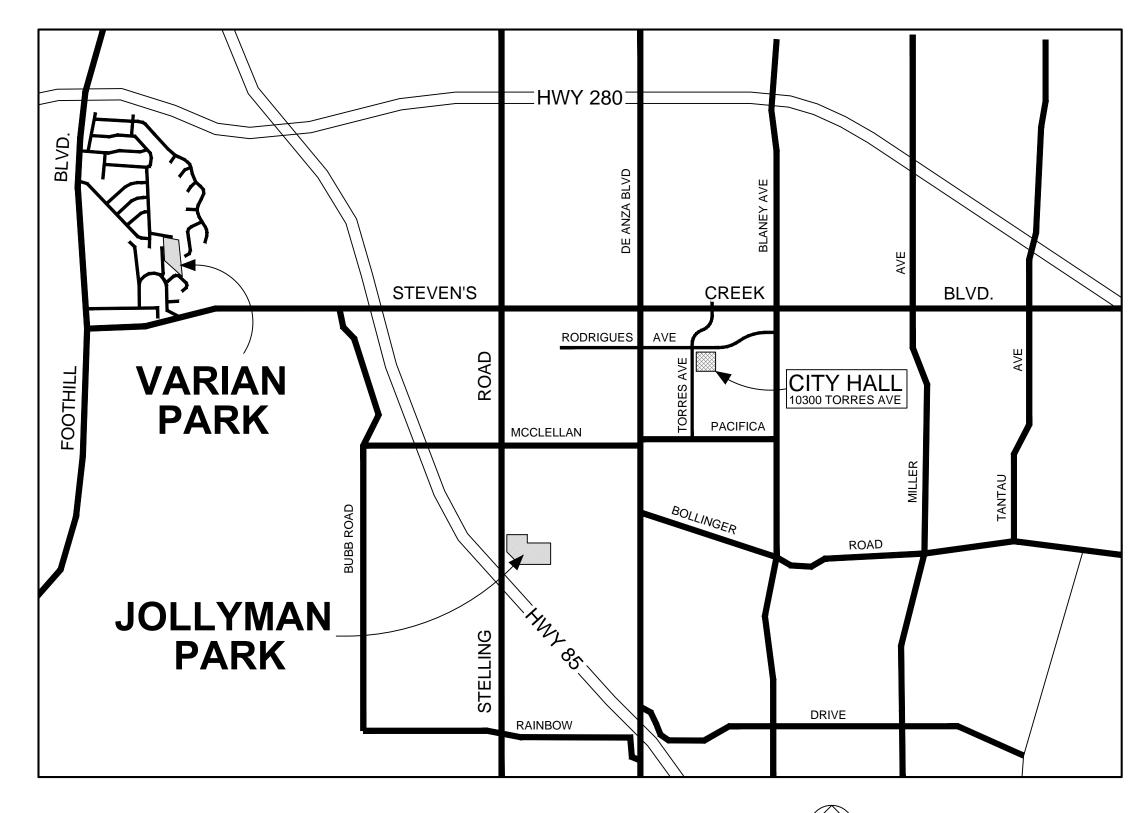
PROJECT NO. 2016-03.01

- EXISTING SITE FACILITIES (WHICH MAY OR MAY NOT BE SHOWN DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR
- ALL AREAS OF NEW & EXISTING CONCRETE SIDEWALK, CURB &/OR GUTTER WHICH ARE CHIPPED. BROKEN OR DAMAGED CONCRETE REPAIRS SHALL EXTEND TO THE NEAREST
- CONTRACTOR SHALL PREVENT VEHICLES & HEAVY EQUIPMENT EXCAVATION WITHIN 10' OF TREE TRUNKS TO BE PERFORMED BY HAND DIGGING ONLY UNLESS OTHERWISE DIRECTED BY CITY REPRESENTATIVE. TREE PROTECTION FENCING SHALL BE INSTALLED PER CITY STANDARD DETAIL 6-4 (SEE SHEET NO. 3).
- CONTRACTOR SHALL TAKE CARE TO AVOID CUTTING THROUGH TREE ROOTS LARGER THAN 2" IN DIAMETER WITHOUT PRIOR APPROVAL OF PROJECT ARBORIST. IF ANY TREE ROOTS 2" OR LARGER IN DIAMETER ARE FOUND WITHIN LIMITS OF WORK & DETERMINED TO CONFLICT WITH PLAN, CONTRACTOR SHALL NOTIFY CITY REPRESENTATIVE FOR DIRECTION PRIOR TO PROCEEDING WITH THE WORK.
- TREES, ROOTS, AND FOREIGN MATTER IN EXISTING OR PROPOSED RIGHT-OF-WAY SHALL BE REMOVED TO A DEPTH OF TWO (2) FEET BELOW SUBGRADE AND DISPOSED OF PER CALTRANS STANDARDS. IN THE CASE OF LIVE TREE ROOTS FROM CITY STREET TREES, CONTRACTOR SHALL CONTACT THE CITY REPRESENTATIVE IN COORDINATION W/THE PROJECT ARBORIST PRIOR TO CONTINUATION OF THE WORK FOR FIELD OBSERVATION PRIOR TO REMOVING TREE ROOTS.
- CONTRACTOR SHALL INSTALL TEMPORARY EROSION & SEDIMENT CONTROL FACILITIES AT ALL OPEN DRAIN INLETS, CURB INLETS & DRAINAGE FACILITIES WITHIN OR IMMEDIATELY ADJACENT TO ZONE OF CONSTRUCTION TO PREVENT STORMWATER POLLUTION. POLLUTION PREVENTION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE PROJECT & SHALL BE REMOVED WITHIN 7 DAYS OF FINAL ACCEPTANCE OF THE WORK.
- CONTRACTOR SHALL CLEAN ALL LOOSE ROCK, DEBRIS, VEGETATION & DELETERIOUS MATERIAL FROM ROADWAY, PARKING LOT SURFACE & SIDEWALKS AT THE END OF EACH WORKING DAY.
- ANY UTILITY BOXES LOCATED WITHIN CONSTRUCTION AREAS SHALL BE ADJUSTED TO FINISHED GRADE. IF BOXES ARE NOT REUSABLE, CONTRACTOR SHALL INSTALL NEW BOXES TO MATCH EXISTING.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (2010 EDITION, AS AMENDED), AND STANDARD PLANS (2010 EDITION, AS AMENDED), AND CITY OF CUPERTINO STANDARD DETAILS. THE CONTRACTOR SHALL PERFORM THE WORK DESCRIBED IN THE SPECIFICATION, AND AS SHOWN ON THE DRAWINGS, AND TO THE SATISFACTION OF THE CITY

- OR CONTRACTOR.
- ENSURE THE APPROVED PLANS OR THE LATEST REVISED PLANS ARE FURNISHED TO ITS SUBCONTRACTORS, AND TO ENSURE THE LATEST APPROVED PLANS ARE ONSITE AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF CUPERTING PUBLIC WORKS INSPECTOR TWO (2) WORKING DAYS PRIOR TO REQUIRING AN INSPECTION. CALL (408) 777-3104 TO SCHEDULE PUBLIC WORKS INSPECTIONS.
- 13. CONSTRUCTION AREA TRAFFIC CONTROL DEVICES SHALL BE INSTALLED PRIOR TO BEGINNING OF WORK.
- 14. THE CONTRACTOR SHALL LOCATE UNDERGROUND FACILITIES IN THE AREA OF WORK. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT 811 TWO (2) WORKING DAYS IN ADVANCE OF ANY WORK FOR LOCATION OF THE UNDERGROUND FACILITIES.
- 15. ALL TRENCH BACKFILL, FILL AREAS, AND BASE MATERIAL UNDER HOT MIX ASPHALT SURFACES SHALL ATTAIN A MINIMUM 95% RELATIVE COMPACTION. BASE MATERIAL UNDERNEATH CONCRETE FACILITIES INCLUDING SIDEWALKS, CURB & GUTTER, CURB RAMPS, ETC. SHALL ATTAIN A MINIMUM 90% RELATIVE COMPACTION.
- 16. FIVE (5) WORKING DAYS PRIOR TO INSTALLING PERMANENT STRIPING, THE CONTRACTOR SHALL COORDINATE A MEETING AT THE SITE WITH THE CITY TRAFFIC ENGINEER TO VERIFY PLACEMENT OF ALL PAINTED LEGENDS & ROADWAY STRIPING. THE CITY ENGINEER SHALL HAVE THE RIGHT TO MAKE CHANGES IN THE LOCATION OF THE ALIGNMENT OF TRAFFIC STRIPES, PAVEMENT MARKINGS, AND PAVEMENT MARKERS.
- 17. CONCRETE FOR USE IN ALL CONCRETE STRUCTURES SHALL CONFORM TO CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 90. DROP INLETS, SIDEWALKS, CURBS AND GUTTERS SHALL CONTAIN 590 LBS. OF CEMENT PER CUBIC YARD AND SHALL ATTAIN A MINIMUM STRENGTH OF 3,000 PSI IN 28 DAYS.
- 18. ONE POUND OF DISPERSING BLACK SHALL BE MIXED WITH EACH CUBIC YARD OF CONCRETE AT THE BATCH PLANT.
- 19. CONSTRUCTION SURVEY STAKES OR MARKS (CONTROL STAKES) TO ESTABLISH LINES AND GRADES SHALL BE SET BY THE CONTRACTOR'S SURVEYOR OR ENGINEER.
- 20. NOTIFY THE CITY INSPECTOR TWO (2) WORKING DAYS IN ADVANCE OF REQUIRING SERVICES FOR CHECKING FIELD STAKING. TLU-EE (3) COPIES OF THE CUT SHEETS SHALL BE FURNISHED TO THE CITY INSPECTOR.



LOCATION MAP: CITY OF CUPERTINO



TABLE OF CONTENTS	
SHEET#	DESCRIPTION
1	TITLE SHEET
2	JOLLYMAN PARK (PATHWAY) - SITE PLAN
3	JOLLYMAN PARK (PLAYGROUND AREA) - DEMOLITION PLAN
4	JOLLYMAN PARK (PLAYGROUND AREA) - SITE PLAN
5	VARIAN PARK - SITE PLAN
6	DETAILS
	CITY OF CUPERTINO - BMP INFORMATION

CONTACT INFORMATION

CITY OF CUPERTINO PUBLIC WORKS DEPT. ATTN: ALEX ACENAS

(408) 777-3354 (OFFICE) 10300 TORRE AVENUE CUPERTINO, CA 95014 AlexA@cupertino.org

REVIEWED BY:

PAVEMENT ENGINEERING INC.

ATTN: MIKE WASDEN, PROJECT MANAGER (707) 695-5327 (CELL) 3820 CYPRESS DRIVE, SUITE 3 PETALUMA, CA 94954 mikew@pavementengineering.com

Menas ALEX ACENAS PUBLIC WORKS PROJECT MANAGER APPROVED BY:

TIMM BORDEN, RLE #45512 DIRECTOR OF PUBLIC WORKS



VAR EET **∞** I

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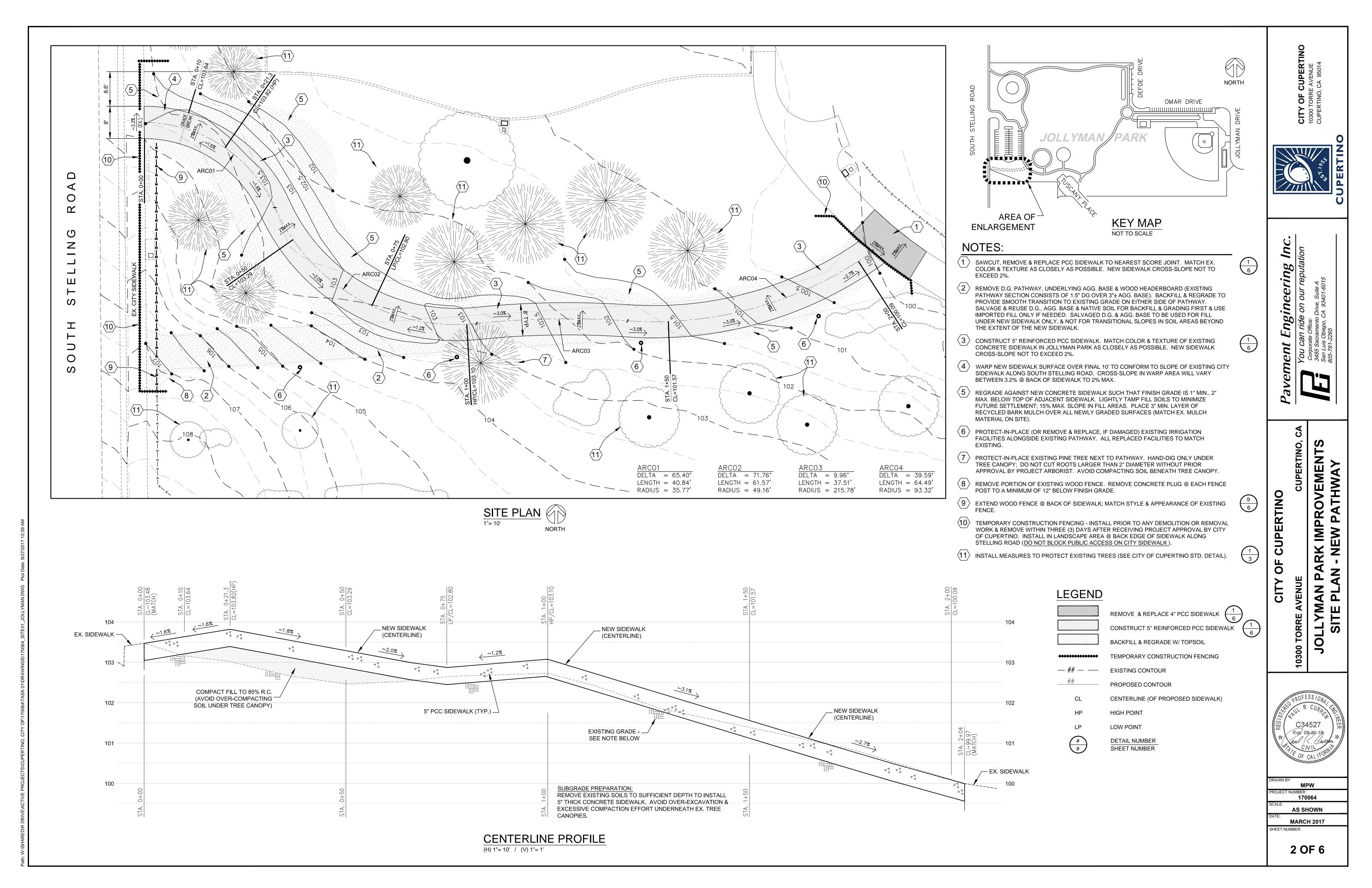
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JUNE 2016

1 OF 6



- Prior to any construction operations contractor shall construct and maintain, for each protected tree on a construction site, a protective fencing
 which encircles the outer limits of the critical root zone(CRZ) of the tree to protect it from construction activity. The CRZ is calculated 1.25 feet
 times the diameter of the trunk measured in inches 4.5 feet above the natural grade).
- 2. All protective fencing shall be in place prior to commencement of any site work and remain in place until all exterior construction activity at the site has been completed.
- 3. Protective fencing shall be at least six (6) feet high, clearly visible, and shall have a tree protection sign affixed to the fence every twenty (20) feet in such a manner to be clearly visible and legible to workers on the site at a distance of twenty-five (25) feet. The sign(s) shall read "Tree Protection Zone Keep out".
- 4. The owner shall cause the required fencing and signage to be installed and maintained for the duration of the construction.
- 5. In situations where a protected tree remains in the immediate area of intended construction and the tree may be in danger of being damaged by construction equipment or other activity, the contractor or subcontractor shall protect the tree with 2"x4" lumber encircled with wire or other means that do not damage the tree. The intent is to protect the trunk of the tree against incidental contact by large construction equipment.
- Material Storage: No storage or placement of materials intended for use in construction or waste materials accumulated due to excavation or demolition shall be placed within the limits of the critical root zone of any protected tree.
- Equipment Cleaning/Liquid Disposal: No equipment shall be cleaned or other liquids, including, without limitation, paint, oil, solvents, asphalt, concrete, mortar or similar materials deposited or allowed to flow into the critical root zone of a protected tree.
- 8. Tree Attachments: No signs, wires or other attachments, other than those of a protective nature, shall be attached to any protected tree.
- Vehicular Traffic: No vehicular and/or construction equipment traffic or parking shall take place within the critical root zone of any protected tree other than on existing street pavement.
- 10. No heavy equipment, including but not limited to trucks, tractors, trailers, bulldozers, excavators, skid steer tractors, trenchers, compressors, and hoists, shall be allowed inside the drip-line of any protected tree on any construction site.
- 11. Grade Changes: No grade changes shall be allowed within the limits of the critical root zone of any protected tree unless adequate protective construction methods are approved in advance in writing by the city.
- 12. Impervious Paving: No paving with asphalt, concrete or other impervious materials shall be placed within the limits of the critical root zone of a protected tree, unless expressly permitted by the public works Dept
- 13. Root Pruning: All roots two inches or larger in diameter which are exposed as a result of trenching or other excavation shall be cut off square with a sharp medium tooth saw and covered with natural fiber burlap within two hours of initial exposure.
- 14. All public sidewalks shall remain open, free and clear for public access, unless closure is permitted by the Public Works Department.

TREE PROTECTION STANDARDS

REVISED 5/13

CITY OF CUPERTINO STANDARD DETAILS APPROVED BY: DATE: 7/19/3

6-4

(1) CITY OF CUPERTINO STD. DETAIL 6-4: TREE PROTECTION STANDARDS
NTS

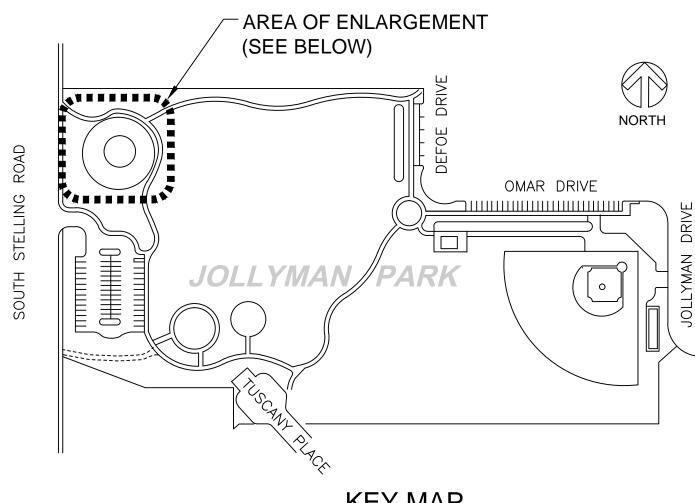
LEGEND

REMOVE CONCRETE FACILITIES

FIBAR SURFACE (SEE NOTE NO. 4)

DEMOLITION PLAN NOTES:

- SAWCUT @ NEAREST JOINT & REMOVE EXISTING SIDEWALK. MINIMIZE DISTURBANCE TO UNDERLYING BASE ROCK UNLESS NECESSARY.
- $\langle 2 \rangle$ SAWCUT & REMOVE CONCRETE MOW BAND.
- REMOVE CONCRETE SIDEWALK & RAMP TO PLAYGROUND AREA. MINIMIZE DISTURBANCE TO UNDERLYING BASE ROCK UNLESS NECESSARY.
- COLLECT FIBAR SURFACE MATERIAL IN PLAYGROUND AREA ADJACENT TO CONCRETE REPAIRS & STORE ON SITE FOR REUSE. PROTECT STOCKPILED MATERIAL FROM ACCIDENTAL DISPERSION & CONTAMINATION FROM CONSTRUCTION DEBRIS, SOIL, BASE ROCK, ETC.
- PROTECT EXISTING TREES ADJACENT TO CONSTRUCTION AREA. AVOID DAMAGE TO TRUNKS & BRANCHES THAT OVERHANG INTO CONSTRUCTION AREA. DO NOT CUT OR TRIM ANY BRANCHES UNLESS FIRST AUTHORIZED TO DO SO, IN WRITING, BY THE CITY OF CUPERTINO. AVOID DAMAGE TO ROOTS DURING EXCAVATION WORK & DO NOT ALLOW HEAVY CONSTRUCTION VEHICLES BENEATH TREE CANOPY UNLESS NECESSARY TO DO SO. DO NOT CUT ANY TREE ROOTS LARGER THAN 2 INCHES IN DIAMETER UNLESS FIRST AUTHORIZED TO DO SO. CONTRACTOR SHALL RECEIVE WRITTEN DIRECTION FROM THE CITY REPRESENTATIVE IN COORDINATION W/THE PROJECT ARBORIST PRIOR TO CONTINUATION OF WORK. REFER TO CITY STANDARD DETAIL 6-4 "TREE PROTECTION STANDARDS" (ON THIS SHEET) & THE "TEMPORARY TREE/PLANT PROTECTION SPECIFICATION FOR MORE INFORMATION.
- 6 INSTALL & MAINTAIN TEMPORARY CONSTRUCTION FENCING AROUND PERIMETER OF WORK ZONE FOR THE DURATION OF WORK.
- 7 EXISTING SIGN (TO REMAIN).



KEY MAP NOT TO SCALE

You can ride on our reputat.

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3485 Saramento Drive, Suite A.
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PROJECT NUMBER:

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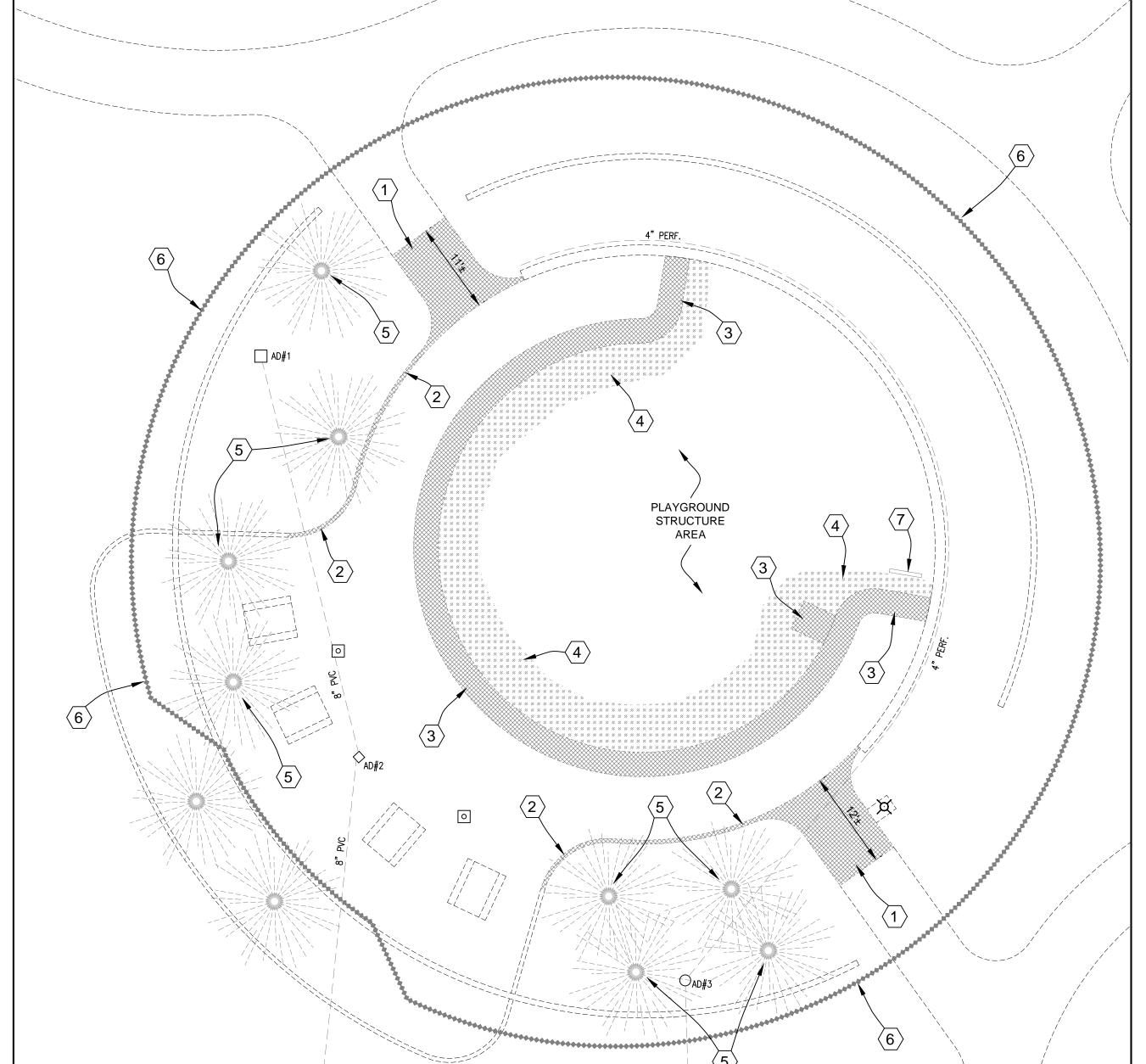
1"= 10'

DATE:

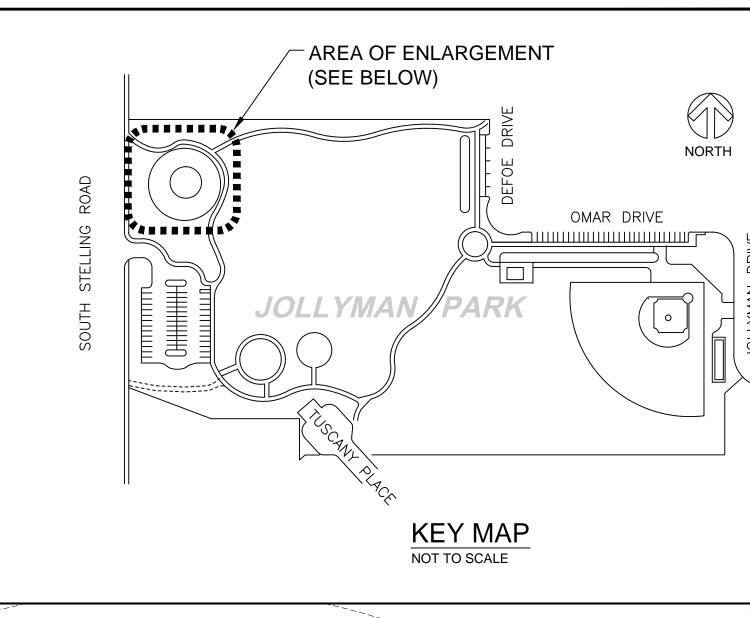
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SHEET NUMBER:

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DEMOLITION PLAN





PLACE (OR REPLACE) 8" MIN. FIBAR LAYER REMOVE & REPLACE/INSTALL 5" THICK PCC SIDEWALK $\begin{pmatrix} 1 \\ 6 \end{pmatrix}$ BACKFILL & REGRADE W/ TOPSOIL INTEGRAL CURB A2 $\begin{pmatrix} 4 \\ 6 \end{pmatrix}$ TEMPORARY CONSTRUCTION FENCING LIGHT STANDARD (EX.) TEMPORARY BENCHMARK SEE SITE PLAN FOR ELEVATION NO CHANGE **EXISTING GRADE** PORTLAND CEMENT CONCRETE SIDEWALK TOP OF GRATE TOP OF CURB XXX.XX DESIGN ELEVATION

/ EXIST. ELEVATION

DETAIL NUMBER

SHEET NUMBER

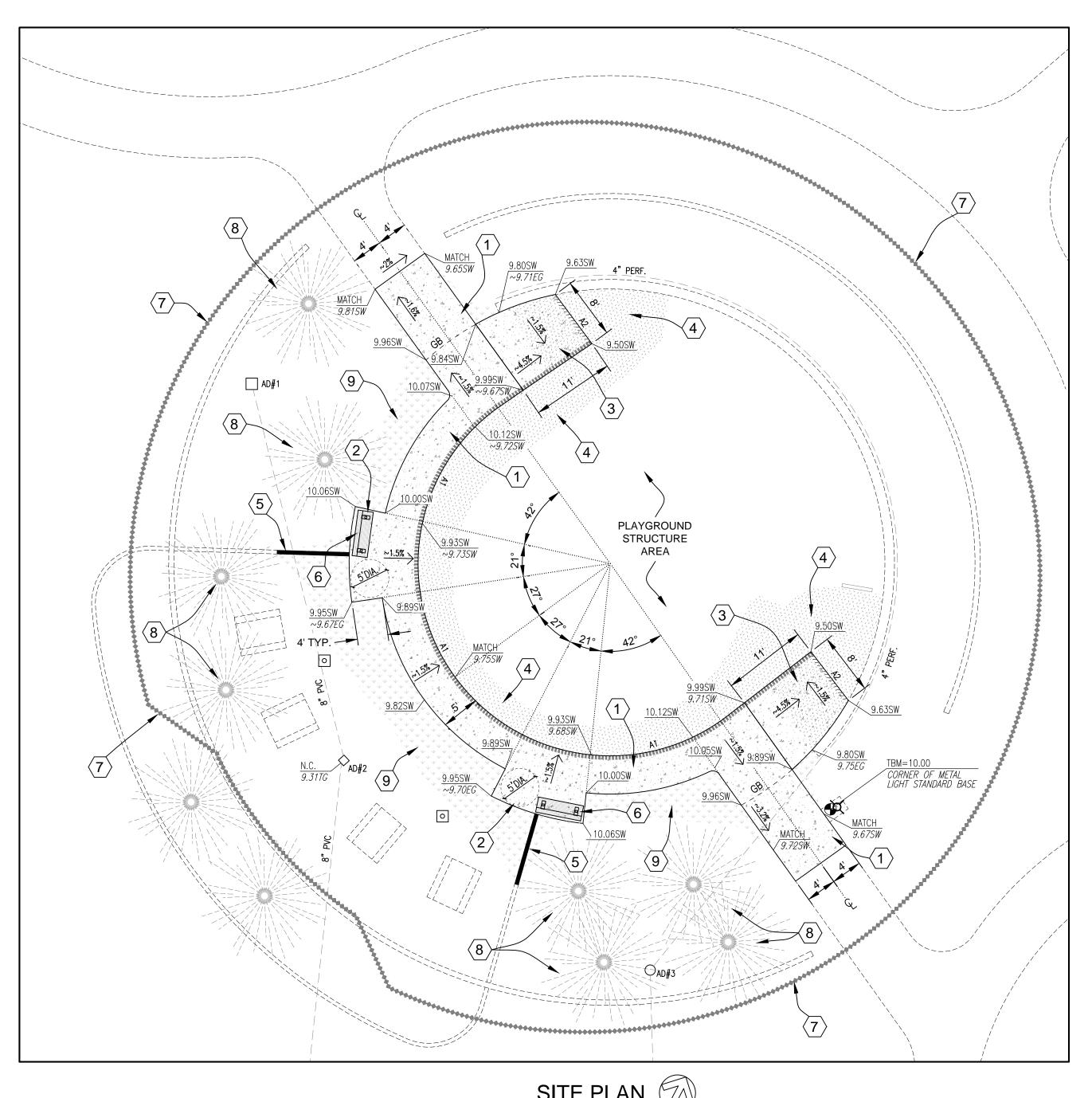
NOTES:

/ XXX.XX

- CONSTRUCT 5" THICK REINFORCED CONCRETE SIDEWALK OVER EXISTING NATIVE &/OR AGG. BASE; 2% MAX. CROSS-SLOPE ON SIDEWALK.
- 2 PLACE 5" THICK REINFORCED CONCRETE SIDEWALK OVER EXISTING NATIVE SOIL FOR ADDITIONAL SEATING AREA; 2% MAX. SLOPE IN ANY/ALL DIRECTIONS.
- $\overline{3}$ CONSTRUCT PCC SIDEWALK W/SLOPING SURFACE TO ACCESS PLAYGROUND AREA; 5% MAX. SLOPE (DESIGNED @ 4.5%±), 2% MAX. CROSS-SLOPE (DESIGNED @ 1.5%±). REPLACE EXCAVATED SOIL AROUND CONCRETE REPAIRS & PLACE 8" MIN. FIBAR CHIP AGAINST CONCRETE REPAIRS. FEATHER FIBAR CHIP MATERIAL OVER TOP OF CONCRETE SURFACE TO PROVIDE SMOOTH TRANSITION TO PLAYGROUND AREA.
- RESTORE FIBAR CHIP SURFACE AGAINST NEW CONCRETE FACILITIES 8" MIN. THICKNESS OF FIBAR LAYER. USE STOCKPILED FIBAR CHIP FIRST, IMPORT & PLACE ADDITIONAL CHIP AS NECESSARY(MATCH. EXISTING). ANY VOIDS RESULTING FROM REMOVAL OF CONCRETE FACILITIES WHICH ARE NOT TO BE REPLACED MAY BE FILLED USING SALVAGED SOILS FROM ON SITE PRIOR TO PLACING 8" MIN. FIBAR CHIP LAYER. SURFACE OF FIBAR CHIP TO BE 1"± FROM TOP OF CONCRETE.
- 5 REPLACE CONCRETE MOW CURB. —
- 6 INSTALL BENCH IN CONCRETE SIDEWALK AREA (SEE BENCH NOTE BELOW).
- TEMPORARY CONSTRUCTION FENCING INSTALL PRIOR TO ANY DEMOLITION OR REMOVAL WORK & REMOVE WITHIN THREE (3) DAYS AFTER RECEIVING PROJECT APPROVAL BY CITY OF CUPERTINO.
- $\langle 8
 angle$ INSTALL MEASURES TO PROTECT EXIST. TREES (SEE CITY OF CUPERTINO STD. DETAIL 6-4).
- BACKFILL W/SALVAGED SITE SOILS OR CLEAN, IMPORTED FILL AGAINST NEW CONCRETE FACILITIES. LIGHTLY COMPACT SOILS TO 85% R.C. SUCH THAT FINISH GRADE IS 1" MAX. BELOW TOP OF ADJACENT CONCRETE SURFACE. AVOID EXCESSIVE COMPACTION EFFORT UNDERNEATH DRIPLINE OF TREES.

BENCHES:

BENCHES TO BE 6' LENGTH, SURFACE-MOUNTED, METAL BASE (DARK GREEN) & RECYCLED PLASTIC SLATS W/WOODGRAIN TEXTURE & NO ARM RESTS. BENCH PRODUCTS: BENCH FACTORY "CHAMPION" BENCH (MODEL TBN-154); BELSON "MALIBU" BENCH (MODEL P-660X); PARK WAREHOUSE "RICHMOND" SERIES (NO MODEL # AVAILABLE); OR APPROVED EQUAL. INSTALL BENCHES PER MANUFACTURER'S DIRECTIONS.





Engineering Inc.

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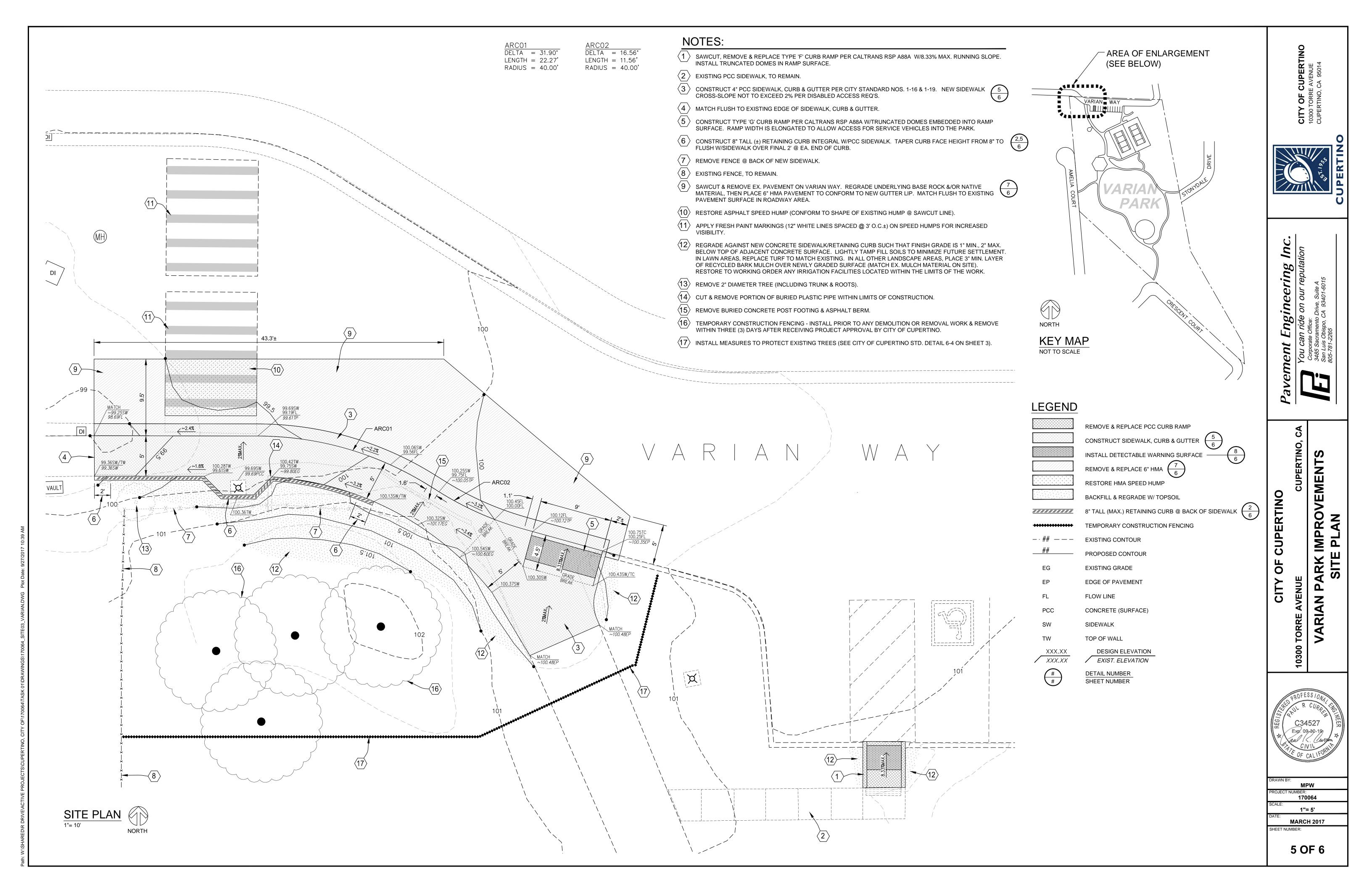
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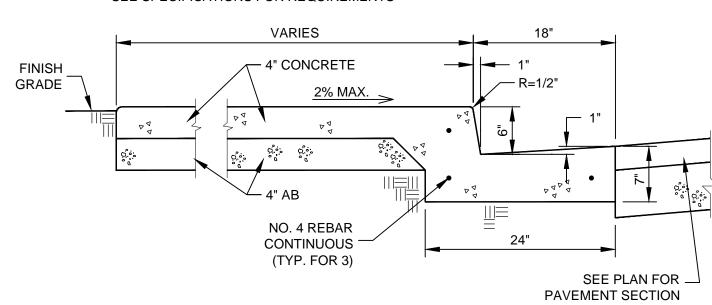


1"= 10' **JUNE 2016**

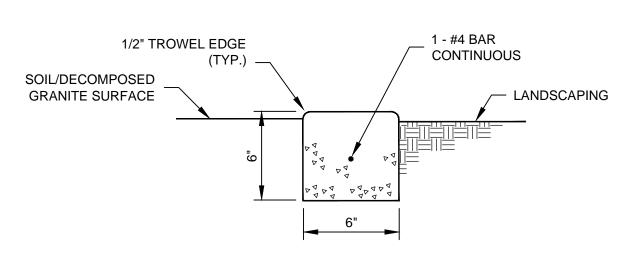
4 OF 6



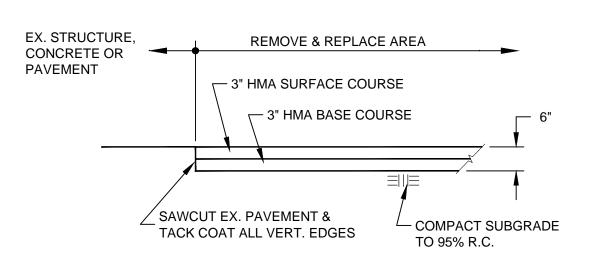
NOTES
CONTROL JOINTS SHALL BE @ 10' O.C. MAXIMUM. SEE SPECIFICATIONS FOR REQUIREMENTS



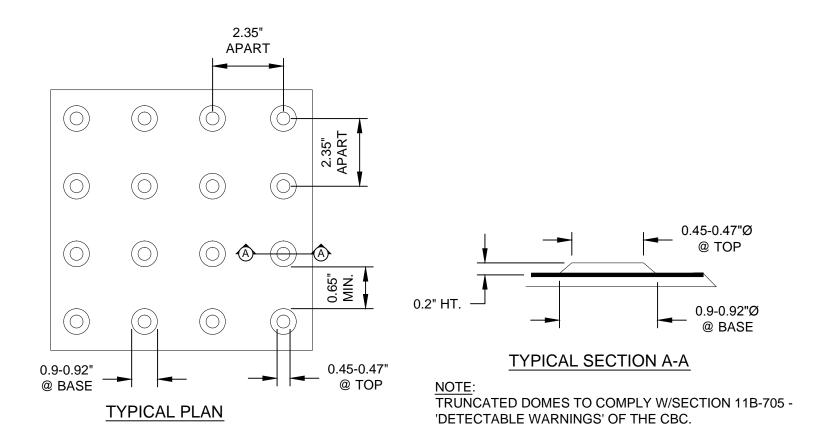
(5) INTEGRAL SIDEWALK, CURB & GUTTER DETAIL (VARIAN PARK)



6 PCC MOW STRIP DETAIL NTS



(7) REMOVE & REPLACE 6" HMA

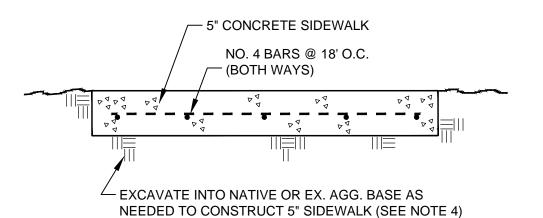


NOTES
1. CONTROL JOINTS @ 10' O.C. MAX.

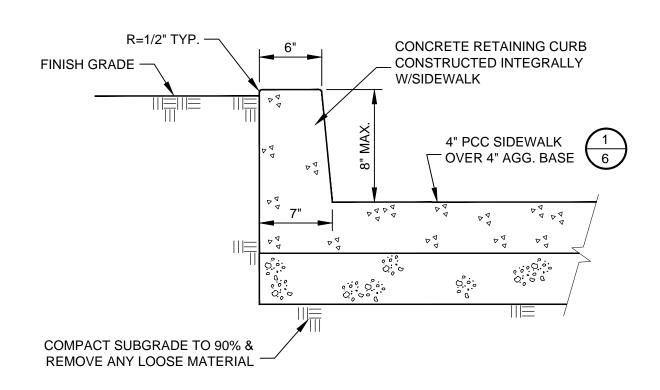
2. 2% MAX. CROSS-SLOPE ON SIDEWALKS CONSTITUTING THE ACCESSIBLE PATH OF

3. MATCH EXISTING COLOR/TEXTURE AS CLOSELY AS POSSIBLE WHERE REMOVING & REPLACING SIDEWALK, OR EXTENDING EXISTING SIDEWALK.

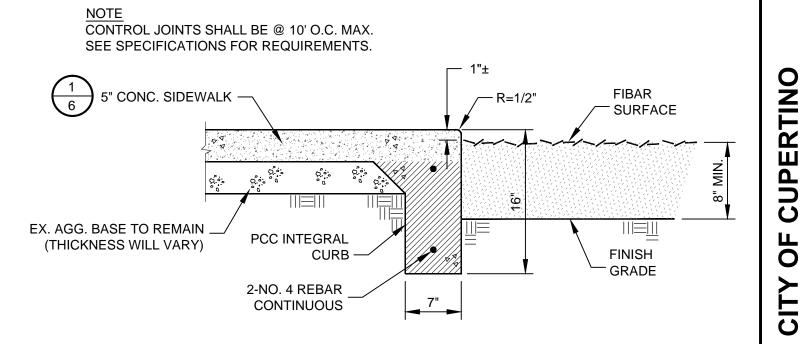
4. IN AREAS OF REMOVE & REPLACE, EXCAVATE & REMOVE BASE ROCK ONLY TO SUFFICIENT DEPTH TO PLACE NEW 5" SIDEWALK. DO NOT RECOMPACT REMAINING AGG. BASE OR NATIVE SURFACE WHEN PLACING SIDEWALK UNDER TREE CANOPY. IN OTHER AREAS BEYOND TREE CANOPY, RECOMPACT UNDERLYING BASE ROCK/NATIVE TO 90% R.C.



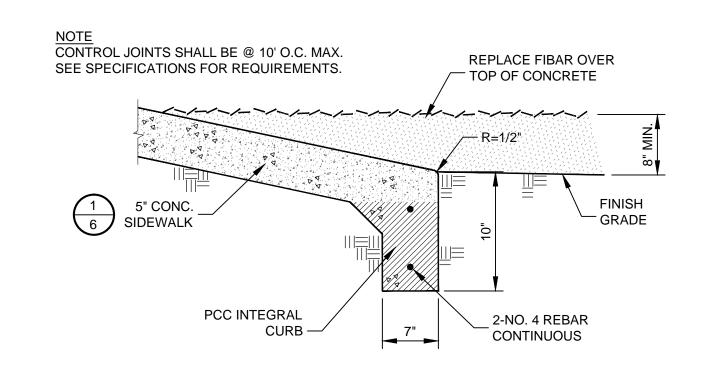
PCC SIDEWALK DETAIL (JOLLYMAN PARK)



MAX. PCC RETAINING CURB W/SIDEWALK



(3) TYPE A1: INTEGRAL SIDEWALK & CURB



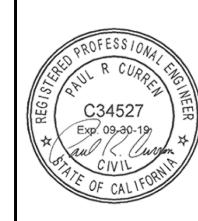
TYPE A2: INTEGRAL SIDEWALK & CURB

CUPERTI RE AVENUE), CA 95014 CITY OF (10300 TORRE CUPERTINO,

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JUNE 2016

6 OF 6

In the Santa Clara Valley, storm drains flow directly to our local creeks, and on to San Francisco Bay, with no treatment.

Storm water pollution is a serious problem for wildlife dependent on our waterways and for the people who live near polluted streams or baylands.

Proper management of construction sites reduces pollution significantly.

This sheet summarizes the "Best Management Practices" (BMPs) for storm water pollution prevention.

ORDINANCE OF THE CITY OF CUPERTINO FOR STORM WATER POLLUTION PREVENTION & WATERCOURSE PROTECTION: Chapter 9.18

9.18.040 Discharge into the storm drain prohibited

It is unlawful to cause, allow, or permit to be discharged, any discharge not composed entirely of stormwater to the storm drain system or to surface waters or to any location where it would contact or eventually be transported to surface waters, including flood plain areas, unless specifically called out in the Municipal Regional Permit as an exempt or conditionally exempt discharge.

9.18.070 Accidental Discharge

All persons shall notify the Director of Public Works immediately upon accidentally discharging pollutants of concern to enable countermeasures to be taken by the City to minimize damage to storm drains and the receiving waters. Initial notification shall be followed, within five (5) business days of the date of occurrence, by a detailed written statement describing the causes of the accidental discharge and the measures being taken to prevent future occurrences. Such notification will not relieve persons of liability for violations of this chapter or for any fines imposed on the City on account thereof under Section 13350 of the California Water Code, or for violation of Section 5650 of the California Fish and Wildlife Code, or any other applicable provisions of State or Federal laws.

9.18.220 Violation*

Any person who violates any provision of this Chapter shall be guilty of a misdemeanor and upon conviction thereof shall be punished as provided in Chapter 1.12 of the City of Cupertino Municipal Code.

Chapter 1.12: General Penalty, Section 1.12.010, paragraph D, states*:

Unless otherwise specified by this code, an infraction is punishable by:

A fine not to exceed \$100 for a first violation

the same chapter within one year.

A fine not to exceed \$200 for a second violation A fine not to exceed \$500 for a third violation of

9.18.240 Civil penalty for illicit discharges*

Any person who discharges pollutants, in violation of this Chapter, by the use of illicit connections shall be civilly liable to the City in a sum **not to exceed twenty-five thousand** dollars per day per violation for each day in which such

*Excerpts – For complete CODE language refer to the City of Cupertino Municipal Code.

> **Building Dept:** 408-777-3228 Public Works Dept: 408-777-3354 Santa Clara County Recycling Hotline:

800-533-8414 www.reducewaste.org www.recyclestuff.com Small Business Hazardous Waste: 408-299-7300

Cupertino Sanitary Sewer Distr 408-253-7071

Santa Clara Valley Urban Runoff Pollution Prevention Prgm 800-794-2482

State Office of Emergency Services 1-800-852-7550 (24 hrs)

Report spills to 911

DIRECTOR OF PUBLIC WORKS

General Construction and Site Supervision

Storm Drain Pollution from Construction Activities

Construction sites are common sources of storm water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay. As a contractor, or site supervisor, owner or operator of a site, you may be responsible for any environmental damage caused by your subcontractors or employees.

- ☐ Keep an orderly site and ensure good housekeeping practices are used.
- Maintain equipment properly. Cover materials when they are not in use. Keep materials away from streets, storm
- drains and drainage channels. Ensure dust control water doesn't leave site or discharge to storm drains.
- Advance Planning To Prevent Pollution Schedule ex cavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins. Use the Erosion and Sediment Control Manual, available from the Regional Water Quality Control Board, as a reference.
- Control the amount of runoff crossing your site (especially during excavation!) by using berns or temporary or permanent drainage ditches to divert water flow around the site Reduce stormwater runoff velocities by constructing temporary check dams or bems
- where appropriate Train your employees and subcontractors. The city can provide brochures about these issues for you to distribute to workers at your construction site. Inform your subcontra dors about the stomwater requirements and their own responsibilities. Use Blueprint for a Clear Bay, a construction best management ractices guide available at our Building Dept. counter.

Good Housekeeping Practices

- Designate one area of the site for auto parking. vehicle refueling, and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets, bermed if necessary. Make major repairs off site. To prevent off-site tracking of dirt, provide entrances with stabilized aggregate surfaces. Or
- provide a tire wash area. ☐ Keep materials out of the rain – prevent runoff contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains, creeks, or channels.
- Contain all litter, food wrappers, bottles and cans - Place lidded trash and recycling bins around the site.
- Clean up leaks, drips and other spills immediately so they do not contaminate soil or groundwater or leave residue on paved surfaces. Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the
- Cover and maintain dumpsters. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. Never clean out a dumpster by hosing it down on the construction site.
- ☐ Place portable toilets away from storm drains. Make sure portable toilets are in good working order. Check frequently for leaks.
- Materials/Waste Handling ☐ Practice Source Reduction -- minimize waste when you order materials. Estimate carefully.
- Recycle excess materials, whenever possible. such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil. antifreeze, batteries, and tires: www.reducewaste.org for info
- Dispose of all wastes properly. Materials that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. Never bury waste materials or leave then in the street or near a creek or stream bed.
- In addition to local grading and building permits, you will need to obtain coverage under the State's General Construction Activity Stormwater Permit if your construction site's disturbed area totals 5 acres or more. Information on the General Permit can be obtained from the Regional Water Quality Control Board. (This criteria will change to one

Landscaping, Gardening, and Pool Maintenance

Lands caping/Garden Maintenance

- Protect stockpiles and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.
- Schedule grading and excavation projects during dry weather
- Use temporary check dams or ditches to divert runoff away from storm drains. Protect storm drains with sandbags, gravelfilled bags, straw wattles, or other sediment
- Re-vegetation is an excellent form of erosion control for any site
- ☐ Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage
- Use pesticides sparingly, according to instructions on the label. Rinse empty containers, and use rinsewater as product Dispose of rinsed, empty containers in the trash. Dispose of unused pesticides as
- In Cupertino, residents with curbside recycling can collect lawn, garden and tree trimmings in yardwaste toters. Yardwaste will be collected and composted by the city's contractors. Residents are encouraged to compost vardwaste on-site themselves. Or take yard waste to a land fill where it will be composted
- ☐ Landscape contractors should take clippings and pruning waste to a landfill that composts yard waste (BFI's Newby Island and Zanker Rd. landfill are the nearest)
- Do not blow or rake leaves into the street

Storm Drain Pollution from Landscaping and Swimming Pool Maintenance Many landscaping activities expose soils and

increase the likelihood that earth and garden chemicals will run off into the storm drains during irrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These chemicals are toxic to aquatic life.

Pool/Fountain/Spa Maintenance

Draining pools or spas

When it's time to drain a pool, spa, or fountain please be sure to call the Cupertino Sanitary District before you start for further guidance on flow rate restrictions, backflow prevention, and handling special cleaning waste (such as acid wash). Discharge flows should be kept to the low levels typically possible through a garden hose Higher flow rates may be prohibited by local ordinance.

- ☐ Never discharge pool or spa water to a street or storm drain; discharge to a sanitary sewer cleanout
- ☐ If possible, when emptying a pool or spa, let chlorine dissipate for a few days and then recycle/reuse water by draining it gradually onto a landscaped area.
- Do not use copper-based algaecides Control algae with chlorine or other alternatives, such as sodium bromide. Filter Cleaning
- ☐ Never clean a filter in the street or near a storm drain. Rinse cartridge and diatomaceous earth filters onto a dirt area. and spade filter residue into soil. Dispose of spent diatomaceous earth in the garbage.
- ☐ If there is no suitable dirt area, call Cupertino Sanitary for instructions on discharging filter backwash or rinsewater to the sanitary sewer.

Earth-Moving **Activities**

Storm Drain Pollution from Earth-Moving Activities

Soil excavation and grading operations loosen large amounts of soil that can flow or blow into storm crains when handled improperly. Sediments in runoff can clog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay. Effective erosion control practices reduce the amount of runof crossing a site and slow the flow with check dams o roughened ground surfaces.

Practices During Construction

- Remove existing vegetation only when absolutely necessary. Plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- Protect downslope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or ditches to divert runoff around excavations. Refer to the Regional Water Quality Control Board's Erosion and Sediment Control Field Manual for proper erosion and sediment control measures.
- ☐ Cover stockpiles and excavated soil with secured tarps or plastic sheeting.



Dewatering Operations

Storm Drain Pollution From Dewatering Activities

Be sure to call your city's storm water inspector at 408-472-9907 before discharging water to street, gutter, or storm drain. Filtration or diversion through a basin, tank, and sediment trap may be required. Reuse water for dust control, irrigation or another on-site purpose to the greatest extent

Check for Sediment or Toxic Pollutants

- ☐ Check for odors, discoloration, or an oily sheen on ground water.
- Ask your city inspector whether the groundwater must be tested by a certified laboratory
- Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain OR you may be required to discharge to the sanitary sewer or collect and haul the water off-site for treatment and disposal at an appropriate treatment facility.
- ☐ When discharging to a storm drain, protect the inlet using a barrier of burlap bags filled with drain rock, or cover inlet with filter fabric anchored under the grate.
- ☐ Contact Cupertino Sanitary District at 253-7071 prior to discharging to the sanitary sewer.

The Project Contractor is responsible

located within the Public Right of Way

for removal of all BMP Facilities

upon project final inspection.

Heavy Equipment Operation

Storm water Pollution from Heavy Equipment on Construction Sites Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution Prevent spills and leaks by isolating equipment from runoff channels, and by

Site Planning and Preventive Vehicle Maintenance

from the site as soon as possible.

watching for leaks and other maintenance

problems. Remove construction equipment

- ☐ Designate one area of the construction site, well away from streams or storm drain inlets, for auto and equipm ent parking, refueling, and routine vehicle and equipment maintenance. Contain the area with berms, sand bags, or other
- Maintain all vehicles and heavy equipment.
- Perform major maintenance, repair jobs, and vehicle and equipment washing off-site, where
- If you must drain and replace motoroil, radiator coolant, or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in separate containers, and properly dispose as hazardous waste (recycle
- Do not use diesel oil to lubricate equipment parts, or clean equipment. Use only water for any onsite cleaning.
- O cover exposed fifth wheel hitches and other oily or greasy equipment during rain events.

Spill Cleanup

Clean up spills im mediately.

- ☐ Neverhose down "dirty" payement or im permeable surfaces where fluids have spilled Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible and properly dispose of absorbent
- ☐ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water,
- Use as little water as possible for dust control. Ensure water used doesn't leave silt or
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil
- ☐ Call 911 for significant spills ☐ If the spill poses a significant hazard to hum an health and safety, property or the State Office of Emergency Services.

The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.

Painting and Application of Solvents and Adhesives

Storm Drain Pollution from Paints, Solvents, and Adhesives

All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

Keep all liquid paint products and wastes away from the gutter, street, and storm

- containers into a street, gutter, storm drain, French drain, or creek.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into an inside
- For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent. Filter and reuse thinners and solvents where possible. Dispose of excess liquids and residue as hazardous waste.

Handling Paint Products

Painting Cleanup

- Never clean brushes or rinse paint
- sink drain that goes to the sanitary sewer.
- ☐ When thoroughly dry, empty paint cans, used brushes, rags, and drop doths may be disposed of as garbage.

Paint Removal

- ☐ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and
- disposed of as trash. ☐ Chemical paint stripping residue, and chips and dust from marine paints, or paints containing lead, mercury or tributyl tin must be disposed of as hazardous wastes. Lead based paint removal requires a state-certified contractor.
- ☐ When stripping or cleaning building exteriors with high-pressure water, block storm drains. Direct washwater onto a dirt area and spade into soil. Or, check with Cupertino Sanitary District to find out if you can mop or vacuum the washwater and dispose of it in a sanitary sewer drain. Sampling of the washwater may be required.
- Washwater from painted buildings constructed before 1978 can contain high amounts of Lead, even if paint chips are not present. Before you begin stripping paint or cleaning pre-1978 building exteriors with water under high pressure, test paint for lead by taking paint scrapings to a local laboratory. (See Yellow Pages for a state-certified
- ☐ If there is loose paint on the building, or if the paint tests positive for lead, block storm drains. Check with Cupertino Sanitary District to determine whether you may discharge water to the sanitary sewer, or if you must send it offsite for disposal as hazardous waste.

Paint Disposal, Return or Donation

- ☐ Dispose of unwanted liquid paint, thinners. solvents, glues, and deaning fluids as hazardous waste (call the Small Business Hazardous Waste Prgm: 299-7300).
- may be able to be returned. Check with the vendor regarding its "buy-back" policy.) ☐ Donate excess paint (call 299-7300 to donate.)

☐ Or Return to supplier. (Unopened cans of paint

Roadwork and Paving

- General Business Practices Develop and implement erosion/sediment
- control plans for roadway embankments. ☐ Schedule excavation and grading work during
- Check for and repair leaking equipment. Perform major equipment repairs at equipment repairs at construction sites.
- ☐ When refueling or when vehicle /e quipment location away from storm drains and creeks.
- Do not use diesel oil to lubricate equipment parts or clean equipment.
- Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly. (www.recyclestuff.com for list of recycling companies.)
- Avoid creating excess dust when breaking asphalt or concrete.
- After breaking up old pavement, be sure to remove all chunks and pieces. Make sure with rainfall or runoff.
- properly dispose of, all residues. Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm

- designated areas in your maintenance yard. where cleanup is easier. Avoid performing
- maintenance must be done on site, designate a

Asphalt/Concrete Removal

remove from the site. Cover or protect storm

drain inlets during saw-cutting. Sweep up, and

- broken pavement does not come in contact ☐ When making saw cuts, use as little water as possible. Shovel or vacuum saw-cut slurry and

Storm Drain Pollution from Roadwork

Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for a sphalt, saw-cut slurry, or excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

- **During Construction** Avoid paving and seal coating in wet weather, or when rain is forecast, to prevent fresh materials from contacting stormwater
- ☐ Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- Protect drainage ways by using earth dikes, sand bags, or other controls to divert or trap and filter runoff. ■ Never wash excess material from exposed-
- aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area. ☐ Cover stockpiles (asphalt, sand, etc.) and other construction materials with plastic tarps.

Protect from rainfall and prevent runoff with

temporary roofs or plastic sheets and berms

- ☐ Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use. ☐ Clean up all spills and leaks using "dry"
- of contaminated soil. ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. ???

Avoid over-application by water trucks for dust

methods (with absorbent materials and/or

rags), or dig up, remove, and properly dispose

Fresh Concrete and Mortar Application -

Storm Drain Pollution from Fresh Concrete and Mortar Applications

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and

is prohibited by law.

- General Business Practices ☐ Wash out concrete mixers only in designated washout areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage.
- Whenever possible, recycle washout by pumping back into mixers for reuse. Wash out chutes onto dirt areas that do not
- flow to streets or drains. Always store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Protect dry materials from wind.

Secure bags of cement after they are open.

away from streets, gutters, storm drains,

Be sure to keep wind-blown cement powder

rainfall, and runoff. Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.

During Construction

Don't mix up more fresh concrete or cement than you will use in a two-hour period. ☐ Set up and operate small mixers on tarps or

heavy plastic drop cloths.

- ☐ When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the drive way or into the street or storm
- ☐ Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried. Wash down exposed aggregate concrete only when the washwater can (1) flow onto a dirt area, (2) drain onto a bermed surface from which it can be pumped and disposed of properly, or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If

necessary, divert runoff with temporary berms.

- Make sure run off does not reach gutters or ☐ When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete. See www.reducewaste.org for info on recyclers.
- Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.

☐ Never dispose of washout into the street,

storm drains, drainage ditches, or streams.



Small Business

Disposal Prgm Businesses that generate less than 27 gallons or 220 pounds of hazardous waste per month are eligible to use this program. Call 408-299-7300

for a quote.

Hazardous Waste





UPDATED SEPTEMBER 2016

SHEET:

SHEETS



91/16 CONSTRUCTION BEST MANAGEMENT PRACTICES

CITY OF CUPERTINO

DEPARTMENT OF PUBLIC WORKS