

CARMEL ESTATES PARK

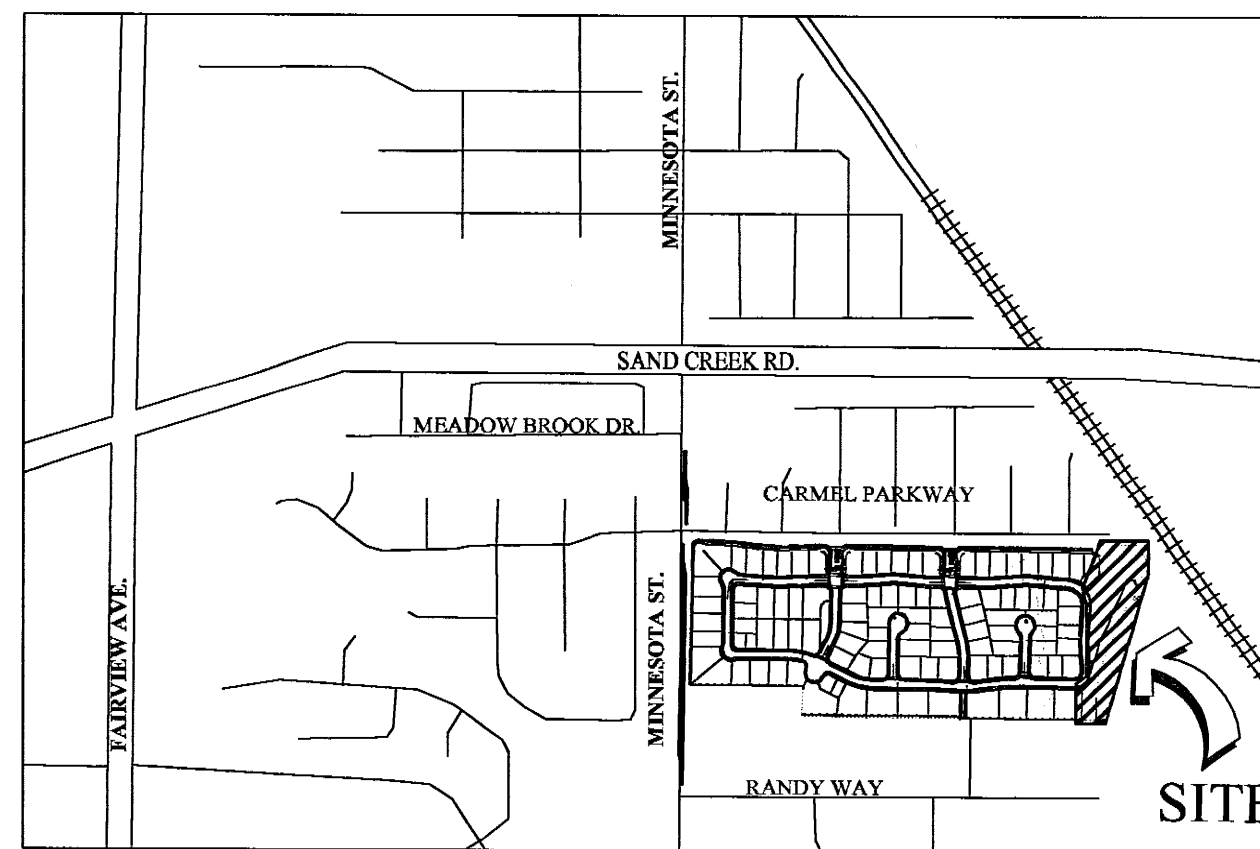
APN: 017-080-006

PARK PLAN

LANDSCAPED AREA = 61,911 S.F./ 1.42 Acres
Brentwood, California

ROBERT MOWAT
ASSOCIATES
LAND PLANNING +
LANDSCAPE ARCHITECTURE

2068 THIRD STREET SUITE 6
SAN FRANCISCO, CA 94107
PHN: (415) 777-4656 FAX: (415) 777-0420



VICINITY MAP

NOT TO SCALE

MERITAGE HOMES

1671 EAST MONTE VISTA AVENUE, SUITE 214
VACAVILLE, CA 95688

PHN: (925) 288-0088

GENERAL NOTES

- ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PLANS, NOTES, AND DETAILS HEREIN. ALL REQUIREMENTS, STANDARDS AND SPECIFICATIONS OF ALL AGENCIES HAVING JURISDICTION OVER THE WORK SHALL BE ADHERED TO AND ALL WORK SHALL BE DONE TO THE SATISFACTION OF THE OWNER, LANDSCAPE ARCHITECT, AND JURISDICTIONAL AGENCIES. FIELD CHANGES WITHOUT NOTIFICATION MAY HAVE IMPLICATIONS NOT FORESEEN BY THE CONTRACTOR AS TO ENGINEERING, SAFETY, DESIGN AESTHETICS, AND CONSTRUCTION METHODOLOGIES.
- THE CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH THE PLANS, NOTES, AND DETAILS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL BECOME FAMILIAR AND COMPLY WITH THE STANDARDS AND SPECIFICATIONS OF AGENCIES HAVING JURISDICTION OVER THE WORK. AGENCY STANDARDS SHALL GOVERN WHEN IN CONFLICT WITH THE PLANS.
- SPECIFICATIONS, SPECIFIC NOTES AND DETAIL DRAWINGS HEREIN TAKE PRECEDENCE OVER GENERAL DRAWINGS AND PLANS, UNLESS OTHERWISE SPECIFICALLY DIRECTED IN WRITING BY THE LANDSCAPE ARCHITECT. ANY DEVIATION FROM THE APPROVED PLANS DURING CONSTRUCTION WILL REQUIRE TWO WORKING DAYS WRITTEN NOTICE TO THE LANDSCAPE ARCHITECT AND OTHER APPROPRIATE PUBLIC AGENCIES OWNER AND APPROVAL BY THE SAME.
- IN THE EVENT THE CONTRACTOR DISCOVERS A DEFICIENCY OR CONFLICT IN THE PLANS, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.
- NO OFF-SITE WORK IS TO BE PERFORMED BY THE CONTRACTOR UNTIL A "RIGHT-OF-ENTRY" AND/OR EASEMENT DOCUMENTS ARE OBTAINED FROM THE AFFECTED PROPERTY OWNER(S) BY THE OWNER, APPROVED BY JURISDICTIONAL AGENCY(S), AND FURNISHED TO THE CONTRACTOR.
- A PRE CONSTRUCTION MEETING WITH THE OWNER AND CONTRACTOR SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION.
- CONTRACTOR WILL NOT MAKE ANY REVISIONS OR FIELD CHANGES WITHOUT THE OWNER'S AND LANDSCAPE ARCHITECT'S PRIOR WRITTEN APPROVAL. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR CHANGE ORDER STATING ADDITIONAL COST OR CREDIT FOR CHANGE, IF ANY. ANY REVISIONS OF FIELD CHANGES PERFORMED WITHOUT THIS AUTHORIZATION WILL BE AT THE CONTRACTOR'S SOLE RISK. THE CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR THE COST OF CORRECTING REMEDYING SUCH CHANGES. ANY REVISIONS REQUIRE JURISDICTIONAL AGENCY APPROVAL PRIOR TO START OF WORK. FIELD CHANGES WITHOUT NOTIFICATION MAY HAVE IMPLICATIONS NOT FORESEEN BY THE CONTRACTOR AS TO ENGINEERING, SAFETY, DESIGN AESTHETICS, AND CONSTRUCTION METHODOLOGIES.
- ANY DEVIATION OR CHANGES IN THESE PLANS WITHOUT OFFICIAL APPROVAL OF THE LANDSCAPE ARCHITECT SHALL ABSOLVE THE LANDSCAPE ARCHITECT FROM ANY AND ALL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.
- THE CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS AND SHALL HOLD HARMLESS, INDEMNIFY AND DEFEND THE OWNER, THE LANDSCAPE ARCHITECT, THEIR OFFICERS AND EMPLOYEES, FROM ANY AND ALL LIABILITY, CLAIMS, LOSSES, OR DAMAGES ARISING, OR ALLEGED TO ARISE, FROM THE PERFORMANCE OF THE WORK DESCRIBED HEREIN, EXCEPT THOSE ARISING FROM THE SOLE NEGLIGENCE OF ANY OF THE AFOREMENTIONED INDIVIDUALS AND ENTITIES. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- CONTRACTOR SHALL KEEP EXISTING STREETS FREE FROM DIRT AND DEBRIS AT ALL TIMES DURING ALL PHASES OF CONSTRUCTION.
- EXISTING UTILITIES MUST NOT BE INTERRUPTED UNTIL THE UTILITY PROVIDER HAS APPROVED ALTERNATIVE SERVICE FACILITIES AND HAS APPROVED THE INTERRUPTION. THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS WORK WITH JURISDICTIONAL AGENCIES AND UTILITY PROVIDERS.
- THE CONTRACTOR SHALL MAKE ALL EFFORTS TO PROTECT IN PLACE ALL EXISTING IMPROVEMENTS AND UTILITIES UNLESS OTHERWISE SPECIFIED ON THESE PLANS.
- THE CONTRACTOR SHALL INITIALLY EXPOSE ALL EXISTING UTILITY FACILITIES WITHIN AND IMMEDIATELY ADJACENT TO AREAS OF WORK, AT THE IN POINTS AND POSSIBLE AREAS OF CONFLICT, AND VERIFY THE LOCATION AND DEPTH OF THE LINES OR OTHER FACILITIES PRIOR TO ANY UTILITY EXCAVATION, TRENCHING OR LAYING OF ANY PROPOSED PIPES, STRUCTURES, OR OTHER UTILITIES. ANY EXCAVATIONS, TRENCHING OR LAYING OF PIPES, STRUCTURES, OR OTHER UTILITIES PRIOR TO VERIFICATION OF THE LOCATION AND DEPTH OF UNDERGROUND FACILITIES AND THE IN POINTS SHALL BE AT THE CONTRACTOR'S OWN RISK.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE LANDSCAPE ARCHITECT OF ANY DIFFERENCE IN LOCATION OR EXISTENCE OF EXISTING UTILITIES FROM THAT SHOWN ON THESE PLANS, OR OF ANY CONFLICTS WITH THE DESIGN BEFORE CONTINUING WITH WORK IN THAT AREA.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AS BUILT INFORMATION. THE CONTRACTOR SHALL MAINTAIN A WRITTEN RECORD AND A MARKED-UP PLAN SHOWING ANY VARIATION OF THE APPROVED PLAN AND REVISIONS. THE CONTRACTOR SHALL SUBMIT ALL AS-BUILT RECORDS TO THE LANDSCAPE ARCHITECT PRIOR TO THE ACCEPTANCE OF ANY PORTION OF WORK SO THAT THE LANDSCAPE ARCHITECT MAY PREPARE FINAL RECORD DRAWINGS.
- THE CONTRACTOR SHALL KEEP THE SITE FREE FROM LITTER AND WASTE DURING THE CONSTRUCTION OPERATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP, REMOVAL, AND DISPOSAL OF ALL EXCESS MATERIALS, BROKEN, OR DISCARDED MATERIALS, SHIPPING MATERIALS, AND DIRT STOCKPILES, TO THE SATISFACTION OF THE OWNER AT THE COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE USUAL AND PECULIAR HAZARDS ASSOCIATED WITH THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE COMPETENT AND SKILLED IN THE PROTECTIVE MEASURES NECESSARY FOR THE SAFE PERFORMANCE OF THE CONSTRUCTION WORK.
- THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGGERS, OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

CONTRACTOR'S SIGNATURE

DATE

GOVERNING AGENCY

CITY OF BRENTWOOD
PARKS AND RECREATION DEPARTMENT
708 THIRD STREET
BRENTWOOD, CA 94513
T (925) 516-5444
F (925) 516-5445

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APPROVED BY:

CRAIG D. BRUNZAN

DIRECTOR OF PARKS AND RECREATION

DATE

5/8/12

BALWINDER S. GREWAL

CITY ENGINEER/DIRECTOR OF PUBLIC WORKS, RCE 49122, EXP. 9-30-08

DATE

5/4/12

REVIEWED FOR CONFORMANCE WITH THE CITY OF BRENTWOOD STANDARDS AND REQUIREMENTS. APPROVAL FOR CONSTRUCTION IS SUBJECT TO THE INFORMATION SHOWN HEREIN. CITY OF BRENTWOOD AND THE UNDERSIGNED ARE NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY EXIST ON THESE PLANS. ALL WORK SHALL CONFORM TO THE CURRENTLY ADOPTED EDITIONS OF THE STANDARDS AND SPECIFICATIONS AND ENGINEERING PROCEDURE MANUAL OF THE CITY OF BRENTWOOD UNLESS OTHERWISE NOTED.

11-28-2012
AS-BUILT DRAWING SET

SHEET

L-0

OF 17



| | | |
|---|--|---------|
| 6 | CITY COMMENTS | 5-2-12 |
| 5 | CITY COMMENTS | 4-9-12 |
| 4 | CITY COMMENTS | 4-3-12 |
| 3 | CITY COMMENTS | 3-22-12 |
| 2 | MOVE VALVES OUT OF HDA EASEMENT | 8-14-08 |
| 1 | MOVE MAIN & VALVES OUT OF HDA EASEMENT | 7-18-08 |
| | REVISIONS | DATE |

C.A.D. BY: JD
CHECKED BY: RJM
PROJ. MGR.: JD
DATE: 2-28-2012
SCALE:
SHEET NO. 0 OF 17 SHEETS

8311 As-Built's Park 1/8

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE MOST CURRENT CITY OF BRENTWOOD STANDARD PLANS AND SPECIFICATIONS. IN CASE OF A CONFLICT BETWEEN THE CITY OF BRENTWOOD STANDARD PLANS AND SPECIFICATIONS AND THE PLANS AND SPECIFICATIONS SHOWN HERE, THE CITY STANDARD PLANS SHALL GOVERN.
2. AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE CITY OF BRENTWOOD FOR ANY WORK TO BE PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY. (NOTE ALL OTHER PERMIT REQUIREMENTS FROM ANY OTHER AFFECTED AGENCIES.)
3. APPROVAL OF THESE PUBLIC IMPROVEMENTS PLANS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
4. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS.

HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY WHETHER OR NOT IT IS SHOWN HEREON, AND IS RESPONSIBLE FOR CORRECTING ANY DAMAGE TO SAID FACILITIES.

5. LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (800-227-2600) TO OBTAIN A U.S.A. IDENTIFICATION NUMBER AND HAVE EXISTING UTILITIES LOCATED.

CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY DUE TO ACTUAL LOCATION OF EXISTING UTILITIES.

6. "CITY ENGINEER" SHALL MEAN THE CITY ENGINEER OR HIS/HER AUTHORIZED AGENT ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY.
7. THE DEVELOPER SHALL TELEPHONE THE CITY OF BRENTWOOD PARK AND RECREATION DEPARTMENT, 925-516-5377, AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING CONSTRUCTION WORK.
8. THE CONTRACTOR SHALL CALL 925-516-5377 TO SCHEDULE A PRECONSTRUCTION CONFERENCE AT THE JOB SITE WITH THE CITY, DEVELOPER, SUBCONTRACTOR AND OTHER AFFECTED AGENCIES AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING ANY CONSTRUCTION WORK.
9. TRAFFIC CONTROL SHALL BE PROVIDED IN CONFORMANCE WITH THE LATEST EDITION OF THE "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES" ISSUED BY THE STATE OF CALIFORNIA, DEPARTMENT TRANSPORTATION AND AS REQUIRED BY THE CITY ENGINEER AND APPROVED BY THE CITY ENGINEER.
10. IF ANY CULTURAL FEATURES OR ARCHEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING, OR OTHER EXCAVATION WORK, ALL WORK WITHIN ONE HUNDRED FEET (100') OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHEOLOGIST CERTIFIED BY THE SOCIETY OF CALIFORNIA ARCHAEOLOGY (SOPA) AND/OR THE SOCIETY OF CALIFORNIA ARCHAEOLOGY (SCA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND APPROPRIATE MITIGATION MEASURES ARE DETERMINED AND IMPLEMENTED.
11. REGULAR HOURS OF WORK WILL BE LIMITED TO 7:00 A.M. TO 3:30 P.M., MONDAY THROUGH FRIDAY. THE OWNER OR DEVELOPER MUST SUBMIT A WRITTEN REQUEST FOR APPROVAL BY THE CITY ENGINEER AT LEAST TWO (2) WORKING DAYS IN ADVANCE TO WORK DURING ANY OTHER HOURS, WEEKENDS, OR HOLIDAYS.

THE FOLLOWING SPECIAL HOURS OF WORK WILL BE ENFORCED FROM MONDAY THROUGH FRIDAY:

- A. WORK AFFECTING TRAFFIC ON BALFOUR ROAD, BRENTWOOD BOULEVARD, FAIRVIEW AVENUE, LONE TREE WAY, SAND CREEK ROAD, CENTRAL BOULEVARD OR WALNUT BOULEVARD WILL BE LIMITED TO 9:00 A.M. TO 3:00 P.M.
- B. WORK ADJACENT TO OR WITHIN FIFTEEN HUNDRED FEET (1500') OF ANY SCHOOL WHILE THE SCHOOL IS IN SESSION WILL BE LIMITED TO 9:00 A.M. TO 3:00 P.M.
- C. WORK WITHIN THREE HUNDRED FEET (300') OF OCCUPIED RESIDENTIAL UNITS AND NOT AFFECTING BALFOUR ROAD, BRENTWOOD BOULEVARD, FAIRVIEW AVENUE, LONE TREE WAY OR WALNUT BOULEVARD SOUTH OF BALFOUR ROAD WILL BE LIMITED TO 8:30 A.M. TO 4:30 P.M.
- D. WORK IN EXCESS OF THREE HUNDRED FEET (300') FROM OCCUPIED RESIDENTIAL UNITS AND NOT AFFECTING BALFOUR ROAD, BRENTWOOD BOULEVARD, FAIRVIEW AVENUE, LONE TREE WAY OR WALNUT BOULEVARD SOUTH OF BALFOUR ROAD, WILL BE LIMITED TO 7:00 A.M. TO 5:00 P.M.
- E. ALL SATURDAY WORK SHALL BE RESTRICTED TO 9:00 A.M. TO 4:00 P.M.

12. CONTRACTOR'S OPERATIONS SHALL CONFORM TO THE RULES AND REGULATIONS OF THE STATE OF CALIFORNIA CONSTRUCTION SAFETY ORDERS PERTAINING TO TRENCHES AND EXCAVATIONS.
13. CONTRACTOR SHALL PROVIDE AT LEAST TWO (2) WORKING DAYS ADVANCE NOTICE TO THE CITY ENGINEER PRIOR TO CONNECTING TO EXISTING WATER FACILITIES. THE MANIPULATION OF EXISTING VALVES SHALL BE DONE UNDER THE DIRECTION OF THE CITY WATER DIVISION PERSONNEL.
14. THE INSTALLATION OF EROSION CONTROL FACILITIES AND MEASURES IS NECESSARY AT ALL TIMES. (EROSION CONTROL PLAN SHALL BE APPROVED BY THE CITY ENGINEER.)
15. MAILBOXES SHALL BE INSTALLED IN LOCATIONS APPROVED BY THE LOCAL POSTMASTER AND PER CITY OF BRENTWOOD STANDARD PLANS.

16. ALL DRIVEWAY LOCATIONS AND WIDTHS ARE APPROVED BASED ON THE INFORMATION PROVIDED BY THE DEVELOPER/OWNER. IF THERE IS A REQUIRED CHANGE IN THE FLOOR PLAN, THE DEVELOPER/OWNER SHALL WIDEN OR RELOCATE THE DRIVEWAY SOLELY AT HIS/HER OWN COST.
17. IF DRIVEWAY DEPRESSIONS ARE MADE IN ANY CURB, DRIVEWAY APPROACHES ARE THEN CONSIDERED TO BE PART OF THE IMPROVEMENT PLAN AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BRENTWOOD STANDARD PLANS.
18. MONUMENTS ARE TO BE SET AS SHOWN ON THE PLANS AND PER THE REQUIREMENTS OF THE SUBDIVISION MAP ACT, LAND SURVEYORS ACT, AND THE CITY SUBDIVISION ORDINANCE AND SHALL BE IN ACCORDANCE WITH THE RULES AND PROCEDURES APPROVED BY THE COUNTY SURVEYOR.
19. TREES SHALL NOT BE PLANTED WITHIN THE CITY OF BRENTWOOD RIGHT-OF-WAY UNLESS A PERMIT HAS BEEN OBTAINED FROM THE PARKS AND RECREATION DEPARTMENT, OR IF THE TRESS ARE PLANTED IN ACCORDANCE WITH A LANDSCAPE PLAN APPROVED BY THE CITY ENGINEER AND THE PARKS AND RECREATION DIRECTOR.
20. JOINTS BETWEEN NEW PAVEMENT AND EXISTING PAVEMENT SHALL BE MADE BY SAW-CUTTING EXISTING PAVEMENT TO EFFECT A NEAT BUTT JOINT AS DEPICTED ON THE CITY STANDARD PLANS. FEATHERING NEW ASPHALT PAVING OVER EXISTING PAVEMENT IS NOT ALLOWED.
21. THE CONTRACTOR SHALL NOTIFY THE CONTRA COSTA FLOOD CONTROL DISTRICT AND EAST CONTRA COSTA IRRIGATION DISTRICT PRIOR TO STARTING WORK NEAR DISTRICT'S FACILITIES AND SHALL COORDINATE ALL WORK WITH DISTRICT'S REPRESENTATIVES.
22. LOCATION AND HEIGHT OF ALL RETAINING WALLS SHALL BE SHOWN ON THESE PLANS. RETAINING WALLS HIGHER THAN ONE FOOT (1') SHALL BE STRUCTURALLY DESIGNED AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION (SEE STANDARD PLANS G-3A, G-3B, G-4A AND G-4B FOR DETAILS).
23. IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT/ENGINEER TO CONTACT THE VARIOUS UTILITY AGENCIES, ADVISE THE AGENCIES OF THE PROPOSED IMPROVEMENTS, AND PAY FOR THE COST OF RELOCATION, IF NEEDED.
24. NO FINAL PAVING SHALL BE DONE UNTIL EXISTING POWER POLES AND OTHER EXISTING FACILITIES, ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.
25. SUBGRADE FOR ALL STREET, CURB AND GUTTER, AND CONCRETE FLATWORK SHALL BE COMPACTED TO NINETY-FIVE PERCENT (95%) RELATIVE COMPACTION.
26. ALL UNDERGROUND UTILITIES SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF BASEROCK UNLESS APPROVED BY THE CITY ENGINEER.
27. ALL PAVEMENT MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE THERMOPLASTIC UNLESS SPECIFICALLY CALLED OUT AS PAINT. NO PERMANENT MARKINGS SHALL BE PLACED UNTIL THE CITY TRAFFIC ENGINEER, CITY ENGINEER OR HIS/HER REPRESENTATIVE APPROVES CAT TRACKING IN THE FILL.
28. BLUE REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION AS SHOWN ON THE CITY OF BRENTWOOD STANDARD PLANS.
29. ALL TRAFFIC SIGNS AND STREET NAME SIGNS SHALL BE HIGHLY REFLECTIVE GRADE MATERIALS.
30. THE IMPROVEMENT PLANS SHALL REFLECT THAT ALL ON-SITE/OFF-SITE STORM DRAIN INLETS SHALL BE "NO DUMPING DRAINS TO CREEK" STENCILED, USING A TWO-STEP THERMOPLASTIC ON THE FACE OF THE CURB ADJACENT TO THE INLET.
31. PRIOR TO THE PLACEMENT OF CONCRETE THE CITY ENGINEER MUST APPROVE FORMS FOR CURBS, GUTTERS AND SIDEWALKS.
32. ALL STORM DRAIN STRUCTURES SHALL BE CONSTRUCTED TO CITY OF BRENTWOOD STANDARDS (WITH WEEP HOLES AT SUBGRADE ELEVATION) UNLESS OTHERWISE NOTED.
33. THE CONTRACTOR SHALL REVIEW THE CURRENT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PROVIDED BY THE OWNER. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY FOR CONDUCTING HIS/HER OPERATIONS IN ADHERENCE TO THE SWPPP. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES, DELAYS, AND/OR DAMAGE RESULTING FROM ANY STATE WATER QUALITY CONTROL BOARD SANCTIONS CAUSED BY THE OPERATION OF THE CONTRACTOR OR HIS/HER SUBCONTRACTORS.
34. MINIMUM SERVICE LINE SIZES TO DRINKING FOUNTAINS SHALL BE ONE INCH (1"). SERVICE LINES IN SIZES UP TO AND INCLUDING TWO INCHES (2") SHALL BE TYPE K SOFT COPPER TUBING. ZINC ANODES SHALL BE PROVIDED AND INSTALLED AT THE LOCATIONS SHOWN ON THE CITY OF BRENTWOOD STANDARD PLANS.
35. COVER REQUIREMENTS: WATER MAINS AND SERVICES SHALL BE INSTALLED AT A DEPTH WHICH WILL PROVIDE A MINIMUM OF THIRTY-SIX INCHES (36") COVER FROM THE TOP OF THE PIPE TO THE SUBGRADE. IN CASE OF UTILITY CONFLICT IN WHICH THE WATER MAIN IS REQUIRED TO GO OVER ANOTHER UTILITY, CITY STANDARD PLAN W-14, "CONCRETE CAP OVER WATER MAIN," APPLIES.

ALL LOT CORNERS AND TRACT BOUNDARIES SHALL BE LOCATED AND MONUMENTED IN ACCORDANCE WITH THE RECORDED TRACT MAP. THE PROJECT CIVIL ENGINEER SHALL SUBMIT A WRITTEN CERTIFICATION TO THE CITY ENGINEER.

IF THE SITE REQUIRES EXCESS FILL MATERIAL, THE OWNER SHALL FURNISH FILL MATERIAL AS REQUIRED FOR THE SITE. THE CONTRACTOR SHALL SPREAD THE MATERIAL AS NECESSARY TO ACHIEVE THE LINES AND GRADES SHOWN ON THE DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

IT SHALL BE FREE OF TOPSOIL, ORGANIC AND OTHER DELETERIOUS SUBSTANCES WHICH MIGHT BE HARMFUL TO PLANT GROWTH. SEE PLANTING NOTES FOR ADDITIONAL REQUIREMENTS FOR IMPORT SOIL THE ROOT AREA OF LANDSCAPE PLANTING.

FOR PUBLICLY MAINTAINED PIPES THE MINIMUM PIPE SLOPE FOR ANY STORM DRAINPIPE SHALL BE 2%. MINIMUM DEPTHS SHALL BE TWO FEET (2') BELOW STREET SUBGRADE. MAXIMUM MANHOLE SPACING SHALL BE THREE HUNDRED FEET (300'). THE CITY ENGINEER SHALL APPROVE ANY DEVIATION FROM THESE MINIMUM ALLOWED CRITERIA.

ALLOWABLE PIPE MATERIALS: ONLY VITRIFIED CLAY, SDR 35, AND DUCTILE IRON PIPE WILL BE ALLOWED. REFER TO SECTION 71, "SEWERS," AND SECTION 76, "STORM DRAIN FACILITIES," OF THE STANDARD PLANS AND SPECIFICATIONS.

PREPARATION: FOR AREAS TO RECEIVE FILL, ALL LOOSE SURFACE SOILS, EXISTING FILLS AND VEGETATION SHOULD BE STRIPPED TO EXPOSE COMPACTED SUBGRADE.

ALL EXPLORATORY TRENCHES AND PITS SHALL BE EXCAVATED AND RECOMPACTED, UNDER THE TESTING AND OBSERVATION OF THE GEOTECHNICAL ENGINEER.

TRENCH BACKFILL: TRENCH BACKFILL SHALL COMPLY WITH THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER. PIPE ZONE BACKFILL (MATERIAL BENEATH AND IMMEDIATELY SURROUNDING PIPE) SHALL CONSIST OF A WELL-GRADED IMPORT OR NATIVE MATERIAL LESS THAN THREE-QUARTER INCH (3/4") MAXIMUM DIMENSION COMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS PROVIDED FOR FILL COMPACTION.

TRENCH ZONE BACKFILL (MATERIAL PLACED BETWEEN THE PIPE ZONE BACKFILL AND THE GROUND SURFACE) SHALL CONSIST OF NATIVE SOIL COMPACTED IN ACCORDANCE WITH RECOMMENDATIONS FOR FILL COMPACTION. WHERE IMPORT MATERIAL IS USED FOR PIPE ZONE BACKFILL, IT SHALL CONSIST OF FINE TO MEDIUM GRAINED SAND OR WELL GRADED SAND AND GRAVEL AND THIS MATERIAL SHALL NOT BE USED WITHIN TWO FEET (2') OF FINISH GRADE.

UNIFORMLY GRADED GRAVEL SHOULD NOT BE USED FOR PIPE OR TRENCH ZONE BACKFILL. UTILITY TRENCHES ENTERING PAVED AREAS MUST BE PROVIDED WITH AN IMPERVIOUS SEAL CONSISTING OF NATIVE MATERIALS OR CONCRETE WHERE THE TRENCHES PASS UNDER PAVEMENT, EXTENDING AT LEAST THREE FEET (3') EITHER SIDE OF THE CROSSING.

GRADES, LINES AND LEVELS: ALL ELEVATIONS SHOWN ON THE DRAWINGS ARE FINISH GRADE UNLESS OTHERWISE NOTED. GRADES NOT OTHERWISE INDICATED SHALL BE UNIFORM LEVELS OR SLOPES BETWEEN TOP AND TOE OF SLOPES. FINISH GRADE SHALL BE A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE. ADJUSTMENTS OF FINISH GRADES SHALL BE MADE AT THE DIRECTION OF THE CITY INSPECTOR IF REQUIRED.

LOW SPOTS AND POCKETS SHALL BE GRADED TO DRAIN PROPERLY. SLOPES SHALL BE AS FOLLOWS, UNLESS OTHERWISE SHOWN ON THE PLANS:
PAVEMENT - 1.5% MINIMUM, 4.9% MAXIMUM
PLANTING AREAS - 2% MINIMUM, 3:1 MAXIMUM

THE OWNER SHALL BE RESPONSIBLE FOR LOCATING CONTROL POINTS AND BENCH MARKS. THE CONTRACTOR SHALL ESTABLISH ANY CONSTRUCTION STAKES NECESSARY TO ESTABLISH ALL LINES AND GRADES REQUIRED FOR THE COMPLETE LAYOUT AND EXECUTION OF THE WORK. SURVEYING SHALL BE PERFORMED USING A LASER TRANSIT OR METHOD APPROVED BY CITY REPRESENTATIVE. ALL BENCH MARKS, MONUMENTS, AND OTHER REFERENCE POINTS SHALL BE CAREFULLY MAINTAINED AND PROTECTED.

ALL ABANDONED UNDERGROUND PIPELINES EXPOSED DURING GRADING SHALL BE REMOVED AND THE ENDS SHALL BE ADEQUATELY PLUGGED.

END OF GENERAL NOTES

GRADING & DRAINAGE NOTES

1. THE CONTRACTOR SHALL BRING GRADES TO WITHIN ONE-TENTH OF ONE FOOT (0.1") OF FINAL GRADES AND OBTAIN GRADE CERTIFICATION PRIOR TO PLACEMENT OF ANY HARDSCAPE, IRRIGATION PIPING, STORM DRAIN PIPING OR PLANTING. CERTIFICATION LETTER SHALL BE SUBMITTED TO CITY INSPECTOR.
2. GRADING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT AND SUPPLEMENTED BY THE SPECIFIC GEOTECHNICAL RECOMMENDATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IN WRITING IMMEDIATELY OF ANY DIFFERENCES IN TOPOGRAPHY FROM THAT SHOWN ON THIS PLAN WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR EFFECT THE EARTHWORK QUANTITY.
4. CUT/FILL BALANCE: IF THE SITE GRADING GENERATES EXCESS MATERIAL, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT FOR POSSIBLE ONSITE ADJUSTMENT OF GRADE. IF GRADES CANNOT BE ADJUSTED ONSITE, EXCESS MATERIALS SHALL BE DISPOSED OF OFFSITE AT THE CONTRACTOR'S EXPENSE. ALL GRADE ADJUSTMENTS SHALL BE APPROVED BY CITY ENGINEER.

IF THE SITE REQUIRES EXCESS FILL MATERIAL, THE OWNER SHALL FURNISH FILL MATERIAL AS REQUIRED FOR THE SITE. THE CONTRACTOR SHALL SPREAD THE MATERIAL AS NECESSARY TO ACHIEVE THE LINES AND GRADES SHOWN ON THE DRAWINGS AT NO ADDITIONAL COST TO THE OWNER.

5. ACCEPTABLE MATERIAL: MATERIAL ACCEPTABLE FOR USE IN FILLS, EMBANKMENTS, BACKFILL, OR OTHER USES AS DIRECTED SHALL BE SUITABLE FOR COMPACTION, HAVE NO CEMENTED LUMPS AND/OR ROCKS LARGER THAN 3 INCHES (3") IN GREATEST DIMENSION. ALL FILL MATERIAL SHALL BE SUBJECT TO "COMPLETE ANALYSIS" TESTING FOR UNACCEPTABLE COMPONENTS SUCH AS HEAVY METAL, HERBICIDES, NITRATES, BORON, HYDROCARBONS, ETC.
6. FOR PUBLICLY MAINTAINED PIPES THE MINIMUM PIPE SLOPE FOR ANY STORM DRAINPIPE SHALL BE 2%. MINIMUM DEPTHS SHALL BE TWO FEET (2') BELOW STREET SUBGRADE. MAXIMUM MANHOLE SPACING SHALL BE THREE HUNDRED FEET (300'). THE CITY ENGINEER SHALL APPROVE ANY DEVIATION FROM THESE MINIMUM ALLOWED CRITERIA.

7. ALLOWABLE PIPE MATERIALS: ONLY VITRIFIED CLAY, SDR 35, AND DUCTILE IRON PIPE WILL BE ALLOWED. REFER TO SECTION 71, "SEWERS," AND SECTION 76, "STORM DRAIN FACILITIES," OF THE STANDARD PLANS AND SPECIFICATIONS.
8. PREPARATION: FOR AREAS TO RECEIVE FILL, ALL LOOSE SURFACE SOILS, EXISTING FILLS AND VEGETATION SHOULD BE STRIPPED TO EXPOSE COMPACTED SUBGRADE.
9. ALL EXPLORATORY TRENCHES AND PITS SHALL BE EXCAVATED AND RECOMPACTED, UNDER THE TESTING AND OBSERVATION OF THE GEOTECHNICAL ENGINEER.
10. TRENCH BACKFILL: TRENCH BACKFILL SHALL COMPLY WITH THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER. PIPE ZONE BACKFILL (MATERIAL BENEATH AND IMMEDIATELY SURROUNDING PIPE) SHALL CONSIST OF A WELL-GRADED IMPORT OR NATIVE MATERIAL LESS THAN THREE-QUARTER INCH (3/4") MAXIMUM DIMENSION COMPACTED IN ACCORDANCE WITH THE RECOMMENDATIONS PROVIDED FOR FILL COMPACTION.

TRENCH ZONE BACKFILL (MATERIAL PLACED BETWEEN THE PIPE ZONE BACKFILL AND THE GROUND SURFACE) SHALL CONSIST OF NATIVE SOIL COMPACTED IN ACCORDANCE WITH RECOMMENDATIONS FOR FILL COMPACTION. WHERE IMPORT MATERIAL IS USED FOR PIPE ZONE BACKFILL, IT SHALL CONSIST OF FINE TO MEDIUM GRAINED SAND OR WELL GRADED SAND AND GRAVEL AND THIS MATERIAL SHALL NOT BE USED WITHIN TWO FEET (2') OF FINISH GRADE.

UNIFORMLY GRADED GRAVEL SHOULD NOT BE USED FOR PIPE OR TRENCH ZONE BACKFILL. UTILITY TRENCHES ENTERING PAVED AREAS MUST BE PROVIDED WITH AN IMPERVIOUS SEAL CONSISTING OF NATIVE MATERIALS OR CONCRETE WHERE THE TRENCHES PASS UNDER PAVEMENT, EXTENDING AT LEAST THREE FEET (3') EITHER SIDE OF THE CROSSING.

11. GRADES, LINES AND LEVELS: ALL ELEVATIONS SHOWN ON THE DRAWINGS ARE FINISH GRADE UNLESS OTHERWISE NOTED. GRADES NOT OTHERWISE INDICATED SHALL BE UNIFORM LEVELS OR SLOPES BETWEEN TOP AND TOE OF SLOPES. FINISH GRADE SHALL BE A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE. ADJUSTMENTS OF FINISH GRADES SHALL BE MADE AT THE DIRECTION OF THE CITY INSPECTOR IF REQUIRED.
12. SURFACE DRAINAGE SHALL BE DIRECTED AS INDICATED ON THE DRAWINGS AND SHALL DIRECT WATER TO STREET CURBS, SWALES, OR EXISTING DRAINAGE STRUCTURES. SURFACES SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER AND SHALL CONFORM TO THE INTENT OF THE DRAWINGS AFTER THOROUGH SETTLEMENT AND COMPACTION OF THE SOILS.

LOW SPOTS AND POCKETS SHALL BE GRADED TO DRAIN PROPERLY. SLOPES SHALL BE AS FOLLOWS, UNLESS OTHERWISE SHOWN ON THE PLANS:
PAVEMENT - 1.5% MINIMUM, 4.9% MAXIMUM
PLANTING AREAS - 2% MINIMUM, 3:1 MAXIMUM

13. THE OWNER SHALL BE RESPONSIBLE FOR LOCATING CONTROL POINTS AND BENCH MARKS. THE CONTRACTOR SHALL ESTABLISH ANY CONSTRUCTION STAKES NECESSARY TO ESTABLISH ALL LINES AND GRADES REQUIRED FOR THE COMPLETE LAYOUT AND EXECUTION OF THE WORK. SURVEYING SHALL BE PERFORMED USING A LASER TRANSIT OR METHOD APPROVED BY CITY REPRESENTATIVE. ALL BENCH MARKS, MONUMENTS, AND OTHER REFERENCE POINTS SHALL BE CAREFULLY MAINTAINED AND PROTECTED.
14. ALL ABANDONED UNDERGROUND PIPELINES EXPOSED DURING GRADING SHALL BE REMOVED AND THE ENDS SHALL BE ADEQUATELY PLUGGED.

15. PROTECTION OF PERSONS AND PROPERTY: BARRICADE OPEN EXCAVATIONS OCCURRING AS PART OF THIS WORK AND POST WITH WARNING LIGHTS. PROTECT EXISTING STRUCTURES, UTILITIES, PAVEMENT FENCES, PLANTING, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY GRADING OPERATIONS.

16. EXCAVATIONS: ALL EXCAVATIONS SHALL BE MADE TRUE TO THE GRADES AND ELEVATIONS SHOWN ON THE PLANS. THE EXCAVATED SURFACES SHALL BE PROPERLY GRADED TO PROVIDE GOOD DRAINAGE DURING CONSTRUCTION.

17. STABILITY OF EXCAVATIONS: SEE CONSTRUCTION NOTES.

18. DEWATERING: PREVENT SURFACE WATER AND SUBSURFACE OR GROUND WATER FROM FLOWING INTO EXCAVATIONS OR TRENCHES AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. ESTABLISH TEMPORARY DRAINAGE DITCHES AS REQUIRED.

19. MATERIAL STORAGE: STOCKPILE SATISFACTORY EXCAVATED MATERIALS UNTIL REQUIRED FOR BACKFILL OR FILL. PLACE, GRADE AND SHAPE STOCKPILES FOR PROPER DRAINAGE AND TO PREVENT EROSION. COVER AS NECESSARY TO PREVENT DUST. STOCKPILED MATERIALS ARE NOT TO EXCEED SIX FEET (6') IN HEIGHT AND SHALL BE A MINIMUM OF FIFTY FEET (50') FROM ANY BASIN INLET.

20. GRADE CERTIFICATION: OWNER/CONTRACTOR WILL OBTAIN GRADE CERTIFICATION FROM SUPERVISOR/ENGINEER FOR ALL HARDSCAPE. IMPROVEMENTS PRIOR TO CONSTRUCTION/PLACEMENT OF HARD SURFACES.

21. SCARIFICATION: PRIOR TO FINISH GRADING, ALL LANDSCAPE AREAS SHALL BE RIPPED AND SCARIFIED TO A MINIMUM TEN INCH (10") DEPTH IN FOUR DIRECTIONS, USING TRACK LAYING OR RUBBER TIRED VEHICLES EQUIPPED WITH SUITABLE RIPPING TEETH SPACED NOT MORE THAN 15 INCHES (15") APART ACROSS THE FULL WIDTH OF THE WHEEL BASE.

22. MAINTENANCE: PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION. KEEP FREE OF TRASH AND DEBRIS. REPAIR AND RE-ESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS. WHERE SETTLING IS MEASURABLE OR OBSERVABLE AT EXCAVATED AREAS DURING GENERAL PROJECT WARRANTY PERIOD, REMOVE SURFACE (PAVEMENT, LAWN OR OTHER FINISH), ADD BACKFILL MATERIAL, COMPACT AND REPLACE SURFACE TREATMENT.

RESTORE APPEARANCE, QUALITY AND CONDITION OF SURFACE OR FINISHES TO MATCH ADJACENT WORK AND ELIMINATE EVIDENCE OF RESTORATION TO GREATEST EXTENT POSSIBLE.

23. CLEANUP: THE CONTRACTOR SHALL DISPOSE OF UNACCEPTABLE SOIL AND EXCAVATED MATERIAL, TRASH AND DEBRIS OUTSIDE THE LIMITS OF THE PROPERTY IN A LEGAL MANNER AT NO ADDITIONAL COST TO THE OWNER. LOCATION OF DUMP AND LENGTH OF HAUL SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

END OF GRADING AND DRAINAGE NOTES

CONSTRUCTION AND LAYOUT NOTES

1. CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE MOST CURRENT CITY OF BRENTWOOD PLANS AND SPECIFICATIONS.
2. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO COMPLETE THE INSTALLATION OF THIS PROJECT AS SPECIFIED ON THE PLANS. THE CONSTRUCTION WORK SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO FULLY COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS.
3. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE CITY INSPECTOR.
4. CONTRACTOR SHALL VERIFY ALL DISTANCES AND DIMENSIONS IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT BEFORE PROCEEDING.
5. OBSERVE ALL SETBACKS SHOWN ON THE PLANS AND AS MAY OTHERWISE BE REQUIRED.
6. ALL WRITTEN DIMENSIONS SUPERSEDE ALL SCALED DISTANCES AND DIMENSIONS.
7. ALL CURVED PAVEMENT AND MOWBANDS SHALL BE SMOOTH AND CONTINUOUS.
8. ALL CONCRETE WORK SHALL BE IN CONFORMANCE WITH SOILS ENGINEERING RECOMMENDATIONS.
9. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE LANDSCAPE ARCHITECT AT THE TIME OF THE PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN.

THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES. CALL UNDERGROUND SERVICE ALERT (U.S.A.), AT 800-227-2600. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES.




ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED AND MERGED IN THE CONTRACT UNIT PRICE.

10. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE CITY INSPECTOR, AT THE CONTRACTOR'S SOLE EXPENSE.

11. ANY RELOCATION OF PUBLIC UTILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH ANY AND ALL REQUIREMENTS OF THE UTILITY COMPANY INCLUDING FEES, BONDS, PERMITS AND WORKING CONDITIONS, ETC. THIS WORK SHALL BE DONE AT NO EXPENSE TO THE UTILITY COMPANY. THE OWNER SHALL PAY THE COST OF ALL SUCH RELOCATION WORK INCLUDING FEES, BONDS, PERMITS, ETC.

CONSTRUCTION AND LAYOUT NOTES CONTINUED ON NEXT SHEET

REVISION DATE: 3/12/07

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|  <div>PUBLIC WORKS DEPARTMENT 708 Third Street, Brentwood, CA 94513 Ph: (925) 516-5420 • FAX: (925) 516-5421 www.ci.brentwood.ca.us</div> |  <div>ROBERT MOWAT ASSOCIATES LANDSCAPE ARCHITECTURE • LAND PLANNING 2068 Third Street Suite 6 San Francisco, California 94107 Phone 415.777.4656 Fax 415.777.8420 www.rmlandscape.com</div> | NO. | REVISIONS | BY | APP | DATE | DESIGNED UNDER THE DIRECTION OF: | |  | IMPROVEMENT PLAN | CARMEL ESTATES PARK | SUBDIVISION | CITY OF BRENTWOOD STANDARD NOTES | LS - 1 | SHEET | |
| | | 1 | MOVE MAIN & VALVES OUT OF HOA EASEMENT | | | 7-18-08 | ROBERT J. MOWAT, RLA 2258 ROBERT MOWAT ASSOCIATES | | | | | | | | | DATE |
| | | 2 | MOVE VALVES OUT OF HOA EASEMENT | | | 8-14-08 | | | | | | | | | | |
| | | 3 | CITY COMMENTS | | | 3-22-12 | | | | | | | | | | |
| | | 4 | CITY COMMENTS | | | 4-3-12 | | | | | | | | | | |
| | | 5 | CITY COMMENTS | | | 4-9-12 | DESIGN: RJM | DATE: | | | | | | | | |
| 6 | CITY COMMENTS | | | 5-2-12 | DRAWN: JD | DATE: 2-28-12 | | | | | | | | | | |
| | | | | | | | CHECKED: RJM | DATE: | | | | | | | | |

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| CONSTRUCTION AND LAYOUT NOTES CONTINUED FROM PREVIOUS SHEET | | | | | REVISION DATE: 3/12/07 | | | | | | | | | | | | | | |
| <p>12. THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO. DUST CONTROL MEASURES AS APPROVED BY THE CITY SHALL BE FOLLOWED AT ALL TIMES.</p> <p>13. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR CITY OF BRENTWOOD APPROVAL PRIOR TO START OF CONSTRUCTION.</p> <p>14. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN, OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY AND TO MAINTAIN TRAFFIC CONTROL AT ALL TIMES.</p> <p>15. THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR ANY PRIVATE PROPERTY ADJACENT TO THE WORK AREA THROUGHOUT THE PERIOD OF CONSTRUCTION.</p> <p>16. EXCAVATIONS SHALL BE ADEQUATELY SHORED BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM LACK OF ADEQUATE SHORING, BRACING AND SHEETING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL EFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE.</p> <p>WHERE THE EXCAVATION FOR A CONDUIT TRENCH, STRUCTURE AND/OR BORING OR JACKING PIT IS FOUR FEET (4') DEEP OR MORE IN DEPTH THE CONTRACTOR SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.</p> <p>17. UNDERGROUND UTILITIES: THE CONTRACTOR SHALL COORDINATE SANITARY SEWER, STORM DRAIN AND WATER CONSTRUCTION IN A MANNER TO PREVENT ANY CONFLICTS WHERE UTILITY LINES CROSS EACH OTHER. SUFFICIENT INFORMATION SHALL BE SHOWN TO ESTABLISH THE ELEVATION AND/OR PROFILE OF WATER SERVICES AND SEWER LATERALS AT CROSSINGS WITH OTHER UNDERGROUND UTILITIES (STORM DRAIN, JOINT TRENCH, ETC.).</p> <p>THE PLANS SHALL ENSURE THAT MINIMUM CLEARANCES AT PIPE CROSSINGS ARE MAINTAINED. MINIMUM CLEARANCE IS ONE FOOT (1') BETWEEN ALL OTHER UNDERGROUND PIPES AND FACILITIES IS SIX INCHES (6"). SERVICES AND LATERALS SHALL CROSS ABOVE OR BELOW THE CONDUIT BANK IN JOINT TRENCHES.</p> <p>18. ALL DEBRIS AND ACCUMULATION OF DEBRIS DURING CONSTRUCTION PERIOD SHALL BE REMOVED FROM THE SITE DAILY AND THE AREA SHALL BE LEFT CLEAN AND IN A CONDITION ACCEPTABLE TO THE CLIENT.</p> <p>19. A 10' WIDE BENCH MUST BE PROVIDED AT THE TOP AND BOTTOM OF ALL SLOPES ADJACENT TO CITY OWNED OPEN SPACE OR PARK PROPERTY FOR MAINTENANCE REQUIREMENTS.</p> <p>20. ANY FEES ASSOCIATED WITH SOIL COMPACTION, MOISTURE, CONCRETE, SUBGRADE OR SUB-BASE SOIL ANALYSIS TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.</p> <p>END OF CONSTRUCTION AND LAYOUT NOTES</p> <p>CONCRETE NOTES</p> <p>1. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT TO PROVIDE ALL CAST-IN-PLACE CONCRETE AS SHOWN ON THE DRAWINGS, AND NOTED HEREIN, INCLUDING BUT LIMITED TO EXTERIOR PAVING, FOOTINGS, MOWBANDS, BASE ROCK, REINFORCING AND CONCRETE FINISHES.</p> <p>2. CONTRACTOR SHALL COMPLY WITH CITY OF BRENTWOOD STANDARD PLANS AND SPECIFICATIONS AND THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, JULY 1999, WHERE REFERENCED.</p> <p>3. SUBMITTALS: SUBMIT CONCRETE MIX DESIGNS, AND A 4"x4"x4" SAMPLE OF CONCRETE WITH FINISH TO CITY INSPECTOR FOR APPROVAL FIVE (5) WORKING DAYS PRIOR TO INSTALLATION.</p> <p>4. INSPECTION: THE CONTRACTOR SHALL NOTIFY CITY TWO (2) WORKING DAYS PRIOR TO THE POURING OF THE CONCRETE PAVING AFTER ALL FORMWORK, REINFORCING, AND INSERTS ARE IN PLACE FOR INSPECTION.</p> <p>5. PREPARATION: SUBGRADE PREPARATION, MOISTURE CONDITIONING, AND COMPACTION SHALL CONFORM TO THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. EXAMINE THE AREAS AND CONDITIONS UNDER WHICH WORK OF THIS SECTION WILL BE INSTALLED. CORRECT CONDITIONS DETRIMENTAL TO TIMELY AND PROPER COMPLETION OF WORK.</p> <p>DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. ANY FEES ASSOCIATED WITH SOIL COMPACTION, MOISTURE, CONCRETE, SUB-GRADE OR SUB-BASE TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.</p> <p>6. BASE ROCK: AGGREGATE BASE ROCK MATERIALS SHALL MEET CURRENT CITY REQUIREMENTS FOR CLASS 2 AGGREGATE BASE ROCK. BASE ROCK SHALL BE INSTALLED WHERE INDICATED ON DRAWINGS. COMPACT TO 95% OF MAXIMUM DRY DENSITY AT OR ABOVE OPTIMUM MOISTURE CONTENT. NO RECYCLED BASE ROCK WILL BE ALLOWED.</p> <p>7. FORMWORK: FORMS SHALL CONFORM STRICTLY TO SHAPE, LINES, DIMENSIONS AND DETAILS FOR CONCRETE WORK. TRANSITION OF CURVES TO STRAIGHT</p> <p>LINES AND OF CURVES TO CURVES SHALL BE SMOOTH, CONTINUOUS, AND UNINTERRUPTED, WITH 90' RADIUS ALIGNMENT AS POINT OF TANGENCY. FORMS SHALL BE CLEANED AND THOROUGHLY COATED WITH FORM OIL.</p> <p>8. FOOTING FORMS: IF EARTH BANKS WILL STAND WITHOUT CLUMPING OR CAVING, CONCEALED FOOTINGS MAY BE CAST IN NEAT TRENCHES. IF EXCAVATIONS RAVEL OR CAVE, FOOTINGS SHALL BE FORMED. SOIL SHALL BE MOIST, BUT NOT MUDDY OR PUDDLED PRIOR TO POURING CONCRETE.</p> <p>9. REINFORCING STEEL: CONFORM TO THE PLACEMENT, CLEAR SPACING AND LAPPING REQUIREMENTS OF REFERENCE STANDARDS. REINFORCING SHALL BE ACCURATELY LOCATED AND HELD IN PLACE BY SUPPORTS ADEQUATE TO PREVENT DISPLACEMENT AND MAINTAIN REINFORCEMENT AT PROPER</p> | | | | | <p>DISTANCE FROM FORM FACE. REINFORCING SHALL BE SECURELY TIED WITH STEEL TIE WIRE AT ALL SPLICES AND INTERSECTIONS. STAGGER SPLICES IN ADJACENT BARS WHEREVER POSSIBLE.</p> <p>10. INSERTS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF ALL ACCESSORIES EMBEDDED IN CONCRETE POSTS, ANCHOR BOLTS AND OTHER ITEMS EMBEDDED IN CONCRETE. SHALL BE ACCURATELY SECURED SO THAT THEY WILL NOT BE DISPLACED DURING PLACING OF CONCRETE.</p> <p>11. EXPANSION JOINTS: JOINTS SHALL CONFORM TO THE REQUIREMENTS OF CITY STANDARDS AND SPECIFICATIONS.</p> <p>12. SCORED CONTROL JOINTS: JOINTS SHALL CONFORM TO THE REQUIREMENTS OF CITY STANDARD PLANS AND SPECIFICATIONS.</p> <p>13. DOWELED JOINTS: DOWEL JOINTS WHERE INDICATED ON DRAWINGS WITH PLAIN BARS GREASED OR WRAPPED ON ONE END WITH BUILDING PAPER.</p> <p>14. CONCRETE PLACEMENT: PLACE CONCRETE IN ACCORDANCE WITH REFERENCE STANDARDS. ALL CONCRETE WORK SHALL BE TRUE TO LINE AND GRADE AS SHOWN ON THE DRAWINGS. PLACING OF CONCRETE SHALL BE DONE IMMEDIATELY AFTER MIXING AND DEPOSITED WITHOUT SEPARATION OF THE INGREDIENTS.</p> <p>CONCRETE SHALL NOT BE DROPPED FREELY MORE THAN SIX FEET (6'). ALL CONCRETE SHALL BE THOROUGHLY COMPACTED BY MEANS OF SPADING AND INTERNAL MECHANICAL VIBRATORS. CONCRETE WALL SURFACES WITH ROCK POCKETS OR HONEY COMBING SHALL NOT BE ACCEPTED.</p> <p>15. FINISH: GENERAL PAVING SHALL HAVE A MEDIUM BROOM FINISH OBTAINED BY DRAWING A STIFF BRISTLED BROOM ACROSS A FLOATED FINISH, UNLESS OTHERWISE SHOWN ON THE DRAWINGS. DIRECTIONS OF BROOMING TO BE PERPENDICULAR TO DIRECTION OF TRAVEL, OR AS DIRECTED BY CITY REPRESENTATIVE. PAVING SHALL HAVE TROWEL MARKS RESULTING FROM TOOLING OF EDGES AND JOINTS CAREFULLY TROWELED OUT.</p> <p>16. TOP OF EXPOSED FOOTINGS SHALL HAVE A FLOAT FINISH WITH SMOOTH, LEVEL, EVEN-TEXTURED SURFACE WITHOUT SHARP RIDGES, UNLESS OTHERWISE SHOWN ON THE DRAWINGS. EDGES TO BE TOOLED.</p> <p>17. GROUTING SHALL BE DONE IN STRICT CONFORMANCE TO THE MANUFACTURER'S RECOMMENDATIONS.</p> <p>18. CURING AND PROTECTION: ALL NEWLY PLACED CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE PROVISIONS IN SECTION 90 OF THE STANDARD SPECIFICATIONS. THE USE OF PIGMENTED CURING COMPOUNDS SHALL NOT BE ALLOWED. PROTECT NEWLY PLACED CONCRETE. CONCRETE WHICH IS DEFACED OR DAMAGED DURING THE COURSE OF THIS CONTRACT SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.</p> <p>19. SURFACE TOLERANCE: VERTICAL DEVIATION FROM ESTABLISHED GRADES SHALL NOT EXCEED 0.04 FOOT. SURFACE SMOOTHNESS DEVIATIONS SHALL EXCEED 0.02 FEET IN TEN FEET (10'). THICKNESS SHALL NOT BE MORE THAN 0.01 FOOT LESS THAN PLANNED THICKNESS AT ANY POINT. NO BIRDBATHS OR OTHER SURFACE IRREGULARITIES WILL BE PERMITTED. PAVING SHALL HAVE A MINIMUM PITCH OF 1.5% UNLESS OTHERWISE SHOWN ON DRAWINGS OR APPROVED BY CITY REPRESENTATIVE.</p> <p>20. NO ADVERTISING IMPRESSIONS, STAMP OR MARK OF ANY DESCRIPTION WILL BE PERMITTED ON THE CONCRETE SURFACES.</p> <p>END OF CONCRETE NOTES</p> <p>IRRIGATION NOTES</p> <p>GENERAL:</p> <p>1. PROVIDE INSTALLATION BY PERSONS FAMILIAR WITH IRRIGATION WORK AND UNDER THE SUPERVISION OF A QUALIFIED SUPERVISOR.</p> <p>2. OBTAIN THE PERMITS REQUIRED AND PROVIDE LABOR AND MATERIALS NECESSARY TO FULLY COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS AND THE SPECIFICATIONS.</p> <p>3. LOCATE AND PROTECT NEW AND EXISTING UTILITIES PRIOR TO EXCAVATION. CALL UNDERGROUND SERVICE ALERT (U.S.A.), AT 800-642-2444.</p> <p>4. DO NOT DAMAGE EXISTING UTILITIES, PAVING OR STRUCTURES. PROVIDE THE NECESSARY REPAIRS WITH APPROVAL OF APPROPRIATE AGENCY BEFORE BACKFILLING AND AT NO ADDITIONAL COST TO THE CITY.</p> <p>5. REMOVE DEBRIS AND ACCUMULATION OF DEBRIS AS A RESULT OF IRRIGATION CONSTRUCTION DAILY FROM THE SITE AND LEAVE AREA IN A CLEAN CONDITION ACCEPTABLE TO THE CITY ENGINEER.</p> <p>6. FOLLOWING ACCEPTANCE OF WORK BY THE CITY MAINTAIN SITE AND MAKE CORRECTIONS OR REPAIRS TO THE IRRIGATION AS DIRECTED BY THE CITY ENGINEER AT THE COMPLETION OF THE MAINTENANCE PERIOD.</p> <p>7. THE DRAWINGS ARE DIAGRAMMATIC. EQUIPMENT SHOWN IN PAVING IS FOR CLARITY ONLY - INSTALL IN PLANTING AREAS WHERE POSSIBLE DUE TO THE SCALE OF THE DRAWINGS, ALL OFFSETS, FITTINGS, SLEEVES, ETC. WHICH MAY BE REQUIRED ARE NOT INDICATED. INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING THE CONTRACT WORK INCLUDING OBSTRUCTIONS, GRADE DIFFERENCES OR AREA DIFFERENCES, WHICH MAY HAVE NOT BEEN CONSIDERED IN THE ENGINEERING.</p> <p>WHERE FIELD CHANGES EXIST, COORDINATE THE INSTALLATION WORK ACCORDINGLY BY NOTIFICATION AND APPROVAL OF THE CITY ENGINEER AS PER THE CONTRACT SPECIFICATIONS. COORDINATE IRRIGATION CONTRACT WORK WITH ALL APPLICABLE CONTRACTORS FOR THE LOCATION AND INSTALLATION OF PIPE, CONDUIT, OR SLEEVES OF PIPE, CONDUIT OR SLEEVES THROUGH OR UNDER WALLS ROADWAYS, PAVING, STRUCTURE, ETC. BEFORE CONSTRUCTION. ASSUME FULL RESPONSIBILITY FOR REQUIRED REVISIONS IF THESE NOTIFICATIONS ARE NOT PERFORMED.</p> <p>8. THE INTENT OF THIS IRRIGATION SYSTEM DESIGN IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH.</p> | | | | | <p>9. PLANTING IS NOT TO START UNTIL THE IRRIGATION SYSTEM IS FULLY OPERATIONAL AND HYDROSTATIC PRESSURE TEST, COVERAGE REVIEW, GRADING REVIEW, BACKFLOW CERTIFICATION, AND AUTOMATIC OPERATION OF CONTROLLER(S) IS COMPLETED, CERTIFIED BY THE VENDOR, AND APPROVED BY THE CITY ENGINEER.</p> <p>10. SPRINKLER SYSTEM GUARANTEE SHALL BE ONE (1) YEAR INCLUDING MANUFACTURER'S WARRANTIES.</p> <p>11. AT TIME OF AS-BUILT SUBMITTAL, PROVIDE ACTUAL FLOW RATE, PRECIPITATION RATE, CYCLE AND SOAK TIME, AND LANDSCAPE COEFFICIENT FOR EACH ZONE.</p> <p>12. PROVIDE A COVERAGE CHECK AND 14-DAY WATERING PERIOD BEFORE PLANTING. REMOVE WEEDS AND PERFORM FINAL GRADING AFTER 14-DAY PERIOD.</p> <p>13. PROVIDE A CERTIFIED WATER AUDIT OF IRRIGATION SYSTEM AND PROVIDE WRITTEN RESULTS TO THE CITY ENGINEER.</p> <p>14. STRAINER AND SPOOL ASSEMBLY SHALL BE LINE SIZE OR AS APPROVED BY CITY OF BRENTWOOD.</p> <p>15. THE BACKFLOW PREVENTION DEVICE IS TO BE CERTIFIED BY A CITY APPROVED BACKFLOW INSPECTOR.</p> <p>16. BOOSTER PUMP, ELECTRIC METER PEDESTAL, CONTROLLER AND ALL OTHER IRRIGATION ENCLOSURES SHALL HAVE A 5' OFFSET FROM ADJACENT PATH OR PAVED AREA AND SHALL BE CLEARLY IDENTIFIED ON ALL PLANS.</p> <p>17. ALL IRRIGATION ENCLOSURES, INCLUDING BACKFLOW ENCLOSURE, SHALL BE STAINLESS STEEL. ELECTRICAL METER PEDESTAL AND IRRIGATION CONTROLLER BOXES SHALL HAVE SLANT TOP LIDS. THE SLANT TOP ENCLOSURES MAY LIMIT CONFIGURATIONS REQUIRING MORE THAN ONE CONTROLLER OR DEVICE. ENCLOSURES TO BE ON A PAD 12" ABOVE FINISHED GRADE.</p> <p>CONTROLLER:</p> <p>18. SEQUENCE VALVES TO OPERATE IN GEOGRAPHIC ORDER. TAG AND MARK (BY HEAT BRANDING) VALVE NUMBER ON LID OF VALVE BOX. (2-1/2" LETTERS AND NUMBERS) IN A PERMANENT FASHION, NOT PAINTED.</p> <p>19. SUPPLY TWO SETS OF LAMINATED, COLOR COATED (BY STATION), REDUCED SCALE, AS BUILT 8-1/2"x11" LAYOUT PLANS.</p> <p>20. PROGRAM THE CONTROLLER TO PROVIDE THE MINIMUM AMOUNT OF WATER NEEDED TO SUSTAIN GOOD PLANT HEALTH. MAKE ADJUSTMENTS TO THE PROGRAM FOR SEASONAL WEATHER CHANGES, PLANT MATERIAL, WATER REQUIREMENTS, MOUNDS AND SLOPES, SUN, SHADE, AND WIND EXPOSURES.</p> <p>INCLUDE A PEAK DEMAND IRRIGATION SCHEDULE BY STATION IN IRRIGATION PLAN AND A LAMINATED COPY OF SCHEDULE IN CONTROLLER ENCLOSURE.</p> <p>21. 120 VOLT A.C. (2.5 AMP DEMAND PER CONTROLLER) ELECTRICAL SERVICE TO IRRIGATION CONTROLLER LOCATION(S) TO BE PROVIDED UNDER ELECTRICAL CONTRACT WORK. IRRIGATION CONTRACTOR TO MAKE FINAL CONNECTION FROM ELECTRICAL SUB-OUT TO CONTROLLER(S) AND PROVIDE PROPER GROUNDING PER CONTROLLER MANUFACTURER'S INSTRUCTIONS. ALL BREAKERS MUST BE LABELED.</p> <p>22. PROVIDE ONE DEDICATED GROUND FOR CONTROLLER AS DETAILED. GROUND ROD: TEN FEET LONG BY 3/4" DIAMETER U.L. APPROVED COPPER CLAD ROD. NO MORE THAN 6" OF THE GROUND ROD TO BE ABOVE GRADE. CONNECT #10 AWG WIRE WITH A U.L. APPROVED GROUND ROD CLAMP TO ROD AND GROUND SCREW AT BASE OF CONTROLLER WITH APPROPRIATE CONNECTOR. PROVIDE WIRE AS SHORT AS POSSIBLE, AVOIDING ANY KINKS.</p> <p>23. SCHEDULE A MEETING WHICH INCLUDES REPRESENTATIVES OF THE IRRIGATION CONTROLLER MANUFACTURER, THE MAINTENANCE PERSONNEL, THE CITY ENGINEER AND THE IRRIGATION CONTRACTOR AT THE SITE FOR INSTRUCTION ON THE PROPER PROGRAMMING AND OPERATION OF THE IRRIGATION CONTROLLER.</p> <p>24. SATELLITE CONTROLLER LOCATION IS DIAGRAMMATIC. THE CITY ENGINEER WILL SET THE EXACT LOCATION IN THE FIELD. CONTACT CITY INSPECTOR ON FINAL LOCATION AND ORIENTATION OF THE IRRIGATION CONTROLLER AND ELECTRIC METER PEDESTAL.</p> <p>25. ALL CONTROLLERS SHALL INCLUDE A RAIN MASTER PRO MAX RECEIVER PMR-CAC. FURNISH ONE RAIN MASTER PRO MAX-RMR-RAC.</p> <p>26. PRIOR TO THE START OF PLANTING, THE SATELLITE CONTROLLERS ARE TO BE FULLY OPERATIONAL, CONNECTED TO THE FINAL ELECTRICAL SOURCE, CONNECTED TO THE PHONE LINE, AND ABLE TO COMMUNICATE TO THE CENTRAL CITY COMPUTER SYSTEM.</p> <p>27. SATELLITE CONTROLLERS ARE TO BE CERTIFIED BY THE VENDOR AFTER INSTALLATION IS COMPLETE.</p> <p>BOOSTER PUMP:</p> <p>28. BOOSTER PUMP SHALL INCLUDE THE FOLLOWING MINIMUM SPECIFICATIONS:</p> <ul style="list-style-type: none">- VARIABLE FREQUENCY DRIVE- STATION DISCONNECT- BY-PASS ISOLATION VALVE- PRESSURE SWITCH GAUGE- TEMPERATURE SENSOR- STATION ISOLATION VALVE- PRESSURE GAUGE- STATION FAN- FLOW SENSOR- PRESSURE TRANSDUCER- UPSTREAM PRESSURE REGULATOR- PRESSURE REGULATOR <p>29. BOOSTER PUMPS SHALL BE USED ON ANY JOB THAT WILL USE RECLAIMED WATER OR NON-POTABLE WATER AND/OR HAS LARGE TURF ROTORS. ALL OTHER SYSTEMS SHALL BE DESIGNED TO OPERATE AT 50 PSI, OR LESS, WITHOUT A BOOSTER PUMP. CITY RESERVE SHALL BE 20% HIGHER THAN DESIGN PRESSURE AS RECORDED ON CITY WATER CHART, OR BOOSTER PUMP REQUIRED.</p> <p>30. BOOSTER PUMP AND EXTERNAL BREAKERS TO BE INSTALLED WITH STAINLESS STEEL ENCLOSURE AND CONCRETE BASE.</p> <p>LOW VOLTAGE WIRE:</p> <p>31. PROVIDE A DEDICATED COMMON GROUND WIRE PLUS ONE SPARE COMMON 12-GAUGE WIRE, WHITE IN COLOR, FOR EACH CONTROLLER (NOT USED). LOOP SPARE COMMON WIRE INTO ALL VALVES BOXES AND RUN ENTIRE LENGTH OF MAINLINE.</p> <p>32. SPARE WIRES SHALL RUN ALONG ENTIRE LENGTH ON MAIN LINE AT A RATIO OF ONE (1) EXTRA WIRE PER SIX (6) STATIONS USED ON THE CLOCK. LOOP 36" EXCESS WIRE INTO EACH SINGLE VALVE</p> | | | | | <p>BOX AND INTO ONE VALVE BOX IN EACH GROUP OF VALVES. WEATHERPROOF UNUSED WIRE ENDS AND INSTALL IN LAST VALVE BOX.</p> <p>33. IRRIGATION CONTROL WIRES: SOLID STRAND COPPER WITH U.L. APPROVAL FOR DIRECT BURIAL IN GROUND, SIZE AWG-UF #14-1. COMMON GROUND WIRE: #12 WITH WHITE INSULATING JACKET. CONTROL WIRE: INSULATING JACKET OF COLOR OTHER THAN WHITE. SPLICES: MADE WITH 3M-DBY SEAL PACKS.</p> <p>TRACER WIRE: INSULATED 10-GAUGE WIRE, BLACK IN COLOR, LOOPED INTO ALL ISOLATION VALVE CANS FOR ENTIRE LENGTH OF MAINLINE.</p> <p>MULTIPLE CONTROLLERS: COLOR CODE WIRES FOR EASE OF IDENTIFICATION BY PROVIDING DIFFERENT COLOR CONTROL WIRE FOR EACH CONTROLLER. REFER TO CITY DETAILS AND SPECIFICATIONS.</p> <p>34. SPLICING OF 24-VOLT WIRES IS NOT PERMITTED EXCEPT AT RCV SOLENOIDS OR BEYOND 2500' OF WIRE LENGTH. PROVIDE A 36" LONG 1" DIAMETER COIL OF EXCESS WIRE AT EACH SPLICE. PROVIDE A 36" LONG 1" DIAMETER EXPANSION LOOP EVERY 100 FEET AND TAPE WIRES TOGETHER EVERY TEN FEET ALONG THE WIRE RUN. DO NOT TAPE WIRES TOGETHER INSIDE SLEEVES. ALL APPROVED SPLICES SHALL BE INSTALLED IN A LABELED SPLICE BOX AS DIRECTED BY CITY REPRESENTATIVE.</p> <p>35. FOR EASE IN IDENTIFICATION COLOR CODE LOW VOLTAGE WIRE AS FOLLOWS:</p> <p>RED = TURF ZONES</p> <p>GREEN = TREE AND/OR SHRUB BUBBLER ZONES</p> <p>MAIN LINE OR MANIFOLD ISOLATION VALVES:</p> <p>36. MAIN LINE OR MANIFOLD ISOLATION VALVES ARE TO BE INSTALLED IN THE FULL OPEN POSITION UNLESS OTHERWISE NOTED.</p> <p>37. PROVIDE ONE GATE VALVE KEY TO CITY FOR OPERATION OF MAIN LINE ISOLATION VALVES, TWO KEYS FOR PROJECT.</p> <p>MASTER CONTROL VALVE AND FLOW SENSOR:</p> <p>38. INSTALL FLOW SENSOR CABLE IN 1.5" PVC CONDUIT FROM FLOW SENSOR TO CONTROLLER ENCLOSURE, WITH PULL BOXES EVERY 100', IF APPLICABLE. MAKE SPLICES ONLY IN CONTROLLER ENCLOSURES OR IN AN APPROVED PULL BOX.</p> <p>39. DO NOT SPLICE SENSOR CABLE BETWEEN THE CONTROLLER AND FLOW SENSOR. DO NOT EXCEED A MAXIMUM OF 2000' OF SENSOR CABLE.</p> <p>40. ALL IRRIGATION SYSTEMS SHALL INCLUDE FLOW SENSORS AND MASTER CONTROL VALVES. THESE SHALL WORK INTEGRALLY WITH THE CONTROLLER. THE FLOW SENSOR SHALL CONNECT TO SATELLITE COMPONENTS NECESSARY FOR OPERATION.</p> <p>REMOTE CONTROL VALVE:</p> <p>41. PROVIDE PLASTIC VALVE BOXES WITH BOLT DOWN (STAINLESS STEEL BOLTS AND WASHERS), NON-HINGED COVER HEAT BRANDED WITH THE WORD "IRRIGATION" AND THE IDENTITY OF THE BOX'S CONTENTS, SUCH AS QUICK COUPLING VALVE, REMOTE CONTROL VALVE (WITH VALVE ID#), ETC. BOX BODY SHALL HAVE KNOCK OUTS. MANUFACTURER: CARSON, NDS OR APPROVED EQUAL AS PER CITY DETAIL.</p> <p>42. INSTALL REMOTE CONTROL VALVE BOXES 12" FROM WALK, CURB, LAWN, HEADER BOARD, BUILDING, OR LANDSCAPE FEATURE. AT MULTIPLE VALVE BOX GROUPS, EACH BOX SHALL BE 12" APART. SHORT SIDE OF RECTANGULAR VALVE BOXES SHALL BE PARALLEL TO WALK, CURB, LAWN, ETC.. REFER TO BOX INSTALLATION DETAIL. REFER TO CITY DETAILS AND SPECIFICATIONS.</p> <p>REMOTE CONTROL VALVES PLACED IN GROUPS CAN BE PLACED ON A MANIFOLD WITH A BALL VALVE AT THE START OF THE MANIFOLD AND QUICK COUPLER AT THE END OF THE MANIFOLD.</p> <p>43. VALVE LOCATIONS ON DRAWINGS ARE DIAGRAMMATIC. INSTALL IN GROUND COVER/SHRUB AREAS WHERE POSSIBLE (NOT IN TURF AREA).</p> <p>44. INSTALL REGULATORS AFTER BACKFLOW VALVE ASSEMBLY FOR POTABLE IRRIGATION SYSTEMS AND AT BOOSTER PUMP FOR NON-POTABLE IRRIGATION SYSTEMS.</p> <p>SPRINKLERS:</p> <p>45. FLUSH AND ADJUST SPRINKLER HEADS FOR EFFICIENT PERFORMANCE. PREVENT OVERSPRAY ON THE WALKS, ROADWAYS, SIGNS, LIGHTS, AND/OR BUILDINGS. SELECT THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS AND THROTTLE THE FLOW CONTROL OR PRESSURE REGULATION DEVICE AT EACH VALVE TO OBTAIN THE BEST OPERATING PRESSURE FOR EACH SYSTEM.</p> <p>46. SET SPRINKLER HEADS PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE NOTED ON THE DRAWINGS.</p> <p>47. IRRIGATION HEAD LAYOUT AND PIPING AS SHOWN ON THE DRAWINGS IS INDICATIVE OF THE WORK TO BE INSTALLED. IRRIGATION HEADS, ARC OF SPRAY, RADIUS OF SPRAY AND PIPING AT CERTAIN LOCATIONS MAY BE REQUIRE FIELD ADJUSTMENT TO PREVENT HARM TO TREE ROOTS AND INTERFERENCE OF TREES TO IRRIGATION SPRAY. EXERCISE PARTICULAR ATTENTION AT ALL TREES TO ELIMINATE DIRECT SPRAY OF IRRIGATION HEADS ON TREE TRUNKS, ESPECIALLY OAK TREES.</p> <p>48. IRRIGATION HEAD LAYOUT PARAMETERS:</p> <ol style="list-style-type: none">1. SPRAY HEADS: HEAD-TO-HEAD SPACING OR CLOSER2. NOZZLES HAVE MATCHED PRECIPITATION RATES, +/- 10%3. ROTORS ARE SPACED AT 45% OF THE DIAMETER <p>49. LOCATE BUBBLERS ON UPHILL SIDE OF PLANT OR TREE TO ALLOW THE FLOW OF WATER TO FLOW INTO THE ROOTBALL AREA.</p> <p>50. BUBBLER SPRINKLER RATIO SHALL BE 1 PER SHRUB AND 2 PER TREE. IN LAWN AREAS ALL TREES SHALL HAVE 2 POP-UP BUBBLERS AND SHALL ALSO BE ON AN INDEPENDENT VALVE CIRCUIT. GALLONAGE PER SHRUB OR TREE SHOULD BE MATCHED TO OVERALL PLANT REQUIREMENT.</p> <p>51. SPRINKLERS AND PIPING IS TO BE NO CLOSER THAN 4" FROM WALKWAYS, FENCES, CURBS, DRIVEWAYS AND UTILITY PADS AND 8" FROM BUILDINGS OR OTHER PERMANENT STRUCTURES.</p> <p>52. INSTALL TRIPLE SWING JOINTS ON ALL HEADS, NO MARLEX TO MARLEX FITTINGS.</p> <p>IRRIGATION NOTES CONTINUED ON NEXT SHEET</p> | | | | |
| <div><div><div>PUBLIC WORKS DEPARTMENT <small>708 Third Street, Brentwood, CA 94513 Ph: (925) 316-5420 • FAX: (925) 316-5421 www.ci.brentwood.ca.us</small></div></div><div><div>ROBERT MOWAT ASSOCIATES <small>LANDSCAPE ARCHITECTURE + LAND PLANNING 2068 Third Street Suite 6 San Francisco, California 94107 Phone: 415-777-4656 Fax: 415-777-4659 www.rmlandscape.com</small></div></div></div> | | | | | | | | | | | | | | | | | | | |
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IRRIGATION NOTES CONTINUED FROM PREVIOUS SHEET

PIPING:

53. PIPE THREAD SEALANT COMPOUND SHALL BE PERMATEX 51 OR RECTOR SEAL T+2.

54. 48 HOURS BEFORE COMMENCING WITH WORK UNDER THIS CONTRACT, NOTIFY UNDERGROUND SERVICE ALERT, U.S.A. 800-842-2444. DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES, PIPES, AND STRUCTURES. COSTS OF DAMAGES WHICH OCCUR FROM FAILURE TO ACCURATELY LOCATE AND PRESERVE THESE UTILITIES IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR.

55. PRESSURE CHECK SYSTEM AT 150 PSI FOR 2 HOURS ON MAIN LINE AND 75 PSI FOR 1 HOUR ON LATERAL LINES (REMOTE CONTROL VALVES, QUICK COUPLING VALVES, SWING JOINTS AND SPRINKLERS ARE NOT INCLUDED).

56. SOLVENT WELD JOINTS: ALL CUTS ARE TO BE SQUARE. USE PRIMER PRIOR TO SOLVENT CEMENT APPLICATION.

57. PROVIDE SLEEVES UNDER ALL PAVEMENT AND MARK TOP OF CURB PER THE CITY ENGINEER'S DIRECTION. FOR MAIN LINE PIPING LOCATED INSIDE SLEEVES, USE SOLVENT WELDED SOCKET FITTINGS WITH PVC PLASTIC PIPE AS PER THE IRRIGATION LEGEND. DO NOT USE GASKETED COUPLINGS INSIDE SLEEVES. SLEEVES SHALL BE TWO PIPE DIAMETER USED IN SLEEVE AND 24-30" DEEP, 36" DEEP MAX. INSTALL BIO BARRIER FABRIC AT EACH END OF SLEEVE.

58. ALL MAINLINES UP TO 2" SHALL BE INSTALLED SO THAT TOP IS A MINIMUM 18", MAXIMUM 24" BELOW FINISHED GRADE; MAINLINES LARGER THAN 2" SHALL BE INSTALLED SO THAT TOP IS A MINIMUM 24", MAXIMUM 36" BELOW FINISHED GRADE. EXCEPTIONS TO THIS DEPTH REQUIREMENT MUST BE PRE-APPROVED BY CITY OF BRENTWOOD PRIOR TO INSTALLATION.

SYSTEM DEMAND AND DESIGN NOTES:

59. IRRIGATION DEMAND: SEE NOTES ON IRRIGATION PLAN.

60. THE IRRIGATION SYSTEM IS DESIGNED TO IRRIGATE THE ENTIRE CONTRACT AREA WITHIN AN 8 HOUR WATERING TIME (10:00 P.M.-6:00 A.M.) WITH THE EXCEPTION OF THE BUBBLER CIRCUITS.

CORROSION PROTECTION NOTE:

61. INSTALL CATHODIC PROTECTION ON ALL SUBSURFACE METALLIC PIPES (INCLUDING COPPER SERVICE LINES), VALVES, FITTINGS, RISERS, FIRE HYDRANTS, ETC. THE SIZE AND NUMBER OF ANODES PER LOCATION SHALL BE DETERMINED BY A REGISTERED CALIFORNIA CORROSION ENGINEER ONLY. SUBMIT A COPY OF THE CATHODIC PROTECTION DESIGN AND POST-INSTALLATION TEST RESULTS WITH REPORT TO THE CITY OF BRENTWOOD ENGINEERING DEPARTMENT FOR REVIEW AND APPROVAL.

REFER TO THE CITY OF BRENTWOOD'S STANDARD PLANS AND SPECIFICATIONS, STANDARD PLANS CP-1 THROUGH CP-17 INCLUSIVE, FOR DETAILS OF CATHODIC PROTECTION AND CONSTRUCTION. INSTALLATION OF BARE ZINC ANODE IS PROHIBITED.

PART OF THE CONTRACT WORK IS TO OBTAIN THE CITY OF BRENTWOOD'S STANDARD PLANS AND SPECIFICATIONS, AVAILABLE AT THE CITY ENGINEERING DEPT. FOR A CHARGE, 120 OAK STREET, BRENTWOOD, 925-516-5420.

LABEL AND MARKING FOR RECYCLED WATER:

GENERAL SIGNAGE:
CONSPICUOUS NOTIFICATION SIGNS MUST BE POSTED PER CITY OF BRENTWOOD USER MANUAL AROUND THE AREA AND MOUNTED ON THE SIGN AS DIRECTED BY THE CITY TO ENSURE PEOPLE KNOW RECYCLED WATER IS NOT POTABLE. SIGNS ARE TO STATE: "RECYCLED WATER" IN ENGLISH AND SPANISH. ADDITIONAL SIGNAGE SHALL BE PURCHASED FROM THE CITY OF BRENTWOOD WATER DEPARTMENT.

VALVES AND CONTROLLERS:
CONTROLLERS ARE TO HAVE WARNING LABELS INSTALLED AS SUPPLIED BY THE WATER DEPARTMENT. VALVES (GATE, MANUAL CONTROL, ELECTRIC CONTROL, PRESSURE REDUCING, QUICK COUPLING) ARE TO BE INSTALLED IN PURPLE COLORED BOXES BELOW GRADE AND HAVE LABELS OR TAGS PERMANENTLY AFFIXED WITH THE WORDS "RECYCLED WATER".

BACKFLOW UNIT:
LABEL BACKFLOW PREVENTION ASSEMBLY ENCLOSURE FOR RECLAIMED WATER AS FOLLOWS:

1. USE A T. CHRISTY ENTERPRISES PART #4100 (NO KNOWN EQUAL) DECAL, 4-3/8"x3-1/2" SIZE, MANUFACTURED FROM A 3.5 MIL FLEXIBLE VINYL BASE, WHITE IN COLOR. PERMANENT ACRYLIC ADHESIVE BACKING, ON A #90 STAY-FLAT LINER, PURPLE (PMS 522C) BACKGROUND, PRINTED WITH UV CURED VINYL INK. DECAL IS CLEAR FLOOD OVERPRINTED FOR SUPERIOR WEATHERING AND UV PROTECTION. DECAL RELEASE PAPER SHALL BE SPLIT FOR EASE OF APPLICATION. DECAL STATES IN ENGLISH AND SPANISH "ATTENTION-UNIT FOR RECLAIMED WATER".

2. ATTACH THE LABEL TO BACKFLOW PREVENTION ASSEMBLY ENCLOSURE.

3. PAINT THE STRAINER AND SPOOL ASSEMBLY WITH PURPLE PAINT, T. CHRISTY ENTERPRISES ID-PNT-QT-300.

SEPARATION BETWEEN WATER, SEWER, AND RECYCLED WATER PIPES:
FOR RECYCLED MAINS LOCATED IN A PUBLIC RIGHT-OF-WAY, PROVIDE A TEN FOOT (10') SEPARATION FOR EACH BETWEEN WATER, SEWER, AND RECYCLED

WATER MAINS. FOR A DESCRIPTION OF ALTERNATIVES, SEE WATER DEPARTMENT STANDARD DRAWING. ON-SITE SEPARATION REQUIRES RECYCLED PIPING TO BE FOUR FEET (4') AWAY FROM POTABLE PIPING WHEN PARALLEL AND ONE FOOT (1') LOWER THAN POTABLE WATER PIPING WITH A SLEEVE WHERE THEY CROSS.

ALLOWABLE WATERING WINDOW:
IRRIGATION IS TO BE APPLIED AT NIGHT, BETWEEN THE HOURS OF 9:00 P.M. AND 7:00 A.M. ANY DAYTIME USE OF RECYCLED WATER (BETWEEN THE HOURS OF 6:00 A.M. AND 9:00 P.M.) IS TO BE UNDER DIRECT CONTROL AND OBSERVATION BY AN INDIVIDUAL FAMILIAR WITH THE CITY OF BRENTWOOD'S GUIDELINES FOR RECYCLED WATER USE WHICH IS AVAILABLE FROM THE CITY'S WATER DEPARTMENT.
END OF IRRIGATION NOTES

PLANTING NOTES

1. NO PLANTING SHALL BE INSTALLED UNTIL:
1. THE BACKFLOW PREVENTION DEVICE IS CERTIFIED BY A CITY APPROVED BACKFLOW INSPECTOR.
2. A HYDROSTATIC PRESSURE TEST ON IRRIGATION MAINS AND LATERALS IS PERFORMED.
3. IRRIGATION CONTROLLER SHALL BE FULLY OPERATIONAL AND CONNECTED TO FINAL ELECTRICAL SOURCE AND AND PHONE LINE AND SHALL BE ABLE TO COMMUNICATE WITH CENTRAL CITY COMPUTER.
4. SOIL HAS BEEN AMENDED.
5. 14-DAY WATERING PERIOD HAS BEEN COMPLETED.

2. ALL PLANTING SHALL CONFORM TO THE CITY OF BRENTWOOD STANDARDS, TREE SPECIES MUST CONFORM TO THE CITY OF BRENTWOOD URBAN FOREST GUIDELINES.

3. ALL WORK SHALL BE PERFORMED BY PERSONS FAMILIAR WITH PLANTING WORK AND UNDER THE SUPERVISION OF A QUALIFIED PLANT FOREMAN.

4. CONTRACTOR SHALL PROVIDE 1-YEAR GUARANTEE ON TREE AND SHRUBS FROM DATE OF ACCEPTANCE BY CITY COUNCIL.

5. CONTRACTOR SHALL INSPECT AND BE FAMILIAR WITH SITE CONDITIONS. ANY DISCREPANCIES WHICH EXIST BETWEEN OBSERVED SITE CONDITIONS AND THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.

6. PLANT MATERIAL LOCATIONS ARE DIAGRAMMATIC, UNLESS OTHERWISE NOTED, AND ARE SUBJECT TO CHANGE IN THE FIELD BY THE OWNER'S REPRESENTATIVE. OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS AND DELETIONS IN THE PLANTING SCHEME AFTER CONSULTING WITH THE LANDSCAPE ARCHITECT, AND IF APPROVED BY THE CITY OF BRENTWOOD, WHILE WORK IS IN PROGRESS.

7. CONTRACTOR SHALL PROVIDE A CITY APPROVED ROOT BARRIER FOR ALL TREES PLANTED WITHIN FIVE FEET (5') OF CURB OR PAVING, PER CITY OF BRENTWOOD DETAIL. INSTALL LINEAL PANELS PARALLEL AND ADJACENT TO EDGE OF PAVEMENT, 12' TOTAL LENGTH, 6' ON EITHER SIDE OF TREE. SEE CITY DETAIL L-3.

8. PLANTING AREAS SHALL BE EXCAVATED TO A MINIMUM DEPTH OF THREE FEET (3') OR DOWN TO NATIVE SOIL IN AREAS WHERE COMPACTION HAS PREVIOUSLY OCCURRED SUCH AS IN MEDIANS AND PARKING LOTS, ESPECIALLY IF ROAD BASE WAS INSTALLED IN THE PLANTING LOCATION. ALL ROAD BASE WILL BE REMOVED AT CONTRACTOR'S EXPENSE.

SOIL PREPARATION:

9. ALL CONSTRUCTION MATERIAL AND DEBRIS SHALL BE REMOVED PRIOR TO SOIL PREPARATION.

10. CITY SHALL COLLECT SOIL SAMPLES FROM POST-GRADED LANDSCAPE AREAS FOR ANALYSIS BY APPROVED TESTING LABORATORY. CONTRACTOR SHALL COORDINATE AND PAY FOR TESTS. SOIL SAMPLES SHALL BE TAKEN AT APPROXIMATELY SIX INCH (6") DEPTHS AS PER THE CITY OF BRENTWOOD.

11. SOIL TEST/RECOMMENDATION RESULTS SHALL BE DISTRIBUTED BY THE CONTRACTOR TO THE CITY, OWNER, LANDSCAPE ARCHITECT AND PROJECT HORTICULTURALIST.

12. A REVISED SOIL AMENDMENT AND PLANT PIT BACKFILL SPECIFICATION SHALL BE DEVELOPED BY THE CITY STAFF IN COOPERATION WITH LANDSCAPE ARCHITECT AND HORTICULTURIST BASED ON SOILS TEST. CONTRACT ADJUSTMENT MAY BE REQUIRED AS A RESULT OF SOILS TEST.

13. PLANT SPECIES LIST SHALL BE EVALUATED BY HORTICULTURIST IN TERMS OF APPROPRIATENESS TO THE SOILS TEST AND SHALL BE REVISED ACCORDINGLY TO LEVELS OF BORON OR SODIUM PRESENT IN THE SOILS.

14. SOIL AMENDMENTS SHALL MEET CITY STANDARDS AND SPECIFICATIONS, AND SHALL CONFORM TO THE RECOMMENDATIONS OF THE SOILS REPORT.

15. CONTRACTOR SHALL PAY FOR SUBSEQUENT POST-AMENDMENT SOIL TESTING AS DIRECTED BY THE CITY PRIOR TO PLANTING TO VERIFY COMPLIANCE OF RECOMMENDATIONS.

16. THE FOLLOWING RECOMMENDATIONS ARE FOR BID PURPOSES ONLY. CONTRACTOR SHALL FOLLOW RECOMMENDATIONS OF SOIL TESTING LAB.
FOR ALL PLANTING AREAS:
1. TILL SOIL THOROUGHLY TO 8" DEPTH.
2. INCORPORATE THE FOLLOWING MATERIAL INTO SOIL PER 1000 SQ. FT.
- SIX CUBIC YARDS NITROGEN FORTIFIED ORGANIC AMENDMENT

17. SPECIFICATIONS AND SAMPLE OF NITROGEN FORTIFIED ORGANIC AMENDMENT SHALL BE SUBMITTED TO CITY FOR APPROVAL PRIOR TO USE.

18. AMENDMENTS SHALL BE ADDED WHEN GRADING IS AT PLUS OR MINUS 1/10 FOOT OF FINISH GRADE.

19. CITY SHALL BE NOTIFIED 3 DAYS PRIOR TO AMENDING OR FERTILIZING PLANTING AREAS FOR INSPECTION DURING WORK.

FOR TREES AND SHRUBS:
20. ALL TREES PLANTING HOLES SHALL BE SCARIFIED ON SIDES AND BOTTOM TO REMOVE AND GLAZING.

21. DRAIN TUBES, AS PER CITY OF BRENTWOOD DETAIL, MAY NOT BE NECESSARY. CONSULT SOILS REPORT FOR SUITABILITY OF SOIL.

22. NO PLANTING OR HARDSCAPE WILL BE INSTALLED UNTIL GRADE IS CERTIFIED TO BE WITHIN PLUS OR MINUS 1/10 FOOT OF FINISH GRADE. FINISH GRADE WILL BE CERTIFIED AT CONTRACTOR'S EXPENSE.

23. FOR 24-INCH BOX AND LARGER MATERIAL, PLANT PIT BACKFILL TO BE PLACED AROUND THE SIDES OF THE ROOTBALL BELOW A ONE FOOT (1') DEPTH SHOULD NOT CONTAIN THE ORGANIC AMENDMENT BUT SHOULD BE NUTRITIONALLY IMPROVED BY BLENDING 2 POUNDS GYPSUM PER CUBIC YARD OF PULVERIZED SITE SOIL.

24. SOIL AMENDED ON THE SITE OR THE FOLLOWING BACKFILL MIX IS RECOMMENDED FOR PLACEMENT AS THE TOP 12 INCHES (12") OF BACKFILL AROUND THE SIDES OF THE ROOTBALL FOR CONTAINER GROWN PLANTS:
- 2 PARTS PULVERIZED SITE SOIL
- 1 PART ORGANIC AMENDMENT
- 2 POUNDS GYPSUM PER CUBIC YARD OF BACKFILL MIX

25. ALL PLANT MATERIAL TO BE INSPECTED BY CITY PRIOR TO INSTALLATION. NOTIFY CITY 48 HOURS PRIOR TO INSPECTION.

26. CITY HAS THE RIGHT TO REJECT PLANT MATERIAL IF IT DOES NOT MEET MINIMUM PLANT SIZE REQUIREMENTS. ALL PLANT MATERIAL MUST BE IN HEALTHY CONDITION AND WITHOUT KINKED, GIRDLED OR ENCIRCLING ROOTS.

27. APPLY PRE-EMERGENT HERBICIDE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO ALL GROUNDCOVER, NON-PLANTED AREAS AND TOT LOTS PRIOR TO SAND AND BARK INSTALLATIONS. CONTACT CITY 24 HOURS PRIOR TO APPLICATION. AREAS SHALL BE WATERED-IN IMMEDIATELY AFTER APPLICATION.

28. FERTILIZER TABLETS SHALL BE BEST PAKS (20-10-5) TABLETS INSTALLED AT MANUFACTURER'S RECOMMENDED RATES UNDER ALL TREES AND SHRUBS.

29. FERTILIZER SHALL BE CITY APPROVED PRODUCT, AT A RECOMMENDED RATE BASED ON SOILS ANALYSIS.

30. REFER TO CITY OF BRENTWOOD STANDARD DETAILS L-1, L-2, L-4 FOR TREE AND SHRUB PLANTING AND GROUNDCOVER SPACING. LODGE POLES WITH FOUR TIES SHALL BE USED ON ALL PARK PROJECTS.

31. STREET TREE PLANTING SHALL NOT INTERFERE WITH CITY OF BRENTWOOD REQUIRED LINE OF SIGHTS. REFER TO CITY OF BRENTWOOD STANDARD DETAIL ST-11 FOR NECESSARY CLEARANCES.

32. MINIMUM CONTAINER PLANT SIZE:
1 GALLON SHRUB: 1' HEIGHT X 1' DIAMETER
5 GALLON SHRUB: 1-1/2' HEIGHT X 1-1/2' DIAMETER
15 GALLON TREE: 6' HEIGHT X 5' CROWN DIAMETER
24" BOX TREES: 8' HEIGHT X 4' CROWN DIAMETER

33. FOR TREES WITH SELF-SUPPORTING CENTRAL LEADERS, REMOVE NURSERY STAKES AT TIME OF PLANTING. FOR TREES WITHOUT SELF-SUPPORTING CENTRAL LEADERS OR FLOPPY CROWNS, RETAIN NURSERY STAKE FOR A 3 MONTH PERIOD OR AT THE END OF THE MAINTENANCE PERIOD, WHICHEVER IS SHORTER.

34. MULCH PLANTING AREAS WITH A 3" LAYER OF 1/2"-3/4" DIAMETER "WALK-ON" TYPE FIR BARK MULCH. DO NOT ALLOW BARK MULCH TO COME WITHIN 2" OF THE PLANT'S PARENT TRUNK.

35. REAPPLY PRE-EMERGENT HERBICIDE AT END OF MAINTENANCE PERIOD.

36. TREES SHALL MAINTAIN THE FOLLOWING CLEARANCES FROM UTILITIES UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE OR REQUIRED BY THE CITY OF BRENTWOOD:
-STOP SIGNS, STREET SIGNS AND DIRECTIONAL SIGNAGE-35'
-LIGHT STANDARDS (STREET AND PARK)-20'
-PROPERTY LINE, FENCES/WALLS-10'
-SANITARY SEWER MAINS/LATERALS, WATER MAINS, POWER MAIN CONDUIT-5'
-WATER AND POWER LATERALS, TELEPHONE, GAS, STORM DRAIN LINES-5'
TREES PLANTED WITHIN 15' OF PROPERTY LINES SHALL BE COMPACT VARIETIES, TREES PLANTED CLOSER THAN 10' FROM STREETS OR SIDEWALKS SHALL ALSO BE COMPACT, SMALL VARIETIES.

37. IF TREES ARE PLANTED WITHIN 10' OF SOUNDWALLS OR PROPERTY LINES, A 36" DEEP X 12' LONG ROOT BARRIER SHALL BE INSTALLED AT PROPERTY LINE AND OR AT THE BASE OF SOUNDWALL.

38. CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT ALL HYDROSEED AND HYDROSODD AREAS BE FULLY GERMINATED AND FREE OF ALL BARE SPOTS AND WEEDS. CONTRACTOR SHALL PROVIDE SUPPLEMENTAL WATER IN ORDER TO ESTABLISH A FULL STAND.

39. HYDROSEED AREAS SHALL RECEIVE SEASONAL MOWINGS, AT THE DIRECTION OF THE FIRE MARSHALL OF THE CITY OF BRENTWOOD FIRE DEPARTMENT.
END OF PLANTING NOTES

MAINTENANCE PERIOD

1. UPON COMPLETION OF FINAL PUNCH LIST ITEMS, NOTICE SHALL BE GIVEN TO THE OWNER AND THE CITY REPRESENTATIVE TO REVIEW THE WORK. MYLAR (4MM) RECORD PLANS, PREPARED BY THE CONTRACTOR, SHALL BE PROVIDED TO THE CITY AT THAT TIME, AS DESCRIBED UNDER SUBMITTALS/RECORD PLANS/REDLINES.

2. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SIGN A STATEMENT OF COMPLIANCE, VERIFYING THAT ALL MATERIALS AND EQUIPMENT ARE INSTALLED PER PLAN AND ARE IN GOOD OPERATING ORDER.

3. ALL MANUFACTURER AND CONTRACTOR WARRANTIES SHALL COMMENCE AFTER CITY ACCEPTANCE OF THE JOB.

4. CONTRACTOR SHALL PROVIDE 90-DAY MAINTENANCE PERIOD AFTER FINAL INSPECTION OF ALL AREAS AND THE CITY COUNCIL HAS ACCEPTED THESE IMPROVEMENTS. MAINTENANCE PERIOD SHALL REQUIRE SCHEDULED, WEEKLY MAINTENANCE. CONTRACTOR SHALL PROVIDE A SCHEDULE PRIOR TO BEGINNING 90-DAY

MAINTENANCE PERIOD: SCHEDULE ONE INSPECTION EVERY 30 DAYS WITH THE CITY. IF ANY OF THESE PROVISIONS ARE NOT MET, INSPECTION PERIOD SHALL RE-COMMENCE AT THE BEGINNING OF THE 90 DAYS.

5. THE DEVELOPER WILL BE RESPONSIBLE FOR SCHEDULING 30-DAY INSPECTIONS DURING THE REQUIRED 90-DAY MAINTENANCE PERIOD.

6. AFTER SATISFACTORY COMPLETION OF THE MAINTENANCE PERIOD AS DETERMINED BY THE CITY THE OWNER SHALL CONTACT THE CITY, 925-516-5377, AND SCHEDULE A CLOSE-OUT MEETING TO HAND OVER ALL AS-BUILT DRAWINGS, MANUALS, BINDERS, KEYS AND ANY OTHER ITEMS REQUESTED IN THE PUNCHLIST. THE CITY OF BRENTWOOD WILL THEN ASSUME MAINTENANCE OF THE LANDSCAPE AND CIVIL IMPROVEMENTS THAT HAVE BEEN COMPLETED AND ACCEPTED.
END OF MAINTENANCE PERIOD NOTES

SUBMITTALS/RECORD PLANS/REDLINES

1. THE CONTRACTOR SHALL MAINTAIN IN GOOD ORDER IN THE FIELD OFFICE, ONE (1) COMPLETE SET OF ALL PLANS INCLUDED IN THIS CONTRACT. WHEN ANY WORK IS NOT INSTALLED AS INDICATED ON THE PLANS OR IN THE SPECIFICATIONS, SUCH WORK SHALL BE INDICATED AND DIMENSIONED ACCURATELY ON THESE REDLINE (AS-BUILT) DRAWINGS.

2. THESE PLANS SHALL ALSO SERVE AS WORK PROGRESS SHEETS. THE CONTRACTOR SHALL MAKE NEAT, LEGIBLE ANNOTATION THEREON DAILY AS THE WORK PROCEEDS, SHOWING THE WORK, INCLUDING THE EXACT LOCATIONS, SIZES, AND KINDS OF EQUIPMENT AS ACTUALLY INSTALLED. THESE PLANS SHALL BE AVAILABLE AT ALL TIMES FOR THE INSPECTION BY THE CITY.

3. ON OR BEFORE THE DATE OF THE PRE-MAINTENANCE FINAL INSPECTION, THE CONTRACTOR SHALL DELIVER TO THE CITY, A CORRECTED, NEATLY DRAFTED, COMPLETE SET OF THESE REDLINE DRAWINGS. THESE PLANS SHALL BE FIRST SUBMITTED TO THE CITY AT FULL SIZE. THE CITY REPRESENTATIVE WILL REVIEW THE PLANS, MAKE ANNOTATIONS IF NECESSARY, AND RETURN TO THE CONTRACTOR.

THE CONTRACTOR SHALL THEN MAKE CORRECTIONS AS NECESSARY, REDUCE THE PLANS TO 8-1/2"x11" OR 11"x17", AND SEND THREE (3) COPIES BACK TO THE CITY. PLANS MUST BE SUBMITTED TO THE CITY BEFORE PROJECT WILL BE FORMALLY ACCEPTED. THE CONTRACTOR SHALL ALSO PROVIDE ONE FULL SIZE REPRODUCIBLE SEP1A MYLAR SET OF THE CORRECTED RECORD PLANS.

REPRODUCIBLE PRINTS FOR PREPARING THE RECORD PLANS MAY BE OBTAINED FROM THE OWNER. DELIVERY OF THESE PLANS TO THE CITY WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING ANY REQUIRED INFORMATION.

4. FOUR (4) SETS OF SUBMITTALS IN INDIVIDUAL THREE-RING BINDERS SHALL BE GIVEN TO THE CITY BY THE PRE-CONSTRUCTION MEETING.

5. OPERATIONS MANUAL MUST BE SUPPLIED IN THREE-RING BINDER. IT MUST INCLUDE MANUFACTURER DATA SHEETS AND MAINTENANCE AND PARTS INFORMATION ON ALL EQUIPMENT INSTALLED AND SUPPLIER FROM WHERE IT WAS OBTAINED.

6. AN INVENTORY SHALL BE SUBMITTED FOR ALL AREAS. INFORMATION SHALL INCLUDE ALL IRRIGATION EQUIPMENT, PLANT COUNTS, AND AREA MEASUREMENTS SUCH AS TURF, GROUNDCOVER AND HARDSCAPING.

7. A WRITTEN CONSTRUCTION SCHEDULE SHALL BE PROVIDED TO THE CITY BEFORE WORK COMMENCES.
END OF SUBMITTAL/RECORD PLAN/REDLINES NOTES

PARKING LOTS/PATHWAYS/TRAILS/SIGNAGE

GENERAL:

1. FOR PURPOSES OF GEOMETRIC AND STRUCTURAL DESIGN, STREETS SHALL BE CLASSIFIED ACCORDING TO THE CITY OF BRENTWOOD GENERAL PLAN. ANY DEVIATION FROM THE STANDARD SHALL REQUIRE THE APPROVAL OF THE CITY ENGINEER.

STREET SECTIONS SHALL BE CALCULATED BASED ON "R" VALUES OBTAINED FROM MATERIAL GATHERED FROM THE LEVEL OF THE PROPOSED SUBGRADE USING THE STATE OF CALIFORNIA DIVISION OF HIGHWAYS DESIGN METHOD. IF SUBGRADE HAS AN "R" VALUE OF 10 OR LESS, GEOGRID SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION ON SUBGRADE PRIOR TO PLACEMENT OF AB MATERIAL.

NO STRUCTURAL ALLOWANCE WILL BE MADE FOR THE GEOGRID. THE MINIMUM STREET SECTION SHALL NOT BE LESS THAN FOUR INCHES (4") OF ASPHALT CONCRETE AND EIGHT INCHES (8") OF AGGREGATE BASE. AGGREGATE BASE AND SUBBASE SHALL CONFORM TO THE STATE STANDARD SPECIFICATIONS, SECTIONS 25 AND 26. THE USE OF "SIERRACRETE" MANUFACTURED BY DUPONT IS NOT PERMITTED.

PRIVATE STREETS, PARKING LOTS, AND COMMERCIAL DEVELOPMENTS SHALL USE LOCAL RESIDENTIAL REQUIREMENTS AS A MINIMUM. OFF-STREET PARKING SHALL BE PROVIDED, DESIGNED, AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL ORDINANCE AND AS REQUIRED BY THE CITY ENGINEER.

DEVELOPERS TO PROVIDE AND INSTALL STANDARD CITY PARK NAME SIGNS AS PER CITY DETAIL. COLOR FOR PARK SIGN CONCRETE FOOTING SHALL MATCH PARK SIGN.



PAVING:

2. PAVING FOR PARKS AND TRAILS SHALL BE CONCRETE, UNLESS OTHERWISE APPROVED BY THE CITY OF BRENTWOOD.

3. MAIN ACCESS PATH SHALL BE A TEN-FOOT (10') WIDTH PAVING, SIX INCHES (6") THICK CONCRETE WITH #4 REBAR AT 24" O.C. AND 1-1/2 LBS. OF FIBER MESH PER CUBIC YARD ON 6" COMPACTED AGGREGATE PER CITY SPECIFICATIONS.

4. TURF PAVERS SHALL BE TUFFTRACK GRASS PAVERS BY NDS OR APPROVED EQUAL.

5. A 24" WIDE MOWBAND SHALL BE PROVIDED AT THE BASE OF A FENCE, A 12" WIDE MOWBAND SHALL PROVIDED ALONG ALL TURF INTERFACE AREAS.
END OF PARKING LOTS/PATHWAYS/TRAILS NOTES

| | | | | | | | | | | | | | |
|---|---|-----|--|----|-----|---------|--|---|--|---|---|--|--|
|  <div>PUBLIC WORKS DEPARTMENT 708 Third Street, Brentwood, CA 94531 Ph: (925) 516-5420 • FAX: (925) 516-5421 www.ci.brentwood.ca.us</div> |  <div>ROBERT MOWAT ASSOCIATES LANDSCAPE ARCHITECTURE • LAND PLANNING 2068 Third Street Suite 6 San Francisco, California 94107 Phone 415.777.4656 Fax 415.777.0420 www.rmalandscape.com</div> | NO. | REVISIONS | BY | APP | DATE | DESIGNED UNDER THE DIRECTION OF: | <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> | <div>IMPROVEMENT PLAN</div> <div>CARMEL ESTATES PARK</div> <div>SUBDIVISION</div> <div>CITY OF BRENTWOOD STANDARD NOTES</div> <div>BRENTWOOD</div> <div>CALIFORNIA</div> | <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> | <div>SHEET</div> <div>LS - 3</div> <div>OF 17 SHEETS</div> | | |
| | | 1 | MOVE MAIN & VALVES OUT OF HOA EASEMENT | | | 7-18-08 | <div>ROBERT J. MOWAT, RLA 2258 ROBERT MOWAT ASSOCIATES</div> <div>DATE</div> <div>DESIGN: RJM</div> <div>DATE:</div> <div>DRAWN: JD</div> <div>DATE: 2-28-12</div> <div>CHECKED: RJM</div> <div>DATE:</div> | | | | | | |
| | | 2 | MOVE VALVES OUT OF HOA EASEMENT | | | 8-14-08 | | | | | | | |
| | | 3 | CITY COMMENTS | | | 3-22-12 | | | | | | | |
| | | 4 | CITY COMMENTS | | | 4-3-12 | | | | | | | |
| | | 5 | CITY COMMENTS | | | 4-9-12 | | | | | | | |
| | | 6 | CITY COMMENTS | | | 5-2-12 | | | | | | | |

PLANNING COMMISSION RESOLUTION NO. 06-26

A RESOLUTION OF THE CITY OF BRENTWOOD'S PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL REZONE (RZ 06-02) PLANNED DEVELOPMENT MAP NO. 26 (PD 26) ZONING DISTRICT TO INCLUDE SPECIFIC DEVELOPMENT STANDARDS FOR THE APPROXIMATELY 37 ACRES CARMELO ESTATES PROJECT, LOCATED SOUTH OF CARMELO PARKWAY, IMMEDIATELY EAST OF MINNESOTA AVENUE, AND WEST OF MARSH CREEK (APN 017-080-008).

WHEREAS, the applicant has applied to amend roughly 37 acres within PD-26 Zone to establish development standards for the Carmelo Estates project and submitted a Tentative Subdivision Map application for a proposed mixed use planned development as shown and described in the application materials for the Carmelo Estates project submitted to the City, and

WHEREAS, the applicant has filed an application to amend the PD-26 zoning district and establish specific regulations and standards for the development and use of the site consistent with the project as shown and described in the companion Design and Site Development Review and Tentative Subdivision Map applications filed by the applicant, and,

WHEREAS, at a duly noticed public hearing on June 6, 2006, this Planning Commission passed Resolution No. 06-52 in which it certified the Mitigated Negative Declaration (MND) and adopted a Mitigation Monitoring and Reporting Plan (MMRP), and,

WHEREAS, a Notice of Public Hearing on this application for approval of the amendment to PD-26 zone and the Tentative Subdivision Map application was legally advertised in the Brentwood Press on May 5, 2006, and mailed to all property owners of record within 300 feet of the subject property according to City policies and Government Code Section 65091.

NOW, THEREFORE, BE IT RESOLVED, on June 6, 2006, the Planning Commission conducted a duly noticed public hearing on this application to amend the PD-26 Zone, and has reviewed and considered all of the evidence in the record of these proceedings, including the MND, the MMRP, and the project testimony and written information presented during the public hearing, and

A. The Planning Commission hereby finds as follows:

1. Is consistent with and implements the intent of the General Plan as amended.
2. Will be consistent with and establish clear development standards for the uses permitted under the General Plan.
3. Will provide standards resulting in development that is consistent and compatible with surrounding uses.
4. Will provide for adequate public uses and private open space.
5. Will generate a level of traffic that can be accommodated by the public circulation system, existing or planned.
6. Will serve the housing needs of the City and the region and will not create a detrimental imbalance between the public service needs of its residents and available fiscal and environmental resources (Government Code Section 65563.6).
7. That the proposed Project will clearly result in a more desirable use of land and a better physical environment than would be possible under any single or combination of zones.
8. That the PD-26 Zone is on property which has a suitable relationship to one or more thoroughfares, and that said thoroughfares as planned are adequate to carry any traffic generated by development consistent with the proposed PD-26 Standards.
9. That the site plan for the proposed Project presents a unified and organized arrangement of buildings and service facilities which are appropriate in relation to adjacent or nearby properties and that adequate landscaping and/or screening is included if necessary to insure compatibility.
10. The natural and scenic qualities of the site are protected with adequate available public and private open spaces designated on the proposed development plans for the Project.
11. That the development of the Project, in the manner proposed by the applicant will not be detrimental to the public welfare, will be in the best interests of the City and will be in keeping with the general intent and spirit of the Zoning Ordinance and with the City's General Plan, including all relevant Elements thereof.

B. The Planning Commission recommends that the City Council approve the rezoning of PD-26 in the form of the amended PD-26 Development Standards attached to this resolution as Exhibit A.

PASSED by the Planning Commission of the City of Brentwood on June 6, 2006 by the following vote:

AYES: Chairman Stirling, Commissioners Cushing, Gildersleeve, London, and Pitkin
NOES: None
ABSENT: None
ABSTAIN: None

APPROVED
Don Stirling
Planning Commission Chairman

ATTEST:
Heidi Kline
Planning Manager

EXHIBIT A
PLANNED DEVELOPMENT 26 (PD-26) ZONE
PLANNING AREA 18 DEVELOPMENT STANDARDS

Ad. 17,476.078 - Regulations for Planning Area 18 - lot area, yards, height and other regulations

A. 7,000 to 10,000 Sq Ft Lot Size

1. Minimum Lot Area: 7,000 square feet.
2. Minimum Lot Width: 65 feet as measured at the front setback line.
3. Minimum Lot Depth: 80 feet as measured at the side setback line.
4. Minimum Lot Frontage: 35 feet.
5. Minimum Front Yard Setback: 20 feet for street facing garages, 15 feet to any primary building wall or side-entry garage.
6. Minimum Side Yard Setback: 5 feet and a total of 15 feet for both sides. For corner lots the street side yard shall be a minimum of 10 feet.
7. Minimum Rear Yard Setback: 20 feet.
8. Maximum Building Height: 30 feet.

B. 10,000 to 20,000 Sq Ft Lot Size

1. Minimum Lot Area: 10,000 square feet.
2. Minimum Lot Width: 80 feet as measured at the front setback line.
3. Minimum Lot Depth: 90 feet as measured at the side setback line.
4. Minimum Lot Frontage: 35 feet.
5. Minimum Front Yard Setback: 20 feet for street facing garages, 15 feet to any primary building wall or side-entry garage.
6. Minimum Side Yard Setback: 5 feet and a total of 15 feet for both sides. For corner lots the street side yard shall be a minimum of 10 feet.
7. Minimum Rear Yard Setback: 20 feet.

C. 20,000 Square Foot + Product

2. Minimum Lot Width: 100 feet as measured at the front setback line.

3. Minimum Lot Depth: 100 feet as measured at the side setback line.

4. Minimum Lot Frontage: 50 feet.

5. Minimum Front Yard Setback: 20 feet for street facing garages, 15 feet for living space and side-entry garage, and 10 feet for front porches.
6. Minimum Side Yard Setback: 10 feet and a total of 12 feet for both sides. For corner lots the street side yard shall be a minimum of 10 feet.
7. Minimum Rear Yard Setback: 25 feet.
8. Maximum Building Height: 30 feet and two stories for main residence.

D. Dual Units

1. Minimum Lot Area: 4,000 square feet.
2. Minimum Lot Width: 35 feet.
3. Minimum Lot Depth: 55 feet.
4. Minimum Lot Frontage: 30 feet.
5. Minimum Front Yard Setback: 20 feet for front facing garages, 15 feet for living space.
6. Minimum Side Yard Setback: Zero (0) feet and a total of 7.5 feet for both sides. Five (5) feet and a total of 10 feet for both sides on corner lots. For corner lots the street side yard shall be a minimum of 10 feet.
7. Maximum Building Height: 30 feet.

E. Other Regulations

1. Design and Site Development shall be required for all housing units pursuant to Sections 17 100.003 and 17 100.004H.
2. Off-street parking shall be provided pursuant to Chapter 17.620 and Section 17 100.004H.
3. The parking and storage of boats, trailers and similar vehicles and equipment shall be subject to the provisions of Section 17.620.016.
4. Accessory buildings and structures shall be permitted pursuant to the provisions of Chapter 17.660 provided lot coverage does not exceed 50 percent.
5. Architectural features may project into any required yard pursuant to the provision of Chapter 17.660.
6. Fencing - on corner lots, all fencing shall be set back a minimum of 5 feet from the street side yard property line, all other fencing shall adhere to the requirements of Chapter 17.660 of the Municipal Code.
7. No building permit for a primary dwelling unit shall be issued until a residential growth management program (RGMP) allocation is received for the unit.

17,476.150 Subarea Map



PLANNING COMMISSION RESOLUTION NO. 06-27

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF BRENTWOOD APPROVING TENTATIVE SUBDIVISION MAP NO. 8311 TO ALLOW THE SUBDIVISION OF 38 ACRES INTO 106 LOTS FOR SINGLE-FAMILY RESIDENTIAL USE, 1.71 ACRE PARK, OPEN SPACE, AND TRAILS, LOCATED SOUTH OF CARMELO PARKWAY, WEST OF MARSH CREEK AND EAST OF MINNESOTA AVENUE (APN 017-080-008).

WHEREAS, Pulte Homes has requested that the City approve a tentative subdivision map to subdivide approximately 38 acres into 106 single-family residential lots, a 1.71 acre park, open space and trails, as well as related improvements; and

WHEREAS, said tentative map was referred to various public utility companies, public districts, and pertinent City departments for review and recommendations; and

WHEREAS, a Notice of Public Hearing was distributed to all property owners of record within 300 feet of the project site and published in the Brentwood Press on May 6, 2006 in accordance with City policies and Government Code Section 65091; and

WHEREAS, the Planning Commission of the City of Brentwood held a public hearing on this project at its regular meeting of June 6, 2006; and

NOW, THEREFORE, BE IT RESOLVED, the Planning Commission of the City of Brentwood has considered the staff report, Mitigated Negative Declaration, supporting documents, public testimony, and all appropriate information that has been submitted with the proposed project and

A. Hereby finds that:

1. The proposed tentative subdivision map, together with the provisions for the design and improvement of the proposed subdivision, are in conformance with the City General Plan, Zoning Ordinance, and Subdivisions and Land Development Ordinance; and
2. The discharge of waste from the proposed subdivision will not result in violation of existing requirements prescribed by the California Regional Water Quality Control Board because the applicant is required to make the CC&Rs necessary improvements to be in the City's Stormwater and sewer facilities; and
3. The site is physically suitable for the type and the density of development proposed because it does meet the General Plan and Zoning designations development requirements; and

4. The design of the subdivision is not likely to cause serious public health problems due to the fact that this project will be required to construct all of the necessary improvements needed to ensure a safe and healthy development

B. Hereby take the following actions:

this project; and

2. That this tentative subdivision map is valid for two years and will expire on June 6, 2008, unless a final map is recorded prior to that date, or a written extension is requested by the applicant and approved by the Planning Commission prior to the expiration date.

PASSED by the Planning Commission of the City of Brentwood at its regular meeting of June 6, 2006 by the following vote:

AYES: Chairman Stirling, Commissioners London and Pitkin
NOES: Commissioners Cushing and Gildersleeve
ABSENT: None
ABSTAIN: None

ATTEST

Heidi Kline
Planning Manager

Attachments:
Exhibit "A" - Conditions of Approval for Tentative Subdivision Map No. 8311

EXHIBIT A
CONDITIONS OF APPROVAL FOR
TENTATIVE SUBDIVISION MAP 8311

1. The Standard Conditions of Approval for Tentative Subdivision Maps, dated May 2005, are hereby incorporated by reference and shall be satisfied by the Developer, unless modified by any of the conditions below.
2. The Final Map shall be in substantial compliance with the Vesting Tentative Map Subdivision 8311, prepared by CBS, Inc., date stamped received May 8, 2006.
3. Developer shall design and construct improvements to Minnesota Avenue along the project frontage to the satisfaction of the City Engineer and Parks and Recreation Director prior to issuance of the 1" building permit excluding models. Improvements shall include but are not limited to pavement, soundwall, curb, gutter, sidewalk, utilities, 20' parkway, landscape, irrigation, signing, marking, and striping.
4. The Developer shall install a 16' wide landscaped center median in Minnesota Avenue from Sand Creek Road to approximately Randy Way to the satisfaction of the City Engineer. A portion of these improvements will be fee creditable per the Development Fee Program.
5. Developer shall design and construct improvements to Carmel Parkway along the project frontage to the satisfaction of the City Engineer and Parks and Recreation Director prior to issuance of the 1" building permit excluding models. Improvements shall include but are not limited to pavement, brick wall, curb, gutter, sidewalk, trail, 25' parkway, landscape, irrigation, signing, marking, and striping.
6. Developer shall design and construct a 35' wide emergency vehicle access road between lots 4 and 5 aligned with Laurel Drive with storm drain, sewer, and water infrastructure to the satisfaction of the City Engineer. The access road shall consist of turf block or pavement acceptable to the City Engineer. A storm drain connection to the existing drainage channel running along the southern project boundary shall also be provided within Laurel Drive.
7. Developer shall dedicate a public utility easement over the emergency vehicle access road on the final map to the satisfaction of the City Engineer.
8. If funding is provided by the proposed Randy Way assessment district, developer shall design and construct a sanitary sewer system serving the Randy Way assessment district properties as and when required by the City Engineer. This work shall be reimbursable.
9. The Developer shall design and construct "D" Street south of "A" Street, to the satisfaction of the City Engineer, to provide for potential extension as a vehicular access for the future development of the southerly adjacent property (APN 017-080-007). If the streets in TSM 8311 are private, an access easement over them shall be granted to the adjacent southern property owner if Street "D" is approved as the sole access point for any subsequent subdivision of that property. "D" Street shall also include wet utility stubs to serve development of the southerly adjacent property and provide for overland drainage release to the satisfaction of the City Engineer.
10. Developer shall design and construct a traffic signal system at the intersection of Carmel Parkway and Minnesota Avenue prior to issuance any building permit excluding models to the satisfaction of the City Engineer.
11. Developer shall design and construct a 6 foot 8 inch high masonry wall along the southerly project boundary to the satisfaction of the City Engineer. Design and construction shall be coordinated with adjacent property owners to mitigate potential impacts.
12. Developer shall construct Minnesota Avenue sidewalk improvements as specified in City CIP project 336-3154 prior to issuance of the 50' building permit excluding models to the satisfaction of the City Engineer. Improvements include but are not limited to new pavement, right of way, sidewalks, lighted crosswalks at Deer Creek and Sand Creek trail crossings, signing, marking and striping. These improvements shall be reimbursable.
13. The Developer shall construct additional pavement and sidewalk along the east side of Minnesota Avenue from the bridge at Sand Creek to the south side of the Deer Creek Channel to provide a Bike Lane with a minimum width of five (5) feet wide, and a sidewalk with a width of five (5) feet. The sidewalk shall be separated from the traffic lanes by a curb satisfactory to the City Engineer. Bike lane construction shall include all signs and pavement markings as required by the City Engineer.
14. Developer shall process a (conditional) letter of map revision prior to approval of grading plans or final map to the satisfaction of the City Engineer.
15. The developer shall dedicate a parcel for park and open space, in fee, to the City of Brentwood on the final map to the satisfaction of the City Engineer. Parcel A shall be constructed, completed, and open to the public prior to the issuance of the 53" building permit to the satisfaction of the Parks and Recreation Director and prior to the issuance of building permits for Lots 1 and 44.
16. The Developer shall install all signs and pavement markings including lane lines, legends, limit lines, etc., satisfactory to the City Engineer, and consistent with the Traffic Division Guidelines for Preparation of Effective Signing and Striping Plans for Residential Development.
17. A phasing plan for this subdivision shall be submitted for the review and approval of the City Engineer to allow the filing of multiple final maps. No final map shall be recorded for more than 83 marketplace units and four affordable units until subsequent residential growth management program (RGMP) allocations are granted by the City.
18. The ultimate "A" Street connection to Minnesota Avenue layout and configuration shall be determined during the design and shall be to the satisfaction of the City Engineer.

19. The Developer shall identify park and trail locations within the subdivision with signage, prior to, through construction and during the maintenance period to the satisfaction of the Director of Parks and Recreation.

20. The Developer shall establish a homeowners association to maintain streets, open space, detention areas, common area fencing, gates, and walls, and any other area deemed appropriate by the Community Development Director, within the proposed development. CC&Rs shall be submitted for the review and approval of the Community Development Director with consultation of the City Attorney prior to recordation of a final map for any portion of the project. Special legal counsel may review the CC&Rs on behalf of the City Attorney and the cost for any such review shall be reimbursed by the developer prior to recordation of the parcel map. The CC&Rs shall provide the City with the rights and remedies of the association, but not the obligation, to enforce the maintenance responsibilities of the homeowners association. A map shall be part of the CC&Rs to show what areas and structures within the development are maintained by the homeowners association and which are maintained by the L&D.

22. Prior to recordation of the final map, the boundaries of Lot 1 shall be reduced to provide for reconfiguration of Parcel B, in a southerly direction, to the satisfaction of the City Engineer and Parks and Recreation Director.

23. At the discretion of the Parks and Recreation Director, the developer may be required to install a bridge across Marsh Creek to connect with the Marsh Creek trail. The design of the bridge and its location shall be subject to the review and approval of the City Engineer and Parks and Recreation Director and shall be reimbursable under the City's Development Fee Program.

24. The developer shall design and build landscape and trail improvements on City-owned property west of the UPRR rail tracks starting at Sungold Court north to Minnesota Avenue. The landscape and trail improvements shall be designed, constructed, and open to the public to the satisfaction of the Director of Parks and Recreation prior to issuance of the 53" building permit.

25. The proposed project shall be designed to include all mitigation measures listed in the adopted mitigated negative declaration for this development.

26. The developer shall ensure that the subdivision and its related improvements and house designs comply with all improvements and commitments made in conjunction with the RGMP allocation approved by the City Council on August 23, 2005.

27. The Developer shall install a landscaped center median in Minnesota Avenue from Sand Creek Road to approximately Randy Way to the satisfaction of the City Engineer. A portion of these improvements will be fee creditable per the Development Fee Program.

28. A recent aerial photograph of the project site and surrounding area shall be posted in a prominent location in the sales office for the subdivision. The disclosure notice to prospective buyers within this subdivision shall also be posted, as well as noted on sales brochures distributed to the prospective purchasers, with a final copy given to the City Engineer and Parks and Recreation Director. The disclosure notice shall advise that the eBART or other computer rail service is planned immediately to the east of the proposed subdivision.

29. Parcels E, F, G, and H shall be configured by the developer to establish separate parcels at the entrance to "D" and "E" Streets that shall be owned and maintained by the project homeowners association to the satisfaction of the City Engineer and Parks and Recreation Director.
30. All gates within the project shall be equipped with Option control devices and all gates shall be operated by the City Engineer.

PLANNING COMMISSION RESOLUTION NO. 06-28

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF BRENTWOOD APPROVING DESIGN REVIEW NO. 05-20 FOR THE DESIGN OF 5 PLANS FOR 102 SINGLE FAMILY HOMES AND ONE (1) PLAN FOR FOUR (4) DUET SINGLE-FAMILY HOMES, ALL WITHIN TENTATIVE SUBDIVISION MAP 8311 LOCATED SOUTH OF CARMELO PARKWAY, WEST OF MARSH CREEK AND EAST OF MINNESOTA AVENUE (APN 017-080-008).

WHEREAS, the Planning Commission of the City of Brentwood has considered the request for Design Review 05-20 submitted by Pulte Homes to allow for five plans on 102 single-family residential lots and one duet plan on four single-family residential lots within Tentative Subdivision Map 8311; and

WHEREAS, the Planning Commission of the City of Brentwood has recommended approval of Rezoning 06-02 amending the PD-26 Zoning District by providing specific development standards on June 6, 2006 for this project site; and

WHEREAS, the Planning Commission of the City of Brentwood has recommended approval of Tentative Subdivision Map 8311 on June 6, 2006, with conditions for the project site; and

WHEREAS, the City has reviewed this project in accordance with the California Environmental Quality Act (CEQA) and has determined that this design review application and its impacts were considered as part of the Mitigated Negative Declaration (MND) prepared for Rezoning 06-02 and Tentative Subdivision Map 8311 and were determined to be less than significant after mitigation; and

WHEREAS, the Planning Commission has considered the staff report, MND, all appropriate project information including testimony received from the applicant and other interested parties; and

WHEREAS, a duly noticed public hearing was advertised in the Brentwood Press on May 6, 2006, and mailed to property owners within 300 feet of the site as required by City Ordinance and Government Code 65091 for necessary entitlements related to this design review request; and

NOW, THEREFORE, BE IT RESOLVED, the Planning Commission has reviewed said Design Review request and has stated the compatibility of this request with adjacent lands, and has considered the project in accordance with the design and site development review criteria identified in Section 17 820.006, 007 and 008 of the Brentwood Municipal Code; and

A. Hereby finds that:

1. The location and design of the proposed use as conditioned will not adversely affect abutting properties and the surrounding neighborhood; and
2. The proposed development, as conditioned shall create a well-coordinated urban design, harmoniously related to other planned facilities in the immediate area; and
3. The location and internal arrangements of all structures and other facilities as conditioned on the site, including land uses, internal circulation and parking shall be conducive to an orderly, attractive, efficient, and harmonious development.
4. The proposed development shall be of a quality and character appropriate to, and serving to protect and enhance the value of, private and public investments in the immediate area.
5. The requested architectural design, site improvements, etc., as conditioned, are compatible with City plans for the surrounding neighborhood; and
6. The subject site (as conditioned) has adequate pedestrian, vehicular circulation and parking and will not have any adverse environmental impacts on surrounding properties; and
7. The availability of public facilities and utilities as conditioned is adequate to serve the proposed use.

- B. Hereby approves Design Review No. 05-20 for five plans to be constructed on 102 lots and one duet model to be constructed on 4 lots, located within Tentative Subdivision Map 8311 subject to the conditions of approval in Exhibit A.

- C. This permit shall terminate on July 5, 2006, one (1) year from the effective date of the granting, unless actual construction or alteration under valid permits has begun and is diligently pursued within said period, or as provided by a valid development agreement. However, such period of time may be extended by the Planning Commission upon application filed at any time before said period has expired.

This action is final unless an appeal is filed pursuant to Chapter 17.880 of the Brentwood Municipal Code within ten (10) calendar days following Planning Commission action.

PASSED AND ADOPTED by the Planning Commission of the City of Brentwood on June 6, 2006, by the following vote:

AYES: Chairman Stirling, Commissioners Cushing, Gildersleeve, London, and Pitkin
NOES: None
ABSENT: None
ABSTAIN: None

APPROVED
Don Stirling
Planning Commission Chairman

ATTEST

Heidi Kline
Planning Manager

EXHIBIT A
CONDITIONS OF APPROVAL FOR
DR 05-20

1. The project shall conform to the City of Brentwood's Standard Conditions of Approval for Residential Design Review, dated May 2005, hereby incorporated by reference, unless modified below or by the Planning Commission.

2. This design review approval is contingent upon approval of Rezoning 06-02 by the City Council and shall be null and void if approval of this related entitlement is not obtained.

3. A detailed fencing and sound wall plan shall be submitted to the Engineering Department, Community Development Department, Building Department, and Parks and Recreation Department for review and approval prior to the recordation of the final final map. Sound barriers, where necessary, shall include landscaped berms, appropriate sound-rated windows, and building insulation to the satisfaction of the Community Development Director, City Engineer and Chief Building Official or their designees.

4. Any conditions of approval associated with Rezoning 06-02 and Tentative Subdivision Map 8311, are hereby incorporated by reference, and are made a part of this action.

5. The homes in this application shall be built in accordance with the development and architectural plan information prepared by Pulte Homes, Inc. Architectural Services, date stamped received December 19, 2005, except as modified by the Planning Commission or conditions contained herein.

6. The Developer shall add bellybanding to the side and rear elevations of Plan 4 in order to meet the Development Standard Guideline No. 6 requirement.

7. The project shall be designed in substantial conformance to the Preliminary Landscape Plan information dated stamped received June 13, 2005 prepared by John Nicol and Associates, except as modified by the conditions contained herein.

8. Detailed Community and Neighborhood entry monumentation and signage designs and material samples shall be submitted for review and approval to the Parks and Recreation and Community Development Departments prior to the recordation of the final Final Map.

9. The lots shall be plotted with differing elevation types at the time of building permit submittal, to the approval of the Community Development Department, to ensure a diverse streetscape.

10. A signed copy of this resolution with all conditions of approval shall be shown on the project building plans.

11. All green building measures/ environmental/ design concepts approved as part of the RGMP application and subsequent allocation for this project shall be included in the proposed plans submitted for issuance of a building permit and/or improvement plan review and approval.

13. The developer shall submit a master plotting plan for review and approval by the Community Development Director prior to recordation of a final map for any portion of the project.

14. The Developer shall implement their front yard landscaping program by entering into an agreement with the future home owner and allow them to install their own landscaping within six (6) months of moving in. The Developer shall create an impond account and deposit the cost of installing the landscaping into this account and in the event the home owner does not install the landscaping within 6 months of moving in the Developer shall use this impond account monies to install the front yard landscaping.

15. The Developer shall work with the Community Development Department to look into revising the Duet Plan by flipping the location of the garage with the living area.

16. The Developer shall carry the front elevation gable end treatments around to the side and rear elevation gable ends.

PLANNING COMMISSION RESOLUTION NO. 06-52

A RESOLUTION OF THE PLANNING COMMISSION APPROVING THE ADOPTION OF A MITIGATED NEGATIVE DECLARATION FOR RZ 06-02 AND TSM 8311.

WHEREAS, The City of Brentwood is requesting approval of a Negative Declaration in accordance with the application filed for RZ 06-02 and TSM 8311; and

WHEREAS, an Initial Study and Mitigated Negative Declaration were prepared for this project in accordance with the California Environmental Quality Act (CEQA) and are considered a part of this review and approval process; and

WHEREAS, the Mitigated Negative Declaration identifies potentially significant environmental effects associated with the proposed project which can be feasibly mitigated or avoided and these project measures are included in the project conditions of approval and will reduce the impacts identified to a less than significant level; and

WHEREAS, the availability of said environmental document for the minimum 30-day public review and comment period began on May 6, 2006 and ended on June 6, 2006 at 5:00 pm; and

WHEREAS, the Planning Commission of the City of Brentwood considered this Negative Declaration at a public hearing at its regular meeting of June 6, 2006 and considered the staff report, all accompanying information, and testimony received from the applicant and other interested parties;

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Brentwood hereby determines the following and approves the Negative Declaration for RZ 06-02 and TSM 8311:

A. Hereby finds the following:

1. That the Mitigated Negative Declaration for the project has been prepared and circulated in accordance with all applicable provisions of the California Environmental Quality Act (CEQA) and represents the independent judgment of the City of Brentwood; and
2. Pursuant to Sections 15162 and 15168 (c) of the CEQA Guidelines, the Planning Commission finds that the project is within the scope of the development levels evaluated in the Program EIR prepared for the 1993 City of Brentwood General Plan. The Initial Study has further evaluated potential project-specific impacts to the environment. Based upon this evidence and the Mitigated Negative Declaration, the Planning Commission finds that the project will not have any significant environmental impacts that were not studied in the Program EIR. The Mitigated Negative Declaration applies all applicable mitigation measures to supplement and strengthen the Program EIR measures. Therefore, since the mitigation measures are incorporated as conditions of approval of the project, the Mitigated Negative Declaration as well as the Program EIR for the 1993 General Plan are adequate for all approvals relating to the project; and
3. The Planning Commission further finds that no significant new information within the meaning of Public Resources Code Section 21062.1 and CEQA Guidelines Section 15065.6 has been presented to the City that would necessitate re-circulation of the Mitigated Negative Declaration for public review. The Planning Commission has considered all verbal and written comments relating to the Mitigated Negative Declaration and finds no significant new information has arisen.

The above actions are final unless an appeal is filed pursuant to Chapter 17.880 of the Brentwood Municipal Code within ten (10) calendar days following Planning Commission action.

PASSED by the Planning Commission of the City of Brentwood at its regular meeting of June 6, 2006 by the following vote:

AYES: Chairman Stirling, Commissioners Cushing, Gildersleeve, London and Pitkin
NOES: None
ABSENT: None
ABSTAIN: None

APPROVED
Don Stirling
Planning Commission Chairman

ATTEST

Heidi Kline
Planning Manager

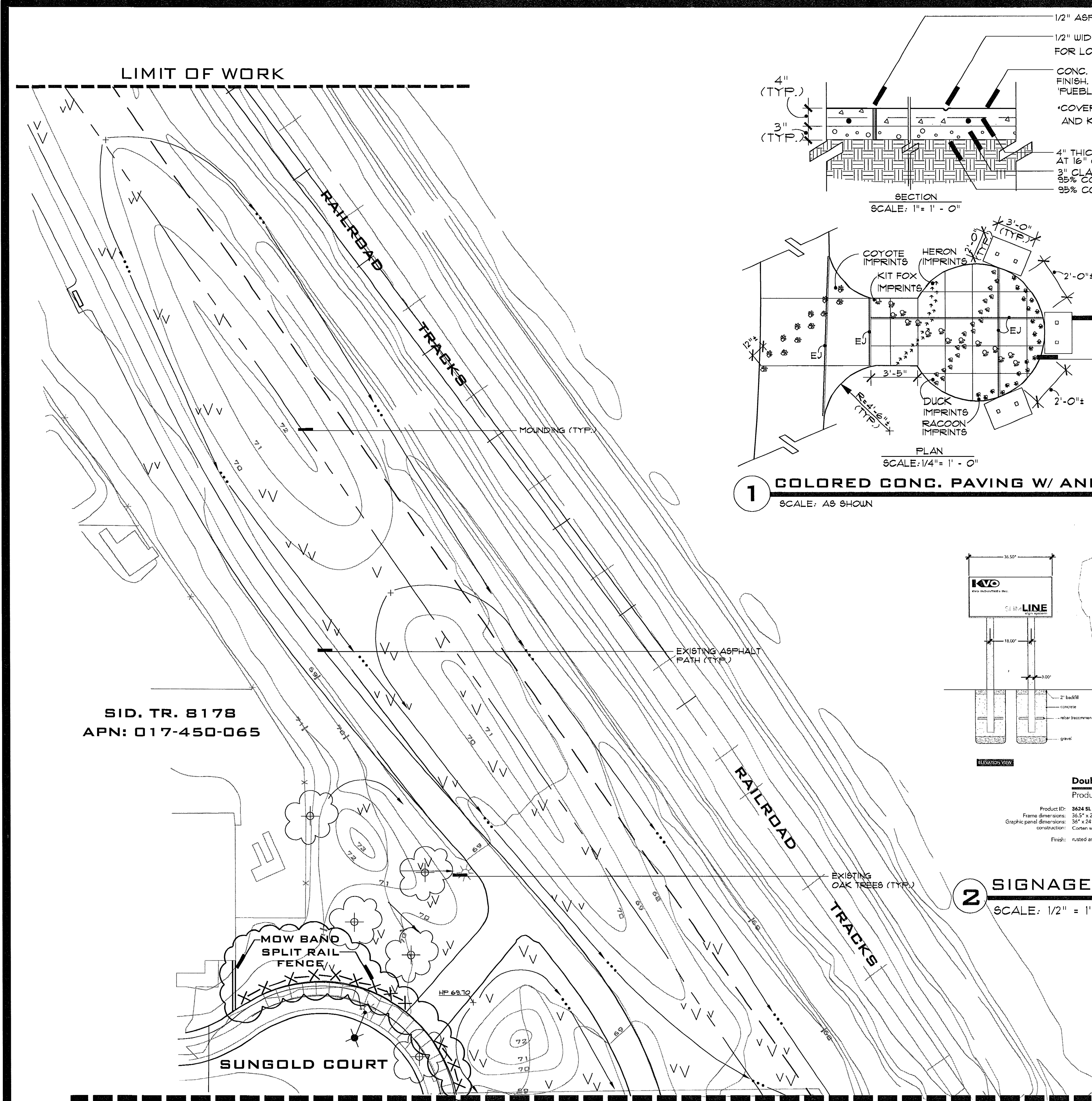
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www.rmatlandscape.com

CONDITIONS OF
MERITAGE HOMES
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(925) 288-0088
APPROVAL

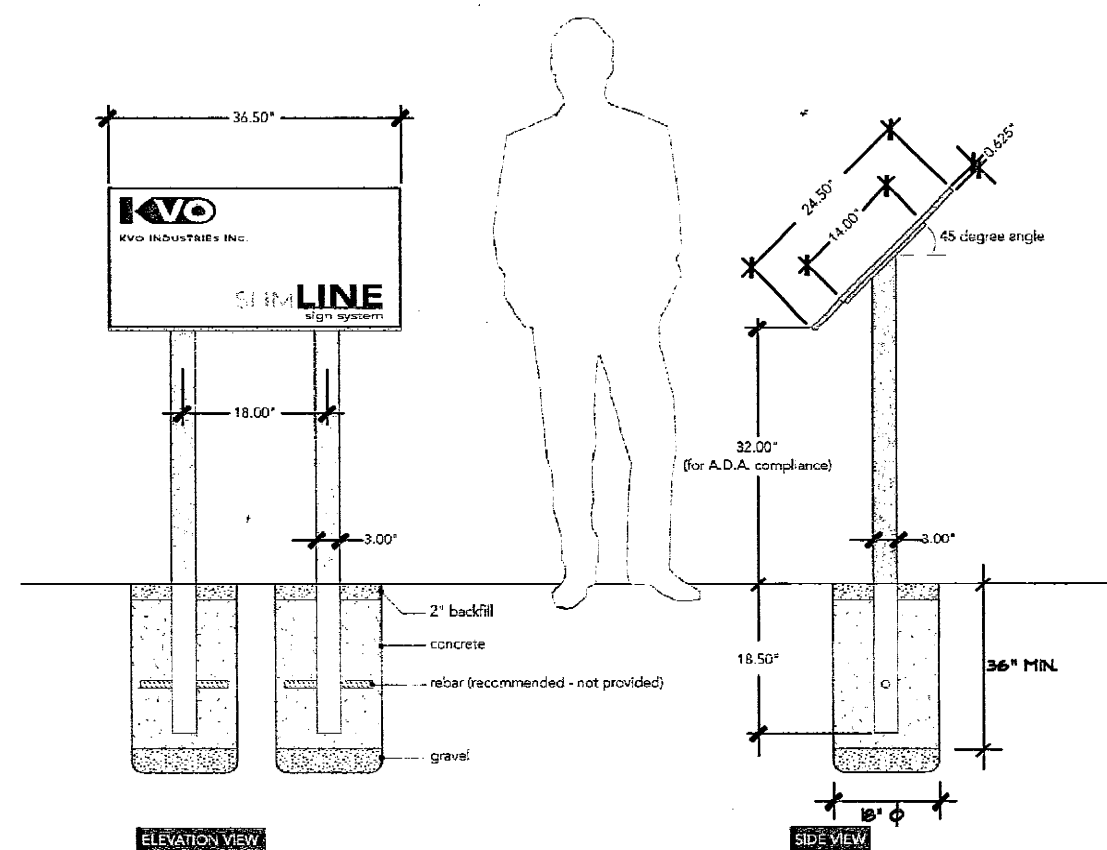
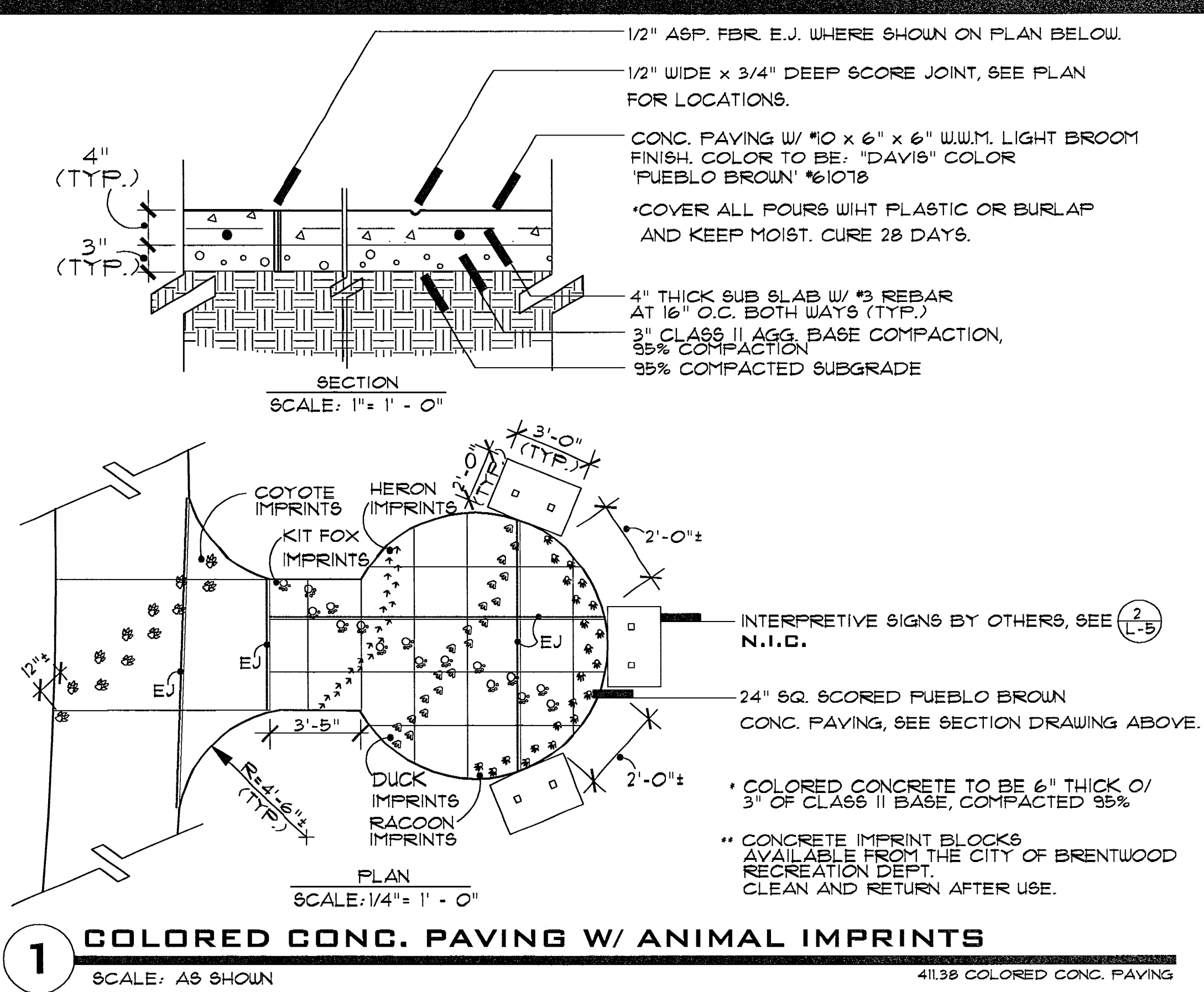
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SID. TR. 8178
APN: 017-450-065



2 SIGNAGE PEDESTAL
SCALE: 1/2" = 1'-0"

GRADING NOTE
FOR GRADING & DRAINAGE INFORMATION
SEE SHEET C-11A PREPARED BY
CARLSON, BARBEE & GIBSON, INC.
(925) 866-0322, DATED 3-2-12

LAYOUT LEGEND

- DIMENSIONAL STARTING POINT
- TYP. TYPICAL
- EQ. EQUAL
- ALIGN
- ANGLE MEASUREMENT
- CENTER LINE
- PROPERTY LINE
- INDICATES DETAIL NUMBER
- INDICATES SHEET NUMBER
- EXISTING LIGHT
- NEW LIGHT, SEE JT TRENCH DWG.
- INDICATES EXISTING CCFCD GRAVEL PATH
- EXISTING ASPHALT PAVING BY OTHERS.
- INDICATES NEW ASPHALT WALK, SEE
- INDICATES PLANTED AREA.
- TRASH CONTAINER, SEE MATERIAL SCHEDULE #3 ON SHEET L-17. (8 EACH)
- HYDRANT, SEE CIVIL DWGS.
- DRINKING FOUNTAIN, SEE
- PICNIC TABLE, SEE MATERIAL SCHEDULE #6 ON SHEET L-17
- BBO UNIT, SEE MATERIAL SCHEDULE #3 ON SHEET L-17
- BENCH, SEE MATERIAL SCHEDULE #1 ON SHEET L-17
- INDICATES CONCRETE H.C. RAMP FOR ENTRY INTO PLAY AREA.
- SPLIT RAIL FENCE, SEE
- VINYL CLAD CHAIN LINK FENCE, SEE
- W.I. FENCE, SEE CIVIL ENGR. DWGS.
- W.I. FENCE W/ CONC. VALLEY GUTTER, SEE CIVIL ENGR. DWGS.
- 6'-0" HIGH GOOD NEIGHBOR FENCE (OR MASONRY WALL) BY OTHERS, SEE PROTOTYPICAL LANDSCAPE PLANS (OR MASONRY WALL PLANS BY CBG). N.I.C.
- BLUEBIRD NESTING BOXES BY OTHERS. N.I.C.
- UTILITY BOXES BY OTHERS, SEE CIVIL AND JOINT TRENCH PLANS.

LAYOUT NOTES
(THESE NOTES ARE IN ADDITION TO BRENTWOODS STANDARD NOTES.)

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- ALL CURVED PORTIONS OF REDWOOD HEADER ARE TO BE SMOOTH AND CONTINUOUS CURVES.
- THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL DISTANCES AND DIMENSIONS AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE CITY AND LANDSCAPE ARCHITECT FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
- SITE INFORMATION WAS TAKEN FROM DRAWINGS PREPARED BY CARLSON, BARBEE & GIBSON INC., 6111 BOLLINGER ROAD, SUITE 150 SAN RAMON, CA 94583 (925) 866-0322, DATED 8-25-05 & REVISED 4-3-07, 7-26-11, 2-17-12, AND 3-2-12. DISTANCES AND DIMENSIONS PRIOR TO STARTING ANY WORK AND BRING ANY DISCREPANCIES TO THE BUILDER AND LANDSCAPE ARCHITECT FOR A DECISION.
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| 6 | CITY COMMENTS | 4-9-12 | C.A.D. BY: JD |
| 4 | CITY COMMENTS | 4-3-12 | CHECKED BY: RJM |
| 3 | CITY COMMENTS | 3-22-12 | PROJ. MGR.: JD |
| 2 | | | DATE: 2-28-12 |
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| | REVISIONS | DATE | SHEET NO. 5 OF 17 SHEETS |

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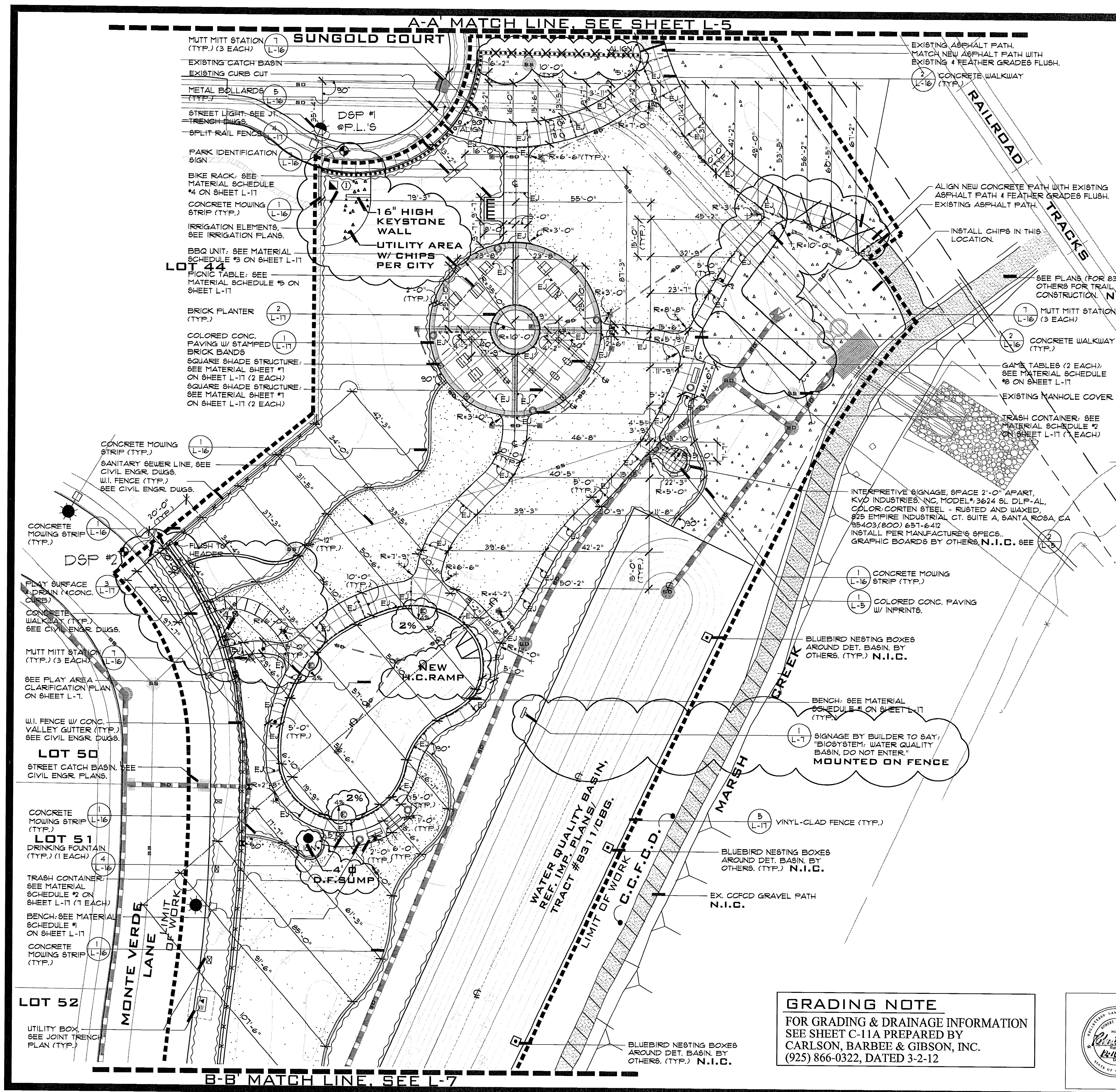
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(925) 288-4088

LAYOUT PLAN

DATE 2-28-12
REVISIONS
3-22-12
4-3-12
4-9-12

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11-28-12 AS-BUILT DRAWING SET 6/10



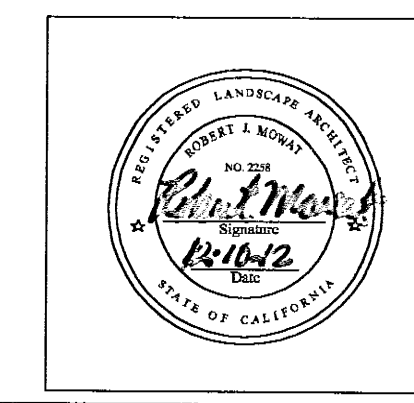
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SEE SHEET C-11A PREPARED BY
CARLSON, BARBEE & GIBSON, INC.
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| 6 | CITY COMMENTS | 5-2-12 |
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| 3 | CITY COMMENTS | 3-22-12 |
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C.A.D. BY: JD
CHECKED BY: RJM
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SHEET NO. 6 OF 17 SHEETS

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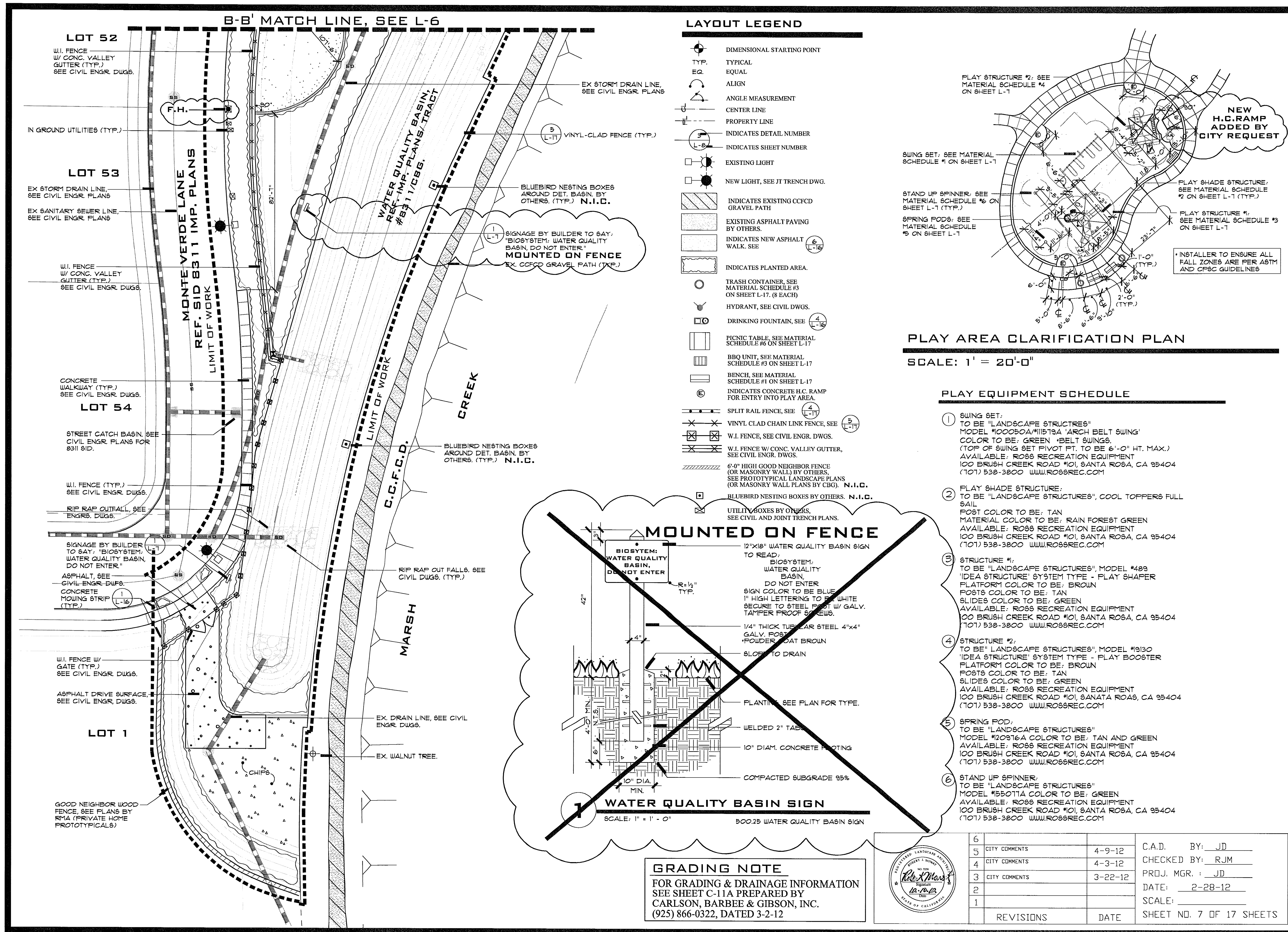
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LAYOUT PLAN

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SCALE
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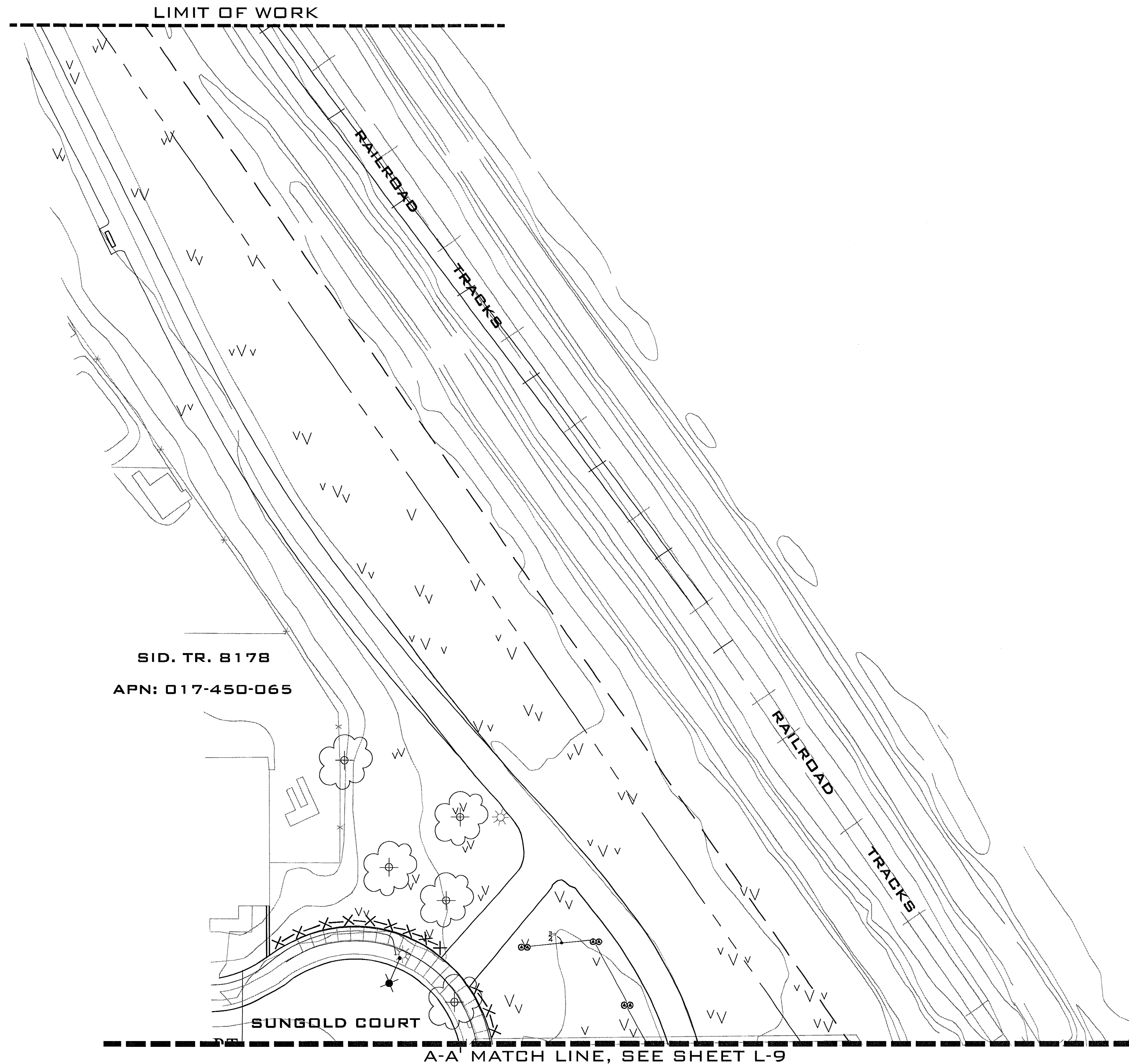
11-28-12 AS-BUILT DRAWING SET

18

This drawing is prepared for this particular site and may not be utilized for another site location.

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MERITAGE HOMES
CARMEL ESTATES PARK, BRENTWOOD, CA



SID. TR. 8178
APN: 017-450-065

IRRIGATION LEGEND

- NEW 2" & 1-1/2" WATER METER. VERIFY LOCATION, GPM AND PRESSURE W/ JOB SUPERINTENDENT AND ON SITE. MIN. STATIC PRESSURE REQUIRED = 61 PSI.
- 42 STATION 'RAINMASTER' IRRIGATION CONTROLLER: MODEL #SA6-RM-7-42/FSAVC-250B/PMF. INSTALL A FLOW SENSOR CABLE (MODEL #EV-CAB-SEN) IN 1" CONDUIT FROM FLOW SENSOR TO CONTROLLER. INSTALL PER MFG.'S SPECS; SEE PLAN FOR LOCATIONS; SEE DETAILS FOR SPECS. CONTROLLER SHALL HAVE (4EA.) HIGH GAIN ANTENNA.
- 30 STATION 'RAINMASTER' IRRIGATION CONTROLLER: MODEL #CA6-RM2-30-FSMV-150B. INSTALL PER MFG.'S SPECS; SEE PLAN FOR LOCATIONS; SEE DETAILS FOR SPECS. CONTROLLER SHALL HAVE (4EA.) OPEN STATIONS. TO BE MAINTAINED BY HOA.
- 2 - 2" NIBCO CAST IRON GATE VALVE (2-1/2P-619-RW) IN AMETEK BOX WITH GRAVEL PLUS 'GRISWOLD' 2160 MASTER CONTROL VALVE (NORMALLY CLOSED) AND FLOW CONTROL. DEVICE AT EACH POINT OF CONNECTION W/ SCH 40 PVC CONDUIT FROM MASTER VALVE TO CONTROLLER.
- WATERTRONICS BOOSTER PUMP MODEL #SSTBV-1.5 W/ STAINLESS STEEL ENCLOSURE & CONCRETE BASE. INSTALL PER MFG.'S SPECS. WATERTRONICS, HARTLAND, WI (262) 367-5000.
- 2-1/2" NIBCO CAST IRON GATE/ ISOLATION VALVE (P-619-RW) IN AMETEK BOX WITH GRAVEL. SIZE PER IRRIGATION MAINLINE, SEE PLAN.
- RAINBIRD PESP-NP-HAN SERIES REMOTE CONTROL VALVE WITH PURPLE CAP AND GRAVEL, SIZE PER PLAN.
- 100 AMP ELECTRIC METER PEDESTAL, SEE ELECTRICAL PLANS FOR DETAILS (UDI).
- NEW 2" FEBCO 825V REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY W/STAINLESS STEEL ENCLOSURE & FREEZE PROTECTION.
- TORO 340 - 00 - 15 - COM - E - 29' - F 6" POP-UP LAWN SPRAY HEADS 7.54 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 29' - 270 " " " 5.66 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 29' - H " " " 3.77 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 29' - 135 " " " 2.83 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 29' - Q " " " 1.89 GPM @ 50 P.S.I.
- TORO 340 - 00 - 15 - COM - E - 18' - F 6" POP-UP LAWN SPRAY HEADS 3.74 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 18' - 270 " " " 2.81 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 18' - H " " " 1.87 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 18' - 135 " " " 1.40 GPM @ 50 P.S.I.
TORO 340 - 00 - 15 - COM - E - 18' - Q " " " 0.94 GPM @ 50 P.S.I.
- TORO 570 - ZPRX - 6P - 12' - F - PC 6" POP-UP LAWN SPRAY HEADS 2.35 GPM @ 40 P.S.I.
TORO 570 - ZPRX - 6P - 12' - 270 - PC " " " 1.65 GPM @ 40 P.S.I.
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TORO 570 - ZPRX - 6P - 12' - Q - PC " " " 0.60 GPM @ 40 P.S.I.
- TORO 570 - ZPRX - 6P - 8' - F - PC 6" POP-UP LAWN SPRAY HEADS 1.16 GPM @ 40 P.S.I.
TORO 570 - ZPRX - 6P - 8' - 270 - PC " " " 0.86 GPM @ 40 P.S.I.
TORO 570 - ZPRX - 6P - 8' - H - PC " " " 0.58 GPM @ 40 P.S.I.
TORO 570 - ZPRX - 6P - 8' - Q - PC " " " 0.26 GPM @ 40 P.S.I.
- TORO 570 - ZPRX - 6P - 4 - EST - PC 6" POP-UP LAWN SPRAY HEADS 0.53 GPM @ 40 P.S.I.
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TORO 570 - ZPRX - 12P - 8' - Q - PC " " " 0.26 GPM @ 40 P.S.I.
- TORO 570 SERIES PRESSURE COMPENSATION TREE BUBBLER - TORO-570-4P-COM-FB-50 (0.5 GPM)
- TORO 570 SERIES PRESSURE COMPENSATION SHRUB BUBBLER - TORO-570-4P-COM-FB-50 (0.5 GPM)
- TORO 570 - ZPRX - 12P - 5' - EST - PC 12" POP-UP SHRUB SPRAY HEADS 0.53 GPM @ 40 P.S.I.
TORO 570 - ZPRX - 12P - 5' - CST - PC " " " 1.04 GPM @ 40 P.S.I.
- SCH 40 PVC SLEEVE, BURY 18" DEEP, SIZE PER PLAN, 24" UNDER ROADWAYS.
EXTEND 12" PAST HARDCAPED EDGES.
- SCH 40 PVC MAINLINE, BURY 18" DEEP, SIZE PER PLAN, 24" UNDER ROADWAYS.
ALL MAINLINE FITTINGS SCH 80 (USE CLASS 315 FOR ALL MAINLINES OVER 2" DIA.)
- SCH 40 PVC LATERAL, BURY 12" DEEP, SIZE PER PLAN.
- 1 1/4" Ø BROWNLINE PIPE WITH GALVANIZED STAPLES 24" O.C.

- INDICATES STATION NUMBER
- INDICATES GPM DEMAND PER VALVE
- INDICATED VALVE SIZE

- * ALL SHRUB HEADS NEXT TO ALL WALKS AND DRIVES SHALL BE 12" POP-UP HEADS.
- * DRINKING FOUNTAIN SUPPLY LINE SHALL BE 1" SCH. 40 PVC (TYP.)
- ◆ QUICK COUPLER VALVE, RAINBIRD MODEL #44DLRC; IN PLASTIC VALVE BOX W/ LOCKING LID.

| | | | |
|-----------|---------------|---------|--------------------------|
| 6 | CITY COMMENTS | 5-2-12 | C.A.D. BY: JD |
| 5 | CITY COMMENTS | 4-9-12 | CHECKED BY: RJM |
| 4 | CITY COMMENTS | 4-3-12 | PROJ. MGR.: JD |
| 3 | CITY COMMENTS | 3-22-12 | DATE: 2-28-12 |
| 2 | | | SCALE: 1' = 20'-0" |
| 1 | | | SHEET NO. 8 OF 17 SHEETS |
| REVISIONS | | DATE | |



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(925) 288-0088

IRRIGATION PLAN

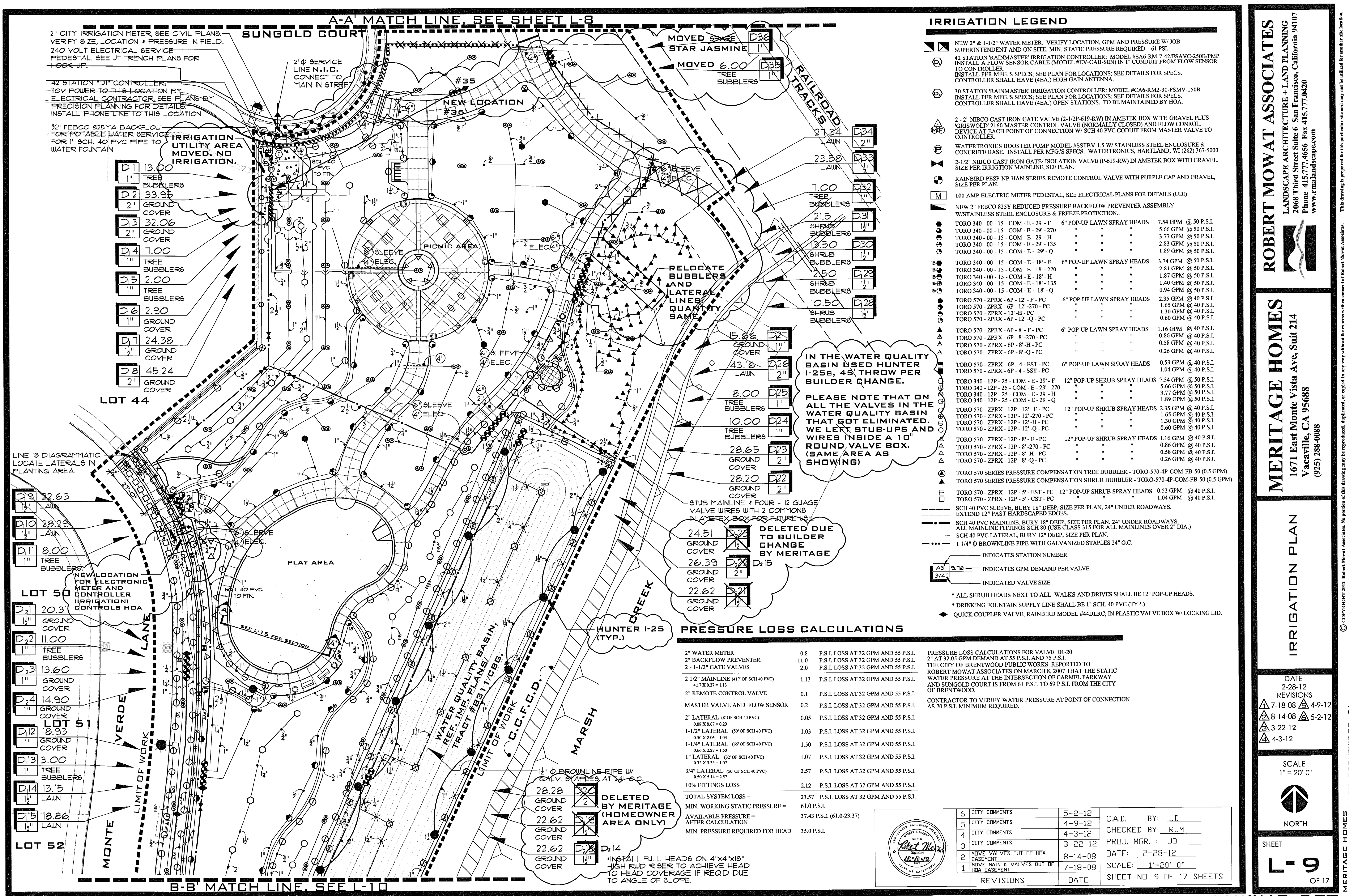
DATE
2-28-12
REVISIONS
3-22-12
4-3-12
4-9-12
5-2-12

SCALE
1" = 20'-0"



SHEET

L-8
OF 17



IRRIGATION LEGEND

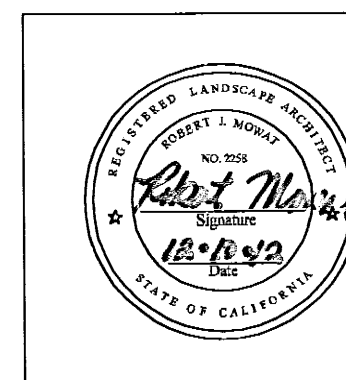
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- WATERTRONICS BOOSTER PUMP MODEL #SSTBV-1.5 W/ STAINLESS STEEL ENCLOSURE & CONCRETE BASE. INSTALL PER MFG.'S SPECS. WATERTRONICS, HARTLAND, WI (262) 367-5000
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- ALL MAINLINE FITTINGS SCH 80 (USE CLASS 315 FOR ALL MAINLINES OVER 2" DIA.)
- SCH 40 PVC LATERAL, BURY 12" DEEP, SIZE PER PLAN.
- 1 1/4" Ø BROWNLINE PIPE WITH GALVANIZED STAPLES 24" O.C.
- INDICATES STATION NUMBER
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- INDICATED VALVE SIZE
- * ALL SHRUB HEADS NEXT TO ALL WALKS AND DRIVES SHALL BE 12" POP-UP HEADS.
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- * QUICK COUPLER VALVE, RAINBIRD MODEL #44DLRC; IN PLASTIC VALVE BOX W/ LOCKING LID.

PRESSURE LOSS CALCULATIONS

| | | |
|--------------------------------------|---------------------------|-------------------------------------|
| 2" WATER METER | 0.8 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 2" BACKFLOW PREVENTER | 11.0 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 2-1-1/2" GATE VALVES | 2.0 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 2 1/2" MAINLINE (417' OF SCH 40 PVC) | 1.13 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 2" REMOTE CONTROL VALVE | 0.1 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| MASTER VALVE AND FLOW SENSOR | 0.2 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 2" LATERAL (8' OF SCH 40 PVC) | 0.05 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 0.08 X 0.67 = 0.05 | | |
| 1-1/2" LATERAL (30' OF SCH 40 PVC) | 1.03 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 0.50 X 2.06 = 1.03 | | |
| 1-1/4" LATERAL (66' OF SCH 40 PVC) | 1.50 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 0.66 X 2.27 = 1.50 | | |
| 1" LATERAL (32' OF SCH 40 PVC) | 1.07 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 0.32 X 3.35 = 1.07 | | |
| 3/4" LATERAL (59' OF SCH 40 PVC) | 2.57 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| 0.50 X 5.14 = 2.57 | | |
| 10% FITTINGS LOSS | 2.12 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| TOTAL SYSTEM LOSS = | 23.57 | P.S.I. LOSS AT 32 GPM AND 55 P.S.I. |
| MIN. WORKING STATIC PRESSURE = | 61.0 P.S.I. | |
| AVAILABLE PRESSURE = | 37.43 P.S.I. (61.0-23.57) | |
| MIN. PRESSURE REQUIRED FOR HEAD | 35.0 P.S.I. | |

PRESSURE LOSS CALCULATIONS FOR VALVE D1-20
2" AT 32.05 GPM DEMAND AT 55 P.S.I. AND 75 P.S.I.
THE CITY OF BRENTWOOD PUBLIC WORKS REPORTED TO ROBERT MOWAT ASSOCIATES ON MARCH 8, 2007 THAT THE STATIC WATER PRESSURE AT THE INTERSECTION OF CARMEL PARKWAY AND SUNGOLD COURT IS FROM 61 P.S.I. TO 69 P.S.I. FROM THE CITY OF BRENTWOOD.

CONTRACTOR TO VERIFY WATER PRESSURE AT POINT OF CONNECTION AS 70 P.S.I. MINIMUM REQUIRED.



| | | | |
|---|--|---------|--------------------------|
| 6 | CITY COMMENTS | 5-2-12 | C.A.D. BY: JD |
| 5 | CITY COMMENTS | 4-9-12 | CHECKED BY: RJM |
| 4 | CITY COMMENTS | 4-3-12 | PROJ. MGR.: JD |
| 3 | CITY COMMENTS | 3-22-12 | DATE: 2-28-12 |
| 2 | MOVE VALVES OUT OF HOA EASEMENT | 8-14-08 | SCALE: 1"=20'-0" |
| 1 | MOVE MAIN & VALVES OUT OF HOA EASEMENT | 7-18-08 | SHEET NO. 9 OF 17 SHEETS |
| | REVISIONS | DATE | |

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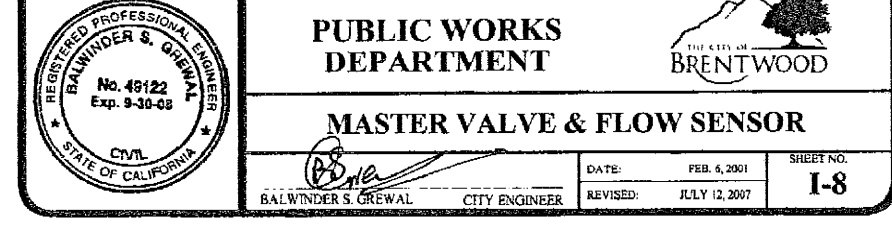
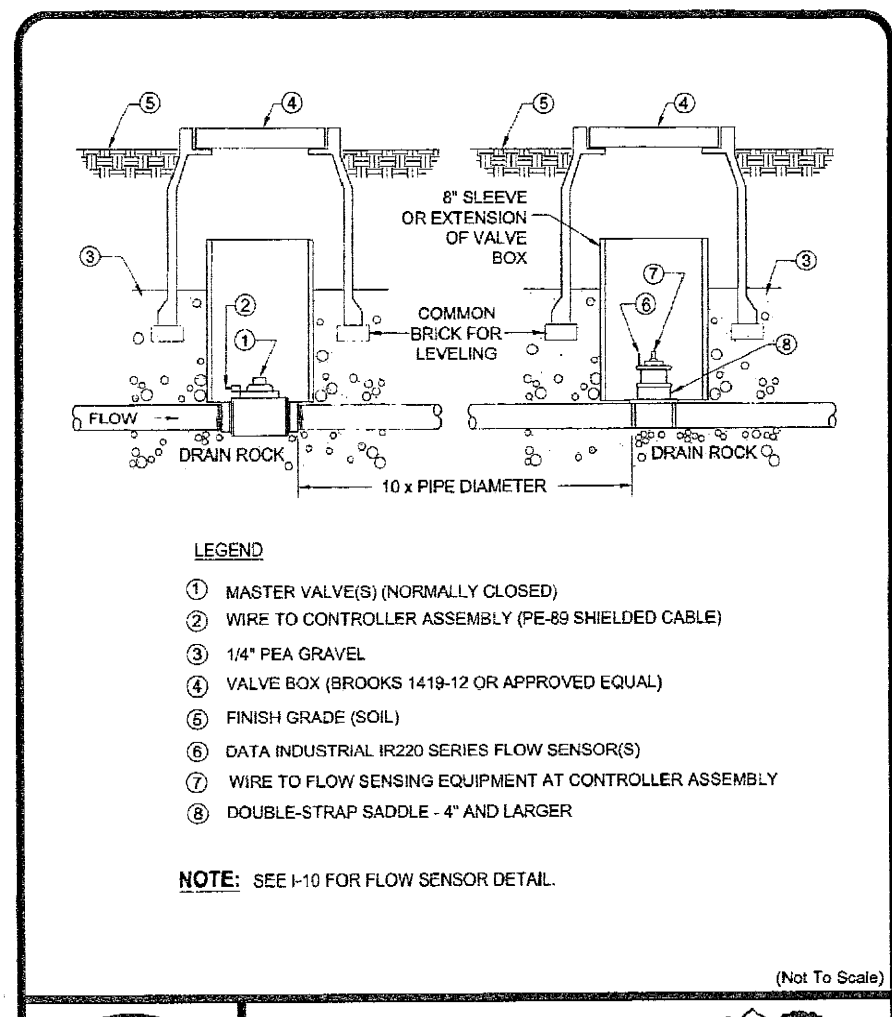
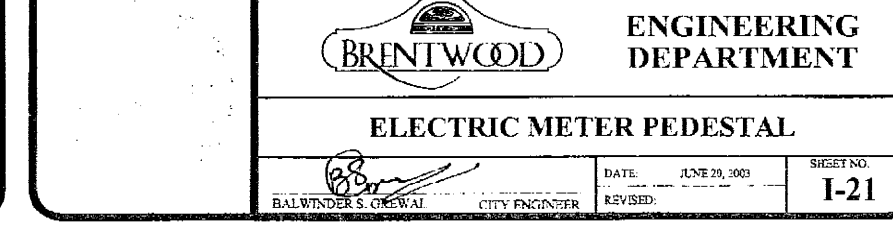
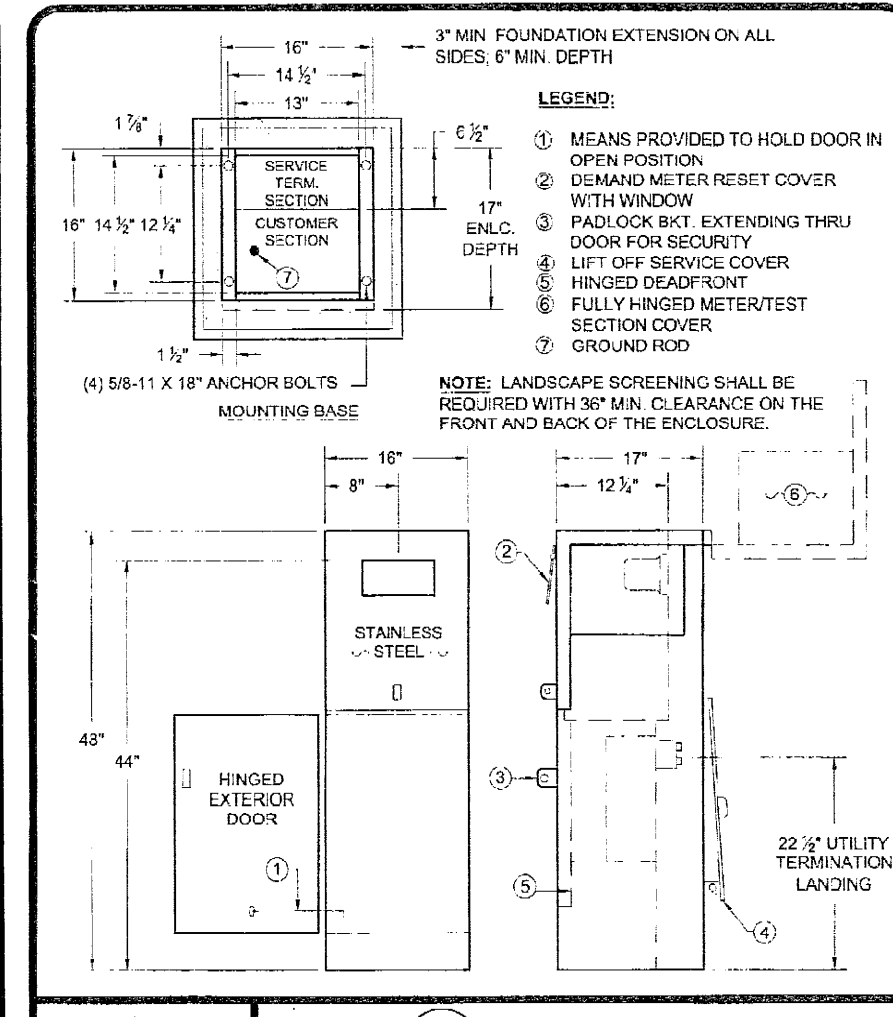
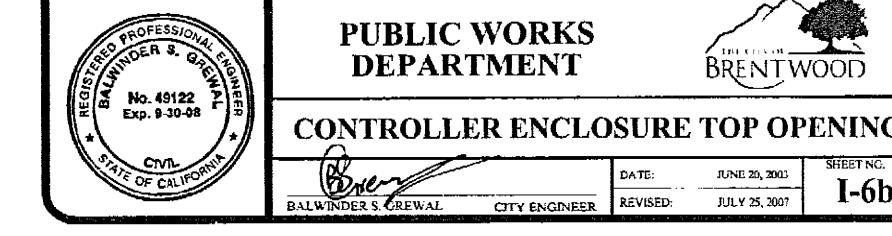
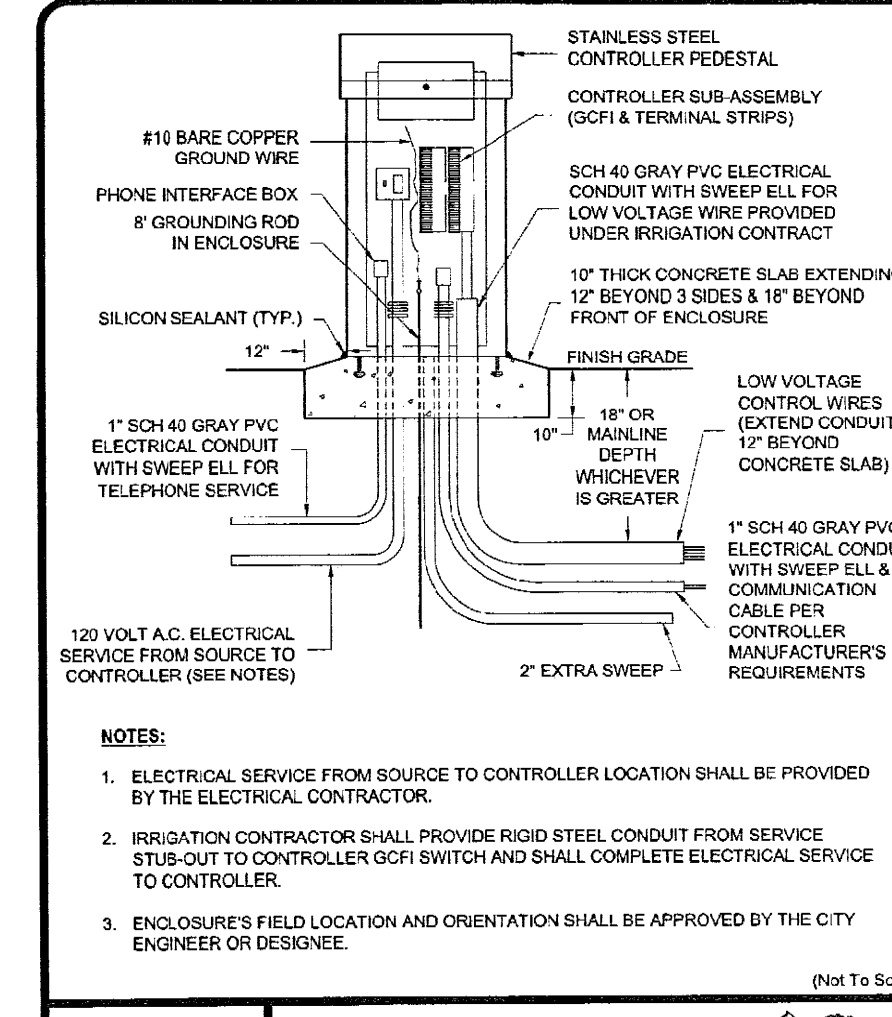
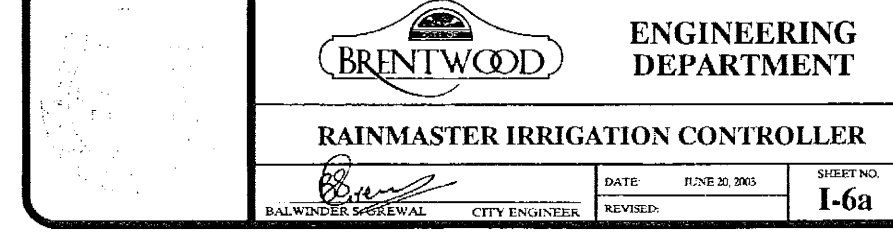
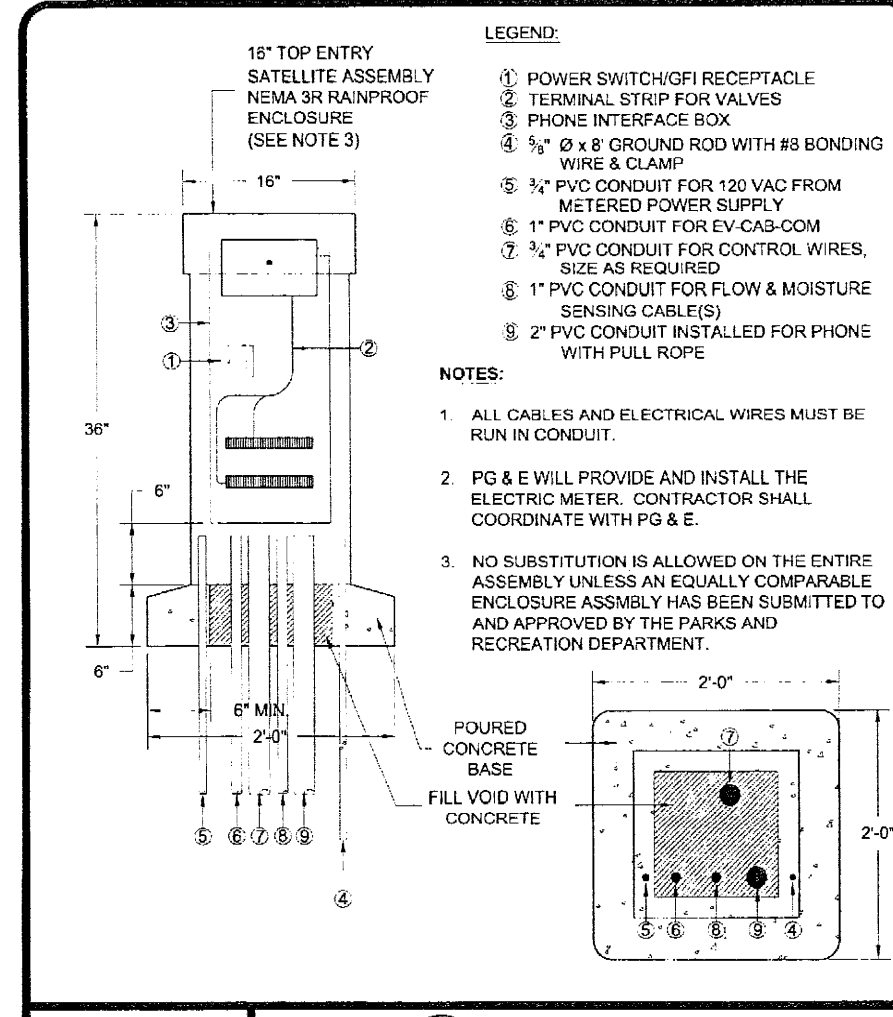
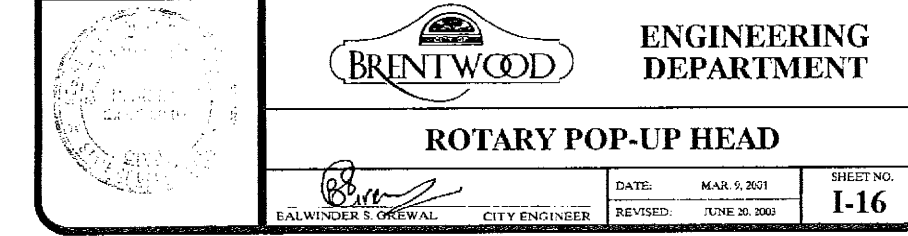
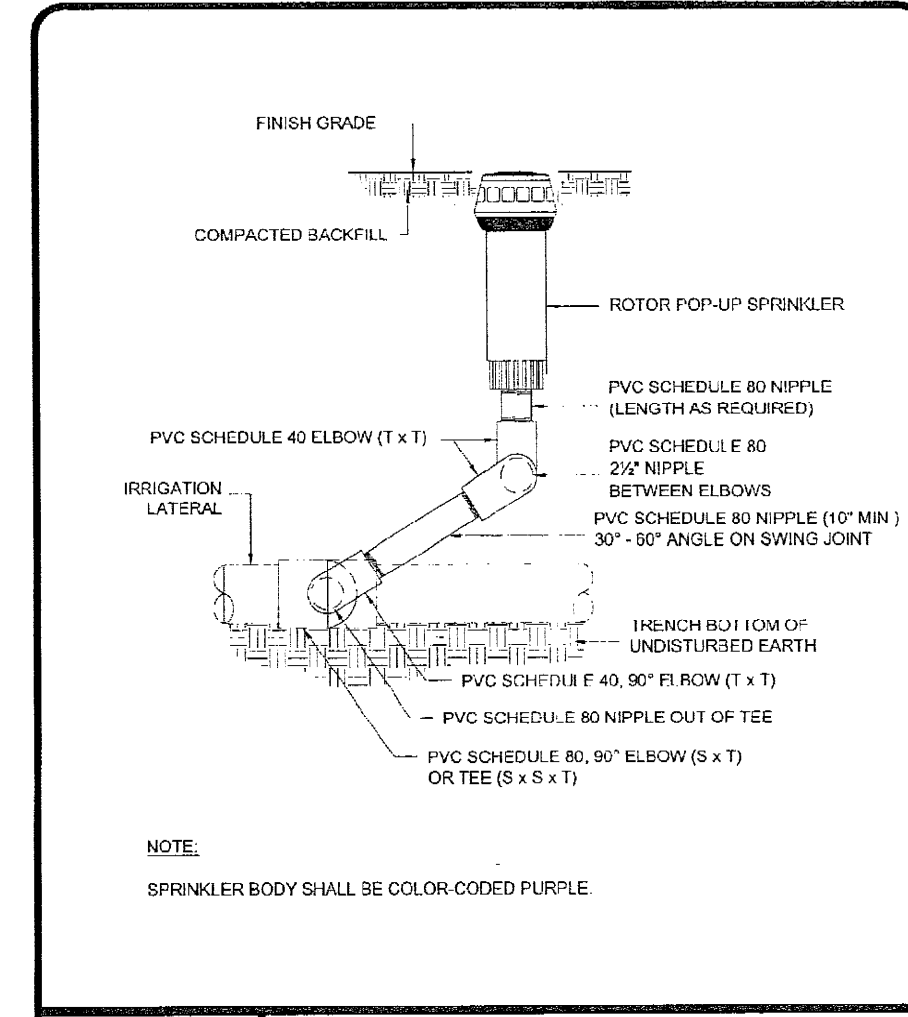
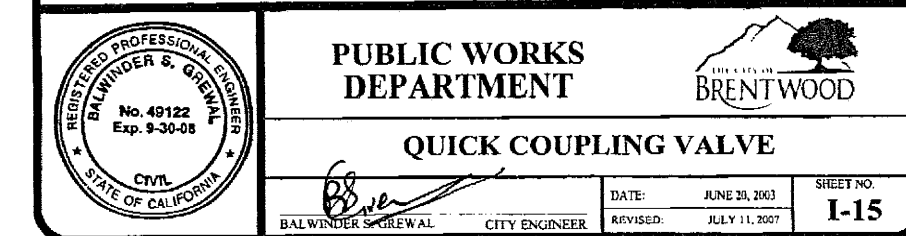
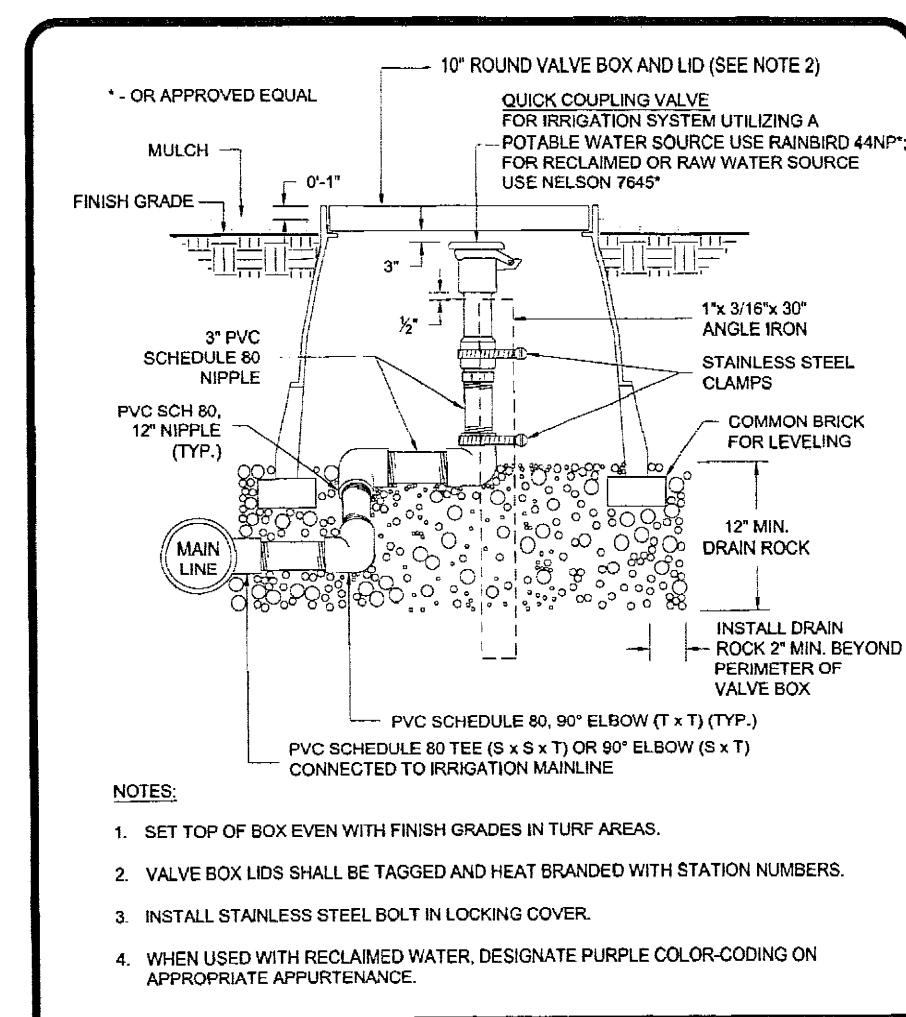
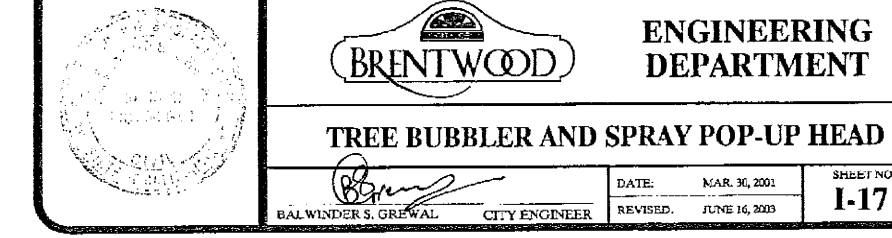
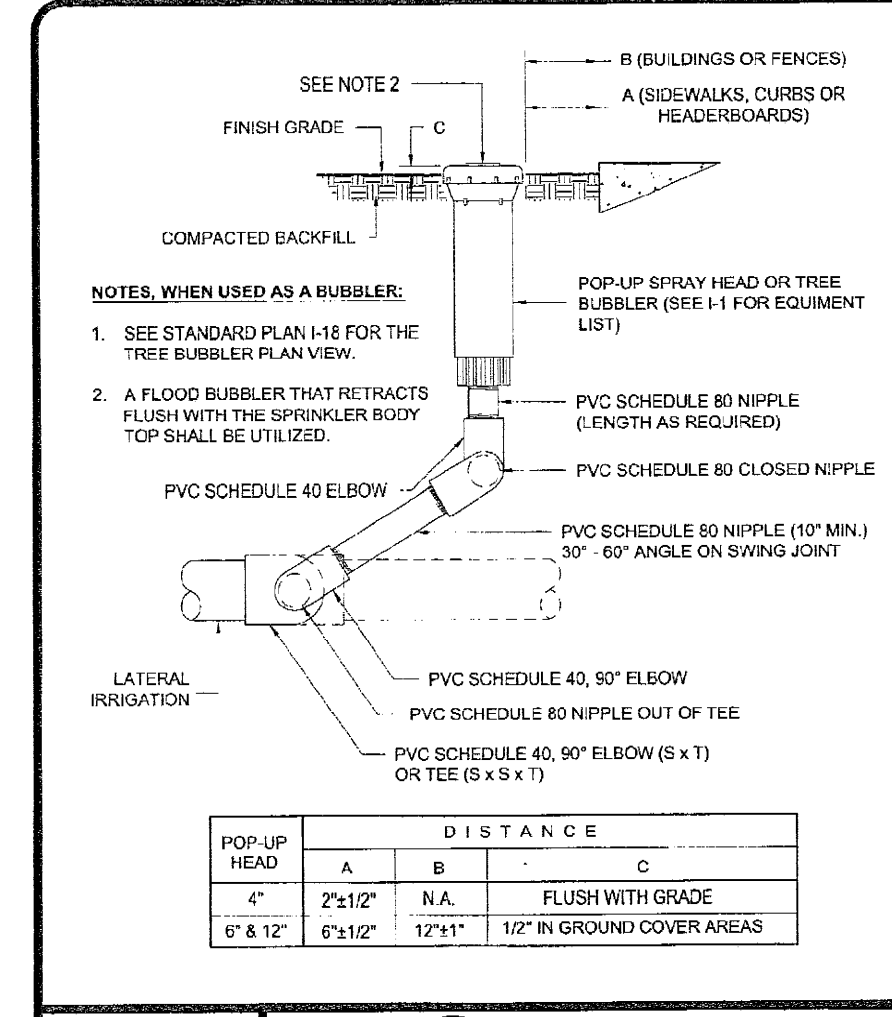
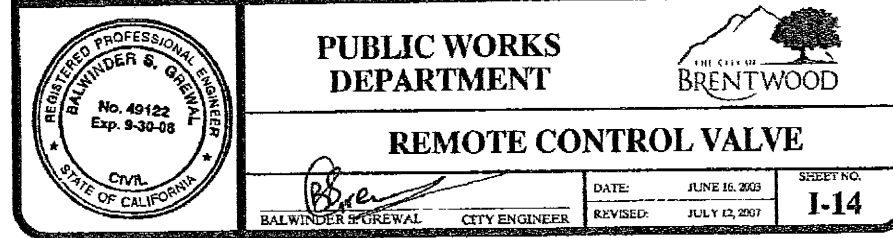
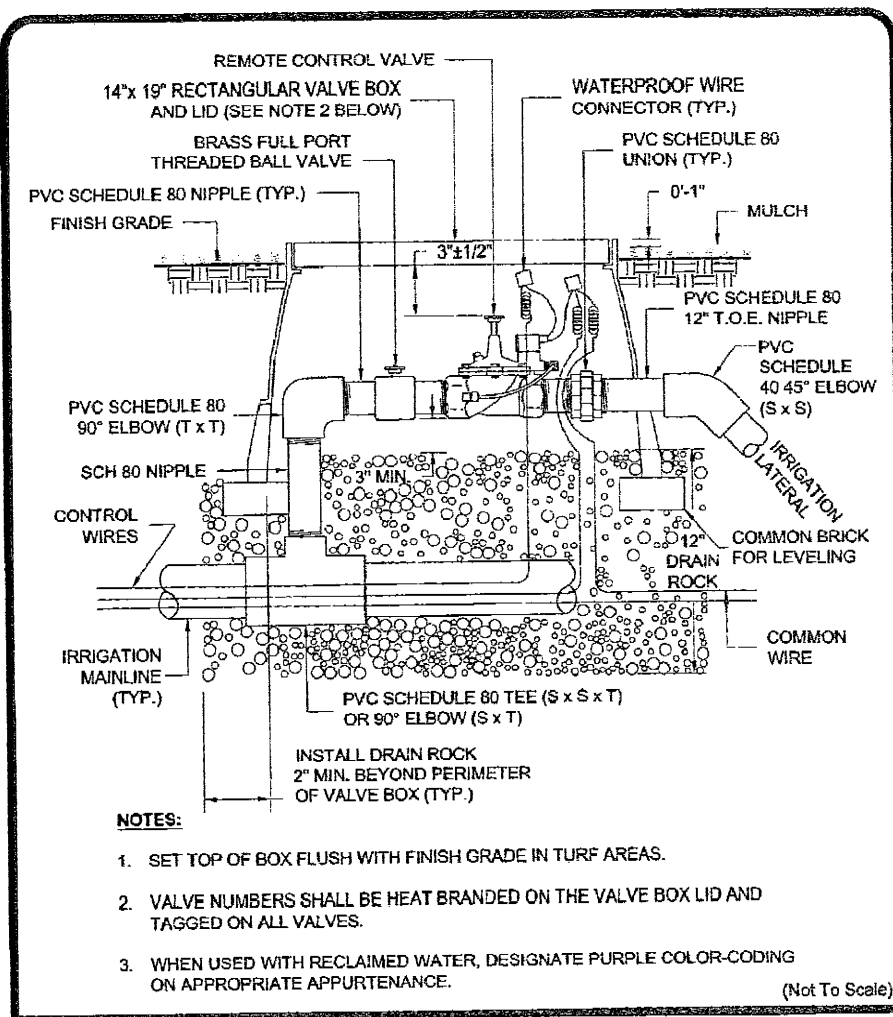
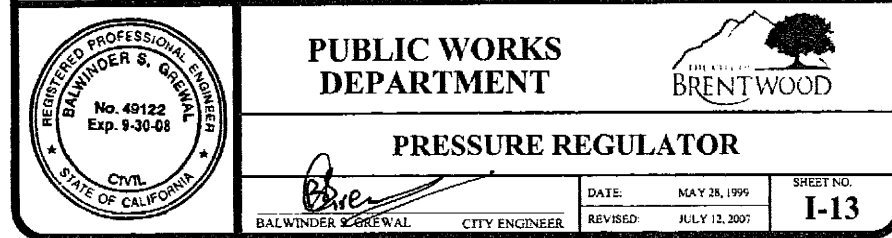
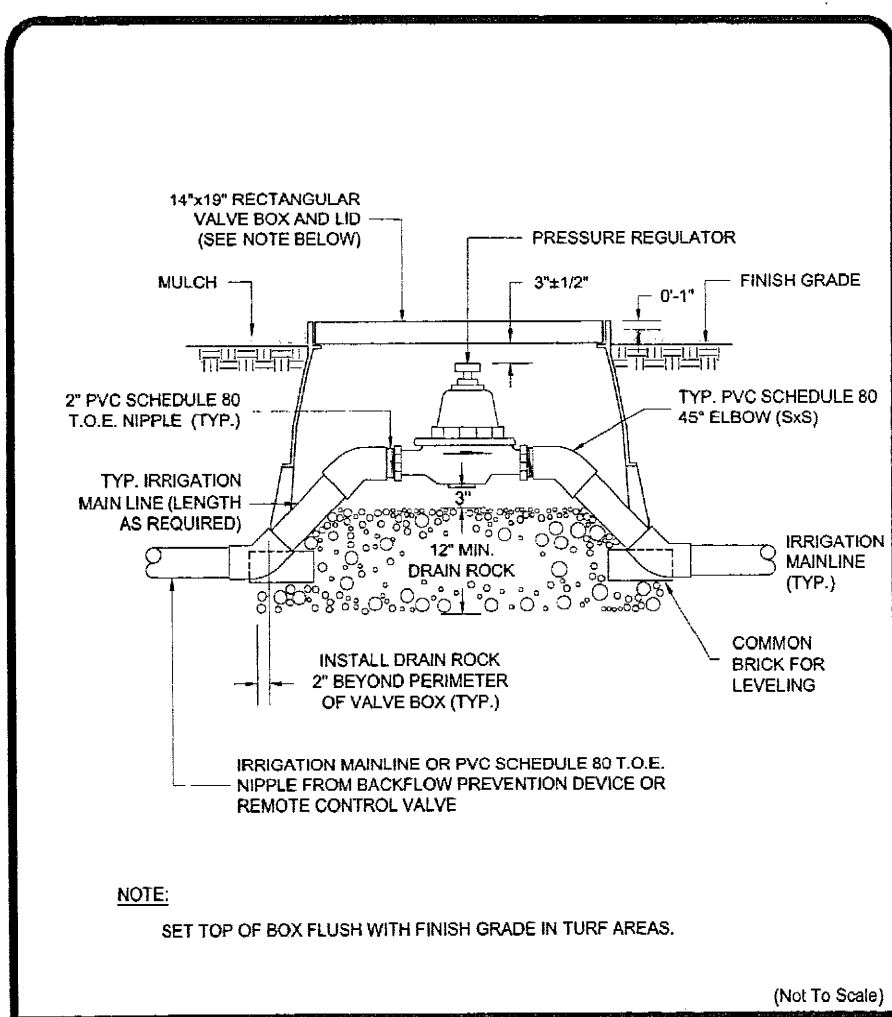
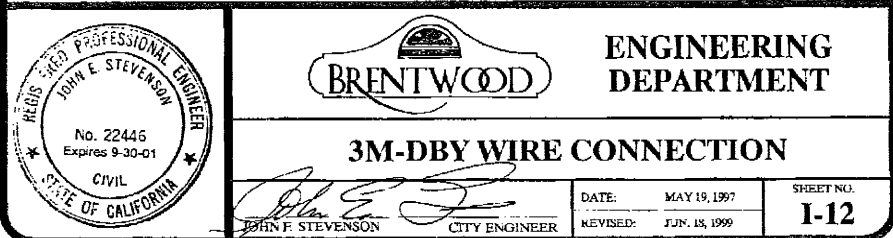
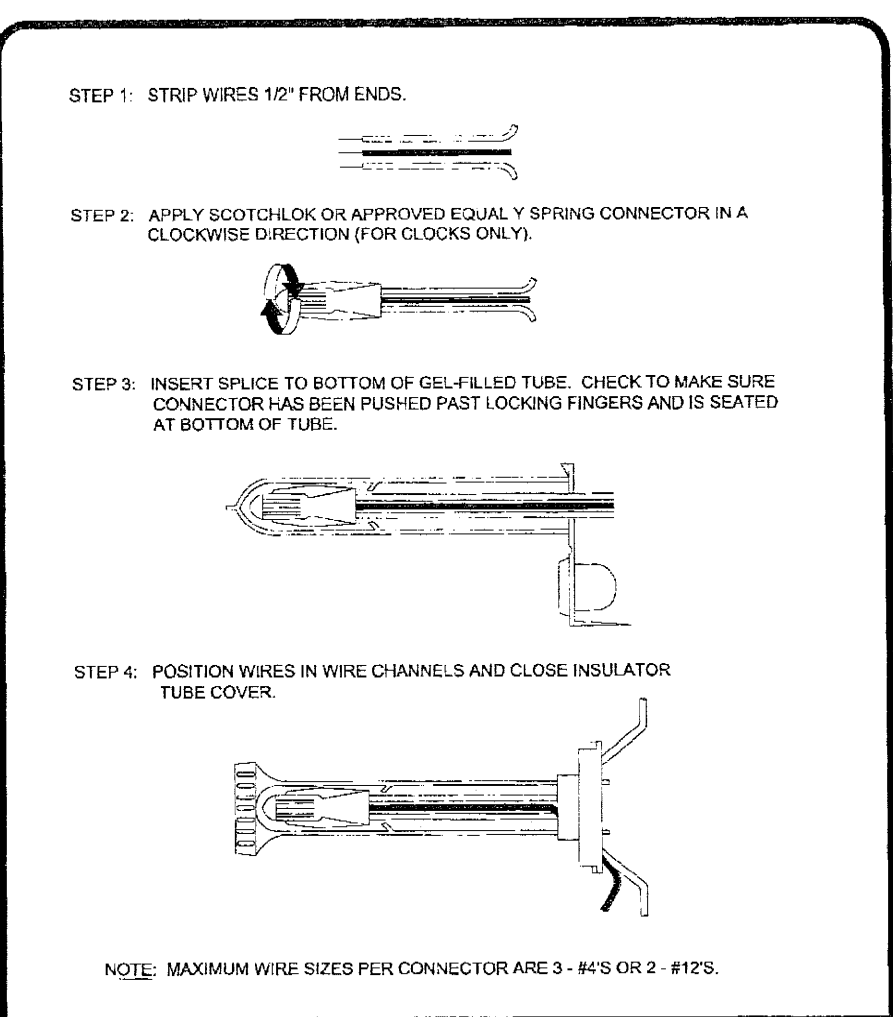
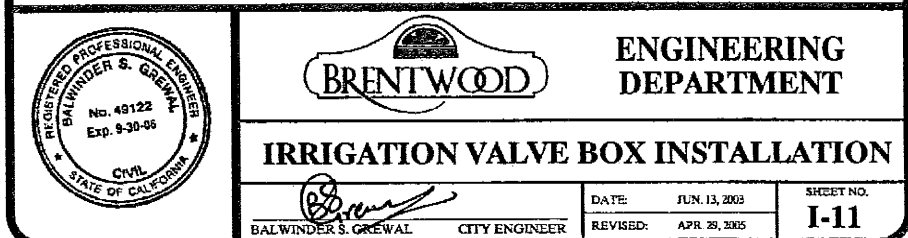
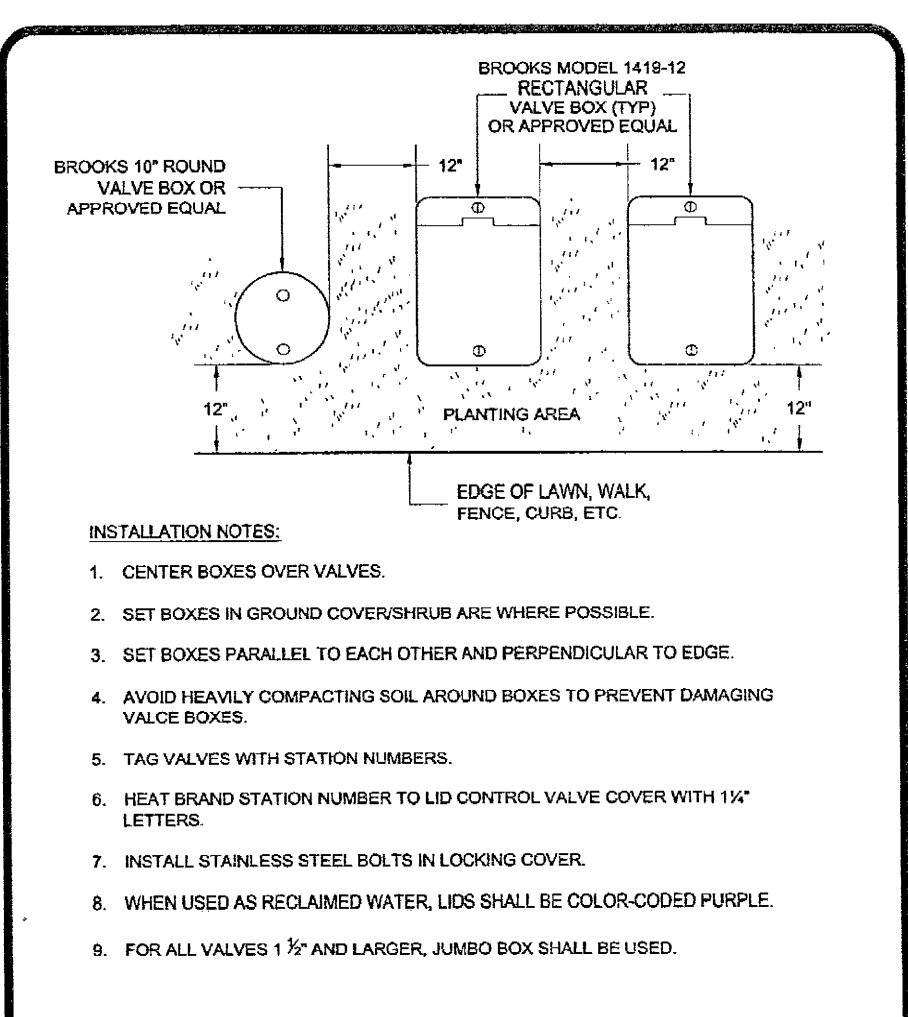
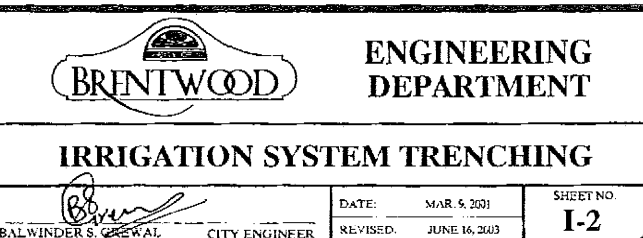
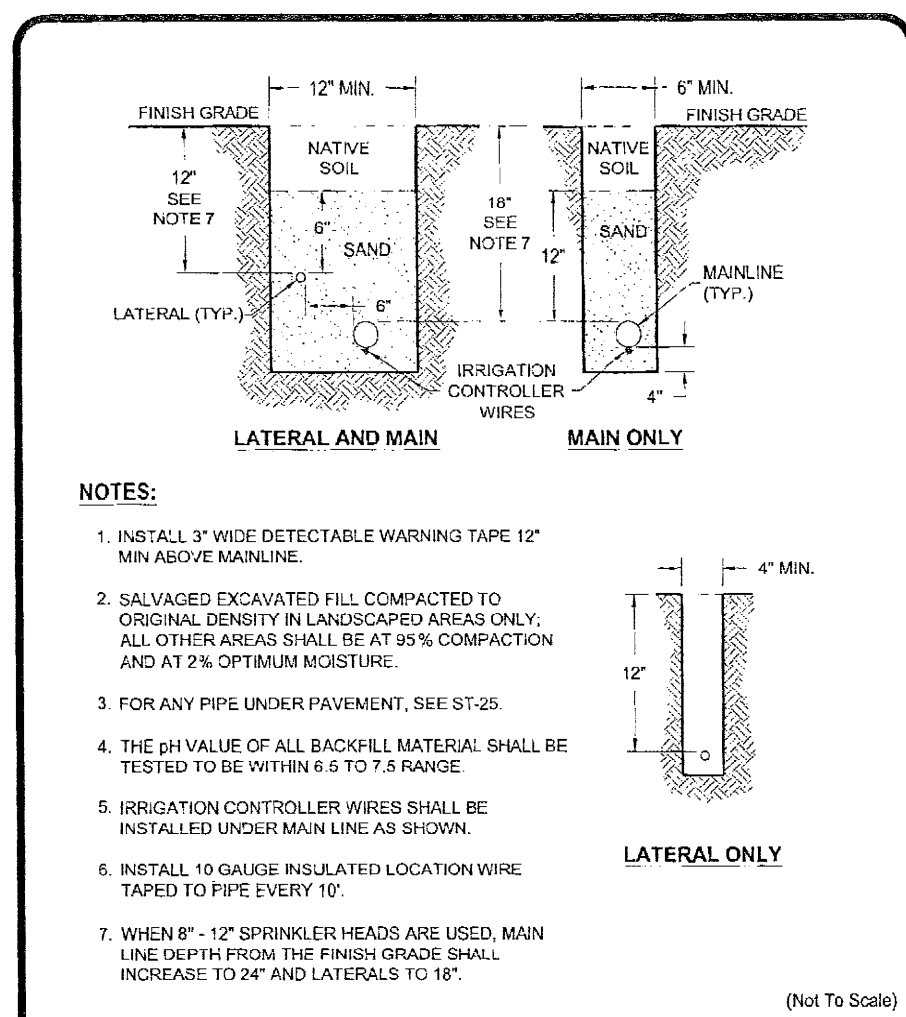
DATE 2-28-12
REVISIONS
7-18-08 4-9-12
8-14-08 5-2-12
3-22-12
4-3-12

SCALE
1" = 20'-0"

NORTH

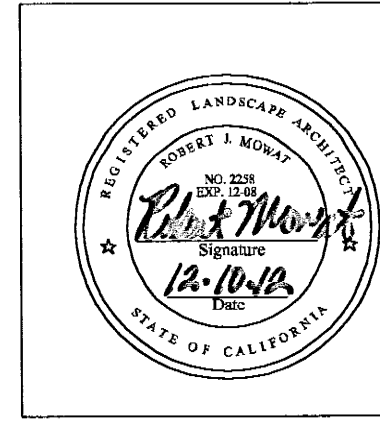
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OF 17

IRRIGATION PLAN



IRRIGATION NOTES

1. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN THE PAVED AREAS OR BUILDINGS IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED IN PLANTING AREAS WHERE POSSIBLE. AVOID CONFLICTS WITH PLANTING, PIPINGS, UTILITIES AND ARCHITECTURE WHERE POSSIBLE.
2. DO NOT WILLFULLY INSTALL THE SYSTEMS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES, GPM AVAILABILITY, OR PRESSURES EXIST THAT MAY NOT HAVE BEEN INCLUDED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CITY AND LAND ARCH. FOR A DECISION. IN THE EVENT THAT NOTIFICATION IS NOT PERFORMED, THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
3. 120 VOLT ELECTRICAL POWER OUTLET AT THE AUTOMATIC CONTROLLER LOCATION SHALL BE PROVIDED BY OTHERS. THE IRRIGATION CONTRACTOR SHALL MAKE FINAL HOOK-UP FROM REMOTE CONTROL VALVES TO CONTROLLER.
4. IT IS THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, RETAINING WALLS, UTILITIES, PIPING, BUILDINGS, ETC. HE SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR FOR THE INSTALLATION OR PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, STRUCTURES, ETC.
5. THE IRRIGATION SYSTEM SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES BY A LICENSED LANDSCAPE CONTRACTOR AND EXPERIENCED WORKMEN. CONTRACTOR TO OBTAIN AND PAY FOR ALL IRRIGATION PERMITS AND REQUIRED FEES.
6. CONTRACTOR IS TO CONFIRM THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES PRIOR TO THE EXCAVATION OF TRENCHES. CONTRACTOR TO REPAIR ANY DAMAGE CAUSED BY, OR DURING THE PERFORMANCE OF, HIS WORK AT NO ADDITIONAL COST TO THE CITY OR HOMEOWNERS.
7. SYSTEM IS BASED UPON A STATIC MAINLINE PRESSURE OF 70 P.S.I.. THE CITY OF BRENTWOOD PUBLIC WORKS REPORTED TO ROBERT MOWAT ASSOCIATES ON MARCH 8, 2007 THAT THE STATIC WATER PRESSURE AT THE INTERSECTION OF CARMEL PARKWAY AND SUNGOLD COURT IS FROM 61 P.S.I. TO 69 P.S.I. FROM THE CITY OF BRENTWOOD. A PRESSURE REDUCER MAY (MAY NOT) BE REQUIRED SO THAT THE STATIC MAINLINE PRESSURE AS MEASURED AT THE POINT OF CONNECTION (AFTER THE BACK FLOW DEVICE) IS 75 P.S.I.. AFTER CALCULATING PRESSURE LOSSES, THE SYSTEM IS DESIGNED TO OPERATE AT APPROXIMATELY 35-40 P.S.I. WORKING PRESSURE AT THE HEADS. THROUGH ANY ONE VALVE, THE SYSTEM IS DESIGNED TO OPERATE AT A MAXIMUM OF 30 GPM.
8. TRENCHES ARE TO BE OF SUFFICIENT DEPTH TO PROVIDE 18" OF COVER OVER MAINLINE LATERAL LINES PRIOR TO THE INSTALLATION OF IRRIGATION HEADS. MAINLINE TO BE VISUALLY INSPECTED FOR LEAKS UNDER FULL OPERATING PRESSURE PRIOR TO BACKFILLING. MAINLINE UNDER STREETS TO BE 24" DEEP; MINIMUM.
9. FLUSH MAINLINES PRIOR TO THE INSTALLATION OF REMOTE CONTROL VALVES. FLUSH LATERAL LINES PRIOR TO THE INSTALLATION OF IRRIGATION HEADS. MAINLINE TO BE VISUALLY INSPECTED FOR LEAKS UNDER FULL OPERATING PRESSURE PRIOR TO BACKFILLING.
10. IRRIGATION CONTROL WIRE SHALL BE #14, U.L. APPROVED FOR DIRECT BURIAL. COMMON WIRE SHALL BE #12 U.L. APPROVED FOR DIRECT BURIAL, WHITE IN COLOR. WIRES TO INDIVIDUAL REMOTE CONTROL VALVES SHALL BE A COLOR OTHER THAN WHITE. ALL SPLICES SHALL BE MADE WITHIN REMOTE CONTROL VALVE BOXES. LEAVE 24" EXCESS WIRE COIL AT REMOTE CONTROL LOCATIONS.
11. REMOTE CONTROL VALVE BOXES SHALL BE INSTALLED FLUSH WITH FINISH GRADE (NOT NECESSARILY PLUMB). ALIGN VALVE BOXES WITH ADJACENT PAVEMENT EDGES OR STRUCTURES. VALVE BOXES SHALL BE PLASTIC WITH BOLT DOWN LIDS AND WITH WHITE NUMBERED VALVE STATIONS IN STENCILS.
12. ALL EXCAVATIONS SHALL BE BACKFILLED TO 90% COMPACTION (MIN.). CONTRACTOR TO REPAIR SETTLED TRENCHES FOR ONE YEAR AFTER COMPLETION OF WORK.
13. CONTRACTOR TO MAKE MINOR ADJUSTMENTS IN HEAD LOCATIONS AND ADJUST HEADS FOR RADIUS (ARC IF APPLICABLE), TO OPTIMUM COVERAGE, AND TO MINIMIZE SPRAYING ONTO PAVEMENT.
14. CONTRACTOR TO MAINTAIN A SET OF "AS-BUILT" DRAWINGS THROUGHOUT THE COURSE OF CONSTRUCTION AND DELIVER THESE DRAWINGS TO THE CITY UPON THE COMPLETION OF WORK.
15. CONTRACTOR SHALL GUARANTEE THE SYSTEM AND MATERIALS TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE YEAR STARTING FROM COUNCIL ACCEPTANCE.
16. ALL HEADS WHICH MAY EXPERIENCE LOW HEAD DRAINAGE SHOULD HAVE IN-LINE OR IN-HEAD CHECK VALVES INSTALLED.
17. THE IRRIGATION CONTRACTOR SHOULD ARRANGE WITH THE LAND, ARCH. & CITY REP. FOR A SITE REVIEW OF THE SYSTEM. CALL WITH TWO DAYS PRIOR NOTICE TO ARRANGE REVIEW DATES. REVIEWS WILL BE SCHEDULED TO REVIEW:
 1. PRESSURE TEST TO MAIN LINE PRIOR TO BACKFILLING TRENCHES.
 2. COVERAGE TEST OF SPRINKLER SYSTEM PRIOR TO PLANTING.
 3. FINAL WALK-THROUGH OF ALL ASPECTS OF THE IRRIGATION SYSTEM.
18. CONTRACTOR TO HIRE A CERTIFIED WATER AUDITOR TO CERTIFY IRRIGATION SYSTEM PRIOR TO FINAL WALK.
19. LABEL ALL POTABLE WATER METERS AND ABOVE GROUND POTABLE WATER PIPES/ DEVICES (BACKFLOW PREVENTERS, HOSE BIBS, ETC.) WITH TAGS OR LABELS READING: "POTABLE WATER" IN BLACK LETTERS ON BLUE BACKGROUND.



| REVISIONS | APPROVED BY | DATE |
|-----------|-------------|---------|
| 6 | | |
| 5 | | |
| 4 | | 4-3-12 |
| 3 | | 3-22-12 |
| 2 | | |
| 1 | | |

C.A.D. BY: JD
CHECKED BY: RJM
PROJ. MGR.: JD
DATE: 2-28-12
SCALE:
SHEET NO. 11 OF 17 SHEETS

ROBERT MOWAT ASSOCIATES
LANDSCAPE ARCHITECTURE + LAND PLANNING
2068 Third Street Suite 6 San Francisco, California 94107
Phone 415.777.4656 Fax 415.777.0420
www.rmlandscape.com

MERITAGE HOMES
1671 East Monte Vista Ave, Suite 214
Vacaville, CA 95688
(925) 288-0088

IRRIGATION DETAILS

DATE: 2-28-12
REVISIONS: 3-22-12
4-3-12

SHEET
L-11
OF 17

CARMEL ESTATES PARK ONLY
IRRIGATION SCHEDULE

| STATION NUMBER: | IRRIGATION TYPE: | ESTABLISHMENT PERIOD | | | | ESTABLISHED LANDSCAPE | | | |
|------------------------|---------------------|----------------------|--------|------|--------|-----------------------|--------|------|--------|
| | | SPRING | SUMMER | FALL | WINTER | SPRING | SUMMER | FALL | WINTER |
| D1-1 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-2 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-3 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-4 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-5 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-6 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-7 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-8 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-9 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-10 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-11 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-12 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-13 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-14 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-15 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-16 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-17 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-18 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-19 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-20 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-21 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-22 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-23 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-24 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-25 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-26 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-27 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-28 | BUBBLERS SHRUBS | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-29 | BUBBLERS SHRUBS | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-30 | BUBBLERS SHRUBS | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-31 | BUBBLERS SHRUBS | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-32 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-33 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-34 | ROTORS LAWN | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D1-35 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D1-36 | SPARE | - | - | - | - | - | - | - | - |
| TOTAL HOURS PER DAY | | 3.9 | 5.8 | 4.3 | 2.5 | 2.7 | 4.6 | 3.0 | 1.5 |

* 7 / 1 : INDICATES STATION RUN TIME / CYCLES PER DAY
** DAILY APPLICATION FOR IRRIGATION 7 DAYS PER WEEK
*** ACTUAL RUN TIMES MAY VARY IN ACCORDANCE WITH VARYING SITE CONDITIONS. IT IS
THE RESPONSIBILITY OF THE ON-SITE WATER MANAGER TO DETERMINE OPTIMUM RUN TIMES.

CARMEL ESTATES PARK ONLY
HYDROZONE TABLE

| STATION NUMBER | HIGH WATER NEEDS (SQ. FT.) | MEDIUM WATER NEEDS (SQ. FT.) | LOW WATER NEEDS (SQ. FT.) | VERY LOW WATER NEEDS (SQ. FT.) | SPECIAL LANDSCAPE AREA (SQ. FT.) |
|-------------------|-------------------------------------|---------------------------------------|------------------------------------|---|---|
| 1 | | 442.77 | | | |
| 2 | | 2,347.5 | | | |
| 3 | | 2,347.5 | | | |
| 4 | | 442.77 | | | |
| 5 | | 442.77 | | | |
| 6 | | 201 | | | |
| 7 | | 2,347.5 | | | |
| 8 | | 2,347.5 | | | |
| 9 | | | | | 2,289.55 |
| 10 | | | | | 2,289.55 |
| 11 | | 442.77 | | | |
| 12 | | | 1,975 | | |
| 13 | | 442.78 | | | |
| 14 | | | | | 2,289.55 |
| 15 | | | | | 2,289.55 |
| 16 | | | | | 2,289.55 |
| 17 | | | | | 2,289.55 |
| 18 | | 442.77 | | | |
| 19 | | | 1,126 | | |
| 20 | | | 1,126 | | |
| 21 | | | 1,126 | | |
| 22 | | | 1,975 | | |
| 23 | | | 1,975 | | |
| 24 | | 442.77 | | | |
| 25 | | 442.77 | | | |
| 26 | | | | | 2,289.55 |
| 27 | | | 1,975 | | |
| 28 | | 1,363.25 | | | |
| 29 | | 1,363.25 | | | |
| 30 | | 1,363.25 | | | |
| 31 | | 1,363.25 | | | |
| 32 | | 442.77 | | | |
| 33 | | | | | 2,289.55 |
| 34 | | | | | 2,289.55 |
| 35 | | | 144 | | |
| 36 | | | 144 | | |
| TOTALS | | 19,029 SQ. FT. | 11,566 SQ. FT. | | 20,606 SQ. FT. |

CARMEL ESTATES HOA LANDSCAPE ONLY
IRRIGATION SCHEDULE

| STATION NUMBER: | IRRIGATION TYPE: | ESTABLISHMENT PERIOD | | | | ESTABLISHED LANDSCAPE | | | |
|------------------------|---------------------|----------------------|--------|------|--------|-----------------------|--------|------|--------|
| | | SPRING | SUMMER | FALL | WINTER | SPRING | SUMMER | FALL | WINTER |
| D2-1 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-2 | BUBBLERS TREES | 6/1 | 10/1 | 8/1 | 3/1 | 4/1 | 8/1 | 5/1 | 2/1 |
| D2-3 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-4 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-5 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-6 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-7 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-8 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-9 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-10 | SPRAY SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-11 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-12 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-13 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-14 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-15 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-16 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-17 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-18 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-19 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-20 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-21 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-22 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| D2-23 | ROTORS SHRUBS | 7/1 | 10/1 | 7/1 | 5/1 | 5/1 | 8/1 | 5/1 | 3/1 |
| TOTAL HOURS PER DAY | | 2.6 | 3.8 | 2.7 | 1.9 | 1.9 | 3.0 | 1.9 | 1.1 |

* 7 / 1 : INDICATES STATION RUN TIME / CYCLES PER DAY
** DAILY APPLICATION FOR IRRIGATION 7 DAYS PER WEEK
*** ACTUAL RUN TIMES MAY VARY IN ACCORDANCE WITH VARYING SITE CONDITIONS. IT IS
THE RESPONSIBILITY OF THE ON-SITE WATER MANAGER TO DETERMINE OPTIMUM RUN TIMES.

CARMEL ESTATES HOA LANDSCAPE ONLY
ESTIMATED WATER USE & HYDROZONE TABLE

| HYDROZONE TYPE: | VALVE NUMBERS: | PLANT FACTOR | HYDROZONE AREA/ % OF LANDSCAPE AREA: | PLANT FACTOR X HYDROZONE AREA |
|---|---|-----------------|---|--|
| H-1 SHRUBS LOW WATER USE TORO ROTOR HEADS | D2-12, D2-13, D2-14, D2-17 D2-20, D2-22, D2-23 | 0.3 | 21,611 SF (64%) | 6,483 |
| H-2 SHRUBS MEDIUM WATER USE TORO ROTOR HEADS | D2-11, D2-15, D2-16, D2-18 D2-19, D2-21 | 0.5 | 5,928 SF (17%) | 2,964 |
| H-3 SHRUBS LOW WATER USE TORO SPRAY | D2-1, D2-3, D2-4, D2-5, D2-6 D2-7, D2-8 | 0.3 | 4,356 SF (13%) | 1,307 |
| H-4 SHRUBS MEDIUM WATER USE TORO SPRAY | D2-9, D2-10 | 0.5 | 1,865 SF (5.5%) | 933 |
| H-5 TREES MEDIUM WATER USE BUBBLERS | D2-22 | 0.5 | 176 SF (0.5%) | 88 |

TOTAL: 11,775

ESTIMATED TOTAL WATER USE: $51 \times 0.62 \left(\frac{11,775}{0.71} \right) = 524,386 \text{ GAL / YEAR}$

MAXIMUM APPLIED WATER ALLOWANCE: $51 \times 0.62 [(0.7 \times 33,936 \text{ SF}) + (0.3 \times 0 \text{ SF})] = 751,133 \text{ GAL / YEAR}$

CARMEL ESTATES
HOA LANDSCAPE ONLY
HYDROZONE TABLE

| STATION NUMBER | HIGH WATER NEEDS (SQ. FT.) | MEDIUM WATER NEEDS (SQ. FT.) | LOW WATER NEEDS (SQ. FT.) | VERY LOW WATER NEEDS (SQ. FT.) | SPECIAL LANDSCAPE AREA (SQ. FT.) |
|-------------------|-------------------------------------|---------------------------------------|------------------------------------|---|---|
| 1 | | | 274 | | |
| 2 | | 176 | | | |
| 3 | | | 793 | | |
| 4 | | | 793 | | |
| 5 | | | 793 | | |
| 6 | | | 793 | | |
| 7 | | | 542 | | |
| 8 | | | 368 | | |
| 9 | | 932.5 | | | |
| 10 | | 932.5 | | | |
| 11 | | 988 | | | |
| 12 | | | 3,087.3 | | |
| 13 | | | 3,087.3 | | |
| 14 | | | 3,087.3 | | |
| 15 | | 988 | | | |
| 16 | | 988 | | | |
| 17 | | | 3,087.3 | | |
| 18 | | 988 | | | |
| 19 | | 988 | | | |
| 20 | | | 3,087.3 | | |
| 21 | | 988 | | | |
| 22 | | | 3,087.3 | | |
| 23 | | | 3,087.3 | | |
| TOTALS | | 7,969 SQ. FT. | 25,967 SQ. FT. | | |

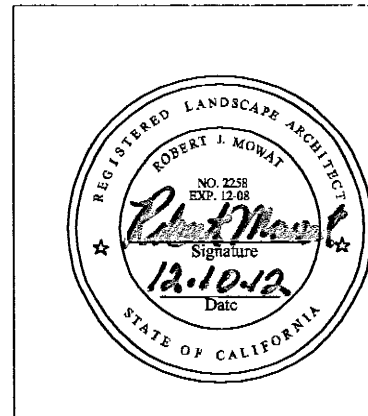
CALCULATION REFERENCE

ESTIMATED TOTAL WATER USE CALCULATION: $ET_o \times 0.62 \left(\frac{PF \times HA}{IE} + SLA \right)$

ET_o: REFERENCE EVAPOTRANSPIRATION (51 INCHES PER YEAR IN CITY OF BRENTWOOD)
0.62: CONVERSION FACTOR (INCHES PER SQAURE FOOT TO GALLONS PER SQUARE FEET)
PF: PLANT FACTOR FROM WUCOLS
HA: HYDROZONE AREA [HIGH, MEDIUM AND LOW WATER USE AREAS] (IN SQUARE FEET)
IE: IRRIGATION EFFICIENCY (MINIMUM 0.70)
SLA: SPECIAL LANDSCAPED AREA (SQUARE FEET)

MAXIMUM APPLIED WATER ALLOWANCE CALCULATION: $ET_o \times 0.62 \times [(0.7 \times LA) + (0.3 \times SLA)]$

ET_o: REFERENCED EVAPOTRANSPIRATION (51 INCHES PER YEAR IN CITY OF BRENTWOOD)
0.62: CONVERSION FACTOR (INCHES PER SQAURE FOOT TO GALLONS PER SQUARE FEET)
0.7: REFERENCE EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF)
LA: LANDSCAPED AREA INCLUDING SLA (SQUARE FEET)
0.3: ADDITIONAL WATER ALLOWANCE FOR SLA
SLA: SPECIAL LANDSCAPED AREA (SQUARE FEET)



| | | | |
|---|---------------|-------------|---------|
| 6 | | | |
| 5 | | | |
| 4 | CITY COMMENTS | | 4-3-12 |
| 3 | CITY COMMENTS | | 3-22-12 |
| 2 | | | |
| 1 | | | |
| | REVISIONS | APPROVED BY | DATE |

C.A.D. BY: JD
CHECKED BY: RJM
PROJ. MGR. : JD
DATE: 2-28-12
SCALE:
SHEET NO. 12 OF 17 SHEETS

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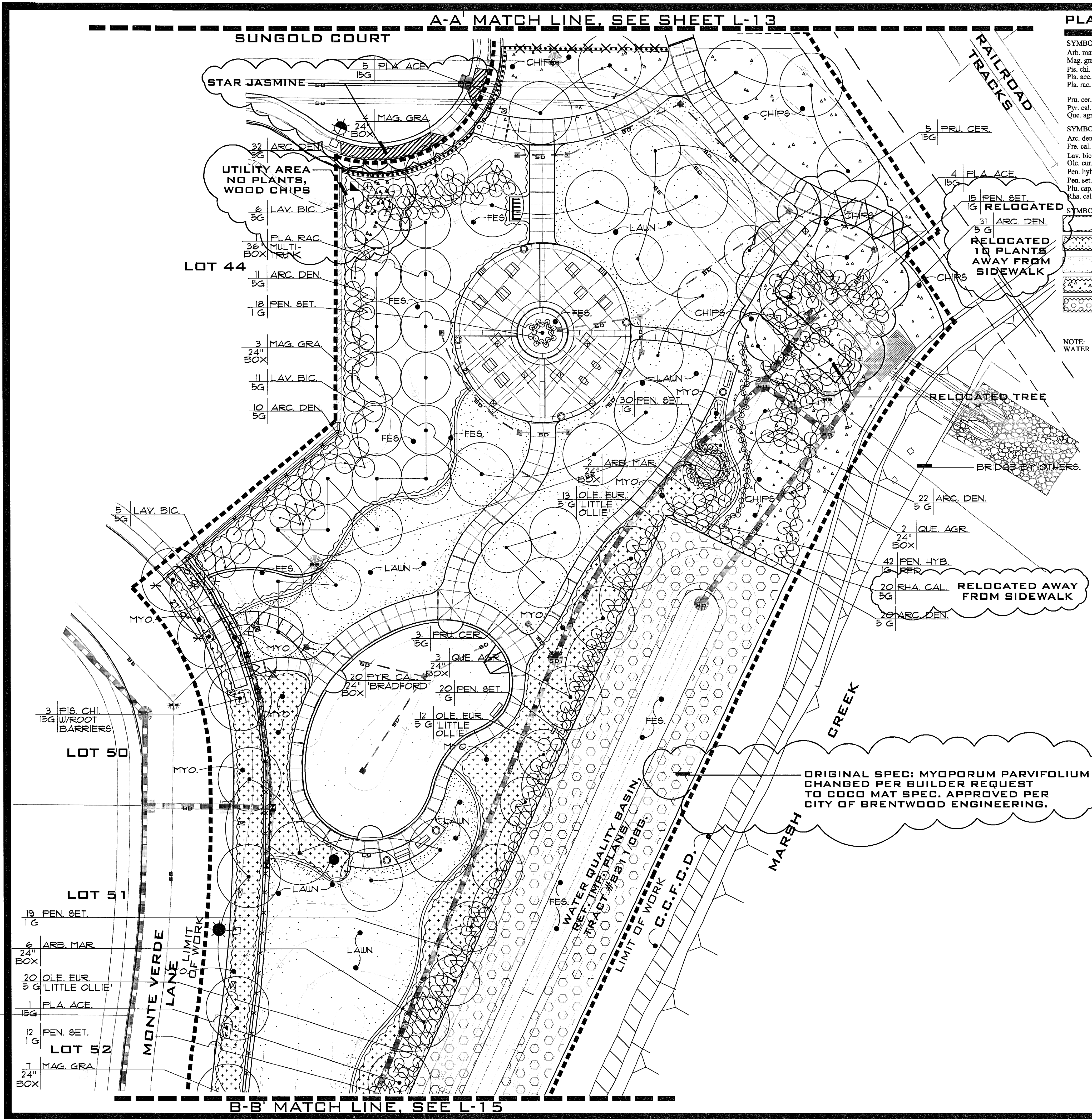
IRRIGATION
DETAILS


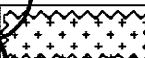
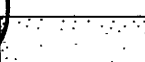
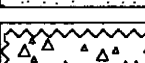
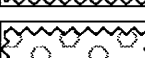
DATE
2-28-12
REVISIONS
3-22-12
4-3-12

SHEET

L-12
OF 17

11-28-12 AS-BUILT DRAWING SET



| PLANTING LEGEND | | | | | | |
|--|---|---|-----------------------------|---------------------------|------------|------------|
| SYMBOL | SIZE | BOTANICAL NAME | COMMON NAME | HEIGHT/WIDTH | QTY. | WATER REQ. |
| Arb. mar. | 24" Box | Arbutus "Marina" | Strawberry Tree | 40' / 40' | 8 | LOW |
| Mag. gra. | 24" Box | Magnolia grandiflora | Southern Magnolia | 20' / 20' | 14 | MOD. |
| Pis. chi. | 15 G. | Pistacia chinensis | Chinese Pistache | 30' / 30' | 5 | LOW |
| Pla. acc. | 15 G. | Platanus acerifolia 'Columbia' | London Plane Tree | 50' / 40' | 16 | MOD. |
| Pla. rac. | 36" Box | Platanus racemosa - Multi-trunk (To be selected by Landscape Architect.) | California Sycamore | 50' / 40' | 1 | MOD. |
| Pru. cer. | 15 G. | Prunus cerasifera 'Krauter Vesuvius' | Purple Leaf Plum | 40' / 30' | 8 | MOD. |
| Pyr. cal. | 24" Box | Pyrus calleryana 'Bradford' | Ornamental Pear | 25' / 25' | 20 | MOD. |
| Que. agr. | 24" Box | Quercus agrifolia | Coast Live Oak | 30' - 40' | 8 | VERY LOW |
| SYMBOL | SIZE | BOTANICAL NAME | COMMON NAME | HEIGHT/WIDTH | QTY. | WATER REQ. |
| Arb. den. | 5 G. | Arctostaphylos densiflora 'Howard McMinn' | Vine Hill Manzanita | 4' / 5' | 126 | LOW |
| Fre. cal. | 15 G. | Fremontodendron californicum | Flannel Bush | 20' / 12' | 0 | VERY LOW |
| Lav. bic. | 5 G. | Lavatera bicolor | Lavaters | 6' / 4' | 22 | LOW |
| Ole. eur. | 5 G. | Olea europaea 'Little Ollie' | Dwarf Olive | 5' / 5' | 79 | VERY LOW |
| Pen. hyb. | 1 G. | Pennisetum hybridus - Red | Red Flowering Beard Tongue | 3' / 3' | 42 | MOD. |
| Pen. set. | 1 G. | Pennisetum setaceum | Fountain Grass | 3' / 3' | 146 | LOW |
| Pla. cap. | 1 G. | Plumbago capensis 'Imperial Blue' | Cape Plumbago Imperial Blue | 6' / 8' | 45 | MOD. |
| Rha. cal. | 5 G. | Rhamnus californica | Coffeeberry | 3' / 6' | 20 | LOW |
| SYMBOL | BOTANICAL NAME | | COMMON NAME | SPACING | WATER REQ. | |
|  | Festuca rubra | | Red Fescue | SOD | MOD. | |
|  | Myoporum parvifolium | | Myoporum | 36" O.C. FROM 1 GAL. POTS | LOW | |
|  | Sod - (Medallion III) - BID ALTERNATE - Hydrosseed | | | | | MOD. |
|  | 2" LAYER OF BARK CHIPS PER CITY BARK CHIP STANDARD. | | | | | |
|  | COCO MAT PER BUILDER'S DIRECTION. | | | | | |
| *INSTALL JUTE MESH NETTING ON ENTIRE SLOPE AREA. LAP MIN. 2'-0". ATTACH WITH 6" GALV. STAPLES AT 18" O.C. TYP. INSTALL A 1" LAYER OF SHREDDED FIR BARK ON NETTING. BY OTHERS. | | | | | | |
| NOTE: WATER REQUIREMENTS WERE TAKEN FROM: THE WATER CLASSIFICATION OF LANDSCAPE SPECIES (WULCOLS III) 1999 EDITION | | | | | | |

PLANTING NOTES (THESE NOTES ARE IN ADDITION TO BRENTWOOD STD. NOTES.)

- ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR AND PERSONNEL FAMILIAR WITH THE WORK AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN.
- PLANT MATERIAL LOCATIONS ARE DIAGRAMMATIC AND SUBJECT TO CHANGE IN THE FIELD AS DIRECTED BY THE LANDSCAPE ARCHITECT. LOCATE PLANT MATERIALS TO SCREEN UTILITIES, IRRIGATION DEVICES, ETC. AS MUCH AS POSSIBLE YET ALLOW ACCESS TO THEM.
- ALL TREES SHALL BE STAKED AS SHOWN IN THE DETAILS.
- THE OWNER RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS AND DELETIONS IN THE PLANTING SCHEME AS NECESSARY WHILE WORK IS IN PROGRESS. SUCH CASES ARE TO BE ACCOMPANIED BY EQUITABLE ADJUSTMENTS IN THE CONTRACT PRICE IF/WHEN NECESSARY.
- THE PLANT COUNT IS FOR THE CONTRACTOR'S CONVENIENCE. IN CASE OF A DISCREPANCY, THE PLAN SHALL GOVERN.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS AND, GROUND COVER FOR A PERIOD OF ONE YEAR.
- ANY REQUIREMENTS IN THE PLANS SHALL BE CONSIDERED BINDING. IN CASE OF DISCREPANCIES THE OWNER AND LAND. ARCH. SHALL BE IMMEDIATELY NOTIFIED FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
- THERE SHALL BE REGULAR SITE VISITS BY THE LANDSCAPE ARCHITECT AND THE OWNER THROUGHOUT CONSTRUCTION AND A FINAL SITE REVIEW.
 - TO INSPECT PLANTS ON ARRIVAL FROM NURSERY
 - AT TIME OF PLANTING
 - A FINAL SITE REVIEW
- ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES. THE LANDSCAPE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS.
- PROTECT EXISTING TREES AS NECESSARY. FENCE AS NECESSARY. LOCATE ALL UTILITIES BEFORE PROCEEDING WITH THE WORK. COORDINATE ALL DIGGING AND TRENCHING PRIOR TO BEGINNING WORK WITH THE PROJECT SUPERINTENDENT (DEVELOPER) FIRST.
- THE DESIGN INTENT OF THE PLANTING PLAN IS TO ESTABLISH AND IMMEDIATE, ATTRACTIVE AND MATURE LANDSCAPE APPEARANCE. FUTURE PLANT GROWTH WILL NECESSITATE TRIMMING, SHAPING, PRUNING AND IN MOST CASES, REMOVAL OF TREES AND SHRUBS AS PART OF AN ON-GOING MAINTENANCE PROGRAM.
- ALL PLANT PITS SHALL BE FREE FROM ROCKS AND DEBRIS GREATER THAN 2" IN DIAMETER.
- APPLY "RONSTAR" OR "ELANCO XL" PRE-EMERGENT HERBICIDE TO ALL PLANTED AREAS. APPLY HERBICIDE IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECS. THE LANDSCAPE SHALL BE WEED FREE AT THE TIME OF THE FINAL WALK-THROUGH.
- CONTRACTOR TO PROVIDE MAINTENANCE DURING CONSTRUCTION AND FOR A PERIOD OF 90 DAYS FOLLOWING CITY'S ACCEPTANCE BY CITY COUNCIL OF THE COMPLETION OF THE FINAL PUNCH LIST AS PART OF HIS BID. ALL PRUNING, SPRAYING, FERTILIZING, MOWING, CLEAN-UP AND ASSOCIATED LANDSCAPE PRACTICES SHALL BE INCLUDED. THE 30 DAY MAINTENANCE PERIOD DOES NOT END UNTIL FINAL ACCEPTANCE BY THE OWNER IS GRANTED. BUILDER TO MAINTAIN LANDSCAPE UNTIL CITY ACCEPTS MAINTENANCE FOLLOWING WALK THROUGH AND CITY ACCEPTANCE BY CITY COUNCIL.
- CONTRACTOR TO SUBMIT UNIT PRICES FOR THE POSSIBLE ADDITION OF PLANTS TO THE PROJECT. SUBMIT UNIT PRICES FOR 15 GALLON TREES, 5 GALLON SHRUBS, 1 GALLON SHRUBS, LAWN AND GROUND COVER AT SQ. FT. PRICES.
- CONTRACTOR SHALL INSTALL EPOXY VINE TIES AT ALL VINES PLANTING LOCATIONS TO TIE VINES TO WALLS AND POSTS AS NEEDED.
- SOILS TEST BY LANDSCAPE CONTRACTOR TO ASCERTAIN HORTICULTURAL SUITABILITY. DRAW 3 SAMPLES FROM DIFFERENT AREAS OF PROJECT SITE. SEE CITY STANDARD NOTES FOR REQUIREMENTS.
- ROOT DEFLECTION PANELS ON ALL TREES WITHIN 5' OF PAVEMENT. INSTALL LINEAL PANELS PARALLEL TO PAVEMENT 20' IN LENGTH (10' ON EITHER SIDE OF TREE.)

| | | | | |
|--|---|---------------|---------|--|
| | 6 | CITY COMMENTS | 5-2-12 | C.A.D. BY: J.D. CHECKED BY: RJM PROJ. MGR.: J.D. DATE: 2-28-12 SCALE: 1"=20'-0" SHEET NO. 14 OF 17 SHEETS |
| | 5 | CITY COMMENTS | 4-9-12 | |
| | 4 | CITY COMMENTS | 4-3-12 | |
| | 3 | CITY COMMENTS | 3-22-12 | |
| | 2 | | | |
| | 1 | | | |
| | | REVISIONS | DATE | |

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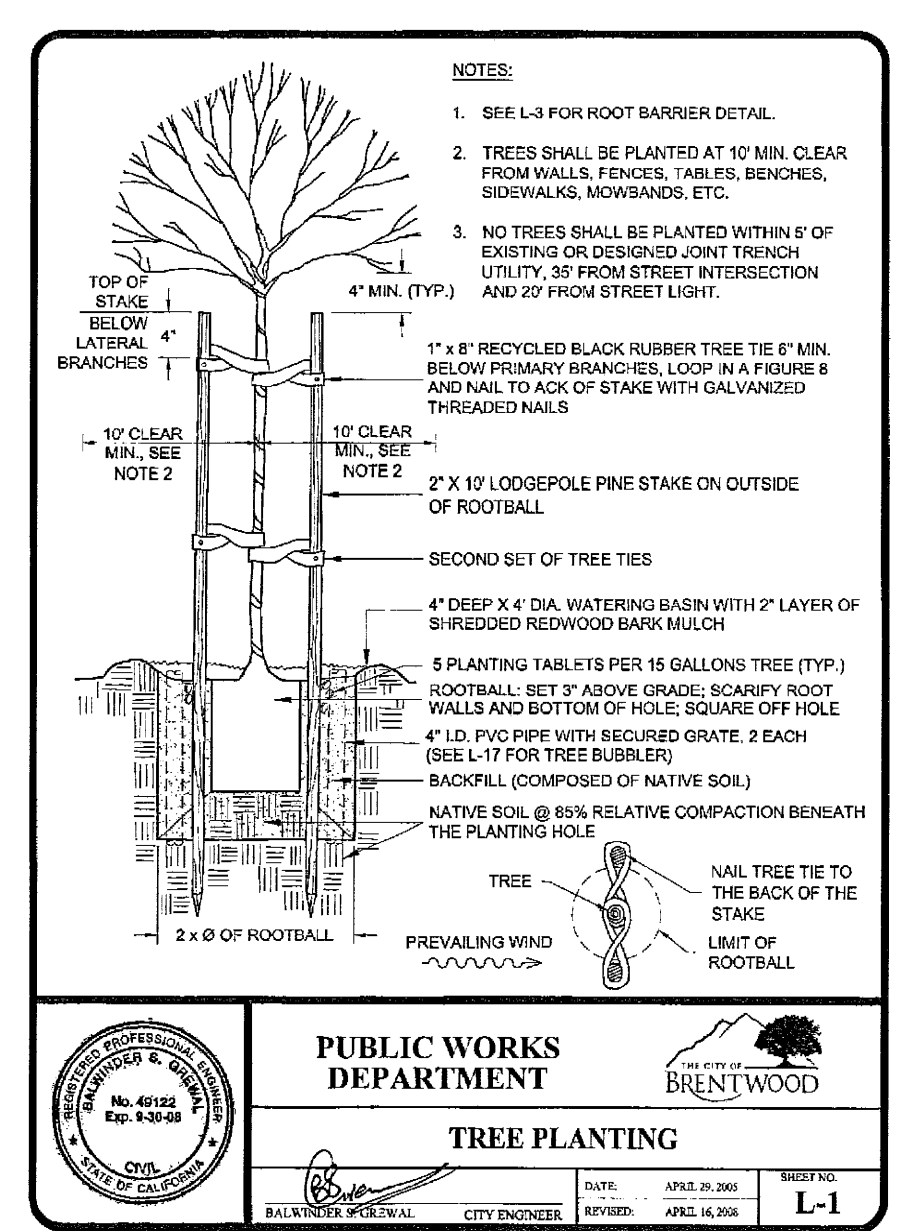
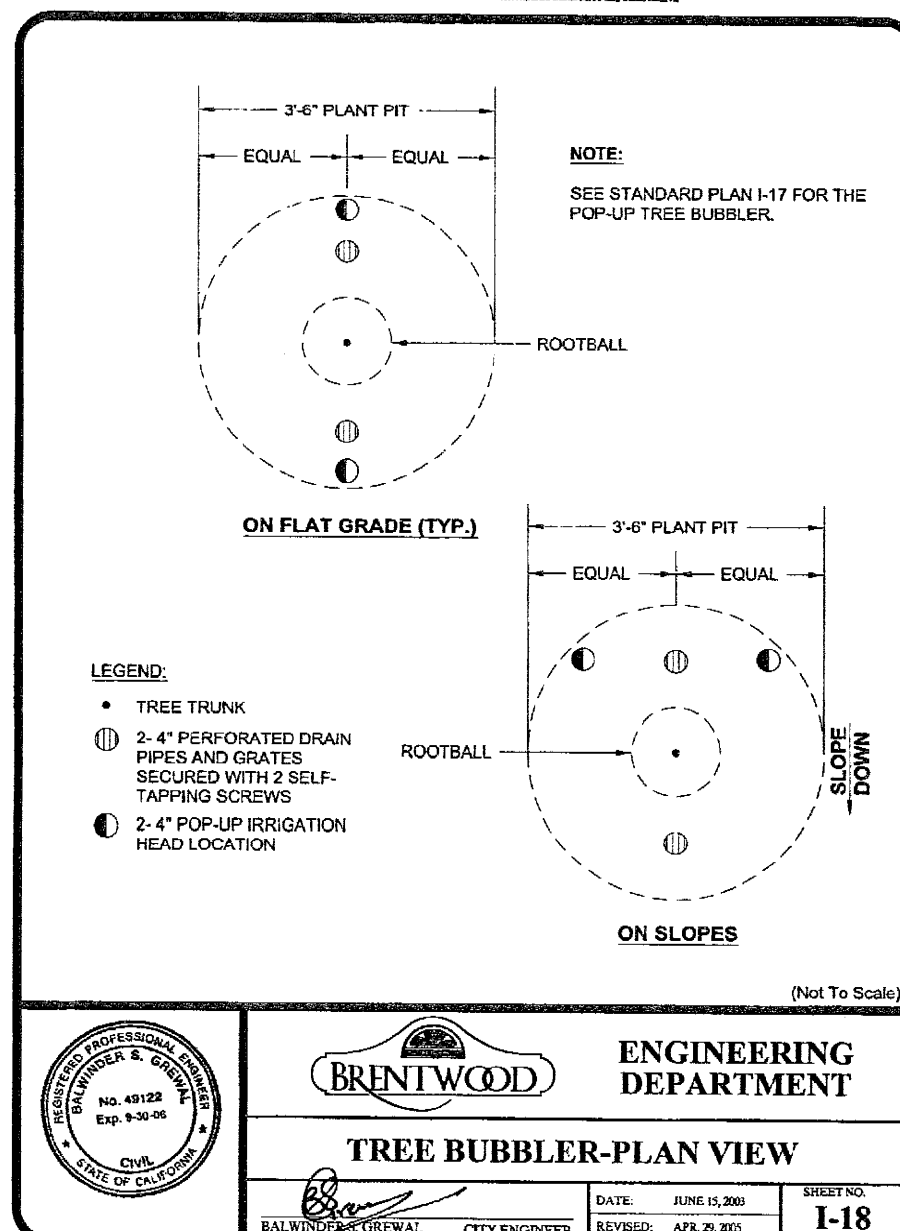
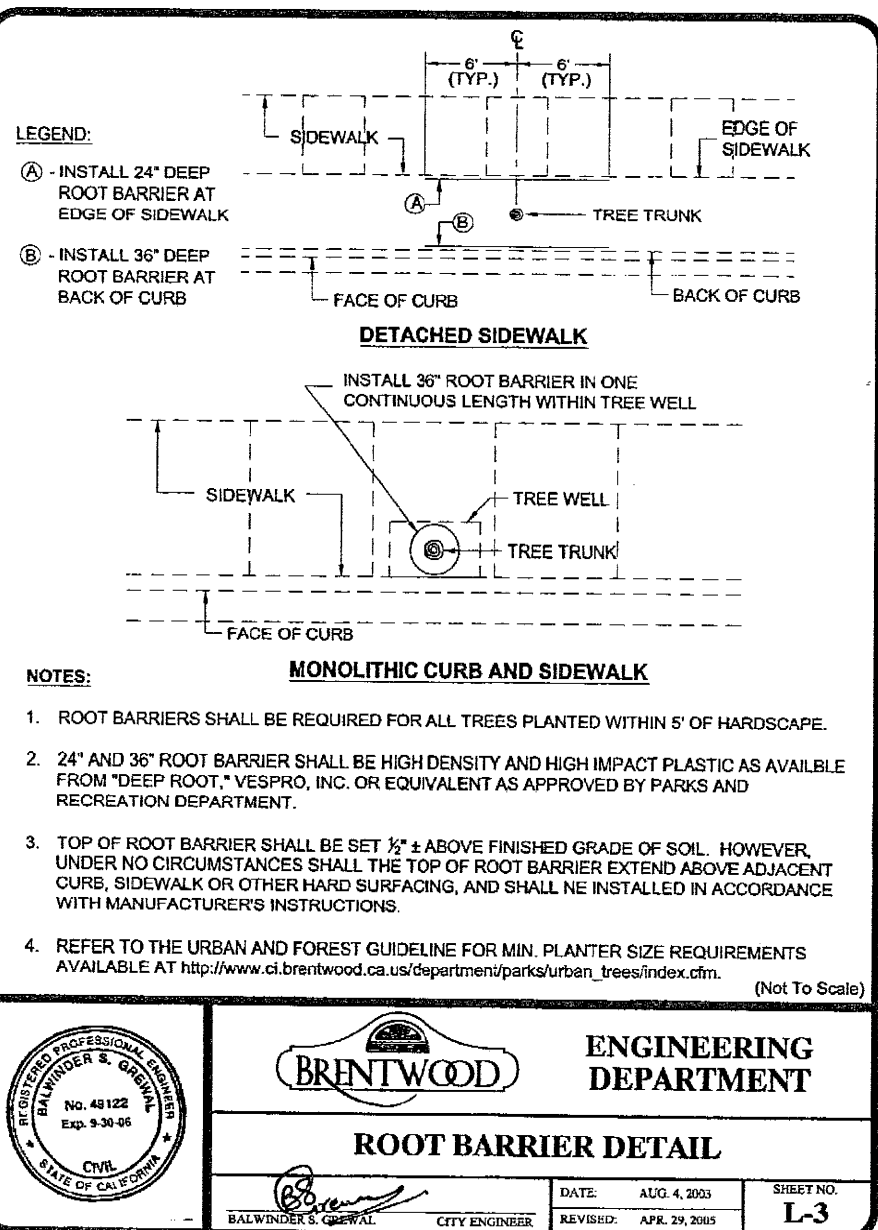
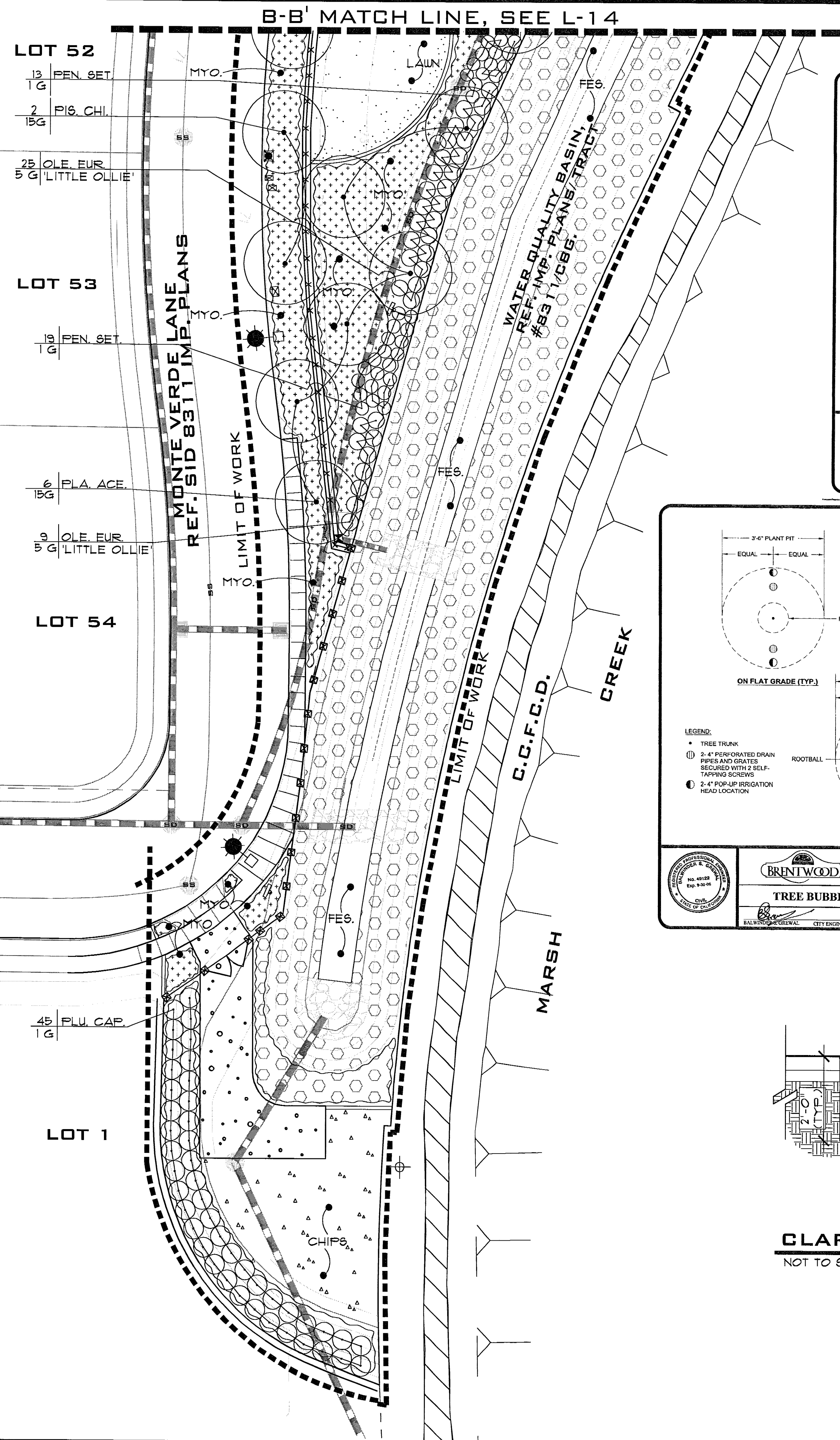
PLANTING PLAN

| | |
|-----------|---------|
| DATE | 2-28-12 |
| REVISIONS | 3-22-12 |
| | 4-3-12 |
| | 4-9-12 |
| | 5-2-12 |


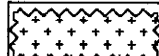
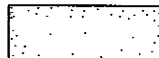
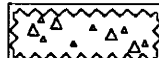

SCALE
1" = 20'-0"



SHEET
L-14
OF 17

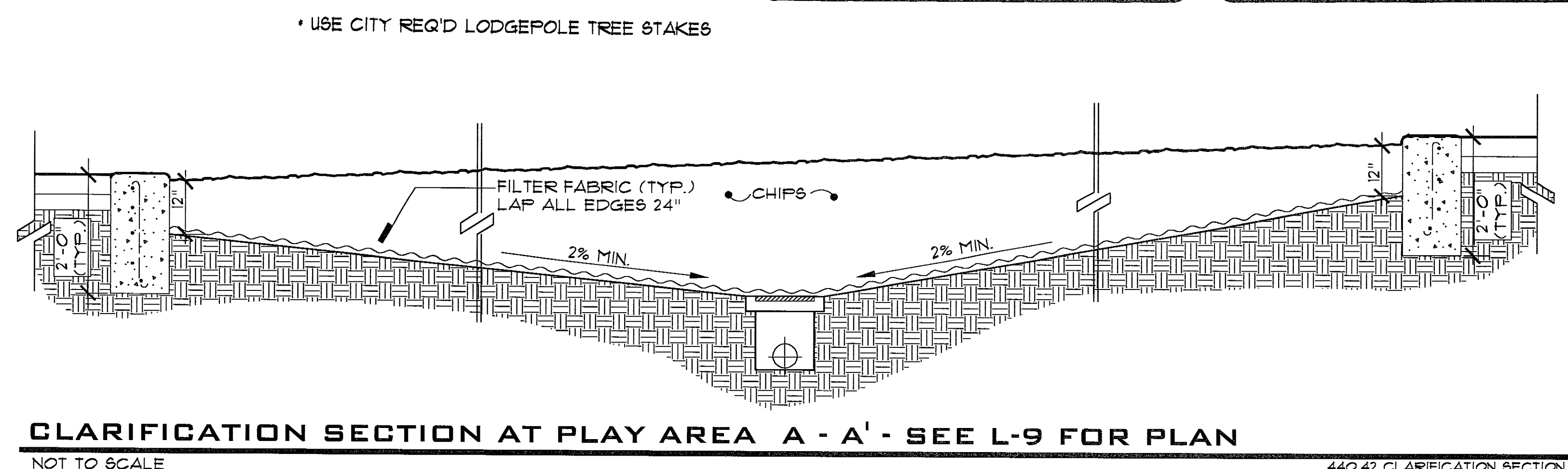
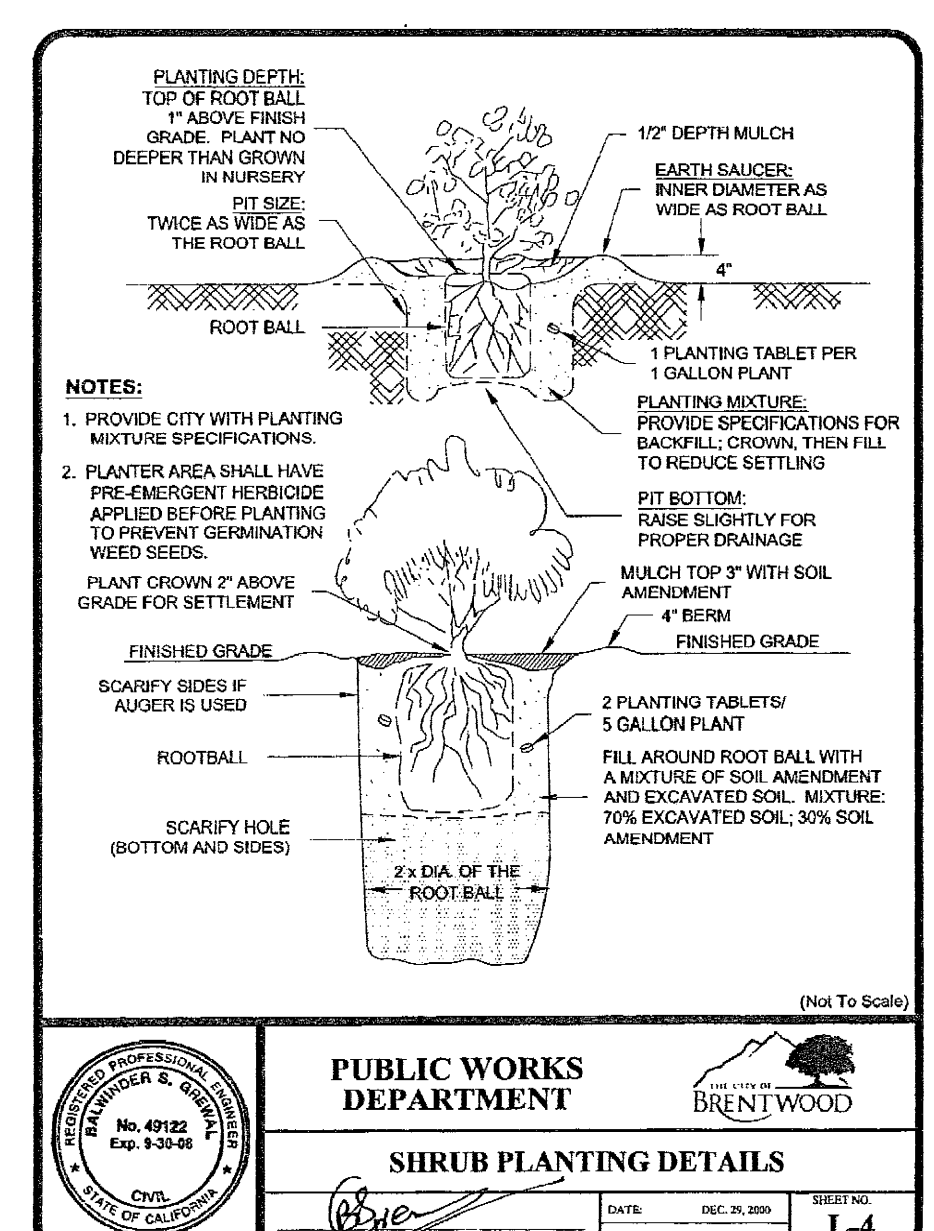
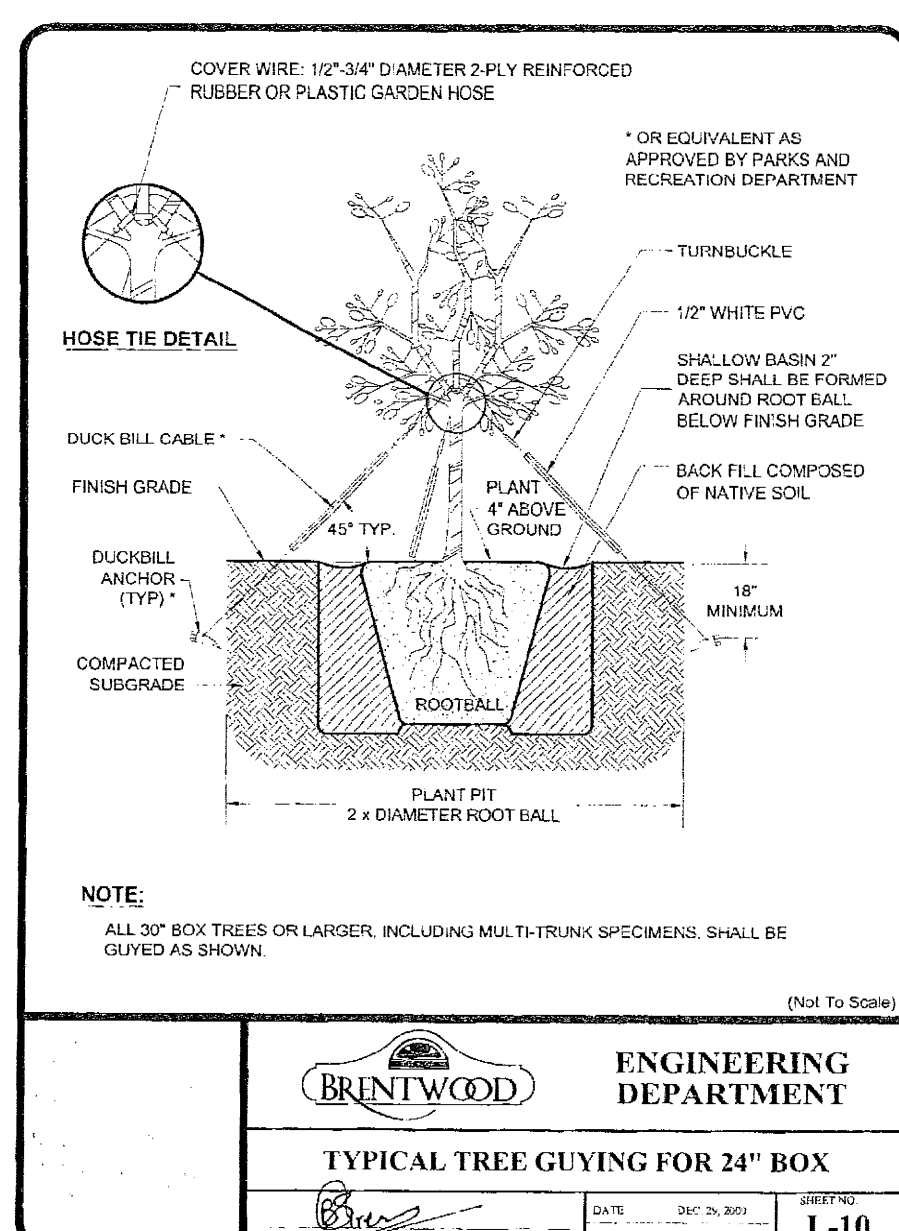


PLANTING LEGEND

| SYMBOL | SIZE | BOTANICAL NAME | COMMON NAME | HEIGHT/WIDTH | QTY. | WATER REQ. |
|---|--|---|-----------------------------|--------------|------|------------|
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| Pla. rac. | 36" Box | Platanus racemosa - Multi-trunk (To be selected by Landscape Architect.) | California Sycamore | 50' / 40' | 1 | MOD. |
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| Lav. bic. | 5 G. | Lavatera bicolor | Lavatera | 6' / 4' | 22 | LOW |
| Ole. eur. | 5 G. | Olea europaea 'Little Ollie' | Dwarf Olive | 5' / 3' | 79 | VERY LOW |
| Pen. hyb. | 1 G. | Penstemon hybrids - Red | Red Flowering Beard Tongue | 3' / 3' | 42 | MOD. |
| Pen. set. | 1 G. | Penstemon setaceus | Fountain Grass | 3' / 3' | 146 | LOW |
| Plu. cap. | 1 G. | Plumbago capensis 'Imperial Blue' | Cape Plumbago Imperial Blue | 6' / 8' | 45 | MOD. |
| Rha. cal. | 5 G. | Rhamnus californica | Coffeeberry | 3' / 6' | 20 | LOW |
| SYMBOL | BOTANICAL NAME | COMMON NAME | SPACING | WATER REQ. | | |
|  | Festuca rubra | Red Fescue | SOD | MOD. | | |
|  | Myoporum parvifolium | Myoporum | 36" O.C. FROM 1 GAL. POTS | LOW | | |
|  | Sod - (Medallion III) - BID ALTERNATE - Hydrosced | | | MOD. | | |
|  | 2" LAYER OF BARK CHIPS PER CITY BARK CHIP STANDARD. | | | | | |
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*INSTALL JUTE MESH NETTING ON ENTIRE SLOPE AREA. LAP MIN. 2'-0". ATTACH WITH 6" GALV. STAPLES AT 18" O.C. TYP. INSTALL A 1" LAYER OF SHREDDED FIR BARK ON NETTING. BY OTHERS.

NOTE: WATER REQUIREMENTS WERE TAKEN FROM: THE WATER CLASSIFICATION OF LANDSCAPE SPECIES (WULCOLS III) 1999 EDITION



| NO. | REVISIONS | DATE |
|-----|---------------|---------|
| 6 | CITY COMMENTS | 5-2-12 |
| 5 | | |
| 4 | CITY COMMENTS | 4-3-12 |
| 3 | CITY COMMENTS | 3-22-12 |
| 2 | | |
| 1 | | |

C.A.D. BY: JD
CHECKED BY: RJM
PROJ. MGR.: JD
DATE: 2-28-12
SCALE: 1"=20'-0"
SHEET NO. 15 OF 17 SHEETS

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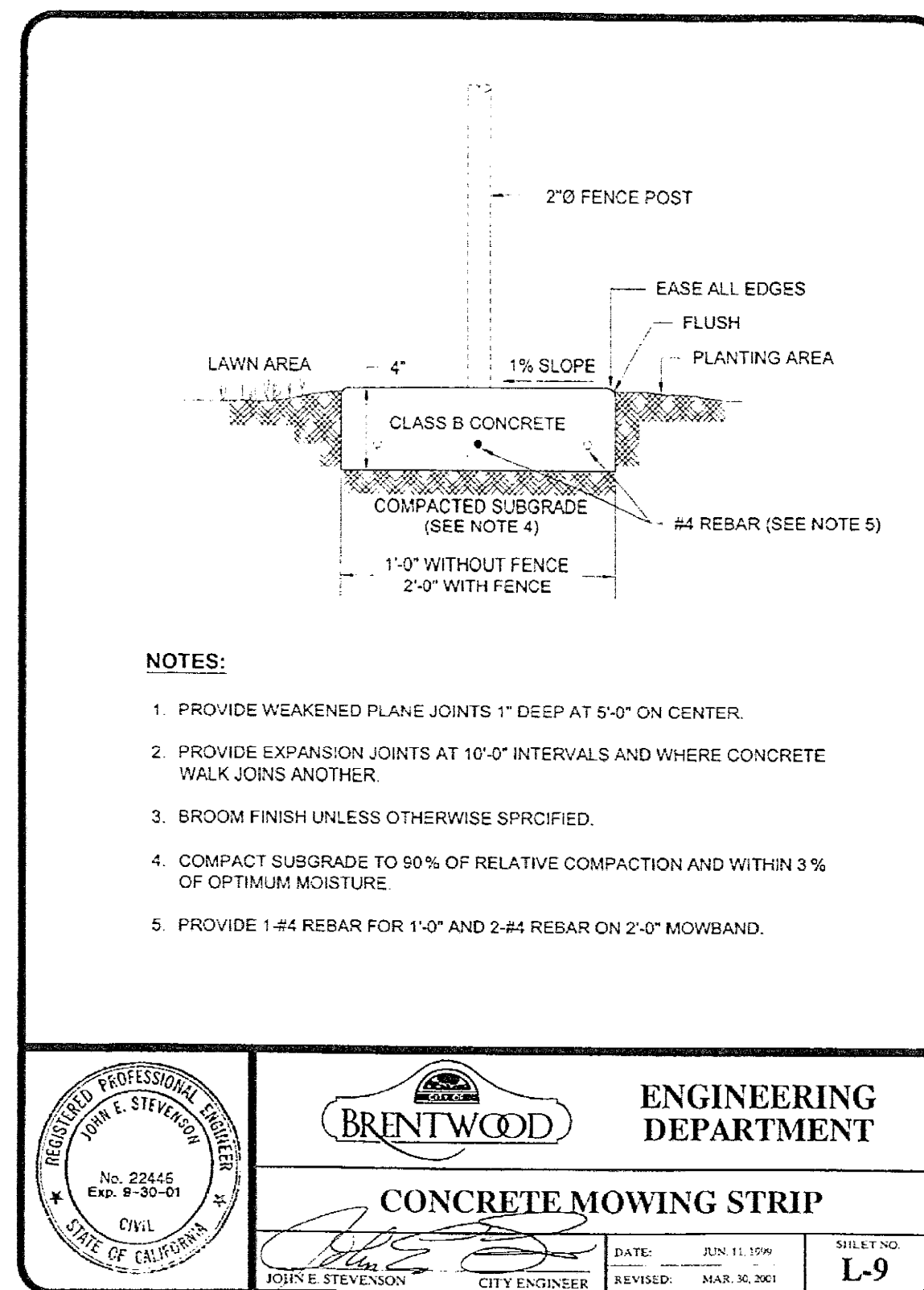
PLANTING PLAN

DATE: 2-28-12
REVISIONS:
3-22-12
4-3-12
5-2-12

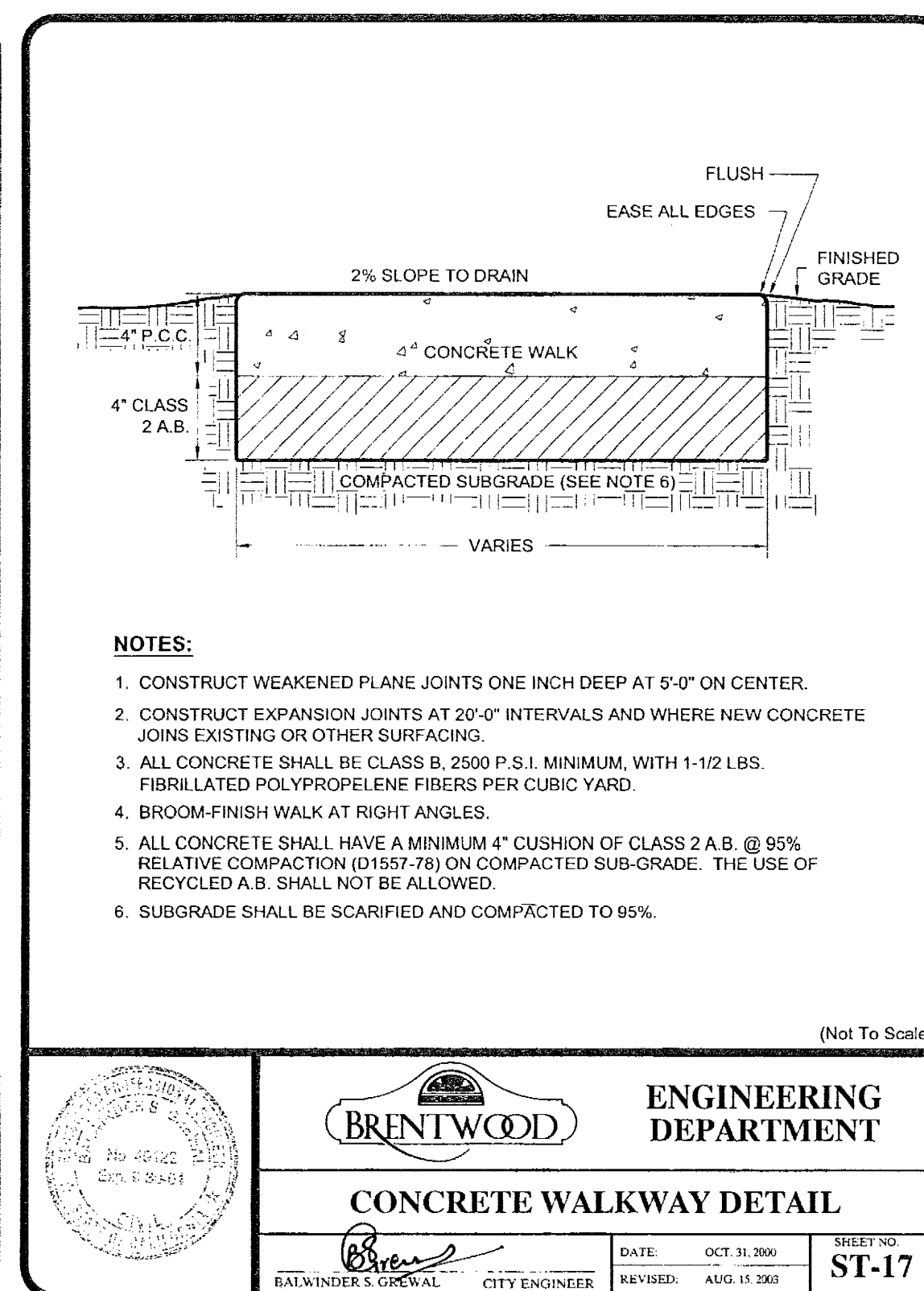
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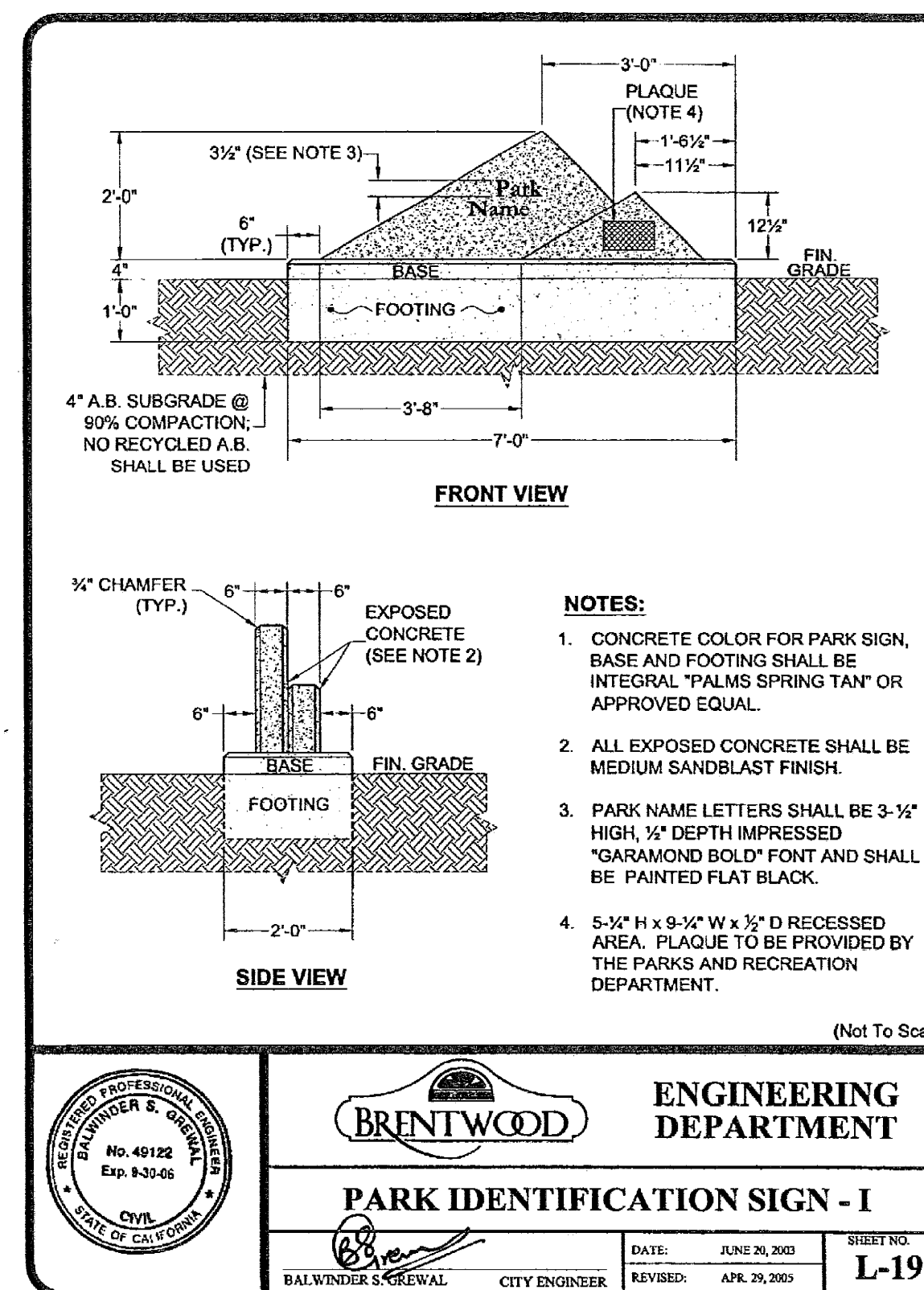
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L-15
OF 17



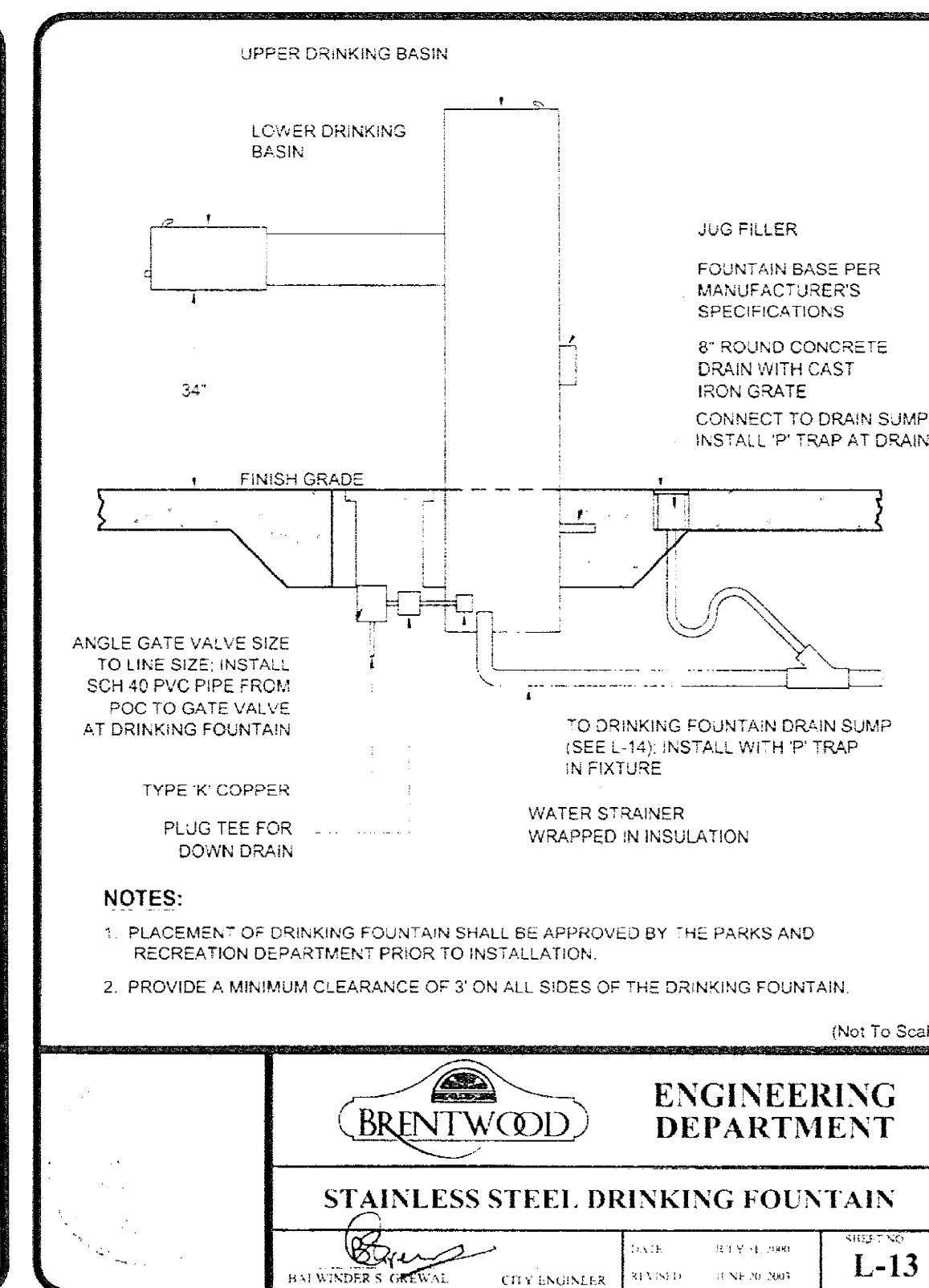
1 CONCRETE MOWING STRIP
SCALE: N.T.S.



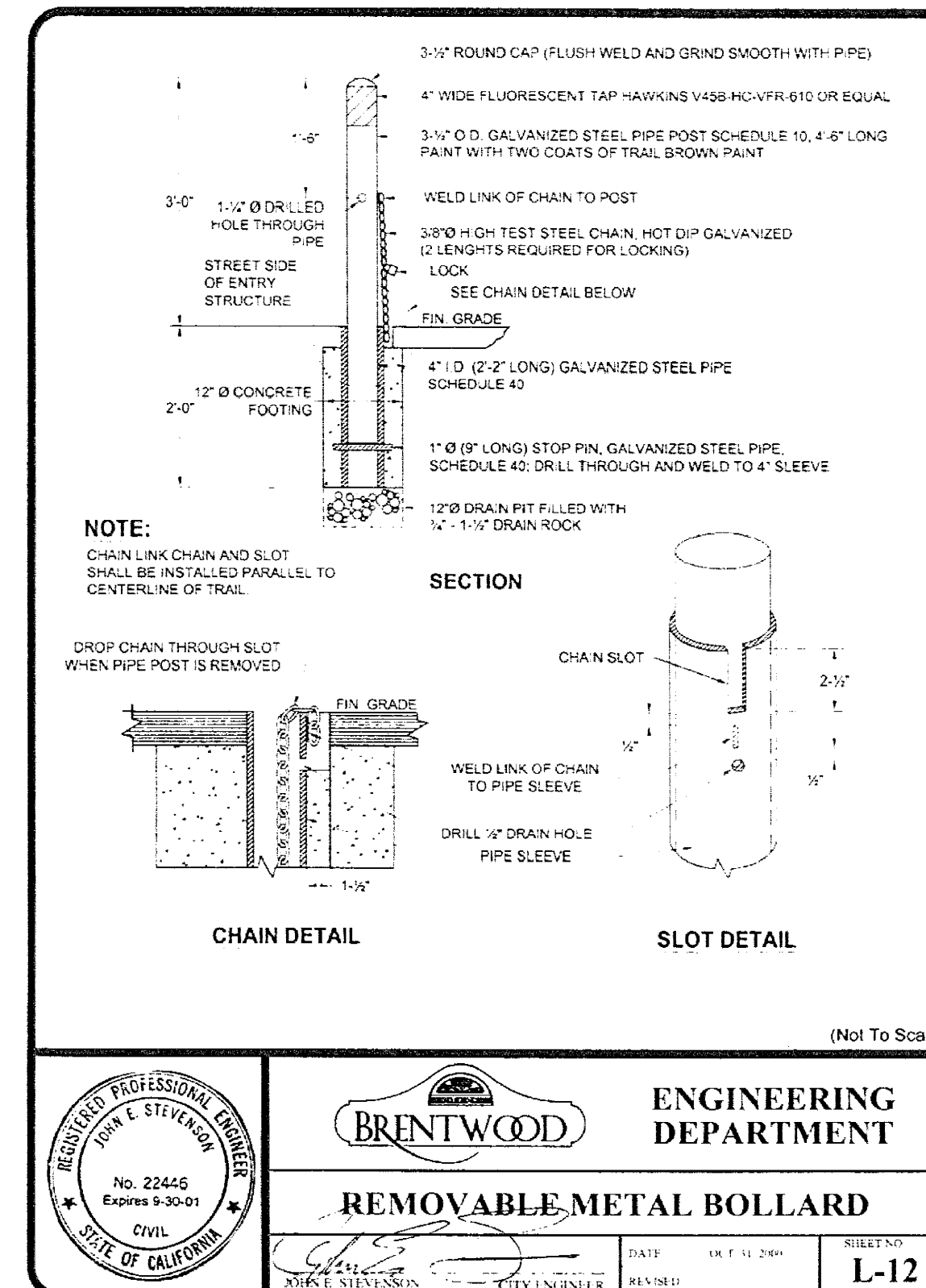
2 CONCRETE WALKWAY
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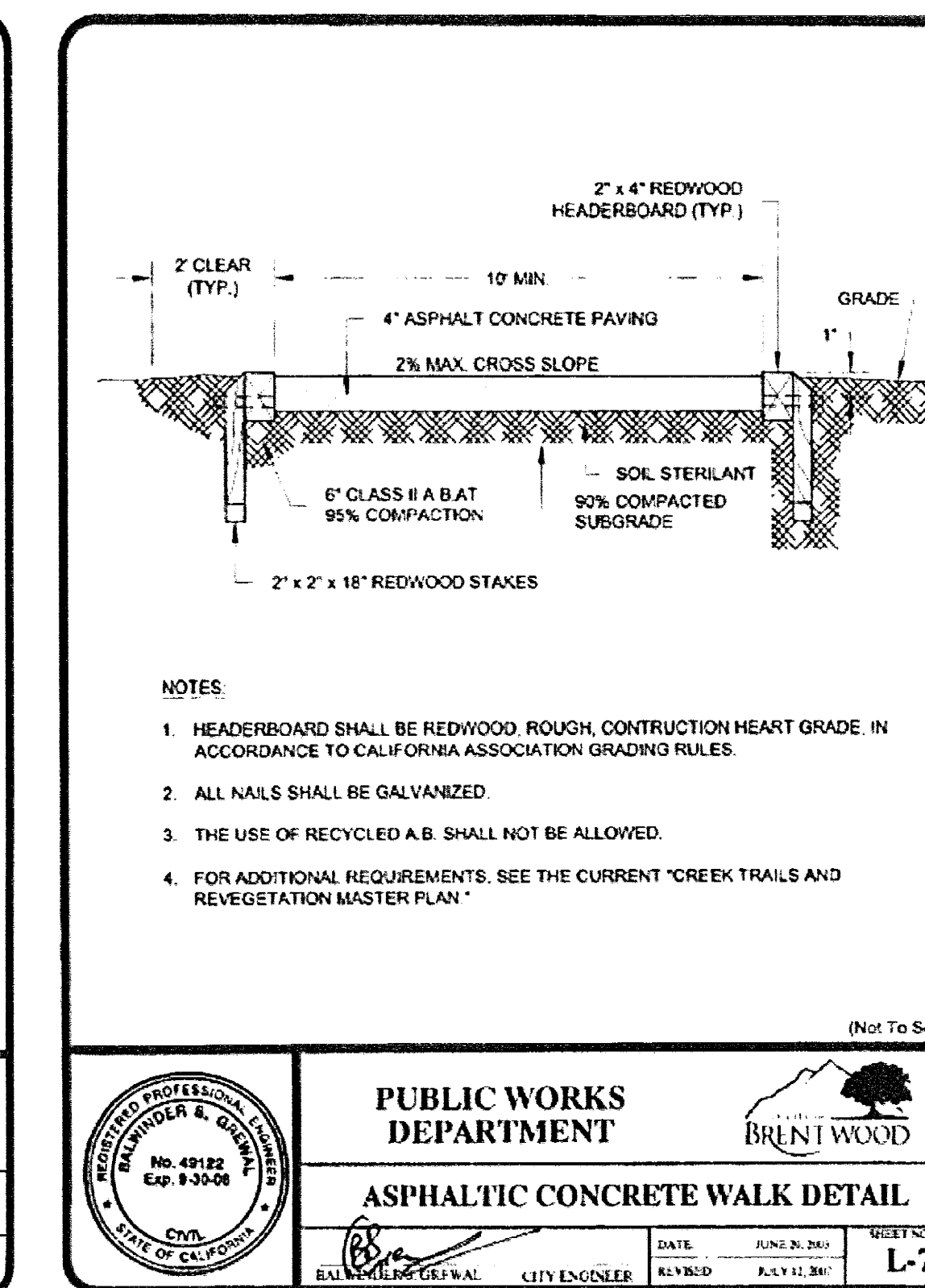
3 PARK IDENTIFICATION SIGN - I
SCALE: N.T.S.



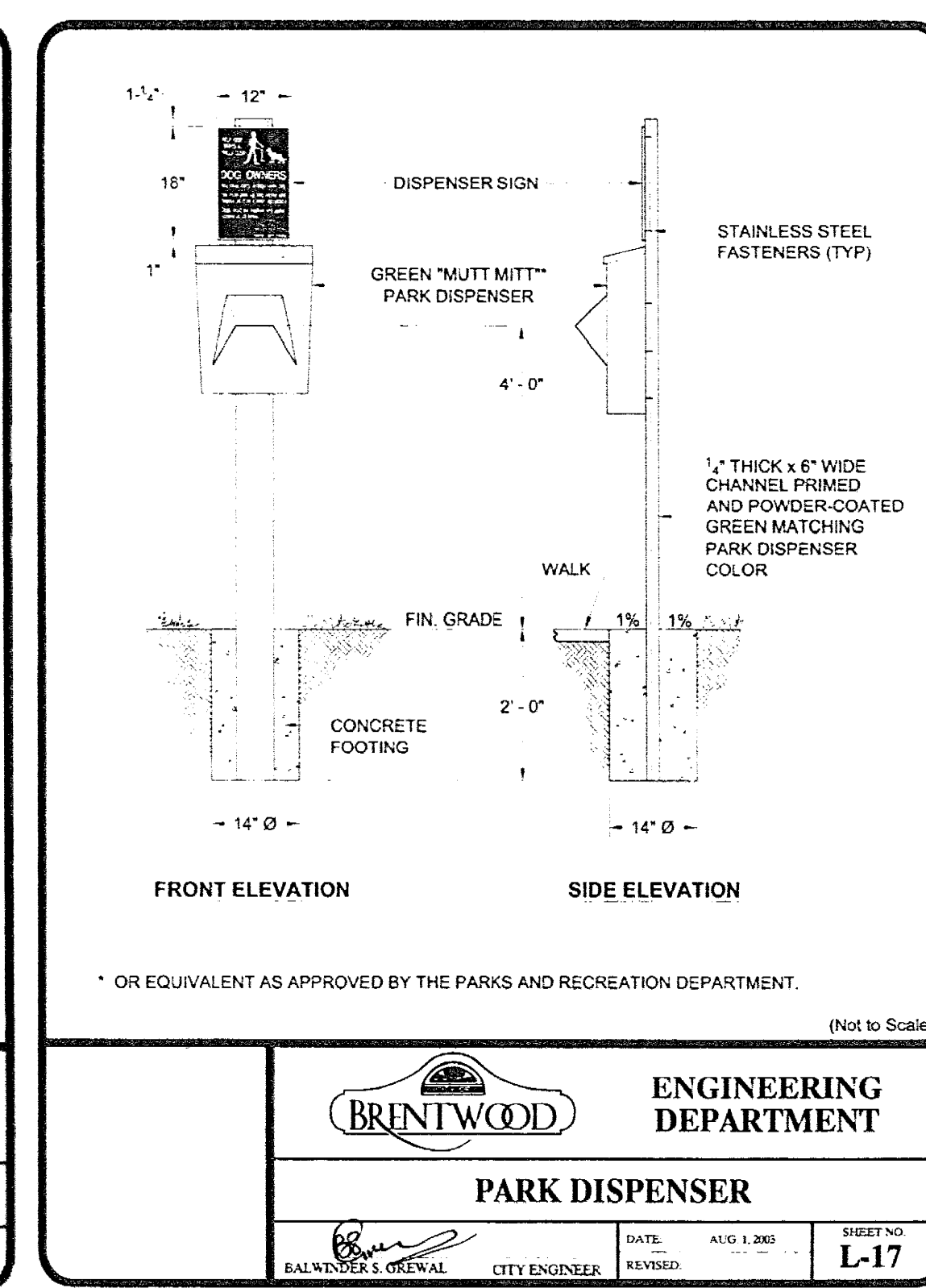
4 DRINKING FOUNTAIN
SCALE: N.T.S.



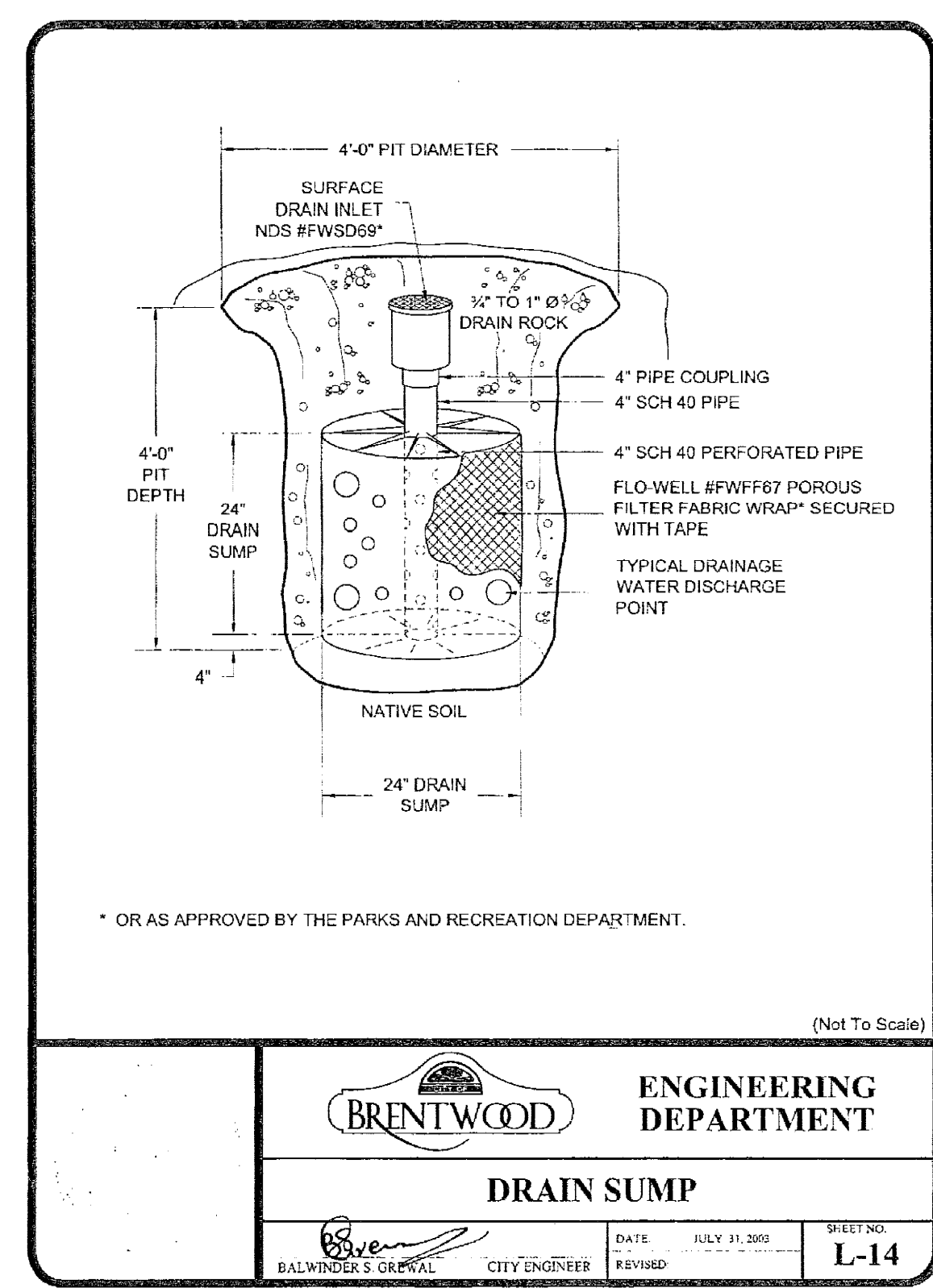
5 METAL BOLLARD
SCALE: N.T.S.



6 ASPHALTIC CONC. WALK
SCALE: N.T.S.



7 MUTT MITT STATION
SCALE: N.T.S.



8 DRAIN SUMP
SCALE: N.T.S.

| | | | |
|-----------|---------------|---------|---------------------------|
| 6 | | | C.A.D. BY: JD |
| 5 | | | CHECKED BY: RJM |
| 4 | | | PROJ. MGR.: JD |
| 3 | CITY COMMENTS | 3-22-12 | DATE: 2-28-12 |
| 2 | | | SCALE: |
| 1 | | | SHEET NO. 16 OF 17 SHEETS |
| REVISIONS | | DATE | |

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CONSTRUCTION DETAILS

DATE
2-28-12
REVISIONS
3-22-12

SHEET
L-16
OF 17



8'-0" O.C.

1 1/2" (TYP.)

4'-0" TYP.

3" - 4" (TYP.)

12" DEEP PIN

10" DIA. X 2'-6" DEEP MIN. CONC. FOOTING

1-1/2" SQ. GALV. POST (AT 8'-0" O.C. (TYP.))

1" MESH CYCLONE FENCE W/ 9 GAUGE, 0.148", WIRE. COAT W/ 15 MILS OF BLACK PVC (VINYL) COATING. TIE WIRES SHOULD BE A MIN. OF 9 GAUGE PVC COATED. (TYP.)

1" X 1-1/2" GALV. TOP & BOTTOM RAIL TUBING (TYP.)

HEAVY-DUTY SELF CLOSING HINGES & SELF LOCKING LATCH. SUBMIT SAMPLE FOR APPROVAL (TYP.) "MEDECO" STYLED KEYED LOCK.

*SLOPE TOP OF CONC. FOOTING FOR DRAINAGE

CONCRETE MOWING STRIP, SEE (1/15)

95% COMPACTED SUBGRADE

3'-6" O.C.

1 1/2" (TYP.)

4'-0" TYP.

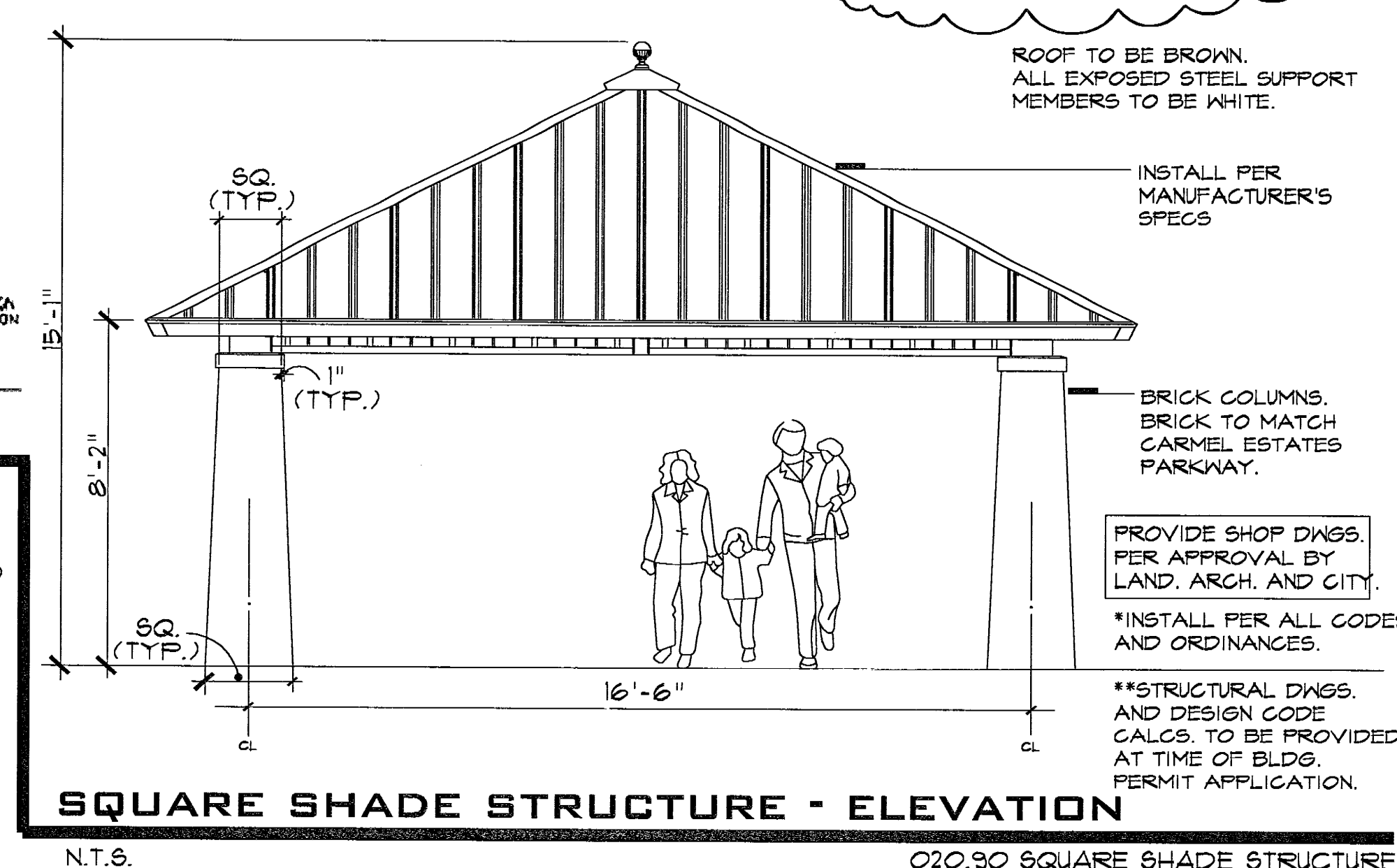
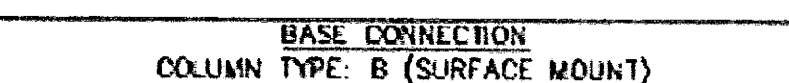
10" DIA. X 2'-6" DEEP MIN. CONC. FOOTING


12" DEEP PIN

10" DIA. X 2'-6" DEEP MIN. CONC. FOOTING

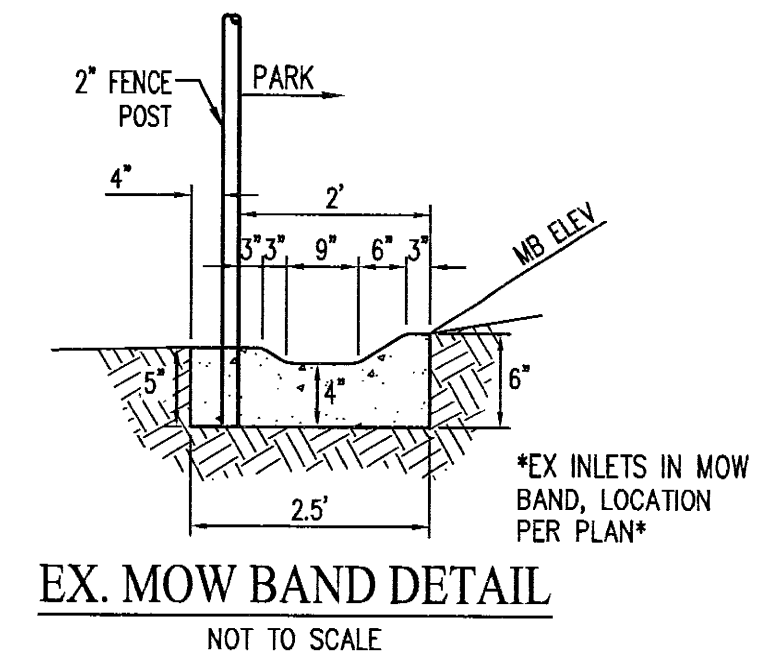
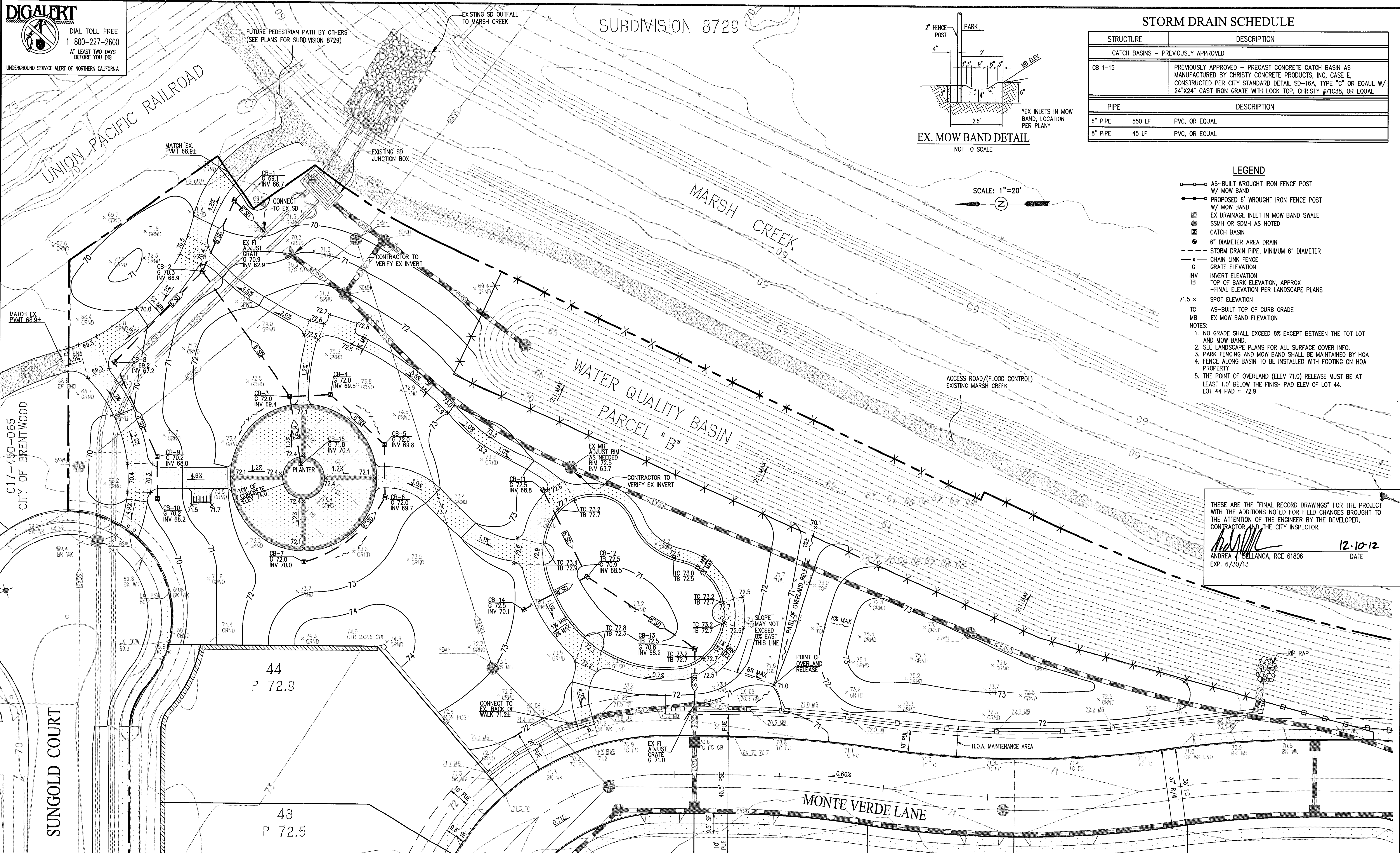
95% COMPACTED SUBGRADE

180.84 VINYL-CLAD CHAINLINK FENCE W/GATE



| | | | | |
|---|-----------|---------------|---------------------------|------------------------|
|  | 6 | | | |
| | 5 | CITY COMMENTS | 4-9-12 | C.A.D. BY: <u>JD</u> |
| | 4 | CITY COMMENTS | 4-3-12 | CHECKED BY: <u>RJM</u> |
| | 3 | CITY COMMENTS | 3-22-12 | PROJ. MGR. : <u>JD</u> |
| | 2 | | | DATE: <u>2-28-12</u> |
| | 1 | | | SCALE: _____ |
| | REVISIONS | DATE | SHEET NO. 17 OF 17 SHEETS | |

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA



| STORM DRAIN SCHEDULE | | |
|------------------------------------|---|---------------|
| STRUCTURE | | DESCRIPTION |
| CATCH BASINS – PREVIOUSLY APPROVED | | |
| CB 1-15 | PREVIOUSLY APPROVED – PRECAST CONCRETE CATCH BASIN AS MANUFACTURED BY CHRISTY CONCRETE PRODUCTS, INC. CASE E, CONSTRUCTED PER CITY STANDARD DETAIL SD-16A, TYPE "C" OR EQUAL W/ 24"x24" CAST IRON GRATE WITH LOCK TOP, CHRISTY #71C38, OR EQUAL | |
| PIPE | | DESCRIPTION |
| 6" PIPE | 550 LF | PVC, OR EQUAL |
| 8" PIPE | 45 LF | PVC, OR EQUAL |

- LEGEND**
- AS-BUILT WROUGHT IRON FENCE POST W/ MOW BAND
 - PROPOSED 6" WROUGHT IRON FENCE POST W/ MOW BAND
 - EX DRAINAGE INLET IN MOW BAND SWALE
 - SSMH OR SDMH AS NOTED
 - CATCH BASIN
 - 6" DIAMETER AREA DRAIN
 - STORM DRAIN PIPE, MINIMUM 6" DIAMETER
 - CHAIN LINK FENCE
 - GRATE ELEVATION
 - INVERT ELEVATION
 - TOP OF BARK ELEVATION, APPROX
 - FINAL ELEVATION PER LANDSCAPE PLANS
 - 71.5 x SPOT ELEVATION
 - TC AS-BUILT TOP OF CURB GRADE
 - MB EX MOW BAND ELEVATION
- NOTES:**
- NO GRADE SHALL EXCEED 8% EXCEPT BETWEEN THE TOT LOT AND MOW BAND.
 - SEE LANDSCAPE PLANS FOR ALL SURFACE COVER INFO.
 - PARK FENCING AND MOW BAND SHALL BE MAINTAINED BY HOA.
 - FENCE ALONG BASIN TO BE INSTALLED WITH FOOTING ON HOA PROPERTY.
 - THE POINT OF OVERLAND (ELEV 71.0) RELEASE MUST BE AT LEAST 1.0' BELOW THE FINISH PAD ELEV OF LOT 44. LOT 44 PAD = 72.9

THESE ARE THE "FINAL RECORD DRAWINGS" FOR THE PROJECT WITH THE ADDITIONS NOTED FOR FIELD CHANGES BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE DEVELOPER, CONTRACTOR, AND THE CITY INSPECTOR.

Signature
ANDREA J. BELLANCA, RCE 61806
EXP. 6/30/13

12-10-12
DATE

THE CITY OF BRENTWOOD
PUBLIC WORKS DEPARTMENT
708 Third Street, Brentwood, CA 94515
Ph: (925) 516-5420 • FAX: (925) 516-5421
www.ci.brentwood.ca.us

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CARMEL ESTATES
BRENTWOOD

PARK GRADING PLAN

SUBDIVISION 8311
CALIFORNIA

| NO. | REVISIONS | BY | APP | DATE |
|-----|---|-----|-----|---------|
| 1 | REVISED STORM DRAIN FOR AS-BUILT CONDITIONS | AJB | | 12/4/12 |
| 2 | REVISED PARK GRADING, ADDED SHEET 11A | AJB | | 3/02/12 |

DESIGNED UNDER THE DIRECTION OF:
Signature
ANDREA J. BELLANCA
R.C.E. No. 61806 REGISTRATION EXPIRES 6/30/13
DESIGN: AAA
DATE: 03-02-2012
DRAWN: NGS
DATE: 03-02-2012
CHECKED: AJB
DATE: 03-02-2012

REGISTERED PROFESSIONAL ENGINEER
ANDREA J. BELLANCA
No. 61806
Exp. 6/30/13
CIVIL
STATE OF CALIFORNIA

SHEET 11A
15
OF SHEETS