### <u>GRADING</u>

- 1. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL ON EXISTING FILL THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF
- 2. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
- 3. SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER
- COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.
  4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
- 5. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
- 6. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPT
RESIDENCE			
ACCESSORY			
STRUCTURE			
DRYWELLS			
LANDSCAPE	2.17	24.64	3'
DRIVEWAY			
OFF SITE			
<u>IMPROVEMENTS</u>			
ITOTAL	2 17	24.64	

- NOTE: FILL VOLUMES INCLUDE 10% SHRINKAGE. EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.
- 7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
- 8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT
- 9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%
- 10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE
- GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY. 12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE
- 13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA

RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED

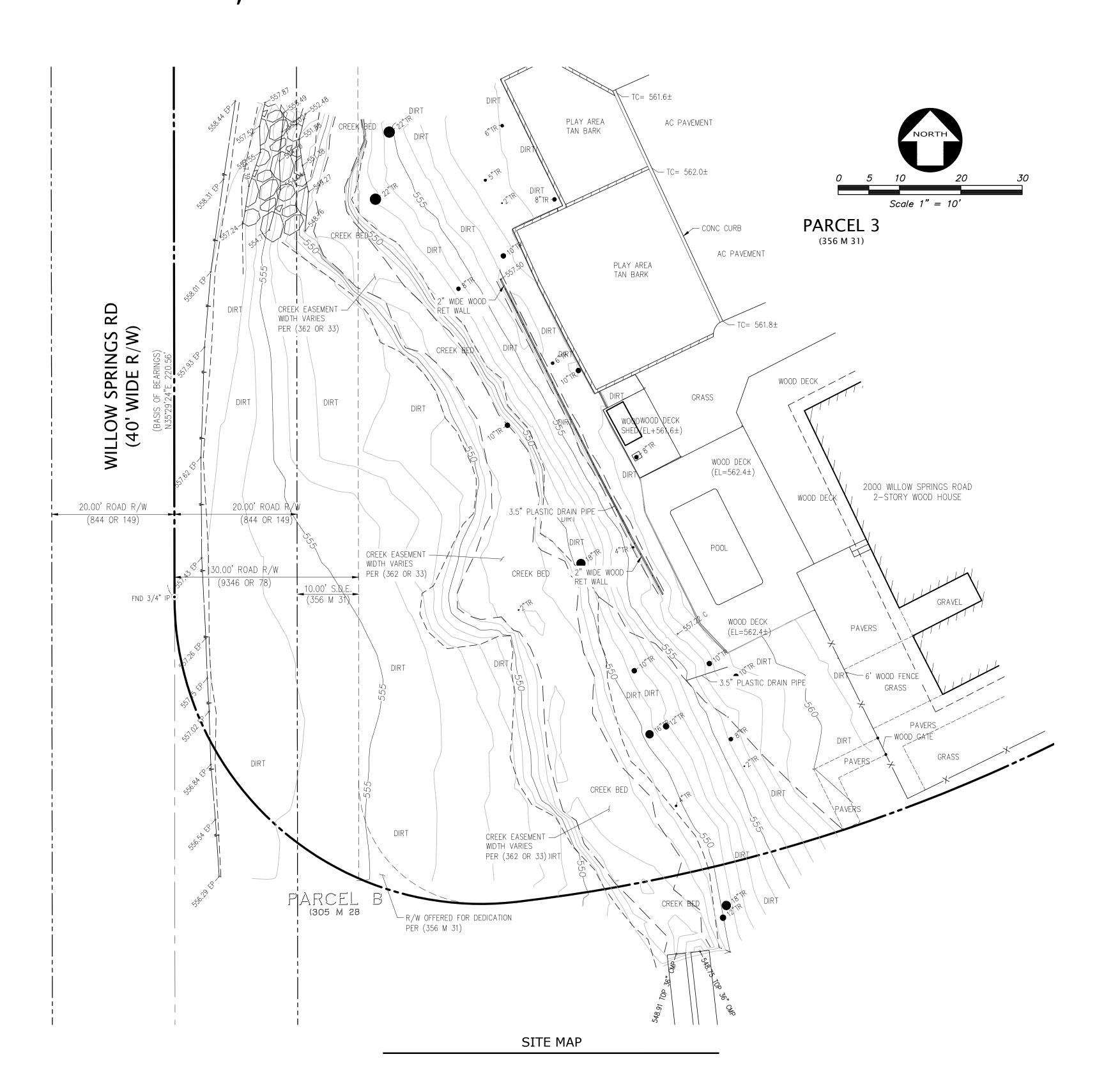
- CLARA COUNTY GRADING OFFICIAL.

  14. T OTAL DISTURBED AREA FOR THE PROJECT
- 16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

# CUT AND FILL ASSESSMENT 2000 WILLOW SPRINGS JEREMY NISKALA

MORGAN HILL,

CALIFORNIA





VICINITY MAP

SHEET INDEX

SHEET **DESCRIPTION** 

COVER SHEET/EARTHWORK SUMMARY C1.1 TOPOGRAPHIC SURVEY

GRADING PLAN

BEST MANAGEMENT PRACTICES AND DETAILS SHEET C2.0

EARTHWORK SUMMARY

Name	Туре	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
EARTHWORK COMPARISON	full	1.00	1.00	1335.75	2.17	24.64	22.47 <fill></fill>

(Sq. Ft.) (Cu. Yd.) (Cu. Yd.)

\* Value adjusted by cut or fill factor other than 1.0 **CUT & FILL QUANTITIES** 

# CIVIL ENGINEER

KIER & WRIGHT CIVIL ENGINEERS & SURVEYORS, INC. ATTN: DAN MITCHELL, P.E. 3350 SCOTT BOULEVARD BUILDING 22

SANTA CLARA, CA 95054 408-727-6665

PREPARED BY OR UNDER THE SUPERVISION OF DATE DANIEL S. MITCHELL PROFESSIONAL ENGINEER P.E. 69152



SHEET/EARTHWORK

SURVEYOR DRAWN BY

(305 M 28

└─R/W OFFERED FOR DEDICATION PER (356 M 31)

### **NOTES**

- 1. THE BOUNDARY, EASEMENT, AND OTHER ENCUMBRANCES SHOWN ON THIS DRAWING ARE BASED SOLELY UPON INFORMATION CONTAINED IN THE FOLLOWING DOCUMENTS: A) PARCEL MAP, FILED FOR RECORD ON JUNE 2, 1975 IN BOOK 356 OR MAPS AT PAGE 31, SANTA CLARA
  - OFFICIAL RECORDS. B) PARCEL MAP, FILED FOR RECORD ON AUGUST 18, 1988 IN BOOK 590 OF MAPS AT PAGE 19, SANTA CLARA COUNTY RECORDS.
- 2. ALL DISTANCES AND ELEVATIONS SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF.
- 3. THIS IS NOT A UTILITY SURVEY. PHYSICAL ITEMS SHOWN ON THIS SURVEY ARE LIMITED TO THOSE ITEMS VISIBLE AS OF THE DATE OF THIS SURVEY. SUBSURFACE STRUCTURES, IF ANY, ARE NOT SHOWN. SAID SUBSURFACE OBJECTS MAY INCLUDE, BUT ARE NOT LIMITED TO, CONCRETE FOOTINGS, SLABS, SHORING, STRUCTURAL PILES, UTILITY VAULTS, PIPING, UNDERGROUND TANKS, AND ANY OTHER SUBSURFACE STRUCTURES NOT REVEALED BY A SURFACE INSPECTION.
- 4. THE SUBJECT PROPERTY IS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) FOR SANTA CLARA COUNTY, CALIFORNIA, MAP NUMBER 06085C044CH FOR COMMUNITY NUMBER 060346 (CITY OF MORGAN HILL), WITH AN EFFECTIVE DATE OF MAY 18, 2009, AS BEING LOCATED IN FLOOD ZONE "D". ACCORDING TO FEMA THE DEFINITION OF ZONE "D" IS: AREA OF UNDETERMINED FLOOD HAZARD

FEMA BASE FLOOD ELEVATIONS ARE BASED ON NAVD88 DATUM.

ALUMINUM ROD DRIVEN TO REFUSAL WITH ALUMINUM DISK SET IN CONCRETE IN CAST IRON MONUMENT BOX IN DIRT SHOULDER SOUTH OF CENTERLINE INTERSECTION OF OAK GLEN AVENUE AND WILLOW SPRINGS ROAD; 26 FEET SOUTH FROM CENTERLINE OAK GLEN AVENUE ALONG SOUTH EXTENSION OF CENTERLINE FOR WILLOW SPRINGS ROAD; 89 FEET SOUTHWESTERLY FROM TELEPHONE POLE AT NORTHEASTERLY CORNER OF INTERSECTION; 6 FEET SOUTH FOR SOUTHERLY EDGE OF PAVEMENT FOR OAK GLEN AVENUE UNINCORPORATED SANTA CLARA COUNTY. ELEVATION= 533.89' NAVD88 DATUM

## 6. BASIS OF BEARINGS:

THE BEARING OF NORTH 35° 29' 24" EAST TAKEN ON THE MONUMENT LINE OF WILLOW SPRINGS ROAD AS SHOWN ON THAT CERTAIN PARCEL MAP FILED FOR RECORD ON JUNE 2, 1975, IN BOOK 356 OF MAPS AT PAGE 41, OFFICIAL RECORDS OF SANTA CLARA COUNTY WAS TAKEN AS THE BASIS FOR ALL BEARINGS SHOWN HEREON.

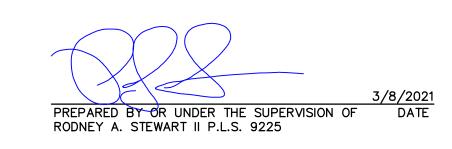
### 7. CORNER RECORD NOTE:

THE DEVELOPER AND/OR CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION AND FILING OF PRE-CONSTRUCTION AND POST-CONSTRUCTION CORNER RECORDS FOR ANY MONUMENTS OR PROPERTY CORNERS SHOWN HEREON THAT MAY BE DESTROYED DURING IMPROVEMENTS TO THE SUBJECT PROPERTY AS DEFINED IN SECTION 8771(B) OF THE PROFESSIONAL LAND SURVEYORS ACT.

	LEGEND
	BUILDING LINE
	BUILDING OVERHANG CONCRETE CURB
<del>_</del>	EASEMENT LINE
γγ	EDGE OF PAVEMENT
	EDGE OF ROCK
	GB
	LOT LINE
$\overline{}$ 100 $\underline{}$	MAJOR CONTOUR LINE
101	MINOR CONTOUR LINE
— — <del>•</del>	MONUMENT/MONUMENT LINE
	PROPERTY LINE
	SIDEWALK
+ 100.0	SPOT ELEVATION
	TOE
	TOP
	WOOD RETAINING WALL

### ARREVIATIONS

F	ADDKEVIA	110112
	EP EL FND GB IP LS M MON OR R/W S.D.E.	EDGE OF PAVEMENT ELEVATION FOUND GRADE BREAK IRON PIPE LICENSED SURVEYOR MAP MONUMENT OFFICIAL RECORD RIGHT OF WAY STORM DRAIN EASEMEN
	J.D.L.	C.C D.C E. COLMEN



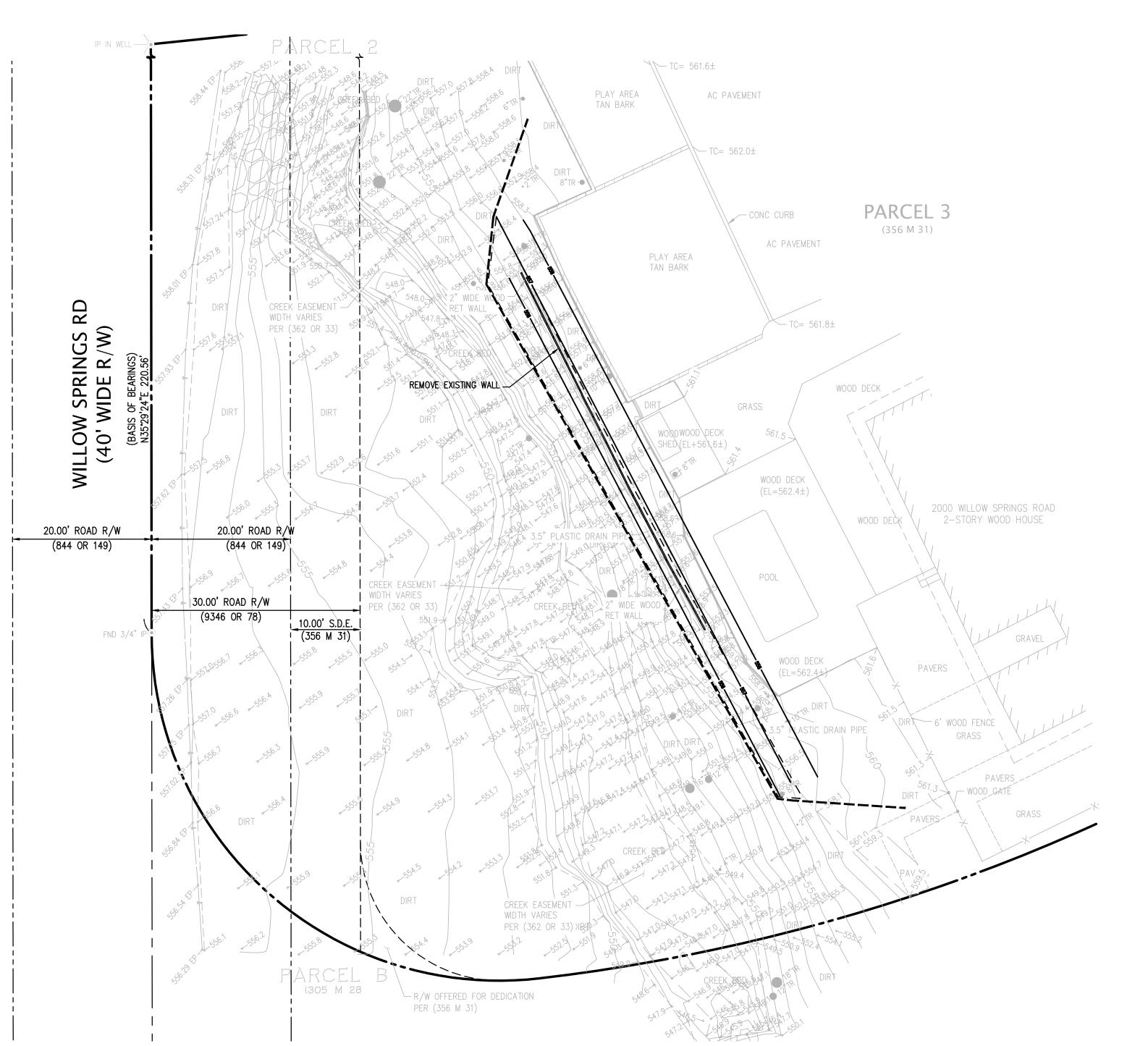


SURVEYOR

DRAWN BY JOB NO.

2000 WILLOW

KIER+WRIGHT





Scale 1" = 10'

**LEGEND** BUILDING OVERHANG CONCRETE CURB EASEMENT LINE EDGE OF PAVEMENT EDGE OF ROCK \_\_\_\_\_ LOT LINE PRE-EXISTING CONTOUR LINE STRAW WATTLE SEDIMENT TRAP/FILTER  $(\frac{2}{C2.0})$ MAJOR CONTOUR LINE MINOR CONTOUR LINE MONUMENT/MONUMENT LINE PROPERTY LINE SPOT ELEVATION TOE

WOOD RETAINING WALL (TO BE REMOVED)

KIER+WRIGHT

2000 WILLOW SPRINGS FOR JEREMY NISKALA

GRADING PLAN

SURVEYOR DRAWN BY

### **ABBREVIATIONS**

EP EL FND GB IP LS M	EDGE OF PAVEMENT ELEVATION FOUND GRADE BREAK IRON PIPE LICENSED SURVEYOR MAP MONUMENT
OR D /w	OFFICIAL RECORD RIGHT OF WAY
R/W	
S.D.E.	STORM DRAIN EASEMENT

### **GRADING NOTES**

- 1. CONTRACTOR SHALL DETERMINE HIS OWN EARTH QUANTITIES AND BASE HIS BID ACCORDINGLY.
- 2. COMPACTION TO BE DETERMINED USING ASTM D1557, LATEST EDITION LABORATORY TEST PROCEDURE.
- 3. THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESES IMPROVEMENT PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, THE ENGINEER CAN NOT ASSUME RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THEIR DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT ARE NOT SHOWN ON THESE DRAWINGS.
- 4. CONTRACTOR SHALL UNCOVER AND EXPOSE ALL EXISTING UTILITY AND SEWER LINES WHERE THEY ARE TO BE CROSSED, ABOVE OR BELOW, BY THE NEW FACILITY BEING CONSTRUCTED IN ORDER TO VERIFY THE GRADE AND TO ASSURE THAT THERE IS SUFFICIENT CLEARANCE. PIPE SHALL NOT BE STRUNG NOR TRENCHING COMMENCED UNTIL ALL CROSSINGS HAVE BEEN VERIFIED FOR CLEARANCE. IF THE CONTRACTOR FAILS TO FOLLOW THIS PROCEDURE, HE WILL BE SOLELY RESPONSIBLE FOR ANY EXTRA WORK OR MATERIAL REQUIRED IF MODIFICATIONS TO THE DESIGN ARE NECESSARY.
- 5. THE CONTRACTOR SHALL SET HIS STRING OR WIRE THROUGH AT LEAST THREE GRADE STAKES TO VERIFY GRADE. IF THE STAKES DO NOT PRODUCE A UNIFORM GRADE, NOTIFY THE ENGINEER IMMEDIATELY AND HAVE THE GRADES CHECKED PRIOR THE TRENCHING OR PLACEMENT OF CONCRETE.
- 6. ADJUSTMENTS/CHANGES AND/OR ANY DEVIATIONS FROM THE APPROVED GRADING PLANS REQUIRE A GRADING PLAN/PERMIT REVISION THROUGH THE SANTA CLARA COUNTY DEVELOPMENT SERVICES OFFICE AND APPROVAL OF ENGINEER.
- 7. ALL WORK, ON—SITE AND IN THE PUBLIC RIGHT—OF—WAY, SHALL CONFORM TO THE COUNTY OF SANTA CLARA STANDARDS AND REQUIREMENTS.
- 8. PROTECT THE PROPOSED ONSITE WATER TREATMENT SYSTEM DISPERSAL FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION GRADING ACTIVITIES.

PREPARED BY OR UNDER THE SUPERVISION OF DATE DANIEL S. MITCHELL PROFESSIONAL ENGINEER P.E. 69152

### STANDARD BEST MANAGEMENT PRACTICE NOTES

- 1. Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or
- 2. Hazardous Waste Management: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th
- 3. Spill Prevention and Control: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8,
- 4. Vehicle and Construction Equipment Service and Storage: An area shall be designated for the maintenance, where onsite maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or
- 5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
- 6. Handling and Disposal of Concrete and Cement: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to
- . Pavement Construction Management: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to
- 8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or
- Sanitary/Septic Water Management: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or
- 0. Inspection & Maintenance: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

### STANDARD EROSION CONTROL NOTES

### 1. Sediment Control Management:

Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

Storm Drain Inlet and Catch Basin Inlet Protection: All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

<u>Dust Control</u>: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.

- . Erosion Control: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
- Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/ or alternative control measures implemented immediately, within 24 hours of the problem being identified.
- 4. Project Completion: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
- 5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
- 6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

Informati

BMP-1

Best Management Practices and Erosion Control Details Sheet 1 County of Santa Clara



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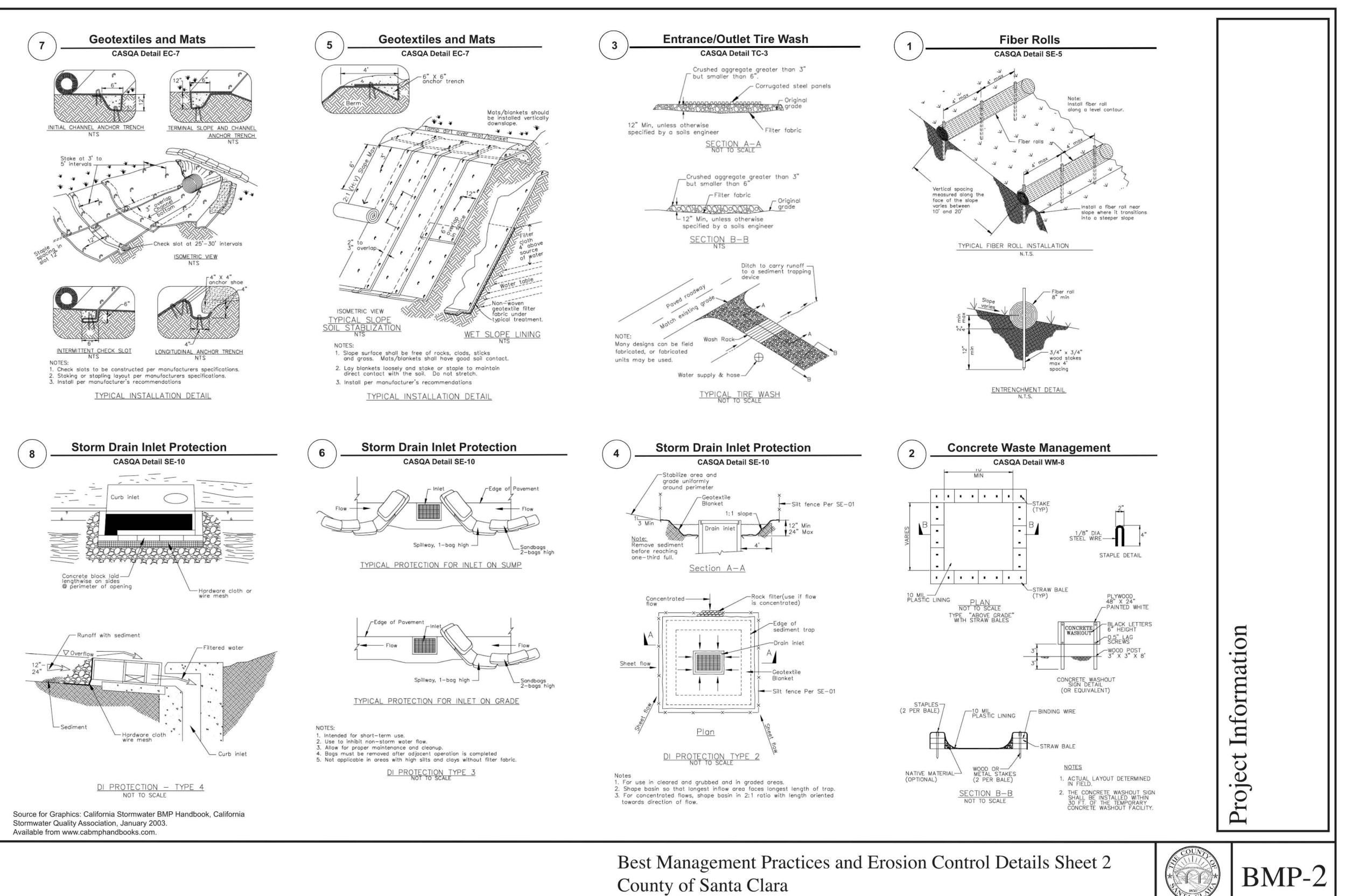
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KIER+WRIGH

PRACTICES AND EROSION CONTROL SPRINGS 2000 WILLOW SPRIN FOR JEREMY NISKALA

SURVEYOR







SURVEYOR

MANAGEMENT PRACTICES AND EROSION CONTROL

2000 WILLOW SPRINGS
FOR
JEREMY NISKALA

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