

**TOWN OF OLD ORCHARD BEACH
TOWN COUNCIL WORKSHOP
WEDNESDAY, FEBRUARY 9, 2011
TOWN HALL CHAMBERS**

A Town Council Workshop of the Old Orchard Beach Town Council was held on Wednesday, February 9, 2011 in the Town Council Chambers. Chair Quinn opened the meeting at 7:05 p.m. The purpose of the Workshop was to discuss the West Grand Avenue Bond issue and also the subject of Sidewalks.

The following were in attendance:

**Chair Bob Quinn
Vice Chair Michael Tousignant
Councilor Robin Dayton
Councilor Sharri MacDonald
Town Manager Jack Turcotte
Assistant Town Manager Louise Reid
Bill Robertson – Public Works Director
Michael Nugent – Code Enforcement Officer
Ryan Wingard – Wright Pierce Engineering
John Edgerton - Wright Pierce Engineering
Steve Guerrette – Wright Pierce Engineering**

The Town Manager introduced the three gentlemen from Wright Pierce with the major presentation being provided by Ryan Wingard. In June of 2008 the community approved a number of bond issues to support a variety of infrastructure improvements. This evening we will be discussing the West Grand Stormwater Bond Project. There have been several workshops where information and updates were provided for the Council including March 24, 2008, June 24, 2009, July 6, 2009, September 30, 2010 and October 5, 2010. The bond proposal included \$1.85 million to address public infrastructure improvements to the vicinity of West Grand Avenue which would address issues associated with periodic flooding. In 2008 a preliminary design process to evaluate the nature and extent of flooding and to better understand the factors behind it was presented. The evaluation focused on site topography and its relation to sea level, the tide gate, hydrology and hydraulics. Wright Pierce came to the Council this evening after receiving months ago instructions from the Council that they move forward and to bring detailed plans showing what is to be done, what it will accomplish and to do it in a timely manner.

A major factor driving the necessity for the project is the need to maintain a safe and dry evacuation route during a 100-year flood. The existing evacuation route in the area utilizes a portion of West Grand Avenue (from Pavia Avenue to New Salt Road) that is frequently inundated with flood waters during storm events significantly less than the 100-year flood. Adding to the complexity of flooding issues is the mandate that improvements be confined to within the Right of Way (ROW). Public bond money expenditures cannot be used on private property to mitigate flooding on that property. Localized flooding has been observed outside

of the ROW in several locations with particular attention paid to ensure that the flood mitigation project selected does not exacerbate the localized flooding outside of the ROW.

During the many workshops previously presented, it was recommended that Wright Pierce proceed with Alternative Number two of three Alternatives provided to the Council several months ago. It was the moderate improvement scenario based on goals for the project as presented to voters (work within the public domain to mitigate flood hazards and to maintain a safe/dry emergency evacuation route. This alternative will minimize impacts to private property and are more localized flood mitigation solutions. The following solutions were discussed this evening and further information provided with the major change that the evacuation route would be Seaside Avenue rather than West Grand Avenue. The work was to be based on topographic elevations and requires some capital improvements in addition to pavement markings and signage with on-street parking, etc, probably not a big issue at times when the evacuation route would be needed due to flooding. It was agreed that general stormwater improvements would be necessary along West Grand Avenue along with improving local stormwater infrastructure near 17 Tunis Avenue. It will be necessary to improve local stormwater infrastructure near inlet to box culvers and adjust drainage structure at Temple Avenue and optimize the tide gate operation especially prior to large rain events. It was the plan to add storage upstream of Free Street culvert. It is obvious that there would be a requirement for extensive coordination with the Ocean Park Association and the local citizens as well and this has been ongoing.

The advantages to this alternative include local stormwater infrastructure improves; it requires minimal construction impacts and schedules to both wetlands and marsh areas; passable emergency evacuation route with new infrastructure at Free Street and increased storage in the marsh prior to rain events; enhanced SCADA operations and decreased potential for negative impacts in private property drainage; and costs are within the original bond amount. However there are some disadvantages including flood protection is not mitigated for significant floods; increased traffic on smaller local roads such as Seaside Avenue and side streets; and significant coordination within the Ocean Park community is required.

Work elements include stormwater upgrades to Tripoli, Tunis, Hampton and Roanoke; regrade/modify roadway crown to achieve positive drainage; replace catch basins and piping; and raise catch basins and piping. This will improve local infrastructure; minimize construction impacts and schedule; decrease negative impacts on private property; flooding to recede quickly; eliminate standing water when tide recedes; and compatibility with future drainage improvements. The addition of bar racks will address drowning safety hazards and improve the infrastructure.

A great deal of discussion resulted on the issue of the Tide Gate. The Town Manager indicated that they are working closely with the Department of Environmental Protection (DEP) for a listing of requirements for the opening and closing of the tide gate and the final plan of approval will come from the DEP. It is obvious that there needs to be modification to the tide gate operation which will include closing the gate in advance of wet weather events; relocate the gate controls to the pump station; and add one ore mechanical gate operator. This will increase storage in the marsh prior to rain; enhance SCADA operations; and increase the flow of saltwater into the marsh during dry periods.

A lengthy discussion continued on the need to address invasive species in the marsh. The tide gate is operated by the Town and is there to prevent excessive tidal water from entering the marshes adjacent to West Grand Avenue and flooding properties along West Grand Avenue during extreme tidal elevations. The New Salt Road crossings consist of three 48-inch diameter gates attached to the ocean side of three 48-inch diameter reinforced concrete culverts. Two of the three gates are flap gates, which only allow water to discharge to Goosefare Brook and prevent tidal water from flowing in. The third gate which is electrically powered slides vertically to regulate the amount of tidal water that enters the upstream salt water marshes. The water level sensor is located on the ocean side of the tide gates, which automatically closes the gate during periods of high tides to prevent salt water from flooding inhabited areas. So working with the DEP the goals are to provide for an increased level of flood protection for the flood prone West Grand Avenue area in anticipation of significant rain events and to maintain a high level of salinity in the salt water marshes during periods of dry weather.

Kelly Raye, John Bird, Jerome Begart and Jack Sarno again entered into this discussion at length. Discussion involved physical removal versus chemical removal and the use of the Scarborough plan as a pilot. However the Council and Kelly Raye indicated there are many plans out there and we don't need to wait for the Scarborough plan to be finalized when we can get any number of finalized plans that have been completed and begin on this project immediately. The Council seemed to have consensus that this plan needed to be put into the works sooner, rather than later. There is the awareness that the salt marsh and the question of life and death of the salt marsh are vital. There was a focus on the many aspects of the ecology of the marsh including geology and species, seasons and topics of marsh pollution and conservation. They spoke of the spar Tina grasses and the need to preserve this marsh which is vital to the community. There are growing concerns about a variety of species, water quality, fish migration, invasive plants (such as phragmites), salt marsh degradation, population growth, and development. Marshes rank among the most productive ecosystems on earth and the concerns that were made include the desire to be more actively involved and address the issues presented. Again, the Council seemed to have consensus to move this study forward; the focus of the assessment would be to observe any changes in the existing salt marsh and their zones of habitat. Typically, different species of salt marsh vegetation have their own affinities to tidal inundation and or salinity levels. Under normal circumstances the static state of a coastal marsh vegetative community is indicative of the amount of salt water it receives. The observed change of the vegetative species composition is one means of inferring the impact of the newly functioning tide gate on pre-existing hydrologic conditions.

John Bird and Jack Sarno entered into discussion during the evening and Mr. Bird had presented earlier a list of suggestions to the Council and Wright Pierce with their constructive responses to the issues he raised:

Clean, repair and refurbish of all existing drains, sewers, water line and associated infrastructure along West Grand Avenue from Seaview to Randall out to at least Seaside Avenue.

Response: Replacement of culverts, storm drains, manholes and catch basins between Tripoli and Roanoke are included in the proposed design.

Divert some freshwater flows from the area by installing a new storm drain line with a back-flow prevention valve from Seaview to Weymouth along the East side of West Grand Avenue, picking up all of the storm drains from Seaview to Randall to out at least to Seaside Avenue and the flow which runs through Ocean Park Meadows, all of which are fresh water and which currently drain into the Ocean Park marshes. This will bring excess fresh storm water directly to the Goosefare areas to which it eventually runs now, bypassing the marshes and the flooding area.

Response: The issue is not available pipe capacity but rather the driving hydraulic head available to push water out of the area. Because the area is so flat and close to sea level, the amount of driving head is minimal and large culverts will not help. The only way to successfully address the problem is by berming the low areas and building a pump station to counteract the tides. This “Cadillac” option was presented to the Council (Alternative Three) in October of 2010 with a significant price tag. The Council directed Wright Pierce to proceed with Alternative Two which addressed local flooding. The current design alternative will not eliminate flooding in the West Grand Avenue area. It will, however, allow the water to drain away quicker after a flooding event.

Replace the two Oceana culverts which are a choke point now.

Response: Replacement of culverts, storm drains, manholes, and catch basins between Tripoli and Roanoke are included in the proposed design as shown on the maps presented at the meeting.

Dig up and reset the existing Box Culvert and existing associated infrastructure.

Response: The existing box culvert, while it may have settled or risen over the years since it was installed, is not a priority improvement to address flooding. Once again, the issue is not available pipe capacity or pipes sloped in the wrong direction, but rather the driving hydraulic head available to push water out of the area. Because the area is so flat and close to sea level, the amount of driving head is minimal and resetting the culvert will not help.

Resurface a re-curb West Grand Avenue.

Response: Regrading and resurfacing of West Grand Avenue between Tripoli and Roanoke are included in the proposed design.

Raise and resurface Free Street at the two areas where it floods. (This flooding contributes to the overall West Grand area flooding.)

Response: As a stand alone project, the cost/benefit of raising Free Street is in question. The Department of Public Works feels that Free Street needs to be repaved. If pavement is needed at Free Street anyway, it would make sense to raise the street at the same time to increase the cost/benefit of the project. Wright Pierce and staff will continue to discuss this option.

Negotiate for, obtain, form, and maintain further upstream flood water detention areas.

Response: Wright Pierce looked at this in the past and did not see significant opportunities in the tributary watershed. However, additional investigation could be completed to determine if detention opportunities do exist in the watershed. A similar investigation was completed in the area tributary to East Grand Avenue, and a few opportunities were noted.

Institute shore land zoning protections on the streams that feed into the area to prevent further rapid runoff which will contribute to the problem.

Response: This is a specific zoning comment that is not related to the West Grand Avenue project.

Gently (non-mechanically) clean out the existing drainage canals through Ocean Park.

Response: Because of the low driving head in the system, this would not result in increased flows into and out of the marsh system. It would slightly increase storage in the system but would not eliminate flooding. This is very similar to dredging that was completed in the East Grand area, which did not provide a hydraulic benefit.

Create a low berm along part of New Salt Road to protect against massive storm overflow into the area from the Goosefare estuary.

Response: This is an issue that was brought by Jim Walker during past meeting. The Department of Public Works has stated that they will coordinate this work outside of the West Grand Avenue project.

The Council thanked Wright Pierce representatives for their attendance and as a summary to the evenings presentation it was obvious they discussed the preliminary design components including the emergency evacuation route; improving local stormwater infrastructure; safety at the box culver; modification of the tide gate operation; storage upstream on Free Street; addressing invasive species in the marsh and sewer improvements. They indicated they had met with the Department of Public Works in November 2010 with a site visit and again on January of 2011. The conceptual sketches were turned into preliminary design drawings which are 75% complete but they are still working on the specifications. They discussed the Emergency Evacuation Route including removing two signs; adding five signs; pavement improvements on Seaside from Tunis to Odessa and address Mr. Sarno's question if the Seaside pavement improvements are eligible under the bond project. They discussed local stormwater infrastructure; talked about new storm drains, catch basins, manholes, full width pavement reclaim and repave from Tripoli to Roanoke, vertical roadway adjustments to achieve positive drainage. John Bird mentioned a proposal from 1984 that involved a large diameter culvert running along the ocean side of West Grand that would carry freshwater runoff past the marshes to Goosefare Brook. It was noted that the improvements proposed would not solve the flooding problems along West Grand Avenue but rather would allow flood waters to recede quicker. Work, both grading and permanent structure, may be necessary on private property. The question was asked if the public bond funds could be used for work on private property. These questions and others would be researched by Wright Pierce. The Town is to do storm drain work in-house and utilize favorable pricing from Dayton Paving, Inc. for paving services. Vice Chair Tousignant urged that low points are not left in front of houses where the water could collect. The current proposed schedule for

construction of the storm drain is this coming summer while groundwater levels are at their lowest. The Council members noted that this is a very congested area at this time of year and that detours may not be possible and that there will likely be numerous public complaints. They discussed box culvert safety and were going to install two bar racks. Mr. Bird indicated that the existing box culvert along West Grand should be replaced or reset and Wright Pierce said they would visit the culvert with the Department of Public Works to determine if work should be done. Wright Pierce noted that much of the box culvert lies within private property but there may be easements for maintenance. Discussion continued on the modification of the tide gate operations. The Town Manager indicated that there is being developed a tide Gate Operation Protocol. The discussion included storm mode versus dry mode and moving controls to the pump station. They indicated there is a potential to add a second automated gate. They still need additional monitoring data to verify open/close elevations. Wright Pierce is testing the salinity of the marsh under varied gate operation conditions to determine if a second automated gate is a benefit. Mr. Bird discussed the history of the gate and the current operation violation. It was mentioned again as it had been several times during the discussion that discussions with the DEP are ongoing and that Wright Pierce will work with the DEP to perform a rain gauge and tide gauge program to further study rainfall impacts on the marsh. Wright Pierce, in accordance with the DEP requirements will coordinate a growing season analysis of the New Salt Road marsh vegetation to determine if health of the marsh is being maintained. Councilor Dayton suggested the use of volunteers for the rain gauge and tide level monitoring. Vice Chair Tousignant did not think that volunteer should be used for the task. Mr. Bird felt that the gate close setting should be at least ten feet and that if the gate is set at nine feet; the Jordan park marsh is destroyed. The gate close elevation is currently at 9.5 feet. Councilor Dayton requested that the Council be kept in the loop on the tide gate and that the Council should review anything prior to finalizing. Vice Chair Tousignant also questioned if the DEP could hold up the project by not issuing permits until the tide gate issue has been resolved. In discussing storage upstream of Free Street it was noted that an analysis showed poor cost/benefit. Vice Chair Tousignant and the DEP walked the site and noted the poor condition of the pavement and that it would need to be replaced no matter what. Councilor Dayton said that the Free Street pavement project is not in the three to year CIP plan and should not be added. Wright Pierce will have further discussions with staff on these issues. Vice Chair Tousignant asked if other opportunities exist in the watershed to store water. A preliminary look by Wright Pierce revealed not many opportunities exist but is willing to look closer at the potential. In discussions about the invasive species in the marsh, Councilor Dayton does not want to wait to see what Scarborough does and wants to see invasive species addressed soon. Kelly Raye would like to see the invasive species addressed immediately. Sewer improvements were discussed and again whether these are covered under the bond. Town Manager Turcotte state that is a coin flip. The Town would like to address buried utilities if the pavement is disturbed.

In discussion of the next steps, this would include utility coordination, DEP coordination and permitting, 95% drawings and specifications; 100% contract package, bidding in the spring, and construction in the summer when groundwater is lower. It appears that with the plan presented this evening they have done many of the issues requested by the Council to be addressed including relocating the emergency evacuation route; listed improved local stormwater infrastructure; improved safety at box culvert; modify tide gate operation; added storage upstream of Free Street; addressed invasive species in marsh; and several sewer improvements.

Mike Nugent, Code Enforcement Officer, presented to the Council Chapter 50 – Streets, Sidewalks and Other Public Places. This has been reviewed again by the Ordinance Review Committee and will go back to the Council for consideration and a public hearing on the changes. Updates for consideration will be: Lien procedures; permanent resurfacing of pavement, excavator licenses, application process, updated definitions and Sidewalk Cafes.

The meeting closed at 9:40 p.m.

Respectfully Submitted,

**V. Louise Reid
Town Council Secretary**

I, V. Louise Reid, Secretary to the Town Council of Old Orchard Beach, Maine, do hereby certify that the foregoing document consisting of seven (7) pages is a true copy of the original Minutes of the Town Council Workshop of February 9, 2011.

V. Louise Reid