## Storm Water Pollution Prevention Plan (SWP3) Checklist for Construction Activities<sup>1</sup>

<del></del>	(Please read footnotes fo	or important of	details	s.)					
Facility Name:		Date SWP	<b>P3 Received:</b> Click or tap to enter a date.						
SWP3 Reviewe	er: Alison Manning	Date SWP	3 Re	view	red: Cl	ick or tap to enter a date.			
Approved: No		Approval	•						
		T PP							
Applicability									
	Soil disturbing areas of one (1) acre or mor	e of land or	less t	han (	one (1)	and part of larger plan			
	Soil disturbing areas between one/tenth ac	re and one	area	of lar	nd: <b>req</b> i	uirements in purple			
						Pripri			
Part III.G.1 - Site	e Description – Does the SWP3								
			Υ	N	N/A	Comments			
(a) describe	e the nature and type of construction activity	(e.g.,	П	П					
	nsity residential, shopping mall, highway, etc								
	e the total area of the site that is expected to		П	П	П				
	ed (i.e., the area of grubbing, clearing, excav								
filling,	or grading including off-site borrow areas)?								
(c) include a	a measure <sup>2</sup> of the impervious area and perce	ent		П	П				
imperv	riousness as a result of the construction activ	ity			_				
(existin	ng, new and total impervious area after const	truction)?							
(d) storm w	vater calculations - these include volumetric i	runoff							
coeffic	ients for both pre-and post-construction site	s, resulting							
water	quality volume, design details for post-constr	ruction							
storm	water facilities and pretreatment practices <sup>3</sup> a	and if							
applica	ble, an explanation of the use of exiting post	i-							
constru	uction facilities.								
(e) include	any existing data describing.								
a.	,	lable, it							
	does not need to be included								
b.	provide any information on the quality of t								
	water discharge from the construction site	-							
	this data is not available, it does not need	to be							
	included?								
	any information about prior land uses at the								
	e property used to manage solid or hazardou	is waste)?							
	the condition of on-site streams (prior	ala a sa a a la	Ш		Ш				
	elization, existing bed instability or headcuts,								
	ng public maintenance, or natural channels)? an implementation schedule which describe:								
	nce of major construction operations (e.g., gr		Ш	Ш					
	ting, grading, utilities, infrastructure installat								
	plementation of erosion, sediment and storn								
	ement practices or facilities to be employed								
_	peration of the sequence?	a ar mg							
	he name(s) or location(s) of:								
a.	the initial and subsequent surface water bo	odies							
	receiving the storm water discharge?			ш					
b.		which will		П	П				

be disturbed and/or will receive the storm water discharges and their areal extent and description?

<sup>&</sup>lt;sup>1</sup>This checklist is a modification of an existing Ohio EPA SWP3 Review Checklist that reflects the 2018 Construction General Permit (CGP) language

<sup>&</sup>lt;sup>2</sup> This differs from previous permit which called for an estimate. The new permit calls for a "measure" of impervious area and percent imperviousness

<sup>&</sup>lt;sup>3</sup> Design details include contributing drainage areas, capacities, elevations, outlet details and drain times shall be included in the SWP3; and if applicable, explanation of the use of existing post-construction facilities

Part III.G.1 - Site Description – Does the SWP3				
·	Υ	N	N/A	Comments
(j) include a detailed drawing of individual parcels with their	П	П	П	
erosion, sediment or storm water control practices or a	_	_	_	
typical individual lot with shown standard individual lot				
erosion and sediment control practices (for subdivided				
developments)?				
(k) include the location and description of storm water				
discharges associated with dedicated asphalt and/or concrete				
batch plants covered by the NPDES construction storm water				
general permit?				
(I) include a cover page identifying the name and location of the				
site, the name and contact information for site operators and				
SWP3 authorization agents as well as preparation date, start				
date, and completion date?				
(m) include a modification log to be updated in the field?				
Site Map Requirements (III.G.1.n.)				
(i) describe the limits of earth-disturbing activity of the site				
including associated off-site borrow or spoil areas that are				
not addressed by a separate NOI and associated SWP3?				
(ii) describe the soils types depicted for all areas of the site,		П		
including locations of unstable or highly erodible and/or	_	_	_	
known contaminated soils?				
(iii) show existing and proposed contours and delineation of				
drainage watersheds expected during and after major grading				
activities as well as the size of each drainage watershed, in				
acres?				
(iv) delineated boundary for required riparian setbacks?				
(v) the location of conservation easements, open space areas,				
preserved vegetation, or other protected areas and				
associated temporary or permanent fencing or signage?				
(vi) show surface water locations including springs, wetlands,				
streams, lakes, water wells, etc., on or within 200 feet of the				
site, including the boundaries of wetlands or stream channels				
and first subsequent named receiving water(s) the permittee				
intends to fill or relocate for which the permittee is seeking				
approval from the Army Corps of Engineers and/or Ohio EPA?				
(vii) include the location of existing and planned buildings, roads,				
parking facilities, and utilities?				
(viii)include the location of all erosion and sediment control				
practices, including the location of areas likely to require				
temporary stabilization during the course of site				
development?				
(ix) include the location of sediment management traps and	Ш	Ш	Ш	
basins noting their sediment storage and dewatering and contributing drainage area? <sup>4</sup>				
(x) include the location(s) of				
(x) include the location(s) of				

<sup>&</sup>lt;sup>4</sup> Ohio EPA recommends using data sheets to provide data for all sediment traps and basins noting inputs to design and resulting parameters (e.g. contributing drainage areas, disturbed area, detention volume, sedimentation volume, practices surface area, dewatering time, outlet type and dimensions)

Part III.G.1 - Site Description – Does the SWP3				
	Y	N	N/A	Comments
a. permanent storm water management practices (new and existing) including pre-treatment practices to be				
used to control pollutants in storm water after construction operations have been completed?				
<ul> <li>b. location of existing and planned drainagefeatures including catch basins, culverts, ditches, swales,</li> </ul>				
surface inlets out outlet structures?				
(xi) include areas designated for the storage or disposal of solid,				
sanitary, and toxic wastes (including dumpster areas), areas				
designated for cement truck washout, and areas for vehicle fueling?				
(xii) include the location of designated construction entrances				
where the vehicles will access the construction site?				
(xiii)The location of proposed floodplain fill, flood plain				
excavation, stream restoration, or known temporary or permanent stream crossings?				
Part III.G.2 - Sediment & Erosion Controls				
	Υ	N	N/A	Comments
(a) Preservation Methods <sup>5</sup>				
Has every effort been made to preserve the natural riparian				
setback (vegetative buffer strip) adjacent to streams or other				
surface water bodies and existing vegetation, vegetative buffer				
strips, soil profile, and topsoil?				
Have efforts been made to phase in construction activities in				
order to minimize the amount of land disturbance at one time?				
Will any portions of the site be left undisturbed (e.g., tree preservation areas, topsoil, soil profile)?				
(b) Erosion Controls Practices	Υ	N	N/A	Comments
Is there a description of the erosion control practices designed to				
re-establish vegetation or provide suitable cover on disturbed areas after grading?				
Does the SWP3 describe the control practices used to re-stabilize areas after grubbing or construction?				
Does the SWP3 specify the types of stabilization measures to be employed for any time of the year?				
(i) Stabilization	П		П	
Are disturbed areas stabilized in accordance to CGP Table 1	一	$\overline{}$		
(Permanent Stabilization) and CGP Table 2 (Temporary Stabilization)?	Ш	Ш	Ш	
(ii) Permanent Stabilization of conveyance channels				
Are channels and outfalls stabilized and have measures been				
taken to prevent erosive flows?	ш	Ц	Ш	
(c) Runoff Control Practices				
Does the SWP3 incorporate measures to reduce flow rates (e.g., riprap, ditch check dams)?				
Does the SWP3 incorporate measures to divert concentrated flow (e.g., pipe slope drains)?				

<sup>&</sup>lt;sup>5</sup> Previous permit had "Non-Structural" Preservation Methods

Part III.G.2 - Sediment & Erosion Controls				
	Υ	N	N/A	Comments
(d) Sediment Control Practices				
Will sediment control devices be implemented for all areas				
remaining disturbed for over 14 days? (e.g., sediment settling				
ponds, sediment barriers <sup>6</sup> , earth diversion dikes, or channels)?				
Are detail drawings of the sediment controls to be used included				
in the SWP3?				

## **Table 1: Permanent Stabilization**

Area requiring permanent stabilization	Time frame to apply erosion controls
Any areas that will lie dormant for one year or more	Within seven days of the most recent disturbance
Any areas within 50 feet of a surface water f the state and at final grade	Within two days of reaching final grade
Other areas at final grade	Within seven days of reaching final grade within that area

## **Table 2: Temporary Stabilization**

Area requiring permanent stabilization	Time frame to apply erosion controls
Any disturbed areas within 50 feet of a surface water of the state and not at final grade	Within two days of the most recent disturbance if the area will remain idle for more than 14 days
Any disturbed areas that will be dormant for more than 14 days but less than one year, and not within 50 feet of a surface water of the state	Within seven days of the most recent disturbance within the area  For residential subdivisions, disturbed areas must be stabilized at least seven days prior to transfer of permit coverage for the individual lot(s).
Disturbed areas that will be idle over winter	Prior to the onset of winter weather

Part III.G.2 - Sediment & Erosion Controls (cont.)				
	Υ	N	N/A	Comments
(i) Timing				
Does the SWP3 specify that sediment controls will be installed/implemented within 7 days of the start of grubbing activities and continue to function until the upslope area is stabilized with permanent cover?				
Does the SWP3 propose alternate sediment controls for the changing slopes and topography during construction?				
(ii) Sediment Settling Ponds				
<ul> <li>Does the SWP3 include the installation and use of a sediment settling pond? NOTE: Sediment settling ponds are required:</li> <li>when there is concentrated or collected runoff (storm sewer or ditch),</li> <li>when the design capacity of silt fence/sediment barrier, or inlet protection has been exceeded.<sup>7</sup></li> </ul>				

<sup>&</sup>lt;sup>6</sup> New CGP substitutes term "sediment barriers" for "silt fences" as examples of sediment control practices.

<sup>&</sup>lt;sup>7</sup> New CGP removes drainage area of 10 acres or greater of disturbed land criterion for sediment settling ponds. These are required for drainage areas exceeding 1 acre.

Part III.G.2 - Sediment & Erosion Controls (cont.)				
	Υ	N	N/A	Comments
For construction activities that require sediment settling pond(s),	П	П		
does the SWP3 propose to implement alternative controls to	_		_	
sediment settling ponds? NOTE: Alternative controls must be				
equivalent in effectiveness to a sediment settling pond and must				
be approved by Ohio EPA.				
Does dewatering of the sediment settling pond take place at the		П		
surface of the pond?	_		_	
Is dewatering of the sediment settling pond accomplished with				
the use of a skimmer or other equivalent device?	_	_	_	
Is the dewatering volume of the sediment settling pond sized to				
receive at least 67 cubic yards (1800 cubic feet) of storm water	_	_	_	
per acre of total drainage area?				
Is the depth of the dewatering volume for each sediment settling	П	П		
pond less than or equal to 5 feet? NOTE: The base of the		_	_	
dewatering volume is where the skimmer is connected to the				
outlet.				
Will the dewatering volume drain time meet at least the minimum				
48-hour requirement?	_		_	
Is the sediment storage zone volume of the pond at least 1000		П		
cubic feet per disturbed acre (Method 1)?		_	_	
If not, was RUSLE method or a similar generally accepted erosion	П	П		
prediction model (Method 2) used to calculate the sediment		_	_	
storage zone volume?				
(iii) Is the length to width ratio of the sediment settling pond at	П	П		
least two units of length for every one unit of width (> 2:1			_	
length <b>to</b> width)? <i>NOTE: The greater the distance from the</i>				
storm water inlet into the pond to the storm water outlet, the				
greater likelihood of sediment settlement. This prevents				
short-circuiting of the pond.				
Will the sediment storage zone of the pond be cleaned out when				
the sediment exceeds 50 percent of the minimum required		_	_	
sediment storage design capacity and prior to the post-				
construction practice unless suitable storage is demonstrated				
based upon over-design?				
Is the sediment settling pond designed to consider public (i.e.,				
child) safety where site limitations preclude a safe design?	_	_	_	
Has the use of multiple sediment and erosion control measures				
been considered and/or planned in order to maximize pollutant		_	_	
removal?				
(iv) Sediment Barriers and Diversions <sup>8</sup>				
Will sediment barriers or other diversions be used to control sheet				
flow?			_	
Will a 12-inch diameter sediment barrier be substituted for a				
standard silt fence?		_		
Will sediment barriers be used in areas of steep slopes or				
concentrated flow? NOTE: Sediment barriers are not permitted to				
be used for controlling high velocity storm water flow.				

<sup>&</sup>lt;sup>8</sup> Placing sediment barriers in a parallel series does not extend the size of the drainage area being covered.

## **Sediment Barrier Maximum Drainage Area Based on Slope**

Maximum drainage area (in acres) to 100 linear feet of sediment barrier	Range of slope for a particular drainage area (in percent)
0.5	< 2%
0.25	<u>&gt;</u> 2% but < 20%
0.125	≥ 20% but < 50%

(v) Inlet Protection					
Are sediment settling ponds proposed for all inlets receiving runoff					
from drainage areas of one or more acres?					
Do any inlets not connected to a sediment settling pond receive					
runoff from one or more acres?					
Have protective measures been specified for all inlets? NOTE: Inlet					
protection is mandatory.					
Does the inlet protection meet the standards of Ohio's Rainwater					
and Land Development Manual?					
(vi) Stream (Surface Waters of the State) Protection					
Does the SWP3 propose to use any structural sediment controls in a					
stream? NOTE: Use of structural sediment controls in-stream is					
prohibited in accordance with Part III.G.2.d.v.					
For construction activities that are on the stream bank or will					
involve stream crossing, does the SWP3 include measures to					
minimize the number of stream crossings and/or the width of					
disturbance? NOTE: If work along a stream bank is necessary, a					
non-erodible pad or non-erodible stream diversion dams (sand bags)					
must be installed. If stream crossings are necessary, a non-erodible					
stream crossing must be installed.					
stream crossing must be instaneu.					
stream crossing must be installed.					
Part III.G.2.e – Post-Construction Storm Water Management					
-	Υ	N	N/A	Comments	
-	Y	N	N/A	Comments	
Part III.G.2.e – Post-Construction Storm Water Management	Υ	N	N/A	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post-	Υ	N	N/A	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage	Υ	N	N/A	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been	Υ	N	<b>N/A</b>	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all	Y	N	<b>N/A</b> □	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.	Y		<b>N/A</b> □	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.  Will the construction activity result in the installation of any impervious surface? NOTE: Projects that do not result in the installation of impervious surface do not require the installation of	<b>Y</b>		<b>N/A</b>	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.  Will the construction activity result in the installation of any impervious surface? NOTE: Projects that do not result in the	<b>Y</b>		N/A	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.  Will the construction activity result in the installation of any impervious surface? NOTE: Projects that do not result in the installation of impervious surface do not require the installation of post-construction BMPs.  Have detailed drawings and a long-term maintenance plan (including			N/A ☐ ☐ ☐ ☐ ☐	Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post-construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.  Will the construction activity result in the installation of any impervious surface? NOTE: Projects that do not result in the installation of impervious surface do not require the installation of post-construction BMPs.			<b>N/A</b> ☐	Comments	
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Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.  Will the construction activity result in the installation of any impervious surface? NOTE: Projects that do not result in the installation of impervious surface do not require the installation of post-construction BMPs.  Have detailed drawings and a long-term maintenance plan (including identification of the party responsible for maintenance) been provided for all post-construction BMPs in the SWP3?9				Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.  Will the construction activity result in the installation of any impervious surface? NOTE: Projects that do not result in the installation of impervious surface do not require the installation of post-construction BMPs.  Have detailed drawings and a long-term maintenance plan (including identification of the party responsible for maintenance) been provided for all post-construction BMPs in the SWP3?9  Has an abbreviated long-term maintenance plan, that includes all required elements listed in the City of Middletown's ESPSC Plan beer included?				Comments	
Part III.G.2.e – Post-Construction Storm Water Management  Does the SWP3 include the installation of a structural post- construction best management practice (BMP)/control to manage storm water runoff once construction activities have been completed? NOTE: Post-construction controls are required for all sites with one or more acres of disturbed area.  Will the construction activity result in the installation of any impervious surface? NOTE: Projects that do not result in the installation of impervious surface do not require the installation of post-construction BMPs.  Have detailed drawings and a long-term maintenance plan (including identification of the party responsible for maintenance) been provided for all post-construction BMPs in the SWP3?9  Has an abbreviated long-term maintenance plan, that includes all required elements listed in the City of Middletown's ESPSC Plan been				Comments	

<sup>&</sup>lt;sup>9</sup> Note: Page 20 of the final OHC000005 permit has new requirements of what must be included in the O&M plans.

Part III.G.2.e – Post-Construction Storm Water Management				
	Υ	N	N/A	Comments
Does the SWP3 specify that the permittee is responsible for assuring				
all post-construction practices meeting plan specifications and				
intended post-construction conditions have been met before				
coverage under this permit is terminated? <sup>10</sup>				
Note: Permittee is not responsible under the permit for operation				
and maintenance of post-construction practices once the permit is				
terminated. The long-term maintenance agreement stipulates the				
responsible party.				
Is the construction activity a linear project (e.g., pipeline or utility				
line installation) that does not result in the installation of				
impervious surface? NOTE: Linear projects that don't result in the				
installation of impervious surface do not need the installation of structural post-construction BMPs. However, they do require				
minimizing the number of stream crossings.				
Does the SWP3 includes structural post-construction BMP(s)	$\overline{}$			
selected from Table 4a or 4b? <sup>11</sup>	Ш	Ш	ш	
If not, have alternative BMP(s) been approved?				
Does the SWP3 include a structural post-construction BMP with a	П	П	П	
specified volume and drain time?				
If so, were Equations 1 and 2 in the CGP used to determine the				
water quality volume (WQv) and drain time?				
If the formula described in the CGP was used to calculate the				
WQv, were the correct values used for:				
<ul> <li>volumetric runoff coefficient (Rv)?<sup>12</sup></li> </ul>				
<ul> <li>fraction of post-construction impervious surface (i)</li> </ul>				
<ul><li>precipitation depth (P = 0.90-inches)?</li></ul>				
<ul><li>and the drainage area (A) to the BMP?</li></ul>				
If the structural post-construction BMP will be used for sediment				
storage and/or has a reduced infiltration capacity, was the WQv				
increased by an additional 20 percent ("fudge factor")?				
Does the drain time in the SWP3 for the proposed structural post-				
construction BMP match the drain time for the selected BMP in the				
Tables 4a and 4b below? <sup>13</sup>				
Are the post-construction practices sized to treat 100% of the WQv associated with their contributing drainage area?	Ш	Ш	Ш	
Are existing post-construction BMPs being used to manage the		П		
WQv?	Ш	Ш	Ш	
If so, do they treat runoff from the disturbed area(s) and meet				
post-construction requirements of the CGP? Note: If the above				
criteria are met, no additional post-construction BMP(s) are				
required.				
Is a regional storm water BMP being used to meet post-construction				
requirements?				

<sup>&</sup>lt;sup>10</sup> Post-construction conditions include, but are not limited to, sediment removed from, and sediment storage restored to, permanent pools, sediment control outlets removed and replaced with permanent post-construction discharge structures, and all slopes and drainageways permanently stabilized.

<sup>&</sup>lt;sup>11</sup> BMPs presented in Tables 4a and 4b are considered standard BMPs for general use. The identified BMPs have changed from the previous CGP and are broken into two types: Extended Detention (Table 4a) and Infiltration (Table 4b).

<sup>&</sup>lt;sup>12</sup> The new CGP replaces the use of runoff coefficient (C).

<sup>&</sup>lt;sup>13</sup> Tables 4a and 4b replace the former Table 2

Part III.G.2.e – Post-Construction Storm Water Management				
	Υ	N	N/A	Comments
If so, are the following conditions met?				
<ul> <li>Does the BMP meet the design requirements for treating the WQv?</li> </ul>				
<ul> <li>Has a legal agreement been established such that the regional BMP owner or operator agrees to provide this service in the long term?</li> </ul>				
Does the SWP3 contain design information for these facilities show contributing drainage areas, capacities, elevations, outlet details and drain times?				
Does the outlet structure of the post-construction BMP allow the discharge of half of the WQv in less than 1/3 <sup>rd</sup> of the drain time?				

### Table 4a Extended Detention Post- Construction Practices with Minimum Drain Times

Extended Detention Practices	Minimum Drain Time of WQv
Wet Extended Detention Basin <sup>1,2</sup>	24 hours
Constructed Extended Detention Wetland <sup>1,2</sup>	24 hours
Dry Extended Detention Basin <sup>1,3</sup>	48 hours
Permeable Pavement- Extended Detention <sup>1</sup>	24 hours
Underground Storage Extended Detention <sup>1,4</sup>	24 hours
Sand & Other Media Filtration Extended Detention <sup>1</sup>	24 hours

#### Notes for Table 4a:

- 1. The outlet structure shall not discharge more than the first half of the WQv in less than one-third of the draintime
- 2. Provide a permanent pool with a minimum volume equal to the WQv and an extended detention volume above the permanent pool equal to 1.0 x WQv
- 3. Dry basins must include a forebay and micropool each sized at a minimum of 0.1 x WQv and protected outlet, or include acceptable pretreatment and protected outlet.
- 4. Underground storage must have pretreatment for removal of suspended sediments included in the design and documented in the SWP3. This pretreatment shall concentrate sediment in a location where it can be readily removed. For non-infiltrating, underground extended detention systems, pretreatment shall be 50% effective at capturing total suspended solids according to the testing protocol established in the Alternative Post-Construction BMP Testing Protocol.
- 5. The WQv ponding area shall completely empty between 24 and 72 hours.

### Table 4b Infiltration Post-Construction Practices with Maximum Drainage Time

Infiltration Practices	Maximum Drain
	Time of WQv
Bioretention Area/Cell <sup>1,2</sup>	24 hours
Infiltration Basin	24 hours
Infiltration Trench <sup>2</sup>	48 hours
Permeable Pavement- Infiltration <sup>3</sup>	48 hours
Underground Storage- Infiltration <sup>3,4</sup>	48 hours

## Notes for Table 4b:

1. Bioretention soil media shall have a permeability of approximately 1-4in/hr. Meeting the soil media specifications in the Rainwater and Land Development manual is considered compliant with this requirement. Bioretention cells must have underdrains unless in-situ conditions allow for the WQv (surface ponding) plus the bioretention soil (to a depth of 24 inches) to drain completely within 48 hours.

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- 2. Infiltration practices with the WQv stored aboveground (bioretention, infiltration basin) shall fully drain the WQv within 24 hours to minimize nuisance effects of standing water and to promote vigorous communities of appropriate vegetation.
- 3. Subsurface practices designed to fully infiltration the WQv (infiltration trench, permeable pavement with infiltration, underground storage with infiltration) shall empty within 48 hours to recover storage for subsequent storm events.
- 4. Underground storage systems with infiltration must have adequate pretreatment of suspended sediments included in the design and documented in the SWP3 in order to minimize clogging of the infiltrating surface. Pretreatment shall concentrate sediment in a location where it can be readily removed. Examples include media filters situated upstream of the storage or other suitable alternative approved by the Ohio EPA. For infiltrating underground systems, pretreatment shall be 80% effective at capturing total suspended solids according to the testing protocol established in the Alternative Post-Construction BMP Testing Protocol.

Part III.G.2.e – Post-Construction Storm Water Management (cont.)						
	Υ	N	N/A	Comments		
Pre-Existing Drainage Basin						
Is there a pre-existing drainage basin or other BMP that will receive the storm water drainage from the construction site?						
If so, is it sized and designed appropriately to treat the WQv?						
Is there an identified entity/individual responsible for long- term maintenance?						
Public Road Construction/Transportation Projects						
For public road construction activities, are the post-construction BMPs						
designed consistent with the Ohio Department of Transportation's						
"Location and Design Manual, Volume Two Drainage Design?"						
Offsite Mitigation						
For construction activities where a post-construction BMP cannot be						
placed onsite and will require an offsite post-construction BMP:						
Has it been demonstrated that a BMP or BMPs from Tables 4a and 4b are not feasible?						
Does each offsite BMP have a long-term maintenance	П		П			
agreement, is located within the same HUC-12, and is at least 1.5 times the size of an onsite BMP?						
Has the offsite <b>mitigation proposal</b> been authorized by Ohio EPA?						
Small Construction Activities (< 2 Acres)						
Does the SWP3 include one or more structural post-construction BMPs						
for small construction activities with less than 2 acres but more than 1 acre of disturbed area?						
If each BMP is not one of the approved post-construction	П	П				
controls in Table 4a or 4b, is there a justification as to why its			_			
use was not feasible? Are limiting factors presented?						
If so, does the SWP3 explain the technical basis used to select the BMPs chosen where flows exceed pre-development levels?						
Does the SWP3 include the installation of velocity dissipation	П					
devices at discharge locations and outfall channels?	ш	ш	Ш			
Has green infrastructure been proposed?	П	П	П			
Previously Developed Areas						
Will the site be redeveloped from a previously graded, paved, or built						
upon area?	Ш	Ш	Ш			
Will the area have a 20% net reduction of the sites volumetric						
runoff coefficient through impervious area reduction or treat		Ш				
20% of the WQv for the previously developed area?						

Part III.G.2.e – Post-Construction Storm Water Management (cont.)				
· · · · · · · · · · · · · · · · · · ·	Υ	N	N/A	Comments
Will there be a combination of redeveloped and newly developed areas? If so, has the weighted approach for calculating the WQv (Equation 3) been used?				
Are the post-construction practices located to treat impervious areas that are most likely to generate the highest pollution load? (e.g., parking lots and roadways rather than rooftops)				
Runoff Reduction Practices				
Will runoff reduction practices be incorporated into the site drainage system? <sup>14</sup>				
Are the runoff reduction practices located in areas of the site not draining into a common drainage system?				
Have the runoff reduction volumes associated with these practices been calculated and documented in accordance with the Rainwater and Land Development Manual?				
If their use is to reduce the water quality volume to be treated, has their use been approved by Ohio EPA?				
Use of Alternative Post-Construction BMPs				
Will alternative post-construction BMPs be used?				
Has it been demonstrated that a BMP listed in tables 4a and 4b cannot be used?				
Does the alternative BMP meet the sediment removal and discharge rate criteria?				
Has field or laboratory field testing been performed by a third party?				
Has effectiveness of the proposed alternative post-construction BMP been demonstrated by testing of a similar BMP through the Washington State TAPE or New Jersey Department of Environmental Protection Manufactured Treatment Device programs?				
Does the alternative post-construction BMP treat and remove at the minimum 80% of the TSS for influent concentrations equal to or greater than 100mg/L TSS? If concentrations are less than 100mg/L TSS than does the BMP achieve a concentration of TSS less than or equal to 20mg/L?				
Does the alternative BMP utilize treatment processes such as filtering or centrifugal separation? If so, can the BMP ensure treatment of 90% of the average annual runoff?				
*To be verified prior to construction start – Has Ohio EPA approved use of the alternative post-construction BMP?				
Part III.G.2.f - Surface Water Protection				
	Υ	N	N/A	Comments
Does the construction site contain any streams, rivers, lakes, or wetlands?				
If so, has the U.S. Army Corps of Engineers been contacted for a determination of impacts requiring Clean Water Act 401 or 404 permitting?				

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<sup>&</sup>lt;sup>14</sup> Runoff reduction practices can include impervious surface disconnection, rainwater harvesting, bioretention, infiltration basin, infiltration trench, permeable pavement with infiltration, underground storage with infiltration, grass swale, sheet flow to filter strip, sheet flow to conservation area

For storm water discharges from BMPs into wetlands, have BMPs (e.g.,	
level spreaders, buffers, or infiltration basins) been proposed to diffuse	
the concentrated flow into non-erosive flow?	

Part III.G.2.g Other Controls				
	Υ	N	N/A	Comments
(i) Non-Sediment Pollutant Controls				
Are practices identified for protecting exposure of construction				
materials, trash, landscape materials, fertilizers, pesticides,				
herbicides, detergents and sanitary wastes to precipitation, storm				
water runoff and snow melt?				
Are protocols established to prevent wastewater from washout of				
concrete trucks, stucco, paint, form release oil, curing compounds				
to prevent direct discharge into surface waters of the state?				
Does the SWP3 designate areas used for fueling or performing				
vehicle maintenance?				
Will covered, leak-proof containers available for storage and				
disposal of debris, trash, hazardous or petroleum wastes?				
Has a spill prevention control and countermeasures (SPCC) plan				
been developed? NOTE: A SPCC plan must be developed for sites				
with one above ground storage tank (AST) of 660 gallons or more,				
total above ground tank storage of 1330 gallons, or below ground				
storage of 42,000 gallons of fuel.				
Does the SWP3 describe what to do in the event of a small release		Ш	Ш	
(less than 25 gallons) of petroleum waste? NOTE: Petroleum-based				
and concrete curing compounds must have special handling				
procedures.	_			
Does the SWP3 describe what to do in the event of a larger release	Ш	Ш	Ш	
(25 or more gallons) of petroleum waste? <sup>15</sup>	_			
Does the SWP3 provide directions on how to dispose toxic or	Ш	Ш	Ш	
hazardous wastes properly?				
Does the SWP3 provide areas for recycling of used or unused hazardous materials? NOTE: No toxic or hazardous wastes shall be	Ш	Ш	Ш	
disposed into storm drains, septic tanks, or by burying, burning, or				
mixing the wastes.				
Does the SWP3 designate areas used for receiving concrete chute				
or other concrete wash waters?	Ш	Ш	Ш	
If so, are these areas located away from watercourses,		П		
drainage ditches, field drains, or other storm water drainage	Ш	ш	ш	
areas?				
Does the SWP3 designate areas used for mixing or storage of			П	
compounds such as fertilizers, lime, asphalt, or concrete?	ш	ш	ш	
If so, are these areas located away from watercourses,				
drainage ditches, field drains, or other storm water drainage		_	_	
areas?				
(ii) Tracking/Off-Site Traffic				
Are protocols and practices specified to minimize tracking of				
sediment and dust off-site? NOTE: Open transport vehicles should	_	_		
be covered during travel on roadways to the point of disposal to				
prevent debris spills and dust generation.				

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 $<sup>^{15}</sup>$  You must contact, Ohio EPA (at 1-800-282-9378), the local fire department, and the local emergency planning committee (LEPC) within 30 minutes of a spill of 25 or more gallons.

Par	t III.G.2.g Other Controls				
		Υ	N	N/A	Comments
	Does the SWP3 specify that no detergents may be used to wash vehicles?				
	Are provisions in place for treating wash waters in either a		П		
	sediment basin or alternative control prior to discharge?	ш	ш	ш	
	(iii) Compliance with Other Requirements				
	Does the SWP3 state that all construction & demolition debris	П	П		
	(Cⅅ) waste will be disposed of in an Ohio EPA approved Cⅅ				
	landfill as required by Ohio Revised Code (ORC) 3714? NOTE:				
	Construction debris may be disposed of on-site, but demolition				
	debris must be disposed in an Ohio EPA approved landfill. Materials				
	which contain asbestos must comply with air pollution regulations				
	(see Ohio Administrative Code 3745-20).				
	Is open burning performed in a restricted area (as defined in OAC				
	3745-19)? NOTE: Open burning is permitted in restricted areas for				
	barbeques, heating, and certain occupational purposes.				
	Is open burning performed in a non-restricted area, but within				
	1,000 feet of an inhabited building away from the property? <i>NOTE:</i>				
	Open burning in an unrestricted area is limited to scrap lumber,				
	wooden fence posts, agricultural, land-clearing, or landscape				
-	wastes.	_	_		
	Are dust suppressants proposed to be used in the SWP3?	Ш	Ш		
	If so, are the areas which the dust suppressant will be applied				
	located near catch basins for storm sewers or other drainage				
	ways? NOTE: Used oil may not be used as a dust suppressant.				
	Have appropriate measures been taken to ensure that all air				
	pollution permits have been obtained? NOTE: Air pollution permits				
	may be required for activities including, but not limited to, mobile				
	concrete batch plants, mobile asphalt plants, concrete crushers, and				
-	large generators.				
	For restoration or demolition projects, will a notification be submitted to Ohio EPA, Division of Air Pollution Control to	Ш	Ш		
	determine if asbestos corrective actions are required?				
	Will all process wastewaters (e.g., equipment washing, leachate				
	associated with on-site waste disposal, and concrete wash-outs) be	Ш	Ш	Ш	
	collected and disposed of properly (e.g., to a publicly-owned				
	treatment works)? NOTE: The NPDES construction storm water				
	general permit only authorizes the discharge of storm water and				
	certain uncontaminated non-storm waters. The discharge of non-				
	storm waters to waters of the state may be in violation of local,				
	state, and federal laws or regulations.				
	(iv) Trench & Ground Water Control				
	Does the construction site have an onsite trench or pond that must				
	be dewatered?				
	If so, does the SWP3 call for the discharge of potentially turbid				
	water through a filter bag, sump pit, or other sediment				
	removal device?				
	(v) Contaminated Soils				
	Does the SWP3 address proper handling and disposal of soils				
	contaminated by petroleum or other chemical spills? NOTE: All				
	contaminated soils must be treated and/or disposed in Ohio EPA				
	approved solid waste management facilities or hazardous waste				
	treatment, storage or disposal facilities (TSDFs).				

# City of Middletown – ESC Plan/SWP3 Checklist

Part III.G.2.g Other Controls				
	Υ	N	N/A	Comments
If the facility contains contaminated soil, which of the following				
practices will be used to prevent contamination from being				
released?				
<ul> <li>The use of berms, trenches, and pits to collect contaminated</li> </ul>				
runoff and prevent discharges				
<ul> <li>Pumping runoff into a sanitary sewer (with prior approval of</li> </ul>				
the sanitary sewer operator) or into a container for transport				
to an appropriate treatment/disposal facility				
<ul> <li>Covering areas of contamination with tarps or other methods</li> </ul>			П	
that prevent storm water from coming into contact with the				
material				
Part III.G.2.i - Inspections				
	Υ	N	N/A	Comments
Does the SWP3 require weekly inspections of BMPs and an	П	П		
inspection by the end of the next calendar day (excluding	ш	ш	ш	
weekends and holidays) after every rain event of 0.5 inches within				
a 24-hour period?				
If the site will be dormant for a long period, it's stabilized, and less	П	П	П	
frequent inspections are desired, does the SWP3 call for a waiver				
request to be submitted to OEPA for a reduction to monthly				
inspections?				
Does the SWP3 state that only "qualified inspection personnel" will		П		
perform the inspections?	_		_	
Does the SWP3 state that an inspection checklist will be completed				
and signed by the inspector after every inspection?			_	
Are the required elements for the inspection report, identified in				
the CGP, listed in the SWP3?				
Does the SWP3 state that inspection records will be kept for 3				
years after termination of construction activities?				
For BMPS that require repair or maintenance, does the SWP3				
specify non-sediment pond BMPs to be repaired within 3 days of				
inspection and sediment ponds to be repaired or cleaned out				
within 10 days of inspection?				
For BMPs not meeting the intended function, does the SWP3 state				
that a new BMP will be installed within 10 days of the inspection?				
For missing BMPs required for installation by the SWP3, does the				
SWP3 state that the missing BMPs will be installed within 10 days				
of the inspection?				

ADDITIONAL COMMENTS/DETAIL EXAMPLES: