

CONCEPT PLAN C1.3 SUMMARY:

IN CONCEPT PLAN C1.3, FILL IS PROPOSED AROUND THE VULNERABLE EDGE OF CYPRESS PARK'S NORTHERN HALF. THE FILL IS PROPOSED AT ELEVATION 1.42'. FILLING TO ELEVATION 1.42' WAS SELECTED DUE TO THE EXISTING TENNIS / PICKLEBALL COURTS MOST SOUTHERN CORNER IS AT 1.42'. THE COURTS ARE PITCHED TO THE SOUTH AND 1.42 IS THE LOWEST POINT ON THE COURT. FILLING TO ELEVATION 1.42' WOULD ALLOW THE PARK TO DRAIN FREELY WITHOUT HAVING TO MODIFY THE TENNIS COURTS THROUGH RESURFACING OR RECONSTRUCTION.

WETLAND DISTURBANCE IS APPROXIMATELY ESTIMATED AT 14,271 SQ-FT THAT HAS TO BE MITIGATED AT A 1:1 BARE MINIMUM RATIO (I.E. ONE FOOT OF DISTURBANCE = ONE FOOT OF MITIGATION THROUGH WETLAND CREATION). WITH FILL ADDED TO THE EDGE OF THE NORTHERN HALF OF THE PARK, POCOMOKE CITY HAS THE OPPORTUNITY TO MAINTAIN MOST OF THE EXISTING INFRASTRUCTURE AS IT IS NOW WITH MINIMAL MODIFICATIONS. THE COOKOUT PAVILION WOULD HAVE TO BE REMOVED OR ELEVATED. THE SOUTHERN PAVILION COULD BE LEFT INTACT. THE EXISTING ASPHALT WALKING TRAIL COULD BE REBUILT ON TOP OF THE FILL IN NEARLY THE SAME FOOTPRINT OF THE CURRENT TRAIL FOOTPRINT. THE SOUTHERN HALF OF CYPRESS PARK IS THE LEAST USED SPACE IN THE PARK AND IS MORE OPEN AND NATURAL, MAKING THE SOUTHERN HALF AN IDEAL LOCATION FOR ANY PROPOSED ON-SITE WETLAND MITIGATION REQUIREMENTS AND IS THEREFORE LEFT ALONE FOR THAT PURPOSE.

IMPORTED FILL BROUGHT TO RAISE THE PARK'S EDGE TO ELEVATION 1.42' WOULD PROTECT THE PARK FROM THE MAJORITY OF HIGH TIDE EVENTS CURRENTLY, BASED ON THE SNOW HILL TIDE GAUGE. THE FILL AT ELEVATION 1.42' WOULD NOT PROTECT THE PARK FROM SEA LEVEL RISE PROJECTIONS PAST 2040 IN THE 5TH PERCENTILE CATEGORY. ANYTHING BEYOND THAT WILL EXCEED ELEVATION 1.42' AND THE PARK WOULD BE MOSTLY UNDERWATER AGAIN.

THE MAIN ADVANTAGE OF WIDE SPREAD FILL IS THAT THE FILL COULD MITIGATE MOST HIGH TIDE EVENTS AND MAINTAIN POSITIVE SHEETFLOW DRAINAGE FROM THE HIGH GROUND STRAIGHT INTO THE RIVER WITHOUT THE NEED FOR ADDITIONAL STORMWATER MANAGEMENT OR MAINTENANCE. THIS WOULD ALLOW THE CITY TO MAINTAIN VALUABLE OPEN SPACE WITH LITTLE MAINTENANCE WHILE KEEPING MOST OF THE PARK HIGH AND DRY FOR THE IMMEDIATE FUTURE.

THE PRIMARY DISADVANTAGE OF FILLING TO ELEVATION 1.42' IS THE LACK OF LONG-TERM PROTECTION TO PROJECTED SEA LEVEL RISE SCENARIOS. ADDITIONALLY, THE COURTS FLOOD OUT CURRENTLY, WITH TIDES THAT EXCEED THE EXPECTED TIDE RANGE, INDICATING THAT ELEVATION 1.42' STILL MAY NOT BE ENOUGH PROTECTION FOR EVEN TODAY'S TIDE LEVELS.

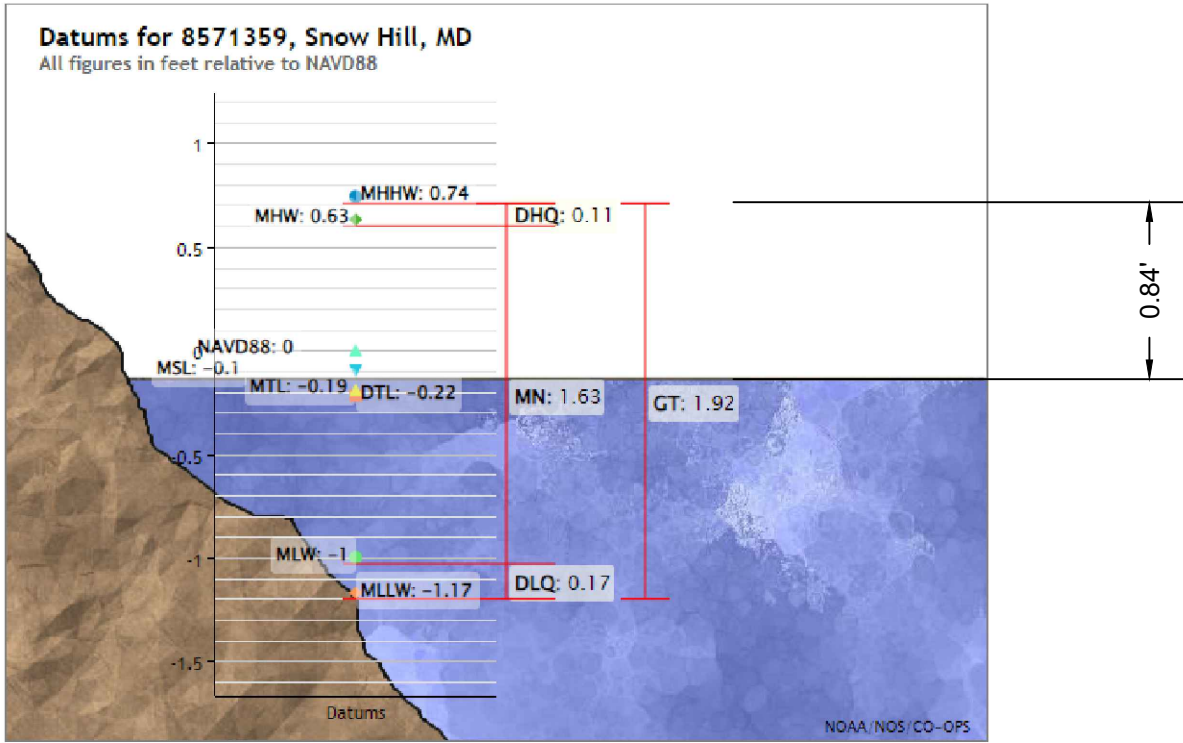
ESTIMATED BASE HARD COSTS: \$201,208

Item	QTY	Unit	Unit Price	Extended	Subtotal
CONSTRUCTED WETLAND					
Capital Costs	14,271.00	SF	\$ 12.06	\$ 172,108.26	
EARTHWORK					
Import	291	CY	\$ 100.00	\$ 29,100.00	
TOTAL					\$ 201,208.26

NOTE: COSTS ARE NOT FINAL COST ESTIMATES NOR ARE THEY ALL INCLUSIVE OF ALL COSTS. THEY ARE BASED ON AN ORDER OF MAGNITUDE AND COMMON DENOMINATORS REQUIRED FOR EACH CONCEPT PLAN APPROACH.

TIDE DATA - SNOW HILL TIDE GAUGE - DATUM IS NAVD88:

AVERAGE HIGH TIDE IS ELEVATION 0.63'. AVERAGE MEAN HIGHER HIGH WATER (MHHW) IS 0.74'. TIDE RANGE POTENTIAL IS 0.84' BETWEEN MEAN SEA LEVEL AND MHHW ELEVATION.

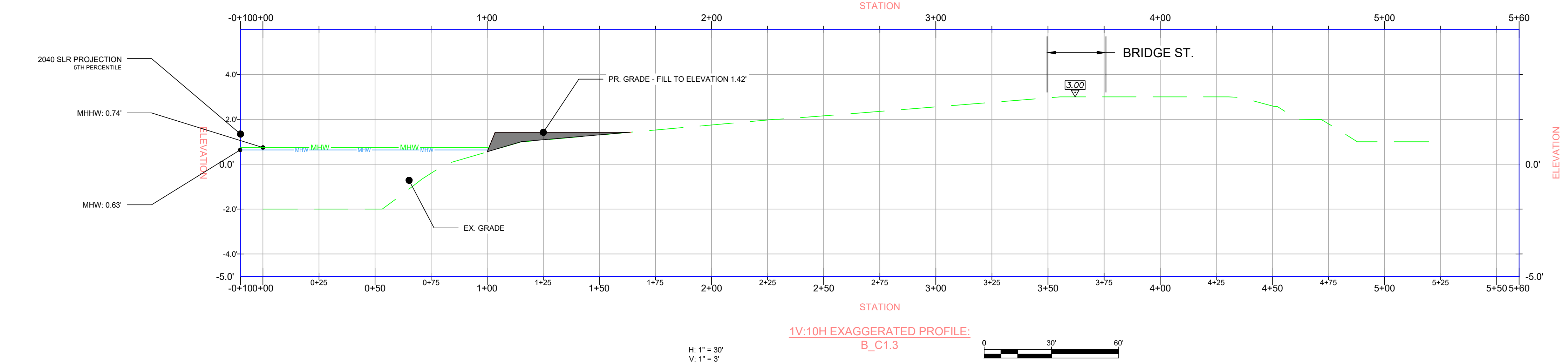


SEA LEVEL RISE (SLR) PROJECTIONS:
BASED ON UMCES SLR PROJECTIONS 2023 - CAMBRIDGE TIDE STATION

Tide Gauge: Cambridge MD Emissions Pathway: SSP2-4.5 (ft)					
Year	5th percentile	50th percentile (High tolerance for flood risk)	83rd percentile (Medium tolerance for flood risk)	83rd-95th percentile with additional ice loss (Low tolerance for flood risk)	
2040	0.50	0.92	1.20	1.3	
2050	0.76	1.23	1.57	1.6	
2060	1.02	1.53	1.92	2.3	
2070	1.26	1.85	2.33	3.0	
2080	1.49	2.16	2.74	3.6	
2090	1.68	2.45	3.15	4.3	
2100	1.78	2.79	3.65	4.9	
2110	1.82	3.07	4.13	5.9	
2120	2.01	3.41	4.60	6.9	

EQUATION: TIDE RANGE POTENTIAL + SLR PROJECTION BASED ON COMMUNITY'S RISK TOLERANCE AND/OR SITE CONSTRAINTS = NEW TIDE WATER SURFACE ELEVATION

C1.3 SCENARIO EXAMPLE: 0.84' (TIDE RANGE POTENTIAL) + 0.50' (SLR PROJECTION) = 1.34'



CYPRESS PARK - CONCEPT PLAN C1.3

OF THE LANDS OF

POCOMOKE CITY



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REVISIONS

REV. #	DATE	DESCRIPTION
1		

DATE: 9/9/2024

SCALE: AS SHOWN

DRAWN BY: WCS

DESIGNED BY: WCS

APPROVED BY:

SHEET NO.: C-1.3

FOR REVIEW