

MINUTES OF SPECIAL MEETING
HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 81
OF HARRIS COUNTY, TEXAS

CINCO REGIONAL SEWAGE TREATMENT PLANT

October 17, 2019

The Board of Directors (the "Board") of Harris County Municipal Utility District No. 81 of Harris County, Texas (the "District"), met in special session, open to the public, at 805 Hidden Canyon Drive, Katy, Texas 77450, inside the boundaries of the District, on the 17th day of October, 2019, and the roll was called of the duly constituted members of the Board of Directors, to-wit:

John Savage	President
George Goff	Vice President
Patrick Cathcart	Secretary
Donna Brown	Treasurer
Bruce Cox	Assistant Secretary

and all of said persons were present, thus constituting a quorum.

Also present was Morgan Stagg and Tony Garza of Cornerstones Municipal Utility District; Buddy Trotter of Memorial Municipal Utility District; Whitney Alemore of Si Environmental ("SE"); Mary Lutz of McLennan & Associates, L.P.; and Katie Carner and Kim Cannon of Allen Boone Humphries Robinson LLP ("ABHR").

MINUTES

The Board considered approving the minutes of the September 26, 2019, Cinco Regional Sewage Treatment Plant (the "Plant") meeting. After discussion, Director Cathcart moved to approve the minutes of the September 26, 2019, Plant meeting, as written. Director Brown seconded the motion, which passed unanimously.

PLANT BOOKKEEPER'S REPORT INCLUDING PAYMENT OF THE BILLS AND REVIEW OF INVESTMENT OF CINCO PLANT FUNDS

Ms. Lutz presented the bookkeeper's report on the Plant funds. She reviewed the Plant account, the bills to be paid, budget comparison, investment report, and annual energy billing. A copy of the bookkeeper's report is attached.

After discussion, Director Cathcart moved to approve the bookkeeper's report and pay the bills. Director Cox seconded the motion, which passed unanimously.

REVIEW DRAFT BUDGET FOR FISCAL YEAR END DECEMBER 21, 2020

Ms. Lutz stated a draft of the budget will be presented next month.

PLANT OPERATIONS, DISCHARGE, AND REPAIRS AND MAINTENANCE

Ms. Aelmore reviewed a report on operations of the Plant, a copy of which is attached. She then reviewed the Discharge Monitoring Report and noted that no excursions occurred at the Plant during the month.

After review and discussion, Director Cathcart moved to approve the operator's report. Director Brown seconded the motion, which passed unanimously.

ENGINEER'S REPORT

The Board reviewed the engineer's report prepared by BGE, Inc. ("BGE"), a copy of which is attached.

MONITORING OF HARRIS COUNTY FLOOD CONTROL DISTRICT CHANNEL

Ms. Carner stated that the report provides Harris County has issued notice to proceed for the erosion repairs to the channel.

UPDATE ON INSTALLATION OF ADDITIONAL BLOWER VARIABLE FREQUENCY DRIVE ("VFD")

Ms. Carner stated the report provides installation of the additional VFD is in process.

OTHER ENGINEERING MATTERS

Ms. Carner stated that the report provides Cinco Municipal Utility District No. 1 has inquired regarding whether the ground storage tank capacity for the proposed reclaimed water facilities on the Plant site could be doubled from 1.2 to 2.4 million gallons. The Board reviewed an exhibit of layout options and tank sizes, a copy of which is attached to the engineer's report.

Ms. Carner stated the report notes that the main influent trunkline for the Plant has not been inspected in many years. She stated BGE is requesting the Board's authorization to solicit proposals to televise the line.

After review and discussion, Director Cathcart moved to approve the engineer's report and authorize BGE to solicit proposals to televise the main influent trunkline for the Plant. Director Cox seconded the motion, which passed unanimously.

HARVEY MATTERS INCLUDING REPORT ON FEDERAL EMERGENCY
MANAGEMENT AGENCY ("FEMA") CLAIM FOR FEDERAL FUNDING

There was no discussion on this matter.

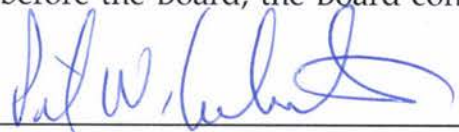
DISCUSS NOVEMBER AND DECEMBER MEETING SCHEDULE

The Board discussed the upcoming November and December Cinco Regional Plant Operating Committee and Cinco Regional Sewage Treatment Plant meeting dates. The Board concurred that the November and December Operating meetings would be held on November 14, 2019, and December 5, 2019, both at 6:00 p.m., and the Sewage Treatment Plant meetings would be held on November 21, 2019 and December 12, 2019, both at 6:00 p.m.

DISTRICT FINANCIAL AND BOOKKEEPING MATTERS, INCLUDING APPROVE
PAYMENT FOR MAINTENANCE AND REPAIRS TO ADMINISTRATIVE OFFICE

Ms. Lutz requested approval of check no. 15658, payable to City Maintenance in the amount of \$33,300.64 for the administrative building repairs. Following review and discussion, Director Brown moved to approve the check to City Maintenance in the amount of \$33,300.64. Director Cox seconded the motion, which carried by unanimous vote.

There being no further business to come before the Board, the Board concurred to adjourn the meeting.



Secretary, Board of Directors

(SEAL)



LIST OF ATTACHMENTS

	Minutes
	<u>Page</u>
Bookkeeper's report.....	1
Operator's report.....	2
Engineer's report.....	2



Memorandum

To: HCM 81 for Cinco Regional Operating Committee
From: Douglas W. Baker, P.E. *Douglas W Baker, P.E.*
Brown & Gay Engineers, Inc.
Date: October 17, 2019
Subject: Monthly Engineer's Report

WASTEWATER TREATMENT PLANT FLOWS

Month:	September 2019
Average Daily Flow:	1.355 MGD
ESFC Count:	7,134 ESFC
ADF/ESFC:	190 gpd/ESFC at ADF
Rainfall this Month:	7.50 inches

TRUNKLINES

Scour areas surveyed January 30, 2019.

T103 to be repaired under Project No. T-103-00-00-X010-Channel Rehabilitation.

Repairs should be initiated starting in October 2019.

REUSE SYSTEM

Project ready to advertise when required.

There has been an inquiry by Cinco MUD No. 1 to determine if the ground storage for the facility be doubled; from 1,200,000 GAL to 2,400,000 GAL.

(Reference the attached layouts and presentation Exhibits).

SECURITY

Please find attached signed proposal by HCM 81 to NCS of Texas to install a total of 3 cameras to scan the main gate, regular building entrance, and southwest quadrant of the plant to include the emergency generator and the gate for the remote well.

(Reference attached signed proposal).

October 17, 2019

Page 2

HARVEY CHARGES

Our new Grant Coordinator in PA Recovery is Alexis Scayola.

FEMA has provided HCM 81 with a letter closing out the referral for the East Siphon Manhole project – PW 00912. Reference attached letter from FEMA.

The table below details the amounts paid by FEMA for Hurricane Harvey damages:

Project	Amount Paid by FEMA	Date of Payment
Composite Sampler Flow meter	\$12,155.08	Aug. 9, 2018
Recycle Sludge Pumps	\$105,816.46	Sept. 20, 2018
Plant Monitoring Waste Hauls	\$30,339.82	Oct. 12, 2018
Siphon Manhole Repair	\$238,251.60	Mar. 15, 2019
Subtotal	\$386,562.96	
Direct Administrative Costs	\$21,540.67	Pending
Total	\$408,103.63	

BGE received an email from FEMA apparently questioning the procurement process with regards to BGE executing engineering duties with respect to the Direct Administrative Costs associated with hurricane Harvey damages to the Cinco WWTP Plant and siphon manhole (Reference attached email and response).

BGE also received notification that applications for damage claims for event 4332DR (ie hurricane Harvey) expired on February 25th, 2019. BGE contacted Renee Devereaux of CohnReznick concerning this notification. No action required (reference attached email).

VARIABLE FREQUENCY DRIVES (VFDs)

Neil Technical Services has installed one VFD and will be installing a second VFD to vary the output of two (2) blowers. The normal operation would be one (1) blower running at 75% capacity and one (1) blower being run at a more reduced rate. This operating scenario had to be modified to run two (2) blowers at the same frequency to balance air pressure on the process air supply header.

The cost to supply a second VFD is \$24,897.00.

Power savings per year would be in the range of \$22,900.00 to \$18,300.00.

Cost to supply and install both VFDs is approximately \$50,000.00; pay back should be approximately 2 to 3 years.

TRUNKLINE INSPECTION

The only primary component of the WWTP that has not been really closely studied is the main influent trunk line along T-103.

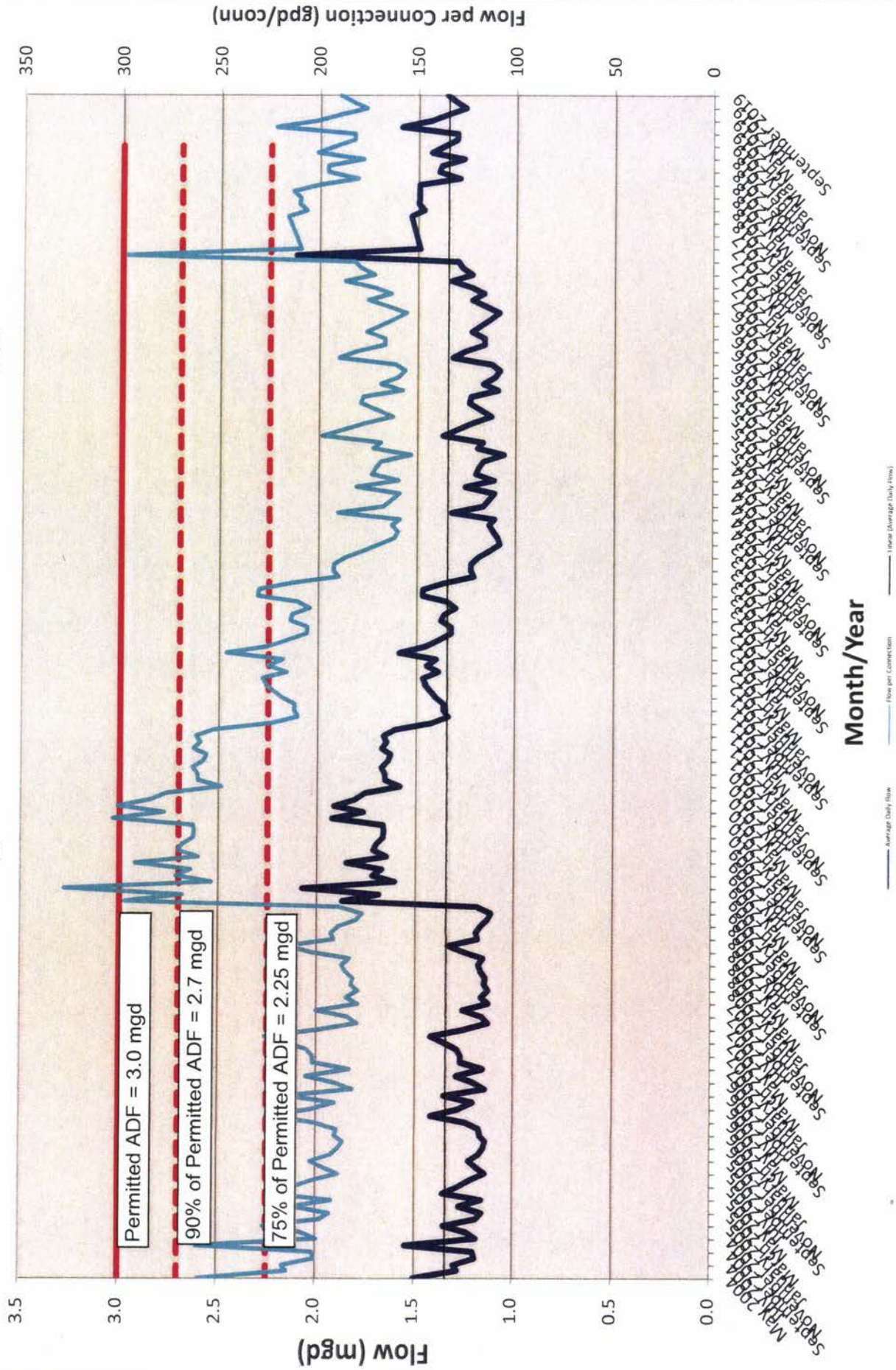
BGE requests permission to obtain quotes to partially clean and televise the main influent trunk line to better determine condition of the 40 year old line.



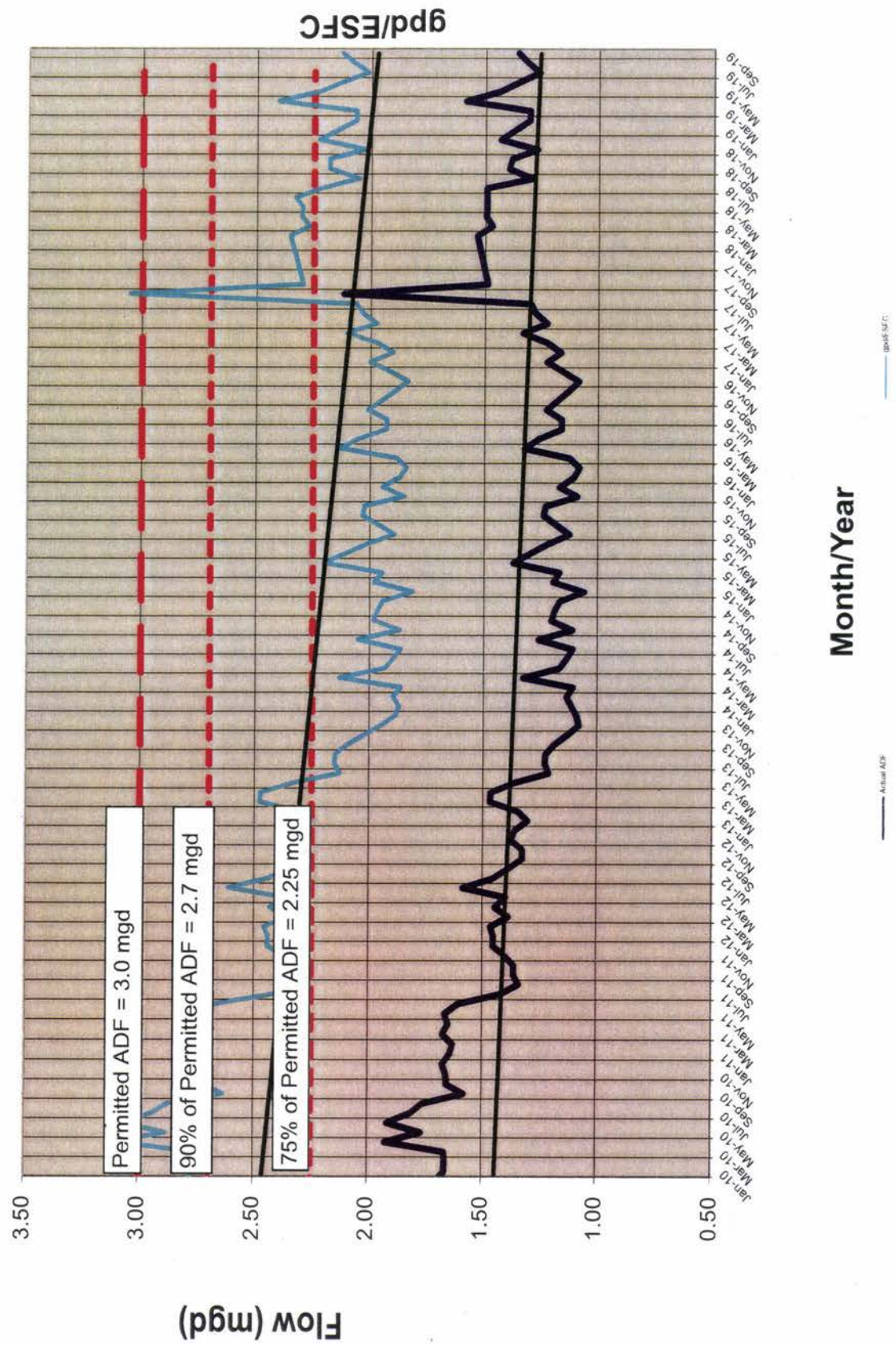
Cinco Regional Wastewater Treatment Plant Running Average Comparison

Month	Active Equivalent Single Family Connections				Total Active ESFC	ADF (gpd)	ADF per ESFC (gpd)	Percent of Permitted Capacity	Rainfall Max.(in.)	Rainfall Total (in.)	
	Memorial	HC MUD 81	District Cornerstones	Mason Creek							
January 2018	2290	1268	2005	1548	7111	1,457,000	205	49%	1.00	2.00	
February 2018	2290	1268	2005	1548	7111	1,537,000	216	51%	2.25	4.50	
March 2018	2328	1268	1976	1547	7119	1,471,000	207	49%	4.00	4.00	
April 2018	2328	1268	1976	1547	7119	1,498,000	210	50%	1.25	2.25	
May 2018	2328	1268	1976	1547	7119	1,495,000	210	50%	1.00	2.50	
June 2018	2328	1268	1976	1547	7119	1,520,000	214	51%	1.75	5.50	
July 2018	2328	1268	1976	1547	7119	1,424,000	200	47%	1.75	3.75	
August 2018	2328	1268	1976	1547	7119	1,289,000	181	43%	1.75	1.75	
September 2018	2328	1268	1977	1547	7120	1,396,000	196	47%	1.25	7.25	
October 2018	2328	1268	1977	1547	7120	1,396,000	196	47%	1.25	9.50	
November 2018	2328	1268	1979	1547	7122	1,269,000	178	42%	1.25	0.60	
December 2018	2328	1268	1979	1547	7122	1,434,000	201	48%	4.00	10.75	
January 2019	2328	1266	1979	1546	7119	1,370,000	192	46%	4.00	10.75	
February 2019	2341	1266	1986	1548	7141	1,305,000	183	44%	1.50	5.50	
March 2019	2341	1266	1984	1542	7133	1,303,000	183	43%	1.50	5.50	
April 2019	2341	1266	1984	1544	7135	1,587,000	222	53%	1.75	4.00	
May 2019	2341	1266	1984	1544	7135	1,438,000	202	48%	4.25	9.00	
June 2019	2341	1266	1984	1544	7135	1,352,000	189	45%	4.25	7.00	
July 2019	2341	1266	1984	1544	7135	1,261,000	177	42%	0.25	0.25	
August 2019	2341	1266	1984	1543	7134	1,312,000	184	44%	1.50	2.75	
September 2019	2341	1266	1984	1543	7134	1,355,000	190	45%	1.50	7.50	
					Annual Average		199				52.25 for 2019

Cinco Regional WWTP - Historical Flow Data



Cinco Regional WWTP - Historical Flow Data



Doug Baker

From: Simon McGlone
Sent: Tuesday, October 15, 2019 3:57 PM
To: Doug Baker
Subject: CNMUD1_WWTP_EFFLUENT REUSE - ACRES

Option 1:

0.9126 Acres + 0.6504 Acres = 1.563 Acres

Option 2:

0.9126 Acres + 0.7873 Acres = 1.699 Acres

Option 3:

0.9126 Acres + 0.7556 Acres = 1.668 Acres

Option 4:

0.9126 Acres + 0.6583 Acres = 1.571 Acres

Simon McGlone | Public Works

BGE, Inc.

Main: 281-558-8700

Direct: 713-488-8147



Serving. Leading. Solving.™

500-YR Floodplain

100-YR Floodplain



THIS PROPERTY LIES WITHIN THE DESIGNATED 100 YEAR FLOOD PLAIN OR BELOW THE BASE FLOOD ELEVATION. CONSULTING TO THE FLOOD INSURANCE RATE MAP, HARRIS COUNTY, TEXAS, PANEL NUMBER 482575885 L, DATED JUNE 18, 2007.

PROPERTY LIES IN SHARED ZONE "A" 100 YR WATER SURFACE ELEVATION = 97.20 AT NOTED UNIT 1023-00-00.

REMARKS:
FLOODPLAIN REFERENCE MARK NUMBER 190215, A BRASS DISK STAMPED 190215 ON BRIDGE AT N. TRY ROAD AND MASON CREEK LOCATED ON DOWNSIDE CONCRETE WALK. MASON CREEK LOCATED ON DOWNSIDE CONCRETE WALK. BANKER WATERWHEEL NEAR STREAM 1023-00-00, ELEV. 102.709 FEET MAND 1988, 2007 ADJUSTED.

FIG. 1: "SQUARE" CUT AT NE CORNER OF LIFT STATION ELEV. 103.09

FIG. 2: "SQUARE" CUT AT NE CORNER OF TREATMENT UNIT ELEV. 104.89

ALL WATER HEATERS, FURNACES, AIR CONDITIONING UNITS, ELECTRICAL DISTRIBUTION PANELS AND ANY OTHER ELECTRICAL EQUIPMENT SHALL BE LOCATED AT LEAST FOURTEEN (14) INCHES ABOVE THE BASE (100 YEAR) FLOOD ELEVATION.

MATCH LINE
See Sheet 6

LEGEND:
LIMITS OF FILL IN FLOODPLAIN
100 YEAR FLOOD PLAIN

ONE-CALL NOTIFICATION SYSTEM:
CALL BEFORE YOU DIG!!
DIAL 811

REV	NO.	DATE	DESCRIPTION	P.E.	APPRO.
△					
△					
△					



THESE PLANS ARE ISSUED FOR THE PURPOSE OF PRELIMINARY REVIEW AND AS SHOWN HEREIN FOR CONSTRUCTION. WHEN ISSUED IN FINAL FORM THEY WILL BE SEALED, SIGNED AND DATED.

RESPONSIBLE ENGINEER:
DOUGLAS W. BAKER, P.E.
TEXAS REGISTRATION NO. 56839
February 23, 2017

BCE, Inc.
10777 Westheimer, Suite 400
Houston, Texas 77042
Tel: 281-558-3700, Fax: 770-47
www.bce-engineers.com
TSP# Registration No. F-1046

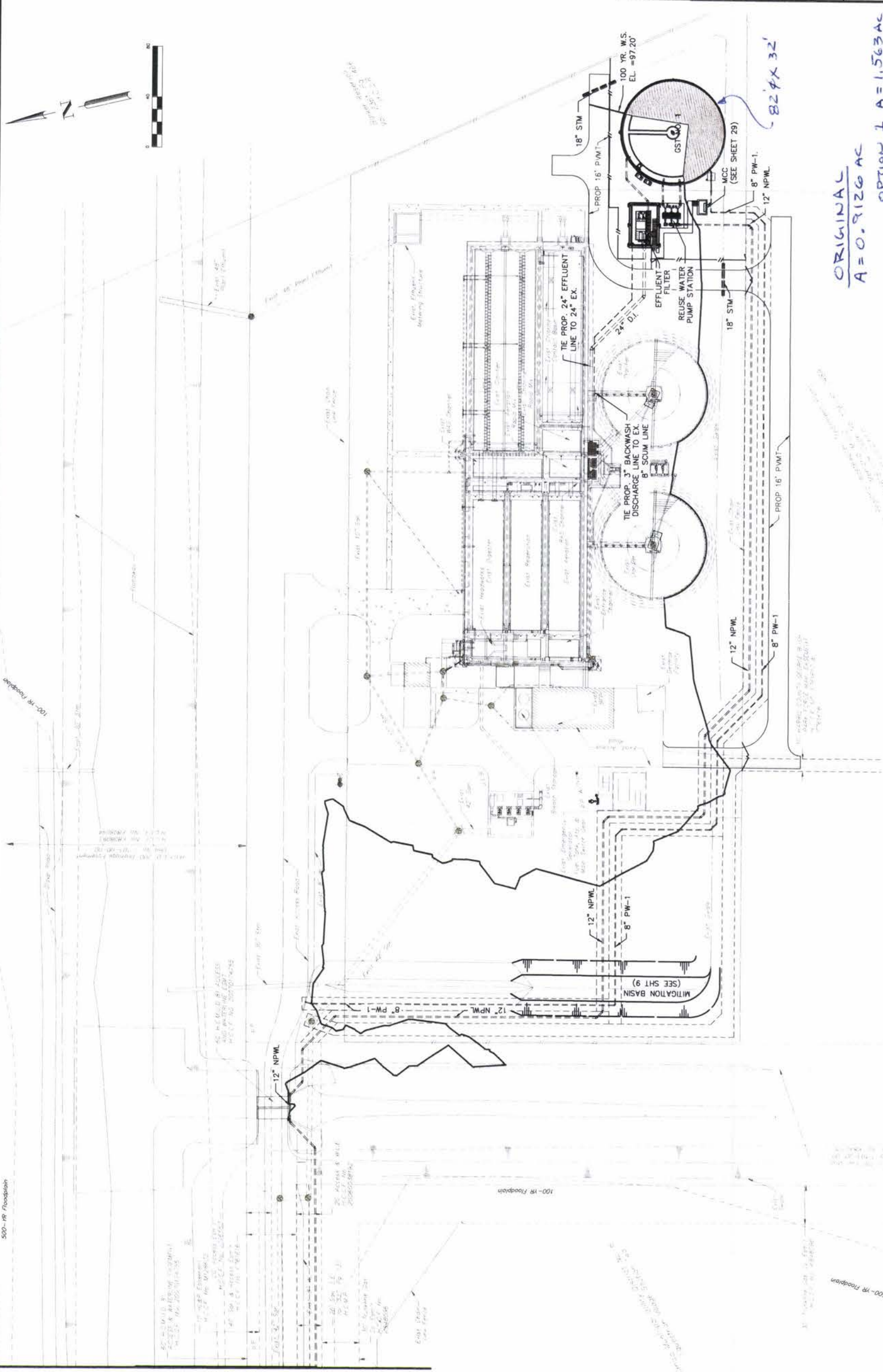
DOUGLAS W. BAKER, P.E.
F-1046
February 23, 2017

HARRIS COUNTY M.U.D. 81	
CINCO REGIONAL WWTP EFFLUENT REUSE FACILITY	
OVERALL SITE PLAN (SHEET 1 OF 2)	
JOB NUMBER:	4223-00
SUBMITTED: BY: INC.	DATE: FEBRUARY 2017
SCALE: 1" = 40'	SHEET NO. 5 OF 31 SHEETS
DESIGNED BY: C.E.	DRAWN BY: B.L.P.
SURVEY BY: INC.	

COH. 2-YR FREQUENCY	
TOTAL AREA = 16.02 ACRES	EXISTING
TC = 10 (TOTAL MC) 1781 + 15	C = 0.18
TC = 31.39 MIN.	C = 0.90
I = 75.0	C = 0.40
Q = 10.33 CFS	PROPOSED
Q EXISTING = 10.33 CFS	C = 0.18
Q PROP = 10.78 CFS	C = 0.90
Q INCREASE = 0.45 CFS	C = 0.40

MITIGATION TABLE	
100-YR WSE: 97.20 (2001 ADJ.)	REQUIRED MITIGATION: 56 CY
	PROVIDED MITIGATION: 131 CY

ORIGINAL
A = 0.9126 AC
OPTION 1 A = 1.563 AC
OPTION 2 A = 1.699 AC
OPTION 3 A = 1.668 AC
OPTION 4 A = 1.571 AC



THIS PROPERTY LIES WITHIN THE DESIGNATED 100 YEAR FLOOD PLAIN OR BELOW THE BASE FLOOD ELEVATION ACCORDING TO THE FLOOD INSURANCE RATE MAP, HARRIS COUNTY, TEXAS PANEL NUMBER 48030085 L DATED JUNE 18, 2007.

PROPERTY LIES IN SHADDED ZONE "AL"

100 YEAR FLOOD ELEVATION = 97.20

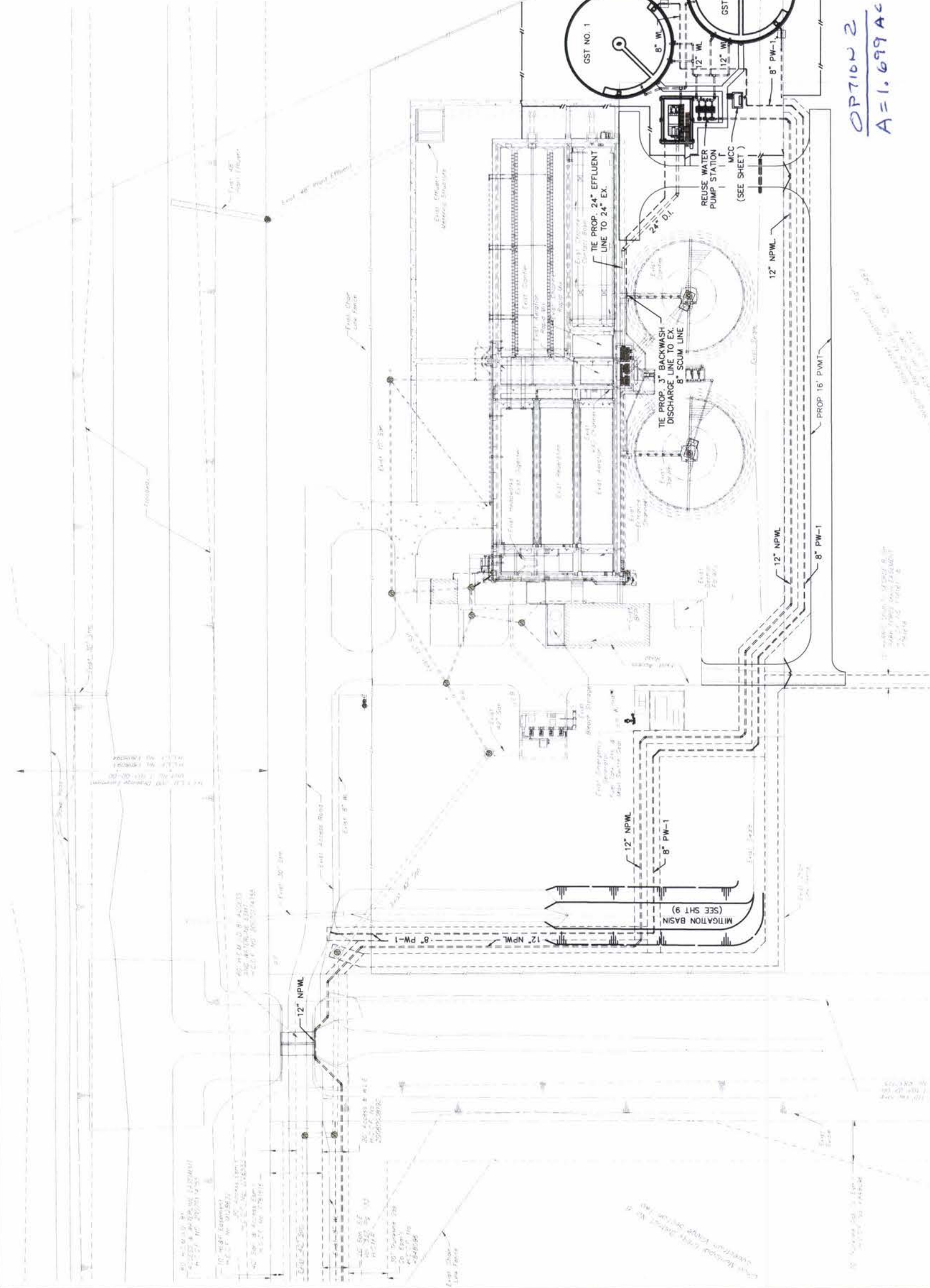
AT HATCHED UNIT 703-00-00.

BRASS DISK STAMPED 180215 ON BRIDGE AT N. RY ROAD AND MASON CREEK LOCATED ON DOWNSTREAM CONCRETE WALL. DISK STAMPED 180215 ON BRIDGE AT N. RY ROAD AND MASON CREEK LOCATED ON DOWNSTREAM CONCRETE WALL. DISK STAMPED 180215 ON BRIDGE AT N. RY ROAD AND MASON CREEK LOCATED ON DOWNSTREAM CONCRETE WALL.

ITEM-1: "SQUARE" CUT AT NE CORNER OF LIFT STATION ELEV. 103.09

ITEM-2: "SQUARE" CUT AT NE CORNER OF TREATMENT UNIT ELEV. 104.89

ALL WATER HEATERS, FURNACES, AIR CONDITIONING UNITS, ELECTRICAL DISTRIBUTION PANELS AND ANY OTHER EQUIPMENT LOCATED ON THIS PROPERTY MUST BE ELEVATED EXCEPT (10) INCHES ABOVE THE BASE (100 YEAR) FLOOD ELEVATION.



ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
DIAL 811 or 1-(800)-344-8377
AT LEAST 48 HOURS BEFORE
PROCEEDING WITH ANY EXCAVATION

REUSE WATER PUMPS AND
TANKS - DOUBLE 82'X32'

REV	NO	DATE	DESCRIPTION	P.E.	APPR.
1	1				
2	2				
3	3				

THESE PLANS ARE ISSUED FOR THE PURPOSE OF PRELIMINARY REVIEW AND CONSTRUCTION. THEY WILL BE SEaled, SIGNED AND DATED.

RESPONSIBLE ENGINEER:
BGE INC.
10777 Westheimer, Suite 400
Houston, TX 77042
Tel: 281-420-0000
TPE Registration No. 61346
October 4, 2019

DOUGLAS W. BAKER, P.E.
TECHNICAL SUPERVISOR
No. 56639
October 4, 2019

HARRIS COUNTY M.U.D. 81

CINCO REGIONAL WWTP
EFFLUENT REUSE FACILITY

OVERALL SITE PLAN
(OPTION 2)

JOB NUMBER: 4223-00

DESIGNED BY: C.R.

SUBMITTED BY: B.L.P.

SCALE: 1" = 40'

DATE: FEBRUARY 2017

SURVEY BY: BGE, INC.

SHEET NO. 5 OF 31 SHEETS

MITIGATION TABLE

100-YR WSE: 97.20 (2001 ADJ.)
500-YR WSE: 99.00 (2001 ADJ.)
REQUIRED MITIGATION: 56 CY
PROVIDED MITIGATION: 131 CY

OPTION 2
A=1.699 AC

THIS PROPERTY LIES WITHIN THE DESIGNATED 100 YEAR FLOOD PLAIN OR BELOW THE BASE FLOOD ELEVATION. FLOOD ELEVATION: 100.00. FLOOD ELEVATION: 100.00. COUNTY: CLAS PANEL NUMBER: 442010285 L DATED: JUNE 18, 2007.

PROPERTY LIES IN SHARED ZONE "A". 100-YR WATER SURFACE ELEVATION = 97.20 AT HOTD UNIT 1013-00-00.

BOUNDARIES: FLOODPLAIN REFERENCE MARK NUMBER 190215, A BRASS DISK STAMPED 190215 ON BRIDGE AT N. RY ROAD AND WAGON CREEK LOCATED ON CORRESPONDING ADJACENT WATERSHED NEAR STREAM 1013-00-00, D.I.E. 102709 FEET NAVD 1988, 2007 ADJUSTED.

TABLE 1: "SQUARE" CUT AT NE CORNER OF LEFT STATION ELEV. 100.09

TABLE 2: "SQUARE" CUT AT NE CORNER OF TREATMENT UNIT ELEV. 104.85

ALL WATER HEATERS, FURNACES, AIR CONDITIONING UNITS, ELECTRICAL DISTRIBUTION PANELS AND ALL OTHERS MUST BE ELEVATED EIGHTEEN (18) INCHES ABOVE THE BASE (100 YEAR) FLOOD ELEVATION.



ONE-CALL NOTIFICATION SYSTEM
CALL BEFORE YOU DIG!!!
DIAL 811 or 1-(800)-344-8377
AT LEAST 48 HOURS BEFORE
PROCEEDING WITH ANY EXCAVATION

REUSE WATER PUMPS AND
TANKS - DOUBLE 72'X40'

REV.	NO.	DATE	DESCRIPTION	P.E.	APPR.
1	1				
2	2				
3	3				



BGE, Inc.
10777 Meadowbrook, Suite 400
Houston, Texas 77036
Tel: 281-588-8700 • Fax: 281-588-8701
TSPS Registration No. F-1046

THESE PLANS ARE ISSUED FOR THE PURPOSE OF PRELIMINARY REVIEW AND ARE NOT TO BE USED FOR CONSTRUCTION WHEN ISSUED IN FINAL FORM THEY WILL BE REVISITED, SIGNED AND DATED.

RESPONSIBLE ENGINEER:
DOUGLAS J. BAKER, P.E.
TEXAS REGISTRATION NO. 56659
October 4, 2019

HARRIS COUNTY M.U.D. 81

CINCO REGIONAL WWTP
EFFLUENT REUSE FACILITY

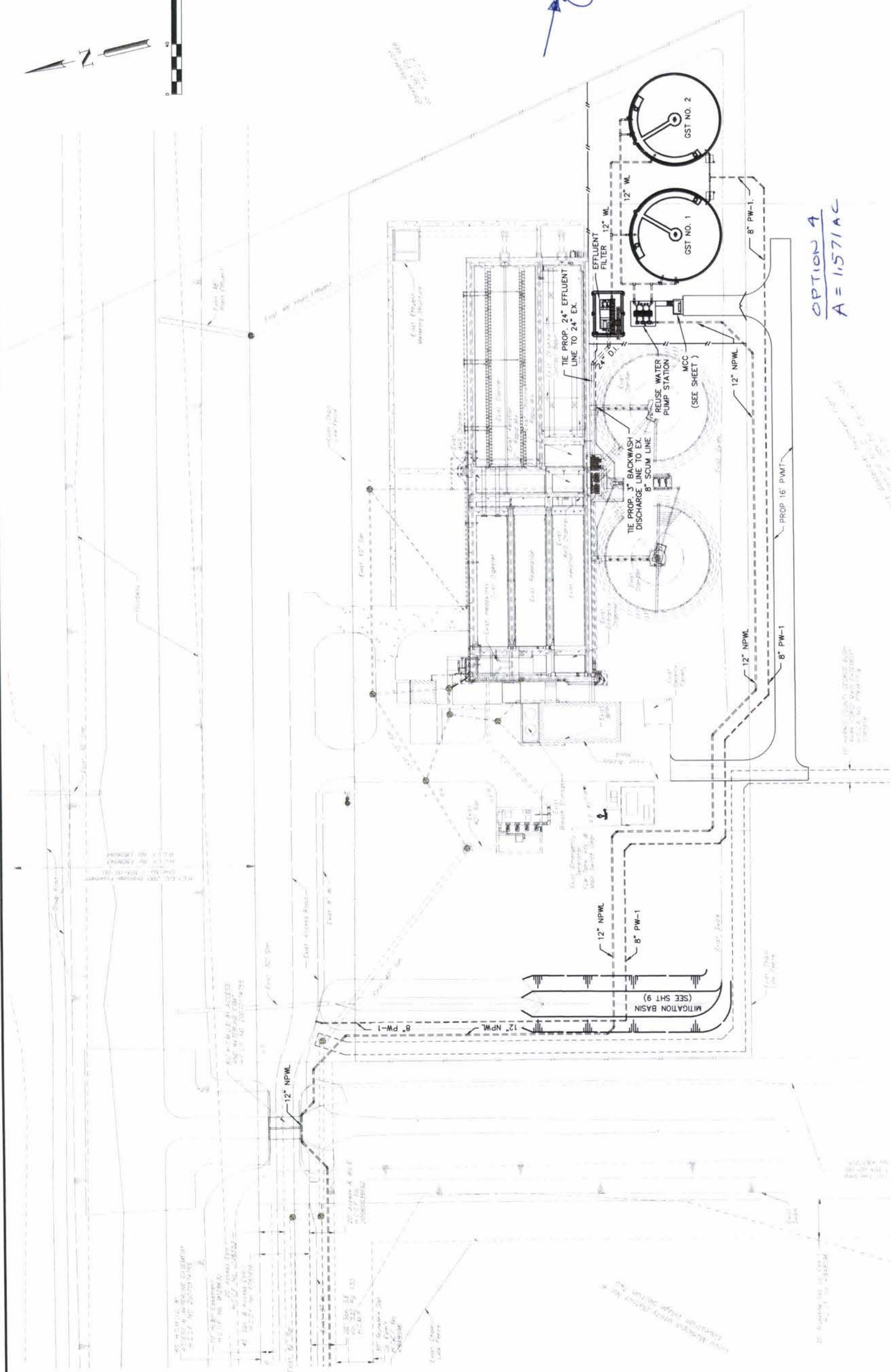
OVERALL SITE PLAN
(OPTION 4)

JOB NUMBER:	4223-00
SUBMITTED: BGL INC.	DESIGNED BY: C.H.
SCALE: 1" = 40'	DRAWN BY: B.L.P.
DATE: FEBRUARY 2017	SHEET NO: 5 OF 31 SHEETS
SURVEY BY: BGL INC.	F.B.G.

MITIGATION TABLE

100-YR WSE: 97.20 (2001 ADJ.)
500-YR WSE: 99.00 (2001 ADJ.)
REQUIRED MITIGATION: 56 CY
PROVIDED MITIGATION: 131 CY

OPTION 4
A = 1,571 AC



Cinco STP
Cash Report Summary
09/20/19 to 10/17/19

	GENERAL FUND
BEGINNING BALANCE	\$ 1,977.79
RECEIPTS - SEE PAGE 2	117,202.10
DISBURSEMENTS - SEE PAGE 3	105,044.94
CURRENT CASH BALANCE	\$ 14,134.95
CURRENT INVESTMENTS	33,380.11
CURRENT OPERATING FUNDS AVAILABLE	\$ 47,515.06

RSTP - Operating MM

Compass Bank

Account No. XXXXXX2799

McLennan & Associates, L.P.
1717 St. James Place, Ste 500 Box 45
Houston, Texas 77056
Phone 281 920-4000 Fax 281 920-0065
E-Mail mlutz@mcclennanandassoc.com
E-Mail rbutler@mcclennanandassoc.com

Cinco STP
Cash Receipts
09/20/19 to 10/17/19

	<u>GENERAL FUND</u>
INTEREST	\$ 11.74
INVESTMENT PROCEEDS - TEXPOOL	-
INVESTMENT PROCEEDS - CENTRAL BANK	-
HARRIS COUNTY MUD #81	18,297.85
MEMORIAL MUD	32,230.56
CORNERSTONES MUD	30,721.12
MASON CREEK UD	33,440.83
RECLAIM WATER AGMT CINCO MUD #1;	2,500.00
	-
TOTAL RECEIPTS	<u>\$ 117,202.10</u>

Cinco STP
Cash Disbursements
10/17/19

GENERAL FUND

Check	Payee	Description	Amount
4630	Allen Boone Humphries Robinson, LLP	Legal Fees-Regional Sewage Treatment Plant thru 9/20/19	3,475.05
4631	Allen Boone Humphries Robinson, LLP	Legal Fees-Regional STP FEMA thru 9/20/19	250.00
4632	BGE, Inc.	Engr Fees-General Regional WWTP thru 8/23/19	4,423.39
4633	Si Environmental, LLC	Operations, Maintenance & Repair 9/19	23,349.70
4634	McLennan & Associates	Bkkpg, Exps, & Addtl 9/19	1,611.19
4635	Best Trash	Dumpster Service - 9/19	210.00
4636	Direct Energy Business	(STP) 2811 S Fry Rd. SVC - 8/01-8/29/19	12,050.27
4637	Envirodyne Laboratories, Inc.	Laboratory Expense - 8/19	1,396.00
4638	Napco Chemical Company, Inc.	Chemicals Expense - 8/16,8/27,8/30,9/10,9/13/19	17,444.00
4639	Trinity Wastewater Solutions Company	Sludge Removal - 9/11-9/16/19	10,800.00
4640	West Harris County Regional Water Auth.	Pumpage Fees (8 X 2.95) 8/19	23.60
P 4641	Direct Energy Business	(STP) 2811 S. Fry Rd. SVC	-

-DM-	Compass Bank	Service Charge	11.74
-DM-	Compass Bank	Transfer excess to TexPool	30,000.00

TOTAL GENERAL FUND DISBURSEMENTS \$ 105,044.94

P Indicates checks written at last meeting

Cinco STP

Schedule of Investments

09/20/19 to 10/17/19

BANK	INVESTMENT #	RATE	PURCHASE	MATURE	AMOUNT
GENERAL FUND					
TexPool	78472 25569 00005	2.1635%	09/30/19		\$33,380.11
Activity from Month End to Current: Balance - 9/30/19\$3,380.11 Additions\$30,000.00 Total to Date - 9/30/19\$33,380.11 Transfer excess to TexPool 10/7/19					
TOTAL GENERAL FUND		(Interest Earned thru 9/30/19) =		\$48.21	\$33,380.11
TOTAL INVESTMENTS, ALL FUNDS					\$33,380.11

Cinco STP
Investment Report
09/01/19 to 09/30/19

BANK	INVESTMENT NUMBER	TYPE*	RATE	PURCHASE	MATURE	AMOUNT	INVESTMENT MARKET VALUE
GENERAL FUND							
TexPool	78472 25569 00005	C	2.1635%	09/30/19		\$ 3,380.11	\$ 3,380.11
Beginning Balance	\$ 41,331.90						
Interest	48.21						
Additions	-						
Withdrawals	(38,000.00)	Transfer to Checking 9/19/19					
TOTAL GENERAL FUND	\$ 3,380.11					\$ 3,380.11	\$ 3,380.11

The District's Investments are in compliance with the investment strategy as expressed in the Investment Policy and with the relevant provisions of Chapter 2256 of the Texas Government Code. Further, they comply with Generally Accepted Accounting Principles.

- * TYPE A = Certificate of Deposit
- * TYPE B = Direct Government Obligation
- * TYPE C = Public Fund Investment Pool
- * TYPE D = Other

INVESTMENT OFFICER - GEORGE W. GOFF

DISTRICT BOOKKEEPER - Renee Butler

Cinco STP

Investment Report, Continued

09/01/19 to 09/30/19

Pledged Securities

BANK: Compass Bank

Security/Description	Par Value	Market Value @ 09/30/19	Current Deposits
	Maturity Date		
Plus FDIC Insurance	250,000.00	250,000.00	
Total Pledged	\$ 250,000.00	\$ 250,000.00	\$ 75,750.22

COMPLIANCE TRAINING

HB675 states that the Investment Officer must attend at least one training seminar for six (6) hours within twelve months of taking office and requires at least four (4) hours of training within each two year period thereafter.

	INVESTMENT OFFICER	TREASURER	BOOKKEEPER
Name	GEORGE W. GOFF	SAME	McLENNAN & ASSOCIATES, L.P.
Date Assumed Office	9/28/1995		3/18/2004
Completed Training	11/07/95 SMLB (2 Hrs) 6/07/96 U of H (5 Hrs) 3/28/98 McCall (5 Hrs) 4/17/99 McCall (5 Hrs) 9/09/00 McCall (5 Hrs) 9/08/01 McCall (4 Hrs) 9/13/03 McCall (4 Hrs) 10/01/05 McCall (4 Hrs) 9/29/07 McCall (4 Hrs) 2/07/10 TexPool (4 Hrs) 8/18/12 Txpl Academy (4 Hrs) 4/27/15 Txpl Academy (4Hrs) 5/21/17 TxPI Academy (4 Hrs) 10/27/18 McCall (6Hrs)		1995-2001 Various (48 Hrs) 11/20/03 TAC (6 Hrs) 10/01/05 McCall (6 Hrs) 06/21/07 UNT (4 Hrs) 06/18/09 UNT (4 Hrs) 01/30/12 Txpl Academy (4 Hrs) 06/12/14 UNT (6 Hrs) 10/15/15 McCall (6 Hrs) 06/23/16 UNT (8 Hrs) 10/29/16 McCall (36 Hrs) 10/21/17 McCall (8 Hrs) 10/27/18 McCall (30 Hrs)

METHODS USED FOR REPORTING MARKET VALUES

Certificate of Deposit:
 Securities/Direct Government Obligations: Face Value plus accrued interest.
 Current face value multiplied by
 the net selling price quoted by the
 broker. Valued at current book
 value
 Public Fund Investment Pool/MM Accts:

APPROVED BROKERS

Compass Bank
 Comerica Bank

Cinco STP

Annual Energy Billings

October 17, 2019

Billing Start Date	Billing End Date	Actual Consumption, KWh or CCF	Period Charges	Service Provider	Billing Start Date	Billing End Date	Actual Consumption, KWh or CCF	Period Charges	Service Provider
Sewage Treatment Plant, 2811 S. Fry Road					Sewage Treatment Plant, 2811 S. Fry Road				
12/14/17	01/16/18	268,847	18,898.37	Reliant Energy	01/03/19	01/31/19	225,160	14,517.59	Direct Energy
SUB-TOTALS		268,847	18,898		SUB-TOTALS		225,160	14,517.59	
01/17/18	02/12/18	204,039	15,611.56	Reliant Energy	02/01/19	03/03/19	233,766	15,047.17	Direct Energy
SUB-TOTALS		472,886	34,510		SUB-TOTALS		458,926	29,564.76	
02/12/18	03/01/18	123,157	9,117.50	Reliant Energy	03/04/19	04/01/19	210,767	13,814.28	Direct Energy
SUB-TOTALS		596,043	43,627		SUB-TOTALS		669,693	43,379.04	
03/01/18	04/02/18	234,128	17,011.63	Reliant Energy	04/02/19	05/01/19	202,839	13,459.99	Direct Energy
SUB-TOTALS		830,171	60,639		SUB-TOTALS		872,532	56,839.03	
04/02/18	05/01/18	210,208	15,534.18	Reliant Energy	05/02/19	06/02/19	212,912	14,160.90	Direct Energy
SUB-TOTALS		1,040,379	76,173		SUB-TOTALS		1,085,444	70,999.93	
05/02/18	05/31/18	205,880	15,506.42	Reliant Energy	06/03/19	07/01/19	182,260	12,451.46	Direct Energy
SUB-TOTALS		1,246,259	91,680		SUB-TOTALS		1,267,704	83,451.39	
06/01/18	07/01/18	210,740	15,534.13	Reliant Energy	07/02/19	07/31/19	192,278	12,546.06	Direct Energy
SUB-TOTALS		1,456,999	107,214		SUB-TOTALS		1,459,982	95,997.45	
07/01/18	08/01/18	198,096	14,693.87	Reliant Energy	08/01/19	08/29/19	184,895	12,050.27	Direct Energy
SUB-TOTALS		1,655,095	121,908		SUB-TOTALS		1,644,877	108,047.72	
07/31/18	08/29/18	201,197	14,548.55	Reliant Energy					
SUB-TOTALS		1,856,292	136,456		SUB-TOTALS		1,644,877	108,047.72	
08/29/18	09/30/18	226,318	16,206.97	Reliant Energy					
SUB-TOTALS		2,082,610	152,663		SUB-TOTALS		1,644,877	108,047.72	
09/30/18	10/29/18	215,222	15,319.86	Reliant Energy					
SUB-TOTALS		2,297,832	167,983		SUB-TOTALS		1,644,877	108,047.72	
10/29/18	11/29/18	237,985	16,736.90	Reliant Energy					
SUB-TOTALS		2,535,817	184,720		SUB-TOTALS		1,644,877	108,047.72	
11/30/18	01/02/19	261,319	18,185.54	Reliant Energy-Final					
SUB-TOTALS		2,797,136	202,905.48		SUB-TOTALS		1,644,877	108,047.72	
Total for FY 2018					Total for FY 2019				
		2,797,136	\$ 202,905.48				1,644,877	108,047.72	
Totals for Cinco STP for FY 2018					Totals for Cinco STP for FY 2019				
Electricity					Electricity				
Totals for FY 2018					Total for FY 2019				
		2,797,136	\$ 202,905.48				1,644,877	\$ 108,047.72	

CINCO REGIONAL SEWAGE TREATMENT PLANT

c/o McLennan & Associates, L.P.
1717 St. James Place, Ste 500 Box 45
Houston, Texas 77056

Billing for October 2019

EXPENSE ITEMS - September 2019	TOTALS	MEMORIAL	HCMUD 81	CRSTS MUD	MASON CRK
Variable Costs					
ESFC's	7134	2341	1266	1984	1543
% of ESFC's	100%	32.8147%	17.7460%	27.8105%	21.6288%
Chemicals	17,444.00	5,724.19	3,095.61	4,851.26	3,772.93
Sludge & Waste Disposal	10,800.00	3,543.99	1,916.57	3,003.53	2,335.91
RWA Fee - (8 x 2.95) -August 19	23.60	7.74	4.19	6.56	5.10
Garbage - August 19	210.00	68.91	37.27	58.40	45.42
Direct Energy Service:8/1-8/31/19	12,050.27	3,954.26	2,138.44	3,351.24	2,606.33
AT&T Services - 6/15-9/14/19	0.00	0.00	0.00	0.00	0.00
Total Variable Costs	\$ 40,527.87	\$ 13,299.09	\$ 7,192.08	\$ 11,271.00	\$ 8,765.70
Fixed Costs (% of ownership)					
		31.33%	18.67%	33.33%	16.67%
Legal Fees thru - 9/20	3,663.75	1,147.85	684.02	1,221.13	610.75
Engr - General thru 8/23	4,423.39	1,385.85	825.85	1,474.32	737.38
Engr - FY 2017 TPDES Permit Fee	0.00	0.00	0.00	0.00	0.00
Bookkeeping	1,400.00	438.62	261.38	466.62	233.38
Insurance	0.00	0.00	0.00	0.00	0.00
Laboratory	1,396.00	437.37	260.63	465.29	232.71
Maint & Repairs	20,072.25	6,288.64	3,747.49	6,690.08	3,346.04
Mowing	0.00	0.00	0.00	0.00	0.00
Office	286.04	89.62	53.40	95.34	47.68
Messenger Services	0.00	0.00	0.00	0.00	0.00
Postage	7.15	2.24	1.33	2.38	1.19
Audit Fees Year Ending	0.00	0.00	0.00	0.00	0.00
Operator Fees	3,256.75	1,020.34	608.04	1,085.47	542.90
Total Fixed Costs	34,505.33	10,810.52	6,442.15	11,500.63	5,752.04
Bank Service Charge	11.74	3.68	2.19	3.91	1.96
Interest on Investment	(\$59.95)	\$(18.78)	\$(11.19)	\$(19.98)	\$(9.99)
CINCO ONE	(2,500.00)	\$(783.25)	\$(466.75)	\$(833.25)	\$(416.75)
Total Current Billing	\$ 72,484.99	\$ 23,311.26	\$ 13,158.47	\$ 21,922.31	\$ 14,092.95
Credit or Unpaid Balance Due	0.00	0.00	0.00	0.00	0.00
Increase / Decrease Reserve	0.00	0.00	0.00	0.00	0.00
BALANCE DUE	\$ 72,484.99	\$ 23,311.26	\$ 13,158.47	\$ 21,922.31	\$ 14,092.95

CINCO REGIONAL SEWAGE TREATMENT PLANT

ANALYSIS OF RESERVE FUNDS

Billing for October 2019

Total Current Billing	\$	72,484.99
Current Ending Cash Balance		47,515.06
Total Funds in Reserve	\$	120,000.00
DISTRICTS TOTAL DEPOSITS		120,000.00
INTEREST EARNED THIS REPORT		(59.95)
		119,940.05
INTEREST REFUNDED TO DISTRICTS		59.95
	\$	120,000.00
Districts Operating deposits are as follows:	REMAINING SURPLUS	
MEMORIAL M. U. D.	30,000.00	-
HARRIS COUNTY M. U. D. #81	30,000.00	-
CORNERSTONES M. U. D.	30,000.00	-
MASON CREEK U. D.	30,000.00	-
Totals	\$ 120,000.00	-
	\$	120,000.00
BALANCE OUTSTANDING		
OPERATING DEPOSITS + REMAINING SURPLUS	\$	(120,000.00)

Balance	\$	(120,000.00)
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CINCO REGIONAL STP

Operating Budget

1/01/19 - 12/31/19

Draft #2

JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
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Revenues:

5001	Memorial MUD	21,533	21,533	21,533	21,533	23,726	34,378	21,533	21,533	21,533	21,533	27,329	21,533	279,228
5000	Harris Co. MUD #81	13,616	13,616	13,616	13,616	14,923	21,271	13,616	13,616	13,616	13,616	17,070	13,616	175,806
5002	Cornerstones MUD	20,541	20,541	20,541	20,541	22,874	34,206	20,541	20,541	20,541	20,541	26,707	20,541	268,651
5003	Mason Creek UD	14,648	14,648	14,648	14,648	15,815	21,483	14,648	14,648	14,648	14,648	17,732	14,648	186,866
5004	Cinco MUD 1	1,500	1,500	1,500	1,500	2,250	2,500	2,500	2,500	2,500	2,500	2,500	2,500	25,750
5391	Interest Earned	150	150	150	150	150	150	150	150	150	150	150	150	1,800

Total Revenues	71,988	71,988	71,988	71,988	79,738	113,988	72,988	72,988	72,988	72,988	91,488	72,988	938,100
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Expenses:

6320	Legal Fees	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
6321	Audit Fees	-	-	-	-	7,000	1,000	-	-	-	-	-	-	8,000
6322	Engineer Fees	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	30,000
6324	Laboratory Fees	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	28,800
6326	Permits	-	-	-	-	-	-	-	-	-	-	18,000	-	18,000
6323	Operator Fees	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	3,250	39,000
6333	Bookkeeping	1,363	1,363	1,363	1,363	1,363	1,363	1,363	1,363	1,363	1,363	1,863	1,363	16,850
6335	Maintenance/Repairs	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	240,000
6340	Office Exps	215	215	215	215	215	215	215	215	215	215	215	215	2,580
6342	Chemicals	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	108,000
6336	Sludge/Waste Disposal	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	11,000	132,000
6350	Postage	10	10	10	10	10	10	10	10	10	10	10	10	120
6351	Telephone	135	135	135	135	135	135	135	135	135	135	135	135	1,620
6352	Utilities	15,400	15,400	15,400	15,400	15,400	15,400	15,400	15,400	15,400	15,400	15,400	15,400	184,800
6353	Insurance	-	-	-	-	-	40,000	-	-	-	-	-	-	40,000
6359	Other Expenses	5	5	5	5	5	5	5	5	5	5	5	5	60
6399	Garbage	210	210	210	210	210	210	210	210	210	210	210	210	2,520
7395	Meeting Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cinco One	1,500	1,500	1,500	1,500	2,250	2,500	2,500	2,500	2,500	2,500	2,500	2,500	25,750

Total Expenses	71,988	71,988	71,988	71,988	79,738	113,988	72,988	72,988	72,988	72,988	91,488	72,988	938,100
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Net Revenue/Exps	0	0	0	0	0	0	0	0	0	0	0	0	0
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Notes:

[1] Income based on percentage rate (Fixed vs. Variable)

[2] All expenses based on 10 months history

Presented Draft #1: 11/15/2018

Presented Draft #2: 12/13/2018

Adopted: 12/13/2018

Prepared By:

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Cinco Regional STP - General Fund
Budget Comparison
September 2019

	Sep 19	Budget	Variance	Jan - Sep 19	YTD Budget	Variance
Revenue						
5000 · Harris County MUD #81	18,298	13,616	4,682	112,252	131,506	(19,254)
5001 · Memorial MUD	32,231	21,533	10,698	195,223	208,835	(13,612)
5002 · Cornerstone	30,721	20,541	10,180	187,965	200,867	(12,902)
5003 · Mason Creek UD	33,441	14,648	18,793	118,768	139,834	(21,066)
5004 · Cinco MUD #1	2,500	2,500	-	17,177	18,250	(1,073)
5379 · FEMA Hurricane Income	-	-	-	268,591	-	268,591
5391 · Interest on Temp Investments	60	150	(90)	1,354	1,350	4
Total Revenue	117,251	72,988	44,263	901,330	700,642	200,688
Expense						
6318 · Legal Fees - Hurricane Expense	125	-	125	1,823	-	1,823
6320.1 · Legal Fees	6,414	5,000	1,414	47,825	45,000	2,825
6321 · Auditing Fees	-	-	-	8,200	8,000	200
6322 · Engineering Fees - General	1,630	2,500	(870)	22,871	22,500	371
6323 · Operator Fees	3,257	3,250	7	29,311	29,250	61
6324 · Laboratory Expenses	1,472	2,400	(928)	18,667	21,600	(2,933)
6326 · Permit Fees	-	-	-	-	-	-
6328 · Surface Water Expense	18	-	18	322	-	322
6333 · Bookkeeping Fees	1,550	1,363	187	12,750	12,267	483
6335 · Maintenance & Repairs - Routine	38,356	20,000	18,356	132,818	180,000	(47,182)
6336 · Sludge & Waste Disposal	21,646	11,000	10,646	98,007	99,000	(993)
6340 · Printing & Office Supplies	238	215	23	2,225	1,935	290
6342 · Chemicals	15,234	9,000	6,234	85,344	81,000	4,344
6350 · Postage	7	10	(3)	69	90	(21)
6351 · Telephone	592	135	457	1,492	1,215	277
6352 · Utilities	12,546	15,400	(2,854)	114,183	138,600	(24,417)
6353 · Insurance	-	-	-	39,833	40,000	(167)
6359 · Other Expenses	-	5	(5)	-	45	(45)
6379 · FEMA Hurricane Expense	-	-	-	268,591	-	268,591
6399 · Garbage Expenses	210	210	-	1,680	1,890	(210)
7395 · Meeting Exp-Cinco One	-	2,500	(2,500)	-	18,250	(18,250)
Total Expense	103,295	72,988	30,307	886,011	700,642	185,369
Net Surplus / Deficit	13,956	-	13,956	15,319	-	15,319

CINCO REGIONAL WASTEWATER TREATMENT PLANT

OPERATIONS REPORT
SEPTEMBER 2019



SiEnviro 

**CINCO REGIONAL
WASTEWATER TREATMENT PLANT
MANAGEMENT REPORT
SEPTEMBER 2019**

I. WASTEWATER TREATMENT PLANT

Repairs and Maintenance included in the SEPTEMBER invoice.

1. PM rotating equipment.	\$822.14
2. Vactor work completed at facility.	\$1,871.63
3. Pumped down clarifier and cleaned.	\$15,200.63
4. Quarterly vibration testing.	\$448.00

CINCO REGIONAL WASTEWATER TREATMENT PLANT

SEPTEMBER 2019

OPERATIONS CHARGES

1. Operations Fees	\$3,256.75
2. Administrative Fees	\$20.70
3. Wastewater Treatment Plant	\$20,072.25
4. Water Well	<u>\$0.00</u>
TOTAL OPERATION CHARGES	\$23,349.70

CINCO REGIONAL WASTEWATER PLANT WASTEWATER TREATMENT PLANT

Permit # 11893-001
Expires: 5/1/2022

Design: 3.000 MGD
Utilized 43.7%

PARAMETER		UNITS	PERMIT LIMITS	Aug-19 RESULTS	EXCURSION
Dissolved Oxygen:	Min	mg / l	6.0	6.7	0
pH:	Min	S.U.	6.0	7.2	0
	Max	S.U.	9.0	7.4	0
Total Suspended Solids:	Avg	lbs / day	376.0	35.0	0
	Avg	mg / l	15.0	3.7	0
	Max	mg / l	40.0	6.6	0
Ammonia:	Avg	lbs / day	50.0	1.9	0
	Avg	mg / l	2.0	0.2	0
	Max	mg / l	7.0	0.2	0
Monthly Flow:	Avg	M.G.D.	3.000	1.312	0
2-Hour Peak Flow:	Max	gpm	10417	1041	0
Annual Flow:	Avg	M.G.D.	3.000	1.368	0
De-Chlor:	Max	mg / l	0.1	0.1	0
Chlorine:	Min	mg / l	1.0	1.1	0
E.coli	Avg	C.F.U.	63.0	2.0	0
	Max	C.F.U.	200.0	4.0	0
CBOD:	Avg	lbs / day	250.0	22.2	0
	Avg	mg / l	10.0	2.4	0
	Max	mg / l	25.0	3.7	0

Permit Excursions:	0	Sanitary Sewer Overflows:	0
Rainfall:	2.75	SSO Gallons:	0

