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<u>MEMORANDUM</u>

TO: Hardyston Township Planning Board

A. Wilhelm, Land Use Administrator / T. Molica, Board Attorney /

FROM: Michael Vreeland, Board Engineer

CC: T. Graham, Applicant Engineer / K. Dykstra, Applicant Surveyor / B. Hefele,

Applicant Attorney

RE: Boomerang Garage Parking Expansion

Grand Cascades Lodge at Crystal Springs Hotel and Conference Center

Construction Plan & Final Site Plan

Amended Preliminary and Final Subdivision

Block 16, Lot 1.09; Block 16.32, Lot 1

Hardyston Township

VCEA Project No. HDY-1001.015

DATE: December 2, 2020

We are in receipt of the following information pertaining to the above-referenced application:

- A. Land Use Application with attachments;
- B. Waiver Summary List;
- C. Plans entitled, "Construction Plan & Final Site Plan, Amended Preliminary and Final Subdivision for Grand Cascades Lodge at Crystal Springs Hotel & Conference Center, Block: 16 Lot: 1.09 & Block 16.32 Lot: 1, Wild Turkey Way, Devon Court and LAM Drive. Township of Hardyston, Sussex County New Jersey" consisting of 10 sheets. The plans prepared by Dykstra Walker Design Group (Thomas F. Graham, PE and Kenneth D. Dykstra, PE & PLS) are dated November 19, 2019, last revised August 26, 2020;
- D. Plan entitled, "General Development Plan #2, LAM Development Group for the Shotmeyer Section, Township of Hardyston, Sussex County, New Jersey". The plan prepared by Dykstra Walker Design Group (Thomas F. Graham, PE) is dated November, 15, 2019, last revised August 26, 2020;
- E. Report entitled, "Stormwater Management Calculations Addendum For Boomerang Parking Garage Parking Lot Expansion, Block 16, Lot 1.09; Block 16.32, Lot 1 Situated in Township of Hardyston, Sussex County, New Jersey". The report prepared by Dykstra Walker Design Group (Thomas F. Graham, PE) is dated August 26, 2020;





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- F. Dykstra Walker Design Group correspondence (Thomas F. Graham, PE) dated August 28, 2020; and
- G. Bernd E. Hefele, Esq. correspondence dated November 4, 2020.

We have reviewed the information along with the Township Code (Code) as well as project file and offer the following comments:

1. INTRODUCTION

The subject property contains three adjacent parcels (Block 16 - Lot 1.09 and Block 16.32, Lots 1.17 & 1.18) located within the Township's Commercial Recreation (C-R) Zone District. Lot 1.09 is currently developed with the Boomerang Parking Garage Facility and Golf Course. Lots 1.17 and 1.18 are part of the Cloverdale residential development and recently perfected Cloverdale East at Crystal Springs Phase 2 Plat.

The application is proposing to add 60 spaces to the Boomerang Parking Garage surface parking lot. Residential Lots 1.17 and 1.18 are to be consolidated into Lot 1.09 and the improvement will be located within the same lot as the Boomerang Parking Garage.

2. COMPLETENESS

We have reviewed the application for technical completeness in accordance with the Application Checklists. Based on this review, we believe the Applicant is requesting the following waivers from the Schedule A Checklists:

2.1. Preliminary Site Plan

2.1.1. Item 10: Survey of the entire tract or property prepared by a NJ licensed surveyor conforming to all requirements of N.J.A.C. 13:40-5.1

Comment: The Applicant indicates surveys for the properties have previously been submitted for prior applications on the affected lots. If the members of the Planning Board have access to these surveys, we have no objection to the waiver request at this time.

2.1.2. Item 34: Environmental Impact Assessment

Comment: The Applicant indicates this was submitted as part of the original overall development application and proposes no substantial changes to the previously approved plans. This item was also waived for the Shotmeyer applications. Based on the nature and scope of the proposal we have no objection to the waiver request at this time.



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2.2. <u>Final Site Plan</u>

2.2.1. Item 1: As-Built Plans

Comment: The Applicant is requesting a temporary waiver as the data will be provided upon completion of construction. We have no objection to the temporary waiver request at this time. As-built plans should be provided upon completion of construction.

2.2.2. Item 12: Public and common private improvements constructed in conjunction with the site plan.

Comment: The Applicant is requesting a temporary waiver as the data will be provided upon completion of construction. We have no objection to the temporary waiver request at this time. All improvements should be indicated on the as-built plans.

2.2.3. Item 14: Stormwater Management Facilities

Comment: We understand the project proposes an expansion to the existing stormwater collection and conveyance system and additional stormwater management is to be handled by existing facilities. If members of the Planning Board have access to the previously approved stormwater management plans and associated drainage reports, we have no objection to the waiver request. In addition, the Applicant is requesting a temporary waiver for the Certification of stormwater improvements as the data will be provided upon completion of construction. We have no objection to this temporary waiver request at this time. Certification should be provided upon completion of construction.

2.2.4. Item 17: Stormwater Management Maintenance Plan

Comment: The Applicant has indicated that changes are not proposed to the stormwater management facilities. Assuming that a Stormwater Management Maintenance Plan is on file for the original improvements, we have no objection to the waiver request at this time. If it is determined that stormwater management facility improvements are required, a revised Stormwater Management Maintenance Plan should be provided.

2.2.5. Item 20: Construction Cost Estimate

Comment: This requirement is for the benefit of the Applicant. Should the Applicant agree to pay all escrow fees and charges we would have no engineering objection to the waiver request.

2.2.6. Item 22: Copy of existing and proposed protective covenants or deed restrictions Comment: The Applicant indicates that data was submitted as part of the original overall development application and proposes no substantial changes to the previously approved plans. This item was waived for the Shotmeyer application. We have no objection to the waiver request at this time.



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2.2.7. Item 23: Developer's Agreement

Comment: The Applicant indicates data was submitted as part of the original overall development application and proposes no substantial changes to the previously approved plans. This item was waived for the Shotmeyer application. We have no objection to the waiver request at this time.

2.2.8. Item 24: Affidavit verifying compliance with terms and conditions of the preliminary approval

Comment: The Applicant is requesting a temporary waiver as the data will be provided upon completion of construction. We have no objection to the temporary waiver request at this time. Affidavit should be provided upon completion of construction.

2.2.9. Item 25: Affidavit that the final site plan is identical to the preliminary site plan **Comment:** The Applicant is requesting a temporary waiver as the data will be provided upon completion of construction. We have no objection to the temporary waiver request at this time. Affidavit should be provided upon completion of construction.

2.3. Preliminary Subdivision

2.3.1. Item 6: Survey of the entire tract or property prepared by a NJ licensed surveyor conforming to all requirements of N.J.A.C. 13:40-5.1

Comment: The Applicant indicates surveys for the properties have previously been submitted for prior applications on the affected lots. If the members of the Planning Board have access to these surveys, we have no objection to the waiver request at this time.

2.3.2. Item 21: Construction Cost Estimate

Comment: This requirement is for the benefit of the Applicant. Should the Applicant agree to pay all escrow fees and charges we would have no engineering objection to the waiver request.

2.3.3. Item 29: Plans and profiles for storm sewers, sanitary sewers and water mains **Comment:** The Applicant indicates that sufficient data is provided on the plans and there are no significant alterations or utility services proposed. We have no objection to the waiver request at this time.

2.3.4. Item 34: Environmental Impact Assessment

Comment: The Applicant indicates that data was submitted as part of the original overall development application and proposes no substantial changes to the previously approved plans. This item was waived for the Shotmeyer application. We have no objection to the waiver request at this time.



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2.4. <u>Final Subdivision</u>

2.4.1. Item 3: As-Built Plans

Comment: We have no objection to the temporary waiver request at this time. As-built plans should be provided upon completion of construction.

2.4.2. Item 6: Public and common private improvements constructed in conjunction with the subdivision plan

Comment: The applicant is requesting a temporary waiver as the data will be provided upon completion of construction. We have no objection to waiver request. All improvements should be indicated on the plans.

2.4.3. Item 9: Stormwater Management Facilities

Comment: We understand that the project proposes an expansion to the stormwater collection and conveyance system and that additional stormwater management is to be handled by existing facilities. If members of the Planning Board have access to the previously approved stormwater management plans and associated drainage reports, we have no objection to the waiver request. In addition, the Applicant is requesting a temporary waiver for the Certification of stormwater improvements as the data will be provided upon completion of construction. We have no objection to this portion of the temporary waiver request at this time. Certification should be provided upon completion of construction.

2.4.4. Item 13: Stormwater Management Maintenance Plan

Comment: The Applicant has indicated that changes are not proposed to the stormwater management facilities. Assuming that a Stormwater Management Maintenance Plan is on file for the original improvements, we have no objection to the waiver request at this time. If it is determined that stormwater management facility improvements are required, a revised Stormwater Management Maintenance Plan should be provided.

2.4.5. Item 14: Construction Cost Estimate

Comment: This requirement is for the benefit of the Applicant. Should the Applicant agree to pay all escrow fees and charges we would have no engineering objection to the waiver request.

2.4.6. Item 16: Copy of existing and proposed protective covenants or deed restrictions **Comment:** The Applicant indicates data was submitted as part of the original overall development application and proposes no substantial changes to the previously approved plans. Also, this item was waived for the Shotmeyer application. We have no objection to the waiver request at this time.



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2.4.7. Item 17: Developer's Agreement

Comment: The Applicant indicates data was submitted as part of the original overall development application and proposes no substantial changes to the previously approved plans. Also, this item was waived for the Shotmeyer application. We have no objection to the waiver request at this time.

2.4.8. Item 18: Affidavit from applicant verifying compliance with all terms and conditions of the preliminary approval

Comment: The Applicant is requesting a temporary waiver as the data will be provided upon completion of construction. We have no objection to the temporary waiver request at this time. Affidavit should be provided upon completion of construction.

2.4.9. Item 19: Affidavit from applicant that the final subdivision is identical to the preliminary subdivision

Comment: The applicant is requesting a temporary waiver as the data will be provided upon completion of construction. We have no objection to the temporary waiver request at this time. Affidavit should be provided upon completion of construction.

2.4.10. Item 21: An electronic copy, prepared with AutoCAD, of the as-built and final plat **Comment:** Electronic copies of as-built and final plat should be provided upon completion of construction.

3. PROJECT PROPOSAL

- 3.1. The Board has acted on other applications within Crystal Springs before the subject applications have been scheduled. As a result, we recommend the following revisions be made to the GDP:
 - 3.1.1. The plan should note General Development Plan #3 rather than #2;
 - 3.1.2. The history for the Shotmeyer Property list should be updated; and
 - 3.1.3. The Applicant should review the Residential Building Unit Table and confirm that it accurately reflects the current proposal.
- 3.2. We are concerned that existing landscaping and roadway alignment may impact sight distance in the vicinity of the Grand Cascades Lodge and Boomerang facility. The need for sight distance improvements in this area should be addressed by the Applicants Engineer.
- 3.3. The Applicant should provide testimony regarding usage of the parking facility.
- 3.4. The Applicant should provide testimony regarding available sidewalks and pedestrian routes within as well as to and from the parking lot.



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- 3.5. The Applicant should clarify if any ADA parking spaces exists and if any are proposed.
- 3.6. The fence noted on the "Boulder Wall Detail" should be illustrated on the site plan. The type of fence along with detail should be provided.
- 3.7. The Applicant is advised walls greater than 4' tall will require construction permits.
- 3.8. We are concerned with the proximity of the proposed wall and parking stalls. The need for vehicular barriers in this area should be addressed by the Applicant's Engineer.

4. STORMWATER MANAGEMENT

The parking lot expansion is considered a "Major Development" as defined by N.J.A.C. 7:8 and is subject to the Stormwater Management Requirements. The Applicant's engineer has a provided a stormwater collection and conveyance system connecting to the existing storm sewer system within the existing parking lot. According to the Stormwater Management Calculations Addendum report runoff will ultimately discharge into the Shotmeyer Stormwater Management basin. Based on our review, we offer the following comments:

- 4.1. Copies of the drainage area maps referenced in the Addendum Report should be included in the report.
- 4.2. The allowable runoff rates in Summary of Peak Runoff Rates Table should be revised to indicate 50%, 75% and 80% for the 2-, 10- and 100-year storm events respectively.
- 4.3. An updated Annual Groundwater Recharge Analysis Spreadsheet should be provided.
- 4.4. The drainage calculations chart for the 25-Year Storm should include manning's roughness coefficient, rim/grate elevations and hydraulic grade line elevations for each pipe segment.
- 4.5. The following items in the 25-Year Storm chart should be revised to be consistent with the plans:
 - 4.5.1.1. Pipe size of the pipe between Inlet #16.1 & #16 (15" on plan; 18" on chart);
 - 4.5.1.2. Slope of the pipe between Inlet #16.2 & #16 (2.16% on plan, 1.93% on chart);
 - 4.5.1.3. Slope of pipe between Inlet #16.1 & #16 (0.30% on plan, 0.50% on chart);
 - 4.5.1.4. Slope of pipe between Inlet #16 & #17 (0.50% on plan, 0.70% on chart).

5. LIGHTING

5.1. The plans do not provide documentation showing compliance with Section 185-79D of the Code relating to parking lot lighting. The plans should be revised to demonstrate

December 2, 2020



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conformance to these requirements. In addition, details should be provided for the light fixtures, poles and foundations.

- 5.2. We recommend full cutoff and shielded fixtures be provided along the parking lot perimeter to reduce potential light spillage.
- 5.3. Testimony should be provided regarding lighting hours due to its proximity to residential development.

6. SUBDIVISION

- 6.1. We have a number of technical comments relating to the Subdivision Plat. Should the subdivision be perfected by recording a Plat, it may be beneficial for us to meet with the Applicant's Professionals and review our comments.
- 6.2. We recommend deeds and description associated with the subdivision be provided to the Board Attorney and our office for review prior to recording.
- 6.3. The applicant's surveyor should provide closure calculations for each of the lots. In addition, an electronic ACAD drawing file of the final subdivision map will need to be submitted.

Please contact me should you have any questions.

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