FINAL DRAFT
SUMMARY FOR THE HARBOR TEAM MEETING
July 27, 2017; 6:00 PM
Tradepoint Atlantic Offices
1600 Sparrows Pt. Boulevard
Baltimore, MD

Attendees:
Anne Arundel County Department of Public Works: Chris Phipps
Baltimore County Economic and Workforce Development: Rick Johnson
Baltimore Port Alliance: Rupert Denney
Blue Water Baltimore: Angela Haren
Chesapeake Bay Foundation: Doug Myers
Clean Water Action: Emily Ranson
Cristal Corporation: Paul Morris
Dundalk Renaissance Corporation: Paul Rosenberger
EcoLogix Group: Steve Pattison
Edgemere: Keith Taylor
Gahagan & Bryant Associates, Inc. (GBA): Brian Newbury
GEOmatx Survey and Mapping: Tom McElroy
Greater Dundalk Alliance: Russell Donnelly
Mahan Rykiel Associates: Isaac Hametz, Qing Li, Maddie Hoagland-Hanson, Xiang Huang, Jingting Li
Maryland Department of the Environment: Jennifer Sohns, Barbara Brown
Maryland Environmental Service (MES): Melissa Slatnick, Jeff Halka, Kristen Keene
Maryland Department of Transportation Port Administration (MPA): Chris Correale, Kristen Fidler, Holly Miller, Katrina Jones, John Vasina, Sergio Adantor, Shawn Kiernan, Bertrand Djiki, Bill Lear
Moffat & Nichol: John Walker, Mary Walker
North County Land Trust: Rebecca Kolberg
North Point Peninsula Community Coordinating Council: Fran Taylor
Patapsco Back River Tributary Team: Stuart Stainman
Sparrows Point Shipyard: Tim Barletta
Terracon: Rabi Yadava
Tradepoint Atlantic: Aaron Tomarchio, Mindy Strevig, Pete Haid
Turner Station: Gloria Nelson
W.R. Grace: Mark Galloway

Action Items:
1.) None.

Statements for the Record:
1.) None.

1.0 Welcome & Introductions **Mr. Steve Pattison**
Mr. Pattison welcomed the attendees and everyone introduced themselves.

2.0 Approval of Summary from Last Meeting **Team**

The Harbor Team (HT) approved the April 27th meeting summary as written.

3.0 Tradepoint Atlantic Project Plans **Aaron Tomarchio, Tradepoint Atlantic**

Tradepoint Atlantic (TA) represents a partnership of two private investment companies: Hilco Global and Redwood Capital Investment. Hilco Global is Chicago-based and specializes in monetizing distressed assets. Hilco Global had initially purchased the steel mill in 2012. In 2014 a partnership was formed with a Maryland-based company, Redwood Capital Investments. TPA is taking a 19th Century industrial model and repositioning it for a 21st Century industrial model by taking advantage of the deep water in the Port of Baltimore, the multiple rail services, and the interstate highway system. TPA is actively working with local and federal environmental regulators to clean-up a century of steel making impacts. TPA has pledged $48 million to set aside in a trust that is dedicated to clean-up of the site. An additional $3 million was set aside to study the off shore environmental impacts. Overall, a little more than $2 billion is expected to be invested in Sparrows Point. The site is composed of 3,100 acres and 98% of the property is being recycled for reuse. Roughly 100 acres have been set aside for retail and amenities. There will be approximately 10,000 workers at Sparrows Point. Early tenants include FedEx Ground, Under Armour, LafargeHolcim, and Pasha Automotive Group. The land is being developed, as well as creation of a marine asset, Tradepoint Marine, to provide terminal services for the tenants. Additionally, there is a short-line rail operation named Tradepoint Rail. Ideally, the goal is to have tenants which will use land, marine and rail amenities.

Ms. Strevig stated that approximately 1,000 acres of the property will be dedicated to marine activity. There will be areas designated for roll-on/roll-off cargo as well as marine transit sheds. There are three large marine assets on site: 1) The east/west berth which is 2,200 linear feet, includes a crane, and is 36 feet deep with historical permits that allow for 42 feet; 2) A finger pier which is over 1,100 linear feet, and is 41 feet deep with historical permits which allow for deepening to 47 feet; and 3) The Penwood Wharf which is a 50,000 square foot warehouse structure that is partially suspended over water that is about 20 feet deep. Mr. Myers asked if there was potential for offshore wind turbines to be manufactured at Sparrows Point. Ms. Strevig replied that since the site will be built out in phases, the potential for offshore wind manufacturing exists. The TPA property can be built to accommodate future tenants. It is estimated that the development process will involve 1 million cubic yards (mcy) of dredged material from maintenance dredging over the next five years.

Ms. Kolberg asked where the 1 mcy of dredged material will be deposited, especially since TPA may be taking work away from Anne Arundel County. Ms. Strevig stated that it is an ongoing conversation and that any material within the Baltimore Harbor must go into a Dredged Material Containment Facility (DMCF) within the harbor (i.e. Cox Creek DMCF or Masonville DMCF). Ms. Kolberg asked why TPA does not offer space for a DMCF on-site. Mr. Haid stated that Innovative Reuse is a viable option at this point in time and referenced the creation of the Innovative Reuse Guidance Document. There is an existing DMCF on-site but it is almost at capacity. Since there is a need for placement capacity, TPA is working with the Maryland Department of Transportation Maryland Port Administration (MDOT MPA), not only for capacity purposes but for reuse of material on-site as well; TPA appreciates the great potential and

opportunity. The on-site DMCF is about 40 acres and TPA has no plans for the expansion of that DMCF, but rather to reuse the existing facility. TPA has sampled the DMCF material and the results indicated that it is has chemical homogeneity considering all of the material came from one source. The Maryland Department of the Environment (MDE) reviewed the results and provided promising feedback. About 530,000 cubic yards of existing material is in the TPA DMCF and it is estimated that there will be 1 mcy of capacity once it is repurposed.

Mr. Donnelly asked if the sediment slated for dredging is toxic. Ms. Strevig stated that any dredging would be maintenance dredging; a small pilot dredging project was conducted and the material was determined to be non-toxic. Mr. Myers asked if reuse of the existing TPA DMCF material will create available capacity for future TPA maintenance dredging. Ms. Strevig stated that some of the dredging needs are immediate and the DMCF at TPA may not be able to immediately accommodate the maintenance material. TPA is holding discussions with MDOT MPA to request material placement. The long-term vision includes a potential partnership with MDOT MPA, deepening of the TA channels to 50 feet, and use of the TPA DMCF for future dredging needs. Currently Cox Creek is undergoing an expansion which has a timeline where innovative reuse is going to be phased in within that facility to extend its time. The HT has been dealing with the Harbor's navigation channel maintenance needs and the TPA maintenance needs were not calculated or anticipated; adding TPA's maintenance material will change the capacity calculations which have been determined. Mr. Myers requested, on behalf of the HT, the mass balance for the 20 year plan regarding capacity versus dredging needs (i.e. cubic yards versus time) for both the TPA maintenance needs and the Port of Baltimore's maintenance to determine if there will be enough capacity for those actions. Ms. Kolberg asked for the amount of dredged material that TPA will be asking to place in MDOT MPA facilities. Ms. Strevig stated that TPA can only ask for maintenance dredging at this time which would be 1 mcy over the next five years. Mr. Donnelly asked if post-Panamax ships could access TA. Ms. Strevig replied not at this time. Ms. Kolberg asked if palm oil manufacturing was similar to a refinery, and Ms. Strevig replied yes.

Mr. Haid stated that TPA is investigating the use of their DMCF material to meet development needs while exploring Innovative Reuse and its application on the site. TPA material and possibly material from other terminals and DMCF's could be used as fill for major construction activities on site. Mr. Myers asked how long it would be until TPA receives the US Army Corps of Engineers (USACE) permit for maintenance dredging. Ms. Strevig stated that TPA has active permits to 36 feet and they are working through the permit process now to increase the depth to the historic maintenance depths. The USACE is currently reviewing the permit and the public notice should be available in the next couple of months.

Ms. Correale asked about the significant excavation of the west berth and if it was included in the USACE dredging application or in the 1 mcy maintenance dredging estimate. Ms. Strevig replied no, but it is a hopeful potential. Ms. Strevig added that Penwood channel is not currently included in the dredging plan. Mr. Myers stated, given the concerns of legacy contamination, it might be helpful to have toxicology testing information available in the public notice to help expedite the permit process. Ms. Strevig stated that sharable data is available. Mr. Donnelly asked how many cores were taken, and Ms. Strevig replied about 10. Mr. Donnelly asked what type of total suspended solids prevention TPA will employ from a dredging perspective. Ms. Strevig replied

that the same procedures would be followed as for harbor maintenance dredging; turbidity curtains are not currently used around the harbor during dredging activities.

Ms. Strevig stated, regarding offshore wind manufacturing, that TPA has the capacity and can expand that capacity to accommodate large manufacturing components at the finger pier and the east/west berth. Mr. Taylor asked if the entire site will be impervious surfaces once fully developed. Ms. Strevig stated that the long-term build-out will include a lot of impervious area, but it is consistent with historical impervious areas. Mr. Myers asked if the expected size of vessels could be accommodated by maintenance dredging; Ms. Strevig replied yes.

Mr. Tomarchio stated that TPA views itself as a regional development project. Once fully developed, the site will be a cleaner, greener facility. Mr. Stainman stated that considering the development plans include the construction of over 1 million square feet, how TPA will be handling stormwater management requirements. Ms. Strevig stated that the stormwater will be managed in a combination of methods. For example, FedEx has a stormwater management facility within their complex and many of the larger buildings in the northern half of the facility will treat their own stormwater runoff in an optimal manner. In some cases TPA is taking credits for reducing impervious areas, or paying a fee in lieu. Currently stormwater management is being handled project by project, but TPA may be able to consolidate the stormwater facilities as development occurs. Mr. Myers stated that traditional stormwater treatment includes water percolating underground. Since that option is not desirable in some areas, Mr. Myers suggested that TPA discuss the site by site solutions for the stormwater management (i.e. infiltration, best management practices, collected and treated, etc.) Ms. Brown stated that currently the majority of the stormwater is being routed to Humphries Creek either by existing piping, new piping, or frack tanks; all on-site stormwater facilities are required to be lined. A plan exists to remove the residue which has accumulated in the Tin Mill Canal so it can function as a clean conveyance. Ms. Kolberg noted that the southern portion of the Sparrows Point property borders the Patapsco River and TPA needs to strictly adhere to the environmental standards.

4.0 IBR Workgroup Update **Kristen Fidler, MDOT MPA**

Ms. Fidler stated that in April the HT was given an in-depth overview of the Innovative and Beneficial Reuse (IBR) Guidance Document and associated screening criteria which was out for public comment. The public comment period has since closed and MDE is actively working on responding to the comments and revising the document; MDOT MPA expects to see a final IBR Guidance Document in August. Regarding the IBR Workgroup's third recommendation, which proposed that the Governor issue an Executive Order calling on state agencies to be a leader in reuse of dredged material; this initiative was announced at the Maryland Municipal League Conference in June. It is a broad initiative which is housed at MDE and involves resource recovery and waste reductions. There are a couple of provisions to note within the document including: 1) It identifies channel dredged material as a resource of economic value and vast opportunities for reuse; 2) It calls on the Port and MDE to work as strategic partners to develop the guidance and criteria; and 3) The document requests state agencies to use dredged material in projects where it is economically feasible and safe for the environment.

Regarding the photo contest "From Sediment to Solutions", which is part of the initiative to build awareness and support for dredged material, dredging, the Port of Baltimore, and reuse, there were

over 60 entries received. The winner has not been announced yet, but their photo will be shown in the August issue of the Port of Baltimore Magazine along with a short interview with the photographer. The innovative reuse infographic and video have been recognized and awarded by the American Association of Port Authorities in their 2017 Communications Awards Program. The video won the highest award for excellence, while the infographic and whole campaign won the second award. Regarding the next steps, the IBR Regulatory Workgroup is wrapping up since the Guidance Document is moving into its final phase. MDOT MPA is actively moving dried piles of dredged material at Cox Creek to implement several small volume demonstration projects in 2017. Concurrently, MDOT MPA is preparing for large volume innovative reuse projects.

5.0 Mahan Rykiel "Design with Dredge" Intern Program — Mr. Isaac Hametz, Mahan Rykiel Associates

Ms. Fidler introduced the "Design with Dredge" Intern Program being facilitated by MDOT MPA and Mahan Rykiel Associates. The interns have been investigating how dredged material from the Port's channels can be repurposed to create public landscapes, enhance ecosystems, address climate change resilience, and provide access to the environment in an urban setting. The interns have ground-truthed the ideas so that they are technically feasible to the extent possible, but keep in mind that they are conceptual designs and there is no guarantee that the ideas will progress.

Mr. Hametz recognized the interns who have been working tirelessly over the last eight weeks as well as the staff as Mahan Rykiel and Professor Brian Davis from Cornell University. Mr. Hametz stated that the Scope of Work included looking at the broader system of dredged material management and evaluating specific sites that could be reimagined using dredged material while also focusing on a public outreach installation. The program looked at the overall dredged material management process, from dredging to transportation, to placement and processing, and end use. The interns investigated the use of dredged material from a landscape perspective as an ecological, cultural, and economic condition as well as the economic and social benefits. One of the questions they examined was how dredged material processing can become more adaptable and resilient and contribute to a more resilient city. For instance, potential shoreline locations were investigated; the locations were simulated to be raised by about five feet to protect against the effect of climate change using dredged material. This action would allow for 17 more years of placement capacity at the DMCF's. The use of dredged material in brown fields and vacant buildings were also investigated, as well as landfill covers, quarries, etc. which would add an additional 20 years of placement capacity. These investigations led to the interns to ask how to make the processing more efficient, from a landscape perspective. There are obvious challenges which slow down the process, such as water quality management, moisture management, and soil quality. There is resilience to build into the process by adding new tools. Tools and techniques being used throughout the country were investigated.

Mr. Hametz explained that Hart-Miller Island (HMI) was identified as a possible site for experimentation to identify tools and techniques for use in the dredged material management process. For example, one proposal involved using a large dike to serve as a pedestrian promenade and to split the cells into smaller units, thereby making the site more resilient and recreationally viable. Mr. Hametz noted that the structural capacity of dredged material is limited since it is primarily composed of silt and clays. MDOT MPA has begun to solve that problem by determining the proper blend to obtain the necessary structural capacity. Additional uses for

dredged material were also explored (i.e. creating parks, reefballs, etc.). Other waterfront areas which can connect to the communities and the industrial past were identified such as Fleming Park and Turner Station. Fleming Park is currently being investigated for thin layer replacement and is a very promising site due to a preexisting former pier structure and shallow bathymetry. Fleming Park and HMI are entering the next phase of conceptual designs.

Mr. Donnelly asked which category of IBR thin layer replacement would qualify for. Ms. Fidler replied that thin layer replacement would likely require coordination with MDE to determine which category of IBR material would be most applicable for that particular use. Mr. Hametz noted that category 2 material is cleaner than the existing soil at Fleming Park.

6.0 Harbor Development Outreach Update Ms. Katrina Jones, MDOT MPA

Ms. Jones stated there have been a few outreach events since April. At the Cox Creek Expanded public meeting on April 6th some concerns were raised regarding the handling of the demolition due to possible contamination from the former Copper Refinery. Other recent outreach efforts include: Cox Creek riding van tours; Cox Creek Expanded presentations given at community events and meetings; an IBR public meeting that was held on April 25th; an MDOT MPA photo contest; and an Earth Day event. The Dredged Material Management Program Citizens Advisory Committee annual trip will occur soon, if there is space available, the HT members will be notified for those who would be interested in attending. MDOT MPA is very active within the communities and is seeking additional community engagement opportunities.

7.0 Upcoming Meetings Mr. Steve Pattison

Mr. Pattison stated that the next HT meeting will be held on Thursday October 26th. The DMMP Annual Meeting will be held on November 3rd.

8.0 Adjourn