ALBERT A. WEBB ASSOCIATES

Patterson & Nance (APN 314-153-024 thru 314-161-050)

WS: 2020-1153, WO: 16238

DESIGN CONDITIONS REPORT

Prepared for:

Duke REALTY

emwd EASTERN MUNICIPAL WATER DISTRICT

JUNE 2022

www.webbassociates.com

Patterson & Nance

APN 314-153-024 thru 314-161-050

(WS: 2020-1153, WO: 16238)

DESIGN CONDITIONS REPORT

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ABBREVIATIONS

AC	Acre
ADD	Average Day Demand
APN	Assessor's Parcel Number
CFS	Cubic Feet Per Second
District	Eastern Municipal Water District
EDU	Equivalent Dwelling Units
EMWD	Eastern Municipal Water District
FF	Fire Flow
FPS	Feet per Second
GPD/AC	Gallons per Day per Acre
GPM	Gallons per Minute
HBC	Hydraulic Boundary Condition
HDR	High Density Residential
HGL	Hydraulic Grade Line
Hwy	Highway
IN	Inch
LDR	Low Density Residential
L.F.	Linear Feet
MG	Million Gallons
MGD	Million Gallons per Day
MDR	Medium Density Residential
MHD	Minimum Hour Demand
MHDR	Medium High Density Residential
MDD	Maximum Day Demand
PHD	Peak Hour Demand
POC	Point of Connection
PSI	Pounds Per Square Inch
PZ	Pressure Zone
ROW	Right of Way
RWUE	Recycled Water Use Exhibit
SP	Specific Plan
WFMP	Water Facilities Master Plan
WWCSMP	Wastewater Collection System Master Plan

SECTION 1 - INTRODUCTION

PURPOSE

The purpose of this report is to document the results of our analysis of the existing and proposed water, sewer, and recycled water facilities which would serve the proposed Duke Patterson Nance (Patterson & Nance) development in the City of Perris, and to determine and verify the adequacy of the existing and proposed facilities to accommodate the demands and flows generated by the proposed development.

Both the water and sewer analysis were conducted using Eastern Municipal Water District (District) Planning and Design guidelines supplemented by Master Plan reports:

- "Water System Planning & Design" guidelines, updated February 2016 and revised September 2006
- "Water Facilities Master Plan" (WFMP) 2015
- "Sanitary Sewer System Planning & Design" guidelines, updated February 1993 and revised September 2006
- "Wastewater Collection System Master Plan" (WWCSMP) 2015

BACKGROUND

Patterson & Nance is located between Harley Knox Boulevard and Markham Street just east of the I-215 freeway as shown on **Figure 1-1**. The portion of Nance Street between Patterson Avenue and Nevada Avenue is within the project site boundaries and will be vacated. A warehouse type building is proposed for this site with a project area of approximately 33.4 acres and a 719,468 sf. building.

H:\2020\20-0231\GIS\Fig 1-1 Vicinity Map.mxd; Map created 07 Feb 2022

Sources: Riverside Co. GIS, 2017; USDA NAIP, 2016.

0 2,000 4,000 Feet

Figure 1-1 Vicinity Map and Project Location

Patterson & Nance

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SECTION 2 - WATER FACILITIES

EXISTING WATER FACILITIES

Patterson & Nance will be served by the 1705 pressure zone (PZ) with the Decker water storage reservoir being the primary source of water supply. The reservoir has a storage capacity of 8.38 million gallons (MG). The floor elevation of this reservoir is ±1666 ft. There is an existing 12-inch diameter water pipeline along Patterson Street fronting Patterson & Nance to the west as shown on **Figure 2-1**.

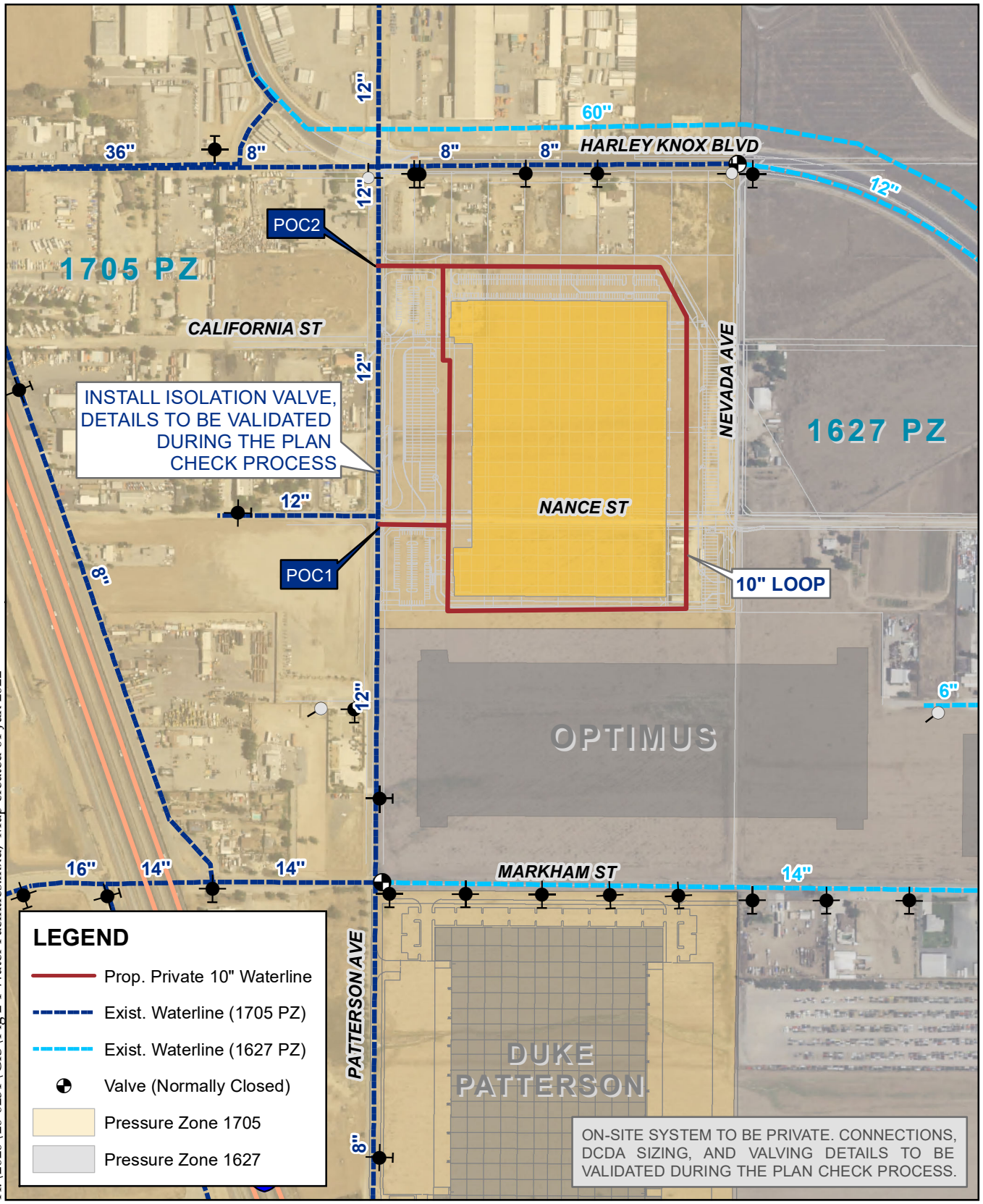
PROPOSED WATER DEMAND

The 1705 PZ is considered to be a "Medium Pressure Zone," so for analysis purposes the following peaking factors provided in **Table 2-1** were used. These peaking factors are based on the recommendations found in the District's WFMP (2015).

Table 2-1 Peaking Factors

Planning Evaluation	Maximum Day (MDD:ADD)	Peak Hour (PHD:MDD)
Facilities Sizing		
Small Pressure Zone (under 500 gpm ADD)	3.0	2.0
Medium Pressure Zone (500 to 2,000 gpm ADD)	2.5	2.0
Large Pressure Zones (greater than 2,000 gpm ADD)	2.0	2.0
All Others	2.0	2.0

Estimated potable water demands for the project are given in **Table 2-2** and are based on the District's current planning standards. Fire flow requirements for the project are 4000 gpm for duration of 4 hours while maintaining a minimum residual pressure of 20 psi (see **Appendix A**). EMWD provided fire flow and hydraulic boundary conditions for this project with the use of their hydraulic model. A copy of these boundary conditions is provided in **Appendix B**.



H:\2020\20-0231\GIS\Fig 2-1 Water Facilities.mxd; Map created 01 Jun 2022

Sources: EMWD, 2019; Riverside Co. GIS, 2021; USDA NAIP, 2016.

0 500 1,000 Feet

Figure 2-1 Water Facilities
Patterson & Nance

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Table 2-2 Water Demand Estimate

Planning Area	Land Use Zoning	Area (Acres)	Demand Rates* (gpd/ac)	ADD (gpd)	ADD (gpm)	MDD (gpd)	MDD** (gpm)	PHD (gpm)
Patterson & Nance	Warehouse	33.4	550	18,370	13	45,925	32	64
Patterson & Nance	Fire Flow						4000	
Total:		**33.4**		**18,370**	**13**	**45,925**	**4032**	**64**

*Based on EMWD WFMP Table 5-1

**Based on EMWD WFMP Table 5-2 (Medium Pressure Zone)

PROPOSED PIPELINE IMPROVEMENT

No offsite waterline improvements are proposed for Patterson & Nance. Onsite improvements consist of a looped 10-inch diameter waterline around the proposed building which would include two connections to the 1705 PZ, both of which will have DCDA's. There will also be a fire flow pump for fire flow demands. Point of Connection (POC) 1 will be on the existing 12-inch diameter waterline at the intersection of Patterson Avenue and Nance Street. POC2 will be on the existing 12-inch diameter waterline approximately 330 feet south of the Patterson Ave and Harley Knox Blvd intersection, as shown on **Figure 2-1**.

In response to the DCDA vs. RPDA Memo provided in **Appendix C**, this project is a speculative type building and the Developer is in no position to know future tenants at this time nor the types of hazardous material they may or may not use/store onsite. For planning purposes, it was assumed that DCDA's will be installed at each point of connection for fire service.

HYDRAULIC ANALYSIS

A hydraulic analysis was conducted with the use of the District's Water Master Plan model which was revised by the District for the Development Services Department. The version of the model used is entitled DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3 and was run using Innovyze's® InfoWater® software version 12.4.

Multiple scenarios were analyzed as part of this design report to determine the adequacy of both the existing and proposed facilities to accommodate Patterson & Nance. For modeling purposes, the elevation of on-site model junctions were set to 1500 feet and a roughness coefficient of 120 was applied to the proposed pipes. The base scenarios was considered to be the Existing_EPS_MDD model scenarios which has Maximum Day Demand (MDD) for the year 2018 built into the model. All model scenarios used for this analysis are extended period simulations which have a pre-defined diurnal curve based on historical data. Peak Hour Demand (PHD) are built into the diurnal curves.

A fire flow pattern was also applied to predefined nodes and takes place the third day of the 7 day simulation period between the hours of 63 through 66. A hydraulic model run was prepared and analyzed using the existing MDD scenarios with the proposed improvements planned for Patterson & Nance.

MODEL RESULTS

Model results are provided graphically in **Appendix D**. Figures D1.1 and D1.2 represent the model results of the existing condition with Patterson & Nance proposed improvements during the MDD plus fire and PHD conditions, respectively.

It was determined through the hydraulic analysis that the existing and proposed system can meet the District's pressure and velocity constraints with Patterson & Nance demands added to the system.

The pressures represented in the model results are based on system without the use of an on-site private booster pump. The project site will likely have a pump house to boost the pressures in the fire suppression system.

WATER SUMMARY AND RECOMMENDATIONS

With the proposed facilities outlined in this section of the Design Conditions Report, Patterson & Nance is expected to have adequate pressure during the demand conditions analyzed and still meet District minimum pressure and maximum velocity constraints. This analysis was based on the assumption that the hydraulic model provided by the District accurately represents the existing conditions.

Based on the results of the analysis, it is recommended that the District authorize the developer to proceed to the next phase of designing the proposed waterline improvements outlined in this report. Design connections, DCDA sizing, and valving details to be validated during the plan check review process.

SECTION 3 - SEWER FACILITIES

EXISTING SEWER FACILITIES

As shown on **Figure 3-1,** there is an existing 15-inch diameter gravity sewer line in Harley Knox Boulevard that is assumed to have capacity for the Patterson & Nance project.

PROPOSED SEWER FACILITIES

An 8-inch diameter gravity sewer line (public) is proposed in Nevada Avenue between the project site and the existing 15-inch diameter gravity sewer line in Harley Knox Boulevard.

ESTIMATED SEWER FLOWS

Estimated peak flows for the proposed development are provided in **Table 3-1** along with the assumed sewer generation rates.

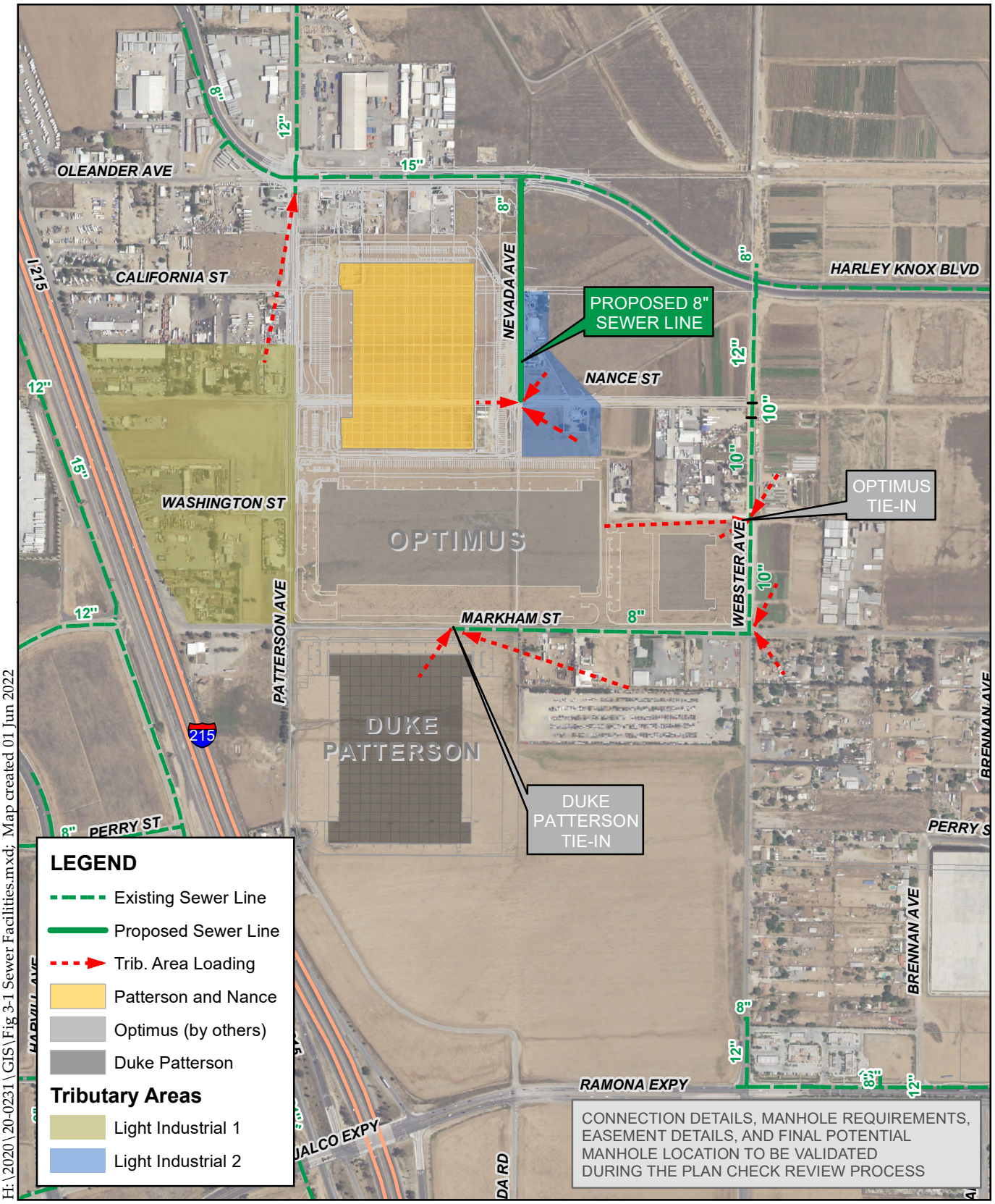
Table 3-1 Tributary Flows to Proposed Nevada Avenue 8-inch

Property Zoning	Acres	EDU	Gen. Rates (gpd/ac)[1]	ADF (gpd)	Peaking Factor[2]	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)
Patterson & Nance	33.4	167.0	1200	40,080	2.87	115,030	79.9	0.178
Total:	33.4			40,080	2.87	115,030	79.9	0.178

[1]Based on Table 4-4 of the 2015 WWFMP for Wastewater Criteria for Flow Factors and Density

[2]From EMWD Peaking Factor Curve in 2015 Wastewater Collection System Master Plan ($PF=2.13*Q_{ADWF}^{-0.13}$, 2.87 Max.)

There is very little undeveloped land that is anticipated to be tributary to the proposed Nevada Avenue 8-inch diameter sewer line other than the Patterson & Nance project. Most of the neighboring undeveloped property is Government owned land within the airport crash zone where buildings will not be allowed for the foreseeable future. Estimated buildout flows for the Nevada Avenue 8-inch diameter sewer line are provided in the following table.



H:\2020\20-0231\GIS\Fig 3-1 Sewer Facilities.mxd; Map created 01 Jun 2022

Sources: EMWD, 2019; Riverside Co. GIS, 2021; USDA NAIP, 2016.

Figure 3-1 Sewer Facilities
Patterson & Nance

ALBERT A. WEBB ASSOCIATES

Table 3-2 Estimated Buildout flows for the Proposed Nevada Avenue 8-inch

Property Zoning	Acres	EDU	Gen. Rates (gpd/ac)[1]	ADF (gpd)	Peaking Factor[2]	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)
Patterson & Nance	33.4	167	1200	40,080	2.87	115,030	79.9	0.178
Light Industrial 2	16.0	80	1200	19,228	2.87	55,183	38.3	0.085
Total:	49.4			59,308	2.87	170,213	118.2	0.263

[1]Based on Table 4-4 of the 2015 WWFMP for Wastewater Criteria for Flow Factors and Density

[2]From EMWD Peaking Factor Curve in 2015 Wastewater Collection System Master Plan (PF=2.13*$Q_{ADWF}^{-0.13}$, 2.87 Max.)

SEWER CAPACITY ANALYSIS

Provided in the following table are the sewer capacity analysis results for the proposed 8-inch diameter sewer line in Nevada Avenue based on the District's minimum slope criteria using a Manning's "n" value of 0.015.

Table 3-3 Sewer Capacity Results of Proposed Nevada Avenue 8-inch

Governing Pipe Segment	Upstream Tributary Areas	Dia. (in)	Slope (ft/ft)	ADF[1] (gpd)	Peaking Factor[2]	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)
Proposed	Patterson & Nance and Light Industrial 1	8	0.004	59,308	2.87	170,213	118	0.263
Exist. offsite sewer line capacity of **0.332cfs**[3] (Est. d/D with proposed project added to proposed sewer line = 0.44)								

[1]Average Day Flow based on 2015 Wastewater Collection System Master Plan Update, Table 4-4

[2]From EMWD Peaking Factor Curve in 2015 Wastewater Collection System Master Plan (PF=2.13*$Q_{ADWF}^{-0.13}$, 2.87 Max.)

[3]Assumed Manning "n" = 0.015 based on "Sanitary Sewer System Planning & Design" guidelines, Updated Feb 1993, and revised Sep 1, 2006

If the existing topography allows, slopes steeper than the minimum of 0.0040 ft/ft will be used for the proposed 8-inch diameter sewer line. Steeper slopes will increase cleansing velocities. At minimum slope with buildout flow estimates, cleansing velocities are estimated to reach as high as 1.79 fps.

A 6-inch diameter on-site sewer lateral at a slope of 2 percent has a maximum half full capacity of 155 gpm using a conservative Manning "n" value of 0.015. Estimated d/D for the 6-inch lateral is 0.35 with a cleansing velocity of 2.95 fps. A 6-inch diameter sewer lateral will have sufficient capacity for this project. If an 8-inch diameter sewer lateral is needed for unforeseen design constraints discovered during the detailed design process,

(such as conflicting utilities or adverse grades), the Developer understands that an EMWD easement will be required with manhole(s) and details will need to be validated during plan check.

SEWER SUMMARY AND RECOMMENDATIONS

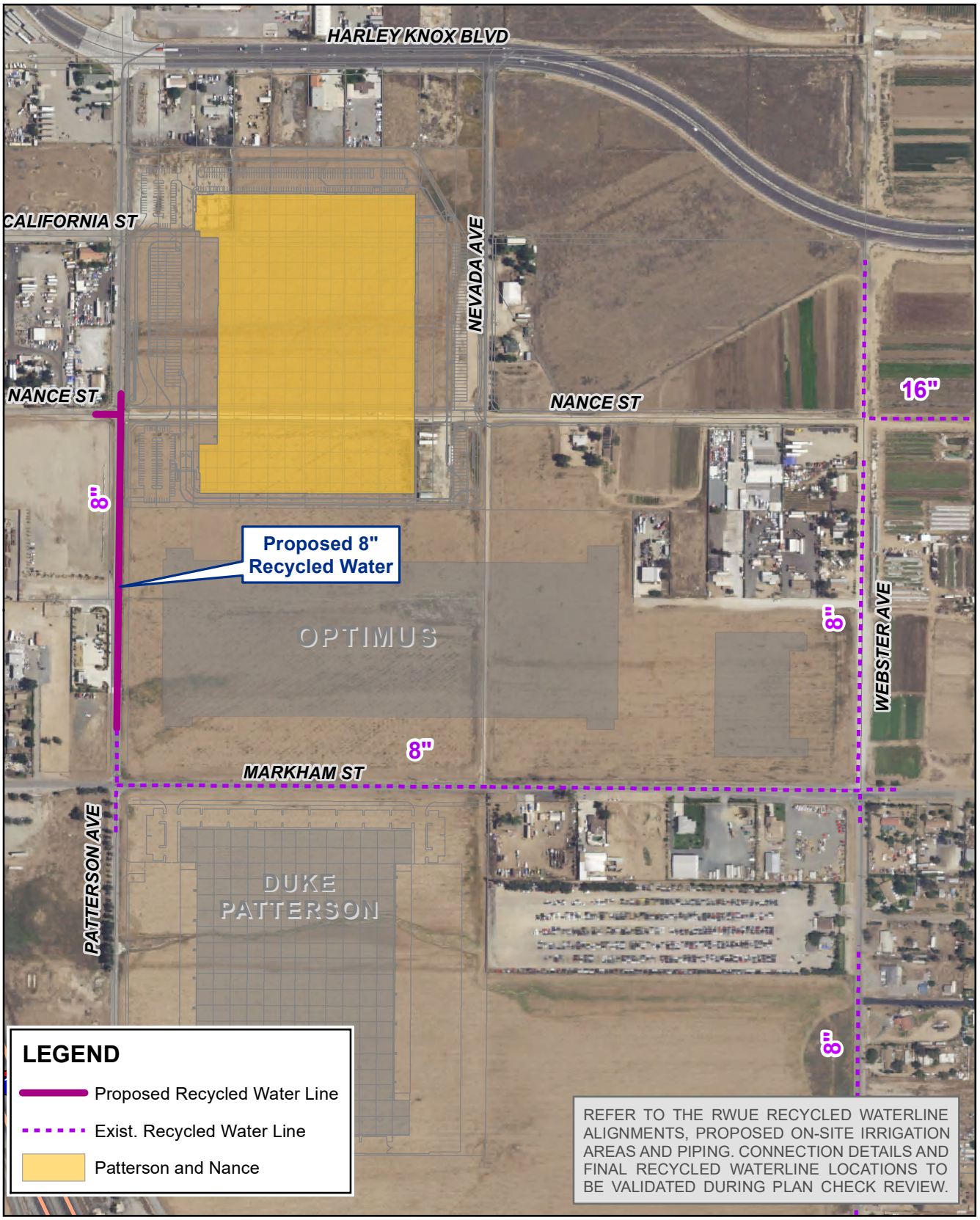
Based on the results of the analysis, the proposed sewer system will meet the District's design capacity planning standard with the estimated peak flows from the Patterson & Nance project and future buildout flows. It is recommended that the District authorize the developer to proceed to the next phase of designing the proposed sewer improvements outlined in this report. Connection details will be validated during the plan check review process.

SECTION 4 - RECYCLED WATER FACILITIES

EXISTING AND PROPOSED RECYCLED WATER FACILITIES

This project is a recycled water candidate. The Recycled Water Use Exhibit (RWUE) was prepared by WEBB and a copy is included in **Appendix E**. There is an existing 8-inch diameter recycled waterline just north of Markham Street on Patterson Avenue as shown in **Figure 4-1**. An 8-inch diameter recycled water line is proposed in Patterson Avenue from just north of Markham Street to Nance Street. At Nance Street, a tee will be placed with stubs going north and west to extend just beyond the concrete intersection.

Proposed water, sewer, and recycled water facilities for this project are summarized in the Draft Design Conditions Summary provided in **Appendix F**.



H:\2020\20-0231\GIS\Fig 4-1 Recycled Water Facilities.mxd; Map created 01 Jun 2022

Sources: EMWD, 2016; Riverside Co. GIS, 2017; USDA NAIP, 2016.

0 500 1,000 Feet

Figure 4-1 Recycled Water Facilities
Patterson & Nance

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Appendix A
Conditions of Approval or Fire Agency Conditions

ALBERT A. WEBB ASSOCIATES

CALIFORNIA FIRE CODE – MATRIX ADOPTION TABLE
APPENDIX B – FIRE-FLOW REQUIREMENTS FOR BUILDINGS

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user.
See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	SFM		HCD			DSA		OSHPD				BSCC	DHS	AGR	DWR	CEC	CA	SL	SLC
		T-24	T-19*	1	2	1/AC	AC	SS	1	2	3	4								
Adopt Entire Chapter																				
Adopt Entire Chapter as amended (amended sections listed below)		X																		
Adopt only those sections that are listed below																				
[California Code of Regulations, Title 19, Division 1]																				
Chapter / Section																				
B105.2		X																		

* The *California Code of Regulations* (CCR), Title 19, Division 1 provisions that are found in the *California Fire Code* are a reprint from the current CCR, Title 19, Division 1 text for the code user's convenience only. The scope, applicability and appeals procedures of CCR, Title 19, Division I remain the same.

APPENDIX B
FIRE-FLOW REQUIREMENTS FOR BUILDINGS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION B101
GENERAL

B101.1 Scope. The procedure for determining fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with this appendix. This appendix does not apply to structures other than buildings.

SECTION B102
DEFINITIONS

B102.1 Definitions. For the purpose of this appendix, certain terms are defined as follows:

FIRE-FLOW. The flow rate of a water supply, measured at 20 pounds per square inch (psi) (138 kPa) residual pressure, that is available for fire fighting.

FIRE-FLOW CALCULATION AREA. The floor area, in square feet (m^2), used to determine the required fire flow.

SECTION B103
MODIFICATIONS

B103.1 Decreases. The fire chief is authorized to reduce the fire-flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.

B103.2 Increases. The fire chief is authorized to increase the fire-flow requirements where conditions indicate an unusual susceptibility to group fires or conflagrations. An increase shall not be more than twice that required for the building under consideration.

B103.3 Areas without water supply systems. For information regarding water supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the fire code official is authorized to utilize NFPA 1142 or the *California Wildland-Urban Interface Code.*

SECTION B104
FIRE-FLOW CALCULATION AREA

B104.1 General. The fire-flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building, except as modified in Section B104.3.

B104.2 Area separation. Portions of buildings which are separated by fire walls without openings, constructed in accordance with the *California Building Code,* are allowed to be considered as separate fire-flow calculation areas.

B104.3 Type IA and Type IB construction. The fire-flow calculation area of buildings constructed of Type IA and Type IB construction shall be the area of the three largest successive floors.

Exception: Fire-flow calculation area for open parking garages shall be determined by the area of the largest floor.

SECTION B105
FIRE-FLOW REQUIREMENTS FOR BUILDINGS

B105.1 One- and two-family dwellings. The minimum fire-flow and flow duration requirements for one- and two-family

dwellings having a fire-flow calculation area that does not exceed 3,600 square feet (344.5 m^2) shall be 1,000 gallons per minute (3785.4 L/min) for 1 hour. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5m^2) shall not be less than that specified in Table B105.1.

Exception: A reduction in required fire-flow of 50 percent, as approved, is allowed when the building is equipped with an approved automatic sprinkler system.

B105.2 Buildings other than one- and two-family dwellings. The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

Exceptions:

1. A reduction in required fire-flow of up to 75 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute (5678 L/min) for the prescribed duration as specified in Table B105.1.
2. *[SFM] Group B, S-2 and U occupancies having a floor area not exceeding 1,000 square feet, primarily constructed of noncombustible exterior walls with wood or steel roof framing, having a Class A roof assembly, with uses limited to the following or similar uses:*
   - *2.1. California State Parks buildings of an accessory nature (restrooms).*
   - *2.2. Safety roadside rest areas, (SRRA), public restrooms.*
   - *2.3. Truck inspection facilities, (TIF), CHP office space and vehicle inspection bays.*
   - *2.4. Sand/salt storage buildings, storage of sand and salt.*

TABLE B105.1
MINIMUM REQUIRED FIRE-FLOW AND FLOW DURATION FOR BUILDINGS

FIRE-FLOW CALCULATION AREA (square feet)					FIRE-FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	2
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	3
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	4
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-103,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	103,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	
—	—	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
—	—	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
—	—	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
—	—	145,801-156,700	106,801-113,200	64,801-69,600	7,000	
—	—	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
—	—	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
—	—	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
—	—	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m^2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

a. Types of construction are based on the *California Building Code*.

b. Measured at 20 psi residual pressure.

Patterson & Nance will be building type IIIB and greater than 138,301 sf. Fire sprinklers will be installed and a reduction of 50 percents was used for the fire flow requirement (4,000 gpm for 4 hrs).

Appendix B
EMWD'S Fire Flow and Hydraulic Boundary Conditions

APPENDIX B

ALBERT A. WEBB ASSOCIATES

COMPUTER MODEL TEST

Grid Number:	49-A	**Date:**	May 7, 2021
Customer Name:	Duke Realty	**Address:**	200 Spectrum Center Drive; Suite 1600
City, State Zip:	Irvine, CA 92618		
Contact Name:	D. J. Arellano		
Phone:	949-797-7054	**Cell:**	kristin.lemus@webbassociates.com
Fax:		**Email:**	dj.arellano@dukerealty.com
Project Record Number:	WS 2021-0459	**WO/CO:**	WO 16238
Project Name:	Patterson & Nance	**APN:**	314-153-015 thru -042, -044, -046 & -048
(Approximate) Test & Hydrant Location:	POC1: Intersection of Patterson Ave and Nance Street (see Figure 1) POC2: About 330 feet south of Patterson Ave and Harley Knox Blvd intersection PIQ: S of Harley Knox Blvd/N of Nance St/W of Nevada Ave/E of Patterson Ave.; Perris, CA		

MODEL	**DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3.mxd**				
POC Test Location:	**EMWD RESULTS**			**Requested**	**Flow Availability for Fire Department**
	POC 1	**POC 2**		**Requested**	
Elevation*:	1498.4	1501.5			
Steady State, Dynamic (psi):	87.6	88.9			
Residual Pressure (psi):	74.4	75.8			
Tested FF (gpm):	2000	2000		4000	
Combined Total (gpm):	MDD 166 gpm** plus 4000 gpm fire flow			4166	
Number of Hydrants:	POC1 and 2 tested simultaneously			2	
Duration Tested @:	Four Hours			4	
Demand Conditions:	Max Day				
Pressure Zone/Tank Name(s)/Level(s):	1705 / Decker / Base Elevation 1666.0 ft				
Pump Operating Status:	ON	**Computer Model Setting:**	EPS		

Number of Points of connections (POC):	**POC (Circle One)**		**Reason (Circle what Applies)**				
	One	Two or More	Plan of Service	Limited Capacity (Existing System)	Supply Redundancy	Conditions of Approval	Fire Sprinkler Connection(s)

Comments: The water system is capable of providing 4000 GPM for 4 hours at a minimum of 20 psi, as shown in Figure 1. These Fire Flow test results may need to be complemented by a Plan of Service and do not include all facility conditioning that may be required for this project. Fire Agency Conditions were not provided, if any Fire Flow changes occur in the Fire Agency Conditions, you may need to resubmit another Fire Flow test at the requester's expense.

The above results are not a guarantee the District's system will supply water to the project at any specific flows or pressures. These results were determined from a computer simulation of the District's water system and/or from hydraulic calculations pertaining to distribution pipelines: The capacity of the service laterals, meters, backflow assemblies, on-site fire system, and other appurtenances were not considered in these results. The design and sizing of service laterals and downstream facilities shall be the responsibility of the Project Sponsor.

EMWD's Fire Flow test results are valid for twelve months from the date of testing.

Completed By: Kris Danielson

Should you have any questions or need additional information, please contact me at (951) 928-3777, ext. 4478.

Sincerely, Kristyna Danielson Date: 5/7/2021

Rudy Esparza
Sr. Engineering Technician
New Business Development

DRAFT - Pending Formal Fire Agency Conditions

Reviewed By: RE Date: 5-11-2021

* Elevation based on Riverside County Flood Control digital data.
** Assumed 29 acres (average day demand = 3300 gpd/ac, Max Day Demand (MDD) is 2 times average day).

Hydraulic Boundary Conditions, In The Main Water Pipeline[6][7], Based on Hydraulic Model Results

Project Name: Patterson & Nance
Pressure Zone: 1705, WS 2021-0459
Model Version [12]: DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3.mxd

ADD (GPM): 66
FFD (GPM): 4000
Duration (Hours): 4

POC Location: POC 1 (Intersection of Patterson Ave and Nance St)
Elevation (ft): 1498.4
APN: 314-153-015 thru -042, -044, -046 & -04 (See Attached Figure 1)

	Modeling Scenario [12]	Operational Conditions:	Project Demands[2][3][11] (gpm): Project's Domestic Water Demands[2][3][11] (gpm)	Project Demands[2][3][11] (gpm): Fire Flow Demand[4] (gpm)	Existing system (With No Improvements): HGL (ft)	Existing system (With No Improvements): Pressure (psi)	Existing system (With Improvements)[1]: HGL (ft)	Existing system (With Improvements)[1]: Pressure (psi)
Operational Demand	EPS, MDD, Pumps On (8)	MDD	166		1701	88		
	EPS, MDD, Pumps On (8)	PHD	332		1697	86		
	EPS, ADD, Pumps On (8)	MHD	22		1748	108		
Fire Flow Demand		FFD + MDD						
	EPS, MDD, Pumps On (8)	FFD + MDD	166	2000	1670	74		74

Footnotes (see page 2 for additional footnotes):
(1) If improvements are required, please describe the improvements here:

Minimum Pressure Criteria:

50 PSI	...under PHD, MDD, and MHD
20 PSI	...under MDD + FFD

Minimum Criteria, Velocities in Pipelines:
Equal to or less than 5 fps: ...for MDD
Equal to or less than 10 fps: ...for PHD
Equal to or less than 15 fps: ...for FF + MDD

	Adequate?
Available Firm Pumping Capacity:	TBD
Available Firm Pumping Capacity, w/ Electrical Outage :	No
Available Storage Capacity:	TBD

Comments: (TBD indicates To Be Determined) Capacity availability shall be verified separately by the customer and reviewed by Development Services Engineers.

Additional Comments:
Fire flow and domestic demands were divided evenly between the two POC's

Prepared by: Kristyna Hamilton
Date: May 7, 2021

Reviewed by: RE
Date: 5-11-2021

File: 2021-0459 Output Data_V10
FORM: NBD-068 (July 25, 2016) --- Date Printed: 5/8/2021, 11:26 AM

Hydraulic Boundary Conditions, In The Main Water Pipeline[6][7], Based on Hydraulic Model Results

Project Name:	Patterson & Nance	**ADD (GPM):**	66
Pressure Zone:	1705, WS 2021-0459	**FFD (GPM):**	4000
Model Version [12]:	DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3.mxd	**Duration (Hours):**	4

Acronyms:

ADD: Average Day Demand, in GPM
EPS: Extended Period Simulation
FFD[3]: Fire Flow Demand, in GPM
FPS: Feet per second
GPM: Gallons Per Minute
HGL: Hydraulic Grade-Line, in feet
MDD: Maximum Day Demand, in GPM
MHD: Minimum Hour Demand, in GPM
PHD: Peak-Hour Demand, in GPM
POC: Point Of Connection
PSI: Pounds Per Inch
SSS: Steady State Simulation

Footnotes (Ct'd):

(2) Project Demands include ADD of the proposed project, peaked for each test scenario, in accordance with the latest EMWD Water Master Plan Design Criteria

(3) Domestic water demands from existing services are already included in the Model

(4) This is NOT a Fire Flow Test Report: The customer shall verify with the Fire Marshall if a separate Fire Flow Test Report/Letter is required for Jurisdictional Project approval.

(5) All required storage and pumping shall be evaluated in a POS report, per the latest EMWD Master Plan Design Criteria

(6) Applicants, or their designees, shall design service laterals, commencing from the point of connection(s) in EMWD's main pipeline(s), including main extension(s), lateral(s), meter(s), and all post-meter appurtenances, taking into consideration resulting head losses, pad elevations, and building height, such that the pressure delivered to each floor level and service is adequate to meet jurisdictional requirements.

(7) In addition to design requirements, operational minimum and maximum pressures are used to identify and record Service Agreements for Low and High pressure conditions in Residential use. Commercial, Institutional, and Industrial uses do not require low and high pressure recordation.

(8) Storage tanks: Initial levels set at 75% full in EPS

(9) Storage tanks: Initial levels set at 50% full in SSS, Pumps Off

(10) Storage tanks: Initial levels set at 50% full in SSS, Pumps On

(11) Existing demands are based on COINS data, calendar-year 2013

(12) For EPS modeling, use file name: ***DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3.mxd***

Hydraulic Boundary Conditions, In The Main Water Pipeline[6][7], Based on Hydraulic Model Results

Project Name: Patterson & Nance
Pressure Zone: 1705, WS 2021-0459
Model Version [12]: DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3.mxd

ADD (GPM): 66
FFD (GPM): 4000
Duration (Hours): 4

POC Location: POC 2 (330' S. of Patterson/Harley Knox intersecti
Elevation (ft): 1501.5
APN: 314-153-015 thru -042, -044, -046 & -04 (See Attached Figure 1)

	Modeling Scenario [12]	Operational Conditions:	Project Demands[2][3][11] (gpm): Project's Domestic Water Demands[2][3][11] (gpm)	Project Demands[2][3][11] (gpm): Fire Flow Demand[4] (gpm)	Existing system (With No Improvements): HGL (ft)	Existing system (With No Improvements): Pressure (psi)	Existing system (With Improvements)[1]: HGL (ft)	Existing system (With Improvements)[1]: Pressure (psi)
Operational Demand	EPS, MDD, Pumps On (8)	MDD	166		1707	89		
	EPS, MDD, Pumps On (8)	PHD	332		1703	87		
	EPS, ADD, Pumps On (8)	MHD	23		1755	110		
Fire Flow Demand		FFD + MDD						
	EPS, MDD, Pumps On (8)	FFD + MDD	166	2000	1677	76		76

Footnotes (see page 2 for additional footnotes):
(1) If improvements are required, please describe the improvements here:

Minimum Pressure Criteria:

50 PSI	...under PHD, MDD, and MHD
20 PSI	...under MDD + FFD

Minimum Criteria, Velocities in Pipelines:
Equal to or less than 5 fps: ...for MDD
Equal to or less than 10 fps: ...for PHD
Equal to or less than 15 fps: ...for FF + MDD

	Adequate?	Comments:
Available Firm Pumping Capacity:	TBD	(TBD indicates To Be Determined) Capacity availability shall be verified separately by the customer and reviewed by Development Services Engineers.
Available Firm Pumping Capacity, w/ Electrical Outage :	No	
Available Storage Capacity:	TBD	

Additional Comments:
Fire flow and domestic demands were divided evenly between the two POC's

Prepared by: Kristyna Hanson
Date: May 7, 2021

Reviewed by: RE
Date: 5-11-2021

Hydraulic Boundary Conditions, In The Main Water Pipeline[6][7], Based on Hydraulic Model Results

Project Name:	Patterson & Nance	**ADD (GPM):**	66
Pressure Zone:	1705, WS 2021-0459	**FFD (GPM):**	4000
Model Version [12]:	DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3.mxd	**Duration (Hours):**	4

Acronyms:

ADD: Average Day Demand, in GPM
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PHD: Peak-Hour Demand, in GPM
POC: Point Of Connection
PSI: Pounds Per Inch
SSS: Steady State Simulation

Footnotes (Ct'd):

(2) Project Demands include ADD of the proposed project, peaked for each test scenario, in accordance with the latest EMWD Water Master Plan Design Criteria

(3) Domestic water demands from existing services are already included in the Model

(4) This is NOT a Fire Flow Test Report: The customer shall verify with the Fire Marshall if a separate Fire Flow Test Report/Letter is required for Jurisdictional Project approval.

(5) All required storage and pumping shall be evaluated in a POS report, per the latest EMWD Master Plan Design Criteria

(6) Applicants, or their designees, shall design service laterals, commencing from the point of connection(s) in EMWD's main pipeline(s), including main extension(s), lateral(s), meter(s), and all post-meter appurtenances, taking into consideration resulting head losses, pad elevations, and building height, such that the pressure delivered to each floor level and service is adequate to meet jurisdictional requirements.

(7) In addition to design requirements, operational minimum and maximum pressures are used to identify and record Service Agreements for Low and High pressure conditions in Residential use. Commercial, Institutional, and Industrial uses do not require low and high pressure recordation.

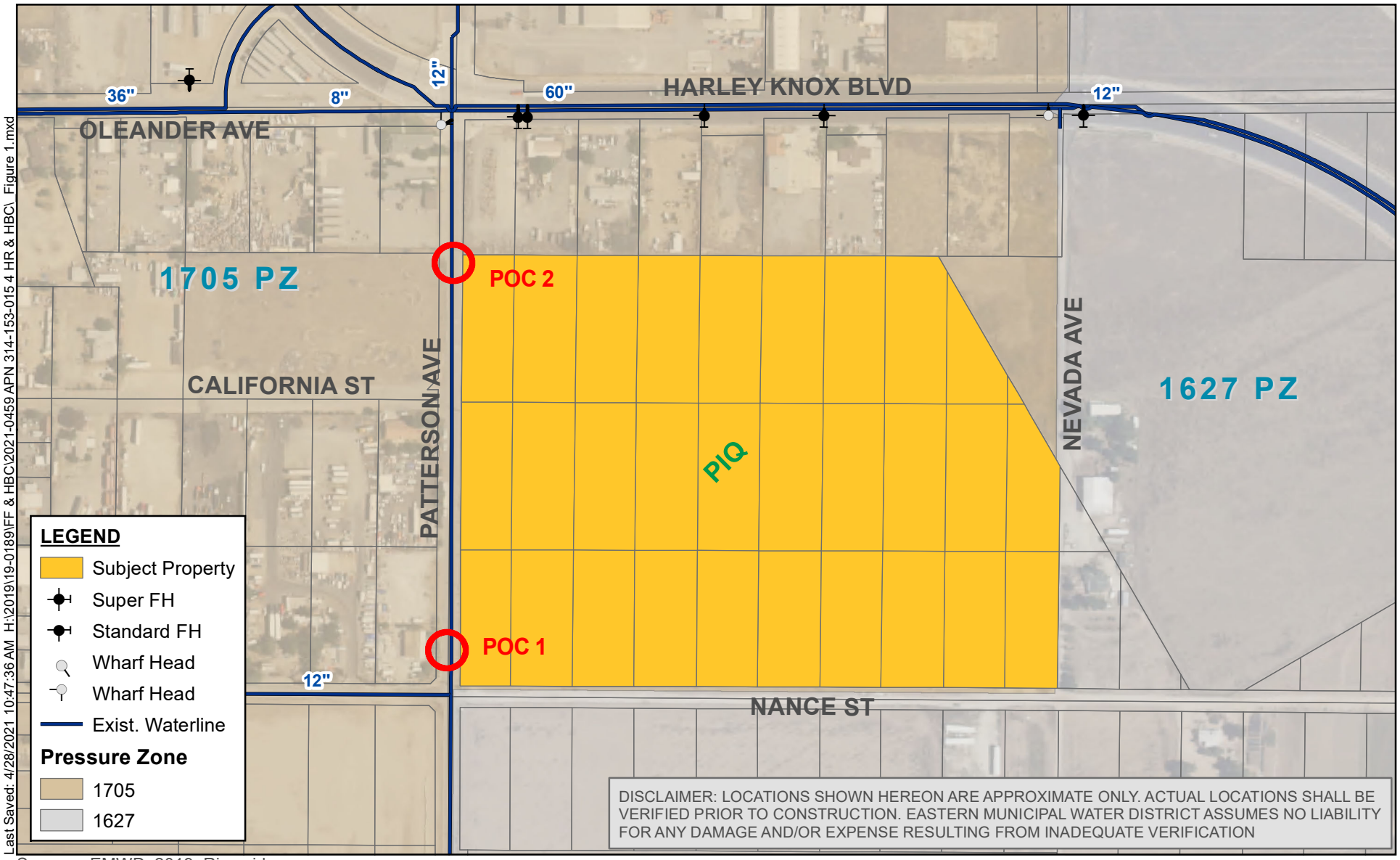
(8) Storage tanks: Initial levels set at 75% full in EPS

(9) Storage tanks: Initial levels set at 50% full in SSS, Pumps Off

(10) Storage tanks: Initial levels set at 50% full in SSS, Pumps On

(11) Existing demands are based on COINS data, calendar-year 2013

(12) For EPS modeling, use file name: ***DS_MM_wya20181018_POS-DC_Combined MDD and FF Diurnals_v3.mxd***



Last Saved: 4/28/2021 10:47:36 AM H:\2019\19-0189\FF & HBC\2021-0459 APN 314-153-015 4 HR & HBC\ Figure 1.mxd

Sources: EMWD, 2019; Riverside Co. GIS, 2020; USDA NAIP, 2016.

0 300 600 Feet

emwd EASTERN MUNICIPAL WATER DISTRICT

FIGURE 1

APN 314-153-015 - 042, 044, 046, & 048
FIRE FLOW TEST & HBC

Appendix C
DCDA vs. RPDA Memo

ALBERT A. WEBB ASSOCIATES

Interoffice Memo

TO: Development Services

FROM: Water Operations, Cross-Connection

DATE: June 5, 2019

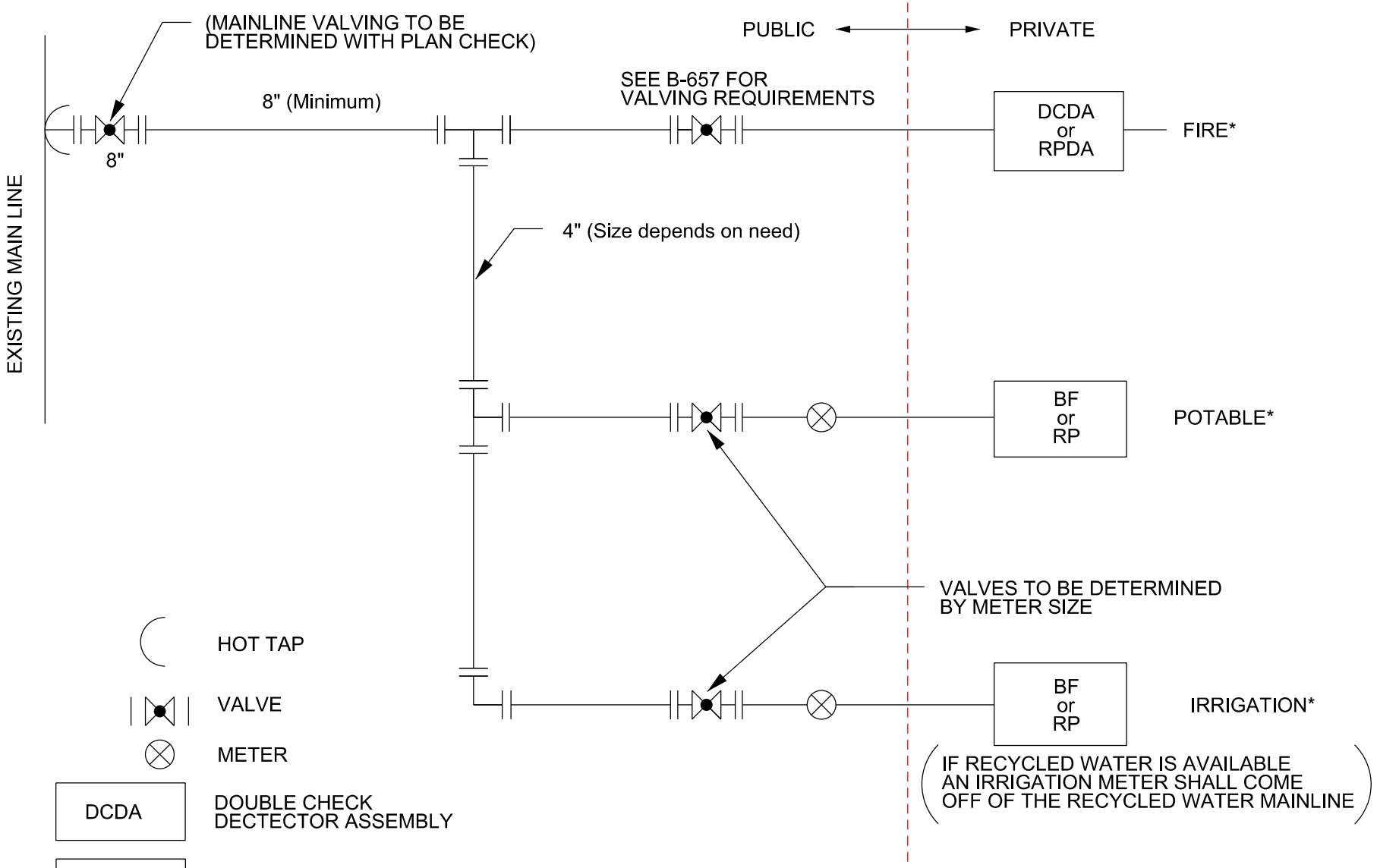
SUBJECT: DCDA vs. RPDA

Cross-Connection staff has identified the need to know all potential hazards which could contaminate EMWD's water system through the proposed Fire Service associated with your project. While a double check detector assembly (DCDA) backflow protects against low health hazard pollutants, a reduced pressure detector assembly (RPDA) backflow protects against high health hazard pollutants and contaminants. All dedicated and private fire protection services must utilize, at a minimum, a DCDA at each point of connection to EMWD's public water system (per EMWD standard drawing B-657). However, an RPDA backflow must be used in the event of any potential onsite contaminants. Examples of potential contaminants to be identified as part of the plan check and application processes are:

1. Use of hazardous chemicals on the premises
2. Injection of any chemical-additives (fire-fighting or corrosion inhibitors)
3. On-site water storage (tanks or ponds)
4. On-site auxiliary water supply (wells active or not properly abandoned)
5. Sites with marine facilities (lakes and water parks)

A list of onsite processes and potential hazards should be obtained from the customer by Development Services staff for review and determination of the appropriate backflow prevention device to be specified by the Cross-Connection staff as part of the plan check process.

EMWD STANDARD FOR PRIVATE CONNECTIONS FOR EXISTING WATERLINES

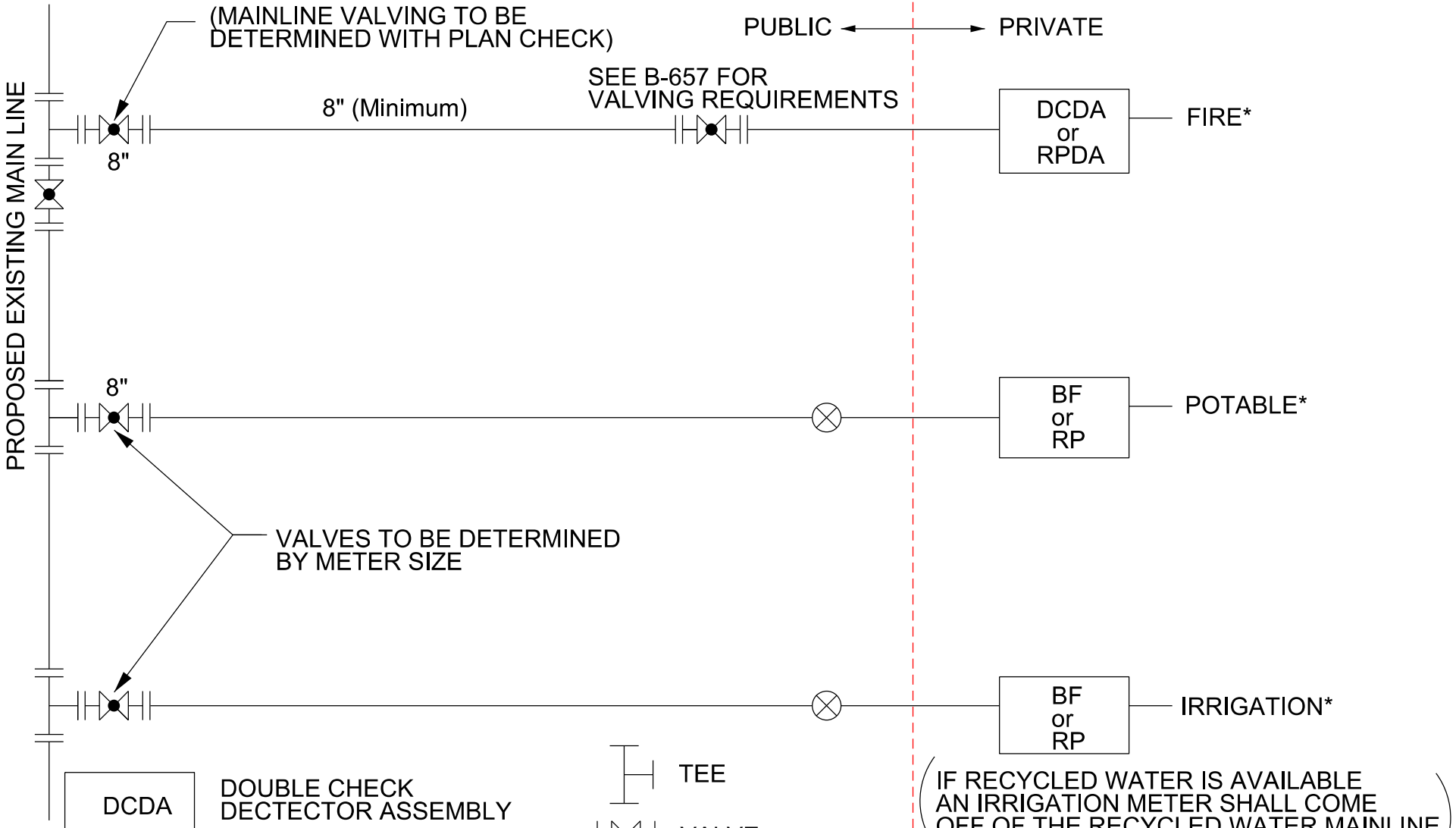


* Please note that EMWD does not inspect onsite private potable water and/or private fire systems, however, EMWD does require that there is no cross-connections onsite. Each service connection must maintain their separate systems onsite. (Example: domestic potable, fire services must remain a dual system onsite).

DATE 1-23-2015

\KAUAI\engineering\esparza\DGNv8

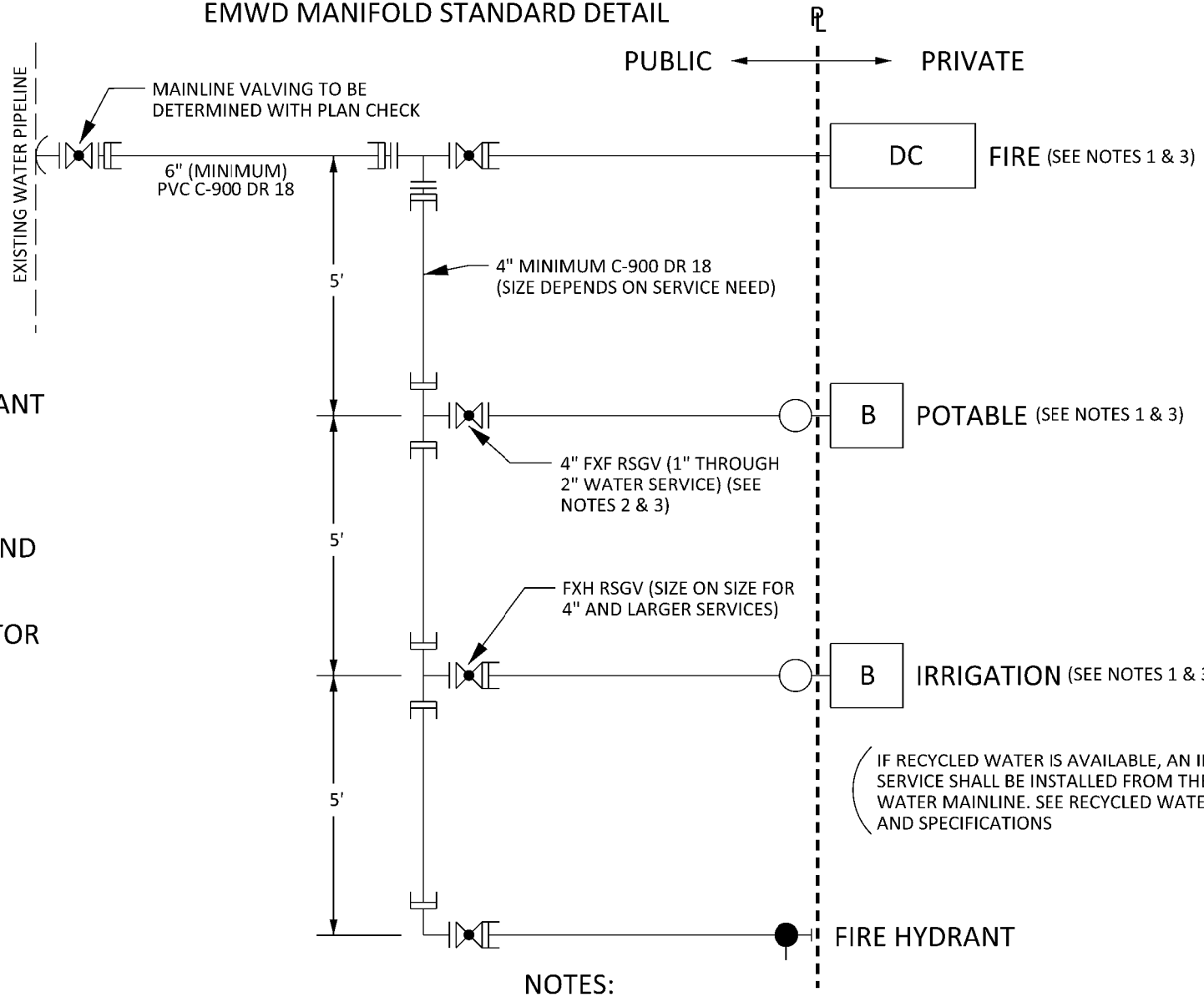
EMWD STANDARD FOR PRIVATE CONNECTIONS FOR PROPOSED WATERLINES



✳ Please note that EMWD does not inspect onsite private potable water and/or private fire systems, however, EMWD does require that there is no cross-connections onsite. Each service connection must maintain their separate systems onsite. (Example: domestic potable, fire services must remain a dual system onsite).

DATE 1-23-2015
\KAUAI\engineering\esparza\DGNv8

EMWD MANIFOLD STANDARD DETAIL



FIRE HYDRANT

HOT TAP

FXH 90° BEND

FXH ADAPTOR

FXF TEE

FXH TEE

FXF RSGV

FXH RSGV

METER BOX

DCDA OR RPDA — DOUBLE CHECK OR REDUCED PRESSURE DECTECTOR ASSEMBLY

B — REDUCED PRESSURE BACK FLOW PREVENTER

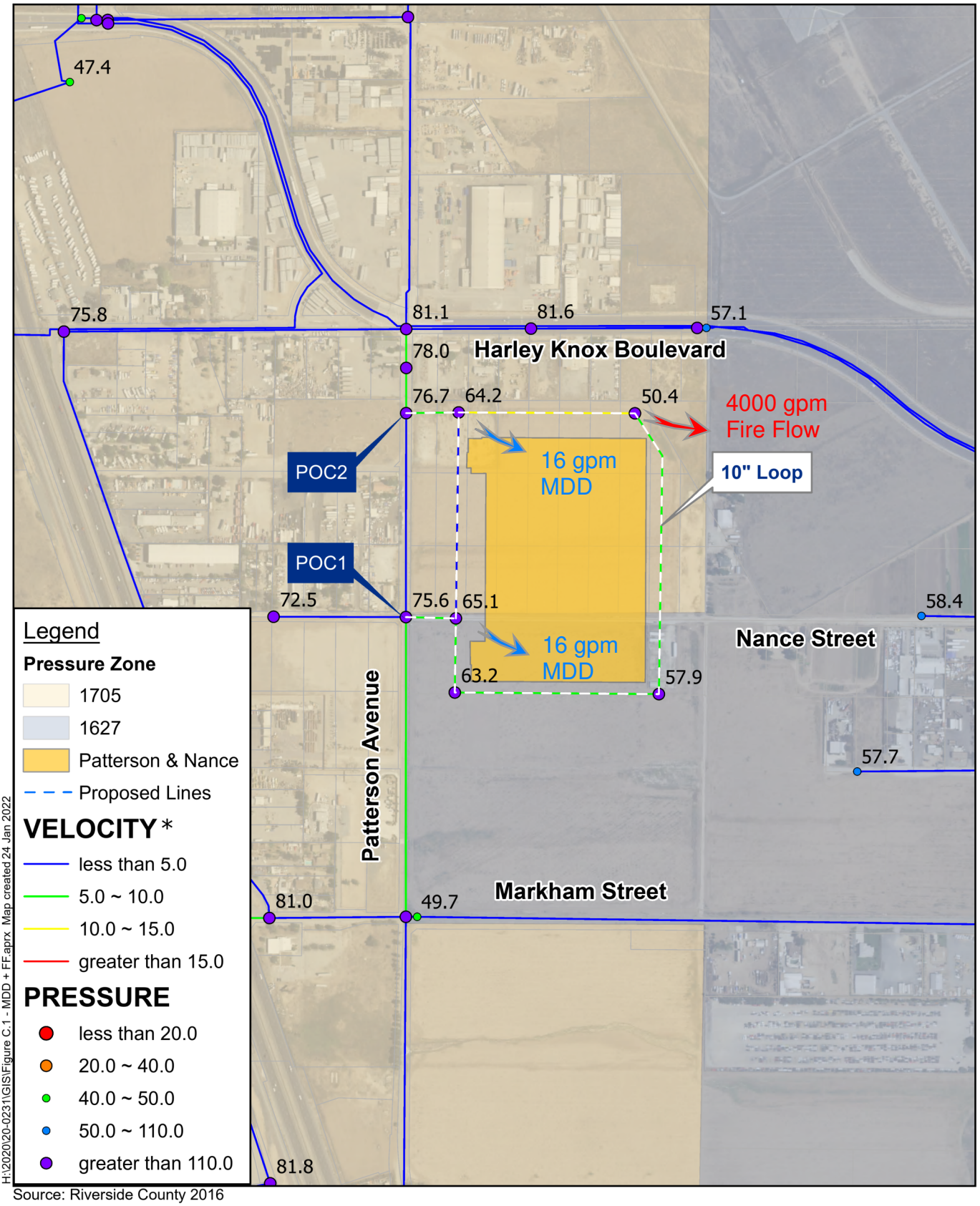
NOTES:

1. THAT EMWD DOES NOT INSPECT ONSITE PRIVATE POTABLE WATER AND/OR PRIVATE FIRE SYSTEMS, HOWEVER, EMWD DOES REQUIRE THAT THERE IS NO CROSS-CONNECTIONS ONSITE. EACH SERVICE CONNECTION MUST MAINTAIN THEIR SEPARATE SYSTEMS ONSITE. (EXAMPLE: DOMESTIC POTABLE, FIRE SERVICES MUST REMAIN A DUAL SYSTEM ONSITE).
2. A FLANGE BY FLANGE RSGV AND COMPANION FLANGE WILL BE REQUIRED FOR 1" THROUGH 2" WATER SERVICE CONNECTIONS PER B-658.
3. THE MAXIMUM VELOCITY THROUGH THE MANIFOLD SHALL BE 10 FEET PER SECOND, BASED ON CAPACITIES OF THE BACK FLOW DEVICES AND METERS.

REV DATE 10/25/19

Appendix D
Hydraulic Analysis Modeling Results

ALBERT A. WEBB ASSOCIATES



Source: Riverside County 2016
EXIST_EPS_MDD_4HR_FF, Hour 64

0 600 1,200 US Feet

*Dashed lines are proposed private water line

Figure D1.1 - MDD+FF

PATTERSON & NANCE

ALBERT A. WEBB ASSOCIATES

Source: Riverside County 2016
EXIST_EPS_MDD_4HR_FF, Hour 30

Figure D1.2 - PHD
PATTERSON & NANCE

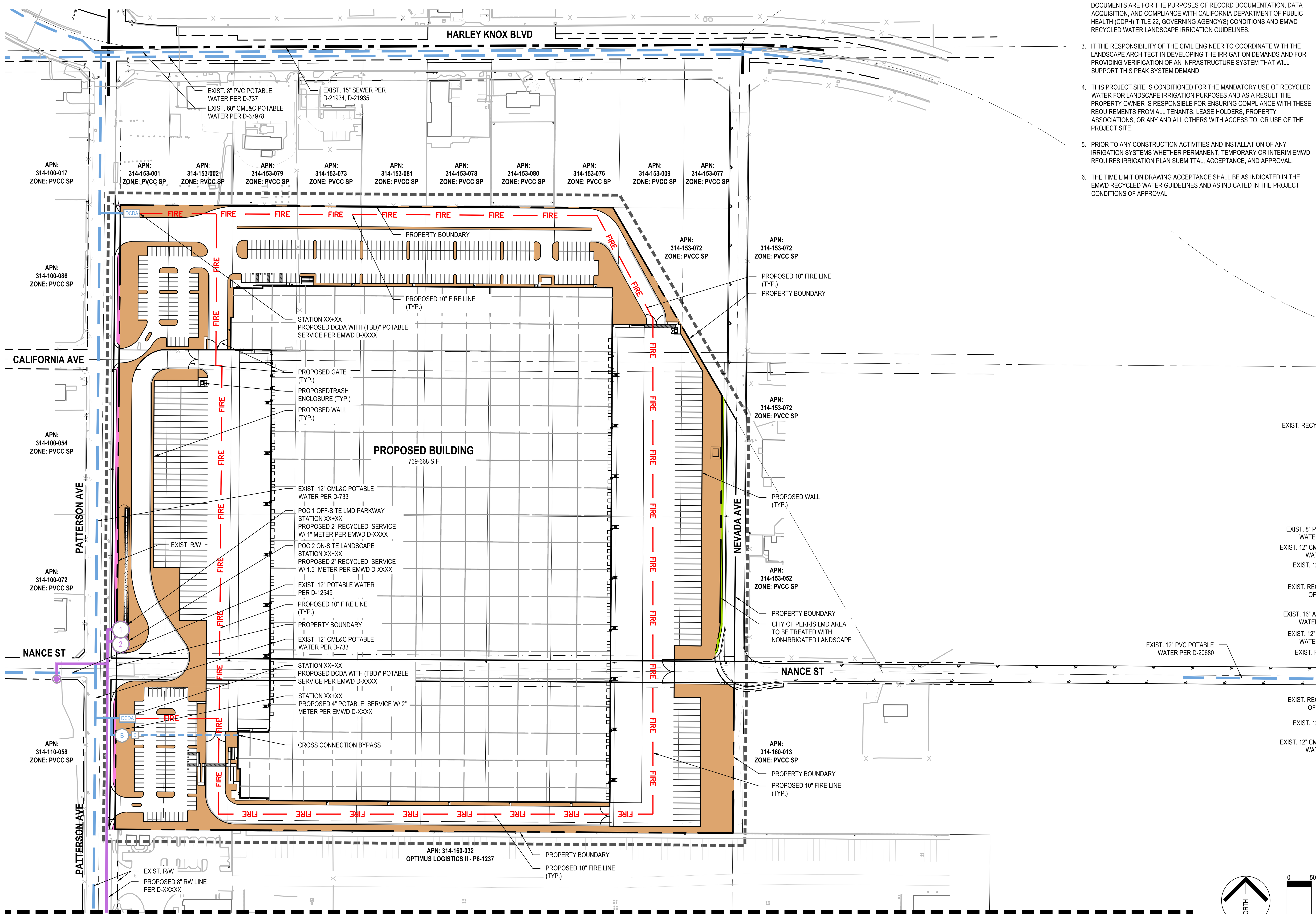
ALBERT A. WEBB ASSOCIATES

Appendix E
RWUE

DUKE REALTY - PATTERSON AVENUE & NANCE STREET - RWUE

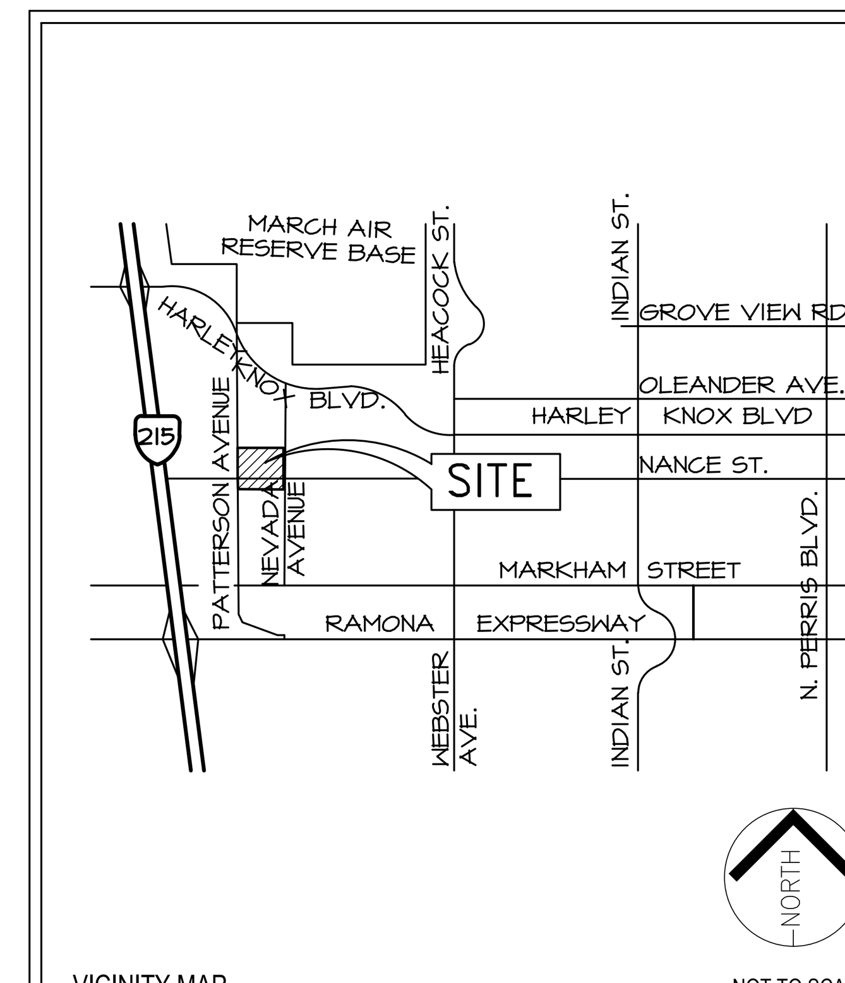
CITY OF PERRIS

WO 16369



EMWD STANDARD RWUE NOTES

1. THE RWUE IS CONSIDERED A COMPONENT OF THE RECYCLED WATER LANDSCAPE IRRIGATION GUIDELINES.
2. EMWD'S REVIEW, ACCEPTANCE AND APPROVAL OF THE RWUE AND ASSOCIATED DOCUMENTS ARE FOR THE PURPOSES OF RECORD DOCUMENTATION, DATA ACQUISITION, AND COMPLIANCE WITH CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH) TITLE 22, GOVERNING AGENCY(S) CONDITIONS AND EMWD RECYCLED WATER LANDSCAPE IRRIGATION GUIDELINES.
3. IT THE RESPONSIBILITY OF THE CIVIL ENGINEER TO COORDINATE WITH THE LANDSCAPE ARCHITECT IN DEVELOPING THE IRRIGATION DEMANDS AND FOR PROVIDING VERIFICATION OF AN INFRASTRUCTURE SYSTEM THAT WILL SUPPORT THIS PEAK SYSTEM DEMAND.
4. THIS PROJECT SITE IS CONDITIONED FOR THE MANDATORY USE OF RECYCLED WATER FOR LANDSCAPE IRRIGATION PURPOSES AND AS A RESULT THE PROPERTY OWNER IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH THESE REQUIREMENTS FROM ALL TENANTS, LEASE HOLDERS, PROPERTY ASSOCIATIONS, OR ANY AND ALL OTHERS WITH ACCESS TO, OR USE OF THE PROJECT SITE.
5. PRIOR TO ANY CONSTRUCTION ACTIVITIES AND INSTALLATION OF ANY IRRIGATION SYSTEMS WHETHER PERMANENT, TEMPORARY OR INTERIM EMWD REQUIRES IRRIGATION PLAN SUBMITTAL, ACCEPTANCE, AND APPROVAL.
6. THE TIME LIMIT ON DRAWING ACCEPTANCE SHALL BE AS INDICATED IN THE EMWD RECYCLED WATER GUIDELINES AND AS INDICATED IN THE PROJECT CONDITIONS OF APPROVAL.



VICINITY MAP

NOT TO SCALE

RWUE LEGEND:

- PROPERTIES TO BE SERVED (RECYCLED IRR AREA)
- PROJECT LIMIT LINE
- SLEEVE
- PROPOSED POTABLE WATER MAINLINE (EMWD MAINTAINED)
- EXISTING POTABLE WATER MAINLINE (EMWD MAINTAINED)
- PROPOSED RECYCLED WATER MAINLINE (EMWD MAINTAINED)
- EXISTING RECYCLED WATER MAINLINE (EMWD MAINTAINED)
- PROPOSED POTABLE WATER MAINLINE (PRIVATELY MAINTAINED)
- PROPOSED RECYCLED IRRIGATION WATER MAINLINE (PRIVATE MAINTAINED)
- FIRE — FIRE: PROPOSED FIRE SUPPLY WATER SERVICE LINE (PRIVATELY MAINTAINED)
- EXISTING SEWER MAIN LINE
- 1: PROPOSED RECYCLED WATER METER (EMWD MAINTAINED)
- B: PROPOSED POTABLE WATER METER (EMWD MAINTAINED)
- RECYCLED ISOLATION VALVE (EMWD MAINTAINED)
- POTABLE ISOLATION VALVE (EMWD MAINTAINED)
- STUBOUT RECYCLED WATER
- STUBOUT POTABLE WATER
- AIR VAC RECYCLED WATER
- AIR VAC POTABLE WATER
- BLOW OFF RECYCLED (EMWD MAINTAINED)
- BLOW OFF POTABLE (EMWD MAINTAINED)
- FIRE HYDRANT (PRIVATELY MAINTAINED, EXCEPT AS INDICATED)
- DCDA: POTABLE DOUBLE CHECK DEVICE
- B: POTABLE BACKFLOW DEVICE (RP)

CITY OF PERRIS
101 NORTH D STREET
PERRIS, CA 92570

PROJECT NAME/ TRACT NUMBER________

APPROVED BY:

DATE:

DIG ALERT

CALL BEFORE YOU DIG

Call: TOLL FREE
1-800-227-2600
OR
811

TWO FULL WORKING DAYS BEFORE YOU DIG

BENCHMARK

NGS DESIGNATION 435
NGS PID: DX5442

DESCRIBED BY METRO WATER DISTR SO. CALIFORNIA 1992 PERRIS, 1300 FEET (396.2 M) WEST OF ATSF RAILROAD ALONG RIDER ST. ON TOP OF NORTH CURB FACE OF RIDER ST. 28 FEET (8.5 M) NORTH OF RIDER ST, 6 FEET (1.8 M) SOUTH OF A GTE TELEPHONE BOX (DAMAGED). A STANDARD 3-1/4 INCH ALUMINUM DISK SET FLUSH IN TOP OF CURB.

ELEVATION = 1515.12 (NAVD88)
(NAVD88) - 2.45' = (NGVD29)

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

CONTACT: GUILLERMO GONZALEZ
EMAIL: guillermo.gonzalez@webbassociates.com

LICENSED LANDSCAPE ARCHITECT GUILLERMO GONZALEZ 6294 SIGNATURE 6-30-2022 RENEWAL DATE 06-10-2022 DATE STATE OF CALIFORNIA

DATE: 06-10-2022	REVISIONS				
DRAWN BY: GG	DATE	BY	MARK	APPR.	DATE
CHECKED BY: GG	ENGINEER		DESCRIPTION	EMWD	

ACCEPTED BY:
EASTERN MUNICIPAL WATER DISTRICT

DEVELOPMENT SERVICES CIVIL ENGINEER DATE

DEPARTMENT	ACCEPTANCE	DATE
DS PLAN CHECKER		
OPERATIONS		
ENGINEERING		
DC ENGINEER		

CITY OF PERRIS

APN #: 314-153-015 THROUGH 314-153-040, 314-153-042, 314-153-044, 314-153-046, 314-153-048, & 314-160-003 THOUGH 314-160-012

RECYCLED WATER USE IMPROVEMENTS
RECYCLED WATER USE EXHIBIT

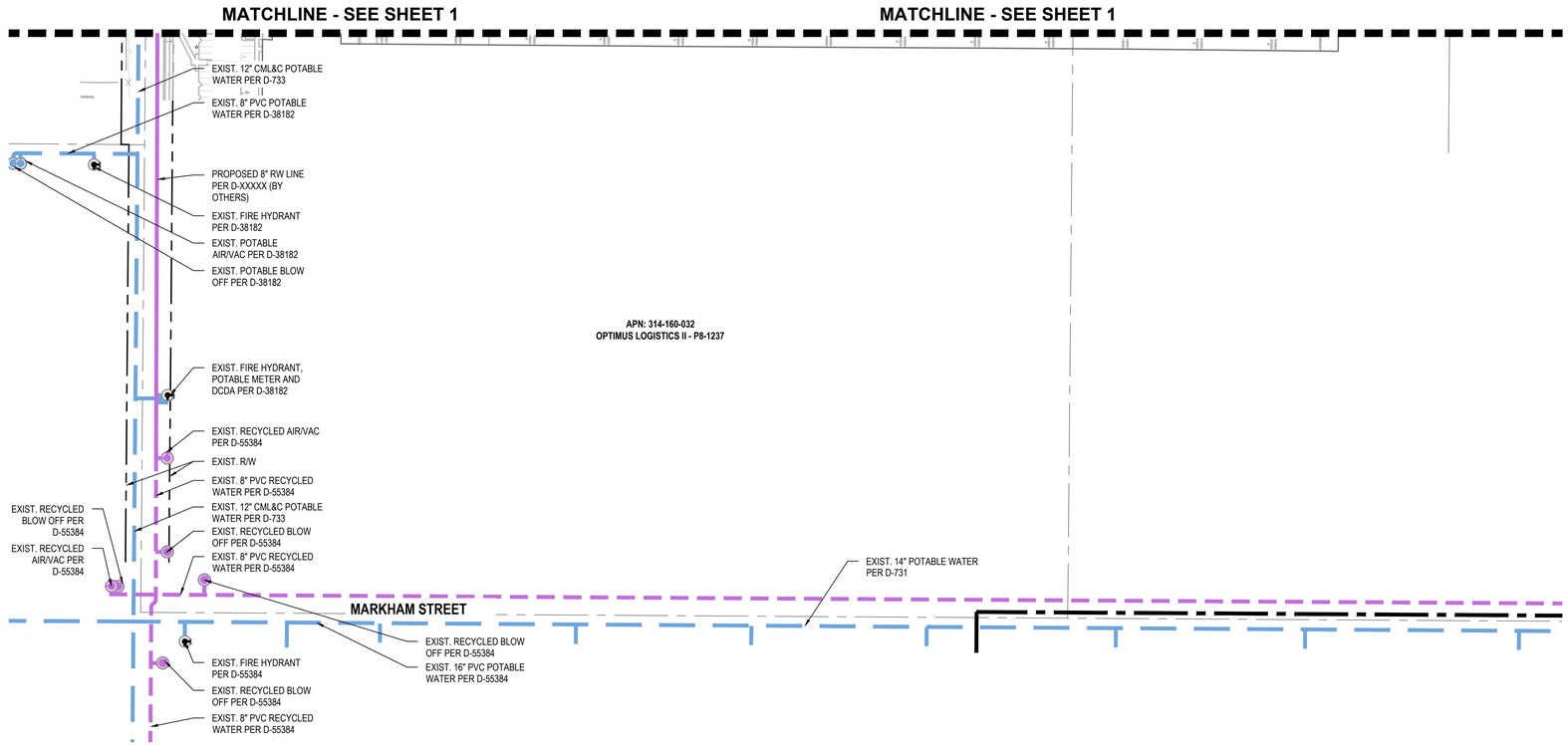
DRP NO. 21-00005
DUKE REALTY - PATTERSON AVE & NANCE ST

L-01	
	RWIP:
DOPP.	RWUE: 16369
COORD. 49-A-28/ 49-C-36	RWUP:
I.D. 98	SHT. 1 OF 2
S.A. 32	D-

H:\2020\20-0231\DRAWINGS\LANDSCAPE\RWUE\16369_RWUE.DWG 6/10/2022 3:32 PM

DUKE REALTY - PATTERSON AVENUE & NANCE STREET - RWUE

CITY OF PERRIS



EMWD STANDARD RWUE NOTES

1. THE RWUE IS CONSIDERED A COMPONENT OF THE RECYCLED WATER LANDSCAPE IRRIGATION GUIDELINES.
2. EMWD'S REVIEW, ACCEPTANCE AND APPROVAL OF THE RWUE AND ASSOCIATED DOCUMENTS ARE FOR THE PURPOSES OF RECORD DOCUMENTATION, DATA ACQUISITION, AND COMPLIANCE WITH CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH) TITLE 22, GOVERNING AGENCY(S) CONDITIONS AND EMWD RECYCLED WATER LANDSCAPE IRRIGATION GUIDELINES.
3. IT THE RESPONSIBILITY OF THE CIVIL ENGINEER TO COORDINATE WITH THE LANDSCAPE ARCHITECT IN DEVELOPING THE IRRIGATION DEMANDS AND FOR PROVIDING VERIFICATION OF AN INFRASTRUCTURE SYSTEM THAT WILL SUPPORT THIS PEAK SYSTEM DEMAND.
4. THIS PROJECT SITE IS CONDITIONED FOR THE MANDATORY USE OF RECYCLED WATER FOR LANDSCAPE IRRIGATION PURPOSES AND AS A RESULT THE PROPERTY OWNER IS RESPONSIBLE FOR ENSURING COMPLIANCE WITH THESE REQUIREMENTS FROM ALL TENANTS, LEASE HOLDERS, PROPERTY ASSOCIATIONS, OR ANY AND ALL OTHERS WITH ACCESS TO, OR USE OF THE PROJECT SITE.
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6. THE TIME LIMIT ON DRAWING ACCEPTANCE SHALL BE AS INDICATED IN THE EMWD RECYCLED WATER GUIDELINES AND AS INDICATED IN THE PROJECT CONDITIONS OF APPROVAL.

RWUE LEGEND:

- PROPERTIES TO BE SERVED (RECYCLED IRR AREA)
- PROJECT LIMIT LINE
- SLEEVE
- PROPOSED POTABLE WATER MAINLINE (EMWD MAINTAINED)
- EXISTING POTABLE WATER MAINLINE (EMWD MAINTAINED)
- PROPOSED RECYCLED WATER MAINLINE (EMWD MAINTAINED)
- EXISTING RECYCLED WATER MAINLINE (EMWD MAINTAINED)
- PROPOSED POTABLE WATER MAINLINE (PRIVATELY MAINTAINED)
- PROPOSED RECYCLED IRRIGATION WATER MAINLINE (PRIVATE MAINTAINED)
- PROPOSED FIRE SUPPLY WATER SERVICE LINE (PRIVATELY MAINTAINED)
- EXISTING SEWER MAIN LINE
- (1) PROPOSED RECYCLED WATER METER (EMWD MAINTAINED)
- (B) PROPOSED POTABLE WATER METER (EMWD MAINTAINED)
- RECYCLED ISOLATION VALVE (EMWD MAINTAINED)
- POTABLE ISOLATION VALVE (EMWD MAINTAINED)
- STUBOUT RECYCLED WATER
- STUBOUT POTABLE WATER
- AIR VAC RECYCLED WATER
- AIR VAC POTABLE WATER
- BLOW OFF RECYCLED (EMWD MAINTAINED)
- BLOW OFF POTABLE (EMWD MAINTAINED)
- FIRE HYDRANT (PRIVATELY MAINTAINED, EXCEPT AS INDICATED)
- DCDA POTABLE DOUBLE CHECK DEVICE
- B POTABLE BACKFLOW DEVICE (RP)

RWUE PROJECT SUMMARY TABLE

Date: 06/10/2022

Select land use from Drop down

Project Study Area per RWUP WO 12345	Tract Number/APN	POC Designation	Recycled and Potable Water Use Areas (Indicate the color used)	Initial Source of Water Supply	Meter Location (Street Name and Side)	Station Number	EMWD D Sheet #	Land Use Type (Description)	Land Use Functionality	Meter Size (Inches)	Service Line Size (Inches)	Maintenance Entity	Irrigated Area Served (Square Feet)	Irrigated Area Served (Acres)	Maximum Irrigation Peak Demand (GPM)	Maximum Irrigation Annual Water Use (Acre FT / Year)	Safe Meter Capacity	Application Method	Watering Window Restricted
N/A	DRP NO. 21-00005	1		RECYCLED	PATTERSON AVE (EAST)	XX+XX	D-XXXXX	LMD STREETSCAPE	Non-Functional	1"	2"	CITY OF PERRIS LMD	4,261	0.10	1.16	0.23	30	DRIP	UNRESTRICTED
N/A	DRP NO. 21-00005	2		RECYCLED	PATTERSON AVE (EAST)	XX+XX	D-XXXXX	PRIVATE ONSITE	Non-Functional	1.5"	2"	PRIVATE	169,449	3.89	46.30	9.34	75	COMBO	RESTRICTED
N/A	DRP NO. 21-00005	A		POTABLE	PATTERSON AVE (EAST)	XX+XX	D-XXXXX	DOMESTIC USE	FUNCTIONAL	TBD	TBD	PRIVATE	0	0.00	0.00	0.00	0		

Owner: Duke Realty Corporation
Address: 200 Spectrum Center Drive
Suite 1600 Irvine, CA 92618
Contact: D.J. Arellano
Phone #: (949) 797-7048

Developer: Duke Realty Corporation
Address: 200 Spectrum Center Drive
Suite 1600 Irvine, CA 92618
Contact: D.J. Arellano
Phone #: (949) 797-7048

RWUP SUMMARY	
Project Study Area:	
Parcel:	
Gross Site Area (acres):	XX
Irrigated Area (acres):	XX
Max Peak Demand Allowed (GPM)	XX
Max Demand Allowed (ACRE/FT/Y)	XX

	Irrigated Area Served (Square Feet)	Irrigated Area Served (Acres)	Maximum Irrigation Peak Demand (GPM)	Maximum Irrigation Annual Water Use (Acre FT / Year)
Recycled Totals	**173,710.00**	**3.99**	**47.47**	**9.57**
Potable Totals	**0.00**	**0.00**	**0.00**	**0.00**

EMWD Administrative Code 5111 with a .50 factor for all new construction as of 6/1/15. Formula for water use calculations within table cells have been updated.

NORTH

0 50' 100' 300'

CITY OF PERRIS
101 NORTH D STREET
PERRIS, CA 92570

PROJECT NAME/ TRACT NUMBER _____

APPROVED BY:

_____ DATE:

DIG ALERT
Call: TOLL FREE
1-800-227-2600
OR
811
TWO FULL WORKING DAYS BEFORE YOU DIG

BENCHMARK

NGS DESIGNATION 435
NGS PID: DX5442

DESCRIBED BY METRO WATER DISTR SO. CALIFORNIA 1992 PERRIS, 1300 FEET (396.2 M) WEST OF ATSF RAILROAD ALONG RIDER ST. ON TOP OF NORTH CURB FACE OF RIDER ST. 28 FEET (8.5 M) NORTH OF RIDER ST., 6 FEET (1.8 M) SOUTH OF A GTE TELEPHONE BOX (DAMAGED). A STANDARD 3-1/4 INCH ALUMINUM DISK SET FLUSH IN TOP OF CURB.

ELEVATION = 1515.12 (NAVD88)
(NAVD88) - 2.45' = (NGVD29)

ALBERT A. WEBB ASSOCIATES
ENGINEERING CONSULTANTS
3788 McCRAY STREET
RIVERSIDE, CA. 92506
PH. (951) 686-1070
FAX (951) 788-1256

CONTACT: GUILLERMO GONZALEZ
EMAIL: guillermo.gonzalez@webbassociates.com

LICENSED LANDSCAPE ARCHITECT
GUILLERMO GONZALEZ 6294
SIGNATURE
6-30-2022
RENEWAL DATE
05-10-2022
DATE
STATE OF CALIFORNIA

DATE: 06-10-2022
DRAWN BY: GG
CHECKED BY: GG

REVISIONS

DATE	BY	MARK	DESCRIPTION	APPR.	DATE
	ENGINEER			EMWD	

ACCEPTED BY:
EASTERN MUNICIPAL WATER DISTRICT
DEVELOPMENT SERVICES CIVIL ENGINEER _____ DATE _____

DEPARTMENT	ACCEPTANCE	DATE
DS PLAN CHECKER		
OPERATIONS		
ENGINEERING		
DC ENGINEER		

CITY OF PERRIS

APN #: 314-153-015 THROUGH 314-153-040, 314-153-042, 314-153-044, 314-153-046, 314-153-048, & 314-160-003 THOUGH 314-160-012

RECYCLED WATER USE IMPROVEMENTS
RECYCLED WATER USE EXHIBIT

DRP NO. 21-00005
DUKE REALTY - PATTERSON AVE & NANCE ST

L-02

RWIP:	
DOPP.	RWUE: 16369
COORD. 49-A-28/ 49-C-36	RWUP:
I.D. 98	SHT. 2 OF 2
S.A. 32	D-

WO 16369

H:\2020\20-0231\DRAWINGS\LANDSCAPE\RWUE\16369_RWUE.DWG 6/10/2022 3:32 PM

Appendix F
Design Conditions Summary

ALBERT A. WEBB ASSOCIATES

Development Services Department (DSD)

DESIGN CONDITIONS (DC)

[Formerly: Plan Of Service]

******* NOTE TO APPLICANT: To fill out this form, please use the latest design guidelines, noted below: *******

- EMWD's "Water System Planning & Design" guidelines, Updated Feb 2006, and revised Sep 14, 2006, AND, EMWD's 2015 Water Facilities Master Plan Supplement
- EMWD's "Sanitary Sewer System Planning & Design" guidelines, Updated Feb 1993, and revised Sep 1, 2006, AND, EMWD's 2015 Wastewater Collection System Master Plan Supplement

- Applicant to complete Gray sections - EMWD to complete Yellow/White sections -

Form No: *DSD-045*
Updated: 10/11/2021

I. PROJECT INFORMATION

Project Reference No. (City View):	2020-1153
DC - Work Order:	16369
Plan Check - Work Order:	N/A

Is LAFCO Fringe Annexation Required?	☐ Yes ☑ No
Was LAFCO Fringe Annexation Approved?	☐ Yes ☑ No
Project to be transferred to AFS, upon DC approval?	☐ Yes ☑ No

Project Name: [(a)] Patterson & Nance

(a) Include TTM, TR, PM, SP, APN or other applicable number or name

Cross Streets: Patterson Avenue and Nance Street

Existing land use	Proposed Land Use	Acres	# of Units, or Hotel Bedrooms	Building Area (SF)	# of Students	# of Hospital Beds, or Dialysis Seats	Average Flow (GPD)
	Residential, Rural						
	Residential, Low Density (SFR)						
	Residential, Medium Density (SFR)						
	Residential, Condominiums						
	Residential, Apartments						
	Residential, Age Restricted						
	Residential, Mobile Home Park						
	School		----------				
	Educational: College		----------				
	Church		----------				
	Motel/Hotel						
	Hospital		----------				
	Medical Office Building (offices)		----------				
	Medical Office Building (long term care)		----------				
	Medical Office Building (Dialysis)		----------		----------		
	Mixed Use Policy Area		----------				
	Commercial, Retail		----------				
	Commercial, Office		----------				
	Industrial, Light		----------				
L1	Industrial, Light (Warehouse)	33.4	----------	719,468			
	Industrial, Heavy		----------		----------		
	Open Space, Rural						
	Open Space, Agricultural						
	Open Space, Conservation						
	Open Space, Recreation						
	Other						
	Totals:	**33.4**	**0**	**719,468**	**0**	**0**	**0**

II. COMMUNITY FACILITIES DISTRICT (CFD)

Is this Project in a Facilities CFD ?	☐ Yes ☑ No
Is This Project in a Fees Only CFD ?	☐ Yes ☑ No
If yes, what is the lead agency: EMWD	☐ Yes ☐ No
Other:	

Development Services Department (DSD)

DESIGN CONDITIONS (DC)

[Formerly: Plan Of Service]

- Applicant to complete Gray sections - EMWD to complete Yellow/White sections -

Form No: *DSD-045*
Updated: 10/11/2021

III. WATER DEMAND AND SEWER FLOW ASSESSMENT

				POTABLE WATER					*SEWER*		
AREA	LAND USE	AREA SIZE		DEMAND PROJECTIONS			PEAK FACTOR		FLOW PROJECTIONS		
DESCRIPTION		AC	DU	(GAL/AC)	(GAL/EDU)	ADD	MDD	PKHR	(GAL/AC)	(GAL/EDU)	ADWF
PA 1	LDR				570					306	0
PA 2	MDR				440					235	0
PA 3	M/HDR				400					212	0
PA 4	HDR				310					165	0
PA 5	Commercial/Office			2,200					1,200		0
PA 6	Light Industrial / Warehouse	33.4		550		18,370			1,200		40,080
PA 7	Mixed Use Policy Area			2,200		0			1,200		0
							2.5	2.0			
					TOTAL (GPD)	18,370	45,925	91,850			
					TOTAL (GPM)	13	32	64			

									ADWF TOTAL (GPD)	40,080
									ADWF TOTAL (GPM)	28
									ADWF TOTAL (MGD)	0.0401
									PEAK FACTOR [a]	2.87
									PDWF - PEAK FLOW (GPD)	115,030
									PDWF - PEAK FLOW (GPM)	80

IRRIGATION [b]				POTABLE WATER				
AREA	LAND USE	AREA SIZE		DEMAND ASSMT.			PEAK FACTOR	
DESCRIPTION		AC	DU	(GAL/AC)	(GAL/EDU)	ADD	MDD	PKHR
				550		0	2.5	
						0		
					TOTAL (GPD)	0	0	
					TOTAL (GPM)	0	0	

(a) Sewer Peak Factor:

1- Use PF of 3.0 for Temecula Wine Country, Old Town Temecula, or similar hospitality type of use.

2- All other cases, PF is based on the following equation, PF = 2.13 $Q^{-0.13}$, where Q is ADWF in MGD,

3- Use max PF of 2.87, and Min PF of 1.5

IV. WATER SUPPLY

Is a Water Supply Assessment Required?	☐ Yes	☑ No	
If WSA is required, did the Land Agency request a WSA from EMWD?	☐ Yes	☐ No	
Water Supply Assessment Issued?	☐ Yes	☐ No	Date Issued:

Development Services Department (DSD)

DESIGN CONDITIONS (DC)

[Formerly: Plan Of Service]

- Applicant to complete Gray sections - EMWD to complete Yellow/White sections -

Form No: *DSD-045*
Updated: 10/11/2021

V. WATER PRESSURE

Pressure Zone: 1705 HWL **Pressure Conditions (in the main pipeline):** ☐ High ☑ Normal ☐ Low ☐ Not Applicable (Commercial Use)

Notes: For only Residential lots, Plan checker shall utilize the attached service-pressure table(s) to determine pressure conditions for each lot, and cause the recordation of High or Low pressure conditions if applicable: Low Pressure Agreement is required for pressures<50 psi; High Pressure Agreement is required for pressures>80 psi; and Lots with pressures <50 psi shall receive a minimum of 1.5" laterals.

VI. Fire Flow Demand

Has applicant requested a fire flow letter or fire flow test from EMWD: ☑ Yes, see below ☐ Yes, waiting for results ☐ No, need to request

Did it meet the fire flow demand: ☑ Yes ☐ No

Fire flow demand (GPM): 4000 **(GPM)**

Fire flow duration (HRS): 4 **(HRS)**

Has EMWD received a copy of Fire Flow Conditions or onsite private calculations: ☑ Yes ☐ No Comment: DRAFT - Pending Formal Fire Flow Conditions Dated 5/7/2021

Note: -Estimated for planning purposes (at a 20 psi residual pressure). Actual fire flow and duration will be established by the governing Fire Marshall.

VII. WATER TRANSMISSION

Nearest Pipeline Facility w/Capacity: Existing 12-inch diameter waterline in Patterson Avenue, between Harley Knox Boulevard and Nance Street

☐ Not requesting Water Service

Interagency Agency Permit: required? ☐ Yes ☑ No If Yes, Agency name:

VIII. WATER FACILITY REQUIREMENTS [e]

	Onsite/Offsite	Dia (in)	Length (lf)[f]	Location		Limits		Size needed by Project (in)
Pipeline:	On-site (Private)	N/A	5,400	On site around building		Onsite 10" water system shall be private.		N/A
	Onsite/Offsite	**Size**	**Unit**	Easement	Grant Deed	Abandonment Deposit Am't	**Location**	
Booster Plant:	N/A							
Storage Tank:	N/A							
Temporary Pipeline Alignment:	N/A			☐ Yes	☐ Yes			

Implementing facility: N/A

Notes:
1- The Planning & Design Criteria used for this DC is the most current version of the "Development Services Department and Facility Design Guidelines", Section 3: "Design Conditions".
2 - Project will need two fire line connections to the existing 12" water pipeline on Patterson.
3 - Install an isolation valve between the two point of fire line connections to provide a loop system for the project. A portion of the existing 12" CML&C pipelines will need to be exposed and fully welded to avoid separation of joints due to the installation of the isolation valve.

(e) Include attachments (such as hydraulic calculations, maps, etc.) when necessary
(f) Approximate lengths for planning purposes only

Development Services Department (DSD)

DESIGN CONDITIONS (DC)

[Formerly: Plan Of Service]

- Applicant to complete Gray sections - EMWD to complete Yellow/White sections -

Form No: *DSD-045*
Updated: 10/11/2021

IX. SEWER TREATMENT

Location: Perris Valley Regional Water Reclamation Facility

Remaining Available Capacity?:	☑ Yes	☐ No
Is the project within 1/4 mile from the Treatment Plant?	☐ Yes	☑ No

If yes, a notification letter shall be recorded against each of the lots.

X. SEWER COLLECTION

Nearest Pipeline Facility w/Capacity:
1) Existing 12-inch diameter sewer line in Webster Avenue
2) Existing 8-inch diameter stub-out in Nance Street just west of Webster Avenue

☐ Not requesting Sewer Service

Interagency Agency Permit: required?	☐ Yes	☑ No	If Yes, Agency name:

XI. SEWER FACILITY REQUIREMENTS [g]

	Onsite/Offsite	Dia (in)	Length (lf)[h]	Location		Limits		Size needed by Project
Pipeline:	Offsite	8	1,265	Nevada Avenue		Project site to existing 15-inch in Harley-Knox Boulevard		8
	Onsite/Offsite	**Size (gpm)**	**Interim/Perm**	Easement	Grant Deed	Abandonment Deposit Am't	**Location**	
Lift Station[i][j][k]:	N/A			☐ Yes	☐ Yes			
Implementing facility:	N/A							
Notes:	1- The Planning & Design Criteria used for this DC is the most current version of the "Development Services Department and Facility Design Guidelines", Section 3: "Design Conditions".							

(g) Include attachments (such as special studies, maps, etc.) when applicable
(h) Approximate lengths for planning purposes only
(i) If interim, describe method and timing of abandonment, and include Demolition and Abandonment plans during Plan Check. Customer is responsible for Abandonment cost.
(j) If applicant is proposing a Lift Station (either temporary or permanent): Submit a study justifying this use, identifying all other options and why they are not viable.
The study shall include a grading analysis of quantities and cost.
For a proposed temporary Lift Station, the study shall identify an abandonment plan, including plans and calculations, to demonstrate the feasibility of the abandonment.
(k) Proposed Lift Stations shall be presented for consideration by the Waste Water Enterprise Team prior to considering the DC approval.

Development Services Department (DSD)

DESIGN CONDITIONS (DC)

[Formerly: Plan Of Service]

- Applicant to complete Gray sections - EMWD to complete Yellow/White sections -

Form No: *DSD-045*
Updated: 10/11/2021

XII. RECYCLED WATER TRANSMISSION

Nearest Pipeline Facility w/Capacity: 8-inch diameter recycled waterline in Markham Street
16-inch diameter recycled waterline in Webster Avenue

XIII. RECYCLED WATER FACILITY REQUIREMENTS [j] (RWUE and/or RWUP)

	Onsite/Offsite	Dia (in)	Length (lf)[k]	Location		Limits		Size needed by Project
Pipeline:	Offsite	8	1200	Patterson Avenue		From existing 8-inch in Patterson Avenue to Nance Street		8
	Onsite/Offsite	**Size**	**Unit**	Easement	Grant Deed	Abandonment Deposit Am't	**Location**	
Temporary Inter-Tie	N/A			☐ Yes	☐ Yes			
Booster Plant:	N/A							
Storage Tank:	N/A							

Implementing facility: N/A

Notes[l]:
1- The Planning & Design Criteria used for this DC is the most current version of the "Development Services Department and Facility Design Guidelines".
2 - At the intersection of Nance Street and Patterson the recycled waterline will need to be extend to the north and west to extend past the concrete for the intersection.
3 - Developer will be seeking reimbursement from other developers for fair share if connection is made to the proposed recycled waterline.

(j) Include attachments (such as hydraulic calculations, maps, etc.) when necessary
(k) Approximate lengths for planning purposes only
(l) RWUP: has it been completed ? ☐ Yes ☐ No ☑ N/A
RWUE: has it been completed ? ☐ Yes ☑ No ☐ N/A

Comments:

XIV. FRONTAGE [m]

Water/Sewer/RcId	Description/General Location	Existing Frontage Memo #	Type [n,o]	Length (lf)	$ Amt/lf	Total
						$0
						$0
						$0
						$0

(n) "Potentially Reimbursable" means: Potentially Reimbursable to project sponsor, in accordance with EMWD Admin Code as amended.
(o) "Non-Reimbursable" means: Payment by this applicant to reimburse original sponsor of facilities

Estimated for budgetary purposes only

(m) *Special Funding / Agreement Area:* ☐ Yes ☑ No

(If Yes) Name of Area:

Signature (EMWD-FRONTAGE) **Date**

XV. FINANCIAL PARTICIPATION CHARGES [m]

S.O. by DSD Representative? ☑ Yes ☐ No *If 'Yes', please coordinate with a Development Services Representative for preparation of an Application For Service*

XVI. ESTIMATE CONNECT FEES FOR APPLICANT BENEFIT

All connection fees can be estimated via our EMWD website.
Visit http://www.emwd.org/new_biz/construction_fee-schedule.html for our complete fee schedule.

XVII. TIME LIMITATION of DESIGN CONDITIONS APPROVAL

This Design Conditions (DC) approval is valid for 24 months. From the time the DC is approved and until preparation of the Standard Facilities Agreement, this DC shall be subject to further evaluation if any of the following conditions exist:
a- The project's scope of work has changed substantially from the approved DC, causing the need to re-evaluate the proposed facilities
b- New regulatory requirements are in effect
c- EMWD has significant updates to its Facilities Master Plans/CIP program, and Design Criteria

Development Services Department (DSD)

DESIGN CONDITIONS (DC)

[Formerly: Plan Of Service]

- Applicant to complete Gray sections - EMWD to complete Yellow/White sections -

Form No: *DSD-045*
Updated: 10/11/2021

XVIII. SPECIAL CONDITIONS: **For Conditions 1 and 2, please select one of the choices from the Drop-Down List - For all others, do NOT delete the ones that do not apply, instead, cross them out.**

1- Use The Drop Down...	This DC was developed based on the latest Conditions Of Approval (COA), provided by the applicant.
2- ...List for items 1 and 2	~~Per attached confirmation by the sponsor/developer waiving his/her right for facility oversizing reimbursement from EMWD, the project shall not receive consideration for oversizing reimbursement.~~
3-	It is the applicant's responsibility to provide any updates or revisions to the Project COA during the development, or after the approval, of the DC. The DC shall be revised and updated as needed, including updating the Fire Flow test if the requirements are different from the original test: Failure to provide timely COA updates or revisions may result in potential additional facility requirements and/or delays in processing the project during subsequent phases (such as Plan Check or Agreement phases).
4-	~~(Only for Residential lots) Plan checker shall utilize the attached service pressure table(s) to determine pressure conditions for each lot, and cause the recordation of High or Low pressure conditions if applicable: **Low Pressure Agreement** is required for lot pressures <50 psi; **High Pressure Agreement** is required for lot pressures >80 psi; and Lots with pressures <50 psi shall receive a **minimum of 1.5" service laterals**.~~
5-	~~The project lies within the _____ Special Benefit Area, and is subject to additional connection fees.~~
6-	~~(For residential landscaping fed from a potable water source) At FIRST Plan Check, a "Residential Landscaping Water Budget" form shall be completed and submitted (by a Licensed Civil Engineer or a Licensed Landscape Architect). This form will be reviewed by the Conservation Dept. during the Plan Check phase. A final approval of this form is required by EMWD's Conservation Dept., prior to EMWD's facilities "Release" by the Inspection Department.~~
7-	For Potable Landscape Irrigation and Meter Requirements (applicable to Commercial, Industrial, Institutional use, as well as common-areas within Residential Tract Development), sponsor shall provide information that is requested in the attached "Documents Required": This Information must be provided with the FIRST Plan Check submittal, and shall be submitted by a Licensed Civil Engineer or a Licensed Landscape Architect. This form will be reviewed by the Conservation Dept. during the Plan Check phase. A final approval of this form is required by EMWD's Conservation Dept., prior to EMWD's facilities "Release" by the Inspection Department.
8-	To submit for Plan Check of final design, the applicant shall refer to the Plan Check Submittal Checklist (attached). The Plan Check submittal shall include the appropriate Plan Check deposit in order for it to be considered complete.
9-	~~If this project requires Implementing Facilities, then such Implementing Facilities shall be concurrently in Plan Check with this project's Plan Check.~~
10-	~~For design of all pumping facilities: Provide design capacity, and preliminary site plan and pipeline alignments for DC approval. Final design shall be reviewed during Plan Check. If a an interim Lift Station is proposed, customer shall include Demolition and Abandonment plans during Plan Check.~~
11-	Design and install a potable-water sampling station per standard detail B-935, to be located within the project and as designated during the Plan Check review.
12-	~~The project is located within 1/4 mile from an existing EMWD waste water treatment plant, and therefore a notification letter shall be recorded against each of the lots, prior to occupancy.~~
13-	~~Provide an approved Inter Agency Permit during Plan Check and prior to final plan approval.~~

XIX. LIST OF APPLICABLE ATTACHMENTS & REFERENCES: **(do NOT delete Attachments & References that do not apply, instead, cross them out).**

1- Project Vicinity Map
2- Exhibit(s) of DC Facilities: existing and proposed facilities
~~3- Exhibit(s) of DC Facilities subject to relocation and/or easements~~
~~4- Available Min/Max Pressure table(s) (Residential only)~~
5- Fire Dept. Requirements ☐ DRAFT ☑ FINAL
6- Project Conditions Of Approval ☑ DRAFT ☐ FINAL
7- EMWD Fire Flow Test Results
8- Hydraulic Boundary Conditions Report
9- Accepted Recycled Water Use Exhibit or Plan
10- Reports or special studies
11- DCDA vs RPDA: EMWD Requirements Memo
12- DCDA vs RPDA: Customer memo declaring intent of on-site use (Commercial & industrial use only)
~~13- Spreadsheet (template) for "Residential Landscaping Water Budget" and Instructions: **Template form must be filled out and provided with first Plan Check submittal.**~~

14- "Documents Required" for Potable Landscape Irrigation and Meter Requirements (applicable to Commercial, Industrial, Institutional use, as well as common-areas within Residential Tract Development): **This Information must be provided with the first Plan Check submittal.**
15- Manifold detail, for commercial projects
~~16- CFD Letter, signed by the Owner (Residential tracts only)~~
~~17- Prevailing wage requirements and process description~~
~~18- Sponsor/developer e-mail, waiving oversizing reimbursement from EMWD~~
~~19- Application For Service Requirements~~
20- Plan Check Submittal Checklist
21- Plan Check Deposit Schedule
22- Blank
23- Blank

		Date
Prepared By:	Albert A. Webb Associates	1/31/2022
Reviewed By:	Sambo Lay	_____
	DC Engineer & Initials	
Supervisor's Name:	Armando Arroyo	_____
	Principal Civil Engineer & Initials	
Work Order Closure processed ?	☑ Yes ☐ No	

EMWD's Disposition:

Initials: **Date:**