

MOUNT JOY TOWNSHIP

LANCASTER COUNTY, PENNSYLVANIA

Application for Consideration of a Subdivision and/or Land Development Plan

For Mount Joy Township Use Only:

M.J.T.P.C. File No.:	24-05-MLDP	Date of Receipt/Filing:	January 23, 2024
School District:	X Donegal	Elizabethtown	

The undersigned hereby applies for approval under Chapter 119, Subdivision and Land Development, of the Code of the Township of Mount Joy for the Plan submitted herewith and described below:

Plan Name:	Pi	oposed Bu	oposed Building for Jay Garman							
Plan No.:	5	947-23-01				Pla	n Dat	e: 1 /	19/2024	
Location:	:	1267 Risse	r Mill Road							
Property Ow	ner:	Jay W. G	arman and Emi	ly R.	Garma	n				
Owner Addre	ess:	1267 I	Risser Mill Road							
Telephone N	0.:	717 3	363-3375							
E-mail:		jwg	1893@gmail.co	m						
Deed Referen	nce:	Instr	ument #674445	1	Tax Pa	arcel	No.:	461-1)741-0-0000	
Plan Type:			Sketch				Preli	minary	Fi	nal
			Lot Line Char	ige		x	Mine	or Agric	ultural or Land Dev	velopment
Description:	Const	ruction of	a 9,600 s.f. buil	ding	to hou	se eo	quipm	ent for f	ed grinding busines	s along
	with	parking ac	cess drive, stori	mwa	iter ma	nage	ment	facilities	, and related appurt	enances.
Zoning Distri	ict:	Agricu	ltural							
Is a zoning ch	nange	necessary	? no	If y	ves, ple	ase s	specif	y:		
Is/was a zoni	ng va	riance, spe	ecial exception,	or	conditi	onal		yes, S.E.	If yes, attach ZH	B decision.
use approval	neces	sary?								
Total Acreage	e:	Gross	63.96 Acres No	rth o	f PA Rt	283,	0.87	Ac. Sout	of Rt 283	
Name of app	licant	(if other t	han owner):							
Address:										
Telephone N	o.:									
E-mail:										
Firm which p	repar	ed plan:	TeamAg, Inc.							
Address:		120 La	ke St. Ephrata,	PA 1	7522					
Phone No.:		717	721-6795							
Person respon	nsible	for plan:	Cameron L.	Ren	ehan					
E-mail:		Cam	eronR@teamag	inc.	com					

Plan & Project Information

Proposed Lots and Units

	# of Lots	# of Units		# of Lots	# of Units	
Total #		1	Mixed Use			
Agricultural		1	Single Family Detached			
Commercial			Multifamily (attached-sale)			
Industrial			Multifamily (attached-rental)			
Institutional			Other:			
Total Square Feet of Ground	footprint): 9,6	500				
Total Square Feet of Existing	Total Square Feet of Existing Structures (all floors):					
Total Square Feet of Propose	s): 9,6	500				
Total Square Feet (or Acres)	/Other Public Use:	0				
Linear feet of new street:		0				
Identify all street(s) not proposed for dedication:						

Type of water supply proposed:

Public (Live)		Community
Public (Capped)	X	Individual

Type of sanitary sewage disposal proposed:

Public (Live)		Community
Public (Capped)	×	Individual

The undersigned hereby represents that, to the best of his knowledge and belief, all information listed above is true, correct and complete.

Gy and Signature of Landowner of Applicant

1-15-2024 Date



RECEIVED Jan 23 2024

January 23, 2024

24-05-MLDP

MOUNT JOY TOWNSHIP

Justin S. Evans – Township Community Development Director/Zoning Officer Mount Joy Township 8853 Elizabethtown Road Elizabethtown, PA 17022

Subject: **Proposed Building for Jay Garman Minor Land Development Plan** Waiver Requests 1267 Risser Mill Road, Mount Joy, PA 17552

Dear Justin,

On behalf of the applicant, we request the following waivers/modifications for consideration by the Board of Supervisors in conjunction with the above Land Development Plan.

Please note that we have submitted a copy of this letter directly to Ben Craddock, P.E. at Lancaster Civil Engineering Co. via email.

MODIFICATION REQUESTS

1. SALDO Section 119-31.C.3 - Existing features within 200' of the tract

This section of the SALDO requires showing existing contours and existing features on and within 200' of the subject tract. We request a modification of this section to allow that topography and existing features located outside of the limits of disturbance be based on Lancaster GIS information.

Justification for the request is that field-surveyed topography and existing features located within the limits of disturbance are provided, and areas not impacted by the project utilize the GIS and LiDAR information which is adequate for purposes of this minor project.

2. SALDO Section 119-32.A - Water and sewer facilities feasibility report

This section of the Township SALDO requires a feasibility study on connection to existing public sewer and water systems.

We request a modification of this section to allow the existing on-lot well and septic system to be utilized for this project in the Agricultural Zone due to the rural location and minor nature of the proposed agri-business. A sewage permit application will be filed for the connection of the proposed building sewer to the existing sewage system. The existing well on this 62 acre farm will be utilized and is functioning. Less than 400 GPD sewage flows is anticipated to be generated by the project.

3. <u>SALDO Section 119-52.J(3)</u> - Improvements of existing streets

This section of the Township Subdivision and Land Development Ordinance requires when a land development abuts an existing Township street, the street shall be improved to the cartway width in Subsection J and additional right-of-way shall be provided, along with curbing and sidewalk and other street improvement shall be constructed.

We request a modification of this section to allow that no improvements be required at this time along the road frontages of the applicant's 62 acre farm property located in the Agricultural Zone due to the rural location and minor nature of the proposed agri-business. Furthermore, Risser Mill Road along the property frontage has a 25' wide right-of-way from road centerline, which meets Township standards. The road along the property frontage is 19' wide and has no existing curb similar to many other rural roads in the Township. We do not believe road widening and curbing is appropriate in this location.

4. <u>SALDO Section 119-53.B.1 & 119-53.C</u> - Deferral of sidewalk and curbing

This section of the SALDO requires curbs and sidewalk on streets and access drives that serve land developments inside and outside the designated growth area.

We request a modification of this section to allow that no improvements be required at this time along the road frontage and access drive to the applicant's 62 acre farm property located in the Agricultural Zone due to the rural location and minor nature of the proposed agri-business. We do not believe curb and sidewalk is appropriate in this location as none exists in the vicinity of the property.

5. SALDO Section 119-56.D & E - Easements

This section of the SALDO requires 30 feet wide easements for all stormwater or surface water drainage facilities and utility lines that serve land developments.

We request a modification of this section to allow that no utility easements be proposed for the project due to the large tract size and agricultural nature of the project.

6. SWMO Section 113-32.A.2.c - Maximum Loading Ratios

This section of the Township Stormwater Management Ordinance requires a maximum of loading ratio of 3:1 impervious drainage area to infiltration area and 5:1 total drainage area to infiltration area for stormwater volume control facilites.

We propose the infiltration basin to have slightly higher loading ratios of 3.2:1 impervious drainage area to infiltration area and 5.7:1 total drainage area to infiltration area.

Justification for the request is that we have maximized the basin footprint with consideration to existing site constraints including the existing drainfield upslope of the basin, the existing pond downslope of the basin, and existing fencing/garden area to the west.

We believe these are reasonable loading ratios considering that the basin test pits show relatively deep soils in the basin with no bedrock encountered. No karst features were identified on the site. See January 16, 2024 Lancaster Geology Karst Evaluation for

Stormwater Management. The recommendations of the geologist report will be included on the plan to minimize sink hole potential.

We would appreciate your review at your earliest convenience. Should you have any questions, or require additional information, please contact our office.

Sincerely,

Cound the for

Cameron L. Renehan, P.E. Engineer - TeamAg Inc.

Enclosures

c: Ben Craddock, P.E. (via email) Jay Garman

ANNA ONE CALL Software of the software of the	RESPONDING UTILITIES: FIRSTENERGY CORPORATION 21 S MAIN ST AKRON, OH. 44308 CONTACT: MELLYSSA ADAMS madams@firstenergycorp.com 330-604-4073 MOUNT JOY TOWNSHIP ADDRESS: 8853 ELIZABETHTOWN RE ELIZABETHTOWN, PA. 17022 CONTACT: KEN EBERSOLE KEN@MTJOYTWP.ORG 717-673-2054	PPL ELECTRIC UTILITIES CORPORATION 437 BLUE CHURCH RD PAXINOS, PA. 17860 CONTACT: DOUG HAUPT dihaupt@pplweb.com 570-490-5684 D UGI UTILITIES INC 1301 AIP DR MIDDLETOWN, PA. 17057 CONTACT: STEPHEN BATEMAN sbateman@ugi.com 610-807-3174	MINOR
CARBONATE GEOLOGY CER I,, 20 Date	<u>TIFICATION</u> _ hereby certify that the stormw 	ater management facilities are underl n Baughman, P.G.	ain by carbonate geology.
STORM DRAINAGE PLAN CEI	RTIFICATION		NNWEALA
I, hereby certify that, to the best designed in conformance with 0	of my knowledge, the stormwa Chapter 119, Subdivision and La	ter management facilities shown and and Development, and Chapter 113, S	described hereon are stormwater Management. MARK D. MYERS ENGINEER No.040678E
STATEMENT OF ACCURACY	(PLAN)		14SYLVATOD
I, hereby certify that, to the best accuracy required by the Chapt , 20	of my knowledge, the survey a er 119, Subdivision and Land D	nd plan shown and described hereon evelopment.	is true and correct to the
STORMWATER FACILITY PEF I, the undersigned, hereby repre BMPs, facilities, areas, or struct agreement is part of the stormw	RMANENCE STATEMENT esent that no person shall modif cures without the written approva vater management site plan.	y, remove, fill, landscape, or alter any al of Mount Joy Township. The operat	stormwater management ion and maintenance
, 20	Jay Wende	ell Garman	
,20	Fmily Rose	Garman	
Commonwealth of Pennsylvania		IT OF FLAN	
On this, the day of Jay Wendell Garman and Er owners of the property show same to be their act and play proposed public property (ex	, 20 <u>mily Rose Garman</u> , who being d on on this plan, that the plan then n, that they desire the same to b accepting those areas labeled "No	, before me, the undersigned luly sworn according to law, depose a reof was made at their direction, that be recorded, and that all streets and o ot for Dedication") are hereby dedicat	, personally appeared nd say that they are the hey acknowledge the ther property identified as ed to the public use.
Jay Wendell Garman	Emil	y Rose Garman	
Notary Public			
My commission expires	, 20		
LANCASTER COUNTY PLANN	IING DEPARTMENT REVIEW (CERTIFICATE	
This plan, bearing LCPC File No on, amended. This certificate does regulations, or laws of the local	o, was review 20 as required by the Per not represent nor guarantee the municipality, the Commonwealt	wed by the staff of the Lancaster Cou nnsylvania Municipalities Planning Co at this plan complies with the various th, or the Federal Government.	nty Planning Department de, Act 247, of 1968, as ordinances, rules,
* Signature of the Chairper	son or their designee		
MOUNT JOY TOWNSHIP PLAI	NNING COMMISSION REVIEW	/ CERTIFICATE	
At a meeting on approved this project including to , based upon its confect Stormwater Management.	the complete set of plans which prmity with the standards of Cha	, 20 the Mount Joy Town are filed in Mount Joy Township Plan apter 119, Subdivision and Land Deve	ship Planning Commission ning Commission File No. lopment and Chapter 113,
MOUNT JOY TOWNSHIP FINA	L PLAN APPROVAL CERTIFIC	CATION Mount Joy Township Board of Super	/isors approved this
project, including the complete	set of plans and information that	t are filed with the Township in File No	b. , based

R LAND DEVELOPMENT PLAN PROPOSED BUILDING

SITE ADDRESS: 1267 RISSER MILL ROAD MOUNT JOY, PA 17552

MOUNT JOY TOWNSHIP LANCASTER COUNTY, PA

> Owner/Developer: JAY GARMAN

	<u>SHEEI INDEX</u>
TS-1	- TITLE SHEET*
EX-1	- EXISTING CONDITIONS PLAN
SP-1	- OVERALL SITE PLAN*
ES-1	- EROSION CONTROL PLAN
ES-2	- EROSION CONTROL PLAN
ES-3	- EROSION CONTROL DETAILS
PC-1	- OVERALL PCSM PLAN*
PC-2	- PCSM PLAN*
PC-3	- PCSM DETAILS & PROFILES*

*TO BE RECORDED

REQUESTED MODIFICATIONS/WAIVERS The following waivers/modifications have been requested:		
Mount Joy Township SALD Ordinance: 1. Section 119-31.C.3 - Existing features within 200' of the tract 2. Section 119-32.A - Water and Sewer Feasibility Report 3. Section 119-52.J(3) - Improvements of existing streets 4. Section 119-53.B.1 & 119-53.C - Deferral of sidewalk and curbing 5. Section 119-56.D & E - Easements	<u>DATE</u>	<u>ACTION</u>
Mount Joy Township Stormwater Management Ordinance: 1. Section 113-31.32.A.2c - Maximum Loading Ratios	DATE	ACTION

ZONING CRITERIA - AGRICULTURAL (FARM-RELATED BUSINESS)

	Required	Existing	Proposed
Minimum lot size (Area)	10 ac	62.53	n/a
Minimum yard dimensions:			
Front yard, from ROW	50 ft	n/a	374 Ft
Side yard	20 ft	n/a	24 Ft
Rear yard	50 ft	n/a	179 Ft
Minimum lot width	100 ft	2600 ft	2600 ft
Minimum lot depth	150 ft	510 ft	510 ft
Maximum Height, Ag Use	n/a	n/a	30 Ft
Maximum Building Coverage	20%	0.6% (15,307 sf)	0.9% (24907 sf)
Maximum Impervious Coverage	25%	1.0% (28,324 SF)	2.6% (70,894 SF)
Units of Occupancy		1 unit	1 unit
Density		0.016 unit/acre	0.016 unit/acre

NOTICE

According to County records, the subject property is subject to the Pennsylvania Farmland and Forest Land Assessment Act of 1974 (A.k.a. The Clean and Green Act), Act 319 of 1974, P.L. 973; 72 P.S. 5490.1, as amended, and as further amended by Act 156 of 1998, as amended. These Acts provide for preferential property tax assessment and treatment. It is the property owner's responsibility to be aware of the laws, rules and regulations applicable to his or her property, including the following provisions: (a) preferential property tax assessment and treatment will remain in effect continuously until the land owner changes the agricultural use from the approved category (b) If a transfer, split-off or separation of the subject land occurs, the property owner is responsible for submitting 30 days' notice to the County Assessor of a proposed change in use of the land, a change in ownership of any portion of the land, or any type of division or conveyance of the land. (c) the payment of roll-back tax, plus interest, for the period of enrollment, or a period not to exceed 7-years, whichever is less, may be required; (d) if the property owner fails to provide 30 days' notice to the County, the property owner may be subject to a \$100.00 civil penalty; (e) if the property owner fails to pay the roll-back tax, a municipal lien could be placed on the property under existing delinquent tax law.

GENERAL NOTES

Existing Site Data	
Total Area:	6
Source of Title:	D
	Pa
Owners:	Ja
	12
	Μ
Developer:	Ja
Property boundary	Info
6744451) and a red	cord
by D.C. Gohn Asso	ociat
-	

3. Topographical information within the limits of disturbance for this plan was obtained from a GPS survey (Trimble RTK--Engineering Precision) conducted on July 17, 2023 by TeamAg. The horizontal datum is WGS-1984, PA South and the vertical datum is NAVD88. Topography shown outside the limits of disturbance is taken from PASDA LiDAR.

4. No changes shall be made to these plans without the written permission of the client, owner, Mount Joy Township, and TeamAg. TeamAg will not be responsible for unauthorized revisions to the plan.

6. All accessible parking spaces, sidewalks, and ramps shall be in conformance with the most recent A.D.A. accessibility guidelines. 7. No FEMA floodplains are located on the subject property per FEMA Flood Insurance Rate Map Panel 42071C0119F, effective on 4/5/2016

8. Property has a Deed of Agricultural Conservation Easement to the Commonwealth of Pennsylvania in perpetuity (Deed Reference #5685464).

9. No changes shall be made to these plans without the written permission of the client, owner, Mount Joy Township, and TeamAg. TeamAg will not be responsible for unauthorized revisions to the plan. 10. A Wetland Determination Report by Vortex Environmental, Inc. dated January 13, 2024 indicates that no wetlands exist on the subject

project site. 11. Lancaster Geology has prepared a geology investigation of the project site dated January 16, 2024. The site is mapped by PA DCNR as being underlain with Hershey and Myerstown Formations which consists of Ordovician Argillaceous Limestoneand conglomerate of dolomite (Carbonate Geology). If any potential sink holes are encountered during construction, the owner/contractor shall contact the project geologist to assist in repair/remediation of any karst feature.

12. A well is exists on the property. The proposed building will utilize the existing septic facilities on the property. Sewage flows generated by the project are anticipated at less than 400 GPD. 13. Nothing shall be placed, planted, set, or put within the area of the stormwater easements that would obstruct or adversely affect the

function of the storm water management facilities. All federal, state, and local laws, rules and regulations covering the construction of this facility shall be strictly followed. 14. No structures, trees, landscaping walls, fences, grading or other visual obstructions may be constructed, installed or performed within the area of the clear sight triangle which would obscure the vision of motorists. Clear sight triangles shall be formed by the center lines of the of the intersecting street and driveway and the stopping sight distance as measured along the centerline of the driveway 15 feet from the white line/edge of paving and along the street centerline in both directions from the driveway centerline for the required safe stopping sight distance as indicated on the plans. Lot(s) which contain a clear sight triangle shall include the above restrictions within

the lot's deed. 15. Act 187: It is the duty of the contractors to comply with the provisions of the 'PA One-Call' utility check before performing any excavation work. The toll-free number of the One-Call system is 1-800-242-1776.

ZONING NOTES

criteria for special exceptions.

Hearing Board on September 6, 2023 subject to the following conditions: 4.1. The Applicant and/or the owner(s) of the Property shall comply with all other provisions contained in the Ordinance for which relief has not been requested or granted;

4.2. The Applicant shall file and obtain approval of a land development plan, or waiver thereof, from the Mount Joy Township Planning Commission:

4.3. The Applicant shall submit and gain approval of a stormwater management site plan through the Mount Joy Township Planning Commission or Township Engineer, as applicable.

STORMWATER NOTES

- within any portion of the drainage easements.

PROJECT TIME SCHEDULE Begin earthwork and construction - Spring 2024 Anticipated completion date - Spring 2025



Site Location Map

Scale: 1'' = 2000

51.272 Acres North of PA Rt 283, 0.897 Ac. South of Rt 283 (Deed) Deed Instrument #6744451

Parcel ID #461-10741-0-0000

lay Wendell Garman and Emily Rose Garman 267 Risser Mill Road

Nount Joy, PA 17552

lay Garman

ormation for subject property on this plan was obtained from the recorded deed for the property (Instrument #: ded subdivision plan J-230-143, Document #5624021, Final Subdivision Plan for William Longenecker prepared tes, Inc., recorded June 1, 2007. A boundary survey was not completed by TeamAg, Inc. in conjunction with this

5. The building will be serviced by on-lot water and sewer

Existing and Continued Use of Land : Residential/Agricultural

2. The proposed use of a Farm-Related Business the property is a Special Exception Use.

3. The Property is located within the A – Agricultural District and consists of approximately 62.53 acres. The purpose of this plan is to secure the required approvals for the applicant proposed construction an 80' x 120' barn, of which approximately 49% will be used as a shop for the farm-related business of Garman Ag, Inc. Garman Ag, Inc. conducts off-site mobile shelling at other farms where it grinds and processes such farms' hay, straw and corn fodder. The Applicant proposes to utilize a portion of the proposed structure to store equipment for Garman Ag, Inc. and the occasional service and repair of such equipment. The farm-related business will have three employees. A tractor trailer used for the business may be occasionally parked overnight on-site on weekends only. Applicant demonstrated compliance with the criteria in Section 135-227 of the Ordinance for farm-related businesses, as well as the general

4. A Special Exception pursuant to Section 135-83.G in accordance with Section 135-227 was granted by the Mount Joy Township Zoning

4.4. The Applicant and any representative of the Applicant shall comply with and adhere to the testimony and any evidence presented to the Board at the hearing held on September 6, 2023 except to the extent modified by conditions imposed by the Board herein.

The stormwater management plan is designed for an increase in impervious area of 42,570 square feet. 2. No excavation, the placement of fill or structures, and any alterations that may adversely affect the flow of stormwater is prohibited

3. It is the responsibility of the contractor/developer to schedule a pre-construction meeting with the Township and design engineer prior to the start of construction. The scope of the inspections shall be determined at the pre-construction meeting. The Township shall be provideda minimum of 24 hours in advance of the required inspections.

4. A blanket drainage easement with a minimum width of 20 feet encompassing all proposed stormwater management facilities on the subject tract and extending to the right-of-way of Risser Mill Road is hereby established by this plan to allow Mount Joy Township officials, employees or agents to have the right of entry for the purposes of inspecting all stormwater conveyance, treatment, or storage facilities. Mount Joy Township officials and their agents or employees have the right of access and in cases of construction default, construction of the stormwater management facilities via the nearest public right-of-way.

At the completion of the project, and as prerequisite for the release of financial security, the applicant shall submit an as-built plan certified by a licenced professional, and meeting all of the requirements of Section 113-58 of the Mount Joy Township Stormwater Management Ordinance. Following approval of the as-built plan by the Township Engineer, the applicant shall submit the stormwater site plan for recordation in the office of the recorder of deeds.

6. There are no prior recorded stormwater management agreements affecting the subject property.





TS-1







GENERAL EROSION CONTROL NOTES

- 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 (stamped, signed and dated by the reviewing agency) must be available at the project site at all times. The reviewing agency shall be notified of any changes to the approved plan prior to implementation of those changes. The reviewing agency may require a written submittal of those changes for review and approval at its discretion.
- 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 Ets plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the local conservation district to an on-site preconstruction meeting.
- 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.
- All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the local conservation district or by the Department prior to implementation.
- Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
- 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 this E\$S plan. 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 and fenced off before clearing and grubbing operations begin. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on
- the plan maps(s) in the amount necessary to complete the finish grading of all exposed areas that are to be stabilized by vegetation. Each stackpile shall be protected in the manner shown on the plan drawings. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:IV or flatter. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to
- minimize the potential for erosion and sediment pollution and notify the local conservation district and/or the regional office of the Department. 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.
- All off-site waste and borrow areas must have an E#S plan approved by the local conservation district or the Department fully implemented prior to being activated. 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. 3. All pumping of water from any work area shall be done according to the procedure described in this
- plan, over undisturbed vegetated areas. 4. 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, regrading, 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.
- 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. 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. All sediment removed from BMPs shall be disposed of in the manner described on the plan drawinas
- . 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 4 inches of topsoil in place prior to seeding and mulching. Fill autslopes shall have a minimum of 2 inches of topsoil.
- 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
- 20. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness. 21. 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.
- 22. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into 23. Fill shall not be placed on saturated or frozen surfaces.
- 24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
- 25. 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 26. 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 I 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.
- 27. 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. 28. 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 local conservation district or the Department. 29. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas,
- the owner and/or operator shall contact the local conservation district for an inspection prior to removal/conversion of the E\$S BMPs. 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. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas,
- the owner and/or operator shall contact the local conservation district to schedule a final inspection. 2. Failure to correctly install E#S BMPs, failure to prevent sediment-laden runoff from leaving the construction 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. 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.

ADDITIONAL NOTES:

- Concrete wash water shall be handled in the manner described on the plan drawings. In no case shall it be allowed to enter any surface waters or groundwater systems.
- All channels shall be kept free of obstructions including but not limited to fill, rocks, leaves, woody debris, accumulated sediment, excess vegetation, and construction material/wastes. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel
- shall be conveyed past the work area in the manner described in this plan until such restoration is Channels having riprap, Reno mattress, or gabion linings must be sufficiently over-excavated so that
- the design dimensions will be provided after placement of the protective lining. Sediment basins and/or traps shall be kept free of all construction waste, wash water, and other debris having potential to clog the basin/trap outlet structures and/or pollute the surface waters.
- Sediment basins shall be protected from unauthorized acts by third parties.
- Any damage that occurs in whole or in part as a result of basin or trap discharge shall be immediately repaired by the permittee in a permanent manner satisfactory to the municipality, local conservation district, and the owner of the damaged property.
- Upon request, the applicant or his contractor shall provide an as-built (record drawing) for any sediment basin or trap to the municipal inspector, local conservation district or the Department.
- Erosion control blanketing shall be installed on all slopes 3H:1V or steeper within 50 feet of a surface water and on all other disturbed areas specified on the plan maps and/or detail sheets.
- Fill material for embankments shall be free of roots, or other woody vegetation, organic material, large stones, and other objectionable materials. The embankment shall be compacted in maximum 6"-12" layered lifts at 90% density.

SEQUENCE OF CONSTRUCTION

All earth disturbance activities shall proceed in accordance with the following sequence. Each stage shall be completed in compliance with Chapter 102 regulations before any following stage is initiated. Clearing and grubbing shall be limited only to those areas described in each stage. Before implementing any revisions to the approved erosion and sediment control plan or revisions to other plans which may affect the effectiveness of the approved E#S control plan, the operator must receive approval of the revisions from the County Conservation District.

At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, the erosion and sedimentation control plan preparer, and a representative of the County Conservation District to schedule an on-site pre-construction meeting. Also, at least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call System Inc. at 1-800-242-1776 for buried utilities location.

Construction Sequence

- The contractor shall contact utility owners prior to beginning earth disturbance, including the underground cable and other utilities in the right-of way of Center Road to protect the utilities.
- Field mark the limits of disturbance. All infiltration BMPs shall be protected from compaction. Install rock construction entrance.
- Install compost filter sock as shown on the drawings
- Install gravel driveway entrance, noting cross slope directions of driveway.
- . Strip and stockpile topsoil and rough grade area for the proposed building. Place excess soil in stockpile as needed. Stockpile height shall not exceed 35 ft. Side slopes must be 2:1 or flatter.

- Verify compost filter sock is installed below topsoil and excess material stockpiles. 7. If groundwater or subsurface flow is encountered during construction, install tile drains and direct the flow to the nearest waterway.
- 8. Install roof drains from barn to basin starting with riprap apron and working upslope 9. A crushed aggregate base cause shall be immediately applied to the barn pad area to service the proposed site.
- 10. Begin construction of the building with utilities. Install concrete washouts as necessary before
- concrete pours. Begin to install proposed utilities. Fine grade the lawn areas and seed or sod immediately with a perennial grass cover. Lawns shall be
- maintained on a regular basis and repaired, reseeded and mulched until stabilization is achieved. 12. Install infiltration basin after all tributary areas are uniformly stabilized. The conservation district and township shall approve the start of installation of infiltration basin to infiltration basin CRITICAL STAGE - See Plan sheet PC-3 for specifications. Contact TeamAg for inspection to be present for the excavation of the basin bottom and topsoil placement at the direction of the Project engineer or geologist. The basin should be excavated from the sides as much as practical to reduce compaction. Equipment that exerts a low ground pressure (less than 4 pounds per square inch) shall be used to construct the basin and all other infiltration BMPs to avoid compaction of the infiltration floor.
- 12.1. Remove any water trash and other debris from the basin. 12.2. Remove sediment that has accumulated in the basin.
- 12.3. Inspect and repair outlet structures if necessary.
- 12.4. Excavate infiltration basin to proposed invert depth and scarify existing soil surfaces. 12.5. Install outlet structure OS-1 to FES-1 starting with riprap apron and working upslope. 12.6. The infiltration basin floor shall be chisel plowed to a depth of 12-18 inches with suitable
- equipment. 12.7. Backfill basin with top soil as shown on plans and specifications. Overfilling is recommended to account for settlement. Light hand tamping is acceptable if necessary. Seed with ERNST Mix 126
- or equal. 12.8. Install underdrain. 13. After final grading, seeding will take place to establish a dense vegetative cover. 14. After permanent stabilization of site (i.e. a minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation) has been achieved, the temporary erosion and sedimentation controls must be removed. Areas disturbed during the removal of the
- controls shall be restabilized. 15. Upon completion of an earth disturbance activity or any stage or phase of an activity, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation. Erosion and sediment control BMPs shall be implemented and maintained until the permanent stabilization is completed. For an earth disturbance activity or any stage or phase of an activity to be considered permanently stabilized, the disturbed greas shall be covered with one of the following: (1) A minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation. (2) An acceptable BMP which permanently minimizes
- accelerated erosion and sedimentation. 16. Upon stabilization and authorization by the Conservation District, remove all temporary erosion and sediment control BMPs.
- 17. Within 30 days after the completion of earth disturbance activities authorized by this permit, including the permanent stabilization of the site and proper installation of PCSM BMPs in accordance with the approved PCSM Plan, or upon submission of the NOT if not sooner, the permittee shall file with the Department or authorized Conservation District, a statement signed by a licensed professional and by the permittee certifying the work has been performed in accordance with the terms and conditions of this permit and the approved E#S and PCSM Plans. Completion certificates are needed to ensure that all work is performed in accordance with the terms and conditions of the permit and the approved E#S and PCSM Plans.

MAINTENANCE OF EROSION CONTROL FACILITIES:

- . The General Contractor, or in the absence of a General Contractor, the Operator/Owner, shall be responsible for implementing and maintaining all Soil Erosion Controls. The Contractor shall, at the end of each week as well as with each rainfall, inspect all drainage and erosion control facilities to determine if they still function. Silt fence shall be cleared of silt when silt reaches halfway up fence. Additional stone ballast shall be placed, if necessary, to control the tracking of mud by construction vehicles onto the adjacent roads.
- 2. Check basin embankments, spillways, and outlets for erosion, piping and settlement. Make necessary repairs immediately. Replace displaced riprap within the outlet energy dissipater immediately after it is displaced and especially after major storm discharge events.
- 3. If additional silt fence or diversions are necessary, they shall be provided as required. The County Conservation District must review all changes. Sediment deposited behind silt barriers shall be
- removed and incorporated into the final grading operations. Until the site is stabilized, all erosion and sedimentation controls must be maintained properly. Maintenance must include inspections of all erosion and sedimentation controls after each storm event and on a weekly basis. All site inspections will be documented in an inspection log kept for this
- purpose. The compliance actions and the date, time and name of the person conducting the inspection. The inspection log will be kept on site at all times and made available to the district on 5. All preventative and remedial maintenance work, including clean out, repair, replacement, regarding,
- reseeding, remulching and renetting must be performed immediately. If erosion and sedimentation BMPs fail to perform as expected, replace or modify installed BMPs. An extra supply of stone, seed, mulch and silt fence shall be kept on site for emergency purposes.
- 6. When the entire project has become stabilized (i.e. uniform vegetative cover), any temporary sediment and erosion controls shall be removed and the areas stabilized.
- Sediment must be removed from basins when sediment has accumulated to the clean out elevation. Sediment basins must be protected from unauthorized acts of third parties. 3. Stockpile heights must not exceed 35'. Stockpile slopes must be 2:1 or flatter.
- 9. An area shall be considered to have achieved final stabilization when it has a minimum of 70% uniform perennial vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated surface erosion and subsurface characteristics sufficient to resist sliding or other movements.
- 10. Mulch with mulch control netting or erosion control blankets must be installed on all slopes 3:1 and

NPDES PERMIT NOTES:

- The Permittee and the Co-permittee must ensure that visual site inspections of BMP's are conducted weekly as well as after each precipitation event. The inspector must be qualified and a written account of the inspections and the corrective action taken must be kept. 2. All Permittees and Co-permittees will comply with the terms and conditions of the NPDES permit.
- Any non-compliance may be arounds for enforcement action. The Permittees could be subject to criminal and/or civil penalties for violations of the terms of the permit. 3. The County Conservation District shall be contacted at least seven (7) days prior to the start of
- construction to schedule a pre-construction meeting. I. All earth movers shall be added to the NPDES permit as Permittees or Co-permittees prior to
- All monitoring records shall be kept for a period of 3 years from the date of termination of the NPDES permit.
- 6. Upon reduction, loss or failure of the BMPs, the permittee and co-permittee shall take immediate action to restore the BMPs or provide an alternative method of treatment. If an alternate BMP will be employed the permit-issuing agency must be contacted.
- All reasonable steps will be taken to prevent or minimize any discharges, which have the reasonable likelihood of effecting human health or the environment in violation of the NPDES permit. 8. The owner or operator of this facility covered by the permit shall make the plans available to the
- public if requested. Erosion and sedimentation control plans must be available at the site at all 9. The staging of earthmoving and maintenance requirements contained in this plan must be followed
- unless amended and approved by the County Conservation District. 10. All building materials and waste must be removed from the site and disposed of or recycled in accordance with the solid waste management regulations. No material may be buried, dumped or
- discharged on site. 11. All borrow and spoil areas shall have an erosion control plan approved by the County Conservation
- District prior to their use, 12. Should there be additional phases to the project each phase shall have an erosion control plan approved by the County Conservation District prior to the start of construction of that phase.

FILL MATERIALS

- The General Contractor, or in the absence of a General Contractor, the Operator/Owner shall be responsible for performing Environmental Due Diligence to ensure that all fill material associated with the project qualifies as Clean Fill. All fill material must be used in accordance with the Department's policy "Management of Fill", document number 258-2182-773. Clean Fill is defined as: 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 is 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.)
- 3. Environmental due diligence is defined as: Investigative techniques, including, but 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 substance. 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"

PROCEDURES FOR RECYCLING AND WASTE HANDLING & DISPOSAL

The developer or its authorized representative shall to the greatest extent possible recycle and reuse construction materials when no longer needed on the site. Concrete forms will be reused in other construction projects. Excess materials will be used in other projects as much as is feasible, rather than disposal on the site. Construction waste anticipated for this project includes wood forms, excess concrete, cardboard and other typical construction wastes. All wastes shall be handled and disposed of properly in accordance with governing state and federal regulations. Manure shall be handled and disposed of according to PA Act 38 and other governing manure management plan requirements and applicable regulations.

GENERAL SEEDING NOTES

- I. Any disturbed area on which activity has ceased and which will remain exposed must be seeded and mulched immediately. During non-germinating periods, mulch must be applied at the recommended rates. Disturbed areas which are not at finished grade and which will be redisturbed within I year may be seeded and mulched with a quick growing temporary seeding mixture and mulch. Disturbed areas which are either at finished grade or will not be redisturbed within one year must be seeded and mulched with a permanent seed mixture and mulch. Diversions, channels, sedimentation basins and stockpiles must be seeded and mulched immediately.
- 3. Hay or straw mulch must be applied at rates of at least 3.0 tons per acre. Mulch shall be anchored immediately after application. Mulch shall be held down by synthetic binders or mechanical means.

TEMPORARY SEEDING NOTES

Site preparation: Apply I ton/acre agricultural grade limestone and 10-10-10 fertilizer at a rate of 500 lbs./acre and work in where possible. Mulch seeded areas immediately after seeding. PERMANENT SEEDING NOTES

Site preparation: Grade as necessary to bring the subgrade to a true, smooth slope parallel to and six inches below finished grade. Place topsoil over specified areas to a depth sufficiently greater than six inches so that after settlement and light rolling the complete work will conform to lines, grades, and elevations shown.

Apply 6 tons/acre agricultural grade limestone and 10-20-10 fertilizer at a rate of 1,000 lbs./acre or as per soil test. Limestone and fertilizer may not be required in agricultural fields.

Fertilizer and agricultural limestone shall be thoroughly incorporated into the soil by rototilling or other method to a minimum depth of four inches. The entire surface shall be done in two separate operations. The second seeding shall be done immediately after the first and at right angles to the first seeding and lightly raked into the soil. Mulch seeded areas immediately after seeding.

RECOMMENDED SEED MIXTURES

CONDITION	MIXTURE NUMBER	SPECIES	SEEDING RATES PURE LIVE SEED()
Temporary	1	Spring oats, or Annual ryegrass (spring or fall), or Winter wheat (fall), or Winter rye (fall)	64 10 90 56
Lawn area flatter than 3 to 1 and permanent swales ⁽²⁾		Temporary mixture, plus	
		Tall fescue, or Fine fescue, or Kentucky bluegrass, plus Redtop, or Perennial ryegrass	60 35 25 3 15
Lawn area 1		Temporary mixture, plus	
3 to 1 and steeper 3	Birdsfaot trefoil, plus Tall fescue	6 30	

apted from PA DEP Erosion and Sediment Pollution Control Program Manual (1) PLS is the product of the percentage of pure seed times percentage germination divided by 100. ⁽²⁾This mixture is suitable for frequent mowing. Do not cut shorter than 4 inches.

CONSTRUCTION TECHNIQUES AND SPECIAL CONSIDERATIONS TO ADDRESS SOIL LIMITATIONS The limitations for both the Clarksburg and Hagerstown series include the following, along with the proposed resolutions considered in the design of this project:

- Cut banks cave All trenching and temporary excavated cut slopes shall be performed according to OSHA guidelines.
- Corrosive to concrete Concrete shall be placed and cured according to specifications in order to meet the useful like of the structure. • Easily eradible - All of the erasion and sediment control measures outlined in the plans shall be
- followed to minimize erosion
- Low strength Design fill slopes shall be adequately compacted and stabilized. • Slow percolation ~ Infiltration testing was performed in the areas of proposed stormwater
- facilities, and facilities and the soils were found to have adequate infiltration properties. • Piping - adequate compaction of all fill slopes and berms, and inclusion of anti-seep collars on facility barrel outlets will limit piping.
- Poor source of topsoil Only the soils suitable for topsoil shall be used as such. It is anticipated that the project will have extra topsoil but if there is not an adequate amount of material to be used as topsoil, additional clean topsoil shall be imported to the site.
- Frost Action Fill material shall be free of frozen or partially frozen soils. Soil to be used as fill shall not exceed the recommended moisture content. Whenever possible, excavation shall take place when temperatures are above freezing to order to prevent frost action.

In general, adequate compaction, stabilization, and subsurface drainage of the site in accordance with the drawings will maximize favorable conditions for construction and minimize erosion potential. The design engineer should be contacted if issues arise which have the potential to cause erosion or sediment discharge during excavation and construction.

	TABLE 4.2 Compost Standards
Organic Matter Content	25% - 100% (dry weight)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 50% pass through
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Ma
Filtrowy	

ES-2

RAWING

NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST & FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT, DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER I YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

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.

2 IN. x 2 IN. WOODEN STAKES PLACED 10 FT ON CENTER

EXISTING

2 IN. x 2 IN.

CENTER

WOODEN STAKES

PLACED 10 FT ON

CONTOURS

NOT TO SCALE

Undisturbed Area

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCK .

COMPOST

FILTER SOCK

NOTES:

BLOWN/PLACED FILTER MEDIA

DISTURBED AREA

Z Z Z Z

SECTION

DISTURBED AREA .

Undisturbed Area

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL

MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION

<u>PLAN VIEW</u>

EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF OR REPLACED WITHIN 24 HOURS OF INSPECTION.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED

ΉE MESH SHALL BE CUT OPEN A

AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER I YEAR. POLYPROPYLENE SOCKS SHALL

BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. UPON STABILIZATION OF THE THE SOCK MAY BE LEFT IN

COMPOST FILTER SOCK

THE AREA TRIE	BUTARY TO THE VEGETATED OR	SOCK, STAKES REMOVED. IN T	SHALL BE REMO HE LATTER CAS	WED. 5E, T
EN AND THE MU	JLCH SPREAD AS	A SOIL SUPPLE	EMENT.	
STANDARD	CONSTRUC	TION DETAI	L #4-1	

TABLE 4.2 Compost Standards	
Fibrous and elongated	
5.5 - 8.5	
30% - 60%	
30% - 50% pass through 3/8" screen	
5.0 dS/m (mmhos/cm) Maximum	

<u>NOTES:</u>

Polypropylene HDMFPP)

Photo-

202 ps

100% at

1000 hr.

2 years

degradable

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

INTAKE HOSE

ELEVATION VIEW

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE

MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

NOTES: I. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.

- 2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL
- CONFIGURATION FOR ADDED HEIGHT. 3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.
- 4. ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
- 5. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
- 6. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

FYPICAL COMPOST WASHOUT INSTALLATION

BLANKET EDGES INSTALL BEGINNING OF ROLL STAPLED AND IN 6 IN. x 6 IN. ANCHOR **OVERLAPPED** TRENCH, STAPLE, BACKFILL (4 IN. MIN.) AND COMPACT SOIL STARTING AT TOP OF SLOPE, ROLL BLANKETS IN DIRECTION OF WATER FLOW PREPARE SEED BED (INCLUDING APPLICATION OF LIME, FERTILIZER AND SEED) PRIOR TO BLANKET INSTALLATION THE BLANKET SHOULD \rightarrow OVERLAP BLANKET ENDS 6 IN. MIN. \rightarrow REFER TO MANUF. RECOMMENDED NOT BE STRETCHED; STAPLING PATTERN FOR WITH THE UPSLOPE BLANKED IT MUST MAINTAIN OVERLYING THE DOWNSLOPE BLANKET STEEPNESS AND LENGTH OF GOOD SOIL CONTACT (SHINGLE STYLE). STAPLE SECURELY. SLOPE BEING BLANKETED

NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

OPERATION AND MAINTENANCE PROCEDURES

- Responsible Party for PCSM Operation and Maintenance: Property Owner (Jay Garman). 2) The property owner shall be responsible for implementing and maintaining all PCSM facilities, property owner shall regularly inspect all facilities to determine if they still function. Repair clogged or damaged spillways immediately.
- Remove trash and other debris from the basin. 2) The property owner shall be responsible for implementing and maintaining all PCSM facilities, property owner shall regularly inspect all facilities to determine if they still function. Repair clogged or damaged spillways immediately.
- Remove trash and other debris from the basin. 3) BMPs should be inspected as stated for each BMP and after any major storm event. A major storm event is defined
- as greater than or equal to 3.05 inches of rainfall in a period of 24 hours (2-year, 24-hour storm). Detailed inspections by a qualified inspector shall occur at least annually to ensure that the facility is operating as designed and to schedule maintenance that the facility may require. If possible, inspections shall be made during wet weather to ensure that the facility is maintaining desirable retention times. In addition to regularly scheduled inspections, deficiencies should be noted during any visit by maintenance personnel. An important purpose of inspections is to ascertain the operational condition and safety of the facility.
- 4) Written reports shall be completed for each inspection documenting all BMP repair and maintenance activities. 5) Maintenance Requirements a) Regular inspections of the SWM Facilities. To assure proper implementation of BMPs, maintenance and care SWM
- BMPs should be inspected by a qualified person, which may include the landowner, or the owner's designee (including the Municipality for dedicated and owned facilities), according to the following minimum frequencies: Annually for the first 5 years.) Once every 3 years thereafter
- iii) During or immediately after the cessation of a 10-year or greater storm, which is defined as greater than or equal to 4.66 inches of rainfall in a period of 24 hours. iv) As specified in the O&M Agreement.
- b) All pipes, swales and detention facilities shall be kept free of any debris or other obstruction and in original design condition,
- c) Removal of silt from all permanent structures which trap silt or sediment in order to keep the material from building up in grass waterways, pipes, detention or retention basins, infiltration structures, or BMPS, and thus reducing their capacity to convey or store water. d) Re-establishment of vegetation of scoured areas or areas where vegetation has not been successfully established,
- Selection of seed mixtures shall be subject to approval by the Municipality. 6) Mechanical components such as valves, sluice gates, fence gates, locks, and access hatches should be functional at all
- 7) Replace displaced riprop within the outlet energy dissipater immediately after it is displaced and especially after major storm discharge events.
- 8) Trash and debris should be removed on a regular basis. 9) Infiltration Basin
- a) Flared end sections (upgradient of infiltration basin) should be inspected and cleaned at least 2 times per year and after runoff events. b) The vegetation along the surface of the infiltration basin should be maintained in good condition, and any bare
- spots re-vegetated as soon as possible. c) Vehicles should not be parked or driven on a infiltration basin, and care should be taken to avoid excessive
- compaction by mowers. d) Inspect basin after runoff events and make sure that runoff drains within (Basin A: 46 hours, Basin B: 20 hours) from the end of the storm event. Also inspect for accumulation of sediment, damage to outlet control structures, erosion control measures, signs of water contamination/spills, and slope stability of the berms. Mow only as appropriate for the vegetative species.
- Remove accumulated sediment from the basin as required. Restore original cross section and infiltration rate. Properly dispose of sediment. g) In the event of infiltration basin failure the design engineer and Township shall be contacted to determine the
- cause of the failure and coordinate corrective action such as repair or replacement of the infiltration soil layer. Infiltration basin failure is defined as failure of the basin to dewater to a dry state within (Basin A: 46 hours, Basin B: 20 hours) hours after the end of the storm event. If the basin were to fail, an engineer shall oversee the repair, replacement to ensure proper function and operation of the BMP. A possible solution is as follows:
- Remove topsoil and stockpile
- Chisel plow basin bottom to a depth of 18 inches
- Replace amended soils \$ topsoil taking care to prevent compaction of basin bottom
- · Seed and stabilize basin bottom. Plant a seed mix containing "Virginia Wild rye" such as "Retention Basin Floor Seeding Mix ERNMX-126" from Ernst Conservation Seeds at 1/2 to 1 pound per 1,000 square feet. 10) Riprop Aprons
- a) All riprap aprons shall be inspected after each runoff event. Displaced riprap within the apron shall be replaced immediately. b) If these facilities were to fail, an engineer shall oversee the repair, replacement to ensure proper function and operation of the BMP.

PCSM LONG TERM OPERATIONS AND MAINTENANCE REQUIREMENTS.

1. Until the permittee or co-permittee has received written approval of a notice of termination, the permittee or

- co-permittee will remain responsible for compliance with the permit terms and conditions including long-term operation and maintenance of all PCSM BMPs on the project site and is responsible for violations occurring on the project site. 2. The permittee or co-permittee shall be responsible for long-term operation and maintenance of PCSM BMPs unless a different person is identified in the notice of termination and has agreed to long-term operation and maintenance of PCSM BMPs
- 3. For any property containing a PCSM BMP, the permittee or co-permittee shall record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must identify the PCSM BMP, provide for necessary access related to long-term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable subsequent grantees, and provide proof of filing with the notice of termination under §102.7(b.(5. (relating to permit
- 4. The person responsible for performing long-term operation and maintenance may enter into an agreement with another person including a conservation district, nonprofit organization, municipality, authority, private corporation or other person, to transfer the responsibility for PCSM BMPs or to perform long-term operation and maintenance and provide notice thereof to the Department,
- 5. A permittee or co-permittee that fails to transfer long-term operation and maintenance of the PCSM BMP or otherwise fails to comply with this requirement shall remain jointly and severally responsible with the landowner for long-term operation and maintenance of the PCSM BMPs located on the property. PROCEDURES FOR RECYCLING

Anticipated wastes for the project include typical commercial building waste, including recoverable waste materials generated during construction, packaging, new material scraps and old materials and debris all constitute potentially

recoverable materials The developer or its authorized representative shall to the greatest extent possible recycle and reuse construction materials when no longer needed on the site. Concrete forms will be reused in other construction projects. Excess materials will be used in other projects as much as is feasible, rather than disposal on the site. Construction waste anticipated for this project includes wood forms, excess concrete, cardboard and other typical construction wastes. All wastes shall be handled and disposed of properly in accordance with governing state and federal regulations. Manure shall be handled and disposed of according to PA Act 38 and other governing manure management plan requirements and applicable regulations. Materials associated with or from PCSM BMPs shall be recycled or disposed of in accordance with laws, regulations, and

requirements. Anticipated materials from PCSM BMPs include excess pipe and erosion control matting. These materials, to the greatest extent possible, shall be recycled or reused on other construction projects. Compost from compost silt socks may be incorporated into the amended soils for the infiltration basin and the soil

amendment/restoration areas. Accumulated sediment shall be collected and incorporated into site grading or adjacent cultivated fields.

Manure shall be handled and disposed of according to PA Act 38 and other governing manure management plan requirements and applicable regulations.

COMPLAINT OR SITE INSPECTION

Upon complaint or site inspection, the Department or conservation district may require that the PCSM Plan be submitted for review and approval to ensure compliance with PA Code Title 25, Environmental Protection, Ch.102

PCSM REPORTING AND RECORDICEPING

The PCSM Plan, inspection reports and monitoring records shall be available for review and inspection by the Department or the conservation district. FINAL CERTIFICATION

The permittee shall include with the notice of termination "Record Drawings" with a final certification statement from a licensed professional, which reads as follows:

"I (name) do hereby certify pursuant to the penalties of 18 Pa.C.S.A. §4904 to the best of my knowledge, information and belief, that the accompanying record drawings accurately reflect the as-built conditions, are true and correct, and are in conformance with Chapter 102 of the rules and regulations of the Department of Environmental Protection and that the project site was constructed in accordance with the approved PCSM Plan, all approved plan changes and accepted construction practices."

(1) The permittee shall retain a copy of the record drawings as a part of the approved PCSM Plan.

(2) The permittee shall provide a copy of the record drawings as a part of the approved PCSM Plan to the person identified in this section as being responsible for the long-term operation and maintenance of the PCSM BMPs. Upon permanent stabilization of the earth disturbance activity under §102.22(a)(2) (relating to permanent stabilization), and installation of BMPs in accordance with an approved plan prepared and implemented in accordance with §§ 102.4 and 102.8 (relating to erosion and sediment control requirements; and PCSM requirements), the permittee or co-permittee shall submit a notice of termination to the Department or conservation district.

The notice of termination must include: (1) The facility name, address and location.

- (2) The operator name and address.
- (3) The permit number.
- (4) The reason for permit termination

(5) Identification of the persons who have agreed to and will be responsible for long-term operation and maintenance of the PCSM BMPs in accordance with \$102.8(m) and proof of compliance with \$102.8(m)(2). Prior to accepting the NOT, the Department and/or Conservation District staff will perform a final inspection and approve or deny the Notice of Termination

SEQUENCING OF PCSM BMP IMPLEMENTATION:

The owner should minimize land clearing, grading and impervious areas to that shown on the plans; minimize soil compaction; and protect existing drainage features and existing vegetation. Implementation of this plan shall:

- Preserve the integrity of stream channels and maintain and protect the physical, biological and chemical qualities of the receiving stream
- Prevent any increase in the rate of stormater runoff
- Minimize any increase in stormwater runoff volume

- Minimize impervious areas
- Maximize the protection of existing drainage features and existing vegetation • Minimize land clearing and grading

- Minimize soil compaction
- PER THE SEQUENCE OF CONSTRUCTION SHOWN ON SHEET ES-2.
- Infiltration Basin I. Install Temporary sediment control BMPs as shown on the plans.
- 2. Complete site grading. 3. Stabilize grading within the drainage area to the infiltration basin.
- 4. The infiltration basin should not be installed until all tributary areas are uniformly stabilized. The conservation district
- Any equipment that enters the infiltration area shall be limited to a ground pressure of 4 pounds per square inch. 6. Backfill infiltration basin with amended soil as shown on the plans. Overfilling is recommended to account for settling. 7. Presoak the planting soil prior to planting vegetation to aid in settlement.
- 8. Complete final grading to achieve proposed design elevations.

GENERAL SEEDING NOTES

- after application. Mulch shall be held down by synthetic binders or mechanical means.
- TEMPORARY SEEDING NOTES Site preparation: Apply I ton/acre agricultural grade limestone and 10-10-10 fertilizer at a rate of 500 lbs./acre and work in where possible. Mulch seeded areas immediately after seeding.

PERMANENT SEEDING NOTES settlement and light rolling the complete work will conform to lines, grades, and elevations shown.

Limestone and fertilizer may not be required in agricultural fields.

be done immediately after the first and at right angles to the first seeding and lightly raked into the soil. Mulch seeded areas immediately after seeding.

RECONTIENDED	SEED MIXTL	RES		
CONDITION	MIXTURE NUMBER	SPECIES	SEEDING RATES PURE LIVE SEED	SEEDING RATES (LBS/ACRE)
Temporary	I	Spring oats, or Annual ryegrass (spring or fall), or Winter wheat (fall), or Winter rye (fall)	64 10 90 56	75.3 11.8 105.9 65.9
	1	Temporary mixture, plus		
Lawn area flatter than 3 to 1 and permanent swales ⁽²⁾	2	Tall fescue, or Fine fescue, or Kentucky bluegrass, plus Redtop, or Perennial ryegrass	60 35 25 3 15	75 43.8 33.3 3.8 17.6
Lawn area 3 to 1 and steeper	I	Temporary mixture, plus		
	3	Birdsfaat trefoil, plus Tall fescue	6 30	7.5 37.5
	Í	Temporary mixture, plus		
BASIN	ERNMX-126	Alkaligrass, Fults (20%) Deertangue, Tiaga (19%) Creeping Bentgrase (18%) Virginia Wildrye, PA Ecotype (18%) Fowl Bluegrase (15%) Fox Sedge, PA Ecotype (5%) Soft Rush (3%) Blunt Broom Sedge, PA Ecotype (2%)	N/A	Plant seed mix at a rate of 20-40 Ib/acre with an annual rye grass at a rate of 11.8 Ib/acre.

Adapted from PA DEP Erosion and Sediment Pollution Control Program Manual ⁽¹⁾ PLS is the product of the percentage of pure seed times percentage germination divided by 100,

CONSTRUCTION TECHNIQUES AND SPECIAL CONSIDERATIONS TO ADDRESS SOIL LIMITATIONS The limitations for both the Clarksburg and Hagerstown series include the following, along with the proposed resolutions considered in the design of this project:

- to OSHA guidelines.
- Corrosive to concrete Concrete shall be placed and cured according to specifications in order to meet the useful like of the structure.
- Easily eradible All of the erasion and sediment control measures outlined in the plans shall be followed to minimize erosion,
- Low strength Design fill slopes shall be adequately compacted and stabilized.
- Slow percolation Infiltration testing was performed in the areas of proposed stormwater facilities, and facilities and the soils were found to have adequate infiltration properties.
- Piping adequate compaction of all fill slopes and berms, and inclusion of anti-seep collars on facility barrel outlets will limit piping.
- Poor source of topsoil Only the soils suitable for topsoil shall be used as such. It is anticipated
- Frost Action Fill material shall be free of frozen or partially frozen soils. Soil to be used as
- In general, adequate compaction, stabilization, and subsurface drainage of the site in accordance with the drawings will maximize favorable conditions for construction and minimize erosion potential. The design engineer should be contacted if issues arise which have the potential to cause erosion or sediment discharge during excavation and construction.

• Utilize other structural or nonstructural BMPs that prevent or minimize changes in stormwater runoff ALL PCSM BEST MANAGEMENT PRACTICES, INCLUDING INFILTRATION BASIN AND SWALES, SHALL BE INSTALLED

and township shall approve the start of construction on the infiltration basin. 5. Excavate infiltration basin to proposed invert depth and scarify the existing soil surfaces. Do not compact in-situ soils.

9. Seed and stabilize basin bottom. Plant a seed mix containing "Virginia Wild rye" such as "Retention Basin Floor Seeding Mix ERNMX-126" from Ernst Conservation Seeds at 1/2 to 1 pound per 1,000 square feet.

I. Any disturbed area on which activity has ceased and which will remain exposed must be seeded and mulched immediately. During non-germinating periods, mulch must be applied at the recommended rates. Disturbed areas which are not at finished grade and which will be redisturbed within I year may be seeded and mulched with a quick growing temporary seeding mixture and mulch. Disturbed areas which are either at finished grade or will not be redisturbed within one year must be seeded and mulched with a permanent seed mixture and mulch, 2. Diversions, channels, sedimentation basins sediment traps and stockpiles must be seeded and mulched immediately 3. Hay or straw mulch must be applied at rates of at least 3.0 tans per acre. Mulch shall be anchored immediately

- Site preparation: Grade as necessary to bring the subgrade to a true, smooth slope parallel to and six inches below finished grade. Place topsoil over specified areas to a depth sufficiently greater than six inches so that after
- Apply 6 tons/acre agricultural grade limestone and 10-20-10 fertilizer at a rate of 1,000 lbs./acre or as per soil test.
- Fertilizer and agricultural limestone shall be thoroughly incorporated into the soil by rotatilling or other method to a minimum depth of four inches. The entire surface shall be done in two separate operations. The second seeding shall

• Cut banks cave - All trenching and temporary excavated cut slopes shall be performed according

that the project will have extra topsoil but if there is not an adequate amount of material to be used as topsoil, additional clean topsoil shall be imported to the site.

fill shall not exceed the recommended moisture content. Whenever possible, excavation shall take place when temperatures are above freezing to order to prevent frost action.

CONSTRUCTION TECHNIQUES AND SPECIAL CONSIDERATIONS TO ADDRESS SOIL LIMITATIONS The limitations for both the Chester series include the following, along with the proposed resolutions considered in the design of this project:

- Cut banks cave All trenching and temporary excavated cut slopes shall be performed according to OSHA quidelines.
- Corrosive to concrete Concrete shall be placed and cured according to specifications in order to meet the useful like of the structure. • Easily eradible - All of the erasion and sediment control measures outlined in the plans shall be
- followed to minimize erosion. • Low strength - Design fill slopes shall be adequately compacted and stabilized.
- Slow percolation Infiltration testing was performed in the areas of proposed stormwater facilities, and facilities and the soils were found to have adequate infiltration properties.
- Piping adequate compaction of all fill slopes and berms, and inclusion of anti-seep collars on facility barrel outlets will limit piping. • Poor source of topsoil - Only the soils suitable for topsoil shall be used as such. It is anticipated that
- the project will have extra topsoil but if there is not an adequate amount of material to be used as topsoil, additional clean topsoil shall be imported to the site. • Frost Action - Fill material shall be free of frozen or partially frozen soils. Soil to be used as fill
- shall not exceed the recommended moisture content. Whenever possible, excavation shall take place when temperatures are above freezing to order to prevent frost action. In general, adequate compaction, stabilization, and subsurface drainage of the site in accordance with the

drawings will maximize favorable conditions for construction and minimize erosion potential. The design engineer should be contacted if issues arise which have the potential to cause erosion or sediment discharge during excavation and construction.

OUTLET NO.	PIPE DIA. Pd (IN)	RIPRAP		APRON		
		SIZE	THICK. Rt (IN)	LENGTH AI (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)
FES-I	12	R-3	9	6.00	3.00	9.00
6"Roof Drain	8	R-3	9	6.00	2.00	8.00

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.

> STANDARD CONSTRUCTION DETAIL #9-1 RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

LAW OFFICES

ANTHONY P. SCHIMANECK JOSELE CLEARY ROBERT E. SISKO JASON M. HESS MORGAN, HALLGREN, CROSSWELL & KANE, P.C.

P. O. BOX 4686

LANCASTER, PENNSYLVANIA 17604-4686

WWW.MHCK.COM

FAX (717) 299-6170

E-MAIL: attorneys@mhck.com

February 3, 2024

VIA EMAIL

GEORGE J. MORGAN (1971 - 2021)

RETIRED CARL R. HALLGREN MICHAEL P. KANE

700 NORTH DUKE STREET LANCASTER, PA 17602 717-299-5251

1536 W MAIN STREET EPHRATA, PA 17522 717-733-2313

659 E WILLOW STREET ELIZABETHTOWN, PA 17022 717-361-8524

<u>OF COUNSEL</u> WILLIAM C. CROSSWELL RANDALL K. MILLER

> Justin S. Evans, AICP, Community Development Director/Zoning Officer Mount Joy Township 8853 Elizabethtown Road Elizabethtown, PA 17022

> > Re: Minor Land Development Plan Proposed Building 1267 Risser Mill Road Our File No. 10221-1

Dear Justin:

I have been provided with a copy of the Minor Land Development Plan Proposed Building 1267 Risser Mill Road (the "Plan") prepared by TeamAg, Inc. The Plan proposes the development of a tract of land located at the northwest corner of the intersection of Risser Mill Road and Route 283 identified as 1267 Risser Mill Road (the "Property") with a proposed barn. The Property is presently developed with a dwelling, shed, and barn at the northern portion of the Property. The proposed barn would be located in the same vicinity. This letter sets forth comments on the Plan.

Jay Wendell Garman and Emily Rose Garman acquired the Property from Carl S. Garman and Nancy W. Garman by a deed recorded at Document No. 6744451. They granted a mortgage to Carl S. Garman and Nancy W. Garman recorded at Document No. 6744452. They also assumed the mortgage which Carl S. Garman and Nancy W. Garman granted to Mid Atlantic Farm Credit, now known as Horizon Farm Credit, ACA, which was recorded at Document No. 6744453. There must be a Storm Water Management Agreement relating to the Plan, and the mortgage holders will have to execute Joinders by Mortgagee.

The Plan proposes the installation of an infiltration basin, riprap, piping, and roof collection water tanks. The Storm Water Management Agreement must contain the operation and maintenance requirements for these facilities shown on Sheet PC-2. TeamAg should create an exhibit, no larger than 8½ inches by 11 inches, with the operation and maintenance procedures. A reduced copy of the plan sheet is not acceptable.

The proposed barn will be used for a farm-related business, Garman Ag, Inc. (the "Business"). The Plan sets forth the conditions on approval of the special exception for the Business. It states that approximately 49 percent of the new building will be used for the Business.

Justin S. Evans, AICP, Community Development Director/Zoning Officer February 3, 2024 Page 2

The Business will have employees, and General Note 5 indicates the barn will be served by onsite water and sewer. General Note 12 states that it will use an existing on-lot sewage disposal system. The Plan does not show a tested replacement location for the on-lot sewage disposal system. The Plan does show a "proposed wash water collection tank."

There should be a tested replacement location for the on-lot sewage disposal system. Chapter 100, Sewers, Article VI, Individual and Community On-Lot Sewage Disposal Systems, of the Code of Ordinances states that all persons who request review of subdivision and land development plans shall demonstrate that a replacement area exists. See §100-58.A. In addition, there should be a holding tank agreement for the wash water collection tank. See Chapter 100, Article I, Holding Tanks. I assume that the Plan has been provided to the Township Sewage Enforcement Officer with an application for a holding tank permit.

The Property is a preserved farm, and General Note 8 reflects the status and provides the recording reference of the Deed of Agricultural Conservation Easement. The recording of the Storm Water Management Agreement will not violate that Deed of Agricultural Conservation Easement. It will prevent dedication of any additional right-of-way, but it appears that the right-of-way of Risser Mill Road does meet the requirement to be 25 feet from the centerline. The landowners have requested waivers from the requirements of the Subdivision and Land Development Ordinance to make improvements along the Risser Mill Road frontage. If the Township will defer those improvements rather than grant waivers, there should be a deferred improvements agreement.

If you have any questions concerning these comments, please contact me.

Very truly yours,

Josele Cleary

JC:sle MUNI\10221-1(7)\240201\71

cc: Ryan Minnich, Township Manager (via email) Patricia J. Bailey, Secretary (via email) Benjamin S. Craddock, P.E. (via email) Cameron L. Renehan, P.E. (via email) February 20, 2024

Ryan Minnich Township Manager Mount Joy Township 8853 Elizabethtown Road Elizabethtown, PA 17022

Via email: ryan@mtjoytwp.org

Re: 1267 Risser Mill Road (Jay Garman) Minor Land Development Plan Township Permit No. 24-05-MLDP LCEC Project No: 25-158

Image: Constraint of the second state of the second sta

Dear Mr. Minnich,

We have received a minor land development plan submission from TeamAg, Inc. for the abovereferenced project. The submission consisted of the following documents:

- Submission cover letter dated January 23, 2024
- Waiver request letter dated January 23, 2024
- Certification of Requested Subdivision/Land Development Plan Review undated
- Minor Land Development Plan dated January 19, 2024
- Post Construction Stormwater Management Narrative dated January 19, 2024
- Karst Evaluation For Stormwater Management dated January 16, 2024
- Wetland Investigation dated January 13, 2024

Based upon my review of the submitted information, I offer the following comments for the Township to consider:

Zoning Ordinance

- At a Zoning Hearing Board meeting on September 6, 2023, the Board granted a Special Exception per Section 135-83.G to allow a farm-related business in the Agricultural (A) District
- 2. If exterior lighting is proposed, an exterior lighting plan shall be submitted (135-298.D & 119-31.D(13)).
- 3. Clear sight triangles and stopping sight distances shall be shown at the existing and proposed driveways (135-299.E(2) & 119-31.D(12)).
- 4. Slopes greater than 15% shall be shown on the plans (135-305.A).
- 5. Riparian corridors shall be established to include 30 feet on each side of the watercourse, measured from the top of each stream bank (135-306.B). Please note that the zoning definition of a watercourse includes not just streams and rivers, but ponds, lakes and other bodies of water, whether natural or artificial.

6. The required number of parking spaces for the farm-related business shall be provided (135-227.H). The proposed parking spaces shall be shown on the plan.

Subdivision and Land Development Ordinance

- 7. The existing conditions plan shall be shown at a scale between 20 feet and 100 feet to the inch (119-31.A(1)).
- 8. Plan sheets shall be numbered to show the relationship to the total number of sheets in the plan (119-31.A(3) & 113-42.C).
- 9. The plans shall be signed and sealed by a registered engineer, surveyor or landscape architect (119-31.A(5)).
- 10. A written scale shall be provided for Sheets EX-1 and SP-1 (119-31.B(5)). The written and graphic scales for Sheets ES-1 and PC-1 shall be confirmed.
- 11. The plan shall identify all prior plans, including all notes or restrictions affecting the current development, with a verification signed by the design professional that such list is complete and correct (119-31.B(14) and 119-51.C).
- 12. The location of the tract boundary along Risser Mill Road shall be confirmed (119-31.B(17)). The tract boundary and right-of-way lines are shown at different locations which is not consistent with prior plans and the previously dedicated right-of-way (Instrument #5640594).
- 13. The applicant has requested a modification of the requirement to show existing features within 200 feet of the subject tract; however, this is not a requirement for minor land development plans (119-31.C(3)). Therefore, the waiver request is not needed and should be withdrawn.
- 14. The building setback lines shall be shown on the plan (119-31.D(5)).
- 15. A water and sewer feasibility report shall be provided (119-32.A & 119-35.E(3)(b)). The applicant has requested a waiver of this requirement.

<u>Waiver response</u>: A water and sewer feasibility study (however abbreviated) should be provided to confirm the suitability of the existing on-lot well and septic system for the proposed development. The feasibility study should also investigate whether the existing on-lot sewage disposal system has adequate capacity for the increased flows and a location for a replacement system.

- 16. A PDNI search shall be provided (119-32.B.4(c)[4]).
- 17. Written notice shall be provided from the DEP that approval of the sewer planning module has been granted or notice from the Department that such approval is not required (119-35.E(2)(a) & 119-60.A).
- 18. A Stormwater Management Agreement and Declaration of Easement in a form acceptable to the Township Solicitor shall be executed and recorded (119-35.E(4)(c), 119-56.E & 113-62).
- 19. A land development agreement in a form acceptable to the Township Solicitor shall be executed (119-35.E(4)(f)).
- 20. All certificates shall be executed prior to final plan approval (119-37.D).
- 21. A construction cost estimate and financial security shall be provided (119-41 & 113-60).

22. The frontage along Risser Mill Road (a local street) shall be improved in accordance with 119-52.J or as indicated on the Township Official Map, whichever is greater (119-52.J(3)(a)). The required cartway width for a local street outside of the urban growth area is 24 feet. The applicant has requested a waiver of this requirement.

<u>Waiver response</u>: The existing cartway width is 19 feet which does not meet local or State minimum roadway width standards for a rural road. Additionally, tractor trailer traffic is expected for the farm-related business. Therefore, I am not able to support a complete waiver of this requirement. However, in accordance with 119-52.J(3)(d), if the Township determines that the required improvements are not feasible at this time, the applicant could enter into an agreement that would defer road improvements to a time the Township would deem such improvements as feasible.

- 23. Driveways shall be paved for at least the first 8 feet from the edge of any paved cartway. The paving shall consist of a minimum of 6" stone base and 3" bituminous paving (119-52.S(2)(a) & 67-4.E).
- 24. The property is outside of the designated growth area, therefore sidewalk and curbs are not required and the requested waiver is not necessary (119-53.B(1) & 119-53.C(1)).
- 25. General Note #13 shall be revised to include the entire easement statement (119-56.B). This note shall also be included in all deeds for lots which contain an easement.
- 26. All utility easements shall have a minimum width of 30 feet (119-56.D & 113-31.Q). Stormwater Note 4 shall be revised accordingly.
- 27. A modification of Sections 119-56.D & E has been requested to allow that no utility easements be provided; however, Stormwater Note 4 indicates that a blanket drainage easement is proposed. This inconsistency shall be clarified. If a blanket easement is proposed, then the easement requirements are met and no modification is necessary.
- 28. The location of all existing and proposed lot line markers shall be shown on the plan (119-57.A).
- 29. Three monuments shall be spaced around the proposed project, with at least two of the monuments placed as consecutive corners along the street right-of-way (119-57.B).
- 30. Lot line markers shall be set at all points where lot lines intersection curves, at all angles in property lines, at the intersection of all other property lines and at the street right-of-way (119-57.D).
- 31. A note shall be provided on the plan indicating when the monuments and markers are to be set (119-57.H).
- 32. Evidence of approval of the NPDES Permit and Erosion and Sedimentation Control Plan by the Lancaster County Conservation District shall be provided (119-58.A, 113-31.D, 113-45.B & 113-45.C).
- 33. Any action taken on waiver requests, dates, and any conditions of approval shall be added to the cover sheet (119-91.C).

Stormwater Management Ordinance

- 34. The following erosion and sediment control items shall be addressed (113-31.E & 113-43.K):
 - a. The rock construction entrance shall be shown on the plans.
 - b. The plans shall show the location of all proposed erosion control matting.
 - c. The installation of diversion swale shall be included in the construction sequence.

- d. Design information (slope length, grade, design chart, etc.) shall be provided for the proposed compost filter sock.
- 35. To the maximum extent practicable, areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase to maintain maximum infiltration capacity (113-31.0). The plan shall show the provisions for protecting the infiltration basin during construction (e.g. construction fence, etc.).
- 36. The Ordinance requires the loading ratio for the total drainage area to infiltration area to be less than 5:1 and the impervious drainage area to infiltration area to be less than 3:1 (113-32.A.(2)(c). A total loading ratio of 5.7:1 and an impervious loading ratio of 3.2:1 are provided; a modification is being requested, however per Ordinance 312-2017 the Township Engineer can approve higher loading ratios.

<u>Approval response</u>: The loading ratio guideline is a recommendation intended to prevent infiltration of a substantial volume of water in a very small area, to limit excessive depth of water in infiltration facilities, and to avoid lengthy dewatering/drawdown times. The proposed Rain Garden has been designed to capture a depth of 0.91 feet for the 2 year storm with a dewatering time of 4.4 hours, which will mitigate each of the risk factors described above. Given these considerations, I have no objection to the higher ratios.

- 37. The 100 year pre-development runoff shown in Table 3 of the PCSM Report (15.96 cfs) is inconsistent with the 100 year flow shown in Hydrograph 1 (16.02 cfs) (113-35.B).
- 38. Design calculations shall be provided for the proposed diversion swale (113-34.G(1) & 113-37.C.(1) & (5)). Construction details shall be added to the plan for the swale and any required temporary erosion control matting.
- 39. The top of berm width shown in the Permanent Infiltration Basin detail (5 feet) is inconsistent with the width shown on the plan (2 feet) (113-37.A(1)(a)[1]).
- 40. Pretreatment elements are required for the roof drain piping to the infiltration basin (113-37.A(4)).
- 41. The landowner shall execute the final documents prior to final plan approval (113-41.B).
- 42. The Stormwater Facility Permanence Statement shall be revised to acknowledge that the SWM facilities cannot be altered or removed "unless a revised plan is approved by the Township" (113-43.D).
- 43. An invert shall be provided for the roof drain pipe outlet (113-43.J(5)).
- 44. The invert elevation of the underdrain pipe in the Permanent Infiltration Basin detail shall be corrected (113-43.J(5)).
- 45. The Permanent Infiltration Basin detail appears to show an emergency spillway; however, a spillway is not proposed elsewhere (113-43.J(5)).
- 46. The proposed grades on the driveway profile shall be consistent with the slopes shown on the Driveway Water Bar detail (113-43.J(5)).
- 47. The Backup Under-Drain Detail shall accurately reflect the proposed depth of the topsoil surrounding the underdrain (113-43.J(5)).
- 48. The Orifice Trash Rack Detail is unnecessary and should be removed (113-43.J(5)).

If you should have any questions or need additional information, please do not hesitate to contact me at <u>bencraddock@lancastercivil.com</u> or via telephone at 717-799-8599.

Sincerely,

Boyjamin S Gaddack

Benjamin S. Craddock, PE, President LANCASTER CIVIL

 cc: Justin Evans, Township Community Development Director/Zoning Officer (via email) Patricia Bailey, Township Secretary (via email) Josele Cleary, Esquire, Township Solicitor (via email) Len Spencer, Township SEO (via email) Renee Addleman, Planner, LCPC (via email) Cameron L. Renehan, PE, TeamAg, Inc. (via email)