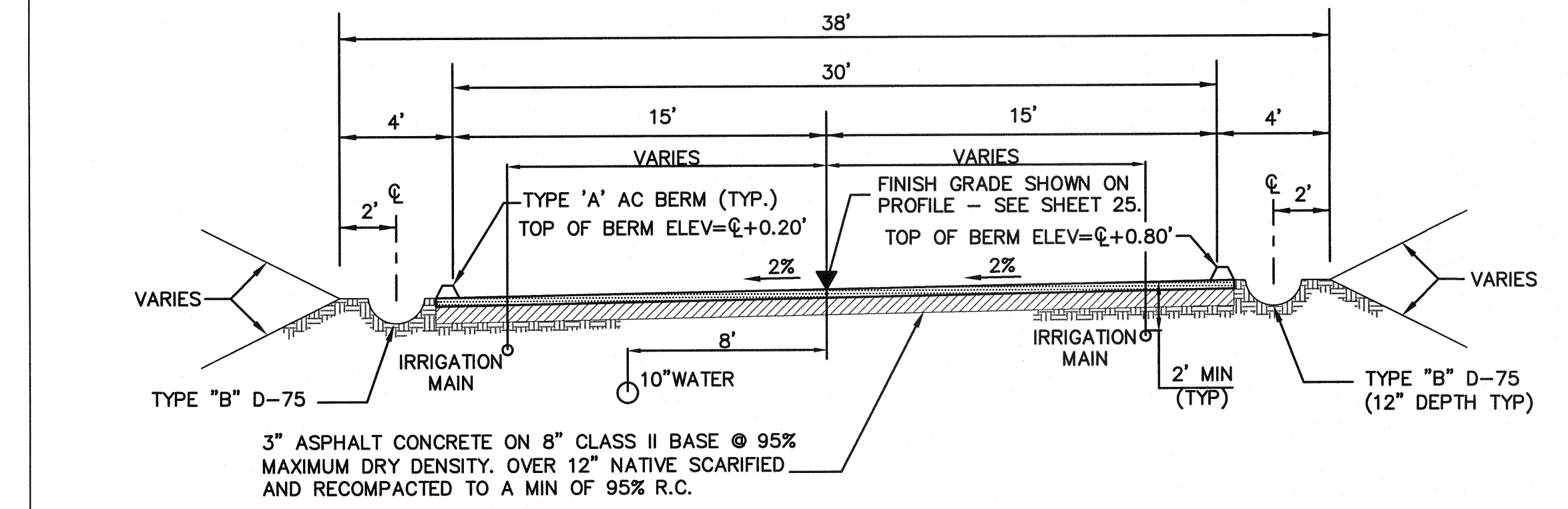
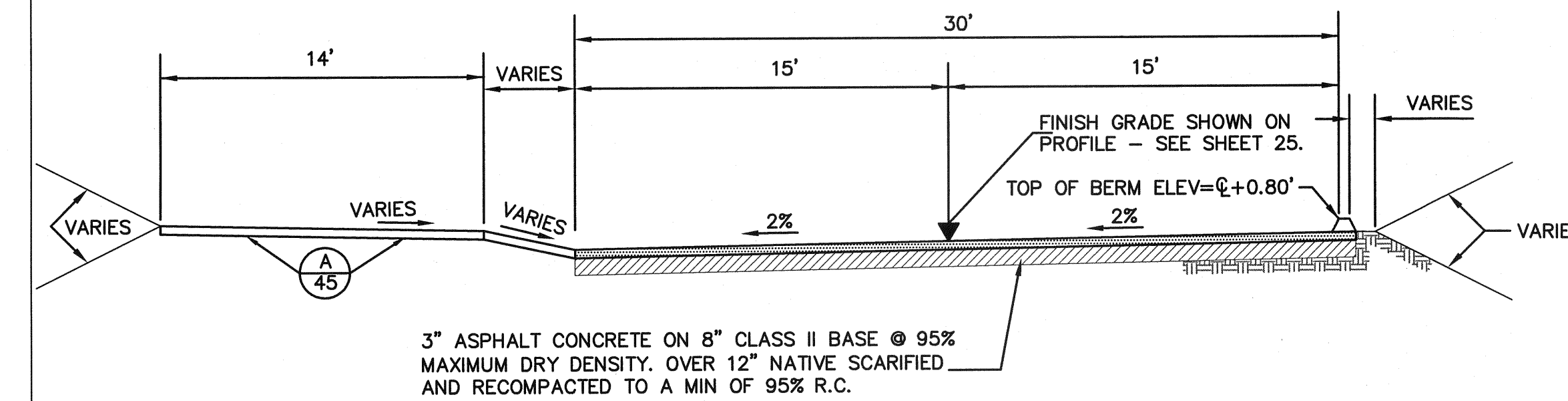


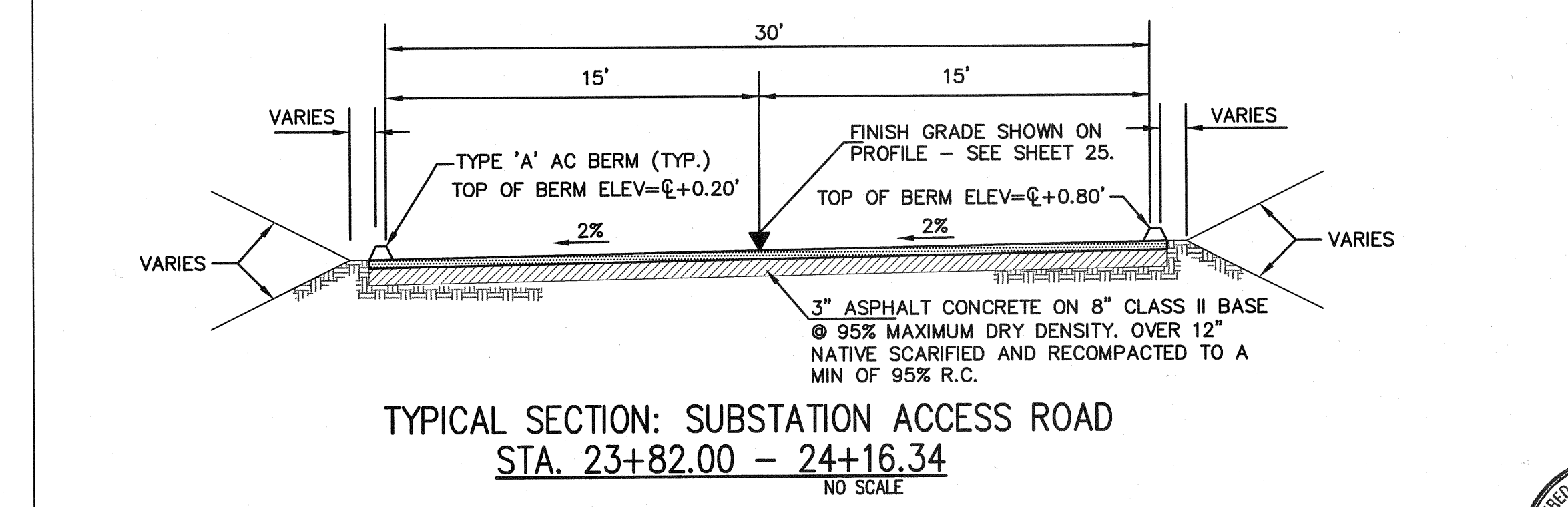
TYPICAL SECTION: SUBSTATION ACCESS ROAD
STA. 10+00.00 - 11+84.00
NO SCALE



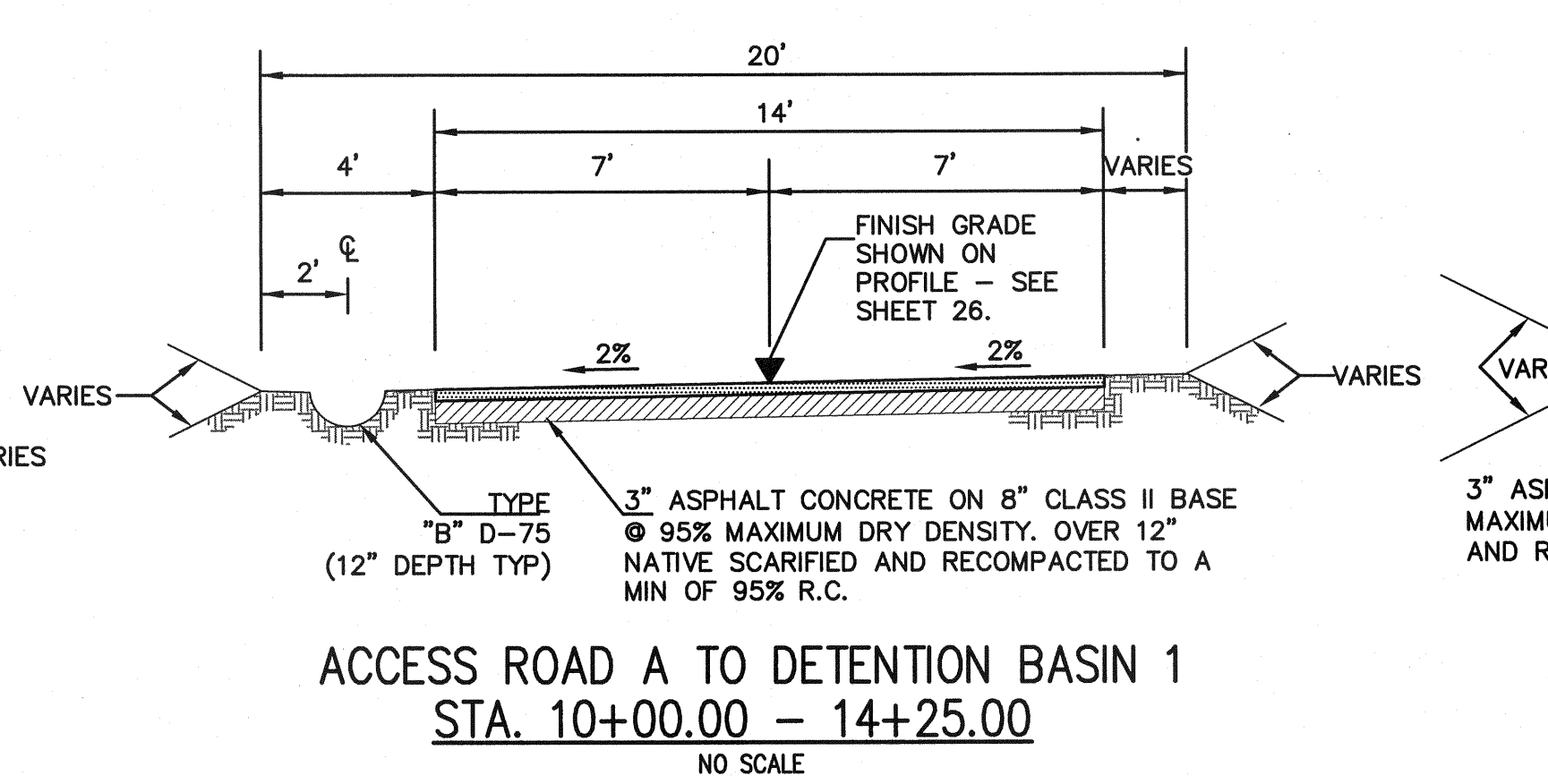
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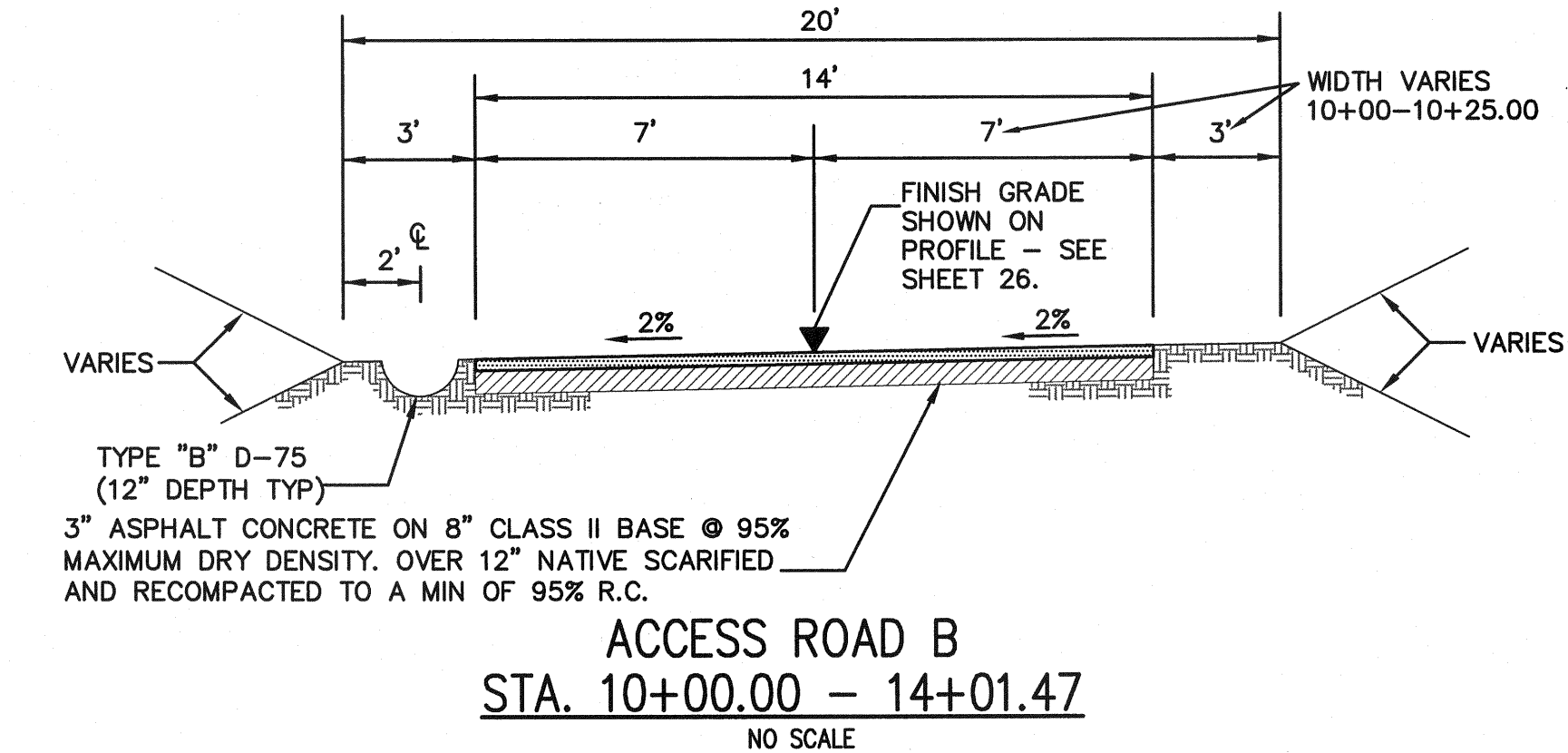
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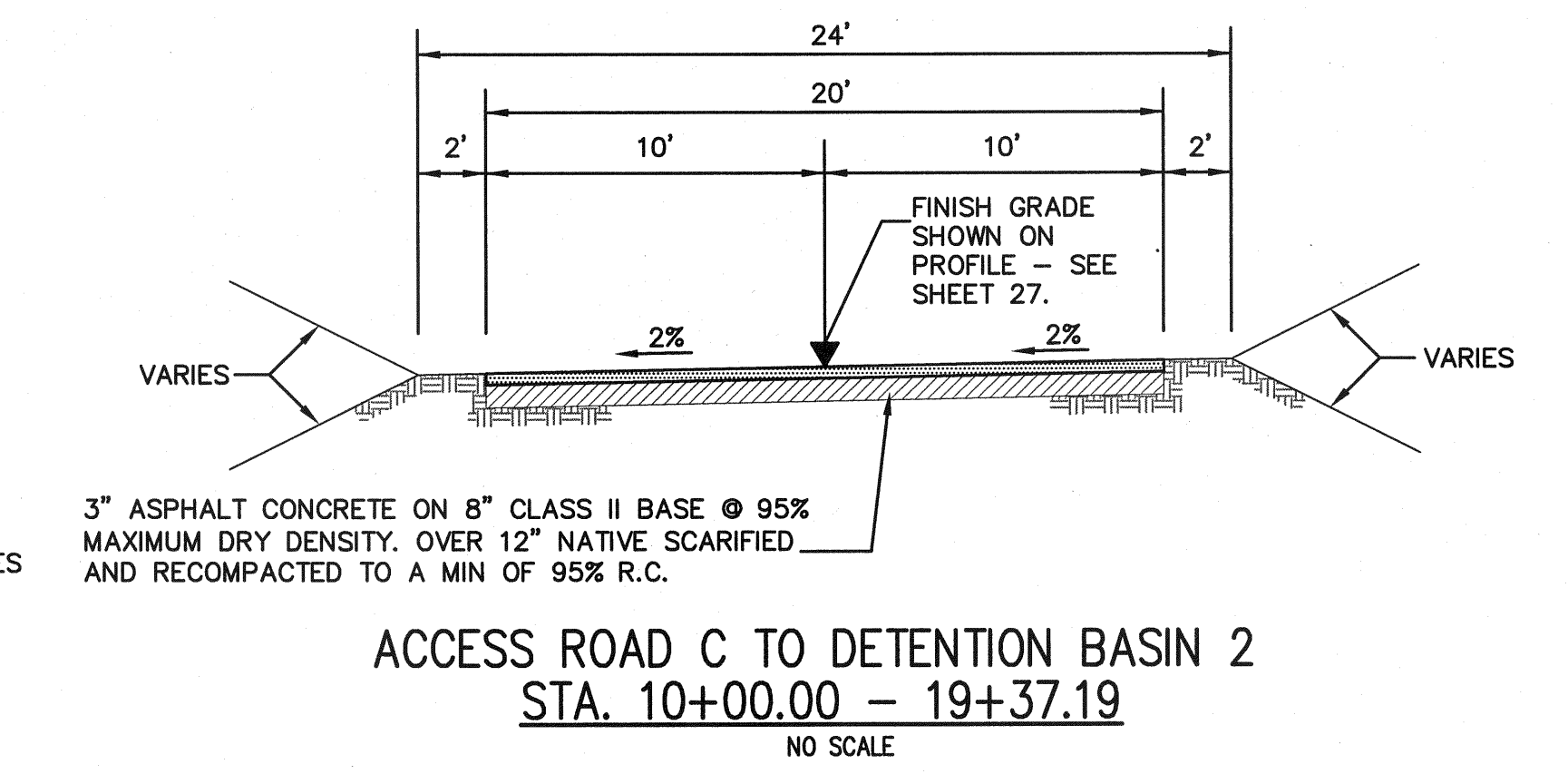
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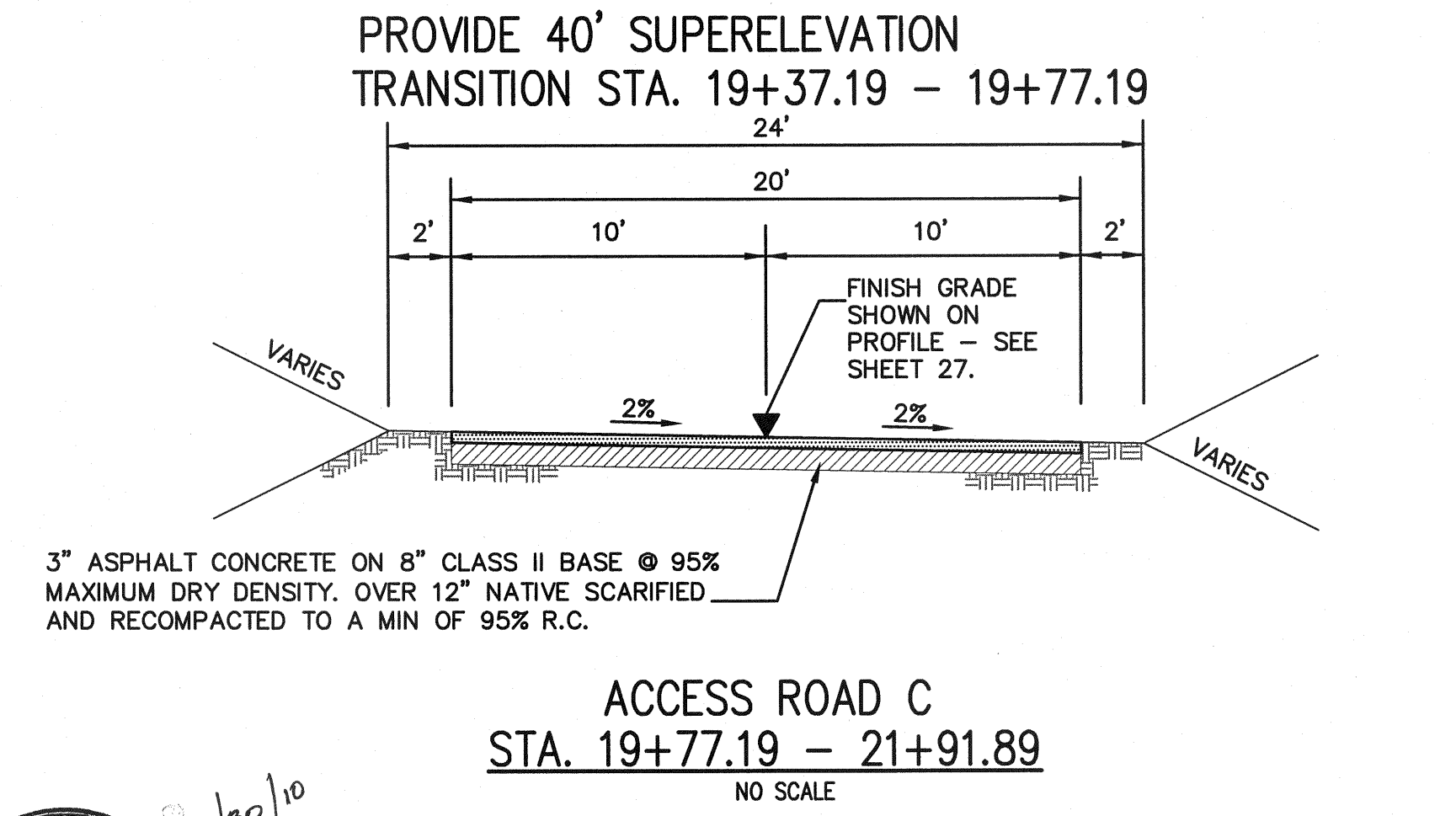
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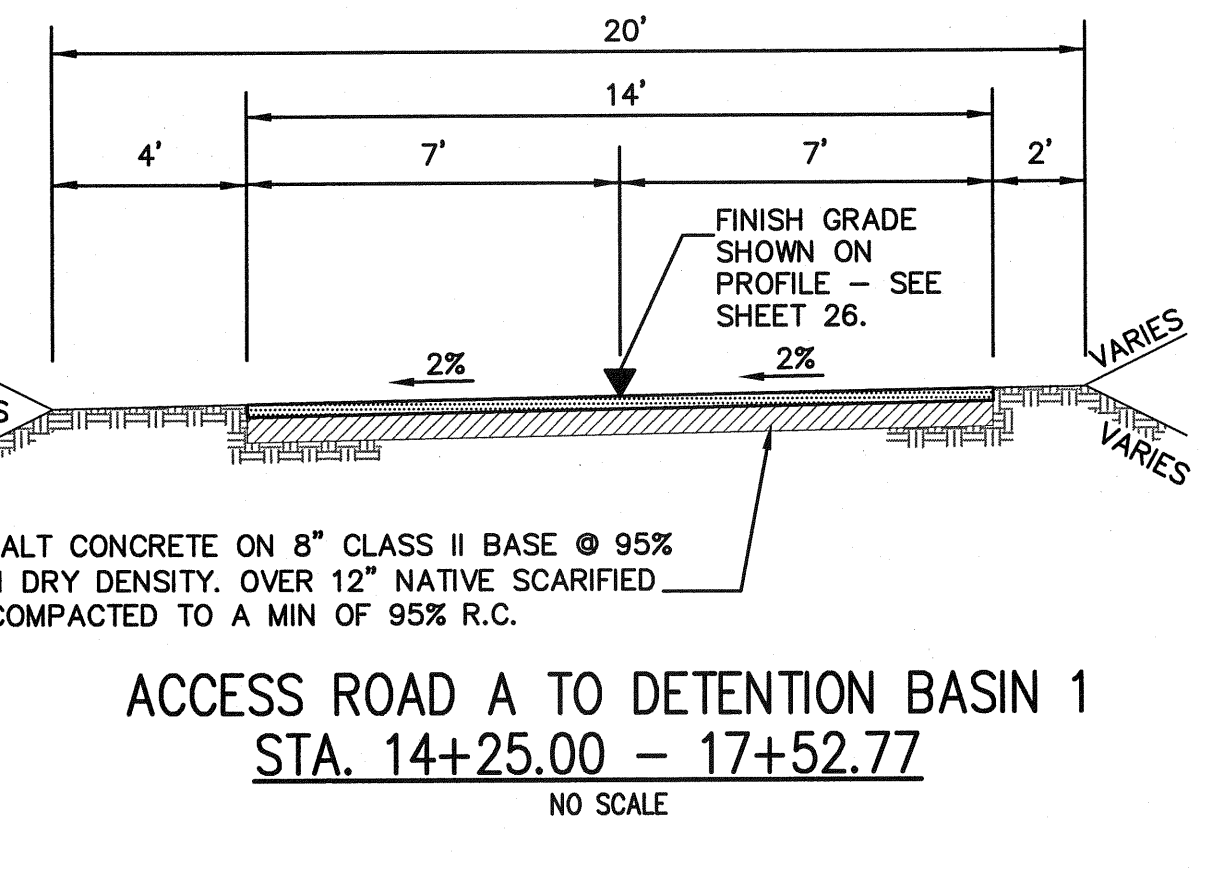
ACCESS ROAD B
STA. 10+00.00 - 14+01.47
NO SCALE



ACCESS ROAD C TO DETENTION BASIN 2
STA. 10+00.00 - 19+37.19
NO SCALE



ACCESS ROAD C
STA. 19+77.19 - 21+91.89
NO SCALE



ACCESS ROAD A TO DETENTION BASIN 1
STA. 14+25.00 - 17+52.77
NO SCALE

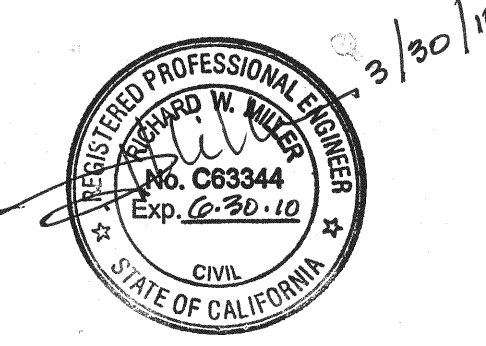
WATER NOTES

1. WATER WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS AND MATERIALS AS SPECIFIED HEREIN AND WITHIN THE MOST RECENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) WATER AGENCY STANDARDS AND ALL SUPPLEMENTS. CONTRACTOR SHALL HAVE A COPY OF THE STANDARD SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
2. CONTRACTOR SHALL COORDINATE WITH OWNER ALL ARRANGEMENTS FOR HIGH-LINING TEMPORARY SERVICES PRIOR TO SHUTDOWNS.
3. CONTRACTOR SHALL REVIEW ALL PROPOSED TRENCH WORK WITH CAL/OSHA. A COPY OF EXEMPTION LETTER OR TRENCHING PERMIT, IF REQUIRED, SHALL BE SUBMITTED TO THE CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL PER THE SPECIFICATIONS, THE APPROPRIATE BURIED UTILITY WARNING, AND IDENTIFICATION TAPE ABOVE ALL WATER LINES, INCLUDING WATER LATERALS.
5. AUTOMATIC AIR RELEASE VALVES SHALL BE INSTALLED AT ALL HIGH POINTS AND BLOW-OFFS AT ALL LOW POINTS IN THE WATER MAIN PROFILE.
6. FILL AREAS MUST BE COMPACTED TO MINIMUM 90% (PERCENT) RELATIVE COMPACTION PRIOR TO PIPE INSTALLATION.
7. PIPELINES SHALL BE CONSTRUCTED WITH A MINIMUM 3.0 FOOT COVER, AND AS SHOWN IN THE DRAWINGS.
8. CONTRACTOR SHALL REMOVE ANY ABANDONED PIPE IN CONFLICT WITH THE PROPOSED PIPELINE OR WITHIN PIPE TRENCH WIDTH. ALL SECTIONS OF ABANDONED PIPE SHALL BE SEALED BY EITHER WELDING A CAP OR POURING A CONCRETE PLUG ON EACH END OF THE PIPE.
9. CONTRACTOR SHALL LOCATE THE EXISTING PIPELINES AND CONFIRM THE CONNECTION LOCATIONS PRIOR TO ORDERING THE MATERIALS. THE CONTRACTOR SHALL CUT AND REPLACE ANY DAMAGED PIPE WITH NEW PIPE AT ALL CONNECTION LOCATIONS.
10. THE WATER SYSTEM SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE PROCEDURES IN THE SPECIFICATIONS.
11. PIPELINES AND APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH THE SPECIFICATIONS PRIOR TO TIE-IN OR CONNECTION TO EXISTING SYSTEM FACILITIES. BACTERIOLOGIC QUALITY TEST RESULTS SHALL CONFORM TO THE CRITERIA SPECIFIED IN THAT SPECIFICATION.
12. CONTRACT RECORD DRAWINGS MUST BE SUBMITTED PRIOR TO FINAL ACCEPTANCE OF WORK. THE PLANS MUST PROVIDE POST CONSTRUCTION VERIFICATION OF THE LOCATION AND ELEVATION OF PIPES AND APPURTENANCES.

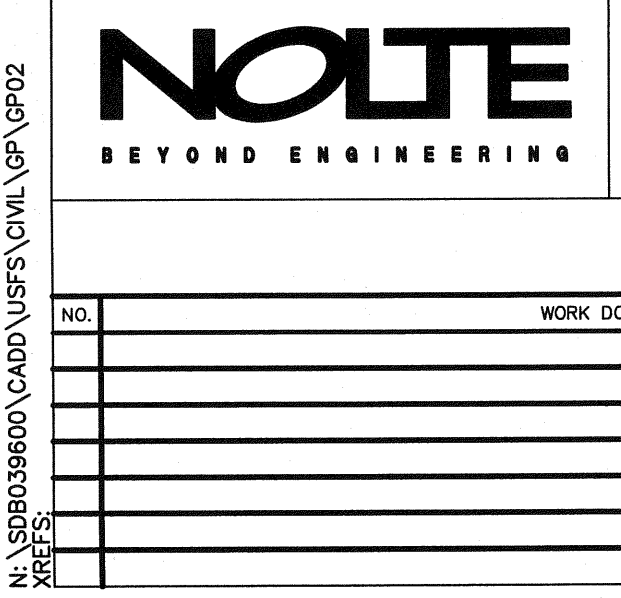
CONTRACTOR NOTES

- THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTION TO THE CONTRACTOR BY THE ENGINEER OF WORK.
1. NEITHER THE OWNER, NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, MOISTURE CONDITION AND COMPACT ALL FILL IN STRICT ACCORDANCE WITH SDG&E'S SPECIFICATIONS. A GEOTECHNICAL ENGINEER SHALL BE THE OWNER'S REPRESENTATIVE TO OBSERVE THE CONSTRUCTION OF FILL. THE EXCAVATION AND THE PLACEMENT OF FILL SHALL BE UNDER THE DIRECT OBSERVATION OF THE GEOTECHNICAL ENGINEER, AND HE SHALL GIVE WRITTEN NOTICE OF CONFORMANCE WITH THE SPECIFICATIONS UPON COMPLETION OF GRADING. DEVIATIONS FROM SDG&E'S SPECIFICATIONS WILL BE PERMITTED ONLY UPON WRITTEN AUTHORIZATION FROM THE GEOTECHNICAL ENGINEER.
 3. OBSERVATIONS AND COMPACTION TESTS SHALL BE MADE BY THE GEOTECHNICAL ENGINEER DURING THE FILLING AND COMPACTING OPERATIONS SO THAT HE CAN STATE HIS OPINION THAT THE FILL WAS CONSTRUCTED IN ACCORDANCE WITH SDG&E'S SPECIFICATIONS.
 4. DURING CONSTRUCTION: THE CONTRACTOR SHALL GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. THE CONTRACTOR SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISH WORK ON THE SITE. THE CONTRACTOR SHALL TAKE REMEDIAL MEASURES TO PREVENT EROSION OF FRESHLY GRADED AREAS, AND UNTIL SUCH TIME AS PERMANENT DRAINAGE AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
 5. AFTER GRADING IS COMPLETED AND THE GEOTECHNICAL ENGINEER HAS FINISHED HIS OBSERVATIONS OF THE WORK, NO FURTHER EXCAVATION OR FILLING SHALL BE DONE EXCEPT UNDER THE OBSERVATIONS OF THE GEOTECHNICAL ENGINEER.
 6. CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS REQUIRED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING OPERATIONS.
 7. CUT SLOPES SHALL BE SERRATED AND LEFT ROUGH. FILL SLOPES SHALL BE OVERLIFTED BY AT LEAST 3 FEET AND CUT BACK TO DESIRED SLOPE. FILL SLOPES SHALL BE TRACK WALKED AT LEAST TWICE OR MORE AS NEEDED TO ACHIEVE SATISFACTORY COMPACTION OF THE SLOPE FACE.
 8. WHERE TRENCHES ARE WITHIN EASEMENTS, STREETS, OR 10 FEET OF ANY BUILDING, SOILS REPORTS SHALL BE SUBMITTED TO THE ENGINEER OF WORK BY A QUALIFIED GEOTECHNICAL ENGINEER WHICH INDICATE THAT TRENCH BACKFILL WAS COMPACTED UNDER THE OBSERVATION AND TESTING OF THE GEOTECHNICAL ENGINEER AND IN ACCORDANCE WITH THE ABOVE NAMED SPECIFICATIONS.
 9. BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES WITH THE APPROPRIATE UTILITY COMPANY.
 10. CONTRACTOR SHALL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
 11. CONTRACTOR SHALL NOTIFY THE RESPECTIVE UTILITY COMPANIES PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES. BEFORE EXCAVATING, VERIFY LOCATION OF EXISTING ELECTRICAL, GAS, TELEPHONE, CATV AND ALL OTHER UTILITIES. CONTACT UNDERGROUND SERVICE ALERT AT (800) 422-4133.
 12. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED FROM A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHERS NOT ON RECORD OR NOT SHOWN ON THESE PLANS. ALL DAMAGES THERETO CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE APPROPRIATE SPECIFICATIONS AND STANDARDS AT THE EXPENSE OF THE CONTRACTOR.
 13. FILL AND CUT SLOPES ARE 2:1 HORIZONTAL TO VERTICAL UNLESS OTHERWISE NOTED.
 14. ALL ON SITE IMPROVEMENTS ARE PRIVATE. ALL TREES, BRUSH, GRASS, AND OTHER OBJECTIONABLE MATERIAL TO BE REMOVED, SHALL BE COLLECTED AND DISPOSED OF BY THE CONTRACTOR OFF THE SITE SO AS TO LEAVE THE AREAS THAT HAVE BEEN CLEARED WITH A NEAT AND FINISHED APPEARANCE AND FREE FROM UNSIGHTLY DEBRIS.
 15. THE ELEVATIONS SHOWN ON THE PLANS REPRESENT THE FINISH SURFACE ELEVATIONS OF ROADS, PAVEMENTS, FLOOR SLABS ON-GRADE, AND LANDSCAPED AREAS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL MAKE ALLOWANCES FOR THE THICKNESS OF PAVING MATERIALS, CONCRETE SLABS, AND TOPSOIL.
 16. GRADING SHALL BE DONE WITHIN A TOLERANCE OF (+/-)0.1' OF THE GRADES AND ELEVATIONS SHOWN ON THESE PLANS AND ALL SLOPES SHALL BE CONSTRUCTED WITHIN 0.5'(+/-) OF THE LOCATION SHOWN ON THESE PLANS. IN NO WAY SHALL THE ABOVE TOLERANCES RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING A FINISH THAT WILL NOT POND WATER.
 17. ANY QUANTITIES INDICATED ON THESE PLANS ARE ENGINEERS' ESTIMATES ONLY AND ARE NOT TO BE USED BY CONTRACTOR FOR BIDDING PURPOSES.
 18. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR BENCHMARKS WHICH WILL BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYOR'S ACT.
 19. GRADING AT FLOWLINES SHALL BE PERFORMED SUCH THAT A MINIMUM 0.7% SLOPE TO DRAIN IS CONSTRUCTED, AND SUCH THAT THE FLOW LINE ELEVATION AT ANY POINT IS WITHIN 0.1' OF DESIGN ELEVATION AS INTERPOLATED BETWEEN HIGH AND LOW POINTS SHOWN ON PLAN.

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.



REVISIONS



SAN DIEGO GAS & ELECTRIC COMPANY SAN DIEGO, CALIFORNIA	
SUNCREST SUBSTATION	
NOTES & TYPICAL ROAD SECTIONS	
DRAWN BY: MJ	DATE: 3/24/10
CHECKED BY: RWM	DATE: -
APPROVED BY: CR	DATE: -
CAD NO.: GP02	PLOT SCALE: 1=1
SCALE: AS NOTED	W.D.: -
REV.: 0	
SCR-C-002	

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