



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

353 Santa Monica Drive · Channel Islands Beach, CA · 93035-4473 · (805) 985-6021 · FAX (805) 985-7156
A PUBLIC ENTITY SERVING CHANNEL ISLANDS BEACHES AND HARBOR · CIBCSD.COM

BOARD OF DIRECTORS REGULAR BOARD MEETING NOTICE & AGENDA

NOTICE IS HEREBY GIVEN that the Board of Directors of the Channel Islands Beach Community Services District will hold A Regular Meeting beginning at 5:00 PM on Tuesday, June 12, 2018. The Meeting will be held at the **District Office Conference Room, 353 Santa Monica Drive, Channel Islands Beach, CA 93035.** The Agenda is as follows:

A. CALL TO ORDER, ROLL CALL, PLEDGE OF ALLEGIANCE:

B. PUBLIC COMMENTS:

1. Opportunity for members of the public to address the Board on matters under the purview of the District and which are not on the agenda. (Time limit 3 minutes per speaker)

C. CONSENT CALENDAR:

1. Approve the Agenda Order
2. Financial Reports:
 - a. Cash Disbursal & Receipt Report –May 2018
3. Minutes
 - a. May 8, 2018 Regular Board Meeting

4. Authorize customer request for relief from water charges due to leaks on the property consistent with Resolution 16-06:

	Account Number	Water Relief	Sewer Relief	Total Relief
a.	00620-01	\$0.00	\$5.15	\$5.15
b.	05190-01	\$7.17	\$20.61	\$27.78
c.	08950-01	\$11.00	\$25.76	\$36.76
d.	00500-02	\$61.11	\$175.17	\$236.28

D. OPERATIONS AND MAINTENANCE REPORT

E. ACTION CALENDAR

1. **5:00 P.M. CLOSED SESSION: Public Employee Performance Evaluation – Title: General Manager; Pursuant to Government Code Section 54957(b)**
2. **6:00 P.M. Final Proposed Budget FY 2018-2019**
 Recommendation:
 - 1) Review and adopt Final Proposed FY 2018 – 2019 Operating and Capital Budget.
3. **Smart Meter Installation Bid/ Meter Negotiated Sale/ Lid Negotiated Sale**
 Recommendation:
 - 1) Approve Purchase Order and service agreement with National Meter for smart meters
 - 2) Approve Purchase Order with Famcon Supply for meter box lids
 - 3) Authorize advertisement of bid for smart meter installation
4. **Second Reading of Rate Ordinances / Retirement of Water Availability Charge**
 Recommendation:
 - 1) Perform second reading and adoption of Ordinance 89 and Ordinance 90, which upon adoption will implement the rate increases approved in the Proposition 218 Hearing held August 9, 2016.
5. **Sewer Station SCADA Improvements – CI 207**
 Recommendation:
 - 1) Consider and approve proposal from XiO, Inc. (XiO) to provide cloud based Supervisory Control and Data Acquisition (SCADA) monitoring and control systems at six sewer stations throughout the District’s service area.
 - 2) Consider and approve proposal from Dieners Electric for the installation of six XiO SCADA monitoring and control systems at the six sewer stations.

6. SB 1029 Debt Management Policy (Audit Requirement for Special Districts)

Recommendation:

- 1) Approve proposed Channel Islands Beach Community Services District Municipal Debt Management Policy.

7. District Office and Yard Design Project Update

Recommendation:

- 1) Receive and file artist renderings of redesign options.
- 2) Provide direction to General Manager regarding disposal of real property and value engineering of redesign.

F. INFORMATION CALENDAR

1. SAS114 Auditor Engagement Letter
2. PHWA Agenda Review
3. Report from Board Members of any meeting or conference where compensation from the District for attendance was received

G. BOARD MEMBER COMMENTS

H. GENERAL COUNSEL & GENERAL MANAGER COMMENTS

AGENDA POSTING CERTIFICATION

This agenda was posted Thursday, June 7, 2018 by 5:00 PM. The agenda is posted at the District Office and two public notice bulletin boards, which are accessible 24 hours per day. The locations include:

- Hollywood Beach School, 4000 Sunset
- Corner Store, 2425 Roosevelt Blvd.
- District Office, 353 Santa Monica Drive

Agendas are also posted on the District's website at www.cibcsd.com.



Akbar Alikhan
General Manager

REQUESTS FOR DISABILITY-RELATED MODIFICATION OR ACCOMMODATION, INCLUDING AUXILIARY AIDS OR SERVICES, IN ORDER TO ATTEND OR PARTICIPATE IN A MEETING, SHOULD BE MADE TO THE SECRETARY OF THE BOARD IN ADVANCE OF THE MEETING TO ENSURE THE AVAILABILITY OF REQUESTED SERVICE OR ACCOMODATION. NOTICES, AGENDAS AND PUBLIC DOCUMENTS RELATED TO THE BOARD MEETINGS CAN BE MADE AVAILABLE IN ALTERNATIVE FORMAT UPON REQUEST.

Channel Islands Beach 2013

6/7/2018 10:13 AM

Register: 1002 · Checking Pacific Western

From 05/01/2018 through 05/31/2018

Sorted by: Date, Type, Number/Ref

Date	Number	Payee	Account	Memo	Payment	C	Deposit	Balance
05/01/2018	4974	A to Z Law, LLP	2000 - Accounts Payable		1,738.00			661,409.95
05/01/2018	4975	Cardmember Service	2000 - Accounts Payable		3,241.52			658,168.43
05/01/2018	4976	FGL Environmental I...	2000 - Accounts Payable		409.00			657,759.43
05/01/2018	4977	Miguel Zavalza	2000 - Accounts Payable		225.00			657,534.43
05/01/2018	4978	Oilfield Electric Motor	2000 - Accounts Payable		1,826.26			655,708.17
05/01/2018	4979	Philip's Janitorial Ser...	2000 - Accounts Payable		185.00			655,523.17
05/01/2018	4980	Hollister & Brace	2000 - Accounts Payable		2,887.50			652,635.67
05/01/2018	4982	CIBCSO-Petty Cash	2000 - Accounts Payable		283.44			652,352.23
05/02/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/1			5,137.08	657,489.31
05/02/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/1			1,419.25	658,908.56
05/03/2018	EDEP	DEPOSIT	1200 - Accounts Recei...	e-checks			6,935.76	665,844.32
05/07/2018	4983	Aflac	2000 - Accounts Payable		300.50			665,543.82
05/07/2018	4984	Arco	2000 - Accounts Payable		1,077.09			664,466.73
05/07/2018	4985	AWA	2000 - Accounts Payable	Martinez, Broc...	140.00			664,326.73
05/07/2018	4986	Dial Security	2000 - Accounts Payable		180.00			664,146.73
05/07/2018	4987	Document Systems, I...	2000 - Accounts Payable	Office HP	67.97			664,078.76
05/07/2018	4988	GEORGE VALERIE...	2000 - Accounts Payable	CUSTOMER ...	55.54			664,023.22
05/07/2018	4989	KEH & Associates, I...	2000 - Accounts Payable		6,982.50			657,040.72
05/07/2018	4990	Nationwide Retirement	2000 - Accounts Payable	pr pd 4/20/18 t...	3,476.48			653,564.24
05/07/2018	4991	ROGER KRATZ	2000 - Accounts Payable	CUSTOMER ...	18.26			653,545.98
05/07/2018	4992	Spectrum	2000 - Accounts Payable		44.64			653,501.34
05/07/2018	4993	Streamline	2000 - Accounts Payable		200.00			653,301.34
05/07/2018	4994	Underground Service...	2000 - Accounts Payable		18.25			653,283.09
05/07/2018	4995	United Rentals, Inc.	2000 - Accounts Payable	backhoe rental	2,020.69			651,262.40
05/08/2018	DEP	DEPOSIT	1200 - Accounts Recei...	transfer from C...			371,223.99	1,022,486.39
05/08/2018	4996	Badger Meter	2000 - Accounts Payable		30.00			1,022,456.39
05/08/2018	4997	FedEX	2000 - Accounts Payable		71.08			1,022,385.31
05/08/2018	4998	Frontier	2000 - Accounts Payable		39.43			1,022,345.88
05/08/2018	4999	ImageSource	2000 - Accounts Payable		243.23			1,022,102.65
05/08/2018	5000	Pacific Couriers	2000 - Accounts Payable		205.70			1,021,896.95
05/08/2018	5001	Pitney Bowes Inc.	2000 - Accounts Payable		144.16			1,021,752.79
05/08/2018	5002	SoCalGas	2000 - Accounts Payable		44.93			1,021,707.86
05/08/2018	5003	Streamline	2000 - Accounts Payable		200.00			1,021,507.86
05/08/2018	5004	Tampa Hardware 2	2000 - Accounts Payable		250.47			1,021,257.39
05/08/2018		QuickBooks Payroll ...	-split-	Created by Pay...	23,925.87			997,331.52
05/09/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/3			1,645.49	998,977.01
05/09/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/4			3,079.87	1,002,056.88
05/09/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/4 pymt f...			80.90	1,002,137.78
05/09/2018	DEP	DEPOSIT	2050 - Customer Depo...	Dep 5/4			150.00	1,002,287.78
05/09/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/8			11,308.50	1,013,596.28

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Sorted by: Date, Type, Number/Ref

Date	Number	Payee	Account	Memo	Payment C	Deposit	Balance
05/09/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/8		8,698.74	1,022,295.02
05/09/2018	To Print	Carol J Dillon	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	Casey D Johnson	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	E.D. Brock	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	Erika F Davis	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	Lupe C Lopez	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	Mark A Espinosa	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	Akbar Alikhan	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	Keila E Wilson	-split-	Direct Deposit			1,022,295.02
05/09/2018	To Print	Peter A. Martinez	-split-	Direct Deposit			1,022,295.02
05/10/2018	5006	AWA	2000 - Accounts Payable	Alikhan and Nast	50.00		1,022,245.02
05/10/2018	5007	advanced geotechnic...	2000 - Accounts Payable	Geo. Eng. stud...	2,750.00		1,019,495.02
05/10/2018	5008	ACWA/JPIA Health ...	2000 - Accounts Payable		1,103.87		1,018,391.15
05/10/2018	5009	City of Oxnard	2000 - Accounts Payable	True-up for the...	226,354.00		792,037.15
05/10/2018	5010	County of Ventura - ...	2000 - Accounts Payable	1/1/18 through ...	420.16		791,616.99
05/11/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/11		11,123.26	802,740.25
05/11/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/8		1,266.37	804,006.62
05/11/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/9		2,474.54	806,481.16
05/11/2018	DEP	DEPOSIT	1200 - Accounts Recei...	dep 5/10		9,461.94	815,943.10
05/11/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/7		4,111.11	820,054.21
05/11/2018	EDEP	DEPOSIT	1200 - Accounts Recei...	e-checks		26,606.35	846,660.56
05/15/2018	EFT	CalPers	-split-	Health Ins.	8,006.87		838,653.69
05/16/2018	DEP	DEPOSIT	3120 Sewer Revenues:...	Dep 5/16		213,360.47	1,052,014.16
05/16/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/15		32,490.41	1,084,504.57
05/16/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/15		936.59	1,085,441.16
05/16/2018	DEP	DEPOSIT	1200 - Accounts Recei...	dep 5/14		14,266.93	1,099,708.09
05/16/2018	DEP	DEPOSIT	2050 - Customer Depo...	Deo 5/14		750.00	1,100,458.09
05/16/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/11		964.58	1,101,422.67
05/16/2018	5011	AT & T	2000 - Accounts Payable		568.98		1,100,853.69
05/16/2018	5012	Diener's Electric, Inc.	2000 - Accounts Payable		555.96		1,100,297.73
05/16/2018	5013	Frontier	2000 - Accounts Payable		246.44		1,100,051.29
05/16/2018	5014	Office Depot	2000 - Accounts Payable		31.02		1,100,020.27
05/16/2018	5015	PHWA	2000 - Accounts Payable		52,967.61		1,047,052.66
05/16/2018	5016	Plumbers Depot, Inc.	2000 - Accounts Payable		177.79		1,046,874.87
05/16/2018	5017	So. California Edison...	2000 - Accounts Payable		717.22		1,046,157.65
05/16/2018	5018	Spectrum	2000 - Accounts Payable	office internet	124.98		1,046,032.67
05/16/2018	5019	Xerox Financial Serv...	2000 - Accounts Payable		285.91		1,045,746.76
05/16/2018	5020	EJ Harrison & Sons, ...	2000 - Accounts Payable	pr pd 3/16/18 t...	40,631.23		1,005,115.53
05/16/2018	5021	Ventura County Star	2000 - Accounts Payable	1 year subscrip...	330.87		1,004,784.66
05/16/2018	5022	Priority Safety Servi...	2000 - Accounts Payable		266.60		1,004,518.06

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Date	Number	Payee	Account	Memo	Payment	C	Deposit	Balance
05/16/2018	5023	Xpress Lube	2000 - Accounts Payable	Fleet Oil Chan...	123.77			1,004,394.29
05/22/2018		QuickBooks Payroll ...	-split-	Adjusted for vo...	12.00			1,004,382.29
05/22/2018		QuickBooks Payroll ...	-split-	Created by Pay...	20,855.57			983,526.72
05/23/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/18			523.08	984,049.80
05/23/2018	DEP	DEPOSIT	2050 - Customer Depo...	Dep 5/15			150.00	984,199.80
05/23/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/17			18,999.69	1,003,199.49
05/23/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/18			7,008.73	1,010,208.22
05/23/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/21			18,129.99	1,028,338.21
05/23/2018	DEP	DEPOSIT	2050 - Customer Depo...	Dep 5/18			150.00	1,028,488.21
05/23/2018	DEP	DEPOSIT	1200 - Accounts Recei...	Dep 5/16			656.06	1,029,144.27
05/23/2018	DEP	DEPOSIT	1200 - Accounts Recei...	dep 5/22			13,006.90	1,042,151.17
05/23/2018		Akbar Alikhan	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018		Carol J Dillon	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018		Casey D Johnson	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018		E.D. Brock	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018		Erika F Davis	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018		Keila E Wilson	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018		Mark A Espinosa	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018		Peter A. Martinez	-split-	VOID: Direct ...		X		1,042,151.17
05/23/2018	To Print	Akbar Alikhan	-split-	Direct Deposit		X		1,042,151.17
05/23/2018	To Print	Carol J Dillon	-split-	Direct Deposit		X		1,042,151.17
05/23/2018	To Print	Casey D Johnson	-split-	Direct Deposit		X		1,042,151.17
05/23/2018	To Print	E.D. Brock	-split-	Direct Deposit		X		1,042,151.17
05/23/2018	To Print	Erika F Davis	-split-	Direct Deposit		X		1,042,151.17
05/23/2018	To Print	Keila E Wilson	-split-	Direct Deposit		X		1,042,151.17
05/23/2018	To Print	Mark A Espinosa	-split-	Direct Deposit		X		1,042,151.17
05/23/2018	To Print	Peter A. Martinez	-split-	Direct Deposit		X		1,042,151.17
05/24/2018	EDEP	DEPOSIT	1200 - Accounts Recei...	e-checks			85,787.56	1,127,938.73
05/24/2018		QuickBooks Payroll ...	-split-	Created by Pay...	58.46			1,127,880.27
05/25/2018	5024	Casey D Johnson	-split-		1,107.32			1,126,772.95
05/25/2018	5025	Erika F Davis	-split-		279.73			1,126,493.22
05/29/2018	RETCK	Returned Item	1200 - Accounts Recei...	R. Seim	122.88			1,126,370.34
05/31/2018	5026	A to Z Law, LLP	2000 - Accounts Payable	matter no. 3127...	3,959.62			1,122,410.72
05/31/2018	5027	ARC Document Solu...	2000 - Accounts Payable		63.05			1,122,347.67
05/31/2018	5028	Architects Orange, L...	2000 - Accounts Payable		6,090.00			1,116,257.67
05/31/2018	5029	Bay Alarm Company	2000 - Accounts Payable	103152	90.00			1,116,167.67
05/31/2018	5030	Cardmember Service	2000 - Accounts Payable		1,843.76			1,114,323.91
05/31/2018	5031	County of Ventura	2000 - Accounts Payable	Funds transfere...	350,000.00			764,323.91
05/31/2018	5032	Diener's Electric, Inc.	2000 - Accounts Payable		558.83			763,765.08
05/31/2018	5033	Elevated Entitlements	2000 - Accounts Payable	Retainer for Zo...	1,500.00			762,265.08

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Sorted by: Date, Type, Number/Ref

Date	Number	Payee	Account	Memo	Payment C	Deposit	Balance
05/31/2018	5034	FGL Environmental I...	2000 - Accounts Payable		267.00		761,998.08
05/31/2018	5035	Frontier	2000 - Accounts Payable		429.86		761,568.22
05/31/2018	5036	Miguel Zavalza	2000 - Accounts Payable		225.00		761,343.22
05/31/2018	5037	Philip's Janitorial Ser...	2000 - Accounts Payable		185.00		761,158.22
05/31/2018	5038	Port Hueneme Marin...	2000 - Accounts Payable		101.60		761,056.62
05/31/2018	5039	SCE- Office	2000 - Accounts Payable		230.01		760,826.61
05/31/2018	5040	So. California Edison...	2000 - Accounts Payable		250.30		760,576.31
05/31/2018	5041	XIO, Inc.	2000 - Accounts Payable	Lift Station Co...	19,937.16		740,639.15
05/31/2018	5042	Nationwide Retirement	2000 - Accounts Payable	pr pd 05/05/18 ...	1,815.45		738,823.70
05/31/2018	5043	Hollister & Brace	2000 - Accounts Payable		4,462.50		734,361.20

MINUTES OF THE
CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT
REGULAR BOARD MEETING, May 8, 2018

A. CALL TO ORDER, ROLL CALL, AND PLEDGE OF ALLEGIANCE:

President Spiegel called the meeting to order at 6:03 PM and led everyone in attendance in the Pledge of Allegiance. In attendance, Vice President Brewer, Director Marcus, Director Nast, General Manager, Akbar Alikhan, Clerk of the Board, Erika Davis, General Counsel, John Mathews, Office Manager, CJ Dillon and Deputy General Manager/ Operations Manager Pete Martinez.

Director Koesterer was absent.

B. PUBLIC COMMENTS:

None.

C. CONSENT CALENDAR:

Director Marcus moved to approve the Consent Calendar and President Spiegel seconded the motion. The motion passed.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 - No

D. OPERATIONS AND MAINTENANCE REPORT

Deputy General Manager/ Operations Manager Pete Martinez presented the Operations and Maintenance Report. Deputy General Manager/ Operations Manager Pete Martinez explained the failures at H station and B station were due to aged electrical equipment. Deputy General Manager/ Operations Manager Pete Martinez noted that on April 11th the SCADA Pilot test at Hueneme Station began. Since its implementation there has not been an alarm. District is looking forward to outfitting all the sewer stations with this system beginning July 2018. Deputy General Manager/ Operations Manager Pete Martinez also mentioned sewer station pump repairs and Operations Staff participation in safety training during the month.

E. ACTION CALENDAR

1. Changes to Proposed FY 2018-2019 CIP Budget

Using a PowerPoint presentation, General Manager Alikhan pointed out the five key changes to the proposed CIP Budget: 1) increase in Billing/Financial Systems from \$40,000 to \$50,000, 2) Water Line Relocation item changing to Water Line Monitoring decreasing the cost from an estimate of approximately \$300,000 to \$60,000 3) District's share of the cost of the Oxnard Wastewater Treatment Plant electrical improvements increased to \$200,000, 4) Pump Station Improvements are consolidated into one single project and 5) the addition of the Wastewater Flow Meter Installation Project for the year 2019.

No action taken.

2. Revised District Policy and Procedure for the Sale of Surplus Real Property

General Manager Alikhan explained that the requested revisions to the policy from the last Board meeting were made. Board asked questions. The Board suggested shortening the surplus real property policy publication requirement from 60 days to 45 days prior to auction. General Counsel John Mathews said he would confirm this conforms to the law. If it is confirmed that it is in accordance with the law the motion made by Vice President Brewer is to approve Revised District Policy and Procedure for the Sale of Surplus Real Property with the amended change from 60 days to 45 days prior to auction. Director Marcus seconded the motion. The motion passed as amended.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 – No

President Spiegel made the motion to Authorize General Manager to begin advertising of Las Palmas Property and set auction date pursuant to adopted policy. Vice President Brewer seconded the motion. Motion passed all in favor.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 – No

3. Redwood Trunk Line Authorization for Payment

Deputy General Manager/ Operations Manager Pete Martinez explained the final true up payment to the City of Oxnard using a PowerPoint presentation to show the details. Board asked questions regarding the decrease in cost and the delay in billing. Deputy General Manager/ Operations Manager Pete Martinez explained that the cost was renegotiated and lowered by the previous General Manager and that the delay in billing was due to litigation issues at the City of Oxnard. Director Marcus moved to approve the motion and Vice President Brewer seconded the motion. The motion passed.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 – No

4. First Reading of Rate Ordinances / Retirement of Water Availability Charge

General Manager Alikhan stated this is a legal requirement to update the Rate Ordinances to reflect the changes to the rates. In addition to the standard requirement the water availability charge is being retired. The first reading of Ordinances 89 and 90 were performed in title only and the public hearing date was set for June 12, 2018. Director Marcus made the motion to Adopt Ordinance 89 and Ordinance 90 and set June 12, 2018 as the Public Hearing date. Vice President Brewer seconded the motion. The motion passed.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 – No

5. Proposed Side Letter to Union Memorandum of Understanding

General Manager Alikhan stated that to follow the CalPers requirements three new job classifications have been created. The side letter to the Union Memorandum of Understanding defines the new job classifications. General Manager Alikhan described the new job classifications with a PowerPoint Presentation. Vice President Brewer moved to approve the Side Letter to Memorandum of Understanding with Local SEIU 721 and President Spiegel seconded the motion. The motion passed unanimously.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 - No

6. Discussion on General Manager's Participation in PHWA Activities

General Manager Alikhan and the Board of Directors discussed the possible involvement of General Manager Alikhan in PHWA Activities. The Board agreed it would be beneficial to the Channel Islands Beach Community Services District and the Port Hueneme Water Agency. Director Marcus moved to have the General Manager of the Channel Islands Beach Community Services District participate in Port Hueneme Water Agency activities and Vice President Brewer seconded the motion. The motion passed.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 - No

7. Opposition to SB 623 Drinking Water Tax

General Manager Alikhan explained the proposed Senate Bill 623 and although he supports the mission he does not think this is the right way to accomplish it. He recommended sending a position letter opposing the Senate Bill 623. Director Marcus moved to Authorize General Manager to send position letter on behalf of the District opposing the SB 623 Drinking Water Tax. Vice President Brewer seconded the motion. The motion was adopted.

Spiegel, Brewer, Marcus, Nast 4 - Yes 0 - No

F. INFORMATION CALENDAR

1. Historic Vote on California Water Fix

General Alikhan presented a PowerPoint presentation which included content from Susan Mulligan that explained the historic vote on California Water Fix.

2. Temporary Rental Unit Policy Letter

General Manager announced that a letter was sent to the County on behalf of the District capturing the comments from the last Board Meeting. The next meeting regarding the Temporary Rental Units is scheduled on June 12th at 5pm.

3. PHWA Agenda Review

General Manager Alikhan went over the suggested format with the Board. Board agreed on the format. The possible items on the PHWA agenda were reviewed.

4. Report from Board Members of any meeting or conference where compensation from the District for attendance was received

Director Nast referred to the detailed report he handed out regarding the 26th Annual Water Symposium Conducted by The Association of Water Agencies Ventura County at the Oxnard Marriot.

G. BOARD MEMBER COMMENTS

Director Marcus said the recall results will be finalized in City of Oxnard tomorrow.

Director Nast announced a group of concerned citizens in Hollywood Beach may be starting a Neighborhood Watch Program.

H. GENERAL COUNSEL & GENERAL MANAGER COMMENTS

General Counsel had no comments.

General Manager Alikhan stated his Annual Review is scheduled for next month in closed session. Board may change meeting time to 5:30 p.m. if all members can attend.

General Manager Alikhan announced next month's meeting will include discussion of Smart Meter Installation Contracts and the first draft of the District Office and Yard Redesign will be presented.

General Manager Alikhan announced the May 22nd meeting is cancelled.

The Board Meeting adjourned at 8:12 PM.

Operations & Maintenance Report

June 12, 2018

Heavy Equipment

- Backhoe was listed for a 2-week period
- Bids closed on May 22, 2018
 - Sold for \$8,500 (highest bid received)
- District branded covers
 - New backhoe
 - Trailer mounted emergency generator



Water Valve Maintenance

- Staff performed valve exercising of water valves in anticipation of Water Main Cleaning
 - Hollywood Beach
 - Silverstrand
 - Hollywood by the Sea
- Vacuuming sand and debris from valve stacks
- Exercising valves open/closed for proper operation
- GPS coordinates for all water valves and hydrants



Water Main Cleaning

Outreach

1. Bill Insert
2. Changeable Message Sign
3. Post on NextDoor
4. Driving traffic to the website
 1. Updating completed streets
 2. Educates customers on NO-DES process

Schedule

- Hollywood Beach (June 4 – June 7)
- Silverstrand (June 7 – June 11)
- Hollywood by the Sea (June 12 – June 15)

Water Main Cleaning

8:30 AM to 3:30 PM Each Day
(No weekend work)

PROJECT SCHEDULE



Sewer System Issues/Maintenance

- Blockage of gravity sewer line on Roosevelt between Cahuenga and Highland
 - **SmartCover** alerted operations staff enabling the blockage to be cleared prior to a spill occurring
- Los Robles Station
 - Failure of high level float
 - No alarm notification to operations staff
 - **SmartCover** alerted operations staff enabling on-call staff to manually pump station down to safe operating level
- Hot spot cleanings completed at 13 known trouble areas throughout the District's collection system
- Wet well cleanouts at all 7 sewer stations



Baseline Atmospheric Monitoring of Hydrogen Sulfide (H₂S)

Installation of “OdaLogs” at the 3 Sewer Pump Stations (A, B, H)

- Allow staff to perform baseline atmospheric monitoring of hydrogen sulfide gas in the collection system
- Devices continuously monitor the hydrogen sulfide in the atmosphere at the set locations
- Alarm via SMS text message if H₂S levels exceed set point
- 30-day baseline study





Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

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Regular Board Meeting, June 12, 2018

To: Board of Directors
From: Akbar Alikhan, *General Manager*
Subject: Final Proposed FY 2018 – 2019 Budget
Item No. E-2

RECOMMENDATION:

1. Review and adopt Final Proposed FY 2018 – 2019 Operating and Capital Budget.

FINANCIAL IMPACT: Action provides guidance and spending limits for the District for operating and capital needs from July 1, 2018 through June 30, 2019.

BACKGROUND/DISCUSSION:

The Board first considered a preliminary budget at the March 13 Board Meeting and provided feedback to staff. In late March, District staff delivered and reviewed the budget with the Harbor Director. A second budget workshop was held at the April 10 Board Meeting with no changes to the Operating Budget and minor changes to the Capital Budget. The attached Budget Summary reflects all comments and recommended changes to earlier versions of the Budget.

In review, the proposed Operating Budget represents a 2.8% increase from the FY 2017 – 2018 Operating Budget, less than the cost of inflation for 2018. The table below summarizes the proposed budget for each cost category.

	FY 2017 – 2018	FY 2018 – 2019	% Change
Total Water System Expense	\$858,990	\$877,400	2.1%
Total Sewer System Expense	\$982,000	\$1,012,000	3.1%
Total Trash Expense	\$492,000	\$528,000	7.3%
Total Maintenance Expenses	\$54,420	\$52,800	-3.0%
Total Salaries & Benefits	\$798,500	\$884,000	10.7%
Total Administrative Expenses	\$477,300	\$412,150	-13.6%
TOTAL OPERATING EXPENSES	\$3,663,210	\$3,766,350	2.8%

The Capital Budget calls for \$1.22M in infrastructure investment for FY 2018 – 2019, with \$460,000 assigned to the Water Enterprise and \$760,000 assigned to the Sewer Enterprise.

If approved, the adopted Budget would go into effect on July 1, 2018 and new utility rates would become effective July 15, 2018.

Members of the public wishing to access the full Budget document may request a copy from the Clerk of the Board or view any time by visiting www.cibcsd.com/budget.

ATTACHMENTS:

1. FY 2018 – 2019 Final Proposed Budget Summary

FY 2018 - 2019 CAPITAL IMPROVEMENT PROGRAM

Line	Project No.	Capital Project	Water	Sewer	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1	CI 101	Monitoring of Water Lines in Easements	100%		\$20,000	\$40,000	\$0	\$0	\$0
2	CI 102	Well Rehabilitation	100%		\$10,000	\$0	\$0	\$0	\$0
3	CI 103	PHWA Improvements	100%		\$30,000	\$50,000	\$0	\$200,000	\$1,000,000
4	CI 104	Metering at Interconnections	100%		\$20,000	\$0	\$0	\$0	\$0
5	CI 201	I&I Reduction - Gravity Main Improvements		100%	\$0	\$420,000	\$0	\$0	\$250,000
6	CI 202	Sewer Lift Station and Pump Station Rehabilitation		100%	\$320,000	\$100,000	\$200,000	\$60,000	\$0
7	CI 203	Manhole Rehabilitation		100%	\$0	\$0	\$75,000	\$0	\$0
8	CI 204	CCTV Video Inspection		100%	\$70,000	\$0	\$0	\$0	\$70,000
9	CI 205	Hydrogen Sulfide Reduction		100%	\$0	\$100,000	\$100,000	\$0	\$0
10	CI 206	Oxnard Wastewater Plant Improvements		100%	\$0	\$200,000	\$100,000	\$100,000	\$100,000
11	CI 207	SCADA Improvements		100%	\$150,000	\$0	\$0	\$0	\$0
12	CI 401	Smart Meter Deployment	50%	50%	\$250,000	\$100,000	\$100,000	\$100,000	\$100,000
13	CI 402	Yard and Building Improvements	50%	50%	\$50,000	\$150,000	\$0	\$0	\$0
14	CI 403	Billing and Financial Systems Software	50%	50%	\$50,000	\$0	\$0	\$0	\$0
15	CI 208	Wastewater Flow Meter Insallation		100%	\$35,000	\$0	\$0	\$0	\$0
Water					\$255,000	\$215,000	\$50,000	\$250,000	\$1,050,000
Sewer					\$750,000	\$945,000	\$525,000	\$210,000	\$470,000
Total					\$1,005,000	\$1,160,000	\$575,000	\$460,000	\$1,520,000

Water Enterprise

FY 2019

Beginning Capital Reserve Balance	\$1,761,752
Contributions for FY 2018 - 2019:	\$269,300
Planned Capital Expenditures	-\$255,000
Ending Capital Reserve Balance	\$1,776,052
 Minimum Capital Reserve Balance	 \$825,955

Sewer Enterprise

FY 2019

Beginning Capital Reserve Balance	\$1,399,888
Contributions for FY 2018 - 2019:	\$446,200
Planned Capital Expenditures	-\$750,000
Ending Capital Reserve Balance	\$1,096,088
 Minimum Capital Reserve Balance	 \$1,048,640

FY 2018 - 2019 OPERATING BUDGET

Sheet No.	Account	Adopted	Actual Through	Projected	Proposed	Percent Expended	Water Enterprise		Sewer Enterprise		Solid Waste Enterprise		Community Service		Total	
		FY 2017 - 2018	1/31/2018	June 2018	FY 2018 - 2019		\$	%	\$	%	\$	%	\$	%		
OPERATING REVENUES																
Rate Revenues																
1	Water Revenue	3110	1,879,000	1,172,047	2,092,262	2,021,000	111%	2,021,000	100%	0	0%	0	0%	0	0%	2,021,000
2	Sewer Revenue	3120	2,067,000	746,448	2,170,373	2,180,000	105%	0	0%	2,180,000	100%	0	0%	0	0%	2,180,000
3	Solid Waste Revenue	3130	684,300	388,800	694,832	731,000	102%	0	0%	0	0%	731,000	100%	0	0%	731,000
Total Rate Revenues			\$ 4,630,300	\$ 4,957,467	\$ 4,932,000	107%	\$ 2,021,000		\$ 2,180,000		\$ 731,000		\$ -		\$ 4,932,000	
OPERATING EXPENSES																
Water System Expense																
4	PHWA Water Contract	4210	724,000	253,533	633,830	740,000	88%	740,000	100%	0	0%	0	0%	0	0%	740,000
5	Water Sampling	4215	16,400	8,682	14,000	17,000	85%	17,000	100%	0	0%	0	0%	0	0%	17,000
6	SWRCB Annual Admin Fee	4220	12,240	12,603	12,603	12,700	103%	12,700	100%	0	0%	0	0%	0	0%	12,700
7	Annual Water Quality Report	4225	1,650	0	1,650	4,000	100%	4,000	100%	0	0%	0	0%	0	0%	4,000
8	Cross Connect Contract Charge	4230	1,700	1,260	1,681	1,700	99%	1,700	100%	0	0%	0	0%	0	0%	1,700
9	Water Repair & Maintenance	4235	103,000	35,000	103,000	91,000	100%	91,000	100%	0	0%	0	0%	0	0%	91,000
10	Telemetry	4240	0	0	0	11,000	0%	11,000	100%	0	0%	0	0%	0	0%	11,000
Total Water System Expense			\$ 858,990	\$ 766,764	\$ 877,400	89%	\$ 877,400		\$ -		\$ -		\$ -		\$ 877,400	
Sewer System Expense																
11	Wastewater Transportation	4260	823,000	392,340	823,022	840,000	100%	0	0%	840,000	100%	0	0%	0	0%	840,000
12	Sewer Repair & Maintenance	4265	121,000	35,315	121,000	121,000	100%	0	0%	121,000	100%	0	0%	0	0%	121,000
13	Telemetry	4270	20,000	9,682	16,600	33,000	83%	0	0%	33,000	100%	0	0%	0	0%	33,000
14	Power	4275	18,000	9,480	16,300	18,000	91%	0	0%	18,000	100%	0	0%	0	0%	18,000
Total Sewer System Expense			\$ 982,000	\$ 976,922	\$ 1,012,000	99%	\$ -		\$ 1,012,000		\$ -		\$ -		\$ 1,012,000	
Trash Expense																
15	Contract Trash Services	4285	492,000	289,968	493,100	528,000	100%	0	0%	0	0%	528,000	100%	0	0%	528,000
Total Trash Expense			\$ 492,000	\$ 493,100	\$ 528,000	100%	\$ -		\$ -		\$ 528,000		\$ -		\$ 528,000	
Maintenance Expenses																
16	Gasoline	4310	20,000	9,682	16,600	15,000	83%	6,450	43%	6,150	41%	2,100	14%	300	2%	15,000
17	Vehicle Maintenance	4320	6,120	3,221	6,120	10,000	100%	4,300	43%	4,100	41%	1,400	14%	200	2%	10,000
18	Building Security	4330	900	631	950	1,600	106%	528	33%	544	34%	528	33%	0	0%	1,600
19	Building Maintenance	4340	18,500	24,650	25,550	9,000	138%	2,970	33%	3,060	34%	2,970	33%	0	0%	9,000
20	Signs & Banners	4350	1,500	1,000	1,500	1,500	100%	495	33%	510	34%	495	33%	0	0%	1,500
21	Public Landscaping	4360	1,900	1,368	2,593	9,200	136%	0	0%	0	0%	0	0%	9,200	100%	9,200
22	Employee Workplace Safety	4370	4,000	1,191	4,000	5,000	100%	2,150	43%	2,050	41%	700	14%	100	2%	5,000
23	Emergency Preparedness	4380	1,500	134	1,500	1,500	100%	0	0%	0	0%	0	0%	1,500	100%	1,500
Total Maintenance Expenses			\$ 54,420	\$ 58,813	\$ 52,800	108%	\$ 16,893		\$ 16,414		\$ 8,193		\$ 11,300		\$ 52,800	

FY 2018 - 2019 OPERATING BUDGET

Sheet No.	Account	Adopted	Actual Through	Projected	Proposed	Percent Expended	Water Enterprise		Sewer Enterprise		Solid Waste Enterprise		Community Service		Total			
		FY 2017 - 2018	1/31/2018	June 2018	FY 2018 - 2019		\$	%	\$	%	\$	%	\$	%				
Salaries & Benefits																		
24	Regular Salaries	4400	583,000	332,509	563,000	97%	251,940	39%	258,400	40%	122,740	19%	12,920	2%	646,000			
25	Payroll Taxes	4500	17,000	9,142	14,000	82%	7,410	39%	7,600	40%	3,610	19%	380	2%	19,000			
26	Group Insurance	4525	119,000	58,494	90,000	76%	46,410	39%	47,600	40%	22,610	19%	2,380	2%	119,000			
27	Retirement Benefits	4550	58,300	39,708	58,300	100%	25,194	39%	25,840	40%	12,274	19%	1,292	2%	64,600			
28	Uniforms	4575	2,600	1,886	2,600	100%	1,677	43%	1,599	41%	546	14%	78	2%	3,900			
29	Workers' Comp Insurance	4600	16,000	4,089	11,500	72%	5,460	39%	5,600	40%	2,660	19%	280	2%	14,000			
30	Employee Education	4650	2,600	1,886	2,600	100%	6,825	39%	7,000	40%	3,325	19%	350	2%	17,500			
Total Salaries & Benefits		\$	798,500	\$	742,000	\$	884,000	93%	\$	344,916	\$	353,639	\$	167,765	\$	17,680	\$	884,000
Administrative Expenses																		
31	Regular Board Payments	5010	7,650	3,000	7,650	100%	2,984	39%	3,060	40%	1,454	19%	153	2%	7,650			
32	Special Board Meetings	5020	2,350	400	2,350	100%	917	39%	940	40%	447	19%	47	2%	2,350			
33	Board/ Committee Expenses	5030	1,500	806	1,500	100%	585	39%	600	40%	285	19%	30	2%	1,500			
34	Board Conferences & Seminars	5040	6,000	1,745	6,000	100%	2,340	39%	2,400	40%	1,140	19%	120	2%	6,000			
35	Travel & Lodging	5050	8,500	4,760	6,000	71%	3,315	39%	3,400	40%	1,615	19%	170	2%	8,500			
36	District Dues & Memberships	5100	20,000	17,696	19,000	95%	8,602	43%	7,790	39%	3,416	17%	192	1%	20,000			
37	Office Supplies	5210	7,150	5,864	7,150	100%	2,360	33%	2,431	34%	2,360	33%	0	0%	7,150			
38	On-Line Bill Paying	5215	6,750	5,000	6,145	91%	2,310	33%	2,380	34%	2,310	33%	0	0%	7,000			
39	Communications	5220	15,000	11,287	15,000	100%	4,455	33%	4,590	34%	4,455	33%	0	0%	13,500			
40	Printing & Publications	5230	6,000	3,002	6,000	100%	1,980	33%	2,040	34%	1,980	33%	0	0%	6,000			
41	Postage & Shipping	5240	15,000	8,057	15,000	100%	4,950	33%	5,100	34%	4,950	33%	0	0%	15,000			
42	Miscellaneous Office Expense	5250	12,000	11,197	14,000	117%	3,960	33%	4,080	34%	3,960	33%	0	0%	12,000			
43	Office Utilities	5260	4,200	1,710	2,931	70%	1,155	33%	1,190	34%	1,155	33%	0	0%	3,500			
44	Office Equipment Maintenance	5290	9,600	6,382	9,000	94%	3,300	33%	3,400	34%	3,300	33%	0	0%	10,000			
45	Asset Replacement	5300	28,000	5,711	37,000	132%	11,550	33%	11,900	34%	11,550	33%	0	0%	35,000			
46	Insurance	5400	31,100	27,607	37,872	122%	15,990	41%	17,160	44%	5,850	15%	0	0%	39,000			
47	Legal Services	5510	50,000	35,655	61,000	122%	31,400	57%	17,600	32%	6,000	11%	0	0%	55,000			
48	Accounting Services	5520	50,000	12,715	50,000	100%	20,500	41%	22,000	44%	7,500	15%	0	0%	50,000			
49	Computer Services & Subscriptions	5530	15,000	9,873	15,000	100%	7,380	41%	7,920	44%	2,700	15%	0	0%	18,000			
50	Engineering Services	5540	120,000	3,332	50,000	42%	24,600	41%	26,400	44%	9,000	15%	0	0%	60,000			
51	Bank & Trustee Fees	5560	5,000	2,500	4,000	80%	1,640	41%	1,760	44%	600	15%	0	0%	4,000			
52	Other Professional Services	5565	50,000	6,614	50,000	100%	4,100	41%	4,400	44%	1,500	15%	0	0%	10,000			
53	Legal Notices Publication	5600	5,000	0	800	16%	1,650	33%	1,700	34%	1,650	33%	0	0%	5,000			
54	Public Information & Outreach	5650	1,500	0	1,500	100%	5,280	33%	5,440	34%	5,280	33%	0	0%	16,000			
Total Administrative Expenses		\$	477,300	\$	424,898	\$	412,150	89%	\$	167,301	\$	159,681	\$	84,455	\$	712	\$	412,150
TOTAL OPERATING EXPENSES		\$	3,663,210	\$	3,462,497	\$	3,766,350		\$	1,406,510	\$	1,541,734	\$	788,413	\$	29,692	\$	3,766,350
NET OPERATING INCOME		\$	967,090	\$	1,494,970	\$	1,165,650		\$	614,490	\$	638,266	\$	(57,413)	\$	(29,692)	\$	1,165,650

FY 2018 - 2019 OPERATING BUDGET

Sheet No.	Account	Adopted	Actual Through	Projected	Proposed	Percent Expended	Water Enterprise		Sewer Enterprise		Solid Waste Enterprise		Community Service		Total
		FY 2017 - 2018	1/31/2018	June 2018	FY 2018 - 2019		\$	%	\$	%	\$	%	\$	%	
OTHER REVENUES															
55	Interest Earnings	6100	8,000	19,082	25,000	313%	13,300	35%	20,900	55%	3,800	10%	0	0%	38,000
56	Penalty Revenue	6200	0	0	0	36,000	0	0%	0	0%	0	0%	36,000	100%	36,000
57	Secured & Unsecured Taxes	6320	60,000	42,100	65,000	65,000	0	0%	0	0%	0	0%	65,000	100%	65,000
TOTAL OTHER REVENUES			\$ 68,000	\$ 90,000	\$ 139,000	132%	\$ 13,300		\$ 20,900		\$ 3,800		\$ 101,000		\$ 139,000
DEBT OBLIGATIONS															
58	2012 Water Revenue Bonds	2805	312,834	312,834	312,834	313,000	313,000	100%	0	0%	0	0%	0	0%	313,000
59	2016 Sewer Refunding Bonds	2855	186,991	0	186,991	191,000	0	0%	191,000	100%	0	0%	0	0%	191,000
TOTAL DEBT OBLIGATION			\$ 499,825	\$ 499,825	\$ 504,000	100%	\$ 313,000		\$ 191,000		\$ -		\$ -		\$ 504,000
OTHER BUDGET ITEMS															
60	Allocation of Community Service	N/A	47,662	0	0	50,000	20,500	41%	22,000	44%	7,500	15%	(50,000)	0%	0
TOTAL OTHER BUDGET ITEMS			\$ 47,662	\$ -	\$ 50,000		\$ 20,500		\$ 22,000		\$ 7,500		\$ (50,000)		\$ -
AVAILABLE FOR CAPITAL & RESERVES			\$ 487,603	\$ -	\$ 1,085,145	\$ 750,650	\$ 294,290		\$ 446,166		\$ (61,113)		\$ 121,308		\$ 800,650
RESERVE CONTRIBUTIONS															
Unrestricted															
	Water						0		0		0		0		0
	Sewer						0		0		0		0		0
	Solid Waste						0		0		0		0		0
	Community Reserves						0		0		0		121,308		121,308
Total Unrestricted Contributions							\$ -		\$ -		\$ -		\$ 121,308		\$ 121,308
Board Restricted															
	Water Operations Reserve						10,000		0		0		0		10,000
	Water Rate Stabilization						15,000		0		0		0		15,000
	Water Capital Reserve						269,300		0		0		0		269,300
	Sewer Operations Reserve						0		0		0		0		0
	Sewer Rate Stabilization						0		0		0		0		0
	Sewer Capital Reserve						0		446,200		0		0		446,200
	Solid Waste Operations Reserve						0		0		0		0		0
	Solid Waste Rate Stabilization						0		0		(61,113)		0		(61,113)
	Solid Waste Capital Reserve						0		0		0		0		0
Total Board Restricted Contributions							\$ 294,300		\$ 446,200		\$ (61,113)		\$ -		\$ 679,387
Outside Restricted															
	Water						0		0		0		0		0
	Sewer						0		0		0		0		0
	Solid Waste						0		0		0		0		0
Total Outside Restricted Contributions							\$ -		\$ -		\$ -		\$ -		\$ -
AVAILABLE AFTER RESERVE CONTRIBUTIONS							\$ 0		\$ 0		\$ 0		\$ 0		\$ 0

Channel Islands Beach Community Services District

FY 2018 - 2019 Operating & Capital Budgets



@cashmere33

JUNE 2018



Board of Directors:

Ellen Spiegel, *Board President*
Kristina Brewer, *Vice President*
Susie Koesterer, *Director*
Marcia Marcus, *Director*
Robert Nast, *Director*

Budget Preparation Team:

Akbar Alikhan, *General Manager*
Pete Martinez, *Deputy General Manager / Operations Manager*
CJ Dillon, *Office Manager*
Erika Davis, *Clerk of the Board*

Cover photo provided by Mary Carlson

Glossary of Terms	
High Level	
Operating Budget	Expected future costs and forecasted income over the course of a fiscal year.
Capital Improvement Program	Short-range plan which identifies capital projects and equipment purchases, with anticipated costs associated with each project for each fiscal year.
Enterprise	A segregated account from other funds and accounts of the District with the intent that revenues generated by the enterprise will only be used to fund the operations and capital of the enterprise. District has Water, Sewer, and Solid Waste Enterprises.
Enterprise Allocation	Amount of overhead costs that is attributable to a particular enterprise fund.
Fund Balance	
Capital Reserve	Funds reserved for large anticipated expenses related to the procurement and/or construction of capital assets. Currently set at 3.5% of District asset value.
Operating Reserve	Funds reserved for unexpected shortages of cash flows to allow the District to pay obligations. Currently set at 25% of Operating Expenses, or 90 days of operations.
Rate Stabilization Reserve	Funds reserved to weather sharp unanticipated changes in District costs, to smooth rate adjustments over time, rather than cause rate spikes. Set at 10% of annual operating expenses.
Beginning Balance	Amount of funds in the account at the beginning of a new fiscal year – July 1.
Ending Balance	Amount of funds in the account at the end of a fiscal year – June 30.
Accounting	
Operating Revenues	Cash proceeds from providing water, sewer, or trash services.
Operating Expenses	Costs incurred from providing water, sewer, or trash services.
Net Operating Income	Operating Revenues less Operating Expenses.
Other Revenues	Proceeds generated from non-service activities.
Debt Service	Annual payments towards loans and bonds in the current year.
Debt-to-Equity Ratio	Net Operating Income divided by Debt Service. Ratio must be kept above 1.25 to maintain covenants stipulated by creditors.

Glossary of Terms	
Reserves	
Reserve Contribution	Cash set aside for transfer to one of three reserve accounts for each enterprise.
Unrestricted	Reserve funds set aside for District’s operating activities without a prescribed policy minimum or specific function.
Board Restricted	Reserve funds set aside to meet the District’s adopted financial policies with respect to minimum targets for Operating Reserve, Rate Stabilization Reserve, and Capital Reserve.
Outside Restricted	Reserve funds set aside to meet bond covenants as stipulated by creditors. Funds also contain customer deposits.
Timeline	
Adopted	Program costs approved by Board prior to the start of current fiscal year.
Actual Through	Program costs that have been incurred as of a particular date during the fiscal year.
Projected	Estimated program costs by the end of the fiscal year based current expenditures and remaining anticipated obligations.
Proposed	Requested budget amount for upcoming fiscal year.

Commonly Used Abbreviations

ACWA	Association of California Water Agencies
ACWA/JPIA	ACWA Joint Powers Insurance Authority
AMI	Advanced Metering Infrastructure
AWA	Association of Water Agencies
AWWA	American Water Works Association
CalPERS	California Public Employees Retirement System
CASA	California Association of Sanitation Agencies
CCC	Cross Connection Compliance
CCTV	Closed Circuit Television
CCWUA	Channel Counties Water Utilities Agency
CIBERT	Channel Islands Beach Emergency Response Team
CIP	Capital Improvement Budget
COLA	Cost of Living Adjustment
CSDA	California Special Districts Association
CWEA	California Water Environment Association
FY	Fiscal Year
I&I	Inflow and Infiltration (into sewer collection system)
LAFCO	Local Agency Formation Commission
LGFA	Local Government Finance Act
MOU	Memorandum of Understanding
NASSCO	National Association of Sewer Service Companies
PHWA	Port Hueneme Water Agency
R & M	Repair & Maintenance
SCADA	Supervisory Control and Data Acquisition
SDHS	State Department of Health Services
SWRCB	State Water Resources Control Board
VCEHD	Ventura County Environmental Health Division
VCSDA	Ventura County Special Districts Association
WAN	Wide Area Network
WPD	Watershed Protection District

ALLOCATION METHODS

The District is comprised of three enterprise funds – Water Enterprise, Sewer Enterprise, and Solid Waste Enterprise. The revenues generated by each enterprise are used to support operational activities for only that same enterprise. While several budget items are entirely attributable to a single enterprise, there are many others that are shared between more than one enterprise. To appropriately assign shared costs to each enterprise, an allocation method, or basis for splitting costs is employed. The table below shows the name of the allocation method, the percentage of costs distributed to each enterprise, and the description.

Allocation Method	Water	Sewer	Trash	Community	Description
Water Only	100%	0%	0%	0%	Allocated entirely to Water Enterprise.
Sewer Only	0%	100%	0%	0%	Allocated entirely to Sewer Enterprise.
Solid Waste Only	0%	0%	100%	0%	Allocated entirely to Solid Waste Enterprise.
Comm Svc Only	0%	0%	0%	100%	Allocated entirely to Community Service Account.
Equal Distribution	33%	34%	33%	0%	Split equally among Water, Sewer, and Solid Waste Enterprises.
Staff Time	39%	40%	19%	2%	Split based on how staff time is spent.
Expense Basis	36%	42%	22%	0%	Split based on ratio of operating expenses from each enterprise.
Revenue Basis	41%	44%	15%	0%	Split based on ratio of revenues from each enterprise.
Rev. Water/Sewer	49%	52%	0%	0%	Split based on ratio of revenues from only Water and Sewer.
Ops Time	43%	41%	14%	2%	Split based on how Operations staff time is spent.
Interest Earnings	35%	55%	10%	0%	Split based on interest generated by each enterprise.

FY 2018 - 2019 CAPITAL IMPROVEMENT PROGRAM

Line	Project No.	Capital Project	Water	Sewer	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1	CI 101	Monitoring of Water Lines in Easements	100%		\$20,000	\$40,000	\$0	\$0	\$0
2	CI 102	Well Rehabilitation	100%		\$10,000	\$0	\$0	\$0	\$0
3	CI 103	PHWA Improvements	100%		\$30,000	\$50,000	\$0	\$200,000	\$1,000,000
4	CI 104	Metering at Interconnections	100%		\$20,000	\$0	\$0	\$0	\$0
5	CI 201	I&I Reduction - Gravity Main Improvements		100%	\$0	\$420,000	\$0	\$0	\$250,000
6	CI 202	Sewer Lift Station and Pump Station Rehabilitation		100%	\$320,000	\$100,000	\$200,000	\$60,000	\$0
7	CI 203	Manhole Rehabilitation		100%	\$0	\$0	\$75,000	\$0	\$0
8	CI 204	CCTV Video Inspection		100%	\$70,000	\$0	\$0	\$0	\$70,000
9	CI 205	Hydrogen Sulfide Reduction		100%	\$0	\$100,000	\$100,000	\$0	\$0
10	CI 206	Oxnard Wastewater Plant Improvements		100%	\$0	\$200,000	\$100,000	\$100,000	\$100,000
11	CI 207	SCADA Improvements		100%	\$150,000	\$0	\$0	\$0	\$0
12	CI 401	Smart Meter Deployment	50%	50%	\$250,000	\$100,000	\$100,000	\$100,000	\$100,000
13	CI 402	Yard and Building Improvements	50%	50%	\$50,000	\$150,000	\$0	\$0	\$0
14	CI 403	Billing and Financial Systems Software	50%	50%	\$50,000	\$0	\$0	\$0	\$0
15	CI 208	Wastewater Flow Meter Insallation		100%	\$35,000	\$0	\$0	\$0	\$0
Water					\$255,000	\$215,000	\$50,000	\$250,000	\$1,050,000
Sewer					\$750,000	\$945,000	\$525,000	\$210,000	\$470,000
Total					\$1,005,000	\$1,160,000	\$575,000	\$460,000	\$1,520,000

Water Enterprise

FY 2019

Beginning Capital Reserve Balance	\$1,761,752
Contributions for FY 2018 - 2019:	\$269,300
Planned Capital Expenditures	-\$255,000
Ending Capital Reserve Balance	\$1,776,052
Minimum Capital Reserve Balance	\$825,955

Sewer Enterprise

FY 2019

Beginning Capital Reserve Balance	\$1,399,888
Contributions for FY 2018 - 2019:	\$446,200
Planned Capital Expenditures	-\$750,000
Ending Capital Reserve Balance	\$1,096,088
Minimum Capital Reserve Balance	\$1,048,640

FY 2018 - 2019 OPERATING BUDGET

Sheet No.	Account	Adopted	Actual Through	Projected	Proposed	Percent	Water Enterprise		Sewer Enterprise		Solid Waste Enterprise		Community Service		Total	
		FY 2017 - 2018	1/31/2018	June 2018	FY 2018 - 2019	Expended	\$	%	\$	%	\$	%	\$	%		
OPERATING REVENUES																
Rate Revenues																
1	Water Revenue	3110	1,879,000	1,172,047	2,092,262	2,021,000	111%	2,021,000	100%	0	0%	0	0%	0	0%	2,021,000
2	Sewer Revenue	3120	2,067,000	746,448	2,170,373	2,180,000	105%	0	0%	2,180,000	100%	0	0%	0	0%	2,180,000
3	Solid Waste Revenue	3130	684,300	388,800	694,832	731,000	102%	0	0%	0	0%	731,000	100%	0	0%	731,000
Total Rate Revenues			\$ 4,630,300	\$ 4,957,467	\$ 4,932,000	107%	\$ 2,021,000		\$ 2,180,000		\$ 731,000		\$ -		\$ 4,932,000	
OPERATING EXPENSES																
Water System Expense																
4	PHWA Water Contract	4210	724,000	253,533	633,830	740,000	88%	740,000	100%	0	0%	0	0%	0	0%	740,000
5	Water Sampling	4215	16,400	8,682	14,000	17,000	85%	17,000	100%	0	0%	0	0%	0	0%	17,000
6	SWRCB Annual Admin Fee	4220	12,240	12,603	12,603	12,700	103%	12,700	100%	0	0%	0	0%	0	0%	12,700
7	Annual Water Quality Report	4225	1,650	0	1,650	4,000	100%	4,000	100%	0	0%	0	0%	0	0%	4,000
8	Cross Connect Contract Charge	4230	1,700	1,260	1,681	1,700	99%	1,700	100%	0	0%	0	0%	0	0%	1,700
9	Water Repair & Maintenance	4235	103,000	35,000	103,000	91,000	100%	91,000	100%	0	0%	0	0%	0	0%	91,000
10	Telemetry	4240	0	0	0	11,000	0%	11,000	100%	0	0%	0	0%	0	0%	11,000
Total Water System Expense			\$ 858,990	\$ 766,764	\$ 877,400	89%	\$ 877,400		\$ -		\$ -		\$ -		\$ 877,400	
Sewer System Expense																
11	Wastewater Transportation	4260	823,000	392,340	823,022	840,000	100%	0	0%	840,000	100%	0	0%	0	0%	840,000
12	Sewer Repair & Maintenance	4265	121,000	35,315	121,000	121,000	100%	0	0%	121,000	100%	0	0%	0	0%	121,000
13	Telemetry	4270	20,000	9,682	16,600	33,000	83%	0	0%	33,000	100%	0	0%	0	0%	33,000
14	Power	4275	18,000	9,480	16,300	18,000	91%	0	0%	18,000	100%	0	0%	0	0%	18,000
Total Sewer System Expense			\$ 982,000	\$ 976,922	\$ 1,012,000	99%	\$ -		\$ 1,012,000		\$ -		\$ -		\$ 1,012,000	
Trash Expense																
15	Contract Trash Services	4285	492,000	289,968	493,100	528,000	100%	0	0%	0	0%	528,000	100%	0	0%	528,000
Total Trash Expense			\$ 492,000	\$ 493,100	\$ 528,000	100%	\$ -		\$ -		\$ 528,000		\$ -		\$ 528,000	
Maintenance Expenses																
16	Gasoline	4310	20,000	9,682	16,600	15,000	83%	6,450	43%	6,150	41%	2,100	14%	300	2%	15,000
17	Vehicle Maintenance	4320	6,120	3,221	6,120	10,000	100%	4,300	43%	4,100	41%	1,400	14%	200	2%	10,000
18	Building Security	4330	900	631	950	1,600	106%	528	33%	544	34%	528	33%	0	0%	1,600
19	Building Maintenance	4340	18,500	24,650	25,550	9,000	138%	2,970	33%	3,060	34%	2,970	33%	0	0%	9,000
20	Signs & Banners	4350	1,500	1,000	1,500	1,500	100%	495	33%	510	34%	495	33%	0	0%	1,500
21	Public Landscaping	4360	1,900	1,368	2,593	9,200	136%	0	0%	0	0%	0	0%	9,200	100%	9,200
22	Employee Workplace Safety	4370	4,000	1,191	4,000	5,000	100%	2,150	43%	2,050	41%	700	14%	100	2%	5,000
23	Emergency Preparedness	4380	1,500	134	1,500	1,500	100%	0	0%	0	0%	0	0%	1,500	100%	1,500
Total Maintenance Expenses			\$ 54,420	\$ 58,813	\$ 52,800	108%	\$ 16,893		\$ 16,414		\$ 8,193		\$ 11,300		\$ 52,800	

FY 2018 - 2019 OPERATING BUDGET

Sheet No.	Account	Adopted	Actual Through	Projected	Proposed	Percent Expended	Water Enterprise		Sewer Enterprise		Solid Waste Enterprise		Community Service		Total			
		FY 2017 - 2018	1/31/2018	June 2018	FY 2018 - 2019		\$	%	\$	%	\$	%	\$	%				
Salaries & Benefits																		
24	Regular Salaries	4400	583,000	332,509	563,000	646,000	97%	251,940	39%	258,400	40%	122,740	19%	12,920	2%	646,000		
25	Payroll Taxes	4500	17,000	9,142	14,000	19,000	82%	7,410	39%	7,600	40%	3,610	19%	380	2%	19,000		
26	Group Insurance	4525	119,000	58,494	90,000	119,000	76%	46,410	39%	47,600	40%	22,610	19%	2,380	2%	119,000		
27	Retirement Benefits	4550	58,300	39,708	58,300	64,600	100%	25,194	39%	25,840	40%	12,274	19%	1,292	2%	64,600		
28	Uniforms	4575	2,600	1,886	2,600	3,900	100%	1,677	43%	1,599	41%	546	14%	78	2%	3,900		
29	Workers' Comp Insurance	4600	16,000	4,089	11,500	14,000	72%	5,460	39%	5,600	40%	2,660	19%	280	2%	14,000		
30	Employee Education	4650	2,600	1,886	2,600	17,500	100%	6,825	39%	7,000	40%	3,325	19%	350	2%	17,500		
Total Salaries & Benefits		\$	798,500	\$	742,000	\$	884,000	93%	\$	344,916	\$	353,639	\$	167,765	\$	17,680	\$	884,000
Administrative Expenses																		
31	Regular Board Payments	5010	7,650	3,000	7,650	7,650	100%	2,984	39%	3,060	40%	1,454	19%	153	2%	7,650		
32	Special Board Meetings	5020	2,350	400	2,350	2,350	100%	917	39%	940	40%	447	19%	47	2%	2,350		
33	Board/ Committee Expenses	5030	1,500	806	1,500	1,500	100%	585	39%	600	40%	285	19%	30	2%	1,500		
34	Board Conferences & Seminars	5040	6,000	1,745	6,000	6,000	100%	2,340	39%	2,400	40%	1,140	19%	120	2%	6,000		
35	Travel & Lodging	5050	8,500	4,760	6,000	8,500	71%	3,315	39%	3,400	40%	1,615	19%	170	2%	8,500		
36	District Dues & Memberships	5100	20,000	17,696	19,000	20,000	95%	8,602	43%	7,790	39%	3,416	17%	192	1%	20,000		
37	Office Supplies	5210	7,150	5,864	7,150	7,150	100%	2,360	33%	2,431	34%	2,360	33%	0	0%	7,150		
38	On-Line Bill Paying	5215	6,750	5,000	6,145	7,000	91%	2,310	33%	2,380	34%	2,310	33%	0	0%	7,000		
39	Communications	5220	15,000	11,287	15,000	13,500	100%	4,455	33%	4,590	34%	4,455	33%	0	0%	13,500		
40	Printing & Publications	5230	6,000	3,002	6,000	6,000	100%	1,980	33%	2,040	34%	1,980	33%	0	0%	6,000		
41	Postage & Shipping	5240	15,000	8,057	15,000	15,000	100%	4,950	33%	5,100	34%	4,950	33%	0	0%	15,000		
42	Miscellaneous Office Expense	5250	12,000	11,197	14,000	12,000	117%	3,960	33%	4,080	34%	3,960	33%	0	0%	12,000		
43	Office Utilities	5260	4,200	1,710	2,931	3,500	70%	1,155	33%	1,190	34%	1,155	33%	0	0%	3,500		
44	Office Equipment Maintenance	5290	9,600	6,382	9,000	10,000	94%	3,300	33%	3,400	34%	3,300	33%	0	0%	10,000		
45	Asset Replacement	5300	28,000	5,711	37,000	35,000	132%	11,550	33%	11,900	34%	11,550	33%	0	0%	35,000		
46	Insurance	5400	31,100	27,607	37,872	39,000	122%	15,990	41%	17,160	44%	5,850	15%	0	0%	39,000		
47	Legal Services	5510	50,000	35,655	61,000	55,000	122%	31,400	57%	17,600	32%	6,000	11%	0	0%	55,000		
48	Accounting Services	5520	50,000	12,715	50,000	50,000	100%	20,500	41%	22,000	44%	7,500	15%	0	0%	50,000		
49	Computer Services & Subscriptions	5530	15,000	9,873	15,000	18,000	100%	7,380	41%	7,920	44%	2,700	15%	0	0%	18,000		
50	Engineering Services	5540	120,000	3,332	50,000	60,000	42%	24,600	41%	26,400	44%	9,000	15%	0	0%	60,000		
51	Bank & Trustee Fees	5560	5,000	2,500	4,000	4,000	80%	1,640	41%	1,760	44%	600	15%	0	0%	4,000		
52	Other Professional Services	5565	50,000	6,614	50,000	10,000	100%	4,100	41%	4,400	44%	1,500	15%	0	0%	10,000		
53	Legal Notices Publication	5600	5,000	0	800	5,000	16%	1,650	33%	1,700	34%	1,650	33%	0	0%	5,000		
54	Public Information & Outreach	5650	1,500	0	1,500	16,000	100%	5,280	33%	5,440	34%	5,280	33%	0	0%	16,000		
Total Administrative Expenses		\$	477,300	\$	424,898	\$	412,150	89%	\$	167,301	\$	159,681	\$	84,455	\$	712	\$	412,150
TOTAL OPERATING EXPENSES		\$	3,663,210	\$	3,462,497	\$	3,766,350		\$	1,406,510	\$	1,541,734	\$	788,413	\$	29,692	\$	3,766,350
NET OPERATING INCOME		\$	967,090	\$	1,494,970	\$	1,165,650		\$	614,490	\$	638,266	\$	(57,413)	\$	(29,692)	\$	1,165,650

FY 2018 - 2019 OPERATING BUDGET

Sheet No.	Account	Adopted	Actual Through	Projected	Proposed	Percent Expended	Water Enterprise		Sewer Enterprise		Solid Waste Enterprise		Community Service		Total
		FY 2017 - 2018	1/31/2018	June 2018	FY 2018 - 2019		\$	%	\$	%	\$	%	\$	%	
OTHER REVENUES															
55	Interest Earnings	6100	8,000	19,082	25,000	313%	13,300	35%	20,900	55%	3,800	10%	0	0%	38,000
56	Penalty Revenue	6200	0	0	0	36,000	0	0%	0	0%	0	0%	36,000	100%	36,000
57	Secured & Unsecured Taxes	6320	60,000	42,100	65,000	65,000	0	0%	0	0%	0	0%	65,000	100%	65,000
TOTAL OTHER REVENUES			\$ 68,000	\$ 90,000	\$ 139,000	132%	\$ 13,300		\$ 20,900		\$ 3,800		\$ 101,000		\$ 139,000
DEBT OBLIGATIONS															
58	2012 Water Revenue Bonds	2805	312,834	312,834	312,834	313,000	313,000	100%	0	0%	0	0%	0	0%	313,000
59	2016 Sewer Refunding Bonds	2855	186,991	0	186,991	191,000	0	0%	191,000	100%	0	0%	0	0%	191,000
TOTAL DEBT OBLIGATION			\$ 499,825	\$ 499,825	\$ 504,000	100%	\$ 313,000		\$ 191,000		\$ -		\$ -		\$ 504,000
OTHER BUDGET ITEMS															
60	Allocation of Community Service	N/A	47,662	0	0	50,000	20,500	41%	22,000	44%	7,500	15%	(50,000)	0%	0
TOTAL OTHER BUDGET ITEMS			\$ 47,662	\$ -	\$ 50,000		\$ 20,500		\$ 22,000		\$ 7,500		\$ (50,000)		\$ -
AVAILABLE FOR CAPITAL & RESERVES			\$ 487,603	\$ -	\$ 1,085,145	\$ 750,650	\$ 294,290		\$ 446,166		\$ (61,113)		\$ 121,308		\$ 800,650
RESERVE CONTRIBUTIONS															
Unrestricted															
	Water						0		0		0		0		0
	Sewer						0		0		0		0		0
	Solid Waste						0		0		0		0		0
	Community Reserves						0		0		0		121,308		121,308
Total Unrestricted Contributions							\$ -		\$ -		\$ -		\$ 121,308		\$ 121,308
Board Restricted															
	Water Operations Reserve						10,000		0		0		0		10,000
	Water Rate Stabilization						15,000		0		0		0		15,000
	Water Capital Reserve						269,300		0		0		0		269,300
	Sewer Operations Reserve						0		0		0		0		0
	Sewer Rate Stabilization						0		0		0		0		0
	Sewer Capital Reserve						0		446,200		0		0		446,200
	Solid Waste Operations Reserve						0		0		0		0		0
	Solid Waste Rate Stabilization						0		0		(61,113)		0		(61,113)
	Solid Waste Capital Reserve						0		0		0		0		0
Total Board Restricted Contributions							\$ 294,300		\$ 446,200		\$ (61,113)		\$ -		\$ 679,387
Outside Restricted															
	Water						0		0		0		0		0
	Sewer						0		0		0		0		0
	Solid Waste						0		0		0		0		0
Total Outside Restricted Contributions							\$ -		\$ -		\$ -		\$ -		\$ -
AVAILABLE AFTER RESERVE CONTRIBUTIONS							\$ 0		\$ 0		\$ 0		\$ 0		\$ 0

WATER ENTERPRISE
Water Revenue

Account Number: 3110
Budget Line Item: 1

Account Description:

All water sales revenues from flat meter charges and volumetric water sales from all customer classes.

Changes for FY 2018 - 2019:

Revenue adjustment of 5% effective July 15, 2018 per Proposition 218 notice issued in September 2016.

Budget Backup

Water Revenue

Meter Flat Rate	\$	1,149,194
Water Usage Charges	\$	871,593
Total	\$	2,020,787

Rounded To: 3 \$ **2,021,000**

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Water Revenue	\$ 1,879,000	\$ 1,172,047	\$ 2,092,262	\$ 2,021,000

SEWER ENTERPRISE
Sewer Revenue

Account Number: 3120
Budget Line Item: 2

Account Description:
All sewer revenues from fixed charges and volumetric sewage usage charges from approximately 2236 sewer connections.

Changes for FY 2018 - 2019:
Revenue adjustment of 6% effective July 15, 2018 per Proposition 218 notice issued in September 2016. Payment from County Watershed Protection District (WPD) for diverting stormwater into District's sewage collection system to improve coastal water quality. Anticipated revenue is contingent upon negotiations with County WPD.

Budget Backup

Sewer Revenue

Fixed Charges	\$	690,406
Sewer Usage Charges	\$	625,278
Operational Offset from Oxnard	\$	831,143
San Nicholas Stormwater Diversion - County WPD	\$	30,000
Total	\$	2,176,826

Rounded To: \$ 2,180,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Sewer Revenue	\$ 2,067,000	\$ 746,448	\$ 2,170,373	\$ 2,180,000

TRASH ENTERPRISE
Solid Waste Revenue

Account Number: 3130
Budget Line Item: 3

Account Description:
All trash revenues from flat trash service charges, walk-in service, and large bin rental.

Changes for FY 2018 - 2019:
Revenue adjustment of 2.5% effective July 15, 2018 per Proposition 218 notice issued in September 2016. Will require approximately \$25,000 from reserves to balance Enterprise for FY 2018-2019.

Budget Backup

Solid Waste Revenue	
EJ Harrison Contract Costs	\$ 730,052
Total	\$ 730,052

Rounded To: \$ 731,000
3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Solid Waste Revenue	\$ 684,300	\$ 388,800	\$ 694,832	\$ 731,000

WATER ENTERPRISE
PHWA Water Contract

Account Number: 4210
Budget Line Item: 4

Account Description:
Water supply costs from the Port Hueneme Water Agency.

Changes for FY 2018 - 2019:
Anticipated increase in PHWA water supply costs.

Budget Backup

PHWA Water Contract	Quantity	Rate	Total	Allocation
Monthly Fixed Costs	12	\$ 30,795	\$ 369,540	Water Only
Variable Water Purchase Costs	449	\$ 822	\$ 369,181	Water Only
Total			\$ 738,721	

Rounded To: \$ 740,000
4

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
PHWA Water Contract	\$ 724,000	\$ 253,533	\$ 633,830	\$ 740,000

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 738,721	\$ 740,000
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 738,721	\$ 740,000

WATER ENTERPRISE *Water Sampling*

Account Number: 4215
Budget Line Item: 5

Account Description:

Weekly bacteriological sampling and analyses required by the State Department of Health Services. Results are submitted to SDHS via the District's monthly report every month.

Changes for FY 2018 - 2019:

Anticipated increase in PHWA water supply costs.

Budget Backup

Water Sampling	Quantity	Rate	Total	Allocation
Weekly Sampling Costs	52	\$ 150	\$ 7,800	<i>Water Only</i>
Lead and Copper Testing	1	\$ 2,100	\$ 2,100	<i>Water Only</i>
Disinfection Monitoring	1	\$ 2,500	\$ 2,500	<i>Water Only</i>
Miscellaneous Testing	1	\$ 2,100	\$ 2,100	<i>Water Only</i>
Hardness, Nitrate Monitoring	1	\$ 2,100	\$ 2,100	<i>Water Only</i>
Total			\$ 16,600	

Rounded To: \$ 17,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Water Sampling	\$ 16,400	\$ 8,682	\$ 14,000	\$ 17,000

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 16,600	\$ 17,000
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 16,600	\$ 17,000

WATER ENTERPRISE SWRCB Annual Admin Fee

Account Number: 4220
Budget Line Item: 6

Account Description:
Regulatory fees due to the State Water Resources Control Board, the State Regulatory Agency overseeing community water systems.

Changes for FY 2018 - 2019:

Budget Backup

SWRCB Annual Admin Fee	Total	Allocation
Base Fee	\$ 10,000	<i>Water Only</i>
Inspections & Compliance Tracking	\$ 2,700	<i>Water Only</i>
Total	\$ 12,700	

Rounded To: \$ 12,700

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
SWRCB Annual Admin Fee	\$ 12,240	\$ 12,603	\$ 12,603	\$ 12,700

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 12,700	\$ 12,700
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 12,700	\$ 12,700

WATER ENTERPRISE Annual Water Quality Report

Account Number: 4225
Budget Line Item: 7

Account Description:
Consumer Confidence Report to District Customers as mandated by the State Department of Health requirements.

Changes for FY 2018 - 2019:
Increase due to higher printing and design costs to use required notice as a community outreach opportunity via postal mail.

Budget Backup

Annual Water Quality Report	Total	Allocation
Design, Print, and Mailing Costs	\$ 4,000	<i>Water Only</i>
Total	\$ 4,000	

Rounded To: \$ 4,000
2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Annual Water Quality Report	\$ 1,650	\$ -	\$ 1,650	\$ 4,000

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 4,000	\$ 4,000
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 4,000	\$ 4,000

WATER ENTERPRISE Cross Connect Contract Charge

Account Number: 4230
Budget Line Item: 8

Account Description:

Cross Connection Control contract, with the County of Ventura, Environmental Health Department (VCEHD). Required monitoring of backflow devices in the District to insure against cross connections failures between potable and non-potable water systems in the District. Enforcement of CCC compliance remains with the District, however testing and repairs are done by private certified firms.

Changes for FY 2018 - 2019:

Budget Backup

Cross Connect Contract Charge	Quantity	Rate	Total	Allocation
Quarterly Testing	4	\$ 420	\$ 1,680	<i>Water Only</i>
Total			\$ 1,680	

Rounded To: \$ 1,700

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Cross Connect Contract Charge	\$ 1,700	\$ 1,260	\$ 1,681	\$ 1,700

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 1,680	\$ 1,700
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 1,680	\$ 1,700

WATER ENTERPRISE

Water Repair & Maintenance

Account Number: 4235
Budget Line Item: 9

Account Description:
 Costs for routine repairs to water distribution system for both services and materials.

Changes for FY 2018 - 2019:

Budget Backup

Water Repair & Maintenance	Total	Allocation
Water Meters	\$ 3,600	Water Only
Water Meter Boxes	\$ 1,800	Water Only
Water Meter Lids	\$ 1,000	Water Only
Copper Tubing	\$ 3,000	Water Only
Ball valves	\$ 2,500	Water Only
Couplings & Adapters	\$ 2,900	Water Only
Saddles	\$ 1,800	Water Only
Repair clamps	\$ 2,000	Water Only
Dresser couplings	\$ 1,500	Water Only
Pipe	\$ 2,500	Water Only
Traffic plates	\$ 1,500	Water Only
No Dez	\$ 20,000	Water Only
On-Call Emergency Repair	\$ 40,000	Water Only
Backflow Testing	\$ 1,000	Water Only
Concrete	\$ 3,000	Water Only
Ashphalt	\$ 2,500	Water Only
Total	\$ 90,600	

Rounded To: \$ 91,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Water Repair & Maintenance	\$ 103,000	\$ 35,000	\$ 103,000	\$ 91,000

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 90,600	\$ 91,000
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 90,600	\$ 91,000

WATER ENTERPRISE Telemetry

Account Number: 4240
Budget Line Item: 10

Account Description:

Costs for transmitting water consumption data from smart water meters to cloud server through Advanced Metering Infrastructure. Contingent upon Board approval of Capital Project. Actual costs will vary based on speed of deployment and/or project phasing. Program costs only include half of annual costs. Remaining half is funded by Sewer Enterprise.

Changes for FY 2018 - 2019:

New program for FY 2018 - 2019. Costs are allocated on revenue split basis between Water and Sewer Enterprises.

Budget Backup

Telemetry	Quantity	Rate	Total	Allocation
Monthly Data Costs	12	\$ 910	\$ 10,920	<i>Water Only</i>
Total			\$ 10,920	

Rounded To: \$ 11,000

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Telemetry	\$ -	\$ -	\$ -	\$ 11,000

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 10,920	\$ 11,000
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 10,920	\$ 11,000

SEWER ENTERPRISE *Wastewater Transportation*

Account Number: 4260
Budget Line Item: 11

Account Description:

Payments to the City of Oxnard to transport, treat and dispose of the District's sewage at the Oxnard Regional Wastewater Treatment Plant. The rate shown for each bill component is adjusted on January 1 of each year. The rate shown is an average of the two calendar year rates within the fiscal year.

Changes for FY 2018 - 2019:

Additional costs to treat stormwater from San Nicholas Diversion offset by Sewer Revenues.

Budget Backup

Wastewater Transportation	Quantity	Rate (Average)	Total	Allocation
Flow (mg)	332.76	\$ 1,591	\$ 529,421	<i>Sewer Only</i>
BOD (lbs)	634.8	\$ 180	\$ 114,429	<i>Sewer Only</i>
TSS (lbs)	610.44	\$ 264	\$ 161,260	<i>Sewer Only</i>
Administration			\$ 17,851	<i>Sewer Only</i>
San Nicholas Diversion Treatment			\$ 10,000	<i>Sewer Only</i>
Total			\$ 832,961	

Rounded To: \$ 840,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Wastewater Transportation	\$ 823,000	\$ 392,340	\$ 823,022	\$ 840,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	100%	\$ 832,961	\$ 840,000
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 832,961	\$ 840,000

SEWER ENTERPRISE

Sewer Repair & Maintenance

Account Number: 4265

Budget Line Item: 12

Account Description:

Costs for routine repairs to sewage collection system for both services and materials.

Budget Backup

Sewer Repair & Maintenance	Total	Allocation
Safety Equipment & Apparatuses	\$ 17,020	<i>Sewer Only</i>
Nozzles	\$ 2,500	<i>Sewer Only</i>
Plugs	\$ 1,100	<i>Sewer Only</i>
Small generator	\$ 1,200	<i>Sewer Only</i>
Tools for trucks	\$ 4,000	<i>Sewer Only</i>
Stihl cut-off saw	\$ 1,000	<i>Sewer Only</i>
Crane truck rehab	\$ 12,000	<i>Sewer Only</i>
Palm tree removal	\$ 4,000	<i>Sewer Only</i>
Copper tube pinchers	\$ 500	<i>Sewer Only</i>
Manhole ring and covers	\$ 4,200	<i>Sewer Only</i>
Tablet	\$ 700	<i>Sewer Only</i>
Saw Blades	\$ 500	<i>Sewer Only</i>
NASSCO Training	\$ 3,600	<i>Sewer Only</i>
CWEA Training	\$ 2,500	<i>Sewer Only</i>
3" Trash pump	\$ 2,000	<i>Sewer Only</i>
Manhole opening tools	\$ 600	<i>Sewer Only</i>
Wastewater Electrical and Instrumentation	\$ 5,000	<i>Sewer Only</i>
Emergency Repairs - Sam Hill	\$ 40,000	<i>Sewer Only</i>
Wetwell & Hot Spot Cleaning	\$ 18,000	<i>Sewer Only</i>
Total	\$ 120,420	

Rounded To: \$ 121,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Sewer Repair & Maintenance	\$ 121,000	\$ 35,315	\$ 121,000	\$ 121,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	100%	\$ 120,420	\$ 121,000
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 120,420	\$ 121,000

SEWER ENTERPRISE *Telemetry*

Account Number: 4270
Budget Line Item: 13

Account Description:

Costs for communication systems within sewer lift stations, alarm relay services, smart meter data transmission, and smart cover satellite communication.

Changes for FY 2018 - 2019:

Capital Projects such as the Smart Water Meter Deployment and SCADA installation will impact telemetry costs for FY 2018 - 2019 once operational. It is anticipated that FY 2019 - 2020 costs will decrease after the transition to modern panel systems is complete. District will no longer incur Frontier and Dial Security costs.

Budget Backup

Telemetry	Quantity	Rate	Total	Allocation
Frontier Phone Costs	12	\$ 850	\$ 10,200	<i>Sewer Only</i>
AT&T Cellular	12	\$ 150	\$ 1,800	<i>Sewer Only</i>
Dial Security Alarm Relay	12	\$ 230	\$ 2,760	<i>Sewer Only</i>
Smart Cover Subscription	12	\$ 218	\$ 2,616	<i>Sewer Only</i>
Smart Meter Telemetry	12	\$ 910	\$ 10,920	<i>Sewer Only</i>
Overages			\$ 4,000	<i>Sewer Only</i>
Total			\$ 32,296	

Rounded To: \$ 33,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Telemetry	\$ 20,000	\$ 9,682	\$ 16,600	\$ 33,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	100%	\$ 32,296	\$ 33,000
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 32,296	\$ 33,000

SEWER ENTERPRISE *Power*

Account Number: 4275
Budget Line Item: 14

Account Description:
Payments to Southern California Edison for power to wastewater lift stations.

Changes for FY 2018 - 2019:
Anticipated 5% increase for electricity costs.

Budget Backup

Power	Quantity	Rate	Total	Allocation
Monthly Electrical Costs	12	\$ 1,470	\$ 17,640	<i>Sewer Only</i>
Total			\$ 17,640	

Rounded To: \$ 18,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Power	\$ 18,000	\$ 9,480	\$ 16,300	\$ 18,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	100%	\$ 17,640	\$ 18,000
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 17,640	\$ 18,000

TRASH ENTERPRISE *Contract Trash Services*

Account Number: 4285
Budget Line Item: 15

Account Description:

Contract trash collection and recycling service payments to EJ Harrion & Sons pursuant to Trash and Disposal Agreement dated Jan. 9, 2018. Also provides for one community clean up event per year and HHW pickup.

Changes for FY 2018 - 2019:

Notified of 6% increase to rates beginning July 2018. District will use rate reserves of approximately 25,000 to balance Trash Enterprise.

Budget Backup

Contract Trash Services	Quantity	Rate	Total	Allocation
Monthly Contract Costs	12	\$ 43,990	\$ 527,880	<i>Solid Waste Only</i>
Total			\$ 527,880	

Rounded To: \$ 528,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Contract Trash Services	\$ 492,000	\$ 289,968	\$ 493,100	\$ 528,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	0%	\$ -	\$ -
Trash	100%	\$ 527,880	\$ 528,000
Community	0%	\$ -	\$ -
Total	100%	\$ 527,880	\$ 528,000

GENERAL
Gasoline

Account Number: 4310
Budget Line Item: 16

Account Description:

Gasoline purchases required to support the daily operation of the District's fleet of four vehicles and backhoe in support of the water, sewer, trash utilities and non-core utility community service programs.

Changes for FY 2018 - 2019:

Budgeted amount is requested due to anticipated fuel usage and vector truck diesel. Contingent upon other projects being completed, District plans to use staff to perform wastewater line cleaning with the aid of a vector truck.

Budget Backup

Gasoline	Total	Allocation
Fuel Costs	\$ 15,000	<i>Ops Time</i>
Total	\$ 15,000	

Rounded To: \$ 15,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Gasoline	\$ 20,000	\$ 9,682	\$ 16,600	\$ 15,000

Enterprise Allocation		Calculated	Rounded
Water	43%	\$ 6,450	\$ 6,450
Sewer	41%	\$ 6,150	\$ 6,150
Trash	14%	\$ 2,100	\$ 2,100
Community	2%	\$ 300	\$ 300
Total	100%	\$ 15,000	\$ 15,000

GENERAL Vehicle Maintenance

Account Number: 4320
Budget Line Item: 17

Account Description:

Vehicle maintenance expenses required to support the daily operation of the District's fleet of three vehicles in support of the water, sewer, trash utilities and non-core utility community service programs.

Changes for FY 2018 - 2019:

Additional funds are to extend life of vehicles beyond historical replacement schedule, while staff determines best available option for future fleet needs.

Budget Backup

Vehicle Maintenance	Total	Allocation
Vehicle Repair Costs	\$ 10,000	<i>Ops Time</i>
Total	\$ 10,000	

Rounded To: \$ 10,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Vehicle Maintenance	\$ 6,120	\$ 3,221	\$ 6,120	\$ 10,000

Enterprise Allocation		Calculated	Rounded
Water	43%	\$ 4,300	\$ 4,300
Sewer	41%	\$ 4,100	\$ 4,100
Trash	14%	\$ 1,400	\$ 1,400
Community	2%	\$ 200	\$ 200
Total	100%	\$ 10,000	\$ 10,000

GENERAL Building Security

Account Number: 4330
Budget Line Item: 18

Account Description:
 Subscription, service, and maintenance costs related to building alarms and camera systems.

Changes for FY 2018 - 2019:
 Added CCTV and updated touchpad in FY 2017 - 2018.

Budget Backup

Building Security	Quantity	Rate	Total	Allocation
Monthly CCTV Subscription	12	\$ 40	\$ 480	<i>Equal Distribution</i>
Monthly Alarm Service	12	\$ 90	\$ 1,080	<i>Equal Distribution</i>
Total			\$ 1,560	

Rounded To: \$ 1,600

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Building Security	\$ 900	\$ 631	\$ 950	\$ 1,600

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 515	\$ 528
Sewer	34%	\$ 530	\$ 544
Trash	33%	\$ 515	\$ 528
Community	0%	\$ -	\$ -
Total	100%	\$ 1,560	\$ 1,600

GENERAL Building Maintenance

Account Number: 4340
Budget Line Item: 19

Account Description:

Maintenance and supply expenses incurred by planned and unplanned repairs and improvements to the District's buildings, small equipment, storage containers and areas.

Changes for FY 2018 - 2019:

Budget Backup

Building Maintenance	Total	Allocation
Fire Extinguisher Recharge	\$ 650	<i>Equal Distribution</i>
Electrical & Plumbing Repair	\$ 2,500	<i>Equal Distribution</i>
Carpet Cleaning	\$ 1,000	<i>Equal Distribution</i>
Fumigation	\$ 2,000	<i>Equal Distribution</i>
Additional Network Cabling	\$ 400	<i>Equal Distribution</i>
Janitorial Service	\$ 2,340	<i>Equal Distribution</i>
Total	\$ 8,890	

Rounded To: \$ 9,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Building Maintenance	\$ 18,500	\$ 24,650	\$ 25,550	\$ 9,000

Enterprise Allocation	Calculated	Rounded
Water	33% \$ 2,934	\$ 2,970
Sewer	34% \$ 3,023	\$ 3,060
Trash	33% \$ 2,934	\$ 2,970
Community	0% \$ -	\$ -
Total	100% \$ 8,890	\$ 9,000

GENERAL Signs & Banners

Account Number: 4350
Budget Line Item: 20

Account Description:

Annual maintenance and/or replacement of signs and banners used by the District to inform the beach community about building uses, utility services, special programs, and non-core community services, Community Clean Up Day.

Changes for FY 2018 - 2019:

New rear decals for fleet trucks.

Budget Backup

Signs & Banners	Total	Allocation
Signs & Banner Expense	\$ 1,500	<i>Equal Distribution</i>
Total	\$ 1,500	

Rounded To: \$ 1,500

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Signs & Banners	\$ 1,500	\$ 1,000	\$ 1,500	\$ 1,500

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 495	\$ 495
Sewer	34%	\$ 510	\$ 510
Trash	33%	\$ 495	\$ 495
Community	0%	\$ -	\$ -
Total	100%	\$ 1,500	\$ 1,500

COMMUNITY SERVICE
Public Landscaping

Account Number: 4360
Budget Line Item: 21

Account Description:

Annual maintenance and/or repair of existing public landscape projects at the Wanda M. Pirkle Community Park and District Office.

Changes for FY 2018 - 2019:

Increase for FY 2018 - 2019 for palm tree trimming at Pirkle Park.

Budget Backup

Public Landscaping	Total	Allocation
Pirkle Park Maintenance	\$ 2,500	<i>Comm Svc Only</i>
Palm Tree Removal & Stump Grinding	\$ 4,000	<i>Comm Svc Only</i>
District Yard Maintenance	\$ 2,700	<i>Comm Svc Only</i>
Total	\$ 9,200	

Rounded To: \$ 9,200

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Public Landscaping	\$ 1,900	\$ 1,368	\$ 2,593	\$ 9,200

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	100%	\$ 5,200	\$ 9,200
Total	100%	\$ 5,200	\$ 9,200

GENERAL
Employee Workplace Safety

Account Number: 4370
Budget Line Item: 22

Account Description:

Safety supplies and equipment for District personnel (not associated with a specific Enterprise fund), including, but not limited to, steel toe boots for operations department, employee training, sun screen & gas protectors.

Changes for FY 2018 - 2019:

Budget Backup

Employee Workplace Safety	Total	Allocation
Safety Equipment	\$ 5,000	<i>Ops Time</i>
Total	\$ 5,000	

Rounded To: \$ 5,000

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Employee Workplace Safety	\$ 4,000	\$ 1,191	\$ 4,000	\$ 5,000

Enterprise Allocation		Calculated	Rounded
Water	43%	\$ 2,150	\$ 2,150
Sewer	41%	\$ 2,050	\$ 2,050
Trash	14%	\$ 700	\$ 700
Community	2%	\$ 100	\$ 100
Total	100%	\$ 5,000	\$ 5,000

COMMUNITY SERVICE
Emergency Preparedness

Account Number: 4380
Budget Line Item: 23

Account Description:

Expenditures required to support the planning, development, training and equipment of the Channel Islands Beach Community Services District Emergency Response Team (CIBERT) and coordinate the team's activities with the Ventura County Sheriff's Dept. Office.

Changes for FY 2018 - 2019:

Budget Backup

Emergency Preparedness	Total	Allocation
CERT Supplies	\$ 1,500	<i>Comm Svc Only</i>
Total	\$ 1,500	

Rounded To: \$ 1,500

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Emergency Preparedness	\$ 1,500	\$ 134	\$ 1,500	\$ 1,500

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	100%	\$ 1,500	\$ 1,500
Total	100%	\$ 1,500	\$ 1,500

GENERAL Regular Salaries

Account Number: 4400
Budget Line Item: 24

Account Description:

Regular wage and salary compensation payments for the District's 8 employees: General Manager, Operations Manager, Office Manager, 2 Customer Service Reps and 3 Water/Wastewater workers.

Changes for FY 2018 - 2019:

District is slated to enroll in CalPERS in May 2018, with a requested one-time adjustment to staff salaries to prevent take-home wages from decreasing as a result of CalPERS formula. Budgeted amount also includes COLA of 3.5%.

Budget Backup

Regular Salaries	Total	Allocation
Staff Salaries	\$ 646,000	<i>Staff Time</i>
Total	\$ 646,000	

Rounded To: \$ 646,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Regular Salaries	\$ 583,000	\$ 332,509	\$ 563,000	\$ 646,000

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 251,940	\$ 251,940
Sewer	40%	\$ 258,400	\$ 258,400
Trash	19%	\$ 122,740	\$ 122,740
Community	2%	\$ 12,920	\$ 12,920
Total	100%	\$ 646,000	\$ 646,000

GENERAL Payroll Taxes

Account Number: 4500
Budget Line Item: 25

Account Description:
 Employer taxes on personnel and Board wages.

Changes for FY 2018 - 2019:

Budget Backup

Payroll Taxes	Total	Allocation
Payroll Taxes	\$ 18,734	Staff Time
Total	\$ 18,734	

Rounded To: \$ 19,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Payroll Taxes	\$ 17,000	\$ 9,142	\$ 14,000	\$ 19,000

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 7,306	\$ 7,410
Sewer	40%	\$ 7,494	\$ 7,600
Trash	19%	\$ 3,559	\$ 3,610
Community	2%	\$ 375	\$ 380
Total	100%	\$ 18,734	\$ 19,000

GENERAL
Group Insurance

Account Number: 4525
Budget Line Item: 26

Account Description:
Medical Insurance provided by CalPERS. Dental, Vision and Life Insurance provided by ACWA/JPIA.

Changes for FY 2018 - 2019:

Budget Backup

Group Insurance	Total	Allocation
Insurance Premiums	\$ 119,000	Staff Time
Total	\$ 119,000	

Rounded To: \$ 119,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Group Insurance	\$ 119,000	\$ 58,494	\$ 90,000	\$ 119,000

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 46,410	\$ 46,410
Sewer	40%	\$ 47,600	\$ 47,600
Trash	19%	\$ 22,610	\$ 22,610
Community	2%	\$ 2,380	\$ 2,380
Total	100%	\$ 119,000	\$ 119,000

GENERAL Retirement Benefits

Account Number: 4550
Budget Line Item: 27

Account Description:

Retirement benefits conferred to staff per MOU for represented employees and management contracts for management staff. Upon completion of six month probation period the District contributes 10% of gross compensation payments towards the employees 457 retirement plan. This is a fully funded, private (Nationwide) tax sheltered annuity plan, qualified under the Department of Labor.

Changes for FY 2018 - 2019:

Upon enrollment in CalPERS, 6.533% of employee wages will go toward Employer share of CalPERS formula. The remaining 3.467% (of the total 10% contribution) will continue to be contributed to employee 457 plans.

Budget Backup

Retirement Benefits	Total	Allocation
Retirement Benefits	\$ 64,600	<i>Staff Time</i>
Total	\$ 64,600	

Rounded To: \$ 64,600

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Retirement Benefits	\$ 58,300	\$ 39,708	\$ 58,300	\$ 64,600

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 25,194	\$ 25,194
Sewer	40%	\$ 25,840	\$ 25,840
Trash	19%	\$ 12,274	\$ 12,274
Community	2%	\$ 1,292	\$ 1,292
Total	100%	\$ 64,600	\$ 64,600

GENERAL Uniforms

Account Number: 4575
Budget Line Item: 28

Account Description:
 Weekly uniform cleaning and laundry expenses for District staff uniforms and towel service.

Changes for FY 2018 - 2019:

Budget Backup

Uniforms	Total	Allocation
Cleaning Costs	\$ 2,220	<i>Ops Time</i>
Uniform Replacement	\$ 1,600	<i>Ops Time</i>
Total	\$ 3,820	

Rounded To: \$ 3,900

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Uniforms	\$ 2,600	\$ 1,886	\$ 2,600	\$ 3,900

Enterprise Allocation		Calculated	Rounded
Water	43%	\$ 1,643	\$ 1,677
Sewer	41%	\$ 1,566	\$ 1,599
Trash	14%	\$ 535	\$ 546
Community	2%	\$ 76	\$ 78
Total	100%	\$ 3,820	\$ 3,900

GENERAL
Workers' Comp Insurance

Account Number: 4600
Budget Line Item: 29

Account Description:
Monthly payments to State Fund Compensation Insurance based on total wages for employees and Board Members.

Changes for FY 2018 - 2019:

Budget Backup

Workers' Comp Insurance	Total	Allocation
Insurance Premium	\$ 14,000	<i>Staff Time</i>
Total	\$ 14,000	

Rounded To: \$ 14,000

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Workers' Comp Insurance	\$ 16,000	\$ 4,089	\$ 11,500	\$ 14,000

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 5,460	\$ 5,460
Sewer	40%	\$ 5,600	\$ 5,600
Trash	19%	\$ 2,660	\$ 2,660
Community	2%	\$ 280	\$ 280
Total	100%	\$ 14,000	\$ 14,000

GENERAL
Employee Education

Account Number: 4650
Budget Line Item: 30

Account Description:
Expenses related to tuition reimbursement programs, general trainings, and conference registration.

Changes for FY 2018 - 2019:
Adjustment to MOU for tuition reimbursement for Represented Staff up to \$2,000 per year

Budget Backup

Employee Education	Total	Allocation
Represented Employee Tuition Reimbursement	\$ 2,000	Staff Time
Management Tuition Reimbursement (Expires FY 2021)	\$ 8,000	Staff Time
Trainings & Continuing Education	\$ 3,500	Staff Time
Conference Registration	\$ 4,000	Staff Time
Total	\$ 17,500	

Rounded To: \$ 17,500

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Employee Education	\$ 2,600	\$ 1,886	\$ 2,600	\$ 17,500

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 6,825	\$ 6,825
Sewer	40%	\$ 7,000	\$ 7,000
Trash	19%	\$ 3,325	\$ 3,325
Community	2%	\$ 350	\$ 350
Total	100%	\$ 17,500	\$ 17,500

GENERAL Regular Board Payments

Account Number: 5010
Budget Line Item: 31

Account Description:
 Boardmember compensation for Regular Board Meetings

Changes for FY 2018 - 2019:

Budget Backup

Regular Board Payments	Total	Allocation
Board Compensation	\$ 7,650	Staff Time
Total	\$ 7,650	

Rounded To: \$ 7,650

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Regular Board Payments	\$ 7,650	\$ 3,000	\$ 7,650	\$ 7,650

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 2,984	\$ 2,984
Sewer	40%	\$ 3,060	\$ 3,060
Trash	19%	\$ 1,454	\$ 1,454
Community	2%	\$ 153	\$ 153
Total	100%	\$ 7,650	\$ 7,650

GENERAL
Special Board Meetings

Account Number: 5020
Budget Line Item: 32

Account Description:
Boardmember compensation for Special Board Meetings and Committee Meetings

Changes for FY 2018 - 2019:

Budget Backup

Special Board Meetings	Total	Allocation
Board Compensation	\$ 2,350	Staff Time
Total	\$ 2,350	

Rounded To: \$ 2,350

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Special Board Meetings	\$ 2,350	\$ 400	\$ 2,350	\$ 2,350

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 917	\$ 917
Sewer	40%	\$ 940	\$ 940
Trash	19%	\$ 447	\$ 447
Community	2%	\$ 47	\$ 47
Total	100%	\$ 2,350	\$ 2,350

GENERAL
Board/ Committee Expenses

Account Number: 5030
Budget Line Item: 33

Account Description:

Board/Committee Meeting Expenses including Hollywood Beach School rental, miscellaneous supplies, Annual Volunteer Luncheon. Includes donation for Veteran's Day Event at Hollywood Beach School.

Changes for FY 2018 - 2019:

Budget Backup

Board/ Committee Expenses	Total	Allocation
Meeting Expenses	\$ 1,500	Staff Time
Total	\$ 1,500	

Rounded To: \$ 1,500

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Board/ Committee Expenses	\$ 1,500	\$ 806	\$ 1,500	\$ 1,500

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 585	\$ 585
Sewer	40%	\$ 600	\$ 600
Trash	19%	\$ 285	\$ 285
Community	2%	\$ 30	\$ 30
Total	100%	\$ 1,500	\$ 1,500

GENERAL
Board Conferences & Seminars

Account Number: 5040
Budget Line Item: 34

Account Description:
Registration for attendance at conferences including ACWA, CSDA, and various Mangement seminars.

Changes for FY 2018 - 2019:

Budget Backup

Board Conferences & Seminars	Total	Allocation
Registration Costs	\$ 6,000	<i>Staff Time</i>
Total	\$ 6,000	

Rounded To: \$ 6,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Board Conferences & Seminars	\$ 6,000	\$ 1,745	\$ 6,000	\$ 6,000

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 2,340	\$ 2,340
Sewer	40%	\$ 2,400	\$ 2,400
Trash	19%	\$ 1,140	\$ 1,140
Community	2%	\$ 120	\$ 120
Total	100%	\$ 6,000	\$ 6,000

GENERAL Travel & Lodging

Account Number: 5050
Budget Line Item: 35

Account Description:

Employee and Boardmember travel for education and seminars, including reimbursement for mileage and meals.

Changes for FY 2018 - 2019:

Budget Backup

Travel & Lodging	Total	Allocation
Travel Expenses	\$ 8,500	<i>Staff Time</i>
Total	\$ 8,500	

Rounded To: \$ 8,500

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Travel & Lodging	\$ 8,500	\$ 4,760	\$ 6,000	\$ 8,500

Enterprise Allocation		Calculated	Rounded
Water	39%	\$ 3,315	\$ 3,315
Sewer	40%	\$ 3,400	\$ 3,400
Trash	19%	\$ 1,615	\$ 1,615
Community	2%	\$ 170	\$ 170
Total	100%	\$ 8,500	\$ 8,500

GENERAL
District Dues & Memberships

Account Number: 5100
Budget Line Item: 36

Account Description:
Annual payments for the District's membership in organizations.

Changes for FY 2018 - 2019:

Budget Backup

District Dues & Memberships	Total	Allocation
Association of California Water Agencies (ACWA)	\$ 9,500	Ops Time
Channel Counties Water Utilities Assoc (CCWUA)	\$ 100	Water Only
American Water Works Association (AWWA)	\$ 475	Water Only
Ventura County Special Districts Association (VCSDA)	\$ 150	Water Only
LAFCO (District mandated share of LAFCO expense)	\$ 3,000	Equal Distribution
California Water Efficiency Partnership	\$ 1,350	Water Only
Association of Water Agencies (AWA)	\$ 300	Water Only
California Special District Association (CSDA)	\$ 3,208	Equal Distribution
California Association of Sanitation Agencies (CASA)	\$ 1,700	Sewer Only
Total	\$ 19,783	

Rounded To: \$ 20,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
District Dues & Memberships	\$ 20,000	\$ 17,696	\$ 19,000	\$ 20,000

Enterprise Allocation		Calculated	Rounded
Water	43%	\$ 8,509	\$ 8,602
Sewer	39%	\$ 7,706	\$ 7,790
Trash	17%	\$ 3,379	\$ 3,416
Community	1%	\$ 190	\$ 192
Total	100%	\$ 19,783	\$ 20,000

GENERAL Office Supplies

Account Number: 5210
Budget Line Item: 37

Account Description:

Office supplies for office and operations including, but not limited to: Printer & fax cartridges, copy paper, checks, printers, monitors, office furniture, etc.

Changes for FY 2018 - 2019:

Budget Backup

Office Supplies	Total	Allocation
Supplies	\$ 7,150	<i>Equal Distribution</i>
Total	\$ 7,150	

Rounded To: \$ 7,150

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Office Supplies	\$ 7,150	\$ 5,864	\$ 7,150	\$ 7,150

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 2,360	\$ 2,360
Sewer	34%	\$ 2,431	\$ 2,431
Trash	33%	\$ 2,360	\$ 2,360
Community	0%	\$ -	\$ -
Total	100%	\$ 7,150	\$ 7,150

GENERAL On-Line Bill Paying

Account Number: 5215
Budget Line Item: 38

Account Description:

Electronic Billing Software & Support. District is charged on a per-transaction basis from vendor. Costs increase based on vendor rate and adoption by District customers.

Changes for FY 2018 - 2019:

Budget Backup

On-Line Bill Paying	Total	Allocation
Xpress Bill Pay	\$ 6,750	<i>Equal Distribution</i>
Total	\$ 6,750	

Rounded To: \$ 7,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
On-Line Bill Paying	\$ 6,750	\$ 5,000	\$ 6,145	\$ 7,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 2,228	\$ 2,310
Sewer	34%	\$ 2,295	\$ 2,380
Trash	33%	\$ 2,228	\$ 2,310
Community	0%	\$ -	\$ -
Total	100%	\$ 6,750	\$ 7,000

GENERAL Communications

Account Number: 5220
Budget Line Item: 39

Account Description:
 Communications services, District website, and advertising.

Changes for FY 2018 - 2019:
 Elimination of analog phone lines. Redundant dual WAN connections via Frontier DSL and Spectrum Cable. District website vendor.

Budget Backup

Communications	Total	Allocation
Frontier	\$ 720	<i>Equal Distribution</i>
Spectrum TV	\$ 540	<i>Equal Distribution</i>
Spectrum Internet	\$ 1,560	<i>Equal Distribution</i>
AT&T	\$ 7,680	<i>Equal Distribution</i>
Streamline	\$ 2,400	<i>Equal Distribution</i>
Miscellaneous	\$ 600	<i>Equal Distribution</i>
Total	\$ 13,500	

Rounded To: \$ 13,500

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Communications	\$ 15,000	\$ 11,287	\$ 15,000	\$ 13,500

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 4,455	\$ 4,455
Sewer	34%	\$ 4,590	\$ 4,590
Trash	33%	\$ 4,455	\$ 4,455
Community	0%	\$ -	\$ -
Total	100%	\$ 13,500	\$ 13,500

GENERAL
Printing & Publications

Account Number: 5230
Budget Line Item: 40

Account Description:
Printing and binding expenses for envelopes, letterhead, business cards, billing statements and related envelopes.

Changes for FY 2018 - 2019:

Budget Backup

Printing & Publications	Total	Allocation
Printing Expenses	\$ 6,000	<i>Equal Distribution</i>
Total	\$ 6,000	

Rounded To: \$ 6,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Printing & Publications	\$ 6,000	\$ 3,002	\$ 6,000	\$ 6,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 1,980	\$ 1,980
Sewer	34%	\$ 2,040	\$ 2,040
Trash	33%	\$ 1,980	\$ 1,980
Community	0%	\$ -	\$ -
Total	100%	\$ 6,000	\$ 6,000

GENERAL
Postage & Shipping

Account Number: 5240
Budget Line Item: 41

Account Description:
Mailing costs for billing statements sent via metered postage and miscellaneous shipping via FedEx and UPS.

Changes for FY 2018 - 2019:

Budget Backup

Postage & Shipping	Total	Allocation
Printing Expenses	\$ 15,000	<i>Equal Distribution</i>
Total	\$ 15,000	

Rounded To: \$ 15,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Postage & Shipping	\$ 15,000	\$ 8,057	\$ 15,000	\$ 15,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 4,950	\$ 4,950
Sewer	34%	\$ 5,100	\$ 5,100
Trash	33%	\$ 4,950	\$ 4,950
Community	0%	\$ -	\$ -
Total	100%	\$ 15,000	\$ 15,000

GENERAL
Miscellaneous Office Expense

Account Number: 5250
Budget Line Item: 42

Account Description:

Postage machine, payroll, and check courier costs. Also includes miscellaneous office supplies, kitchen & restroom supplies, newspaper subscriptions, employee recognition, luncheons and other miscellaneous expenses.

Changes for FY 2018 - 2019:

Budget Backup

Miscellaneous Office Expense	Total	Allocation
Courier Service	\$ 2,300	Equal Distribution
Postage machine rental	\$ 1,750	Equal Distribution
Payroll Service	\$ 2,400	Equal Distribution
Miscellaneous Office	\$ 5,550	Equal Distribution
Total	\$ 12,000	

Rounded To: \$ 12,000

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Miscellaneous Office Expense	\$ 12,000	\$ 11,197	\$ 14,000	\$ 12,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 3,960	\$ 3,960
Sewer	34%	\$ 4,080	\$ 4,080
Trash	33%	\$ 3,960	\$ 3,960
Community	0%	\$ -	\$ -
Total	100%	\$ 12,000	\$ 12,000

GENERAL Office Utilities

Account Number: 5260
Budget Line Item: 43

Account Description:
 Utility charges for District office.

Changes for FY 2018 - 2019:

Budget Backup

Office Utilities	Total	Allocation
Utilities	\$ 3,500	<i>Equal Distribution</i>
Total	\$ 3,500	

Rounded To: \$ 3,500

2

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Office Utilities	\$ 4,200	\$ 1,710	\$ 2,931	\$ 3,500

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 1,155	\$ 1,155
Sewer	34%	\$ 1,190	\$ 1,190
Trash	33%	\$ 1,155	\$ 1,155
Community	0%	\$ -	\$ -
Total	100%	\$ 3,500	\$ 3,500

GENERAL Office Equipment Maintenance

Account Number: 5290
Budget Line Item: 44

Account Description:

Annual and monthly maintenance contract charges, service and miscellaneous parts and unanticipated repairs for equipment not covered by a contract.

Changes for FY 2018 - 2019:

Budget Backup

Office Equipment Maintenance	Total	Allocation
Radix Handheld Maintenance	\$ 2,700	<i>Equal Distribution</i>
Image Source Lease	\$ 720	<i>Equal Distribution</i>
Print Charges	\$ 3,500	<i>Equal Distribution</i>
Folding Machine Maintenance	\$ 2,100	<i>Equal Distribution</i>
Total	\$ 9,020	

Rounded To: \$ 10,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Office Equipment Maintenance	\$ 9,600	\$ 6,382	\$ 9,000	\$ 10,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 2,977	\$ 3,300
Sewer	34%	\$ 3,067	\$ 3,400
Trash	33%	\$ 2,977	\$ 3,300
Community	0%	\$ -	\$ -
Total	100%	\$ 9,020	\$ 10,000

GENERAL Asset Replacement

Account Number: 5300
Budget Line Item: 45

Account Description:

Asset replacement for large equipment with pre-determined lifespan for District use. Funds are allocated via the Operating Budget every year and disbursed per the Asset Replacement schedule.

Changes for FY 2018 - 2019:

Budget Backup

Asset	Unit Cost	Quantity	Lifespan (Yrs.)	Total	Allocation
Computers	\$ 2,000	9	5	\$ 3,600	<i>Equal Distribution</i>
Fleet	\$ 36,000	5	8	\$ 22,500	<i>Equal Distribution</i>
Backhoe	\$ 70,000	1	10	\$ 7,000	<i>Equal Distribution</i>
Copier	\$ 10,000	1	8	\$ 1,250	<i>Equal Distribution</i>
Total				\$ 34,350	

Rounded To: \$ 35,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Asset Replacement	\$ 28,000	\$ 5,711	\$ 37,000	\$ 35,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 11,336	\$ 11,550
Sewer	34%	\$ 11,679	\$ 11,900
Trash	33%	\$ 11,336	\$ 11,550
Community	0%	\$ -	\$ -
Total	100%	\$ 34,350	\$ 35,000

GENERAL Insurance

Account Number: 5400
Budget Line Item: 46

Account Description:

Property and general liability insurance through Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA).

Changes for FY 2018 - 2019:

Additional coverage for Flood Insurance.

Budget Backup

Insurance	Total	Allocation
General Liability	\$ 32,100	<i>Revenue Basis</i>
Additional Flood Coverage	\$ 6,000	<i>Revenue Basis</i>
Fidelity Bond Coverage	\$ 900	<i>Revenue Basis</i>
Total	\$ 39,000	

Rounded To: \$ 39,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Insurance	\$ 31,100	\$ 27,607	\$ 37,872	\$ 39,000

Enterprise Allocation		Calculated	Rounded
Water	41%	\$ 15,990	\$ 15,990
Sewer	44%	\$ 17,160	\$ 17,160
Trash	15%	\$ 5,850	\$ 5,850
Community	0%	\$ -	\$ -
Total	100%	\$ 39,000	\$ 39,000

GENERAL
Legal Services

Account Number: 5510
Budget Line Item: 47

Account Description:
Professional legal services for District Counsel and Special Counsel.

Changes for FY 2018 - 2019:

Budget Backup

Legal Services	Total	Allocation
A to Z Law - District Counsel	\$ 40,000	<i>Revenue Basis</i>
Hollister & Brace - Special Counsel	\$ 15,000	<i>Water Only</i>
Total	\$ 55,000	

Rounded To: \$ 55,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Legal Services	\$ 50,000	\$ 35,655	\$ 61,000	\$ 55,000

Enterprise Allocation		Calculated	Rounded
Water	57%	\$ 31,400	\$ 31,400
Sewer	32%	\$ 17,600	\$ 17,600
Trash	11%	\$ 6,000	\$ 6,000
Community	0%	\$ -	\$ -
Total	100%	\$ 55,000	\$ 55,000

GENERAL Accounting Services

Account Number: 5520
Budget Line Item: 48

Account Description:

Accounting services including staff training and support, budget preparation, audit preparation and review, bond issues, LGFA preparation, 1099's, refinancing, contract analysis, maintain fixed asset records, etc.

Changes for FY 2018 - 2019:

Budget Backup

Accounting Services	Total	Allocation
Soares, Sandall, Bernacchi & Petrovich, LLP	\$ 34,000	<i>Revenue Basis</i>
Annual Audit	\$ 16,000	<i>Revenue Basis</i>
Total	\$ 50,000	

Rounded To: \$ 50,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Accounting Services	\$ 50,000	\$ 12,715	\$ 50,000	\$ 50,000

Enterprise Allocation		Calculated	Rounded
Water	41%	\$ 20,500	\$ 20,500
Sewer	44%	\$ 22,000	\$ 22,000
Trash	15%	\$ 7,500	\$ 7,500
Community	0%	\$ -	\$ -
Total	100%	\$ 50,000	\$ 50,000

GENERAL
Computer Services & Subscriptions

Account Number: 5530
Budget Line Item: 49

Account Description:
Professional IT-related services and software subscriptions.

Changes for FY 2018 - 2019:

Budget Backup

Computer Services & Subscriptions	Total	Allocation
Data West - Special Reports	\$ 1,500	<i>Revenue Basis</i>
Data West - Billmaster Contract R&M	\$ 6,300	<i>Revenue Basis</i>
Antivirus & Web Security	\$ 1,000	<i>Revenue Basis</i>
Adobe	\$ 1,000	<i>Revenue Basis</i>
Microsoft	\$ 4,000	<i>Revenue Basis</i>
Computer Experts - On Call	\$ 4,000	<i>Revenue Basis</i>
Total	\$ 17,800	

Rounded To: \$ 18,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Computer Services & Subscriptions	\$ 15,000	\$ 9,873	\$ 15,000	\$ 18,000

Enterprise Allocation		Calculated	Rounded
Water	41%	\$ 615	\$ 7,380
Sewer	44%	\$ 660	\$ 7,920
Trash	15%	\$ 225	\$ 2,700
Community	0%	\$ -	\$ -
Total	100%	\$ 1,500	\$ 18,000

GENERAL Engineering Services

Account Number: 5540
Budget Line Item: 50

Account Description:
 Professional Engineering Consulting Services not associated with an identified project in the Capital Improvement Program Budget.

Changes for FY 2018 - 2019:
 Reduction due to Water Feasibility Study included in previous year's budget.

Budget Backup

Engineering Services	Total	Allocation
KEH & Associated On-Call Services	\$ 40,000	<i>Revenue Basis</i>
Standards Book Design	\$ 20,000	<i>Revenue Basis</i>
Total	\$ 60,000	

Rounded To: \$ 60,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Engineering Services	\$ 120,000	\$ 3,332	\$ 50,000	\$ 60,000

Enterprise Allocation		Calculated	Rounded
Water	41%	\$ 24,600	\$ 24,600
Sewer	44%	\$ 26,400	\$ 26,400
Trash	15%	\$ 9,000	\$ 9,000
Community	0%	\$ -	\$ -
Total	100%	\$ 60,000	\$ 60,000

GENERAL
Bank & Trustee Fees

Account Number: 5560
Budget Line Item: 51

Account Description:
Bank and Trustee Fees

Changes for FY 2018 - 2019:

Budget Backup

Bank & Trustee Fees	Total	Allocation
Expenses	\$ 4,000	<i>Revenue Basis</i>
Total	\$ 4,000	

Rounded To: \$ 4,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Bank & Trustee Fees	\$ 5,000	\$ 2,500	\$ 4,000	\$ 4,000

Enterprise Allocation		Calculated	Rounded
Water	41%	\$ 1,640	\$ 1,640
Sewer	44%	\$ 1,760	\$ 1,760
Trash	15%	\$ 600	\$ 600
Community	0%	\$ -	\$ -
Total	100%	\$ 4,000	\$ 4,000

GENERAL
Other Professional Services

Account Number: 5565
Budget Line Item: 52

Account Description:

Professional services, including, but not limited to: payroll service, shredding, appraisals, various studies as needed and consultants.

Changes for FY 2018 - 2019:

Reduction due to no foreseeable studies being performed, that are not associated with programmed Capital Projects.

Budget Backup

Other Professional Services	Total	Allocation
Expenses	\$ 10,000	<i>Revenue Basis</i>
Total	\$ 10,000	

Rounded To: \$ 10,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Other Professional Services	\$ 50,000	\$ 6,614	\$ 50,000	\$ 10,000

Enterprise Allocation		Calculated	Rounded
Water	41%	\$ 4,100	\$ 4,100
Sewer	44%	\$ 4,400	\$ 4,400
Trash	15%	\$ 1,500	\$ 1,500
Community	0%	\$ -	\$ -
Total	100%	\$ 10,000	\$ 10,000

GENERAL Legal Notices Publication

Account Number: 5600
Budget Line Item: 53

Account Description:
Expenses incurred by public legal notices as required by State Law.

Changes for FY 2018 - 2019:
Program is higher in election years and lower in non-election years.

Budget Backup

Legal Notices Publication	Total	Allocation
Public Notices	\$ 1,500	<i>Equal Distribution</i>
Board Elections	\$ 2,200	<i>Equal Distribution</i>
Ordinances and Notifications	\$ 1,000	<i>Equal Distribution</i>
Total	\$ 4,700	

Rounded To: \$ 5,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Legal Notices Publication	\$ 5,000	\$ -	\$ 800	\$ 5,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 495	\$ 1,650
Sewer	34%	\$ 510	\$ 1,700
Trash	33%	\$ 495	\$ 1,650
Community	0%	\$ -	\$ -
Total	100%	\$ 1,500	\$ 5,000

GENERAL
Public Information & Outreach

Account Number: 5650
Budget Line Item: 54

Account Description:
Customer Outreach and Public Information Costs

Changes for FY 2018 - 2019:
Requested budget increase for customer outreach activities. Once features are developed, it is anticipated that public information costs for future fiscal years will be less.

Budget Backup

Public Information & Outreach	Total	Allocation
Website Domain Fee	\$ 180	Equal Distribution
Website Feature Design	\$ 1,500	Equal Distribution
Additional Mailer	\$ 1,400	Equal Distribution
Graphic Design Services for Outreach Materials	\$ 3,000	Equal Distribution
NextDoor Ad Buys	\$ 800	Equal Distribution
Reverse 911 Services	\$ 1,000	Equal Distribution
Laserfiche Subscription	\$ 4,000	Equal Distribution
Miscellaneous Records Management	\$ 2,500	Equal Distribution
General Notification Costs	\$ 1,600	Equal Distribution
Total	\$ 15,980	

Rounded To: \$ 16,000

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Public Information & Outreach	\$ 1,500	\$ -	\$ 1,500	\$ 16,000

Enterprise Allocation		Calculated	Rounded
Water	33%	\$ 59	\$ 5,280
Sewer	34%	\$ 61	\$ 5,440
Trash	33%	\$ 59	\$ 5,280
Community	0%	\$ -	\$ -
Total	100%	\$ 180	\$ 16,000

NON-RATE REVENUE

Interest Earnings

Account Number: 6100
Budget Line Item: 55

Account Description:

Interest income from fund balances held with County Fund. Earnings are allocated at the end of the fiscal year based on interest earned by each Enterprise.

Changes for FY 2018 - 2019:

Income based on market performance.

Budget Backup

Interest Earnings	Total	Allocation
Interest Earnings	\$ 38,000	<i>Interest Earnings</i>
Total	\$ 38,000	

Rounded To: \$ 38,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Interest Earnings	\$ 8,000	\$ 19,082	\$ 25,000	\$ 38,000

Enterprise Allocation		Calculated	Rounded
Water	35%	\$ 13,300	\$ 13,300
Sewer	55%	\$ 20,900	\$ 20,900
Trash	10%	\$ 3,800	\$ 3,800
Community	0%	\$ -	\$ -
Total	100%	\$ 38,000	\$ 38,000

NON-RATE REVENUE

Penalty Revenue

Account Number: 6200
Budget Line Item: 56

Account Description:
 Revenue generated from late and delinquent payments.

Changes for FY 2018 - 2019:
 Income previously contained in each Enterprise Fund account. As part of FY 2018 - 2019 Operating Budget, late payment revenues are proposed to be held in a single account to offset Community Service obligations from each utility.

Budget Backup

Penalty Revenue	Total	Allocation
Late Payment Revenue	\$ 36,000	<i>Comm Svc Only</i>
Total	\$ 36,000	

Rounded To: \$ 36,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Penalty Revenue	\$ -	\$ -	\$ -	\$ 36,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	100%	\$ 36,000	\$ 36,000
Total	100%	\$ 36,000	\$ 36,000

NON-RATE REVENUE *Secured & Unsecured Taxes*

Account Number: 6320
Budget Line Item: 57

Account Description:

District's portion of 1% Ad Valorem Property Tax collected from properties within District's service area. Funds are held by County of Ventura.

Changes for FY 2018 - 2019:

Minor fluctuations can be caused by changes to local housing market and transaction activity.

Budget Backup

Secured & Unsecured Taxes	Total	Allocation
Tax Income	\$ 65,000	<i>Comm Svc Only</i>
Total	\$ 65,000	

Rounded To: \$ 65,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Secured & Unsecured Taxes	\$ 60,000	\$ 42,100	\$ 65,000	\$ 65,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	100%	\$ 65,000	\$ 65,000
Total	100%	\$ 65,000	\$ 65,000

DEBT SERVICE 2012 Water Revenue Bonds

Account Number: 2805
Budget Line Item: 58

Account Description:

Annual debt service for 2012 Water Revenue Bonds, initially issued for District's capacity share in PHWA. Debt service set to retire in FY 2021 - 2022. Payments are based on a predetermined debt schedule for the life of the bond.

Changes for FY 2018 - 2019:

Budget Backup

2012 Water Revenue Bonds	Total	Allocation
Certificate of Participation	\$ 312,753	<i>Water Only</i>
Total	\$ 312,753	

Rounded To: \$ 313,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
2012 Water Revenue Bonds	\$ 312,834	\$ 312,834	\$ 312,834	\$ 313,000

Enterprise Allocation		Calculated	Rounded
Water	100%	\$ 312,753	\$ 313,000
Sewer	0%	\$ -	\$ -
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 312,753	\$ 313,000

DEBT SERVICE 2016 Sewer Refunding Bonds

Account Number: 2855
Budget Line Item: 59

Account Description:

Annual debt service for 2016 Sewer Bonds. Payments are based on a predetermined debt schedule for the life of the bond.

Changes for FY 2018 - 2019:

Budget Backup

2016 Sewer Refunding Bonds	Total	Allocation
Debt Service	\$ 190,481	<i>Sewer Only</i>
Total	\$ 190,481	

Rounded To: \$ 191,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
2016 Sewer Refunding Bonds	\$ 186,991	\$ -	\$ 186,991	\$ 191,000

Enterprise Allocation		Calculated	Rounded
Water	0%	\$ -	\$ -
Sewer	100%	\$ 190,481	\$ 191,000
Trash	0%	\$ -	\$ -
Community	0%	\$ -	\$ -
Total	100%	\$ 190,481	\$ 191,000

OTHER
Allocation of Community Service

Account Number: N/A
Budget Line Item: 60

Account Description:
Funds required from each Enterprise to fund Community Service activities.

Changes for FY 2018 - 2019:

Budget Backup

Allocation of Community Service	Total	Allocation
Required Allocation	\$ 50,000	<i>Revenue Basis</i>
Total	\$ 50,000	

Rounded To: \$ 50,000

3

	Adopted FY 2017 - 2018	Actual Through 1/31/2018	Projected June 2018	Proposed FY 2018 - 2019
Allocation of Community Service	\$ 47,662	\$ -	\$ -	\$ 50,000

Enterprise Allocation		Calculated	Rounded
Water	41%	\$ 20,500	\$ 20,500
Sewer	44%	\$ 22,000	\$ 22,000
Trash	15%	\$ 7,500	\$ 7,500
Community	0%	\$ -	\$ -
Total	100%	\$ 50,000	\$ 50,000



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

353 Santa Monica Drive · Channel Islands Beach, CA · 93035-4473 · (805) 985-6021 · FAX (805) 985-7156
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Regular Board Meeting, June 12, 2018

To: Board of Directors
From: Akbar Alikhan, *General Manager*
Subject: Smart Meter Deployment (CI 401)
Item No. E-3

RECOMMENDATION:

1. Approve Purchase Order and service agreement with National Meter for smart meters
2. Approve Purchase Order with Famcon Supply for meter box lids
3. Authorize advertisement of bid for smart meter installation

FINANCIAL IMPACT: Approximately \$900,000 in capital expenses (CI 401), with \$700,000 financed through a 10-year loan product and \$200,000 from capital reserves.

BACKGROUND:

The District maintains approximately 1,900 water meters within its service area. These meters are read monthly by District Operations staff to generate data for the volumetric water consumption and sewer usage charges on customer bills. Based on best available data, the average age of the District's meters is 12 – 15 years old, with some being in service over 20 years.

In preparation for the eventual replacement of the existing meters, staff identified several potential options. The options included:

1. Manual Read (Status Quo)
2. Automatic Meter Reading (AMR)
3. Advanced Metering Infrastructure (AMI) – Fixed Base Network
4. Advanced Metering Infrastructure (AMI) – Cellular

After a presentation of a financial plan detailing the long-term costs for each option, the Facilities Committee and the full Board ultimately selected the AMI – Cellular option through Badger Meter. Furthermore, the District had the benefit of testing 10 AMI-Cellular meters throughout the service area from mid-February through mid-June. During the test period, staff was able to evaluate the ease of installation, reliability of data transmission, ease of use for customer and administrative portal, quality of leak detection reports, and vendor responsiveness.

Staff also sought Board direction on the phasing of the smart meter deployment. While there were pros and cons of shorter and longer deployment periods, the Board selected to do a full-scale deployment in one year for the following reasons:

- Having a mix of old and new meters may result in lower registered usage (thus lower bills) for customers with old meter versus higher bills for customers with new meters.
- The overall project costs would be higher due to less advantageous volume pricing and delaying the avoided costs that come with newer technologies (e.g. staff time required to manually read meters)
- A multi-year rollout would require more staff time to complete several smaller projects, instead of one larger project due to repetitive bid advertisements and quote gathering.

DISCUSSION/ANALYSIS:

There are three components to the project, with different means of procurement. The proposed procurement methods for each component are summarized in the table below.

Project Component	Procurement Method
Meter and cellular endpoint	Negotiated sale based on unit prices received in recent competitive bid issued by City of San Luis Obispo
Installation Services	Formal request for bid issued by the District
Meter box lids	Four quotes sought for various lid products.

Meter and Cellular Endpoint

After receiving direction from the Facilities Committee and the Board, the District selected the Badger E-series ultrasonic meter as the preferred product. The Badger meter was the only product that met all of the District’s desired criteria:

- Communicated via cellular AMI, requiring no District communication assets
- Meter and endpoint manufactured by same party, eliminating compatibility issues
- Small form factor that could fit into small residential meter boxes
- Vendor (National Meter) guarantee of data transmission
- At least 15-year warranty on products
- Stainless steel terminals to eliminate meter stripping at uneven service lines and ensure water flow is maintained for firefighting

Staff is proposing a negotiated sale with National Meter for the procurement of the Badger meter product. After considering products from all makes and manufacturers, the Badger Meter product was the only product that met all the District’s desired criteria listed above. Additionally, National Meter agreed to furnish the meters at the same unit price as a recent competitive bid through the City of San Luis Obispo. Piggybacking off of the San Luis Obispo bid, will likely result in a lower cost to the District than if the District advertised for bids on its own. The procurement method has been shared with District counsel throughout the process.

The service agreement includes an ongoing subscription cost of \$.89 per meter, per month, which covers the cost of daily data transmission, ongoing customer service from the vendor, residents’ access to the customer portal, and staff access to the administrative portal. Per the attached supply agreement (Attachment #1), the monthly subscription cost will remain unchanged for 10 years and will increase by the CPI beyond that. Furthermore, the attached quote for the materials

(Attachment #2) allows the District to scale the quantities up or down on a per-unit basis if the project needs change.

Installation Services

Staff is proposing a formal request for bid (Attachment #3) for the installation services of the meters and cellular endpoints. Contracted labor would perform most of the meter exchanges, while District operators oversee installations, assist with encoding cellular endpoints, and deliver supplies to installers. Overall, the contractor’s scope would include the following:

ITEM	DESCRIPTION	ESTIMATED QUANTITY
1	Mobilization / Demobilization	Lump Sum
2	Standard Meter Exchange	1,758
3	Non-Standard Meter Exchange	100
4	Installation of replacement isolation valves	60
5	Replacement of concrete meter boxes	40
6	Hauling / Disposal of Concrete Lids	14 ton
7	Hauling / Disposal of Waste Material	1 ton
8	Salvage existing bronze meters	1,000 lbs
9	Additional Work as identified by the District	

If approved, bids would be advertised on June 13, respondents would have five weeks to submit a bid, and the District would award the project at the August 14 Board Meeting.

Meter Box Lids

The new cellular endpoints require an opening through the lid of the meter box in order to communicate to cell towers, which requires replacement of the District’s existing concrete lids. During the pilot test period of the Badger meters, staff also had the opportunity to test nearly a dozen types of meter box lids. Overall, staff identified the following criteria as most important for a new meter box lid specification:

- Pre-cored endpoint hole sized for selected cellular endpoint (to expedite installation)
- H-10 traffic rating or greater to withstand light traffic, for use in driveways and near rolled curbs
- Long-term U.V. protection to guard against cracking and deterioration with constant exposure to sunlight
- No/minimal iron or steel content to avoid rusting in salty environment
- Float-resistance to protect against a flood scenario
- Option to include District branding on lid
- General aesthetics of lid, particularly as it ages
- As close to natural concrete color as possible

Of the samples that the District tested, three products were identified as potential candidates to be the new lid standard for the District. The table below summarizes the quotes received for these products for nearly 1,800 meter lids.

Vendor	Lid Manufacturer	Quoted Price
Nicor Inc	Nicor	\$43,808
Famcon	Oldcastle (Fiberlyte)	\$55,881
Johnson Enterprises	DFW	\$57,108
Ferguson	DFW	\$70,790

Staff is recommending the Fiberlyte product, made by Oldcastle, and sold by Famcon Pipe & Supply (Oxnard, CA). The product met all of the desired criteria, was priced competitively, and the District will have a ready-made inventory of lids with local vendor. The volume pricing of the lids is approximately \$31 per unit; each lid is estimated at \$45 when purchased individually.

Project Costs & Financing

The total project costs of \$900,000 are shown in the table below. As demonstrated by the AMI financial plan presented to the Board at February 13 meeting, the AMI Cellular option is less expensive over the life of the meter than either the manual read (status-quo) or AMR (drive-by) options. By 2023, the AMI Cellular option will be cheaper to operate than both manual reads and AMR, and will remain cheaper in perpetuity.

Project Component	Cost
Meters and endpoints (+ tax)	\$685,000
Installation (estimated bid)	\$120,000
Lids (+ tax)	\$61,000
Contingency	\$34,000
Total	\$900,000

To finance the project, staff is proposing to use \$200,000 of capital reserves and secure a \$700,000 loan through the California Special Districts Association Financing Corporation. The District has been approved for the requested loan amount and purpose. The finalized financing agreement and resolution will be brought for Board consideration at the July 10 Board Meeting.

The loan product is for a 10-year term at 3.4% interest rate, resulting in an annual payment of \$84,000 per year. The loan can be paid off early, with a pre-payment penalty equal to 1% of the outstanding balance. Staff had initially pursued a low-interest State Revolving Fund (SRF) Loan. However, grant and loan preparation consultants advised District staff that the preparation and reporting requirements for SRF Loans would outweigh the interest savings on projects below \$1M. Furthermore, the District may likely opt to pay the loan off early in 2022 when the PHWA Capacity debt is fully retired.

Outreach

District staff has identified several methods of customer outreach to educate residents on the capabilities of their new meter. The outreach campaign will include:

- Project page on the District website at www.cibcsd.com/meters
- Bill inserts in July and August, with project schedule for August insert
- Doorhanger at installation, notifying them that their meter has been replaced
- Two community training sessions, where staff will hold one-on-one and group training sessions on how to use the Eye on Water mobile apps and web platform
- Roadside signage alerting residents to project webpage
- NextDoor posts
- Farmers Market booth

Next Steps

If approved, staff would immediately advertise the bid document for installation of the meters and proceed with the sales agreement for the materials. The table below details a basic list of events towards project completion.

Event	Date
Advertise bid & approve sale agreement	June 12
Open bids	July 18
July bill insert	July 27
Award installation contract	August 14
August bill insert and schedule	August 23
Project start	September 4
Project completion	December 18

SUPPLY AGREEMENT FOR WATER METERS

THIS AGREEMENT made and entered into this ___ day of ____ 2018, by and between Badger Meter, Inc. DBA National Meter & Automation, a Wisconsin corporation, hereinafter referred to as "National Meter" and Channel Island Beach Community Services District, a California corporation, hereinafter referred to as the "District."

WITNESSETH:

WHEREAS, the District has taken proposals for the purchase of water meters; and

WHEREAS, National Meter desires to sell these products to the District.

THEREFORE, the parties for and in consideration of the mutual covenants and Agreement herein contained, do agree as follows:

1. National Meter shall furnish products, as provided under National Meter Quote Number: 050118RS-CIB-CSD, hereinafter referred to as ("Quote") (Attachment "A").

2. ORION® Cellular Service Units subscription shall be provided per service unit listed under the Quote for ten (10) years. The effective date of the term is _____ through _____, which may be increased in proportion to the increase in the Consumer Price Index for All Urban Consumers as reported by the U.S. Department of Labor. The base index shall be the April 2018 index of 250.546. The initial Service Unit pricing will be held at quoted rate for the first 36-month period of the term. Thereafter, a review for changes in prices will be no more frequent than every 12 months, if necessary. All other terms and conditions of the original Quote remain the same.

3. The District reserves the right to purchase more than or less than the quantity stated in the bid documents at the unit prices quoted by National Meter.

4. National Meter's Proposal (and documentation attached thereto) to the District dated as of May 7, 2018 is hereby incorporated by reference and made a part of this Agreement.

5. This Agreement may not be amended by either party hereto without the express written consent of the other party.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

CHANNEL ISLAND COMMUNITY SERVICES DISTRICT
353 Santa Monica Drive
Channel Island Beach, CA 93035

BADGER METER, INC. DBA NATIONAL METER & AUTOMATION
4545 West Brown Deer Rd.
Milwaukee WI 53223

By: _____
Name: _____
Title: _____
Date: _____

By: _____
Name: Korrine L. Fleming
Title: Assistant Secretary
Date: _____

3 Faraday, Suite A
Irvine, California 92618
Phone: 949-445-7171
Fax: 949-595-0958

QUOTE NUMBER: 060118RS-CIB-CSD
DATE: Friday, June 01, 2018
QUOTED BY: Rob Sears
REQUESTED BY: Akbar Alikhan
PHONE: 805-985-6021
EMAIL: aalikh@cibcsd.com

BILL TO:

Channel Islands Beach CSD
353 Santa Monica Drive
Channel Islands Beach, Ca 93035-4473

SHIP TO:

Same

SALESPERSON	PAYMENT TERMS	SHIPPING METHOD	SHIPPING TERMS	Subject to Review After:
Rob Sears	Net 30 Days	TBD	FOB Factory	Thursday, August 30, 2018

QTY	PRODUCT DESCRIPTION	UNIT PRICE	AMOUNT
	Badger BEACON ORION Cellular-Advanced Meter Analytics		
1 Time	Reduced- Engagement Fee- SetUp & Activation of Customer Portfolio in Cloud Based Software & Initial Licensing of BEACON AMA Software	\$ 2,100.00	\$ 2,100.00
1,716	Badger Meter E-35 3/4" x 7.5" Ultra-Sonic 316 Stainless Steel, w/HRE-LCD Encoder Cu.Ft., w/Nicor Connector	\$ 181.00	\$ 310,596.00
69	Badger Meter E-55 1" x 10.75" Ultra-Sonic 316 Stainless Steel, w/HRE-LCD Encoder Cu.Ft., w/Nicor Connector	\$ 213.00	\$ 14,697.00
17	Badger Meter E-Series 1.5" x 13" Ultra-Sonic 316 Stainless Steel, w/HRE-LCD Encoder Cu.Ft., w/Nicor Connector	\$ 501.00	\$ 8,517.00
27	Badger Meter E-Series 2" x 17" Ultra-Sonic 316 Stainless Steel, w/HRE-LCD Encoder Cu.Ft., w/Nicor Connector	\$ 675.00	\$ 18,225.00
17	Elster 3" evoQ4 Mag Meter w/Field Replaceable Battery w/Sensus Protocol, w/Nicor Connector	\$ 2,700.00	\$ 45,900.00
9	Elster 4" evoQ4 Mag Meter w/Field Replaceable Battery w/Sensus Protocol, w/Nicor Connector	\$ 3,000.00	\$ 27,000.00
1,855	ORION Cellular LTE Endpoint w/Nicor Connector	\$ 117.00	\$ 217,035.00



QUOTE

3 Faraday, Suite A
 Irvine, California 92618
 Phone: 949-445-7171
 Fax: 949-595-0958

QUOTE NUMBER: 060118RS-CIB-CSD
DATE: Friday, June 01, 2018
QUOTED BY: Rob Sears
REQUESTED BY: Akbar Alikhan
PHONE: 805-985-6021
EMAIL: aalikh@ciibcsd.com
SHIP TO: Same

BILL TO:

Channel Islands Beach CSD
 353 Santa Monica Drive
 Channel Islands Beach, Ca 93035-4473

SALESPERSON	PAYMENT TERMS	SHIPPING METHOD	SHIPPING TERMS	Subject to Review After:
Rob Sears	Net 30 Days	TBD	FOB Factory	Thursday, August 30, 2018

	Subscription Based- ORION Cellular Service Units-TBD One Service Unit= \$.89/EP/Mo.		
	Training BEACON AMA Intro-\$600 & BEACON Data Exchange-\$450 Included in Starter Kit		
	Technical Support Ongoing Tech Support provided by National Meter & Automation and/or Badger Meter Online Tech Support at no Extra Cost		
	Badger BEACON ORION Cellular-Advanced Meter Analytics Includes Customer Portal		
	Taxes NOT included.		
	Freight included on orders of \$25,000 or more.		

SUBTOTAL	\$ 644,070.00
SALES TAX	Add
FREIGHT	Add
Grand Total	644,070.00

Sales Tax: To be quoted at time of order
Est. Lead Time: 4-6 weeks ARO

THANK YOU FOR YOUR BUSINESS!!

Standard Terms & Conditions

www.nationalmeter.com/legal

SPECIFICATIONS AND BID PROPOSAL FOR WATER METER REPLACEMENT AND AMI INSTALLATION SERVICES

June 12, 2018

PREPARED FOR:

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

353 SANTA MONICA DRIVE
OXNARD, CA 93035



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LIST OF EXHIBITS

- A. Work Rules
- B. Insurance Requirements
- C. Installation Specifications and Project Requirements
- D. Figures
 - a. District Service Area and District Office
 - b. Meter Locations and Sizes (21 pages)
- E. Product Specifications
- F. Endpoint Installation Specifications

INVITATION FOR BIDS

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

Notice is hereby given that the Channel Islands Beach Community Services District (District) plans to transition from an existing manual water meter reading system to a new advanced metering infrastructure (AMI) system. The District intends to provide the materials for the replacement of approximately 1,800 water meters / endpoints, and will receive sealed bids for *Water Meter Replacement and AMI Installation Services* within the unincorporated communities of Silverstrand, Hollywood by the Sea, and Hollywood Beach, located in Ventura County, CA.

Specifications and bidding documents may be obtained by visiting www.cibcsd.com/bids or from the District's headquarters:

Channel Islands Beach Community Services District
353 Santa Monica Drive
Oxnard, California 93035
Telephone (805) 985-6021

A pre-bid meeting will be held at the District's headquarters at 10 A.M. on June 26, 2018. Bids are due at the District's headquarters, by 3:00 P.M. local time on July 12, 2018. Interested persons are invited to attend the bid opening, which will be held in the Conference Room at the District's Headquarters.

No bid shall be withdrawn for a period of forty-five (45) days after the scheduled date and time of opening of bids without written consent of the District. The District reserves the right, within the limitations of state law, to reject any or all bids received, to waive any informalities or irregularities in the bids received, or to accept any bid which is deemed most favorable to the District.

CHANNEL ISLANDS BEACH, CALIFORNIA

BY: _____.

Akbar Alikhan, General Manager

PUBLISH:
June 12, 2018

INSTRUCTIONS TO BIDDERS

WATER METER REPLACEMENT AND AMI INSTALLATION SERVICES

Bids that are sent by mail shall be clearly marked "Bid Enclosed" or "Bid Envelope Enclosed" as appropriate. The sealed envelope containing the bid shall have the following information shown on the envelope:

BID ENCLOSED

ITEM: WATER METER REPLACEMENT AND AMI INSTALLATION SERVICES

OWNER: CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

BIDDER: _____.

ADDRESS: _____.

BID DUE: *[see Invitation for Bids for bid due date]*

Bids that are sent by mail or by parcel delivery service should be addressed to:

Akbar Alikhan, General Manager
Channel Islands Beach Community Services District
353 Santa Monica Drive
Oxnard, California 93035
Telephone (805) 985-6021

The General Manager will represent the District in all matters pertaining to this project, including but not limited to, answering technical questions of prospective bidders and recommendations for selection of the responsive, low-bidder.

All questions must be submitted by Tuesday, July 3, 2018 by 3:00 PM. Submit all questions to the General Manager via email at aalikhana@cibcsd.com. Replies will be issued to all prospective Bidders of Record. Neither the General Manager nor the Owner will be responsible for oral clarifications.

Each Contractor submitting a bid shall complete and submit with the bid all of the mandatory forms and information requested by the Bid Documents. Failure to include any of these documents with the bid may disqualify the bid. The following documents are to be submitted with and made a condition of this Bid:

- 1. Completed and Signed Forms**, including:
 - a. Bid Proposal
 - b. Agreement for Water Meter Replacement and AMI Installation
 - c. Exhibit A – Work Rules
 - d. Exhibit B – Insurance Requirements

- e. Exhibit C – Installation Specifications and Project Requirements

2. Exceptions, Clarifications or Assumptions

- a. Bidders taking exceptions to any part of the agreement bound herein shall show such exception on the Bid Form in a separate document entitled “Exceptions” with a detailed list of non-compliances with proposed exceptions.
- b. Assumptions/Clarifications - Bidders wishing to list separate assumptions or conditions shall include with its Bid Proposal a separate document entitled “Clarifications” with a detailed list of assumptions or conditions Bidder’s Bid Proposal is contingent upon.
- c. If exceptions or clarifications are not provided with Bidder’s Bid Proposal, then Bidder agrees to provide the services as shown in the Water Meter Replacement and AMI Installation Agreement, and associated appendices, bound herein for the amounts shown on the Bid Form.

3. Minimum Qualifications – In accordance with Exhibit C, Item D, Contractor shall provide:

- a. Three references of past projects of similar size and scope. References shall include agency name, contact person with phone number and email, and type and number of installations.
- b. Provide example (i.e. screenshot) of work order management system. See Exhibit C, Section 2 for requirements of work order management system.

4. Evidence of Contractor’s License - Contractors submitting a bid shall possess, at the time the contract is awarded, the following class of contractor’s license issued pursuant to Division 3, Chapter 9 of the Business and Professions Code of the State of California: General Engineering A License. The Contractor shall certify that the license specified is the classification of contractor’s license required by law to enable the Contractor to perform the Work contemplated under the Contract Documents. Contractor shall provide the District with a copy of its Contractor’s License and expiration date with its bid, and shall present satisfactory evidence that it is licensed in good standing.

All subcontractors to be utilized must be included in the initial bid response, included in the “Bid Proposal” form, along with documentation supporting their ability to complete the work required. Responsibility for the performance of the contract remains with the bidder.

Bids that are modified, excepted, contingent upon assumptions or clarifications, or in any way changed from the Agreement that the Owner is requesting in this request for Bids may be rejected by the Owner.

While the District intends to evaluate Proposals received based upon estimated unit quantities shown in the Proposal Form, it reserves the right to alter the quantity of unit quantities as required to accomplish the OWNER’s Work.

BID PROPOSAL

The undersigned (hereinafter called the CONTRACTOR) acknowledges by their signature that they have received and examined the documents entitled "Specifications and Bid Proposal for WATER METER REPLACEMENT AND AMI INSTALLATION SERVICES" for Channel Islands Beach Community Services District, dated June 12, 2018, and has included the provisions of the Specifications in their Proposal.

The CONTRACTOR hereby proposes to provide to the District (hereinafter called OWNER) domestic water distribution system construction services, as required by Channel Islands Beach Community Services District; Oxnard, California, upon the terms and conditions herein contained in the AGREEMENT and associated EXHIBITS. Compensation to the CONTRACTOR by the OWNER shall be in accordance with proposed unit prices and lump sum prices submitted by the CONTRACTOR with this proposal.

1. BID FORM

Payment for unit price work will be made by the unit and unit price shown in the table below. Unit price work includes full compensation for furnishing all labor and equipment for removal of existing meters, sorting and storage of removed meters at the District office and installation of OWNER-furnished materials (water meters, lids, adaptors and gaskets). This includes all activities associated with this work as defined in this Contract.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE (PER EACH)	TOTAL BID PRICE
1	Mobilization / Demobilization ^(a)	Lump Sum	--	\$
2	Standard Meter Exchange ^(b)	1,794	\$	\$
3	Non-Standard Meter Exchange ^(c)	70	\$	\$
4	Installation of replacement isolation valves ^(d)	60	\$	\$
5	Replacement of concrete meter boxes ^(e)	40	\$	\$
6	Hauling / Disposal of Concrete Lids ^(f)	14 ton	\$ /ton	\$
7	Hauling / Disposal of Waste Material ^(f)	1 ton	\$ /ton	\$
8	Salvage existing bronze meters ^(g)	1,000 lbs	\$ /lb	\$
9	Additional Work as identified by the District ^(h)	Shall be provided on a Time and Materials (T&M) total not-to-exceed fee basis.		\$10,000
TOTAL BID PRICE			\$	

NOTES:

- a) Limit to 5% of bid price, includes all activities for mobilization/demobilization, storage, schedule, and project meetings.
- b) Unit cost shall include all labor, equipment and materials for installing meter for "Standard Installation" as defined in Exhibit C and E. This bid item includes hauling and sorting of waste materials from the project site to the District office.
- c) Non-Standard Meter Installation definition provided in Exhibit C, Item 1.G. These unit costs represent ONLY non-standard meters that include vault or above ground installations. Details regarding the vault or above ground installations are included in Table 2 of Exhibit C.
- d) If necessary, replace existing isolation valves at meter with new valves, as provided by the District.
- e) If necessary, replace existing concrete meter boxes with new boxes, as provided by the District.
- f) Waste material is intended to include miscellaneous waste, including at minimum non-bronze meters and other related materials. It is not intended to include salvageable material such as bronze meter assemblies collected as part

- of the meter exchange process. This includes cost for disposing of materials *from* District headquarters; services related to hauling materials from the Project site to the District headquarters is included in Bid Item 2.
- g) This bid item includes the cost OR deduction for disposing of salvaged bronze meters *from* the District headquarters; services related to hauling materials from the Project site to the District headquarters is included in Bid Item 2. For determining salvage value, Contractor shall assume bronze meters will be in the same condition as they were at the customer location.
 - h) Bid item will be expended only upon authorization by the District in accordance with Section 2 below. This work includes any Non-Standard Meter Installations NOT included in Bid Item 3.

2. PAYMENT FOR ADDITIONAL WORK (BID ITEM 9)

The Contractor shall complete additional work using the following method:

A. Labor

- i. The cost of labor shall be the actual cost for wages of workers performing the Work at the time the Work is done, plus employer payments of payroll taxes, workers compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs, resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements.
- ii. The use of a labor classification which would increase the Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental. The labor cost for foremen shall be proportioned to all of their assigned work and only that applicable to the Work will be paid.
- iii. Non-direct labor costs, including superintendence, shall be considered part of the markup specified in 2.F.i.

B. Materials

- i. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available and delivered to the Work site in the quantities involved, plus sales tax, freight, and delivery.
- ii. The District reserves the right to approve materials and sources of supply, or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the District.

C. Tool and Equipment Rental

- i. No payment will be made for the use of tools which have a replacement value of \$200 or less.
- ii. Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the Work is performed.
- iii. The rental rates paid shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Necessary loading and transportation costs for equipment used on the Work shall be included.

- iv. If equipment is used intermittently and, when not in use, could be returned to its rental source at less expense to the District than holding it at the Work site, it shall be returned, unless the Contractor elects to keep it at the Work site, at no expense to the District.
- v. All equipment shall be acceptable to the Engineer, in good working condition, and suitable for the purpose for which it is to be used.
- vi. The reported rental time for equipment already at the Work site shall be the duration of its use on the Work. This time shall begin when the equipment is first used on the Work, plus the time required to move it from its previous site and back, or to a closer site.

D. Other Items

The District may authorize other items which may be required on the Work, including labor, services, material, and equipment. These items must be different in their nature from those required for the Work, and be of a type not ordinarily available from the Contractor or Subcontractors.

E. Invoices

Labor hours, invoices for material, equipment rental and other expenditures shall be submitted with the daily report per 2.G. If the daily report is not substantiated by invoices or other documentation, the District may establish the cost of the item involved at the lowest price which was current at the time of the report.

F. Markup

- i. Work by the Contractor

CATEGORY	OVERHEAD	PROFIT
Labor	10%	10%
Materials	10%	5%
Equipment	10%	5%

- ii. Work by Subcontractor

The Contractor may add 5 percent of the subcontractor’s total cost for the work. Regardless of the number of hierarchical tiers of subcontractor, the five percent which includes the Contractor’s allowance for overhead (3.5%) and profit (1.5%) may be applied one time only to the performing subcontractor’s total cost.

G. Daily Reports

The Contractor shall submit a daily report to the District on forms approved by the District. Applicable delivery tickets, listing all labor, materials, and equipment involved for that day, and other services and expenditures when authorized shall be included. Failure to submit the daily report by the close of the next Working Day may waive any rights for that day. An attempt shall be made to reconcile the report daily, and it shall be signed by the District and the Contractor. In the event of a disagreement, pertinent notes shall be entered by each party

to explain points which cannot be resolved immediately. Each party shall retain a signed copy of the report. Reports by Subcontractors or others shall be submitted through the Contractor.

The report shall:

- a. List the names of workers, classifications, and hours worked.
- b. Describe and list quantities of materials used.
- c. List the type of equipment, size, identification number, and hours of operation, including loading and transportation, if applicable.
- d. Describe other services and expenditures in such detail as the District may require.

H. Other Considerations

For items not addressed in the contract documents, the Contractor shall refer to the Standard Specification for Public Works Construction, 2015 Edition.

It is understood by the undersigned that the OWNER retains the privilege of accepting or rejecting all or any part of this proposal and to waive any informalities or technicalities therein.

3. LIST OF SUBCONTRACTORS

The bidder is required to furnish the following information in accordance with the provisions of the Subletting and Subcontracting Fair Practices Act (California Public Contract Code Section 4100, et seq.).

Subcontractors, as defined in California Public Contract Code Section 4101(a)(1), must be listed if they will provide work, labor or service in an amount in excess of one-half (½) of one percent (1 %) of the total bid.

Subcontractor	License No. & Type	Main Office Address	% of Total Dollar Value Work	Description of Subcontract
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

All contractors and subcontractors listed in the Proposal Form must be registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5.

4. ACKNOWLEDGEMENT OF ADDENDA AND SITE CONDITIONS

Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<i>Addendum No.</i>	<i>Addendum Date</i>	<i>Addendum No.</i>	<i>Addendum Date</i>

Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

CONTRACTOR

BY: _____.

TITLE: _____.

ADDRESS: _____.

TELEPHONE NO.: _____.

DATE SIGNED: _____.

AGREEMENT FOR WATER METER REPLACEMENT AND AMI INSTALLATION

WATER METER REPLACEMENT AND AMI INSTALLATION SERVICES

This AGREEMENT made and entered into this day of _____, 2018, between _____, hereinafter referred to as "CONTRACTOR", organized and existing under the laws of the State of California and **Channel Islands Beach Community Services District**, hereinafter referred to as "OWNER".

WITNESSETH:

For the consideration and subject to the terms and conditions hereafter set forth, the OWNER and the CONTRACTOR mutually agree as follows:

1. SCOPE OF WORK

The CONTRACTOR shall perform Water Meter Replacement and AMI Installation services as required by the OWNER. The CONTRACTOR shall perform all work within the locations designated by the OWNER's representative.

The CONTRACTOR will furnish all supervision, labor, tools, equipment, and transportation, and shall perform in a good, proper and workmanlike manner, all work required to replace the OWNER's existing water meters and lids with the OWNER's new Advanced Metering Infrastructure (AMI) and lids. The work will be performed within the unincorporated communities of Silverstrand, Hollywood by the Sea, and Hollywood Beach, located in Ventura County, CA, in such areas as designated by the OWNER, as shown in the District Service Area Map provided as **Exhibit D**.

The CONTRACTOR will furnish necessary manpower and equipment as required to meet OWNER's implementation schedule for its AMI System.

The OWNER will furnish necessary materials to notify the public of project schedule.

2. MATERIALS

Water meters (see Product Specifications provided as **Exhibit E**), endpoints, adapters, valves, meter boxes, lids, and gaskets shall be furnished by the OWNER.

The following materials, if required; PVC water pipe, miscellaneous fittings, curb stops, risers, connectors, etc., shall be furnished by CONTRACTOR on a time and materials (T&M) total not-to-exceed fee basis.

OWNER-Furnished materials will be picked up by the CONTRACTOR at the OWNER's headquarters. Upon completion of the work assigned, the CONTRACTOR shall return all excess new materials furnished by the OWNER and all removed materials to the OWNER's headquarters as directed by the OWNER. These materials shall be delivered in a manner and packaged as directed by the OWNER.

CONTRACTOR, acting as an independent CONTRACTOR, shall be responsible for all of OWNER's materials so issued to it or removed from the job and shall make an accounting of all items. It is further understood and agreed that CONTRACTOR shall be held liable for loss or destruction of any and all materials and supplies furnished by OWNER that are in the possession and control of CONTRACTOR.

OWNER may instruct CONTRACTOR in writing, where unit prices do not adequately describe or cover proposed work ("Non-Standard Work"), to furnish any part or all of the materials for a job. OWNER shall pay CONTRACTOR for such materials furnished and incorporated in the job at CONTRACTOR's cost plus percentage shown in the attached **Bid Proposal Form**.

3. SPECIFICATIONS

The work performed for OWNER by CONTRACTOR under the terms of this Agreement shall be performed in a workmanlike manner and shall comply with OWNER's Installation Specifications & Project Requirements (collectively referred to as SPECIFICATIONS) included in **Exhibit C**.

4. SUPERVISION

The OWNER does not reserve any right to control the methods or manner of performance of the work by the CONTRACTOR. The CONTRACTOR, in doing the work herein called for, shall not act as an agent or employee of the OWNER, but shall be and act as an independent CONTRACTOR, and shall be free to perform the work by such methods and in such manner as the CONTRACTOR may choose, furnishing all equipment, and doing everything necessary to perform such work properly and safely, having supervision over and responsibility for the safety and actions of his employees, and control over and responsibility for his equipment. The OWNER may at all times have the right to have its authorized representative inspect the work, not for any purpose or reserved right of controlling the methods and manner of the performance of the work, but in order to assure that all work complies with the requirements of the Agreement.

CONTRACTOR shall provide and maintain at its own expense all such safeguards as will effectively prevent accident or damage to property or person during the prosecution of the work. CONTRACTOR's safety rules and regulations shall be applicable to all work performed hereunder. CONTRACTOR shall be solely responsible for job safety.

CONTRACTOR shall employ an ample force of workers and supervisory personal and shall prosecute the work in a prompt, diligent, and professional manner and in strict accordance with specifications. Any equipment or materials that are to be furnished by CONTRACTOR hereunder shall be furnished in sufficient time to enable CONTRACTOR to perform and complete the work within the time or times required by OWNER.

CONTRACTOR shall be responsible for coordinating all work hereunder with all utility companies and municipalities having facilities near such work.

OWNER will furnish CONTRACTOR with available data, records, specifications, and other information regarding the work. If CONTRACTOR discovers any errors, omissions, discrepancies, or conflicts in any such information, CONTRACTOR shall immediately so inform OWNER in writing. Any work affected by such discoveries that is performed by CONTRACTOR prior to authorization by OWNER shall be at CONTRACTOR's risk and expense.

CONTRACTOR represents that it is fully experienced and properly qualified to perform the work, and that it is properly equipped, organized, and financed to perform such work. CONTRACTOR represents that it is properly licensed and qualified to do business in all governmental jurisdictions in which the work is to be performed, and that it will maintain such licenses and qualifications throughout the term of this

Agreement. Upon written request by OWNER, CONTRACTOR shall promptly furnish to OWNER such evidence as OWNER may require relating to CONTRACTOR's ability to perform fully this Agreement in the manner and within the time required by OWNER.

CONTRACTOR specifically agrees that CONTRACTOR is an independent CONTRACTOR and an employing unit subject as an employer to all applicable unemployment compensation, Occupational Safety & Health Act ("OSHA"), and similar laws so as to relieve OWNER of any responsibility or liability for treating CONTRACTOR's employees as employees of OWNER for the purpose of their safety or keeping records, making reports or paying any payroll taxes or contribution for such persons; and CONTRACTOR agrees to indemnify and hold OWNER harmless and reimburse it for any expense or liability incurred under such laws in connection with the employees of CONTRACTOR.

CONTRACTOR shall be solely responsible for training its own employees and assuring that those employees are fully aware of the hazards associated with the work, including, but not limited to, the hazards of working on or around energized electrical facilities. CONTRACTOR assumes full responsibility for compliance with OSHA.

5. WORKMANSHIP AND CONDUCT OF CONTRACTOR'S EMPLOYEES

CONTRACTOR warrants that it is competent to do the work in a safe manner and agrees to employ none but qualified foremen and skilled workmen on work requiring special qualifications and to at all times enforce strict discipline and good order among employees and others carrying out the Agreement. CONTRACTOR shall ensure that all employees are provided uniform clothing, so that installer is clearly identifiable as an employee of the contractor. CONTRACTOR shall not hire or retain employees who are not sober, who are negligent, careless or incompetent or otherwise unfit to perform the work assigned them, or who (except as authorized by law) sell, purchase, transfer, possess or use controlled substances or marijuana on the job site or otherwise violate the law. CONTRACTOR shall require his employees to abide by all regulations, security measures, and procedures of the project. CONTRACTOR shall employ, discharge, pay, control or direct its employees and shall not permit them to directly or indirectly interfere with the employees of OWNER or other Contractors in the performance of their work, or the OWNER in the inspection of the work. It shall be the duty of CONTRACTOR to adequately train and supervise its agents, representatives, employees in all matters relating to safety and job performance.

The public relations of the OWNER shall be given due and practicable consideration at all times. The CONTRACTOR and his employees shall be courteous in all of their communications with property owners. All of the CONTRACTOR's personnel and equipment shall be neat and orderly in behavior and appearance. Complaints received from property owners shall be immediately reported by the CONTRACTOR to the OWNER.

CONTRACTOR agrees to immediately remove, at OWNER's request, any person carrying out the Agreement due to misconduct or any other sound reason for removal. Should CONTRACTOR fail or refuse to immediately take such action, OWNER may issue a stop work order suspending all or any part of the work or may terminate the Agreement pursuant to Section 8 herein. No part of the time lost due to any such stop work order shall constitute a claim for extension of the Agreement time or for excess costs or damages by CONTRACTOR.

6. INSPECTION OF WORK

The OWNER reserves the right, but shall not be obligated, to appoint inspectors to follow the progress of the work with authority to suspend work not in accordance with the Agreement. Acceptance or approval by the inspector shall in no event be deemed to constitute final acceptance of same by the OWNER. The inspection by the OWNER's inspector shall not relieve the CONTRACTOR of any responsibility for the proper performance of the work. Inspection by the OWNER's inspectors shall not be deemed to be supervision by the OWNER of the CONTRACTOR, its agents, servants, or employees, but shall be only for the purpose of assuring that the work complies with the Agreement. All persons employed by the CONTRACTOR in performance of any work under this Agreement shall be employees of the CONTRACTOR and shall not be deemed to be employees of the OWNER for any purpose whatever.

7. QUALITY CONTROL

The quality of the work shall be checked by an OWNER's representative and the CONTRACTOR's General Supervisor at least monthly, or more frequently if requested by the OWNER. The Quality Control check shall consist of, but not be limited to, checking selected work locations for compliance with SPECIFICATIONS and appearance of the work and the general work area. A Quality Control sheet shall be prepared upon completion of the inspection. If serious discrepancies are discovered, all work locations, back to the last Quality Control check, shall be re-inspected and all discrepancies corrected at no cost to the OWNER.

8. TERMINATION OF THE AGREEMENT

OWNER may terminate the Agreement at any time, for OWNER's convenience, by delivery of written notice of such termination to CONTRACTOR, and CONTRACTOR shall immediately cease the work and transfer to OWNER, in accordance with OWNER's directions, all materials, supplies, work in progress, equipment, machinery or tools acquired by CONTRACTOR in connection with the performance of the work and for which CONTRACTOR is reimbursed hereunder, and all drawings, specifications, plans, sketches, and information for use in connection therewith. CONTRACTOR shall, if directed by the OWNER and to the extent stated in the notice of termination, do such work as may be necessary to preserve the work in progress and to protect material and equipment on the job site or in transit thereto.

If work is not being done in accordance with the Agreement, any work in progress shall be stopped immediately by the CONTRACTOR upon request of the OWNER. Further, this Agreement may be cancelled by the OWNER by delivery of written notice of such termination to CONTRACTOR in the event the CONTRACTOR fails to perform the work in accordance with the SPECIFICATIONS or otherwise breaches any of the terms and conditions of the Agreement. The remedies of the OWNER set forth in this Agreement are cumulative and in addition to all rights and remedies provided by law or equity.

9. INDEMNIFICATION

CONTRACTOR shall indemnify and hold harmless the OWNER and its officers, agents, servants, and employees from and against all loss, damage or liability resulting from claims, suits, and actions for injuries to persons (including death) and damages to property caused by or arising out of any negligent (including strict liability), wanton or intentional act or omission in the performance of the work by the CONTRACTOR, anyone directly or indirectly employed by him or anyone for whose acts he may be liable, in any way associated or connected with the performance of the obligations herein, in whatever manner the same may be caused, and whether or not the same be caused by or arise out of the joint, concurrent or

contributory negligence of the OWNER, its officers, agents, servants, or employees. The foregoing indemnity shall include, but not be limited to, court costs, attorney fees, costs of investigation, costs of defense, settlements and judgments associated with such claims, suits or actions.

10. INSURANCE

CONTRACTOR, at his expense, shall procure and maintain during the term of this Agreement insurance in accordance with the requirements in **Exhibit B** attached hereto and made a part hereof. The provisions herein requiring the CONTRACTOR to carry said insurance shall not be construed as in any manner waiving, relieving or restricting the liability of the CONTRACTOR as to any obligations imposed under this Agreement.

11. LAWS, RULES, REGULATIONS, CODES AND ORDINANCES

CONTRACTOR shall comply at all times with all Federal, State, County, and Municipal laws, ordinances and regulations that in any manner affect the Agreement and its performance. He shall comply with all such laws, ordinances and regulations applicable to the work, including obtaining permits and licenses, disposing of debris resulting from the work, inspection of equipment and licensing members of the crew. CONTRACTOR shall require all of his agents and employees to observe and comply with the said laws, ordinances and regulations, and the CONTRACTOR expressly binds himself to defend, indemnify and save harmless the OWNER and its officers, agents, servants and employees from and against all claims, demands, suits or actions of every kind and nature presented or brought for any claim or liability arising from or based on the violation of any such law, ordinance or regulation on the part of the CONTRACTOR, or his agents, servants or employees.

It is a policy of the OWNER that employees shall not be involved with the unlawful use, possession, sale, or transfer of drugs or narcotics in any manner which may impair an individual's ability to perform assigned duties or otherwise adversely affect the OWNER's business interests; and further, that employees shall not possess alcoholic beverages in the work place or consume alcoholic beverages in association with working hours. This policy will apply to all persons performing work for the OWNER or visiting OWNER property.

12. SUBROGATION

This Agreement is considered one for the personal services of the CONTRACTOR, and the CONTRACTOR shall not subcontract the whole or part of the work to others without the prior written consent of the OWNER. This Agreement shall inure to and be binding upon the successors and assigns of the parties hereto, but the CONTRACTOR shall not assign, directly or indirectly, this Agreement or any of his rights or performance obligations without prior written consent of the OWNER.

13. WORK ON PUBLIC RIGHTS-OF-WAY AND PRIVATE PROPERTY

The CONTRACTOR shall be responsible for the preservation of all public and private property along and adjacent to the work, including roads, walks, fences, utility lines, landscaping, pipes, conduits, etc., whether above ground or underground, and shall use every precaution necessary to prevent damage or injury thereto. When or where any direct or indirect damage or injury is done to such public or private property by or on account of any act or omission of the CONTRACTOR in the performance of the work, such property shall be restored by the CONTRACTOR at his/her expense to a condition substantially equal

to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring same.

14. PRICE SCHEDULE AND WORK RULES

This contract includes lump sum, unit pricing and time and material bid items. For lump sum and unit pricing, CONTRACTOR agrees to furnish labor, equipment, and supervision, and the OWNER agrees to pay for same, in accordance with the unit prices and lump sums listed in the attached **Bid Proposal Form**. All work performed shall conform to the work rules set forth in **Exhibit A**, attached hereto and made apart hereof.

In cases where the unit prices do not adequately describe or cover the work proposed, work will be performed on a time and material basis as defined in Section 2 of the attached **Bid Proposal Form**. All work performed shall conform to the work rules set forth in **Exhibit A**, attached hereto and made apart hereof.

15. PUBLIC WORKS AND PAYMENT OF PREVAILING WAGE

A. Contractor/General Requirements

- i. CONTRACTOR shall comply with state prevailing wage law, Chapter 1 of Part 7 of Division 2 of the Labor Code, commencing with Section 1720 and Title 8, California Code of Regulations, Chapter 8, Subchapter 3, commencing with Section 16000, for any "public works" (as that term is defined in the statutes) performed on the Project funded by this Agreement. For purpose of compliance with prevailing wage law, the Contractor shall comply with provisions applicable to an awarding body. Compliance with state prevailing wage law includes without limitation: payment of at least prevailing wage as applicable; overtime and working hour requirements; apprenticeship obligations; payroll recordkeeping requirements; and other obligations as required by law.
- ii. CONTRACTOR shall certify to the OWNER on each monthly invoice, that prevailing wages were paid to eligible workers who provided labor for work covered by the invoice and that the Contractor and all subcontractors complied with prevailing wage laws. Prior to the release of any retained funds under this Agreement, the CONTRACTOR shall submit to the District a certificate signed by the CONTRACTOR and all subcontractors performing public works activities stating that prevailing wages were paid as required by law.

B. Flowdown Requirements

CONTRACTOR shall ensure that all agreements with its subcontractors to perform work related to this Program contain the following provisions:

- i. CONTRACTOR shall comply with state prevailing wage law, Chapter 1 of Part 7 of Division 2 of the Labor Code, commencing with Section 1720; and Title 8, California Code of Regulations, Chapter 8, Subchapter 3, commencing with Section 16000, for all installation, repair or maintenance work performed under the contract. CONTRACTOR's obligations under prevailing wage laws include without limitation:

pay at least the applicable prevailing wage for public works activities performed on the Project; comply with overtime and working hour requirements; comply with apprenticeship obligations; comply with payroll recordkeeping requirements; and comply with other obligations as required by law.

- ii. CONTRACTOR shall ensure that the above requirements are included in all its contracts and any layer of subcontracts for activities for the Project.

16. EQUIPMENT RENTAL

The CONTRACTOR agrees to furnish tools, equipment, and transportation to accomplish the assigned work and that such tools, equipment and transportation shall be included in the unit prices listed in the attached **Bid Proposal Form**. OWNER agrees to pay for same in accordance with the unit prices listed in the attached **Bid Proposal Form**. All work shall conform to the work rules set forth in **Exhibit A**, attached hereto and made apart hereof.

17. TERMS OF ACCOUNT AND PAYMENT

OWNER agrees to pay for the work in accordance with the prices listed in the attached exhibits. OWNER agrees to pay for the work within forty five (45) days upon receipt of the invoice, provided the work being invoiced has been completed to the satisfaction of OWNER. The Basis of Charges under this Agreement set forth in the **Bid Proposal Form**, attached hereto and made a part hereof. The Basis of Charges shall be effective for the period beginning on the Effective Date shown on the attached **Bid Proposal Form** for a period of one (1) year.

All Federal, State and other governmental division taxes, including sales or use taxes, and all taxes or contributions for unemployment compensation, social security, and similar laws applicable to the CONTRACTOR and his employees shall be included in the unit prices included in the attached **Bid Proposal Form** and the OWNER shall not be liable for additional charges because of such taxes or contributions.

The CONTRACTOR shall prepare and submit a summary of the work performed during each calendar week, on a standard form to be provided by the OWNER. The summary shall be submitted to the OWNER no later than Tuesday of the week following the week covered by the summary. The summary shall set forth:

- a) The location of work performed (by Job/Map number or name of street, road, property owner, work request number, or similar identification);
- b) If work is performed at more than one location during that week, then the number of hours or days worked at each location;
- c) The name, job classification, rate of pay and number of hours worked by each employee;
- d) Each item of equipment utilized during that week, the hourly rate and the number of hours of operation of each item of equipment.

18. REVISION OF CONTRACT SPECIFICATIONS AND EXHIBITS

The parties may by mutual agreement, and without the necessity of a formal amendment to the Agreement, make modifications to the Basis of Charges, Work Rules, Insurance Requirements and Specifications by preparing substitutes for EXHIBITS. Each substitute EXHIBIT shall be identified by the effective date of the substitute EXHIBIT and shall be signed by authorized personnel of the parties.

Thereupon, such substitute EXHIBIT shall, on its effective date, automatically supersede all previous EXHIBITS of the same category and become a part of this Agreement by reference.

19. TERM OF CONTRACT

The term of this Agreement shall remain in effect until terminated for convenience (a) by the OWNER by giving seven (7) days written notice thereof to the CONTRACTOR or (b) by the CONTRACTOR by giving thirty (30) days written notice thereof to the OWNER, with termination to occur at the end of the notice period or at a later date as stated in the notice. In the event of a termination hereunder, the CONTRACTOR will be paid for all work performed to the date of termination, but will not be paid for any work not performed or for any anticipated profits on work not performed or for any loss or damage with respect to any equipment or materials purchased for anticipated use in the work or for payments, taxes or benefits to or for personnel anticipated to be employed in the performance of the work.

The CONTRACTOR shall adhere to the project duration detailed in **Table 1**, which consists of completion within **80 working days from Notice to Proceed**.

TABLE 1: MILESTONE SCHEDULE

Milestone	Anticipated Completion
Project Awarded	August 14, 2018
Notice to Proceed (NTP)	September 2018
Submittals and Mobilization	4 weeks from NTP
Complete Installation per region ^{a)} as follows: 1. Silverstrand 2. Hollywood By the Sea 3. Hollywood Beach 4. Commercial Route	12 weeks from mobilization

NOTES:

a) Regions are designated on the service area figure provided as **Exhibit D**.

20. LIQUIDATED DAMAGES

CONTRACTOR and OWNER recognize that time is of the essence and that OWNER will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Section 19, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, CONTRACTOR and OWNER agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay Owner **\$500 for each day** that expires after the time (as duly adjusted pursuant to the Contract) specified in Section 19 until the Work is complete.

21. WARRANTY

CONTRACTOR warrants and guarantees that all work performed hereunder shall be free from defects in workmanship and shall be performed in a timely, safe, and professional manner and in accordance with all specifications, plans, and instructions, and all applicable laws, ordinances, regulations, industry codes and all terms and conditions of this Agreement.

CONTRACTOR'S warranty and guarantee hereunder excludes defects or damage caused by:

- a) Abuse, modification, or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors, Suppliers, or any other individual or entity for whom CONTRACTOR is responsible;

OR

- b) Normal wear and tear under normal usage.

22. CORRECTION PERIOD

If within one year after the date of Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for CONTRACTOR'S use by OWNER or permitted by Laws and Regulations is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER'S written instructions:

- a) Repair such defective land or areas; or
- b) Correct such defective Work; or
- c) If the defective Work has been rejected by OWNER, remove it from the Project and replace it with Work that is not defective, and
- d) Satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

If CONTRACTOR does not promptly comply with the terms of OWNER'S written instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

Contractor's obligations are in addition to any other obligation or warranty. These provisions shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

23. COUNTERPARTS

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which shall constitute but one and the same instrument.

24. NO WAIVER

OWNER's failure to insist on performance of any term, condition, or instruction, or to exercise any right or privilege included in this Agreement, or its waiver of any breach, shall not thereafter waive any such term, condition, instruction, right, privilege, or breach. No waiver by OWNER of any breach of any provision of this Agreement shall be effective unless expressly set forth in writing and signed by OWNER's representative.

25. ENTIRE AGREEMENT

This Agreement and its EXHIBITS embody the entire agreement between CONTRACTOR and OWNER concerning the subject matter hereof. The parties shall not be bound by or be liable for any statement, representation, promise, inducement, or understanding of any kind or nature not set forth herein. Except as otherwise provided herein, no changes, modifications, or amendments of any of the terms and conditions hereof shall be valid unless agreed to by the parties in writing and signed by their authorized representatives.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers on the day and date first written above.

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

ATTEST:

SIGNATURE: _____.

NAME: _____.

TITLE: _____.

DATE: _____.

CONTRACTOR

ATTEST:

SIGNATURE: _____.

NAME: _____.

TITLE: _____.

DATE: _____.

**EXHIBIT A
WORK RULES**

1. REGULAR WORK PERIOD

The Regular Work Week shall be a forty (40) hour week consisting of five (5) - eight (8) hour days, Monday through Friday, or as designated by the OWNER. The Regular Work Day shall be between the hours of 8:30 AM and 4:30 PM, or as designated by the OWNER.

2. OVERTIME

If a crew is required by the OWNER to work outside of the regular work week period and hours for OWNER's convenience, the OWNER shall be charged based on applicable prevailing wage overtime rates as defined in Section 2 of the **Bid Proposal Form**.

3. HOLIDAYS

The following holidays will be observed: New Year's Day, Martin Luther King's Birthday, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day following Thanksgiving, Christmas Day and the day following Christmas Day. Holidays shall be observed by the CONTRACTOR on the same days as observed by the OWNER.

If a crew is required by the OWNER to work on a holiday for OWNER's convenience, the OWNER shall be charged based on applicable prevailing wage holiday rates as defined in Section 2 of the **Bid Proposal Form**.

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

ATTEST:

SIGNATURE: _____.

NAME: _____.

TITLE: _____.

DATE: _____.

CONTRACTOR

ATTEST:

SIGNATURE: _____.

NAME: _____.

TITLE: _____.

DATE: _____.

EXHIBIT B
INSURANCE REQUIREMENTS

The CONTRACTOR shall purchase from and maintain in a company or companies lawfully authorized to do business in the State of California such insurance as will protect the CONTRACTOR and the OWNER from claims set forth below which may arise out of or result from the CONTRACTOR's operations under this agreement:

- Claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts that are applicable to the Work to be performed;
- Claims for damages because of bodily injury, occupational sickness or disease, or death of the CONTRACTOR's employees;
- Claims for damages because of bodily injury, sickness or disease, or death of any person other than the CONTRACTOR's employees;
- Claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result or an offense directly or indirectly related to employment of such person by the CONTRACTOR, or (2) by another person;
- Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting there from; and
- Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle.

The CONTRACTOR shall takeout and maintain throughout the period of this Agreement the following types and minimum amounts of insurance:

1. Workers' compensation and employers' liability insurance, as required by law, covering all its employees who perform any of the obligations of the CONTRACTOR under this Agreement, and Employer's Liability with a minimum limit of \$100,000 per person.
2. Public liability insurance covering all operations under the contract shall have limits for bodily injury or death of not less than \$2 million each occurrence, limits for property damage of not less than \$1 million each occurrence, and \$1 million aggregate for accidents during the policy period. A single limit of \$2 million of bodily injury and property damage is acceptable. This required insurance may be in a policy or policies of insurance, primary and excess including the umbrella or catastrophe form.
3. Automobile liability insurance on all motor vehicles used in connection with the Agreement, whether owned, non-owned, or hired, shall have limits for bodily injury or death of not less than \$1 million per person and \$1 million each occurrence and property damage limits of \$1 million for each occurrence. A single limit of \$1 million of bodily injury and property damage is acceptable. This required insurance may be in a policy or policies of insurance, primary and excess including the umbrella or catastrophe form.

- The OWNER and OWNER'S ENGINEER shall be named as Additional insured on all policies of insurance required in subparagraphs "1" and "2" of this Section and shall receive an express waiver of subrogation as to those policies. The policies of insurance shall be in such form and issued by such insurer as shall be satisfactory to the OWNER. The CONTRACTOR shall furnish the OWNER a certificate evidencing compliance with the foregoing requirements that shall provide not less than 30 days prior written notice to the OWNER of any cancellation or material change in the insurance.

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

ATTEST:

SIGNATURE: _____.

NAME: _____.

TITLE: _____.

DATE: _____.

CONTRACTOR

ATTEST:

SIGNATURE: _____.

NAME: _____.

TITLE: _____.

DATE: _____.

EXHIBIT C
INSTALLATION SPECIFICATIONS AND PROJECT REQUIREMENTS

1. WATER METER INSTALLATION

A. Scope

Within 30 days of receiving notice to proceed, the selected Contractor shall submit a project schedule identifying the work flow by route / location, expected time required to complete the work, and meter density analysis (determined using the District's meter location maps provided in **Appendix D**). The routing shall be consistent with the order identified in the *Agreement for Water Meter Replacement and AMI Installation*, Section 19, provided herein.

The new meters, lids, adapters and gaskets are being provided by the District. The selected contractor is responsible for installing miscellaneous fittings and materials and conducting meter and AMI module installation. The District will provide GPS coordinates and addresses for all meter installations, and the Contractor will electronically transfer readings from the existing meter, and new meter number at the time of replacement using the electronic work order management system discussed in Section 2 of this exhibit.

A 2,000 square foot staging area will be provided to the Contractor at the District's office. Contractor will be responsible for the security and storage of any equipment or materials at the staging area. The selected Contractor is responsible for pick up from the District and delivery to the project site. A map of the project area and general location of the District office is provided as **Exhibit D**.

Collect From: Channel Islands Beach Community Services District (District)
 353 Santa Monica Drive,
 Oxnard, CA 93035

Deliver To: Project Site
 Oxnard, CA 93035

B. Materials Provided by the District

1. 1,855 Water meters (sizes 3/4" to 4") w/pre-attached communication modules (See **Table 2**).
2. 1,855 ORION Cellular LTE Endpoints w/ Nicor Connector
3. Existing meter number, service address and GPS coordinates.
4. Approximately 2,000 square feet of laydown storage area within the fenced storage area of the District headquarters. Contractor will be responsible for security of any materials stored by the Contractor at the site and will have access during working hours.
5. District contact person to assist in finding locations of "hard to find" meter boxes.
6. 1,799 pre-cored meter box lids; Nicor, Armorcast, or equal (See **Table 3**).
7. A23 brass adapters, as needed.
8. Replacement isolation valves and concrete meter boxes, as needed.

9. Doorhangers for notifying customers.

TABLE 2: METER SIZES AND QUANTITY

Meter Size (Inches)	Quantity	Location (In Meter Box, Vault or Above Ground)	Model
¾	1,725	1,725 – Meter Boxes	Badger Meter E-35 ¾" x 7.5" Ultra-Sonic 316 Stainless Steel w/ HRE-LCD Encoder Cu.Ft., w/ Nicor Connector
1	69	68– Meter Boxes 1 – Vault	Badger Meter E-35 1" x 10.75" Ultra-Sonic 316 Stainless Steel w/ HRE-LCD Encoder Cu.Ft., w/ Nicor Connector
1 ½	17	16 – Meter Boxes 1– Above Ground	Badger Meter E-35 1.5" x 13" Ultra-Sonic 316 Stainless Steel w/ HRE-LCD Encoder Cu.Ft., w/ Nicor Connector
2	27	27 – Meter Boxes	Badger Meter E-35 2" x 17" Ultra-Sonic 316 Stainless Steel w/ HRE-LCD Encoder Cu.Ft., w/ Nicor Connector
3	17	9 – Meter Boxes 5 – Vault 3 – Above Ground	Elster 3" evoQ4 MagMeter w/ Field Replaceable Battery w/Sensus Protocol, w/ Nicor Connector
4	9	1 – Meter Boxes 1 – Vault 7 – Above Ground	Elster 4" evoQ4 MagMeter w/ Field Replaceable Battery w/Sensus Protocol, w/ Nicor Connector
Total	1,864		

NOTES: Location of each meter and its size is provided in **Exhibit D**.

TABLE 3: LID SIZES AND METER BOX DIMENSIONS

Dimensions (Inches)	Meter Box	Quantity
15.5 x 10.25	36 / 3.5	936
18 x 11	37 / 4.5	804
23.25 x 13.25	38 / 5.25	39
30.25 x 17.25	66 / 5.5	20
	Total	1,799

NOTES: Quantities are approximate. Final values will be determined by the Contractor in the field.

C. Materials Provided by the Contractor

1. Electronic work order management system per Section 2 below, to record field data, for capturing meter exchange information and new meter serial numbers.

D. Contractor Minimum Requirements

1. Must have experience with Badger-specific AMI or AMR installation / exchanges. Provide three (3) references of past projects of similar size.
2. Provide example (i.e. screenshot) of work order management system. Ensure data collection procedure meets requirements outlined in Section 2 below.

3. Provide information for any subcontractors and define their responsibilities for the project.

E. Site Description

The following describes the conditions for a standard installation (Sizes 4" and below only):

1. Meter box has unrestricted access (no locked gates, dogs in rear yards, etc.).
2. Meter box location is consistent with locations of adjoining residences and is not covered with landscaping or paving materials.
3. All meters are equipped with a working curb stop or shut off valve.
4. Residential and commercial meters are in an accessible water meter box less than 30" deep.
5. Meters are installed with swivel meter nuts on both sides of the meter allowing for removal and installation.
6. There is adequate room within the meter box for a contractor to work around and remove meter.
7. Meter boxes may occasionally be filled with sand, dirt or storm water which must be removed by contractor to access necessary components.
8. The DISTRICT will be performing extensive community outreach and will make every attempt to notify customers in advance.

F. Standard Water Meter Exchange

For standard installations as described above, it shall be the responsibility of the contractor to complete the following work:

1. Safely remove meter box cover and verify meter number.
2. Attempt to notify customer if they are home. If there is no answer, check to see if meter is turning. If turning, come back later or wait a few moments to see if meter stops turning.
3. Shut off water supply to meter.
4. Document information and take photos as defined in 2.J and 2.K, respectively.
5. Remove old meter, discard old meter gaskets, record pertinent data, and perform visual inspection for general condition, potential damage, malfunction, diversion or other notable issues and document findings.
6. Approximately 20% of meters include a PVC lateral. Contractor shall take care not to damage PVC lateral during meter exchange.
7. Record serial number of new meter.
8. Flush line before installing the new meter
9. Install new meter and AMI module per manufacturer specifications (Endpoint Installation Specifications provided as **Exhibit F**) and record pertinent data. Install new gaskets.
10. After new meter is installed, open water supply slowly to avoid any surge or water hammer that might cause damage. Document and confirm there are no leaks near the meter and that the meter is operating correctly.
11. Record initial reading of new meter.
12. Take clear digital photo of new meter installation and reading (with date and time stamp). See Section 2, K. for complete photo list.

13. Replace with new meter box lid.
14. When a meter exchange is completed, the contractor shall leave the premises in a reasonably close condition to which it was found with no tools, trash, large dirt piles, or other debris either on the customer's property or within the meter box. The Contractor shall return all demolished materials (i.e. lids, meter, gaskets, etc) to the District headquarters. Materials shall be separated by the end of each working day into separate piles for bronze meters, concrete lids and other materials.
15. When a meter exchange is completed all components within the meter box shall be in working order with no leaking components and the meter turning as designed. Meter box shall be free of debris or trash.
16. Meter box cover shall fit snugly and securely without pressing on the radio transmitter and without presenting any danger to pedestrians.
17. Ensure that the customer is aware that the work is complete by placing doorhanger on front door of home/business. Doorhanger to be provided by the DISTRICT.
18. Verify that new meter functions properly before leaving site, as indicated by plus sign on the meter readout screen.
19. Provide meter installation record (electronically) which contains at minimum:
 - i. Customer address, meter register number, encoder number, and AMI serial number.
 - ii. Installation site digital photos with each digital photo uniquely named including Project Number, Meter Serial ID, and a photo-set sequence number. See Section 2, K. for complete photo list.
 - iii. Water service pipe material (i.e. copper, PVC, etc.)
 - iv. Old and new meter readings.

G. Non-Standard Installations

In the event that a meter installation is found to be in non-conformance with the standard installation as described above and is in need of additional repairs or modifications to complete the meter exchange (examples may include non-working curb stops, broken or leaking pipes, collapsed meter boxes, heavy root penetration, riser installation, or where precore lids are insufficient (**Table 2** provides an estimate of meters which are located in vaults or aboveground alongside fire meters, etc.):

1. Notify a designated utility employee before conducting any work on the premises or proceeding with any work once a problem is identified. Following notification, the District and Contractor will determine if the work is to be completed as part of **Bid Item 3 Non-Standard Meter Exchange OR Bid Item 9 Additional Work**.
2. If the designated employee cannot be reached, the contractor shall return the site to, or leave the site in its original condition and continue to the next exchange. The problem and site location shall be noted in order to inform the District as soon as possible.
3. Once notified, the District may choose to complete the work at that site using its own personnel or request the contractor to make the necessary repairs at the discretion of both parties.
4. For all meter boxes in restricted access areas or back yards which do not allow easy access for installers (fenced in areas), the District may choose to conduct the exchange using its own personnel or request the contractor to complete.

2. GENERAL CONTRACTOR REQUIREMENTS

In addition to the work described above, it is required that the selected Contractor meet the following requirements and provide the following:

- A. Comply with all state and federal requirements. Contractor shall have a California Class A license.
- B. Conduct installations by route, or group of routes, based on the project schedule provided to the District within 30 days of receiving notice to proceed. Route groups should be based on geographic proximity and logistics, and neighborhood. The initial schedule shall adhere to the order of neighborhoods outlined in **Table 1** of the *Agreement for Water Meter Replacement and AMI Installation*. The District retains the right to prioritize Neighborhoods, or to reorganize priorities, both before the process begins, and during the process. Route or set of route saturation (meaning meters 100% installed or returned to District for installation exceptions) will be required prior to authorizing work to begin in another route or set of routes.
- C. Minimize service interruptions and time at customer premises.
- D. Pick-up meters, AMI modules and District-supplied items from staging location at District office, located at 353 Santa Monica Drive, Oxnard, CA 93035.
- E. Advise customer of work crew presence before work starts.
- F. Immediately notify District of any objections or concerns raised by customer.
- G. Inform customer that their water supply will be shut off for the change out (if no bypass is available).
- H. Inspect existing meter (meter and register).
- I. Notify District if meter pit plumbing requires repair prior to or following a meter change out. Do not proceed until receiving go ahead from District.
- J. Implement electronic work order management system for data collection and provide data in a format mutually agreeable between Contractor and District, in order to integrate into District's utility billing system. Document pipe material and record existing meter reading, and new meter serial number.
- K. As part of work order management system, take clear digital photos of the following (with date and time stamp):
 - a. Meter - before and after installation
 - b. Lid - before and after installation
 - c. Meter reads, meter number, and address of existing and new meter
 - d. Any signs of meter or site tampering including meter bypass. Advise the District immediately if meter is bypassed or in a tamper condition.
- L. Contractor to record location where each A23 adapter is installed and document total number of adapters installed.
- M. Retrieve equipment and materials from the designated staging location at the District office at the beginning of each work day.
- N. Each working day, return existing meters to staging location and separate out bronze and non-bronze meters. Existing concrete meter box lids should be separated from other spoils and also returned to staging area.

- O. A project manager shall be assigned by the Contractor, to interact with the District, schedule resources, manage data, and oversee all aspects of the installation for the contractor.
- P. Project manager will coordinate daily with the District on task progress.
- Q. Project manager is expected to prepare a written report of task progress each week and provide updates at a weekly meeting to be held with the District. Written report shall be prepared using a standard form provided by the District.
- R. All field personnel must be uniformed with company name decaled on all vehicles. Contractor's meter installation personnel shall wear easily recognizable uniforms displaying the Contractor's name, as well as a prominently visible identification badge.
- S. Contractor shall be responsible for restoring job site to its original condition and shall be responsible for all repairs of damages directly caused due to improper installation procedures or negligence.
- T. All costs associated with the care and protection of the work area and all necessary precautions taken to prevent damage to existing lines and contractor personnel shall be considered incidental and included in the unit price provided.
- U. All project workmanship will be to the satisfaction of the District, as stipulated by this contract and may be inspected by a District representative before approval.
- V. All subcontractors to be utilized must be included in the initial bid response along with documentation supporting their ability to complete the work required. Responsibility for the performance of the contract remains with the bidder.

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

ATTEST:

SIGNATURE: _____.

NAME: _____.

TITLE: _____.

DATE: _____.

CONTRACTOR

ATTEST:

SIGNATURE: _____.

NAME: _____.

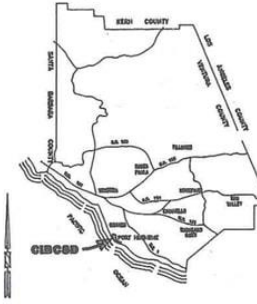
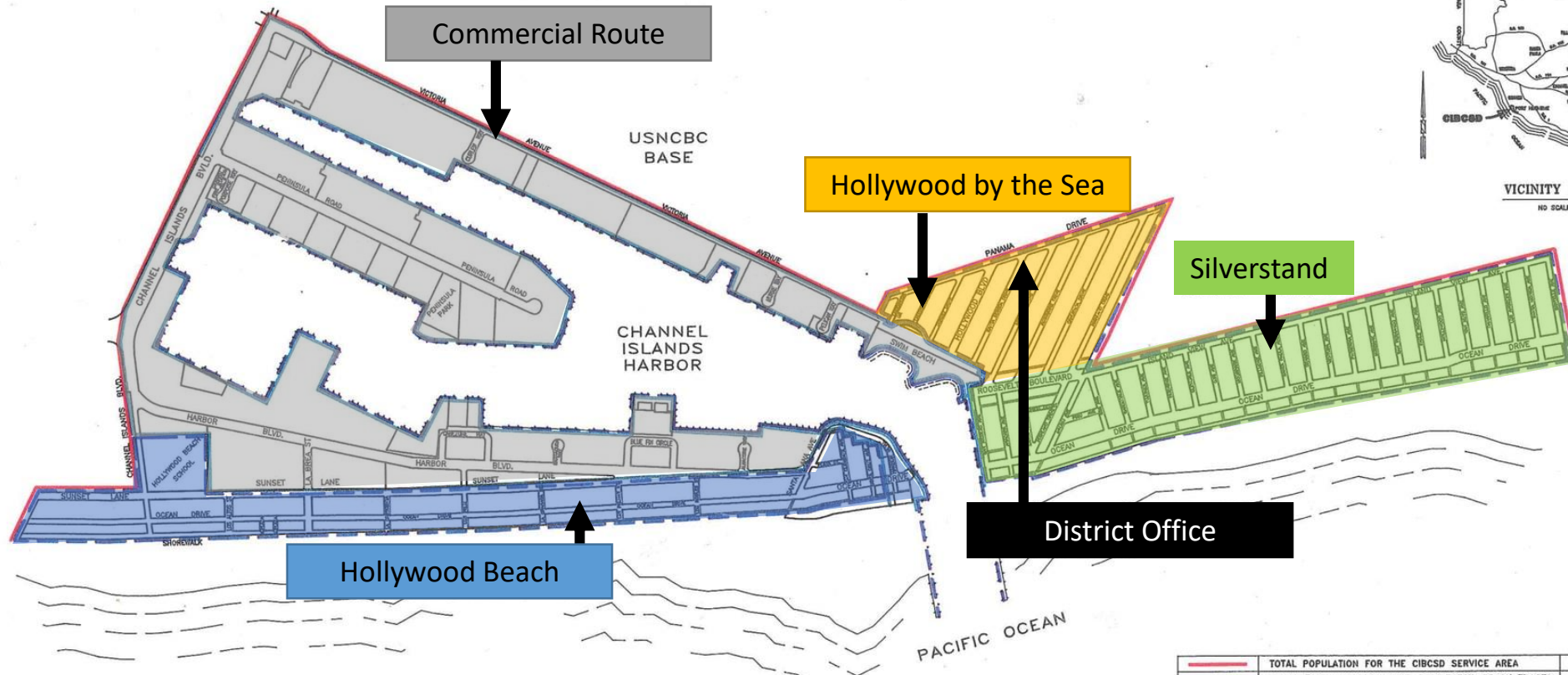
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EXHIBIT D

FIGURES

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT POLITICAL & SERVICE AREA BOUNDARY



VICINITY MAP
NO SCALE

Hollywood Beach

Commercial Route

Hollywood by the Sea

Silverstrand

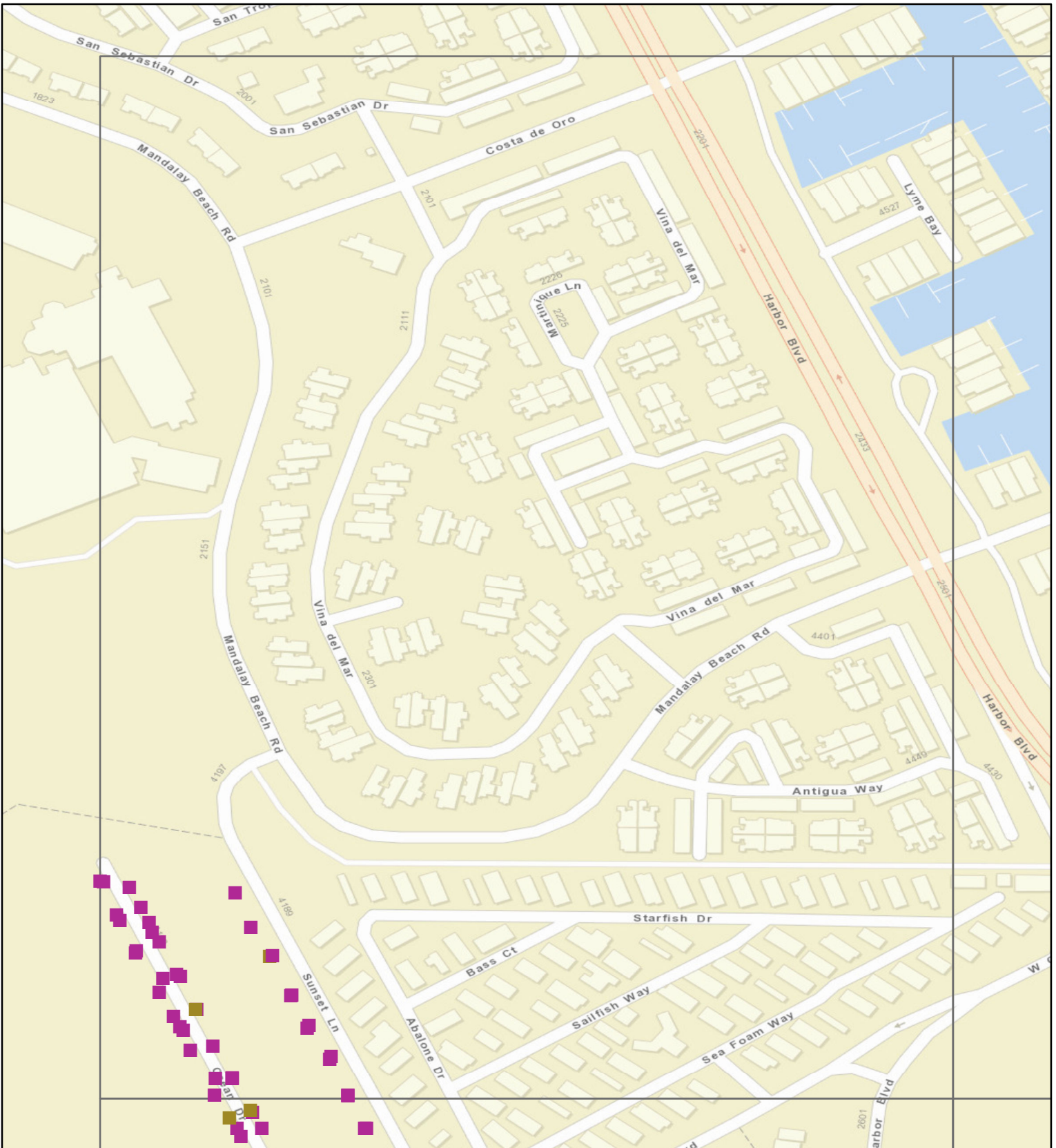
District Office

	TOTAL POPULATION FOR THE CIBCSO SERVICE AREA	9527
	POPULATION UNINCORPORATED RESIDENTIAL BEACH TRACTS (SILVER STRAND, HOLLYWOOD, HOLLYWOOD-BY-SEA)	5973
	POPULATION INCORPORATED AREAS (CITY OF OXNARD)	3554
DATED MARCH 31, 1994		

LEGEND

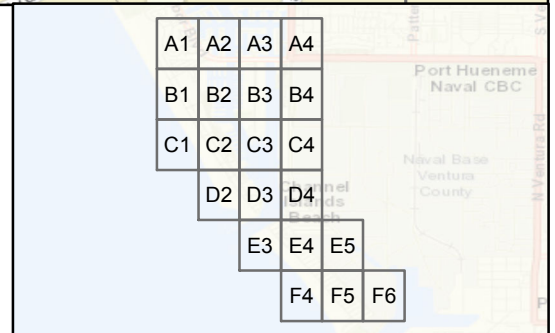
- SERVICE AREA BOUNDARY
- DISTRICT POLITICAL BOUNDARY
- CITY OF OXNARD-INCORPORATED AREAS

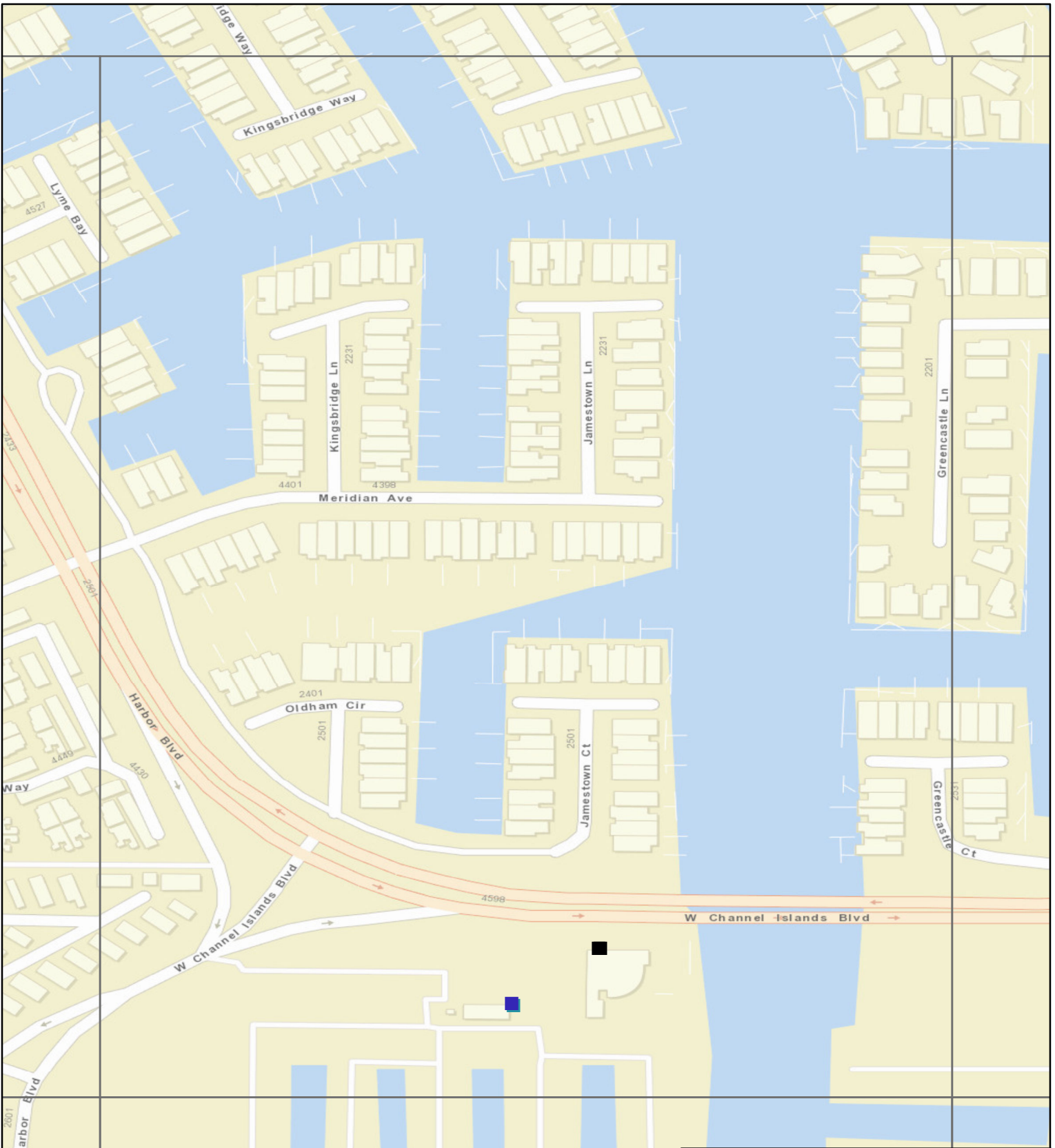




Channel Island Beach Grid - A1

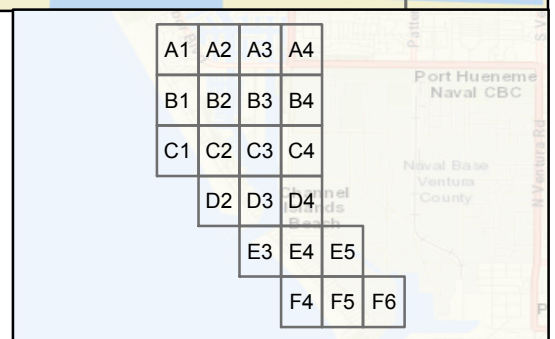
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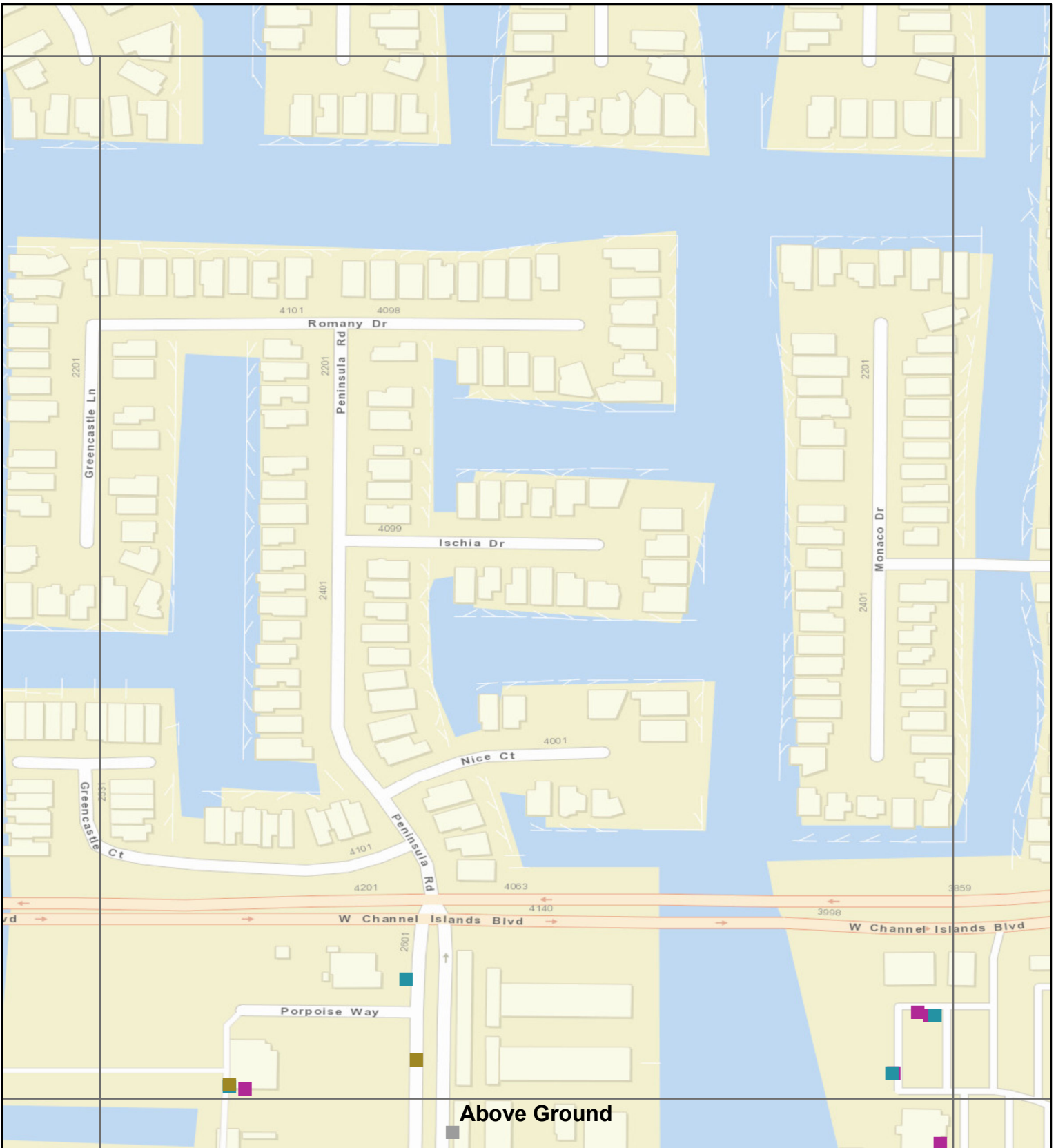




Channel Island Beach Grid - A2

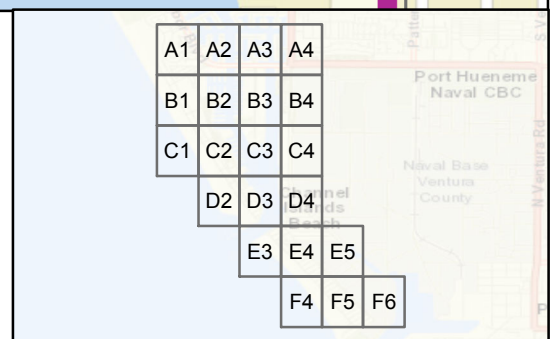
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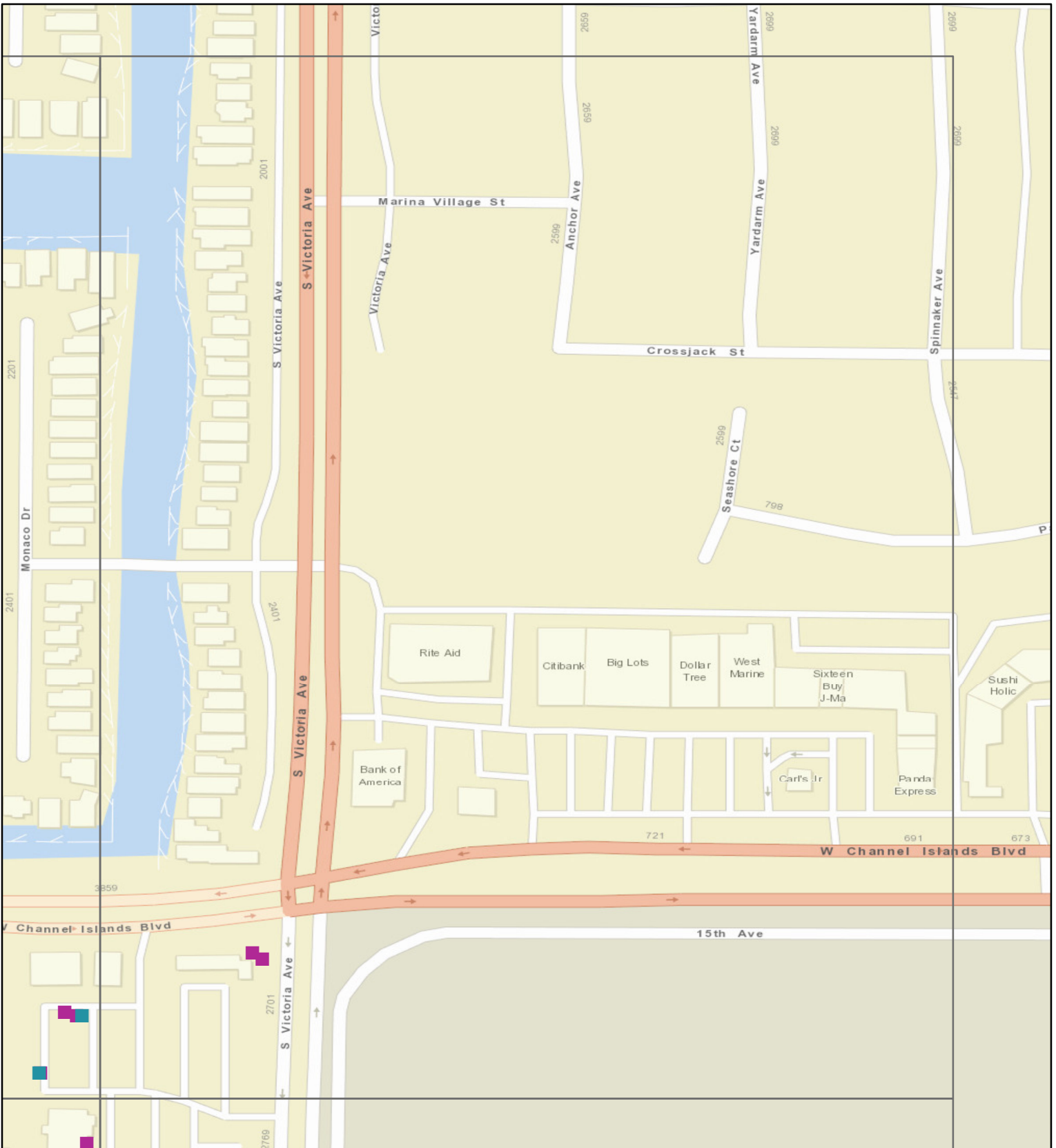




Channel Island Beach Grid - A3

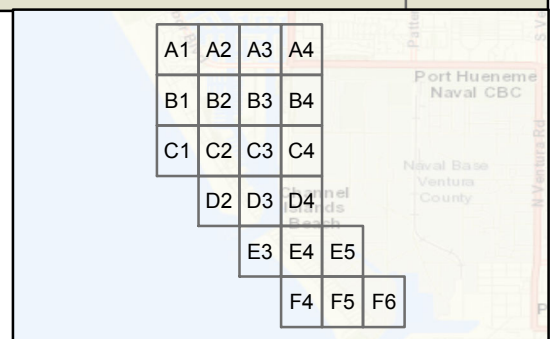
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Channel Island Beach Grid - A4

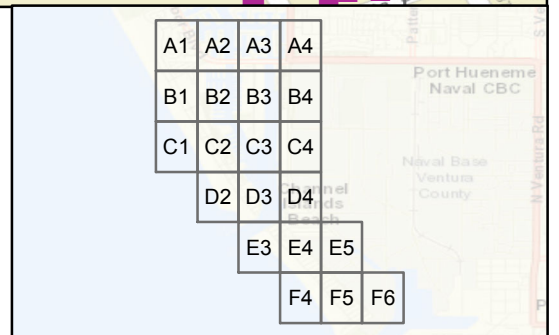
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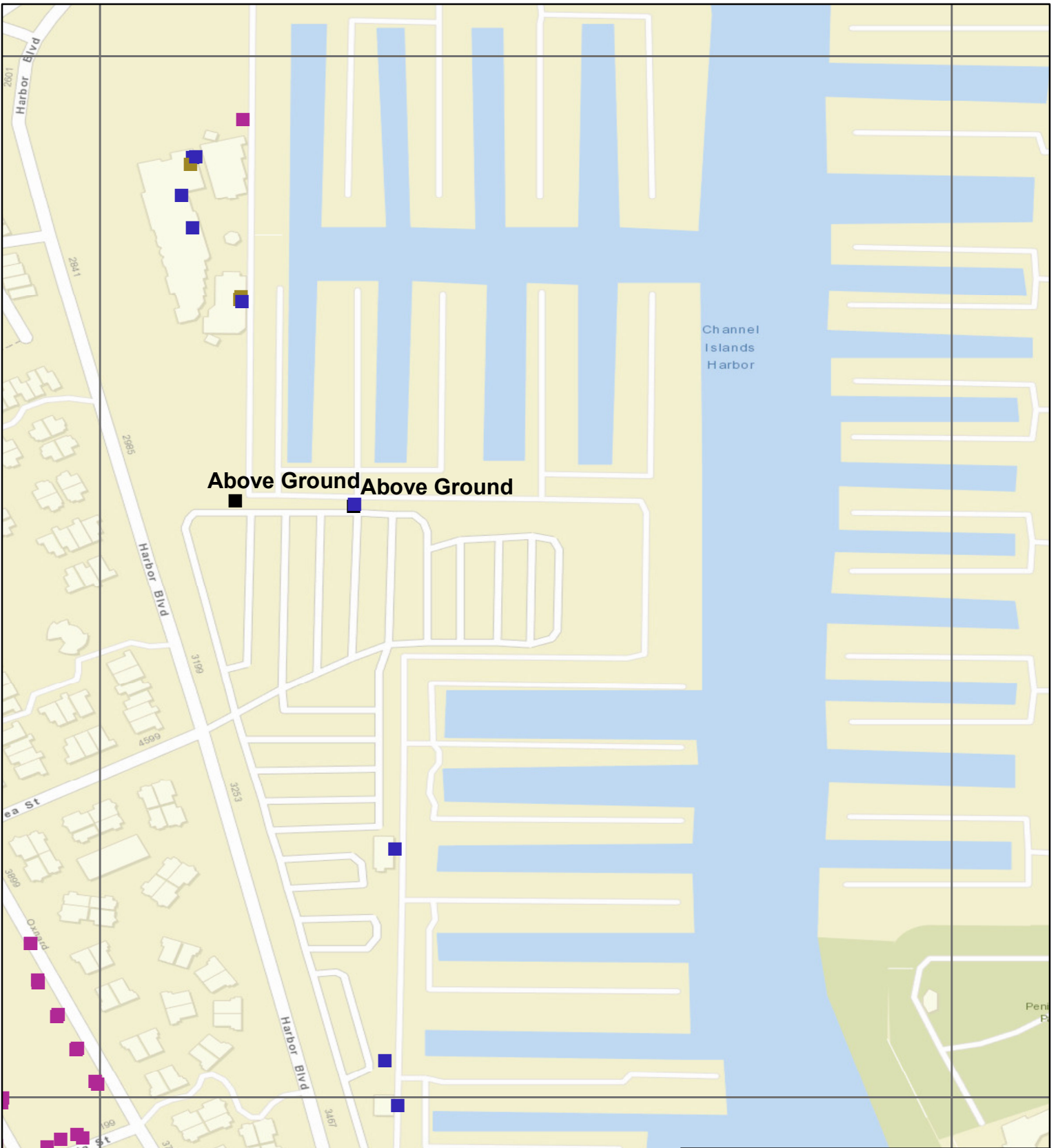




Channel Island Beach Grid - B1

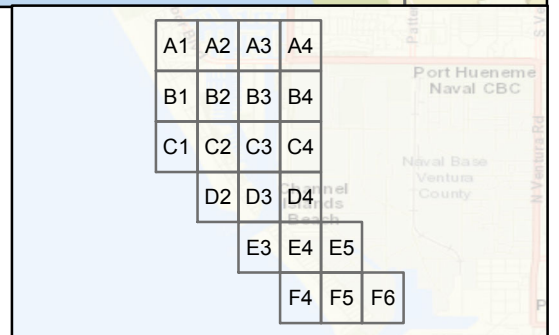
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Channel Island Beach Grid - B2

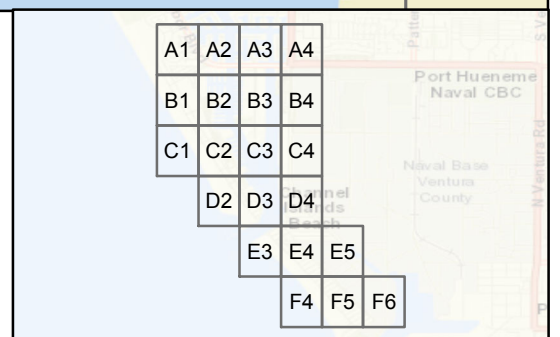
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| Size | ■ | 2" |
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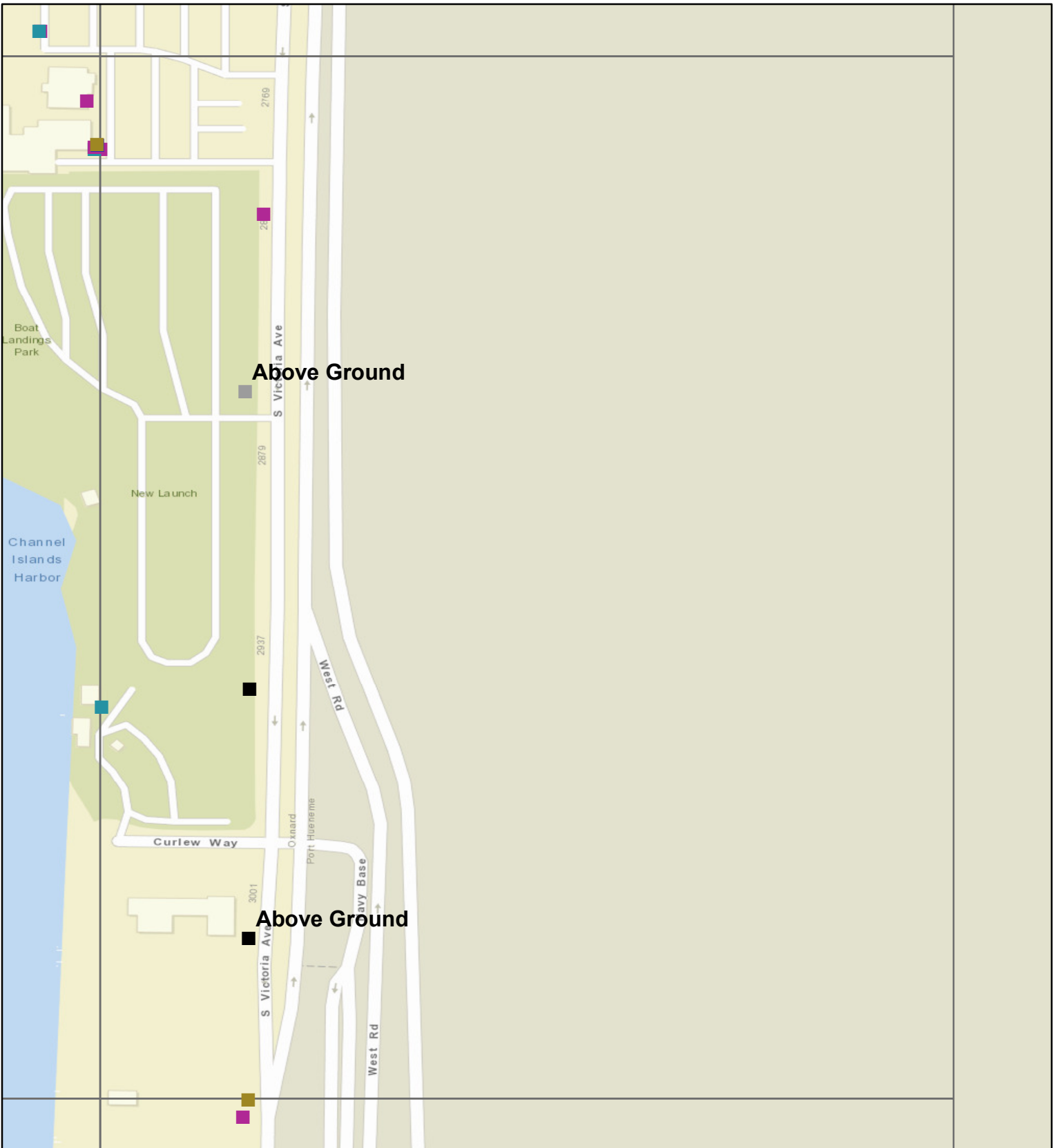




Channel Island Beach Grid - B3

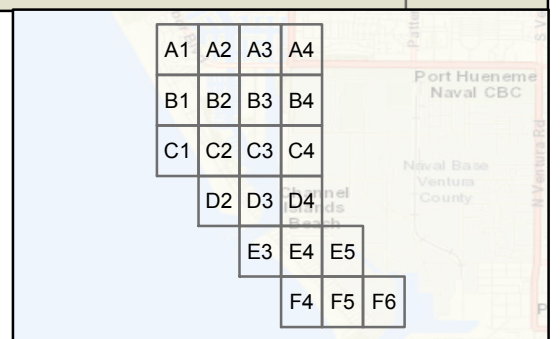
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Size	■	2"
	■	3/4"
	■	1"
	■	3"
	■	4"

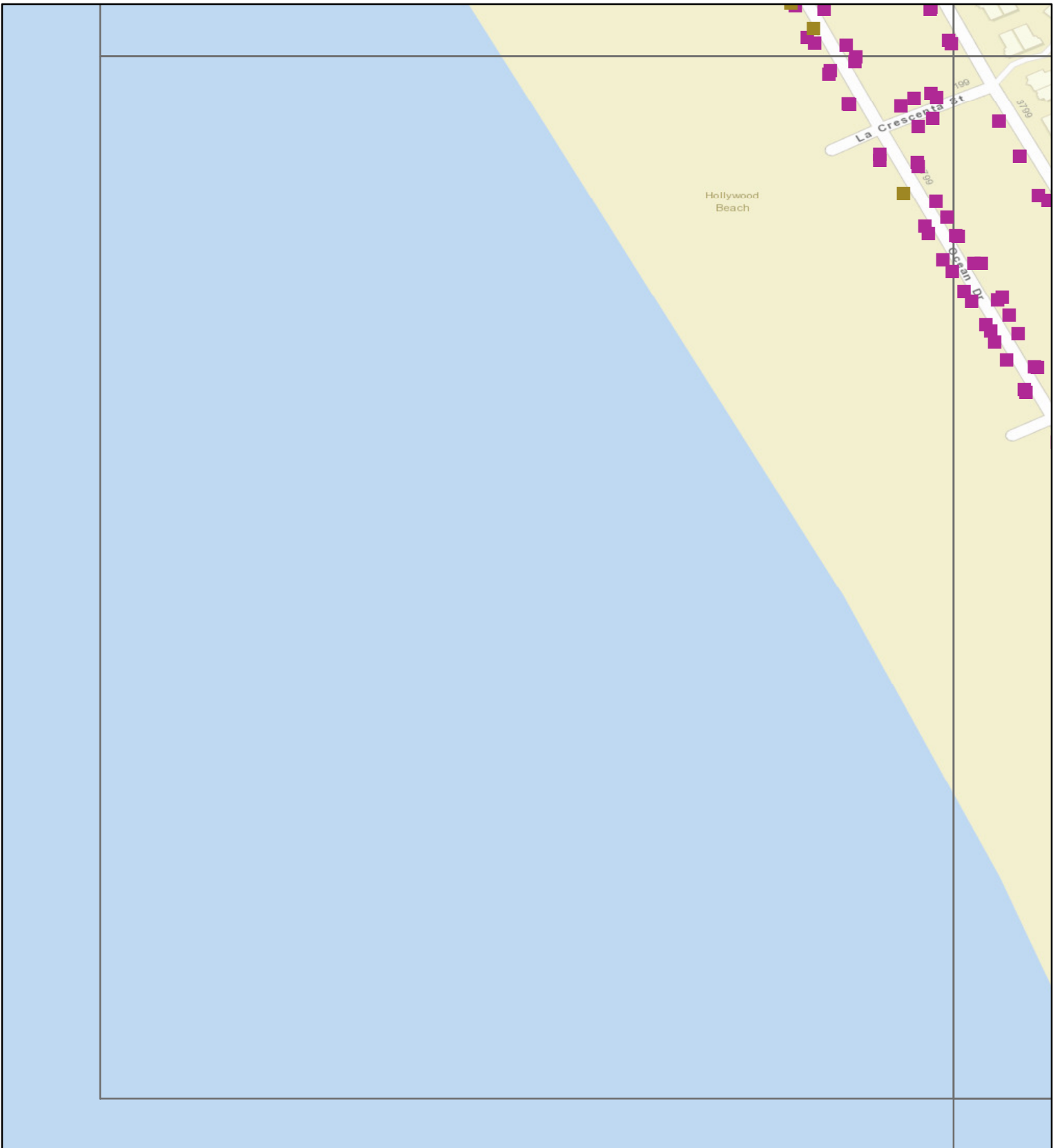




Channel Island Beach Grid - B4

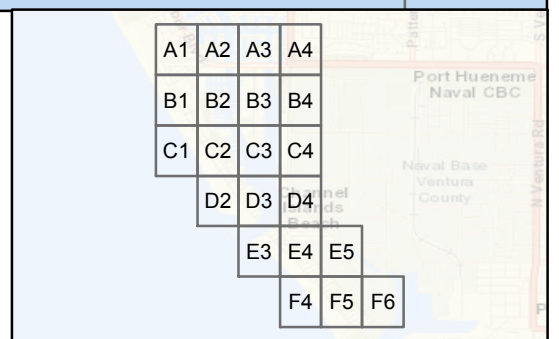
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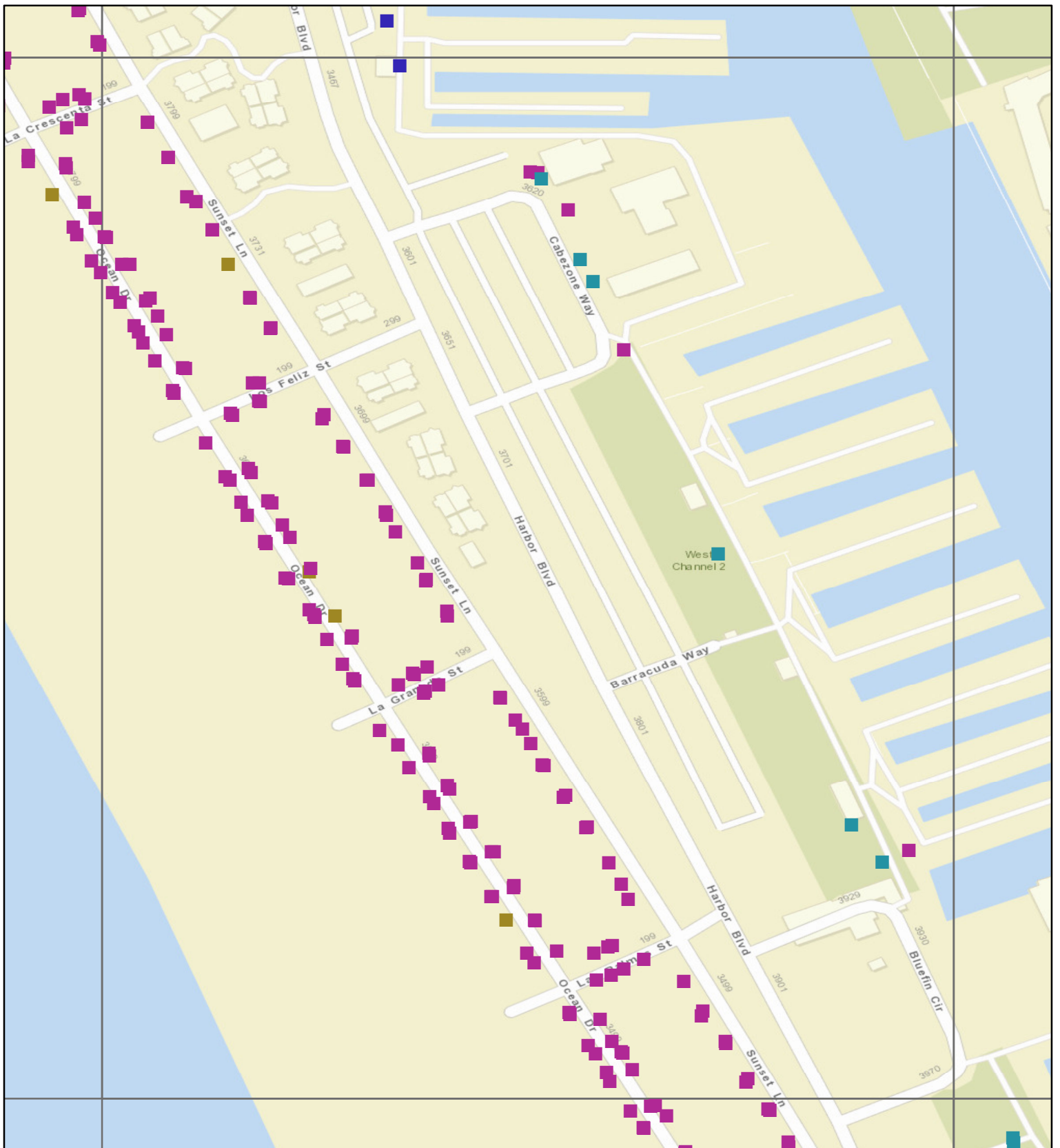




Channel Island Beach Grid - C1

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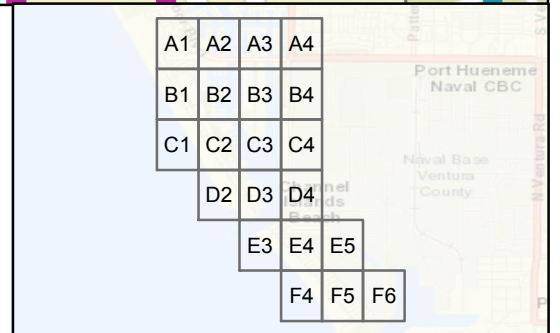




Channel Island Beach Grid - C2

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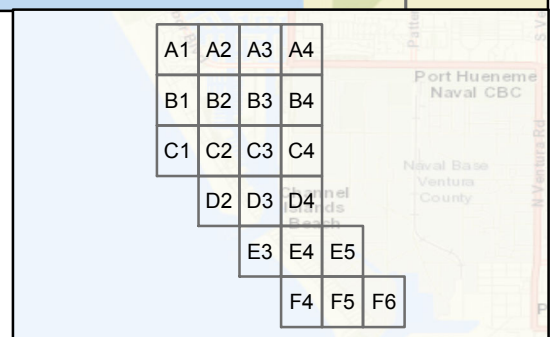
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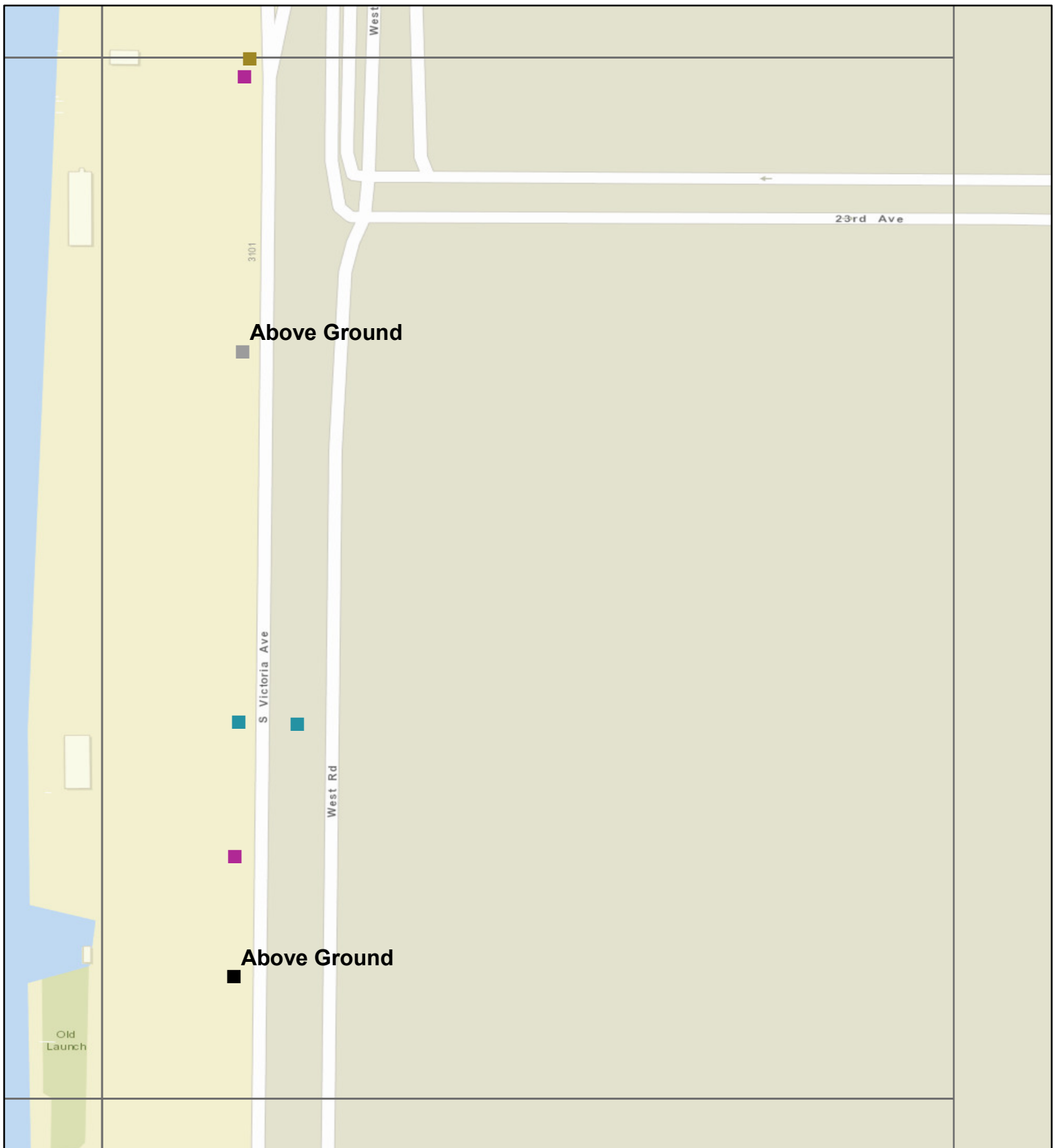










Channel Island Beach Grid - C3

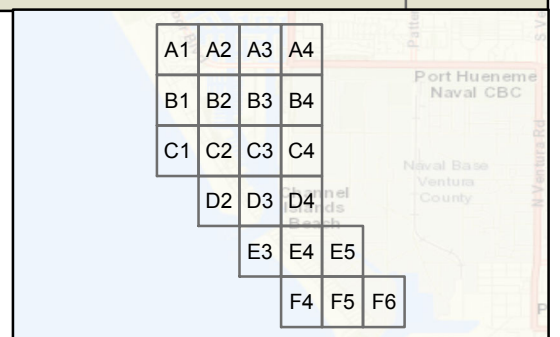
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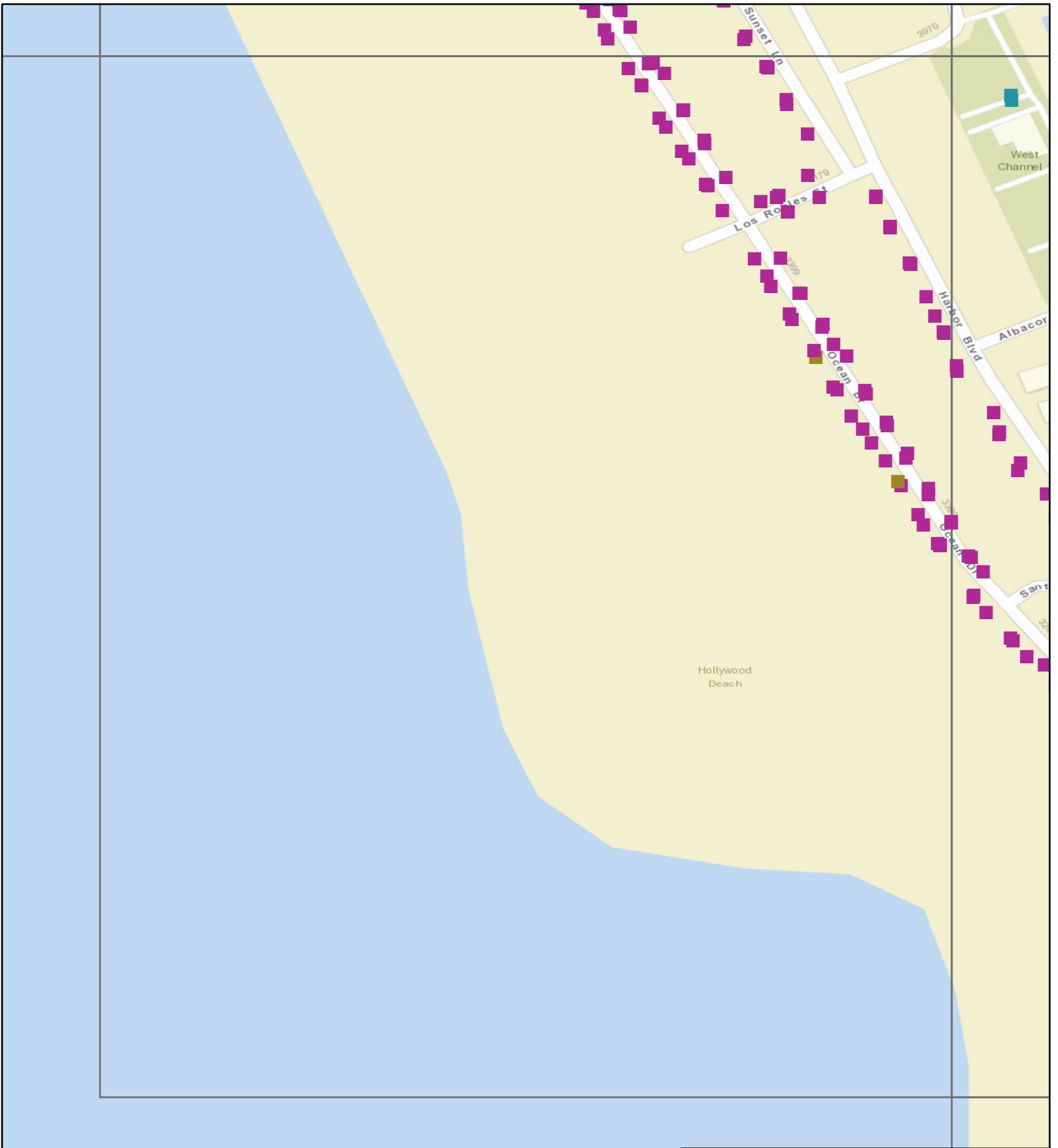




Channel Island Beach Grid - C4

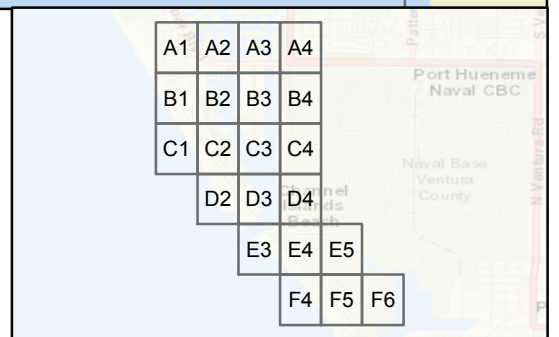
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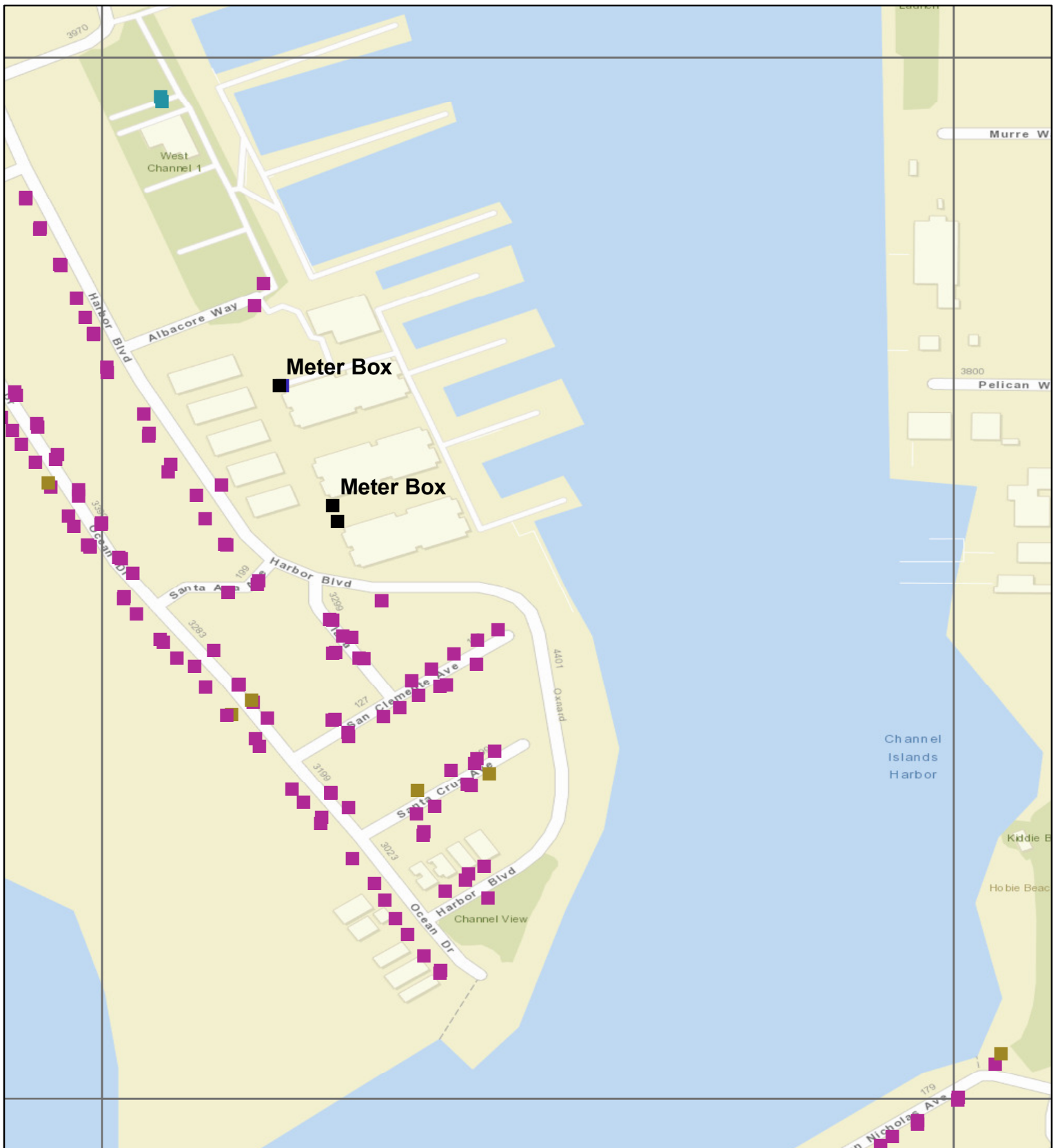




Channel Island Beach Grid - D2

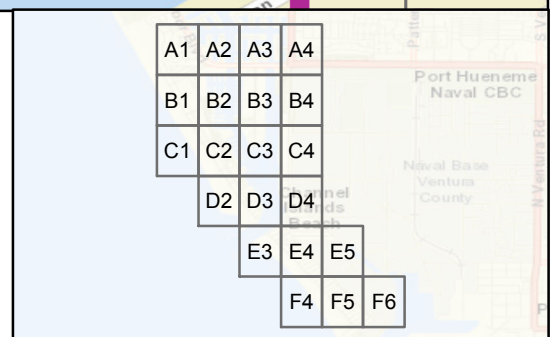
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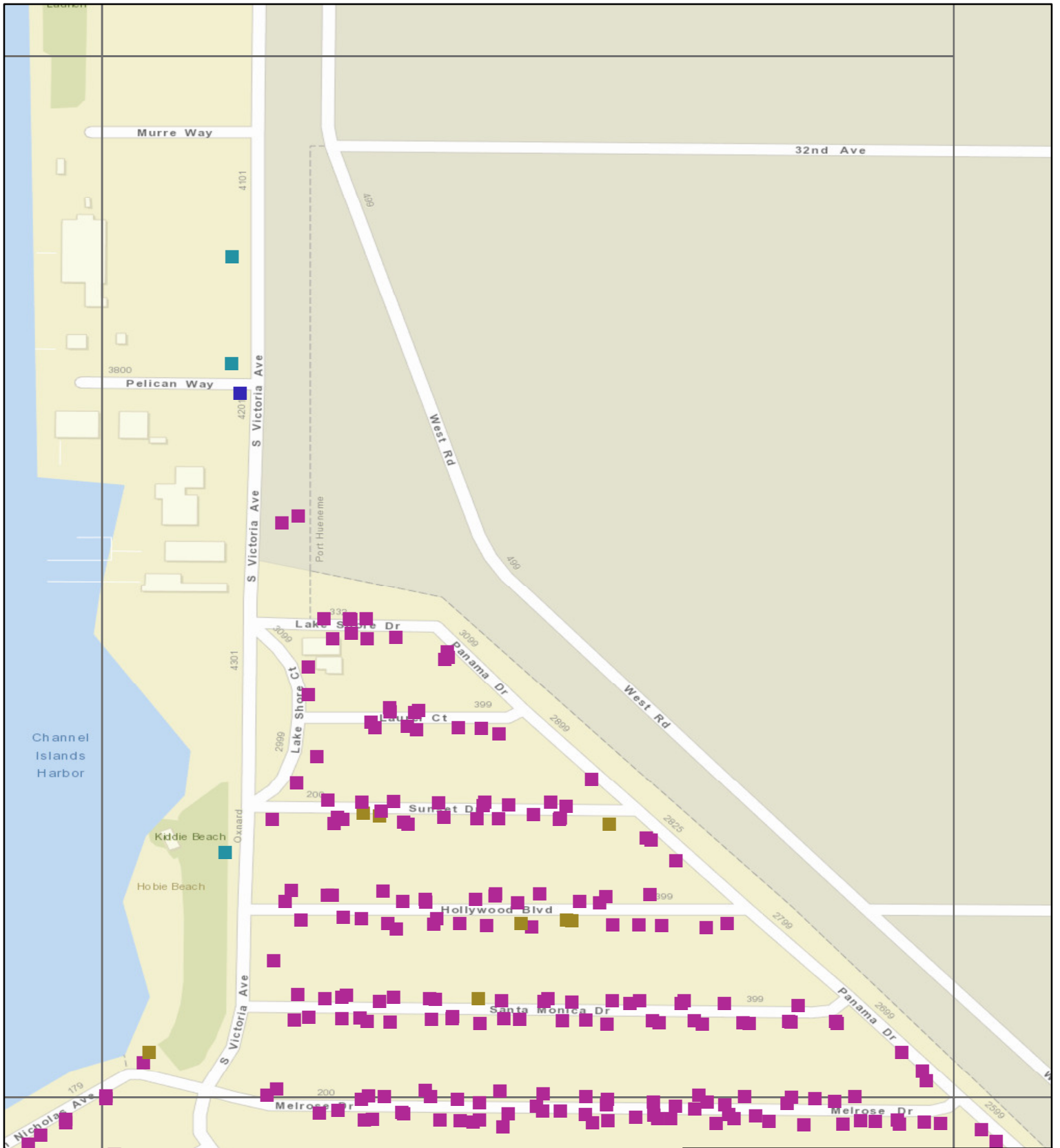




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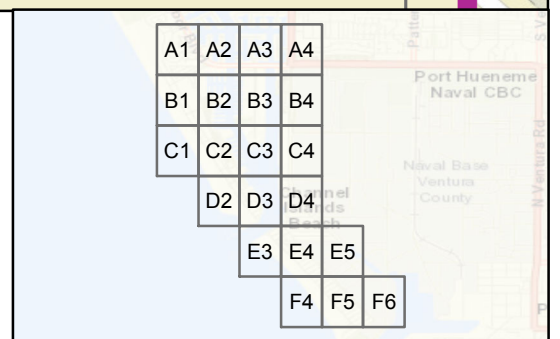
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Channel Island Beach Grid - D4

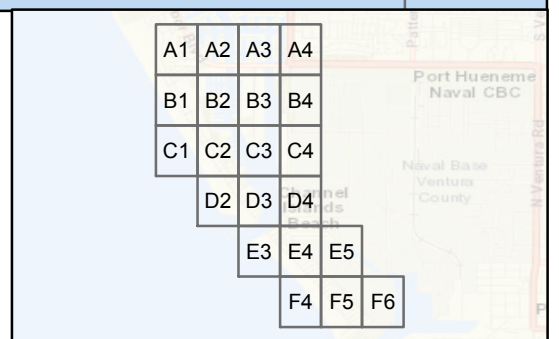
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Channel Island Beach Grid - E3

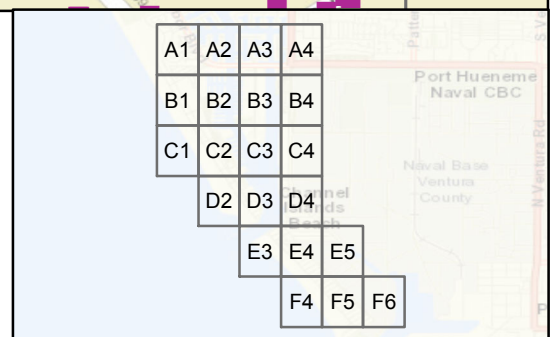
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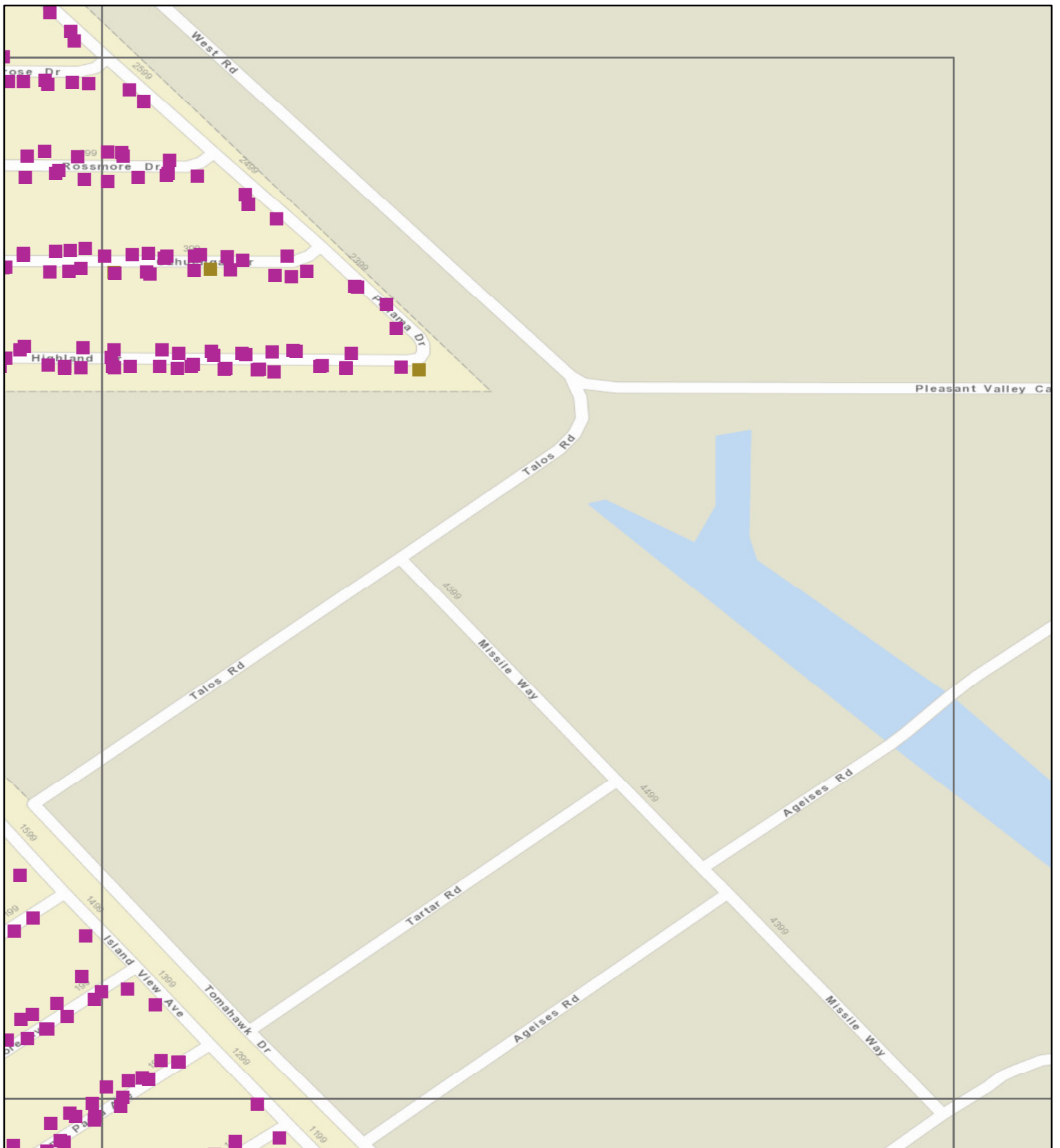




Channel Island Beach Grid - E4

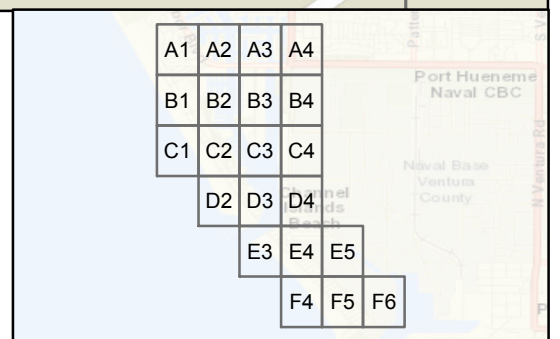
- CIBCSD Meters**
- 1.5"
 - 2"
 - 3/4"
 - 1"
 - 3"
 - 4"

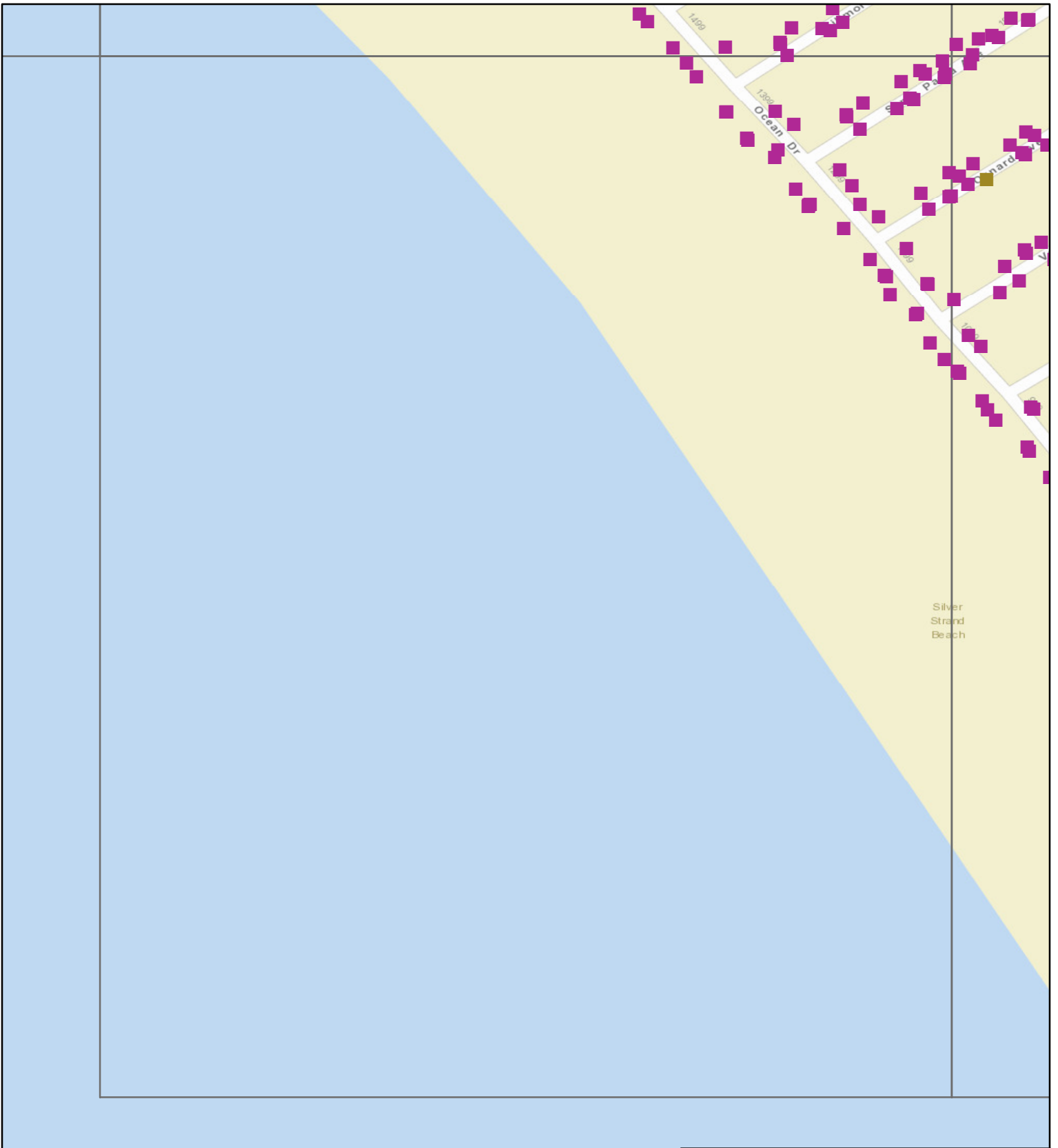




Channel Island Beach Grid - E5

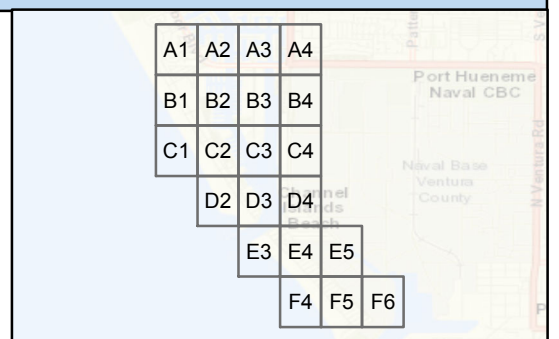
- CIBCSD Meters**
- 1.5"
 - 2"
 - 3/4"
 - 3"
 - 1"
 - 4"
- 150





Channel Island Beach Grid - F4

- CIBCSD Meters**
- 1.5"
 - 2"
 - 3/4"
 - 3"
 - 1"
 - 4"

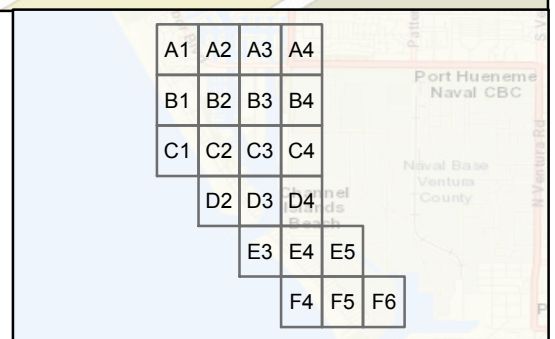


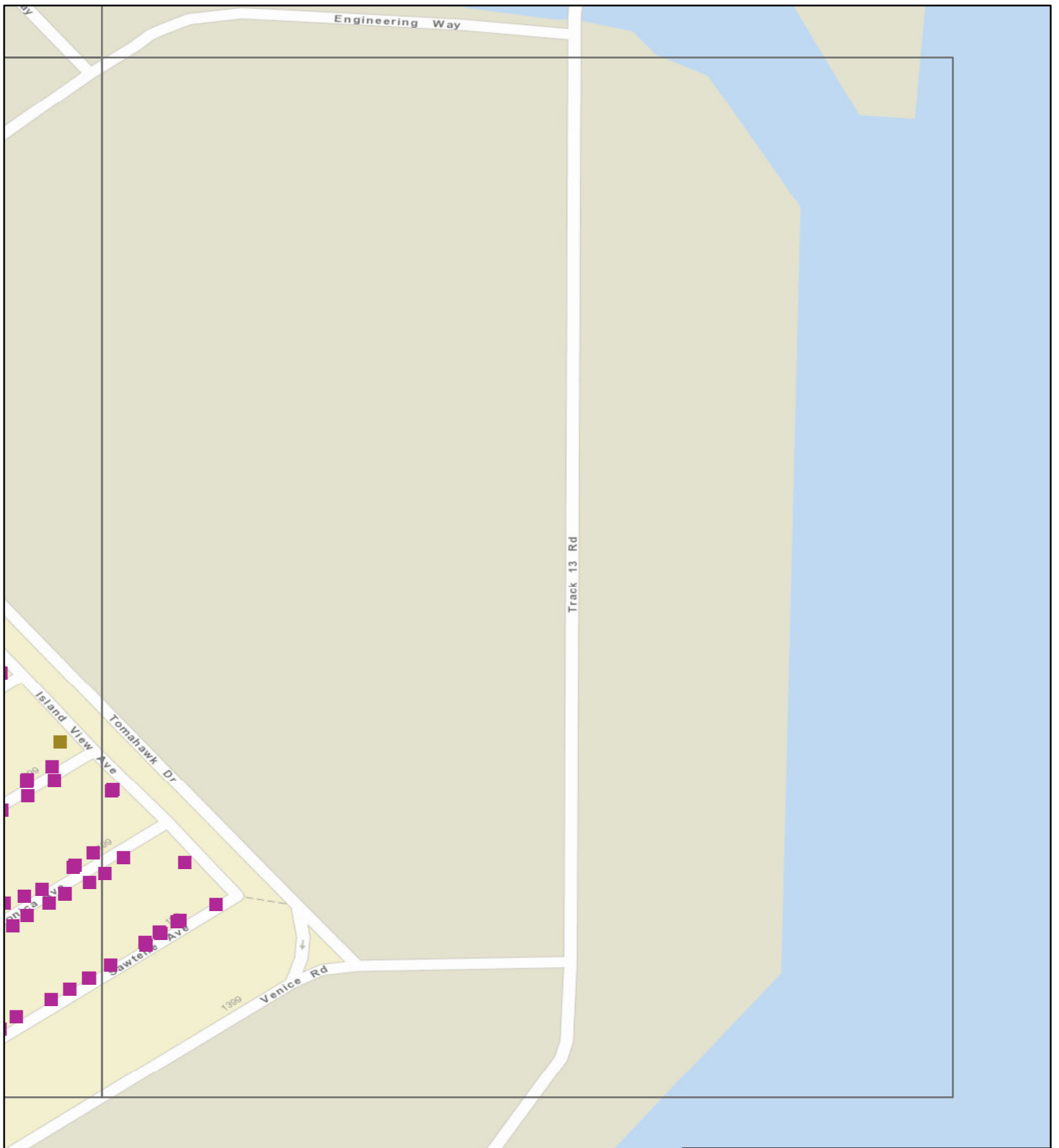


Channel Island Beach Grid - F5

- CIBCSD Meters**
- 1.5"
 - 2"
 - 3/4"
 - 3"
 - 1"
 - 4"

152





Channel Island Beach Grid - F6

- CIBCSD Meters**
- 1.5"
 - 2"
 - 3/4"
 - 1"
 - 3"
 - 4"

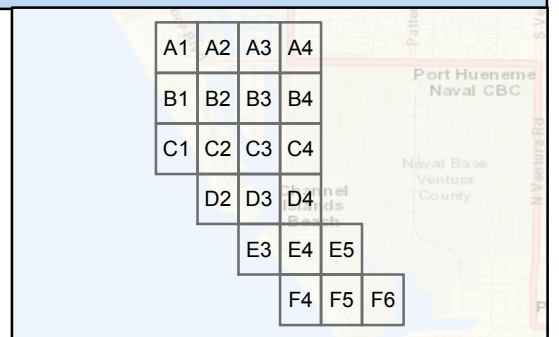


EXHIBIT E

PRODUCT SPECIFICATIONS

evoQ₄ Electromagnetic Meter

Size 2" to 12"



The evoQ₄ is a single meter that meets the needs of traditional turbine, compound, single jet and magnetic meters.

Performance	inches	2	3	4	6	8	10	12
	mm	50	80	100	150	200	250	>300
> 95% Accuracy	GPM	0.25	0.6	1.7	4	8	32	32
	m ³ /hr	0.06	0.14	0.4	0.9	1.8	7.3	7.3
98.5% - 101.5% Accuracy	GPM	1-220	2-550	4-880	8-1400	16-3500	50-5500	65-5500
	m ³ /hr	0.23-50	0.5-125	0.9-200	1.8-318	3.6-795	11.4-1249	14.8-1249
Maximum flow	GPM	220	550	880	1400	3500	5500	5500
	m ³ /hr	50	125	200	318	795	1249	1249
Max. operating pressure	psi	230	230	230	230	230	150	150
	Bar	16	16	16	16	16	10	10

Materials

Body	Stainless steel grade 304
Flow tube	Stainless steel grade 316
Liner	Polyethylene epoxy
Electrodes	Stainless steel grade 316
Flanges	Epoxy coated cast iron
Register	Stainless steel with glass lens
Register housing/lid	UV-resistant plastic
Environmental class	IP68 hermetically sealed unit waterproof to 30 ft depth

Features

10 year continuous life	No need for costly and time-consuming replacement
No moving parts	Maintenance free
0.5 second sampling rate	Highest accuracy
Wide measuring range	Suitable for all commercial applications
Simple installation	No additional training required
Pulse or encoder connectivity	Pre-equipped or retrofitted for your AMR and telemetry needs
AWWA lay lengths	Simple changeout
IP68 sealed	Provides long trouble-free life
NSF61 Annex G listed	Zero lead contaminants

Benefits

Operation

The evoQ₄ is a battery powered electromagnetic water meter that is suitable for a wide range of metering applications. Using Faraday's law of electromagnetic induction, two magnets provide a magnetic field within the pipe; two electrodes measure the induced voltage that is proportional to the flow of conductive water through the field in the pipe. Every 0.5 seconds the measurement is taken and the totalized volume is calculated and updated on the LCD display. The meter is designed for 10 years of continuous operation with no battery changes necessary.

Application

The meter is for use only with potable cold water up to 120°F. The meter will typically register at +/-0.75% accuracy at normal and high flows and better than 95% accuracy at extended low flows. The evoQ₄ product line is suited for metering utility customer services for potable water. With the addition of outputs described below, the meter can fulfill a number of distribution management roles as well.

Pulse or encoder output

The meter can be fitted with a pulse output device that can be attached to a radio transceiver module or a data logger. The pulse output can be programmed in the factory to meet the needs of the utility. For utilities preferring encoded output technologies, an encoder module is available for interface with AMR or AMI systems.



Remote display

The meter can be fitted with a remote display. A two channelled output can provide both forward and reverse pulses.

Connections

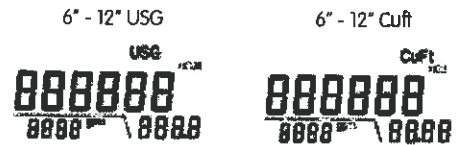
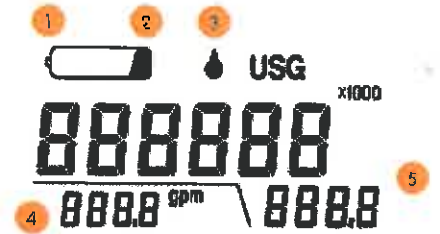
The evoQ₄ comes in AWWA C701 Class II Turbine meter lay lengths. The flanges are epoxy coated cast iron to reduce weight and prevent corrosion. The 2" comes with an oval flange and the 3"- 12" come with a round flange. All flanges conform to ANSI B16.1 Class 125 standards. Allow for 5 pipe diameters of straight pipe upstream and 3 pipe diameters of straight pipe downstream for optimum performance.

LCD

Bright, large and easy-to-read LCD incorporating totalized volume and a reference flow-rate indicator. Alarm functions provide in-situ status ensuring no loss in measuring continuity. An IP68 seal ensures the meter electronics are safely protected providing long term reliability.

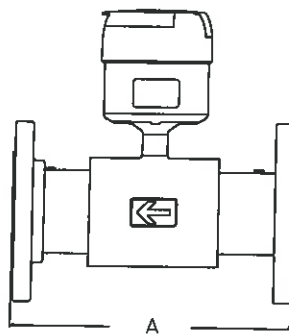
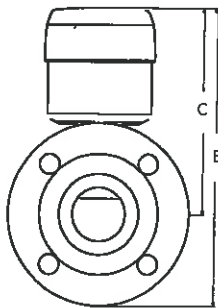
Display functions

- 1 **Low-Battery** – The indicator blinks when the meter has approximately 3 months working life remaining.
- 2 **End of Life Battery** – Measurement stopped. The indicator appears permanently when the meter life expires. Data is displayed for up to 9 months.
- 3 **No-Water** – The indicator blinks when there is an empty pipe condition.
- 4 **Flow Rate** – If water is flowing in the reverse direction a minus sign is displayed to the left of the value.
- 5 **Net Volume** – Any reverse flow is subtracted from the volume display. The top line displays billable units with the multiplier shown in upper right corner. Measurement resolution is provided in the lower right for testing.



Dimensions and net weight

Meter Size	A		B		C		Weight	
	in	(mm)	in	(mm)	in	(mm)	lbs	(kg)
2"	10	(254.0)	11.24	(285.5)	8.12	(206.2)	11.0	(5)
3"	12	(304.8)	12.27	(311.7)	8.52	(216.3)	22.5	(10)
4"	14	(355.6)	13.22	(335.8)	8.72	(221.5)	35.5	(16)
6"	18	(457.2)	15.32	(389.1)	9.82	(249.4)	55.5	(25)
8"	20	(508.0)	17.16	(435.9)	10.71	(272.0)	81.5	(37)
10"	17.75	(450)	19.50	(495.3)	11.50	(292.1)	120.0	(55)
12"	19.7	(500)	21.00	(533.4)	11.50	(292.1)	159.0	(72)



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Product manufactured by Aichi Tokai Denki Co Ltd.

www.elsteramcowater.com

Lit Ref: evoQ₄/05-13

evoQ₄ Electromagnetic Meter Sensus Encoder Module



Specification

Protocol	Sensus V frame
Encoded digits	6 most significant v_6 v_8-8 most significant
Encoder ID	10 digit fixed
Power source	Lithium battery (10 yr)
Environmental rating (with appropriate splice kit)	NEMA 6P / IP68
Cable lengths (bare wire)	30 feet, 90 feet
Optional connectors (25)	Itron In Line Connector™ Nicor Connector™
Compatibility	MegaNet™: Enc MTU Itron™: 60W, 60W-R, 200W, 100W Datamatic™: Firefly, MOSAIC Others, contact AMI provider tech support
Materials module	ABS Resin 3 conductor AWG 22 cable

Operation

The Elster AMCO Water evoQ4 Sensus Protocol encoder module is designed for use with 3 wire radio endpoints. The 3 wire to 2 wire adapter module is necessary to allow the encoder to interface with 2 wire endpoints such as wall or pit pads for touch reading or AMR devices that utilize a 2 wire coupler integrated into the radio module.

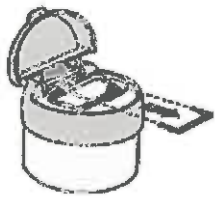
The encoder reading is obtained through the normal means of interrogation of the reading point via radio endpoint.

The Sensus (also called V frame) protocol is transmitted from the encoder module and reported to the interrogating device.

Reading resolution is determined by the version of Sensus protocol encoder module used and the programming set in the handheld. Either 6 digit or 8 digit reads are transmitted.



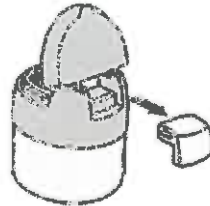
evoQ4 size and units	1.5"-4" USG	6"-12" USG	1.5"-4" CuFt	6"-12" CuFt	1.5"-4" M3	6"-12" M3
Resolution						
6 Digit Sensus encoder module	123456 x 1000 USG	123456 x 1000 USG	123456 x 100 CuFt	123456 x 100 CuFt	123456 x 1 M3	123456 x 1 M3
8 Digit Sensus encoder module	12345678 x 10 USG	12345678 x 10 USG	12345678 x 1 CuFt	12345678 x 1 CuFt	12345678 x 10 Litre	12345678 x 10 Litre



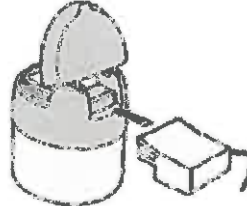
1. Lift the lid, using a small screwdriver blade, carefully remove the pulser clip.



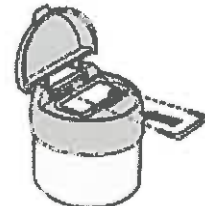
2. Remove the blank cover by lifting up...



3. ...and then slide out.



4. Fit the Encoder unit in the opposite manner to the cover removal.



5. Replace the securing clip (lugs uppermost).

WARNING: Take care not to dislodge the rubber gasket on the underside of the unit when fitting / removing.



Generic Wire Diagram:

Red: Data
White: V+ (power)
Black: V0 (ground)



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www.elsteramcowater.com

Lit Ref: evoQ₂ENC5/05-13



Badger Meter HR-E[®] LCD Encoder

DESCRIPTION

Applications: The High Resolution encoder (HR-E LCD) is a fully electronic, solid-state encoder with no moving parts. It is designed for use with all current Badger Meter Recordall[®] Disc, Turbo Series, Compound Series, Combo Series and Fire Service meters and assemblies. The HR-E LCD provides connectivity with Badger Meter ORION[®] and GALAXY[®] AMR/AMI endpoints and other AMR/AMI technology solutions approved by Badger Meter.

NOTE: For more detailed information, refer to the document *HR-E LCD Encoder User Manual*, available at www.badgermeter.com.

Field Programmable: The HR-E LCD encoder comes standard as factory programmed to customer specifications, with the option for field programming the unit of measure, meter type, meter model, digit resolution from the encoder, billing units, and rate-of-flow time and units. Programming is performed through the IR port via a computer.

Electronic Resolution: Standard encoded output from the HR-E LCD is nine digits.

Status Indicators: Status indicators are sent as part of the encoder extended message to AMR/AMI systems such as ORION Cellular, Fixed Network and Migratable endpoints that are capable of receiving an extended message. The details can also be read through an IR interface.

Mounting: Icons on the HR-E LCD encoder face indicate encoder status and alarm conditions. The fully potted encoder assembly has a bayonet mount compatible with all Recordall Disc, Turbo Series, Compound Series, Combo Series and Fire Series meters and assemblies. The bayonet mount positions the encoder in any of four orientations for visual reading convenience. The HR-E LCD encoder can be removed from the meter without disrupting water service.

Magnetic Drive Communication: The HR-E LCD encoder detects movement of the wet side meter magnet with magnetic sensors to provide reliable and dependable encoded communication.

Tamper-resistant Features:

Unauthorized removal of the HR-E LCD encoder is inhibited by a tamper-resistant Torx seal screw. Torx seal screws are provided as standard accessories. Optional proprietary tamper-proof screws are also available.

Magnetic sensors detect and report an attempted encoder removal. In addition, the HR-E LCD encoder is resistant to magnetic tampering. The encoder detects an attempted tamper—as well as encoder removal—and sends a tamper alarm in either situation. Approved endpoints capable of receiving the alarms, such as ORION Cellular, Fixed Network and Migratable endpoints, can then report the tamper condition to the meter reading software.



SPECIFICATIONS

Encoder type	Straight reading, permanently sealed, electronic LCD absolute encoder with field-programmable option
Encoder display	Status indicators, unit of measure, billing units, automatic toggle between 9-digit and 6-digit consumption (segmented leak detector in this mode), rate of flow, meter model
Unit of measure	U.S. gallons, Imperial gallons, cubic feet, cubic meters, and liters clearly identified on register face
Flow rate	Seconds, minutes, and hours
Numerals	7 mm (0.28 in.) high
Weight	11 ounces
Humidity	0...100% condensing
Temperature	Storage: -40...60° C (-40...140° F) Max. ambient for 1 hr: 72° C (150° F) Electronics & Display: -10...60° C (14...140° F)
Status indicators	Electronic and visual icons for: meter functioning correctly, meter alarm (indicates temperature limits exceeded, magnetic tamper or encoder removal), reverse flow, suspected leak, 30-day no usage, end of battery life
Signal output	Industry standard ASCII format
Signal type	Three-wire synchronous for AMR/AMI solutions Red = clock/power; Black = ground; Green = data
Battery	Lithium thionyl chloride AA cell, fully encapsulated within encoder housing
Battery Life	20 years (calculated)

Construction: The housing of the HR-E LCD encoder is constructed of an engineered polymer enclosure and a polycarbonate lens. For long-term performance, the enclosure is fully encapsulated, weatherproof, and UV-resistant to withstand harsh environments and to protect the electronics in flooded or submerged pit applications. An epoxy potting (patent pending) comprises the encoder bottom. Due to this unique sealing, the HR-E LCD exceeds all applicable requirements of AWWA Standard C706 and C707.

Wire Connections: The HR-E LCD encoder is available with an in-line connector for easy connection and installation to AMR/AMI endpoints. It is also available with a flying lead for a field splice connection, or fully prewired to an AMR/AMI endpoint.

Operating Characteristics: The HR-E LCD encoder is shipped in storage mode so a meter status alarm is not triggered. In storage mode, the meter model screen is displayed. Upon sensing two revolutions of the meter magnet, the encoder goes into normal operation mode. The display then automatically toggles between these four modes:

- 9-digit consumption displays for 45 seconds.
- 6-digit consumption (segmented leak detector in this mode) displays for 5 seconds.
- Rate of flow displays for 5 seconds.
- Meter model displays for 5 seconds.

DIMENSIONAL DRAWINGS

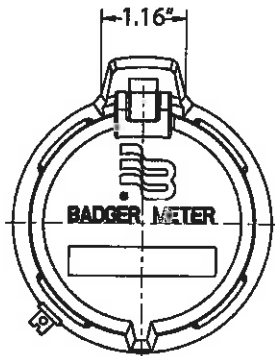


Figure 1: Top view

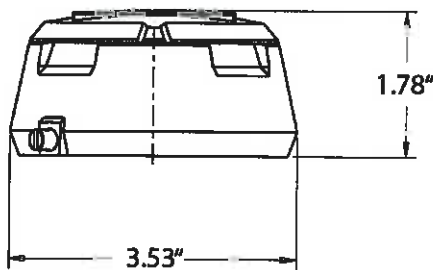


Figure 2: Front view

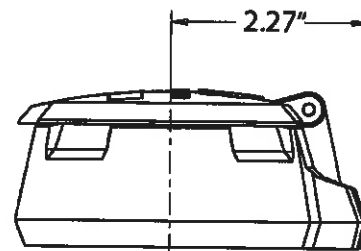


Figure 3: Left side view

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MEASUREMENT RESOLUTION

The electronic encoder output resolution of the HR-E LCD is as noted below.

Recordall Disc Series	Size (in.)	9-dial encoder output (gal)	9-dial encoder output (ft³)	9-dial encoder output (m³)
LP	5/8, 5/8 x 3/4	0.01	0.001	0.0001
M25	5/8, 5/8 x 3/4	0.01	0.001	0.0001
M35	3/4	0.01	0.001	0.0001
M40	1	0.01	0.001	0.0001
M55	1	0.01	0.001	0.0001
M70	1	0.01	0.001	0.0001
M120	1-1/2	0.1	0.01	0.001
M170	2	0.1	0.01	0.001

Recordall Turbo Series	Size (in.)	9-dial encoder output (gal)	9-dial encoder output (ft³)	9-dial encoder output (m³)
T160	1-1/2	0.1	0.01	0.001
T200	2	0.1	0.01	0.001
T450	3	0.1	0.01	0.001
T1000	4	0.1	0.01	0.001
T2000	6	1	0.1	0.01
T3500	8	1	0.1	0.01
T5500	10	1	0.1	0.01
T6200	12	10	1	0.01
T6600	16	10	1	0.01
T10000	20	10	1	0.01

Recordall Compound Series	Size (in.)	9-dial encoder output (gal)	9-dial encoder output (ft³)	9-dial encoder output (m³)
High Side T200	2	0.1	0.01	0.001
Low Side M25	2	0.01	0.001	0.0001
High Side T450	3	0.1	0.01	0.001
Low Side M25	3	0.01	0.001	0.0001
High Side T1000	4	0.1	0.01	0.001
Low side M35	4	0.01	0.001	0.0001
High Side T2000	6	1	0.1	0.01
Low Side M35	6	0.01	0.001	0.0001
High Side T3500	8	1	0.1	0.01
Low side M120	8	0.1	0.01	0.001

NOTE: For Fire Service Meters and Assemblies, please refer to appropriate Disc and TSM information provided above.



Badger Meter

HR-E[®] LCD

High Resolution ELCD encoder

PRODUCTS COVERED

This Badger Meter warranty shall apply to the High Resolution ELCD encoder (HR-E LCD) ("Product"), sold on or after April 20, 2016. The warranty is extended only to utilities, municipalities, or other commercial users, and authorized Badger Meter, Inc. (Badger Meter[®]) distributors, hereinafter referred to as "Customer," and does NOT apply to consumers or any person or entity who is not an original customer of Badger Meter or its authorized distributors.

MATERIALS AND WORKMANSHIP

Badger Meter warrants the Product to be free from defects in materials and workmanship appearing within ten (10) years and six (6) months after shipment from Badger Meter.

PRODUCT RETURNS

Product failures must be proven and verified to the satisfaction of Badger Meter. The Badger Meter obligation hereunder shall be limited to such repair and replacement and shall be conditioned upon Badger Meter receiving written notice of any asserted defect within 10 (ten) days after its discovery. If the defect arises and a valid claim is received within the Warranty Period, at its option, Badger Meter will either (1) exchange the Product with a new, used or refurbished Product that is at least functionally equivalent to the original Product, or (2) refund the purchase price of the Product.

Product returns must be shipped by the Customer prepaid F.O.B. to the nearest Badger Meter factory or distribution center. The Customer shall be responsible for all direct and indirect costs associated with removing the original Product and reinstalling the repaired or replacement Product. A replacement Product assumes the remaining warranty of the original Product, or ninety (90) days from the date of replacement, whichever provides longer coverage.

LIMITS OF LIABILITY

This warranty shall not apply to any Product repaired or altered by any party other than Badger Meter. The foregoing warranty applies only to the extent that the Product is installed, serviced and operated strictly in accordance with Badger Meter instructions. The warranty shall not apply and shall be void with respect to a Product exposed to conditions other than those detailed in applicable technical literature, or which have been subject to vandalism, negligence, accident, acts of God, improper installation, operation or repair, alteration, or other circumstances which are beyond the reasonable control of Badger Meter.

With respect to products not manufactured by Badger Meter, the warranty obligations of Badger Meter shall in all respects conform and be limited to the warranty extended to Badger Meter by the supplier.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE (except warranties of title).

Any description of a Product, whether in writing or made orally by Badger Meter or its agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with any Customer's order are for the sole purpose of identifying the Product and shall not be construed as an express warranty. Any suggestions by Badger Meter or its agents regarding use, application or suitability of the Product shall not be construed as an express warranty unless confirmed to be such, in writing, by Badger Meter.

EXCLUSION OF CONSEQUENTIAL DAMAGES AND DISCLAIMER OF OTHER LIABILITY

Badger Meter liability with respect to breaches of the foregoing warranty shall be limited as stated herein. Badger Meter liability shall in no event exceed the contract price. BADGER METER SHALL NOT BE SUBJECT TO AND DISCLAIMS: (1) ANY OTHER OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR OF WARRANTY, (2) ANY OBLIGATIONS WHATSOEVER ARISING FROM TORT CLAIMS (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR ARISING UNDER OTHER THEORIES OF LAW WITH RESPECT TO PRODUCTS SOLD OR SERVICES RENDERED BY BADGER METER, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATING THERETO, AND (3) ALL CONSEQUENTIAL, INCIDENTAL AND CONTINGENT DAMAGES WHATSOEVER.

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Legacy document number: LCD-W-01



Badger Meter

E-Series® Ultrasonic Meter

Cold Water Stainless Steel Meter, 1-1/2 and 2 inch
NSF/ANSI Standard 61 Certified, Annex G

DESCRIPTION

The E-Series® Ultrasonic meter uses solid-state technology in a compact, totally encapsulated, weatherproof, and UV-resistant housing, suitable for residential and commercial applications. Electronic metering provides information—such as rate of flow and reverse flow indication—and data not typically available through traditional, mechanical meters and registers. Electronic metering eliminates measurement errors due to sand, suspended particles and pressure fluctuations.

The Ultrasonic 1-1/2 and 2 inch meters feature:

- Minimum extended low-flow rate lower than typical positive displacement meters.
- Simplified one-piece electronic meter and register that are integral to the meter body and virtually maintenance free.
- Sealed, non-removable, tamper-protected meter and register.
- Easy-to-read, 9-digit LCD display presents consumption, rate of flow, reverse-flow indication, and alarms.
- High resolution industry standard ASCII encoder protocol.

The Ultrasonic meter is available with an in-line connector for easy connection and installation to AMR/AMI endpoints. It is also available with a flying lead for field splice connection.

APPLICATIONS

Use the Ultrasonic meter for measuring potable cold water in residential, commercial and industrial services. The meter is also ideal for non-potable, reclaimed irrigation water applications or less than optimum water conditions where small particles exist.

The Ultrasonic meter complies with applicable portions of ANSI/AWWA Standard C700 and NSF/ANSI Standard 61, Annex G. There is currently no AWWA standard that specifically addresses ultrasonic meters for residential applications.

OPERATION & PERFORMANCE

As water flows into the measuring tube, ultrasonic signals are sent consecutively in forward and reverse directions of flow. Velocity is then determined by measuring the time difference between the measurement in the forward and reverse directions. Total volume is calculated from the measured flow velocity using water temperature and pipe diameter. The LCD display shows total volume and alarm conditions and can toggle to display rate of flow.



In the normal temperature range of 45...85° F (7...29° C), the Ultrasonic “new meter” consumption measurement is accurate to:

- ±1.5% over the normal flow range
- ±3.0% from the extended low flow range to the minimum flow value

CONSTRUCTION

E-Series Ultrasonic meters feature a stainless steel, lead-free meter housing, an engineered polymer and stainless steel metering insert, a meter-control circuit board with associated wiring, LCD, and battery. Wetted elements are limited to the pressure vessel, the polymer/stainless steel metering insert and the transducers. The electronic components are housed and fully potted within a molded, engineered polymer enclosure, which is permanently attached to the meter housing. The transducers extend through the stainless steel housing and are sealed by O-rings.

The metering insert holds the stainless steel ultrasonic reflectors in the center of the flow area, enabling turbulence-free water flow through the tube and around the ultrasonic signal reflectors. The metering insert's patented design virtually eliminates chemical buildup on the reflectors, ensuring long-term metering accuracy.

METER INSTALLATION

The meter is completely submersible and can be installed using horizontal or vertical piping, with flow in the up direction. The meter will not measure flow when an “empty pipe” condition is experienced. An empty pipe is defined as a condition that occurs when the flow sensors are not fully submerged.

SPECIFICATIONS

E-Series Ultrasonic Meter Size	1-1/2 in. (40 mm)	2 in. (50 mm)
Operating Range	1.25...100 gpm	1.5...160 gpm
Extended Low-Flow Rate	0.40 gpm	0.50 gpm
Maximum Continuous Operation	100 gpm	160 gpm
Pressure Loss at Maximum Flow	3.8 psi	5.2 psi
Reverse Flow – Maximum Rate	12 gpm	18 gpm
Operating Performance	In the normal temperature range of 45...85° F (7...29° C), new meter consumption measurement is accurate to: <ul style="list-style-type: none"> • ±1.5% over the normal flow range • ±3.0% from the extended low flow range to the minimum flow value 	
Storage Temperature	- 40...140° F (- 40...60° C)	
Maximum Ambient Storage (Storage for One Hour)	150° F (72° C)	
Measured-Fluid Temperature Range	34...140° F (1...60° C)	
Humidity	0...100% condensing; meter is capable of operating in fully submerged environments	
Maximum Operating Pressure of Meter Housing	175 psi (12 bar)	
Register Type	Straight reading, permanently sealed electronic LCD; digits are 0.28 in. (7 mm) high	
Register Display	<ul style="list-style-type: none"> • Consumption (up to nine digits) • Rate of flow • Alarms • Unit of measure factory programmed for gallons, cubic feet and cubic meters 	
Register Capacity	<ul style="list-style-type: none"> • 100,000,000 gallons • 10,000,000 cubic feet • 1,000,000 cubic meters 	
Totalization Display Resolution	<ul style="list-style-type: none"> • Gallons: 0.X • Cubic feet: 0.XX • Cubic meters: 0.XXX 	
Battery	3.6-volt lithium thionyl chloride; battery is fully encapsulated within the register housing and is not replaceable; 20-year battery life	

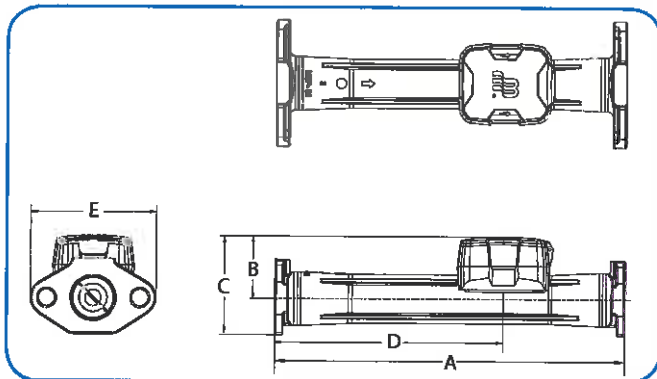
MATERIALS

Meter Housing	316 stainless steel
Measuring Element	Pair of ultrasonic sensors located in the flow tube
Register Housing & Lid	Engineered polymer
Metering Insert	Engineered polymer & stainless steel
Transducers	Piezo-ceramic device with wetted surface of stainless CrNiMo

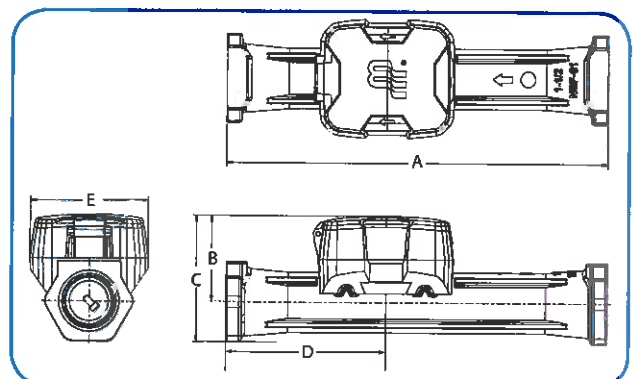
PHYSICAL DIMENSIONS

E-Series Ultrasonic Meter Size	1-1/2 in. (40 mm)	1-1/2 in. (40 mm)	2 in. (50 mm)	2 in. (50 mm)
Housing	Elliptical	HEX	Elliptical	HEX
Size Designation X Lay Length	1-1/2 x 13 in. (38 x 330 mm)	1-1/2 x 12.62 in. (38 x 321 mm)	2 x 17 in. (51 x 432 mm)	2 x 15.25 in. (51 x 387 mm)
Weight (without AMR)	8.2 lb (3.7 kg)	6.5 lb (2.9 kg)	11.9 lb (5.4 kg)	8.9 lb (4.0 kg)
See illustration below for Measurement Designations.				
Length (A)	13 in. (33 cm)	12.62 in. (32 cm)	17 in. (43 cm)	15.25 in. (39 cm)
Height (B)	2.80 in. (71 mm)	2.84 in. (72 mm)	3.01 in. (77 mm)	3.06 in. (78 mm)
Height (C)	4.55 in. (116 mm)	4.15 in. (105 mm)	4.76 in. (121 mm)	4.68 in. (119 mm)
Length (D)	7.10 in. (180 mm)	5.31 in. (135 mm)	11.10 in. (282 mm)	5.05 in. (128 mm)
Width (E)	5.50 in. (140 mm)	3.90 in. (99 mm)	6.08 in. (154 mm)	3.90 in. (99 mm)
Bore Size	1-1/2 in. (40 mm)	1-1/2 in. (40 mm)	2 in. (51 mm)	2 in. (51 mm)
Two-Bolt Elliptical Flange (AWWA)	1-1/2 in. (40 mm)	—	2 in. (51 mm)	—
Companion Flange	1-1/2 in. (40 mm)	—	2 in. (51 mm)	—
Internal Thread Size	—	1-1/2 in. NPT	—	2 in. NPT

Elliptical Measurement Designations

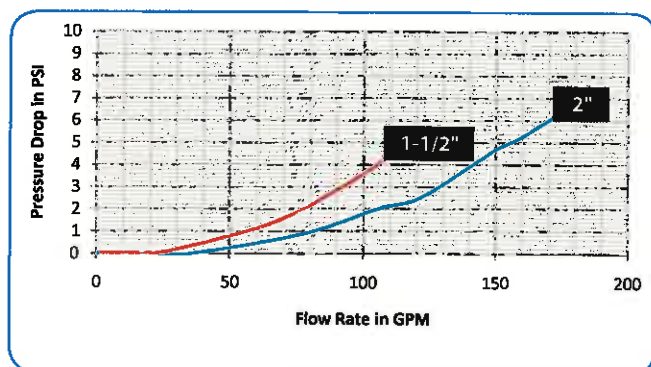


HEX Measurement Designations



PRESSURE LOSS CHART

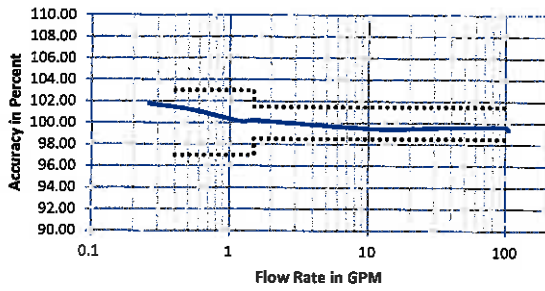
Flow rate in Gallons Per Minute (GPM)



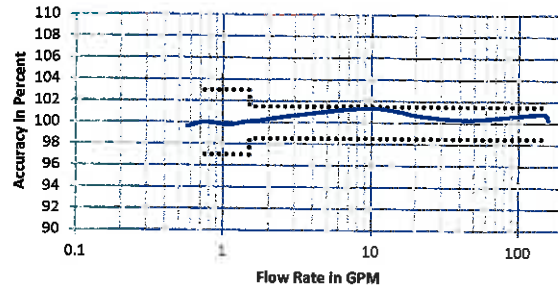
ACCURACY CHARTS

Rate of Flow in Gallons Per Minute (GPM)

1-1/2 in. Meter



2 in. Meter



Making Water Visible®

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Legacy Document Number: ESM-T-10-EN



Badger Meter

E-Series® Ultrasonic Meter

Cold Water Stainless Steel Meter, 5/8, 5/8 x 3/4, 3/4 and 1 inch NSF/ANSI Standard 61 Certified, Annex G

DESCRIPTION

The E-Series® Ultrasonic meter uses solid-state technology in a compact, totally encapsulated, weatherproof, and UV-resistant housing, suitable for residential and commercial applications. Electronic metering provides information—such as rate of flow and reverse flow indication—and data not typically available through traditional, mechanical meters and registers. Electronic metering eliminates measurement errors due to sand, suspended particles and pressure fluctuations.

Offered in four sizes and lay lengths, the Ultrasonic meter features:

- Minimum extended low-flow rate lower than typical positive displacement meters.
- Simplified one-piece electronic meter and register that are integral to the meter body and virtually maintenance free.
- Sealed, non-removable, tamper-protected meter and register.
- Easy-to-read, 9-digit LCD display presents consumption, rate of flow, reverse-flow indication, and alarms.
- High resolution industry standard ASCII encoder protocol.

The Ultrasonic meter is available with an in-line connector for easy connection and installation to AMR/AMI endpoints. It is also available with a flying lead for field splice connection.

APPLICATIONS

Use the Ultrasonic meter for measuring potable cold water in residential, commercial and industrial services. The meter is also ideal for non-potable, reclaimed irrigation water applications or less than optimum water conditions where small particles exist.

The Ultrasonic meter complies with applicable portions of ANSI/AWWA Standard C700 and NSF/ANSI Standard 61, Annex G. There is currently no AWWA standard that specifically addresses ultrasonic meters for residential applications.

OPERATION & PERFORMANCE

As water flows into the measuring tube, ultrasonic signals are sent consecutively in forward and reverse directions of flow. Velocity is then determined by measuring the time difference between the measurement in the forward and reverse directions. Total volume is calculated from the measured flow velocity using water temperature and pipe diameter. The LCD display shows total volume and alarm conditions and can toggle to display rate of flow.



In the normal temperature range of 45...85° F (7...29° C), the Ultrasonic “new meter” consumption measurement is accurate to:

- $\pm 1.5\%$ over the normal flow range
- $\pm 3.0\%$ from the extended low flow range to the minimum flow value

CONSTRUCTION

E-Series Ultrasonic meters feature a stainless steel, lead-free meter housing, an engineered polymer and stainless steel metering insert, a meter-control circuit board with associated wiring, LCD, and battery. Wetted elements are limited to the pressure vessel, polymer/stainless steel metering insert and the transducers. The electronic components are housed and fully potted within a molded, engineered polymer enclosure, which is permanently attached to the meter housing. The transducers extend through the stainless steel housing and are sealed by O-rings.

The metering insert holds the stainless steel ultrasonic reflectors in the center of the flow area, enabling turbulence-free water flow through the tube and around the ultrasonic signal reflectors. The metering insert's patented design virtually eliminates chemical buildup on the reflectors, ensuring long-term metering accuracy.

METER INSTALLATION

The meter is completely submersible and can be installed using horizontal or vertical piping, with flow in the up direction. The meter will not measure flow when an “empty pipe” condition is experienced. An empty pipe is defined as a condition that occurs when the flow sensors are not fully submerged.

SPECIFICATIONS

E-Series Ultrasonic Meter Size	5/8 in. (16 mm)	5/8 x 3/4 in. (16 x 19 mm)	3/4 in. (19 mm)	1 in. (25 mm)
Operating Range	0.1...25 gpm (0.02...5.7 m ³ /hr)	0.1...25 gpm (0.02...5.7 m ³ /hr)	0.1...32 gpm (0.02...7.3 m ³ /hr)	0.4...55 gpm (0.09...12.5 m ³ /hr)
Extended Low-Flow Rate	0.05 gpm (0.01 m ³ /hr)	0.05 gpm (0.01 m ³ /hr)	0.05 gpm (0.01 m ³ /hr)	0.25 gpm (0.06 m ³ /hr)
Maximum Continuous Operation	25 gpm (5.7 m ³ /hr)	25 gpm (5.7 m ³ /hr)	32 gpm (7.3 m ³ /hr)	55 gpm (12.5 m ³ /hr)
Pressure Loss	4.3 psi at 15 gpm (0.3 bar @ 3.4 m ³ /hr)	2.3 psi at 15 gpm (0.16 bar @ 3.4 m ³ /hr)	2.0 psi at 15 gpm (0.14 bar @ 3.4 m ³ /hr)	1.8 psi at 25 gpm (0.12 bar @ 5.7 m ³ /hr)
Reverse Flow - Maximum Rate	4 gpm (0.9 m ³ /hr)	4 gpm (0.9 m ³ /hr)	4 gpm (0.9 m ³ /hr)	9 gpm (2.0 m ³ /hr)
Operating Performance	In the normal temperature range of 45...85° F (7...29° C), new meter consumption measurement is accurate to: <ul style="list-style-type: none"> • ±1.5% over the normal flow range • ±3.0% from the extended low flow range to the minimum flow value 			
Storage Temperature	- 40...140° F (- 40...60° C)			
Maximum Ambient Storage (Storage for One Hour)	150° F (72° C)			
Measured-Fluid Temperature Range	34...140° F (1°...60° C)			
Humidity	0...100% condensing; meter is capable of operating in fully submerged environments			
Maximum Operating Pressure of Meter Housing	175 psi (12 bar)			
Register Type	Straight reading, permanently sealed electronic LCD; digits are 0.28 in. (7 mm) high			
Register Display	<ul style="list-style-type: none"> • Consumption (up to nine digits) • Rate of flow • Alarms • Unit of measure factory programmed for gallons, cubic feet and cubic meters 			
Register Capacity	<ul style="list-style-type: none"> • 10,000,000 gallons • 1,000,000 cubic feet • 100,000 cubic meters 			
Totalization Display Resolution	<ul style="list-style-type: none"> • Gallons: 0.XX • Cubic feet: 0.XXX • Cubic meters: 0.XXXX 			
Battery	3.6-volt lithium thionyl chloride; battery is fully encapsulated within the register housing and is not replaceable; 20-year battery life			

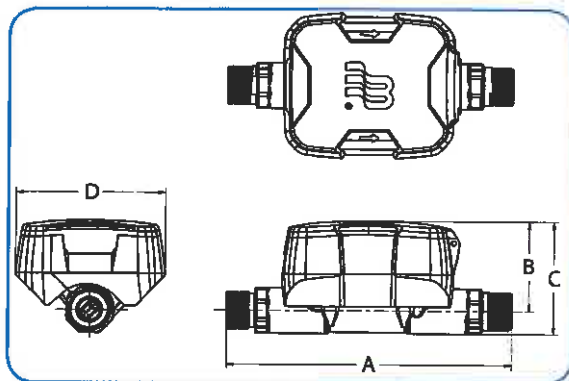
MATERIALS

Meter Housing	316 stainless steel
Measuring Element	Pair of ultrasonic sensors located in the flow tube
Register Housing & Lid	Engineered polymer
Metering Insert	Engineered polymer & stainless steel
Transducers	Piezo-ceramic device with wetted surface of stainless CrNiMo

PHYSICAL DIMENSIONS

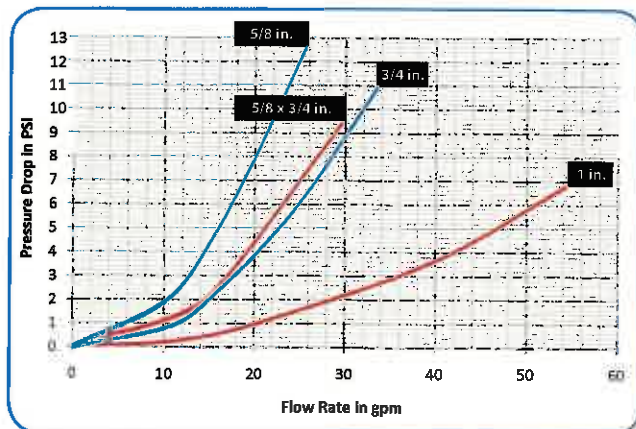
E-Series Ultrasonic Meter Size	5/8 in. (16 mm)	5/8 x 3/4 in. (16 x 19 mm)	3/4 in. (19 mm)	1 in. (25 mm)
Size Designation X Lay Length	5/8 x 7-1/2 in. (16 x 191 mm)	5/8 x 3/4 x 7-1/2 in. (16 x 19 x 191 mm)	3/4 x 7-1/2 in. or 3/4 x 9 in. (19 x 191 mm or 19 x 229 mm)	1 x 10-3/4 in. 25 x 273 mm)
Weight (without AMR)	2.2 lb (1 kg)	2.1 lb (.95 kg)	3/4 x 7-1/2 in.: 2.1 lb 3/4 x 9 in.: 2.4 lb (20 x 190 mm.: 0.95 kg or 20 x 229 mm: 1.08 kg)	3.1 lb (1.4 kg)
See illustration below for Measurement Designations.				
Length (A)	7.5 in. (191 mm)	7.5 in. (191 mm)	7.5 in. or 8.98 in. (191 mm or 228 mm)	10.745 in (273 mm).
Height (B)	2.404 in. (61 mm)	2.404 in. (61 mm)	2.404 in. (61 mm)	2.529 in. (64 mm)
Height (C)	3.014 in. (77 mm)	3.014 in. (77 mm)	3.094 in. (79 mm)	3.359 in. (85 mm)
Width (D)	3.898 in. (99 mm)	3.898 in. (99 mm)	3.898 in. (99 mm)	3.898 in. (99 mm)
Bore Size	5/8 in. (16 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	1 in. (25 mm)
Coupling Nut & Spud Thread	3/4 in. x 14 NPSM	1 in. x 11-1/2 NPSM	1 in. x 11-1/2 NPSM	1-1/4 in. x 11-1/2 NPSM
Tailpiece Pipe Thread (NPT)	1/2 in. (13 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	1 in. (25 mm)
Service Pipe Thread (NPT)	1/2 in. (13 mm)	3/4 in. (19 mm)	3/4 in. (19 mm)	1 in. (25 mm)

Measurement Designations



PRESSURE LOSS CHART

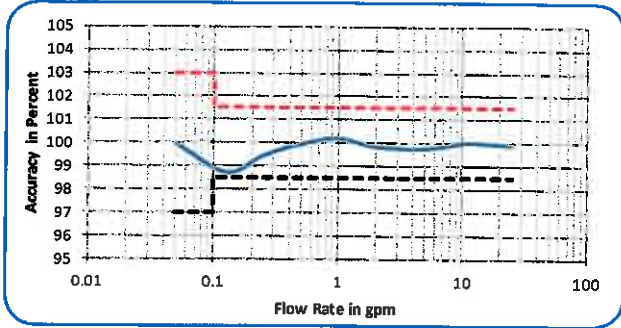
Rate of Flow in gallons per minute (gpm)



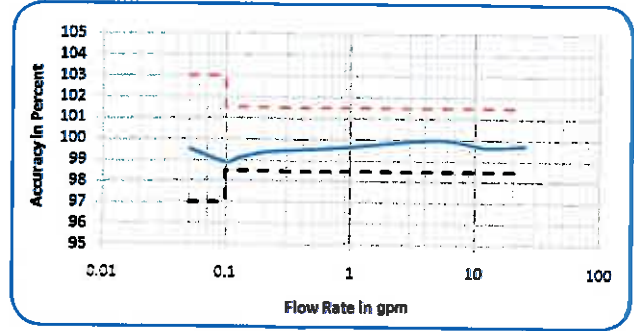
ACCURACY CHARTS

Rate of Flow in gallons per minute (gpm)

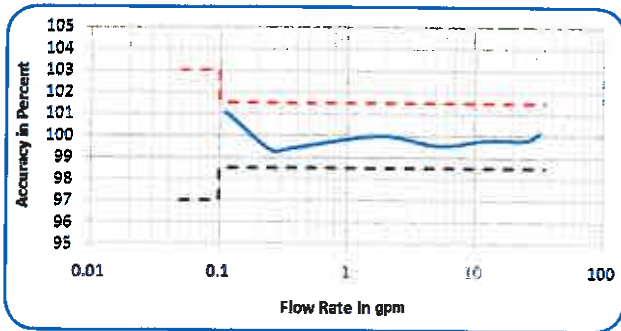
5/8 in. Meter



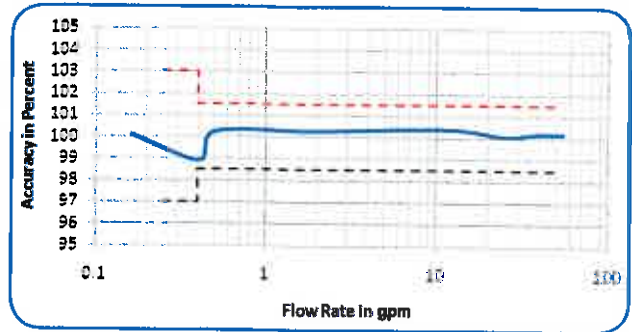
5/8 x 3/4 in. Meter



3/4 in. Meter



1 in. Meter



Making Water Visible®

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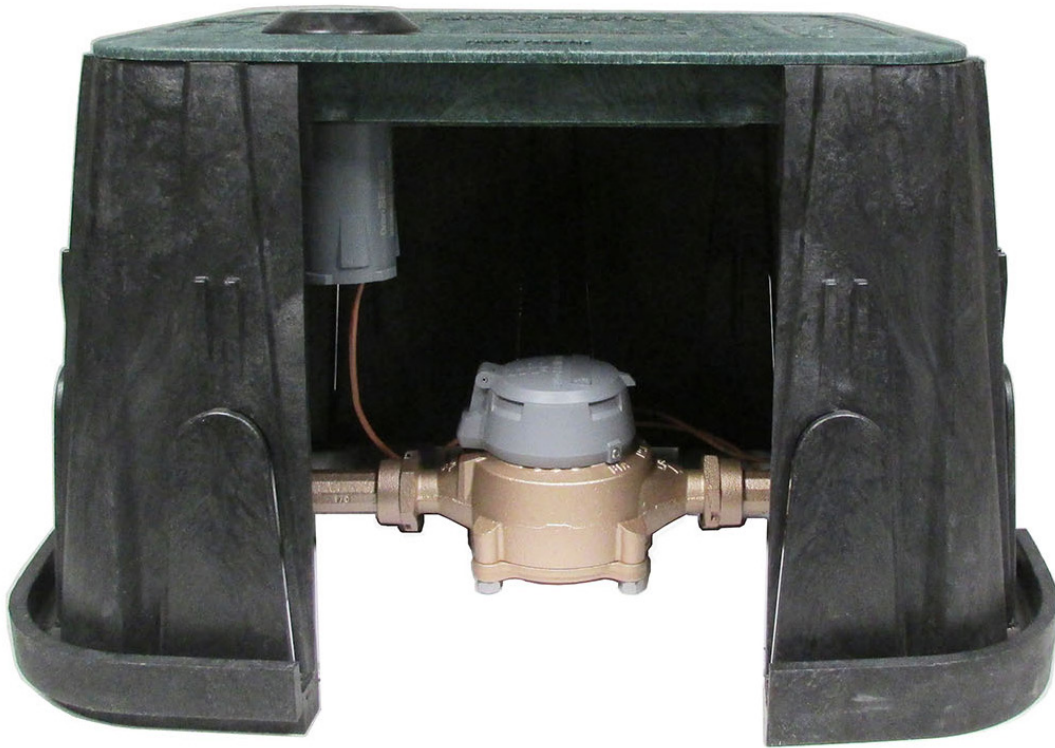
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ENDPOINT INSTALLATION SPECIFICATIONS



Badger Meter

ORION® Water Endpoints



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SCOPE OF THIS MANUAL

This manual contains installation instructions for ORION® water endpoints.

- Installation of ORION endpoints must comply with all applicable federal, state and local rules, regulations and codes.
- Failure to read and follow these instructions can lead to misapplication or misuse of this product, resulting in personal injury and damage to equipment.
- Proper performance and reliability of ORION endpoints depend upon installation in accordance with these instructions.

NOTE: In addition to this document, endpoint installation kit and parts information are available in the *ORION Water Endpoints Installation Kit Ordering Guide* and the *ORION Water Endpoint Parts List*. Both documents are available in the Resource Library at www.badgermeter.com.

PRODUCT UNPACKING AND INSPECTION

Upon receipt of the product, perform the following unpacking and inspection procedures.

NOTE: If damage to the shipping container is evident upon receipt, request the carrier to be present when the product is unpacked.

Carefully open the shipping package, follow any instructions that may be marked on the exterior. Remove all cushioning material surrounding the product and carefully lift the product from the package. Retain the package and all packing material for possible use in reshipment or storage.

Visually inspect the product and applicable accessories for any physical damage such as scratches, loose or broken parts or any other sign of damage that may have occurred during shipment.

NOTE: If damage is found, request an inspection by the carrier's agent within 48 hours of delivery and file a claim with the carrier. A claim for equipment damage in transit is the sole responsibility of the purchaser.

Carefully remove the pre-wired ORION endpoint and encoder assembly or ORION endpoint from the shipping carton and inspect for damage. Retain the contents of the installation kit for use in mounting the endpoint in the field.

LICENSE REQUIREMENTS

ORION Fixed Network, Migratable and Classic endpoints comply with Part 15 of FCC Rules. ORION Cellular CDMA endpoints comply with Part 15, Part 22, and Part 24 of FCC Rules. ORION Cellular LTE and HSPA endpoints comply with Part 15, Part 22, Part 24, and Part 27 of FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

In accordance with FCC Regulations, "Code of Federal Regulations" Title 47, Part 2, Subpart J, Section 1091, transmitters pass the requirements pertaining to radiation exposure. However, to avoid public exposure in excess of limits for general population (uncontrolled exposure), a 20 centimeter distance between the transmitter and the body of the user must be maintained during operation.

No FCC license is required by a utility to operate an ORION meter reading system.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IMPORTANT

Transportation: The Federal Aviation Administration prohibits operating endpoints and receivers on all commercial aircraft. The ORION endpoint is considered an operating transmitter and cannot be shipped by air.

IDENTIFICATION

Endpoints

The ORION endpoint is a three-wire metering device (Figure 1). Each ORION endpoint has a unique numeric serial number on the tag attached to the cable harness and etched on the endpoint housing. Endpoints require connection to an encoder to complete the assembly. Badger Meter encoders are shown in Figure 4.



Cellular LTE endpoint
(medium gray with yellow label)



Cellular CDMA/HSPA
endpoint
(medium gray with yellow label)



Fixed Network (SE) or
Migratable (ME) endpoint
(medium gray)



Classic (CE) ADE® endpoint
(light gray)



Classic (CE) RTR® endpoint
(black)

Figure 1: ORION endpoints

Endpoint Dimensions

The drawings below show the dimensions for the ORION Cellular LTE and all other ORION endpoints.

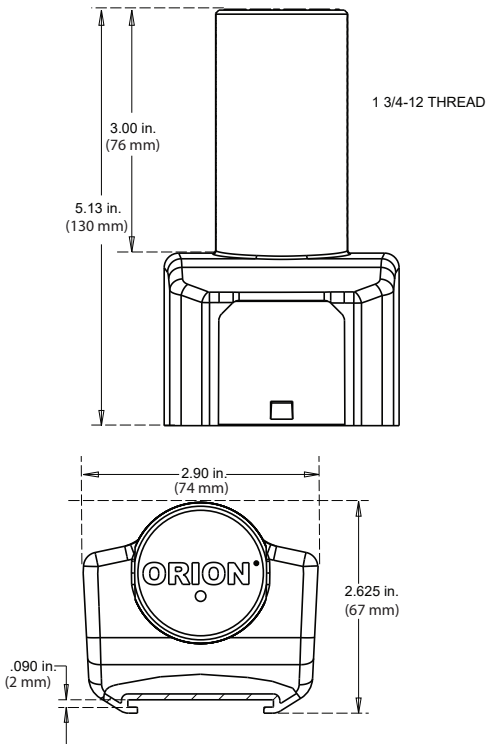


Figure 2: ORION Cellular LTE endpoint dimensions

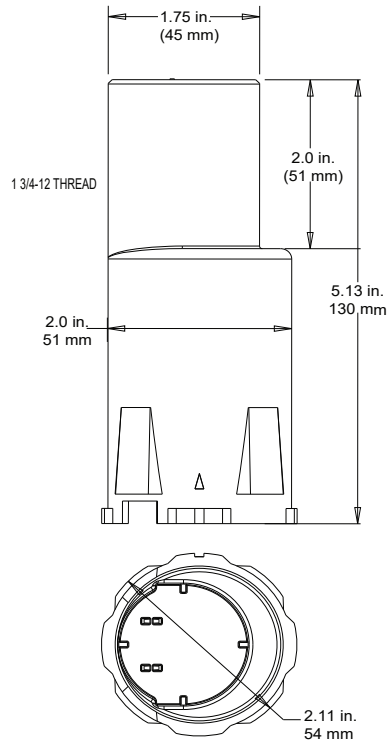


Figure 3: ORION endpoint dimensions (all except ORION Cellular LTE)

Encoders/Register

Each Badger Meter encoder is identified on the face of the register with an assembly number, unit of measure and meter model. Current and legacy encoders products are pictured in [Figure 4](#).

Current Products



High Resolution LCD Encoder (HR-E® LCD) E-Series® Ultrasonic Meter with High Resolution LCD Encoder High Resolution 8-Dial Encoder (HR-E®)

Legacy Products



Absolute Digital Encoder (ADE®) Recordall® Transmitter Register (RTR®)

Figure 4: Encoders and register

NOTE: Installation information for each of the ORION endpoints, including endpoint/encoder configuration options, starts on the next page.

ORION CELLULAR ENDPOINTS

This section covers identification, installation, encoder compatibility, and activation for the ORION Cellular LTE endpoint, and for the ORION CDMA and HSPA endpoints. All ORION Cellular endpoints have a 9-digit serial number range of 100000000 to 199999999. ORION Cellular LTE endpoints use serial numbers starting with 11xxxxxxx.

ORION Cellular LTE Endpoints

The ORION Cellular LTE endpoint is pictured in [Figure 5](#). The serial number is engraved on one side of the endpoint base, and a yellow FCC label is displayed on the other side.

Endpoint Configurations

ORION Cellular LTE endpoints can be ordered in the configurations listed here. They can be deployed in indoor, outdoor and pit applications.



Figure 5: ORION Cellular LTE endpoint

Endpoint Configurations	Encoder Connection
Endpoint only with in-line connector (Twist Tight or Nicor®)	Connect the endpoint to an encoder using the in-line connector. See " Endpoint Installation Kits " on page 18, and " In-line Connectors " on page 38.
Endpoint only with flying lead for field splice	See " Field Wiring, Encoder Connectivity and Read Resolution " on page 8 below and on the next page for field wiring information.
Endpoint/encoder assembly with in-line connector	Endpoints connected to a Badger Meter encoder are shipped, ready for installation. See " Endpoint Installation Kits " on page 18, and " In-line Connectors " on page 38.

Installation Guidelines

Connect the endpoint to an encoder to complete the assembly and install according to these guidelines:

- **Indoor/Outdoor Installation:**
 - Indoor installation is **recommended**. Mount indoors in the floor joist, near an outside wall, and away from large metal objects.
 - Outdoor installation is acceptable and may be required where signal strength does not support an indoor installation.
- **Pit Installation:** Mounting through a non-metal pit lid is **required**.

NOTE: Endpoints that are not properly installed may not be covered under warranty.

Field Wiring, Encoder Connectivity and Read Resolution

Endpoints are shipped from the factory pre-programmed and are available in an indoor/outdoor, three-wire configuration for connection to the encoders listed. All three wires must be connected to complete an installation. The endpoint connection can be made to either existing wires from the encoder or directly to the terminal screws of the encoder, depending on the application and manufacturer. Follow the manufacturer's installation kit instructions provided with the gel splice or field splice kit you are using. See also "[Endpoint Installation Kits](#)" on page 18.

NOTE: For instructions on field wiring using gel connectors, see "[Gel Caps to Connect an Encoder](#)" on page 41 .

ORION Cellular LTE endpoints with flying leads can be connected to Badger Meter high resolution encoders and E-Series Ultrasonic meters as well as a number of competitive encoders as shown in the wiring chart on the next page.

ORION endpoint wires: **Red** = Power/Clock; **Black** = Ground; **Green** = Data

Endpoint Label	Encoder Connectivity	Endpoint Wire Colors			Reading Resolution
		Red	Black	Green	
ORION Cellular LTE	Badger Meter HR-E LCD or HR-E encoders or E-Series Ultrasonic and Ultrasonic Plus Meter with High Resolution output	Red	Black	Green	Up to nine (9) most significant digits
	Elster InVISION and ScanCoder® encoders and evoQ4 meter (encoder output)*	Green	Black	Red	Up to nine (9) most significant digits
	Metron-Farnier Hawkeye*	Red	Black	Green	Up to nine (9) most significant digits
	Mueller Systems 420 Solid State Register (SSR) LCD*	Red	Black	Green	Up to nine (9) most significant digits
	Neptune ProRead, E-coder or ARB-V*	Black	Green	Red	Up to nine (9) most significant digits
	Sensus Electronic Register encoder (ECR) or ICE*	Red	Black	Green	Up to nine (9) most significant digits
	Master Meter® Octave® Ultrasonic meter (encoder output)*	Red	Black	Green	Up to eight (8) most significant digits
	Hersey Translator*	Due to the customized, factory wire configurations of the Hersey Translator, the terminal posts may not match the ORION endpoint wire colors. Please contact Hersey for the terminal post wiring schematic of your encoders to determine how the posts correspond to ORION endpoint wires.			

NOTE: Competitive encoder output is determined by the encoder configuration.

*ORION Cellular endpoints are compatible with the encoders/meters noted above with a manufacture date within 10 years of the current date as long as the encoder has three wires connected to it and is programmed into the three-wire output mode for AMR/AMI. Encoder registers that are currently in two-wire mode of operation require programming by the Utility, including registers that support auto two- or three-wire detection systems that do not automatically switch to three-wire mode of operation once a compatible endpoint is connected for ORION connectivity.

Activating the Endpoint

ORION Cellular LTE endpoints offer a Smart Activation feature. When shipped in the factory default "Pause" (soft sleep) mode, endpoints are in an inactive, non-transmitting state. After installation, the endpoint radio "wakes up" and begins broadcasting data when the encoder to which it is connected detects enough water usage from the register within one fifteen minute interval. The amount of water depends on the endpoint and meter size. No field programming or special tools are required to activate the ORION Cellular LTE endpoint.

IMPORTANT

*The Smart Activation feature does not apply to endpoints in "Stop" (hard sleep) mode. Endpoints in "Stop" mode **must** be manually activated via infrared (IR) communication using an ORION handheld or mobile reading system and the ORION Endpoint Utility software. ORION Endpoint Utility software can be used to identify the endpoint radio "mode." For more information, see the ORION Endpoint Utility User Manual for Handheld or Laptop, in the Resource Library at www.badgermeter.com.*

Confirming Installation

Before leaving the installation site, the installer can confirm an endpoint is broadcasting RF data for cellular data collection use in one of two ways.

1. BEACON® AMA users can check the endpoint activation status with the **ORION Endpoint Status** tool. Endpoints do not need to be provisioned in BEACON AMA to display in the application. See "[Endpoint Status Tool for ORION Cellular Endpoints](#)" on page 43 for more information.
2. The installer can use the ORION handheld to confirm activation via IR. Refer to the appropriate handheld user manual for more information.

Endpoints automatically transition to the appropriate network.

ORION Cellular CDMA, HSPA Endpoints

ORION Cellular CDMA and HSPA endpoint is pictured in [Figure 6](#). The serial number is engraved on the endpoint body, which also displays the yellow FCC label.



Figure 6: ORION Cellular CDMA and ORION Cellular HSPA endpoint

Endpoint Configurations

ORION Cellular CDMA and HSPA endpoints can be ordered in the configurations listed here. They can be deployed in indoor, outdoor and pit applications.

Endpoint Configurations	Encoder Connection
Endpoint only with in-line connector (Twist Tight, Nicor, 308)	Connect the endpoint to an encoder using the in-line connector. See "Endpoint Installation Kits" on page 18 , and "In-line Connectors" on page 38 .
Endpoint only with flying lead for field splice	See Field Wiring, Encoder Connectivity and Read Resolution below and on the next page for field wiring information.
Prewired endpoint/encoder assembly with or without in-line connector	Factory prewired endpoints, connected to a Badger Meter encoder, are shipped, ready for installation. See "Endpoint Installation Kits" on page 18 , and "In-line Connectors" on page 38 .

Installation Guidelines

Connect the endpoint to an encoder to complete the assembly and install according to these guidelines:

- **Indoor/Outdoor Installation:** Mount outside the building, or indoors in the floor joist, near an outside wall, and away from large metal objects.
- **Pit Installation:** Mounting through a non-metal pit lid is **required**.

NOTE: Endpoints that are not properly installed may not be covered under warranty.

Field Wiring, Encoder Connectivity and Read Resolution

Endpoints are shipped from the factory pre-programmed and are available in an indoor/outdoor, three-wire configuration for connection to the encoders listed. All three wires must be connected to complete an installation. The endpoint connection can be made to either existing wires from the encoder or directly to the terminal screws of the encoder, depending on the application and manufacturer. Follow the manufacturer's installation kit instructions provided with the gel splice or field splice kit you are using. See also ["Endpoint Installation Kits" on page 18](#).

NOTE: For instructions on field wiring using gel connectors, see ["Connecting an Encoder Using Gel Caps" on page 41](#).

ORION Cellular CDMA and HSPA endpoints with flying leads can be connected to Badger Meter high resolution encoders and E-Series Ultrasonic meters as well as a number of competitive encoders as shown in the wiring chart on the next page.

ORION endpoint wires: **Red** = Power/Clock; **Black** = Ground; **Green** = Data

Endpoint Label	Encoder Connectivity	Endpoint Wire Colors			Reading Resolution	
		Red	Black	Green		
ORION Cellular CDMA, HSPA	Badger Meter HR-E LCD or HR-E encoders or E-Series Ultrasonic Meter with High Resolution output	Encoder Wire/Termination Colors	Red	Black	Green	Up to nine (9) most significant digits
	Elster InVISION and ScanCoder® encoders and evoQ4 meter (encoder output)*		Green	Black	Red	Up to nine (9) most significant digits
	Metron-Farnier Hawkeye*		Red	Black	Green	Up to nine (9) most significant digits
	Mueller Systems 420 Solid State Register (SSR) LCD*		Red	Black	Green	Up to nine (9) most significant digits
	Neptune ProRead, E-coder or ARB-V*		Black	Green	Red	Up to nine (9) most significant digits
	Sensus Electronic Register encoder (ECR) or ICE*		Red	Black	Green	Up to nine (9) most significant digits
	Master Meter® Octave® Ultrasonic meter (encoder output)*		Red	Black	Green	Up to eight (8) most significant digits
	Hersey Translator*		Due to the customized, factory wire configurations of the Hersey Translator, the terminal posts may not match the ORION endpoint wire colors. Please contact Hersey for the terminal post wiring schematic of your encoders to determine how the posts correspond to ORION endpoint wires.			

NOTE: Competitive encoder output is determined by the encoder configuration.

*ORION Cellular endpoints are compatible with the encoders/meters noted above with a manufacture date within 10 years of the current date as long as the encoder has three wires connected to it and is programmed into the three-wire output mode for AMR/AMI. Encoder registers that are currently in two-wire mode of operation require programming by the Utility, including registers that support auto two- or three-wire detection systems that do not automatically switch to three-wire mode of operation once a compatible endpoint is connected for ORION connectivity.

Activating the Endpoint

ORION endpoints are shipped in an inactive, non-transmitting state. ORION Cellular CDMA and HSPA endpoints must be activated by magnet swipe. Follow the ORION Cellular Endpoint Activation instructions included with the endpoint when it is shipped. The instructions are also shown in [Figure 7](#).

ORION® CELLULAR ENDPOINT ACTIVATION

1. Connect endpoint to encoder
2. Swipe magnet along the word "Cellular" on the endpoint
2 short LED flashes = Wakeup No LED flashes = Swipe again
3. Encoder & wireless communication tests begin. Observe results of each.
 - a) Encoder read confirmation (may require up to 20 seconds)
1 long flash = Success 3 short flashes = Read Error
 - b) Wireless communication confirmation (may require up to 3 minutes)
2 long flashes = Success 6 short flashes = Communication Error
- No errors = Activation complete
Error on step 3a or 3b = Endpoint reset required – continue to step 4 below
4. Verify endpoint/encoder connection
5. Hold magnet over the "u" in "Cellular" for 10 seconds then remove.
2 short LED flashes = reset and steps 3 – 4 will repeat

Figure 7: ORION Cellular CDMA and HSPA activation steps

Confirming Installation

Before leaving the installation site, the installer can confirm an ORION Cellular endpoint is broadcasting RF data for cellular data collection use in one of two ways.

1. BEACON AMA users can check the endpoint activation status with the **ORION Endpoint Status** tool. Endpoints do not need to be provisioned in BEACON AMA to display in the application. See "[Endpoint Status Tool for ORION Cellular Endpoints](#)" on page 43 for more information.
2. As an alternative method, the installer can use the ORION handheld to confirm activation via IR. Refer to the appropriate handheld user manual for more information.

Endpoints automatically transition to the appropriate network.

ORION FIXED NETWORK AND MIGRATABLE ENDPOINTS

This section covers identification, installation, encoder compatibility, and activation for ORION Fixed Network (SE) and ORION Migratable (ME) endpoints.

ORION Fixed Network and Migratable endpoints have a serial number range of 30000000 to 599999999. The serial number is engraved on the endpoint body.



Figure 8: ORION Fixed Network (SE) and ORION Migratable (ME) Endpoint

Endpoint Configurations

ORION Fixed Network and Migratable endpoints can be ordered in the configurations listed here. They can be deployed in indoor, outdoor and pit applications.

Endpoint Configurations	Encoder Connection
Endpoint only with in-line connector (Twist Tight, Nicor, 308)	Connect the endpoint to an encoder using the in-line connector. See "Endpoint Installation Kits" on page 18 , and "In-line Connectors" on page 38 .
Endpoint only with flying lead for field splice	See Field Wiring, Encoder Connectivity and Read Resolution below and on the next page for field wiring information.
Prewired endpoint/encoder assembly with or without in-line connector	Factory prewired endpoints, connected to a Badger Meter encoder, are shipped, ready for installation. No splicing required. See "Endpoint Installation Kits" on page 18 .
Prewired integral endpoint/encoder assembly	Mount the assembly on the bayonet of the meter. See "Integral Endpoint Installation" on page 34 for details.

Installation Guidelines

Connect the endpoint to an encoder to complete the assembly and install according to these guidelines:

- **Indoor/Outdoor Installation:** Mount outside the building, or indoors in the floor joist, near an outside wall, and away from large metal objects.
- **Pit Installation, Fixed Network Endpoints:** Mounting through a non-metal pit lid is **required**.
- **Pit Installation, Migratable Endpoints:** Mounting through a non-metal pit lid is **recommended**.

NOTE: Endpoints that are not properly installed may not be covered under warranty.

Field Wiring, Encoder Connectivity and Read Resolution

Endpoints are shipped from the factory pre-programmed and are available in an indoor/outdoor, three-wire configuration for connection to the encoders listed. See also ["Endpoint Installation Kits" on page 18](#).

All three wires must be connected to complete an installation. The endpoint connection can be made to either existing wires from the encoder or directly to the terminal screws of the encoder, depending on the application and manufacturer. Follow the manufacturer's installation kit instructions provided with the gel splice or field splice kit you are using.

NOTE: For instructions on field wiring using gel connectors, see ["Gel Caps to Connect an Encoder" on page 41](#).

ORION Fixed Network and Migratable endpoints with flying leads are available for connectivity to Badger Meter encoders and E-Series Ultrasonic meters as well as a number of competitive encoders as shown in wiring chart on the next page.

ORION endpoint wires: Red = Power/Clock; Black = Ground; Green = Data

Endpoint Label	Encoder Connectivity	Endpoint Wire Colors			Reading Resolution
		Red	Black	Green	
ELCD or ENC	Badger Meter HR-E LCD or HR-E encoders, or E-Series Ultrasonic Meter with High Res output	Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Badger Meter ADE or E-Series Ultrasonic Meter with ADE output	Red	Black	Green	Up to six (6) most significant digits
RTR	Badger Meter RTR or E-Series Ultrasonic Meter with RTR output	Red	Black	Green	Up to seven (7) most significant digits
ADE or ENC	Elster/AMCo ScanCoder or Invision* Elster evoQ4 meter (encoder output)*	Green	Black	Red	Up to eight (8) most significant digits
C700D	Elster/AMCo C700 Digital*	Red	Black	Not used – cut green wire flush with outer sheath	Up to seven (7) most significant digits
ADE or ENC	Master Meter Octave Ultrasonic meter (encoder output)*	Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Metron Hawkeye*	Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Mueller Systems 420 Solid State Register (SSR) LCD*	Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Neptune ProRead, E-coder or ARB-V*	Black	Green	Red	Up to eight (8) most significant digits
ADE or ENC	Sensus Electronic Register encoder (ECR) or ICE*	Red	Black	Green	Up to eight (8) most significant digits
ADE or ENC	Hersey Translator*	Due to the customized, factory wire configurations of the Hersey Translator, the terminal posts may not match the ORION endpoint wire colors. Please contact Hersey for the terminal post wiring schematic of your encoders to determine how the posts correspond to ORION endpoint wires.			

NOTE: Competitive encoder output is determined by the encoder configuration.

*ORION Fixed Network and Migratable ADE or ENC endpoints are compatible with the encoders/meters noted above with a manufacture date within 10 years of the current date as long as the encoder is programmed into the three-wire output mode for AMR/AMI and has three wires connected to it. Encoder registers that are currently in two-wire mode of operation require programming by the Utility, including registers that support auto two- or three-wire detection systems that do not automatically switch to three-wire mode of operation once a compatible endpoint is connected for ORION connectivity.

Activating the Endpoint

ORION Fixed Network and Migratable endpoints offer a Smart Activation feature. When shipped in the factory default "Pause" (soft sleep) mode, endpoints are in an inactive, non-transmitting state. After installation, the endpoint radio "wakes up" and begins broadcasting data when the encoder to which it is connected first senses water usage. No field programming or special tools are required to activate the endpoint.

IMPORTANT

*The Smart Activation feature does not apply to endpoints in "Stop" (hard sleep) mode. Endpoints in "Stop" mode **must** be manually activated via infrared (IR) communication using an ORION handheld or mobile reading system and the ORION Endpoint Utility software. ORION Endpoint Utility software can be used to identify the endpoint radio "mode." For more information, see the ORION Endpoint Utility User Manual for Handheld or Laptop, in the Resource Library at www.badgermeter.com.*

RTR

When an RTR is mounted on the water meter, and the ORION endpoint connected to the RTR is securely installed, the ORION system is ready for operation. The endpoint will turn on with water usage. Run water through the meter to increment the RTR 1/10th of the test circle. Upon receiving the first digital signal from the RTR, the endpoint counts the signal and begins its RF transmissions. No specific wire testing or endpoint programming is required.

HR-E or ADE

When an HR-E or ADE encoder is mounted on the water meter, and the ORION endpoint connected to the encoder is securely installed, the ORION system is ready for operation. The endpoint will begin RF transmission when it detects enough water usage from the register within one fifteen minute interval. The amount of water depends on the endpoint and meter size. For example, with an ORION ME endpoint connected to an 8-dial HR-E on an M25 meter, the encoder must detect 1 gallon of water usage before the endpoint turns on and begins its RF data broadcast. Once it begins broadcasting, the endpoint updates hourly based on the encoder odometer reading. No specific wire testing or endpoint programming is required.

High Resolution ELCD Encoder or E-Series Ultrasonic Meter

When an HR-ELCD encoder is mounted on the water meter or an E-Series Ultrasonic meter is installed, and the ORION endpoint connected to the encoder or E-Series Ultrasonic meter is securely installed, the ORION system is ready for operation. The endpoint will begin RF transmission when it detects enough water usage from the register within one fifteen minute interval. The amount of water depends on the endpoint and meter size. For example, with an ORION ME endpoint connected to a 9-dial HR-E LCD on an M120 meter, the encoder must detect 1 gallon of water usage before the endpoint begins its RF data broadcast. Once the endpoint has begun broadcasting, it will update hourly based on the HR-E LCD encoder or High Resolution E-Series Ultrasonic meter odometer reading. No specific wire testing or endpoint programming is required.

Changing the Registration for an Existing Endpoint Assembly – Best Practice

To connect an ORION Fixed Network or Migratable endpoint that has previously logged historical profile data to different registration (encoder), best practice recommends following this process:

1. Extract and save the historical profile data from the endpoint. See the *ORION Endpoint Utility User Manual* for mobile or handheld, available in the Resource Library at www.badgermeter.com, if you need help.
2. Clear the profile data from the endpoint.
3. Connect the new registration. Follow applicable installation instructions in this manual.

Confirming Installation

Reading an ORION endpoint immediately after installation verifies proper operation and reading performance. Before leaving the installation site, the installer can use an ORION handheld or ORION Mobile Reading system to confirm the endpoint wiring was done correctly and the endpoint is broadcasting RF data for reading. See the appropriate handheld or ORION Mobile Reading system user manuals, available in the Resource Library at www.badgermeter.com, for more information.

ORION CLASSIC ENDPOINTS

This section covers identification, installation, encoder compatibility, and activation for ORION Classic (CE) endpoints.

ORION Classic endpoints have a serial number range of 70000000 to 89999999. The serial number is engraved on the endpoint.

Endpoint Configurations

ORION Classic endpoints can be ordered in the configurations listed here. They can be deployed in indoor, outdoor and pit applications.



Figure 9: ORION Classic (CE) Endpoint

Endpoint Configurations

Endpoint only with in-line connector
(Twist Tight, Nicor, 308)

Endpoint only with flying lead for field splice

Prewired endpoint/encoder assembly
with or without in-line connector

Prewired integral endpoint/encoder assembly

Encoder Connection

Connect the endpoint to an encoder using the in-line connector. See ["Endpoint Installation Kits" on page 18](#), and ["In-line Connectors" on page 38](#).

See [Field Wiring, Encoder Connectivity and Read Resolution](#) below and on the next page for field wiring information.

Factory prewired endpoints, connected to a Badger Meter encoder, are shipped, ready for installation. No splicing required. See ["Endpoint Installation Kits" on page 18](#).

Mount the assembly on the bayonet of the meter. See ["Integral Endpoint Installation" on page 34](#) for details.

Installation Guidelines

Connect the endpoint to an encoder to complete the assembly and install according to these guidelines:

- **Indoor/Outdoor Installation:** Mount outside the building, or indoors in the floor joist, near an outside wall, and away from large metal objects.
- **Pit Installation:** For Classic endpoints, mounting through a non-metal pit lid is **recommended**.

NOTE: Endpoints that are not properly installed may not be covered under warranty.

Field Wiring, Encoder Connectivity and Read Resolution

Endpoints are shipped from the factory pre-programmed and are available in an indoor/outdoor, three-wire configuration for connection to the encoders listed. See also ["Endpoint Installation Kits" on page 18](#).

All three wires must be connected to complete an installation. The endpoint connection can be made to either existing wires from the encoder or directly to the terminal screws of the encoder, depending on the application and manufacturer. Follow the manufacturer's installation kit instructions provided with the gel splice or field splice kit you are using.

NOTE: For instructions on field wiring using gel connectors, see ["Gel Caps to Connect an Encoder" on page 41](#).

ORION Classic endpoints with flying leads are available for connectivity to Badger Meter encoders and E-Series Ultrasonic meters as well as a number of competitive encoders as shown in wiring chart on the next page.

ORION endpoint wires: Red = Power/Clock; Black = Ground; Green = Data

Endpoint Label	Encoder Connectivity	Endpoint Wire Colors			Reading Resolution
		Red	Black	Green	
ADE	Badger Meter ADE, HR-E LCD or HR-E encoders, or E-Series Ultrasonic Meter with High Res or ADE output	Red	Black	Green	Up to seven (7) most significant digits
RTR	Badger Meter RTR or E-Series Ultrasonic Meter with RTR output	Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Elster/AMCo ScanCoder or Invision	Green	Black	Red	Up to seven (7) most significant digits
UNIV*	Master Meter Octave Ultrasonic meter (encoder output)	Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Metron Hawkeye	Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Mueller Systems 420 Solid State Register (SSR) LCD	Red	Black	Green	Up to seven (7) most significant digits
ARB-V*/**	Neptune ARB-V for connectivity to ORION endpoint > serial number 80000000	Black	Green	Red	Up to seven (7) most significant digits
ARB-V*/**	Neptune ARB-V for connectivity to ORION endpoint < serial number 79999999	Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Neptune ProRead or E-coder	Black	Green	Red	Up to seven (7) most significant digits
UNIV*	Sensus Electronic Register Encoder (ECR) or ICE	Red	Black	Green	Up to seven (7) most significant digits
UNIV*	Hersey Translator	Due to the customized, factory wire configurations of the Hersey Translator, the terminal posts may not match the ORION endpoint wire colors. Please contact Hersey for the terminal post wiring schematic of your encoders to determine how the posts correspond to ORION endpoint wires.			

NOTE: Competitive encoder output is determined by the encoder configuration.

*ORION Classic UNIV and ARB-V endpoints are compatible with the encoders/meters noted above with a manufacture date within 10 years of the current date as long as the encoder is programmed into the three-wire output mode for AMR/AMI and has three wires connected to it. Encoder registers that are currently in two-wire mode of operation require programming by the Utility, including registers that support auto two- or three-wire detection systems that do not automatically switch to three-wire mode of operation once a compatible endpoint is connected for ORION connectivity.

**A separate ORION CE Universal endpoint is available for connectivity to the Neptune ARB-V encoder. Make sure the ORION Classic endpoint has "ARB-V" on the harness label when wiring to an ARB-V encoder. Wiring differs depending on the serial number of the ORION endpoint you are connecting to the ARB-V encoder, so make sure to verify wiring is correct per the above chart.

Activating the Endpoint

ORION Classic endpoints offer a Smart Activation feature. When shipped in the factory default "Pause" (soft sleep) mode, endpoints are in an inactive, non-transmitting state. After installation, the endpoint radio "wakes up" and begins broadcasting data when the encoder to which it is connected first senses water usage. No field programming or special tools are required to activate the endpoint.

IMPORTANT

*The Smart Activation feature does not apply to endpoints in "Stop" (hard sleep) mode. Endpoints in "Stop" mode **must** be manually activated via infrared (IR) communication using an ORION handheld or mobile reading system and the ORION Endpoint Utility software. ORION Endpoint Utility software can be used to identify the endpoint radio "mode." For more information, see the ORION Endpoint Utility User Manual for Handheld or Laptop, in the Resource Library at www.badgermeter.com.*

RTR

When an RTR is mounted on the water meter, and the ORION endpoint connected to the RTR is securely installed, the ORION system is ready for operation. The endpoint will turn on with water usage. Run water through the meter to increment the RTR 1/10th of the test circle. Upon receiving the first digital signal from the RTR, the endpoint counts the signal and begins its radio frequency (RF) transmissions. No specific wire testing or endpoint programming is required.

ADE, UNIV or ARB-V Endpoint

After the ORION endpoint is securely installed and the encoder is mounted on the water meter, the ORION system is ready for operation. The endpoint will turn on with water usage. An ADE/UNIV/ARB-V endpoint requires up to one hourly reading interval where consumption changes the electronic reading. The amount of water depends on meter size. For example, with an ORION endpoint connected to a 6-dial ADE on an M35 meter, the encoder must detect 10 gallons of water usage before the endpoint will begin its RF data broadcast. Once it begins broadcasting, the endpoint will update hourly based on the encoder odometer reading. No specific wire testing or endpoint programming is required.

Confirming Installation

Reading an ORION endpoint immediately after installation verifies proper operation and reading performance. Before leaving the installation site, the installer can use an ORION handheld or ORION Mobile Reading system to confirm the endpoint wiring was done correctly and the endpoint is broadcasting RF data for reading. See the appropriate handheld or ORION Mobile Reading system user manuals, available in the *Resource Library* at www.badgermeter.com, for more information.

ENDPOINT INSTALLATION KITS

The following kits are available for endpoint installations. Kit information and instructions for using the kits start on [page 19](#).

Type	For Use With	Description	Kit Part Number (PN)
REMOTE	All ORION endpoints	<i>Wall Cover Install Kit (June 2017 & Later)</i>	64394-032
REMOTE	1XRTT*, HSPA, SE, ME, CE	<i>Wall Cover Install Kit (pre-June 2017)</i>	66009-004
REMOTE	64394-032, 66009-004	<i>IR Holder for Wall Cover Install Kit</i>	67625-001
REMOTE or PIT	1XRTT*, HSPA, SE, ME, CE	<i>Wall Bracket Install Kit - ORION</i>	64394-029
REMOTE	ORION Cellular LTE	<i>Wall Bracket Install Kit - ORION Cellular LTE</i>	64394-031
REMOTE	All ORION endpoints	<i>C-Clamp Wall Bracket Install Kit - ORION</i>	64394-008
REMOTE or PIT	All ORION endpoints	<i>Pipe Install Kit-ORION</i>	64394-003
REMOTE	All ORION endpoints	<i>Commercial Meter Mounting Bracket Install Kit-ORION</i>	64394-023
PIT	All ORION endpoints	<i>Thru-the-Lid Install Kit-ORION</i>	64394-030
PIT	ORION SE, ME, CE	<i>Integrated Pit Lid Hanger Install Kit-ORION</i>	64394-009

*1XRTT = ORION Cellular CDMA, CDMA N endpoints

Refer to the *ORION Water Endpoints Installation Kit Ordering Guide* and the *ORION Water Endpoint Parts List* for individual endpoint kit components. Both documents are available in the *Resource Library* at www.badgermeter.com.

64394-032 WALL COVER INSTALL KIT (JUNE 2017 & LATER)

The **Wall Cover Install Kit (June 2017 & later) PN: 64394-032** is recommended for proper mounting of an endpoint in indoor and outdoor remote applications, and is designed to provide an environmentally protected area for gel splice connections (if needed).

For use with: All ORION endpoints, including the ORION Cellular LTE endpoint.

A photo of the Wall Cover enclosure and the outside dimensions are shown in [Figure 10](#) and [Figure 11](#).



Figure 10: 64394-032 Wall Cover enclosure

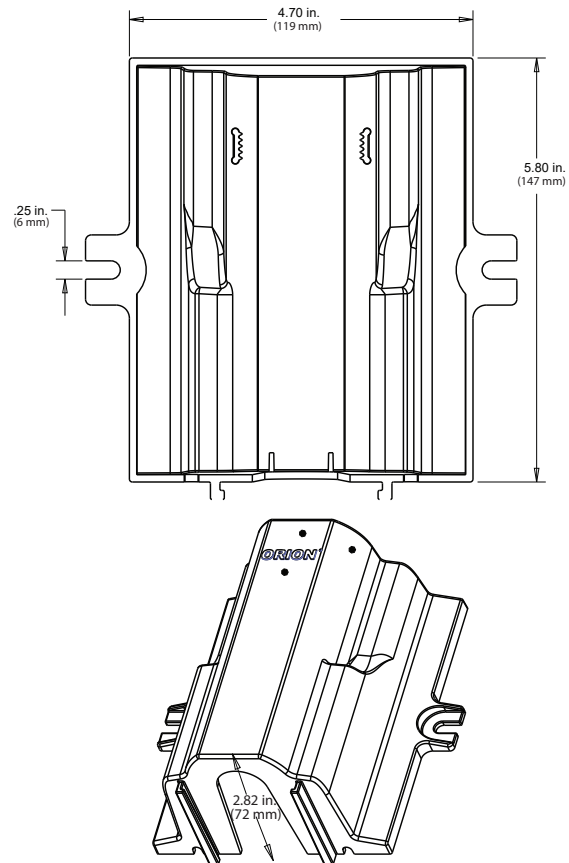


Figure 11: 64394-032 Outside dimensions

To install an ORION endpoint using the 64394-032 Wall Cover install kit, follow these steps.

1. Choose an appropriate installation location within the limits of the connector harness.
2. Verify the proper orientation ([Figure 12](#)). The bottom of the enclosure has IR programming bracket holder rails and an opening for IR programming.

The opening provides access to the IR LED port of the endpoint without having to disassemble the unit. See "[67625-001 IR Holder for Wall Cover Install Kit](#)" on page 23.

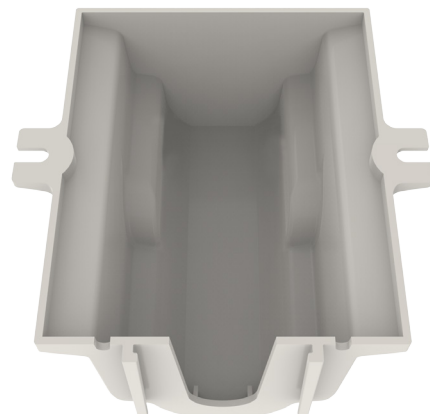


Figure 12: Interior 64394-032

3. Place the endpoint into the enclosure, antenna (threaded portion) up.

ORION Cellular LTE endpoint: Place the endpoint into the enclosure. [Figure 13](#) shows the correct placement for the ORION Cellular LTE endpoint.

All other ORION endpoints: Place the endpoint into the enclosure. Make sure the flat side of the endpoint faces in and fits up against the inside of the enclosure front wall.

NOTE: If double-sided tape is included in the kit contents, you can use the tape to temporarily secure the endpoint inside the enclosure prior to mounting the enclosure to the wall.

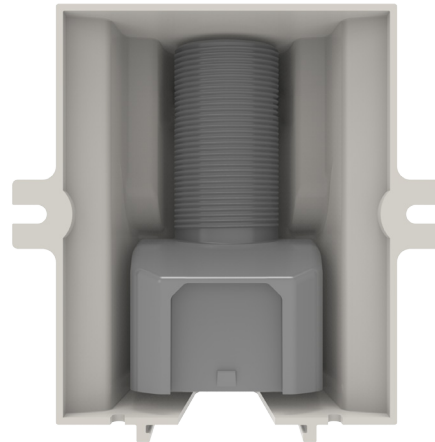


Figure 13: ORION Cellular LTE endpoint orientation

4. After the endpoint is correctly placed in the enclosure, position the endpoint cable.
 - Route the cable through the cutout on the bottom.
 - If the endpoint has an in-line connector, place the connector *inside* the enclosure with the endpoint and route the connector cable through the cutout on the bottom.
 - If you are drilling a hole through the wall behind the enclosure for the endpoint cable, the cable does not need to route through the cutout at the bottom.

NOTE: If needed, gel splice connections can be placed inside the enclosure.

NOTE: See "[Outdoor Installation for Endpoint with In-line Connector](#)" on [page 24](#) for additional information about installing the endpoint outdoors with the Wall Cover enclosure.

5. Verify that the enclosure is properly positioned, with the endpoint antenna straight up and the endpoint IR LED port down. Secure the enclosure on the wall using customer-supplied screws. Installation is complete.



Figure 14: 64394-032 installation complete

66009-004 WALL COVER INSTALL KIT (PRE-JUNE 2017)

The **Wall Cover Install Kit PN: 66009-004** is recommended for proper mounting of an endpoint in indoor and outdoor remote applications, and is designed to provide an environmentally protected area for gel splice connections (if needed).

For use with: All ORION endpoints, **except** the ORION Cellular LTE endpoint. A photo of the wall cover and the outside dimensions are shown in [Figure 15](#) and [Figure 16](#).



Figure 15: 66009-004 Wall mount enclosure

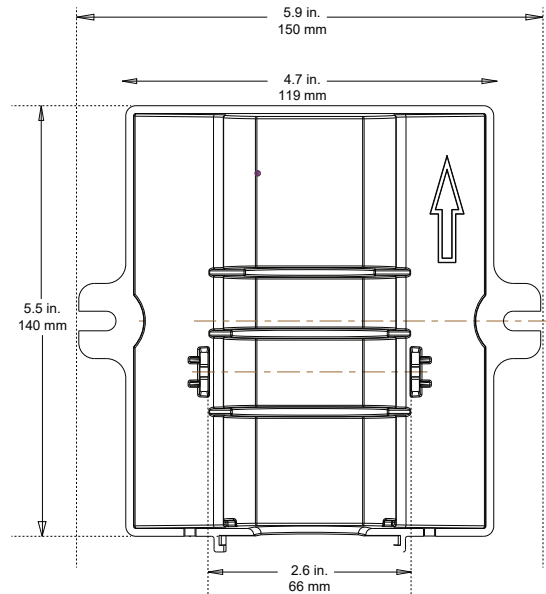


Figure 16: 66009-004 Outside dimensions

To install an ORION endpoint using the 66009-004 Wall Cover Install kit, follow these steps.

1. Choose an appropriate installation location within the limits of the connector harness.
2. Look at the enclosure to verify the proper orientation.

The bottom of the enclosure has IR programming bracket holder rails and an IR programming opening ([Figure 17](#)). The opening at the bottom provides access to the IR LED port at the base of the endpoint without having to disassemble the unit. See "[67625-001 IR Holder for Wall Cover Install Kit](#)" on page 23.

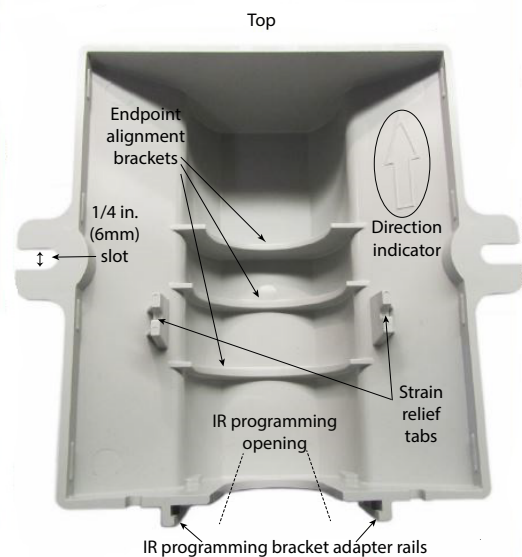


Figure 17: Interior orientation

3. Place the endpoint into the enclosure, antenna (threaded portion) up, using the endpoint alignment brackets, as shown in [Figure 18](#). Make sure the flat side of the endpoint is facing out (toward the installer).

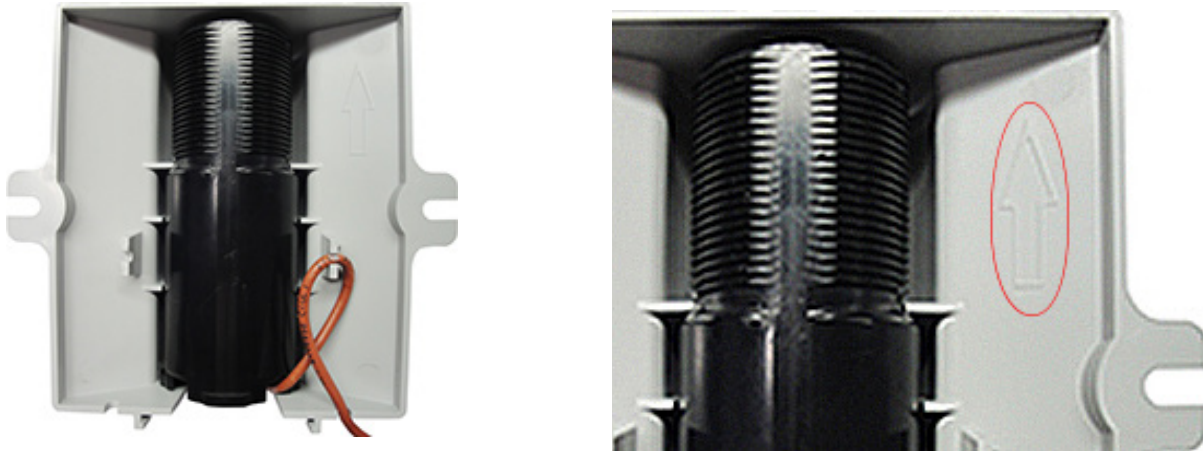


Figure 18: Endpoint orientation

NOTE: The arrow on the inside wall of the enclosure points up to show the correct endpoint position. See the close-up image in [Figure 18](#).

4. After the endpoint is placed in the enclosure, position the endpoint cable.
- Loop the endpoint cable through the strain relief tab and through the cutout on the bottom ([Figure 19](#)).
 - If the endpoint has an in-line connector, place the connector inside the enclosure with the endpoint ([Figure 20](#)) and route the connector cable through the cutout on the bottom.
 - If you are drilling a hole through the wall behind the enclosure for the endpoint cable, the cable does not need to route through the cutout at the bottom.

NOTE: If needed, gel splice connections can be placed inside the enclosure.

NOTE: See "[Outdoor Installation for Endpoint with In-line Connector](#)" on [page 24](#) for additional information about installing the endpoint outdoors with the Wall Cover enclosure.

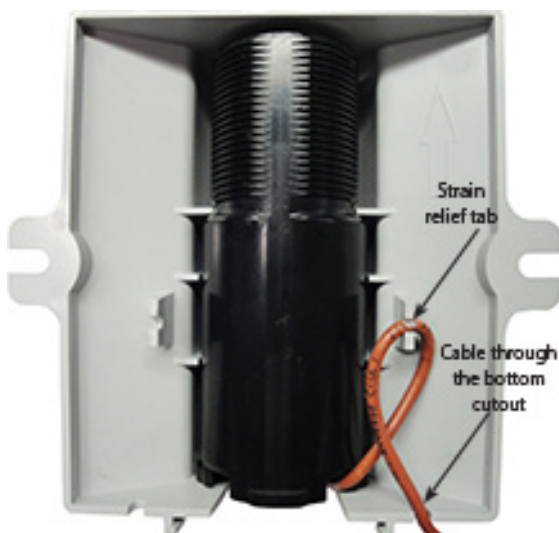


Figure 19: Cable positioning



Figure 20: Cable position with connector

- Verify that the enclosure is properly positioned with the endpoint antenna straight up and the endpoint IR LED port down. Secure the enclosure on the wall using customer-supplied screws.

Installation is complete.



Figure 21: 66009-004 Installation complete

67625-001 IR Holder for Wall Cover Install Kit

An optional **IR Holder for Wall Cover Install Kit (PN: 67625-001)** can be ordered for use with both Wall Cover install kits (**64394-032** and **66009-004**). The holder fits on the Wall Cover enclosure adapter rails and is used to position the IR programming head while performing IR functions on ORION endpoints inside the enclosure.

- Slip the optical head of the IR programming cable into the top of the holder with the nubs on the head fitted into the cutouts on the holder.



(PN: 67625-001) Holder for the optical head



Optical head of the IR programming cable



Optical head inserted into bracket

Figure 22: IR holder and programming cable optical head

- Slide the holder into the adapter rails at the bottom of the Wall Cover enclosure so the optical head is aligned with the endpoint LED port. See [Figure 24](#) and [Figure 25](#).
- Connect the IR programming cable to a Badger Meter ORION handheld or mobile reading device and refer to the user manuals for those devices for IR Programming instructions.



Figure 23: Holder on the adapter rails

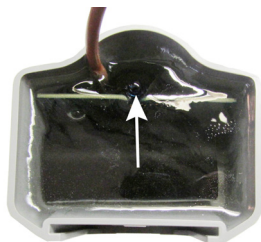


Figure 24: IR LED port ORION Cellular LTE endpoint (bottom up view)

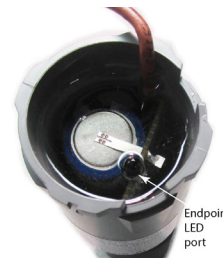


Figure 25: IR LED port ORION ME endpoint (bottom up view)

Outdoor Installation for Endpoint with In-line Connector

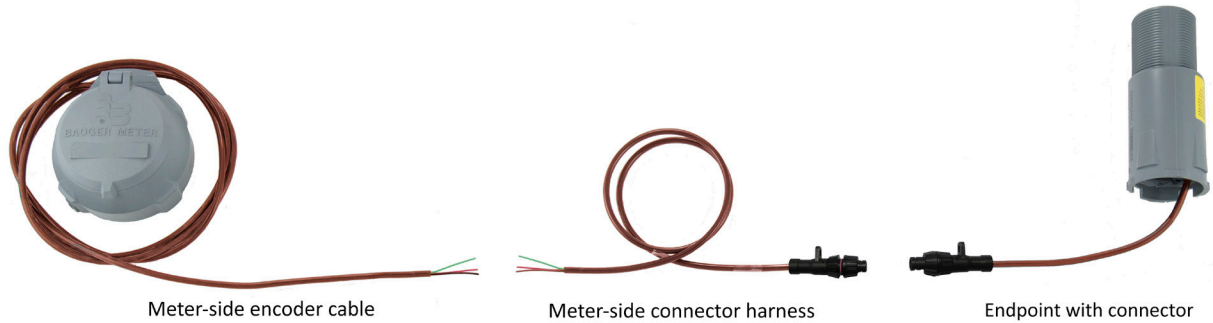


Figure 26: Outdoor endpoint installation

For an outdoor installation of an endpoint with an in-line connector harness, refer to the image in [Figure 26](#). Meter-side connector harnesses are available with Twist Tight and Nicor connectors in the following lengths.

Harness with Twist Tight Connector

Part Number	Harness Lead Length
68307-006	10 ft harness
68307-003	25 ft harness

Harness with Nicor Connector

Part Number	Harness Lead Length
66488-006	10 ft harness
66488-003	25 ft harness

Follow these recommended installation steps for an outdoor installation.

NOTE: The Twist Tight connector is pictured above but the installation steps apply to the Nicor and 308 connectors as well.

1. Choose an appropriate outdoor location, within the limits of the connector harness.

NOTE: If using a Wall Mount enclosure ([Figure 27](#)), see "[64394-032 Wall Cover Install Kit \(June 2017 & Later\)](#)" on page 19 or "[66009-004 Wall Mount Install Kit \(pre-June 2017\)](#)" on page 21 for additional information on mounting.



Figure 27: Endpoint with connector in remote enclosure box

2. Join the connector of the endpoint with the connector mate of the encoder. If using a remote wall mount enclosure, place the in-line connector inside the enclosure.
3. Drill a small hole in the wall of the structure to accommodate the endpoint cable.
4. Pass the cable end with the flying leads through the wall of the structure.
5. Connect the cable to the encoder inside the structure. Depending on the encoder connection, either field splice the wires or connect the wires directly to the encoder terminal screws.

NOTE: Refer to the *Field Splice Kit Application Data Sheet*, available in the Resource Library at www.badgermeter.com, for field splice instructions.

64394-031 WALL BRACKET INSTALL KIT - ORION CELLULAR LTE

A **Wall Bracket Kit PN: 64394-031** (Figure 28) is available for use with the ORION Cellular LTE endpoint.

The bracket clips into the slot on the endpoint and can be used to attach the endpoint to a wall using a screwdriver and two (2) customer supplied screws. The bracket can also be used to mount the endpoint to a pole with cable ties (customer supplied) threaded through the openings on the bracket.

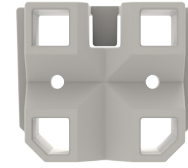


Figure 28: 64394-031

64394-029 WALL BRACKET INSTALL KIT

The **Wall Bracket Install Kit (PN: 64394-029)** can be used to securely install an ORION Fixed Network, Migratable or Classic endpoint. For non-submerged indoor and outdoor applications, the bracket can be used in any indoor or outdoor nonmetallic joist, wall or pit application.

For use with: All ORION Cellular endpoints except Cellular LTE, and ORION Fixed Network, Migratable and Classic endpoints. This kit is not compatible with the ORION Cellular LTE endpoints.

To install, you will need the following items.

- Wall Bracket install kit
- Two customer-supplied screws
- Screwdriver and drill

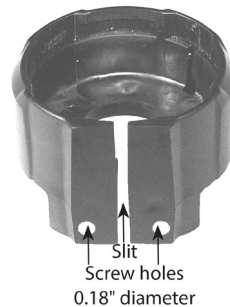


Figure 29: Remote installation bracket

To install the bracket to the endpoint, follow these steps.

1. Place the encoder cable harness through the slit in the bracket with the screw holes at the bottom.

NOTE: Carefully slide the cable harness through the slit in the bracket.

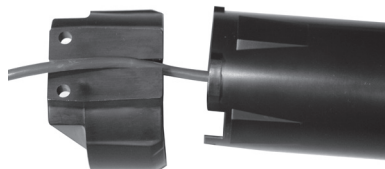


Figure 30: Cable harness threading

2. Locate the small triangle aligned with the small hole on the bottom of the installation bracket. This triangle is used to properly align the endpoint to the installation bracket.

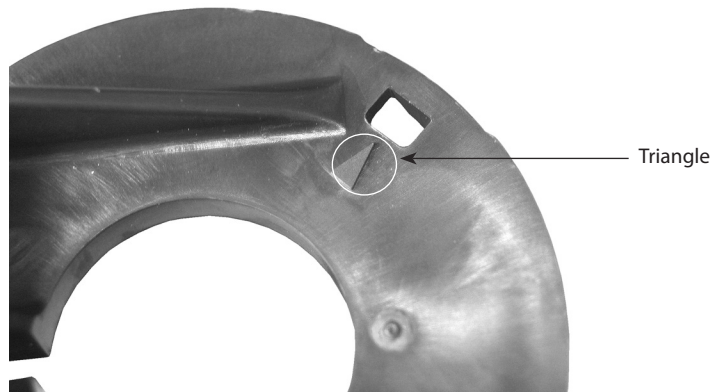


Figure 31: Aligning triangle

3. Locate the small raised triangle on the lower side of the ORION endpoint housing.



Figure 32: Housing triangle

4. Align the two triangles and push the bracket and endpoint together.

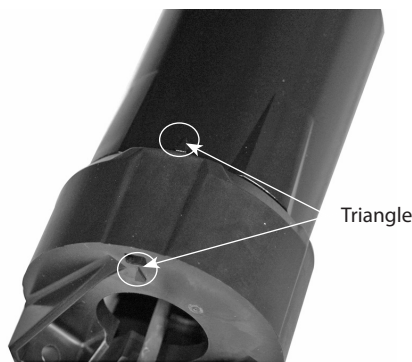


Figure 33: Align both triangles

5. With the installation bracket in one hand and the housing in the other hand, hold the bracket still and twist the housing approximately 1/4 turn clockwise until it clicks and locks into place.

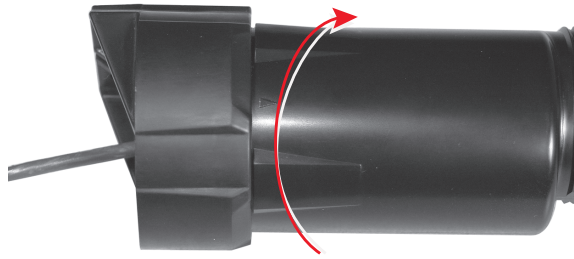


Figure 34: Bracket and housing connection

To install the endpoint assembly, follow these steps.

1. Align the ORION endpoint and the bracket with the antenna facing straight up (Figure 35).
2. Using two customer-supplied screws, secure the endpoint and bracket assembly to a nonmetallic joist or wall.



Figure 35: Endpoint positioning

64394-008 C-CLAMP WALL BRACKET INSTALL KIT

The **C-Clamp Wall Bracket Install Kit (PN: 64394-008)** can be used when mounting an endpoint to a wall.

For use with: All ORION endpoints.

To mount an ORION endpoint using this kit, follow these steps and refer to [Figure 36](#).

1. Mount the C-clamp to the wall. When mounting in a vault, choose a location which is close to the top that will not be damaged when access to the meter is required.
2. Place the neoprene spacer supplied in the installation kit around the endpoint, approximately 1/2 inch (13 mm) from the top of the endpoint.
3. Thread the lock nut on the endpoint until it makes contact with the neoprene spacer as shown in [Figure 36](#).
4. Insert the endpoint into the C-clamp as shown.
5. Close the C-clamp and lock it in place so that it closes over the neoprene spacer and securely holds the endpoint.

NOTE: ORION radio endpoints perform best with a clear line of sight. Performance varies with installation.

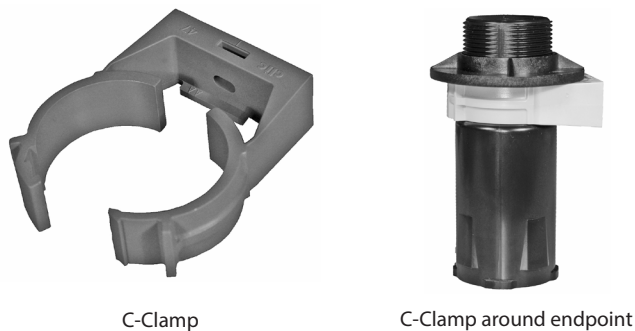


Figure 36: C-Clamp and placement

64394-003 PIPE INSTALL KIT

For pipe installations, the **Pipe Install Kit (PN: 64394-003)** with mounting support bracket (*Figure 37*) is available. The bracket is designed for use with a 3/8, 5/8 and 1/2 inch rebar or 1/2 inch schedule 40 PVC pipe.

For use with: All ORION endpoints. For ORION Cellular endpoints, the kit can be used for indoor and remote installations only.

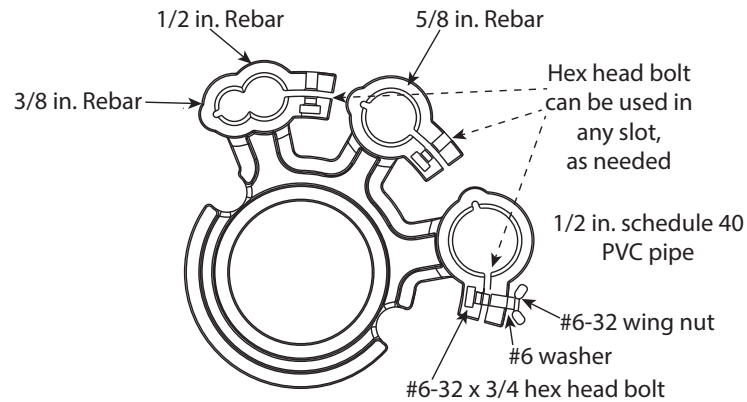


Figure 37: Support bracket (knuckles)

To install an ORION endpoint below a meter pit lid, follow these steps and refer to *Figure 38*.

1. Drive rebar or stake into the ground.

CAUTION

DRIVE REBAR OR STAKE INTO THE GROUND PRIOR TO ATTACHING THE ENDPOINT TO AVOID DAMAGE.

2. Once in the ground, secure the mounting bracket on the appropriate rebar or pipe using the enclosed washer, wing nut and hex head bolt provided with the bracket. The bolt fits in any slot.
3. Insert the endpoint through the bottom of the bracket and thread the lock nut onto the top of the endpoint. For best results, mount the endpoint a maximum of one to two inches (25...51 mm) below the underside of the lid.

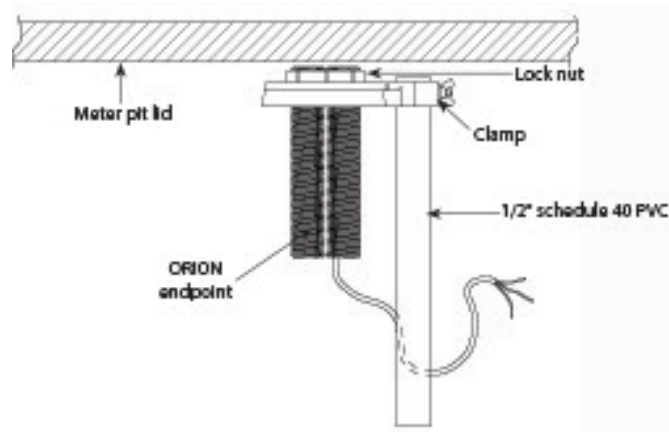


Figure 38: Pit ORION below lid installation

64394-023 COMMERCIAL METER MOUNTING BRACKET INSTALL KIT

The **Commercial Meter Mounting Bracket Install Kit (PN: 64394-023)** is designed for use with most Badger Meter Turbo, Compound Series and Fire Service Disc bypass meter lines. The kit allows you to securely mount an ORION endpoint to a meter.

For use with: All ORION endpoints.

Before you begin the installation, you will need a torque wrench set and the Mounting Bracket install kit. The kit components are:

Stainless steel mounting bracket PN: 66360-001

Lock nut PN: 62825-001



Figure 39: Stainless steel mounting bracket

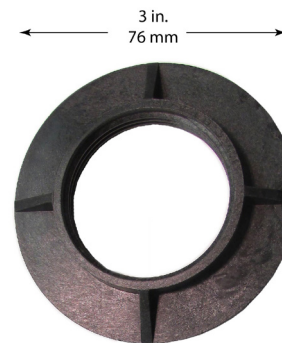


Figure 40: Lock nut with gussets

To install the bracket, follow these steps:

1. Verify that the water is turned off.
2. Slip the mounting bracket over the top of the ORION endpoint, as shown below.



Figure 41: Mounting bracket over endpoint

3. Remove the lock nut from the kit packaging and screw it on the top of the endpoint. Hand tighten the lock nut and verify that the bracket is secure.



Figure 42: Tighten lock nut

4. At the meter, unscrew the head assembly bolt at the location where you plan to mount the endpoint.
5. Position the bracket, reinsert the casing bolt and hand tighten it.

NOTE: For visual clarity, the photo in [Figure 43](#) shows the bracket without the endpoint attached.

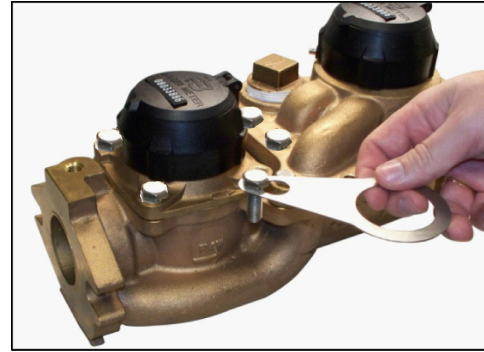


Figure 43: Unscrew head assembly bolt

6. Position the bracket with the endpoint as far from the meter as possible to provide adequate space for the ORION endpoint signal to propagate.



Figure 44: Endpoint connected with bracket to meter

7. With the torque wrench, tighten the casing bolt as indicated in the chart below:

Meter	Ft-lb
2-inch Turbo Series Meter	10.9
3-inch Turbo Series Meter	37.5
4-inch Turbo Series Meter	37.5
6-inch Turbo Series Meter	37.5
2-inch Compound Series Meter	16.7
3-inch Compound Series Meter	33.3
4-inch Compound Series Meter	33.3
6-inch Compound Series Meter	33.3
Heavy Duty Bypass M70	21.0
Heavy Duty Bypass M170	50.0

8. Installation is complete. Turn water back on.

NOTE: If two ORION endpoints are required for a fire series assembly or a compound meter application, the endpoints must be mounted on opposite sides of the meter head assembly.

64394-030 THRU-THE-LID INSTALL KIT

The ADA-compliant **Thru-the-Lid Install Kit (PN: 64394-030)** is designed for use with a pit lid of 1 inch (25 mm) maximum thickness and a standard hole diameter of 1-7/8 inches (48 mm).

For use with: All ORION endpoints.

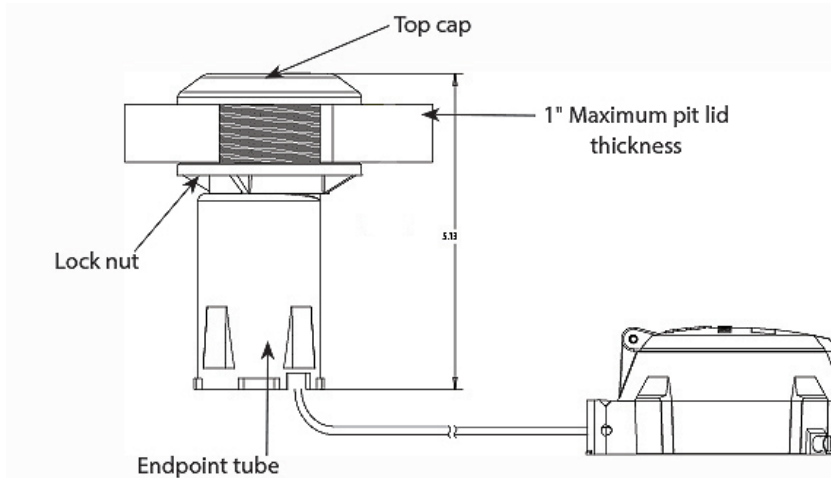


Figure 45: ORION pit endpoint

To install an endpoint through the lid, follow these steps and refer to [Figure 45](#).

1. Screw the lock nut onto the tube threads as shown.
2. Insert the endpoint tube through the bottom of the lid.
3. Screw the top cap onto the endpoint tube threads as shown and tighten.
4. Tighten the lock nut against the bottom of the lid until secure.

NOTE: When installing an ORION endpoint through a thick lid, you can use a **Pit Tube Extender (PN: 67025-001)** which requires a 2 inch (51 mm) diameter hole. The extender screws onto the threaded portion of the endpoint. Radio frequency (RF) performance may be reduced when using the Pit Tube Extender.



Figure 46: Endpoint pit tube extender

64394-009 INTEGRATED PIT LID HANGER INSTALL KIT

The **Integrated Pit Lid Hanger Install Kit (PN: 64394-009)** is designed for ORION Fixed Network, Migratable and Classic endpoints which are installed below composite and plastic lids that have an integrated hanger for AMR/AMI endpoints.

For use with: ORION Fixed Network, Migratable, Classic endpoints. This kit cannot be used with ORION Cellular endpoints.

To install an ORION endpoint with this kit, follow these steps and refer to [Figure 47](#).

1. Thread the lock nut onto the top of the ORION endpoint as shown.
2. Slide the endpoint into the lid bracket.
3. Tighten the lock nut so that the endpoint is held firmly in place.

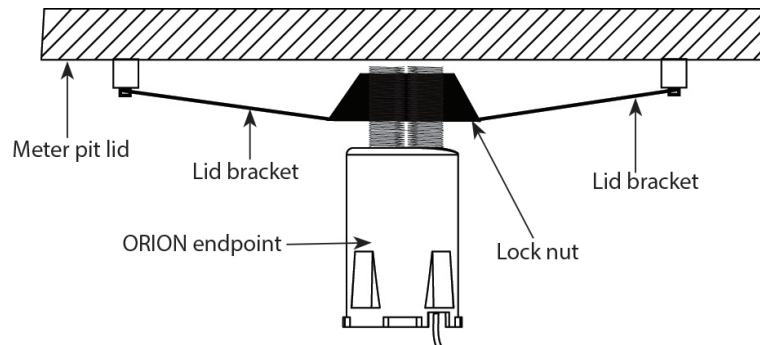


Figure 47: Integrated pit lid hanger installation

INTEGRAL ENDPOINT INSTALLATION

ORION Fixed Network, Migratable and Classic endpoints are available in an integral configuration, in which the endpoint and encoder are connected in one assembly.

Mounting an Integral Endpoint on the Meter

An integral endpoint can be installed on any Badger Meter disc, turbo or compound meter by mounting the assembly onto the bayonet of the meter and rotating it into its locking position. See [Figure 48](#).

1. Loosen the security screw on the endpoint encoder assembly.
2. Mount the assembly housing on the meter bayonet.
3. Turn the assembly clockwise 1/4 turn to lock the assembly into place on the meter.
4. After the assembly is mounted on the meter, tighten the security screw to secure the assembly to the register.

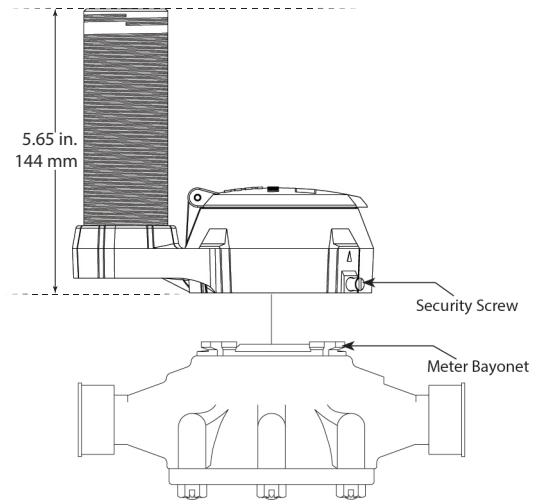


Figure 48: Integral assembly on meter

Integral Endpoint with Three Feet of Wire

An integral endpoint can be ordered with three feet of wire inside the assembly housing. Units with additional wire are marked "3 Ft Wire" on the serial number label on the side of the integral bracket ([Figure 49](#)). With this option, the endpoint can be removed from the housing, if necessary, and mounted remote from the encoder. See "[Removing an Integral Endpoint from the Assembly Housing](#)" on page 35.



Figure 49: Integral assembly with additional wire

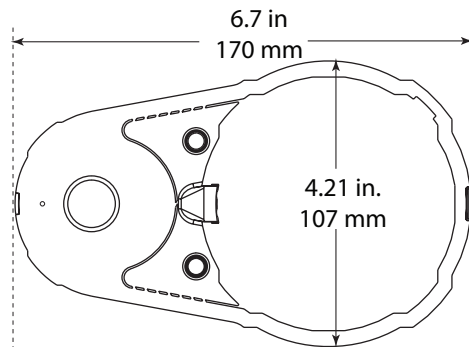


Figure 50: Assembly base dimensions

Removing an Integral Endpoint from the Assembly Housing

IMPORTANT

Removing the endpoint from the assembly housing can only be done once. Once removed, the endpoint cannot be reassembled into an integral configuration with the encoder.

CAUTION

PRIOR TO DISASSEMBLING AN INTEGRAL ENDPOINT, VERIFY THAT THE ENDPOINT HAS THREE FEET OF WIRE PACKAGED WITH THE ASSEMBLY. CHECK THE SERIAL NUMBER LABEL ON THE SIDE OF THE INTEGRAL BRACKET TO MAKE SURE IT INDICATES "3 FT WIRE." DO NOT CONTINUE WITH THE STEPS LISTED BELOW IF YOUR INTEGRAL ENDPOINT DOES NOT HAVE THIS DESCRIPTION ON THE SERIAL NUMBER LABEL, AS ENDPOINT DAMAGE WILL OCCUR.

1. Remove the assembly from the meter.
 - Remove the security screw at the base of the assembly.

NOTE: Make sure to retain the security screw for remounting the encoder assembly in **Step 5**.
 - Turn the endpoint encoder assembly (as one piece) 1/4 turn, counter-clockwise.
 - Lift the assembly off the meter.



Figure 51: Remove assembly from meter

2. Remove the endpoint wire under the breakaway plate.
 - Turn the endpoint/encoder assembly over.
 - Grasp the pull tab located to the right of the encoder seal screw with pliers (Figure 52). Then pull and remove the bottom breakaway plate from the housing to expose the wire. The plate is scored to facilitate removal.
 - With your fingers, remove the three feet of endpoint wire from the housing.

NOTE: The wire is attached to the endpoint.

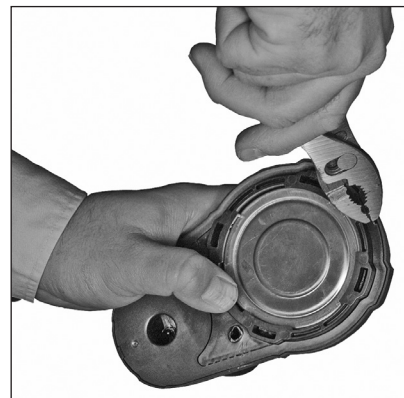


Figure 52: Pull tab to remove the breakaway plate

3. Rotate the endpoint counter-clockwise 1/4 turn and pull the endpoint and endpoint wire out from the assembly base.



Figure 53: Rotate endpoint clockwise



Figure 54: Pull endpoint away from base

4. Mount the endpoint according to recommended installation guidelines using the three feet of wire.
NOTE: The encoder cannot be removed from the assembly housing.
5. Remount the encoder in the assembly housing onto the meter bayonet.
 - Turn the assembly clockwise 1/4 turn so it locks in place.
 - Replace and tighten the security screw.

APPENDIX

IN-LINE CONNECTORS

In-line connectors are used to allow AMA/AMR/AMI device connectivity without the need for a field splice kit.

There are three available in-line connector types: Twist Tight, 308, Nicor.

When ordered as an assembly, the endpoint and encoder (or electronic meter) in-line connectors are joined at the factory, prior to shipping.

When ordered separately, in-line connectors come with removable caps. In-line connector ends can be joined in the field by the customer after removing the caps. With the proper orientation, the connector ends go together easily. No tools are necessary.

NOTE: Additional removable caps are available for order. Part numbers are listed in [Figure 56](#), [Figure 58](#), and [Figure 60](#).

⚠ CAUTION

BEFORE JOINING, MAKE SURE ALL SURFACES OF THE CONNECTOR ENDS ARE CLEAN, DRY, AND FREE OF ANY DEBRIS OR DIRT. THIS STEP IS ESSENTIAL TO MAKE SURE THE CONNECTOR REMAINS WATER TIGHT AND SUBMERSIBLE.

Twist Tight Connector



Twist Tight, caps removed, ends connected

Figure 55: Twist Tight in-line connector

To use the Twist Tight connector, follow these steps and refer to [Figure 56](#).

1. Remove the protective caps.
 - *Endpoint-side connector:* Twist the rotating collar on the *connector* counter clockwise (left) to loosen and remove the cap.
 - *Encoder-side connector:* Twist the rotating collar on the *protective cap* counter clockwise (left) to loosen and remove the cap.
2. Align the notches inside each connector and push the ends together until the endpoint-side is fully seated in the encoder-side connector.



Figure 56: Twist Tight connector ends and caps - close up view

3. On the endpoint-side connector, twist the rotating collar clockwise (right) until the ends are tightly connected. When tightly connected, the tabs at the top of the connectors should be aligned and the red O ring on the encoder-side connector should NOT be visible.

IMPORTANT

Do NOT use tools to tighten the connector ends. Hand tighten only.

Twist Tight Extension Harness

An extension harness connects in-line between the meter- and endpoint-side connectors. Harnesses in these lead lengths are available with the Twist Tight connector.

Extension Harnesses

Part Number	Extension Length
68307-009	5 ft extension
68307-010	10 ft extension

For more information about the Twist Tight connector, refer to the *Twist Tight In-line Connector Assembly Application Data Sheet*, available in the Resource Library at www.badgermeter.com.

308 Connector



Figure 57: 308 in-line connector

To use the 308 connector, follow these steps and refer to [Figure 58](#).

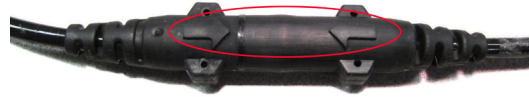
1. Squeeze the notched area and pull to remove the cap(s).
2. Align the notches inside each connector and push the ends together. You will hear a “click” when the connector ends are firmly seated and secure.



Figure 58: 308 connector ends and caps - close up view

For additional information, refer to the *308 In-line Connector Assembly Application Data Sheet*, available in the Resource Library at www.badgermeter.com.

Nicor Connector



Nicor caps removed, ends connected

Figure 59: Nicor in-line connector

To use the Nicor connector, follow these steps and refer to [Figure 60](#).

1. Pull the cap(s) straight off to remove.
2. Locate the arrow on each connector.
With the arrows pointed toward each other, push the ends together until the encoder-side connector is fully seated into the endpoint-side connector. There should be no visible gap.



Figure 60: Nicor connector ends and caps - close up view

Nicor Extension Harness

An extension harness connects in-line between the meter- and endpoint-side connectors. An extension harness in this lead length is available with the Nicor connector.

Extension Harness

Part Number	Extension Length
66488-024	10 ft extension

GEL CAPS TO CONNECT AN ENCODER

For those connections that are not factory wired or equipped with in-line connectors, follow these guidelines for using gel caps when splicing is required, either for installation or to fix a connection after a tamper.

Refer to the wiring charts for each ORION endpoint, starting on [page 9](#).

NOTE:

- For pit environments, splice connections require a field splice kit (**PN: 62084-001**), which can be ordered separately. Refer to the instructions found in the document, *Field Splice Kit for Badger Meter AMR/AMI Products*, available in the Resource Library at www.badgermeter.com.
- For all installations, excess wire should be coiled and cable tied to avoid any damage.

Required Tools

Splicing Tools (Customer Supplied)

- Parallel Pliers

Badger Meter Part Number

59983-001



- Coax Wire Stripper

59989-001



- Diagonal Cutting Pliers

n/a

Connecting an Encoder Using Gel Caps

Follow these steps when using Badger Meter supplied gel caps.

1. To connect an encoder with existing wires to an ORION endpoint, strip approximately 1-1/2 inches (38 mm) of outer insulation sheath from the encoder and endpoint cables using a coax wire stripping tool. We recommend using the Badger Meter Coax Wire Stripper (**PN: 59989-001**).

⚠ CAUTION

USE CAUTION WHEN REMOVING THE OUTER SHEATH SO THAT THE INNER SIGNAL WIRE INSULATION IS NOT NICKED OR DAMAGED.

2. Unwind the outer foil shield from the endpoint cable and cut it off even with the outer sheath using diagonal cutting pliers.
3. Connect the ORION endpoint to an approved encoder. Verify the endpoint serial number prior to completing the wiring setup.
 - Connect the encoder cable wires to the ORION endpoint wires using the insulation gel caps provided in the installation kit. Refer to the charts starting on [page 8](#) for the endpoint type and determine which wires need to be connected to complete an installation.

NOTE: The terminal posts and wire colors may not match.

⚠ CAUTION

DO NOT STRIP ANY INSULATION FROM THE ENDS OF THE WIRES BEFORE YOU PUSH THEM INTO THE GEL CAP.

- Insert the wires from each cable end as far as possible into the gel cap. See [Figure 16: Wires in gel cap](#).

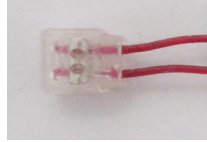


Figure 61: Wires in gel cap

- Using a crimping tool such as the Badger Meter Parallel Pliers (PN: 59983-001), place the gel cap with the wires into the jaws of the crimping tool.

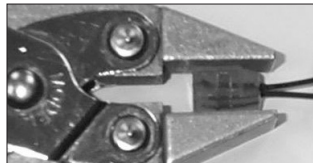


Figure 62: Gel cap in crimping tool

- Crimp the gel cap by squeezing the crimping tool handles until the gel cap is completely compressed. The Badger Meter Parallel Pliers is designed to apply just enough pressure to crimp the gel cap. Apply pressure for three seconds.



Figure 63: Compress the gel cap

- Repeat the crimping procedure for the remaining gel caps and wires.
4. Attach the two plastic cable ties and tighten securely for strain relief. Snip off the excess cable tie with the wire cutter.
 5. For remote installations, the connection is complete.

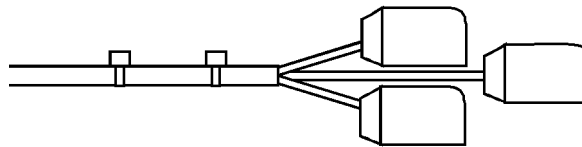


Figure 64: Wire tie attachment locations

NOTE: For pit installations, an appropriate field splice kit should be used. If using the Badger Meter Field Splice Kit, refer to the *Field Splice Kit Application Data Sheet* provided with the kit.

Testing Wire Connections

Test all wiring connections to confirm connectivity, and to verify the ORION endpoint reading and the encoder reading are the same. The connections can be tested using the Quick Read function with either an ORION handheld or mobile data collector. See the appropriate software manual, available in the Resource Library at www.badgermeter.com, for more information.

ENDPOINT STATUS TOOL FOR ORION CELLULAR ENDPOINTS

BEACON® AMA users can check the activation status of ORION Cellular endpoints with the ORION Endpoint Status tool. Several minutes after installation, the tool displays ORION Cellular endpoints assigned to you. Endpoints do not need to be provisioned in BEACON AMA to display.

The browser-based tool can be viewed on a computer or mobile device. An Internet connection is required. Follow these steps to use the ORION Endpoint Status tool.

1. Go to <https://orionstatus.beaconama.net>.
2. Sign in with your BEACON email address and password (Figure 65).

Result: The ORION Endpoint Status screen (Figure 66) opens showing the list of activated Cellular endpoints.

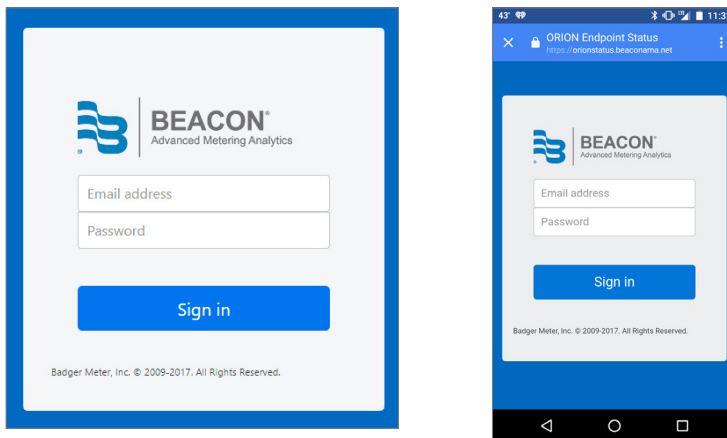


Figure 65: Tool sign in screen - computer and mobile

NOTE: It can take several minutes for a newly installed endpoint to communicate with the cellular network and display on the ORION Endpoint Status screen.

3. View the endpoint list.
The list displays endpoint serial number, activation time, and activation signal strength. The current endpoint and meter status are also shown. Endpoints are listed according to their activation time, with the most recent endpoint activation times listed first (top of list).

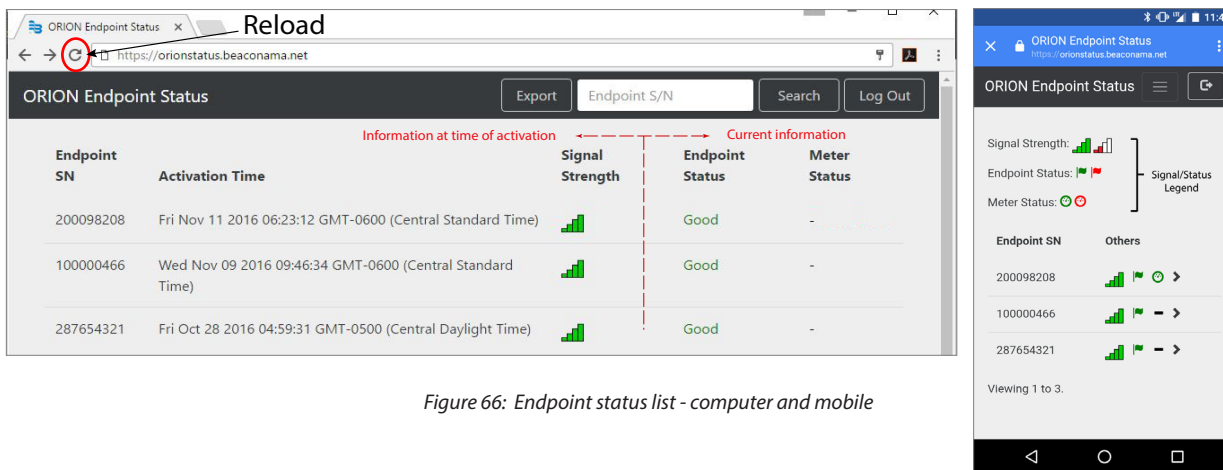



Figure 66: Endpoint status list - computer and mobile

You can also **Export** endpoints into a program such as Excel®, or **Search** to find a specific endpoint.

4. To see any new endpoints that have been added since logging in, reload/refresh the browser window. On a computer, use the reload button  at the top left of the screen. On a mobile device, swipe down the screen to refresh.

- Select an endpoint in the list to see the endpoint raw read. A window opens, like the examples shown in [Figure 67](#).

NOTE: Information in the first three fields is captured at the time of activation. Information in the next three fields is current information.

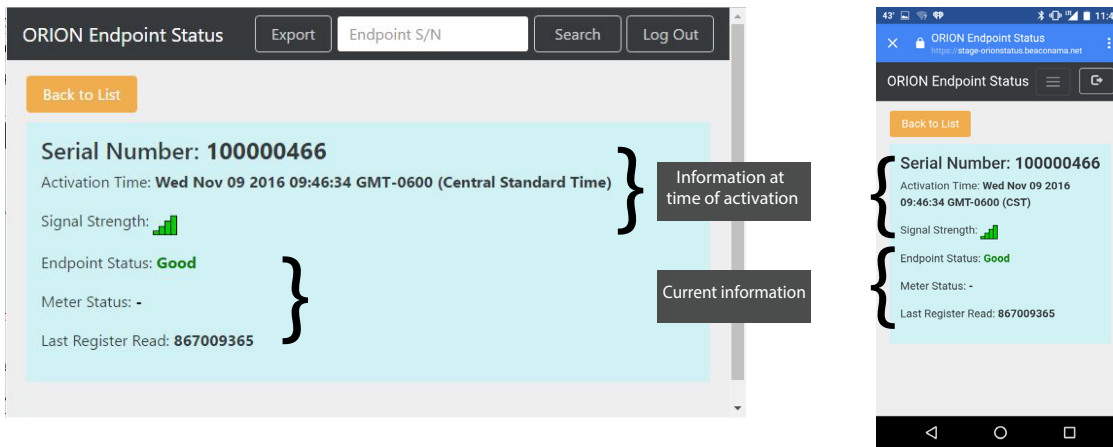


Figure 67: Status detail screen - computer and mobile

The *Endpoint Status* field displays one of the following:

<i>Endpoint Status</i>	<i>Response</i>
Good	No response required.
Endpoint Tamper or Encoder Error	Incomplete information. This message updates at the next scheduled communication.
Endpoint Tamper	Endpoint* requires attention.
Encoder Error	Encoder* requires attention.


*For additional endpoint information, see the ORION Endpoint Utility User Manual for handheld or laptop. For additional encoder information, see the appropriate encoder user manual. All documents are available in the Resource Library at www.badgermeter.com.

The *Meter Status* field displays one of the following:

NOTE: *Meter Status* only displays for E-Series Ultrasonic meters. For other meters, the field will have a dash mark (-).

<i>Meter Status</i>	<i>Response</i>
Good	No response required.
Sensor Error	Meter* requires attention.

*For additional information, see the appropriate E-Series Ultrasonic Meter User Manual, available in the Resource Library at www.badgermeter.com.

- Tap/click **Back to List** to return to the previous screen.
- When finished using the tool, tap the **Log Out** button or  on a mobile device.



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Regular Board Meeting, June 12, 2018

To: Board of Directors
From: CJ Dillon, *Office Manager*
Subject: Second Reading of Rate Ordinances 89 & 90 / Retirement of Water
Availability Charge
Item No. E-4

RECOMMENDATION:

1. Perform second reading and adoption of Ordinance 89 and Ordinance 90, which upon adoption will implement the rate increases approved in the Proposition 218 Hearing held August 9, 2016.

FINANCIAL IMPACT: See Attachments

BACKGROUND/DISCUSSION:

Subject 1: Second Reading in title only and adoption of Ordinance 89: AN ORDINANCE AMENDING RATES, FEES AND REGULATIONS RELATED TO THE PROVISION OF WATER AND WASTEWATER SERVICES WITHIN THE SERVICE AREA OF THE CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT AND ADOPTING BY REFERENCE PORTIONS OF ARTICLE VII- PUBLIC UTILITIES, CHAPTER 2- SEWER SERVICE OF THE CITY OF PORT HUENEME MUNICIPAL CODE

Subject 2: Second Reading in title only and adoption of Ordinance 90: AN ORDINANCE OF THE CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT ESTABLISHING RATES, FEES AND REGULATIONS RELATING TO SOLID WASTE AND RECYCLING COLLECTION AND DISPOSAL AND THE ABATEMENT OF NUISANCES

ATTACHMENTS:

1. Ordinance 89
2. Ordinance 90

ORDINANCE NO. 89

CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT RATES, FEES, AND REGULATIONS RELATED TO THE PROVISION OF WATER AND WASTEWATER SERVICES AND ADOPTION BY REFERENCE OF PORTIONS OF ARTICLE VII- PUBLIC UTILITIES, CHAPTER 2- SEWER SERVICE OF THE CITY OF PORT HUENEME MUNICIPAL CODE

SECTION 1: Short Title

The Short Title of this Ordinance shall be: “**CIBCSD 2018/2019 Water and Wastewater Utility Service Fee and Charges Adjustments Ordinance**” and may be cited as such.

SECTION 2: Purpose

The purpose of this Ordinance is to adjust existing water and wastewater rates and charges in order to balance revenue projections with expenditure requirements found in the adopted Fiscal Year 2018-19 Budget and to establish sufficient rules and regulations related to wastewater (sewer) service to: (1) prevent the introduction of pollutants not customarily found or that are incompatible with the wastewater system, (2) protect District personnel who may be affected by wastewater and sludge in the course of their employment, and (3) enable sufficient control authority to the District in order to comply with local, state and federal wastewater regulations.

SECTION 3: Repeal of Ordinance 87 and annual Water Availability Charge

Ordinance No. 87 regarding the above-referenced fees and charges now in effect is hereby repealed in its entirety. The \$10.00 annual Water Availability Charge is hereby repealed due to the limited amount of vacant lots located within the District’s boundaries and the inability to find the original Ordinance to enforce this charge.

SECTION 4: Water Service Charges

- (a) **Section 4.1: Definitions.** For the purposes of this section, the following definitions shall apply: “Non-Harbor Customers” shall mean those customers who are served water through a connection **not** subject to the terms of the 1996 Water Service Agreement between the County of Ventura and the Channel Islands Beach Community Services District; those residential subdivisions commonly referred to as Hollywood Beach, Hollywood by the Sea, and Silver Strand.
- (b) “Harbor Customers” shall mean those customers who are served water through a

connection subject to the terms of the 1996 Water Service Agreement between the County of Ventura and the Channel Islands Beach Community Services District; those areas located within the lands and water ways owned and operated by the Channel Islands Harbor Department.

- (c) "Single-Family Residential" shall mean single-family residences; single-family residences with one (1) accessory dwelling unit; and residential duplexes serviced through a single, metered water connection.
- (d) "Multi-Family Residential" shall include single-family residences with two (2) or more accessory dwelling units; residential multiplexes with three (3) or more dwelling units serviced through a single, metered water connection. "Multi-family" shall not include any connection that services both dwelling units as well as other uses simultaneously.
- (e) "Commercial" and "Industrial" shall include any use that is not solely comprised of residential dwelling units including those where dwelling units and other uses are serviced by a single, metered water connection.
- (f) "HCF" shall mean Hundred Cubic Feet of water; an industry standard unit of measure for water consumption. One (1) HCF equals 748 gallons of water.
- (g) "Date of Demolition" or "Demolition" shall mean the sign-off date of an approved demolition permit from the County of Ventura.

Section 4.2: Base Monthly Water Service Charges. The following rates are effective beginning at 12:01am on July 15, 2018:

- (a) Non-Harbor Customers
 - (i) ¾" meter: **\$36.41/month**
 - (ii) 1" meter: **\$57.31/month**
 - (iii) 1½" meter: **\$109.56/month**
 - (iv) 2" meter: **\$172.25/month**
 - (v) 3" meter: **\$370.80/month**
 - (vi) 4" meter: **\$663.38/month**
- (b) Harbor Customers
 - (i) ¾" meter: **\$50.13/month**
 - (ii) 1" meter: **\$80.18/month**
 - (iii) 1½" meter: **\$155.31/month**
 - (iv) 2" meter: **\$245.46/month**
 - (v) 3" meter: **\$530.94/month**
 - (vi) 4" meter: **\$951.65/month**
- (c) Fire Hydrant Construction Meter: **\$50.00/month**. A minimum charge of \$50.00 will be applied to any account requesting a Fire Hydrant Construction Meter; following the first fully billing cycle, the \$50.00 per month charge will be prorated to reflect the actual number of days of service.

Section 4.3 Fire Line Charge. In addition to the base monthly water rate for each residential connection served by a **1"** or less water meter with a fire sprinkler system as well as a UL fire water meter and manifold installed in the residence, the following monthly fees shall apply:

- (a) ¾" connection: **\$6.19/month**

(b) 1" connection: **\$9.34/month**

Section 4.4 Three Tiered, Increasing Block-Metered Consumption Rates.

(a) Non-Harbor Single-Family Residential Customers

- (i) Tier 1: **\$3.79/HCF** for first **0-5 HCF** consumed each month
- (ii) Tier 2: **\$4.39/HCF** for water consumed between **6-8 HCF** each month
- (iii) Tier 3: **\$6.10/HCF** for water consumed above **8 HCF** each month

(b) Non-Harbor Multi-Family Residential Customers

- (i) Tier 1: **\$3.79** per HCF for first **0-4 HCF** consumed each month
- (ii) Tier 2: **\$4.39** per HCF for water consumed between **5-6 HCF** each month
- (iii) Tier 3: **\$6.10** per HCF for water consumed above **6 HCF** each month

(c) Example. *The monthly billing for a three (3) unit multi-family structure will be calculated as follows:*

Up to 12 HCF of water at Tier 1 pricing: {up to 4 HCF of Tier 1 water} x {3 units}

Up to 6 HCF of water at Tier 2 pricing: {up to 2 HCF of Tier 2 water} x {3 units}

Remaining HCF of water at Tier 3 pricing: {all HCF above 18 HCF}

Section 4.5 Metered Consumption Rates. The variable monthly rate based on metered consumption for Commercial, Governmental, and Industrial (including Construction and Hydrant) meters shall be:

(a) Non-Harbor: \$4.26per HCF.

(b) Harbor: \$4.98 per HCF.

Section 4.6 Monthly Rates Dedicated Fire Line Rates. The monthly rates for connections dedicated solely to the provision of fire protection shall be based on the diameter of the connection at these rates:

- (a) 1" connection: **\$6.07/month**
- (b) 2" connection: **\$11.35/month**
- (c) 3" connection: **\$23.33/month**
- (d) 4" connection: **\$44.01/month**
- (e) 6" connection: **\$118.20/month**
- (f) 8" connection: **\$246.16/month**

Section 4.7 Charges for Relocation or Abandonment of Metered Service. Charges for all meter relocation services will be billed at the District's actual cost plus a 15% administration fee to cover handling and billing costs on all materials as well as other related costs incurred by the District in connection with the provision of these services. An estimate of costs for each relocation or abandonment shall be available upon request from the District's General Manager.

Section 4.8 Connection Charges Governed by the 1996 Water Service Agreement.

All connection charges for water connections made within the Harbor are governed by the 1996 Water Service Agreement.

Section 4.9 Connection Charges Not Governed by the 1996 Water Service Agreement.

(a) Capacity Connection Charge. Subject to Section 4.8 above, any new

development within the District's service area requiring a metered service connection to the District's water mains shall be subject to a capacity-based connection fee according to the following schedule:

- (i) ¾" connection: **\$6,064.00** (based on equivalency factor: 1)
- (ii) 1" connection: **\$12,128.00** (based on equivalency factor: 2)
- (iii) 1 ½" connection: **\$24,252.00** (based on equivalency factor: 4)
- (iv) 2" connection: **\$43,909.00** (based on equivalency factor: 7)
- (v) 3" connection: **\$90,946.00** (based on equivalency factor: 15)
- (vi) 4" connection: **\$181,893.00** (based on equivalency factor: 30)
- (vii) 6" connection: **\$363,786.00** (based on equivalency factor: 60)

(b) Capacity Connection Charges for Dedicated Fire Protection Connections.

Subject to Section 4.8 above, any development within the District's service area requiring a metered service connection to the District's water mains that will be dedicated solely to fire protection shall be subject to a capacity-based connection fee according to the following schedule:

- (i) ¾" connection: **\$800.00**
- (ii) 1" connection: **\$1,212.00**
- (iii) 2" connection: **\$1,842.00**
- (iv) 3" connection: **\$2,818.00**
- (v) 4" connection: **\$3,860.00**
- (vi) 6" connection: **\$5,712.00**

In addition to this connection fee, applicants will be billed the District's the actual cost to install the required connection plus a 15% administrative fee to cover handling and billing costs, on all materials or external costs incurred by the District. An estimate of costs for each installation can be obtained upon request from the District General Manager.

(c) Connection Charge for Delayed Construction on Vacant Parcels.

- (i) *Structures Constructed Within 5 Years of Paying Connection Charge.* Any structure proposed for residential, commercial, or industrial uses on a vacant and unconnected parcel within the District's service area on a parcel for which a Connection Charge has been paid within the 5 years of the date of the requested connection to the District's water system shall not be subject to the payment of the applicable Connection Charge. This subsection is subject to Section 4.9(e) describing Incremental Water Connection Charges, below.
- (ii) *Structures Constructed 5-10 Years After Paying Connection Charge.* Any structure proposed for residential, commercial, or industrial uses on a vacant and unconnected parcel within the District's service area on a parcel for which a Connection Charge has been paid more than 5 years but less than 10 years from the date of the requested connection to the District's water system shall be subject to the payment of the applicable Connection Charge at a 50% reduced rate. This subsection is subject to Section 4.9(e) describing Incremental Water Connection Charges, below.
- (iii) *Structures Constructed More Than 10 Years After Paying Connection Charge.* Any structure proposed for residential, commercial, or industrial uses on a vacant and unconnected parcel within the District's service area on a parcel for which a Connection Charge has been paid more than 10 years from the date of the requested connection to the District's water system shall be subject

to the payment of the applicable Connection Charge.

(d) Connection Charge for Demolished and Replaced Structures.

- (i) Structures Replaced Within 5 Years of Demolition.** Any structure proposed for residential, commercial, and/or industrial uses within the District's service area that is being constructed to replace a demolished structure shall **not** be subject to the payment of applicable Connection Charges provided: (1) The structure being replaced was properly connected to the District's sewer system, as evidenced by the payment of past applicable sewer connection charges, and (2) the replacement structure is constructed within five (5) years from the date of demolition for the structure it replaces. The property owner shall bear the burden of proof as to the above (5) year time period.
- (ii) Structures Replaced 5-10 Years After Demolition.** If a property owner delays in constructing a replacement structure until more than five (5) years but less than ten (10) years from the date of applicable connection charges being paid or the date of demolition, the District shall levy and collect all applicable Sewer Connection Charges in effect at the time of request for a "Water Service Will Serve or Water Availability Letter" for the structure. However, said charges shall be reduced by (50%) Fifty Percent.
- (iii) Structures Replaced More Than 10 Years After Demolition.** If a property owner delays in constructing a replacement structure until more than ten (10) years from the date of demolition, then there shall be no reduction in the applicable Sewer Connection Charge.
- (e) Incremental Water Connection Charge.** Notwithstanding any other part of this Ordinance, the District shall levy incremental an Incremental Water Connection Charge for any replacement structure which requires a larger size water meter. This incremental charge shall be based on the difference in charges between the larger size connections minus the dollar value of the charges for the original sized connections on the demolished structure. Payment of these charges shall occur prior to and as a condition of the issuance of "Water Will Serve or Water Availability Letter"
- (f) Issuance of Letters.** Payment of all Water Connection Charges shall occur prior to and as a condition of the issuance of "Water/Sewer Will Serve Letter" or "Water/Sewer Availability Letter."

Section 4.10 Charges for Modifying Fire Sprinkler System Service Connections.

- (a) Ventura County Fire Protection District ("VCFPD") Ordinance No. 25 requires new homes and/or remodeled homes to install fire sprinkler systems under certain specific conditions. The design of said sprinkler systems will be determined by the VCFPD.
- (b) Charges or all water service modifications or installations required to accommodate fire sprinkler installations utilizing the same size water meter and pipe will be billed at actual cost to the District, plus a 15% administrative fee to cover handling and billing costs on all materials or external costs incurred by the District. An estimate of costs for each installation can be obtained upon request from the District General Manager.
- (c) If VCFPD determines a larger diameter meter or pipe is necessary to comply with

its Ordinance Code, then fees for such replacement equipment shall be calculated in accordance with Section 6.6(d) of this Ordinance.

SECTION 5: Sewer Service Charges

Section 5.1 Definitions. For the purposes of this section, the following definitions shall apply:

- (a) "Equivalent Residential Unit" or (ERU) shall mean:
 - a. One (1) freestanding single-family residence; or
 - b. Any dwelling unit, attached or detached, designed to be an independent dwelling unit; or
 - c. Any independent dwelling unit that is part of an apartment complex, condominium development, mobile home, or duplex.
- (b) "Single Family Residential" shall mean one (1) Single Family residence with no attached or detached accessory dwelling units.
- (c) "Multi-Family Residential" (MFR) shall mean any residential structure comprised of more than one (1) dwelling unit, including single-family residences with one (1) or more accessory dwelling units.
- (d) "Sewer service only" shall mean those facilities known as the Hollywood Beach Mobile Home Park" and the "Harbor Walk Condominiums".
- (e) "Commercial I – Low" shall mean any premises used for general office functions, retail and or enterprise where it can be reasonably expected that the strength of sewerage generated and discharged will be generally low in total suspend solids and generally low in Bio Oxygen Demand (BOD).
- (f) "Commercial III – High" shall mean any premises used of the purpose of food production, restaurant service or where the sewerage generated and discharged can be reasonably expected to produce high volumes of flow, high total suspended solids and high Bio Oxygen Demand.
- (g) "School" shall mean any premises owned and operated by the Port Hueneme School District.
- (h) "HCF" shall mean Hundred Cubic Feet of water; an industry standard unit of measure for water consumption. One (1) HCF equals 748 gallons of water.
- (i) "Return to Sewer" or (RTS) is the amount of wastewater that flows to the District's sewer system; because of the technical limitations on accurately measuring the flows of sewage from individual connections, RTS is calculated based on industry-standard ratios that are a function of type of use and amount of water delivered. The return to sewer factor for Single-Family Residential and Multi-Family Residential customers is based on annualized FY 2015 winter usage.
- (j) "Lateral" shall mean those portions of sewer line necessary to connect any property to the District Waste Water Collection System, including those portions in the public right of way up to and including the Wye connection to the District Sewer main and those sections extending onto private property.
- (k) "Date of Demolition" or "Demolition" shall mean the sign-off date of an approved demolition permit from the County of Ventura.

SECTION 5.2: Monthly Base and Variable Sewer Rates. The sewer rates shall be comprised of a monthly base service charge in addition to variable charges based on usage according to the following schedule of rates effective beginning at 12:01am on July 15, 2018:

(a) Monthly Base Rates (based on type of connection):

- (i) Single Family Residential: **\$24.91** per month per connection
- (ii) Multi-Family Residential: **\$19.92** per month per ERU behind connection
- (iii) Sewer Service Only: **\$19.92** per month per ERU behind connection
- (iv) School: **\$147.18** per month per connection
- (v) Commercial I – Low: **\$23.44** per month per connection
- (vi) Commercial III – High: **\$59.09** per month per connection

(b) Variable Rates (based on metered water consumption and listed RTS):

- (i) Single-Family Residential: **\$5.88** per HCF per month; calculated at 93% RTS
- (ii) Multi-Family Residential: **\$5.88** per HCF per month for each metered connection; calculated at 94% RTS
- (iii) Sewer Service Only: **\$5.88** per HCF per month for each metered connection; calculated at 94% RTS
- (iv) School: **\$5.61** per HCF per month for each metered connection; calculated at 100% RTS
- (v) Commercial I – Low: **\$5.67** per HCF per month for each metered connection; calculated at 100% RTS
- (vi) Commercial III – High: **\$7.04** per HCF per month for each metered connection; calculated at 100% RTS

(a) **Section 5.3: Sewer Connection Charges. New Connection Charge.** Each residential/commercial unit served by a 4 inch or smaller lateral to be connected directly to the District Waste Water Collection System shall be assessed a \$8,656.00 connection fee by the District. Payment of the connection fee authorizes a single connection from the subject property to the District Waste Water Collection System. It is the sole responsibility of the parcel owner to install and maintain the sewer lateral connecting the subject property to the District owned collection system.

(b) **Connection Charge for Delayed Construction on Vacant Parcels.**

- i. *Structures Constructed Within 5 Years of Paying Connection Charge.* Any structure proposed for residential, commercial, or industrial uses on a vacant and unconnected parcel within the District's service area on a parcel for which a Connection Charge has been paid within the 5 years of the date of the requested connection to the District's sewer system shall not be subject to the payment of the applicable Connection Charge. This subsection is subject to Section 4.9(e) describing Incremental Water Connection Charges, below.
- ii. *Structures Constructed 5-10 Years After Paying Connection Charge.* Any structure proposed for residential, commercial, or industrial uses on a vacant and unconnected parcel within the District's service area on a parcel for which a Connection Charge has been paid more than 5 years but less than 10 years from the date of the requested connection to the District's sewer system shall be subject to the payment of the applicable Connection Charge at a 50% reduced rate. This

subsection is subject to Section 4.9(e) describing Incremental Water Connection Charges, below.

- iii. *Structures Constructed More Than 10 Years After Paying Connection Charge.* Any structure proposed for residential, commercial, or industrial uses on a vacant and unconnected parcel within the District's service area on a parcel for which a Connection Charge has been paid more than 10 years from the date of the requested connection to the District's sewer system shall be subject to the payment of the applicable Connection Charge.

(c) Connection Charge for Demolished and Replaced Structures.

(i) *Structures Replaced Within 5 Years of Demolition.* Any structure proposed for residential, commercial, and/or industrial uses within the District's service area that is being constructed to replace a demolished structure shall **not** be subject to the payment of applicable Connection Charges provided: (1) The structure being replaced was properly connected to the District's sewer system, as evidenced by the payment of past applicable sewer connection charges, and (2) the replacement structure is constructed within five (5) years from the date of demolition, for the structure it replaces. The property owner shall bear the burden of proof as to the above (5) year time period.

(ii) *Structures Replaced 5-10 Years After Demolition.* If a property owner delays in constructing a replacement structure until more than five (5) years but less than ten (10) years from the date of applicable connection charges being paid or the date of demolition, the District shall levy and collect all applicable Sewer Connection Charges in effect at the time of request for a "Water/Sewer Will Serve Letter" or "Water/Sewer Availability Letter" for the structure. However, said charges shall be reduced by (50%) Fifty Percent.

(iii) *Structures Replaced More Than 10 Years After Demolition.* If a property owner delays in constructing a replacement structure until more than ten (10) years from the date of demolition, then there shall be no reduction in the applicable Sewer Connection Charge.

- (d) Incremental Sewer Connection Charge.** Notwithstanding any other part of this Ordinance, the District shall levy incremental an Incremental Sewer Connection Charge on for any replacement structure which requires a larger size water meter. This incremental charge shall be based on the difference in charges between the larger size connections minus the dollar value of the charges for the original sized connections on the demolished structure.

- (e) Issuance of Letters.** Payment of all Sewer Connection Charges shall occur prior to and as a condition of the issuance of "Water/Sewer Will Serve Letter" or "Water/Sewer Availability Letter."

SECTION 6: Charges and Requirements for Remodeling, Replacement, Modification, or Redevelopment Affecting the District's Water or Waste Water Systems

Section 6.1 Charges.

- a) *Cost Calculation.* Notwithstanding any other provisions of this ordinance, the following requirements shall apply to any property connected to the Districts Water or Waste Water Collection System that is to be remodeled, modified or

redeveloped in any matter that includes the repair, replacement or modification of facilities, infrastructure or piping connected to the Districts water or waste water system shall pay to the District the actual cost incurred to the District plus a 15% administrative overhead fee for staff time in plan review, inspections and other charges that may include, but are not limited to atlas updates, hydraulic modeling, construction cost, sampling or engineering.

- b) *Deposit.* A minimum deposit for each project shall be collected by the District from each applicant in accordance with following schedule:
 - (i) Residential Property: \$250.00
 - (ii) Commercial Property with ¾" and 1" meter: \$250.00
 - (iii) Commercial Property with 1.5" and larger meter: \$1000.00
- c) *Costs in Excess of Deposit.* Should the actual cost incurred by the District exceed the amount of the deposit the applicant or property owner shall be required to pay those costs in full prior to receiving service from the District. In the event the actual cost incurred are less than the amount of the deposit the District shall refund the remaining balance of the deposit within thirty days of being notified by the applicant that the project is complete.

Section 6.2 Requirement to Camera Sewer Lateral. Prior to reconnecting to the District Waste Water Collection System the parcel owner shall arrange for and pay for a video inspection of the sewer lateral. The video inspection must occur with an authorized agent of the District present or a copy of the video inspection shall be provided to the District in DVD format. Upon review of the video inspection, the District may require the repair or replacement of any portion of the lateral shown to have the potential for excessive velocities, failures, infiltration of water, roots, soil, or the introduction of anything other than waste water into the District Waste Water Collection System.

SECTION 7: Adoption of Certain Articles and Chapters of the City of Port Hueneme Municipal Code

Pursuant to the Government Code sections 61060 and 61100, Article VII- Public Utilities, Chapter 2 – Sewer Service of the City Of Port Hueneme Municipal Code is hereby adopted by reference and made a part of this Ordinance provided that (1) references to administrative authorities therein be construed, whenever applicable based on context, to refer to the Channel Islands Beach Community Services District ("District") (2) references to authorities therein designated to the Public Works Director be construed, whenever applicable based on context to refer to the District General Manager, (3) The following portions of Article V11- Public Utilities, Chapter 2 – Sewer Service of the City Of Port Hueneme Municipal Code are specifically not part of the referenced adoption and shall not be deemed enforceable or adopted:

- (a) 7152G paragraph (2)
- (b) 7152H paragraphs (2) & (3)
- (c) 7154D is excluded in its' entirety
- (d) Section 7155 is excluded in its' entirety
- (e) 7156A, 7156B, 7156C, 7156D, 7156E, 7156F, 7156G, 7156H, 7156I, 7156J, 7156K and 7156L are excluded in their entirety
- (f) 7157B and 7157C are excluded in their entirety
- (g) Section 7159 is excluded in its' entirety

(h) Section 7160 is excluded in its' entirety

In the case of any conflict between the code adopted by reference herein and a rule or regulation separately adopted by the District, the District's separately adopted rule or regulation shall prevail.

SECTION 8: Effective Date

This Ordinance shall become effective at **12:01 a.m. on July 15, 2018.**

SECTION 9: Publication

Upon adoption, this Ordinance shall be published in title and general description only in a newspaper of general circulation within the District's general area of service.

SECTION 10: Severability

In the event that any section, clause or portion of this Ordinance is found to be invalid, the validity of the remaining sections of the Ordinance shall not be affected.

PASSED, APPROVED and ADOPTED by the Channel Islands Beach Community Services District Board of Directors on this **12th day of June, 2018**, by the following vote:

AYES: Directors:

NOES: Directors:

ABSENT: Directors:

ELLEN SPIEGEL, BOARD PRESIDENT

ATTEST:

APPROVED AS TO FORM:

AKBAR ALIKHAN
GENERAL MANAGER

JOHN MATHEWS
GENERAL COUNSEL



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice
President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

353 Santa Monica Drive · Channel Islands Beach, CA · 93035-4473 · (805) 985-6021 · FAX (805) 985-7156
A PUBLIC ENTITY SERVING CHANNEL ISLANDS BEACHES AND HARBOR · CIBCSD.COM

ORDINANCE NO. 90

AN ORDINANCE OF THE CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT ESTABLISHING RATES, FEES AND REGULATIONS RELATING TO SOLID WASTE AND RECYCLING COLLECTION AND DISPOSAL AND THE ABATEMENT OF NUISANCES

WHEREAS, the Channel Islands Beach Community Services District (hereinafter “District”) is empowered to provide a number of public services in accordance with provisions of **California Government Code Section 61000, et seq** and

WHEREAS, Government Code Section 61600 enumerates the powers that the District may exercise, among them the following: (1) to supply the inhabitants of the district with water for domestic use, irrigation, sanitation, industrial use, fire protection and recreation, (2) to collect, treat or dispose of sewage (wastewater), waste and storm water of the district and its inhabitants, and (3) to collect or dispose of garbage and refuse matter; and

WHEREAS, Government Code Section 61621 provides that the District may prescribe, revise and collect rates or other charges for services and facilities provided by it, such as the above-referenced supply of water sewage and garbage collection and disposal services; and

WHEREAS, the District requires all properties within the District’s service area desiring any one of the above utility services to obtain all services, as evidenced by the connection of the property to the District’s water mains via appropriately sized, metered, service lateral connections and to any appropriate sewer connections; and

WHEREAS, the District has established procedures for the collection of appropriate service charges for the above-referenced services by the number of ordinances and utility billing policies now in effect; and

WHEREAS, the District’s Board of Directors conducted a duly noticed public hearing on the Recommended Fiscal Year 2018/19 Annual Budget during their June 12, 2018 Meeting, concluding in the adoption of the Fiscal Year 2018-19 Annual Budget during the June 12, 2018 Meeting; and

WHEREAS, the adoption of a Final Fiscal Year 2018-19 Annual Budget for the

District requires periodic adjustments to existing water, wastewater and/or trash utility rates and fees to balance revenue projections with expenditure requirements; and

WHEREAS, the District has provided written notice pursuant to California Proposition 218 to all property owners in the District's area regarding the proposed adjustment to the water, wastewater, and trash utility rates and fees, and held and conducted a public hearing regarding the proposed adjustment on August 9, 2016.

The Board of Directors of the Channel Islands Beach Community Services District does ordain as follows:

Section 1. Definitions.

Unless the context otherwise requires, the following definitions shall govern the construction of this chapter.

A. "District" means the Channel Islands Beach Community Services District and all territory now or hereafter included within the boundaries of District.

B. "Contractor" means any person with whom District may have a contract pursuant to this ordinance for the collection and disposal of trash from any property within District.

C. "Employee" means all persons engaged in the operation or conduct of any garbage, trash or refuse contractor business as defined in subsection B, whether as owner, partner, agent or manager, and any and all other persons employed or working in the business.

D. "Green Waste" means tree trimmings, grass cuttings, dead plants, leaves, branches and dead trees, any type of non-chemically treated wood or lumber and similar materials

E. "Recyclable Material(s)" means those materials designated by the Contractor and the District which will be processed for marketing.

F. "Solid Waste" means all putrescible and non-putrescible solids, semi-solids and liquid waste accumulated or delivered for collection and disposal within the District and includes, but are not limited to, construction, demolition, debris and bulky waste. Solid Waste does not include:

1. Hazardous waste or low level radioactive waste regulated under Chapter 7.6 of Division 20 of the Health and Safety Code.
2. Medical waste which is regulated pursuant to the Medical Waste Management Act (Chapter 6.1 of the Health and Safety Code), provided that the medical waste, whether treated or untreated, is not disposed of at a solid waste facility. Medical waste which has been treated and which is deemed to be solid

waste shall be regulated pursuant to this division.

3. Recyclable materials.

G. "Prohibited Materials" includes bricks, stones, concrete, cement, plaster, asphalt and debris incident to construction or demolition; hot ashes; earth, sod and sand other than the minimal amounts accumulated in ordinary cleaning; any toxic or hazardous materials, chemicals or waste, including flammable or explosive substances such as drain oil and paints; medicines, drugs and pills, unless securely enclosed in containers which do not in any way indicate the nature of the contents; and appliances and furniture which are bulky or unusually heavy, such as couches, refrigerators, water heaters and similar items. Other than as specified in Sections 8 and 30 relating to nuisances, "Prohibited Materials" are specifically excluded from the definitions of "Garbage," 'Refuse' and "Trash' herein.

H. "Real Property," "Property" or "Properties" means all real property in District, residential, commercial or otherwise, vacant or otherwise, upon which trash, garbage, or refuse is produced or accumulates.

I. "Residential Property" means real property used for residential purposes, containing no more than one (1) residential dwelling unit. "Residential Property" is real property containing a single-family dwelling.

J. A "Residential Dwelling Unit" means an independent residential living space, with kitchen facilities, designed for use by one (1) or more persons. For purposes of this definition, a residential dwelling unit includes, without limitation, a single-family dwelling, one-half (1/2) of a duplex, and an apartment within a multi—unit residential building.

K. "Multi-Unit Residential Property" means real property used for residential purposes, containing two (2) or more residential dwelling units. "Multi—Unit Residential Property" includes a duplex with two (2) dwelling units, a triplex with three (3) dwelling units, and an apartment complex or other multi-tenant building containing four (4) or more dwelling units.

L. "Commercial Property" shall include real property being used for commercial pm-poses, including offices, restaurants and hotels or motels.

M. "Public Entity Property" means those properties owned or occupied by public entities, including: (1) the Hueneme School District (Hollywood Beach School); and (2) the County of Ventura.

N. "Construction Site" means real property undergoing construction or substantial repairs and/or reconstruction.

O. "Person" means an individual, partnership, corporation or any commercial

association or venture, however defined.

P. "Occupant" means every resident or possessor of improved real property within the District, residential or commercial.

Q. "Owner" means a person holding title to real property within District.

R. "Manager" shall mean the General Manager of this District. The Manager may delegate his or her responsibilities under this ordinance to other District employees.

S. "Street" means any public or private street or way.

T. "Truck" means any truck, trailer, semi-trailer, conveyance or vehicle to collect, hold or transport trash, garbage, or refuse upon and along the streets, roads and highways of District.

U. "Independent Contractor" means a person other than Contractor with whom an owner or occupant has a collection contract.

V. "Board of Directors" means the Board of Directors of the Channel Islands Beach Community Services District.

Section 2. Intent.

Pursuant to the statutory authority enumerated in California Government Code Section 61 600 and Public Resources Code Section 40059, it is the declared intent of District to provide for the collection and removal of trash, garbage and refuse from real property within the District in accordance with the provisions of this ordinance, any rules and regulations of District adopted pursuant to this ordinance, and the terms and conditions of any contract between District and Contractor(s) pursuant to this ordinance.

Section 3. Exclusive Right of District to Regulate Trash Collection and Disposal.

The collection, removal and disposal of all trash shall be performed by District or its authorized Contractor, and no other person shall engage in the business of collection, removal and disposal of trash unless authorized to do so by District. The provisions of this section shall not apply to any owner or occupant hiring an independent contractor to collect and dispose of refuse or prohibited materials from property for which such services are not provided by District or its Contractor, nor shall these provisions apply to the exemption specified in Section 6 herein.

Section 4. Supervision of Collection

A. The Manager shall supervise the collection and removal of garbage, refuse, waste and trash within District.

B. The Board of Directors of District may by resolution adopt rules, regulations, terms and conditions governing the collection, removal and disposal of garbage and refuse, which are not inconsistent with the provisions of this ordinance.

Section 5. Eligibility for Service.

All real property within District shall be eligible to receive trash collection and disposal services by District's Contractor. All real property so served must be on the current property tax roll for the County of Ventura, with all taxes paid and current. Provision of services is subject to proof of legal occupancy and compliance with all terms and conditions of this ordinance, including timely payment of all service rates and charges.

Section 6. Owners' and Occupants' Exemption.

Owners' and Occupants' removal and conveyance of an occasional load of refuse or prohibited materials, not containing garbage, from their own property to a legal point of disposal, shall be exempted from the provisions of this ordinance. Additional exemptions shall be the hauling of grass cuttings, pruning's, manure or other refuse or rubbish not containing garbage, by gardeners or gardening services working on such property.

Section 7. Deposit of Trash or Prohibited Materials on Streets.

It shall be unlawful for any person to deposit, or cause or permit to be deposited, any trash or prohibited materials upon or in any public sidewalk, Street, road, highway, court or alley within District, or upon any property owned or leased by District, except in receptacles or areas specifically designated or provided for that purpose. A violation of this provision shall be a misdemeanor punishable by imprisonment in the county jail for not more than thirty (30) days, or by a fine of not more than Five Hundred Dollars (\$500.00), or by both such fine and imprisonment.

Section 8. Accumulation of Trash or Prohibited Materials on Property.

Every owner or occupant of real property shall properly store accumulations of trash or prohibited materials such that they will not be carried or deposited by the elements upon any street, sidewalk or public place or upon the private property of another person. No person shall deposit, store, or cause or permit to be deposited or stored, any trash or prohibited materials upon any property owned or occupied by such person so that such trash or prohibited materials constitute a "nuisance" pursuant to Section 30 herein. Every person owning or occupying property where there is any accumulation of garbage or refuse shall cause the same to be lawfully removed or disposed of at least once each calendar week. No person owning or occupying property shall set out or cause to be set out for collection during any week garbage or refuse for collection other than garbage or refuse originating on that same property. No person may discard prohibited materials through the weekly collection process described

herein. All persons in possession of such prohibited materials shall either lawfully dispose of such materials themselves or make arrangements with District for the removal and disposal of such materials.

Section 9. Solid Waste & Recycle Containers.

A. Registration. All solid waste & recycle containers provided by Contractor shall bear a registration number, be kept at their designated property address, and shall not be painted by the occupant. All solid waste & recycle containers furnished by Contractor shall remain the property of Contractor and shall be replaced at Contractor's expense when deemed necessary by the District.

B. Residential Property. Contractor shall provide each residential property with a solid waste & recycle container(s), including lid, of a size and type approved by District.

C. Multi-Unit Residential, Commercial and Public Entity Properties. As directed by the District, Contractor shall provide each multi-unit residential, commercial and public entity property with one (1) or more, three (3)-cubic yard trash bin(s), including lid, and suitable for locks, of a type approved by District. At the District's discretion, commercial food service/restaurant establishments shall be liable for an additional surcharge for fly-tight lids for such trash bins.

D. Construction Site Bins. Upon the District's request, Contractor shall provide a construction site with one (1) or more three (3)-cubic yard trash bin(s), including lid, of a type approved by District. Construction bin service shall be determined by the District upon processing of a 'will-serve' letter or meter service request, or upon District's inspection of a construction site. Construction site bin collection and removal services shall be provided by District's Contractor, unless otherwise approved by the Manager.

E. Additional Trash Containers. Additional solid waste & recycle container(s) shall be supplied by the Contractor to, or an increased frequency of pick-ups of solid waste & recycle shall be made from, any of the properties described in this section upon the request of either: (1) the occupant or owner of the property, communicated to District; or (2) the Manager, upon recent evidence that the solid waste or recycle container(s) placed on the property is generally insufficient to hold the accumulation of trash from the property, or that solid waste or recyclables need to be collected more frequently. Prior to ordering either increased pick-up service or the placement of additional container(s) on a property, the Manager shall notify in writing the property's occupant or owner of the Manager's intentions and seek comments. Written notice of the placement of additional container(s) or increased pick-up, together with a schedule of the service rates to be paid for the additional container(s) or increased frequency of pick-ups, shall be sent to the property occupant or owner.

F. Excess Solid Waste Surcharges. The Manager, in his discretion, may impose an excessive solid waste volume surcharge upon any owner or occupant who

repeatedly sets out for pick-up a volume of solid waste in excess of the weekly limits as specified in Section 11. The amount of surcharge shall be \$35.00 for each additional full solid waste container utilized to pick up excess solid waste, or a pro-rated amount depending upon the volume of excess solid waste. For example, use of an additional half-container for excess solid waste shall result in a \$17.50 surcharge. Prior to levying such surcharges, the District shall either personally deliver or mail at least (1) written notice, by regular first-class mail, to the owner or occupant, warning them of the levying of such a surcharge or fine in the event of future non-compliance.

G. Recycling Surcharges. The Manager, in his discretion, may impose a Failure to Recycle Surcharge upon any owner or occupant who causes solid waste, hazardous, e-waste or other non-recyclable materials to be placed in recycle containers. The same surcharge may be imposed on any owner or occupant who repeatedly causes recyclable materials to be placed in the solid waste containers. The amount of the surcharge shall be \$25.00 for each recycle container contaminated with solid waste, hazardous waste, e-waste or other non-recyclable materials.

Section 10. Non-Permitted Solid Waste or Recycle Containers;

Apart from the exception of District-approved containers for recyclables, no other trash containers or receptacles other than those specifically authorized herein may be used to deposit trash for collection by Contractor. Trash deposited in these receptacles, e.g., disposable plastic bags, refuse bundles, oil drums, wooden crates, waste baskets, cardboard boxes and paper bags, will not be collected by Contractor.

Section 11. Limitations on Amount of Solid Waste.

Each property shall be entitled to have collected and disposed of by Contractor the amount of solid waste equaling the volume of the trash container(s) placed on the property pursuant to Section 9. Trash more than this volume limitation shall not be part of the basic collection service specified herein and shall not be picked up by Contractor unless directed by the District.

Section 12. Holiday Collection.

There will be no trash collection by Contractor on the following holidays: Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day and New Year's Day, amid any other holiday unspecified herein during which the landfill customarily used by Contractor is closed. Contractor shall be responsible for notifying District and owners and occupants of any unspecified holidays at least two (2) weeks in advance, in accordance with Section 23 herein. If a -weekly pick-up day falls on any of these days, trash for that week shall be placed for disposal and picked up on the day following the day trash is normally collected.

Section 13. Placement of Trash Containers.

A. No owner or occupant or any other person shall place or cause to be

placed any trash containers on any sidewalk, street, road or highway within District at any time other than on the days established for the collection of trash on the route, or before 5 p.m. on the days immediately prior to such collection, or permit such containers to remain there after 7 p.m. on the day of collection. Any trash containers placed for collection shall be placed within two (2') of the curbside. Subject to Section 13, Subsection C, after collection of trash, the trash containers shall be removed and returned to an area within the property where such containers cannot be viewed from adjacent properties or from any street, road or highway in front of or to the rear of said property. Pursuant to Subsection E of this Section, the Manager in his discretion may impose a surcharge or fine on any owner, occupant or person who violates the provisions of this section.

B. Owners and occupants of 'Residential Property' as defined herein may at their discretion request 'walk-in' service from Contractor at the service rate specified by District in Section 25 herein.

C. The District may make exceptions where site conditions prevent an owner or occupant from complying with the above trash container placement requirements. The District will only grant exceptions where the owner or occupant (1) Demonstrates that there is no area on the site where trash containers cannot be viewed from adjacent properties or from any street, road or highway in front of or to the rear of said property; and, (2) Stipulates that trash containers will be located in most unobtrusive manner under the circumstances as determined by the District. Pursuant to Subsection E of this Section, the Manager in his discretion may impose a surcharge or fine on any owner, occupant or person who has been granted an exception under this subsection and fails to locate trash containers in the manner so stipulated.

Owners or occupants must locate trash containers in a manner that fully complies with both District requirements and applicable Ventura County Housing Code provisions. The Manager in his discretion may impose a surcharge or fine on any homeowner who repeatedly violates the provisions of this Section according to the following schedule:

First Offense	\$25.00
Second Offense	\$50.00
Third Offense	\$75.00
Each Add 'l Offense	\$100.00

Prior to levying such surcharges, the District shall either personally deliver or mail at least (1) written notice, by regular first-class mail, to the owner of occupant, warning them of the levying of such a surcharge or fine in the event of future non-compliance.

Section 14. Unlawful Collection or Interference.

A. It shall be unlawful for any person other than an owner, occupant, Contractor or Contractor's employee's to:

(1) Interfere in any manner with any trash container or the contents thereof, or to place contents within or remove contents from any container without

consent of the owner or occupant;

(2) Remove or disturb any “solid waste”, “green waste”, or recyclable materials” as defined herein from the place where the same has been placed for collection;

(3) Collect or haul away any “solid waste”, “green waste”, or “recyclable materials” as defined herein from the place where the same has been placed for collection;

(4) Transport any “solid waste”, “green waste”, or “recyclable materials” as defined herein from the place where the same has been placed for collection.

B. It shall be unlawful for any person, other than Contractor, or an independent contractor as specified herein, or an owner or occupant as specified in Section 6 herein, to remove or convey, or cause or permit to be removed or conveyed, any “solid waste”, “recyclable materials”, or “green waste” as defined herein upon or along any public sidewalk, highway, street, boulevard, court, way or alley within the District, or engage in the business of trash collection, removal and disposal within the District, including the collection and disposal of “solid waste”, “recyclable materials”, or “green waste” as defined herein.

C. It shall be unlawful for any person, other than Contractor, or an independent contractor as specified herein, or an owner or occupant as specified in Section 6 herein, to place, store, dispose, or deposit, or cause or permit to be placed, stored, disposed, or deposited, any “solid waste”, “recyclable materials”, or “green waste” as defined herein upon or along any public sidewalk, highway, street, boulevard, court, way or alley within the District, or engage in the business of trash collection, removal and disposal within the District, including the collection and disposal of “solid waste”, “recyclable materials”, or “green waste” as defined herein.

D. A violation of these provisions shall be a misdemeanor punishable by imprisonment in the county jail for no more than thirty (30) days, or by a fine of not more than Five Hundred Dollars (\$500.00), or by both such fine and imprisonment.

E. Where a District employee determines that a person is unlawfully collecting or interfering with the collection of solid waste or recyclables under these provisions, that employee may either notify the appropriate authorities or issue a warning to the offender on a form drafted and approved by the District. Such form will clearly notify the offender of the District’s authority, the nature of the offense, and the possibility of future criminal action.

Section 15. Receptacles to be Kept Clean.

Owners and occupants shall keep trash containers in a clean and sanitary condition.

Section 16. No Burning.

No person shall cause or permit the burning of refuse, garbage, trash or waste.

Section 17. Agreement Between District and Contractor.

Pursuant to California Public Resources Code Section 40059, District may enter into a contract with any person to provide trash collection and disposal services for real property within District in accordance with the provisions of this ordinance. Such contract may be terminated by District in the event of Contractor's noncompliance with the terms of this ordinance, rules and regulations adopted hereunder, or the contract.

Section 18. Contracts and Length of Term.

The actual number of trash collection contracts to be issued and outstanding at any time shall be in the sound legislative discretion of the Board of Directors of District, based upon the Board of Directors' assessment of District's needs and the public interest, safety, health and general welfare. The duration of any collection contract awarded by District shall not be longer than five years 62 months. District by contract may limit the area or customers within District which may be served by any Contractor. District may condition issuance of a Contractor's agreement or renewal of such agreement upon any terms, as it may deem desirable or necessary to protect the public interest.

Section 19. Public Hearing on Award or Renewal of Contract.

In awarding or renewing any agreement with a contractor, District shall review all applications and requests received from prospective contractors to supply trash collection service to District and the Board of Directors shall thereafter hold a public hearing at which the award, or renewal of an existing contract or contracts, shall be made. These provisions shall not be construed to require District to solicit applications, proposals, or bids from prospective contractors; all decisions regarding the procurement of contractor services shall be within the discretion of the Board of Directors.

Section 20. Conditions to be Included in Agreement with Contractor.

The following performance specifications to be followed by Contractor(s) shall be included, at least by reference, in agreements made by District with a contractor:

A. Office and Emergency Number. Contractor shall maintain an office readily accessible to owners and occupants and officials of District. The office shall remain open from 8 a.m. to 5 p.m. Monday through Friday, except on holidays. Contractor shall have a telephone number listed under its name in the local telephone directory. During non-office hours as specified herein, Contractor shall be available through said telephone number to provide emergency services.

B. Route Schedules. Contractor shall file with District a schedule and map showing its collection routes and the day or days on which each route is used. The collection schedule shall be subject to approval by the Manager and shall be maintained unless a change therein is approved in writing by the Manager not less than two (2) weeks prior to changes going into effect and public notice is given as provided in Section 23.

C. Equipment Specifications.

(1) Contractor shall provide metal-lined non-leaking trucks to be used in the collection, transportation and hauling of garbage or refuse, which trucks shall be securely covered and closed except during loading and unloading to limit odors and prevent flies and any insects from entering such trucks so far as practicable. Every such truck shall be cleansed daily and thoroughly disinfected at least once each week. Every such truck shall be loaded and driven to preclude the escape of any of its contents.

(2) Contractor's trucks shall carry, at all times, a broom and a shovel to be used for the immediate removal of any spilled material; one (1), five (5)-pound dry chemical fire extinguisher classified ABC multi-purpose; and an approved compound required to absorb and clean any liquid spills.

(3) Contractor's trucks shall have their firm or business name and telephone number painted in letters no less than three inches (3') in height on both sides of the truck.

(4) Contractor's trucks shall at all times be kept in a good and safe operating condition amid meet all equipment and mechanical operating requirements of state law, including but not limited to all requirements of the California Vehicle Code and the California Code of Regulations, as those requirements may apply to each such truck. All trucks are subject to inspection at any time by the Manager to ensure compliance with these requirements.

D. Collection of Trash.

(1) Contractor shall faithfully and regularly collect and remove all garbage and refuse properly left for collection by property owners or occupants in a prompt, thorough and workmanlike manner. After collecting trash from containers, Contractor shall return the container in an upright position where it was found. Contractor shall not place any container in the roadway portion of any street, nor on any public sidewalk to block the use of the sidewalk to pedestrians, or on private property other than that of the owner or occupant. Contractor shall not throw containers from its truck to the ground, nor cause other unnecessary noise during the collection process.

(2) Unless determined otherwise by the District, collection of trash by

Contractor within District shall be confined to Monday through Friday between the hours of 7 a.m. and 6 p.m. Contractor may make collections on Saturdays if a holiday occurs within the preceding six (6) days.

(3) If, in the judgment of the Manager, conditions warrant a temporary departure from the days amid hours of collection as determined by District, the Manager may authorize collection of trash on such days and during such hours as the Manager deems appropriate.

(4) To the extent reasonably possible, collection on each route shall commence at the same point, at the same time and follow the same route each time collections are made.

(5) Should any trash not be collected by Contractor from a property on a regular day of collection, Contractor shall attach a tag not less than three inches (3") by five inches (5') in size to the collection container amid shall state thereon the reason for its refusal to collect such trash. Contractor shall after each day's collections immediately advise District, in writing, of all such notices given by Contractor. Any routine overfilling of trash containers by an owner or occupant shall be reported to the District in a timely manner.

(6) Contractor shall immediately pick up and remove all trash or any other materials which have spilled or dropped on public or private property during its collection, transportation or disposal of trash. Any expense incurred by District in the pick-up, removal or disposal of any such spilled or dropped trash or any other materials shall be immediately paid by Contractor to District upon presentation by District to Contractor of a written statement of the expenses incurred in such clean up, or alternatively may be offset against the amount owed to Contractor by District in Contractor's next billing cycle.

(7) Contractor shall immediately notify the Manager, with submission of a written report following to the Manager within five (5) days thereafter, of any incident involving damage or potential damage to any person or property within District involving Contractor.

E. Complaints.

Contractors shall maintain a written record of all complaints received regarding Contractor's services, trash containers, or any aspect of Contractor's performance, including the name and address of the complaining party, a description of the complaint, the time the complaint was received, the action taken in response to the complaint amid the time the responsive action was taken. The record should be kept at Contractor's office and shall be available for inspection or duplication at all reasonable times by the District's representatives. Should any owner or occupant report to the Manager that a complaint has not been resolved to the complaining party's satisfaction, the Manager may require Contractor to present a detailed report outlining the nature of the complaint and remedies proposed or actions taken to resolve said complaint. If it is the opinion of

the Manager that Contractor's remedies proposed amid actions taken are insufficient to adequately resolve said complaint; the Manager may require Contractor to carry out an alternative remedy process intended to resolve the complaint. Said remedies shall be carried out at no cost whatever to District unless otherwise specified by the Manager.

F. Permits.

Contractor shall obtain and maintain in full force and effect all permits and licenses required by local, state or federal governmental agencies exercising jurisdiction over the trash collection and disposal services described herein. Contractor shall immediately notify District, in writing, of any proceeding or action to revoke or suspend, or which affects Contractor's permits or licenses. Contractor shall comply with all local, state and federal laws, regulations and ordinances pertaining to Contractor's trash collection and disposal operation.

G. Reports and Financial Information.

Contractor shall provide District such financial information concerning Contractor, and such periodic reports on its current collection services within District, as required by the trash collection services agreement between District and Contractor.

H. "Special Service" Collections.

Contractor shall provide special service collection for those discarded appliances and furniture items whose size, bulk, volume and/or composition places them outside of the typical trash collection and disposal process. These items shall include, for example, mattresses, chairs, couches, stoves, refrigerators and water heaters. Such collection service shall be available at the request of an owner or occupant and subject to District's approval. Charges for such service and collection of the charges shall be as follows:

Televisions	\$22.40each
Mattress or Box Springs	\$22.40each
(King-Sized) Mattress or Box Springs	\$22.40 each
Couch/Stuffed Chair	\$22.40 each
Stove (two burner)	\$22.40 each
Stove (four burner)	\$25.50 each
Water Heater (50-60 Gal)	\$25.50 each
Water Heater (80-100 Gal)	\$33.60 each
Sleeper Couch	\$33.60 each
Washer or Dryer	\$22.40 each
Miscellaneous trash bags (33 Gal)	\$2.00 each
Self-Haul Concrete (miscellaneous)	\$5.00 min
Full pickup truck load	\$15.00 each
Commercial bed design load	\$20.00 each
Dump truck or contractor load	\$30.00 each

B. Contractor agrees to provide special services as defined in the Agreement for Service between CIBCSD and EJ Harrison and Sons at the contractor's sole expense.

Section 21. Insurance.

A. No contract shall be awarded nor shall Contractor operate a refuse or garbage truck within District until Contractor files with the District a valid, unexpired certificate of liability insurance, evidencing insurance coverage with the following minimum limits:

Bodily Injury:

\$3,000,000 each person

\$3,000,000 each accident

\$3,000,000 aggregate products

Property Damage:

\$3,000,000 each accident

\$3,000,000 aggregate operations

\$3,000,000 aggregate products

\$3,000,000 aggregate, contractual

B. Contractor's insurance policy or policies shall be in a form and with a licensed insurance company authorized to do business within the State of California acceptable to District. The insurance certificate shall provide that the insurance thereby evidenced shall not be canceled, allowed to lapse or expire, or reduced in amount during the term of any such collection contract, unless the District is given at least a thirty (30)-day notice in writing by the insurer prior to any such cancellation, lapse or expiration or reduction in coverage. A lapse of the minimum insurance required by this provision for any reason shall result in automatic termination of District's agreement with Contractor.

Section 22. Bonding Requirement.

Contractor shall be required to furnish a performance bond payable to District in an amount sufficient to guarantee Contractor's performance as specified in District's agreement with Contractor. The performance bond shall be conditioned on the faithful performance of the duties imposed by this ordinance amid by the terms of District's agreement with Contractor.

Section 23. Information to Residents.

Contractor at its expense shall distribute to all owners and occupants printed information amid instructions relating to collection routes and schedules, handling requirements for types of refuse, service rates, District notices and any other information relating to trash collection that District may require from time to time. In the event of route changes or changes in the days of collection, Contractor shall provide

occupants with at least two (2) weeks' notice. Contractor shall at its own expense, by written notice with postage prepaid and forwarded through the United States mail or by personal service, notify each occupant of the day or days of the week on which trash shall be collected if such represents a change from an existing schedule and if such change has been approved by the Manager. The notice shall contain the day or days of the week upon which collections will be made, the name, address and telephone number of Contractor and other information deemed necessary by the Manager. Said notice shall be posted in the mails or by personal service to each property served not less than two (2) weeks prior to the change of collection schedule. All such information, instructions and notices distributed or mailed by Contractor shall either be prepared by District or approved in advance by the Manager.

Section 24. Contract Limitations and Retained Rights and Powers of District.

Nothing in this ordinance shall be interpreted as limiting the retained rights and powers of District regarding regulating or providing trash collection service within District consistent with the provisions of California Government Code Section 61600 and Public Resources Code Section 40059. Each Contractor is put on notice and agrees by its execution of an agreement with District that among the various rights and powers of District, which the District may exercise, and which are not diminished or waived by the issuance of a collection contract, is District's right and power to:

- A. Repeal or amend the whole or any provision of this ordinance.
- B. Exclusively undertake all trash collection within District; or grant to, and contract with one or more persons for collection of trash within District.
- C. Require Contractor(s) to deposit refuse collected within District at a legal disposal site specified by District located outside District boundaries.
- D. Require Contractor(s) to collect and dispose of trash collected within District in a manner or according to methods prescribed by District.
- E. Establish specific routes within District for Contractor(s) and to limit a Contractor's operations within District to such routes.

Section 25. Trash Collection Rates.

A. The Board of Directors finds that the service rates indicated herein are for the purpose of: (1) meeting the contractual operating expenses of District's trash collection services Contractor, and (2) meeting District's general and administrative expenses in the administration and enforcement of District's trash collection and disposal ordinance, agreements and regulations.

B. Upon adoption of this ordinance by the Channel Islands Beach Community Services District Board of Directors, the following rates shall become effective July 15, 2018 at 12:01 a.m. and shall be subject to periodic adjustment by the

Board of Directors.

C.

(1) Residential and Commercial Standard Trash Collection Services: 64-gallon solid waste and 64 or 96 gallon recycle containers are included with standard service rates

1/Week Pick-Up Standard Service:	\$30.39/container/mo.
1/Week Walk-In Service:	\$48.36/container/mo.
2/Week Walk in Service	\$96.72/container/mo.
Additional Empties (Barrels)	\$10.67/container

(2) Multi-Unit Residential Property and Commercial Property Collection Services (3 Yard Bin):

1/Week Pick-Up Bin Service:	\$169.60/bin/mo.
2/Week Pick-Up Bin Service:	\$261.44/bin/mo.
3/Week Pick-Up Bin Service:	\$336.00/bin/mo.
1 time additional empty	\$69.73/bin/empty
Locks for Comm. Bins	\$2.75

(3) Additional Barrels:

64 gallon Solid Waste	\$15.72/container/mo.
64 or 96 gallon Recycle	\$2.86/container/mo.
Additional Trash Walk In	\$23.84/Container/mo.
Additional Recycle Walk In	\$7.03/Container/Mo

(4) Temporary 3 cubic-yard bin

(delivery, initial load and removal included)	\$102.31/bin
Additional Dumps	\$102.31/bin
(each empty)	
Daily Rental Fee	\$2.48/day after 7 days

(5) 20 or 40 Yard Cubic Yard Construction Bin Services:

20 or 40 Cubic Yard Construction Bin Service is available at the rates and fees stipulated in the agreement for Service between Channel Islands Beach Community Services District and EJ Harrison and Sons. Rates are subject to modification based on tipping, surcharge or other fee increases associated with the provision of service.

Section 26. Compensation of Contractors.

District shall levy and collect the service rates and charges on properties within District receiving service from Contractor. The Manager shall prepare monthly transaction reports listing those properties within District receiving trash collection services from Contractor. The terms of compensation to the Contractor shall be specified in the District's agreement with the Contractor.

Section 27. Billing of Charges.

A. All trash collection charges shall be billed by District. To the extent practicable, all such charges shall be billed by District in conjunction with its billings for water and sewer services. Charges for portions of a month shall be appropriately prorated. The owner or occupant of the affected property shall make payment of the charges within twenty (20) days of District's mailing of its billing statement.

B. In the event of past due payment of a billing statement, an owner or occupant shall be assessed a past due payment charge, or interest, or both, in accordance with procedures established by resolution adopted by the Board of Directors.

C. In the event of nonpayment of a billing statement, District may initiate proceedings to discontinue service to the affected property, or exercise whatever other remedies may be available to District pursuant to Government Code Section 61621 et seq. or other applicable laws.

D. Procedures to be utilized for initiation of trash collection services or resumption of interrupted service, including applications for service amid deposits to be held by District, shall be in accordance with a resolution adopted by the Board Directors.

Section 28. No Assignment or Transfer.

No Contractor shall assign or transfer its rights wider its contract with District to any other person without the advance written consent of the district.

Section 29. Termination of Contract.

In the event a Contractor violates any of the specific terms, conditions and requirements of its contract with District, or any provision of this ordinance or any other local, state or federal law, rule or regulation, either now in effect or hereafter enacted relating to the collection, transportation or disposal of trash, District may terminate its collection contract with Contractor.

Section 30. Abatement of Nuisances.

A. Pursuant to California Government Code Section 61623.4, the District may exercise the power of a fire protection district to abate public nuisances. The accumulation on property of trash or prohibited materials, including but not limited to weeds, rubbish, brush, any grass, hay, straw, vines, stubble, construction materials or debris, litter, hazardous materials, waste petroleum, or any flammable or combustible materials, such that the accumulation represents a threat to the public health or safety, shall be deemed a public nuisance and may be abated by the District pursuant to California Health and Safety Code Section 13879 utilizing the procedures set forth in Health and Safety Code Section 14875 et seq. The expenses of abatement shall be borne by the owners of the property on which the accumulation of materials constituting

a nuisance has occurred, in accordance with Health amid Safety Code Section 14875 et seq.

B. If the Manager determines that a public nuisance exists as defined in subsection A., the Manager shall notify the occupant (and the owner of the affected property, if different from the occupant) of the existence of the nuisance and shall require the parties to abate or cause the nuisance to be abated within legal means as provided in this ordinance within ten (10) calendar days after receipt of such notice from the Manager. If the occupant or owner of the affected property does not abate or cause the nuisance to be abated within said ten (10)-day period, then the District shall follow the abatement procedures specified in Health amid Safety Code Section 14875 et seq.

C. Inoperative, unlicensed, or unregistered vehicles which are considered abandoned vehicles pursuant to the County Abandoned Vehicle Abatement Ordinance shall not be permitted on any vacant property within the District and any accumulation of a vehicle or vehicles on any vacant property shall be deemed a public nuisance. The Manager shall document the make; model, color, license number and vehicle identification number of the abandoned vehicle amid report same to the County of Ventura for removal.

Section 31. Exceptions for Practical Difficulty.

In all cases where the Manager finds that practical difficulty exists in complying with requirements of this ordinance as to the placing of refuse for collection, the Manager shall designate where and what manner such refuse shall be placed or kept for collection and the conditions under which it shall be collected.

Section 32. Repeal of Prior Ordinance.

District Ordinance No. 88 relating to trash collection and disposal is hereby repealed.

Section 33. Publication.

This ordinance shall be published once, upon its adoption, in a newspaper of general circulation within District's boundaries.

Section 34. Severability.

If any section, clause or portion of this ordinance is found to be invalid, then the validity of the remaining sections of the ordinance shall not be affected.

Section 35. Effective Date.

The trash collection rates specified in Section 25 of this ordinance shall be effective 30 days from date of adoption, and shall be subject to periodic adjustment by the Board of Directors.

Passed, approved and adopted this 12th day of June 2018 by following vote of the Board of Directors:

Ayes:

Nays:

Absent:

Ellen Spiegel, President
Board of Directors

Attest:

Approved As To Form:

Akbar Alikhan, General Manager

John Mathews, District Counsel



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

353 Santa Monica Drive · Channel Islands Beach, CA · 93035-4473 · (805) 985-6021 · FAX (805) 985-7156
A PUBLIC ENTITY SERVING CHANNEL ISLANDS BEACHES AND HARBOR · CIBCSD.COM

Regular Board Meeting, June 12, 2018

To: Board of Directors
From: Pete Martinez, *Deputy General Manager / Operations Manager*
Subject: Sewer Station SCADA Improvements – CI 207
Item: E-5

RECOMMENDATION:

1. Consider and approve proposal from XiO, Inc. (XiO) to provide cloud based Supervisory Control and Data Acquisition (SCADA) monitoring and control systems at six sewer stations throughout the District's service area.
2. Consider and approve proposal from Dieners Electric for the installation of six XiO SCADA monitoring and control systems at the six sewer stations.

FINANCIAL IMPACT: There is sufficient funding in the FY 2018-2019 Wastewater Capital Improvement Plan budget to fund project CI 207 in the amount of \$120,966 for the six SCADA monitoring and control system units and \$25,650 for installation costs.

BACKGROUND:

On May 11, 2018, the District began a pilot study utilizing the XiO cloud based SCADA monitoring and control system at Hueneme Station, which historically had been one of the District's more problematic sewer stations. Since the installation of the XiO unit the District has not experienced any after hour call-outs and the station has been operating as designed while allowing remote monitoring and control functionality of the station.

The District has a total of seven sewer stations located in various parts of the service area. With the exception of our XiO SCADA pilot study at Hueneme Station the other six sewer stations are without SCADA system monitoring and control; therefore, we are seeking to outfit these six stations with the XiO system. If approved this will allow all XiO SCADA monitoring and control systems throughout the District to be uniform allowing for one common dashboard/hub for all the District's sewer station assets.

In March of 2018, it is important to note, the District underwent a Sewer Station Condition Assessment that was performed by a group of professional engineers. As a result of this assessment, it was recommended that the District replace the existing control systems at the stations as they have outlived their useful life and replacement parts are becoming difficult to find. In addition, it was recommended the District embark on the implementation of a SCADA system at all sewer stations to optimize operating efficiency while minimizing costs to the District for after hour call-outs.

DISCUSSION:

The proposed system consists of an additional of six lift station / pump stations to an existing XiO System. For each station, XiO will provide a monitoring and controls system that will control the operation of the two pumps, based on a user defined level in the wet well. This system will be installed by Dieners Electric to provide the following capabilities. The existing high-level float will be connected through a series of latching relays directly to the pump motors. This will ensure that if the high-level float sensor is activated, the pumps will immediately start to reduce the likelihood of occurrence of a Sanitary sewer Overflow (SSO). Additionally, the existing low-level float will be connected through a series of relays directly to the pump motors. This will ensure that if the low-level float is activated, the pumps will immediately cease pumping to prevent running the pumps dry.

The redundant system described above is designed to serve as a separate and unilateral back-up system to the XiO system. XiO requires this additional level of safety and assurance for wastewater systems because of the environmental consequences associated with failure.

An XiO-supplied cellular modem will communicate directly to the XiO Cloud Servers, enabling seamless access for the users through their established web page.

Alarm notification is sent via SMS text and email to the District operations staff. This direct notification will eliminate the dependence of a third party to receive and promptly dispatch alarms to on-call staff.

In addition to remote monitoring, controlling, and alarm notification, XiO also has the capability of producing comprehensive reports that can include; pump hours, volume of water pumped in gallons, electricity used, and costs to pump wastewater by the month, day, hour or minute. This data can be viewed and organized by any authorized District operator on the secure XiO website.

The XiO system will be monitored and managed through an account on XiO's secure cloud servers and will provide District staff with the following:

- System Overview - Process diagram showing the current state of the system (i.e. tank levels, status of pumps, etc.).
- Levels - Line graphs showing the levels of all monitored parameters.
- Reports - Downloadable reports showing water pumped (gallons), energy used by pumps (kWh), efficiency of pumps (kWh/1000gallons), and pump runtime (hours).
- Alarms - View of all alarms that have been triggered.
- Schedule - Page allowing the user to adjust the set points that affect when the pumps will run.

ATTACHMENTS:

1. XiO, Inc. Proposal
2. Dieners Electric Proposal

DIENER'S ELECTRIC, INC.

P.O. Box 946 • Oxnard, California 93033 • (805) 483-9123

Lic. 289432

QUOTE

Date: May 29, 2018
To: Channel Island Beach District
Attn: Pete Martinez
Job: Lift Station Telemetry Installation

Provide labor and materials to install XIO telemetry equipment at six sewage lift stations. Installation will consist of mounting XIO equipment, integrating XIO equipment to existing electrical controls, removing any unnecessary electrical devices, labeling and marking electrical wires. Our electricians will work with XIO technicians to calibrate devices, conduct real time testing, and commission all lift stations. Electrical permits and XIO equipment are not included.

Actual XIO design may vary from quoted design; so note that price is an approximation based on other similar projects and subject to change.

Quote \$25,650.00

If quote is acceptable please sign, date, and return.

Sign: _____ Date _____

Thank you,
David Romero



A Proposal for an XiO Cloud SCADA[®] Water Control System for
Channel Islands Beach Community Services District:
Phase 2

Version 1
May 22, 2018

Proposal

XiO Proposed System

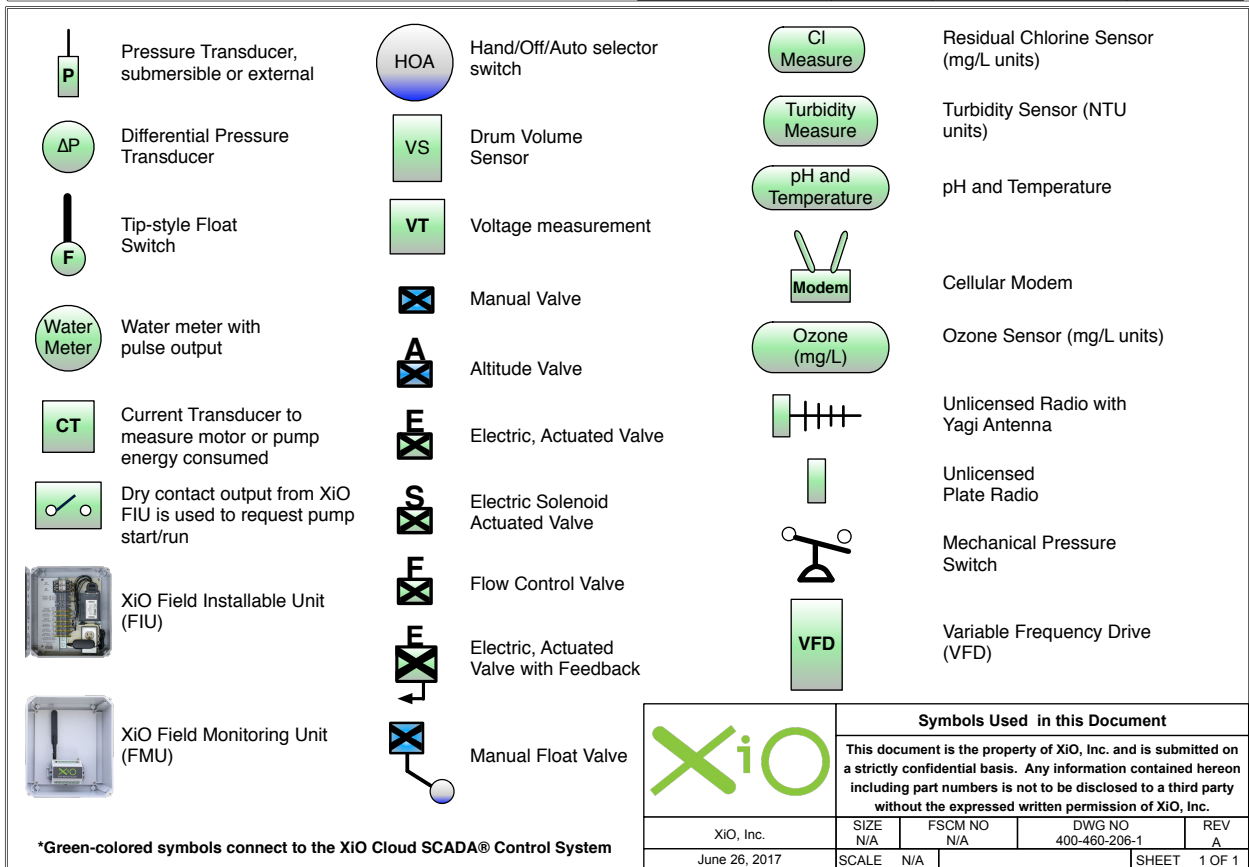
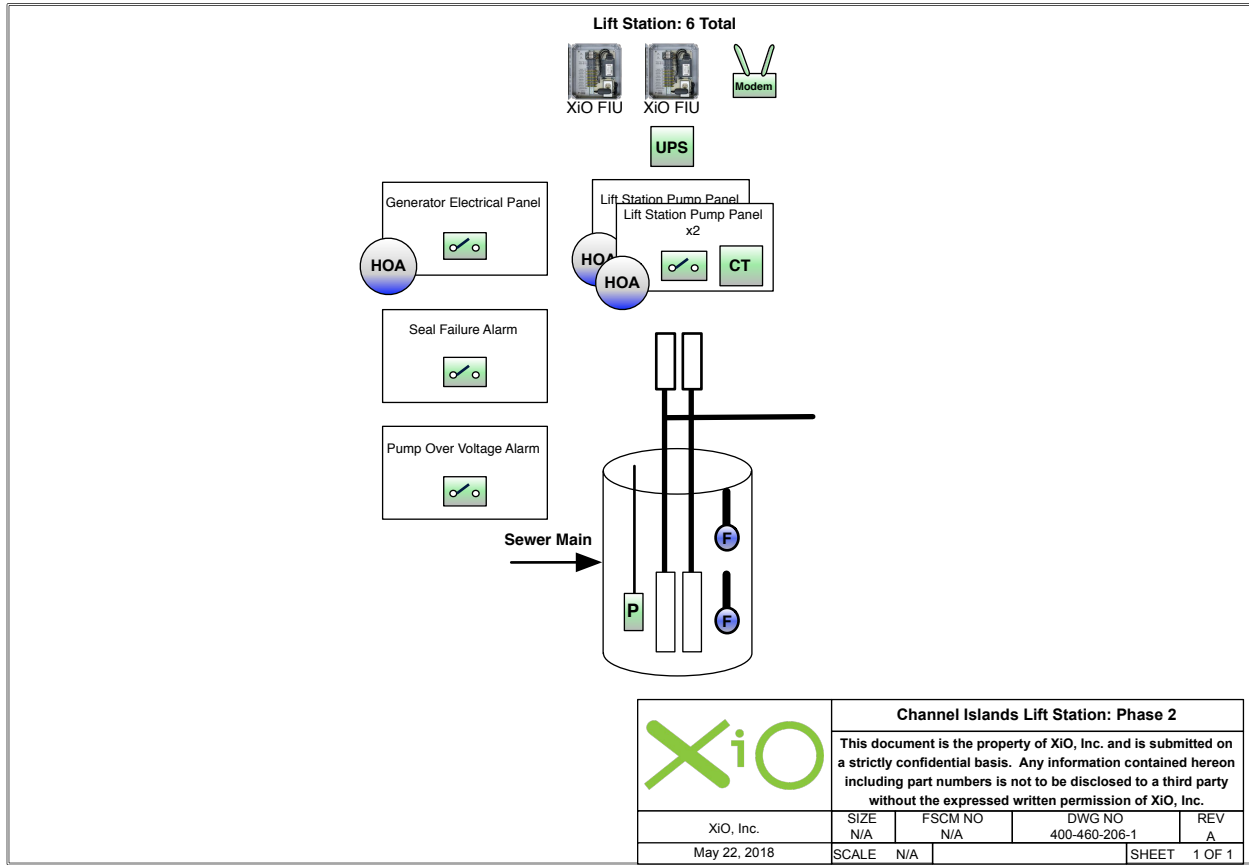
XiO, Inc. (XiO) is pleased to supply this proposal to provide a monitoring and control system for Channel Islands Beach Community Services District: Phase 2 (Channel Islands).

The purpose of this proposed system is to:

• Lift Station (6 Total)

- Monitor and control the two Booster Pumps based on a user defined level in the Lift Station.
- Monitor and report the electrical energy used by each of the two Booster Pumps.
- Monitor and report the wet well level utilizing an XiO-supplied submersible wet well level management sensor.
- Provide galvanic signal isolation for the existing high and low level float sensors. This isolation will allow XiO to monitor and alarm on values; however, will not be linked to control of the system.
- Monitor and report the flow rate and total flow through the system utilizing the existing meter. This requires that the meter be equipped with a pulse output.
- Monitor and report the status of the generator automatic transfer switch.
- Monitor and report seal failure alarm status through the existing dry contact.
- Monitor and report pump motor over voltage alarm status through the existing dry contact.

System Diagrams



Description of the System

The proposed system consists of an additional of six Lift Station / Pump Stations to an existing XiO System. For each station, XiO will provide a monitoring and controls system that will control the operation of the two pumps, based on a user defined level in the wet well. XiO requires that a unilateral back-up system be installed as a component of all wastewater systems.

This system will be installed by the electrician to provide the following capabilities. The existing High Level Float will be connected through a series of latching relays directly to the pump motors. This will ensure that if the High Level Float sensor is activated, the pumps will immediately start to reduce the likelihood of occurrence of an overflow.

Additionally, the existing Low Level Float will be connected through a series of relays directly to the pump motors. This will ensure that if the Low Level Float is activated, the pumps will immediately cease pumping to prevent running the pumps dry.

The redundant system described above is designed to serve as a separate and unilateral back-up system to the XiO system. XiO requires this additional level of safety and assurance for wastewater systems because of the environmental consequences associated with failure.

An XiO-supplied cellular modem will communicate directly to the XiO Cloud Servers, enabling seamless access for the users through their established web page.

XiO recommends that our enclosures be mounted in a suitable, Hoffman style enclosure to provide additional security for the control devices.

Alarms

The XiO system can send SMS and email alarm notification to a list of customer authorized users for any XiO monitored value. Examples of these alarms include:

- No communication with the site
- High/Low tank level
- High/Low float sensors

Verizon Modem

The XiO Cloud SCADA control system requires a minimum of one connection to the Internet. XiO supplies a rugged NEMA4X enclosure with a Verizon modem that connects to the Verizon network. Like all parts of the XiO control system, the modem is shipped to site ready for an electrician to mount, apply 120VAC and power up. The system automatically connects to the Internet and XiO is informed of the event and can assist in system start-up.

Report Generator

Included at no additional cost is a comprehensive report generation system that can produce monthly reports downloadable in Excel format containing required fields, employing any data collected such as pressure levels, pump hours, water pumped, electricity used, cost to pump water—all listed by month, day, hour, minute. The data is organized and can be viewed by any authorized operator on the secure XiO website.

Cloud Based Management

The XiO system will be monitored and managed through an account on XiO's secure cloud servers. The password protected account will provide managers with the following:

- **System Overview** - Process diagram showing the current state of the system (i.e. tank levels, status of pumps, etc.).
- **Levels** - Line graphs showing the levels of all monitored parameters.
- **Reports** - Downloadable reports showing water pumped (gallons), energy used by pumps (kWh), efficiency of pumps (kWh/1000gallons), and pump runtime (hours).
- **Alarms** - View of all alarms that have been triggered.
- **Schedule** - Page allowing the user to adjust the set points that affect when the pumps will run.

Features to be Delivered

QTY	Item	Description
6	Lift Station Controller	<p>Wastewater Lift Station Controller provides up to the minute monitoring and control of the Lift Station and its associated components. Standard alarms will notify the user of high tank level and loss of communication with the site.</p> <p>Pricing Includes:</p> <ul style="list-style-type: none"> • Two FIU Controllers • Two contactor relays for two pumps • Two current transducers for two pumps • Level Sensor • Two signal isolation modules • Uninterruptible Power Supply
12	Dry Contact Monitoring	Monitors the status of a dry contact, and will allow for alarms assigned to specific values.
6	Modem	Provides secure access to the XiO Cloud servers at the site. Housed in a NEMA-4X enclosure.

System Installation

XiO does not act as a contractor and does not install the equipment. XiO recommends that the Proposed Control System be installed by a licensed electrician and a water operator. The XiO hardware requires a single 120VAC circuit, fused at 15 amps or less. An individual Field Installable Unit (FIU) draws 3.7 watts, while the supplied cellular modem draws 6 watts. A solid earth ground must be provided, as required by code, but no special precautions need be taken. All connections are clearly marked with UL-recognized label materials. All enclosures are non-metallic rated NEMA4X, and XiO recommends employing water tight conduit especially in near-marine environments.

The customer is responsible for providing a suitable mounting location for the FIU(s) and other XiO-supplied hardware. There are several considerations when selecting a suitable mounting location for the FIU, Uninterruptible Power Supply (UPS) or other XiO supplied hardware:

Temperature- As with all electronics, extreme temperatures, especially heat, can affect the proper operation of the XiO Control System. It is important to consider sources of heat when selecting a suitable mounting location for the FIU.

- Keep the FIU out of direct sunlight
- Do not mount the FIU on a South-facing wall or panel
- Consider constructing a cover to provide shade for the FIU
- Avoid mounting the FIU on a surface that may become hot such as an outdoor metal panel.
- Be sure the Soft-I/O Module is properly seated in its bracket

Environment- Components of the XiO Cloud SCADA® Control System are housed in NEMA-4X enclosures that protect them from many environmental conditions such as rain, solid objects, dust, and some corrosive agents.

- Take additional steps to avoid harsh environmental conditions if possible
- This includes potentially dangerous gasses produced by wastewater
- Be sure to provide a water-tight seal on any enclosure penetrations

Delivery

The preconfigured system will be shipped from XiO **4—6 weeks** after receipt of a purchase order.

Quoted Price

The total cost of the system will be **\$120,966.00** (not including tax or actual UPS ground shipping costs). This price includes all XiO-supplied hardware as listed above and all programming.

Recurring Monthly Service Fees

The cloud service fee is **\$39/month per Controller** (if applicable) and includes all programming, ongoing support, alarms, report generation, unlimited access to the secure website and an extended warranty on the FIU control module--Soft-I/O®--as long as the Cloud service fee is kept current. The warranty referenced in this paragraph is attached to this document. This paragraph specifically modifies the warranty in the favor of the customer. The cloud secure cellular access charge, including Internet, is **\$35/month per modem** (if applicable). The fee of **\$41/month per Field Monitoring Unit** (if applicable) includes secure cellular cloud access as well as all programming, ongoing support, alarms, report generation, and unlimited access to the secure website.

When the system has been installed, the customer will receive notice regarding payment for the recurring service fees. A check will be required for the first 90 days of service. Subsequent payments will be made through an automatic payment process.

Item	Monthly Fee/Unit	QTY	Subtotal
Controller (FIU)	\$39	12	\$468
Cellular Modem	\$35	6	\$210
Total Monthly Fees			\$678

Terms

This proposal is valid for 90 days from the the date that this proposal was transmitted. XiO will invoice upon shipment, and payment is due 30 days from invoice date.

Payment of Recurring Monthly Service Fees

When the system has been installed, the customer will receive notice regarding payment for the recurring service fees. A check will be required for the first 90 days of service. Subsequent payments will be made through an automatic payment process.

Terms and Conditions of Sale

The following Terms & Conditions of Sale are included in this proposal.

Hardware Accepted by (Print):

Sign: _____

Bill to:

Ship to:

Cloud Fees Accepted by (Print):

Sign: _____

Bill to:

Terms and Conditions

The following Terms and Conditions are incorporated in and are a part of the Purchase Agreement. Where the Product in question is a software product, it is understood that Customer receives only a license to use such product on the terms stated herein. XiO, Inc. ("XiO") retains title to said product.

1. Price; Payment Terms

- A. Prices for all products (hardware and software) will be the price agreed upon in XiO's acknowledgment of Customer's order or at the time of online order placement.
- B. XiO shall provide written acknowledgment of all non-online orders showing price, anticipated delivery date and payment terms. For online orders, Customer is provided with these Terms and Conditions, price, anticipated delivery date and payment terms. As a result, no written acknowledgment is provided for online orders.
- C. Prices are exclusive of all federal, state, municipal or other government, excise, sales, use, occupational, or like taxes or duties now in force or enacted in the future. Any such tax, fee, or charge of any nature whatsoever imposed by any governmental authority on, or measured by, the transaction (including the shipment of goods) between XiO and Customer shall be paid by Customer in addition to the prices quoted or invoiced. In the event XiO is required to pay any such tax, fee, or charge at the time of sale or thereafter, Customer shall reimburse XiO therefore.
- D. Payments shall be made by Customer in accordance with payment terms stated by XiO in written acknowledgment of order, or in an online description for online orders. Amounts not timely paid shall bear interest at the rate of 1-1/2% for each month or portion thereof that payment is late.

2. Delivery

- A. Delivery will be F.O.B. XiO's plant and shall occur on the date of turnover to a common carrier unless, at Customer's option, Product is picked up at the F.O.B. point by Customer.

- B. Title and risk of loss for Products shall pass to Customer on delivery F.O.B. XiO's plant. Customer shall then be responsible for and bear the entire risk of loss or damage to Products. Unless otherwise instructed, by Customer, XiO shall insure each product during shipment for Customer' account and will add the cost of such insurance to Customer' invoice.
- C. Shipment will be scheduled to be made on the date specified on Customer's written purchase order or on the date agreed upon by both parties and specified on the written acknowledgment of XiO, whichever is later, or--in the case of online orders--based upon the online-stated scheduled date. This date is the scheduled shipment date. XiO reserves the right to extend this date by not more than sixty (60) days upon notification of Customer. If shipment is delayed by XiO more than sixty (60) days, Customer may terminate this Agreement and receive a refund of all money paid hereunder.

3. Change Orders

Any written request from Customer for a change in the order acknowledged by XiO may subject Customer to a price change reflecting XiO's increased or decreased direct costs or an extension of the scheduled shipment date, or both, depending on the change requested. Written acknowledgment by XiO of a change order will specify and confirm any price or delivery impact.

4. Shipment

In the absence of specific shipping instructions from Customer, XiO will ship by the method it deems most advantageous to both parties. Transportation charges may be prepaid and will be subsequently invoiced to Customer. Unless otherwise specified, products shall be shipped in XiO's standard commercial packaging. When special packaging is requested or, in the opinion of XiO, required under the circumstances, the cost of the same will be separately invoiced. If Customer specifies the shipment method on the purchase order, and XiO uses a different method, then XiO shall be liable for the difference, if any, between the cost of freight incurred and the cost of freight which would have been incurred had XiO complied with Customer' shipping instructions.

5. Cancellations

XiO shall have the right to cancel the order and recover possession of and title to a product (if such have passed to Customer) under any of the following circumstances: Customer fails to perform its obligations under any of the material Terms and Conditions hereunder; or Customer's delay directly causes material delay to XiO's performance; or any bankruptcy, arrangement or insolvency proceedings are

commenced by or against Customer; or in the event of the appointment of any assignee for the benefit of creditors or of a receiver of Customer or its properties. No such termination shall prejudice any of the rights of XiO arising prior to such termination or shall limit in any way other remedies available to XiO. Customer shall have no right to cancel the purchase of any product after shipment from XiO. Orders for standard products that are canceled within fifteen (15) days prior to the scheduled shipment date from XiO shall be subject to a cancellation charge equal to twenty percent (20%) of the total purchase price. Orders for custom products are not cancelable after order acknowledgment.

6. Warranty

Hardware products and software media are warranted against defects in materials and workmanship for a period of one year from the date of shipment. During the warranty period, XiO will, at its option, either repair or replace (but not install) product or software media which proves to be defective. The Product or media must be returned to XiO for warranty service or repair. Customer shall prepay shipping charges to XiO and XiO shall ship to Customer in accordance with Section 4 of this Agreement, except that shipment by surface transportation to Customer, within the U.S. only, shall be at XiO's expense. XiO warrants that software products will conform to published specifications and will operate properly for one year from the date of shipment. XiO will correct material defects in software products during the warranty period by issuing converted versions of software products.

7. Limitations and Disclaimers of Warranties

Certain products are factory sealed and carry a label stating "warranty void if this seal is broken". In such a case, the foregoing warranty shall not apply if the product seal has been broken or the enclosure has been opened. The foregoing warranties shall not apply to defects resulting from improper connection, improper interfacing, misuse, or operation outside the specified environment.

THE FOREGOING WARRANTIES ARE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED. XIO SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN.

8. Waiver of Certain Damages and Limit of Liability

XIO WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT OR CONSEQUENTIAL DAMAGES, HOWEVER CAUSED, OR ON ANY THEORY OF LIABILITY, NOR WILL XIO BE LIABLE FOR LOSS, DAMAGE OR EXPENSE WHICH DI-

RECTLY OR INDIRECTLY ARISES FROM CUSTOMER' USE OF OR INABILITY TO USE PRODUCT EITHER SEPARATELY OR IN COMBINATION WITH OTHER EQUIPMENT [EXCEPT FOR DAMAGE TO PERSON OR TANGIBLE PROPERTY], OR FOR COMMERCIAL LOSS OF ANY KIND, OR FOR PROCUREMENT OF SUBSTITUTE GOODS, WHETHER OR NOT XIO HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE OR LOSS. IN NO EVENT SHALL XIO'S LIABILITY ARISING OUT OF THIS AGREEMENT EXCEED THE AMOUNT PAID TO XIO BY CUSTOMER FOR THE PURCHASE OF THE PRODUCT GIVING RISE TO SUCH LIABILITY. THIS LIMITATION IS INTENDED TO LIMIT THE LIABILITY OF XIO AND SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

9. Security Interest

Customer hereby grants to XiO a security interest in each product, to secure payment of the purchase price. XiO shall have the rights of a secured party under the Uniform Commercial Code in effect in the state where the premises at which the product is installed are located, including the right to retake possession of, or inhibit the use of product on any default by Customer. XiO's security interest shall expire upon the payment to XiO of the full purchase price. Customer agrees to execute such other documents as XiO shall reasonably require to perfect XiO's security interest.

10. Patent and Copyright Indemnity

- A. XiO will defend at its expense any action brought against Customer to the extent based upon the claim that a product constitutes direct infringement of any duly issued United States patent or copyright and shall pay any settlements or judgments to the extent based thereon, provided XiO shall have sole control of any such action or settlement negotiations, provided further that Customer notifies XiO promptly in writing of such claim, suit or proceeding and, at XiO's expense (except the value of time of Customer' employees), gives XiO adequate information and uses its best efforts to settle and/or defend any such claim, suit or proceeding.
- B. If a product becomes, or in the opinion of XiO may become, subject to any claim of infringement for any United States patent or copyright, XiO may, at its option: (i) procure for Customer the right to use or sell the product; (ii) replace or modify the product, or part thereof; or (iii) remove the product, or part thereof, and refund the aggregate payments paid therefor to XiO less a reasonable sum for use and damage. XiO shall not be liable for any costs or expenses incurred without its prior written authorization.

- C. XiO assumes no liability for (i) infringement of patent or copyright claims resulting from completed products of Customer into which a product is incorporated; (ii) any assembly, circuit, combination, method or process of Customer in which any product may be used; (iii) any compliance with Customer' specifications; or (iv) the modification of a product, or any part thereof, unless such modification was made by XiO or with the written approval of XiO.
- D. THE FOREGOING STATES THE SOLE AND EXCLUSIVE LIABILITY OF XIO, AND THE EXCLUSIVE REMEDY OF CUSTOMER, FOR PATENT, COPYRIGHT AND OTHER INTELLECTUAL PROPERTY RIGHTS INFRINGEMENT OR CLAIMS OF INFRINGEMENT.

11. Substitutions and Modifications

XiO reserves the right to make substitutions and modifications in the specifications of products designed by XiO providing that such substitutions or modifications will not materially negatively affect performance in the intended application, and that upon written request, XiO will provide a brief explanation of the change.

12. Entire Agreement

The Purchase Agreement and Terms and Conditions as set forth herein shall govern and constitute the entire agreement between XiO and Customer. XiO shall not be bound by any terms of Customer' order which are inconsistent with or additional to the Terms and Conditions herein set forth.

13. Software Products Restriction

Products delivered to Customer pursuant to these Terms and Conditions may embody and include certain software programs in object code (machine-readable but not human-readable form). In some cases, the only product delivered will be a software product. The software may be contained on disk drives or CD's, erasable programmable read-only memories (EPROMS), non-volatile random access memories (NVRAM), electrically erasable programmable read-only memories (EEPROMS or flash memory), programmable array logic devices (PALS or FPGAS), disk cartridges, may be embodied in Application Specific Integrated Circuits (ASIC's) or in other electronic or mechanical forms. Such software constitutes either the copyrighted property of XiO or the proprietary trade secret information of XiO, or both, and shall be held in confidence by Customer. XiO retains title to the software (excluding media on which recorded) and all intellectual property rights, and no title to software or intellectual property rights is transferred to Customer. Unless Customer is granted greater rights by written amendment to these Terms and Conditions executed by

XiO, Customer is hereby granted a personal, non-transferable, non-exclusive perpetual license to use only the number of copies of the software which are provided by XiO, and to use such copies only on (i) the hardware on which it is originally mounted by XiO, or (ii) on a single hardware product identified by Customer in its purchase order and confirmed by XiO in its order acknowledgment. Without XiO's prior written consent, Customer may not copy the software for any purpose, nor may Customer remove the software or attempt to execute the software on any hardware other than the authorized hardware. Customer shall not, whether through use of disassemblers or any other means whatsoever (including but not limited to manual, mechanical or electrical means), reverse engineer, decompile, disassemble or derive source code from the software, or attempt to or permit any third party to do any of the foregoing, including causing the software to be destroyed or disabled. Any attempt to do any of these things shall be material breach of these Terms and Conditions which shall immediately entitle XiO to exercise any remedies set forth herein, as well as any remedy that may exist at law or in equity. The provisions of this Section 13 shall survive this Agreement in perpetuity.

14. Conditions of Operation

THE PRODUCTS PROVIDED BY XIO ARE INTENDED TO BE USED ONLY WHEN SUPPLEMENTAL PROTECTION IS PROVIDED TO PREVENT DAMAGE TO CUSTOMER' PROPERTY OR INJURY TO PERSONNEL. BECAUSE OF THE HIGH COMPLEXITY OF A COMPUTER-CONTROLLED MACHINE CONTROL OR INPUT/OUTPUT SYSTEM, UNINTENDED MOTION AND ACTIONS CAN OCCUR. CUSTOMER ACCEPTS ALL RESPONSIBILITY FOR INTEGRATING XIO PRODUCTS INTO MECHANISMS OR PROCESSES. LIMIT SWITCHES MUST BE A PART OF A MACHINE CONTROL OR INPUT/OUTPUT SYSTEM. OPERATOR GUARDS AND OTHER PROTECTION FOR OPERATORS MUST UNILATERALLY ACT TO PROTECT PERSONNEL AND PROPERTY. CUSTOMER ACCEPTS ALL RESPONSIBILITY FOR INSURING THAT MECHANISMS OR PROCESSES OF WHICH XIO PRODUCTS ARE A PART COMPLY WITH APPLICABLE SAFETY AND HEALTH STANDARDS, MUNICIPAL CODES, AND ANY SIMILAR REQUIREMENTS.



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

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Regular Board Meeting, June 12, 2018

To: Board of Directors
From: CJ Dillon, *Office Manager*
Subject: Municipal Debt Management Policy
Item No. E-6

RECOMMENDATION:

1. Approve proposed Channel Islands Beach Community Services District Municipal Debt Management Policy.

FINANCIAL IMPACT: No financial Impact to District

BACKGROUND:

On September 12, 2016, the California Senate adopted SB 1029, the California Debt and Investment Advisory Commission: accountability reports. California's local government have issued 1.5 trillion in debt since 1984. Due to rising concern over the transparency of these public debts, the Senate voted to approve Senate Bill 1029 and require all public agencies to report their debt for transparency and market integrity. In addition to reporting the agencies debt, a new policy is required to guide the agency in any future acquired debts.

DISCUSSION/ANALYSIS:

The District currently reports the status of our debt through EMMA, the website for the Municipal Securities Rulemaking Board (MSRB). Additionally, all future debt the District enters into will have to be reported to CDIAC (California Debt and Investment Advisory Commission). SB 1029 requires State and local agencies to adopt comprehensive debt management policies pursuant to the recommendation of the Government Finance Association. These policies should reflect local, state, and federal laws and regulations.

Each policy should be agency specific. The main objectives in the District's policy are to maintain cost effective access to the capital markets through prudent policies and practices. Maintain manageable debt and debt service payments through effective planning and to achieve the highest possible credit rating within the context of the District's financial capabilities.

Adhering to these objectives in issuing and administering debt will help ensure the District and its residents obtain the best long-term financial value.

ATTACHMENTS:

1. Channel Islands Beach Community Services District Municipal Debt Management Policy



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

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CHANNEL ISLANDS BEACH COMMUNITY SERVICES DISTRICT

MUNICIPAL DEBT MANAGEMENT POLICY

PURPOSE

This Municipal Debt Management Policy establishes parameters and provides guidance governing the issuance, management, refunding, and reporting on all debt obligations of the Channel Islands Beach Community Services District. This Policy is intended to guide the District in its debt issuance during its customary practices. The Debt Management Policy is now required under California SB 1029. Should circumstances arise which could cause the District to deviate from any of the policies herein, District staff shall return to the Board of Directors for policy direction. The Board of Directors may amend this Policy from time to time.

RESPONSIBILITY

The General Manager or his/her designee shall be responsible for enforcing this Policy. The General Manager or his/her designee may issue supplemental procedures and memoranda that detail specific directions that clarify this Policy. However, such procedures and directives must be consistent and not conflict with the general provisions of this Policy.

POLICY

Under the governance and guidance of federal and state laws and the District's ordinances and resolutions, the District may periodically enter into debt obligations that finance the construction or acquisition of infrastructure and other assets or to refinance its existing debt into more favorable terms. When issuing new debt or refinancing existing debt, the District seeks to:

- Maintain cost-effective access to the capital markets through prudent policies and practices.
- Maintain manageable debt and debt service payments through effective planning.
- Achieve the highest possible credit ratings within the context of the District's financing needs and financing capabilities.

Adhering to these objectives in issuing and administering debt will help ensure the District and its residents obtain the best long-term financial value.

The District will not use short-term borrowing to finance operating needs except in the case of an extreme financial emergency that necessitates such a borrowing.

Types of Debt

The District may issue all such types of debt as are permitted by the State Constitution, applicable State Statutes, and the District's Articles of Incorporation, and may include, but are not limited to:

- Revenue bonds, certificates of participation, installment sale agreements, financing agreements, and lease-purchase agreements
- Land-secured financings, such as special tax bonds and assessment bonds
- General obligation bonds
- Refunding Obligations
- State Revolving Loan Funds
- Bank Loans

The District will adhere to the following legal requirements for the issuance of public debt:

- The state law which authorizes the issuance of the debt
- The federal and state laws which govern the eligibility of the debt for tax-exempt status
- The federal and state laws which govern the issuance of taxable debt
- The federal and state laws which govern disclosure, sale, and trading of the debt both before and after issuance

General Debt Guidelines

- A. Purposes of Issuance - The District will utilize debt obligations only after giving due consideration to all available funding sources, including available cash reserves, available current revenues, potential future revenue sources, potential grants, and all other financing sources legally available to be used for such purposes. Long-term debt will not be issued for operations or maintenance costs. Expenditure of bond proceeds should be limited to major, non-recurring expenditures/expenses, including but not limited to: the financing of costs related to capital project planning and design, land acquisition, real property, and equipment acquisition; the construction or renovation of buildings and permanent structures and the equipping thereof; financing costs related to the issuance of securities, capitalized interest, necessary or financially prudent debt service reserves; or other costs as permitted by law. Refunding bond issues designed to restructure currently outstanding debt are an acceptable use of bond proceeds.

- B. Approval by the Board of Directors – All long-term financing transactions shall be approved by the Board of Directors. The Board shall comply with all public hearing requirements applicable to the specific type of debt being approved.
- C. Maximum Maturity - All debt obligations shall have a maximum maturity of the earlier of: i) the estimated useful life of the capital improvements being financed, ii) 40 years or, iii) in the event obligations are being issued to refinance outstanding debt obligations, the final maturity of the debt obligations being refinanced unless a longer term is approved by the District Board.
- D. Bond Covenants and Laws - The District shall comply with all covenants and requirements of applicable bond resolutions, indentures, trust agreements, and other financing documents, as well as applicable state and federal laws authorizing and governing the issuance and administration of debt obligations.
- E. Method of Sale - Bonds will be sold on a competitive basis unless it is in the best interest of the District to conduct a negotiated sale or private placement. Negotiated sales may occur when selling bonds to refund existing debt, for land-secured debt or for other appropriate reasons. Staff shall evaluate the cost-effectiveness of alternative financing methods before the District conducts a private placement of debt. The Board of Directors should seek the advice of its professional managers, special legal counsel, and/or qualified municipal advisors in making the determination of the appropriate method of sale.
- F. Refundings - The District shall review its outstanding debt for the purpose of determining if the financial marketplace will afford the District the opportunity to refund an issue and lessen its debt service costs. For refunding's undertaken to achieve debt service savings, the sum total of all savings (net of expenses and funds contributed by the issuer at the time of closing), discounted to the present at the bond true interest cost, should at a minimum produce net present value savings equal to at least 3% of the par amount of refunding bonds to be sold. Refunding's may be undertaken for reasons other than to achieve debt service savings, such as to remove restrictive covenants or restructure debt payments. Such restructuring refunding's do not need to achieve 3% net present value savings.
- G. Investment of Bond Proceeds - Bond proceeds will be invested only in investments as permitted by the applicable governing document of the bond issue. When placing such investments, staff will ensure that there is sufficient liquidity to meet the underlying needs (i.e. construction funds or debt service reserve funds) of the funds being invested. Staff will give due consideration to credit risk and counterparty risk when investing such funds.
- H. Continuing Disclosure – The District will comply with all continuing disclosure obligations set forth in the debt contract/agreement and in compliance with the District's Debt Disclosure.

- I. Use of Bond Proceeds – The General Manager/Office Manager and other appropriate District personnel shall:
- Monitor the use of Bond proceeds and the use of Bond-financed assets (e.g., facilities, furnishings or equipment) throughout the term of the Bonds to ensure compliance with covenants and restrictions set forth in applicable District resolutions.
 - Maintain records identifying the assets or portion of assets that are financed or refinanced with proceeds of each issue of Bonds.
 - Consult with Bond Counsel and other professional expert advisers in the review of any contracts or arrangements involving use of Bond-financed facilities to ensure compliance with all covenants and restrictions set forth in applicable District resolutions and Certificates.
 - Maintain records for any contracts or arrangements involving the use of Bond-financed facilities as might be necessary or appropriate to document compliance with all covenants and restrictions set forth in applicable District resolutions.
- K. Relationship of Debt to Capital Improvement Program and Budget - New debt issues and refinancing of existing debt, should be analyzed for compatibility with the District's Capital Improvement Plan. The District shall strive to fund the upkeep and maintenance of its infrastructure and facilities due to normal wear and tear through the expenditure of available operating revenues. The District shall seek to avoid the use of debt to fund infrastructure and facilities improvements that are the result of normal wear and tear. The District shall seek to issue debt in a timely manner to avoid having to make unplanned expenditures for capital improvements or equipment from its general fund.
- L. Policy Goals Related to Planning Goals and Objectives - The District is committed to long-term financial planning, maintaining appropriate reserve levels, and employing prudent practices in governance, management and budget administration. The District intends to issue debt for the purposes stated in this Policy and, in doing so, to implement policy decisions incorporated in the District's long-term financial plans and its annual operating budget.

PASSED AND ADOPTED on this 12th day of June 2018, by the following vote:

AYES:

NOES:

ABSTAINS:

Akbar Alikhan, General Manager

Ellen Spiegel, President, Board of Director



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, President
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

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Regular Board Meeting, June 12, 2018

To: Board of Directors
From: Akbar Alikhan, *General Manager*
Subject: District Office and Yard Redesign Project Update Property
Item No. E-7

RECOMMENDATION:

1. Receive and file artist renderings of redesign options.
2. Provide direction to General Manager regarding disposal of real property and value engineering of redesign.

FINANCIAL IMPACT: No direct financial impact with current action. Subsequent action will have financial impacts and will come before the Board at a later date.

BACKGROUND:

At the April 10, 2018 Regular Board meeting the District declared the property at 112 Las Palmas Street to be surplus real property available for public sale. Subsequently, the District approved a policy for the disposal of real property at the May 8 Board Meeting. Staff informed the Board that the surplus property would likely be listed for sale in late May.

On May 16, the District received cost estimates for its planned Yard and Building Improvements (CI 402). The design schemes include two options (Attachment #1):

1. Renovation of existing building with 400 square foot addition - \$1.14M
2. New 2-story building located on southwest corner of parcel - \$1.35M

Both of the options' costs were above previous estimates, which is a reflection of the current demand for contractor labor in Ventura County and the sheer scope of the proposed project. The estimated sale prices of the La Crescenta property is \$800,000. The sale of the real property was intended to cover most of the project costs for redesign and improvement effort.

Since the estimated project costs are higher than the anticipated sale price of the real property, staff felt it was necessary to consult the Board prior to continuing with the sale of the property.

DISCUSSION/ANALYSIS:

Staff is seeking direction from the Board on how to proceed with the sale of real property and the redesign of the District office. Below is a list of potential options for the District.

1. Proceed with sale of property and proceed with one of the two design options shown
2. Proceed with sale of property and perform value engineering to reduce project cost
3. Pause sale of property until value engineering has been completed with revised costs
4. Cash fund improvements and perform value engineering to reduce project cost
5. Pause project altogether

The means and methods for disposal of real property have already been approved by previous Board action, should the Board wish to proceed with the sale. Staff has engaged geotechnical services to perform soil sampling at the site and retained a planning consultant to assist the District with zoning issues.

ATTACHMENT(S):

1. Design scheme renderings
2. Estimated construction costs



Image
Data SIO, NOAA, U.S.





May 16th, 2018

PRELIMINARY BUDGET - COST BREAKDOWN

Mr. Akbar Alikhan

Channel Islands Beach

353 Santa Monica Drive
Channel Islands Beach, CA 93035

Scheme 5

Remodel at Existing Office Building - 2,200 Sq Ft	\$429,000.00	195 per sq ft
Remodel at Existing Fitness Building - 800 Sq Ft	\$136,000.00	170 per sq ft
Sitework Remodel - 15,250 Sq Ft	\$396,500.00	26 per sq ft
Covered Canopies (Parking) - 1,200 Sq Ft	\$90,000.00	75 per sq ft
Covered Canopies (Recycling) - 400 Sq Ft	\$30,000.00	75 per sq ft
Shade Canopy - 500 Sq Ft	\$30,000.00	60 per sq ft
Solar Energy System - 24 Panels	\$30,000.00	3.70 per watt
Total Budget	\$1,141,500.00	

Scheme 6

New Two Story Office Building - 2,500 Sq Ft	\$625,000.00	250 per sq ft
Remodel at Existing Fitness Building - 800 Sq Ft	\$136,000.00	170 per sq ft
Sitework Remodel - 15,800 Sq Ft	\$410,800.00	26 per sq ft
Covered Canopies (Parking) - 1,200 Sq Ft	\$90,000.00	75 per sq ft
Covered Canopies (Recycling) - 400 Sq Ft	\$30,000.00	75 per sq ft
Courtyard Canopies - 560 sq ft	\$33,600.00	60 per sq ft
Solar Energy System - 24 Panels	\$30,000.00	3.70 per watt
Total Budget	\$1,355,400.00	

EXCLUSIONS:

Architectural Fees, Engineering Fees, City Permits & Fees
Hazardous Waste Remediation,

Qualifications:

This Budget is based on preliminary conceptual plans.

April 26, 2018

Board of Directors
Channel Islands Beach Community
Services District
Oxnard, California

We are engaged to audit the financial statements of the Channel Islands Beach Community Services District (the "District") for the year ended June 30, 2018. Professional standards require that we provide you with the following information related to our audit. We would also appreciate the opportunity to meet with you to discuss this information further since a two-way dialogue can provide valuable information for the audit process.

Our Responsibilities under U.S. Generally Accepted Auditing Standards and *Government Auditing Standards*

As stated in our engagement letter dated April 26, 2018, our responsibility, as described by professional standards, is to express opinions about whether the financial statements prepared by management with your oversight are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. Our audit of the financial statements does not relieve you or management of your responsibilities.

As part of our audit, we will consider the internal control of the District. Such considerations are solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will also perform tests of the District's compliance with certain provisions of laws, regulations, contracts, and grants. However, providing an opinion on compliance with those provisions is not an objective of our audit.

Our responsibility is to plan and perform the audit to obtain reasonable, but not absolute, assurance that the financial statements are free of material misstatement.

We are responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures specifically to identify such matters.

Generally accepted accounting principles provide for certain required supplementary information (RSI) to supplement the basic financial statements. Our responsibility with respect to *management's discussion and analysis, schedule of the District's proportionate share of the net pension liability, and schedule of contributions - CalPERS pension plan*, which supplements the basic financial statements, is to apply certain limited procedures in accordance with generally accepted auditing standards. However, the RSI will not be audited and, because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance, we will not express an opinion or provide any assurance on the RSI.

We have been engaged to report on the budgetary comparison schedules, which accompany the financial statements but are not RSI. Our responsibility for this supplementary information, as described by professional standards, is to evaluate the presentation of the supplementary information in relation to the financial statements as a whole and to report on whether the supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole.

As part of the audit, we assist with the preparation of financial statements and related notes. However, this assistance does not constitute an audit under *Government Auditing Standards* and is considered nonaudit services. Management is responsible for overseeing and accepting responsibility for these services.

Planned Scope, Timing of the Audit, and Other

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested.

Our audit will include obtaining an understanding of the District and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Material misstatements may result from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the District or to acts by management or employees acting on behalf of the District. We will generally communicate our significant findings at the conclusion of the audit. However, some matters could be communicated sooner, particularly if significant difficulties are encountered during the audit where assistance is needed to overcome the difficulties or if the difficulties may lead to a modified opinion. We will also communicate any internal control related matters that are required to be communicated under professional standards.

We expect to begin our final audit fieldwork on approximately October 22, 2018 and issue our report approximately in December 2018. Joshua Calhoun is the engagement partner and is responsible for supervising the engagement and signing the report or authorizing another individual to sign it.

This information is intended solely for the use of the Board of Directors and management of the District and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

Jeannan Ramirez & Smith, L.L.C.



Board of Directors:

ELLEN SPIEGEL, President
KRISTINA BREWER, Vice President
SUSIE KOESTERER, Director
MARCIA MARCUS, Director
BOB NAST, Director

AKBAR ALIKHAN
General Manager

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Regular Board Meeting, June 12, 2018

To: Board of Directors
From: Akbar Alikhan, *General Manager*
Subject: PHWA Agenda Review
Item No. F-2

INFORMATION:

The following items are slated for consideration at the next PHWA Board Meeting. The following is not an official agenda or notice, and is subject to change.

Date: Monday, June 18, 2018

Time: 4:00 PM

Location: City Council Chambers - 250 North Ventura Road, Port Hueneme, CA 93041

Items for Consideration:

1. BWRDF Operational Report
2. Review of Proposed State Legislation on Water Issues
3. Update on Strategic Planning Exercise

PHWA staff has a budget development session scheduled for June 13. However, the FY 2018 – 2019 Budget will not be available for consideration at the June 18th meeting. It is scheduled for consideration at the July 16th meeting.