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Mr. Joe Teixeira, Chairman Newburyport Conservation Commission 60 Pleasant Street Newburyport, MA 01950

Dear Chairman Teixeira and Members of the Commission:

At the end of April this year, we received a letter with attachments submitted to the City by Mr. Bill Brown and a summary of those issues from Tara Felts at 18 Boyd Drive. This letter is in response to that correspondence on behalf of the development team at Port Place. The context of these letters is important as not all of the issues relate to permit requirements or conditions. Many are more "punch list" items to be resolved between the developer and the HOA. However, we have tried to be responsive to the issues raised. Many of the items noted include elements of the project that are still ongoing and the status of these items changes day to day as we move forward with finishing the open space and addressing issues that arise from time to time elsewhere. Mr. Browns comments and our responses follow.

Mr. Brown: The grading of the site has been poorly executed.

With regards to site grading, we will be providing an as-built with our certificate of compliance request which has not yet been filed which will demonstrate site grades consistent with our permit plans. Most of the site grading was actually performed with GPS guided site equipment and our overall grading is well within that shown on the plan. Due to the flatness of the site in some areas, the finish grading has been challenging to achieve and get the results for conveyance of through long shallow swales that are designed at 0.5% slope. With that said, the as-built will show that the grading was performed per the plan and if not, the areas outside of professional tolerances will rework to bring into specifications.

Mr. Brown: There are many areas that do not drain and there are many areas that pond water.

As noted above, finish grades have required some adjustments due to the long gentle swales that convey water in some locations. The areas of ponding that we have worked to address on the eastern portion of the site were largely a result of the City Engineer requesting that we not install the drywells originally shown on our plans. Instead, he asked that we use very subtle swales to convey water over long distances so we did not directly infiltrate water on the well side of the property. There is one area where ponding currently occurs due to the placement of an irrigation control box within the swale by the HOA irrigation contractor.

Mr. Brown: Many homeowners have had water in their basements. Some have had water flowing into basement windows.

We did have a number of homes where roof runoff did not adequately run away from the home perimeter due to the flatness of the grades in those locations. We have addressed those situations. This is not and has not been an ongoing problem which is intimated by the inclusion in this letter. Further, these would be issues to be addressed by the Owner and the Contractor and not a matter under the Order of Conditions.

Mr. Brown: Many homeowners are experiencing erosion from roof run off. Gravel splash areas should be modified to

The developer has provided an 18" drip edge along the foundation perimeter as was shown on the approved plans.

Mr. Brown: We have reviewed the site 24 hours after a rain and have noted areas that need to be regraded or dry wellsadded to eliminate standing water.

We are continually monitoring and observing the site. Active areas of the site and the stormwater system are inspected weekly until documented stable (as defined by the NPDES construction general permit). Corrective actions have been taken when problems are observed, such as the installation of a drywell and drain behind lots 5 and 6.

Mr. Brown: There is standing water on the boundary of lots 36/37, standing water at the rear of lot 36/37 and standing water at the rear boundary of lots 36/37 after a rainstorm. Water ponds for over 5 days after it rains. A dry well should be installed at the rear boundary of lots 36 and 37 and the side and rear of lot 36 and 37 should be regraded to pitch to the dry well. Pitch the grade at 2% minimum per code to the drywell. Water continues to pond in this area. The installation of a dry well and the regrading of this area has not been completed.

There is a very small area of ponding around the rear property bound that is behind the homes on lots 36 and 37 that we are aware of. This is nowhere near the size depicted on Mr. Brown's exhibits. This area is supposed to drain via a long flat swale that runs to the north that was added as a result of the City Engineers request that we not have infiltration structures (drywells) as we had on the originally approved site plans. It appears the HOA installation of the irrigation system disturbed the swale, slightly blocking drainage from this small area. We observed the ponding Memorial Day weekend when the area received about 3 inches of rain over 3 days and the area of puddling is much smaller than shown on Mr. Brown's sketch. The area was dry within 2 days after the rain stopped. We will be evaluating the ponding and make adjustments to alleviate any ponding within the lot boundaries. The Developer has agreed to address this are by adding organic compost to slightly raise the grading within the lots where the puddling has been observed to direct any water to the open space.

Mr. Brown: Trees were planted in the low area in April 2021. These trees will eventually die due to ponding water.

The tree species indicated on the landscape plan for this area are tolerant of brief duration ponding, ranging in wetland rating from FACU to FACW.

Mr. Brown: There is standing water behind the house at lot 5 and at the common property line of lot 2 after a rainstorm. Water ponds for over 3 days after it rains. A dry well should be installed behind the home at lot 5. The back yard should be regraded to pitch to the dry well. Pitch the grade at 2% minimum per code to the drywell. Mr. Brown acknowledges that a dry well and regrading has been completed by the developer.

We had evaluated this situation and addressed it prior to receiving Mr. Brown's letter.

Mr. Brown: There is standing water behind the house at lot 6 and at the common property line of lot 3 after a rainstorm. Water ponds for over 3 days after it rains. A dry well should be installed behind the home. The back yard should be regraded to pitch to the dry well. Pitch the grade at 2% minimum per code to the drywell. Mr. Brown acknowledges Work has been done in this area as part of the lot 5 drywell work to eliminate water ponding.

We had evaluated this situation and addressed it prior to receiving Mr. Brown's letter.

Mr. Brown: At the property line between lots 6/7 and lot 3 there is standing water. Remove the trees in the low area and regrade this area to pitch to Retention Area B at 2% minimum or install a drywell. Mr. Brown acknowledges that work has been done in this area as part of the lot 5 drywell work to eliminate water ponding.

We had evaluated this situation and addressed it prior to receiving Mr. Brown's letter.

Mr. Brown with regards to the Grading of the center Common area: There are a number of areas that water ponds for over 3 days in the common area. These areas should be regraded.

This is not an issue that currently exists on site and other than the area around the patio we have not observed ponding that lasted 3 days.

Mr. Brown with regards to Grading/Slope of walkways between lots 16/17, lots 20/21 and north west of lot 24: American with Disabilities Act federal code requires that all walk be less than 5%. The walks in these areas are over 5%. These walks must be reconstructed to be less than 5%.

As stated in prior communications between the developer and the HOA, the HOA is not required to provide access under the ADA, but rather the AAB. It is not feasible to provide accessible routes between those units. See attached memo.

Mr. Brown follows with: The path west of Lot 24 was reconstructed to comply with ADA slope but the path has not been constructed to ADA cross slope requirements of less than 2%.

This is not a conservation issue. The path was never intended to meet ADA requirements and the Planning Board did not require that it be so. The path was retrofitted with a new access point at the northern end of the site to provide an accessible route after a complaint from one of the residents. While the new access has been installed and grades need to be double checked prior to the finish surface being refreshed and the cross slope will be corrected. As stated in prior communications between the developer and the HOA, the HOA is not required to provide access under the ADA, but rather the AAB.

Mr. Brown: Walks at the bridges: stone dust is eroding at the bridge stone dust interface. Redo or add boulders so that stone dust does not erode.

The bridge areas have been inspected weekly since (and during) construction. There has been no observed erosion and the area around the bridge has just been seeded this spring. The path material will settle initially and during final work on the path, new material will be added as necessary during the final finish work on the path. We continue to inspect the site weekly and will make any corrections as necessary and will address any erosion if it occurs.

Mr. Brown with regards to the Common Area between homes and Route 95:

The vegetation coverage is sparse and erosion control measures have not been installed around the waterfeatures, retention areas and improved isolated wetlands (storm water features). It appears that soil from around these features has eroded into the storm water features potentially altering the below water grading and compromising the performance of the storm water features.

Will erosion control measures be installed to keep soils from eroding into the storm water features until there is vegetative cover?

Will an underwater survey be done to determine if the contours of the storm water features are as designed?

With soil eroding into the storm water features, has the soil and stone installed on the bottoms and sides of the storm water features been compromised?

Soil has not eroded into stormwater features in any significant manner. In the few times that it has happened, it has been highlighted in the weekly inspections and corrected. The regular maintenance of

these features, including refreshing mulch in the rain gardens removes sediment laden mulch that accumulates as a result of normal operation of the feature. All rain gardens are functioning well, draining within 72 hours. Erosion controls have been installed where necessary during the course of the project as required by the NPDES permit (to remind the Commission there are no "Waters of the US" on site and we vegetated the buffer to the IVW around the same time the IVW was stabilized to protect the IVW from sedimentation events). I do note that at this time we have called for additional controls are being installed south of Rain Garden C. The rain gardens are in need of weeding and routine maintenance that is to be performed by the HOA landscape company. I note that the HOA landscaper needs to remove phragmites and their roots from rain gardens D and E which have been allowed to slowly expand within these areas due to the lack of regular weeding and this must happen soon to avoid the phragmites taking hold site wide.

Mr. Brown with regards to Vegetation in the Improved Isolated Wetland Area: Has the Improved Isolated Wetland Area been designed to have vegetation within the water area of the feature or should the vegetation that is growing in the Improved Isolated Wetland Area be removed?

The entire wetland is and should be vegetated and no vegetation should be removed. As noted above, it is important that the HOA require their landscape contractor to remove the phragmites from rain gardens D and E asap to prevent this invasive plant from taking route in the IVW.

Mr. Brown with regards to sidewalks: remove snap caps and install sealant.

This is not a Conservation Issue. Prior to final sign off from the City, the project engineer will inspect the sidewalks to ensure they are built per plan.

Mr. Brown: Many trees/shrubs are in poor condition or dying. Will all of the plants be inspected before final acceptance by the City and will plants in poor health be replaced?

Prior to the issuance of the final certificate of compliance from the Conservation Commission we are required to demonstrate that we substantially comply with the approved planting plans. Generally, this constitutes 75% survival of shrub and small sapling plantings and full survival of the larger trees. We have been evaluating the health of plantings and replaced a number of plants to date. Due to last year's drought we opted to wait until this spring to begin replacing plants and installing plants in the remaining open space areas and were delayed slightly by confusion caused by ribbons hung on various trees which lead various professionals on our team to assume another team member had conducted the health assessment last fall. By the time we realized those flags were not internally placed it was too late to conduct the evaluation and we had to wait until leaf out this spring. We have replaced dead plants and identified which of the remaining plants are in need of further evaluation.

Mr. Brown: Many trees have not been installed as per the details shown on the plans.

A number of plantings were installed after large portions of the open space was completed in 2019. At this time, there were a number of open space areas still being worked on. Due to last year's drought, we put a hold on plantings until the fall.

Mr. Brown: Plant pits have not been dug as large as shown on the drawings.

We did identify an issue that occurred for a brief time for some plantings installed by the landscape contractor in the early planting that was done where it appears some plants were not planted with a proper root ball tree pit being dug with amendment as per plan. However, this does not necessarily mean that those plants will fail. The plantings in the open space are native plants that once established in the native soils will continue to survive regardless of the initial planting conditions. The root ball pit size and material become somewhat irrelevant once the root system has established in the surrounding native soils. We have replaced many of those plants and the replacements have been properly installed. The landscape contractor has indicated that all plantings have been installed with the larger root ball pit (twice the width

of the root ball) with mild amendment to allow for root system development. That 'mild amendment' includes mixing of new compost with existing soils.

Mr. Brown: Many trees have been installed with the root crown too low as related to the surrounding gradecompromising their growth and future survivability.

What trees? Where? How many? The landscape contractor indicates that he has not seen any trees or shrubs installed whose root flare have been installed too deep other than a few trees that were installed in the open space that appeared too deep. Those trees did not survive and have since been replaced with proper planting depth. The exceptions are the roses in foundation plantings when they are selected. Proper rose shrub installation requires their root flares to be installed below adjacent grade.

Mr. Brown: Bark mulch saucers have not been installed around all of the trees.

The trees installed within the Central Green location were not provided a typical mulch ring at initial installation. This has since been rectified.

Mr. Brown: Where bark mulch saucers have been installed they have not been installed to the thickness and as per the details shown on the drawings. Excess mulch around tree is detrimental to survivability of the trees.

The plan shows a 3" +\- depth of mulch, which is typical for new mulch beds. The landscape contractor indicates that this is the thickness that was applied. If the claim is that there is too much mulch, was this applied by the installation contractor or by the maintenance landscaper working for the HOA? Which trees and where on site are there issues. If Mr. Brown can mark specific trees where he believes there is a problem we can evaluate.

Mr. Brown: Tree stakes have not been installed as shown on the drawings.

The landscape contractor indicates that all trees installed have been staked following best horticultural and landscape practices for the size of the trees the plan calls for. The plan calls for guying of trees. No trees on the plan have a size that would require that staking technique. In fact, the landscape contractor indicates that using that technique would create unnecessary tension on the cambium of the young trees causing stress that could lead to their demise. As far as the duration, L-6 does not say how long they should be staked and some of the staking may have been removed.

Mr. Brown with regards to Dead trees and brush: Cut down dead trees and remove dead branches and brush from the edges of the disturbed area around the edges of the entire site.

The perimeter of the stie is largely wooded and the dead trees and branches are part of the ecological function of these areas. There are no areas of brush piles or cut trees that need to be removed that we are aware of.

Mr. Brown with regards to Clean up: Construction debris and trash needs to be removed from the extents of the property.

The site is still under construction and crews are regularly collecting and disposing of debris and trash. Additionally, any trash or debris that is found during the weekly NPDES inspections is identified and the contractor follows up on cleaning up that material.

Mr. Brown with regards to Dust: There are soil piles and soil areas exposed that create a lot of dust. Exposed soil and soil piles should be stabilized to reduce the amount of dust during windy days.

Dust controls have been employed for the duration of the project, including water trucks, tackifiers and calcium chloride. This has been, at times, a difficult site to manage dust on due to the wide-open nature of the site. However, there is now very little exposed soil on site and minimal potential for dust generation.

Mr. Brown with regards to Exposed piping and conduit: There is exposed piping and conduit above grade in the front yards of most of the homes. Work associated with these pipes and conduits should be completed or cut down and capped below grade.

It is unclear what areas Mr. Brown is referring to. It may be part of the irrigation system installed by the HOA that ran into the open space and was disturbed during our recent reworking of the open space? If Mr. Brown can clarify, we can address this issue. This is not a Conservation issue, but a site work punch list for the HOA and contractor.

With regards to the Playground: The subdrainage mitigation proposed by the engineer dated April 12, 2021 (Hughes Environmental) is not adequate to solve the water issue. The play surface needs to be removed and flat drains need to be installed on top of the subgrade at 10 feet on center and connected to a drain pipe.

The playground has been dry and walkable immediately after rain storms this spring. Since this issue was raised, we have included a walk by or through the playground on all inspections done after rain events and observed no ponding, including after several 1 inch plus events. We see no need for further drainage work in this area, and none is required by the site plans. The ground material meets AAB and safety requirements.

*Mr. Brown: The playground does not comply with the American with Disabilities Code.*This is not a conservation issue. Rubber matting was installed per AAB guidelines for accessibility.

Mr. Brown: Mats providing ADA access to the equipment are inadequate and are not ADA code compliant. Refer to attached memo.

This is not a conservation issue. This is incorrect. The installations follow the AAB guidelines. See attached.

Mr. Brown with regards to Trees and Shrubs: Trees and shrubs have been flagged in the common areas with green tape that should be replaced. These trees are dead, have trunk damage/frost cracks or have 25% or more of the crown of the tree dead. All trees and shrubs should be evaluated before acceptance by the City and replaced.

We have conducted an assessment of trees and shrubs in the open space and replaced several. Others are being monitored for health.

Mr. Brown: We have flagged trees with pink tape that although technically not dead look dead because the leaves of the trees dropped each year around June. These trees are struggling and will eventually die. They were not a good choice for this environment and should be replaced.

As noted above, we have completed an interim assessment of the plantings in place and replaced many as well as installed plants that were not installed last year due to the drought conditions.

Also, I do note that the site is under the purview of both Planning and Conservation approvals and there are a number of professionals working on the site to coordinate compliance with the permits. While I am sure marking vegetation and pruning of vegetation by some homeowners is intended to be helpful, this interferes with our overall work to ensure compliance, and the pruning by others may void the warranty on some of the plantings that are the subject of concern. Last fall, an initial inventory and health assessment of vegetation was called off since it was assumed someone else on the team had done so and placed those ribbons referenced in the letter. By the time we internally determined that it was not part of the project team, it was too late to effectively complete the assessment as leaves had fallen. Performing the assessment this spring caused delay in obtaining and installing plants this spring.

Mr. Brown: Many trees and shrubs have not been installed as per the attached detail as shown on C13 and L-6 of the Approved Drawings.

As we have already noted above, due to last years drought, we postponed many plantings until this spring. Many plants have been installed this spring and any that are missing or were not planted will be installed. The attached marked up plan includes the state of open space plantings.

Mr. Brown: Many of the area that were seeded in the common areas and in the rear yards of the homes are filled with crab grass and weeds with very little growth of the seed mix required in the Planning Documents. These areas are to be seededwith New England Roadside Matrix, New England Conservation and Wildlife Mix, Showy Northern Native Wildflower and Grass Mix, New England Wetmix, and Fescue Blend. See attached plans L-1, L-5.

We have conducted re-preparation and seeding of large portions of the open space where the original seeding did not take. Last years seeding was unsuccessful due to the drought, despite efforts to water the open space areas.

Mr. Brown: The soils in all areas are compacted. Water cannot infiltrate into the soil due to its compaction. Compaction of soils limits the ability of water to penetrate the soil and for seed to grow and for roots to grow into the soil. Typically roots are evident at least 6" into the soil if the soil is healthy. Most roots are in the top 2" and most roots are crabgrass roots.

Compaction occurred within the laydown area and along the equipment route through the open space to access the northern portions of the site from the laydown area that had been located in the southwestern portion of the site. Attempts to break up the soil last year with a Harley rake on a skidsteer, which was able to break up the soil down 3 to 4 inches, but did not sufficiently penetrate the underlying soils in areas where ongoing haul routes had caused deeper compactions. This year, the area was aggressively prepared and deep plowed using farm equipment in the spring. The seeds are taking well to date.

Mr. Brown: The subgrade was to be scarified 4" before the topsoil was installed as required in the Permit Drawings (See C15). This was not done by the developer. This requirement promotes water movement through the soil horizon and promotes root growth into the soil.

The site contractor, who is responsible for grading and spreading of loam provided the following summary:

"As a rule, and as we have done for 50 years in business, the following same standard procedures were incorporated into the work at Port Place - once a foundation is backfilled, and rough graded, it is left for the building process. In the case of Port Place - we also were able to install utilities and deck piers as well as driveway gravels at the time of backfilling. Once the home build is done and the building is closed in and sided, which has been on average 3 to 5 months, we consider the prior excavations and earthwork to be "settled out" by construction traffic and by rain. Depending on the time of year and depending on other site construction activities, a plan is made to "finish" the site lot work. Finishing involves, in most cases importing and placing additional fill materials to "subgrade" the lot. In most cases, and especially on this project where everything is flat, careful and fine adjustments are made to make water flow away from the buildings during this stage. This is the key step that loosens and scarifies the soil, by the action of the dozer blade and/or an excavator bucket pushing and dragging across the surface to create the fine graded subgrade. At this point the lot is ready for topsoil which is trucked in and spread with either a dozer or an excavator depending on the space available and/or the individual situation. The topsoil is generally placed at a depth of about 6" and to within 1" to 2" of finished grade. We would expect that the last 1" to 2" would be fine graded with a power rake or a hand

rake prior to seeding. The raking process will take care of loosening the soil for the seedbed to establish. "

Mr. Brown: The homeowners conducted soil testing through UMASS in various areas throughout the community. The soils tests determined that:

- a. The topsoils are low in organic material. The soils have 2.0 organic content or below. In order to growhealthy lawns and grasses the organic content should be 3.5 or above.
- b. PH levels are below what is required in the Planning Documents. Planning Documents require a PH of 5.5- 6.5. One sample was 5.4 and all others were 4.9 or below
- c. Macronutrients (Phosphorus, Potassium, Calcium, Magnesium and Sulfur) are very low.
- d. The topsoil composition is primarily evenly graded sand. Soils that are primarily sand tend to be over compacted and do not allow water to penetrate through the soil to promote seed growth and root growth into the soil. Sandy soils are low in PH, Organic Content and Macronutrients.

Test locations and methodology was not provided and samples were taken while we were still working on our own adjustments to the soils. As the Commission may recall, the City restricted our ability to import soils and wanted us to reuse on site material, which was done. Materials were tested prior to spreading and we have subsequently tested in various areas. We have amended soil as a result of our testing, ranging from adding lime to adding compost. Much of this amendment occurred after the date of the soil samples which appear to be from last year.

Mr. Brown Concludes: Lawns and grasses specified in the Planning Documents are not growing as required.

Sod was applied in the front lawns and side and rear lawns were seeded. Those areas were monitored to ensure that 75% uniform vegetation occurred in accordance with the Construction General Permit to ensure they are stable. The permits do not require any more that. Open space areas do call for specific types of seed and vegetation, and we continue to work on successfully establishing that vegetation.

Mr. Brown Concludes: The topsoil is over compacted, low in PH, Organic Content and Micronutrients. PH has been adjusted and the area of compaction in the open space has been corrected and the soil amended with compost. This same technique will be used on the remaining open space that needs to be completed in the southern end of site in the old laydown area.

Mr. Brown suggests: A qualified Agricultural Soils Scientist (not a landscaper) should take samples and make recommendations on how to manage the in place soil to correct the topsoil deficiencies. This is not a requirement of our permits and there is no need to do this to evaluate organic content and pH which are the only applicable standards.

Mr. Brown further suggests: After the recommendations from the Soil Scientist are implemented testing should occur at a later date as recommended by the Soil Scientist to determine if further actions are necessary.

The permit plans include the specifications for PH and organic content, which we have taken steps to remedy.

Mr. Brown requests various items below for Project Closeout: We request that these documents be prepared as soon as possible as outlined in the Permit Documents. The homeowners are taking over the HOA from the developer soon.

- 1. We understand that there are many documents that are required from the developer as part to the permit process. The homeowners request that documents, in draft form and as early as possible be provided to the City and to the homeowners so that the homeowners can prepare for and understand responsibilities after the project is accepted by the City. Documents would include but not limited to:
 - a. Stormwater Management Operation and Maintenance Plan.
 - b. Open Space Management Plan: Written report by a registered Landscape Architect.
 - c. Open Space Preservation: Conservation Restriction.
 - d. 2020/2021 Operation and management plan for snow removal (required to be submitted to the city).
 - e. 2021 landscape maintenance and lawn fertilization plan (required to be submitted to the city).

These items will be, and in some cases have been, provided to the Homeowners. For example, the Conservation Restriction was preceded on record by the Declaration of Restriction. Each Homeowner was advised of same at the time of the reservation of lot. Further, annually, the HOA has to provide to the city the landscape plan. The HOA management company submits those plans via their contractor. Those documents are available through the HOA management company. As this Commission knows, the Conservation Restriction is a document in process and which process the City is intricately involved. Once completed it will be provided to the HOA and management company. Suffice it to say, however, it is a mirror image of the Declaration of Restriction with more details related to as built conditions. Finally, as recently as a month ago the O & M plan was updated given the changes in the plantings as approved by the Commission. That too will be made available. All items in progress which importantly will be provided to the HOA upon finalization.

In conclusion, the development at Port Place has addressed many of Mr. Brown's issues on an ongoing basis, and some issues raised had already been addressed at the time of submission of his letter. During our construction phase, we have been confronted with challenges including an overly wet year in 2019 and a drought in 2020, along with limitations imposed by the public health emergency that restricted our access to some products and workers during much of 2020. We continue on an ongoing basis to evaluate the work that has been done and make corrections and adjustments to address any issues related to our project and compliance with our permits. We continue to work towards completing the development in full compliance with the applicable permits and the plans that have been approved.

I look forward to discussing these issues with the Commission and please do not hesitate to contact me with any questions.

Sincerely,

Thomas G. Hughes, BS, MA

Enclosures: AAB attachment

Landscape Plan marked up with status of plantings as of 6/7/2021