



Regional Sewerage Program Technical Committee Meeting

AGENDA

Thursday, January 27, 2022

2:00 p.m.

Teleconference Call

In an effort to prevent the spread of COVID-19, the Regional Sewerage Program Technical Committee Meeting will be held remotely by teleconference.

Teams Conference Link: https://teams.microsoft.com/join/19%3ameeting_NmRmY2FmMDYtNTBmMS00MjA5LTk3ODgtZDkyY2U3MTRmZGYz%40thread.v2/0?context=%7b%22Tid%22%3a%224c0c1e57-30f3-4048-9bd2-cd58917dcf07%22%2c%22Oid%22%3a%22329ec40e-eb94-4218-9621-6bfa0baa9697%22%7d

Teleconference: (415) 856-9169/Conference ID: 715 477 121#

This meeting is being conducted virtually by video and audio conferencing. There will be no public location available to attend the meeting; however, the public may participate and provide public comment during the meeting by calling the number provided above. Alternatively, you may email your public comments to the Recording Secretary Sally Lee at shlee@ieua.org no later than 24 hours prior to the scheduled meeting time. Your comments will then be read into the record during the meeting.

Call to Order

Roll Call

Public Comment

Members of the public may address the Committee on any item that is within the jurisdiction of the Committee; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Comments will be limited to three minutes per speaker.

Additions to the Agenda

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of

(Continued)

Regional Sewerage Program Technical Committee Meeting Agenda

January 27, 2022

Page 2 of 2

those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

1. Action Items

- A. Approval of November 29, 2021 Special Technical Committee Meeting Minutes
- B. Request by the City of Chino for a Regional Sewage Connection at Chino Parkway and Serenity Trails (#C-45)

2. Informational Items

- A. Rialto Water Principles Agreement
- B. Recycled Water Cost of Service Study
- C. Engineering Quarterly Project Update
- D. Groundwater Recharge Update
- E. Operations Quarterly Division Quarterly Update
- F. Return to Sewer Study (*Oral*)
- G. Operations & Compliance Updates (*Oral*)

3. Receive and File

- A. Draft Regional Sewerage Program Policy Committee Meeting Agenda
- B. Building Activity Report
- C. Recycled Water Distribution - Operations Summary

4. Technical Committee Items Distributed

None

5. Other Business

- A. IEUA General Manager's Update
- B. Committee Member Requested Agenda Items for Next Meeting
- C. Committee Member Comments
- D. Next Regular Meeting – February 24, 2022

Adjournment

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Recording Secretary (909) 993-1926, 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

DECLARATION OF POSTING

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency*, a Municipal Water District, hereby certify that, per Government Code Section 54954.2, a copy of this agenda has been posted at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA and on the Agency's website at www.ieua.org at least seventy-two (72) hours prior to the meeting date and time above.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Sally Lee at (909) 993-1926 or shlee@ieua.org 48 hours prior to the scheduled meeting so that IEUA can make reasonable arrangements to ensure accessibility.

**ACTION
ITEM**

1A



Regional Sewerage Program Special Technical Committee Meeting MINUTES OF NOVEMBER 29, 2021

CALL TO ORDER

A special meeting of the IEUA/Regional Sewerage Program – Technical Committee was held via teleconference on Thursday, November 29, 2021. Committee Chair Nicole deMoet/City of Upland called the meeting to order at 2:04 p.m. Recording Secretary Laura Mantilla took roll call and established a quorum was present.

ATTENDANCE via Teleconference

COMMITTEE MEMBERS PRESENT:

Dave Crosley	City of Chino
Ron Craig	City of Chino Hills
Eduardo Espinoza	Cucamonga Valley Water District (CVWD)
Abigail Gomez	City of Fontana
Courtney Jones	City of Ontario
Nicole deMoet	City of Upland
Christiana Daisy	Inland Empire Utilities Agency (IEUA)

ABSENT:

Monica Heredia	City of Montclair
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OTHERS PRESENT:

Amanda Coker	City of Chino
Christopher Quach	City of Ontario
Braden Yu	City of Upland
Kathy Besser	Inland Empire Utilities Agency
Christina Valencia	Inland Empire Utilities Agency
Javier Chagoyen-Lazaro	Inland Empire Utilities Agency
Jerry Burke	Inland Empire Utilities Agency
Don Hamlett	Inland Empire Utilities Agency
Elizabeth Hurst	Inland Empire Utilities Agency
Eddie Lin	Inland Empire Utilities Agency
Ryan Love	Inland Empire Utilities Agency

OTHERS PRESENT (continued):

Laura Mantilla	Inland Empire Utilities Agency
Jason Marseilles	Inland Empire Utilities Agency
Matt Poeske	Inland Empire Utilities Agency
Jeanina Romero	Inland Empire Utilities Agency
Frank Sotomayer	Inland Empire Utilities Agency
Ken Tam	Inland Empire Utilities Agency
Teresa Velarde	Inland Empire Utilities Agency

PUBLIC COMMENTS

There were no public comments.

ADDITIONS/CHANGES TO THE AGENDA

There were no additions/changes to the agenda.

1. ACTION ITEMS**A. APPROVAL OF OCTOBER 28, 2021 TECHNICAL COMMITTEE MEETING MINUTES**

Motion: By Dave Crosley/City of Chino and seconded by Eduardo Espinoza/CVWD to approve the meeting minutes of the October 28, 2021, Regional Technical Committee meeting by the following vote:

Ayes: Crosley, Espinoza, Craig, Gomez, Daisy, Jones, deMoet
 Noes: None
 Absent: Heredia
 Abstain: None

The motion passed by a vote of 7 ayes, 0 noes, 0 abstain, and 1 absent.

B. &C. APPROVAL OF THE SEWER CONNECTION C-44 TO THE WESTSIDE INTERCEPTOR REQUEST BY THE CITY OF CHINO AND APPROVAL OF THE SEWER CONNECTION F-32 TO THE ETIWANDA TRUNK SEWER REQUEST BY THE CITY OF FONTANA

Jerry Burke/IEUA provided the background and recommendation on two sewer connection requests received from the City of Chino (Sewer Connection #C-44) and the City of Fontana (Sewer Connection #F-32).

Motion: By Eduardo Espinoza/CVWD and seconded by Dave Crosley/City of Chino to approve the Sewer Connection (C-44) to the Westside Interceptor request by the City of Chino and approve the Sewer Connection (F-32) to the Etiwanda Trunk sewer request by the City of Fontana by the following vote:

Ayes: Crosley, Espinoza, Craig, Gomez, Daisy, Jones, deMoet
 Noes: None
 Absent: Heredia
 Abstain: None

The motion passed by a vote of 7 ayes, 0 noes, 0 abstain, and 1 absent.

2. INFORMATIONAL ITEMS**A. RETURN TO SEWER STUDY**

Ken Tam/IEUA provided an update on the Return to Sewer Study. He reported that Data Collaborative continues to perform analysis on the data from the City of Chino and City of Fontana and CVWD. Once the data is available, a meeting will be scheduled with the subgroup to review the results in December.

B. OPERATIONS & COMPLIANCE UPDATES

Ken Tam/IEUA reported that the southern service area experienced another foaming disruption at the Carbon Canyon Facility on November 24, 2021. IEUA and the City of Chino's Source Control team performed site inspections at two industries that potentially could have caused the foaming and did not find any evidence from either of those facilities. He noted that the facility that caused the foaming in September 2021, completed the necessary facility upgrades and staff training. Staff will continue to investigate and gather information from those facilities and monitor the downstream of those facilities. Mr. Tam thanked the City of Chino Source Control staff for working with IEUA on this matter.

3. RECEIVE AND FILE**A. DRAFT REGIONAL SEWERAGE PROGRAM POLICY COMMITTEE MEETING****B. BUILDING ACTIVITY REPORT****C. RECYCLED WATER DISTRIBUTION – OPERATIONS SUMMARY****D. ANNUAL REPORTS (10-YEAR GROWTH FORECAST, RECYCLED WATER & ENERGY)**

Items 3A through 3D were received and filed by the Committee.

4. TECHNICAL COMMITTEE ITEMS DISTRIBUTED

There were no items distributed.

5. OTHER BUSINESS**A. IEUA GENERAL MANAGER'S UPDATE**

Christiana Daisy/IEUA stated that during the last Technical Committee meeting, a request was received for an action item to consider the extension of the Kearns & West Regional Contract Facilitation services. The contract is set to expire at the end of December 2021. There is \$236,970 of the budget remaining on the contract. IEUA reached out to Mike Harty of Kearns & West to request feedback on his interest in continuing to provide facilitation services. Mr. Harty agreed to continue as a facilitator for as long as both the contracting agencies and IEUA find his services valuable. There was a consensus from the contracting agencies and IEUA that the facilitation service provided by Kearns & West is important to support the negotiation process. IEUA will proceed to extend the facilitation contract through June 30, 2022.

B. COMMITTEE MEMBER REQUESTED AGENDA ITEMS FOR NEXT MEETING

Ron Craig/City of Chino Hills requested the latest status of the CASA Study. Mr. Tam stated he will follow up and provide the latest update.

C. COMMITTEE MEMBER COMMENTS

There were no member comments.

D. NEXT MEETING – DECEMBER 30, 2021

Chair deMoet stated that there are no action items for the December meeting and asked the Committee if they desire to hold the December meeting or cancel. The Committee agreed to cancel the December 30 meeting.

ADJOURNMENT – Chair deMoet adjourned the meeting at 2:22 p.m.

Prepared by:

Laura Mantilla, Recording Secretary

**ACTION
ITEM**

1B

Date: January 27, 2022

To: Regional Technical Committee

From: Inland Empire Utilities Agency

Subject: Request by the City of Chino for a Regional Connection Point to the Chino Trunk Interceptor Chino Regional Sewer Connection # C-45 (Project No. EN0000000104)

RECOMMENDATION

It is recommended that the Regional Technical Committee approve the request by the City of Chino for one new connection point to the Chino Trunk Interceptor (Chino Regional Sewer Connection # C-45) contingent upon:

1. Collection of permit and hydraulic modeling fees; and,
2. The City of Chino providing the LAFCO approved resolution ratifying the Irrevocable Agreement to Annex the noted area for sewer service.

BACKGROUND

In April of 2021, the Inland Empire Utilities Agency (IEUA) received a request from the City of Chino to evaluate impacts to the Regional Sewerage System due to the annexation of the Serenity Trails development to the City of Chino.

A request dated January 18, 2022 (Attachment "A"), has been provided, based on previous correspondence between the City, Developer, and IEUA, for connection of the Summerland Senior Living Development (Development), located at 13225 Serenity Trail in the City's sphere of influence. This development consists of a 109 unit assisted living/memory care facility and requires approval for a new regional connection to the Chino Trunk Interceptor at Station 35+67.24 through a tie-in to an existing manhole on the 24-inch interceptor.

The Average Dry Weather Flow (ADWF) was provided by the City for the proposed development and they were utilized to evaluate the impact on the Regional Interceptors.

SUMMARY OF FLOW RATES UTILIZED

Chino Regional Connection C-45:

Average Dry Weather Flow (ADWF) Rate = 0.057 MGD

Peak Dry Weather Flow (PDWF) Rate = 0.136 MGD

Peak Wet Weather Flow (PWWF) Rate = 0.184 MGD

The hydraulic model was used to evaluate the capacity of the Chino Trunk Interceptor and the interceptors downstream. The projected total PWWF with Serenity Trail will be 1.094 MGD. This is less than the maximum capacity of 1.11 MGD in the Chino Trunk Interceptor at the downstream limiting 15" pipeline/siphon. The analysis indicates that the downstream sewer(s) has/have sufficient capacity to convey

Chino and Chino Hills flows plus the Serenity Trail development and downstream Under PDWF conditions, the pipe will be less than half full.

ATTACHMENT A
City of Chino Regional Interceptor Request
Dated January 18, 2022

EUNICE M. ULLOA
Mayor

MARC LUCIO
Mayor Pro Tem



KAREN C. COMSTOCK
CHRISTOPHER FLORES
WALT POCOCK
Council Members

MATTHEW C. BALLANTYNE
City Manager

CITY of CHINO

January 18, 2022

Mr. Matthew A. Poeske, PE
Senior Engineer
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Subject: Sewer Connection to existing 24" IEUA sewer Chino Avenue Sewer Connector No. SB-2 at Station 35+67.24 for the Serenity Trail Sewer Project

Dear Mr. Poeske:

The Summerland Senior Living located at 13225 Serenity Trail in the City's sphere of influence consists of a 109 unit assisted living/memory care facility.

Recently, the owner requested that the project be allowed to connect to the City's sanitary sewer system as a better long-term solution than constructing an on-site septic system. In exchange for allowing sewer service connection, the owner agreed to provide additional sewer line infrastructure beyond the normally required amount along the project's frontage to serve the broader area moving into the future. It was determined that the sewer main extension in Serenity Trail would be extended further north to the end of the cul-de-sac located at the intersection with Hillview Drive North (as shown on the attached location map) for the proposed sewer extension limits in Serenity Trail. There is capacity in the existing sewer line in Chino Avenue to the south to accommodate the project and the additional flow estimated from added sewer infrastructure along Serenity Trail.

The property owners have executed an Irrevocable Agreement to Annex, as amended, with the City for said property. With the adoption of Resolution No. 2021-083, the City Manager was authorized to execute the Local Agency Formation Commission ("LAFCO") Application for Extension of Service by Contract. The proposed hearing date is February 16, 2022 and upon approval by LAFCO, the City of Chino will provide the approved resolution ratifying the Irrevocable Agreement to Annex for Sewer to IEUA.

Consequently, the City is hereby formally requesting "one" new point of connection for this development and future development along Serenity Trail. The connection is a new 8" public sewer main to the existing IEUA sewer manhole. The sewer main's point of connection to the existing manhole is located at Station 35+67.24 on sheet 4 of approved Sewer Plan Chino Avenue Sewer Connector No. SB-2.

The peak wastewater flows included in the sewer study provided by Huitt-Zollars on behalf of Summerland Chino MGR, LLC are summarized below:



Mr. Matthew A. Poeske, PE

Inland Empire Utilities Agency

Subject: Sewer Connection to existing 24" IEUA sewer Chino Avenue Sewer Connector
No. SB-2 at Station 35+67.24 for the Serenity Trail Sewer Project

January 18, 2022

Page 2

Calculated Flows Summerland Senior Living Development:

1. The estimated average outflow is 30,250 gallons per day
2. The estimated maximum outflow is 84,700 gallons per day

Calculated Tributary Flows:

1. Average Dry Weather Flow (ADWF) = 0.057 million gallons per day
2. Peak Wet Weather Flow (PWWF) = 0.184 million gallons per day

If you should need any further information, please feel free to contact Sylvia Ramos, Associate Engineer at (909) 334-3418.

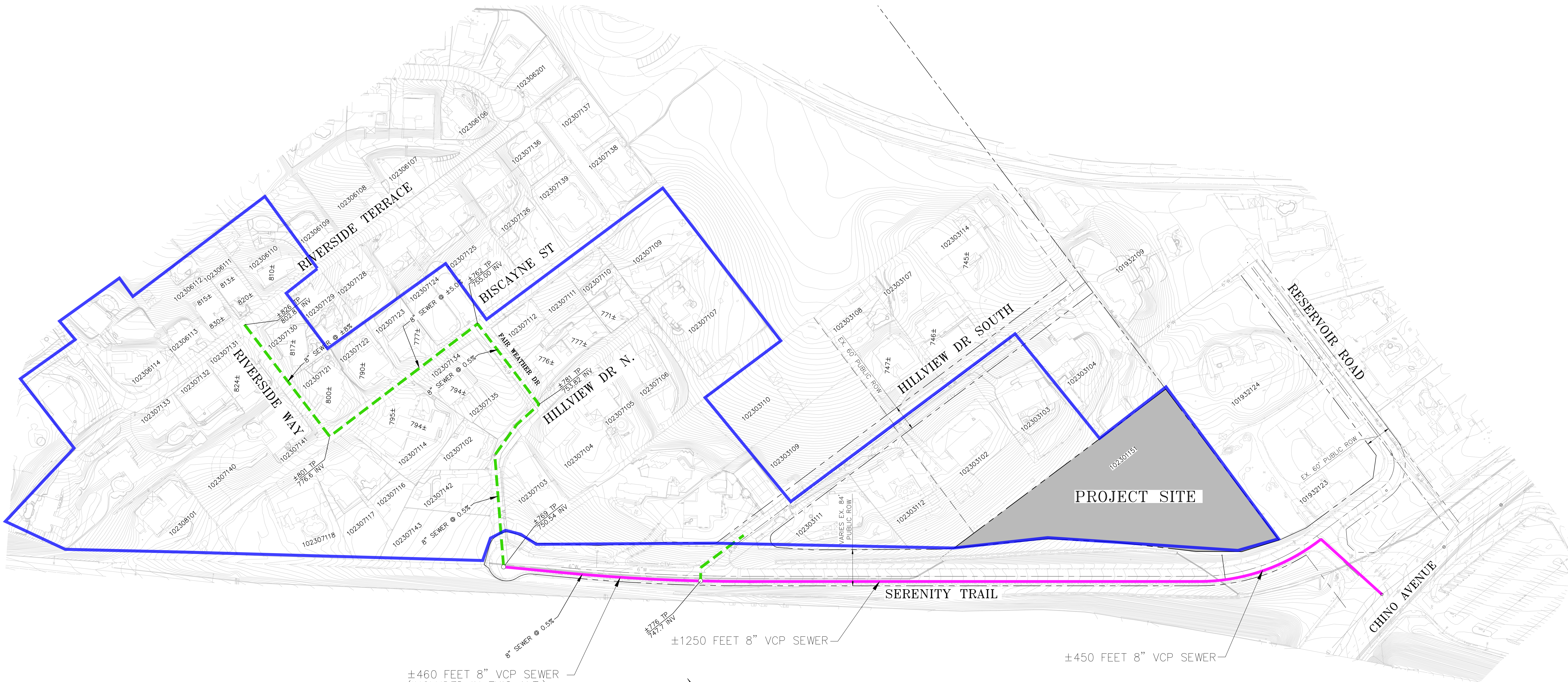
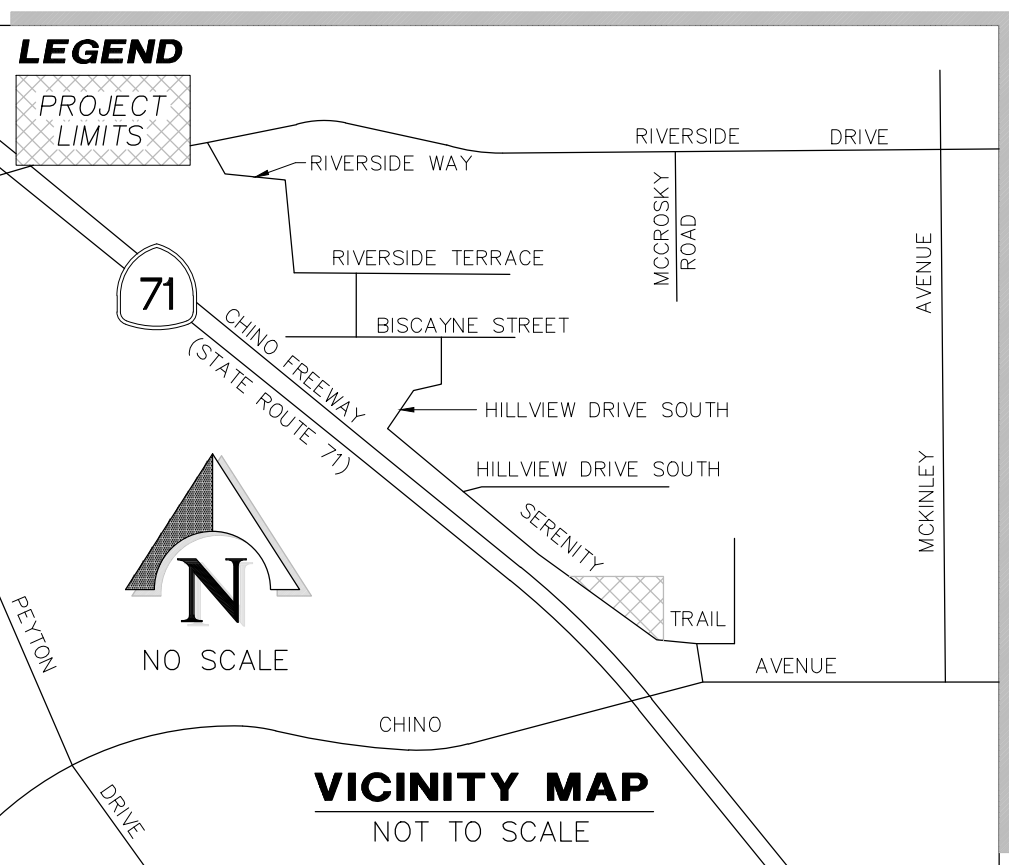
Sincerely,

A handwritten signature in blue ink, appearing to read 'Amer Jakher', with a stylized, cursive script.

Amer Jakher

Director of Public Works, Acting City Engineer

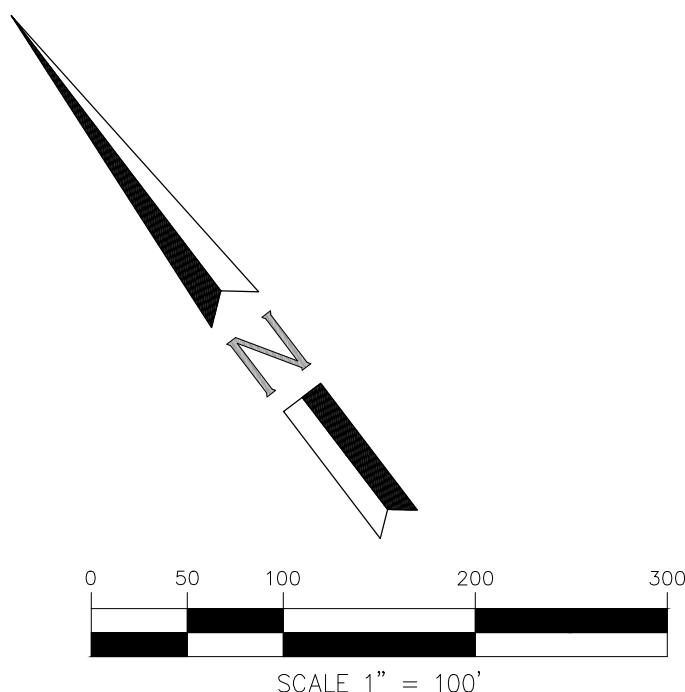
TRIBUTARY BOUNDARY MAP
FOR
SERENITY TRAIL



LEGEND

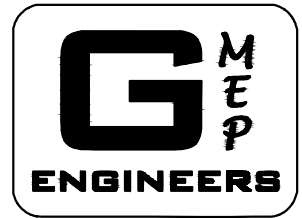
- PROPOSED SEWER PROJECT LIMITS
- FUTURE SERENITY TRAIL SEWER MAIN EXTENSION BY OTHERS

NOTE: SERENITY TRAIL, RESERVOIR RD. AND HILLVIEW SOUTH DR. HAVE PUBLIC ROW. OTHERS ARE PRIVATE ROADS OR MAY HAVE PRIVATE EASEMENTS. SEWER EASEMENTS WOULD BE REQUIRED.



GMEP Engineers

26439 Rancho Parkway S., Ste 120
Lake Forest, CA 92630
Ph: (949)267-9095
www.gmepe.com



Project: Summerland Assisted Living
Location: 13225 Serenity Trail
Chino, CA 91710

Date: 12/08/21

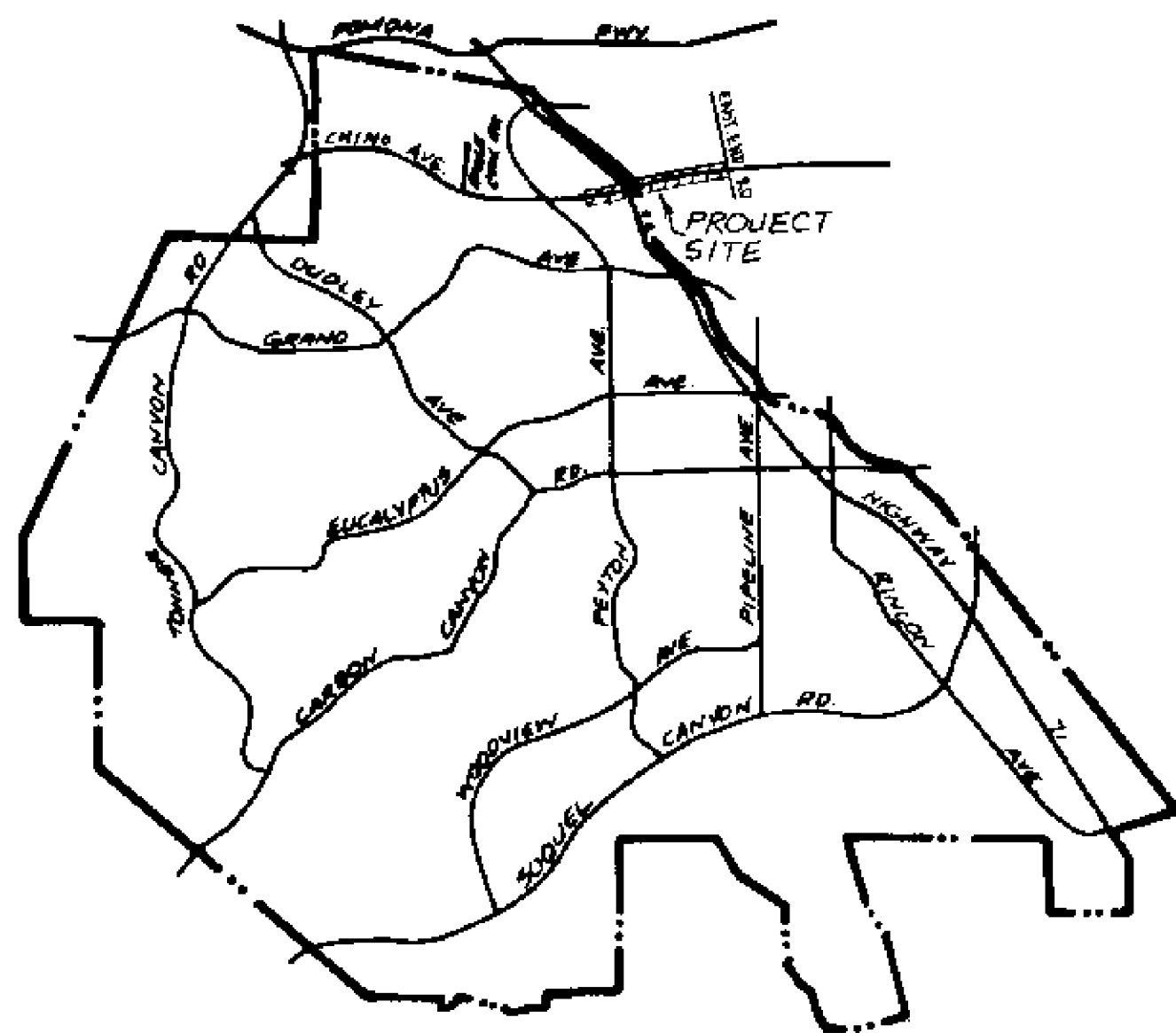
To Whom it May Concern,

The following table is a total calculation of all the water fixture units (WFU) and drainage fixture units (DFU) for the Summerland Assisted Living building.

TOTAL FIXTURE UNIT CALCULATIONS FOR BUILDING					
UNIT TYPE	QTY	DOMESTIC WATER		DRAINAGE	
		COLD WATER FIXTURE UNITS (CWFU)	TOTAL COLD WATER DEMAND (CWFU)	DRAINAGE FIXTURE UNITS (DFU)	TOTAL (DFU)
UNIT PLAN 1 (RESIDENCE)	83	7.0	581.0	8	664
PLAN 2 (RESIDENCE)	3	12.5	37.5	14	42
MEMORY CARE UNIT	8	5.5	44.0	6	48
SEMI PRIVATE MEMORY CARE UNIT	20	6.5	130.0	7	140
RESIDENTIAL LAUNDRY ROOM PLAN 1	6	9.5	57.0	8	48
RESIDENTIAL LAUNDRY ROOM PLAN 2	1	5.5	5.5	5	5
COMMERCIAL KITCHEN & LAUNDRY	1	29.5	29.5	29	29
BISTRO KITCHEN	1	1.0	1.0	2	2
THEATER	1	1.5	1.5	2	2
MC ACTIVITY ROOM	1	1.5	1.5	2	2
COUNTRY KITCHEN & SERVERY	1	2.5	2.5	7	7
SALON	1	7.5	7.5	7	7
ARTS&CRAFTS KITCHEN	1	1.0	1.0	2	2
MOP SINKS (HOUSE KEEPING)	10	3	30.0	3	30
RESTROOMS	7	3.5	24.5	4	28
MEDICINE ROOM	3	1.0	3.0	2	6
HOSE BIBB	1	2.5	2.5	0	0
HOSEBIBB (EACH ADDITIONAL)	4	1.0	4.0	0	0
TOTAL FIXTURE UNITS			963.5		1062
EQUIVALENT WATER DEMAND IN GPM			203		
REQUIRED MINIMUM PIPE SIZE			4"		8"

Steve Sheffield, PE
Project Engineer





VICINITY MAP
NOT TO SCALE

IMPROVEMENT PLANS FOR PARCEL MAP NO. 10048 IN THE COUNTY OF SAN BERNARDINO FOR THE CONSTRUCTION OF CHINO AVE. SEWER IMPROVEMENTS

CONSTRUCTION NOTES & ESTIMATE OF QUANTITIES			
SEWER			
NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1	CONST. 48" PRECAST CONCRETE MANHOLE PER STD. B-5	EA	12
2	CONST. 8" SEWER LATERAL (VCP OR ABS)	LF	50
3	CONST. 10" SEWER MAIN (VCP OR ABS)	LF	2115
4	CONST. 15" SEWER MAIN (VCP OR ABS)	LF	2111
5	REMOVE EXISTING PLUG & JOIN	EA	1
6	INSTALL 8" PLUG	EA	1
7	JACK & BORE 30" I.D. STEEL CASING	LF	140
8	JACK & BORE 36" I.D. STEEL CASING	LF	90
9	INSTALL 8" D.I.P. 114" BEND	EA	2
10	INSTALL 6" D.I.P. 114" BEND	EA	2
11	CONST. 60" PRECAST CONCRETE MANHOLE PER STD. B-5 (MODIFIED)	EA	1
12	EDGING PARALLEL FLOORS PER STD. B-5 (MODIFIED PER DETAIL ON SHT. 1)	EA	1
13	REMOVE AND REPAVE 5' PAVEMENT AND BASE (PER DETAIL ON SHT. 1) (SEE SHT. 2 FOR PLAN)	SF	650
14	REMOVE AND REPAVE 5' PAVEMENT AND BASE (PER DETAIL ON SHT. 1) (SEE SHT. 2 FOR PLAN)	SF	1010
15	CONST. TRENCH BACKFILL (PER DETAIL ON SHT. 1)	CU	64
16	CONST. 6" EXPOSED LINED D.I.P. FEMALE JOINT	LF	216
17	CONST. 12" EXPOSED LINED D.I.P. FEMALE JOINT	LF	216
18	CONST. 24" SEWER MAIN (VCP OR ABS)	LF	181
19	CONST. 12" PVC 2'000 (AIR VENT)	LF	245

GENERAL NOTES WATER WORKS DIST. NO. 8 CONSTRUCTION

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE COUNTY OF SAN BERNARDINO WATERWORKS DISTRICT NO. 8 STANDARD PROCEDURES AND REQUIREMENTS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF WATER AND WASTEWATER FACILITIES CURRENT EDITION AND IN DATE OF YEAR APPROVAL.
- THE CONTRACTOR SHALL APPLY FOR A CONSTRUCTION PERMIT FROM THE SAN BERNARDINO COUNTY WATERWORKS DISTRICT NO. 8, AND ARRANGE FOR A PRE-CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION.
- BEFORE WORK IS STARTED THE CONTRACTOR MUST OBTAIN A PERMIT TO EXCAVATE IN PUBLIC STREETS.
- THE CONTRACTOR SHALL UNCOVER AND VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITY LINES PRIOR TO EXCAVATING. THE CONTRACTOR SHALL MAKE APPROPRIATE ARRANGEMENTS FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL NOTIFY (TELEPHONE OR SIGN) ALL UTILITY OWNERS AT 1-800-422-4133 PRIOR TO BEGINNING WORK.
- ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS OPERATIONS, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS.
- THE CONTRACTOR'S ATTENTION IS EXPRESSLY DIRECTED TO ALL THE REQUIREMENTS AND PROVISIONS OF THE STATE OF CALIFORNIA SAFETY REGULATIONS. COMPLIANCE THEREWITH SHALL BE STRICTLY ENFORCED DURING THE ENTIRE LIFE OF THE CONTRACT. AN EXCAVATION PERMIT WILL BE REQUIRED FOR TRENCHES IN EXCESS OF 5.0 FEET IN DEPTH.
- THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION OUTSIDE OF THE PROJECT AREA, ON AS DIRECTED BY THE DISTRICT.
- COMPACTION TEST SHALL BE REQUIRED FOR ALL TRENCH BACKFILL PER SAN BERNARDINO COUNTY WATERWORKS DISTRICT NO. 8 STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL REPLACE IN KIND, TO THE SATISFACTION OF THE DESIGN ENGINEER AND ANY AGENCY HAVING JURISDICTION, THEREOF, ANY PAVING, CURB AND GUTTER OR OTHER IMPROVEMENTS CUT, REMOVED OR DAMAGED IN CONNECTION WITH THIS PROJECT.
- PIPE DELIVERED TO THE SITE SHALL BE PROTECTED BY THE CONTRACTOR FROM DUST OR OTHER CONTAMINATION PRIOR TO PLACING IN TRENCH AND SHALL BE INSTALLED IN ACCORDANCE WITH DISTRICT STANDARDS TO THE SATISFACTION OF THE DISTRICT'S INSPECTOR.
- THE CONTRACTOR AT THE END OF EACH DAY'S WORK SHALL ENSURE THAT ALL OPENINGS INTO THE PIPELINE ARE SECURELY PLOUGHED AND STOPPED SO THAT NO ANIMAL, POLE OR OBJECT CAN ENTER THE PIPELINE.
- PIPE TRENCH SHALL BE EXCAVATED TRUE TO LINE AND GRADE IN ACCORDANCE WITH THE SPECIFICATIONS. ALL BACKFILL SHALL BE PLACED IN A MANNER SATISFACTORY TO THE ENGINEER AND IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. MATERIAL FOR BACKFILL TO TWELVE (12) INCHES ABOVE THE PIPE SHALL BE GRANULAR MATERIAL WITH A MINIMUM SAND EQUIVALENT OF 70.
- NO PIPELINE SHALL BE INSTALLED ON FILL MATERIAL WITHOUT FIRST MEETING IN-PLACE DENSITY TESTS REQUIRED BY THE COUNTY OF SAN BERNARDINO. COMPACTION IN INTERMEDIATE ZONE SHALL BE COMPLETED TO 90% RELATIVE COMPACTION (MINIMUM SPEC. 1.2 OF TECH. SPEC.)
- ALL WORK SHALL BE INSPECTED BY SAN BERNARDINO COUNTY WATERWORKS DISTRICT NO. 8, OR ITS DULY AUTHORIZED AGENT. THE CONTRACTOR SHALL NOT PROCEED WITH ANY SUBSEQUENT PHASE OF WORK UNTIL THE PREVIOUS PHASE HAS BEEN INSPECTED AND APPROVED. INSPECTION SHALL BE MADE OF THE FOLLOWING INTERVALS OF WORK:
 - TRENCHING, PLACING OF PIPE, VALVES, FITTINGS AND MANHOLES.
 - BACKFILL AND COMPACTION.
 - OTHER UNDERGROUND UTILITIES IN PLACE.
 - LEAKAGE TESTING.
 - MANHOLES AND VALVE BOXES RAISED TO GRADE AND LINES PLOUGHED.
 - FINAL INSPECTION.
- THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE WHEN INSPECTIONS OR ENGINEERING JURISDICTIONS BECOME NECESSARY AS SET FORTH IN THE STANDARDS.
- CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE ENGINEER, AND THE DISTRICT AND HIS REPRESENTATIVE, HARMLESS FROM ANY AND ALL LIABILITIES, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- ALL TRENCHES SHALL BE EXCAVATED WITH VERTICAL WALLS, TRENCH WIDTH SHALL BE NO GREATER THAN 8 INCHES OUTSIDE THE PIPE O.D. AS SHOWN ON STANDARD DWS 6-3 AND W-9 UNLESS OTHERWISE APPROVED BY THE OWNER. EXCAVATION SHALL BE BACKFILLED UPON COMPLETION OF PIPE OR STRUCTURE IN PLACE. WHEN INCLEMENT WEATHER IS FORECAST FOR THE FOLLOWING DAY (10% CHANCE OR BETTER TO RAIN) ALL EXCAVATION SHALL BE BACKFILLED BY THE END OF THAT PRECEDING DAY.
- SPECIAL SEWER NOTE: (CWMW WEB) TRACT 14442 MAY BE READY FOR ACTIVE SEWER PRIOR TO COMPLETION OF CHINO AVENUE SEWER IF THIS IS THE CASE THE OWNER MUST MAKE THE NECESSARY ARRANGEMENTS FOR MANHOLE NO. 1 AT THE JUNCTION OF CHINO DRIVE AND MAINSTREAM DRIVE TO FLOW INTO MANHOLE NO. 1 ON CHINO DRIVE. INVERT ELEVATION 850.04 PER DRAWINGS PREPARED BY DISTRICT ENGINEER. THIS MAY INCLUDE AN INTERIM PUMPING FACILITY APPROVED BY THE DISTRICT.

SEWER NOTES

- THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE DISTRICT BEFORE BACKFILLING OVER ANY LATERAL 24" OR LARGER.
- SEWER LATERALS ARE TO BE CONSTRUCTED WITH EXPOSED 5.0 FEET BELOW TOP OF CURB UNLESS OTHERWISE NOTED.
- ALL LATERALS SHALL BE LAYED AT 90° TO MAIN EXCEPT AS CALLED-OUT WHERE LATERALS MAY BE LAYED AT 45° TO MAIN.
- IN CHURCH STREETS, EXPOSED SEWER LATERALS VCP & 4" IN CHURCH STREETS.
- PIPELINE MATERIALS MAY BE EITHER VITRIFIED CLAY PIPE OR A.S.A. TRUNK PIPE AS SPECIFIED IN THE STANDARDS.
- PIPE TESTING SHALL BE PERFORMED PER SAN BERNARDINO COUNTY WATERWORKS DISTRICT NO. 8 "STANDARDS FOR WASTEWATER FACILITIES" STANDARD DRAWING NO. 8-3, UNLESS OTHERWISE SHOWN ON PLANS.
- SERVICE LATERALS ARE TO BE LOCATED IN FIELD AT TIME OF CONSTRUCTION BY OWNER OR HIS REPRESENTATIVE. LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE FOR GUIDANCE PURPOSES ONLY.
- A WATERPROOF PLUG SHALL BE INSTALLED AT ALL HOUSE LATERAL ENDS AND AT ALL PIPE ENDS AS SHOWN ON PLANS.
- NO LOTS SHALL BE CONNECTED TO THE SEWER MAIN UNTIL THE PORTION OF THE SEWER MAIN TERMINATES IN A CLEANOUT OR MANHOLE CONSTRUCTED PER DISTRICT STANDARDS.
- LATERALS SHALL EXTEND TO PROPERTY LINE UNLESS SHOWN OTHERWISE ON PLANS.
- SEWER CONSTRUCTION SHALL MAINTAIN A MINIMUM OF 5.0 FEET FROM ANY EXISTING STRUCTURE OR MANHOLE. THE CLOSING SECTION SHALL NOT BE INSTALLED UNTIL ALL MAINS HAVE BEEN CLEANED, TESTED AND TENTATIVELY ACCEPTED BY THE DISTRICT IN WRITING.

NOTE:

DETAILS SHOWN ON SH. 2 OF D. SHALL APPLY TO THAT PORTION OF THE SYSTEM BETWEEN STA 10+10.69 AND STA 31+23.28

GENERAL NOTES - CWMW CONSTRUCTION

- ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH THE PROJECT SPECIFICATIONS AS APPROVED BY CHINO BASIN MUNICIPAL WATER DISTRICT. THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION) AND THE CWMW STANDARD DETAIL SHEET OF THIS PLAN SET (SHT. 6) AS APPROPRIATE.
- ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS OPERATIONS, WHETHER OR NOT SHOWN ON THESE PLANS.
- ALL OBSTRUCTIONS WITHIN THE AREA TO BE IMPROVED ARE TO BE REMOVED OR THE DIRECTION OF THE ENGINEER. UTILITIES ARE TO BE RELOCATED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR IS REFERRED TO SECTION 5 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- UTILITY LINE LOCATIONS WERE TAKEN FROM RECORD AND WERE NOT LOCATED IN THE FIELD. UNLESS OTHERWISE NOTED ON THE PLAN, THE CONTRACTOR IS REFERRED TO SECTION 5 OF THE STANDARD SPECIFICATIONS.
- IN CASE OF ANY ACCIDENTS INVOLVING SAFETY MATTERS COVERED BY SECTION 8424 OF THE CALIFORNIA LABOR CODE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STATE DIVISION OF INDUSTRIAL SAFETY.
- CALL UNDERGROUND SERVICE ALERT FOR UNDERGROUND LOCATIONS 72 HOURS BEFORE DIG (800-422-4133).
- THE CONTRACTOR SHALL OBTAIN A TRAFFIC CONTROL PERMIT 48-HRS PRIOR TO THE BEGINNING OF CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR IS REFERRED TO SECTION 7-10.3 OF THE STANDARD SPEC.
- THE CONTRACTOR SHALL RENEW OR REPLACE ANY EXISTING TRAFFIC STRIPING AND/OR PAVEMENT MARKINGS WHICH DURING HIS OPERATIONS HAVE BEEN REMOVED OR THE EFFECTIVENESS OF WHICH HAS BEEN REDUCED. RENEWAL OF PAVEMENT STRIPING AND MARKINGS SHALL BE DONE IN CONFORMANCE WITH SECTION 310-0.8 OF THE STANDARD SPECIFICATIONS.
- ALL SEWER MAINS SHALL BE BELL AND SPIGOT EXTRA-STRENGTH VITRIFIED CLAY PIPE (V.C.P.) UNLESS OTHERWISE NOTED ON THE PLAN.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING SEWER MAIN(S) AND NOTIFY THE DESIGN ENGINEER OF ANY VARIATION FROM DESIGN.
- CONSTRUCTION SHALL NOT BEGIN ON FACILITIES TO BE OWNED BY CWMW UNTIL AFTER THE ISSUANCE OF A PERMIT BY CWMW TO ALLOW THE CONSTRUCTION, AND ALSO AFTER A PRE-CONSTRUCTION CONFERENCE TO BE HELD AT LEAST ONE WEEK PRIOR TO BEGINNING CONSTRUCTION. IN ADDITION, CWMW SHALL BE NOTIFIED A MINIMUM OF 48-HRS. PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF THE TRUNK SEWER OR ANY FACILITIES OWNED BY CWMW.
- ALL TRENCHING AND/OR SHORING SHALL MEET REQUIREMENTS OF CAL-OSHA.
- THE CONTRACTOR SHALL SUBMIT COPIES OF HIS DEPARTMENT OF INDUSTRIAL SAFETY PERMIT TO CWMW AND TO CITY OF CHINO AND SAN BERNARDINO COUNTY.
- SHOP DRAWINGS AS REQUIRED BY THE PERMIT SHALL BE APPROVED BY CWMW PRIOR TO BEGINNING OF THE INSTALLATION OF THE FLOVE.

NBS/LOWRY ENGINEERS & PLANNERS RECORD DRAWINGS

Information Obtained From

Client's Records
NBS/L Records
Contractor's Records
By: [Signature] Date: 10-9-91

UNDERGROUND SERVICE
ALERT
CALL TOLL FREE
1-800
422-4133
TWO WORKING DAYS
BEFORE YOU DIG

NOTICE TO CONTRACTORS

The existence and location of any underground utility pipes or structures shown on this plan are obtained by a search of available records. To the best of our knowledge there are no existing utilities except as shown on these plans. The contractor is required to take due precautionary measures to protect the utility lines shown and any other lines or structures not of record or not shown on these drawings. It shall be the contractor's responsibility to notify the owners of the utilities or structures concerned before starting work. The contractor, further assumes all liability and responsibility for the underground utility pipes, conduits, and structures shown or not shown on these drawings.

All contractors and subcontractors performing work shown on or related to these plans shall conduct their operations so that all employees are provided a safe place to work and the public is protected. All contractors and subcontractors shall comply with the "Occupational Safety and Health Regulations" of the U.S. Department of Labor, and with the State of California Department of Industrial Relations' "Construction Safety Orders."

The civil engineer shall not be responsible in any way for the contractors' and subcontractors' compliance with the "Occupational Safety and Health Regulations" of the U.S. Department of Labor or with the State of California Department of Industrial Relations' "Construction Safety Orders."

Contractor further agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the contractor shall defend, indemnify and hold the owner and the engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting for liability arising from the sole negligence of the owner or the engineer.

BASIS OF BEARING

BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF PEYTON DRIVE BEING N 60°19'11"W PER TRACT 12561-1, M.B. 177/9-10, RECORDS OF SAN BERNARDINO, CALIFORNIA

BENCH MARK:

CAL TRANS' BENCH MARK 7-5B-77-5B PER F.D. 07-1A-071-B PAGE 1-D CHISELED SQUARE IN NW EDGE OF HEADWALL 330' SOUTHERLY OF COUNTY LINE, 90' WEST OF CENTERLINE OF HIGHWAY 71. ELEVATION 777.13

CHINO HILLS MANAGERS OFFICE

APPROVED BY: [Signature] DATE: 10/1/91

CHINO BASIN MUNICIPAL WATER DISTRICT

APPROVED BY: [Signature] DATE: 10/1/91

OFFICE ENGINEER

CITY OF CHINO ENGINEERING DIVISION

APPROVED BY: [Signature] DATE: 10/1/91

DEPUTY CITY ENGINEER

CHECKED BY: MN 12.85.90

DATE: 10/1/91

WD NO: 579

FILE NO:

SHEET 1 OF 8

PLANS PREPARED FOR

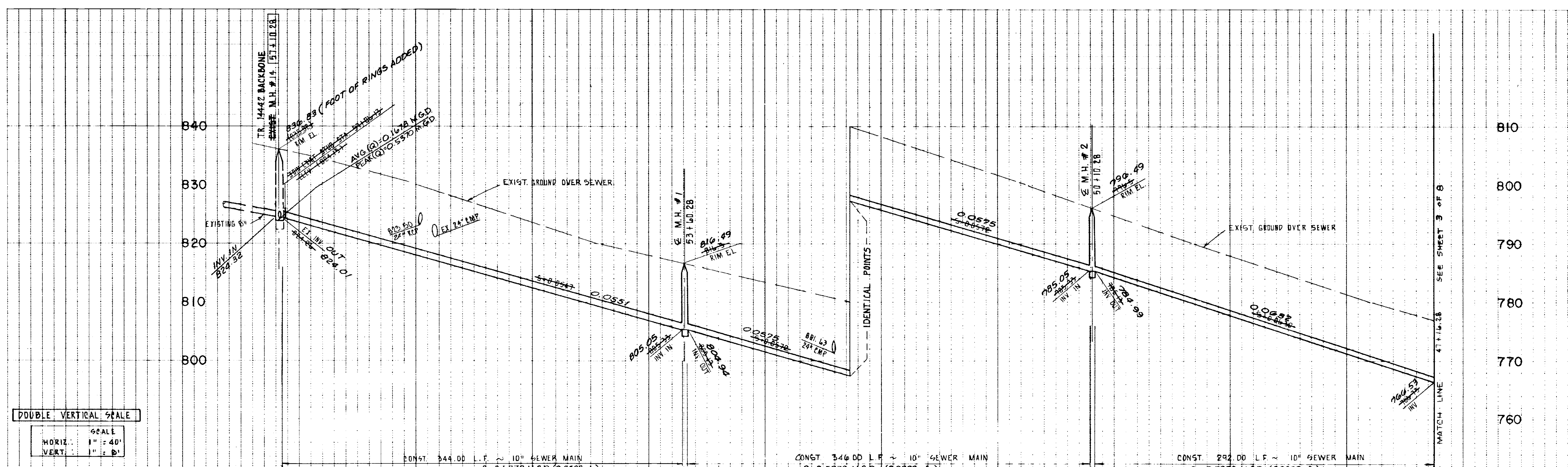
BRAMALEA CALIFORNIA INC.
ONE PARK PLAZA, SUITE 1100
IRVINE, CA. 92714
(714) 851-3131

SAN BERNARDINO

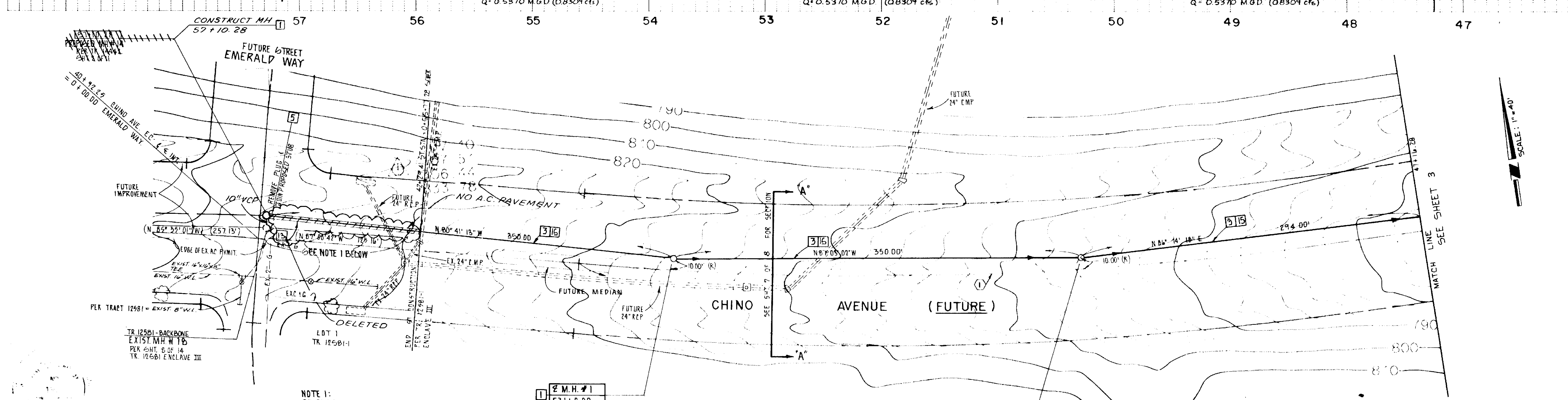
COUNTY WATERWORKS DISTRICT NO. 8

PARCEL MAP NO. 10048
TRACT 14442

GENERAL NOTES, CONSTRUCTION NOTES AND ESTIMATE OF QUANTITIES CHINO AVE. SEWER



DOUBLE VERTICAL SCALE
 SCALE
 HORIZ.: 1" = 40'
 VERT.: 1" = 10'



SEWER CONSTRUCTION NOTES

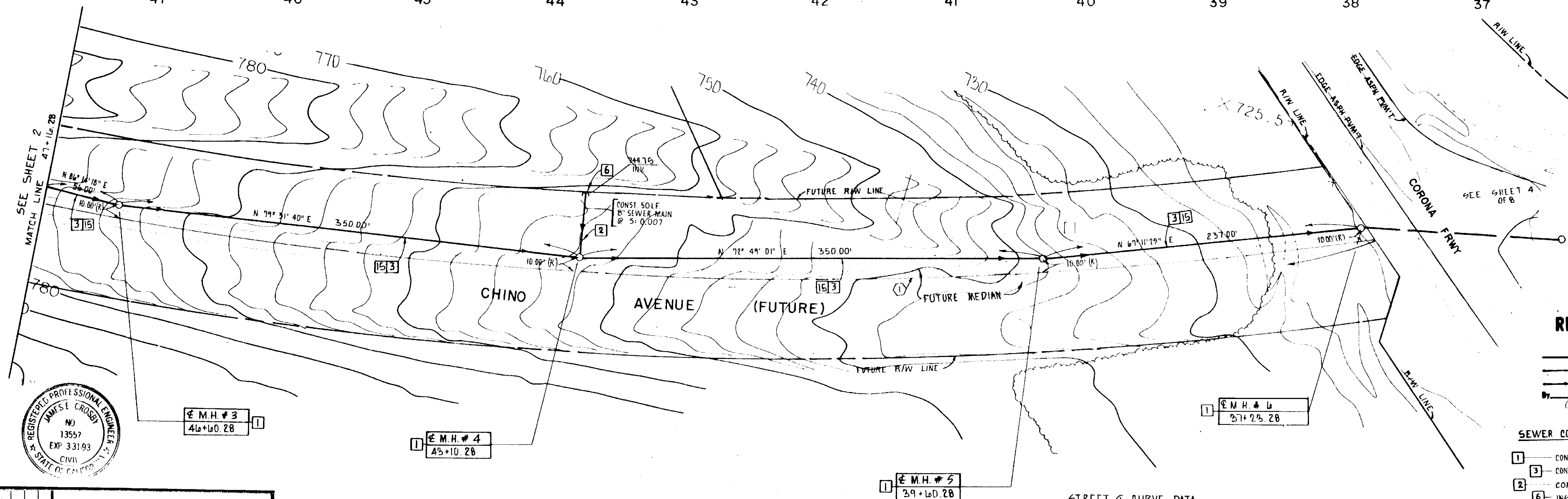
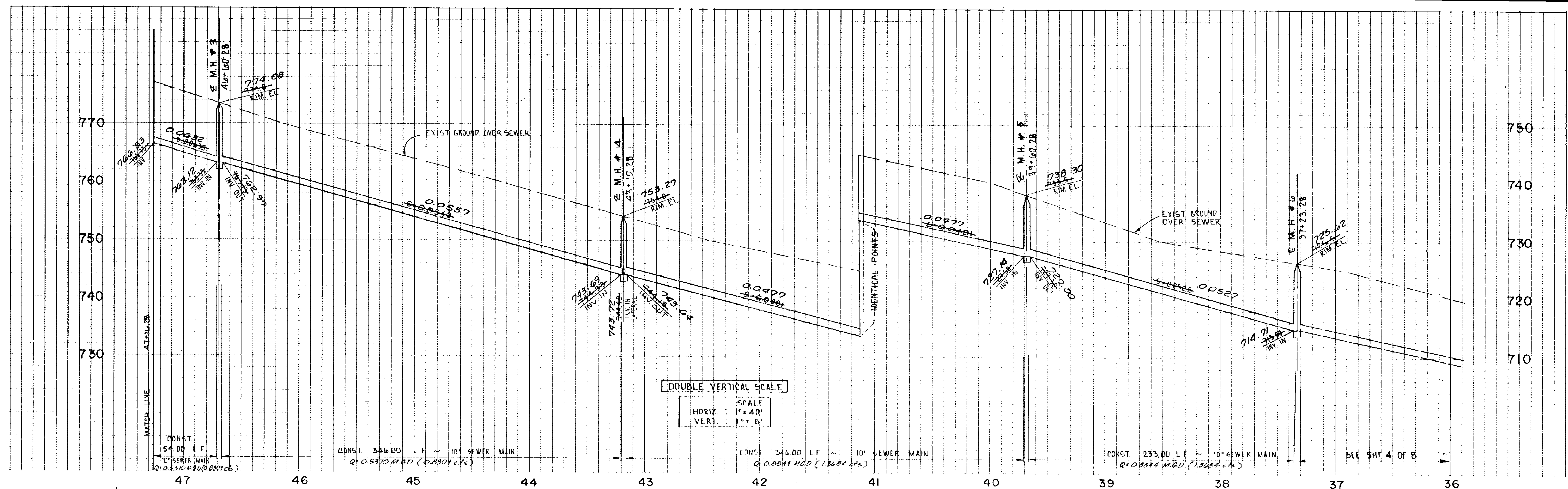
- CONST. 48" PRECAST CONCRETE MANHOLE PER STD. 5-5
- CONST. 10" SEWER MAIN
- REMOVE EXISTING PLUG AND JOIN
- REMOVE & REPLACE 5' PAVEMENT BASE PER DETAIL ON SHEET 1
- CONST. TRENCH BACKFILL PER DETAIL ON SHEET 1

STREET & CURVE DATA

NO.	Δ	R	L	T
1	33° 07' 10"	3000'	1734.25'	842.11'

RECORD DRAWINGS
 Information Obtained From:
 Client's Records
 NBS/L Records
 Contractor's Records
 Date: 10-9-91

Crosby Associates 1932 E. DEERE AVE. SUITE 100 SANTA ANA, CA. 92705 (714) 261-9560	PLANS PREPARED FOR BRAMALEA CALIFORNIA INC. ONE PARK PLAZA, SUITE 1100 IRVINE, CA. 92714 (714) 851-3131		SAN BERNARDINO COUNTY WATERWORKS DISTRICT NO. 8 APPROVED BY: [Signature] DISTRICT MANAGER DATE: 12-21-90 DISTRICT ENGINEER: [Signature] DATE: 12-19-90		PARCEL MAP NO. 10048 TRACT 14442 CHINO AVE. SEWER
	DESIGNED: [Signature] CHECKED: [Signature]	DRAWN: [Signature] SCALE: AS SHOWN	NO. DATE APP. REVISIONS DRAWN DESIGNED CHECKED	W.O. NO. 575 FILE NO. SHEET 2 OF 8	



NBS / LOWRY ENGINEERS • PLANNERS

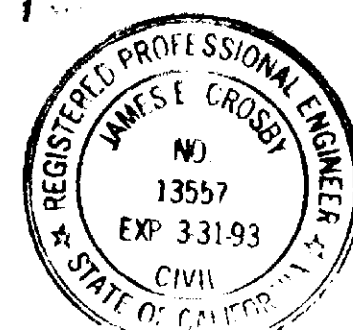
RECORD DRAWINGS
Information Obtained From
Client's Records
NBS/L Records
Contractor's Records
By: *[Signature]* Date: 10-9-91

SEWER CONSTRUCTION NOTES

- 1 — CONST. 48" PRECAST CONCRETE MANHOLE PER STD 5-5
- 3 — CONST. 10" SEWER MAIN
- 2 — CONST. 8" SEWER LATERAL
- 6 — INSTALL 6" PLUG
- 15 — CONST. TRENCH BACKFILL PER DETAIL ON SHT. 7

STREET & CURVE DATA

NO.	Δ	R	L	T
(1)	33° 07' 10"	2000'	1734.25'	892.11'



Crosby & Associates
1932 E. DEERE AVE.
SUITE 100
SANTA ANA, CA, 92705
(714) 261-9560

BENCHMARK:
CALTRANS BENCHMARK 3-58-77-58 PER F.B. 07-LA-071-B PAGE
1-B CHISELED SQUARE IN NW EDGE OF HEADWALL 330' SOUTHERLY
OF COUNTY LINE, 50' WEST OF CENTERLINE CONST. HIGHWAY 71.
ELEV. 777.13

PLANS PREPARED FOR

BRAMALEA CALIFORNIA INC.
ONE PARK PLAZA, SUITE 1100
IRVINE, CA. 92714
(714) 851-3131

SAN BERNARDINO COUNTY WATERWORKS DISTRICT NO. 8

APPROVED BY: *[Signature]* DATE: 12/21/90
DISTRICT MANAGER
DISTRICT ENGINEER: *[Signature]* DATE: 12-19-90
RCE 11900

**PARCEL MAP NO. 10048
TRACT 14442**

CHINO AVE. SEWER

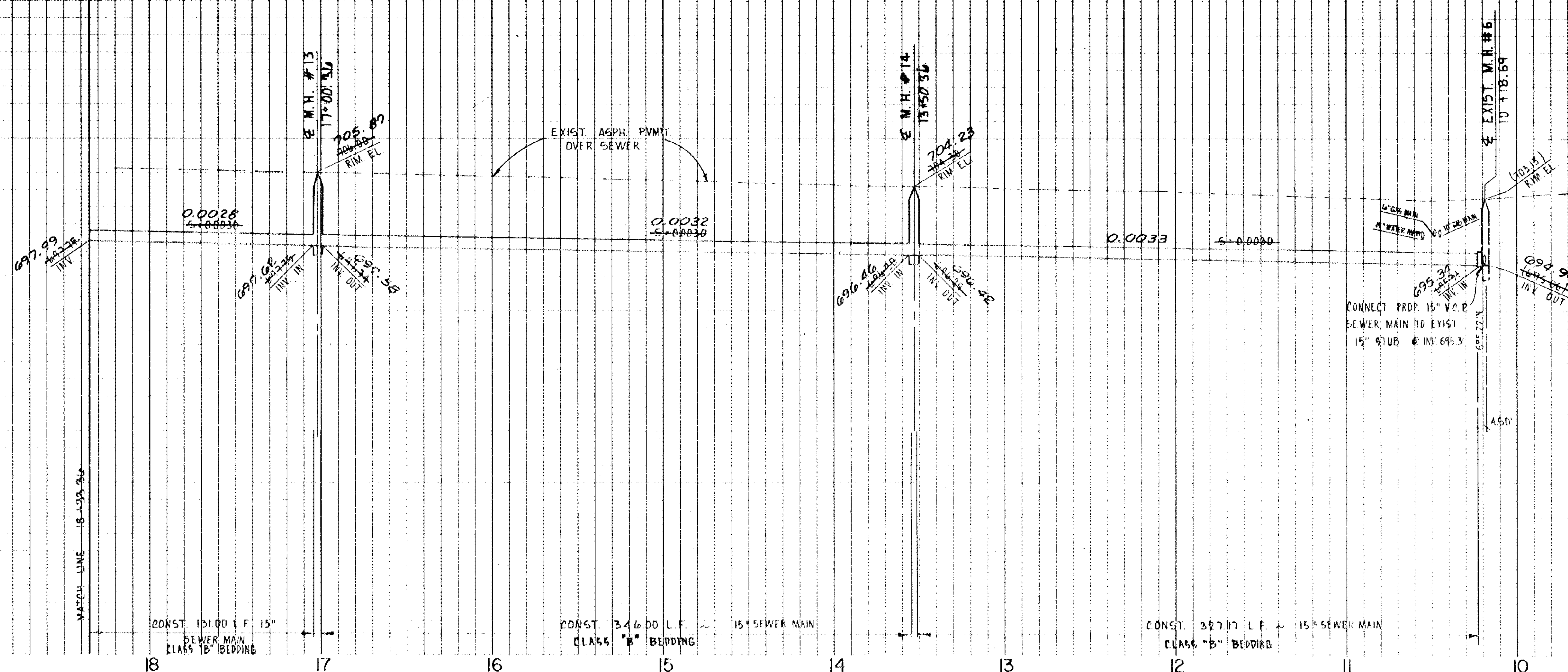
WO NO 575

FILE NO.

SHEET 3 OF 8

CAD 42 D-4582-3

710
700
690
680
670

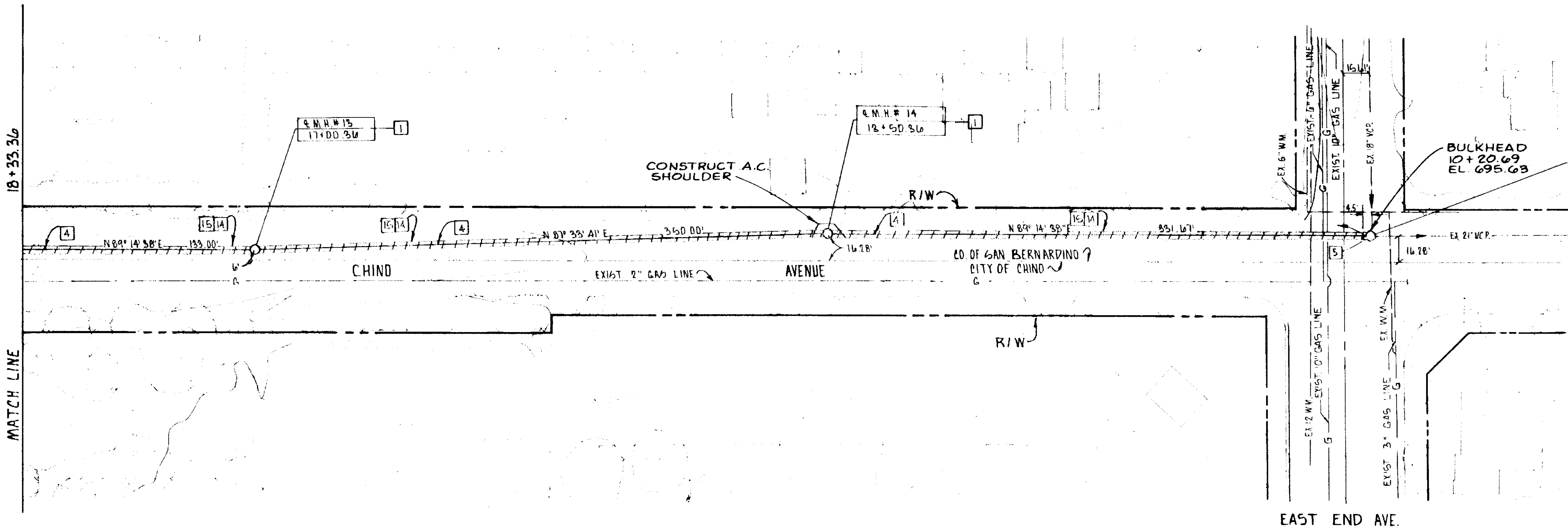
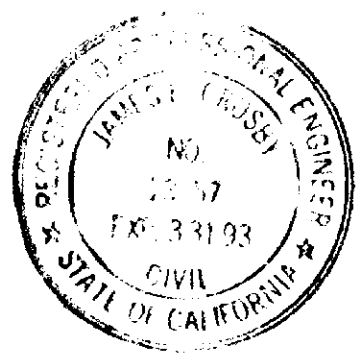


PLUG EXISTING 15" STUB WITH MECHANICAL PLUG, KEEP PLUG IN PLACE UNTIL COMPLETION OF TESTING AND ACCEPTANCE BY C.B.M.W.D.

DOUBLE VERTICAL SCALE
SCALE
HORIZ. : 1" = 40'
VERT. : 1" = 8'

710
700
690
680
670

RECORD DRAWING
CROSBY ENGINEERS
1932 E. DEERE AVE.
SANTA ANA, CA 92705
(714) 261-9560



EXIST. M.H. #6
10+18.69
EL. 695.63

REF:
WESTSIDE INTERCEPTOR PHASE II
PLAN AND PROFILE CHINO BASIN
MUNICIPAL WATER DIST. SHT. 3 OF 7,
DWG. NO. D-4505-3
WESTSIDE INTERCEPTOR STATION 36+10.11

- SEWER CONSTRUCTION NOTES
- 1 - CONST. 48" PRECAST CONCRETE MANHOLE PER STD 5-5
 - 4 - CONST. 15" V.C.P. SEWER MAIN
 - 5 - REMOVE EX. PLUG & JOIN
 - 14 - REMOVE & REPLACE 5.5' PAVEMENT & BASE PER DETAIL ON SHT. 7
 - 15 - CONST. TRENCH BACKFILL PER DETAIL ON SHT. 7

EAST END AVE.

BENCHMARK:
CALTRANS BENCHMARK 3-58-77-58 PER F.B. 07-LA-071-B PAGE
1-B CHISELED SQUARE IN NW EDGE OF HEADWALL 330' SOUTHERLY
OF COUNTY LINE, 50' WEST OF CENTERLINE CONST. HIGHWAY 71.
ELEV. 777.13

PLANS PREPARED FOR
BRAMALEA CALIFORNIA INC.
ONE PARK PLAZA, SUITE 1100
IRVINE, CA 92714
(714) 851-3131

NO.	DATE	APP.	REVISIONS

SAN BERNARDINO
COUNTY WATERWORKS DISTRICT NO. 8

APPROVED BY: *[Signature]* DATE: 12/21/90
DISTRICT MANAGER

[Signature] DATE: 12-19-90
DISTRICT ENGINEER RCE 11900

CHINO BASIN MUNICIPAL WATER DISTRICT

APPROVED BY: *[Signature]* DATE: 12/17/90
OFFICE ENGINEER

CITY OF CHINO ENGINEERING DIVISION

APPROVED BY: *[Signature]* CHECKED BY: HW 12.05.90
DEPUTY CITY ENGINEER RCE 24039

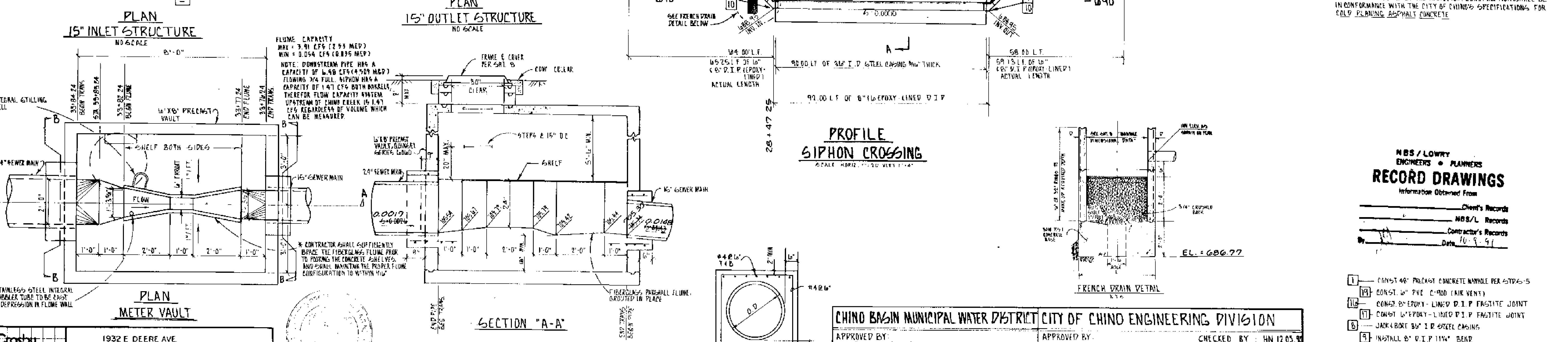
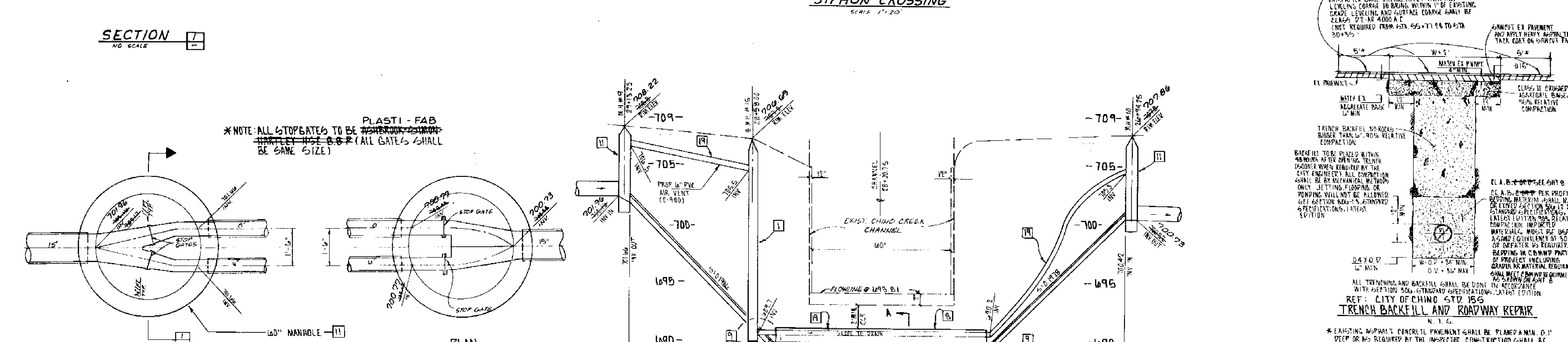
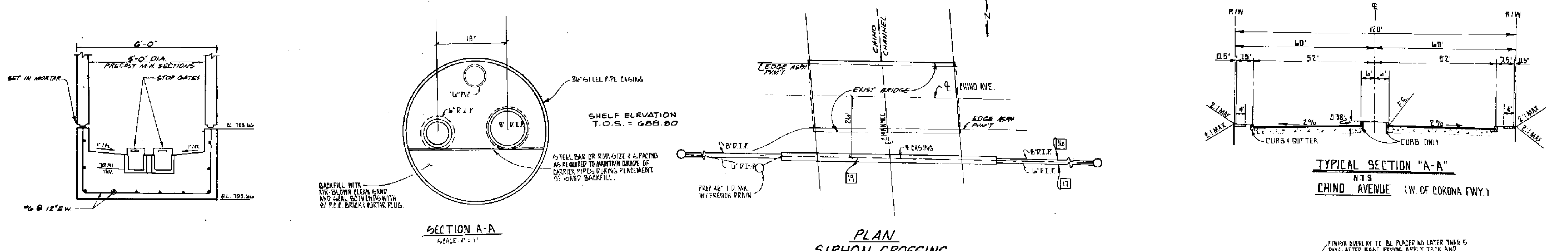
DATE: 12/17/90

PARCEL MAP NO. 10048
TRACT 14442

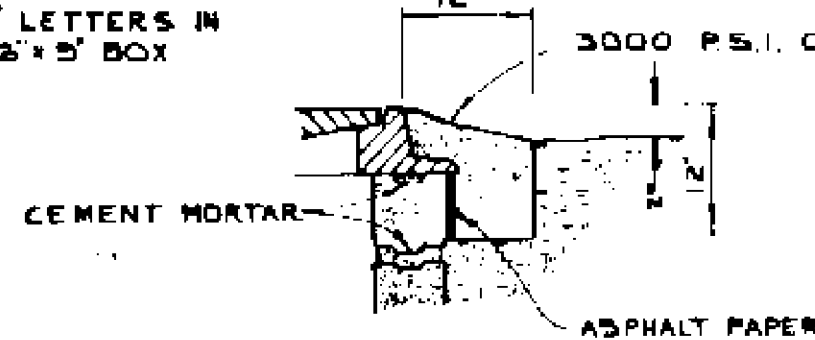
CHINO AVE. SEWER
CONNO. 5B-2

WO NO. 575
FILE NO.
SHEET 6 OF 8

CAD 4/2
D-4582-6

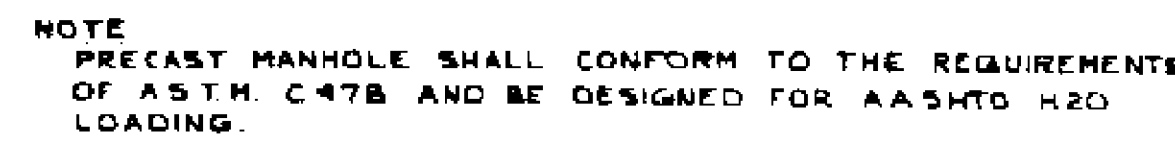


Crosby Associates 1932 E DEERE AVE SUITE 100 SANTA ANA, CA TELEPHONE: (714) 261-9560		PLANS PREPARED FOR BRAMALEA CALIFORNIA INC. ONE PARK PLAZA, SUITE 1100 IRVINE, CA 92714 (714) 851-3131		CHINO BASIN MUNICIPAL WATER DISTRICT COUNTY WATERWORKS DISTRICT NO. 8 APPROVED BY: <i>[Signature]</i> DATE: 12/21/90 DISTRICT MANAGER		CITY OF CHINO ENGINEERING DIVISION APPROVED BY: <i>[Signature]</i> CHECKED BY: HN 12/05/90 DEPUTY CITY ENGINEER DATE: 12/19/90		PARCEL MAP NO. 10048 TRACT 14442 CHINO AVE. SEWER IMPROVEMENT DETAILS CONN. NO. 6B-2		W.D. NO. 577 FILE NO. SHEET 7 OF 8	
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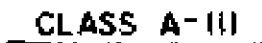
* IF CONNECTIONS AND TEES ARE REQUIRED,
USE NEXT HIGHER DIAMETER MANHOLE.

** WHERE 30" OPENING IS NOT POSSIBLE, USE
CONCENTRIC COVER, ALHAMBRA FOUNDRY
TYPE A-1325 OR EQUIVALENT.



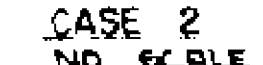
Information Obtained From

NO SCALE

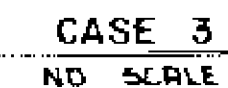


TRENCH SHORING & TRENCH WALL SLOPING SHALL BE IN CONFORMANCE WITH STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL SAFETY REQUIREMENTS AND THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.

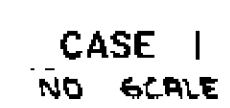
NO SCALE



100 PERCENT PASSING 1/4 IN. SIEVE
90-100 PERCENT PASSING 3/4 IN. SIEVE
20-50 PERCENT PASSING 3/8 IN. SIEVE
0-10 PERCENT PASSING #4 SIEVE
0-5 PERCENT PASSING #8 SIEVE
SLAG, PEA GRAVEL OR OTHER ALTERNATIVE
NOT BE ACCEPTABLE IN LIEU OF CRUSHED



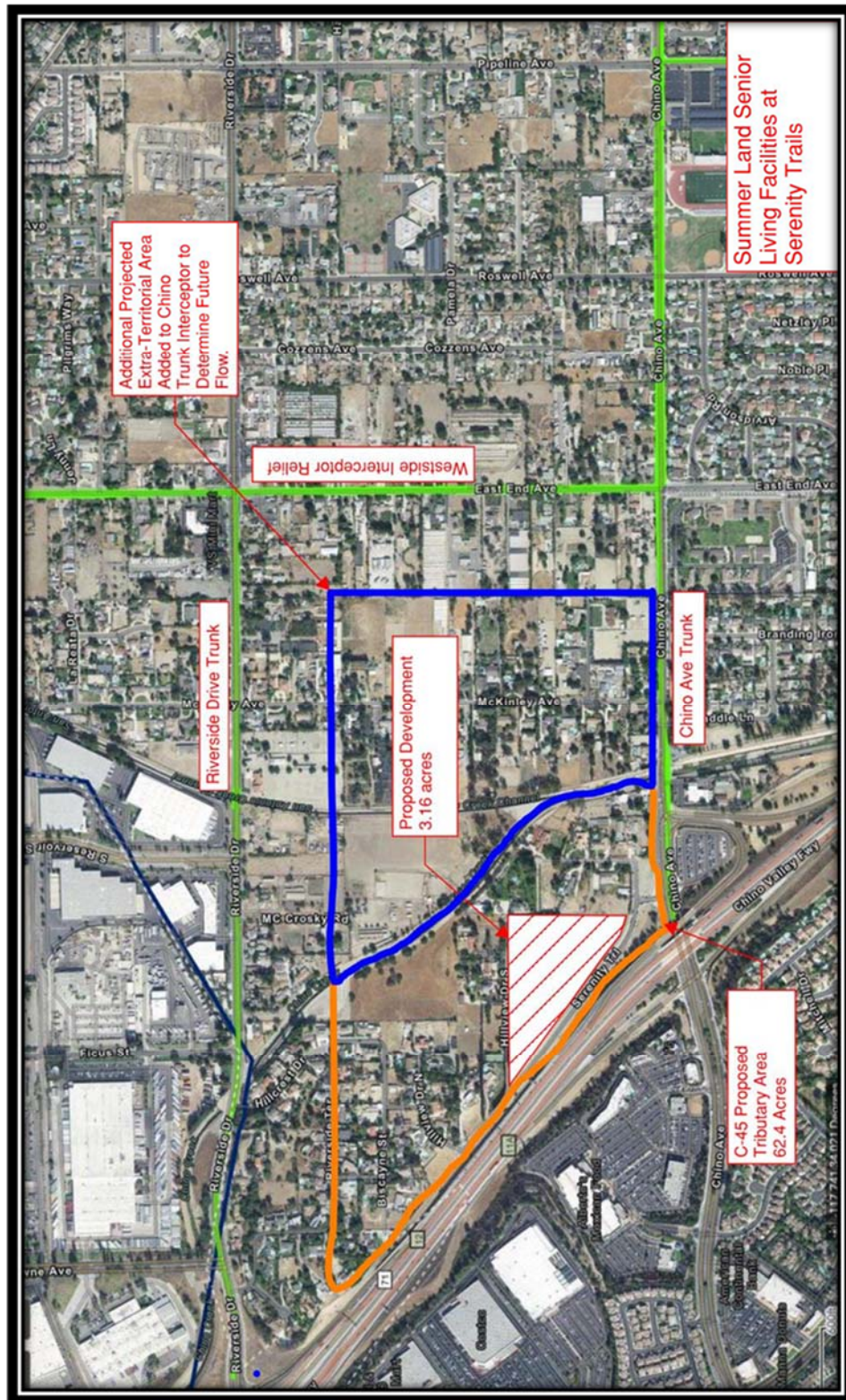
NO SCALE



DEPTH OF COVER	B	MIN. BEAR.
0'-6" 0'	0'-18" 0'	18'
6'-1-16" 0'	0'-12" 0'	18'
	12'-15" 0'	24'
	0'-10" 0'	18'
16'-1-25" 0'	7'-1-7" 0'	24'
	10'-1-12" 0'	30'

1. ALL CROSSING HOUSE LATERALS 10" AND SMALLER SHALL BE SUPPORTED BY USE OF CASE 2 PIPE SUPPORT DETAIL.
2. ALL NON-METALLIC CROSSING PIPELINE AND CONDUITS WITH 18" OR LESS CLEARANCE, EXCEPT THOSE COVERED BY NOTE 1 ABOVE, SHALL BE SUPPORTED BY CASE 1 PIPE SUPPORT DETAIL.
3. ALL NON-METALLIC CROSSING PIPELINE AND CONDUITS NOT COVERED BY THE ABOVE NOTES 1 OR 2 SHALL BE SUPPORTED BY USE OF CASE 2 PIPE SUPPORT DETAIL.
4. BACKFILL SHALL BE BROUGHT UP UNIFORMLY ALONG BOTH SIDES OF THE PROTECTED PIPE AND SUPPORT GO AS TO INDUCE NO UNBALANCED FORCE.
5. CROSSING METALLIC CONDUITS 3 INCHES NOMINAL SIZE AND LARGER SHALL BE BACKFILLED TO 2' BELOW THE CROSSING CONDUIT WITH CLASS 2 AGGREGATE BASE. MATERIALS AND INSTALLATION SHALL BE PER CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, SECTION 26. JAN. 1978 EDITION. 12 INCH SHALL THEN BE BACKFILLED TO 12 INCHES OVER THE CONDUIT WITH CLEAN, MOISTENED SAND AND EQUIVALENT OVER 30' BROUGHT UP 6 LAYERS OF NOT OVER 6 INCHES AND MECHANICALLY COMPACTED TO A RELATIVE DENSITY OF AT LEAST 90% WITH SPECIAL ATTENTION BEING GIVEN TO THE PIPE BOTTOM AND HATCH AREAS OF THE BACKFILL.

ATTACHMENT B
General Location for Connection C-45



ATTACHMENT B – General Location

**INFORMATION
ITEM**

2A



Date: January 27, 2022

To: Regional Technical Committee

From: Inland Empire Utilities Agency

Subject: City of Rialto Principles of Agreement

RECOMMENDATION

This is an information item.

BACKGROUND

To meet Chino Basin water quality objectives and wastewater permit compliance requirements, Inland Empire Utilities Agency (IEUA) is planning an advanced water purification facility (AWPF) located at Regional Plant No. 4 (RP-4) which requires a constant monthly recycled water supply for its operation. Due to the seasonality of IEUA's recycled water, the AWPF needs augmented recycled water supplies when the demands are higher than the available supplies during the six months between May and October. The City of Rialto (Rialto) is interested in monetizing its recycled water to achieve ecosystem benefits and financial security and is amenable to engage in a partnership with IEUA to develop terms for their recycled water supplies. The removal of effluent flows generated from Rialto's treatment plant from the Santa Ana River will reduce the adverse impacts to native species and a portion of these flows would serve as part of the RP-4 AWPF supply.

The principles of agreement were drafted to consolidate the needs of both IEUA and Rialto. The proposed terms include the design and construction of the recycled water facilities, the diversion of 3,500 acre-feet per year (afy) between May and October into the IEUA recycled water system at a rate of \$275 per acre-foot for a period of 50 years, and the first right of purchase for any amount above the 3,500 afy or the remaining six months.

IEUA will present this item to the Board of Directors as an action item in February 2022. Rialto will present it to their City Council for approval in February 2022.

**INFORMATION
ITEM**

2B



Recycled Water Cost of Service Study

Eddie Lin
Strategic Planning and Resources
January-February 2022

Recycled Water Rate Study Goals

- Financial Resilience
 - Promote the resiliency and sustainability of the recycled water and recharge program
- Proportionality
 - Appropriately recover costs based on the services provided, equity, and affordability
- Collaboration
 - Employ an open, collaborative, and transparent public process
- Compliance with California Law
 - Ensure that rates adhere to State legal requirements.

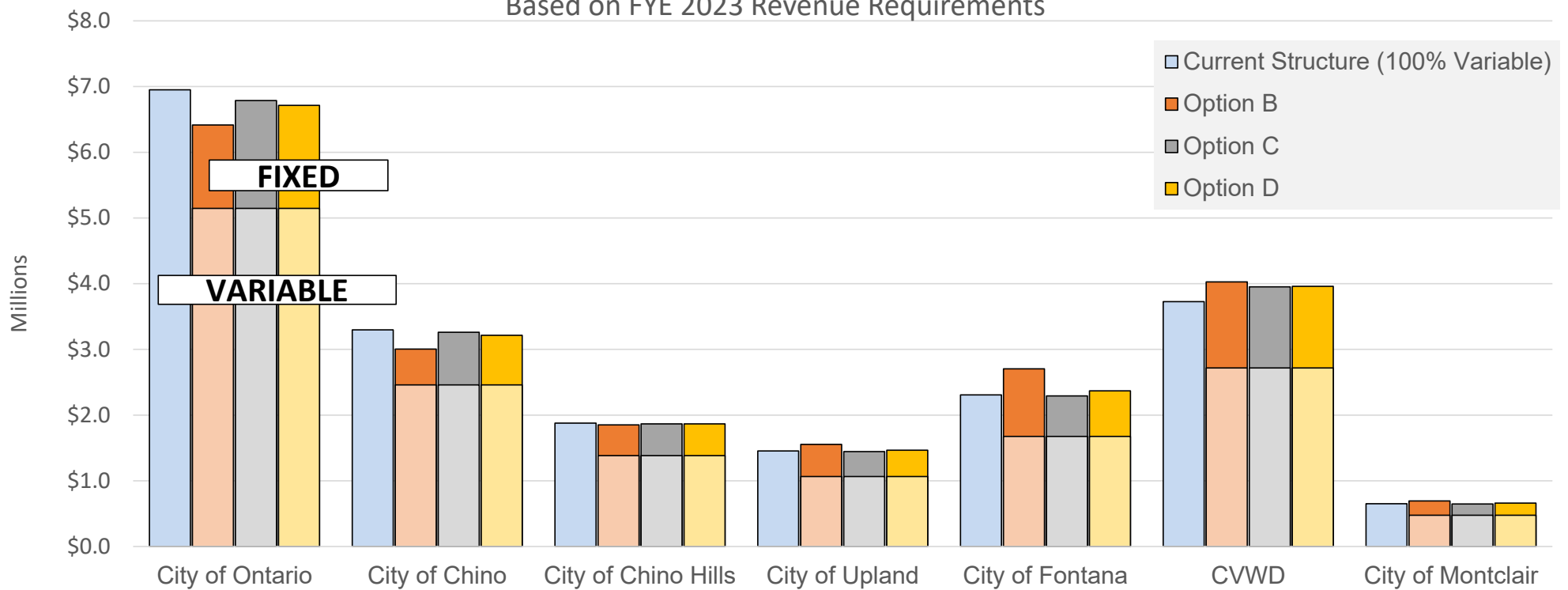
Recycled Water Rate Study

Fixed Cost Recovery

- Developing fixed cost recovery structure
 - Projected recycled water supply:
 - 56,000 acre-ft per year
 - Projected demand assumptions:
 - Direct use = 18,000 acre-ft per year
 - Recharge = 16,000 acre-ft per year
- Seven rate structures considered, narrowed down to three
 - Option B: Fixed charge based on Equivalent Dwelling Units (EDUs)
 - Option C: Fixed charge based on 3-year rolling average demands
 - Option D: Fixed charge based on 3-year rolling average (direct) and EDUs (recharge)

Recycled Water Rate Study Structure Options

Recycled Water Revenues by Agency
Based on FYE 2023 Revenue Requirements



Recycled Water Rate Study Milestones



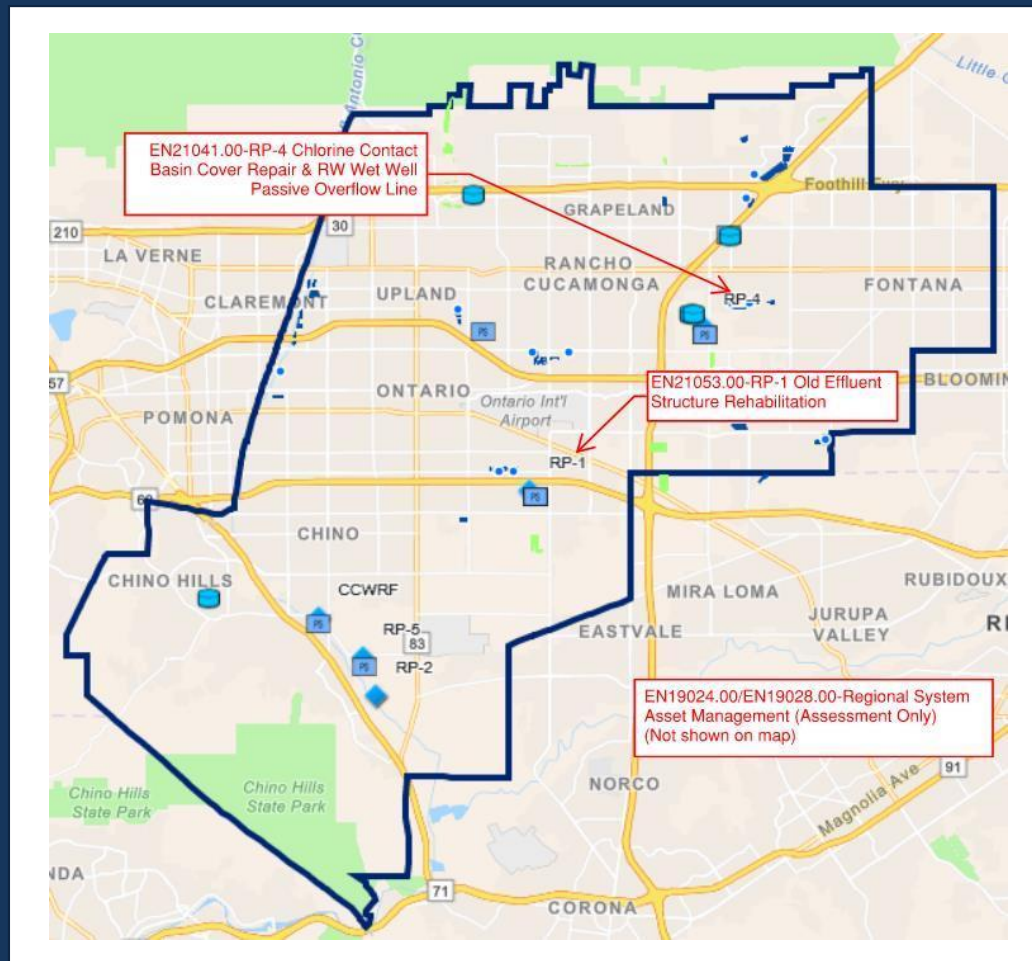
**INFORMATION
ITEM**

2C



Engineering and Construction Management Quarterly Project Updates Regional Tech/Policy Committees

Jason Marseilles, P.E.
Manager of Engineering
January/February 2022



Project Location Map

Collection System Asset Management

Project Goal: Maintain Existing Assets



Remote CCTV Entering MH for Inspection

Total Project Budget: \$3.7 M

Project Completion: September 2022

Condition Assessment Percent Complete: 25%

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Condition Assessment	CDM Smith	\$2.9 M	2%
Project Management Team			
Project Manager:		Ignacio, Joel	
Assistant/Associate Engineer:		Ward, Ryan	
Administrative Assistant:		GK & Associates	
Inspector:		GK & Associates	

RP-1 Old Effluent Structure Rehabilitation

Project Goal: Rehabilitate/Repair Existing Assets

Total Project Budget: \$1.5M
Project Completion: March 2024
Design Percent Complete: 30%

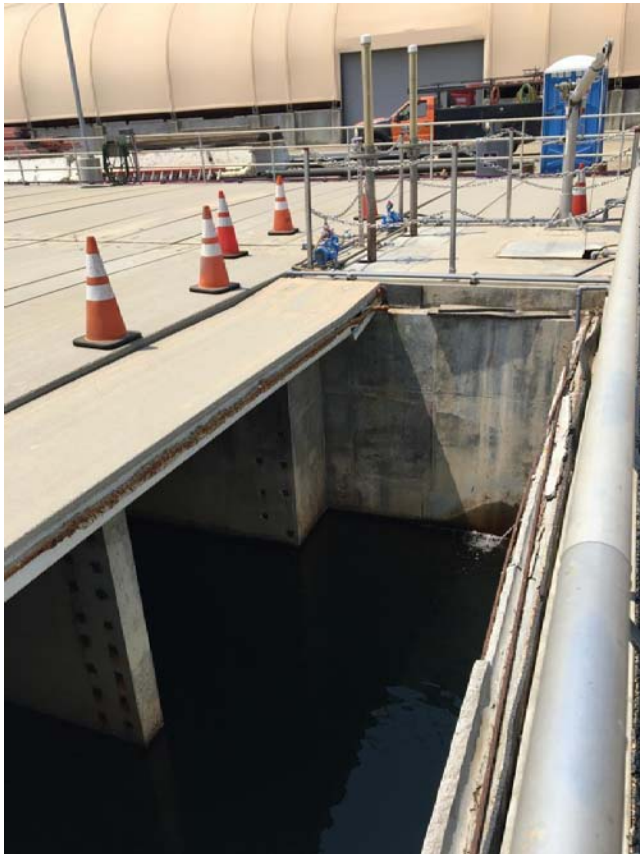
Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Pre-Design (Current)	GHD	\$56k	0%
Construction	TBD	\$0	0%
Project Management Team			
Project Manager:		Zughbi, Jamal	
Assistant/Associate Engineer:		Ferrer, Karen	
Administrative Assistant:		Wood & Associates	
Inspector:		TBD	



Unsecured Wood Plank Covers

RP-4 Chlorine Contact Basin Cover Repair & RW Wet Well Passive Overflow Line

Project Goal: Rehabilitate/Repair Existing Assets and Improve Safety



RP-4 Chlorine Contact Basin 2

Total Project Budget: \$4.3M
Project Completion: September 2023
Design Percent Complete: 10%

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Pre-Design (Current)	GHD	\$144k	0%
Construction	TBD	\$0	0%
Project Management Team			
Project Manager:		Zughbi, Jamal	
Assistant/Associate Engineer:		Tao, Justin	
Administrative Assistant:		Wood & Associates	
Inspector:		TBD	

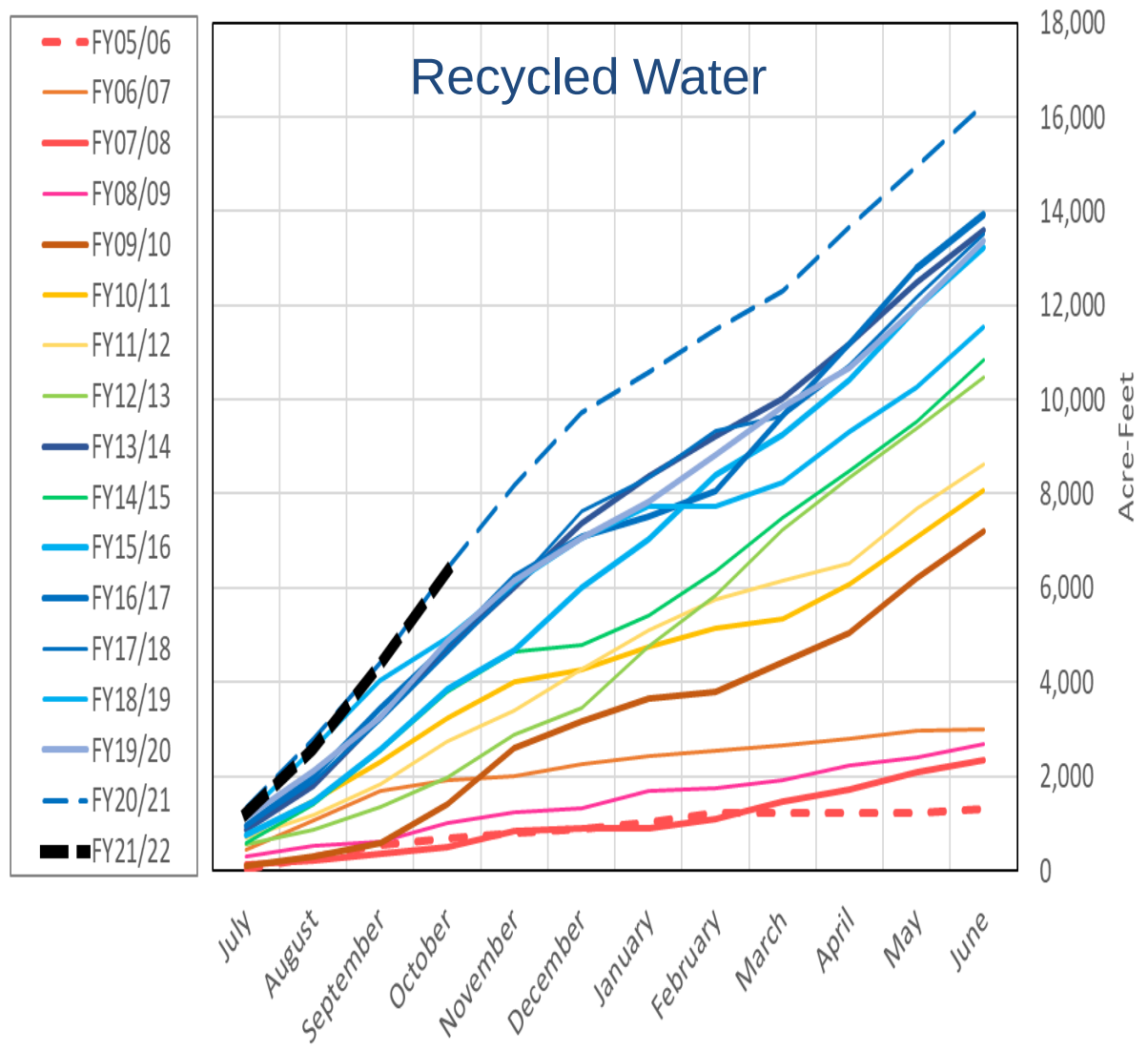
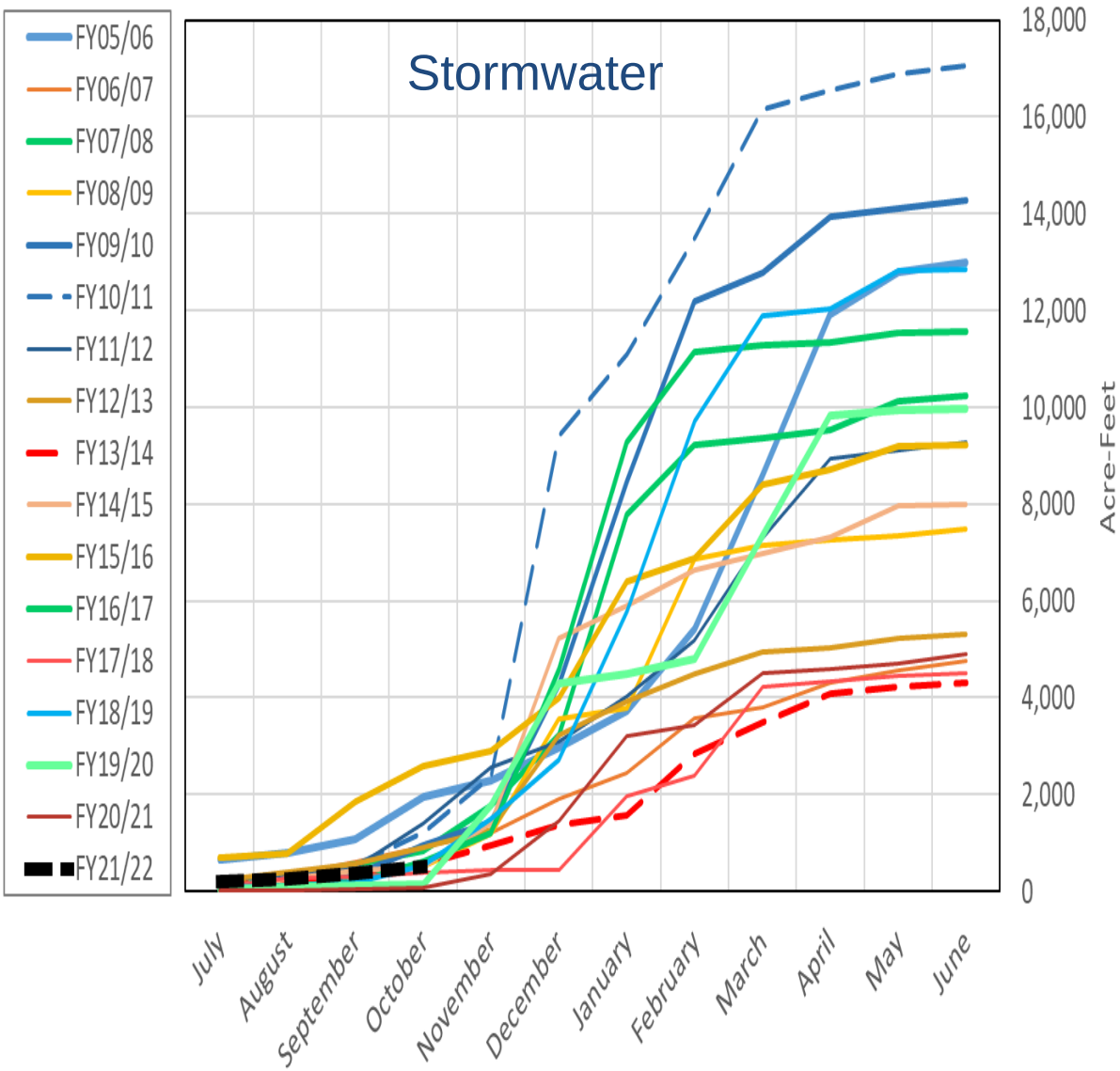
**INFORMATION
ITEM**

2D

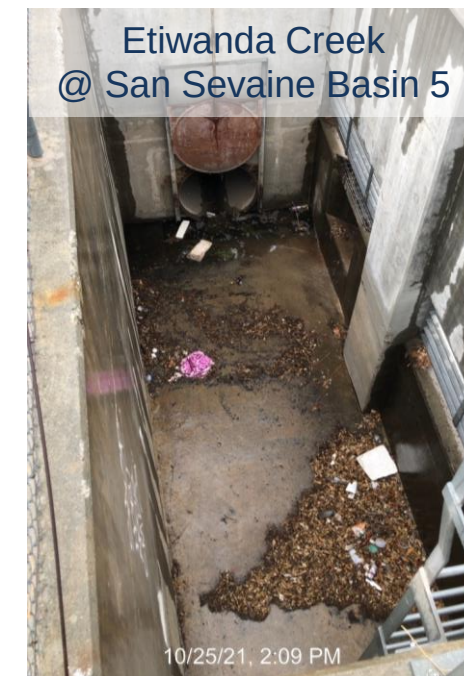
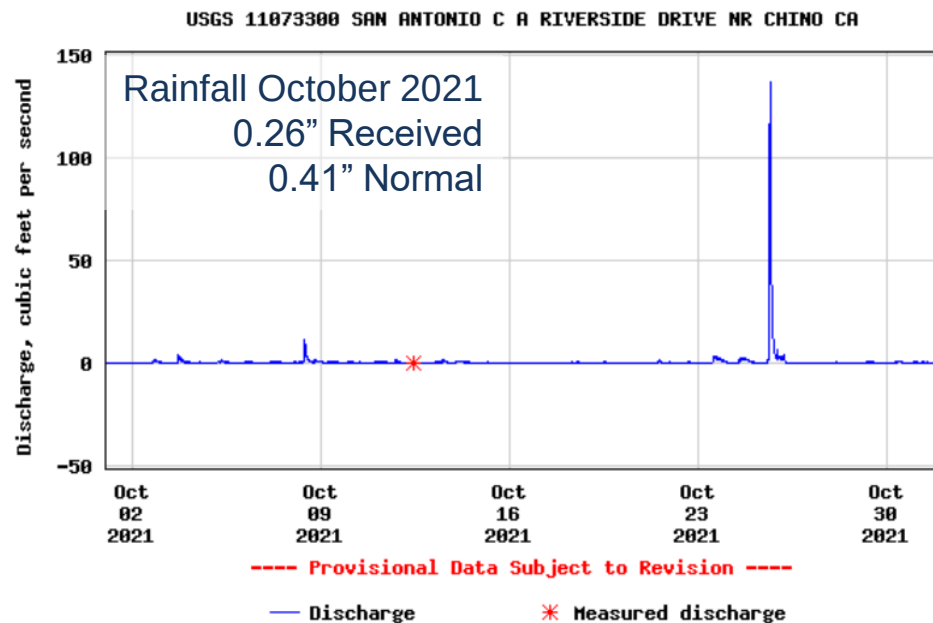
Recycled Water Groundwater Recharge Update

Andy Campbell, PG, CHG
GWR Coordinator/Hydrogeologist
December 2021

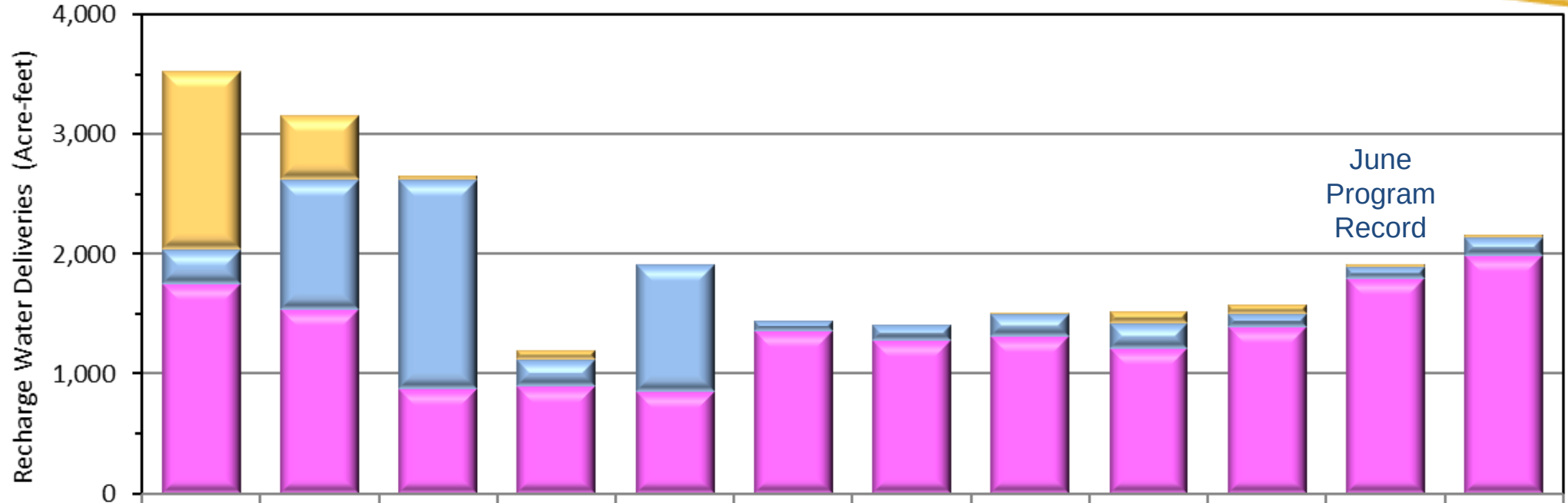
Accumulated Monthly Recharge By Source



October Rainfall – Light Rain-First Flush

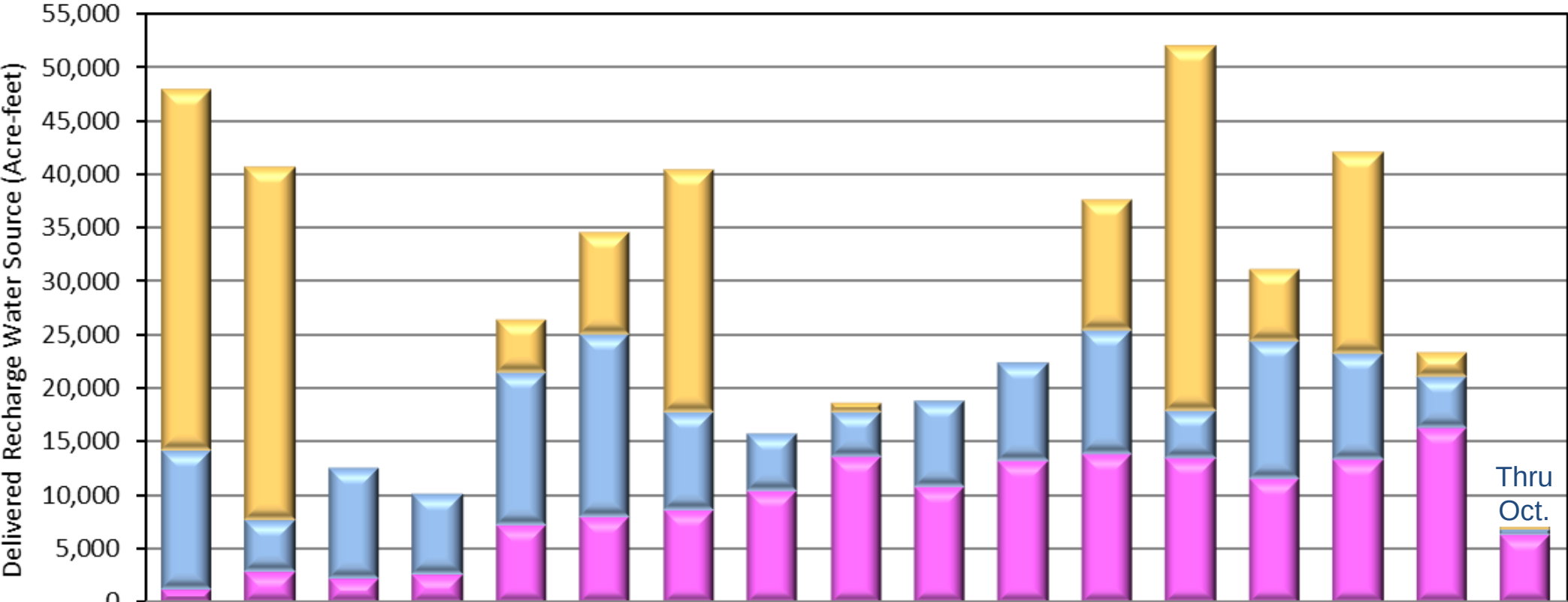


Groundwater Recharge Deliveries Past 12 Months



	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021
■ MWD and other Imported Water	1,498	542	25	76	0	0	0	2	108	69	33	26
■ Stormwater and LR (excluded Non-Replenishment)	290	1,090	1,758	227	1,063	93	134	185	209	118	96	162
■ Recycled Water	1,749	1,528	868	891	849	1,350	1,274	1,311	1,209	1,387	1,791	1,979

Groundwater Recharge Annual History

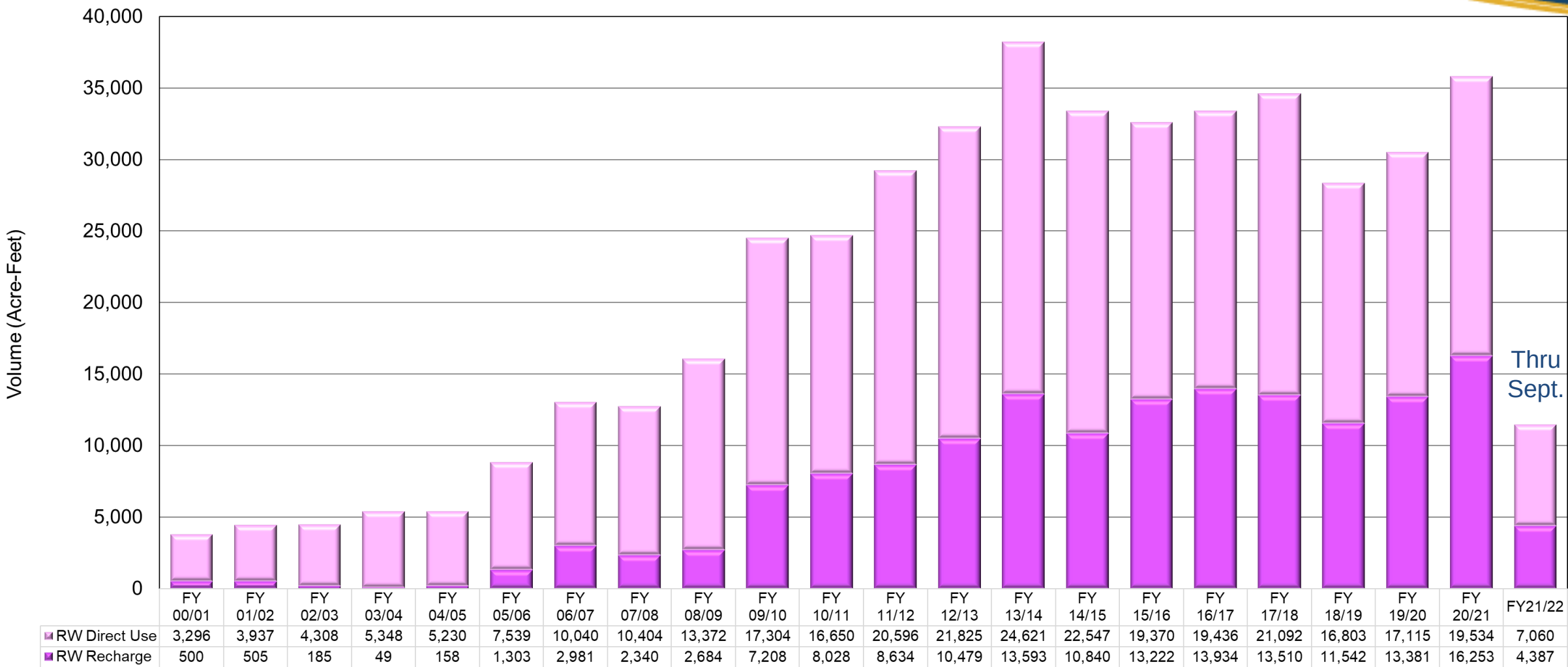


■ MWD and Other Imported Water	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22
■ Stormwater and LR (excludes Non-Repl.)	12,999	4,770.	10,243	7,494.	14,274	17,051	9,266.	5,298.	4,299.	7,996.	9,233.	11,574	4,494.	12,861	9,966.	4,910.	505.9
■ Recycled Water	1,303.	2,988.	2,340.	2,684.	7,210.	8,065.	8,634.	10,479	13,593	10,840	13,222	13,934	13,510	11,542	13,380	16,252	6,370.

Upcoming Recharge Activities

- November, December - Watermaster Replenishment Obligation 2,077 AF
- November – Etiwanda Debris Basin Burrowing Owl Weephole Exclusion
- December – Etiwanda Debris Basin Infiltration Restoration
- January – RP3 and Lower Day RMPU Project Operation
- Spring Infiltration Restoration Sites – Lower Day
- Spring Basin Fill Removal – Magnolia Channel Basin

Recycled Water (RW) Demand History



**INFORMATION
ITEM**

2E



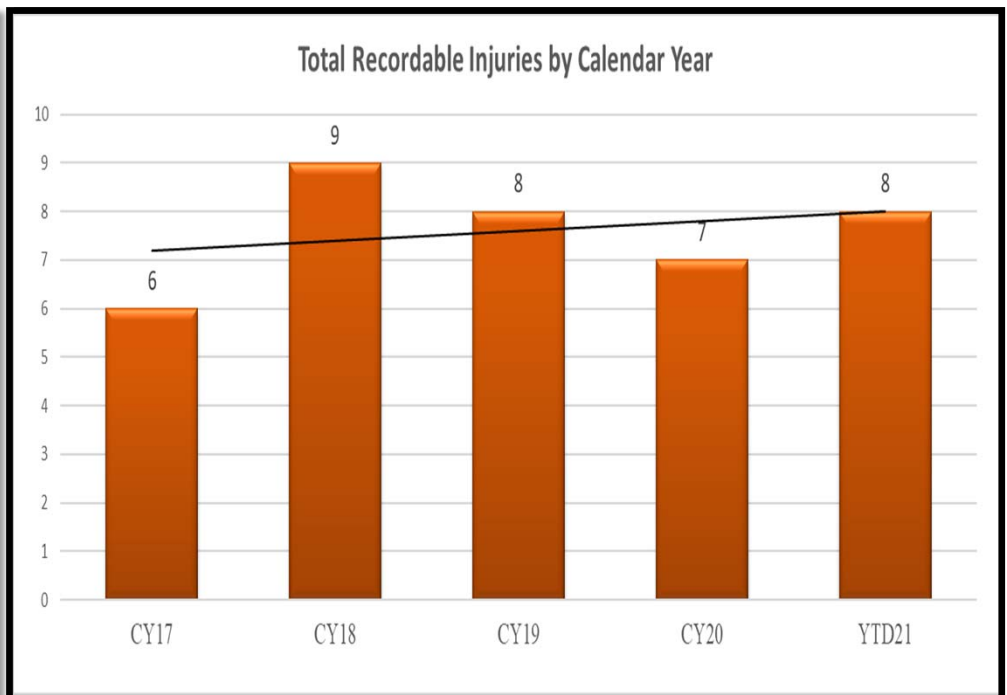
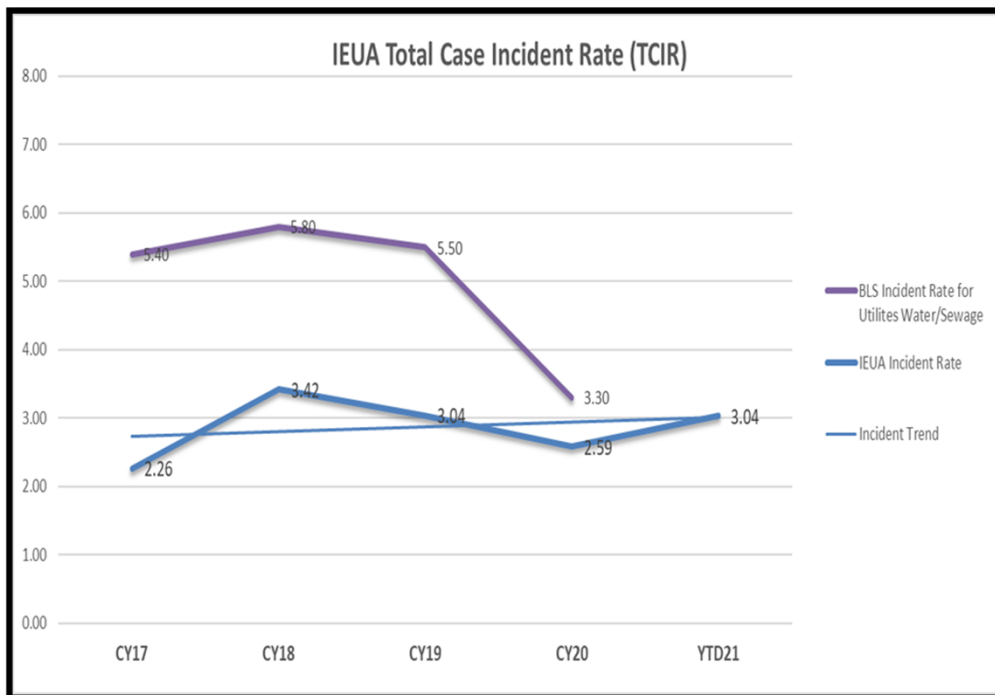
Operations Division Quarterly Update

Don Hamlett

Acting Deputy Manager of Integrated Systems Services

January 2022

IEUA Incident Rates vs. Industry & Total Recordable Injuries



* Estimated incident rate based on past December hours worked

Q2 Cybersecurity

Protect | Detect | Respond

Beginning October 2021, Monthly Cybersecurity training courses were assigned to all staff. Each approximately 15 minutes in length, user security awareness concepts including social engineering, web safety, and technology tips are introduced and reinforced.

Staff Engagement

Your training completion rate



Your completion rate

62.47%

Industry average completion rate **65.11%**

Your average learner training time

Average time per learner (minutes)

15.05

Recommended annual learner training time (minu... **60**

Your on time completion

On-time completion

77.57%

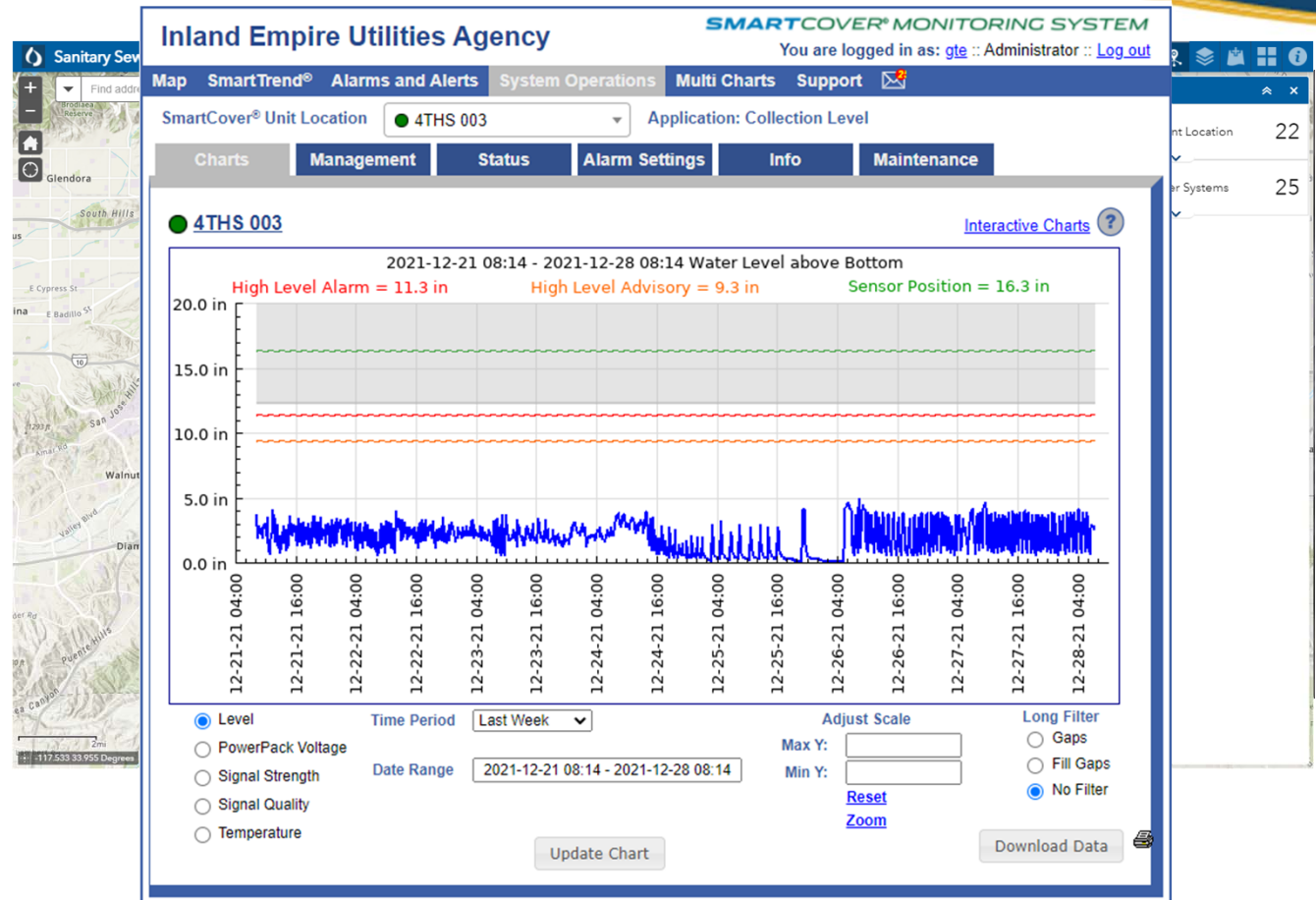
Late completion **22.43%**

Q3 Goals

- **HQA Firewall Upgrade**
 - Increased capacity
 - Improved security
- **Cloud Migration SAP Non-Production**
 - Increased Flexibility
 - Secure Access for development team
 - Rapid deployment
 - Proof of concept
- **Contract Incident Response Retainer**
 - Cybersecurity program review
 - Risk modeling
 - Dedicated Rapid Response

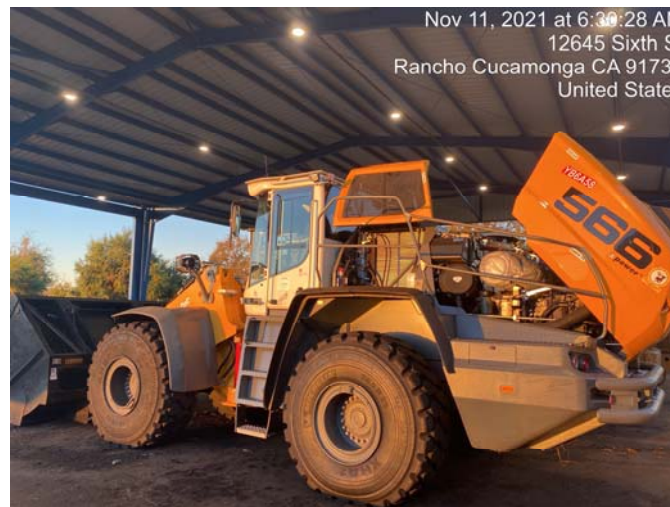


SmartCover Technology Update



IERCF Reliability Update

- Using laser to digitally align pulleys and bearings
- Procured loaders engineered specifically for the waste sector
 - Corrosion resistant
 - Sealed cabs
 - Center-mounted radiator
 - Heavy-duty pins
 - Increased visibility



Industrial wheel loaders



Laser alignment tool

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Regional Sewerage Program Policy Committee Meeting

AGENDA

Thursday, February 3, 2022

3:30 p.m.

Teleconference Call

In an effort to prevent the spread of COVID-19, the Regional Sewerage Program Policy Committee Meeting will be held remotely by teleconference.

Teams Conference Link: https://teams.microsoft.com/l/meetup-join/19%3ameeting_NWU1NzA2NDktM2VjMC00NDU1LTkxMmUtMjYyMjA2YWM3YWU4%40thread.v2/0?context=%7b%22Tid%22%3a%224c0c1e57-30f3-4048-9bd2-cd58917dcf07%22%2c%22Oid%22%3a%22329ec40e-eb94-4218-9621-6bfa0baa9697%22%7d

Teleconference: 1-415-856-9169/Conference ID: 552 973 583#

This meeting is being conducted virtually by video and audio conferencing. There will be no public location available to attend the meeting; however, the public may participate and provide public comment during the meeting by calling the number provided above. Alternatively, you may email your public comments to the Recording Secretary Sally Lee at shlee@ieua.org no later than 24 hours prior to the scheduled meeting time. Your comments will then be read into the record during the meeting.

Call to Order/Flag Salute

Roll Call

Public Comment

Members of the public may address the Committee on any item that is within the jurisdiction of the Committee; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code.
Comments will be limited to three minutes per speaker.

(Continued)

Additions to the Agenda

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

1. Technical Committee Report (Oral)

2. Action Item

- A. Approval of November 4, 2021 Policy Committee Meeting Minutes

3. Informational Items

- A. Regional Contract Negotiation Update (Oral)
- B. Rialto Water Principles Agreement
- C. Recycled Water Cost of Service Study
- D. Engineering Quarterly Update
- E. Groundwater Recharge Update
- F. Operations Division Quarterly Update

4. Receive and File

- A. Building Activity Report
- B. Recycled Water Distribution – Operations Summary
- C. Revised Annual FY 2020-21 Reports

5. Policy Committee Items Distributed

None

6. Other Business

- A. IEUA General Manager's Update
- B. Committee Member Requested Agenda Items for Next Meeting
- C. Committee Member Comments
- D. Next Meeting – March 3, 2022

Adjourn

DECLARATION OF POSTING

I, Sally Lee, Executive Assistant of the Inland Empire Utilities Agency*, a Municipal Water District, hereby certify that, per Government Code Section 54954.2, a copy of this agenda has been posted at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA and on the Agency's website at www.ieua.org at least seventy-two (72) hours prior to the meeting date and time above.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Sally Lee at (909) 993-1926 or shlee@ieua.org 48 hours prior to the scheduled meeting so that IEUA can make reasonable arrangements to ensure accessibility.

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BAR Note:

*Ontario data does not include
November values. Ontario CCRA
balance and October data is currently
pending review.

Building Activity Report - YTD Fiscal Year 2021/22



Legend

- Service Area
- Unincorporated

Residential

- <=1.0
- 1.0 - 10.0
- >10.0

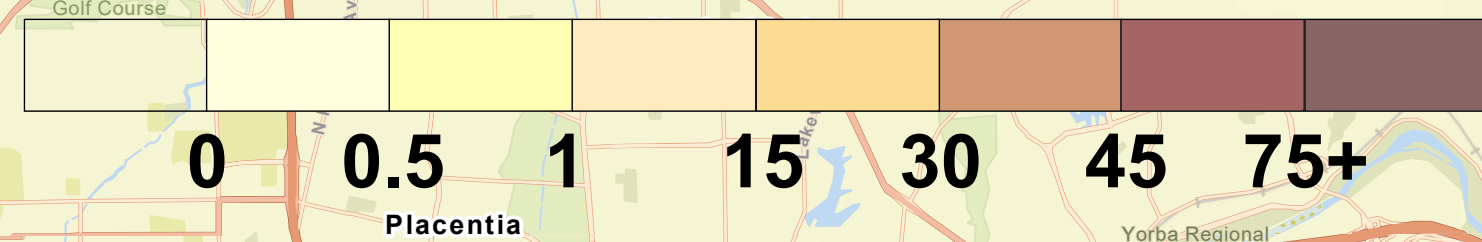
Commercial

- <=1.0
- 1.0 - 10.0
- >10.0

Industrial

- <=1.0
- 1.0 - 10.0
- >10.0

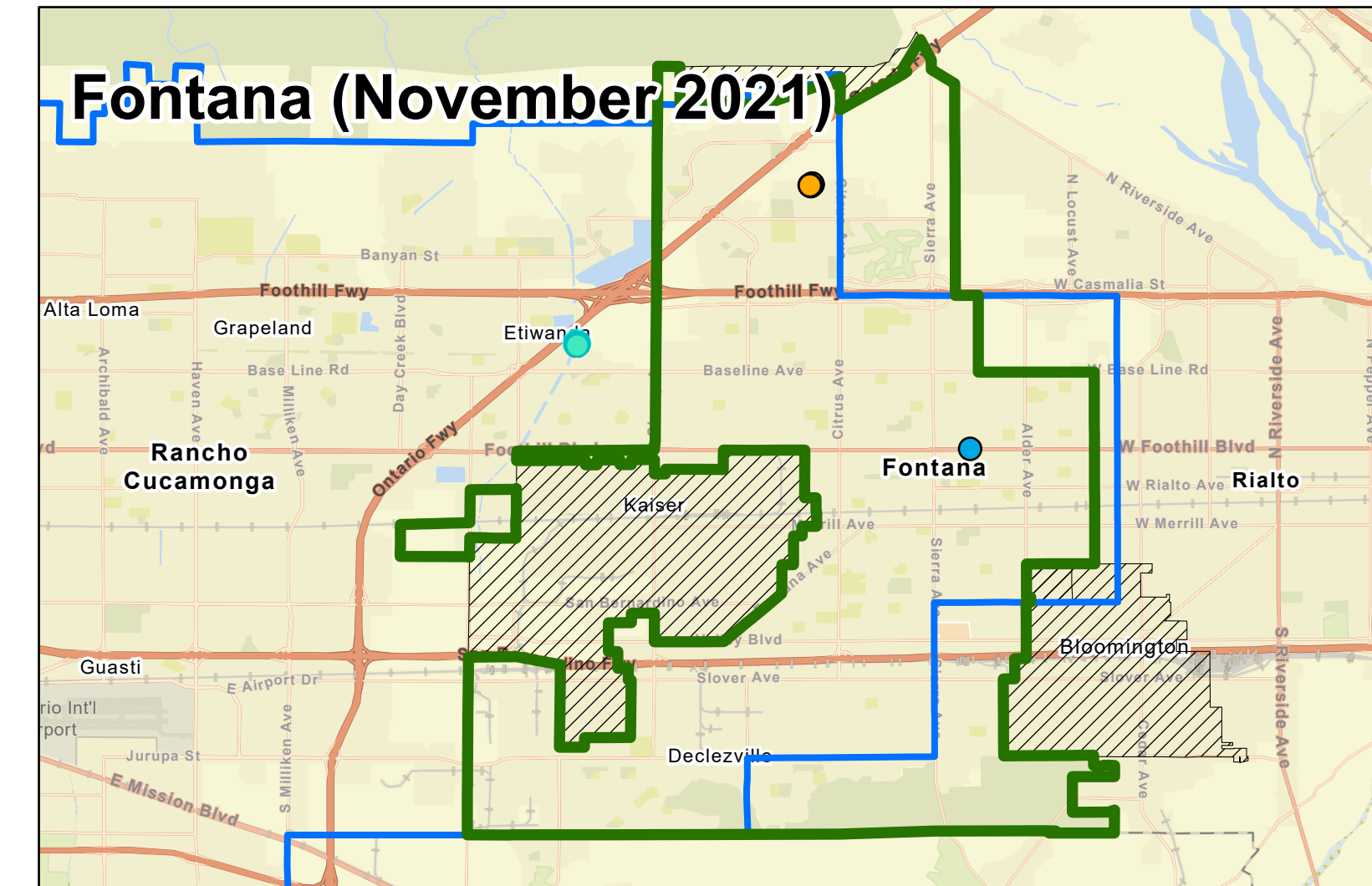
HALF MILE GRID: TOTAL EDU's (YTD)



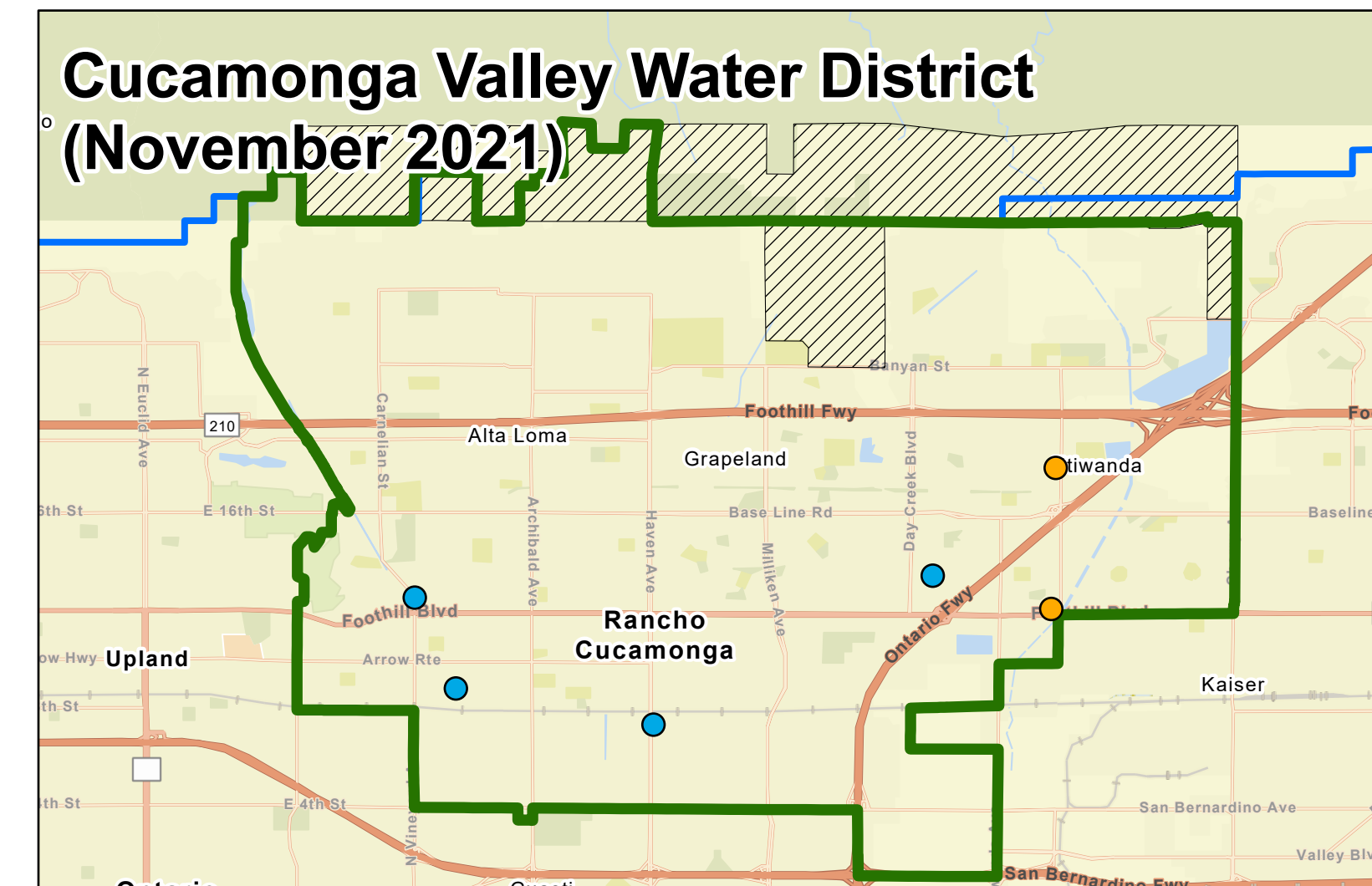
TOTAL EDU BY WASTEWATER CONNECTION TYPE (YTD)

Contracting Agency	YTD Actual				Projected
	Commercial (EDUs)	Industrial (EDUs)	Residential (EDUs)	Total (EDUs)	
Chino	62	0	205	267	434
Chino Hills	45	0	18	63	276
CVWD	43	218	194	455	2050
Fontana	34	0	261	295	1792
Montclair	9	0	0	9	474
Ontario	90	0	368	459	7560
Upland	6	0	27	33	952
Total	289	219	1073	1581	13538

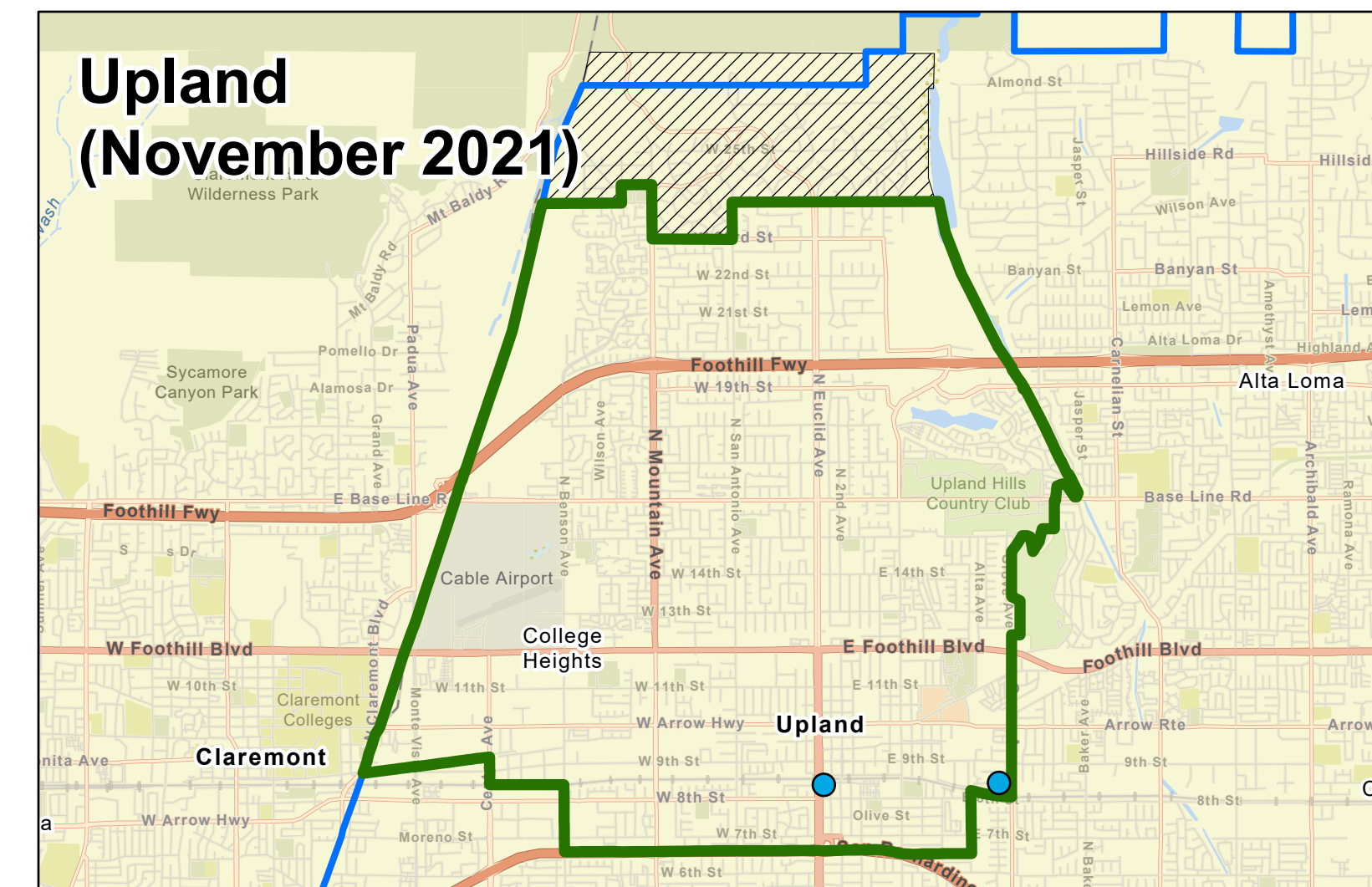
Fontana (November 2021)



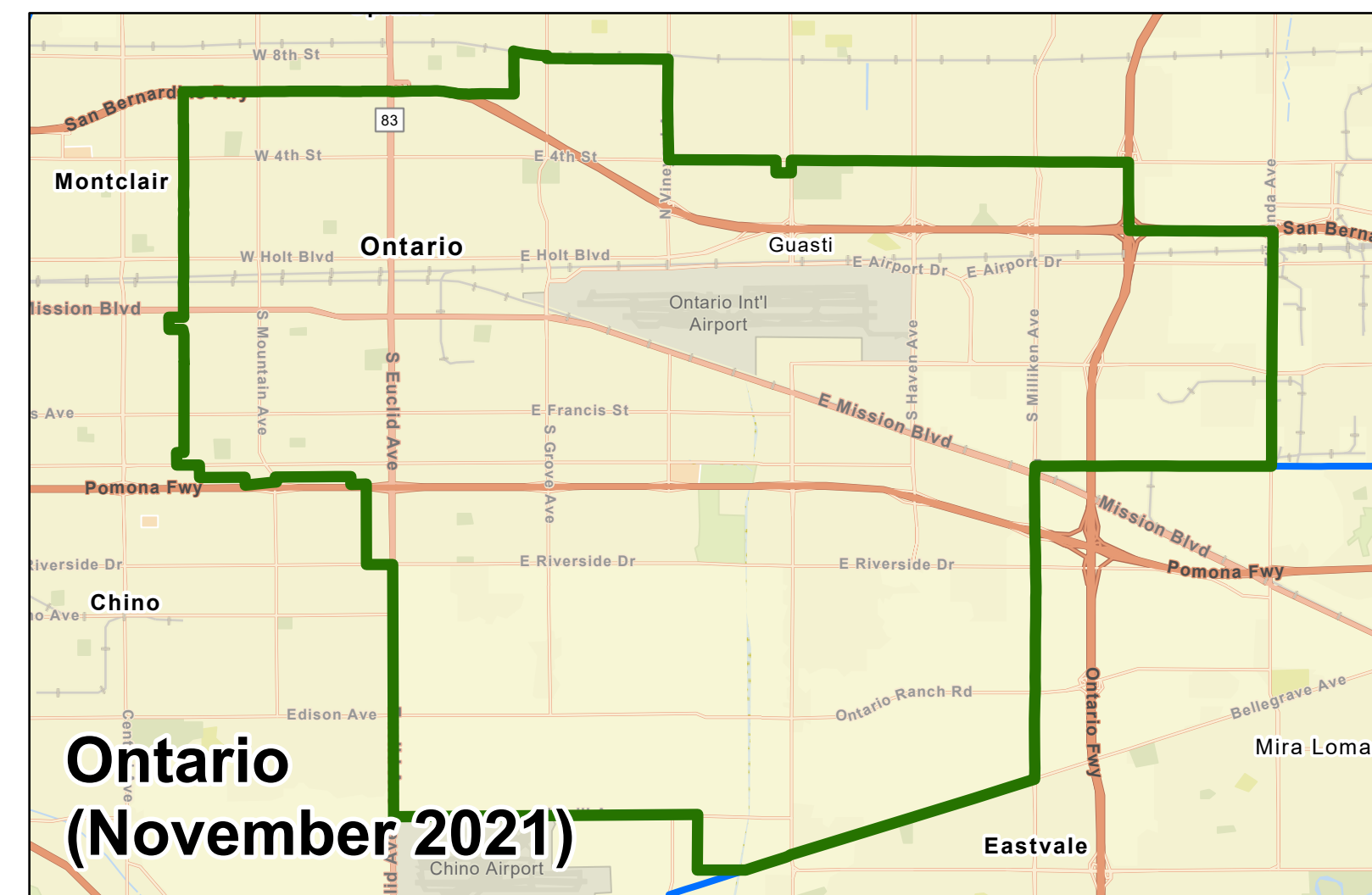
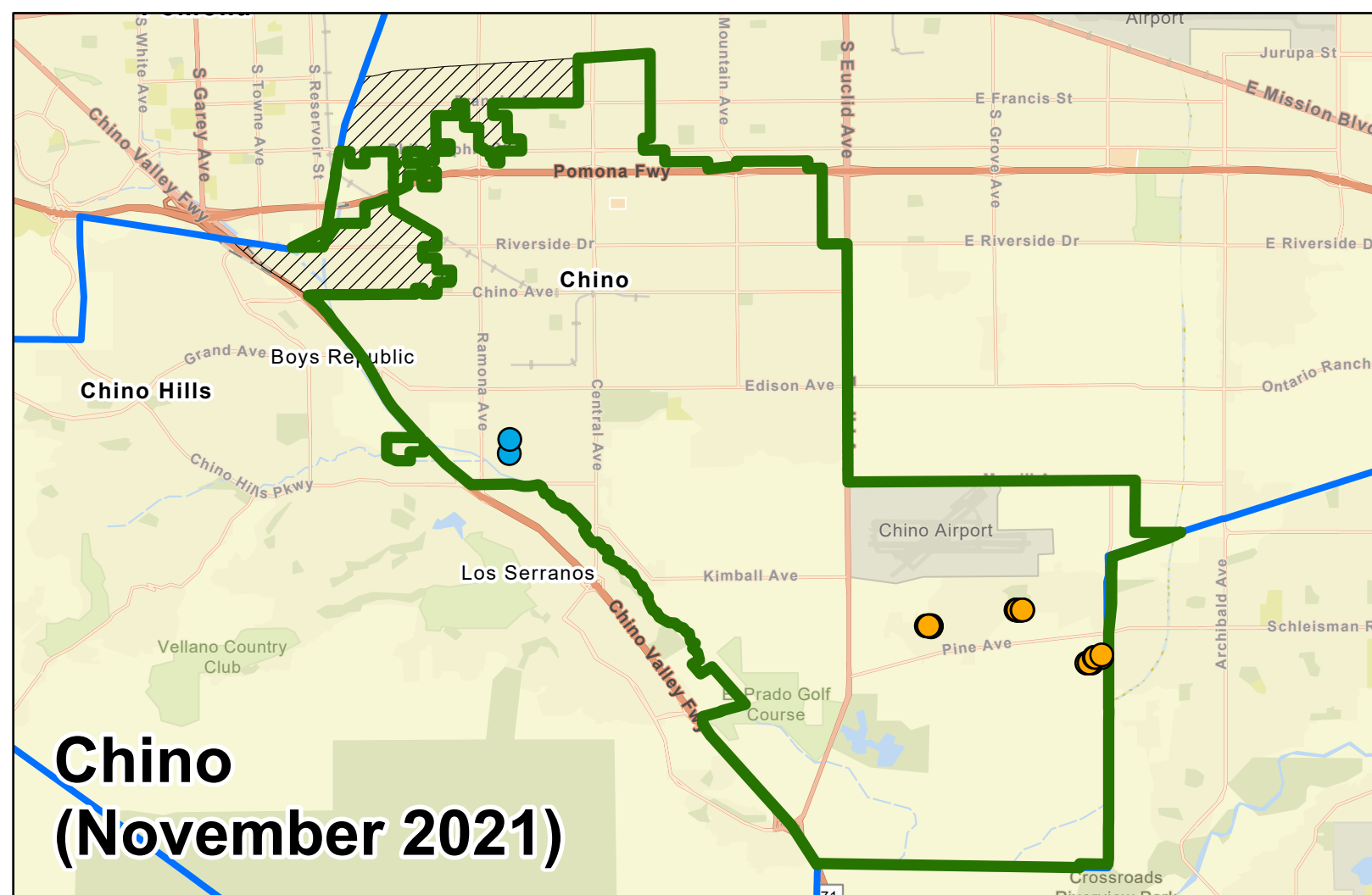
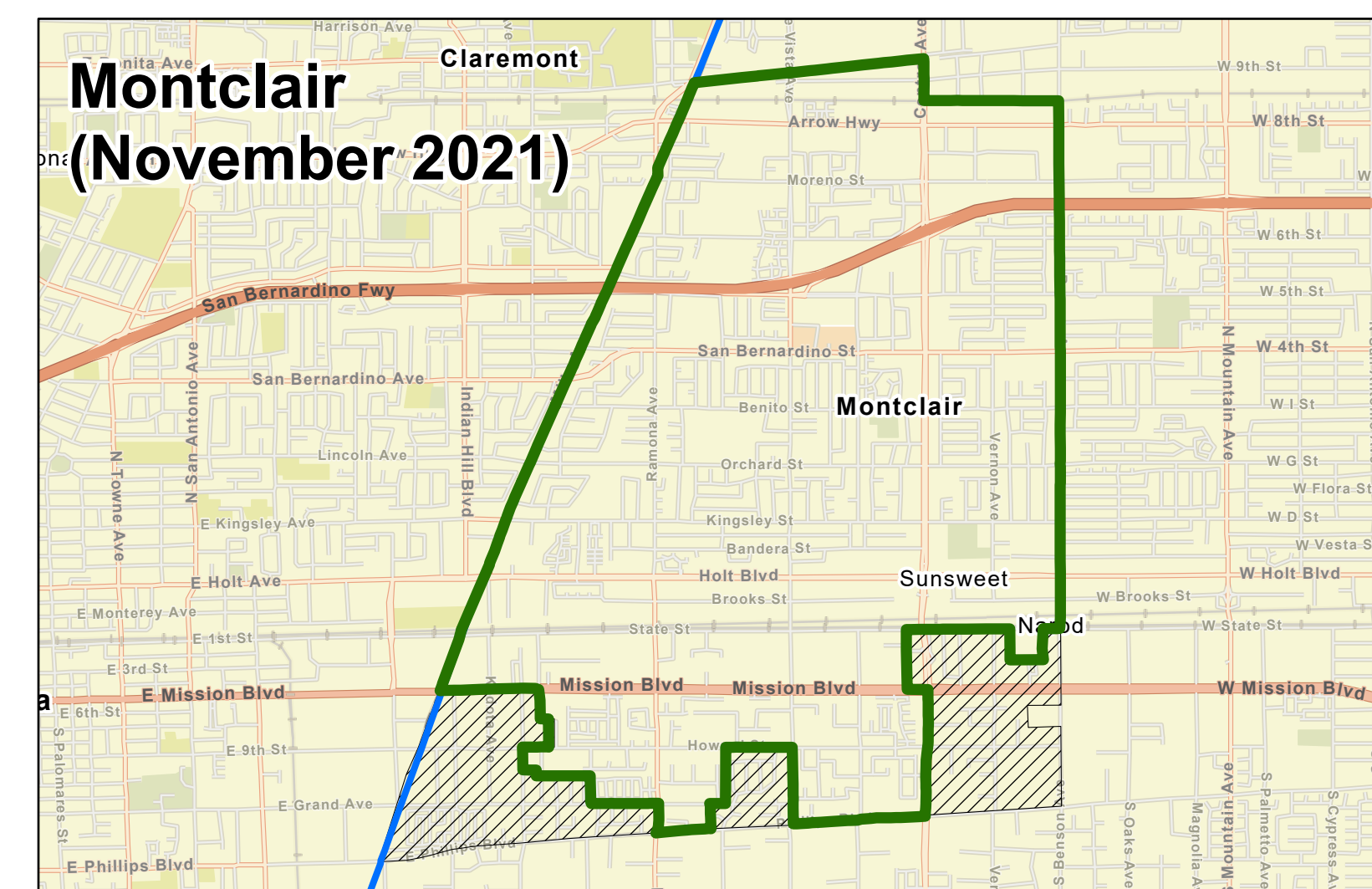
Cucamonga Valley Water District (November 2021)



Upland (November 2021)



Montclair (November 2021)



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IEUA RECYCLED WATER DISTRIBUTION – DECEMBER 2021

TOTAL ALL PLANTS

Influent: 53.7 MGD

Delivered: 17.6 MGD

Percent Delivered: 33%

Preliminary Deliveries

RW GWR: 7.2 MGD

RW Direct Use: 10.4 MGD

RP-4

Delivered: 6.8 MGD

RP-1

Delivered: 5.9 MGD

CCWRF

Delivered: 3.0 MGD

RP-5

Delivered: 1.9 MGD

Delivered For Groundwater Recharge

Storm/Local Runoff: 59.2 MGD 5,637 AFM

Imported Water:	0.1 MGD	13 AFM
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Recycled Water: 7.2 MGD 686 AFM

Total: 66.5 MGD 6,336 AFM

Creek Discharges

Prado Park (001):	3.1 MGD	295 AFM
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RP-1 (002): 24.6 MGD 2,341 AFM

RP-5 (003): 6.4 MGD 609 AFM

CCWRF (004):	5.2 MGD	495 AFM
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Total: 39.3 MGD 3,740 AFM

Recycled Water Recharge Deliveries - December 2021 (Acre-Feet)

Basin	12/1-12/4	12/5-12/11	12/12-12/18	12/19-12/25	12/26-12/31	Month Actual	FY To Date Actual	Deliveries are draft until reported as final and do not included evaporative losses.
Ely	0.0	0.0	0.0	0.0	0.0	0.0	355	Lost RW due to Storm Flow: 221.2 AF
Banana	0.0	1.9	0.0	0.0	0.0	1.9	367	Lost RW due to Storm Flow: 16.6 AF
Hickory	5.2	2.6	0.0	0.0	0.0	7.8	611	Lost RW due to Storm Flow: 37.6 AF
Turner 1 & 2	0.0	0.0	0.0	0.0	0.0	0.0	401	Lost RW due to Storm Flow: 0.0 AF
Turner 3 & 4	23.1	10.0	0.0	0.0	0.0	33.1		Lost RW due to Storm Flow: 0.0 AF
8th Street	52.1	50.8	0.0	0.0	0.0	102.9	1102	Lost RW due to Storm Flow: 15.2 AF
Brooks	20.6	6.4	0.0	0.0	0.0	27.0	479	Lost RW due to Storm Flow: 0.0 AF
RP3	84.9	111.1	46.0	41.2	0.0	283.2	2946	Lost RW due to Storm Flow: 0.0 AF
Declez	0.3	0.0	0.0	0.0	0.0	0.3	487	Lost RW due to Storm Flow: 53.9 AF
Victoria	28.1	26.2	19.7	22.3	0.0	96.3	477	Lost RW due to Storm Flow: 0.0 AF
San Sevaine	34.5	56.7	8.1	30.4	3.4	133.1	1501	Lost RW due to Storm Flow: 0.0 AF
Total	248.8	265.7	73.8	93.9	3.4	685.6	0	9,711 AF previous FY to day actual

Total RW lost due to Dec. storms: 344.0 AF

