

**CITY OF SANTEE
DEPARTMENT OF DEVELOPMENT SERVICES
STREET IMPROVEMENT PLAN
PLAN CHECK TRANSMITTAL**

To: _____

Date: _____

Check No. _____

Plan No.: _____

Project: _____

The attached plans have been reviewed by Engineering Division and are being returned for correction. Please complete all corrections noted both on the check sheets and the attached plans. If you have any questions on this review, please call the reviewing engineer at (619) 258-4100 at their extension listed below. The check sheets and the attached check print(s) must be returned with the corrected plans when they are resubmitted for approval.

Project Engineer: _____ Extension: _____

Project Planner: _____ Extension: _____

CITY OF SANTEE - DEPARTMENT OF DEVELOPMENT SERVICES

STREET IMPROVEMENT PLAN CHECK

I. SUBMITTAL REQUIREMENTS

Unless specifically waived or modified by the Director of Development Services all of the following submittal requirements shall be complied with prior to issuance of a construction permit.

- A. Completed permit application.
- B. Improvement plans submitted on City standard sheets.
- C. Drainage study submitted and conforms to City standards.
- D. Construction cost estimate, sealed and signed.
- E. Improvement plan check fee \$ _____
- F. Executed Right-of-Way Improvement Agreement.
- G. Performance Bond \$ _____
- H. Labor and Materials Bond \$ _____

II. SPECIAL SUBMITTAL

- A. Detailed soil erosion control plans.
- B. Hydrology and hydraulic studies related to flood plain determinations.
- C. Application for Environmental Initial Study (AEIS).
- D. Submit off-site letters for permission to grade and have owners sign a copy of the plan affecting their site. (City can provide sample format)
- E. Waiver and release to divert or concentrate drainage affecting down stream off-site property.
- F. Drainage easement and flowage rights documents.
- G. Geotechnical Study, sealed and signed.
- H. Current Title Report.

III. PRELIMINARY CHECK - Plans shall conform to the following:

- A. Design is/is not substantially complete.
- B. Horizontal and vertical control from ROS 11252.
- C. Correct number of plans are submitted and if other than first submittal, check prints are returned with the submittal.
- D. Tentative Map and Plot Plan: Typical section, street layout, other:
- E. Compliance with Tentative Map and Plot Plan conditions of approval:
- F. Compliance with Development Review Permit or Conditional Use Permit conditions of approval:
- G. Comments:

IV. DETAILED CHECK - Form and Standard

- A. GENERAL

1. Drawing requirements.
 - (a) Prepared on standard City of Santee title sheets.
 - (b) Black permanent ink on mylar (3 mil minimum).
 - (c) Lettering is a minimum of 0.10" for mechanical lettering or 0.12" for free-hand lettering.
 - (d) Line weight is a minimum of "OO" for existing conditions and a minimum of "O" for proposed improvements.
 - (e) Sheets numbered consecutively with total number of sheets in the plan set indicated.
 - (f) Title block on each sheet titled:
 - (1) Improvement Plan for
 - (2) Project title or name
 - (3) City of Santee tentative map or parcel number.
 - (g) Bench mark description and datum reference on each sheet. Bench mark must be from ROS 11252 and shall include the station designation number in the description.
 - (h) Minimum scale 1" = 20'.
 - (i) North arrow and a 4 inch graphic scale on each sheet.
 - (j) Each sheet shall be sealed and signed by the engineer of work preparing the plan.
 - (k) Sheet size shall be 24" x 36".
 - (l) It is the engineer of works responsibility that all development plans (site, improvement, landscape, plot, grading and drainage plans and elevations) are coordinated and consistent with each other.

2. Engineer of Work shall provide a cost estimate for the construction. The minimum unit prices for the work shall not be less than the unit prices stated in the City of Santee - Department of Development Services - Cost Estimate Unit Prices for Subdivision Permits, latest revision. The estimate may be prepared in letter format and shall be revised based on the approved final design. Engineer of work to sign and seal the estimate.

B. COVER SHEET

1. Vicinity map showing the location of the project with north arrow and scale indicated.
2. Project title information.
3. Key map.
 - (a) North arrow
 - (b) Scale: 1" = 200'
 - (c) Shows general plan of subdivision boundary, streets and lots identified
 - (d) Shows adjacent subdivisions and connecting streets

- (e) Shows sheet coverage
 - (f) Legend identifies all symbols used
 - (g) Show drainage facilities
 - (h) Direction of drainage flow
4. Include notes and certifications in accordance with Attachment - A, "CITY OF SANTEE - DEPARTMENT OF DEVELOPMENT SERVICES GENERAL NOTES AND CERTIFICATIONS FOR IMPROVEMENT PLANS"
 5. Legend identifying all symbols used and reference to the appropriate standard.
 6. Approval blocks for other agencies, as applicable.
 - (a) City of Santee - Fire Department
 - (b) Padre Dam Municipal Water District
 - (c) County of San Diego - Flood Control District
 - (d) Lakeside Sanitation District
 7. Engineer of Work's statement, signature and seal.
 8. Soils Engineer's statement, signature and seal.
 9. Assessor parcel number(s).
 10. Legal description of parcel(s).
 11. Name, address and telephone number of owner.
 12. Name, address and telephone number of engineer of work.

C. DETAIL SHEETS

1. Separate detail sheets shall be provided in lieu of including details on the plan drawings.
2. Street cross-sections:
 - (a) Each street is represented.
 - (b) Dimensions - right of way, sidewalks, medians, easements, etc. comply with City standards and tentative map or development review conditions of approval.
 - (c) Street structural section conforms with design standard and is shown with a note to verify line and grade after rough grading.
3. Detail drawings to be provided for clarity as noted on the plans.
4. Show a detail of any required pedestrian ramps. Ramp must

conform to Title 24 requirements.

D. PLAN AND PROFILE SHEETS - PLAN VIEW

1. Boundaries and easements.
 - (a) Jurisdictional boundaries.
 - (1) County - City
 - (2) City - City
 - (b) Subdivision or project boundaries.
 - (c) Right of way lines.
 - (d) Lot lines and lot numbers.
 - (e) Lot lines and boundaries of adjacent properties shown.
 - (1) Adjacent properties assessors parcel number shown.
 - (2) Map or parcel map references shown.
 - (f) Show and dimension all existing and proposed easements which encumber the property. Reference source document.
 - (1) Utility easements.
 - (2) Drainage easements.
 - (3) Access easements.
 - (4) Slope right easements.
 - (5) Tree planting and maintenance easements.
 - (6) Open space easements.

2. Utilities
 - (a) Show existing water distribution facilities.
 - (1) Show size of pipe, type of material if it can be determined, type of main whether potable or reclaimed water.
 - (2) Show all appurtenant structures.
 - (i) Main line valves
 - (ii) Fire hydrants
 - (iii) Blow-off valves, air releases, vacuum release valves
 - (iv) Back flow preventers and water meters
 - (v) Service lines, sizes if known
 - (3) Indicate disposition of existing utilities whether to remain or be removed (as applicable).
 - (4) Include construction plan references when obtainable.
 - (b) Show proposed water distribution facilities.
 - (1) Water main data is tabulated in the plan view, includes item number, delta or bearing, radius, length, and a remarks column.
 - (c) Show existing sanitary sewer collection facilities and force mains.
 - (1) Show size of pipe, type of material if it can be determined.

- (2) Show all appurtenant structures.
 - (i) Manholes
 - (ii) Cleanouts
 - (iii) Line stub outs or extensions
 - (iv) Valves
 - (v) Service laterals, sizes if known
- (3) Indicate disposition of existing utilities whether to remain or be removed (as applicable).
- (4) Include construction plan references when obtainable.
- (d) Show proposed sanitary sewer collection facilities and force mains.
 - (1) Sewer main data is tabulated in the plan view, includes item number, delta or bearing, radius, length, and a remarks column.

3. Drainage

- (a) Show existing drainage facilities.
 - (1) Show size of pipe, type of material and direction of flow.
 - (2) Number all structures for identification purposes such as cleanouts, inlets, brow ditches and headwalls. Designate their type.
 - (3) Rim and outfall pipe flowline elevation.
 - (4) Indicate the disposition of the existing drainage facilities (To remain or to be removed).
- (b) Show proposed drainage facilities.
 - (1) Storm drain data is tabulated in the plan view, includes item number, delta or bearing, radius, length, and a remarks column.
 - (1) Show size of pipe, type of material and direction of flow.
 - (2) Number all structures for identification purposes such as cleanouts, inlets, brow ditches and headwalls. Designate their type.
 - (3) Rim and outfall pipe flowline elevation.
- (c) Non-silting velocity of 4 fps when pipe is flowing 1/4 full.
- (d) Change in pipe size occurs only at a structure.
- (e) Appropriate design considerations shown for pipes with grades of 20% or greater.
- (f) Discharge points are designed with adequate protection.
- (g) Inlets conform to City standards and are correctly sized.
- (h) Cleanouts are provided at the appropriate spacing.
- (i) Pipe curvature conforms to standards.
- (j) Desilting basins and/or energy dissipaters shown and correctly sized.
- (k) Trash racks provided at pipe entrances as required.

- (m) Junction of pipes conform to standards, no acute angles proposed.

4. Streets

- (a) Street widths and easements comply with standards and are dimensioned, compare with final map and/or resolution of approval.
- (b) Show stationing and check for conformity with any existing streets.
- (c) Show design feasibility of extending streets a minimum of 200 feet beyond the property line or subdivision boundary.
- (d) Sight distance requirements are met and where applicable sight distance easements are shown.
 - (1) Corners
 - (2) Driveway entrances
 - (3) Horizontal curves
 - (4) Intersections
- (e) Show street lights, check they are correct as to spacing requirements, labeled as to size and type, station and offset given.
- (f) Show curb data tabulated in the plan view, include item number, delta or bearing, radius, length, and a remarks column.
- (g) Cul-de-sac and curb radii conform to City standards and are included in the curb table.
- (h) Cul-de-sacs have a maximum length of 500 feet or adequate intermediate turn around is provided.
- (i) Show location of standard M-10 street survey monuments.
- (j) Show traffic control and street sign locations and type.
- (k) Show guard rail locations and type.
- (l) Show the approved street names.
- (m) Adjacent improvement plans and subdivisions referenced.
- (n) Show driveway widths and check for site distance.
- (o) Show the location of any retaining walls, sound walls or decorative block walls adjacent the right-of-way.

5. Other.

- (a) Erosion control on parkway if street grade exceeds 7%.
- (b) Normal crown of 2%.
- (c) Special pavement design for grades of 12% or greater.
- (d) Horizontal curves conform to design standards.
- (e) Streets intersect at right angles ± 10 degrees.
- (f) Minimum tangent section at intersections of 50 feet.
- (g) Minimum tangent section for a reverse curve of 100 feet.
- (h) Sidewalks conform to design standards and the conditions of approval.

- (i) Cross gutters cross local and industrial streets only and only at intersections.
- (j) Appropriate transitions provided from widened sections, including berms, barricades and markers.

E. PLAN AND PROFILE SHEETS - PROFILE VIEW

1. Utilities

- (a) Show existing water distribution facilities.
 - (1) Show pipe and size.
- (b) Show proposed water distribution facilities.
 - (1) Show pipe and size.
- (c) Show existing sanitary sewer collection facilities and force mains.
 - (1) Show pipe and size.
 - (2) Show appurtenant structures.
 - (i) Manholes
 - (ii) Cleanouts
 - (iii) Line stub outs or extensions
- (d) Show proposed sanitary sewer collection facilities and force mains.
 - (1) Show pipe and size.
 - (2) Show appurtenant structures.
 - (i) Manholes
 - (ii) Cleanouts
 - (iii) Line stub outs or extensions

2. Drainage

- (a) Show existing drainage facilities.
 - (1) Show size of pipe, type of material and direction of flow.
 - (2) Strength classification or gauge if available.
 - (3) Number structures such as cleanouts and inlets and designate the type.
 - (4) Rim and outfall pipe flowline elevation.
- (b) Show proposed drainage facilities.
 - (1) Number all structures for identification purposes such as cleanouts, inlets, and headwalls. Designate their type.
 - (2) Give rim elevation on each structure.
 - (3) Give upstream and downstream flowline elevations on each and every pipe.
 - (4) Specify strength classification or gauge of pipe.
 - (5) Show size of pipe, slope and length of pipe.
- (c) Show the systems hydraulic grade line (HGL).
- (d) Show the design flow rate (Q) and design velocity (V).

- (e) Grade exceeds 0.1% minimum and conforms to hydraulic calculations.
- (f) Minimum pipe size is 18 inches and conforms to design calculations.

3. Streets

- (a) Show natural ground and finished surface at centerline of roadway.
- (b) Show percent grades.
 - (1) Minimum grade 1%.
 - (2) Maximum grade 15%.
- (c) Show stationing and check for conformance with any existing streets.
- (d) Vertical curves.
 - (1) Required for grade breaks over 0.5%.
 - (2) Conforms to minimum design standards.
 - (3) Show length of curve, minimum = 50'; 100' preferred.
 - (4) Show PVI station and elevation.
 - (5) Show BVC and EVC station and elevation.
 - (6) Show design speed and sight distance.
 - (7) Show sufficient intermediate elevations and stations to construct a smooth curve. Usually a minimum of 25' intervals will be required.
- (e) Show design feasibility of extending streets a minimum of 200 feet beyond the property line or subdivision boundary.

4. Other.

- (a) Compare with grading plans for consistency.

F. DRAINAGE DESIGN

- 1. Drainage design shall conform with the requirements of the Public Works Standards of the City of Santee and such additional requirements as stated herein.
- 2. If diversion or concentration of existing drainage courses occurs, a signed waiver and release from the affected downstream owners must be submitted.
- 3. Floodplain analysis submitted, as applicable, and in a format acceptable to the Department of Development Services.
- 4. If drainage is out-falling in proximity to the San Diego River design shall include conformance with the Department of Development Services "PROCEDURE FOR DESIGN OF STORM DRAINS OUTLETING IN THE SAN DIEGO RIVER", dated March 22, 1991.
- 5. All drainage design requirements shall be in accordance with the latest adopted Master Drainage Plan, the requirements of the Director of Development Services and be based on full

- development of upstream areas.
6. The design of all master plan facilities shall be in accordance with the latest standards of the San Diego County Flood Control District.
 7. Public drainage facilities shall be designed to carry a ten-year storm underground, and the 100-year storm to the right-of-way lines.
 8. Permanent open drainage ditches will not be permitted in public right-of-way, without the specific permission of the Director of Development Services.
 9. The type of drainage facility shall be selected on the basis of physical and aesthetic adaptability to the proposed land use. Open channels may be considered in lieu of underground systems when the peak flow exceeds the capacity of a 48-inch diameter RCP. Open channels shall be fenced.
 10. Permanent drainage facilities and right-of-way shall be provided from the development to point of satisfactory discharge.
 11. On site drainage shall be collected on-site and discharged to a storm drain system, or if no system is available within reasonable proximity to the site as determined by the Director of Development Services, the drainage may be discharged through the curb face to the street. Minor drainage areas less than one acre in size may drain from the site across the driveway.

G. TRAFFIC STRIPING PLAN or SIGNING PLAN

It is generally desirable to include traffic signing and striping on the same plan sheets. If deviation from this practice is requested, first obtain written approval from the City Traffic Engineer.

1. Preparation of a plan to scale with dimensions showing the following:
 - (a) existing striping to be removed.
 - (b) new striping to be installed including lane delineation, turn arrows and legends.
 - (c) all existing signing to be relocated or salvaged and delivered to City yard.
 - (d) all new signing to be installed specifying type, location and size of sign. Signs included are warning, regulatory, guide and street name signs.
2. Signs shall be installed on aluminum poles with a minimum of 7 feet vertical clearance. Street name signs shall be installed at a location which is compatible with the future installation of stop signs (if necessary).
3. Street name signs shall conform to San Diego County Design Standard DS-13, Standard Street Sign.
4. All other signing and striping shall conform to CalTrans Traffic Control Manual unless otherwise directed by the City Traffic

Engineer.

H. ADDITIONAL COMMENTS

**ATTACHMENT - A
CITY OF SANTEE - DEPARTMENT OF DEVELOPMENT SERVICES
GENERAL NOTES AND CERTIFICATIONS FOR IMPROVEMENT PLANS**

Last update: 10/09/2003

The following Notes, Statements and Certifications shall be included on the improvement plans. Additions or deletions shall be made as deemed necessary by the Department.

GENERAL STANDARDS OF CONSTRUCTION

UNLESS OTHERWISE NOTED ON THE PLANS, ALL WORK SHALL CONFORM WITH THE FOLLOWING STANDARD SPECIFICATIONS AND DRAWINGS:

STANDARD SPECIFICATIONS:

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
2. STANDARD SPECIAL PROVISIONS.
3. CITY OF SANTEE DEVELOPMENT SERVICES STANDARDS, SEPTEMBER 1982.
4. CALIFORNIA DEPARTMENT OF TRANSPORTATION, "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES," LATEST EDITION.
5. STANDARD SPECIFICATIONS OF THE PADRE DAM MUNICIPAL WATER DISTRICT, ADOPTED APRIL 2, 2001.
6. CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA), STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK CONSTRUCTION, LATEST EDITION.
7. CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.

STANDARD DRAWINGS:

1. CITY OF SANTEE STANDARD DRAWINGS.
2. SAN DIEGO REGIONAL STANDARD DRAWINGS (S.D.R.S.) AS RECOMMENDED BY THE REGIONAL STANDARDS COMMITTEE, MAINTAINED AND PUBLISHED BY THE SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS, LATEST EDITION.
3. STANDARD DRAWINGS OF THE PADRE DAM MUNICIPAL WATER DISTRICT, ADOPTED APRIL 2, 2001.

GENERAL NOTES

1. AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF DEVELOPMENT SERVICES PRIOR TO THE START OF ANY CONSTRUCTION WITHIN THE LIMITS OF THE PUBLIC RIGHT-OF-WAY INCLUDING BUT NOT LIMITED TO UTILITY CONNECTIONS OR GRADING.
2. ACCEPTANCE OF THESE IMPROVEMENTS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
3. ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, TESTED AND CONNECTED PRIOR TO CONSTRUCTION OF BERMS, CURBS, CROSS-GUTTERS, SIDEWALKS OR FINAL PAVING.
4. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING EXPLORATORY EXCAVATIONS AND LOCATING EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO ALLOW FOR REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF CHANGES IN LINE OR GRADE DUE TO THE ACTUAL LOCATION OF THE EXISTING FACILITIES.
5. THE CONTRACTOR SHALL NOTIFY DIG ALERT 24 HOURS PRIOR TO STARTING WORK AND SHALL COORDINATE HIS WORK WITH UTILITY COMPANY REPRESENTATIVES.
6. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS, AND BEAR THE COST OF RELOCATIONS, IF NEEDED.

7. POWER SOURCES AND RUNS SERVING STREET LIGHTS SHALL BE SHOWN ON THE "AS-BUILT" IMPROVEMENT DRAWINGS. ALL SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT-OF-WAY, OR WITHIN EASEMENTS DEDICATED TO THE CITY OF SANTEE.
8. FINAL PAVING SHALL NOT BE PERFORMED UNTIL EXISTING POWER POLES ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED AND ALL REMEDIAL CONCRETE REPLACEMENT WORK HAS BEEN CORRECTED.
9. CITY OF SANTEE - INSPECTION REQUIREMENTS:
 - A. CONTRACTOR SHALL INFORM THE CITY PROJECT ENGINEER 48 HRS. IN ADVANCE OF COMMENCING WORK. PHONE (619) 258-4100.
 - B. THE CONTRACTOR SHALL GIVE A MINIMUM OF 24 HRS. NOTICE ON REQUESTS FOR INSPECTION. PHONE (619) 258-4100.
 - C. ANY WORK PERFORMED WITHOUT THE BENEFIT OF INSPECTION IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
10. THE DEPARTMENT OF DEVELOPMENT SERVICES WILL REMOVE STREET NAME SIGNS WHEN CONDITIONS SO DICTATE. CONTRACTOR SHALL PROTECT AND ASSUME RESPONSIBILITY FOR ALL OTHER TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL REPLACE TRAFFIC STRIPING, STREET MARKINGS, AND CURB MARKINGS REMOVED OR DAMAGED BY HIS WORK.
11. SIDEWALK JOINT LOCATIONS SHALL BE INSTALLED IN ACCORDANCE WITH REGIONAL STANDARD DRAWING NO. G-9. CURB OR CURB AND GUTTER JOINT LOCATIONS SHALL INCLUDE EXPANSION JOINTS AT CURB RETURNS, ADJACENT TO STRUCTURES AND AT 45 FOOT INTERVALS. WEAKENED PLANE JOINTS SHALL BE INSTALLED AT DRIVEWAY LOCATIONS AND AT 15 FOOT INTERVALS BETWEEN EXPANSION JOINTS. ALL CONCRETE JOINTS SHALL CONFORM TO REGIONAL STANDARD DRAWING NO. G-10.
12. SIDEWALKS AND BIKEPATHS ARE DESIGNED TO HAVE CLEAR UNOBSTRUCTED ACCESS. THESE FACILITIES SHALL BE KEPT CLEAR OF STREET LIGHTS, FIRE HYDRANTS, METER BOXES, TRANSFORMERS, ELECTRICAL PULL BOXES, BLOWOFFS, AIR VENTS OR OTHER SIMILAR OBSTRUCTIONS AT ALL TIMES.

13. THE OWNER IS RESPONSIBLE FOR ENSURING ADEQUACY OF DESIGN AND CONSTRUCTION IN ACCORDANCE WITH THE SPECIFIED GENERAL STANDARDS OF CONSTRUCTION LISTED HEREON, AND TO PROTECT THE WORK AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. FAILED OR DAMAGED WORK SUCH AS CRACKED SIDEWALKS, CURB AND GUTTER, CROSS GUTTERS, DRIVEWAY APRONS AND SO FORTH, SHALL BE REPLACED TO THE NEAREST JOINT OR SCORE LINE IN EACH DIRECTION PRIOR TO PLACEMENT OF THE FINAL PAVEMENT COURSE.
14. ACCEPTANCE OF THESE PLANS BY THE CITY OF SANTEE IS VALID FOR ONE YEAR FROM THE DATE OF ACCEPTANCE. FAILURE TO COMMENCE CONSTRUCTION WITHIN ONE YEAR VOIDS ACCEPTANCE OF THESE PLANS.

PAVING NOTES:

1. A MINIMUM OF SEVEN DAYS PRIOR TO THE PLACEMENT OF ROADWAY BASE MATERIAL THE CONTRACTOR SHALL SUBMIT A CERTIFIED SOILS REPORT FROM A REGISTERED CIVIL OR GEOTECHNICAL ENGINEER CERTIFYING ALL ROADWAY AND UTILITY TRENCHING HAS BEEN COMPACTED TO THE MINIMUM REQUIREMENTS SPECIFIED IN THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE RECOMMENDATIONS CONTAINED IN THE PROJECT'S SOILS REPORT.
2. A FINAL PAVEMENT STRUCTURAL SECTION DESIGN SHALL BE SUBMITTED TO THE CITY PROJECT ENGINEER FOR APPROVAL A MINIMUM OF TEN DAYS PRIOR TO PLACEMENT OF BASE MATERIAL. THE DESIGN REPORT SHALL CONFORM TO CITY FORM 435 – PAVEMENT DESIGN AND R-VALUE TEST SUBMITTAL PROCEDURES. THE DESIGN SHALL ADHERE TO THE METHODOLOGY SET FORTH IN CHAPTER 600 OF THE CALTRANS HIGHWAY DESIGN MANUAL AND UTILIZE THE "R" VALUE METHOD. DESIGN SHALL BE SUBMITTED IN REPORT FORM AND MUST INCLUDE ALL SUPPORTING CALCULATIONS AND TEST RESULTS. THE "R" VALUE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH CALIFORNIA TEST NO. 301 AND SHALL BE PERFORMED BY A REGISTERED CIVIL ENGINEER WHOSE PRIMARY PROFESSIONAL ACTIVITY IS PERFORMING SUCH TESTS. THE NUMBER AND LOCATION OF R-VALUE TESTS SHALL BE COORDINATED WITH THE CITY PROJECT INSPECTOR AND BE SUBJECT TO APPROVAL OF THE CITY PROJECT ENGINEER.

3. THE FOLLOWING MINIMUM STRUCTURAL THICKNESS ARE BASED ON AN R-VALUE OF 30. TRAFFIC INDEXES ARE BASED ON CITY PUBLIC WORKS STANDARDS AND SHALL BE USED FOR PAVEMENT DESIGN BASED ON ACTUAL R-VALUES OBTAINED AT TIME OF CONSTRUCTION.

<u>STREET NAME</u>	<u>TRAFFIC INDEX</u>	<u>ANTICIPATED STRUCTURAL SECTION</u>
A. ARTERIAL	9.0	5" AC / 12" AB
B. MAJOR	8.5	4" AC / 12" AB
C. COLLECTOR	8.0	4" AC / 11" AB
D. INDUSTRIAL	7.0	3" AC / 11" AB
E. RESIDENTIAL COLLECTOR	6.0	3" AC / 8" AB
F. LOCAL	5.0	2" AC / 8" AB
G. CUL-DE-SAC	4.5	2" AC / 7" AB

THE MINIMUM SECTIONS LISTED ABOVE ARE FOR ESTIMATION AND DESIGN PURPOSES ONLY AND ARE SUBJECT TO CHANGE FOLLOWING SUBMITTAL OF THE FINAL PAVEMENT DESIGN REPORT.

4. ASPHALT CONCRETE SHALL CONFORM TO ALL PROVISIONS OF SECTION 39 OF THE CURRENT CALTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION OF LOCAL STREETS AND ROADS. SURFACE COURSE SHALL BE A MINIMUM THICKNESS IS 2 INCHES, MAXIMUM THICKNESS IS 3 INCHES. ASPHALT CONCRETE SECTIONS GREATER THAN 3 INCHES SHALL CONTAIN A BASE COURSE OF ASPHALT, A MINIMUM THICKNESS OF 2 INCHES.

ACCEPTED UNTREATED BASE MATERIALS INCLUDE:

PER SECTION 200-2.2	CRUSHED AGGREGATE BASE
PER SECTION 200-2.4	CRUSHED MISCELLANEOUS BASE
CALTRANS	CLASS 2 – AGGREGATE BASE

PROCESSED MISCELLANEOUS BASE PER THE GREEN BOOK AND CALTRANS CLASS 2 RECYCLED BASE ARE NOT PERMITTED.

ACCEPTED ASPHALT BASE COURSE MIXES INCLUDE:

PER CALTRANS SECTION 39 PG 64-10, ¾" MAXIMUM, COARSE

ACCEPTED ASPHALT SURFACE COURSE MIXES INCLUDE:

PER CALTRANS SECTION 39 PG 64-10, ½" MAXIMUM, COARSE

UTILITIES COORDINATION NOTES: (As applicable)

1. THESE PLANS CONTAIN MEANDERING BIKE AND PEDESTRIAN PATHS. THE LOCATION OF ALL ABOVE GROUND AND AT GRADE UTILITIES SHALL BE COORDINATED WITH THE MEANDERING PATH. NO ABOVE GROUND FACILITY SHALL BE LOCATED WITHIN TWO FEET OF THE PATH (PREFERRED MINIMUM IS THREE FEET). ACTUAL LOCATION OF FACILITIES IS SUBJECT TO APPROVAL BY THE DIRECTOR OF DEVELOPMENT SERVICES PRIOR TO ISSUANCE OF A CONSTRUCTION / ENCROACHMENT PERMIT. ALL ABOVE GROUND FACILITIES SHALL BE PAINTED WITH AMERON AMERSHIELD RAPID RESPONSE RT1405 PAINT IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.

EROSION CONTROL NOTES

1. THE TOPS OF ALL SLOPES SHALL HAVE A DIKE OR TRENCH TO PREVENT WATER FROM FLOWING OVER THE CRESTS OF SLOPES.
2. CATCH BASINS, DESILTING BASINS, SAND BAGS, CHECK DAMS AND STORM DRAIN SYSTEMS SHALL BE INSTALLED TO THE SATISFACTION OF THE DIRECTOR OF DEVELOPMENT SERVICES. THESE FACILITIES SHALL BE CLEANED ON A REGULAR BASIS, KEPT FREE OF SOIL ACCUMULATION.
3. GRAVEL BAG CHECK DAMS SHALL BE PLACED IN UNPAVED AREAS WITH GRADIENTS IN EXCESS OF 2%, IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE DEPARTMENT OF DEVELOPMENT SERVICES, AND AT OR NEAR EVERY POINT WHERE CONCENTRATED FLOWS LEAVE THE DEVELOPMENT.
4. GRAVEL BAGS SHALL BE PLACED ON THE UPSTREAM SIDE OF ALL DRAINAGE INLETS TO MINIMIZE SILT BUILDUP IN THE INLETS AND PIPES.
5. THE CONTRACTOR SHALL REPAIR ANY ERODED SLOPES AS DIRECTED BY THE DEPARTMENT OF DEVELOPMENT SERVICES.
6. ROADWAYS AND ENTRANCES TO AND FROM THE SITE SHALL BE SWEEPED ON A REGULAR BASIS TO KEEP THEM FREE OF SOIL ACCUMULATIONS.

7. CONTRACTOR SHALL HAVE WATER TRUCKS AND EQUIPMENT ON-SITE TO MINIMIZE AIR BORNE DUST CREATED FROM GRADING AND HAULING OPERATIONS OR EXCESSIVE WIND CONDITIONS. WATER SPRAYING SHALL BE PERFORMED ON A CONTINUOUS BASIS ANY TIME THESE CONDITIONS ARE PRESENT AND AT ALL OTHER TIMES AS DIRECTED BY THE CITY INSPECTOR.
8. STOCKPILES SHALL BE COVERED AT THE END OF EACH WORKING DAY AND PRIOR TO PREDICTED RAIN EVENTS.
9. ALL PORTABLE TOILETS SHALL HAVE A SECONDARY CONTAINMENT AND NOT BE LOCATED NEAR A STORM DRAIN (I.E. CATCH BASIN OR STREET)
10. INACTIVE SLOPES SHALL BE PROTECTED AND STABILIZED WITHIN 10 CALENDAR DAYS OF LAST BEING WORKED ON TO THE SATISFACTION OF THE CITY ENGINEER.
11. EROSION CONTROL ON SLOPES SHALL BE MITIGATED BY INSTALLING LANDSCAPING AS PER APPROVED LANDSCAPE PLANS AS REQUIRED BY THE DEVELOPMENT REVIEW CONDITIONS, OR BY TEMPORARY EROSION CONTROL CONFORMING TO THE FOLLOWING:

<u>NON-IRRIGATED HYDROSEED MIX</u>		
<u>LBS. PER ACRE</u>	<u>% PURITY PER ACRE</u>	<u>SEED SPECIES</u>
20	70% PLS.	ATRIPLEX GLAUCA
50		PLANTAGE INSULARIS
8		ENCELIS FARINOSA
6	SCARIFIED	LOTUS SCOPARIUS
<u>7</u>	50% PLS.	EXCHSCHOLTZIA CALIF.
91 LBS.		

12. 125 PERCENT OF THE MATERIALS REQUIRED TO MAINTAIN STORM WATER BMPS SHALL BE PRESENT ON THE SITE AT ALL TIMES.
13. STORMWATER CONTROL MEASURES SHOWN HEREON ARE BEST MANAGEMENT PRACTICES FOR THIS SITE BASED ON THE ANTICIPATED PROGRESS OF THE WORK. ADDITIONAL MEASURES MAY BE REQUIRED AT ANY TIME AT THE DISCRETION OF THE CITY ENGINEER AS THE WORK PROGRESSES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE PROTECTION IS IN PLACE AT ALL TIMES TO PREVENT ANY DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENT, FROM THE EXPOSED SITE AREAS.

ENGINEER OF WORK'S DESIGN CERTIFICATION

I, _____, HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SANTEE IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

I FURTHER UNDERSTAND THAT UPON APPROVAL OF THESE PLANS BY THE CITY ENGINEER, THE PLANS BECOME THE PROPERTY OF THE CITY OF SANTEE IN ACCORDANCE WITH THE CITY PUBLIC WORKS STANDARDS. AS SUCH, I HEREBY RELINQUISH RIGHT OF OWNERSHIP TO THE CITY TO USE THESE PLANS AS THEY MAY DEEM NECESSARY.

SIGNED : _____ DATE : _____
REGISTRATION # XXXXX , MY REGISTRATION EXPIRES ON XX/XX/XX

FIRM _____
ADDRESS _____
TELEPHONE _____

ENGINEER OF WORK'S AS-BUILT CERTIFICATION

I, _____, A REGISTERED CIVIL ENGINEER IN THE STATE OF CALIFORNIA, HEREBY DECLARE THAT I HAVE EXERCISED RESPONSIBLE CHARGE, AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, OVER THE PREPARATION OF THESE AS-BUILT DRAWINGS AND THAT THE INFORMATION SHOWN IS BASED ON ACTUAL SITE INVESTIGATION AND SURVEY OF THE IMPROVEMENTS BETWEEN THE DATES OF _____ AND _____. TO THE BEST OF MY KNOWLEDGE AND EXPERIENCE THE INFORMATION SHOWN ON THESE PLANS PROVIDE AN ACCURATE AND CORRECT REPRESENTATION OF THE AS-BUILT CONDITIONS.

SIGNED : _____ DATE : _____
REGISTRATION # XXXXX , MY REGISTRATION EXPIRES ON XX/XX/XX

FIRM _____
ADDRESS _____
TELEPHONE _____

LANDSCAPE ARCHITECT'S DESIGN CERTIFICATION

I, _____, HEREBY DECLARE THAT I AM THE LANDSCAPE ARCHITECT OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE, AS DEFINED IN THE BUSINESS AND PROFESSIONS CODE, OVER THE LANDSCAPE DESIGN OF THIS PROJECT AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS IN THE CITY OF SANTEE IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

I FURTHER UNDERSTAND THAT UPON APPROVAL OF THESE PLANS BY THE CITY ENGINEER, THE PLANS BECOME THE PROPERTY OF THE CITY OF SANTEE IN ACCORDANCE WITH THE CITY PUBLIC WORKS STANDARDS. AS SUCH, I HEREBY RELINQUISH RIGHT OF OWNERSHIP TO THE CITY TO USE THESE PLANS AS THEY MAY DEEM NECESSARY.

SIGNED : _____ DATE :

REGISTRATION # XXXXX , MY REGISTRATION EXPIRES ON XX/XX/XX

FIRM _____
ADDRESS _____

TELEPHONE _____

LANDSCAPE ARCHITECT'S AS-BUILT CERTIFICATION

I, _____, A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF CALIFORNIA, HEREBY DECLARE THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE PREPARATION OF THESE AS-BUILT DRAWINGS AS THEY PERTAIN TO THE LANDSCAPE IMPROVEMENTS. THE INFORMATION SHOWN IS BASED ON ACTUAL SITE INVESTIGATION AND SURVEY OF THE IMPROVEMENTS BETWEEN THE DATES OF _____ AND _____. TO THE BEST OF MY KNOWLEDGE AND EXPERIENCE THE INFORMATION SHOWN ON THESE PLANS PROVIDES AN ACCURATE AND CORRECT REPRESENTATION OF THE AS-BUILT CONDITIONS.

SIGNED : _____ DATE : _____
REGISTRATION # XXXXX , MY REGISTRATION EXPIRES ON XX/XX/XX

FIRM

ADDRESS

TELEPHONE

OWNER'S ACCEPTANCE

I, _____, AS OWNER OF THE PROPERTY DESCRIBED HEREON ACKNOWLEDGE THESE PLANS HAVE BEEN PREPARED AT MY DIRECTION AND WITH MY FULL CONSENT. I UNDERSTAND ALL CONSTRUCTION MUST CONFORM TO CURRENT CITY STANDARDS AND BE COMPLETED IN ACCORDANCE WITH THESE PLANS. ANY CHANGES TO THE WORK MUST BE APPROVED IN WRITING, IN ADVANCE, IN ACCORDANCE WITH THE CITY'S CONSTRUCTION CHANGE POLICY. I AGREE TO REMOVE AND RECONSTRUCT AT MY COST ANY WORK NOT COMPLETED IN STRICT ACCORDANCE WITH THESE PLANS OR ANY CONSTRUCTION CHANGES APPROVED INCIDENTAL THERETO.

BY: _____ DATE: