

## APPENDIX

IE D N ES SUMMARY – 20 N V. 2019 INSPE I N BY ANDMARK

**Landmark**



Project #  
 Project Name East Riverside Shoreline Inspection  
 Date 2 / /2  
 Location East Riverside Lake St.Clair  
 Lake Elevation (m) 5.

Property Identification Number / Street Address (Riverside Drive E)	NEARSHORE ZONE				ONSHORE ZONE										
	Lake Bottom				Wall Condition			Apron		Secondary Wall			Berm Conditions		
	Surface Bottom	Approx. Elevation at Bottom (m)	Approx. Water Depth (m)	Comments	Existing Condition	Approx. Top Elevation (m)	Comments	Existing Condition	Comments	Existing Condition	Approx. Top Elevation (m)	Comments	Existing Condition	Approx. Top Elevation (m)	Comments
( 8 )	Sand/Gravel	3.	2.	Rock Rubble extends 2.5-3. m from wall Rock extends 2.5-3. m from wall Firm Bottom	Fair	6.2		Good		Excellent	6.		Excellent		Visible grass berm with raised home
2 ( 8 6 )	Sand/Gravel	3.	2.	Sand Bottom	Fair	6.2	Some concrete spalling	Fair	Good but back falling toward secondary wall	Excellent	6.		Excellent		Berm exists slightly lower than property 3 mm higher than secondary wall
3 ( )	Sand/Gravel	3.6	2.	2. m Depth at the wall (just sand)	Fair	6.2		Fair	Lifted roughly 5 mm above the wall Apron has back fall	Excellent	6.		Good	6.85	5 mm above secondary wall
4 ( 3 )	Sand/Gravel	3.6	2.	2. m Depth the wall	Fair	6.2	Some concrete spalling	Excellent		Excellent	6.		Excellent	.2	.5m than secondary wall
5 ( 5 )	Sand/Gravel		U k ow	Steel offshore structure for boat docking steel sheet pile steel is i fair/poor condition	Fair	6.2		Good		Excellent	6.		Excellent	.45	. 5m(+) from secondary wall
6 ( 6 )	Rubble Bottom	3.8	.		Fair	6.2		Good	Drainage well	Excellent	6.	Drainage forward	Excellent	.45	Raised home . 5m(+) from secondary wall
( 6 )	Rubble Bottom	3.8	.		Fair	6.2		Good		Excellent	6.		Excellent	.2	Raised berm (. 5m higher than secondary wall) low lying home



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	Surface Bottom	Approx. Elevation at Bottom (m)	Approx. Water Depth (m)	Comments	Existing Condition	Approx. Top Elevation (m)	Comments	Existing Condition	Comments	Existing Condition	Approx. Top Elevation (m)	Comments	Existing Condition	Approx. Top Elevation (m)	Comments
8 ( 88)	Rubble Bottom	3.8	.	Rocky stone bottom	Fair	6.2		Good		Excellent	6.		Excellent	.	3 mm higher than secondary wall
( )	Rock/Rubble	3.8	.		Fair	6.3		Good	some back fall between &	Good	6.	Parged masonry block	Good	6.8	Roughly 6.8m
( 4)	Rock/Rubble	3.8	.		Fair	6.3		Good	some back fall between &	Good	6.8	Masonry block secondary wall 3 courses high	Good	6.8	Roughly 6.8m
( 3)	Rock/Rubble	3.8	.		Fair	6.3		Excellent		Good	6.	Masonry stone plaster wall partial	Good	6.8	Roughly 6.8m
2 ( 44)	Rubble Bottom	3.8	.		Good	6.3		Excellent		Good	6.	Secondary wall is partial (4 mm above apro) stone plaster wall east end beyond secondary wall, minor sinkhole where secondary wall stops	Good	6.8	Roughly 6.8m
3 ( 6)	Rock/Rubble	3.	.8		Good	6.		Good		N/A	6.5	Non secondary wall curb visible sinkhole beyond secondary wall(minor)	Good	6.8	
4 ( 8)	Rock/Rubble	3.	.8		Fair	6.		Fair	West end visible (rocky and settlement) Apparent undermining of slab	N/A	6.4	No secondary wall 3" curb 6. + .3	Good	6.8	(+)
5 ( 2)	Rock/Rubble	3.	.8		Fair	6.		Fair	Drainage well Concrete breakup at West end	N/A	6.2	No secondary wall 4" high curb visible sinkholes beyond curb	Good	6.8	(+)
6 ( 34)	Rock/Rubble	3.	.8		Fair	6.		poor	Apro visibly cracked undermined	Good	6.4		Good	6.8	
( 5)	Rock/Rubble	3.	.8		Fair	6.	Concrete delamination	Fair	Small visible Cracking	Fair	6.5	8" high Curb like Structure Sinkholes visible behind secondary wall(2+)	Good	6.8	
8 ( 66)	Rock/Rubble	3.	.8		Good	6.		Good	Minor cracking	Good	6.6		N/A		



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( 8)	Rock/Rubble	3.	.8		Excellent	6.4		Good	Minor cracking	Good	6.6		Good	6.	
2 ( 4)	Rock/Rubble	3.	.8		Fair	6.		Good	Sloping towards water	Good	6.6		Good	6.8	
2 (Empty Lot)	Rock/Rubble	3.	.8		Fair	6.		Good	Scour beyond apron	N/A		No secondary wall	Good	6.8	
22 ( 28)	Rock/Rubble	3.	.8	Adjoining properties to 2	Fair	6.		Good	Scour beyond apron	N/A		No secondary wall	Good	6.8	
23 ( 228)	Rock/Rubble	3.	.8		Fair	5.	Variable	poor	SEVERE cracking, settlement, distortion	poor	6.5 6.4	Masonry block wall Height of wall varies	Good		In tact
24 ( 246)	Rock/Rubble	3.	.8		Fair	5.		poor	SEVERE cracking, settlement	Good	6.8	Gabion stone baskets	Good		Berm extends backward from gabion stone baskets
25 ( 262)	Sand/Gravel	3.	.8	Sand/Gravel bottom	Fair	5.		poor	SEVERE cracking	Good	6.8	Gabion stone baskets	Good		Berm extends off back of gabion stone
26 ( 28 )	Rock/Rubble	3.	.8	Gravel/Rubble	Fair	5.		poor	SEVERE cracking, settlement Scour beyond apron (substantial)	Fair	6.	3" Curb	Good	6.8	Berm intact
2 ( 3 )	Rock/Rubble	3.	.8		Good	6.		Fair	Settlement, Cracking	Fair	6.5	Gabion baskets Tops open top of baskets, potential for failure	Good	6.8	
28 ( 336)	Rock/Rubble	3.	.8		Fair	5.		Good		Good	6.4	Concrete secondary wall	N/A		Whole property is raised
2 ( 35 )	Sand/Gravel	3.	.8		Fair	6.		Excellent		Good	6.8	Gabion baskets	Fair	6.6	.2m Lower than secondary wall



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3 ( 36 )	Sand/Gravel	3.	.8		Fair	6.		Excellent		Fair	6.		Fair	6.5	.2m Lower than secondary wall
3 ( 3 )	Sand/Gravel	3.	.8	Small amount of rubble	Fair	5.		poor	Severe settlement Starting to crack	Fair	6.	Masonry block wall varying height	Fair	.	Exists
32 ( 382 )	Sand/Gravel	3.	.8	Small amount of rubble	Fair	5.		poor	Completely failed Broke rock pieces	poor	6.3	Remnants of it left (Failed)	Good		
33 ( 34 )	Rock/Rubble	3.	.8		Good	6.		Excellent		Good	6.4		Good	.	
34 ( 44 )	Rock/Rubble	3.	.8		Good	6.		Excellent		Good	6.4		Good	.	
35 ( 42 )	Sand/Gravel	3.	.8		Good/Fair	6.	Concrete spalling	Good		Good	6.3		Good	.	
36 ( 43 )	Sand/Gravel	3.	.8		Good/Fair	6.	Concrete spalling	Good		Good	6.3		Good	.	
3 ( 438 )	Sand/Gravel	3.	.8		Good/Fair	6.	Concrete spalling	Good		Good	6.3		Good	.	
38 ( 45 )	Sand/Gravel	3.	.8	Very small amounts of rubble	Fair	6.		Good		Fair	6.	2" Curb Sand bags placed for protection (3 courses)	Good	.	
3 ( 46 )	Sand/Gravel	3.	.8		Good	6.5		Good		Good	6.4	Concrete wall	Good	.	
4 ( 44 )	Sand/Gravel	3.	.8		Good	6.5		Good		Good	6.4	Concrete wall	Good	.	
4 ( 488 )	Sand/Gravel	3.	.8		Good	6.5		Good		Good	6.4	Concrete wall	Good	.	
42 ( 56 )	Sand/Gravel	3.	.8		Good/Fair	5.		poor	Slab has completely failed at East end Scour	Fair	6.3	East end partially failed/undermined	Fair	.	Existing berm
43 ( 52 )	Sand/Gravel	3.	.8	Sparse Rubble	Fair	6.		Excellent	Steel channel on top of apro	Good	6.5		Fair	6.	Slightly lower



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44 ( 53 )	Sand/Gravel	3.	.8	Debbie Colto	Fair	6.		poor	Visible cracking/settlement	Fair	6.5	Visible cracking/settlement Sinkhole behind secondary wall	Fair	6.8	
45 ( 55 )	Sand/Gravel	3.	.8		Fair	6.		poor	Visible cracking/settlement	Fair	6.5	Sinkhole behind secondary wall Secondary wall has cracking visible	Fair	6.8	Fairly good shape
46 ( 566 )	Sand/Gravel	3.8	.		Fair	6.5		Excellent		Good	6.4	Design a wave deflector	Fair	6.	
4 ( 584 )	Sand/Gravel	3.8	.		Fair	6.5		Excellent		Good	6.4	Wave deflector profile	N/A		No berm Property raised
48 ( 6 )	Sand/Gravel	3.8	.		Fair	5.		poor	Visible cracking/settlement O e section complete failure	Good	6.4	SSP	N/A		No berm Property raised
4 ( 622 )	Sand/Gravel	3.8	.		Fair	5.		poor	Settlement, Cracking	N/A	6.4	Wave deflector profile Visible settlement beyond secondary wall	Fair	6.6	Slight berm
5 ( 636 )	Sand/Gravel	3.8	.		Good/Fair	5.	Minimal spalling	Fair		Good	6.4		Fair	6.6	Slight berm
5 ( 646 )	Sand/Gravel	3.8	.		Good/Fair	5.	Minimal spalling	Fair		Good	6.4		Fair	6.6	Slight berm
52 ( 66 )	Sand/Gravel	3.8	.		Good	5.		Fair		Good	6.4		Fair	6.5	Very minimal
53 ( 66 )	Sand/Gravel	3.	.8		Fair	5.		Fair	Visible settlement / cracking visible slow behind apron	Fair	6.	3" Curb Sandbags placed	Fair	6.	Grass berm
54 ( 64 )	Sand/Gravel	3.	.8		Fair	5.		Fair		Fair		2nd wall 6. SSP 3rd wall 6. (good condition)	Fair		Minimal grass berm
55 ( )	Sand/Gravel	3.	.8		Fair	5.		Fair	Visible cracking/settlement	Good	6.	Scour Behind secondary wall 3 course of dry stack brick on top of lowest curb	Fair	6.	
56 ( 2 )	Sand/Gravel	3.	.8		Fair	5.		Fair	Visible cracking/settlement	Good	6.	Scour Behind secondary wall 3 course of dry stack brick on top of lowest curb	Fair	6.	



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5 ( 4 )	Sand/Gravel	3.	.8		Fair	5.		Fair	Visible cracking/settlement	Good	6.	Scour Behind secondary wall 3 course of dry stack brick on top of lowest curb	Fair	6.	
58 ( 5 )	Sand/Gravel	3.	.8		Fair	5.		Fair	Visible cracking/settlement	Good	6.	Scour Behind secondary wall 3 course of dry stack brick on top of lowest curb	Fair	6.	
5 ( 66 )	Sand/Gravel	3.	.8		Fair	5.		Fair	Visible cracking/settlement	Good	6.	Scour Behind secondary wall 3 course of dry stack brick on top of lowest curb	Fair	6.	
6 ( )	Sand/Gravel	3.8	.		Fair	6.		Good	Stepped apron	Good	6.	Dry stack block wall with concrete cap	N/A		New construction / Raised lot No berm
6 ( 8 )	Sand/Gravel	3.8	.		Good/Fair	6.	Cracking spalling	Good		Good	6.6	Dry stack secondary wall	Fair	6.6	Slight berm
62 ( 82 )	Sand/Gravel	3.8	.		Good/Fair	6.		Good		Good	6.6	Dry stacked central portion has stepped deck, 5 mm lower than stacked wall	Fair	6.6	Same height as stacked wall
63 ( 83 )	Sand/Gravel	3.8	.		Good/Fair	6.		Good		N/A	6.2	No secondary wall Berm of cobble .2m higher than apron	Fair	6.8	
64 ( 85 )	Sand/Gravel	3.8	.		Good/Fair	6.		Good		Good	6.2	.2m High concrete patio	Fair	6.6	Berm
65 ( 86 )	Sand/Gravel	3.8	.		Fair	6.		poor	Visible cracking/settlement slow beyond with rubble fill	N/A	6.2	No Existence	N/A	6.6	
66 ( 8 )	Sand/Gravel	3.8	.		Good	5.		poor	No Existence Rubble apron	poor		No Existence	N/A	6.6	
6 ( 88 )	Sand/Gravel	3.8	.		Good/Fair	6.		Good		Good	6.2	Curb Structure	Fair	6.6	
68 ( 8 )	Sand/Gravel	3.8	.		Good/Fair	6.		Good		Good	6.2	Curb Structure	Fair	6.6	



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6 ( 6)	Sand/Gravel	3.8	.		Good	5.	Minor spalling towards ends	Fair	Visible settlement	Good	6.2	Curb Structure	Fair	6.6	