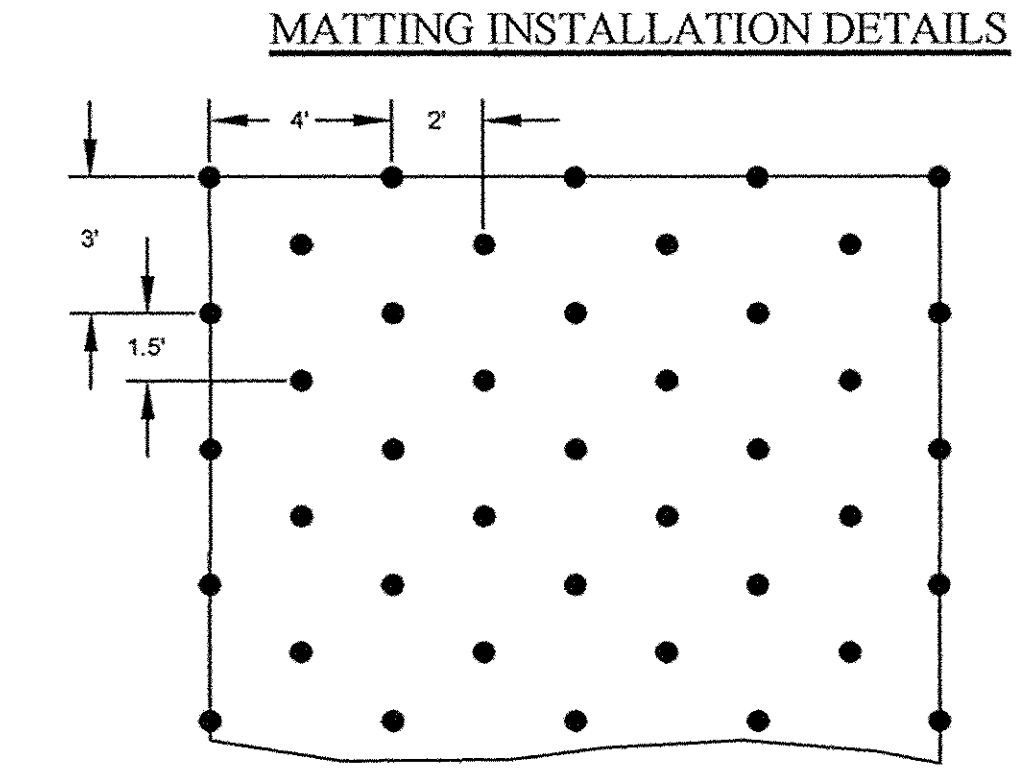
THESE APPLICATION RATES ARE FOR STANDARD CONDITIONS. DESIGNERS MAY WISH TO REDUCE RATES TO ENCOURAGE FASTER VEGETATION ESTABLISHMENT OR MAY NEED TO INCREASE APPLICATION RATES ON ROUGH SURFACES. CONSULT APPLICATION AND LOADING CHARTS TO DETERMINE NUMBER OF BAGS TO BE ADDED FOR DESIRED ARES AND APPLICATION RATE.

SLOPE GRADIENT / CONDITION	ENGLISH	SI
≤ 4H TO 1V	2,500 LB/AC	2,800 KG/HA
> 4H TO 1V AND ≤ 3H TO 1V	3,000 LB/AC	3,400 KG/HA
≥ 3H TO 1V AND ≤ 2H TO 1V	3,500 LB/AC	3,900 KG/HA
> 2H TO 1V AND ≤ 1H TO 1V	4,000 LB/AC	4,500 KG/HA
> 1H TO 1V	4,500 LB/AC	5,100 KG/HA
BELOW ECB OR TRM	1,500 LB/AC	1,700 KG/HA
AS INFILL FOR TRM	3,500 LB/AC	3,900 KG/HA

3A DETAIL
HP-FGM EROSION CONTROL PRODUCT
NOT TO SCALE
3,4,5,6



MATTING INSTALLATION DETAILS

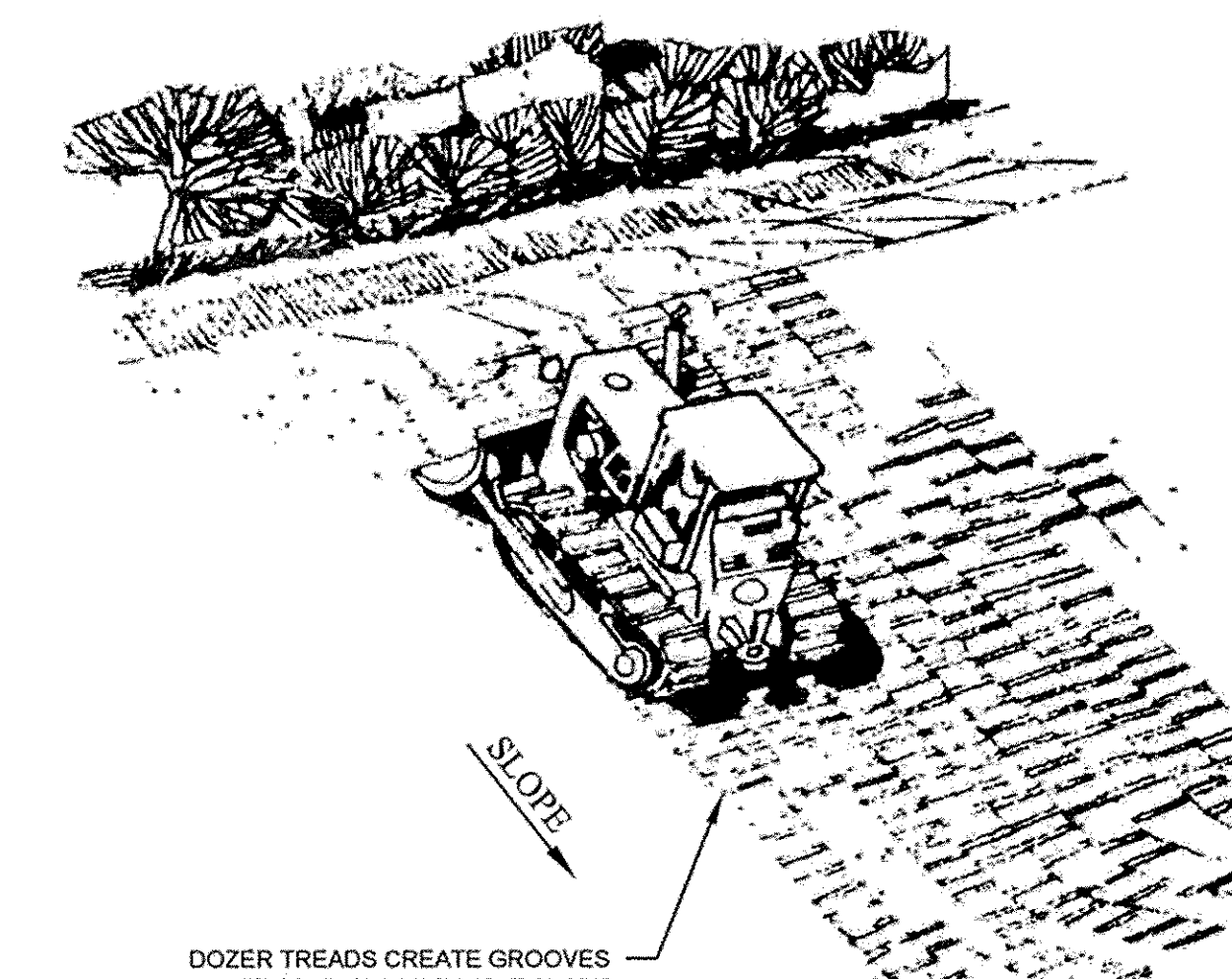


STAPLE PATTERN FOR 16' WIDE ROLLS

NOTES:

1. MATTING SHALL BE PLACED ON SLOPES 3H:1V OR STEEPER.
2. MATTING SHALL BE PLACED ALONG STREAM EMBANKMENTS AND SLOPES.
3. PREPARE SOIL BEFORE INSTALLING INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
4. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE MATTING IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF MATTING EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE MATTING WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF MATTING BACK OVER SEED AND COMPACTED SOIL. SECURE MATTING OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE MATTING.
5. ROLL MATTING DOWN THE SLOPE. MATTING MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE ABOVE STAPLE PATTERN.
6. THE EDGES OF PARALLEL ROLLS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP. CONSECUTIVE ROLLS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE - WITH UPSLOPE MAT OVERLYING DOWNSLOPE MAT) WITH AN APPROXIMATE 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE MATTING.
7. AS AN ALTERNATIVE TO ECM, A FLEXIBLE GROWTH MEDIUM (FGM) SHALL BE USED UNLESS SPECIFIED BY THE OWNER OR ENGINEER.

3B DETAIL
EROSION CONTROL MATTING
NOT TO SCALE
3,4,5,6

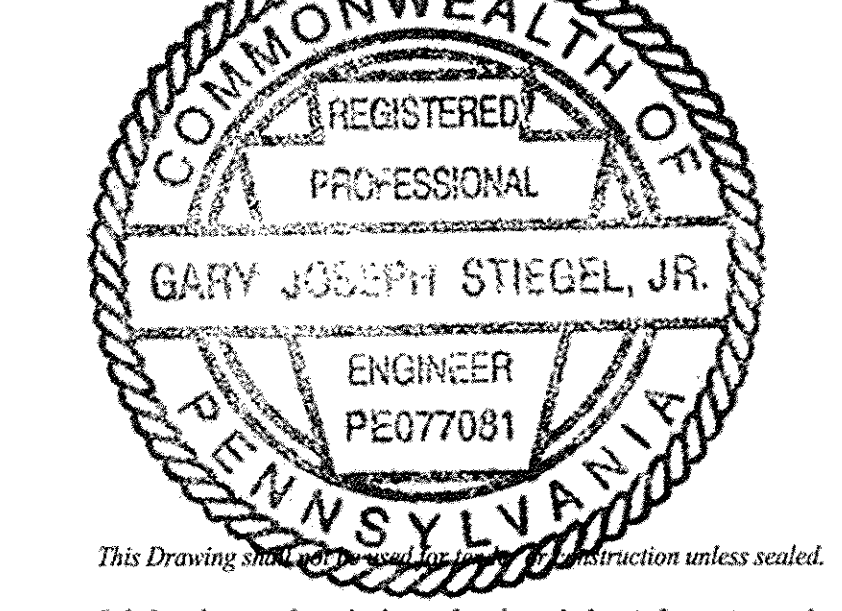


NOTE:

TRACKING SLOPES IS DONE BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR. IF A BULLDOZER IS USED, THE BLADE SHOULD BE UP.

4/6 DETAIL
TRACKING FILL AND CUT SLOPES
NOT TO SCALE

PLAN BOOK	PAGE
348	39



This Drawing shall not be used for construction unless sealed.

I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMP's are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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Earth Resource Engineers and Consultants
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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

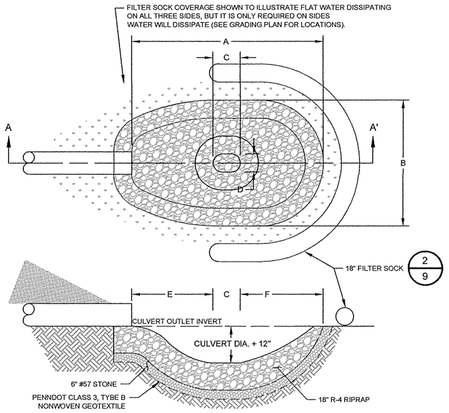
scale AS NOTED
date 03/14/2014
project no. C12104-1-34
designed DLL
checked GJS
drawn TMZ
graphic scale

drawing title
E&S DETAILS (SHEET 1 OF 4)
EROSION AND SEDIMENT CONTROL PLAN

project title
DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC
OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Sheet 9

P:\EdgeMare\C12104-1-34-Draco Well Pad\Drwg\Production\E&S Construction Drwgs_Revised\C12104-1-34-ES-C-509.dwg Plotted: May 12, 2014



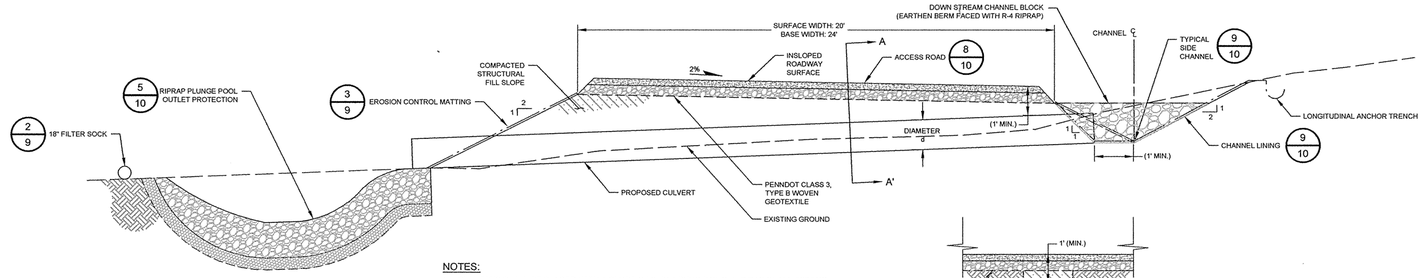
SECTION A-A'

PIPE SIZE	A	B	C	D	E	F	WT. RIPRAP IN TONS
15"	10'	7'	1 1\2'	1'	4 1\2'	3'	6
18"	12'	8'	2'	1'	5'	4'	8
21"	15'	9'	2 1\2'	1 1\2'	7'	4 1\2'	12
24"	17'	10'	2 1\2'	1 1\2'	8'	5 1\2'	15
30"	20'	13'	3'	2'	9'	6'	22
DUAL 24"/36"	24'	16'	3 1\2'	2'	9 1\2'	7'	33

NOTE:

1. WELL PAD DISCHARGE PIPING AND CHANNEL / DITCH PLUNGE POOLS SHALL USE 15" DIA. CULVERT DIMENSIONS FOR INSTALLING DEVICE.
2. DETAIL DERIVED FROM MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS MANUAL, REVISED JULY 1, 2010.

5 / 3,4,5,6 DETAIL
RIPRAP PLUNGE POOL
NOT TO SCALE

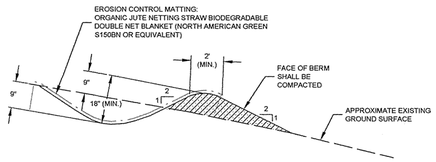


NOTES:

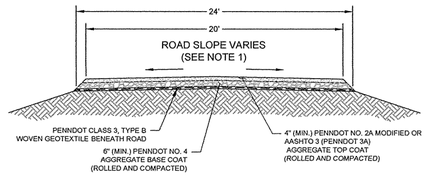
1. CULVERTS SHALL BE PLACED WITH A SLOPE OF 2 TO 4 PERCENT. CULVERTS SHALL EXTEND BEYOND THE FILL SLOPE.
2. TRANSITION CHANNEL DIMENSIONS TO CULVERT INLETS. INSTALL MATTING WITHIN CHANNEL AND AT CULVERT TRANSITION AREAS INCLUDING CHANNEL BLOCK.
3. STABILIZE IMMEDIATELY AFTER CONSTRUCTION.

SECTION A-A'

7 / 3,4,5,6 DETAIL
ACCESS ROAD - CROSS SECTION W/ CULVERT
NOT TO SCALE



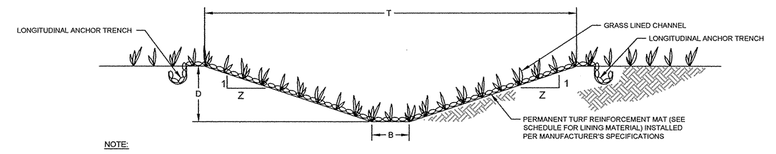
6 / 5,6 DETAIL
TOP OF SLOPE BERM
NOT TO SCALE



NOTE:

1. IN CASES WHERE THE ACCESS ROAD IS ACCOMPANIED BY A GRASS LINED CHANNEL, THE ROAD SHALL BE GRADED AT A SLOPE OF 2% TOWARDS THE CHANNEL. IN ALL OTHER CASES, THE ACCESS ROAD SHALL BE CROWNED WITH A 2% SLOPE.

8 / 3,4,5,6 DETAIL
ACCESS ROAD
NOT TO SCALE



NOTE:

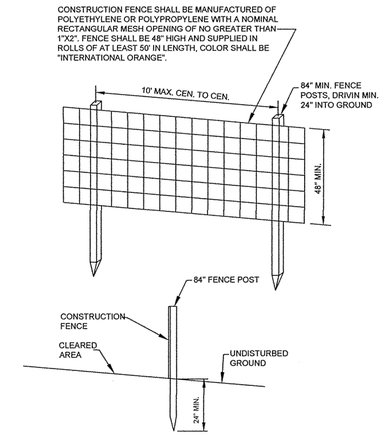
1. ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

GRASS LINED CHANNEL SCHEDULE

CHANNEL I.D.	LENGTH (ft)	SLOPE (%)	BOTTOM WIDTH B (ft)	DEPTH D (ft)	SIDE SLOPES (Z:1)	TOP WIDTH T (ft)	LINING *
CHANNEL 1	230	5.9	1.0	2.00	2	9.0	NAG P300
CHANNEL 2	300	1.4	1.0	2.00	2	9.0	NAG P300
CHANNEL 3	285	5.0	1.0	2.00	2	9.0	NAG P300
CHANNEL 4	555	5.0	1.0	2.00	2	9.0	NAG P300
CHANNEL 5	455	0.5	1.0	2.00	2	9.0	NAG P300
CHANNEL 6	420	0.5	1.0	2.00	2	9.0	NAG P300
CHANNEL 7	486	4.5	1.0	2.00	2	9.0	NAG P300
CHANNEL 8	165	2.1-8.3	1.0	2.00	2	9.0	NAG P300

* NAG - NORTH AMERICAN GREEN

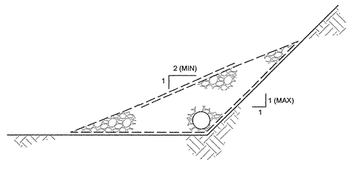
9 / 3,4,5,6 DETAIL
TYPICAL GRASS-LINED CHANNEL
NOT TO SCALE



THE CONTRACTOR SHALL INSTALL THE CONSTRUCTION FENCE IN LOCATIONS AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.

FENCE DESIRABLE WOODED AREAS, INDIVIDUAL TREES, AND SHRUBS DESIGNATED FOR PROTECTION, BEFORE BEGINNING OTHER GENERAL PROJECT WORK. WHERE DIRECTED, FENCE OTHER AREAS TO BE PROTECTED. DO NOT STOCKPILE MATERIALS UNDER, OR WITHIN, PROTECTED VEGETATION AREAS. PROHIBIT CONSTRUCTION TRAFFIC WITHIN PROTECTED AREAS. PLACE THE FENCE AT THE DRIPLINE OF TREES OR PLANTS, BUT AVOID CAUSING ROOT DAMAGE WHEN DRIVING POSTS. REPLACE DAMAGED FENCE IN KIND WITHIN 24 HOURS OF DAMAGE, AS DIRECTED. REMOVE TEMPORARY PROTECTION, WHEN DIRECTED.

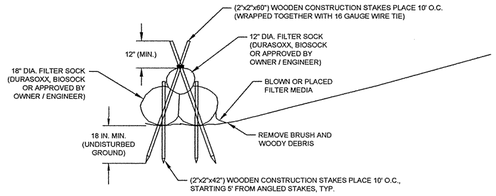
10 / 3,4,6 DETAIL
EXCLUSION FENCE
NOT TO SCALE



NOTES:

1. INSTALL BENCH DRAINS BENEATH EMBANKMENTS WHERE DESIGNATED ON THE DRAWINGS, OR WHERE DIRECTED DURING CONSTRUCTION AS FIELD CONDITIONS DICTATE.
2. DRAIN AGGREGATE TO MEET PENNDOT GRADATION REQUIREMENTS FOR PENNDOT NO. 2B/AASHTO NO. 57 AGGREGATE AND TO BE PRODUCED FROM A TYPE A SOURCE STONE.
3. GEOTEXTILE TO BE WOVEN POLYPROPYLENE WITH AN APPARENT OPENING SIZE (AOS) NO LARGER THAN NO. 0.43 MILLIMETERS (U.S. NO. 40 STANDARD SIEVE), AND PERCENT OPEN AREA (POA) OF AT LEAST 2 PERCENT.
4. COLLECTION PIPE TO BE PERFORATED OR SLOTTED SCHEDULE 40 PVC PIPE. PERFORATIONS TO BE 0.25-INCHES IN DIAMETER; MINIMUM OF 8 PER LINEAL FOOT OF PIPE; ARRANGED IN GROUPS OF 2 TO 4 PERFORATIONS LOCATED SYMETRICALLY AROUND THE LOWER HALF OF THE PIPE CIRCUMFERENCE. SLOTS TO BE 0.05 TO 0.15-INCHES IN WIDTH; MINIMUM OF 4 SLOTS PER LINEAL FOOT OF PIPE; EACH SLOT EXTENDING ACROSS THE LOWER THIRD OF THE PIPE CIRCUMFERENCE.
5. PLACE 2 TO 4 INCHES OF DRAIN AGGREGATE BENEATH THE COLLECTION PIPE. INSTALL COLLECTION PIPE SO THAT PERFORATIONS OR SLOTS ARE ON THE BOTTOM OF THE PIPE.
6. MAINTAIN A SLOPE OF AT LEAST 0.5% IN COLLECTION PIPES. PROVIDE OUTLETS FOR COLLECTION PIPES AT INTERVALS OF NO MORE THAN 200 FEET. OUTLETS TO CONSIST OF NON-PERFORATED OR NON-SLOTTED LONGITUDINAL EXTENSIONS OUTLETTING ON THE GROUND SURFACE ADJACENT TO THE FILL SLOPE, OR, TRANSVERSE LATERALS OUTLETTING THROUGH THE COMPLETED EMBANKMENT FACE. IN EITHER CASE, PROVIDE EROSION PROTECTION MEASURES AT DISCHARGE POINTS IN ACCORDANCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN.
7. MAINTAIN OVERLAPS AT LEAST 2 FEET IN WIDTH WHERE GEOTEXTILE PANELS MEET. WRAP ADDITIONAL GEOTEXTILE AROUND PENETRATIONS (SUCH AS AT COLLECTION PIPE OUTLETS) AND SECURE WITH CLAMPS OR OTHER APPROVED MEASURES IN ORDER TO MAINTAIN FILTER PROTECTION AROUND THE DRAINAGE AGGREGATE AND COLLECTION PIPE.

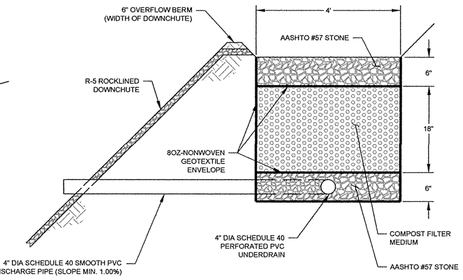
11 / 6 DETAIL
BENCH DRAIN
NOT TO SCALE



NOTES:

1. SEDIMENT ACCUMULATION SHALL NOT EXCEED 1/3 THE TOTAL HEIGHT OF THE TRAP.
2. ENDS OF THE TRAP SHALL BE A MINIMUM OF 1 FOOT HIGHER IN ELEVATION THAN THE MID-SECTION, WHICH SHALL BE LOCATED AT THE POINT OF DISCHARGE.

12 / 3 DETAIL
FILTER SOCK SEDIMENT TRAP
NOT TO SCALE



NOTES:

1. COMPOST FILTER MEDIUM TO BE MADE UP OF LEAF COMPOST OR EQUIVALENT.
2. COMPOST FILTER MEDIUM TO HAVE A MINIMUM HYDRAULIC CONDUCTIVITY OF 8.7 FT/DAY.

13 / 5,6 DETAIL
LINEAR CONSTRUCTED FILTER
NOT TO SCALE

PLAN BOOK	PAGE
348	40

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
PE077081

This Drawing shall not be used for tender or construction unless sealed.

I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

scale: AS NOTED
date: 03/14/2014
project no.: C12104-1-34
designed: DLL
checked: GJS
drawn: TMZ
graphic scale:

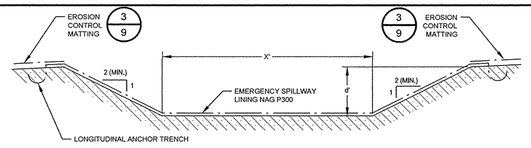
drawing title: E&S DETAILS (SHEET 2 OF 4) EROSION AND SEDIMENT CONTROL PLAN
project title: DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD EM ENERGY PENNSYLVANIA, LLC
OAKLAND TOWNSHIP BUTLER COUNTY, PENNSYLVANIA

Sheet 10

P:\Projfiles\C12104-1-34\Dwg\Production\E&S Construction Dwgs\ServiceEC12104-1-34-E&S-C-101.dwg - Printed: May 12, 2014

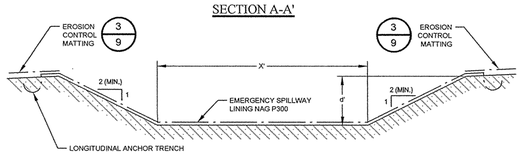
BASIN CONSTRUCTION NOTES

1. BASIN BOTTOM SHALL BE GRADED TO A SMOOTH TEXTURE AND BE SLOPED (2 PERCENT MIN.) IN THE DIRECTION OF *THE PRINCIPAL SPILLWAY TO PROMOTE DRAINAGE.*
2. ANTI-SEEP COLLARS SHALL BE WELDED OR ATTACHED TO OUTLET BARREL PIPE WITH WATERTIGHT SEALS.
3. STRUCTURAL FILL SHALL BE PLACED IN 9" LIFTS AND COMPACTED TO NOT LESS 95% OF MAXIMUM DRY DENSITY BASED ON THE STANDARD PROCTOR (ASTM D-1557). IF COMPOSITION OF NATIVE STRUCTURAL FILL IS NOT CONDUCIVE TO STANDARD PROCTOR TESTING AND/OR FIELD DENSITY MEASUREMENTS WITH A NUCLEAR DENSITY GAUGE DUE TO PERCENTAGE AND SIZE OF THE COARSE FRAGMENTS, AS DETERMINED BY THE ENGINEER, THEN SATISFACTORY DENSIFICATION SHALL BE DETERMINED BY THE ENGINEER BASED ON FIELD OBSERVATION OF EQUIPMENT PASSES AND CORRESPONDING DEFLECTION OF THE FILL. MOISTURE CONTENT SHALL BE WITHIN -2 OF +4 OF OPTIMUM. FILL MATERIALS FOR THE EMBANKMENT SHALL BE FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES (>6"), AND OTHER OBJECTIONABLE MATERIALS.
4. WATER LEVEL AT SPILLWAY CREST SHALL BE LESS THAN 15 FT. ABOVE POND BOTTOM AT UPSLOPE SIDE OF EMBANKMENT.
5. SUITABLE CLAYS AND LOW-PERMEABILITY, PLASTIC SOILS EXCAVATED FOR POND CONSTRUCTION SHALL BE PREFERENTIALLY USED FOR CONSTRUCTION OF THE KEY TRENCH AND CORE OF THE EMBANKMENT, FOLLOWED BY BOTTOM AREAS POTENTIALLY SUBJECT TO LEAKAGE BASED ON OBSERVED SOIL/ROCK CONDITIONS.
6. IF BASIN DEWATERING IS REQUIRED DURING CONSTRUCTION AT A RATE FASTER THAN CAN BE DRAINED BY OUTLET PIPE, WATER SHALL BE PUMPED AND DISCHARGED THROUGH THE PRINCIPAL SPILLWAY INLET. PUMPING DISCHARGE SHALL BE CONTROLLED TO PREVENT EROSION IN SPILLWAY CHANNEL.
7. ANCHOR RISER PIPE TO CONCRETE BASE WITH A MINIMUM OF 2 #8 REBAR PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER. REBAR SHOULD PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.
8. CONCRETE BASES SHOULD BE POURED IN SUCH A MANNER AS TO INSURE THAT CONCRETE FILLS THE BOTTOM OF THE RISER TO THE INVERT OF THE OUTLET PIPE TO PREVENT RISER FROM BREAKING AWAY FROM BASE. THE MINIMUM BASE WIDTH SHOULD EQUAL 2 TIMES RISER DIAMETER.
9. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT REACHES CLEAN-OUT LEVEL AND AT HE BEGINNING OF THE POST CONSTRUCTION PERIOD.



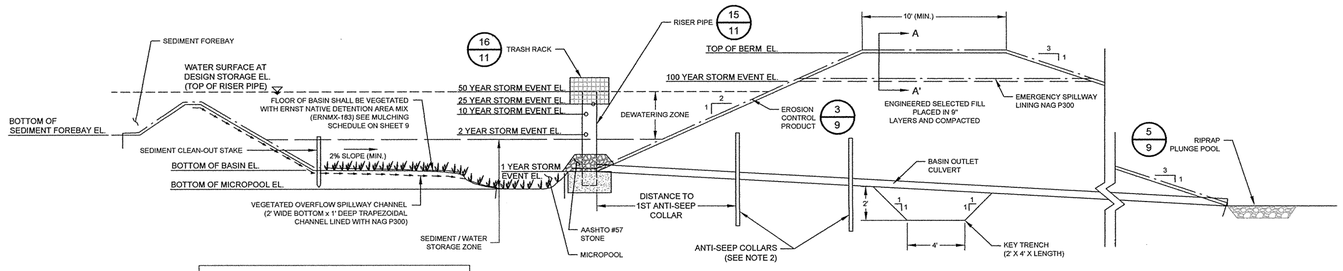
EMERGENCY SPILLWAY SCHEDULE		
BASIN NO.	X (ft.)	d (ft.)
BASIN 1	20.0	1.0

SECTION A-A'



FOREBAY SPILLWAY SCHEDULE		
BASIN NO.	X (ft.)	d (ft.)
BASIN 1	30.0	0.5

SECTION A-A'

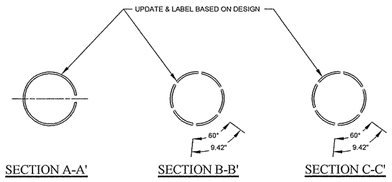


BASIN SCHEDULE	
BASIN DESIGN VARIABLES	BASIN 1
BOTTOM OF FOREBAY EL. (ft.)	1240.00
BOTTOM OF MICRO POOL EL. (ft.)	1238.00
BOTTOM OF BASIN EL. (ft.)	1239.00
1 YEAR STORM EVENT EL. (ft.)	1240.06
2 YEAR STORM EVENT EL. (ft.)	1241.07
10 YEAR STORM EVENT EL. (ft.)	1241.67
25 YEAR STORM EVENT EL. (ft.)	1242.32
50 YEAR STORM EVENT EL. (ft.)	1242.70
TOP OF RISER PIPE EL. (ft.)	1242.70
100 YEAR STORM EVENT EL. (ft.)	1242.99
TOP OF BERM EL. (ft.)	1244.25
BASIN OUTLET CULVERT DIA. & MATERIAL	18" HDPE
BASIN OUTLET CULVERT LENGTH	50.00'

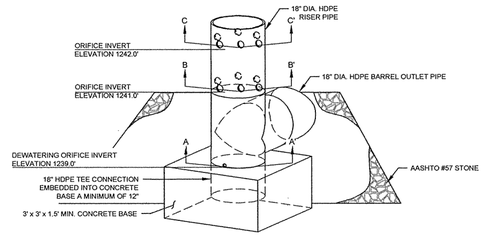
ANTI-SEEP COLLAR SCHEDULE	
ANTI-SEEP COLLAR DESIGN VARIABLES	BASIN 1
ANTI-SEEP COLLAR SIZE AND MATERIAL	3.7' X 3.7' HDPE PLATE
DISTANCE TO 1ST ANTI-SEEP COLLAR (ft.)	8.00
SPACING BETWEEN COLLAR 1 & 2	8.00

14
5,6
DETAIL
RETENTION BASIN
SCALE: 1" = 5'

ORIFICE SCHEDULE				
INVERT ELEVATION (FT)	# ORIFICES IN ROW	DISTANCE (IN) / ANGLE (°) BETWEEN ORIFICES		ORIFICE DIMENSIONS
1239	1	-	-	2"
1241	6	9.42"	60	5"
1242	6	9.42"	60	5"

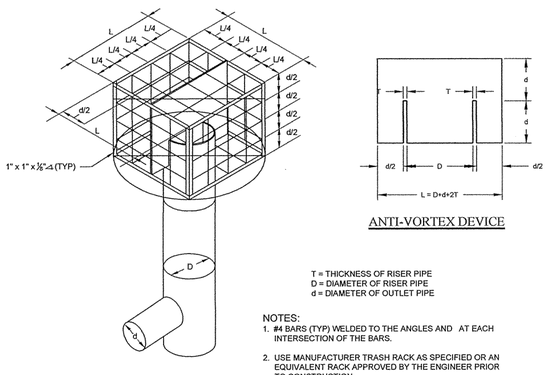


SECTION A-A' SECTION B-B' SECTION C-C'



NOTE:
1. RISER STRUCTURE SHOWN WITHOUT TRASH RACK FOR CLARITY.
2. ORIFICES SHOULD BE EVENLY SPACED HORIZONTALLY AND VERTICALLY STAGGERED ON-CENTER.

15
11
DETAIL
BASIN 1 RISER PIPE - ISOMETRIC VIEW
SCALE: 1" = 2'

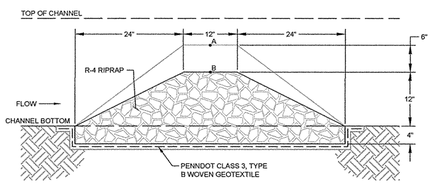


ANTI-VORTEX DEVICE

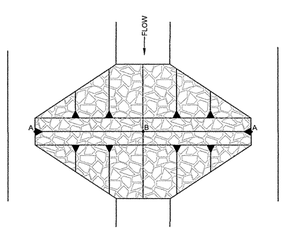
T = THICKNESS OF RISER PIPE
D = DIAMETER OF RISER PIPE
d = DIAMETER OF OUTLET PIPE

NOTES:
1. #4 BARS (TYP) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS.
2. USE MANUFACTURER TRASH RACK AS SPECIFIED OR AN EQUIVALENT RACK APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

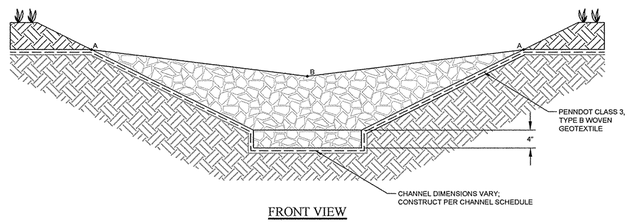
16
11
DETAIL
TRASH RACK W/ ANTI-VORTEX DEVICE
NOT TO SCALE



SIDE VIEW

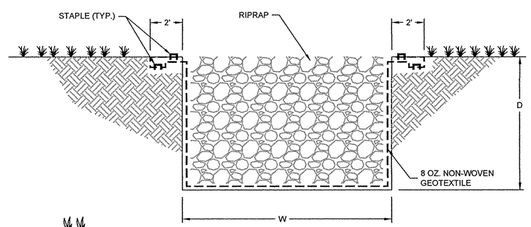


PLAN VIEW



FRONT VIEW

17
5,6
DETAIL
ROCK CHECK DAM
NOT TO SCALE



RIPRAP DOWNCHUTE SCHEDULE			
CHUTE #	W (FT)	D (FT)	RIPRAP SIZE
1	6	3	R-5
2	6	3	R-5
3	6	3	R-5
4	6	3	R-5

NOTE: RIPRAP DOWNCHUTES TO NOT EXCEED SLOPES OF 2:1

18
5,6
DETAIL
ROCK CHECK DAM
NOT TO SCALE

PLAN BOOK	PAGE
348	41

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
GARY JOSEPH STIEGEL, JR.
ENGINEER
PE077081

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No.	Revision	Date	By
1	REVISED CONSTRUCTION DRAWINGS	05/12/14	ARM

scale	AS NOTED
date	03/14/2014
project no.	C12104-1-34
designed	DLL
checked	GJS
drawn	TMZ
graphic scale	

drawing title
E&S DETAILS (SHEET 3 OF 4)
EROSION AND SEDIMENT CONTROL PLAN

project title
DRACO WELL PAD & CONSTELLATION COMPRESSOR PAD
EM ENERGY PENNSYLVANIA, LLC

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

Sheet 11

T:\Eng\Jobs\C12100s\12104wn Well Pad\Prod\Const\ESCP\Compressor Dwgs_Revised\C12104-1-34-ESCP-C-011.dwg Plotted: May 12, 2014

GENERAL NOTES

1. A COPY OF THIS EROSION AND SEDIMENT CONTROL PLAN MUST BE KEPT AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
2. ARCHAEOLOGICAL ARTIFACTS DISCOVERED DURING THE PERFORMANCE OF THE WORK MUST BE ADEQUATELY PROTECTED AND THEIR DISCOVERY PROMPTLY REPORTED TO THE BUREAU FOR HISTORIC PRESERVATION, HISTORICAL AND MUSEUM COMMISSION, 400 NORTH STREET, SECOND FLOOR, HARRISBURG, PA 17120-0093, TELEPHONE (717) 783-8946.
3. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE §260.1 ET SEQ., §271.1 ET SEQ., AND §287.1 ET SEQ. NO BUILDING MATERIAL OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
4. SURFACE-WATER RUNOFF FROM THE STOCKPILE AREAS SHALL TRAVEL AS SHEET FLOW. FILTER SOCK THAT WILL RECEIVE THE RUNOFF FROM THE STOCKPILE AREAS SHALL BE MONITORED PERIODICALLY TO VERIFY THAT DISCHARGES TO THE RECEIVING WATERWAYS ARE NOT SEDIMENT LADEN. IF THE DISCHARGE DOES NOT MEET THIS REQUIREMENT, SEDIMENT CONTROL MEASURES SHALL BE INCREASED. ALSO, DURING CONSTRUCTION, TEMPORARY DIVERSION CHANNELS OR BERMS SHALL BE PLACED AS NEEDED AROUND THE UPSLOPE SIDE OF STOCKPILE AREAS TO PREVENT RUN-ON. SEDIMENT LADEN WATERS SHALL NOT BE ALLOWED TO ENTER STORMWATER MANAGEMENT FACILITIES.
5. THE PERMIT COVERS THE "MOVING, DEPOSITING, STOCKPILING, OR STORING OF SOIL, ROCK, OR EARTH MATERIALS". IF THE SITE WILL NEED TO HAVE FILL IMPORTED FROM AN OFF SITE LOCATION, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND THE DETERMINATION OF CLEAN FILL WILL RESIDE WITH THE OPERATOR. IF THE SITE WILL HAVE EXCESS FILL THAT WILL NEED TO BE EXPORTED TO AN OFF SITE LOCATION, THE RESPONSIBILITY OF CLEAN FILL DETERMINATION AND ENVIRONMENTAL DUE DILIGENCE RESTS ON THE APPLICANT.
6. DEFINITIONS
   - 6.1. CLEAN FILL: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.)
     - 6.1.1. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.
     - 6.1.2. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.
   - 6.2. ENVIRONMENTAL DUE DILIGENCE: ACCEPTABLE INVESTIGATIVE TECHNIQUES INCLUDE, BUT ARE NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, *REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY*, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCES. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
7. FOR STRIP MINED AREAS, SOIL TESTING WILL BE DONE AT THE START OF EARTH DISTURBANCE ACTIVITIES TO DETERMINE THE FORMATION ACIDITY. IF IT IS FOUND THAT THE TOTAL SULFUR CONTENT EXCEEDS 0.5%, A LIME DOSAGE WILL BE APPLIED AT A RATE ACCORDING TO DEP PUBLICATION 5600-FS-DEP4284. THE REQUIRED LIMING RATE WILL ALSO BE APPLIED WHEN THE SITE IS RECLAIMED.

STANDARD E&S PLAN NOTES

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
2. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, AND THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THE SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THE E&S PLAN.
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT ADDITIONAL (AS NEEDED) AND APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE REGIONAL OFFICE OF THE DEPARTMENT.
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET. SEQ., 271.1 AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE PROJECT SITE ONTO STATE OR MUNICIPAL ROADS.
15. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
16. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
17. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
18. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
19. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
20. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
21. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
22. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
23. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
24. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
25. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SUBSURFACE DRAINS OR OTHER APPROVED METHOD.
26. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
27. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
28. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
29. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT.
30. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST-CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
31. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW AND CHAPTER 32 OF ACT 13 (58 PA. C.S.). THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
32. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
33. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
34. THE OWNER/OPERATOR MAY NOT COMMENCE DRILLING ACTIVITIES UNTIL THE DEPARTMENT HAS CONDUCTED AN INSPECTION OF THE SITE AFTER THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES.

SEQUENCE OF CONSTRUCTION

ALL EARTH DISTURBANCE ACTIVITIES WILL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. DEVIATION FROM THE ESCP MUST BE APPROVED IN WRITING FROM THE ENGINEER.

1. AN ON-SITE PRECONSTRUCTION MEETING WILL TAKE PLACE BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), AND THE OWNER OR OPERATOR WILL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, AND THE ENGINEER. PADEP WILL BE NOTIFIED OF THE PRECONSTRUCTION MEETING AT LEAST SEVEN (7) DAYS BEFORE THE MEETING OCCURS.
2. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE ENGINEER WILL NOTIFY ALL APPROPRIATE MUNICIPAL OFFICIALS, PADEP, AND THE PENNSYLVANIA FISH AND BOAT COMMISSION (IF REQUIRED BY PERMIT) OF THE INTENT TO BEGIN CONSTRUCTION.
3. AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES WILL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM, INC. AT 1_800-242-1776 TO LOCATE EXISTING UNDERGROUND UTILITIES.
4. MARK THE PROJECT LIMITS OF DISTURBANCE FOR THE ACCESS ROAD, PAD AREA, COMPRESSOR STATION, AND ANY OTHER POTENTIALLY DISTURBED AREA.

PAD, IMPOUNDMENT, COMPRESSOR STATION, AND ACCESS ROAD CONSTRUCTION SEQUENCE

1. INSTALL THE ROCK CONSTRUCTION ENTRANCE AS SHOWN ON THE DRAWINGS.
2. INSTALL FILTER SOCKS AND TOP-OF-SLOPE BERMS AT THE LOCATIONS SHOWN ON THE DRAWINGS.
3. CLEAR AND GRUB WITHIN DISTURBANCE LIMITS. NOTE: TEMPORARY STABILIZATION MEASURES ARE TO BE IMPLEMENTED WHENEVER EARTHWORK ACTIVITIES AT A PARTICULAR LOCATION CEASE FOR MORE THAN FOUR (4) DAYS.
4. GRADE AND CONSTRUCT THE ACCESS ROAD AND ASSOCIATED CHANNELS (CHANNELS 1-8), AND CHECK DAM.
5. CONSTRUCT THE WELL PAD, COMPRESSOR STATION, AND FLOWBACK WATER STORAGE IMPOUNDMENT (FIRST CONSTRUCTING THE ASSOCIATED WELL PAD CONTAINMENT TRENCHES, OUTLET PIPES, RIPRAP PLUNGE POOLS, AND RETENTION BASIN),

SITE STABILIZATION

TEMPORARY STABILIZATION - UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE WILL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.

PERMANENT STABILIZATION - UPON FINAL COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE WILL IMMEDIATELY HAVE TOPSOIL RESTORED, REPLACED, OR AMENDED, SEEDED, MULCHED, OR OTHERWISE PERMANENTLY STABILIZED AND PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION.

1. STABILIZE WITH EROSION BLANKETS ON STEEP SLOPES WHERE SPECIFIED ON THE DRAWINGS, AND PROVIDE REVEGETATION OF PERMANENT, NATIVE AREAS AS SPECIFIED IN THE DRAWINGS.
2. INSTALL LINEAR CONSTRUCTED FILTER AS SHOWN ON THE PLANS.
3. CLEANUP SITE TO SATISFACTION OF OWNER OR THEIR REPRESENTATIVE.
4. REMOVE TEMPORARY EROSION MEASURES.
5. UPON COMPLETION OF EARTH DISTURBANCE ACTIVITIES AND INSTALLATION OF PERMANENT BEST MANAGEMENT PRACTICES, THE ENGINEER OR HIS REPRESENTATIVE WILL SUBMIT A NOTICE OF TERMINATION TO PADEP.

NOTES:

- ALL DISTURBED AREAS WILL BE STABILIZED IMMEDIATELY WITH ROCK OR SEEDING AND MULCHING DURING THE FOUR (4) DAY CONSTRUCTION LIMIT.
- ONLY CLEAN, NON-POLLUTING MATERIALS WILL BE USED AS FILL. MINIMUM STONE SIZE SHOULD BE R-4, AS RATED BY THE NATIONAL STONE ASSOCIATION.
- ALL STRUCTURES WILL BE CONSTRUCTED ACCORDING TO THE SPECIFIC GENERAL PERMIT DETAILS.
- ALL EARTHMOVING ACTIVITIES MUST INCORPORATE MEASURES TO MINIMIZE ACCELERATED EROSION AND MUST HAVE THE ESCP AT THE SITE OF ACTIVITY AT ALL TIMES. THE SITE MUST BE AVAILABLE FOR INSPECTION BY A REPRESENTATIVE OF PADEP AT ANY TIME.
- ALL EARTH DISTURBANCE ACTIVITIES WILL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED IN THE PLAN DRAWINGS. **DEVIATION FROM THE SEQUENCE MUST BE APPROVED IN WRITING BY PADEP PRIOR TO IMPLEMENTATION.** PADEP WILL BE NOTIFIED SEVEN (7) DAYS PRIOR TO THE START OF THE PROJECT CONSTRUCTION AND FIVE (5) DAYS PRIOR TO ANY PLAN CHANGES.

MAINTENANCE PROGRAM

E&S CONTROL MEASURES WILL BE MAINTAINED ACCORDING TO THE APPLICABLE PADEP REQUIREMENTS AND STANDARD BEST MANAGEMENT PRACTICES. IN GENERAL, MAINTENANCE WILL INCLUDE INSPECTIONS ON A WEEKLY BASIS AND AFTER RUNOFF EVENTS, AND PERIODIC REMOVAL OF ANY ACCUMULATED SEDIMENT. COMPLETE DETAILS REGARDING MAINTENANCE OF E&S CONTROL MEASURES ARE PRESENTED ON THE ESCP DRAWINGS.

THE FOLLOWING MAINTENANCE PROGRAM SHALL BE FOLLOWED UNTIL THE SITE IS COMPLETELY STABILIZED AFTER CONSTRUCTION. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL FEATURES.

1. *ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. REPAIR DEFECTIVE EROSION CONTROL MEASURES IMMEDIATELY.*
   - 1.1. CONSTRUCTION ENTRANCE WITH WASH RACK: THE ROCK CONSTRUCTION ENTRANCE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS WILL BE IMMEDIATELY REMOVED AND RETURNED TO THE CONSTRUCTION SITE.
   - 1.2. FILTER SOCKS: SPLIT, TORN, UNRAVELING OR SLUMPING FILTER SOCKS WILL BE REPAIRED OR REPLACED. SEDIMENT WILL BE REMOVED WHEN ACCUMULATIONS REACH ½ THE DIAMETER OF THE FILTER SOCK.
   - 1.3. EROSION CONTROL PRODUCT: EROSION CONTROL PRODUCT DAMAGED BEFORE SUFFICIENT STABILIZATION OF UP-GRADIENT VEGETATION WILL BE IMMEDIATELY REPLACED.
   - 1.4. FILTER SOCK SEDIMENT TRAPS: SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE STRUCTURE.

ALL PERMANENT E&S CONTROL MEASURES WILL BE INSPECTED IMMEDIATELY AFTER STABILIZATION, PRIOR TO LEAVING SITE, AND FOR A YEAR AFTER CONSTRUCTION, AND REPAIRED AS NECESSARY.

- 1.1. PERMANENT SEEDING: SEEDING SHALL BE APPLIED IN THE LOCATIONS AND AT THE RATES SPECIFIED ON THE DRAWINGS. SEEDED AREAS WILL BE INSPECTED ONCE STABILIZED, PRIOR TO LEAVING THE SITE, AT SIX MONTH INTERVALS FOR ONE YEAR, THEN YEARLY FOR EACH SUBSEQUENT YEAR. VEGETATION COVER AND SIGNS OF EROSION WILL ALSO BE CHECKED AND RE-SEEDED AND FERTILIZED, AS NECESSARY.
- 1.2. UPLAND NATIVE RE-VEGETATION:
  - 1.2.1. FIRST YEAR MAINTENANCE: OBSERVATION OF THE GROWTH OF DESIRED SPECIES AND WEED COMPETITION IS ESSENTIAL TO MAKING MAINTENANCE DECISIONS. WHEN VEGETATION REACHES 12"-18" TALL, MOW TO NO LESS THAN 6" HIGH (WITH A MOWER OR WEED EATER) TO PREVENT THE WEEDS FROM GOING TO SEED. MOST NATIVE PLANTS WILL GROW DEEPER ROOT SYSTEMS THAN TOPS IN THE FIRST YEAR, AND MOWING TO 6"-8" HIGH WILL NOT HURT THEM. THIS ALLOWS SUNLIGHT TO REACH DESIRED SPECIES. DO NOT MOW WITH A LAWNMOWER. MOWING TOO CLOSE ENCOURAGES WEEDY SPECIES.
  - 1.2.2. SECOND YEAR MAINTENANCE: MOW ONCE, AS CLOSE TO THE GROUND AS POSSIBLE, IN EARLY SPRING. THIS ALLOWS THE SOIL TO WARM MORE QUICKLY AND YOUNG NATIVE PLANTS TO EMERGE.

NOTE: UPLAND NATIVE MAINTENANCE SCHEDULE AS RECOMMENDED BY ERNST CONSERVATION SEEDS, LLP. ADHERE TO SUPPLIER'S MAINTENANCE DIRECTIONS FOR EACH SEED MIX.

- 1.3. CHANNELS, CULVERTS: THE DIMENSIONS OF THESE STRUCTURES WILL BE MAINTAINED. SEDIMENT DEPOSITS WILL BE REMOVED. DAMAGED LININGS WILL BE REPAIRED OR REPLACED. ALL CHANNELS AND CULVERTS SHOULD BE KEPT FREE OF OBSTRUCTIONS, INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES. ALL CHANNELS AND CULVERTS WILL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
- 1.4. RIPRAP PLUNGE POOLS: DISPLACED RIPRAP IN THE PLUNGE POOL WILL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT BUILDUP THAT REDUCES THE DEPTH WILL BE REMOVED AS NECESSARY. ALL PLUNGE POOLS AND SUMPS WILL BE INSPECTED ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
- 1.5. TOP-OF-SLOPE BERMS: SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE STRUCTURE.
- 1.6. RETENTION BASINS: ALL BASIN STRUCTURES EXPECTED TO RECEIVE OR TRAP DEBRIS AND SEDIMENT SHOULD BE INSPECTED FOR CLOGGING, EXCESSIVE DEBRIS, AND SEDIMENT ACCUMULATION WEEKLY AND FOLLOWING RUNOFF EVENTS UNTIL SITE STABILIZATION IS ACHIEVED. AFTER FINAL STABILIZATION, INSPECTIONS SHALL OCCUR AT LEAST FOUR TIMES PER YEAR, AND AFTER EVERY STORM EVENT GREATER THAN 1 INCH. STRUCTURES INCLUDE BASIN BOTTOMS, TRASH RACKS, OUTLET STRUCTURES, RIPRAP OR GABION STRUCTURES, AND INLETS. *SEDIMENT SHOULD BE DISPOSED OF PROPERLY AND ONCE SEDIMENT IS REMOVED, DISTURBED AREAS NEED* TO BE IMMEDIATELY STABILIZED AND REVEGETATED.
- 1.7. LINEAR CONSTRUCTED FILTER: TILL AND AERATE THE FILTER AREA WHEN THERE ARE INDICATIONS THAT THE FILTER IS NOT FUNCTIONING OPTIMALLY. REMOVE ACCUMULATED SEDIMENT BUILDUP, TRASH, AND DEBRIS AS NECESSARY. REPLACE FILTER MEDIUM IF SCRAPING/REMOVAL HAS REDUCED DEPTH OF FILTERING MEDIA.
- 1.8. ROCK CHECK-DAMS: THE DIMENSIONS OF THE ROCK CHECK-DAMS WILL BE MAINTAINED. SEDIMENT DEPOSITS WILL BE REMOVED. ROCK CHECK-DAMS WILL BE INSPECTED ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.

MAINTENANCE FOR BOTH THE TEMPORARY AND PERMANENT E&S CONTROL BMPS WILL INCLUDE PROPER REMOVAL AND DISPOSAL OF MATERIALS IN THE PROJECT AREA. ACCUMULATED SEDIMENT WILL BE SPREAD WITHIN THE EASEMENT AREAS AND PREPARED FOR PERMANENT EROSION CONTROL MEASURES. NO SEDIMENT WILL BE PLACED WITHIN 100 FEET OF STREAMS, LAKES, PONDS, AND WETLANDS.

CONSTRUCTION WASTES, SUCH AS EXCESS SOIL MATERIALS, BUILDING MATERIALS, CONCRETE WASH WATER, SANITARY WASTES, ETC. SHOULD BE RECYCLED WHERE FEASIBLE AND IS PREFERRED VERSUS DISPOSAL. WASTE MATERIALS COULD ADVERSELY IMPACT THE WATER QUALITY OF THE STREAMS, LAKES, PONDS, AND WETLANDS.

TEMPORARY CONTROLS

AN EROSION CONTROL PRODUCT WILL BE INSTALLED ON ALL DISTURBED SLOPES STEEPER OR EQUAL TO 3:1, ALL AREAS OF CONCENTRATED FLOWS, AND DISTURBED AREAS WITHIN FIFTY (50) FEET OF WATERS OF THE COMMONWEALTH.

1. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE ACTIVITY OF ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED, OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
2. FOR AN EARTH DISTURBANCE AC

VOLUME REPORT*	
REPLACEMENT	
WATER CONTENT (GALLONS)	570,600
TOP SOIL (CUBIC YARDS)	8,483
SUBSOIL (CUBIC YARDS)	30,033
ROCK - SHALE (CUBIC YARDS)	0
BEDDING - SAND (CUBIC YARDS)	2,878
GRAVEL (CUBIC YARDS)	10,660
TOTAL EARTHWORK (CUBIC YARDS)	21,514
ASPHALT (SQUARE YARDS)	37,661
REINFORCED CONCRETE (CUBIC YDS)	0
MISCELLANEOUS	1,231
DRACO WELL PAD & COMPRESSOR PAD	
TOPSOIL (CUBIC YDS)	13,466
SUBSOIL (CUBIC YDS)	61,233
TOTAL EARTHWORK (CUBIC YDS)	87,154
ROCK (CUBIC YDS)	47,919
MISCELLANEOUS	8,331
ACCESS ROADS & LOD/LOD AREA	
TOPSOIL (CUBIC YDS)	6,162
SUBSOIL (CUBIC YDS)	4,874
TOTAL EARTHWORK (CUBIC YDS)	11,391
ROCK (CUBIC YDS)	8,428
MISCELLANEOUS	2,010
TOTAL TOPSOIL + STOCKPILE (CY)	28,621
TOTAL EXCESS MATERIAL (CY)	7,839

1. VOLUMES INCLUDE 10% SHRINKAGE FACTOR FOR SUBSOIL AND 25% FOR ROCK. EXCESS VOLUME ESTIMATES ARE BASED ON CUT/FILL ANALYSIS AND DO NOT INCLUDE ADDITIONAL VOLUME FOR UNDERCUTTING OR OVERBLASTING.
2. TOP SOIL VOLUME IS BASED ON A 6" DEPTH OVER ALL DISTURBED AREAS.
3. SUBSOIL VOLUME IS BASED ON A 2' DEPTH OVER ALL DISTURBED AREAS EXCEPT FOR ROCK CUT AREAS.
4. TOTAL EXCESS MATERIAL ESTIMATE DOES NOT INCLUDE ANY ADDITIONAL MATERIAL THAT MAY BE GENERATED DURING CONSTRUCTION OF THE PROPOSED IMPOUNDMENT.
5. ALL VOLUMES ARE ESTIMATES AND ARE NOT GUARANTEED. CONTRACTOR SHALL PERFORM HIS OWN CALCULATIONS.

NOTES:

1. THE BASE MAP HAS BEEN CREATED USING AVAILABLE AERIAL PHOTOGRAPHY PROVIDED BY PAMAP TILES 600013B0PAS. EXISTING TOPOGRAPHY HAS BEEN CREATED USING LIDAR CONTOURS PROVIDED BY PAMAP TILES 600013B0PAS.
2. PROPERTY LINES AND OWNER INFORMATION ARE TAKEN FROM BUTLER COUNTY TAX ASSESSMENT MAPS AND RECORDS. THIS BASEMAP IS NOT THE RESULT OF AN ACTUAL FIELD SURVEY OF PROPERTIES SHOWN AND SHOULD NOT BE USED AS SUCH.
3. THE LOCATION AND EXTENT OF ABANDONED SURFACE AND DEEP MINE WORKINGS DEPICTED ON THIS MAP ARE NOT TAKEN FROM A FINAL CERTIFIED MINE MAP. UNKNOWN OR UNMAPPED MINES MAY EXTEND PAST DEPICTED BOUNDARIES AND MAY CONTAIN ABANDONED MINE POOLS AS WELL AS OTHER SAFTEY HAZARDS.
4. THIS PLAN IS IN THE PENNSYLVANIA STATE PLANE SOUTH, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.
5. ALL DEVELOPED FEATURES TO REMAIN UNLESS OTHERWISE NOTED

LEGEND

NOTE: LEGEND IS TYPICAL, NOT ALL OBJECTS IN LEGEND APPEAR IN PLAN.

- EXISTING CONTOURS
- EXISTING WETLANDS
- EXISTING PROPERTY LINE
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING ELECTRIC LINE EASEMENT
- EXISTING TREELINE
- EXISTING MAPPED WATERCOURSE
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING UTILITY POLE AND GUY WIRE
- DEVELOPED CONTOURS
- DEVELOPED ROAD
- DEVELOPED STOCKPILE
- DEVELOPED CHANNEL
- DEVELOPED TOP-OF-SLOPE BERM
- DEVELOPED POST AND WIRE FENCE
- DEVELOPED WELL/COMPRESSOR PAD SURFACE
- DEVELOPED OUTSIDE EDGE OF PERIMETER CONTAINMENT BERM
- DEVELOPED WELL/COMPRESSOR PAD PERIMETER CONTAINMENT TRENCH
- DEVELOPED EXCLUSION FENCE (CONSTRUCTION FENCE)
- DEVELOPED LIMIT OF CLEARING / CONSTRUCTION
- DEVELOPED ESCGP-1 PERMIT BOUNDARY / LIMIT OF DISTURBANCE
- DEVELOPED ROCK CONSTRUCTION ENTRANCE
- DEVELOPED CULVERT
- DEVELOPED SLOPE (2H:1V)
- DEVELOPED GAS WELL
- DEVELOPED POST AND EXCLUSION FENCE
- DEVELOPED GAS VENT
- DEVELOPED ROCK CHECK DAM
- RESTORATION 12" FILTER SOCK
- RESTORATION 18" FILTER SOCK
- RESTORATION 24" FILTER SOCK
- RESTORATION 32" FILTER SOCK
- RESTORATION FILTER SOCK TURNOUT
- RESTORATION EROSION CONTROL PRODUCT
- RESTORATION CHANNEL
- RESTORATION CONTOURS
- RESTORATION INFILTRATION BERM

ARM Group Inc.
Earth Resource Engineers and Consultants
www.armgroup.net

No.	Revision	Date	By
1	RSP Comments	02/21/14	BMW

1" = 50'	
01/21/2014	
C12104-1-34	
D.L.L	
G.V.S	
T.M.Z	

SCALE IN FEET

ACCESS ROAD, WELL/COMPRESSOR PAD & IMPOUNDMENT GRADING PLAN
SITE RESTORATION PLAN

OAKLAND TOWNSHIP
BUTLER COUNTY, PENNSYLVANIA

DRACO WELL PAD & CONSTELLATION COMPRESSOR STATION
EM ENERGY PENNSYLVANIA, LLC

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL ENGINEER — GARY JOSEPH STIEGEL, JR. — PE077081

This drawing is not to be used for tender or construction unless sealed.

I do hereby certify to the best of my knowledge, information and belief, that the Erosion and Sediment Control and Site Restoration Plan and Post Construction BMPs are true and correct, represent actual field conditions and are in accordance with the 25 Pa. Code Chapters 78 and 102 of the Department's rules and regulations. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

GARY JOSEPH STIEGEL, JR., PE - 077081

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Sheet 4

PLAN BOOK	PAGE
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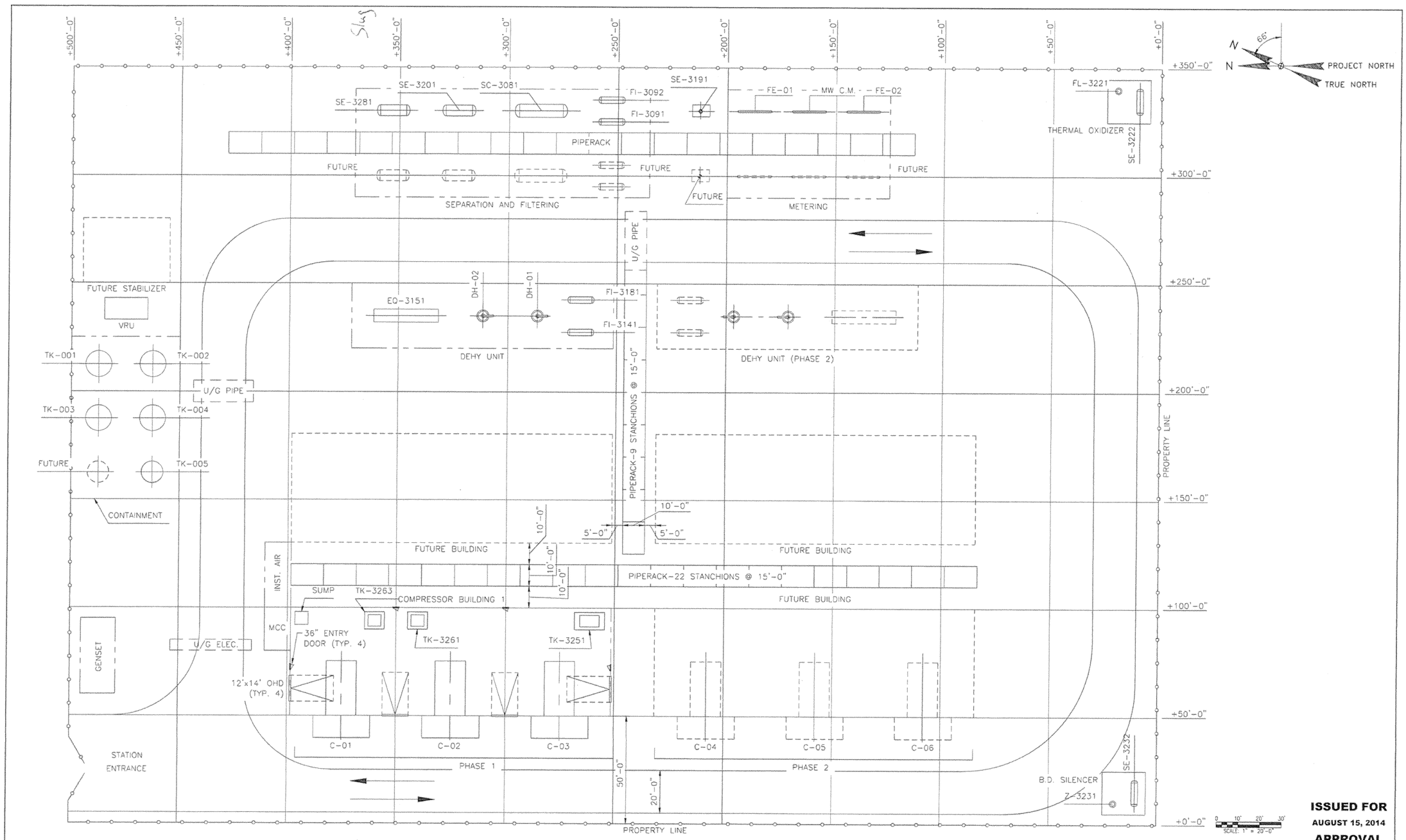
Slug Catchers



ISSUED FOR
AUGUST 15, 2014
APPROVAL

NO.	DATE	REVISION
A	07/28/14	ISSUED FOR REVIEW
B	08/06/14	ISSUED FOR APPROVAL
C	08/15/14	ISSUED FOR APPROVAL

DRAWN BY:	CGW	DATE:	07/14/25
DESIGNED BY:	CGW	SCALE:	1"=20'
CHECKED BY:	DLD	PROJECT NO.:	03875.28
ENGINEERED BY:	CO		

DRAWING TITLE:
CONSTELLATION COMPRESSOR STATION
EQUIPMENT LOCATION PLAN

AXIP ENERGY SERVICES

ROSS ENGINEERING

620 WEST CALIFORNIA AVENUE
OKLAHOMA CITY, OKLAHOMA
73102-2418 (405)264-2200

DRAWING NO: 3875-M-201

PLAN BOOK	PAGE
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OWNERS ADOPTION FOR PARTNERSHIP

THE TOWNE CENTRE ASSOCIATES, A PENNSYLVANIA LIMITED PARTNERSHIP, OWNER OF THE LAND SHOWN ON THE CREEKSIDE COMMERCIAL SUBDIVISION PLAN HEREBY ADOPTS THIS PLAN AS ITS LAND DEVELOPMENT AND IRREVOCABLY DEDICATES ALL STREETS AND OTHER PROPERTY IDENTIFIED FOR DEDICATION ON THE PLAN TO THE JACKSON TOWNSHIP. THIS ADOPTION AND DEDICATION SHALL BE BINDING UPON THE PARTNERSHIP AND UPON ITS HEIRS, EXECUTORS, AND ASSIGNS.

IN WITNESS OF WHICH, TO THIS I SET MY HAND AND SEAL THIS 4th DAY OF June, 20 15

ATTEST:

NOTARY PUBLIC _____ SIGNATURE OF GENERAL PARTNER _____

ACKNOWLEDGMENT OF PARTNERSHIP ADOPTION AND DEDICATION

BEFORE ME, THE UNDERSIGNED NOTARY PUBLIC IN AND FOR THE COMMONWEALTH OF PENNSYLVANIA AND COUNTY OF BUTLER, PERSONALLY APPEARED THE ABOVE NAMED Donald B Rodgers, A GENERAL PARTNER IN THE FIRM OF TOWNE CENTRE ASSOCIATES, A PENNSYLVANIA LIMITED PARTNERSHIP, AND ACKNOWLEDGED THE FOREGOING ADOPTION AND DEDICATION TO BE THE ACT OF THE PARTNERSHIP.

WITNESS MY HAND AND NOTARIAL SEAL THIS 4th DAY OF June, 2015

MY COMMISSION EXPIRES THE 13 DAY OF September, 2016

NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Kimberly May, Notary Public
Cranberry Twp., Butler County
My Commission Expires Sept. 13, 2016
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

CERTIFICATION OF TITLE WITH MORTGAGE AND CONSENT OF MORTGAGEE

WE HEREBY CERTIFY THAT THE TITLE TO THE PROPERTY CONTAINED IN THE CREEKSIDE COMMERCIAL SUBDIVISION PLAN IS IN THE NAME OF TOWNE CENTRE ASSOCIATES, A PENNSYLVANIA LIMITED PARTNERSHIP AND IS RECORDED IN INSTRUMENT 199812210036541 & 200107060018227.

WITNESS _____ SIGNATURE OF GENERAL PARTNER _____

FIRST NATIONAL BANK OF PENNSYLVANIA, MORTGAGEES OF THE PROPERTY CONTAINED IN THE CREEKSIDE COMMERCIAL SUBDIVISION PLAN CONSENTS TO THE RECORDING OF SAID PLAN AND TO THE DEDICATIONS AND ALL OTHER MATTERS APPEARING ON THE PLAN.

WITNESS _____ NAME, TITLE AND MORTGAGEE Branch Mgr.

NAME, TITLE AND MORTGAGEE _____

JACKSON TOWNSHIP MUNICIPAL PLANNING COMMISSION REVIEW CERTIFICATE

REVIEWED BY THE PLANNING COMMISSION OF THE TOWNSHIP OF JACKSON THIS 2nd DAY OF June, 20 15

TOWNSHIP SECRETARY _____ CHAIRPERSON _____

JACKSON TOWNSHIP BOARD OF SUPERVISORS APPROVAL CERTIFICATE

APPROVED BY THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF JACKSON THIS 2nd DAY OF June, 20 15. THE BOARD OF SUPERVISORS OF THE TOWNSHIP OF JACKSON GIVES NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING THE TOWNSHIP OF JACKSON ASSUMES NO OBLIGATION TO ACCEPT THE DEDICATION OF ANY STREETS, LAND OR PUBLIC FACILITIES AND HAS NO OBLIGATION TO IMPROVE OR MAINTAIN SUCH STREETS, LAND OR FACILITIES.

TOWNSHIP SECRETARY _____ CHAIRMAN, BOARD OF SUPERVISORS _____

JACKSON TOWNSHIP PLANNING DIRECTOR APPROVAL CERTIFICATE

APPROVED BY THE PLANNING DIRECTOR OF THE TOWNSHIP OF JACKSON THIS 2nd DAY OF June, 20 15 PURSUANT TO CHAPTER 22 OF THE JACKSON TOWNSHIP CODE OF ORDINANCES, SUBDIVISION AND LAND DEVELOPMENT, AS AMENDED, THE PLANNING DIRECTOR OF THE TOWNSHIP OF JACKSON GIVES NOTICE THAT IN APPROVING THIS PLAN FOR RECORDING THE TOWNSHIP OF JACKSON ASSUMES NO OBLIGATION TO ACCEPT THE DEDICATION OF ANY STREETS, LAND OR PUBLIC FACILITIES AND HAS NO OBLIGATION TO IMPROVE OR MAINTAIN SUCH STREETS, LAND OR FACILITIES.

TOWNSHIP SECRETARY _____ PLANNING DIRECTOR _____

BUTLER COUNTY PLANNING COMMISSION REVIEW CERTIFICATE

REVIEWED BY THE BUTLER COUNTY PLANNING COMMISSION ON THIS 19TH DAY OF MARCH, 20 15.

SECRETARY _____ CHAIRPERSON _____

PROOF OF RECORDING

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF BUTLER COUNTY, COMMONWEALTH OF PENNSYLVANIA IN PLAN BOOK VOLUME 348, PAGE(S) 45.

GIVEN UNDER MY HAND AND SEAL THIS 4th DAY OF June, 20 15.

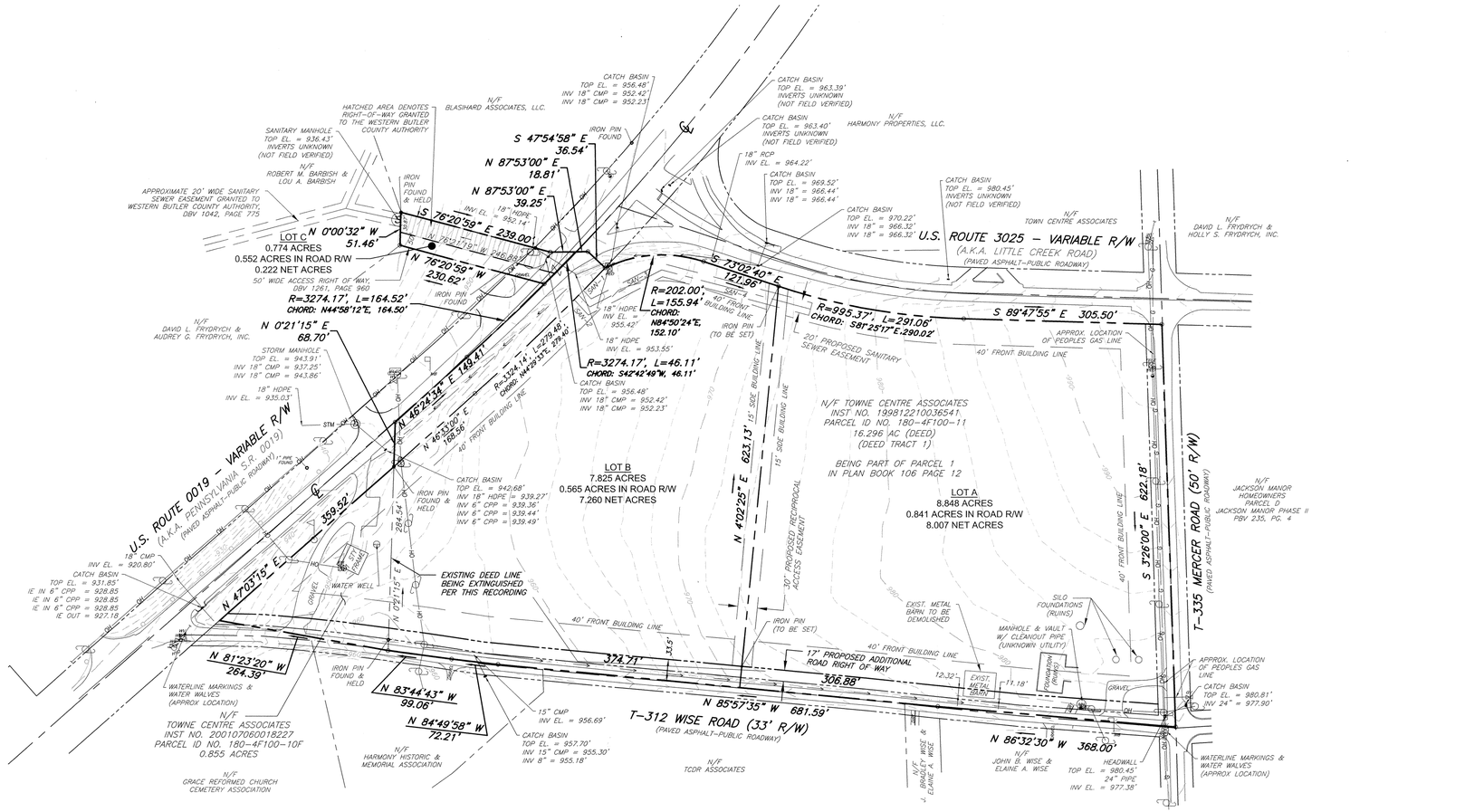
RECORDER OF DEEDS _____

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

SURVEYORS CERTIFICATION

I HEREBY CERTIFY THAT, TO THE BEST OF MY INFORMATION, KNOWLEDGE AND BELIEF THE SURVEY AND PLAN SHOWN HEREON ARE CORRECT AND ACCURATE TO THE STANDARDS REQUIRED BY THE ORDINANCES OF JACKSON TOWNSHIP.

DATE 6/3/15 DAVID W. LAPEARLE P.L.S. REG. NO. SU034201E



NOTE:

A highway occupancy permit is required pursuant to §420 of the Act of June 1, 1945 (P.L. 1212, No.428), known as the "State Highway Law" before driveway access to the State highway is permitted.

Area Tabulation	
TOTAL AREA	17.447 ACRES
EXISTING PARCELS	
• PARCEL ID NO. 180-4F100-11	16.952 ACRES
• PARCEL ID NO. 180-4F100-10F	0.855 ACRES
PROPOSED LOTS	
• LOT A	8.848 ACRES
• LOT B	7.825 ACRES
• LOT C	0.774 ACRES
• TOTAL	17.447 ACRES

ZONING INFORMATION:

THE SUBJECT PREMISES LIES WITHIN THE CC ZONING DISTRICT (COMMERCIAL CORRIDOR).

ZONING DISTRICT:	CC (COMMERCIAL CORRIDOR)
MIN. LOT AREA:	0.5 ACRE
MIN. LOT WIDTH AT R/W	100 FEET
MIN. LOT WIDTH AT FRONT SETBACK LINE:	100 FEET
MAX. BUILDING COVERAGE:	80%
MIN. FRONT YARD:	FORTY (40) FEET
MIN. SIDE YARD:	FIFTEEN(15) FEET THIRTY (30) FEET ABUTTING A RESIDENTIAL DISTRICT
MIN. REAR YARD:	THIRTY (30) FEET

ZONING INFORMATION WAS OBTAINED FROM:

JACKSON TOWNSHIP
http://www.jackson-township.com

TOWNSHIP MANAGER
CHRIS REARICK
140 MAGILL ROAD
ZELIENOPLE, PA 16063
PHONE: 724-452-5581

℄ SANITARY SEWER EASEMENT		
Line #	Direction	Length
SAN-1	S 44°02'39" W	58.44
SAN-2	N 41°50'23" W	25.00
SAN-3	S 62°36'31" W	125.20
SAN-4	N 75°07'18" W	237.54

LEGEND:

GUY WIRE — GUIDERAIL — STREAM — PROPERTY ADJOINER — SUBJECT PROPERTY — PROPERTY EASEMENT — ROAD CENTERLINE — ROAD LEGAL R/W — OVERHEAD LINES — GAS UTILITY — SANITARY UTILITY — STORM UTILITY — WATER UTILITY — DITCH LINE — UNKNOWN MANHOLE — TELEPHONE PEDESTAL — ELECTRIC VAULT

FENCE POST — FIRE HYDRANT — GAS MARKER — GAS VALVE — GUY ANCHOR — UTILITY POLE — IRON PIN FOUND (UNLESS NOTED OTHERWISE) — MAIL BOX — SANITARY MANHOLE — SINGLE POST SIGN — WATER MARKER — WATER VALVE — FLAG POLE — GROUND LIGHTS

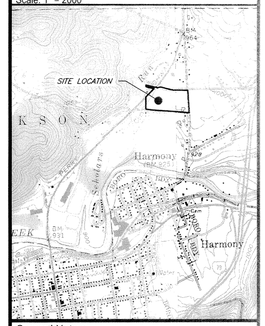
PLAN BOOK	PAGE
348	45

OWNERS
TOWNE CENTRE ASSOCIATES 215 EXECUTIVE DRIVE, SUITE 300 CRANBERRY TWP., PA 16066
DEVELOPER
TOWNE CENTRE ASSOCIATES 215 EXECUTIVE DRIVE, SUITE 300 CRANBERRY TWP., PA 16066

BUTLER COUNTY PLANNING COMMISSION — BUTLER COUNTY RECORDER OF DEEDS — REGISTERED SURVEYOR — TOWNSHIP OF JACKSON TOWNSHIP ENGINEER — TOWNSHIP OF JACKSON PLANNING COMMISSION — TOWNSHIP OF JACKSON BOARD OF SUPERVISORS

Instr:201506040011979 06/04/2015
Pages:1 F:$45.00 1:53PM
Michele Mustello T20150009647
Butler County Recorder FL

Site Location Map: Evans City & Zelienople Quads
Scale: 1" = 2000'



General Notes:

1. MERIDIAN SHOWN HEREON WAS ESTABLISHED USING BEARINGS SHOWN FOR PARCEL 1 OF THE PAUL W. WISE ESTATE SUBDIVISION PLAN - RECORDED IN THE OFFICE OF THE RECORDER OF BUTLER COUNTY IN PLAN BOOK VOLUME 106, PAGE 12.
2. THE UNDERGROUND UTILITIES SHOWN ON THIS SURVEY HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MARKINGS PROVIDED BY THE UTILITY COMPANIES AND EXISTING DRAWINGS OBTAINED FROM THE UTILITY COMPANIES. THE SURVEYOR MAKES NO GUARANTEE 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, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION. ALL UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY/ALL CONSTRUCTION PROJECTS.
3. HORIZONTAL CONTROL SHOWN HEREON IS PENNSYLVANIA SOUTH STATE PLANE NAD 83, VERTICAL DATUM IS NAVD 88, AND OBTAINED THRU GPS SURVEYS BY PVES.
4. AS PER THE DATE OF THE SURVEY, THERE WAS NO OBSERVED EVIDENCE OF THE SUBJECT PREMISES BEING USED AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.
5. AS PER THE DATE OF THE SURVEY, THERE WAS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS ON THE SUBJECT PREMISES.
6. THE RIGHT-OF-WAY LINES SHOWN HEREON ARE BASED UPON HIGHWAY RIGHT-OF-WAY PLANS OBTAINED FROM THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION ENGINEERING DISTRICT 10-0 OFFICE FOR S.R. 0019, (ROUTE 246 SEC. NO. R-1), SHEET NOS. 1 THROUGH 9 OF 9.
7. THE NORTHERLY R.O.W. LINE OF WISE ROAD (T-312) IS BEING WIDENED BY 17' TO GIVE A FULL TOTAL OF 33.5' ON THAT SIDE, AND A TOTAL OF 50' ON THE FINAL ROAD R.O.W. (TO ACCOMMODATE FUTURE ROAD & SITE IMPROVEMENTS).

0 100' 200'

Drawing Scale: 1" = 100'

NORTH

Prepared By:

PVE Sheffler
Engineering • Surveying • Design

Waterfront Corporate Park III, Suite 101 Phone: 724-444-1100
2000 Georgetowne Drive Fax: 724-444-1104
Sewickley, PA 15143 E-mail: info@pvesheffler.com

Prepared For:

Towne Centre Associates
215 Executive Drive
Cranberry Township, PA 16066

This plan has been prepared solely for the benefit of the person(s) named above and for the project noted on this drawing. The use of this plan by any third party, or for any other purpose other than specified, is prohibited without written consent from PVE Sheffler, LLC.

811 Know what's below. Call before you dig.
POCS SER. # 20143451217 (DIG) 20143451224 (DESIGN)

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

DATE ISSUED: February 18th, 2015

PLAN REVISIONS

	DATE	DESCRIPTION
1	06/02/2015	Revised per Township Comment
		Dated June 02, 2015

Situate In:
Jackson Township, Butler County, PA

Project Name:
Creekside Commercial

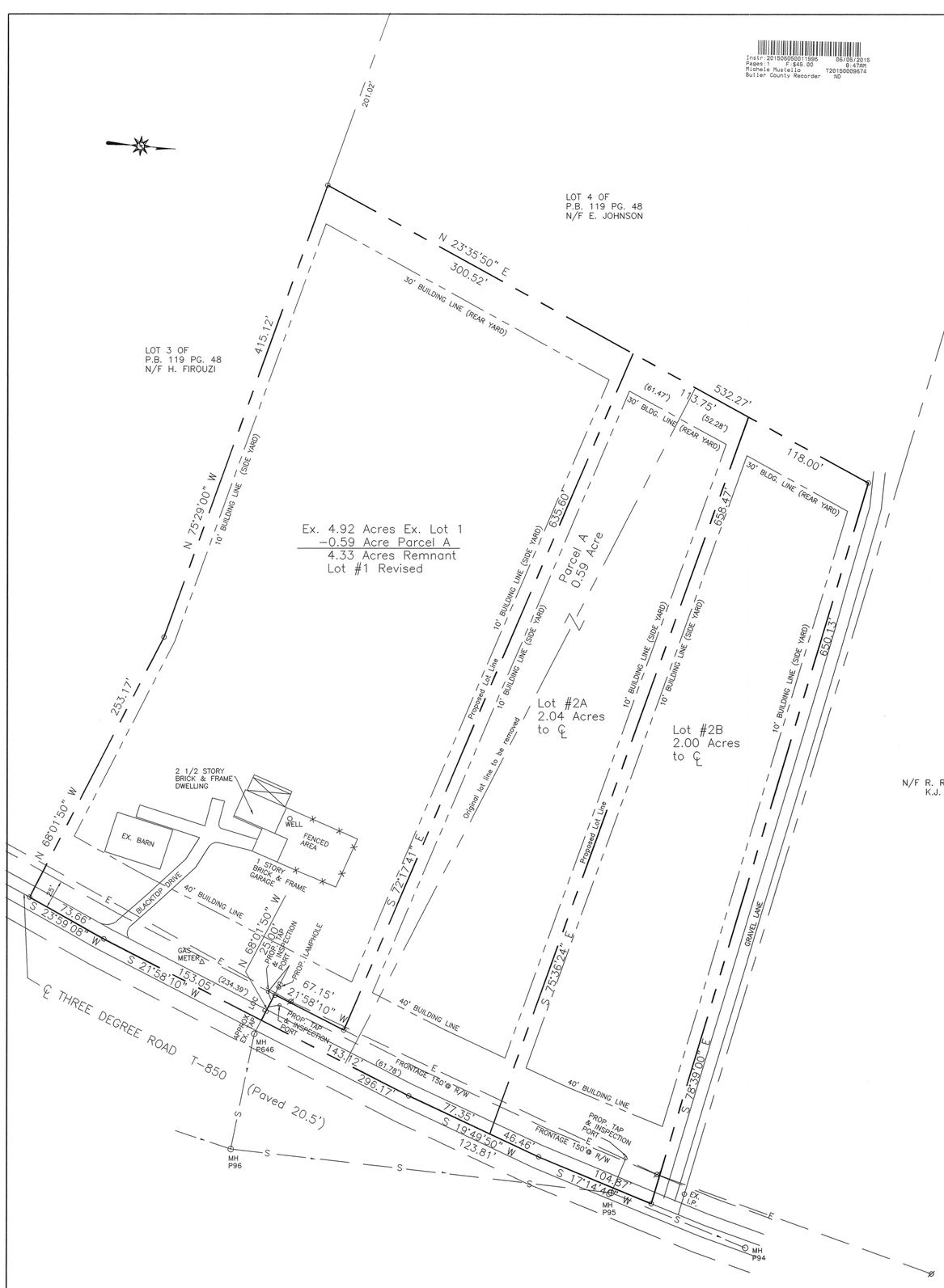
Drawing Name:
JACKSON TOWNE CENTRE SUBDIVISION

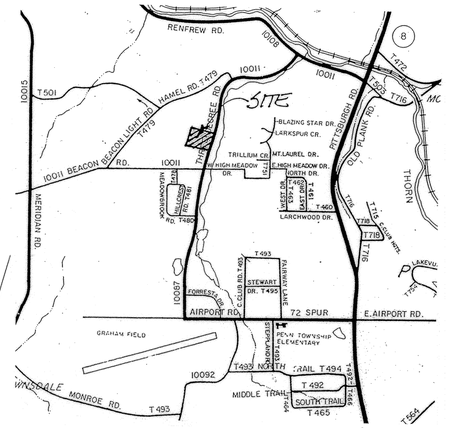
Project No: **160051**

Drawing No: **S-200**

N:\Project Files\161138 - Jackson Towne Centre\Drawings\Survey\160051-Commercial-Subdivision-Plan.dwg, 6/2/2015 2:56:02 PM, DWG To PDF.pc3

Instr: 201506050011996 06/05/2015
Pages: 1 F: $45.00 8:47AM
Michele Mustello T20150009674
Butler County Recorder ND





VICINITY MAP Scale: 1" = 2000'

NOTES:

SUBJECT TO ANY AND ALL EXISTING RIGHTS-OF-WAY AND EASEMENTS OF RECORD.

ACCORDING TO THE FLOOD INSURANCE RATE MAP PREPARED FOR THIS TOWNSHIP, THIS PROPERTY LIES IN ZONE X – AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN.

PROPERTY OWNER: ELIZABETH M. YOEST
398 THREE DEGREE ROAD
RENFREW, PA 16053

IRON PINS TO BE SET AT LOT CORNERS.

ZONING: R-1

BUILDING REQUIREMENTS:

40' BUILDING LINE FRONT YARD
10' BUILDING LINE SIDE YARD
30' BUILDING LINE REAR YARD
MINIMUM LOT AREA: 1 ACRE
MINIMUM LOT WIDTH: 150'

REF: SUBDIVISION FOR RANDALL A. THOMPSON & CONSTANCE J. BAIR-THOMPSON BY R.B. SHANNON & ASSOC., INC., RECORDED IN P.B. 126 PG. 33.

0' 50' 100' 150'

KNOW ALL MEN BY THESE PRESENTS, that I, Elizabeth M. Yoest, of the Township of Penn, County of Butler and State of Pennsylvania for myself, my heirs, executors, administrators and assigns, do hereby adopt this as my Plan of Lots of my property, situate in Penn Township, Pennsylvania, and for divers advantages accruing to me, do hereby dedicate forever, for public use for highway purposes, all drives, roads, streets, lanes and ways and other public highways shown upon the plan, with the same force and effect as if the same had been opened through legal proceedings, and I hereby release and forever discharge the Township of Penn, their successors and assigns, from any liability for damage caused by any grading thereof to any grades hereafter at any time established and any slopes required for the support and maintenance thereof according to such established grades. This dedication and release shall be binding upon Elizabeth M. Yoest, my heirs, executors, administrators and assigns and purchasers of lots in this plan.

IN WITNESS WHEREOF, I hereunto set my hand and seal this 14 day of May, 20 15.

ATTEST:
NOTARY PUBLIC — OWNER: Elizabeth M. Yoest

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
ROBERT JOHN WHITE
Notary Public
BUTLER TWP., BUTLER COUNTY
My Commission Expires Sep 19, 2016

STATE OF PENNSYLVANIA)SS:
COUNTY OF BUTLER)

Before me, the subscriber, a Notary Public in and for said State and County, personally came the above named Elizabeth M. Yoest and acknowledged the foregoing release and dedication and plan to be her act and deed and desired the same to be recorded as such.

WITNESS MY HAND AND NOTARIAL SEAL this 14 day of May, 20 15.

My Commission expires the 19 day of Sept, 20 16.

SEAL
NOTARY PUBLIC

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
ROBERT JOHN WHITE
Notary Public
BUTLER TWP., BUTLER COUNTY
My Commission Expires Sep 19, 2016

MORTGAGE CLAUSES
I, Elizabeth M. Yoest, owner of the property shown in this plan of subdivision, do hereby certify that there is no mortgage, lien or encumbrance against this property.

WITNESS — OWNER: Elizabeth M. Yoest

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
Cheryl A. Hughes
LAND SURVEYOR
SU-32490-E
PENNSYLVANIA

I, Cheryl A. Hughes, a Registered Professional Land Surveyor of the State of Pennsylvania, do hereby certify that this plan correctly represents the lots, lands, streets, alleys and highways as surveyed and plotted by me for the owners or agents.

I further certify that there are no requirements of Zoning existent under the laws of the Township in which this subdivision is located.

I further certify that this plan meets with the requirements of all ordinances, including Zoning, existent under the laws of the Township in which this subdivision is located and which affect this plan.

SURVEYOR'S NAME & DATE 3/10/15

NOTE: EXCEPTIONS TO REQUIREMENTS OF ZONING ARE NOTED ON PLAN.

Approved by the Board of Supervisors of the Penn Township by Resolution this 19 day of May, 20 15.

ATTEST:
SECRETARY — SEAL — CHAIRMAN

The Board of Supervisors of Penn Township hereby gives public notice that, in approving this plan for recording purposes only, the Township assumes no obligations, legal or otherwise, expressed or implied, either to accept said streets as public streets or roads, or to grade, pave and curb the streets in said plan, or to construct sewers therein or to install any other streets or roads.

ATTEST:
SECRETARY — SEAL — CHAIRMAN

The following owner(s) of the land within or adjacent to this plan of lots do hereby agree to the recording of this plan insofar as if affects these properties.

Approved by the Planning Commission of the Township of Penn this 26th day of May, 20 15.

ATTEST:
SECRETARY — SEAL — CHAIRMAN

Reviewed by the Butler County Planning Commission this 25TH day of MARCH, 20 15.

ATTEST:
SECRETARY — CHAIRMAN

BUTLER COUNTY PLANNING COMMISSION

STATE OF PENNSYLVANIA)SS:
COUNTY OF BUTLER)

Recorded in the Recorder's Office for the recording of deeds, plans, etc. in said County in Plan Book Volume 348 Page 46.

Given under my hand and seal this 5th day of June, 20 15.

RECORDER

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

RECORDER OF DEEDS
BUTLER COUNTY, PA

PLAN BOOK	PAGE
348	46

L S J

Land Surveyors, Inc.
523 North Main Street
P.O. Box 1061
Butler, PA 16003-1061
(724) 287-6865
Cheryl A. Hughes, PLS Owner

PLAN OF SUBDIVISION

FOR: ELIZABETH M. YOEST

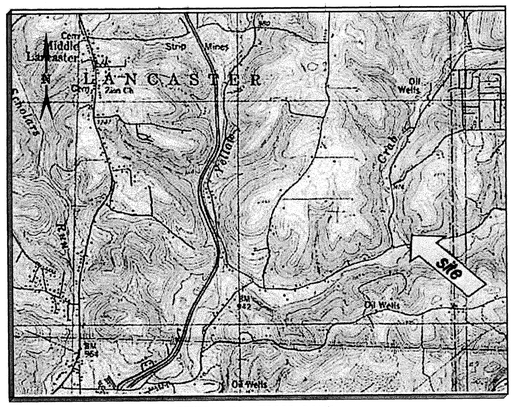
SITUATE: PENN TWP., BUTLER CO., PA

Date 03/10/15	Scale 1" = 50'	Dwn By BEC	Ckd By CAH
Parcel No. 270-3F51-14P1, 14PB		Db-Pg 2286-5, 2286-1	Service No. 14-147
Address 398 THREE DEGREE RD.			

MM&L FAMILY LTD

RESIDENTIAL DEVELOPMENT

POST CONSTRUCTION STORMWATER PLAN



SITE LOCATION MAP



PENNSYLVANIA

BUTLER COUNTY

PROJECT CONTACTS

PROPERTY OWNER:	M M & L LTD FAMILY PARTNERSHIP 11243 QUIGLEY LANE CONNEAUT LAKE, PA 16316	
CONTACT:	KEVIN HANDLOW 418-812-2011	
DEVELOPER:	KEVIN HANDLOW 11243 QUIGLEY LANE CONNEAUT LAKE, PA 16316	
UTILITY COMPANIES:	ARMSTRONG ONE ARMSTRONG PLACE BUTLER, PA 16001 1(877) 277 5711	VERIZON P.O. BOX 15124 BUTLER, PA 16001 1(800) 837 4966
	PENN POWER (FIRST ENERGY COMPANY) P.O. BOX 5000 AKRON, OH 44309 1(800) 720 3600	MARKWEST ENERGY PARTNERS, L.P. [illegible] EVANS CITY, PA 16033 (724) 789 0030
	PEOPLES GAS 100 ALLEGHENY CENTER MALL PITTSBURGH, PA 15212 (412) 395 3000	
TOWNSHIP/MUNICIPALITY:	LANCASTER TOWNSHIP 113 KINGS ALLEY HARMONY, PA 16037 BENJAMIN KRAMER T: 724-453-7213	
ENGINEER:	OLSEN & ASSOCIATES, LLC 126 SOUTH MAIN STREET BUTLER, PA 16001 RICHARD W. CRAFT, P.E. PHONE: 724-282-4786 FAX: 724-282-7619	

Instr: 201506050012009 06/05/2015
Pages:6 F $245.00 9:24AM
Michele Mustello T20150005983
Butler County Recorder FL

LANCASTER TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

DRAWING INDEX

SHEET #	SHEET TITLE
C000	COVER SHEET
C005	LEGEND SHEET
C100-C101	EXISTING SITE CONDITIONS
C200-C201	PROPOSED SITE PLAN
C920	CONSTRUCTION DETAILS
C960-C961	STORMWATER DETAILS

NOTE:

1. PROPERTY, TAX PARCEL 20-4F54-6B, LOCATED AT 544 LITTLE CREEK ROAD, IS OWNED BY MM&L FAMILY LTD PARTNERSHIP AT 11243 QUIGLEY LANE, CONNEAUT LAKE, PA. 16316 AND IS MANAGED BY KEVIN HANDLOW.
2. THE OWNER'S SIGNATURE ON THIS PLAN ACKNOWLEDGES HIS ACCEPTANCE OF RESPONSIBILITY FOR STORMWATER DRAINAGE FACILITIES AND CONTROL OF STORMWATER DRAINAGE.
3. AS PART OF THIS PLAN A DRAINAGE EASEMENT IS BEING CREATED 20' BEYOND THE EXISTING AND PROPOSED STROMWATER FACILITIES.
4. RECORD DRAWINGS WILL BE PROVIDED FOR THE PROPOSED STORMWATER FACILITIES PRIOR TO OCCUPANCY OR THE RELEASE OF THE SURETY BOND.

OPERATION AND MAINTENANCE AGREEMENT:

1. ALL STORMWATER FACILITIES INCLUDING SUMPS, RAIN GARDENS, STORM INLETS, AND STORM SEWER PIPES SHALL BE INSPECTED ANNUALLY DURING THE MONTH OF MAY. MAINTENANCE AS NEEDED SHALL BE COMPLETED WITHIN THIRTY (30) DAYS OF THE INSPECTION DATE.
2. EACH TIME THE SYSTEM IS INSPECTED, THE INLETS SHALL BE INSPECTED AND ANY DEBRIS SHALL BE REMOVED FROM THE OPENING. DEBRIS, INCLUDING PAPER, LEAVES, TWIGS, OR ANY OTHER MATERIAL, WHICH COULD CAUSE A BLOCKAGE, SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED TRASH CONTAINER. PROPER VENTILATION MUST BE PROVIDED IN THE STRUCTURES WHILE PERSONNEL ARE INSPECTING OR MAINTAINING THE FACILITY.
3. LANCASTER TOWNSHIP SHALL HAVE THE RIGHT TO ENTER ONTO THE PREMISES FOR THE PURPOSE OF INSPECTION OF THE STORMWATER FACILITIES. IF THE OWNER IS NOTIFIED OF MAINTENANCE REQUIREMENTS BY THE TOWNSHIP AND FAILS TO PERFORM SAID MAINTENANCE, THE TOWNSHIP MAY PERFORM THE NECESSARY MAINTENANCE WORK OR CORRECTIVE WORK AND THE OWNER SHALL REIMBURSE THE TOWNSHIP FOR ALL COSTS.
4. THE RECORDED OPERATION AND MAINTENANCE AGREEMENT IS A PART OF THE STORMWATER MANAGEMENT SITE PLAN.

STORMWATER CERTIFICATES

I, RONALD OLSEN, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE "LANCASTER TOWNSHIP STORMWATER MANAGEMENT ORDINANCE".

June 2 2015 _____
DATE RONALD OLSEN

I, THOMAS L. THOMPSON, HAVE REVIEWED THIS STORMWATER MANAGEMENT PLAN IN ACCORDANCE WITH THE DESIGN STANDARDS AND CRITERIA OF THE "LANDCASTER TOWNSHIP STORMWATER MANAGEMENT ORDINANCE".

_____ JUNE 3 2015
DATE THOMAS L. THOMPSON

I, _____, KEVIN HANDLOW, AS MANAGING MEMBER OF KHJH PROPERTIES, LLC. GENERAL PARTNER OF MM&L FAMILY LIMITED PARTNERSHIP, OF BUTLER COUNTY, OF THE COMMONWEALTH OF PENNSYLVANIA, ACKNOWLEDGE THAT THE STORMWATER BMP'S ARE FIXTURES THAT CANNOT BE ALTERED OR REMOVED WITHOUT PRIOR APPROVAL BY LANCASTER TOWNSHIP.

FAMILY LIMITED PARTNERSHIP ADOPTION, DEDICATION, AND RELEASE

KNOW ALL MEN BY THESE PRESENTS: THAT THE MM&L FAMILY LIMITED PARTNERSHIP, A LIMITED PARTNERSHIP FORMED UNDER THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA BY VIRTUE OF A RESOLUTION OF THE GENERAL PARTNER, KHJH PROPERTIES, LLC, THEREOF, DOES HEREBY ADOPT THIS PLAN AS ITS PLAN OF LOTS OF ITS PROPERTY, SITUATE IN THE LANCASTER TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA, AND FOR DIVERS ADVANTAGES ACCRUING TO IT, DOES HEREBY IRREVOCABLY DEDICATE ALL STREETS AND OTHER PROPERTY IDENTIFIED FOR DEDICATION ON THE PLAN TO THE PUBLIC. UPON ANY FUTURE ACCEPTANCE OF SAID PUBLIC STREETS OR PROPERTY BY THE SAID COMMONWEALTH OF PENNSYLVANIA, COUNTY OF BUTLER AND TOWNSHIP OF LANCASTER, MM&L FAMILY LIMITED PARTNERSHIP, HEREBY COVENANTS AND AGREES TO AND BY THESE PRESENTS DOES RELEASE AND FOREVER DISCHARGE SAID COMMONWEALTH OF PENNSYLVANIA, COUNTY OF BUTLER AND TOWNSHIP OF LANCASTER, THEIR SUCCESSORS OR ASSIGNS FROM ANY LIABILITY FOR DAMAGES ARISING AND TO ARISE FROM THE APPROPRIATION OF SAID GROUND FOR PUBLIC HIGHWAYS AND THE PHYSICAL GRADING THEREOF TO ANY GRADES THAT MAY BE ESTABLISHED HEREAFTER AT ANY TIME. THIS DEDICATION AND RELEASE SHALL BE BINDING UPON MM&L FAMILY LIMITED PARTNERSHIP, ITS SUCCESSORS AND ASSIGNS, AND PURCHASERS OF LOTS IN THIS PLAN.

IN WITNESS WHEREOF, THE SAID LIMITED PARTNERSHIP HAS CAUSED ITS SIGNATURE TO BE AFFIXED BY THE HAND OF ITS GENERAL PARTNER.

THIS 2nd DAY OF June, 2015.

_____
KEVIN HANDLOW, AS MANAGING MEMBER OF
KHJH PROPERTIES, LLC, GENERAL PARTNER OF
MM&L FAMILY LIMITED PARTNERSHIP

FAMILY LIMITED PARTNERSHIP ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA }
} SS:
COUNTY OF Crawford }

BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR SAID COMMONWEALTH AND COUNTY PERSONALLY APPEARED KEVIN HANDLOW AS MANAGING MEMBER OF KHJH PROPERTIES, LLC, GENERAL PARTNER OF MM&L FAMILY LIMITED PARTNERSHIP, WHO BEING DULY SWORN, DEPOSETH AND SAITH THAT ITHE ABOVE RELEASE AND DEDICATION WAS DULY SIGNED FOR THE ACT AND DEED OF THE SAID MM&L FAMILY LIMITED PARTNERSHIP, FOR THE USES AND PURPOSES THEREIN MENTIONED AND THAT THE DUE EXECUTION AND DELIVERY OF SAID RELEASE AND DEDICATION IS THIS DEPONENT'S OWN AND PROPER AND RESPECTIVE HANDWRITING.

_____
KEVIN HANDLOW, AS MANAGING MEMBER OF
KHJH PROPERTIES, LLC, GENERAL PARTNER OF
MM&L FAMILY LIMITED PARTNERSHIP

SWORN TO AND SUBSCRIBED BEFORE ME THIS DAY.

WITNESS MY HAND AND NOTARIAL SEAL THIS 2nd DAY OF June, 2015.

Mary E. Hill
NOTARY PUBLIC

Mary E. Hill, Notary Public
Summerhill Twp., Crawford County
My commission expires July 17, 2018

MY COMMISSION EXPIRES THE 17th DAY OF July, 2018.

ISSUED FOR APPROVAL
DATE: 05-01-2015

PROOF OF RECORDING

COMMONWEALTH OF PENNSYLVANIA }
} SS
COUNTY OF BUTLER }

RECORDED IN THE RECORDERS OFFICE FOR THE RECORDING OF DEEDS, PLATS, ETC.,

IN SAID COUNTY IN PLAN BOOK VOLUME 348 PAGE 47-52.

GIVEN UNDER MY HAND AND SEAL THIS 5th DAY OF June 2015

_____ SEAL

MICHELE M. MUSTELLO
RECORDER OF DEEDS
My Commission Expires First Monday in January 2016

RECORDER OF DEEDS 2015 BUTLER COUNTY, PA

COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
RONALD OLSEN
39954
REGISTERED
RONALD OLSEN, P.E.
26400-E
June 1, 2015
DATE

RECORDED: June 5, 2015

PLAN BOOK	PAGE
348	47

OLSEN & ASSOCIATES, LLC
ENGINEERS·COMMUNITY PLANNERS·SURVEYORS·LANDSCAPE ARCHITECTS·GRANTS WRITERS/ADMINISTRATORS
126 S. MAIN STREET BUTLER PENNSYLVANIA 16001 (724) 282-4786 FAX (724) 282-7619 www.OlsenAndAssociates.us

MM&L FAMILY LTD PARTNERSHIP
RESIDENTIAL DEVELOPMENT

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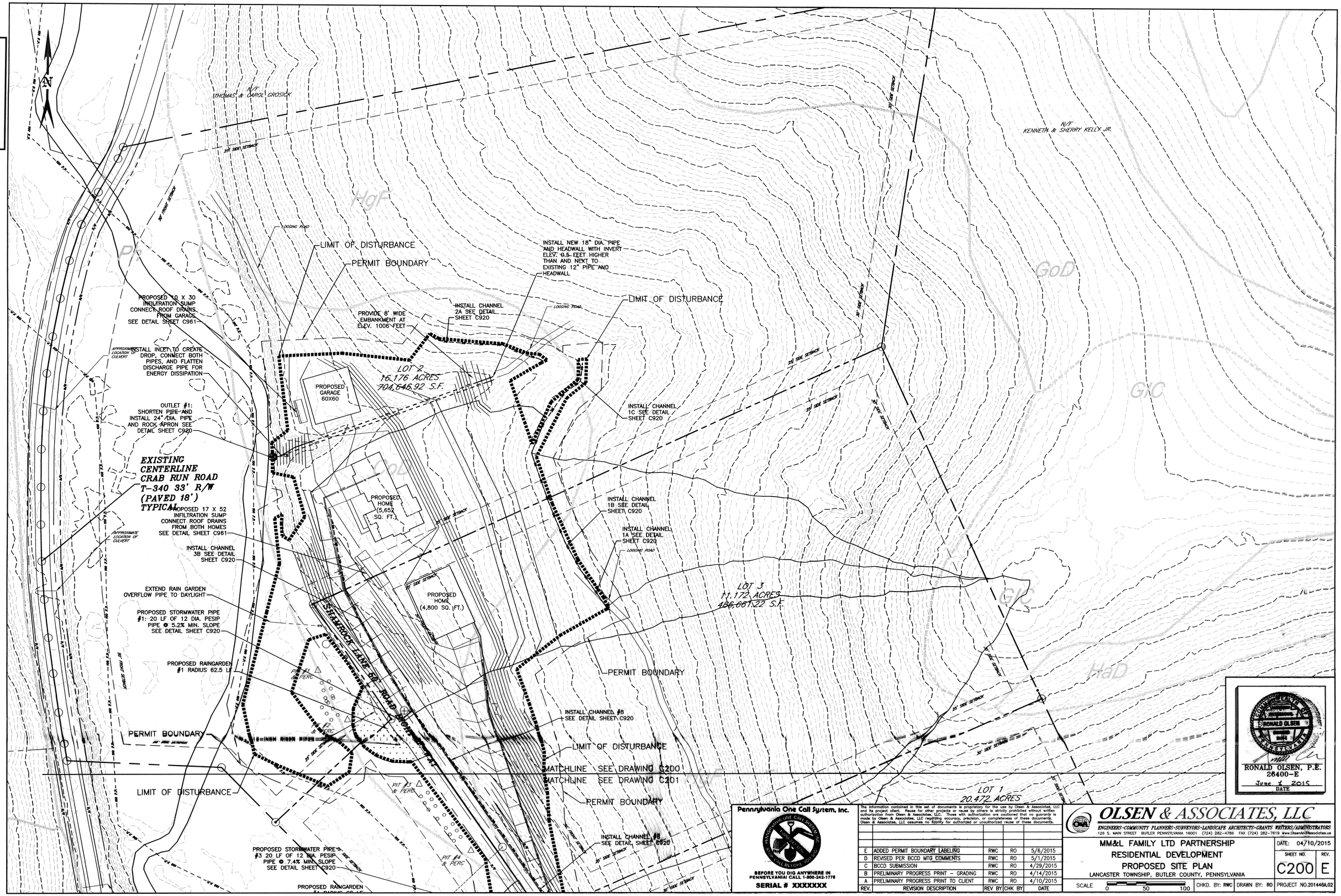
DATE: 04-14-2015
PROJECT NO201446A.02
C000
REV. C

PLAN BOOK 348 PAGE 48



RONALD OLSEN, P.E.
26400-E
June 1 2015
DATE

Pennsylvania One Call System, Inc.

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

SERIAL # XXXXXXX

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REV.	REVISION DESCRIPTION	REV BY	CHK BY	DATE
E	ADDED PERMIT BOUNDARY LABELING	RWC	RO	5/6/2015
D	REVISED PER BCCD MTG COMMENTS	RWC	RO	5/1/2015
C	BCCD SUBMISSION	RWC	RO	4/29/2015
B	PRELIMINARY PROGRESS PRINT – GRADING	RWC	RO	4/14/2015
A	PRELIMINARY PROGRESS PRINT TO CLIENT	RWC	RO	4/10/2015

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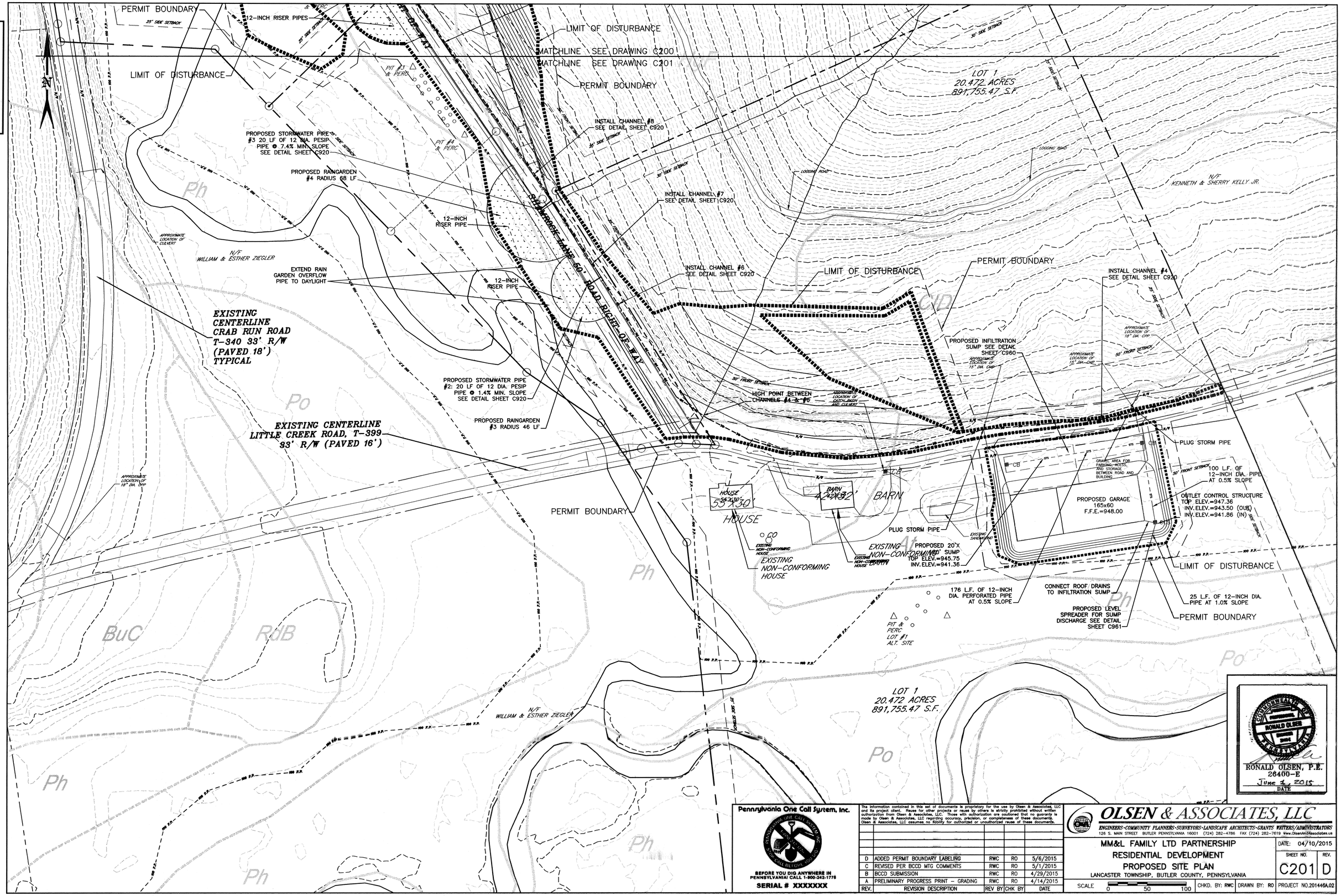
MM&L FAMILY LTD PARTNERSHIP
RESIDENTIAL DEVELOPMENT
PROPOSED SITE PLAN
LANCASTER TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

DATE: 04/10/2015
SHEET NO. C200
REV. E

SCALE 0 50 100
CHKD. BY: RWC
DRAWN BY: RO
PROJECT NO.201446A.02



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MM&L FAMILY LTD PARTNERSHIP
RESIDENTIAL DEVELOPMENT
PROPOSED SITE PLAN
LANCASTER TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

DATE: 04/10/2015
SHEET NO. C201 REV. D

SCALE 0 50 100 | CHKD. BY: RWC | DRAWN BY: RO | PROJECT NO.201446A.02

CONSTRUCTION SEQUENCE:

GENERAL:

1. THE TOTAL PROJECT WORK IS EXPECTED TO BE CONSTRUCTED OVER SEVERAL YEARS AND HAS BEEN BROKEN UP INTO SECTIONS SINCE SOME OF THE AREAS CAN BE DONE IN VARIOUS SEQUENCES OR ONLY REQUIRE SOME AND NOT ALL OF THE E&S CONTROLS. AREAS REQUIRING OTHER AREAS FIRST HAVE BEEN APPROPRIATELY NOTED BELOW. THE LIST BELOW IS IN A GENERAL ORDER OF CURRENTLY ANTICIPATED CONSTRUCTION.

2. TREE CUTTING WORK: A MAJORITY OF THIS HAS ALREADY BEEN COMPLETED REMAINING TREES REQUIRING REMOVAL WILL BE DONE PRIOR TO CONSTRUCTION ACTIVITIES.

3. THE "CRITICAL STAGE" INDICATED BELOW REQUIRES ON-SITE INSPECTION FOR POST CONSTRUCTION CERTIFICATION PURPOSES.

4. PROTECT INFILTRATION BMP AREAS BY LIMITING EQUIPMENT USAGE IN AREAS OF SUMPS AND RAIN GARDENS.

CONSTRUCTION LOT #2 HOUSE-SHEETS C200 & C700:

1. IMPROVE AND MAINTAIN ROCK CONSTRUCTION ENTRANCE (SEE DETAIL SHEET C971) AT BEGINNING OF SHAMROCK LANE AT THE LITTLE CREEK ROAD INTERSECTION.
2. INSTALL PERMANENT UPSTREAM DIVERSION CHANNELS #1 AND #2 WITH ROCK FILTERS AT ENDS OF CHANNELS ON SHEET C700 PER DETAIL ON THIS PAGE. (ALL SECTIONS)
3. **"CRITICAL STAGE" INSTALL SEDIMENT TRAP #1 ON SHEET C700 PER DETAIL SHEET C971. (MAY WANT TO INSTALL ALL OTHER SILT SOCK/SILT TRAPS AT THIS TIME)**
4. INSTALL SILT FENCE "A" AS INDICATED ON SHEET C700 AT TOP OF SLOPE ABOVE CRAB RUN PER DETAIL SHEET C971.
5. INSTALL DRIVEWAY PIPE #1 AS NOTED ON SHEET C200. SEE DETAIL THIS SHEET.
6. INSTALL TEMPORARY CHANNEL #3A AND PERMANENT CHANNEL #3B ALONG DRIVEWAY AS INDICATED ON SHEET C700 AND ADD SUBBASE MATERIAL AS NEEDED TO SLOPE DRIVEWAY TO CHANNEL.
7. INSTALL UTILITIES ALONG SHAMROCK LANE INCLUDING GAS AND ELECTRIC AS INDICATED ON SHEET C200 & C201 PER THE UTILITY INSTALLATION REQUIREMENTS. (SEE THIS SHEET)
8. CONSTRUCT HOUSE
9. **"CRITICAL STAGE"** EXCAVATE AND CONSTRUCT INFILTRATION SUMP FOR HOUSE DIRECTING ROOF DRAINS FROM HOUSE INTO SUMP AS NOTED ON SHEET C200.
10. GRADE YARD AREAS THAT ARE UPSTREAM OF CHANNEL #3A. PORTION OF "CULVERT BACKFILL AREA" SEQUENCE WILL NEED TO BE DONE IN ORDER TO COMPLETE YARD GRADING WORK. PERMANENTLY SEED ALL AREAS ONCE THEY REACH FINAL GRADE
11. PLACE FILL MATERIAL ON SHAMROCK LANE IN ORDER TO BRING UP TO DESIGN SLOPE AS SHOWN ON C200. (RAISE CHANNEL #3 WITH ROADWAY MAINTAINING CHANNEL DEPTH)
12. ONCE UPSTREAM AREAS ARE STABILIZED (DRIVEWAY STONE PLACED & 70% UNIFORM GRASS GROWTH IS ACHIEVED) TEMPORARY PORTION OF CHANNEL #3a AND SILT FENCE "A" CAN BE REMOVED.
13. **"CRITICAL STAGE"** SILT TRAP #1 TO RAINGARDEN #1 CONVERSION:
    A. REMOVE ALL SEDIMENT FROM TRAP. NOTE SIZE CHANGE FROM 41R TO 62.5R.
    B. CUT SOCKS AND MIX COMPOST MATERIAL WITH SOIL BELOW TRAP AREA
    C. PLANT SOILS WITH RAINGARDEN PLANT MIX

CULVERT BACKFILL AREA-SHEETS C200 & C700:

1. ITEMS #1-6 UNDER "CONSTRUCTION LOT #2 HOUSE" ABOVE MUST PRECEED THIS WORK.
2. INSTALL SUPER SILT FENCE "B" AS INDICATED ON PLAN SHEET C700.
3. INSTALL 18" DIA. PARALLEL PIPE AND EMBANKMENT AS INDICATED ON PLAN SHEET C200.
4. TEMPORARILY BLOCK PIPE FLOW AND REMOVE PIPE END SECTION
5. INSTALL INLET BOX AND CREATE DROP CONDITION FROM INLET TO OUTLET
6. PLACE OUTFLOW PIPE AT A 1.00% SLOPE.
7. INSTALL RIPRAP APRON AT PIPE DISCHARGE PER DETAIL ON THIS SHEET.
8. PLACE FILL MATERIAL ABOVE PIPE IN LIFTS UNTIL ELEVATION OF CHANNEL #3A IS REACHED.
9. CONTINUE TO PLACE FILL MAINTAINING SLOPE FROM TOP OF BANK BACK TO CHANNEL #3A. ADJUST LOCATION OF CHANNEL #3A AS NEEDED TO DIRECT AREA TO TRAP.
10. COMPLETE LOT #2 YARD GRADING
11. PERMANENTLY SEED AREAS ONCE FINAL GRADE IS REACHED.
12. REMOVE SILT FENCE "B" AND TEMPORARY CHANNEL #3A ONCE 70% OF UNIFORM GRASS GROWTH HAS BEEN ACHIEVED.

CONSTRUCTION LOT #1 GARAGE-SHEETS C201 & C701:

1. IMPROVE AND MAINTAIN ROCK CONSTRUCTION ENTRANCE (SEE DETAIL SHEET C971) AT BEGINNING OF SHAMROCK LANE AT THE LITTLE CREEK ROAD INTERSECTION.
2. EXCAVATE AND INSTALL ROCK FILTER JUST WEST OF PLASTIC ROADWAY CULVERT NEAR EASTERN PROPERTY LINE OF LOT #1. SEE SHEET C701.
3. RE-GRADE LITTLE CREEK ROAD DITCH FROM DOWNSTREAM TO UPSTREAM. TO CONFORM TO CHANNEL #4. (1% SLOPE) FROM CULVERT TO PROPOSED SEDIMENT TRAP #2. SEE SHEET C201.
4. **PLUG OLD CMP PIPE CULVERTS AS ENCOUNTERED ALONG ROADWAY TO ELIMINATE RUNOFF TO GARAGE CONSTRUCTION AREA. SEE SHEET C201.**
5. INSTALL TEMPORARY SLOPE PIPE SEE SHEET C701.
6. INSTALL TEMPORARY CHANNEL #5 WITH ROCK FILTER AT END SEE SHEET C701
7. **"CRITICAL STAGE"** INSTALL SEDIMENT TRAP #2 BY WIDENING ROADWAY DITCH TO 10' WIDE AND PLACING SILT SOCK BETWEEN ROADWAY AND SLOPE TO A HEIGHT OF 2' SEE SHEET C701
8. WIDEN THE REST OF THE ROADSIDE DITCH TO A WIDTH OF 10' FOR 226' IN LENGTH FOR SEDIMENT TRAP SEE SHEET C701.
9. **"CRITICAL STAGE"** IINSTALL SEDIMENT TRAP #3 ON SHEET C701 PER DETAIL SHEET C971. (MAY WANT TO INSTALL ALL OTHER SILT SOCK/SILT TRAPS AT THIS TIME)
10. INSTALL DRIVEWAY PIPE #2 AS NOTED ON SHEET C201. SEE DETAIL THIS SHEET.
11. INSTALL CHANNELS #6 & #7 ALONG DRIVEWAY. SEE SHEET C201. ADD SUBBASE MATERIAL AS NEEDED IN ORDER TO SLOPE DRIVEWAY TO CHANNEL.
12. INSTALL 18-INCH HIGH SILT FENCE "C" AS SHOWN ON SHEET C701.

LOT #1 GARAGE CONSTRUCTION-SHEETS C201 & C701 CONTINUED:

13. STRIP TOPSOIL FROM GARAGE SITE AND HAUL TO HOUSE SITE
14. **"CRITICAL STAGE"** INSTALL INFILTRATION SUMP SEE DETAIL SHEET C960
15. EXCAVATE "CUT" MATERIAL FROM HILLSIDE AT CORNER OF ENTRANCE TO PROVIDE FILL FOR GARAGE. SEE SHEET C201. INSTALL ROCK CONSTRUCTION ENTRANCE ONCE AREA REACHES ROAD ELEVATION. UNTIL THEN SWEEP LITTLE CREEK ROAD AT THE END OF EACH WORKING DAY TO REVIEW SEDIMENT FROM IT.
16. CONSTRUCT GARAGE STRUCTURE AND DIRECT ROOF DRAINS TO INFILTRATION SUMP SEE SHEET C201.
17. INSTALL UTILITY SERVICE LINES TO GARAGE PER UTILITY INSTALLATION REQUIREMENTS THIS SHEET.
18. ONCE "GARAGE SITE" IS STABILIZED (DRIVEWAY ROAD PLACED & 70% UNIFORM GRASS COVERAGE ON SLOPES) REMOVE SILT FENCE "C".
19. ONCE HILLSIDE AT ENTRANCE IS STABILIZED (70% UNIFORM COVERAGE) SEE SHEET C701.
    A. REMOVE SEDIMENT TRAP #2 SILT SOCK
    B. BACKFILL CHANNEL #5.
    C. REMOVE TEMPORARY SLOPE PIPE
    D. BACKFILL SEDIMENT TRAP #2 TO MAKE IT CONFORM WITH CHANNEL #4 WIDTH
20. **"CRITICAL STAGE"** SILT TRAP #3 TO RAINGARDEN #3 CONVERSION:
    A. **REMOVE ALL SEDIMENT FROM TRAP. NOTE SIZE CHANGE FROM 30R TO 46R**
    B. CUT SOCKS AND MIX COMPOST MATERIAL WITH SOIL BELOW TRAP AREA
    C. PLANT SOILS WITH RAINGARDEN PLANT MIX

CONSTRUCTION LOT #3 HOUSE-SHEETS C200 & C700:

1. ITEMS #1-6 UNDER "CONSTRUCTION LOT #2 HOUSE" ABOVE MUST PRECEED THIS WORK.
2. **"CRITICAL STAGE"** INSTALL SEDIMENT TRAP #4 ON SHEET C701 PER DETAIL SHEET C971. (MAY WANT TO INSTALL ALL OTHER SILT SOCK/SILT TRAPS AT THIS TIME)
3. INSTALL DRIVEWAY PIPE #3 AS NOTED ON SHEET C201 SEE DETAIL THIS SHEET
4. INSTALL CHANNEL #8 ALONG DRIVEWAY AS INDICATED ON SHEET C200 & C201 AND ADD SUBBASE MATERIAL AS NEEDED TO SLOPE DRIVEWAY TO CHANNEL.
5. CONSTRUCT HOUSE
6. PERFORM #9 UNDER CONSTRUCTION LOT #2 HOUSE (INFILTRATION SUMP INSTALLATION)
7. INSTALL ROOF DRAINS AND CONNECT TO INFILTRATION SUMP SEE SHEET C200.
8. INSTALL UTILITIES ALONG PROPOSED DRIVEWAY PER THE UTILITY INSTALLATION REQUIREMENTS. (SEE THIS SHEET)
9. STABILIZE SITE - STONE DRIVEWAY AND 70% UNIFORM GRASS COVERAGE
10. **"CRITICAL STAGE"** SILT TRAP #4 TO RAINGARDEN #4 CONVERSION:
    A. REMOVE ALL SEDIMENT FROM TRAP. NOTE SIZE CHANGE FROM 45R TO 68R.
    B. CUT SOCKS AND MIX COMPOST MATERIAL WITH SOIL BELOW TRAP AREA
    C. PLANT SOILS WITH RAINGARDEN PLANT MIX

CONSTRUCTION LOT #2 GARAGE:

1. ITEMS #1-6 UNDER "CONSTRUCTION OF LOT #2 HOUSE" ABOVE MUST PRECEED THIS WORK.
2. ITEMS #2-8 UNDER "CULVERT BACKFILL AREA" ABOVE MUST PRECEED THIS WORK.
3. CONSTRUCT GARAGE
4. **"CRITICAL STAGE"** EXCAVATE AND CONSTRUCT INFILTRATION SUMP FOR GARAGE DIRECTIONG ROOF DRAINS FROM GARAGE INTO SUMP AS NOTED ON SHEET C200.
5. INSTALL ROOF DRAINS TO INFILTRATION SUMP
6. ONCE 70% UNIFORM GRASS GROWTH HAS BEEN ESTABLISHED REMOVED DOWNSTREAM SILT FENCE.

UTILITY LINE INSTALLATION REQUIREMENTS:

NOTE: EXPOSED TRENCH EXCAVATIONS HAVE HIGH POTENTIAL FOR ACCELERATED EROSION AND SEDIMENT POLLUTION. SINCE THESE EXCAVATIONS ARE USUALLY LOCATED AT LOWER ELEVATIONS ALONG OR ACROSS EARTH DISTURBANCE SITED, OPEN TRENCHES SERVE TO CONCENTRATE SEDIMENT-LADEN RUNOFF AND CONVEY IT TO SITE BOUNDARIES OR WATERWAYS. THE MOST IMPORTANT EROSION AND SEDIMENT POLLUTION CONTROL CONSIDERATION FOR TRENCH CONSTRUCTION IS THE LIMITING AND SPECIFIC SCHEDULING OF WORK ACTIVITIES.

A. ADVANCED CLEARING AND GRUBBING OPERATIONS FOR STRIP UTILITY LINE INSTALLATIONS SHALL BE LIMITED TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.

B. DAILY TRENCH EXCAVATION SHALL BE LIMITED TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.

C. WATER WHICH ACCUMULATES IN THE OPEN TRENCH MUST BE COMPLETELY REMOVED BY PUMPING INTO A FILTER BAG (SEE DETAIL), PRIOR TO PIPE PLACEMENT OR BACKFILLING OPERATIONS.

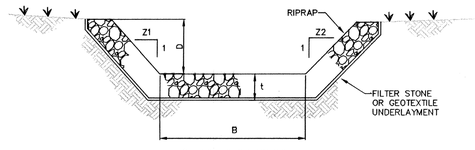
D. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA SHALL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES/FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE AT THE END OF EACH WEEK.

WASTE AND RECYCLING NOTE:

1. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

2. ANTICIPATED WASTE INCLUDES GENERAL CONSTRUCTION MATERIALS INCLUDING SILT FENCING, SILT SOCK STAKES, SILT SOCK MESH, LUMBER, BLOCK, AND CONCRETE.

3. CONCRETE AND BLOCK MAYBE CRUSHED AND USED AS BACKFILL MATERIAL WHILE ALL OTHER SHOULD BE DISPOSED OF IN AN APPROVED TRASH CONTAINER AND TAKEN OFFSITE.



(LOOKING DOWNSTREAM)

CHANNEL CROSS-SECTION

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	Z1 (FT)	Z2 (FT)	RIPRAP GRADATION (R-_)	RIPRAP DEPTH t (IN)	UNDERLAYMENT	UNDER-LAYMENT THICKNESS
3-B	2+00 - 4+86	1	1.5	2	2	3	9	FS-2 STONE	3'

NOTES:

FILTER STONE UNDERLAYMENT FOR BED SLOPES ≥ 0.10 FT/FT (10 %) SHALL BE USED.

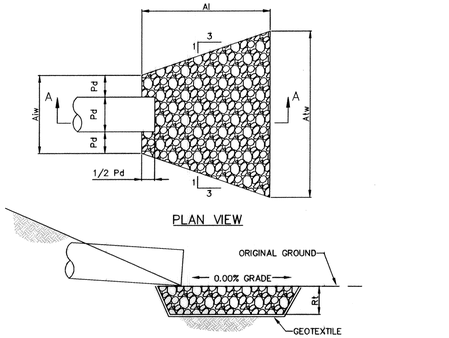
CHANNEL DIMENSIONS ARE FOR THE COMPLETED CHANNEL AFTER ROCK PLACEMENT. CHANNEL MUST BE OVER-EXCAVATED A SUFFICIENT AMOUNT TO ALLOW FOR THE VOLUME OF ROCK PLACED WITHIN THE CHANNEL WHILE PROVIDING THE SPECIFIED FINISHED DIMENSIONS.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE.

DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

THE MINIMUM ROCK THICKNESS (t) SHALL BE 1.5 TIMES THE MAX ROCK SIZE.

STANDARD CONSTRUCTION DETAIL #6-3
RIPRAP CHANNEL
NOT TO SCALE



OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R-_	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
1	24	5	27	20	6	26

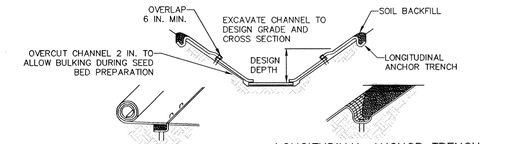
NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

STANDARD CONSTRUCTION DETAIL #9-2
RIPRAP APRON AT PIPE OUTLET
NO FLARED ENDWALL
NOT TO SCALE



(LOOKING DOWNSTREAM)

CHANNEL CROSS-SECTION

* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING *
1-A	0+00 - 0+57	4	1	8	2	2	SEEDING & JUTE MAT
1-B	0+57 - 2+23	4	1	8	2	2	SEEDING & JUTE MAT
1-C	2+23 - 3+61	4	1	8	2	2	SEEDING & JUTE MAT
2-A	0+00 - 1+53	2	1	6	2	2	SEEDING & JUTE MAT
3-A	0+00 - 2+00	3	1	7	2	2	SEEDING & JUTE MAT
4	0+00 - 6+75	4	1.5	7	2	2	SEEDING & JUTE MAT
5	0+00 - 2+06	1	1	5	2	2	BARE EARTH
6	0+00 - 2+30	1	1.5	7	2	2	SEEDING & JUTE MAT
7	0+00 - 1+15	1	1.5	7	2	2	SEEDING & JUTE MAT
8	0+00 - 3+28	2.1	1.5	8.1	2	2	SEEDING & JUTE MAT

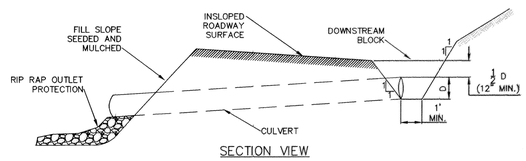
NOTES:

ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION. SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL
NOT TO SCALE



NOTES:

CUT AND FILL SLOPES SHALL BE STABILIZED IMMEDIATELY UPON COMPLETION OF ROADWAY GRADING. THESE AREAS SHALL BE BLANKETED WHEREVER THEY ARE LOCATED WITHIN 50 FEET OF A SURFACE WATER OR WITHIN 100 FEET OF AN HQ OR EV SURFACE WATER OR WHERE A SUITABLE VEGETATIVE FILTER STRIP DOES NOT EXIST.

A TOP DRESSING COMPOSED OF HARD, DURABLE STONE SHALL BE PROVIDED FOR SOILS HAVING LOW STRENGTH.

ROADSIDE DITCHES SHALL BE PROVIDED WITH ADEQUATE PROTECTIVE LINING.

ADEQUATELY SIZED CULVERTS OR OTHER SUITABLE CROSS DRAINS SHALL BE PROVIDED AT ALL SEEPS, SPRINGS, AND DRAINAGE COURSES. DITCH RELIEF CULVERTS SHALL BE PROVIDED AT THE INTERVALS INDICATED ON TABLE 3.3 OR TABLE 3.4 OF THE PA DEP EROSION CONTROL MANUAL. RIPRAP OUTLET PROTECTION TO BE SIZED ACCORDING TO ANTICIPATED DISCHARGE VELOCITY.

ROADWAY SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED ROADWAYS, DITCHES, OR CROSS DRAINS SHALL BE REPAIRED IMMEDIATELY.

STANDARD CONSTRUCTION DETAIL #3-4
INSLOPED ROADWAY
NOT TO SCALE

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REV.	REVISION DESCRIPTION	REV BY	CHK BY	DATE
C	REVISED PER BCCD MTG COMMENTS	RWC	RO	5/1/2015
B	BCCD SUBMISSION	RWC	RO	4/29/2015
A	PRELIMINARY PROGRESS PRINT	RWC	RO	4/21/2015

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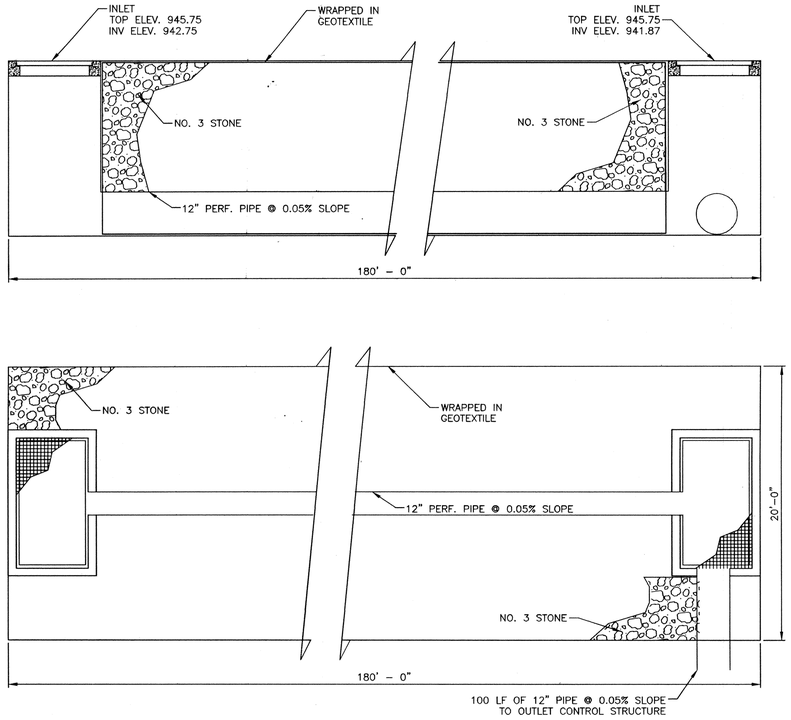
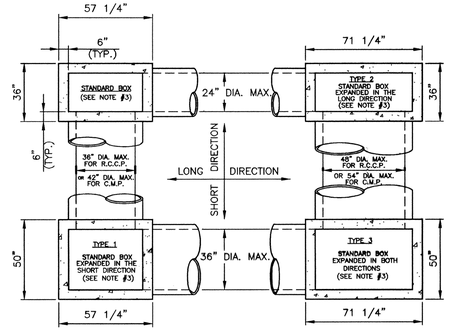
MM&L FAMILY LTD PARTNERSHIP
RESIDENTIAL DEVELOPMENT
CONSTRUCTION DETAILS
LANCASTER TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

DATE: 4/21/2015
SHEET NO. C920
REV. C
SCALE 0 0 0
CHKD. BY: RWC
DRAWN BY: RWC
PROJECT NO. 201446A.02



SW040 — INFILTRATION SUMP DETAIL
(NOT TO SCALE) SW040 REV: 03/17/15



NOTES:
1. CONSTRUCT INLET BOXES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 713.2(d), FOR PRECAST CEMENT CONCRETE UNITS.

2. ONLY PRECAST INLET BOXES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED.

3. PROVIDE STANDARD INLET BOXES AND COVER ADJUSTMENT SLABS WITH A 24" X 45 1/4" OPENING TO ACCOMMODATE STANDARD TOP COMPONENTS.

4. INLETS THAT EXCEED THE MAXIMUM HEIGHT SHOWN SHALL REQUIRE A SPECIAL DETAIL AND DESIGN FOR THE INLET WALLS AND BASE. CONSTRUCT INLETS THAT EXCEED 5 FEET IN HEIGHT WITH STEPS SIMILAR TO MANHOLES.

5. LOCATE PIPE OR PIPES, AS INDICATED, WITH THE INLET BOTTOM SHAPED TO CHANNEL THE FLOW TOWARD THE OUTLET PIPE.

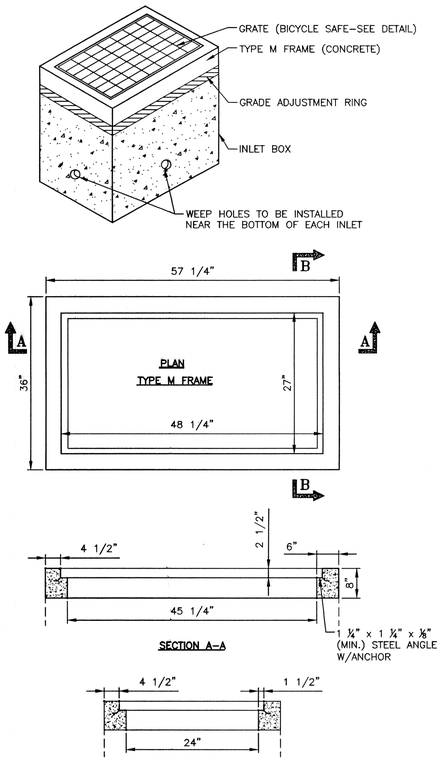
6. PLACE SUBBASE MATERIAL MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 350.2, IN 4 INCH LAYERS, COMPACTED TO A DENSITY SATISFACTORY TO THE ENGINEER AND INCIDENTAL TO THE INLET PAY ITEM.

7. FOR PIPE DIAMETERS LARGER THAN 36" IN THIS WALL FOR A TYPE 1, USE A MODIFIED TYPE I INLET BOX.

8. FOR PIPE DIAMETERS LARGER THAN 48" R.C.C.P. OR 54" C.M.P. IN THIS WALL FOR A TYPE 2, USE A MODIFIED TYPE II INLET BOX.

9. FOR PIPE DIAMETERS LARGER THAN 48" R.C.C.P. OR 54" C.M.P. IN THE LONG DIRECTION OR LARGER THAN 36" IN THE SHORT DIRECTION, A SPECIAL DETAIL AND DESIGN IS REQUIRED.

SW006 — PRECAST CONCRETE INLET BOXES
(NOT TO SCALE) SW006 REV: 03-22-07



NOTES:
1. THIS SHEET DEPICTS THE SHAPE AND DIMENSIONS REQUIRED FOR UNIFORMITY AND COMPATIBILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR MANUFACTURING AND HANDLING PRECAST TOP UNITS.

2. CAST-IN-PLACE TOP UNITS MAY BE MONOLITHIC WITH THE INLET BOX.

3. PROVIDE ANGLES EMBEDDED IN THE CONCRETE AS A BEARING AREA FOR THE GRATE FOR ALL TOP UNITS WHICH SEAT THE GRATE DIRECTLY WITHIN THE UNIT.

SW010 — TYPE M INLET AND TYPE M FRAME
(NOT TO SCALE) SW010 REV: 10-24-06

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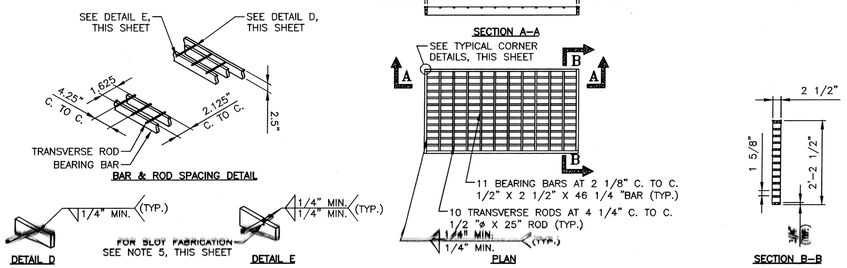


NOTES:
1. THIS SHEET DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGEABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING. ONLY GRATES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE PERMITTED. FOR A BULLETIN 15 LISTING, SUBMIT A 22"x36" REPRODUCIBLE SHOP DRAWING TO THE BUREAU OF CONSTRUCTION AND MATERIALS, MATERIALS AND TESTING DIVISION FOR REVIEW AND APPROVAL.

2. WELD STRUCTURAL STEEL GRATES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408 SECTION 1105.03(R). WELDING SHOPS ARE NOT REQUIRED TO BE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) CERTIFIED.

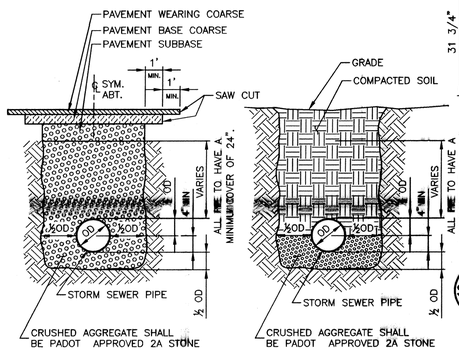
3. PROVIDE TRANSVERSE RODS, MEETING THE REQUIREMENTS OF AASHTO-M227 OR M255, GRADE 70, 75 OR 80, FLUSH WITH THE GRATE SURFACE.

4. PROVIDE BICYCLE-SAFE, STRUCTURAL STEEL OR CAST IRON VANE GRATES FOR INSTALLATION ONLY WHERE BICYCLE TRAFFIC IS ANTICIPATED SUCH AS CURBED ROADWAYS IN URBAN AREAS OR ROADWAYS SPECIFICALLY ESTABLISHED AND SIGNED AS BIKEWAYS OR HAVING BIKE LANES. ALTERNATE BICYCLE-SAFE GRATE DESIGNS SHALL REQUIRE A SHOP DRAWING SUBMISSION, AS SPECIFIED IN NOTE 1, AND SHALL CONFORM TO THE DIMENSIONAL REQUIREMENTS FOR PROPER INSTALLATION WITH THE CURRENT CONCRETE TOP UNITS.

5. FABRICATE SLOTS BY BURNING, DRILLING , SHEARING OR PUNCHING. HAVE THE BOTTOM OF ALL BURNED OR DRILLED SLOTS CONFORM TO THE SHAPE OF THE ROD.

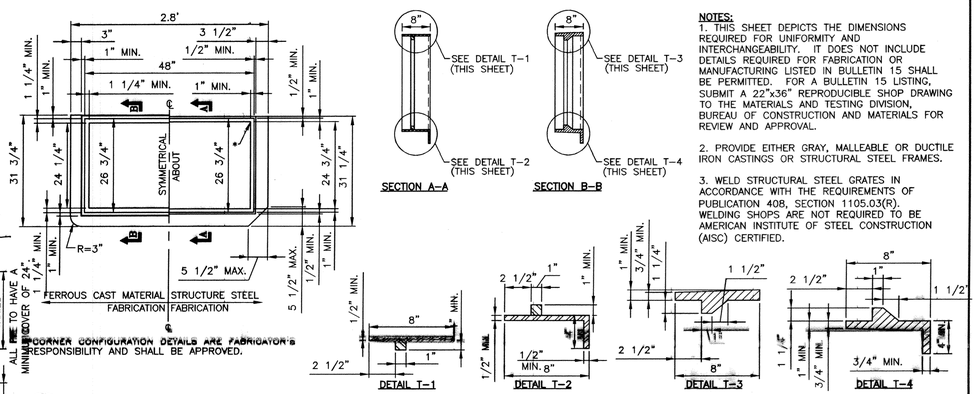
6. INSTALL STRUCTURAL STEEL GRATES WITH THE GRATE SPACERS LOCATED FLUSH ALONG THE TOP SURFACE OF THE GRATE.

SW009 — BICYCLE SAFE GRATE DETAILS
(NOT TO SCALE) SW009 REV: 05-15-07



NOTE: TRENCH WIDTH SHOWN ARE MINIMUM WIDTHS AND MAY BE WIDENED AT DISCRETION OF THE CONTRACTOR TO ACCOMODATE TRENCH BOXES.

SW020 — STORM SEWER TRENCH DETAILS
(NOT TO SCALE) SW020 REV: 11-09-12



NOTES:
1. THIS SHEET DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGEABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING LISTED IN BULLETIN 15 SHALL BE PERMITTED. FOR A BULLETIN 15 LISTING, SUBMIT A 22"x36" REPRODUCIBLE SHOP DRAWING TO THE MATERIALS AND TESTING DIVISION, BUREAU OF CONSTRUCTION AND MATERIALS FOR REVIEW AND APPROVAL.

2. PROVIDE EITHER GRAY, MALLEABLE OR DUCTILE IRON CASTINGS OR STRUCTURAL STEEL FRAMES.

3. WELD STRUCTURAL STEEL GRATES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 1105.03(R). WELDING SHOPS ARE NOT REQUIRED TO BE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) CERTIFIED.

SW023 — INLET FRAME
(NOT TO SCALE) SW023 REV: 04-04-07

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REV.	REVISION DESCRIPTION	REV BY	CHK BY	DATE
B	BCCD SUBMISSION	RWC	RO	4/29/2015
A	SUBMISSION TO TOWNSHIP	RWC	RO	3/17/2015

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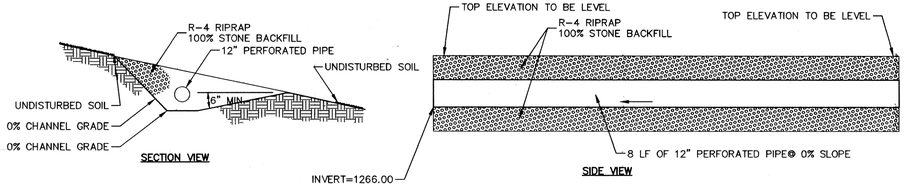
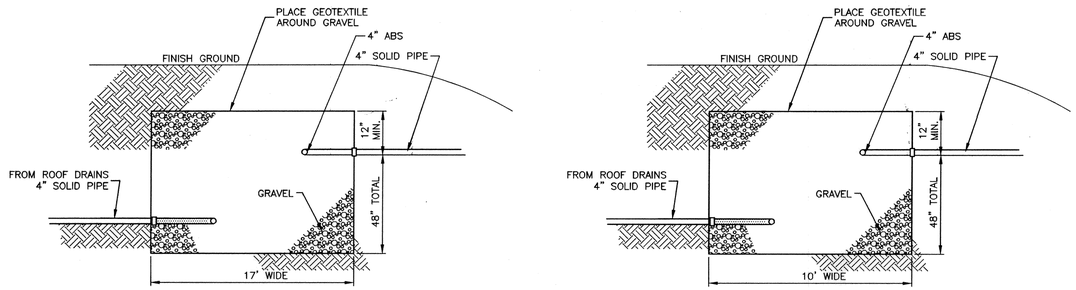
MM&L FAMILY LTD PARTNERSHIP
PROPOSED GARAGE
STORMWATER DETAILS
LANCASTER TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

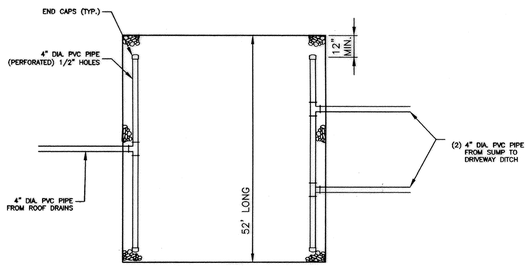
DATE: 03/17/2015
SHEET NO. C960
REV. B

SCALE 0 0 0 | CHKD. BY: RWC | DRAWN BY: RO | PROJECT NO. 201448A

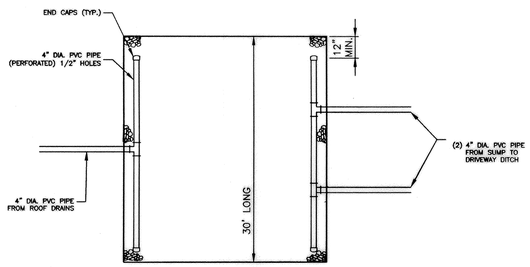


8 **STONE LEVEL SPREADER**
(NOT TO SCALE) SW041 REV: 02-24-15

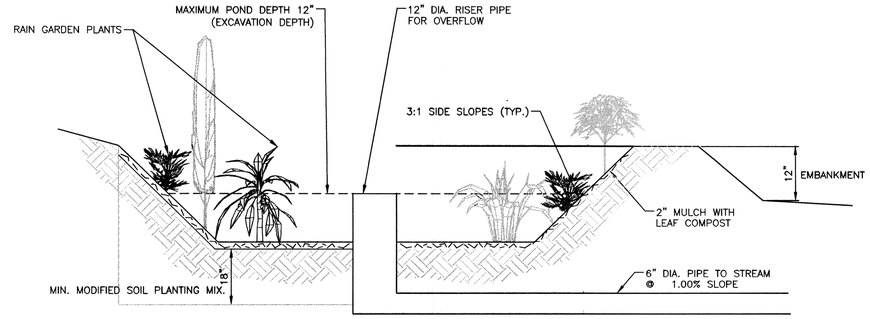




9 **LOT #2 & #3 HOUSES SUMP DETAIL**
(NOT TO SCALE) SW039 REV: 04-29-15



10 **LOT #2 GARAGE SUMP DETAIL**
(NOT TO SCALE) SW038 REV: 04-29-15



NOTES:
1. RAIN GARDEN PLANTS SHALL BE NATIVE FLOODPLAIN PLANTS SPECIES

RAIN GARDEN NO.	MAXIMUM DRAINAGE AREA (ACRES)	RISER PIPE NO.	INVERT ELEV. (FT)	LENGTH OR RADIUS (FT)	WIDTH OR RADIUS (FT)	STORAGE VOLUME TOTAL (FT^3)
1	3.38 ACRES	2	945	62.5 R	62.5 R	6,136 FT^3
3	2.11 ACRES	1	943	46 R	46 R	3,324 FT^3
4	4.62 ACRES	2	943	68 R	68 R	7,263 FT^3

11 **RAIN GARDEN DETAIL**
(NOT TO SCALE)

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REV.	REVISION DESCRIPTION	REV BY	CHK BY	DATE
A	BCCD SUBMISSION	RWC	RO	4/29/2015

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PROPOSED GARAGE
STORMWATER DETAILS
LANCASTER TOWNSHIP, BUTLER COUNTY, PENNSYLVANIA

DATE: 04/29/2015
SHEET NO. C961 REV. A
SCALE 0 0 0 CHKD. BY: RWC DRAWN BY: RO PROJECT NO. 201446A