



CITY OF PARKER
City Hall
1001 West Park Street
Phone 850-871-4104

Planning Committee

Mark Rega, Chairman
Rich Hall
Kyle Merritt
Terence Stryker

Attorney
Tim Sloan

City Clerk
Ingrid Bundy

PUBLIC HEARING
PLANNING COMMITTEE SPECIAL MEETING
FEBRUARY 4, 2025 | 5:00 P.M.
LOCATED AT
PARKER CITY HALL

AGENDA

CALL TO ORDER – Mark Rega, Chairman

INVOCATION – Chairman Rega

ROLL CALL – City Clerk

REGULAR AGENDA

- 1. Application for Major Development**
 - **909 West St – Coastal Acquisitions of Florida, LLC (Mr. Phillip Santora)**
REQUESTING APPROVAL FOR MAJOR DEVELOPMENT OF COMMERCIAL BUILDING

ADJOURNMENT

Ingrid Bundy, City Clerk

If a person decides to appeal any decision made by the Planning Council with respect to any matter considered at the meeting, if an appeal is available, such person will need a record of the proceeding and such person may need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence upon which the appeal is to be made.

Any person requiring special accommodation at this meeting because of a disability or physical impairment should contact the City Clerk at 1001 West Park Street, Parker, Florida 32404; or by phone at (850) 871-4104. If you are hearing or speech impaired and you have TDD equipment, you may contact the City Clerk using the Florida Dual Party System, which can be reached at 1-800-955-8770 (Voice) or 1-800-955-8771 (TDD).

ALL INTERESTED PERSONS DESIRING TO BE HEARD ON THE AFORESAID agenda are invited to be present at the meeting.



CITY OF PARKER

1001 WEST PARK STREET • PARKER, FLORIDA 32404
TELEPHONE (850) 871-4104 • FAX (850) 871-6684

CITY OF PARKER APPLICATION FOR DEVELOPMENT PERMIT MAJOR DEVELOPMENT

NOTE: \$1000 Deposit plus review fee

Date of Submittal: _____
DO Permit #: _____
Bldg Permit #: _____
Land Use Designation: _____
Parcel ID# _____

APPLICANT INFORMATION

NAME OF APPLICANT: Coastal Acquisitions of Florida, LLC
ADDRESS: 423 Tartan Way, Enterprise, AL 36330
TELEPHONE: _____ EMAIL: _____
NAME OF CONTACT: Phillip E. Santora
ADDRESS: 2431 Hartford Highway, Dothan, AL 36305
TELEPHONE: 334-701-6583 EMAIL: psantora@northstarengineering.com

SITE INFORMATION

SITE LOCATION: 909 West St., Panama City, FL 32404 (Northeast of intersection of West St. and E. 2nd St.)
(MUST INCLUDE ADDRESS)
CURRENT USE OF SITE: Vacant
PROPOSED USE OF SITE: Commercial /
SIZE (SQ. FT. / ACRES): 64,217 SQ.FT. / 1.47 ACRES
SOIL TYPES LOCATED ON PROPERTY: Lakeland sand (Hydrologic Soil Group: A)
TOPOGRAPHY ELEVATIONS LOCATED ON PROPERTY: 19.00 - 21.00
IS THE PROPOSED STRUCTURE WITHIN A DESIGNATED FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP: YES NO ZONE: _____
NAME(S) OF STREET(S) ADJACENT TO PROPERTY: West St., E. 2nd St.
SET BACK FROM SHORELINE (FEET): N/A
SET BACK FROM ROAD RIGHT OF WAY: 15 feet
WHAT IS THE PROPOSED PERCENTAGE OF LAND TO BE COVERED? 64%

HOW WILL INGRESS AND EGRESS BE MADE AVAILABLE? driveways off of West St. and E. 2nd St.

NUMBER AND TYPE OF TREES TO BE CUT: 4 - palm trees, 1 - oak tree

NOISE LEVEL OF PROPOSED DEVELOPMENT: None

IMPACT ON SURROUNDING NATURAL RESOURCES: None

HOW WILL LIGHTING BE PROVIDED FOR PUBLIC SAFETY AND SECURITY: Exterior lights will be provided on the building

BUILDING/STRUCTURE INFORMATION

PRINCIPAL USE OF BUILDING: Metal roll forming
TYPE OF CONSTRUCTION (WOOD FRAME, BLOCK, METAL, ETC.): metal

SQUARE FEET UNDER ROOF: 28,000

SQUARE FEET OF PAVED PARKING: 7,620

NUMBER OF PARKING SPACES PROVIDED: 25

NUMBER OF RESIDENTIAL UNITS TO BE BUILT: N/A

NUMBER OF BEDROOMS PER UNIT: N/A

WILL HAZARDOUS OR FLAMMABLE MATERIALS BE STORED OR USED ON SITE:
YES NO

TYPE OF FIRE SUPPRESSION SYSTEM TO BE INSTALLED: internal fire sprinkler system

TYPE OF GROUND SPRINKLER SYSTEM TO BE INSTALLED: N/A

FOR COMMERCIAL DEVELOPMENT - NUMBER OF EMPLOYEES: 6

ACCESSORY STRUCTURES: None NUMBER TYPE

(GARAGE, SWIMMING NUMBER TYPE

POOLS, FENCES, NUMBER TYPE

STORAGE BLDG. ETC) NUMBER TYPE

STRUCTURE HEIGHT: 24'-0"

BUILDING SET BACKS:

1. SIDE PROPERTY LINES: 7 feet

2. REAR PROPERTY LINE: 15 feet

3. FRONT PROPERTY LINE: 15 feet

SIGNS TO BE INSTALLED: 1 NUMBER located on building TYPE

NOTE: CAUTION SHOULD BE TAKEN WHEN PLACING AND/OR MODIFYING A STRUCTURES IN THE AREA LOCATED ON THE IMMEDIATE WEST SIDE OF THE DUPONT BRIDGE, (ALSO KNOWN AS LONGPOINT) DUE TO POTENTIAL HIGH NOISE LEVELS CREATED BY AIRCRAFT FROM TYNDALL AFB.

UTILITIES INFORMATION

IS WATER AND SEWER CURRENTLY AVAILABLE: X YES NO

NUMBER OF EXISTING CONNECTIONS: WATER None SEWER None

PROPOSED SEWER CONNECTIONS: 1 NUMBER 4" SIZE

PROPOSED WATER CONNECTIONS: 2 NUMBER SIZE 3/4" Domestic & 6" Fire

IS ADEQUATE DRAINAGE AVAILABLE FOR THIS SITE: X YES NO

TYPE OF DRAINAGE: STATE ROAD CULVERT

(CHECK ONE) LOCAL STREET CULVERT

SWALE

RETENTION POND

PROPOSED METHOD OF PROVIDING DRAINAGE: surface drainage off of property

(DRAINAGE MUST MEET THE REQUIREMENTS OF A 25 YEAR, 24 HOUR STORM EVENT)

OTHER INFORMATION

YES NO ARE OTHER STATE AND/OR FEDERAL PERMITS REQUIRED FOR THIS DEVELOPMENT?
(NOTE: IF YES, COPIES OF APPROVED STATE AND/OR FEDERAL PERMITS MUST BE SUBMITTED, EITHER WITH THIS APPLICATION OR PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY (CO).)

YES NO WILL THE PROPOSED DEVELOPMENT REQUIRE LARGE VOLUMES OF WATER OR SEWER CAPACITY?

YES NO ARE WETLANDS, SALTWATER MARSHES OR FLOOD ZONES PRESENT ON THE PROPERTY?

YES NO WILL THE PROPOSED DEVELOPMENT INCLUDE PIERS, SLIPS, BULKHEADS OR SIMILAR STRUCTURES WHICH EXTEND INTO STATE WATERS?
(NOTE: IF THE DEVELOPMENT INCLUDES ANY OF THE ABOVE, SEPARATE PERMITS WILL BE REQUIRED)

FAILURE TO COMPLY WITH THE PROVISIONS OF THIS PERMIT MAY SUBJECT THE PERMIT TO MODIFICATION(S), STOP WORK ORDERS OR CANCELLATION, IN ADDITION TO ADDITIONAL FEE OR COSTS TO THE APPLICANT UP TO AND INCLUDING LEGAL FEES.

I HEREBY CERTIFY THAT THE INFORMATION PROVIDED HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

Phil C. Carter
SIGNATURE OF OWNER (MANDATORY)

12-19-24
DATE

SIGNATURE OF CONTRACTOR

DATE

TO BUILDING DEPARTMENT

PLEASE BE ADVISED THAT YOU MAY ISSUE A BUILDING PERMIT TO THE ABOVE NAMED APPLICANT/CONTRACTOR ON BEHALF OF THE CITY OF PARKER.

SIGNATURE OF APPROVAL

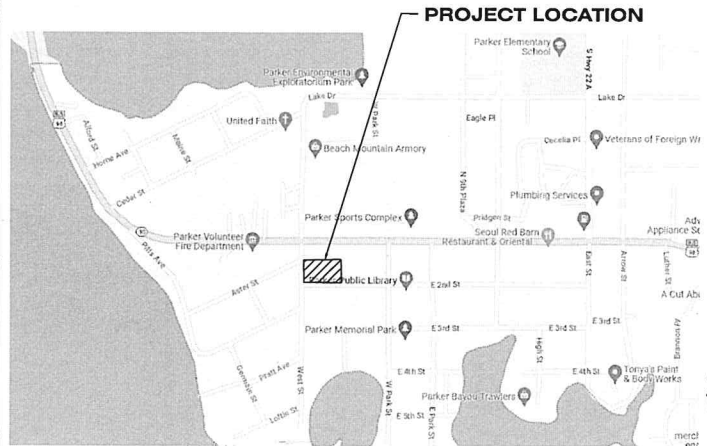
DATE

REQUIRED ATTACHMENTS

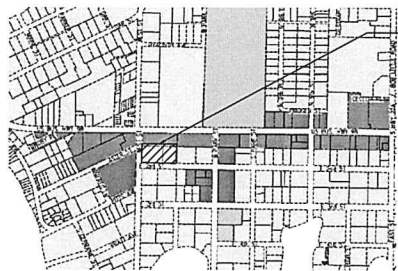
1. 3 COPIES OF SITE PLANS TO INCLUDE THE FOLLOWING:
 - a. VICINITY SKETCHES SHOWING THE RELATIONSHIP OF THE SITE IN RELATION TO SURROUNDING ROADWAYS, LAND USE DISTRICTS AND FLOOD ZONES WITH BASE FLOOD ELEVATIONS.
 - b. THE BOUNDARY LINES AND DIMENSIONS OF THE AREA OR LOTS INCLUDED IN THE SITE PLAN, INCLUDING ANGLES, DIMENSIONS AND REFERENCES; A NORTH DIRECTIONAL ARROW AND MAP SCALE; AND THE PROPOSED USE OF THE LAND BY AREAS.
 - c. THE EXISTING AND PROPOSED GRADES, THE DRAINAGE PLAN, EROSION CONTROL PLAN AND THE PROPOSED STRUCTURES WITH APPROPRIATE TOPOGRAPHIC CONTOUR INTERVALS OR SPOT ELEVATIONS.
 - d. THE SHAPE, SIZE AND LOCATIONS OF ALL STRUCTURES, INCLUDING THE FLOOR AREA AND ELEVATIONS THEREOF; THE FLOOR AREA AND GROUND COVERAGE RATIOS AND THE RELATIVE FINISHED GROUND AND BASEMENT FLOOR GRADES.
 - e. NATURAL FEATURES SUCH AS WETLANDS, SHORELINE, LAKES OR PONDS AND PROTECTED TREES AND MAN-MADE FEATURES SUCH AS EXISTING ROADS, SIDEWALKS, WALLS, FENCES OR OTHER STRUCTURES INDICATING WHICH ARE TO BE RETAINED, REMOVED OR ALTERED AND THE ADJACENT PROPERTIES THEIR USES AND LAND USE DESIGNATIONS.
 - f. PROPOSE STREETS, DRIVEWAYS, SIDEWALKS AND PARKING FACILITIES, VEHICULAR TURNAROUNDS, CURB CUTOUTS AND LOADING AREAS; THE LOCATION OF SOLID WASTE RECEPTACLES, THE INSIDE RADI OF ALL CURVES, THE WIDTH OF THE STREETS, DRIVEWAYS AND SIDEWALKS AND TOTAL NUMBER OF AVAILABLE PARKING SPACES SPECIFYING THE TYPE OF CONSTRUCTION AND CRITICAL DIMENSIONS AND THE OWNERSHIP OF THE VARIOUS FACILITIES.
 - g. THE SIZE AND LOCATION OF ALL EXISTING AND PROPOSED PUBLIC AND PRIVATE UTILITIES AND EASEMENTS; WATER AND SEWER TAP LOCATIONS; SEWER CLEANOUTS AND TURNS; AND WATER, METER TYPES, SIZES AND LOCATIONS.
 - h. ALL PROPOSED LANDSCAPING AND THE DIMENSIONS AND LOCATION OF ALL PROPOSED SIGNS.
2. FLOOD ZONE ELEVATION CERTIFICATE
3. CITY PERMIT SIGN APPLICATION IF APPROPRIATE.
4. ALL APPLICABLE STATE AND FEDERAL PERMITS. (DEP, DOT ETC.)
5. ALL UTILITY FEES MUST BE PAID IN FULL PRIOR TO THE DEVELOPMENT PERMIT BEING ISSUED.

SITE CONSTRUCTION PLANS FOR **ALL METAL ROOFING & SIDING**

WEST STREET CITY OF PARKER, FL BAY COUNTY



VICINITY MAP
NOT TO SCALE



LAND USE MAP
NOT TO SCALE

PROJECT LOCATION

PROJECT LOCATION

FEBRUARY, 2023

REVISD: 10/25/23
CITY OF PARKER
SUBMITTAL REVIEW COMMENTS NO. 2

REVISD: 1/22/24
CITY OF PARKER
SUBMITTAL REVIEW COMMENTS NO. 3

DEVELOPER/OWNER
COASTAL ACQUISITIONS OF FLORIDA, LLC.
423 TARTAN WAY
ENTERPRISE, AL 36330
TEL: (334)-701-6583

NES PROJECT NO. FL0012-22



2431 HARTFORD HIGHWAY DOTHAN, ALABAMA 36305
www.northstarengineering.com
PHONE (334) 673-9895

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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY PHILLIP E. SANTORA P.E. ON THE DATE ADJACENT TO THE SEAL.

Phillip E Santora
Digitally signed by Phillip E Santora
Date: 2024.12.19 15:12:52 -06'00'

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

GENERAL NOTES

- Existing conditions and utilities shown are from field observations at the time of survey and available records. No guarantee is made that other underground utilities do not exist.
- The Contractor shall be responsible for contacting the appropriate municipal authorities and utility companies to obtain their assistance in locating underground utilities. The Contractor shall be responsible for the protection of all utilities throughout the construction period. The costs for repairing utilities damaged by construction activities shall be the responsibility of the Contractor.
- The Contractor shall comply with local, state, and federal regulations. An NPDES permit will be obtained by the Owner. The permit shall be posted at the construction entrance. All other permits and licenses required for the construction activities shall be the responsibility of the Contractor.
- The Contractor shall be responsible for construction stake out and field engineering.
- The Contractor shall protect existing control points and benchmarks, whether public or private. The owners of control points and benchmarks that will be disturbed by construction activities shall be contacted prior to disturbance of the markers.
- Traffic control devices shall be installed and maintained in accordance with Florida Department of Transportation specifications and the "Manual on Uniform Traffic Control Devices."
- The Contractor shall be responsible for the repair of any roadways or haul routes damaged by construction operations.
- Prior to beginning earthwork operations, the site grading area shall be cleared and grubbed and stripped of any topsoil. Any topsoil shall be stockpiled on site to be reused in landscaped areas, and/or areas outside pavements and building structures.
- Debris from clearing and grubbing operations may be utilized for erosion control, and shall be removed from the project site and legally disposed of by the Contractor. Burning on site will not be allowed without approval and permits from all authorities having jurisdiction.
- All debris and organic materials shall be removed from areas receiving fill and the owner's engineer shall be notified before beginning any backfill operations. An inspection shall be performed to determine stability of existing material. Should un-suitable material be encountered, the contractor shall remove same, at the direction of the engineer, and replace with embankment material. Fill material shall be suitable on-site material or a locally approved mixture suitable for structural fill. Embankment fill shall be accomplished in lifts of 8 inch maximum compacted thickness. Each lift shall be compacted to a minimum of 98% Standard Proctor Density (ASTM D698). The top 6" layer of fill in structural areas, and the top 6" of sub-grade in cut areas shall be processed and compacted to 100% Standard Proctor Density (ASTM D698).
- The Contractor shall employ an approved independent testing laboratory approved by the Owner's representative to perform density tests. Testing will be required as follows:
 - test every 700 S.Y. per lift of fill, subgrade, and base processed or placed.
 - There shall be no subsequent layers placed before the underlying layer has all passing density tests.
 Test locations shall be approved by the Owner's Representative and a City of Parker representative must be present for all tests within public right of ways or as required for building permit approval.
- Concrete shall develop a minimum 28-day compressive strength of 3,000 psi unless noted otherwise.
- Pipe bedding and installation shall be in accordance with the minimum recommendations of the supplier and shall meet City of Parker's requirements. Pipe trenches shall be backfilled and properly compacted so that excessive trench settlement does not occur.
- The Contractor shall be responsible for compliance with all OSHA guidelines and regulations.
- The utility Contractor shall notify the City of Parker water and sewer departments of the start date of construction and schedule a pre-construction meeting to discuss potential conflicts and verify compliance with material standards and installations.
- The final grades of all appurtenances, i.e. manholes, valve boxes, cleanouts, etc., shall be adjusted to match final grades.
- The City of Parker shall be notified prior to beginning work. The contractor shall secure city approval and schedule work before making taps on existing lines or working ground existing utilities.
- The contractor is responsible for all drainage and erosion control during construction.
- In all landscaping areas and curbed islands, the site contractor shall provide a minimum topsoil thickness of 2 feet.
- The Developer shall be responsible for the relocation of any conflicting utilities within or related to the development of this property.
- It is the contractor's responsibility to restrict public access to this site during construction.
- The Contractor shall notify the City of Parker water department concerning the temporary use of water in the development during construction. Any use of water from the City of Parker system must be regulated and billed either through a meter set installed by the City of Parker or from a fire hydrant whose usage has been granted by the City of Parker and its procedures and billings are followed by the contractor.
- The site contractor shall refer to architectural plans furnished by the owner for dimensions of the building, and shall coordinate and verify layout dimensions prior to construction.
- The site will be maintained in accordance with rules and regulations set by FDOT, Bay County, the City of Parker, and not create a public safety hazard or nuisance to the City of Parker.

LEGAL DESCRIPTION:

A lot or parcel of land being located in the City of Parker, Bay County, Florida, and being more particularly described as follows:

BEGINNING at the intersection of the South Right of Way (R/W) of East U.S. Highway 88 (20' R/W) with the East R/W of West Street (50' R/W) as marked by an existing iron pin (IP) (5/8" Rebar); thence along said South R/W bearing S 89°31'10" E a distance of 173.12 FT to an EP (1" Pipe); thence along said North R/W bearing N 89°33'07" E a distance of 197.88 FT to an EP (1" Pipe); thence depart said South R/W bearing S 00°24'55" W a distance of 163.31 FT to an EP (Rebar #3#4); thence S 00°23'54" W a distance of 172.99 FT to the North R/W of East 2nd Street (50' R/W) as marked by an EP (1" Pipe); thence along said North R/W bearing N 89°59'09" W a distance of 371.35 FT to said East R/W as marked by an EP (Rebar); thence along said East R/W bearing N 00°29'02" E a distance of 173.00 FT to a set iron pin (SP); thence along said East R/W bearing N 00°29'02" E a distance of 165.43 FT to the POINT OF BEGINNING. Said parcel being located in the City of Parker, Bay County, Florida, in the Northwest 1/4 of the Northwest 1/4 of Fractional Section 24, Township 4 South, Range 14 West and containing 2.87 acres, more or less.

EROSION & SEDIMENT CONTROL NOTES

- AN NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) SHALL BE OBTAINED BY THE OWNER PRIOR TO ANY CONSTRUCTION OR LAND DISTURBANCE.
- COPIES OF ALL ENVIRONMENTAL PERMITS SHALL BE POSTED ON-SITE AND A RAIN GAUGE SHALL BE INSTALLED ON-SITE.
- A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PREPARED BY THE PROJECT ENGINEER AND A COPY OF THE SWPPP SHALL BE KEPT ON-SITE DURING CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE FLORIDA STORMWATER EROSION AND SEDIMENT CONTROL MANUAL AND AS PER MANUFACTURER RECOMMENDATIONS.
- SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AT THE BEGINNING OF SITE GRADING AS SOON AS PRACTICAL. THESE DEVICES WILL REQUIRE PERIODIC MAINTENANCE AND REPAIR AND SHALL REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE HAS BEEN ADEQUATELY STABILIZED WITH VEGETATION. THE EROSION AND SEDIMENT CONTROL MEASURES REPRESENTED IN THESE DRAWINGS SHALL BE CONSIDERED MINIMUM REQUIREMENTS, AND ADDITIONAL MEASURES COULD BE REQUIRED DEPENDING ON SITE CONDITIONS, WEATHER, CONSTRUCTION METHODS, ETC.
- INSPECTION OF EROSION AND SEDIMENT CONTROL DEVICES SHALL BE DONE AT LEAST ONCE EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF A STORM EVENT THAT HAS 0.50" OR GREATER RAINFALL ACCUMULATIONS.
- CONTRACTOR SHALL MAINTAIN A LOG OF ALL RAINFALL MEASUREMENTS DURING CONSTRUCTION.
- SITE INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED INSPECTOR THAT HAS SUCCESSFULLY COMPLETED THE FLORIDA DEP STORMWATER, EROSION, AND SEDIMENTATION CONTROL INSPECTOR CERTIFICATION. COPIES OF THE INSPECTION REPORTS SHALL BE KEPT ON-SITE AT THE TEMPORARY CONSTRUCTION OFFICE AND SHALL BE AVAILABLE FOR REVIEW BY FDEP PERSONNEL.
- MODIFICATIONS OF THE EROSION AND SEDIMENT CONTROL PLAN CAN BE EFFECTED AS THE PROJECT IS CONSTRUCTED & ADDITIONAL MEASURES SHALL BE IDENTIFIED IF NEEDED AS A RESULT OF SITE INSPECTIONS.
- FOLLOW MANUFACTURER SPECIFICATIONS FOR INSTALLATION OF EROSION & SEDIMENT CONTROL DEVICES.
- MINIMIZE DISTURBANCE BY RESTRICTING CLEARING LIMITS TO NECESSARY CONSTRUCTION/GRADING AREAS ONLY.
- PROVIDE AND MAINTAIN A 30 FOOT NATURAL RIPARIAN BUFFER AROUND SURFACE WATERS.
- INSTALL 50"x20" (MINIMUM) GRAVEL PAD AT CONSTRUCTION ENTRANCE/EXIT TO REDUCE OFF-SITE VEHICLE TRACKING.
- INSTALL SILT FENCE AT THE TOP OF SLOPES ON PERIMETER OF CONSTRUCTION AREAS PRIOR TO EARTHWORK.
- PROVIDE INLET PROTECTION USING SILT FENCE DROP INLET PROTECTION OR "SILT SAVER" DOMES FOR EXCAVATED DROP INLET PROTECTION. INSTALL BLOCK AND GRAVEL OR "SILT SAVER" CURB INLET PROTECTION AROUND EXISTING CURB INLETS. INLET PROTECTION SHALL BE ADEQUATELY MAINTAINED.
- ALL DISTURBED AREAS AND SLOPES NOT CURRENTLY UNDERGOING GRADING/CONSTRUCTION FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATION. ALL DISTURBED AREAS THAT HAVE BEEN GRADED AND NOT RECEIVING PAVEMENT OR OTHER PERMANENT IMPROVEMENTS SHALL RECEIVE TOPSOIL SEEDING, AND MULCHING.
- PROTECT ALL TREES THAT ARE NOT TO BE REMOVED FROM SITE. DO NOT PARK VEHICLES, CONSTRUCTION EQUIPMENT, OR STOCKPILE MATERIALS WITHIN DRIP LINE OF TREES.
- MINIMIZE THE GENERATION OF DUST THROUGH THE APPROPRIATE APPLICATION OF WATER OR OTHER DUST SUPPRESSION TECHNIQUES.
- WASTE WATER FROM WASHOUT OF CONCRETE TRUCKS OR EQUIPMENT SHALL BE PROPERLY MANAGED. A CONCRETE WASHOUT PIT SHALL BE CONSTRUCTED ON-SITE AND ALL CONCRETE WASTE MATERIALS SHALL BE ADEQUATELY CONTAINED.
- ALL EROSION CONTROL MEASURES SHALL BE IN PLACE AS REQUIRED BY THE ENGINEER, PLANS AND CITY REPRESENTATIVE. SILT FENCING SHALL BE MEASURED AND DATED ON EACH RUN. AN INSPECTION LOG WILL BE REQUIRED TO BE SUBMITTED TO THE CITY. SITUATION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND AT MINIMUM ONCE A MONTH. ANY DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY AND NO FURTHER WORK WILL PROCEED UNTIL SAID DEFICIENCIES ARE CORRECTED AS PER THE CITY OR ENGINEER'S APPROVAL.
- ANY BMP DEFICIENCIES NOTED DURING INSPECTIONS SHALL BE CORRECTED WITHIN 5 DAYS OF THE INSPECTION UNLESS PREVENTED BY UNSAFE WEATHER CONDITIONS. IF UNSAFE WEATHER CONDITIONS ARE PRESENT, THEY SHOULD BE DOCUMENTED WITHIN THE DAILY INSPECTION LOG.
- THE CONTRACTOR SHALL PROPERLY TAKE ALL STEPS TO REMOVE TO THE MAXIMUM EXTENT PRACTICAL, SEDIMENT ACCUMULATIONS OR OTHER POLLUTANTS DEPOSITED OFF-SITE OR IN ANY WATERBODY OR STORMWATER CONVEYANCE STRUCTURE.

PROJECT No.
FL 0012-22

DATE: FEB., 2023
SCALE: N.T.S.

DRAWN BY:
T. SCARBOROUGH

APPROVED BY:
P. SANTORA

REVISIONS:

SITE CONSTRUCTION PLANS FOR
ALL METAL ROOFING & SIDING
CITY OF PARKER
BAY COUNTY, FLORIDA
GENERAL NOTES



(P)334.673.9895 (F)334.673.1846
2431 Hartford Hwy Dothan, AL 36305
www.northstarengineering.com

PROJECT DEVELOPER/OWNER

COASTAL ACQUISITIONS OF FLORIDA, LLC.
423 TARTAN WAY
ENTERPRISE, AL 36330
CONTACT: PHILLIP SANTORA
(334) 701-6583

ENGINEER OF RECORD

PHILLIP SANTORA, P.E.
NORTHSTAR ENGINEERING SERVICES
2431 HARTFORD HWY.
DOTHAN, AL 36305
(334) 673-9895

UTILITY OWNERS

WATER & SANITARY SEWER
CITY OF PARKER
1001 WEST PARK STREET
PARKER, FL 32404
(850) 871-4949

ELECTRIC
GULF COAST ELECTRIC COOPERATIVE
6243 E. HIGHWAY 98
PANAMA CITY, FL 32404
(850) 265-3631

GAS
TECO PEOPLES GAS
3706 W. 23RD ST
PANAMA CITY, FL 32405
(850) 914-6143

TELEPHONE & CABLE SERVICES

AT&T
1 (850) 769-1616

WOW
(850) 215-1000



1-800-432-4770
11 Plantation Road
DeBary, FL 32713

SHEET **2**
OF **11**

NOTES:

- INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SOON AS CLEARING AND GRUBBING OPERATIONS ARE BEGUN. SEE EROSION CONTROL PLAN. EROSION CONTROL MEASURES SHALL BE MAINTAINED AND PROTECTED DURING CONSTRUCTION.
- CONTRACTOR SHALL STRICTLY ADHERE TO CLEARING AND GRUBBING LIMITS UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. DO NOT PARK VEHICLES OR STOCKPILE MATERIALS WITHIN THE DUMP LINES OF TREES TO REMAIN.
- ALL DISTURBED AREAS SHALL BE GRASSED AND MULCHED IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
- DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT, PROPERTY LINE, RIGHT OF WAY, OR ROADWAY CENTERLINE UNLESS OTHERWISE NOTED.
- PAVEMENT MARKINGS SHALL BE REFLECTIVE PAINT IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND CITY OF PARKER REGULATIONS.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS, DEPTHS, AND INVERTS OF ALL EXISTING SANITARY SEWER STRUCTURES, STORM SEWER STRUCTURES, AND ALL OTHER UTILITIES.
- PRIOR TO ANY SITE WORK CONSTRUCTION, VERIFY THE BUILDING DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS. COORDINATES PROVIDED ON THE "BUILDING CORNER COORDINATE CHART" ARE FOR BUILDING PAD BUILD UP AND NOT INTENDED TO BE USED AS THE FOUNDATION STAKEOUT POINTS.
- PRIOR TO ANY SITE PLANNING, COORDINATE THE PLACEMENT OF ANY UNDERGROUND UTILITIES, IRRIGATION DUCTS, OR ELECTRICAL DUCTS FOR AREA LIGHTING WITH THE OWNER AND ARCHITECTURAL DRAWINGS.

SITE/ZONING INFORMATION

SITE AREA: 0.87 AC (123,017 SQ.FT.)
 EXISTING SITE ZONING: GC, MU-1
 PROPOSED SITE ZONING: GC
 MAXIMUM BUILDING HEIGHT (GC): 60 FT - 6 STORES
 MINIMUM LOT SETBACKS (GC):
 FRONT YARD: 15 FT
 SIDE YARD: 7 FT
 REAR YARD: 10 FT
 CORNER LOTS: 10 FT
 MAXIMUM LOT COVERAGE: 85%
 MINIMUM LOT SIZE: 8,000 SQ.FT.
 FLOOR AREA RATIO (FAR): 1.5
 IMPERVIOUS SURFACE RATIO (ISR): 0.7
 CURRENT USE: VACANT
 PROPOSED USE: COMMERCIAL (METAL ROLL FORMING)
 MAXIMUM BUILDING HEIGHT PROPOSED: 24'-0"
 BUILDING SQUARE FOOTAGE: 28,000 SQ.FT.
 DISTURBED AREA: 0.28 AC
 OVERALL DRAINAGE STUDY AREA: 3.08
 EXISTING OVERALL IMPERVIOUS AREA: 1.78 AC (77,536 SQ.FT.)
 PROPOSED IMPERVIOUS AREA: 1.18 AC (50,696 SQ.FT.)
 PROPOSED IMPERVIOUS SURFACE RATIO (SITE AREA): 0.41
 (PROPOSED IMPERVIOUS (SITE AREA) / SITE AREA)
 FLOOR AREA RATIO (SITE AREA) / (FLOOR AREA / SITE AREA)

SITE DATA

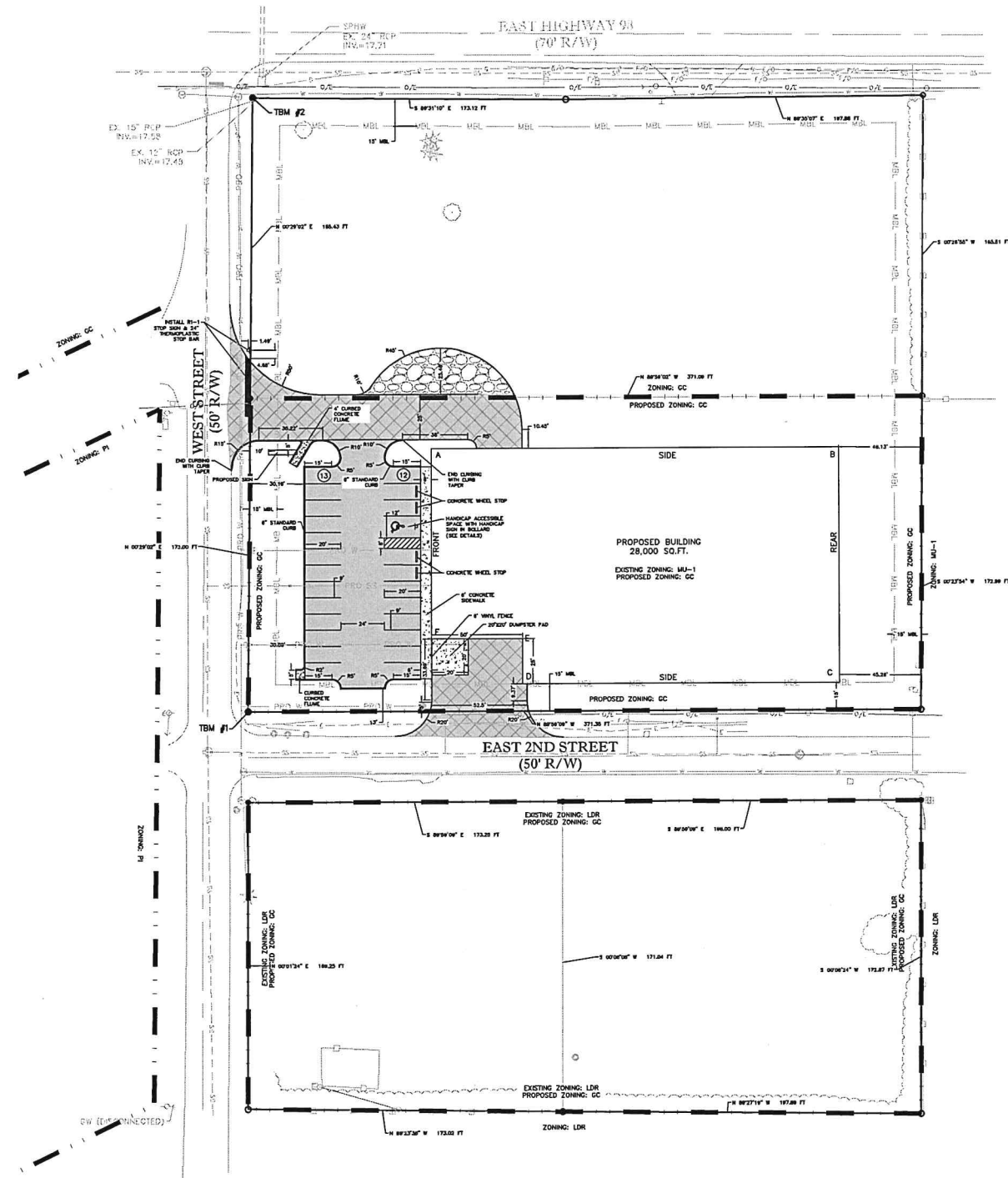
BUILDING FOOTPRINT: 28,000 SQ.FT.
 PAVEMENT/PARKING AREA: 12,787 SQ.FT.
 SIDEWALKS: 1,128 SQ.FT.
 DRIVE HEAVY DUTY ASPHALT: 7,297 SQ.FT.
 GRAVEL AREA: 1,484 SQ.FT.
 STORMWATER PONDS: 5,136 SQ.FT.
 TOTAL OF IMPERVIOUS STRUCTURES: 55,832 SQ. FT.
 LOT COVERAGE: 44.65%

PARKING INFORMATION

PROPOSED ZONING: GC
 TOTAL PARKING SPACES PROVIDED = 25
 (MANUFACTURING)
 HANDICAP SPACES REQUIRED = 1
 HANDICAP SPACES PROVIDED = 1

BUILDING CORNER COORDINATE CHART

POINT	NORTHING	EASTING
A	412810.9689	1618413.3519
B	412728.5239	1618472.4088
C	412860.9131	1618638.3197
D	412680.9565	1618463.3197
E	412705.9565	1618463.3259
F	412705.9689	1618413.3259



T.B.M. #1
 EXISTING IRON PIN (IPI) (ILLEGIBLE) LOCATED AT THE SOUTH-WEST CORNER OF THE PROPERTY
 N: 412863.8960
 E: 161832.1270
 ELEV: 19.251

T.B.M. #2
 EXISTING IRON PIN (IPI) (5/8" REBAR)
 LOCATED NORTH OF THE PROPERTY ALONG HIGHWAY 99 RIGHT OF WAY
 N: 413004.4000
 E: 161834.9950
 ELEV: 19.729

- LEGEND**
- TH ◊ EXISTING FIRE HYDRANT
 - PP ◊ POWER POLE
 - LP ◊ LIGHT POLE
 - UP ◊ UTILITY POLE
 - WV ⊙ WATER VALVE
 - WM ⊙ WATER METER
 - GM ⊙ GAS METER
 - DV ⊙ GAS VALVE
 - SM ⊙ SANITARY MANHOLE
 - SC ⊙ SANITARY CLEANOUT
 - DM ⊙ DRAINAGE MANHOLE
 - TE ⊙ TELEPHONE BOX
 - SN ⊙ SIGN
 - ECM ⊙ EXISTING CONCRETE MONUMENT
 - EP ⊙ EXISTING IRON PIN
 - MB ⊙ MAILBOX
 - GW ⊙ CUI WIRE
 - CR ⊙ CABLE RISER
 - SCM ⊙ ELECTRIC METER
 - SC ⊙ SET CONCRETE MONUMENT
 - SP ⊙ SET IRON PIN
 - EG ⊙ EXISTING GAS
 - UT ⊙ UNDERGROUND TELEPHONE
 - UC ⊙ UNDERGROUND CABLE
 - OC ⊙ OVERHEAD CABLE
 - OE ⊙ OVERHEAD ELECTRIC
 - UEC ⊙ OVERHEAD ELECTRIC AND CABLE LINE
 - ESL ⊙ EXIST. SANITARY SEWER LINE
 - EWL ⊙ EXIST. SANITARY SEWER FORCE MAIN
 - EW ⊙ EXIST. WATER MAIN
 - ESD ⊙ EXIST. STORM DRAIN LINE
 - ETL ⊙ EXISTING TREE LINE
 - EX ⊙ EXISTING FENCE (WIRE)
 - OW ⊙ EXISTING FENCE (WOODEN)
 - EL ⊙ EXISTING FENCE (CHAIN LINK)
 - EC ⊙ EXISTING CONTOUR
 - PC ⊙ PROPOSED CONTOUR
 - PL ⊙ PROPOSED WATER LINE
 - PH ⊙ PROPOSED FIRE HYDRANT ASSEMBLY
 - PSL ⊙ PROPOSED SANITARY SEWER LINE
 - ML ⊙ MINIMUM BUILDING LINE
 - UL ⊙ UNDERGROUND ELECTRIC
 - PL ⊙ PROPERTY LINE
 - EL ⊙ EXISTING EASEMENT LINE
 - CL ⊙ CENTERLINE OF ROAD
 - ZL ⊙ ZONING LINE
- Proposed Concrete Sidewalk
 - Proposed Gravel Pavement
 - Proposed Standard Duty Asphalt
 - Proposed Heavy Duty Asphalt

PROJECT No.
 FL 0012-22

DATE: FEB., 2023
 SCALE: 1"=30'

DRAWN BY:
 T. SCARBOROUGH

APPROVED BY:
 P. SANTORA

REVISIONS:

SITE CONSTRUCTION PLANS FOR
 ALL METAL ROOFING & SIDING
 CITY OF PARKER
 BAY COUNTY, FLORIDA
 LAYOUT PLAN

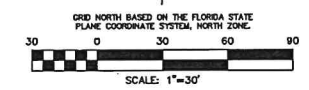
NORTHSTAR
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 2411 Hartford Hwy Dothan, AL, 36015
 web: www.northstarengineering.com

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 26312-E-7858-S

GA CERT. OF AUTH.
 003129, LSF001156

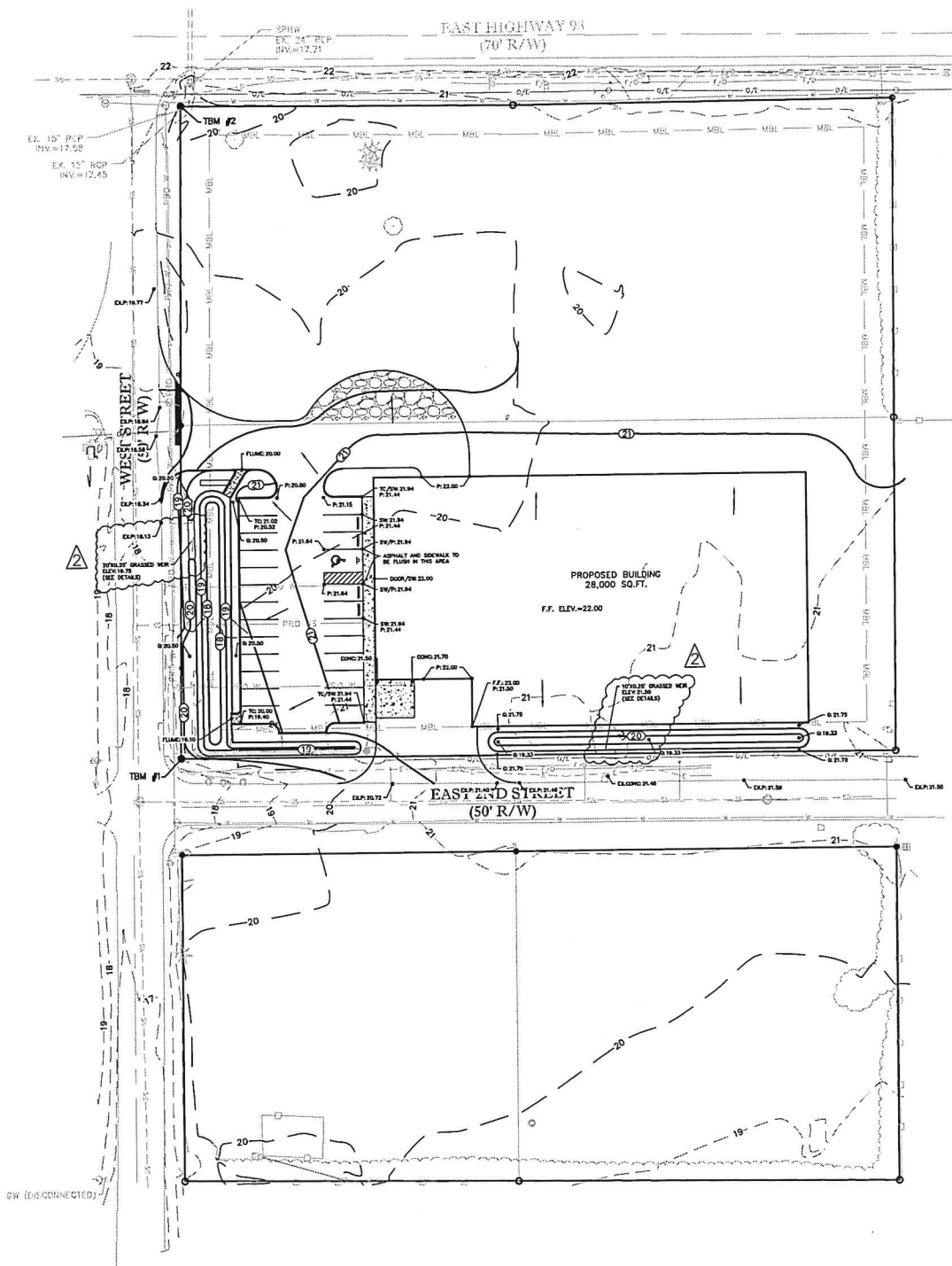
MS CERT. OF AUTH.
 E-00001823



SHEET 4
 OF 11

NOTES:

1. INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SOON AS CLEARING AND GRUBBING OPERATIONS ARE BEGUN. SEE EROSION CONTROL PLAN. EROSION CONTROL MEASURES SHALL BE MAINTAINED AND PROTECTED DURING CONSTRUCTION.
2. CONTRACTOR SHALL STRICTLY ADHERE TO CLEARING AND GRUBBING LIMITS UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. DO NOT PARK VEHICLES OR STOCKPILE MATERIALS WITHIN THE DRP LINES OF TREES TO REMAIN.
3. ALL DISTURBED AREAS SHALL BE GRASSED AND MULCHED IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
4. DIMENSIONS ARE TO FACE OF CURB EDGE OF PAVEMENT, PROPERTY LINE, RIGHT OF WAY OR ROADWAY CENTERLINE UNLESS OTHERWISE NOTED.
5. PAVEMENT MARKINGS SHALL BE REFLECTIVE PAINT IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND CITY OF PARKER REGULATIONS.
6. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS, DEPTHS, AND INVERTS OF ALL EXISTING SANITARY SEWER STRUCTURES, STORM SEWER STRUCTURES, AND ALL OTHER UTILITIES.
7. THE ENGINEER OF RECORD AND CITY OF PARKER MAY REQUIRE UNDERDRAIN IF SITE CONDITIONS WARRANT.

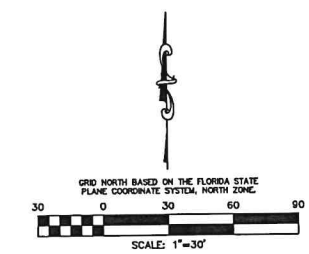


T.B.M. #1
 EXISTING IRON PIN (OP) (LEGIBLE) LOCATED AT THE
 SOUTHWEST CORNER OF THE PROPERTY
 N=412845.9850
 E=181831.1270
 ELEV=18.251

T.B.M. #2
 EXISTING IRON PIN (OP) (1/4" REDBAR)
 LOCATED NORTH OF THE PROPERTY ALONG
 HIGHWAY 94 RIGHT OF WAY
 N=412004.4030
 E=181831.9850
 ELEV=18.729

- LEGEND**
- FH ◊ EXISTING FIRE HYDRANT
 - PP ◊ POWER POLE
 - LP ◊ LIGHT POLE
 - UP ◊ UTILITY POLE
 - WV ◊ WATER VALVE
 - WM ◊ WATER METER
 - GM ◊ GAS METER
 - GV ◊ GAS VALVE
 - SM ◊ SANITARY MANHOLE
 - SCM ◊ SANITARY CLEANOUT
 - DM ◊ DRAINAGE MANHOLE
 - TEB ◊ TELEPHONE BOX
 - SIG ◊ SIGN
 - ECM ◊ EXISTING CONCRETE MONUMENT
 - EP ◊ EXISTING IRON PIN
 - MB ◊ MAILBOX
 - CK ◊ CLAY WIRE
 - CR ◊ CABLE RISER
 - EM ◊ ELECTRIC METER
 - SCM ◊ SET CONCRETE MONUMENT
 - SIP ◊ SET IRON PIN
 - UG ◊ EXISTING GAS
 - UT ◊ UNDERGROUND TELEPHONE
 - UC ◊ UNDERGROUND CABLE
 - OE ◊ OVERHEAD ELECTRIC
 - OEAC ◊ OVERHEAD ELECTRIC AND CABLE LINE
 - OWE ◊ OVERHEAD WATER
 - OWEAC ◊ OVERHEAD WATER AND CABLE LINE
 - ESL ◊ EXIST. SANITARY SEWER LINE
 - ESLFM ◊ EXIST. SANITARY SEWER FORCE MAIN
 - EWL ◊ EXIST. WATER MAIN
 - ESDL ◊ EXIST. STORM DRAIN LINE
 - ETL ◊ EXISTING TREE LINE
 - EX ◊ EXISTING FENCE (WIRE)
 - EW ◊ EXISTING FENCE (WOODEN)
 - EC ◊ EXISTING FENCE (CHAIN LINK)
 - EXC ◊ EXISTING CONTOUR
 - PC ◊ PROPOSED CONTOUR
 - PL ◊ PROPOSED WATER LINE
 - FHA ◊ PROPOSED FIRE HYDRANT ASSEMBLY
 - PSL ◊ PROPOSED SANITARY SEWER LINE
 - MBL ◊ MINIMUM BUILDING LINE
 - UGEL ◊ UNDERGROUND ELECTRIC
 - PL ◊ PROPERTY LINE
 - EL ◊ EXISTING EASEMENT LINE
 - CL ◊ CENTERLINE OF ROAD
 - PCS ◊ PROPOSED CONCRETE SIDEWALK
 - GR ◊ PROPOSED GRAVEL

PROPOSED SPOT ELEVATION
 EX=EXISTING
 P=PROPOSED PAVEMENT
 TOP OF CURB
 FLUME=CONCRETE FLUME
 SW=SIDEWALK
 F.F.=FINISH FLOOR
 G=GROUND



PROJECT No.
 FL 0012-22

DATE: FEB., 2023

SCALE: 1"=30'

DRAWN BY:
 T. SCARBOROUGH

APPROVED BY:
 P. SANTORA

REVISIONS:

SITE CONSTRUCTION PLANS FOR
 ALL METAL ROOFING & SIDING
 CITY OF PARKER
 BAY COUNTY, FLORIDA
 GRADING PLAN

NORTHSTAR
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 www.northstarengineering.com

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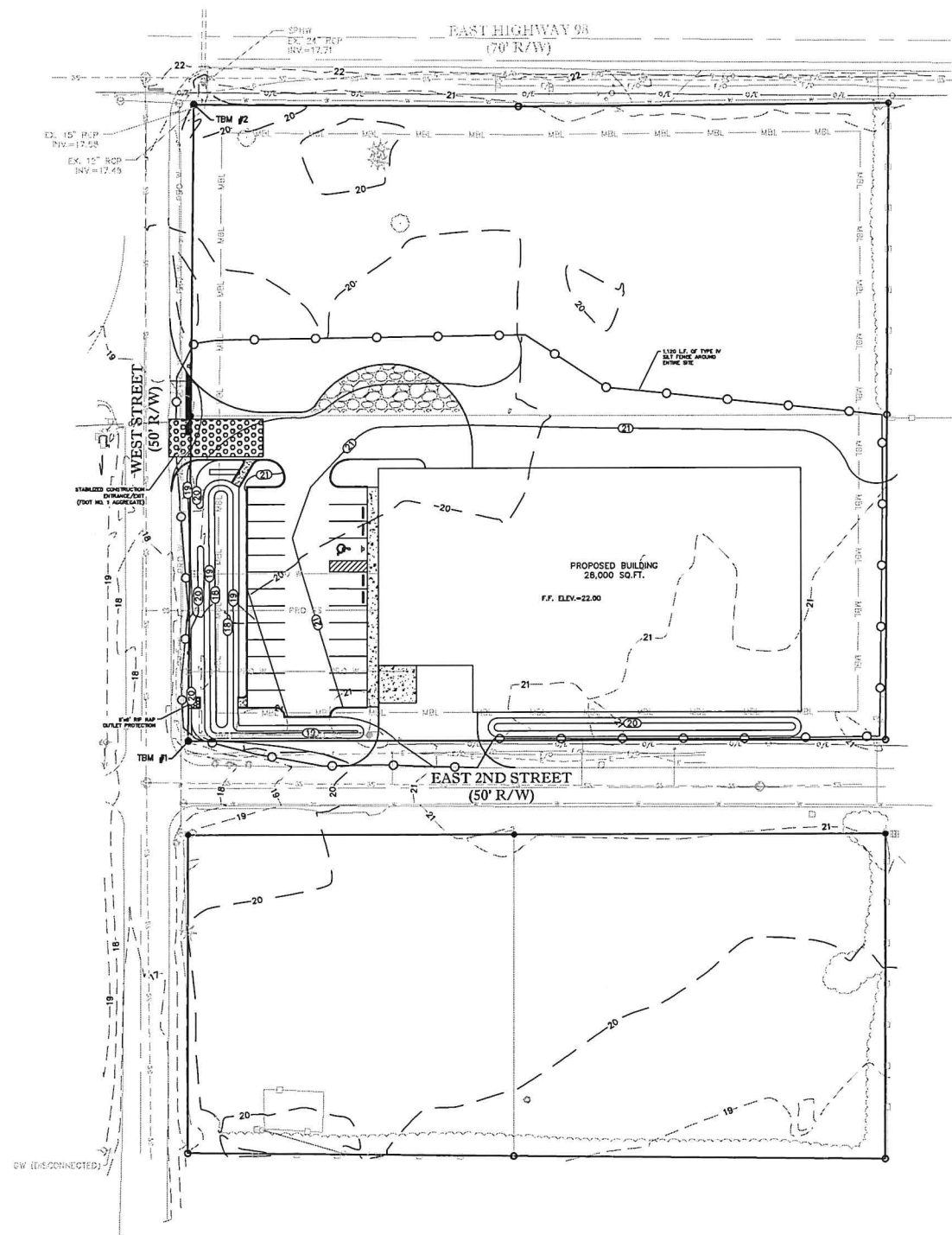
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GA CERT. OF AUTH.
 003120, LS000156

MS CERT. OF AUTH.
 E-00001825

SHEET **5**
 OF **11**

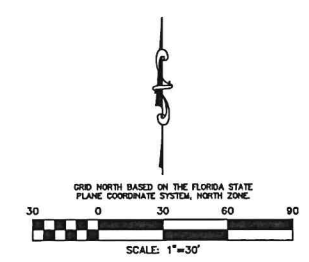
SEE GENERAL NOTES, SHEET 2
FOR EROSION CONTROL NOTES



T.B.M. #1
EXISTING IRON PIN (IP) (4 LEGIBLE) LOCATED AT THE
SOUTHWEST CORNER OF THE PROPERTY
N=412865.9870
E=161832.1270
ELEV: 19.251

T.B.M. #2
EXISTING IRON PIN (IP) (5/8" REBAR)
LOCATED NORTH OF THE PROPERTY ALONG
HIGHWAY 98 RIGHT OF WAY
N=413004.4030
E=161834.9500
ELEV: 19.728

- LEGEND**
- PH ◊ EXISTING FIRE HYDRANT
 - PP ◊ POWER POLE
 - LP ◊ LIGHT POLE
 - UP ◊ UTILITY POLE
 - WV ⊙ WATER VALVE
 - WM ⊙ WATER METER
 - GM ⊙ GAS METER
 - DV ⊙ GAS VALVE
 - SM ⊙ SANITARY MANHOLE
 - SC ⊙ SANITARY CLEANHOUT
 - DM ⊙ DRAINAGE MANHOLE
 - TE ⊙ TELEPHONE BOX
 - SB □ SIGN
 - ECM □ EXISTING CONCRETE MONUMENT
 - EP ◊ EXISTING IRON PIN
 - MB □ MAILBOX
 - CW ◊ GUY WIRE
 - CR ◊ CABLE RISER
 - EM ⊙ ELECTRIC METER
 - SCM □ SET CONCRETE MONUMENT
 - SIP ◊ SET IRON PIN
 - EXISTING GAS
 - UT — UNDERGROUND TELEPHONE
 - UC — UNDERGROUND CABLE
 - OC — OVERHEAD CABLE
 - OE — OVERHEAD ELECTRIC
 - OE/C — OVERHEAD ELECTRIC AND CABLE LINE
 - ES — EXIST. SANITARY SEWER LINE
 - ES — EXIST. SANITARY SEWER FORCE MAIN
 - EM — EXIST. WATER MAIN
 - ED — EXIST. STORM DRAIN LINE
 - ET — EXISTING TREE LINE
 - EX — EXISTING FENCE (W/RO)
 - EW — EXISTING FENCE (WOODEN)
 - EL — EXISTING FENCE (CHAIN LINK)
 - EC — EXISTING CONTOUR
 - PC — PROPOSED CONTOUR
 - PL — PROPOSED WATER LINE
 - FH — PROPOSED FIRE HYDRANT ASSEMBLY
 - PS — PROPOSED SANITARY SEWER LINE
 - MB — MINIMUM BUILDING LINE
 - UE — UNDERGROUND ELECTRIC
 - PL — PROPERTY LINE
 - EL — EXISTING EASEMENT LINE
 - CL — CENTERLINE OF ROAD
 - PROPOSED CONCRETE SIDEWALK
 - PROPOSED GRAVEL
 - STABILIZED CONSTRUCTION ENTRANCE/EXIT
 - TYPE IV SILT FENCE
 - RIP RAP OUTLET PROTECTION



PROJECT No.
FL 0012-22

DATE: FEB., 2023
SCALE: 1"=30'

DRAWN BY:
T. SCARBOROUGH

APPROVED BY:
P. SANTORA

REVISIONS:

SITE CONSTRUCTION PLANS FOR
ALL METAL ROOFING & SIDING
CITY OF PARKER
BAY COUNTY, FLORIDA
EROSION CONTROL PLAN

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CA CERT. OF AUTH.
003120, LSF001156

MS CERT. OF AUTH.
E-00001825

SHEET 6
OF 11

NOTES:

- INSTALL EROSION AND SEDIMENT CONTROL DEVICES AS SOON AS CLEARING AND GRUBBING OPERATIONS ARE BEGUN. SEE EROSION CONTROL PLAN. EROSION CONTROL MEASURES SHALL BE MAINTAINED AND PROTECTED DURING CONSTRUCTION.
- CONTRACTOR SHALL STRICTLY ADHERE TO CLEARING AND GRUBBING LIMITS UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. DO NOT PARK VEHICLES OR STOCKPILE MATERIALS WITHIN THE DRIP LINES OF TREES TO REMAIN.
- ALL DISTURBED AREAS SHALL BE GRASSED AND MULCHED IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
- DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT, PROPERTY LINE, RIGHT OF WAY, OR ROADWAY CENTERLINE UNLESS OTHERWISE NOTED.
- PAVEMENT MARKINGS SHALL BE REFLECTIVE PAINT IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND CITY OF PARKER REGULATIONS.
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- THE ENGINEER OF RECORD AND CITY OF PARKER MAY REQUIRE UNDERDRAIN IF SITE CONDITIONS WARRANT.

STORMWATER INFORMATION

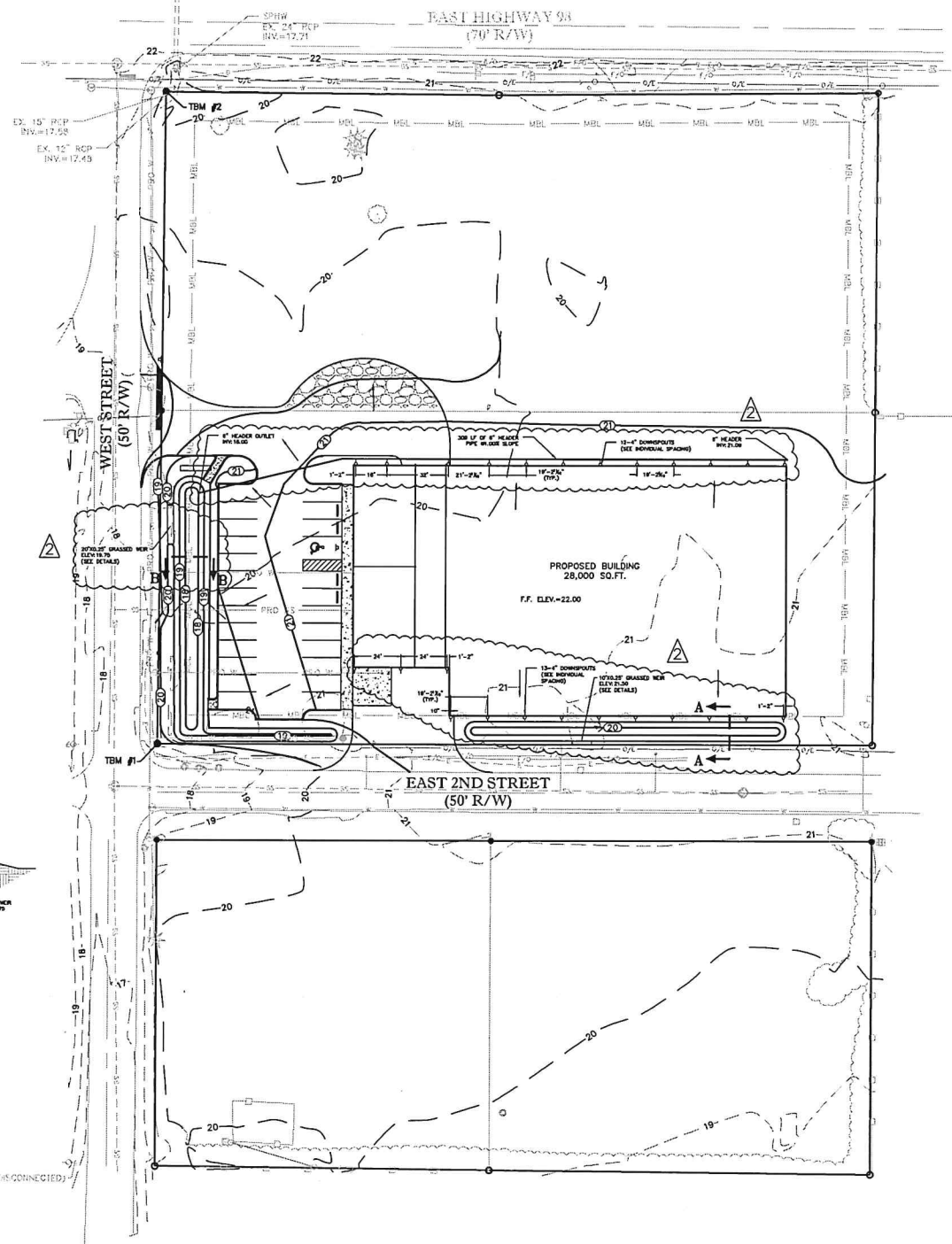
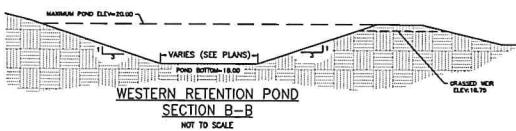
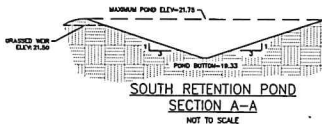
SITE AREA: 2.87 AC (125,017 SQ.FT.)
 OVERALL DRAINAGE STUDY AREA: 2.88 AC.
 DISTURBED AREA: 1.99 AC (77,536 SQ.FT.)
 EXISTING IMPERVIOUS AREA: 1.78 AC (77,536 SQ.FT.)
 PROPOSED IMPERVIOUS AREA: 1.18 AC (50,696 SQ.FT.)

PROPOSED IMPERVIOUS SURFACE AREA < EXISTING IMPERVIOUS SURFACE AREA THEREFORE FURTHER DEVELOPMENT ON WILL BE LOWER THAN PREDEVELOPMENT ON. (SEE PONDPACK PRINTOUT AND SUMMARY FOR DETAILS)

REQUIRED TREATMENT VOLUME = FIRST 1" OVER IMPERVIOUS SURFACE AREA
 REQUIRED TREATMENT VOLUME = 3,829 CUBIC FEET
 TREATMENT VOLUME PROVIDED = 6,229 CUBIC FEET

INFILTRATION RATE = 15.4 INCHES/HOUR
 FACTOR OF SAFETY = 2.0 = 7.7 INCHES/HOUR
 MAXIMUM WATER SURFACE ELEVATION = 20.00

RECOVERY TIME = (MAX SURFACE ELEVATION-BOTTOM OF POND)/12"/MIN. RATE
 = (20.00-18.00)/12" = 1.7 HOURS
 = 3.12 HOURS TO RECOVER < 72 HOURS MAXIMUM



T.B.M. #1
 EXISTING IRON PIN (IP) (LEGIBLE) LOCATED AT THE SOUTHWEST CORNER OF THE PROPERTY
 N=412645.8890
 E=1818312.1570
 ELEV.=19.251

T.B.M. #2
 EXISTING IRON PIN (IP) (6" REBAR) LOCATED NORTH OF THE PROPERTY ALONG HIGHWAY 98 RIGHT OF WAY
 N=413004.4330
 E=1818314.9850
 ELEV.=19.729

LEGEND

PH	EXISTING FIRE HYDRANT
PP	POWER POLE
LP	LIGHT POLE
UP	UTILITY POLE
WV	WATER VALVE
WM	WATER METER
GM	GAS METER
GV	GAS VALVE
SM	SANITARY MANHOLE
SC	SANITARY CLEANOUT
DM	DRAINAGE MANHOLE
TE	TELEPHONE BOX
SI	SIGN
ECM	EXISTING CONCRETE MONUMENT
EP	EXISTING IRON PIN
MB	MAILBOX
GW	GLY WIRE
CR	CABLE RISER
EM	ELECTRIC METER
SCM	SET CONCRETE MONUMENT
SIP	SET IRON PIN
EG	EXISTING GAS
UT	UNDERGROUND TELEPHONE
UC	UNDERGROUND CABLE
OC	OVERHEAD CABLE
OEC	OVERHEAD ELECTRIC AND CABLE LINE
ESL	EXIST. SANITARY SEWER LINE
ESFM	EXIST. SANITARY SEWER FORCE MAIN
EW	EXIST. WATER MAIN
ESDL	EXIST. STORM DRAIN LINE
ETL	EXISTING TREE LINE
EFW	EXISTING FENCE (WIRE)
EFOD	EXISTING FENCE (WOODEN)
EFCL	EXISTING FENCE (CHAIN LINK)
EC	EXISTING CONTOUR
PC	PROPOSED CONTOUR
PWL	PROPOSED WATER LINE
PFHA	PROPOSED FIRE HYDRANT ASSEMBLY
PSL	PROPOSED SANITARY SEWER LINE
MBL	MINIMUM BUILDING LINE
ULE	UNDERGROUND ELECTRIC
PL	PROPERTY LINE
EEL	EXISTING EASEMENT LINE
CLR	CENTERLINE OF ROAD
PCS	PROPOSED CONCRETE SIDEWALK
GR	PROPOSED GRAVEL

PROJECT No.
 FL 0012-22

DATE: FEB. 2023
 SCALE: 1"=30'

DRAWN BY:
 T. SCARBOROUGH

APPROVED BY:
 P. SANTORA

REVISIONS:

SITE CONSTRUCTION PLANS FOR
 ALL METAL ROOFING & SIDING
 CITY OF PARKER
 BAY COUNTY, FLORIDA
 STORMWATER MANAGEMENT PLAN

NORTHSTAR
 ENGINEERING SERVICES

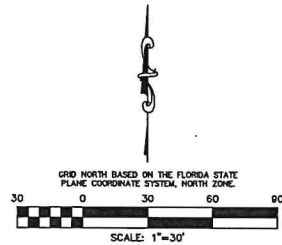
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 26312-E-7858-S

GA CERT. OF AUTH.
 003129-LS000156

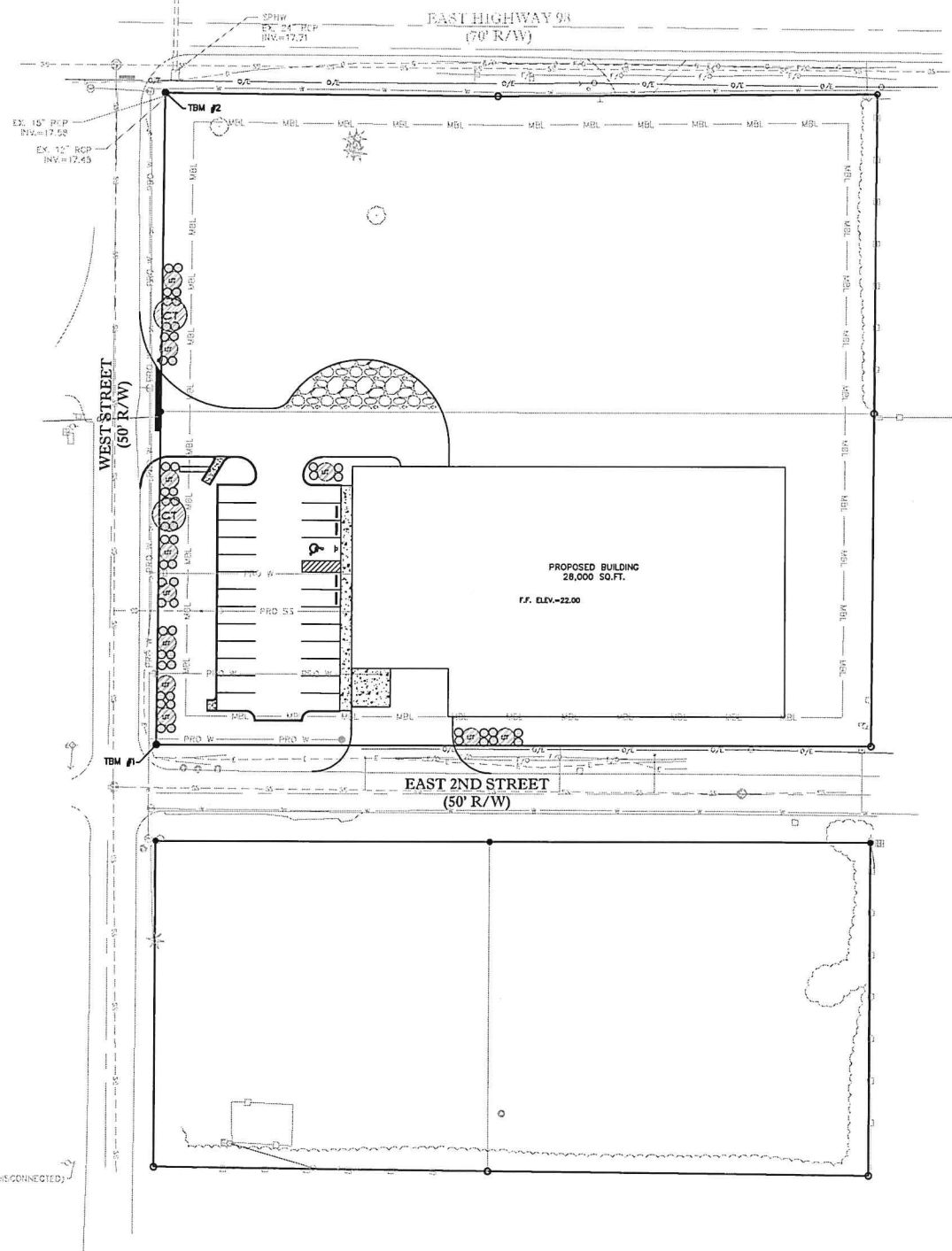
MS CERT. OF AUTH.
 E-00001825



LANDSCAPING SCHEDULE

- CT** CANOPY TREE: 2 1/2" CALIFER, 10' TALL, OAK, RED MAPLE, HICKORY, BEECH, PECAN, SYCAMORE, SWEETGUM, POPLAR, ASH, RIVER BIRCH
- UT** UNDERSTORY TREE: SINGLE TRUNK - 1 1/2" DIAMETER, MULTIPLE TRUNK - MIN 3 TRUNKS, 8" TALL; FLOQUERING DOGWOOD, HOLLY, GRANCY GRAYBEARD, LILAC, CHASTE, PURPLE LEAF PLUM, SOUTHERN WAX MYRTLE, CREPE MYRTLE, JAPANESE MAPLE, SOURWOOD, YAUJON, CAROLINA SILVER BELL, CHERRY LAUREL, LIGUSTRUM
- S** SHRUB: 18" OR 3 GALLONS; ABELIA, ANISE, ARBORVITAE, AZALEA, BANANA SHRUB, BOTTLEBRUSH, CAPELLIA, CHINESE QUINCE, ELAEAGNUS, FORSYTHIA, HYDRANGEAS, HOLLIES, LEUCOTHOE, LIGUSTRUM, LOROPETALUM, OLEANDER, PITTSOPORUM, ROSES, SPIRAEA, VIBURNUM, YEW

LANDSCAPING NOTES:
 ALL DISTURBED AREAS AND SLOPES NOT CURRENTLY UNDERGOING GRADING/CONSTRUCTION FOR A PERIOD GREATER THAN 7 DAYS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATION.
 ALL DISTURBED AREAS THAT HAVE BEEN GRADED AND NOT RECEIVING PAVEMENT OR OTHER PERMANENT IMPROVEMENTS SHALL RECEIVE TOPSOIL, SEEDING, AND MULCHING.



T.B.M. #1
 EXISTING IRON PIN (IP) (LEGIBLE) LOCATED AT THE SOUTHWEST CORNER OF THE PROPERTY
 N: 412845.9890
 E: 1818312.1270
 ELEV: 18.23

T.B.M. #2
 EXISTING IRON PIN (IP) (5/8" REBAR) LOCATED NORTH OF THE PROPERTY ALONG HIGHWAY 98 RIGHT OF WAY
 N: 413004.4000
 E: 1818314.9850
 ELEV: 18.72

LEGEND

- FH ◊ EXISTING FIRE HYDRANT
- PP ○ POWER POLE
- LP ⊕ LIGHT POLE
- UP ⊕ UTILITY POLE
- WV ⊕ WATER VALVE
- WM ⊕ WATER METER
- GM ⊕ GAS METER
- GV ⊕ GAS VALVE
- SM ⊕ SANITARY MANHOLE
- SC ⊕ SANITARY CLEANOUT
- DM ⊕ DRAINAGE MANHOLE
- TE ⊕ TELEPHONE BOX
- SIG ⊕ SIGN
- ECM ⊕ EXISTING CONCRETE MONUMENT
- EP ⊕ EXISTING IRON PIN
- WB ⊕ WALLBOX
- CW ⊕ CUY WIRE
- CR ⊕ CABLE RISER
- EM ⊕ ELECTRIC METER
- SCM ⊕ SET CONCRETE MONUMENT
- SIP ⊕ SET IRON PIN
- EXISTING GAS
- UT UNDERGROUND TELEPHONE
- UC UNDERGROUND CABLE
- OC OVERHEAD CABLE
- OEC OVERHEAD ELECTRIC
- OEC&C OVERHEAD ELECTRIC AND CABLE LINE
- ESX EXIST. SANITARY SEWER LINE
- ESXW EXIST. SANITARY SEWER FORCE MAIN
- EW EXIST. WATER MAIN
- ESD EXIST. STORM DRAIN LINE
- ET EXISTING TREE LINE
- XF EXISTING FENCE (WIRE)
- XW EXISTING FENCE (WOODEN)
- CL EXISTING FENCE (CHAIN LINK)
- CO EXISTING CONTOUR
- PC PROPOSED CONTOUR
- PW PROPOSED WATER LINE
- FPH PROPOSED FIRE HYDRANT ASSEMBLY
- PWS PROPOSED SANITARY SEWER LINE
- MBL MINIMUM BUILDING LINE
- UEL UNDERGROUND ELECTRIC
- PL PROPERTY LINE
- EEL EXISTING EASEMENT LINE
- CLR CENTERLINE OF ROAD
- PROPOSED CONCRETE SIDEWALK
- PROPOSED GRAVEL

PROJECT No.
 FL 0012-22

DATE: FEB., 2023
 SCALE: 1"=30'

DRAWN BY:
 T. SCARBOROUGH

APPROVED BY:
 P. SANTORA

REVISIONS:

SITE CONSTRUCTION PLANS FOR
 ALL METAL ROOFING & SIDING
 CITY OF PARKER
 BAY COUNTY, FLORIDA
 LANDSCAPING PLAN

NORTHSTAR
 ENGINEERING SERVICES

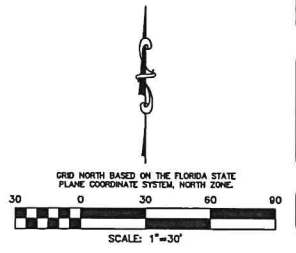
(P)334.673.9893 (F)314.672.1846
 2401 Highland Hwy., Dothan, AL, 36025
 www.northstarengineering.com

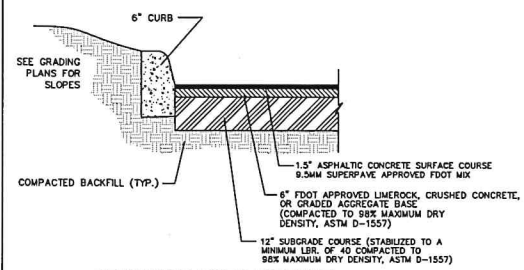
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 CA-16986, CA-062115

FL CERT. OF AUTH.
 26312-E, 7858-S

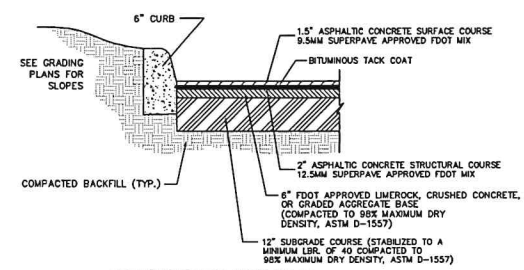
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MS CERT. OF AUTH.
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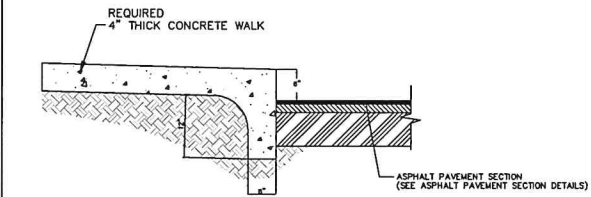




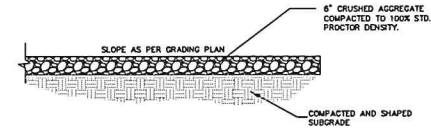
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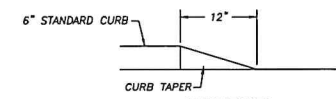
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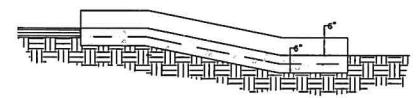
ASPHALT PAVING AT SIDEWALK DETAIL
NO SCALE



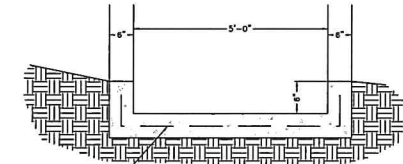
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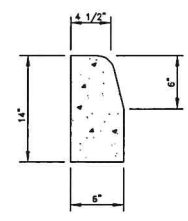
CURB TAPER
NOT TO SCALE



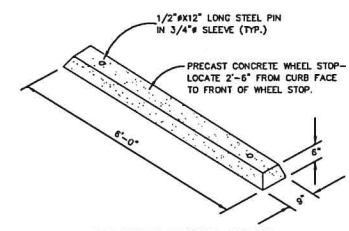
SECTION B-B



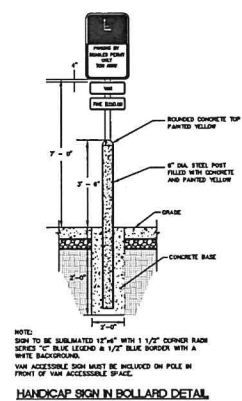
SECTION A-A



6" STANDARD CURB
NO SCALE



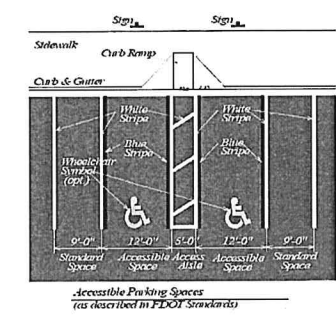
CONCRETE WHEEL STOP
NOT TO SCALE



HANDICAP SIGN IN BOLLARD DETAIL
NOT TO SCALE

ACCESSIBLE HANDICAP SIGN AND STRIPING DETAILS

Considering the above: in Florida, all accessible parking spaces *must* be designated with blue paint. In this case, Florida law is applied in addition to the standard described in MUTCD. The correct markings for accessible parking spaces have both white and blue stripes and access aisles are marked in white. Usually this is applied with the blue paint 'inside' the white paint for the space (see drawing below, which illustrates the Florida Department of Transportation Standard Plans, Index 711-001.)



Accessible Parking Spaces
(as described in FDOT Standard Plans)

NOTES TO DRAWING:

According to the MUTCD, the pavement markings for the parking space and the access aisle (blue and white stripes) may be either 4" or 6".

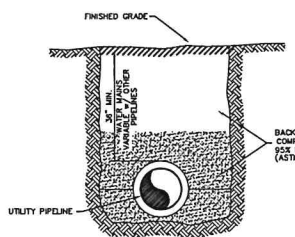
If used, a ground-level wheelchair symbol should be white.

If there is a curb, there must be a curb ramp (1:12 max. slope) outside the space and access aisle. A perpendicular curb ramp must have flared sides (1:12 max. slope) if pedestrians may cross it transversely.

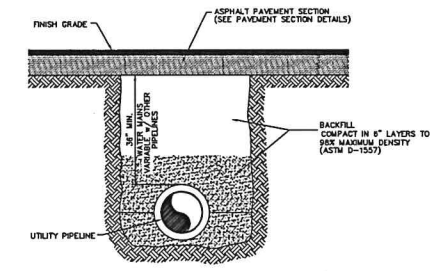
A pair of parallel curb ramps may also be used (w/3'-0" landing at the bottom). Wheel stops should be used to limit vehicular encroachment on the sidewalk.

FDOT Design Standards show dimensions to the centerline between two adjacent stripes. This is intended primarily for double lines between travel lanes on a roadway. For parking spaces, it is appropriate to dimension to the centerline of the white stripes and then add the blue stripes.

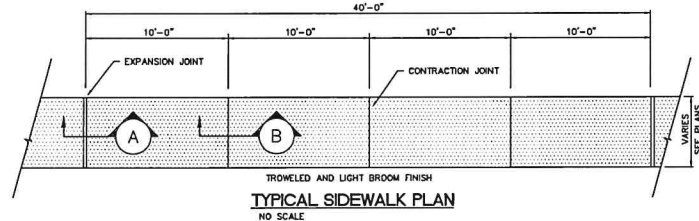
Also, as described above, the Florida accessible parking space provides the space for an automobile or a lift-equipped van. Therefore, a 'van accessible' sign and an 8' access aisle are not required. The standard for accessible parking in Florida is a 12' minimum parking space with an adjacent 5' minimum access aisle. Two accessible parking spaces may share an access aisle.



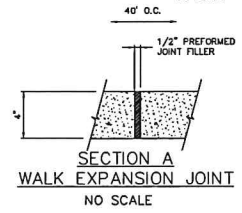
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NO SCALE



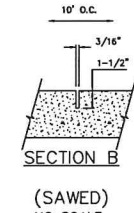
PAVED AREAS PIPELINE INSTALLATION
NO SCALE



TYPICAL SIDEWALK PLAN
NO SCALE

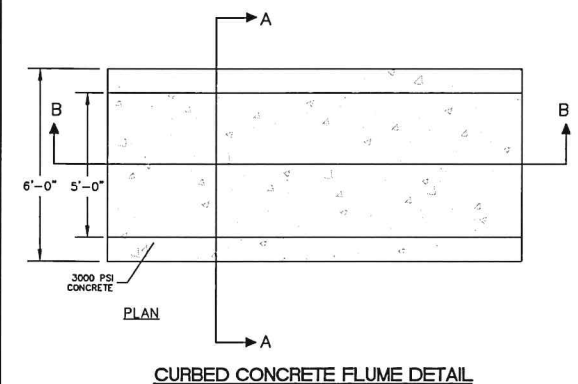


SECTION A WALK EXPANSION JOINT
NO SCALE

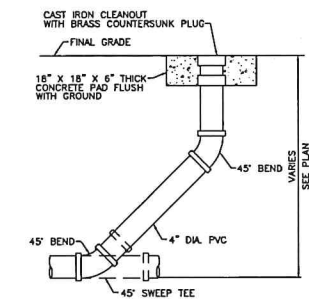


SECTION B (SAWED)
NO SCALE

SIDEWALK NOTES:
CONSTRUCT CONTRACTION JOINTS EVERY 10 FT. O.C.
CONSTRUCT EXPANSION JOINTS (1/2") EVERY 40 FT. O.C.
FIBERMESH OR WELDED WIRE FABRIC REINFORCEMENT SHALL BE PLACED IN ALL SIDEWALKS.
3000 P.S.I. CLASS A CONCRETE.



CURBED CONCRETE FLUME DETAIL



SANITARY SEWER CLEANOUT

PROJECT No. FL 0012-22
DATE: FEB., 2023
SCALE: N.T.S.

DRAWN BY: T. SCARBOROUGH
APPROVED BY: P. SANTORA

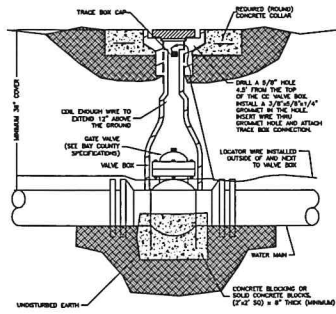
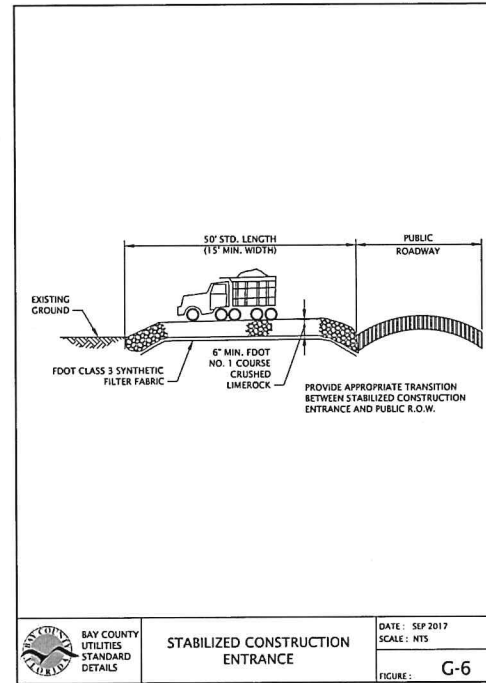
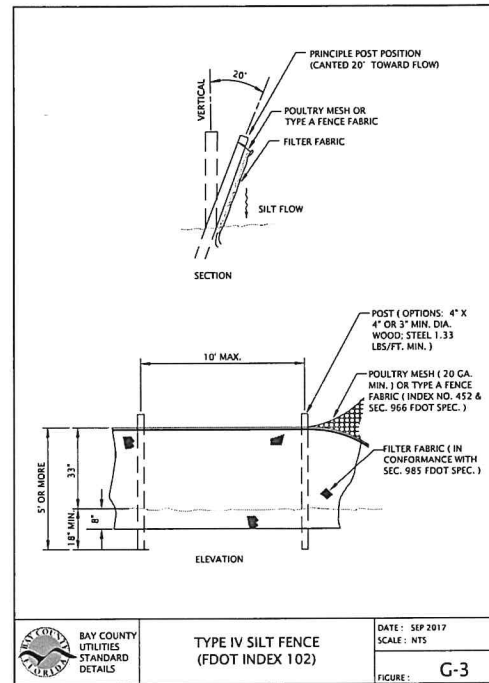
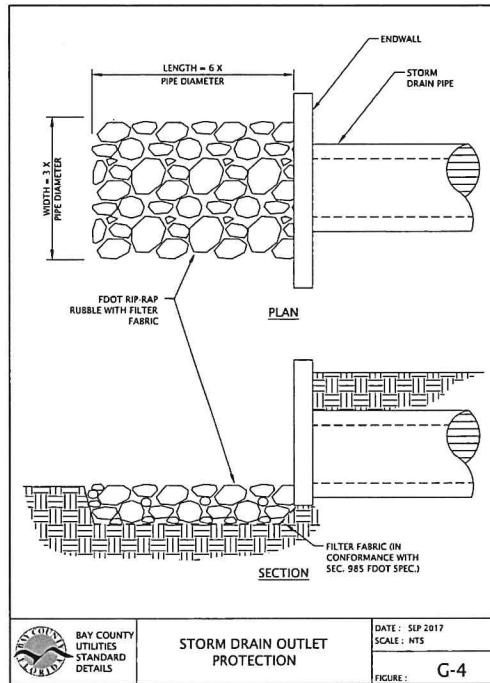
REVISIONS:

SITE CONSTRUCTION PLANS FOR ALL METAL ROOFING & SIDING CITY OF PARKER BAY COUNTY, FLORIDA CONSTRUCTION DETAILS

NORTHSTAR ENGINEERING SERVICES
(P)334.671.8855 (F)334.671.1816
2411 Harford Hwy., Doheny, AL., 36005
www.northstarengineering.com

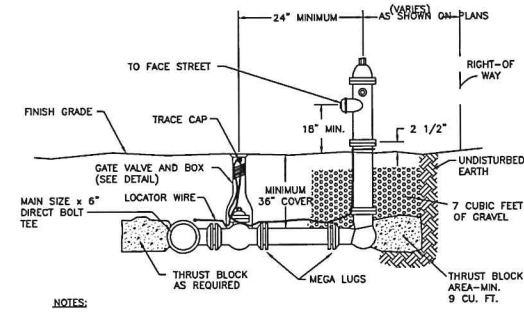
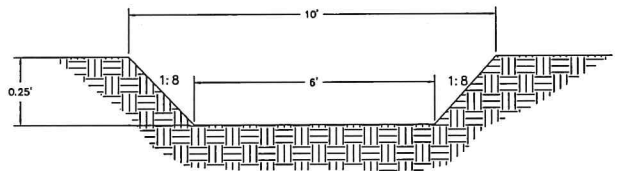
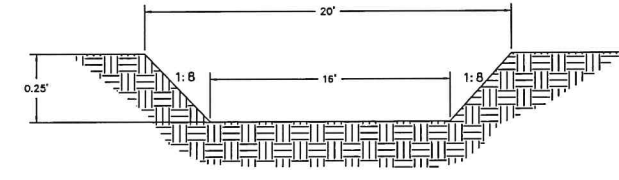
AL. CERT. OF AUTH. CA-18886 CA-08213
FL. CERT. OF AUTH. 26312-E, 7858-S
GA. CERT. OF AUTH. 003129, LS000156
MS. CERT. OF AUTH. E-00001825

SHEET 10 OF 11



- NOTES:**
1. ALL GATE VALVE TYPES AND INSTALLATIONS SHALL BE PER CITY OF PARKER SPECIFICATIONS.
 2. CONCRETE COLLAR AND VALVE BOX COVER SHALL BE FLUSH WITH FINISH GRADE.
 3. VALVE STAND TO BE SET STRAIGHT (WITHOUT LEANING) AND CENTERED OVER VALVE NUT TO ALLOW FULL SEPARATION WITH VALVE WRENCH.

GATE VALVE WITH LOCATOR WIRE
Not to scale



- NOTES:**
1. ALL FIRE HYDRANTS SHALL FACE THE STREET AND SHALL BE INSTALLED AS SHOWN ON PLANS & DRAWINGS OR AS DIRECTED BY UTILITY PROVIDER.
 2. ALL FIRE HYDRANTS SHALL HAVE MAIN SIZE BY 6" DIRECT BOLT TEES AND ALL LEES OR LATERALS SHALL BE DUCTILE IRON CEMENT LINED CLASS 50 WATER PIPE W/ MEGA LUGS (JOINTS REQUIRE US LOK GASKETS OR CITY OF PARKER APPROVED EQUAL).
 3. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ADAPTERS, GLANDS AND OTHER FITTINGS REQUIRED TO PROPERLY INSTALL THE FIRE HYDRANT. FIRE HYDRANT SPOOL PIECES BY THE SAME BRAND AS THE FIRE HYDRANT SHALL BE USED TO ADJUST THE FIRE HYDRANT TO PROPER GRADE. ALL FIRE HYDRANTS TO BE TRUE AND PLUMB. EARTH BUILT-UP AROUND THE FIRE HYDRANT IS NOT ACCEPTABLE.
 4. CONCRETE THRUST BLOCKS SHALL NOT OBSTRUCT FIRE HYDRANT DRAIN HOLES.
 5. INSTALL A LOCATOR WIRE TO THE FIRE HYDRANT VALVE STAND ACCORDING TO THE GATE VALVE DETAIL AND LOCATE WIRE SPECIFICATIONS.
 6. INSTALL FIRE HYDRANT MARKERS ACCORDING TO THE FIRE HYDRANTS MARKER DETAIL AND FIRE HYDRANTS SPECIFICATIONS.
 7. ALL FIRE HYDRANTS SHALL BE PAINTED ACCORDING TO THE FIRE HYDRANT SPECIFICATIONS.
 8. FIVE (5) MIL POLYETHYLENE PLASTIC SHALL BE USED TO COVER THE FIRE HYDRANT FITTINGS PRIOR TO POURING THE TRUST BLOCKING.

FIRE HYDRANT ASSEMBLY DETAIL
Not to scale

PROJECT No.
FL 0012-22
DATE: FEB., 2023
SCALE: N.T.S.

DRAWN BY:
T. SCARBOROUGH
APPROVED BY:
P. SANTORA

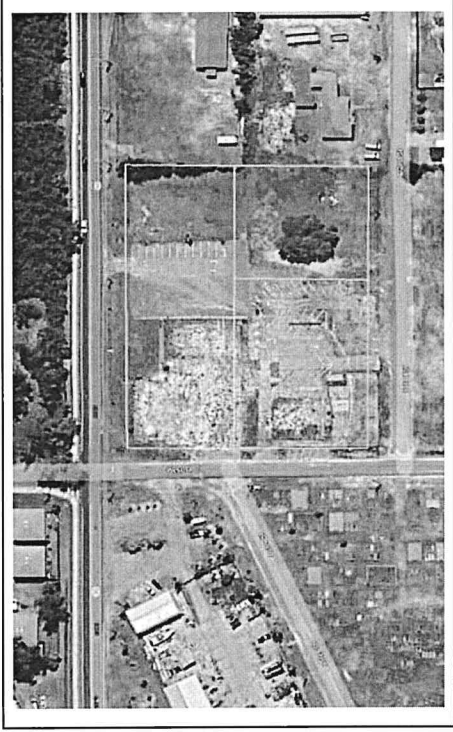
REVISIONS:

SITE CONSTRUCTION PLANS FOR
ALL METAL ROOFING & SIDING
CITY OF PARKER
BAY COUNTY, FLORIDA
CONSTRUCTION DETAILS

NORTHSTAR
ENGINEERING SERVICES
(P)334.673.8895 (F)334.673.1846
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AL CERT. OF AUTH.
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FL CERT. OF AUTH.
28312-E 7858-S
GA CERT. OF AUTH.
003120, LSF001156
MS CERT. OF AUTH.
E-00001825

GEOTECHNICAL ENGINEERING REPORT



909 West Street Warehouse
Parker, Bay County, Florida

PREPARED FOR:
Northstar Engineering Services, LLC
2431 Hartford Highway
Dothan, Alabama 36305

NOVA Project Number: 10111-2023184

October 25, 2023

NOVA
PROFESSIONAL | PRACTICAL | PROVEN



October 25, 2023

Northstar Engineering Services, LLC
2431 Hartford Highway
Dothan, Alabama 36305

Attention: Mr. Nathan Parish

Subject: **Geotechnical Engineering Report**
909 West Street Warehouse
Parker, Bay County, Florida
NOVA Project Number 10111-2023184

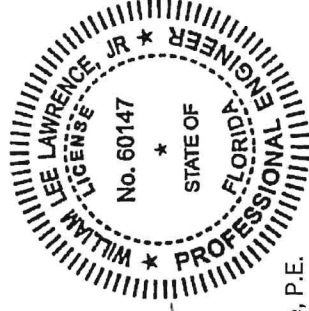
Dear Mr. Parish:

NOVA Engineering and Environmental, LLC (NOVA) has completed the authorized Geotechnical Engineering Report for the development in Parker, Bay County, Florida. The work was performed in general accordance with NOVA Proposal Number 10111-2023184, dated August 31, 2023. This report briefly discusses our understanding of the project at the time of the subsurface exploration, describes the geotechnical consulting services provided by NOVA, and presents our findings, conclusions, and recommendations.

We appreciate your selection of NOVA and the opportunity to be of service on this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact us.

Sincerely,
NOVA Engineering and Environmental, LLC

K. Nick Gonzalez
Staff Engineer



William L. Lawrence, P.E.
Principal Engineer
Florida Registration No. 60147

Copies Submitted: Addressee (electronic)

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1.0 INTRODUCTION

This section provides information relating to our contract, the purpose of our work, and a summary of our understanding of the project,

1.1 NAME AND LOCATION OF PROJECT

The ±2.6-acre Subject Property (Bay County Parcel Numbers 5870-000-000, 25869-000-000 and 25838-000-000) is located at 909 West Street in Parker, Bay County, Florida. The location of the site is indicated on the Site Location Map included in Appendix A.

1.2 AUTHORIZATION AND SCOPE OF STUDY

Our work on this project was as described in our Proposal Number 10111-2023184, dated August 31, 2023, and authorized by the Client on September 5, 2023. The primary objectives of this work were to perform a geotechnical exploration within the areas of the proposed construction and to assess these findings as they relate to geotechnical aspects of the planned site development. The authorized geotechnical engineering services included a site reconnaissance, soil test borings and sampling, engineering evaluation of the field and laboratory data, and the preparation of this report. As authorized per the above referenced proposal, this completed geotechnical report includes:

- A description of the site, fieldwork, laboratory testing and general soil conditions encountered, together with a Boring Location Plan and individual Test Boring Records.
- Site preparation considerations that include geotechnical discussions regarding site stripping and subgrade preparation and engineered fill/backfill placement.
- Recommendations for controlling groundwater and/or run-off during construction.
- Foundation system recommendations for the proposed structure, as deemed necessary based on the boring results.
- Slab-on-grade construction considerations based on the geotechnical findings, including the need for a sub-slab vapor barrier or a capillary barrier.
- Suitability of on-site soils for re-use as structural fill and backfill. Additionally, the criteria for suitable fill materials will be provided.
- Recommended quality control measures (i.e., sampling, testing, and inspection requirements) for site grading and foundation construction.
- Recommended pavement sections based on assumed traffic loading and subgrade strengths estimate from correlation with test borings, laboratory data, and soil types collected from the test borings.

- Recommended soil related design parameters for the SMS area including measured hydraulic conductivity rates and an estimated fillable porosity value.

The assessment of the presence of wetlands, floodplains, or water classified as state waters was beyond the scope of this exploration. Additionally, the assessment of site environmental conditions, including the detection of pollutants in the soil, rock, or groundwater, at the site was also beyond the scope of this geotechnical exploration and evaluation.

2.0 PROJECT INFORMATION

Our understanding of this project is based on discussions with The Client, review of the provided site plans with requested boring locations, a site reconnaissance during boring layout and field testing, and our experience with similar projects.

2.1 Site Plans and Documents

We were furnished with the following document:

- Document: Boring Markers/Site Construction Plans for All Metal Roofing and Siding
Dated: February 2023
Created By: Northstar Engineering Services, LLC.
Note: Boring locations and depths were provided by the Client.

2.2 PROJECT SITE

The ±2.6-acre Subject Property (Bay County Parcel Numbers 5870-000-000, 25869-000-000 and 25838-000-000) is located at 909 West Street in Parker, Bay County, Florida. At the time of our field exploration, the vicinity of the Subject Property was observed to be moderately developed with existing medium-sized commercial warehouse structures and a graveyard to the west, a church and a single family residence located to the east and undeveloped lots of similar size to the north and south. Parker Bayou is located about 900 feet south of the Subject Property. We note that the Subject Property was previously developed with a single-story structure and paved areas that had been demolished prior to our exploration.

2.3 PROPOSED DEVELOPMENT

NOVA understands the project will include the construction of a single-story, commercial warehouse structure with a plan footprint of approximately 28,000 square feet with associated asphaltic and concrete pavements and a stormwater management system (SMS) consisting of a conventional shallow dry retention pond.

The warehouse structure is anticipated to be of metal frame construction supported by a shallow foundation system.

Maximum Loads

Final structural loading details were not available from the Design Team at the time of the issuance of this report. We have therefore assumed that maximum loadings for the proposed structure will not exceed 75 kips per column for isolated interior columns and 8 kips per linear foot for continuous load bearing walls.

Site Grading

Final grading details were not available from the Design Team at the time of the issuance of this report. We have therefore assumed that finished site grades will not change greater than +/- 3 feet from existing grades within the proposed structure footprint.

3.0 SUBSURFACE EXPLORATION

3.1 AREA GEOLOGY

According to the United States Geological Survey (USGS), the subject site is located in Bay County within the Gulf Coastal Plain, separated from the Florida Platform by geologic structures known as the Gulf Trough and Apalachicola Embayment. These structures formed a bathymetric and environmental barrier from the earliest Eocene or earliest Oligocene periods into the Miocene. According to the “Text to Accompany the Geologic Map of Florida” by Scott, 2001, the site is generally underlain by undifferentiated sediments deposited during the Quaternary period. These sediments typically consist of siliciclastics (sand), organics and freshwater carbonates. These soils are highly permeable and form the Sand and Gravel Aquifer of the surficial aquifer system. Surficial soils in the region are primarily siliciclastic sediments deposited in response to the renewed uplift and erosion in the Appalachian highlands to the north and sea-level fluctuations. The extent and type of deposit is influenced by numerous factors, including mineral composition of the parent rock and meteorological events.

NRCS Soil Survey

The Natural Resources Conservation Service (NRCS) “Web Soil” was reviewed to obtain shallow soil and seasonal high-water table (SHWT) information. Generally, the site lies within the Lakeland sand (Map Unit 9) unit. The NRCS Soil Survey map and data have been included in the Appendix.

Unit no.	Soil Name	Depth (in)	Soil Description	Depth to Seasonal High Groundwater (in)
9	Lakeland Sand 0 to 5 Percent Slopes	0 - 80	Sand	More than 80

3.2 LOCAL EXPERIENCE

NOVA has conducted numerous geotechnical studies for projects in the general site area. The typical subsurface conditions in this area were found to consist of fine-grained sands to silty sands (USCS classifications of SP, SP-SM, and SM). In some instances, sand to silty sand strata with some organics and/or significant organic staining have also been encountered.

3.3 FIELD EXPLORATION

Our field exploration was conducted on September 22 and October 3, 2023, and included:

- Four 15-foot-SPT borings at locations provided by the Client (designated B-1 through B-4 in the attached Appendix).
- Two 10-foot-auger borings at locations provided by the Client (designated S-1 and S-2).
- One Double Ring Infiltration (DRI) test at a location provided by the Client.

The boring and test locations were established in the field by NOVA personnel using a handheld GPS device and by estimating distances and angles from site landmarks. Prior to initiating field testing, underground utilities were marked by the state utility locate service (811, or Sunshine One-Call). Any required underground utility related adjustments of the test locations were then made at the time of the field exploration. The approximate test locations are shown on the Boring Location Plan presented in Appendix B. If increased accuracy is desired by the Client, test locations and elevations may be surveyed.

The Test Boring Records in Appendix B show the Standard Penetration Test (SPT) resistances, or “N-values”, and present the soil conditions encountered in the borings. These records represent our interpretation of the subsurface conditions based on the field exploration data, visual examination of the split-barrel samples, laboratory test data, and generally accepted geotechnical engineering practices. The stratification lines and depth designations represent approximate boundaries between various subsurface strata. Actual transitions between materials may be gradual.

The groundwater levels reported on the Test Boring Records represent measurements made at the completion of each test boring, following a suitable stabilization period. The test borings were subsequently backfilled with soil cuttings from the drilling process for safety concerns.

SPT Borings

The test borings were performed using the guidelines of ASTM Designation D-1586, "Penetration Test and Split-Barrel Sampling of Soils". A mud rotary drilling process was used to advance the borings once groundwater was encountered. At regular intervals, soil samples were obtained with a standard 1.4-inch I.D., 2.0-inch O.D., split-tube sampler. The sampler was first seated six inches and then driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot is designated the "Penetration Resistance". Representative portions of the soil samples, obtained from the sampler, were placed

in sealed containers and transported to our laboratory for further evaluation and laboratory testing.

Auger Borings

The auger borings were performed using a hand operated soil sampler. Soil samples were obtained from the auger bucket approximately at each stratum break.

Test Boring Records in Appendix B present the soil conditions encountered in the borings. These records represent our interpretation of the subsurface conditions based on the field exploration data, visual examination of the recovered samples, laboratory test data, and generally accepted geotechnical engineering practices. The stratification lines and depth designations represent approximate boundaries between various subsurface strata. Actual transitions between materials may be gradual.

3.4 LABORATORY TESTING

Following completion of the field work, soil samples obtained in the field were returned to our office for classification and laboratory testing assignment. These tests included the following:

- Manual/Visual Soil Classification
- Moisture Content
- Fines Content
- Organic Content
- Re-Molded Falling Head Permeability

The purpose of the testing program was to classify the subsurface materials relative to the Unified Classification System and to determine their physical characteristics including strength, and compressibility.

Moisture Content

The moisture content is the ratio expressed as a percentage of the weight of water in a given mass of soil to the weight of the solid particles. This testing was conducted in general accordance with ASTM Designation D-2216. Seven moisture content tests were performed in this study.

Fines Content

The percentage of fines passing through the No. 200 sieve is generally considered to represent the amount of silt and clay of the tested soil sample. The sieve analysis testing

was conducted in general accordance with ASTM Designations D-6913 and D-11140. Seven fines content tests were performed in this study.

Organic Content

The organic content is the ratio expressed as a percentage of the weight of organic material in a given mass of soil to the weight of the solid particles. This testing was conducted in general accordance with ASTM D-2974. Seven organic content tests were performed in this study.

Re-Molded Falling Head Permeability

A remolded falling head permeability test (ASTM D-5084) is a common laboratory test used to determine the hydraulic conductivity of fine-grained soils. The test involves the flow of water through a re-molded, fully saturated soil sample inside a rigid-wall permeameter connected to a standpipe of constant diameter. Before beginning the flow measurements, the soil sample is saturated, and the standpipe is filled with water to a given level. The test then starts by allowing the water to flow through the sample until the water in the standpipe reaches a lower limit. The time required for the water to flow from the upper to lower limit is recorded. One remolded permeability test was performed in this study.

Detailed descriptions of the tests conducted are presented in Appendix C. The soil samples will be discarded 30 days following the submittal of this report, unless you request otherwise.

3.5 SUBSURFACE CONDITIONS

The following paragraphs provide generalized descriptions of the subsurface profiles and soil conditions encountered by the borings conducted during this exploration.

Surface Materials

Surface materials encountered in test borings generally consisted of sand with trace organics and building debris (from the recently demolished building). Further, existing asphaltic pavement occupies part of the subject property.

Fill

Based on the boring results and our observations of the property at the time of our field exploration, previously installed fill materials do not appear to be present on this property.

Native Soils

The soil borings generally encountered very loose to medium-dense fine-grained sands (USCS classification of SP) below surficial materials to about 12 feet below existing grade (BEG), underlain by medium dense fine-grained slightly clayey to clayey sands (SP-SC, SC) to the maximum explored depth of about 15 feet BEG.

Standard Penetration Test (SPT) resistance values ("N"- values) varied from 2 to 16 blows per foot (bpf) and generally increased with depth. SPT values typically ranged from 2 to 8 bpf in the upper 10 feet of the soil horizon, and 11 to 16 bpf at greater depths.

Groundwater Conditions

Groundwater in the Bay County, Florida area typically occurs as an unconfined aquifer condition. Consequently, the groundwater table is expected to be a subdued replica of the original surface topography.

Recharge is provided by the infiltration of rainfall and surface water through the soil overburden. More permeable zones in the soil matrix can affect groundwater conditions.

A stabilized groundwater table was not encountered in the test borings at the time of our final field exploration, which occurred during a period of relatively normal seasonal rainfall and within a pattern of frequent (daily) rain events. Based on a review of topographic maps and our visual site observations, we anticipate the groundwater flow at the site to be towards the south (i.e., towards nearby Parker Bayou).

Groundwater levels vary with changes in season and rainfall, construction activity, surface water runoff, and other site-specific factors. Groundwater levels in the Bay County area are typically lowest in the late fall to winter and highest in the early spring to mid-summer with annual groundwater fluctuations by seasonal rainfall; consequently, the water table may vary at times. Based on comparisons of current annual monthly rainfall data to historical rainfall data extending back 50+ years in time and the boring results, we estimate that the normal permanent seasonal high groundwater (SHGW) elevation will remain at a depth below 15 feet BEG, during the wet season. This data generally correlates to the values provided by the USGS Natural Resources Conservation Service (NRCS). The following table shows the following information for each soil test boring: soil type per NRCS, the encountered groundwater table and the estimated seasonal high groundwater level.

Test Boring	Soil Type*	Encountered Groundwater Depth (ft)**	Estimated Seasonal High Groundwater Depth (ft)**
B-1	Sand	Not Encountered	Below 15 feet
B-2	Sand	Not Encountered	Below 15 feet
B-3	Sand	Not Encountered	Below 15 feet
B-4	Sand	Not Encountered	Below 15 feet
S-1	Sand	Not Encountered	Below 15 feet
S-2	Sand	Not Encountered	Below 15 feet

* Based on the NRCS Soil Survey provided Appendix A

** From the existing ground surface

4.0 GEOTECHNICAL ASSESSMENT

The following assessment is based on our understanding of the proposed construction, our site observations, our evaluation and interpretation of the field data obtained during this exploration, our experience with similar subsurface conditions, and generally accepted geotechnical engineering principles and practices.

Based on boring data and analysis, the subject site appears to be favorable for the proposed development. On-site near surface soils that are categorized as fine-grained sands (SP) based on the Unified Soil Classification System (USCS) are considered suitable for reuse as structural fill or backfill (if required), provided that the materials are free of building debris, rubble, clay, rock, roots, and organics.

We note that subsurface conditions in unexplored locations can and will vary from those encountered at the boring locations considered and discussed herein. If such variations are noted during construction, or if project development plans are changed, we request the opportunity to review the changes and amend our recommendations, if necessary.

The following sections present our recommendations for site preparation and grading, and for the design of foundations.

5.0 RECOMMENDATIONS

5.1 SITE PREPARATION

Prior to proceeding with construction, all topsoil and vegetation, trees and associated root systems, and any other deleterious non-soil materials found to be present should be stripped from the proposed construction areas. Clean topsoil may be stockpiled and subsequently re-used in landscaped areas. Debris-laden materials should be excavated, transported, and disposed of off-site in accordance with appropriate solid waste rules and regulations. Any existing utility locations should be reviewed to assess their impact on the proposed construction and relocated/grouted in-place as appropriate.

Prior to fill placement or construction within cut areas, we recommend densifying (compacting) the upper zone of fine-grained sand (SP, N-values of concern varying between 2 and 6) that were generally encountered in the upper 2 feet to 6 feet of the soil horizon all SPT borings performed for this project.

This can most likely be accomplished by compacting the exposed subgrade from the stripped grade elevation with a heavy weight vibratory roller (i.e., a minimum 10-ton roller, static weight, with a minimum 5-foot drum diameter) to a minimum soil density of at least 98 percent of the maximum dry density as determined by the Modified Proctor test method (ASTM D-1557), as equipment of this size can typically impact sandy profiles to depths of 5+ feet. We note that vibratory compaction operations should not be conducted within a clear distance of 50 feet from any existing structures on adjacent properties.

Verification of the improvement of the loose subgrade soils within the proposed structure footprints that are at grade should be achieved via Dynamic Cone Penetrometer testing to a depth of at least 4 feet BEG and additional recommendations (i.e., further compaction effort, possible undercutting, choking stone into the exposed subgrade, etc.) can be rendered in the field as these tests are performed.

NOVA should observe the compaction of the subgrade to locate soft, weak, or excessively wet fill or existing soils present at the time of construction. Any unstable materials observed during the evaluation and compaction operations should be undercut and replaced with structural fill or stabilized in-place by scarifying and re-densifying. Actual remedial recommendations can best be determined by the geotechnical engineer in the field at the time of construction.

5.2 EXCAVATION

Excavations greater than five feet deep (such as for deeper foundations and underground utilities) should be sloped or shored in accordance with local, state, and federal regulations, including OSHA (29CFR Part 1926), excavation safety standards. It should be noted that the Contractor is solely responsible for site safety. This information is provided only as a service and under no circumstances should NOVA be assumed to be responsible for construction site safety. Each excavation should be observed and classified by an OSHA-competent person. All excavations below the groundwater level are classified as OSHA Class C soils for excavation purposes.

After stripping and trench excavation, a NOVA geotechnical engineer should carefully evaluate the exposed soils. We recommend undercutting the proposed pipe trench areas approximately ½ feet below the proposed pipe bearing elevations and installing structural backfill for use as pipe bedding materials. Sewer pipe installation should be constructed in general compliance with ASTM D 2321, standard practice for underground installation of pipe for sewers and other gravity flow applications.

Groundwater Control

A stabilized groundwater table was not encountered in the test borings during our field exploration, which occurred during a period of relatively normal seasonal rainfall and within a period of frequent (daily) rain events. Based on our understanding of the proposed construction, we do not anticipate that significant groundwater control issues will develop during mass grading and foundation construction.

5.3 FILL PLACEMENT

Fill Suitability

Fill materials should be relatively clean sands with less than 12 percent fines (material passing the No. 200 sieve), and free of non-soil materials and rock fragments larger than 3 inches in diameter. Based on visual examination and limited laboratory soil testing results, the existing surficial soils encountered during this exploration typically consisted of fine-grained sands (SP) that should be suitable for re-use as fill or backfill material, provided they are within acceptable moisture tolerances at the time of replacement and compaction.

We recommend that stockpiles of all materials planned for re-use be sealed as they are excavated to prevent (to the greatest extent practical) the intrusion of moisture into the core of the soil stockpile(s) during significant rain events prior to their potential re-use as fill and/or backfill soils.

Prior to construction, bulk samples of all proposed fill materials (both native and import) should be laboratory tested to confirm their suitability. Organic and/or debris-laden material is not suitable for re-use as structural fill. Topsoil, mulch, and similar organic materials can be wasted in architectural areas. Debris-laden materials should be excavated, transported, and disposed of off-site in accordance with appropriate solid waste rules and regulations.

Soil Compaction

Fill should be placed in thin, horizontal loose lifts (maximum 8-inch) and compacted to a minimum soil density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D-1557). The upper 12 inches of soil beneath the bottoms of all foundation footings should be compacted to at least 98 percent. In confined areas, such as utility trenches, portable compaction equipment and thinner fill lifts (3 to 4 inches) may be necessary.

Fill materials used in structural areas should have a target maximum dry density of at least 95 pounds per cubic foot (pcf). If lighter weight fill materials are used, the NOVA geotechnical engineer should be consulted to assess the impact on design recommendations.

Soil moisture content should be maintained within 3 percent of the optimum moisture content. We recommend that the grading contractor have equipment on site during earthwork for both drying and wetting fill soils. Moisture control may be difficult during rainy weather. Soils excavated from below the groundwater table will likely require significant efforts to achieve acceptable moisture contents prior to re-use as fill.

One test per 2,500 square feet of building footprint and per 5,000 square feet of pavement area should be performed at the stripped grade elevation and in each lift of fill, with test locations well distributed throughout the fill mass. When filling in small areas, at least one test per day per area should be performed. One test in conventional spread foundations, one test per in each column footing, and one test per 50 linear feet of continuous strip foundations is also recommended.

The site should be graded during construction to maintain positive drainage away from the construction areas, to prevent ponding of stormwater on the site during and shortly following significant rain events. The construction areas should be sealed and crowned with a smooth roller to minimize ponding water from storm events at the end of each day of work.

5.4 FOUNDATIONS

General

We understand that the proposed structure will be supported on a conventional shallow foundation system. Final structural loadings were not available from the design team at the time of the issuance of this report; we have therefore assumed that maximum isolated interior column and continuous load bearing wall loads will not exceed 75 kips per column and 8 kips per linear foot, respectively, for the proposed structure.

If any of the above stated design assumptions are found to be incorrect or are revised, NOVA should be contacted immediately so that additional analyses can be performed to determine if the recommendations presented herein will need to be modified.

Shallow Foundations

Design: After the recommended site and subgrade preparation and fill placement has been completed, it is our opinion that a conventional shallow foundation consisting of isolated spread footings and/or turn-down slab-on-grade construction can be used to support the proposed structure.

Foundations bearing on densified existing soils and/or compacted structural fill, as recommended in this report, may be designed employing a maximum allowable soil bearing pressure of **1,500 pounds per square foot (psf)**.

We recommend a value of 0.35 can be employed as the coefficient of friction (sliding resistance) between foundations and the underlying residual or fill soils. Footings should be a minimum of 24 inches in width for ease of construction and to reduce the possibility of localized shear failures. Isolated exterior and interior footing bottoms should be established at least 18 inches below finished surrounding exterior grades. When utilizing a post-tensioned monolithic slab-on-grade design, exterior and interior footing bottoms should be established a minimum of 12 inches below adjacent finished grades.

Settlement: Settlements for a spread foundation bearing on structural fill were assessed using SPT values to estimate elastic modulus, based on published correlations and previous NOVA experience. We note that the settlements presented are based on the SPT boring results. Conditions may be better or worse in other areas; however, we believe the estimated settlements are reasonably conservative.

Based on the provided structural loadings, the soil bearing capacity provided above, the presumed foundation elevations as discussed above, we expect residual primary total settlement beneath individual foundations to be on the order of 1-inch.

The amount of differential settlement is difficult to predict because the subsurface and foundation loading conditions can vary considerably across the site. However, we anticipate residual differential settlement between adjacent foundations will be less than ½ inch. The final deflected shape of the structure will be dependent on actual foundation locations and loading.

Foundation support conditions are highly erratic and may vary dramatically in short horizontal distances. It is anticipated that the geotechnical engineer may recommend a different bearing capacity upon examination of the actual foundation subgrade at numerous locations.

To reduce the differential settlement if lower consistency materials are encountered, a lower bearing capacity should be used. We anticipate that timely communication between the geotechnical engineer and the structural engineer, as well as other design and construction team members, will be required.

Construction: Foundation excavations should be evaluated by the NOVA geotechnical engineer prior to reinforcing steel placement to observe foundation subgrade preparation and confirm bearing pressure capacity. Foundation excavations should be level and free of debris, ponded water, mud, and loose, frozen, or water-softened soils. Concrete should be placed as soon as is practical after the foundation is excavated and the subgrade evaluated. Foundation concrete should not be placed on frozen or saturated soil.

If a foundation excavation remains open overnight, or if rain or snow is imminent, a 3 to 4-inch thick "mud mat" of lean concrete should be placed in the bottom of the excavation to protect the bearing soils until reinforcing steel and concrete can be placed.

5.5 SLAB-ON-GRADE

General

The conditions exposed at subgrade levels will vary across the site and may include structural fill or densified in-situ soils. The slab-on-grade may be adequately supported on these subgrade conditions subject to the recommendations in this report. The slab-on-grade should be jointed around columns and along walls to reduce cracking due to differential movement. An underdrain system is not necessary beneath the slab, provided that the slab is installed at least 2 feet above the post development high groundwater level. An impermeable vapor barrier is recommended beneath finished spaces to reduce dampness.

Once grading is completed, the subgrade can be exposed to adverse construction activities and weather conditions during the period of sub-slab utility installation. The subgrade should be well drained to prevent the accumulation of water. If the exposed subgrade becomes unstable, excessively wet or exhibits excessive rutting or pumping, the geotechnical engineer should be consulted.

Subgrade Modulus

A coefficient of subgrade reaction (k) of 125 pci (psi per inch) may be used for conventional slab design where slabs bear upon subgrades prepared in accordance with previous recommendations.

Please note that this magnitude of k is intended to reflect the elastic response of soil beneath a typical floor slab under light loads with a small load contact area often measured in square inches, such as loads from forklifts, automobile/truck traffic or lightly loaded storage racks. The recommended coefficient of subgrade reaction (k) of 125 pci is not applicable for heavy slab loads caused by bulk storage or tall storage racks, or for mat foundation design.

Several design methods are applicable for conventional slab design. We have assumed that the slab designer will utilize the methods discussed in the American Concrete Institute (ACI) Committee 360 report, “*Guide to Design of Slabs-on-Ground*, (ACI 360R-10).

5.6 STORMWATER MANAGEMENT SYSTEM RECOMMENDATIONS

NOVA understands that the stormwater management system (SMS) to treat and dispose of stormwater runoff associated with the proposed development is desired to consist of a conventional shallow dry retention basin. Based on the results of our field exploration, the subsurface conditions encountered in the SMS area appear to be adaptable for the treatment and disposal of stormwater runoff via the desired conventional shallow retention basin. We recommend that the soil parameters presented in the table on the next page be considered for the design of the SMS for this project.

SMS SOIL DESIGN PARAMETERS	
Corresponding Soil Boring Test Location	S-1, S-2, and B-2
Approximate Depth to Confining Stratum, BEG**	Below 15 feet
Measured Vertical Hydraulic Conductivity (k_v)*	7 ft/day
Estimated Lateral Saturated Hydraulic Conductivity (k_h)*	10 ft/day
Measured In-Situ Infiltration Rate (DRI)	15 in/hr.*
Estimated Fillable Porosity of Soil	20%
Average Depth to Stabilized Groundwater Table, BEG	Not Encountered
Estimated Average Normal Permanent SHGW Table, BEG**	Below 15 feet

* Factors of Safety have not been applied to the noted hydraulic conductivity and infiltration values.

** Relative to the maximum explored depth in test borings.

The estimated normal permanent SHGW level provided in Table 1 above is based on our experience with projects in this locale; the soil strata encountered in the test boring; and the published information by the “Web Soil Survey” National database, NRCS division of the United States Department of Agriculture (USDA).

5.7 PAVEMENT CROSS SECTION DESIGN

General

A recommended flexible (asphalt) pavement section has been developed for this project based on our understanding of the existing subsurface conditions, review of applicable FDOT specifications, and the assumed loading conditions of 50,000 Equivalent Single-Axle Loads (ESALS) for heavy duty pavement areas and 25,000 Equivalent Single-Axle Loads (ESALS) for standard (light) duty pavement areas, with a 20-year design life. The terminal serviceability index and reliability for these pavement sections were assumed to be 2.0 and 85%, respectively. Traffic exceeding the stated criteria will require a heavier pavement section.

Flexible Pavements

We recommend a minimum compaction of at least 98 percent of the maximum dry density be specified for the base and stabilized subgrade courses as determined by the Modified Proctor test method (ASTM D-1557). A minimum separation of at least 24 inches between the bottom of an FDOT approved Crushed Limerock Base or GAB course and the seasonal high groundwater table should be maintained.

All asphalt material and paving operations should meet applicable specifications of the Asphalt Institute and FDOT requirements. A NOVA technician should observe placement and perform density testing of the stabilized subgrade and base course materials as well as asphalt. We recommend using the parameters shown for a flexible pavement section presented below in Table 1 (Standard Duty) and in Table 2 (Heavy Duty) for the flexible pavement section designs for this project.

Table 1 – Recommended Standard Duty Flexible Pavement Section	
Asphaltic Concrete Structural Course (SuperPave SP-9.5 or SP-12.5)	1½ inch
FDOT Approved Crushed Limerock, Crushed Concrete, or Graded Aggregate Base (GAB) Material (minimum LBR of 100)	6 inches
Stabilized Subgrade Course (minimum LBR of 40)	12 inches

Table 2 – Recommended Heavy Duty Flexible Pavement Section (Primary Entrance, and areas where static wheel turning is required)	
Asphaltic Concrete Surface Course (such as a 9.5 mm SuperPave approved FDOT mix)	1 inch
Asphaltic Concrete Structural Course (such as a 12.5 mm SuperPave approved FDOT mix)	1½ inches
FDOT Approved Crushed Limerock, Crushed Concrete, or Graded Aggregate Base (GAB) Material (minimum LBR of 100)	8 inches
Stabilized Subgrade Course (minimum LBR of 40)	12 inches

Based on visual classification of the near-surface materials encountered in the test borings, it appears that the native sand (SP) soils will likely not meet the minimum LBR requirement of 40 for the Stabilized Subgrade Course (SSC, which is the upper 12 inches of subgrade beneath flexible pavement sections) and will require stabilization with soil fines or additional base course material. An imported material having a minimum LBR value of 40 should be specified for the final (12-inch) lift of fill for pavement areas being installed over fill.

All asphalt material and paving operations should meet applicable specifications of the Asphalt Institute and Florida Department of Transportation. A NOVA technician should observe placement and perform density testing of the SSC, base course material and asphalt.

Rigid Pavements

We understand that a rigid (concrete) pavement section may also be employed for the proposed pavement areas planned as part of this development. Recommended heavy duty and light duty pavement sections have been developed for this project based on our understanding of the existing subsurface conditions, review of applicable FDOT specifications, and the assumed pavement design parameters stated previously.

Our recommendations for slab thickness for standard duty and heavy-duty concrete pavements are also based on the subgrade soils being densified to a minimum soil density of at least 98 percent of the Modified Proctor test method (ASTM D-1557), and employment of a design modulus of subgrade reaction (k) equal to 150 pounds per cubic inch.

We recommend using the designs in Table 3 for Standard Duty and Heavy-Duty concrete (rigid) pavement sections.

Table 3 - Recommended Rigid Pavement Sections		
STANDARD DUTY PAVEMENT SECTION		
Minimum Pavement Thickness	Maximum Control Joint Spacing	Recommended Saw-Cut Depth
5½ Inches	10 feet x 10 feet	1 ³ / ₈ Inches
HEAVY DUTY PAVEMENT SECTION		
Minimum Pavement Thickness	Maximum Control Joint Spacing	Recommended Saw-Cut Depth
8 Inches	12 feet x 12 feet	2 Inches

All concrete materials and placement should conform to applicable FDOT specifications. We recommend that a non-woven geotextile (about 3 feet wide) be placed beneath the construction joints to prevent upward "pumping" movement of soil fines through the joints.

The recommend using concrete with a minimum compressive strength of 4,000 psi and a minimum 28-day flexural strength (modulus of rupture) of at least 600 pounds per square inch, based on 3rd point loading of concrete beam test samples. All sections should be reinforced with #3 (3/8-in. diameter) rebar every 18-in OC. Layout of the sawcut control joints should form square panels, and the depth of sawcut joint should

be 1/4 of the concrete slab thickness. The joints should be sawed within six hours of concrete placement or as soon as the concrete has developed sufficient strength to support workers and equipment.

We also recommend allowing NOVA to review and comment on the final concrete pavement design, including section and joint details (type of joints, joint spacing, etc.), prior to the start of construction. For further details on concrete pavement construction, please reference “Building Quality Concrete Parking Areas”, published by the Portland Cement Association.

5.8 DRAINAGE CONSIDERATIONS

Soil strength and settlement potential is highly dependent upon the moisture condition of the supportive soil. Soil characteristics can change dramatically when moisture conditions change. As such, building pads, walkways, structures and surrounding grades should be properly designed and constructed to properly control water (surface and subsurface). Building pads should be designed to shed surface water prior to building construction. Grades surrounding structures should be adequately sloped away from the structure to promote positive drainage and prevent water from ponding near or against the structure. Swales and/or storm drainage structures should be constructed to collect and remove all surface water run-off. All roof drain downspouts should be connected to drain leaders that are properly daylighted or connected to storm drainage structures such that water is removed from structural areas. Interior and/or exterior foundation drains, if provided, should be installed to properly protect foundations from changing moisture conditions, including fluctuating shallow perched/laterally flowing subsurface water levels. All foundation drains, if provided, should be properly daylighted or connected to storm drain structures to remove all water from foundation areas. Roof drain lines and foundation drain lines should always remain independent of each other. Any subsurface water that may rise near structural grades should be controlled by adequately constructed subsurface drainage mechanisms.

6.0 LIMITATIONS

The findings, conclusions and recommendations presented in this report represent our professional opinions concerning subsurface conditions at the site. The opinions presented are relative to the dates of our site work and should not be relied on to represent conditions at significantly later dates or at locations not explored. The opinions included herein are based on information provided to us, the data obtained at specific locations during the study and our experience. If additional information becomes available that might impact our geotechnical opinions, it will be necessary for NOVA to review the information, reassess the potential concerns, and re-evaluate our conclusions and recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is the possibility that conditions between test locations will differ from those encountered at specific test locations, that conditions are not as anticipated by the designers and/or the contractors, or that either natural events or the construction process have altered the subsurface conditions. These variations are an inherent risk associated with subsurface conditions in this region and the approximate methods used to obtain the data. These variations may not be apparent until construction.

This report is intended for the sole use of **Northstar Engineering Services, LLC**. for the above noted project. The scope of work performed during this study may not satisfy other user's requirements. Use of this report or the findings, conclusions or recommendations by others will be at the sole risk of the user. NOVA is not responsible or liable for the interpretation by others of the data in this report, nor their conclusions, recommendations or opinions.

Our professional services have been performed, our findings obtained, our conclusions derived and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices in the State of Florida. This warranty is in lieu of all other statements or warranties, either expressed or implied.

APPENDIX A
Figures and Maps



Base map provided by *Google Earth*

Scale: Not To Scale
Date Drawn: October 11, 2023
Drawn By: C. Alessio
Checked By: W. Lawrence






17612 Ashley Drive
 Panama City Beach, Florida 32413
 850.249.6682 ♦ 850.249.6683

PROJECT LOCATION MAP
909 West Street Warehouse
 Parker, Bay County, Florida
 NOVA Project Number 10111-2023184




LEGEND

-  15' SPT Boring Locations
-  10' Auger Boring Locations
-  DRI Test Location

Base map provided by **Google Earth**

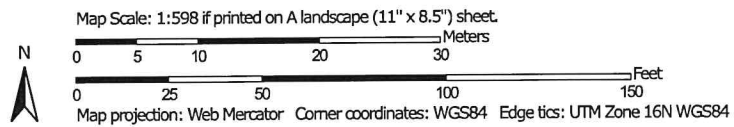
Scale: Not To Scale
Date Drawn: October 11, 2023
Drawn By: C. Alessio
Checked By: W. Lawrence






































 17612 Ashley Drive
 Panama City Beach, Florida 32413
 850.249.NOVA(6682) ♦ 850.249.6683

BORING LOCATION PLAN
909 West Street Warehouse
 Parker, Bay County, Florida
 NOVA Project Number 10111-2023184

Soil Map—Bay County, Florida
(909 West Street Warehouse)



MAP LEGEND

Area of Interest (AOI)			Spoil Area
	Area of Interest (AOI)		Stony Spot
Soils			Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
Special Point Features		Water Features	
	Blowout		Streams and Canals
	Borrow Pit	Transportation	
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow	Background	
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bay County, Florida
Survey Area Data: Version 23, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 2, 2020—Dec 8, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
9	Lakeland sand, 0 to 5 percent slopes	1.6	100.0%
Totals for Area of Interest		1.6	100.0%

Bay County, Florida

9—Lakeland sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2r2z0n

Elevation: 100 to 400 feet

Mean annual precipitation: 40 to 69 inches

Mean annual air temperature: 63 to 70 degrees F

Frost-free period: 190 to 310 days

Farmland classification: Not prime farmland

Map Unit Composition

Lakeland and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lakeland

Setting

Landform: Hills on marine terraces

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluvium

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: sand

C - 7 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): 4s

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R133AY002FL)

Hydric soil rating: No

Minor Components

Troup

Percent of map unit: 6 percent
 Landform: Ridges, knolls
 Landform position (*two-dimensional*): Summit
 Landform position (*three-dimensional*): Interfluvium
 Down-slope shape: Convex
 Across-slope shape: Linear
 Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G133AA111FL)
 Hydric soil rating: No

Bonifay

Percent of map unit: 5 percent
 Landform: Hills on marine terraces
 Landform position (*two-dimensional*): Summit
 Landform position (*three-dimensional*): Interfluvium
 Down-slope shape: Linear, convex
 Across-slope shape: Convex, linear
 Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G133AA121FL), Longleaf Pine-Turkey Oak Hills (R133AY002FL)
 Hydric soil rating: No

Foxworth

Percent of map unit: 5 percent
 Landform: Ridges on marine terraces
 Landform position (*two-dimensional*): Summit
 Landform position (*three-dimensional*): Interfluvium
 Down-slope shape: Convex
 Across-slope shape: Linear
 Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G133AA121FL)
 Hydric soil rating: No

Albany

Percent of map unit: 2 percent
 Landform: Knolls on marine terraces, ridges on marine terraces, interfluvium on marine terraces
 Landform position (*two-dimensional*): Summit, shoulder
 Landform position (*three-dimensional*): Interfluvium, side slope, tread
 Down-slope shape: Convex
 Across-slope shape: Convex, linear
 Other vegetative classification: Forage suitability group not assigned (G133AA999FL)
 Hydric soil rating: No

Chipley

Percent of map unit: 2 percent
 Landform: Ridges on marine terraces
 Landform position (*two-dimensional*): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of
mesic uplands (G133AA131FL)






Hydric soil rating: No

Data Source Information

Soil Survey Area: Bay County, Florida

Survey Area Data: Version 23, Aug 24, 2023

APPENDIX B
Subsurface Data

<u>SYMBOL</u>	<u>DESCRIPTION</u>
N-Value	No. of Blows of a 140-lb. Weight Falling 30 Inches Required to Drive a Standard Spoon 1 Foot
WOR	Weight of Drill Rods
WOH	Weight of Drill Rods and Hammer
	Sample from Auger Cuttings
	Standard Penetration Test Sample
	Thin-wall Shelby Tube Sample (Undisturbed Sampler Used)
% REC	Percent Core Recovery from Rock Core Drilling
RQD	Rock Quality Designation
	Stabilized Groundwater Level
	Seasonal High Groundwater Level (also referred to as the W.S.W.T.)
NE	Not Encountered
GNE	Groundwater Not Encountered
BT	Boring Terminated
-200 (%)	Fines Content or % Passing No. 200 Sieve
MC (%)	Moisture Content
LL	Liquid Limit (Atterberg Limits Test)
PI	Plasticity Index (Atterberg Limits Test)
K	Coefficient of Permeability
Org. Cont.	Organic Content
G.S. Elevation	Ground Surface Elevation

UNIFIED SOIL CLASSIFICATION SYSTEM			GROUP SYMBOLS	TYPICAL NAMES
GRAVELS 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GRAVELS WITH FINES	GW	Well-graded gravels and gravel-sand mixtures, little or no fines
	SANDS More than 50% of coarse fraction passes No. 4 sieve		GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
SANDS AND CLAYS Liquid limit 50% or less	CLEAN SANDS 5% or less passing No. 200 sieve	SANDS WITH 12% or more passing No. 200 sieve	GM	Silty gravels and gravel-sand-silt mixtures
	SANDS More than 50% of coarse fraction passes No. 4 sieve		GC	Clayey gravels and gravel-sand-clay mixtures
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve*	SANDS AND CLAYS Liquid limit 50% or less	SANDS WITH 12% or more passing No. 200 sieve	SW**	Well-graded sands and gravelly sands, little or no fines
			SP**	Poorly graded sands and gravelly sands, little or no fines
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve*	SANDS AND CLAYS Liquid limit 50% or less	SANDS WITH 12% or more passing No. 200 sieve	SM**	Silty sands, sand-silt mixtures
			SC**	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve*	SANDS AND CLAYS Liquid limit 50% or less	SANDS WITH 12% or more passing No. 200 sieve	ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve*	SANDS AND CLAYS Liquid limit 50% or less	SANDS WITH 12% or more passing No. 200 sieve	OL	Organic silts and organic silty clays of low plasticity
			MH	Inorganic silts, micaceous or diamicaceous fine sands or silts, elastic silts
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve*	SANDS AND CLAYS Liquid limit 50% or less	SANDS WITH 12% or more passing No. 200 sieve	CH	Inorganic clays or clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve*	SANDS AND CLAYS Liquid limit 50% or less	SANDS WITH 12% or more passing No. 200 sieve	PT	Peat, muck and other highly organic soils
			*Based on the material passing the 3-inch (75 mm) sieve ** Use dual symbol (such as SP-SM and SP-SC) for soils with more than 5% but less than 12% passing the No. 200 sieve	

<u>RELATIVE DENSITY</u> (Sands and Gravels)
Very loose – Less than 4 Blows/Foot
Loose – 4 to 10 Blows/Foot
Medium Dense – 11 to 30 Blows/Foot
Dense – 31 to 50 Blows/Foot
Very Dense – More than 50 Blows/Foot
<u>CONSISTENCY</u> (Silts and Clays)
Very Soft – Less than 2 Blows/Foot
Soft – 2 to 4 Blows/Foot
Medium Stiff – 5 to 8 Blows/Foot
Stiff – 9 to 15 Blows/Foot
Very Stiff – 16 to 30 Blows/Foot
Hard – More than 30 Blows/Foot
<u>RELATIVE HARDNESS</u> (Limestone)
Soft – 100 Blows for more than 2 inches
Hard – 100 Blows for less than 2 inches

MODIFIERS
These modifiers Provide Our Estimate of the Amount of Minor Constituents (Silt or Clay Size Particles) in the Soil Sample
Trace – 5% or less
With Silt or With Clay – 6% to 11%
Silty or Clayey – 12% to 30%
Very Silty or Very Clayey – 31% to 50%
These Modifiers Provide Our Estimate of the Amount of Organic Components in the Soil Sample
Trace – Less than 3%
Few – 3% to 4%
Some – 5% to 8%
Many – Greater than 8%
These Modifiers Provide Our Estimate of the Amount of Other Components (Shell, Gravel, Etc.) in the Soil Sample
Trace – 5% or less
Few – 6% to 12%
Some – 13% to 30%
Many – 31% to 50%



TEST BORING RECORD B-2

PROJECT NAME: 909 West Street Warehouse DATE: 9/22/2023
 PROJECT NO.: 2023184 CLIENT: Northstar Engineering Services, LLC.
 PROJECT LOCATION: Parker, Bay County, Florida
 LOCATION: See Boring Location Plan ELEVATION: Existing Grade
 DRILLED BY: L. Griffin LOGGED BY: N. Gonzalez
 DRILLING METHOD: Mud Rotary HAMMER: Manual
 INITIAL GW DEPTH: 15 GNE EST. SHGW DEPTH: 15 GNE

Depth (feet)	Elevation	Material Description	Graphic	Groundwater	Sample Type	N-Value	<ul style="list-style-type: none"> ● N-Value (Blows per Foot) ▲ Moisture Content (%) ◇ Organic Content (%) ■ Fines Content (%)
0							
5		SAND with trace organics and building debris (from the recently demolished building) (SP) Very loose to loose light brown fine-grained SAND (SP)				5	
						4	
						2	
						4	
10						6	
		Medium dense light brown to grey fine-grained slightly clayey SAND (SP-SC)					
15						11	

Note: Boring Terminated at 15 feet

This information pertains only to this boring and should not be interpreted as being indicative of the site.



TEST BORING RECORD B-3

PROJECT NAME: 909 West Street Warehouse DATE: 9/22/2023
 PROJECT NO.: 2023184 CLIENT: Northstar Engineering Services, LLC.
 PROJECT LOCATION: Parker, Bay County, Florida
 LOCATION: See Boring Location Plan ELEVATION: Existing Grade
 DRILLED BY: L. Griffin LOGGED BY: N. Gonzalez
 DRILLING METHOD: Mud Rotary HAMMER: Manual
 INITIAL GW DEPTH: ▼ GNE EST. SHGW DEPTH: ▽ GNE

Depth (feet)	Elevation	Material Description	Graphic	Groundwater	Sample Type	N-Value	<ul style="list-style-type: none"> ● N-Value (Blows per Foot) ▲ Moisture Content (%) ◇ Organic Content (%) ■ Fines Content (%)
0		SAND with trace organics and building debris (from the recently demolished building) (SP) Loose light brown fine-grained SAND (SP)					
						5	●
						8	●
5						4	●
						4	●
						4	●
10						4	●
.15			Medium dense grey fine-grained clayey SAND (SC)				16

Note: Boring Terminated at 15 feet

This information pertains only to this boring and should not be interpreted as being indicative of the site.



TEST BORING RECORD B-4

PROJECT NAME: 909 West Street Warehouse DATE: 9/22/2023
 PROJECT NO.: 2023184 CLIENT: Northstar Engineering Services, LLC.
 PROJECT LOCATION: Parker, Bay County, Florida
 LOCATION: See Boring Location Plan ELEVATION: Existing Grade
 DRILLED BY: L. Griffin LOGGED BY: N. Gonzalez
 DRILLING METHOD: Mud Rotary HAMMER: Manual
 INITIAL GW DEPTH: 15' GNE EST. SHGW DEPTH: 15' GNE

Depth (feet)	Elevation	Material Description	Graphic	Groundwater	Sample Type	N-Value	<ul style="list-style-type: none"> ● N-Value (Blows per Foot) ▲ Moisture Content (%) ◇ Organic Content (%) ■ Fines Content (%) 	
0		<p>SAND with trace organics and building debris (from the recently demolished building) (SP) Very loose to loose light brown fine-grained SAND (SP)</p> <hr/> <p>Medium dense light brown to grey fine-grained slightly clayey SAND (SP-SC)</p>						
5							3	
10								
15							16	

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Note: Boring Terminated at 15 feet



TEST BORING RECORD S-2

PROJECT NAME: 909 West Street Warehouse DATE: 10/3/2023
 PROJECT NO.: 2023184 CLIENT: Northstar Engineering Services, LLC.
 PROJECT LOCATION: Parker, Bay County, Florida
 LOCATION: See Boring Location Plan ELEVATION: Existing Grade
 DRILLED BY: N. Gonzalez LOGGED BY: N. Gonzalez
 DRILLING METHOD: Hand Auger HAMMER: None
 INITIAL GW DEPTH: ▽ GNE EST. SHGW DEPTH: ▽ GNE

Depth (feet)	Elevation	Material Description	Graphic	Groundwater	Sample Type	N-Value	<ul style="list-style-type: none"> ● N-Value (Blows per Foot) ▲ Moisture Content (%) ◇ Organic Content (%) ■ Fines Content (%)
0							<div style="display: flex; justify-content: space-between; width: 100%;"> 10 20 30 40 50 60 70 80 90 </div> <div style="text-align: right; margin-top: -10px;"> PL LI </div>
5		SAND with trace organics and building debris (from the recently demolished building) (SP) Light brown fine-grained SAND (SP)					
10		Boring Terminated at 10 feet					
15							

This information pertains only to this boring and should not be interpreted as being indicative of the site.

Note:

Project: 909 West Street Warehouse
Project Location: Bay County, Florida
Project Number: 10111-2023184

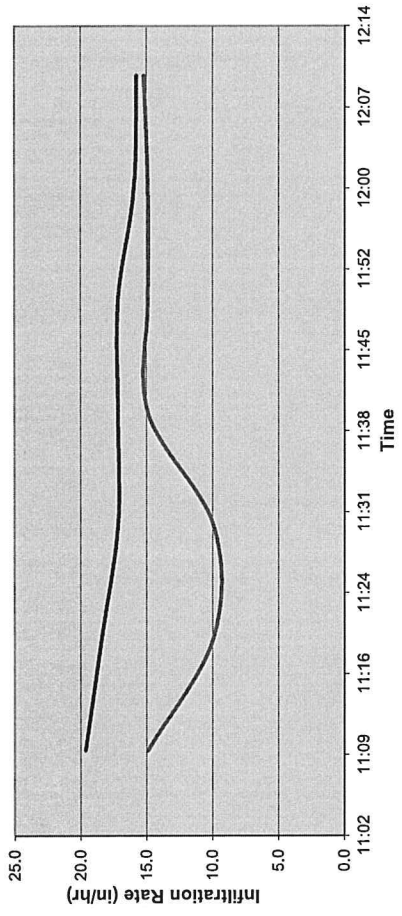
Report of DRI - 1

Date(s) of Test	October 3, 2023	Tested by	N. Gonzalez	Weather	Clear
Test Method	ASTM D 3385	Logged by	N. Gonzalez	Type of liquid	tap water
Area Inner Ring	110.75 sq. in.	Checked by	W. Lawrence	Liquid Temperature	80 °F
Area Outer Ring	447.69 sq. in.	See Auger Boring Record for Soil Profile		Soil Temperature	83 °F
Area Annular Space	334.59 sq. in.	Approx. Elevation	9 in. below grade	Location	Per Boring Location Plan

INCREMENTAL INFILTRATION RATE vs. TOTAL ELAPSED TIME

Time	Inner Ring			Outer Ring			Comments
	Elapsed Time (minutes)	Volume (gal)	Infiltration Rate (in/hr)	Volume (gal)	Infiltration Rate (in/hr)		
11:10	10	1.2	14.9	6.3	19.6		Test began after a 30-minute saturation period.
11:20	10	0.8	9.9	5.9	18.4		
11:30	10	0.8	9.9	5.5	17.2		
11:40	10	1.2	14.9	5.5	17.2		
11:50	10	1.2	14.9	5.5	17.2		
12:00	10	1.2	14.9	5.2	15.9		
12:10	10	1.2	15.2	5.1	15.8		

Infiltration Rate



INFILTRATION RATE = 15.4 in/hr



Figure DRI-1

APPENDIX C
Laboratory Data

SUMMARY OF CLASSIFICATION & INDEX TESTING

909 West Street Warehouse
Parker, Bay County, Florida
NOVA Project Number 10111-2023184

Boring Number	Sample Depth (ft)	Natural Moisture (%)	Percent (%) Passing Sieve #200	Organic Content (%)	USCS Soil Classification
B-1	0 - 2	2	5	2	SP
B-1	2 - 4	3	5	1	SP
B-2	2 - 4	4	5	1	SP
B-3	4 - 6	5	5	1	SP
B-3	13 ½ - 15	13	25	1	SC
B-4	0 - 2	3	5	1	SP
B-4	2 - 4	4	5	1	SP

NOVA

PERMEABILITY, -200 SIEVE WASH, AND MOISTURE CONTENT

PROJECT: 909 West Street Warehouse NOVA PROJECT #: 10111-2023184

DATE: 10/3/2023 ASSIGNED BY: W.Lawrence TESTED BY: N. Gonzalez

Sample LOCATION / BORING NO.	S-1
Sample NUMBER / DEPTH	0' - 5'

PERMEABILITY TESTING SUMMARY			
PERMEABILITY (K_v)	→	7	ft/day
Corresponding K_h	→	10	ft/day
DRY DENSITY	→	104	lbs/ft ³
MOISTURE CONTENT	→	5	%
-200 FINES CONTENT	→	5	%

FALLING HEAD PERMEABILITY (ASTM D 5084)			
No. of LAYERS:	3	Wt. of MOLD (lbs):	9.31
BLOWS/LAYER:	15	Wt. of MOLD/SOIL (lbs):	12.95
HEIGHT (FT)	TRIAL #1 (SEC)	TRIAL #2 (SEC)	PERMEABILITY
5	0.0	0.0	
4	15.7	15.6	2.54E-03
3	23.0	20.7	2.35E-03
2	29.2	30.4	2.43E-03
1	53.0	52.4	2.34E-03
Average Permeability		2.4E-03	cm/sec

MOISTURE CONTENT (ASTM D 2216)	
Pan NUMBER	SP-9
Wt. of WET SOIL & PAN (g)	325.2
Wt. of DRY SOIL & PAN (g)	313.9
Wt. of PAN (g)	74.0
Wt. of Water (g)	11.3
Wt. of Dry Soil (g)	239.9
MOISTURE CONTENT (%)	4.7

-200 SIEVE WASH (ASTM D 1140)	
Pan NUMBER	M-1
Wt. of DRY SOIL & PAN (g)	162.9
Wt. of WASH SOIL & PAN (g)	156.7
Wt. of PAN (g)	48.5
Wt. of Original Dry Sample (g)	114.4
Wt. of -200 Material (g)	6.2
Wt. of Washed Dry Sample (g)	108.2
-200 FINES CONTENT (%)	5.4

NUMBER OF INCHES MOLD WAS SHORT? 0.000 INCHES

PERMEABILITY CONSTANT USED WAS → 0.41 (Includes 1/2" ID tubing)

(ZERO INCHES IS DEFAULT)

APPENDIX D
Support Documents

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply this report for any purpose or project except the one originally contemplated.*

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an

assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by:* the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time to perform additional study.* Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help

others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical-engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017

e-mail: info@geoprofessional.org www.geoprofessional.org

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ORIGINAL

EASEMENT

This EASEMENT ("Easement") is made and entered into as of this 7th day of March, 2024, by and between COASTAL ACQUISITIONS OF FLORIDA, LLC, a Florida limited liability company ("Grantor"), in favor of the CITY OF PARKER, FLORIDA, a municipal corporation organized and existing under the laws of the State of Florida ("Grantee").

In consideration of the covenants set forth herein, the sum of Ten and No/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Grant of Easement. Grantor does hereby grant, convey, bargain and sell unto Grantee a non-exclusive easement over, under, upon, through, across and onto that certain real property located in Bay County, Florida, more particularly described on Exhibit "A", attached hereto and incorporated herein ("Property"), for the purposes expressed herein.

2. Purpose of Easement. The purpose of the Easement is the use by Grantee and the public in general of the stormwater system on the Property, water and sewer lines or other related facilities approved by Grantee as a part of the development of the Property (collectively "Facilities") and structures related to the Facilities and rights of Grantee to ingress and egress over, across and through the Property. Grantor acknowledges that the Facilities

may be used as a part of a larger stormwater system throughout the City of Parker, Florida, and that stormwater from other properties may flow onto the Property and be conveyed or treated by the Facilities.

3. Maintenance of Facilities. Grantor or Grantor's successors and assigns shall maintain the Property and the Facilities including but not limited to installing, constructing, repairing and maintaining the Facilities to the satisfaction of Grantee.

4. Commencement. This Easement shall be perpetual commencing on the date of execution of this Easement.

5. Reservation of Rights. Grantor reserves and retains all rights in the Property not specifically granted herein, including, but not limited to, the right to use the Property for any and all purposes not inconsistent with the exercise by Grantee of the privileges granted herein.

6. Non-Interference. Grantor shall not obstruct the use of the Property or interfere with the lawful use thereof by Grantee and/or Grantee's guests, invitees, licensees, agents, employees, contractors, heirs, successors and assigns.

7. Title. Grantor covenants to Grantee and Grantee's successors and assigns that Grantor is the fee simple owner of the Property and the Development and the Property and the Development is free from all liens and encumbrances whatsoever, except ad

CITY OF PARKER, FLORIDA

Julie Ducharme
Name Printed: Julie L Ducharme
Address: 1001 W Park St
Parker, FL 32404

BY: [Signature]
ANDREW KELLY, as Mayor

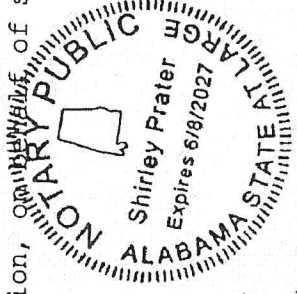
Kimberly Prater
Name Printed: Kimberly Prater
Address: 1001 W. Park St
Parker FL 32404

STATE OF FLORIDA
COUNTY OF BAY

The foregoing instrument was acknowledged before me by means of
 physical presence or online notarization, on this 2ND day
of APRIL, 2024, by PHILLIP E. SANTORA as Manager of COASTAL
ACQUISITIONS OF FLORIDA, LLC, a Florida limited liability company, who
is personally known to me or who has produced
_____ as identification, ~~on behalf of~~ of said
entity.

Kimberly Prater
NOTARY SIGNATURE

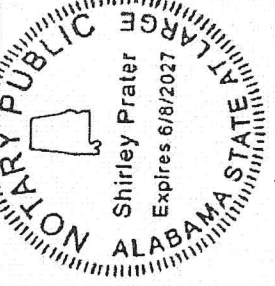
STATE OF FLORIDA
COUNTY OF ~~BAY~~ HOUSTON



The foregoing instrument was acknowledged before me by means of
 physical presence or online notarization, on this 2ND day
of APRIL, 2024, by WILLIAM H. CARR, as Manager of COASTAL
ACQUISITIONS OF FLORIDA, LLC, a Florida limited liability company, who
is personally known to me or who has produced
_____ as identification, on behalf of, said
entity.

Kimberly Prater
NOTARY SIGNATURE

STATE OF FLORIDA
COUNTY OF BAY



The foregoing instrument was acknowledged before me by means of
 physical presence or online notarization, on this 26th day
of March, 2024, by ANDREW KELLY, as Mayor of the City of
Parker, Florida who is personally known to me or who has produced

_____ as identification, on behalf of said entity.

Donna L. Perdue

NOTARY SIGNATURE

THIS INSTRUMENT PREPARED BY: TIMOTHY J. SLOAN, ESQ., TIMOTHY J. SLOAN, P.A., 427 MCKENZIE AVENUE, PANAMA CITY, FL 32401, NOT IN CONNECTION WITH THE ISSUANCE OF TITLE INSURANCE. THE PREPARER MAKES NO REPRESENTATIONS AS TO THE TITLE OF THE PROPERTY AND THE ACCURACY OF THE LEGAL DESCRIPTION AND DISCLAIMS ALL RESPONSIBILITY THEREFORE.

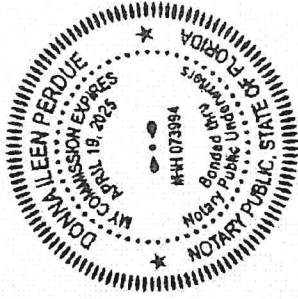


EXHIBIT "A"

A strip of land 10 feet in width running the entire frontage along and abutting the road/highway right-of-way of the following described property:

Parcel 1:

The West 50 feet of Lot 25 and all of Lot 26, according to the Map of Parker, Florida, located in the Northwest Quarter of Section 24, Township 4 South, Range 14 West, according to Plat thereof recorded in the Public Records of Bay County, Florida.

Parcel 2:

Lot 25, LESS the West 50 feet thereof, according to the Map of Parker, Florida, located in the Northwest Quarter of Section 24, Township 4 South, Range 14 West, according to Plat thereof recorded in the Public Records of Bay County, Florida.

Parcel 3:

Lot 27, according to the Map of Parker, Florida, located in the Northwest Quarter of Section 24, Township 4 South, Range 14 West, according to Plat thereof recorded in the Public Records of Bay County, Florida.

Parcel 4:

Lot 28, according to the Map of Parker, Florida, located in the Northwest Quarter of Section 24, Township 4 South, Range 14 West, according to Plat thereof recorded in the Public Records of Bay County, Florida.

COPY

valorem taxes not yet due and any mortgage of a mortgagee that has executed and delivered to Grantee a joinder and consent to this Easement.

8. Binding Covenants. The covenants contained herein run with the lands owned by the parties hereto and shall inure to the benefit of and be binding upon the parties hereto and their successors in interest and assigns.

9. Time of the Essence. Time shall be of the essence as to all terms and provisions of this Easement.

IN WITNESS WHEREOF, the parties hereto have executed and delivered this document as of the first date written above.

WITNESSES:

COASTAL ACQUISITIONS OF FLORIDA, LLC

By: Phillip E. Santora
PHILLIP E. SANTORA, as Manager

Stephen Nichols
Name Printed: Stephen Nichols
Address: 2431 Hartford Hwy
Dothan, AL 36305

Nathan Parrish
Name Printed: Nathan Parrish
Address: 2431 Hartford Hwy
Dothan, AL 36305

Gabel Pylant
Name Printed: Gabel Pylant
Address: 2431 Hartford Hwy
Dothan, AL 36305

Mark Amah
Name Printed: Mark Amah
Address: 2431 Heat Fern Highway
Dothan, AL 36305

By: William H. Carr
WILLIAM H. CARR, as Manager



October 26, 2023

**Stormwater Management Report
All Metal Roofing and Siding
Parker, Florida**

Project Number: FL0016-22
Project Title: All Metal Roofing and Siding
909 West Street
Parker, Florida 32404
Bay County

Storm Calculation Summary

The proposed All Metal Roofing and Siding project and contributing area were analyzed to determine the pre-development and post-development storm runoff rates for the 100-year critical storm event, as well as storage volumes and recovery times. The calculations include the 1 hour, 2-hour, 4-hour, 8 hour, and 24-hour durations. The calculations also include pre-development and post-development storm runoff rates for the 25-year 1-hour, 2-hour, 4-hour, 8-hour, and 24-hour storm events. PondPackV8i and the design parameters in the Bay County Land Development Regulations and the Florida Department of Environmental Protection and Northwest Florida Water Management District's Environmental Resource Permit Applicant's Handbook, Volume II were used to perform the calculations. The results of the calculations are summarized as follows:

Pre-Development:

The pre-development site and contributing area consists of one (1) subarea. This is named "Pre Development Area". Its properties are as follows:

"Pre Development Area" is area that flows to the southwest corner of the property. It consists of 2.88 acres with a curve number of 74.1 (35/157). Its time of concentration is 5 minutes (28/157). The pre-development peak flows to the outfall ("Pre Outfall") are 11.24 cfs, 10.93 cfs, 6.04 cfs, 7.31 cfs, and 2.31 cfs for the 1-hour, 2-hour, 4-hour, 8-hour, and 24-hour durations of the 25-year storm event, respectively and 15.72 cfs, 15.39 cfs, 8.39 cfs, 9.77 cfs, and 3.38 cfs for the 1-hour, 2-hour, 4-hour, 8-hour, and 24-hour durations of the 100-year storm event, respectively. (3/157).

Post-Development:

The proposed site and contributing area consists of three (3) subareas. These are "Post to West", "Post to South", and "Post Outfall". Their properties are as follows:

“Post to West” is area that will be detained within the proposed dry detention pond (“Western Pond”). It will consist of 1.212 acres with a curve number of 70.5 (34/157). Its time of concentration is to be 5.0 minutes (minimum).

“Post to South” is area that will be detained within the proposed dry detention pond (“Southern Pond”). It will consist of 0.364 acres with a curve number of 85.4 (33/157). Its time of concentration is to be 5.0 minutes (minimum).

“Post Outfall” is area that will not reach a detention system and is to be released directly to the outfall (“Post Outfall”). It will consist of 1.308 acres with a curve number of 43.0 (32/157). Its time of concentration is to be 5.0 minutes (18/157). The post-development peak flows to the outfall are to be 0.42 cfs, 0.49 cfs, 0.79 cfs, 1.17 cfs, and 0.42 cfs for the 1-hour, 2-hour, 4-hour, 8-hour, and 24-hour durations of the 25-year storm event, respectively and 1.11 cfs, 1.49 cfs, 1.41 cfs, 2.01 cfs, and 0.77 cfs for the 1-hour, 2-hour, 4-hour, 8-hour, and 24-hour durations of the 100-year storm event (2/157).

The post-development peak flows to the outfall (“Post Outfall”) are to be 2.65 cfs, 2.98 cfs, 2.99 cfs, 4.25 cfs, and 0.90 cfs for the 1-hour, 2-hour, 4-hour, 8-hour, and 24-hour durations of the 25-year storm event, respectively and 6.80 cfs, 8.16 cfs, 4.65 cfs, 6.41 cfs, and 1.66 cfs for the 1-hour, 2-hour, 4-hour, 8-hour, and 24-hour durations of the 100-year storm event (3/157).

The greatest post development discharge to the “Post Outfall” outfall occurs during the 2-hour, 100-year storm event. Therefore, the 2-hour, 100-year storm event is the critical storm event for this outfall.

Post-Development Detention:

The proposed site and contributing area will contain two (2) dry detention ponds. These are “Western Pond” and “Southern Pond”. Their properties are as follows:

“Western Pond” will provide 0.081 ac-ft of storage volume between the elevations of 18.00 and 20.00 (120/157). The maximum stormwater elevation reached in the pond is to be 19.95, which occurs during the 2-hour, 100-year storm (4/157), thereby being contained within the proposed dry detention system. The infiltration rate of 15.4 in/hr with a factor of safety of 2.0 (equaling 7.7 in/hr) was used in the design of this dry detention system. A weir (Outlet-1) was modeled as an outlet device in the western edge of the pond with an elevation of 19.75 (123/157) to prevent over-topping in the event of severe flooding. The required maximum treatment height for this pond is 19.68’, therefore the required treatment volume is reached before any outflow occurs.

“Southern Pond” will provide 0.062 ac-ft of storage volume between the elevations of 19.33 and 21.75 (118/157). The maximum stormwater elevation reached in the pond is to be 21.64, which occurs during the 2-hour, 100-year storm (4/157), thereby being contained within the proposed dry detention system. The infiltration rate of 15.4 in/hr with a factor of safety of 2.0 (equaling 7.7 in/hr) was used in the design of this dry detention system. A weir (Outlet-2) was modeled as an outlet device in the south edge of

the pond with an elevation of 21.50 (127/157) to prevent over-topping in the event of severe flooding. The required maximum treatment height for this pond is 20.81', therefore the required treatment volume is reached before any outflow occurs.

Conclusion:

The results show that the routed peak flows for the developed site are less than or equal to the peak flows for the pre-developed site for the critical storm events with the critical storm events being controlled within the detention systems. The results also show that the routed peak flows for the developed site are less than or equal to the peak flows for the pre-developed site for all 25-year and 100-year storm events, thus they are being controlled within the detention systems.

The attached detailed report includes:

- Required treatment volume calculations
- Recovery time calculations
- PondPack Stormwater report

Please let me know if you have any questions or need any additional information.

Sincerely,

Phillip E. Santora, P.E.
Northstar Engineering Services, Inc.



REQUIRED TREATMENT VOLUME CALCULATION & RECOVERY TIME CALCULATIONS

Dry Detention System "Western Pond"

Contributing Area = 1.212 Acres

Required Treatment Volume Calculations:

Impervious Area = 0.626 ac. (0.95)

Gravel Area = 0.034 (0.85)

Grassed/Landscaped Areas = 0.553 ac. (0.25)

$$\text{Runoff Coefficient} = \frac{(0.626 \text{ ac.} \cdot 0.95) + (0.034 \cdot 0.85) + (0.553 \text{ ac.} \cdot 0.25)}{1.212 \text{ ac.}} = 0.63$$

$$\text{Treatment Volume (1 in x Runoff Coefficient)} = \frac{0.63(1.212 \text{ ac})(1 \text{ in})(43,560 \text{ ft}^2/\text{ac})}{12 \text{ in/ft}} = 2771.72 \text{ ft}^3$$

$$\text{Treatment Volume (0.5 in)} = \frac{0.50(1.212 \text{ ac.})(1 \text{ in})(43,560 \frac{\text{ft}^2}{\text{ac.}})}{12 \text{ in/ft}} = 2199.78 \text{ ft}^3$$

$$2771.72 \text{ ft}^3 > 2199.78 \text{ ft}^3$$

$$\text{Treatment Volume Required} = 2771.72 \text{ ft}^3 = 0.064 \text{ ac. ft.}$$

"Western Pond" Stage Storage		
Elevation	Area (ac)	Volume (Total)(ac.ft)
18.00	0.019	0.000
19.00	0.039	0.028
20.00	0.068	0.081

Height of Treatment Volume in Pond (between elevations 19.00 and 20.00):

$$= 19.00 + (20.00 - 19.00) \left[\frac{(0.064 \text{ ac.ft} - 0.028 \text{ ac.ft})}{(0.081 \text{ ac.ft} - 0.028 \text{ ac.ft})} \right] = 19.68$$

Required Recovery Time Calculations

$$\text{Depth to Drawdown} = 19.68 - 18.00 = 1.68 \text{ ft} * 1 \text{ ft} / 12 \text{ in} = 20.16 \text{ in}$$

$$\text{Design Infiltration Rate} = 7.7 \text{ in/hr}$$

$$\text{Recovery Time} = \frac{20.16 \text{ in}}{7.7 \frac{\text{in}}{\text{hr}}} = 2.62 \text{ hrs} (< 72 \text{ hrs})$$

Dry Detention System "Southern Pond"

Contributing Area = 0.364 Acres

Required Treatment Volume Calculations:

Impervious Area = 0.286 ac. (0.95)
Grassed/Landscaped Areas = 0.078 ac. (0.25)

$$\text{Runoff Coefficient} = \frac{(0.286 \text{ ac.} \cdot 0.95) + (0.078 \text{ ac.} \cdot 0.25)}{0.364 \text{ ac.}} = 0.80$$

$$\text{Treatment Volume (1 in x Runoff Coefficient)} = \frac{0.80(0.364 \text{ ac})(1 \text{ in})(43,560 \text{ ft}^2/\text{ac})}{12 \text{ in/ft}} = 1057.06 \text{ ft}^3$$

$$\text{Treatment Volume (0.5 in)} = \frac{0.50(0.364 \text{ ac.})(1 \text{ in})(43560 \frac{\text{ft}^2}{\text{ac}})}{12 \text{ in/ft}} = 660.66 \text{ ft}^3$$

$$1057.06 \text{ ft}^3 > 660.66 \text{ ft}^3$$

$$\text{Treatment Volume Required} = 1,057.06 \text{ ft}^3 = 0.024 \text{ ac. ft.}$$

"Southern Pond" Stage Storage		
Elevation	Area (ac)	Volume (Total)(ac.ft)
19.33	0.000	0.000
20.00	0.015	0.003
21.00	0.038	0.029
21.75	0.050	0.062

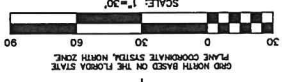
Height of Treatment Volume in Pond (between elevations 28.00 and 29.00):
 $= 20.00 + (21.00 - 20.00) \left[\frac{(0.024 \text{ ac.ft} - 0.003 \text{ ac.ft})}{(0.029 \text{ ac.ft} - 0.003 \text{ ac.ft})} \right] = 20.81$

Required Recovery Time Calculations

$$\text{Depth to Drawdown} = 20.96 - 20.00 = 0.81 \text{ ft} * 1 \text{ ft} / 12 \text{ in} = 9.72 \text{ in}$$

$$\text{Design Infiltration Rate} = 7.7 \text{ in/hr}$$

$$\text{Recovery Time} = \frac{9.72 \text{ in}}{7.7 \frac{\text{in}}{\text{hr}}} = 1.26 \text{ hrs} (< 72 \text{ hrs})$$



STUDY AREA=2.88 AC.
 EXISTING IMPERVIOUS AREA=1.67 AC.
 EXISTING GRAVEL AREA=0.07 AC.
 EXISTING PERVIOUS AREA=1.14 AC.



PROJECT No. FL 0012-22
 DATE: FEB. 2023
 SCALE: 1"=30'

DRAWN BY: T. SCARBROUGH
 APPROVED BY: P. SANTORA

REVISIONS:

PRE-DEVELOPMENT DRAINAGE MAP FOR
 ALL METAL ROOFING & SIDING
 CITY OF PARKER
 BAY COUNTY, FLORIDA



AL. CERT. OF AUTH. CA-1896E, CA-06211S
 PL. CERT. OF AUTH. 26312-E, 7828-S
 CL. CERT. OF AUTH. 003129, 15F001156
 MS. CERT. OF AUTH. E-00001823

SHEET 1 OF 1

PROJECT No. FL 0012-22
 DATE: FEB. 2023
 SCALE: 1"=30'

DRAWN BY: T. SCARBOROUGH
 APPROVED BY: F. SANTORA

REVISIONS:

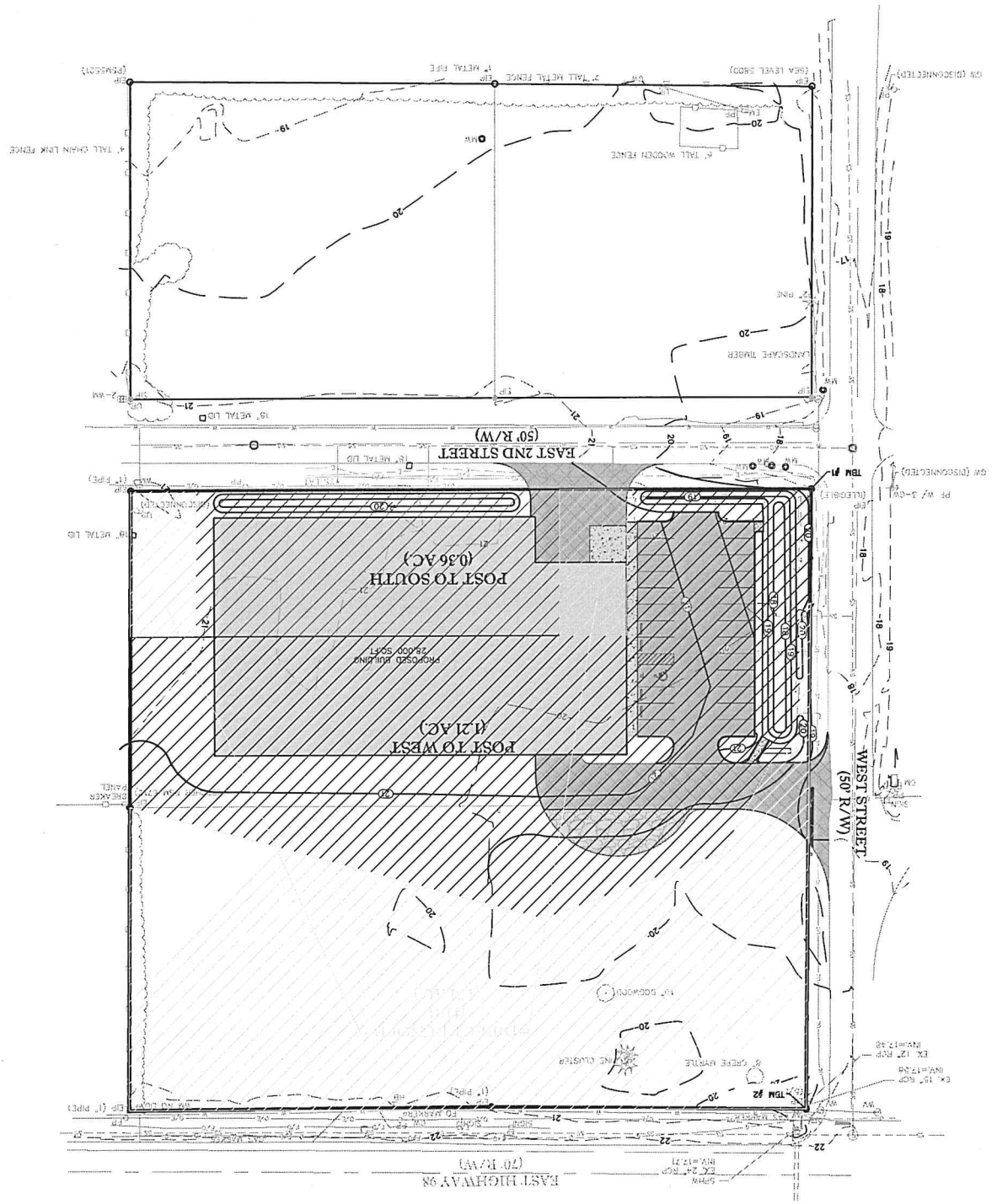
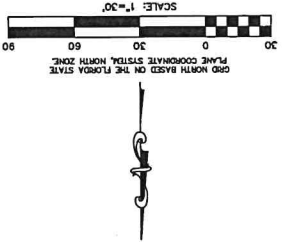
POST-DEVELOPMENT DRAINAGE MAP FOR
 ALL METAL ROOFING & SIDING
 CITY OF PALM BEACH
 BAY COUNTY, FLORIDA



AL CERT. OF AUTH. CA-1896E, CA-06211S
 FL CERT. OF AUTH. 26312-E, 1848-S
 GA CERT. OF AUTH. 003129, LRF001156
 MS CERT. OF AUTH. E-00001825

SHEET 1 OF 1

STUDY AREA=2.88 AC.
 PROPOSED IMPERVIOUS AREA=1.02 AC.
 PROPOSED SITE PERVIOUS AREA=1.86 AC.



Scenario: 100 year (2 hour)

