

Gulfstream Polo Community Development District

Engineer's Report Infrastructure Improvements

Prepared for:

**Gulfstream Polo Community
Development District
Board of Supervisors
Palm Beach County, Florida**

May 15, 2017

Prepared by:



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GULFSTREAM POLO COMMUNITY DEVELOPMENT DISTRICT

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I. Introduction / Project Description

The Gulfstream Polo Community Development District (GSCDD or District) was created for the purpose of financing and managing the construction and maintenance of the public infrastructure for Pods B-E of the Fields at Gulfstream Polo PUD Development, a 224.90 gross acre residential development located south of Lake Worth Road on both sides of Polo Road, west of the Turnpike/LWDD E-2W canal, and north of the LWDD L-14 canal in unincorporated Palm Beach County, Florida. The GSCDD consists of 203.54 acres within the PUD. The Master Plan for Fields at Gulfstream Polo PUD has been approved by Palm Beach County. The GSCDD excludes Pod A of this PUD. The GSCDD will be developed in three phases as follows:

Pod B – 1 single family, 86 zero lot line, and 140 townhome units – Currently under construction
Fields at Gulfstream Polo PUD – Plat One

Pod C & D – 56 single family, 258 zero lot line, and 240 townhome units – Currently in design
Fields at Gulfstream Polo PUD – Plat Two

Pod E - 56 zero lot line and 46 townhome units – No activity at this time

See Site Plan for a graphical representation of the development, attached hereto as Exhibit “B”.

The public infrastructure includes stormwater management consisting of a network of lakes, concrete curbing and gutter in the roadways, and storm drainage; a perimeter buffer containing landscape, irrigation and entry walls; Florida Turnpike sound barrier consisting of a wall and berm; as well as the water distribution systems and sanitary sewer collection and transmission system that will provide service to 57 single-family units, 400 zero lot line units, and 426 townhomes. The estimated cost of these public improvements is \$11,843,996.98, as further detailed in this Engineer’s Report (sometimes collectively referred to as the “Project”).

The District is located south of Lake Worth Road on both sides of Polo Road, west of the Turnpike/LWDD E-2W canal, and north of the LWDD L-14 canal in unincorporated Palm Beach County, Florida. The development may be accessed from the east and west by Polo Road. A location map is attached as Exhibit “A”.

The surface water management system is divided by the LWDD L-13 canal into two separate water management basins. The North Basin will consist of inlets, manholes and storm pipes that direct runoff to the on-site lake system for detention prior to discharge into the Lake Worth Drainage District (LWDD) L-13 Canal adjacent to the south property line. The South Basin will consist of inlets, manholes and storm pipes that direct runoff to the on-site lake system for detention prior to discharge into the Lake Worth Drainage District (LWDD) L-13 Canal adjacent to the north property line and the LWDD E-2W canal along the east property line. In accordance with the Federal Emergency Management Agency (FEMA), the District is within Zone B per FEMA Map Panel 120192 170 A, dated June 2nd, 1992. The minimum road crown has been established at 17.7’ NAVD (North Basin), 17.5’ NAVD (South Basin) and the finish floor of the residences shall be set at a minimum elevation of 19.5’ NAVD (North Basin) and 19.3’ NAVD (South Basin).

II. Purpose and Scope

The purpose of this Engineer's Report is to outline the infrastructure improvements and associated costs. The District Engineer has considered, and, in certain instances, relied upon opinions, information, and documentation prepared or supplied by others, which may have included the developer, contractors, surveyors, legal counsel, and the District's Board of Supervisors, staff, and consultants.

III. Description of the Public Improvements

1. Lake Excavation and Surface Water Management System and Concrete Curbing/Gutter

The surface water management system is divided by the LWDD L-13 canal into two separate stand-alone water management basins. The North Basin (Pods A & B of the PUD and a portion of Polo Road south of Lake Worth Road) will consist of inlets, manholes and storm pipes that direct runoff to the on-site lake system for detention prior to discharge into the Lake Worth Drainage District (LWDD) L-13 Canal adjacent to the south property line. The South Basin (Pods C, D, and E of the PUD and the adjacent Polo Road) will consist of inlets, manholes and storm pipes that direct runoff to the on-site lake system for detention prior to discharge into the Lake Worth Drainage District (LWDD) L-13 Canal adjacent to the north property line and the LWDD E-2W canal along the east property line. Both systems also include the littoral area planting and maintenance. The surface water management system is located in easements granted to the GSCDD (See Exhibit 'B') or in easements to be granted to the GSCDD (See Exhibit 'C'). The surface water management system in Pod B is substantially complete, but no other surface water management systems for any of the phases have been constructed.

The lake excavation for the project consists of the contractor's mobilization, supervision, clearing and grubbing, demolition, dewatering, lake excavation to 12 feet below design water level, and stockpiling the material adjacent to the lake. These activities also include storm water pollution prevention measures. The excavated material will be used onsite to construct the roads and house pads, but the cost to transport and place the excavated material is not included. As of the date of this report, lake excavation for Pod B in the North Basin is substantially complete.

The on-site common roadways, which will be private with a gated entrance, consist of two and four lane urban sections. The stormwater components include concrete curb and gutter and concrete valley gutter which are an integral part of the surface water management system. Only the stormwater components of the curb and gutter and valley gutter will be funded by the GSCDD. The remaining private part of the roads are not being funded by the GSCDD. The roadways are located in tracts to be deeded to the Homeowner's Association with an easement granted to the GSCDD (See Exhibit 'B') for drainage, water, and sewer purposes. As of the date of this report, The valley gutter and curb and gutter within Pod B has been substantially complete, but nothing has been started in other Pods.

2. Water Distribution System

The onsite water distribution system is composed of 6" and 8" diameter mains, fire hydrants, and water services to all of the lots for potable service and fire protection. There is a 12" diameter watermain proposed on Polo Road, but since this is considered an offsite improvement

it has not been included. There are four connection points for the Project; one to the existing 12" main on the north side of Lake Worth Road at Blanchette Trail and three to the existing 12" main in Polo Road. The 6" ductile iron water mains branch from the main lines to serve the fire hydrants. As of the date of this report, all the water main within Pod B has been installed, but testing has not been completed. No water main installation has commenced in other Pods.

3. Sanitary Sewer Collection and Transmission System

The sewage collection and transmission system consists of two lift stations, 6" on-site force main, 6" off-site forcemain, 8" polyvinyl chloride (PVC) gravity pipe, manholes and 6" service laterals. The Pod B lift station is located at the northeast corner of the project, on the west side of San Fratello Circle. The lift station has been sized to accommodate additional development outside the boundaries of the GSCDD. The increased size of the lift station and force to accommodate the additional sewer flow is approximately 25% so the unit cost of those items has been reduced accordingly. The Pod C and D lift station is located near the northwest corner of San Fratello Circle and Cinch Way and will only be designed to accommodate the Pod C and D development. The 6" force main extends west and north on-site to Polo Road then north to a proposed 6" force main located just south of the LWDD L-13 canal. Pod E is served by an existing 8" gravity main stub located on the west side of the property. The 8" PVC gravity pipe extends throughout the project to serve all the units. As of the date of this report, the sewer in Pod B is nearly complete, but no testing has been completed. No sewer installation has commenced in other Pods.

4. Florida's Turnpike Sound Barrier

Due to the proximity of the project to the Florida's Turnpike, Palm Beach County required a sound barrier along the east property line to mitigate future traffic noise. A traffic noise study was performed by RS&H, Inc. and reviewed by the Florida Department of Transportation and Palm Beach County. The sound barrier is generally a combination of 6-foot high berm and 10-foot high wall to obtain the required height along the east property line and about 300 feet of 10-foot high wall extending west at each end of the wall. The berm and wall will be owned and maintained by the GSCDD and will be located in an easement granted to the GSCDD on land owned by the homeowner's association.

5. Perimeter Buffer

The project is surrounded by a buffer within an easement granted to the GSCDD on land owned by the homeowner's association. The buffer will contain landscaping, irrigation, fence, and project sign walls at the entrances to Pods B and C.

IV. Ownership and Maintenance

The District will finance the construction and acquisition of the improvements necessary for their operation and maintenance. As appropriate, some infrastructure will be transferred to other entities as summarized below:

Description	Future Ownership and Maintenance
• Surface Water Management Facilities	GSCDD
• Water Distribution Facilities	PB County Water Utilities Department
• Sanitary Sewer System	PB County Water Utilities Department
• Florida's Turnpike Sound Barrier	GSCDD
• Perimeter Buffer	GSCDD

V. Permitting Status**1. Roads /Drainage / Earthwork – Pod B Only**

1. Palm Beach County Land Development Permit 0969-001-11621-16 issued 2-1-2017
2. Approved South Florida Water Management District, May 2, 2016 (Permit No. 50-11013-P, Application No. 160215-23).
3. Approved South Florida Water Management District, July 12, 2016 (Permit No. 50-11013-P, Application No. 160617-4).
4. Lake Worth Drainage District 16-4965D.20
5. Approved Palm Beach County ERM (Lake Excavation Permit), May 25, 2016, Permit No. E201605
6. Approved Palm Beach County ERM (Protection of Native Vegetation Permit), June 10, 2016, Permit No. PNV-2016-008
7. Approved Florida Department of Environmental Protection, February 26, 2016 NPDES NOI (Project ID: FLR20AO86)
8. Department of the Army Permit (Permit No. SAJ-2015-01550(SP-SLR)
9. Florida Department of Transportation Driveway Permit No. 16A-496-0073-93180

2. Water Distribution – Pod B Only

1. Approved Palm Beach County Water Utilities Department Permit No. WUD 16-548 on September 1, 2016
2. Approved Florida Department of Health on September 27, 2016 (Permit No. 138303-498-DSGP)
3. Approved Palm Beach County Fire Department on August 16, 2016

3. Sewage Collection and Transmission System – Pod B Only

1. Approved Palm Beach County Water Utilities Department Permit No. WUD 16-548 on September 1, 2016
2. Approved Florida Department of Health on September 27, 2016 (Permit No. 138303-499-DWC)

4. Water Use – Irrigation & Construction Dewatering – Pod B Only

1. Approved South Florida Water Management District, July 1, 2016 (Permit No. 50-11076-W, Application No. 160215-19)
2. Approved South Florida Water Management District, June 27, 2016 (Permit No. 50-11036-W, Application No. 10222-11)

5. **Pod C** – The engineering plans for Pod C have been completed and are currently being permitted.

VI. Estimate of Total Capital Improvements Combined	
Pod B	\$ 3,517,290.40
Pod C	\$ 3,959,817.61
Pod D	\$ 3,118,065.67
<u>Pod E</u>	<u>\$ 1,248,823.30</u>
Infrastructure Cost Grand Total	\$11,843,996.98

The following is a breakdown of the infrastructure cost by description of work:

Lake Excavation	\$ 1,513,916.21
Florida's Turnpike Sound Barrier	\$ 483,840.00
Perimeter Buffer	\$ 1,797,419.18
Drainage	\$ 3,073,268.18
Water Distribution System	\$ 2,041,525.70
Sanitary Sewer Collection and Transmission	<u>\$ 2,934,027.71</u>
Infrastructure Cost Grand Total	\$11,843,996.98

The total benefit and total cost of the infrastructure, inclusive of financing costs, will be allocated to each residential unit within the development in the form of special assessments, in accordance with the approved methodology described in the "Special Assessment Methodology Report" prepared for the District by Special District Services, Inc. Soft costs for permit fees; engineering design, permitting, and construction inspection; surveying stake-out and as-builts; and geotechnical testing for the construction phase have been included in each of the above categories in the amount of 7% of the subtotal. A 5% contingency has also been included.

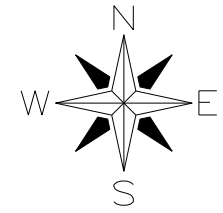
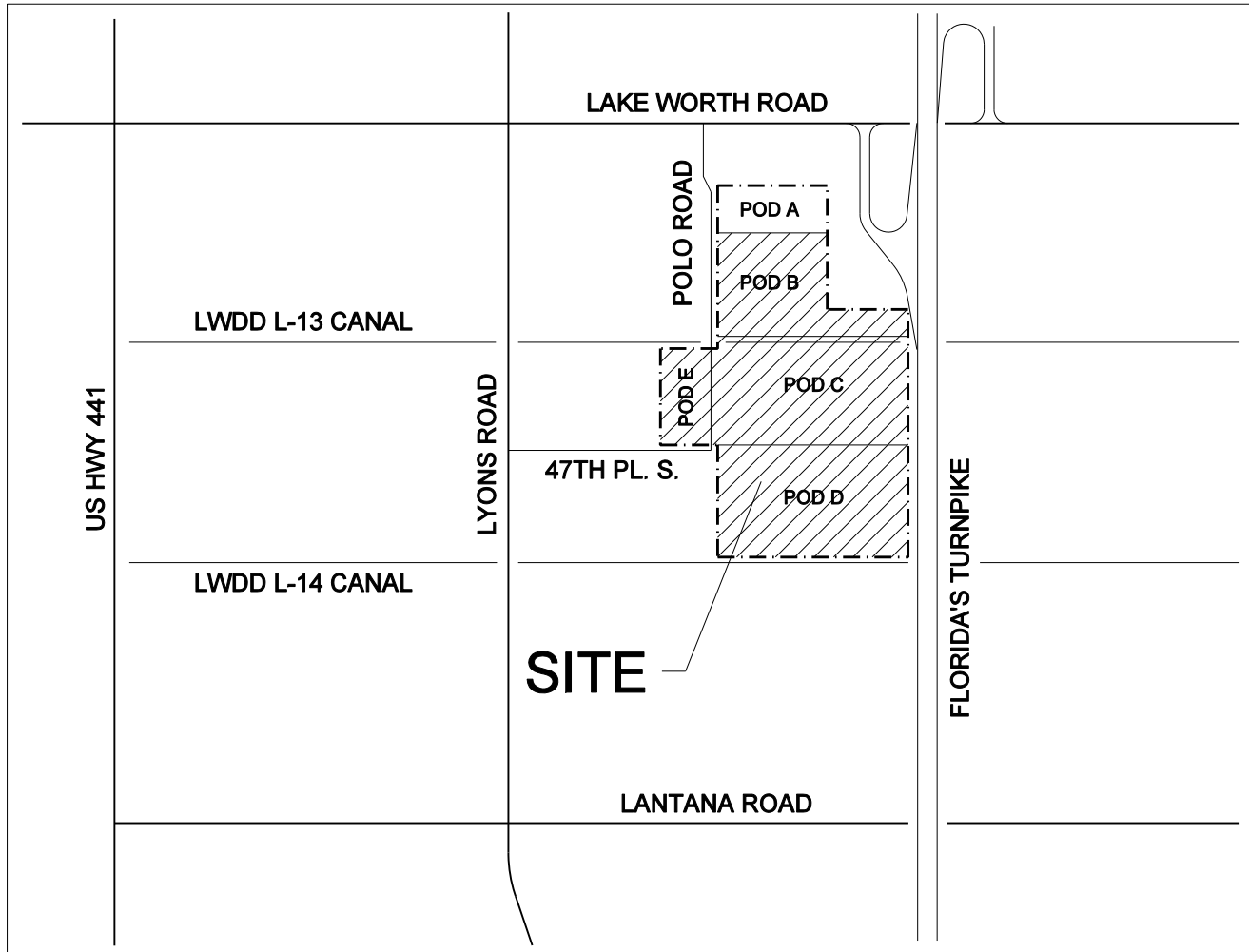
VII. Engineer's Certification

It is our opinion that the extent of proposed improvements and their estimated costs are fair and reasonable and provide a direct and special benefit to the properties located within the District. We believe that those improvements not yet completed can be permitted, constructed, and installed at the estimated costs described in the report.

I hereby certify that the foregoing instrument is a true and correct copy of the Engineer's Report of Gulfstream Polo Community Development District.

Schnars Engineering Corporation


Jeffrey T. Schnars, P.E.
 For the Firm
 Civil Engineer
 Florida Registration No. 46697
 Certificate of Authorization No. 6640
 GSCDD Engineer



NOT TO SCALE

LOCATION MAP
SEC 29, TWP 44S, RGE 42E

LEGEND

-  FIELDS AT GULFSTREAM POLO P.U.D.
-  GULFSTREAM POLO C.D.D.

SCHNARS
ENGINEERING CORPORATION

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 Certificate of Authorization #6640

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PROJECT:

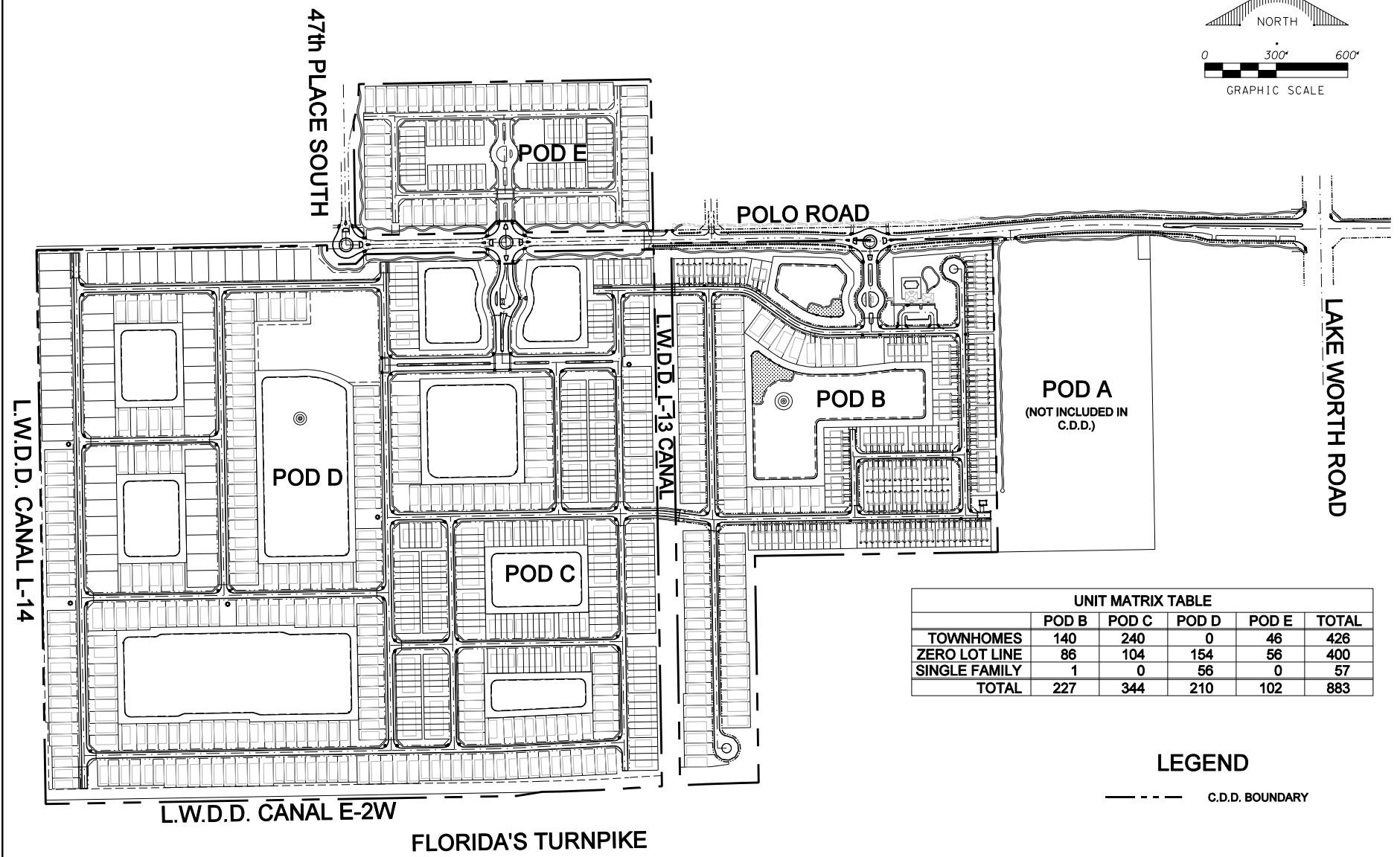
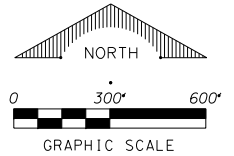
GULFSTREAM POLO
COMMUNITY DEVELOPMENT DISTRICT

TASK:

EXHIBIT A

JOB NO. 14132
 DRAWN FM
 DESIGNED JTS
 CHECKED JWM
 Q.C. JTS

SHEET 1 of 1



UNIT MATRIX TABLE

	POD B	POD C	POD D	POD E	TOTAL
TOWNHOMES	140	240	0	46	426
ZERO LOT LINE	86	104	154	56	400
SINGLE FAMILY	1	0	56	0	57
TOTAL	227	344	210	102	883

LEGEND

----- C.D.D. BOUNDARY

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ENGINEERING CORPORATION

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PROJECT:

**GULFSTREAM POLO
COMMUNITY DEVELOPMENT DISTRICT**

TASK:

EXHIBIT B

JOB NO. 14132
DRAWN FM
DESIGNED JTS
CHECKED JWM
Q.C. JTS
SHEET 1 of 1