BOROUGH OF HIGHLANDS

LAND USE BOARD MEETING

151 Navesink Ave. - Court Room
Thursday, August 08, 2024 at 7:00 PM

AGENDA

Please be advised that the agenda as shown may be subject to change. This meeting is a quasi-judicial proceeding. Any questions or comments must be limited to issues that are relevant to what the board may legally consider in reaching a decision and decorum appropriate to a judicial hearing must be maintained at all times.

CALL TO ORDER: *The chair reserves the right to change the order of the agenda.*

PLEDGE OF ALLEGIANCE

OPEN PUBLIC MEETING STATEMENT: *As per requirement, notice is hereby given that this is a Regular Meeting of the Borough of Highlands Land Use Board and all requirements have been met. Notice has been transmitted to the Asbury Park Press and the Two River Times. Notice has been posted on the public bulletin board. Formal Action will be taken.*

ROLL CALL

OPEN FOR PUBLIC COMMENTS: *General Questions or Comments not pertaining to Applications*

APPROVAL OF MINUTES

1. July 11, 2024 LUB Meeting Minutes

RESOLUTIONS

2. Memorializing Resolution for LUB2022-04: Kirsh - 9 Fifth St., B57 Ls 8 & 9

HEARINGS ON NEW BUSINESS

3. LUB24-02: Cahill – 60 Bay Ave., B42 L1

4. LUB24-04: Nastasi – 19 Gravelly Point Rd, B100 L26.19

ADJOURNMENT

Board Policy: • All meetings shall adjourn no later than 10:00 P.M. unless a majority of the quorum present at said hour vote to continue the meeting to a later hour. • No new hearing shall commence after 9:15 P.M. unless the Chairperson shall rule otherwise. • The Chair may limit repetitive comments or irrelevant testimony and may limit the time or number of questions or comments from any one citizen to ensure an orderly meeting and allow adequate time for members of the public to be heard.

BOROUGH OF HIGHLANDS
COUNTY OF MONMOUTH

LAND USE BOARD RESOLUTION 2024-15

MEMORIALIZATION OF MINOR SUBDIVISION APPROVAL
WITH ANCILLARY VARIANCE RELIEF

IN THE MATTER OF KIRSH KRAFT, LLC **Approved: July 11, 2024**
APPLICATION NO. LUB2024-04 **Memorialized: August 8, 2024**

WHEREAS, an application for minor subdivision approval with ancillary variance relief has been made to the Highlands Land Use Board (hereinafter referred to as the "Board") by Kirsh Kraft, LLC (hereinafter referred to as the "Applicant") on lands known and designated as Block 57, Lots 8 & 9, as depicted on the Tax Map of the Borough of Highlands (hereinafter "Borough"), and more commonly known as 9 Fifth Street in the R-2.02 (Residential Zone) Zone; and

WHEREAS, a complete application has been filed, the fees as required by Borough Ordinance have been paid, proof of service and publication of notice as required by law has been furnished and determined to be in proper order, and it otherwise appears that the jurisdiction and powers of the Board have been properly invoked and exercised; and

WHEREAS, public hearings were held on June 13, 2024 and July 11, 2024, at which time testimony and exhibits were presented on behalf of the Applicant and all interested parties were provided with an opportunity to be heard; and

NOW, THEREFORE, the Highlands Land Use Board makes the following findings of fact and conclusions of law with regard to this application:

1. The subject Property contains a total of 5,431.30 square feet (0.125 acres) consisting of two (2) existing lots. Existing Lots 8 contains 603.60 square feet and existing Lot 9 (4,827.70 square feet). Both lots are located within the Residential 2.02 (R-2.02) Zone of the

Borough. The subject Property is situated along the southerly side of Fifth Street between Miller Street and Valley Street. Existing Lot 8 is improved with an unhabitable dwelling and existing Lot 9 is improved with a shed and a portion of the empty unhabitable dwelling which encroached from existing Lot 8. The existing lots are both non-compliant. The Applicant received a Zoning Denial Letter, dated May 13, 2022. A Notice of Unsafe Structure was also issued on April 12, 2024, by the Construction Department concerning existing Lot 8.

2. The Applicant is seeking minor subdivision approval to create the following two (2) new Lots:

a. Proposed Lot 8.01will contain 2,618 square feet;

b. Proposed Lot 9.01 will contain 2,913 square feet.

3. The Applicant requires the following variance relief:

a. ***Chapter 21 – Attachment 1*** – the minimum lot area is 4,000 square feet, whereas 603.60 square feet is existing for Lot 8 and 2,913 square feet is proposed for proposed Lot 8.01.

b. ***Chapter 21 – Attachment 1*** – the minimum lot area is 4,000 square feet, whereas 4,827.7 square feet is existing for Lot 9 and 2,618 square feet is proposed for Proposed Lot 9.01.

c. ***Chapter 21 – Attachment 1*** – the minimum lot frontage/width is 50 feet, whereas a lot frontage/width of 27.30 feet is existing for Lot 8 and 45.62 feet is proposed for Proposed Lot 8.01.

d. ***Chapter 21 – Attachment 1*** – the minimum lot frontage/width is 50 feet, whereas a lot frontage/width of 59.52 feet is existing for Lot 9 and 41.00 feet is proposed for Proposed Lot 9.01.

e. ***Chapter 21 – Attachment 1*** – the minimum lot depth is 75 feet, whereas 22.11 feet is existing for Lot 8 and 63.86 feet is proposed for Proposed Lot 8.01.

f. ***Chapter 21 – Attachment 1*** – the minimum lot depth is 75 feet, whereas 63.86 feet is existing for Lot 9 and 63.86 feet is proposed for Proposed Lot 9.01.

g. ***Chapter 21 – Attachment 1*** – the minimum front yard setback is 20 feet*, whereas 0.6 feet is existing for Lot 8 and a front yard setback of 10.00 feet is proposed for Proposed Lot 8.01.

h. ***Chapter 21 – Attachment 1*** – the minimum front yard setback is 20 feet*, whereas 2.0 feet is existing for Lot 9 and a front yard setback of 10.00 feet is proposed for Proposed Lot 9.01.

i. ***Chapter 21 – Attachment 1*** – the minimum side yard setback is 6/8 feet, whereas 0.3/-3.6 feet is existing on Lot 8 and 3(1)/4.3 feet proposed for Proposed Lot 8.01.

j. ***Chapter 21 – Attachment 1*** – the minimum side yard setback is 6/8 feet, whereas 7.7/40.7 feet is existing on Lot 9 and 3(1)/6 feet proposed for Proposed Lot 9.01.

k. ***Chapter 21 – Attachment 1*** – the minimum rear yard setback is 20 feet, whereas 1.2 feet is existing on Lot 8 and 15.0 feet proposed for Proposed Lot 8.01.

l. ***Chapter 21 – Attachment 1*** – the minimum rear yard setback is 20 feet, whereas 41.6 feet is existing on Lot 9 and 15.0 feet proposed for Proposed Lot 9.01.

m. ***Chapter 21 – Attachment 1*** – the maximum building coverage is 33%, whereas 89.28 feet is existing on Lot 8 and 40.03% proposed for Proposed Lot 8.01.

n. ***Chapter 21 – Attachment 1*** – the maximum building coverage is 33%, whereas 9.74% is existing on Lot 9 and 47.52% proposed for Proposed Lot 9.01.

* Or the average of the existing front yard setback within two hundred (200) feet in the same block and zone, per Ordinance Section 21-79B. The prevailing setback shall be the average setback of buildings on the same block in the same zone, but not less than the average of the setbacks of the buildings on the two (2) nearest adjacent lots and in no case, less than half the required setback.

(1) Potential lot line.

June 13, 2024 Hearing

4. Counsel for the Applicant, Henry F. Wolff, Esq., III, Esq., stated that the Applicant was seeking minor subdivision approval with ancillary bulk variance relief. He then addressed an issue raised within the Board Engineer's Report seeking confirmation as to whether wetlands existed on the subject Property. Mr. Wolff represented that the subject Property did not contain any wetlands. The Board Engineer, Carmela Roberts, P.E., CME, CPWM, asked for the Applicant to provide a signed letter by a qualified wetlands expert.

5. Testimony was then taken from Trevor Kirsh, who identified himself as the owner of the Applicant. Mr. Kirsh explained that he had purchased the subject Property in 2016 with the intention to construct two (2) single-family dwellings. He stated that the existing structure encroached over the existing lot line while the westerly half of the subject Property was vacant. Mr. Kirsh further testified that he intended to demolish the existing structures, merge Lots 8 and 9, then subdivide the subject property into two (2) new lots. He noted, however, that the new lots required variance relief.

6. Mr. Kirsh further testified that the architectural plans for the two (2) future dwellings were drawn by Red Bank Modular architectural firm. He described the future dwellings as elevated based upon pilings with parking underneath and two stories above. Mr. Kirsh stated that the lower levels would also have break-away walls. He explained that he intended to live in one of the dwellings and relatives would live in the other dwelling. Mr. Kirsh also stated that the proposed development had encountered many delays. He stated that he temporarily lives in Long Branch but wishes to return to live within the Borough.

7. The Board recognized that a portion of the dwelling on Lot 5 encroached over the subject Property line and asked if the owner of adjacent Lot 5 was present. Mr. Wolff stated that he had provided notice to the owner of Lot 5 as required by the Municipal Land Use Law (MLUL), but had not received and response and had not reached out to the owner of Lot 5 by any other means. The Board expressed its concern that the encroachment would negatively impact the proposed subdivision and questioned the impact any future changes to the structure on Lot 5 would have on the subject Property. Mr. Wolff represented that aerial maps dating as far back as the 1960s depicted the existing structure on Lot 5 as it currently exists with the encroachment onto the subject Property. He stated that the owner of Lot 5 may have prescriptive rights to the encroachment. He also stated that the encroachment created a hardship in support of the proposed variance relief with the proposed subdivision.

8. The Applicant's Engineer, Walter Hopkin, P.E., first addressed the issue regarding the Board Engineer's Report requesting written confirmation regarding the absence of wetlands on the subject Property. He explained that his office had not prepared such written certification by a wetlands expert in anticipation that such certification would be subject of a condition of approval. Mr. Hopkin also stated that while he was not a wetlands expert, another professional from his office would prepare such a certification for the next hearing.

9. Mr. Hopkin proceeded to identify the subject Property as Block 57, Lots 8 & 9, with the address of 9 Fifth Street located within the R-2.02 (Residential Zone) Zone. He testified that the subject Property contained a total of 5,431 square feet and consisted of two (2) lots. Mr. Hopkin explained that one existing lot contained approximately 600 square feet while the other

contained approximately 4,800 square feet. He stated that an existing structure and a shed currently existed on the subject Property over the lot line.

10. Mr. Hopkin further testified that the subject Property included ten (10) existing non-compliant conditions. He also stated that the dwelling on adjacent Lot 5 encroached upon the subject Property. Mr. Hopkin explained that the Applicant was proposing to grant an easement to the adjacent Lot 5 to permit the contained encroachment. He also stated that the proposed setbacks were based upon the proposed easement, not the actual property line. Mr. Hopkin further testified that the two (2) proposed future dwellings would be similar in size with footprints of approximately 1,200 square feet. He also represented that each dwelling would have a two-car garage.

11. Mr. Hopkin next addressed the proposed setbacks of the new dwellings. He stated that the minimum front yard setback of both dwellings would be 10.0 feet, whereas a minimum of 20.0 feet or the average of the existing front yard setbacks within 200 feet of the same block and zone was required. Mr. Hopkin explained that the side yard setback of proposed Lot 8.01 would be 3.0 feet to the proposed easement and 4.3 feet to the proposed lot line. He also stated that the side yard setback of proposed Lot 9.01 would be 3.0 feet to the proposed lot line and a conforming 6.0 feet to the westerly lot line. He stated that the proposed rear yard setback would be 15.0 feet for both proposed Lots 8.01 and 9.01, whereas a minimum of 20.0 feet is required. He also stated that the proposed heights would be conforming.

12. Mr. Hopkin further testified that the Applicant was seeking variance relief for lot area, where a minimum of 4,000 square feet is required, and 2,913 square feet and 2,618 square

feet were being proposed for Lot 8.01 and 9.01, respectively. He also stated that variance relief was required for lot width, where a minimum of 50 feet was required, whereas 45.62 feet and 41.00 feet was proposed for proposed lots 8.01 and 9.01, respectively. Mr. Hopkin further testified that variance relief was required for maximum building coverage, where a maximum of 33% is permitted, and 40.03% and 47.52% were proposed for proposed lots 8.01 and 9.01, respectively.

13. Mr. Hopkin explained that he would agree to comply with the technical comments contained within the Board Engineer's Report. He also testified that the lot area was below the threshold in order to require CAFRA permits. Mr. Hopkin opined that the proposed frontages were in character with the surrounding area.

14. The Applicant's Planner, John Taikina, P.P., AICP, first addressed the dwelling on Lot 5 and its encroachment onto the subject Property. He stated that historical data from NJDEP and private aerial photos depict the encroachment. Mr. Taikina explained that he did not find any information concerning the title search or through Open Public Records Act (OPRA) requests. He stated that an aerial photo from 1956 clearly depicted the encroachment. Mr. Taikina also stated that aerial photos from 1941 and 1945 were not clear enough to distinguish whether the dwelling encroached upon the subject Property. He further explained that the portion of the dwelling of Lot 5 that encroached upon the subject Property was a one-story shed-like addition to the rear of the dwelling. Mr. Taikina stated that the remainder of the Lot 5 dwelling was a residential three-story, three-family dwelling. He explained that the shed-like addition on the rear of the Lot 5 dwelling was eight (8) feet from the rear façade of the dwelling and encroached

7.3 feet onto the subject Property. Mr. Taikina stated that a prior survey depicted the encroachment to be 1.5 feet.

15. Mr. Taikina also stated that such encroachments were not uncommon in historic towns, such as the Borough. He believed that the encroachment was unlikely to be changed anytime in the near future because the existing three-family dwelling was an existing non-compliant use. Mr. Taikina speculated that the owner of Lot 5 would want to maintain the existing non-compliant use, therefore would not be interested in making changes to the dwelling that would risk forfeiting any vested rights. He also stated that the Lot 5 dwelling would have to be raised in order to comply with the latest flood zone requirements as a result of any improvements. Mr. Taikina further testified that the Applicant was proposing to alleviate the encroachment by granting an easement to the benefit of Lot 5.

16. In response to questions from the Board, Mr. Taikina testified that the structures would be spaced sufficiently apart in order to comply with building code, which was at least five (5) feet.

17. Mr. Taikina further testified that an easement was a better solution than the existing encroachment. He stated that an easement agreement would require that any changes made to the dwelling on Lot 5 would require the encroachment to be discontinued and that any improvements to Lot 5 remain upon Lot 5. Mr. Taikina testified that the subdivision did not require “d” variance relief for two (2) principal structures on a single lot for Lot 8.01 because the easement remedied such use.

18. Mr. Taikina next testified that the Applicant was proposing two (2) lots. He stated that the center property line would be slightly offset from a center line in order to provide sufficient space for the easement. Mr. Taikina explained that the Applicant was proposing to construct in the future two (2) single-family dwellings each with a width of thirty (30) feet and thirty-two (32) feet, respectively. He opined that the proposed dwellings would fit within the character of the area.

19. Mr. Taikina further testified that the variance relief could be granted under the c(1) hardship criteria. He stated that the lot depth was existing and was not possible to change. Mr. Taikina explained that the front and rear setbacks were also a result of the lot depth. He noted that the ordinance for the front yard setback required a minimum of 20.0 feet or an average of the adjacent dwellings within 200 feet. Mr. Taikina testified that the average front yard setback was 16.1 feet, thereby reducing the impact of the variance relief. He also stated that the Applicant was proposing a setback of 10.0 feet for both proposed dwellings. Mr. Taikina stated that the immediately front yard setbacks of the immediately adjacent properties were 3.6 feet and 4.5 feet.

20. Mr. Taikina further testified that the proposed rear yard setback would be fifteen (15) feet. He explained that when considering the percentage that the lot depth is reduced by, which was 84%, and applying it to the rear yard setback requirement, the rear yard setback would only be required to be 16.2 feet. He also stated that the rear yard setback of the adjacent lots to the rear were very deep, thereby mitigating the proposed rear yard setbacks.

21. Mr. Taikina also stated that the proposed side yard setback to adjacent Lot 10 was conforming. He explained that the existing side yard setback of Lot 10 was non-compliant along the mutual property line with the subject Property. Mr. Taikina further testified that the side yard setback to the internal property line would be three (3) feet each, thereby creating six (6) feet of separation of the proposed dwellings. He stated that the setback to adjacent Lot 7 would be 12.0 feet, but the setback to Lot 5 was 4.3 feet as measured from the easement line.

22. Mr. Taikina further testified that the requested variance relief would provide adequate light, air, and open space. He stated that Lang v. North Caldwell permitted the construction of a normal dwelling in spite of being a narrow lot. He explained that the width of the dwellings was necessary in order to provide sufficient space for a two-car garage and the length of the dwellings was necessary to provide additional storage at the rear of the garage.

23. Mr. Taikina also opined that the variance relief could be granted under the c(2) flexible criteria. He stated that the lot area, lot frontage, and maximum building coverage could be granted as c(2) variances. He stated that the proposal was appropriate and a better plan to construct two (2) normal dwellings with adequate parking.

24. Mr. Taikina identified a total of fifteen (15) variances which were being requested. He stated that while the total number of required variances might be high, ten (10) non-compliant conditions already existed on the subject Property. Mr. Taikina again opined that the proposed dwellings would fit within the character of the neighborhood.

25. Mr. Taikina further testified that the proposal advanced several purposes of the MLUL. He stated that the proposal provided sufficient space in an appropriate location for two

(2) single-family dwellings. Mr. Taikina also stated that the proposal promoted a desirable visual environment. He stated that the proposal was an efficient use of land.

26. Mr. Taikina next introduced a Proximity Lot Analysis Map dated June 13, 2024 as Exhibit A-1. He explained that three (3) types of properties were marked on the Exhibit. Mr. Taikina first identified twenty-nine (29) lots in the R-2.02 Zone which were located in the area. He then stipulated that five (5) conforming lots existed, six (6) undersized lots and undersized frontages also existed, and eighteen (18) lots that with smaller lot areas and lot frontages than the proposed lots.

27. Mr. Taikina further testified that the grant of variance relief would not result in any substantial detriment to the public good. He stated that the front setbacks would be more compliant than some in the area, and that the proposal provided parking. He opined that the grant of variance relief would not result in any substantial detriment to the zone plan or master plan. Mr. Taikina stated that the zone itself impaired the area because the R-2.02 Zone did not meet the character of the area. He highlighted that many lots in the area existed prior to the adoption of the zoning ordinance. Mr. Taikina further testified that the proposed lots conformed with the character of the area. He again stated that there were only five (5) lots in the surrounding area that conformed with the R-2.02 standards. Mr. Taikina stated that the lots across the street were in a different zone and were waterfront.

28. Mr. Taikina further testified that the proposal created lots which better conformed with the surrounding area. He stated that the proposed easement was also not unreasonable.

29. In response to questions from the Board, Mr. Taikina acknowledged that the immediately adjacent lot to the west was conforming. He stated that historically, the subject Property had been two (2) lots with two (2) dwellings. Mr. Taikina also stated that the existing Lots 8 and 9 had not been merged by common ownership because Lot 8 was owned by Mr. Kirsh personally and Lot 9 was owned by the Applicant.

30. In response to questions from the Board Attorney, Mr. Taikina testified that the dwellings would be compliant in regard to Residential Site Improvement Standards (RSIS) and the Borough ordinance requirement for two (2) parking spaces per four-bedroom dwelling.

31. In response to questions from the Board Engineer, Mr. Taikina stated that the 2021 survey depicted the subject Property to be a rectangle. He also stated that if there were a dispute with the adjacent Lot 5 regarding the lot line, and that the County Board of Surveyors would adjudicate the dispute and override any lot lines approved by the Board, if necessary. He stated that the lot line being created would not be impacted by any dispute with adjacent Lot 5.

July 11, 2024 Hearing

32. Mr. Wolff provided an overview of the previous testimony. He stated that "d" variance relief was not necessary because the second dwelling was only partially on the subject Property and would be contained within an easement. He also stated that the easement agreement would contain a condition requiring any renovation to the Lot 5 dwelling also include the elimination of the encroachment.

33. Mr. Wolff further summarized the Applicant's Planner's testimony as to the justification for the variance relief. He stated that the encroachment was a hardship creating the need for some of the variance relief. He also reiterated that any dispute regarding the accuracy of the property line with Lot 5 would be referred by the County Board of Surveyors.

34. In response to questions from the Board, the Board Engineer, Ms. Roberts confirmed that the Board had received the wetlands certification as requested and that there were no issues regarding wetlands on the subject Property.

35. There were no members of the public expressing an interest in this application.

WHEREAS, the Highlands Land Use Board, having reviewed the proposed application and having considered the impact of the proposed application on the Borough and its residents to determine whether it is in furtherance of the Municipal Land Use Law; and having considered whether the proposal is conducive to the orderly development of the site and the general area in which it is located pursuant to the land use and zoning ordinances of the Borough of Highlands; and upon the imposition of specific conditions to be fulfilled, hereby determines that the Applicant's request for minor subdivision approval pursuant to N.J.S.A. 40:55D-47 along with ancillary variance relief pursuant to N.J.S.A. 40:55D-70c should be granted in this instance.

The Board first addresses the question of whether "d" use variance is necessary. A Zoning Board of Adjustment or combined Planning/Zoning Board of Adjustment may grant relief to permit a principal structure in a district restricted against such principal structure pursuant to N.J.S.A. 40:55D-70d. The Applicant had provided sufficient notice that includes the alternative request for "d" use variance for two (2) principal structures. The Board, therefore, finds that it has jurisdiction

to grant said relief. However, the Board finds it unnecessary to grant relief for two (2) principal structures. The Board finds that the Applicant has presented convincing testimony that "d" use variance is unnecessary. The Board specifically finds that the second principal structure on Lot 8.01 is a portion of the principal structure on Lot 5 which encroaches upon the subject Property. The Board finds that the Applicant has proposed to grant an easement, which will contain the encroaching second principal structure. The Board also finds that the Applicant has proposed an easement agreement which would require the second principal structure to be removed from the subject Property if any renovations were to be performed on the second principal structure. The Board finds that two (2) principal structures will not remain in perpetuity and the Board recognizes the non-conformity will exist so long as the second principal structure is not improved. Therefore, the Board finds "d" use variance for two (2) principal structures is unnecessary.

The Board finds that the Applicant has proposed a minor subdivision which requires ancillary variance relief. The Municipal Land Use Law, at N.J.S.A. 40:55D-70c provides Boards with the power to grant variances from strict ancillary and other non-use related issues when the applicant satisfies certain specific proofs which are enunciated in the Statute. Specifically, the applicant may be entitled to relief if the specific parcel is limited by exceptional narrowness, shallowness or shape. An applicant may show that exceptional topographic conditions or physical features exist which uniquely affect a specific piece of property. Further, the applicant may also supply evidence that exceptional or extraordinary circumstances exist which uniquely affect a specific piece of property or any structure lawfully existing thereon and the strict application of any regulation contained in the Zoning Ordinance would result in a peculiar and exceptional practical difficulty or exceptional and undue hardship upon the developer of that

property. Additionally, under the c(2) criteria, the applicant has the option of showing that in a particular instance relating to a specific piece of property, the purpose of the act would be advanced by allowing a deviation from the Zoning Ordinance requirements and the benefits of any deviation will substantially outweigh any detriment. In those instances, a variance may be granted to allow departure from regulations adopted, pursuant to the Zoning Ordinance.

Those categories specifically enumerated above constitute the affirmative proofs necessary in order to obtain "bulk" or (c) variance relief. Finally, an applicant must also show that the proposed variance relief sought will not have a substantial detriment to the public good and, further, will not substantially impair the intent and purpose of the zone plan and Zoning Ordinance. It is only in those instances when the applicant has satisfied both these tests, that a Board, acting pursuant to the Statute and case law, can grant relief. The burden of proof is upon the applicant to establish these criteria.

The Board finds that the Applicant has satisfied the positive criteria pursuant to the flexible c(2) standard codified at N.J.S.A. 40:55D-70c(2). The Board finds that the existing two lots are under separate ownership and are improved with a dilapidated single-family residence which encroaches over the property line. The Board finds that the proposed subdivision will permit the construction of two (2) new attractive single-family dwellings which will eliminate the encroachment. The Board finds that this will promote a desirable visual environment not only for the Applicant, but for the entire neighborhood. The Board further finds that the Applicant has proposed population densities which comply with the Ordinance requirements. The two (2) new proposed lots will also fit the character of the prevailing neighborhood scheme. The Board

therefore finds that the grant of variance relief will promote the goals of planning enumerated at N.J.S.A. 40:55D-2. The positive criteria has therefore been satisfied.

The Board further finds that the Applicant has also satisfied the negative criteria. The proposed dimensions of the proposed lots will be similar to the dimensions of other lots in the neighborhood. The subdivision will also note result in increased traffic, noise or noxious odor beyond what is contemplated by the Ordinance. The Board also finds that the rear yard setback is mitigated by the rear yard setbacks of the adjacent properties which exceed the minimum requirements. The Board therefore finds that the grant of variance relief will not result in substantial detriment to the public welfare or substantially impair the zone plan or zoning ordinance. The negative criteria has therefore been satisfied.

The Board concludes that the positive criteria substantially outweighs the negative criteria and that variance relief may be granted pursuant to N.J.S.A. 40:55D-70c(2).

With the exception of the above relief, the Applicant complies with all other zoning, subdivision and design criteria ordinance requirements. Minor subdivision approval pursuant to N.J.S.A. 40:55D-47 is therefore appropriate.

NOW, THEREFORE, BE IT RESOLVED by the Land Use Board of the Borough of Highlands on this 8th day of August 2024, that the action of the Land Use Board taken on July 11, 2024 granting application no. LUB2024-04, for minor subdivision approval pursuant to N.J.S.A. 40:55D-47 along with ancillary bulk variance relief pursuant to N.J.S.A. 40:55D-70c(2) is as follows:

The application is granted subject to the following conditions:

1. All site improvement shall take place in strict compliance with the testimony and with the plans and drawings which have been submitted to the Board with this application, or to be revised.

2. Except where specifically modified by the terms of this Resolution, the Applicant shall comply with all recommendations contained in the reports of the Board professionals.

3. The Deed recorded memorializing this subdivision shall specifically refer to this Resolution and shall be subject to the review and approval of the Board Engineer and Board Attorney. The Applicant shall record the Subdivision Plat or Deed within 190 days of the memorializing Resolution being adopted. Failure to do so shall render this approval null and void.

4. All easements shall be depicted on the Subdivision Plan.

5. The proposed new homes shall not exceed the height requirements for the Zone.

6. The Applicant shall return to this Board for an amended approval if the property line dispute with adjacent lot 5 results in a change in the size of the lots created by this approval, intensifies any variance relief or creates any new relief.

7. The separation between buildings shall comply with all building code requirements.

8. Each new home shall have a two-car garage.

9. The Applicant shall confirm that each new lot can be serviced by utilities without the need for easements over adjacent properties. The Applicant shall provide such draft easements for the review and approval of the Board Engineer and Board Attorney if such easements are necessary.

10. The Applicant shall comply with all applicable affordable housing requirements.

11. The Applicant shall submit the easement and easement agreement with adjacent Lot 5 subject to review by the Board Attorney.

12. Payment of all fees, costs, escrows due and to become due. Any monies are to be paid within twenty (20) days of said request by the Board Secretary.

13. Subject to all other applicable rules, regulations, ordinances and statutes of the Borough of Highlands, County of Monmouth, State of New Jersey or any other jurisdiction.

BE IT FURTHER RESOLVED that the Board secretary is hereby authorized and directed to cause a notice of this decision to be published in the official newspaper at the Applicant's expense and to send a certified copy of this Resolution to the Applicant and to the Borough Clerk, Engineer, Attorney and Tax Assessor, and shall make same available to all other interested parties.

_____
Robert Knox, Chairman
Borough of Highlands Land Use Board

ON MOTION OF:
SECONDED BY:
ROLL CALL:
YES:
NO:
ABSTAINED:
ABSENT:
DATED:

I hereby certify this to be a true and accurate copy of the Resolution adopted by the Highlands Land Use Board, Monmouth County, New Jersey at a public meeting held on August 8, 2024.

_____
Nancy Tran, Secretary
Borough of Highlands Land Use Board

Borough of Highlands
42 Shore Drive
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

LAND USE BOARD APPLICATION

FOR OFFICIAL USE

Date Rec'd: 4/15/2024 Application #: LUB24-02 Fee: Ck#1009 $375 Escrow: Ck#1012 $750

1. APPLICANT

Name: 60 Bay Ave Highlands LLC
Address: 60 Bay Avenue
City: Highlands State: NJ Zip: 07732
Phone: 732.855.6039 (Owner's Attorney)
Email: djennings@wilentz.com (Owner's Attorney)
Relation to property: Owner

2. OWNER

Name: 60 Bay Ave Highlands LLC
Address: 60 Bay Avenue Highlands LLC
City: Highlands State: NJ Zip: 07732
Phone: 732.855.6039 (Owner's Attorney)
Email: djennings@wilentz.com (Owner's Attorney)

3. TYPE OF APPLICATION (Check all that apply)

- ☐ Minor Subdivision
- ☐ Major Subdivision – Preliminary
- ☐ Major Subdivision – Final
- ☐ Minor Site Plan
- ☑ Major Site Plan – Preliminary
- ☑ Major Site Plan – Final
- ☐ Variance
- ☐ Use Variance
- ☐ Appeal – Zoning Denial date _____
- ☐ Appeal – Land Use Decision date _____
- ☐ Informal Concept Plan Review
- ☐ Extension of Approval
- ☐ Revision/Resubmission of Prior Application
- ☐ Other _____

4. PROPERTY INFORMATION

Block 42 Lot(s) 1 Address: 60 Bay Avenue
Lot size 0.147 acres # of Existing Lots 1 # of Proposed Lots 1
Zone CBD* Are there existing Deed Restrictions or Easements? ☑ No ☐ Yes – Please attach copies
Has the property been subdivided? ☑ No ☐ Yes If yes, when? _____
Attach copies of approved map or approved resolution
Property taxes paid through Quarter 1 Sewer paid through Current

5. ATTORNEY (A corporation, LLC, Limited Partnership, or S-Corp **must** be represented by a NJ attorney)

Name: Donna M. Jennings, Esq. (on behalf of Applicant)
Address: 90 Woodbridge Center Drive Suite 900 Box 10, Woodbridge, NJ 07095
Phone: 732.855.6039 Email: djennings@wilentz.com

*The Property is located in the CBD Redevelopment Area in Overlay Zone 2.

**This office requested sewer tax certification on March 6, 2024 and will provide same once received.

Borough of Highlands
42 Shore Drive
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

6. APPLICANT'S OTHER PROFESSIONAL(S) – Engineer, Planner, Architect, etc.

Name: Douglas D. Clelland, PE (Engineer)
Address: 1955 Route 354, Suite 1A, Wall NJ 07719
Phone: 732-531-7100
Email: doug@insiteeng.net

Name: Salvatore LaFerlita, RA, AIA (Architect)
Address: 115 University Drive, Lincroft NJ 07738
Phone: 732-741-5105
Email: sallaferlita@aol.com

7. LAND USE

A. PROPERTY HISTORY –Describe in detail, nature of prior use(s) on the site, start date of such use, any prior Land Use Board applications for this site (attach copy of resolution, if applicable), history of current ownership, etc.

A public records request returned no results for the Property. The Rider addresses the current use.

B. PROPOSED PLAN –Describe in detail, proposed use for property, including, but not limited to: 1) portion to be subdivided; 2) sell lot only; 3) construct house(s) for sale; 4) how trash will be disposed; 5) landscaping; 6) hours of operation; 7) type of goods/services; 8) fire lane. Attach additional sheets if necessary.

See attached rider.

C. ADDITIONAL INFORMATION:

		Existing	Proposed
Residential:	How many dwelling units?	4	5
	How many bedrooms in each unit?	1-2	1-3
	How many on-site parking spaces?	5	7
Commercial:	How many commercial uses on site?	None	None
	How many on-site parking spaces?	N/A	N/A

Borough of Highlands
42 Shore Drive
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

8. VARIANCE REQUESTS Complete section(s) related to the relief being requested.

	Req'd	Exist.	Prop'd
Minimum Lot Requirements			
Lot Area			
Frontage			
Lot Depth			
Minimum Yard Requirements			
Front Yard Setback			
2nd Front Yard Setback			
Rear Yard Setback			
Side Yard Setback, right			
Side Yard Setback, left			
Building Height			

	Req'd	Exist.	Prop'd
Accessory Structures			
Fence/Wall Height			
Garage/Shed Height			
Garage/Shed Area			
Pool Setback			
Parking Requirements			
On-site Parking Spaces			
Other (please add)			
Max Driveway Width at Curb (FT)			

9. OTHER RELIEF REQUESTED Please specify relief(s) and explain below.

Borough of Highlands
42 Shore Drive
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

10. NOTARIZED SIGNATURE OF APPLICANT

I certify that the foregoing statements and the materials submitted are true. I further certify that I am the individual Applicant, or that I am an Officer of the Applicant authorized to sign the application for the business organization. Additionally, I certify that the survey or plans submitted with this application shows and discloses the premises in its entirety, and I further certify that no buildings, fences, or other facilities have been constructed, installed, or otherwise located on the premises after the date of the survey with the exception of the structures shown.

SWORN & SUBSCRIBED to before me this
15th day of April 2024 (year)
Lisa Haak (notary)
Lisa Haak
Notary Public, State of New Jersey (Seal)
I.D. No. 50163068
My Commission Expires June 26, 2026

Signature 4/15/2024 Date

Donna M. Jennings, Esq. (WGS on behalf of Applicant)
Print Full Name

11. NOTARIZED CONSENT OF OWNER

I certify that I am the Owner of the property which is the subject of this application, hereby consent to the making of this application and approval of the plans submitted herewith. I further consent to the inspection of this property in connection with this application as deemed necessary by the municipal agency (if owned by a corporation, a resolution must be attached authorizing the application and officer signature).

SWORN & SUBSCRIBED to before me this
15th day of April 2024 (year)
Lisa Haak (notary)
Lisa Haak
Notary Public, State of New Jersey
I.D. No. 50163068 (Seal)
My Commission Expires June 26, 2026

Signature 4/15/2024 Date

Donna M. Jennings, Esq. (WGS on behalf of Owner)
Print Full Name

12A. DISCLOSURE STATEMENT Circle all that apply.

Pursuant to N.J.S.A. 40:55D-48.1 & 48.2, please answer the following questions:

Is this application to subdivide a parcel of land into six (6) or more lots?	Yes	**No**
Is this application to construct a multiple dwelling of 25 or more units?	Yes	**No**
Is this an application for approval of a site(s) for non-residential purposes?	Yes	**No**
Is this Applicant a corporation?	Yes	**No**
Is the Applicant a limited liability corporation?	**Yes**	No
Is the Applicant a partnership?	Yes	**No**

If you circled **YES** to any of the above, please complete the following Ownership Discloser Statement (use additional sheets if necessary).

Borough of Highlands
42 Shore Drive
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

12B. BUSINESS ORGANIZATION OWNERSHIP DISCLOSURE STATEMENT

Name of Corporation, Partnership, LLC, LLP, S-Corp:
60 Bay Ave Highlands LLC

Listed below are the names and addresses of all owners of 10% or more of the stock/interest* in the above referenced business organization:

NAME	ADDRESS
David Cahill	60 Bay Avenue Apt 3, Highlands, NJ 07732

*If a corporation or a partnership owns 10% or more of the stock of a corporation, or 10% or great interest in a partnership, that corporation or partnership shall list the names and address of its stockholders holding 10% or more of its stock or 10% or greater interest in the partnership, and this requirement shall be followed until the names and addresses of the non-corporate stockholders and individual partners, exceeding the 10% owner ship criterion established have been listed.

SWORN & SUBSCRIBED to before me this
15th day of April 20 24 (year)
(notary)
Lisa Haak
Notary Public, State of New Jersey (Seal)
I.D. No. 50163068
My Commission Expires June 26, 2026

Signature (Officer/Partner) Date 4/15/2024

Donna M. Jennings, Esq. (WGS on behalf of Applicant)
Print Full Name Title

RIDER
60 Bay Ave Highlands LLC
60 Bay Avenue
Block 42, Lot 1
Application for Preliminary and Final Major Site Plan Approval

60 Bay Ave Highlands LLC ("Applicant") submits this application for Preliminary and Final Major Site Plan Approval to raise and expand the existing three-story multi-family residential building on property located at 60 Bay Avenue and identified as Block 42, Lot 1 on the Borough's tax maps (the "Property"). The Property comprises approximately 6,425 square feet, or 0.147 acres, and is located in the Central Business District (CBD) within the CBD Redevelopment Area Overlay 2 Zone.

Applicant proposes to lift, renovate and expand the existing structure creating a new ground floor consisting of: one (1) -1 car garage, two (2) -1 1/2 car garages, and a two (2) car garage. The new ground floor will also have storage areas. In addition, Applicant proposes to add another unit, creating five (5) total. Residential above the first floor is a permitted use in the CBD pursuant to Ordinance Section 21-91(A)(1)(u) and the Central Business District Redevelopment Plan. All five (5) of the proposed residential units are located above the ground floor.

Further, Applicant intends to utilize a portion of the interior yard as a refuse area for trash bins for the tenants. Applicant will also plant twenty (20) shade and ornamental trees, eighteen (18) shrubs, and 104 grasses, perennial flowers, and groundcovers throughout the Property.

Design Waivers

1. Maximum Driveway Width at Curb (FT) – Ordinance Section 21-65.5(C)(1)

   18 FT permitted / 19.09 FT proposed

2. Minimum Lighting Level – Ordinance Section 21-65(11)(E)

   0.3 FC required / 0.1 FC proposed

3. Maximum Lighting Level at Property Line – Ordinance Section 21-65(11)(F)

0.3 FC permitted / 1.7 FC proposed

WILENTZ
—ATTORNEYS AT LAW—

DONNA M. JENNINGS, ESQ.

T: 732.855.6039
F: 732.726.6560
djennings@wilentz.com

90 Woodbridge Center Drive
Suite 900 Box 10
Woodbridge, NJ 07095-0958
732.636.8000

April 15, 2024

VIA HAND DELIVERY AND EMAIL
Nancy Tran, Land Use Board Secretary
Borough of Highlands
151 Navesink Avenue
Highlands, NJ 07732
landuse@highlandsborough.org

RE: 60 Bay Ave Highlands LLC
Preliminary and Final Major Site Plan Approval
60 Bay Avenue
Block 42, Lot 1

Dear Ms. Tran:

This office represents 60 Bay Ave Highlands LLC in connection with the above referenced matter. Enclosed, for filing, please find the following:

1. Four (4) copies of the Land Use Board Application with Rider.

2. Four (4) copies of Zoning Permit Denial, dated February 14, 2024.

3. Certification from Tax Collector, dated March 6, 2024, confirming payment of taxes.

4. Correspondence via e-mail from Kevin Rooney, Cashier, dated April 2, 2024, confirming payment of sewer bills.

5. Executed W-9, dated March 18, 2024.

6. Four (4) copies of a Stormwater Management Statement of Compliance, prepared by InSite Engineering, LLC, dated April 11, 2024.

7. Four (4) copies of Survey entitled "Boundary & Topographic Survey," prepared by InSite Surveying, LLC, dated November 30, 2023, last revised December 20, 2023.

8. Four (4) copies of Floor Plans and Elevations, prepared by LaFerlita Architectural Services, dated March 13, 2024, consisting of five (5) sheets.

9. Four (4) copies of Site Plan entitled "Preliminary & Final Major Site Plan for Proposed Multi-Family Residence," prepared by InSite Engineering, LLC, dated February 5, 2024, last revised April 9, 2024, consisting of twelve (12) sheets.

Please advise as to the application and escrow fees, which will be provided under separate cover.

Should you have any questions or require additional information, please do not hesitate to contact this office.

Thank you for your assistance in this matter.

Very truly yours,

DONNA M. JENNINGS

w/encl.

cc: 60 Bay Ave Highlands, LLC (ATTN: David Cahill)
Douglas D. Clelland, PE
Salvatore LaFerlita, RA, AIA
Luke H. Policastro, Esq.

Borough of Highlands

151 Navesink Ave
Highlands, NJ 07732
Phone: (732) 872-1224

Control #: Z-0021
Date Issued: 2/14/2024

DENIAL OF ZONING PERMIT

IDENTIFICATION

Work Site Location:	60 BAY AVENUE	**Block:**	42	**Lot:**	1	**Zone:**	B-2
Owner in Fee:	60 BAY AVENUE HIGHLANDS, LLC	**Contractor/Agent:**					
Address:	60 BAY AVENUE	**Address:**					
	HIGHLANDS NJ 07732						
Telephone:		**Telephone:**					
		Contractor License No:					

For the project/work located at the above address, your application for a permit to:

LIFT HOUSE UP TO FLOOD REQUIREMENTS. MOVE FORWARD TOWARD BAY AVE. ADD 2 EXTESIONS TO THE SIDE AND BACK AND ADD PARKING UNDERNEATH HOUSE.

has been denied for noncompliance with provisions of Sections: of the Municipal Zoning Ordinance for the following reasons:

Proposed building coverage is 52.4% where 35% is permitted; proposed parking spaces is 7 where 10.1 is required ; proposed driveway with at curb is 19.09 Ft where 18 FT is permitted.

Information on procedures for an appeal of this decision to the Land Use Board can be obtained from the Secretary of the Land Use Board. It should be noted that under State Statute, notice of appeal of this decision must be filed with this office not later than (20) days from the date of this notice. You can also file for a variance to the Land Use Board and can obtain from the Secretary of the Land Use Board the required forms.

The permit which you submitted has been placed in the inactive files in the Zoning Department. Please contact this office to reactivate the permit.

Denied by:

Courtney Lopez — Zoning Official

Borough of Highlands
Planning Board
.Attn: Nancy Tran
Board Secretary
151 Navesink Ave.
Highlands, NJ 07732

Via Hand Delivery

April 11, 2024

Subject: **MULTI-FAMILY RESIDENCE – PRELIMINARY & FINAL MAJOR SITEPLAN**
STORMWATER STATEMENT OF COMPLIANCE
60 Bay Avenue
Block 42, Lot 1
Borough of Highlands, Monmouth County, New Jersey

Ms. Tran:

We are submitting this letter on behalf of the Applicant, who is proposing to renovate and expand the existing dwelling onsite to a 3-story multi-family residential building with parking below at the above referenced site in accordance with the Borough of Highlands Ordinance. There are anticipated New Jersey Department of Environmental Protection (NJDEP) land use permits required for the project, however, the project does not meet the definition of a 'major development' as it relates to stormwater management and as defined in N.J.A.C. 7:8. Therefore, the Borough of Highlands has jurisdiction over the stormwater management for the site.

Ultimately, the project proposes to disturb 0.16 acres of land and results in a slight increase in impervious coverage (0.037 acres) for the site. There are no coverage variances required. In the existing condition, stormwater runoff from the roof of the existing building is not captured by a gutter and is ultimately discharged near neighboring properties and ROW. The intent of the proposed drainage and grading plan is to improve the drainage characteristics that exist on site. In the proposed condition, all roof runoff is collected in a roof leader system and ultimately discharged to the public right-of-way (ROW) via a direct connection to the existing storm inlet within South Street in accordance with standard design practices.

Thank you for your kind consideration of this application. If you have any questions or require further information, please feel free to contact this office anytime.

Sincerely,
InSite Engineering, LLC

Douglas D. Clelland PE

INTRODUCTION

The project site is located on Block 42, Lot 1, with frontage on Shrewsbury Avenue to the east, existing residential developments to the north, Bay Avenue to the west and South Street to the south. The 0.147 acre site is currently developed with a residential dwelling, in the CBD Redevelopment Overlay 2 Zone – Gateway Parcels. The proposed project consists of a multi-family residence with parking on the ground level and associated infrastructure. The entire property is tributary to two existing storm inlets located on the corner of Bay Ave and South Street.

STORMWATER MANAGEMENT ANALYSIS:

PREDEVELOPMENT DRAINAGE AREA (TRIBUTARY TO ROW INLETS)

Surface Type (Tributary to ROW)	*Area*	*Runoff Coefficient*
Impervious	*2,377.3 SF (0.055 AC)*	*0.98*
Lawn/Planted areas	*4,047.7 SF (0.093 AC)*	*0.25*

2-year Storm

(Tributary to ROW) $Q_2 = Ci_2A = (0.25)(3.40\ ^2in/hr)(0.093\ AC) + (0.98)(3.40^2in/hr)(0.055\ AC) =$ ***0.26 CFS***

10-year Storm

(Tributary to ROW) $Q_{10} = Ci_{10}A = (0.25)(5.20\ ^2in/hr)(0.093\ AC) + (0.98)(5.20\ ^2in/hr)(0.055\ AC) =$ ***0.40 CFS***

POSTDEVELOPMENT DRAINAGE AREA TRIBUTARY TO ROW INLETS)

Surface Type (Tributary to ROW)	*Area*	*Runoff Coefficient*
Impervious	*3,983.5 SF (0.091 AC)*	*0.98*
Lawn	*2,441.5 SF (0.056 AC)*	*0.25*

2-year Storm

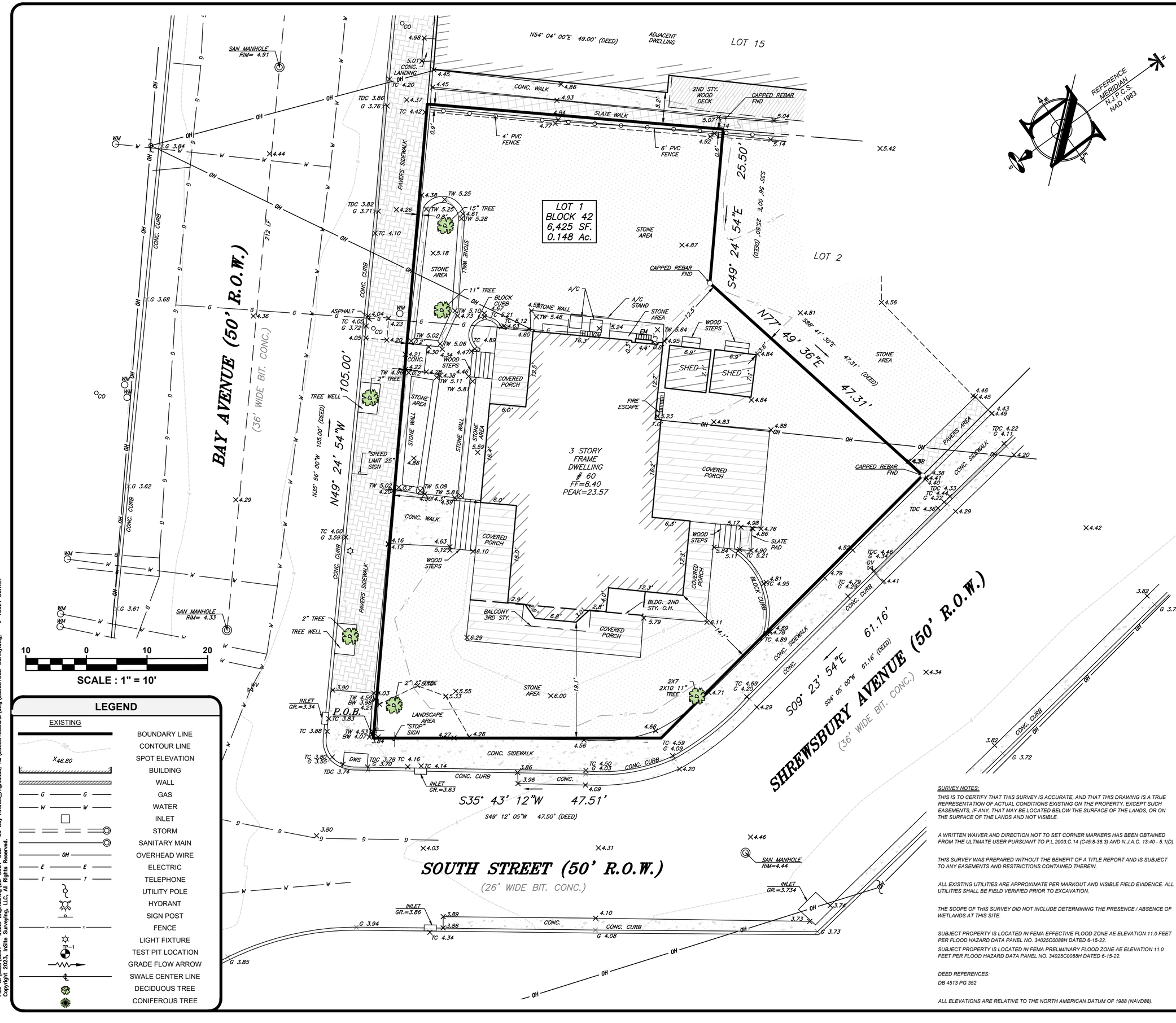
(Tributary to ROW) $Q_2 = Ci_2A = (0.25)(3.40\ ^2in/hr)(0.056\ AC) + (0.98)(3.40^2in/hr)(0.091\ AC) =$ ***0.35 CFS***

10-year Storm

(Tributary to ROW) $Q_{10} = Ci_{10}A = (0.25)(5.20\ ^2in/hr)(0.056\ AC) + (0.98)(5.20\ ^2in/hr)(0.091\ AC) =$ ***0.54 CFS***

CONCLUSION:

The proposed grading and drainage design was prepared in accordance with Borough requirements and mimics the existing condition. In the proposed condition, roof runoff will be collected in a downspout collection system and piped directly to the existing stormwater infrastructure within the ROW. This design solution provides an improvement over the existing condition and provides stable soil conditions both onsite and downstream.



LEGEND

EXISTING

- BOUNDARY LINE
- CONTOUR LINE
- SPOT ELEVATION (X46.80)
- BUILDING
- WALL
- GAS (G)
- WATER (W)
- INLET
- STORM
- SANITARY MAIN
- OVERHEAD WIRE (OH)
- ELECTRIC (E)
- TELEPHONE (T)
- UTILITY POLE
- HYDRANT
- SIGN POST
- FENCE
- LIGHT FIXTURE
- TP-1 TEST PIT LOCATION
- GRADE FLOW ARROW
- SWALE CENTER LINE
- DECIDUOUS TREE
- CONIFEROUS TREE

SURVEY NOTES:

THIS IS TO CERTIFY THAT THIS SURVEY IS ACCURATE, AND THAT THIS DRAWING IS A TRUE REPRESENTATION OF ACTUAL CONDITIONS EXISTING ON THE PROPERTY, EXCEPT SUCH EASEMENTS, IF ANY, THAT MAY BE LOCATED BELOW THE SURFACE OF THE LANDS, OR ON THE SURFACE OF THE LANDS AND NOT VISIBLE.

A WRITTEN WAIVER AND DIRECTION NOT TO SET CORNER MARKERS HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO P.L.2003.C.14 (C45:8-36.3) AND N.J.A.C. 13:40 - 5.1(D).

THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY EASEMENTS AND RESTRICTIONS CONTAINED THEREIN.

ALL EXISTING UTILITIES ARE APPROXIMATE PER MARKOUT AND VISIBLE FIELD EVIDENCE. ALL UTILITIES SHALL BE FIELD VERIFIED PRIOR TO EXCAVATION.

THE SCOPE OF THIS SURVEY DID NOT INCLUDE DETERMINING THE PRESENCE / ABSENCE OF WETLANDS AT THIS SITE.

SUBJECT PROPERTY IS LOCATED IN FEMA EFFECTIVE FLOOD ZONE AE ELEVATION 11.0 FEET PER FLOOD HAZARD DATA PANEL NO. 34025C0088H DATED 6-15-22.

SUBJECT PROPERTY IS LOCATED IN FEMA PRELIMINARY FLOOD ZONE AE ELEVATION 11.0 FEET PER FLOOD HAZARD DATA PANEL NO. 34025C0088H DATED 6-15-22.

DEED REFERENCES:

DB 4513 PG 352

ALL ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1988 (NAVD88).

PROJECT NAME:

BOUNDARY & TOPOGRAPHIC SURVEY

OF

BLOCK 42, LOT 1

60 BAY AVENUE

SITUATED IN:

BOROUGH OF HIGHLANDS
MONMOUTH COUNTY
NEW JERSEY

PREPARED FOR:

INSITE Engineering • Surveying • Planning

INSITE Surveying

InSite Surveying, LLC
CERTIFICATE OF AUTHORIZATION:
24GA28290100
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InsiteSurveying.net
www.InSiteSurveying.net

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

REVISIONS

Rev.#	Date	Comment
0	12/20/23	INITIAL RELEASE

SCALE: 1"=10'	DRAWN BY: GS/MB
FIELD DATE: 11/30/23	CHECKED BY: JJH
JOB #: 23-S001-860	

CERTIFICATION

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

JUSTIN J. HEDGES, P.L.S., C.F.S.
PROFESSIONAL LAND SURVEYOR
NJ LIC. NO. GS43362
CERTIFIED FLOODPLAIN SURVEYOR NJ LIC. NO. NJ-044

SHEET NO:

1 of 1

File: S:\Jobs\2001 – InSite Engineering\23-S001-860 – 60 Bay Avenue_Highlands, NJ\23S001860CAD\dwg\23S001860–Survey.dwg, ---> 18x24 SURVEY
Copyright 2023, InSite Surveying, LLC, All Rights Reserved.



1 A-100 EXISTING FRONT ELEVATION

SCALE: N.T.S.



A A-100 GROUND FLOOR PLAN

2,491 S.F.

SCALE: 1/4" = 1'-0"

APPLICABLE CODES

· INTERNATIONAL RESIDENTIAL CODE (N.J. EDITION)	2021
· INTERNATIONAL MECHANICAL CODE	2021
· NATIONAL STANDARD PLUMBING CODE	2021
· NATIONAL ELECTRICAL CODE	2020
· INTERNATIONAL FIRE CODE	2021
· INTERNATIONAL ENERGY CONSERVATION CODE	2021

ZONING DATA

	ZONE: CBD	BLOCK: 42	LOT: 1
ITEM	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA			6,408 S.F.
MINIMUM LOT FRONTAGE			105.00'
MINIMUM FRONT SETBACK ACCESSORY			2.00'
MINIMUM SIDE SETBACK ACCESSORY			5.00' / 8.00'
MINIMUM STREET SIDE SETBACK ACCESSORY			
MINIMUM REAR SETBACK ACCESSORY			5.00' / 8.00'
MINIMUM REAR STREET SIDE SETBACK ACCESSORY			
MAXIMUM BUILDING COVERAGE			2,681 S.F.
* MAXIMUM LOT COVERAGE			2,681 / 6,408 = .42%
MAXIMUM BUILDING HEIGHT ACCESSORY			46'-10"

REFER TO INSITE ENGINEERING DATA

BUILDING DATA

HABITABLE AREA	EXISTING AREA	NEW AREA	TOTAL AREA
GROUND FLOOR	0	0	0
FIRST FLOOR	1,200 SF	1,268 SF	2,468 SF
SECOND FLOOR	900 SF	1,686 SF	2,586 SF
THIRD FLOOR	900 SF	1,534 SF	2,434 SF
TOTAL	3,000 SF	4,488 SF	7,488 SF
HABITABLE AREA	EXISTING VOLUME	NEW VOLUME	TOTAL VOLUME
GROUND FLOOR	0	22,419 CF	22,419 CF
FIRST FLOOR	9,600 CF	11,412 CF	21,012 CF
SECOND FLOOR	7,200 CF	13,488 CF	20,688 CF
THIRD FLOOR	7,200 CF	12,272 CF	19,472 CF
TOTAL	24,000 CF	59,591 CF	83,591 CF

LEGEND

- EXISTING TO BE REMOVED
- EXISTING INTERIOR PARTITION TO REMAIN
- NEW 2" x 4" WOOD STUD INTERIOR WALL CONSTRUCTION
- NEW TWO HOUR RATED WALL CONSTRUCTION
- NEW 2" x 6" WOOD STUD EXTERIOR WALL CONSTRUCTION
- NEW CONCRETE BLOCK FOUNDATION WALL
- EXISTING CMU WALL WITH NEW CMU ON TOP
- F.V. NEW 'SMART VENT' AUTOMATIC NON-POWERED, 8" x 16" FLOOD VENTS OR APPROVED EQUAL, 12" ABOVE GRADE MAX (1) PER 200 S.F. MIN.

FOR ZONING REVIEW
ISSUED: 4/5/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

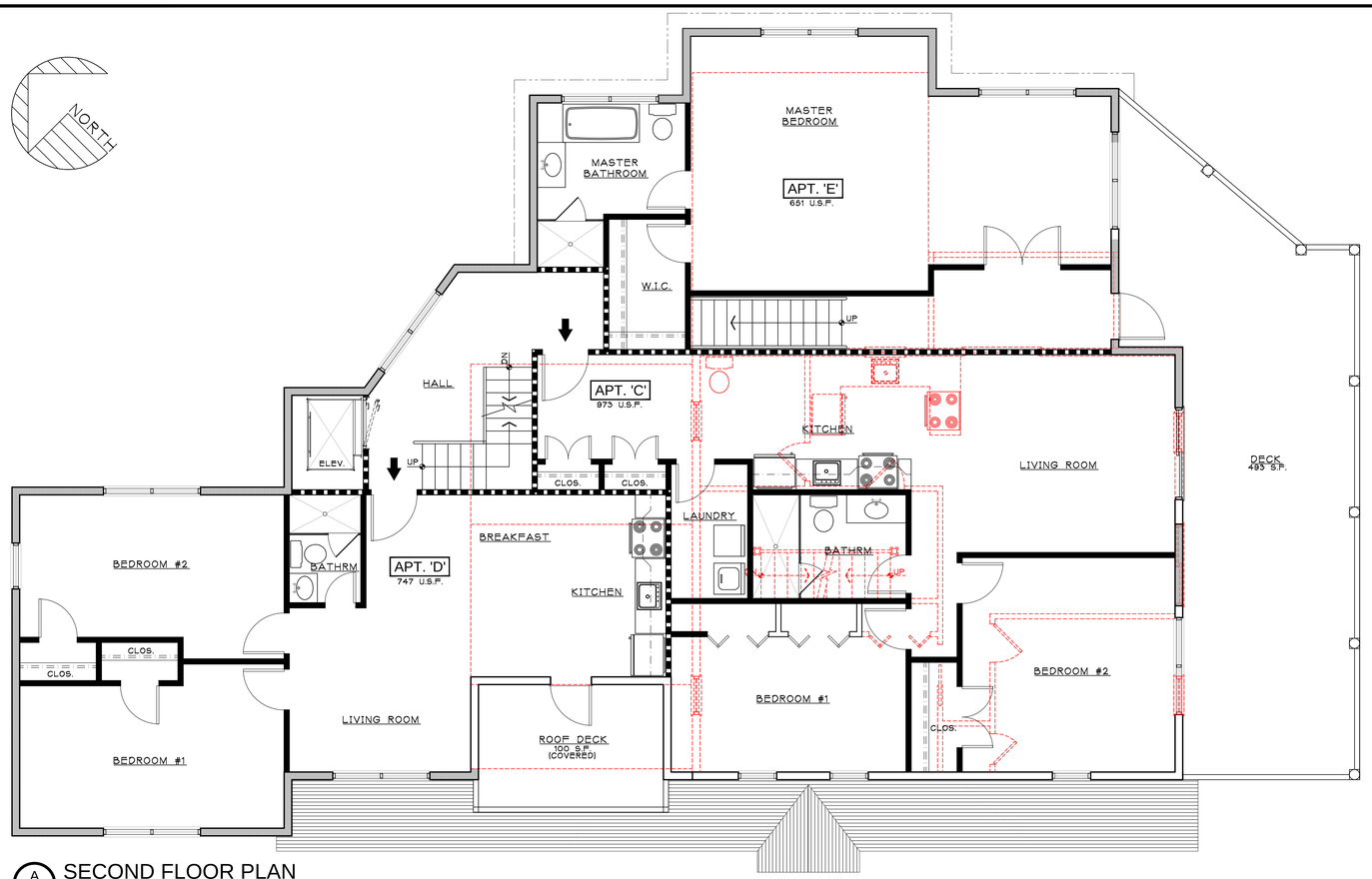
GROUND FLOOR PRELIMINARY SPACE ANALYSIS

Seal & Signature:

STATE OF NEW JERSEY SALVATORE LA FERLITA AI15228 REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-100
SHEET No.:	_ OF _



A A-101 SECOND FLOOR PLAN

2,586 S.F.

SCALE: 1/4" = 1'-0"

B A-101 FIRST FLOOR PLAN (RAISED)

2,468 S.F.

SCALE: 1/4" = 1'-0"

FOR ZONING REVIEW
ISSUED: 4/5/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

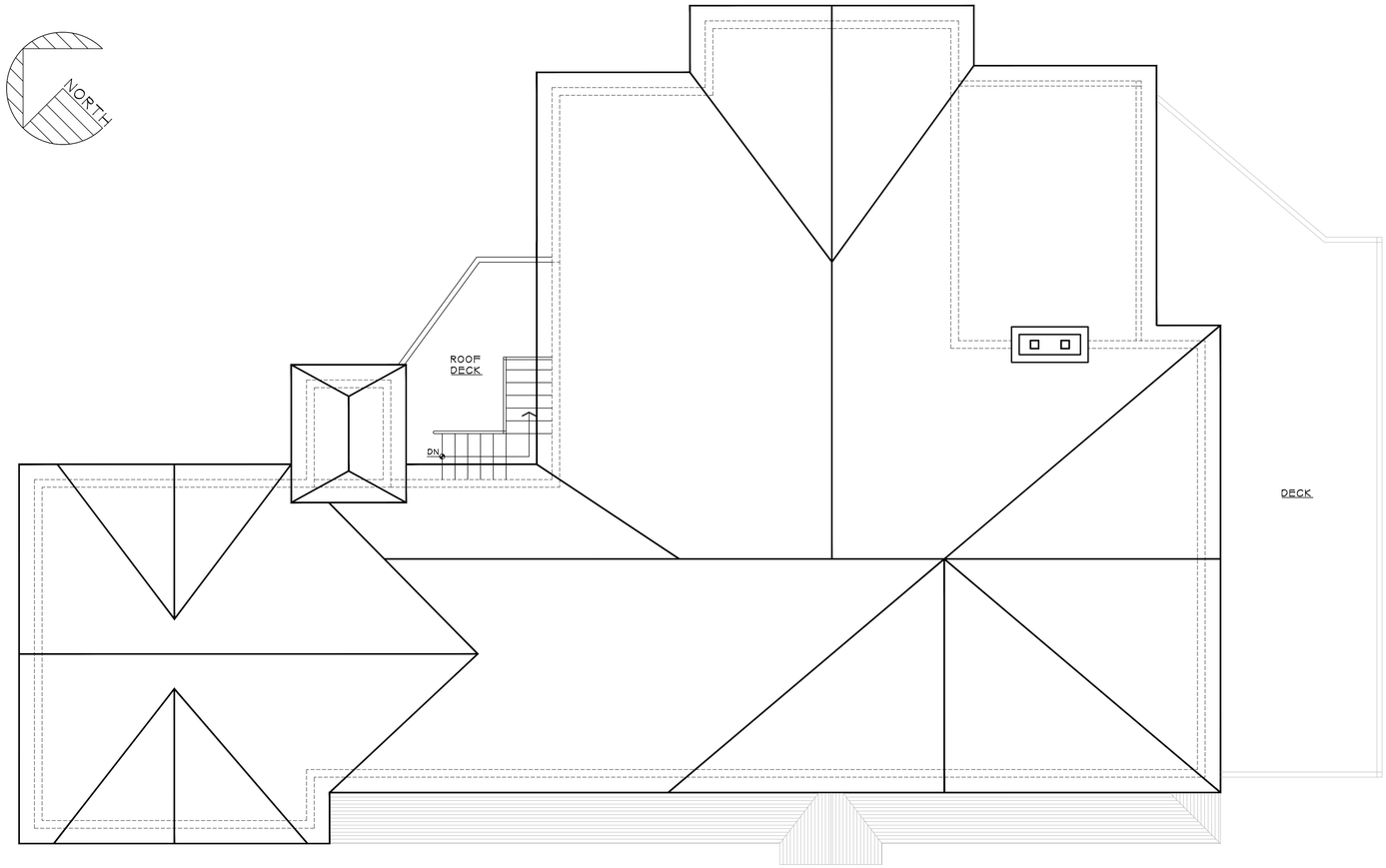
FIRST AND SECOND FLOOR
PRELIMINARY LAYOUT

Seal & Signature:

STATE OF NEW JERSEY
SALVATORE LA FERLITA
AI15228
REGISTERED ARCHITECT

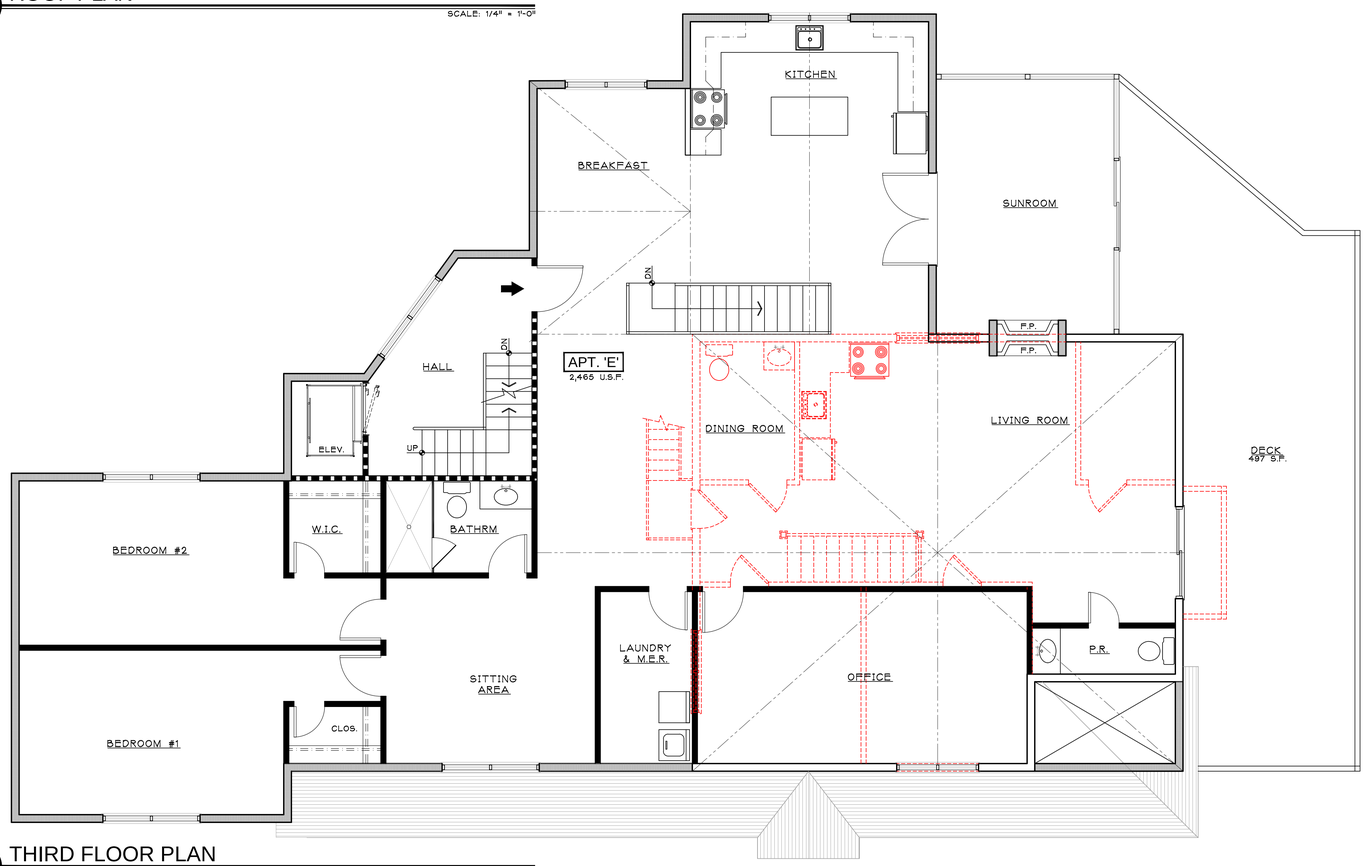
N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-101
SHEET No.:	_ OF _



A A-102 ROOF PLAN

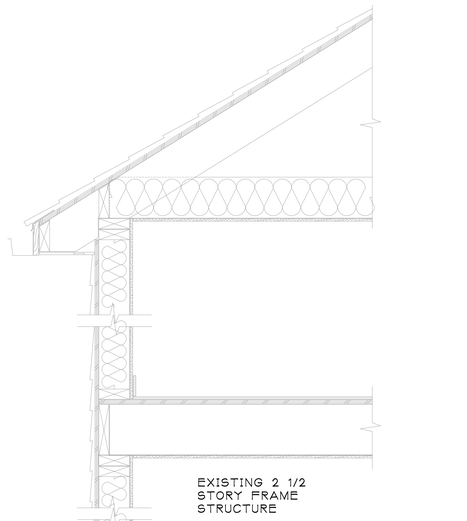
SCALE: 1/4" = 1'-0"

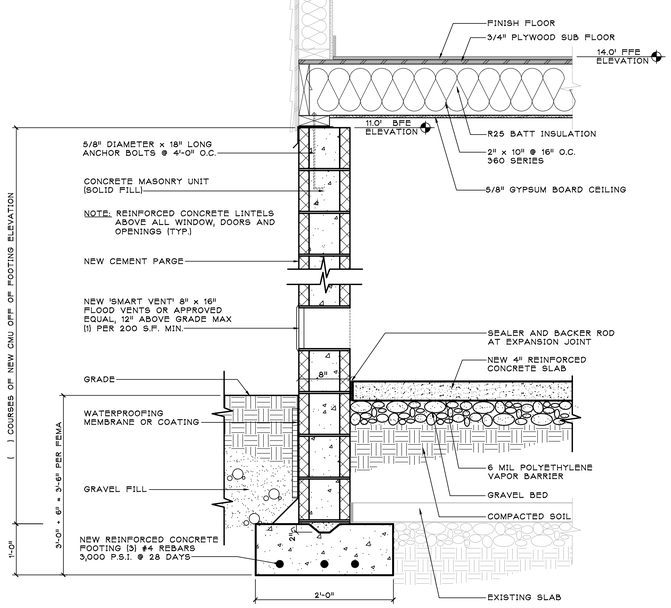


B A-102 THIRD FLOOR PLAN

2,634 S.F.

SCALE: 1/4" = 1'-0"





C A-102 WALL SECTION

SCALE: 1" = 1'-0"

FOR ZONING REVIEW
ISSUED: 4/5/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

THIRD FLOOR AND ROOF
PRELIMINARY SPACE ANALYSIS

Seal & Signature:

STATE OF NEW JERSEY
SALVATORE LA FERLITA
AI15228
REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-102
SHEET No.:	_ OF _



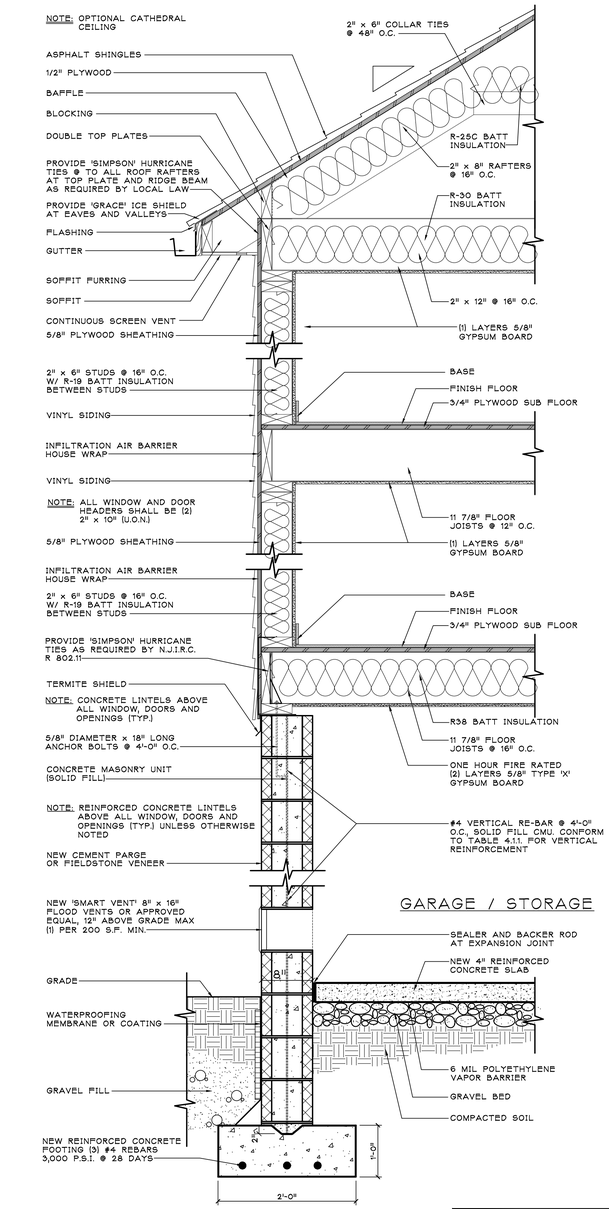
1 A-103 FRONT ELEVATION

SCALE: 1/4" = 1'-0"



2 A-103 REAR ELEVATION

SCALE: 1/4" = 1'-0"



A A-103 FOUNDATION / WALL SECTION

SCALE: 1" = 1'-0"

FOR ZONING REVIEW
ISSUED: 4/5/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

FRONT ELEVATION AND REAR ELEVATION

Seal & Signature:

STATE OF NEW JERSEY SALVATORE LaFERLITA AI15228 REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-103
SHEET No.:	_ OF _



1 A-104 RIGHT SIDE ELEVATION

SCALE: 1/4" = 1'-0"



2 A-104 LEFT SIDE ELEVATION

SCALE: 1/4" = 1'-0"

FOR ZONING REVIEW
ISSUED: 4/5/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management

115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

LEFT AND RIGHT
SIDE ELEVATIONS

Seal & Signature:

STATE OF NEW JERSEY
SALVATORE LA FERLITA
AI15228
REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-104
SHEET No.:	_ OF _

PRELIMINARY & FINAL MAJOR SITE PLAN
FOR
PROPOSED MULTI-FAMILY RESIDENCE

BLOCK 42, LOT 1
TAX MAP SHEET #11
60 BAY AVENUE
BOROUGH OF HIGHLANDS, MONMOUTH COUNTY, NEW JERSEY

PROPERTY OWNERS WITHIN 200' (2/21/2024)

Block/Lot	Current Owner	Mailing Address		
1319-41-8	75 BAY AVENUE SWANTON LLC	75 BAY AVENUE	HIGHLANDS NJ	07732
1319-41-9	DOUTY DOUGLAS & BAYARD	88 BAY AVENUE	HIGHLANDS NJ	07732
1319-41-10	AMERICAN LEGION	BAY AVE	HIGHLANDS NJ	07732
1319-42-2	SHARKEY MARY T	68 BAY AVENUE	HIGHLANDS NJ	07732
1319-42-13	WEST CARL & BUSICHIO KARIN	78 BAY AVENUE	HIGHLANDS NJ	07732
1319-42-14	TRI STATE REALTY LLC	494 SYCAMORE AVE.STE.100	SHREWSBURY NJ	07702
1319-39-1.01	BOROUGH OF HIGHLANDS	171 BAY AVE	HIGHLANDS NJ	07732
1319-39-1.02	BOROUGH OF HIGHLANDS	171 BAY AVE	HIGHLANDS NJ	07732
1319-42-3	PISANO BEVERLY	11 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-41-4	61 BAY AVENUE LLC	28 ATLANTIC AVENUE	OCEAN GROVE NJ	07756
1319-41-7	KEMPSON MATTHEW	30 SECOND STREET	HIGHLANDS NJ	07732
1319-42-9	KURDES LAWRENCE J & MARY-ALISON	8 KAY ST	HIGHLANDS NJ	07732
1319-41-2.01	BASKET EUGENE J	57 BAY AVENUE	HIGHLANDS NJ	07732
1319-43-3	REMIAS ROSE MARIE	22 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-42-12.01	RICCIARDONE BRIAN	163 FANNING STREET	STATEN ISLAND NY	10314
1319-42-15	SHARKEY HUGH & MARY	68 BAY AVENUE	HIGHLANDS NJ	07732
1319-43-1	LAURITANO VICTOR	18 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-43-2	FRANSON LOREEN	20 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-41-3	KU WALTER & EVA L	59 BAY AVENUE	HIGHLANDS NJ	07732
1319-42-4	HARTSGROVE TROY & JOY ANNE	13 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-42-5	STENSETH MARK D & ALECIA E	15 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-42-6	MAZZELLA KIM M	17 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-42-7	MENZA DAN & KAREN	19 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-41-5	SMITH MURRAY T.	226 PARK STREET	MONTCLAIR NJ	07042
1319-38.01-17.01	MONAHAN WILLIAM	55 A BAY AVE	HIGHLANDS NJ	07732
1319-38.01-17.02	DAVIS COREY MOLZON & JOHN A	55 BAY AVENUE	HIGHLANDS NJ	07732
1319-38.01-17.03	KEETON RANDALL E & DALE ANN	53 BAY AVENUE	HIGHLANDS NJ	07732
1319-38.01-17.04	FEGHHI ALICIA M	51 BAY AVENUE	HIGHLANDS NJ	07732
1319-38.01-17.05	ZHENG WU & OI SUM	27 SOUTH AVENUE	ATLANTIC HIGHLANDS NJ	07716
1319-41-6	KOEPPEL RICHARD J & JOSEPH W	P.O. BOX 810	NAVESINK NJ	07752

UTILITY CONTACTS

* If you are located within 200 feet of a State Highway, you **MUST** notify the NJ Department of Transportation:

NJ Dept. of Transportation
1035 Pkwy Avenue
PO Box 600
Trenton, NJ 08625

*If you are within 200 feet of a County owned road, you **MUST** notify the Monmouth County Planning Board:

Monmouth County Planning Board
Hall of Records Annex 2nd Floor
One East Main St.
PO Box 1255
Freehold, NJ 07728

JCP&L
300 Madison Avenue
PO Box 1911
Morristown, NJ 07960

NEW JERSEY AMERICAN WATER COMPANY
Attn: Construction Department
661 Shrewsbury Ave
Shrewsbury, NJ 07702

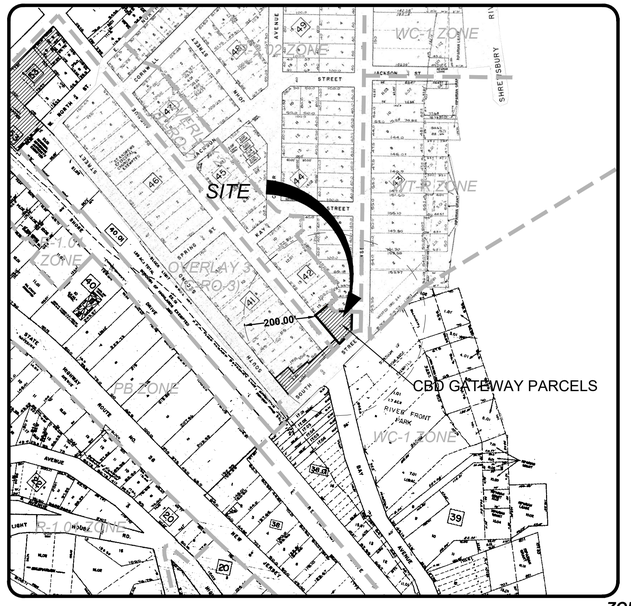
COMCAST COMMUNICATIONS OF MONMOUTH COUNTY
Ron Bertrand, Construction Foreman
403 South St.
Eatontown, NJ 07724

VERIZON COMMUNICATIONS
One Verizon Way
Basking Ridge, NJ 07920

TOWNSHIP OF MIDDLETOWN SEWERAGE AUTHORITY
Raymond J. Nierstedt, P.E., Executive Director
PO Box 205, 100 Beverly Way
Belford, NJ 07718

NEW JERSEY NATURAL GAS COMPANY
Attn: Joan Purcaro
PO Box 1464
1415 Wyckoff Road
Wall, NJ 07719

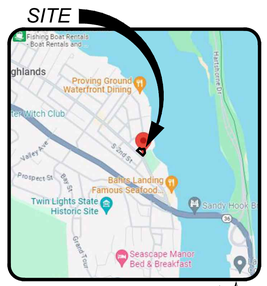
MONMOUTH COUNTY BAYSHORE OUTFALL AUTHORITY
Attn: Executive Director
200 Harbor Way
PO Box 184
Belford, NJ 07718



TAX MAP
200 0 200 400
Scale: 1"=200'



USGS MAP
2000 0 2000 4000
Scale: 1"=2000'



LOCATION MAP
1000 0 1000 2000
Scale: 1"=1000'



EFFECTIVE FLOOD INSURANCE RATE MAP
600 0 600 1200
Scale: 1"=600'

ZONE

CBD	***REDEVELOPMENT OVERLAY 2 ZONE (C-RO-2)***
C-RO-3	*REDEVELOPMENT OVERLAY 3 ZONE (C-RO-3)*
PB	*PROFESSIONAL BUSINESS*
R-1.01	*SINGLE FAMILY RESIDENTIAL*
R-2.02	*SINGLE FAMILY RESIDENTIAL*
R-4	*ONE-FAMILY RESIDENTIAL*
WC-1	*WATERFRONT COMMERCIAL*
WT-R	*WATERFRONT TRANSITION RESIDENTIAL*

LAND USE BOARD APPROVAL

APPROVED BY THE BOROUGH OF HIGHLANDS LAND USE BOARD

BOARD CHAIRPERSON DATE

BOARD SECRETARY DATE

BOARD ENGINEER DATE

INDEX OF SHEETS:

SHEET #:	SHEET TITLE:	INITIAL RELEASE:	REV. DATE:
C100	TITLE SHEET	2/5/24	04/09/24
C101	PLAN NOTES	2/5/24	04/09/24
C200	EXISTING CONDITIONS & SITE PREPARATION PLAN	2/5/24	04/09/24
C300	SITE LAYOUT PLAN	2/5/24	04/09/24
C400	GRADING, DRAINAGE & UTILITY PLAN	2/5/24	04/09/24
C600	LANDSCAPE PLAN	2/5/24	04/09/24
C601	LIGHTING PLAN	2/5/24	04/09/24
C602	LANDSCAPE & LIGHTING NOTES & DETAILS	2/5/24	04/09/24
C800	CONSTRUCTION DETAILS	2/5/24	04/09/24
C900	SOIL EROSION & SEDIMENT CONTROL PLAN	2/5/24	04/09/24
C901	SESC NOTES	2/5/24	04/09/24
C902	SESC DETAILS	2/5/24	04/09/24

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:
BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL.....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

TITLE SHEET

SHEET NO.

C100

File: X:\Jobs\2237 — 60 Bay Ave Highlands LLC\23-2237-01 — 60 Bay Avenue_Highlands, NJ\2322370100\Cad\Dwg\01-Title.dwg, —> C100 Title Sheet
Copyright 2004, InSite Engineering, LLC. All Rights Reserved.

GENERAL SLOPE PLANTING

A. PLANTING PREPARATION
1. SLOPE TEXTURING
   a. CUT SLOPES: THESE SURFACES SHALL BE ROUGHENED IN A HORIZONTAL DIRECTION FOLLOWING THE CONTOUR OF THE SLOPE. THE ROUGHENED TEXTURE SHALL BE MADE BY HAND RAKING OR SIMILAR MECHANICAL MEANS.
   b. FILL SLOPES: THESE SURFACES SHALL BE COMPACTED AND FINISHED AND ALSO ROUGHENED IN A HORIZONTAL DIRECTION FOLLOWING THE CONTOUR OF THE SLOPE. THE ROUGHENED TEXTURE SHALL BE MADE BY HAND RAKING OR SIMILAR MECHANICAL MEANS.
2. WEED ERADICATION
   a. MANUALLY REMOVE EXISTING VEGETATION WHERE NOTED ON PLAN AND DISPOSE OFFSITE.
   b. FERTILIZE ALL PLANTING AREAS BASED UPON SOIL ANALYSIS. BEGIN WATERING PROCESS TO ACTIVATE FERTILIZER AND ADDITIVE CHEMICALS.
   c. WATER ALL PLANTING AREAS THOROUGHLY FOR A PERIOD OF TWO (2) CONSECUTIVE WEEKS. THE UNDERSIGNED SHALL APPROVE SPECIFIC WATERING DURATION AND FREQUENCY DESIGNED TO GERMINATE ALL RESIDUAL WEED SEEDS.
   d. IF PERENNIAL WEEDS APPEAR, DISCONTINUE WATERING PROCESS FOR TWO (2) DAYS, THEN APPLY RECOMMENDED HERBICIDE BY LICENSED APPLICATOR IF ANNUAL WEEDS APPEAR, USE STRAIGHT CONTACT HERBICIDE AS PER THE LICENSED APPLICATOR'S RECOMMENDATIONS. NO WATER SHALL BE APPLIED FOR A MINIMUM OF FOUR (4) DAYS FOLLOWING APPLICATION CONTACT WEED KILLER.
   e. ALLOW SUFFICIENT PERIOD OF TIME TO INSURE THAT ALL WEEDS ARE DEAD.
   f. WATER ALL PLANTING AREAS THOROUGHLY FOR A PERIOD OF THREE (3) WEEKS. A SHORTER WATERING PERIOD MAY BE PERMISSIBLE AT THE DISCRETION OF THE UNDERSIGNED AND/OR THE PEST CONTROL ADVISOR. DISCONTINUE WATERING FOR ONE (1) DAY PRIOR TO THE SECOND APPLICATION OF THE HERBICIDE. RE-APPLY A STRAIGHT CONTACT WEED KILLER, AS PER THE PEST CONTROL ADVISOR'S RECOMMENDATIONS. FOR EFFECTIVE WEED ERADICATION, ALLOW A MINIMUM OF FOUR (4) DAYS WITHOUT IRRIGATION RO
   g. REMOVE ALL DESICCATED WEEDS FROM SLOPES.

B. PLANTING
PLANT TREES AND SHRUBS AS INDICATED ON PLANTING PLAN AND AS DETAILED ON PLANTING DETAIL SHEET. SUBSTITUTIONS OF PLANTS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE UNDERSIGNED. INSTALL ALL CONTAINER GROWN PLANTS ACCORDING TO TREE AND SHRUB PLANTING AND STAKING DETAIL. THOROUGHLY MIX THE SPECIFIED MATERIALS FOUND IN THE SOIL ANALYSIS AND THOSE SPECIFIED IN THE PLANTING DETAIL SHEET WITH THE SITE SOIL PRIOR TO BACKFILLING OF PLANTING PITS.

GENERAL NOTES

1. **SUBJECT PROPERTY**
TAX MAP 11: BLOCK 42, LOTS 1, BOROUGH HIGHLANDS, MONMOUTH COUNTY, NEW JERSEY

2. **PURPOSE OF THIS PLAN SET**
THIS PLAN SET HAS BEEN PREPARED FOR THE PURPOSE OF PRELIMINARY/FINAL SITE PLAN MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THE PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL FINAL APPROVALS HAVE BEEN OBTAINED AND ALL THE CONDITIONS OF THE APPROVALS HAVE BEEN SATISFIED.

3. **SURVEY DATA**
SURVEY INFORMATION CONTAINED HEREON IS BASED ON A FIELD SURVEY PERFORMED BY INSITE SURVEYING, LLC, ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY", LAST REVISED 12/20/23. ALL ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1988 (NAVD88). SEE SURVEY FOR DEED REFERENCES.

4. **BASE FLOOD ELEVATION**
ACCORDING TO FEMA'S EFFECTIVE FIRM ENTITLED "FIRM - FLOOD INSURANCE RATE MAP (FIRM), MONMOUTH COUNTY, NEW JERSEY (ALL JURISDICTIONS)," COMMUNITY PANEL #34025C0008H, DATED 6/15/22, THE SITE IS LOCATED IN ZONE AE WITH A BASE FLOOD ELEVATION OF 11. ACCORDING TO FEMA'S CURRENT PRELIMINARY FIRM ENTITLED,"PRELIMINARY FLOOD INSURANCE RATE MAP (FIRM)", COMMUNITY PANEL #34025C0008H, DATED 6/15/22, THE SITE IS LOCATED IN ZONE AE WITH A BASE FLOOD ELEVATION OF 11. BOTH FEMA MAPS REFERENCE THE NAVD88 VERTICAL DATUM.

5. **ARCHITECTURAL INFORMATION**
ARCHITECTURAL INFORMATION CONTAINED HEREON IS BASED ON PLANS PREPARED BY SALVATORE LA FERLITA, R.A. ARCHITECTURAL SERVICE CONSTRUCTION MANAGEMENT.

6. **UNDERGROUND UTILITIES NOTIFICATION**
FOR ANY EXCAVATION IN NEW JERSEY, THE CONTRACTOR MUST CALL NEW JERSEY ONE CALL SERVICE AT 1-800-272-1000 FOR A MARKOUT REQUEST NO LESS THAN THREE (3) WORKING DAYS PRIOR TO STARTING ANY EXCAVATION.

7. **VERIFICATION OF UTILITIES**
THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES (INCLUDING BUT NOT LIMITED TO SANITARY SEWERS, STORM SEWERS, POTABLE WATER LINES AND APPURTENANCES, NATURAL GAS LINES, ELECTRIC, TELEPHONE AND CATV LINES AND UNDERGROUND STORAGE TANKS) THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF THE WORK ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTS CONCERNING THE LOCATION AND ELEVATION OF THESE UTILITIES OR OTHER CONSTRUCTION OBSTACLES IMPACTED BY NEW CONSTRUCTION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.

8. **SPECIFICATIONS**
UNLESS OTHERWISE NOTED HEREON, ALL SITE WORK SHALL BE CARRIED OUT IN CONFORMANCE WITH THE PROVISIONS OF THE "NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.

9. **CONSTRUCTION REQUIREMENTS**
   a. ALL CONSTRUCTION AND DEMOLITION SHALL CONFORM WITH ANY APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY WAYS, MEANS AND METHODS OF CONSTRUCTION, AND SHALL CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES REMAIN THE OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
   b. THE CONTRACTOR SHALL PERFORM ALL WORK IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
   c. THE CONTRACTOR SHALL PROVIDE NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY WITHIN THE PROJECT FOR THE PROTECTION AND THE SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION.
   d. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE CLEANUP WITHIN THE CONSTRUCTION AREA AND SHALL DISPOSE OF DEBRIS IN ACCORDANCE WITH ANY LOCAL, STATE OR FEDERAL REGULATIONS.
   e. ANY DAMAGE TO PUBLIC STREETS, CURBS, SIDEWALKS AND UTILITIES AS A RESULT OF SITE CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR.

10. **CONSTRUCTION PERMITS/INSPECTIONS**
CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS INCLUDING ROAD OPENING PERMITS, PREPARATION OF TRAFFIC CONTROL PLANS, INSTALLATION AND MAINTENANCE OF TRAFFIC CONTROL AND COORDINATION OF ALL INSPECTIONS REQUIRED BY THE BOROUGH OF HIGHLANDS, COUNTY OF MONMOUTH, TOWNSHIP OF MIDDLETOWN SA WMP SEWERAGE AUTHORITY, AND ANY OTHER APPLICABLE AGENCY HAVING JURISDICTION OVER THE PROJECT.

11. **ADA COMPLIANCE**
   a. ALL SITE IMPROVEMENTS LOCATED ON THE PRIVATE PROPERTY SHALL BE IN COMPLIANCE WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, STANDARDS FOR PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES: TITLE III.
   b. ALL SITE IMPROVEMENTS LOCATED WITHIN PUBLIC RIGHT-OF-WAY SHALL BE IN COMPLIANCE WITH THE CURRENT PUBLIC RIGHTS-OF-WAY ACCESS ADVISORY COMMITTEE GUIDELINES.

12. **OVERALL CONSTRUCTION DOCUMENTS**
THIS PLAN SET CONSISTS OF MULTIPLE SHEETS. INDIVIDUAL PAGES SHALL NOT BE UTILIZED FOR CONSTRUCTION ON THEIR OWN AS NOTES AND INFORMATION PROVIDED ON OTHER SHEETS MAY IMPACT WORK REQUIREMENTS. CONTRACTOR SHALL REVIEW AND UTILIZE ENTIRE PLAN SET FOR CONSTRUCTION.

13. **FRESHWATER/COASTAL WETLANDS AND STREAMS**
BASED UPON REVIEW OF PUBLISHED MAPPING, NO FRESHWATER/COASTAL WETLANDS OR STREAMS EXIST ON-SITE.

14. **SOIL REMOVAL**
ANY SOIL REMOVAL FROM THE SITE SHALL BE IN ACCORDANCE WITH BOROUGH CODE.

15. **SITE MAINTENANCE**
REGULAR MAINTENANCE OF THE PROPERTY (INCLUDING BUT NOT LIMITED TO: SNOW PLOWING, PAVEMENT / PARKING LOT REPAIRS, COMMON AREAS, REFUSE AREA, LANDSCAPING AND LIGHTING) SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

16. **IMPORTED FILL**
ANY IMPORTED FILL SHALL MEET THE DEFINITION OF CLEAN FILL, PURSUANT TO THE TECHNICAL REQUIREMENTS OF SITE REMEDIATION (AS FOUND AT NJAC 7:26E-1.8).

17. **UNDERGROUND TANKS**
ANY SEPTIC SYSTEMS OR UNDERGROUND STORAGE TANKS FOUND ONSITE WILL BE DECOMMISSIONED AND/OR REMOVED IN ACCORDANCE WITH BOROUGH, COUNTY AND/OR NJDEP REQUIREMENTS.

GENERAL LANDSCAPING NOTES

A. CLEAN-UP
AFTER ALL INSTALLATION OPERATIONS HAVE BEEN COMPLETED, REMOVE ALL RUBBISH, EXCESS SOIL, EMPTY PLANT CONTAINERS AND TRASH FROM THE SITE DAILY. ALL SCARS, RUTS AND OTHER MARKS IN THE AREA CAUSED BY THIS WORK SHALL BE REPAIRED AND THE GROUND LEFT IN A NEAT, ORDERLY CONDITION. LEAVE SITE IN BROOM-CLEAN CONDITION AT THE END OF EACH DAY.

B. MAINTENANCE
1. DURING INSTALLATION, THE CONTRACTOR SHALL MAINTAIN A SUFFICIENT NUMBER OF LABORERS AND ADEQUATE EQUIPMENT TO PERFORM THE WORK HEREIN SPECIFIED. PLANT MAINTENANCE SHALL CONSIST OF WATERING, WEEDING, CARING OF PLANTS, INCLUDING GROUND COVERS, SHRUBS, VINES AND TREES, EDGING AND MOWING LAWNS, FERTILIZING, CONTROL OF PESTS AND DISEASES, AND MAINTAINING WALKS FREE OF DEBRIS AND DIRT. UPON COMPLETION OF EACH AREA, THE CONTRACTOR, THE UNDERSIGNED, THE OWNER, ALONG WITH THE OWNER'S MAINTENANCE REPRESENTATIVE SHALL CONDUCT AN INSPECTION OF COMPLETED AREA. AT THIS TIME, A LIST OF CORRECTIONS, IF ANY, SHALL BE MADE. ALL CORRECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. AFTER ALL WORK HAS BEEN COMPLETED, INSPECTED AND ACCEPTED, ALL AREAS WILL BE MAINTAINED FOR A PERIOD OF NINETY (90) CALENDAR DAYS OR AS LONG AS IS NECESSARY TO ESTABLISH THRIVING TREES, SHRUBS, TURF AND GROUND COVER WITHOUT BARE SPOTS.
3. KEEP ALL AREAS WEED-FREE, ADEQUATELY WATERED AND NEATLY CULTIVATED FOR THE NINETY (90) PERIOD. REMOVE ALL DEBRIS FROM SITE AND KEEP THE ENTIRE SITE BROOM-CLEAN. TURF AREAS ARE TO BE MOWED WEEKLY.
4. RE-SEED ALL BARE SPOTS IN TURF AREAS AT TWO (2) WEEK INTERVALS AND MAINTAIN UNTIL AN EVEN STAND OF TURF IS OBTAINED. RE-SEED ALL SLOPE AREAS THAT FAIL TO GERMINATE EVENLY. REPAIR ALL ERODED SURFACES AT NO COST TO THE OWNER.
5. DAMAGE TO ANY PLANTED AREA SHALL BE REPAIRED IMMEDIATELY. DEPRESSIONS CAUSED BY VEHICLES OR FOOT TRAFFIC SHALL BE FILLED WITH TOPSOIL, LEVELED AND REPLANTED.
6. THE PROJECT SHALL BE SO CARED FOR THAT A NEAT, CLEAN CONDITION WILL BE PRESENTED AT ALL TIMES TO THE SATISFACTION OF THE OWNER AND THE UNDERSIGNED. THE LANDSCAPE CONTRACTOR SHALL BE EXPECTED TO MAKE A MINIMUM OF ONE (1) VISIT PER WEEK FOR MAINTENANCE PURPOSES DURING THE MAINTENANCE PERIOD (90 DAYS).
7. AT THE END OF THE MAINTENANCE PERIOD, ALL AREAS THAT HAVE BEEN PLANTED SHALL BE FERTILIZED WITH COMMERCIAL FERTILIZER. ANALYSIS AND RATE OF APPLICATION SHALL BE PER THE SOILS REPORT.
8. THE CONTRACTOR SHALL REQUEST A FINAL SITE VISIT SEVEN (7) DAYS PRIOR TO THE END OF THE MAINTENANCE PERIOD (90 DAYS). THIS REQUEST SHALL BE WRITTEN AND DIRECTED TO THE OWNER AND THE UNDERSIGNED. UPON WRITTEN ACCEPTANCE OF THE PROJECT BY THE OWNER AND THE UNDERSIGNED, THE CONTRACTOR SHALL BE RELIEVED OF ANY FURTHER MAINTENANCE.

C. GUARANTEE
ALL TURF, GROUND COVER AND SHRUBS SHALL BE GUARANTEED TO LIVE AND GROW THROUGH THE FIRST GROWING SEASON. TREES SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR. THE CONTRACTOR, AT NO COST TO THE OWNER, SHALL REPLACE ANY MATERIAL THAT FAILS TO GROW THROUGH THE SPECIFIED MAINTENANCE AND GUARANTEED.

D. INSPECTION DURING CONSTRUCTION
1. OBSERVATION VISITS SPECIFIED HEREIN SHALL BE MADE BY THE UNDERSIGNED OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL REQUEST OBSERVATION AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF THE TIME THAT THE OBSERVATION IS REQUESTED. A
2. OBSERVATION VISITS ARE SUGGESTED FOR THE FOLLOWING PARTS OF THE WORK:
   a. UPON COMPLETION OF GRADING AND SOIL CONDITIONING PRIOR TO PLANTING.
   b. WHEN TREES ARE SPOTTED FOR PLANTING, BUT PRIOR TO WHEN PLANTING HOLES ARE EXCAVATED.
   c. WRITTEN ACCEPTANCE OF THE PROJECT TO RELEASE THE CONTRACTOR FROM FURTHER MAINTENANCE SHALL OCCUR AFTER FINAL OBSERVATION WITH THE OWNER OR HIS REPRESENTATIVE AT THE END OF THE MAINTENANCE PERIOD.

E. VERIFICATION OF DIMENSIONS
ALL SCALED DIMENSIONS ARE APPROXIMATE. PRIOR TO PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND QUANTITIES, AND SHALL IMMEDIATELY NOTIFY THE UNDERSIGNED OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND ACTUAL CONDITIONS. NO WORK SHALL BE DONE IN ANY AREA WHERE THERE IS SUCH A DISCREPANCY UNTIL APPROVAL FOR SAME HAS BEEN GIVEN BY THE UNDERSIGNED.

F. UTILITIES
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY CONSTRUCTION, SO THAT PROPER PRECAUTIONS MAY BE TAKEN NOT TO DAMAGE SUCH LINES AND PLANT LOCATIONS. PROMPTLY NOTIFY THE UNDERSIGNED TO ARRANGE FOR RELOCATIONS OF UTILITIES OR PLANTING LOCATIONS. FAILURE TO FOLLOW THIS PROCEDURE PLACES UPON THE CONTRACTOR THE RESPONSIBILITY FOR, AT HIS OWN EXPENSE, MAKING ANY AND ALL REPAIRS FOR DAMAGES RESULTING FROM HIS WORK.

G. EXISTING TREES
CONTRACTOR IS TO TAKE CARE IN PRESERVING ANY EXISTING TREES GREATER THAN OR EQUAL TO 6" ON THE SITE. DAMAGE OR LOSS OF THESE TREES WILL RESULT IN REPLACEMENT OF EQUAL SIZE BY THE LANDSCAPE CONTRACTOR.

H. INSTALLATION
THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FINAL GRADING, SEEDING, SOIL AMENDMENTS, ETC., AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION.

I. PLANTING SPECIFICATIONS
ALL TREE AND SHRUB MATERIAL SPECIFIED MUST MEET STANDARD INDUSTRY SPECIFICATIONS FOR THE CONTAINER SIZE INDICATED. DOWNSIZING OR SUBSTITUTION OF PLANT MATERIAL WITHOUT PRIOR APPROVAL OF UNDERSIGNED WILL NOT BE ALLOWED.

J. FINAL GRADING AND PLANTING
ALL LANDSCAPE AREAS SHALL BE GRADED TO A SMOOTH EVEN SURFACE PRIOR TO ANY PLANT INSTALLATION. ALL PLANT MATERIALS SHALL BE INSTALLED USING GOOD HORTICULTURAL PRACTICES IN ACCORDANCE WITH THE PLANS AND DETAILS.

K. TREE PLANTINGS
1. WHENEVER FEASIBLE, TREES SHOULD BE PLANTED A MINIMUM OF TEN (10) FEET FROM ALL UNDERGROUND UTILITIES, STREETLIGHTS, HYDRANTS, AND OUT OF DRAINAGE FLOW LINES. SHOULD THIS NOT BE POSSIBLE, CONTACT THE UNDERSIGNED FOR DECISION ON PLACEMENT.
2. ALL TREES IN TURF AREAS SHALL HAVE 12" MIN. CLR. CIRCUMFERENCE AROUND THE TRUNK BASE. PROVIDE 3" MIN. THK. MULCH AT BASE OF TRUNK.

L. GROUNDCOVER
GROUNDCOVER TYPE SHOWN SHALL BE PLANTED IN ALL SHRUB AREAS AS SPECIFIED ON PLANS. GROUNDCOVER SHALL BE PLANTED AT 18" ON-CENTER UNIFORM TRIANGULAR SPACING, AND SHALL BE CONTINUOUS UNDER ALL TREE AND SHRUB MASSES AS SHOWN ON PLAN.

M. TURF
ALL TURF AREAS ARE TO BE SODDED WITH AN APPROVED GRASS MIXTURE.

*SEE LANDSCAPING NOTES AND DETAIL SHEET FOR ADDITIONAL PLANTING NOTES.

GENERAL SITE PLANTING

THE OWNER SHALL HAVE A SOIL ANALYSIS MADE AFTER COMPLETION OF THE ROUGH GRADING. THE CONTRACTOR SHALL INCORPORATE ALL SOIL AMENDMENTS AND FERTILIZERS DESCRIBED HEREIN. THE SOIL PREPARATION SPECIFIED BELOW SHALL BE ADJUSTED ACCORDING TO THE ANALYSIS, FOLLOWING APPROVAL FROM THE UNDERSIGNED.

A. WEED CONTROL FOR LAWN, SHRUB & GROUND COVER AREAS (EXCEPT SLOPES)
1. REMOVE ALL EXISTING WEEDS FROM SURFACE AND DISPOSE OFFSITE.
2. IRRIGATION IS TO BE INSTALLED WHERE NOTED ON PLAN ACCORDING TO SHOP DRAWINGS.
3. FERTILIZE ALL SHRUB/GROUND COVER AREAS. APPLY 10LBS. OF 16-20-0 COMMERCIAL FERTILIZER PER 1,000 SQ. FT. OR AS DIRECTED BY SOILS REPORT.
4. WATER ALL SHRUB/GROUND COVER AREAS FOR THREE (3) WEEKS TO GERMINATE WEED SEEDS. APPLY WATER AT LOW RATE TO AVOID EROSION.
5. LICENSED APPLICATOR SHALL APPLY SYSTEMIC WEED KILLER TO ALL PLANTING AREAS PER MANUFACTURER'S SPECIFICATIONS.

B. TOPSOIL PRESERVATION
TOPSOIL MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGARDED SURFACES. AT LEAST THREE (3) INCHES OF EVEN COVER SHALL BE PROVIDED TO ALL DISTRIBUTED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING. IF EXCESS TOPSOIL REMAINS, THE THICKNESS SHALL BE INCREASED. IF ADDITIONAL IS REQUIRED, THE DEVELOPER SHALL PROVIDE IT. REMOVAL OF EXCESS TOPSOIL SHALL ONLY BE PERMITTED IN ACCORDANCE WITH A PLAN APPROVED BY THE MUNICIPAL AGENCY.

C. SOIL PREPARATION & FINAL GRADING
1. ALL STUMPS AND OTHER TREE PARTS, LITTER, BRUSH, WEEDS, EXCESS OR SCRAP BUILDING MATERIALS, OR OTHER DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF. NO TREE STUMPS, PORTIONS OF TREE TRUNKS OR LIMBS SHALL BE BURIED ANYWHERE IN THE DEVELOPMENT. ALL DEAD OR DYING TREES, STANDING OR FALLEN, SHALL BE REMOVED FROM THE SITE.
2. ROUGH GRADE: SITE TO BE RECEIVED BY LANDSCAPE CONTRACTOR, TO WITHIN 1/10 FOOT PLUS OR MINUS, BY OWNER BASED UPON GRADING PLAN.
3. FINAL GRADE: FINAL GRADE TO CONSIST OF GRADING, RAKING AND HAND WORK NECESSARY TO ACHIEVE DESIRED CONTOUR AND FLOW LINE PATTERNS RESULTING IN EVENLY FINISHED SURFACES FREE OF DEBRIS AND LITTER.
4. SPREAD OVER ALL LAWN, SHRUB AND GROUND COVER AREAS, AMENDMENTS AND FERTILIZER PRESCRIBED IN SOILS REPORT. THOROUGHLY MIX INTO SOIL TO DEPTH OF 6" OR MORE AND FINE GRADE. CONTRACTOR TO IMPORT SOIL NECESSARY TO ATTAIN DESIGN GRADES AND BERMS. ALL IMPORTED SOIL SHALL BE FREE OF WEEDS AND DEBRIS AND HAVE BALANCED PH., SMOOTH AND EVEN GRADING FOR PROPER DRAINAGE. FINAL GRADE SHALL BE 1" BELOW WALK/TOP OF CURB. REMOVE FROM THE SITE ALL STONES OVER 2" IN SIZE.

D. PLANTING
PLANT TREES, SHRUBS AND GROUND COVER AS CALLED FOR WHERE INDICATED ON PLANTING PLAN AND AS DETAILED ON PLANTING DETAIL SHEET.
1. GROUND COVER - FLATS AND/OR CUTTINGS:
   ALL PLANT MATERIALS SPECIFIED AS PLUGS OR FLAT STOCK ON PLANTING PLAN SHALL REMAIN IN THE FLATS UNTIL TIME OF TRANSPLANTING. THE FLAT SOIL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT SOIL DOES NOT FALL APART WHEN LIFTING PLANT FROM FLAT. GROUND COVER PLANTS SHALL NOT BE ALLOWED TO DRY OUT BEFORE OR DURING PLANTING. ROOTS SHALL NOT BE EXPOSED TO THE AIR EXCEPT WHILE ACTUALLY BEING PLANTED. WILTED PLANTS WILL NOT BE ACCEPTED. AT THE TIME OF PLANTING, THE SOIL AROUND EACH PLANT SHALL BE FIRMED SUFFICIENTLY TO FORCE OUT AIR POCKETS. PLANTS TO BE PLANTED IN TRIANGULAR SPACING AS SPECIFIED O.C. (ON CENTER). ALL CUTTINGS SHALL BE MINIMUM OF 6" LONG. WATER IMMEDIATELY AFTER EACH PLANTING UNTIL ONE INCH OF WATER PENETRATION IS OBTAINED. CARE SHALL BE EXERCISED AT ALL TIMES TO PROTECT THE PLANTS AFTER PLANTING. ANY DAMAGE TO PLANTS BY TRAMPLING OR OTHER OPERATIONS OF THIS CONTRACT SHALL BE REPAIRED IMMEDIATELY.
2. SHRUBS:
   PLANT ALL CONTAINER GROWN PLANTS IN PLANTING PITS AS DIRECTED ON TREE AND SHRUB PLANTING AND STAKING DETAIL. THOROUGHLY MIX BACKFILL ACCORDING TO TREE AND SHRUB PLANTING AND STAKING DETAIL. CONTRACTOR SHALL CONSTRUCT BASINS AROUND ALL TREES; BASINS SHALL NOT EXCEED TOP OF ROOT BALL CROWN.
3. TREES:
   ALL TREES SHALL HAVE A CALIPER OF TWO AND ONE-HALF (2 ½) INCHES OR SPECIFIED CALIPER IN PLANTING SCHEDULE AND THEY SHALL BE NURSERY GROWN, OF SUBSTANTIALLY UNIFORM SIZE AND SHAPE, AND HAVE STRAIGHT TRUNKS. TREES SHALL BE PROPERLY PLANTED AND STAKED ACCORDING TO TREE AND SHRUB PLANTING AND STAKING/ EVERGREEN PLANTING & STAKING DETAIL AND PROVISION MADE BY THE APPLICANT FOR REGULAR WATERING AND MAINTENANCE UNTIL THEY ARE ESTABLISHED. THE APPLICANT SHALL REPLACE DEAD OR DYING TREES DURING THE NEXT PLANTING SEASON.
4. TOP DRESSING:
   TOP DRESS ALL GROUND COVER AND SHRUB AREAS WITH 2" THICK LAYER OF OGC (ORGANIC GROUND COVER) AS SPECIFIED ON PLANTING PLAN.

E. SOD
1. AREAS SHALL HAVE A SMOOTH CONTINUAL GRADE BETWEEN EXISTING OF FIXED CONTROLS, SUCH AS: WALKS, CURBS, CATCH BASINS. ROLL, SCARIFY, RAKE AND LEVEL AS NECESSARY TO OBTAIN TRUE, EVEN SOIL STRUCTURE.
2. APPLY FERTILIZERS AS SPECIFIED BY SOIL ANALYSIS TO DEPTH OF 6".
3. SOD SHALL BE INSTALLED THE SAME DAY AS IT IS DELIVERED. SOD SHALL NOT BE LEFT ON PALLETS IN THE HOT SUN. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO SOD NOT INSTALLED ON DAY OF DELIVERY.
4. UNROLL SOD CAREFULLY AND PLACE IN STAGGERED PATTERN OF STRIPS. SOD SHALL BE INSTALLED AGAINST ADJACENT STRIPS TO ELIMINATE JOINTS AND EDGES.
5. FOLLOWING INSTALLATION, SOD SHALL BE IRRIGATED THOROUGHLY TO PROVIDE MOISTURE PENETRATION TO AT LEAST 6" INTO PREPARED SOIL.
6. ALL SOD SHALL BE HANDLED AND LAID IN A HIGH STANDARD OF WORKMANSHIP MANNER. ALL ENDS, JOINTS, AND CUTS SHALL FIT TIGHTLY SO THAT THERE ARE NO VOIDS. THE FINAL APPEARANCE SHALL BE ONE OF A CONTINUOUS LAWN. SECTIONS OF SOD LESS THAN 18" LONG OR 9" WIDE SHALL NOT BE USED.
7. NO SOD AREA WILL BE ACCEPTED UNTIL APPROVED BY AUTHORITY HAVING JURISDICTION OR THE UNDERSIGNED, AS REQUIRED.

GRADING NOTES

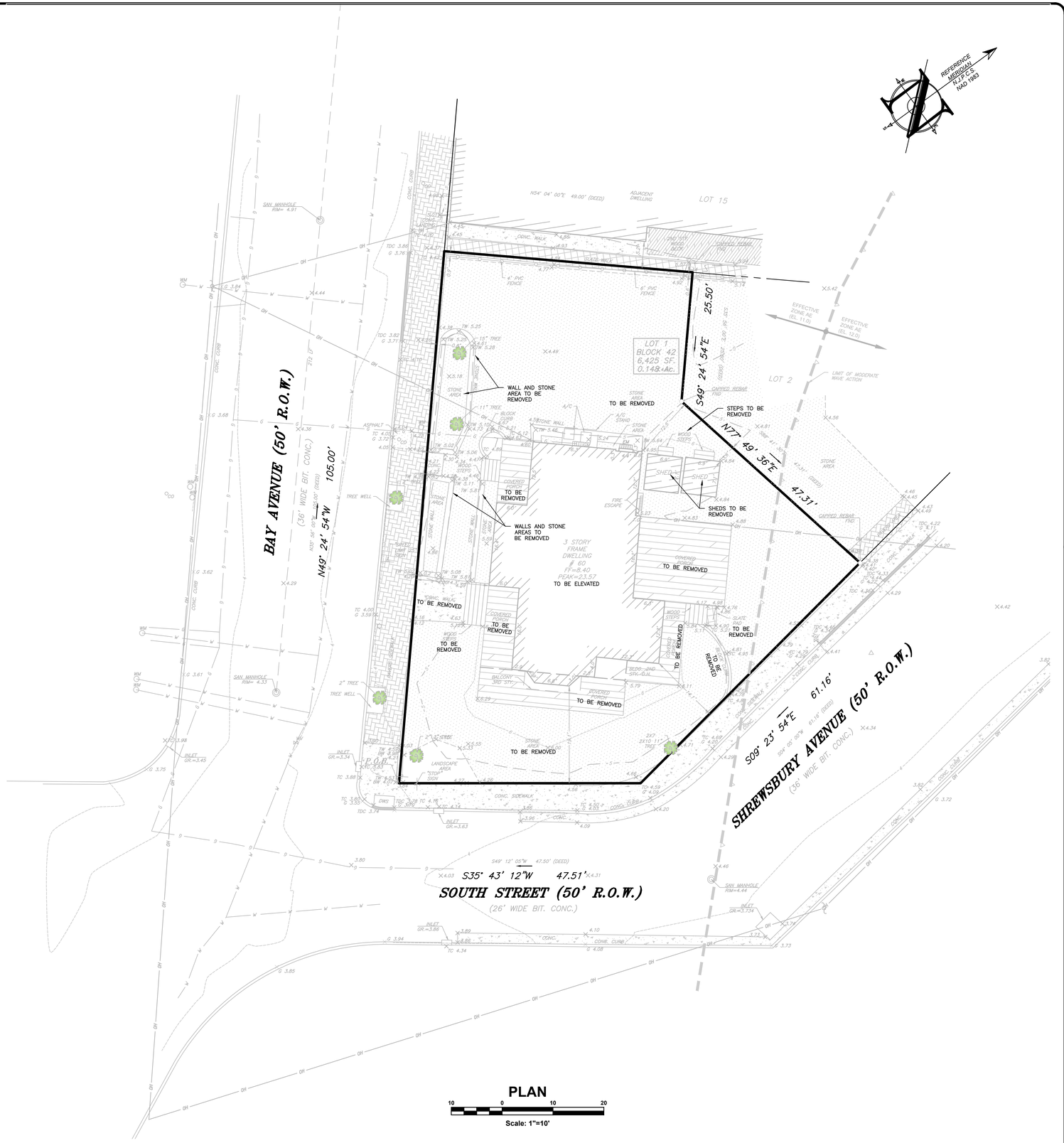
1. ALL PROPOSED ON-SITE CURBING TO BE VERTICAL CURB WITH 6" REVEAL, UNLESS OTHERWISE STATED.
2. ALL CURBS SHALL BE DEPRESSED AT CROSSWALKS AND CONFORM TO APPLICABLE STATE AND FEDERAL BARRIER FREE DESIGN STANDARDS.
3. ALL CURB INLETS TO USE 6" CASTING. TOP OF CASTING TO FOLLOW TOP OF CURB ELEVATIONS.
4. FOR ALL AREAS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY, ACCESSIBILITY SHALL BE IN ACCORDANCE WITH THE CURRENT PUBLIC RIGHTS-OF-WAY ACCESS ADVISORY COMMITTEE GUIDELINE (PROWAG).
   a. ALL WALKING SURFACES TO HAVE A MAXIMUM RUNNING SLOPE OF 1:20 (5%).
   b. ALL WALKING SURFACES GREATER THAN 1:20 (5%) WILL REQUIRE HANDRAILS.
   c. RAMP RUNS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1:12 (8.3%).
   d. ALL WALKING SURFACES TO HAVE A MAXIMUM CROSS SLOPE OF 1:48 (2%).
   e. ALL CROSSWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1:48 (2%).
5. ALL GRADING WITHIN GRASSED AREAS TO BE A MINIMUM OF 2% AND A MAXIMUM OF 3:1 SLOPE UNLESS OTHERWISE NOTED.
6. POSITIVE DRAINAGE TO BE MAINTAINED FROM ALL BUILDINGS IN ACCORDANCE WITH APPLICABLE REGULATIONS AND BUILDING CODE.
7. FLOOR ELEVATIONS, ADJACENT GRADE, DOORWAY LOCATIONS AND ELEVATIONS SHALL BE CONFIRMED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION BY THE CONTRACTOR.
8. ALL EXCAVATED SOIL TO BE DISPOSED SHALL BE PROPERLY CLASSIFIED, HANDLED, AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
9. ALL GRASSED AREAS TO HAVE A MINIMUM OF 4" CLEAN TOP SOIL, WHEN SOD IS BEING INSTALLED, OR 6" CLEAN TOP SOIL FOR SEEDING APPLICATIONS.

DRAINAGE NOTES

1. PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
2. SHOP DRAWINGS AND PRODUCT CATALOG INFORMATION FOR ALL STORM DRAINAGE SEWER STRUCTURES, CONDUITS, MATERIALS, AND APPURTENANCES, TO BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING.
3. BUILDING ROOF LEADERS AND CLEAR WASTE FROM BUILDING TO CONNECT TO SITE STORM SEWER SYSTEM. CONNECTION POINTS WILL BE COORDINATED WITH ARCHITECTURAL AND PLUMBING PLANS.
4. UNLESS OTHERWISE INDICATED:
   a. RCP SHALL BE CLASS 3 WALL, BELL AND SPIGOT TYPE WITH O-RING GASKETS, UNLESS OTHERWISE NOTED.
   b. HDPE PIPES SHALL BE ADS N-12 WITH WATER TIGHT JOINTS OR APPROVED EQUAL.
   c. STORM SEWER PVC PIPES SHALL BE SCHEDULE 80 WITHIN PAVED AREAS AND SCHEDULE 40 IN LANDSCAPED AREAS, UNLESS OTHERWISE NOTED.
5. ALL STORM PIPE TO BE CLEANED AND TELEVISED PRIOR TO ISSUANCE OF CERTIFICATES OF OCCUPANCY.

SANITARY SEWER NOTES

1. CONTRACTOR TO PERFORM TEST PITS TO VERIFY EXISTING UTILITY DEPTHS, SIZES AND LOCATIONS PRIOR TO CONNECTING PROPOSED SEWER TO EXISTING SEWER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS SO THAT DESIGN MODIFICATIONS CAN BE MADE IF NECESSARY.
2. PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
3. ALL SANITARY SEWER MAINS, SEWER LATERALS, AND APPURTENANCES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH (SEWER AUTHORITY) AND NJDEP REQUIREMENTS.
4. SHOP DRAWINGS AND PRODUCT CATALOG INFORMATION FOR ALL SANITARY SEWER, CONDUITS, MATERIALS, AND APPURTENANCES, TO BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING.
5. ANY DAMAGE CAUSED TO THE EXISTING SANITARY SEWER SYSTEM AS A RESULT OF CONSTRUCTION ACTIVITIES (TO BE DETERMINED BY THE SEWER OWNER) SHALL BE REPAIRED BY THE CON



PLAN

10 0 10 20

Scale: 1"=10'

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
70	CONTOUR LINE	70
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN.	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION
APPROVED BY:
FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

EXISTING CONDITIONS & SITE PREPARATION PLAN

SHEET NO:

C200

File: X:\Jobs\2237 - 60 Bay Ave Highlands LLC\23-2237-01 - 60 Bay Avenue_Highlands, NJ\2237701CAD\Dwg\02-Existing.dwg, ---> C200 Existing Conditions
Copyright 2024, Insite Engineering, LLC, All Rights Reserved.



BUILDING HEIGHT COMPLIANCE PER MUNICIPAL ORDINANCE

NTS

ZONING COMPLIANCE CHART

CBD REDEVELOPMENT OVERLAY 2 ZONE (C-RO-2 - GATEWAY PARCELS)

RESIDENTIAL ABOVE FIRST FLOOR: PERMITTED (§ 21-91A.u.)

ORD.SECTION	STANDARD	REQUIRED		EXISTING	PROPOSED	COMPLIES
ATT. 1	MIN. LOT AREA (SF)	-		6,425 (0.147 AC)	NO CHANGE	-
ATT. 1	MIN. LOT FRONTAGE (FT)	-		213.67	NO CHANGE	-
	PRINCIPAL BUILDING					
VII.A.	MIN. FRONT YARD SETBACK (FT)					
	BAY AVENUE (FT)	2		13.9	5.00	YES
	SOUTH STREET (FT)	2		13.3	8.30	YES
	SHREWSBURY AVENUE	2		8.3	8.05	YES
VII.A.	MIN. REAR YARD SETBACK (FT)	12		-	N/A	YES
VII.A.	MIN. SIDE YARD SETBACK	5	(1)	11.4	7.93	YES
VII.D.	MAX. BUILDING HEIGHT (FT)	40	(3)	11.6	29.25	YES
VII.B.	MAX. BUILDING COVERAGE (%)	80		31.9	54.5	YES
VII.B.	MAX. LOT COVERAGE (%)	80		37.0	62.0	YES
	ACCESSORY BUILDING					
§21-78A.2.	MAX. GROUND FLOOR AREA (%)	30	(2)	5.0	N/A	-
§21-78A.2.	MAX. COVERAGE OF REAR YARD (%)	40	(2)	N/A	N/A	-
§21-78A.3.	MIN. YARD SETBACK (FT)	3		3.6	N/A	-

(N) EXISTING NON-CONFORMITY (I) IMPROVED CONDITION N/A - NOT APPLICABLE
(E) EXISTING VARIANCE (X) VARIANCE / NON-CONFORMITY ELIMINATED N/S - NOT SPECIFIED
(V) PROPOSED VARIANCE (W) PROPOSED WAIVER

(a) THIS PERTAINS TO AN EXISTING STRUCTURE WHICH WAS NOT MADE AVAILABLE TO THIS OFFICE
(1) PER §VII.A SIDE YARDS. NO SIDE YARD IS REQUIRED ADJACENT TO THE PROPERTIES IN THE CBD ZONE, HOWEVER, IF ANY IS TO BE PROVIDED, IT SHALL BE AT LEAST FIVE (5) FEET. ANY SIDE YARD WHICH SERVES AS A BOUNDARY BETWEEN THAT LOT AND ANY RESIDENCE ZONE SHALL BE AT LEAST FIVE (5) FEET AND SHALL CONTAIN BUFFERING IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.
(2) NO ACCESSORY STRUCTURE(S), EXCEPT FOR SHORE FRONT PROTECTION, BULKHEADS, REVETMENTS AND OTHER SUCH STRUCTURES, SHALL HAVE AN AGGREGATE GROUND FLOOR AREA GREATER THAN THIRTY (30%) PERCENT OF THE GROUND FLOOR AREA OF THE PRINCIPAL STRUCTURE ON THE SAME LOT. ALL ACCESSORY STRUCTURES SHALL OCCUPY NO MORE THAN FORTY (40%) PERCENT OF THE REAR YARD AREA.
(3) THE VERTICAL DISTANCE AS MEASURED FROM THE GRADE PLANE TO THE AVERAGE HEIGHT OF THE HIGHEST ROOF SURFACE. IN THE CASE OF SLOPED ROOFS, THE AVERAGE HEIGHT IS THE MID-POINT BETWEEN THE LOWEST ROOF EAVE OF THE TOP FLOOR AND THE ROOF RIDGE. IN THE CASE OF A BUILDING THAT HAS MULTIPLE ROOF LEVELS, THE HIGHEST ROOF LEVELS MUST BE USED TO DETERMINE THE BUILDING HEIGHT
GRADE PLANE: AREAS OR PORTIONS OF THE BUILDING AREA OF A LOT LOCATED WITHIN THE FLOOD HAZARD AREA: THE REFERENCE PLANE SHALL BE THE MORE RESTRICTIVE OF THE BASE FLOOD ELEVATION OR ADVISORY BASE FLOOD ELEVATION OF THE FLOOD HAZARD AREA PLUS ONE (1) FOOT.

PARKING, DRIVEWAY & LOADING COMPLIANCE CHART

ORD.SECTION	STANDARD	REQUIRED	PROPOSED	COMPLIES
§21-65.14	STALL SIZE (FT)	9 X 18	9 X 18	YES
	NUMBER OF PARKING SPACES			
RSIS TABLE 4.4	RESIDENTIAL USES (2 FAMILY & MULTIFAMILY UNITS)			
	1.8 SPACES PER (1 BR UNITS)			
	2.0 SPACES PER (2 BR UNITS)			
	2.1 SPACES PER (3 BR UNITS)			
	1ST. FLOOR - 2 UNITS 2 BEDROOMS EACH	4		
	2ND. FLOOR - 2 UNITS 2 BEDROOMS EACH	4		
	3RD. FLOOR - 1 UNIT 3 BEDROOMS	2.1		
	TOTAL PARKING SPACES	10.1	7 (1)	YES
	MAX. DRIVEWAY WIDTH AT CURB (FT)	18	19.09 (V)	NO
§21-65.5C.	MAX. DRIVEWAY WIDTH AT INTERIOR (FT)	22	17.5	YES
§21-65.5A.	MIN. DRIVEWAY DISTANCE TO STREET INTERSECTION (FT)	25	26.91	YES

(N) EXISTING NON-CONFORMITY (I) IMPROVED CONDITION N/A - NOT APPLICABLE
(V) PROPOSED VARIANCE (W) PROPOSED WAIVER N/S - NOT SPECIFIED
(1) PURSUANT TO THE BOROUGH OF HIGHLANDS, NJ CENTRAL BUSINESS DISTRICT REDEVELOPMENT PLAN §VII.A VEHICULAR PARKING: RESIDENTIAL USES ARE PERMITTED TO COUNT FIRST ANY AVAILABLE ON-STREET PARKING SPACES BEFORE DETERMINING THE NUMBER OF PARKING SPACES THAT MUST BE PROVIDED OFF-STREET. THERE ARE MORE THAN 3.1 EXISTING ON-STREET PARKING SPACES WITHIN THE IMMEDIATE VICINITY, THEREFORE THE PROJECT COMPLIES.

ELECTRIC VEHICLE PARKING SUMMARY (P.L. 1975, c. 291)

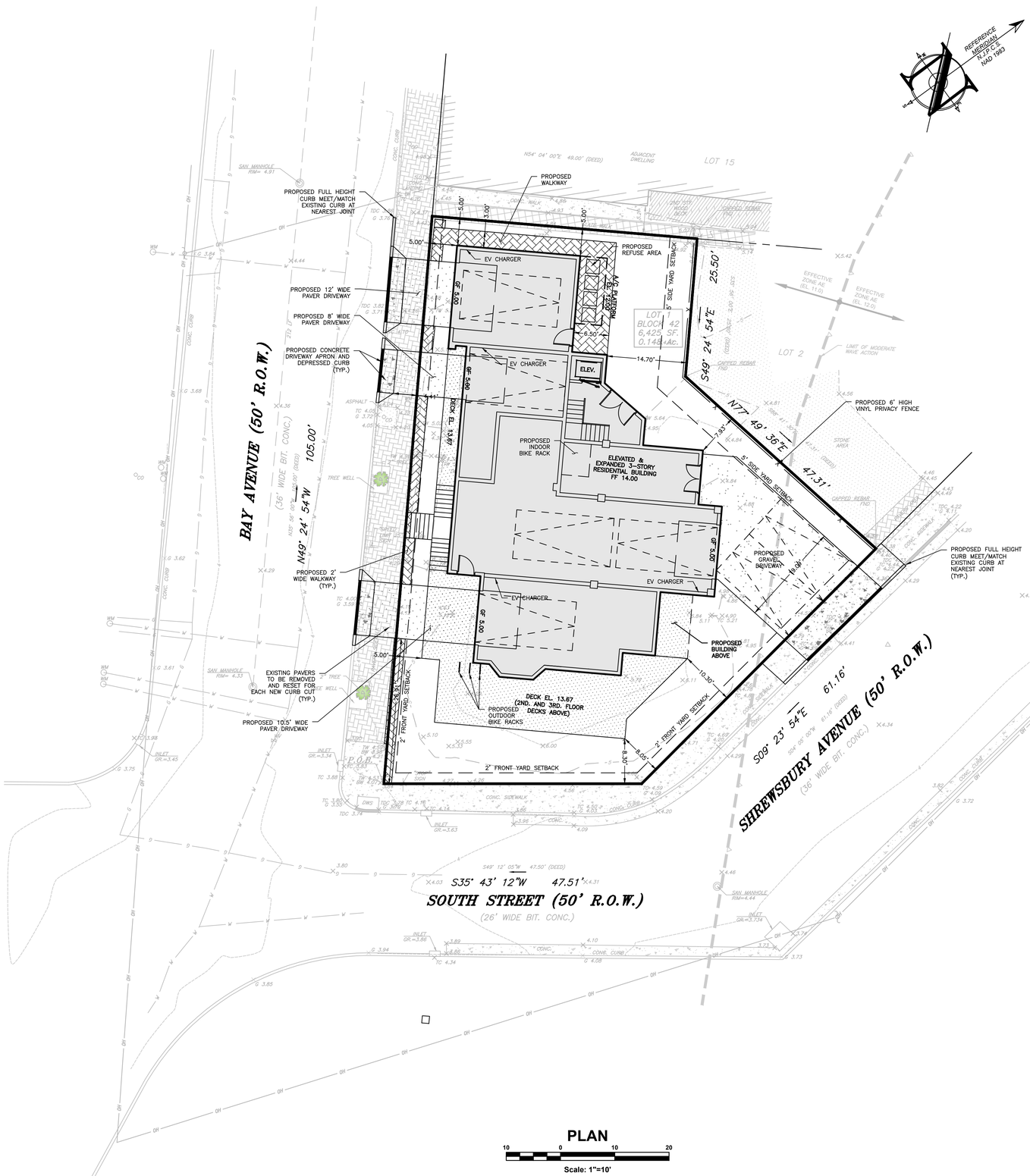
RESIDENTIAL ABOVE FIRST FLOOR / CBD REDEVELOPMENT OVERLAY 2 ZONE (C.40:55D-66.20.3.a.(1))

SECTION	STANDARD	REQUIRED	PROPOSED	COMPLIES
3.a.(1)(a)	MIN. NUMBER OF MAKE-READY (MR) PARKING SPACES	15% OF REQUIRED OFF-STREET SPACES		
		10 x 15% = 1.5 SPACES = 2	2 SPACES	YES
	MIN. # OF INSTALLED VEHICLE SUPPLY EQUIPMENT			
3.a.(1)(a)	@ INITIAL CONSTRUCTION	⅓ x MAKE-READY = 1 SPACES	1 EV SPACES	YES
3.a.(1)(b)	@ 3 YEARS AFTER CERT. OF OCCUPANCY	⅔ x MAKE-READY = 2 SPACES	2 EV SPACES	YES
3.a.(1)(c)	@ 6 YEARS AFTER CERT. OF OCCUPANCY	⅔ x MAKE-READY = 2 SPACES	2 EV SPACES	YES

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
98	CONTOUR LINE	98
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
SAN SAN	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH OH	OVERHEAD WIRE	OH
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
X X	FENCE	X X
TP-1	LIGHT FIXTURE	TP-1
	TEST PIT LOCATION	
	GRADE FLOW ARROW	
	SWALE CENTER LINE	



File: X:\Jobs\2237 – 60 Bay Ave Highlands LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\2022\70\CAD\Dwg\03-Site Layout Plan.dwg, ---> C300 SITE LAYOUT PLAN
Copyright 2024, Insite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
N.J PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

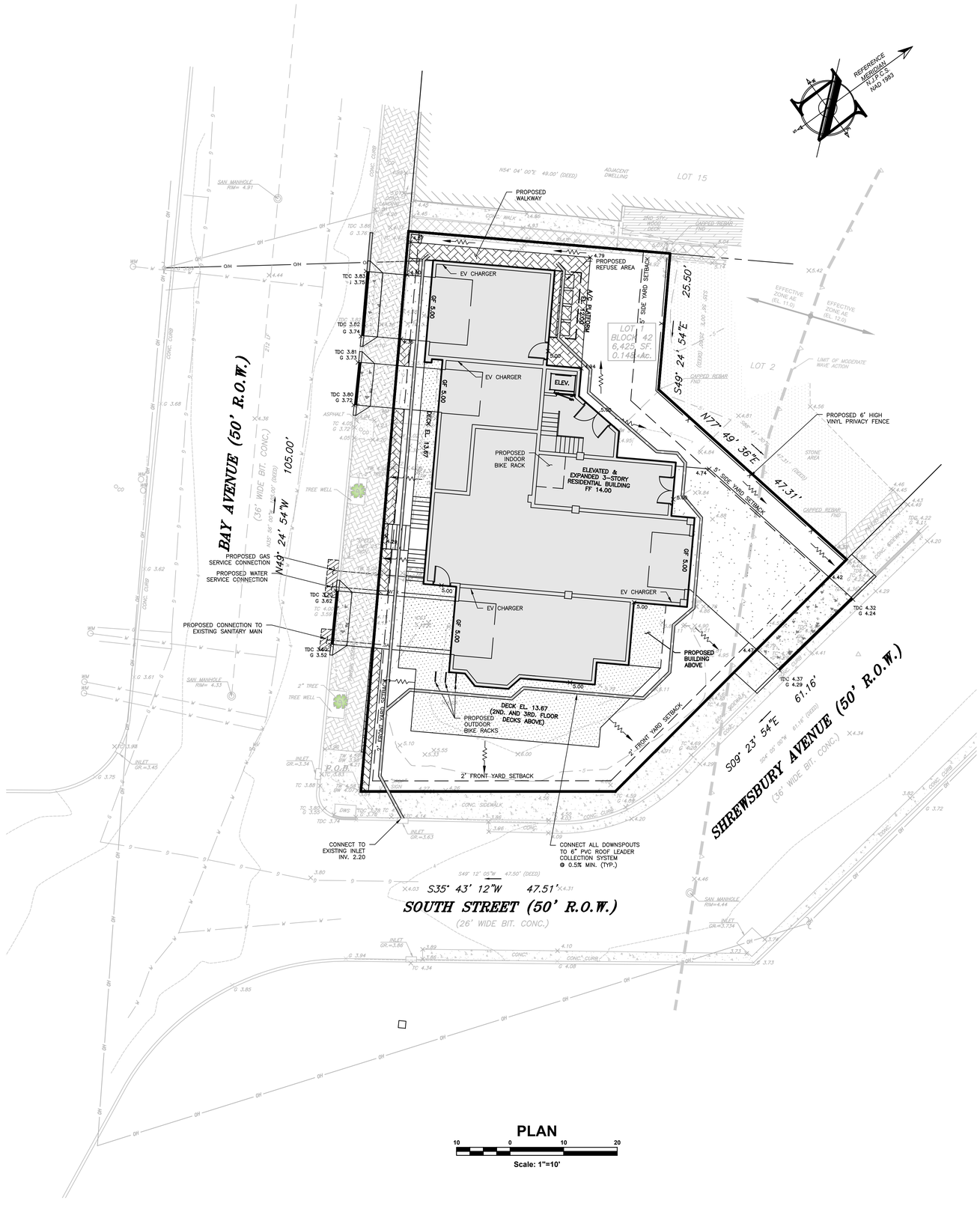
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

SITE LAYOUT PLAN

SHEET NO:

C300



SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
50	CONTOUR LINE	50
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN SAN	SANITARY LATERAL	SAN 50
OH OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x x	FENCE	x x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

File: X:\Jobs\2237 - 60 Bay Ave Highlands LLC\23-2237-01 - 60 Bay Avenue_Highlands, NJ\23223701CAD\dwg\04-GDU.dwg, --> C400 GDU
Copyright 2024, InSite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

GRADING, DRAINAGE & UTILITY PLAN

SHEET NO:

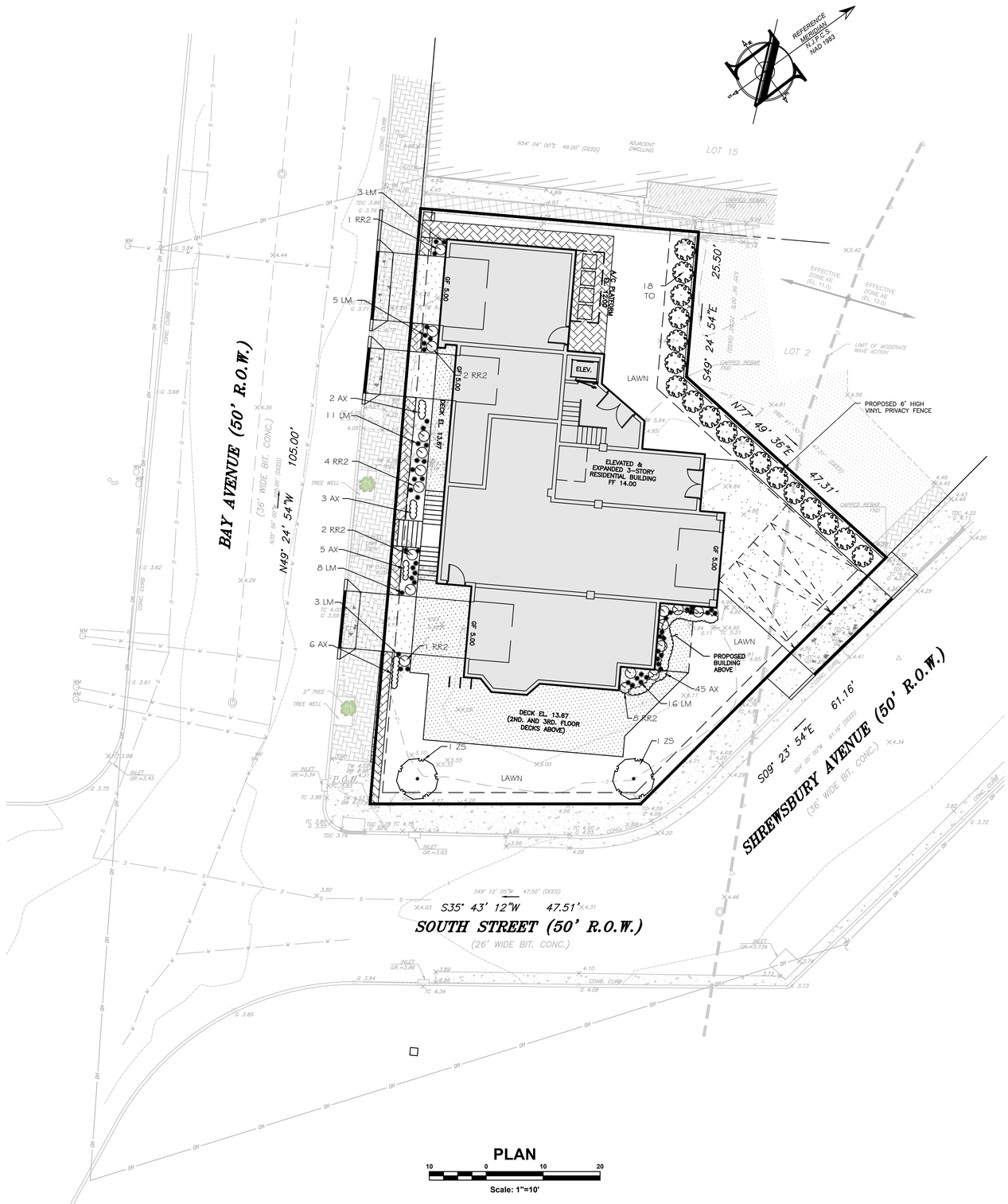
C400

PLANTING SCHEDULE					
KEY	QTY.	BOTANICAL NAME	COMMON NAME	PLANTING SIZE	ROOT
		SHED AND ORNAMENTAL TREES			
TO	18	THUJA OCCIDENTALIS 'SMARAGO'	EMERALD GREEN ARBORVITAE	8-10' HT.	670 GAL.
ZS	2	ZELKOVA SERRATA 'MUSASHINO'	MUSASHINO COLUMNAR ZELKOVA	7-8' HT.	(B+B)
		SHRUBS			
RR2	18	ROSA RUGOSA 'KNOCKOUT'	PINK 'KNOCKOUT' ROSE	2.5'-3 FT	#5 CONT.
		GRASSES, PERENNIAL FLOWER, GROUNCOVERS			
LM	52	LIRIOPE MUSCARI	LILLYTURF	1 GAL.	(Cont.)
AX	61	AJUGA REPTANS	BUGLEWEED	3-4"	6" POT

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
50	CONTOUR LINE	50
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN SAN	SANITARY LATERAL	SAN
OH OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
X X	FENCE	X X
TP-1	LIGHT FIXTURE	
	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	



PLAN

10 0 10 20

Scale: 1"=10'

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA DELAWARE, CONNECTICUT, NORTH CAROLINA COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

LANDSCAPE PLAN

SHEET NO:

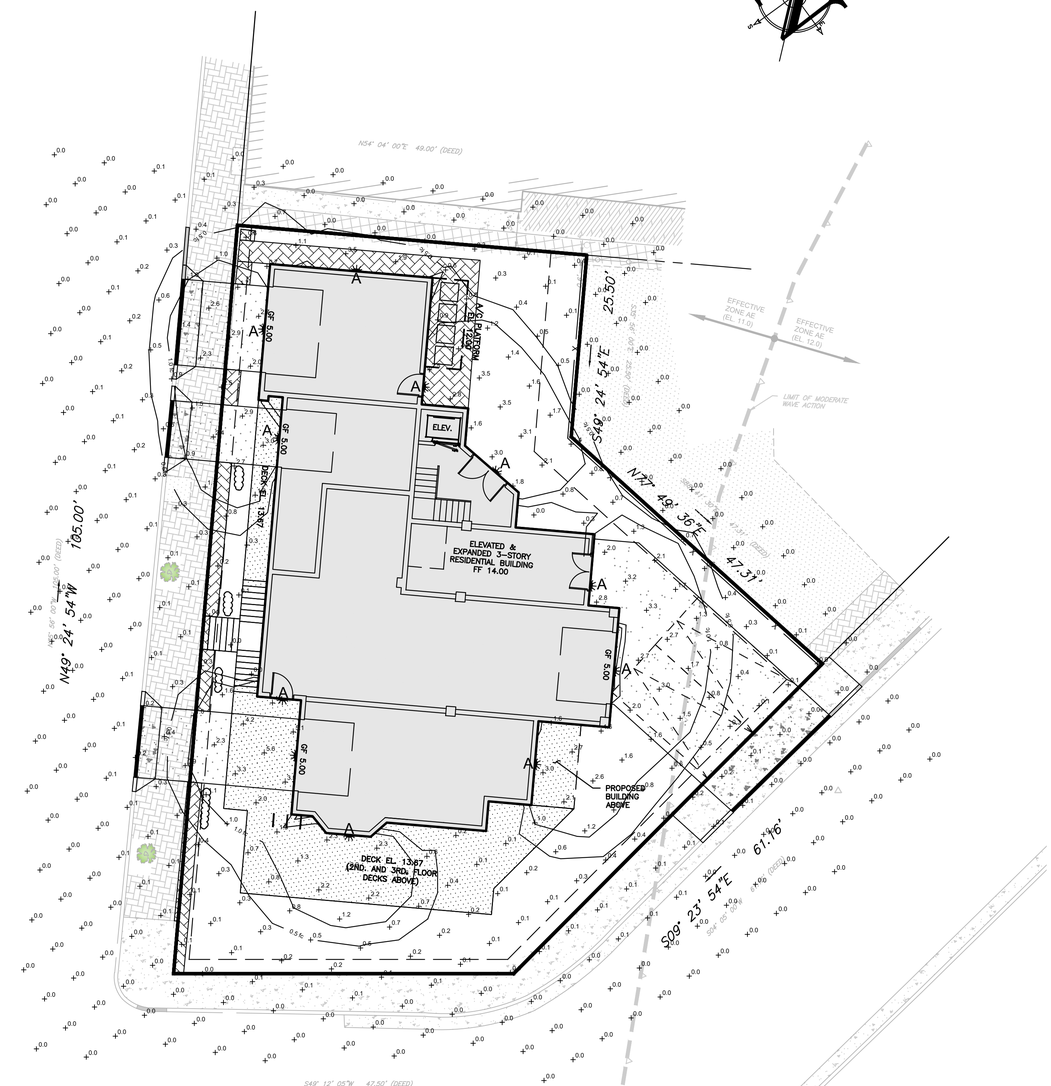
C600

File: X:\Jobs\2237 — 60 Bay Ave Highlands LLC\23-2237-01 — 60 Bay Avenue_Highlands, NJ\23223701CAD\dwg\05—Landscape & Lighting.dwg, —> C600 LANDSCAPE
Copyright 2024, InSite Engineering, LLC, All Rights Reserved.

SCHEDULE OF LIGHTING REQUIREMENTS (§ 21-65.11)				
ORD.SECTION	STANDARD	PERMITTED	PROPOSED	COMPLIES
21-65.11E	MIN. LIGHTING LEVEL (FC)	0.3	0.1 (W)	NO
21-65.11E	MIN. AVERAGE LIGHTING LEVEL (FC)	0.5	0.7 (W)	NO
21-65.11F	MAX. LIGHTING LEVEL AT PROPERTY LINE (FC)	0.3	1.7 (W)	NO
21-65.11D	MAX. LIGHT MOUNTING HEIGHT (FT)	15	8.5	YES

LUMINAIRE SCHEDULE							
LABEL	QTY	DESCRIPTION	WATTAGE	LAYOUT	MOUNT HEIGHT	TYPE	DIRECTION OF ILLUMINATION
A	11	WDGE1 LED ARCHITECTURAL WALL SCONCE	LED	SINGLE	8.5'	WALL	DOWN

NOTE:
1. LIGHTING TEMPLATE VALUES SHOWN ARE: 1.0 AND 0.50 FOOTCANDLES.
2. ALL LIGHTS TO REMAIN ON FROM DUSK UNTIL DAWN.
3. EXISTING LIGHTS ARE NOT INCLUDED IN THIS ANALYSIS.



PLAN

10 0 10 20

Scale: 1"=10'

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
70	CONTOUR LINE	70
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

File: S:\Jobs\2237 – 60 Bay Ave Highlands LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\23227010A0\Dwg\05-Landscape & Lighting.dwg, ---> C601 LIGHTING
Copyright 2024, InSite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev #	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

☒ NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

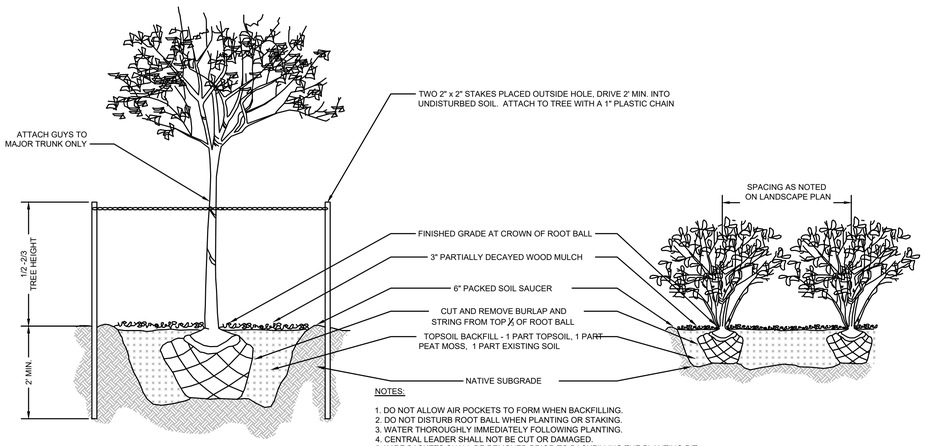
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

LIGHTING PLAN

SHEET NO:

C601

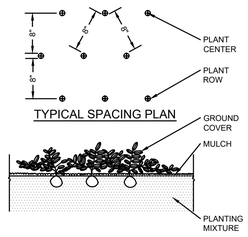


NOTES:

1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
2. DO NOT DISTURB ROOT BALL WHEN PLANTING OR STAKING.
3. WATER THOROUGHLY IMMEDIATELY FOLLOWING PLANTING.
4. CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
5. WIRE BASKETS SHALL BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT.

TREE & SHRUB PLANTING & STAKING

NTS



GROUND COVER PLANTING

NTS



WDGE1 LED
Architectural Wall Sconce

Catalog Number:
Notes:
Type:

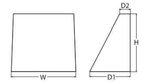
Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

Specifications

Depth (D1): 5.5"
Depth (D2): 1.5"
Height: 8"
Width: 9"
Weight: (without options) 9 lbs



WDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WDGE2 LED	10W	14W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information **EXAMPLE:** WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE1 LED	P1 1,200 lm P2 2,000 lm	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	80CRI 90CRI	VF Visual comfort forward throw FO Visual comfort offset throw	MVOLT 120-277V 347 347V	**Shipped included** SRM Surface mounting bracket. ICW Indirect Canopy/Pathway Washer bracket (dry/damp locations only)* **Shipped separately** AWS 3/8inch Architectural wall spacer PBBW Surface mounted back box (top, left, right conduit entry). Use when there is no junction box available.

Options		Finish	
E4WH*	Emergency Battery Backup, Certified in CA Title 20 MAEDBS (4W, 0°C min).	DDBXD	Dark bronze
PE*	Photocell, Button Type	DBLXD	Black
DS	Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)	DNAXD	Natural aluminum
DMG	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD	White
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD	Sandstone
BAA	Buy American Act Compliant		
DSLE	Dual Switching (1 Driver, 2 Light Engines)		

DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white
DSSTXD	Textured sandstone

© 2019-2023 Acuity Brands Lighting, Inc. All rights reserved.

WALL MOUNTED LIGHTS TYPE A

NTS

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INTIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION
APPROVED BY:
FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

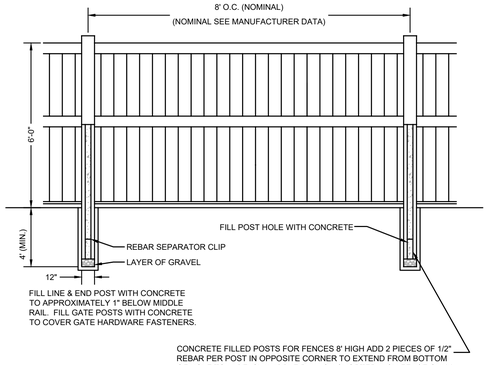
SHEET TITLE:

LANDSCAPE & LIGHTING NOTES & DETAILS

SHEET NO:

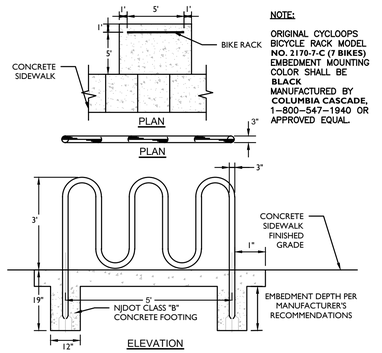
C602

File: X:\Jobs\2237 – 60 Bay Ave Highlands LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\23237001CAD\dwg\05-Landscape & Lighting.dwg, ---> 0602 LANDSCAPE & LIGHTING NOTES & DETAILS
Copyright 2024, InSite Engineering, LLC, all Rights Reserved.



NOTES:
1. ALL CONCRETE SHALL BE A MINIMUM OF 3000 PSI AIR ENTRAINED.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS.

VINYL FENCE
NTS

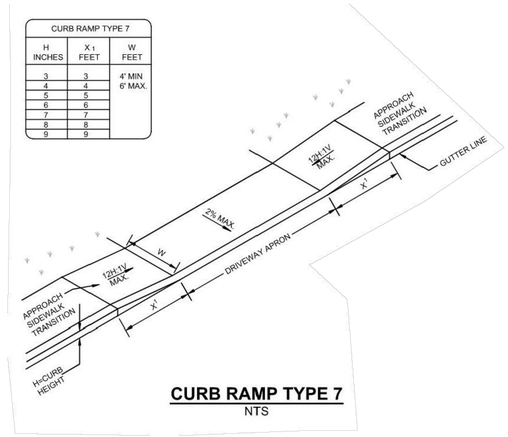


NOTE:

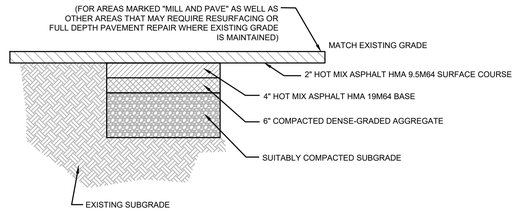
ORIGINAL CYCLOOPS BICYCLE RACK MODEL NO. 2170-7-C (7 BIKES) EMBEDMENT MOUNTING COLOR SHALL BE BLACK MANUFACTURED BY COLUMBIA CASCADE, 1-800-547-1940 OR APPROVED EQUAL.

BICYCLE RACK DETAIL
NOT TO SCALE

CURB RAMP TYPE 7		
H INCHES	X_1 FEET	W FEET
3	3	4' MIN 6' MAX.
4	4	
5	5	
6	6	
7	7	
8	8	
9	9	



CURB RAMP TYPE 7
NTS



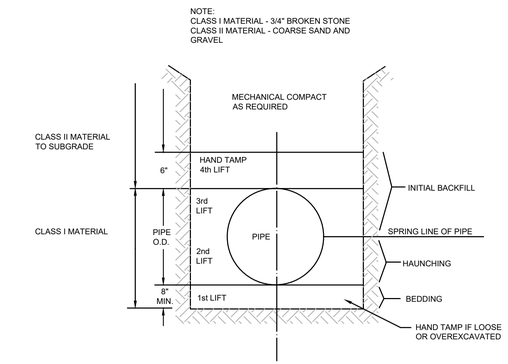
PAVEMENT CONSTRUCTION SEQUENCE:
1. MILL AND EXCAVATE WHERE NOTED ON PLAN.
2. PREPARE BASE WHERE NECESSARY.
3. INSTALL SURFACE COURSE OVER ENTIRE PAVED AREA AT ONE TIME.

MATERIALS FOR ASPHALT SURFACE SHALL CONFORM TO SECTION 404.02 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION). MATERIALS FOR ASPHALT BASE SHALL CONFORM TO SECTIONS 301.02 AND 304.02 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).

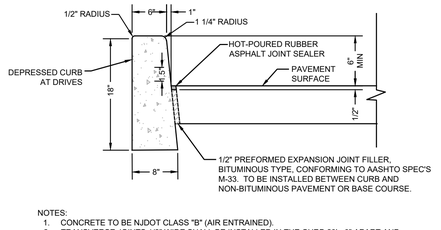
PAVEMENT REPAIR
NTS

Roof Runoff Flowrate Calculation			
Q = ciA			
	c =	0.99	
	i =	6.50	in/hr
	A =	0.070	ac
Q =	0.45	cfs	
Pipe Capacity Calculation (Manning's Equation)			
Q = 1.49/n * A * R^2/3 * S^1/2			
n (pvc) =	0.01		
d =	6	in	
A (full) =	0.20	sf	
ro (full) =	1.57	ft	
R (full) =	0.13	ft	
S =	0.005	ft / ft	
Q (full) =	0.52	cfs	
Q required =	0.45	cfs	< OK >

ROOF LEADER COLLECTION SYSTEM CAPACITY CALCULATIONS

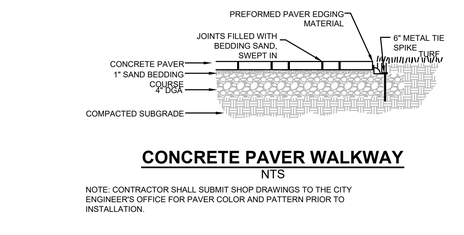


PIPE BEDDING DETAIL
NTS



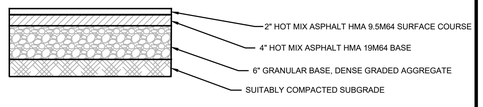
NOTES:
1. CONCRETE TO BE NJDOT CLASS "B" (AIR ENTRAINED).
2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20' - 0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF AASHTO M-213, RECESSED 1/4" FROM THE FRONT FACE AND TOP OF THE CURB.
3. DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.
4. WIDTH OF JOINT FILLER STRIP EQUAL TO THE THICKNESS OF THE PAVEMENT LESS 1/2".

CONCRETE VERTICAL CURB
NTS



CONCRETE PAVER WALKWAY
NTS

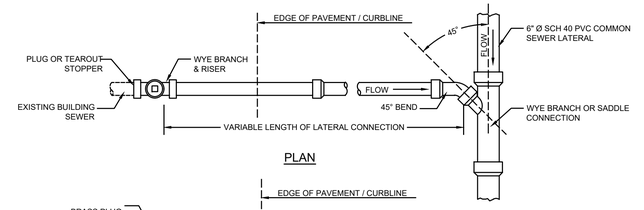
NOTE: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE CITY ENGINEER'S OFFICE FOR PAVER COLOR AND PATTERN PRIOR TO INSTALLATION.



NOTES:

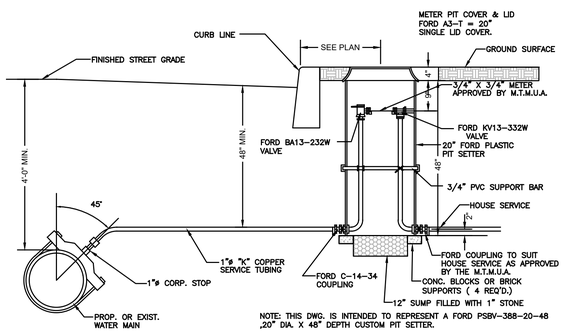
1. THE GRANULAR BASE SHALL BE DENSE GRADED AGGREGATE CONFORMING TO SUBSECTION 901.08 AND SHOWN IN TABLE 901-2 OF THE N.J. DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (1989).
2. SUBGRADE CONDITIONS AND COMPACTION SHALL BE APPROVED BY THE CITY PLANNING BOARD ENGINEER PRIOR TO THE PLACEMENT OF BITUMINOUS PAVEMENT.

PAVEMENT SECTION
NTS

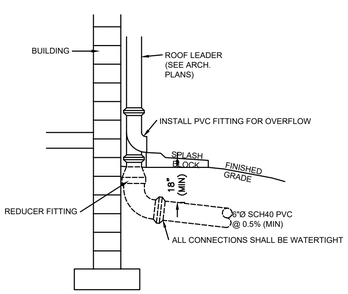


STANDARD LATERAL CONNECTION WITH CLEANOUT - SEWER DEPTH 10' OR LESS
NTS

IN ACCORDANCE WITH NJAC 7:10-11.10(E)5, ALL WATER MAINS AND SANITARY LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAI (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATERTIGHT CONSTRCUTION (DUCTILE IRON), WITH WATERTIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN.



TYPICAL SERVICE CONNECTION WITH FORD METER PIT
NTS



EXTERIOR DOWNSPOUT COLLECTOR
NTS

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:
BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA DELAWARE, CONNECTICUT, NORTH CAROLINA COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev #	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NO:
C800

File: X:\Jobs\2237 - 60 Bay Ave Highlands LLC\23-2237-01 - 60 Bay Avenue_Highlands, NJ\23223701CAD\dwg\07-Details.dwg, --> C800 CONSTRUCTION DETAILS
Copyright 2024 - InSite Engineering, LLC - All Rights Reserved

SITE

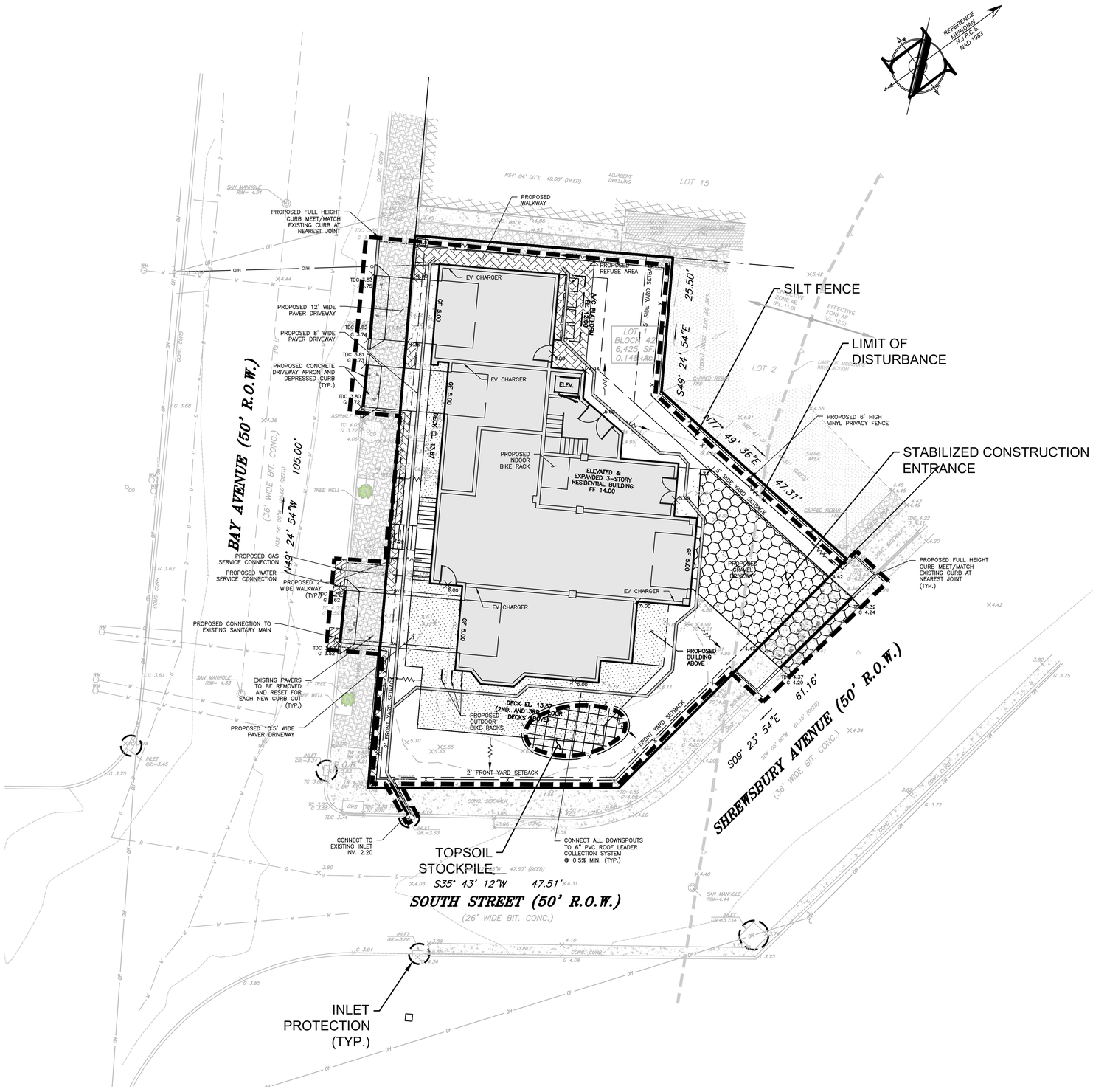


SOIL MAP

200 0 200 400

Scale: 1"=200'

SOIL DESIGNATION LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
USKLEA	URBAN LAND-KLEY COMPLEX, 0 TO 2 PERCENT SLOPES	X



PLAN

10 0 10 20

Scale: 1"=10'

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
	CONTOUR LINE	
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
X X	FENCE	X X
TP-1	LIGHT FIXTURE	
	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

SOIL EROSION LEGEND

- LIMIT OF DISTURBANCE
- SILT FENCE
- INLET PROTECTION
- PROPOSED TREE PROTECTION
- SOIL COMPACTION TEST LOCATION
- STABILIZED CONSTRUCTION ENTRANCE
- RIP-RAP APRON, SCOUR HOLE
- SOIL RESTORATION AREA

CONSTRUCTION / SPPP NOTE

THIS PLAN WAS PREPARED TO ADDRESS THE SOIL EROSION AND SEDIMENT CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) AT THE TIME OF DESIGN ONLY. ALL OTHER COMPONENTS OF THE SPPP AND GENERAL STORMWATER PERMIT ARE TO BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE SITE CONTRACTOR.

PLEASE NOTE - THIS PLAN IS NOT TO BE USED FOR SITE CONSTRUCTION.

TOTAL LIMIT OF DISTURBANCE = 0.161 AC.

SOIL RESTORATION EXEMPTION

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN AN AREA OF "URBAN REDEVELOPMENT" AND IS CONSIDERED "PREVIOUSLY DEVELOPED" AS DEFINED BY THE NJDEP. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND REGRADING (REVISED 2017), THE SITE IS EXEMPT FROM SOIL RESTORATION REQUIREMENTS.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED.

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

SESC PLAN

SHEET NO:

C900

File: X:\Jobs\2237 – 60 Bay Ave Highlands, LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\2022\70\CAD\Dwg\08-SESC Plan.dwg, —> C900 SESC PLAN
Copyright 2024, Insite Engineering, LLC, All Rights Reserved.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 ½ TONS PER ACRE, ACCORDING TO STATE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF ONE INCH TO TWO INCH (1" - 2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEEDBED PREPARATION

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. LIMING RATES SHALL BE ESTABLISHED VIA SOIL TESTING. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

3. SEEDING

A. TEMPORARY VEGETATIVE SEEDING COVER SHALL CONSIST OF PERENNIAL RYEGRASS APPLIED UNIFORMLY AT A RATE OF 1 POUND PER 1,000 SF (100 LBS/AC) WITH AN OPTIMUM SEED DEPTH OF 0.5" (TWICE THE DEPTH IF SANDY SOILS), IN ACCORDANCE WITH TABLE 7-2, PAGE 7-3.

*SEEDING DATES: 2/15-5/1 AND 8/15-10/15

B. CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.

D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS. - MAY BE USED TO ANCHOR HAY OR STRAW MULCH.
   a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
   b. USE ONE OF THE FOLLOWING:
      (1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
      (2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
      NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 PONDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORMA MULCH MAT. PELLETIZED MULCH SHALL BE APPLIES IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEE FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

2. SEEDBED PREPARATION

A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

3. SEEDING

(ZONE 6B)

A. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.

SEED MIXTURE #13 FOR LAWN AREAS	PLANTING RATE LBS/1,000 (LBS/ACRE)
HARD FESCUE AND/OR CHEWING FESCUE AND/OR STRONG CREEPING RED FESCUE	4 (175)
PERENNIAL RYEGRASS	1 (45)
KENTUCKY BLUEGRASS (BLEND)	1 (45)

*ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14**
*OPTIMAL SEEDING DATES: 8/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

SEED MIXTURE #7 FOR BASIN, SIDE SLOPES, AND SWALES	PLANTING RATE LBS/ 2,000 (LBS/ACRE)
STRONG CREEPING RED FESCUE	3 (130)
KENTUCKY BLUEGRASS	1 (50)
PERENNIAL RYEGRASS	0.5 (20)
OR REDTOP	0.25 (10)
PLUS WHITE CLOVER	0.10 (5)

*ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14**
*OPTIMAL SEEDING DATES: 8/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

3. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE.

4. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 850 F AND ABOVE. SEE TABLE 4-3 MIXTURES 1 TO 7. PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.

5. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 8 MANY GRASSES BECOME ACTIVE AT 600F. SEE TABLE 4-3, MIXTURES 8-20. ADJUSTMENT OF PLANTING RATE COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.

C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

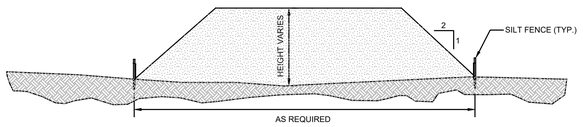
APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING COULTER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.
   a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
   b. USE ONE OF THE FOLLOWING:
      (1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER-BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
      (2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
      NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

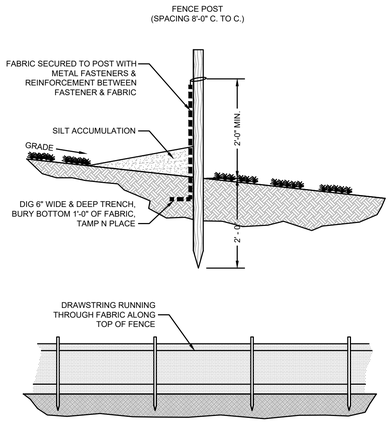
B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO STANDARDS PREVENTING GROWTH AND SEDIMENT CONTROL IN NEW JERSEY, JANUARY 2014GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT REMIXEDIN THE TANK WITH SEED USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH-COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAYECTI CONTAIN CO-POLYMERS, TACKIFIERS,FERTILIZERS,AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO AW SEEDED AREA AND WATERED, FORM A MULCHMAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL TOP DRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR 7 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS



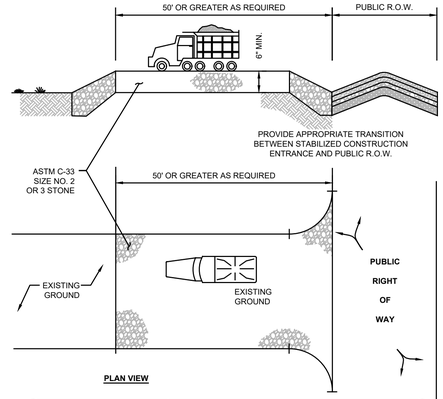
SECTION THROUGH SOIL STOCKPILE (TYP.)

NTS



SILT FENCE DETAIL

NTS



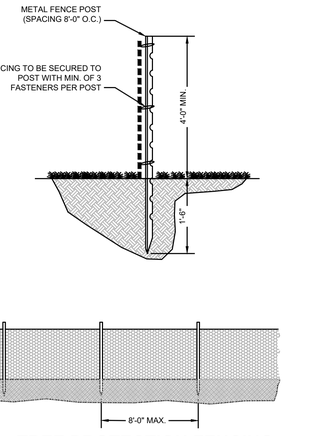
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COURSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2 TO 5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH FABC HOT MIX ASPHALT BASE COURSE, MIX 1-2 [1]	

1. AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

STABILIZED CONSTRUCTION ENTRANCE

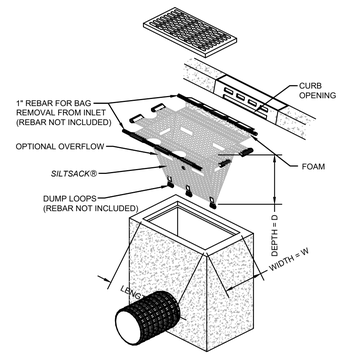
NTS

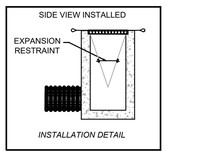
NOTE: INDIVIDUAL LOT ACCESS POINTS MAY REQUIRE STABILIZATION. THE THICKNESS SHOWN IS FOR STONE CONSTRUCTION ENTRANCE ONLY.



TREE PROTECTION FENCING

NTS





INLET PROTECTION DETAIL

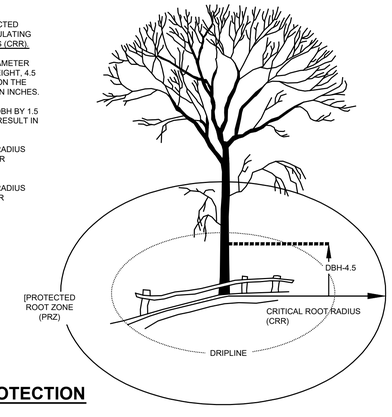
NTS

ESTIMATE A TREE'S PROTECTED ROOT ZONE (PRZ) BY CALCULATING THE CRITICAL ROOT RADIUS (CRR).

1. MEASURE THE DBH (DIAMETER OF TREE AT BREAST HEIGHT, 4.5 FEET ABOVE GROUND ON THE UPHILL SIDE OF TREE) IN INCHES.
2. MULTIPLY MEASURED DBH BY 1.5 OR 1.0. EXPRESS THE RESULT IN FEET.

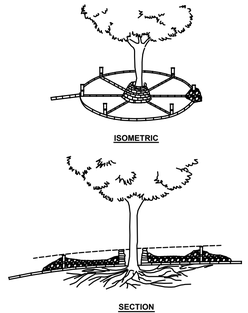
DBH X 1.5: CRITICAL ROOT RADIUS FOR OLDER, UNHEALTHY, OR SENSITIVE SPECIES.

DBH X 1.0: CRITICAL ROOT RADIUS FOR YOUNGER, HEALTHY OR TOLERANT SPECIES.



TREE ROOT PROTECTION

NTS

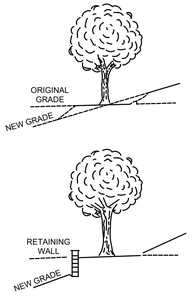


TREE PROTECTION - TILE AND GRAVEL WILL ALLOW AIR CIRCULATION TO ROOT ZONE UNDER A FILL.

TREE PROTECTION (FILL AREAS)

NTS

A RETAINING WALL PROTECTS A TREE FROM A LOWERED GRADE.



TREE PROTECTION (CUT AREAS)

NTS

File: X:\Jobs\2023 — 60 Bay Ave Highlands LLC\23-2237-01 — 60 Bay Avenue_Highlands, NJ\23237701CAD\dwg\08-SESC Plan.dwg, —> C902 SESC DETAILS
Copyright 2024, InSite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA DELAWARE, CONNECTICUT, NORTH CAROLINA COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
2	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

SESC DETAILS

SHEET NO:

C902

Roberts
ENGINEERING GROUP LLC
Women Business Enterprise Certified

1670 Whitehorse-Hamilton Square Rd.
Hamilton, New Jersey 08690
609-586-1141 fax 609-586-1143
www.RobertsEngineeringGroup.com

May 17, 2024

Nancy Tran
Land Use Board Secretary
Borough of Highlands Land Use Board
151 Navesink Avenue
Highlands, New Jersey 07732

Re: Completeness Review No. 1
Preliminary and Final Site Plan
60 Bay Ave Highlands, LLC
60 Bay Avenue
Block 42, Lot 1
Borough of Highlands, Monmouth County, New Jersey
Our File No.: HLPB2024-02

Dear Ms. Tran:

As requested, we have reviewed the above referenced application in accordance with the Borough of Highlands Zoning and Land Use Regulations. section entitled, "Part III, Subdivision and Site Plan Review, Article VI, Application Procedure", and "Article VIII, Plat and Plan Details, section 21-58.E & F – Preliminary Site Plan and Final Site Plan" and the Borough of Highlands, NJ Central Business District Redevelopment Plan May 2018.

The Applicant seeks to move and elevate an existing 3-story multi-family residential building (4 units), renovate, construct two extensions, decks, provide ground floor storage and garage parking and associated site improvements. The proposed multi-family residential building will consist of 5 units, one (1) car garage, two (2) – 1 ½ garages, and two (2) car garages.

The residential building is situated on a 6,625 sf (0.147 Ac) lot in the Central Business District (CBD) within the CDB Redevelopment Area Overlay 2 Zone - Gateway Parcels bounded by Bay Avenue, South Street, Shrewsbury Avenue, Lot 15 in the same zone and residential Lot 7 within the R-2.02 District. The property is located in the AE Flood Hazard and partially in the Coastal A Zone area and the Limit of the Moderate Wave Action (LiMWa) delineation.

The Applicant received a Denial of Zoning Permit on February 14, 2024, for non-compliance of bulk requirements for exceeding building coverage, decrease of required parking and increase of driveway width at the curb and must seek Planning Board approval.

We have reviewed the following documents submitted in support of the above referenced application for completeness purposes:

1. Copy of Land Use Board Application for Variance, dated April 15, 2024.

2. Copy of a Denial of Zoning Permit issued on February 14, 2024, by Courtney Lopez, Zoning Officer for the Borough of Highlands.

3. Copy of plans entitled, "Preliminary & Final Major Site Plan for Proposed Multi-family Residence, Block 42, Lot 1, 60 Bay Avenue, Borough of Highlands, Monmouth County, New Jersey", prepared by InSite Engineering, LLC., dated February 5, 2024, and last revised April 9, 2024, consisting of 12 sheets.

4. Copy of report entitled, "Multi-Family Residence-Preliminary & Final Major Site Plan, Stormwater Management Statement of Compliance, 60 Bay Avenue, Block 42, Lot 1, Borough of Highlands, Monmouth County, New Jersey", prepared by InSite Engineering, LLC, dated April 11, 2024.

5. Copy of Architectural plans entitled, "60 Bay Ave Highland LLC, Multi-family Residence, 60 Bay Avenue, Highlands, New Jersey, prepared by Salvatore La Ferlita, R.A. issued April 5, 2024, consisting of 5 sheets.

6. Copy of plan entitled, "Boundary & Topographic Survey of Block 42, Lot 1, 60 Bay Avenue, Borough of Highlands, Monmouth County, New Jersey", prepared by InSite Surveying, LLC., dated November 30, 2023, and last revised December 20, 2023.

7. Copy of the Borough of Highlands, NJ Central Business District Redevelopment Plan, prepared by Phillips Preiss Grygiel Leheny Hughes LLC, Planning and Real Estate Consultants, adopted May 18, 2022.

We offer the following comments and recommendations for the Planning Board's consideration:

I. ZONING

1. This property is located in the CBD Redevelopment Overlay 2 Zone (C-RO-2) Gateway Parcels.

2. The proposed multi-family residential building is a permitted use.

3. The Applicant requires zero (0) bulk variances.

4. The following bulk requirement summary is provided for the Board's reference.

Schedule I – Bulk and Area Requirements				
CBD Redevelopment Overlay 2 Zone (C-RO-2) Gateway Parcels				
	Required	Existing	Proposed	Variance
Min. Lot Area (sf)	-	6,425	6,425	No
Lot Frontage/Width (ft)	-	213.67	213.67	No
Principal Building				
Min. Front Yard Setback (ft)				
Bay Avenue	2	13.9	5.00	No
South Street	2	13.3	8.30	No
Shrewsbury Avenue	2	8.3	8.05	No
Min. Rear Yard Setback (ft)	12	_	N/A	
Min. Side Yard Setback (ft)	5	11.4	7.93	No

Max. Building Height (ft)	40	11.6	29.33	No
Max. Lot Coverage (%)	80	37.0	62.0	No
Max Building Coverage (%)	80	31.9	54.5	No
Max. Floor Area Ratio	N/A	N/A	N/A	N/A
Minimum Outdoor Living Space	100 sf/Unit Plus 50 sf/BR		TBD	TBD
Accessory Building				
Max. Gound Floor Area (%)	30	5.0	N/A	-
Max. Coverage Rear Yard (%)	40	N/A	N/A	-
Min. Yard Setback (ft)	3	3.6	N/A	-
On-Site Parking (spaces)		0	0	-

II. APPLICATION FEES (PART 6 FEE SCHEDULE ARTICLE XXIII, ORD. 21-107)

1. Site Plans

Major		
Preliminary approval	$1000 plus $50 per acre or Part thereof and $20 per 1,000 Square foot of building floor area or part thereof or $20 per dwelling unit	$ 1,103.80
Final approval	50% preliminary fee	$ 551.90
Total		$ 1,655.70

III. CHECKLIST ITEMS

1. Date, name, location of site, name of owner, scale, and reference meridian. **Provided.**

2. Area of the lot and all lot line dimensions and bearings. **Provided.**

3. The location of all existing watercourses, wooded areas, easements, rights-of-way, streets, roads, highways, rivers, buildings, structures, and any other feature on the property and within seventy-five (75) feet of the property line. **Partially provided.**

   Provide existing features and information as described within seventy-five feet of the property lines.

4. Location, use and ground floor area of all existing and proposed buildings, with the building setback, sideline, and rear yard distance. **Partially provided.**

   Provide ground floor area(s) on the site plans.

5. Elevations at the corners of all proposed buildings and paved areas and at property corners if new buildings or paved areas are proposed. **Partially provided.**

Provide additional elevations on the site plans.

6. The location and widths of existing and proposed streets servicing the site plan. **Provided.**

7. Specifications for and location of proposed surface paving and curbing. **Provided.**

8. Location of all structures within seventy-five (75) feet of the property. **Partially provided.**

   Provide location of all structures within seventy-five feet of the property.

9. Location of off-street parking areas, with dimensions, showing proposed parking and loading spaces, with dimensions, width of proposed access drives and aisles and traffic circulation. **Provided.**

10. Stormwater management and sanitary sewer reports, including proposed storm drainage and sanitary disposal facilities; specifically, the location, type and size of all existing and proposed catch basins, storm drainage facilities, utilities, plus all required design data supporting the adequacy of the existing or proposed facilities to handle future storm flows. **Partially provided.**

    Applicant has provided stormwater management report.

    Provide existing and proposed sanitary sewer report, locations, and total average daily sewage flow. Please see general comments.

11. Existing and proposed contours of the property and for seventy-five (75) feet outside the property at one (1) foot intervals when new buildings or parking areas are proposed. Spot elevations for any development in a flood hazard area. **Partially provided.**

    Provide existing contours for seventy-five (75) feet outside the property.

    Provide additional proposed spot elevations in the flood hazard area.

12. The location and treatment of proposed entrances and exits to public rights-of-way, including the possible utilization of traffic signals, channelization, acceleration and deceleration lanes, additional widths, and any other devices necessary to traffic safety and/or convenience. **Provided.**

13. The location and identification of proposed open space, parks, or other recreation areas. **Not applicable.**

14. The location and design of landscaping, buffer areas and screening areas showing size, species and spacing of trees and plants and treatment of unpaved areas. **Provided.**

15. The location of sidewalks, walkways, traffic islands and all other areas proposed to be devoted to pedestrian use. **Provided.**

16. The nature and location of public and private utilities, including maintenance and solid waste disposal, recycling and/or storage facilities. **Partially provided.**

    Provide location of recycling bins. Provide location of garbage disposal pick up.

17. Specific location and design of traffic control devices, signs, and lighting fixtures. The Board may require of the applicant expert testimony concerning the adequacy of proposed traffic control devices, signs, and lighting fixtures. **Not applicable.**

18. Preliminary architectural plans for the proposed buildings or structures, indicating typical floor plans, elevations, heights and general design or architectural styling. **Provided.**

19. The present and past status and use and contemplated use of the property and all existing buildings on the property. A cleanup plan where such is necessary because of the past or present use of the site. **Not applicable.**

20. A soil erosion and sediment control plan are required. Said plan shall be submitted to the Soil Conservation District and approval of the application shall be conditioned upon certification of the soil erosion and sediment control plan by the District. **Provided.**

21. Soil borings, when required by the Board Engineer. **Not provided.**
    May be required for footings for construction.

22. Certification statement for the required municipal signatures, stating:

    Application No._____ approved/disapproved by the Borough of Highlands Land Use Board as a Major Site Plan on (date). **Provided.**

    _____
    Chairman

    _____
    Secretary

23. Certification statement for the County Planning Board approval/disapproval, if required.
    Not provided. Condition of approval.
    Bay Avenue is County Route 8; therefore, County Planning Board approval will be required.

24. The Board may require any additional information which is reasonably necessary to ascertain compliance with the provisions of this chapter. **Open.**

II. DESIGN WAIVERS

1. Relief is requested from Ordinance Subsection 21-65.5(C)(1) Maximum Driveway Width at Curb. Eighteen (18) feet is permitted, and 19.09 feet is proposed for the site.

2. Relief is requested from Ordinance Subsection 21-65(11)(E) Minimum Lighting Level. 0.3 fc is required, and 0.1 fc is proposed for the site.

3. Relief is requested from Ordinance Subsection 21-65(11)(F) Maximum Lighting Level at property line. 0.3 fc is permitted, and 1.7 fc is proposed for the site.

IV. COMPLETENNESS

The application may be deemed complete with waivers to be determined.

V. GENERAL COMMENTS

1. Please confirm that the existing dwelling will be moved closer to Bay Avenue.

   The Land Use Board Application, Rider, cover letter and reports do not indicate that the existing structure is to be located closer the Bay Avenue.

   The Denial of Zoning Permit notes "Lift house up to flood requirements. Move forward toward Bay Ave…." The Boundary and Topographic Survey, Existing Conditions Plan, Site Plan and architectural plans were compared, the common existing and proposed walls appear to be closer to Bay Avenue.

   Please provide a note on the plans clearly indicating that the dwelling is to be relocated.

2. The site was issued a *Denial of Zoning Permit* on February 14, 2024, by Courtney Lopez, Zoning Officer for the Borough of Highlands. The site was denied for non-compliance for having a building coverage of 52.4% where 35% is permitted: proposed parking spaces at 7 where 10.1 spaces are required and proposed driveway at curb is 19.09 feet where 18 feet is permitted.

3. The proposed site is located in the CBD Redevelopment Overlay 2 Zone (C-RO-2) Gateway Parcels which allows for 80% building coverage. The Applicant is proposing 62%.

4. Please indicate on the plans the elevation and square footage of the floors and the required minimum outdoor living per 100 sf/unit plus 50 sf/BR. Please update the bulk requirements summary

5. Eleven spaces (10.1 spaces per RSIS Midrise Apartments) per C-RO-2 are required for the proposed site. Per §VIIA Vehicular Parking, residential uses are permitted to count first any available on-street parking spaces before determining the number of parking spaces that must be provided off-street. The Applicant notes that there are more than 3.1 existing on street parking spaces within the immediate vicinity and therefore the project complies.

   Bay Avenue, South Street and Shrewsbury Avenue have no parking areas that are designated by yellow painted curbing.

   Please indicate and dimension the available on-street parking spaces on the plans and confirm that the parking requirement has been met. Please update the parking chart.

6. The Applicant is requesting a design waiver for the proposed a 19.01 ft width driveway with apron and sidewalk accessing Shrewsbury Avenue.

   Please explain why an 18 ft width driveway is not sufficient for the proposed driveway. An 18 ft. driveway is required per § 21-65.5.

   Please provide spot elevations for the proposed apron and sidewalk ramps. Confirm ADA compliant.

7. Please provide proposed spot elevations indicating positive drainage between the rear driveway and the landscape buffer towards the roadway. Flow arrows and spot elevations are shown in the landscaped area, which cannot be relied on for long term positive flow.

8. There is existing 4 ft and 6 ft high fencing along Lot 15, as shown on the Boundary and Topographic Survey and the Existing Conditions Plan.

   The fencing is missing from the site plans. Please confirm ownership of the fence and place on the site plans.

9. Please provide proposed spot elevations indicating positive drainage between and along the existing fence with Lot 15, paved walkway and building to the roadway.

10. The ground elevations on the Architectural plans are 4.00 whereas the grading plan is 5.00. Please confirm the elevation and correct.

11. There are elevation five- and six contours shown in the southeast corner of the lot between the proposed dwelling, under the deck and the existing sidewalk. The ground elevation at the dwelling is 5.00. Please provide positive drainage and spot elevations.

12. Provide proposed spot elevations at all the corners of the proposed building, walkways, driveway, and aprons.

13. Please revise the building height per architectural plans from 29.25 ft to 29.33 ft.

14. Plantings are shown on the northeast portion of the proposed dwelling beneath the decking and upper floors.

    Please confirm that the proposed plantings will thrive with minimum sun exposure.

    Please place landscaping details on the Landscape Plan.

15. Please indicate if there is lawn or stone under the proposed decking. Please update the stormwater calculation if necessary.

16. Provide a note on the plans that the Applicant is responsible for any damages to any/all existing curb, sidewalk, roadway, and other off-site objects made during construction and must be repaired and/or replaced to the satisfaction of the Borough Engineer and costs paid by the Applicant.

17. Indicate the pavement replacement areas for the installation of all utilities and proposed driveways.

    Update pavement details according to § 21-65.15.

18. Indicate the areas of concrete sidewalk and paver walkway repair for the installation of utilities and provide details.

19. Indicate inverts, cleanouts, roof leader connections and splash blocks on the plans for the roof leader collection system that discharges to an existing inlet located on South Street. Provide size and material type on the plans.

20. A proposed sanitary sewer connection within a proposed driveway is shown connecting to the sanitary sewer line in Bay Avenue.

It is recommended that the lateral not be placed in the driveway and a cleanout provided near the dwelling and near the curb.

Provide the size and type of material for the lateral.

Provide cleanout protection box details for paved or unpaved areas.

21. An existing cleanout is shown approximately 4.5 ft within an asphalt area of sidewalk near one of the two pairs of proposed driveways accessing Bay Ave.

    Please indicate the location of the existing sanitary sewer connection (size and material) and its intent as to whether it is to be abandoned or to serve in conjunction with the proposed sanitary lateral.
    Please provide note on plan.

22. A Sanitary Sewer Connection fee will be required for the site.

    As per N.J.S.A. 40A:26a-11.1, "A municipal sewerage facility may charge an additional connection fee for an addition, alteration, or change in use that materially increases the level of use (15% or more) and imposes a greater demand on the sewerage system but does not involve a new physical connection of the property to the sewerage system."

    The additional dwelling unit and increased number of overall bedrooms is anticipated to increase the flow by over 15%.

    The Applicant is requested to provide the existing and projected increased total daily sanitary sewer flow to calculate the connection fee.

    The projected average daily sanitary flow shall be based upon NJDEP criteria N.J.A.C. 7:14A-23.3(a).

    Please provide a table of calculations on the plan.

23. An existing water meter is shown approximately 1.5 ft within the existing paver sidewalk near one of the two pairs of proposed driveways accessing Bay Ave.

    Please indicate the location of the existing water service (size and material) and its intent as to whether it is to be abandoned or to serve in conjunction with the proposed water service.

    Please provide the size and material type for the proposed water service on the plan.

24. There is an existing gas service line in Bay Avenue on the Boundary and Topographic survey but is not shown on the site plans.

    Please indicate the location of the existing gas service and its intent as to whether it is to be abandoned or to serve in conjunction with the proposed gas service.
    Please provide note on plan.

    There is a gas valve at the existing rear driveway on Shrewsbury Avenue. Provide the existing gas service line on the plans. Provide a note regarding its service to the proposed building.

25. There are two existing overhead services on Bay Avenue and Shrewsbury Avenue as shown on the Boundary and Topographic Survey and the Existing Conditions Plan. A proposed and existing overhead service is shown for Bay Avenue on the Grading, Drainage and Utility Plan, however the existing service on Shrewsbury is not shown.

    Please indicate the existing service on the plan and note if it is to be removed.

    All proposed utilities are required to be underground per § 21-65.26 B, however the section allows overhead service with the provision of:

    Lots which abut existing streets where overhead electric or telephone distribution supply lines and service connections have heretofore been installed may be supplied with electric and telephone service from these overhead lines, but any new service from these overhead lines shall be installed underground.

    Provide a note on the plans.

26. An existing decorative streetlight is located within one of the proposed driveway aprons along Bay Avenue. Please provide a design solution for the conflict and location for the relocated pole.

27. The Applicant is requesting relief from 2 Lighting Ordinances:

    a. Subsection 21-65(11)(E) Minimum Lighting Level. 0.3 fc is required, and 0.1 fc is proposed for the site.

    b. Subsection 21-65(11)(F) Maximum Lighting Level at property line. 0.3 fc is permitted, and 1.7 fc is proposed for the site.

    The Applicant did not include existing lighting in the analysis.
    The existing decorative streetlight (see comment above) and street lighting need to be included for an overall analysis.

    It is unknown if the existing fencing along Lot 15 has factored into the analysis. The proposed light facing Lot 15 does not seem to have the same intensity as those of the other proposed lights.

    There is a lighting void area for the main entrance and sidewalk to the proposed building along Bay Avenue. Please provide sufficient lighting for the entrance and sidewalk.

    Please provide the manufacturer's specifications.

    We recommend the applicant provide the minimum lighting level required, and a decrease in lighting levels at the property line, along with testimony of why such highlighting levels are being requested.

28. There is a rear entrance and a doorway for a storage unit on the north side of the building which access to a lawn and gravel area, respectively. It is recommended that a sidewalk be provided to connect the rear entrance with the walkway area for the garbage bin area and the rear gravel driveway.

29. Please indicate where the recycling bins are to be placed.

30. Please indicate if there is a dedicated area for garbage and recycling pickup.

31. Please revise the concrete vertical curb to indicate the depressed curb.

32. As a condition of approval, it is recommended that the Applicant provide a plot plan for review and approval at the time of obtaining the building permit.

33. The property is located in the AE flood zone with a Base Flood Elevation of 11 feet and the proposed finished floor elevation is 14.00.

    We defer further review to the Flood Plain Administrator and Construction Official for any applicable building requirements accordingly.

34. According to XI.E General Administrative Requirements Affordable Housing Provisions, the mandatory set-aside requirements in Section 26-2 of the Borough of Highlands Affordable Housing Ordinance apply to any multifamily residential development of five (5) dwelling units or more, including the residential portion of a mixed-use project.

    The applicant is to address this and provide testimony related to the same.

V. APPROVALS

Approval of this application will be conditioned upon the Applicant obtaining or providing approved documents for the following:

1. Monmouth County Planning Board
2. Freehold Soil Conservation Service
3. Coastal Area Facilities Review Act (CAFRA) Zone

Should you have any questions, please do not hesitate to contact me.

Very truly yours,

Carmela Roberts, P.E., C.M.E., C.P.W.M.
Land Use Board Engineer

cc: Michael Muscillo, Borough Administrator, (mmuscillo@highlandsborough.org)
P. Austin Mueller, Assoc., Land Use Board Attorney (amueller@weiner.law)
Courtney Lopez, Zoning Officer (clopez@highlandsborough.org)
Donna M. Jennings, Esq., Applicant's Attorney (djennings@wilentz.com)
Douglas D. Clelland, P.E., Applicant's Engineer (doug@insiteeng.net)
Salvatore LaFerlita, R.A., A.I.A. Applicant's Architect (sallaferlita@aol.com)
Cameron Corini, P.E., C.M.E., C.P.W.M., Roberts Engineering Group, LLC
GS Bachman, E.I.T., Roberts Engineering Group, LLC

WILENTZ
—ATTORNEYS AT LAW—

DONNA M. JENNINGS, ESQ.

T: 732.855.6039
F: 732.726.6560
djennings@wilentz.com

90 Woodbridge Center Drive
Suite 900 Box 10
Woodbridge, NJ 07095-0958
732.636.8000

June 18, 2024

VIA HAND DELIVERY AND EMAIL
Nancy Tran, Land Use Board Secretary
Borough of Highlands Land Use Board
151 Navesink Avenue
Highlands, NJ 07732

RE: 60 Bay Ave Highlands LLC
Preliminary & Final Major Site Plan Approval
60 Bay Avenue
Block 42, Lot 1

Dear Ms. Tran:

This office represents 60 Bay Ave Highlands LLC in connection with the above-referenced application. Enclosed, for filing, please accept the following as included in the applicant's site plan application:

1. Eighteen (18) copies of the Land Use Board Application, amended to reflect updated tax payment, with Rider.

2. Eighteen (18) copies of an updated Zoning Permit Denial, dated April 23, 2024.

3. Eighteen (18) copies of a Response Letter, prepared by InSite Engineering, LLC, to the Roberts Engineering Group LLC Completeness Review No. 1, dated May 17, 2024.

4. Eighteen (18) copies of Proof of Property Taxes Paid provided by Donna Conrad, Borough Tax Clerk/Cashier, dated June 12, 2024.

5. Eighteen (18) copies of email correspondence from Kevin Rooney, Cashier, confirming sewer bill payment, dated June 18, 2024.

6. Eighteen (18) copies of Executed W-9, dated March 18, 2024.

Wilentz, Goldman & Spitzer, P.A. Woodbridge | Newark | New York | Philadelphia | Red Bank www.wilentz.com

7. Eighteen (18) copies of Stormwater Management Statement of Compliance, prepared by InSite Engineering, LLC, dated April 11, 2024.

8. Eighteen (18) copies of a sanitary sewer and water volume report, entitled "Engineer's Report," prepared by InSite Engineering, LLC, dated June 10, 2024.

9. Eighteen (18) copies of a survey, entitled "Boundary & Topographic Survey," prepared by InSite Surveying, LLC, dated November 30, 2023, last revised December 20, 2023, consisting of one (1) sheet.

10. Eighteen (18) copies of floor plans and elevations, entitled "60 Bay Ave Highland LLC Multi-Family Residence 60 Bay Avenue Highlands, New Jersey," prepared by LaFerlita Architectural Services, dated June 12, 2024.

11. Eighteen (18) copies of a preliminary & final major site plan, entitled "Proposed-Multi Family Residence," prepared by InSite Engineering, LLC, dated February 5, 2024, last revised June 5, 2024, consisting of thirteen (13) sheets.

Please be advised that the application and escrow fees were provided under separate cover. Additionally, please advise as to when this matter will be scheduled for a public hearing before the Land Use Board.

Thank you for your continued assistance in this matter. Should you require any additional information, please do not hesitate to contact this office.

Very truly yours,

DONNA M. JENNINGS

w/encl.

CC: 60 Bay Ave Highlands, LLC
Doug Clelland, PE
Sal LaFerlita, AIA
Luke H. Policastro, Esq.

Land Use Board
Borough of Highlands
Attn: Nancy Tran
Land Use Board Secretary
151 Navesink Avenue
Highlands, New Jersey 07732

June 12, 2024

Via Hand Delivery

RE: **60 BAY AVENUE**
Response Letter (HLPB2024-02)
Block 42, Lot 1;
60 Bay Avenue
Borough of Highlands, Monmouth County, New Jersey

Ms. Tran:

We are submitting this letter on behalf of the Owner/Applicant in response to Roberts Engineering Group Review Letter dated May 17, 2024. Each comment and response are numbered in accordance with the aforementioned review memo. *Italicized text is taken from the review memo for your ease of reference;* non-italicized text represents our responses.

Review Letter, dated May 17, 2024

III. CHECKLIST ITEMS

3. *The location of all existing watercourses, wooded areas, easements, rights-of-way, streets, roads, highways, rivers, buildings, structures, and any other feature on the property and within seventy-five (75) feet of the property line. Partially provided.*

   Provide existing features and information as described within seventy-five feet of the property lines.

   The Location Map on the Title Sheet (C100) was revised accordingly.

4. *Location, Use and ground floor area of all existing and proposed buildings, with the building setback, sideline, and rear yard distance. Partially provided.*

   Provide ground floor area(s) on the site plans.

   A "Building Data" chart was added to the Site Layout Plan (C300).

5. *Elevations at the corners of all proposed buildings and paved areas and at property corners if new buildings or paved areas are proposed. Partially provided.*

   Provide additional elevations on the site plans.

   Additional elevations were added to the Grading, Drainage & Utility Plan (C400).

8. *Location of all structures withing seventy-five (75) feet of the property. Partially provided.*

   Provide location of all structures within seventy-five feet of the property.

   The Location Map on the Title Sheet (C100) was revised accordingly.

10. *Stormwater management and sanitary sewer reports, including proposed storm drainage and sanitary disposal facilities; specifically, the location, type, and size of all existing and proposed catch basins, storm drainage facilities, utilities, plus all required design data supporting the adequacy of the existing or proposed facilities to handle future storm flows. Partially provided.*

    Applicant has provided stormwater management report.

    Provide existing and proposed sanitary sewer report, locations, and total average daily sewerage flow. Please see general comments.

    An Engineer's Report is included in this submission, accordingly.

11. *Existing and proposed contours of the property and for seventy-five (75) feet outside the property at one (1) foot intervals when new buildings or parking areas are proposed. Spot elevations for any development in a flood hazard area. Partially provided.*

    Provide existing contours for seventy-five (75) feet outside the property.

    Provide additional proposed spot elevations in the flood hazard area.

    Monmouth County topographic data was added to a key map on the Title Sheet (C100).

16. *The nature and location of public and private utilities, including maintenance and solid waste disposal, recycling and/or storage facilities. Partially provided.*

    Provide location of recycling bins. Provide location of garbage disposal pick up.

    The location of recycling bins and the location for garbage disposal pick up was added to the Site Layout Plan (C300).

21. *Soil borings, when required by Board Engineer. Not provided.*
    May be required for footings for construction.

    The Applicant agrees to comply, as required, prior to construction.

23. *Certification statement for the County Planning Board approval/disapproval, if required. Not provided. Condition of Approval.*
    Bay Avenue is County Route 8; therefore, County Planning Board approval will be required.

    The Applicant agrees to comply as a condition of approval, if approved.

24. *The Board may require any additional information which is reasonably necessary to ascertain compliance with the provisions of this chapter. Open.*

Informational, no response required.

II. DESIGN WAIVERS

1. *Relief is requested from Ordinance Subsection 21-65.5(C)(1) Maximum Driveway Width at Curb. Eighteen (18) feet is permitted, and 19.09 feet is proposed for the site.*

   Supporting testimony will be provided.

2. *Relief is requested from the Ordinance Subsection 21-65(11)(E) Minimum Lighting Level. 0.3 fc is required, and 0.1 fc is proposed for the site.*

   Supporting testimony will be provided.

3. *Relief is requested from Ordinance Subsection 21-65(11)(F) Maximum Lighting Level at property line. 0.3 fc is permitted, and 1.7fc is proposed for the site.*

   Supporting testimony will be provided.

V. GENERAL COMMENTS

1. *Please confirm that the existing dwelling will be moved closer to Bay Avenue.*

   The Land Use Board Application, Rider, cover letter and reports do not indicate that the existing structure is to be located closer to Bay Avenue.

   The Denial of Zoning Permit notes "Lift house up to flood requirements. Move forward toward Bay Avenue…" The Boundary and Topographic Survey, Existing Conditions Plan, Site Plan and architectural plans were compared, the common existing and proposed walls appear to be closer to Bay Avenue.

   Please provide a note on the plans clearly indicating that the dwelling is to be relocated.

   The site plan was revised accordingly (multiple sheets).

2. *The site was issued a Denial of Zoning Permit on February 14, 2024, by Courtney Lopez, Zoning Officer for the Borough of Highlands. The site was denied for non-compliance for having a building coverage of 52.4% where 35% is permitted: proposed parking spaces at 7 where 10.01 spaces are required and proposed driveway at curb is 19.09 feet where 18 feet is permitted.*

   Informational, no response required.

3. *The proposed site is located in the CBD Redevelopment Overlay 2 Zone (C-RO-2) Gateway Parcels which allows for 80% building coverage. The Applicant is proposing 62%.*

   Informational, no response required.

4. *Please indicate on the plans the elevation and square footage of the floors and the required minimum outdoor living per 100 sf/unit plus 50 sf/BR. Please update the bulk requirements summary.*

   The architectural plans as well as the Zoning Compliance Chart on the Site Layout Plan (C300) was revised accordingly.

5. *Eleven spaces (10.1 spaces per RSIS Midrise Apartments) per C-RO-2 are required for the proposed site. Per §VIIA Vehicular Parking, residential uses are permitted to count first any available on-street parking spaces before determining the number of parking spaces that must be provided off-street. The Applicant notes that there are more than 3.1 existing on street parking spaces within the immediate vicinity and therefore the project complies.*

   Bay Avenue, South Street and Shrewsbury Avenue have no parking areas that are designated by yellow painted curbing.

   Please indicate and dimension the available on-street parking spaces on the plans and confirm that the parking requirement has been met. Please update the parking chart.

   The existing parking spaces across Shrewsbury Avenue were added to the plan. Although not striped, parking is also available along Bay Avenue. The parking spaces that are provided on-site are indicated in the proposed column and footnote (1) describes the available parking in the immediate vicinity to demonstrate compliance.

6. *The Applicant is requesting a design waiver for the proposed 19.01 ft width driveway with apron and sidewalk accessing Shrewsbury Avenue.*

   Please explain why an 18 ft width driveway is not sufficient for the proposed driveway. An 18 ft driveway is required per §21-65.5.

   Please provide spot elevations for the proposed apron and sidewalk ramps. Confirm ADA compliant.

   Additional spot elevations were added to the plan. The proposed driveway was made slightly wider than 18' in order to accommodate two complete parking areas fully within the driveway and on the subject property.

7. *Please provide proposed spot elevations indicating positive drainage between the rear driveway and the landscape buffer towards the roadway. Flow arrows and spot elevations are shown in the landscaped area, which cannot be relied on for long term positive flow.*

Additional spot grades were added to the plan, accordingly.

8. *There is existing 4 ft and 6 ft high fencing along Lot 15, as shown on the Boundary and Topographic Survey and the Existing Conditions Plan.*

   The fencing is missing from the site plans. Please confirm ownership of the fence and place on the site plans.

   The existing fence was added to the plans, testimony will be provided regarding ownership of the fence.

9. *Please provide proposed spot elevations indicating positive drainage between and along the existing fence with Lot 15, paved walkway and building to the roadway.*

   Additional spot grades were added to the plan, accordingly.

10. *The ground elevations on the Architectural plans are 4.00 whereas the grading plan is 5.00. Please confirm the elevations and correct.*

    The architectural plans were revised, accordingly.

11. *There are elevation five – and six contours shown in the southeast corner of the lot between the proposed dwelling, under the deck and the existing sidewalk. The ground elevation at the dwelling is 5.00. Please provide positive drainage and spot elevations.*

    Existing contours are shown as shaded (grey). We leave them on the plan so that the future contractor has an indication of the earthwork necessary. There is only one proposed 5 contour which was added to the plan. The proposed elevation at the base of the building is 5 and the existing/proposed sidewalk varies between 4 and 4.5, therefore positive drainage is maintained.

12. *Provide proposed spot elevations at all the corners of the proposed building, walkways, driveway, and aprons.*

    Additional spot grades were added, accordingly.

13. *Please revise the building height per architectural plans from 29.25 ft to 29.33 ft.*

    The plans were revised accordingly.

14. *Plantings are shown on the northeast portion of the proposed dwelling beneath the decking and upper floors.*

    Please confirm that the proposed plantings will thrive with minimum sun exposure.

    Please place landscaping details on the Landscape Plan.

With the area getting southern exposure, there will be ample morning sun, with the potential for more in the spring and fall months when the sun angle is lower.

15. *Please indicate if there is lawn or stone under the proposed decking. Please update the stormwater calculation if necessary.*

    The plan was revised, accordingly.

16. *Provide a note on the plans that the Applicant is responsible for any damages to any/all existing curb, sidewalk, roadway, and other off-site objects made during construction and must be repaired and/or replaced to the satisfaction of the Borough Engineer and costs paid by the Applicant.*

    General Note 18 was added to the plan (C101).

17. *Indicate the pavement replacement areas for the installation of all utilities and proposed driveways.*

    Update pavement details according to § 21-65.15.

    The plan was revised, accordingly.

18. *Indicate the areas of concrete sidewalk and paver walkway repair for the installation of utilities and provide details.*

    The plan was revised, accordingly.

19. *Indicate inverts, cleanouts, roof leader connections and splash blocks on the plans for the roof leader collection system that discharges to an existing inlet located on South Street. Provide size and material type on the plans.*

    Proposed downspout locations were added, accordingly. The "Exterior Downspout Collector" detail indicates that a splash block is proposed at each downspout location. Size, material, and slope of pipe is indicated on the plans with capacity calculations.

20. *A proposed sanitary sewer connection within a proposed driveway is shown connecting to the sanitary sewer line in Bay Avenue.*

    It is recommended that the lateral not be placed in the driveway and a cleanout provided near the dwelling and near the curb.

    Provide the size and type of material for the lateral.

    Provide cleanout protection box details for paved or unpaved areas.

    The plan was revised to provide additional detail on the sanitary sewer connection.

21. *An existing cleanout is shown approximately 4.5 ft within an asphalt area of sidewalk near on of the two pairs of proposed driveways accessing Bay Ave.*

    Please indicate the location of the existing sanitary sewer connection (size and material) and its intent as to whether it is to be abandoned or to serve in conjunction with the proposed sanitary lateral. Please provide note on plan.

    The plan was revised accordingly.

22. *A Sanitary Sewer Connection Fee will be required for the site.*

    As per N.J.S.A. 40A:26a-11.1, "A municipal sewerage facility may charge an additional connection fee for an addition, alteration, or change in use that materially increases the level of use (15% or more) and imposes a greater demand on the sewerage system but does not involve a new physical connection of the property to the sewerage system."

    The additional dwelling unit and increased number of overall bedrooms is anticipated to increase the flow by over 15%.

    The Applicant is requested to provide the existing and projected increased total daily sanitary sewer flow to calculate the connection fee.

    The projected average daily sanitary flow shall be based on NJDEP criteria for N.J.A.C. 7:11A-23.3(a).

    Please provide a table of calculations on the plan.

    An Engineer's Report is included in this submission, accordingly. Demand calculations were also added to the Grading, Drainage & Utility Plan, as requested.

23. *An existing water meter is shown approximately 1.5 ft within the existing paver sidewalk near one of the two pairs of proposed driveways accessing Bay Ave.*

    Please indicate the location of the existing water service (size and material) and its intent as whether it is to be abandoned or to serve in conjunction with the proposed water service.

    Please provide the size and material type for the proposed water service on the plan.

    The existing service was identified as to be abandoned and the proposed service size and material have been identified on the plan. This is subject to confirmation from the project MEP, prior to construction, if approved.

24. *There is an existing gas service line in Bay Avenue on the Boundary and Topographic survey but is not shown on the site plans.*

Please indicate the location of the existing gas service and its intent as to whether it is to be abandoned or to serve in conjunction with the proposed gas service. Please provide a note on the plan.

There is a gas valve at the existing rear driveway on Shrewsbury Avenue. Provide the existing gas service line on the plans. Please provide a note regarding its service to the proposed building.

The existing service was identified as to be abandoned and the proposed service has been identified on the plan. This is subject to confirmation from the project MEP, prior to construction, if approved.

25. *There are two existing overhead services on Bay Avenue and Shrewsbury Avenue as shown on the Boundary and Topographic Survey and the Existing Conditions Plan. A proposed and existing overhead service is shown for Bay Avenue on the Grading, Drainage and Utility Plan, however the existing service on Shrewsbury is not shown.*

    Please indicate the existing service on the plan and note if it is to be removed.

    All proposed utilities are required to be underground per §21-65.26 B, however the section allows overhead service with the provision of:

    Lots which abut existing streets where overhead electric or telephone distribution supply lines and service connections have heretofore been installed may be supplied with electric and telephone service from these overhead lines, but any new service from these overhead lines shall be installed underground.

    Provide a note on the plans.

    The existing service was identified as to be abandoned and the proposed service has been identified on the plan as underground. Tapping points are subject to confirmation from the project MEP, prior to construction, if approved.

26. *An existing decorative streetlight is located within one of the proposed driveway aprons along Bay Avenue. Please provide a design solution for the conflict and location for the relocated pole.*

    The plans were revised to show this light as being relocated, accordingly.

27. *The Application is requesting relief from 2 Lighting Ordinances:*
    a. *Subsection 21-65(11)(E) Minimum Lighting Level. 0.3 fc is required, and 0.1 fc is proposed for the site.*
    b. *Subsection 21-65(11)(F) Maximum Lighting Level at property line. 0.3 fc is permitted, and 1.7 fc is proposed for the site.*

    The Applicant did not include existing lighting in the analysis.
    The existing decorative streetlight (see comment above) and street lighting need to be included for an overall analysis.

It is unknown if the existing fencing along Lot 15 has factored into the analysis. The proposed light facing Lot 15 does not seem to have the same intensity as those of the other proposed lights.

There is a lighting void area for the main entrance and sidewalk to the proposed building along Bay Avenue. Please provide sufficient lighting for the entrance and sidewalk.

Please provide the manufacturer's specifications.

We recommend the applicant provide the minimum lighting level required, and a decrease in lighting levels at the property line, along with testimony of why such highlighting levels are being requested.

The existing fence along Lot 15 was factored into the analysis. Manufacturers specifications were added to the plans. Existing lighting from the ROW was added to the plan first in a standalone viewport, and secondly it was included in the proposed lighting conditions.

28. *There is a rear entrance and a doorway for a storage unit on the north side of the building which access to a lawn and gravel area, respectively. It is recommended that a sidewalk be provided to connect the rear entrance with the walkway area for the garbage bin area and the rear gravel driveway.*

    A sidewalk was added, accordingly.

29. *Please indicate where the recycling bins are to be placed.*

    The Site Layout Plan was revised (C300), accordingly.

30. *Please indicate if there is a dedicated area for garbage and recycling pickup.*

    The Site Layout Plan was revised (C300), accordingly.

31. *Please revise the concrete vertical curb to indicate the depressed curb.*

    The Construction Details (C800 & C801) were revised, accordingly.

32. *As a condition of approval, it is recommended that the Applicant provide a plot plan for review and approval at the time of obtaining the building permit.*

    The Applicant agrees to comply as a condition of approval, if approved.

33. *The property is located in the AE flood zone with a Base Flood Elevation of 11 feet and the proposed finished floor elevation is 14.00.*

    We defer further review to the Flood Plain Administrator and Construction Official for any applicable building requirements accordingly.

Informational, no response required.

34. *According to XI.E General Administrative Requirements Affordable Housing Provisions, the mandatory set-aside requirements in Section 26-2 of the Borough of Highlands Affordable Housing Ordinance apply to any multifamily residential development of five (5) dwelling units or more, including the residential portion of a mixed-use project.*

    The applicant is to address this and provide testimony related to the same.

    Testimony will be provided at the hearing.

V. APPROVALS

Approval of this application will be conditioned upon the Applicant obtaining or providing approved documents for the following:

1. *Monmouth County Planning Board.* **WILL COMPLY**
2. *Freehold Soil Conservation Service.* **WILL COMPLY**
3. *Coastal Area Facilities Review Act (CAFRA) Zone.* **WILL COMPLY**

In accordance with the above, enclosed please find the following:

- Nineteen (19) copies of the plan entitled, "Preliminary and Final Major Site Plan", dated 02/05/24, last revised 06/05/24 (r4), totaling thirteen (13) sheets, as prepared by this office;
- Nineteen (1) copies of the survey for the project;
- Nineteen (19) copies of the Engineer's Report for the project; and,
- Nineteen (19) copies of the Stormwater Statement for the project.

Thank you for your continued courtesies regarding this application. If you have any questions or require further information, please feel free to contact this office anytime.

Sincerely,
InSite Engineering, LLC

Douglas D. Clelland, PE

Job #23-2237-01
DDC/mn
cc: 60 Bay Ave Highlands, LLC, Applicant (via Email)
Donna Jennings, Esq., Applicant's Attorney (via Email)
Sal Laferlita, AIA, Applicant's Architect (via Email)

This

ENGINEERS REPORT

for a

PRELIMINARY & FINAL MAJOR SITE PLAN FOR PROPOSED RESIDENTIAL USE

of

BLOCK 42; LOT 1
60 BAY AVENUE

in

THE BOROUGH OF HIGHLANDS
MONMOUTH COUNTY, NJ

has been prepared for

60 BAY AVE HIGHLANDS, LLC
60 Bay Avenue
Highlands, NJ 07732

by

InSite Engineering, LLC
1955 Route 34, Suite 1A
Wall, NJ 07719
CERTIFICATE OF AUTHORIZATION 24GA28083200

On

June 10, 2024

InSite Project No. 23-2237-01



Douglas D. Clelland
NJPE 53310

TABLE OF CONTENTS

I.	**INTRODUCTION**	**3**
II.	**PROJECT SUMMARY**	**3**
III.	**SEWER FLOW CALCULATIONS**	**4**
IV.	**WATER DEMAND CALCULATIONS**	**5**
V.	**CONCLUSION**	**5**

INTRODUCTION

The project site is located on Lot 1 within Block 42 (0.148 acre) that has frontage on Bay Avenue to the west, South Street to the south, Shrewsbury Ave to the east, and residential developments to the north. The 0.148 acre site is currently developed with a multi-family residential use.

The applicant, 60 Bay Ave Highlands, LLC is proposing to relocate, elevate and expand the 3 story multifamily residential building. The current building has three 2-bedroom apartments and one studio apartment. The expanded building will have four 2-bedroom apartments and one 3-bedroom apartments. Additional improvements include parking areas, lighting and landscaping measures, stormwater management facilities, and other associated site amenities.

This report analyzes the proposed sanitary sewer and water volume for the project. The analysis presented herein is intended to support applications for approval of the service connections by the Borough of Highlands and New Jersey American Water.

PROJECT SUMMARY

The project is located in a Sewer Service Area with existing service located in the Bay Avenue ROW. As part of the application, the applicant is proposing to connect to the existing sewer main with a proposed 34 LF of 4" SDR-35 PVC at a slope of 2.1%. Flow rate calculations as well as conveyance system details and specifications are in accordance with the requirements of Title 7 of the New Jersey Administrative Code and the NHSA.

Additionally, the project contains an existing water main located within the Bay Avenue ROW. The applicant is proposing to connect to this main via a wet tap. The proposed water service consists of a 2" copper domestic service lateral. Demand calculations are provided in accordance with N.J.A.C. 5:21-5.2. The proposed service line sizes are subject to a more detailed design by the project MEP Engineer. The MEP Engineer was not yet retained as of the writing of this report.

SEWER FLOW CALCULATIONS

A. Proposed Average Daily Flow (per N.J.A.C. 7:14A-23.3)**:**

Two-Bedroom Apartment (unit) = 4 units

Two-Bedroom Apartment (225 gpd/unit) : $Q_{avg.}$ = 225 gpd x 4 units = 900 gpd

Three-Bedroom Apartment (unit) = 1 units

One-Bedroom Apartment (300 gpd/unit) : $Q_{avg.}$ = 300 gpd x units = 300 gpd

Total Estimated Flow: = 1,200 gpd ≈ 0.0012 mgd

B. Service Connections Capacity Analysis

Proposed Service Connection: Bay Avenue

The proposed 4-inch SDR-35 PVC sanitary sewer service connection will be sufficient to convey the proposed residential flows from the building (1,050 gpd or 0.0011 mgd) as calculated below:

$$Q_d = (1.486 / n) \times A \times R^{2/3} \times S^{1/2}$$

where,
Q_d = design capacity, cfs (1/2 full)
n = Mannings roughness coefficient (PVC = 0.010)
A = flow area (1/2 full) = 0.087 S.F.
R = hydraulic radius = A/WP = 0.083 ft.
S = pipe slope = 0.02 ft/ft.

$Q_d = (1.486/0.010) \times 0.087 \times 0.083^{2/3} \times 0.02^{1/2} = 0.348$ cfs

Q_d = 0.348 cfs x 0.6463 mgd/cfs = 0.225 mgd

Minimum Design Capacity = 2 x $Q_{avg.}$ (flowing 1/2 full)

$\frac{Q_d}{Q_{avg.}} = \frac{0.225 \text{ mgd}}{0.0012 \text{ mgd}} = 187.5 > 2$ **∴ OK**
(Capacity exceeds demand)

WATER DEMAND CALCULATIONS

A. Proposed Average Daily Demand (per N.J.A.C. 5:21-5.2)**:**

Peak Demand

Two-Bedroom Apartment (Unit) = 4 Units

Two-Bedroom Apartment (140 Gpd/Unit: Q/Avg. = 140 Gpd/Unit X 4 Units = 560 Gpd

Three-Bedroom Apartment (Unit) = 1 Units

Three-Bedroom Apartment (200 Gpd/Unit: Q/Avg. = 200 Gpd/Unit X 1 Units = 200 Gpd

Total Proposed Average Daily Demand: = 560 Gpd + 200 Gpd= 760 Gpd ≈ 0.0006 Mgd

CONCLUSION

The analysis herein demonstrates that the proposed building service connection will adequately convey wastewater and water flows from the proposed building into the existing infrastructure within Bay Avenue.

PRELIMINARY & FINAL MAJOR SITE PLAN
FOR
PROPOSED MULTI-FAMILY RESIDENCE

BLOCK 42, LOT 1
TAX MAP SHEET #11
60 BAY AVENUE
BOROUGH OF HIGHLANDS, MONMOUTH COUNTY, NEW JERSEY

PROPERTY OWNERS WITHIN 200' (2/21/2024)

Block/Lot	Current Owner	Mailing Address		
1319-41-8	75 BAY AVENUE SWANTON LLC	75 BAY AVENUE	HIGHLANDS NJ	07732
1319-41-9	DOUTY DOUGLAS & BAYARD	88 BAY AVENUE	HIGHLANDS NJ	07732
1319-41-10	AMERICAN LEGION	BAY AVE	HIGHLANDS NJ	07732
1319-42-2	SHARKEY MARY T	68 BAY AVENUE	HIGHLANDS NJ	07732
1319-42-13	WEST CARL & BUSICHIO KARIN	78 BAY AVENUE	HIGHLANDS NJ	07732
1319-42-14	TRI STATE REALTY LLC	494 SYCAMORE AVE.STE.100	SHREWSBURY NJ	07702
1319-39-1.01	BOROUGH OF HIGHLANDS	171 BAY AVE	HIGHLANDS NJ	07732
1319-39-1.02	BOROUGH OF HIGHLANDS	171 BAY AVE	HIGHLANDS NJ	07732
1319-42-3	PISANO BEVERLY	11 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-41-4	61 BAY AVENUE LLC	28 ATLANTIC AVENUE	OCEAN GROVE NJ	07756
1319-41-7	KEMPSON MATTHEW	30 SECOND STREET	HIGHLANDS NJ	07732
1319-42-9	KURDES LAWRENCE J & MARY-ALISON	8 KAY ST	HIGHLANDS NJ	07732
1319-41-2.01	BASKET EUGENE J	57 BAY AVENUE	HIGHLANDS NJ	07732
1319-43-3	REMIAS ROSE MARIE	22 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-42-12.01	RICCIARDONE BRIAN	163 FANNING STREET	STATEN ISLAND NY	10314
1319-42-15	SHARKEY HUGH & MARY	68 BAY AVENUE	HIGHLANDS NJ	07732
1319-43-1	LAURITANO VICTOR	18 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-43-2	FRANSON LOREEN	20 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-41-3	KU WALTER & EVA L	59 BAY AVENUE	HIGHLANDS NJ	07732
1319-42-4	HARTSGROVE TROY & JOY ANNE	13 SHREWSBURY AVE	HIGHLANDS NJ	07732
1319-42-5	STENSETH MARK D & ALECIA E	15 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-42-6	MAZZELLA KIM M	17 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-42-7	MENZA DAN & KAREN	19 SHREWSBURY AVENUE	HIGHLANDS NJ	07732
1319-41-5	SMITH MURRAY T.	226 PARK STREET	MONTCLAIR NJ	07042
1319-38.01-17.01	MONAHAN WILLIAM	55 A BAY AVE	HIGHLANDS NJ	07732
1319-38.01-17.02	DAVIS COREY MOLZON & JOHN A	55 BAY AVENUE	HIGHLANDS NJ	07732
1319-38.01-17.03	KEETON RANDALL E & DALE ANN	53 BAY AVENUE	HIGHLANDS NJ	07732
1319-38.01-17.04	FEGHHI ALICIA M	51 BAY AVENUE	HIGHLANDS NJ	07732
1319-38.01-17.05	ZHENG WU & OI SUM	27 SOUTH AVENUE	ATLANTIC HIGHLANDS NJ	07716
1319-41-6	KOEPPEL RICHARD J & JOSEPH W	P.O. BOX 810	NAVESINK NJ	07752

UTILITY CONTACTS

* If you are located within 200 feet of a State Highway, you **MUST** notify the NJ Department of Transportation:

NJ Dept. of Transportation
1035 Pkwy Avenue
PO Box 600
Trenton, NJ 08625

*If you are within 200 feet of a County owned road, you **MUST** notify the Monmouth County Planning Board:

Monmouth County Planning Board
Hall of Records Annex 2nd Floor
One East Main St.
PO Box 1255
Freehold, NJ 07728

JCP&L
300 Madison Avenue
PO Box 1911
Morristown, NJ 07960

NEW JERSEY AMERICAN WATER COMPANY
Attn: Construction Department
661 Shrewsbury Ave
Shrewsbury, NJ 07702

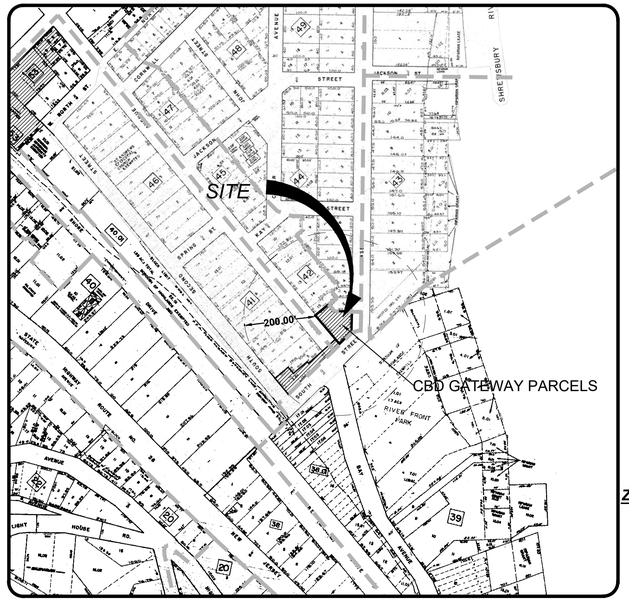
COMCAST COMMUNICATIONS OF MONMOUTH COUNTY
Ron Bertrand, Construction Foreman
403 South St
Eatontown, NJ 07724

VERIZON COMMUNICATIONS
One Verizon Way
Basking Ridge, NJ 07920

TOWNSHIP OF MIDDLETOWN SEWERAGE AUTHORITY
Raymond J. Nierstedt, P.E., Executive Director
PO Box 205, 100 Beverly Way
Belford, NJ 07718

NEW JERSEY NATURAL GAS COMPANY
Attn: Joan Purcaro
PO Box 1464
1415 Wyckoff Road
Wall, NJ 07719

MONMOUTH COUNTY BAYSHORE OUTFALL AUTHORITY
Attn: Executive Director
200 Harbor Way
PO Box 184
Belford, NJ 07718



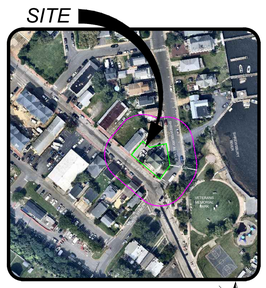
TAX MAP
200 0 200 400
Scale: 1"=200'

ZONE

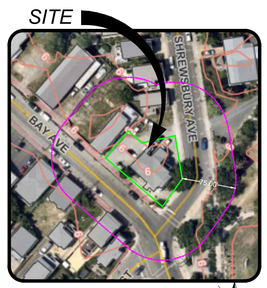
CBD	***REDEVELOPMENT OVERLAY 2 ZONE (C-RO-2)***
CBD	REDEVELOPMENT OVERLAY 3 ZONE (C-RO-3)
PB	PROFESSIONAL BUSINESS
R-1.01	SINGLE FAMILY RESIDENTIAL
R-2.02	SINGLE FAMILY RESIDENTIAL
R-4	ONE-FAMILY RESIDENTIAL
WC-1	WATERFRONT COMMERCIAL
WT-R	WATERFRONT TRANSITION RESIDENTIAL



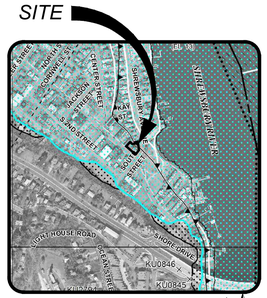
USGS MAP
2000 0 2000 4000
Scale: 1"=2000'



LOCATION MAP
200 0 200 400
Scale: 1"=200'



MONMOUTH COUNTY TOPOGRAPHY MAP
100 0 100 200
Scale: 1"=100'



EFFECTIVE FLOOD INSURANCE RATE MAP
600 0 600 1200
Scale: 1"=600'

LAND USE BOARD APPROVAL

APPROVED BY THE BOROUGH OF HIGHLANDS LAND USE BOARD

BOARD CHAIRPERSON DATE

BOARD SECRETARY DATE

BOARD ENGINEER DATE

INDEX OF SHEETS:

SHEET #:	SHEET TITLE:	INITIAL RELEASE:	REV. DATE:
C100	TITLE SHEET	02/05/24	06/05/24
C101	PLAN NOTES	02/05/24	06/05/24
C200	EXISTING CONDITIONS & SITE PREPARATION PLAN	02/05/24	06/05/24
C300	SITE LAYOUT PLAN	02/05/24	06/05/24
C400	GRADING, DRAINAGE & UTILITY PLAN	02/05/24	06/05/24
C600	LANDSCAPE PLAN	02/05/24	06/05/24
C601	LIGHTING PLAN - EXISTING CONDITIONS R.O.W. ONLY	06/05/24	06/05/24
C602	LIGHTING PLAN - PROPOSED CONDITIONS	02/05/24	06/05/24
C800	CONSTRUCTION DETAILS	02/05/24	06/05/24
C801	CONSTRUCTION DETAILS	06/05/24	06/05/24
C900	SOIL EROSION & SEDIMENT CONTROL PLAN	02/05/24	06/05/24
C901	SESC NOTES	02/05/24	06/05/24
C902	SESC DETAILS	02/05/24	06/05/24

File: X:\Jobs\2327---60 Bay Ave Highlands LLC\23-2237-01 --- 60 Bay Avenue_Highlands, NJ\23223701CAD\dwg\01-Title.dwg, ---> C100 Title Sheet
Copyright 2024, InSite Engineering, LLC. All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev #	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

TITLE SHEET

SHEET NO.

C100

GENERAL SLOPE PLANTING

A. PLANTING PREPARATION
1. SLOPE TEXTURING
   a. CUT SLOPES: THESE SURFACES SHALL BE ROUGHENED IN A HORIZONTAL DIRECTION FOLLOWING THE CONTOUR OF THE SLOPE. THE ROUGHENED TEXTURE SHALL BE MADE BY HAND RAKING OR SIMILAR MECHANICAL MEANS.
   b. FILL SLOPES: THESE SURFACES SHALL BE COMPACTED AND FINISHED AND ALSO ROUGHENED IN A HORIZONTAL DIRECTION FOLLOWING THE CONTOUR OF THE SLOPE. THE ROUGHENED TEXTURE SHALL BE MADE BY HAND RAKING OR SIMILAR MECHANICAL MEANS.
2. WEED ERADICATION
   a. MANUALLY REMOVE EXISTING VEGETATION WHERE NOTED ON PLAN AND DISPOSE OFFSITE.
   b. FERTILIZE ALL PLANTING AREAS BASED UPON SOIL ANALYSIS. BEGIN WATERING PROCESS TO ACTIVATE FERTILIZER AND ADDITIVE CHEMICALS.
   c. WATER ALL PLANTING AREAS THOROUGHLY FOR A PERIOD OF TWO (2) CONSECUTIVE WEEKS. THE UNDERSIGNED SHALL APPROVE SPECIFIC WATERING DURATION AND FREQUENCY DESIGNED TO GERMINATE ALL RESIDUAL WEED SEEDS.
   d. IF PERENNIAL WEEDS APPEAR, DISCONTINUE WATERING PROCESS FOR TWO (2) DAYS, THEN APPLY RECOMMENDED HERBICIDE BY LICENSED APPLICATOR IF ANNUAL WEEDS APPEAR, USE STRAIGHT CONTACT HERBICIDE AS PER THE LICENSED APPLICATOR'S RECOMMENDATIONS. NO WATER SHALL BE APPLIED FOR A MINIMUM OF FOUR (4) DAYS FOLLOWING APPLICATION CONTACT WEED KILLER.
   e. ALLOW SUFFICIENT PERIOD OF TIME TO INSURE THAT ALL WEEDS ARE DEAD.
   f. WATER ALL PLANTING AREAS THOROUGHLY FOR A PERIOD OF THREE (3) WEEKS. A SHORTER WATERING PERIOD MAY BE PERMISSIBLE AT THE DISCRETION OF THE UNDERSIGNED AND/OR THE PEST CONTROL ADVISOR. DISCONTINUE WATERING FOR ONE (1) DAY PRIOR TO THE SECOND APPLICATION OF THE HERBICIDE. RE-APPLY A STRAIGHT CONTACT WEED KILLER, AS PER THE PEST CONTROL ADVISOR'S RECOMMENDATIONS. FOR EFFECTIVE WEED ERADICATION, ALLOW A MINIMUM OF FOUR (4) DAYS WITHOUT IRRIGATION RO
   g. REMOVE ALL DESICCATED WEEDS FROM SLOPES.

B. PLANTING
PLANT TREES AND SHRUBS AS INDICATED ON PLANTING PLAN AND AS DETAILED ON PLANTING DETAIL SHEET. SUBSTITUTIONS OF PLANTS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE UNDERSIGNED. INSTALL ALL CONTAINER GROWN PLANTS ACCORDING TO TREE AND SHRUB PLANTING AND STAKING DETAIL. THOROUGHLY MIX THE SPECIFIED MATERIALS FOUND IN THE SOIL ANALYSIS AND THOSE SPECIFIED IN THE PLANTING DETAIL SHEET WITH THE SITE SOIL PRIOR TO BACKFILLING OF PLANTING PITS.

GENERAL NOTES

1. **SUBJECT PROPERTY**
TAX MAP 11: BLOCK 42, LOTS 1, BOROUGH HIGHLANDS, MONMOUTH COUNTY, NEW JERSEY

2. **PURPOSE OF THIS PLAN SET**
THIS PLAN SET HAS BEEN PREPARED FOR THE PURPOSE OF PRELIMINARY/FINAL SITE PLAN MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THE PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL FINAL APPROVALS HAVE BEEN OBTAINED AND ALL THE CONDITIONS OF THE APPROVALS HAVE BEEN SATISFIED.

3. **SURVEY DATA**
SURVEY INFORMATION CONTAINED HEREON IS BASED ON A FIELD SURVEY PERFORMED BY INSITE SURVEYING, LLC, ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY", LAST REVISED 12/20/23. ALL ELEVATIONS ARE RELATIVE TO THE NORTH AMERICAN DATUM OF 1988 (NAVD88). SEE SURVEY FOR DEED REFERENCES.

4. **BASE FLOOD ELEVATION**
ACCORDING TO FEMA'S EFFECTIVE FIRM ENTITLED "FIRM - FLOOD INSURANCE RATE MAP (FIRM), MONMOUTH COUNTY, NEW JERSEY (ALL JURISDICTIONS)," COMMUNITY PANEL #34025C0008H, DATED 6/15/22, THE SITE IS LOCATED IN ZONE AE WITH A BASE FLOOD ELEVATION OF 11. ACCORDING TO FEMA'S CURRENT PRELIMINARY FIRM ENTITLED,"PRELIMINARY FLOOD INSURANCE RATE MAP (FIRM)", COMMUNITY PANEL #34025C0008H, DATED 6/15/22, THE SITE IS LOCATED IN ZONE AE WITH A BASE FLOOD ELEVATION OF 11. BOTH FEMA MAPS REFERENCE THE NAVD88 VERTICAL DATUM.

5. **ARCHITECTURAL INFORMATION**
ARCHITECTURAL INFORMATION CONTAINED HEREON IS BASED ON PLANS PREPARED BY SALVATORE LA FERLITA, R.A. ARCHITECTURAL SERVICE CONSTRUCTION MANAGEMENT.

6. **UNDERGROUND UTILITIES NOTIFICATION**
FOR ANY EXCAVATION IN NEW JERSEY, THE CONTRACTOR MUST CALL NEW JERSEY ONE CALL SERVICE AT 1-800-272-1000 FOR A MARKOUT REQUEST NO LESS THAN THREE (3) WORKING DAYS PRIOR TO STARTING ANY EXCAVATION.

7. **VERIFICATION OF UTILITIES**
THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES (INCLUDING BUT NOT LIMITED TO SANITARY SEWERS, STORM SEWERS, POTABLE WATER LINES AND APPURTENANCES, NATURAL GAS LINES, ELECTRIC, TELEPHONE AND CATV LINES AND UNDERGROUND STORAGE TANKS) THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF THE WORK ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTS CONCERNING THE LOCATION AND ELEVATION OF THESE UTILITIES OR OTHER CONSTRUCTION OBSTACLES IMPACTED BY NEW CONSTRUCTION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.

8. **SPECIFICATIONS**
UNLESS OTHERWISE NOTED HEREON, ALL SITE WORK SHALL BE CARRIED OUT IN CONFORMANCE WITH THE PROVISIONS OF THE "NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.

9. **CONSTRUCTION REQUIREMENTS**
   a. ALL CONSTRUCTION AND DEMOLITION SHALL CONFORM WITH ANY APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY WAYS, MEANS AND METHODS OF CONSTRUCTION, AND SHALL CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES REMAIN THE OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
   b. THE CONTRACTOR SHALL PERFORM ALL WORK IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
   c. THE CONTRACTOR SHALL PROVIDE NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS, AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY WITHIN THE PROJECT FOR THE PROTECTION AND THE SAFETY OF THE PUBLIC AND MAINTAIN THROUGHOUT CONSTRUCTION.
   d. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE CLEANUP WITHIN THE CONSTRUCTION AREA AND SHALL DISPOSE OF DEBRIS IN ACCORDANCE WITH ANY LOCAL, STATE OR FEDERAL REGULATIONS.
   e. ANY DAMAGE TO PUBLIC STREETS, CURBS, SIDEWALKS AND UTILITIES AS A RESULT OF SITE CONSTRUCTION ACTIVITIES SHALL BE REPAIRED BY THE CONTRACTOR.

10. **CONSTRUCTION PERMITS/INSPECTIONS**
CONTRACTOR RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS INCLUDING ROAD OPENING PERMITS, PREPARATION OF TRAFFIC CONTROL PLANS, INSTALLATION AND MAINTENANCE OF TRAFFIC CONTROL AND COORDINATION OF ALL INSPECTIONS REQUIRED BY THE BOROUGH OF HIGHLANDS, COUNTY OF MONMOUTH, TOWNSHIP OF MIDDLETOWN SA WMP SEWERAGE AUTHORITY, AND ANY OTHER APPLICABLE AGENCY HAVING JURISDICTION OVER THE PROJECT.

11. **ADA COMPLIANCE**
   a. ALL SITE IMPROVEMENTS LOCATED ON THE PRIVATE PROPERTY SHALL BE IN COMPLIANCE WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, STANDARDS FOR PUBLIC ACCOMMODATIONS AND COMMERCIAL FACILITIES: TITLE III.
   b. ALL SITE IMPROVEMENTS LOCATED WITHIN PUBLIC RIGHT-OF-WAY SHALL BE IN COMPLIANCE WITH THE CURRENT PUBLIC RIGHTS-OF-WAY ACCESS ADVISORY COMMITTEE GUIDELINES.

12. **OVERALL CONSTRUCTION DOCUMENTS**
THIS PLAN SET CONSISTS OF MULTIPLE SHEETS. INDIVIDUAL PAGES SHALL NOT BE UTILIZED FOR CONSTRUCTION ON THEIR OWN AS NOTES AND INFORMATION PROVIDED ON OTHER SHEETS MAY IMPACT WORK REQUIREMENTS. CONTRACTOR SHALL REVIEW AND UTILIZE ENTIRE PLAN SET FOR CONSTRUCTION.

13. **FRESHWATER/COASTAL WETLANDS AND STREAMS**
BASED UPON REVIEW OF PUBLISHED MAPPING, NO FRESHWATER/COASTAL WETLANDS OR STREAMS EXIST ON-SITE.

14. **SOIL REMOVAL**
ANY SOIL REMOVAL FROM THE SITE SHALL BE IN ACCORDANCE WITH BOROUGH CODE.

15. **SITE MAINTENANCE**
REGULAR MAINTENANCE OF THE PROPERTY (INCLUDING BUT NOT LIMITED TO: SNOW PLOWING, PAVEMENT / PARKING LOT REPAIRS, COMMON AREAS, REFUSE AREA, LANDSCAPING AND LIGHTING) SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

16. **IMPORTED FILL**
ANY IMPORTED FILL SHALL MEET THE DEFINITION OF CLEAN FILL, PURSUANT TO THE TECHNICAL REQUIREMENTS OF SITE REMEDIATION (AS FOUND AT NJAC 7:26E-1.8).

17. **UNDERGROUND TANKS**
ANY SEPTIC SYSTEMS OR UNDERGROUND STORAGE TANKS FOUND ONSITE WILL BE DECOMMISSIONED AND/OR REMOVED IN ACCORDANCE WITH BOROUGH, COUNTY AND/OR NJDEP REQUIREMENTS.

18. **CURBS, SIDEWALKS**
APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO ANY/ALL EXISTING CURB, SIDEWALK, ROADWAY AND OTHER OFF-SITE OBJECTS MADE DURING CONSTRUCTION AND MUST BE REPAIRED AND/OR REPLACED TO THE PRE-EXISTING CONDITION/STATE TO THE SATISFACTION OF THE BOROUGH ENGINEER, WHICH SHALL NOT UNREASONABLY BE WITHHELD, AND COAST PAID BY THE APPLICANT.

GENERAL LANDSCAPING NOTES

A. CLEAN-UP
AFTER ALL INSTALLATION OPERATIONS HAVE BEEN COMPLETED, REMOVE ALL RUBBISH, EXCESS SOIL, EMPTY PLANT CONTAINERS AND TRASH FROM THE SITE DAILY. ALL SCARS, RUTS AND OTHER MARKS IN THE AREA CAUSED BY THIS WORK SHALL BE REPAIRED AND THE GROUND LEFT IN A NEAT, ORDERLY CONDITION. LEAVE SITE IN BROOM-CLEAN CONDITION AT THE END OF EACH DAY.

B. MAINTENANCE
1. DURING INSTALLATION, THE CONTRACTOR SHALL MAINTAIN A SUFFICIENT NUMBER OF LABORERS AND ADEQUATE EQUIPMENT TO PERFORM THE WORK HEREIN SPECIFIED. PLANT MAINTENANCE SHALL CONSIST OF WATERING, WEEDING, CARING OF PLANTS, INCLUDING GROUND COVERS, SHRUBS, VINES AND TREES, EDGING AND MOWING LAWNS, FERTILIZING, CONTROL OF PESTS AND DISEASES, AND MAINTAINING WALKS FREE OF DEBRIS AND DIRT. UPON COMPLETION OF EACH AREA, THE CONTRACTOR, THE UNDERSIGNED, THE OWNER, ALONG WITH THE OWNER'S MAINTENANCE REPRESENTATIVE SHALL CONDUCT AN INSPECTION OF COMPLETED AREA. AT THIS TIME, A LIST OF CORRECTIONS, IF ANY, SHALL BE MADE. ALL CORRECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. AFTER ALL WORK HAS BEEN COMPLETED, INSPECTED AND ACCEPTED, ALL AREAS WILL BE MAINTAINED FOR A PERIOD OF NINETY (90) CALENDAR DAYS OR AS LONG AS IS NECESSARY TO ESTABLISH THRIVING TREES, SHRUBS, TURF AND GROUND COVER WITHOUT BARE SPOTS.
3. KEEP ALL AREAS WEED-FREE, ADEQUATELY WATERED AND NEATLY CULTIVATED FOR THE NINETY (90) PERIOD. REMOVE ALL DEBRIS FROM SITE AND KEEP THE ENTIRE SITE BROOM-CLEAN. TURF AREAS ARE TO BE MOWED WEEKLY.
4. RE-SEED ALL BARE SPOTS IN TURF AREAS AT TWO (2) WEEK INTERVALS AND MAINTAIN UNTIL AN EVEN STAND OF TURF IS OBTAINED. RE-SEED ALL SLOPE AREAS THAT FAIL TO GERMINATE EVENLY. REPAIR ALL ERODED SURFACES AT NO COST TO THE OWNER.
5. DAMAGE TO ANY PLANTED AREA SHALL BE REPAIRED IMMEDIATELY. DEPRESSIONS CAUSED BY VEHICLES OR FOOT TRAFFIC SHALL BE FILLED WITH TOPSOIL, LEVELED AND REPLANTED.
6. THE PROJECT SHALL BE SO CARED FOR THAT A NEAT, CLEAN CONDITION WILL BE PRESENTED AT ALL TIMES TO THE SATISFACTION OF THE OWNER AND THE UNDERSIGNED. THE LANDSCAPE CONTRACTOR SHALL BE EXPECTED TO MAKE A MINIMUM OF ONE (1) VISIT PER WEEK FOR MAINTENANCE PURPOSES DURING THE MAINTENANCE PERIOD (90 DAYS).
7. AT THE END OF THE MAINTENANCE PERIOD, ALL AREAS THAT HAVE BEEN PLANTED SHALL BE FERTILIZED WITH COMMERCIAL FERTILIZER. ANALYSIS AND RATE OF APPLICATION SHALL BE PER THE SOILS REPORT.
8. THE CONTRACTOR SHALL REQUEST A FINAL SITE VISIT SEVEN (7) DAYS PRIOR TO THE END OF THE MAINTENANCE PERIOD (90 DAYS). THIS REQUEST SHALL BE WRITTEN AND DIRECTED TO THE OWNER AND THE UNDERSIGNED. UPON WRITTEN ACCEPTANCE OF THE PROJECT BY THE OWNER AND THE UNDERSIGNED, THE CONTRACTOR SHALL BE RELIEVED OF ANY FURTHER MAINTENANCE.

C. GUARANTEE
ALL TURF, GROUND COVER AND SHRUBS SHALL BE GUARANTEED TO LIVE AND GROW THROUGH THE FIRST GROWING SEASON. TREES SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR. THE CONTRACTOR, AT NO COST TO THE OWNER, SHALL REPLACE ANY MATERIAL THAT FAILS TO GROW THROUGH THE SPECIFIED MAINTENANCE AND GUARANTEED.

D. INSPECTION DURING CONSTRUCTION
1. OBSERVATION VISITS SPECIFIED HEREIN SHALL BE MADE BY THE UNDERSIGNED OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL REQUEST OBSERVATION AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF THE TIME THAT THE OBSERVATION IS REQUESTED. A
2. OBSERVATION VISITS ARE SUGGESTED FOR THE FOLLOWING PARTS OF THE WORK:
   a. UPON COMPLETION OF GRADING AND SOIL CONDITIONING PRIOR TO PLANTING.
   b. WHEN TREES ARE SPOTTED FOR PLANTING, BUT PRIOR TO WHEN PLANTING HOLES ARE EXCAVATED.
   c. WRITTEN ACCEPTANCE OF THE PROJECT TO RELEASE THE CONTRACTOR FROM FURTHER MAINTENANCE SHALL OCCUR AFTER FINAL OBSERVATION WITH THE OWNER OR HIS REPRESENTATIVE AT THE END OF THE MAINTENANCE PERIOD.

E. VERIFICATION OF DIMENSIONS
ALL SCALED DIMENSIONS ARE APPROXIMATE. PRIOR TO PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND QUANTITIES, AND SHALL IMMEDIATELY NOTIFY THE UNDERSIGNED OF ANY DISCREPANCY BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND ACTUAL CONDITIONS. NO WORK SHALL BE DONE IN ANY AREA WHERE THERE IS SUCH A DISCREPANCY UNTIL APPROVAL FOR SAME HAS BEEN GIVEN BY THE UNDERSIGNED.

F. UTILITIES
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY CONSTRUCTION, SO THAT PROPER PRECAUTIONS MAY BE TAKEN NOT TO DAMAGE SUCH LINES AND PLANT LOCATIONS. PROMPTLY NOTIFY THE UNDERSIGNED TO ARRANGE FOR RELOCATIONS OF UTILITIES OR PLANTING LOCATIONS. FAILURE TO FOLLOW THIS PROCEDURE PLACES UPON THE CONTRACTOR THE RESPONSIBILITY FOR, AT HIS OWN EXPENSE, MAKING ANY AND ALL REPAIRS FOR DAMAGES RESULTING FROM HIS WORK.

G. EXISTING TREES
CONTRACTOR IS TO TAKE CARE IN PRESERVING ANY EXISTING TREES GREATER THAN OR EQUAL TO 6" ON THE SITE. DAMAGE OR LOSS OF THESE TREES WILL RESULT IN REPLACEMENT OF EQUAL SIZE BY THE LANDSCAPE CONTRACTOR.

H. INSTALLATION
THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FINAL GRADING, SEEDING, SOIL AMENDMENTS, ETC., AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION.

I. PLANTING SPECIFICATIONS
ALL TREE AND SHRUB MATERIAL SPECIFIED MUST MEET STANDARD INDUSTRY SPECIFICATIONS FOR THE CONTAINER SIZE INDICATED. DOWNSIZING OR SUBSTITUTION OF PLANT MATERIAL WITHOUT PRIOR APPROVAL OF UNDERSIGNED WILL NOT BE ALLOWED.

J. FINAL GRADING AND PLANTING
ALL LANDSCAPE AREAS SHALL BE GRADED TO A SMOOTH EVEN SURFACE PRIOR TO ANY PLANT INSTALLATION. ALL PLANT MATERIALS SHALL BE INSTALLED USING GOOD HORTICULTURAL PRACTICES IN ACCORDANCE WITH THE PLANS AND DETAILS.

K. TREE PLANTINGS
1. WHENEVER FEASIBLE, TREES SHOULD BE PLANTED A MINIMUM OF TEN (10) FEET FROM ALL UNDERGROUND UTILITIES, STREETLIGHTS, HYDRANTS, AND OUT OF DRAINAGE FLOW LINES. SHOULD THIS NOT BE POSSIBLE, CONTACT THE UNDERSIGNED FOR DECISION ON PLACEMENT.
2. ALL TREES IN TURF AREAS SHALL HAVE 12" MIN. CLR. CIRCUMFERENCE AROUND THE TRUNK BASE. PROVIDE 3" MIN. THK. MULCH AT BASE OF TRUNK.

L. GROUNDCOVER
GROUNDCOVER TYPE SHOWN SHALL BE PLANTED IN ALL SHRUB AREAS AS SPECIFIED ON PLANS. GROUNDCOVER SHALL BE PLANTED AT 18" ON-CENTER UNIFORM TRIANGULAR SPACING, AND SHALL BE CONTINUOUS UNDER ALL TREE AND SHRUB MASSES AS SHOWN ON PLAN.

M. TURF
ALL TURF AREAS ARE TO BE SODDED WITH AN APPROVED GRASS MIXTURE.

*SEE LANDSCAPING NOTES AND DETAIL SHEET FOR ADDITIONAL PLANTING NOTES.

GENERAL SITE PLANTING

THE OWNER SHALL HAVE A SOIL ANALYSIS MADE AFTER COMPLETION OF THE ROUGH GRADING. THE CONTRACTOR SHALL INCORPORATE ALL SOIL AMENDMENTS AND FERTILIZERS DESCRIBED HEREIN. THE SOIL PREPARATION SPECIFIED BELOW SHALL BE ADJUSTED ACCORDING TO THE ANALYSIS, FOLLOWING APPROVAL FROM THE UNDERSIGNED.

A. WEED CONTROL FOR LAWN, SHRUB & GROUND COVER AREAS (EXCEPT SLOPES)
1. REMOVE ALL EXISTING WEEDS FROM SURFACE AND DISPOSE OFFSITE.
2. IRRIGATION IS TO BE INSTALLED WHERE NOTED ON PLAN ACCORDING TO SHOP DRAWINGS.
3. FERTILIZE ALL SHRUB/GROUND COVER AREAS. APPLY 10LBS. OF 16-20-0 COMMERCIAL FERTILIZER PER 1,000 SQ. FT. OR AS DIRECTED BY SOILS REPORT.
4. WATER ALL SHRUB/GROUND COVER AREAS FOR THREE (3) WEEKS TO GERMINATE WEED SEEDS. APPLY WATER AT LOW RATE TO AVOID EROSION.
5. LICENSED APPLICATOR SHALL APPLY SYSTEMIC WEED KILLER TO ALL PLANTING AREAS PER MANUFACTURER'S SPECIFICATIONS.

B. TOPSOIL PRESERVATION
TOPSOIL MOVED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED ON ALL REGARDED SURFACES. AT LEAST THREE (3) INCHES OF EVEN COVER SHALL BE PROVIDED TO ALL DISTRIBUTED AREAS OF THE DEVELOPMENT AND SHALL BE STABILIZED BY SEEDING OR PLANTING. IF EXCESS TOPSOIL REMAINS, THE THICKNESS SHALL BE INCREASED. IF ADDITIONAL IS REQUIRED, THE DEVELOPER SHALL PROVIDE IT. REMOVAL OF EXCESS TOPSOIL SHALL ONLY BE PERMITTED IN ACCORDANCE WITH A PLAN APPROVED BY THE MUNICIPAL AGENCY.

C. SOIL PREPARATION & FINAL GRADING
1. ALL STUMPS AND OTHER TREE PARTS, LITTER, BRUSH, WEEDS, EXCESS OR SCRAP BUILDING MATERIALS, OR OTHER DEBRIS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF. NO TREE STUMPS, PORTIONS OF TREE TRUNKS OR LIMBS SHALL BE BURIED ANYWHERE IN THE DEVELOPMENT. ALL DEAD OR DYING TREES, STANDING OR FALLEN, SHALL BE REMOVED FROM THE SITE.
2. ROUGH GRADE: SITE TO BE RECEIVED BY LANDSCAPE CONTRACTOR, TO WITHIN 1/10 FOOT PLUS OR MINUS, BY OWNER BASED UPON GRADING PLAN.
3. FINAL GRADE: FINAL GRADE TO CONSIST OF GRADING, RAKING AND HAND WORK NECESSARY TO ACHIEVE DESIRED CONTOUR AND FLOW LINE PATTERNS RESULTING IN EVENLY FINISHED SURFACES FREE OF DEBRIS AND LITTER.
4. SPREAD OVER ALL LAWN, SHRUB AND GROUND COVER AREAS, AMENDMENTS AND FERTILIZER PRESCRIBED IN SOILS REPORT. THOROUGHLY MIX INTO SOIL TO DEPTH OF 6" OR MORE AND FINE GRADE. CONTRACTOR TO IMPORT SOIL NECESSARY TO ATTAIN DESIGN GRADES AND BERMS. ALL IMPORTED SOIL SHALL BE FREE OF WEEDS AND DEBRIS AND HAVE BALANCED PH., SMOOTH AND EVEN GRADING FOR PROPER DRAINAGE. FINAL GRADE SHALL BE 1" BELOW WALK/TOP OF CURB. REMOVE FROM THE SITE ALL STONES OVER 2" IN SIZE.

D. PLANTING
PLANT TREES, SHRUBS AND GROUND COVER AS CALLED FOR WHERE INDICATED ON PLANTING PLAN AND AS DETAILED ON PLANTING DETAIL SHEET.
1. GROUND COVER - FLATS AND/OR CUTTINGS:
   ALL PLANT MATERIALS SPECIFIED AS PLUGS OR FLAT STOCK ON PLANTING PLAN SHALL REMAIN IN THE FLATS UNTIL TIME OF TRANSPLANTING. THE FLAT SOIL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT SOIL DOES NOT FALL APART WHEN LIFTING PLANT FROM FLAT. GROUND COVER PLANTS SHALL NOT BE ALLOWED TO DRY OUT BEFORE OR DURING PLANTING. ROOTS SHALL NOT BE EXPOSED TO THE AIR EXCEPT WHILE ACTUALLY BEING PLANTED. WILTED PLANTS WILL NOT BE ACCEPTED. AT THE TIME OF PLANTING, THE SOIL AROUND EACH PLANT SHALL BE FIRMED SUFFICIENTLY TO FORCE OUT AIR POCKETS. PLANTS TO BE PLANTED IN TRIANGULAR SPACING AS SPECIFIED O.C. (ON CENTER). ALL CUTTINGS SHALL BE MINIMUM OF 6" LONG. WATER IMMEDIATELY AFTER EACH PLANTING UNTIL ONE INCH OF WATER PENETRATION IS OBTAINED. CARE SHALL BE EXERCISED AT ALL TIMES TO PROTECT THE PLANTS AFTER PLANTING. ANY DAMAGE TO PLANTS BY TRAMPLING OR OTHER OPERATIONS OF THIS CONTRACT SHALL BE REPAIRED IMMEDIATELY.
2. SHRUBS:
   PLANT ALL CONTAINER GROWN PLANTS IN PLANTING PITS AS DIRECTED ON TREE AND SHRUB PLANTING AND STAKING DETAIL. THOROUGHLY MIX BACKFILL ACCORDING TO TREE AND SHRUB PLANTING AND STAKING DETAIL. CONTRACTOR SHALL CONSTRUCT BASINS AROUND ALL TREES; BASINS SHALL NOT EXCEED TOP OF ROOT BALL CROWN.
3. TREES:
   ALL TREES SHALL HAVE A CALIPER OF TWO AND ONE-HALF (2 ½) INCHES OR SPECIFIED CALIPER IN PLANTING SCHEDULE AND THEY SHALL BE NURSERY GROWN, OF SUBSTANTIALLY UNIFORM SIZE AND SHAPE, AND HAVE STRAIGHT TRUNKS. TREES SHALL BE PROPERLY PLANTED AND STAKED ACCORDING TO TREE AND SHRUB PLANTING AND STAKING/ EVERGREEN PLANTING & STAKING DETAIL AND PROVISION MADE BY THE APPLICANT FOR REGULAR WATERING AND MAINTENANCE UNTIL THEY ARE ESTABLISHED. THE APPLICANT SHALL REPLACE DEAD OR DYING TREES DURING THE NEXT PLANTING SEASON.
4. TOP DRESSING:
   TOP DRESS ALL GROUND COVER AND SHRUB AREAS WITH 2" THICK LAYER OF OGC (ORGANIC GROUND COVER) AS SPECIFIED ON PLANTING PLAN.

E. SOD
1. AREAS SHALL HAVE A SMOOTH CONTINUAL GRADE BETWEEN EXISTING OF FIXED CONTROLS, SUCH AS: WALKS, CURBS, CATCH BASINS. ROLL, SCARIFY, RAKE AND LEVEL AS NECESSARY TO OBTAIN TRUE, EVEN SOIL STRUCTURE.
2. APPLY FERTILIZERS AS SPECIFIED BY SOIL ANALYSIS TO DEPTH OF 6".
3. SOD SHALL BE INSTALLED THE SAME DAY AS IT IS DELIVERED. SOD SHALL NOT BE LEFT ON PALLETS IN THE HOT SUN. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO SOD NOT INSTALLED ON DAY OF DELIVERY .
4. UNROLL SOD CAREFULLY AND PLACE IN STAGGERED PATTERN OF STRIPS. SOD SHALL BE INSTALLED AGAINST ADJACENT STRIPS TO ELIMINATE JOINTS AND EDGES.
5. FOLLOWING INSTALLATION, SOD SHALL BE IRRIGATED THOROUGHLY TO PROVIDE MOISTURE PENETRATION TO AT LEAST 6" INTO PREPARED SOIL.
6. ALL SOD SHALL BE HANDLED AND LAID IN A HIGH STANDARD OF WORKMANSHIP MANNER. ALL ENDS, JOINTS, AND CUTS SHALL FIT TIGHTLY SO THAT THERE ARE NO VOIDS. THE FINAL APPEARANCE SHALL BE ONE OF A CONTINUOUS LAWN. SECTIONS OF SOD LESS THAN 18" LONG OR 9" WIDE SHALL NOT BE USED.
7. NO SOD AREA WILL BE ACCEPTED UNTIL APPROVED BY AUTHORITY HAVING JURISDICTION OR THE UNDERSIGNED, AS REQUIRED.

GRADING NOTES

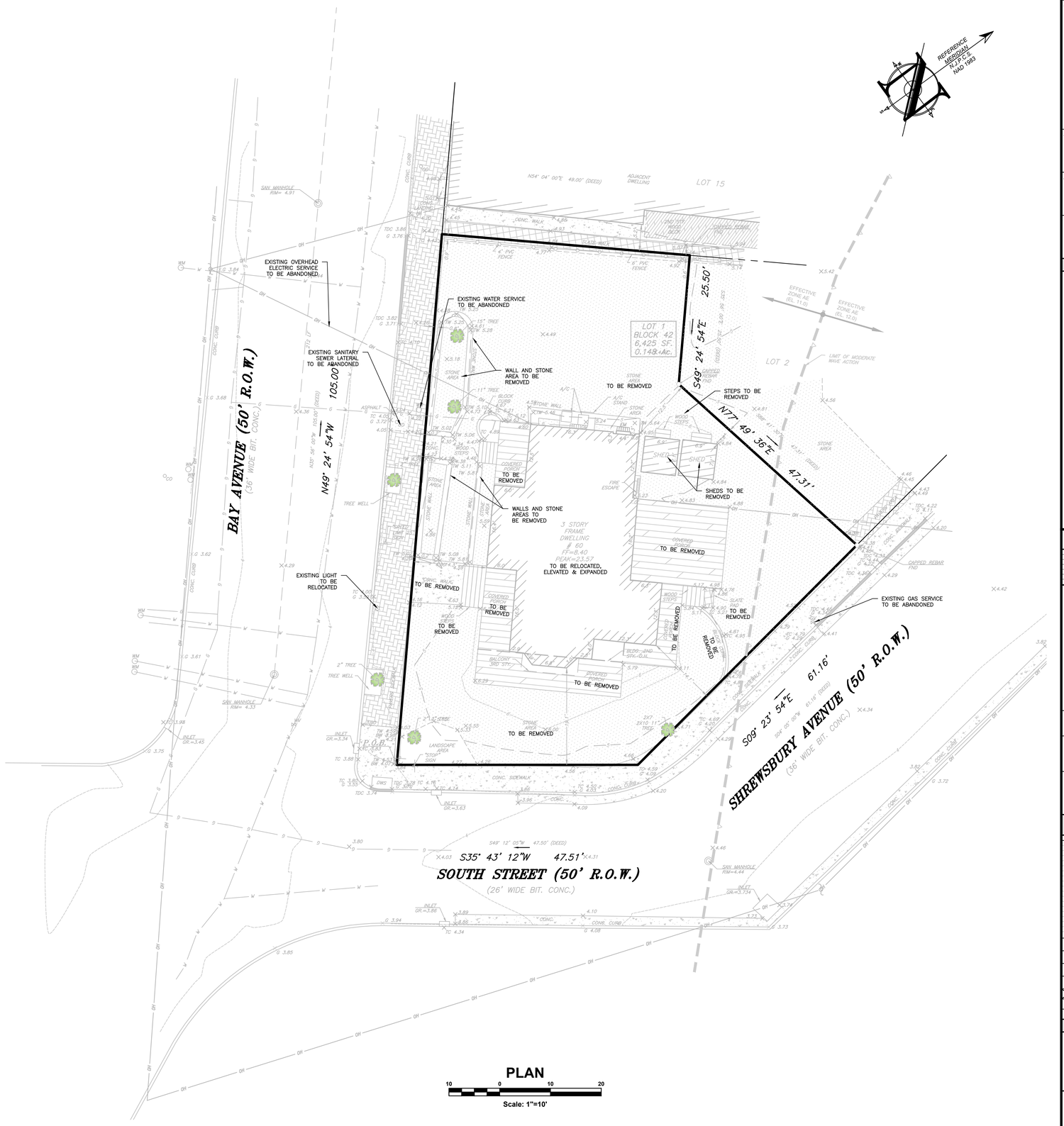
1. ALL PROPOSED ON-SITE CURBING TO BE VERTICAL CURB WITH 6" REVEAL, UNLESS OTHERWISE STATED.
2. ALL CURBS SHALL BE DEPRESSED AT CROSSWALKS AND CONFORM TO APPLICABLE STATE AND FEDERAL BARRIER FREE DESIGN STANDARDS.
3. ALL CURB INLETS TO USE 6" CASTING. TOP OF CASTING TO FOLLOW TOP OF CURB ELEVATIONS.
4. FOR ALL AREAS LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY, ACCESSIBILITY SHALL BE IN ACCORDANCE WITH THE CURRENT PUBLIC RIGHTS-OF-WAY ACCESS ADVISORY COMMITTEE GUIDELINE (PROWAG).
   a. ALL WALKING SURFACES TO HAVE A MAXIMUM RUNNING SLOPE OF 1:20 (5%).
   b. ALL WALKING SURFACES GREATER THAN 1:20 (5%) WILL REQUIRE HANDRAILS.
   c. RAMP RUNS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1:12 (8.3%).
   d. ALL WALKING SURFACES TO HAVE A MAXIMUM CROSS SLOPE OF 1:48 (2%).
   e. ALL CROSSWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1:48 (2%).
5. ALL GRADING WITHIN GRASSED AREAS TO BE A MINIMUM OF 2% AND A MAXIMUM OF 3:1 SLOPE UNLESS OTHERWISE NOTED.
6. POSITIVE DRAINAGE TO BE MAINTAINED FROM ALL BUILDINGS IN ACCORDANCE WITH APPLICABLE REGULATIONS AND BUILDING CODE.
7. FLOOR ELEVATIONS, ADJACENT GRADE, DOORWAY LOCATIONS AND ELEVATIONS SHALL BE CONFIRMED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION BY THE CONTRACTOR.
8. ALL EXCAVATED SOIL TO BE DISPOSED SHALL BE PROPERLY CLASSIFIED, HANDLED, AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
9. ALL GRASSED AREAS TO HAVE A MINIMUM OF 4" CLEAN TOP SOIL, WHEN SOD IS BEING INSTALLED, OR 6" CLEAN TOP SOIL FOR SEEDING APPLICATIONS.

DRAINAGE NOTES

1. PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
2. SHOP DRAWINGS AND PRODUCT CATALOG INFORMATION FOR ALL STORM DRAINAGE SEWER STRUCTURES, CONDUITS, MATERIALS, AND APPURTENANCES, TO BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING.
3. BUILDING ROOF LEADERS AND CLEAR WASTE FROM BUILDING TO CONNECT TO SITE STORM SEWER SYSTEM. CONNECTION POINTS WILL BE COORDINATED WITH ARCHITECTURAL AND PLUMBING PLANS.
4. UNLESS OTHERWISE INDICATED:
   a. RCP SHALL BE CLASS 3 WALL, BELL AND SPIGOT TYPE WITH O-RING GASKETS, UNLESS OTHERWISE NOTED.
   b. HDPE PIPES SHALL BE ADS N-12 WITH WATER TIGHT JOINTS OR APPROVED EQUAL.
   c. STORM SEWER PVC PIPES SHALL BE SCHEDULE 80 WITHIN PAVED AREAS AND SCHEDULE 40 IN LANDSCAPED AREAS, UNLESS OTHERWISE NOTED.
5. ALL STORM PIPE TO BE CLEANED AND TELEVISED PRIOR TO ISSUANCE OF CERTIFICATES OF OCCUPANCY.

SANITARY SEWER NOTES

1. CONTRACTOR TO PERFORM TEST PITS TO VERIFY EXISTING UTILITY DEPTHS, SIZES AND LOCATIONS PRIOR TO CONNECTING PROPOSED SEWER TO EXISTING SEWER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS SO THAT DESIGN MODIFICATIONS CAN BE MADE IF NECESSARY.
2. PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
3. ALL SANITARY SEWER MAINS, SEWER LATERALS, AND APPURTENANCES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH TOWNSHIP OF MIDDLETOWN SEWERAGE AUTHORITY AND NJDEP REQUIREMENTS.
4. SHOP DRAWING



PLAN

10 0 10 20

Scale: 1"=10'

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
70	CONTOUR LINE	70
+ 46.80	SPOT ELEVATION	+ 46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN.	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

File: X:\Jobs\2237 – 60 Bay Ave Highlands LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\2322370101\CAD\Dwg\02-Existing.dwg, —> C200 Existing Conditions
Copyright 2024, InSite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

☒ NOT FOR CONSTRUCTION

APPROVED BY:

☐ FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

EXISTING CONDITIONS & SITE PREPARATION PLAN

SHEET NO:

C200



BUILDING HEIGHT COMPLIANCE PER MUNICIPAL ORDINANCE

NTS

ZONING COMPLIANCE CHART

CBD REDEVELOPMENT OVERLAY 2 ZONE (C-RO-2 - GATEWAY PARCELS)

RESIDENTIAL ABOVE FIRST FLOOR: PERMITTED (§ 21-91A.u.)

ORD.SECTION	STANDARD	REQUIRED	EXISTING	PROPOSED	COMPLIES
ATT. 1	MIN. LOT AREA (SF)	-	6,425 (0.147 AC)	NO CHANGE	-
ATT. 1	MIN. LOT FRONTAGE (FT)	-	213.67	NO CHANGE	-
	PRINCIPAL BUILDING				
VII.A.	MIN. FRONT YARD SETBACK (FT)				
	BAY AVENUE (FT)	2	13.9	5.00	YES
	SOUTH STREET (FT)	2	13.3	8.30	YES
	SHREWSBURY AVENUE	2	8.3	8.05	YES
VII.A.	MIN. REAR YARD SETBACK (FT)	12	-	N/A	YES
VII.A.	MIN. SIDE YARD SETBACK	5 (1)	11.4	7.93	YES
VII.D.	MAX. BUILDING HEIGHT (FT)	40 (3)	11.6	29.33	YES
VII.B.	MAX. BUILDING COVERAGE (%)	80	31.9	54.5	YES
VII.B.	MAX. LOT COVERAGE (%)	80	37.0	71.2	YES
	ACCESSORY BUILDING				
§21-78A.2.	MAX. GROUND FLOOR AREA (%)	30 (2)	5.0	N/A	-
§21-78A.2.	MAX. COVERAGE OF REAR YARD (%)	40 (2)	N/A	N/A	-
§21-78A.3.	MIN. YARD SETBACK (FT)	3	3.6	N/A	-
	MIN. OUTDOOR LIVING SPACE (SF) 100 SF/UNIT	500	(a)	1,981	YES

(N) EXISTING NON-CONFORMITY (I) IMPROVED CONDITION N/A - NOT APPLICABLE
(E) EXISTING VARIANCE (X) VARIANCE / NON-CONFORMITY ELIMINATED N/S - NOT SPECIFIED
(V) PROPOSED VARIANCE (W) PROPOSED WAIVER

(a) THIS PERTAINS TO AN EXISTING STRUCTURE WHICH WAS NOT MADE AVAILABLE TO THIS OFFICE
(1) PER §VII.A SIDE YARDS. NO SIDE YARD IS REQUIRED ADJACENT TO THE PROPERTIES IN THE CBD ZONE, HOWEVER, IF ANY IS TO BE PROVIDED, IT SHALL BE AT LEAST FIVE (5) FEET. ANY SIDE YARD WHICH SERVES AS A BOUNDARY BETWEEN THAT LOT AND ANY RESIDENCE ZONE SHALL BE AT LEAST FIVE (5) FEET AND SHALL CONTAIN BUFFERING IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.
(2) NO ACCESSORY STRUCTURE(S), EXCEPT FOR SHORE FRONT PROTECTION, BULKHEADS, REVETMENTS AND OTHER SUCH STRUCTURES, SHALL HAVE AN AGGREGATE GROUND FLOOR AREA GREATER THAN THIRTY (30%) PERCENT OF THE GROUND FLOOR AREA OF THE PRINCIPAL STRUCTURE ON THE SAME LOT. ALL ACCESSORY STRUCTURES SHALL OCCUPY NO MORE THAN FORTY (40%) PERCENT OF THE REAR YARD AREA.
(3) THE VERTICAL DISTANCE AS MEASURED FROM THE GRADE PLANE TO THE AVERAGE HEIGHT OF THE HIGHEST ROOF SURFACE. IN THE CASE OF SLOPED ROOFS, THE AVERAGE HEIGHT IS THE MID-POINT BETWEEN THE LOWEST ROOF EAVE OF THE TOP FLOOR AND THE ROOF RIDGE. IN THE CASE OF A BUILDING THAT HAS MULTIPLE ROOF LEVELS, THE HIGHEST ROOF LEVELS MUST BE USED TO DETERMINE THE BUILDING HEIGHT
GRADE PLANE AREAS OR PORTIONS OF THE BUILDING AREA OF A LOT LOCATED WITHIN THE FLOOD HAZARD AREA: THE REFERENCE PLANE SHALL BE THE MORE RESTRICTIVE OF THE BASE FLOOD ELEVATION OR ADVISORY BASE FLOOD ELEVATION OF THE FLOOD HAZARD AREA PLUS ONE (1) FOOT.

BUILDING DATA

AREA	EXISTING AREA	PROPOSED AREA	TOTAL AREA
GROUND FLOOR	0	0	0
FIRST FLOOR	1,200 SF	1,268 SF	2,468 SF
SECOND FLOOR	900 SF	1,686 SF	2,586 SF
THIRD FLOOR	900 SF	1,534 SF	2,434 SF
TOTAL	3,000 SF	4,488 SF	7,488 SF
AREA	EXISTING VOLUME	PROPOSED VOLUME	TOTAL VOLUME
GROUND FLOOR	0	22,419 CF	22,419 CF
FIRST FLOOR	9,600 CF	11,412 CF	21,012 CF
SECOND FLOOR	7,200 CF	13,488 CF	20,688 CF
THIRD FLOOR	7,200 CF	12,272 CF	19,472 CF
TOTAL	24,000 CF	59,591 CF	83,591 CF

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
100	BOUNDARY LINE	
100	CONTOUR LINE	100
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
SAN SAN	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

PARKING, DRIVEWAY & LOADING COMPLIANCE CHART

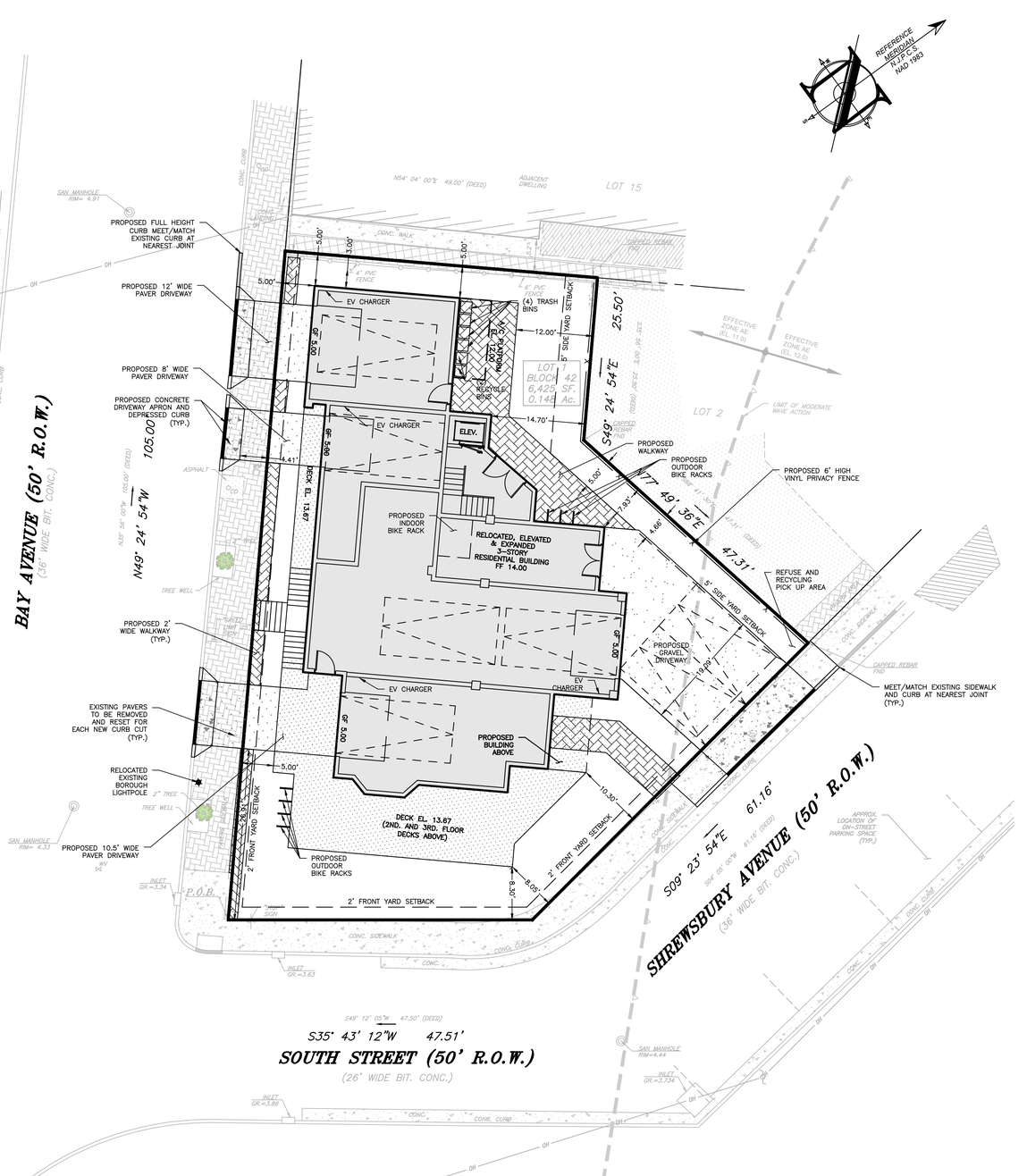
ORD.SECTION	STANDARD	REQUIRED	PROPOSED	COMPLIES
§21-65.14	STALL SIZE (FT)	9 X 18	9 X 18	YES
	NUMBER OF PARKING SPACES			
RSIS TABLE 4.4	RESIDENTIAL USES (2 FAMILY & MULTIFAMILY UNITS)			
	1.8 SPACES PER (1 BR UNITS) 2.0 SPACES PER (2 BR UNITS) 2.1 SPACES PER (3 BR UNITS)			
	1ST. FLOOR - 2 UNITS 2 BEDROOMS EACH	4		
	2ND. FLOOR - 2 UNITS 2 BEDROOMS EACH	4		
	3RD. FLOOR - 1 UNIT 3 BEDROOMS	2.1		
	TOTAL PARKING SPACES (INCLUDING EV CREDIT OF 1 SPACE)	9.1	7 (1)	YES
	MAX. DRIVEWAY WIDTH AT CURB (FT)	18	19.09 (W)	NO
§21-65.5C.	MAX. DRIVEWAY WIDTH AT INTERIOR (FT)	22	17.5	YES
§21-65.5A.	MIN. DRIVEWAY DISTANCE TO STREET INTERSECTION (FT)	25	26.91	YES

(N) EXISTING NON-CONFORMITY (I) IMPROVED CONDITION N/A - NOT APPLICABLE
(V) PROPOSED VARIANCE (W) PROPOSED WAIVER N/S - NOT SPECIFIED
(1) PURSUANT TO THE BOROUGH OF HIGHLANDS, NJ CENTRAL BUSINESS DISTRICT REDEVELOPMENT PLAN §VII.A VEHICULAR PARKING: RESIDENTIAL USES ARE PERMITTED TO COUNT FIRST ANY AVAILABLE ON-STREET PARKING SPACES BEFORE DETERMINING THE NUMBER OF PARKING SPACES THAT MUST BE PROVIDED OFF-STREET. THERE ARE MORE THAN 3 EXISTING ON-STREET PARKING SPACES WITHIN THE IMMEDIATE VICINITY, THEREFORE THE PROJECT COMPLIES.

ELECTRIC VEHICLE PARKING SUMMARY (P.L. 1975, c. 291)

RESIDENTIAL ABOVE FIRST FLOOR / CBD REDEVELOPMENT OVERLAY 2 ZONE (C.40:55D-66.20.3.a.(1))

SECTION	STANDARD	REQUIRED	PROPOSED	COMPLIES
3.a.(1)(a)	MIN. NUMBER OF MAKE-READY (MR) PARKING SPACES	15% OF REQUIRED OFF-STREET SPACES		
		10 x 15% = 1.5 SPACES = 2	2 SPACES	YES
	MIN. # OF INSTALLED VEHICLE SUPPLY EQUIPMENT			
3.a.(1)(a)	@ INITIAL CONSTRUCTION	¼ x MAKE-READY = 1 SPACES	1 EV SPACES	YES
3.a.(1)(b)	@ 3 YEARS AFTER CERT. OF OCCUPANCY	½ x MAKE-READY = 2 SPACES	2 EV SPACES	YES
3.a.(1)(c)	@ 6 YEARS AFTER CERT. OF OCCUPANCY	¾ x MAKE-READY = 2 SPACES	2 EV SPACES	YES



PLAN

10 0 10 20

Scale: 1"=10'

File: X:\Jobs\2237 - 60 Bay Ave Highlands LLC\23-2237-01 - 60 Bay Avenue_Highlands, NJ\2023\01CAD\Dwg\03-Site Layout Plan.dwg, ---> C300 SITE LAYOUT PLAN
Copyright 2024, InSite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED.

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

SITE LAYOUT PLAN

SHEET NO:

C300

WATER FLOW CALCULATIONS

EXISTING AVERAGE DAILY DEMAND (PER N.J.A.C. 5:21-5.2)

TWO-BEDROOM APARTMENT (UNIT) = 3 UNITS

TWO-BEDROOM APARTMENT (140 GPD/UNIT: $Q_{AVG.}$ = 140 GPD/UNIT X 3 UNITS = 420 GPD)

STUDIO-BEDROOM APARTMENT (UNIT) = 1 UNITS

STUDIO APARTMENT (120 GPD/UNIT: $Q_{AVG.}$ = 120 GPD/UNIT X 1 UNITS = 120 GPD)

TOTAL EXISTING AVERAGE DAILY DEMAND: = 540 GPD = 0.0005 MGD

PROPOSED AVERAGE DAILY DEMAND (PER N.J.A.C. 5:21-5.2):

TWO-BEDROOM APARTMENT (UNIT) = 4 UNITS

TWO-BEDROOM APARTMENT (140 GPD/UNIT: $Q_{AVG.}$ = 140 GPD/UNIT X 4 UNITS = 560 GPD

THREE-BEDROOM APARTMENT (UNIT) = 1 UNITS

THREE-BEDROOM APARTMENT (200 GPD/UNIT: $Q_{AVG.}$ = 200 GPD/UNIT X 1 UNITS = 200 GPD

TOTAL PROPOSED AVERAGE DAILY DEMAND: = 560 GPD + 200 GPD= 760 GPD = 0.0006 MGD

SANITARY SEWER FLOW CALCULATIONS

EXISTING AVERAGE DAILY DEMAND (PER N.J.A.C. 7:14A-23.3)

TWO-BEDROOM APARTMENT (UNIT) = 3 UNITS

TWO-BEDROOM APARTMENT (225 GPD/UNIT: $Q_{AVG.}$ = 225 GPD/UNIT X 3 UNITS = 675 GPD)

STUDIO-BEDROOM APARTMENT (UNIT) = 1 UNITS

STUDIO APARTMENT (150 GPD/UNIT: $Q_{AVG.}$ = 150 GPD/UNIT X 1 UNITS = 150 GPD)

TOTAL EXISTING AVERAGE DAILY DEMAND: = 675 GPD + 150 GPD= 825 GPD = 0.0009 MGD

PROPOSED AVERAGE DAILY DEMAND (PER N.J.A.C. 7:14A-23.3)

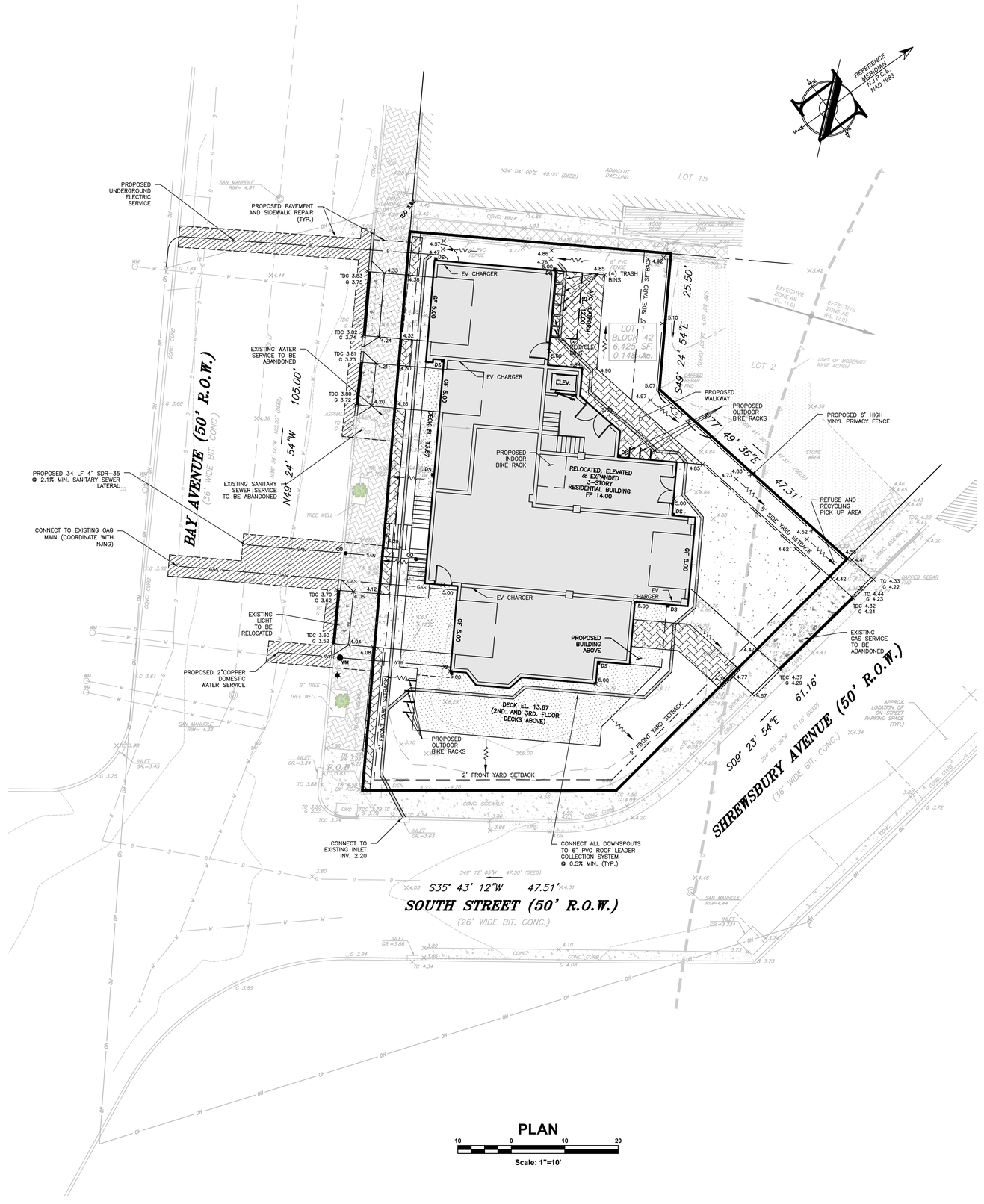
TWO-BEDROOM APARTMENT (UNIT) = 4 UNITS

TWO-BEDROOM APARTMENT (225 GPD/UNIT: $Q_{AVG.}$ = 225 GPD/UNIT X 4 UNITS = 900 GPD

THREE-BEDROOM APARTMENT (UNIT) = 1 UNITS

THREE-BEDROOM APARTMENT (300 GPD/UNIT: $Q_{AVG.}$ = 300 GPD/UNIT X 1 UNITS = 300 GPD

TOTAL PROPOSED AVERAGE DAILY DEMAND: = 900 GPD + 300 GPD= 1,200 GPD = 0.0012 MGD



PLAN

10 0 10 20

Scale: 1"=10'

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
70	CONTOUR LINE	(70)
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G	GAS	GAS
W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E	ELECTRIC	E
T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x	FENCE	x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

File: X:\Jobs\2237-- 60 Bay Ave Highlands LLC\23-2237--01 - 60 Bay Avenue_Highlands, NJ\2022\07\CAD\dwg\04-GDU.dwg, ---> 0400 GDU
Copyright 2024, Insite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA, DELAWARE, CONNECTICUT, NORTH CAROLINA, COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

☒ NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

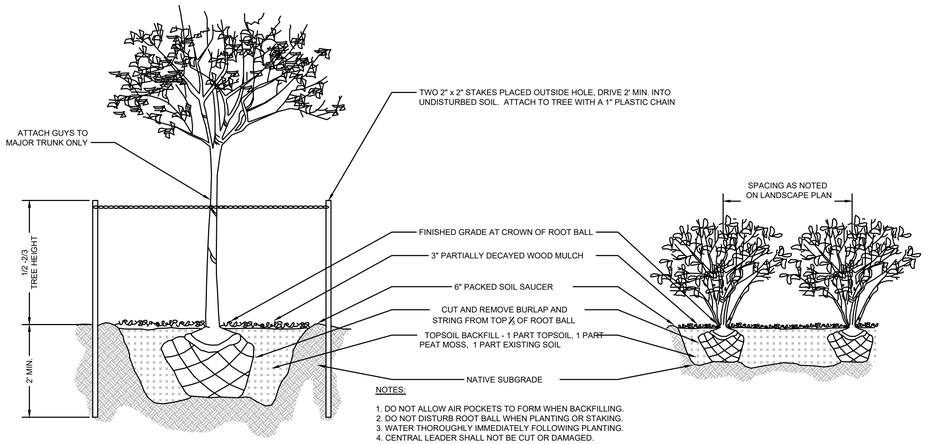
SHEET TITLE:

GRADING, DRAINAGE & UTILITY PLAN

SHEET NO:

C400

PLANTING SCHEDULE					
KEY	QTY.	BOTANICAL NAME	COMMON NAME	PLANTING SIZE	ROOT
		SHED AND ORNAMENTAL TREES			
TO	16	THUJA OCCIDENTALIS 'SMARAGO'	EMERALD GREEN ARBORVITAE	8-10' HT.	670 GAL.
ZS	2	ZELKOVA SERRATA 'MUSASHINO'	MUSASHINO COLUMNAR ZELKOVA	7-8' HT.	(B+B)
		SHRUBS			
RR2	26	ROSA RUGOSA 'KNOCKOUT'	PINK 'KNOCKOUT' ROSE	2.5'-3 FT	#5 CONT.
		GRASSES, PERENNIAL FLOWER, GROUNCOVERS			
LM	52	LIRIOPE MUSCARI	LILLYTURF	1 GAL.	(Cont.)
AX	61	AJUGA REPTANS	BUGLEWEED	3-4"	6" POT

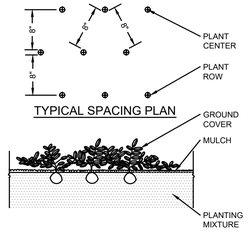


NOTES:

1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
2. DO NOT DISTURB ROOT BALL WHEN PLANTING OR STAKING.
3. WATER THOROUGHLY IMMEDIATELY FOLLOWING PLANTING.
4. CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.
5. WIRE BASKETS SHALL BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT.

TREE & SHRUB PLANTING & STAKING

NTS



TYPICAL SPACING PLAN

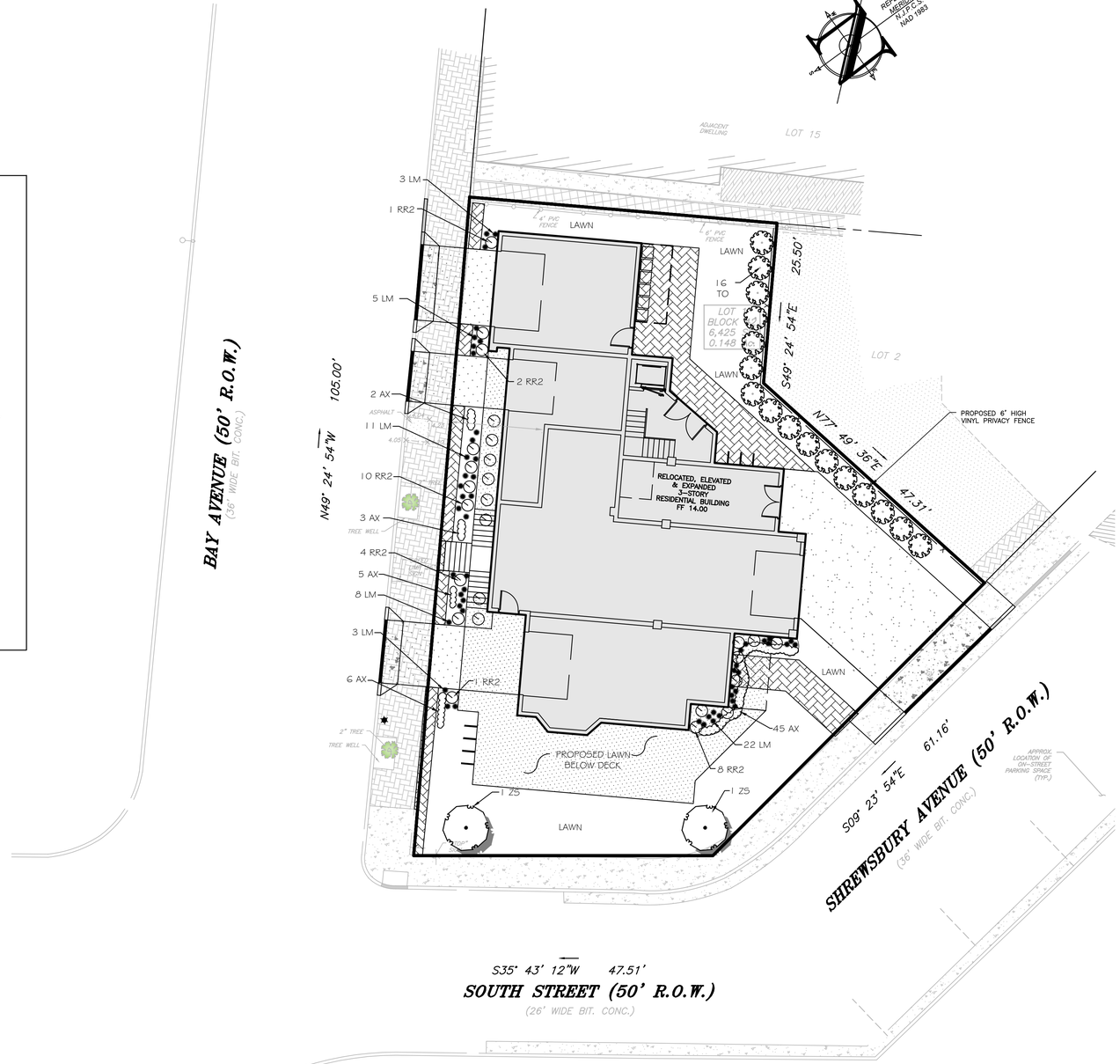
GROUND COVER PLANTING

NTS

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
50	CONTOUR LINE	50
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
X X	FENCE	X X
	LIGHT FIXTURE	
	TEST PIT LOCATION	TP#1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	



PLAN

10 0 10 20

Scale: 1"=10'

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC.
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

Douglas D. Clelland

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

☒ NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

LANDSCAPE PLAN

SHEET NO:

C600

File: X:\Jobs\2023 – 60 Bay Ave Highlands LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\2023270104D\dwg\05-Landscape & Lighting.dwg, ---> C600 LANDSCAPE
Copyright 2024, Insite Engineering, LLC., All Rights Reserved.


REFERENCE MERIDIAN
N.J.C.S.
NAD 1983
LOT 15
ADJACENT DWELLING
4" PVC FENCE
6' PVC FENCE
LOT 1
BLOCK 42
6,425 SF.
0.148 AC.
LOT 2
25.50'
S49° 24' 54"E
N77° 49' 36"E
47.31'
S09° 23' 54"E
61.16'
SHREWSBURY AVENUE (50' R.O.W.)
(36' WIDE BIT. CONC.)
S35° 43' 12"W
47.51'
SOUTH STREET (50' R.O.W.)
(26' WIDE BIT. CONC.)
BAY AVENUE (50' R.O.W.)
(30' WIDE BIT. CONC.)
N49° 24' 54"W
105.00'
3 STORY FRAME DWELLING # 60 FF=8.40 PEAK=23.57
SHED
COVERED PORCH
COVERED DECK
BALCONY 3RD STY.
BEDD. AND STK. GLS.
SLATE PAD
BASE FLOOR
WOOD STEPS
STONE AREA
STONE WALL
CONC. WALKS
ASPHALT
TREE WELL
EXISTING MUNICIPAL COBRA HEAD LIGHT
EXISTING MUNICIPAL ACORN LIGHT
EXISTING MUNICIPAL ACORN LIGHT TO BE MOVED
LANDSCAPE AREA
2X7 5X10 A/C TREE
A/C
A/C STAND
FM
WATER METER
GAS METER
WOOD STEPS
FIRE ESCAPE
BLOCK CURB
11" TREE
15" TREE
2" TREE
TREE WELL
TW 5.25
TW 5.28
TW 5.46
TW 5.64
TW 5.02
TW 5.06
TW 5.11
TW 5.18
TW 5.08
TW 5.84
TW 5.55
TW 5.70
TW 5.81
TW 5.76
TW 5.78
TW 5.79
TW 5.76
TW 5.81
TW 5.78
TW 5.79
TW 5.76
TW 5.81
TW 5.78
TW 5.79
TW 5.76
TW 5.81

Specifications
Dimensions: H 8 in, W 5.5 in, D 7 in



Sconce Type	Number of Lights	Power Source
Lantern	1 Light	Hardwired
See Similar Items	See Similar Items	See Similar Items
Light Direction	**Fixture Material**	**Damp/Wet Rating**
Down	Metal	Wet Rated
See Similar Items	See Similar Items	See Similar Items

Dimensions

Mounting Plate Height (in.)	5
Mounting Plate Width (in.)	4.3
Product Depth (in.)	7 in
Product Height (in.)	8 in
Product Width (in.)	5.5 in

Details

Actual Color Temperature (K)	3000
Color Rendering Index (CRI)	82
Color Temperature	Warm White
Damp/Wet Rating	Wet Rated
Durability	Weather Resistant
Exterior Lighting Product Type	Sconce
Fixture Color/Finish	Black
Fixture Material	Metal
Glass Type	Frosted Glass
Included	Hardware Included
Indoor/Outdoor	Outdoor
Light Bulb Type Included	Integrated LED
Light Direction	Down
Lumens	600
Number of Lights	1 Light
Outdoor Lighting Features	No additional features
Package Quantity	2
Power Source	Hardwired
Product Size	Small
Product Weight (lb.)	2.87 lb
Returnable	90-Day
Sconce Type	Lantern
Shade Material	Glass
Shape	Square
Style	Transitional
Voltage Type	Line Voltage
Watt Equivalence	60

Feedback | Live Chat

WALL MOUNTED LIGHTS TYPE A
NTS

SCHEDULE OF LIGHTING REQUIREMENTS (§ 21-65.11)

ORD.SECTION	STANDARD	PERMITTED	EXISTING	PROPOSED	COMPLIES
21-65.11E	MIN. LIGHTING LEVEL (FC)	0.3	0.0 (N)	0.1 (N)(W)	NO
21-65.11E	MIN. AVERAGE LIGHTING LEVEL (FC)	0.5	0.2 (N)	0.4 (I) (W)	NO
21-65.11F	MAX. LIGHTING LEVEL AT PROPERTY LINE (FC)	0.3	2.3 (N)	2.8 (W)	NO
21-65.11D	MAX. LIGHT MOUNTING HEIGHT (FT)	15	N/A	11.70	YES

LUMINAIRE SCHEDULE

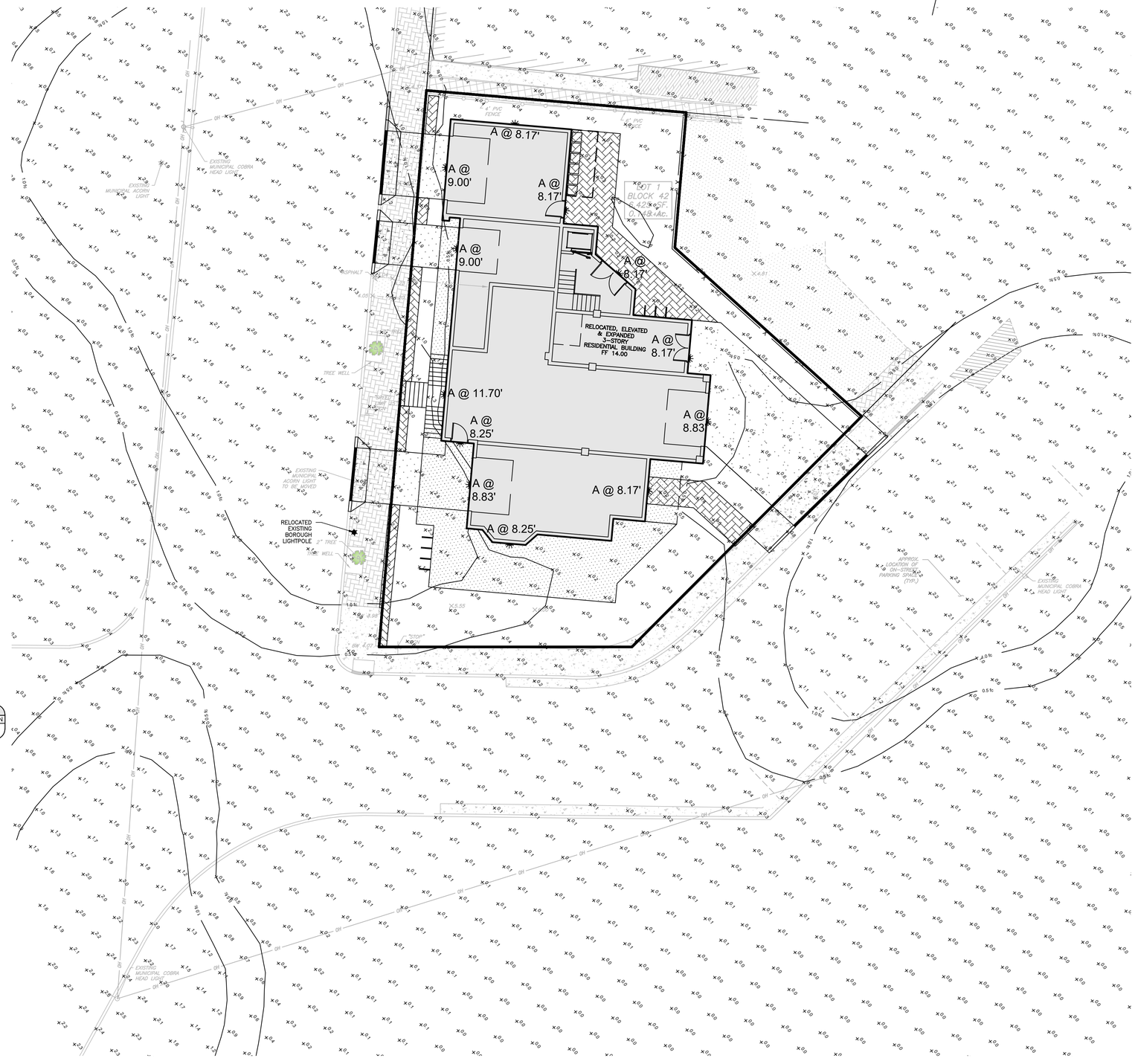
LABEL	QTY	DESCRIPTION	WATTAGE	LAYOUT	MOUNT HEIGHT	TYPE	DIRECTION OF ILLUMINATION
A	12	HAMPTON BAY LED OUTDOOR WALL LIGHT FIXTURE	LED	SINGLE	SEE PLAN	WALL	DOWN

NOTE:
1. LIGHTING TEMPLATE VALUES SHOWN ARE: 1.0 AND 0.50 FOOTCANDLES.
2. ALL LIGHTS TO REMAIN ON FROM DUSK UNTIL DAWN.

SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
98	CONTOUR LINE	98
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
	SANITARY MAIN	
SAN	SANITARY LATERAL	SAN
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
TP-1	LIGHT FIXTURE	TP-1
	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	



PLAN
10 0 10 20
Scale: 1"=10'

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:
BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

Douglas D. Clelland

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:
FOR CONSTRUCTION

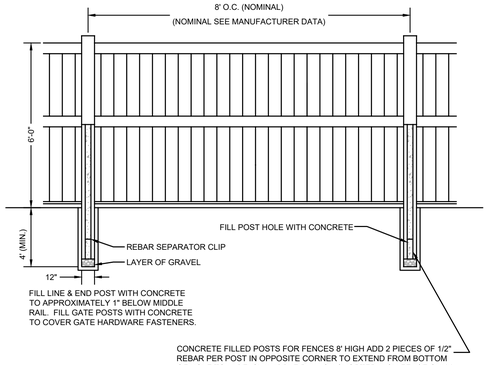
PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:
LIGHTING PLAN - PROPOSED CONDITIONS

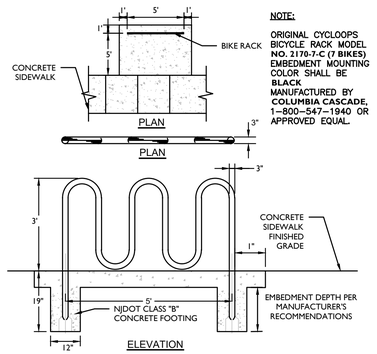
SHEET NO:
C602

File: X:\Jobs\2237 — 60 Bay Ave Highlands LLC\23-2237-01 — 60 Bay Ave Highlands, NJ\2237701CAD\dwg\05-Landscape & Lighting.dwg, —> C602 LIGHTING
Copyright 2024, InSite Engineering, LLC, All Rights Reserved.



NOTES:
1. ALL CONCRETE SHALL BE A MINIMUM OF 3000 PSI AIR ENTRAINED.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER REQUIREMENTS.

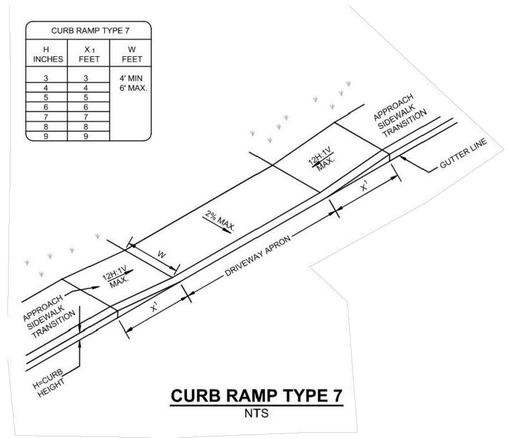
VINYL FENCE
NTS



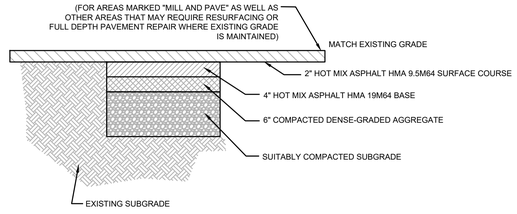
NOTE:

ORIGINAL CYCLOOPS BICYCLE RACK MODEL NO. 2170-7-C (7 BIKES) EMBEDMENT MOUNTING COLOR SHALL BE BLACK MANUFACTURED BY COLUMBIA CASCADE, 1-800-547-1940 OR APPROVED EQUAL.

BICYCLE RACK DETAIL
NOT TO SCALE



CURB RAMP TYPE 7
NTS



PAVEMENT CONSTRUCTION SEQUENCE:
1. MILL AND EXCAVATE WHERE NOTED ON PLAN.
2. PREPARE BASE WHERE NECESSARY.
3. INSTALL SURFACE COURSE OVER ENTIRE PAVED AREA AT ONE TIME.

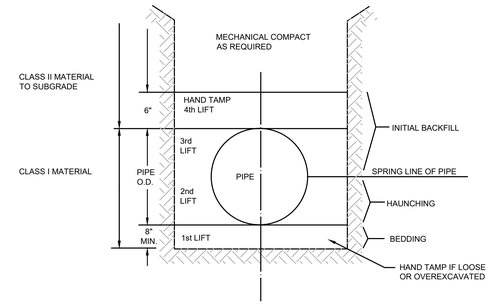
MATERIALS FOR ASPHALT SURFACE SHALL CONFORM TO SECTION 404.02 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION). MATERIALS FOR ASPHALT BASE SHALL CONFORM TO SECTIONS 301.02 AND 304.02 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).

PAVEMENT REPAIR
NTS

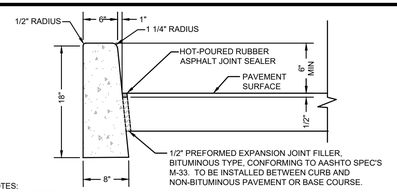
Roof Runoff Flowrate Calculation			
Q = ciA			
	c =	0.99	
	i =	6.50	in/hr
	A =	0.070	ac
Q =	0.45	cfs	
Pipe Capacity Calculation (Manning's Equation)			
Q = 1.49/n * A * R^2/3 * S^1/2			
n (pvc) =	0.01		
d =	6	in	
A (full) =	0.20	sf	
ro (full) =	1.57	ft	
R (full) =	0.13	ft	
S =	0.005	ft / ft	
Q (full) =	0.52	cfs	
Q required =	0.45	cfs	< OK >

ROOF LEADER COLLECTION SYSTEM CAPACITY CALCULATIONS

NOTE:
CLASS I MATERIAL - 3/4" BROKEN STONE
CLASS II MATERIAL - COARSE SAND AND GRAVEL

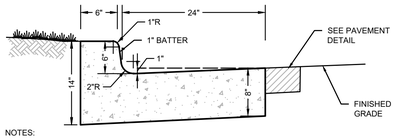


PIPE BEDDING DETAIL
NTS



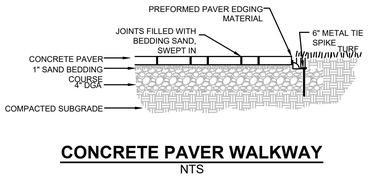
NOTES:
1. CONCRETE TO BE NJDOT CLASS "B" (AIR ENTRAINED).
2. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20' - 0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF AASHTO M-213, RECESSED 1/4" FROM THE FRONT FACE AND TOP OF THE CURB.
3. DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.
4. WIDTH OF JOINT FILLER STRIP EQUAL TO THE THICKNESS OF THE PAVEMENT LESS 1/2".

CONCRETE VERTICAL CURB
NTS



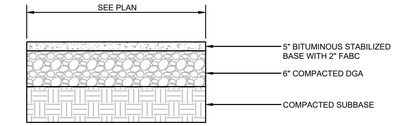
NOTES:
1. PREFORMED BITUMINOUS EXPANSION JOINTS, 1/2" THICK SHALL BE INSTALLED EVERY 20 FEET. CONTRACTION JOINTS SHALL BE INSTALLED AT 10 FT. INTERVALS ON CENTER ALL JOINT TO BE FULL DEPTH.
2. CONCRETE SHALL BE CLASS "B" PORTLAND CEMENT HAVING A 28 DAY STRENGTH OF 4,000 PSI.

ROLLED CONCRETE CURB & GUTTER
NTS

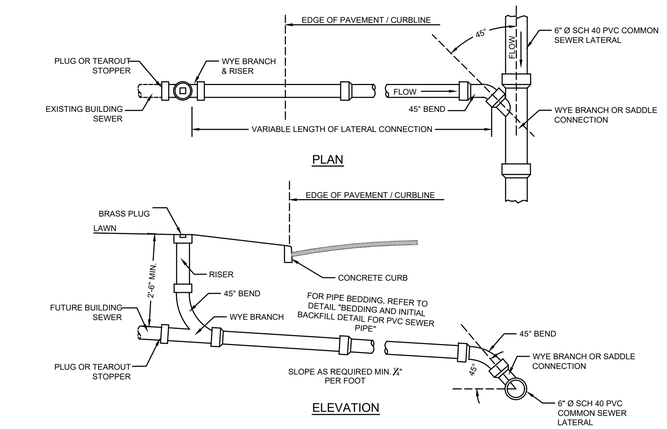


CONCRETE PAVER WALKWAY
NTS

NOTE: CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE CITY ENGINEER'S OFFICE FOR PAVER COLOR AND PATTERN PRIOR TO INSTALLATION.

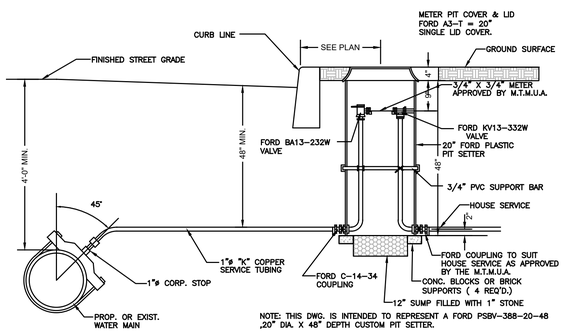


PAVEMENT SECTION
NTS

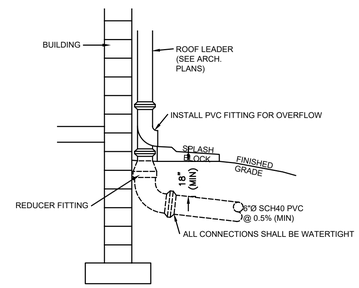


STANDARD LATERAL CONNECTION WITH CLEANOUT - SEWER DEPTH 10' OR LESS
NTS

IN ACCORDANCE WITH NJAC 7:10-11.10(E)5, ALL WATER MAINS AND SANITARY LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAI (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATERTIGHT CONSTRCUTION (DUCTILE IRON), WITH WATERTIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN.



TYPICAL SERVICE CONNECTION WITH FORD METER PIT
NTS



EXTERIOR DOWNSPOUT COLLECTOR
NTS

File: X:\Jobs\2327 — 60 Bay Ave Highlands LLC\23-2327-01 — 60 Bay Avenue_Highlands, NJ\2327701CAD\dwg\07-Details.dwg, ---> C800 CONSTRUCTION DETAILS (2)
Copyright 2024, Insite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:
BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA DELAWARE, CONNECTICUT, NORTH CAROLINA COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

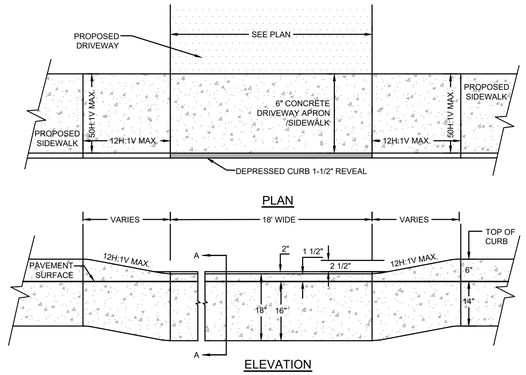
☒ NOT FOR CONSTRUCTION
APPROVED BY:
FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:
PRELIMINARY & FINAL MAJOR SITE PLAN

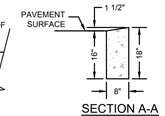
SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NO:
C800



PLAN

ELEVATION



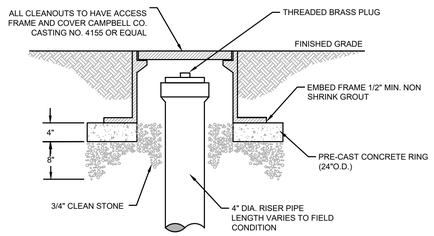
SECTION A-A

NOTES:

1. ALL SIDEWALK AND DRIVEWAY APRON CONCRETE TO BE NJDOT CLASS "B".
2. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS 1/2" THICK AT 20'-0" (MAXIMUM) INTERVALS. PROVIDE DUMMY JOINTS AT INTERVALS EQUAL TO THE SIDEWALK WIDTH BETWEEN EXPANSION JOINTS.
3. PROVIDE WELDED WIRE FABRIC REINFORCEMENT, TYPE 6X6=W2.9XW2.9 AT DRIVEWAY APRONS.
4. CURB AND SIDEWALK SHALL BE POURED SEPARATELY.
5. LONGITUDAL JOINTS BETWEEN CURB AND SIDEWALK SHALL BE PREFORMED BITUMINOUS FIBER EXPANSION MATERIAL 1/2" THICK.
6. FOR CURB, PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS 1/2" THICK AT 20'-0" MAXIMUM INTERVALS. PROVIDE DUMMY JOINTS (FORMED) MIDWAY BETWEEN EXPANSION JOINTS.

DEPRESSED CURB, DRIVEWAY APRON & SIDEWALK

NTS



SANITARY SEWER CLEANOUT FRAME AND COVER

NTS

File: X:\Jobs\2237 – 60 Bay Ave Highlands LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\2322370\CAD\dwg\07-Details.dwg, ---> C801 CONSTRUCTION DETAILS
Copyright 2024, InSite Engineering, LLC. All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INTIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

☒ NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NO:

C801

SITE

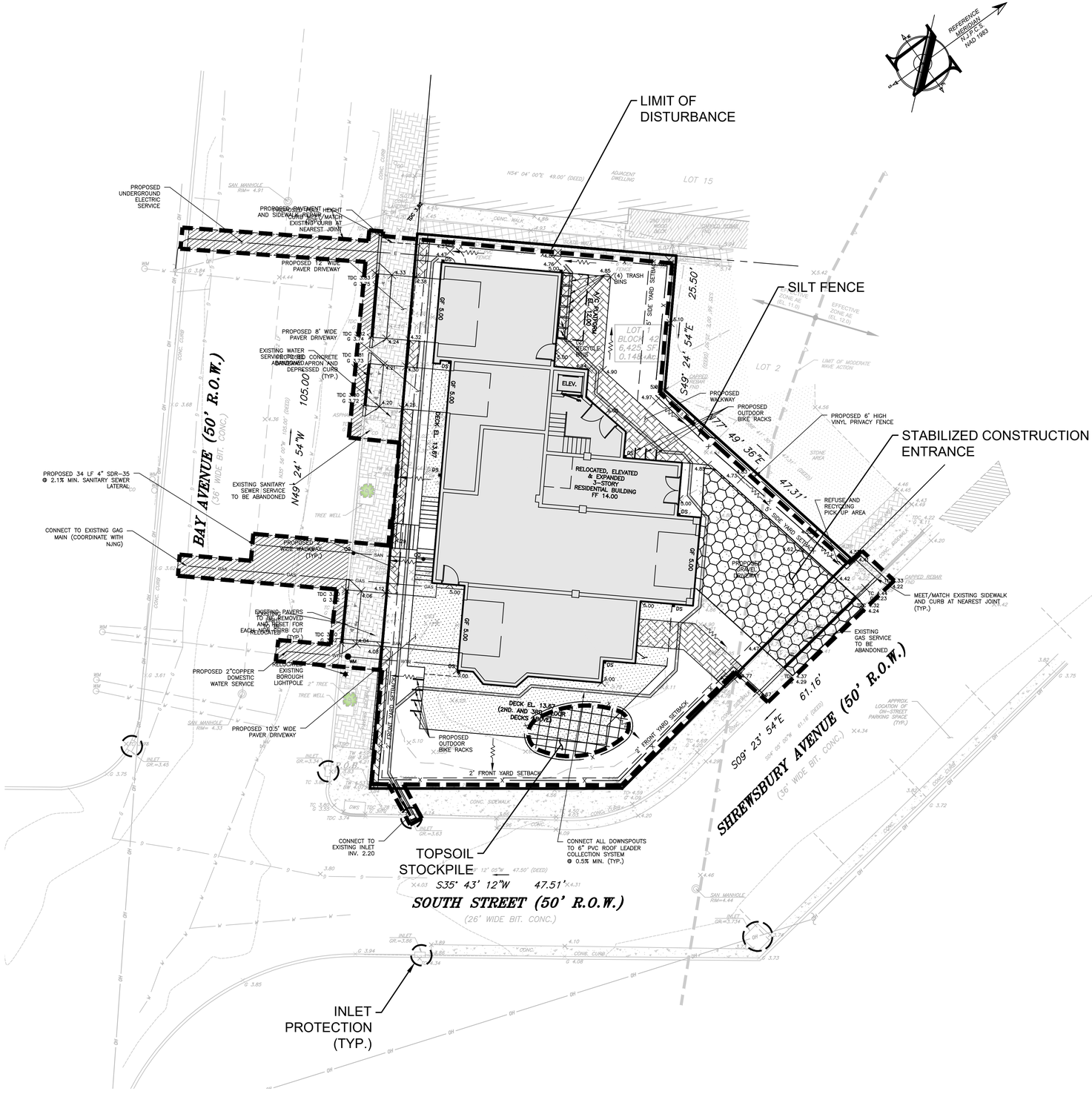


SOIL MAP

200 0 200 400

Scale: 1"=200'

SOIL DESIGNATION LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
USKLEA	URBAN LAND-KLEY COMPLEX, 0 TO 2 PERCENT SLOPES	X



SEE SHEET C101 FOR PLAN NOTES

LEGEND

EXISTING		PROPOSED
	BOUNDARY LINE	
	CONTOUR LINE	
+ 46.80	SPOT ELEVATION	+46.80
	BUILDING	
	WALL	
G G	GAS	GAS
W W	WATER	WTR
	INLET	
	STORM	
SAN	SANITARY LAGERAL	SAN
	SANITARY MAIN	
OH	OVERHEAD WIRE	O/H
E E	ELECTRIC	E
T T	TELEPHONE	TEL
	UTILITY POLE	
	HYDRANT	
	SIGN POST	
x x	FENCE	x x
	LIGHT FIXTURE	
TP-1	TEST PIT LOCATION	TP-1
	GRADE FLOW ARROW	
	SWALE CENTER LINE	

SOIL EROSION LEGEND

- LIMIT OF DISTURBANCE
- SILT FENCE
- INLET PROTECTION
- PROPOSED TREE PROTECTION
- SOIL COMPACTION TEST LOCATION
- STABILIZED CONSTRUCTION ENTRANCE
- RIP-RAP APRON, SCOUR HOLE
- SOIL RESTORATION AREA

CONSTRUCTION / SPPP NOTE

THIS PLAN WAS PREPARED TO ADDRESS THE SOIL EROSION AND SEDIMENT CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) AT THE TIME OF DESIGN ONLY. ALL OTHER COMPONENTS OF THE SPPP AND GENERAL STORMWATER PERMIT ARE TO BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE SITE CONTRACTOR.

PLEASE NOTE - THIS PLAN IS NOT TO BE USED FOR SITE CONSTRUCTION.

TOTAL LIMIT OF DISTURBANCE = 0.172 AC.

SOIL RESTORATION EXEMPTION

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN AN AREA OF "URBAN REDEVELOPMENT" AND IS CONSIDERED "PREVIOUSLY DEVELOPED" AS DEFINED BY THE NJDEP. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND REGRADING (REVISED 2017), THE SITE IS EXEMPT FROM SOIL RESTORATION REQUIREMENTS.

File: X:\Jobs\2237 – 60 Bay Ave Highlands LLC\23-2237-01 – 60 Bay Avenue_Highlands, NJ\23237001CAD\Dwg\08-SESC Plan.dwg, —> C900 SESC PLAN
Copyright 2024, Insite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:
BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:
60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

INSITE ENGINEERING, LLC SINCE 2003

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

INSITE Engineering • Surveying • Planning
InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA
DELAWARE, CONNECTICUT, NORTH CAROLINA
COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

Douglas D. Clelland

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev #	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: 1"=10'	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

☒ NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

SESC PLAN

SHEET NO:

C900

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 ½ TONS PER ACRE, ACCORDING TO STATE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF ONE INCH TO TWO INCH (1" - 2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

2. SEEDBED PREPARATION

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. LIMING RATES SHALL BE ESTABLISHED VIA SOIL TESTING. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

3. SEEDING

A. TEMPORARY VEGETATIVE SEEDING COVER SHALL CONSIST OF PERENNIAL RYEGRASS APPLIED UNIFORMLY AT A RATE OF 1 POUND PER 1,000 SF (100 LBS/AC) WITH AN OPTIMUM SEED DEPTH OF 0.5" (TWICE THE DEPTH IF SANDY SOILS), IN ACCORDANCE WITH TABLE 7-2, PAGE 7-3.

*SEEDING DATES: 2/15-5/1 AND 8/15-10/15

B. CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.

D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS. - MAY BE USED TO ANCHOR HAY OR STRAW MULCH.
   a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
   b. USE ONE OF THE FOLLOWING:
      (1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
      (2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
      NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 PONDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORMA MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEE FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

2. SEEDBED PREPARATION

A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

3. SEEDING

(ZONE 6B)

A. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.

SEED MIXTURE #13 FOR LAWN AREAS	PLANTING RATE LBS/1,000 (LBS/ACRE)
HARD FESCUE AND/OR CHEWING FESCUE AND/OR STRONG CREEPING RED FESCUE	4 (175)
PERENNIAL RYEGRASS	1 (45)
KENTUCKY BLUEGRASS (BLEND)	1 (45)

*ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14**
*OPTIMAL SEEDING DATES: 8/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

SEED MIXTURE #7 FOR BASIN, SIDE SLOPES, AND SWALES	PLANTING RATE LBS/ 2,000 (LBS/ACRE)
STRONG CREEPING RED FESCUE	3 (130)
KENTUCKY BLUEGRASS	1 (50)
PERENNIAL RYEGRASS	0.5 (20)
OR REDTOP	0.25 (10)
PLUS WHITE CLOVER	0.10 (5)

*ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14**
*OPTIMAL SEEDING DATES: 8/15-10/15
**SUMMER SEEDING SHALL ONLY BE CONDUCTED WHEN SITE IS IRRIGATED

3. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE.

4. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 850 F AND ABOVE. SEE TABLE 4-3 MIXTURES 1 TO 7. PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.

5. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 8 MANY GRASSES BECOME ACTIVE AT 600F. SEE TABLE 4-3, MIXTURES 8-20. ADJUSTMENT OF PLANTING RATE COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.

C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

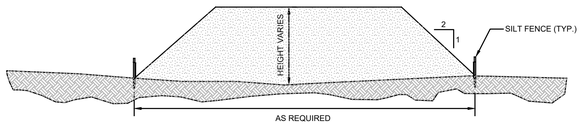
ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING COULTER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.
   a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
   b. USE ONE OF THE FOLLOWING:
      (1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER-BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
      (2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
      NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO STANDARDS FOR GROWTH AND SEDIMENT CONTROL IN NEW JERSEY, JANUARY 2014GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT REMIXEDIN THE TANK WITH SEED USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

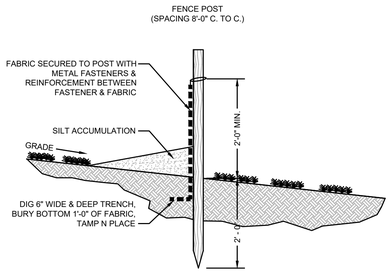
C. PELLETIZED MULCH-COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAYECTI CONTAIN CO-POLYMERS, TACKIFIERS,FERTILIZERS,AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO AW SEEDED AREA AND WATERED, FORM A MULCHMAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER SPREADING PELLETIZED MULCH ON THE SEEDBED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

5.



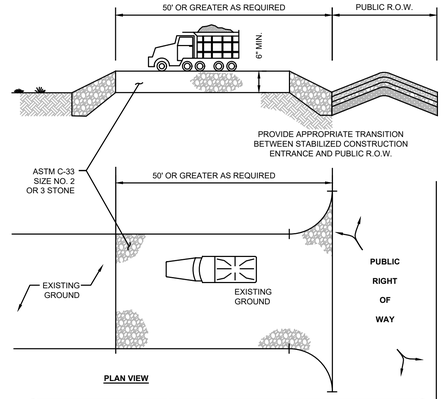
SECTION THROUGH SOIL STOCKPILE (TYP.)

NTS



SILT FENCE DETAIL

NTS



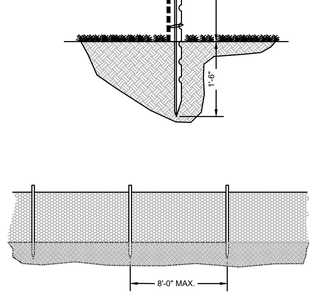
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COURSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2 TO 5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH FABC HOT MIX ASPHALT BASE COURSE, MIX 1-2 [1]	

1. AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

STABILIZED CONSTRUCTION ENTRANCE

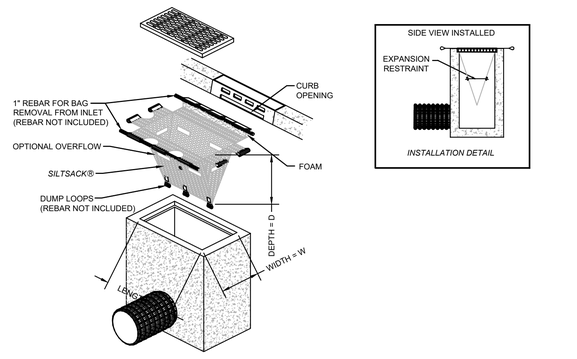
NTS

NOTE: INDIVIDUAL LOT ACCESS POINTS MAY REQUIRE STABILIZATION. THE THICKNESS SHOWN IS FOR STONE CONSTRUCTION ENTRANCE ONLY.



TREE PROTECTION FENCING

NTS



INLET PROTECTION DETAIL

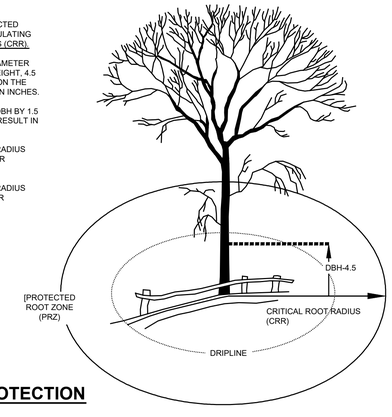
NTS

ESTIMATE A TREE'S PROTECTED ROOT ZONE (PRZ) BY CALCULATING THE CRITICAL ROOT RADIUS (CRR).

1. MEASURE THE DBH (DIAMETER OF TREE AT BREAST HEIGHT, 4.5 FEET ABOVE GROUND ON THE UPHILL SIDE OF TREE) IN INCHES.
2. MULTIPLY MEASURED DBH BY 1.5 OR 1.0. EXPRESS THE RESULT IN FEET.

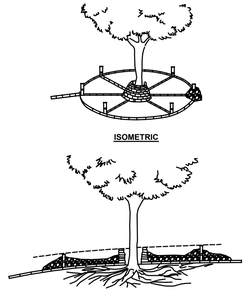
DBH X 1.5: CRITICAL ROOT RADIUS FOR OLDER, UNHEALTHY, OR SENSITIVE SPECIES.

DBH X 1.0: CRITICAL ROOT RADIUS FOR YOUNGER, HEALTHY OR TOLERANT SPECIES.



TREE ROOT PROTECTION

NTS

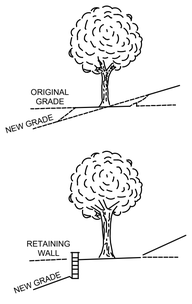


TREE PROTECTION - TILE AND GRAVEL WILL ALLOW AIR CIRCULATION TO ROOT ZONE UNDER A FILL.

TREE PROTECTION (FILL AREAS)

NTS

A RETAINING WALL PROTECTS A TREE FROM A LOWERED GRADE.



TREE PROTECTION (CUT AREAS)

NTS

File: X:\Jobs\23237 — 60 Bay Ave Highlands LLC\23-2237-01 — 60 Bay Avenue_Highlands, NJ\23237701CAD\dwg\08-SESC Plan.dwg, —> C902 SESC DETAILS
Copyright 2024, Insite Engineering, LLC, All Rights Reserved.

PROJECT INFORMATION

PROJECT NAME:

PROPOSED MULTI - FAMILY RESIDENCE

PROJECT LOCATION:

BLOCK 42, LOT 1
60 BAY AVENUE
BOROUGH OF HIGHLANDS,
MONMOUTH COUNTY, NJ

OWNER:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT:

60 BAY AVE HIGHLANDS, LLC
60 BAY AVENUE
HIGHLANDS, NJ 07732

APPLICANT'S PROFESSIONALS

ATTORNEY:
DONNA M. JENNINGS ESQ.
WILENTZ, GOLDMAN & SPITZER, PA
90 WOODBRIDGE CENTER DRIVE, SUITE 900
WOODBRIDGE, NJ 07095

ARCHITECT:
SALVATORE LA FERLITA, R.A.
115 UNIVERSITY DRIVE
LINCROFT, NJ 07738

SURVEYOR:
INSITE SURVEYING, LLC
1955 ROUTE 37, SUITE 1A
WALL, NJ 07719

CALL BEFORE YOU DIG!
NJ ONE CALL....800-272-1000
(at least 3 days prior to excavation)

ELECTRIC	RED
GAS / OIL	YELLOW
COMMUNICATION / TV	ORANGE
WATER	BLUE
SEWER	GREEN
TEMP. SURVEY MARKINGS	MAGENTA
PROPOSED EXCAVATION	WHITE

InSite Engineering, LLC
CERTIFICATE OF AUTHORIZATION: 24GA28083200
1955 ROUTE 34, SUITE 1A, WALL, NJ 07719
732-531-7100 (Ph) 732-531-7344 (Fax)
InSite@InSiteEng.net www.InSiteEng.net

LICENSED IN: NEW JERSEY, NEW YORK, PENNSYLVANIA DELAWARE, CONNECTICUT, NORTH CAROLINA COLORADO, & DISTRICT OF COLUMBIA

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN THE SIGNATURE AND RAISED SEAL OF THE PROFESSIONAL, IT IS NOT AN ORIGINAL AND MAY HAVE BEEN ALTERED

DOUGLAS D. CLELLAND, PE
PROFESSIONAL ENGINEER
NJ PE 24GE05331000

REVISIONS

Rev.#	Date	Comment
4	06/05/24	PER BOROUGH COMMENTS
3	04/09/24	PER ATTORNEY
2	03/28/24	PER ATTORNEY
1	03/12/24	PER ARCHITECT
0	02/05/24	INITIAL RELEASE

SCALE: AS SHOWN	DESIGNED BY: DDC
DATE: 02/05/24	DRAWN BY: AMC
JOB #: 23-2237-01	CHECKED BY: DDC
CAD ID: 23-2237-01r3	

NOT FOR CONSTRUCTION

APPROVED BY:

FOR CONSTRUCTION

PLAN INFORMATION

DRAWING TITLE:

PRELIMINARY & FINAL MAJOR SITE PLAN

SHEET TITLE:

SESC DETAILS

SHEET NO:

C902



1 A-100 EXISTING FRONT ELEVATION

SCALE: N.T.S.



A A-100 GROUND FLOOR PLAN

2,491 S.F. - G.F.E.: 5.00'

SCALE: 1/4" = 1'-0"

APPLICABLE CODES

· INTERNATIONAL RESIDENTIAL CODE (N.J. EDITION)	2021
· INTERNATIONAL MECHANICAL CODE	2021
· NATIONAL STANDARD PLUMBING CODE	2021
· NATIONAL ELECTRICAL CODE	2020
· INTERNATIONAL FIRE CODE	2021
· INTERNATIONAL ENERGY CONSERVATION CODE	2021

ZONING DATA

	ZONE: CBD	BLOCK: 42	LOT: 1
ITEM	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA			6,408 S.F.
MINIMUM LOT FRONTAGE			105.00'
MINIMUM FRONT SETBACK ACCESSORY			2.00'
MINIMUM SIDE SETBACK ACCESSORY			5.00' / 8.00'
MINIMUM STREET SIDE SETBACK ACCESSORY			
MINIMUM REAR SETBACK ACCESSORY			5.00' / 8.00'
MINIMUM REAR STREET SIDE SETBACK ACCESSORY			
MAXIMUM BUILDING COVERAGE			2,681 S.F.
* MAXIMUM LOT COVERAGE			2,681 / 6,408 = .42%
MAXIMUM BUILDING HEIGHT ACCESSORY			46'-10"

REFER TO INSITE ENGINEERING DATA

BUILDING DATA

HABITABLE AREA	EXISTING AREA	NEW AREA	TOTAL AREA
GROUND FLOOR	0	0	0
FIRST FLOOR	1,200 SF	1,268 SF	2,468 SF
SECOND FLOOR	900 SF	1,686 SF	2,586 SF
THIRD FLOOR	900 SF	1,534 SF	2,434 SF
TOTAL	3,000 SF	4,488 SF	7,488 SF
HABITABLE AREA	EXISTING VOLUME	NEW VOLUME	TOTAL VOLUME
GROUND FLOOR	0	22,419 CF	22,419 CF
FIRST FLOOR	9,600 CF	11,412 CF	21,012 CF
SECOND FLOOR	7,200 CF	13,488 CF	20,688 CF
THIRD FLOOR	7,200 CF	12,272 CF	19,472 CF
TOTAL	24,000 CF	59,591 CF	83,591 CF

OUTDOOR SPACE

UNIT	REQUIRED	PROVIDED
APARTMENT 'A'	100 S.F.	160 S.F.
APARTMENT 'B'	100 S.F.	678 S.F.
APARTMENT 'C'	100 S.F.	286 S.F.
APARTMENT 'D'	100 S.F.	154 S.F.
APARTMENT 'E'	100 S.F.	703 S.F.
TOTAL	600 S.F.	1,981 S.F.

· 100 SF / PER UNIT

LEGEND

- EXISTING TO BE REMOVED
- EXISTING INTERIOR PARTITION TO REMAIN
- NEW 2" x 4" WOOD STUD INTERIOR WALL CONSTRUCTION
- NEW TWO HOUR RATED WALL CONSTRUCTION
- NEW 2" x 6" WOOD STUD EXTERIOR WALL CONSTRUCTION
- NEW CONCRETE BLOCK FOUNDATION WALL
- EXISTING CMU WALL WITH NEW CMU ON TOP
- F.V. NEW 'SMART VENT' AUTOMATIC NON-POWERED, 8" x 16" FLOOD VENTS OR APPROVED EQUAL, 12" ABOVE GRADE MAX (1) PER 200 S.F. MIN.

FOR ZONING REVIEW
ISSUED: 6/12/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client
60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

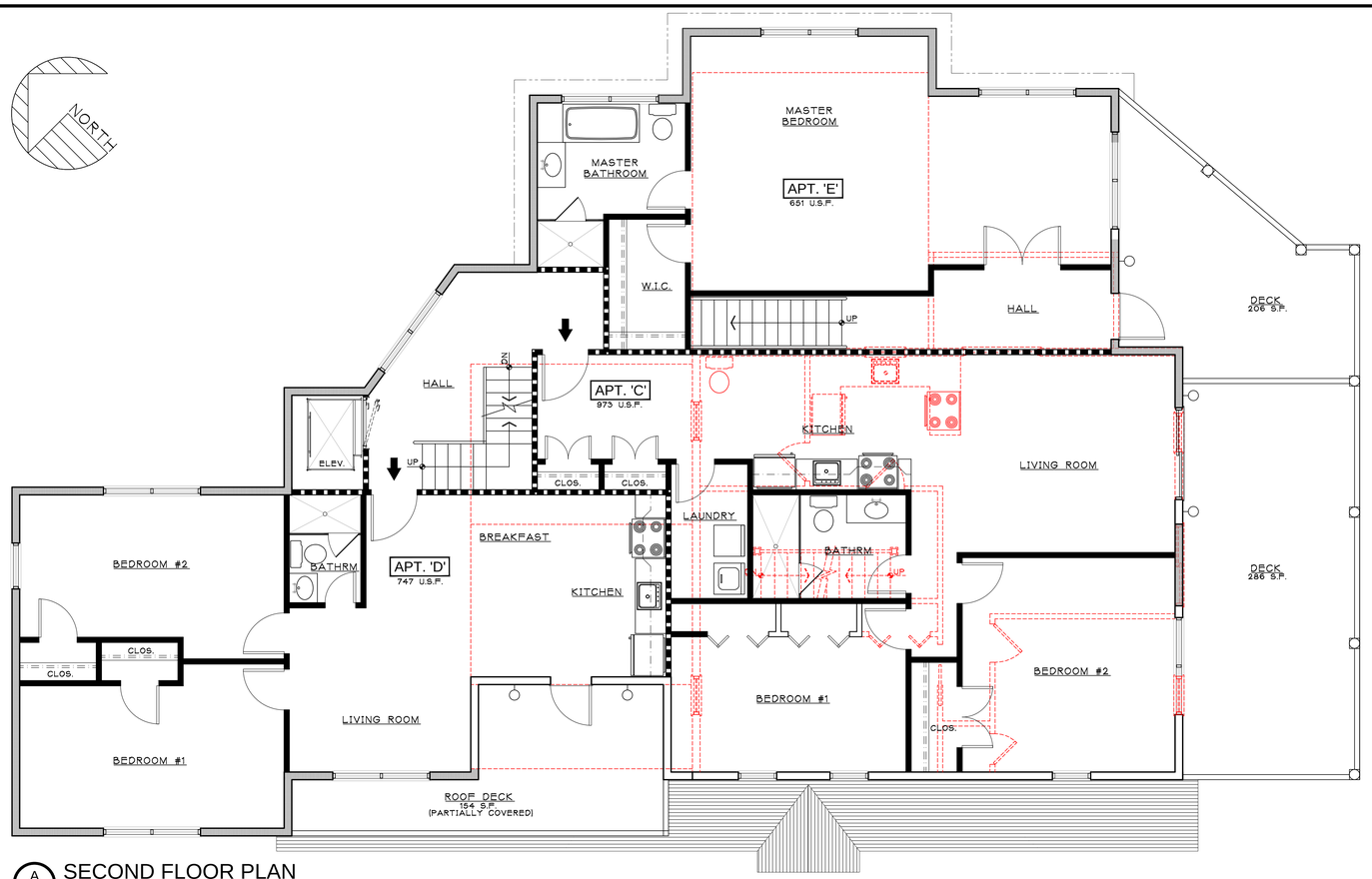
Title
GROUND FLOOR PRELIMINARY SPACE ANALYSIS

Seal & Signature:

STATE OF NEW JERSEY · SALVATORE LaFERLITA · AI15228 · REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-100
SHEET No.:	_ OF _

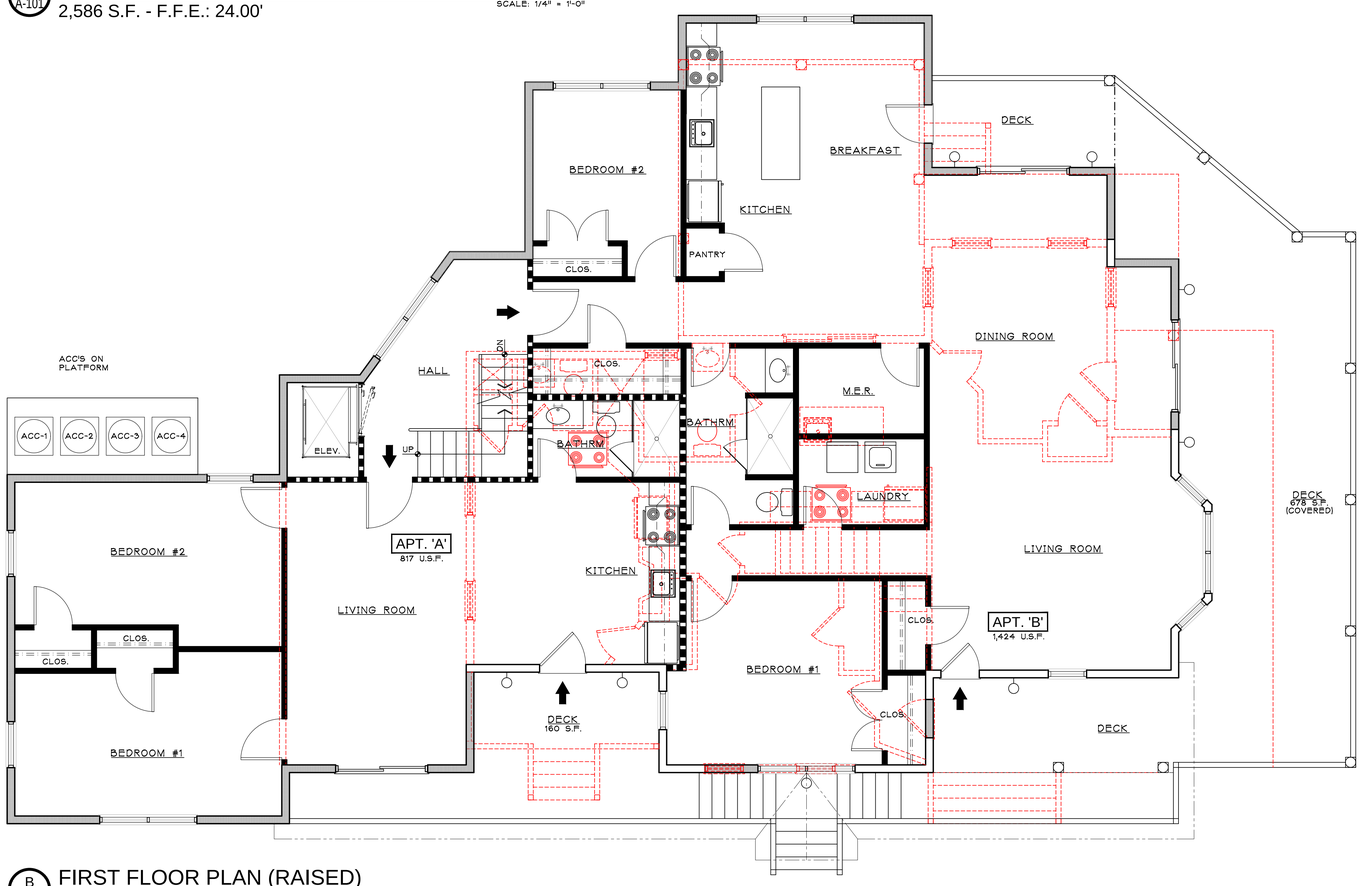


A
A-101

SECOND FLOOR PLAN

2,586 S.F. - F.F.E.: 24.00'

SCALE: 1/4" = 1'-0"

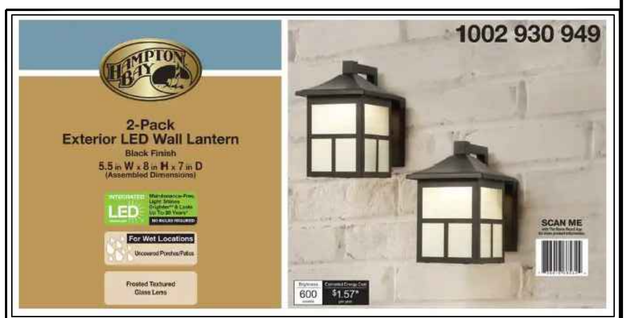


B
A-101

FIRST FLOOR PLAN (RAISED)

2,468 S.F. - F.F.E.: 15.00'

SCALE: 1/4" = 1'-0"



TYPE 'A'

WALL MOUNTED GARAGE & DECK LIGHT

FOR ZONING REVIEW
ISSUED: 6/12/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

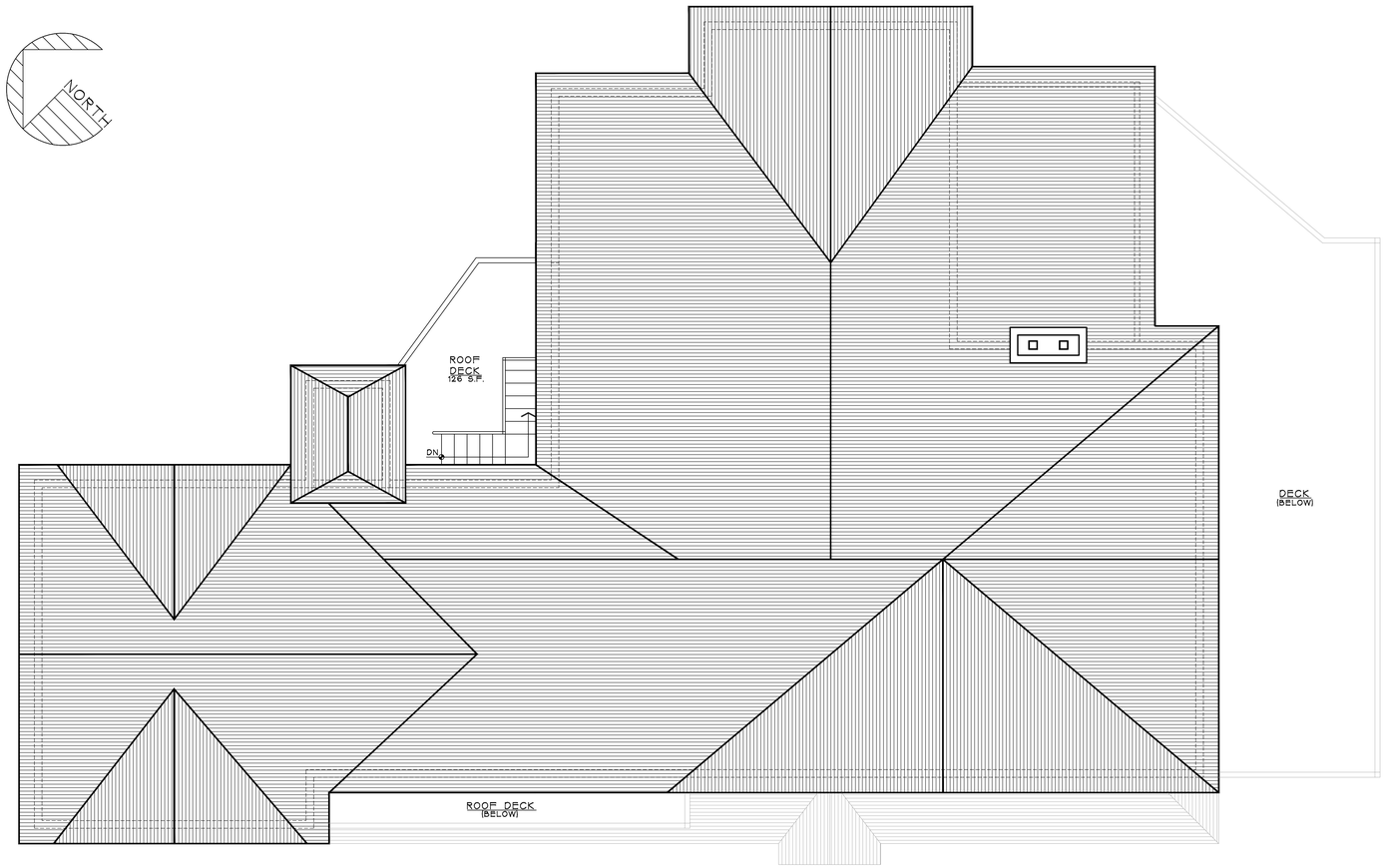
FIRST AND SECOND FLOOR
PRELIMINARY LAYOUT

Seal & Signature:

STATE OF NEW JERSEY
SALVATORE LA FERLITA
AI15228
REGISTERED ARCHITECT

N.J. LIC. #AI15228

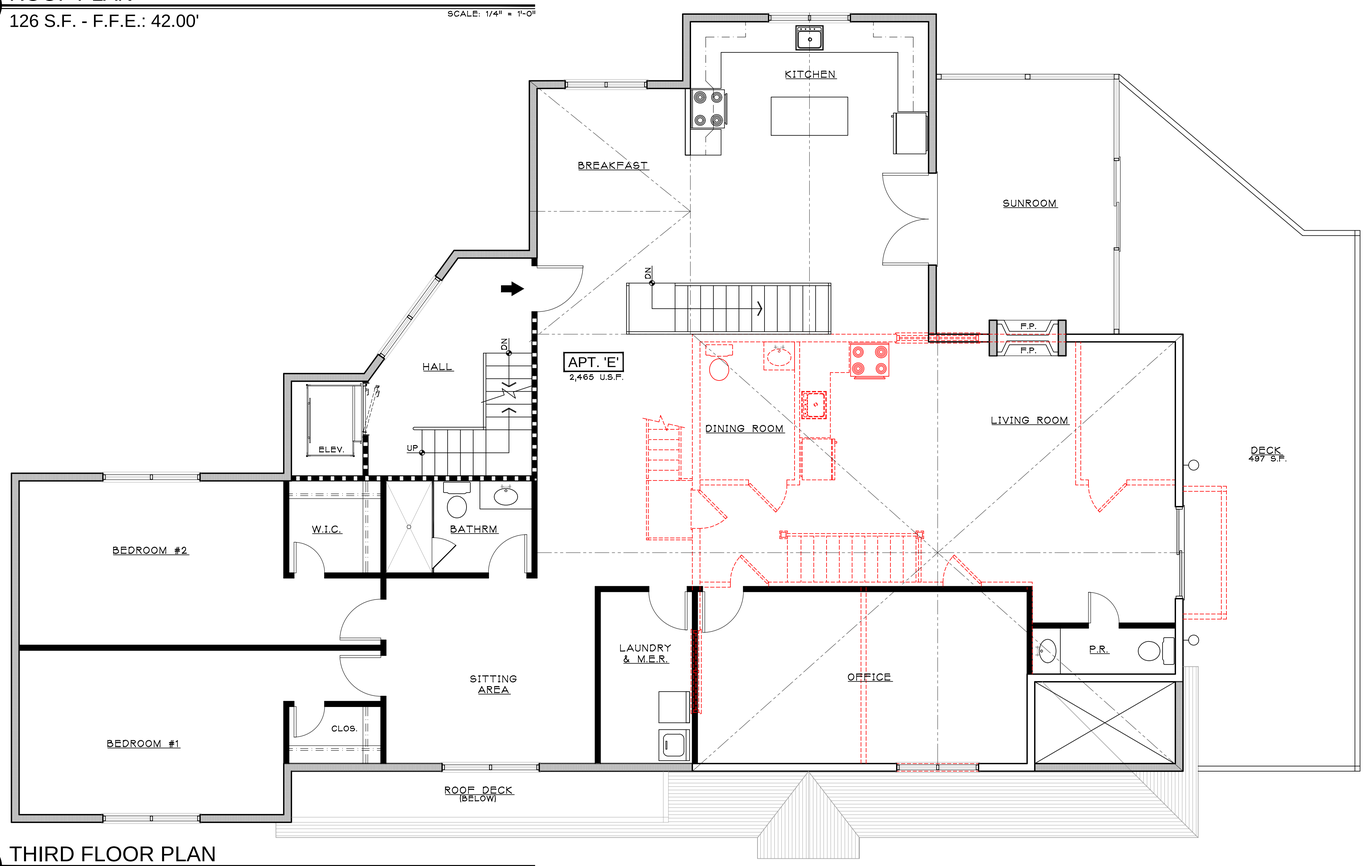
Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-101
SHEET No.:	_ OF _



A A-102 ROOF PLAN

126 S.F. - F.F.E.: 42.00'

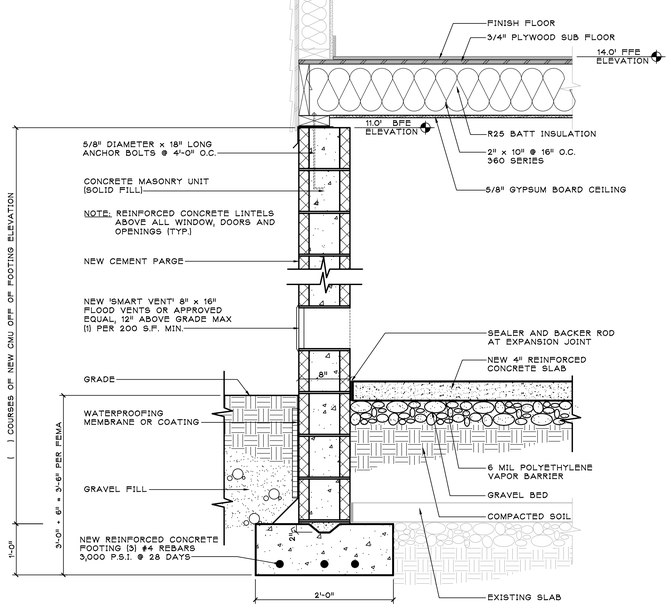
SCALE: 1/4" = 1'-0"



B A-102 THIRD FLOOR PLAN

2,634 S.F. - F.F.E.: 33.00'

SCALE: 1/4" = 1'-0"



C A-102 WALL SECTION

SCALE: 1" = 1'-0"

FOR ZONING REVIEW
ISSUED: 6/12/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

THIRD FLOOR AND ROOF PRELIMINARY SPACE ANALYSIS

Seal & Signature:

STATE OF NEW JERSEY SALVATORE LA FERLITA LICENSED AI15228 REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-102
SHEET No.:	_ OF _



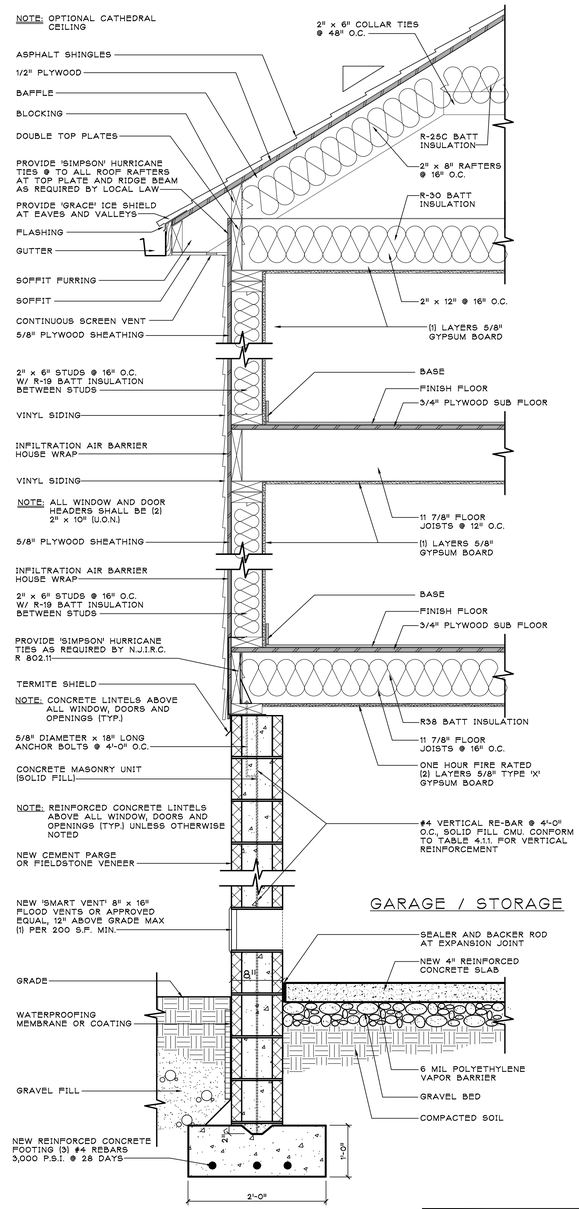
1 A-103 FRONT ELEVATION

SCALE: 1/4" = 1'-0"



2 A-103 REAR ELEVATION

SCALE: 1/4" = 1'-0"



A A-103 FOUNDATION / WALL SECTION

SCALE: 1" = 1'-0"

FOR ZONING REVIEW
ISSUED: 6/12/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management
115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

FRONT ELEVATION AND REAR ELEVATION

Seal & Signature:

STATE OF NEW JERSEY SALVATORE LaFERLITA AI15228 REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-103
SHEET No.:	_ OF _



1 A-104 RIGHT SIDE ELEVATION

SCALE: 1/4" = 1'-0"



2 A-104 LEFT SIDE ELEVATION

SCALE: 1/4" = 1'-0"

FOR ZONING REVIEW
ISSUED: 6/12/2024

SALVATORE LA FERLITA, R.A.
Architectural Services
Construction Management

115 University Drive
Lincroft, N.J. 07738
732-741-5105
Sallaferlita@aol.com

Revised			Issued		
No.	DATE	REVISION	No.	DATE	DESCRIPTION

Client

60 BAY AVE HIGHLAND LLC
MULTI- FAMILY RESIDENCE
60 BAY AVENUE
HIGHLANDS, NEW JERSEY

Title

LEFT AND RIGHT
SIDE ELEVATIONS

Seal & Signature:

STATE OF NEW JERSEY
SALVATORE LA FERLITA
AI15228
REGISTERED ARCHITECT

N.J. LIC. #AI15228

Job Type:	-
Project No.:	
Scale:	AS NOTED
Date:	
Drawn By:	
Reviewed By:	-
Drawing No.:	A-104
SHEET No.:	_ OF _

Roberts
ENGINEERING GROUP LLC
Women Business Enterprise Certified

1670 Whitehorse-Hamilton Square Rd.
Hamilton, New Jersey 08690
609-586-1141 fax 609-586-1143
www.RobertsEngineeringGroup.com

August 1, 2024

Nancy Tran
Land Use Board Secretary
Borough of Highlands Land Use Board
151 Navesink Avenue
Highlands, New Jersey 07732

Re: Completeness Review No. 2
Preliminary and Final Site Plan
60 Bay Ave Highlands, LLC
60 Bay Avenue
Block 42, Lot 1
Borough of Highlands, Monmouth County, New Jersey
Our File No.: HLPB2024-02

Dear Ms. Tran:

As requested, we have reviewed the above referenced application in accordance with the Borough of Highlands Zoning and Land Use Regulations sections entitled "Part III, Subdivision and Site Plan Review, Article VI, Application Procedure" and "Article VIII, Plat and Plan Details, section 21-58.E & F – Preliminary Site Plan and Final Site Plan" as well as the Borough of Highlands, NJ Central Business District Redevelopment Plan May 2018.

The applicant seeks to move and elevate an existing 3-story multi-family residential building, complete renovations, provide ground floor storage and garage parking, and construct two extensions, decks, and associated site improvements. The proposed multi-family residential building will increase its existing 4 units to 5 units and will include a one (1) car garage, two (2) 1-½ garages, and a two (2) car garage.

The residential building is situated on a 6,625 SF (0.147 Ac) lot in the Central Business District (CBD). It is located within the CDB Redevelopment Area Overlay 2 Zone - Gateway Parcels and is bounded by Bay Avenue, South Street, Shrewsbury Avenue, Lot 15 in the same zone, and residential Lot 7 within the R-2.02 District. The property is located in the AE Flood Hazard zone, partially in the Coastal A zone, and in the Limit of the Moderate Wave Action (LiMWa) delineation area.

The site was issued a Denial of Zoning Permit on February 14, 2024, and April 23, 2024, by Courtney Lopez, Zoning Officer for the Borough of Highlands. The site was denied for a proposed building coverage of 52.4% where 35% is permitted, 7 parking spaces where 10.1 spaces are required, and 19.09 feet of driveway width at the curb where only 18 feet is permitted.

We have reviewed the following documents submitted in support of the above referenced application for completeness purposes:

1. Copy of the Completeness Review No. 1 letter to Nancy Tran dated May 17, 2024.
2. Copy of the Response Letter from InSite Engineering, LLC dated June 12, 2024.
3. Copy of the Letter to Nancy Tran from InSite Engineering, LLC dated April 11, 2024.
4. Copy of the Land Use Board Application for Variance dated June 18, 2024.

5. Copy of the Denial of Zoning Permit issued on April 23, 2024, by Courtney Lopez, Zoning Officer for the Borough of Highlands.

6. Copy of the Engineer's Report prepared by InSite Engineering, LLC dated June 10, 2024.

7. Copy of plans entitled, "Preliminary & Final Major Site Plan for Proposed Multi-family Residence, Block 42, Lot 1, 60 Bay Avenue, Borough of Highlands, Monmouth County, New Jersey, prepared by InSite Engineering, LLC., last revised June 5, 2024". The set consists of 13 sheets.

8. Copy of report entitled, "Multi-Family Residence - Preliminary & Final Major Site Plan, Stormwater Management Statement of Compliance, 60 Bay Avenue, Block 42, Lot 1, Borough of Highlands, Monmouth County, New Jersey", prepared by InSite Engineering, LLC, dated April 11, 2024.

9. Copy of Architectural plans entitled, "60 Bay Ave Highland LLC, Multi-family Residence, 60 Bay Avenue, Highlands, New Jersey, prepared by Salvatore La Ferlita, R.A. issued April 5, 2024." The set consists of 5 sheets.

10. Copy of a plan entitled, "Boundary & Topographic Survey of Block 42, Lot 1, 60 Bay Avenue, Borough of Highlands, Monmouth County, New Jersey, prepared by InSite Surveying, LLC., last revised December 20, 2023."

11. Copy of the Borough of Highlands, NJ Central Business District Redevelopment Plan, prepared by Phillips Preiss Grygiel Leheny Hughes LLC, Planning and Real Estate Consultants, adopted May 18, 2022.

12. Copy of an Architectural plan entitled, "Ground Floor Preliminary Space Analysis, prepared by Salvatore La Ferlita, R.A., dated June 12, 2024".

We offer the following comments and recommendations for the Planning Board's consideration:

I. ZONING

1. This property is located in the CBD Redevelopment Overlay 2 Zone (C-RO-2) Gateway Parcels.

2. The proposed multi-family residential building is a permitted use.

3. The Applicant requires zero (0) bulk variances. The following bulk requirement summary is provided for the Board's reference.

Schedule I – Bulk and Area Requirements				
CBD Redevelopment Overlay 2 Zone (C-RO-2) Gateway Parcels				
	Required	Existing	Proposed	Variance
Min. Lot Area (sf)	-	6,425	6,425	No
Lot Frontage/Width (ft)	-	213.67	213.67	No
Principal Building				
Min. Front Yard Setback (ft)				
Bay Avenue	2	13.9	5.00	No
South Street	2	13.3	8.30	No
Shrewsbury Avenue	2	8.3	8.05	No
Min. Rear Yard Setback (ft)	12	_	N/A	
Min. Side Yard Setback (ft)	5	11.4	7.93	No
Max. Building Height (ft)	40	11.6	29.33	No
Max. Lot Coverage (%)	80	37.0	62.0	No
Max Building Coverage (%)	80	31.9	54.5	No
Max. Floor Area Ratio	N/A	N/A	N/A	N/A
Minimum Outdoor Living Space	100 sf/Unit Plus 50 sf/BR	N/A	1,981	No
Accessory Building				
Max. Gound Floor Area (%)	30	5.0	N/A	-
Max. Coverage Rear Yard (%)	40	N/A	N/A	-
Min. Yard Setback (ft)	3	3.6	N/A	-
On-Site Parking (spaces)		0	0	-

II. APPLICATION FEES (PART 6 FEE SCHEDULE ARTICLE XXIII, ORD. 21-107)

1. Site Plans

Major		
Preliminary approval	$1,000 plus $50 per acre or part thereof, and $20 per 1,000 Square foot of building floor area or part thereof or $20 per dwelling unit.	$ 1,103.80
Final approval	50% preliminary fee.	$ 551.90
Total		$ 1,655.70

III. CHECKLIST ITEMS

1. Date, name, location of site, name of owner, scale, and reference meridian. **Provided.**

2. Area of the lot and all lot line dimensions and bearings. **Provided.**

3. The location of all existing watercourses, wooded areas, easements, rights-of-way, streets, roads, highways, rivers, buildings, structures, and any other feature on the property and within seventy-five (75) feet of the property line. **Provided.**

4. Location, use, and ground floor area of all existing and proposed buildings, building setback, sideline, and rear yard distance. **Provided.**

5. Elevations at the corners of all proposed buildings and paved areas and at property corners if new buildings or paved areas are proposed. **Provided.**

6. The location and widths of existing and proposed streets servicing the site plan. **Provided.**

7. Specifications for and location of proposed surface paving and curbing. **Provided.**

8. Location of all structures within seventy-five (75) feet of the property. **Provided.**

9. Location of off-street parking areas, with dimensions, showing proposed parking and loading spaces, with dimensions, width of proposed access drives and aisles and traffic circulation. **Provided.**

10. Stormwater management and sanitary sewer reports, including proposed storm drainage and sanitary disposal facilities; specifically, the location, type and size of all existing and proposed catch basins, storm drainage facilities, utilities, plus all required design data supporting the adequacy of the existing or proposed facilities to handle future storm flows. **Provided.**

11. Existing and proposed contours of the property and for seventy-five (75) feet outside the property at one (1) foot intervals when new buildings or parking areas are proposed. Spot elevations for any development in a flood hazard area. **Provided.**

12. The location and treatment of proposed entrances and exits to public rights-of-way, including the possible utilization of traffic signals, channelization, acceleration and deceleration lanes, additional widths, and any other devices necessary to traffic safety and/or convenience. **Provided.**

13. The location and identification of proposed open space, parks, or other recreation areas. **Not applicable.**

14. The location and design of landscaping, buffer areas and screening areas showing size, species and spacing of trees and plants and treatment of unpaved areas. **Provided.**

15. The location of sidewalks, walkways, traffic islands and all other areas proposed to be devoted to pedestrian use. **Provided.**

16. The nature and location of public and private utilities, including maintenance and solid waste disposal, recycling and/or storage facilities. **Provided.**

17. Specific location and design of traffic control devices, signs, and lighting fixtures. The Board may require of the applicant expert testimony concerning the adequacy of proposed traffic control devices, signs, and lighting fixtures. **Not applicable.**

18. Preliminary architectural plans for the proposed buildings or structures, indicating typical floor plans, elevations, heights and general design or architectural styling. **Provided.**

19. The present and past status and use and contemplated use of the property and all existing buildings on the property. A cleanup plan where such is necessary because of the past or present use of the site. **Not applicable.**

20. A soil erosion and sediment control plan are required. Said plan shall be submitted to the Soil Conservation District and approval of the application shall be conditioned upon certification of the soil erosion and sediment control plan by the District. **Provided.**

21. Soil borings, when required by the Board Engineer. **Not provided.**

    May be required for footings for construction. The applicant has agreed to provide soil borings if and when required.

22. Certification statement for the required municipal signatures, stating:

    Application No._____ approved/disapproved by the Borough of Highlands Land Use Board as a Major Site Plan on (date). **Provided.**

    _____
    Chairman

    _____
    Secretary

23. Certification statement for the County Planning Board approval/disapproval, if required. **Not provided. Condition of approval.**

    Bay Avenue is County Route 8; therefore, County Planning Board approval will be required. The applicant has agreed to provide a certification statement if and when required.

24. The Board may require any additional information which is reasonably necessary to ascertain compliance with the provisions of this chapter. **Open.**

II. DESIGN WAIVERS

1. Relief is requested from Ordinance Subsection 21-65.5(C)(1) Maximum Driveway Width at Curb. Eighteen (18) feet is permitted, and 19.09 feet is proposed for the site.

2. Relief is requested from Ordinance Subsection 21-65(11)(E) Minimum Lighting Level. 0.3 fc is required, and 0.1 fc is proposed for the site.

3. Relief is requested from Ordinance Subsection 21-65(11)(F) Maximum Lighting Level at property line. 0.3 fc is permitted, and 1.7 fc is proposed for the site.

IV. COMPLETENNESS

The application may be deemed complete with waivers requested.

V. GENERAL COMMENTS

1. Please confirm that the existing dwelling will be enlarged and extended closer to Bay Avenue. The Applicant to provide testimony on how the building has been expanded.

   The Land Use Board Application, Rider, cover letter and reports do not indicate that the existing structure is to be located closer the Bay Avenue.

   However, the Denial of Zoning Permit notes "Lift house up to flood requirements. Move forward toward Bay Ave…." The Boundary and Topographic Survey, Existing Conditions Plan, Site Plan and architectural plans were compared, and the common existing and proposed walls appear to be closer to Bay Avenue.

2. The site was issued a Denial of Zoning Permit on February 14, 2024, and April 23, 2024, by Courtney Lopez, Zoning Officer for the Borough of Highlands. The site was denied for proposed building coverage of 52.4% where 35% is permitted, 7 parking spaces where 10.1 spaces are required, and 19.09 feet of driveway width at the curb where only 18 feet is permitted.

3. The proposed site is located in the CBD Redevelopment Overlay 2 Zone (C-RO-2) Gateway Parcels which allows for a maximum building coverage of 80%. The Applicant is proposing 62%.

4. Eleven spaces (10.1 spaces per RSIS Midrise Apartments) per C-RO-2 are required for the proposed site. Per §VIIA Vehicular Parking, residential uses are permitted to first count any available on-street parking spaces before determining the number of parking spaces that must be provided off-street. The Applicant notes that there are more than 3.1 existing on street parking spaces within the immediate vicinity and therefore the project complies. The applicant is to provide testimony.

5. The Applicant is requesting a design waiver for the proposed a 19.01 ft width driveway with apron and sidewalk accessing Shrewsbury Avenue.

   The applicant states a larger driveway entrance is proposed to accommodate two complete parking spaces fully within the driveway and on the property. However, these two parking spaces block access to and from the rear two-car garage, and we do not find these spaces practical and usable. The applicant is to provide testimony on how these two spaces as well as the garage parking will operate.

6. Applicant proposes downspouts to collect stormwater from the proposed building and proposes grading to direct stormwater away from the building and adjacent properties and towards the roadways.

7. There is existing 4 ft and 6 ft high fencing along Lot 15, as shown on the Boundary and Topographic Survey and the Existing Conditions Plan.

   Applicant to provide testimony regarding ownership of the existing fences.

8. Plantings are shown on the northeast portion of the proposed dwelling beneath the decking and upper floors. The applicant states the area will receive ample morning sun exposure and add the potential for more exposure in the summer and fall months when the sun angle is lower, and therefore the plantings are appropriate.

9. The applicant proposes stone under the new decking.

10. "Proposed pavement and sidewalk repair (typ.)" note on sheet C400 is to include curb replacement/repair.

11. A Sanitary Sewer Connection fee will be required for the site.

    As per N.J.S.A. 40A:26a-11.1, "A municipal sewerage facility may charge an additional connection fee for an addition, alteration, or change in use that materially increases the level of use (15% or more) and imposes a greater demand on the sewerage system but does not involve a new physical connection of the property to the sewerage system."

    The proposed apartment units will increase the sanitary sewer flow by approximately 45%. Therefore, the applicant is subject to a sanitary sewer connection fee.

12. The applicant has stated the existing gas service was identified as to be abandoned and the proposed service has been identified on the plan as underground.

13. The Applicant is requesting relief from 2 Lighting Ordinances:

    a. Subsection 21-65(11)(E) Minimum Lighting Level. 0.3 fc is required, and 0.1 fc is proposed for the site.

    b. Subsection 21-65(11)(F) Maximum Lighting Level at property line. 0.3 fc is permitted, and 1.7 fc is proposed for the site.

    We recommend the applicant provide the minimum lighting level required, and a decrease in lighting levels at the property line, along with testimony of why such highlighting levels are being requested.

14. Recycling and garbage areas have been included on the Site Plans.

15. As a condition of approval, it is recommended that the Applicant provide a plot plan for review and approval at the time of obtaining the building permit. The applicant shall provide a plot plan for review and approval by the Borough Engineer.

16. The property is located in the AE flood zone with a Base Flood Elevation of 11 feet and the proposed finished floor elevation is 14.00. In addition, enclosed garages are no longer permitted per FEMA/NJDEP regulations.

    We defer further review to the Flood Plain Administrator and Construction Official for applicable building requirements.

17. According to XI.E General Administrative Requirements Affordable Housing Provisions, the mandatory set-aside requirements in Section 26-2 of the Borough of Highlands Affordable Housing Ordinance apply to any multifamily residential development of five (5) dwelling units or more, including the residential portion of a mixed-use project.

    The applicant is to address this and provide testimony related to the same.

V. APPROVALS

Approval of this application will be conditioned upon the Applicant obtaining or providing approved documents for the following:

1. Monmouth County Planning Board
2. Freehold Soil Conservation Service
3. Coastal Area Facilities Review Act (CAFRA) Zone

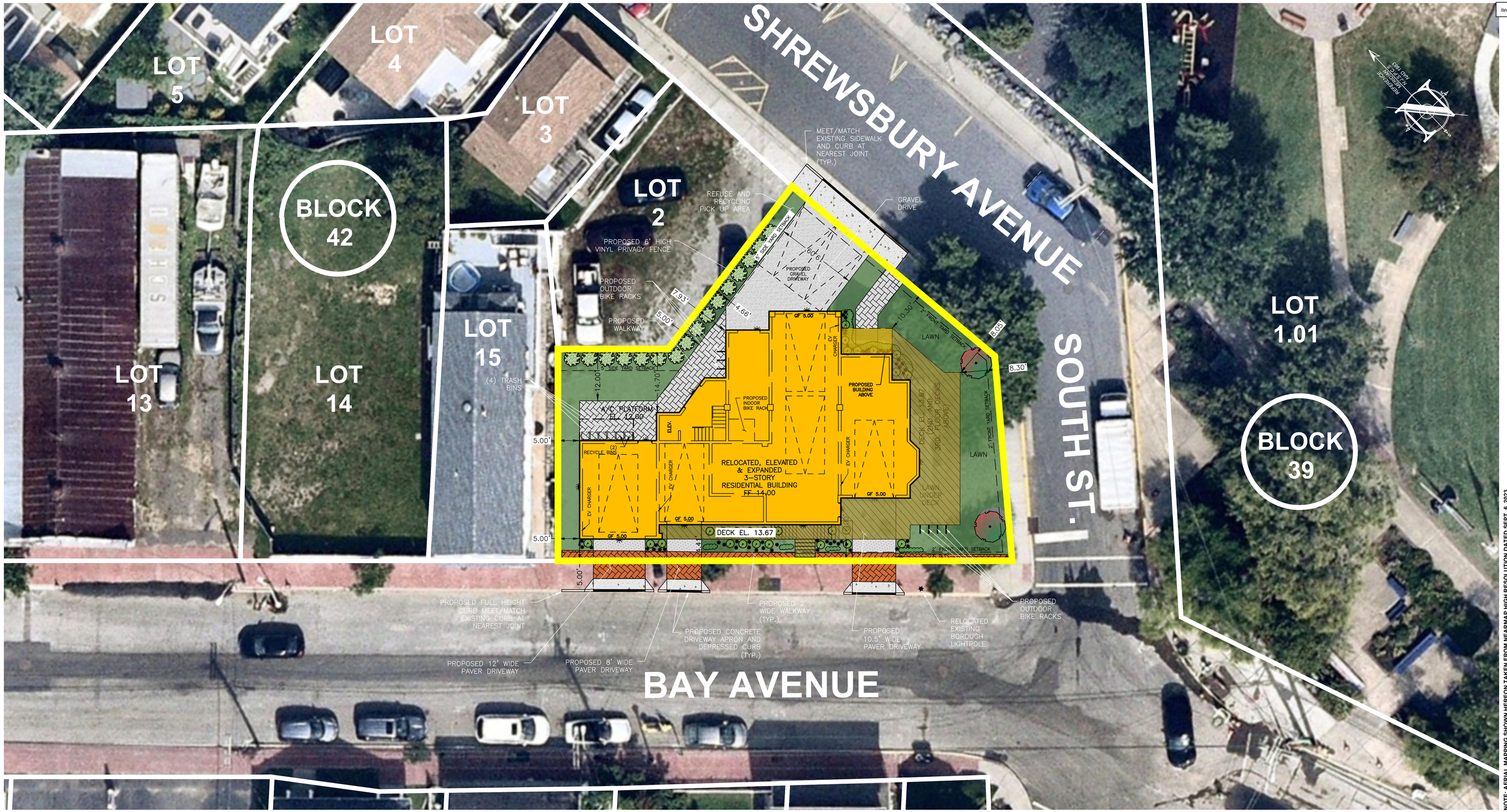
Should you have any questions, please do not hesitate to contact me.

Very truly yours,



Carmela Roberts, PE, CME, CPWM
Land Use Board Engineer

cc: Michael Muscillo, Borough Administrator, (mmuscillo@highlandsborough.org)
P. Austin Mueller, Assoc., Land Use Board Attorney (amueller@weiner.law)
Courtney Lopez, Zoning Officer (clopez@highlandsborough.org)
Donna M. Jennings, Esq., Applicant's Attorney (djennings@wilentz.com)
Douglas D. Clelland, P.E., Applicant's Engineer (doug@insiteeng.net)
Salvatore LaFerlita, R.A., A.I.A. Applicant's Architect (sallaferlita@aol.com)
Cameron Corini, P.E., C.M.E., C.P.W.M., Roberts Engineering Group, LLC
GS Bachman, E.I.T., Roberts Engineering Group, LLC
Kelly Pham, E.I.T., Roberts Engineering Group, LLC



NOTE: AERIAL MAPPING SHOWN HEREON TAKEN FROM NEARMAP HIGH RESOLUTION DATED SEPT. 6, 2023. MUNICIPAL ZONE BOUNDARIES SHOWN HEREON TAKEN FROM MONMOUTH COUNTY GIS. BLOCK AND LOT LINES SHOWN HEREON TAKEN FROM HIHGLANDS BOROUGH TAX MAPS

PLAN
10 0 10 20
Scale: 1"=10'

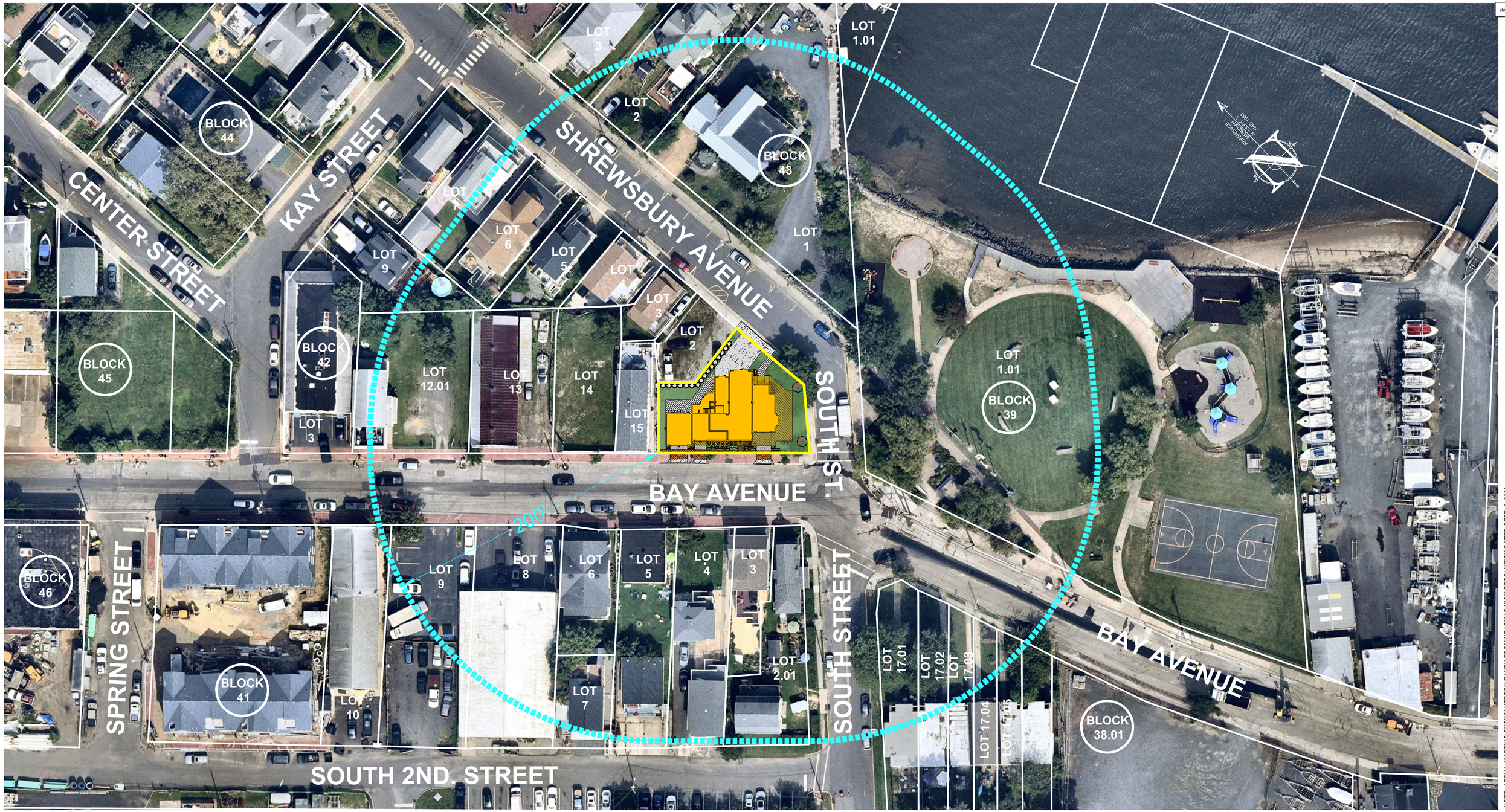
PROPOSED MULTI-FAMILY RESIDENCE

Site Layout Exhibit

Borough of Highlands, Monmouth County, New Jersey

INSITE
Engineering • Surveying • Planning

DATE
7/26/2024



NOTE: AERIAL MAPPING SHOWN HEREON TAKEN FROM NEARMAP HIGH RESOLUTION DATED SEPT. 6, 2023. MUNICIPAL ZONE BOUNDARIES SHOWN HEREON TAKEN FROM MONMOUTH COUNTY GIS. BLOCK AND LOT LINES SHOWN HEREON TAKEN FROM HIHGLANDS BOROUGH TAX MAPS 2023.

PLAN
30 0 30 60
Scale: 1"=30'

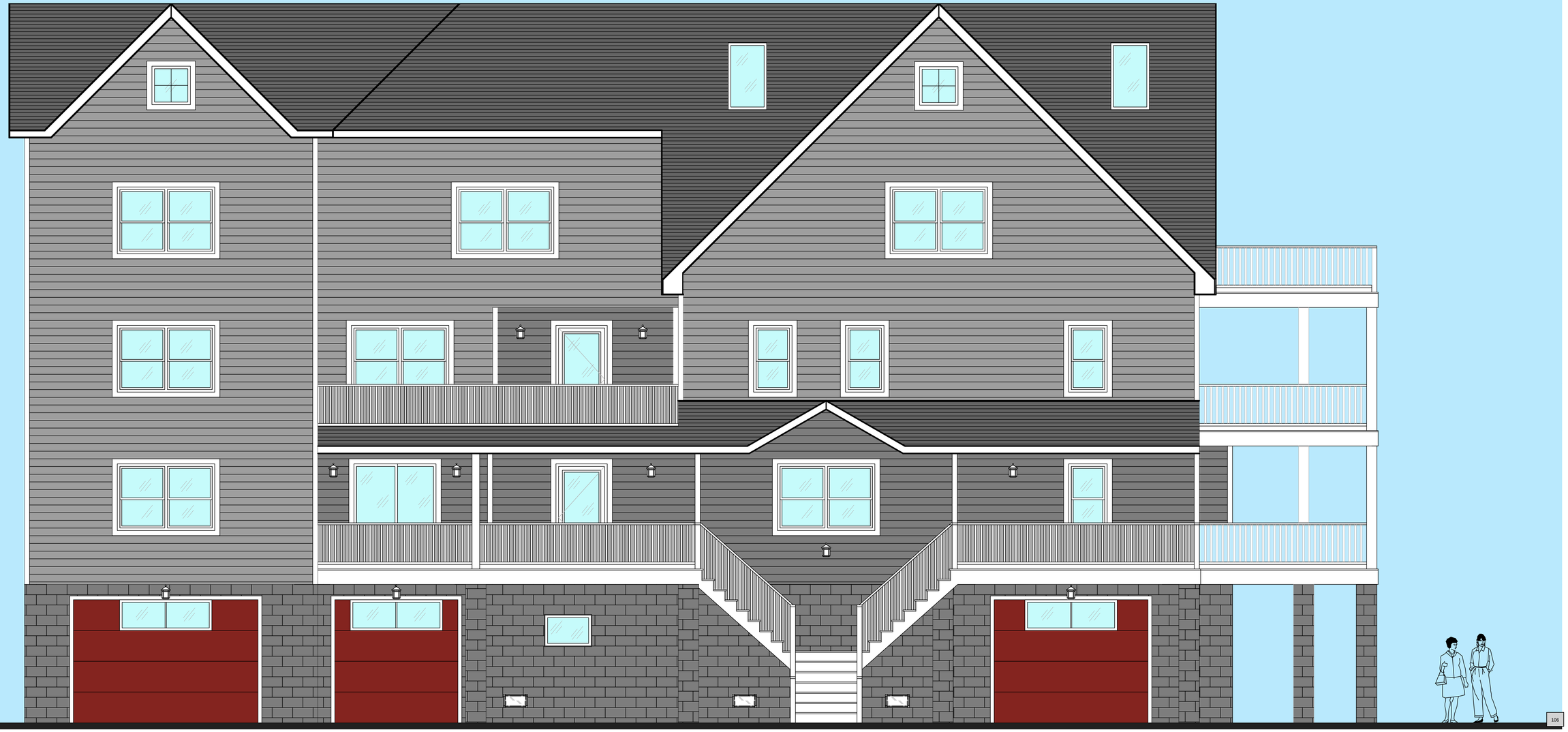
PROPOSED MULTI-FAMILY RESIDENCE

Neighborhood Aerial Exhibit

Borough of Highlands, Monmouth County, New Jersey

INSITE
Engineering • Surveying • Planning

DATE
7/26/2024



Borough of Highlands
151 Navesink Ave.
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

LAND USE BOARD APPLICATION

FOR OFFICIAL USE ck#235 ck# 236

Date Rec'd: 5/30/2024 Application #: LUB24-04 Fee: $150.00 Escrow: $750.00

1. APPLICANT

Name: John and Shari Nastasi
Address: 19 Gravelly Point Road
City: Highlands State: NJ Zip: 07732
Phone: (516) 885-4104
Email: beachrx18@yahoo.com
Relation to property: Owner

2. OWNER

Name: John and Shari Nastasi
Address: 19 Gravelly Point Road
City: Highlands State: NJ Zip: 07732
Phone: (516) 885-4104
Email: beachrx18@yahoo.com

3. TYPE OF APPLICATION (Check all that apply)

- ☐ Minor Subdivision
- ☐ Major Subdivision – Preliminary
- ☐ Major Subdivision – Final
- ☐ Minor Site Plan
- ☐ Major Site Plan – Preliminary
- ☐ Major Site Plan – Final
- ☒ Variance
- ☐ Use Variance
- ☐ Appeal – Zoning Denial date _____
- ☐ Appeal – Land Use Decision date _____
- ☐ Informal Concept Plan Review
- ☐ Extension of Approval
- ☐ Revision/Resubmission of Prior Application
- ☐ Other _____

4. PROPERTY INFORMATION

Block 100 Lot(s) 26.19 Address: 19 Gravelly Point Road
Lot size 0.057 # of Existing Lots 1 # of Proposed Lots 1
Zone R203 Are there existing Deed Restrictions or Easements? ☑ No ☐ Yes – Please attach copies
Has the property been subdivided? ☑ No ☐ Yes If yes, when? _____
Attach copies of approved map or approved resolution
Property taxes paid through current Sewer paid through current

5. ATTORNEY (A corporation, LLC, Limited Partnership, or S-Corp **must** be represented by a NJ attorney)

Name: Edward J. McKenna, Jr., Esq.
Address: 229 Broad Street, Red Bank, NJ 07701
Phone: (732) 741-6681 Email: mckenna@redbanklaw.com

Borough of Highlands
151 Navesink Ave.
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

6. APPLICANT'S OTHER PROFESSIONAL(S) – Engineer, Planner, Architect, etc.

Name: Catherine Franco, AIA
Address: 148 Parkview Terrace
Lincroft, NJ 07738
Phone: (732) 291-5942
Email: cfarchitects@hotmail.com

Name:
Address:
Phone:
Email:

7. LAND USE

A. PROPERTY HISTORY –Describe in detail, nature of prior use(s) on the site, start date of such use, any prior Land Use Board applications for this site (attach copy of resolution, if applicable), history of current ownership, etc.

The current owners purchased the property on May 4, 2022.

B. PROPOSED PLAN –Describe in detail, proposed use for property, including, but not limited to: 1) portion to be subdivided; 2) sell lot only; 3) construct house(s) for sale; 4) how trash will be disposed; 5) landscaping; 6) hours of operation; 7) type of goods/services; 8) fire lane. Attach additional sheets if necessary.

Utilities will be moved to attic to get them off the ground level, which is a significant benefit in that area. The residence is presently two stories with a building height of 20 feet and applicant is proposing three stories with a building height of 29.1 feet. Elevations show a much better appearance for the structure.

Pitched roof architecturally allows for more window space and more light to come into the home. Ceiling heights are adequate in the living space. Applicant proposes 3 on-site parking spaces. Difficult to find parking on the street.

C. ADDITIONAL INFORMATION:		**Existing**	**Proposed**
Residential:	How many dwelling units?	1	1
	How many bedrooms in each unit?	2	3
	How many on-site parking spaces?	3	3
Commercial:	How many commercial uses on site?	N/A	N/A
	How many on-site parking spaces?	N/A	N/A

Borough of Highlands
151 Navesink Ave.
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

8. VARIANCE REQUESTS Complete section(s) related to the relief being requested.

	Req'd	Exist.	Prop'd
Minimum Lot Requirements			
Lot Area			
Frontage			
Lot Depth			
Minimum Yard Requirements			
Front Yard Setback			
2nd Front Yard Setback			
Rear Yard Setback			
Side Yard Setback, right			
Side Yard Setback, left			
Building Height	20'	16'	29.1'

	Req'd	Exist.	Prop'd
Accessory Structures			
Fence/Wall Height			
Garage/Shed Height			
Garage/Shed Area			
Pool Setback			
Parking Requirements			
On-site Parking Spaces			
Other (please add)			

9. OTHER RELIEF REQUESTED Please specify relief(s) and explain below.

A D(6) height variance is required along with variance relief for the nonconforming detached accessory structure. Detached accessory structures are prohibited in the minimum required yard area.

Borough of Highlands
151 Navesink Ave.
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

10. NOTARIZED SIGNATURE OF APPLICANT

I certify that the foregoing statements and the materials submitted are true. I further certify that I am the individual Applicant, or that I am an Officer of the Applicant authorized to sign the application for the business organization. Additionally, I certify that the survey or plans submitted with this application shows and discloses the premises in its entirety, and I further certify that no buildings, fences, or other facilities have been constructed, installed, or otherwise located on the premises after the date of the survey with the exception of the structures shown.

SWORN & SUBSCRIBED to before me this
30 day of May 20 24 (year)
Lisa Natale (notary)
(Seal)

Signature — may 30, 2024 Date

Shari Nastas
Print Full Name

LISA B NATALE
Notary Public, State of New Jersey
Comm. # 50219223
My Commission Expires 3/1/2029

11. NOTARIZED CONSENT OF OWNER

I certify that I am the Owner of the property which is the subject of this application, hereby consent to the making of this application and approval of the plans submitted herewith. I further consent to the inspection of this property in connection with this application as deemed necessary by the municipal agency (if owned by a corporation, a resolution must be attached authorizing the application and officer signature).

SWORN & SUBSCRIBED to before me this
30 day of May 20 24 (year)
Lisa Natale (notary)
(Seal)

Signature — may 30 2024 Date

Shari Nastas
Print Full Name

LISA B NATALE
Notary Public, State of New Jersey
Comm. # 50219223
My Commission Expires 3/1/2029

12A. DISCLOSURE STATEMENT Circle all that apply.

Pursuant to N.J.S.A. 40:55D-48.1 & 48.2, please answer the following questions:

Is this application to subdivide a parcel of land into six (6) or more lots?	Yes	(No)
Is this application to construct a multiple dwelling of 25 or more units?	Yes	(No)
Is this an application for approval of a site(s) for non-residential purposes?	Yes	(No)
Is this Applicant a corporation?	Yes	(No)
Is the Applicant a limited liability corporation?	Yes	(No)
Is the Applicant a partnership?	Yes	(No)

If you circled **YES** to any of the above, please complete the following Ownership Discloser Statement (use additional sheets if necessary).

Borough of H
42 Shore Drive
Highlands, NJ 07732
(732) 872-1224
www.highlandsborough.org

12B. BUSINESS ORGANIZATION OWNERSHIP DISCLOSURE STATEMENT

Name of Corporation, Partnership, LLC, LLP, S-Corp: N/A

Listed below are the names and addresses of all owners of 10% or more of the stock/interest* in the above referenced business organization:

NAME	ADDRESS

*If a corporation or a partnership owns 10% or more of the stock of a corporation, or 10% or great interest in a partnership, that corporation or partnership shall list the names and address of its stockholders holding 10% or more of its stock or 10% or greater interest in the partnership, and this requirement shall be followed until the names and addresses of the non-corporate stockholders and individual partners, exceeding the 10% owner ship criterion established have been listed.

SWORN & SUBSCRIBED to before me this

_____ day of _____ 20_____ (year)

_____(notary)

(Seal)

_____
Signature (Officer/Partner) Date

_____
Print Full Name Title

U.S. DEPARTMENT OF HOMELAND SECURITY
Federal Emergency Management Agency
National Flood Insurance Program

2911516393 0900
E.L. Hipp.

OMB No. 1660-0008
Expiration Date: November 30, 2018

ELEVATION CERTIFICATE

Important: Follow the instructions on pages 1–9.

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

SECTION A – PROPERTY INFORMATION

	FOR INSURANCE COMPANY USE
A1. Building Owner's Name ESTATE OF CAMILLE CEFALO	Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. # 19 GRAVELLY POINT ROAD	Company NAIC Number:

City	State	ZIP Code
HIGHLANDS	New Jersey	07732

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
LOT 26.19 BLOCK 100

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) SF RESIDENTIAL

A5. Latitude/Longitude: Lat. N.40-24-23.4 Long. W.73-59-46.7 Horizontal Datum: ☐ NAD 1927 ☒ NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number 7

A8. For a building with a crawlspace or enclosure(s):

a) Square footage of crawlspace or enclosure(s) 1,127 sq ft

b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 6

c) Total net area of flood openings in A8.b 1,230 sq in

d) Engineered flood openings? ☒ Yes ☐ No

A9. For a building with an attached garage:

a) Square footage of attached garage _____ sq ft

b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade _____

c) Total net area of flood openings in A9.b _____ sq in

d) Engineered flood openings? ☐ Yes ☐ No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number	B2. County Name	B3. State
HIGHLANDS BOROUGH & 345297	MONMOUTH	New Jersey

B4. Map/Panel Number	B5. Suffix	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date	B8. Flood Zone(s)	B9. Base Flood Elevation(s) (Zone AO, use Base Flood Depth)
34025C0086	F	09/25/2009	01/31/2014*	AE	11-Ft

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9:
☐ FIS Profile ☒ FIRM ☐ Community Determined ☐ Other/Source: _____

B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source: _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? ☐ Yes ☒ No
Designation Date: _____ ☐ CBRS ☐ OPA

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. # 19 GRAVELLY POINT ROAD			Policy Number:
City HIGHLANDS	State New Jersey	ZIP Code 07732	Company NAIC Number

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☐ Construction Drawings* ☐ Building Under Construction* ☒ Finished Construction

*A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations – Zones A1–A30, AE, AH, A (with BFE), VE, V1–V30, V (with BFE), AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO. Complete Items C2.a–h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: Local tied to NGS Vertical Datum: NAVD 88

Indicate elevation datum used for the elevations in items a) through h) below.

☐ NGVD 1929 ☒ NAVD 1988 ☐ Other/Source:

Datum used for building elevations must be the same as that used for the BFE.

		Check the measurement used.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor)	6.4	☒ feet	☐ meters
b) Top of the next higher floor	16.2	☒ feet	☐ meters
c) Bottom of the lowest horizontal structural member (V Zones only)	N/A	☒ feet	☐ meters
d) Attached garage (top of slab)	N/A	☒ feet	☐ meters
e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments)	12.5	☒ feet	☐ meters
f) Lowest adjacent (finished) grade next to building (LAG)	5.6	☒ feet	☐ meters
g) Highest adjacent (finished) grade next to building (HAG)	6.3	☒ feet	☐ meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support	6.3	☒ feet	☐ meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. *I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.*

Were latitude and longitude in Section A provided by a licensed land surveyor? ☒ Yes ☐ No ☐ Check here if attachments.

Certifier's Name ANDREW R. STOCKTON	License Number NJ Lic. No. 35405	
Title PROFESSIONAL ENGINEER & LAND SURVEYOR		
Company Name EASTERN CIVIL ENGINEERING, LLC		
Address 31 GRAND TOUR		
City HIGHLANDS	State New Jersey	ZIP Code 07732
Signature	Date 09/10/2016	Telephone (732) 872-7736

Place Seal Here

Copy all pages of this Elevation Certificate and all attachments for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments (including type of equipment and location, per C2(e), if applicable)

Subject property is situated in FEMA Flood Zone AE (BFE 11 Ft) as shown on current FIRM. Site is also situated in FEMA Future Flood Zone AE (BFE 11 Ft) as shown on FEMA Preliminary Maps dated 1-31-14. There are 6 flood vents around perimeter of foundation walls, Crawlspace Doors Model No. 816CS, which the manufacturer represents that one vent has 105 sq-in. net open area and provides hydrostatic equalization of flood waters for 205 square feet of enclosed area (see attached). Lowest elevation of equipment is for air conditioning condenser on utility pedestal at left-rear corner of building.

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. # 19 GRAVELLY POINT ROAD			Policy Number:
City HIGHLANDS	State New Jersey	ZIP Code 07732	Company NAIC Number

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B,and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).

a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ ☐ feet ☐ meters ☐ above or ☐ below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 1–2 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ . _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E3. Attached garage (top of slab) is _____ . _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____ . _____ ☐ feet ☐ meters ☐ above or ☐ below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? ☐ Yes ☐ No ☐ Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner or Owner's Authorized Representative's Name			
Address	City	State	ZIP Code
Signature	Date	Telephone	

Comments

☐ Check here if attachments.

ELEVATION CERTIFICATE

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. # 19 GRAVELLY POINT ROAD			Policy Number:
City HIGHLANDS	State New Jersey	ZIP Code 07732	Company NAIC Number

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate of Compliance/Occupancy Issued

G7. This permit has been issued for: ☐ New Construction ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _____ . _____ ☐ feet ☐ meters Datum _____

G9. BFE or (in Zone AO) depth of flooding at the building site: _____ . _____ ☐ feet ☐ meters Datum _____

G10. Community's design flood elevation: _____ . _____ ☐ feet ☐ meters Datum _____

Local Official's Name	Title
Community Name	Telephone
Signature	*Date*

Comments (including type of equipment and location, per C2(e), if applicable)

☐ Check here if attachments.

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. # 19 GRAVELLY POINT ROAD			Policy Number:
City HIGHLANDS	State New Jersey	ZIP Code 07732	Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

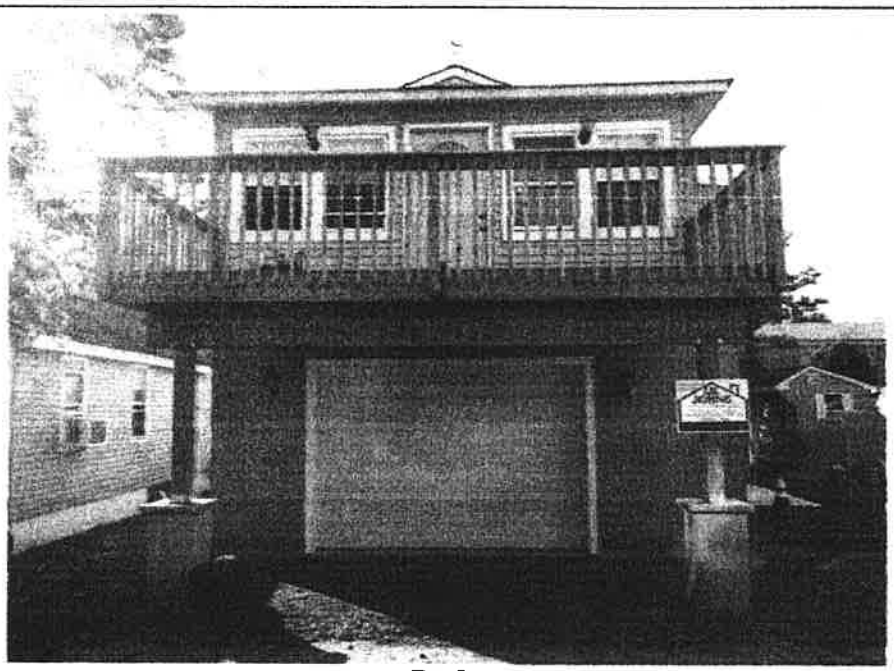


Photo One

Photo One Caption

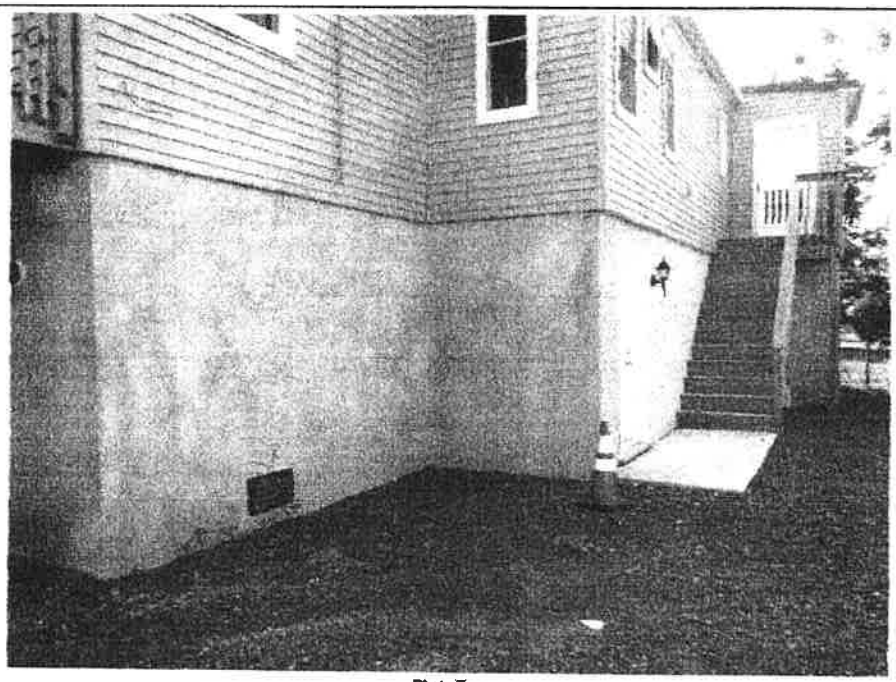


Photo Two

Photo Two Caption

ELEVATION CERTIFICATE

BUILDING PHOTOGRAPHS

Continuation Page

OMB No. 1660-0008
Expiration Date: November 30, 2018

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. # 19 GRAVELLY POINT ROAD			Policy Number:
City HIGHLANDS	State New Jersey	ZIP Code 07732	Company NAIC Number

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.

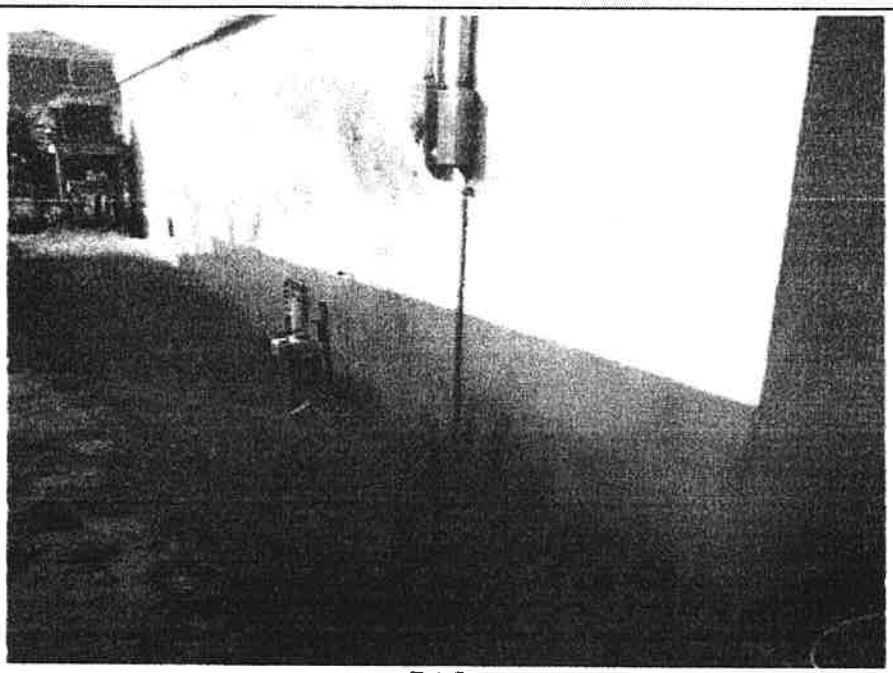


Photo One

Photo One Caption LEFT-SIDE VIEW NOTE UTILITY PEDESTAL AT BACK CORNER

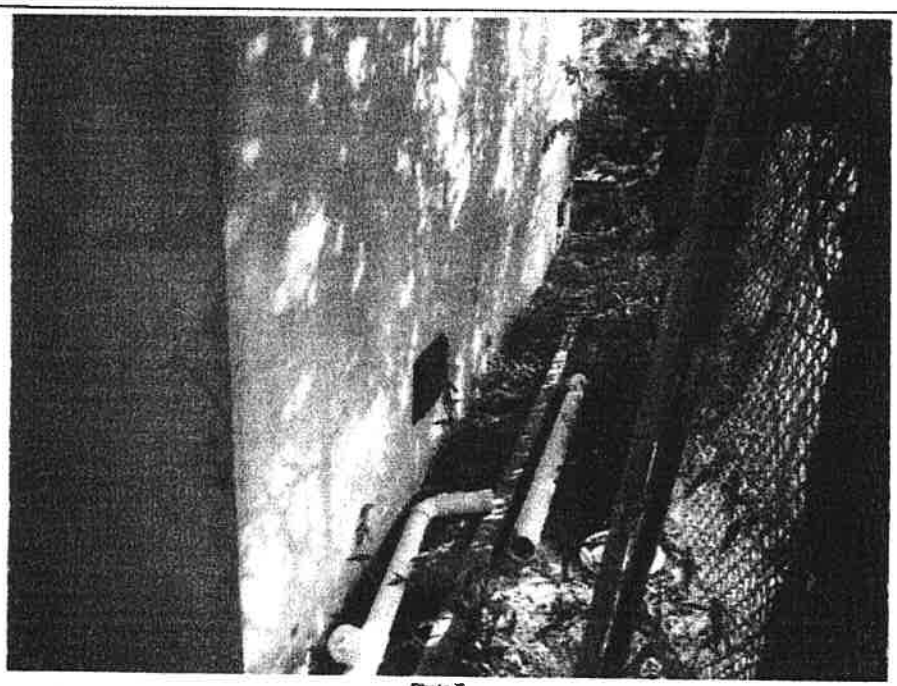
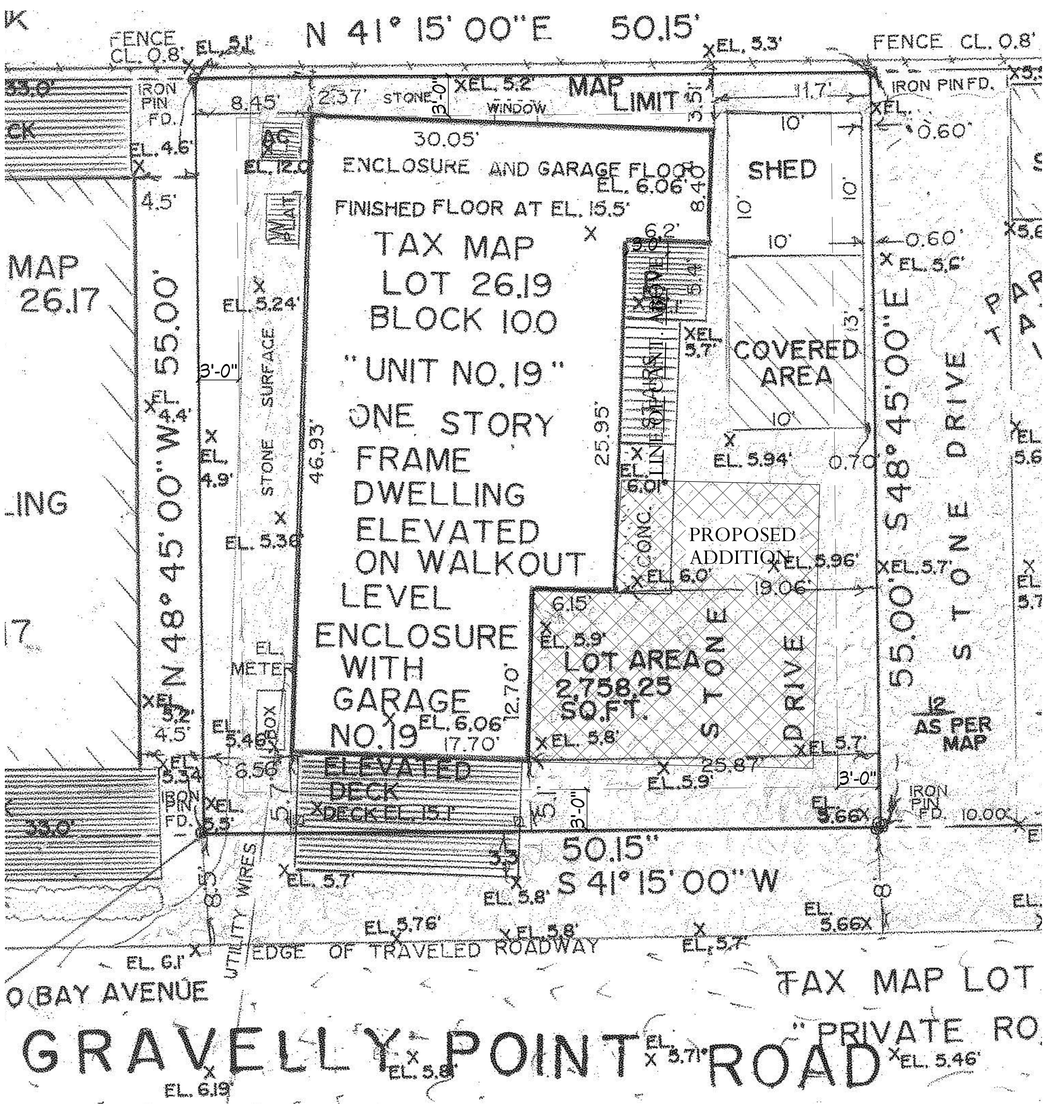


Photo Two

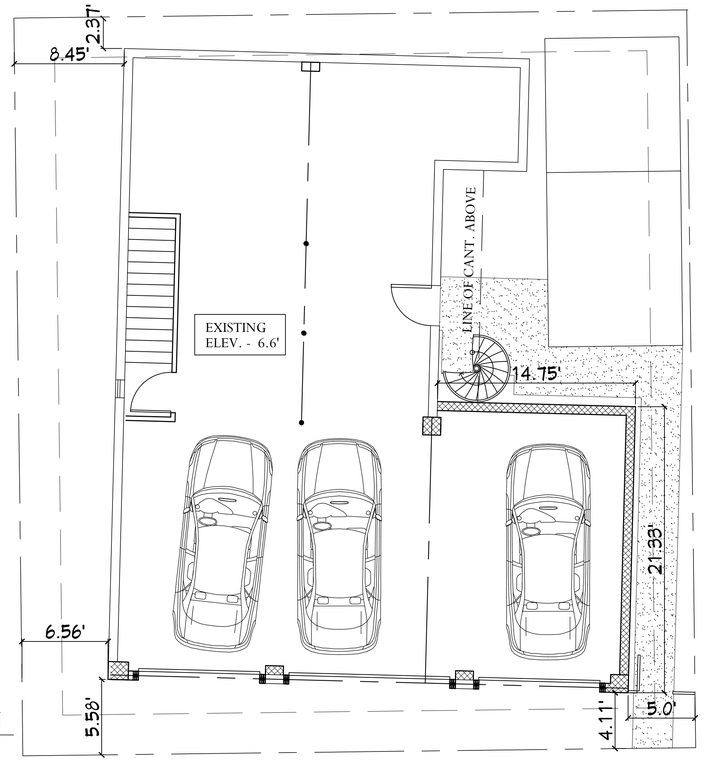
Photo Two Caption REAR VIEW



SURVEY
SCALE: 3/16" = 1'-0"

NO. 19 GRAVELLY POINT ROAD
TOPOGRAPHIC LOCATION LAND SURVEY OF LOT 26.19 IN BLOCK 100 ON THE OFFICAL TAX MAP OF THE BOROUGH OF HIGHLANDS, MONMOUTH COUNTY, NEW JERSEY
TAX MAX PAGE 17
THOMAS CRAIG FINNEGAN LAND SURVEYING, LLC
THOMAS CRAIG FINNEGAN P.L.S. LIC. # 38601
PROFESSIONAL LAND SURVEYOR,
245 EAST END AVENUE BELFORD, NEW JERSEY 07718
Office # 732-787-0318, fax # 732-495-6217
Cell # 733-856-2821, email: thomascfinnegan@gmail.com
SCALE 1" = 10' DECEMBER 28, 2023

NOTES:
- FRONT DECK TO BE REMOVED
- SIDE STEPS TO BE REMOVED



SITE PLAN
SCALE: 3/16" = 1'-0"

ZONING INFORMATION

Existing bungalow colonies shall meet the following requirements:
(1)
Density shall not exceed the number of units existing at the time of the adoption of this ordinance, as shown on existing Borough Tax Maps and/or other tax records.
(2)
Any application for expansion of an individual dwelling unit, either vertically or horizontally, shall meet the following standards:
(a)
Every unit shall have associated with it a minimum yard requirement around the perimeter of the unit and attached accessory structures of three (3) feet, except for those decks attached to the front of the dwellings situated in Block 100, Lots 26.01-26.76 and Block 69, Lots 15.01-15.28, which may extend to locations equivalent to those which existed prior to elevation or reconstruction as determined by prior property surveys conducted by a licensed surveyor. For those properties situated in Block 100, Lots 26.01-26.76 and Block 69, Lots 15.01-15.28 that do not have prior property surveys available, any new decks attached to the front of the dwelling can extend to a location which is the equivalent of the location of the front decks located on adjacent properties situated in Block 100, Lots 26.01-26.76 and Block 69, Lots 15.01-15.28. Structures shall be located no closer together than the sum of the yard requirements, that is, six (6) feet. Detached accessory structures are prohibited in the minimum required yard area.
(b)
Each unit shall have associated with it a minimum of one (1) parking space, located on site, either adjacent to the individual unit or in a common parking area.
(c)
Total building coverage shall not exceed thirty-five (35%) percent of the total lot area and total lot coverage shall not exceed seventy-five (75%) percent except for those situated in Block 100, Lots 26.01-26.76 and Block 69, Lots 15.01-15.28.
(d)
Building height shall not exceed twenty (20) feet.
(e)
Shall require an application for a site plan for the entire property except for those situated in Block 100, Lots 26.01-26.76 and Block 69, Lots 15.0l-15.28.
(3)
Bungalow colonies shall not be subject to the provisions of Section 21-98F below.

- VARIANCE REQUESTED FOR HEIGHT WHERE 20' FROM BASE FLOOD ELEVATION IS REQUIRED AND PROPOSING 28.25'

CATHERINE FRANCO
ARCHITECT
architecturedevelopmentstrategiesplanning

148 PARKVIEW TERRACE
LINCROFT, NEW JERSEY 07738
TEL: 732.291.5942
E-MAIL: CFARCHITECTS@HOTMAIL.COM

INTELLECTUAL PROPERTY
ALL DRAWINGS AND CORRESPONDENCE HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THIS FIRM. THE UNAUTHORIZED REPRODUCTION OF ANY AND ALL WORK FOR THE PURPOSE OF COPYING OR REVISING SAID DRAWINGS SHALL BE CONSIDERED A VIOLATION OF BOTH THE PROFESSIONAL CODE OF ETHICS AND A THEFT OF COMPANY ASSETS, BOTH OF WHICH SHALL BE PROSECUTED TO THE FULLEST EXTENT OF THE STATUTES.

REVISIONS

No.	Date:	Description:
1	10.12.22	LETTER DATED 10.6.22

Project:
PROPOSED RENOVATION & ADDITION
19 GRAVELY POINT ROAD
UNIT 19
HIGHLANDS
LOT: 26.19 BLOCK: 100

Owner:
MR. JOHN NASASI
19 GRAVELY POINT ROAD
HIGHLANDS NJ

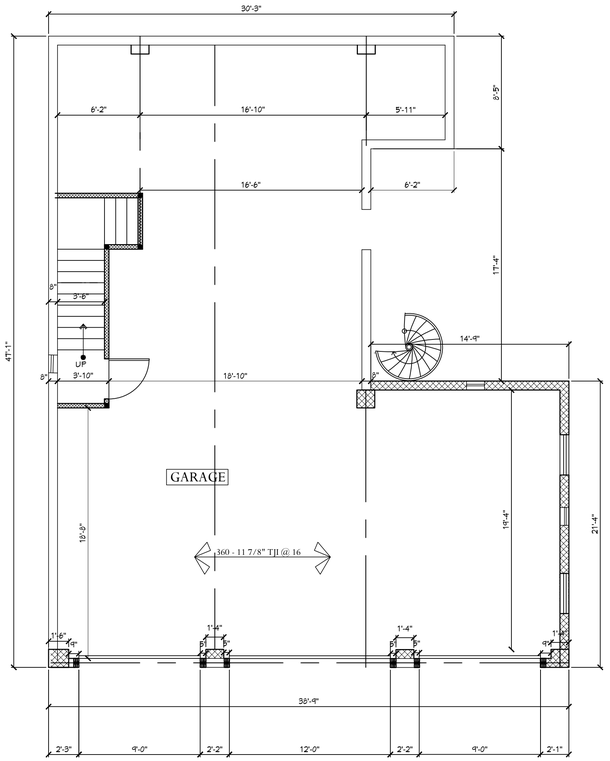
Drawing Title: LIL JOHN

Project No. 2401
Date 1.18.24

CATHERINE FRANCO, AIA
NJ RA AI11411
NJ PP 5416

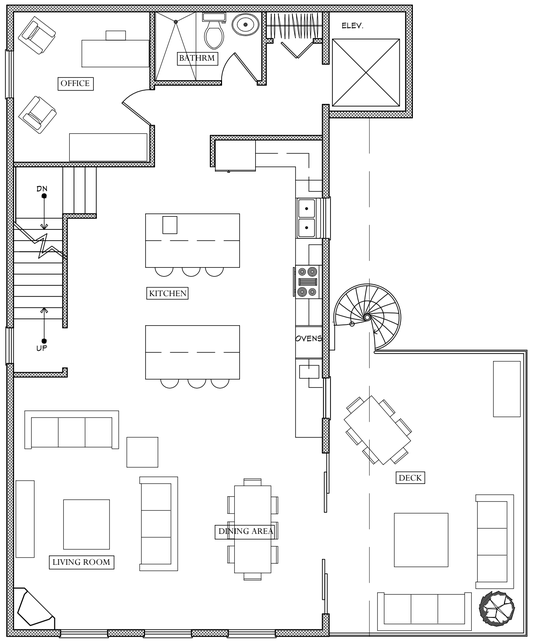
Drawn by: CF

Dwg. No. Z1
1 of 3



GARAGE PLAN

SCALE: 3/16" = 1'-0"

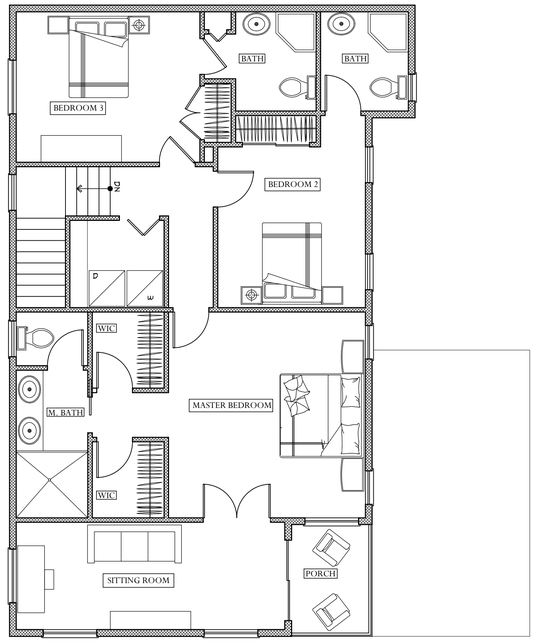


1182

TOTAL LIVING AREA = 2430

FIRST FLOOR PLAN

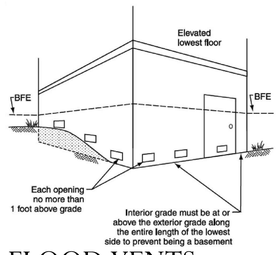
SCALE: 3/16" = 1'-0"

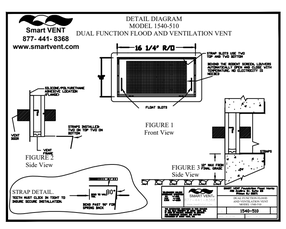


1248

SECOND FLOOR PLAN

SCALE: 3/16" = 1'-0"







FLOOD VENTS

NOTES:
NEW AREA AT GRADE 319 SF = 1.1 VENTS NEEDED

- ADDING (3) NEW FLOOD

CATHERINE FRANCO
ARCHITECT
architecturedevelopmentstrategiesplanning

148 PARKVIEW TERRACE
LINCROFT, NEW JERSEY 07738
TEL: 732.291.5942
E-MAIL: CFARCHITECTS@HOTMAIL.COM

INTELLECTUAL PROPERTY
ALL DRAWINGS AND CORRESPONDENCE HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THIS FIRM. THE UNAUTHORIZED REPRODUCTION OF ANY AND ALL WORK FOR THE PURPOSE OF COPYING OR REVISING SAID DRAWINGS SHALL BE CONSIDERED A VIOLATION OF BOTH THE PROFESSIONAL CODE OF ETHICS AND A THEFT OF COMPANY ASSETS, BOTH OF WHICH SHALL BE PROSECUTED TO THE FULLEST EXTENT OF THE STATUTES.

REVISIONS

No.	Date:	Description:
1	10.12.22	LETTER DATED 10.6.22

Project:
PROPOSED RENOVATION & ADDITION
19 GRAVELY POINT ROAD
UNIT 19
HIGHLANDS
LOT: 26.19 BLOCK: 100

Owner:
MR. JOHN NASASI
19 GRAVELY POINT ROAD
HIGHLANDS NJ

Drawing Title: LIL JOHN

Project No. 2401

Date 1.18.24

CATHERINE FRANCO, AIA
NJ RA AI11411
NJ PP 5416

Drawn by: CF

Dwg. No. Z2

2 of 3



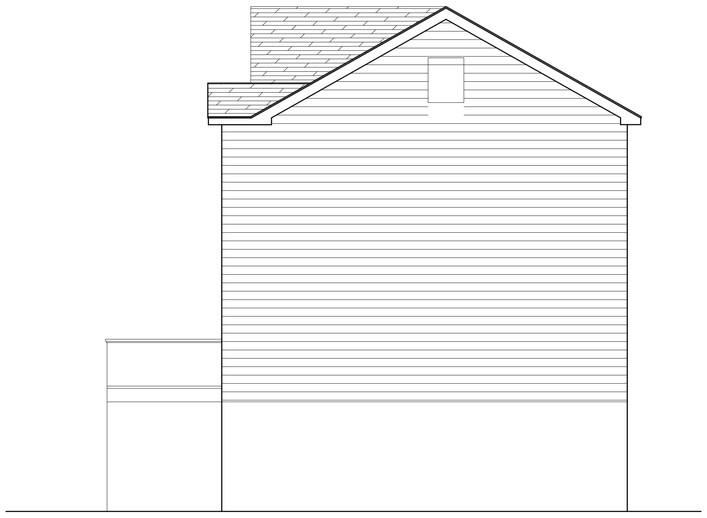
FRONT ELEVATION

SCALE: 3/16" = 1'-0"



RIGHT ELEVATION

SCALE: 3/16" = 1'-0"



REAR ELEVATION

SCALE: 3/16" = 1'-0"



LEFT ELEVATION

SCALE: 3/16" = 1'-0"

CATHERINE FRANCO
ARCHITECT
architecturedevelopmentstrategiesplanning

148 PARKVIEW TERRACE
LINCROFT, NEW JERSEY 07738
TEL: 732.291.5942
E-MAIL: CFARCHITECTS@HOTMAIL.COM

INTELLECTUAL PROPERTY
ALL DRAWINGS AND CORRESPONDENCE HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THIS FIRM. THE UNAUTHORIZED REPRODUCTION OF ANY AND ALL WORK FOR THE PURPOSE OF COPYING OR REVISING SAID DRAWINGS SHALL BE CONSIDERED A VIOLATION OF BOTH THE PROFESSIONAL CODE OF ETHICS AND A THEFT OF COMPANY ASSETS, BOTH OF WHICH SHALL BE PROSECUTED TO THE FULLEST EXTENT OF THE STATUTES.

REVISIONS

No.	Date:	Description:
1	10.12.22	LETTER DATED 10.6.22

Project:
PROPOSED RENOVATION & ADDITION
19 GRAVELY POINT ROAD
UNIT 19
HIGHLANDS
LOT: 26.19 BLOCK: 100

Owner:
MR. JOHN NASASI
19 GRAVELY POINT ROAD
HIGHLANDS NJ

Drawing Title: LIL JOHN

Project No. 2401

Date 1.18.24

CATHERINE FRANCO, AIA
NJ RA AI11411
NJ PP 5416

Drawn by: CF

Dwg. No. Z3

3 of 3

Borough of Highlands

151 Navesink Ave
Highlands, NJ 07732
Phone: (732) 872-1224

Control #: Z-0045
Date Issued: 5/1/2024

DENIAL OF ZONING PERMIT

IDENTIFICATION

Work Site Location:	19 GRAVELLY POINT ROAD	**Block:**	100	**Lot:**	26.19	**Zone:**	R203
Owner in Fee:	NASTASI, JOHN III & SHARI ROSE	**Contractor/Agent:**					
Address:	19 GRAVELLY POINT ROAD	**Address:**					
	HIGHLANDS NJ 07732						
Telephone:	201-317-2504	**Telephone:**					
		Contractor License No:					

For the project/work located at the above address, your application for a permit to:

ADDITION RENO

has been denied for noncompliance with provisions of Sections: of the Municipal Zoning Ordinance for the following reasons:

§ 21-86R-2 SINGLE-FAMILY RESIDENCE - Existing Bungalow Colonies
Applicant is proposing a building height of 29.1 feet, where 20 feet is permitted.
A D(6) height variance is required along with variance relief for the nonconforming detached accessory structure. Detached accessory structures are prohibited in the minimum required yard area.

Information on procedures for an appeal of this decision to the Land Use Board can be obtained from the Secretary of the Land Use Board. It should be noted that under State Statute, notice of appeal of this decision must be filed with this office not later than (20) days from the date of this notice. You can also file for a variance to the Land Use Board and can obtain from the Secretary of the Land Use Board the required forms.

The permit which you submitted has been placed in the inactive files in the Zoning Department. Please contact this office to reactivate the permit.

Denied by: _____

Courtney Lopez — Zoning Official

Roberts
ENGINEERING GROUP LLC
Women Business Enterprise Certified

1670 Whitehorse-Hamilton Square Rd.
Hamilton, New Jersey 08690
609-586-1141 fax 609-586-1143
www.RobertsEngineeringGroup.com

July 12, 2024

Nancy Tran
Land Use Board Secretary
Borough of Highlands Land Use Board
151 Navesink Avenue
Highlands, New Jersey 07732

Re: Completeness Review No. 1
Applicant: Nastasi
19 Gravelly Point Road
Block 100, Lot 26.19
Borough of Highlands, Monmouth County, New Jersey
Our File No.: HLPB24-04

Dear Ms. Tran:

As requested, we have reviewed the above referenced application in accordance with the Borough of Highlands Zoning and Land Use Regulations.

The Applicant seeks to construct a 3-story dwelling on an existing elevated 2-story frame dwelling with existing garage under parking, with an elevated addition with garage under parking, decking and stairs. One additional bedroom is proposed for the dwelling. Utilities will be elevated with their placement in the proposed attic. The number of parking spaces remain, and all are provided in the existing and proposed garage under parking. The existing decking and stairs will be removed, and the existing shed and attached covered area will remain as is on the property.

The residential building is situated on a 2,758.25 sf (0.06 Ac) lot in the Bungalow Colonies area of the R-2.03 Single Family Residential District. The property is located in the AE Flood Hazard.

A site plan is not required per §21-86A.4.b(2)(e):

Zone R-2.03 shall require an application for a site plan for the entire property except for those situated in Block 100, Lots 26.01- 26.76 and Block 69, Lots 15.01-15.28. This applies to subject property, Block 100, Lot 26.19.

We have reviewed the following documents submitted in support of the above referenced application for completeness purposes:

1. Copy of the Land Use Board Application for Minor Subdivision and Variance, dated May 30, 2024.

2. Copy of plans entitled, “Proposed Renovations & Addition, 19 Gravely Point Road, Unit 19, Highlands, NJ, Lot: 26.19 Block: 100”, prepared by Catherine Franco, Architect, unsigned and dated January 18, 2024, and having a revision date of October 12, 2022, consisting of 3 sheets (survey & site plan, floor plans and elevations.

We offer the following comments and recommendations for the Land Use Board’s consideration:

I. ZONING

1. This property is located in an area designated as the Bungalow Colonies within the R-2.03 Single Family Residential District. The property is subject to the Bungalow Colonies’ bulk requirements and applicable ordinances.

2. The Applicant requires one D(6) variance because the proposed building height exceeds the maximum height permitted in the district for a principal structure. To be entitled to “d” variance relief, the applicant must provide proof to satisfy the positive and negative criteria pursuance to N.J.S.A 40:55D-

70d. The existing dwelling is currently two stories with a building height of 16 ft and the Applicant is proposing three stories with a building height of 29.1 ft.
The Applicant will be required to provide proof during testimony.

3. The Applicant requires four (4) bulk "c" variances for minimum lot area, minimum lot depth, rear yard setback and detached accessory structure in a minimum yard setback. To be entitled to bulk "c" variance relief, the applicant must provide proof to satisfy the positive and negative criteria pursuance to N.J.S.A 40:55D-70c.
The Applicant will be required to provide proof during testimony.

4. The following bulk requirement summary is provided for the Board's reference. In accordance with Ordinance §21-86A.4.b existing and proposed bulk deficiencies which require bulk "c" variances have been noted:

Schedule I – Bulk and Area Requirements §21-86A.4b				
Requirement	R-2.03 Residential Zone	Bungalow Colonies Required	Existing Lot 26.19 Bungalow Colonies	Proposed Lot 26.19 Bungalow Colonies
Min. Lot Area (sf)	5,000	5,000	2,758.25**	2,758.25*
Lot Frontage/Width (ft)	50	50	50.15	50.15
Min. Lot Depth (ft)	100	100	55.0**	55.00*
Min. Front Yard Setback (ft)	20	3	5.1	4.11
Min. Side Yard Setback (ft)	6/8	3	6.56/11.7	5.46/4.1±
Min. Rear Yard Setback (ft)	20	3	2.37**	2.37*
Max. Building Height (ft)***	30	20	16.0	29.1*
Max Lot Coverage****	75%	75%	53.4±	69.8±
Max Building Coverage****	30%	35%	43.3±	59.3±
On-Site Parking (spaces)	2	1	3	3

* Proposed Variance
** Existing non-conformity
*** Where a dwelling is constructed or reconstructed to provide the required parking under the structure, the maximum height shall be increased by two and one-half (2 ½) feet.
**** §21-86 A.4.b(c) Total building coverage shall not exceed thirty-five (35%) percent of the total lot area and total lot coverage shall not exceed seventy-five (75%) percent except for those situated in Block 100, Lots 26.01-26.76 and Block 69, Lots 15.01-15.28.

II. VARIANCES REQUIRED:

1. N.J.S.A. 40:55D70d

   D(6) Bulk Variance required

   §21-86A.4.b (2)(d)

   The building height shall not exceed twenty (20) feet.

2. §21-86A.4.b(2)(a)

   Detached accessory structures are prohibited in the minimum required yard area.

   The existing shed and covered area are located within the side yard setback and possibly the rear yard setback. The existing shed and covered area are to remain.

3. Those noted in the Table.

III. APPLICATION FEES (PART 6 FEE SCHEDULE ARTICLE XXIII, ORD. 21-107)

As posted on Borough website under Land Use forms

Variances:

Residential "d" (max. building height) x1	1 EA	$ 150.00	$ 150.00
Residential "c" (minimum lot area) x1	1 EA	$ 125.00	$ 125.00
Residential "c" (minimum lot depth) x1	1 EA	$ 125.00	$ 125.00
Residential "c" (minimum rear yard) x1	1 EA	$ 125.00	$ 125.00
Residential "c" (accessory structure yard) x1	1 EA	$ 125.00	$ 125.00
Subtotal			$650.00

IV. CHECKLIST ITEMS

A Site Plan is not required per §21-86A.4.b(2)(e) thus a checklist is not required for this submission.

V. COMPLETENNESS

Adequate information has been provided to perform a technical review and fee calculation for the application, and therefore the application is deemed complete.

The Bungalow Colony is defined in the municipal code as a cluster of small, detached dwelling units originally designed for summer occupancy only, located on property held in common ownership. There are other properties in the immediate vicinity that have recently developed lots with large multiple storied dwellings.

The property is required to follow the bulk requirements for the Bungalow Colony area.

VI. GENERAL COMMENTS

Although the property does not require a site plan, some of the following comments are site plan related and will provide the Land Use Board with information to make an informed decision.

1. Please provide signed and dated architectural plans.

2. Please provide a zoning bulk and area requirements table on the plan noting zoning for bungalow parameters.

3. Please confirm the maximum existing and proposed building and lot coverages.

4. Please provide the nearest proposed front and side building offsets on the plan.

5. Please confirm the grade elevation on the architectural elevation sheet (3 of 3) as 6.56’.

The elevations along the front of the existing building range from 5.46 ft to 5.8 ft and 5.7 ft± along the northeasterly property line. The existing garage elevation is 6.06 ft.

The elevation of 6.56 ft ± appears to represent a building offset.

Please update architectural elevations.

6. The existing garage elevation on the survey does not match the existing elevation shown on the site plan, Sheet 1 of 3. Please clarify if these elevations represent the pitch of the slab.

7. Please provide the base and design flood elevations and reference the FIRM panel on Sheet 1 of 3.

8. Please clarify the building height. There are different building heights noted in the documents.

   Additionally, the height of the roof needs to be evaluated since the grade elevation may be incorrect.

   The roof elevation is based on the grade elevation and heights of the dwelling's stories.

   According to §21-86A.4b the building height in the bungalow colonies shall not exceed twenty (20) feet. The garage under parking allows an additional 2.5 ft in building height.

   The maximum building height is exceeded, and a variance is required, as noted on the submitted plans and documents. However, there are different building heights shown on the plans and the application. The building height for the noted variance needs to be established for this submission based on §21-8 Definitions for Building Height and Grade Plane.

   Please update the plan notes and provide consistent information where needed in the requested zoning bulk and area requirements table.

   The Applicant will be required to provide testimony.

We will continue our review upon submission of revised plans.

Should you have any questions, please do not hesitate to contact me.

Very truly yours,



Carmela Roberts, P.E., C.M.E., C.P.W.M.
Land Use Board Engineer

cc: Michael Muscillo, Borough Administrator, (mmuscillo@highlandsborough.org)
Austin P. Mueller, Assoc., Land Use Board Attorney (amueller@weiner.law)
Courtney Lopez, Zoning Officer (clopez@highlandsborough.org)
Edward J. McKenna, Jr., Esq., Applicant's Attorney (mckenna@redbanklaw.com)
Catherine Franco, AIA, Applicant's Architect (cfarchitects@hotmail.com)
Cameron Corini, P.E., C.M.E., C.P.W.M., Roberts Engineering Group, LLC
GS Bachman, E.I.T., Roberts Engineering Group, LLC