



STATE OF FLORIDA
DEPARTMENT OF HEALTH
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM
SITE EVALUATION AND SYSTEM SPECIFICATIONS

PERMIT #. _____

APPLICANT: _____ AGENT: _____

LOT: _____ BLOCK: _____ SUBDIVISION: _____

PROPERTY ID #: _____ [Section/Township/Parcel No. or Tax ID Number]

TO BE COMPLETED BY ENGINEER, HEALTH DEPARTMENT EMPLOYEE, OR OTHER QUALIFIED PERSON. ENGINEERS
MUST PROVIDE REGISTRATION NUMBER AND SIGN AND SEAL EACH PAGE OF SUBMITTAL. COMPLETE ALL ITEMS.

PROPERTY SIZE CONFORMS TO SITE PLAN: ☐ YES ☐ NO NET USABLE AREA AVAILABLE: _____ ACRES

TOTAL ESTIMATED SEWAGE FLOW: _____ GALLONS PER DAY [RESIDENCES-TABLE 1/OTHER-TABLE2]

AUTHORIZED SEWAGE FLOW: _____ GALLONS PER DAY [1500 GPD/ACRE OR 2500 GPD/ACRE]

UNOBSTRUCTED AREA AVAILABLE: _____ SQFT UNOBSTRUCTED AREA REQUIRED: _____ SQFT

BENCHMARK/REFERENCE POINT LOCATION: _____

ELEVATION OF PROPOSED SYSTEM SITE IS _____ [INCHES/FT] [ABOVE/BELOW] BENCHMARK/REFERENCE POINT

THE MINIMUM SETBACK WHICH CAN BE MAINTAINED FROM THE PROPOSED SYSTEM TO THE FOLLOWING FEATURES

SURFACE WATER: _____ FT DITCHES/SWALES: _____ FT NORMALLY WET? ☐ YES ☐ NO

WELLS: PUBLIC: _____ FT LIMITED USE: _____ FT PRIVATE: _____ FT NON-POTABLE: _____ FT

BUILDING FOUNDATIONS: _____ FT PROPERTY LINES: _____ FT POTABLE WATER LINES: _____ FT

SITE SUBJECT TO FREQUENT FLOODING: ☐ YES ☐ NO 10 YEAR FLOODING? ☐ YES ☐ NO

10 YEAR FLOOD ELEVATION FOR SITE: _____ FT MSL/NGVD SITE ELEVATION: _____ FT MSL/NGVD

SOIL PROFILE INFORMATION SITE 1 Elev: 12.32'

MUNSELL #/COLOR	TEXTURE	DEPTH
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
USDA SOIL SERIES: _____		

SOIL PROFILE INFORMATION SITE 2 Elev: 12.30'

MUNSELL #/COLOR	TEXTURE	DEPTH
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
_____	_____	TO
USDA SOIL SERIES: _____		

OBSERVED WATER TABLE: _____ INCHES [ABOVE / BELOW] EXISTING GRADE. TYPE: [PERCHED / APPARENT]

ESTIMATED WET SEASON WATER TABLE ELEVATION: _____ INCHES [ABOVE / BELOW] EXISTING GRADE

HIGH WATER TABLE VEGETATION: ☐ YES ☐ NO MOTTLING: ☐ YES ☐ NO DEPTH: _____ INCHES

SOIL TEXTURE/LOADING RATE FOR SYSTEM SIZING: _____ DEPTH OF EXCAVATION: _____ INCHES

DRAINFIELD CONFIGURATION: ☐ TRENCH ☐ BED ☐ OTHER (SPECIFY) _____

REMARKS/ADDITIONAL CRITERIA: _____

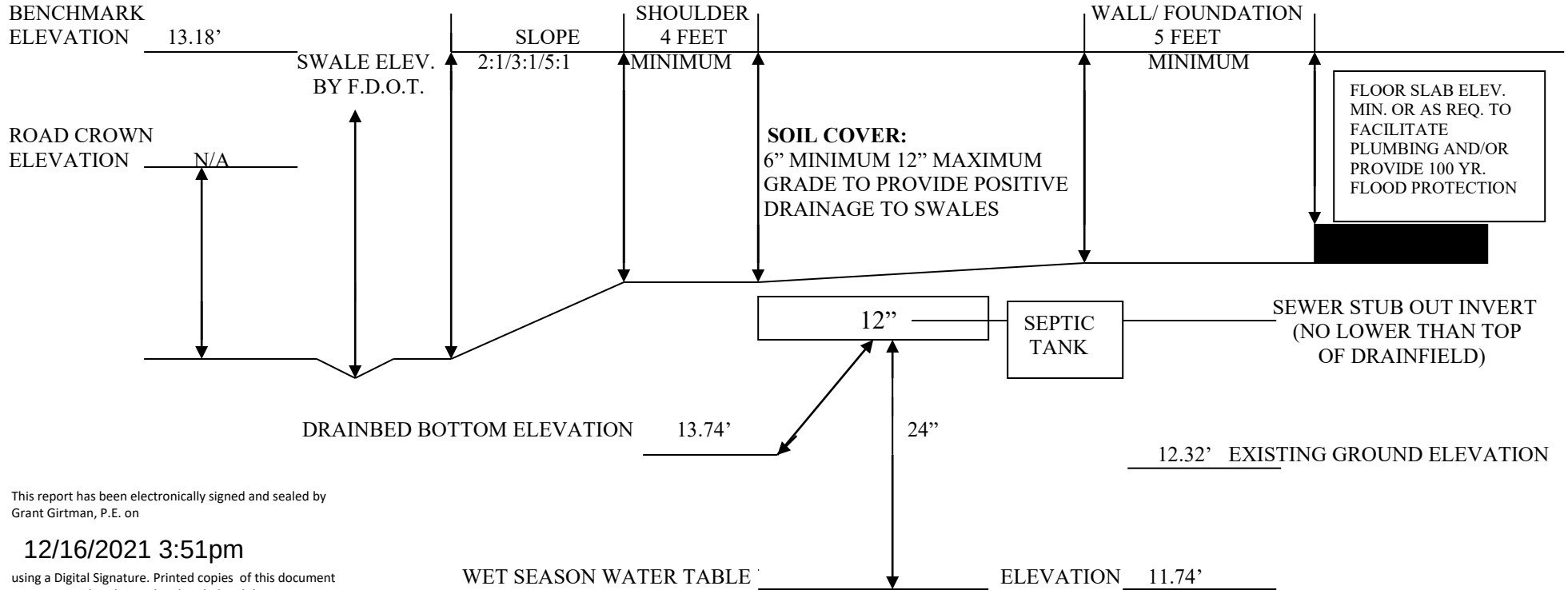
This report has been electronically signed and sealed by
Grant Girtman, P.E. on

12/16/2021 3:50pm

SITE EVALUATED BY: H. E. H. using a Digital Signature. Printed copies of this document
are not considered signed and sealed and the signature
must be verified on any electronic copies.

PROPOSED INSTALLATION SITE PROFILE

ADDRESS: 99 Desoto Blvd LOT: TR 72 BLOCK: N/A UNIT: 79 PERMIT # _____
CITY: Naples SUBDIVISION Golden Gate Estates STRAP # 40806320009



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Grant Girtman, P.E. on

12/16/2021 3:51pm

using a Digital Signature. Printed copies of this document
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must be verified on any electronic copies.

DESIGN BY: Kelly E. Hill, CEHP
COMPANY: Accepted By:
Commercial-Residential Structural Engineering, Inc.
Grant Girtman, P.E. FL#57458 CA # 28397
ADDRESS: 10491 Six Mile Cypress Pkwy, Ste 283
CITY, STATE, ZIP: Fort Myers, FL 33966
PHONE: 239-274-6818
ENGINEER'S SEAL: _____

PREScribed CORRECTIONS: Excavation = 0" Below Existing Ground or to
12" of Slightly Limited Material

CONSTRUCTION CERTIFICATION BY A PROFESSIONAL ENGINEER MAY BE REQUIRED

Low Pressure Dosing Specs

ESTIMATED SEWAGE FLOWS:

TOTAL FLOWS: = 1495 GPD

DRAINFIELD SIZE:

1495 GPD @ 0.80gal/ft²/day = 1869 ft²

Total of 126 Arc 24's with 1890-sqft

ARC 24 DRAINBED in Trenches

126 Arcs

7 Trenches 18 Arcs per Trench

LOW PRESSURE DESIGN:

1. HOLE DIAMETER & HOLE SPACING FOR LATERALS:

- a. HOLE DIAMETER = 5/32"
- b. HOLE SPACING = 60" O.C.

3. LATERAL DIAMETER:

- a. 1" DIAMETER
- b. HOLE SPACING = 60" O.C.

LATERAL DISCHARGE RATE:

MAINTAIN 3' HEAD (1.3 P.S.I.), GIVEN HOLE DIA.
THEREFORE; DISCHARGE RATE = 0.50 G.P.M./HOLE

NUMBER OF HOLES PER LATERAL = 18

90' LATERAL DISCHARGE RATE
= 18 X 0.5 G.P.M. = 9 G.P.M.

MANIFOLD SIZE:

MANIFOLD LENGTH = 1 @ 23' (Header)

MANIFOLD DIAMETER = 4"

Lateral ends shall be capped

MINIMUM DOSE VOLUME:

7 LATERALS

LATERAL DIAMETER 1"

LATERALS LENGTH 90'

CHECK PIPE VOLUME :

$R = (D/2) = 0.5" = 0.042'$

$V = \text{NUMBER OF LATERALS} \times (3.14 \times R^2) \times \text{LENGTH}$

$V = 7 \times (3.14 \times 0.042^2) \times 90'$

$V = 3.49 \text{ CF} = 26.10 \text{ GALL}$

90' PIPE VOLUME = 3.72 GALLONS/LATERAL

NUMBER OF DOSES:

NUMBER OF DOSES = DAILY FLOW / DOSE VOLUME

4 = 1495 GPD / 374 GALL PER DOSE

MINIMUM DISCHARGE RATE:

PUMP = 80 G.P.M.

PUMP RUN TIME:

RUN TIME = MIN. DOSE VOLUME / MIN. DISCHARGE RATE

= 374 GAL / 80 GPM

= 4.7 MINUTES

DESIGN SUMMARY:

LATERAL LENGTH (7) @ 90'

HOLE DIAMETER = 5/32"

HOLE SPACING = 60"

LATERAL DIAMETER = 1"

MANIFOLD SIZE = 4"

MANIFOLD LENGTH = 1 @ 23' (Header)

DELIVER PIPE = 2"

LATERAL DISCHARGE RATE = (7) @ 11.5 G.P.M./lateral

PUMPS FOR DOSING:

80 GPM & 9' TDH - SIZE CRITERIA

(2) 1.0 HP Myers High Submersible Sewage Pump or Equivalent

This report has been electronically signed and sealed by
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SITE ADDRESS: 99 Desoto Blvd
Naples, FL 34117
Tr 72 Golden Gate Estates

12/16/2021 3:51pm

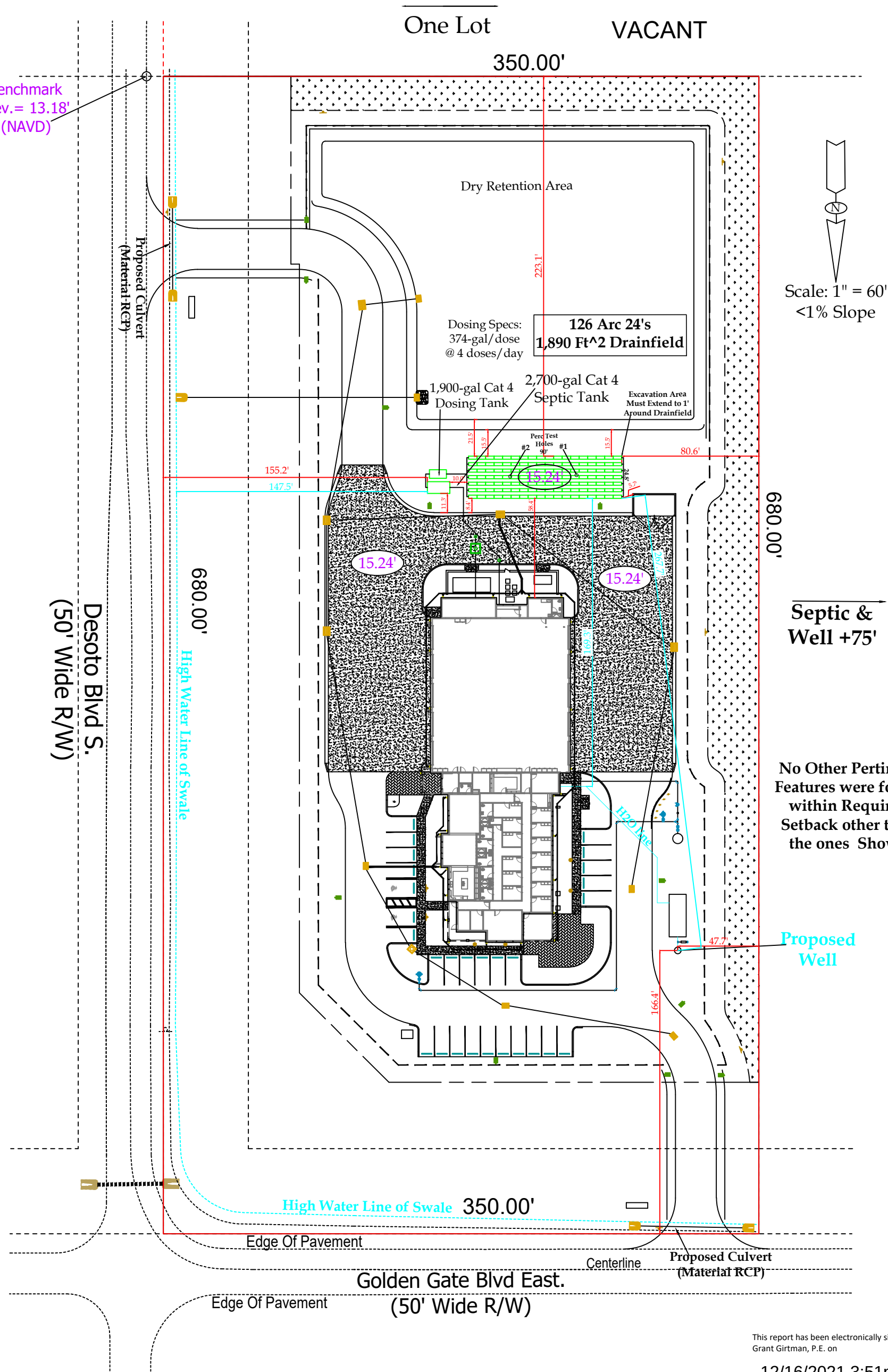
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must be verified on any electronic copies.



Land Perc, Inc.
5475 Lee St, #302
Lehigh Acres, FL 33971

DRAWN BY: Drawn By KEH
21-24301
Original 12-15-21

CHECKED BY:
Grant C. Girtman, P.E., PE # 57458 CA # 28397
Commercial-Residential
Structural Engineering, Inc.
10491 Six Mile Cypress Pkwy, Ste 283
Fort Myers, FL 33966
239-274-6818



Scale: 1" = 60'
<1% Slope

Septic & Well +75'

No Other Pertinent Features were found within Required Setback other than the ones Shown

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Site Address: 99 Desoto Blvd., Naples, FL 34117 TR 72 Unit 79Golden Gate Estates	NOTE: THIS DRAWING IS NOT A SURVEY. THIS DRAWING IS TO BE USED FOR SEPTIC SYSTEM PERMITTING AND INSTALLATION ONLY. THE CONTRACTOR SHALL ENSURE THAT ALL STRUCTURES MEET SETBACK REQUIREMENTS AND VERIFY ALL SETBACKS, DIMENSIONS, AND FINISH FLOOR ELEVATION PRIOR TO PERMITTING AND CONSTRUCTION.	
 Land Perc, Inc. 5475 Lee Street Lehigh Acres, FL 33971 Unit 302	USE OF ALTERNATIVE STATE APPROVED PRODUCTS IS ACCEPTABLE FOR INSTALLATION PER ENGINEER DRAWN BY: Drawn By AAR 21-24301-Delisi Original 12-14-2021	ACCEPTED BY: Grant C. Girtman, P.E., PE # 57458 CA # 28397 Commercial-Residential Structural Engineering, Inc. 10491 Six Mile Cypress Pkwy, Ste 283 Fort Myers, FL 33966 239-274-6818

K:\1575- EMS 74 GOLDEN GATE ESTATES\SD\PLAN SET\1575-05-UTILITY PLANDWG
9/27/2021 10:03 AM

GENERAL UTILITY NOTES:

1. ALL UTILITY CONSTRUCTION TO BE IN ACCORDANCE COLLIER COUNTY TECHNICAL SPECIFICATIONS AND DETAILS, LATEST EDITION.
2. CONTRACTOR TO VERIFY THE SIZE AND LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION.
3. LOCATIONS OF PROPOSED UTILITY LINES ARE SUBJECT TO MODIFICATIONS TO PRESERVE ANY EXISTING VEGETATION AS DETERMINED BY THE ENGINEER.
4. WHEN REFERENCING IMPROVEMENTS ADJACENT TO THE SUBJECT PROPERTY THE WORD "EXISTING" (OR ABBREVIATED "EX.") SHALL MEAN IMPROVEMENTS PROPOSED BY THE DEVELOPER WHICH ARE INTENDED TO BE CONSTRUCTED PRIOR TO OR CONCURRENT WITH THIS PROJECT.
5. NO TREES OR SHRUBS SHALL BE PLACED SO AS TO BLOCK ACCESS OR LINE OF SIGHT TO FIRE HYDRANTS PLACED WITHIN LANDSCAPE ISLANDS THROUGHOUT THE PROJECT SITE.
6. CONTRACTOR TO PROVIDE UTILITY RECORD DRAWINGS TO OWNER AND ENGINEER PRIOR TO FINAL PAYMENT REQUEST.
7. ALL UNDERGROUND UTILITIES LOCATED BENEATH THE STABILIZED PORTION OF THE ROAD BED SHALL BE INSTALLED PRIOR TO COMPACTION OF THE SUBGRADE.
8. CONTRACTOR SHALL NOTIFY ALL UTILITY PROVIDERS AT LEAST 48 HOURS PRIOR TO THE START OF UNDERGROUND CONSTRUCTION THE CONTRACTOR SHALL DETERMINE IF UTILITIES OTHER THAN THOSE SHOWN THE PLANS EXIST.
9. CONTRACTOR TO EXERCISE CARE TO PROTECT THE ROOTS OF TREES TO REMAIN WITH THE BRANCH SPREAD OF SUCH TREES. PERFORM ALL TRENCHING BY HAND. OPEN THE TRENCH ONLY WHEN UTILITIES CAN BE INSTALLED IMMEDIATELY. PRUNE INJURED ROOTS CLEANLY AND BACKFILL AS SOON AS POSSIBLE.
10. THE CONTRACTOR IS REQUIRED TO ADJUST ALL EXISTING AND PROPOSED VALVE BOXES, MANHOLE RIMS, GRATES, ETC. AS REQUIRED TO MATCH THE PROPOSED GRADES.

11. CASINGS AND/OR CONDUIT SHALL EXTEND FIVE (5) FEET BEYOND THE EDGE OF PAVEMENT, BACK OF CURB AND/OR SIDEWALK AT EACH END AND SHALL BE INCLUDED IN RECORD DRAWINGS TO THE ENGINEER.
12. CONTRACTOR TO INSTALL WATER MAINS SUCH THAT 18" OF MINIMUM CLEARANCE IS PROVIDED FROM EXISTING FORCE MAINS. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
13. CONTRACTOR TO VERIFY INVERT ELEVATION AND LOCATION OF EXISTING SANITARY SEWER MANHOLES OR FORCE MAINS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
14. ALL GRAVITY SEWER LINES SHALL BE PVC (SDR 26), GREEN IN COLOR, UNLESS OTHERWISE NOTED.
15. ALL SANITARY SEWER SERVICES TO BE 6" IN DIAMETER, UNLESS OTHERWISE NOTED.
16. A SEPARATE PERMIT IS REQUIRED PRIOR TO INSTALLATION OF ANY FIRE LINE.
17. INSTALLATION OF ALL UNDERGROUND FIRE LINES SHALL COMPLY WITH THE 2007 EDITION OF THE NFPA 24.
18. UNDERGROUND FIRE LINES SHALL BE PERMITTED AND INSTALLED BY AN APPROPRIATELY CERTIFIED FIRE SPRINKLER CONTRACTOR OR A TYPE V UNDERGROUND CONTRACTOR AS DEFINED AND OUTLINED IN 633.021, 633.521 AND 633.539 F.S.
19. ALL FIRE HYDRANTS, FIRE DEPARTMENT CONNECTIONS (FDC) AND POST-INDICATING VALVES (PIV) SHALL BE VISIBLE AND ACCESSIBLE. THEY SHALL NOT BE OBSTRUCTED VISUALLY OR FUNCTIONALLY BY TREES OR LANDSCAPING.
20. ALL FIRE MAINS CONSTRUCTED UNDER PAVEMENT SHALL BE A MINIMUM OF 36" DEEP PER NFPA 24, 2007 EDITION.
21. COSTS AND EXPENSES OF ANY AND ALL REPAIRS, REPLACEMENTS, MAINTENANCE AND RESTORATION OF ABOVE-GROUND IMPROVEMENTS PERMITTED WITHIN A COUNTY UTILITY EASEMENT SHALL BE THE SOLE FINANCIAL RESPONSIBILITY OF THE GRANTOR, ITS SUCCESSORS OR ASSIGNS.

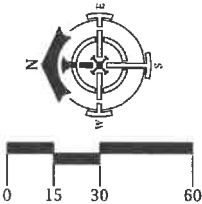
FIRE FLOW REQUIREMENTS:

14,082 SF EMS STATION
CONSTRUCTION TYPE: IIB
FROM NFPA1 TABLE 16.4.5.2.1, THE REQUIRED FIRE FLOW
WITH SPRINKLERS IS 1,000 GPM

EX. GOLDEN GATE BOULEVARD EAST

PROPERTY
BOUNDARY

EX. DESOTO BOULEVARD SOUTH

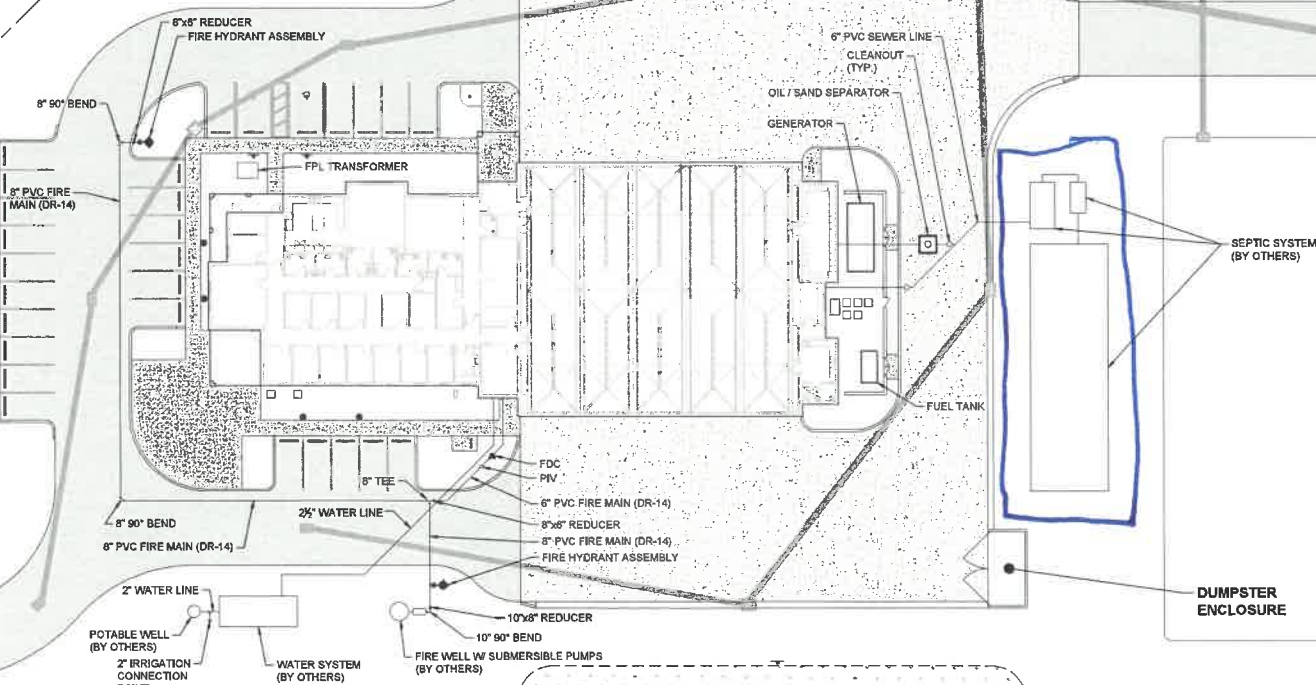


VACANT

DRY
DETENTION
AREA

PROPERTY
BOUNDARY

EX. RESIDENTIAL



DELISI FITZGERALD, INC.
Planning - Engineering - Project Management



1605 Hendry Street
Fort Myers, FL 33901
(239) 418-0691
(239) 418-0692 fax

Florida Certificate
of Authorization
Engineering LS #26978

ENGINEER OF RECORD:
JOHN T. WOODARD P.E. (FOR THE FIRM)
FLORIDA P.E. NO. 58217

NOT VALID WITHOUT SEAL, SIGNATURE AND DATE

OWNER / DEVELOPER

COLLIER COUNTY DIVISION OF FACILITIES MANAGEMENT

3335 TAMMAM TIALE
NAVES, FL 34112
(239) 255-9906

PROJECT:

EMS 74 GOLDEN GATE ESTATES

PLAN REVISIONS

DATE

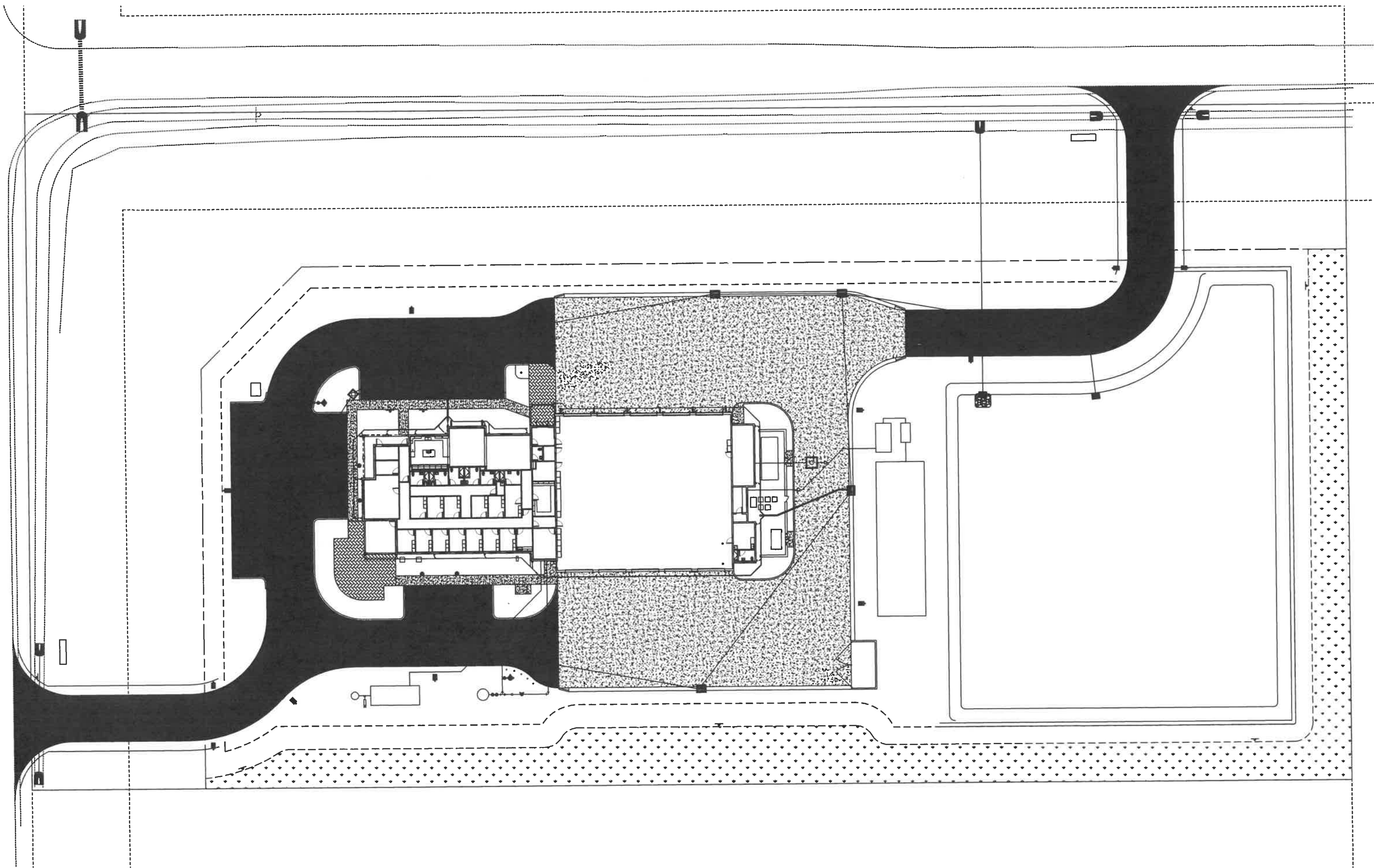
DESCRIPTION

UTILITY PLAN

Project Manager	JTW
Drawn By	CAS
Checked By	JTW
Project Number	21575
Located in Section(s)	9
Township	49 S
Range	28 E
County, State	COLLIER COUNTY, FL

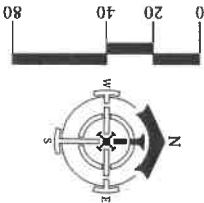
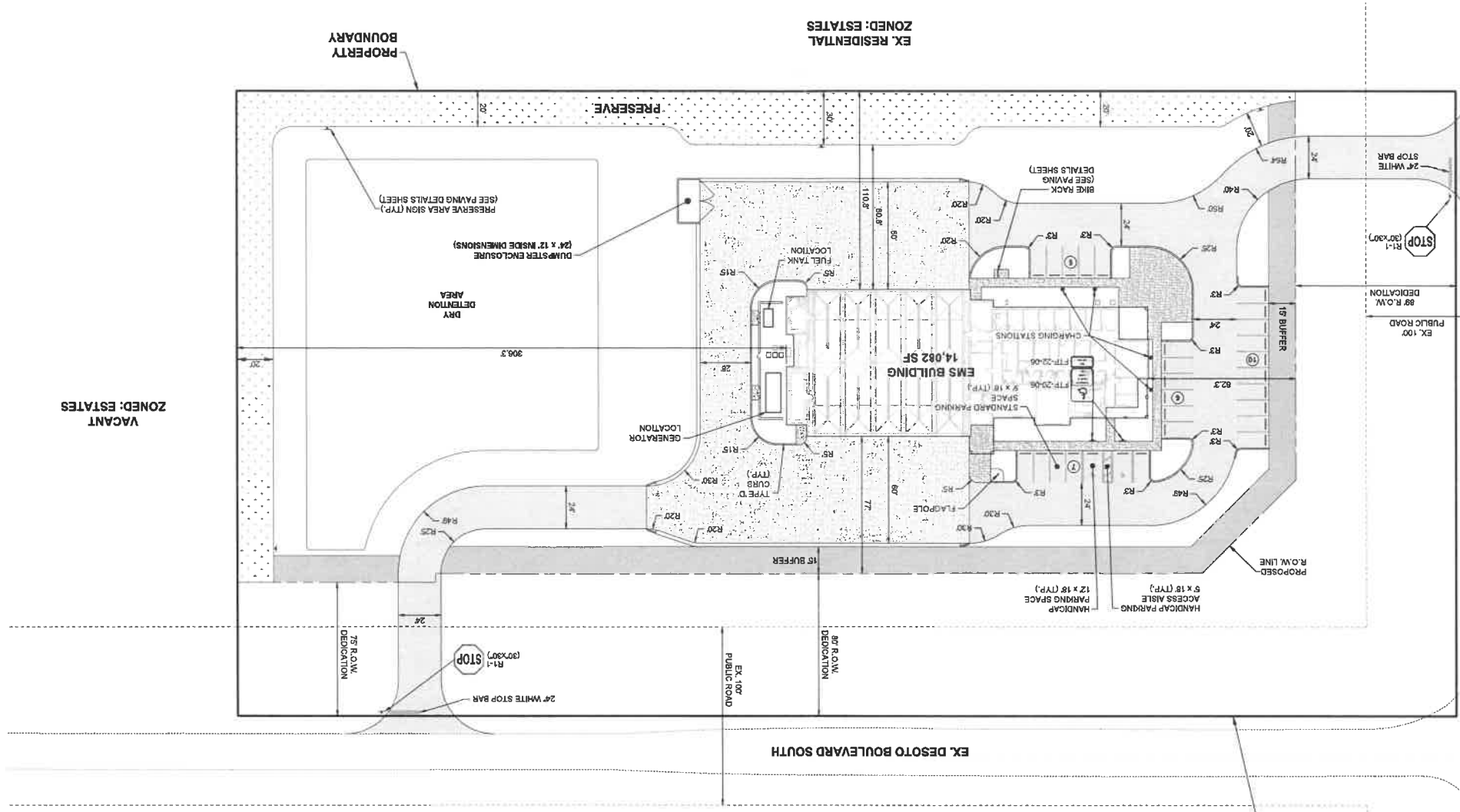
Status
FOR CONSTRUCTION
SUBJECT TO ALL PERMIT APPROVALS

Sheet Number: 5



VACANT
ZONED: ESTATES

EX. GOLDEN GATE BOULEVARD EAST



DESIGN:
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1. ALL CONTRACTORS AND SUB-CONTRACTORS SHALL MAINTAIN THEIR WORK AND THE SITE RELATIVE TO THEIR WORK IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND ALL REQUIREMENTS OF THE PROJECT N.P.D.S. PERMIT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE TO DEMONSTRATE COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL PERMITTING LAWS.
3. ALL CONTRACTORS SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL PERMITTING LAWS.
4. THE CONTRACTOR SHALL RETAIN ON THE WORK SITE AT ALL TIMES COPIES OF ALL PERMITS NECESSARY FOR ANY CONSTRUCTION.
5. THE CONTRACTOR SHALL NOTIFY THE OWNER AND CONTACT ALL UTILITY COMPANIES FOR LOCATIONS OF EXISTING UTILITIES IN THE AREA 24 HOURS (MINIMUM) PRIOR TO COMMENCING CONSTRUCTION.
6. THE LOCATION OF EXISTING UTILITIES, SIDEWALKS, AVERAGE VEGETATION AND MISCELLANEOUS IMPROVEMENTS ARE TO BE IDENTIFIED AND LOCATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO COMMENCING ANY CONSTRUCTION.
7. THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 IS THE BENCHMARK DATUM FOR THIS PROJECT.
8. ANY PUBLIC ROAD AND CORNER WITHIN LIMITS OF CONSTRUCTION IS TO BE PROTECTED, AND LAND CORNER MONUMENT IN DANGER OR BEING DESTROYED MUST BE PROPERLY REPERMANENTED BY THE CONTRACTOR.
9. EXISTING IMPROVEMENTS SHALL BE RESTORED TO A CONDITION EQUIVALENT TO THAT WHICH EXISTED PRIOR TO COMMENCING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL REPORT ALL CHANGES AND VARIATIONS IN PLAN INFORMATION TO THE ENGINEER AND OWNERS REPRESENTATIVE IMMEDIATELY.
11. THE CONTRACTOR IS REQUIRED TO OBTAIN FROM THE ENGINEER WRITTEN APPROVAL FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
12. UNDERSTOOD AND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND WIDTH OF ALL TRENCHES AND AVOID OBSTRUCTIONS OR OBSTRUCTIONS SHALL BE PLACED ON OR NEARBY AND BE PROTECTED BY THE OWNER. CONTRACTOR SHALL NOT REMOVE OR CHAIN ANY TREES AND/OR SHRUBS WITHOUT PRIOR APPROVAL OF THE OWNER.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT. THE CONTRACTOR SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL PERMITTING LAWS.
14. THE APPROVAL OF THESE CONSTRUCTION PLANS DOES NOT AUTHORIZE CONSTRUCTION OF REQUIRED IMPROVEMENTS THAT ARE INCONCLUSIVE OF THESE CONSTRUCTION PLANS BY THE ENGINEER OF RECORD.
15. ALL RIGHT EXCEPT VEGETATION SHALL BE REMOVED FROM THE SITE AND MAINTAINED FREE OF EXCORTS IN PERPETUITY. ALL LIGHT POLICE LIGHT SHALL NOT EXCEED 20 FT. LIGHT POLES MUST BE 2.5 FT MINIMUM FROM ANY TREE.

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BUILDING DESIGN STANDARDS		DESIGN STANDARD	PER RESOLUTION ZI-20
	REQUIRED	FRONT YARD SETBACK (GOLDEN GATE BLVD.)	MAX. BUILDING HEIGHT - ACTUAL (PRINCIPAL)
		FRONT YARD SETBACK (RESISTO BLVD.)	MAX. BUILDING HEIGHT - ZONED (PRINCIPAL)
		SIDE YARD SETBACK (SOUTH)	MAX. BUILDING HEIGHT - ACTUAL (ACCESSORY)
		SIDE YARD SETBACK (WEST)	MAX. BUILDING HEIGHT - ZONED (ACCESSORY)
62.5'		PRESERVE SETBACK	N/A
77'			N/A
106.3'			N/A
110.6'			N/A
90.8'			N/A
10'			N/A
25'			N/A
35'			N/A
50'			N/A
75'			N/A

RY

PARKING SUMMARY			
USE	RATIO	2 PER EMPLOYE OF THE LARGEST SHIFT	26 (2)
PUBLIC BUILDINGS		26	
LOADING	N/A (SEE NOTE 3)	0	0
BICYCLE	5% OF REQUIRED PARKING SPACES (MIN. 2)	2	2

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LAND USE SUMMARY	
CATEGORY	AREA
ROW DEDICATION	1.82 AC.
BUILDING	0.34 AC.
PAVEMENT / SIDEWALK	1.04 AC.
DRY DETENTION (BOTTOM)	0.57 AC.
OPEN SPACE	1.27 AC.
PRESERVE	0.42 AC.
TOTAL	5.46 AC.
	100%

LANDSCAPE BUFFER REQUIREMENTS

- [illegible]

QND

PROPOSED ASPHALT PAVEMENT	
PROPOSED CONCRETE PAVEMENT	
PROPOSED 4" CONCRETE SIDEWALK	
PRESERVE	
LANDSCAPE BUFFER	
PARKING COUNT	
LIGHT POLE	

EMS 74 GOLDEN GATE ESTATES

OWNER / DEVELOPER
COLLER COUNTY DIVISION OF FACILITIES MANAGEMENT
3335 TAMPAH TOLL E
NARLES, FL 34112
(239) 252-8380

ENGINEER OF RECORD:
JOHN T. WOLDAK, P.E. (FOR THE FIRM)
FLORIDA P.E. NO. 58217

NOT VALID WITHOUT SEAL, SIGNATURE AND DATE

DELISI FITZGERALD, INC.
Planning - Engineering - Project Management

**1605 Hendry Street
Fort Myers, FL 33901
(239) 418-0691
(239) 418-0692 fax**

**Florida Certificate
of Authorization
Engineering LB #26978**

Sheet Number:

Project Manager:	JTM
Checked by:	CAS
Project Number	21575
Located in Section:	5
Township	49 S
County, State:	COLLIER COUNTY, FL

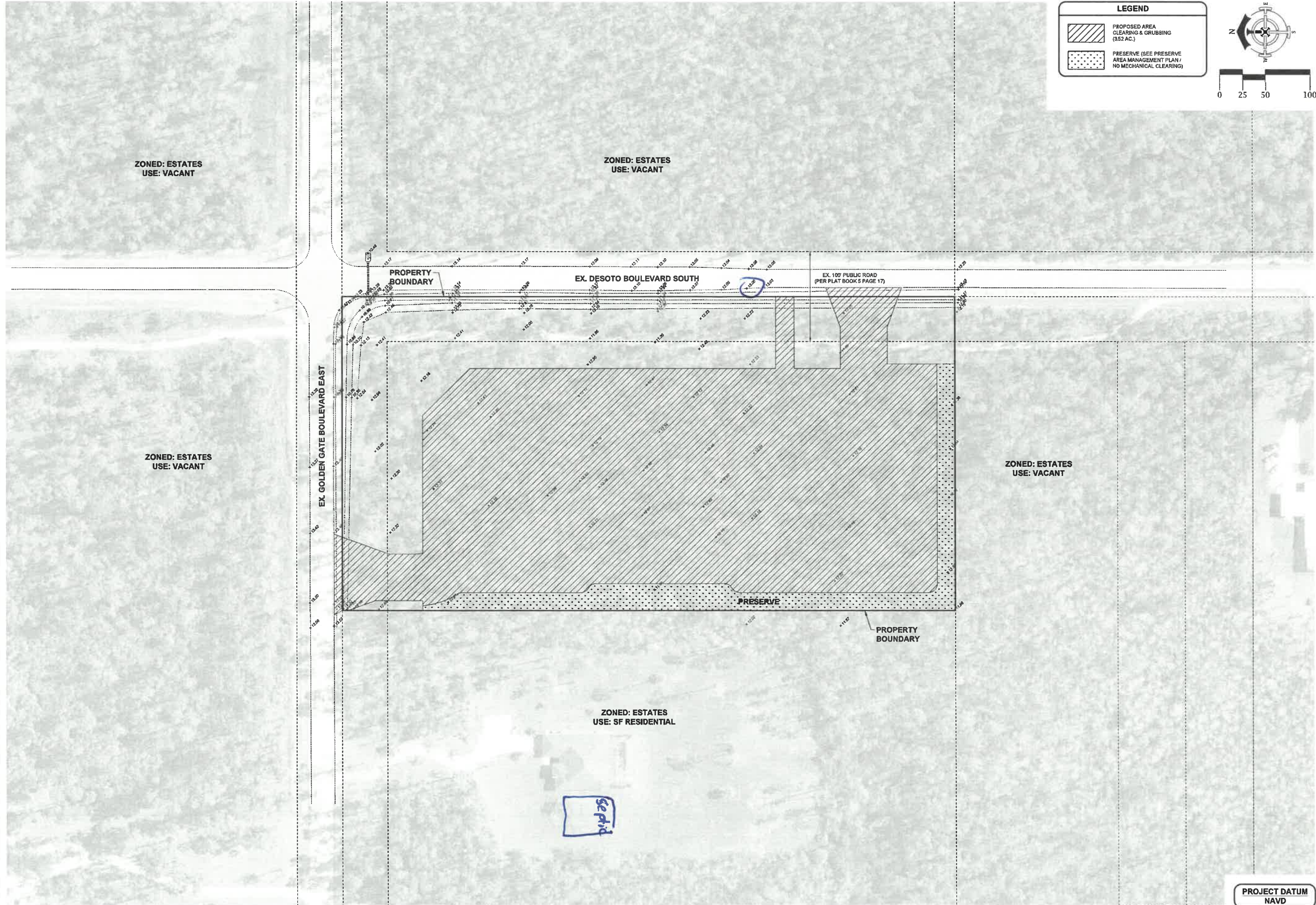
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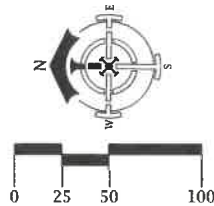
K:\21575 - EMS GOLDEN GATE ESTATES\SDP\PLAN SET\21575-02-AERIAL.DWG
9/22/2021 10:03 AM



LEGEND

PROPOSED AREA
CLEARING & GRUBBING
(352 AC.)

PRESERVE (SEE PRESERVE
AREA MANAGEMENT PLAN /
NO MECHANICAL CLEARING)



DELISI FITZGERALD, INC.
Planning - Engineering - Project Management

Florida Certificate
of Authorization
Engineering LB #28976

1605 Hendry Street
Fort Myers, FL 33901
(239) 418-0691
(239) 418-0692 fax

ENGINEER OF RECORD:
JOHN T. WOODARD, P.E. (FOR THE FIRM)
FLORIDA P.E. NO. 58217

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OWNER / DEVELOPER
COLLIER COUNTY DIVISION OF FACILITIES MANAGEMENT
3335 TAMARIND TRAIL E
FORT MYERS, FL 33912
(239) 251-8008

PROJECT:

EMS 74 GOLDEN GATE ESTATES

PLAN REVISIONS		DESCRIPTION
#	DATE	

**AERIAL PHOTOGRAPH,
EXISTING CONDITIONS,
& CLEARING PLAN**

Project Manager: JTW
Drawn By: CAS
Checked By: JTW
Project Number: 21575
Located in Section(s): 9
Township: 49 S Range: 28 E
County, State: COLLIER COUNTY, FL

PROJECT DATUM
NAVD

Status
FOR CONSTRUCTION
SUBJECT TO ALL PERMIT APPROVALS

Sheet Number: 2

TECHNICAL BROCHURE

B3885 R2



FEATURES

Impeller: Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

Casing: Cast iron volute type for maximum efficiency. 2" NPT discharge.

Mechanical Seal: Silicon Carbide vs. Silicon Carbide sealing faces. Stainless steel metal parts, BUNA-N elastomers.

Shaft: Corrosion-resistant, stainless steel. Threaded design. Locknut on all models to guard against component damage on accidental reverse rotation.

Fasteners: 300 series stainless steel.

Capable of running dry without damage to components.

Designed for continuous operation when fully submerged.

EXTENDED WARRANTY AVAILABLE FOR RESIDENTIAL APPLICATIONS.

WE Series Model 3885

SUBMERSIBLE EFFLUENT PUMPS



 **GOULDS**
WATER TECHNOLOGY
a **xylem** brand

Wastewater

APPLICATIONS

Specifically designed for the following uses:

- Homes, Farms, Trailer Courts, Motels, Schools, Hospitals, Industry, Effluent Systems

SPECIFICATIONS

Pump

- Solids handling capabilities: $\frac{3}{4}$ " maximum
- Discharge size: 2" NPT
- Capacities: up to 140 GPM
- Total heads: up to 128 feet TDH
- Temperature: 104°F (40°C) continuous, 140°F (60°C) intermittent.
- See order numbers on reverse side for specific HP, voltage, phase and RPM's available.

MOTORS

- Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.
- Class B insulation on $\frac{1}{8}$ - 1½ HP models.
- Class F insulation on 2 HP models.

Single phase (60 Hz):

- Capacitor start motors for maximum starting torque.
- Built-in overload with automatic reset.

- SJTOW or STOW severe duty oil and water resistant power cords.
- $\frac{1}{8}$ - 1 HP models have NEMA three prong grounding plugs.
- 1½ HP and larger units have bare lead cord ends.

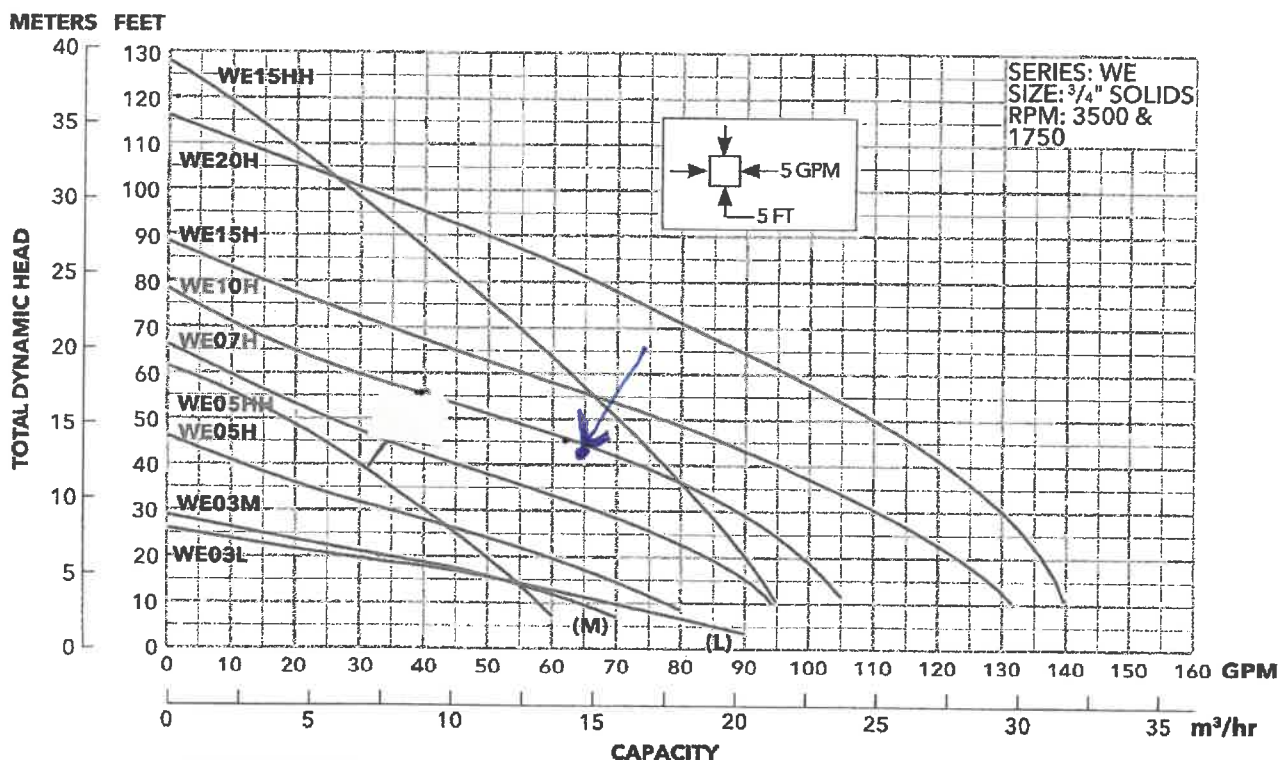
Three phase (60 Hz):

- Class 10 overload protection must be provided in separately ordered starter unit.
- STOW power cords all have bare lead cord ends.
- Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
- Bearings: Upper and lower heavy duty ball bearing construction.
- Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
- O-ring: Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS



Tested to UL 778 and CSA 22.2 108 Standards
By Canadian Standards Association File #LR38549



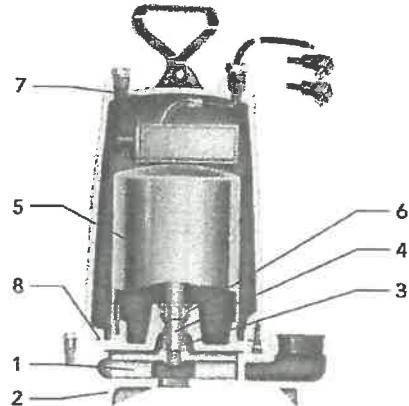
PERFORMANCE RATINGS (gallons per minute)

This pump

Order No.	WE-03L	WE-03M	WE-05H	WE-07H	WE-10H	WE-15H	WE-05HH	WE-15HH	WE-20H
HP	1/3	1/3	1/2	3/4	1	1 1/2	1/2	1 1/2	2
RPM	1750	1750	3500	3500	3500	3500	3500	3500	3500
5	86	-	-	-	-	-	-	-	-
10	70	63	78	94	-	-	58	95	-
15	52	52	70	90	103	128	53	93	138
20	27	35	60	83	98	123	49	90	136
25	5	15	48	76	94	117	45	87	133
30	-	-	35	67	88	110	40	83	130
35	-	-	22	57	82	103	35	80	126
40	-	-	-	45	74	95	30	77	121
45	-	-	-	35	64	86	25	74	116
50	-	-	-	25	53	77	-	70	110
55	-	-	-	-	40	67	-	66	103
60	-	-	-	-	30	56	-	63	96
65	-	-	-	-	20	45	-	58	89
70	-	-	-	-	-	35	-	55	81
75	-	-	-	-	-	25	-	51	74
80	-	-	-	-	-	-	-	47	66
90	-	-	-	-	-	-	-	37	49
100	-	-	-	-	-	-	-	28	30

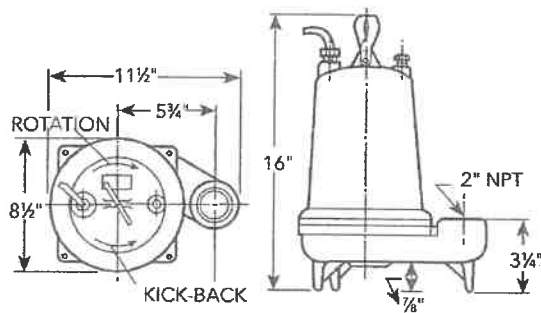
COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Ring



DIMENSIONS

(All dimensions are in inches. Do not use for construction purposes.)



xylem
Let's Solve Water

Xylem Inc.
2881 East Bayard Street Ext., Suite A
Seneca Falls, NY 13148
Phone: (866) 325-4210
Fax: (888) 322-5877
www.gouldswatertechnology.com

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Wastewater

MODELS

Order Number	HP	Phase	Volts	RPM	Impeller Diameter (in.)	Maximum Amps	Locked Rotor Amps	KVA Code	Full Load Efficiency %	Resistance		Power Cable Size	Weight (lbs.)	
										Start	Line-Line			
WE0311L	0.33	1	115	1750	5.38	10.7	30.0	M	54	11.9	1.7	16/3	56	
WE0318L			208			6.8	19.5	K	51	9.1	4.2			
WE0312L			230			4.9	14.1	L	53	14.5	8.0			
WE0311M			115			10.7	30.0	M	54	11.9	1.7			
WE0318M			208			6.8	19.5	K	51	9.1	4.2			
WE0312M			230			4.9	14.1	L	53	14.5	8.0			
WE0511H	0.5	1	115	3450	3.56	14.5	46.0	M	54	7.5	1.0	14/3	60	
WE0518H			208			8.1	31.0	K	68	9.7	2.4	16/3		
WE0512H			230			7.3	34.5	M	53	9.6	4.0			
WE0538H		3	200			4.9	22.6	R	68	NA	3.8	14/4		
WE0532H			230			3.3	18.8	R	70	NA	5.8			
WE0534H			460			1.7	9.4	R	70	NA	23.2			
WE0537H			575		1.4	7.5	R	62	NA	35.3				
WE0511HH		1	115		3.88	14.5	46.0	M	54	7.5	1.0	14/3		16/3
WE0518HH			208			8.1	31.0	K	68	9.7	2.4			
WE0512HH			230			7.3	34.5	M	53	9.6	4.0			
WE0538HH		3	200			4.9	22.6	R	68	NA	3.8	14/4		
WE0532HH			230			3.6	18.8	R	70	NA	5.8			
WE0534HH			460			1.8	9.4	R	70	NA	23.2			
WE0537HH			575		1.5	7.5	R	62	NA	35.3				
WE0718H	0.75	1	208	4.06	11.0	31.0	K	68	9.7	2.4	14/3	70		
WE0712H			230		10.0	27.5	J	65	12.2	2.7				
WE0738H		3	200		6.2	20.6	L	64	NA	5.7	14/4			
WE0732H			230		5.4	15.7	K	68	NA	8.6				
WE0734H			460		2.7	7.9	K	68	NA	34.2				
WE0737H			575		2.2	9.9	L	78	NA	26.5				
WE1018H	1	1	208	3450	4.44	14.0	59.0	K	68	9.3	1.1	14/3	80	
WE1012H			230			12.5	36.2	J	69	10.3	2.1			
WE1038H		3	200			8.1	37.6	M	77	NA	2.7	14/4		
WE1032H			230			7.0	24.1	L	79	NA	4.1			
WE1034H			460			3.5	12.1	L	79	NA	16.2			
WE1037H			575			2.8	9.9	L	78	NA	26.5			
WE1518H	1.5	1	208	4.56	17.5	59.0	K	68	9.3	1.1	14/3	80		
WE1512H			230		15.7	50.0	H	68	11.3	1.6				
WE1538H		3	200		10.6	40.6	K	79	NA	1.9	14/4			
WE1532H			230		9.2	31.7	K	78	NA	2.9				
WE1534H			460		4.6	15.9	K	78	NA	11.4				
WE1537H			575		3.7	13.1	K	75	NA	16.9				
WE1518HH		1	208	5.50	17.5	59.0	K	68	9.3	1.1	14/3	14/4		
WE1512HH			230		15.7	50.0	H	68	11.3	1.6				
WE1538HH		3	200		10.6	40.6	K	79	NA	1.9	14/4			
WE1532HH			230		9.2	31.7	K	78	NA	2.9				
WE1534HH			460		4.6	15.9	K	78	NA	11.4				
WE1537HH			575		3.7	13.1	K	75	NA	16.9				
WE2012H	2	3	230	3450	5.38	18.0	49.6	F	78	3.2	1.2	14/3	83	
WE2038H			200			12.0	42.4	K	78	NA	1.7			
WE2032H			230			11.6	42.4	K	78	NA	1.7			
WE2034H			460			5.8	21.2	K	78	NA	6.6			
WE2037H			575			4.7	16.3	L	78	NA	10.5			

This one

[Print](#)[New Search](#)[Tax Bills](#)[Change of Address](#)**Property Summary**[Property Detail](#)[Aerial](#)[Sketches](#)[Trim Notices](#)Parcel No **40806320009**Site Address **99 DESOTO
*Disclaimer BLVD S**Site City **NAPLES**Site Zone **34117**
Note**Name / Address **COLLIER COUNTY*3335 TAMIAMI TRAIL E STE 101**City **NAPLES**State **FL**Zip **34112**

Map No.

Strap No.

Section

Township

Range

Acres ***Estimated****4D09****350200 72 04D09****9****49****28****5.46**Legal **GOLDEN GATE EST UNIT 79 TR 72****Millage Area 80****Millage Rates *Calculations**Sub./Condo **350200 - GOLDEN GATE EST UNIT 79****School****Other****Total**Use Code **86 - COUNTIES INCLUDING NON-MUNICIPAL GOV.****4.889****6.5293****11.4183****Latest Sales History**

(Not all Sales are listed due to Confidentiality)

Date	Book-Page	Amount
12/20/19	5714-1589	\$ 105,000
09/18/12	4843-2757	\$ 0

2021 Certified Tax Roll

(Subject to Change)

Land Value	\$ 81,060
(+) Improved Value	\$ 0
(=) Market Value	\$ 81,060
(=) Assessed Value	\$ 81,060
(=) School Taxable Value	\$ 0
(=) Taxable Value	\$ 0

If all Values shown above equal 0 this parcel was created after the Final Tax Roll

**EMS 44 Golden Gate Estates
Sewer Demands**

Sewer Demands					
Units	Summary	Per Capita Flow (gpd) / Unit ¹	Average Daily Flow (gpd)	Peak Factor	Peak Flow (gpm)
13	100 GPD / person	100	1,300	4.40	4.0
13	5 GPD / meal	15	195	4.40	0.6
	Total for this Project		1,495		4.6

Notes:

1. Per Capita Flow for from FDEP Estimated Sewage Flows (FAC 64E-6.008) using 13 staff and 3 meals per day for Public Institutions other than schools and hospitals per person
2. Peak Factor Based on 10 States Standards Population Equation

Sanitary Sewer Pipe Capacity Calculations								
Pipe Size (in)	η	Area (ft ²)	Wetted Perimeter (ft)	Hydraulic Radius (ft)	Hydraulic Radius (ft)	Slope	Flow (gpm)	Velocity (fps)
Full Flow								
6	0.013	0.196	1.57	0.13	0.13	0.0104	257	2.92
8	0.013	0.349	2.09	0.17	0.17	0.004	343	2.20
10	0.013	0.545	2.62	0.21	0.21	0.0028	520	2.13
Flowing Half Full								
6	0.013	0.098	0.79	0.13	0.13	0.0104	128	2.92
8	0.013	0.175	1.05	0.17	0.17	0.004	172	2.20
10	0.013	0.273	1.31	0.21	0.21	0.0028	260	2.13

Notes:

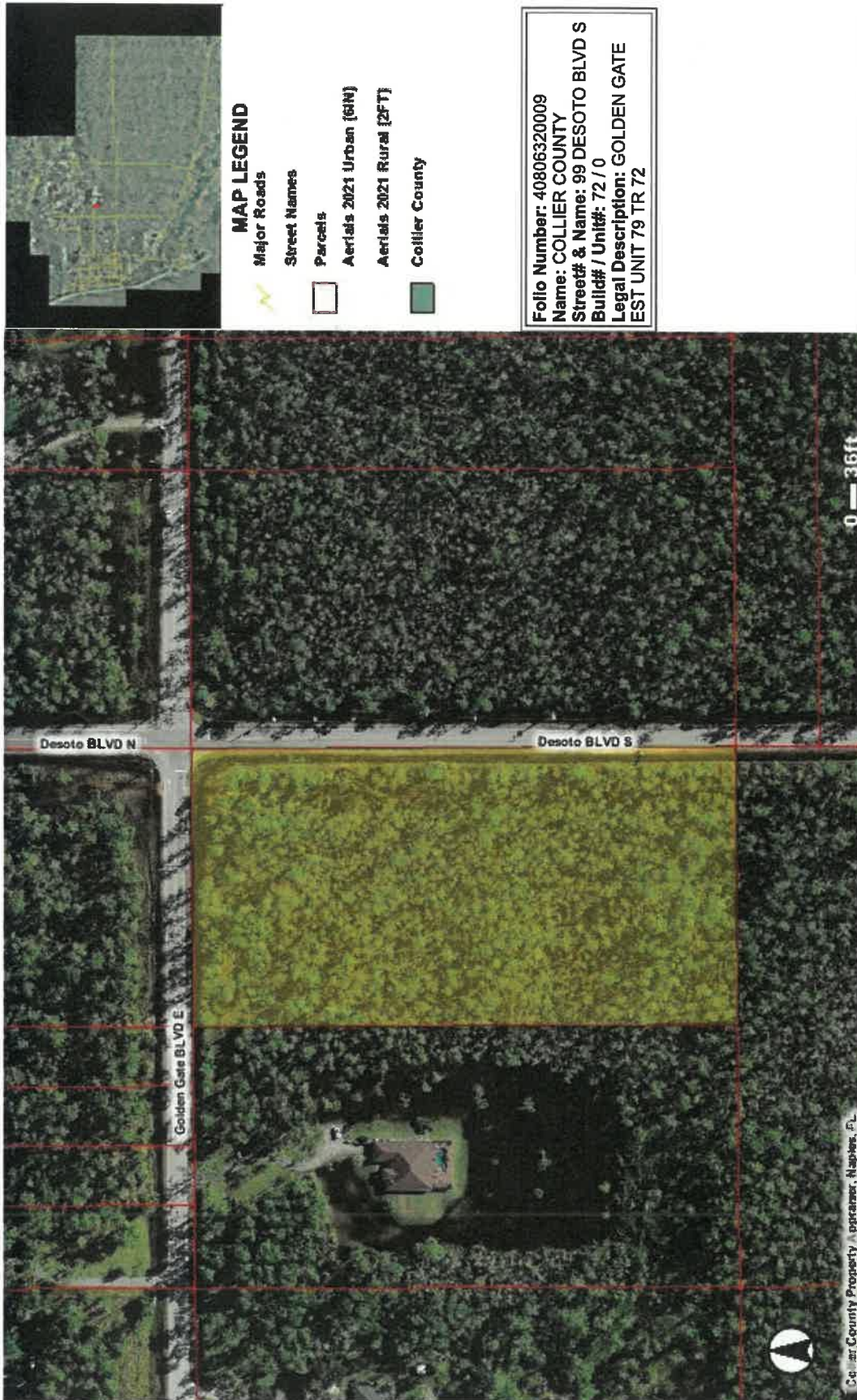
$\eta = 0.013$

6" lateral has a minimum slope of 1.04%

8" gravity main has a minimum slope of 0.40%, 10" of 0.28%

Manning's Equation is used to determine pipe capacity

21-24301
DeLisi Fitzgerald Inc



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