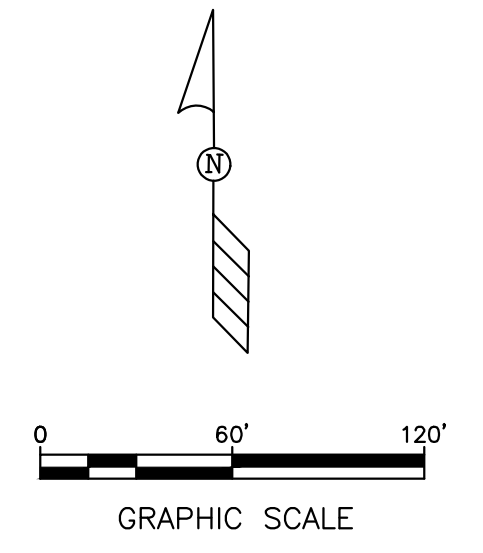


**PRELIMINARY  
NOT FOR CONSTRUCTION**



**LEGEND**

---	SECTION 1/4 SECTION LINE
---	PROPERTY LINE
---	EASEMENT
-x-x-x-	CHAIN LINK FENCE
~~~~~	TREE LINE
OH	OVERHEAD UTILITY LINE
E	ELECTRIC
T	TELEPHONE
FO	FIBER OPTIC
CTV	CABLE TV
SAN	SANITARY SEWER
FM	FORCE MAIN
ST	STORM SEWER
W	WATER MAIN
G	GAS
---	EXISTING CONTOUR
○	MANHOLE
⊠	CATCH BASIN
●	CATCH BASIN (ROUND)
⊙	ROOF DRAIN
⊕	HYDRANT
⊕	WATER VALVE
⊕	GAS VALVE
⊕	UTILITY POLE
⊕	GUY WIRE
⊕	GAS METER
⊕	ELECTRIC METER
⊕	UTILITY PEDESTAL
⊕	TRAFFIC SIGNAL
⊕	LIGHT POLE
⊕	SOIL BORING
⊕	MONITORING WELL
○	IRON PIPE FOUND/SET
●	REBAR FOUND/SET
⊗	CHISELED CROSS FOUND/SET
⊕	PK NAIL FOUND/SET
⊕	SPIKE/NAIL
⊕	MONUMENT
⊕	BENCHMARK
⊕	SIGN
○	DECIDUOUS TREE
⊕	CONIFEROUS TREE
○	BUSH
⊕	POST

- GENERAL NOTES:**
1. BEARINGS BASED ON WISCONSIN STATE PLANE COORDINATE SYSTEM.
  2. VERTICAL DATUM IS CITY OF MILWAUKEE DATUM. TO CONVERT TO NGVD 1929 ADD 580.603. BENCHMARK IS SOUTHWEST FLANGE BOLD ON HYDRANT IN NORTHEAST QUADRANT OF W. OREGON STREET AND S. 3RD STREET WITH AN ELEVATION OF 12.93.
  3. FEMA FLOODPLAIN INFORMATION DIGITIZED FROM FIRM PANEL 55079C 0093 E DATED 9/26/2008. BASE FLOOD ELEVATION FOR SITE IS 584 (NGVD) OR 3.4 (CITY DATUM).

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD DATA AS MARKED BY DIGGERS HOTLINE AND OBTAINED DURING THIS SURVEY, INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY, AND AS-BUILT INFORMATION. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.



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MCKINLEY MARINA  
MILWAUKEE, WISCONSIN

**SITE SURVEY**

NO.	REVISION	DATE	BY

DRAWING NO. 3127-500-A.dwg
DRAWN BY: AEK
DATE: 01-08-13
PROJECT NO: 3127
CHECKED BY:
APPROVED BY:
SHEET NO.:

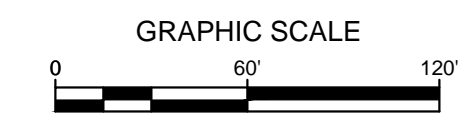
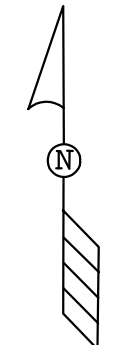
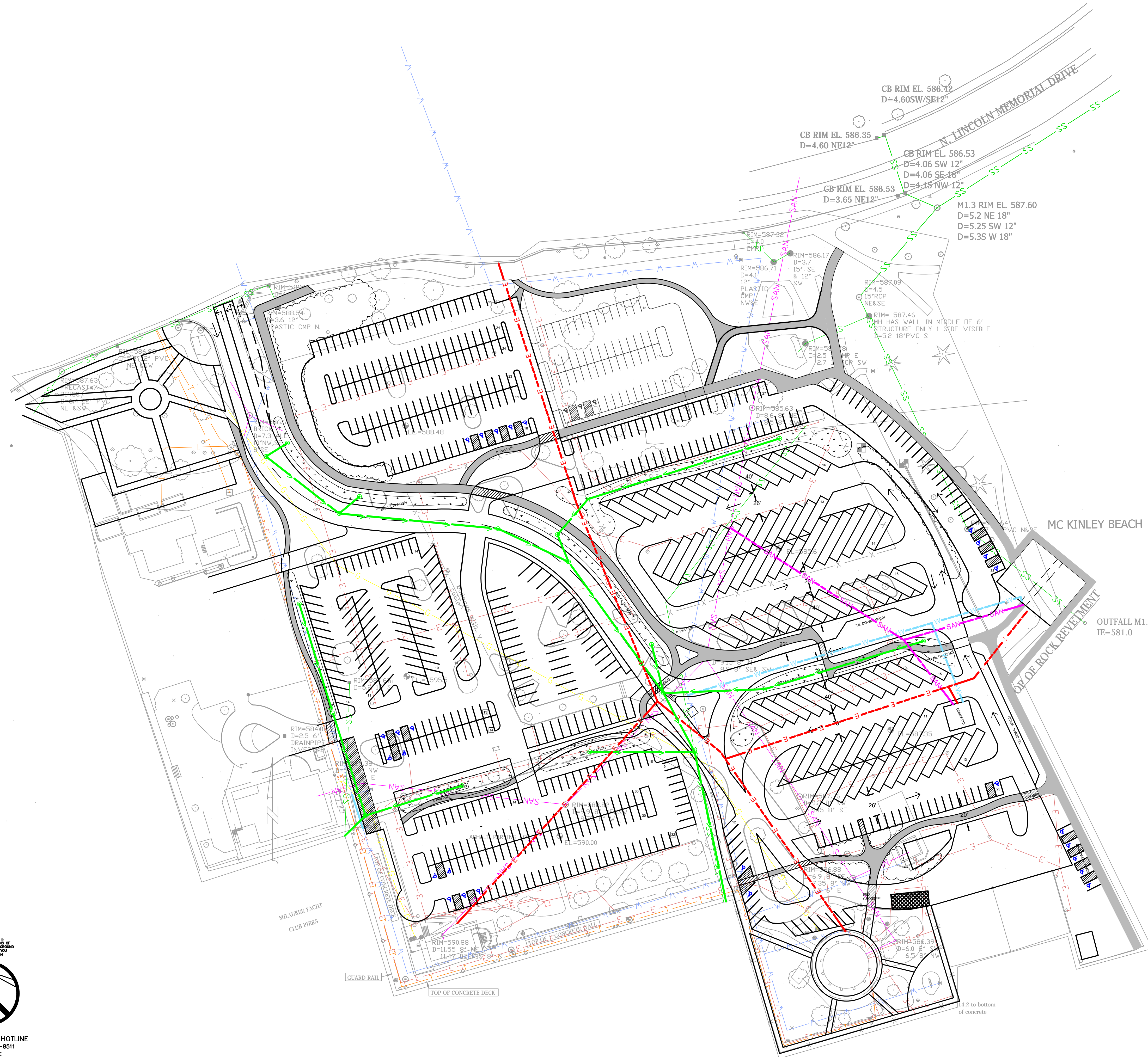
**FIGURE 1**



File: N:\milwco\13637 Mckinley Marina\060 CAD\C - Civil\500 Production - Civil Plans\506-Utility Plan\Concept\13637-Concept Utilities.dwg



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LEGEND	
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING ELECTRICAL SERVICE
	EXISTING TELEPHONE SERVICE
	EXISTING GAS SERVICE
	EXISTING WATER SERVICE
	PROPOSED WATER SERVICE
	PROPOSED STORM SERVICE
	PROPOSED SANITARY SERVICE
	PROPOSED ELECTRIC SERVICE

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**MCKINLEY MARINA  
1750 N LINCOLN MEMORIAL DRIVE  
MILWAUKEE, WISCONSIN**

**CONCEPT UTILITY PLAN**

NO. REVISION      DATE      BY

DRAWING NO. 13637-Concept Utilities.dwg  
DRAWN BY:  
DATE:  
PROJECT NO:  
CHECKED BY:  
APPROVED BY:  
SHEET NO.:

**FIGURE 2**



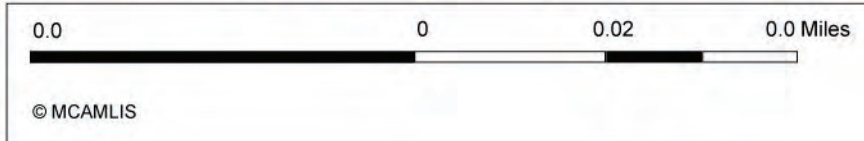
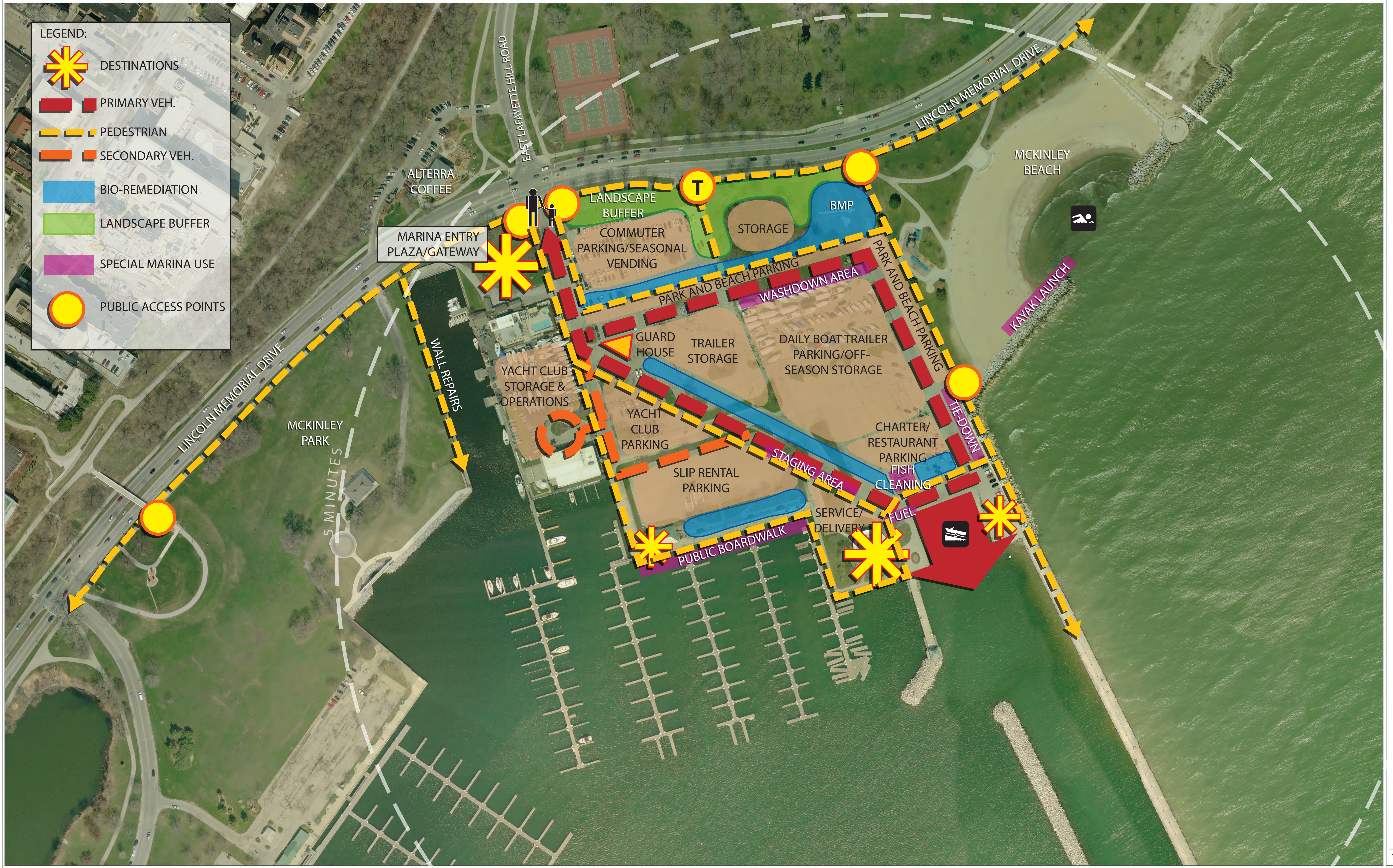


**LEGEND:**

- DESTINATIONS
- PRIMARY VEH.
- PEDESTRIAN
- SECONDARY VEH.
- BIO-REMEDIATION
- LANDSCAPE BUFFER
- SPECIAL MARINA USE
- PUBLIC ACCESS POINTS

2010 (High Res) NAT CLR

- Red: Band\_1
- Green: Band\_2
- Blue: Band\_3



1:1,200

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**Notes**  
Enter Map Description

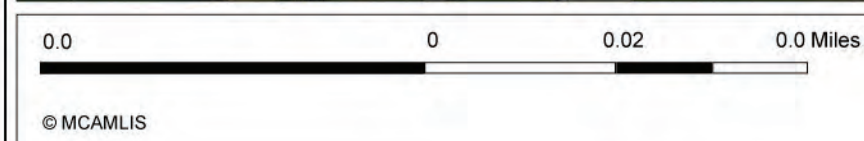
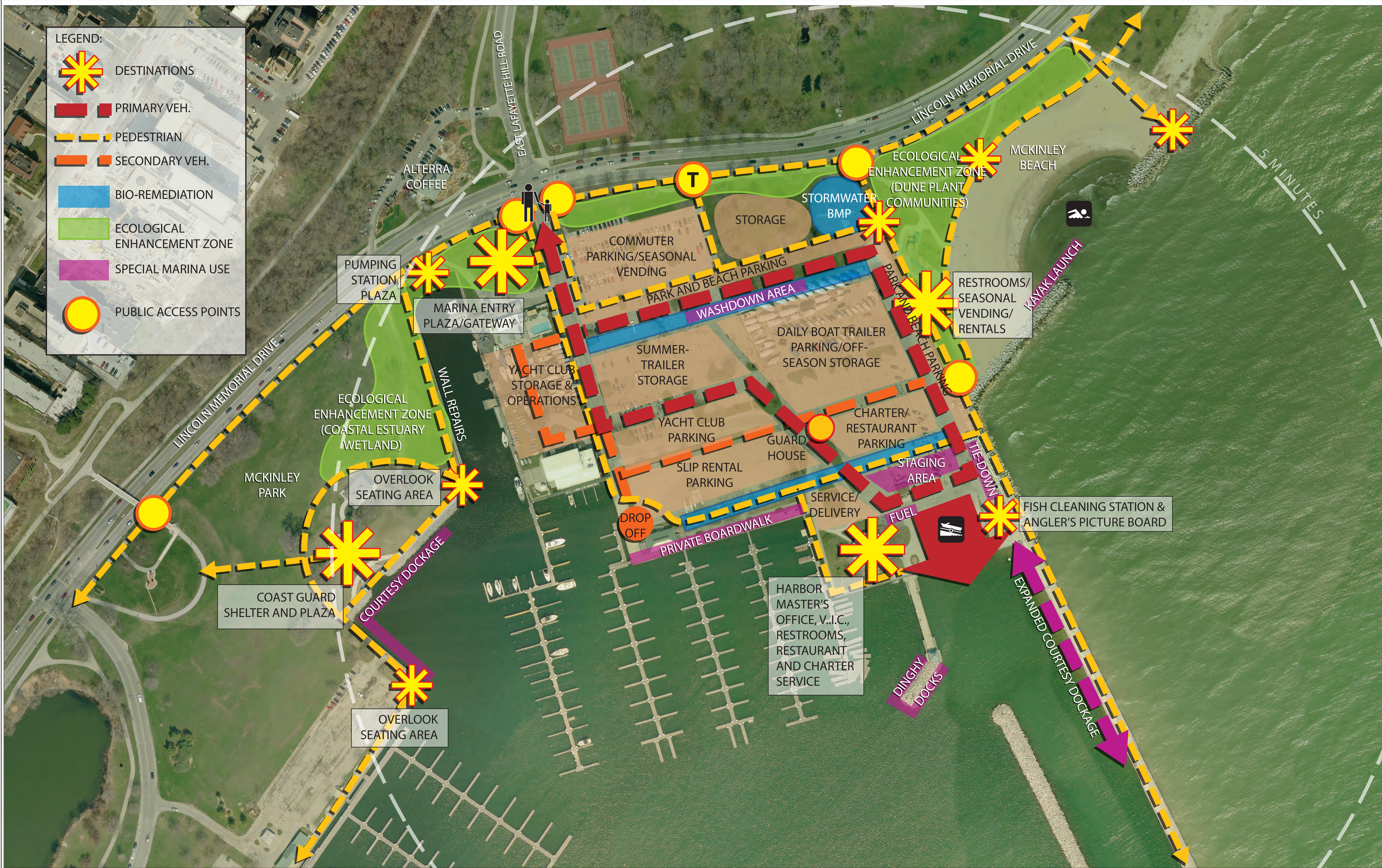




2010(High Res) NAT CLR  
Red: Band\_1  
Green: Band\_2  
Blue: Band\_3

**LEGEND:**

- DESTINATIONS
- PRIMARY VEH.
- PEDESTRIAN
- SECONDARY VEH.
- BIO-REMEDIATION
- ECOLOGICAL ENHANCEMENT ZONE
- SPECIAL MARINA USE
- PUBLIC ACCESS POINTS



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1:1,200  
Notes  
Enter Map Description





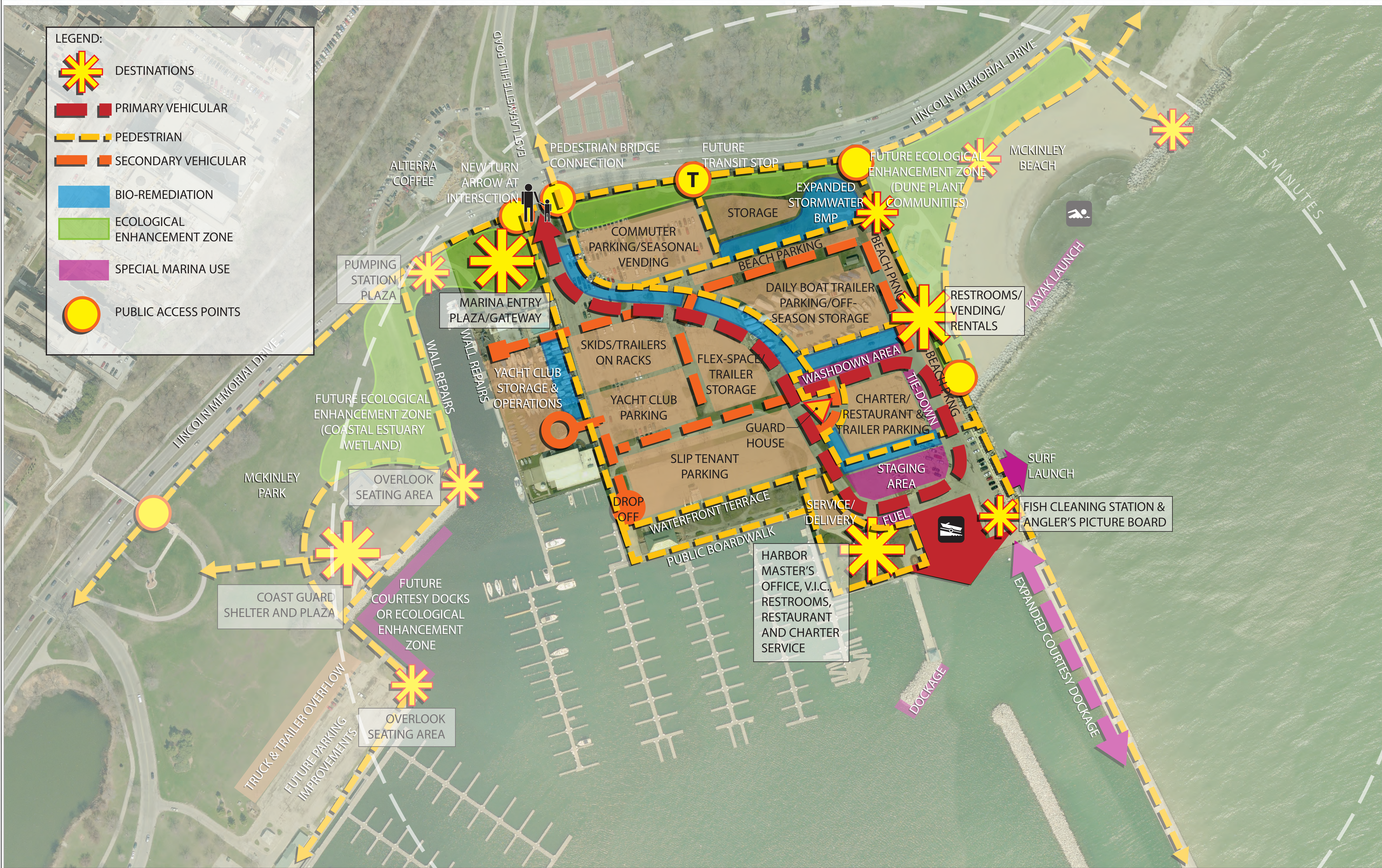




2010(High Res) NAT CLR  
Red: Band\_1  
Green: Band\_2  
Blue: Band\_3

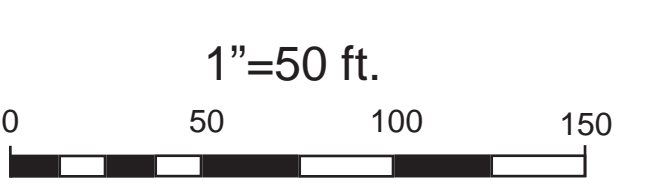
**LEGEND:**

- DESTINATIONS
- PRIMARY VEHICULAR
- PEDESTRIAN
- SECONDARY VEHICULAR
- BIO-REMEDIATION
- ECOLOGICAL ENHANCEMENT ZONE
- SPECIAL MARINA USE
- PUBLIC ACCESS POINTS



0.0 0 0.02 0.0 Miles  
© MCAMLS  
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1:1,200  
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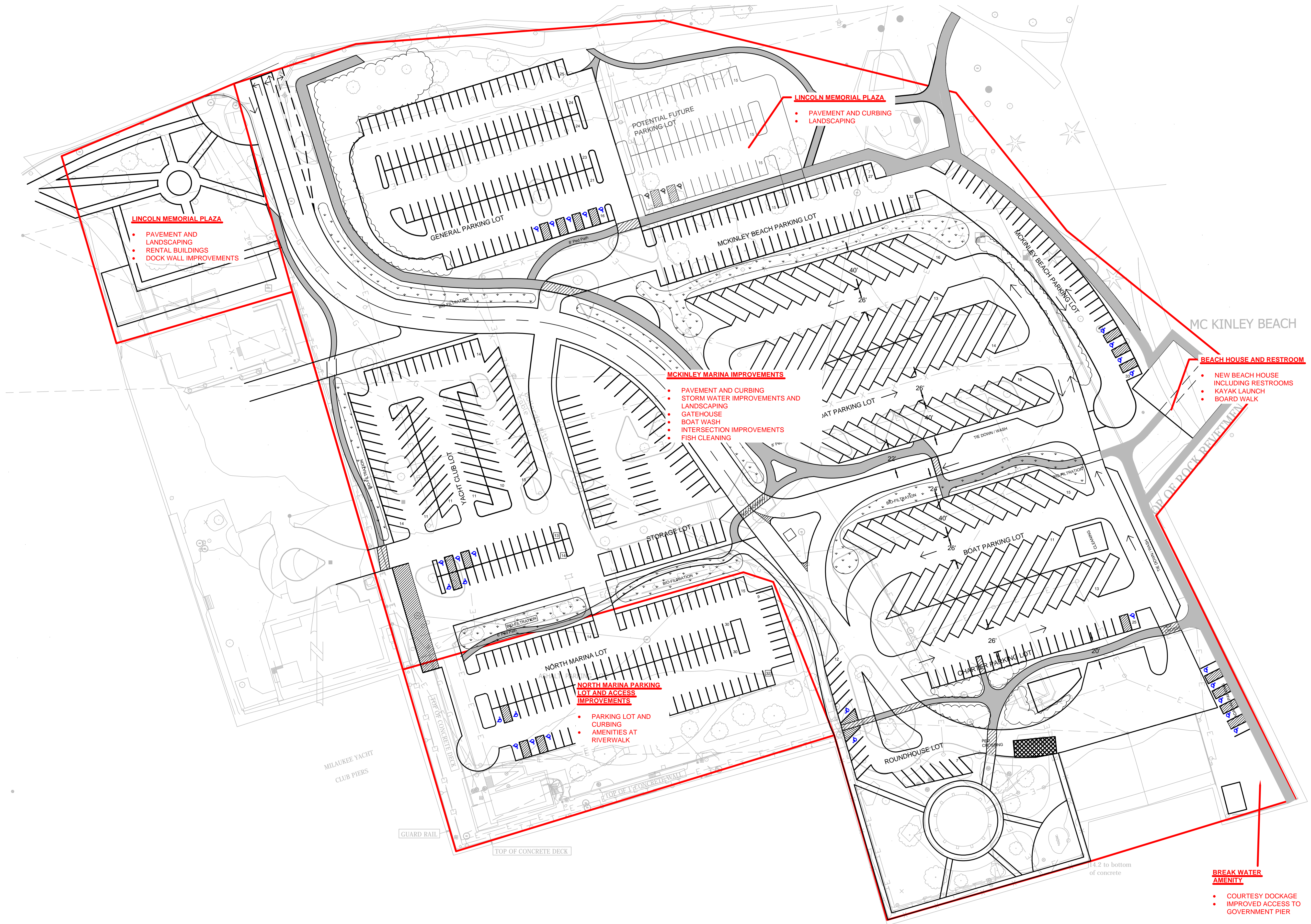
# SITE PLAN FOR MCKINLEY MARINA NORTH



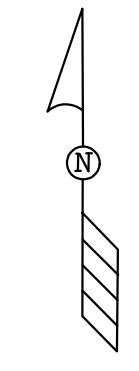
File: N:\milwco\13637 Mckinley Marina\Report\Internal Draft\Figures\8 Phasing Plan\13637-Phasing.dwg



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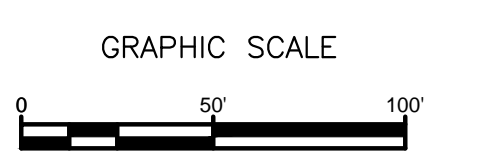
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MCKINLEY MARINA  
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MILWAUKEE, WISCONSIN

**SITE PHASING PLAN**

NO. REVISION DATE BY



DRAWING NO. 13637-Phasing.dwg  
DRAWN BY: TPM  
DATE: 5-07-13  
PROJECT NO: 13637  
CHECKED BY: CTC  
APPROVED BY: CTC  
SHEET NO.:

**FIGURE 8**



**Preliminary Cost Opinion**  
**McKinley Marina - North**

Updated September 2013

**McKinley Marina Improvements**

Item	Unit	QTY	Unit Cost	Cost	
<b>General Conditions</b>					
Erosion Control	LS	1	\$25,000	\$25,000	
Miscellaneous Dewatering	LS	1	\$10,000	\$10,000	
Temporary Fencing and Security	LS	1	\$25,000	\$25,000	
Temporary Roads	LS	1	\$2,500	\$2,500	
Temporary Traffic Control	LS	1	\$2,500	\$2,500	
<i>Subtotal</i>				<i>\$65,000</i>	\$65,000
<b>Site Clearing and Demolition</b>					
Pavement Demolition [pulverize, reuse]	SY	55,556	\$1	\$66,667	
Clearing and Grubbing, Vegetation	LS	1	\$25,000	\$25,000	
Miscellaneous Site Demolition	LS	1	\$50,000	\$50,000	
Utility Abandonment and Removal	LS	1	\$25,000	\$25,000	
<i>Subtotal</i>				<i>\$166,667</i>	\$166,667
<b>Earthworks</b>					
Master Grading (1 ft over whole site)	CY	26,782	\$5	\$133,909	
<i>Subtotal</i>				<i>\$133,909</i>	\$133,909
<b>Storm Sewer</b>					
12" Dia. RCP	LF	1,200	\$50	\$60,000	
24" Dia. RCP	LF	500	\$60	\$30,000	
36" Dia. RCP	LF	300	\$70	\$21,000	
48" Dia. RCP	LF	175	\$90	\$15,750	
Storm Manholes & Catch Basins	EA	20	\$3,500	\$70,000	
Storm Outfalls to Lake	EA	2	\$10,000	\$20,000	
<i>Subtotal</i>				<i>\$216,750</i>	\$216,750
<b>Sanitary Sewer</b>					
Miscellaneous Adjustments	LS	0	\$5,000	\$0	
Fish Cleaning Pump Improvements	LS	1	\$75,000	\$75,000	
Stub Service to Future Bathrooms	LF	200	\$60	\$12,000	
<i>Subtotal</i>				<i>\$87,000</i>	\$87,000
<b>Water Service/ Fire Protection</b>					
Misc. Adjustments	LS	1	\$5,000	\$5,000	
Close water loop	LS	1	\$10,000	\$10,000	
Stub Service to Future Bathrooms	LF	250	\$50	\$12,500	
<i>Subtotal</i>				<i>\$27,500</i>	\$27,500
<b>Dry Utilities</b>					
Lighting Roads and Lots	POLE	25	\$3,500	\$87,500	
Light Controller and Cabling	LS	1	\$50,000	\$50,000	
New Site Electrical Service	LS	1	\$100,000	\$100,000	
Telecommunications	LS	1	\$50,000	\$50,000	
Gas Services	LS	1	\$0	\$0	
<i>Subtotal</i>				<i>\$287,500</i>	\$287,500



<b>Storm Water Biofiltration Areas</b>				
Excavate Biofiltration Areas	CY	2,652	\$5	\$13,259
Liner Material	SF	23,000	\$2	\$40,250
6" PVC Drain Underdrains	LF	1,000	\$6	\$6,000
Washed Gravel Base	CY	700	\$20	\$14,000
Engineered Soil Mix	CY	2,652	\$30	\$79,552
Seed and Plantings	LS	1	\$75,000	\$75,000
<i>Subtotal</i>				<i>\$228,061</i>

\$228,061

<b>Pavement</b>				
18" Concrete C&G (External)	LF	10,500	\$14	\$147,000
Asphalt Paths (3")	Ton	1,200	\$75	\$90,000
Asphalt Lots:	SF	279,103	See Below	
Base Aggregate Dense Under Lots (6")	Ton	9,071	Reuse	
Asphalt Pavement Lots (3.5")	Ton	6,105	\$75	\$457,903
Asphalt Roadway:	SF	63,201	See Below	
Base Aggregate Dense Under Roads (9")	Ton	3,081	Reuse	
Asphalt Pavement Roads (5")	Ton	1,975	\$75	\$148,127
Detectable Warning Fields	EA	30	\$350	\$10,500
Pavement Markings	LS	1	\$15,000	\$15,000
<i>Subtotal</i>				<i>\$868,530</i>

agg  
pave

\$868,530

<b>Landscaping</b>				
Trees and Shrubs	LS	1	\$150,000	\$150,000
Topsoil, Seed, Mulch	LS	1	\$20,000	\$20,000
<i>Subtotal</i>				<i>\$170,000</i>

\$170,000

<b>Other</b>				
New Fish Cleaning Station	LS	1	\$150,000	\$150,000
Gatehouse	LS	1	\$200,000	\$200,000
Fencing at Storage	LF	850	\$70	\$59,500
Ammenities (Bike Racks, Benches, Etc.)	LS	1	\$15,000	\$15,000
Site Signage	LS	1	\$25,000	\$25,000
Dumpster Enclosures	LS	1	\$15,000	\$15,000
Boat Launch	LS	1	\$50,000	\$50,000
Boat Wash BMP	LS	1	\$75,000	\$75,000
Intersection Improvements	LS	1	\$100,000	\$100,000
<i>Subtotal</i>				<i>\$689,500</i>

\$689,500

<b>Total Base Construction Costs</b>				<b>\$2,940,416</b>
<b>Construction Contingency (15%)</b>				<b>\$441,062</b>
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$3,381,478</b>



**Lincoln Memorial Plaza**

Misc. Grading	LS	1	\$5,000	\$5,000
Asphalt Pavement	Ton	500	\$75	\$37,500
Base Aggregate	Ton	500	\$20	\$10,000
Rental Buildings	LS	1	\$250,000	\$250,000
New Dock Wall	LF	120	\$2,000	\$240,000

<b>Total Base Construction Costs</b>				<b>\$542,500</b>
<b>Construction Contingency (15%)</b>				<b>\$81,375</b>
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$623,875</b>

**North Parking Lot and Access Improvements**

Misc. Grading	LS	1	\$15,000	\$15,000
Pavement Demolition [pulverize, reuse]	SY	4,550	\$1	\$4,550
Asphalt Pavement	Ton	896	\$75	\$67,214
Base Aggregate	Ton	0	\$20	\$0
New Paths	LS	1	\$25,000	\$25,000
Ammenities (Bike Racks, Benches, Etc.)	LS	1	\$15,000	\$15,000

agg  
pave

<b>Total Base Construction Costs</b>				<b>\$126,764</b>
<b>Construction Contingency (15%)</b>				<b>\$19,015</b>
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$145,779</b>

**Beach House and Restroom**

Restroom and Beach Building	LS	1	\$500,000	\$500,000
-----------------------------	----	---	-----------	-----------

<b>Total Base Construction Costs</b>				<b>\$500,000</b>
<b>Construction Contingency (15%)</b>				<b>\$75,000</b>
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$575,000</b>

**Lincoln Memorial Additional Parking**

Misc. Grading	LS	1	\$15,000	\$15,000
Base Aggregate Dense Under Lots (6")	Ton	659	\$20	\$13,180
Asphalt Pavement Lots (3.5")	Ton	444	\$75	\$33,267

agg  
pave

<b>Total Base Construction Costs</b>				<b>\$61,447</b>
<b>Construction Contingency (15%)</b>				<b>\$9,217</b>
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$70,664</b>

**Break Water Amenity**

Breakwater Feature	LS	1	\$250,000	\$250,000
Courtesy Dockage	LS	1	\$75,000	\$75,000

<b>Total Base Construction Costs</b>				<b>\$325,000</b>
<b>Construction Contingency (15%)</b>				<b>\$48,750</b>
<b>TOTAL CONSTRUCTION COSTS</b>				<b>\$373,750</b>

<b>Total Master Plan Costs</b>				<b>\$4,496,127</b>
<b>Construction Contingency (15%)</b>				<b>\$674,419</b>
<b>TOTAL MASTER PLAN COSTS</b>				<b>\$5,170,546</b>