

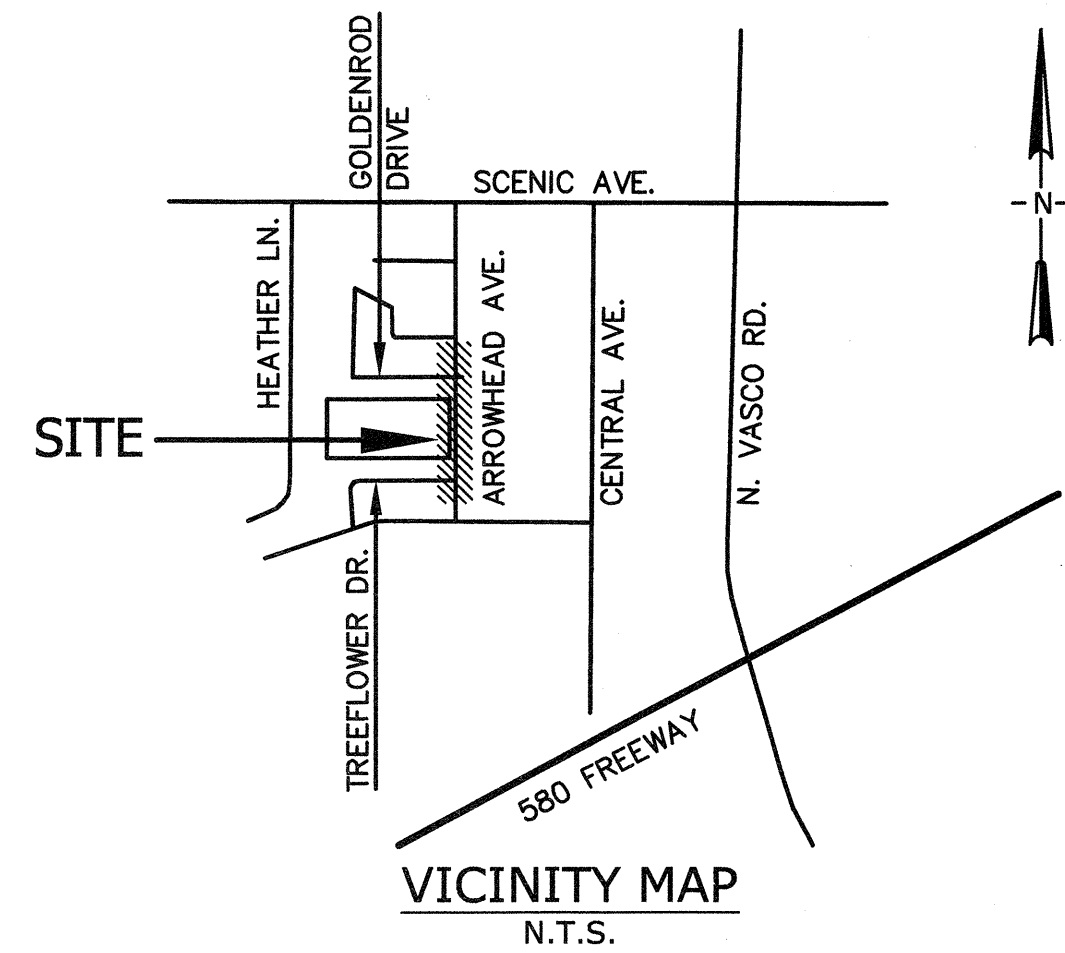
IMPROVEMENT PLANS

OF

ARROWHEAD AVENUE (STA. 1+00 to 5+23)

FOR

HINDU COMMUNITY & CULTURAL CENTER LIVERMORE, CALIFORNIA



LEGEND AND ABBREVIATIONS

PROPOSED	EXISTING	DESCRIPTION
		CONTAINS EXISTING
		CONTOURS (1' INTERVALS)
		SPOT ELEVATION
		LOT LINE
		EASEMENT LINE
		BUILDING FOOTPRINT
		CURB & GUTTER
		CONCRETE CURB
		RETAINING WALL
		CURB, GUTTER & SIDEWALK
		STORM DRAIN LINE
		SANITARY SEWER LINE
		WATER LINE
		STREET SIGNS
		DOWNSPOUT
		FIRE HYDRANT
		EARTH SWALE
		DIRECTION OF FLOW
		FINISHED FLOOR
		PAVEMENT
		TOP OF CURB
		GRADE BREAK
		GRATE
		INVERT
		FLOW LINE
		BASE OF WALL
		TOP OF WALL
		POINT OF CONNECTION

OWNER: HINDU COMMUNITY & CULTURAL CENTER
1232 ARROWHEAD AVENUE
LIVERMORE, CA 94557-6963
(925) 833-9784

ENGINEER: DEBOLT CIVIL ENGINEERING
811 SAN RAMON VALLEY BLVD.
DANVILLE, CA 94526
(925) 837-3780
ATTN: JAMES DIGGINS

ELECTRICAL ENGINEER: GIACALONE UTILITY DESIGN & PLANNING
5820 STONERIDGE MALL RD., SUITE 209
PLEASANTON, CA 94588
(925) 467-1740

SOILS ENGINEER: HENRY JUSTINIANO & ASSOCIATES
P.O. BOX 2338
SAN RAMON, CA 94583
(925) 831-9092
ATTN: HENRY JUSTINIANO

APPROVAL OF THESE PLANS DOES NOT RELEASE THE DEVELOPER OF THE RESPONSIBILITY FOR CORRECTION OF MISTAKES, ERRORS, OR OMISSIONS CONTAINED THEREIN IF DURING THE COURSE OF CONSTRUCTION OF THE IMPROVEMENTS PUBLIC INTEREST REQUIRES A MODIFICATION OF OR A DEPARTURE FROM THE SPECIFICATIONS AND DETAILS OF THE CITY OF LIVERMORE OR THESE PLANS, THE CITY ENGINEER SHALL HAVE THE AUTHORITY TO REQUIRE SUCH MODIFICATIONS OR DEPARTURE AND TO SPECIFY SUCH MODIFICATIONS OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH SAME IS TO BE MADE.

APPROVED AS TO DESIGN ONLY BASED ON INFORMATION SUBMITTED HEREON.

APPROVED FOR THE CITY OF LIVERMORE:

ROBERT GREGORY VINN _____ DATE _____
ASSISTANT CITY ENGINEER
R.C.E. 51222
EXPIRES: 9-30-11

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COVER SHEET

HINDU COMMUNITY and CULTURAL CENTER
1200 & 1232 ARROWHEAD AVENUE

LIVERMORE

ALAMEDA COUNTY

CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818
RENEWAL DATE: 03/31/12

#	REVISIONS	DATE



DeBolt Civil Engineering
811 San Ramon Valley Boulevard
Danville, California 94526
Tel: 925/837-3780
Fax: 925/837-4378

Date: 12/01/10
Scale:
By: JED / kt
Job No.: 06309

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GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO CURRENT THE LATEST CITY OF LIVERMORE STANDARDS DETAILS AND SPECIFICATIONS.
- BENCHMARK MONUMENT PIN AT THE INTERSECTION OF HEATHER LANE AND BLUEBELL DRIVE. ELEVATION: 510.42
- FINISH GRADE PROFILE REPRESENTS TOP OF CURB.
- ALL LOT FILL SHALL BE DONE IN CONFORMANCE TO THE SOILS ENGINEER'S RECOMMENDATIONS. SEE SOILS REPORT PREPARED BY HENRY JUSTINANO AND ASSOCIATES (GEOTECHNICAL ENGINEERING). ALL WORK SHALL BE DONE IN CONFORMANCE WITH THIS REPORT.
- ANY EXISTING WELLS ENCOUNTERED SHALL BE ABANDONED AND SEALED PER ZONE 7 REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITIES 48 HOURS PRIOR TO ANY EXCAVATION SO THAT THEIR LINES CAN BE MARKED. THOSE TO BE NOTIFIED INCLUDED, BUT MAY NOT BE LIMITED TO:

UNDERGROUND SERVICE ALERT (800) 227-2600

PG&E, AT&T, COMCAST CABLE, ZONE 7 AND THE CITY OF LIVERMORE.
- ANY DEVIATIONS OR CHANGES IN THESE PLANS WITHOUT OFFICIAL APPROVAL OF THE DESIGN ENGINEER SHALL ABSOLVE THE DESIGN ENGINEER OF ANY AND ALL RESPONSIBILITY OF SAID DEVIATION OR CHANGE.
- COMPACTION TEST WILL BE PERFORMED ON ALL TRENCHES AND STREET WORK TO VERIFY THAT COMPACTION CONFORMS TO CITY STANDARDS. THE INITIAL TEST AND ONE RE-TEST WILL BE PERFORMED BY THE CITY (24 HOUR NOTICE REQUIRED). ALL ADDITIONAL TESTING WILL BE AT THE DEVELOPER'S/CONTRACTOR'S EXPENSE.
- ALL WORK ADJACENT TO EXISTING PAVEMENT SECTION SHALL BUTT UP TO FULL EXISTING SECTION WHERE FULL SECTION IS NOT ENCOUNTERED. CONTINUE REMOVAL OF ADDITIONAL PAVEMENT UNTIL A FULL SECTION IS FOUND. SEE CITY STANDARD DETAIL ST-25.
- DEBOLT CIVIL ENGINEERING SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF WHEN FIELD STAKING IS TO BE REQUIRED.
- ALL CONSTRUCTION STAKING SHALL OCCUR ON THE PROJECT SITE.
- ALL CONSTRUCTION PIPE GRADES SHOWN AS FLOW LINE ELEVATIONS.
- ONE 6" SANITARY SEWER LATERAL AND CLEANOUT SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE DRAWINGS AND AN "S" STAMPED ON THE FACE OF CURB ABOVE THE LATERAL.
- ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 48".
- WATER LATERAL SHALL BE INSTALLED AND A "W" STAMPED ON THE FACE OF CURB ABOVE THE LATERAL PER CITY DETAIL W-17.
- WHENEVER POSSIBLE SANITARY SEWER LATERALS TO CROSS UNDER WATER MAIN.
- FIRE HYDRANTS AND VALVES SHALL BE PER CITY STANDARDS. PAVEMENT MARKERS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION PER CITY STANDARD DETAIL W-1.
- ALL FIRE HYDRANT INSTALLATIONS WILL BE SUBJECT TO APPROVAL BY THE FIRE CHIEF. FLOW TESTING BY THE CITY OF LIVERMORE MUNICIPAL WATER DEPARTMENT WILL ONLY BE MADE AT THE REQUEST OF THE PUBLIC WORKS INSPECTOR AT SUCH TIME AS ALL WORK IN THE WATER SUPPLY SYSTEM HAS BEEN COMPLETED.
- PRIOR TO BEGINNING ANY WORK ON EXISTING STREETS, CONTRACTOR SHALL INSTALL ADVANCE WARNING SIGNS (C18 AND C13).
- TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE CALTRANS "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES" CURRENT EDITION. FAILURE TO COMPLY MAY RESULT IN IMMEDIATE STOPPAGE OF WORK UNTIL THE PROPER TRAFFIC CONTROL IS IN ORDER.
- THE OWNER SHALL HAVE A JOB SUPERINTENDENT OR A DESIGNATED RESPONSIBLE REPRESENTATIVE ON THE JOB SITE ANYTIME WORK IS IN PROGRESS DURING THE CONSTRUCTION OF THE PROJECT. THE DEVELOPER/OWNER SHALL ADVISE THE CITY ENGINEER WHOM THE DESIGNEE IS IN WRITING. THE NOTICE SHALL INCLUDE AN EMERGENCY NOTIFICATION PHONE NUMBER. THE CITY SHALL BE ADVISED IN WRITING IF THERE IS TO BE A CHANGE IN JOB SITE REPRESENTATIVE.
- A PRE-CONSTRUCTION MEETING OF ALL THE CONTRACTOR'S REPRESENTATIVES INVOLVED IN THE PROJECT WILL BE HELD PRIOR TO THE START OF CONSTRUCTION AT THE REQUEST OF THE CITY OF LIVERMORE CITY ENGINEER.
- CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.
- PERMITS SHALL BE OBTAINED WHENEVER THE WORK COMES UNDER THE JURISDICTION OF ANY OF THE FOLLOWING AGENCIES. AFTER PERMIT IS OBTAINED, THE AGENCY MUST BE NOTIFIED PRIOR TO WORK BEING DONE AS REQUIRED IN THE PERMIT:

A. CITY OF LIVERMORE, ENGINEERING DIVISION
1052 SOUTH LIVERMORE AVENUE
LIVERMORE CA 94550
TELEPHONE: (925) 960-4500
- ALL SANITARY SEWERS SHALL BE EXTRA STRENGTH VCP OR SDR-26.
- ALL PROPERTY LINES SHALL BE MARKED WITH AN INDENTATION IN THE FACE OF CURB.
- CONSTRUCTION OPERATIONS - WASTEWATER GENERATED DURING CONSTRUCTION SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THIS INCLUDES WASTE FROM PAINTING, SAWCUTTING, CONCRETE WORK, ETC. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO ELIMINATE DISCHARGES TO THE STORM DRAIN SYSTEM AND, IF NECESSARY, PROVIDE AN AREA ON-SITE WASHING ACTIVITIES DURING CONSTRUCTION. MATERIALS WHICH COULD CONTAMINATE STORM RUNOFF SHALL BE STORED IN AREAS WHICH ARE DESIGNED TO PREVENT EXPOSURE TO RAIN FALL AND TO NOT ALLOW STORM WATER TO RUN ONTO THE AREA.

NOTES

- PAVEMENT CLEANING - FLUSHING OF STREETS/PARKING LOTS TO REMOVE DIRT AND CONSTRUCTION DEBRIS IS PROHIBITED UNLESS PROPER SEDIMENT CONTROLS ARE USED, PREFERABLY, AREAS REQUIRING CLEANING SHOULD BE SWEEPED.
- STORM DRAIN INLETS - STORM DRAIN INLETS MUST BE STENCILLED OR MARKED WITH THE FOLLOWING STATEMENT: "NO DUMPING, DRAINS TO BAY." STENCILS MAY BE OBTAINED FROM THE WATER RESOURCES DIVISION OF THE PUBLIC SERVICES DEPARTMENT (925.960-8100).
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED BY OCTOBER 15TH.
- A CITY TRANSPORTATION PERMIT IS REQUIRED FOR OVERSIZED LOADS. CONTACT THE CITY OF LIVERMORE ENGINEERING DIVISION AT (925) 960-4500 FOR PERMIT.
- DURING GRADING OPERATIONS, THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES BOTH ON-SITE AND ON THE HAUL ROUTE. ARROWHEAD AVENUE SHALL BE SWEEPED A MINIMUM OF TWO TIMES A DAY OR AS REQUIRED BY THE CITY ENGINEER.
- SUBMIT CITY OF LIVERMORE DEVELOPMENT STREET INVENTORY FORM PRIOR TO PRE-CONSTRUCTION MEETING.
- HAUL ROUTE:
I-580 TO VASCO ROAD TO SCENIC AVENUE TO ARROWHEAD AVENUE.
- DEVELOPER/DESIGN ENGINEER TO SUBMIT A SCHEDULE FOR WATER SYSTEM THRUST BLOCKS PER CITY STANDARD SPECIFICATIONS.
- DEVELOPER SHALL PROVIDE THE FOLLOWING TO THE CITY PRIOR TO STREET IMPROVEMENT ACCEPTANCE FOR MAINTENANCE:

A) A CERTIFICATION (FINAL SOILS REPORT) FROM THE SOILS ENGINEER STATING THAT ALL OF THE GRADING HAS BEEN COMPLETED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PRELIMINARY SOILS REPORT.

B) DEVELOPMENT STREET INVENTORY (SEE SECTION VI)

C) ELEVATION CERTIFICATION OF ALL INSTALLED MONUMENTS FROM THE SURVEYOR. THE ELEVATIONS SHALL BE NOTED ON THE RECORD DRAWINGS.

UTILITY NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LIVERMORE.
- BEFORE COMMENCING EXCAVATION, CONTRACTOR SHALL NOTIFY ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING POSSIBLE INTEREST IN THE WORK, OF CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES, AND CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES WITHIN THE WORK AREA.
- THE CONTRACTOR SHALL ABIDE BY THE CONDITIONS OF THE WORK PERMITS AND SHALL PERFORM ALL WORK ORDERED BY SAID PERMITS IN CONFORMANCE THEREWITH AS DIRECTED BY THE ENGINEER.
- BACKFILLING AND COMPACTION FOR ALL TRENCHES SHALL BE INSPECTED AND APPROVED BY THE CITY ENGINEER. NO JETTING IS ALLOWED, ALL COMPACTION SHALL BE BY MECHANICAL MEANS.
- CONTRACTOR TO VERIFY ALL EXISTING INVERT ELEVATIONS FOR STORM DRAIN AND SANITARY SEWER CONSTRUCTION PRIOR TO ANY SITE WORK. ALL WORK FOR STORM DRAIN AND SANITARY INSTALLATION SHALL BEGIN AT THE DOWNSTREAM CONNECTION POINT. THIS WILL ALLOW FOR ANY NECESSARY ADJUSTMENTS TO BE MADE PRIOR TO THE INSTALLATION OF THE ENTIRE LINE. IF THE CONTRACTOR FAILS TO BEGIN AT THE DOWNSTREAM CONNECTION POINT AND WORKS UPSTREAM, HE SHALL PROCEED AT HIS OWN RISK AND BE RESPONSIBLE FOR ANY ADJUSTMENTS NECESSARY.
- THE CITY OF LIVERMORE SHALL BE NOTIFIED 24 HOURS PRIOR TO START OF ANY SEWER CONSTRUCTION AND A REQUEST MADE FOR INSPECTION. THIS NOTIFICATION APPLIES NOT ONLY TO STARTING WORK, BUT ALSO TO RESTARTING WORK WHICH HAS BEEN TEMPORARILY HALTED.
- GENERAL CONTRACTOR SHALL COORDINATE ALL UNDERGROUND UTILITIES. PROVIDE 6" MINIMUM BETWEEN PIPES CROSSING ELECTRICAL LINES AND 12" MINIMUM BETWEEN PIPES PARALLEL TO ELECTRICAL LINES.
- WATER LINES SHOULD BE 12" MINIMUM ABOVE SANITARY SEWER LINE AT ALL CROSSINGS.
- HAZARD IDENTIFICATION - CONTRACTORS ARE HEREBY ADVISED THAT THEY MAY BE EXPOSED TO HAZARDOUS CONDITIONS WHEN INSTALLING OR MODIFYING SANITARY SEWER PIPELINES AND STRUCTURES. SOME OF THESE HAZARDS INCLUDE BUT ARE NOT LIMITED TO: EXPOSURES TO HAZARDOUS GASSES COMMONLY FOUND IN SEWER SYSTEMS SUCH AS HYDROGEN SULFIDE, CARBON DIOXIDE, METHANE, OXYGEN DEFICIENT ENVIRONMENTS, AND OTHER FLAMMABLE EXPLOSIVE GASSES; EXPOSURE TO SEWAGE WHICH MAY CONTAIN BACTERIOLOGICAL, CHEMICAL AND OTHER CONSTITUENTS HARMFUL TO HUMANS; AND EXPOSURE TO AREAS WHICH HAVE LIMITED OR RESTRICTED ACCESS AND EGRESS, WHICH MAY BE CONSIDERED PERMITTED.
- STORM DRAIN PIPE DESIGNATED AS "SD" 24" AND SMALLER TO BE H.D.P.E. OR CLASS III R.C.P. OR BETTER. SUBSTITUTIONS FOR ANY PIPE WITH A PARTICULAR MATERIAL ON THIS PLAN SHALL ONLY BE MADE WITH THE APPROVAL OF THE CITY ENGINEER.
- STORM DRAIN PIPE DESIGNATED AS "SD" 27" AND LARGER TO BE CLASS III R.C.P. OR BETTER SUBSTITUTIONS FOR ANY PIPE WITH A PARTICULAR MATERIAL ON THIS PLAN SHALL ONLY BE MADE WITH THE APPROVAL OF THE CITY ENGINEER.
- ALL CONSTRUCTION ON WATER SYSTEM SHALL BE PER CITY OF LIVERMORE DETAILS AND STANDARDS AND WILL BE SUBJECT TO FINAL INSPECTION AND APPROVAL BY THE CITY OF LIVERMORE.
- VALVE EXTENSIONS ARE REQUIRED ON ALL VALVES WHERE DEPTH OF VALVE NUTS EXCEEDS 8".
- ALL SANITARY SEWER LATERALS AND MAINS THAT CROSS OVER WATER MAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY STANDARD DETAIL G-2A & G-2B WHENEVER POSSIBLE SANITARY SEWER LATERALS TO CROSS UNDER WATER MAIN.

UTILITY NOTES CONTINUED

- EPDM VALVES MUST BE USED FOR ALL WATER LINES. GATE VALVES SHALL BE USED FOR VALVES 6" TO 12", AND BUTTERFLY VALVES SHALL BE USED FOR ALL VALVES 14" AND LARGER.
- ALL UTILITY STRUCTURES INCLUDING, BUT NOT LIMITED TO MANHOLES, CATCH BASINS, WATER VALVES, FIRE HYDRANTS, TELEPHONE AND ELECTRIC VALVES, AND PULL BOXES, THAT LIE WITHIN THE PUBLIC RIGHT-OF-WAY EASEMENTS OR AREAS AFFECTED BY WORK ON THIS PROJECT SHALL BE ADJUSTED TO GRADE BY THE CONTRACTOR OR THE RESPECTIVE UTILITY COMPANY FOR WHICH THE CONTRACTOR IS RESPONSIBLE TO AFFECT COORDINATION.
- THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE IMPROVEMENT PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT SIZES, LOCATIONS, AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THEIR DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT ARE NOT SHOWN ON THESE DRAWINGS.
- CONTRACTOR SHALL UNCOVER AND EXPOSE ALL EXISTING UTILITY AND SEWER LINES WHERE THEY ARE TO BE CROSSED, ABOVE OR BELOW, BY THE NEW FACILITY BEING CONSTRUCTED IN ORDER TO VERIFY THE GRADE AND TO ASSURE THAT THERE IS SUFFICIENT CLEARANCE. PIPE SHALL NOT BE STRUNG NOR TRENCHING COMMENCED UNTIL ALL CROSSINGS HAVE BEEN VERIFIED FOR CLEARANCE. IF THE CONTRACTOR FAILS TO FOLLOW THIS PROCEDURE, HE WILL BE SOLELY RESPONSIBLE FOR ANY EXTRA WORK OR MATERIAL REQUIRED IF MODIFICATIONS TO THE DESIGN ARE NECESSARY.

GRADING NOTES

- ALL GRADING AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH RECOMMENDATIONS IN THE SOILS REPORT PREPARED FOR THIS SITE PREPARED BY HENRY JUSTINANO AND ASSOCIATES.
- CONTRACTOR SHALL DETERMINE HIS OWN EARTH QUANTITIES AND BASE HIS BID ACCORDINGLY.
- ADJUSTMENTS TO BUILDING PAD ELEVATIONS OR PARKING LOT GRADES TO ACHIEVE EARTHWORK BALANCE SHALL BE MADE ONLY WITH APPROVAL OF THE ENGINEER.
- GRADING TO BE SUBJECT TO ADDITIONAL CONDITIONS, IF ANY, IMPOSED BY THE CITY OF LIVERMORE PURSUANT TO ISSUANCE OF A GRADING PERMIT. CITY CONSTRUCTION INSPECTOR TO BE NOTIFIED 48 HOURS PRIOR TO WORK COMMENCING ON SITE.
- THE CONTRACTOR SHALL SET HIS STRING OR WIRE THROUGH AT LEAST THREE GRADE STAKES TO VERIFY GRADE. IF THE STAKES DO NOT PRODUCE A UNIFORM GRADE, NOTIFY THE ENGINEER IMMEDIATELY AND HAVE THE GRADES CHECKED PRIOR TO THE TRENCHING OR PLACEMENT OF CONCRETE.

C-2

HINDU COMMUNITY and CULTURAL CENTER
1200 & 1232 ARROWHEAD AVENUE
LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818
RENEWAL DATE: 03/31/12

#	REVISIONS	DATE



DeBolt Civil Engineering
811 San Ramon Valley Boulevard
Danville, California 94526
Tel: 925/837-3780
Fax: 925/837-4378

Date: 12/01/10
Scale:
By: JED / kd
Job No.: 06309

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EROSION AND SEDIMENT CONTROL MEASURES

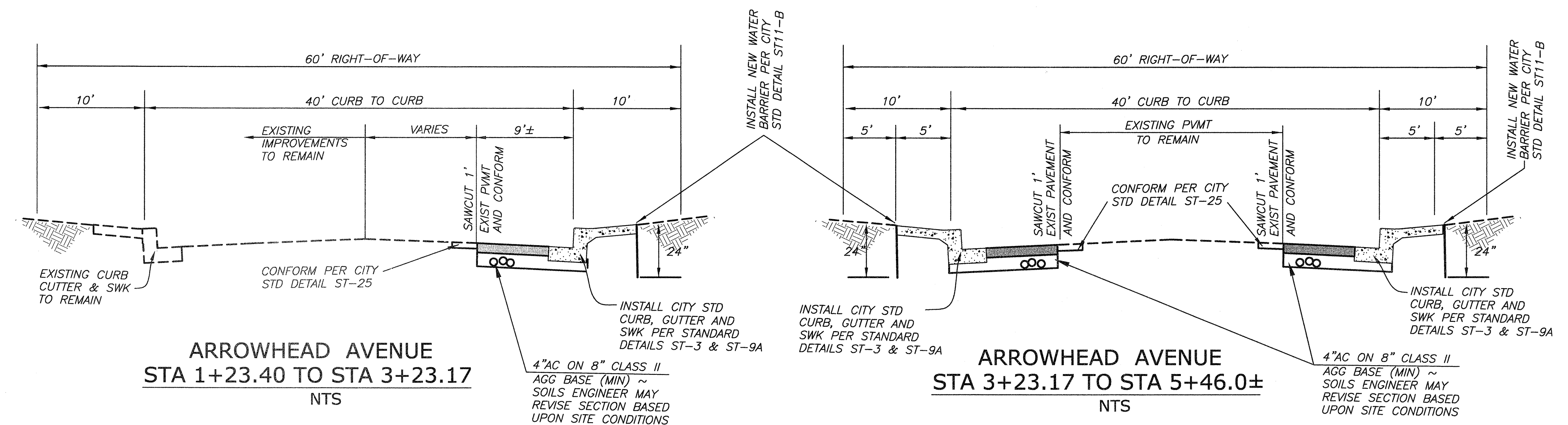
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE EFFECTIVE FOR CONSTRUCTION DURING THE RAINY SEASON (OCT. 15 TO APRIL 15).
- AFTER THE UNDERGROUND STORM DRAIN SYSTEM IS UNINSTALLED, THE CATCH BASINS WILL BE INSTALLED (AS SOON AS PRACTICAL) AND STRAW WATTLE WILL BE PLACED AROUND THOSE CATCH BASINS AS SHOWN ON THIS PLAN UNTIL THIS SITE IS PAVED.
- SHOULD THE ON-SITE STORM DRAINS NOT BE INSTALLED COMPLETELY BY OCTOBER 15, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SEDIMENT BASINS AT THE EXISTING STORM PIPES STUBBED TO THE SITE.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTATION OF EROSION AND SEDIMENTATION PLAN.
- THE CONTRACTOR SHALL PLACE DRAIN ROCK AS A GRAVEL ROADWAY (6" MIN. THICK FOR THE FULL WIDTH AND 50 FEET LONG) AT EACH D/W ENTRANCE TO SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THAT SAME DAY AND AS REQUIRED BY THE CITY OF LIVERMORE.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE CITY ENGINEER.
- DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUN-OFF TO ANY STORM DRAINAGE SYSTEM.
- THIS PLAN COVERS ONLY THE FIRST WINTER FOLLOWING GRADING. PLANS ARE TO BE RESUBMITTED FOR CITY APPROVAL PRIOR TO THE SEPTEMBER FIRST OF EACH SUBSEQUENT YEAR UNTIL THE SITE IMPROVEMENTS ARE ACCEPTED BY THE CITY.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
- SEDIMENT BASINS SHALL BE CLEANED OUT WHENEVER SEDIMENT REACHES THE SEDIMENT CLEANOUT LEVEL INDICATED ON THE PLANS.
- BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER.
- ALL CUT AND FILL SLOPES ARE TO BE PROTECTED TO PREVENT OVERTHEBANK FLOW.
- INLETS WHICH ARE NOT USED IN CONJUNCTION WITH STRAW BALES OR SEDIMENT BASINS SHOULD BE COVERED, OR OTHERWISE ADJUSTED TO PREVENT INFLOW, UNLESS THE AREA DRAINED IS UNDISTURBED OR STABILIZED.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING THE CONSTRUCTION DUE TO ANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF THE ENGINEER.
- DETAILS FOR THE CONSTRUCTION OF FACILITIES ARE SHOWN ON THESE PLANS.
- THIS PLAN IS INTENDED TO BE USED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT.
- CONSTRUCTION OPERATIONS: DUST SHALL BE CONTROLLED. WASTEWATER GENERATED DURING CONSTRUCTION SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THIS INCLUDES WASTE FROM PAINTING, SAWCUTTING, CONCRETE WORK, ETC. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO ELIMINATE DISCHARGES TO THE STORM DRAIN SYSTEM AND, IF NECESSARY, PROVIDE AN AREA FOR ON-SITE WASHING ACTIVITIES DURING CONSTRUCTION. MATERIALS THAT COULD CONTAMINATE STORM RUNOFF SHALL BE STORED IN AREAS WHICH ARE DESIGNED TO PREVENT EXPOSURE TO NOT ALLOW STORM WATER TO RUN ONTO THE AREA.
- PAVEMENT CLEANING - FLUSHING OF STREETS/PARKING LOTS TO REMOVE DIRT AND CONSTRUCTION DEBRIS IS PROHIBITED UNLESS PROPER SEDIMENT CONTROLS ARE USED, PREFERABLY, AREAS REQUIRING CLEANING SHOULD BE SWEEPED.

BAAQMD STANDARD NOTES

- WATER ALL ACTIVE DRY CONSTRUCTION AREAS AT LEAST TWICE DAILY.
- COVER TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
- PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.
- SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITE.
- SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS.
- HYDROSEED OR APPLY (NON-TOXIC) SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
- ENCLOSE, COVER, WATER TWICE DAILY OR APPLY (NON-TOXIC) SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.).
- LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MPH.
- INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
- REPLANT VEGETATION IN DISTURBED AREAS AS QUICKLY AS POSSIBLE.
- SUSPEND EXCAVATION AND GRADING ACTIVITY WHEN WINDS (INSTANTANEOUS GUSTS) EXCEED 25 MPH.

WATER QUALITY CONTROL NOTES

- EXISTING VEGETATION SHALL BE RETAINING WHERE POSSIBLE.
- GRADING ACTIVITIES WILL BE LIMITED TO THE IMMEDIATE AREA REQUIRED FOR CONSTRUCTION.
- EROSION CONTROL MEASURES SUCH AS SILT FENCES, STAKED STRAW BALES, AND TEMPORARY RE-VEGETATION SHALL BE EMPLOYED FOR DISTURBED AREAS TO PREVENT SOIL, DIRT AND DEBRIS FROM ENTERING THE STORM DRAIN SYSTEM.
- NO DISTURBED SURFACES SHALL BE LEFT WITHOUT EROSION CONTROL MEASURES IN PLACE DURING THE WINTER AND SPRING MONTHS.
- SEDIMENT SHALL BE RETAINED ON-SITE BY A SYSTEM OF SEDIMENT BASINS, TRAPS, OR OTHER APPROPRIATE MEASURES.
- MEASURES SHALL BE TAKEN TO ENSURE PROPER COLLECTION AND DISPOSAL OF ALL POLLUTANTS HANDLED OR PRODUCED ON THE SITE DURING CONSTRUCTION, INCLUDING SANITARY WASTES, CEMENT, AND PETROLEUM PRODUCTS.
- ALL STORM WATER CONVEYANCE AND DISCHARGE FACILITIES THAT WILL BE THE RESPONSIBILITY OF THE CITY SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS AND DETAILS.
- THE APPLICANT SHALL MEET AND IMPLEMENT ALL OTHER APPLICABLE CITY, STATE, AND FEDERAL REQUIREMENTS FOR NON-POINT SOURCE RUNOFF.
- IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITY, THE PROJECT APPLICANT SHALL COMPLY WITH THE PROVISIONS OF THE RWQCB'S GENERAL PERMIT FOR DEWATERING AND OTHER LOW THREAT DISCHARGES TO SURFACE WATERS. COMPLIANCE SHALL INCLUDE PREPARATION OF A MONITORING AND REPORTING PROGRAM AND IMPLEMENTATION OF BEST MANAGEMENT PRACTICES ASSOCIATED WITH THE DEWATERING ACTIVITIES.



NOTES & SECTIONS

HINDU COMMUNITY and CULTURAL CENTER
 1200 & 1232 ARROWHEAD AVENUE
 LIVERMORE ALAMEDA COUNTY CALIFORNIA

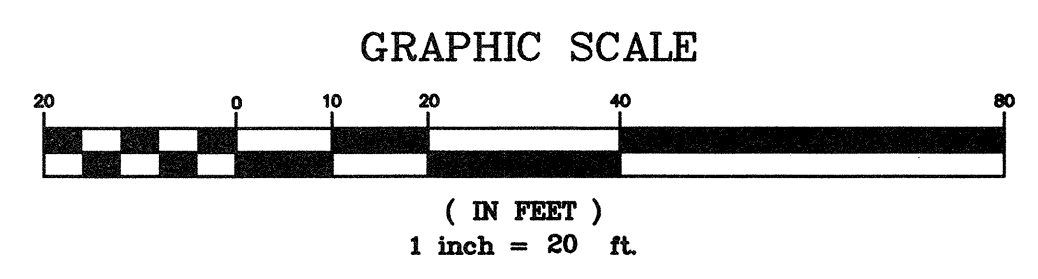
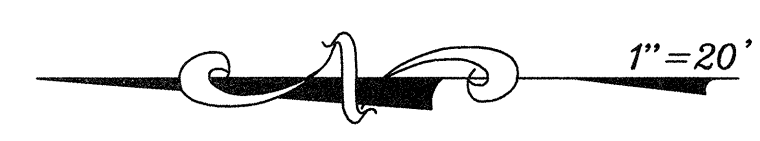
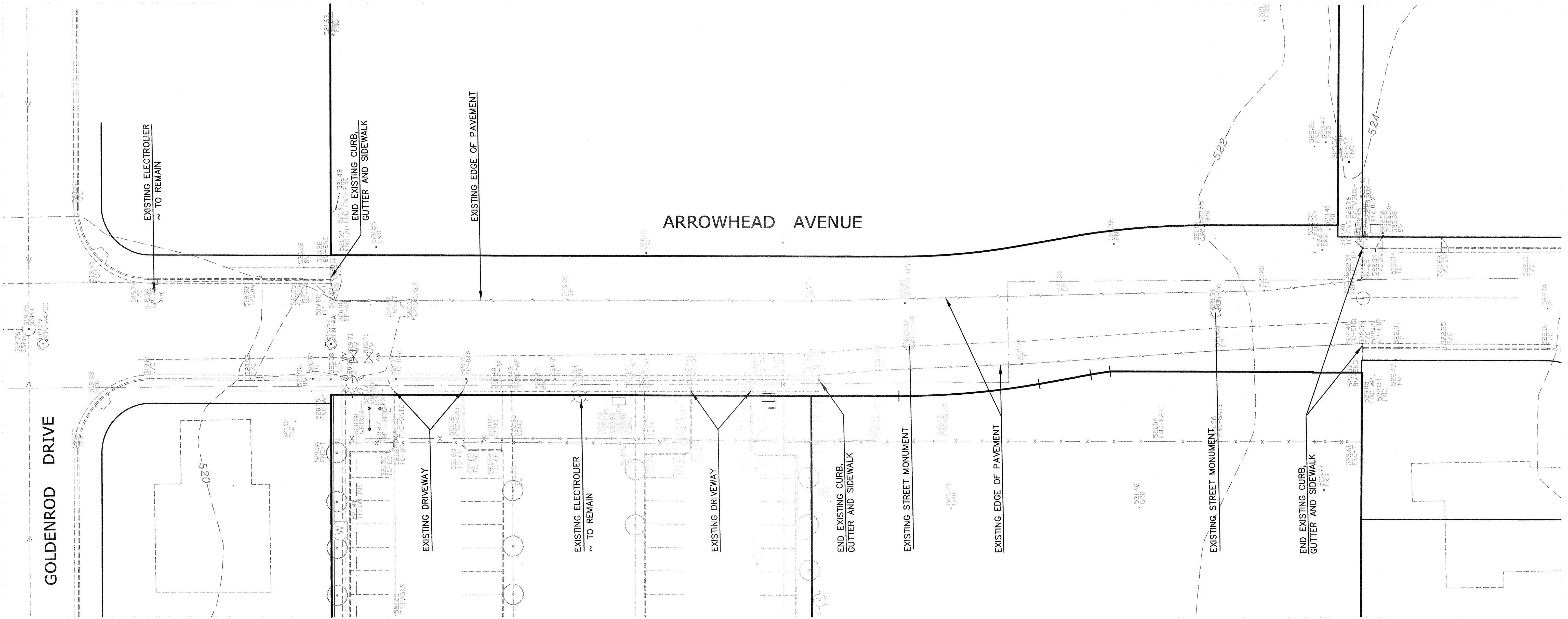
JAMES E. DIGGINS R.C.E. 27818
 RENEWAL DATE: 03/31/12

#	REVISIONS	DATE



DeBolt Civil Engineering
 811 San Ramon Valley Boulevard
 Danville, California 94526
 Tel: 925/837-3780
 Fax: 925/837-4378

Date: 12/01/10
 Scale:
 By: JED / kl
 Job No.: 06309



LEGEND

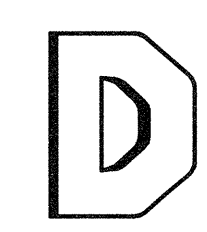
---	522	---	EXISTING CONTOUR
			EXISTING CURB & GUTTER
-x-x-			EXISTING FENCE
---			EDGE OF PAVEMENT
☉			EXISTING ELECTROLIER
○			EXISTING SURVEY MONUMENT

EXISTING CONDITIONS

HINDU COMMUNITY and CULTURAL CENTER
 1200 & 1232 ARROWHEAD AVENUE
 LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818
 RENEWAL DATE: 03/31/12

#	REVISIONS	DATE



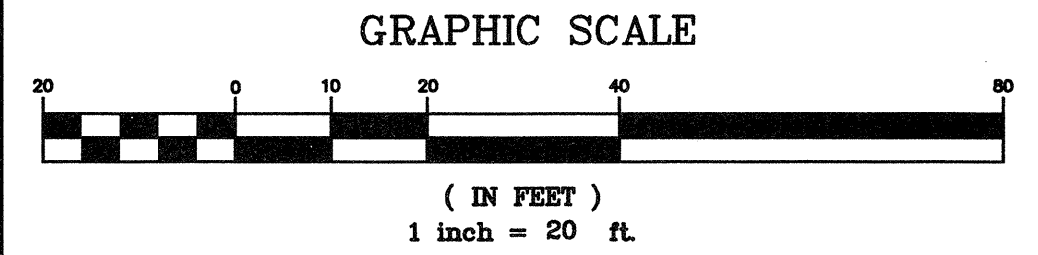
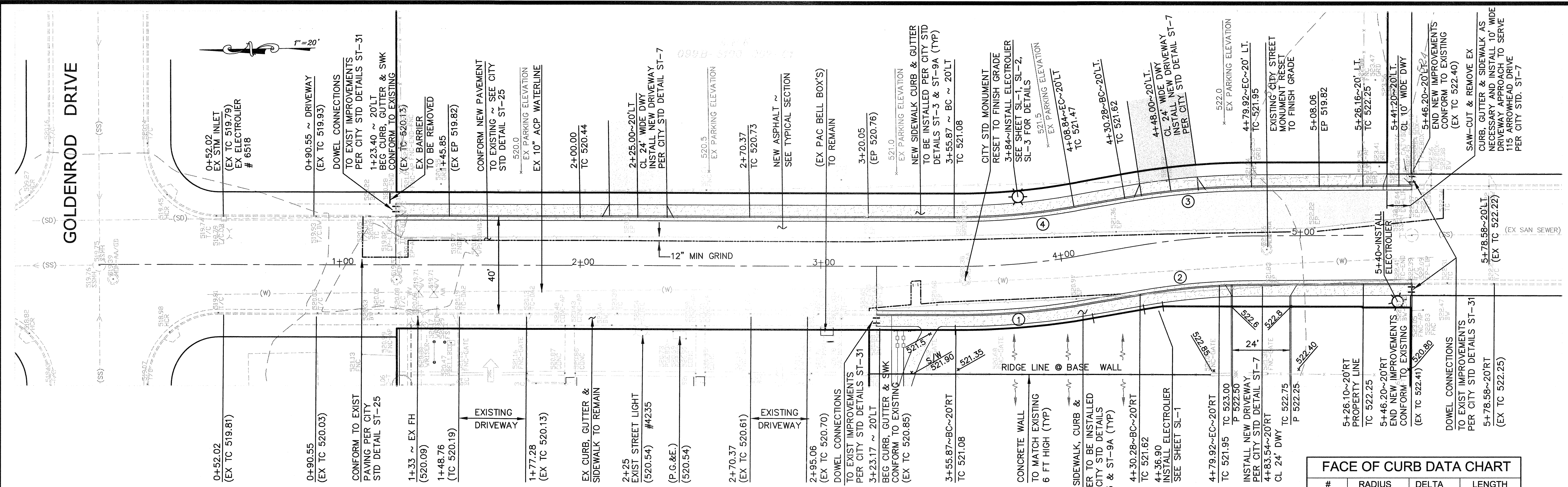
DeBolt Civil Engineering
 811 San Ramon Valley Boulevard
 Danville, California 94526
 Tel: 925/837-3780
 Fax: 925/837-4378

C-4

Date: 12/01/10
 Scale: 1" = 20'
 By: JED / kt
 Job No.: 06309

P:\P06309\FINAL-ST-MP\C4-DX-CONDITION.dwg 12/21/10 9:52

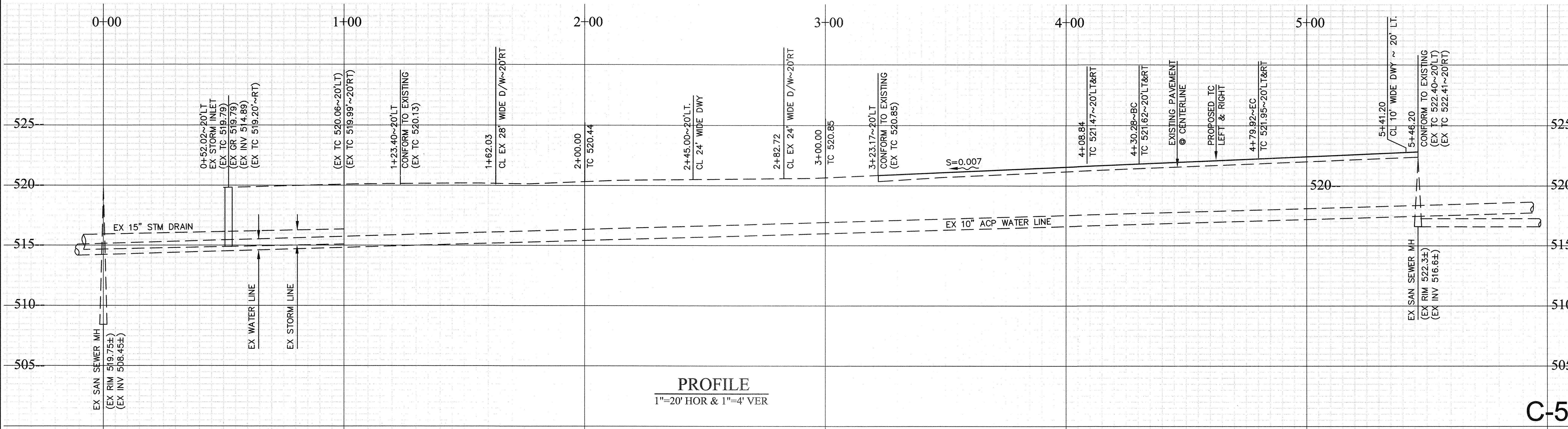
GOLDENROD DRIVE



NOTE:
ARROWHEAD AVENUE SHALL HAVE A 1 1/2" MIN OVERLAY ACROSS THE ENTIRE STREET FROM STA 1+23 TO STA 5+47

ARROWHEAD AVENUE
1" = 20'

#	RADIUS	DELTA	LENGTH
1	323.50	D=10°00'00"	L=56.46'
2	276.50	D= 9°35'32"	L=46.29'
3	316.50	D= 9°35'32"	L=52.99'
4	283.50	D=10°00'00"	L=49.48'



PROFILE
1"=20' HOR & 1"=4' VER

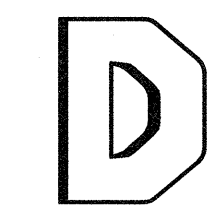
C-5

ARROWHEAD AVENUE
IMPROVEMENT PLAN

HINDU COMMUNITY and CULTURAL CENTER
1200 & 1232 ARROWHEAD AVENUE
LIVERMORE ALAMEDA COUNTY CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818
RENEWAL DATE: 03/31/12



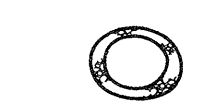

#	REVISIONS	DATE



DeBolt Civil Engineering
811 San Ramon Valley Boulevard
Danville, California 94526
Tel: 925/837-3780
Fax: 925/837-4378

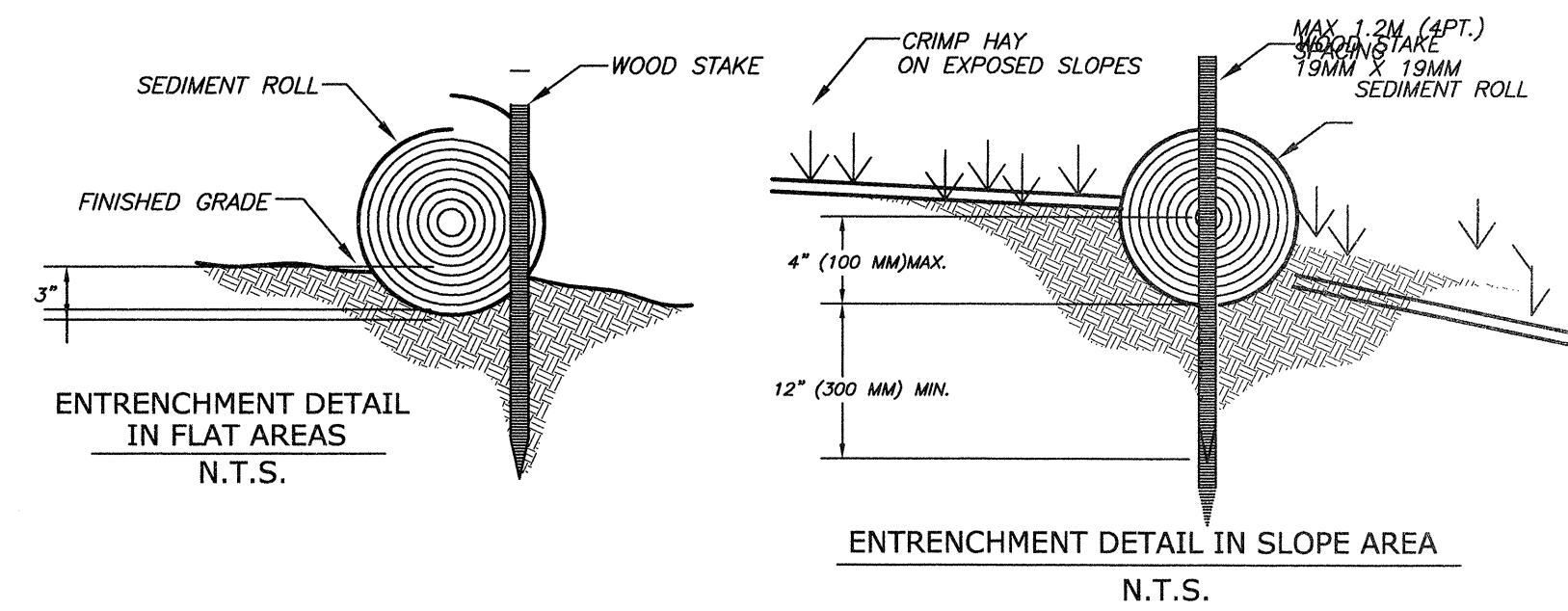
Date: 12/01/10
Scale: 1" = 20'
By: [Signature]
Job No.: 06309

LEGEND

-  STRAW WATTLE
-  STRAW WATTLE FENCING
-  CRUSHED ROCK BETWEEN STRAW WATTLE
-  STABILIZED CONSTRUCTION ENTRANCE

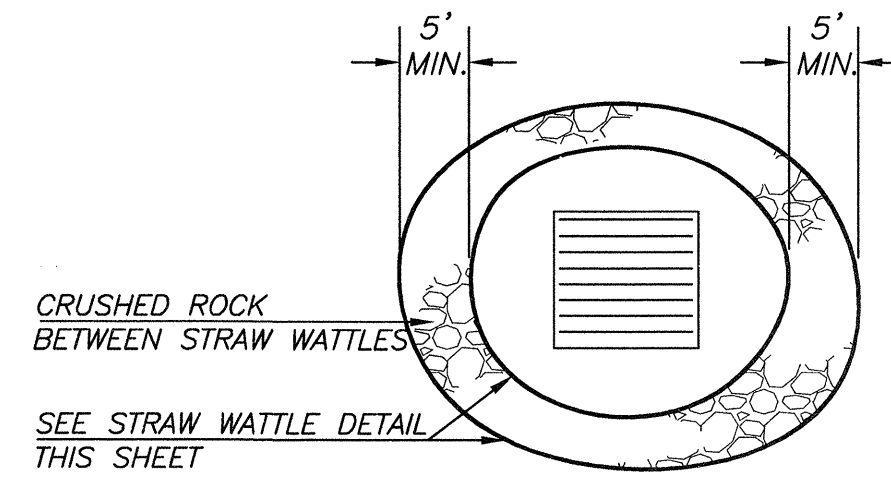
NOTE:

ELEVATIONS, GRADES AND IMPROVEMENTS SHOWN ON THIS SHEET ARE FOR GENERAL INFORMATION ONLY.



STRAW WATTLE DETAILS

N.T.S.

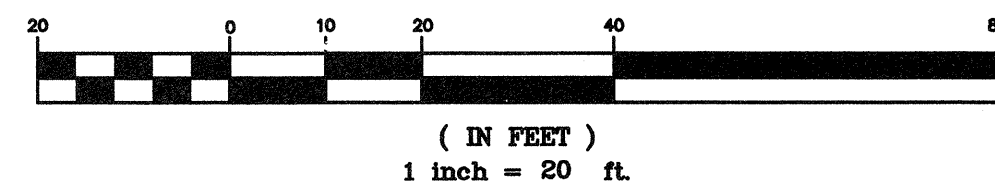


INLET PROTECTION DETAIL

UNPAVED AREAS
N.T.S.

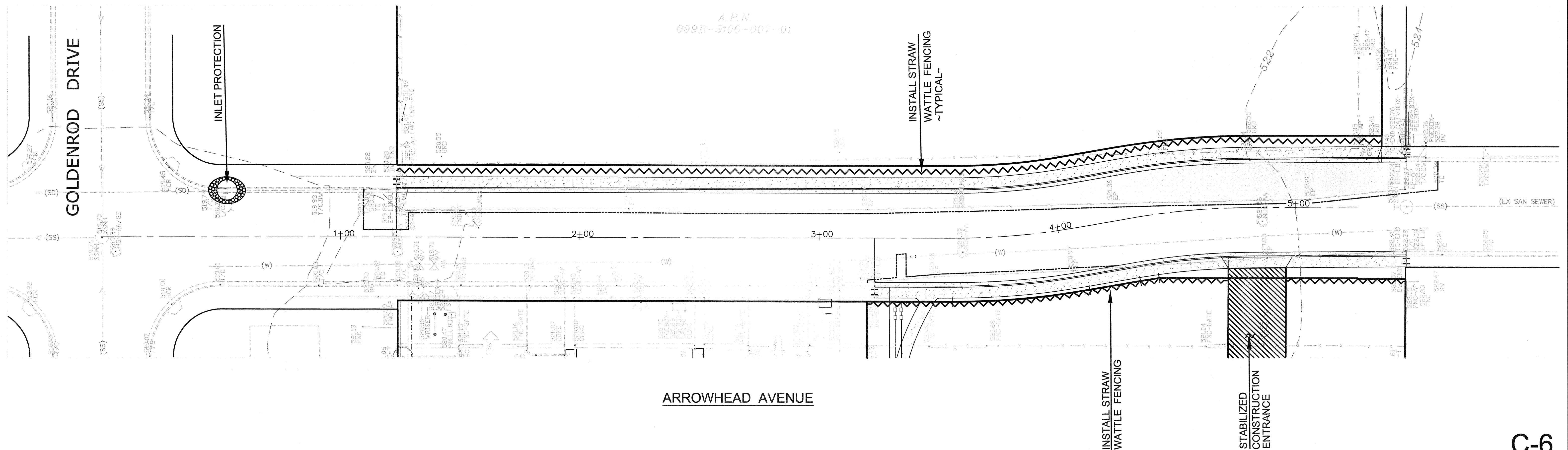


GRAPHIC SCALE



EROSION CONTROL NOTES:

1. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, OCTOBER FIRST TO APRIL FIFTEENTH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND MAY 1 UNLESS AUTHORIZED BY THE COUNTY GRADING DEPARTMENT.
2. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE DIRECTOR OF THE COUNTY GRADING DEPARTMENT.
3. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.
4. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
5. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (3" MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG FOR THE FULL WIDTH AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.
6. TEMPORARY EROSION CONTROL DEVICES WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED ONLY WHEN THE PROJECT EROSION CONTROL SPECIALIST DIRECTS THE DEVELOPER/OWNER PER THE REQUIREMENTS OF THE NPDES (GENERAL PERMIT/SWPPP).
7. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND REMOVED DAILY AND AS DIRECTED BY THE EROSION CONTROL SPECIALIST AND REQUIRED BY THE NPDES (GENERAL PERMIT/SWPPP). NOTE: REMOVE 40% CHANCE OF RAIN FROM ALL NOTES. INSTALLATION OF ADEQUATE BMPs AND COMPLIANCE TO THE GENERAL PERMIT IS REQUIRED IN THE EVENT OF ANY CHANCE FOR RAIN (SMALL, MEDIUM, OR HEAVY). THE DISCHARGER IS REQUIRED TO COMPLY TO THE GENERAL PERMIT.
8. AFTER SEWER LATERAL AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHALL BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
9. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN ON THESE PLANS SHALL ALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE FORECAST OF RAIN PROBABILITY EXCEEDS 40%. THESE DEVICES MUST BE MAINTAINED DURING THE RAINY SEASON (OCTOBER 1 TO MAY 1).
10. STRAW WATTLES AND SANDBAGS SHALL BE STOCKPILED AS SHOWN ON THE PLAN AND PUT INTO PLACE WHEN THE FORECAST FOR RAIN EXCEEDS 40% OR WHEN DIRECTED BY THE INSPECTOR OR EROSION CONTROL SPECIALIST.
11. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE SAND, DECOMPOSED GRANITE, AND/OR GRAVEL OR OTHER MATERIALS APPROVED BY THE INSPECTOR OR EROSION CONTROL SPECIALIST.
12. THE DOWNSTREAM STORM SYSTEM SHOULD BE INSPECTED TO VERIFY THAT THE SYSTEM IS CLEAR OF OBSTRUCTIONS AND FUNCTIONING PROPERLY.
13. AS PART OF THE EROSION CONTROL MEASURES, THE UNDERGROUND STORM DRAIN FACILITIES SHOULD BE INSTALLED COMPLETE AS SHOWN ON THESE PLANS.
14. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THESE PLANS IN THE FIELD, SUBJECT TO APPROVAL OF THE EROSION CONTROL SPECIALIST AND IN COMPLIANCE TO THE GENERAL PERMIT REQUIREMENTS.
15. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE NPDES (GENERAL PERMIT) AND INSTALLATION OF BMPs IS UNDER THE DIRECTION OF THE DISCHARGER'S EROSION CONTROL SPECIALIST.
16. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES IN COMPLIANCE WITH THE NPDES (GENERAL PERMIT) AND INSTALLATION OF BMPs IS UNDER THE DIRECTION OF THE DISCHARGER'S EROSION CONTROL SPECIALIST.
17. CONSTRUCTION OPERATION - DUST SHALL BE CONTROLLED AT ALL TIMES. WASTEWATER GENERATED DURING CONSTRUCTION SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THIS INCLUDES WASTE FROM PAINTING, SAWCUTTING, CONCRETE WORK, ETC. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO ELIMINATE DISCHARGES TO THE STORM DRAIN SYSTEM AND, IF NECESSARY, PROVIDE AN AREA FOR ON-SITE WASHING ACTIVITIES DURING CONSTRUCTION. MATERIALS THAT COULD CONTAMINATE STORM RUNOFF SHALL BE STORED IN AREAS THAT ARE DESIGNED TO PREVENT EXPOSURE TO RAINFALL AND TO NOT ALLOW STORM WATER TO RUN ONTO THE AREAS.



EROSION CONTROL PLAN

HINDU COMMUNITY and CULTURAL CENTER
1200 & 1232 ARROWHEAD AVENUE

LIVERMORE

ALAMEDA COUNTY

CALIFORNIA

JAMES E. DIGGINS R.C.E. 27818
RENEWAL DATE: 03/31/12

#	REVISIONS	DATE



DeBolt Civil Engineering
811 San Ramon Valley Boulevard
Danville, California 94526
Tel: 925/837-3780
Fax: 925/837-4378

Date: 12/01/10
Scale: 1" = 20'
By: JED / JJ
Job No.: 06309

C-6

ELECTROLIER NOTES:

- ALL MATERIAL AND WORKMANSHIP SHALL FULLY CONFORM WITH THE SPECIFICATIONS OF THE CITY OF LIVERMORE.
- ELECTROLIERS ARE TO BE LOCATED NO CLOSER THAN 3' FROM THE EDGE OF DRIVEWAYS OR 5' FROM HYDRANTS.
- IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO INSTALL UNDERGROUND SERVICE FROM THE ELECTROLIER TO P.G. & E. SERVICE BOX AND TERMINATE CONDUIT AND WIRE IN BOX AS DIRECTED BY P.G. & E.
- CONDUIT AND FITTINGS SHALL BE U.L. APPROVED. CONDUIT BELOW GRADE SHALL BE MINIMUM 1-1/2" SCHEDULE 40 P.V.C. U.O.N. MINIMUM RADIUS BENDS SHALL BE 18". (FOR CONDUIT DEPTH REFER TO CITY DETAILS).
- CABLE TO BE A.W.G. NUMBER 8, (OR LARGER AS NOTED) 7 - STRAND COPPER, TYPE THHN OR APPROVED EQUAL.
- CIRCUITS WITH THREE OR MORE ELECTROLIERS SHALL BE WIRED TO BALANCE THE LOAD. (SEE WIRING DIAGRAM.)
- JUNCTION BOXES SHALL MEET THE REQUIREMENTS FOR STATE NUMBER 3 1/2 PULL BOX WITH COVERS. COVERS TO BE MARKED, "STREET LIGHTING" AND SECURED WITH BRASS HOLD DOWN BOLTS.
- FUSE EACH POLE WITH WATER PROOF IN-LINE BREAK AWAY FUSE HOLDERS AND AT EACH ADJACENT JUNCTION BOX.
- ALL SPLICES SHALL BE MADE IN HANDHOLES OR JUNCTION BOXES ONLY. ALL SPLICES MUST BE PER CAL-TRANS SECTION 86.
- CONTRACTOR TO PLACE POLE NUMBERS ON ALL STREET LIGHT STANDARDS. ALL NUMBERS ARE TO BE IN ACCORDANCE WITH P.G. & E. & LOCAL STANDARDS.

SYMBOL LIST

- EXISTING ELECTROLIER
- PROPOSED CITY STANDARD ELECTROLIER PER CITY STANDARD DETAIL ST-14A & ST-14B
- #3 1/2 SPLICE BOX W/ GROUND ROD & FUSE KIT
- #3 1/2 SPLICE BOX
- #XXXXX POLE NUMBER
- PROPOSED 1 1/2" PVC CONDUIT W/ 2 #8 CU & 1 #10 GND (UNLESS NOTED)
- FIRE HYDRANT (BY OTHERS)

TWO DAYS BEFORE YOU DIG
CALL USA TOLL FREE
811
CALL BEFORE YOU DIG

PUBLIC/PRIVATE LIGHTING: PUBLIC
 P.G. & E. RATE SCHEDULE: LS-2A
 INSTALL IN JOINT TRENCH: _____
 INSTALL IN SEPARATE TRENCH:
 CITY PERMIT REQUIRED:

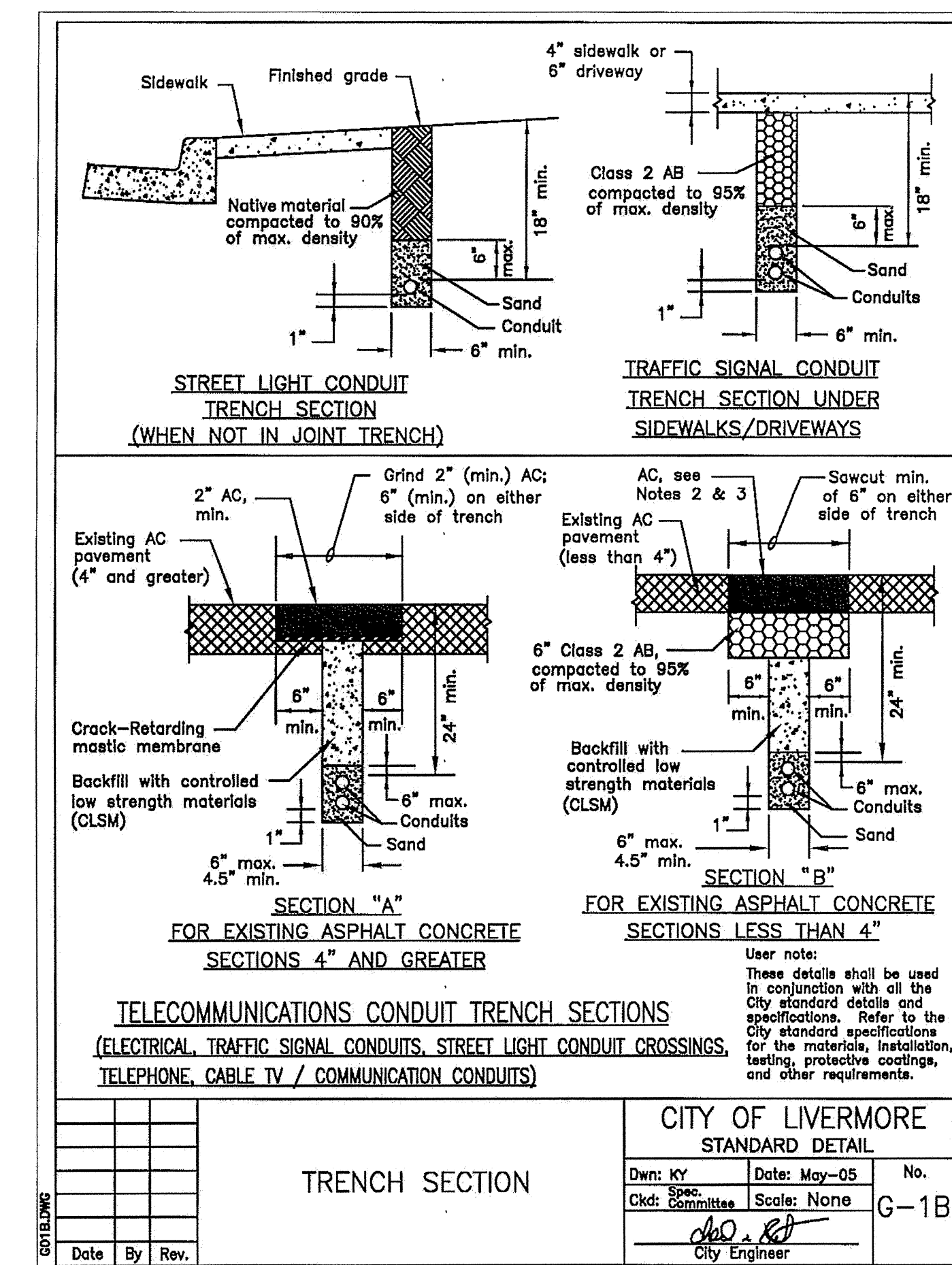
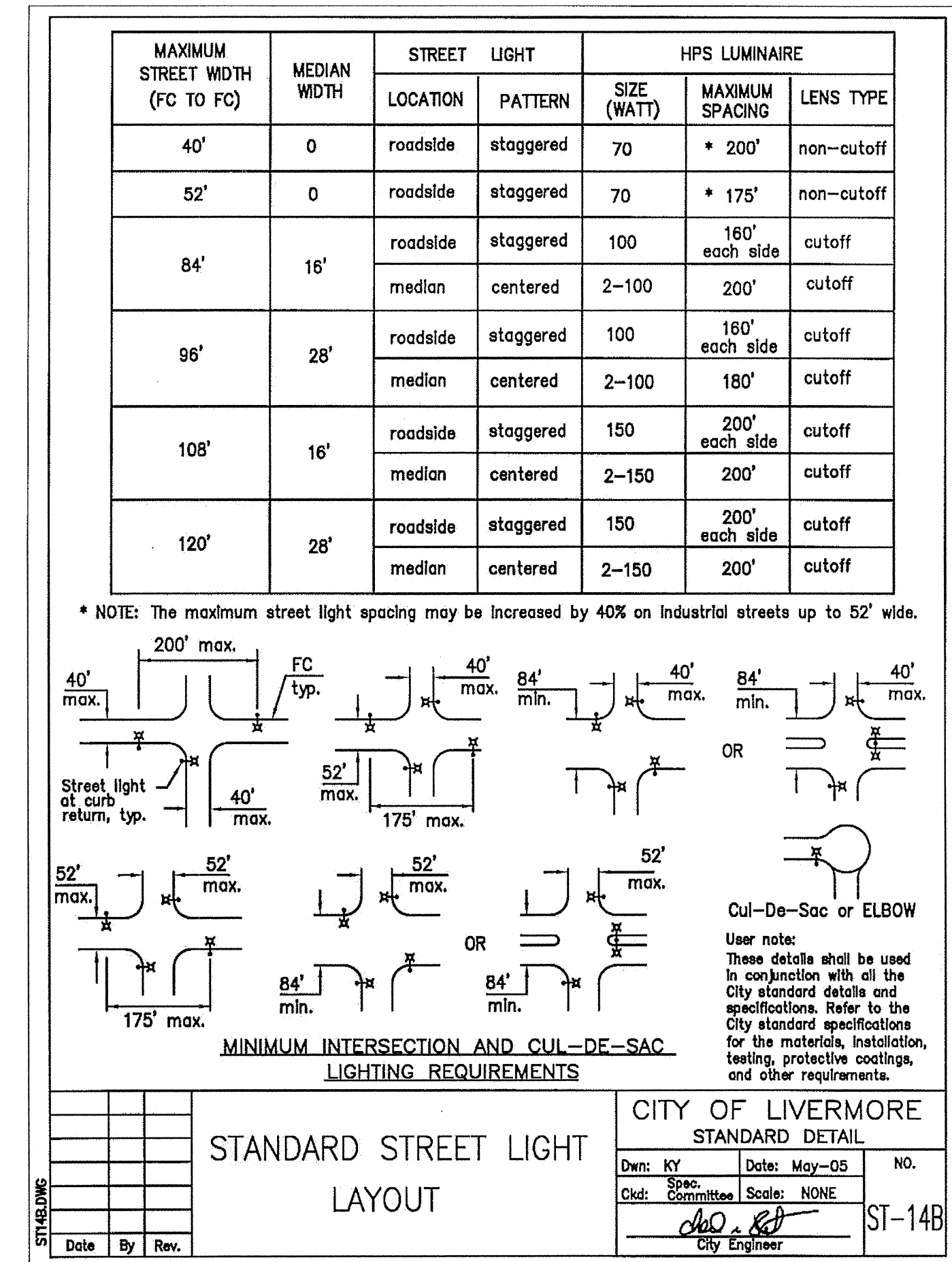
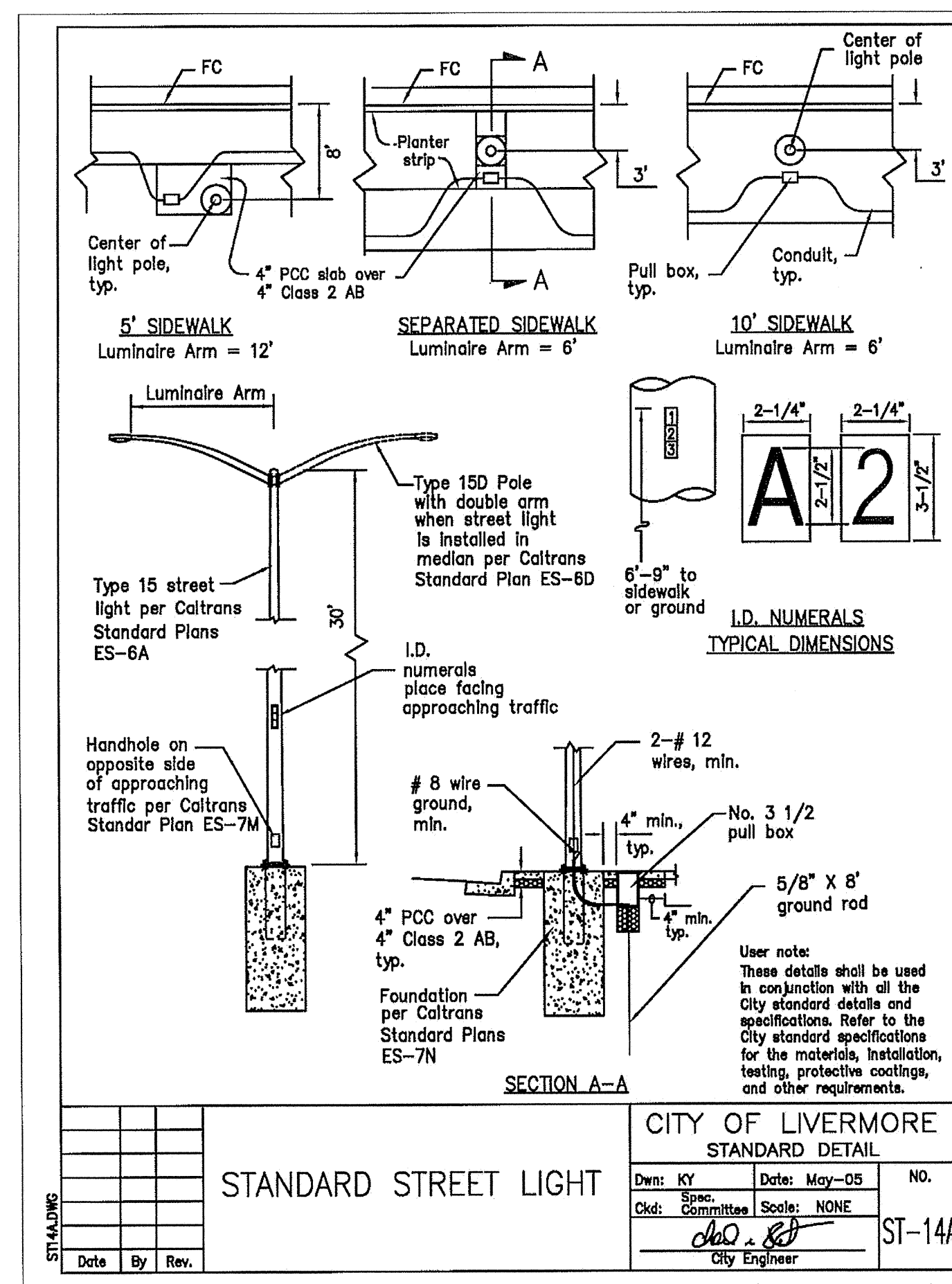
ELECTRICAL APPROVED BY:

 DARIN GOSSETT
 CIVIL ENGINEER
 LIC# 60203

DATE _____

LUMINAIRE SCHEDULE						
TYPE	LUMINAIRE	MTG. HT.	ARM	POLE HT.	MATERIAL	QUANTITY
COBRAHEAD	70W HPS 120V	33'-" \pm	12'-0"	30'-0"	GALV. STEEL	2

* NOTE: CONTRACTOR TO VERIFY ALL QUANTITIES AND SPECIFICATIONS PRIOR TO ORDERING.

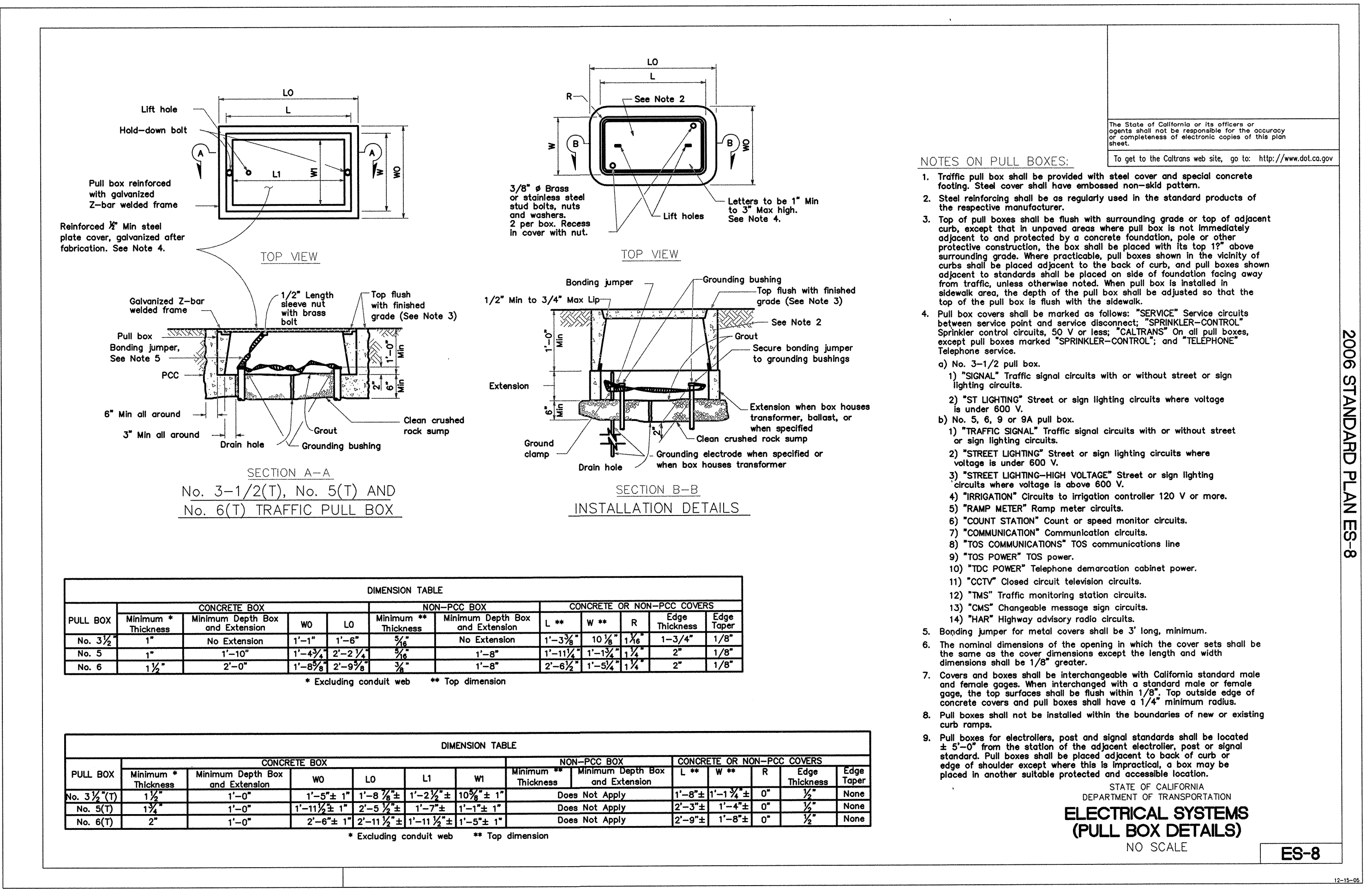
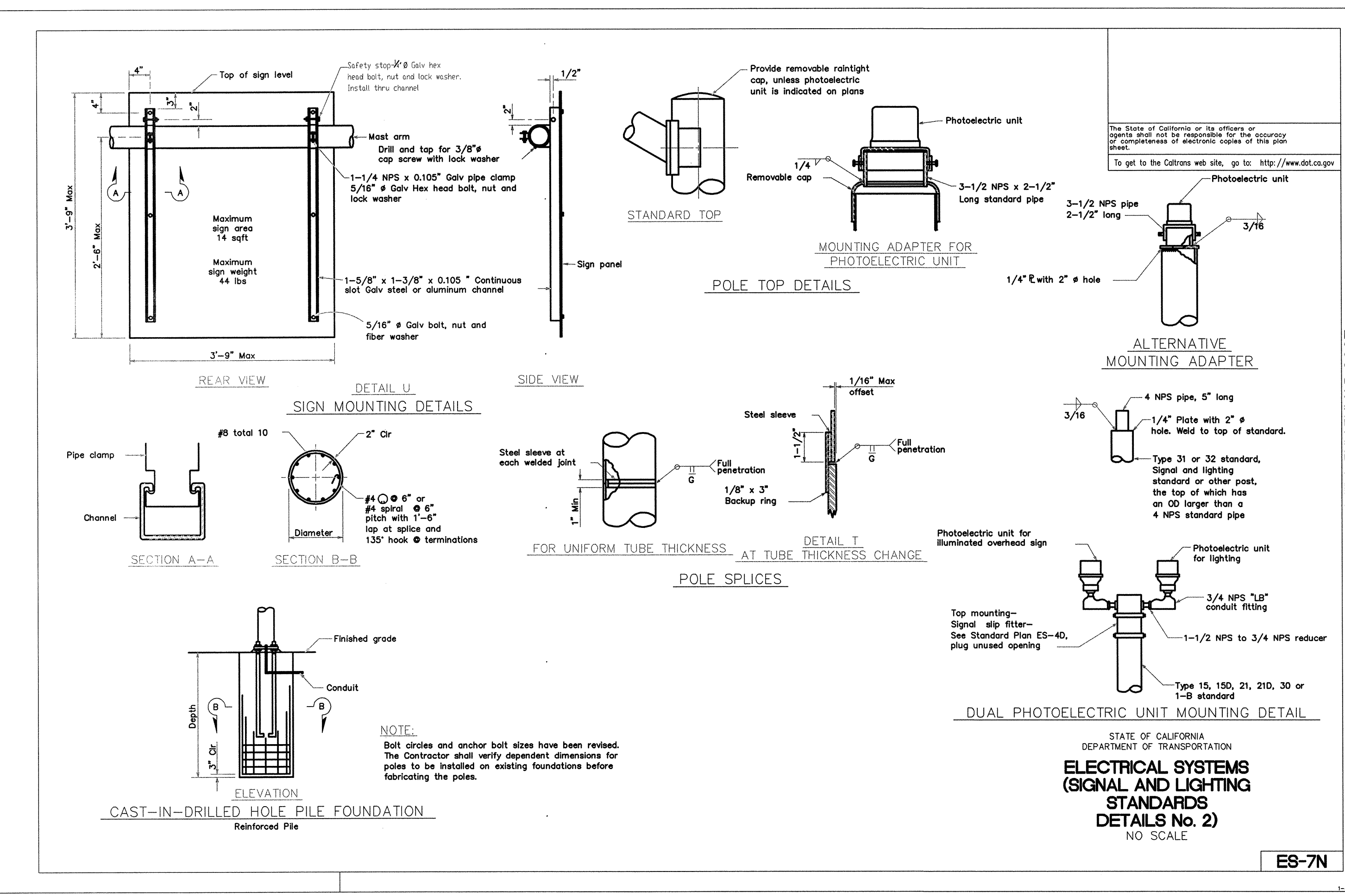
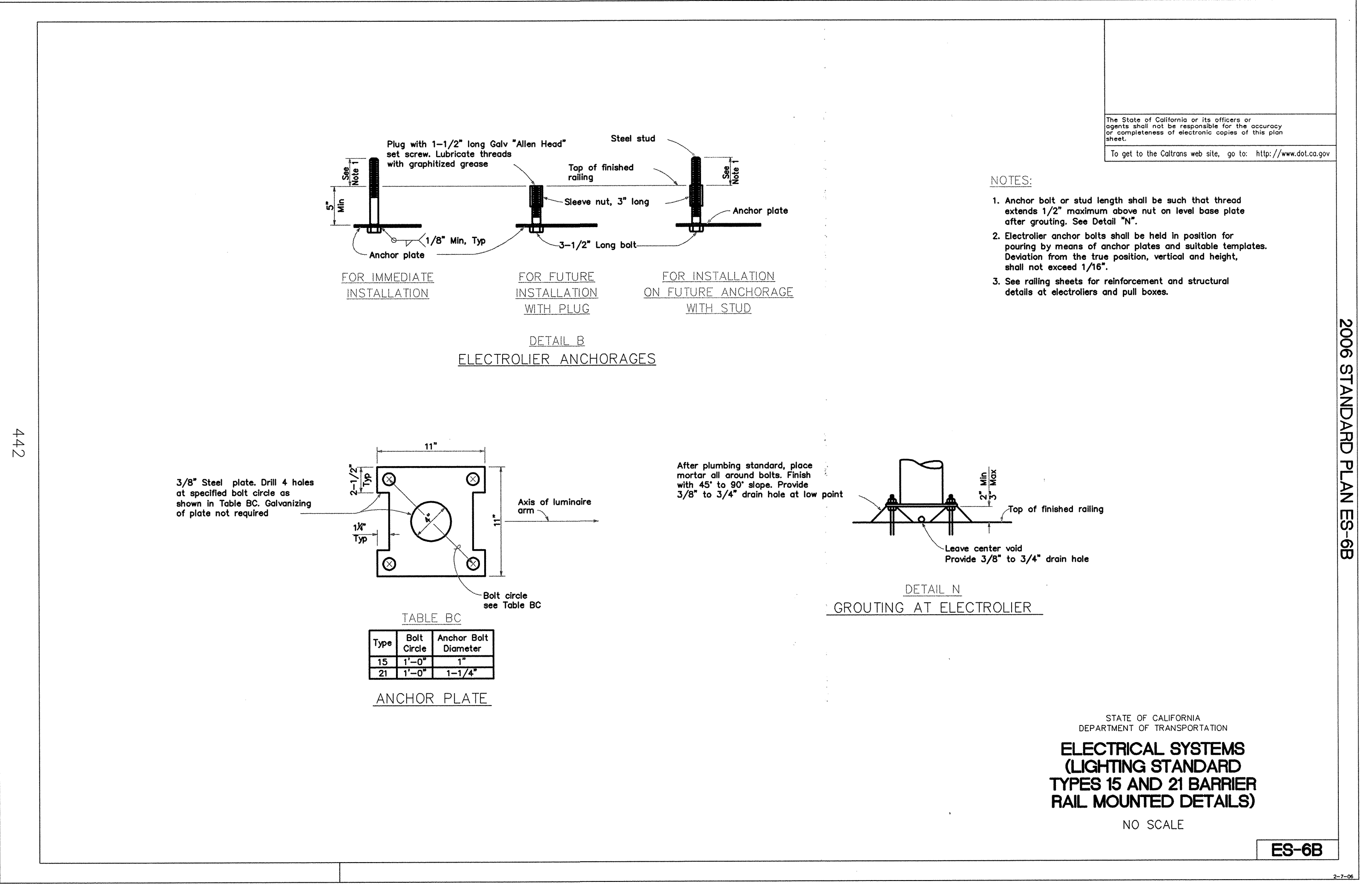
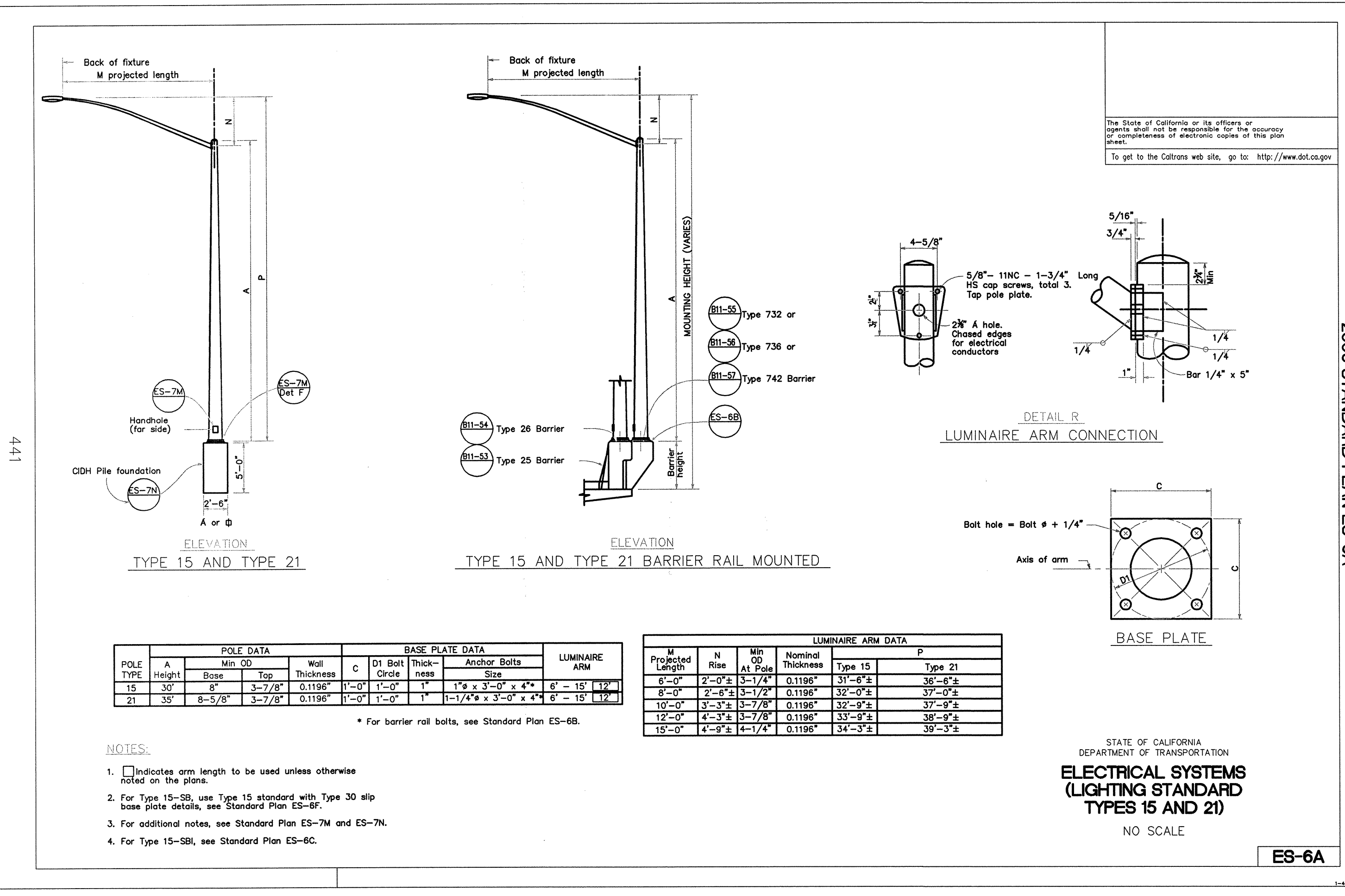


APPROVED	REVISIONS	DESCRIPTION	DATE	SYMBOL

GIACALONE
 UTILITY DESIGN + PLANNING
 5820 STONERIDGE MALL RD., SUITE 209
 PLEASANTON, CA 94588
 PHONE (925) 467-1740 - FAX (925) 467-1741

STREET LIGHTING COVER SHEET
 HINDU TEMPLE
 1200/1232 ARROWHEAD AVENUE
 LIVERMORE CALIFORNIA

PROJECT MANAGER: PG
 DRAWN BY: T.KAHHIKOLO
 CHECKED BY: PG
 SCALE: N.T.S.
 JOB NUMBER: 10-113
 DATE LAST MODIFIED: 12-01-10
SHEET SL1
 OF 3 SHEETS



APPROVED

REVISIONS

DESCRIPTION

DATE

SYMBOL

STANDARD PLAN ES-6A

STANDARD PLAN ES-6B

STANDARD PLAN ES-7N

STANDARD PLAN ES-8

STANDARD PLAN ES-6A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(LIGHTING STANDARD
TYPES 15 AND 21)
NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(LIGHTING STANDARD
TYPES 15 AND 21 BARRIER
RAIL MOUNTED DETAILS)
NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(SIGNAL AND LIGHTING
STANDARDS
DETAILS No. 2)
NO SCALE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS
(PULL BOX DETAILS)
NO SCALE

GIACALONE
UTILITY DESIGN + PLANNING
5820 STONERIDGE MALL RD., SUITE 209
PLEASANTON, CA 94588
PHONE (925) 467-1740 • FAX (925) 467-1741

STREET LIGHTING COVER SHEET

HINDU TEMPLE
1200/1232 ARROWHEAD AVENUE
LIVERMORE CALIFORNIA

PROJECT MANAGER:
PG

DRAWN BY:
T.KAHHIKOLO

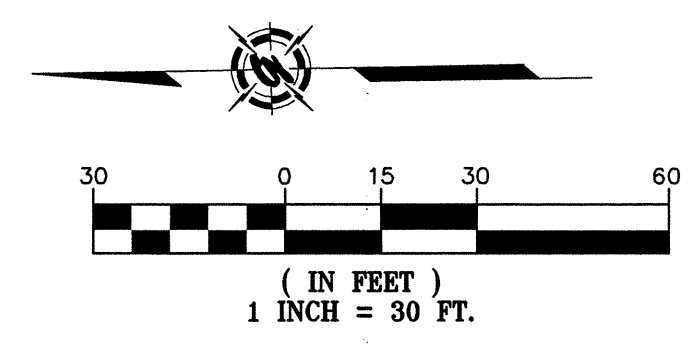
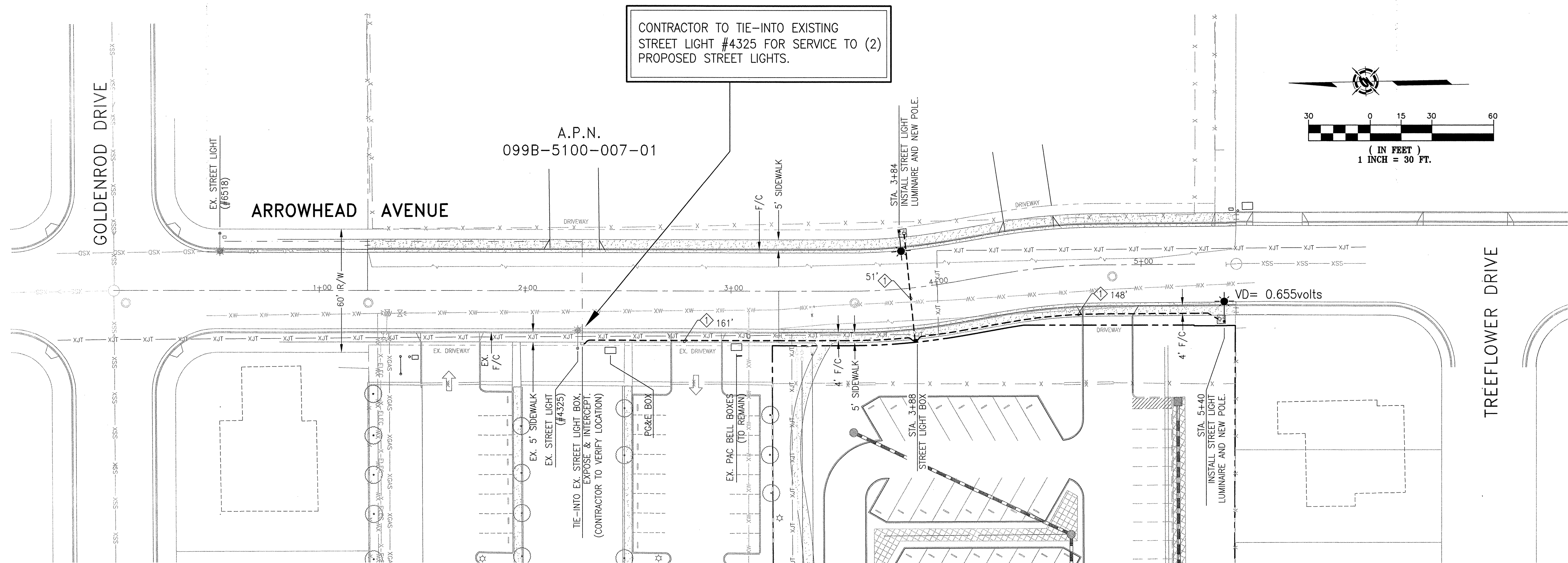
CHECKED BY:
PG

SCALE:
N.T.S.

JOB NUMBER:
10-113

DATE LAST MODIFIED:
12-01-10

SHEET
SL2
OF 3 SHEETS



CONTRACTOR TO TIE-INTO EXISTING STREET LIGHT #4325 FOR SERVICE TO (2) PROPOSED STREET LIGHTS.

A.P.N.
099B-5100-007-01

CITY TO PROVIDE EXISTING CIRCUITRY TO STREET LIGHT #4325 AT WHICH TIME A COMPLETE VOLTAGE DROP CALCULATION AND ACCURATE WIRE SIZING CAN BE COMPLETED.
ADDITIONAL LOAD TO EXISTING CIRCUIT:
FOOTAGE = 360'
WATTAGE = 140W
VOLTAGE = 120V

CALL BEFORE YOU DIG

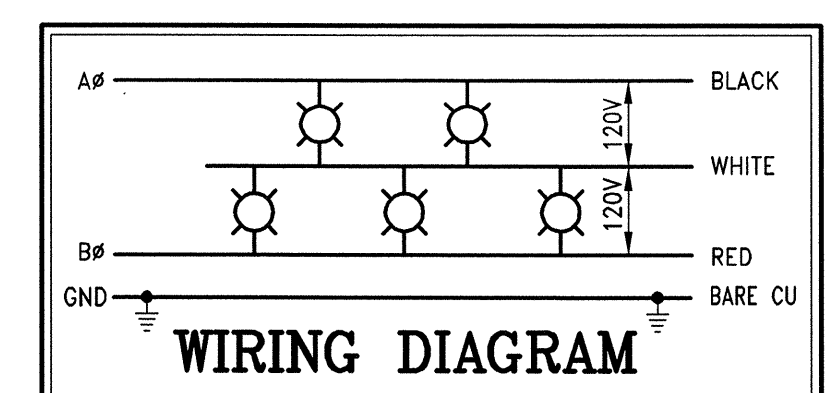
TWO DAYS BEFORE YOU DIG
CALL USA TOLL FREE
811

SYMBOL LIST

- EXISTING ELECTROLIER
- PROPOSED CITY STANDARD ELECTROLIER PER CITY STANDARD DETAIL ST-14A & ST-14B
- #3 1/2 SPLICE BOX W/ GROUND ROD & FUSE KIT
- #3 1/2 SPLICE BOX
- POLE NUMBER
- PROPOSED 1 1/2" PVC CONDUIT W/ 2 #8 CU & 1-#10 GND (UNLESS NOTED)
- FIRE HYDRANT (BY OTHERS)

CONDUCTOR AND CONDUIT SCHEDULE

AWG OR CABLE	RUN NUMBER	
	NUMBER OF CONDUCTORS	
#4		
#6	GND	
#8	2	1
#10	GND	
#12	GND	
CONDUIT SIZE	1.5"	



REVISIONS

SYMBOL	DATE	DESCRIPTION

GIACALONE
UTILITY DESIGN + PLANNING

5820 STONERIDGE WALL RD., SUITE 209
PLEASANTON, CA 94588
PHONE (925) 467-1740 • FAX (925) 467-1741

STREET LIGHTING PLAN

HINDU TEMPLE
1200/1252 ARROWHEAD AVENUE
LIVERMORE CALIFORNIA

PROJECT MANAGER:
PG

DRAWN BY:
T.KAHIHIKOLO

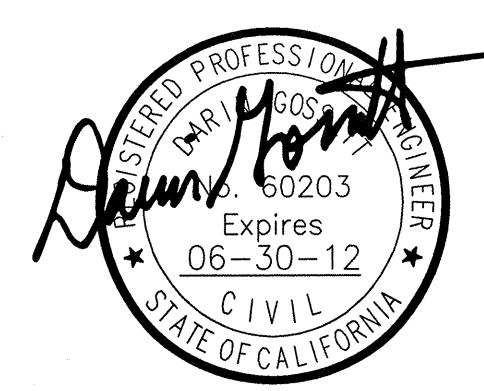
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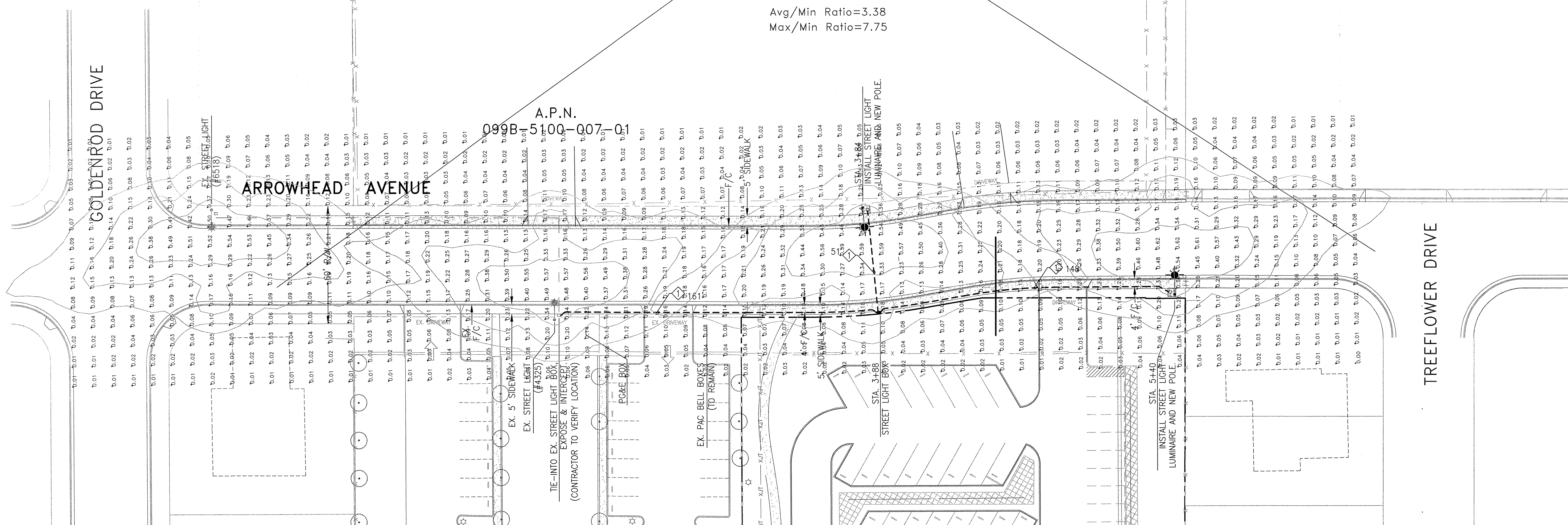
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1"=30'

JOB NUMBER:
10-113

DATE LAST MODIFIED:
12-01-10

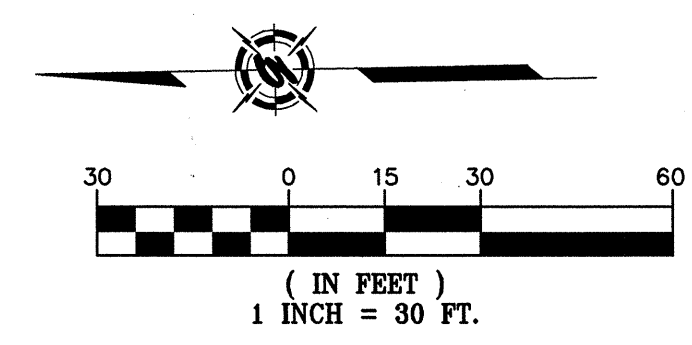
SHEET
SL3
OF 3 SHEETS





StatArea - ARROWHEAD AVE

Illuminance Values (Fc)
 Average = 0.27
 Maximum = 0.62
 Minimum = 0.08
 Avg/Min Ratio = 3.38
 Max/Min Ratio = 7.75



NOTE:
 Calculations have been performed according to IES standards and good practice. Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculate values.

Symbol	Qty	Label	Arrangement	Lumens	LLF	Description	Filename
☉	2	PROPOSED	SINGLE	6300	0.765	M2AR15S___AMN3_TYPE III 70W HPS 12' ARM @ 31.5' LC	GE177233.IES
☉	2	EXISTING	SINGLE	6300	0.702	M2AR15S___AMN3_TYPE III 70W HPS 6' ARM @ 31.5' LC	GE177233.IES

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CalcPts	Illuminance	Fc	0.13	0.62	0.00	N.A.	N.A.
StatArea - ARROWHEAD AVE	Illuminance	Fc	0.27	0.62	0.08	3.38	7.75

HINDU TEMPLE:
 CALCS BY: TIM KAHHIKOLO
 VOICE: (925) 467-1740 ext.306
 FAX: (925) 467-1741
 EMAIL: TIMK@DRYUTILITYDESIGN.COM

DATE: 11-23-10

AGI32 VERSION 2.04
 AGI (C) 2009 LIGHTING ANALYSTS, INC.
 10440 BRADFORD ROAD, UNIT A
 LITTLETON, COLORADO 80127

REVISIONS	DATE	DESCRIPTION

GIACALONE
 UTILITY DESIGN + PLANNING

5820 STONERIDGE WALL RD., SUITE 209
 PLEASANTON, CA 94588
 PHONE (925) 467-1740 • FAX (925) 467-1741

PHOTOMETRIC STUDY

HINDU TEMPLE
 1200/1232 ARROWHEAD AVENUE
 CALIFORNIA
 LIVERMORE

PROJECT MANAGER:
 PG

DRAWN BY:
 T.KAHHIKOLO

CHECKED BY:
 SCALE:
 1"=30'

JOB NUMBER:
 10-113

DATE LAST MODIFIED:
 12-01-10

SHEET
PM1
 OF 1 SHEETS