

NOTES ON DUNE MEETING SSPK COUNCIL MEETING AUGUST 23, 2018

By Bob Hopkins

17 11th Avenue

Seaside Park, NJ

973-903-3198

-started 7:00 and went to 8:15 PM on Thursday, August 23rd

-guest attendees NJDEP Kelley Staffieri, Project Manager; Bill Dixon, Director; USACE Keith Watson, Project Manager and Ed Voigt, Public Relations

-Keith gave an overview of the project

*this is the largest in the area at more than \$120 million

*funding is 65% federal and 35% NJ (SSPK should have paid 8.75% of this since this project was not underway before Sandy but an exception was made so NJ picked up all 35% on non federal costs)

*the project was initially \$92 million without Point Pleasant, Bay Head and Berkeley which did not have all their easements done; after they got their easements and were added to the project, cost went to \$120 million

*they can do up to 200 feet per day of beach and dune, so, the 1000 foot sections take a minimum of 5 days but it is usually longer due to weather delays (pipeline cutter head dredges like we have are susceptible to outages due to rough seas due to the nature of the way they work)

*after the beach and dune are done for a segment, the beach entrances/crossovers and dune grass is planted

*the project (Manasquan Inlet to Barnegat Inlet) currently has two hopper dredges and two pipeline dredges working; SSPK has pipeline dredge as does Ortley

*hopper dredges work by loading sand onto it and then moving to work site where it is off loaded

*pipeline dredges work by taking in sand/water slurry (40/60 mix) and then pumping it directly to the beach via a pipeline it is attached to

*the specific schedule for SSPK is doing beach north of 5th Ave. through September/October and then south to Berkeley Twsp till mid to late November

*two types of beach grass will be planted; American Beach Grass on east side and Spartina Patens on west side between Thanksgiving and mid March while plants are dormant

*target for dune grass plant survival rate is 8 out of 10; they will fertilize plants the following spring

QUESTIONS AND ANSWERS

Q. will grass be planted

A. yes, per previous comments; no wooded vegetation will be planted by this project but that can be done afterwards by volunteers or Borough

Q. pipes on beach, 40 foot protective matts, beach entrances

A. pipes will transport sand north from 5th Ave initially and then flip and carry sand south end of Berkeley Twsp at Island Beach entrance

A. no 40 foot protective matts will be used; they were never considered for SSPK

A. each current beach entrance will have access via walking over the dune

Q. what about beach outflow pipes flooding the bayside

A. there will be no beach outflow pipes

Comment by Bill Dixon-two studies have been done (NJ Back Bay and NY/NJ Harbor Study) to study the bayside flooding problem; it is a different problem than the ocean side moving water problem; an Army Corps/NJDEP meeting on this problem will be held at Ocean County Community College on September 13th in the evening; see the Army Corps or SSPK website for details

Q. it was difficult to get out of the ocean at the new beach because sand had eroded away and there was a three foot cliff

A. the extended beach will erode with the ocean tides and currents; this is planned and expected so that that sand provides a gradual decline underwater which is part of the overall dune/beach/underwater engineering design; over weeks and months, that newly pumped sand will settle to its natural state so by next summer it will be where nature intends it to be; the beach should be somewhat wider and the underwater slope will be as designed; renourishment (replacement of lost sand) is scheduled for every 4 years for 50 years or sooner if dictated by storms

Q. what about handicap entrances

A. there will be four; the current three at Decatur, F and 7th and a new one at 13th; they will be at a grade of 1:12 which means a one foot drop for every 12 feet on length per ADA(Americans with Disabilities Act) standards; the entrance will start at boardwalk level to the crest of the dune (22 feet above sea level) at which point a sitting platform will be built off to the side of the ramp; the same 1:12 slope will be used on the east side down to the beach at the 8.5 foot elevation

Q. when will F Street entrance be reopened

A. at the maximum rate of 200 feet per day, it would take five days to go the 1000 feet (four blocks at 250 ft per block) from Brighton past F St.

Q. what is the impact of the project on the ocean environment

A. much study has been done to minimize environmental impact; in general, "critters" in the sand return to normal in 1-3 weeks and life around the borrow areas in the ocean return to normal in months to years

Q. what will be the slope of our beaches in one to five years

A. the same tides and currents will dictate the beach configuration as today, so, the beach will be the same as now; based on much experience with lots of projects, flat beaches like Wildwood will be that way after a project and beaches with steep beaches like in northern NJ will have the same configuration after a project; off shore sandbars will also return to pre project configurations; at the LBI projects done before Sandy, all sand bars returned to their normal configurations by the time Sandy hit

Q. what will the effect of the ocean beach project have on bay flooding

A. no negative effects; it may mitigate the severity of the bay flooding since ocean water will not be flowing down each street with a beach entrance as happened with Sandy since those openings will be filled in; during Sandy, the breach in Mantoloking let the ocean run into the bay and that significantly raised the bay level causing bay side flooding; the small over run on Island Beach had a negligible effect on the bay level

Q. is the cloudy water runoff from sand pumped onto beach polluted

A. no, it is only small particles of sand, silt or clay ("fines") suspended in the ocean water; it may stay in suspension a long time but will eventually settle out

Q. the Mayor made two requests that were denied; the first was to delay the project in SSPK until after Labor Day and the second was to start pumping south first rather than north; neither was granted; why?

A. the Mayor presented his case very strongly to the Army Corps/DEP but the time frame for the project could not be moved back or forward because of economic reasons related to dredge scheduling etc.; if time constraints were imposed on the contractors, the cost of the project would be greatly increased and/or may have resulted in "no bids" from the two of contractors big enough to do this project, Weeks Marine (who got the award) and Great Lakes Dredge & Dock Company (who lost this bid); every summer some municipality has had the project in operation in their town; regarding initial pumping going north rather than south, Bill Dixon said he will take the hit on that since he thought there was an option on that and conveyed that to the Mayor when in fact, there was no option; since the north end of town needed protection more due to inferior dunes there and because of the need to coordinate with the Seaside Heights part of the project, the initial pumping had to proceed to the north; another overriding factor is the need to minimize underwater pipe movement; the selection of the 5th Ave pipe landing allowed pumping to cover the northern and southern distances (Seaside Heights border

to Berkeley Twsp) without having to move the underwater pipes which is a very dangerous activity

Q. how much of the new beach will remain a year after the project is complete

A. the tides and currents in that area of the beach will dictate the final result; the beach is expanded significantly farther than the final configuration in order to provide sand for the gradual slope needed underwater to provide maximum protection; that is part of the dune design from 22 feet above sea level to minus 18.5 feet underwater; the final width of the beach (from the eastern toe of the dune) will be somewhere between its normal 140 feet up to about 250 feet wide but less than its maximum 320 feet post construction width

Q. how much more effective will the new dune be versus our current dune

A. the Army Corps does not do specific studies to determine that; the dune is designed based on simulations (Monte Carlo methodology) using data from past storms to provide optimal protection to the entire 14 mile long dune system so improvement will vary from municipality to municipality depending on how effective their original dune was; Seaside Park will have less of an improvement than Ortley for example since SSPK already had a good dune system to begin with and Ortley did not

Q. how long will it be before the newly planted dune grass is effective in holding sand in place

A. one growing season; dune grass planted prior to March 2019 will be effective by summer 2020

Q. what about handicap ramps

A. the current three at Decatur, F and 7th will be increased by one at 13th; the ramps will be ADA compliant with a 1:12 grade (one foot rise over 12 foot length) and will have an observation platform on top of the dune off to the side so as not to obstruct pedestrian traffic to and from the beach; SSPK will decide what type of benches etc. will be on the observation platform; the ramps up and down will switch back and forth to allow the gentle 1:12 grade; by comparison, the regular beach entrances will have a 1:7 grade and vehicle entrance at Brighton will have 1:10 grade

Q. will our dunes that are higher than the 22 foot high Army Corps design be lowered

A. no; only those segments of the dune that are too low will have sand added; measurements are made every 100 feet to determine where sand is needed; in the first 20 sections (2000 feet) only three sections needed sand; as the project proceeds north more sand will be needed on the north end; similarly, more sand will be needed on the south end of the Borough where Sandy took away the dunes and which have been rebuilt since then but are still too low

Q. what about the bay flooding problem

A. that is a separate and more complex problem; a meeting on that subject will be held on September 13th at Ocean County College to discuss it

Q. what about the "cliff" (drop off) at the end of the new beach at 2nd Ave

A. that is a natural occurrence called a scarp that is more apparent on the newly expanded beach because of the depth of sand at the new wider beach; it also occurs (but usually not as dramatically) on non expanded beaches; the Borough is responsible for "blading" it down as part of its normal beach maintenance

Q. will the Borough get to keep any excess storm fencing

A. yes and SSPK can use it as it sees fit

Q. how will beaches be accessed after the current beach entrance opening have been filled in

A. up and over for all types, pedestrian, handicap and vehicular; all will be surfaced with a earthen like material (called i5) which is a clay like material available locally; it is placed on top of the sand over the dune and makes travel across the dune much easier that walking/driving on sand; it is also easy to replace in case of damage

Q. what about vehicular access

A. it will still be at Brighton Ave with up and over on i5 surfaced access path

Q. what about dune/beach maintenance

A. the project is not a "one and done"; sand replenishment is planned every four years for the 50 year life of the project or more frequently if storm damage dictates

PS as always, the best place to get current information on the Army Corps dune project is on their website

<http://www.nap.usace.army.mil/Missions/Civil-Works/Manasquan-Inlet-to-Barneget-Inlet/>