



Environmental Protection and Growth Management Department  
**ENVIRONMENTAL ENGINEERING AND PERMITTING DIVISION**  
1 North University Drive, Mailbox 201, Plantation, Florida 33324 • 954-519-1483 • FAX 954-519-1412

***Via e-mail to Marlon John of Lennar Homes, LLC***

December 16, 2019

Lennar Homes LLC  
c/o Marlon John  
730 NW 107th Ave, Suite 300  
Miami, FL 33431

**Re: Sierra Ranch  
License Transfer of County License No. DF15-1259**

This is to acknowledge receipt of your recently submitted letter requesting transfer of the above-referenced license. The request is hereby approved as follows:

Transferred from: Amzak International Inc.  
c/o David Schack  
4755 Technology Way, Suite 210  
Boca Raton, FL 33431

Transferred to: Lennar Homes LLC  
c/o Marlon John  
730 NW 107<sup>th</sup> Ave, Suite 300  
Miami, FL 33431

The scope and all other general and specific conditions of the license, including the July 31, 2023 expiration date, remain the same. Attach this letter to the license as it becomes a part thereof.

If you have any questions regarding this modification approval, please feel free to contact Michelle Decker at (954) 519-1205 or [mdecker@broward.org](mailto:mdecker@broward.org).

Sincerely,

Linda Sunderland  
Natural Resources Section Manager

cc: USACOE/WPB (via e-mail)



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***Via E-mail to Mary Lindgren for EW Consultants, Inc.***

Amzak International Inc.  
c/o David Schack  
4755 Technology Way, Suite 210  
Boca Raton, FL 33431

Dear Mr. Schack:

This is to notify you of the Environmental Protection and Growth Management Department's action concerning your application received December 4, 2015, for authorization to fill surface waters, including wetlands, at an 89 acre residential development located at 112<sup>th</sup> Avenue in the Town of Davie, Florida. The application has been reviewed for an Environmental Resource License.

**Broward County - Environmental Resource License (ERL) Review – Granted**

The Department has reviewed the project for compliance with Aquatic and Wetland Resource Protection Ordinance Sec. 27-331 through 27-341 of the Broward County Code. Based on the information submitted, Environmental Resource License No. **DF15-1259** is hereby issued. The above named licensee is hereby authorized to perform the work per the approved drawings(s), plans, documents and specifications as submitted by the licensee, and made a part hereof. The above referenced approvals will remain in effect subject to the attached Broward County General Conditions, Broward County Specific Conditions, and stamped exhibits.

The issuance of this license is a **final agency determination**. A person with a substantial interest may file a petition to request review of, or to intervene in a review of, a final administrative determination, subject to the provisions of Section 27-14, Broward County Code of Ordinances (excerpt attached).

Sincerely,

*Linda Sunderland*

Linda Sunderland, NRS  
Natural Resources Section Manager

*July 31, 2018*

Date

ENC:

1. Environmental Resource License
2. Sec. 27-14 Administrative Review Procedures (4 pages)
3. One copy of stamped drawings (25 pages)

CC:

1. Daryl Stoddard, SFWMD (via e-mail)
2. USACOE-PBG (via e-mail)





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## ENVIRONMENTAL RESOURCE LICENSE

**LICENSEE: Amzak International, Inc.**  
c/o David Schack  
4755 Technology Way, Suite 210  
Boca Raton, Florida 33431

**LICENSE NO: DF15-1259**  
**PROJECT:**  
Multi-Family Development –  
Wetland/Surface Water Dredge  
and Fill

This license is issued under the provision of Chapter 27 of the Broward County Code of Ordinances also cited as Broward County Natural Resource Protection Code hereinafter called the Code. The above-named applicant, hereinafter called licensee, is hereby authorized to perform the work or operate the facility shown on the approved drawing(s), plans, documents, and specifications as submitted by applicant, and made a part hereof and specifically described as follows:

**Description of Work:** This project involves the construction of an 89.1 acre residential development and associated surface water management system. Currently, the site contains 16.2 acres of uplands, 69.2 acres of jurisdictional wetlands, and 3.7 acres of existing surface waters. The following regulated activities are proposed during construction of the aforementioned development: (1) the excavation and filling of approximately 48.9 acres of existing wetlands with 305,250 and 299,350 cubic yards of fill, respectively; (2) the enhancement of 20.3 acres of existing wetland within the mitigation area; (3) the creation of 3.56 acres of wetland; (4) the excavation and filling of approximately 3.0 acres of existing agricultural ditches with approximately 5,650 and 21,800 cubic yards of fill, respectively; (5) the creation of a 6.71 acre surface water management lake with a depth of minus 35 feet NGVD with lake slopes in conformance with Section 27-337(b)(11); and (6) the installation of a boat ramp and four headwalls along the perimeter of the lake.

Unavoidable impacts to 48.9 acres of wetlands shall be offset through a combination of 20.3 acres of on-site enhancement and 3.56 acres of wetland creation within a 23.86 acre mitigation and buffer area, to be encumbered by a Conservation Easement, and the purchase of 3.01 freshwater herbaceous mitigation credits from the FPL/Everglades Mitigation Bank (EMB).

**Location of Work:** This project is located on the west side of 112th Avenue (Hiatus Road) between S Harmony Lake Circle and Pegasus Street (SW 21<sup>st</sup> Street), Section 18, Township 50 South, Range 42 East, in the Town of Davie, Florida. Folio Number 504118170010.

Construction shall be in accordance with submitted ERL Application Form received on 12/04/2015, and all additional information submitted; plans stamped by the Department on 07/31/2018 (attached); and with all General and Specific Conditions of this license.

**License No. DF15-1259**  
**LICENSEE: Amzak International, Inc.**

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations and restrictions set forth herein are accepted by the licensee and enforceable by Environmental Protection and Growth Management Department (EPGMD) pursuant to Chapter 27 of the Broward County Code of Ordinances. EPGMD will review this license periodically and may revoke the license, initiate administrative and/or judicial action for any violation of the conditions by the licensee, its agents, employees, servants or representatives or principals.
2. This license is valid only for the specific uses set forth in the license application, and any deviation from the approved uses may constitute grounds for revocation and enforcement action by EPGMD.
3. In the event the licensee is temporarily unable to comply with any of the conditions of the license, the licensee shall notify EPGMD within twelve (12) hours. Within five (5) working days of the event, the licensee shall submit a written report to EPGMD that describes the incident, its cause, the measures being taken to correct the problem and prevent its reoccurrence, the owner's intention toward repair, replacement, and reconstruction of destroyed facilities, and a schedule of action leading toward operation within the license conditions.
4. The issuance of this license does not convey any vested rights or exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, or any violations of federal, state or local laws or regulations.
5. This license must be available for inspection on the licensee's premises during the entire life of the license.
6. By accepting this license, the licensee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, that are submitted to EPGMD, may be used by EPGMD as evidence in any enforcement proceeding arising under Chapter 27 of the Broward County Code of Ordinances, except where such use is prohibited by § 403.111, F.S.
7. The licensee agrees to comply with Chapter 27 of the Broward County Code of Ordinances, as amended.
8. Any new owner of a licensed facility shall apply by letter for a transfer of license within thirty (30) days after sale or legal transfer. The transferor shall remain liable for performance in accordance with the license until the transferee applies for, and is granted the transfer of license. The transferee shall also be liable for performance in accordance with the license.
9. The licensee, by acceptance of this license, specifically agrees to allow access to the licensed source at reasonable times by EPGMD personnel for the purposes of inspection and testing to determine compliance with this license and Chapter 27 of the Broward County Code of Ordinances.
10. This license does not constitute a waiver or approval of any other license that may be required for other aspects of the total project.
11. If the licensee wishes to renew a license or extend its term, the licensee shall make application sixty (60) days prior to its expiration. Expired licenses are not renewable.
12. In addition to the general conditions set forth above, each license issued by EPGMD shall contain specific conditions determined by site conditions and requirements pursuant to the regulations as determined by the director of EPGMD. The licensee agrees that specific conditions are enforceable by EPGMD for any violation thereof.
13. Enforcement of the terms and provisions of this license shall be at the reasonable discretion of EPGMD, and any forbearance on behalf of EPGMD to exercise its rights hereunder in the event of any breach by the licensee, shall not be deemed or construed to be a waiver of EPGMD's rights hereunder.

License No. DF15-1259  
LICENSEE: Amzak International, Inc.

**SPECIFIC CONDITIONS:**

A. STANDARD CONDITIONS

1. **Notify the Department in writing a minimum of 48 hours prior to project commencement and a maximum of 48 hours after project completion.** Commencement notification should include such information as the intended start date, estimated duration of construction, and the name and contact information of the firm contracted to do the work. Failure to comply with this condition may result in enforcement action.
2. Any project caused environmental problem(s) shall be reported immediately to the Department's Environmental Response Line at 954-519-1499.
3. All project generated solid waste and/or spoil material must be disposed of in a suitable approved in accordance with current regulations at an upland location (not including surface waters and wetlands).
4. Turbidity screens, silt fences, or equivalent shall be properly employed and maintained as necessary to effectively contain suspended sediments and/or runoff during construction activities. **Dredging, filling, excavation, seawall removal, seawall construction, and other projects which result in similar degrees of disturbance to wet sediments shall in all cases employ turbidity control measures designed to effectively enclose the entire work area.**
5. Turbidity levels shall be monitored and recorded if a visible turbidity plume is observed leaving the site during construction activities. If monitoring reveals that turbidity levels exceed 29 NTU's above natural background 50 feet downstream of the point of discharge, project activities shall immediately cease, and work shall not resume until turbidity levels drop to within these limits [62-302.530(69) FAC].
6. Only clean fill shall be placed in the water bodies being filled. Any fill material used shall be free of garbage, rubbish, refuse, asphalt, hazardous materials, organic matter such [as] wood, lumber, tree or tree trimmings, or other contaminants. The disposal of any putrescible or deleterious debris in any water body is prohibited.

B. CONSTRUCTION CONDITIONS

1. If the approved license drawings and/or license attachments/plans conflict with the specific conditions, then the specific conditions shall prevail.
2. **Demolition and construction related debris must be disposed of at an approved upland location and may not be left in wetlands or any surface waters.**
3. This license does not eliminate the necessity to obtain any required federal, state, local or special district authorizations prior to the start of any activity approved by this license.
4. Please be advised that applicants with projects 1 acre or greater in size are required to submit a Storm Water Notice of Intent application 48 hours prior to the commencement of construction to the Florida Department of Environmental Protection, NPDES Stormwater Notices Center, MS #2510, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. In addition, please submit a Stormwater Pollution Prevention Plan to the appropriate local jurisdiction (EPGMD, Drainage District, or municipality) showing all Best Management Practices to be implemented during the construction of the project. The plan must be on a 24" X 36" drawing.
5. If a visible turbidity plume is observed leaving the site at any time, the licensee shall:
  - (a) Immediately cease all work contributing to the water quality violation. Operations may not resume until the Department gives authorization to do so.
  - (b) Notify the EPGMD immediately at (954) 519-1499, referencing the license number and project name.
  - (c) Stabilize all exposed material contributing to the water quality violation. Modify the work procedures that were responsible for the violation, and install more turbidity containment devices and/or repair any non-functioning turbidity containment devices.



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6. Single turbidity screens, booms, curtains, or equivalent shall be affixed, anchored, or weighted and shall span from water's surface to the substrate and shall be maintained as necessary during construction activities to minimize migration of turbidity into the adjacent waterways.
7. Connected turbidity curtain segments shall be overlapped and tied at the top and bottom so as to prevent turbidity from escaping through gaps between segments.
8. Turbidity curtains shall be deployed to effectively encapsulate the work area without impeding flow.

#### C. LAKES

1. Maximum lake depth is restricted to -35 feet NGVD.
2. Note that fountains/aerators as depicted in the attached drawings contribute towards improved water quality (in addition to the shallower depth requirement noted above) and will be required as part of this license. Aerators must be maintained in perpetuity. **Notify the Department in the event that the fountains/aerators are not installed within a month of availability of power supply thereto.**
3. Grass seed or sod, shall be installed and maintained on all disturbed areas within 48 hours of completing final grade, and at other times, as necessary, to prevent erosion, sedimentation or turbid discharges into receiving waters and/or adjacent wetlands.
4. Lake banks shall have a minimum slope of one (1) foot vertical to every four (4) feet horizontal between the ordinary high water line to two (2) feet below the average dry season low water table as demonstrated by water management district or county maps.

#### D. COMPENSATORY MITIGATION CONDITIONS (ON-SITE)

1. Construction and installation of the Areas shall be in accordance with plans dated 07/31/2018 by the Department (attached) and associated information.
2. The following steps must be taken prior to submittal of the Time-Zero monitoring report:
  - (a) The source for the plants and muck (a minimum of 12-inches of muck required) for the wetland area shall be submitted prior to commencement of work.
  - (b) Upon completion of the mitigation earthwork, the Licensee shall submit an as-built survey providing a Florida registered surveyor's certification of elevations in relation to design and surveyor verification of actual acreage for all licensed mitigation habitats;
  - (c) Plant substitutions or planting plan alterations must be approved by the Department prior to installation;
  - (d) Plant installation shall not begin until after the Department has approved the as-built survey.**
  - (e) If there are conflicts with any other agency regarding the mitigation area, notify the aquatic and wetland group immediately at 954-519-1228 or at [AWRLicense@broward.org](mailto:AWRLicense@broward.org)
3. Once condition D.2. has been approved, a Time-Zero monitoring report may be submitted to [AWRLicense@broward.org](mailto:AWRLicense@broward.org). The Time Zero report is required within 30 days of earthwork approval and prior to any Certificate of Occupancy being issued for any structure on the site.
4. A viable wetland system shall be established that replicates a natural reference wetland in basic structure and function. In order to assure that the Area(s) become self-sustaining, the following criteria shall be met:
  - a. A minimum of 80% coverage by desirable wetland species after a two (2) year period and demonstration of persistence for three (3) additional years.
  - b. Less than 2% coverage by invasive exotic and undesirable species is allowable if plants are dispersed and not concentrated in any particular area. Exotic and undesirable species include, but are not limited to, *Melaleuca*, Australian pine, Brazilian pepper, *Bischofia*, torpedo grass, primrose

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**LICENSEE: Amzak International, Inc.**

willow, cattail, air potato, and *Syngonium*. Treatment efforts should be tailored to prevent these species from becoming reproductively mature.

- c. A minimum of 80% survival of each planted species shall be maintained each quarter. An exception to this condition may be allowed where species composition, density of planted and recruitment species, the overall wetland condition, as characterized by the growth rates and viability of the Areas are of higher quality, as determined by the Department.
  - d. Hydrologic conditions and soil characteristics are in general conformity to those specified in plans. Data from the permanent surveyed staff gauges must be collected every two weeks and submitted with the quarterly monitoring reports.
5. Should the Department determine that the Areas are not achieving the listed criteria during some portion of the monitoring period, the licensee shall determine the reasons for failure and prepare plans that demonstrate clearly how the problem(s) will be corrected and submit such plans immediately to the Department for approval. Those plans shall be implemented within 30 days from the Departments written approval.
  6. Introduction (direct or indirect) of Grass Carp (*Ctenopharyngodon idella*) is strictly prohibited. The Licensee shall properly employ and maintain Grass Carp exclusion devices as necessary to prevent entry into the area. (for open water areas connected to other water bodies)
  7. Permanent physical markers designating the preserve status of the wetland conservation area and buffer zones shall be placed around the entire perimeter of the mitigation area a maximum 100 feet apart. The markers shall be maintained in perpetuity.
  8. The licensee shall be responsible for the successful completion of the mitigation work, including the monitoring and maintenance of the mitigation areas for the duration of the plan. The mitigation area shall not be turned over to another entity until the mitigation work is accomplished as licensed and staff has approved the Time Zero mitigation report.
  9. Spoil generated from the excavation authorized by this license must be used on-site or placed in off-site uplands and contained in such a manner as to prevent erosion into wetlands or other surface waters.
  10. The licensee shall provide any future purchaser(s) of this site with a copy of this license.
  11. Required water quality treatment (including ½ dry pretreatment and/or 1" wet detention as required by the appropriate jurisdictional agencies) must be provided **prior to** discharge into any part of the licensed wetland mitigation area. The mitigation areas cannot be considered in, or used for, meeting stormwater treatment requirements. Stormwater from development that abuts the mitigation areas shall be routed away from the mitigation areas through swales or other conveyances, and treated or discharged into treatment lakes at a distance adequate to maximize treatment prior to mixing with waters in the mitigation areas.
  12. The Department must be notified of any change of consultant/contractor during the construction and mitigation monitoring phases of this project.
  13. The conservation area shall be the perpetual responsibility of the licensee and may in no way be altered from its natural or licensed state as documented herein, with the exception of its normal maintenance.
  14. Bird boxes and/or perches must be maintained in perpetuity in conjunction with the mitigation site.
- E. COMPENSATORY MITIGATION CONDITIONS (OFF-SITE)**
1. Off-site mitigation for the authorized wetland impacts shall be comprised of 3.1 freshwater herbaceous mitigation credits in the Everglades Mitigation Bank which shall be formalized via a modification of the Florida Department of Environmental Protection (FDEP) Environmental Resource Permit No. 132637449 and/or 13262249 as appropriate. Proof of the modification shall be submitted to this Department within 45 days of license issuance.



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LICENSEE: Amzak International, Inc.

2. Pursuant to the "Agreement between (Florida Power & Light Company) and Broward County concerning the "South Dade (Everglades) Mitigation Bank", FP&L agrees to provide monitoring reports consistent with applicable FDEP license conditions to the County and to provide reasonable access to the bank by the Broward County staff for purposes of ensuring compliance with this Environmental Resource License and FDEP Environmental Resource Permit No. 132637449 or Permit File No. 0193232.
3. Prior to impacting wetlands, the licensee shall submit verification from EMB that 3.1 credits have been debited from the bank's credit ledger as mitigation for impacts associated with this project.
4. Once purchased the mitigation credits for the Everglades Mitigation Bank shall be the perpetual responsibility of Florida Power and Light Company.

F. CONSERVATION EASEMENT/FINANCIAL ASSURANCE

1. **Prior to any wetland impacts on site, a letter of credit must be submitted and approved by the County Attorney. The licensee will be notified when the documents have been accepted and work may proceed.**
2. The conservation area shall be the perpetual responsibility of the underlying landowner and may in no way be altered from their natural or licensed state as documented in this license, with the exception of restoration activities. Activities prohibited within the conservation area(s) include, but are not limited to: construction or placement of soil or other substances such as trash; removal or destruction of trees, shrubs or other vegetation (with the exception of exotic/nuisance vegetation) removal; excavation, dredging, or removal of soil material; diking or fencing; and any other activities detrimental to drainage, flood control, water conservation, erosion control or fish and wildlife habitat conservation or preservation.
3. The licensee shall provide a Joint Letter of Credit to Broward County EPGMD and SFWMD as financial assurance for this project. The Financial Assurance(s) include(s) construction, monitoring and maintenance costs with a 10% contingency for the total sum of \$718,744.40. After the time zero event and upon EPGMD review and approval of all information required in Specific Condition D.2, the licensee may request release of 35% of the total financial assurance. After two years of monitoring and maintenance and upon EPGMD review and approval, the licensee may request an additional 15% of the financial assurance. At the end of the five year maintenance and monitoring period and upon demonstration that the licensee has met the intent and all information requested in Specific Condition D.2 and D.3, and if necessary D.4., the licensee may request the release of the remaining financial assurance. All requests shall be made in writing to the Natural Resources Section of the Environmental Protection and Growth Management Department. The Licensee is advised that the financial assurance document must remain active until it is released by the Department and no portion of the Financial Assurance will be released by the Department until the Conservation Easement has been recorded.

G. A COPY OF THIS LICENSE SHALL BE KEPT ON SITE DURING ALL PHASES OF LICENSED CONSTRUCTION.

Recommended for approval by:

Michelle Decker  
License Processor

Issued this 31<sup>st</sup> day of July, 2018  
Expiration Date: July 31<sup>st</sup>, 2020

BROWARD COUNTY ENVIRONMENTAL PROTECTION AND  
GROWTH MANAGEMENT DEPARTMENT

*Linda Sunderland*

LINDA SUNDERLAND, NRS  
NATURAL RESOURCES SECTION MANAGER  
ENVIRONMENTAL ENGINEERING AND PERMITTING DIVISION



Sec. 27-14. Administrative review of EPGMD determinations.

- (a) A person with a substantial interest may file a petition to request review of or to intervene in a review of a final administrative determination made pursuant to this chapter concerning:
- (1) The requirement that a facility or activity obtain a license or environmental review approval.
  - (2) Interpretations of license or environmental review approval conditions.
  - (3) Interpretations of variance conditions.
  - (4) The decision to suspend or revoke a license or environmental review approval.
  - (5) The requirement of certain license conditions.
  - (6) The issuance of a license or environmental review approval.
  - (7) The denial of a license or environmental review approval.
  - (8) The scope of a license or environmental review approval, geographic or otherwise.
  - (9) The scope of a variance, geographic or otherwise.
  - (10) The issuance of a stop work order.
  - (11) Similar final administrative determinations.

This administrative review procedure shall be the only means of review available for the above final administrative determinations by either the petitioner or the intervenor (the parties).

- (b) person may not obtain review by this procedure of:
- (1) The issuance or adjudication of or other matters involving a notice of violation or a citation.
  - (2) Internal policy decisions
- (c) A person desiring a review of a staff determination made pursuant to this Chapter shall first bring the determination to the attention of the appropriate section supervisor to attempt to resolve the matter. If a resolution cannot be reached, then the decision shall be reviewed by successive supervisory levels until the issue is resolved or reaches the level of the director or his or her designee for the final determination.
- (d) A person desiring administrative review of a final determination made by the director or the designee shall file a petition with the director for review by the hearing examiner. The petition shall be filed within ten (10) days from the rendition of the action taken or of the decision made by the director. An entity whose license or approval is being challenged shall be a party to the action.
- (e) The review shall not be heard until the provisions of subsection (f) are met. Upon motion to the hearing examiner, an insufficient petition shall be dismissed with or without leave to refile. If a petition is determined to be insufficient by the hearing examiner and the petitioner has been given leave to refile by the hearing examiner, unless otherwise ordered by the hearing examiner, the petitioner must refile within ten (10) days of the rendition of the order of dismissal or the petition will be dismissed with prejudice.

- (f) A sufficient petition for review or petition for intervention in the review shall, at a minimum, contain the following information:
- (1) The nature of the determination sought to be reviewed.
  - (2) A short, plain statement of the facts which form the subject matter upon which the determination was made as asserted by all parties of record at the time that the petition is filed; a statement of the material facts in dispute, if any. If any party is unable to state the matters in sufficient detail at the time initial petition is filed, the petition may be limited to a statement of the issues involved; and thereafter, upon timely written motion, a more definite and detailed statement shall be furnished not less than seven (7) days prior to the date set for the hearing.
  - (3) The specific determination for which the review is sought.
  - (4) The specific legal grounds upon which the parties seek review of the determination.
  - (5) A short statement of the petitioner's or the intervenor's substantial interest in the matter to be reviewed.
  - (6) The specific section of this chapter on which the decision is based, if known, and the specific section that the parties allege should control the decision, if known.
  - (7) A copy of the director's or the designee's written final determination.
  - (8) A statement of the relief requested stating precisely the action that the petitioner wants EPGMD to take with respect to the final determination.
- (g) All pleadings or other documents filed in the proceeding must be signed by a party, the party's attorney, or the party's qualified representative. The signature of a party, the party's attorney or a party's qualified representative constitutes a certificate that he or she has read the pleading or other document and that to the best of his or her knowledge, information, and belief formed after reasonable inquiry, it is not brought for any improper purposes, such as to harass or to cause unnecessary delay or for frivolous purpose or needless increase in the cost of litigation. If a pleading or other document is signed in violation of these requirements, the hearing examiner, upon motion or his or her own initiative, shall dismiss the matter.
- (h) A petitioner or intervenor may request an emergency hearing to stay all activities or work conducted pursuant to the challenged license or approval. Such petitioner or intervenor has the burden of proof to show by a preponderance of the evidence that the continued activities would cause substantial pollution or degradation to the environment. An emergency hearing shall be scheduled by EPGMD and be held within five (5) days of said request or as soon thereafter as possible subject to the availability of the hearing examiner. The petitioner or intervenor shall comply with the notice provisions of section 27-14(j)(2)a. and c. and section 27-14(j)(3) and (4) of this chapter.
- (i) The petition for review will not stay environmental protection activities required for the remediation or mitigation of a site or facility, the protection of the environment or the health, safety and welfare of the citizens of Broward County, or the prevention of further environmental degradation. The person responsible for these activities must take all necessary steps to prevent environmental degradation and must conduct the remediation or mitigation activities required by this chapter. The director may allow these activities to be delayed until after the hearing examiner's decision by certifying to

the hearing examiner that, by reason of facts stated in the certificate, a delay in the initiation or completion of these activities would not cause substantial environmental degradation or peril to life or property. The delay for conducting these activities may be subject to appropriate terms to ensure protection of the environment. The person responsible for these activities shall be responsible for any environmental damage or any violation of this chapter caused by the delay.

- (j) Notice and Scheduling Requirements:
- (1) The hearing on the review shall be scheduled within a reasonable time. It shall be the responsibility of the petitioner to request through EPGMD that the hearing date be scheduled. It shall also be the responsibility of the petitioner to give notice in accordance with this section at least ten (10) days prior to the hearing.
  - (2) The petitioner shall give notice of the hearing by:
    - a. Giving personal notice to all proper parties; and
    - b. Publishing notice on two (2) days in a newspaper of general circulation in the county; and
    - c. Posting notice at a location determined by the Broward County Administrator's Office.
  - (3) The petitioner shall bear the cost of giving notice.
  - (4) The notice shall contain, at a minimum:
    - a. A description and location of the facility or the activity to be conducted by the petitioner; and
    - b. The time and place of the hearing.
- (k) The petitioner shall bear the cost of accurately and completely preserving all testimony and providing full or partial transcripts to all parties.
- (l) The hearing shall be a quasi-judicial hearing.
- (1) The applicant/petitioner requesting the administrative review, any intervenor/petitioner and EPGMD shall have an opportunity to respond to and to present witnesses, other evidence and argument on all issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of facts and orders, and to be represented by counsel. Members of the general public who are not intervenors as set forth in Section 27-14 of this chapter are not parties to the proceeding.
  - (2) When appropriate, the general public may be given an opportunity to present oral or written communications. If the hearing examiner proposes to consider such material, then all parties shall be given an opportunity to cross-examine, challenge or rebut it.
- (m) Denial, protest of, revocation, or suspension of a license, environmental review approval, or any other approval:
- (1) In regard to denial or protest of approval of a license and any other review of an administrative decision, notwithstanding (2) below, the petitioner shall have the burden of showing, by a preponderance of the evidence, that the determination of the director was an arbitrary and/or capricious abuse of discretion, not supported by competent, substantial evidence or not in conformance with the



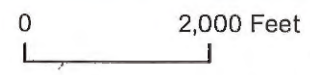
essential requirements of this chapter. The hearing examiner shall not substitute his or her judgment for that of EPGMD on an issue of discretion even though the hearing examiner may have reached a different conclusion based on the same facts.

- (2) In an action to revoke or suspend a valid license or approval, the burden shall be upon EPGMD to prove, by a preponderance of the evidence in an administrative hearing, the grounds for revocation or suspension. The license holder or approval recipient shall be provided notice of the hearing and a copy of the petition stating the grounds for revocation or suspension as provided in section 27-63 of this chapter. The petition shall state with specificity the acts complained of in order to allow the license holder or approval recipient an opportunity to prepare a defense. The hearing shall be conducted in accordance with the provisions of Section 27-37 of this chapter.
- (n) Findings of fact shall be based exclusively on the evidence of record and on matters officially recognized.
  - (o) If the hearing examiner finds that the director or his or her designee has erroneously interpreted a provision and that a correct interpretation compels a particular action, he or she shall remand the case to the director or his or her designee for further action under a correct interpretation of the provision.
  - (p) The hearing examiner shall complete and submit to the director and all parties a final order consisting of his or her findings of fact and conclusions of law.
  - (q) A party to the hearing may obtain appellate review of the final order as provided by section 27-42 of this chapter.
  - (r) A petitioner or intervenor shall pay a filing fee at the time the application for review is filed. The amount of the filing fee shall be set by resolution of the Board.

(Ord. No. 2003-34, § 1, 9-23-03; Ord. No. 2005-08, § 2.03, 4-26-05)  
Secs. 27-15--27-19. Reserved.



LEGEND  
[Hatched Box] - SITE (89.1+/- AC)  
**SIERRA RANCH  
LOCATION MAP**



**EW CONSULTANTS, INC.**  
601 HERITAGE DRIVE, SUITE 124  
JUPITER, FLORIDA 33458  
561-623-5475 FAX 561-623-5481  
WWW.EWCONSULTANTS.COM

**APRIL 2015**  
FIGURE  
**1**





SW 112TH AVE

BROWARD COUNTY AERIALS DATED 2015

0 600  
SCALE IN FEET



# SIERRA RANCH AERIAL MAP

SIERRA\_RANCH.dwg AERIAL



**EW CONSULTANTS, INC.**

601 HERITAGE DRIVE, SUITE 124  
JUPITER, FLORIDA 33458  
561-623-5475 FAX 561-623-5481  
WWW.EWCONSULTANTS.COM

**APRIL 2015**

FIGURE

**3**

Broward County EEPD  
Page 2 of 25  
07/31/18





SIERRA\_RANCH.dwg FLUCFCS

BROWARD COUNTY AERIALS DATED 2015

**LEGEND**

- 422 - BRAZILIAN PEPPER (16.2± AC)
- 510 - DITCHES (3.7± AC)
- 619 - EXOTIC WETLAND HARDWOODS (65.5± AC)
- 641 - FRESHWATER MARSHES (3.7± AC)
- TOTAL SITE (89.1± AC)**



# SIERRA RANCH FLUCFCS MAP

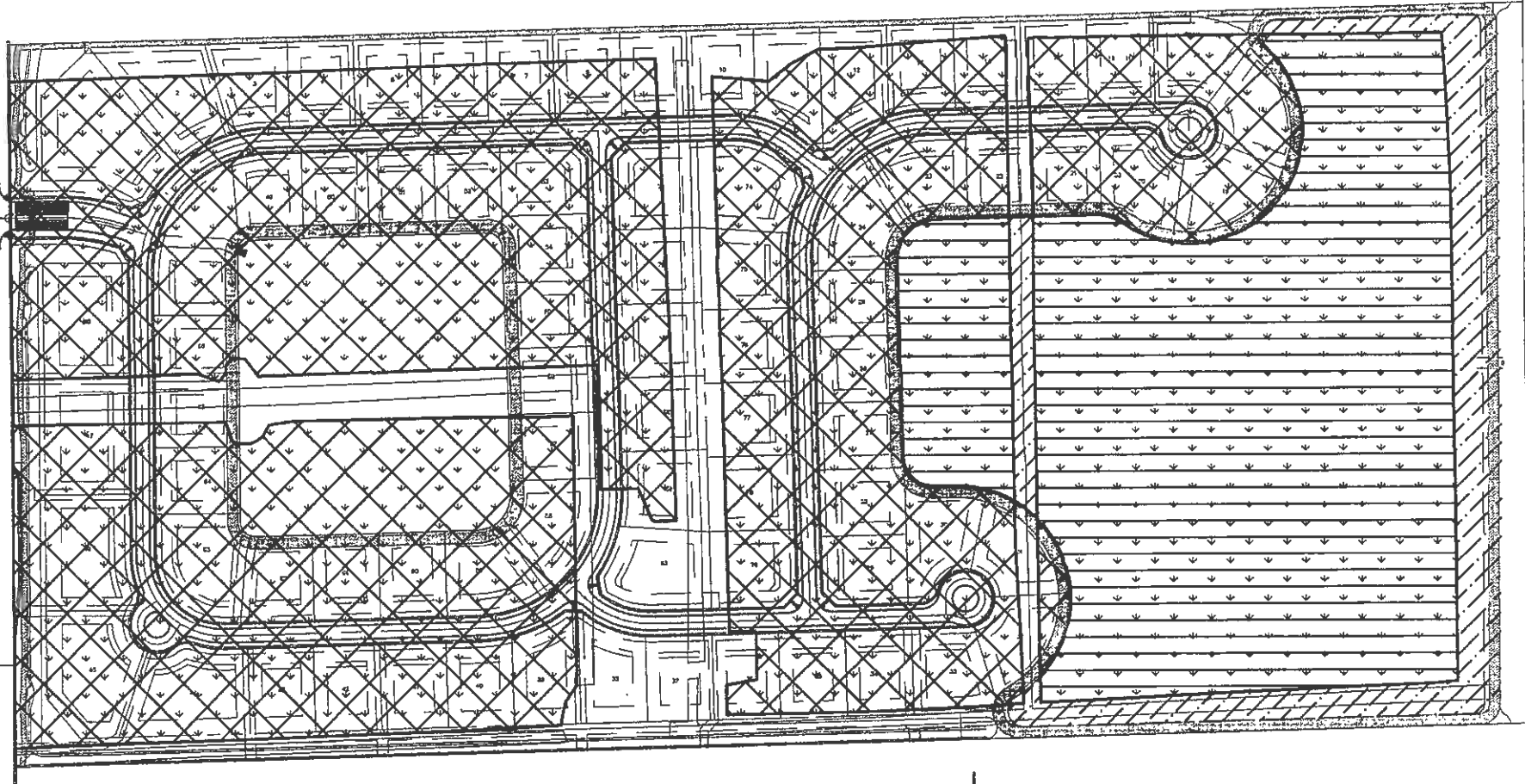


**EW CONSULTANTS, INC.**  
 803 COLONIAL DRIVE, SUITE 100  
 JENNINGS, FLORIDA 32046  
 904-826-6779 904-881-6344 (F)  
 www.ewconsultants.com

APRIL 2015  
**FIGURE**  
4






SW 112TH AVE

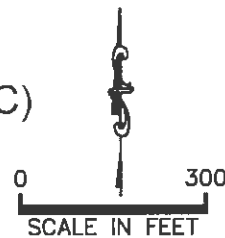


SIERRA RANCH 05-2017.dwg WETLAND IMPACT 8.5x11

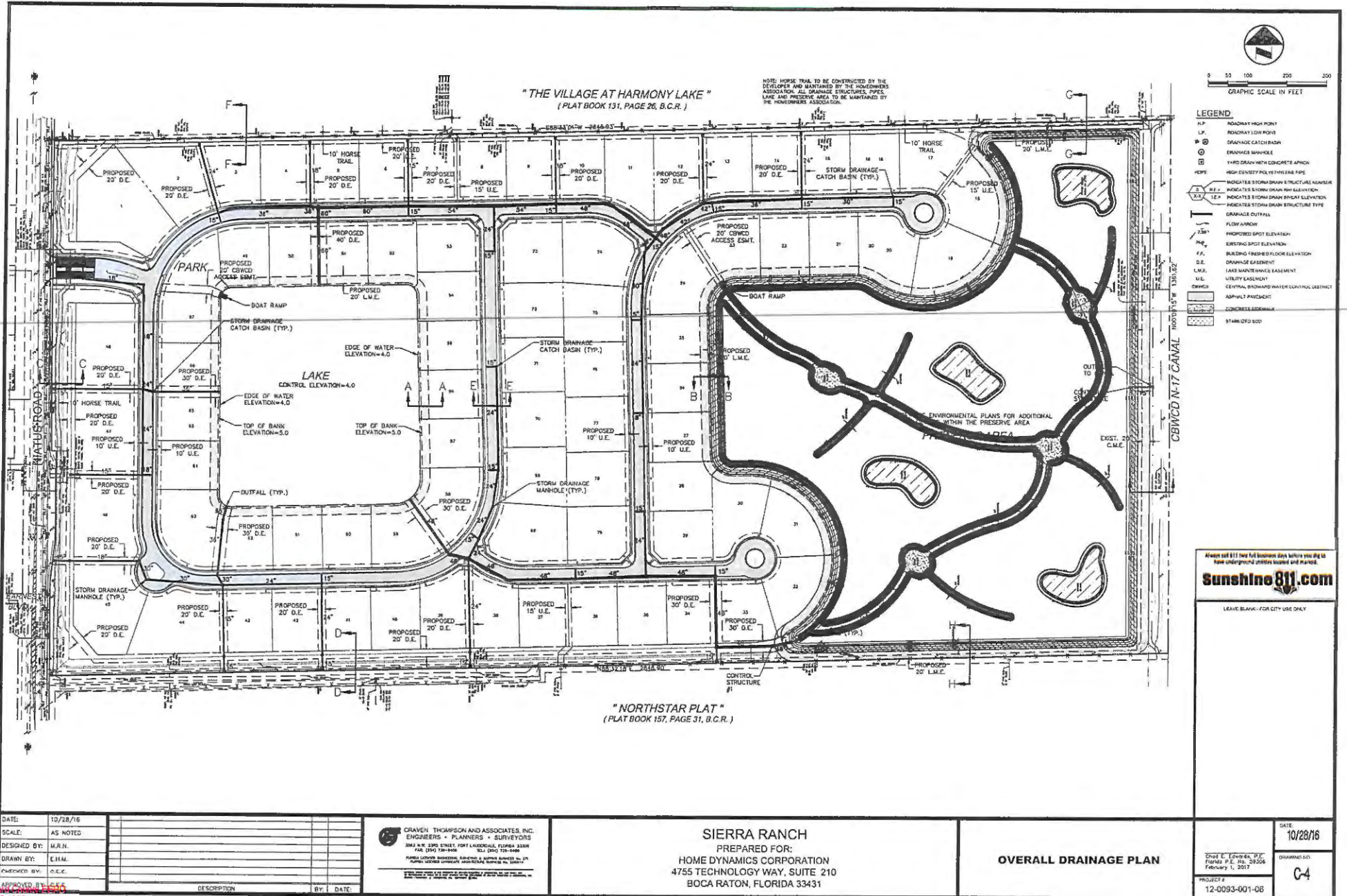
LEGEND

-  - WETLAND ENHANCEMENT (20.30± AC)
-  - WETLAND RESTORATION (3.56± AC)
-  - WETLAND IMPACT (48.90± AC)

Broward County EEPD  
Page 4 of 25  
07/31/18



<b>SIERRA RANCH WETLAND IMPACT</b>	
	<b>EW CONSULTANTS, INC.</b> <small>801 HENRIK DRIVE, SUITE 124          JUPITER, FLORIDA 33405          561-423-5479 FAX 561-423-5481          WWW.EWCONSULTANTS.COM</small>
JUNE 2017 <b>FIGURE</b> <span style="font-size: 2em; font-weight: bold;">5</span>	



DATE:	10/28/16				
SCALE:	AS NOTED				
DESIGNED BY:	M.R.N.				
DRAWN BY:	C.H.M.				
CHECKED BY:	C.E.C.				
APPROVED BY:	C.E.C.				
		DESCRIPTION	BY	DATE	

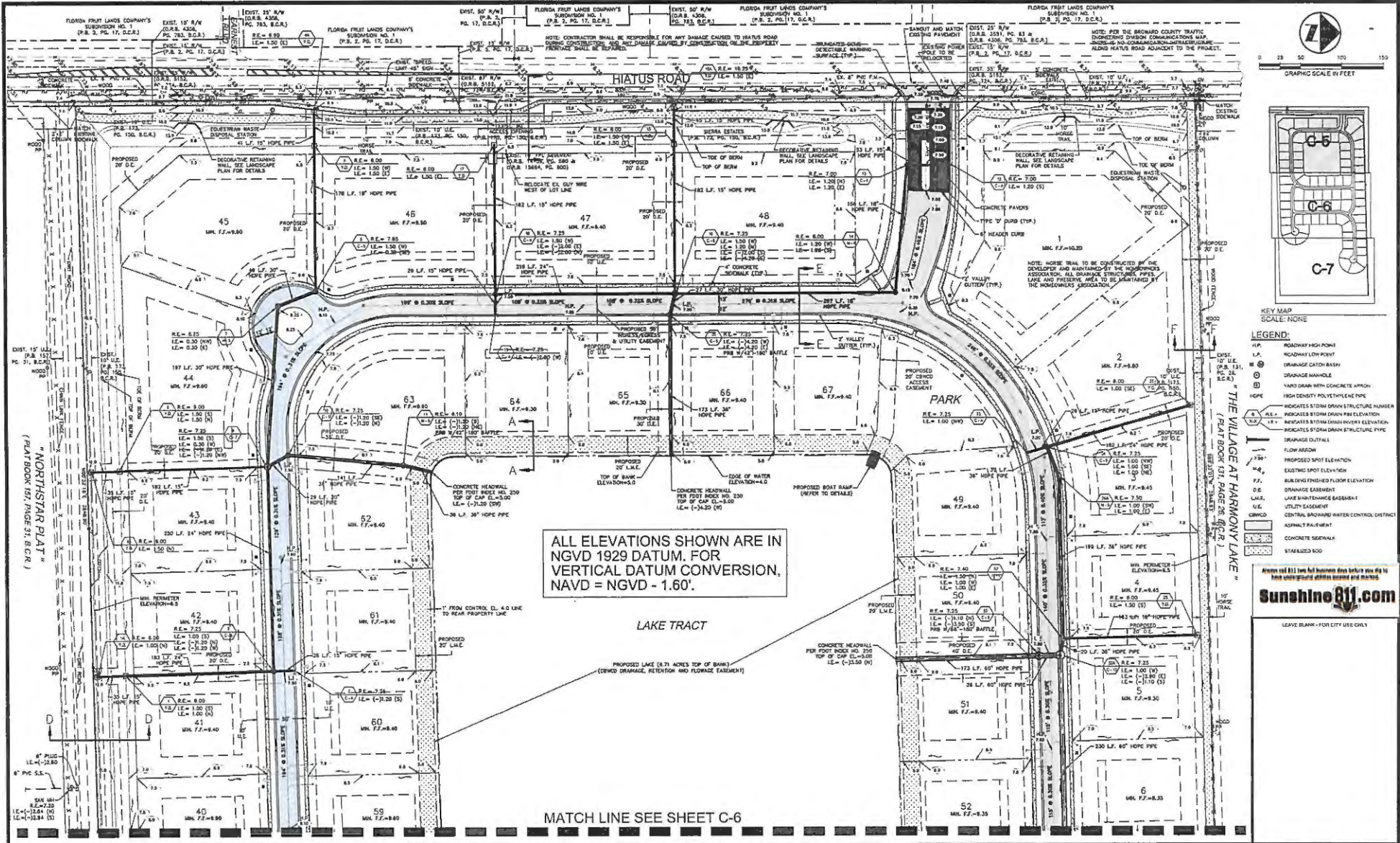
**5** CRAVEN THOMPSON AND ASSOCIATES, INC.  
ENGINEERS + PLANNERS + SURVEYORS  
3843 N.W. 13th STREET, FORT LAUDERDALE, FLORIDA 33304  
FAX: (954) 759-1400 TEL: (954) 759-1400  
PUNTA GORDON BOULEVARD, FORT LAUDERDALE, FLORIDA 33411  
WWW.CRAVEN-THOMPSON.COM

**SIERRA RANCH**  
PREPARED FOR:  
HOME DYNAMICS CORPORATION  
4755 TECHNOLOGY WAY, SUITE 210  
BOCA RATON, FLORIDA 33431

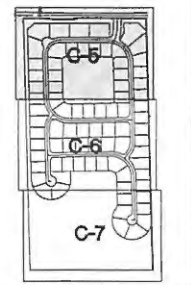
**OVERALL DRAINAGE PLAN**

DATE:	10/28/16
DRAWING NO.:	C-4
PROJECT #:	12-0093-001-06





ALL ELEVATIONS SHOWN ARE IN NGVD 1929 DATUM. FOR VERTICAL DATUM CONVERSION, NAVD = NGVD - 1.60'.



- KEY MAP  
SCALE: NONE
- LEGEND:
- H.P. ROADWAY HIGH POINT
  - L.P. ROADWAY LOW POINT
  - DRAINAGE CATCH BASIN
  - DRAINAGE MANHOLE
  - HAND DRAWN WITH CONCRETE ARCH
  - INDICATES STORM DRAIN STRUCTURE NUMBER
  - INDICATES STORM DRAIN INVERT ELEVATION
  - INDICATES STORM DRAIN STRUCTURE TYPE
  - DRAINAGE OUTFALL
  - FLOW ARROW
  - PROPOSED SPOT ELEVATION
  - EXISTING SPOT ELEVATION
  - BUILDING FINISHED FLOOR ELEVATION
  - DRAINAGE EASEMENT
  - LAKE MAINTENANCE EASEMENT
  - UTILITY EASEMENT
  - CENTRAL BOCAHONDA WATER CONTROL DISTRICT
  - ASPHALT PAVEMENT
  - CONCRETE SEAWALK
  - STABILIZED SOIL
- Notes:
  - Notes: PER THE BOCAHONDA COUNTY TRAFFIC ENGINEERING DIVISION COMMUNICATIONS MAP, THERE IS NO COMMUNICATIONS UTILITY ALONG HIATUS ROAD ADJACENT TO THE PROJECT.
  - NOTE: HOUSING TRAIL TO BE CONSTRUCTED BY THE DEVELOPER AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. ALL DRAINAGE STRUCTURES, PIPES, LINES AND FIXINGS, WHEN TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

Always call 811 first for business areas before you dig to find underground utilities before you dig!

**Sunshine811.com**

LEAVE BLANK - FOR CITY USE ONLY

DATE:	10/28/16
SCALE:	AS NOTED
DESIGNED BY:	M.R.N.
DRAWN BY:	E.H.M.
CHECKED BY:	C.E.E.
APPROVED BY:	C.E.E.

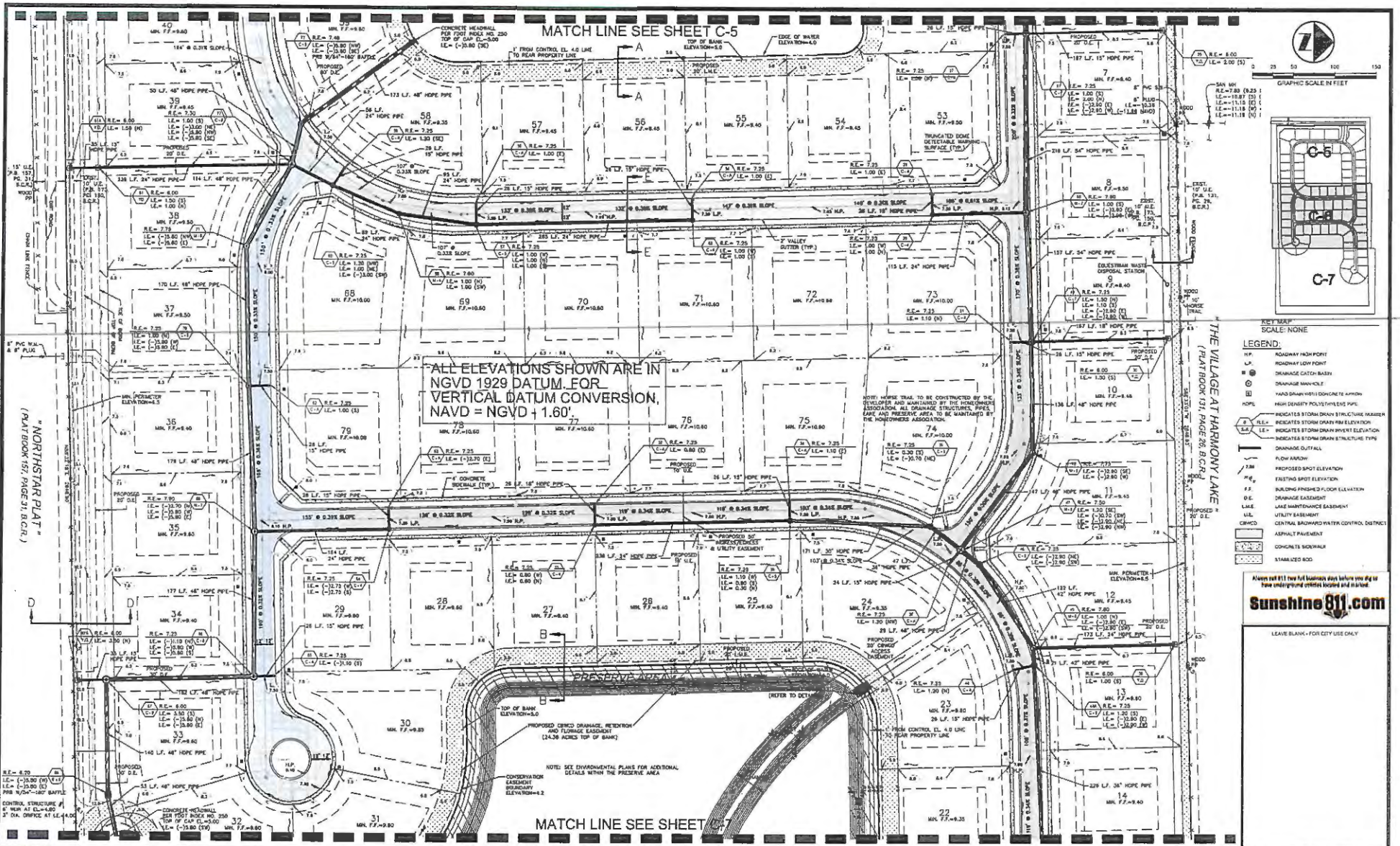
**CRAVEN THOMPSON AND ASSOCIATES, INC.**  
ENGINEERS • PLANNERS • SURVEYORS  
3863 N.E. 20TH STREET, FORT LAUDERDALE, FLORIDA 33309  
TEL (954) 728-6400 FAX (954) 728-6406  
www.ctai.com

**SIERRA RANCH**  
PREPARED FOR:  
HOME DYNAMICS CORPORATION  
4755 TECHNOLOGY WAY, SUITE 210  
BOCA RATON, FLORIDA 33431

**PAVING, GRADING AND DRAINAGE PLAN**

DATE:	10/28/16
DRAWING NO.:	C-5
PROJECT #:	12-0093-001-06





DATE:	10/28/16
SCALE:	AS NOTED
DESIGNED BY:	M.R.N.
DRAWN BY:	E.H.M.
CHECKED BY:	C.E.E.

**GRAVEN THOMPSON AND ASSOCIATES, INC.**  
ENGINEERS + PLANNERS + SURVEYORS  
3043 N. 5300 STREET, FORT LAUDERDALE, FLORIDA 33309  
TEL: (954) 331-4488 FAX: (954) 331-4400

HAND DRAWING CONSTRUCTION: CONTRACTOR TO VERIFY DIMENSIONS AND TO OBTAIN LOCAL REGULATORY AGENCIES' APPROVAL BEFORE CONSTRUCTION.

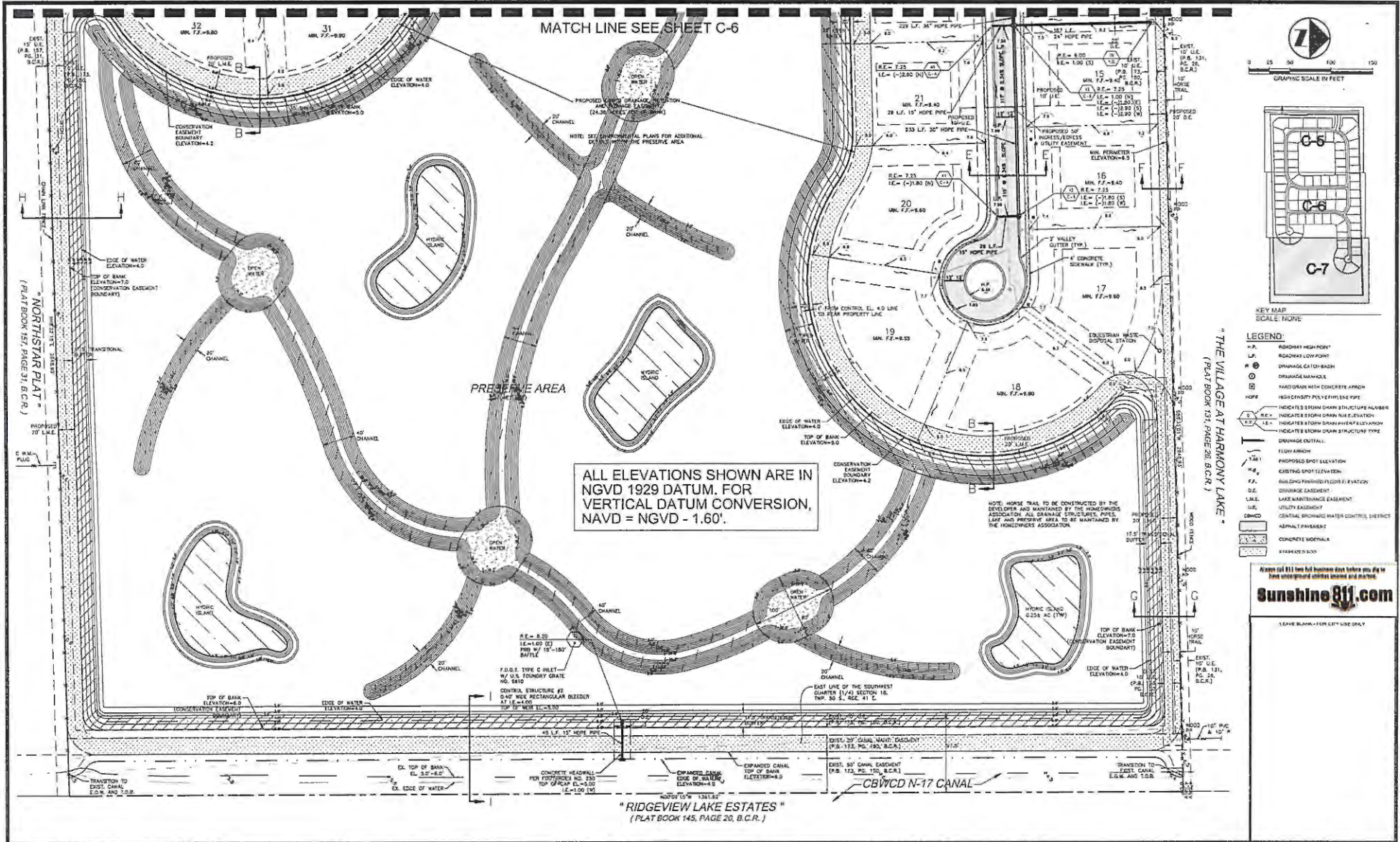
**SIERRA RANCH**  
PREPARED FOR:  
**HOME DYNAMICS CORPORATION**  
4755 TECHNOLOGY WAY, SUITE 210  
BOCA RATON, FLORIDA 33431

**PAVING, GRADING AND DRAINAGE PLAN**

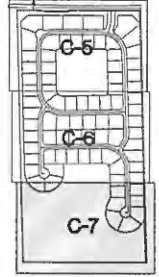
DATE: 10/28/16  
DRAWING NO: C-6  
PROJECT: 12-0093-001-05

Chris W. Edwards, P.E.  
Florida P.E. No. 28356  
February 1, 2017





ALL ELEVATIONS SHOWN ARE IN NGVD 1929 DATUM. FOR VERTICAL DATUM CONVERSION, NAVD = NGVD - 1.60'.



- LEGEND:**
- P • ROADWAY HIGH POINT
  - L • ROADWAY LOW POINT
  - D • DRAINAGE CATCH BASIN
  - S • DRAINAGE MANHOLE
  - H • HAND GRAB WITH CONCRETE APRON
  - R • HIGH DENSITY POLYETHYLENE PIPE
  - R.C. • INDICATES STORM DRAIN STRUCTURE NUMBER
  - E.C. • INDICATES STORM DRAIN RISE ELEVATION
  - H.E. • INDICATES STORM DRAIN HEAD ELEVATION
  - S.E. • INDICATES STORM DRAIN STRUCTURE TYPE
  - DRAINAGE OUTLINE
  - F.A. • FLYSHED ARCH
  - S.P. • PROPOSED SPOT ELEVATION
  - E.S. • EXISTING SPOT ELEVATION
  - P.F. • PROPOSED FINISHED FLOOR ELEVATION
  - D.E. • DRAINAGE EASEMENT
  - L.E. • LAKE MAINTENANCE EASEMENT
  - U.E. • UTILITY EASEMENT
  - C.W.C. • CENTRAL WATER CONTROL DISTRICT
  - A.P. • ASPHALT PAVEMENT
  - C.W. • CONCRETE SIDEWALK
  - S.B. • SPARKLED BODY

Always call 811 before any business that requires you dig to see underground utilities before you dig!  
**Sunshine 811.com**

LEAVE BLANK - FOR CITY USE ONLY

DATE:	10/28/16
SCALE:	AS NOTED
DESIGNED BY:	M.R.N.
DRAWN BY:	E.H.M.
CHECKED BY:	C.E.E.
APPROVED BY:	C.E.E.
DESCRIPTION:	
DATE:	

**CRAVEN THOMPSON AND ASSOCIATES, INC.**  
ENGINEERS • PLANNERS • SURVEYORS  
3847 W. 63RD STREET, FORT LAUDERDALE, FLORIDA 33309  
TEL: (954) 338-6666 FAX: (954) 338-6668  
FLORIDA LICENSE NUMBER: 53446-0001 (P.E.)  
FLORIDA LICENSE NUMBER: 53446-0002 (P.S.)

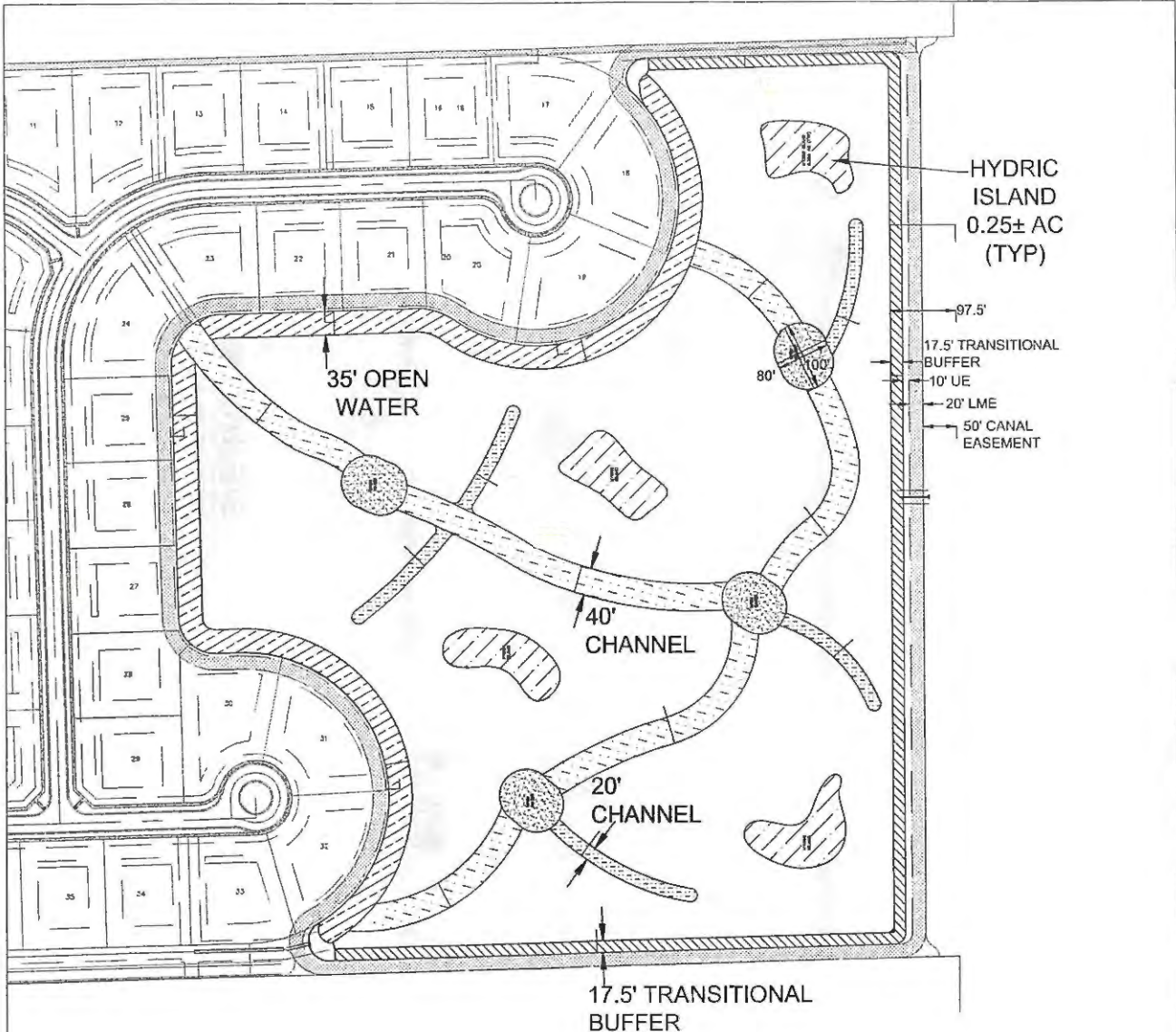
**SIERRA RANCH**  
PREPARED FOR:  
**HOME DYNAMICS CORPORATION**  
4755 TECHNOLOGY WAY, SUITE 210  
BOCA RATON, FLORIDA 33431

**PAVING, GRADING  
AND DRAINAGE PLAN**

DATE:	10/28/16
DRAWING NO.:	C-7
PROJECT #:	12-0093-001-06







**LEGEND**

- HYDRIC ISLAND (0.98± AC)
- 80' x 100' OPEN WATER (0.61± AC)
- 20' SECONDARY CHANNELS (0.46± AC)
- 40' PRIMARY CHANNELS (1.86± AC)
- 17.5' TRANSITIONAL BUFFER (1.01± AC)
- MARSH AREA (17.20± AC)
- 35' OPEN WATER (1.74± AC)
- TOTAL (23.86± AC)**



# SIERRA RANCH PRESERVE AREA LAYOUT

SIERRA RANCH 05-2017.dwg PRESERVE AREA LAYOUT 8.5x11



**EW CONSULTANTS, INC.**

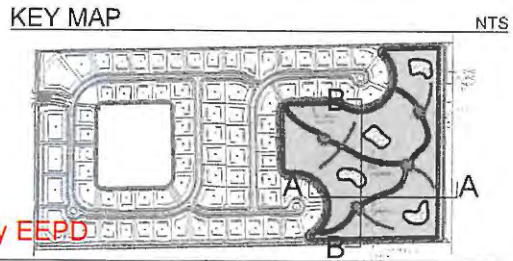
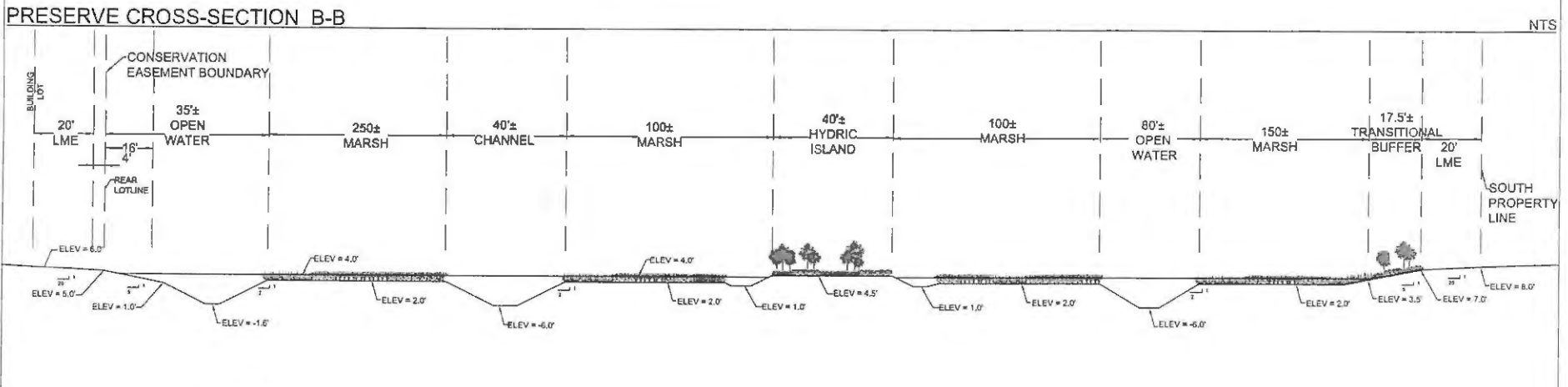
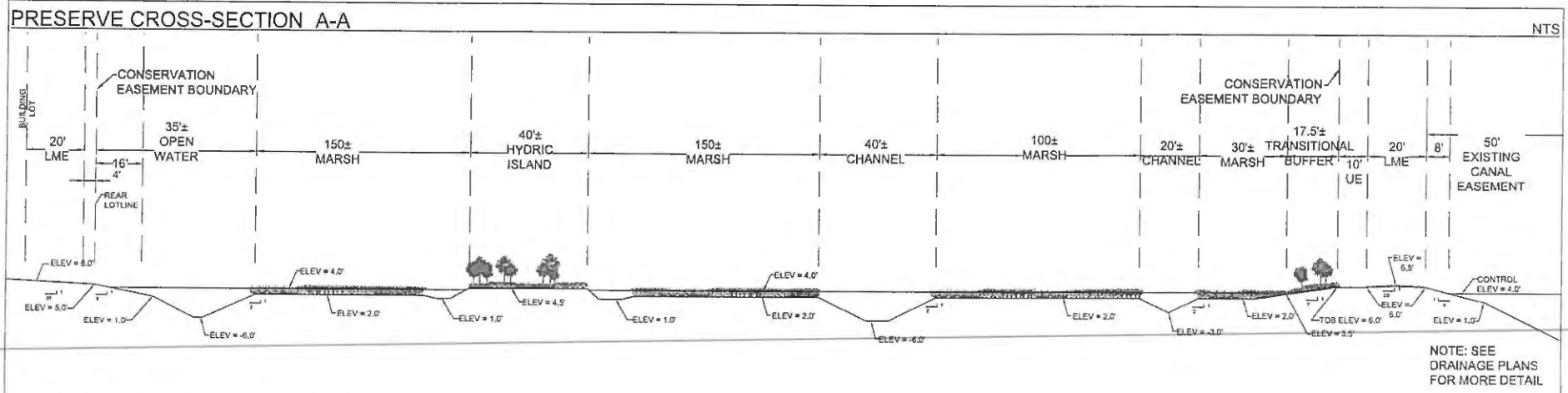
2581 METROCENTRE BLVD., SUITE 1  
WEST PALM BEACH, FL 33407  
561-291-7950 PHONE 561-530-4908 FAX  
WWW.EWCONSULTANTS.COM

**JUNE 2017**

**FIGURE**

**6**



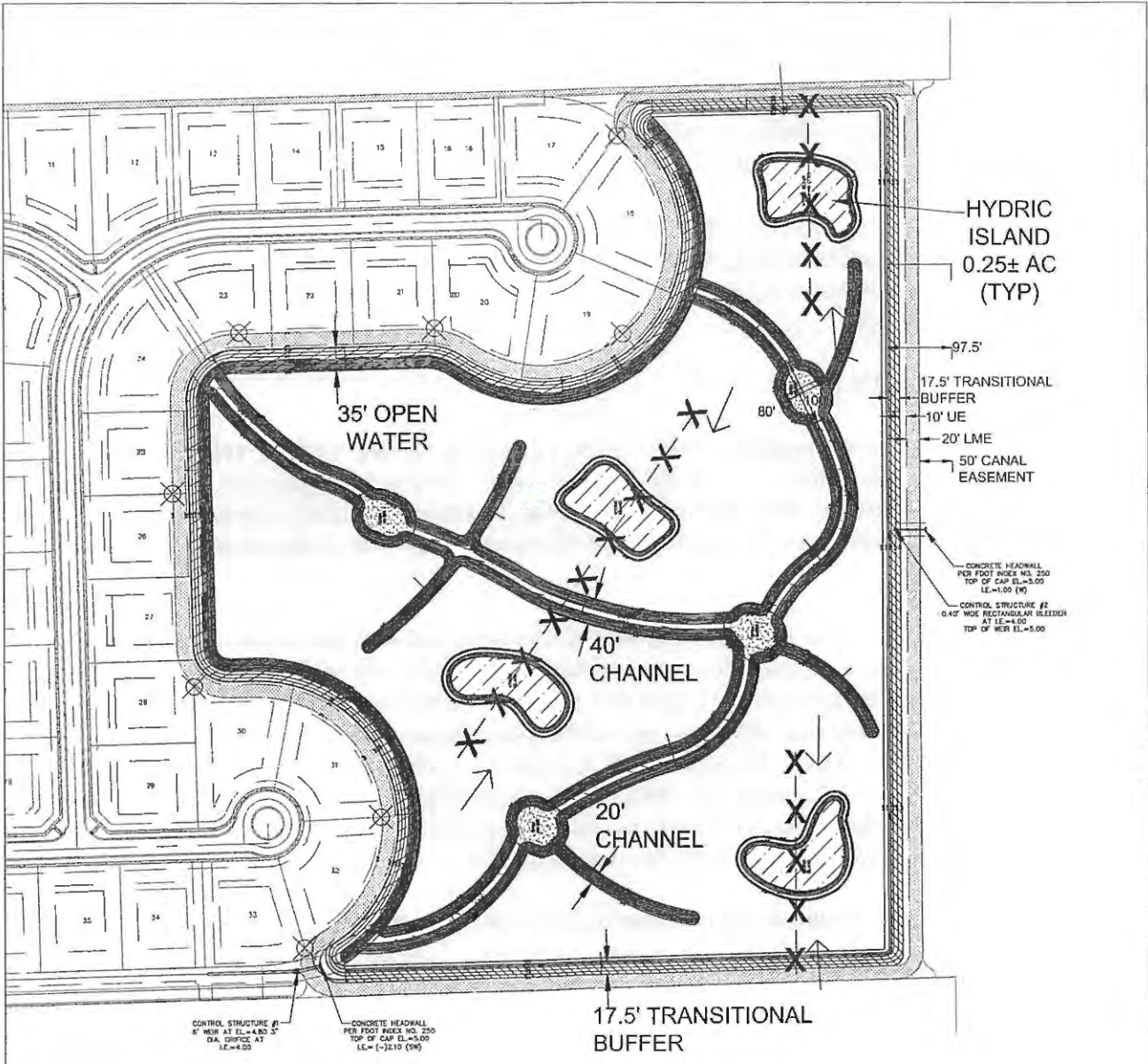


ALL ELEVATIONS SHOWN ARE IN NGVD 1929 DATUM

<b>SIERRA RANCH</b>	
<b>PRESERVE AREA CROSS SECTION</b>	
	<b>EW CONSULTANTS, INC.</b> 601 HERITAGE DRIVE, SUITE 124 JUPITER, FLORIDA 33458 561-623-5475 FAX 561-623-5481 WWW.EWCONSULTANTS.COM
	<b>MAR 2017</b> <b>FIGURE</b> <b>6A</b>

SIERRA RANCH 6-B PRESERVE SECTION





TYPICAL PRESERVE SIGN



LEGEND

- ← - - - MONITORING TRANSECT WITH PHOTO STATIONS AT EACH END
- X - MONITORING QUADRAT
- ⊗ - PRESERVE SIGN
- - - CONTINUOUS-READ MONITORING WELL



# SIERRA RANCH MONITORING MAP

SIERRA RANCH 05-2017.dwg MONITORING MAP 8.5x11



**EW CONSULTANTS, INC.**  
2581 METROCENTRE BLVD., SUITE 1  
WEST PALM BEACH, FL 33407  
561-291-7950 PHONE 561-530-4908 FAX  
WWW.EWCONSULTANTS.COM

**JUNE 2017**  
FIGURE  
**7**

The quality of the 69.2-acres of wetland is poor and has been highly impacted by exotic vegetation and altered hydrologic conditions resulting from previous agricultural uses and surrounding regional development.

So after careful consideration of wetland impact minimization and on-site mitigation options for this project, it was determined that the majority of the mitigation for wetland impacts will consist of on-site wetland enhancement and restoration. The restored areas will then be maintained and preserved in perpetuity.

**IX. MITIGATION PLAN**

As compensation for unavoidable direct wetland impacts, on-site wetland enhancement and restoration will occur within a 23.86-acre on-site area. Wetland impacts and mitigation for impacts occurring on-site were calculated using the Uniform Mitigation Assessment Method (UMAM) (See Attachments). The small deficit of mitigation will be compensated for at an off-site mitigation bank.

There will be 23.86 acres of wetlands that will be enhanced and restored on-site. This mitigation area will be excavated and graded to create herbaceous wetlands with higher areas of tree islands interspersed among the lower areas (Figures 6 and 6A). The proposed wetland enhancement and restoration involves reducing drainage and contouring the area to provide appropriate water levels for each habitat type. An appropriate hydroperiod within the wetland area will sustain native wetland plants and greatly increase the potential forage base for a variety of wetland dependent reptilian, amphibian, mammalian, and wading bird species. Avian perches and duck boxes will be incorporated also to promote avian utilization.

Habitat quality of the enhanced and restored wetland will be maintained by the removal of exotic and nuisance vegetation. After the wetland has been scraped down and contoured, the herbaceous portions of the wetland will be planted with appropriate native vegetation, two and a half feet on center. Tree islands will be planted with trees 10 feet on center and shrubs and grasses planted five feet on center. The plantings on the tree islands will be larger material to ensure diversity and survivability.

Planting Plan:

<u>Common Name</u>	<u>Species</u>	<u>Size</u>	<u>Density</u>	<u>Quantity</u>
<u>Marsh (elevation 1.0 to 2.0 NGVD) 17.4 acres</u>				
Pickerelweed	<i>Pontedaria cordata</i>	bare-root	3' oc	6,500
Duck potato	<i>Sagittaria latifolia</i>	bare-root	3' oc	6,000
Knotted spikerush	<i>Eleocharis interstincta</i>	bare-root	3' oc	12,000
Alligator flag	<i>Thalia geniculata</i>	bare-root	3' oc	6,000
Blue flag iris	<i>Iris virginica</i>	bare-root	3' oc	6,000
Beak rush	<i>Rhynchospora microcarpa</i>	bare-root	3' oc	6,000
Maidencane	<i>Panicum hemitomon</i>	bare-root	3' oc	8,000



Soft rush	<i>Juncus effuses</i>	bare-root	3' oc	12,000
Sawgrass	<i>Cladium jamaicense</i>	bare-root	3' oc	15,000
Soft stem bulrush	<i>Scirpus validus</i>	bare-root	3' oc	10,000
Giant bulrush	<i>Scirpus spp.</i>	bare-root	3' oc	10,000

Hydric Tree Islands (elevation 2.5 to 4.5 NGVD) 1.0 acre

Dahoon holly	<i>Ilex cassine</i>	10 gallon	10' oc	126
Red maple	<i>Acer rubrum</i>	10 gallon	10' oc	126
Red bay	<i>Persea borbonia</i>	7 gallon	10' oc	126
Pond apple	<i>Annona glabra</i>	7 gallon	10' oc	126
Wax myrtle	<i>Myrica cerifera</i>	3 gallon	5' oc	1,010
Coco plum	<i>Chrysobalanus icaco</i>	3 gallon	5' oc	1,010
Sand cordgrass	<i>Spartina bakeri</i>	1 gallon	3' oc	2,800
Fakahatchee grass	<i>Tripsacum floridanum</i>	1 gallon	3' oc	2,800

Transitional Buffer (elevation 3.5 to 7.0 NGVD) 1.0 acre

Slash pine	<i>Pinus elliottii</i>	10 gallon	10' oc	450
Cabbage palm	<i>Sabal palmetto</i>	10-12'	10' oc	160
Firebush	<i>Hamelia patens</i>	7 gallon	5' oc	815
Coco plum	<i>Chrysobalanus icaco</i>	3 gallon	5' oc	815
Wax myrtle	<i>Myrica cerifera</i>	3 gallon	5' oc	815
Sand cordgrass	<i>Spartina bakeri</i>	1 gallon	3' oc	3,390
Fakahatchee grass	<i>Tripsacum floridanum</i>	1 gallon	3' oc	3,390

The wetland mitigation area will be placed in a conservation easement. The preserve area will be posted with permanent signs and boundary markers. Boundary markers will be placed at the back of lots abutting the preserve area. Signs will be at least 11 x 14 inches in size and will be posted in conspicuous locations along the preserve area boundary, at a frequency of no less than one sign per 500 feet.

## X. MAINTENANCE AND MONITORING

The enhanced and restored wetland will be maintained in perpetuity and monitored for a period of five years. Quarterly and annual monitoring reports will include vegetation analysis along established transects, panoramic photographs and water level data.

Monitoring of the on-site mitigation area will ensure success of the mitigation activities. The survival rate of planted vegetation is expected to be maintained at least 80 percent. The vegetative coverage is expected to reach at least 80 percent areal coverage by the end of the second year monitoring period, with at least 40 percent coverage achieved in the first year. Maintenance will be conducted in perpetuity to ensure that the wetland is free of exotic vegetation (as currently defined by the Florida Exotic Pest Plan Council) immediately following a maintenance activity and that total coverage of exotic and nuisance plant species should constitute no more than 3 percent of the total preserve area between maintenance activities.



The preserve area will be posted with signage alerting adjacent property owners of the conservation status. Signs are depicted on the Mitigation Monitoring Plan Map. The property owner's association will be responsible for the maintenance and monitoring of the preserve area. Monitoring will occur in compliance with SFWMD and Broward County wetland monitoring guidelines with annual report for five years to SFWMD and quarterly reports for five years to Broward County to document wetland functional success. Upon completion of construction activities, a time zero baseline report will be filed. Anticipated transect and monitoring station locations are shown in Figure 7.

## XI. CONSTRUCTION SEQUENCE

Mitigation activities will occur commensurate with site construction activities. Site construction and mitigation activities will occur immediately upon permit issuance. A time zero baseline monitoring report will be submitted upon completion of all mitigation activities. Estimated dates for completion of these activities are as follows:

October 2017	Permit Issuance
December 2017	Recorded Conservation Easement and Financial Assurances Submitted
March 2018	Mitigation Area Grading complete, As-Builts Submitted
May 2018	Completion of Mitigation Activities and Planting
May 2018	Time Zero Monitoring Report to SFWMD, Broward, and ACOE
May 2019	First Annual Monitoring Report to SFWMD, Broward and ACOE
May 2020	Second Annual Monitoring Report to SFWMD, Broward and ACOE
May 2021	Third Annual Monitoring Report to SFWMD, Broward and ACOE
May 2022	Fourth Annual Monitoring Report to SFWMD, Broward and ACOE
May 2023	Fifth Annual Monitoring Report to SFWMD, Broward and ACOE

## XII. COST ESTIMATES

The estimated cost for mitigation activities including earthwork and grading, wetland enhancement, restoration and planting, buffer creation and planting, and required maintenance and monitoring is approximately \$718,744. The breakdown of these costs is as follows:

Description	Unit*	Quantity	Unit Cost	Estimated Cost
Wetland Earthwork / Scrape down	CY	116,644	\$ 3.50	\$ 408,254.00
Wetland Planting	AC	23.86	\$ 7,500	\$ 178,950.00
Wetland Maintenance	EA	20	\$ 2,500	\$ 50,000.00
Wetland Monitoring	EA	20	\$ 810	\$ 16,200.00
			Subtotal	\$ 653,404.00
			+10% =	<u>\$ 718,744.40</u>

**PROJECT: SIERRA RANCH**  
JUNE 9, 2016

---

anoxia and stratification can result in artificial water bodies excavated deeper than twenty (20) feet. As such, Broward County typically does not approve excavation proposed in excess of this depth. If the proposed lakes will exceed 20', please revise the proposed design accordingly, or provide detailed hydrologic information or evidence which addresses and alleviates this concern.

**Response: The applicant proposes the maximum lake depth to remain at 35' NGVD as noted on the plans. This depth is required to generate the necessary fill. The applicant has developed several other projects in Broward County with lakes of this depth. The lakes appear to be healthy and support wildlife typical of lake habitat. Examples are the Pembroke Isles and Silver Lakes developments, both in West Pembroke Pines. However, to help alleviate concern regarding anoxia or stratification, the applicant proposes an aerating fountain to be placed near the center of the lake.**

12. Provide a soil containment and handling plan for all excavated material. Please indicate the use of the dredged material, locations of staging areas for equipment, type of containment for the stockpiling/drying of dredged material and the locations of temporary and final disposal areas.

**Response: The dredged material will be used for fill of development areas on the property. The material will be staged temporarily in a location adjacent to the lake. Best management practices will be implemented during the short time that the material is stockpiled. These BMP's will include silt fences placed at perimeters of stockpile when not actively worked to ensure no sedimentation during rain events, and implementation of a dust control plan when necessary. Dust control measure may include wetting of the stockpile, or covering of the stockpile if it remains undisturbed for more than 14 days. Additionally, stockpiles will be located a minimum of 50' away from any surface waters, canals or drainage ditches.**

13. When all plans have been finalized, please submit at least one set of final project drawings signed and sealed by a professional engineer registered in the State of Florida (or provide a SHA-1 report).

**Response: No changes are proposed to the project Engineering Plans at this time. Upon review of our responses above, if any changes are required such as the addition of a fountain in the lake, then we will make changes and submit final signed/scaled drawings.**

We believe that the above information addresses the relevant questions and concerns and we look forward to working with you for processing of this permit.

Sincerely,  
EW Consultants, Inc.



Mary Lindgren  
Environmental Project Manager

cc: Alejandro Delfino, Home Dynamics Corporation



UMAM SUMMARY

Impacts	FLUCFCS	Wetland Type (for Mitigation)	Location and			Water			Community			Acres	Functional Loss	Total Impact Acres	Wetland Acres Provided	Upland Acres Provided	
			Landscape Support			Environment			Structure								
			before		after	before		after	before		after						
Exotic Hardwoods	619	Exotic Hardwoods	3		0	2		0	1		0	31.5	6.30				
Marsh	641	Freshwater Marsh	3		0	2		0	2		0	3.7	0.86	35.2	23.86	0	
<div style="display: flex; justify-content: space-between;"> <div>Functional Loss <b>7.163</b></div> <div>Gain Units <b>7.175</b></div> </div>																	
Mitigation (select type)	FLUCFCS		Location and			Water			Community			Time Lag	Risk Factor	Preservation Adjustment Factor	Relative Functional Gain	Acres Provided	Functional Gain Units
			Landscape Support			Environment			Structure								
			before		after	before		after	before		after						
Marsh Enhancement	641	Marsh	3		5	2		8	1		8	1.14	1.5	n/a	0.29	14.65	4.28
Hydric Tree Island Enhancement	617	Tree Island	3		6	2		8	2		8	1.25	1.5	n/a	0.27	0.98	0.26
Marsh Restoration	641	Marsh	0		5	0		8	0		8	1.14	1.5	n/a	0.41	2.55	1.05
Transitional Buffer Restoration	643	Transitional	0		5	0		8	0		8	1.25	1.5	n/a	0.37	1.01	0.38
Open Water Enhancement	560	Open Water	3		5	2		8	2		5	1.14	1.25	na	0.26	4.67	1.21
<div style="display: flex; justify-content: space-between;"> <div>Acres Provided: 23.86</div> </div>																	

**Mitigation Bank Wetland Function Evaluation Matrix**

Project: Sierra Ranch

Reviewer: EW Consultants Inc.  
Date: 5/10/2017

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews  
Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from  
EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Dade County

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon
			619						
<b>1. Fish &amp; Wildlife Functions Apply to freshwater, saltwater, brackish and mitigation systems</b>									
a. Waterfowl, wading birds, wetland dependent, or aquatic birds of prey. (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	0.5						
	3-6 species commonly observed	2							
	1-2 species commonly observed	1							
	0 species commonly observed	0							
b. Fish (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	0						
	3-6 species commonly observed	2							
	1-2 species commonly observed	1							
	0 species commonly observed	0							
c. Mammals (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Top predator (carnivore) &/or large mammals	3	0.5						
	Medium sized mammals (adult weight > 6 lbs.)	2							
	Small animals (rodents, etc.) (adult weight < 6 lbs.)	1							
	0 species present	0							
d. Aquatic macroinvertebrates, amphibians (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	7 or more species commonly observed	3	0.5						
	3-6 species commonly observed	2							
	1-2 species commonly observed	1							
	0 species commonly observed	0							
e. Aquatic reptiles (Mit. Bank - High specie count w/ low pop. #'s score 1 Restoration that causes 12% pop. Increases-higher score)	Large species observed	3	1						
	Aquatic turtles	2							
	Snakes & lizards	1							
	No evidence of species present	0							



### Mitigation Bank Wetland Function Evaluation Matrix

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Parameter/ Function	Scoring Criteria	Ratings	Polygon	Polygon	Polygon	Polygon
			619			
<b>2. Vegetative Functions Apply to freshwater, saltwater, brackish and mitigation systems</b>						
a. Overstory/shrub canopy	Desirable trees/shrub healthy & providing appropriate habitat (seedlings present) & no inappropriate species	3				
	Desirable trees/shrubs exhibit signs of stress (no seedlings) few inappropriate species present	2				
	Inappropriate trees/shrubs shading or overcoming desirable trees/shrubs	1				
	Very little or no desirable trees/shrubs present (evidence suggests there should be)	0	0.5			
b. Vegetative ground cover	Assessment area exhibits <2% inappropriate herbaceous ground cover for specific wetland systems and groundcover is present	3				
	Assessment area contains >2% but <30% inappropriate herbaceous groundcover, or lack of groundcover >2% but < 30%	2				
	Assessment area contains >30% to <70% inappropriate herbaceous groundcover, or lack of ground cover >30% to <70%	1				
	Assessment area >70% inappropriate herbaceous groundcover or lack of groundcover >70%	0	1			
c. Periphyton mat coverage	Periphyton (Blue-green algae) present with average mat thickness >1 1/4 in. (measure active & dead layer)	3				
	Periphyton (Blue-green algae) present with average mat thickness between 3/4 in. to 1 1/4 in. (active & dead layer)	2				
	Periphyton (Blue-green algae) present with average mat thickness between 1/4 in. to 3/4 in. (active & dead layer)	1				
	Periphyton (Blue-green algae) not present or if present with average thickness of 0.0 to 1/4 in. (active & dead layer)	0	0.5			
d. Category 1 and Category 2 exotic plants or (non-native) species	< (or = to) 1 % exotic plant cover	3				
	>1 % to 10 % exotic plant cover	2				
	>10 % to 65 % exotic plant cover	1				
	> 65 % exotic plant cover	0	0.5			
e. Habitat diversity (vegetative) <i>(within assessment area)</i>	>3 native species communities on site within assessment area	3				
	2 or 3 native species communities on site within assessment area	2				
	1 native species community with 75 % to 90 % coverage within assessment area	1				
	1 native species community has > 90 % coverage within assessment area	0	0.5			
f. Biological diversity within 3000 feet <i>(approximately 1/2 mile from edge of assessment area)</i>	> 3 alternative habitats available (including upland)	3				
	2 to 3 alternative habitats	2				
	1 alternative habitat	1				
	Same habitat type, or inappropriate / impacted	0	0			

### Mitigation Bank Wetland Function Evaluation Matrix

Project: Sierra Ranch

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Date: 5/10/2017

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon
			619						
<b>3. Hydrologic Functions</b>									
a. Surface water hydrology / sheet flow <i>Apply to freshwater, saltwater, brackish and mitigation systems</i>	Major connection (Flowing water/ river or floodplain/ uniform flow through natural systems)	3							
	Moderate connection ( Natural restriction of flow or Flowing water due to hydrologic engineering)	2							
	Minor connection (Runoff collection point, or uneven flow due to berms, ditches, roadways etc.)	1							
	Hydrologically isolated, no net lateral movement	0	0.5						
b. Hydroperiod (normal year) fresh systems	> 8 months inundated with no reversals & every year drydown	3							
	>5 months < 8 months or >5 years continuous inundation (look for strong water stains on persistent vegetation)	2							
	>1 month < 5 months, with possible reversals (look for soft or less distinct water stains on persistent vegetation)	1							
	< 4 weeks cumulative annual inundation or < 2 weeks continuous inundation	0	1						
b-1 Alternate to b. for Short Hydroperiod (normal year) fresh systems:	>10 weeks of continuous inundation including soil saturation	3							
	> 6 weeks but <10 weeks of continuous inundation including soil saturation	2							
	>2 weeks but <6 weeks of inundation, including soil saturation	1							
	<2 weeks of continuous inundation	0							
b-2 Alternate to b. for Saltwater, brackish (tidal) systems	Inundated by >90% high tides	3							
	Inundated by "spring" high tides (bi-monthly)	2							
	Inundated by "extreme high" tides only (biannually)	1							
	Inundated by storm surges only	0							
b-3 Alternate to b. for High Marsh (Juncus-Distichlis)	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 10 days average	3							
	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 30 days on the average	2							
	Inundated by high "spring" tides (monthly) and exposed to rain only	1							
	Inundated by >50% high tides and exposed to rain only	0							
b-4 Alternate to b. for Riverine systems	Inundated by high tides (daily) and/or recieves and maintains fresh water at least into first half of dry season	3							
	Inundated by high tides (daily) and/or recieves and maintains fresh water during rainy season only	2							
	Inundated by high tides (daily) and/or recieves fresh water but does not maintain (reversal) during rainy season	1							
	Inundated by spring tides (bi-monthly) and/or experiences frequent reversals of fresh water (flashy)	0							



### Mitigation Bank Wetland Function Evaluation Matrix

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Reviewer: EW Consultants Inc.  
Date: 5/10/2017

Parameter/ Function	Scoring Criteria	Ratings	Polygon	Polygon	Polygon	Polygon	Polygon	Polygon
			619					
<b>3. Hydrologic Functions continued</b>								
c. Hydropattern (fresh system)	>1 ft. water depth for at least 2.5 months and <6 in. for >1 month (measure water mark/ lichen line), or water depth ideal for specific wetland system.	3						
	>6 in to 1 ft. for at least 2.5 months (measure water mark/ lichen line) or water depth borderline over or under for specific wetland system	2						
	<6 in. for at least 2.5 months (measure water mark/ lichen line) or water depth incorrect for specific wetland system	1						
	<6 in. in association with either canals, ditches, swales, culverts, pumps, and/or wellfields, or these factors cause water depth to be too deep for specific system.	0	1					
c-1 Alternate to c. for Saltwater, brackish (tidal) systems	>1 ft. water depth <2 ft. on 90% high tides	3						
	> 6 in. water depth <1 ft. on >50% high tides	2						
	<6 in. water depth - but -> then saturated	1						
	Saturated by saline water table only	0						
c-2 Alternate to c. for High Marsh (Juncus-Distichlis)	>10 in. water depth <2 ft. on regular basis during growing season	3						
	>5 in. to 10in. water depth on regular basis during growing season	2						
	>1 in. to 5 in. water depth on regular basis during growing season	1						
	>0.0 in. to 1 in. water depth sporadically during growing season	0						
c-3 Alternate to c. for Riverine systems	>2 ft. water depth (main channel) <6 ft. for 8 months	3						
	>2 ft. water depth (main channel) <4 ft. for 6 months	2						
	>1 ft. water depth (main channel) <2.5 ft. for 4 months	1						
	<1 ft. water depth, but dry for >4 weeks (dry season)	0						

**Mitigation Bank Wetland Function Evaluation Matrix**

Project: Sierra Ranch

W.A.T.E.R. - Wetland Assessment Technique for Environmental Reviews  
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Reviewer: EW Consultants Inc.  
Date: 5/10/2017

Parameter/ Function	Scoring Criteria	Ratings	Polygon		Polygon		Polygon		Polygon
			619						
<b>3. Hydrologic Functions continued</b>									
d. Water Quality	No indication of poor water quality (lab testing required, all values within acceptable range)	3	1						
	No visual indicators of poor water quality observed (1 value just over or under acceptable range)	2							
	Visual indicators of poor water quality questionable (2 values over or under acceptable range)	1							
	Visual indicators of poor water quality observed or lab verified (values are out of acceptable range)	0							
e. Intactness of historic topography (soil disturbance)	Unaltered	3	0						
	Slightly altered soil disturbance, < 10% of assessment area	2							
	Moderately altered soil disturbance, < 25% of assessment area	1							
	Extremely altered soil disturbance, may exceed 50% of assessment area	0							
f. Soils, organic (fresh systems)	Organic soil classified hydric soil >12 in. or any thickness over bedrock/caprock with perched water table and either condition covering >90% of surface area	3	2						
	Organic soil classified hydric soil >6 in. but <12 in. and covering >50% of surface area	2							
	Organic soil classified hydric soil >1 in. but <6 in. and covering >50% but <90% of surface area	1							
	Organic soil classified non-hydric soil <1 in. for >50% of surface area	0							
f-1 Alternate to f. for Freshwater, saltwater systems	Sandy soil classified hydric soil with distinct mottling and concretions present in greater than 40% of horizon.	3							
	Sandy soil classified hydric soil with mottling and concretions present in > 20% but < 40% of horizon.	2							
	Sandy soil classified hydric soil with light or sparse mottling and concretions < 2 mm diameter or < 20% of horizon.	1							
	Sandy soil exhibits strong evidence of disturbance or mechanical manipulations or is fill material.	0							
f-2 Alternate to f. for Freshwater, saltwater, brackish (tidal) systems	Calcareous loam >12 in. and >90 % of surface area	3							
	Calcareous loam >6 in. to <12 in. and >90% of surface area	2							
	Calcareous loam >1 in. to <6 in. and covering >50% but <90% of surface area	1							
	Calcareous loam <1 in. for >50% of surface area	0							



### Mitigation Bank Wetland Function Evaluation Matrix

Project: Sierra Ranch

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Date: 5/10/2017

Parameter/ Function	Scoring Criteria	Ratings	Polygon	Polygon	Polygon	Polygon
			619			
<b>4. Salinity Parameters Apply to freshwater, saltwater, brackish, hypersaline and mitigation systems - Choose 1</b>						
a. Optimum salinity for fresh systems during growing season based on mean high salinity for a normal year. <i>Apply to freshwater systems within 5 miles of the coast</i>	<2 parts per thousand (ppt)	3	NA			
	2 to 3 parts per thousand (ppt)	2				
	4 to 5 parts per thousand (ppt)	1				
	>5 parts per thousand (ppt)	0				
a-1. Alternate to a. Optimum salinity for brackish systems during growing season based on mean high salinity for a normal year. <i>Apply to brackish (tidal) systems only</i>	6 to 8 parts per thousand (ppt)	3				
	9 to 13 parts per thousand (ppt)	2				
	14 to 16 parts per thousand (ppt)	1				
	>16 parts per thousand (ppt)	0				
a-2. Alternate to a. Optimum salinity for saline systems during growing season based on mean high salinity for a normal year. <i>Apply to saline marsh (tidal) systems only</i>	17 to 19 parts per thousand (ppt)	3				
	20 to 22 parts per thousand (ppt)	2				
	23 to 25 parts per thousand (ppt)	1				
	>25 parts per thousand (ppt)	0				
a-3. Alternate to a. Optimum salinity for hypersaline systems during growing season based on mean high salinity for a normal year. <i>Apply to hypersaline (tidal) systems only</i>	26 to 41 parts per thousand (ppt)	3				
	42 to 46 parts per thousand (ppt)	2				
	47 to 51 parts per thousand (ppt)	1				
	>51 parts per thousand (ppt)	0				
a-4 Alternate to a. Optimum salinity for riverine/tidal creek system during growing season based on mean high salinity for a normal year. <i>Apply to riverine systems only</i>	bottom (lower) third between 12 to 25 ppt	3				
	middle third between 5 to 11 ppt.					
	upper (top) third between 0 to 4 ppt.					
	bottom (lower) third between 25 to 32 ppt	2				
	middle third between 6 to 24 ppt.					
	upper (top) third between 0 to 5 ppt.					
	bottom (lower) third between 30 to 40 ppt	1				
	middle third between 8 to 29 ppt.					
	upper (top) third between 0 to 7 ppt.					
	bottom (lower) third between 35 to 50 ppt	0				
middle third between 10 to 34 ppt.						
upper (top) third between 0 to 9 ppt.						

W.A.T.E.R. created by: Bill L. Maus  
11/1/1998

Cumulative Score (S.C)	11	0	0	0
Maximum Possible Score (MPS)	51.00	0.00	0.00	0.00
W.A.T.E.R. = Cumulative Score/Maximum Possible Score	0.22			

### SIERRA RANCH - WATER Summary

	<u>WATER Score</u>		<u>SSM</u>		<u>Acres of Impact</u>		<u>Mitigation Credits</u>
619 Exotic Wetland Hardwoods	0.22	x	1	x	13.7	=	3.01
						=	
					Total		3.01

\*SSM Not Applicable for Impact Site





**EVERGLADES**  
MITIGATION BANK

August 18, 2017

HD Sierra Ranch, LLC  
4755 Technology Way, Suite 210  
Boca Raton, FL 33431  
Attn: David Schack, Director

**Re: Everglades Mitigation Bank Credit Reservation:  
U. S. Army Corps of Engineers Permit Number SAJ-2004-01305,  
South Florida Water Management District Permit Application Number  
141223-14, Broward County Environmental Protection and Growth  
Management Department Permit Number DF15-1259**

Please be advised that the Everglades Mitigation Bank (the "EMB") has reserved 10.86 Freshwater Herbaceous mitigation credits necessary to offset the unavoidable wetland impact for the above referenced project. Phase I of the EMB has a signed Mitigation Banking Instrument acknowledged by both FDEP and USACE and sufficient credits are currently available on the EMB ledger to offset the proposed impacts. **The EMB acknowledges receiving a deposit for the above referenced credits.**

Please contact me at 561-694-6388 for any additional information or questions regarding this matter.

Regards,

A handwritten signature in blue ink, appearing to read 'Joseph R. Sicbaldi', is written over a light blue circular scribble.

Joseph R. Sicbaldi  
Everglades Mitigation Bank