APPENDIX G
TRAFFIC MEMO

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URBAN CROSSROADS

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Ms. Julie Gilbert
Jericho Systems, Inc.
47 First Street
Redlands, CA 92373

SUBJECT: SIX WATER BASINS CONSTRUCTION TRIP GENERATION ASSESSMENT

Dear Ms. Julie Gilbert:

The following Construction Trip Generation Assessment has been prepared for the proposed Six Water Basins(referred to as "Project") which refers to the six interconnected groundwater sub-basins that lie just south of the San Gabriel Mountains in eastern Los Angeles County and western San Bernardino County.

PROJECT DESCRIPTION

The Three Valleys Municipal Water District (TVMWD) is a public agency, created in 1950, that provides wholesale water function for the communities of Claremont, Covina, Glendora, La Verne, Pomona, San Dimas, Rowland Heights, Walnut, and West Covina (approximately 133 square miles). TVMWD serves as the lead agency for the Six Basins Watermaster (6BWM) Strategic Plan which has been used to help chart out future projects and programs.

The Six Basins is comprised of adjacent groundwater basins located south of the San Grabiel Mountains:

- **Pomona Basin** – the sub-basin that underlies portions of the City of Claremont, City of La Verne, and the City of Pomona within the Counties of Los Angeles and San Bernardino.
- **Canyon Basin** – the sub-basin that underlies portions of San Antonio Heights, the City of Claremont, and the City of Upland within the County of Los Angeles and County of San Bernardino.
- **Upper Claremont Heights Basin** – the sub-basin that underlies portions of San Antonio Heights, the City of Claremont, and the City of Upland within the Counties of Los Angeles and San Bernardino.
- **Lower Claremont Heights Basin** – the sub-basin that underlies portions of the City of Claremont and the City of Pomona within the County of Los Angeles.
- **Live Oak Basin** – the sub-basin that underlies portions of the City of Claremont, City of La Verne, and the City of Pomona within the County of Los Angeles.
- **Ganesha Basin** – the sub-basin that underlies portions of the City of La Verne within the County of Los Angeles.

Groundwater pumped from the Six Basins are for municipal uses by public water-supply agencies and mutual water companies responsible for supplying water. Surface water runoff from precipitation from the San Gabriel Mountains is the primary source of groundwater for the Six Basins. The purpose

of the Strategic Plan is to develop a water-resources management program for the water supply to the Six Basins.

A new treatment facility is proposed within the Pomona Basin on an approximately 3-acre site. The site will be similar to the existing site at Reservoir 4. The new treatment facility will include 6 new wells and pipelines necessary to connect the new wells and treatment facility. Development of the new treatment facility will require excavation and removal of material from the site.

PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. The trip generation for this assessment has been developed upon anticipated construction activities and operations. The following vehicles and activity have been assumed for the purposes of developing the trip generation:

- All construction activities are to occur between the hours of 7 AM and 6 PM, Monday through Saturday (excludes Sundays and Holidays)
- Staging of equipment is assumed to occur on-site, so no daily arrival/departure of equipment is assumed to occur.
- New Treatment Facility: The number of construction workers is assumed to be 15, including equipment operators and laborers. This results in approximately 30 passenger car trips per day (15 employees x 2-way trip [inbound and outbound] = 30 trips per day). Based on the hours of construction, the employees are anticipated to arrive on-site prior to the AM peak period (7-9 AM) and depart after the PM peak period (4-6 PM).
- New Well Sites: The number of workers is assumed to be 6. This results in approximately 12 passenger car trips per day (6 employees x 2-way trip [inbound and outbound] = 12 trips per day). Based on the hours of construction, the employees are anticipated to arrive on-site prior to the AM peak period (7-9 AM) and depart after the PM peak period (4-6 PM).
- New Pipeline: The number of construction workers is assumed to be 15, including equipment operators and laborers. This results in approximately 30 passenger car trips per day (15 employees x 2-way trip [inbound and outbound] = 30 trips per day). Based on the hours of construction, the employees are anticipated to arrive on-site prior to the AM peak period (7-9 AM) and depart after the PM peak period (4-6 PM).

Each employee is assumed to drive to and from the construction site each day. It has been assumed that employees will arrive up to 30 minutes prior to the workday and will leave up to 30 minutes after the workday ends.

Export will be taken to the following spreading ground sites:

- San Antonio Spreading Grounds; approximately 350,000 cubic yards

- Thompson Creek Spreading Grounds; approximately 160,000 cubic yards
- Pedley Spreading Grounds; approximately 4,500 cubic yards
- Fairplex Site; approximately 14,000 cubic yards

As shown in Table 1, the Project is anticipated to generate 192 vehicles per day with 12 AM peak hour trips and 12 PM peak hour trips. This equates to approximately 432 passenger car equivalent (PCE) vehicles per day with 36 PCE AM peak hour trips and 36 PCE PM peak hour trips.

TABLE 1: PROJECT TRIP GENERATION SUMMARY

Land Use	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Actual Vehicles							
Project							
Passenger Cars (Employees)[1]:	0	0	0	0	0	0	72
Truck Trips (4+-Axle)[2]:	6	6	12	6	6	12	120
TOTAL TRIPS (Actual Vehicles)[3]	**6**	**6**	**12**	**6**	**6**	**12**	**192**
Passenger Car Equivalent (PCE)							
Project							
Passenger Cars (Employees)[1]:	0	0	0	0	0	0	72
Truck Trips (4+-Axle) (PCE Factor = 3.0)[2]:	18	18	36	18	18	36	360
TOTAL TRIPS (PCE)[3]	**18**	**18**	**36**	**18**	**18**	**36**	**432**

[1] Employee shifts occur outside of the typical 7-9 AM and 4-6 PM peak periods.

[2] Conservatively assumed 350,000 cubic yards/year and 16 cubic yard haul trucks over 365-days for a total of 120 two-way truck trips. Trucks during the peak hour are assumed to be evenly spread throughout the 10-hour work day.

[3] TOTAL TRIPS = Passenger Cars + Truck Trips.

FINDINGS

As shown in Table 1, the Project is anticipated to generate fewer than 50 AM and PM peak hour trips. As such, traffic impacts associated with employee and construction-related export is considered less than significant. The following mitigation measures would ensure that traffic impacts would be less than significant for the morning and evening peak periods (7 AM – 9 AM and 4 PM – 6 PM) during the construction phase:

Mitigation Measure 1.1 – The Project Applicant will be required to develop and implement an approved Construction Traffic Management Plan addressing potential construction-related traffic detours and disruptions. In general, the Construction Traffic Management Plan would ensure that to the extent practical, construction traffic would access the Project site during off-peak hours or limited access during the peak hours; and that construction traffic would be routed to avoid travel through, or proximate to, sensitive land uses.

Mitigation Measure 2.1 – The delivery and removal of heavy equipment is recommended during off-peak hours to minimize the heavy truck activity during the morning and evening peak periods (7 AM to 9 AM and 4 PM to 6 PM) in order to have nominal impacts to traffic and circulation near the vicinity of the Project.

Mitigation Measure 3.1 – During the site grading, the Project shall limit export activity from the site during the hours of 7 AM – 9 AM (morning peak period) and 4 PM – 6 PM (evening peak period) to fewer than the equivalent of 50 passenger car equivalent (PCE) truck trips per hour. 50 PCE truck trips equates to approximately 16 total trucks (8 trucks in and 8 trucks out) during the peak periods specified above in order to limit the potential impacts of haul truck activity during these busy commute times:

50 PCE truck trips / 3.0 PCE factor = 16 total trucks during the peak hour

If you have any questions, please contact me directly at (949) 336-5982.

Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE
Associate Principal