



AGENDA

Carlsbad Board of Water and Sewer Commissioners Regular Meeting
City Hall Planning Room
101 N. Halagueno Street
Carlsbad, New Mexico
January 15, 2026 at 8:30 AM

Agenda

1. Roll Call and Determination of Quorum
2. Consider Approval of Minutes of the Board of Water and Sewer Commissioners Regular Meeting held on December 18, 2025
3. Utilities Department Monthly Reports presented by Ivan "Mike" Abell
4. Update on UV Disinfection at the Waste Water Treatment Plant by Ivan "Mike" Abell

FOR INFORMATION ONLY

If you require a hearing interpreter, language interpreters or auxiliary aids in order to attend and participate in the above meeting, please contact the City Manager's office at (575) 887-1191 at least 48 hours prior to the scheduled meeting time.

Roll Call

**MINUTES OF THE REGULAR MEETING OF
THE BOARD OF WATER AND SEWER COMMISSIONERS
DECEMBER 18, 2025, AT 8:30 A.M.,
IN THE PLANNING ROOM AT THE MUNICIPAL BUILDING, 101 N. HALAGUENO
STREET, CARLSBAD, NM**

VOTING MEMBERS PRESENT:	Fred Beard Dennis Miehl John Bowen Robert Chavez	Member Member Member Member
VOTING MEMBERS ABSENT:	Craig Stephens	Chairman
EX-OFFICIO MEMBERS PRESENT:	Richard D. Lopez Eddie Rodriguez Wendy Austin	Mayor Ex-Officio City Manager/ Secretary
EX-OFFICIO MEMBERS ABSENT:		
OTHERS PRESENT:	Ken Ahrens KC Cass Ivan “Mike” Abell Denise Madrid-Boyea Barbara Hodgson Melissa Salcido Matt Warner Olga Ramirez Richard Aguilar Anthony Hernandez Jeff Patterson Maria O’Brien Dave Romero Clay Bradley Valerie Branson Linda Wilson	Deputy City Manager Director of Operations Director of Utilities City Attorney City Attorney Finance Director WWTP Superintendent Assistant to City Administrator Environmental Superintendent Water Superintendent PER Director (entered at 8:41) Modrall Sperling Balleau Groundwater City’s Outside Counsel (via telephone) Citizen Citizen

1. Roll Call and Determination of Quorum

F. Beard called roll and it was determined that there was a quorum of voting members.

**2. Consider Approval of Minutes of the Board of Water and Sewer Commissioners
Regular Meeting held November 20, 2025**

The motion was made by D. Miehl and seconded by J. Bowen to approve the Minutes of the Regular Board of Water and Sewer Commissioners meeting held on November 20, 2025. The vote was as follows: Yes: F. Beard, J. Bowen, R. Chavez, D. Miehl, No: None Absent: C. Stephens The Motion passed.

3. Consider Approval of request from 3R Operating LLC to drill a Gas Well in the City's Wellhead Protection Area

W. Austin stated the City received an application from 3R Operating to drill a gas well in the City's Wellhead Protection Area. C. Bradley and D. Romero have reviewed the application. C. Bradley said 3R Operating has meet the requirements and he recommends approval. D. Romero stated he has reviewed the application and 3R Operating have met the requirements and also recommends approval.

R. Chavez asked if they review OCD reports prior to approving applications to see if they have any reports of incidents happening or if they are in compliance. D. Romero stated they do not, but he could check. D. Miehl asked if this would be the closest well within the City. D. Romero responded there are some wells that are closer than the one 3R Operating is requesting.

W. Austin mentioned to the board currently there are 98 wells in the Wellhead Protection area. Two years ago the City approved 3R Operating to drill within the Wellhead Protection area, those wells are further out than the proposed well and the City had no issues with them.

D. Miehl asked if the City could increase the insurance requirement to possibly \$10 million. If there's a spill or contamination the \$1 million wouldn't cover the costs. C. Bradley responded yes, the City could increase it to \$10 million. Mayor Lopez asked if increasing the insurance to \$10 million is typical or out of the ordinary. C. Bradley responded \$10 million is the industry standard. Councilor Rodriguez asked if they needed to increase anything in the General Liability or just the aggregate. C. Bradley suggested that everything remain the same, just increase the aggregate.

The motion was made by D. Miehl and seconded by J. Bowen to conditionally approve the application with an increase of the insurance requirement to \$10 million and board review of the OCD reports on any incidents 3R Operating has had. The vote was as follows: Yes: J. Bowen, R. Chavez, D. Miehl, No: None Abstain: F. Beard Absent: C. Stephens The Motion passed.

4. Update on Tatum Water Pump Test and long-term Municipal Water Plan presented by Maria O'Brien and Dave Romero

M. O'Brien stated she would like to combine Items #4 and #5 on the Agenda. M. O'Brien briefly reviewed the 40 year Water Plan currently in place. She stated the plan is usually updated every ten years. She mentioned when the City reviews the demand for water they need to review the management of Carlsbad Springs and the chloride levels, the aquifer drawdown in the Ogallala, the return flow obligations and priority considerations. Councilor Rodriguez mentioned the demand for water may be increasing in the near future with the development of Carlston Ranch and other housing developments. M. O'Brien stated the City holds Water Rights in excess of the 40 year demand. D. Romero stated the wells at Tatum were tested and pump about 300 gallons per minute, they are located in the thickest aquifer region. He stated the City has 34 permitted wells that could be developed in the Tatum Wellfield. M. O'Brien stated Water Rights cannot be transferred until they are developed. W. Austin asked if they could evaluate the impact 100 years out. She would like to secure Water Rights for future generations.

5. Discussion on offer made to the City to potentially purchase 250 acre-feet of Water Rights located within the Capitan Reef (Sheep's Draw) presented by Maria O'Brien and Dave Romero

6. Utilities Department Monthly Reports presented by Ivan "Mike" Abell

I. Abell reported for the month of November the Water department pumped approximately 543.82 acre-feet from the Sheep's Draw, which is 6.50 million gallons a day. This is 34.1 acre-feet less than this time last year. The City is at 87% of our Water Rights. In the Double Eagle Water System, the Double Eagle department pumped about 74.43 acre-feet, which is about 24.25 million gallons a day. Due to the meter failure in October numbers were unavailable for the amount of water delivered to the City of Carlsbad. Customers on the Double Eagle water system used approximately 2.82 million gallons. The WWTP treated about 2.51 million gallons of sewage and treated about 132 thousand gallons of septage. They delivered 6.13 million gallons of Effluent to the Municipal Golf Course and had no Effluent sales for the month of November.

R. Chavez asked if the letters to the Double Eagle Water System users have been sent out. M. Abell responded the letters are being prepared and should be sent out after the Holidays.

Precipitation for the month of November was 0.13 inches.

7. Discussion on Waste Water Treatment Plant Tour for Board Members

I. Abell stated he is working on setting up a tour of the Waste Water Treatment Plant for the board members. He will reach out to the board with some available dates and times.

8. Financial Reports presented by Melissa Salcido

M. Salcido gave a summary of the November 2025 Financials. The Water & Sewer Fund had a beginning fund balance of \$17 million. Revenues budget had a balance of \$7.6 million and were \$12.1 million unfavorable to the \$19.7 million budget. She reminded the board this is due to the timing of receiving reimbursement on grants and loans. If the unfavorable variance for the grants and loans were to be removed the Water and Sewer fund would be favorable by \$1 million in revenues. Labor costs of \$2.2 million were \$400 thousand favorable to the \$2.6 million budget. Operating costs of \$1.6 million were \$200 thousand favorable to the \$1.8 million budget. Capital Investment of \$3.5 million was \$18.9 million favorable to the \$22.3 million budget.

M. Salcido distributed the current Water and Sewer rates that went into effect in October.

F. Beard stated the meeting is adjourned.

Chairman



CITY OF CARLSBAD

FY 2025 – 2026

DEPARTMENT OF UTILITIES

DECEMBER 2025

Ivan M. Abell, Director of Utilities

ENVIRONMENTAL SERVICES REPORT

DECEMBER 2025

<i>Environmental Services:</i>	<i>Current Month</i>	<i>Previous Month</i>	<i>Calendar Year to Date</i>
State and Federal Environmental Violations by City	0	1	2
Environmental Assessments (CDBG, P&Z, Drilling)	0	0	0
Environmental Compliance Inspections (NMED, EPA)	0	0	2
Criminal Complaints Filed	0	0	0
Environmental Projects or Programs (HHWC)	0	0	2
Grease Interceptors Inspections	1	0	33

<i>Laboratory:</i>	<i>Current Month</i>	<i>Previous Month</i>	<i>Calendar Year to Date</i>
<i>Municipal Water Sampling/Analysis:</i>			
Wellfield Chemical Characteristic Analysis	53	42	521
Partial Wellfield Chemical Characteristics	53	32	407
Monitoring Wells Chemical Analysis	0	0	19
Total Coliform Analysis	40	40	480
Fecal Coliform Analysis	0	0	0
Chlorine Residual Tests (DE)	23	21	257
Special Chemicals (BTEX, Ammonia, Nitrite)	0	0	0

<i>Municipal Wastewater Sampling/Analysis (Reads):</i>	<i>Current Month</i>	<i>Previous Month</i>	<i>Calendar Year to Date</i>
Chemical Oxygen Demand Tests	0	0	0
Biochemical Oxygen Demand	15	12	159
Total Suspended Solids Tests	15	12	159
Volatile Alkalinity Tests	0	0	0
E-Coli on Effluent	15	12	159
Metals/TCLP/PCB/M2 Sampling on Sludge	0	0	0
Fecal Coliform Analysis on Sludge (Compost)	1	0	8
Effluent Chemical Characteristic Analysis	1	1	12

<i>DMR Bench Sheet:</i>	<i>Current Month</i>	<i>Previous Month</i>	<i>Calendar Year to Date</i>
Influent BOD Avg. (Lbs.)	7,512	6,682	88,118
Effluent BOD Avg. (Lbs.)	134.25	212	1,579
BOD Removal (%)	98.21	97	1,178
Influent TSS Avg. (Lbs.)	8,851	8,546	102,621
Effluent TSS Avg. (Lbs.)	79.58	110	1,340
TSS Removal (%)	9.10	99	1,095

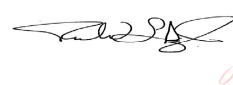
ENVIRONMENTAL SERVICES REPORT

DECEMBER 2025

Private Well Analysis:	Current Month	Previous Month	Calendar Year to Date
Total Coliform Analysis	46	46	507
Total Coliform Analysis (Construction)	0	0	13
Number of Positives for Confirmation	2	2	29
Chemical Characteristics Analysis	0	0	9
Environment Department Mediated Tests	0	0	0
Lake Carlsbad E-Coli Analysis Performed	0	0	153
Lake Carlsbad Beach Closures Due to Bacterial Count	0	0	2

Golf Course (Reclaimed) Water Analysis (NMED Groundwater Discharge Permit):	Current Month	Previous Month	Calendar Year to Date
Nitrate	4	4	51
Total Kjeldahl Nitrogen	0	0	0
Total Dissolved Solids	1	1	12
E-Coli Analysis	12	12	153
Chemical Characteristics	0	0	1
Other NMED-Required Testing (Chlorides, etc.)	1	1	12

Remarks:



Digitally signed by Richard Aguilar
 DN: cn=Richard Aguilar, o=City of Carlsbad,
 ou=Env Services Lab,
 email=raguilar@cityofcarlsbadnm.com, c=US
 Date: 2026.01.07 10:58:31 -07'00'

Richard Aguilar,
Environmental Svcs. Superintendent

Carlsbad Municipal Water System Report

Dec-25

Acre Ft.

Production Figures:

This Month Previous Month Year to Date

Pumped from Sheep's Draw (Ac. Ft.)	527.65	543.82	9,082.69
Water Imported from Double Eagle (Ac. Ft.)	0.00	0.00	287.74
Water delivered to Livestock (Ac. Ft.)	0.10	0.37	2.28
Water Sold to Apartments (Ac. Ft.)	11.62	15.47	160.78
Water Sold to Commercial Accounts (Ac. Ft.)	123.28	146.03	1,896.61
Water Sold to Government Accounts (Ac. Ft.)	23.09	37.91	511.77
Water Sold to Industrial Accounts (Ac.Ft.)	0.06	0.05	0.86
Water Sold to Residential Accounts (Ac.Ft.)	269.75	392.61	5,213.81
Record Only Accounts (Ac.Ft.)	0.95	0.83	11.72
Water Sold to Semi-Commercial Accounts (Ac.Ft.)	11.96	14.20	173.76
Safe Drinking Water Act Violations	0	0	0

*meter failure

Wells:

Number in Operation (Sheep's Draw) **	9/9	9/9	
KWH Consumed	434,880	551,680	7,199,200
Capitan Aquifer Level (Ft. from Surface @ #6)	389'9"	389'4"	
Number of New Water Services Installed	6	12	160

Meters:

Total in Service	13,147	13,165	
------------------	--------	--------	--

Fire Hydrants:

In Service	879	879	
Out of Service	0	0	
Repaired	0	0	3

Remarks:


Anthony Hernandez, Water Superintendent

CARLSBAD WATER SYSTEM WELL OPERATION
Dec-25

WELL	POWER CONSUMPTION X 400			WATER PRODUCTION X 1000				ENGINE HOUR CLOCK			WATER LEVELS			
	CURRENT MONTH	LAST MONTH	KWH CONSUMED	CURRENT MONTH	LAST MONTH	GALLONS PUMPED	ACRE FEET	CURRENT MONTH	LAST MONTH	HOURS RUN	GPM	STATIC	PUMPED per Hour Meter (gal)	gal/kwh
1	2	1	400	270,239	270,096	143,000	0.44	2715.9	2714.4	1.5	1,750		157,500	525
2	4	2	800	98,914	98,712	202,000	0.62	13464.8	13461.4	3.4	1,200		244,800	420
3	4	2	800	696,353	696,104	249,000	0.76	40450.2	40446.9	3.3	1,600		316,800	375
4	630	411	87,600	1,988,570	1,954,467	34,103,000	104.66	65244.8	64917.8	327.0	1,750		34,335,000	257
5	767	512	102,000	3,105,775	3,061,614	44,161,000	135.53	77711	77361.6	349.4	1,200		25,156,800	348
6	38	20	2,880	1,359,425	1,359,150	275,000	0.84		1.7	1.7	2,800		285,600	421
7	786	519	106,800	2,444,083	2,399,934	44,149,000	135.49	21852.3	21461.8	390.5	1,950		45,688,500	424
8	298	295	1,200	1,262,956	1,262,864	92,000	0.28	20955.6	20955.6	0.0	1,350		0	389
9	626	295	132,400	1,701,895	1,653,333	48,562,000	149.03		520.5	520.5	1,600		49,968,000	324
10														
TOTAL KWH CONSUMED			434,880	TOTAL PUMPED		171,936,000	527.65	TOTAL HOURS RUN		1,597.3	OIL		TOTAL CHLORINE USED	
											17.5		1,045	
Reservoir No. 4 Meter				Total Gallons Pumped Comparison				Total Rainfall			Notes			
Inlet This Month X 1000		11,854,308		THIS MONTH		171,936,000	527.65	0.64			Wells #4 and #5 on State Trust Land			
Inlet Last Month X 1000		11,682,931		LAST YEAR, SAME MONTH		153,294,000	470.44							
				DIFFERENCE		18,642,000	57.21							
Total Inlet		171,377,000		* corrected										

MUNICIPAL WATER SYSTEM WATER RIGHTS PUMPED (C-76) ACRE FEET

(9867 Acre Ft. Available Per Year)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2002	297.16	268.70	440.91	704.96	958.06	1,066.88	1,341.56	1,074.79	774.52	485.05	280.99	155.99	7849.57
2003	270.84	203.99	505.94	1,064.03	1,206.94	1,122.78	1,343.98	1,076.39	775.41	685.53	305.27	409.57	8970.67
2004	385.42	439.36	489.06	680.19	948.71	1,063.84	1,068.05	798.52	772.40	451.14	364.15	414.64	7875.48
2005	332.30	318.24	425.71	655.91	878.61	1,123.12	1,338.81	773.36	830.12	609.54	478.07	445.90	8209.69
2006	395.24	416.50	606.61	799.07	1,145.49	1,165.26	1,141.96	699.68	536.40	574.84	453.79	372.30	8307.14
2007	386.96	350.66	480.44	665.57	629.51	1,062.65	841.31	964.52	740.42	672.37	485.02	446.90	7726.33
2008	452.24	668.55	705.92	934.92	1,060.06	1,454.74	1,040.96	900.29	768.43	684.45	505.09	456.16	9631.81
2009	458.70	519.36	694.55	871.85	1,095.02	1,202.19	951.06	980.82	809.14	666.16	529.67	420.61	9199.13
2010	422.56	352.26	539.69	327.39	1,150.19	1,219.15	848.31	1,057.28	738.68	677.68	503.09	461.84	8298.12
2011	474.73	536.44	800.88	973.90	1,238.89	1,355.98	1,423.54	1,226.62	886.11	776.71	540.43	454.95	10689.18
2012	466.85	431.44	701.69	810.10	828.11	1,185.27	901.47	1,013.28	806.85	652.17	480.34	461.15	8738.72
2013	423.91	412.36	633.53	822.91	947.12	1,047.09	800.86	925.05	727.29	611.46	451.84	377.93	8,181.35
2014	388.31	383.82	557.69	701.51	872.84	1,031.98	1,122.07	893.82	552.90	541.69	414.16	391.00	7,851.79
2015	428.54	369.38	490.96	711.13	732.60	903.17	919.01	994.43	789.98	522.56	432.59	418.96	7,713.31
2016	408.24	364.58	449.03	573.56	672.93	921.77	1,157.49	791.59	541.42	587.72	443.39	442.94	7,354.66
2017	394.41	415.24	615.73	768.14	921.14	883.20	1,007.00	726.66	715.10	536.59	482.95	484.39	7,950.55
2018	484.78	402.92	640.20	750.65	991.56	1,023.15	954.69	853.04	684.90	530.89	386.73	404.76	8,108.27
2019	392.03	408.30	501.88	712.74	920.31	919.36	931.82	860.57	880.60	570.04	425.02	400.18	7,922.85
2020	424.96	402.62	508.41	896.76	983.81	1,161.49	1,242.85	1,055.78	1,045.26	625.06	411.27	463.48	9,221.75
2021	368.52	418.64	712.43	726.13	809.60	837.98	793.40	764.24	715.36	652.05	455.84	403.35	7,657.54
2022	336.78	376.58	515.94	882.91	973.98	975.97	1,147.87	848.51	773.62	493.31	404.67	435.85	8,165.99
2023	330.74	313.20	484.97	823.91	916.36	1,079.94	1,232.41	1,223.34	819.91	621.07	486.28	470.52	8,802.65
2024	436.56	468.06	651.21	871.40	1,184.72	1,080.20	1,111.10	1,164.73	813.57	778.98	577.92	470.44	9,608.89
2025	541.75	547.72	656.13	797.44	993.74	857.61	927.33	1,054.58	889.55	745.37	543.82	527.65	9,082.69

Sheep Draw Water Pumped - Acre Feet 9867 Acre Feet Available Per Year

	January	February	March	April	May	June	July	August	September	October	November	December	Total	Difference
														9867
1999	259.97	275.11	485.12	694.64	798.54	839.80	903.86	1,102.11	751.40	534.43	395.59	253.70	7,294.27	2,572.73
Total		535.08	1,020.20	1,714.84	2,513.38	3,353.18	4,257.04	5,359.15	6,110.55	6,644.98	7,040.57	7,294.27		
2000	303.85	377.05	592.71	710.82	1,063.12	1,168.66	1,072.41	1,134.64	886.90	487.13	260.33	278.46	8,336.08	1,530.92
Total		680.90	1,273.61	1,984.43	3,047.55	4,216.21	5,288.62	6,423.26	7,310.16	7,797.29	8,057.62	8,336.08		
2001	379.10	340.60	389.50	714.80	1,129.68	1,083.53	1,341.71	1,074.96	612.54	662.35	356.80	276.27	8,361.84	1,505.16
Total		719.70	1,109.20	1,824.00	2,953.68	4,037.21	5,378.92	6,453.88	7,066.42	7,728.77	8,085.57	8,361.84		
2002	297.16	268.70	440.91	704.96	958.06	1,066.88	1,341.56	1,074.79	774.52	485.05	280.99	155.99	7,849.57	2,017.43
Total		565.86	1,006.77	1,711.73	2,669.79	3,736.67	5,078.23	6,153.02	6,927.54	7,412.59	7,693.58	7,849.57		
2003	270.84	203.99	505.94	1,064.03	1,206.94	1,122.78	1,343.98	1,076.39	775.41	685.53	305.27	409.57	8,970.67	896.33
Total		474.83	980.77	2,044.80	3,251.74	4,374.52	5,718.50	6,794.89	7,570.30	8,255.83	8,561.10	8,970.67		
2004	385.42	439.36	489.06	680.19	948.71	1,063.84	1,068.05	798.52	772.40	451.14	364.15	414.64	7,875.48	1,991.52
Total		824.78	1,313.84	1,994.03	2,942.74	4,006.58	5,074.63	5,873.15	6,645.55	7,096.69	7,460.84	7,875.48		
2005	332.30	318.24	425.71	655.91	878.61	1,123.12	1,338.81	773.36	830.12	609.54	478.07	445.90	8,209.69	1,657.31
Total		650.54	1,076.25	1,732.16	2,610.77	3,733.89	5,072.70	5,846.06	6,676.18	7,285.72	7,763.79	8,209.69		
2006	395.24	416.50	606.61	799.07	1,145.49	1,165.26	1,141.96	699.68	536.40	574.84	453.79	372.30	8,307.14	1,559.86
Total		811.74	1,418.35	2,217.42	3,362.91	4,528.17	5,670.13	6,369.81	6,906.21	7,481.05	7,934.84	8,307.14		
2007	386.96	350.66	480.44	665.57	629.51	1,062.65	841.31	964.52	740.42	672.37	485.02	446.90	7,726.33	2,140.67
Total		737.62	1,218.06	1,883.63	2,513.14	3,575.79	4,417.10	5,381.62	6,122.04	6,794.41	7,279.43	7,726.33		
2008	452.24	668.55	705.91	934.92	1,060.06	1,454.74	1,040.96	900.29	768.43	684.45	505.09	456.16	9,631.80	235.20
Total		1,120.79	1,826.70	2,761.62	3,821.68	5,276.42	6,317.38	7,217.67	7,986.10	8,670.55	9,175.64	9,631.80		
2009	458.70	519.36	694.55	871.85	1,095.02	1,202.19	951.06	980.82	809.14	666.16	529.67	420.61	9,199.13	667.87
Total		978.06	1,672.61	2,544.46	3,639.48	4,841.67	5,792.73	6,773.55	7,582.69	8,248.85	8,778.52	9,199.13		

8

Sheep Draw Water Pumped - Acre Feet 9867 Acre Feet Available Per Year

Difference

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
2011	474.73	536.44	800.88	973.90	1,238.89	1,355.98	1,423.54	1,226.62	886.11	776.71	540.43	454.95	10,689.18	9,867.00
Total		1,011.17	1,812.05	2,785.95	4,024.84	5,380.82	6,804.36	8,030.98	8,917.09	9,693.80	10,234.23	10,689.18		-822.18
2012	466.85	431.44	701.69	810.10	828.11	1,185.27	901.47	1,013.28	806.85	652.17	480.34	461.15	8,738.72	1,128.28
Total		898.29	1,599.98	2,410.08	3,238.19	4,423.46	5,324.93	6,338.21	7,145.06	7,797.23	8,277.57	8,738.72		
2013	423.91	412.36	633.53	822.91	947.12	1,047.09	800.86	925.05	727.29	611.46	451.84	377.93	8,181.35	1,685.65
Total		836.27	1,469.80	2,292.71	3,239.83	4,286.92	5,087.78	6,012.83	6,740.12	7,351.58	7,803.42	8,181.35		
2014	388.31	383.82	557.69	701.51	872.84	1,031.98	1,122.07	893.82	552.90	541.69	414.16	391.00	7,851.79	2,015.21
Total		772.13	1,329.82	2,031.33	2,904.17	3,936.15	5,058.22	5,952.04	6,504.94	7,046.63	7,460.79	7,851.79		
2015	482.54	369.38	490.96	711.13	732.60	903.17	919.01	994.43	789.98	522.56	432.59	418.96	7,767.31	2,099.69
Total		851.92	1,342.88	2,054.01	2,786.61	3,689.78	4,608.79	5,603.22	6,393.20	6,915.76	7,348.35	7,767.31		
2016	408.24	364.58	449.03	573.56	672.93	921.77	1,157.49	791.59	541.42	587.72	443.39	442.94	7,354.66	2,512.34
Total		772.82	1,221.85	1,795.41	2,468.34	3,390.11	4,547.60	5,339.19	5,880.61	6,468.33	6,911.72	7,354.66		
2017	394.41	415.24	615.73	768.14	921.14	883.20	1,007.00	726.66	715.10	536.59	482.95	484.39	7,950.55	1,916.45
Total		809.65	1,425.38	2,193.52	3,114.66	3,997.86	5,004.86	5,731.52	6,446.62	6,983.21	7,466.16	7,950.55		
2018	484.78	402.92	640.20	750.65	991.56	1,023.15	954.69	853.04	684.90	530.89	386.73	404.76	8,108.27	1,758.73
Total		887.70	1,527.90	2,278.55	3,270.11	4,293.26	5,247.95	6,100.99	6,785.89	7,316.78	7,703.51	8,108.27		
2019	392.03	408.30	501.88	712.74	920.31	919.37	931.82	860.57	880.60	570.04	425.02	400.18	7,922.86	1,944.14
Total		800.33	1,302.21	2,014.95	2,935.26	3,854.63	4,786.45	5,647.02	6,527.62	7,097.66	7,522.68	7,922.86		
2020	438.73	387.20	523.69	928.40	1,015.17	1,177.81	1,120.57	1,062.19	1,066.47	539.88	430.40	463.48	9,153.99	713.01
Total		825.93	1,349.62	2,278.02	3,293.19	4,471.00	5,591.57	6,653.76	7,720.23	8,260.11	8,690.51	9,153.99		
2021	368.01	418.64	712.43	726.13	809.60	837.98	793.40	764.24	715.36	652.05	455.84	403.35	7,657.03	2,209.97
Total		786.65	1,499.08	2,225.21	3,034.81	3,872.79	4,666.19	5,430.43	6,145.79	6,797.84	7,253.68	7,657.03		
2022	336.78	376.58	515.94	882.91	973.98	975.97	1,147.87	848.51	773.62	493.31	404.67	435.85	8,165.99	1,701.01
Total		713.36	1,229.30	2,112.21	3,086.19	4,062.16	5,210.03	6,058.54	6,832.16	7,325.47	7,730.14	8,165.99		
2023	330.74	313.20	484.97	823.91	916.36	1,079.94	1,232.41	1,223.34	819.91	621.07	486.28	470.52	8,802.65	1,064.35
Total		643.94	1,128.91	1,952.82	2,869.18	3,949.12	5,181.53	6,404.87	7,224.78	7,845.85	8,332.13	8,802.65		
2024	436.56	468.06	651.21	871.40	1,184.72	1,080.20	1,111.10	1,164.73	813.57	778.98	577.92	470.44	9,608.89	258.11
Total		904.62	1,555.83	2,427.23	3,611.95	4,692.15	5,803.25	6,967.98	7,781.55	8,560.53	9,138.45	9,608.89		
2025	541.75	547.72	656.13	797.44	993.74	857.61	927.33	1,054.58	889.55	745.37	543.82	527.65	9,082.69	784.31
Total		1,089.47	1,745.60	2,543.04	3,536.78	4,394.39	5,321.72	6,376.30	7,265.85	8,011.22	8,555.04	9,082.69		

**MUNICIPAL WATER SYSTEM
WATER SOLD
ACRE FEET**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2002	361.07	373.67	374.24	527.03	956.91	1164.77	996.81	977.93	1153.18	607.92	431.21	301.17	8225.93
2003	391.07	304.91	404.05	598.44	999.69	1030.55	1061.59	1169.02	1046.52	731.67	559.33	342.90	8639.75
2004	418.82	310.23	337.47	479.72	685.58	983.31	984.35	814.65	763.90	475.02	413.97	302.17	6969.19
2005	368.27	275.02	299.95	503.81	693.61	840.97	1296.63	886.95	754.89	658.48	468.42	377.74	7424.74
2006	414.11	677.07	450.26	678.99	725.58	1280.61	1083.09	705.47	564.79	572.49	430.08	334.08	7916.62
2007	354.13	318.22	380.07	437.50	653.63	756.31	899.69	774.47	896.99	541.76	530.36	344.60	6887.72
2008	326.32	375.13	413.71	627.22	842.55	1025.43	943.54	855.66	605.32	559.79	494.03	0.00	7068.68
2009	439.03	352.25	614.56	2321.13	1268.55	1211.80	1099.85	927.66	1030.30	765.46	976.92	564.86	11572.39
2010	567.77	471.98	547.89	757.41	1272.59	1066.67	1081.09	913.03	1105.63	1031.30	950.35	786.38	10552.09
2011	444.27	760.40	774.56	1233.94	1338.54	1352.52	1717.55	1405.40	1347.32	924.66	874.25	677.51	12850.91
2012	565.38	642.97	581.75	926.04	848.01	1000.31	1440.24	1151.94	1237.78	866.01	865.02	670.56	10796.01
2013	616.99	671.05	645.27	975.32	1,049.04	1,249.35	944.16	951.65	1,058.15	785.76	592.98	469.93	10009.65
2014	475.55	470.88	507.96	653.04	920.21	1,041.43	1,157.15	978.54	953.20	558.14	550.55	417.07	8683.72
2015	554.03	282.77	520.21	624.18	758.14	800.23	985.58	863.21	1,068.91	639.91	478.42	448.68	8024.27
2016	456.11	302.09	482.13	615.67	708.66	828.42	1,071.60	820.33	623.25	460.13	368.12	305.64	7042.15
2017	389.78	306.60	440.10	639.30	654.47	838.50	1,049.46	698.97	675.47	504.34	369.98	684.50	7251.47
2018	422.34	332.74	345.80	670.09	971.05	975.33	966.38	858.30	871.28	451.67	438.60	355.77	7659.35
2019	393.08	359.27	350.49	565.35	639.70	890.80	994.24	830.84	887.72	711.06	476.89	347.64	7447.08
2020	336.09	374.53	311.89	657.80	838.33	1,080.68	1,158.21	1,069.16	1,120.70	917.05	479.84	350.70	8694.98
2021	414.83	317.62	365.17	767.91	768.47	825.78	709.15	954.68	597.34	740.70	354.75	355.25	7171.65
2022	367.25	360.67	349.75	693.40	752.88	1,174.27	944.39	940.34	746.92	652.02	422.08	417.17	7821.14
2023	415.22	425.35	388.23	673.31	718.62	934.58	1,252.39	1,033.06	956.03	1,031.98	452.53	368.91	8650.21
2024	384.41	379.02	475.27	574.00	915.24	1,068.20	887.98	1,089.86	980.43	700.51	677.08	451.04	8583.04
2025	393.36	439.02	443.56	631.97	810.03	944.17	735.05	1,006.97	787.84	729.49	607.11	440.70	7969.27

10

* No info available due to transition of new billing system.

MUNICIPAL WATER SYSTEM METERS IN SERVICE

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2002	10,385	10,398	10,360	10,396	10,485	10,486	10,492	10,479	10,512	10,468	10,448	10,534
2003	10,453	10,420	10,550	10,505	10,549	10,682	10,604	10,670	10,688	10,631	10,586	10,606
2004	10,608	10,541	10,617	10,624	10,627	10,678	10,700	10,730	10,671	10,672	10,684	10,597
2005	10,581	10,552	10,635	10,618	10,645	10,733	10,757	10,747	10,725	10,695	10,692	10,669
2006	10,676	10,669	10,663	10,704	10,687	10,759	10,720	10,746	10,739	10,711	10,670	10,645
2007	10,633	10,661	10,679	10,717	10,726	10,814	10,801	10,786	10,740	10,735	10,761	10,753
2008	10,804	10,784	10,809	10,826	10,836	10,880	10,861	10,875	10,820	10,758	10,713	
2009	10,747	10,881	11,126	11,179	11,156	11,232	11,160	11,184	11,158	11,169	11,182	11,107
2010	11,132	11,105	11,201	11,157	11,208	11,221	11,216	11,225	11,201	11,205	11,184	11,165
2011	11,271	11,292	11,256	11,270	11,281	11,349	11,331	11,333	11,327	11,300	11,267	11,224
2012	11,249	11,229	11,277	11,305	11,333	11,353	11,368	11,370	11,319	11,332	11,344	11,321
2013	11,290	11,361	11,415	11,405	11,412	11,450	11,488	11,527	11,507	11,478	11,482	11,442
2014	11,501	11,709	11,803	11,807	11,848	11,893	11,919	11,988	12,001	12,022	11,892	11,993
2015	11,865	11,871	11,916	12,014	11,957	12,153	12,062	12,087	12,020	11,968	11,825	11,978
2016	11,854	12,116	12,166	12,125	12,143	12,224	12,170	12,219	12,162	12,076	11,979	11,948
2017	12,053	12,014	12,173	12,213	12,173	12,223	12,205	12,376	12,213	12,300	12,204	12,288
2018	12,315	12,307	12,329	12,384	12,452	12,531	12,472	12,479	12,467	12,408	12,577	12,352
2019	12,440	12,386	12,556	12,508	12,653	12,656	12,698	12,827	12,644	12,804	12,708	12,653
2020	12,769	12,731	12,859	12,827	12,844	12,926	12,912	13,057	12,996	13,265	12,812	12,799
2021	12,830	12,920	12,945	13,205	13,026	13,162	*	*	*	*	*	*
2022	*	*	*	*	*	*	*	*	*	*	*	12,980
2023	12,572	12,604	12,610	12,646	12,627	12,676	12,706	12,717	12,723	12,736	12,773	12,815
2024	12,803	12,811	12,826	12,843	12,877	12,906	12,912	12,939	12,943	12,981	12,989	12,981
2025	12,995	13,008	13,022	13,066	13,045	13,097	13,091	13,113	13,123	13,150	13,165	13,147

11

* No info available due to transition of new billing system.

AIRPORT WELLS WATER RIGHTS PUMPED ACRE FEET

(61.24 Acre Ft. Available Per Year)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2012	0.59	0.62	1.08	0.83	1.83	3.64	2.31	3.67	2.27	2.01	1.67	1.87	22.41
2013	0.89	2.32	2.26	1.18	1.28	1.73	1.9	3.69	2.01	2.62	1.99	1.06	22.93
2014	1.86	0.73	1.04	1.55	0.66	0.20	3.17	0.96	0.37	1.89	0.80	0.61	13.84
2015	0.03	0.07	0.03	1.02	1.59	2.47	2.57	2.96	2.13	1.35	2.46	1.57	18.25
2016	1.14	2.21	3.25	3.48	2.43	1.45	0.064	0.031	0.002	0.016	0.00	0.058	14.13
2017	0.07	0	0.16	0.31	0	0.51	0.55	0.022	0.00	0	0.18	0.14	1.94
2018	0.00	0.07	0.06	0.082	0.303	0.00	0.002	0.002	0.002	0.002	0.001	0.002	0.53
2019	0.00	0.023	0.36	0.56	1.17	2.72	2.13	2.67	2.60	2.60	1.33	1.99	18.15
2020	0.48	1.04	0.49	1.47	0.61	1.37	0	0.99	1.55	2.03	0.46	0.35	10.84
2021	0.77	0.34	0.45	0.71	0.94	2.01	1	1.56	0.92	0.83	1.21	0.61	11.35
2022	0.89	0.62	0.95	0.27	0.21	0.33	0.9	0.08	0.12	0.01	0.03	0	4.41
2023	0.00	0.00	0.00	0.40	0.52	3.75	3.61	1.76	0.09	0.08	0.00	0.00	10.21
2024	0.58	0.03	0.00	0.05	0.00	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.74
2025	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.05

AIRPORT WELLS WATER SOLD ACRE FEET

2011	1.18	1.09	3.76	3.87	3.32	3.91	3.32	1.69	3.5	3.25	3.99	0.81	33.69
2012	2.36	2.65	3.77	3.84	1.27	3.02	2.66	4.22	2.62	2.3	2.65	1.28	32.64
2013	1.32	1.11	0.88	0.49	0.64	1.67	1.78	2.70	1.22	0.97	1.20	0.95	14.93
2014	1.15	0.05	1.51	0.82	0.07	0	0.44	0.27	0.01	0.02	0.01	0.01	4.36
2015	0.01	0	0	0	0	1.04	1.78	3.12	1.12	1.60	2.07	1.25	11.99
2016	1.4	2.14	2.86	3.35	2.18	1.22	0.04	0.03	0	0.02	0	0	13.235
2017	0	0	0.15	0	0	0.48	0.53	0.00	0	0.00	0.00	0	1.16
2018	0	0	0	0	0	0	0	0.00	0	0.00	0.00	0	0
2019	0	0	0.33	0.052	0	0.031	0.031	0.00	0.37	0.29	0.51	0.08	1.694
2020	0.04	6.27	0.38	1.21	0.58	1.17	0.31	0.00	1.5	1.75	0.40	0.29	13.9
2021	0.84	0.17	0.42	0.73	0.92	1.9	1.36	1.26	1.17	0.64	0.95	0.79	11.15
2022	*	*	*	*	*	*	*	*	*	*	*	*	0
2023	0	0	0	0	0.73	0.55	1.35	3.70	0.95	0.15	0.00	0.00	7.43
2024	1.77	0.52	0	0.03	0	0.04	0.01	0.00	0	0.00	0.00	0.00	2.37
2025	0	0	0	0.04	0	0	0	0.00	0	0.00	0.00	0.00	0.04

Note: Water Sold Report is always one month behind.

*no info available

WATER CUTOFFS

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2012		227	231	299	198	270	216	274	219	504	293	408	3139
2013	260	309	321	438	267	362	267	315	236	254	362	291	3682
2014	343	360	433	239	353	185	363	399	288	373	484	307	4127
2015	397	254	252	355	256	273	299	303	266	307		535	3497
2016	414	440	298	297	360	239	345	163	177	212	240	172	3357
2017	268	210	265	279	158	231	170	195	166	228	221	177	2568
2018	241	301	120	139	235	153	227	152	206	216	368	199	2557
2019	257	270	334	143	238	147	222	251	235	256	341	217	2911
2020	172	172	235	0	0	0	0	0	0	643	0	0	1222
2021	0	0	0	428	341	255	0	0	0	0	0	0	1024
2022	0	0	797	324	394	345	457	285	276	0	0	0	2878
2023	506	275	291	318	305	277	319	232	223	248	0	0	2994
2024	372	306	296	286	209	193	265	198	212	222	185	230	2974
2025	329	310	295	0	232	0	349	281	229	261	230	265	2781

SHOOTING RANGE WELL WATER RIGHTS PUMPED ACRE FEET

(3 Acre Ft. Available Per Year)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2013	0.05	0.03	0.12	0.16	0.18	0.28	0.21	0.32	0.16	0.20	0.08	0.05	1.84
2014	0.07	0.10	0.16	0.10	0.13	0.29	0.34	0.31	0.17	0.18	0.11	0.10	2.06
2015	0.08	0.07	0.12	0.12	0.11	0.12	0.12	0.26	0.21	0.12	0.08	0.09	1.50
2016	0.07	0.08	0.10	0.07	0.10	0.22	0.16	0.09	0.04	0.04	0.037	0.031	1.04
2017	0.009	0.01	0.03	0.02	0.04	0.10	0.04	0.055	0.046	0.05	0.03	0.034	0.47
2018	0.04	0.02	0.04	0.02	0.02	0.03	0.02	0.03	0.025	0.025	0.034	0.058	0.37
2019	0.061	0.05	0.06	0.05	0.03	0.03	0.01	0.02	0.02	0.02	0.086	0.080	0.51
2020	0.003	0.00	0	0	0.00	0.00	0.05	0.06	0.06	0.043	0.043	0.000	0.26
2021	0	0	0	0	0.00	0.03	0.02	0.02	0.09	0.03	0.02	0.04	0.25
2022	0.01	0.01	0.02	0.02	0.02	0.01	0.2	0.01	0.02	0.02	0.02	0.02	0.38
2023	0.01	0.02	0.02	0.02	0.06	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.25
2024	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.03	0.04	0.04	0.03	0.32
2025	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.01	0.24

SUNSET GARDEN WELL WATER RIGHTS PUMPED ACRE FEET

(28.2 Acre Ft. Available Per Year)

2012											10.75	0	10.75
2013	0.00	0.00	0.00	1.51	4.53	4.47	2.98	5.09	1.73	0.51	0.00	0.00	20.82
2014	0.00	0.00	0.00	0.00	0.00	0.00	6.81	2.58	0.53	0.00	0.00	0.00	9.92
2015	0.00	0.00	0.07	2.68	2.84	1.93	1.13	2.72	4.71	1.47	2.17	0.26	19.98
2016	0.13	1.89	3.37	4.30	4.49	4.11	4.66	0.82	0.00	0.00	0.00	0.00	23.77
2017	0.00	0.00	2.60	3.92	3.87	3.63	4.18	2.97	0.33	0.00	0.00	1.38	22.88
2018	0.00	0.07	0.00	1.48	3.53	3.74	1.57	3.46	2.79	1.00	0.00	0.00	17.64
2019	0.00	0.00	0.04	2.56	4.36	4.57	2.72	4.60	3.06	1.04	0.28	0.00	23.23
2020	0.13	0.55	1.06	2.53	3.77	1.58	3.97	3.97	3.81	2.46	0.78	0.29	24.90
2021	0.0045	0.00	1.06	2.23	3.09	3.29	3.36	2.23	2.60	1.07	1.49	1.41	21.84
2022	0.03	0.00	0.31	1.88	3.20	3.74	3.45	2.60	2.30	0.64	0.47	0.70	19.32
2023	0.00	0.02	0.73	2.40	3.43	3.49	0.83	3.03	2.09	0.81	0.00	0.00	16.83
2024	0.31	1.04	1.20	1.64	3.48	2.63	3.42	3.34	1.33	1.21	0.41	0.21	20.22
2025	0.53	0.21	0.82	2.45	1.84	1.01	1.14	2.46	2.97	1.72	0.21	1.37	16.73

WOOD FARM WELLS

1,000,000 325850

*1,000,000 /325850 Formula do not delete

2011	0.08	0.90	11.80	9.78	22.64	22.54	18.60	19.88	37.60	8.30	2.20	0.02	154.34
2012	0.00	4.81	9.11	11.16	11.79	18.76	10.00	11.69	15.24	1.89	0.05	0.64	95.13
2013	0.35	0.61	7.29	12.51	16.04	16.64	10.62	16.57	8.61	4.90	2.34	0.27	96.75
2014	1.36	1.79	6.64	10.62	16.04	22.07	21.01	13.50	3.31	4.42	0.12	0.25	101.13
2015	0.29	1.31	4.58	13.01	37.20	2.17	11.54	20.96	8.74	1.62	0.44	0.55	102.41
2016	0.27	2.67	14.42	13.03	22.09	30.57	33.17	15.94	8.18	15.31	1.38	1.44	158.47
2017	1.62	0.93	11.50	17.68	24.58	29.33	29.59	11.05	14.91	8.18	1.56	1.43	152.36
2018	5.02	3.40	12.61	15.47	26.22	28.31	27.69	24.12	34.65	5.79	11.50	1.96	196.74
2019	4.11	2.42	0.01	14.42	49.65	0.70	25.05	21.72	26.74	13.96	7.00	7.03	172.81
2020	1.14	3.17	12.31	28.72	29.58	30.38	32.01	27.83	27.48	11.13	10.67	5.49	219.91
2021	6.43	4.67	13.65	12.36	10.29	18.34	18.00	12.59	17.68	14.25	9.66	0.00	137.92
2022	1.30	2.77	10.51	18.12	17.91	21.45	25.31	19.20	11.97	11.94	10.19	5.43	156.10
2023	10.89	6.93	13.21	15.06	19.29	27.86	35.38	30.59	17.55	10.27	5.52	34.34	226.89
2024	4.29	7.87	10.12	14.43	25.54	24.23	22.29	26.53	18.45	19.86	13.03	6.83	193.47
2025	4.67	6.99	8.99	11.87	16.46	15.00	13.87	20.00	15.02	15.52	10.77	10.89	150.05

Water Department Summary

Double Eagle Water System

Dec-25

Acre Ft.

Production Figures:

This Month Previous Month Year to Date

Water:

Pumped from Double Eagle (Ac. Ft.)	93.36	74.43	1,110.33
Water Exported to Carlsbad Municipal System	0.00	0.00	287.74
Water delivered to "Paying Livestock Water" Customers (Ac. Ft.)	33.00	0.40	40.44
Water delivered to "Free Livestock Water" Customers (Ac. Ft.)	0.78	1.13	12.65
Water sold to "Governmental Domestic Water" Customers (Ac. Ft.)	0.14	0.19	2.44
Water sold "Commercial Domestic Water" Customers (Ac. Ft.)	0.00	0.00	0.15
Water sold to "Industrial Water" customers (Ac. Ft.)	4.32	3.77	55.79
Water delivered to WIPP (Ac. Ft.)	0.53	3.17	27.59
Safe Drinking Water Act Violations	0	0	0

*meter failure

Wells:

Wells in Operation	18	19	
KWH consumed	87,697	74,240	1,131,443
Total No. of Wells	23	23	
Ogallala Aquifer Level at Hudson 1	129.5'	126.9'	
Tatum Aquifer Level	0	0	
Meters in Service	66	66	

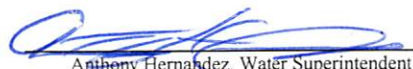
Distribution Figures:

Transmission Lines:

Line Extension (feet)	0	0	0
Line Replacement (feet)	0	0	45
Leaks (Main Lines)	3	5	61
Number of Isolating Valves Operated	2	2	26
Number of Pressure Reducing Valves Serviced	0	0	18
Number of Air Relief Valves Serviced	0	0	5

Remarks:

Wells Down - C-3, AMB-1, AMB-3, CR-16, CR-17
* Not available
** No info available due to billing transitioning to new system.


Anthony Hernandez, Water Superintendent

Double Eagle Well Operation Dec-25

Well	Status	Water Production				Power Consumption			Motor Hours			
		Present Read	Previous Read	Water Pumped		Present Read	Previous Read	KWH	Current	Previous	Hours Run	Avg GPM
				Gallons	Acre Ft.							
AMBASSADOR # 1	Neptune/ Trident											off
AMBASSADOR # 4	Well Inoperable											
AMBASSADOR # 3	Well Inoperable					13,480	13,296	184	3,648.6	3,648.6	0	off
C-11	McCrometer	63,211,680	63,211,680	0	0.00	250,697	250,336	361	3,157.0	3,157.0	0	
C-10	McCrometer	72,153,980	72,153,980	0	0.00	313,640	312,650	990	5,869.8	5,869.8	0	
C-6	Mc Crometer	61,973,086	61,973,086	0	0.00	84,594	84,515	79	22,861.6	22,861.6	0	140
CAPROCK # 19	Mc Crometer Mag	43,736,004	43,400,655	335,349	1.03	61,944	61,131	813	23,130.8	22,900.7	230.1	25
CAPROCK # 13	Mc Crometer	234,867,017	228,220,325	6,646,692	20.40	498,749	485,458	13,291	37,633.6	36,914.1	719.5	140
C-9	McCrometer	78,396,747	77,657,012	739,735	2.27	258,824	257,117	1,707	9,861.7	9,594.7	267	
CAPROCK # 20	Sensus/ Omni	33,568,770	29,599,047	3,969,723	12.18	70,902	62,858	8,044	15,902.0	15,488.1	413.9	150
CAPROCK # 10	Mc Crometer	18,569,695	18,568,788	907	0.00	68,130	68,035	95	941.3	941.3	0	90
C-8	McCrometer	82,820,469	82,169,497	650,972	2.00	249,127	246,761	2,366	7,710.6	7,509.4	201.2	
C-7	McCrometer	46,581,975	46,101,367	480,608	1.47	171,031	169,675	1,356	7,153.0	6,921.6	231.4	
CAPROCK # 18	Sensus/ Omni	25,725,209	23,961,424	1,763,785	5.41	108,716	104,955	3,761	16,095.7	15,811.9	283.8	90
CAPROCK # 6	Neptune/ Trident	10,032,800	9,727,578	305,222	0.94	113,116	112,326	790	30,578.4	30,543.4	35	105
CAPROCK # 4	McCrometer	75,178,932	73,443,795	1,735,137	5.32	190,065	184,910	5,155	31,347.7	30,644.7	703	45
CAPROCK # 1	Mc Crometer	58,832,967	58,222,166	610,801	1.87	213,021	211,206	1,815	28,784.0	28,501.4	282.6	30
Frontier # 2	Mc Crometer	57,920,327	57,890,688	29,639	0.09	57,971	56,591	1,380	24,727.8	24,715.4	12.4	30
Frontier # 1	Sensus/ Omni	38,193,739	35,494,783	2,698,956	8.28	99,269	92,647	6,622	36,914.9	36,260.5	654.4	50
FRONTIER # 3	Mc Crometer	27,171,606	26,994,085	177,521	0.54	57,965	57,502	463	243.9	224.1	19.8	140
C-2	Mc Crometer	9,096,241	7,769,152	1,327,089	4.07	66,572	63,845	2,727	1,113.8	1,005.9	107.9	160
HUDSON # 1	Octave	62,333,236	62,333,236	0	0.00	339,722	338,815	907	18,555.0	18,554.8	0.2	130
CAPROCK # 14	Mc Crometer	88,018,909	88,018,909	0	0.00	19,261	19,253	8	13,589.3	13,589.3	0	110
CAPROCK # 15A	Mc Crometer	8,918,470	8,003,933	914,537	2.81	25,269	23,127	2,142	11,073.4	10,969.8	103.6	130
CAPROCK # 21	Mc Crometer	115,578,558	113,217,396	2,361,162	7.25	336,881	328,892	7,989	22,155.7	21,687.3	468.4	65
C-1	Mc Crometer	43,088,399	37,415,303	5,673,096	17.41	205,310	193,449	11,861	22,439.9	21,771.5	668.4	110
CAPROCK # 2	Well Inoperable											
CAPROCK # 3	Well Inoperable											
CAPROCK # 5	Well Inoperable											
C-5	Well Inoperable											
C-4	McCrometer											
C-3	Mc Crometer											
CAPROCK # 17	Mc Crometer											80
CAPROCK # 16	Mc Crometer											off
Boosters			0	0	0.00	561,718	548,962	12,756	10999.9	10999.9	0	
2 MG RESERVOIR						132	97	35				
Totals				30,420,931	93.36			87,697			5,402.6	

Meter Reads In Barrells

Ambassadors #1 & # 3 - Wells Inoperable

C-3, & Caprock #16 - Wells Inoperable

Meter Changed Out

Meter removed.

15

DOUBLE EAGLE WATER SYSTEM WATER RIGHTS PUMPED ACRE FEET

7648 Acre Ft. Available Per Year

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2003	122.27	104.02	106.63	131.16	131.94	108.31	137.27	122.89	129.50	122.80	83.40	125.20	1,425.39
2004	94.10	99.14	108.96	88.59	85.29	104.91	80.47	96.62	108.99	99.07	84.00	132.98	1,183.12
2005	81.06	73.83	91.00	90.00	110.71	129.71	103.80	125.81	89.55	91.54	92.55	103.75	1,183.31
2006	99.66	92.01	109.29	75.35	137.85	132.18	86.22	98.53	96.51	96.88	103.45	82.69	1,210.62
2007	73.12	78.65	99.85	73.60	97.46	93.25	114.77	141.58	113.26	111.06	98.79	109.92	1,205.31
2008	108.28	117.41	93.89	110.54	91.87	107.59	103.60	134.80	114.37	126.79	119.45	139.80	1,368.39
2009	115.53	83.87	105.70	112.09	109.80	124.02	128.01	105.62	101.64	134.59	96.48	98.93	1,316.28
2010	98.23	113.03	134.55	139.75	121.56	152.79	139.33	180.08	160.27	158.58	167.75	151.88	1,717.80
2011	171.89	131.01	144.73	160.28	185.57	170.30	157.83	137.34	139.25	135.26	137.58	117.98	1,789.02
2012	112.77	108.16	110.15	110.62	111.76	186.92	141.80	163.02	72.61	134.45	161.72	175.64	1,589.62
2013	164.38	146.44	142.20	145.50	142.80	124.28	97.54	94.88	109.18	103.89	93.63	85.58	1,450.30
2014	85.93	86.42	87.69	97.98	125.16	108.77	144.13	120.58	98.47	114.24	102.38	107.72	1,279.47
2015	89.83	63.29	89.61	87.98	64.58	50.44	70.24	51.81	37.52	33.59	30.08	30.07	699.04
2016	30.64	38.22	36.18	26.75	28.85	34.75	32.22	33.35	23.61	26.72	29.06	31.03	371.38
2017	25.7	35.61	28.01	23.74	32.89	38.88	31.35	39.17	34.97	35.18	35.9	30.94	392.34
2018	40.13	23.75	34.02	35.14	39.33	42.3	31.46	43.72	38.41	37.23	35.01	31.7	432.20
2019	38.5	31.43	38.88	47.10	47.95	27.52	54.21	65.54	52.22	48.53	47.46	38.97	538.31
2020	33.11	23.96	37.75	38.84	68.02	54.59	77.21	59.61	62.09	51.36	93.76	34.66	634.96
2021	62.14	65.22	46.43	96.87	69.61	96.94	91.63	56.41	120.17	121.64	87.7	85.52	1,000.28
2022	68.37	81.29	92.93	110.89	112.75	115	78.14	79.49	131.9	119.22	93.76	138.36	1,222.10
2023	108.02	142.18	195.09	128.58	88.51	93.44	86.57	75.07	55.22	73.24	70.51	62.8	1,179.23
2024	66.48	43.37	49.18	69.18	51.52	63.67	62.94	123.19	98.03	100.9	77.15	58.82	864.43
2025	65.02	81.27	85.94	118.18	69.47	66.83	76.66	138.25	99.95	140.97	74.43	93.36	1,110.33

**DOUBLE EAGLE WATER SYSTEM
WATER SOLD/PROVIDED
ACRE FEET**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2003	103.16	118.81	92.16	100.16	106.02	121.98	117.48	118.48	96.98	96.27	117.92	65.14	1,255
2004	77.06	132.54	98.28	113.37	95.77	156.29	95.71	102.28	75.52	133.76	82.88	78.70	1,242
2005	95.53	53.68	62.88	76.56	70.95	68.86	107.91	88.42	76.59	66.83	88.31	60.69	917
2006	68.06	68.09	64.04	74.07	54.60	73.13	70.56	65.77	63.28	71.94	70.15	67.72	811
2007	63.47	71.20	43.33	64.06	81.36	83.03	80.18	72.46	89.35	38.88	49.77	115.89	853
2008	73.31	54.99	170.85	58.17	113.89	87.58	112.17	93.30	54.07	113.46	87.57	0.00	1,019
2009	133.68	134.89	193.91	128.57	124.42	147.29	149.87	144.41	403.39	204.34	216.64	205.47	2,187
2010	166.20	147.23	156.74	206.90	262.81	159.74	235.21	209.27	261.26	289.04	249.98	202.71	2,547
2011	273.88	296.83	197.17	305.62	293.17	356.46	306.39	341.59	373.96	299.28	332.79	115.34	3,492
2012	70.53	108.07	365.95	127.64	147.59	169.53	110.81	151.82	168.33	94.88	158.73	145.76	1,820
2013	304.62	105.90	114.03	89.49	91.59	72.45	66.60	67.58	58.66	52.40	62.94	49.32	1,136
2014	60.02	54.78	73.24	66.94	80.62	76.05	68.73	80.55	75.86	58.67	67.36	63.32	826
2015	59.07	47.81	31.75	28.16	38.17	18.94	17.79	19.48	17.51	11.21	9.04	8.54	307
2016	11.61	8.13	9.02	7.07	5.58	4.20	7.95	6.37	7.11	4.21	3.57	3.61	78
2017	4.28	4.14	3.55	4.95	3.85	8.38	7.79	4.46	4.83	3.69	4.76	7.98	63
2018	6.59	9.34	3.65	6.59	7.74	7.76	11.90	10.94	10.64	4.89	8.53	4.29	93
2019	8.82	6.04	3.21	5.81	9.53	6.98	9.20	9.01	13.52	11.29	9.57	11.67	105
2020	8.15	8.88	6.63	7.80	8.57	11.79	12.75	11.66	9.38	8.64	8.64	11.87	115
2021	4.34	2.25	8.89	9.73	16.09	8.99	13.45	7.96	8.14	6.35	18.20	7.44	111.83
2022	4.86	4.86	7.35	8.99	11.39	11.67	13.44	12.63	11.79	7.41	8.69	5.88	108.96
2023	9.35	7.06	7.84	10.60	8.74	9.70	13.87	13.02	14.00	10.60	7.83	6.68	119.29
2024	6.61	6.90	6.47	5.51	8.12	10.96	12.28	13.17	12.51	11.93	11.20	7.97	113.63
2025	6.16	7.35	7.50	7.32	7.94	11.27	17.59	11.23	14.31	11.04	11.19	10.05	122.95

Note: Free Stock Included

17

** Number includes Paying Livestock/Free Livestock/Gov Domestic/Comm Domestic/Industrial/WIPP

WASTEWATER TREATMENT PLANT REPORT

DECEMBER 2025

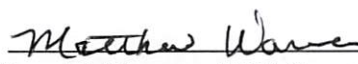
Wastewater:	Current Month	Previous Month	Calendar Year to Date
Total Effluent Discharge to Pecos River (Acre Ft.)	233.17	212.26	1,812.43
Treated Reuse Delivered to Mun. Golf Course (Acre Ft.)	13.51	18.82	464.64
Treated Reuse Sold to Rockhouse Ranch (Acre Ft.)	0.00	0.00	468.60
WWTP Irrigation Meter (Acre Ft.)	0.00	0.00	5.62
Total Reuse Pumped	13.51	18.82	938.86
After Hours Control Panel Alarms	0.00	0.00	7.00
KWH Consumed 977x160=	164,320	159,200.00	2,046,400.00
NPDES Permit Violations	0.00	1.00	5.00
Sodium Hypochloride for Reuse (Gallons)	0.00	55.00	560.00

Septage Disposal Report:	Current Month	Previous Month	Calendar Year to Date
Total Number of Loads	161	153	2,020
Taxed Gallons 144340.00 x \$.10	\$14,434.00	11,103	552,793
Taxed Manifest Books / \$30.00 1 x \$30.00	\$30.00	30	1,440
Subtotal	\$14,464.00	11,133	245,720
5% Tax	\$723.20	557	12,286
Taxed Billing	\$15,187.20	11,689	258,006
Tax Exempt Gallons 13275.00 X .10	\$1,327.50	2,098	35,539
Tax Exempt Manifest Books / \$30.00 0x \$30.00	\$0.00	0	150
Taxed Exempt Billing	\$1,327.50	2,098	35,689
Total Billing	\$16,514.70	13,787	293,695

Biosolids:	Current Month	Previous Month	Calendar Year to Date
Total Compost Produced (Cu. Yds.)	0.00	105.00	1,617.00
Amount of Sludge Sent to Compost Operation (Gals.)	293563.00	248125.00	2,002,994.95

Wastewater Discharge Characteristics:	Previous Month	Permit Limit
Average Biochemical Oxygen Demand (Lbs./Day)	134.25	211.93
Average Total Suspended Solids (Lbs./Day)	100.36	109.96
Average Flow (Million Gallons/Day)	2.34	2.51
E.Coli (30 Day Avg.)	1.40	4.15

Remarks:


 Matthew E. Warner, WW Superintendent

SEWER COLLECTIONS REPORT

Dec 25

Calendar

This Month Previous Month Year to Date

Collection Lines:

Total Mileage of Main Line in System			139
Line Extension (Ft.)	0	0	120
Line Replacement (Ft.)	0	0	42
Repairs on Main Lines	0	1	10
Main Line Stoppages	4	0	34
Number of Manholes and Cleanouts	0	0	0
Manholes Flushed	0	0	0
Manholes Repaired	0	1	10
Customer Service Repairs	0	0	4
Customer Complaints, All Other	5	2	73
Carlsbad Line Location Service	0	0	0
Double Eagle Line Location Service	0	0	0
Ft. Sewer Liner Cleaned/Rodded	10,908	815	53,034
Sewer Tap Inspections	0	0	0
Total No. of Customer Services	0	0	0
Total No. of New Cust. Services Installed	0	0	0

Lift Stations:

Total in Service			
Number of After-Hour Control Panel Alarms	4	2	82
Number of Repairs	0	0	8
KWH Consumed, Primary Lift Station	42,240	22,240	489,440
KWH Consumed, All Other Lift Stations	12,904	11,373	127,373

 1-6-2026
 Anthony Hernandez, Water Superintendent

EFFLUENT DISCHARGE TO PECOS RIVER ACRE / FEET

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2000	275.31	248.42	260.88	233.80	316.16	282.37	276.77	278.69	311.94	258.03	349.52	325.73	3,417.62
2001	272.21	204.60	217.67	191.40	142.09	236.98	244.68	224.77	225.64	195.79	254.84	265.78	2,676.45
2002	266.35	232.01	263.62	256.99	225.81	190.74	250.02	214.79	206.30	244.07	207.28	239.84	2,797.82
2003	195.98	143.44	168.79	155.94	169.64	151.16	185.64	183.40	174.65	209.24	209.88	236.34	2,184.10
2004	232.32	213.56	223.88	291.51	274.82	213.81	209.05	186.17	199.53	241.73	280.59	208.26	2,775.23
2005	184.13	164.12	178.11	168.66	206.41	168.17	167.37	181.58	157.77	173.60	147.12	169.92	2,066.96
2006	141.87	127.02	172.99	140.40	140.92	169.70	174.86	188.76	197.39	185.97	178.88	182.23	2,000.99
2007	175.29	153.32	169.55	166.88	207.94	153.26	271.96	303.14	316.00	351.48	364.76	305.84	2,939.42
2008	259.44	239.22	252.53	246.40	228.69	180.08	206.35	210.09	240.35	261.89	258.89	171.21	2,755.14
2009	358.99	231.11	189.22	175.11	196.47	196.37	167.43	158.99	147.30	182.56	165.29	186.18	2,355.02
2010	179.80	164.40	171.85	172.47	136.28	138.37	220.04	174.07	196.08	190.49	192.02	181.35	2,117.22
2011	177.75	161.00	153.44	128.22	131.87	132.52	140.71	144.86	149.98	149.77	158.14	176.47	1,804.73
2012	177.26	133.35	158.96	132.17	197.54	139.17	163.09	149.43	143.97	124.39	140.86	183.20	1,843.39
2013	174.54	155.21	161.36	131.65	121.07	133.60	175.46	164.14	177.28	206.07	240.30	209.81	2,050.49
2014	210.63	150.47	156.04	153.06	160.67	157.52	218.21	280.09	284.34	255.76	244.57	224.53	2,495.89
2015	251.82	212.71	212.94	169.98	208.69	201.13	216.44	237.77	198.80	221.07	202.61	233.28	2,567.24
2016	250.84	215.81	203.86	199.36	220.94	213.33	202.97	238.61	251.05	230.03	217.11	202.17	2,646.08
2017	226.02	195.23	190.92	172.18	121.62	114.39	132.83	166.44	166.80	172.02	164.66	171.59	1,994.70
2018	180.72	134.33	132.78	116.31	115.83	119.59	129.91	152.77	160.73	184.72	166.96	175.48	1,770.13
2019	187.77	147.18	151.39	141.14	122.93	147.25	156.34	163.47	171.70	196.57	190.31	181.66	1,957.71
2020	171.87	152.55	144.74	108.70	129.17	128.14	127.36	133.91	137.49	147.44	150.85	168.11	1,700.33
2021	176.88	166.70	155.81	141.66	147.77	138.68	213.38	233.23	213.59	229.06	205.63	201.46	2,223.85
2022	215.85	180.58	165.29	88.93	133.36	132.40	154.29	155.42	159.82	200.87	194.49	193.65	1,974.95
2023	195.33	175.90	127.53	162.53	166.59	105.31	32.91	101.38	64.63	215.46	212.03	193.65	1,753.25
2024	72.18	28.76	55.80	93.47	16.25	40.56	161.56	151.24	187.60	214.54	240.34	244.17	1,506.47
2025	114.35	155.05	167.87	109.21	91.88	58.64	93.15	145.00	233.85	198.00	212.26	233.17	1,812.43

**EFFLUENT REUSE
ACRE / FEET**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2001	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2002	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2004	18.94	15.45	17.52	25.36	40.46	43.55	50.58	38.81	31.31	20.14	7.82	8.08	318.02
2005	6.96	5.99	14.35	35.49	31.91	43.54	45.14	30.45	37.52	25.95	25.12	20.74	323.16
2006	22.68	22.17	23.21	37.40	49.95	99.47	207.81	72.92	23.20	34.28	20.50	17.75	631.34
2007	13.63	13.91	24.14	31.79	27.52	49.34	36.59	38.53	32.68	25.42	12.77	13.64	319.96
2008	15.06	20.54	21.83	41.29	46.49	48.50	35.56	40.95	22.85	38.63	26.92	7.18	365.80
2009	16.77	20.71	26.54	40.51	39.84	41.08	44.08	51.38	49.33	43.70	27.62	11.71	413.27
2010	16.58	8.89	23.08	31.79	62.07	61.63	15.10	49.33	28.02	29.55	21.36	18.51	365.91
2011	14.69	8.13	38.05	54.54	56.44	52.72	55.45	50.42	49.73	44.67	23.78	7.38	456.00
2012	5.82	10.40	24.91	46.25	37.18	50.67	42.51	59.86	50.03	26.67	15.56	8.15	378.01
2013	8.68	7.48	21.68	38.81	58.76	53.68	37.15	36.50	21.42	29.52	12.20	14.36	340.24
2014	19.88	23.44	34.05	32.20	47.27	54.26	67.18	45.85	21.00	32.05	19.69	28.04	424.91
2015	7.33	13.31	21.93	47.89	49.49	75.50	63.51	46.70	44.23	16.48	17.41	12.08	415.86
2016	7.43	17.65	41.85	42.00	37.41	34.82	53.26	35.94	29.90	29.75	21.56	18.97	370.54
2017	10.85	15.78	32.93	38.92	58.76	70.39	69.88	42.35	41.26	32.46	17.40	10.48	441.46
2018	25.29	45.73	62.15	81.04	88.81	83.84	93.81	74.15	55.54	42.74	34.22	15.62	702.94
2019	18.09	35.37	50.54	63.17	87.76	78.14	89.60	85.06	68.66	48.29	26.89	27.94	679.51
2020	28.16	29.07	40.67	66.70	70.90	67.84	77.07	74.77	58.73	42.58	23.60	10.88	590.97
2021	7.76	6.75	44.46	41.16	47.64	63.50	37.20	40.37	10.15	33.27	30.33	13.21	375.80
2022	6.81	14.04	38.29	48.19	67.72	82.38	70.77	77.47	75.39	27.51	15.31	14.71	538.59
2023	12.63	10.61	83.36	56.85	58.04	127.63	177.03	111.88	140.74	1.90	29.15	29.41	839.23
2024	76.73	133.77	117.15	76.28	191.34	168.34	60.29	72.52	38.05	28.83	17.83	2.39	983.52
2025	102.73	54.99	63.55	115.15	157.26	99.42	58.32	76.66	36.55	40.04	18.26	13.51	836.44

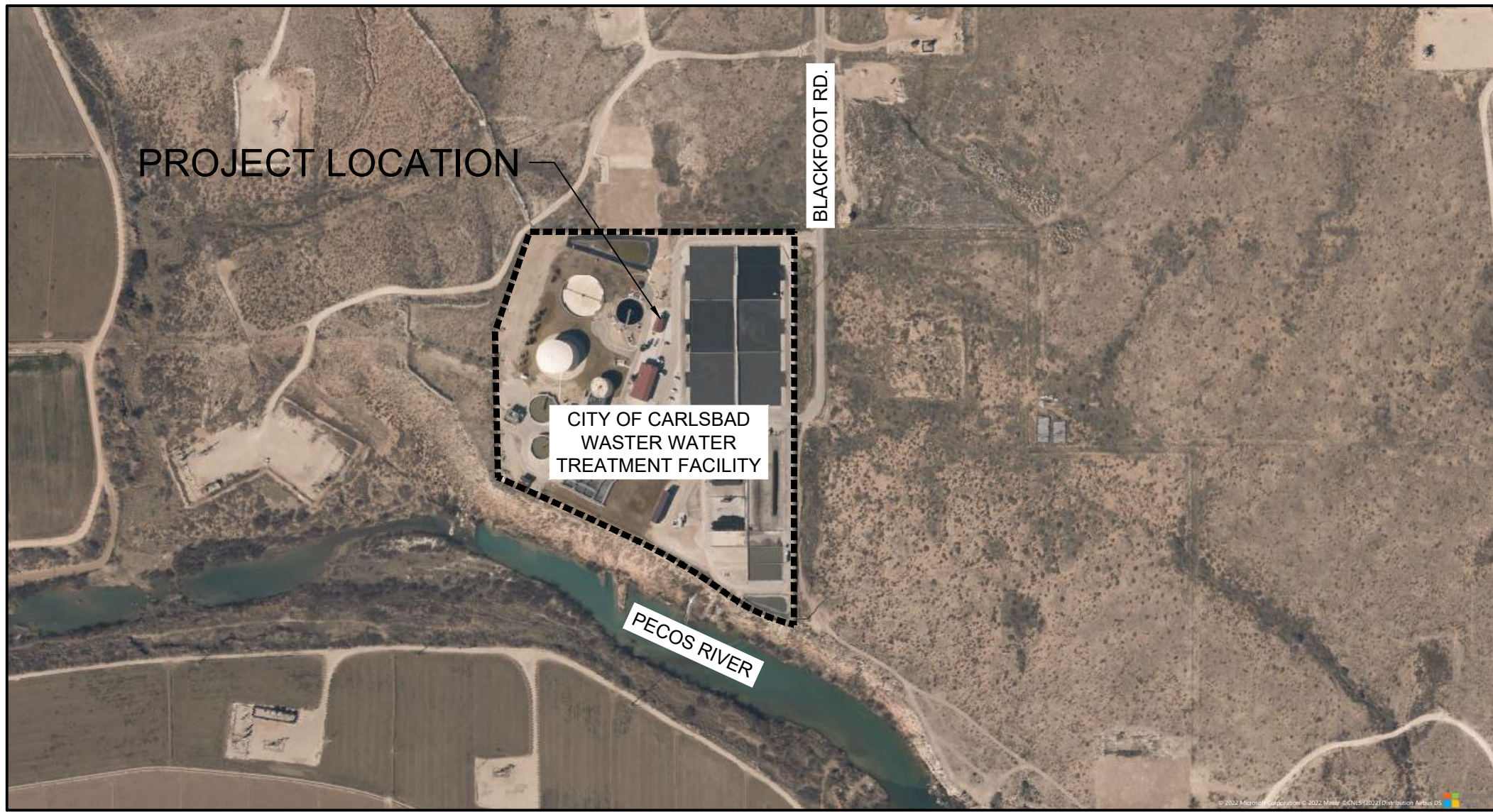
CITY OF CARLSBAD

UV TREATMENT PROJECT



EDDY COUNTY, CITY OF CARLSBAD, NEW MEXICO
MARCH, 2024

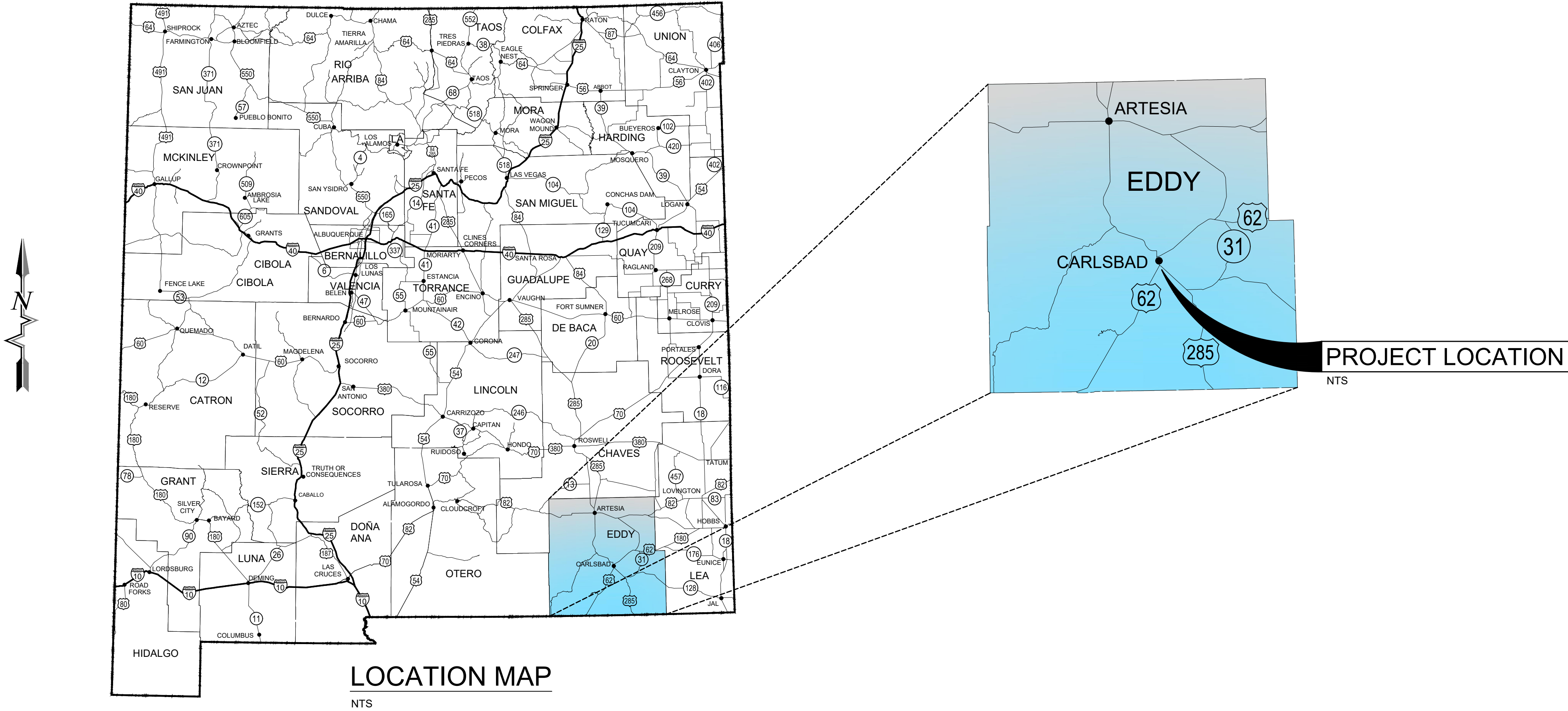
PROJECT DESCRIPTION:
EQUIP EXISTING CHANNEL WITH TROJAN UV EQUIPMENT
AND UV TREATMENT BUILDING UPGRADES



VICINITY MAP
NTS

DRAWING INDEX

- G-1 COVER AND DRAWING INDEX
- G-2 GENERAL NOTES & ABBREVIATIONS
- C-1 UV TREATMENT BUILDING - PLAN VIEW
- C-2 UV TREATMENT BUILDING - SECTION VIEWS
- E-1 ELECTRICAL COMMONS
- E-2 ELECTRICAL PLAN
- E-3 POWER RISER DIAGRAM
- E-4 ELECTRICAL DETAILS



THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION ON BEHALF OF SOUDER, MILLER & ASSOCIATES.

KEATON CHANCELLOR, P.E. DATE
PROJECT MANAGER

THE SEAL AND SIGNATURE OF THE PROFESSIONAL REGISTRANT IDENTIFIED ON THIS COVER SHEET DOES NOT SUGGEST RESPONSIBLE CHARGE FOR ALL SHEETS CONTAINED WITHIN THIS PACKAGE; PLAN SHEETS NOT SIGNED AND SEALED ARE NOT THE RESPONSIBILITY OF THE PROFESSIONAL REGISTRANT IDENTIFIED ON THIS COVER SHEET. PLEASE REFER TO PROFESSIONAL REGISTRANTS IDENTIFIED ON INDIVIDUAL PLAN SHEETS.

© Copyright 2024 All Rights Reserved



NOTICE OF EXTENDED PAYMENT PROVISION - THIS CONTRACT
ALLOWS THE OWNER TO MAKE PAYMENT WITHIN 45 DAYS AFTER
SUBMISSION OF AN UNDISPUTED REQUEST FOR PAYMENT.



Rev #	Date	Description	By	Chkd



SOUDER, MILLER & ASSOCIATES
201 S. Halaqueno Street
Carlsbad, NM 88220

Phone (575) 689-7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains
Albuquerque, Carlsbad, Farmington, Hobbs, Las Cruces, Roswell, Santa Fe, NM
Cortez, Grand Junction, Lakewood, CO - Safford, AZ - El Paso, TX

GENERAL NOTES

GENERAL

1. THE ENGINEER WAIVES ANY AND ALL RESPONSIBILITY AND IS NOT LIABLE FOR PROBLEMS THAT ARISE FROM FAILURE TO FOLLOW THESE DRAWINGS, SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY OR FOR PROBLEMS THAT ARISE FROM FAILURE TO OBTAIN AND/OR FOLLOW THE ENGINEER'S GUIDANCE WITH RESPECT TO ANY ERRORS, OMISSIONS, INCONSISTENCIES, AMBIGUITIES OR CONFLICTS.

CONSTRUCTION REQUIREMENTS

2. CONTACT "NEW MEXICO ONE CALL" AT 1-800-321-2537, THREE (3) WORKING DAYS IN ADVANCE OF CONSTRUCTION FOR UTILITY DEMARCATION.
3. THE CONTRACTOR IS REQUIRED TO PROVIDE DUST AND EROSION PROTECTION TO INHIBIT DUST, WIND, AND AIR SEDIMENT MOVEMENT OFFSITE, AS PART OF GRADING WORK, THROUGHOUT CONSTRUCTION IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

PERMITS

4. ALL PERMITS REQUIRED FOR CONSTRUCTION, INCLUDING ALL IRRIGATION DISTRICT, LOCAL, CITY, COUNTY, STATE, AND FEDERAL PERMITS, ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS ALREADY PROVIDED BY THE ENGINEER IN THE CONTRACT DOCUMENTS.
5. ALL PERMIT FEES ARE PAYABLE BY THE CONTRACTOR, AND SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION UNLESS A SPECIFIC BID ITEM EXISTS FOR THE PERMIT WORK.
6. NO TIME EXTENSIONS WILL BE ALLOWED DUE TO THE NORMAL PERMITTING PROCESSES.
7. ANY FINES ASSOCIATED WITH NOT OBTAINING NECESSARY PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
8. IT IS THE ENGINEER'S RECOMMENDATION THAT ALL BIDDERS CONTACT THE APPROPRIATE AGENCIES PRIOR TO BIDDING TO ENSURE THAT ALL APPROPRIATE FEES, COSTS, AND SCHEDULES FOR THE PERMITS REQUIRED ARE KNOWN PRIOR TO BIDDING.
- PERMITS HAVE BEEN ACQUIRED BY THE OWNER AND ARE AVAILABLE UPON REQUEST. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE TERMS OF THE PERMITS RELATED TO CONSTRUCTION. COST OF COMPLIANCE WITH THESE PERMITS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, AND NO ADDITIONAL PAYMENT SHALL BE MADE THEREFOR.

TRAFFIC CONTROL

9. THE CONTRACTOR SHALL MAINTAIN THE PROPER TRAFFIC CONTROL DEVICES DURING CONSTRUCTION IN COMPLIANCE WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LOCAL AND STATE AGENCIES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR IMPLEMENTING, PROTECTING AND MAINTAINING ANY NECESSARY TRAFFIC CONTROL.

UTILITY LOCATION

10. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR UTILITY LOCATION, PROTECTION AND VERIFICATION PER STATE LAW. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES AND THE ENGINEER WITH REGARD TO RELOCATING, ADJUSTING, REPLACING AND/OR REPAIRING UTILITIES DURING CONSTRUCTION. ADDITIONALLY, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES AND OTHER OBSTRUCTIONS IN RELATION TO THE PROPOSED IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMAL DELAY. DELAYS CAUSED OR COSTS INCURRED BECAUSE OF UTILITY CONFLICTS OR OTHER OBSTRUCTIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
11. UTILITIES SHOWN IN THESE CONSTRUCTION PLANS ARE SHOWN IN THEIR APPROXIMATE LOCATION ONLY, AND SHALL NOT BE RELIED UPON BY THE CONTRACTOR. FIELD MARKS MADE BY THE INDIVIDUAL UTILITIES SHALL OVERRIDE ANY LOCATION SHOWN IN THESE PLANS. UTILITIES LOCATED BY THE CONTRACTOR SHALL BE ANNOTATED AND THE LOCATION IDENTIFIED IN THE CONTRACTOR'S AS-BUILTS KEPT AND MAINTAINED ONSITE.
12. THE EXISTING UTILITIES, STRUCTURES, AND CULVERTS SHOWN ON THESE PLANS ARE SHOWN FOR INFORMATION ONLY.
13. THE ELEVATIONS SHOWN ON THESE PLANS ARE FOR REFERENCE ONLY. THE ACTUAL ELEVATIONS SHALL BE SET SUCH THAT THEY ARE FLUSH WITH THE EXISTING GROUND AS SHOWN IN THE DETAILS.
14. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A COMPREHENSIVE CONSTRUCTION SEQUENCE AND SCHEDULE PRIOR TO COMMENCEMENT OF CONSTRUCTION THAT TAKES INTO ACCOUNT THE FIELD LOCATIONS OF EXISTING UTILITIES AND ANY CONFLICTS WITH THE PROPOSED IMPROVEMENTS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE OWNER, ENGINEER AND THE CONTRACTOR SHALL MAINTAIN ALL EXISTING ELECTRICAL SERVICES THROUGHOUT DEMOLITION AND CONSTRUCTION.

PROTECTION OF EXISTING CONDITIONS

16. THE CARE AND PROTECTION OF ALL OTHER STRUCTURES, FENCING, LANDSCAPING, UTILITIES, CONDUITS, ELECTRICAL CABINETS, PAVEMENT, AND OTHER APPURTENANCES IS THE RESPONSIBILITY OF THE CONTRACTOR. IF DAMAGED, LOST IN TRENCH, OR OTHERWISE DISTURBED, THESE ITEMS WILL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. WHERE TRENCHING BENEATH EXISTING UTILITY LINES OCCURS, THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING THE LINE DURING CONSTRUCTION AND ENSURE THAT IT IS ADEQUATELY BACKFILLED AND COMPACTED.
17. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THE NECESSARY ADJUSTMENTS IN THE COMPACTION EQUIPMENT OR OPERATION FOR COMPACTION REQUIREMENTS SO THAT UNDERGROUND UTILITIES AND PERMANENT STRUCTURES ARE NOT DAMAGED. THE CONTRACTOR SHALL BE RESTRICTED TO A 35 TON (MAXIMUM) NON-VIBRATORY ROLLER FOR COMPACTION IN AREAS WHERE THE USE OF HEAVIER EQUIPMENT COULD DAMAGE UNDERGROUND UTILITIES OR PERMANENTLY DAMAGE ADJACENT STRUCTURES.
18. ALL IMPROVEMENTS (INCLUDING CONDUITS, ELECTRICAL CABINETS, ETC.) THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION OR BETTER. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THE EXISTING CONDITIONS OF THE PROJECT SITE THROUGH VIDEO AS DESCRIBED IN THE PROJECT MANUAL.

PLAN CHANGES, AS-BUILTS, RECORD DRAWINGS

19. IF THERE IS A CONFLICT BETWEEN THE PLANS, SPECIFICATIONS AND/OR MANUFACTURER'S INSTRUCTIONS OR RECOMMENDATIONS FOR ANY DEVICE, PART, OR MATERIAL USED IN THE PROJECT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, FOR CLARIFICATION AT LEAST TWO WEEKS PRIOR TO CONSTRUCTION OF SAID DEVICE, PART, OR MATERIAL.
20. THE CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN TWO WEEKS, AT ALL TIMES. THESE PLANS SHALL BE SUBJECT TO REVIEW BY THE ENGINEER THROUGHOUT THE PROJECT AND WILL BE REVIEWED BY THE ENGINEER FOR ACCURACY AND COMPLETENESS AT LEAST ONCE EVERY 30 DAYS. PAYMENT MAY BE WITHHELD UNTIL AS-BUILT PLANS ARE CURRENT. THE CONTRACTOR SHALL PHOTOGRAPH THE CONSTRUCTION AND AREA OF DISTURBANCE ON A DAILY BASIS. THESE PHOTOS, A LOG OF THE DAILY PHOTOS AND THREE (3) SETS OF THE FINAL AS-BUILT PLANS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL PAYMENT.
21. CONTRACTOR SHALL DOCUMENT THE ROUTING OF ALL CONDUITS INSTALLED FOR THE UV TREATMENT EQUIPMENT INCLUDING PHOTOS OF THE UNDERGROUND CONDUITS FOR RECORD KEEPING.

CONSTRUCTION DEBRIS/DISPOSAL

22. THE CONTRACTOR SHALL PROVIDE AN AREA TO STORE CONSTRUCTION DEBRIS WHERE IT WILL NOT BE A NUISANCE. ALL DEBRIS SHALL BE CONTAINED IN SUCH A MANNER THAT WILL PREVENT SCATTERING. ALL DEBRIS, INCLUDING TREES AND UNDERGROWTH, SHALL BE DISPOSED OF PROPERLY WITHIN A PROPERLY PERMITTED LANDFILL. ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM SITE PRIOR TO SUBSTANTIAL COMPLETION.
23. UNSUITABLE MATERIAL FROM REMOVAL OPERATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR AND CONSIDERED INCIDENTAL.
24. ITEMS DESIGNATED FOR REMOVAL WITHOUT SALVAGE, UNSUITABLE CONSTRUCTION MATERIALS AND DEBRIS FROM CLEARING AND GRUBBING ARE TO BE PLACED IN AN ENVIRONMENTALLY SUITABLE DISPOSAL SITE SECURED AND COORDINATED BY THE CONTRACTOR, WITH THE APPROPRIATE REGULATORY AGENCIES' APPROVAL AND IN ACCORDANCE WITH THE SPECIFICATIONS FOR THIS PROJECT. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, IN WRITING, OF THE DETAILS OF THE DISPOSAL OPERATIONS.
25. CONTRACTOR IS HEREBY GRANTED SALVAGE RIGHTS TO ANY AND ALL CONSTRUCTION DEBRIS (EXCEPT AS SHOWN IN THE PLANS AND SPECIFICATIONS), PROVIDED THE CONTRACTOR USES SAID DEBRIS IN A LAWFUL MANNER. A LIST OF ITEMS SALVAGED SHALL BE REPORTED IN WRITING TO THE ENGINEER AND THE OWNER PRIOR TO SALVAGE ITEMS LEAVING THE SITE. EQUIPMENT, PUMPS, ETC. SHALL BE SALVAGED BACK TO THE OWNER OR DISPOSED OF AS DIRECTED BY THE OWNER.
26. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE STREETS FREE AND CLEAR OF ANY DEBRIS THAT IS TRACKED TO AND FROM THE SITE.

SITE ACCESS AND PROTECTION

27. THE CONTRACTOR IS RESPONSIBLE FOR SECURING A LOCATION FOR THE STAGING AND STORAGE OF EQUIPMENT AND SUPPLIES. THE OWNER SHALL NOT BE RESPONSIBLE FOR THE THEFT, LOSS, OR DAMAGE OF ANY CONTRACTOR EQUIPMENT OR SUPPLIES.
28. THE CONTRACTOR SHALL PROVIDE BARRIERS OR FENCING OR DIRECT OVERSIGHT TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE. ACCESS TO EXISTING FACILITIES ADJACENT TO THE CONSTRUCTION AREA SHALL BE SAFELY MAINTAINED THROUGHOUT CONSTRUCTION UNLESS APPROVED BY THE ENGINEER AND UNLESS PROPER NOTICE HAS BEEN GIVEN TO AFFECTED PARTIES.

ENVIRONMENTAL AND HISTORICAL PRESERVATION

29. IN THE EVENT THE CONTRACTOR ENCOUNTERS ITEMS OF ENVIRONMENTAL, CULTURAL AND/OR HISTORICAL IMPORTANCE, THE ENGINEER AND OWNER SHALL BE NOTIFIED IMMEDIATELY AND WORK IN THE AREA SHALL IMMEDIATELY CEASE UNTIL THE CONTRACTOR RECEIVES WRITTEN AUTHORIZATION TO PROCEED FROM THE OWNER/ENGINEER.

CONSTRUCTION STANDARDS

30. THE CONSTRUCTION OF THE PROJECT WILL BE GOVERNED BY THE FOLLOWING SPECIFICATIONS AND GUIDELINES COPIES OF WHICH SHALL BE KEPT AT THE CONSTRUCTION SITE BY THE CONTRACTOR AT ALL TIMES.
- A. THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- B. WHERE NOT COVERED BY LOCAL ORDINANCE, THE "INTERNATIONAL BUILDING CODE" LATEST EDITION (IBC) FOR APPLICABLE WORK.
- C. OCCUPATIONAL SAFETY HEALTH ADMINISTRATION REGULATIONS FOR TRENCHING, SHORING & EXCAVATION.
- D. SUPPLEMENTAL TECHNICAL SPECIFICATIONS. ANY CONFLICT BETWEEN THE REQUIREMENTS OF THE SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER. IN GENERAL, THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
31. ALL COMPONENTS, MATERIALS AND TREATMENT CHEMICALS THAT COME INTO CONTACT WITH DRINKING WATER SHALL BE CERTIFIED FOR CONFORMANCE TO ANS/NSF STANDARD 60 OR 61, AS APPLICABLE.

CONSTRUCTION LIMITS

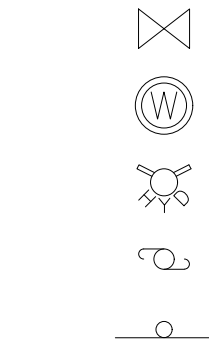
32. THE CONTRACTOR SHALL CONFINE HIS OPERATIONS TO THE CONSTRUCTION LIMITS OF THE PROJECT AND SHALL IN NO WAY ENCROACH ONTO ADJACENT PROPERTIES UNLESS LEGAL EASEMENTS ARE PROVIDED OR SECURED BY THE CONTRACTOR. ALL FILL AND CUT SLOPES FOR STRUCTURES SHALL BE SET BACK FROM THE PROPERTY LINE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY AGREEMENTS NECESSARY OR DAMAGE CAUSED BY CONSTRUCTION ACTIVITIES TO PUBLIC OR PRIVATE PROPERTY, INCLUDING UTILITIES.
33. THE LIMITS OF CONSTRUCTION AND LOCATIONS OF THE CONTRACTORS STAGING AREAS SHALL BE IDENTIFIED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED AND SHALL BE THE MINIMUM REQUIRED TO MAINTAIN ALL WORKERS IN A SAFE CONDITION, TO PROVIDE ACCESS, AND TO MEET OSHA REGULATIONS.

SAFETY

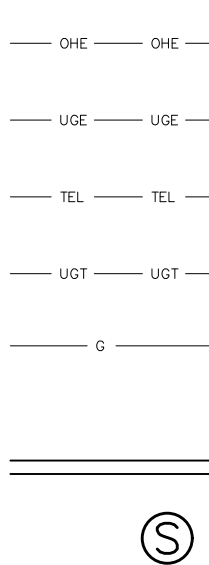
34. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING AND CLEANUP OF SPILLS ASSOCIATED WITH PROJECT CONSTRUCTION AND SHALL REPORT AND RESPOND TO SPILLS OF HAZARDOUS MATERIALS SUCH AS GASOLINE, DIESEL, MOTOR OILS, SOLVENTS, CHEMICALS, TOXIC AND CORROSIVE SUBSTANCES, AND OTHER MATERIALS WHICH MAY BE A THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT. REPORTS SHALL BE MADE IMMEDIATELY TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE TEAM AT (505) 827-4308 OR (505) 470-3657, THE NATIONAL RESPONSE TEAM AT 1-800-424-8802 AND TO THE ENGINEER.
35. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY, AND FOR KNOWLEDGE AND COMPLIANCE WITH APPLICABLE OSHA STANDARDS. THE CONTRACTOR SHALL MAINTAIN ALL TRENCHES IN A SAFE CONDITION PROTECTING THE WORKERS AND THE GENERAL PUBLIC. TRENCH PROTECTION SHALL BE IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS. EXCAVATIONS SHALL BE SLOPED, BRACED, OR SHORED AS REQUIRED BY OSHA REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SAFE HANDLING OF CONSTRUCTION EQUIPMENT AND MATERIALS TO AND FROM THE STAGING/STORAGE AREA AND FOR SITE SECURITY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION AND NO ADDITIONAL COMPENSATION SHALL BE MADE THEREFOR.
36. PRIOR TO AND DURING CONSTRUCTION, ALL ACCESS ROADS SHALL BE SERVICEABLE AND MAINTAINED FOR FIRE PROTECTION AND EMERGENCY VEHICLE ACCESS.

LEGEND

EXISTING



PROPOSED



ABBREVIATIONS

AWWA	AMERICAN WATER WORKS ASSOCIATION	MJ	MECHANICAL JOINT
BIA	BUREAU OF INDIAN AFFAIRS	MH	MANHOLE
CBG	CONCRETE BOX CULVERT	MRGCD	MIDDLE RIO GRANDE CONSERVANCY
CI	CAST IRON	N	DISTRICT
CIPP	CURED-IN-PLACE PIPE	NE	NORTHING
CL or L	CENTERLINE	NGS	NORTHWEST
CMP	CORRUGATED METAL PIPE	NOAA	NATIONAL GEODETIC SURVEY
CO	CLEANOUT		NATIONAL OCEANIC AND ATMOSPHERIC
CONN	CONNECTION	NMED	ADMINISTRATION
D.I.	DUCTILE IRON	NTS	NEW MEXICO ENVIRONMENT DEPARTMENT
DIA	DIAMETER	NW	NOT TO SCALE
E	EASTING	OD	NORTHWEST
E.G.	FOR EXAMPLE	OHD	OUTER DIAMETER
E.A.E.	ENGINEER APPROVED EQUAL	PE	OVERHEAD
EG	EXISTING GROUND	psi	POLYETHYLENE
ELEC	ELECTRIC	PVC	POUNDS PER SQUARE INCH
EOR	EDGE OF ROAD	R	POLYVINYL CHLORIDE
EX or EXIST.	EXISTING	RCP	RADIUS
FG	FINISH GRADE	ROW	REINFORCED CONCRETE PIPE
FIG.	FIGURE	SCH	RIGHT OF WAY
FL	FLANGE	SE	SCHEDULE
FNPT	FEMALE NATIONAL PIPE THREAD	SPD	SOUTHEAST
GALV	GALVANIZED	SPECS	SURGE PROTECTION DEVICE
GFI	GROUND FAULT INTERRUPTER	SS	SPECIFICATIONS
GND	GROUND	STA	SANITARY SEWER
GP	GRINDER PUMP	STD	STATION
HDPE	HIGH DENSITY POLYETHYLENE PIPE	SVC	STANDARD
ID	INNER DIAMETER	UGD	SERVICE
IE	INVERT ELEVATION	SW	UNDERGROUND
INV	INVERT	TELE	SOUTHWEST
KAIC	KILO AMPS INTERRUPTING CAPACITY	TP	TELEPHONE
LF	LINEAR FEET	UTIL	TOP OF PIPE
LPSS	LOW PRESSURE SEWER SYSTEM	WP	UTILITY
LS	LIFT STATION	XING	UNITED STATES BUREAU OF RECLAMATION
MAX	MAXIMUM		WEATHER PROOF
Ma	MILLIAMPS (ONE THOUSANDTH OF AN AMP)		CROSSING
MIN	MINIMUM		

Rev #	Date	Description	By	CHK'd

SOUDER, MILLER & ASSOCIATES
Engineering • Environmental • Geomatics
Serving the Southwest & Rocky Mountains
201 S. Halagueño Street
Carlsbad, NM 88220
Phone: (575) 689-7940
www.soudermiller.com

CITY OF CARLSBAD

CITY OF CARLSBAD
CITY OF CARLSBAD
UV TREATMENT PROJECT
GENERAL NOTES & ABBREVIATIONS

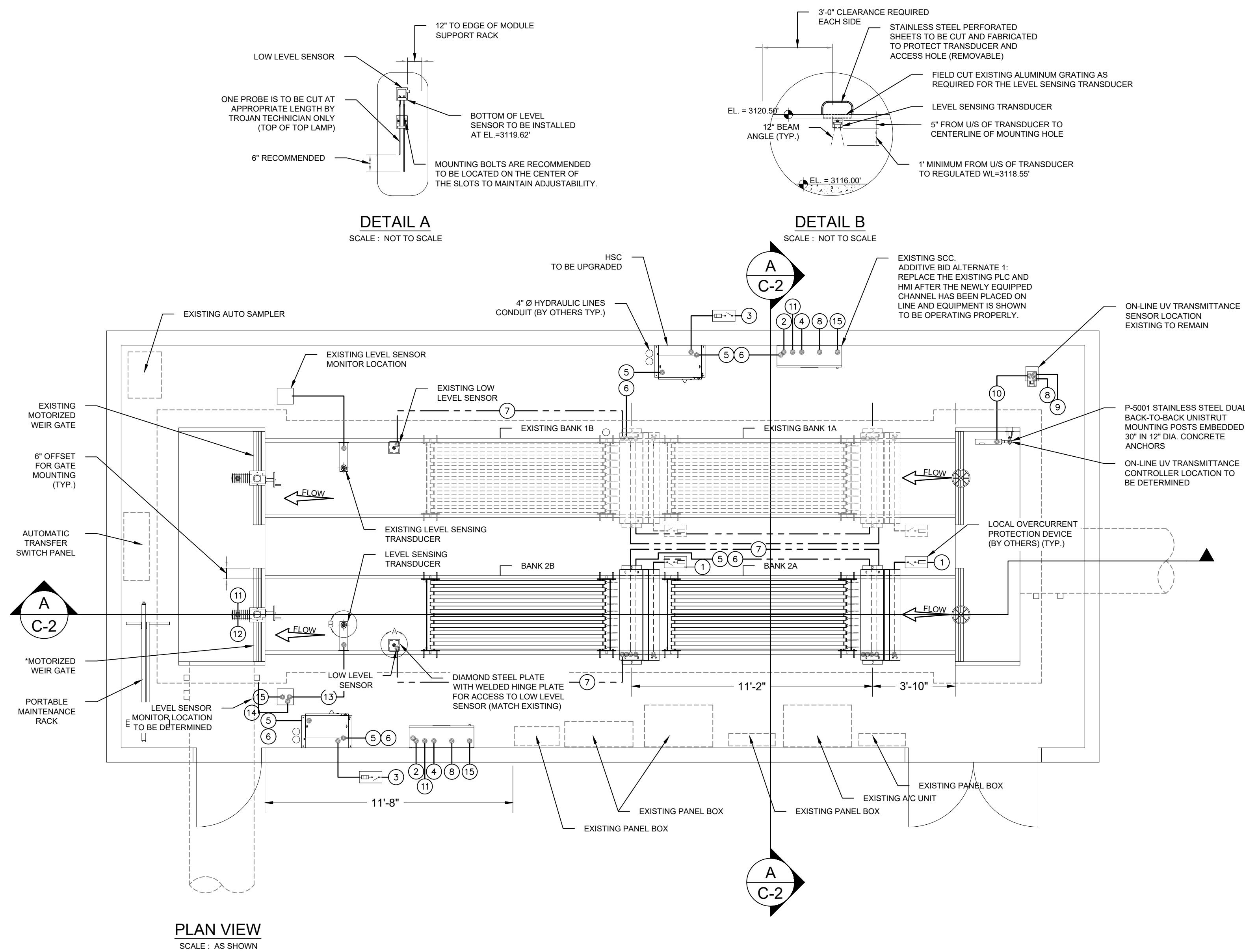


THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

Designed KPC	Drawn MVH	Checked JMG
-----------------	--------------	----------------

811
Know what's
BELOW.
CALL before
you dig.

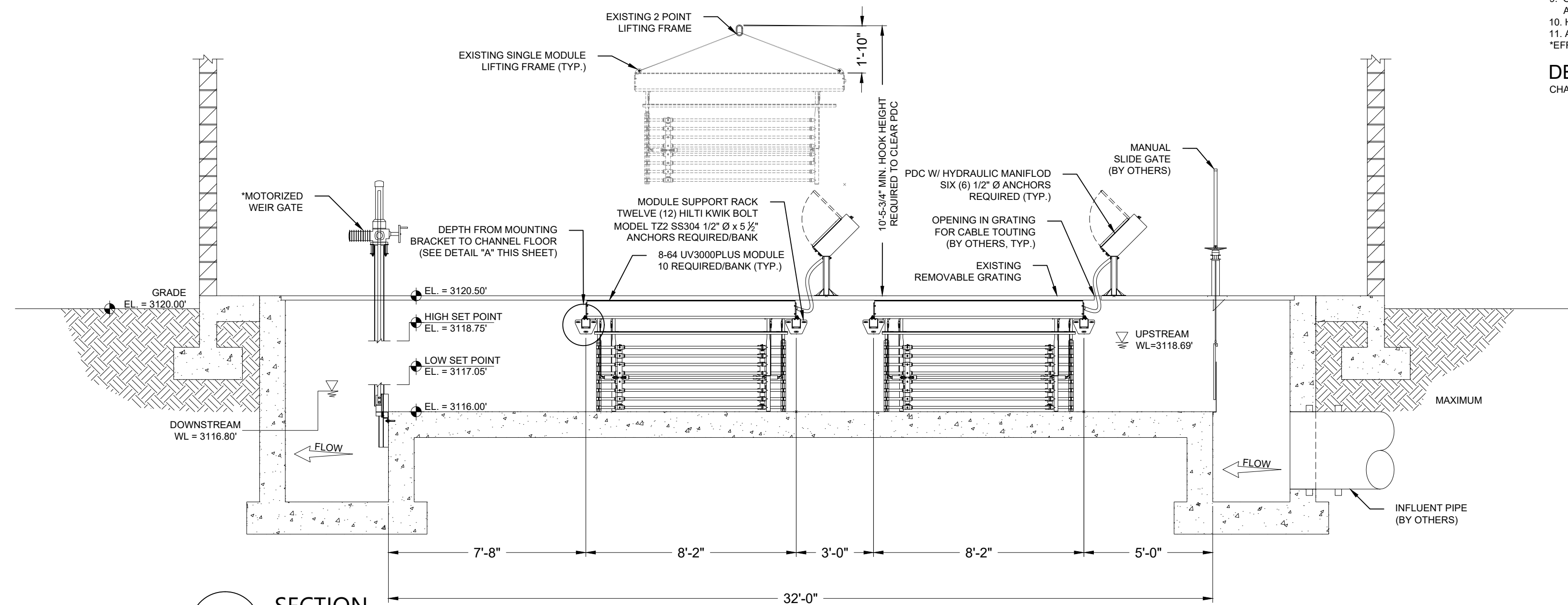
Date:	March 2024
Scale:	Horiz: Vert:
Project No:	6E31053
Sheet:	G-2



 TROJAN UV3000 PLUS™ EQUIPMENT INTERCONNECTIONS			
NO.	DESCRIPTION	FROM	TO
1.	POWER DISTRIBUTION CENTER (PDC) POWER SUPPLY 480V/277V, 3 PHASE, 4 WIRE + GROUND 20.5 KVA/PC POWER DRAW 29.5 AMPS MAXIMUM CURRENT/PHASE	DISTRIBUTION PANEL (DP) (BY OTHERS) (NOT SHOWN)	PDC
2.	SYSTEM CONTROL CENTER (SCC) POWER SUPPLY 120V, 1 PHASE, 32 WIRE + GROUND 15 AMPS	DISTRIBUTION PANEL (DP) (BY OTHERS) (NOT SHOWN)	SCC
3.	HYDRAULIC SYSTEMS CENTER (HSC) POWER SUPPLY 480V, 3 PHASE, 3 WIRE + GROUND, 3 AMPS	DISTRIBUTION PANEL (DP) (BY OTHERS) (NOT SHOWN)	HSC
4.	FLOW METER 4-20 mA DC ANALOG INPUT (BY OTHERS)	SLOW METER PANEL (NOT SHOWN) (BY OTHERS)	SCC
5.	GROUND LINK 14 AWG TYPE TWI STRANDED	SCC	HSC AND PDC(s) (DAISY CHAINED)
6.	MOBUS 1 SHIELDED TWISTED PAIR	SCC	HSC THRU PDC(s) (DAISY CHAINED) OR PDC(s) THRU HSC
7.	DISCRETE LOW LEVEL SIGNAL 12 VDC 2 CONDUCTORS	LOW LEVEL SENSOR	PDC(s) (DAISY CHAINED)
8.	EXISTING ON-LINE UV TRANSMITTANCE CONTROLLER SIGNAL 4-20 mA	ON-LINE UV TRANSMITTANCE SENSOR	SCC
9.	EXISTING ON-LINE UV TRANSMITTANCE CONTROLLER POWER SUPPLY 120V, 1 PHASE, 2 WIRE + GROUND, 1 AMP.	DP (NOT SHOWN) (BY OTHERS)	ON-LINE UV TRANSMITTANCE CONTROLLER
10.	EXISTING ON-LINE UV TRANSMITTANCE SENSOR COMMUNICATION (SENSOR CABLE PROVIDED BY HATCH)	ONLINE UV TRANSMITTANCE SENSOR	ON-LINE UV TRANSMITTANCE CONTROLLER
11.	OPEN COMMAND DISCRETE OUTPUT (MIN 20AWG) - 2 CONDUCTORS CLOSE COMMAND DISCRETE OUTPUT (MIN 20 AWG) - 2 CONDUCTORS GATE IN REMOTE MODE DISCRETE INPUT (MIN 20 AWG) - 2 CONDUCTORS GATE POSITION ANALOG INPUT 4-20mA 1 TWISTED SHIELDED PAIR (24 AWG)	SCC	WEIR GATE
		SCC	WEIR GATE
		WEIR GATE	WEIR GATE
		WEIR GATE	SCC
12.	WEIR GATE POWER SUPPLY 480V, 3 PHASE, 4 WIRE + GROUND	DP (BY OTHERS) (NOT SHOWN)	WEIR GATE
		LEVEL SENSING TRANSDUCER	SENSOR MONITOR
13.	COMMUNICATION LINK (W/ CABLE SUPPLIED)	DP (BY OTHERS) (NOT SHOWN)	SENSOR MONITOR
14.	LEVEL SENSOR POWER SUPPLY 120V, 1 PHASE, 2 WIRE, 2 WIRE + GROUND, 15VA	LEVEL SENSOR MONITOR	SCC

NOTES:

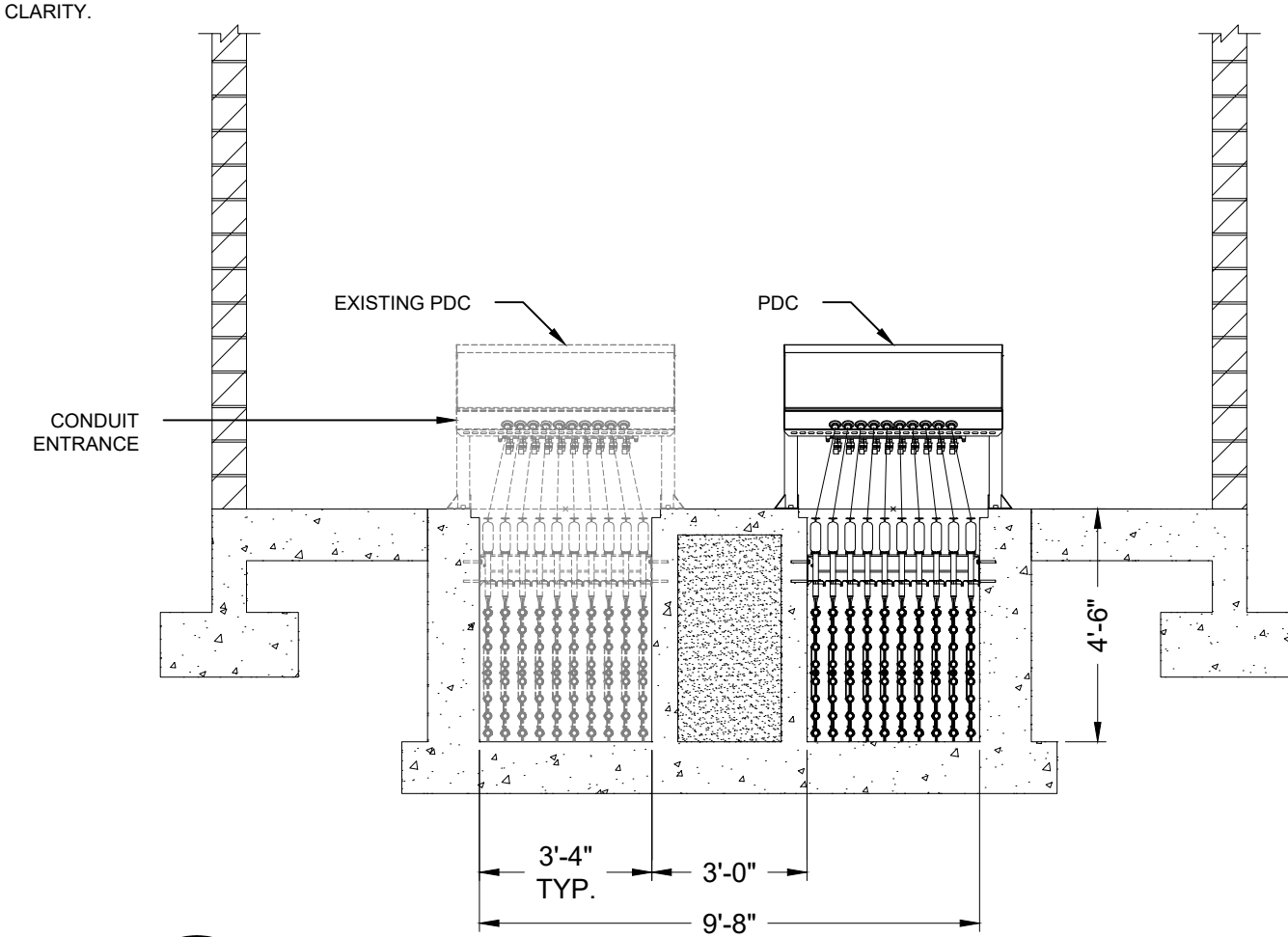
1. ANCHOR BOLTS ARE NOT SUPPLIED BY TROJAN TECHNOLOGIES.
2. SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS BY OTHERS.
3. ELECTRICAL REQUIREMENTS SHOWN ARE TO SUPPLY TROJAN VU EQUIPMENT ONLY.
4. ELECTRICAL LOAD FACTOR TO BE ADDED AS PER IEEE CODE.
5. CONTRACTOR TO REVIEW ALL TROJAN TECHNOLOGIES INSTALLATION INSTRUCTIONS PRIOR TO EQUIPMENT INSTALLATION.
6. EQUIPMENT VENTILATION REQUIREMENTS ASSOCIATED WITH TROJAN EQUIPMENT ONLY.
7. EFFLUENT LEVELS MAY NEED TO BE ALTERED DUE TO CHANNEL DEBRIS OR GEOMETRY.
8. HSC STANDALONE IS TO BE LOCATED WITHIN 45' OF FURTHEST PDC.
9. ALL CONDUCTORS, CABLES, WIRES AND VU BANK, HSC, AND DEVICES TO BE LOCATED IN FLOOR SLAB.
10. "EFFECTIVE WIDTH OF EACH LENGTH IS 40".



SECTION

NOT: AS SHOWN

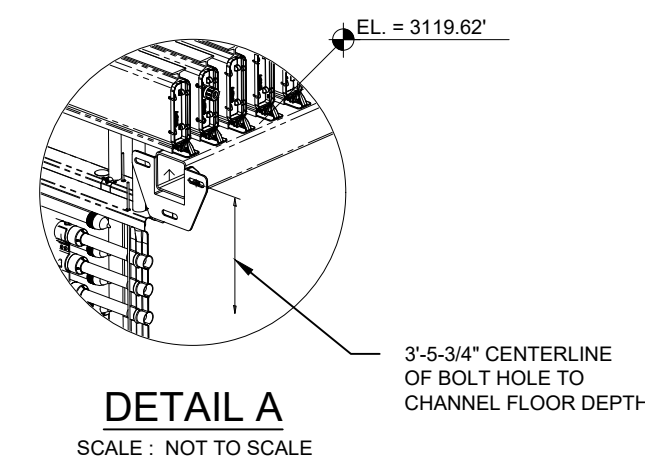
NOTE: ON-LINE UV TRANSMITTANCE CONTROLLER, ON-LINE UV TRANSMITTANCE SENSOR, LOW LEVEL SENSOR AND LEVEL SENSING TRANSDUCER NOT SHOWN FOR CLARITY.



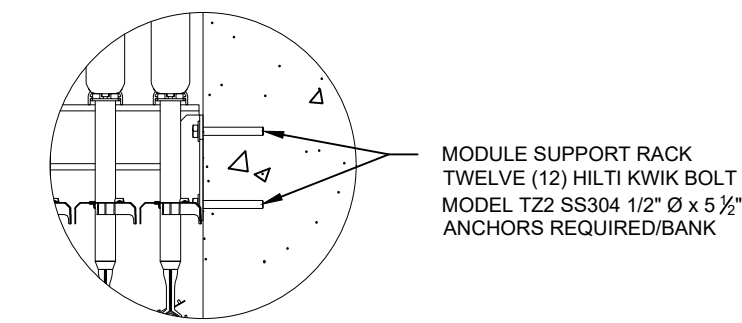
SECTION

NOT: AS SHOWN

NOTE: MANUAL SLIDE GATE(S) (BY OTHERS), ON-LINE UV TRANSMITTANCE CONTROLLER, ON LINE UV TRANSMITTANCE SENSOR AND SCC NOT SHOWN FOR CLARITY.



DETAIL A
SCALE : NOT TO SCALE



DETAIL B
SCALE : NOT TO SCALE

- GENERAL NOTES:
1. DO NOT SLOP CHANNEL FLOOR.
 2. CHANNEL WIDTH & DEPTH MUST BE KEPT WITHIN A TOLERANCE OF + OR - 1/4".
 3. ANCHOR BOLT BULBS ARE NOT SUPPLIED BY TROJAN TECHNOLOGIES.
 4. SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS BY OTHERS.
 5. ELECTRICAL REQUIREMENTS SHOWN ARE FOR TROJAN UV EQUIPMENT ONLY.
 6. ELECTRICAL INRUSOR FACTOR TO BE ADDED AS PER LOCAL CODE.
 7. REMOVABLE GRATING SECTIONS SHALL BE EASILY REMOVED BY ONE PERSON.
 8. MAXIMUM WEIGHT OF THE SECTIONS SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF THE APPLICABLE JURISDICTION.
 9. CONTRACTOR TO REVIEW ALL TROJAN TECHNOLOGIES INSTALLATION INSTRUCTIONS PRIOR TO EQUIPMENT INSTALLATION.
 10. EFFLUENT LEVELS SHOWN REFLECT HYDRAULICS ASSOCIATED WITH TROJAN EQUIPMENT ONLY.
 11. EFFLUENT LEVELS MAY BE ALTERED DUE TO CHANNEL BEDS OR GEOMETRY.
 12. ALL EQUIPMENT IMMEDIATELY ABOVE UV MODULES TO BE OPEN TYPE (ED, PER FERROATED) TO ALLOW ADEQUATE COOLING OF THE UV MODULES.
 13. HSC STANDALONE IS TO BE LOCATED WITHIN 45' OF FURTHEST PDC.
 14. ALL DEVICES, TROJAN UV, CABLES, WIRES FROM UV BANK, HSC, SCC, AND CABLES TO BE LOCATED IN FLOOR SLAB.
 15. EFFECTIVE WEIR GATE LENGTH IS 10'.

DEVIATIONS:
CHANNEL WIDTH TO BE 3'-4" NOT 2'-8" AS PER CONTRACT DRAWING 09S-04 DATED SEPTEMBER 2010

[illegible]

SMA
SOUDER, MILLER & ASSOCIATES
Engineering ♦ Environmental ♦ Geomatics
Serving the Southwest & Rocky Mountains
2011 S. Halagueno Street
Carlsbad, NM 88220
Phone (575) 689-7040
www.soudermiller.com

CITY OF CARLSBAD

CARLSBAD, NM

CITY OF CARLSBAD

UV TREATMENT BUILDING - SECTION VIEWS

UV TREATMENT PROJECT

CITY OF CARLSBAD



THIS DRAWING IS INCOMPLETE
AND NOT TO BE USED FOR
CONSTRUCTION UNLESS IT IS
STAMPED, SIGNED AND DATED

Designed KPC	Drawn MVH	Checked JMG
-----------------	--------------	----------------



Date:	March 2024
Scale:	Horiz: Vert:
Project No:	6E31053
Sheet:	C-2

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	DUPLEX CONVENIENCE OUTLET, 18" A.F.F.
	MOTOR CONNECTION FOR MOTOR WITH HP INDICATED
	DISCONNECT SWITCH, POLES AND RATING AS INDICATED OR AS REQUIRED, NEMA 3R IF INSTALLED OUTSIDE
	120V PANELBOARD, REFER TO PANEL SCHEDULE
	SPECIAL PURPOSE CABINET, AS INDICATED ON DRAWINGS
WP	WEATHERPROOF (NEMA 3R)
EX	EXISTING
R	REMOVE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
(M)	MECHANICAL (FURNISHED UNDER DIVISION 15)
A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
IG	ISOLATED GROUND
UG	UNDERGROUND
FACP	FIRE ALARM CONTROL PANEL
U.N.O.	UNLESS NOTED OTHERWISE
OFOI	OWNER FURNISHED, OWNER INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED

NOTES:

- LIGHTING FIXTURES ARE OF TYPE AS INDICATED ON LIGHT FIXTURE SCHEDULE U.N.O.
- MOUNTING HEIGHTS FOR DEVICES CALLED OUT AT 18" A.F.F. ARE TO THE BOTTOM OF THE DEVICE UNLESS OTHERWISE NOTED.
- MOUNTING HEIGHTS FOR DEVICES CALLED OUT AT 48" A.F.F. ARE TO THE TOP OF THE DEVICE UNLESS OTHERWISE NOTED.
- ANY SPECIFIC DETAILS ABOVE (MOUNTING HEIGHTS, PART NUMBERS, CONNECTION METHODS, ETC.) MAY BE MODIFIED OR REPLACED BY INFORMATION ON PLANS, SCHEDULES, DETAILS, RISERS, ETC. DETAILS NOT SPECIFICALLY MODIFIED REMAIN AS GIVEN ABOVE.

PROJECT NOTES

- A. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL ELECTRICAL FACILITIES IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, PLANS AND ASSOCIATED NOTES, NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES AND IN A NEAT AND WORKMANLIKE MANNER.
- B. CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS AT THE JOB SITE.
- C. ALL UNFORESEEN CONDITIONS THAT MAY AFFECT SCOPE OF WORK / CODE VIOLATIONS, DISCOVERED DURING DEMOLITION / CONSTRUCTION, SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE OWNER / ENGINEER.
- D. THE ELECTRICAL CONTRACTOR SHALL MAKE REQUIRED CONNECTIONS TO EQUIPMENT FURNISHED BY OTHERS.
- E. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF ALL PERMITS, TESTS AND INSPECTIONS, AND VISIT THE SITE OF WORK PRIOR TO SUBMITTING BID.
- F. THE ELECTRICAL CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES.
- G. THE ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE.
- H. A SET OF MARKED UP PRINTS SHALL BE PREPARED SHOWING ALL CHANGES MADE DURING CONSTRUCTION AND TURNED OVER TO THE OWNER AT THE END OF THE CONSTRUCTION. ALL CHANGES MUST HAVE THE OWNER'S APPROVAL.
- I. ANY DISCREPANCY BETWEEN MATERIAL DESCRIPTION AND CATALOG NUMBER SHALL BE BROUGHT TO THE ARCHITECT'S, ENGINEER'S OR OWNER'S ATTENTION IMMEDIATELY.
- J. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR CATALOG CUT SHEETS ON ALL ELECTRICAL DEVICES AND EQUIPMENT WHICH MAY BE SUBSTITUTED FROM THAT SPECIFIED IN CONTRACT DOCUMENTS.
- K. INTERRUPTION OF ANY ELECTRICAL SERVICES SHALL BE COORDINATED WITH THE OWNER AT LEAST 7 DAYS PRIOR TO THE INTENDED OUTAGE AND SHALL BE REQUESTED IN WRITING WITH A COPY TO OWNER.
- L. CONTRACTOR SHALL OBTAIN FROM THE OWNER PRIOR TO COMMENCEMENT OF WORK, THE EXISTING PLANS WHICH INDICATE THE APPROXIMATE ELECTRICAL LAYOUT OF CONDUIT, WIRING, CIRCUITS, ETC.
- M. ELECTRICAL CONTRACTOR SHALL PROVIDE A GROUND CONDUCTOR IN ALL BRANCH CIRCUITRY. CONDUIT SHALL SERVE AS REDUNDANT GROUND ONLY.
- N. ALL WIRING SHALL BE COPPER AND HAVE TYPE THWN OR TYPE XHHW INSULATION MINIMUM.
- O. PROVIDE SEPARATE COLOR CODING FOR 120/240V-1Ø-3W. MAINTAIN SAME COLOR CODING THROUGHOUT.
- P. CONDUIT RUNS EXPOSED ON CEILING OR WALLS SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER, MAKING ALL RUNS STRAIGHT AT PARALLEL OR PERPENDICULAR ANGLES TO BUILDING STRUCTURE.
- Q. PROVIDE RIGID STEEL ELBOWS AND RIGID STEEL CONDUIT RISERS ON UNDERGROUND RUNS OR RUNS IN CONCRETE.
- R. ALL STEEL CONDUITS WHICH COME IN CONTACT WITH EARTH SHALL BE WRAPPED IN SCOTCHRAP-51 HALF-LAPPED OR PVC COATED TO THICKNESS OF 20 MILS. ALL FEEDERS AND HOMERUNS SHALL BE 1" MINIMUM.
- S. CONTRACTOR SHALL PROVIDE AND INSTALL PULLWIRE IN ANY EMPTY CONDUIT.
- DD. ALL PULLBOXES SHALL BE CONSTRUCTED OF CODE-GAUGE GALVANIZED SHEET METAL, NOT LESS THAN THE MINIMUM SIZE RECOMMENDED BY THE N.E.C..
- EE. PANELBOARDS SHALL SHALL BE RATED AT 10,000 AIC MINIMUM, UNLESS NOTED OTHERWISE.
- FF. PROVIDE ARC FLASH WARNING STICKERS PER NEC AND LOCAL AUTHORITIES.

[illegible]

SMA

SOUDER, MILLER & ASSOCIATES

Engineering ♦ Environmental ♦ Geomatics
Serving the Southwest & Rocky Mountains

201 S. Halagueno Street
Carlsbad, NM 88220

Phone (575) 689-7040
www.soudermiller.com

CITY OF CARLSBAD
CARLSBAD, NM

CITY OF CARLSBAD
UV TREATMENT PROJECT
ELECTRICAL COMMONS



22097

THIS DRAWING IS INCOMPLETE
AND NOT TO BE USED FOR
CONSTRUCTION UNLESS IT IS
STAMPED, SIGNED AND DATED

Designed RHP	Drawn RHP	Checked TFR
-----------------	--------------	----------------



Date: ----

Scale: NO SCALE

Project No: 6E31053

Sheet: E-1





<

A. ON EXISTING PANEL SCHEDULE "LP09" CIRCUITS SHOWN GREYED ARE SCOPE OF WORK FOR THIS PROJECT.

1. 3#2 THWN CU AND 1#8 THWN CU GROUND IN 1 1/4" CONDUIT OR 3#1/0 XHHW AI AND 1#6 XHHW AI GROUND IN 1 1/2" CONDUIT.
2. 4#2 THWN CU AND 1#8 THWN CU GROUND IN 1 1/4" CONDUIT OR 4#1/0 XHHW AI AND 1#6 XHHW AI GROUND IN 1 1/2" CONDUIT.
3. PROVIDE AND INSTALL NEW 100 AMP, 3-POLE BREAKER IN 250 AMP MAX SPACE. CIRCUIT BREAKER SHALL BE LISTED FOR USE IN EXISTING PANELBOARD.
4. EXISTING 45KVA, NEMA 4X, 480V-3Ø PRIMARY, 120/208V-3Ø SECONDARY, TRANSFORMER TO BE RELOCATED TO THE EXTERIOR EAST SIDE OF THE BUILDING. REFER TO "ELECTRICAL PLAN" ON SHEET E-2 FOR APPROXIMATE LOCATIONS.
5. EXISTING CONDUIT AND CONDUCTORS TO BE REMOVED IN THEIR ENTIRETY.
6. PROVIDE AND INSTALL NEW 600 VOLT, THREE-POLE 100 AMP, HEAVY DUTY FUSIBLE DISCONNECT SWITCH IN A NEMA 3R ENCLOSURE. PROVIDE AND INSTALL NEW 70 AMP FUSES IN DISCONNECT SWITCH.
7. PROVIDE AND INSTALL NEW 600 VOLT, THREE-POLE 100 AMP, HEAVY DUTY FUSIBLE DISCONNECT SWITCH IN A NEMA 3R ENCLOSURE. PROVIDE AND INSTALL NEW 100 AMP FUSES IN DISCONNECT SWITCH.
8. 3#4 THWN CU AND 1#8 THWN CU GROUND IN 1 1/4" CONDUIT OR 3#2 XHHW AI AND 1#6 XHHW AI GROUND IN 1 1/4" CONDUIT.
9. 4#4 THWN CU AND 1#8 THWN CU GROUND IN 1 1/4" CONDUIT OR 4#2 XHHW AI AND 1#6 XHHW AI GROUND IN 1 1/4" CONDUIT.
10. REFER TO "GROUNDING SYSTEM DIAGRAM" ON SHEET E-4 FOR ADDITIONAL INFORMATION.

[illegible]

SMA

SOUDER, MILLER & ASSOCIATES
Engineering • Environmental • Geomatics
Serving the Southwest & Rocky Mountains
201 S. Halagueno Street
Carlsbad, NM 88220
Phone (575) 689-7140
www.soudermiller.com

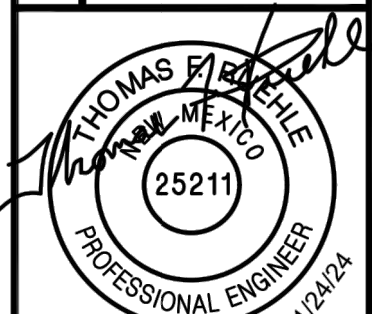
CITY OF CARLSBAD

CARLSBAD, NM

CITY OF CARLSBAD

UV TREATMENT PROJECT

POWER RISER DIAGRAM



22097

THIS DRAWING IS INCOMPLETE
AND NOT TO BE USED FOR
CONSTRUCTION UNLESS IT IS
STAMPED, SIGNED AND DATED

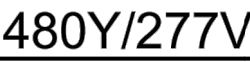
Designed RHP	Drawn RHP	Checked TFR
-----------------	--------------	----------------



Know what's
BELOW.
CALL before
you dig.

Date: ----
Scale: NO SCALE
Project No: 6E31053
Sheet: E-3





2018

- | |
|---------------------|
| Date: ---- |
| Scale: NO SCALE |
| Project No: 6E31053 |
| Sheet: E-4 |

City of Carlsbad					
Engineer's Opinion of Probable Construction Cost					
WWTP UV Treatment Improvements					
Base Bid					
Item No.	Description	Unit	Est. Qty	Unit Price	Total Price
1	Mobilization and Demobilization (50%/50%), Total shall not exceed 5% of the Base Bid Amount.	LS	1	\$ 53,294.61	\$ 53,294.61
2	Furnish and install complete Trojan 3000UV Treatment System, including new Supply Control Center (SCC), Hydraulic Control System (HCS), two (2) bank of UV Lamps consisting of ten (10) modules per bank, and eight (8) lamps per module, two (2) Power Distribution Centers, one motorized weir gate. including all mountaing hardware for complete installation, startup, testing, and training, and spare parts, CIP	LS	1	\$ 788,392.28	\$ 788,392.28
3	Furnish and Install Access Covers and protection covers for the low level sensors and level sensing transducer, including cutting existing grate and in field fabrication to match existing, mounting, and all labor, materials and equipment.	LS	1	\$ 6,500.00	\$ 6,500.00
4	Demolition and Replacement of existing 10-inch thick concrete slab for electrical conduit, including reinforcement and dowels into existing concrete slab.	SF	180	\$ 1,150.00	\$ 207,000.00
5	Furnish and install all conduit and wiring to and from the New SCC and New HCS, including the motorized wier gate actuator, level sensing transducer and monitor, low level sensor, automatic transfer switch, each power distribution center.	LS	1	\$ 45,000.00	\$ 45,000.00
6	Furnish and Install a 75KVA Transformer, new panel (UVPP2), new 600V, 3-pole, 100 Amp, heavy duty fusible disconnect, and all necessary equipment, including all conduit to and from the new equipment, CIP.	LS	1	\$ 12,500.00	\$ 12,500.00
7	De-energize and relocate existing 45KVA Transformer to exterior of building for, new 600 V, 3-pole 100 Amp, Heavy Duty Fusible Disconnect, and all necessary equipment, including all conduit to and from Existing UVPP, CIP.	LS	1	\$ 6,500.00	\$ 6,500.00
CONSTRUCTION SUBTOTAL				\$	1,119,186.89
Contingency (15%)				\$	167,878.03
New Mexico Gross Receipt Tax (5.8333%)				\$	75,078.36
CONSTRUCTION TOTAL				\$	1,362,143.28

Base Bid					
Item No.	Description	Unit	Est. Qty	Unit Price	Total Price
ABA1.1	Remove and Replace Existing SCC PLC and HMI to match new equipment, CIP	LS	1	\$ 35,000.00	\$ 35,000.00
CONSTRUCTION SUBTOTAL				\$	35,000.00
Contingency (15%)				\$	5,250.00
New Mexico Gross Receipt Tax (5.8333%)				\$	2,347.90
CONSTRUCTION TOTAL				\$	42,597.90