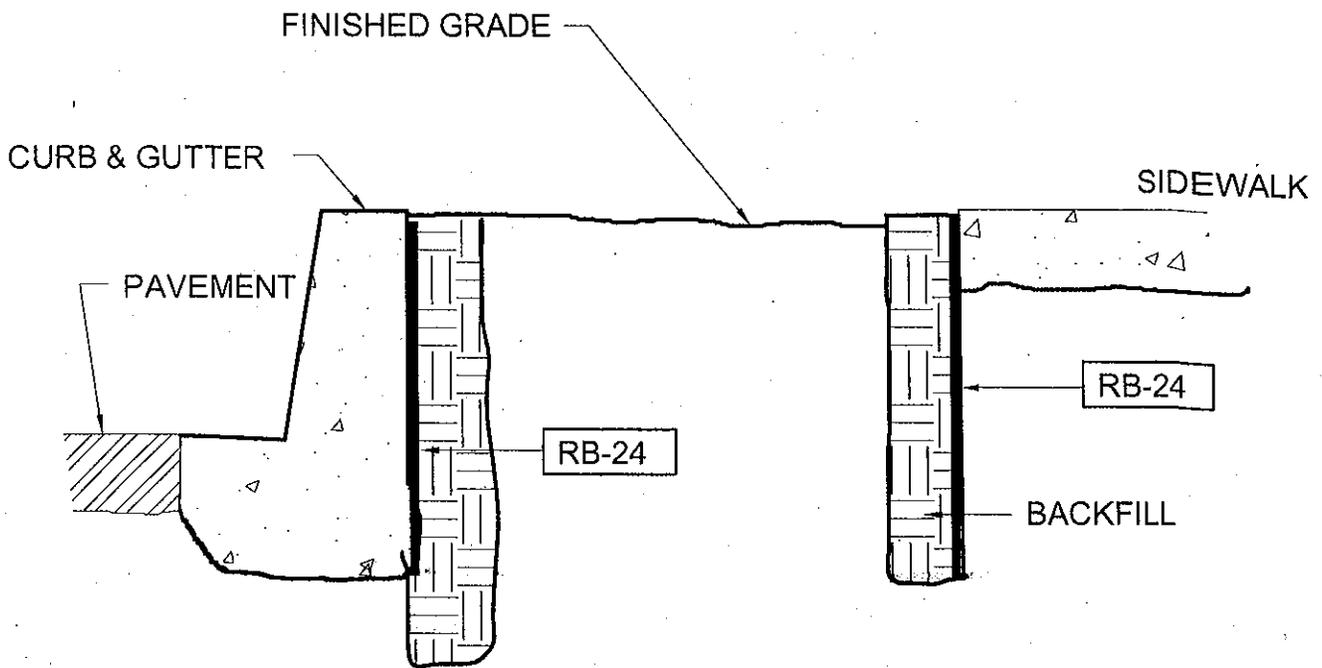


INSTALLATION REQUIRING NO CONCRETE REPLACEMENT



INSTALLATION REQUIRING NEW OR REPLACED CONCRETE

CITY OF SAN BUENAVENTURA

PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

ROOT BARRIER PLACEMENT

STD. DET. NO.

411

APPROVED BY:

*Nancy O'Connell*  
PARKS MANAGER

APPROVED BY:

*[Signature]*  
CITY ENGINEER R.C.E. 37064

DATE 8-2-13

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ALL SURVEY MONUMENTS SHALL BE PRESERVED. CONTRACTOR SHALL CONTACT THE CITY ENGINEERING DIVISION PRIOR TO DISTURBING ANY SUCH MONUMENT. MONUMENTS CAN BE IN THE FORM OF AN "X" CHISELED IN THE CONCRETE, A NAIL AND BRASS TAG, A PIPE, ETC.

METHOD OF ROOT BARRIER INSTALLATION:

- (1) "DEEP ROOT BARRIER" SHOWTOWN OR AS APPROVED BY PARKS MANAGER SHALL BE INSTALLED WITH THE TOP EDGE OF THE BARRIER AT GRADE OR NO MORE THAN 1" INTO THE BOTTOM OF THE SIDEWALK (NEVER BELOW GRADE).
- (2) DEFLECTION OF RIBS MUST FACE THE TREE TO RE-DIRECT NEW ROOT GROWTH DOWNWARD.
- (3) FASTENING STRIPS SHALL BE USED WHEN MORE THAN ONE LENGTH OF BARRIER IS INSTALLED. THE CITY PARKS DIVISION WILL DETERMINE HOW MUCH BARRIER NEEDS TO BE INSTALLED.
- (4) 24" WIDE BARRIER RB-24 SHALL BE USED ON SIDEWALK AND CURB SIDES OF TREES.
- (5) THE TRENCH MUST THEN BE BACKFILLED WITH NATIVE SOIL MATERIAL FREE FROM ANY ROOT TRIMMINGS OR OTHER ORGANIC, DELETERIOUS MATTER. FURTHER INSTALLATION RECOMMENDATIONS ARE AVAILABLE FROM THE DEEP ROOT CORPORATION.
- (6) ROOT BARRIER SHOULD BE 1/2" ABOVE SOIL GRADE AND AT LEAST HALFWAY UP TOTAL HEIGHT OF SIDEWALK.

TREE REMOVAL:

SHALL CONSIST OF THE REMOVAL OF TREES AND STUMPS TOGETHER WITH ROOTS WHICH ARE STILL ATTACHED, THERETO.

- (1) WHERE A TREE TO BE REMOVED IS IN CLOSE PROXIMITY WITH AN OVERHEAD UTILITY LINE OR GUY LINE, EXTREME CAUTION SHALL BE TAKEN TO AVOID DAMAGE TO THESE LINES. ANY DAMAGE THAT DOES OCCUR SHALL BE PROMPTLY REPORTED TO THE SAN BUENAVENTURA POLICE DEPARTMENT, AND TO THE UTILITY COMPANY THAT IS INVOLVED. THE COST OF REPAIR WILL BE AT THE CONTRACTORS EXPENSE. IF DAMAGE OCCURS TO ANY ADJACENT SHRUBS OR TREES THAT ARE TO REMAIN, IMMEDIATE TREATMENT OR NECESSARY REPLACEMENT OF SAME SHALL BE CARRIED OUT UNDER THE DIRECTION OF THE SUPERINTENDENT OF PARKS AT THE CONTRACTORS EXPENSE.
- (2) TREE REMOVAL INCLUDES THE FOLIAGE, LIMBS, BRANCHES, TRUNK AND STUMP COMPLETE WITH ROOTS, WHICH ARE ATTACHED, WITHIN THE STUMP REMOVAL AREA. A STUMP IS DEFINED AS LOWER PORTION OF A TREE, MAXIMUM FOUR FEET HEIGHT, LEFT AFTER THE FOLIAGE, LIMBS, BRANCHES AND THE MAJOR PART OF THE TRUNK HAS BEEN CUT OFF. REMOVAL INCLUDES THE STUMP COMPLETE WITH THE ROOTS WHICH ARE ATTACHED WITHIN THE STUMP REMOVAL AREA.

CITY OF SAN BUENAVENTURA

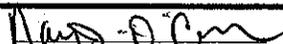
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CONT'D

THE STUMP REMOVAL AREA FOR A STREET TREE SHALL BE BETWEEN THE SIDEWALK AND OR A DISTANCE OF FOUR FEET, WHICHEVER IS SHORTER. THE SIDES OF THIS AREA WILL ALSO BE A DISTANCE OF FOUR(4) FEET FROM THE TRUNK, MEASURED IN BOTH DIRECTIONS PARALLEL TO THE CURB. THE STUMP REMOVAL AREA OTHER FOR TREES SHALL BE FOR A RADIUS OF SIX(6) FEET FROM THE TRUNK. THE DEPTH OF REMOVAL IN THE STUMP AREA SHALL NOT BE LESS THAN 12" INCHES BELOW ADJACENT SOIL GRADE. ALL EXPOSED SURFACE ROOTS BEYOND THE STUMP AREA SHALL BE REMOVED TO A DEPTH TWELVE (12") INCHES BELOW ADJACENT SOIL GRADE.

(3) CLEANUP

- (a) ANY SOIL OR OTHER MATERIAL WHICH HAS BEEN BROUGHT ONTO PAVED AND LANDSCAPE AREAS BY HAULING OPERATIONS OR OTHERWISE, SHALL BE REMOVED PROMPTLY, KEEPING THE AREA CLEAN AT ALL TIMES
- (b) ALL LEAVES, TWIGS OR TRASH RESULTING FROM THIS WORK SHALL BE REMOVED DAILY AND DISPOSED OF AT A LICENSED DUMP OR OTHER LEGAL DISPOSAL AREA. IN NO CASE SHALL ANY TRASH BE ALLOWED TO GET INTO THE CITY SEWER OR STORM DRAIN SYSTEM.
- (c) THE CONTRACTOR MAY CUT LIMBS AND BRANCHES TO FIREWOOD LENGTH (18" MAXIMUM) AND PLACE THEM IN NEAT STACKS IN THE PARKWAY AREA (WITH THE APPROVAL OF THE ABUTTING PROPERTY OWNER) FOR 48 HOURS. ANY STACKED FIREWOOD REMAINING AFTER 48 HOURS SHALL BE REMOVED BY THE CONTRACTOR. IF THE CONTRACTOR ELECTS TO DISPOSE OF SUCH LIMBS AND BRANCHES IN SOME OTHER MANNER, HE MAY DO SO PROVIDED THEY ARE REMOVED DAILY FROM THE SITE OF WORK.

(4) DAMAGE TO EXISTING

PROPERTY DAMAGE TO EXISTING PROPERTY, WHATEVER THE NATURE CAUSED BY THE CONTRACTOR DURING HIS OPERATIONS, SHALL BE IMMEDIATELY REPORTED TO THE PARKS DIVISION - URBAN FORESTRY SECTION, DAMAGE SHALL BE DOCUMENTED AND REPAIRED/MITIGATED PROMPTLY AT THE CONTRACTOR'S EXPENSE.

- (5) THE CONTRACTORS SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN NATIONAL STANDARD, ANSI Z133.1 SAFETY REQUIREMENTS FOR ARBORICULTURAL OPERATIONS. PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE, P.O. BOX 3129, CHAMPAIGN, IL 61826-3129.

NOTIFICATION OF PROPERTY OWNERS

THE CONTRACTOR SHALL NOTIFY, IN WRITING, THE PARKS DIVISION, ALL PROPERTY OWNERS AFFECTED BY THE PROPOSED CONSTRUCTION, 72 HOURS PRIOR TO BEGINNING ANY WORK. THE DRAFT OF THE NOTICE SHALL BE SUBMITTED TO THE PARKS DIVISION FOR APPROVAL WITHIN TEN(10) DAYS AFTER AWARD OF CONTRACT. THE NOTICE SHALL PROVIDE A BRIEF DESCRIPTION OF THE PROJECT AND THE CONTRACTORS NAME, ADDRESS AND PHONE NUMBER WHERE A CITIZEN MAY CONTACT THE CONTRACTOR REGARDING THE WORK.

CITY OF SAN BUENAVENTURA

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*N. J. O'Connell*  
PARKS MANAGER

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DATE *8-2-13*

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