

ENVIRONMENTAL PERMITTING DIVISION

1 North University Drive, Mailbox 201, Plantation, Florida 33324 • 954-519-1483 • FAX 954-519-1412

May 21, 2025

City of Hollywood c/o Jose Cartes PO Box 229045 Hollywood, Florida 33022 E-mail: jcortes@hollywoodfl.org

To Whom It May Concern:

This is to notify you of the Resilient Environment Department's (RED) action concerning your applications received January 2, 2024. The applications have been reviewed for Environmental Resource Permit and Broward County Environmental Resource License.

Florida Department of Environmental Protection (DEP) Environmental Resource Permit – Granted

RED has the authority to review the project for compliance with Rule 62-330 and Chapter 373 of the Florida Administrative Code pursuant to an agreement between RED, DEP, and the South Florida Water Management District. The agreement is outlined in a document entitled "Delegation Agreement among the Florida Department of Environmental Protection, the South Florida Water Management District, and Broward County". Based on the information submitted, Environmental Resource Individual Permit No. **06-0454383-002** is hereby issued.

Broward County Environmental Resource License Review - Granted

RED 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. **DF24-1003** is hereby issued.

The above named permittee/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 FDEP General Conditions, Broward County General Conditions, combined FDEP and Broward County Specific Conditions, and attached exhibits.

Should you wish to object to the Agency action or file a petition, please provide written objections, petitions and/or waivers within ten (10) days from the rendition of the action (refer to the attached "Variance and Administrative Review Procedures", Chapter 27 -10 through 27-14) to Director, EPD, 1 North University Drive Plantation, FL 33324. The "Notice of Rights" addresses the procedures to be followed if you desire a public hearing or review of the Agency's action.

Sincerely,

Linda Sunderland

Linda Sunderland, PWS Environmental Program Supervisor Environmental Permitting Division May 21, 2025

Enclosures:

County Environmental Resource License/State EI Environmental Resource Permit One copy of stamped drawings (55 pages)
Broward County RED Variance and Administrative Review Procedures
Standard Manatee Conditions for In-Water Work, 2011, 2 pages
Florida EPPC's 2015 Invasive Plant Species List, 6 pages, can be downloaded at http://www.fleppc.org/list/2015FLEPPCLIST-LARGEFORMAT-FINAL.pdf

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Permittee/Licensee: City of Hollywood - Hollywood Tidal Flood Mitigation and Shoreline Protection (Sites 9, 10, 17, & 19)

Permit No.: 06-0454383-002 ERL No.: DF24-1003



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Permittee/Authorized Entity:

City of Hollywood c/o Jose Cortes PO Box 229045 Hollywood, FL 33022

Email: jcortes@hollywoodfl.org

Project Name:

Hollywood Tidal Flood Mitigation and Shoreline Protection (Sites 9, 10, 17, & 19)

Authorized Agent:

Cummins Cederberg c/o Francesca Fourney

Phone: (954) 859-2921; Email: ffourney@cumminscederberg.com

Compliance Project Manager:

Linda Sunderland, Environmental Program Supervisor Phone: (954) 591-1454; Email: <u>LSunderland@Broward.org</u>

Environmental Resource Permit (ERP) - Granted
State-owned Submerged Lands Authorization – Not Required
U.S. Army Corps of Engineers Authorization – Separate Corps Authorization Required

State of Florida ERP No.: 06-0454383-002 Broward County ERL No.: DF24-1003

ERP Issuance Date: May 21, 2025

ERP Construction Phase Expiration Date: May 21, 2030

Environmental Resource License Expiration Date: May 21, 2030

STATE ENVIRONMENTAL RESOURCE INDIVIDUAL PERMIT and COUNTY ENVIRONMENTAL RESOURCE LICENSE

PROJECT DESCRIPTION

This project involves the installation of 4,302-linear feet of new seawall and environmental enhancements at multiple locations.

The scope of work at Site 9 involves: (1) removal of access docks and (2) installation of a new 548.8-linear foot sheet pile seawall; and (3) the creation of a 2600 square foot mangrove planter and 446 square foot cordgrass planter using revetment, fill, Armor Stone, and Bedding Stone. Approximately 103 square feet of mangroves will be altered to conduct the noted work.

The scope of work at Site 10 involves: (1) removal of access docks; (2) installation of a new 1518.8-linear foot sheet pile seawall; (3) the use of riprap in front of a portion of the seawall for scour protection; and (4) the creation of nine cordgrass planters using revetment, fill, Armor Stone, and Bedding Stone. Approximately 56 square feet of mangroves and 17.5 square feet of seagrasses will be altered to conduct the noted work.

The scope of work at Site 17 involves: (1) removal of access docks; and (2) installation of a new 885.3-linear foot sheet pile seawall. Approximately 3717 square feet of mangroves will be altered to conduct the noted work.

The scope of work at Site 19 involves: (1) removal of access docks; and (2) installation of a new 1,349.7-linear foot sheet pile seawall. Approximately 668.4 square feet of mangroves will be altered to conduct the noted work.

Total Mangrove Impacts

SITE	AREA of Proposed Impacts
Site 9	103 sq ft
Site 10	56 sq ft
Site 17	3717 sq ft
Site 19	668.4 sq ft
TOTAL IMPACTS	4542.3

Unavoidable impacts to 4342 square feet of mangrove wetlands shall be offset through the purchase of 0.03 saltwater mitigation credits calculated with WATER scores from the FPL/Everglades Mitigation Bank (EMB). The 17.5 square foot seagrass area impacts will be considered de minimis, therefor not requiring any additional mitigation. This license does not authorize impacts to any surface waters or other natural resources not described herein.

PROJECT LOCATION

This project is located at the following locations in the City of Hollywood – listed from North to South:

Site 19, North Lake Drive: 514214026150, 514214024070 Site 9, S North Lake Drive: 514214026160, 514214024070

Site 10, N South Lake Drive: 514214020000, 514214024900, 514214026190 Site 17, S South Lake Drive: 514214024910, 514214024900, 514214026200

Construction shall be in accordance with the ERL and ERP applications received on January 2, 2024, all additional information submitted, plans stamped by the Department (attached) and with all General and Specific Conditions of this license.

AUTHORIZATIONS

Environmental Resource Permit

The Department has determined that the activity qualifies for an Environmental Resource Permit. Therefore, the Environmental Resource Permit is hereby granted, pursuant to Part IV of Chapter 373, Florida Statutes (F.S.), and Chapter 62-330, Florida Administrative Code (F.A.C.).

Sovereignty Submerged Lands Authorization

As staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees), the Department has determined the activity is not on submerged lands owned by the State of Florida. Therefore, your project is not subject to the requirements of Chapter 253, F.S., or Rule 18-21, F.A.C.

Federal Authorization

Your proposed activity as outlined on your application and attached drawings does not qualify for Federal authorization pursuant to the State Programmatic General Permit and a SEPARATE permit or authorization shall be required from the Corps. You must apply separately to the Corps using the appropriate federal application form (ENG 4345). More information about Corps permitting may be found online in the Jacksonville District Regulatory Division Sourcebook.

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection, or Duly Authorized Designee, State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Coastal Zone Management

Issuance of this authorization also constitutes a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Zone Management Act.

Water Quality Certification

This permit also constitutes a water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. 1341.

Other Authorizations

You are advised that authorizations or permits for this activity may be required by other federal, state, regional, or local entities including but not limited to local governments or municipalities. This permit does not relieve you from the requirements to obtain all other required permits or authorizations.

The activity described may be conducted only in accordance with the terms, conditions and attachments contained in this document. Issuance and granting of the permit and authorizations herein do not infer, nor guarantee, nor imply that future permits, authorizations, or modifications will be granted by the Department.

PERMIT

The activities described must be conducted in accordance with:

- ERP Specific Conditions
- ERP General Conditions
- RED General Conditions
- RED Specific Conditions
- The limits, conditions and locations of work shown in the attached drawings
- The term limits of this authorization

You are advised to read and understand these conditions and drawings prior to beginning the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings herein. If you are

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using a contractor, the contractor also should read and understand these conditions and drawings prior to beginning any activity. Failure to comply with these conditions, including any mitigation requirements, shall be grounds for the Department to revoke the permit and authorization and to take appropriate enforcement action.

Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and this permit, as described.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SPECIFIC CONDITIONS

PROJECT FORMS & ATTACHMENTS

- (1) The attached project drawings; the Standard Manatee Conditions for In-Water Work, 2011, which can be downloaded at can be downloaded at https://www.fws.gov/northflorida/Manatee/Manate_Key_Programmatic/20130425_gd_Appendixx%20B_2011_Standard%20Manatee%20Construction%20Conditions.pdf; and DEP forms 62-330.310(3), 62-330.310(1); 62-330.310(2); 62-330.340(1); and 62-330.350(1), which may be downloaded at http://www.dep.state.fl.us/water/wetlands/erp/forms.htm become part of this permit. If the permittee does not have access to the Internet, please contact Broward County at (954) 519-1205 to request the aforementioned forms and/or document(s).
- (2) If the attached permit drawings conflict with the specific conditions, then the specific conditions shall prevail.

PRIOR TO CONSTRUCTION

- (3) After selection of the contractor to perform the authorized activities and prior to the initiation of any work authorized by this permit, the permittee (or authorized agent) and the contractor shall attend a pre-construction conference with a representative of the County; Please contact the aquatic and wetland group at <u>AWRLicense@Broward.org</u> or at (954)519-1454.
- (4) The permittee shall ensure that the permit conditions are explained to all construction personnel working on the project and for providing each contractor and subcontractor with a copy of this permit before the authorized work begins.

CONSTRUCTION ACTIVITIES

- (5) Prior to the initiation of any work authorized by this permit, floating turbidity curtains with weighted skirts that extend to within one foot of the bottom shall be placed around the project site (i.e. dredge area and return water discharge point), and shall be maintained and remain in place for the duration of the project construction to ensure that turbid discharges do not occur outside the boundaries of the floating turbidity screens.
- (6) All areas to be dredged shall be in accordance with the attached permit drawings and shall not exceed the areas and depths indicated on those drawings.
- (7) The dredge material shall be mechanically dredged and deposited directly on a fully-contained spoil disposal cell upon a barge, then transported to an approved upland disposal location.
- (8) There shall be no storage or stockpiling of tools, debris, and/or materials along the shoreline adjacent to waters of the state. All excess construction related materials and any other type of debris shall be removed from waters of the state within 14 days of completion of the work authorized in this permit. All construction equipment/tools and materials shall be transported to and from the site, as well as stored, on the construction barge.
- (9) Riprap shall consist of unconsolidated boulders, rocks, or clean concrete rubble without exposed reinforcing rods or similar protrusions. The riprap shall be free of sediment, debris, and toxic or otherwise deleterious substance. The riprap shall have a diameter of 12 to 36 inches. (7) The slope of the riprap shall

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be no steeper than 2H:1V (horizontal:vertical). The riprap shall extend no more than 8 feet waterward from the wetface of the seawall.

MONITORING/REPORTING REQUIREMENTS

- (10) Turbidity levels outside the construction area shall not exceed 29 NTU's above background levels. The following measures shall be taken immediately by the permittee whenever turbidity levels within waters of the State surrounding the project site exceed 29 NTUs above background:
 - (a) Notify the County at (954) 519-1454 at the time the violation is first detected.
 - (b) Immediately cease all work contributing to the water quality violation.
 - (c) Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation, install more turbidity containment devices, and repair any non-functional turbidity containment devices.
 - (d) As required, perform turbidity monitoring per Specific Conditions.
 - (e) Resume construction activities once turbidity levels outside turbidity curtains fall below 29 NTUs
- (11) Turbidity Monitoring: Water turbidity levels shall be monitored if a turbidity plume is observed outside the limits of the required turbidity control devices. Samples shall be taken every four hours, one foot above the bottom, mid-depth, and one-foot below the surface at monitoring stations located as follows:
 - (a) Approximately 100 feet up-current of the work sites and clearly outside the influence of construction activities. (This shall serve as the natural background sample against which other turbidity readings shall be compared.)
 - (b) Directly outside the turbidity curtains surrounding the work sites and within the densest portion of any visible turbidity plume. (This sample shall serve as the compliance sample.)
- (12) Turbidity Monitoring Reports. During dredging activities, the permittee or permittee's contractor shall collect the following turbidity monitoring data at the frequency and water depths directed by Specific Condition 11:
 - (a) Date and time of sampling event
 - (b) Turbidity sampling results (background NTUs, compliance NTUs, and the difference between them)
 - (c) Description of data collection methods
 - (d) An aerial map indicating the sampling locations
 - (e) Depth of sample(s)
 - (f) Weather conditions at times of sampling
 - (g) Tidal stage and direction of flow

Data shall be collected in a turbidity log and shall include a statement by the individual responsible for implementation of the sampling program attesting to the authenticity, precision, limits of detection, and accuracy of the data. The turbidity log shall be scanned and sent on a weekly basis to the Department's Compliance Project Manager, Linda Sunderland, by email at AWRLicense@broward.org. The subject line of the email shall include the project name, permit number, and the title "Turbidity Monitoring Reports."

MANATEE CONDITIONS

(13) The Standard Manatee Construction Conditions for In-water Work (2011) must be followed for all in-water activity.

LISTED SPECIES

(16) This permit does not authorize the permittee to cause any adverse impact to or "take" of state listed species and other regulated species of fish and wildlife. Compliance with state laws regulating the take of fish and wildlife is the responsibility of the owner or applicant associated with this project. Please refer to Chapter 68A-27 of the

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Florida Administrative Code for definitions of "take" and a list of fish and wildlife species. If listed species are observed onsite, FWC staff are available to provide decision support information or assist in obtaining the appropriate FWC permits. Most marine endangered and threatened species are statutorily protected and a "take" permit cannot be issued. Requests for further information or review can be sent to FWCConservationPlanningServices@MyFWC.com.

ERP GENERAL CONDITIONS FOR INDIVIDUAL PERMITS

The following general conditions are binding on all individual permits issued under chapter 62-330, F.A.C., except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate project-specific conditions.

- (1) All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C. Any deviations that are not so authorized may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- (2) A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
- (3) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), which are both incorporated by reference in subparagraph 62-330.050(9)(b)5., F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
- (4) At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice," [October 1, 2013], which is incorporated by reference in paragraph 62-330.350(1)(d), F.A.C., indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.
- (5) Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
- (6) Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
 - (a) For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
 - (b) For all other activities "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
 - (c) If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

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- (7) If the final operation and maintenance entity is a third party:
 - (a) Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as-built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
 - (b) Within 30 days of submittal of the as-built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
- (8) The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
- (9) This permit does not:
 - (a) Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
 - (b) Convey to the permittee or create in the permittee any interest in real property;
 - (c) Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
 - (d) Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
- (10) Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
- (11) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
- (12) The permittee shall notify the Agency in writing:
 - (a) Immediately if any previously submitted information is discovered to be inaccurate; and
 - (b) Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
- (13) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
- (14) If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review

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Permit No.: 06-0454383-002 ERL No.: DF24-1003 Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

- (15) Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
- (16) The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
- (17) This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
- (18) A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

RED GENERAL CONDITIONS:

- (1) The terms, conditions, requirements, limitations and restrictions set forth herein are accepted by the licensee and enforceable by RED pursuant to this chapter. RED 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 RED.
- (3) In the event the licensee is temporarily unable to comply with any of the conditions of the license, the licensee shall notify RED within twelve (12) hours. Within five (5) working days of the event, the licensee shall submit a written report to RED 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 RED, may be used by RED as evidence in any enforcement proceeding arising under Chapter 27, except where such use is prohibited by § 403.111, F.S.
- (7) The licensee agrees to comply with Chapter 27, 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

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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 RED personnel for the purposes of inspection and testing to determine compliance with this license and this Chapter 27.
- (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 RED shall contain specific conditions determined by site conditions and requirements pursuant to the regulations as determined by the director of RED. The licensee agrees that specific conditions are enforceable by RED for any violation thereof.
- (13) Enforcement of the terms and provisions of this license shall be at the reasonable discretion of RED, and any forbearance on behalf of RED 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 RED's rights hereunder.

RED SPECIFIC CONDITIONS:

A. STANDARD CONDITIONS

- (1) Notify the Development and Environmental Regulation Division in writing (Fax: 954/519-1412, or email) a minimum of 48 hours prior to project commencement and a maximum of 48 hours after project completion. The notification shall include the name of the contractor authorized to perform the licensed activities. Failure to comply with this condition will result in enforcement action.
- (2) Any project caused environmental problem(s) shall be reported immediately to the Resilient Environment Department 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) All watercraft associated with the construction and use of the permitted structure shall only operate within waters of sufficient depth so as to preclude bottom scouring or prop dredging. Specifically, there shall be a minimum 12-inch clearance between the deepest draft of the vessel (with the motor in the down position) and the top of any submerged resources or canal bottom at mean low water.
- (5) Turbidity screens, silt fences, or equivalent shall be properly employed and maintained as necessary to effectively contain suspended sediments 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.
- (6) 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 NTUs above natural background 50 feet downstream of the point of discharge, project activities shall immediately cease, and work shall not resume

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until turbidity levels drop to within these limits [62-302.530(69) FAC].

(7) 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) No dredging is authorized by this license.
- (2) If the approved license drawings and/or license attachments/plans conflict with the specific conditions, then the specific conditions shall prevail.
- (3) Demolition and construction related debris must be disposed of at an approved upland location and may not be left in the waterway.
- (4) 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.

C. SEAGRASS CONDITIONS

- (1) To minimize impacts to seagrasses from construction-related activities, pile driving shall be the method used to install all pilings.
- (2) No permanent mooring of vessels will occur over seagrasses unless the water depth is three (3) feet or greater at mean low water.

D. MANGROVE CONDITIONS

- (1) Adjacent wetland areas shall be protected from construction activities and construction-related runoff through the use of siltation screening and/or haybales around the perimeter of the scrapedown area adjacent to wetlands. The erosion protection devices shall be placed before the initiation of any other ground-disturbing activities and shall remain in place until all ground disturbing activities within the project have concluded, and the site has stabilized, at which time the screening or haybales shall be removed completely from the site.
- (2) Spoil generated from the excavation authorized by this license must be placed on the upland portion of the site and must be contained in such a manner as to prevent erosion into the adjacent mangrove wetlands or other surface waters.

E. TURBIDITY CONDITIONS

- (1) All watercraft associated with the proposed work and/or use of the permitted structure shall only operate within waters of sufficient depth to preclude bottom scouring or prop dredging.
- (2) The contractor shall be responsible to have functional turbidity monitoring equipment on site during all construction activities and shall be responsible for training construction personnel in its calibration, operation, and related license requirements.
- (3) Return water containment booms shall not be removed until the turbidity levels in the containment area drop below the above referenced 29 NTU threshold.
- (4) If a visible turbidity plume is observed leaving the site at any time, the licensee shall:

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Permit No.: 06-0454383-002 ERL No.: DF24-1003

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- (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 RED 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.
- (5) Turbidity screens, booms, curtains, or equivalent shall be affixed, anchored, or weighted to the existing seawall (not attached to the barge) 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 waterway.
- (6) 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.
- (7) Turbidity curtains shall be deployed to effectively encapsulate the work area without impeding navigation in public waterways.

F. SEAWALL CONDITIONS

- (1) No dredging other than that required for proper installation of the proposed seawall paneling is authorized by this license.
- (2) Backfill material shall be clean fill as defined by Section 27-332 of Broward County Code of Ordinances.

G. STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

- (1) All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The licensee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- (2) All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- (3) Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- (4) All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shut down if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- (5) Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com

Permittee/Licensee: City of Hollywood - Hollywood Tidal Flood Mitigation and Shoreline Protection (Sites 9, 10, 17, & 19)

Permit No.: 06-0454383-002 ERL No.: DF24-1003 (6) Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the licensee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads Caution: Boaters must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut-down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

H. STANDARD SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS

- (1) The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- (2) The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- (3) Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- (4) All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- (5) If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- (6) Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- (7) Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

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

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

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Permit No.: 06-0454383-002 ERL No.: DF24-1003

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Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rule 28-106.201, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any email address, any facsimile number, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
- (c) A statement of when and how the petitioner received notice of the agency decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275,

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F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when this order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

Executed in Plantation, Florida.

BROWARD COUNTY RESILIENT ENVIRONMENT DEPARTMENT as delegated by the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Linda Sunderland

Linda Sunderland **Environmental Program Supervisor**

Environmental Permitting Division

May 21, 2025
Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this determination, including all copies were sent on the filing date below to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Michelle Decker May 21, 2025

Date Clerk

Permittee/Licensee: City of Hollywood - Hollywood Tidal Flood Mitigation and Shoreline Protection (Sites 9, 10, 17, & 19)

Permit No.: 06-0454383-002 ERL No.: DF24-1003

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CITY OF HOLLYWOOD FLORIDA TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

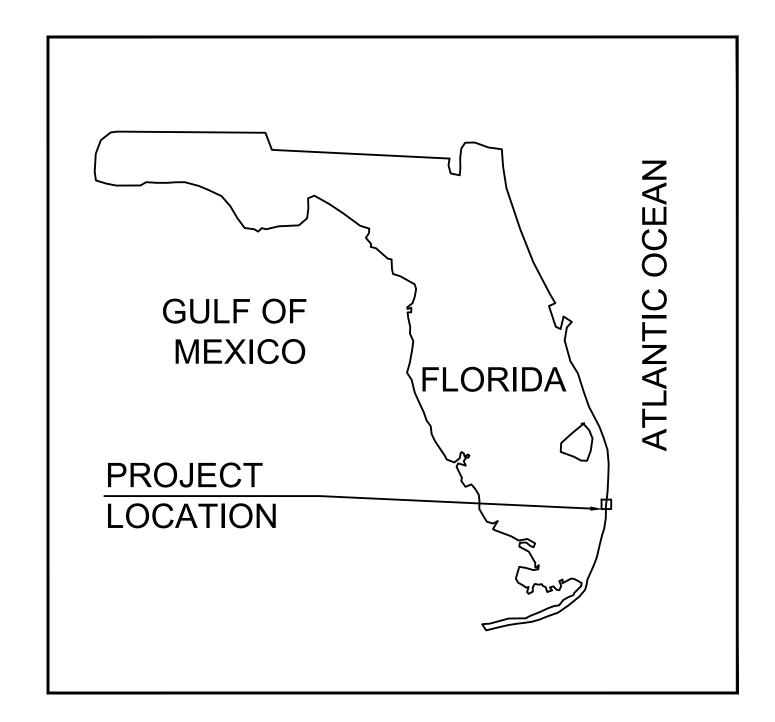
SITES 9, 10, 17 & 19

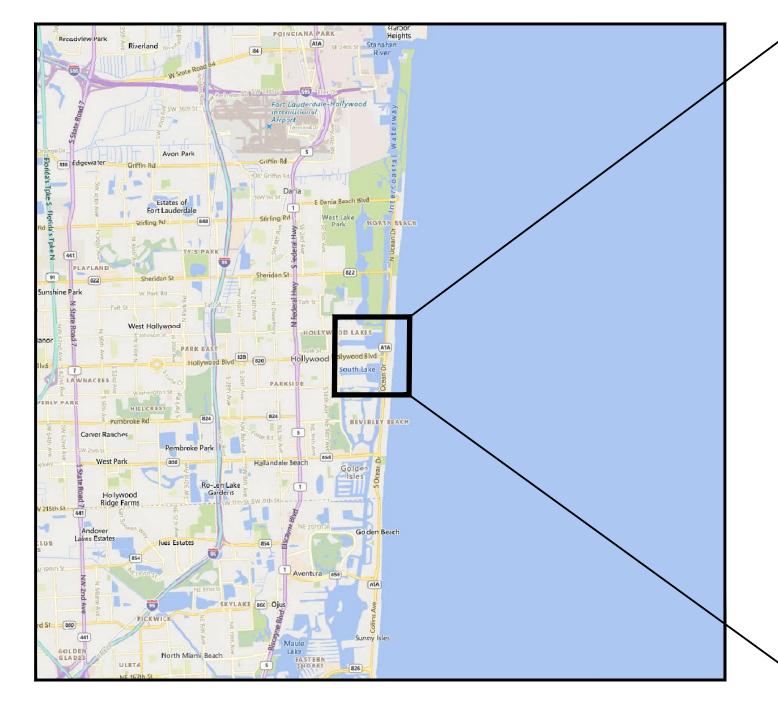
CITY OF HOLLYWOOD PROJECT NO. DCM-001187

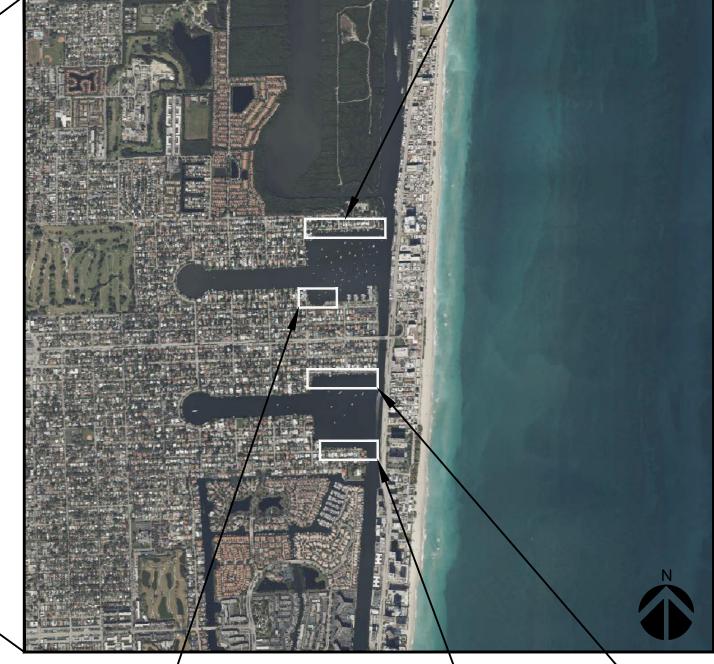




SITE 19
PROJECT LOCATION
NORTH LAKE DR.







SITE 9 /
PROJECT LOCATION
S NORTH LAKE DR

PROJECT LOCATION

N SOUTH LAKE DR

SITE 17

PROJECT LOCATION S SOUTH LAKE DR

NOT FOR CONSTRUCTION

PERMIT DRAWINGS FOR REGULATORY REVIEW ONLY 10/01/2024



OWNER:

CITY OF HOLLYWOOD
DEPARTMENT OF DESIGN AND
CONSTRUCTION MANAGEMENT
2600 HOLLYWOOD BLVD.
HOLLYWOOD, FL 33020

ENGINEER:

CUMMINS | CEDERBERG

Coastal & Marine Engineering

MIAMI | FORT LAUDERDALE | JUPITER
SARASOTA | ST. PETERSBURG | TALLAHASSEE
TEL: +1 305-741-6155 FAX: 305-974-1969
WWW.CUMMINSCEDERBERG.COM

SUBCONSULTANT:



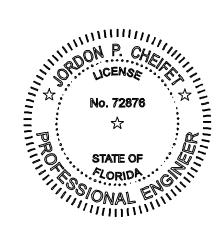




THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JORDON P. CHEIFET ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CUMMINS CEDERBERG 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL. 33304



THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET	DESCRIPTION
CM-1.0	COVER SHEET
CM-1.1	GENERAL NOTES
CM-1.2	SITE 9 GEOTECHNICAL BORINGS
CM-1.3	SITE 9 EXISTING CONDITIONS
CM-1.4	SITE 9 DEMOLITION PLAN
CM-1.5	SITE 9 PROPOSED SITE PLAN
CM-1.6	SITE 9 CROSS SECTIONS
CM-1.7	SITE 9 CROSS SECTIONS
CM-1.8	SITE 9 CROSSECTIONS
CM-2.0	SITE 10 GEOTECHNICAL BORINGS
CM-2.1	SITE 10 EXISTING CONDITIONS
CM-2.2	SITE 10 DEMOLITION PLAN
CM-2.3	SITE 10 PROPOSED SITE PLAN
CM-2.4	SITE 10 PROPOSED STE PLAN
CM-2.5	SITE 10 PROPOSED SITE PLAN
CM-2.6	SITE 10 CROSS SECTIONS
CM-2.7	SITE 10 CROSS SECTIONS
CM-2.8	SITE 10 CROSS SECTIONS
CM-2.9	SITE 10 PROPOSED OUTFALL WALL
CM-3.0	SITE 17 GEOTECHNICAL BORINGS
CM-3.1	SITE 17 EXISTING CONDITIONS
CM-3.2	SITE 17 DEMOLITION PLAN
CM-3.3	SITE 17 PROPOSED WALL
CM-3.4	SITE 17 PROPOSED WALL
CM-3.5	SITE 17 CROSS SECTIONS
CM-4.0	SITE 19 GEOTECHNICAL BORINGS
CM-4.1	SITE 19 EXISTING CONDITIONS
CM-4.2	SITE 19 EXISTING CONDITIONS
CM-4.3	SITE 19 EXISTING CONDITIONS
CM-4.4	SITE 19 DEMOLITION PLAN
CM-4.5	SITE 19 DEMOLITION PLAN
CM-4.6	SITE 19 DEMOLITION PLAN
CM-4.7	SITE 19 PROPOSED WALL
CM-4.8	SITE 19 PROPOSED WALL
CM-4.9	SITE 19 PROPOSED WALL
CM-4.10	SITE 19 CROSS SECTIONS
CM-4.11	SITE 19 CROSS SECTIONS
CM-4.12	SITE 19 CROSS SECTIONS
CM- 5.0	DETAILS

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CHEN MOORE AND ASSOCIATES 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET	DESCRIPTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

CURTIS + ROGERS DESIGN STUDIO, INC. 3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021

THE ABOVE NAMED REGISTERED LANDSCAPE ARCHITECT SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G10-11.011, F.A.C.

SHEET	DESCRIPTION

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:
CITY OF HOLLYWOOD, FL
DEPARTMENT OF DESIGN
AND CONSTRUCTION
MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS
DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES

SURVEYOR 301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC

CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

								PERMIT DRAWINGS	SUBMISSION / REVISION
								10/01/2024	DATE
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RAV	۷N				GK				

CC PROJECT NO: 84300

DRAWN

CHECKED

JPC/SRC

SCALE

AS SHOWN

SHEET TITLE

SIGNATURE SHEET

1. GENERAL

- 1.1. THE WORK CONSISTS OF PROVIDING ALL CONSTRUCTION, LABOR, EQUIPMENT, MATERIAL AND OPERATIONS IN CONNECTION WITH THE MARINE WORKS AND RELATED IMPROVEMENTS AS SHOWN ON THESE DRAWINGS.
- 1.2. ANY DISCREPANCIES IN THE PLANS WITH THE FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. CONSTRUCTION SHALL NOT CONTINUE UNTIL THE ENGINEER HAS ADDRESSED THE DISCREPANCIES.
- 1.3. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING STRUCTURES IN THE PROJECT VICINITY. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY WITHIN THE PROJECT VICINITY, INCLUDING STAGING SITES, WORK AND ACCESS AREAS SHALL BE REPAIRED PROMPTLY BY THE CONTRACTOR. ANY DAMAGE AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO COST TO THE OWNER. ALL ACCESS AND STAGING AREAS SHALL BE KEPT NEAT. ORDERLY AND IN A SAFE MANNER. ALL ACCESS AND STAGING AREAS SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION UPON PROJECT COMPLETION AT THE COST OF THE CONTRACTOR. THE SITE SHALL BE RESTORED BY REMOVING AND FINISHING ALL EVIDENCE FOR CONSTRUCTION. IN THE EVENT INFRASTRUCTURE (SUCH AS WALKWAYS, SIDEWALKS, FENCES, VEGETATION, ETC.) IS TEMPORARILY REMOVED OR RELOCATED OR THERE IS UNAUTHORIZED DAMAGE TO VEGETATION AND/OR FACILITIES BY THE CONTRACTOR, THE CONTRACTOR SHALL RESTORE ALL DAMAGE TO STRUCTURES AND NATURAL FEATURES
- TO PRE-CONSTRUCTION CONDITIONS OR BETTER.

 1.4. UTILITIES ARE NOT SHOWN IN THE PLANS. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PRESENT UTILITIES PRIOR TO CONSTRUCTION.
- 1.5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER CLEARANCE AND PROTECTION TO ALL OVERHEAD WIRES AND OBSTRUCTIONS.
- 1.6. THE CONTRACTOR SHALL EXCLUDE THE PUBLIC FROM THE WORK AREAS IN THE IMMEDIATE VICINITY OF OPERATIONS.

 CONTRACTOR SHALL PROVIDE APPROPRIATE SAFETY MEASURES TO PROTECT THE PUBLIC.
- 1.7. ALL NEW STRUCTURAL WORK SHALL BE ACCURATELY FIELD MEASURED AND DIMENSIONS VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL BE PREPARED TO MAKE FIELD ADJUSTMENTS TO ACCURATELY FIT THE NEW WORK TO EXISTING CONDITIONS.
- 1.8. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN SECURED AND THE CONTRACTOR HAS BEEN ISSUED NOTICE TO PROCEED.
- 1.9. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS SHOULD BE CONSIDERED WHEN OBTAINING SCALED DATA.
- 1.10. CONSTRUCTION WORK SHALL BE EXECUTED IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL BUILDING CODES AND GOVERNING REGULATIONS INCLUDING FDEP, USACE, AND BROWARD COUNTY. CONTRACTOR SHALL ADHERE TO ALL CONDITIONS OF THE PERMITS AND EXEMPTIONS.

2. DESIGN CRITERIA

- 2.1. FLORIDA BUILDING CONSTRUCTION 2020
- 2.2. ASCE 7-22
- 2.3. COASTAL LOADS ASSOCIATED WITH A 25-YR. STORM.
- 2.4. 25-YR. STORM WAVES: H_{MAX} = 2.9', T_P = 2.8 SEC
 2.5. STORM SURGE = 2.7' NAVD88 BASED ON A 25-YR. STORM FROM THE PRELIMINARY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE STUDY (FIS) OF BROWARD COUNTY DATED 02/25/2021.

3. SURVEY

- 3.1. SURVEY PERFORMED BY KEITH AND ASSOCIATES DATED JUNE 4.
- 3.2. ELEVATIONS ARE IN FEET AND REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

4. GEOTECHNICAL DATA

4.1. GEOTECHNICAL REPORTS PROVIDED BY NV5, INC. DATED

5. TIDAL DATA

- 5.1. CONTRACTOR MAY NEED TO ADJUST HIS WORK PLAN TO ACCOUNT FOR ACTUAL WATER LEVELS AND CHANGING WATER LEVELS. THE SITE MAY BE SUBJECT TO VARIABLE WAVE AND SURGE CONDITIONS AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR MARINE STRUCTURES AND SHORELINE DURING CONSTRUCTION.
- 5.2. THE TIDAL DATUM WAS ADOPTED FROM NOAA STATION 8722871 AT WHISKEY CREEK, SOUTH ENTRANCE, FL.
- 5.3. THE HIGHEST ASTRONOMICAL TIDE (HAT) OF +1.77' NAVD88 WAS OBTAINED FROM NOAA STATION 8722956, SOUTH PORT EVERGLADES, FL.

6. LAYOUT AND TESTING

- 6.1. ALL CONSTRUCTION STAKEOUT SHALL BE PERFORMED BY AND PAID FOR BY THE CONTRACTOR UNDER THE SUPERVISION OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
- 6.2. CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS IN SUFFICIENT DETAIL TO ILLUSTRATE THE HORIZONTAL AND VERTICAL COMPONENTS OF ABOVE AND BELOW-GROUND STRUCTURES RELATIVE TO THE CONSTRUCTION BASELINE. DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA-REGISTERED SURVEYOR.

7. DEMOLITION

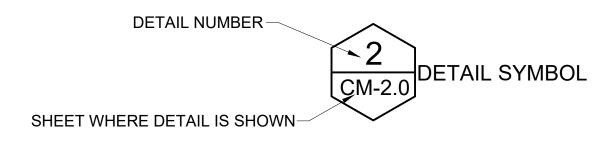
- 7.1. CONTRACTOR SHALL VERIFY THE EXTENTS, LOCATION AND
- QUANTITIES OF EXISTING ELEMENTS TO BE REMOVED.

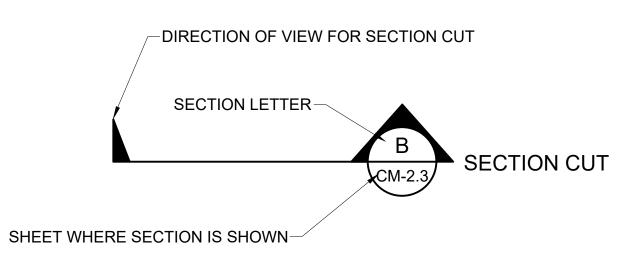
 7.2. ALL DEBRIS WITHIN THE LIMITS OF THE PROJECT SHALL BE
- HAULED OFF SITE BY THE CONTRACTOR, AS DIRECTED BY THE OWNER, AND DISPOSED OF AT AN APPROPRIATE FACILITY.

 7.3. CONTRACTOR SHALL NOT DAMAGE ANY STRUCTURAL COMPONENTS BEYOND THE DEMOLITION REQUIREMENTS DEPICTED IN THESE DRAWINGS. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

	ABBREVIATIONS
ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CONT	CONTINUOUS
CONT'D	CONTINUED
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
KSI	KIPS PER SQUARE INCH
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
NAVD	NORTH AMERICAN VERTICAL DATUM
NGVD	NATIONAL GEODETIC VERTICAL DATUM
PERA	PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS
PSI	POUNDS PER SQUARE INCH
TYP	TYPICAL
USACE	UNITED STATES ARMY CORPS OF ENGINEERS
W/C	WATER/CEMENT RATIO

SYMBOLS LEGEND





INDEX OF DRAWINGS SHEET DESCRIPTION CM-1.0 COVER SHEET GENERAL NOTES CM-1.2 | SITE 9 GEOTECHNICAL BORINGS SITE 9 EXISTING CONDITIONS SITE 9 DEMOLITION PLAN CM-1.5 SITE 9 PROPOSED SITE PLAN CM-1.6 SITE 9 CROSS SECTIONS SITE 9 CROSS SECTIONS SITE 10 GEOTECHNICAL BORINGS SITE 10 EXISTING CONDITIONS CM-2.2 | SITE 10 DEMOLITION PLAN CM-2.3 | SITE 10 PROPOSED SITE PLAN SITE 10 PROPOSED STE PLAN SITE 10 PROPOSED SITE PLAN CM-2.6 SITE 10 CROSS SECTIONS SITE 10 CROSS SECTIONS CM-2.8 SITE 10 CROSS SECTIONS CM-3.0 SITE 17 GEOTECHNICAL BORINGS SITE 17 EXISTING CONDITIONS SITE 17 DEMOLITION PLAN CM-3.3 | SITE 17 PROPOSED WALL CM-3.4 SITE 17 PROPOSED WALL SITE 17 CROSS SECTIONS SITE 19 GEOTECHNICAL BORINGS SITE 19 EXISTING CONDITIONS SITE 19 EXISTING CONDITIONS SITE 19 EXISTING CONDITIONS CM-4.4 | SITE 19 DEMOLITION PLAN SITE 19 DEMOLITION PLAN CM-4.6 | SITE 19 DEMOLITION PLAN SITE 19 PROPOSED WALL SITE 19 PROPOSED WALL SITE 19 PROPOSED WALL CM-4.10 | SITE 19 CROSS SECTIONS CM-4.11 | SITE 19 CROSS SECTIONS CM-4.12 SITE 19 CROSS SECTIONS CM- 5.0 | DETAILS

PROJECT:
CITY OF HOLLYWOOD TIDAL
FLOODING MITIGATION AND
SHORELINE PROTECTION
PROJECT

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS
DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412
N|V|5

200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112
KEITH & ASSOCIATES

GEOTECHNICAL ENGINEER

SURVEYOR 301 E. ATLANTIC BLVD.

POMPANO BEACH, FL 33060
TEL: 954-788-3400

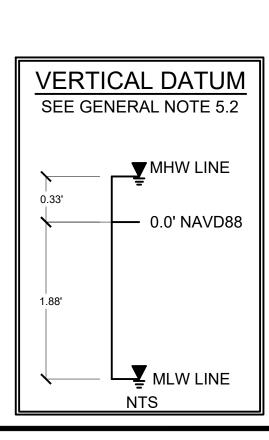
CHEN MOORE AND ASSOC

CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309

BRIZAGA

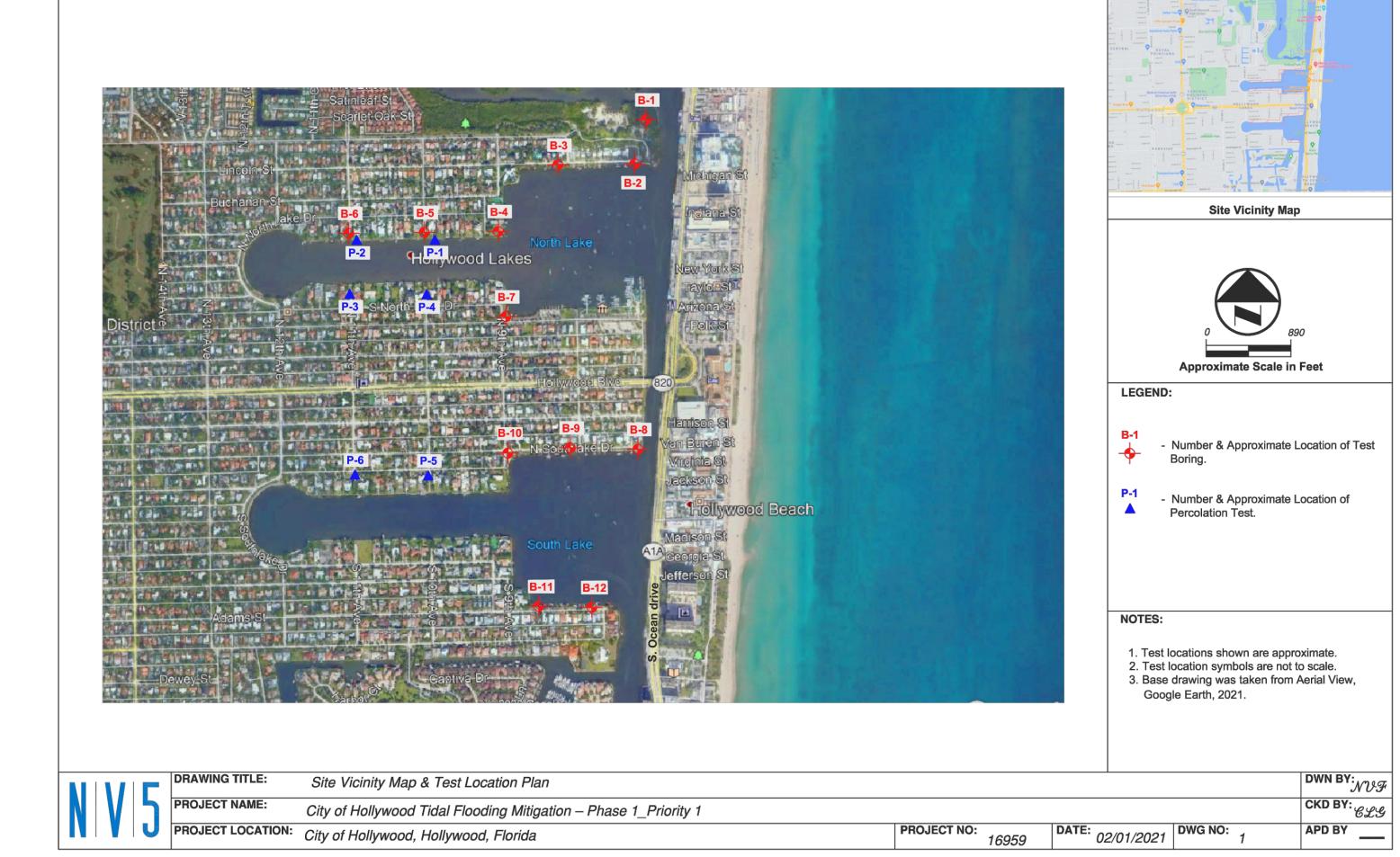
TEL: 954-730-0707

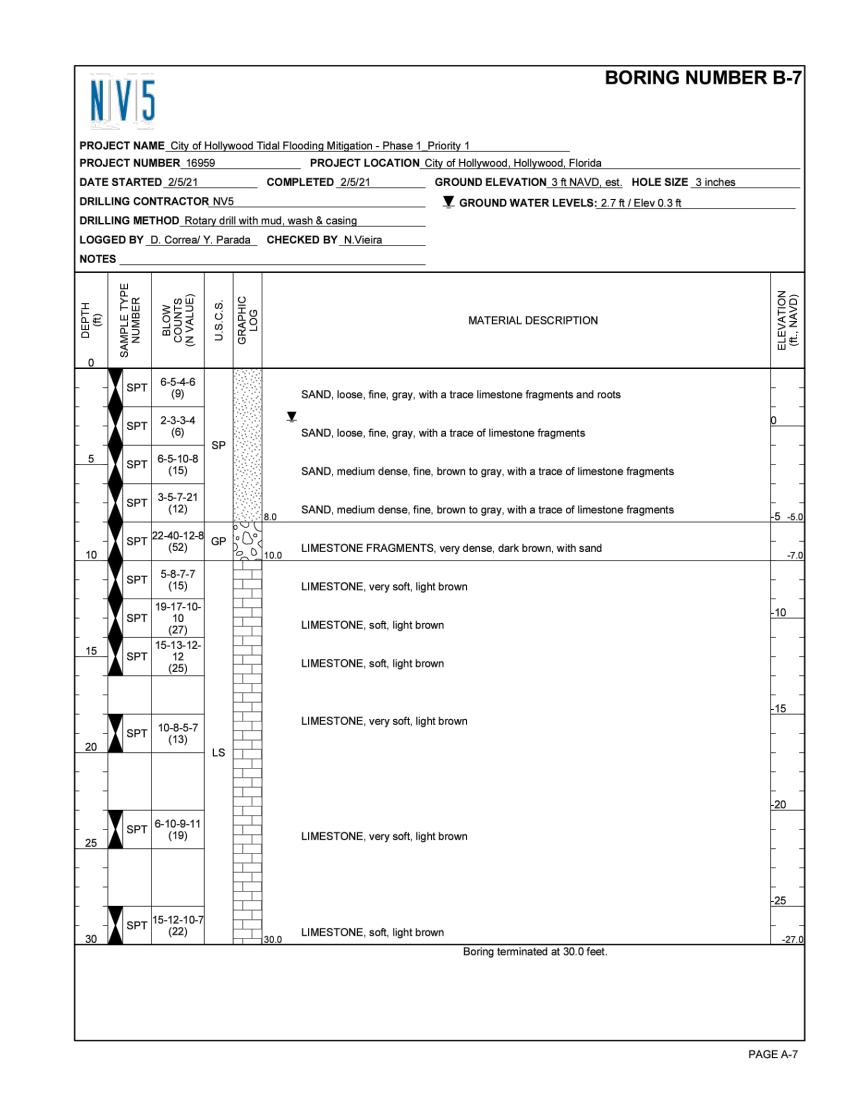
PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533



CC PROJECT NO: 84300
DRAWN GK
CHECKED JPC/SRC
SCALE AS SHOWN
SHEET TITLE

GENERAL NOTES





CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL

DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



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BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

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										10/01/2024	DATE
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SCALE AS SHOWN

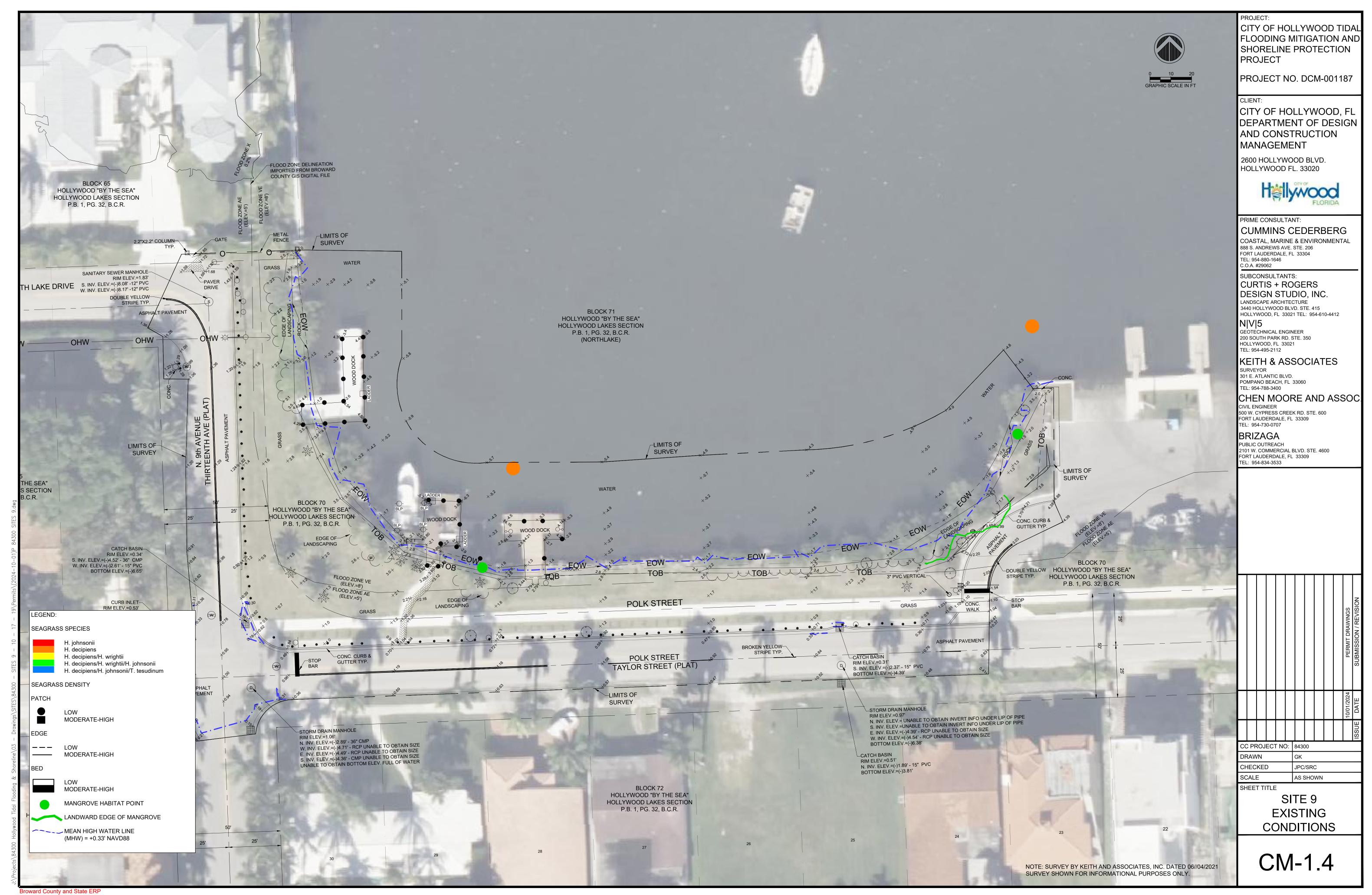
SHEET TITLE

SITE 9

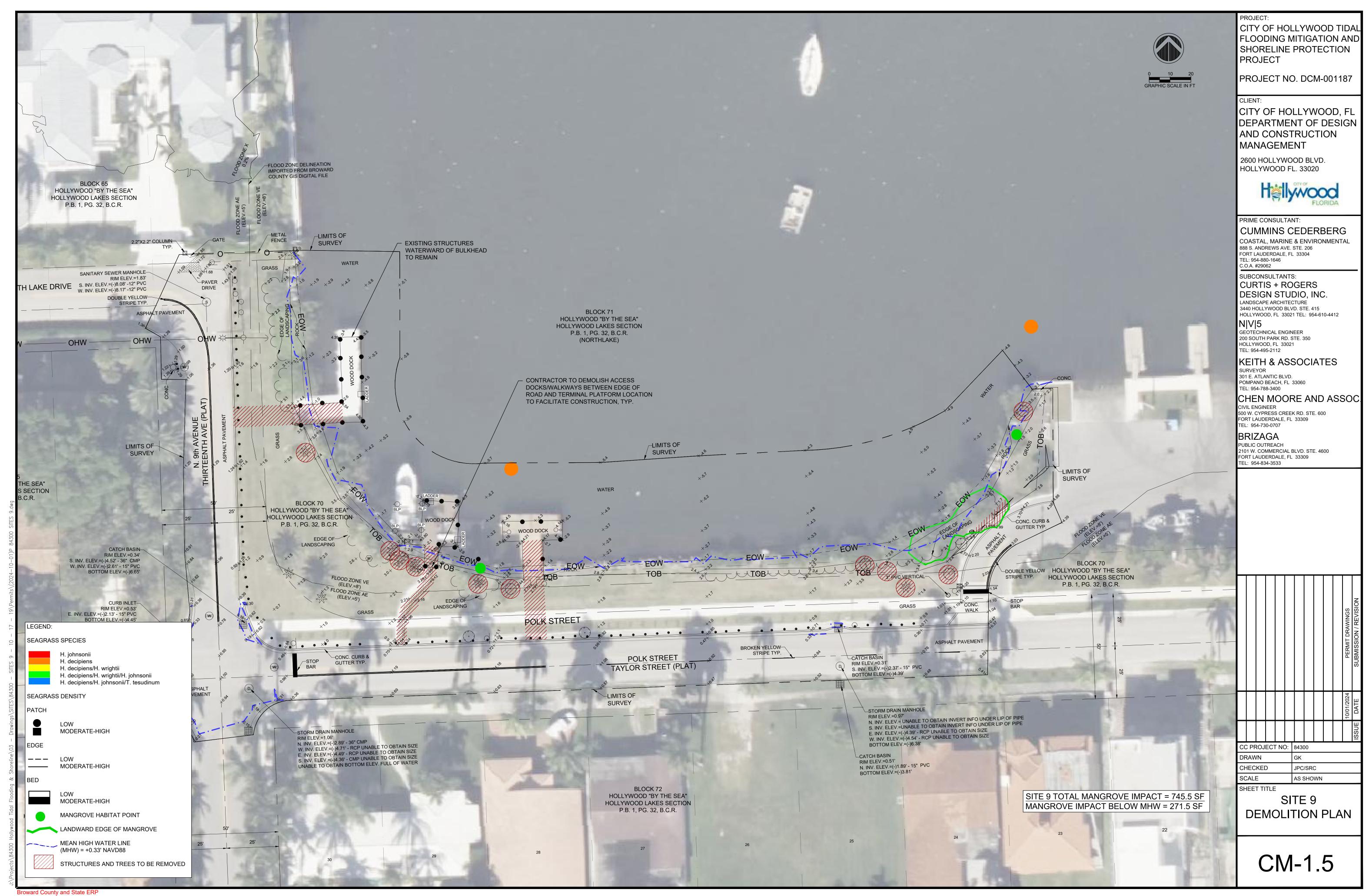
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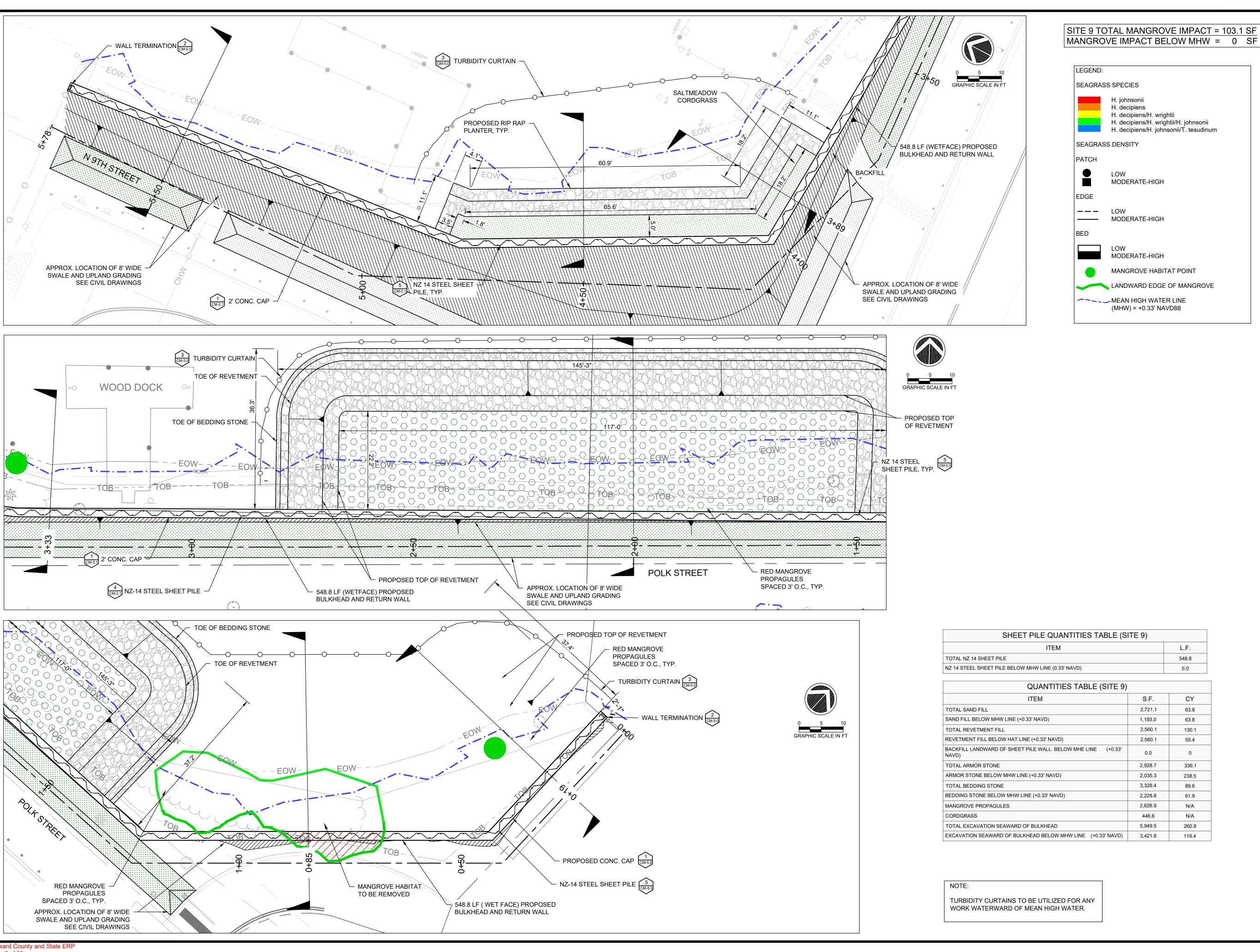
BORINGS



Page 5 of 55 05/21/2025



Broward Cour Page 6 of 55



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION

PROJECT NO. DCM-001187

CITY OF

PROJECT

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



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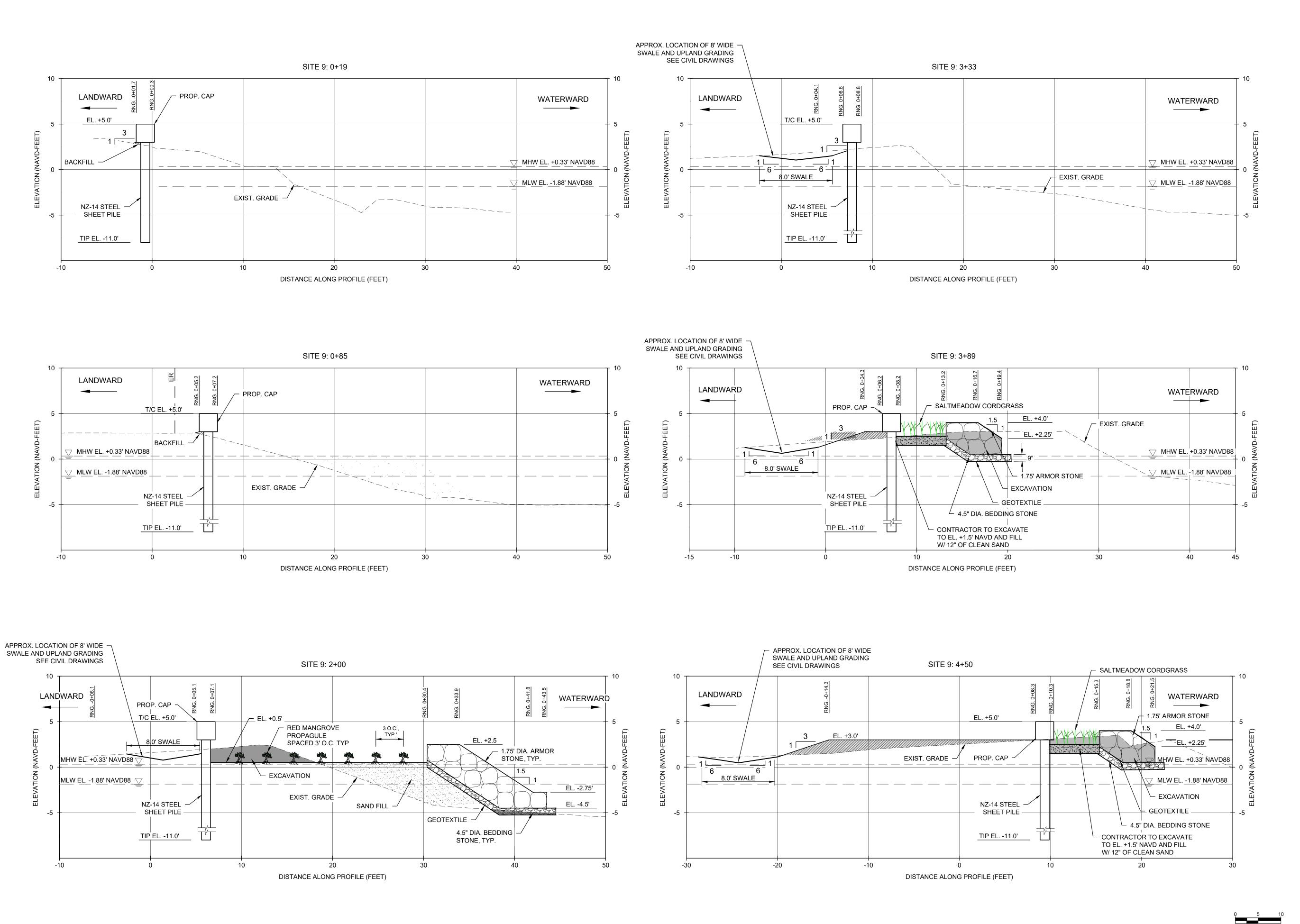
500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

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CC PROJECT NO: 84300
DRAWN
CHECKED
JPC/SRC
SCALE

SITE 9
PROPOSED
CONDITIONS PLAN



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

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KEITH & ASSOCIATES SURVEYOR 301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060

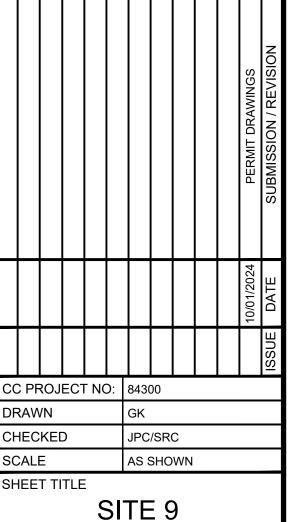
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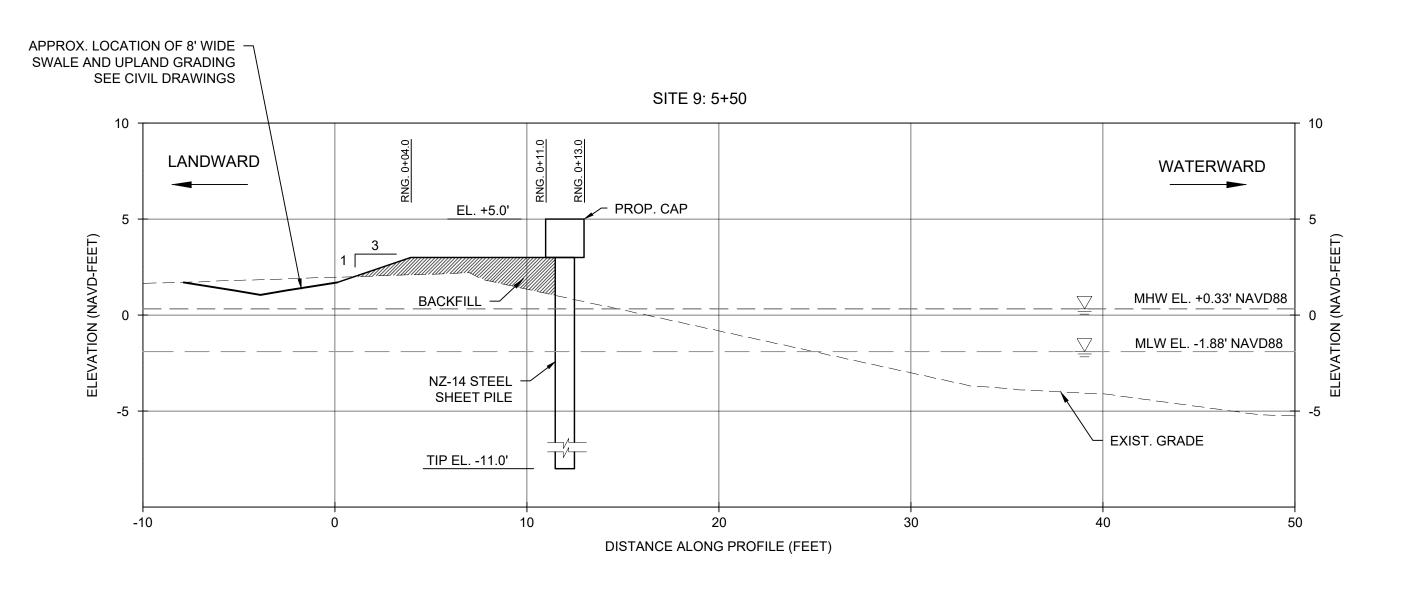
BRIZAGA

TEL: 954-788-3400

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533



CROSS SECTIONS



PROJE

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:

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NIVIS

N|V|5 GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

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DRAMIN GK

DRAMIN GK

DRAMIN GS

DRAMIN GS

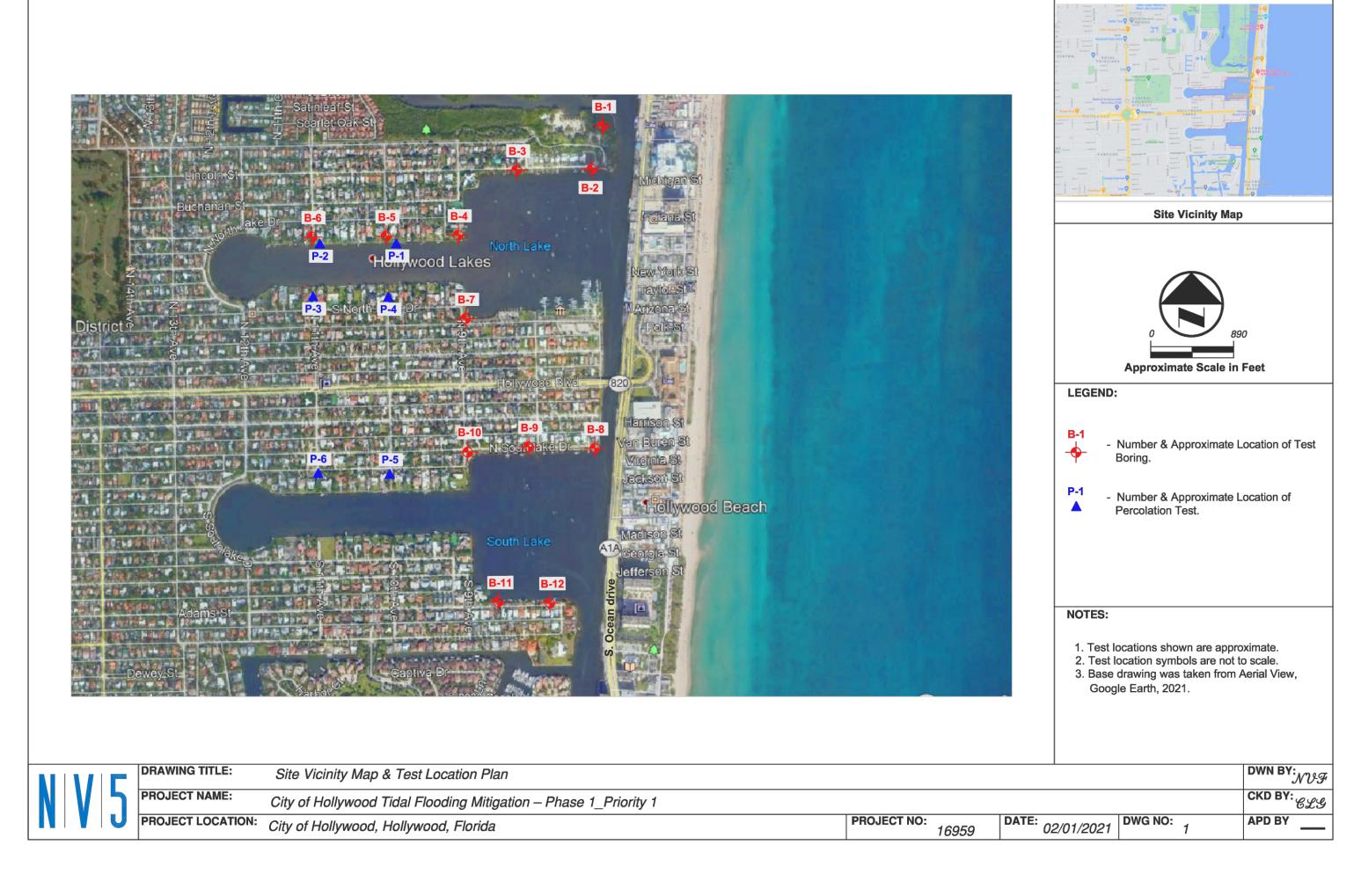
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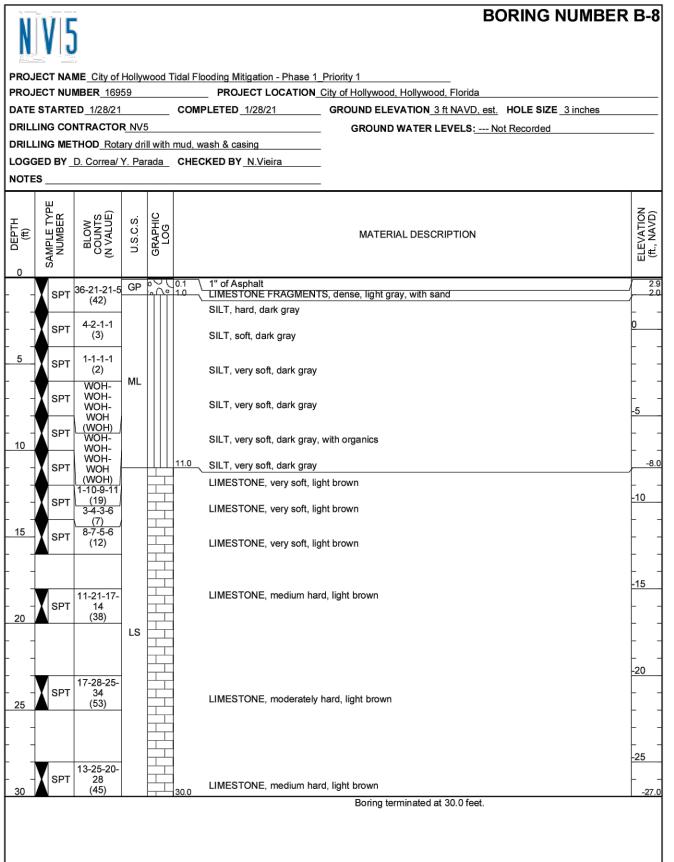
SUBMISSION / REVISION

DRAWN GK
CHECKED JPC/SRC
SCALE AS SHOWN
SHEET TITLE

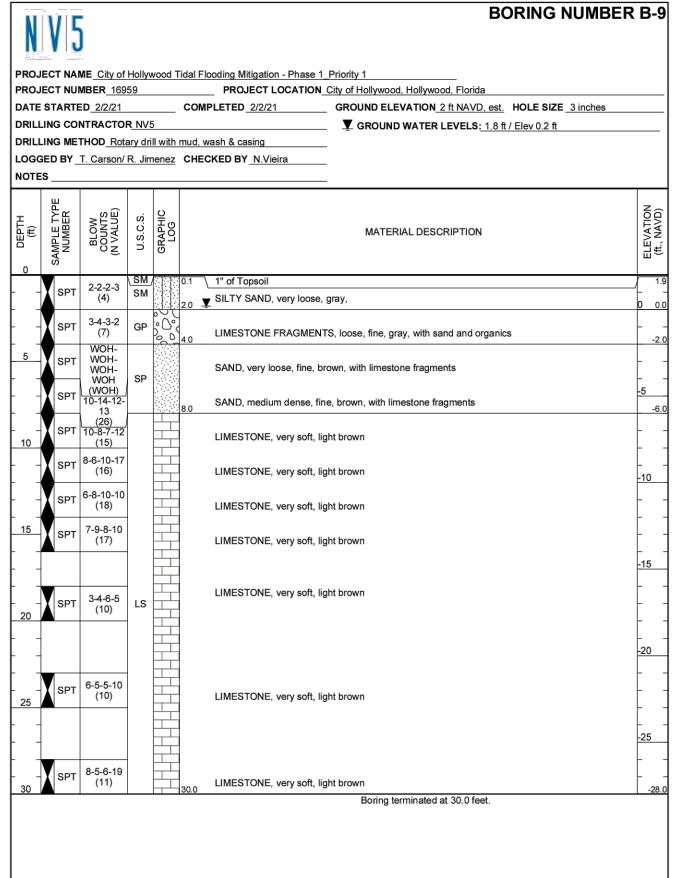
SITE 9 CROSS SECTIONS







PAGE A-8



PAGE A-9

		MBER_169					City of Hollywood, Hollywood, Florida			
					COM	PLETED 2/1/21	GROUND ELEVATION 2 ft NAVD, est. HOLE SIZE 3 inches			
		NTRACTO			mud w	ash & casing	▼ GROUND WATER LEVELS: 1.7 ft / Elev 0.3 ft			
						KED BY N.Vieira	_			
OTE	_	11 0 01 0 011								
O (ff)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG			MATERIAL DESCRIPTION	ELEVATION (ff., NAVD)		
U	CDT	3-2-1-1	SM		0.1	2" of Topsoil		1.		
	SPT	(3)	SM		2.0	SILTY SAND, very loose	, gray	0 0.		
_	SPT	WOH-				SILT, very soft, dark gray		-		
5	SPT	(WOH) WOH- WOH-	ML			SILT, very soft, dark gray	1	-		
-	SPT	WOH- WOH (WOH)			8.0	SILT, soft, dark gray, with	n a trace of limestone fragments and organics	-5 -6		
10	SPT	WOH- WOH-3-22 (3) 28-51-53-				SILTY LIMESTONE, har	d, light brown	-		
-	SPT	7-5-8-26				LIMESTONE, very soft, I	ight brown	- -10		
	SPT	7-14-10-11 (24)	Í			LIMESTONE, soft, light b	prown			
15	SPT	8-7-6-11 (13)				LIMESTONE, very soft, I	ight brown	-		
- - 20	SPT	4-5-4-8 (9)	LS			LIMESTONE, very soft, I	ight brown	-15 - - -		
-	SPT	5-5-4-7 (9)	_			LIMESTONE, very soft, I	ight brown	- -20 - -		
25 - - -			-					- -25 -		
_	SPT	9-7-5-15 (12)			00.0	LIMESTONE, very soft, I	ight brown	<u> </u>		
30					30.0	. ,, -	Boring terminated at 30.0 feet.	-28		

PROJECT:
CITY OF HOLLYWOOD TIDAL
FLOODING MITIGATION AND
SHORELINE PROTECTION
PROJECT

PROJECT NO. DCM-001187

CLIENT:

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HOLLYWOOD, FL 33021 TEL: 954-610-4412
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KEITH & ASSOCIATES

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POMPANO BEACH, FL 33060
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CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

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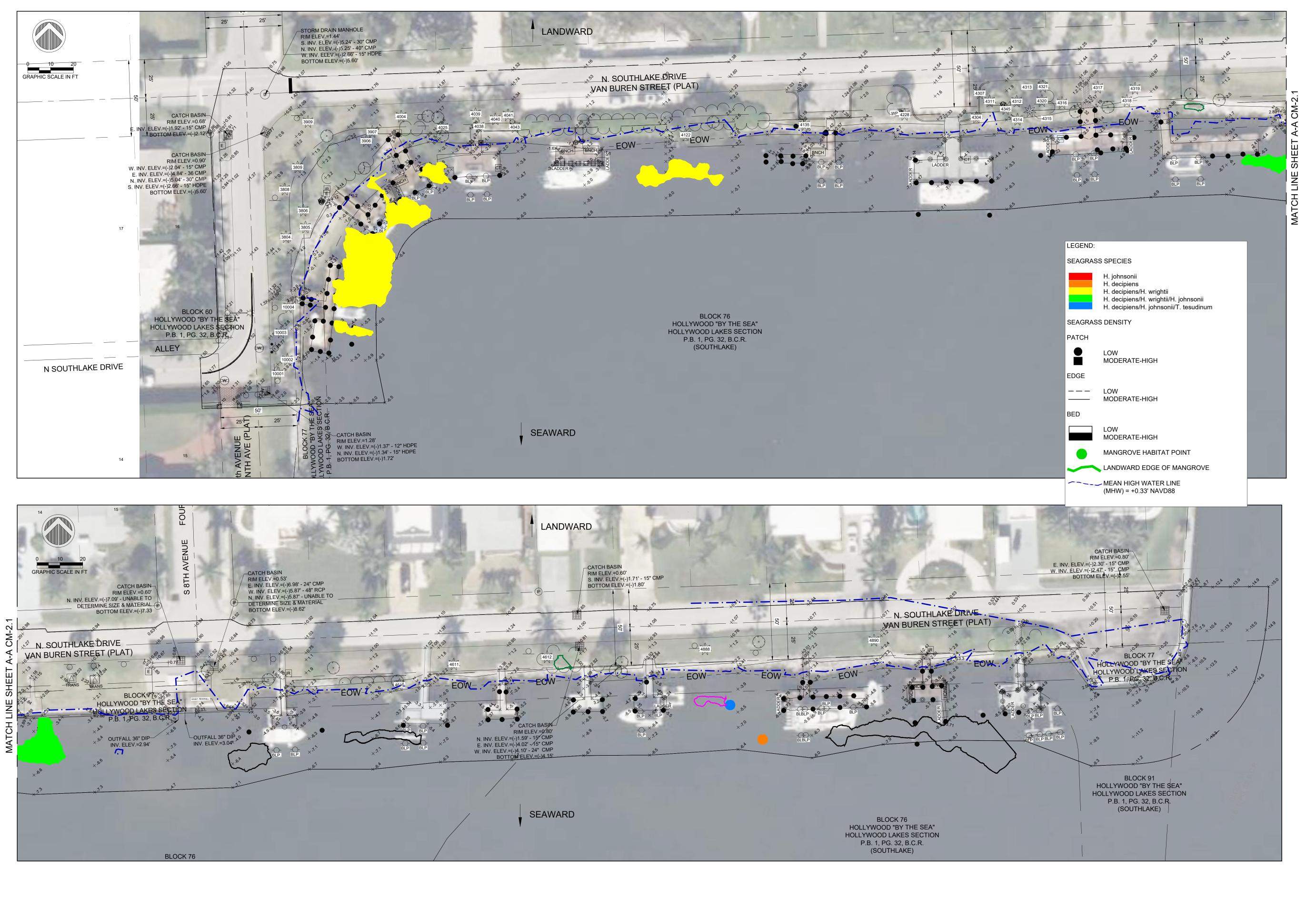
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										10/01/2024	ISSUE DATE
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ALI	E				Α	s s	SHO	WN			
EE	T TI	TLE									
			S	31	Γ	E	1	0			

CM-2.0

GEOTECHNICAL

BORINGS

Broward County and State ERP Page 10 of 55



NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021 SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY. PROJECT:
CITY OF HOLLYWOOD TIDAL
FLOODING MITIGATION AND
SHORELINE PROTECTION
PROJECT

PROJECT NO. DCM-001187

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N|V|5
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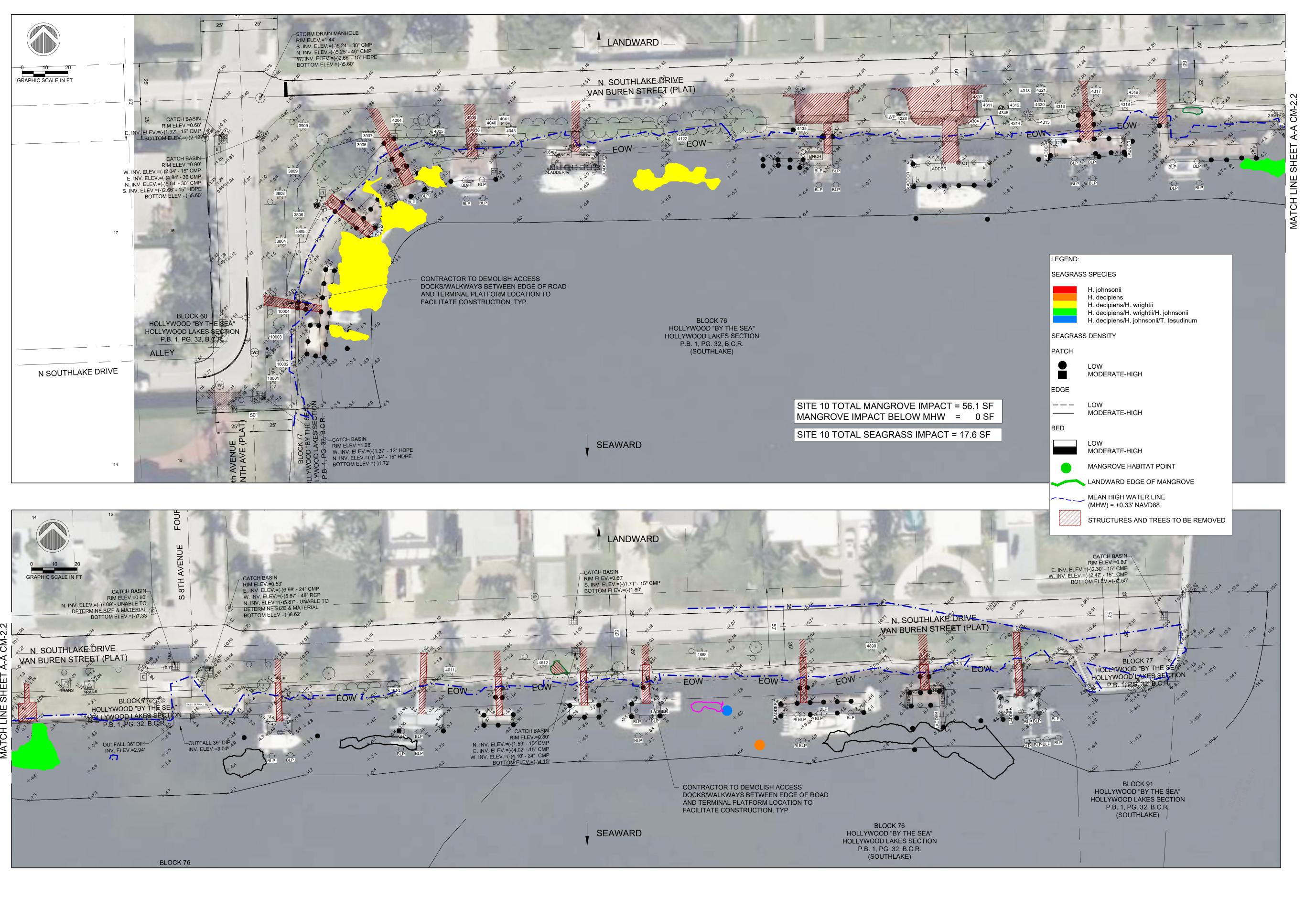
BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

CC PROJECT NO: 84300
DRAWN
GK
CHECKED
JPC/SRC
SCALE
SC

SITE 10 EXISTING CONDITIONS

CM-2.1



FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

CITY OF HOLLYWOOD TIDAL

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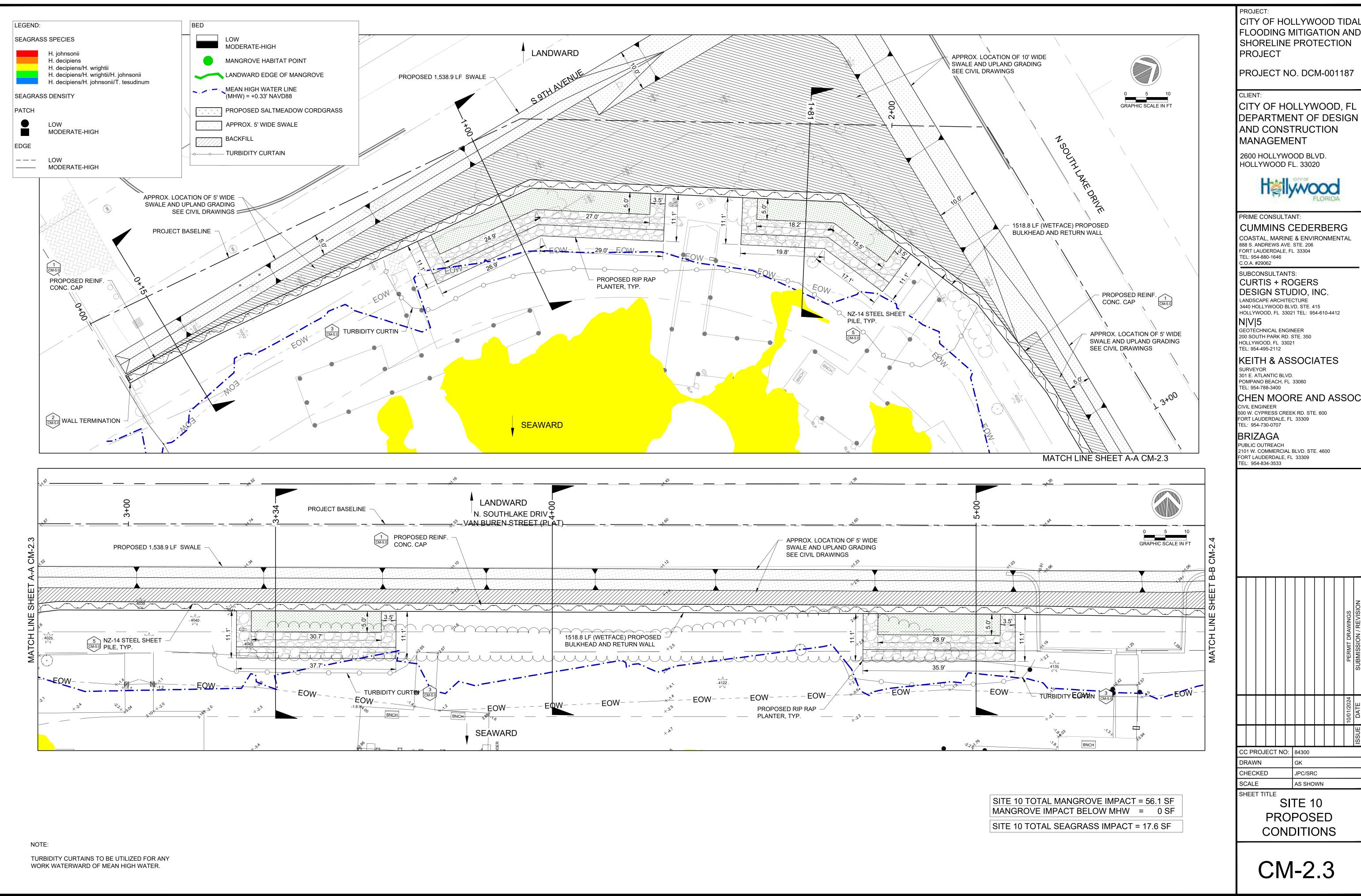
PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

CC PROJECT NO: 84300
DRAWN GK
CHECKED JPC/SRC
SCALE AS SHOWN
SHEET TITLE
SITE 10

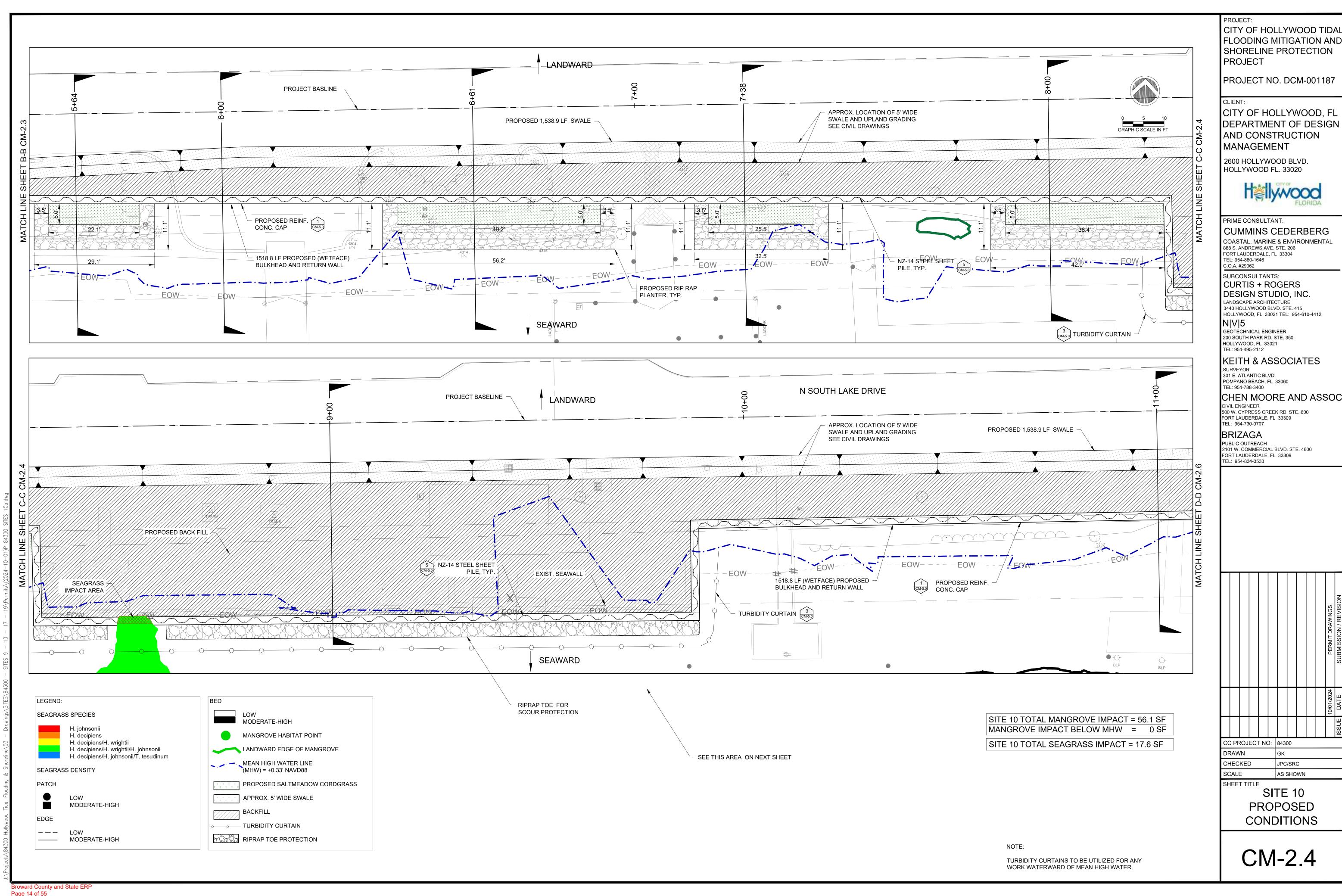
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DEMOLITION

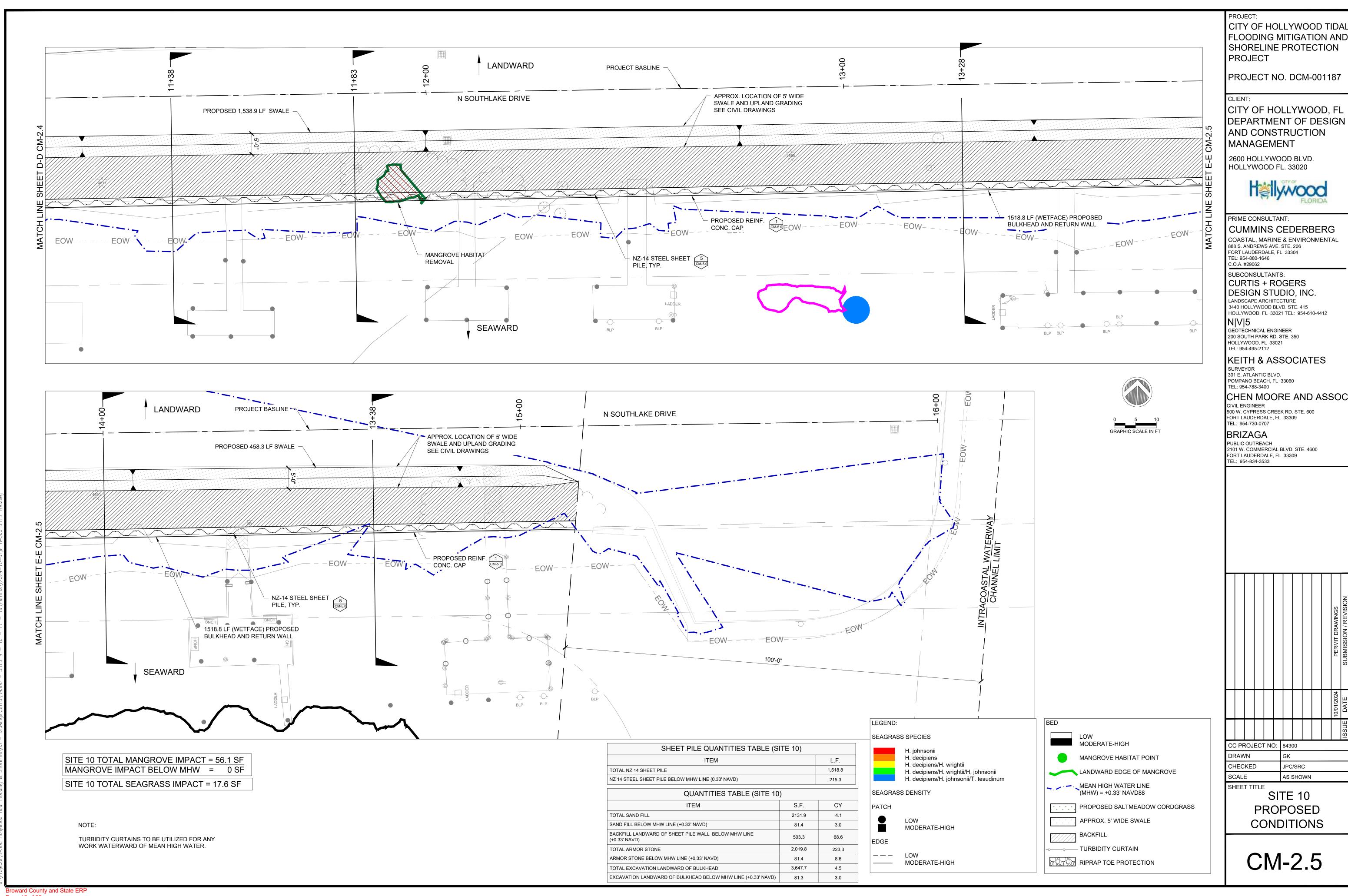
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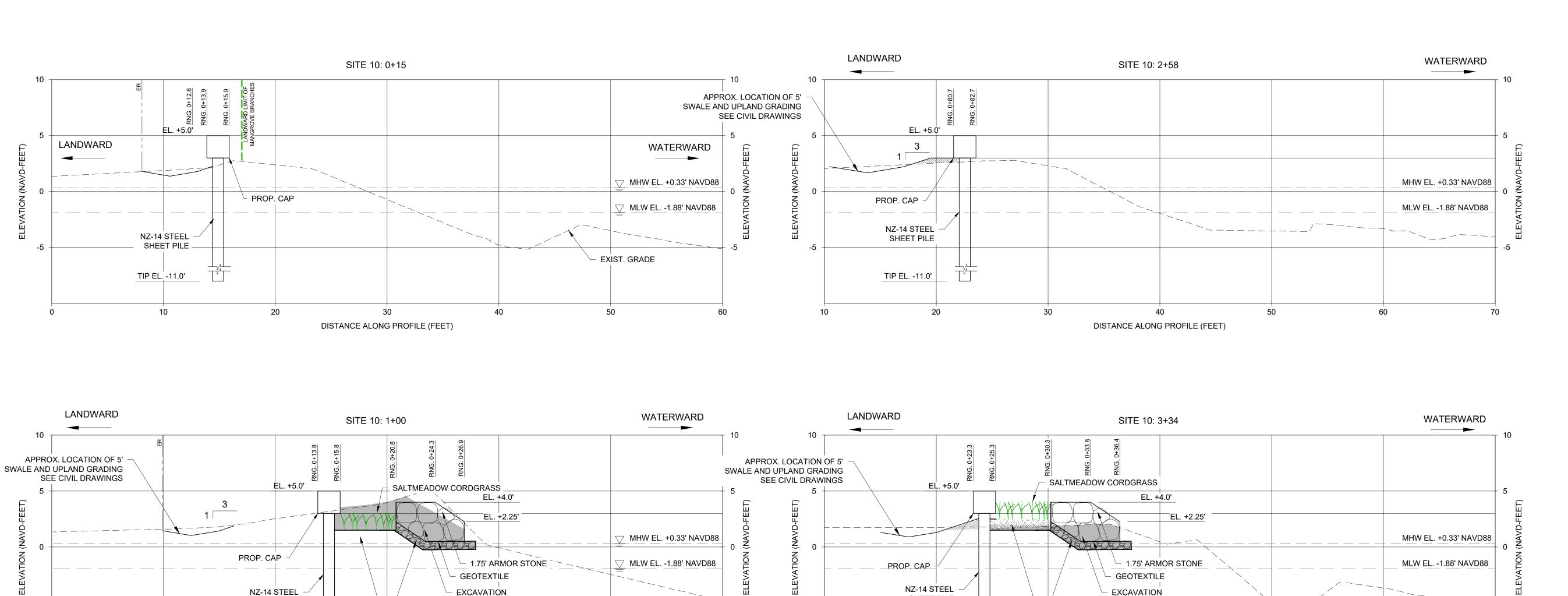
Page 13 of 55



Page 14 of 55



Broward County and Sta Page 15 of 55



SHEET PILE

TIP EL. -11.0'

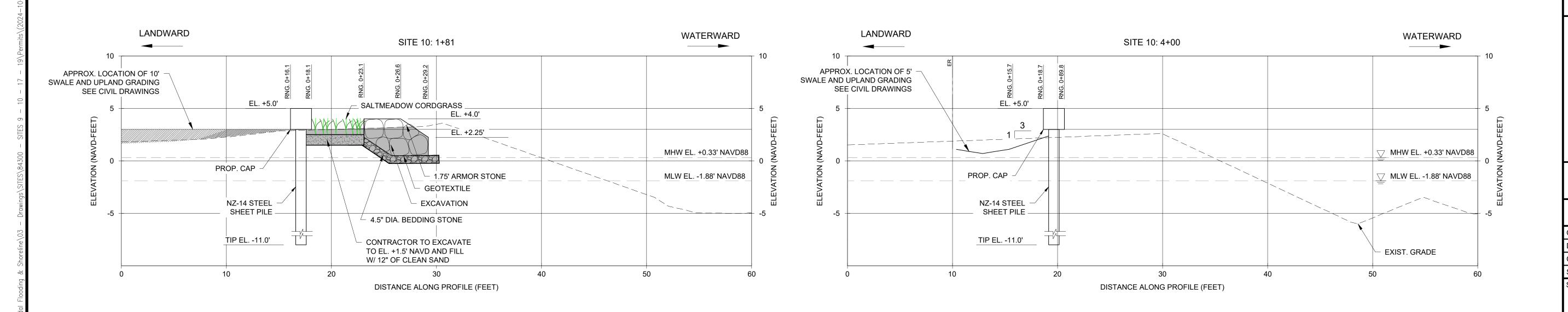
4.5" DIA. BEDDING STONE

CONTRACTOR TO EXCAVATE

DISTANCE ALONG PROFILE (FEET)

TO EL. +1.5' NAVD AND FILL

W/ 12" OF CLEAN SAND



0 2.5 5
GRAPHIC SCALE IN FT

PROJECT:
CITY OF HOLLYWOOD TIDAL
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PROJECT

PROJECT NO. DCM-001187

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DEPARTMENT OF DESIGN
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MANAGEMENT



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C.O.A. #29062

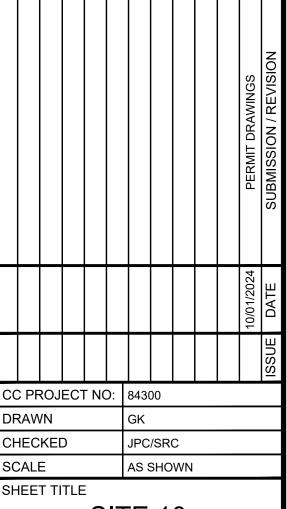
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POMPANO BEACH, FL 33060 TEL: 954-788-3400 CHEN MOORE AND ASSOC

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SITE 10 CROSS SECTIONS

CM-2.6

SHEET PILE

TIP EL. -11.0'

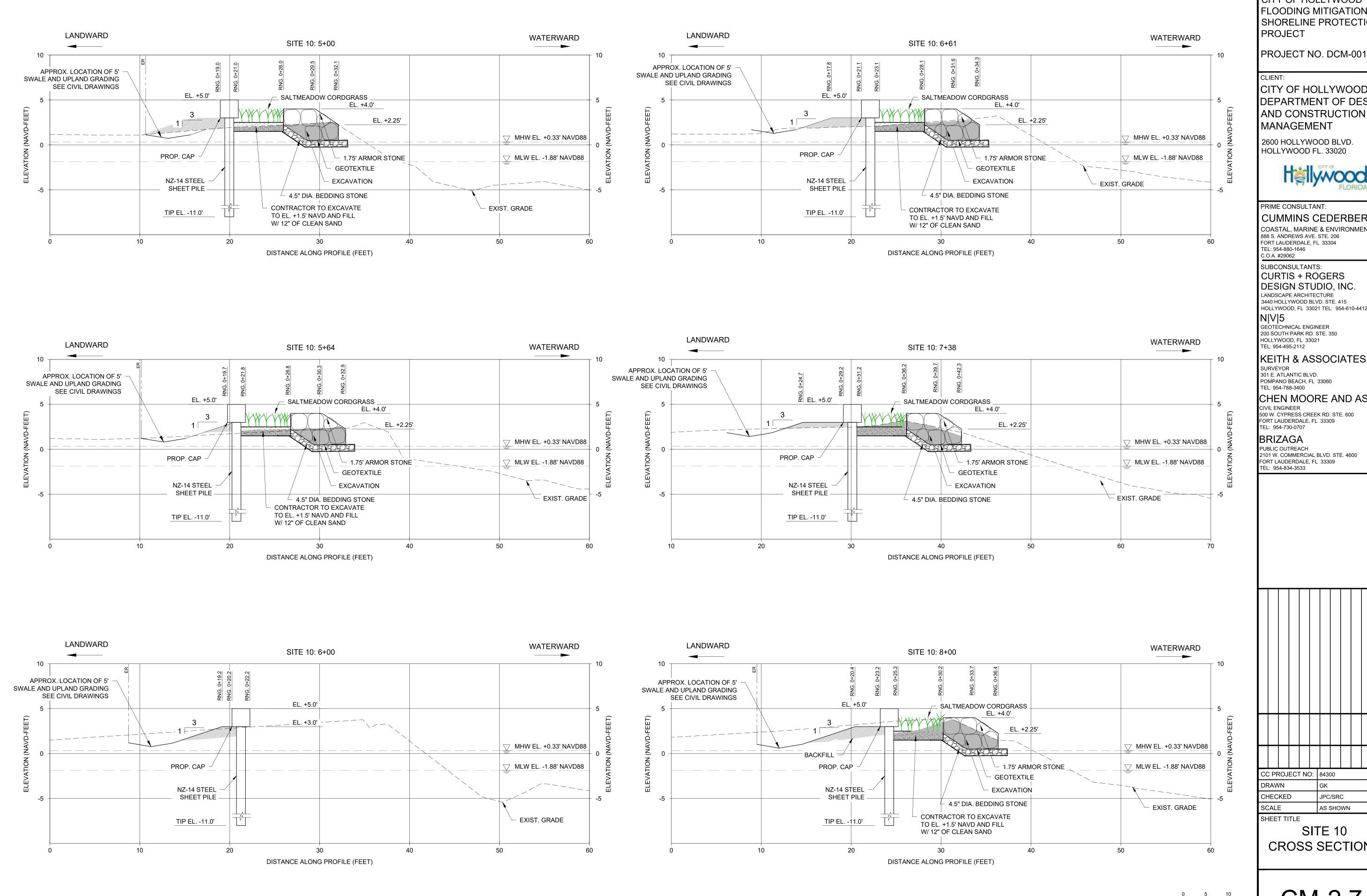
- 4.5" DIA. BEDDING STONE

CONTRACTOR TO EXCAVATE

TO EL. +1.5' NAVD AND FILL

W/ 12" OF CLEAN SAND

DISTANCE ALONG PROFILE (FEET)



Page 17 of 55

PROJECT: CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION

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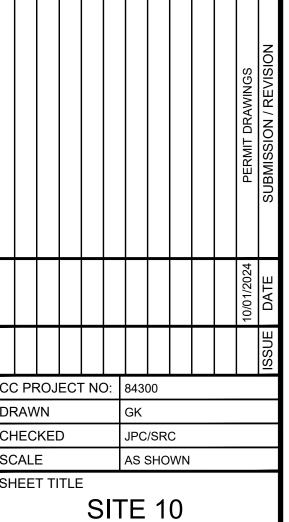
GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021

POMPANO BEACH, FL 33060

CHEN MOORE AND ASSOC

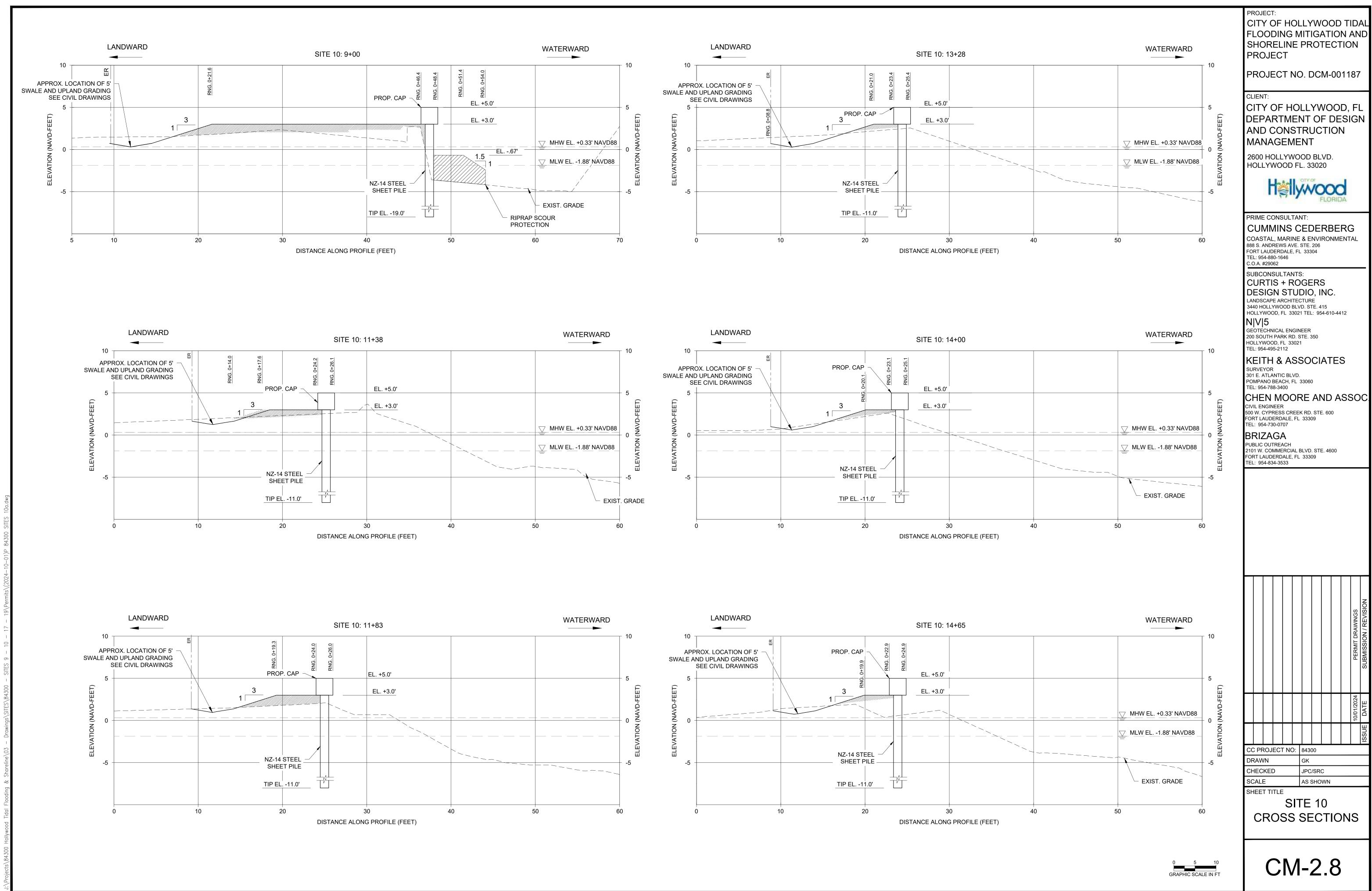
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2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309

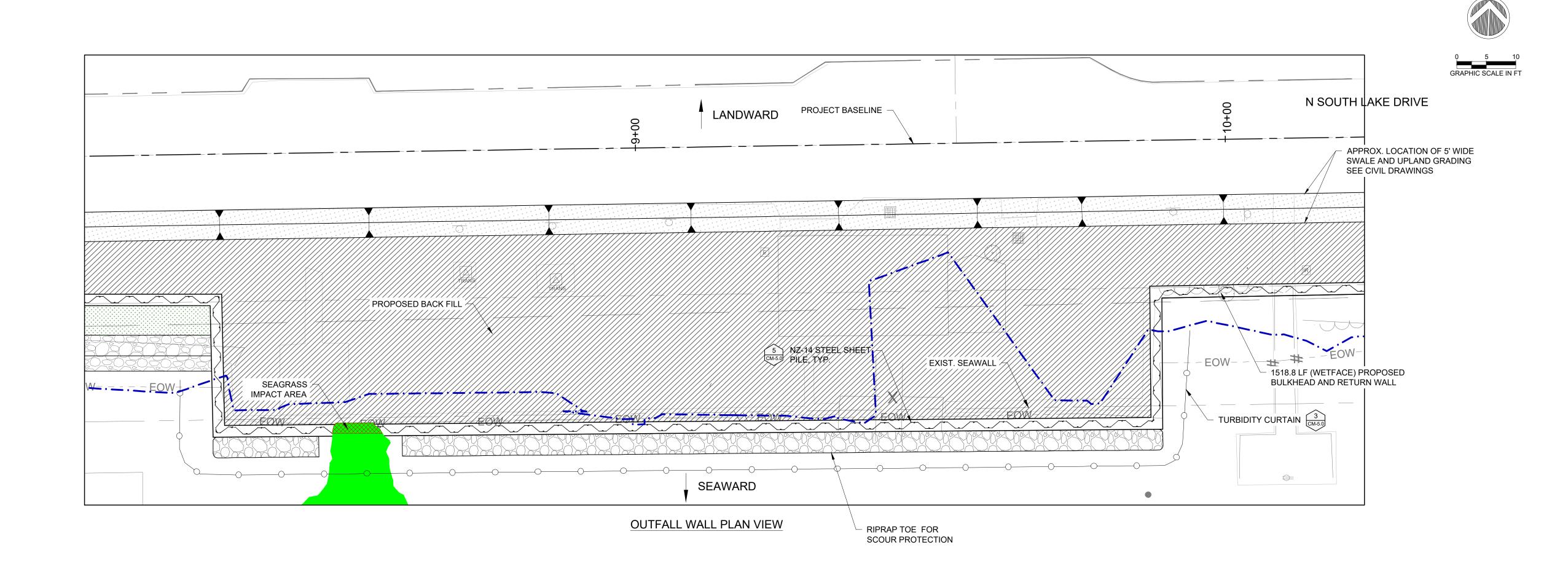


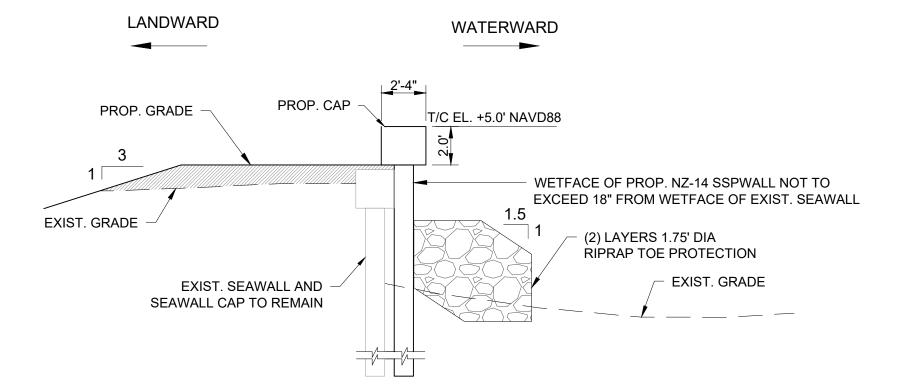
CROSS SECTIONS

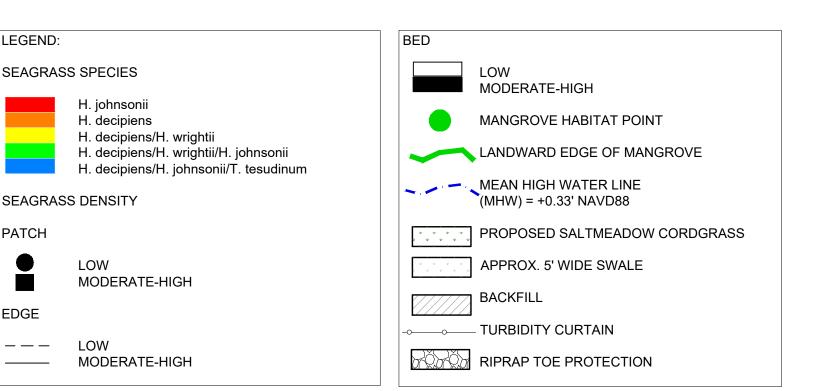
CM-2.7



Broward County Page 18 of 55 05/21/2025







TYPICAL OUTFALL WALL SECTION SCALE: 1" = 5'

NOTE:

TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

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KEITH & ASSOCIATES SURVEYOR

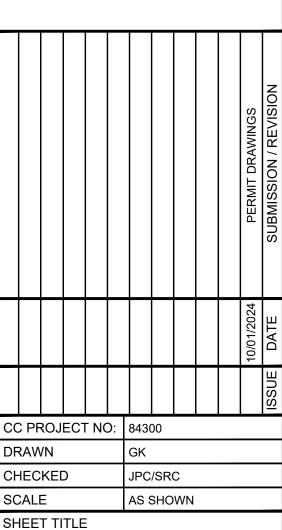
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BRIZAGA

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CM-2.9

SITE 10

PROPOSED

OUTFALL WALL

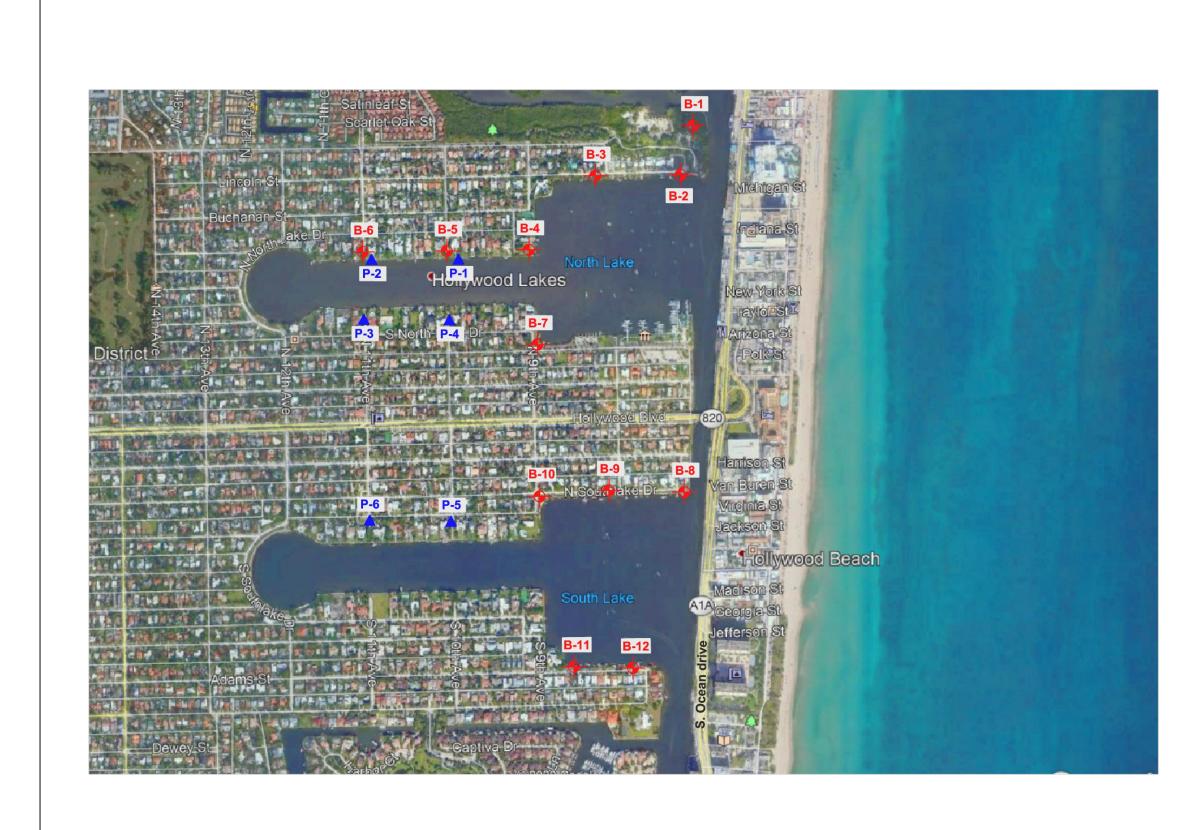
LEGEND:

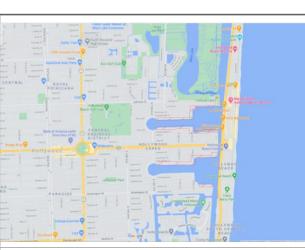
PATCH

SEAGRASS SPECIES

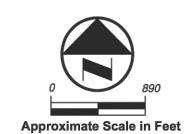
SEAGRASS DENSITY

H. decipiens





Site Vicinity Map



LEGEND:



- Number & Approximate Location of Test Boring.

 P-1

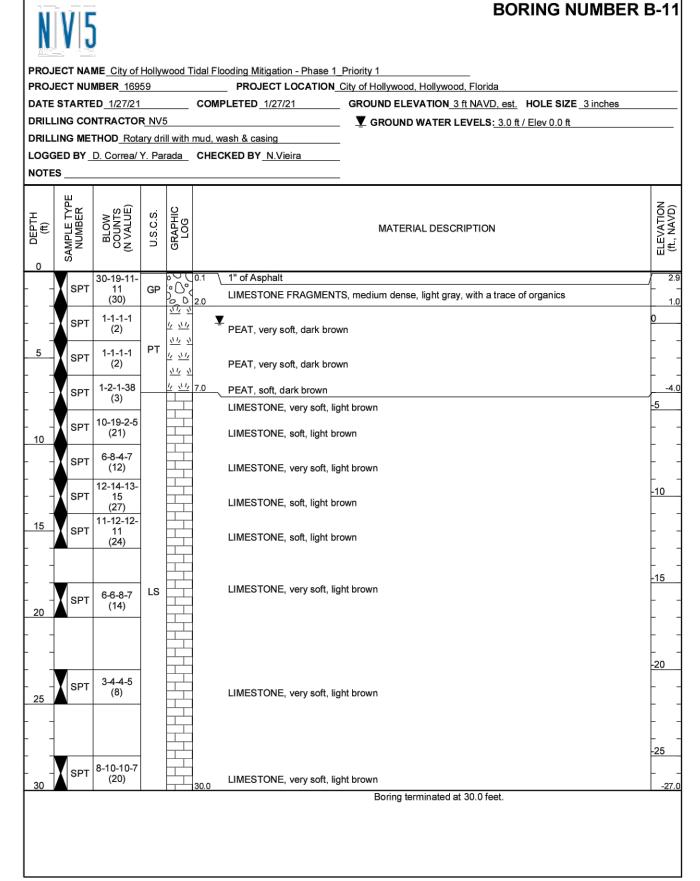
 Number & Approximate Location of Percolation Test.

NOTES:

 Test locations shown are approximate.
 Test location symbols are not to scale.
 Base drawing was taken from Aerial View, Google Earth, 2021.

V	5

DRAWING TITLE:	Site Vicinity Map & Test Location Plan		· · · · · · · · · · · · · · · · · · ·		DWN BY: $_{\mathcal{NVF}}$
PROJECT NAME:	City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1				CKD BY: CLG
PROJECT LOCATION:	City of Hollywood, Hollywood, Florida	PROJECT NO: 16959	DATE: 02/01/20	021 DWG NO: 1	APD BY



PAGE A-11

PROJ	ECT NU	MBER_169	959		PROJECT LOCA	TION_City of Hollywood, Hollywood, Florida	
DRILL DRILL LOGG	ING CO	NTRACTO THOD_Rot	R NV	5 ill with r	mud, wash & casing CHECKED BY N.Vieira	GROUND ELEVATION 3 ft NAVD, est. HOLE SIZE 3 inches To GROUND WATER LEVELS: 3.0 ft / Elev 0.0 ft	
O DEPTH	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	ELEVATION (# NAVD)
	SPT	28-16-11- 10	GP	900	0.1 \ 1" of Asphalt 1.0 \ LIMESTONE FRAG	MENTS, medium dense, light gray, with a trace of organics	2
		(27) 4-2-1-1	ML		SILT, very stiff, dark	grav	0 0
	SPT	(3)		20 20	PEAT, soft, dark bro		
5	SPT	1-1-1-1 (2)	РТ	<u> </u>	PEAT, very soft, da	rk brown	-
	SPT	1-1-2-70	_	4 34	6.7 PEAT, soft, dark bro	own	-3
		(3)	-	弄	LIMESTONE, very	soft, light brown	-5
. – 10	SPT	7-22-4-4 (26)		异	LIMESTONE, soft,	ight brown	t
_	SPT	4-5-8-9 (13)			LIMESTONE, very	soft, light brown	
	SPT	7-13-13-19 (26)	9	祌	LIMESTONE, soft,	iaht brown	-10
 15	SPT	10-13-14- 10	-			•	t
	SFI	(27)	-	开	LIMESTONE, soft, I	ight brown	-
20	SPT	7-8-7-8 (15)	LS		LIMESTONE, very	soft, light brown	- -15 - -
							- - -20
25	SPT	4-5-5-4 (10)			LIMESTONE, very	soft, light brown	-
 							-
	SPT	10-12-9-8 (21)	-		30.0 LIMESTONE, soft, I	ight brown	-25 - 27

PAGE A-12

PROJECT:
CITY OF HOLLYWOOD TIDAL
FLOODING MITIGATION AND
SHORELINE PROTECTION
PROJECT

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS
DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412
NIVI5

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES

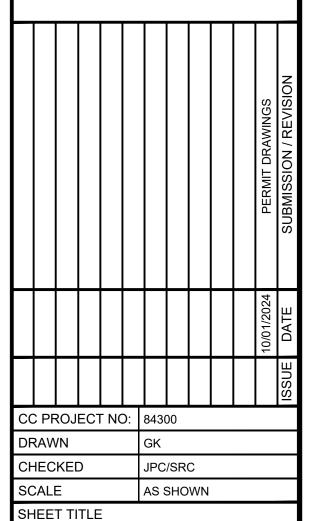
301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC

CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

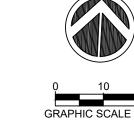


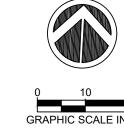
BORINGS

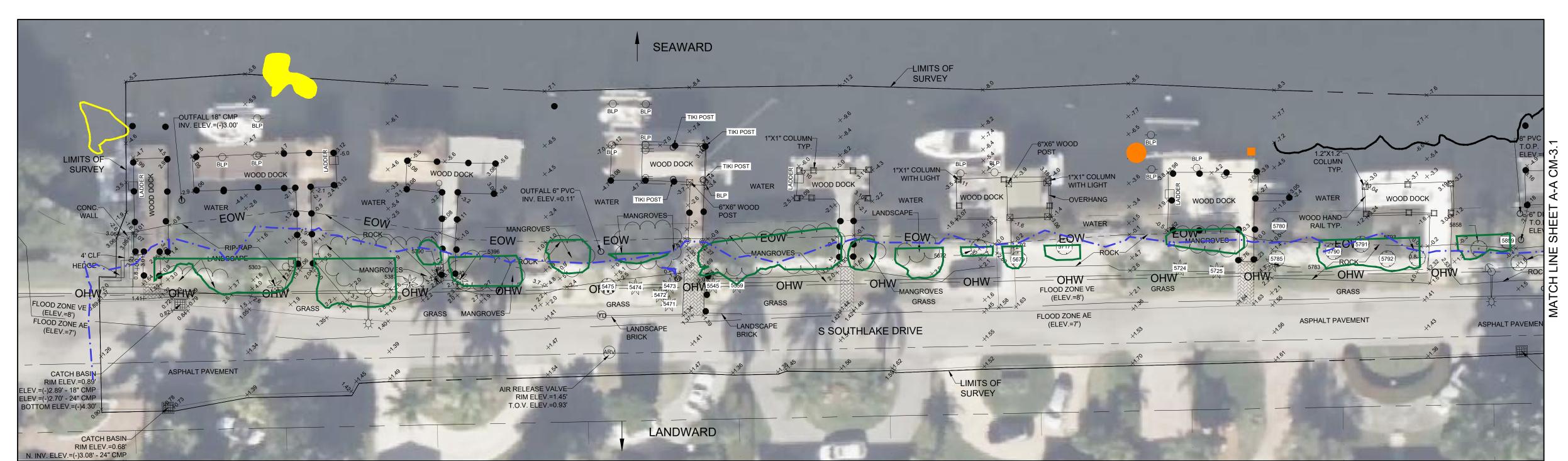
CM-3.0

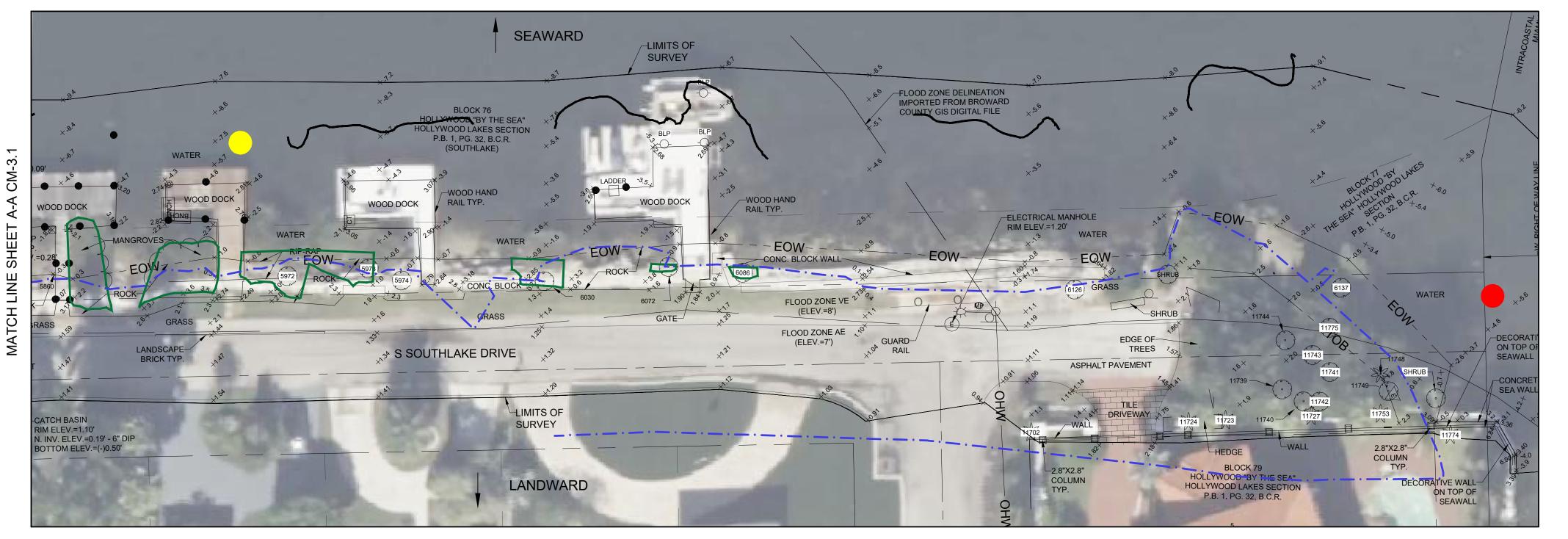
SITE 17

GEOTECHNICAL









LEGEND: SEAGRASS SPECIES H. decipiens H. decipiens/H. wrightii H. decipiens/H. wrightii/H. johnsonii H. decipiens/H. johnsonii/T. tesudinum SEAGRASS DENSITY MODERATE-HIGH EDGE LOW MODERATE-HIGH MODERATE-HIGH MANGROVE HABITAT POINT LANDWARD EDGE OF MANGROVE MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88

NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021 SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION **MANAGEMENT**

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646

SUBCONSULTANTS: CURTIS + ROGERS DESIGN STUDIO, INC. LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES SURVEYOR

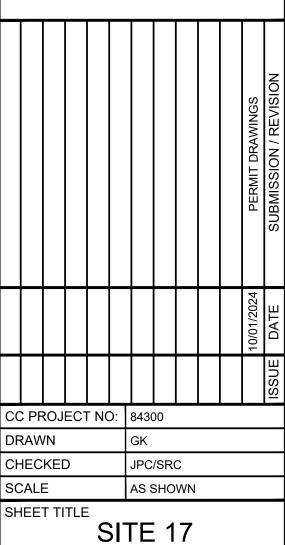
301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC CIVIL ENGINEER

500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

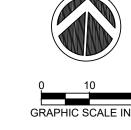
PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

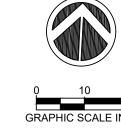


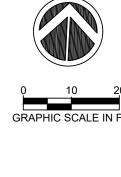
CM-3.1

EXISTING

CONDITIONS







PROJECT NO. DCM-001187

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION

CLIENT:

PROJECT

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION **MANAGEMENT**

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



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GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES SURVEYOR

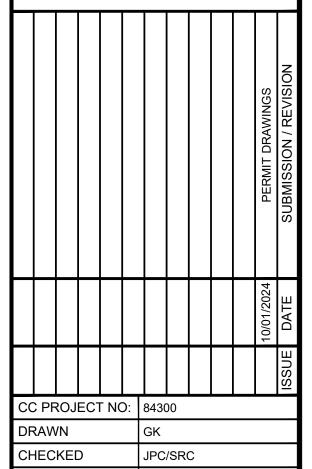
301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600

FORT LAUDERDALE, FL 33309 TEL: 954-730-0707 BRIZAGA

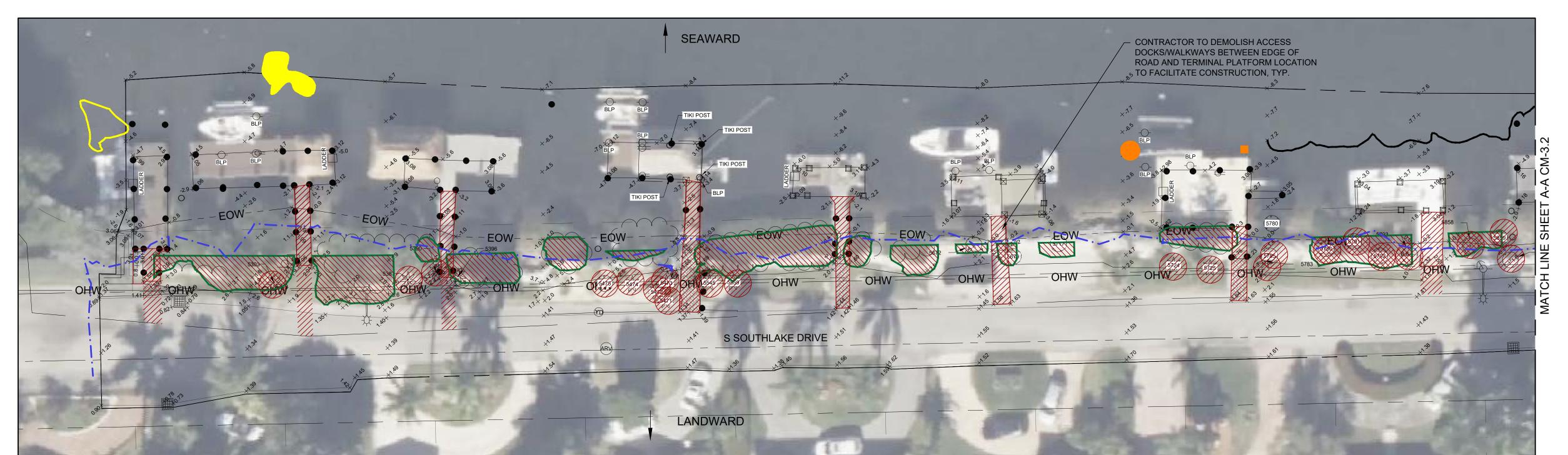
PUBLIC OUTREACH

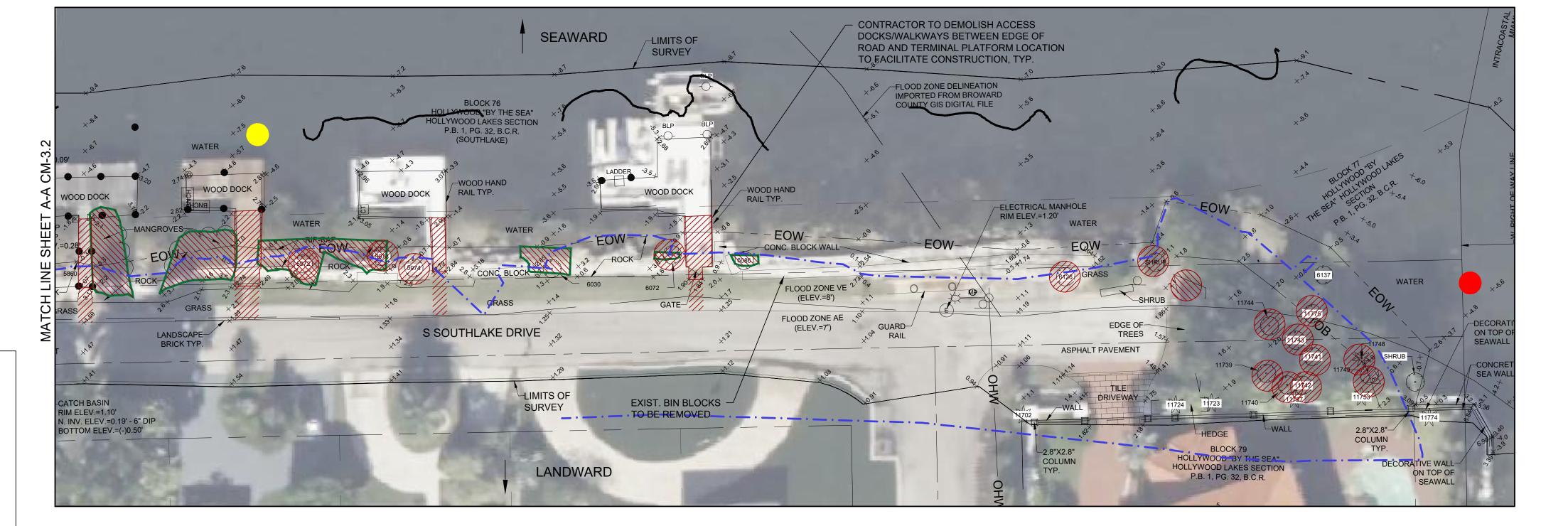
2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

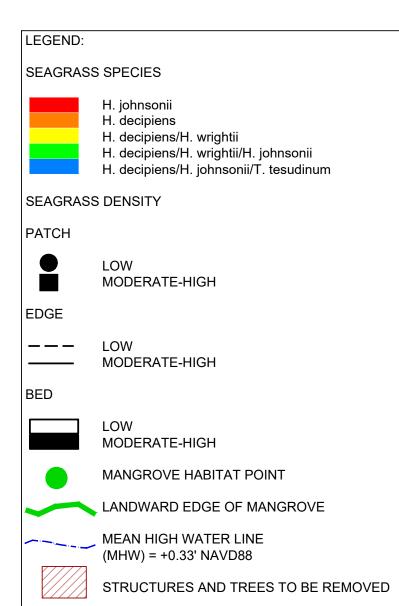


SCALE AS SHOWN SHEET TITLE SITE 17 **DEMOLITION PLAN**

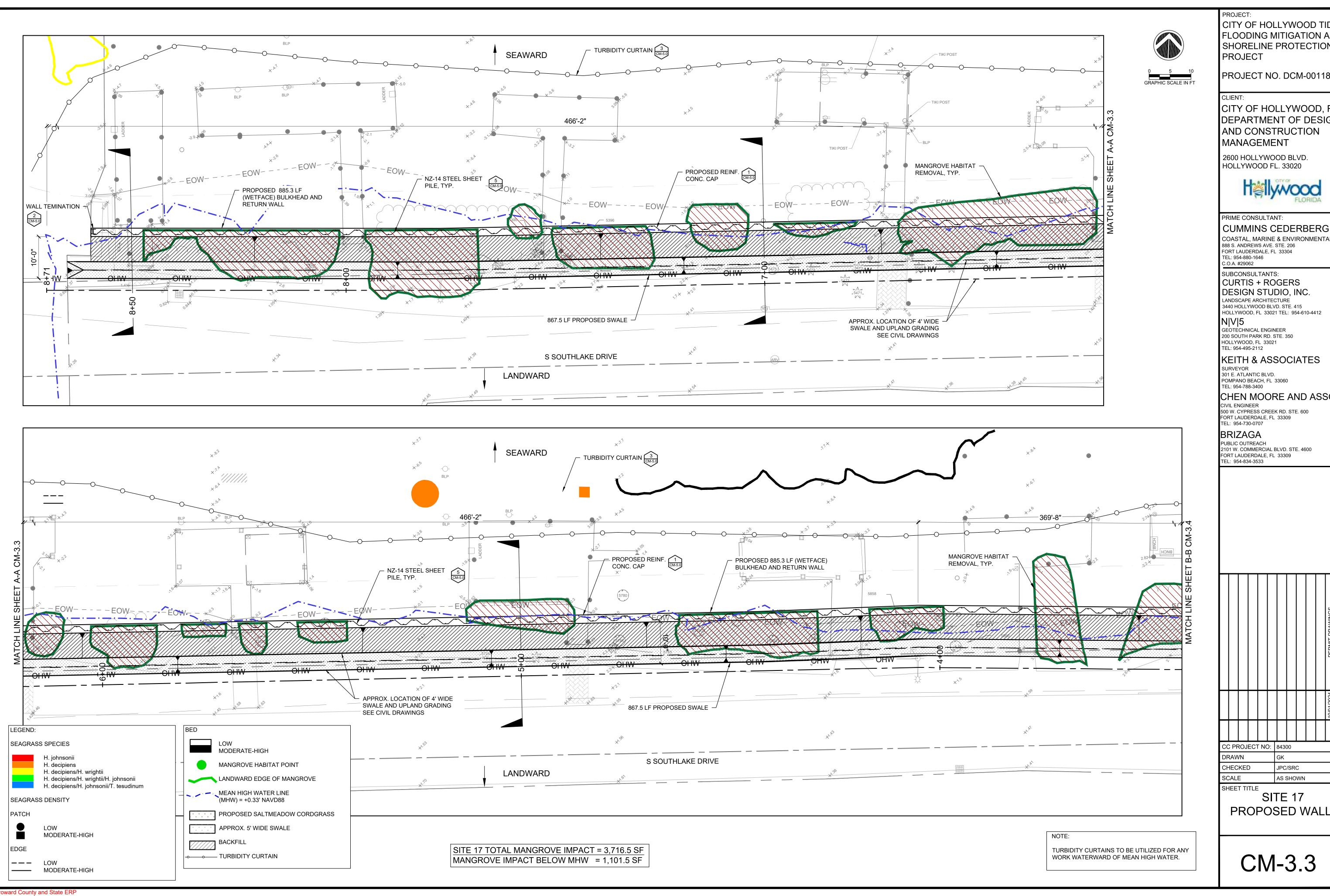
CM-3.2







SITE 17 TOTAL MANGROVE IMPACT = 3,716.5 SF MANGROVE IMPACT BELOW MHW = 1,101.5 SF



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304

SUBCONSULTANTS: CURTIS + ROGERS DESIGN STUDIO, INC. LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

> CHEN MOORE AND ASSOC CIVIL ENGINEER

500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

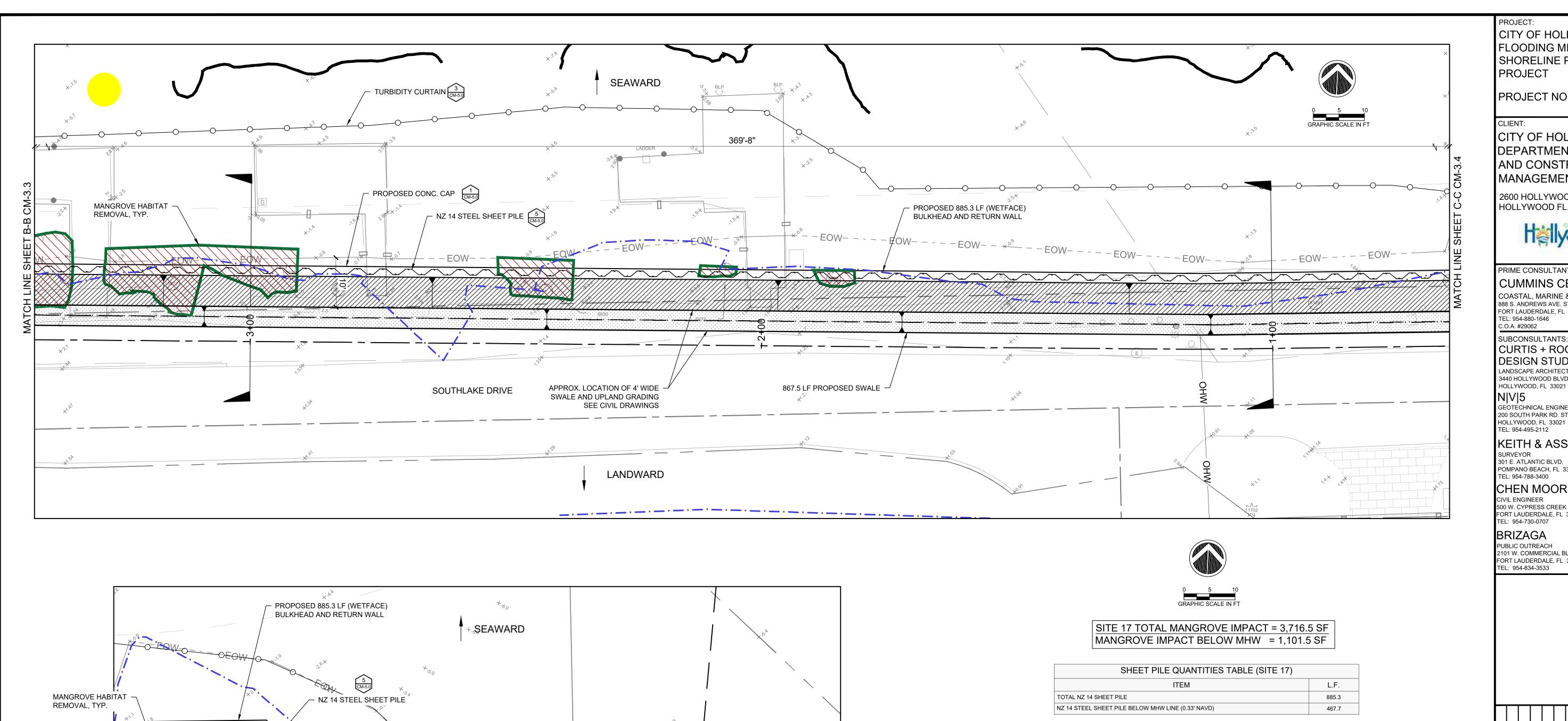
BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

> CC PROJECT NO: 84300 JPC/SRC CHECKED SCALE AS SHOWN SHEET TITLE

SITE 17 PROPOSED WALL

CM-3.3



TURBIDITY CURTAIN 3 CM-5.0

-XEOM-

PROPOSED CONC. CAP

- WALL TEMINATION 2 CM-5.0

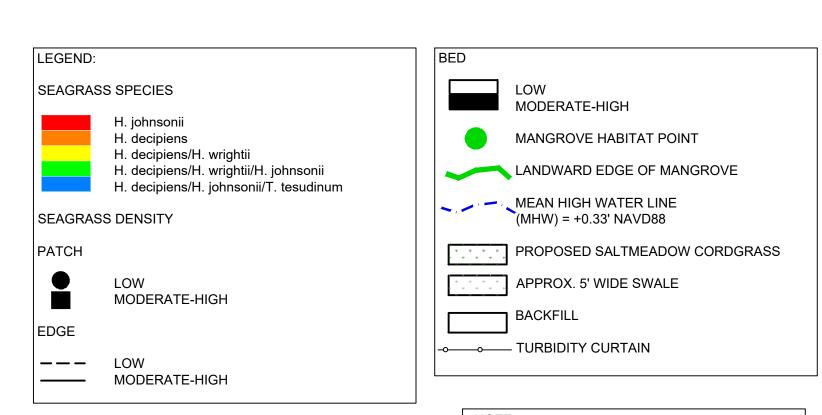
LANDWARD

TOTAL NZ 14 SHEET PILE		885.3							
NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)		467.7							
QUANTITIES TABLE (SITE 17)									
ITEM	S.F.	CY							
TOTAL BACKFILL LANDWARD OF SHEET PILE WALL	5,271.7	389.3							

BACKFILL LANDWARD OF HEET PILE WALL BELOW MHW LINE

(+0.33' NAVD)

SWALE EXCAVATION



NOTE: TURBIDITY CURTAINS TO BE UTILIZED FOR ANY WORK WATERWARD OF MEAN HIGH WATER.

811.6

3,498.0

113.4

153.6

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206

FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062

CURTIS + ROGERS DESIGN STUDIO, INC. LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES SURVEYOR

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

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BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309

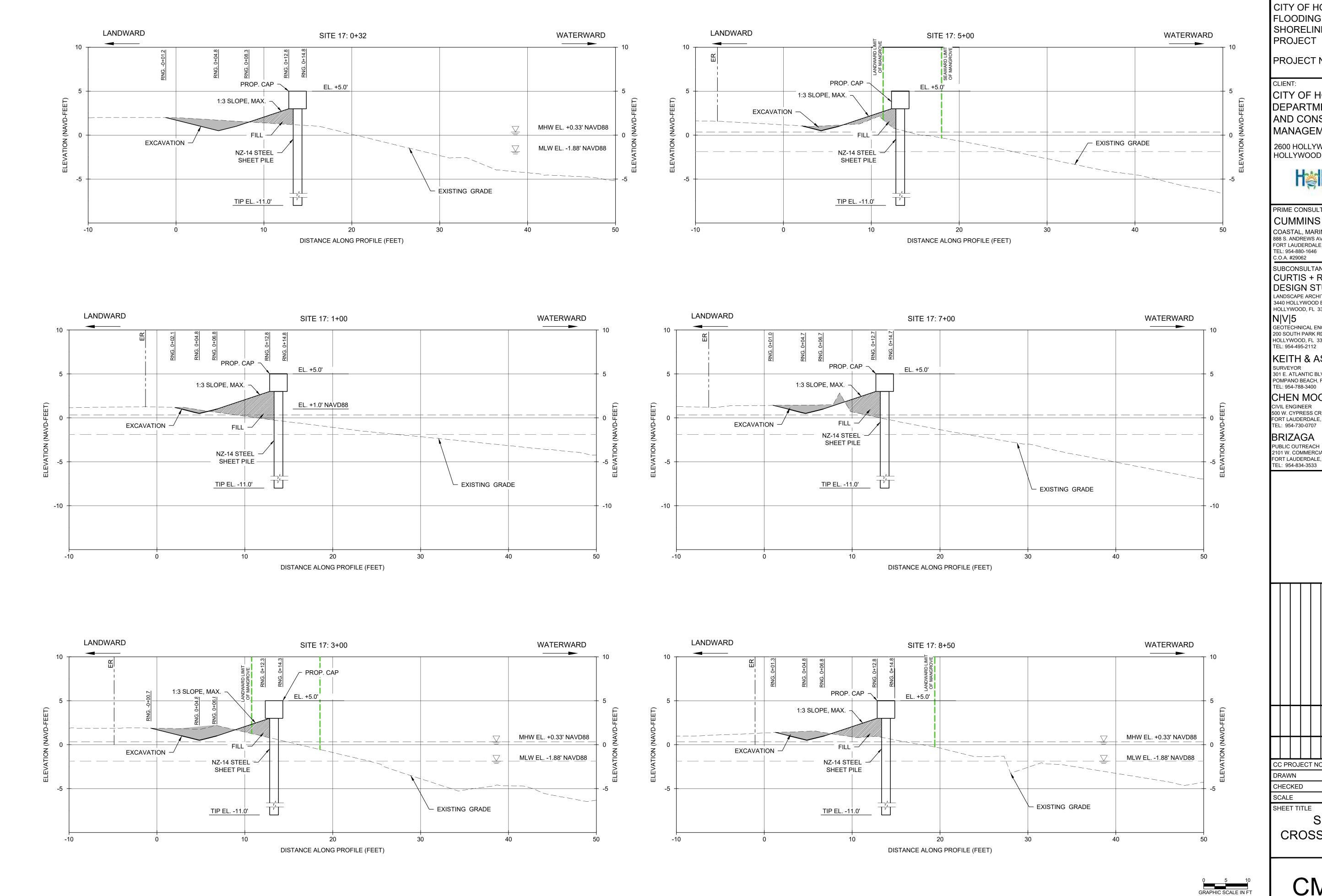
CC PROJECT NO: 84300 JPC/SRC CHECKED SCALE AS SHOWN SHEET TITLE SITE 17

CM-3.4

PROPOSED WALL

867.5 LF PROPOSED SWALE

APPROX. LOCATION OF 4' WIDE SWALE AND UPLAND GRADING SEE CIVIL DRAWINGS



Page 25 of 55

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

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SUBCONSULTANTS: CURTIS + ROGERS DESIGN STUDIO, INC. LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

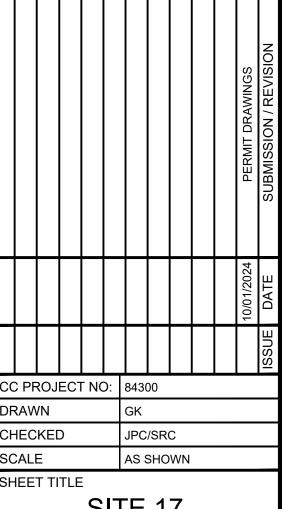
KEITH & ASSOCIATES

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC CIVIL ENGINEER

500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309

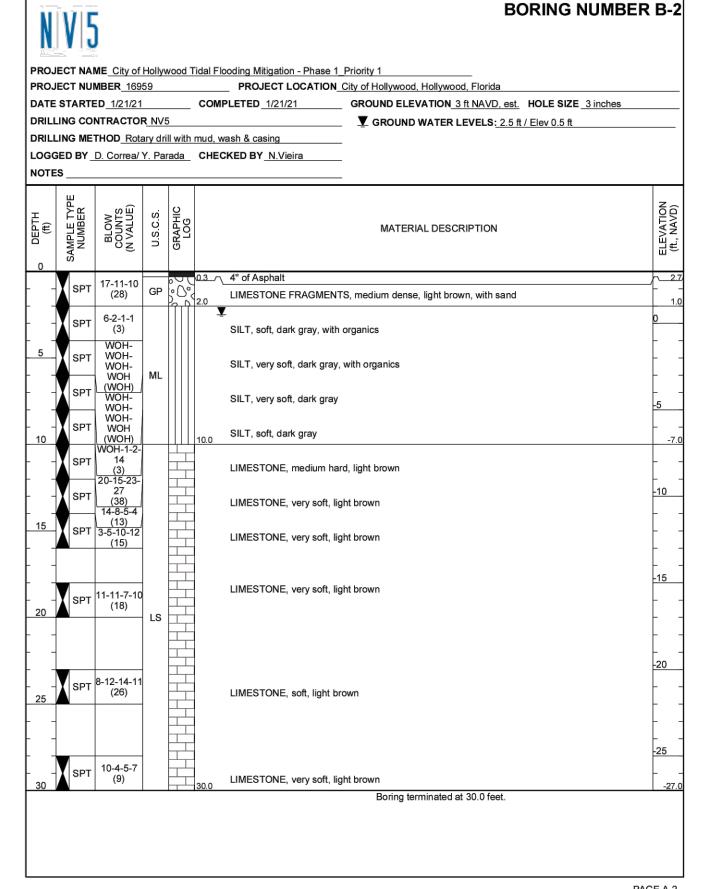


SITE 17 **CROSS SECTIONS**

CM-3.5

City of Hollywood Tidal Flooding Mitigation – Phase 1_Priority 1

PROJECT LOCATION: City of Hollywood, Hollywood, Florida



Site Vicinity Map

Approximate Scale in Feet

Number & Approximate Location of Test

Number & Approximate Location of

Percolation Test.

1. Test locations shown are approximate. 2. Test location symbols are not to scale. 3. Base drawing was taken from Aerial View,

DWN BY: $_{\mathcal{NVF}}$

CKD BY:

APD BY

Google Earth, 2021.

LEGEND:

NOTES:

DATE: 02/01/2021 DWG NO: 1

PROJECT NO:

PAGE A-2

PAGE A-3

						ooding Mitigation - Phase 1_Priority 1PROJECT LOCATION_City of Hollywood, Hollywood, Florida	
						PLETED_1/21/21 GROUND ELEVATION_5 ft NAVD, est. HOLE SIZE 3 inches	
						▼ GROUND WATER LEVELS: 4.5 ft / Elev 0.5 ft	
LOGG		D. Correa/	_			rash & casing CKED BY N.Vieira	
O DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	U.S.C.S.	GRAPHIC LOG		MATERIAL DESCRIPTION	ELEVATION
	SPT	2-4-4-6		34.3	0.3_^		_{
_]	1 3 1	(8)	SP		2.0	SAND, loose, fine, light brown, with sand	;
	SPT	5-2-1-1 (3) 1-WOH-				SILT, soft, dark gray, with organics	-
5	SPT	WOH- WOH (WOH)	ML		7	SILT, very soft, dark gray, with organics	0
	SPT	WOH- WOH- WOH-1				SILT, very soft, dark gray	-
10	SPT	(WOH) 2-7-12-10 (19)		Ш	10.0	SILT, very stiff, dark gray, with a trace of limestone fragments	- -5 -
	SPT	3-3-3-6 (6)				SANDY LIMESTONE, very soft, light brown	-
	SPT	(17)]	LIMESTONE, very soft, light brown	-
15	SPT	10-13-9-11 (22)	1		,]]	LIMESTONE, soft, light brown	<u>-10</u>
· -	SPT	10-8-6-8	_]	LIMESTONE, very soft, light brown	-
20		(14)	LS				<u>-15</u> - -
25 	SPT	10-4-4-2 (8)	-			LIMESTONE, very soft, light brown	- -20 - -
	SPT	3-9-5-3 (14)		井	30.0	LIMESTONE, very soft, light brown	- - -2525

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646

C.O.A. #29062 SUBCONSULTANTS: CURTIS + ROGERS DESIGN STUDIO, INC. LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES SURVEYOR

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC CIVIL ENGINEER

500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

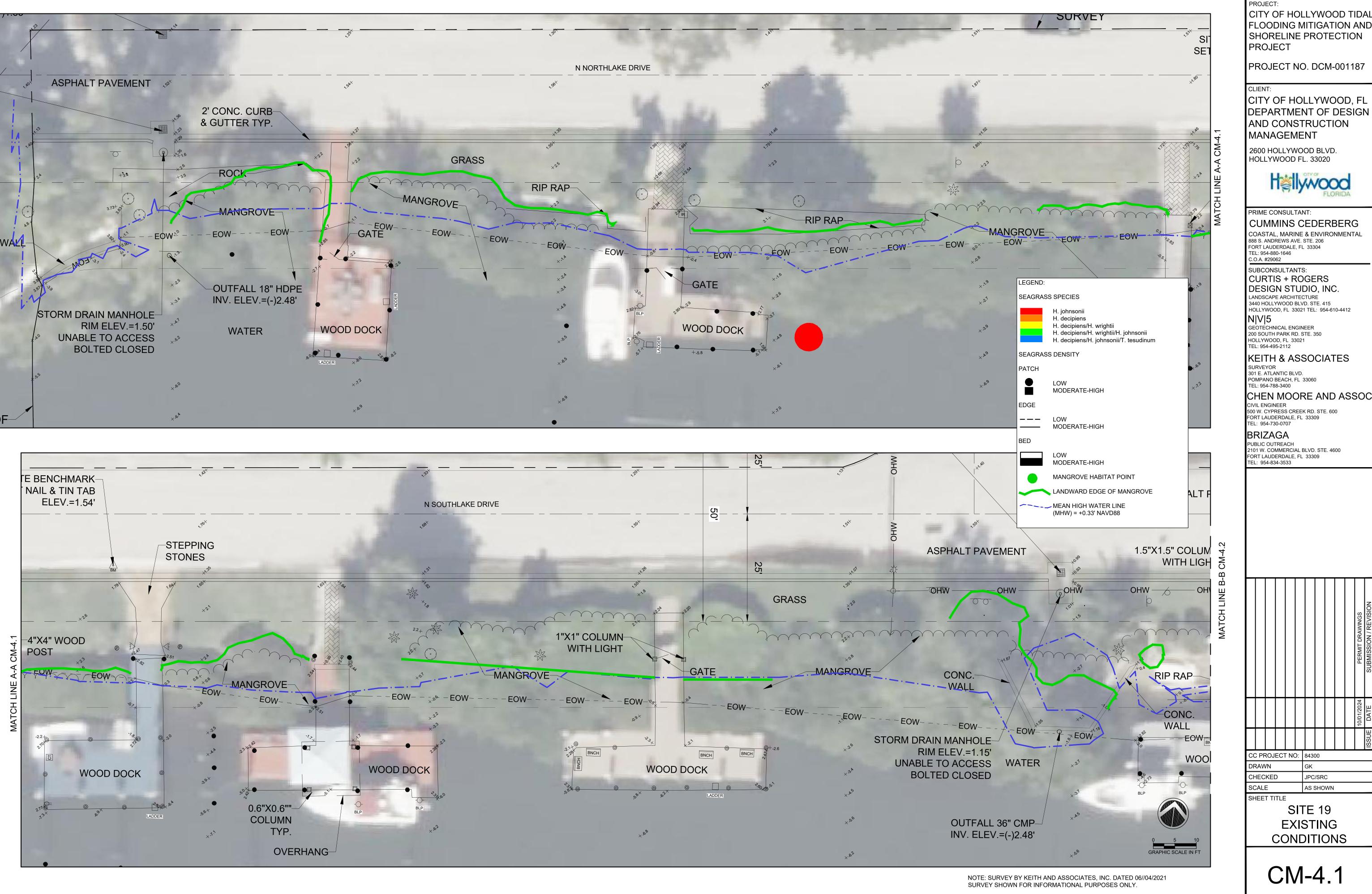
										PERMIT DRAWINGS	SUBMISSION / REVISION
										10/01/2024	DATE
											ISSNE
PROJECT NO:		D:	843	00							
RAV	AWN				GK						
HEC	IECKED			JPC/SRC							
CAL	ALE				AS S	AS SHOWN					

GEOTECHNICAL **BORINGS SITE 19**

SHEET TITLE

CM-4.0

Page 26 of 55



Broward County and State ERP Page 27 of 55



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

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GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES SURVEYOR

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC CIVIL ENGINEER

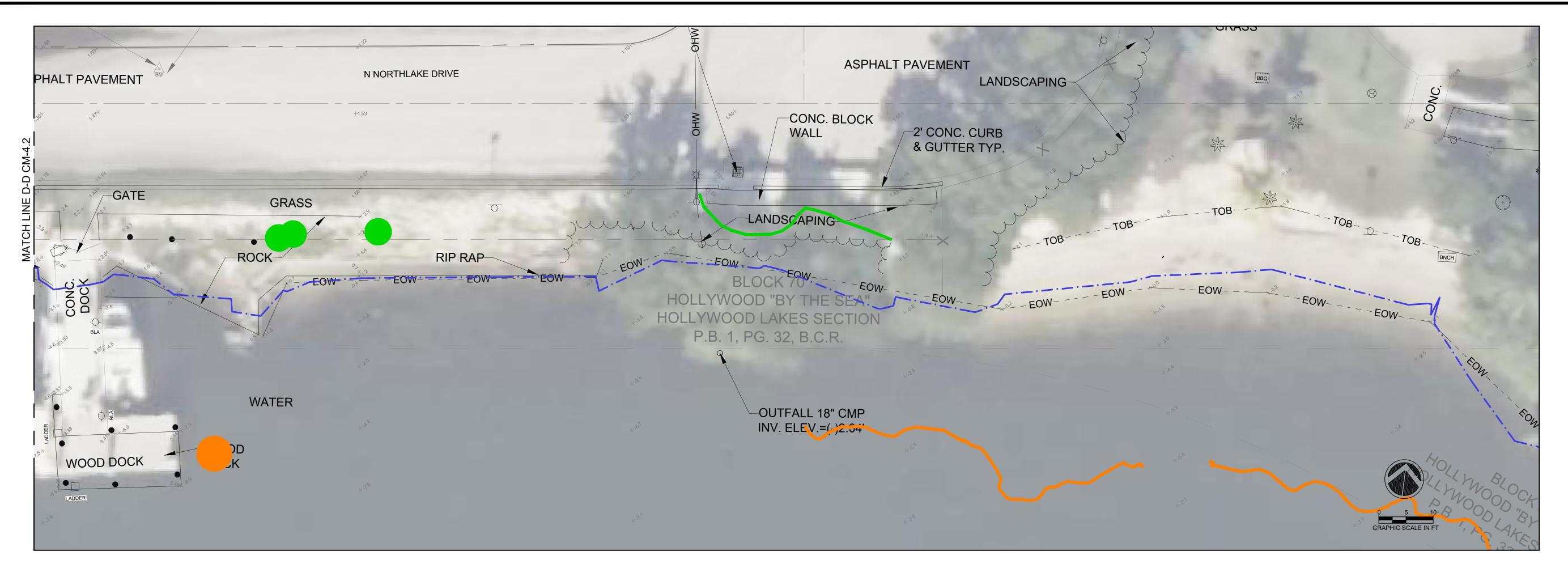
500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

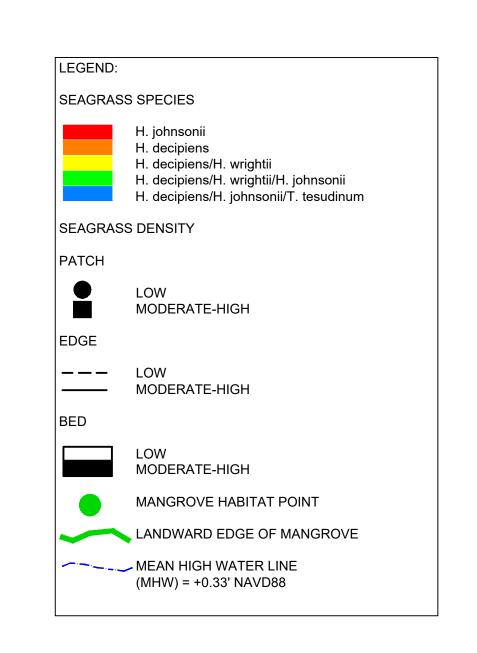
BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

CC PROJECT NO: 84300 JPC/SRC CHECKED SCALE AS SHOWN SHEET TITLE

SITE 19 **EXISTING** CONDITIONS





NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021 SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.

PROJECT:
CITY OF HOLLYWOOD TIDAL
FLOODING MITIGATION AND
SHORELINE PROTECTION
PROJECT

PROJECT NO. DCM-001187

LIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062

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DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412

N|V|5 GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES

SURVEYOR 301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC

CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

										PERMIT DRAWINGS	SUBMISSION / REVISION
										10/01/2024	DATE
											ISSNE
PF	ROJ	EC1	ΓNC	D:	843	00					
AWN					GK						
ECKED					JPC	/SR	С				
ALI	Ξ_				AS S	SHO	WN				
EE	T TI	TLE									
		SITE 19									

CM-4.3

EXISTING

CONDITIONS



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT:

CUMMINS CEDERBERG COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206

FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062 SUBCONSULTANTS: CURTIS + ROGERS

DESIGN STUDIO, INC. LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES SURVEYOR

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC

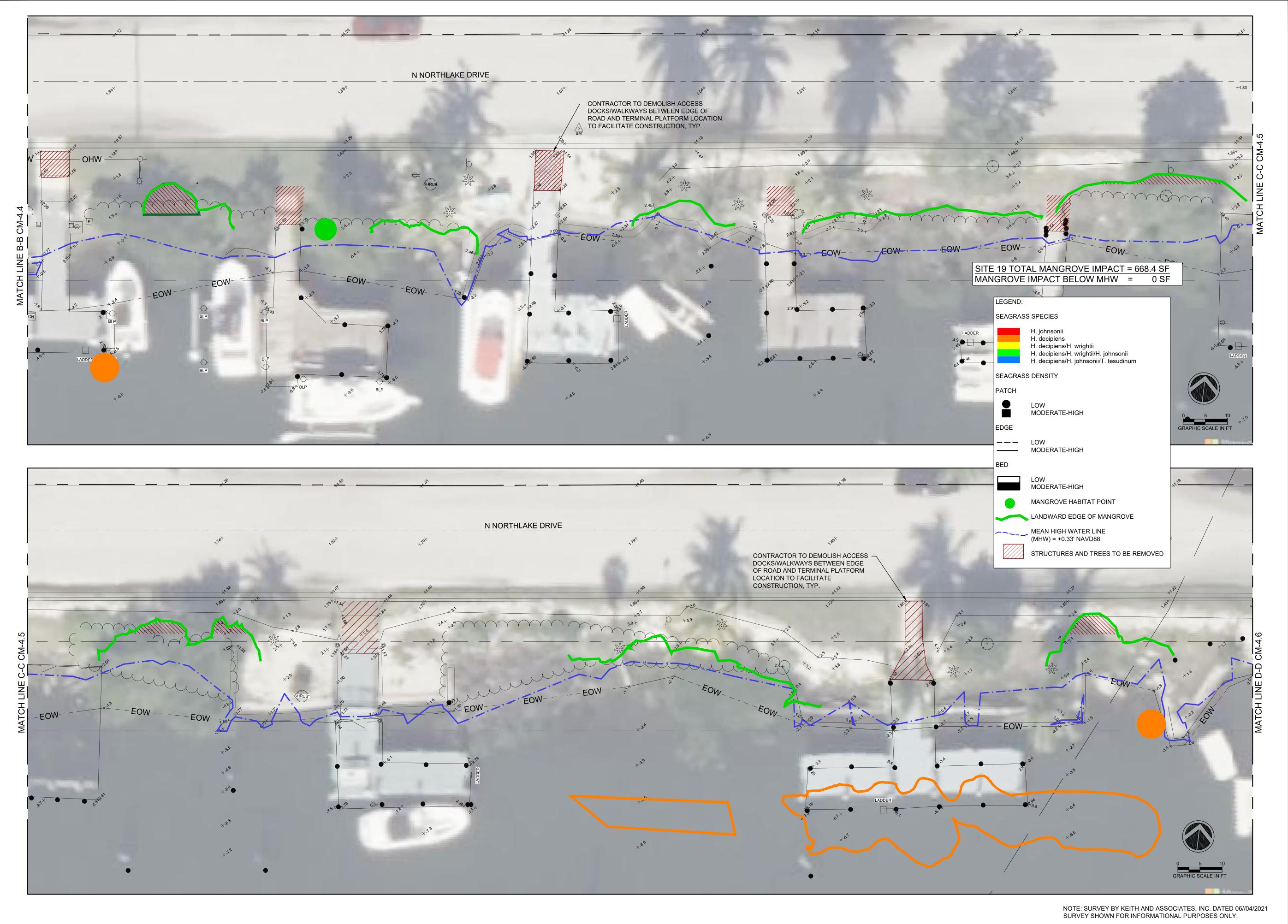
CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309

CC PROJECT NO: 84300 JPC/SRC CHECKED SCALE AS SHOWN SHEET TITLE

> SITE 19 **DEMOLITION** PLAN



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



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HOLLYWOOD, FL 33021 TEL: 954-610-4412

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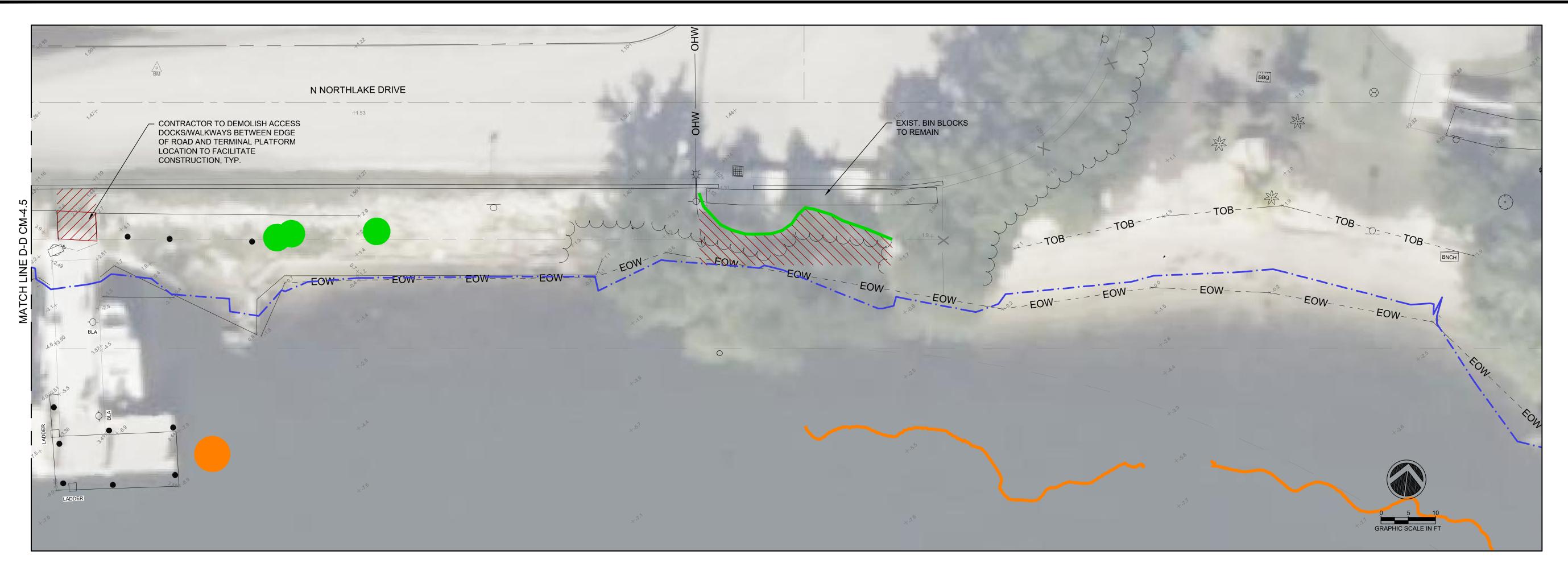
BRIZAGA

TEL: 954-834-3533

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309

CC PROJECT NO: 84300
DRAWN
GK
CHECKED
JPC/SRC
SCALE
SCALE
SCALE
SCHEMIT DRAWINGS
SHEET TITLE
SUBMISSION / REVISION

SITE 19
DEMOLITION
PLAN



PROJECT:
CITY OF HOLLYWOOD TIDAL
FLOODING MITIGATION AND
SHORELINE PROTECTION
PROJECT

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



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LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415

HOLLYWOOD, FL 33021 TEL: 954-610-4412

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GEOTECHNICAL ENGINEER
200 SOUTH PARK RD. STE. 350
HOLLYWOOD, FL 33021
TEL: 954-495-2112

KEITH & ASSOCIATES

SURVEYOR 301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

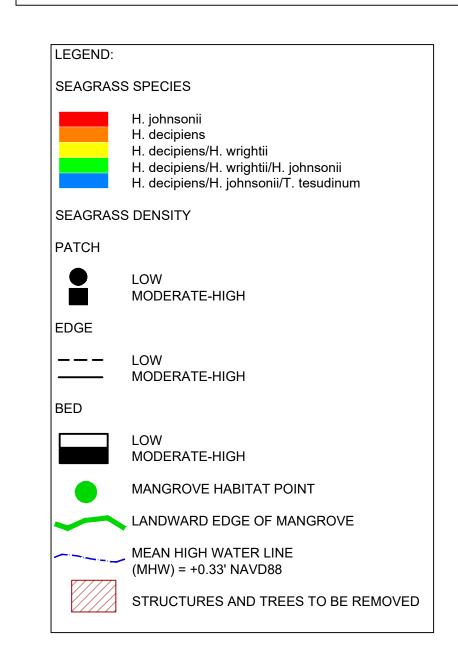
CHEN MOORE AND ASSOC.

CIVIL ENGINEER
500 W. CYPRESS CREEK RD. STE. 600
FORT LAUDERDALE, FL 33309
TEL: 954-730-0707

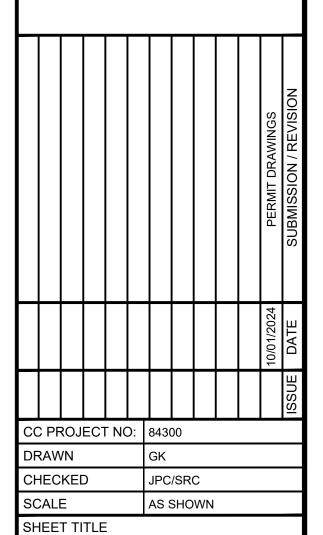
BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

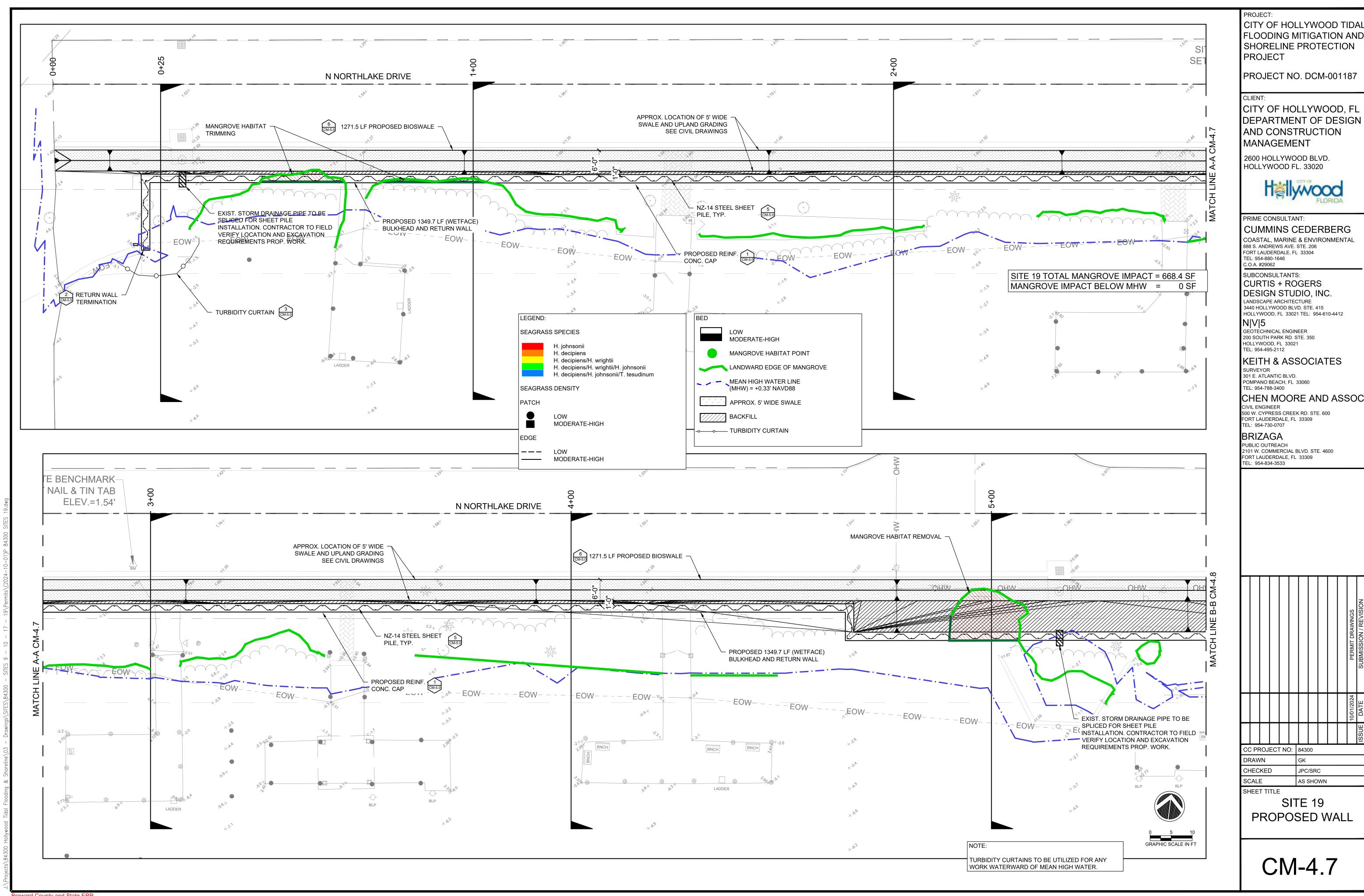
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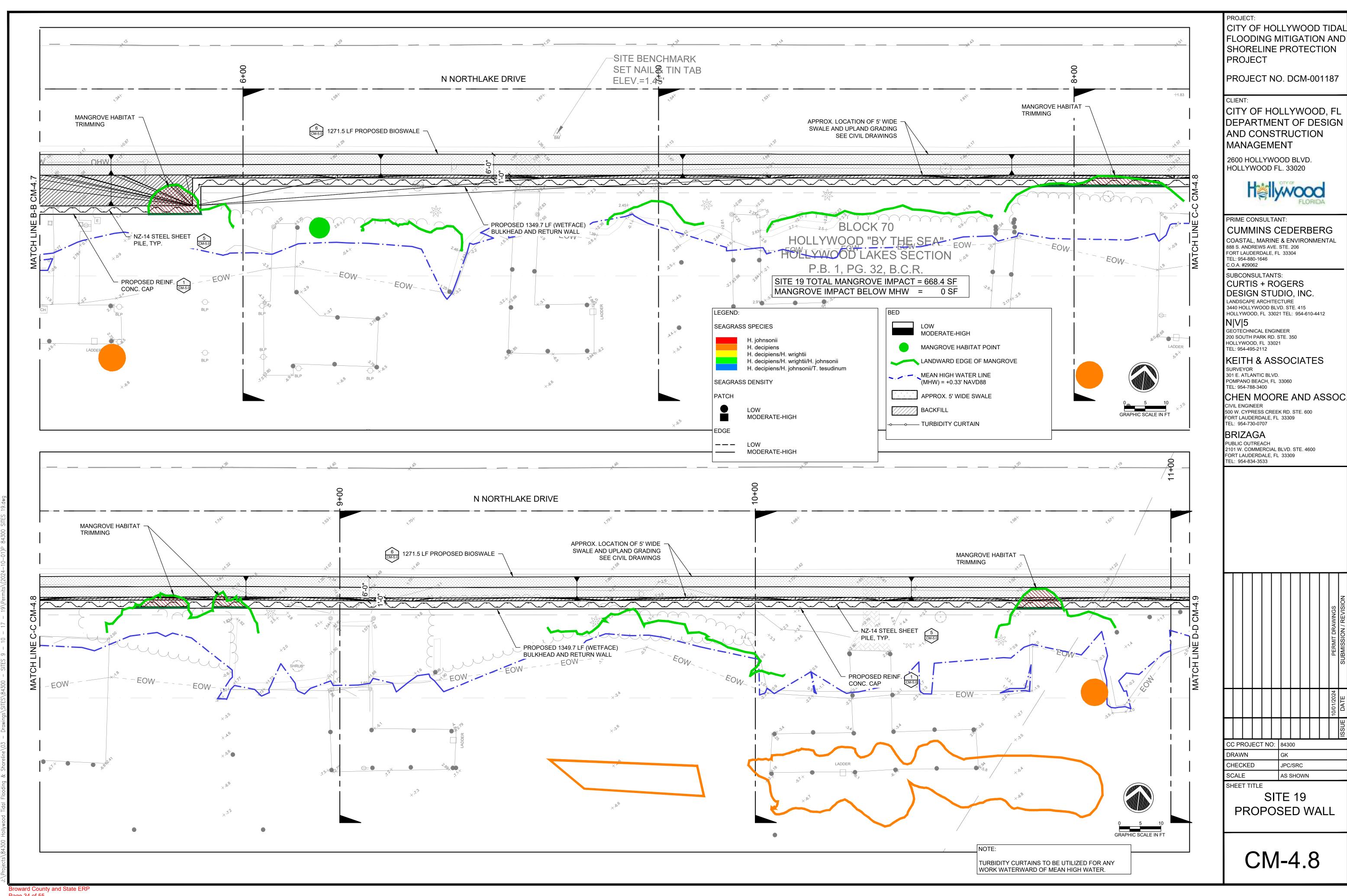
NOTE: SURVEY BY KEITH AND ASSOCIATES, INC. DATED 06//04/2021 SURVEY SHOWN FOR INFORMATIONAL PURPOSES ONLY.



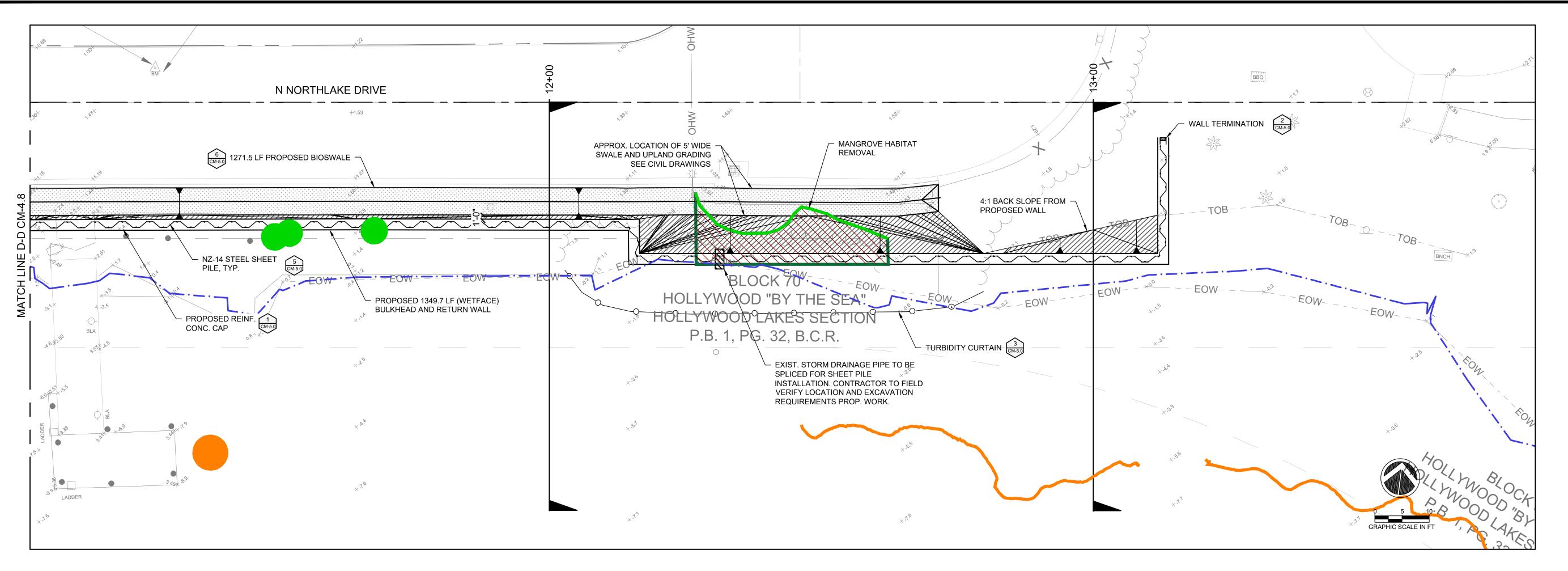
SITE 19 DEMOLITION PLAN



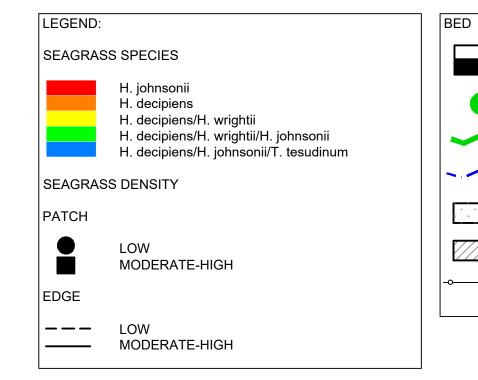
Broward County a
Page 33 of 55



Page 34 of 55



SITE 19 TOTAL MANGROVE IMPACT = 668.4 SF MANGROVE IMPACT BELOW MHW = 0 SF



BED	
	LOW MODERATE-HIGH
	MANGROVE HABITAT POINT
	LANDWARD EDGE OF MANGROVE
-,	MEAN HIGH WATER LINE (MHW) = +0.33' NAVD88
* * * * * *	APPROX. 5' WIDE SWALE
	BACKFILL
	- TURBIDITY CURTAIN

SHEET PILE QUANTITIES TABLE (SITE 19)

L.F.

1349.7

27.8

ITEM

NOTE:
TURBIDITY CURTAINS TO BE UTILIZED FOR ANY

WORK WATERWARD OF MEAN HIGH WATER.

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT NO. DOM: 004407

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



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COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206

888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062

SUBCONSULTANTS:
CURTIS + ROGERS
DESIGN STUDIO, INC.
LANDSCAPE ARCHITECTURE
3440 HOLLYWOOD BLVD. STE. 415
HOLLYWOOD, FL 33021 TEL: 954-610-4412
NIVI5

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC

500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

CC PROJECT NO: 84300

DRAWN

GK

CHECKED

JPC/SRC

SCALE

SCALE

SUBMISSION / REVISION

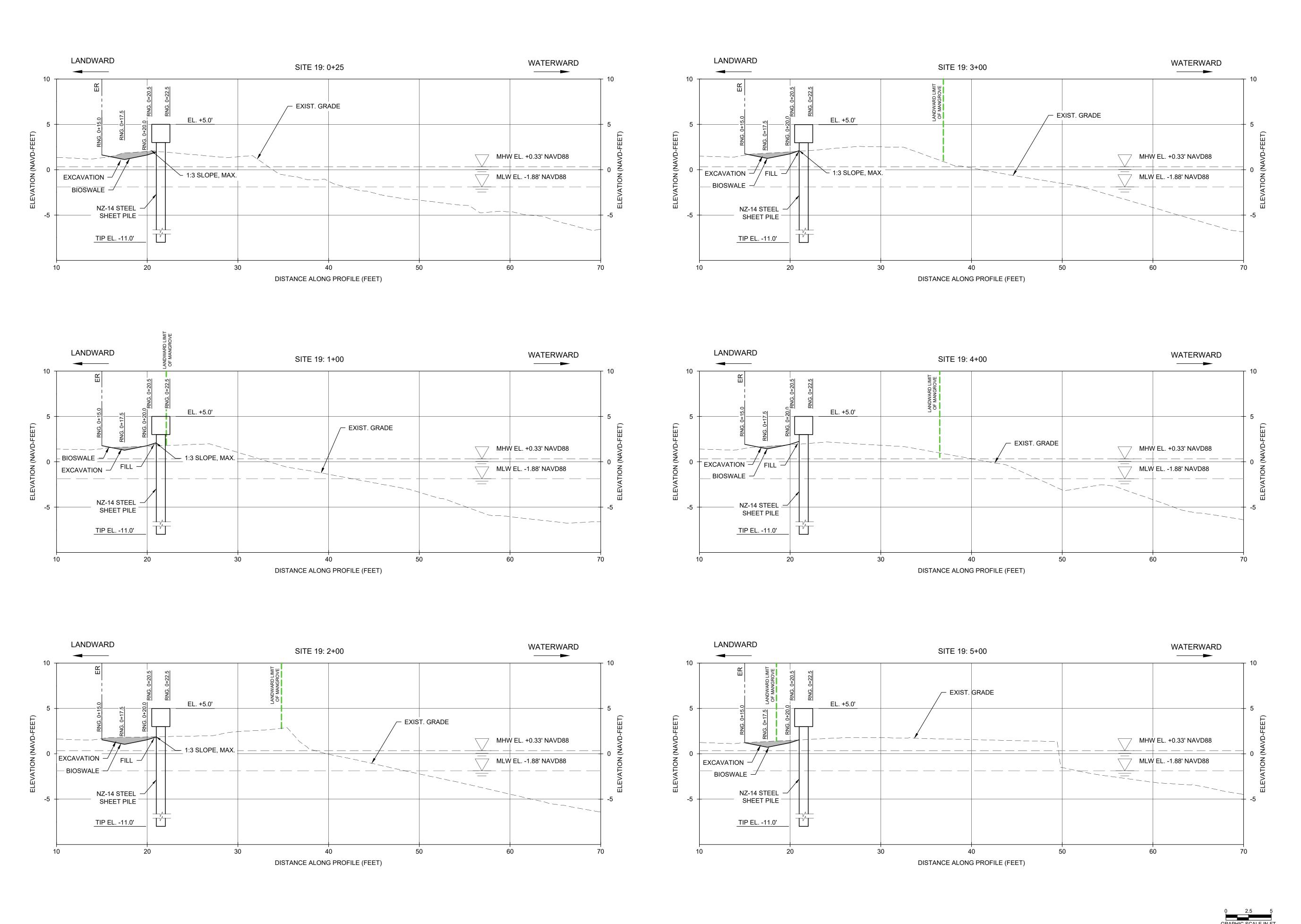
SITE 19 PROPOSED WALL

SHEET TITLE

CM-4.9

TOTAL NZ 14 SHEET PILE

NZ 14 STEEL SHEET PILE BELOW MHW LINE (0.33' NAVD)



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



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C.O.A. #29062

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KEITH & ASSOCIATES SURVEYOR 301 E. ATLANTIC BLVD.

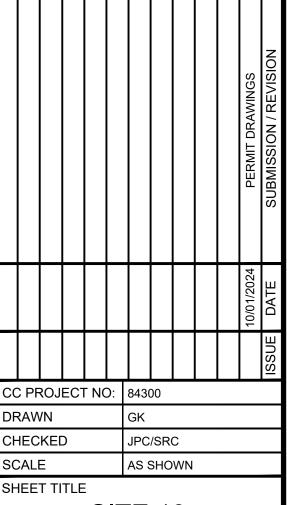
POMPANO BEACH, FL 33060 TEL: 954-788-3400 CHEN MOORE AND ASSOC

CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

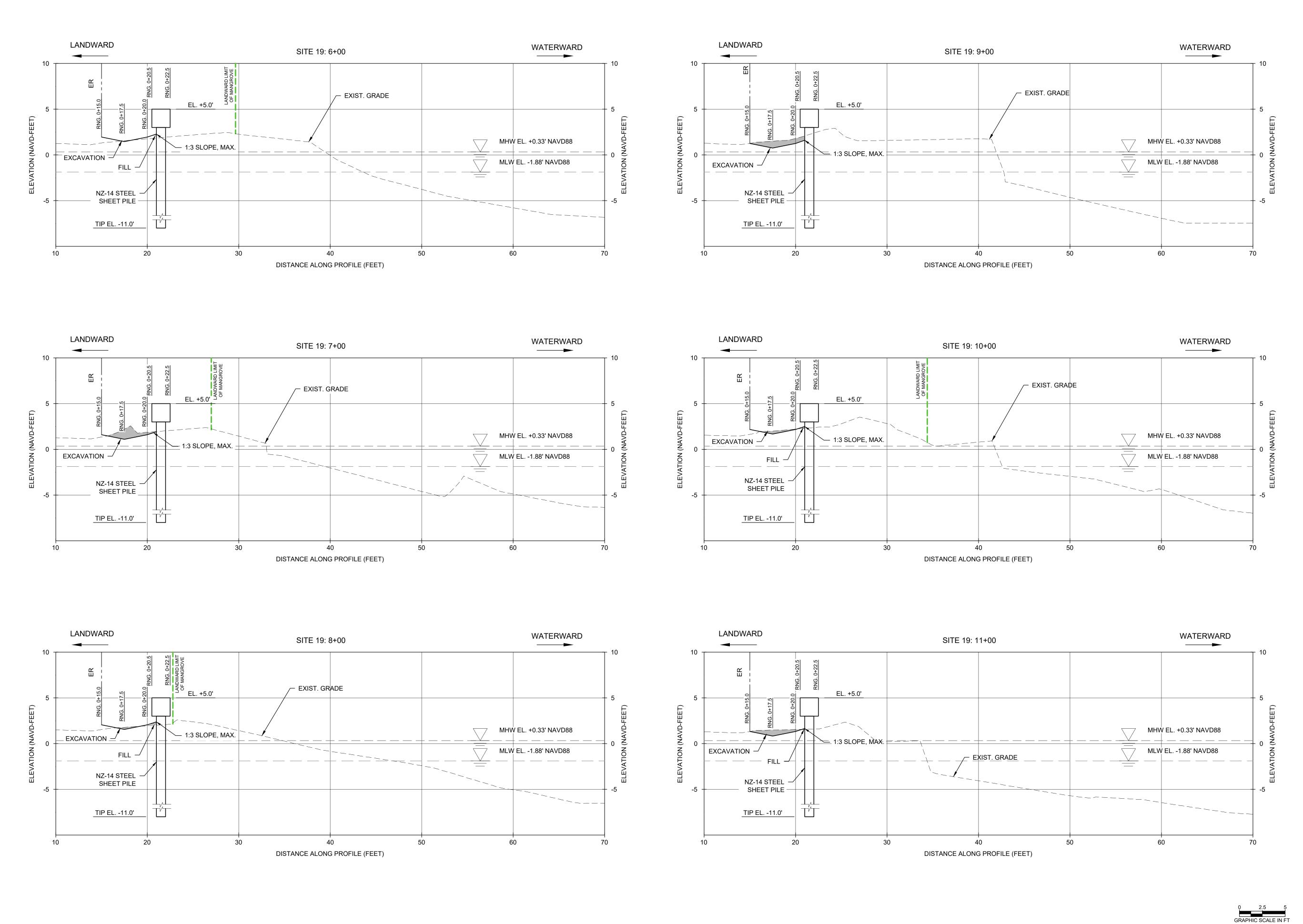
BRIZAGA

TEL: 954-834-3533

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309



SITE 19 **CROSS SECTIONS**



PROJECT:
CITY OF HOLLYWOOD TIDAL
FLOODING MITIGATION AND
SHORELINE PROTECTION
PROJECT

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

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N|V|5

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KEITH & ASSOCIATES
SURVEYOR
301 E. ATLANTIC BLVD.

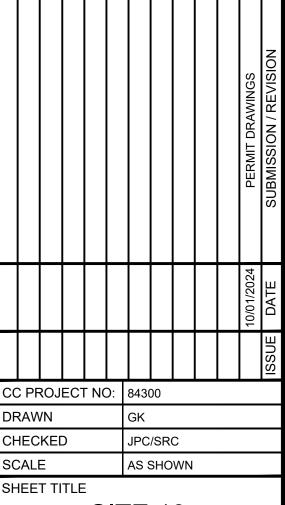
POMPANO BEACH, FL 33060
TEL: 954-788-3400

CHEN MOORE AND ASSOC

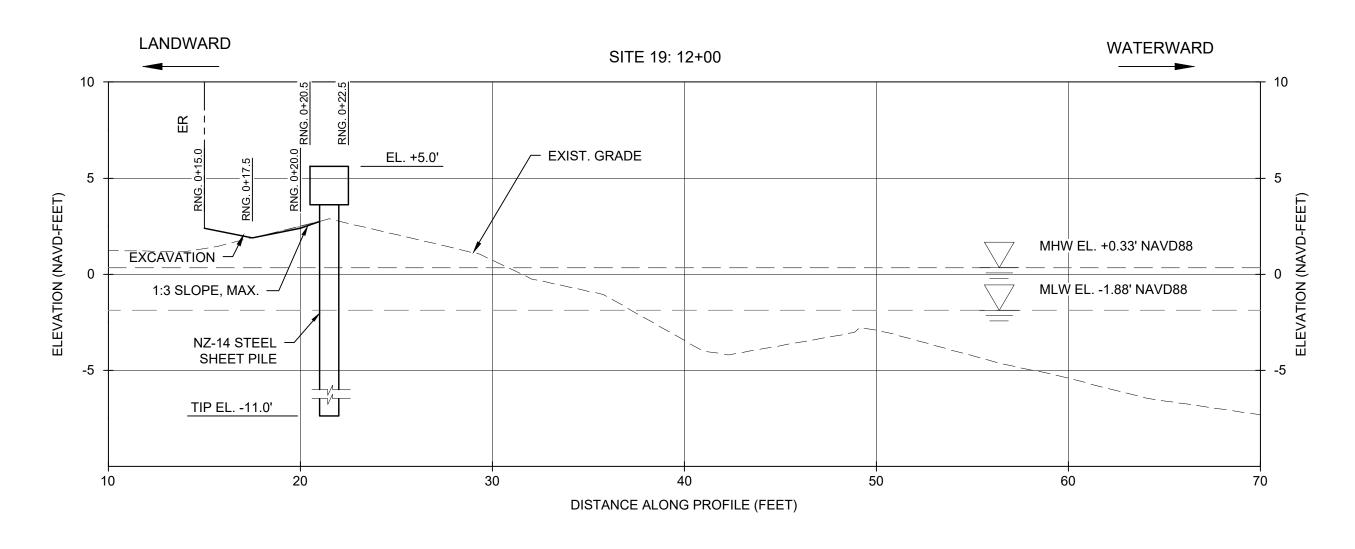
CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

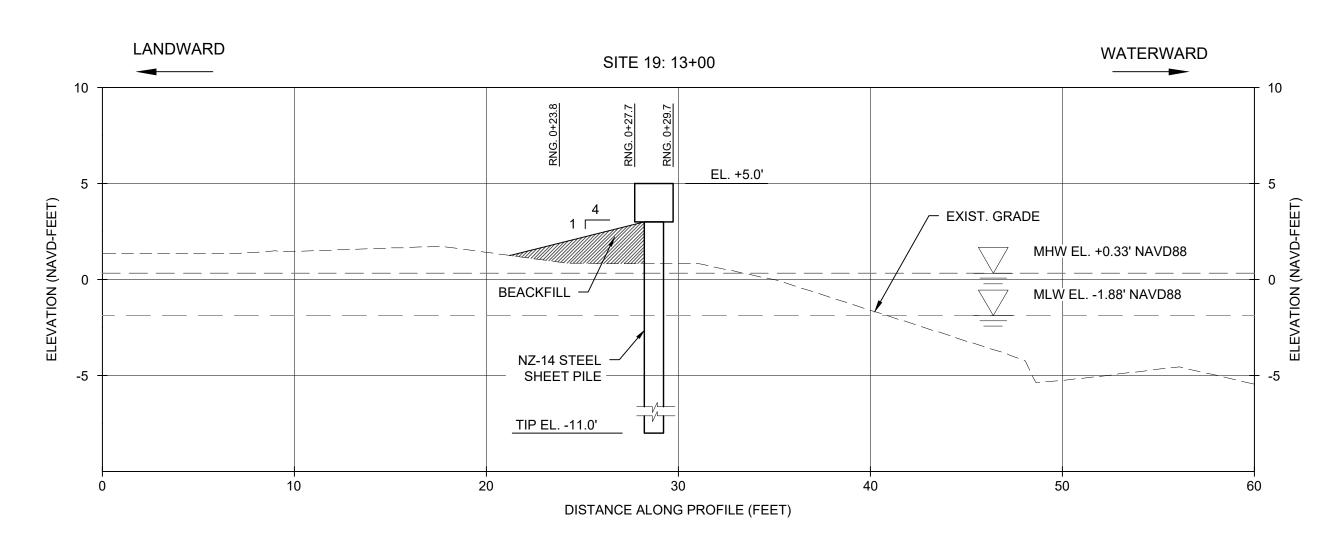
BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533



SITE 19 CROSS SECTIONS





PROJECT:

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

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DRAMIN GK

OCC PROJECT NO: 84300

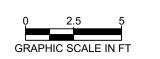
ISSUE DATE SUBMISSION / REVISION

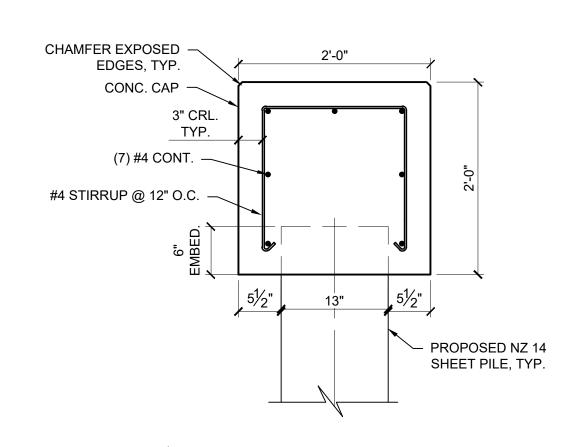
CHECKED JPC/SRC

SCALE AS SHOWN

SHEET TITLE

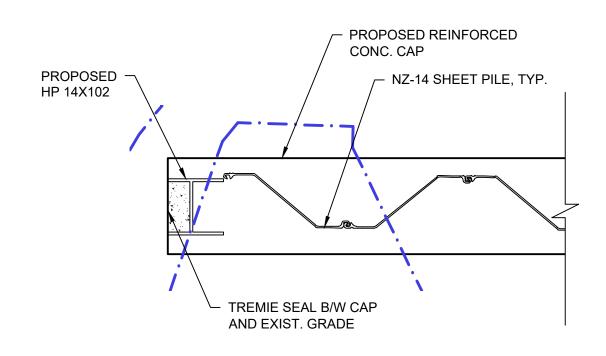
SITE 19 CROSS SECTIONS



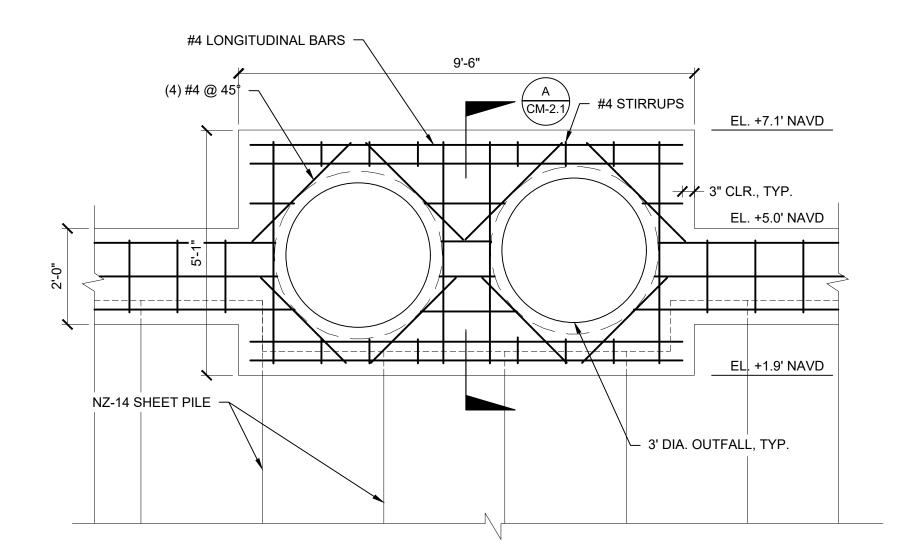


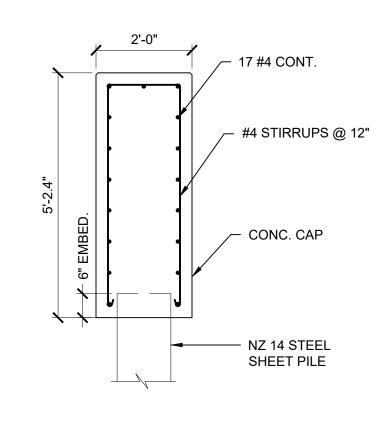
TYPICAL CONC. CAP REINF. DETAIL

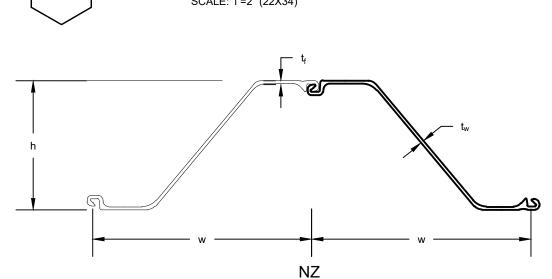
SCALE: 1'=1" (22X34)



TYPICAL TERMINATION DETAIL SCALE: 1'=2" (22X34)

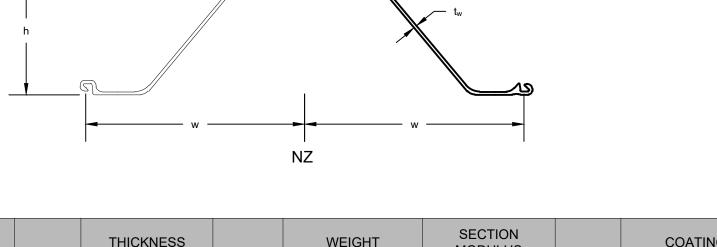






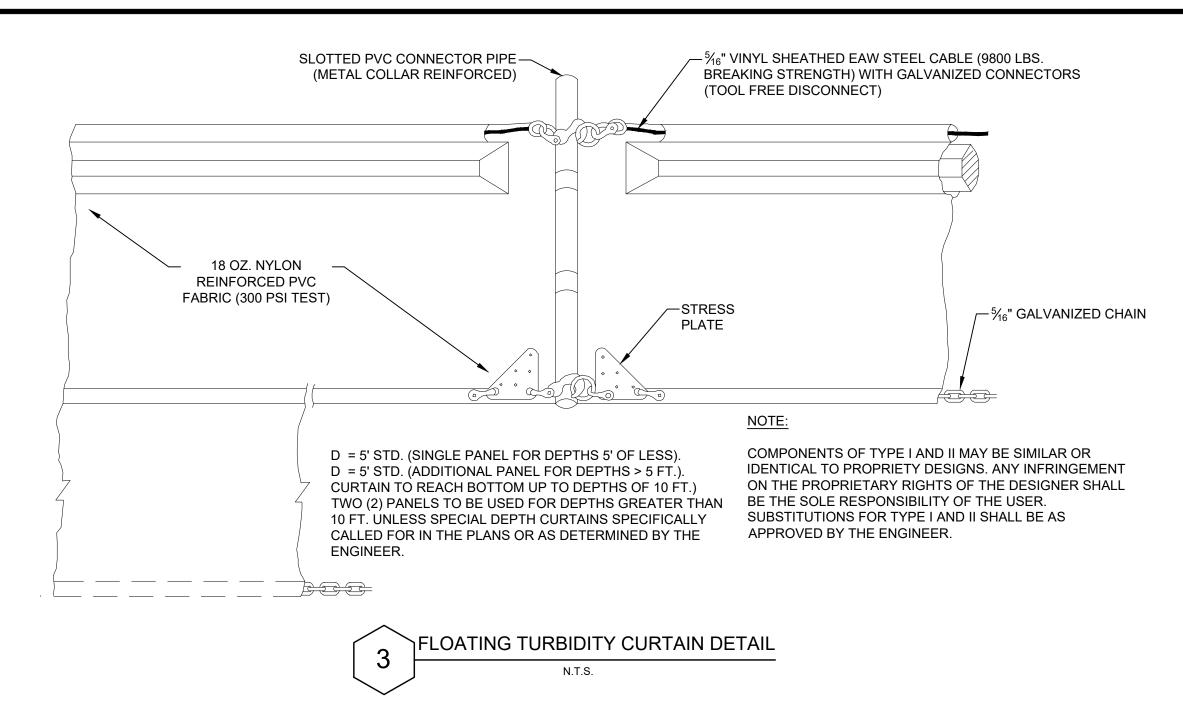
TYPICAL OUTFALL COLLAR DETAIL

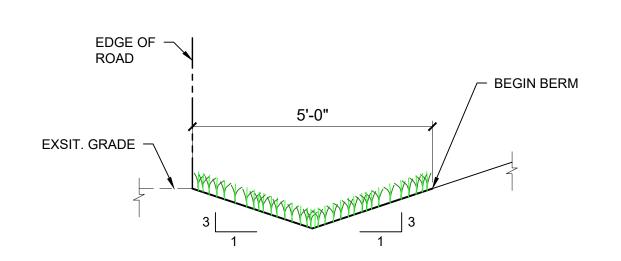
A	TYPICAL OUTFALL COLLAR SECTION
CM-2.1	SCALE: 1'=2" (22X34)



			THICK	NESS	Cross	WEI	GHT		TION ULUS		COATING	S AREA
SECTION	Width (w) in mm	Height (h) in mm	Flange (t _f) in mm	Web (t _w) in mm	Sectional area (w) in mm	Pile lb/ft kg/m	Wall lb/ft² kg/m²	Elastic in ³ /ft cm³/m	Plastic in ³ /ft cm³/m	Moment of Inertia in ⁴ /ft cm ⁴ /m	Both Sides ft²/ft of single m²/m	Wall Surface ft²/ft m²/m²
NZ 14	30.31 770	13.39 340	0.375 9.5	0.375 9.5	6.40 135.4	55 81.26	21.77 106.3	25.65 1379	30.50 1640	171.7 23447	6.10 1.86	1.20 1.20

NZ-14 STEEL SHEET PILE SCALE: N.T.S.





TYPICAL VEGETATED BIOSWALE DETAIL

PROJECT: CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

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CC PROJECT NO: 84300

JPC/SRC CHECKED SCALE AS SHOWN

SHEET TITLE

DETAILS

CM-5.0

GENERAL NOTES

- 1. LOCATIONS OF EXISTING UNDERGROUND UTILITIES WERE OBTAINED FROM AVAILABLE RECORDS. NEITHER THE CITY NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT LOCATED WHERE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING UTILITIES. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING CONSTRUCTION WORK. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR. CONTRACTOR SHALL ALSO PROVIDE THE ENGINEER WITH RECORD INFORMATION ON ALL FIELD VERIFICATION MEASUREMENTS AS SPECIFIED. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF OTHER UTILITIES (NOT SHOWN ON THE PLANS) EXIST WITHIN THE AREA OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE THE CONSULTANT INFORMATION ON ALL FIELD VERIFICATION MEASUREMENTS AS SPECIFIED. IF AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION UPON EXCAVATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CITY SO THAT APPROPRIATE MEASURES CAN BE TAKEN. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
- 2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT EXISTING UTILITIES WHETHER SHOWN
- 3. THE CONTRACTOR SHALL NOTIFY THE CITY IN ADVANCE OF MAKING ANY CONNECTION TO AN ACTIVE PIPELINE OR
- 4. ALL EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS APPROVED OTHERWISE IN WRITING BY THE UTILITY OWNERS.
- CONTRACTOR SHALL NOTIFY ADJACENT PROPERTY OWNERS TWO (2) BUSINESS DAYS PRIOR TO COMMENCING ANY PORTION OF THE WORK TO BE PERFORMED DURING OFF-PEAK HOURS (NIGHTS AND SUNDAYS).
- . ALL ELEVATIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE BASED ON NAVD 1988 DATUM.
- 7. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER PROPERTY AND SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED DURING CONSTRUCTION AND SHALL REPAIR SAID DAMAGES AT THE CONTRACTOR EXPENSE.
- THE CONTRACTOR WILL HOLD A PRE-CONSTRUCTION MEETING PRIOR TO THE START OF ANY CONSTRUCTION INCLUDING A REPRESENTATIVE FROM THE RESPECTIVE ENGINEERING AND UTILITY DEPARTMENTS, OWNER AND OTHER APPLICABLE AGENCIES.
- 9. ALL DEVIATIONS FROM PLANS ARE TO BE APPROVED IN WRITING PRIOR TO CONSTRUCTION AND FOR ALL INSPECTIONS
- 10. THE CITY MUST BE GIVEN A MINIMUM 48 HOURS NOTICE FOR ALL INSPECTIONS UNLESS OTHERWISE AGREED UPON.
- THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES AND IMPROVEMENTS FROM DAMAGES, DISRUPTION OF SERVICE OR DESTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH. SAFETY AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
- 12. EXISTING SECTION CORNERS AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE MAINTAINED BY THE CONTRACTOR AND/OR RESET AFTER CONSTRUCTION UNDER CERTIFICATION BY A FLORIDA REGISTERED SURVEYOR.
- 13. THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE USED AS THE STANDARD FOR ANY SIGNAGE AND PAVEMENT MARKING REQUIREMENTS OF THE PROJECT
- 14. THE EXISTING ELEVATIONS SHOWN HEREIN ARE FOR THE PURPOSE OF INDICATING THE GROUND ELEVATION ONLY AT THE POSITION SHOWN AND IN NO WAY SHOULD INDICATE ELEVATION AT ANY OTHER POINT OTHER THAN THAT SHOWN.
- 15. THE CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC (M .O.T.) FOR ANY WORK PERFORMED ON PUBLIC RIGHT-OF-WAY. NOTIFY THE CITY 48 HOURS PRIOR TO BEGIN WORK. ALL M.O.T. WORK SHALL BE AS PER FDOT INDEX NO. 8008 SERIES
- 16. EXISTING CONDITIONS PRESENTED ARE BASED ON A TOPOGRAPHIC SURVEY PROVIDED BY CUMMINS CEDERBERG. ADDITIONAL INFORMATION WAS OBTAINED FROM AS-BUILTS AND RECORD DRAWINGS PROVIDED BY UTILITY COMPANIES, G.I.S. INFORMATION AND FIELD VISITS.
- 17. ALL WATER BOX, COMMUNICATION BOX, CABLE TV BOX, ETC, DAMAGED DURING CONSTRUCTION OF PROPOSED IMPROVEMENTS SHALL BE REPLACED WITH IDENTICAL OR BETTER AT UTILITY OWNER SATISFACTION.
- 18. THE WORDS 'NEW', 'PROPOSED', 'INSTALL', 'PROVIDE', OR WORDS WITH SIMILAR MEANING, ON ANY PART OF THESE CONSTRUCTION DOCUMENTS, SHALL BE INTERPRETED, UNLESS OTHERWISE SPECIFICALLY STATED, TO MEAN 'FURNISHING AND INSTALL COMPLETE IN PLACE AND READY FOR SERVICE'.
- 19. THESE CONSTRUCTION DOCUMENTS ARE COMPLEMENTARY. WORK DEPICTED UNDER A PARTICULAR DISCIPLINE MAY TRIGGER WORK UNDER A DIFFERENT DISCIPLINE. SUCH WORK REQUIRED FOR THE INTENDED AND PROPER FUNCTION OF THE IMPROVEMENTS, SHALL BE CONSIDERED INCIDENTAL AND PART OF THE CONTRACTOR'S BID PRICE. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH ITEMS.
- 20. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING TREES, STRUCTURES, AND UTILITIES WHICH MAY NOT BE SHOWN ON PLANS. ANY EXISTING STRUCTURE, PAVEMENT, TREES OR OTHER EXISTING IMPROVEMENT NOT SPECIFIED FOR REMOVAL WHICH IS TEMPORARILY DAMAGED, EXPOSED OR IN ANY WAY DISTURBED BY CONSTRUCTION PERFORMED UNDER THIS CONTRACT, SHALL BE REPAIRED, PATCHED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- 21. CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE CALL OF FLORIDA AT 811 LEAST 48 HOURS PRIOR TO PERFORMING ANY DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES.
- 22. EXISTING GRADES WERE TAKEN FROM THE BEST AVAILABLE DATA AND MAY NOT ACCURATELY REFLECT PRESENT CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH CURRENT SITE CONDITIONS. AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO STARTING WORK.
- 23. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- 24. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL ITEMS LISTED IN PROJECT SPECIFICATION.
- 24. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL ITEMS LISTED IN PROJECT SPECIFICATIO
- 25. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES, OR PORTIONS OF WORK, EXPOSED OR OPEN AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES. WHEN THE CONTRACTOR IS NOT WORKING, UNLESS OTHERWISE DETERMINED, ANY TRENCH SHALL BE COVERED, FIRMLY SECURED AND MARKED ACCORDINGLY FOR PEDESTRIAN TRAFFIC.
- 26. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
- 27. ALL EXCAVATED MATERIAL REMOVED FROM THIS PROJECT SHALL BE DISPOSED OF PROPERLY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 28. CAST IRON PRODUCTS: HEAVY DUTY CLASSIFICATION SUITABLE FOR HIGHWAY TRAFFIC LOADS, OR 16,000 LB. WHEEL LOADS
- 29. STEEL GRATING AND COVERS: TRAFFIC CLASSIFICATION H-20 AASHTO H20: 16,000 LBS OVER 8" X 20" AREA.
- 30. ALL STRUCTURES MUST BE CAPABLE OF SUSTAINING HEAVY TRAFFIC LOADS.

THE PERMIT AND THAT CONSTRUCTION IS BEGINNING SOON.

CONTROL AND INFORMATION SIGNING REMOVED DURING CONSTRUCTION PERIOD.

ADVANCE OF THE DETOUR IN ACCORDANCE WITH SECTION 336.048 OF FLORIDA STATUTES.

- 31. ALL GRASS AREAS AFFECTED BY CONSTRUCTION SHALL BE RE-SODDED AND MATCH EXISTING ADJACENT SOD.
 32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION, INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL AND SAFETY DEVICES. IN ADDITION. THE CONTRACTOR IS RESPONSIBLE FOR THE RESETTING OF ALL TRAFFIC
- 33. EXCAVATED OR OTHER MATERIAL STORED ADJACENT TO OR PARTIALLY UPON A ROADWAY PAVEMENT SHALL BE ADEQUATELY MARKED FOR TRAFFIC SAFETY AT ALL TIMES.
- 34. TEMPORARY PATCH MATERIAL MUST BE ON THE JOB SITE WHENEVER PAVEMENT IS CUT, OR THE INSPECTOR WILL SHUT THE JOB DOWN
- 35. CONTRACTOR SHALL MAINTAIN TRAFFIC ACCORDING TO CORRESPONDING TYPICAL CONTROL DETAIL AS OUTLINED IN FLORIDA DEPARTMENT OF TRANSPORTATION REQUIREMENTS.
- 36. CONTRACTOR SHALL NOTIFY LAW ENFORCEMENT AND FIRE PROTECTION SERVICES TWENTY-FOUR (24) HOURS IN
- 37. COMPLETE AS-BUILT INFORMATION RELATIVE TO LOCATION AND DEPTH OF PIPES, MANHOLES, ETC. SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND PROVIDED TO THE CITY PRIOR TO FINAL ACCEPTANCE OF THE
- 38. ALL WORK TO BE IN COMPLIANCE WITH CITY OF DANIA BEACH DESIGN STANDARDS AND SPECIFICATIONS (LATEST VERSION), MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST VERSION), AND FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS AND SPECIFICATIONS (LATEST EDITION).
- 39. DURING CONSTRUCTION IF SOIL OR GROUNDWATER CONTAMINATION IS ENCOUNTERED OR A SPILL OF A HAZARDOUS MATERIAL OR OIL/GASOLINE OCCURS PLEASE STOP WORK IN THAT AREA AND IMMEDIATELY CONTACT ERMD AT 954-965-4380 OR 963-763-4128
- 40. UPON DEVELOPMENT OF A SITE-SPECIFIC STORMWATER POLLUTION PREVENTION PLAN (SWPPP), CONTRACTORS/OPERATORS MUST COMPLETE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA FOR STORMWATER DISCHARGES FROM CONSTRUCTION SITES OVER ONE ACRE. THE EPA REQUIRES 14 DAY NOTICE PRIOR TO COMMENCEMENT OF ANY WORK ON THE PROJECT. THE NOI MUST BE SUBMITTED ONLINE AND INFORMATION ON THIS SUBMITTAL IS AVAILABLE AT http://water.epa.gov/polwaste/npdes/stormwater/EPAs-Electronic-Construction-General-Permit-Notice-of-Intent-eNOI-Home-Page.cfm.
- 41. THE CONTRACTOR SHALL COORDINATE SELECTION AND REVIEW OF ANY PROPOSED STAGING AREAS ASSOCIATED WITH THIS PROJECT WITH THE CITY OF DANIA BEACH.
- 42. NO STAGING OF EQUIPMENT/VEHICLES OR MATERIALS WILL BE ALLOWED WITHIN OR ADJACENT TO PRIVATE PROPERTY

PLEASE COPY THE CITY OF DANIA BEACH ON YOUR SUBMITTAL SO THIS OFFICE IS AWARE THAT YOU HAVE APPLIED FOR

- OR OTHER ENVIRONMENTALLY SENSITIVE AREAS.
- 43. IF SUSPECTED CONTAMINATION OR HAZARDOUS MATERIAL IS FOUND ON THE PROJECT OR ENCOUNTERED DURING CONSTRUCTION THE CONTRACTOR SHALL CEASE OPERATIONS IN THAT AREA. IMMEDIATELY NOTIFY THE CITY ENGINEER, AND PROTECT THE IMMEDIATE AREA OF SUSPECT CONTAMINATED OR HAZARDOUS MATERIAL FROM FURTHER ACCESS. THE CITY ENGINEER, ALESSANDRA DELFICO, WILL ARRANGE FOR THE INVESTIGATION, IDENTIFICATION AND/OR REMOVAL/REMEDIATION OF THE MATERIAL IN QUESTION AS NEEDED.
- 44. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, WRITTEN PERMISSION FROM THE PROJECT ENGINEER. THE CONTRACTOR SHALL PROVIDE A COPY OF THE REQUEST TO THE CITY ENGINEER, WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE, AND PROVIDE A DESCRIPTION OF THE SPECIFIC MANNER IN WHICH THE MATERIAL WILL BE USED. THE PROJECT ENGINEER SHALL COORDINATE WITH THE CITY ENGINEER, PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR. BECAUSE STATE LAW DOES NOT TREAT PETROLEUM PRODUCTS THAT ARE PROPERLY CONTAINERIZED AS HAZARDOUS MATERIALS, SUCH PRODUCTS DO NOT REQUIRE AN MSDS SUBMITTAL. ALL BULK PETROLEUM PRODUCTS STORED ON SITE SHALL REQUIRE PROPER STORAGE WHICH INCLUDES SECONDARY CONTAINMENT.
- 45. WORK SHALL BE PERFORMED ENTIRELY WITHIN THE EXISTING RIGHT-OF-WAY.
- 46. ALL EXISTING SIGNALIZATION EQUIPMENT IS ASSUMED TO BE IN GOOD WORKING ORDER UNLESS BCTED IS NOTIFIED IN WRITING PRIOR TO THE START OF CONSTRUCTION. ANY SUBSEQUENT DAMAGE TO THE SIGNAL EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR.

DEMOLITION NOTES

- 1. DRAIN, PURGE, OR OTHERWISE REMOVE, COLLECT, AND DISPOSE OF CHEMICALS, GASES, EXPLOSIVES, ACIDS, FLAMMABLES, OR OTHER DANGEROUS MATERIALS BEFORE PROCEEDING WITH DEMOLITION OPERATIONS.
- . CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- 3. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER ADJACENT OCCUPIED OR IN-USE FACILITIES WITHOUT PERMISSION FROM OWNER, THE CITY AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS AS REQUIRED BY GOVERNING REGULATIONS.
- 4. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND DEMOLITION AREA.
- 5. ERECT TEMPORARY PROTECTION, SUCH AS WALKS, FENCES, BARRIERS, RAILINGS, ETC. WHERE REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- 6. PROTECT EXISTING SITE IMPROVEMENTS, APPURTENANCES, AND LANDSCAPING TO REMAIN.

LOCATIONS AND THE LOCATIONS OF RECENT ADDITIONS TO THE SYSTEMS NOT SHOWN.

- 7. ADJACENT IMPROVEMENTS SHALL BE CLEANED OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF DEMOLITION.
- 8. FOR SELECTIVE DEMOLITION, USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION. TO MINIMIZE DISTURBANCE OF ADJACENT SURFACES, USE HAND OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING. NOT HAMMERING OR CHOPPING. TEMPORARILY COVER OPENINGS TO REMAIN.
- DEMOLISH CONCRETE IN SMALL SECTIONS. CUT CONCRETE AT JUNCTURES WITH CONSTRUCTION TO REMAIN, USING POWER-DRIVEN MASONRY SAW OR HAND TOOLS; DO NOT USE POWER-DRIVEN IMPACT TOOLS.
- 10. INFORMATION SHOWN ON THE DRAWINGS AS TO THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE DATA AVAILABLE TO THE ENGINEER; HOWEVER, THIS INFORMATION IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION, CHARACTER, AND DEPTH OF ALL EXISTING
- 11. REMOVAL, DEMOLITION, HAULING, AND DISPOSAL SHALL COMPLY WITH REGULATIONS BY F.D.E.P., E.P.A., AND ANY OTHER AUTHORITY HAVING JURISDICTION.
- 2. ALL EXISTING UTILITY MH COVERS, ELECTRICAL BOXES, METER BOXES, METERS, DRAINAGE STRUCTURES, ETC. WITHIN PROPOSED AREAS OF IMPROVEMENTS SHALL BE ADJUSTED TO GRADE ELEVATION, UNLESS OTHERWISE NOTED.

UTILITIES. THE CONTRACTOR SHALL ASSIST THE UTILITY COMPANIES, BY EVERY MEANS POSSIBLE, TO DETERMINE SAID

13. ALL EXISTING STREET LIGHTING WILL REMAIN IN PLACE AND REMAIN IN SERVICE DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL USE CARE TO ENSURE EXISTING CONDUIT, PULLBOXES, AND CONTROL ARE NOT DAMAGED DURING DEMOLITION OPERATIONS.

EARTHWORK NOTES

- THE CONTRACTOR'S BID FOR EARTHWORK SHALL INCLUDE THE EXCAVATION, REMOVAL AND DISPOSAL OF ALL MATERIALS, OF WHATEVER CHARACTER, WITHIN THE LIMITS OF CONSTRUCTION.
- ALL TOPSOIL THAT IS SUITABLE FOR LANDSCAPING OR SODDING OPERATIONS MAY BE STOCKPILED NEARBY FOR SUCH
- 3. WHERE MUCK, ROCK, CLAY, OR OTHER MATERIAL WITHIN THE LIMITS OF CONSTRUCTION IS UNSUITABLE IN ITS ORIGINAL POSITION THE CONTRACTOR SHALL EXCAVATE SUCH MATERIAL IN ITS ENTIRETY AND BACKFILL WITH SUITABLE MATERIAL WHICH SHALL BE COMPACTED IN PLACE TO CONFORM TO THE REQUIRED GRADES AND SECTIONS AS SHOWN
- 4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE UNSUITABLE MATERIAL PRESENT ON-SITE AND INCLUDE THE REMOVAL AND REPLACEMENT OF SAME IN HIS BID PRICE.
- 5. THE CONTRACTOR SHALL MAKE HIS OWN ESTIMATE ON THE VOLUME OF MATERIAL ACTUALLY REQUIRED TO OBTAIN THE CROSS SECTIONS OR GRADES AS SHOWN ON THE PLANS.
- 6. THE CONTRACTOR SHALL REMOVE ALL MUCK, YIELDING MATERIAL ROOTS, VEGETATION AND OTHER DEGRADABLE MATERIAL IN ITS ENTIRETY, WITHIN THE PAVEMENT UNITS AND BELOW ALL STRUCTURES AND UTILITIES TO FULL EXCAVATED TRENCH WIDTH. SAID MATERIAL SHALL BE REPLACED WITH CLEAN ORGANIC FREE MATERIAL WITH ROCKS SMALLER THAN ONE INCH IN DIAMETER COMPACTED TO NOT LESS THAN 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE. AASHTO T-180 METHOD "D" WITH MAXIMUM LIFTS OF TWELVE INCHES COMPACTED THICKNESS.
- 7. TRENCH BACKFILL AND COMPACTION SHALL FOLLOW THE CONTRACT SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING APPROPRIATE SAFETY PRECAUTIONS DURING EXCAVATION AND TRENCHING OPERATIONS AS REQUIRED BY THE "TRENCH SAFETY ACT".
- THIS WORK SHALL INCLUDE THE EXCAVATION OF WHATEVER SUBSTANCES THAT SHALL BE ENCOUNTERED TO THE DEPTHS AS SHOWN ON THE PLANS. EXCAVATED MATERIALS NOT REQUIRED FOR FILL OR BACKFILL SHALL BE REMOVED FROM THE WORK SITE AS DIRECTED BY THE ENGINEER AND SHALL BE CONSIDERED TO BE A PART OF THE BID PRICE OF THE UTILITY PIPE FOR WHICH EXCAVATION AND BACKFILL IS REQUIRED.
- 10. WATER SHALL NOT BE PERMITTED TO ACCUMULATE IN THE EXCAVATED AREA. IT SHALL BE REMOVED BY PUMPING OR OTHER MEANS AS APPROVED BY THE ENGINEER. THE REMOVAL OF WATER SHALL BE CONSIDERED TO BE A PART OF THE BID PRICE OF THE UTILITY PIPE FOR WHICH EXCAVATION AND BACKFILL IS REQUIRED. CONTRACTOR TO OBTAIN DEWATERING PERMITS FROM APPLICABLE JURISDICTIONAL AGENCIES (SFWMD, ETC.) IF REQUIRED.
- 11. IF THE BOTTOM OF THE TRENCH IS ROCK, THE EXCAVATION SHALL BE CARRIED EIGHT INCHES BELOW THE INVERT OF THE PIPE AND BACKFILLED WITH THOROUGHLY COMPACTED SAND, GRAVEL, OR OTHER SUITABLE MATERIAL APPROVED BY THE ENGINEER.
- 12. ROCK EXCAVATION SHALL INCLUDE ANY ROCK ENCOUNTERED WHICH CANNOT BE REMOVED WITH A 3/4 YARD BACKHOE UNDER NORMAL OPERATING CONDITIONS. ROCK EXCAVATION SHALL BE INCIDENTAL TO CONSTRUCTION OF ALL PIPING SYSTEMS AND NO SEPARATE PAYMENT WILL BE MADE.
- BRACING OR SHORING SHALL BE CONSIDERED TO BE PART OF THE BID PRICE OF UTILITY PIPE FOR WHICH EXCAVATION AND BACKFILL IS REQUIRED.

 14. THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING, BRACING, AS MAY BE REQUIRED TO

13. WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE OR SHORE THE SIDES OF THE TRENCH, SUCH

SUPPORT THE SIDE OF THE EXCAVATION, AND TO PREVENT ANY MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES.

15. IF FIELD CONDITIONS, TYPE OF SHEETING OR CONSTRUCTION METHODS MAKE REMOVAL OF SHEETING IMPRACTICABLE, AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR MAY LEAVE ALL SHEETING IN PLACE. THE ENGINEER MAY

REQUIRE SHEETING TO BE CUT OFF AT ANY SPECIFIED ELEVATION BUT IN NO CASE WILL ANY SHEETING BE LEFT

. AFTER PIPES, STRUCTURES, AND OTHER APPURTENANCES HAVE BEEN INSTALLED, THE TRENCH OR OPENING SHALL BE BACKFILLED WITH MATERIAL IN CONFORMANCE WITH THE SPECIFICATION.

CLOSER THAN TWO (2) FEET BELOW THE NATURAL SURFACE, NOR CUT OFF BELOW THE ELEVATION OF THE TOP OF THE

- 17. IN AREAS WHERE PAVEMENTS ARE TO BE CONSTRUCTED OVER THE PIPE. THE REMAINDER OF THE TRENCH SHALL BE PLACED IN SIX INCH LAYERS (COMPACTED THICKNESS) AND SHALL BE COMPACTED TO 98 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. CONTRACTOR WILL BE RESPONSIBLE FOR CORRECTING DAMAGE FROM SETTLEMENT IN THE BACKFILLED AREAS WHETHER UNDER THE PAVEMENT OR OTHERWISE.
- 18. IN AREAS WHERE NO PAVEMENT IS TO BE CONSTRUCTED, THE BACKFILL ABOVE THE TWELVE INCH LINE ABOVE THE PIPE SHALL BE COMPACTED TO A FIRMNESS APPROXIMATELY EQUAL TO THAT OF THE SOIL ADJACENT TO THE PIPE
- 19. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SAFETY BARRIER AND PROTECTIVE STEEL PLATE
- 20. SOIL BORING INFORMATION WILL BE PROVIDED TO THE CONTRACTOR. THE SOIL BORING DATA PROVIDED IS FOR THE CONTRACTOR'S INFORMATION. THE ENGINEER DOES NOT MAKE ANY REPRESENTATION REGARDING EXISTING SUBSOIL CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ADDITIONAL SOIL BORINGS TO VERIFY THE LIMITS OF UNSUITABLE MATERIAL ON-SITE.
- 21. SEE SOILS EVALUATION OF THE PROJECT AREA ON GEOTECHNICAL INVESTIGATION REPORT PERFORMED BY NUTTING ENGINEERS OF FLORIDA, INC., MARCH 2019. ORDER NO. 786.22 (PHONE 954-941-8700)

STORMWATER NOTES

- LIFT HOLES THROUGH PRECAST STRUCTURES ARE NOT PERMITTED.
- 2. ALL CEMENT USED ON DRAINAGE STRUCTURES SHALL BE A TYPE II PORTLAND CEMENT, CONFORMING TO ASTM SPECIFICATION C-150 AASHTO DESIGNATION M-85.
- 3. UNLESS OTHERWISE SPECIFIED ON THE PLANS, STRUCTURES SHALL BE PRECAST CONCRETE SECTIONS.
- 4. MORTAR FOR USE IN CONSTRUCTION AND PLASTERING STRUCTURES SHALL CONFORM TO ASTM C-270 SPECIFICATIONS FOR MORTAR FOR UNIT MASONRY. A PORTLAND CEMENT HYDRATED LIME MIXTURE OR A MASONRY CEMENT MAY BE USED PROVIDED THAT THE SAME MATERIALS ARE USED THROUGHOUT THE PROJECT.
- 5. MORTAR MATERIALS SHALL BE PROPORTIONED BY VOLUME AND SHALL CONSIST OF ONE PART TYPE II PORTLAND CEMENT TO TWO PARTS AGGREGATE (SAND). PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, "SPECIFICATIONS FOR PORTLAND CEMENT", AGGREGATE SHALL CONFORM TO ASTM C-144 "SPECIFICATIONS FOR AGGREGATE FOR MASONRY UNITS",
- 6. PRECAST MANHOLE SECTIONS SHALL CONFORM TO ASTM C-478, SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS AS MODIFIED THERETO. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. MINIMUM WALL THICKNESS SHALL BE 8 INCHES AND MINIMUM INSIDE DIAMETER SHALL BE 48 INCHES. THE INSIDE OF ALL STRUCTURES SHALL BEAR THE APPROVAL OF A CERTIFIED TESTING LABORATORY WHEN DELIVERED TO THE JOB SITE.
- 7. ALL PIPE SHALL BE CAREFULLY LAID, TRUE TO THE LINES AND GRADES GIVEN. ANY PIPE THAT IS NOT IN TRUE ALIGNMENT OR WHICH SHOWS ANY SETTLEMENT AFTER INSTALLATION SHALL BE RE-INSTALLED AT NO ADDITIONAL COST TO THE CITY.
- 8. THE BASE AND WALLS THAT COMPOSE THE BOTTOM SECTION OF THE PRECAST STRUCTURES SHALL BE OF MONOLITHIC CONSTRUCTION, 8 INCHES THICK AND THE EDGE OF THE BASE SLAB SHALL PROJECT A MINIMUM 4 INCHES BEYOND THE OUTSIDE DIAMETER OF THE WALL.
- HOLES FOR PIPING SHALL BE MIN. 6 INCHES LARGER THAN THE OUTSIDE DIAMETER OF THE RESPECTIVE PIPES. AFTER
 THE PIPE IS SET, THE VOID SPACE BETWEEN THE PIPE AND THE HOLE PERIMETER SHALL BE COMPLETELY FILLED WITH
 NON-SHRINKING, QUICK-SETTING, WATERPROOF CEMENT MORTAR AND STRUCK SMOOTH.
- HOWEVER, NO HOLES FOR PIPING SHALL BE CAST LESS THAN 8 INCHES FROM THE TOP OF THE BASE SECTION OR LESS THAN 2 INCHES ABOVE THE TOP OF THE BASE SLAB.

 11. THE CONTRACTOR SHALL FURNISH THE ENGINEER SHOP DRAWINGS OF THE PRECAST STRUCTURES (AND

CERTIFICATION FROM A TESTING I ABORATORY) FOR APPROVAL, SHOP DRAWINGS SHOULD ILLUSTRATE ALL

10. THE MINIMUM HEIGHT OF PRECAST BASE SECTION SHALL BE 36 INCHES FROM THE BOTTOM OF THE BASE SLAB

- 12. ALL CASTING SHALL BE TRUE TO PATTERN AND DIMENSIONS, FREE FROM FAULTS OR DEFECTS AND WELL CLEANED.
- 13. BEARING SURFACES BETWEEN CAST FRAMES, COVERS AND GRATES SHALL BE MACHINED AND FITTED TOGETHER TO ASSURE A TRUE AND EVEN FIT. WITHIN AREAS OF VEHICULAR TRAFFIC THE FRAMES, COVERS AND GRATING SHALL BE MACHINE-GROUND SO THAT IRREGULARITY OF CONTACT WILL BE REDUCED TO A MINIMUM AND WILL BE RATTLE PROOF.
- 14. CONTRACTOR IS TO PREVENT INTRODUCTION OF DEBRIS OR DIRT INTO EXISTING STORM DRAINAGE AND/OR SANITARY SEWER SYSTEM AS A RESULT OF CONSTRUCTION ACTIVITIES. ALL LINES AND STRUCTURES SHALL BE CLEANED PRIOR TO FINAL INSPECTION AND ACCEPTANCE.
- 15. LOCATION OF DRAINAGE STRUCTURES GOVERN. ADJUST PIPE LENGTHS AS REQUIRED.

DIMENSIONS REINFORCEMENT AND SPECIFICATIONS FOR THE COMPLETE STRUCTURE

- 16. WALL REINFORCEMENT AND THICKNESS FOR PRECAST STRUCTURES SHALL BE IN ACCORDANCE WITH ASTM C-478.
- 17. MORTAR USED TO SEAL THE PIPE INTO THE WALLS OF THE PRECAST STRUCTURES WILL BE OF SUCH A MIX THAT SHRINKAGE WILL NOT CAUSE LEAKAGE IN OR OUT OF THE STRUCTURES. THE MAXIMUM OPENING THROUGH WALLS FOR PIPE SHALL BE THE MAXIMUM REQUIRED OUTSIDE DIAMETER PLUS 6".
- 18. ALL STRUCTURES SHALL BE SET PLUMB TO LINE AND GRADE AND SHALL REST ON A FIRM CAREFULLY GRADED SUB GRADE WHICH SHALL PROVIDE UNIFORM BEARING UNDER BASE.
- 19. ALL MUCK OR OTHER UNSTABLE MATERIAL ENCOUNTERED IN TRENCH BOTTOM SHALL BE REMOVED AND BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180, METHOD 'D'. GRANULAR BACKFILL TO BE TYPE D (COURSE ROCK BACKFILL): CRUSHED ROCK OR GRAVEL WITH 100% PASSING A 1-INCH SIEVE AND NOT MORE THAN 10% PASSING A NUMBER 4 SIEVE: OR BETTER.
- 20. PIPE BEDDING SHALL BE SAND, GRAVELLY SAND, OR 1-INCH MINUS CRUSHED LIMESTONE, NOT MORE THAN 10% OF WHICH PASSES A NO. 200 SIEVE.
- 21. CONTRACTOR TO WRAP ALL PIPE JOINTS AND PIPE CONNECTIONS TO STRUCTURES WITH APPROVED FILTER FABRIC.
- 22. SHOP DRAWINGS FOR ALL STRUCTURES AND MATERIALS TO BE USED ON THE PROJECT SHALL BE SUBMITTED TO THE RESPECTIVE ENGINEERING AND UTILITY DEPARTMENTS FOR APPROVAL PRIOR TO CONSTRUCTION OR INSTALLATION.
- 23. PROTECT COMPLETED DRAINAGE STRUCTURES FROM CONTAMINATION BY SILT AND CONSTRUCTION DEBRIS. PLACE FILTER FABRIC BETWEEN THE FRAME AND INLET GRATE UNTIL SITE CONSTRUCTION OPERATIONS ARE FINISHED.
- 24. CONTRACTOR SHALL INSPECT AND CLEAN ALL EXISTING STRUCTURES AND PIPES WITHIN THE PROJECT LIMITS. IF EXISTING STRUCTURES AND PIPES ARE DAMAGED, CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONNECTION WITH THE NEW PIPE OR STRUCTURE. CONTRACTOR TO ENSURE ALL STORM WATER PIPING AND STRUCTURES ARE CLEANED PRIOR TO PROJECT CLOSEOUT.
- 25. ADJUST ALL EXISTING STRUCTURES TO NEW GRADE ELEVATIONS
- 26. ALL DRAINAGE CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF DANIA
- 27. CATCH BASINS, SEEPAGE DRAINS, PAVEMENT RESTORATION AND PAVEMENT AROUND CATCH BASINS TO BE ACCORDING TO THE DETAILS AND APPLICABLE REQUIREMENTS OF THE CITY OF DANIA BEACH PUBLIC WORKS DEPARTMENT.

AS-BUILT DRAWINGS

- CONTRACTOR TO SUBMIT AS-BUILT DRAWINGS TO THE CITY OF DANIA BEACH PUBLIC WORKS DEPARTMENT FOR REVIEW
- FINAL AS-BUILT DRAWINGS TO BE SUBMITTED TO THE CITY OF DANIA BEACH PUBLIC WORKS DEPARTMENT IN THE FOLLOWING FORMAT:

 SIX (6) SIGNED AND SEALED HARD COPIES

PAVING AND GRADING NOTES

- ONE (1) ELECTRONIC FILE (PDF)

- UNDERGROUND UTILITIES SHALL BE COMPLETED OR SLEEVING PROVIDED BEFORE ANY PAVEMENT CONSTRUCTION
- 2. ALL PAVEMENT SUBGRADE MATERIAL SHALL BE COMPACTED TO 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE, AASHTO T-180, METHOD "D" AND SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. SPECIFICATIONS, SECTION 120. THE TEST RESULTS SHALL BE ACCEPTED BY THE CITY PRIOR TO PLACEMENT OF BASE MATERIAL.
- 3. IF THE PLANS INDICATE A LIMEROCK BASE, THE CONSTRUCTION AND THE MATERIAL FOR THE SHELLROCK BASE SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. SPECIFICATIONS, SECTION 230. THE SHELLROCK BASE SHALL BE COMPACTED TO 98% MAXIMUM DENSITY AT OPTIMUM MOISTURE. AASHTO T-180, METHOD "D", THE ENGINEER SHALL SPECIFY THE LOCATION AND NUMBER OF DENSITY TESTS REQUIRED. CITY PUBLIC WORKS DEPARTMENT STANDARDS REQUIRE DENSITY TESTS AT 25' O.C. THE TEST RESULTS SHALL BE ACCEPTED BY THE CITY AND ENGINEER PRIOR TO APPLICATION OF THE PRIME AND TACK COATS
- 4. THE PRIME AND TACK COAT CONSTRUCTION AND MATERIALS FOR THE PRIME AND TACK COATS SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. STANDARD SPECIFICATIONS, SECTION 300. THE PRIME AND TACK COATS SHALL BE APPLIED PRIOR TO CONSTRUCTION OF THE ASPHALT SURFACE COURSE AND SHALL BE SANDED AND ROLLED IN ACCORDANCE WITH SECTION 300. APPLICATION RATES SHALL BE 0.15 GAL/SY FOR LIMEROCK BASE AND 0.25 GAL/SY FOR SHELLROCK BASE.
- 5. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE AS SHOWN ON THE PLANS. THE MATERIALS FOR THE ASPHALT CONCRETE SURFACE COURSE SHALL CONFORM TO THE REQUIREMENTS OF F.D.O.T. STANDARD SPECIFICATIONS, SECTION 331
- 6. THE MATERIAL TO BE USED AS A STABILIZER SHALL BE SOIL OF HIGH BEARING VALUE SUCH AS, SAND-CLAY, GROUND LIMESTONE, CRUSHED LIMEROCK, OYSTER SHELL, COQUINA SHELL, ROCK SCREENINGS, OR ANY OTHER MATERIAL WHICH IS SUITABLE FOR STABILIZATION. MUCK SHALL NOT BE USED AS STABILIZING MATERIAL.
- 7. ALL GRADES SHOWN REFER TO FINISHED ASPHALT PAVEMENT UNLESS OTHERWISE NOTED.
- 8. MATERIAL HAVING A PLASTICITY INDEX AT MORE THAN 10 OR A LIQUID LIMIT GREATER THAN 40 SHALL NOT BE USED. ALL MATERIAL USED FOR STABILIZING THE ROADBED SHALL PASS A 3-1/2 INCH RING.

9. WHERE THE BEARING VALUE OF THE EXISTING SUBGRADE IS ADEQUATE WITHOUT ADDITION OF STABILIZING MATERIAL,

REQUIRED STABILIZATION. THE COMPACTED SUBGRADE SHALL CONFORM TO THE LINES, GRADES AND CROSS-SECTION

USED DO NOT PROVIDE THE REQUIRED UNIFORMITY, PARTICLE SIZE LIMITATION, COMPACTION AND OTHER DESIGNED

- 10. THE SUBGRADE SHALL BE SCARIFIED AND DICED, HARROWED, BLADED, OR TILLED FOR REMOVAL OF BOULDERS, ROOTS, ETC. TO ASSURE UNIFORMITY AND THOROUGH MIXING OF MATERIAL TO THE FULL WIDTH AND DEPTH OF
- MATCH.

 11. THE SUBGRADE TO BE STABILIZED MAY BE PROCESSED IN ONE COURSE, UNLESS THE EQUIPMENT AND METHODS BEING

10. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT AT THE LIMITS OF REMOVAL OF EXISTING PAVEMENT AND WHEN

NEW PAVEMENT CONSTRUCTION MEETS EXISTING PAVEMENT. MEET AND MATCH SHALL ALSO MEAN SAW CUT AND

- RESULTS IN WHICH CASE, THE CITY WILL DIRECT THAT THE PROCESSING BE DONE IN MORE THAN ONE COURSE.
- 12. PRIOR TO THE BEGINNING OF STABILIZING OPERATIONS, THE AREA TO BE STABILIZED SHALL HAVE BEEN CONSTRUCTED TO AN ELEVATION SUCH THAT UPON COMPLETION OF STABILIZING OPERATIONS, THE COMPLETED STABILIZED SUBGRADE SHALL CONFORM TO THE LINES, GRADES AND CROSS-SECTION SHOWN IN THE PLANS, PRIOR TO THE SPREADING OF ANY ADDITIVE STABILIZING MATERIAL THE SURFACE OF THE ROADBED SHALL BE BROUGHT TO A PLACE APPROXIMATELY PARALLEL TO THE PLANE OF THE PROPOSED FINISHED SURFACE.
- 13. THE STABILIZING MATERIAL SHALL BE APPLIED IN SUCH QUANTITY AS IS NECESSARY TO PRODUCE THE REQUIRED BEARING VALUE. IT SHALL BE INCORPORATED WITH THE SUBGRADE BY FLOWING, DICING, HARROWING, BLADING OR MIXING WITH ROTARY TILLERS UNTIL THE MIXED MATERIALS ARE OF A UNIFORM BEARING VALUE FOR THE FULL WIDTH AND DEPTH OF THE COURSE BEFORE COMPACTION, REGARDLESS OF THE CHARACTER OR BEARING VALUE. ALL MATERIALS IN THE STABILIZING COURSE THAT WILL NOT PASS A 3-1/2" RING SHALL BE REMOVED OR BROKEN DOWN TO A SIZE NOT LARGER THAN 3-1/2 INCHES
- 14. COMPACTION SHALL BE ACCOMPLISHED BY ROLLING WITH ANY TYPE OF EQUIPMENT WHICH WILL PRODUCE THE REQUIRED DENSITY. COMPACTION SHALL CONTINUE UNTIL THE ENTIRE DEPTH TO BE STABILIZED HAS A DENSITY OF NOT LESS THAN 98 PERCENT OF THE MAXIMUM DENSITY IN ACCORDANCE WITH AASHTO T-180, FIELD DENSITY TESTS SHALL BE MADE AT INTERVALS NOT GREATER THAN 50 FEET IN EACH COURSE OR LAYER.
- 15. THE LIMEROCK SHALL BE TRANSPORTED TO THE POINT WHERE IT IS TO BE USED OVER BASE PREVIOUSLY PLACED, IF PRACTICABLE, AND DUMPED ON THE END OF THE PROCEEDING SPREAD, HAULING OVER THE SUBGRADE AND DUMPING ON THE SUB GRADE WILL BE PERMITTED ONLY WHEN IN THE CITYS OPINION THESE OPERATIONS WILL NOT BE DETRIMENTAL TO THE BASE
- 16. THE LIMEROCK SHALL BE SPREAD UNIFORMLY, WITH EQUIPMENT ACCEPTABLE TO THE ENGINEER, ALL SEGREGATED OR OTHERWISE UNACCEPTABLE AREAS SHALL BE REMOVED AND REPLACED WITH PROPERLY GRADED ROCK, AFTER SPREADING IS COMPLETED, THE ENTIRE SURFACE SHALL BE SCARIFIED AND THEN SHAPED SO AS TO PRODUCE THE REQUIRED GRADE, THICKNESS AND CROSS-SECTION AFTER COMPACTION. LIFTS SHALL HAVE A MAXIMUM COMPACTED THICKNESS OF SIX INCHES.
- 17. COMPACTION SHALL BE ACCOMPLISHED AT OPTIMUM MOISTURE. WHEN THE MATERIAL DOES NOT HAVE THE PROPER MOISTURE CONTENT TO INSURE THE REQUIRED DENSITY, WETTING OR DRYING WILL BE REQUIRED. ADDED WATER SHALL BE UNIFORMLY MIXED TO THE FULL DEPTH OF THE COURSE WHICH IS BEING COMPACTED.
- 18. BEFORE ANY BITUMINOUS MATERIAL IS APPLIED, ALL LOOSE MATERIAL, DUST, DIRT, CAKED SLAY AND FOREIGN MATERIAL WHICH MIGHT PREVENT PROPER BOND WITH EXISTING SURFACE SHALL BE REMOVED FOR THE FULL WIDTH OF THE APPLICATION, PARTICULAR CARE SHALL BE TAKEN TO CLEAN THE OUTER EDGE OF THE STRIP TO BE TREATED IN ORDER TO ENSURE THAT THE PRIMER WILL ADHERE, WHERE THE PRIMER IS APPLIED ADJACENT TO CURB & GUTTER OR VALLEY GUTTER, SUCH CONCRETE SURFACES ARE TO BE PROTECTED AND KEPT FREE OF BITUMINOUS MATERIAL.
- 19. NO BITUMINOUS MATERIAL SHALL BE APPLIED WHEN THE TEMPERATURE OF THE AIR IS LESS THAN 40 DEGREES F IN THE SHADE AND FALLING, OR WHEN IN THE OPINION OF THE CITY, THE WEATHER CONDITIONS OR THE CONDITION OF THE EXISTING SURFACE IS UNSUITABLE.
- BEFORE THE APPLICATION OF PRIME COAT.

 21. WHERE NEW PAVEMENT MEETS EXISTING, CONNECTION SHALL BE MADE IN A NEAT STRAIGHT LINE AND FLUSH WITH

EXISTING PAVEMENT

20. THE SURFACE TO BE PRIMED SHALL BE CLEAN AND DRY FOR LIMEROCK BASES. THE GLAZED FINISH SHALL BE REMOVED

PROJECT:

CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



RIME CONSULTANT:

CUMMINS CEDERBERG
COASTAL, MARINE & ENVIRONMENTAL
888 S. ANDREWS AVE. STE. 206

FORT LAUDERDALE, FL 33304 TEL: 954-880-1646 C.O.A. #29062

SUBCONSULTANTS:

CURTIS + ROGERS

LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021

200 SOUTH PARK RD. STE. 350

TEL: 954-610-4412

NV5

GEOTECHNICAL ENGINEER

KEITH & ASSOCIATES

SURVEYOR 301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

HOLLYWOOD, FL 33021

CHEN MOORE AND ASSOC CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600

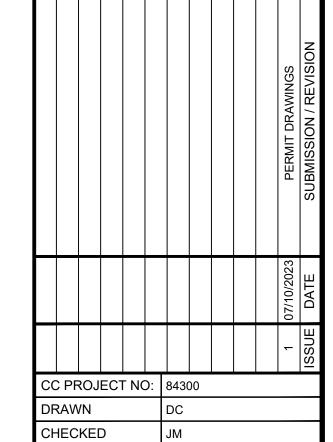
FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA
PUBLIC OUTREACH
2101 W. COMMERCIAL BLVD. STE. 4600
FORT LAUDERDALE, FL 33309
TEL: 954-834-3533

DAVID EDGARDO CASTRO FELIU, PE STATE OF FLORIDA PROFESSIONAL ENGINEER LICENSE NO. 85558

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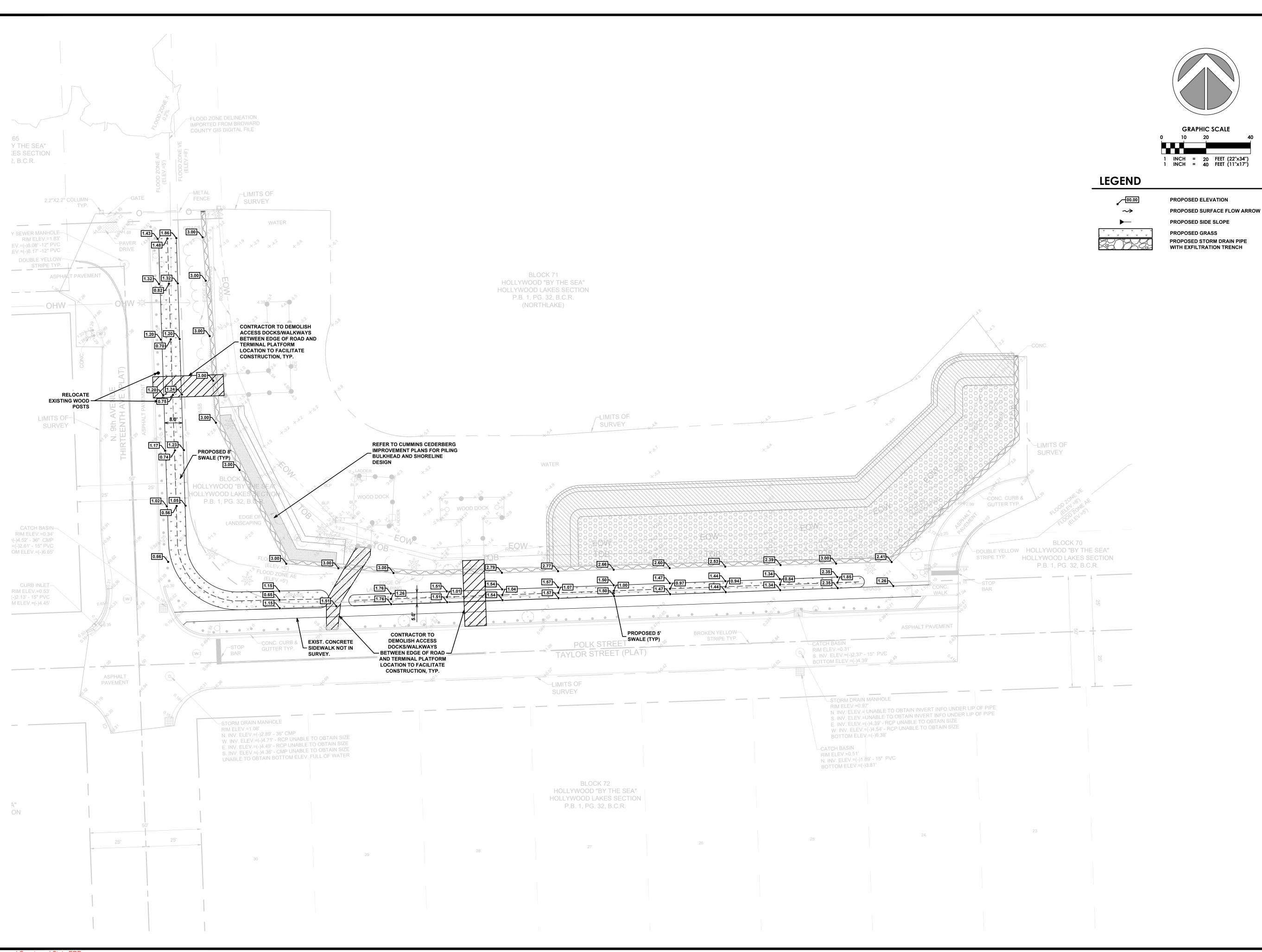
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Broward County and State ERP Page 40 of 55



CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION PROJECT

PROJECT NO. DCM-001187

CLIENT:

GRAPHIC SCALE

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION **MANAGEMENT**

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



PRIME CONSULTANT: **CUMMINS CEDERBERG**

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304 TEL: 954-880-1646

SUBCONSULTANTS:

C.O.A. #29062

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LANDSCAPE ARCHITECTURE 3440 HOLLYWOOD BLVD. STE. 415

HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

KEITH & ASSOCIATES SURVEYOR

301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060 TEL: 954-788-3400

CHEN MOORE AND ASSOC

CIVIL ENGINEER 500 W. CYPRESS CREEK RD. STE. 600 FORT LAUDERDALE, FL 33309 TEL: 954-730-0707

BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

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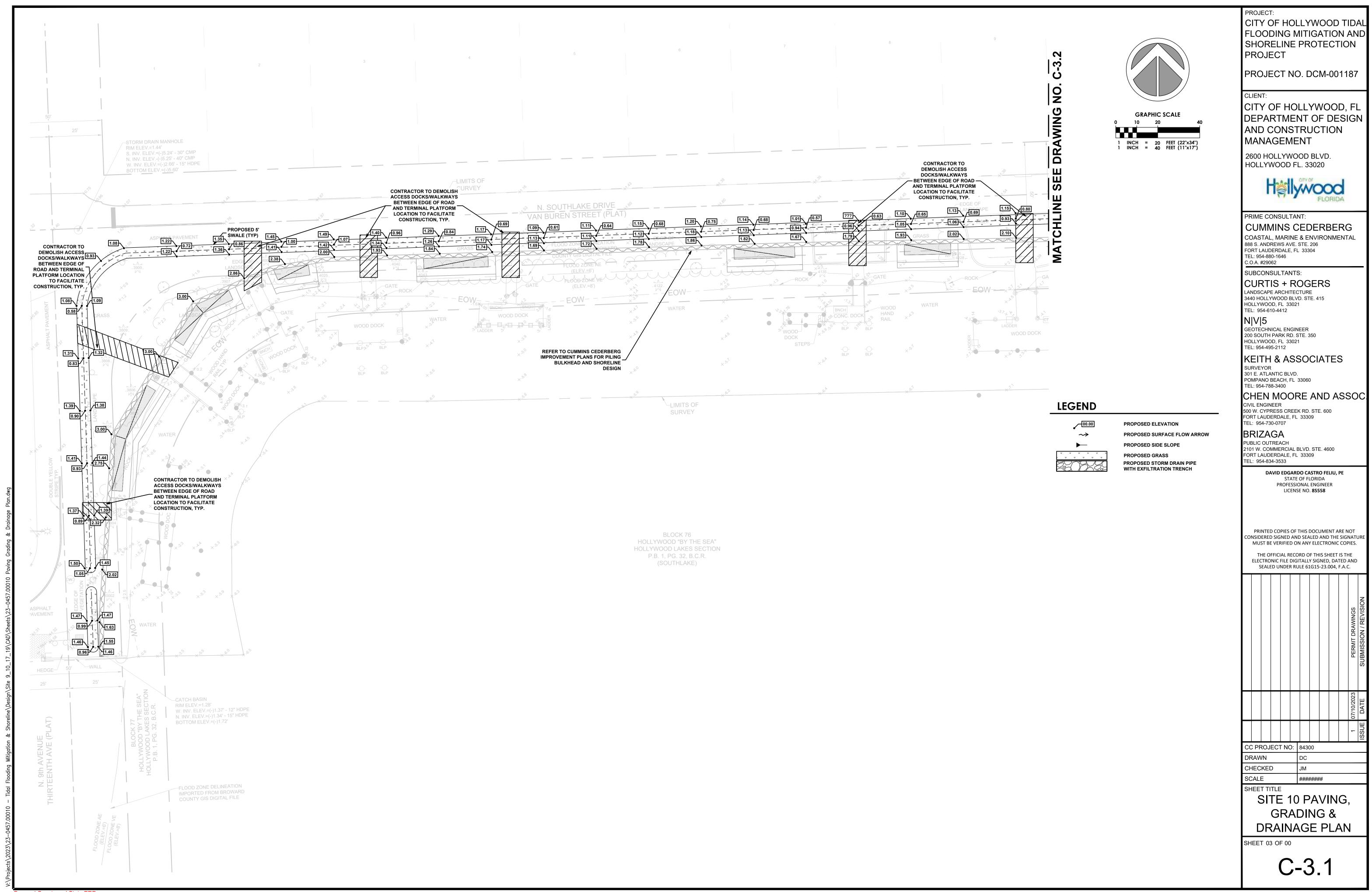
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> SITE 9 PAVING, **GRADING &** DRAINAGE PLAN

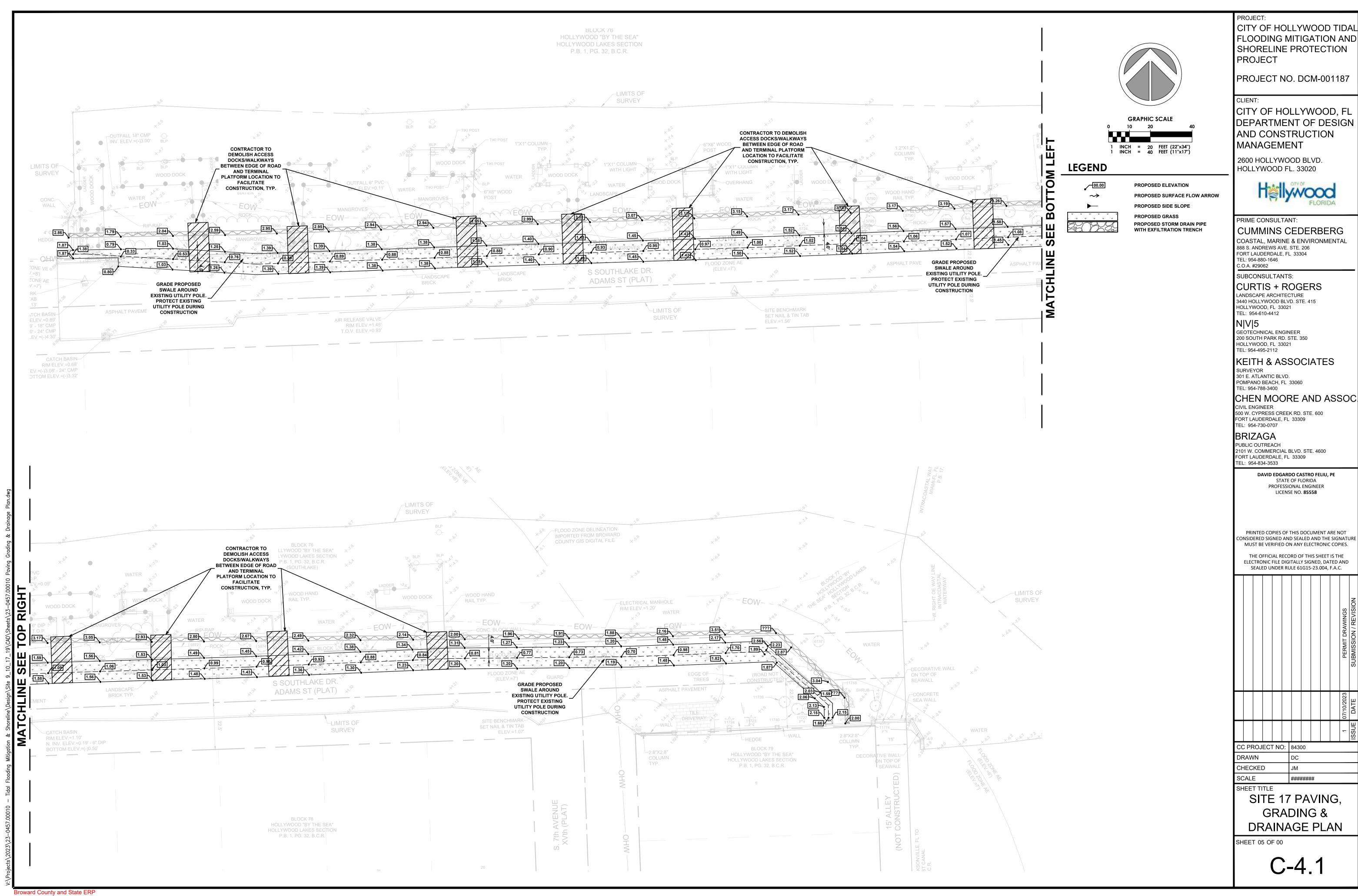
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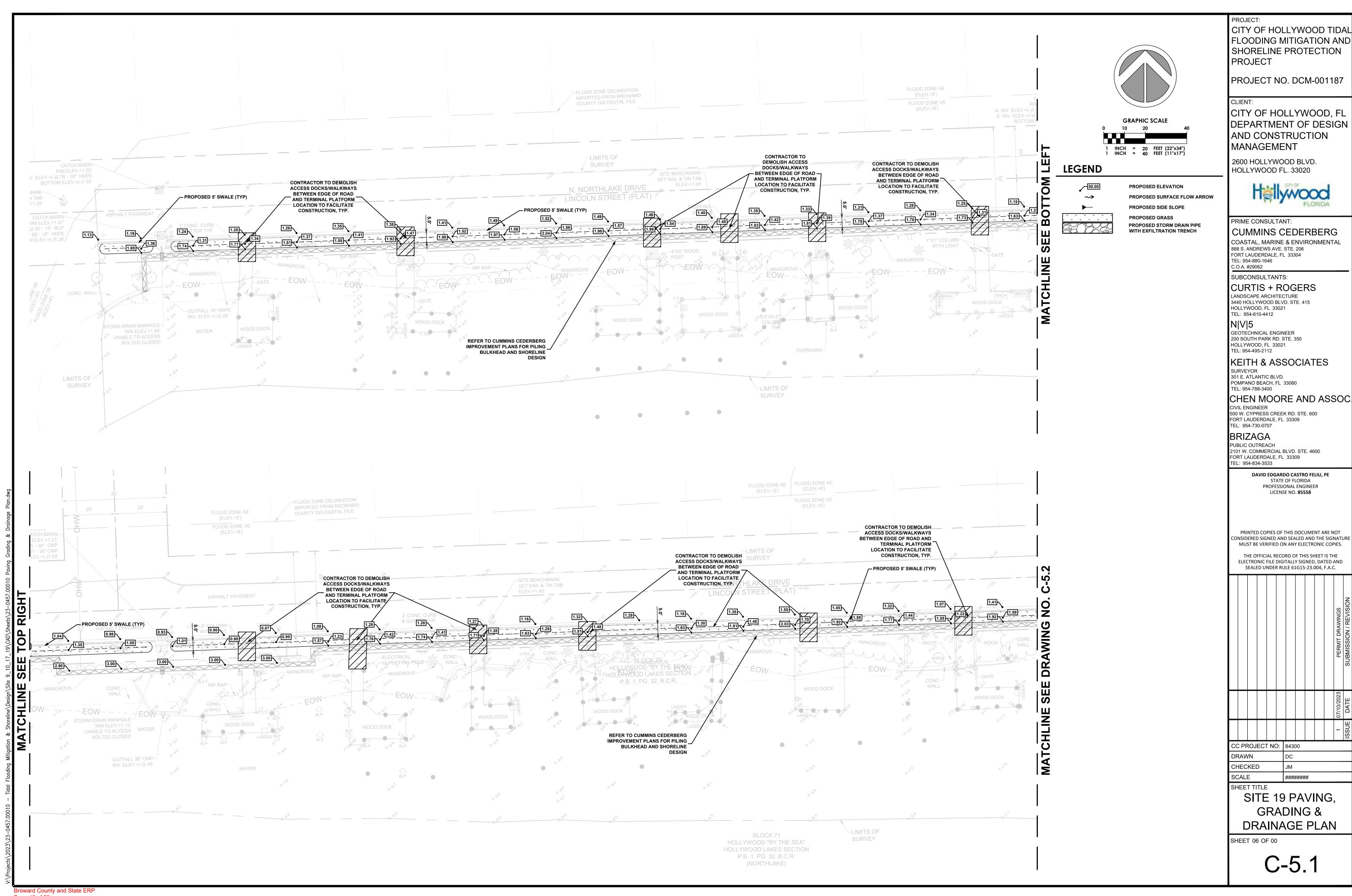


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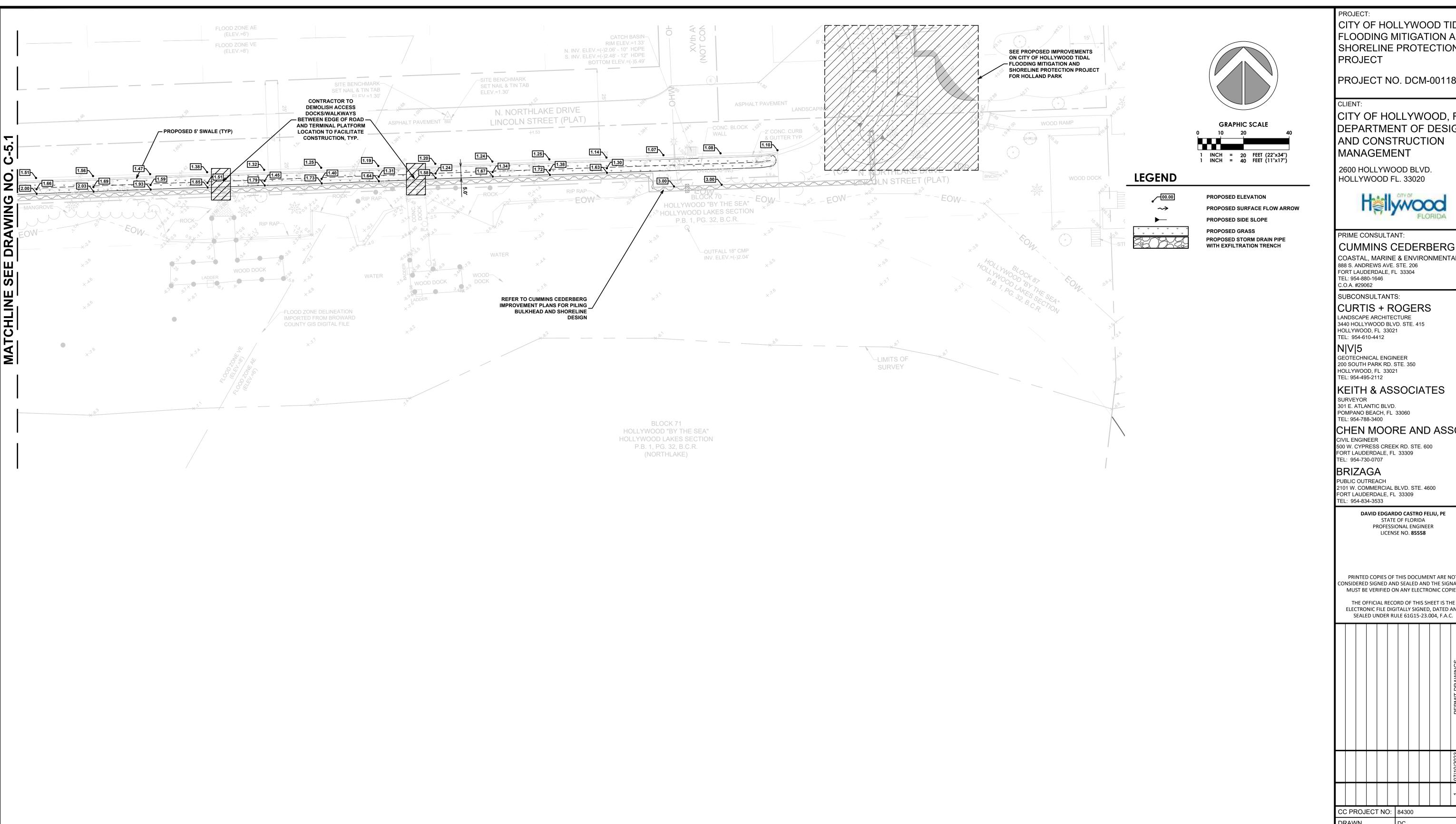




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CITY OF HOLLYWOOD TIDAL FLOODING MITIGATION AND SHORELINE PROTECTION

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL DEPARTMENT OF DESIGN AND CONSTRUCTION MANAGEMENT

2600 HOLLYWOOD BLVD. HOLLYWOOD FL. 33020



CUMMINS CEDERBERG

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304

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2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309

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THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.

ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF HOLLYWOOD DEPARTMENT OF DEVELOPMENT SERVICES. ENGINEERING, TRANSPORTATION & MOBILITY DIVISION, AND ALL OTHER LOCAL, STATE AND NATIONAL CODES, WHERE APPLICABLE.

3. LOCATIONS, ELEVATIONS, SIZES, MATERIALS, ALIGNMENTS, AND DIMENSIONS OF EXISTING FACILITIES, UTILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS; AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. ALSO, THERE MAY HAVE BEEN OTHER IMPROVEMENTS, UTILITIES, ETC., WITHIN THE PROJECT AREA WHICH WERE CONSTRUCTED AFTER THE PREPARATION OF THESE PLANS AND/OR THE ORIGINAL SITE SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY FACILITIES SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE RESPECTIVE UTILITY

4. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION AND ENVIRONMENTAL PERMITS PRIOR TO THE START OF CONSTRUCTION.

5. THE CONTRACTOR SHALL NOTIFY PUBLIC UTILITIES AT LEAST 48 HOURS PRIOR TO BEGINNING

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND INSTALLATION OF THE PROPOSED IMPROVEMENTS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY OTHER AGENCY SHOP DRAWING APPROVAL, IF

ELEVATIONS SHALL BE IN FEET AND REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988

8. CITY OF HOLLYWOOD SHALL NOT PROVIDE STAGING/STORAGE AREA. CONTRACTOR SHALL SECURE STAGING/STORAGE AREA AS NECESSARY FOR CONSTRUCTION WORK.

9. CONTRACTOR SHALL HAUL AWAY EXCESSIVE STOCKPILE OF SOIL FOR DISPOSAL EVERY DAY. NO STOCKPILE SOIL IS ALLOWED TO BE LEFT ON THE CONSTRUCTION SITE OVER NIGHT.

10. CONTRACTOR SHALL CLEAN/SWEEP THE ROAD AT LEAST ONCE A DAY OR AS REQUIRED BY THE

11. CONTRACTOR SHALL PROTECT CATCH BASINS WITHIN/ADJACENT TO THE CONSTRUCTION SITE AS REQUIRED BY NPDES REGULATIONS.

12. CITY OF HOLLYWOOD HAS A NOISE ORDINANCE (CHAPTER 100) WHICH PROHIBITS EXCAVATION AND CONSTRUCTION BEFORE 8:00 A.M. AND AFTER 6:00 P.M., MONDAY THROUGH SATURDAY AND ALL DAY SUNDAY. 13. SUITABLE EXCAVATED MATERIAL SHALL BE USED IN FILL AREAS. NO SEPARATE PAY ITEM FOR THIS WORK, INCLUDE COST IN OTHER ITEMS.

14. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, PARKING LOTS, SIDEWALKS, ETC. TO SATISFY THE INSTALLATION OF THE PROPOSED IMPROVEMENTS WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION.

15. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT. IN CASE WORK ON PRIVATE PROPERTY IS NEEDED, A CITY OF HOLLYWOOD "RIGHT OF ENTRY" FORM MUST BE SIGNED BY PROPERTY OWNER AND THE DIRECTOR OF DEVELOPMENT SERVICES. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ACCESS AT ALL TIMES TO PRIVATE HOMES/BUSINESSES.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, CAUSED TO ANY IRRIGATION SYSTEM (PRIVATE OR PUBLIC) ACCIDENTALLY OR PURPOSELY. THE CONTRACTOR SHALL REPLACE ANY DAMAGED, REMOVED OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES TO MATCH OR EXCEED EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE CITY.

17. MAIL BOXES, FENCES OR OTHER PRIVATE PROPERTY DAMAGED DURING THE CONSTRUCTION OF THE

PROPOSEI	D IMPROVI	EMENTS SHA	ALL BE REPLACED TO MATCH OR EXCEED EXISTING CONDITION.	
ALL A	ISSUED:	MAY 2023	DEPARTMENT OF DEVELOPMENT SERVICES ENGINEERING, TRANSPORTATION & MOBILITY DIVISION	REVISED: -
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18. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX, LATEST EDITION, AND CITY OF HOLLYWOOD DEPARTMENT OF DEVELOPMENT SERVICES STANDARDS.

19. NO TREES ARE TO BE REMOVED OR RELOCATED WITHOUT PRIOR APPROVAL FROM THE CITY ENGINEER. 20. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY TREE REMOVAL OR RELOCATION PERMITS FROM THE CITY OF HOLLYWOOD BUILDING DEPARTMENT FOR TREES LOCATED IN THE PUBLIC RIGHT

21. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE REGULATORY

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS TO EXISTING PAVEMENT, SIDEWALKS, PIPES, CONDUITS, CURBS, CABLES, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY AT NO ADDITIONAL EXPENSE TO THE OWNER. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., PRIOR TO BEGINNING WORK IN ANY

23. WHERE NEW PAVEMENT MEETS EXISTING, CONNECTION SHALL BE MADE IN A NEAT STRAIGHT LINE AND FLUSH WITH EXISTING PAVEMENT TO MATCH EXISTING CONDITIONS.

24. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES, OR PARTS OF, EXPOSED OR OPENED AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES, WHEN THE CONTRACTOR IS NOT WORKING, UNLESS OTHERWISE DIRECTED. ALL TRENCHES SHALL BE COVERED,

FIRMLY SECURED AND MARKED ACCORDINGLY FOR PEDESTRIAN/VEHICULAR TRAFFIC. 25. ALL EXCAVATED MATERIAL REMOVED FROM THIS PROJECT SHALL BE DISPOSED OF OFF THE PROPERTY

BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. 26. ALL RAMPS, SIDEWALK CURB RAMPS, AND, ACCESSIBLE ROUTES SHALL BE ADA COMPLIANT AND SHALL

BE IN ACCORDANCE WITH FDOT STANDARD PLANS INDEX, LATEST EDITION. 27. ALL GRASSED AREAS AFFECTED BY CONSTRUCTION SHALL BE RE-SODDED.

28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION, INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH SPECIFICATIONS OF THE LATEST REVISION OF FDOT DESIGN STANDARDS. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR THE RESETTING OF ALL TRAFFIC CONTROL AND INFORMATION SIGNAGE REMOVED DURING THE CONSTRUCTION PERIOD.

29. EXCAVATED OR OTHER MATERIAL STORED ADJACENT TO OR PARTIALLY UPON A ROADWAY PAVEMENT SHALL BE ADEQUATELY MARKED FOR TRAFFIC SAFETY AT ALL TIMES.

30. TEMPORARY PATCH MATERIAL MUST BE ON THE JOB SITE WHENEVER PAVEMENT IS CUT, OR THE CITY'S

INSPECTOR WILL SHUT THE JOB DOWN. 31. CONTRACTOR MUST PROVIDE FLASHER ARROW SIGNAL FOR ANY LANE THAT IS CLOSED OR DIVERTED.

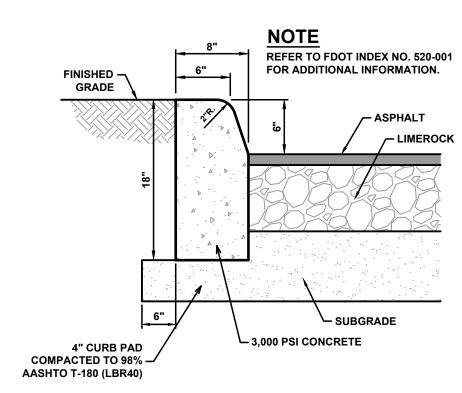
32. THE CITY PREFERS THAT IT'S OWN POLICE OFFICERS PROVIDE TRAFFIC CONTROL TO ENSURE SAFE AND EFFICIENT INTERSECTION OPERATIONS IS MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION, THEREFORE, PLEASE CONTACT MR. JANEL DIXON TO ARRANGE FOR A DETAIL TO PROVIDE THIS SERVICE. HE MAY BE REACHED AT 954-967-4500 OR VIA EMAIL AT jdixon@hollywoodfl.org.

33. CONTRACTOR TO RESTORE PAVEMENT TO ORIGINAL CONDITION AS REQUIRED, REFER TO BCTED, PAVING MARKINGS AND SIGNS DETAILS PLAN, LATEST EDITION.

34. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO UTILITY COMPANIES TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 811 OR 1-800-432-4770 (SUNSHINE ONE-CALL OF FLORIDA).



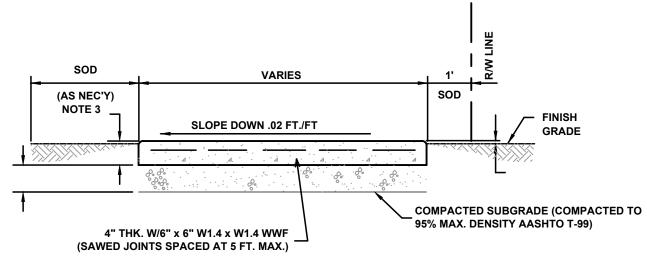
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"William"	APPROVE	D: JG	GENERAL NOTES (2 OF 2)	-02



TYPE 'D' CONCRETE CURB

- SAWCUT & STRIP BACK EXIST. **ASPHALT AND ROCKBASE AS SHOWN** AND CONNECT TO EXIST. PAVEMENT EXIST. ASPHALT - EXIST. LIMEROCK LIMEROCK BASE COMPACTED SUBGRADE

CONNECTION TO EXISTING PAVEMENT DETAIL



SECTION

- CONCRETE TO BE CLASS 1, 2,500 PSI IN 28 DAYS.
- 2. USE OF FIBER REINFORCED CONCRETE IS PROHIBITED. 3. 4" THICK MIN. (TYP.); 6" THICK AT DRIVEWAYS, EXTENDED TWO-FEET BEYOND
- DRIVE, ON BOTH SIDES. 4. SIDEWALK SLOPES SHALL MEET THE REQUIREMENTS OF THE AMERICAN WITH
- DISABILITIES ACT.

5' CONCRETE

6" MAX

3" MAX AT PRIVATE -

0.02 MAX

DOCK ACCESS

SIDEWALK

- INCLUDES ANY CUT AND/OR FILL TO ACHIEVE DESIGN SLOPES
- PROVIDE 1/8" CONSTRUCTION JOINTS AT 5' c.c., MINIMUM DEPTH 1/2". PROVIDE 1/2" EXPANSION JOINTS W/ NON-RISING FILLER AT 30'c.c.
- 8. CURE ALL CONCRETE WITH CLEAN SAND, PLASTIC MEMBRANE, OR OTHER

LIMITS OF

CONSTRUCTION -

& R/W LINE

NA TURAL

GROUND -

CONCRETE SIDEWALK SECTION

WIDTH VARIES

CONCRETE

DRIVEWAY OR

SWALE W/

CLEARING &

GRUBBING

RIGHT-OF-WAY

EXISTING ROADWAY PAVEMENT

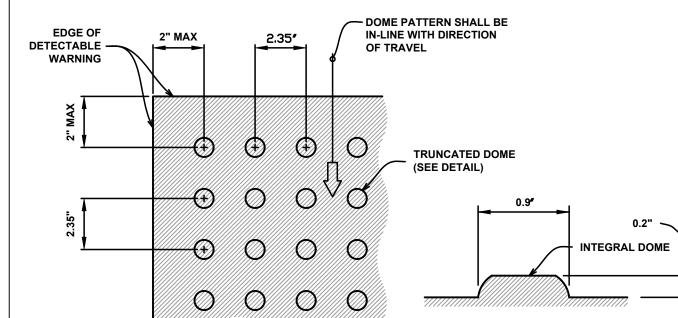
CROSS SLOPE 0.02±

FXISTING ASPHALT OR

ASPHALT RESTORATION

- 3. WHEN NOT PLACED ON CURB RAMPS, DETECTABLE WARNINGS SHALL BE PLACED ON THE WALKING SURFACES ADJOINING A VEHICULAR WAY. THE BOUNDARY BETWEEN THE AREAS SHALL BE DEFINED
- 4. UNLESS NOT PLACED DIRECTLY ON A RAMP, DETECTABLE WARNING SURFACE MUST NOT EXCEED 2%
- 5. WHEN PLACED ON CURB RAMPS, DETECTABLE WARNING SURFACE SHALL EXTEND THE FULL LENGTH
- 6. CONSTRUCTION OF DETECTABLE WARNING SURFACE IS NOT LIMITED TO CONCRETE MATERIAL. HOWEVER, PRIOR TO CONSTRUCTION, THE CONTRACTOR MUST INFORM TO THE ENGINEER OF RECORD THE PROPOSED MATERIAL FOR THE DETECTABLE WARNING SURFACE. CONTRACTOR MUST ENSURE
- A. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70%
- B. 90% OF THE INDIVIDUAL TRUNCATED DOMES MUST COMPLY WITH THE SPECIFIED DIMENSIONS AND
- C. NO TWO ADJACENT DOMES MAY BE NON-COMPLIANT.
- D. SURFACE MAY NOT DEVIATE MORE THAN 0.1" FROM A TRUE PLAN.

PLAN VIEW



DETECTABLE WARNING

- 1. DETECTABLE WARNING SURFACE AS REQUIRED PER AMERICAN WITH DISABILITIES ACT DESIGN
- STANDARDS REQUIRED AT ALL CONCRETE SIDEWALK LANDINGS WITHIN PROJECT LIMITS. 2. STAMPED CONCRETE IS NOT PERMITTED FOR DETECTABLE WARNING SURFACES. ARMOR TILE OR AN APPROVED EQUAL SHALL BE USED.
- BY A CONTINUOUS DETECTABLE WARNING WHICH IS 36" WIDE.
- SLOPE IN ANY DIRECTION.
- AND WIDTH OF THE RAMP. FOR RAMPS WITHIN FDOT RIGHT-OF-WAY, REFER TO THE LATEST VERSION OF THE FDOT DESIGN STANDARDS INDEX #304.
- THAT THE FOLLOWING TRUNCATED DOME CRITERIA IS MET:

CUMMINS CEDERBERG

TRUNCATED DOME

COASTAL, MARINE & ENVIRONMENTAL 888 S. ANDREWS AVE. STE. 206 FORT LAUDERDALE, FL 33304

RIME CONSULTANT:

TEL: 954-880-1646

SUBCONSULTANTS:

CITY OF HOLLYWOOD TIDAL

FLOODING MITIGATION AND

SHORELINE PROTECTION

PROJECT NO. DCM-001187

CITY OF HOLLYWOOD, FL

DEPARTMENT OF DESIGN

AND CONSTRUCTION

2600 HOLLYWOOD BLVD.

HOLLYWOOD FL. 33020

MANAGEMENT

PROJECT

CURTIS + ROGERS LANDSCAPE ARCHITECTURE

3440 HOLLYWOOD BLVD. STE. 415 HOLLYWOOD, FL 33021 TEL: 954-610-4412

GEOTECHNICAL ENGINEER 200 SOUTH PARK RD. STE. 350 HOLLYWOOD, FL 33021 TEL: 954-495-2112

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SURVEYOR 301 E. ATLANTIC BLVD. POMPANO BEACH, FL 33060

TEL: 954-788-3400 ICHEN MOORE AND ASSOC

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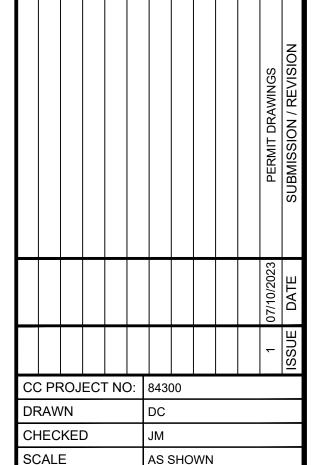
TEL: 954-730-0707 BRIZAGA

PUBLIC OUTREACH 2101 W. COMMERCIAL BLVD. STE. 4600 FORT LAUDERDALE, FL 33309 TEL: 954-834-3533

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DETAILS

CONSTRUCTION -& R/W LINE RIGHT-OF-WAY WIDTH VARIES CONCRETE DRIVEWAY OR SWALE W/ EXISTING EXISTING ROADWAY PAVEMENT CLEARING & *GRASS* CROSS SLOPE 0.02± GRUBBING **VARIES** NA TURAL GROUND -EXISTING ASPHALT OR ASPHALT RESTORATION 6" MAX 3" MAX AT PRIVATE— DOCK ACCESS ·----1:4 SLOPE

THE ROOT SYSTEM FOR ALL EXISTING TREES TO REMAIN SHALL NOT BE IMPACTED BY ANY EARTHWORK ACTIVITIES RELATED TO SWALE REGRADING. SWALE REGRADING SHALL NOT BE COMPLETED WITHIN THE CRITICAL PROTECTION ZONE IS THE AREA SURROUNDING AN EXISTING TREE WITHIN A CIRCLE DEFINED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE TRUNK DIAMETER AT 54 INCHES ABOVE FINISHED GRADE. THE CRITICAL PROTECTION ZONE SHALL HAVE A 4 FOOT MINIMUM RADIUS AND 8 FOOT MAXIMUM RADIUS FROM THE CENTER OF THE TREE TRUNK.

L-----1:4 SLOPE NOTE: THE ROOT SYSTEM FOR ALL EXISTING TREES TO REMAIN SHALL NOT BE IMPACTED BY ANY EARTHWORK ACTIVITIES RELATED TO SWALE REGRADING. SWALE REGRADING SHALL NOT BE COMPLETED WITHIN THE CRITICAL PROTECTION ZONE IS THE AREA SURROUNDING AN EXISTING TREE WITHIN A CIRCLE DEFINED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE TRUNK DIAMETER AT 54 INCHES ABOVE FINISHED GRADE. THE CRITICAL PROTECTION ZONE SHALL HAVE A 4 FOOT MINIMUM RADIUS AND 8 FOOT

MAXIMUM RADIUS FROM THE CENTER OF THE TREE TRUNK.

TYPICAL SWALE REGRADING WITH SIDEWALK

NOTE:

WITHOUT SIDEWALK

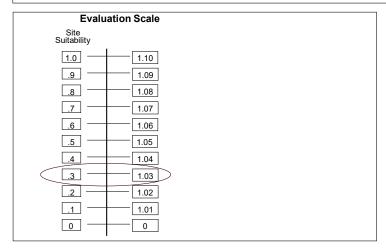
TYPICAL SWALE REGRADING

Mitigation Bank Site Suitability Evaluation (MBSE) Matrix

Page 1 of 1

Parameters			
Parameter	Scoring Criteria	Ratings	Score
Adjacent to lands or waters of regional Importance and results in identifiable	State Park, OFW, AP, and including but not limited to Special Waters on at least 1 boundary	0	
ecological benefits to adjacent lands or waters.	Adjacent lands contain no special designation or undesignated special value	1	0
2. Property is within boundary of an acknowledged state, local or regional acquisition program	Property is within boundary of an acquisition program	1	
	Property is not within boundary of an acquisition program	0	0
Property contains ecological or geological features consistently considered by regional	Property qualifies	1	1
Scientist, or federal and state agencies to be unusual, unique or rare in the region and is of sufficient size	Property does not qualify	0	
1. Property designated as being of critical state or federal concern and/or contains special designations,	Property contains at least 1 special designation.	1	1
	Property contains no special designations.	0	0
5. Property important to acknowledged restoration efforts	Property is important.	1	
	Property is not important.	0	0
6. Ownership and control of the property.	Property is privately owned.	1	
	Property is publicly owned.	0	0
7. Threatened , Endangered & Species of Special Concern	Documented Presence of Species on site	1	
Presence of animal species (faunal) found on site	No documented Presence of species on site.	0	0
3. Threatened , Endangered & Listed Species	Documented Presence of Species on site	1	
Presence of plant species (floral) found on site	No documented Presence of species on site.	0	0
Threat of loss or destruction from development activities. (Development Pressure)	High probability of development.	1	1
	Low probability of development.	0	
10. Extent to which lands are subject to Local, State, and Federal dredge and fill/ ERP Regulations	Property is not regulated.	1	
	Property is regulated.	0	0
	Value Cumulative Score (CS)		3

The Mitigation Bank Site Suitability Evaluation Matrix is designed to provide a quantifiable means of determining the number of mitigation credits that should be assigned to a bank for "value" related parameters. Value related parameters are human values determined to be important to society; and therefore are not measurable in a purely functional analysis. Functional analysis will only measure the degree of functional ecological improvement (degree of ecological improvement) resulting from mitigation activities. The SS Evaluation measures and provides credit for societal values that separate one mitigation bank from another as required by Ch. 62-342 .470 (a) (b) (e) (f) (g) (h) (i) F.A.C.. The SS evaluation is not to be utilized in conjunction with a functional analysis methodology which also utilizes value related parameters in its analysis.



Site Suitability Matrix					
Maximum Possible Score (MPS)					
Cumulative Score (CS)		3			

0.3

EPA, USACOE, USF & W, FDEP, NMFS, SFWMD, Dade DERM, FPL, CH 3-Apr-96

After Calculating the Site Suitability Score determine the Site Suitability Multiplier by utilizing the Evaluation Scale to the left. The Site Suitability Multiplier is to be multiplied times the number of the Functional Mitigation Credits, resulting from the (W.A.T.E.R.) Functional Assessment of the Mitigation Bank, to determine the number of Site Suitability Credits to be assigned to the Mitigation Bank.

Scoring conducted by:Cummins Cederberg

Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from

Data collected on Wetland Delineation 12/5/2023, Agency Site Visit 3/22/2023

EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Miami-Dade County (W.A.T.E.R. created by: Bill L. Maus

EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Miami-Da	ade County (W.A.T.E.R. created by: Bill L. Maus)				
			Site 2 MG	Site 9 10 17 19 MG	Site 10 SG
Parameter/ Function	Scoring Criteria	Ratings	0.105 AC (4,552 SF) impact	Total Mangrove Impacts= 0.10 (4,542.3 SF) Impact above MHWL = 0.079 AC (3,440.8 SF) Impact below MHWL = 0.025 AC (1,101.5 SF)	0.0004 AC (17.6 SF) impact
1. Fish & Wildlife Functions Apply to freshwater, sa	ultwater, brackish and mitigation systems				
	7 or more species commonly observed	3			
a. Waterfowl, wading birds, wetland dependent, or aquatic	3-6 species commonly observed	2			
birds of prey.	1-2 species commonly observed	1	1	1	
(Mit. Bank - High specie count w/ low pop. #'s score 1	0 species commonly observed	0			0
	7 or more species commonly observed	3			
b. Fish	3-6 species commonly observed	2			
(Mit. Bank - High specie count w/ low pop. #'s score 1	1-2 species commonly observed	1			1
Restoration that causes 12% pop. Increases-higher score)	0 species commonly observed	0	0	0	
	Top predator (carnivore) &/or large mammals	3			
c. Mammals	Medium sized mammals , (adult weight > 6 ibs.)	2			N/A
(Mit. Bank - High specie count w/ low pop. #'s score 1	Small animals (rodents, etc.) , (adult weight < 6 lbs.)	1	1		1907
Restoration that causes 12% pop. Increases-higher score)	0 species present	0		0	
	7 or more species commonly observed	3			_
d. Aquatic macroinvertebrates, amphibians	3-6 species commonly observed	2			
(Mit. Bank - High specie count w/ low pop. #'s score 1	1-2 species commonly observed	1	1	1	1
Restoration that causes 12% pop. Increases-higher score)	0 species commonly observed	0			
	Large species observed	3			
e. Aquatic reptiles	Aquatic turtles	2			N/A
(Mit. Bank - High specie count w/ low pop. #'s score 1	Snakes & lizards	1	1	1	IVA
Restoration that causes 12% pop. Increases-higher score)	No evidence of species present	0			

Scoring conducted by:Cummins Cederberg

Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix

Data collected on

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Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Miami-Dade County (W.A.T.E.R. created by: Bill L. Maus)

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

Scoring conducted by:Cummins Cederberg

Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix

Data collected on

Wetland Delineation 12/5/2023, Agency Site Visit 3/22/2023

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Miami-Dade County (W.A.T.E.R. created by Bill L. Maus)

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3. Hydrologic Functions					
	Major connection (Flowing water/ river or floodplain/ uniform flow through natural systems)	3			
a. Surface water hydrology / sheet flow	Moderate connection (Natural restriction of flow or Flowing water due to hydrologic engineering)	2			2
Apply to freshwater, saltwater, brackish and mitigation systems	Minor connection (Runoff collection point, or uneven flow due to berms,	1	1	1	
	ditches, roadways etc.) Hydrologically isolated, no net lateral movement	0	'	ı	
		3			
h Hudran ariad (a armadu a an) farah ayaharra	> 8 months inundated with no reversals & every year drydown >5 months < 8 months or >5 years continuous inundation (look for	2			
b. Hydroperiod (normal year) fresh systems	strong water stains on persistent vegetation) >1 month < 5 months, with possible reversals (look for soft or less distinct water stains on persistent vegetation)	1	N/A	N/A	N/A
	4 4 weeks cumulative annual inundation or < 2 weeks continuous inundation	0			
		3			
b-1 Alternate to b. for	>10 weeks of continuous inundation including soil saturation > 6 weeks but <10 weeks of continuous inundation including soil saturation	2			
Short Hydroperiod (normal year) fresh systems:	>2 weeks but <6 weeks of inudation, including soil saturation	1	N/A	N/A	N/A
	<2 weeks of continuos inundation	0			
	Inundated by >90% high tides	3			
b-2 Alternate to b. for	Inundated by "spring" high tides (bi-monthly)	2			N/A
Saltwater, brackish (tidal) systems	Inundated by "extreme high" tides only (biannually)	1	1	1	11074
	Inundated by storm surges only	0			
	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 10 days average	3			
b-3 Alternate to b. for	Inundated by high "spring" tides (monthly) and flushed by fresh water sheetflow every 30 days on the average	2	N/A	N/A	N/A
High Marsh (Juncus-Distichlis)	Inundated by high "spring" tides (monthly)and exposed to rain only	1			
	Inundated by >50% high tides and exposed to rain only	0			
	Inundated by high tides (daily) and/or recieves and maintains fresh water at least into first half of dry season	3			
b-4 Alternate to b. for	Inundated by high tides (daily) and/or recieves and maintains fresh water during rainy season only	2	N// 5	N//*	\$1/ \$
Riverine systems	Inundated by high tides (daily) and/or recieves fresh water but does not maintain (reversal) during rainy season	1	N/A	N/A	N/A
	Inundated by spring tides (bi-monthly) and/or experiences frequent reversals of fresh water (flashy)	0			

Scoring conducted by:Cummins Cederberg

Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix

Data collected on

Wetland Delineation 12/5/2023, Agency Site Visit 3/22/2023

Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from EPA, FDEP, ACOE, NMFS, USF & W, SFWMD & Miami-Dade County (W.A.T.E.R. created by Bill L. Maus)

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Parameter/ Function	Scoring Criteria	Ratings	0.105 AC (4,552 SF) impact	Total Mangrove Impacts= 0.10 (4,542.3 SF) Impact above MHWL = 0.079 AC (3,440.8 SF) Impact below MHWL = 0.025 AC (1,101.5 SF)	0.0004 AC (17.6 SF) impact
. Hydrologic Functions continued					
	>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	- N/A	N/A	
c. Hydropattern (fresh system)	>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			N/A
	<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 ft. water depth <2 ft. on 90% high tides	3			
-1 Alternate to c. for	> 6 in. water depth <1 ft. on >50% high tides	2		1	N/A
altwater, brackish (tidal) systems	< 6 in. water depth , but > than saturated	1			
	Saturated by saline water table only	0	0		
	>10 in. water depth <2 ft. on regular basis during growing season	3	- N/A	N/A	
-2 Alternate to c. for	>5 in. to 10in. water depth on regular basis during growing season	2			N/A
ligh Marsh (Juncus-Distichlis)	>1 in. to 5 in. water depth on regular basis during growing season	1	N/A		N/A
	>0.0 in. to 1 in. water depth sporadically during growing season	0			
	>2 ft. water depth (main channel) <6 ft. for 8 months	3			
c-3 Alternate to c. for Riverine systems	>2 ft. water depth (main channel) <4 ft. for 6 months	2	N/A	N/A	N/A
	>1 ft. water depth (main channel) <2.5 ft. for 4 months	1	11/74		IV/A
	<1 ft. water depth, but dry for >4 weeks (dry season)	0			

Scoring conducted by:Cummins Cederberg

Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix Based on WBI, WQI, WRAP, HGM and 4th Priority Project List (PPL) with technical advise from

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

Scoring conducted by:Cummins Cederberg

Mitigation Bank Wetland Function Evaluation & Impact Site Evaluation Matrix

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4. Salinity Parameters Apply to freshwater, saltwater	brackish, hypersaline and mitigation systems - Choos	e 1			
	<2 parts per thousand (ppt)	3			
a. Optimum salinity for fresh systems during growing	2 to 3 parts per thousand (ppt)	2	NI/A	N/A	NIA
season based on mean high salinity for a normal year.	4 to 5 parts per thousand (ppt)	1	N/A	N/A	N/A
Apply to freshwater systems within 5 miles of the coast	>5 parts per thousand (ppt)	0			
a-1. Alternate to a.	6 to 8 parts per thousand (ppt)	3			
Optimum salinity for brackish systems during growing	9 to 13 parts per thousand (ppt)	2		N/A	N/A
season based on mean high salinity for a normal year.	14 to 16 parts per thousand (ppt)	1	N/A		
Apply to brackish (tidal) systems only	>16 parts per thousand (ppt)	0			
a-2. Alternate to a.	17 to 19 parts per thousand (ppt)	3	N/A N/A		
Optimum salinity for saline systems during growing	20 to 22 parts per thousand (ppt)	2		N/A	N/A
season based on mean high salinity for a normal year.	23 to 25 parts per thousand (ppt)	1			
Apply to saline marsh (tidal) systems only	>25 parts per thousand (ppt)	0			
a-3. Alternate to a.	26 to 41 parts per thousand (ppt)	3	N/A		N/A
Optimum salinity for hypersaline systems during growing	42 to 46 parts per thousand (ppt)	2		N/A	
season based on mean high salinity for a normal year.	47 to 51 parts per thousand (ppt)	1	IN/A		
Apply to hypersaline (tidal) systems only	>51 parts per thousand (ppt)	0			
a-4 Alternate to a.	bottom (lower) third between 12 to 25 ppt	3			
Optimum salinity for riverine/tidal creek system during	middle third between 5 to 11 ppt.			N/A	
growing season based on mean high slainity for a normal	upper (top) third betweem 0 to 4 ppt.				
year.	bottom (lower) third between 25 to 32 ppt	2			
Apply to riverine systems only	middle third between 6 to 24 ppt.				
	upper (top) third betweem 0 to 5 ppt.		N/A		N/A
	bottom (lower) third between 30 to 40 ppt	1	IN/A	IN/A	IN/A
	middle third between 8 to 29 ppt.				
	upper (top) third betweem 0 to 7 ppt.				
	bottom (lower) third between 35 to 50 ppt	0			
	middle third between 10 to 34 ppt.				
	upper (top) third betweem 0 to 9 ppt.				
		Cumulative Score (SC)	9	10	7
W.A.T.E.R. created by: Bill L. Maus	<u>Maximum</u> W.A.T.E.R. = Cumulative Score/Ma	Possible Score (MPS)	45.00 0.20	43.00 0.23	27.00
11/1/1998	w.a.i.e.k. = Cumulative Score/Ma	AIIIIIIIII FUSSIDIE SCOFE	0.20	U.23	0.26

Broward County and State ERP Page 54 of 55 05/21/2025



April 23, 2025

City of Hollywood P.O. Box 229045 Hollywood, FL 33022 Attn: George R. Keller, Jr.

Re: Everglades Mitigation Bank Credit Reservation:

Anticipated Permit from Army Corps of Engineers, Application No. SAJ-2024-00126; and Broward County Environmental Protection and Growth Management Department, Application No. DF24-1003

Please be advised that the Everglades Mitigation Bank (the "EMB") has reserved 0.03 Joint Saltwater 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 payment in full for the above referenced credits.

Please contact me at 561-691-7060 for any additional information or questions regarding this matter.

Regards,

Brian Yates Everglades Mitigation Bank

Sec. 27-14. Administrative review of RED 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 RED 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 RED 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 RED 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.
- (I) The hearing shall be a quasi-judicial hearing.
 - (1) The applicant/petitioner requesting the administrative review, any intervenor/petitioner and RED 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 RED 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 RED 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.

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used (see MyFWC.com/manatee). One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 81/2" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work all in-water activities must

SHUT DOWN

Report any collision with or injury to a manatee:



1-888-404-FWCC(3922)

cell *FWC or #FWC

