



An Employee-Owned Company

March 23, 2018

Ms. Cheryl Goddard, Senior Planner
City of Chula Vista
Development Services Department
276 Fourth Avenue
Chula Vista, CA 91910

Reference: 701 D Street Park Air Quality Analysis Addendum (RECON Number 8819)

Dear Ms. Goddard:

RECON has reviewed the revised site plan submitted by the City of Chula Vista on the 701 D Street Park Project. This letter is intended to provide the City with additional information relative to the findings of the Air Quality Analysis for the D Street Park Project Chula Vista, California (project Air Quality Analysis), prepared August 18, 2017.

The revised project plans would locate a community garden in the western end of the proposed park near Interstate 5. Therefore, the City has requested additional information on the potential cancer risk from diesel-exhaust particulate matter (DPM) due to the closer proximity of people using the garden to Interstate 5 than previously assessed. Additionally, the City has requested information on the potential for additional cancer risks from ingestion of DPM due to crops grown within the community garden, see Attachment 1.

Details of calculation methodologies and dispersion modeling inputs are included in the project Air Quality Analysis. The following analysis is based on the ground-level concentrations modeling in the project Air Quality Analysis.

Inhalation Risk

Cancer risk associated with inhalation pathways was assessed in the project Air Quality Analysis. The project would result in an incremental cancer risk of 4.2 in one million. This assumed an average exposure of 0.04 microgram per cubic meter ($\mu\text{g}/\text{m}^3$). The proposed community garden is located between 20 and 90 feet from the western property line. Based on Figure 4 of the project Air Quality Analysis, this would result in exposures to ground-level concentrations of DPM between 0.06 and 0.05 $\mu\text{g}/\text{m}^3$ and result in 30-year cancer risks between 5.2 and 6.3 in one million. As the excess cancer risk would remain below 10 in one million, the findings of the project Air Quality Analysis would not change.

Ingestion of DPM

A small subset of toxic substances are subject to deposition onto soil, plants, and water bodies. These substances need to be evaluated by the appropriate non-inhalation pathways, as well as by the inhalation pathway. Potential non-inhalation pathways include: soil ingestion; dermal contact; meat, milk and egg ingestion; fish ingestion; exposed vegetable ingestion; leafy vegetable ingestion; protected vegetable ingestion; root vegetable ingestion; water ingestion; or breast milk ingestion. Substances subject to deposition onto soil, plants, and water bodies are referred to as multi-pathway substances. Such substances include semi-volatile organic chemicals and heavy metals. According to the 2015 *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments*, issued by the Office of Environmental Health Hazard Assessment, DPM is not considered a multi-pathway substance. Therefore, cancer risk associated with DPM is limited to inhalation pathways and no additional cancer risk would be associated with ingestion of DPM.

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In conclusion, locating a community garden near Interstate 5 would not result in significant DPM cancer risks. No change in findings of the Air Quality Analysis would occur.

Please let me know if you have any questions or require any further information.

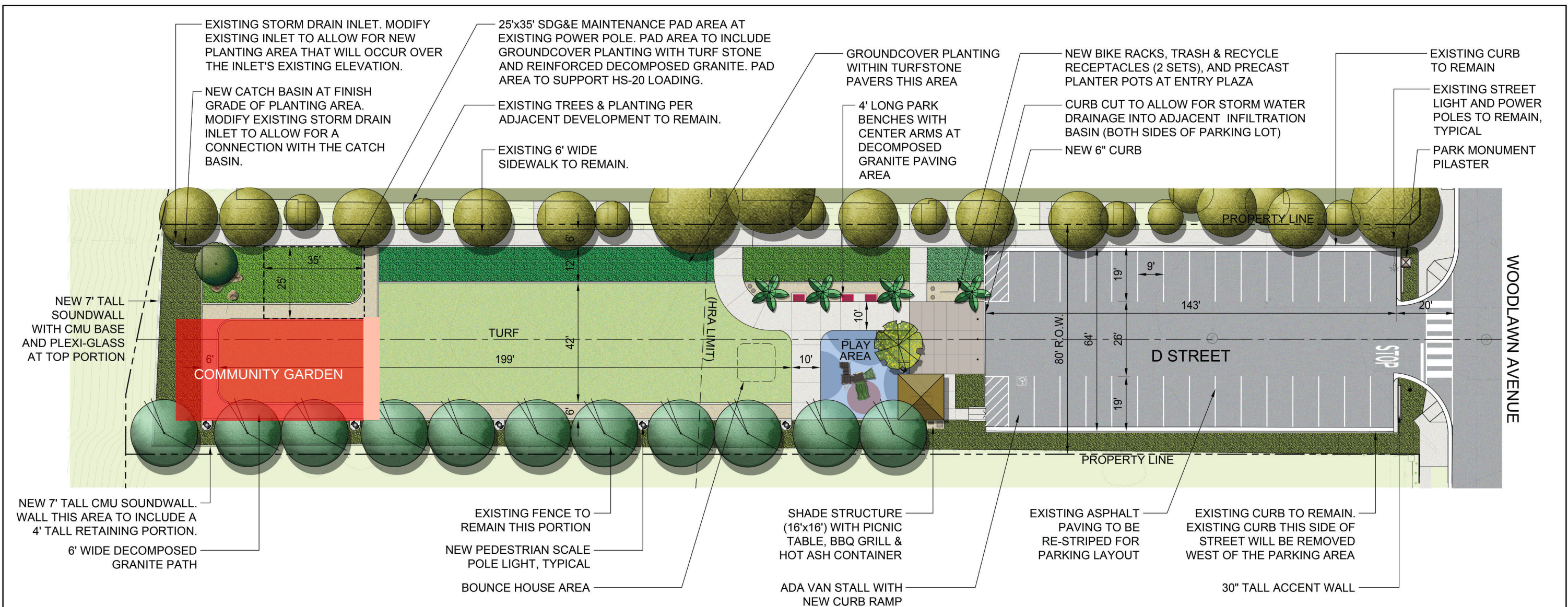
Sincerely,

A handwritten signature in dark ink, appearing to read "William A. Maddux". The signature is fluid and cursive, with a large, stylized "W" and "M".

William Maddux
Senior Technical Specialist

WAM:eab

ATTACHMENT 1



DESIGN STATEMENT

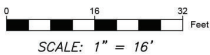
THE PARK HAS BEEN DESIGNED TO ENHANCE THE EXISTING URBAN CONDITION BY UTILIZING AN UNDERUSED EXISTING RIGHT OF WAY FOR PARKLAND PURPOSES. THE PARK INTENDS TO PROVIDE A PLEASING PLACE OF RESPIRE FOR NEARBY RESIDENTS. THE PARK IS DESIGNED TO ALLOW FOR AN OPEN AND CLEARLY VISIBLE PARK SPACE THAT TAKES ADVANTAGE OF ITS PROMINENT VIEWS TO THE WEST. INCLUDED IN THE DESIGN IS A SMALL ENTRY PLAZA, A PLAY ELEMENT FOR CHILDREN BETWEEN THE AGES OF 2 AND 5 YEARS, AND A TURF AREA FOR INFORMAL PLAY. A DECOMPOSED PATHWAY ON THE PARK'S SOUTH END OFFERS A LOOPED PEDESTRIAN PATHWAY THROUGHOUT THE SPACE. THE DESIGN SHALL EMPLOY LOW GROWING DROUGHT TOLERANT PLANTING AND ACCENT TREES FOR SHADE OR SEASONAL INTEREST.

NOTES

- THE PARK WILL OCCUR WITHIN THE EXISTING 80 FT. RIGHT OF WAY FOR D STREET. CONSTRUCTION OF THE PARK WILL INCLUDE REMOVING PORTIONS OF THE EXISTING STREET'S ASPHALT SURFACING AND SUB-BASE FOR THE PARK AREA WEST OF THE PARKING AREA. THE PARKING AREA WILL RETAIN THE EXISTING ASPHALT SURFACING AND PROVIDE NEW STRIPING FOR THE PARKING AREA LAYOUT. A NEW 6" CURB WILL BE PROVIDED AT THE WESTERN END OF THE PARKING AREA. IMPORT SOIL WILL BE PROVIDED IN THE PARK AREA WEST OF THE NEW 6" CURB. THE FINISH GRADES OF THE PARK AREA WILL BE 6 INCHES ABOVE THE EXISTING ASPHALT SURFACE.
- THE PROPOSED PARK DESIGN WILL REDUCE THE IMPERMEABILITY THAT CURRENTLY EXISTS FOR THIS PORTION OF D STREET. ALL REMAINING STORMWATER WILL BE TREATED ON SITE THROUGH BIOFILTRATION AND/OR A VEGETATED SWALES. A STORM WATER QUALITY REPORT WILL BE REQUIRED FOR APPROVAL PRIOR TO CONSTRUCTION OF THE PROJECT.
- THE PARK PROVIDES 29 STANDARD PUBLIC PARKING STALLS AND 1 PUBLIC ADA PARKING STALL. THE PARK SHALL ALSO RESERVE 7 STANDARD PARKING STALLS AND THE 1 ADA PARKING STALL FOR PARK USERS DURING NOTED PARK HOURS.
- FOR THE PROTECTION OF THE EXISTING OVERHEAD POWER LINES ALONG THE PARK'S NORTHERN EDGE, SDG&E HAS REQUESTED THAT NO BALLOONS OR FLYING OF KITES BE PERMITTED WITHIN THE PARK.
- THE LANDSCAPE AND IRRIGATION SHALL COMPLY WITH THE CITY OF CHULA VISTA WATER CONSERVATION ORDINANCE IN CHAPTER 20.12 OF THE MUNICIPAL CODE, THE CITY OF CHULA VISTA DESIGN MANUAL, AND THE CITY OF CHULA VISTA LANDSCAPE MANUAL.

PRELIMINARY PLANTING LEGEND

- PROPOSED TREE SUCH AS:
 - ARBUTUS 'MARINA'
 - CERCIDIUM 'DESERT MUSEUM'
 - LAGUNARIA PATTERSONIA (NORFOLK ISLAND HIBISCUS)
- PROPOSED PALM SUCH AS:
 - TRACHYCARPUS FORTUNEI (WINDMILL PALM)
- PROPOSED SHRUBS AND GROUNDCOVER SUCH AS:
 - AGAVE SPP. (AGAVE SPECIES)
 - ARTEMISIA 'POWIS CASTLE' (SAGEBRUSH 'POWIS CASTLE')
 - ANIGOZANTHOS HYBRIDS (RED KANGAROO PAW)
 - ARMERIA MARITIMA (SEA PINK)
 - CISTUS 'SUNSET' (ROCKROSE 'SUNSET')
 - GAMBELIA SPECIOSA (ISLAND SNAPDRAGON)
 - IVA HAYESIANA (SAN DIEGO MARSH ELDER)
 - LANTANA SPP. (LANTANA)
 - LEYMUS CONDENSATUS 'CANYON PRINCE' (WILD RYE)
- PROPOSED SHRUBS AND GROUNDCOVER SUCH AS (CONT'D):
 - LONICERA JAPONICA 'HALLIANA' (HALL'S JAPANESE HONEYSUCKLE)
 - MUHLENBERGIA RIGENS (DEER GRASS)
 - PITTOSPORUM 'WHEELERS DWARF' (DWARF MOCK ORANGE)
 - RHAPHIOLEPIS INDICA 'BELLERINA' (INDIA HAWTHORN BALLERINA)



DRAFT PARK MASTER PLAN - D STREET @ WOODLAWN AVENUE