

Plot Date: Jun 02, 2017 - 1:55pm Plotted By: tim-b File Name: P:\2016\16003\Drawings\Final Engineering\16003-Plan Set.dwg

	H: 1" = 20' , V: 1" = 5'		
		710	
		705	
Crossing #11 12" RCP (WM Quality)			
B/P 699.50		700	
		700	
► T/P 698.00			
		695	
	- ð		
	RE RE SE	690	
	ATCH	005	
		685	
05.14 05.97 07.14			
	H: 1" = 20' , V: 1" = 5'		
		710	
			.omments mments
		705	ments MWRD C IDOT Co
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		700	06/02/20 05/15/2/ 01/09/20
		695	
			847.39
		690	600 Fox
			<b>Jan</b> 1an 46. 184-6
		685	Tel: 84
			60173 Gerenginn
			nburg, IL not Desi
÷	H: 1" = 20' , V: 1" = 5'		Parkway.
			ast State <b>F</b>
FH1		710	
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		705	S
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			PL PC
6" DIWM		700	
		605	
		090	<b>PR</b> <b>PR</b> <b>IGI</b>
		690	LEX
		685	
-			Project Manager: TJB
708.0			Engineer: DJV Date: 12/19/2016 ₽
			Project No.         16-003           Sheet         ♀         ●



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H. I' = 20', V. I' = 5 710 705  705  700 695  10 10 10 10 10 10 10 10 10 10	H: 1" = 20', V: 1" = 5'           H: 1" = 20', V: 1" = 5'           T10           San MH 5.1           Rim 702.75           Inv 695.70 (N)           Proposed Grade Above Sanitary Sewer           /- Existing Grade Above Sanitary Sewer	1       1	San MH 4.1       Inv 694.61 (E)         Rim 704.47       Inv 694.61 (E)         Rim 704.00       Inv 694.61 (E)	Inv 698.50 (S)       705         Proposed Grade Above Sanitary Sewer       705         Existing Grade Above Sanitary Sewer       700         Water Service Crossing (Typ.)       700         1/2 (S) PVO (WM Quality) @ 2.43%       695         Dip Water Service.       81	690 690 690 685 685 Project Manager: TJB	Engineer: DJV Date: 12/19/2016 Project No. 16-003 Sheet <b>C8.1</b>
Existing Grade Above Sanitary Sewer		Water Service Cross				
San MH 4 Rim 704.47 Inv 694.61 (E) Inv 696.61 (N) 1#10 46	San MH 1 Rim 705 53 Inv 690.68 (N) Inv 688.68 (NW) Inv 688.68 (SE)	0%	San MH 3 Rim 708.44 Inv 693.13 (N) Inv 693.13 (SW) Inv 695.13 (E)			
Sewer Sewer Cross 6" DIW B/P 69 T/P 695:51	San MH 2 <u>Rim 709.09</u> Inv 692.50 (NE) Inv 692.50 (S)	98 6 6 6 5 7 1	R R R	Vater Service Crossing (Typ.)		705.11 707.18 709.47
Proposed Grade Above Sanitary S				, ' , ' Wa T/P 696.14		24 24 24

	VAH Comments VAH and MWRD Comments VAH and IDOT Comments Kevision	007 <b>2</b> 06/02/2017 01/09/2017 <b>006/</b>	DINEERING BINEERING Ind surveyor 1847.394.6600 Fax: 847.394.6600 se No. 184-003152 g.com	AFGER FN (989) 9 engineers • way, Schaumburg, IL 60173 Fel inois Professional Design Firm Licen www.haegerengineerin	100 East State Park	705 NG PLANS 200 207 207 207 207 207 207 207 207 207	2699 PROFILE INGINEERI NGTON HEIGHTS, L	690 <b>S</b> EINAL E85	Project Manager: T J B Engineer: D J V Date: 12/19/2016
	= 5'				= 5'				······
: 1" = 20' , V: 1"	1" = 20' , V: 1"				1" = 20' , V: 1"				
708.87 MATCH LINE - SEE BELOW	H:				H:				:
	San MH 5 Rim 702.7 Inv 695.7( Inv 695.7(				San MH 4 Rim 704.47 Inv 694.61 (E) Inv 694.61 (S)				
	Iry Sewer	y Sewer	Dip Water Service. See Detail.				N N		•••••
707.32	ade Above Sanit	M.Quality) @ 1.5	702.53			/ Sewer 	<u>uality) @ 2.43%</u>	704.55 704.50	
	- Proposed G	- Existing Gra				ade Above Sanitar Grade Above anitary Sewer Service Crossing	7 <u>8'- 8" PVC (WM (</u> ervice.		
	n MH 5-1 n 702.25 r 697.05 (N)		Vater Service.		n MH 4-1	698.50 (S) Proposed Gra Existing Sa Water	Dip Water Se See Detail		
Crossing #12 12" RCP 3/P 699:85 /P 694.80	Sa Rii Im	ice Crossing (Typ	Dip V 702.25		Sa		Ę	703.16 704.08	
tary Sewer		Water Servi							
Frade Above Sanit									
Existing G									
Water S									
	San MH 1 Rim 705,53 nv 690.68 (N) nv 688.68 (NW) nv 688.68 (SE)				<u>(</u>				
San MH 4 Rim 704.47 Inv 694.61 Inv 696.61			Sanitary Sewer		San MH 3 Rim 708.44 Inv 693.13 (N Inv 693.13 (S Inv 695.13 (E				
±10			%				Ň		
Crossing 1 6" DIWM B/P 697.40			<sup></sup>	707.13	Sewer				·····
T/P 695.51 - J			9		Above Sanitary	/	)-/		
103.55 2	San MH 2 Rim 709.09 Inv 692.50 (NE) Inv 692.50 (S)			703.07	Existing Grade		ce Crossing (Typ.		
anitary Sewer				709.36 7			Water Serv		
ed Grade Above S						, ,			
✓ Proposec 5 1 1 5 219' - 6 219' - 7 8 219' -				23 24 24			T/P 696.14		







Plot Date: Jun 02, 2017 - 1:56pm Plotted By: tim-b File Name: P:\2016\16003\Drawings\Final Engineering\16003-Plan Set.dwg

![](_page_5_Figure_0.jpeg)

![](_page_5_Figure_1.jpeg)

![](_page_5_Figure_2.jpeg)

![](_page_5_Figure_3.jpeg)

Plot Date: Jun 02, 2017 - 1:56pm Plotted By: tim-b File Name: P:\2016\16003\Drawings\Final Engineering\16003-Plan Set.dwg

![](_page_5_Figure_5.jpeg)

![](_page_5_Figure_6.jpeg)

![](_page_5_Figure_7.jpeg)

![](_page_5_Figure_8.jpeg)

![](_page_5_Figure_9.jpeg)

![](_page_5_Figure_10.jpeg)

**OLD ARLINGTON HEIGHTS ROAD CROSS SECTIONS** H: 1" = 20' , V: 1" = 5'

![](_page_6_Figure_0.jpeg)

![](_page_6_Figure_4.jpeg)

![](_page_6_Figure_5.jpeg)

C9

![](_page_7_Figure_0.jpeg)

![](_page_7_Figure_2.jpeg)

![](_page_8_Figure_0.jpeg)

Plot Date: Jun 02, 2017 - 1:57pm Plotted By: tim-b File Name: P:\2016\16003\Drawings\Final Engineering\16003-Plan Set.dwg

![](_page_9_Figure_0.jpeg)

## \*Note:

Side curb shall not be utilized for this site. Contractor to grade landscape area down to curb/walk elevations.

![](_page_9_Figure_3.jpeg)

![](_page_9_Figure_4.jpeg)

![](_page_9_Figure_6.jpeg)

![](_page_9_Figure_7.jpeg)

![](_page_10_Figure_0.jpeg)

![](_page_10_Figure_1.jpeg)

![](_page_10_Figure_2.jpeg)

![](_page_10_Figure_4.jpeg)

![](_page_10_Figure_5.jpeg)

![](_page_10_Figure_6.jpeg)

![](_page_10_Figure_7.jpeg)

![](_page_10_Figure_8.jpeg)

NOTES:

THE APPROVED GEOWEB SHALL BE PRESTO GEOWEB (GW30V3). THE GEOWEB NOMINAL DIMENSIONS SHALL BE 9-FT x 25-FT.

THE CONCRETE SPLASH PAD AND GEOWEB SHALL BE INSTALLED PRIOR TO INSTALLATION OF THE STORMTRAP MODULES. 3. THE GEOWEB INFILL MATERIAL SHALL BE #5 AGGREGATE.

C9

![](_page_11_Picture_0.jpeg)

![](_page_12_Picture_0.jpeg)

![](_page_12_Picture_2.jpeg)

	$Q_1 + Q_2 (CFS)$	#19-512 (CF3)	#00-214 (CF3)	#00-223 (CF3)	Total Flow (CFS)
10 Yr 1 Hr	<mark>4.</mark> 60	0.94	0.35	0.63	6.52
10 Yr 2 Hr	4.40	0.94	0.35	0.63	6.32
10 Yr 3 Hr	<mark>3.80</mark>	0.94	0.35	0.63	5.72
10 Yr 6 Hr	2.90	0.94	0.35	0.63	4.82
10 Yr 12 Hr	2.50	0.94	0.35	0.63	4.42
10 Yr 18 Hr	2.40	0.94	0.35	0.63	4.32
10 Yr 24 Hr	2.00	0.94	0.35	0.63	3.92
10 Yr 48 Hr	1.40	0.94	0.35	0.63	3.32
50 Yr 1 Hr	<mark>9.5</mark> 0	0.94	0.35	<mark>0.63</mark>	11.42
50 Yr 2 Hr	<mark>8.90</mark>	0.94	0.35	<mark>0.63</mark>	10.82
50 Yr 3 Hr	7.20	0.94	0.35	0.63	9.12
50 Yr 6 Hr	5.30	0.94	0.35	0.63	7.22
50 Yr 12 Hr	4.10	0.94	0.35	0.63	6.02
50 Yr 18 Hr	3.70	0.94	0.35	0.63	5.62
50 Yr 24 Hr	3.00	0.94	0.35	0.63	4.92
50 Yr 48 Hr	2.00	0.94	0.35	0.63	3.92
100 Yr 1 Hr	12.60	0.94	0.35	0.63	14.52
100 Yr 2 Hr	11.40	0.94	0.35	0.63	13.32
100 Yr 3 Hr	9.30	0.94	0.35	0.63	11.22
100 Yr 6 Hr	6.70	0.94	0.35	0.63	8.62
100 Yr 12 Hr	5.00	0.94	0.35	0.63	6.92
100 Yr 18 Hr	4.40	0.94	0.35	0.63	6.32
100 Yr 24 Hr	3.60	0.94	0.35	0.63	5.52
100 Yr 48 Hr	2.30	0.94	0.35	0.63	4.22

![](_page_12_Picture_4.jpeg)

![](_page_12_Picture_5.jpeg)

Date:

Project No.

<sup>Sheet</sup>Ex 1.1

![](_page_13_Figure_0.jpeg)

# UNDERGROUND DETENTION VAULT

B. Coverage Summary:						
	Sq. Ft	Acre	%	C - Factor	CN	
EXISTING Impervious Area=	40,513	0.930	20%	0.95	98.0	
EXISTING Pervious Area=_	159,511	3.662	80%	0.50	74.0	-
EXISTING Total=	200,024	4.592		0.59	78.9	
	Sa Et	Acre	%	C - Factor	CN	
PROPOSED Impervious Area=	109.958	2.524	55%	0.95	98.0	· A
PROPOSED Pervious Area=	90,066	2.068	45%	0.50	74.0	
PROPOSED Total=	200,024	4.592		0.75	87.2	- N
	0 - 5	<b>A</b>	0/	O Fastar		- /
	Sq. Ft	Acre	<b>%</b>			
	88 010	2.012	00%	0.95	96.0 74.0	
ONSITE TRIB Total=	197,449	4.533	40 /0	0.75	87.3	-
	Sa Et	Aoro	0/	C Easter	CN	
	500 SQ. FL		<u> </u>			
	2047	0.012	20%	0.95	90.0 74.0	
	2 575	0.047	0076	0.59	74.0	
	2,070	•	24		0.0	
	Sq. Ft	Acre	<u>%</u>	C - Factor		
	0	0.000	U% 100%	0.95	98.0	
	4,030	0.093	100%	0.50	74.0	
	1,000	0.000		0.00	71.0	
TOTAL TRIBUTARY =		4.625			87.0	
				ONSITE TRIE		AREA TO
			O UNDER	ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN
			OUNDER	ONSITE TRIE GROUND D TOTA WE	BUTARY ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN
ES: r detailed stormwater information concerning this sit	e, please see En	gineering	OUNDER	ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN
ES: r detailed stormwater information concerning this site rt & Calculations.	e, please see En	gineering		ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN
ES: pr detailed stormwater information concerning this site ort & Calculations. pr detailed information concerning the underground de erground Detention & Restrictor / Overflow / Outfall D s.	e, please see Engletention vault, pl betail within Final	gineering ease see Engineering		ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN
ES: or detailed stormwater information concerning this site or t & Calculations. or detailed information concerning the underground de erground Detention & Restrictor / Overflow / Outfall D s.	e, please see En letention vault, pl betail within Final	gineering ease see Engineering		ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN DRAINAGE A
ES: or detailed stormwater information concerning this site or detailed information concerning the underground de erground Detention & Restrictor / Overflow / Outfall D s. ELEGEND	e, please see Englished	gineering ease see Engineering		ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN DRAINAGE A
ES: Tributary to Detention Vault	e, please see Engletention vault, pl betail within Final	gineering ease see Engineering		ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN DRAINAGE A
ES: or detailed stormwater information concerning this site or detailed information concerning the underground de erground Detention & Restrictor / Overflow / Outfall D s. LEGEND Tributary to Detention Vault Unrestricted Area	e, please see Engletention vault, pl betail within Final	gineering ease see Engineering		ONSITE TRIE GROUND D TOTA WE	BUTAR ETENTI L AREA IGHTEI	AREA TO ON VAULT A = 4.53 AC O CN = 87.3 C = 15 MIN DRAINAGE A

Pervious Area

![](_page_14_Figure_0.jpeg)

# UNDERGROUND DETENTION VAULT (INDIVIDUAL UNIT) N.T.S.

POND:	MWRD VC Area		DATE:	5/12/2017	
JOB NO.	16003		SHGW TABLE:	692.0	
PROJECT:	Lexington Heritage		MIN. V.C. ELEV	695	
	Area	a	Average	Incremental	Cummulativ
Elevation			Area	Storage	Storage
(ft)	$(\mathrm{ft}^2)$	(ac)	(ac)	(ac-ft)	(ac-ft)
	ВС	OTTOM OF BIO	O RETENTION		
695.00	10,679	0.245			0.000
			0.245	0.21	
695.86	10,679	0.245			0.211
	TOP OF	<b>BIO RETENTIO</b>	ON / CLEAR WATER		

Volume Type	Porosity	MWRD Factor	Media Volumes	Storage Volumes
Surface Storage	1	1	0.211	0.211
Soil Media Mix	0.25	0.5	0.000	0.000
Coarse Agg. (Above Invert)	0.36	0.5	0.000	0.000
Coarse Agg. (Below Invert)	0.36	1	0.000	0.000

Total MWRD Volume

(Ac-Ft) (Ac-Ft)

0.21

![](_page_14_Figure_8.jpeg)

# UNDERGROUND DETENTION & RESTRICTOR / OVERFLOW / OUTFALL DETAIL N.T.S.

POND:	Det. Vault		Side Slopes		
JOB NO.	16003		5	Vertical	
PROJECT:	Lexington Heritage		0	Horizontal	
FILE:					
DATE:	5/12/2017				
	Are	a	Average	Incremental	Cummulati
Elevation			Area	Storage	Storage
(ft)	(ft <sup>2</sup> )	(ac)	(ac)	(ac-ft)	(ac-ft)
695.00	10,679	0.245			0.000
			0.245	0.12	
695.50	10,679	0.245			0.123
			0.245	0.12	
696.00	10,679	0.245			0.245
			0.245	0.12	
696.50	10,679	0.245			0.368
			0.245	0.12	
697.00	10,679	0.245			0.490
			0.245	0.12	
697.50	10,679	0.245			0.613
			0.245	0.12	
698.00	10,679	0.245			0.736
			0.245	0.12	
698.50	10,679	0.245			0.858
			0.245	0.12	
699.00	10,679	0.245			0.981
			0.245	0.12	
699.50	10,679	0.245			1.103
			0.245	0.12	
700.00	10,679	0.245			1.226

Gross Detention Vault Area (SF): 11,993

Detention Vault Usable Area : 89%

Net Detention Vault Area (SF): 10,679

![](_page_14_Figure_15.jpeg)

![](_page_14_Figure_16.jpeg)

![](_page_14_Figure_17.jpeg)

![](_page_15_Figure_0.jpeg)

![](_page_15_Figure_2.jpeg)

Project Manager: Engineer D. 1/3/2017 Project No. 16-003 <sup>Sheet</sup> Ex 2.2

Date:

![](_page_16_Figure_0.jpeg)

![](_page_16_Picture_1.jpeg)

![](_page_17_Figure_0.jpeg)

![](_page_17_Picture_1.jpeg)

![](_page_18_Figure_0.jpeg)

Prepared: TJB Reviewed: TJB Date: 12/19/2016

	Type of Vehicle	Est. Workers	Phase Begin	Phase End
Э	B, BD, E, DT	5-10	7/15/2017	8/15/2017
	B, BD, DT, G, E	5-10	8/15/2017	9/15/2017
lity Phase	B, BH, DT, E	5-10	9/1/2017	10/15/2017
Construction Phase	AG, AP, BH, CT, G	5-10	10/15/2017	11/1/2017
Construction Phase	AG, AP, BH, CT, G	5-10	9/15/2017	10/15/2017
ction Phase	B, BH, DT, E	20-30	9/15/2017	9/15/2019
hase	B, BH	5-10	4/15/2018	11/15/2019

Legend AG = Asphalt Grinder AP = Asphalt Paver B = Bobcat BD = Bulldozer BH = Backhoe DT = Dump Truck E = Excavator

CT = Concrete Truck G = Grader

![](_page_18_Picture_8.jpeg)

![](_page_18_Picture_9.jpeg)

![](_page_19_Figure_0.jpeg)

# STORA SECTI ARL

# **CONTACTS:**

### VILLAGE OF ARLINGTON HEIGHTS

33 S Arlington Heights Rd Arlington Heights, IL 60005 Tel: 847-368-5000

OWNER / DEVELOPER / SUBDIVIDER:

Lexington Homes 1731 Marcey Street, Suite 200 Chicago, IL Tel: 847-875-8289 Fax: 773-60-0301

#### CIVIL ENGINEER / LAND SURVEYOR:

Haeger Engineering LLC Illinois Prof. Design Firm #184-003152 100 East State Parkway Schaumburg, IL 60173 Tel: 847-394-6600 Fax: 847-394-6608 www.haegerengineering.com

## LAND PLANNER

JENLand LLC P.O. Box 4397 Oak Park, IL 60304 Tel: 708-848-4350

#### LANDSCAPE ARCHITECT

Krogstad Land Design Limited 519 Pembrook Court N. Crystal Lake, IL 60014 Tel: 815-529-1511

#### TRAFFIC CONSULTANT

KLOA, Inc. 9575 W. Higgins Road Rosemont, IL 60018 Tel: 815-518-9990

Benchmark

Site Benchmark

CP # 101 (See Survey) Description: Cross Notch Elevation: 697.55 NAVD 88 (Geoid 12A)

![](_page_20_Picture_17.jpeg)

Know what's **below. Call** before you dig.

Call 811 at least 48 hours, excluding weekends and holidays, before you dig.

Note:

# **LEXINGTON HERITAGE** STORM WATER POLLUTION PREVENTION PLAN

SECTION 8 TOWNSHIP 42 NORTH RANGE 11 EAST ARLINGTON HEIGHTS, COOK COUNTY, ILLINOIS

![](_page_20_Figure_23.jpeg)

	INDEX TO STORM WATER POLLUTION PREVENTION PLAN SHEETS
NO.	DESCRIPTION
EC1 EC2 EC3 EC4	SWPPP TITLE SHEET SWPPP GENERAL NOTES AND SPECIFICATIONS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SWPPP TYPICAL DETAILS

	1     05/15/2017     Per Village & MWRD Comment Letter       No.     Date     Revision
E HAEGER ENGINEERING	CONSUITING ENGINEERS • Jand Surveyors 100 East State Parkway, Schaumburg, IL 60173 • Fel: 847.394.6600 Fax: 847.394.6608 Illinois Professional Design Firm License No. 184-003152 www.haegerengineering.com
SWPPP TITLE SHEET	LEXINGTON HERITAGE SWPP PLAN ARLINGTON HEIGHTS, ILLINOIS
Project Mana Engineer: Date: Project No. Sheet	ger: TJB DJV 12/16/2016 16-003

#### **Stormwater Pollution Prevention Plan**

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10Y200, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that gualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Owner's Name

Name of Firm/Company

Title

I. Site Description:

A. The following is a description of the project location:

The project is located adjacent to North Old Arlington Heights Road, between North Arlington Heights Road & East Country Lane in Arlington Heights, IL, in Section 8, Township 42 North, Range 11 East all in Cook County, Illinois (See Location Map on Title Sheet for additional information).

- B. The following is a description of the construction activity which is the subject of this plan:
- Construction of multi-family townhomes with pavement and sidewalk expansion to provide site access and related improvements to utilities including storm sewer, sanitary sewer, and water main.
- C. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading:

Exact phasing and sequencing has yet to be determined. Generally, trees will be removed as required, and then clearing and grubbing will occur. Next, mass grading will commence for the building pad and parking areas. Then the underground utilities will be constructed. Finally, the buildings, parking lots, etc. will be constructed, followed by the installation of landscaping.

#### D. The total area of the construction site is estimated to be <u>approximately $\pm$ 4.6 acres</u>.

- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:
- The weighted runoff coefficient after completion of all construction activities is approximately 0.74.
- F. The following is a description of the soil types found at the project site followed by information regarding their erosivity:
- Please refer to the geotechnical report prepared by Testing Service Corporation, dated 05/06/2016. G. The following is a description of potentially erosive areas associated with this project:
- Areas with side slopes exceeding 3:1 slopes. Although slopes in excess of 3:1 are not proposed,
- the Contractor shall monitor slopes and provide stabilization and/or protection as necessary.
- H. The following is a description of soil disturbing activities, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

The soil disturbing activities consist of grading and general infrastructure improvements over the entire site. The Contractor shall be responsible for maintaining all disturbances within the site, and shall protect all off-site areas as needed.

- I. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.
- J. The following is a list of receiving water(s) and the ultimate receiving water(s), and aerial extent of wetland acreage at the site. The location of the receiving waters can be found on the erosion and sediment control plans:
- The closest receiving water is the McDonald Creek.
- K. The following pollutants of concern will be associated with this construction project:
- Soil sediment and dust, and construction of bituminous pavement.

#### II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the contractor will be responsible for its implementation as indicated. The contractor shall provide to the resident engineer a plan for the implementation of the measures indicated. The contractor, and subcontractors, will notify the resident engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the permit. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

#### A.Erosion and Sediment Controls

- 1. Stabilized Practices: Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of 14 or more calendar days.
- a. Where the initiation of stabilization measures by the 7th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following Stabilization Practices will be used for this project: Temporary blanket & seeding, permanent seeding, as shown on the Plans.

- Describe how the Stabilization Practices listed above will be utilized: Seed & blanket.
- See Storm Water Pollution Prevention (SWPP) Plan. SWPP Plan shall be modified as necessary by the Contractor during construction to prevent sediment from leaving the site or entering the offsite storm sewer.
- 2. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following Structural Practices will be used for this project: Perimeter erosion control (silt) fence.

Describe how the Structural Practices listed above will be utilized:

See Storm Water Pollution Prevention (SWPP) Plan. SWPP Plan shall be modified as necessary by the Contractor during construction to prevent sediment from leaving the site or entering the offsite wetland ..

3. Storm Water Management: Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

- a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).
- The practices selected for implementation were determined on the basis of the technical guidance in Section 59-8 (Erosion and Sediment Control) in Chapter 59 (Landscape Design and Erosion Control) of the Illinois Department of Transportation Bureau of Design and Environment Manual. If practices other than those discussed in Section 59-8 are selected for implementation or if practices are applied to situations different from those covered in Section 59-8, the technical basis for such decisions will be explained below.
- b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls: Installation of a storm sewer system. All inlets will be protected with silt baskets.

#### 4. Other Controls:

- a. Vehicle Entrances and Exits Stabilized construction entrances and exits must be constructed to prevent tracking of sediments onto roadways.
- The contractor will provide the resident engineer with a written plan identifying the location of stabilized entrances and exits and the procedures (s)he will use to construct and maintain them
- b. Material Delivery, Storage, and Use The following BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage, and use:
- All products delivered to the project site must be properly labeled. Water tight shipping containers and/or semi trailers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents, and grease
- A storage/containment facility should be chosen for larger items such as drums and items shipped or stored on pallets. Such material is to be covered by a tin roof or large sheets
- of plastic to prevent precipitation from coming in contact with the products being stored. • Large items such as light stands, framing materials and lumber shall be stored in the open in a general storage area. Such material shall be elevated with wood blocks to minimize contact with storm water runoff.
- Spill clean-up materials, material safety data sheets, an inventory of materials, and emergency contact numbers shall be maintained and stored in one designated area and each Contractor is to inform his/her employees and the resident engineer of this location.
- c. Stockpile Management BMPs shall be implemented to reduce or eliminate pollution of storm water from stockpiles of soil and paving materials such as but not limited to portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, aggregate sub base, and pre-mixed aggregate. The following BMPs may be considered:
- Perimeter Erosion Barrier Temporary Seeding
- Temporary Mulch
- Plastic Covers Soil Binders
- Storm Drain Inlet Protection

The contractor will provide the resident engineer with a written plan of the procedures (s)he will use on the project and how they will be maintained.

- d. Waste Disposal. No materials, including building materials, shall be discharged into Waters of
- the State, except as authorized by a Section 404 permit. e. The provisions of this plan shall ensure and demonstrate compliance with applicable State
- and/or local waste disposal, sanitary sewer or septic system regulations.
- f. The contractor shall provide a written and graphic plan to the resident engineer identifying where each of the above areas will be located and how they are to be managed.
- 5. Approved State or Local Laws

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

See Storm Water Pollution Prevention (SWPP) Plan. SWPP Plan shall be modified as necessary by the Contractor during construction to prevent sediment from leaving the site or entering the offsite storm sewer

#### III.Maintenance:

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. The resident engineer will provide maintenance guides to the contractor for the practices associated with this project.

All disturbed areas shall be graded to keep runoff and sediment on-site to the greatest extent possible. Site shall be graded in such a matter to direct runoff to storm structures with catch-all inlet protection. Contractor shall maintain, replace, clean, and add additional measures as needed during the progression of construction to prevent sediment, debris, etc from leaving the site.

#### IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- A.Disturbed areas, use areas (storage of materials, stockpiles, machine maintenance, fueling, etc.), borrow sites, and waste sites shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Discharge locations or points that are accessible, shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- B.Based on the results of the inspection, the description of potential pollutant sources identified in section I above and pollution prevention measures identified in section II above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 1/2 hour to 1 week based on the urgency of the situation. The resident engineer will notify the contractor of the time required to implement such actions through the weekly inspection report.
- C. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section IV(B) shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- D.If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the resident engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of the incident. The resident Engineer shall then complete and submit an "Incidence of Noncompliance" (ION) report for the identified violation within 5 days of the incident. The resident engineer shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.
- The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276

V.Non-Storm Water Discharges:

- Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge.
- A.Spill Prevention and Control BMPs shall be implemented to contain and clean-up spills and prevent material discharges to the storm drain system. The contractor shall produce a written plan stating how his/her company will prevent, report, and clean up spills and provide a copy to all of his/her employees and the resident engineer. The contractor shall notify all of his/her employees on the proper protocol for reporting spills. The contractor shall notify the resident engineer of any spills immediately.

B. Concrete Residuals and Washout Wastes - The following BMPs shall be implemented to control residual concrete, concrete sediments, and rinse water Temporary Concrete Washout Facilities shall be constructed for rinsing out concrete

- trucks. Signs shall be installed directing concrete truck drivers where designated washout facilities are located.
- The contractor shall have the location of temporary concrete washout facilities approved by the resident engineer. All temporary concrete washout facilities are to be inspected by the contractor after each
- use and all spills must be reported to the resident engineer and cleaned up immediately. Concrete waste solids/liquids shall be disposed of properly.

C.Litter Management - A proper number of dumpsters shall be provided on site to handle debris and litter associated with the project. The Contractor is responsible for ensuring his/her employees place all litter including marking paint cans, soda cans, food wrappers, wood lathe, marking ribbon, construction string, and all other construction related litter in the proper dumpsters.

D. Vehicle and Equipment Cleaning - Vehicles and equipment are to be cleaned in designated areas only, preferably off site.

E. Vehicle and Equipment Fueling - A variety of BMPs can be implemented during fueling of vehicles and equipment to prevent pollution. The contractor shall inform the resident engineer as to which BMPs will be used on the project. The contractor shall inform the resident engineer how (s)he will be informing his/her employees of these BMPs (i.e. signs, training, etc.). Below are a few examples of these BMPs:

- Containment
- Spill Prevention and Control Use of Drip Pans and Absorbents
- Automatic Shut-Off Nozzles
- Topping Off Restrictions
- Leak Inspection and Repair

F. Vehicle and Equipment Maintenance - On site maintenance must be performed in accordance with all environmental laws such as proper storage and no dumping of old engine oil or other fluids on site.

VI. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of an Erosion and Sediment Control Deficiency Deduction against the contractor and/or penalties under the NPDES permit which could be passed onto the contractor.

SUPPLEMENTARY EROSION CONTROL NOTES

- 1. Prior to commencement of construction, on sites that will ultimately result in the disturbance of one (1) acre or more, the Contractor shall be responsible for obtaining a copy of the notice of coverage letter and the IEPA National Pollutant Discharge Elimination System (NPDES) General Permit ILR10 from the Owner. The Owner together along with the Contractor and/or other entities if so designated by the Owner, shall be responsible for ensuring that all the requirements of the General Permit and the Storm Water Pollution Prevention Plan (SWPPP) including but not limited to the installation, maintenance as well as the installation of any additional measures necessary that may be required, and inspections of the soil erosion and sediment control measures as well as completing all of the necessary applicable certifications, reports, logs, etc. Inspections are required to be performed at least once every seven (7) calendar days and within 24 hours of the end of a storm event of 0.5 inches of rain (or equivalent snowfall) or greater. The SWPPP and all the required paperwork shall be kept on-site and be organized and ready for viewing. 2. All erosion control measures are to be installed prior to any demolition, earth moving activities
- or other disturbance. 3. Contractor to establish a temporary stabilized construction entrance as well as install all
- perimeter fencing prior to the start of any clearing or grading activities. 4. Temporary gravel stabilized construction entrance shall be maintained, adjusted, and/or relocated as necessary to prevent mud and other debris from being tracked onto adjacent public roadways. Any mud or other debris that is tracked onto a public road shall be properly removed as soon as practical, but before the end of each working day.
- 5. Disturbed areas shall be stabilized by seeding within seven (7) calendar days of the completion of disturbance. If construction activity on a portion of the site is to resume within fourteen (14) calendar days of the end of the last disturbance, then stabilization measures do not have to be initiated on that portion of the site by the 7th day after the completion of said disturbance. Areas with slopes 3H:1V or greater shall be stabilized with erosion control blanket or mat in addition to seeding.
- 6. The Contractor shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 7. No sediment or debris shall be allowed to enter the existing storm sewer system or flow 8. All temporary and permanent erosion and sedimentation control measures shall be maintained, repaired and/or replaced as necessary to ensure effective performance. If required, a designated erosion control inspector shall inspect all measures every seven (7)
- calendar days, or within twenty-four (24) hours of a 0.5-inch rain event or equivalent snowfall, and report where items are in non-compliance. Otherwise, the Contractor shall be responsible for the inspection as well as maintenance of all measures and shall be subject to the terms of Federal, State, and local requirements. All temporary erosion and sedimentation control measures are to remain in place and be
- functioning until final stabilization. After final stabilization, the Contractor is to remove and properly dispose of all erosion and sedimentation measures according to Jurisdictional Agency requirements within thirty (30) days. All disturbed areas or trapped sediment that accumulates from said measures shall be permanently stabilized.
- 10. Topsoil stockpiles shall not be located in flood prone areas or buffers protecting wetlands, or waters of the United States or County. Stockpiles shall be protected from erosion by installing silt fence around the perimeter of the stockpile(s). Stockpiles shall be seeded within seven (7) calendar days of completion.
- 11. If dewatering services are used, adjoining properties and discharge locations shall be protected from erosion. Discharges shall be routed through an effective sediment control measure (i.e., sediment Trap, sediment Basin, or other appropriate measure).
- 12. Extreme caution shall be taken by the Contractor to prevent erosion and siltation during construction. The Contractor shall inspect catch basins and clean out if necessary. The contractor shall use silt/erosion control fence staked in place to prevent siltation of all drainage structures.
- 13. The Contractor shall assume responsibility for maintenance of all soil erosion and sedimentation control measures during and after construction. However, the Contractor shall not transfer these improvements for the purpose of maintenance until they have completed with the above and until they have received final inspection and approval from the Jurisdictional Agency or designated erosion control inspector and a Notice of Termination has been filed (NOT).
- 14. The work shall generally follow the following typical Construction Sequencing: a. Installation of the soil erosion and sediment control (SE/SC) measures: a.1. Selective vegetation removal for silt fence installation
  - a.2. Silt fence installation
- a.3. Stabilized construction entrance b. Tree removal where necessary
- c. Strip and stockpile topsoil and mass grade the site
- d. Temporarily stabilize topsoil stockpiles (seed and silt fence around toe of slope) e. Construction of storm sewer system and other utilities, along with associated inlet protection
- f. Temporary stabilization of areas that have reached temporary grade
- g. Building construction h. Parking lot construction

i. Permanently stabilize site with topsoil, seed and blanket j. Remove all temporary SE/SC measures after the site is stabilized with vegetation

Own	er/Contractor Certification Statement
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