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VIA E-MAIL AND REGULAR MAIL

September 6, 2018

Mayor Ravinder S. Bhalla
City of Hoboken
94 Washington Street
Hoboken, NJ 07030

Re: Alternative Site Analysis Recommendation
NY Waterway Maintenance Facility
Lower Hudson River Waterfront Area
New Jersey / New York
Our Project No. HO-626

Dear Mayor Bhalla:

Boswell was retained by the City of Hoboken to prepare an Alternative Site Analysis for the purposes of identifying and evaluating alternate locations for NY Waterway's proposed Ferry Maintenance Operations Facility (FMOF). The analysis was prepared to ascertain the feasibility of developing a new FMOF along the Hudson River waterfront within a predefined study area from the George Washington Bridge in Fort Lee/Upper Manhattan to the confluence of the New York Bay in Bayonne/Staten Island (*see Appendix A*).

The first step of the analysis involved an evaluation of each coastal property within the study area to identify potential sites capable of accommodating the new ferry maintenance and refueling operation. Properties that were fully built out (e.g. waterfront housing with established public walkways), as well as the highest assessed parcels (predominantly along Manhattan's western coast), were not considered viable options and were given a "low" feasibility rating. The remaining properties consisted of underutilized properties with existing waterfront uses and/or the presence of fixed piers. These sites were given a "moderate" feasibility rating and further evaluated during the second phase of the assessment to determine current availability and future development plans. Of the 24 properties that were analyzed during the second phase, five (5) sites were given a "high" feasibility rating and selected as the most viable and practical options

to accommodate NY Waterway's FMO. (A complete list of all properties evaluated within the study area can be found in *Appendix B*.)

The five (5) most suitable sites were evaluated utilizing various criteria associated with each location's ability to adequately accommodate the needs of the FMOF including impacts to the surrounding human built/ natural environment and costs to complete necessary improvements. The seven attributes analyzed for each alternate location (Capacity, Zoning/Use Compatibility, Development Timing, Accessibility, Environmental Constraints, Future Expansion and Cost) examine specific characteristics of the site in the following manner:

- **Capacity** – The potential sites were analyzed for their ability to meet the FMOF's required berthing capacity, upland capacity and parking capacity. Adequate berthing capacity was estimated at a minimum of 18 ferry boats. The size of the required upland maintenance facility and storage area was considered acceptable by meeting or exceeding the current facility dimensions. Parking capacity was dependent upon the availability of mass transit.

- **Zoning/Use Compatibility** – This category evaluates the compatibility of each site to accommodate an FMOF. Current zoning, as-of-right development potential and adjacent uses were analyzed to determine the level of "compatibility" with the surrounding urban setting and consistency with local/regional master plans. Additionally, portions of the waterfront that are accustomed to higher volumes of boat traffic and ferry wake were ranked higher than other areas not currently subject to this type of activity.

- **Development Timing** – The ranking for this category was based on the estimated timeline the FMOF could begin operations. The stated timeframes were estimated based on the need for engineering design, regulatory approvals, dredging, zoning variances, etc. Sites with shorter lead times were given a higher ranking, while sites that required a lengthy design and approval process were given a lower ranking.

- **Accessibility** – Since the ferry maintenance facility is operated by a diverse labor force, the study assessed the accessibility of the site by various modes of transportation. Higher rankings were given to sites that can be directly accessed by multiple modes of transportation with a preference given to mass transit options.

- **Public Safety** – The installation/development of a FMOF creates secondary impacts that can affect public health and safety. Impacts to public health and safety were evaluated by determining the magnitude of risk at each site in relation to current operations. The major issues associated with this category include higher probability of accidents (kayakers/pedestrians), noise impacts, air quality (fumes), traffic congestion, maneuverability and aesthetics. For example, locations that are routinely subject to high volume vessel traffic and surrounded by industrial uses would be impacted less from the

FMOF than locations with less activity and surrounded by residential uses. The greater the impact to existing conditions, the lower the score.

- **Environmental Constraints** – Each alternate site was analyzed for its potential to impact the natural environment. The lower reaches of the Hudson River are a critical component of the regional aquatic ecosystem. The suitability of marine habitat is dependent upon many factors (tidal patterns, water depth, salinity, wave action, adjacent landform, presence of contaminants, etc.) and the value of the aquatic resource can vary significantly among sites in relatively close proximity to one another. The rankings for this criterion are based on the potential for each site to adversely affect the environment. (Lower scores indicate greater impact to the natural environment).

- **Future Expansion** – As the regional redevelopment effort continues, the demand for ferry service will continue to increase. This category evaluates each site's potential for expansion of the proposed maintenance operation, establishment of a new ferry station or other compatible transit-oriented uses.

- **Cost** – The final category assessed the costs associated with the development of the site inclusive of planning, engineering, permitting, zoning/planning board applications, dredging and construction. It should be noted that NJ Transit is currently in the process of completing a robust cost analysis for several alternative sites capable of accommodating the FMOF. The purpose of Boswell's evaluation is not to present a detailed appraisal of acquisition/development costs, lease terms or operational expenses; but rather to provide a high-level review of overall costs at each site. It is assumed that each site can be purchased/leased at market rates.

Specific evaluation forms have been prepared for each of the five (5) alternate site locations and can be found in *Appendix C*. The sites were ranked on scale from 1 to 10 for all eight (8) of the above referenced criteria with a maximum score of 80. Higher scores represent favorable conditions (7 to 10), mid-ranged scores indicate moderate potential (4 to 6) and lower scores signify unfavorable conditions (1 to 3).

The results of the analysis have been presented in the attached Summary Table (*Appendix D)* The table illustrates the total scores for each location, as well as, individual scoring for each component of the evaluation. The sites were presented in order of preference with Hoboken South achieving the highest score and emerging as the preferred alternative. A detailed description of the results has been provided below:

1- **Hoboken South** (Hoboken, NJ)
Total Score: **58 pts.**

Hoboken South was selected as the preferred alternative with a total score of 58. The advantages of utilizing this site as NY Waterway's FMO over other alternate locations included compatibility with existing use, capacity and superior accessibility. Hoboken Terminal services over 50,000 commuters daily and is home to NY Waterway's Hoboken Ferry Station. This portion of the waterway experiences heavy boat traffic on a daily basis and has adequate depth to accommodate ferry vessels. Due to the amount of activity experienced at Hoboken Terminal, as well as the ongoing maintenance activities associated with the light rail/commuter rail, the addition of a FMOF would not significantly impact adjacent land uses from a visual or operational standpoint. The site's future expansion opportunities ranked low; however, the convenience of locating the FMOF at an existing ferry destination and the availability of utilities on-site compensated for this shortfall.

2- **Bayonne Peninsula** (Bayonne, NJ)
Total Score: **55 pts.**

The second highest ranked site was Bayonne Peninsula. The site is properly zoned for marine operations and has the potential to provide the necessary berthing/upland capacity of a FMOF. The pier extends several thousand feet into the river providing deep waters for the ferry fleet and minimizing disturbances to the channel bottom. Due to the size of the existing pier, future expansion opportunities are most promising at this location. Specifically, no less than three (3) communities, Bayonne, Carteret and South Amboy are at various planning stages for the commencement of ferry service. The prospective regionalization of ferry service to central New Jersey residents underscores the importance of future expansion opportunities and a true regionalization of this critical mode of mass transit. The disadvantages of this location include the site's lack of proximity to NY Waterway's existing facilities and increased operational costs associated with increased travel times to and from the FMOF. These disadvantages, however are substantially outweighed by the future regionalization and expansion opportunities offered by a Bayonne location.

3- **Binghamton Ferry** (Edgewater, NJ)
Total Score: **49 pts.**

The former Binghamton Ferry site contains 850'± of the Hudson River waterfront and is zoned as a Waterfront Commercial Business District (B-3). The site is currently zoned for commercial port use. Adjacent lands include several large retailers and their associated parking areas, as well as, a Comfort Inn. During our analysis of the site's availability, initial inquiries were made to the property owner who expressed an interest in exploring

the inclusion of the FMOF use on the site. The owner disclosed that the property is currently being leased and that the current tenant could be contacted to inquire about possible sublease options. Attempts to contact the current tenant have not been successful to date, but it should be noted that the existing waterfront infrastructure has not been utilized since the dismantling and removal of the Binghamton Ferry in 2017. At this time, future plans to redevelop this portion of the waterfront are uncertain. It was determined that the placement of an FMOF toward the southern portion of the site would have the least impact on nearby uses and likely face less public opposition. Additionally, the location's close proximity to NY Waterway's Edgewater Landing terminal was a key advantage from an accessibility standpoint.

4- **Union Dry Dock** (Hoboken, NJ)
Total Score: **45 pts.**

Union Dry Dock was ranked fourth predominantly due to the site's inconsistency with surrounding land uses, limited accessibility, lack on future expansion opportunities and potential environmental impacts. The former Union Dry Dock facility is the only remaining "gap area" of the Hudson River Waterfront Walkway in the City of Hoboken. The proposed installation of a refueling and maintenance facility at this location is not consistent with the City's Master Plan and has been met with significant public opposition. Heavy utilization of the Hudson River by kayakers and paddle boarders at Hudson Cove (located along the site's northern property limit) also represents a potential public safety concern. Conversely, the site is currently owned by NY Waterway and provides adequate berthing and upland.

5- **Port Imperial Ferry Terminal** (Weehawken, NJ)
Total Score: **44 pts.**

The area surrounding the Port Imperial Ferry Terminal has experienced a dramatic transformation over the last decade as evidenced by the construction of two (2) new structured parking decks and the redevelopment of a former parking area to a luxury residential complex. The existing ferry terminal site has limited capacity to accommodate the FMOF on-site and is situated in a highly visible location adjacent to mixed use residential communities to the north and south. The major advantages of this location are the ongoing presence of daily ferry traffic and the direct accessibility of the site by car, bus or light rail.

The intent of the Alternative Site Analysis was to evaluate each potential FMOF location with a focus on long-term suitability. The analysis was prepared with the understanding that the "study area" is located within a heavily utilized and highly visible section of the Lower Hudson River Waterfront and impacts associated with the placement of the FMOF will directly affect numerous stakeholders, as well as, future generations. Since the ultimate location of the FMOF is

expected to remain in service for 20+ years, a thorough assessment of each potential site is necessary to determine the cumulative effects associated with the environment, recreation, public health/safety, cost and consistency with regional master plans. As such, our final ranking of the alternate sites equally accounted for the eight (8) evaluation criteria to prevent bias toward one specific element over another. Another consideration, although not the subject of this study, is the potential to utilize more than one facility to accommodate boat storage, refueling and maintenance. This option increases the number of candidate sites by allowing locations with less capacity than the existing Weehawken facility to be considered.

NY Waterway provides a valuable service to thousands of daily commuters and is an integral part of the regional transit system. The continued operation of their ferry refueling/maintenance facility is critical to ensure safe and uninterrupted service. However, it is essential that the siting of this facility is the result of a properly vetted and widely accepted solution that minimizes adverse impacts and promotes smart growth principles.

Very truly yours,

BOSWELL ENGINEERING

Joseph A. Pomante

Joseph A. Pomante, P.E.
Vice President, Chief Operations Officer

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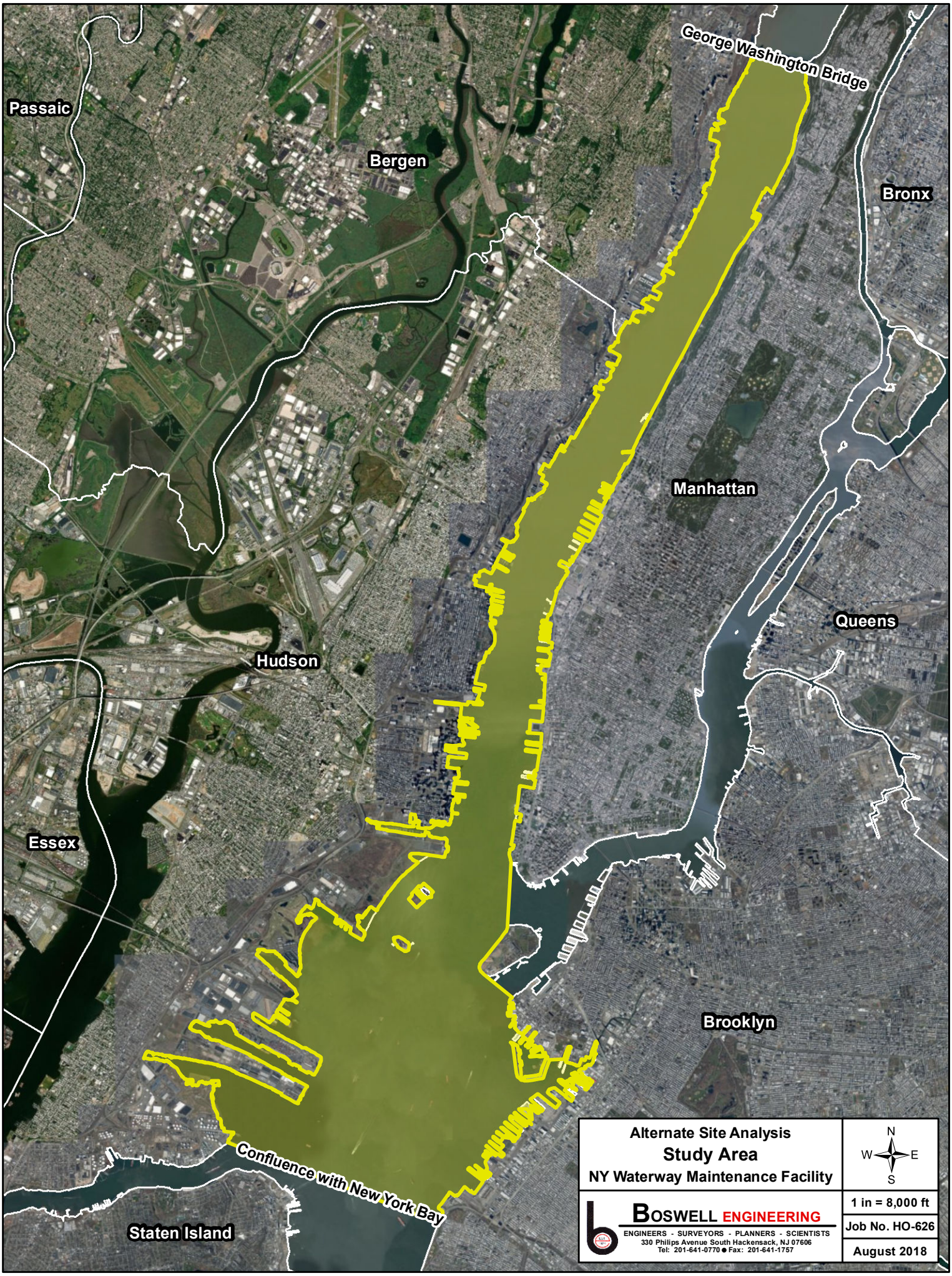
Appendix A

Map of Study Area



Alternate Site Analysis

Study Area

NY Waterway Maintenance Facility

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1 in = 8,000 ft

Job No. HO-626

August 2018

Appendix B

List of Coastal Properties within Study Area

List of Coastal Properties within Study Area

City of Bayonne

Name of Property/Owner	Block	Lot	Usage	Feasability
Port Authority of NY&NJ (Bayonne Peninsula)	404	1	Marine terminal	High
Port Authority of NY&NJ (Greenville)	398	11, 12	Marine terminal	Moderate

City of Jersey City

Name of Property/Owner	Block	Lot(s)	Usage	Feasability
Hugo Neu Shnitzer East	27502	5	Misc-recycle	Moderate
United States Gov.	27701	3	n/a	Low
Port Authority of NY&NJ (Greenville)	30501	4,5,6,8	Marine terminal	Moderate
State of NJ Dept. of Environmental Protection	24501	2	Parking Area	Low
State of NJ Dept. of Environmental Protection	21601	1,3,5,6	Vacant land	Moderate
State of NJ Dept. of Environmental Protection	15904	7	Liberty State Park	Low
State of NJ Dept. of Environmental Protection	15903	3,4	Morris Canal Park	Low
SWJ Holdings, LLC% Proskauer R., LLP	15801	30	Parking Lot	Moderate
Jersey City Redevelopment Authority	15801	31,32	Parking Lot	Moderate
NJ Department of Military and Vet. Affairs	14502	10	Vacant/Open Space	Low
Goldman Sachs	14502	8	Pier/underwater	Moderate
City of Jersey City	14502	5	Boardwalk	Low
CAL-HARBOR SO. PIER UR ASSOC. L.P.	11603	13	n/a	Low
EQR-R.E. TAX DEPARTMENT	11603	20	The pier	Low
ISTAR HARBORSIDE,LLC%DCDPROP.FUND	11603	23	Plaze X	Low
Newport Centre	7302	55	Piers 209 & 211	Moderate
Newport Centre	7302	24, 32	Tennis Courts, Tunnel Vents	Low
Newport Centre	7302	3,5	Pier 200	Moderate

City of Hoboken

Name of Property/Owner	Block	Lot(s)	Usage	Feasability
NJ TRANSIT CORP C/O R.E. OFFICE	139	4	Dock Port	High
NJ TRANSIT CORP C/O R.E. OFFICE	139	3	Maintenance building	Low
Hoboken Mayor and Council	231.5	1	Pier/Walkway	Low
Hoboken Mayor and Council	258	2	Waterfront Park	Low
Trustees of Stevens Institute of Tech	258	1	Maintenance building	Low
Union Drydock	259	1	Vacant	High
PT MAXWELL LLC C/O TOLL BROTHERS	261.07	1	Park/pier	Low
Shipyard Associates	262	1	Run down piers	Low
Port Authority of NY/NJ - Mack Cali	231.2	1, 4	Apartment buildings	Low
Hoboken Hotel LLC	231.3	3	Hotel	Low
Pier 13	261	1	Pier with bar/food	Low
14th street ferry terminal	263	1	Ferry terminal	Low
The Turning Point	264	1	Run down piers/restaurant	Low
City of Hoboken	267	1	Waterfront walkway	Low

List of Coastal Properties within Study Area

Township of Weehawken

Name of Property/Owner	Block	Lot(s)	Usage	Feasability
BDLJ ASSOCIATES LLC	34.03	1.01	Parking lot/vacant land	Moderate
Not Listed	34.03	3	Parking lot	Low
RIVA POINTE CONDOMINIUM ASSOC INC	266	2	Pier with condos	Low
East Coast Yacht Cruises	34.03	4	Piers to hold yachts	Moderate
NORTH PIER ASSOCIATES LLC	34.03	4.08	Pier with parking lot	Low
PORT IMPERIAL S & TOWNSHIP OF WKN	36.04	6	Vacant Land	Low
Not Listed	45.01	5	Baseball field, walkway	Low
Not Listed	45.01	3, 4, 9	Waterfront walkway	Low
Port Imperial South	45.01	26	Port Imperial Ferry Terminal	High

Town of West New York

Name of Property/Owner	Block	Lot(s)	Usage	Feasability
ROSELAND/PORT IMPERIAL PTNRS, LP	168	7	Apartments	Low
BELL ATLANTIC-NEW JERSEY INC	168	4.01	Apartments	Low

Township of North Bergen, NJ

Name of Property/Owner	Block	Lot(s)	Usage	Feasability
PALISADES MEDICAL CENTER % TAX DEPT	438	3	Hospital	Low
NORTH HUDSON HOSPITAL ASSOC	438	6	Hospital	Low
Not Listed	438	7	Apartments	Low
Not Listed	438	14	Townhouses	Low
Not Listed	438	12	Apartments	Low
RIVERVIEW DEV LLC % ACHS MGMT CORP	438	6, 17, 1	Greenery	Low

Borough of Edgewater, NJ

Name of Property/Owner	Block	Lot(s)	Usage	Feasability
I PARK EDGEWATER LLC	99	1	Shopping Plaza	Low
BERGEN NEWSPAPER GROUP	99	5	Newspaper	Low
HUDSON RIVER ASSOC LLC	95	1	n/a	Low
PROMENADE	91	4.01	Apartments	Low
Not Listed	85.01	2	Townhouses	Low
AIMCO RIVER CLUB LLC	85.01	1.01	Apartments	Low
EDWTR RET PTNRS,C/O KIMCO REALTY	84.01	1.01	Shopping Plaza	Low
PIER 541 LLC	84.01	1.02	Pier	Moderate
ENU CORP C/O EDGEWATER GOLF	82	1	Golf Range	Low
YNJ LLC C/0 MITSUWA	81	1	Shopping Plaza	Low
615 RIVER RD PRTNR LLC%ENVIROFIN GR	76	5	HESS OIL & CHEMICAL CORP	Moderate
MARKET PLEDGE LLC% CAPSTONE	75	2.03	Shopping Plaza	Low
725 RIVER LANDING LLC	75	2.02	Shopping Plaza	High
BINGHAMTON MOTOR INN	70	4.01	Hotel	High

List of Coastal Properties within Study Area

Borough of Edgewater, NJ				
Name of Property/Owner	Block	Lot(s)	Usage	Feasability
KRAY PLAZA, LLC NJ LTD PTSHP	67	1.02	Ofice buildings	Low
CA STATE TEACHER'S RET SYSTEM	67	1.01	Apartments	Low
Not Listed	59	2.03	Townhouses	Low
DDR SOUTHEAST EDGEWATER,LLC	58	1	Shopping Plaza	Low
BOROUGH OF EDGEWATER	53	1	Parking Lot	Low
WINDSOR AT MARINER'S COVE, LLC	46	3.03	Townhouses	Low
WINDSOR AT MARINER'S COVE, LLC	46	3.01	Apartments, recreational area	Low
BOROUGH OF EDGEWATER	38	1,2	Boat dock, parking lot	Moderate
Not Listed	33	1.02	Condos	Low
Not Listed	31	1	Recreational Fields	Low
Not Listed	25	3	Townhouses	Low
N.J. STATE DEPT ENVIRON PROTECTION	18	2.01	Townhouses	Low
N.J. STATE DEPT ENVIRON PROTECTION	21	2	Townhouses	Low
NORTH HUDSON YACHT CLUB	12	6.01	Boat Dock	Moderate
THE EDGEWATER COLONY INC	1	1	Houses	Low

Borough of Fort Lee, NJ				
Name of Property/Owner	Block	Lot(s)	Usage	Feasability
PALISADES INTERSTATE PARK COMM.	7252	3, 4	Park	Low
PALISADES INTERSTATE PARK COMM.	7255	3	Parking lot/park	Low

List of Coastal Properties within Study Area

Manhattan Borough, NY				
Name of Property/Owner	Block	Lot	Usage	Feasability
Pier A	16	1	Commercial and Office Buildings	Low
Museum of Jewish Heritage	16	10	Public Facilities	Low
Regatta Condominuim	17	7509	Residential/Commercial Buildings	Low
Liberty Terrace Condo	16	7505	Residential/Commercial Buildings	Low
Battery Park City	16	100	Residential/Commercial Buildings	Low
BOP One North End LLC	16	225	Commercial and Office Buildings	Low
NYC DOT	16	3	n/a	Low
NYS DOT - Pier 25	184	5	Transportation and Utility	Low
NYS DOT -	184	8	Transportation and Utility	Low
NYS DOT - Pier 34	656	9	Transportation and Utility	Low
NYS DOT - Pier 40	656	1	Transportation and Utility	Low
NYS DOT - Pier 51	651	13	Transportation and Utility	Low
NYS DOT	651	1	Transportation and Utility	Moderate
NYS DOT - Pier 54	651	7	Transportation and Utility	Low
NYS Parks and Recreation	662	3	Residential/Commercial Buildings	Low
State of NY - Pier 59, 60, 61	662	11,16,19	Transportation and Utility	Low
NYS DOT - Pier 62	662	62	Transportation and Utility	Low
NYC DCBS - Pier 76	665	10	Transportation and Utility	Moderate
NYC Parks - Pier 79	665	14,19,20	Transportation and Utility	Moderate
NYC Parks - Pier 81	1107	5	Transportation and Utility	Low
NYC Parks - Pier 83	1107	14	Transportation and Utility	Low
NYC Parks - Pier 86	1107	30	Transportation and Utility	Low
NYC DCBS - Pier 88	1107	12	Transportation and Utility	Low
NYC DCBS - Pier 90	1109	21	Transportation and Utility	Low
NYC DCBS - Pier 92	1109	30	Transportation and Utility	Low
NYC DCBS -Pier 94	1109	5	Transportation and Utility	Low
Sanitation - Pier 99	1109	99	Transportation and Utility	Moderate
Sanitation	2101	120	Transportation and Utility	Low
Department of Environmental	2101	117	Transportation and Utility	Low

Brooklyn, NY				
Name of Property/Owner	Block	Lot	Usage	Feasability
Dept Environmental Protection	5835	1	Transportation and Utility	Low
City of New York	5778	1	Transportation and Utility	Low
City of New York	5804	2	Transportation and Utility	Low
NYC DSBS	819	1	Industrial and Manufacturing	Low
NYC DSBS	803	5	Transportation and Utility	Low
NYC DSBS	725	200	Transportation and Utility	Low
NYC DSBS	725	1	Transportation and Utility	Low
Not Listed	715	1	n/a	Low

List of Coastal Properties within Study Area

Brooklyn, NY				
Name of Property/Owner	Block	Lot	Usage	Feasability
Dept Environmental Protection	5835	1	Transportation and Utility	Low
City of New York	5778	1	Transportation and Utility	Low
City of New York	5804	2	Transportation and Utility	Low
NYC DSBS	819	1	Industrial and Manufacturing	Low
NYC DSBS	803	5	Transportation and Utility	Low
NYC DSBS	725	200	Transportation and Utility	Low
NYC DSBS	725	1	Transportation and Utility	Low
Not listed	715	1	n/a	Low
Not listed	710	16	n/a	Low
NYC DSBS	662	1	Transportation and Utility	Low
Astoria Generating Co.	653	7	Transportation and Utility	Low
Eerie Basin Marine	612	250	Industrial and Manufacturing	Low
Eerie Basin Marine	612	205	Industrial and Manufacturing	Low
O'Connell, Gregory	612	1	Industrial and Manufacturing	Low
Thor 280 Richards Street	612	150	Vacant Land	Low
Red Hook Stores	611	6	Industrial and Manufacturing	Low
O'Connell, Gregory	611	25	Industrial and Manufacturing	Low
O'Connell, Gregory	595	170	Open Space & Outdoor Recreation	Low
Kings Harbor View Association	595	9	n/a	Low
175 Van Dyke Street	595	250	Industrial and Manufacturing	Low
Cornell Paper & Box Co.	595	300	Industrial and Manufacturing	Low
Valentino Pier	595	52	Open Space / Park	Low
Red Hook Industrial Co.	595	70	Industrial and Manufacturing	Low
Red Hook Industrial Co.	573	100	Industrial and Manufacturing	Low
Port Authority of NY&NJ	514	21	Transportation and Utility	Low
Governors Island Corp	515	1	Parking Facilities	Low
Port Authority of NY&NJ	515	61	Transportation and Utility	Low

Governors Island, NY				
Name of Property/Owner	Block	Lot	Usage	Feasability
Governors Island Corp	1	10	Public Facilities & Institutions	Low

Appendix C

Alternative Site Evaluation Forms

Site ID	Name of Potential Site
1	**Hoboken South**

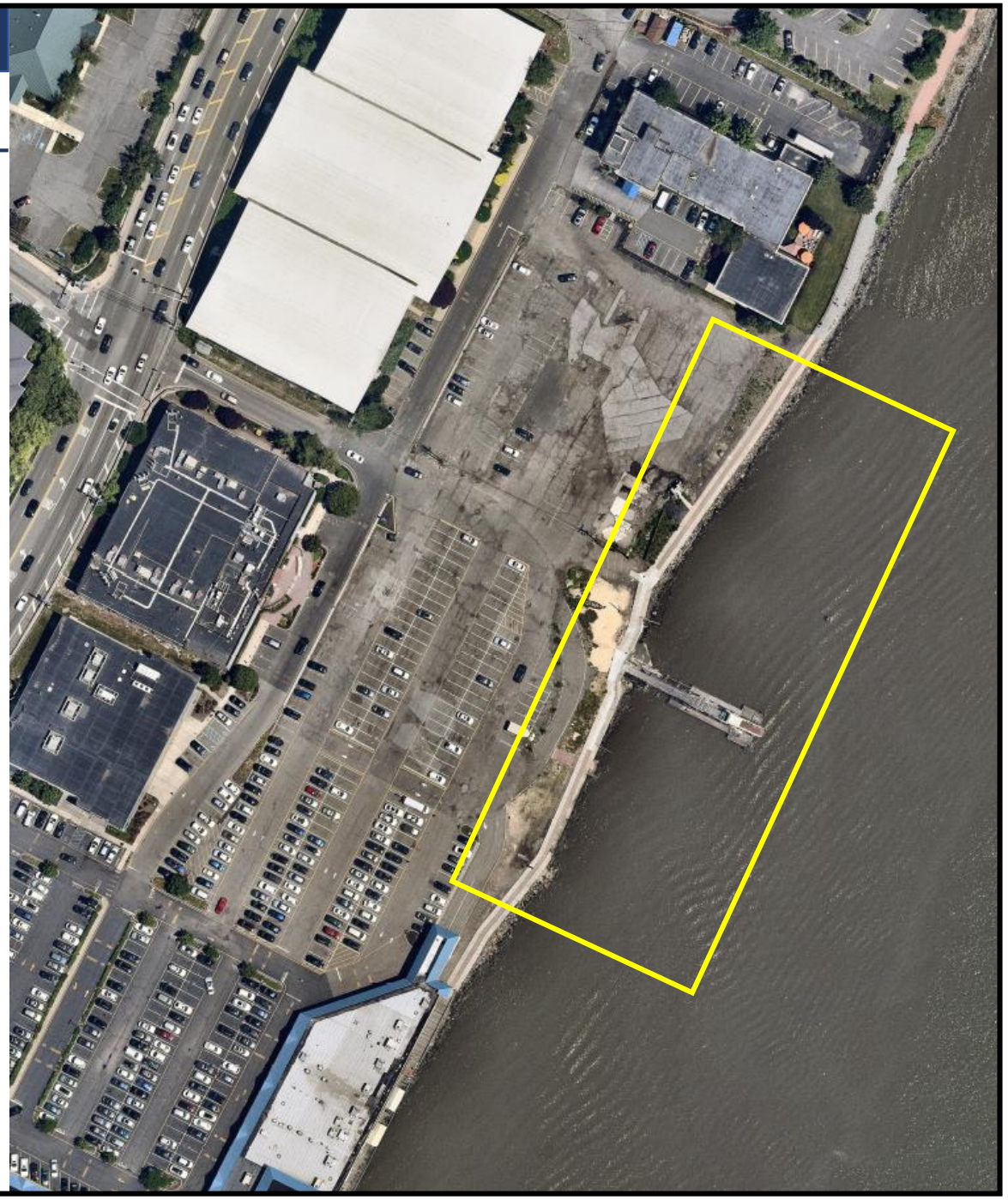
Evaluation Criteria	Site Characteristics	Ranking (1-10)
Capacity	Hoboken South is currently utilized for ferry berthing and maintenance operations. Although the site cannot immediately provide the required berthing capacity or upland capacity, the installation of a barge and redevelopment of site could accommodate the FMOF.	8
Zoning/ Use Compatibility	The existing site is zoned in the I-2 Industrial District and the W (H) Waterfront Historic District. Hoboken south is a transportation hub that houses commuter rails, light rails and the Hoboken Ferry Terminal. Bus and taxi service are also directly accessible at the site. The FMO would be a compatible use at this site, however, nearby property owners have voiced opposition to a maintenance facility in such close proximity to the Jersey City waterfront.	8
Accessibility	Hoboken South is highly accessible by mass transit, as well as, by car or shuttle service.	9
Public Safety	Hoboken Terminal is a high volume transportation hub that will not be significantly impacted by additional vessel traffic or diesel engine fumes. Minor impacts from additional staff and fuel/parts deliveries may occur.	8
Development Timing	Installation of a barge at this location and development of an adequate upland area would require local and environmental approvals. Preparation of engineering plans, acquisition of approvals and construction of the required improvements are estimated to take 18-24 months.	6
Environmental Constraints	Since the site is accustomed to heavy vessel traffic and boat wake, the FMOF will not noticeably increase turbidity. This location is not known for high occurrences of threatened and endangered species.	8
Future Expansion	Although the accommodation of a ferry maintenance facility at this location is feasible, additional berthing or landward capacity is unlikely due to the limited available space at Hoboken Terminal.	4
Cost	Utilization of this site requires a lease agreement with NJ Transit. The cost to construct the required improvements is estimated at $3-5MM.	7

Site ID	Name of Potential Site
2	Bayonne Peninsula

Evaluation Criteria	Site Characteristics	Ranking (1-10)
Capacity	Bayonne Peninsula is an existing waterfront pier consisting of various industrial, commercial and residential uses. The site has access to a large portion of the waterfront and can adequately accommodate the FMOF through installation of a barge or raised dock platform.	8
Zoning/Use Compatibility	The property is zoned as a Metropolitan Harbor District – Redevelopment Area. The surrounding properties consists of water dependent industrial uses, including a boat repair dock, retail establishments, the Bayonne Golf Course and a multi-family residential development. Current zoning allows for the development of a ferry maintenance facility.	9
Accessibility	The site is located along NJ-440 and can be access by car, bus or the Hudson Bergen Light Rail (34 Street Light Rail Station). Direct access to the waterward end of the pier is limited and lack of proximity to NY Waterway ferry terminals is a disadvantage to this location.	4
Public Safety	The pier currently experiences daily vessel traffic and is located several thousand feet from the shoreline. Other than disturbances associated with construction activities, safety will not be impacted.	8
Development Timeline	The preparation of a comprehensive engineering design and the acquisition of regulatory and local approvals would require 18 months since less public opposition is anticipated at this industrial location.	7
Environmental Constraints	Deeper waters at this location reduce the need for frequent maintenance dredging minimizing habitat disturbances. The FMOF will have little to no impact on finfish migratory pathways	8
Future Expansion	The Bayonne Peninsula provides an opportunity for future expansion and has the potential to accommodate an additional ferry terminal as the area continues to be redeveloped with mixed use residential housing and retail establishments.	7
Cost	A portion of the pier can be leased at market rate, however, the distance from NY Waterway facilities will increase operational costs.	4

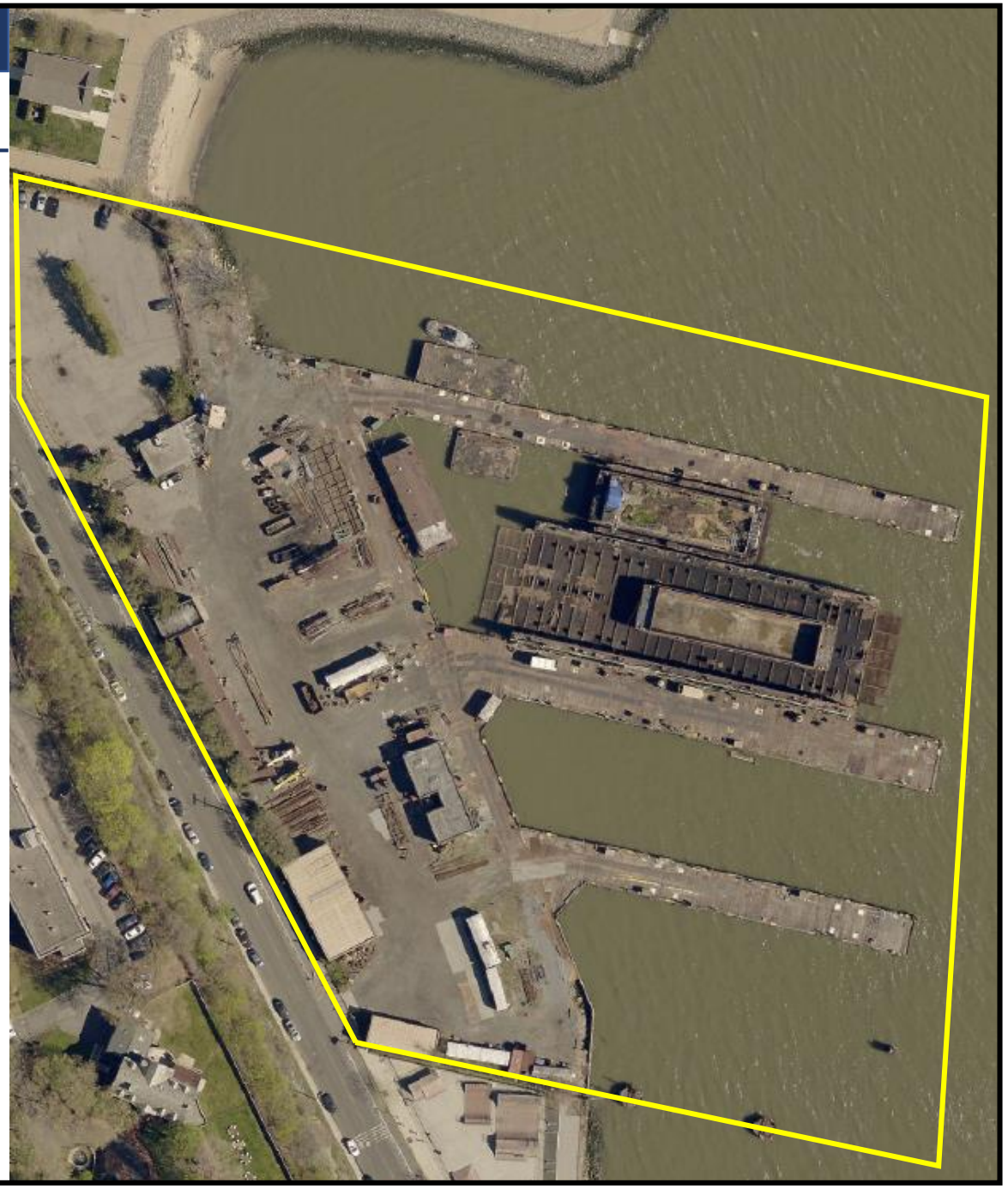
Site ID	Name of Potential Site
3	**Binghamton Ferry Site**

Evaluation Criteria	Site Characteristics	Ranking (1-10)
Capacity	The property was formerly the site of the Binghamton Ferryboat which operated as a restaurant from 1975 to 2007 and most recently dismantled in 2017. The site can accommodate the required berthing capacity through the installation of a barge or fixed pier. The existing parking area would require modification to incorporate an adequately sized upland facility.	6
Zoning/Use Compatibility	The site is located in the Waterfront Commercial Business District. The site is currently zoned for commercial port use. Adjacent land uses include a hotel, several large retailers and their associated parking lots.	6
Accessibility	The site can be directly accessed along River Road by car or bus. Rail service is not available at this location.	8
Public Safety	The site is located adjacent to large parking areas that are congested during the hours of 8am to 8pm. The inclusion of a FMOF at this location would increase congestion and limit fuel/parts deliveries. Safety measures would be required to protect users of the Hudson River Waterfront Walkway during ferry maintenance operations.	7
Development Timing	The construction of a pier and an adjacent upland maintenance facility would require engineering plans, as well as, Federal, State and local approvals including a parking variance. (Estimated timeframe 18-24 months)	6
Environmental Constraints	Dredging is not anticipated since the Binghampton site formerly moored a stationary ferryboat at the terminus of a fixed pier. However, the installation of a FMOF will significantly increase boat wake and propeller induced turbidity.	7
Future Expansion	Development of a FMOF at this heavily built-out site would not provide additional expansion opportunities	3
Cost	A sub-lease with the current tenant is required for the FMOF. The cost to construct the required improvements are estimated at $3-4 MM.	6



Site ID	Name of Potential Site
4	Union Dry Dock

Evaluation Criteria	Site Characteristics	Ranking (1-10)
Capacity	According to a site plan prepared by Bowman Engineering, the site contains berthing capacity for up to 20 ferries. The upland area is adequate with parking for 70± employees.	9
Zoning/ Use Compatibility	The site, which was a former dry dock and boat repair facility, is zoned as a W(N) Waterfront-Castle Point Subdistrict. Surrounding land uses include high density residential buildings, student housing, passive/active recreation and water dependent sporting (kayaking, paddle boarding). The plans to redevelop this highly visible site as a FMOF has been met with significant public opposition from surrounding property owners, residents and interest groups.	4
Accessibility	The site is located along Frank Sinatra Drive and can be accessed by car or bus. Frank Sinatra Drive is a low speed/low volume roadway and direct access by train or light rail is not available.	5
Public Safety	High-volume vessel traffic is a major safety concern at Hudson Cove Community Boathouse servicing over 6,000 paddlers each year. Residents are also concerned with constant fumes from diesel engines.	4
Development Timeline	NY Waterway is awaiting authorization from the Army Corps of Engineers to move forward with their current redevelopment plan. If an approval is issued, occupation can occur in the fall of 2018.	8
Environmental Constraints	The recent biodiversity report (Thurlow, 2018) identified the Hudson Cove area as a habitat for over 70 aquatic species. Shallow channel depths along the shoreline increase the need for periodic dredging and are more susceptible to propeller induced turbidity.	4
Future Expansion	Although the site can accommodate the current FMOF, there is limited opportunity to increase berthing capacity and expansion of the upland area beyond the site limits is not possible.	3
Cost	NY Waterway recently purchased the property for $11MM+. Minor improvements are required to make the site operational, however, additional improvements are anticipated.	8



Site ID	Name of Potential Site
5	Port Imperial Ferry Terminal

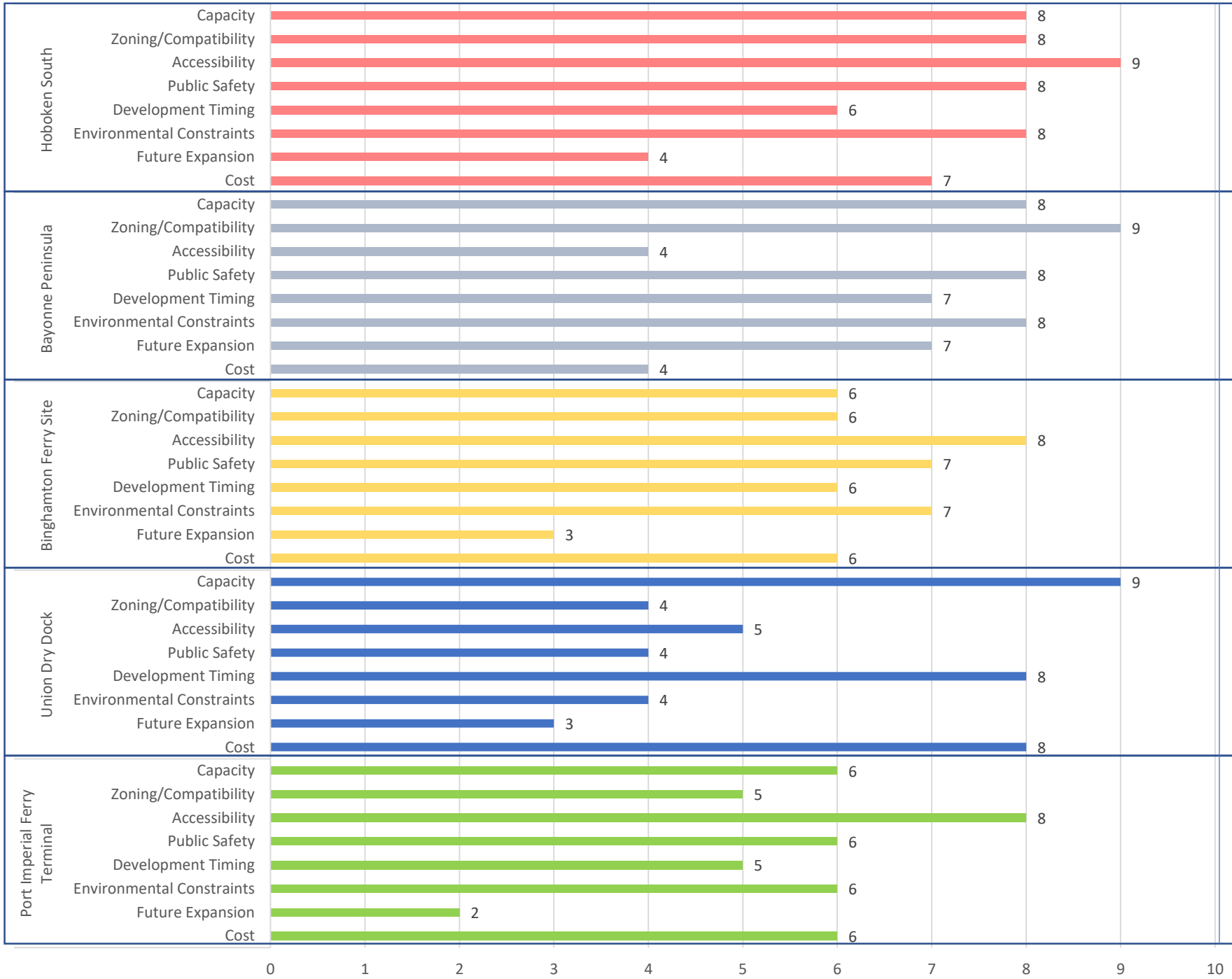
Evaluation Criteria	Site Characteristics	Ranking (1-10)
Capacity	The site does not currently have the berthing capacity or upland facilities necessary to accommodate the FMOF. However, the installation of a barge or fixed pier and redevelopment of the northeastern parking lot would provide the required capacity. Parking needs for employees can be easily met at this location.	6
Zoning/Use Compatibility	Port Imperial Ferry Terminal is surrounded by high density residential development to the north and south. The ferry terminal lies at the foot of the Hudson Palisades which marks the Edgewater/Cliffside Park municipal boundary. The landward portion of the facility includes two parking garages with ground floor retail. This site is accustomed to high volume ferry traffic and is the nearest alternate to the existing FMOF (1,500' apart).	5
Accessibility	The site is located along Port Imperial Boulevard and can be accessed by car, bus or the Hudson Bergen Light Rail (Port Imperial Station). Structured parking is available on-site.	8
Public Safety	The limited space at this location creates maneuverability issues and can increase risks associated with vessel collisions.	6
Development Timing	New development within the Hudson River and along the adjacent upland will require full engineering design, local approvals and permits. The timeline for development is estimated at 18-24 months but could require modification of the existing terminal	5
Environmental Constraints	The waterward potion of this site experiences daily boat traffic and will not be impacted by additional boat traffic, however, shallow channel depth near the shoreline will require dredging.	6
Future Expansion	The site has currently undergone significant redevelopment and is nearing full build-out.	2
Cost	The cost to install a new pier/barge at the existing terminal including the associated upland improvements is estimated at $4-6MM.	6

Appendix D

Summary Table of Results

Summary Table

Alternative Sites Analysis for NY Waterway Ferry Maintenance Operations Facility



	Total Score	Overall Rank
Hoboken South	58	1
Bayonne Peninsula	55	2
Binghamton Ferry Site	49	3
Union Dry Dock	45	4
Port Imperial Ferry Terminal	44	5

Appendix E

Excerpt from March 29, 2018, Report in Opposition of the Waterfront Development Permit Application

G. N.J.A.C. 7:7-9.46 Hudson River waterfront area

As stated in the City of Hoboken's Master Plan (2004), a key feature/initiative is the vision that "the entire waterfront will be connected by a pedestrian walkway." Since the adoption of the Master Plan in 2004, the City has worked with developers, property owners, and regulatory agencies to realize this vision by reclaiming the waterfront for public use. The Hudson River Waterfront Walkway is the focal point of the City's Open Space Plan and currently extends over 2 miles from the Hoboken Terminal to the northeastern municipal boundary. The walkway is located at the landward edge of the pier for its entire length and includes linkages to additional recreational facilities at Pier A, Pier C, Sinatra Park, Castle Point Skatepark and several fishing piers. The last remaining parcel not including a section of the waterfront walkway is the Union Dry Dock facility which represents an 840 foot ± gap area (see Appendix E for a map of the waterfront walkway alignment).

The City's Master Plan also states that "*Hoboken will soon be the first community on the New Jersey shore of the Hudson River to complete its State-mandated waterfront walkway*" and the Coastal Zone Management Rules "*facilitates the completion of the Hudson River Waterfront Walkway, which is intended to provide* ***contiguous access to the waterfront*** *for the public in accordance with the Public Trust Doctrine."* (emphasis added) NY Waterway's purchase of the Union Dry Dock site for use as their primary maintenance facility threatens this key objective which is shared by residents, business owners, local interest groups and the state. The Applicant indicates their current maintenance facility in Weehawken was occupied for over twenty years, and NY Waterway intends to utilize the Union Dry Dock site for the foreseeable future. At this point, NY Waterway has not shared plans to provide visual and physical access to the waterfront on-site. Conversely, the Applicant has indicated that the current sidewalk and bike lane along Frank Sinatra Drive "*can be both formalized and enhanced by NY Waterway in cooperation with the City and Stevens Institute (which owns the underlying land). Since existing industrial development sites along the Hudson River are not required to provide on-site public access if there is no existing public access (see N.J.A.C. 7:7-16.9(k)), the existing public access scheme is consistent with the RCZM*." The City holds the opinion that a sidewalk/bike lane within an existing right-of-way situated between 165 feet ± to over 200 feet from the waterfront does not constitute as physical access to the waterfront.

Additionally, the sidewalk located along the western limit of the Union Dry Dock property does not provide visual access to the waterfront due to the presence of various obstructions including buildings, equipment, and trees. A key element of the Hudson River Waterfront Walkway is unobstructed views of the Hudson River and New York City skyline. To demonstrate the stark contrast between the visual experience provided along the sidewalk in question in comparison to the walkways

immediately upstream and downstream of the site, we have included several photographs which can be found in Appendix F.

Furthermore, the Hudson River Waterfront Walkway Design Guidelines require a minimum width of 16 feet consisting of "pavement free of obstructions." Exhibit-3 of the Applicant's Waterfront Development application includes a picture of the sidewalk with obvious obstructions (telephone poles, bollards, etc.). The Applicant is also including a 2 foot strip of unpaved dirt and gravel as part of the 16 foot travel width. Putting aside the actual location of the public access and its nonconformance with the remainder of the waterfront walkway, the current sidewalk and bike lane do not meet the minimum design standards to be considered compliant with this sub-section.

N.J.A.C. 7:7-9.46 (e) states, "*All waterfront development along the Hudson River shall develop, maintain, and manage a section of the Hudson Waterfront Walkway coincident with the shoreline of the development property.*" Subsection (e) includes the following clarification:

1. Public access to and along the main route of the Hudson Waterfront Walkway and on the adjacent piers shall be on a 24-hour unless it can be demonstrated to the Department that strict compliance with this provision is not practicable based on the risk of injury from substantial permanent obstructions or proposed hazardous operations, or upon documentation of a threat to public safety due to unique circumstances concerning the subject property that would make 24- hour access not feasible.

By admission of the Applicant, "The applicant's proposed use as vessel maintenance and support facility is, if anything, far less industrial in nature and represents a less intense use of the property." In order to properly demonstrate compliance with this sub-section, NY Waterway should provide justification for the omission of a waterfront access area as part of their redevelopment plan. As part of this justification, the Applicant should include an explanation for restricting waterfront access along the eastern boundary of the existing employee parking area.