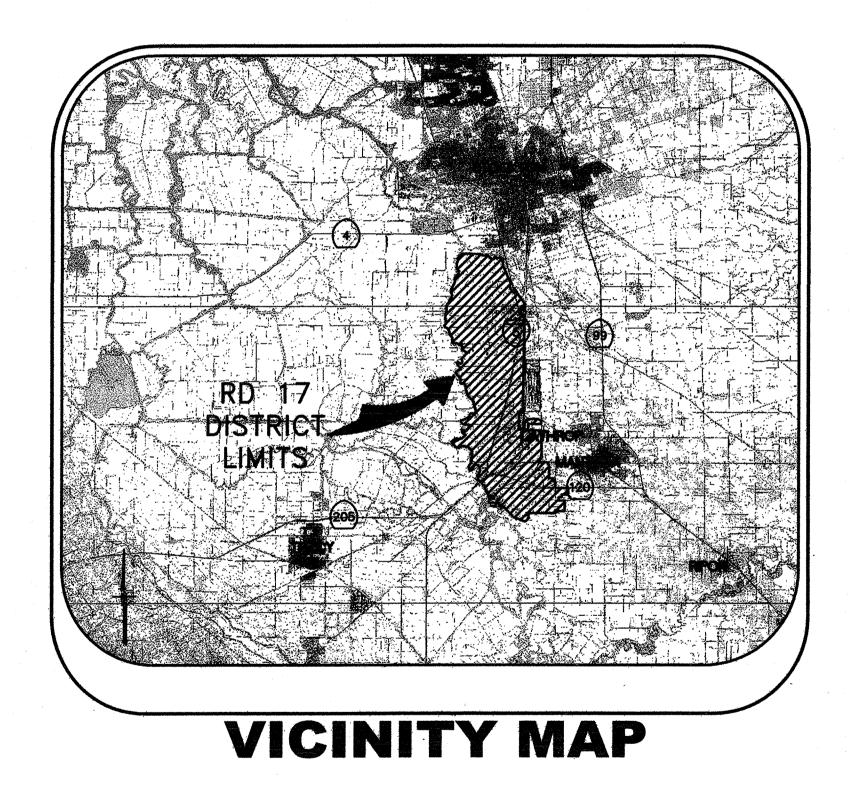
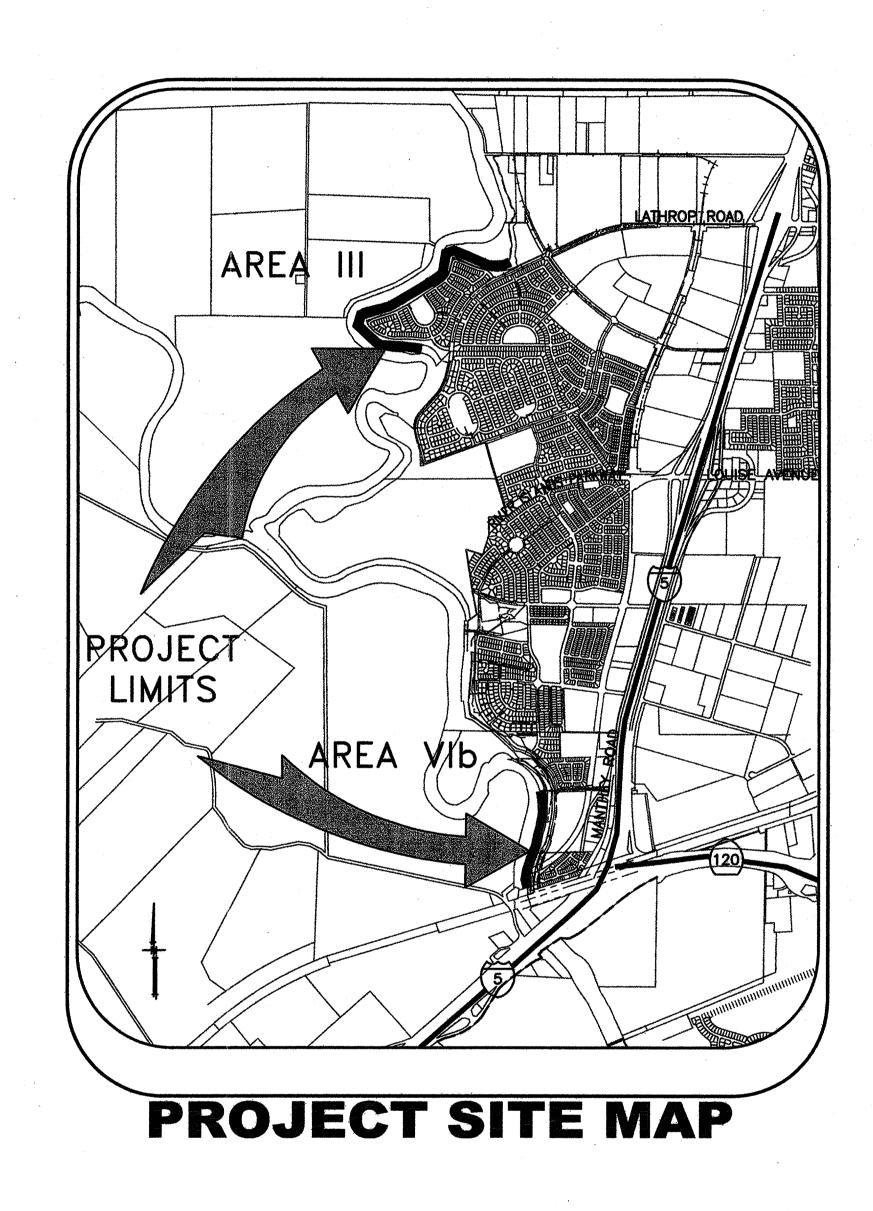
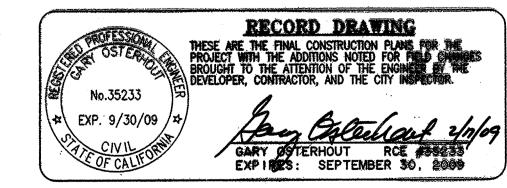
RECLAMATION DISTRICT NO. 17 LEVEE SEEPAGE PROJECT AREAS III AND VIb





SHEET	DESCRIPTION
1.	COVER SHEET
2.	STATIONING MAP / HAUL ROUTES
3.	NOTES & BORING LOCATIONS
4.	TYPICAL SECTIONS & DETAILS
5.	GRADING PLAN (AREA III)
6A	GRADING PLAN (AREA VIb)
7.	SELECTED CROSS SECTIONS FOR QUANTITIES (AREA III)
8.	SELECTED CROSS SECTIONS FOR QUANTITIES (AREA VIb)

INDEX



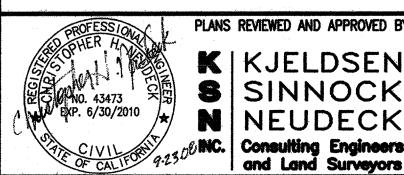
WARNING • CAUTION

EXISTING UNDERGROUND UTILITIES

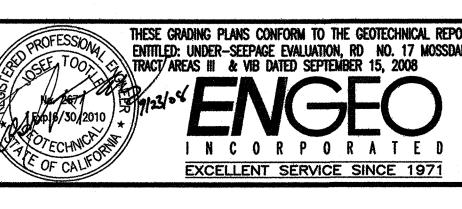
CONTACT: UNDERGROUND SERVICE ALERT

PHONE: (800) 642-2444

FOR MARKING PRIOR TO DIGGING



844 Avenue 01-0844 6-0268 6-0296 inc.com





RECLAMATION DISTRICT NO. 17
MOSSDALE TRACT
 COVER SHEET

			DATE: 9.22.2008	PROJECT NO
			SCALE: NOT TO SCALE	25126.03
			DRAWN BY: EJN	SHT 4
			DESIGNED BY: JSL	
1 No.	AS - BUILT REVISION	2/17/09 DATE	CHECKED BY: GO	or 8





K|KJELDSEN

SINNOCK
NEUDECK
Consulting Engineers and Land Surveyors

Post Office Box 844
711 N. Pershing Avenue
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail: KSN@ksninc.com





RECLAMATION DISTRICT NO. 17 MOSSDALE TRACT

STATIONING MAP / HAUL ROUTES CALIFORNIA SAN JOAQUIN COUNTY

I AS - BUILT

	DATE: 9.22.2008	PROJECT NO.
	SCALE: 1"=2000'	1 25126.03
	DRAWN BY: EJN	SHT ?
	DESIGNED BY: JSL	
7/09 DATE	CHECKED BY: GO	of 8

THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALL CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.

THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER

THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED"SURVEYS.

GENERAL NOTES:

- 1. PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE, AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRECONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR, AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT CONSTRUCTION.
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROADS. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS, UNLESS OTHERWISE APPROVED.
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. MAXIMUM SPEED LIMIT THROUGH AND ALONG TM TRACT 3526, QUEIROLO ROAD AND SADLER OAK DRIVE SHALL BE 20 MPH IN ORDER TO MINIMIZE DISTURBANCE TO LOCAL RESIDENTS AND TO MAINTAIN SAFETY IN AREAS WHERE LOCAL TRAFFIC AND THE PUBLIC MAY BE PRESENT. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE LOCATIONS AND ACCESS OF THE DESIGNATED PROJECT SITES WITH START AND STOP POINTS, AND WILL PROVIDE OFFSET SURVEY STAKES MARKED HORIZONTAL DISTANCE AND VERTICAL CUT/FILL TO TOE OF BERM AT 100' INTERVALS ALONG EACH OF THE PROJECT SITES TO BE UTILIZED BY THE CONTRACTOR FOR SETTING ELEVATIONS.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED IN NOTE 8 ABOVE.
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER. THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- 11. ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT, SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND/OR DEMOBILIZATION, LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED, EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS, DRAINAGE AND IRRIGATION DITCHES. AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS ARE TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT, TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

- 1. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER, OR OTHER MEANS AS NECESSARY. THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS.
- 2. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS. WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS, OIL, BITUMEN'S, CALCIUM CHLORIDE, AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

1. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CONDITIONS CLEAN AND FREE FROM RUBBISH AND DEBRIS.

DUST AND MUD CONTROL:

- 1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROADS, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES AND THE PROJECT SITE.
- a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS WHICH MIGHT DAMAGE CROPS.
- NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS, INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK FOR DUST CONTROL FOR EACH OF THE FOLLOWING AREAS:
- b. ACCESS AND HAUL ROADS LEVEE TOE BERM FILL AREAS
- d. OTHER CONSTRUCTION USE AREAS
- e. CROP DAMAGE PREVENTION f. RESIDENTIAL BUILDING AREAS

- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY—EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF

- 1. THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME CAUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.
- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM.

- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISIONS, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC CONTROL.
- THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED BY HIM IN A CLEAN AND ORDERLY CONDITION, DISPOSING OF REFUSE IN A MANNER SATISFACTORY TO THE ENGINEER.
- 2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL ACCESS ROADS, HAUL ROADS, AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

CONSTRUCTION NOTES: ACCESS ROADS:

- 1. THE CONTRACTOR SHALL IMPROVE, MAINTAIN. AND REPAIR UPON COMPLETION. THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE REPAIR
- 2. THE CONTRACTOR SHALL REVIEW THE ACCESS ROAD ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE ACCESS ROADS MAY REQUIRE MINOR MODIFICATIONS AND ALTERATIONS. THE ACCESS ROADS WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS. AND OTHER LOCAL TRAFFIC.
- 3. THE ACCESS ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD DRAINAGE REQUIREMENTS.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS. MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 5. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE ROADS AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- 7. THE HAUL ROADS MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING REMOVAL IF REQUIRED, IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE ACCESS ROADS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS.
- 9. CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE ROADS USED AT ALL TIMES DURING CONSTRUCTION.

CLEARING & GRUBBING:

- 1. UNLESS OTHERWISE INDICATED, THE WORK AREAS SHALL BE CLEARED AND GRUBBED BY THE
- 2. USE CAUTION WHILE CLEARING AND GRUBBING AROUND POWER LINES & BURIED ELECTRICAL
- 3. ALL MATERIAL CLEARED AND REMOVED SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR FOR REMOVAL AND DISPOSAL OFFSITE.
- 4. ALL AREAS WITHIN THE LIMITS TO RECEIVE THE IMPORT EMBANKMENT FILL MATERIAL SHALL BE
- 5. SOME PRUNING/TRIMMING/THINNING OF BRANCHES OR TREES MAY BE REQUIRED.

LEVEE SEEPAGE BERM FILL:

- 1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED FILL MATERIALS TO THE DESIGNATED SEEPAGE BERM SITES.
- 2. THE FILL SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE FILL AREAS PRIOR TO THE ACCEPTANCE OF THE
- 4. The contractor shall deliver the fill materials to the required sections as uniform MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- a. The fill materials shall be placed in loose horizontal layers not more than eight INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.

FINISHING AND SLOPING GRADING

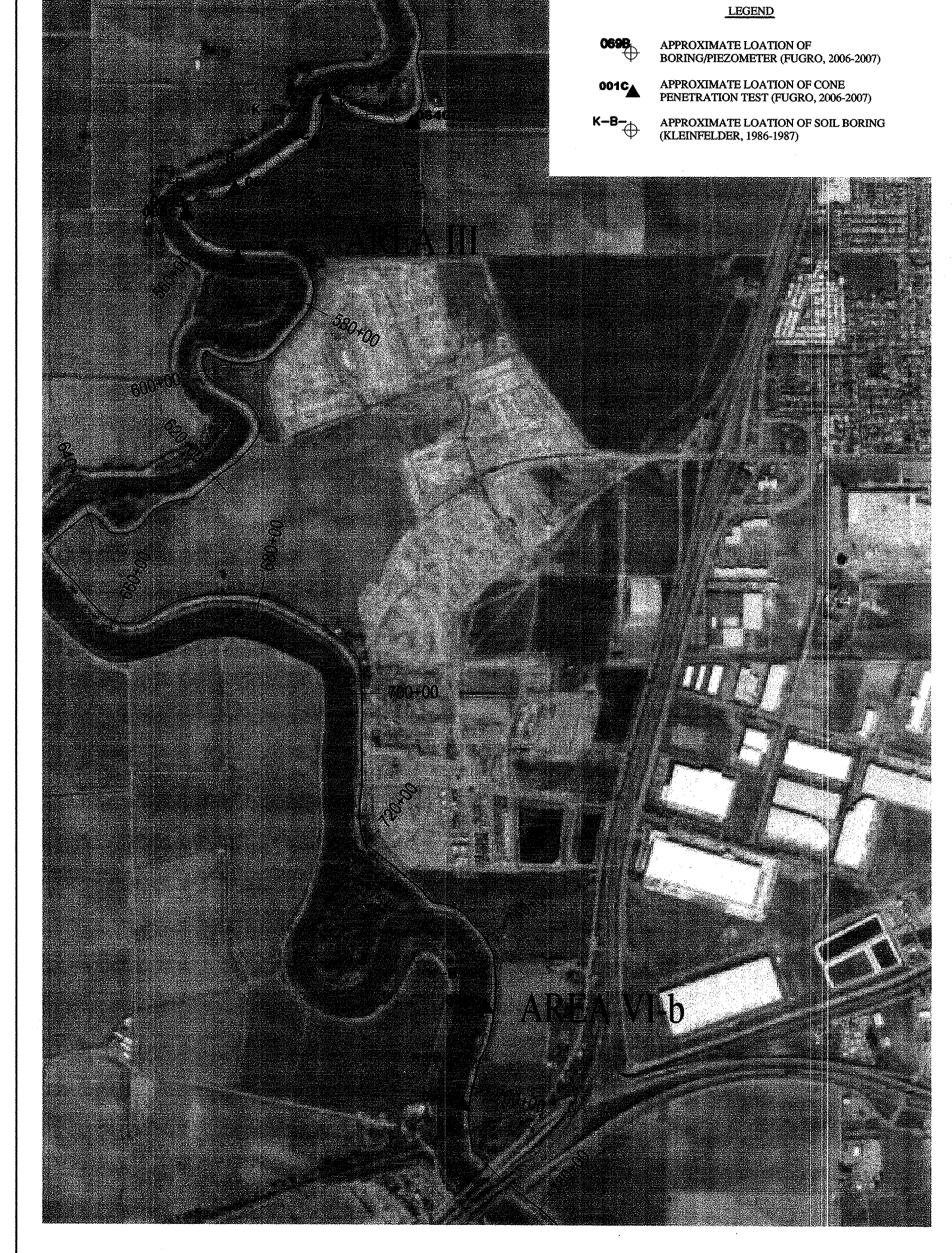
1. THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

COMPACTION EQUIPMENT:

1. COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS.

1. THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO, INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND EMBANKMENT FILL MATERIALS

- 1. GEOTEXTILE FABRIC SHALL BE CONTECH C70/06 WOVEN GEOTEXTILE OR AN APPROVED EQUAL.
- 2. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED FOR FILL BETWEEN THE TOE BERM FILL AND THE FILTER DRAIN ROCK MATERIAL.
- 3. MEASUREMENT AND PAYMENT WILL BE BY THE SQUARE FOOT (FT) NEAT AND BASED UPON THE FABRIC PLACED WITHIN THE DIMENSIONS AND LOCATIONS DESIGNATED AND ACCEPTED BY THE
- 4. MEASUREMENT OF THE FABRIC PLACED DOES NOT INCLUDE OVERLAPS AS REQUIRED.



BORING LOCATIONS SCALE 1":1250'

No.35233 IRES: SEPTEMBER 30. 2009

PLANS REVIEWED AND APPROVED BY:



711 N. Pershing Avenue Stockton, CA 95201-0844 Office: (209) 946-0268 Consulting Engineers Faxes: (209) 946-0296 Surveyors E-mail: KSN@ksninc.com

These grading plans conform to the geotechnical report ENTITLED: UNDER-SEEPAGE EVALUATION, RD NO, 17 MOSSDALI TRACT AREAS III & VIB DATED SEPTEMBER 15, 2008 EXCELLENT SERVICE SINCE 1971

LANS PREPARED UNDER THE DIRECTION OF: PLANNERS 5142 Franklin Drive, Suite B, Pleasanton, CA 94588 (925) 225-0690

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RECLAMATION DISTRICT NO. 17 MOSSDALE TRACT

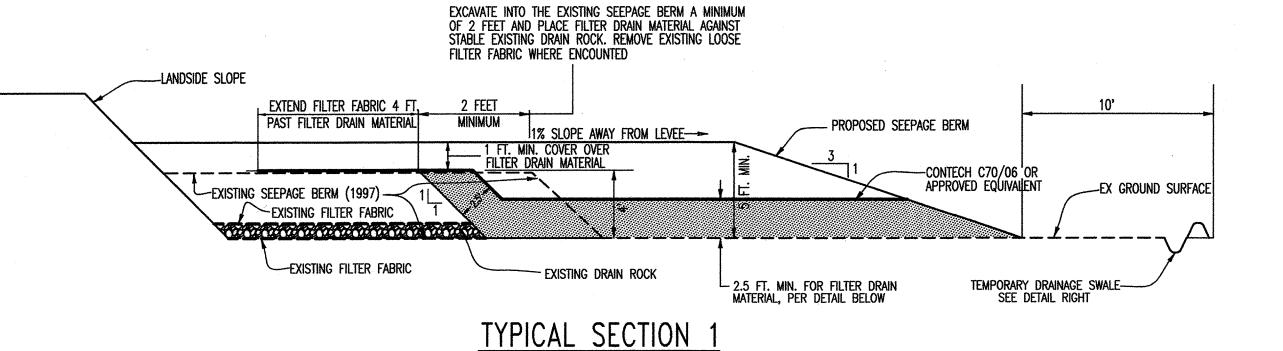
NOTES & BORING LOCATIONS

SAN JOAQUIN COUNTY

CALIFORNIA

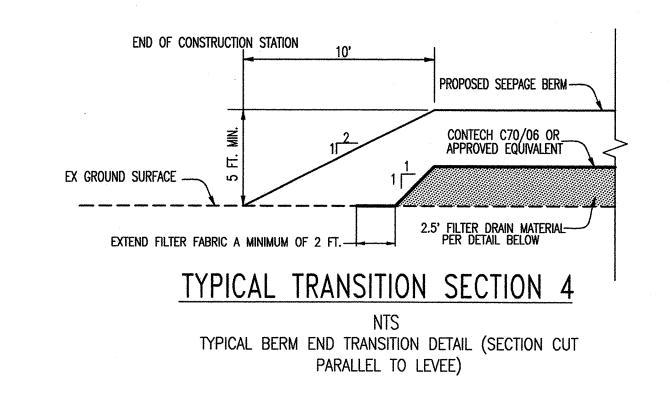
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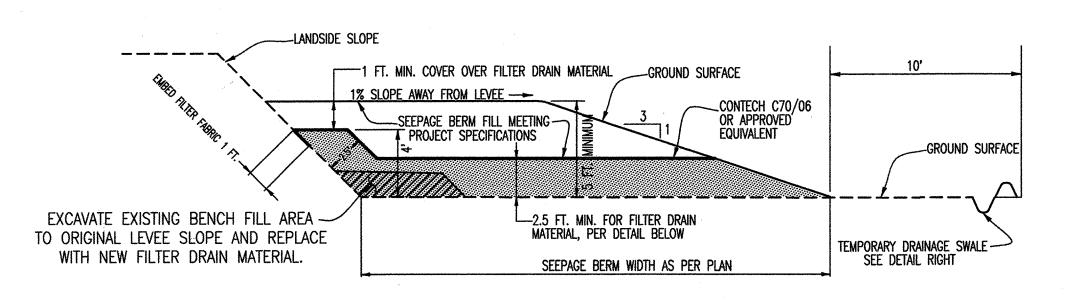
PROJECT NO. 9.22.2008 25126.03 DESIGNED BY: CHECKED BY:



TYPICAL CROSS SECTION FOR INSTALLING NEW SEEPAGE BERM OVER EXISTING SEEPAGE BERM

STATIONING 555+50± THRU 564+80± & 741+05± THRU 760+50±

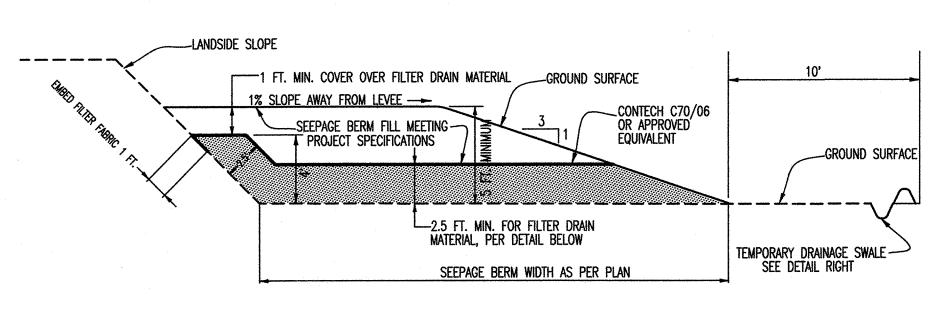




TYPICAL SECTION 2

TYPICAL CROSS SECTION FOR INSTALLING NEW SEEPAGE BERM AGAINST LANDSIDE OF THE LEVEE. (WHERE THERE IS AN EXISTING BENCH FILL OF UNKNOWN ORIGIN)

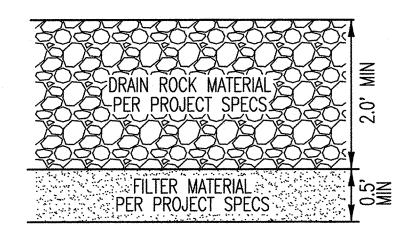
STATIONING 521+00± THRU 548+50±



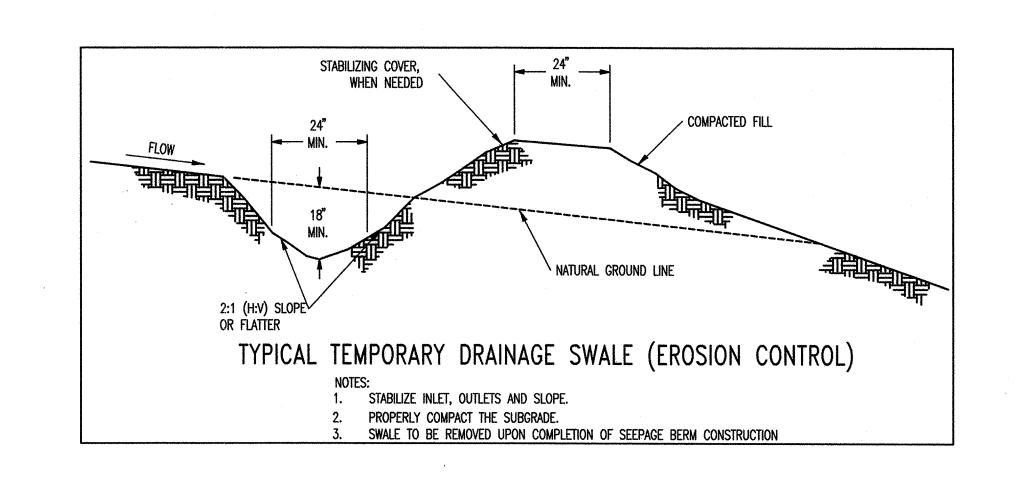
TYPICAL SECTION 3

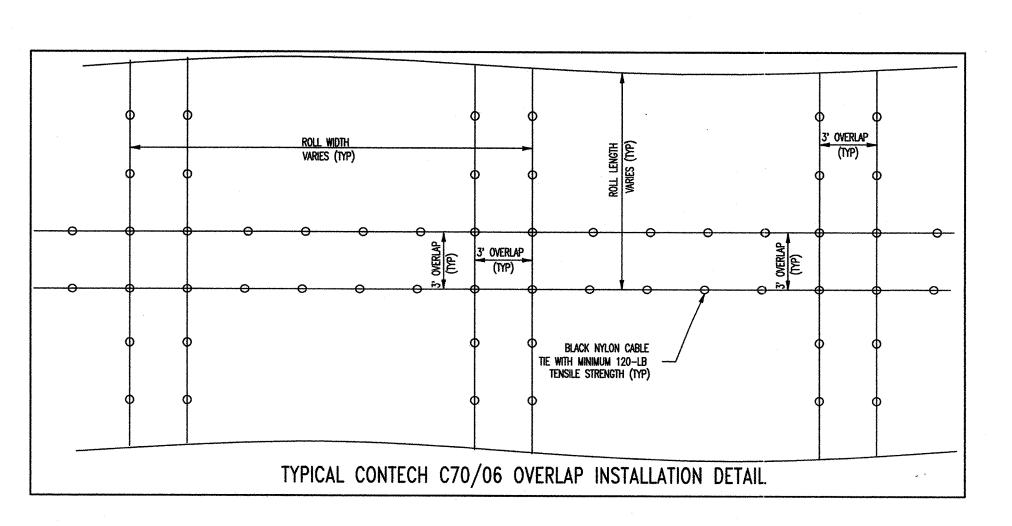
TYPICAL CROSS SECTION FOR INSTALLING NEW SEEPAGE BERM AGAINST LANDSIDE OF THE LEVEE. (WHERE THERE IS NOT AN EXISTING SEEPAGE BERM) (EXCLUDING GAPS AT PUMPS)

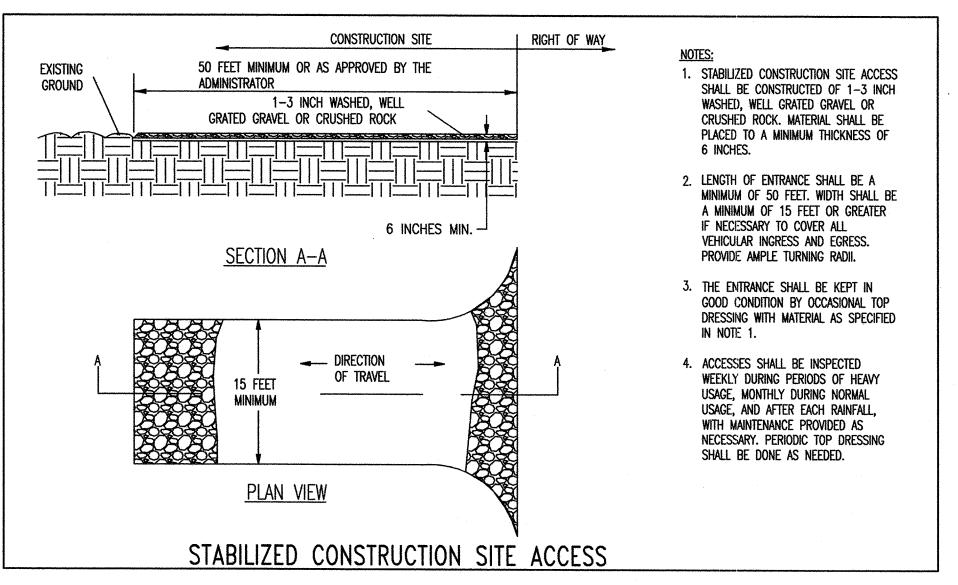
STATIONING 515+50 \pm THRU 521+00 \pm /564+80 \pm THRU 569+50 \pm

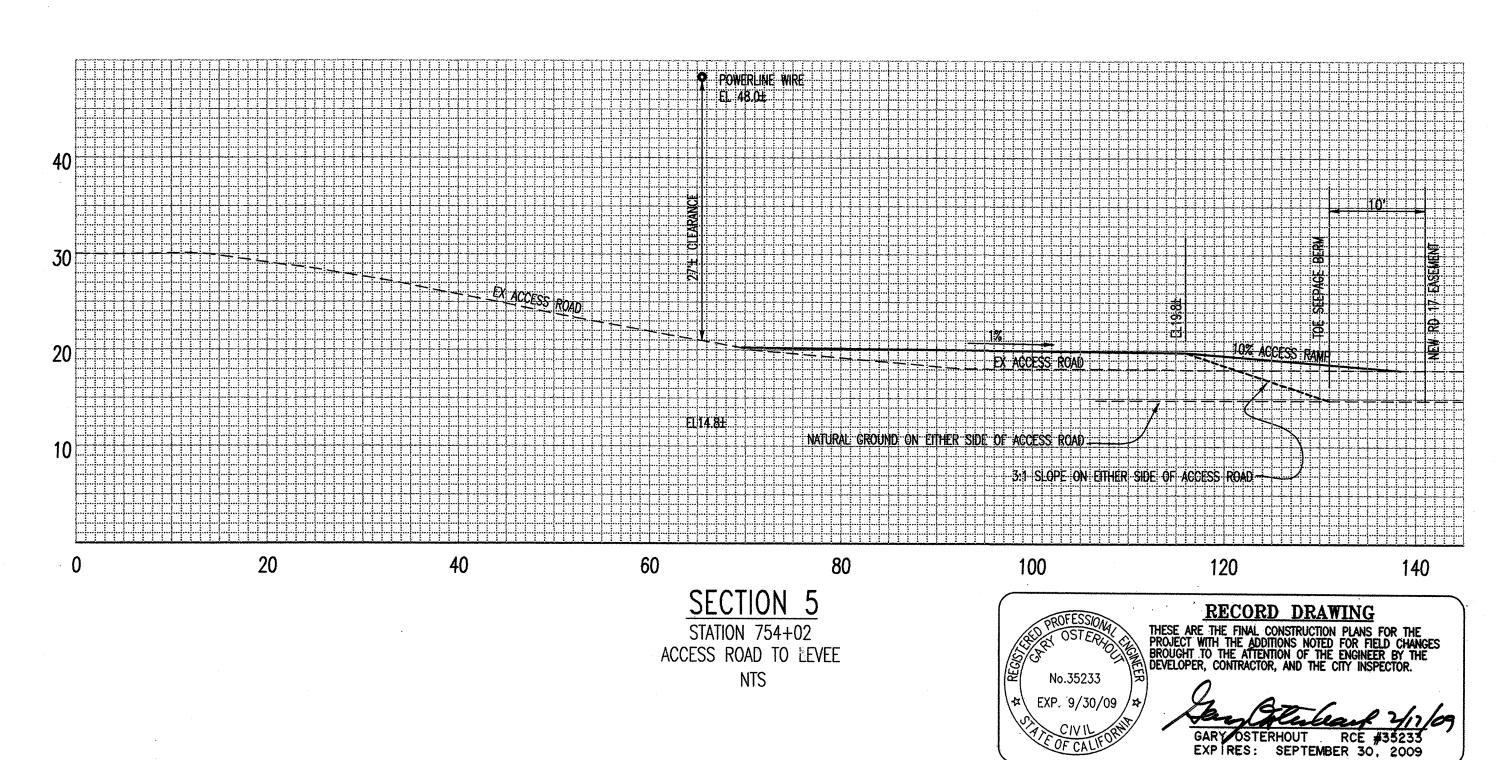


FILTER DRAIN MATERIAL DETAIL





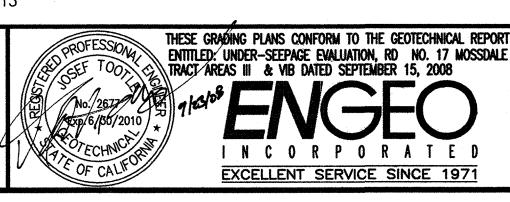




SAN JOAQUIN COUNTY

WARNING • CAUTION EXISTING UNDERGROUND UTILITIES
CONTACT: UNDERGROUND SERVICE ALERT
PHONE: (800) 642-2444
FOR MARKING PRIOR TO DIGGING

PLANS REVIEWED AND APPROVED BY: SINNOCK
NEUDECK
Stockton, CA 95201-0844
Office: (209) 946-0268
Office: (209) 946-0296

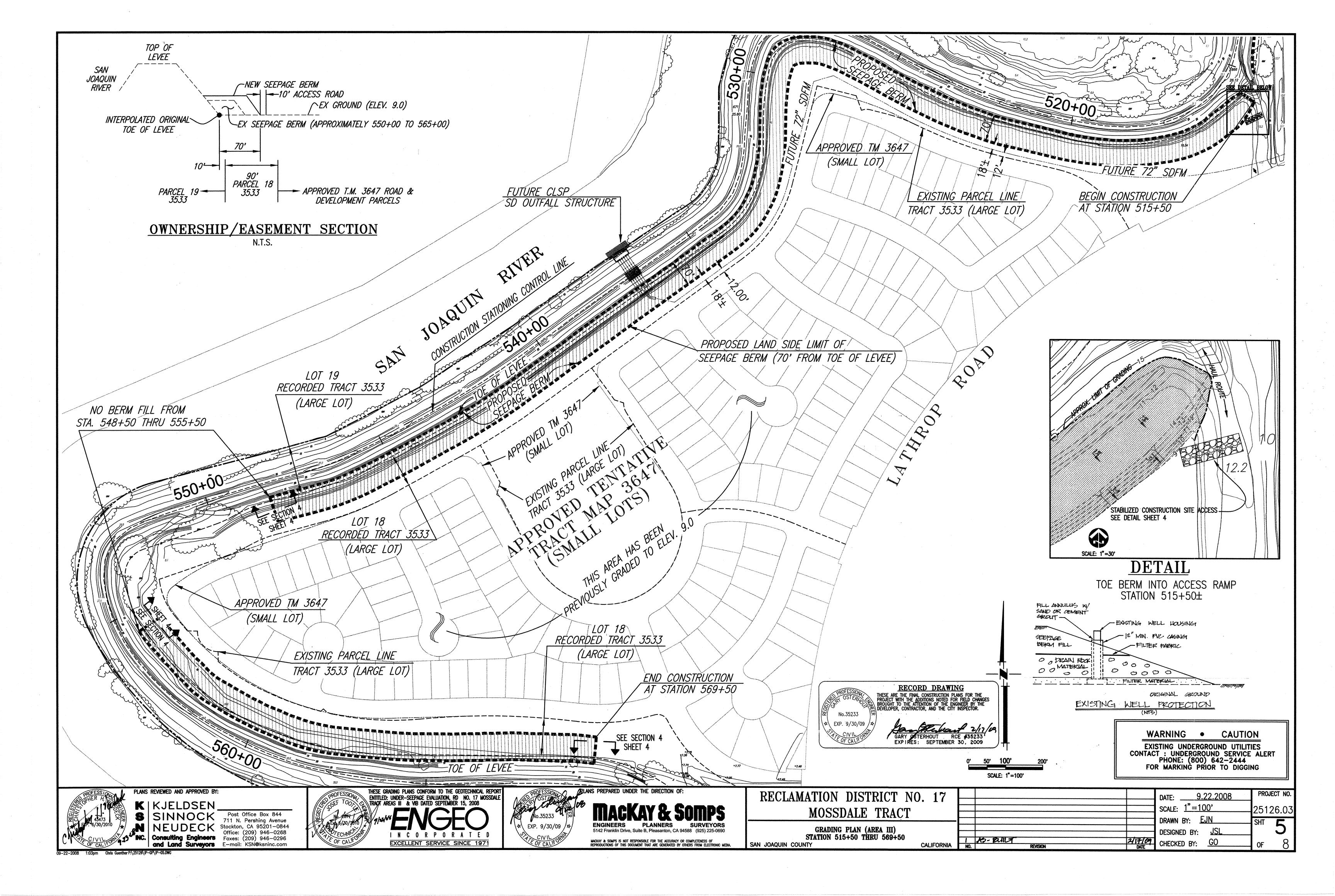


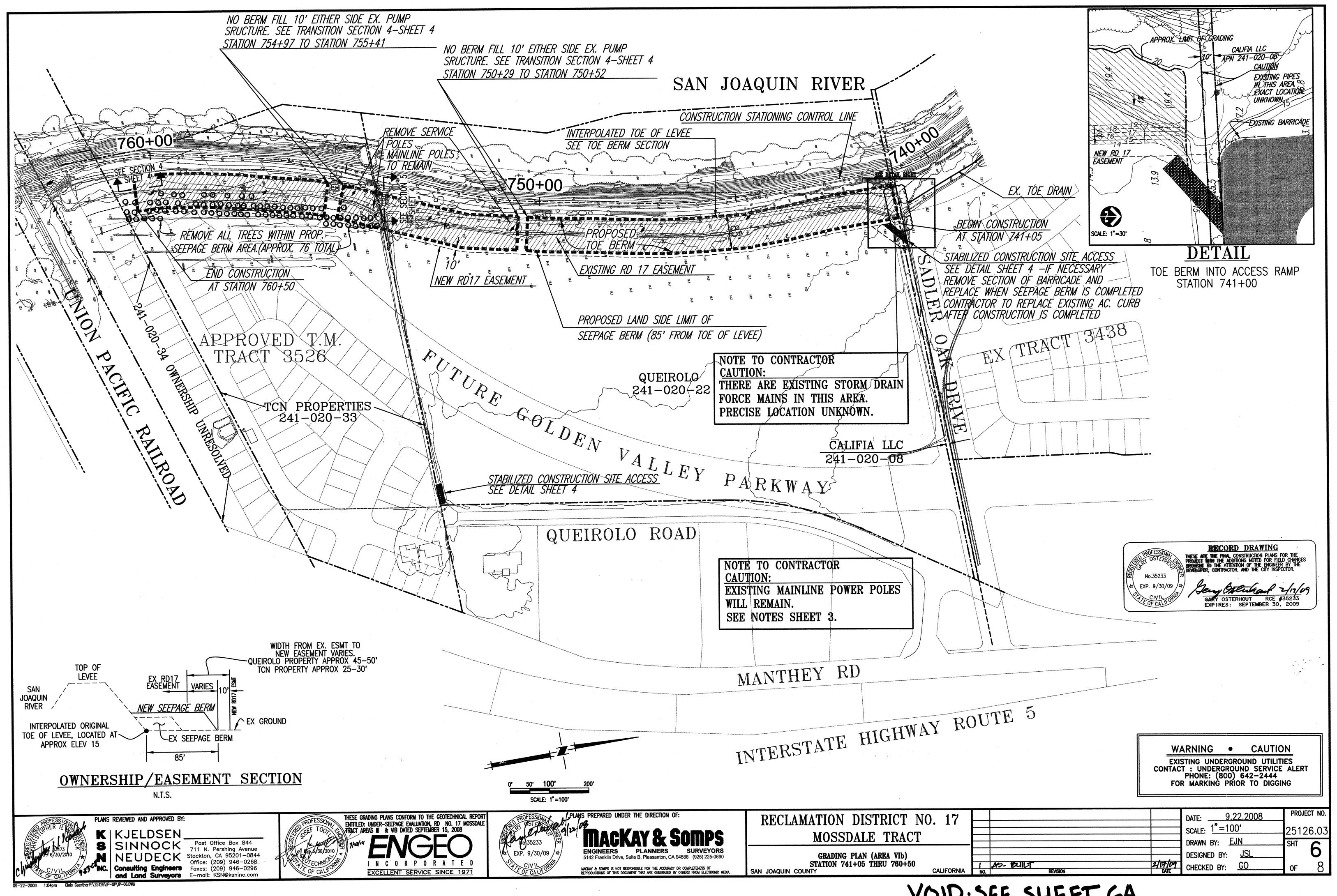
5142 Franklin Drive, Suite B, Pleasanton, CA 94588 (925) 225-0690 MACKAY & SOMPS IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF REPRODUCTIONS OF THIS DOCUMENT THAT ARE GENERATED BY OTHERS FROM ELECTRONIC MEDI RECLAMATION DISTRICT NO. 17 MOSSDALE TRACT TYPICAL SECTIONS AND DETAILS

1 AS - BUILT

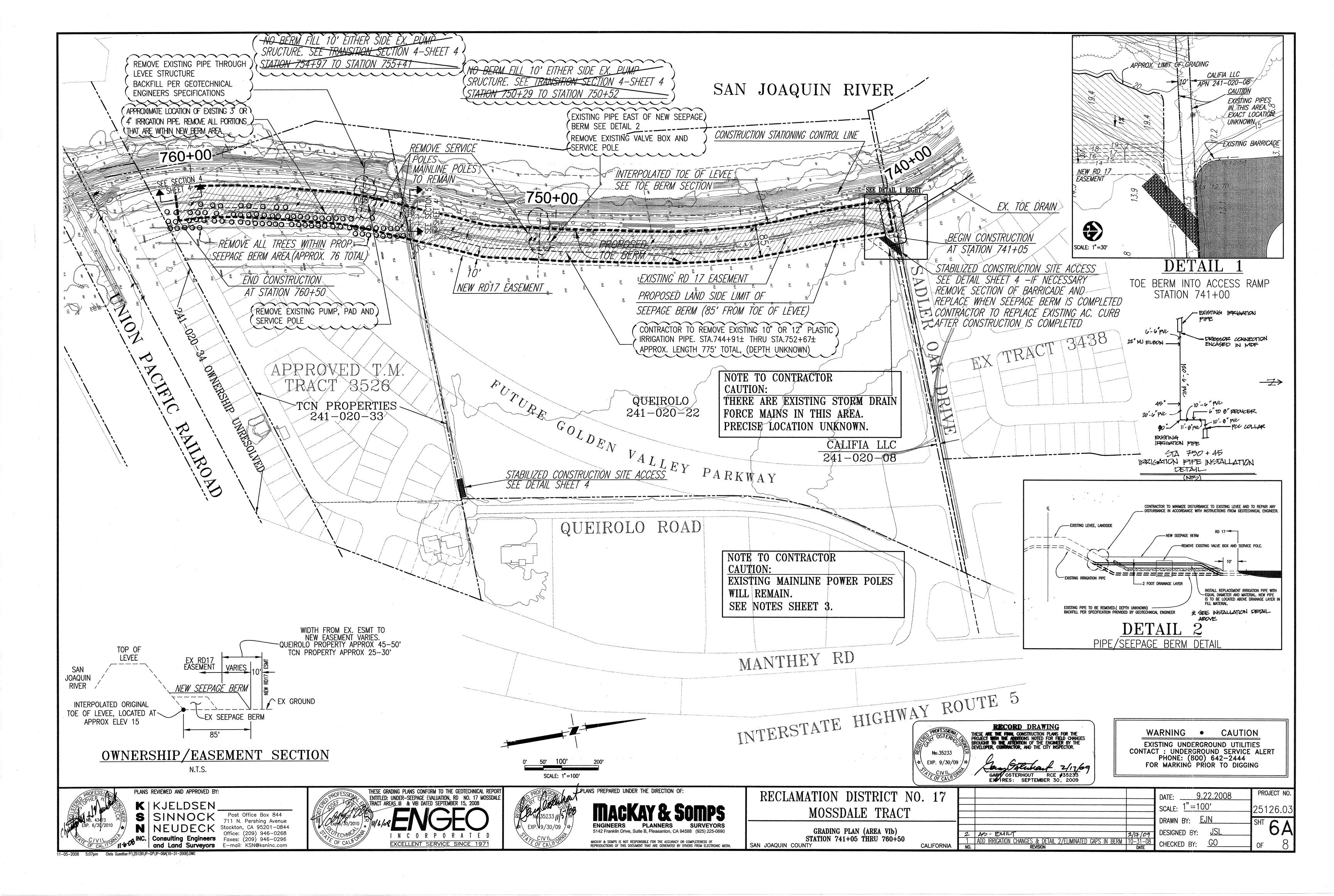
CALIFORNIA

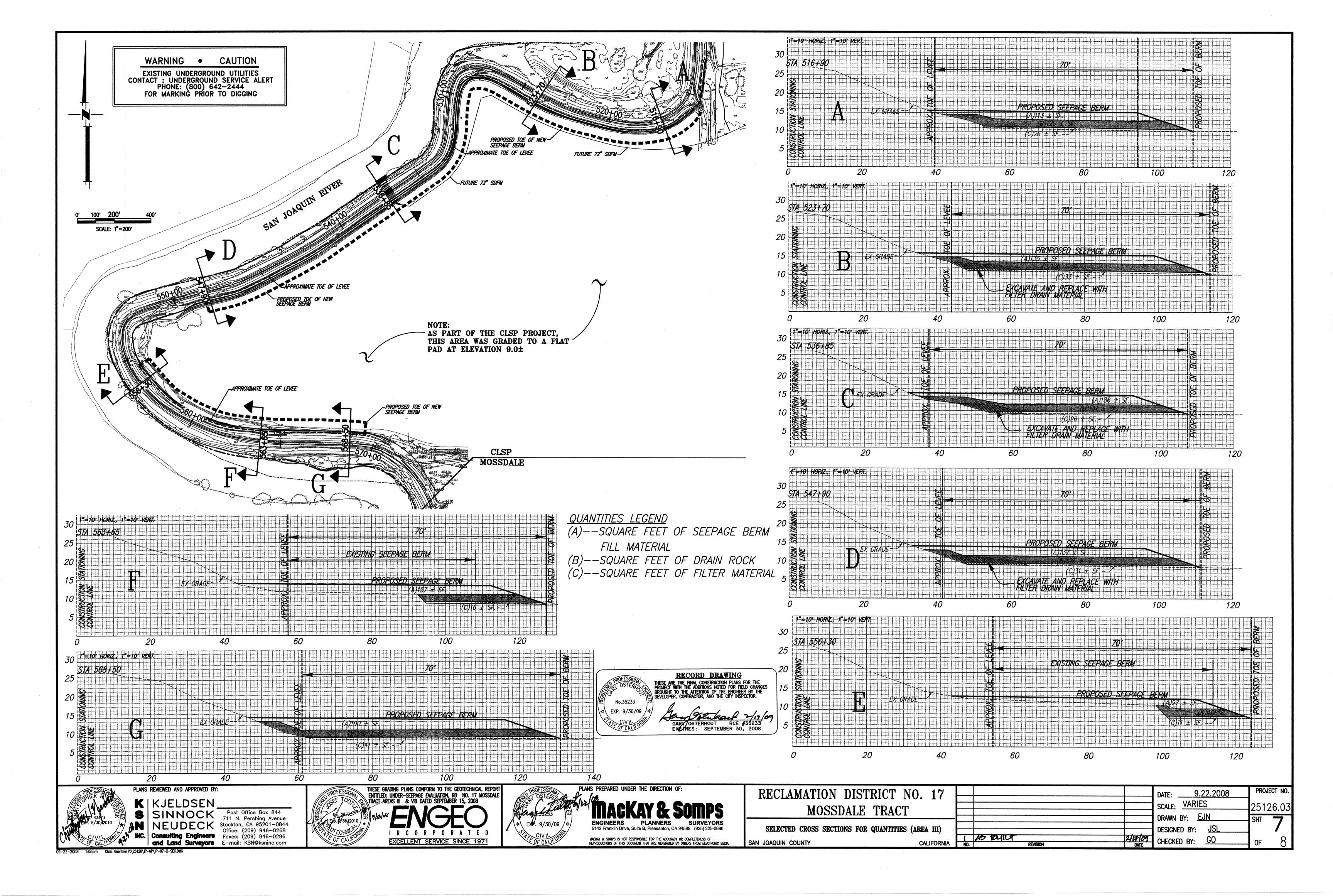
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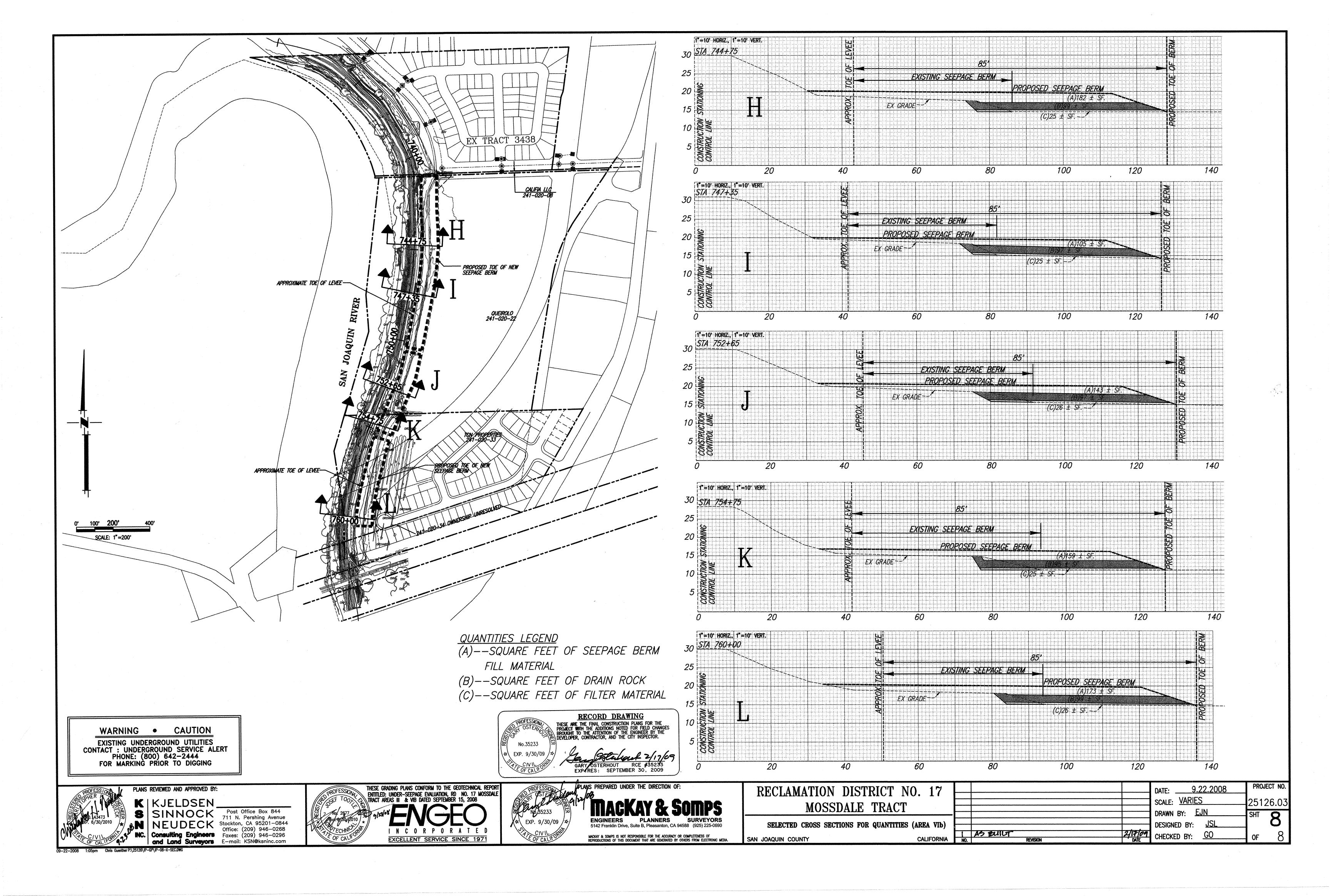




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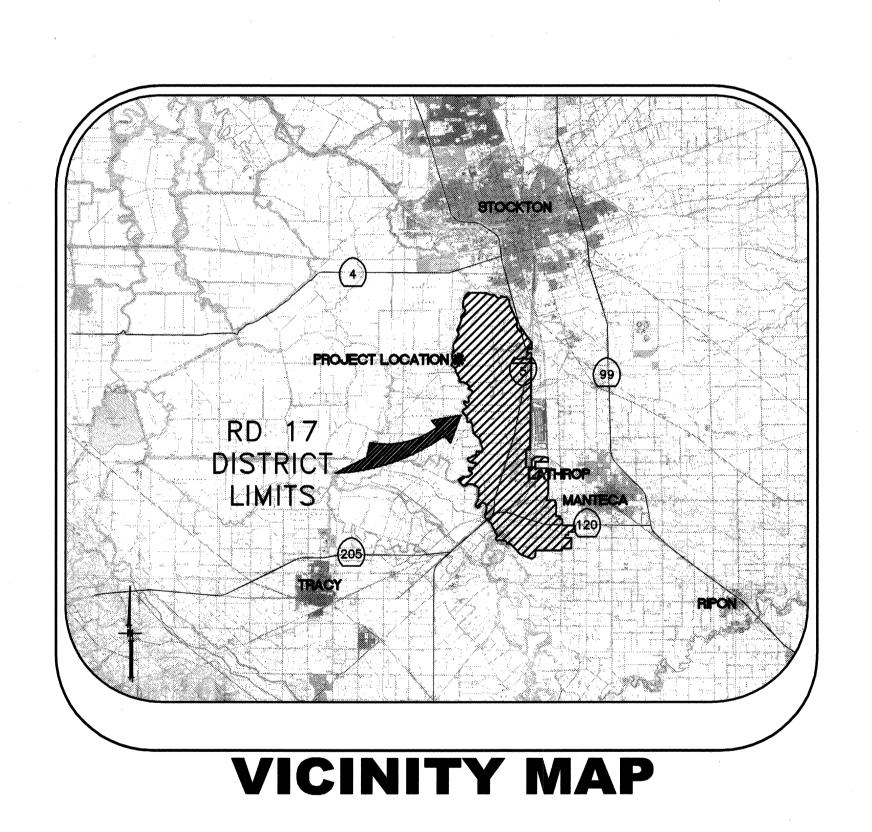


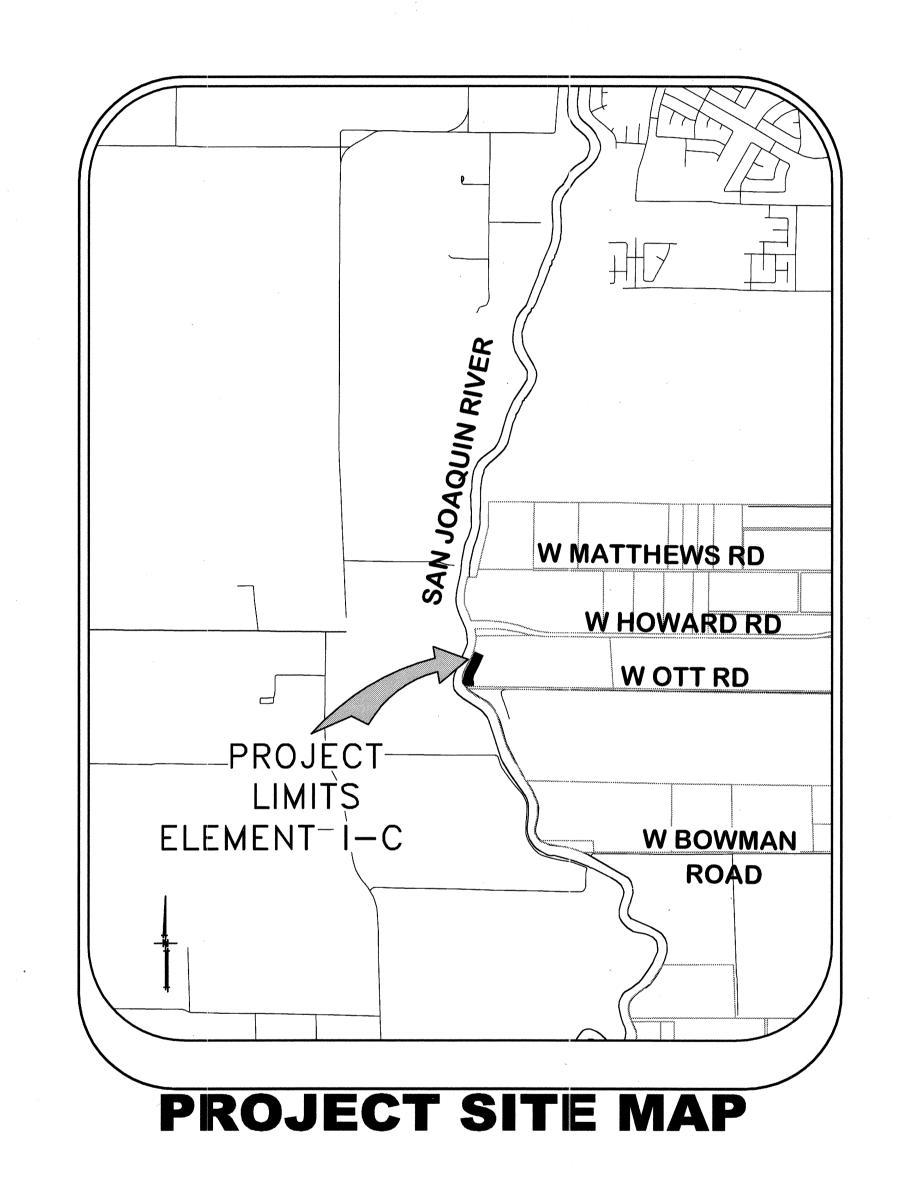




RECLAMATION DISTRICT NO. 17 LEVEE SEEPAGE PROJECT

ELEMENT I-C STATION 259+50 THRU 266+99





SHEET

1. COVER SHEET

2. STATIONING MAP / HAUL ROUTES

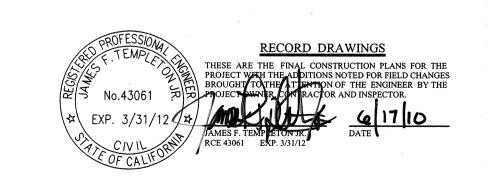
3. NOTES & BORING LOCATIONS

4. TYPICAL SECTIONS & DETAILS

5. SEEPAGE BERM PLAN VIEW

6. SEEPAGE BERM PROFILE VIEW

INDEX



PLANS REVIEWED AND APPROVED BY:

K KJELDSEN

SINNOCK

Post Office Box 844

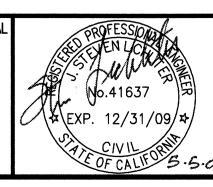
711 N. Pershing Avenue

Stockton, CA 95201-0844

Office: (209) 946-0268

Faxes: (209) 946-0296

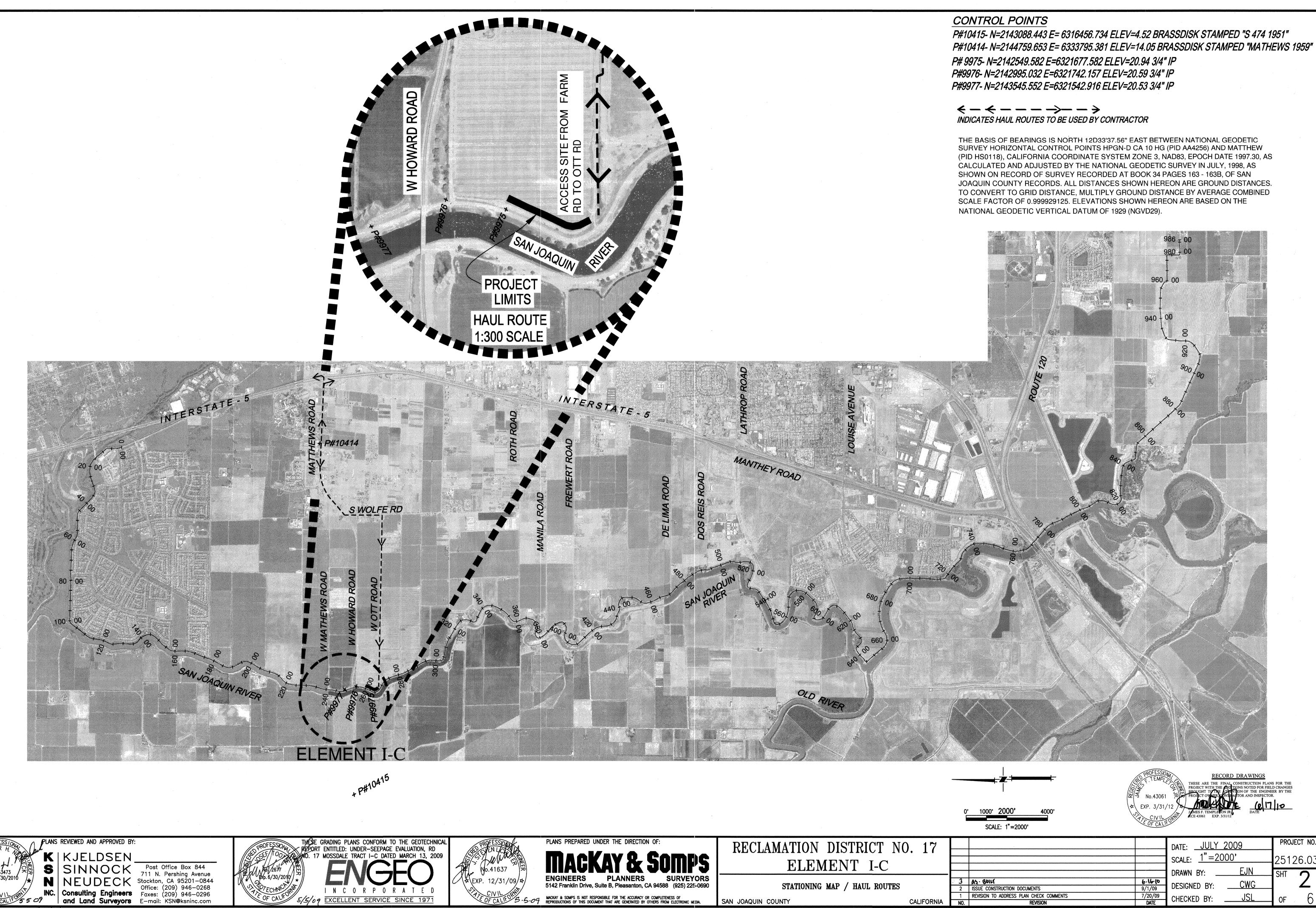






RECLAMATION DISTRICT NO. 17	
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STATIONING MAP / HAUL ROUTES

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THE "DISTRICT" AS REFERRED TO IN THESE NOTES MEANS RECLAMATION DISTRICT 17.

THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALL CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.

THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED" SURVEYS.

THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES.

SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

- . PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE, AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRE-CONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR, AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROUTES. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS AS SHOWN ON HAUL ROUTE PLAN, UNLESS OTHERWISE APPROVED.
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE CONSTRUCTION SURVEY STAKES AS DESCRIBED IN CONSTRUCTION SURVEYING SECTION. PLEASE CONTACT KJELDSEN SINNOCK AND NEUDECK WITH STAKING REQUESTS (209-946-0268) WITH AT LEAST TWO WORKING DAYS ADVANCE NOTICE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED THE CONSTRUCTION SURVEYING SECTION ON THIS SHEET.
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY. REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- 11. ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND OR DEMOBILIZATION. LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED, EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS, DRAINAGE AND IRRIGATION DITCHES, AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS IS TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT, TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER, OR OTHER MEANS AS NECESSARY. THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS CLEAN & CLEAR FROM CONSTRUCTION IMPACTS OR DEBRIS.

2. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS. WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS, OIL, BITUMEN'S, CALCIUM CHLORIDE, AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

ENVIRONMENTAL NOTES (cont'd):

3. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CONDITIONS CLEAN AND FREE FROM RUBBISH AND DEBRIS.

DUST AND MUD CONTROL:

- . DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROUTES, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES AND THE PROJECT SITE.
- a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS WHICH MIGHT DAMAGE CROPS.
- b. NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS, INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK (OR MORE AS NEEDED OR DIRECTED BY THE ENGINEER) TO MAINTAIN ADEQUATE DUST CONTROL FOR THE FOLLOWING AREAS:
- PROJECT AREAS
- HAUL. ROUTES
- LEVEE TOE BERM FILL AREAS d. OTHER CONSTRUCTION USE AREAS
- CROP DAMAGE PREVENTION RESIDENTIAL BUILDING AREAS
- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY—EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF CONSTRUCTION.

- . THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME CAUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.
- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM & CONSISTENT WITH THE RECOMMENDATIONS OF THE SOILS REPORT.

 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISIONS, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC CONTROL OF THE PROJECT SPECIFICATIONS (AS PREPARED BY THE ENGINEER)

- THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED BY HIM IN A CLEAN AND ORDERLY CONDITION, DISPOSING OF REFUSE IN A MANNER SATISFACTORY TO THE ENGINEER.
- 2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL HAUL ROUTES AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

CONSTRUCTION NOTES: HAUL ROUTES:

- THE CONTRACTOR SHALL IMPROVE, MAINTAIN, AND REPAIR UPON COMPLETION, THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE REPAIR AREAS.
- 2. THE CONTRACTOR SHALL REVIEW THE HAUL ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE HAUL ROUTES WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS, AND OTHER LOCAL TRAFFIC.
- 3. THE HAUL ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD DRAINAGE REQUIREMENTS.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS, MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 5. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE HAUL ROUTES AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- 7. THE HAUL ROUTES MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING REMOVAL IF REQUIRED. IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE LANDOWNERS.
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE HAUL ROUTES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS. REPAIRS TO HAUL ROUTES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE HAUL ROUTES USED AT ALL TIMES DURING CONSTRUCTION.

CLEARING & GRUBBING:

1. UNLESS OTHERWISE INDICATED. THE WORK AREAS SHALL BE CLEARED AND GRUBBED BY THE CONTRACTOR, CONTRACTOR SHALL USE CAUTION WHILE CLEARING AND GRUBBING AROUND POWER LINES & BURIED ELECTRICAL CABLES. ALL MATERIAL CLEARED AND REMOVED SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR FOR REMOVAL AND DISPOSAL OFFSITE. SOME PRUNING/TRIMMING/THINNING OF BRANCHES OR TREES MAY BE REQUIRED.

LEVEE SEEPAGE BERM SECTION:

- 1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED MATERIALS (PER THE ENGINEERS SPECIFICATIONS) AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER TO THE DESIGNATED SEEPAGE BERM SITES.
- 2. THE SEEPAGE BERM SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE SEEPAGE BERM AREAS PRIOR TO THE ACCEPTANCE OF THE MATERIAL.
- 4. THE CONTRACTOR SHALL DELIVER THE FILTER DRAIN MATERIAL, DRAIN ROCK, AND SEEPAGE BERM FILL TO THE REQUIRED SECTIONS AS UNIFORM MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- A. THE FILTER DRAIN MATERIAL AND SEEPAGE BERM FILL SHALL BE PLACED IN LOOSE HORIZONTAL LAYERS NOT MORE THAN EIGHT INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.
- 5. THE CONTRACTOR SHALL GRADE THE BASE OF THE SEEPAGE BERM TO MAINTAIN THE DESIGNATED GRADE AND CROSS-SECTIONS AS SHOWN ON THE PLANS. CONTRACTOR SHALL CUT AND FILL AS NECESSARY AND STOCKPILE ANY ADDITIONAL FILL FOR USE AS SEEPAGE BERM FILL.

FINISHING AND SLOPING GRADING

 THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

COMPACTION EQUIPMENT:

 COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS.

TESTING:

1. THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO, INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND SEEPAGE BERM FILL MATERIALS.

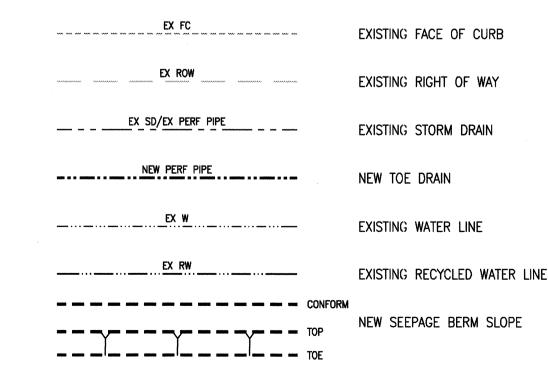
<u>GEOTEXTILE FABRIC:</u>

- 1. GEOTEXTILE FABRIC SHALL BE MIRAFI FW700 WOVEN GEOTEXTILE OR AN APPROVED EQUAL
- 2. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED BETWEEN THE SEEPAGE BERM FILL AND THE DRAIN ROCK MATERIAL.
- 3. MEASUREMENT AND PAYMENT WILL BE BY THE SQUARE FOOT NEAT (WITHOUT OVERLAP) AND BASED UPON THE FABRIC PLACED TO THE DIMENSIONS AND AT THE LOCATIONS DESIGNATED AND ACCEPTED BY THE ENGINEER.
- 4. FOR PAYMENT PURPOSES, MEASUREMENT OF THE FABRIC PLACED WILL NOT INCLUDE OVERLAPS AS REQUIRED BY THESE PLANS.

ROAD PREP, MAINTENANCE, AND SWPPP:

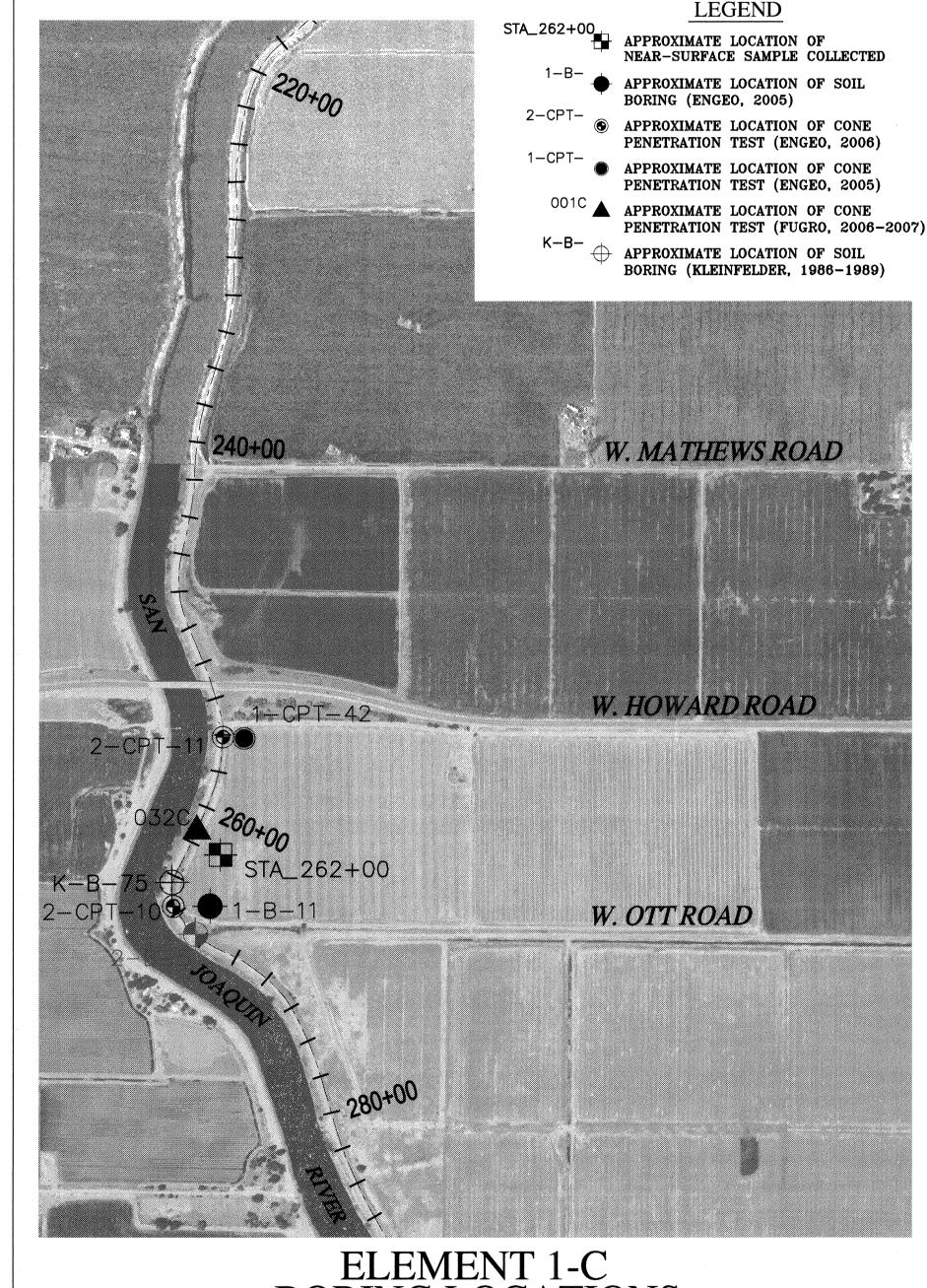
- 1. PER THE IMPROVEMENT PLANS AND SWPPP (AS PREPARED BY ENGEO). CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF REQUIRED:
- A. EROSION CONTROL FACILITIES
- B. CONSTRUCTION ENTRANCE
- C. STREET SWEEPING
- D. SITE/CONSTRUCTION MATERIALS MAINTENANCE
- E. SITE SECURITY

LEGEND

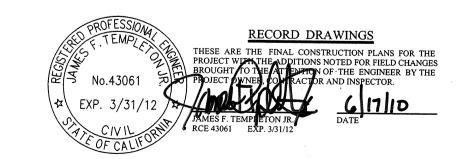


CONSTRUCTION SURVEYING:

- . ROUGH GRADE STAKING SET HORIZONTAL LOCATION STAKES EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES AT THE DESIGN TOE OF THE SEEPAGE BERM. ALSO, SET POINTS AND CORRESPONDING MARKERS AT LOCATIONS THAT ARE OFFSET FROM THE EASTERLY TOE OF BERM EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES. THE MARKER AT THE OFFSET POINT WILL BE LABELED WITH A VERTICAL CUT OR FILL DIMENSION FROM THE TOP OF THE POINT TO THE DESIGN ELEVATION OF THE TOE OF THE SEEPAGE BERM. WHERE GRADING FOR FUTURE TRAILS IS TO BE PROVIDED THROUGH THE FRONT SLOPE OF THE SEEPAGE BERM, THE OFFSET STAKES WILL BE MARKED ACCORDINGLY AT BEGINNING AND END OF TRAIL.
- 2. <u>IRRIGATION SWALES</u> SET HORIZONTAL AND VERTICAL OFFSET STAKES AT 50-FOOT INTERVALS ON TANGENTS AND 25 FOOT INTERVALS ON CURVES.
- 3. <u>VERIFICATIONS DURING AND AFTER CONSTRUCTION</u> UPON COMPLETION OF SUBSTANTIAL PORTIONS OF WORK AND WHEN REQUESTED BY CONTRACTOR, OBTAIN "AS-GRADED" ELEVATIONS (TYPICALLY AT 500' INTERVALS) TO VERIFY THE DEPTH OF PLACED MATERIAL RELATIVE TO THE ELEVATION AT THE TOE OF THE SEEPAGE BERM. THIS CHECK WILL BE PERFORMED TWICE (ONCE AFTER PLACEMENT OF DRAIN ROCK AND ONCE AFTER PLACEMENT OF BERM FILL MATERIAL). CUT/FILL SHEETS SHOWING DEPTHS OF THE PLACED MATERIAL WILL BE PROVIDED FOR EACH SURVEYED VERIFICATION.



BORING LOCATIONS SCALE 1":500'

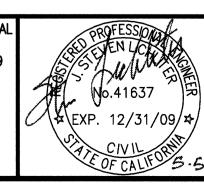


LANS REVIEWED AND APPROVED BY:

10:31gm Chris Guenther P:\25126_1C\IP-03.DWG

SINNOCK
Post Office Box Office 711 N. Pershing Avenue NEUDECK Stockton, CA 95201-0844 Office: (209) 946-0268 Consulting Engineers Faxes: (209) 946-0296 and Land Surveyors E-mail: KSN@ksninc.com

THÉSE GRADING PLANS CONFORM TO THE GEOTECHNICAL REPORT ENTITLED: UNDER-SEEPAGE EVALUATION, RD MO. 17 MOSSDALE TRACT I-C DATED MARCH 13, 2009 5/5/09 EXCELLENT SERVICE SINCE 197



PLANS PREPARED UNDER THE DIRECTION OF: PLANNERS SURVEYORS 5142 Franklin Drive, Suite B. Pleasanton, CA 94588 (925) 225-0690

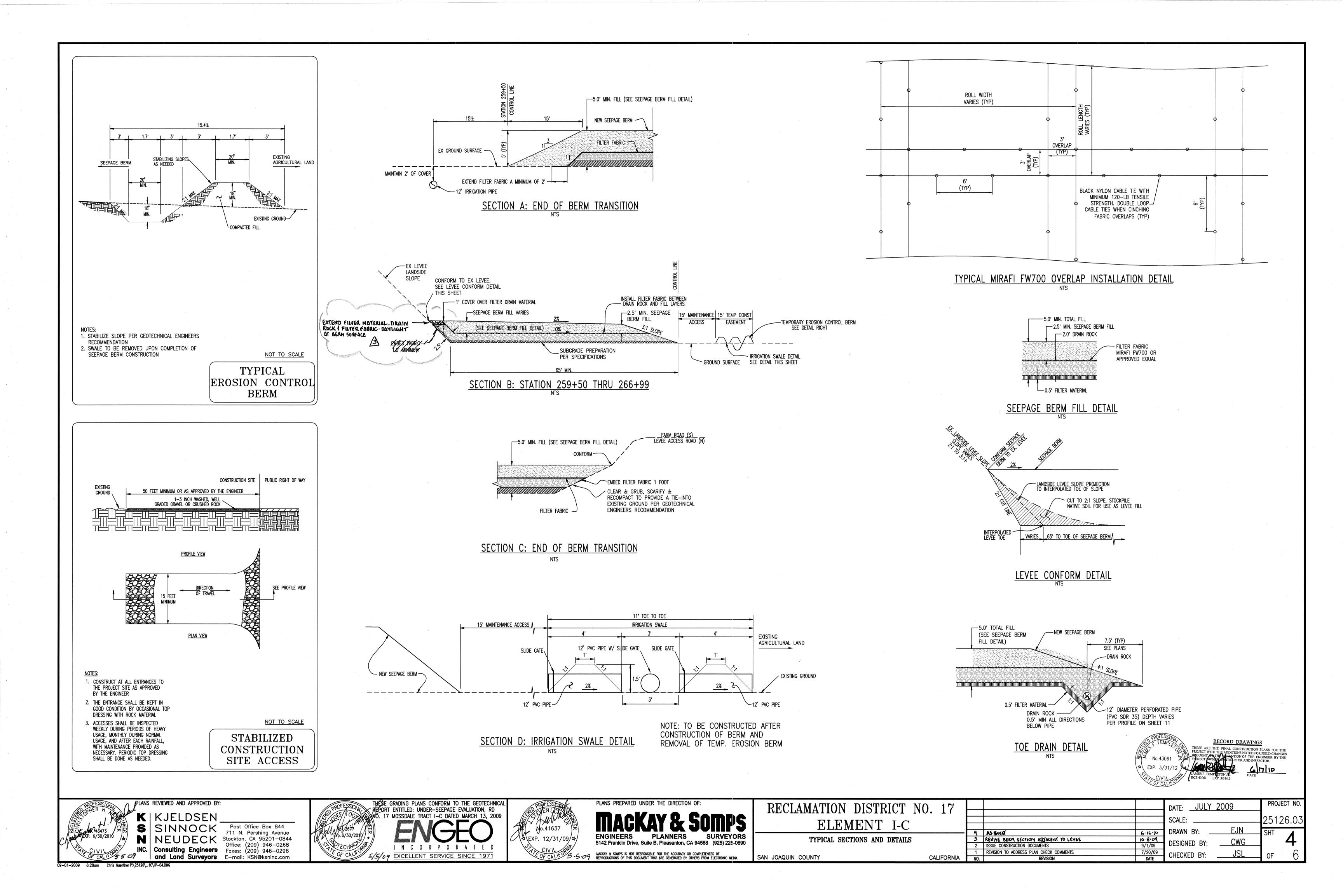
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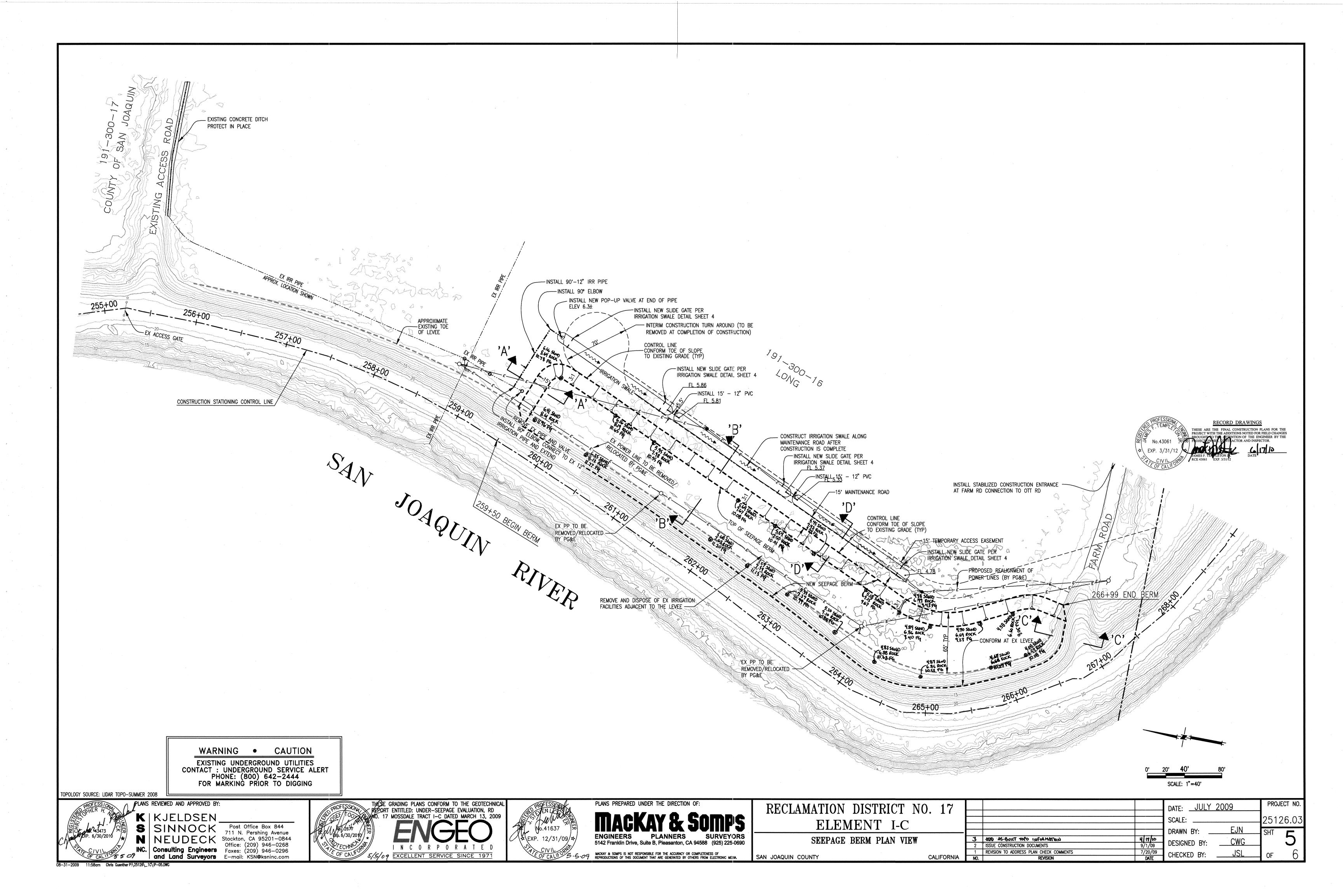
RECLAMATION DISTRICT NO. 17 ELEMENT I-C

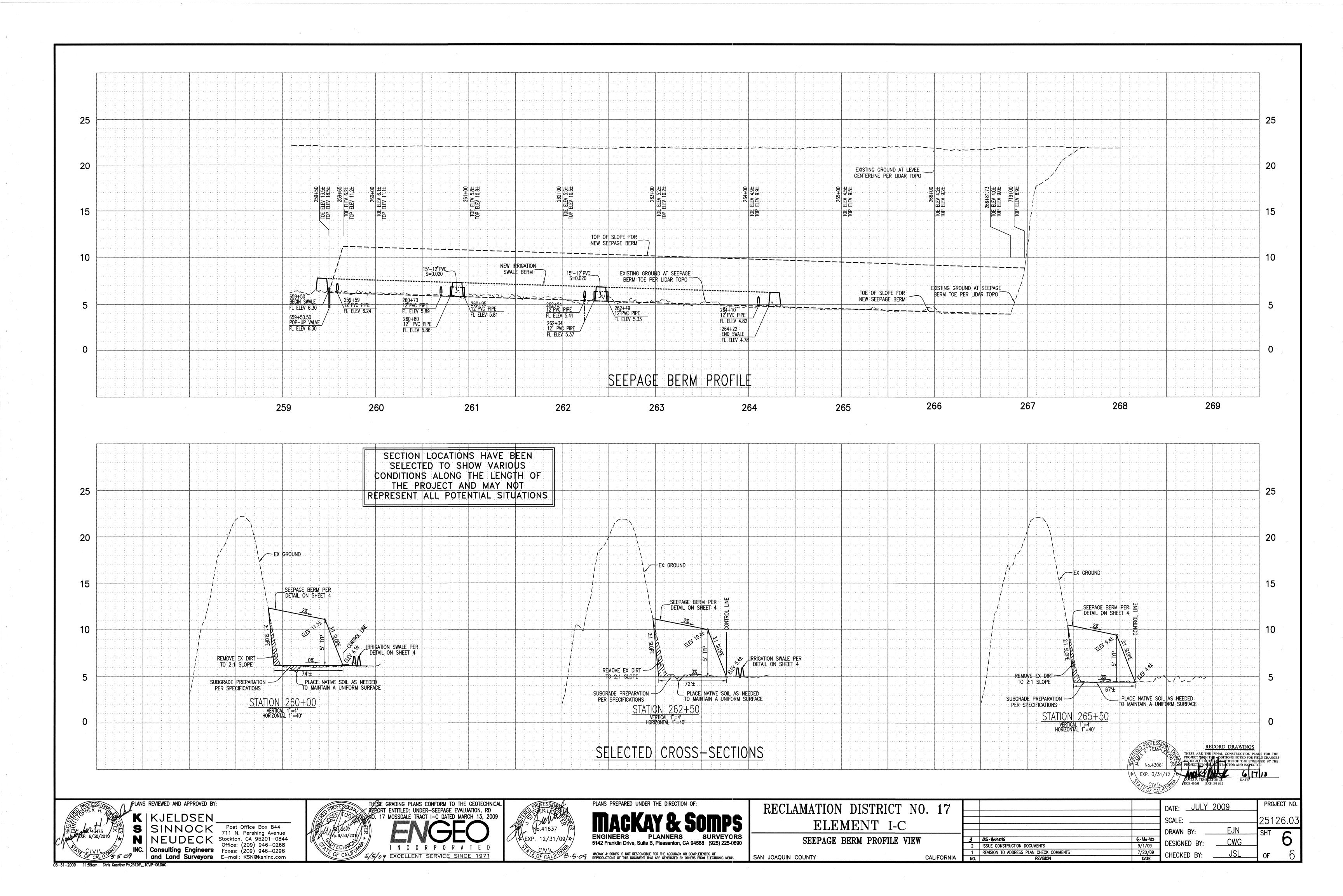
SAN JOAQUIN COUNTY

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2 ISSUE CONSTRUCTION DOCUMENTS NOTES & BORING LOCATIONS 1 REVISION TO ADDRESS PLAN CHECK COMMENTS **CALIFORNIA**

PROJECT NO JULY 2009 25126.03 DRAWN BY: 6-16-10 designed by 9/1/09



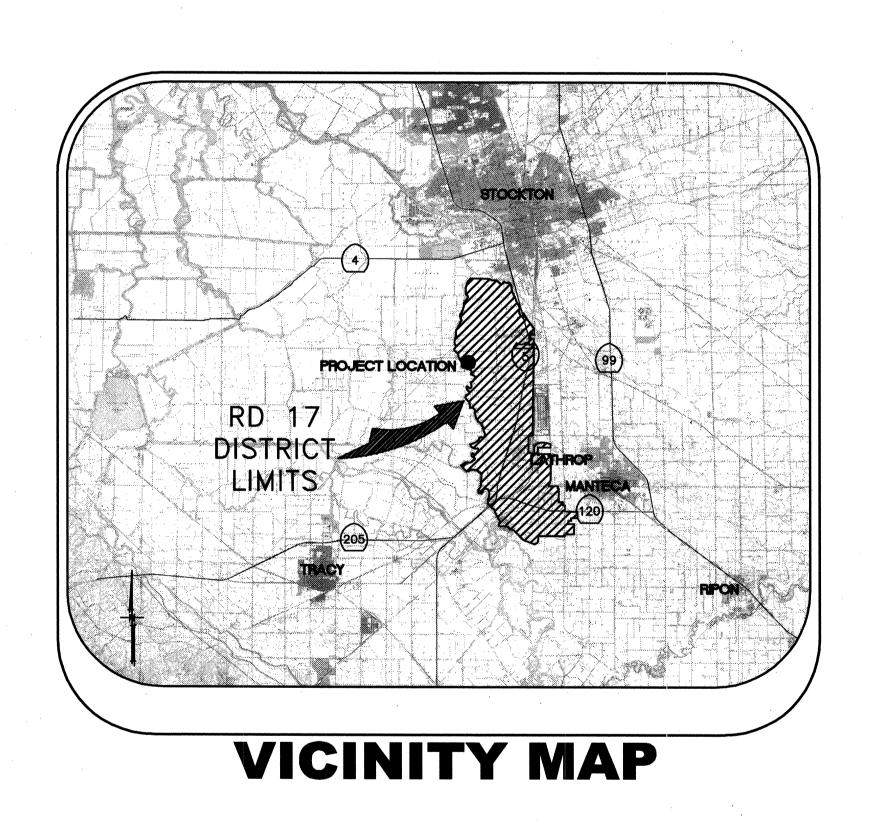


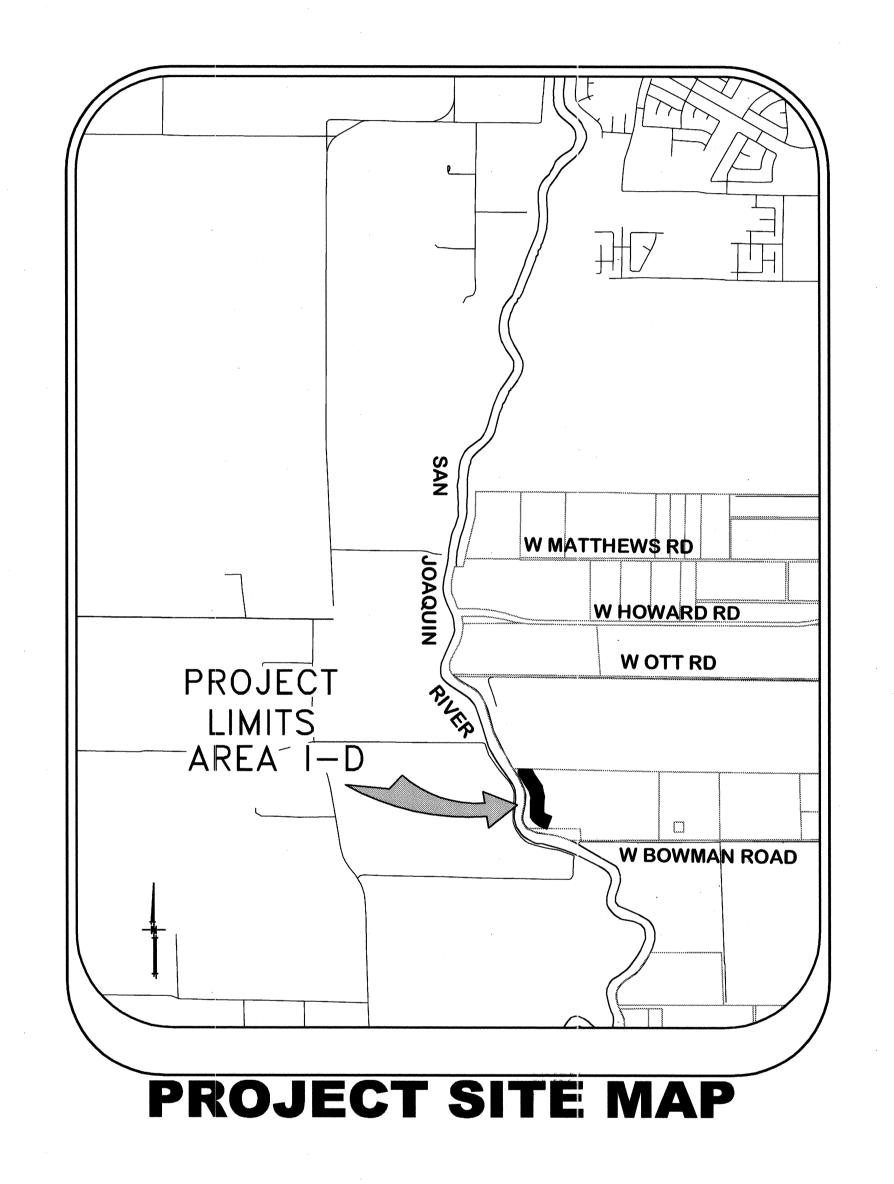


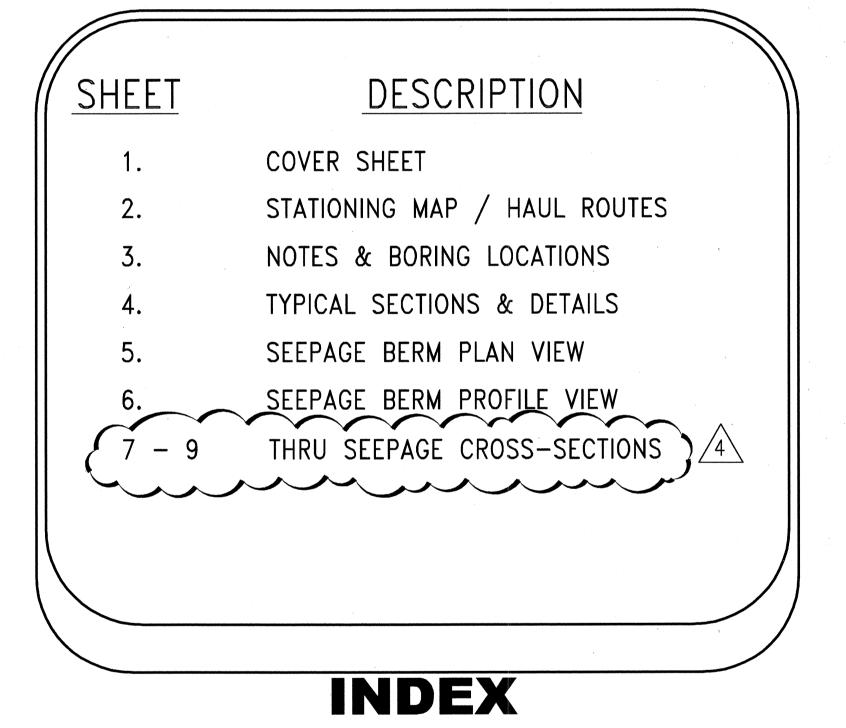
RECLAMATION DISTRICT NO. 17 LEVEE SEEPAGE PROJECT

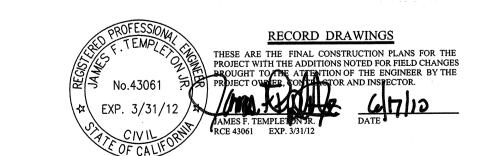
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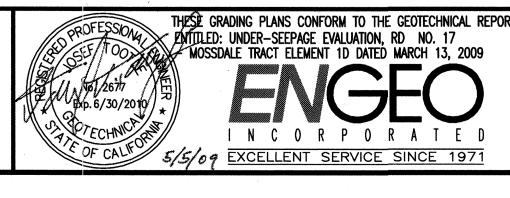


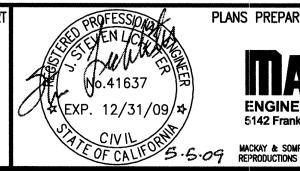




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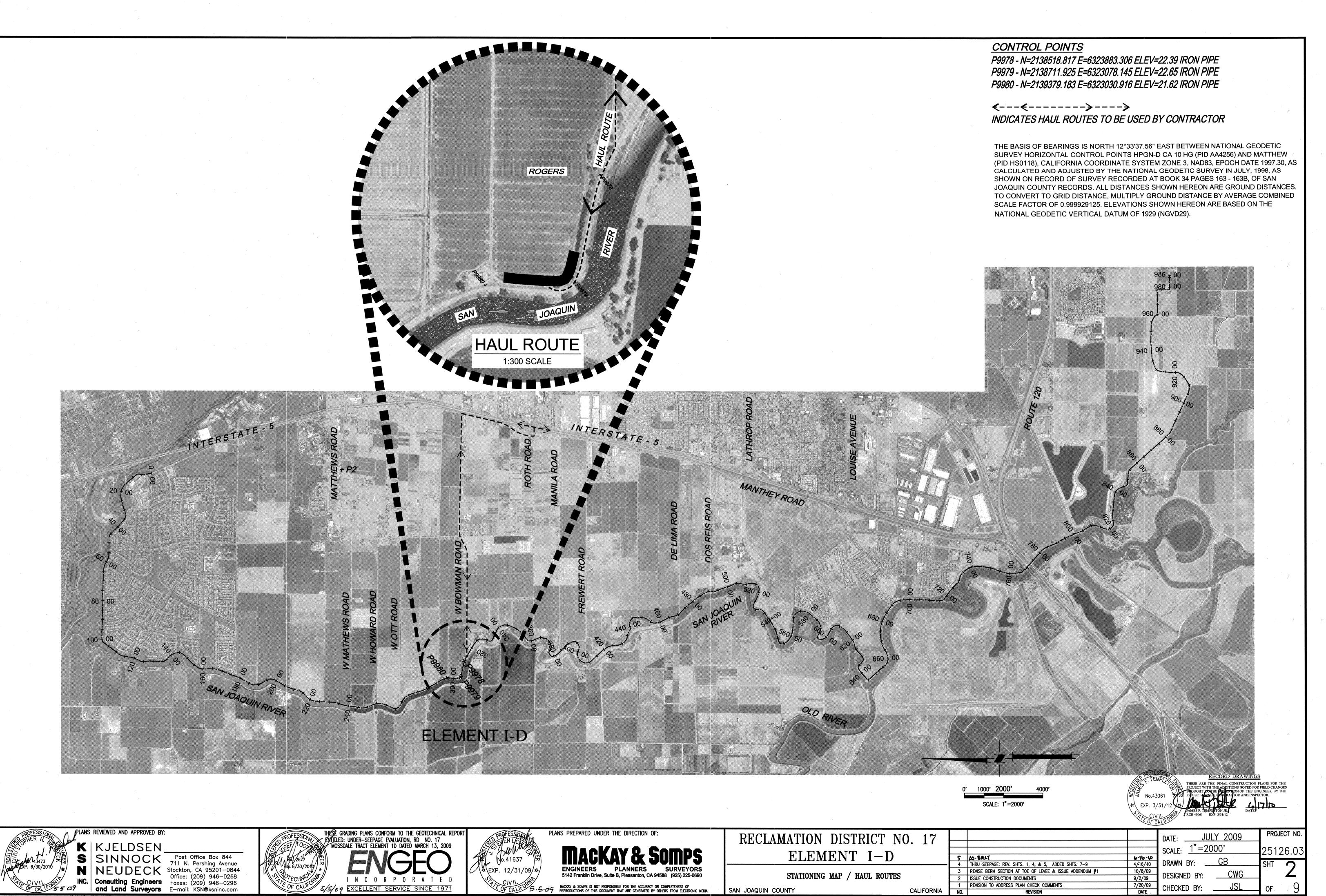




PLA	NS PREPARED UNDER THE DIRECTION OF:
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RECLAMATION DISTRICT NO. 17	
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06-16-2010 10:41am Chris Guenther P:\25126_1D\IP-02.DWG

THE "DISTRICT" AS REFERRED TO IN THESE NOTES MEANS RECLAMATION DISTRICT 17.

THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALI CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.

THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED" SURVEYS.

THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

- PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE. AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRE-CONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS. THE CONTRACTOR. AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROUTES. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS AS SHOWN ON HAUL ROUTE PLAN, UNLESS OTHERWISE APPROVED.
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE CONSTRUCTION SURVEY STAKES AS DESCRIBED IN CONSTRUCTION SURVEYING SECTION. PLEASE CONTACT KJELDSEN SINNOCK AND NEUDECK WITH STAKING REQUESTS (209-946-0268) WITH AT LEAST TWO WORKING DAYS ADVANCE NOTICE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED THE CONSTRUCTION SURVEYING SECTION ON THIS SHEET.
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT, THE ENGINEER. THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- 11. ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND/OR DEMOBILIZATION. LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED, EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS. DRAINAGE AND IRRIGATION DITCHES, AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO. IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS IS TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT, TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

- 1. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER. OR OTHER MEANS AS NECESSARY. THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS CLEAN & CLEAR FROM CONSTRUCTION IMPACTS OR DEBRIS.
- THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS. WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS, OIL, BITUMEN'S, CALCIUM CHLORIDE. AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

ENVIRONMENTAL NOTES (cont'd):

3. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CONDITIONS CLEAN AND FREE FROM RUBBISH AND DEBRIS.

DUST AND MUD CONTROL:

- 1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROUTES, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES AND THE PROJECT SITE.
- a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS WHICH MIGHT DAMAGE CROPS.
- b. NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS, INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK (OR MORE AS NEEDED OR DIRECTED BY THE ENGINEER) TO MAINTAIN ADEQUATE DUST CONTROL FOR THE FOLLOWING AREAS:
- a. PROJECT AREAS
- ь. HAUL ROUTES LEVEE TOE BERM FILL AREAS
- d. OTHER CONSTRUCTION USE AREAS
- e. CROP DAMAGE PREVENTION f. RESIDENTIAL BUILDING AREAS
- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY—EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF

1. THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME (AUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.

- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM & CONSISTENT WITH THE RECOMMENDATIONS OF THE SOILS REPORT.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISIONS, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC CONTROL OF THE PROJECT SPECIFICATIONS (AS PREPARED BY THE ENGINEER)

1. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED BY HIM IN A CLEAN AND ORDERLY CONDITION, DISPOSING OF REFUSE IN A MANNER SATISFACTORY TO THE ENGINEER.

2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL HAUL ROUTES AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL IMPROVE, MAINTAIN, AND REPAIR UPON COMPLETION, THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE REPAIR AREAS.
- 2. THE CONTRACTOR SHALL REVIEW THE HAUL ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE HAUL ROUTES WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS, AND OTHER LOCAL TRAFFIC.
- 3. THE HAUL ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD DRAINAGE REQUIREMENTS.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS, MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 5. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE HAUL ROUTES AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- 7. THE HAUL ROUTES MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING REMOVAL IF REQUIRED, IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE LANDOWNERS.
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE HAUL ROUTES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS. REPAIRS TO HAUL ROUTES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE HAUL ROUTES USED AT ALL TIMES DURING CONSTRUCTION.

CLEARING & GRUBBING:

1. UNLESS OTHERWISE INDICATED, THE WORK AREAS SHALL BE CLEARED AND GRUBBED BY THE CONTRACTOR. CONTRACTOR SHALL USE CAUTION WHILE CLEARING AND GRUBBING AROUND POWER LINES & BURIED ELECTRICAL CABLES. ALL MATERIAL CLEARED AND REMOVED SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR FOR REMOVAL AND DISPOSAL OFFSITE. SOME PRUNING/TRIMMING/THINNING OF BRANCHES OR TREES MAY BE REQUIRED.

LEVEE SEEPAGE BERM SECTION:

- 1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED MATERIALS (PER THE ENGINEERS SPECIFICATIONS) AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER TO THE DESIGNATED SEEPAGE BERM SITES.
- 2. THE SEEPAGE BERM SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE SEEPAGE BERM AREAS PRIOR TO THE ACCEPTANCE OF THE MATERIAL.
- 4. THE CONTRACTOR SHALL DELIVER THE FILTER DRAIN MATERIAL, DRAIN ROCK, AND SEEPAGE BERM FILL TO THE REQUIRED SECTIONS AS UNIFORM MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- A. THE FILTER DRAIN MATERIAL AND SEEPAGE BERM FILL SHALL BE PLACED IN LOOSE HORIZONTAL LAYERS NOT MORE THAN EIGHT INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.
- 5. THE CONTRACTOR SHALL GRADE THE BASE OF THE SEEPAGE BERM TO MAINTAIN THE DESIGNATED GRADE AND CROSS--SECTIONS AS SHOWN ON THE PLANS. CONTRACTOR SHALL CUT AND FILL AS NECESSARY AND STOCKPILE ANY ADDITIONAL FILL FOR USE AS SEEPAGE BERM FILL.

FINISHING AND SLOPING GRADING

 THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

COMPACTION EQUIPMENT:

 COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS

THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO. INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND SEEPAGE BERM FILL MATERIALS.

- 1. GEOTEXTILE FABRIC SHALL BE MIRAFI FW700 WOVEN GEOTEXTILE OR AN APPROVED EQUAL.
- 2. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED BETWEEN THE SEEPAGE BERM FILL AND THE DRAIN ROCK MATERIAL.
- MEASUREMENT AND PAYMENT WILL BE BY THE SQUARE FOOT NEAT (WITHOUT OVERLAP) AND BASED UPON THE FABRIC PLACED TO THE DIMENSIONS AND AT THE LOCATIONS DESIGNATED AND ACCEPTED BY THE ENGINEER.
- 4. FOR PAYMENT PURPOSES, MEASUREMENT OF THE FABRIC PLACED WILL NOT INCLUDE OVERLAPS AS REQUIRED BY THESE PLANS.

ROAD PREP, MAINTENANCE, AND SWPPP:

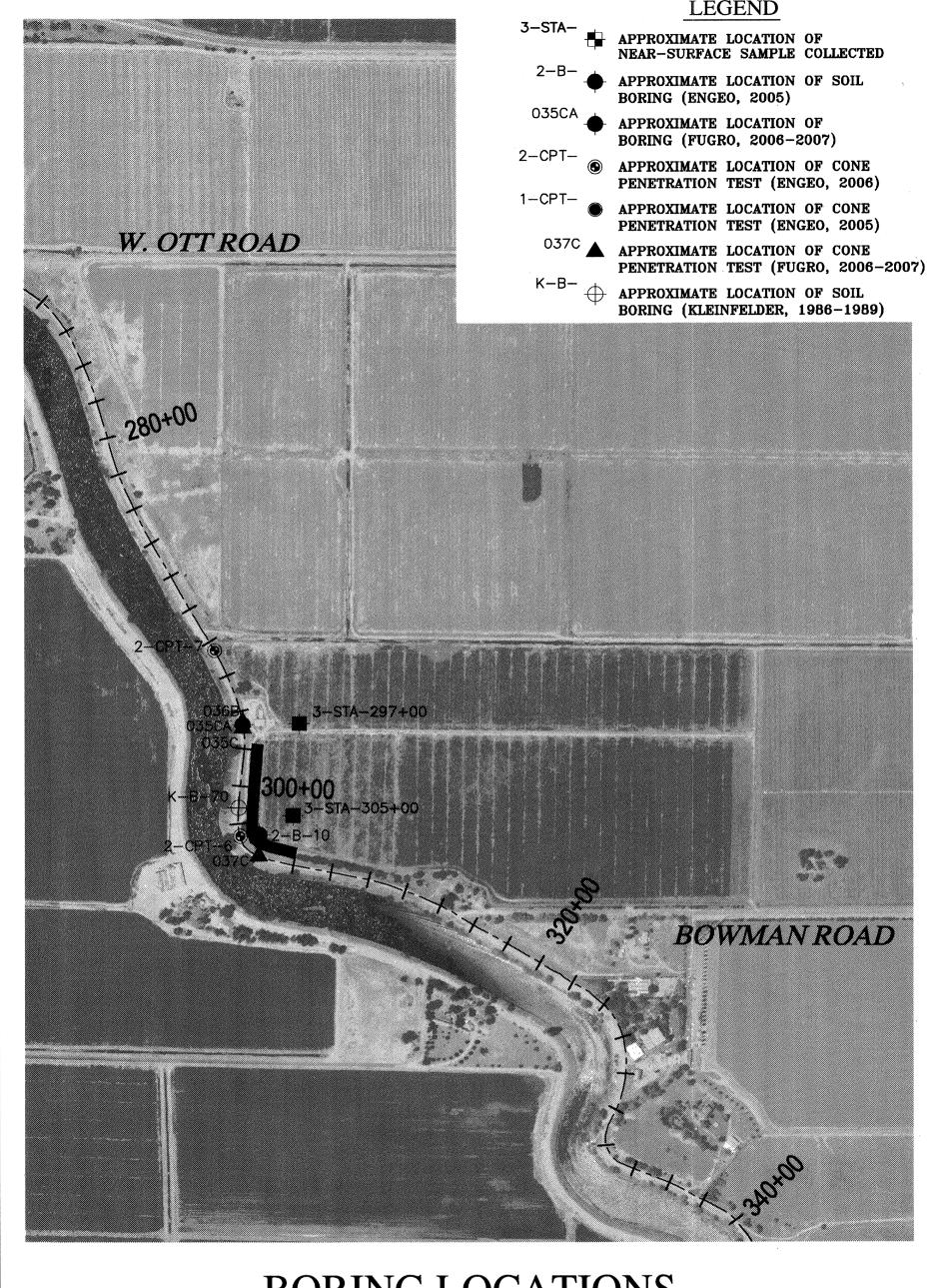
- 1. PER THE IMPROVEMENT PLANS AND SWPPP (AS PREPARED BY ENGEO), CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF REQUIRED:
- A. EROSION CONTROL FACILITIES
- B. CONSTRUCTION ENTRANCE
- C. STREET SWEEPING
 - D. SITE/CONSTRUCTION MATERIALS MAINTENANCE
- E. SITE SECURITY

SITE SECURITY NOTES:

- 1. THE ACCESS GATE THE THE END OF BOWMAN ROAD NEEDS REMAIN CLOSED UNLESS THERE IS ACTIVE CONSTRUCTION WITHIN THE SITE. THIS INCLUDES NIGHTS / WEEKENDS AND PERIODS OF INACTIVITY.
- 2. GATES SHALL BE OPENED TOWARDS THE WEST ONLY AND SECURED BY THE CONTRACTOR IN PLACE.

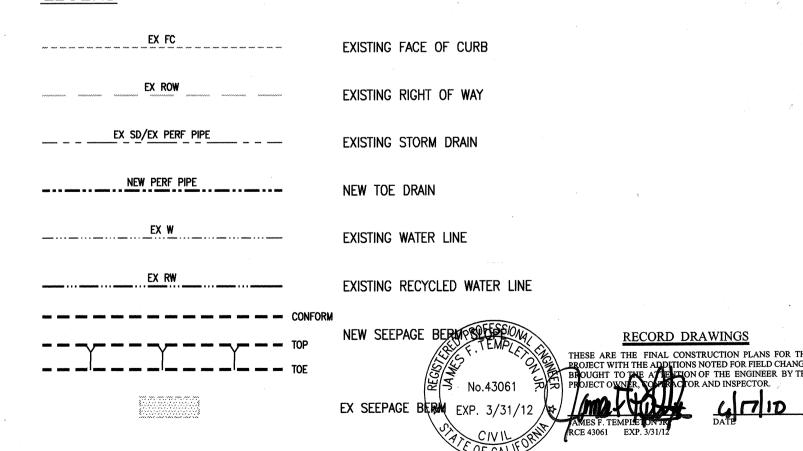
CONSTRUCTION SURVEYING:

- 1. ROUGH GRADE STAKING SET HORIZONTAL LOCATION STAKES EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES AT THE DESIGN TOE OF THE SEEPAGE BERM. ALSO, SET POINTS AND CORRESPONDING MARKERS AT LOCATIONS THAT ARE OFFSET FROM THE EASTERLY TOE OF BERM EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES. THE MARKER AT THE OFFSET POINT WILL BE LABELED WITH A VERTICAL CUT OR FILL DIMENSION FROM THE TOP OF THE POINT TO THE DESIGN ELEVATION OF THE TOE OF THE SEEPAGE BERM. WHERE GRADING FOR FUTURE TRAILS IS TO BE PROVIDED THROUGH THE FRONT SLOPE OF THE SEEPAGE BERM, THE OFFSET STAKES WILL BE MARKED ACCORDINGLY AT BEGINNING AND END OF TRAIL.
- 2. VERIFICATIONS DURING AND AFTER CONSTRUCTION UPON COMPLETION OF SUBSTANTIAL PORTIONS OF WORK AND WHEN REQUESTED BY CONTRACTOR, OBTAIN "AS-GRADED" ELEVATIONS (TYPICALLY AT 500' INTERVALS) TO VERIFY THE DEPTH OF PLACED MATERIAL RELATIVE TO THE ELEVATION AT THE TOE OF THE SEEPAGE BERM. THIS CHECK WILL BE PERFORMED TWICE (ONCE AFTER PLACEMENT OF DRAIN ROCK AND ONCE AFTER PLACEMENT OF BERM FILL MATERIAL). CUT/FILL SHEETS SHOWING DEPTHS OF THE PLACED MATERIAL WILL BE PROVIDED FOR EACH SURVEYED VERIFICATION.



BORING LOCATIONS

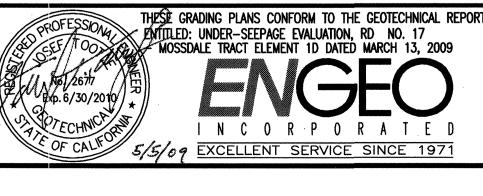
LEGEND



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RECLAMATION DISTRICT NO. 17 ELEMENT I-D NOTES & BORING LOCATIONS

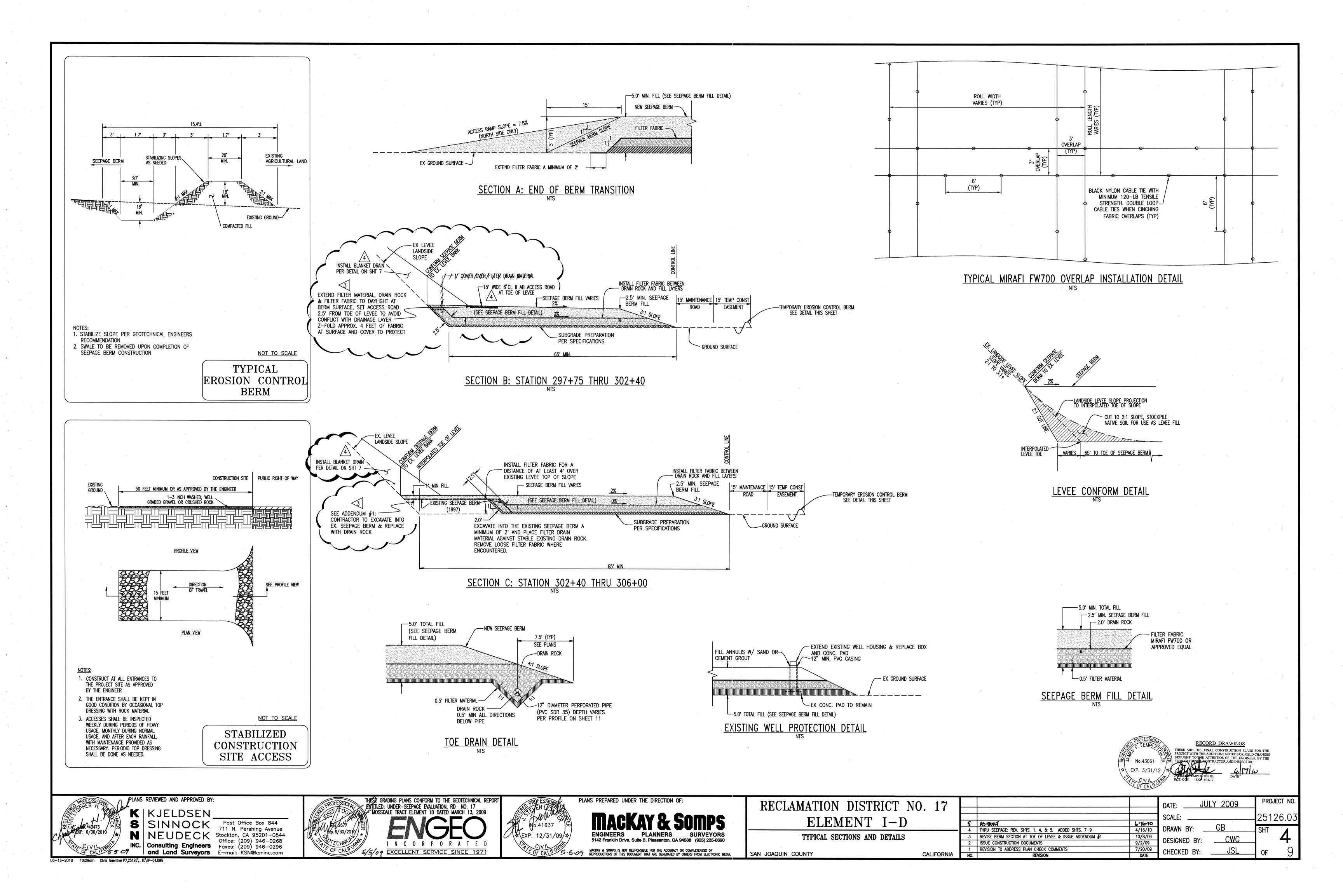
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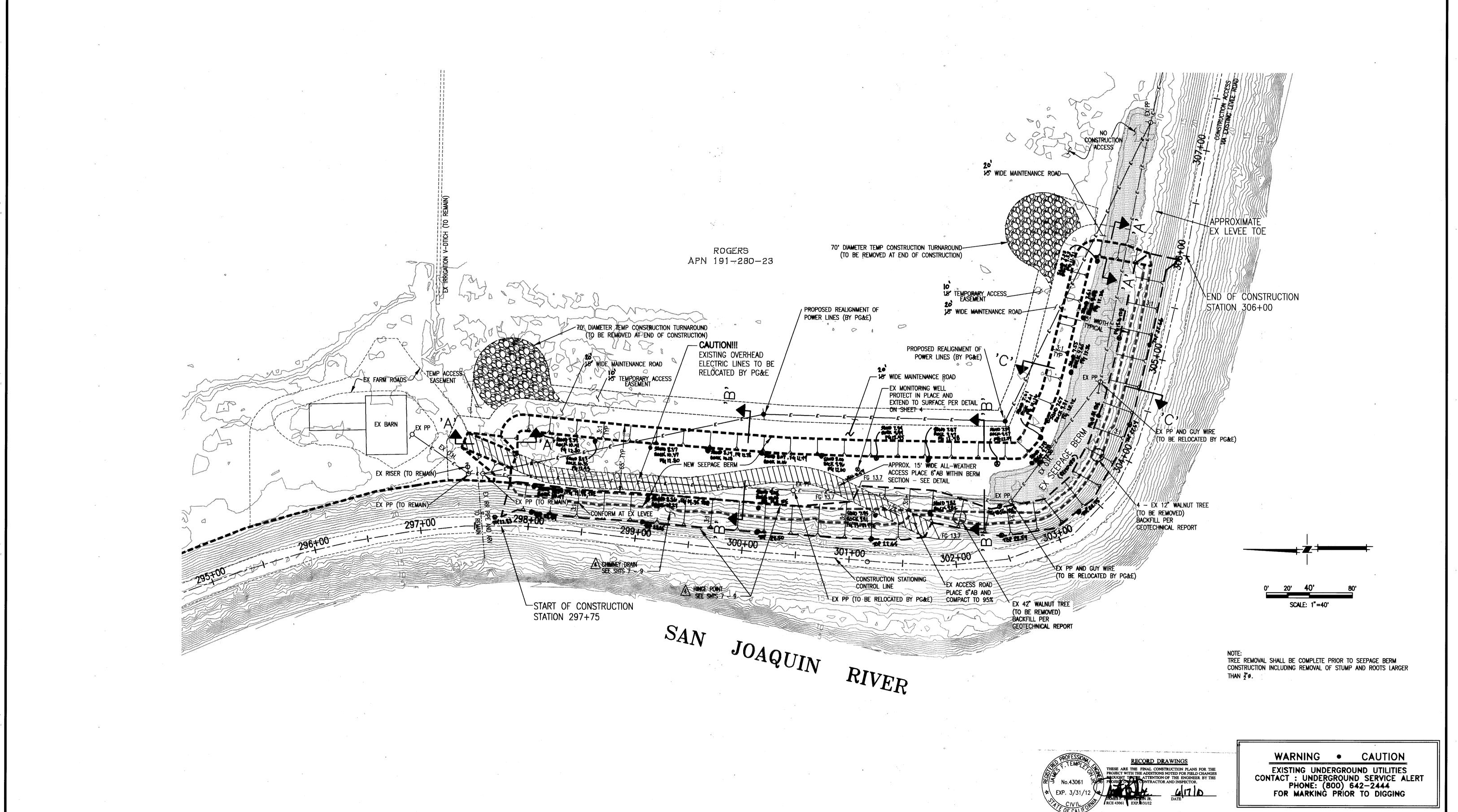
SAN JOAQUIN COUNTY

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REVISION

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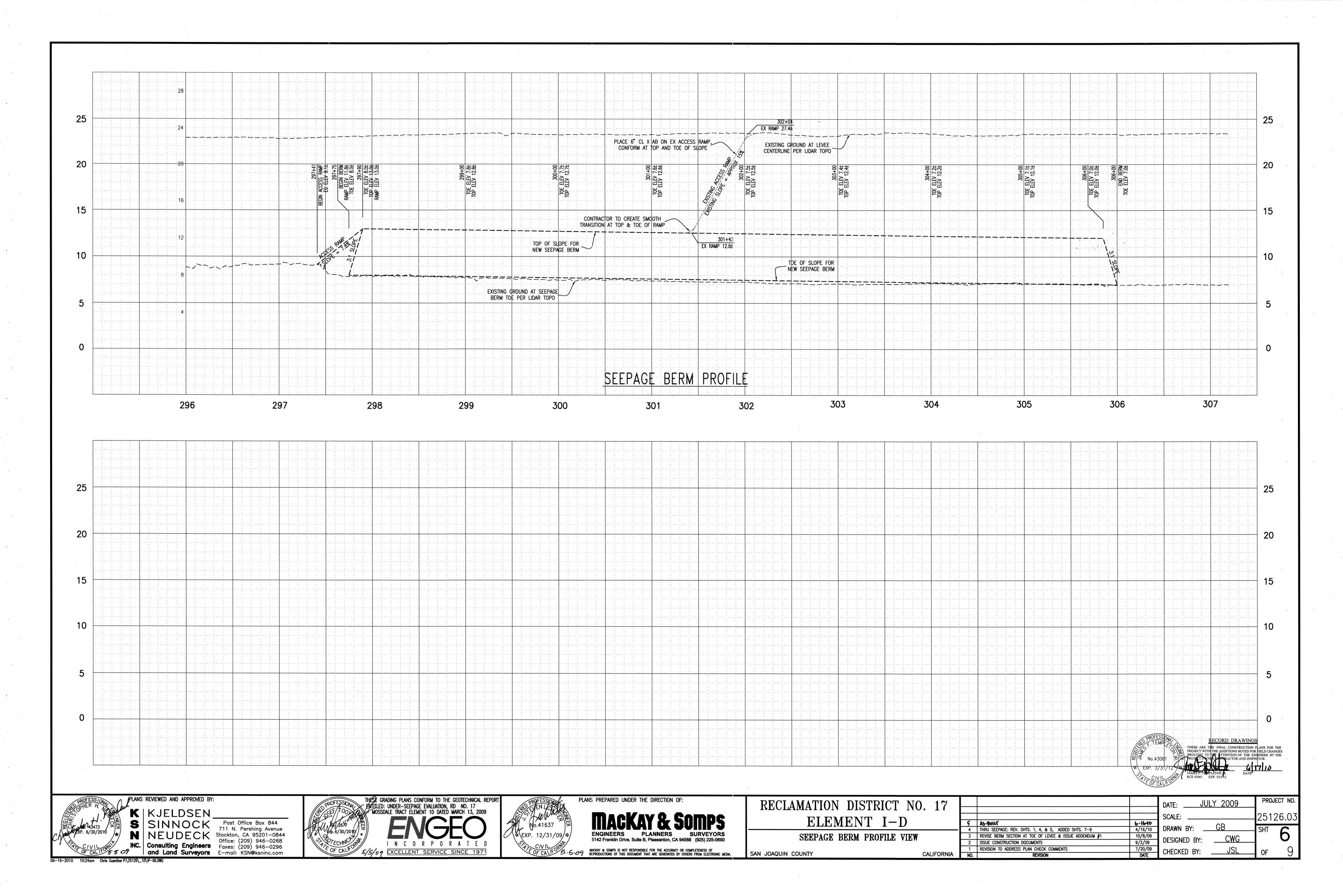
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Post Office Box 844
711 N. Pershing Avenue
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail: KSN®ksninc.com 5/5/09 EXCELLENT SERVICE SINCE 1971

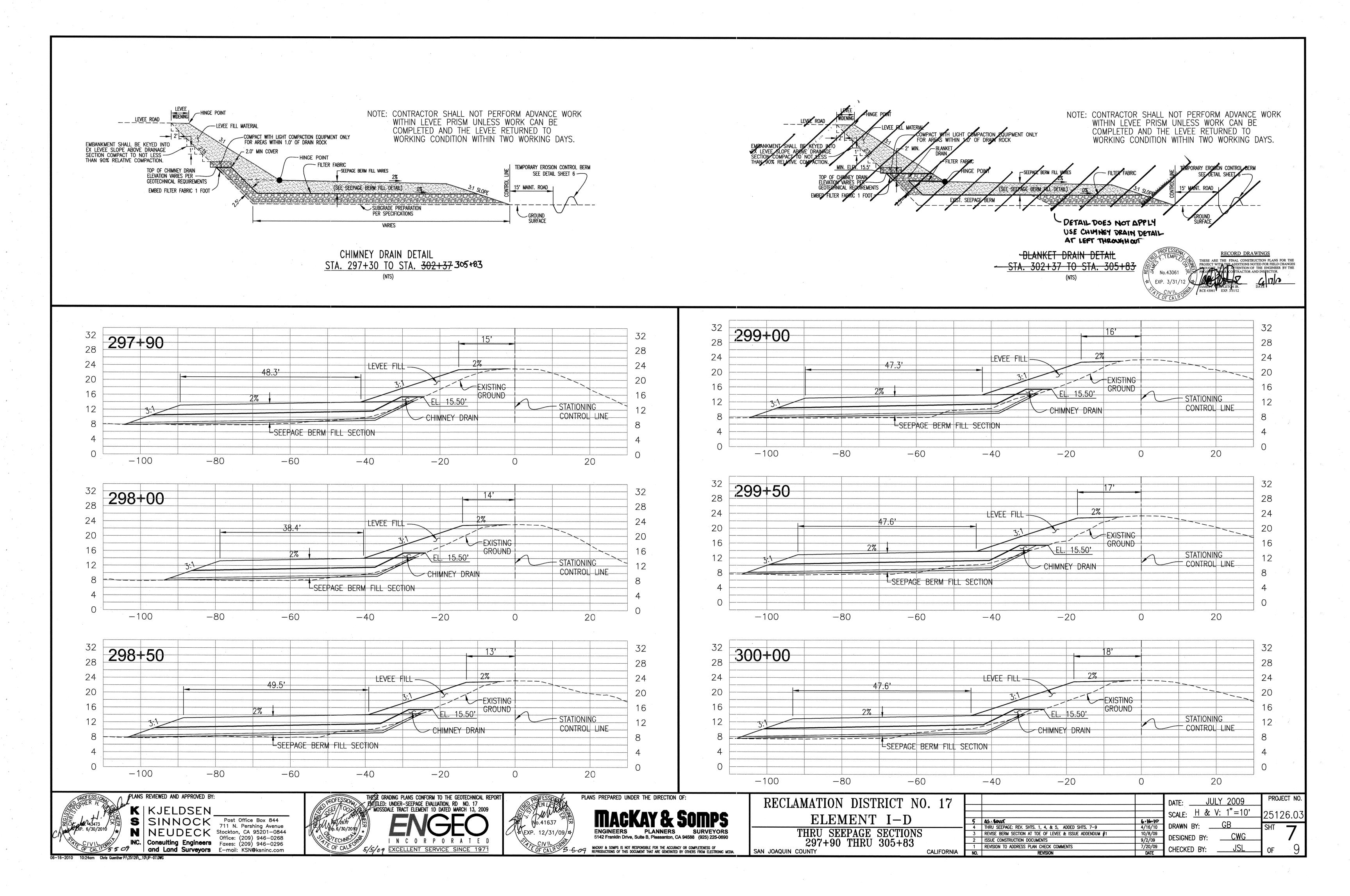
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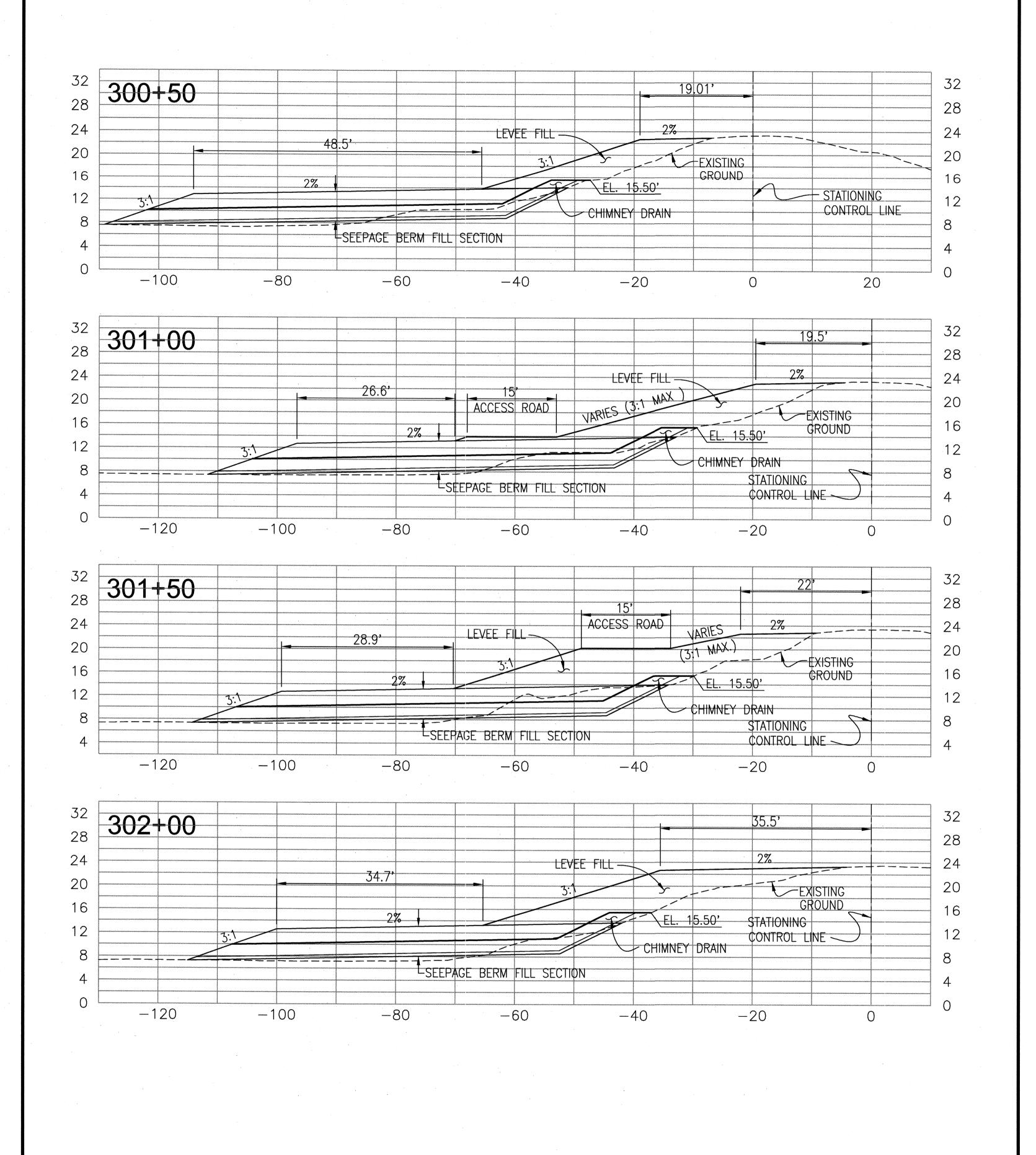
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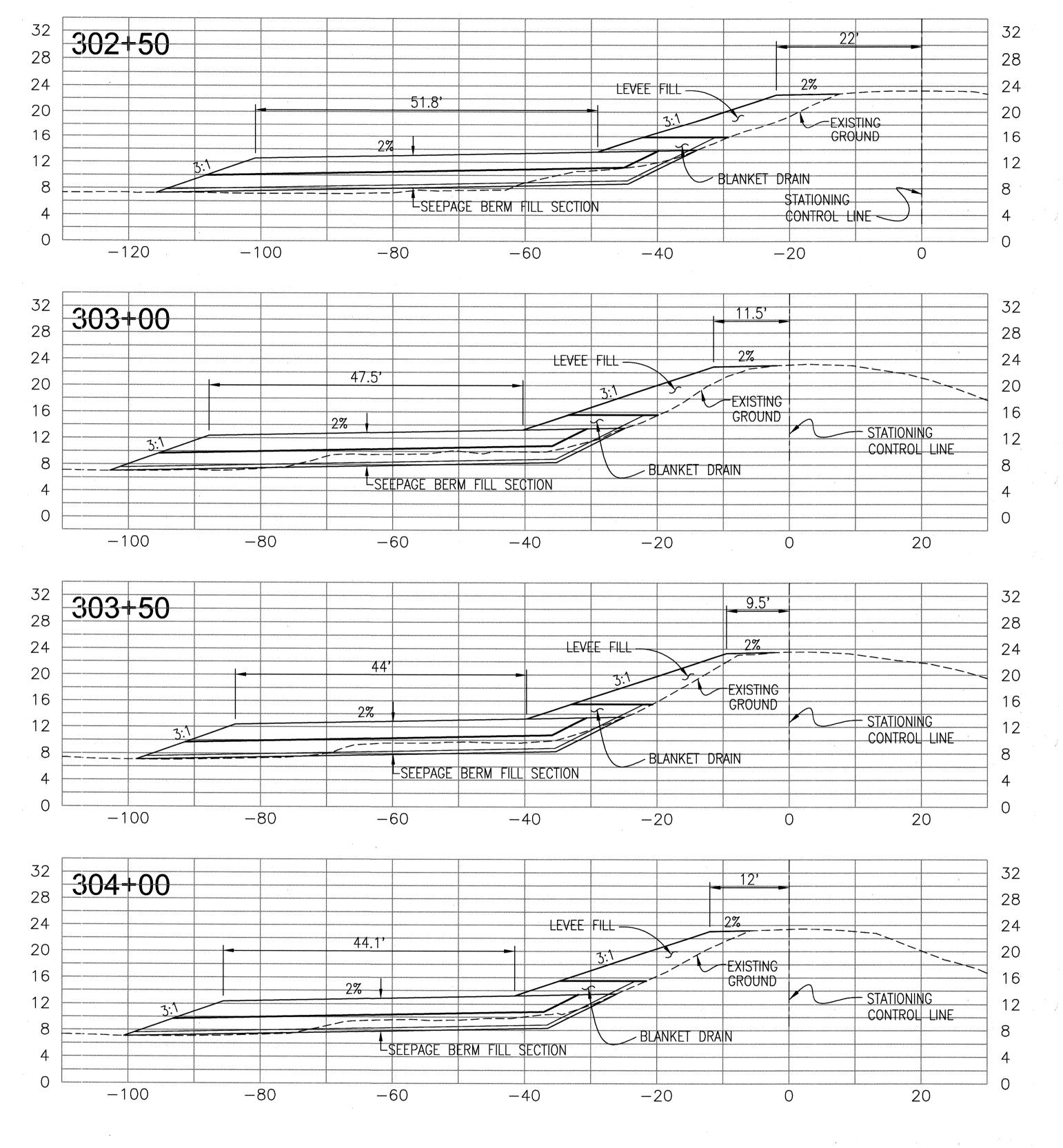
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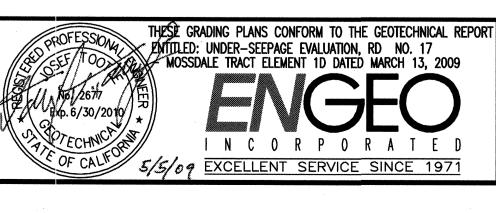


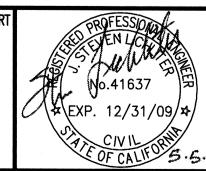






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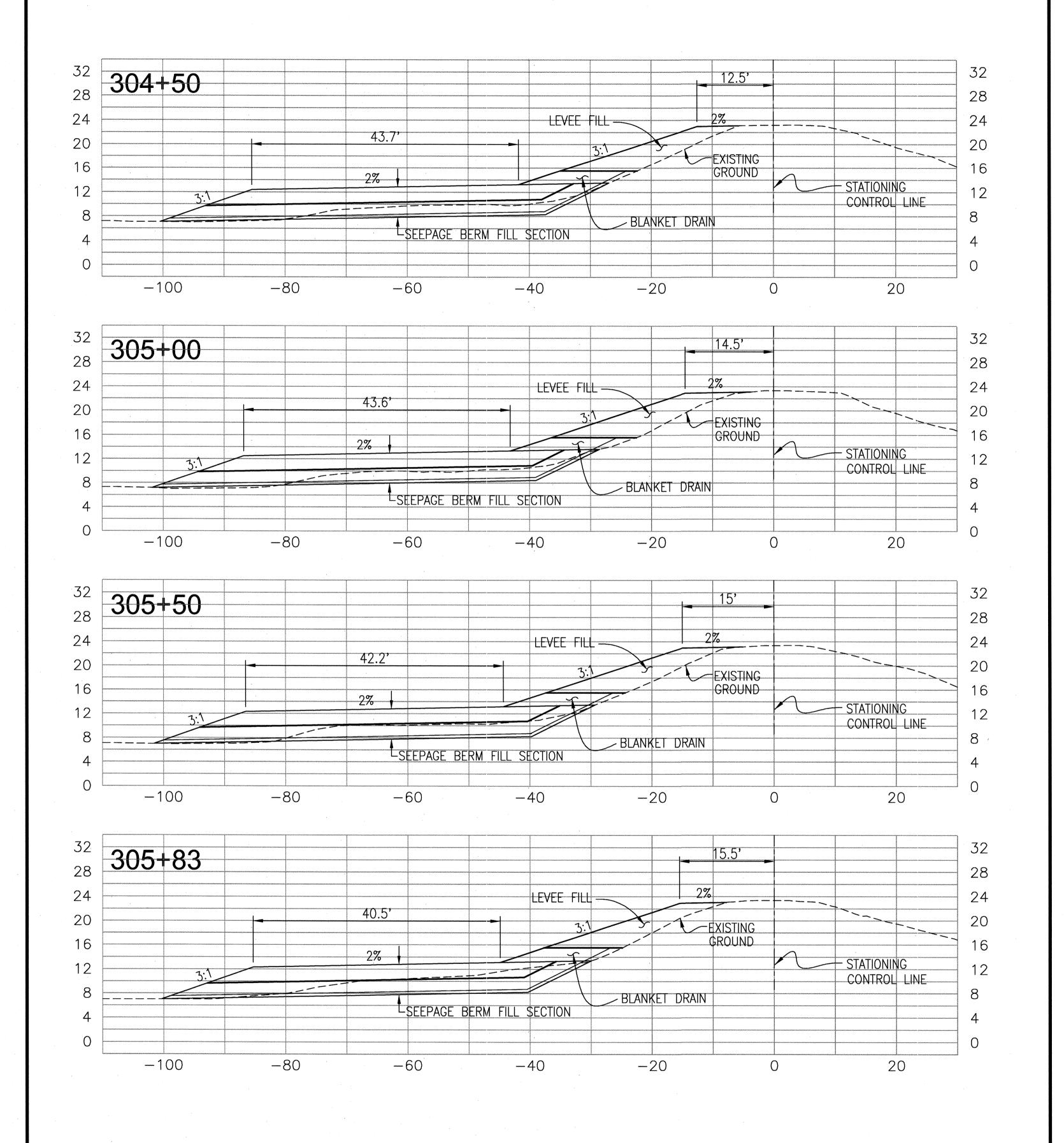


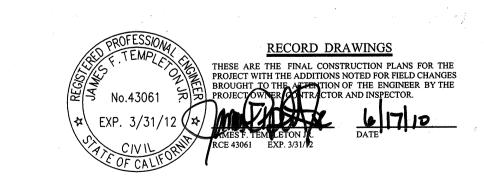


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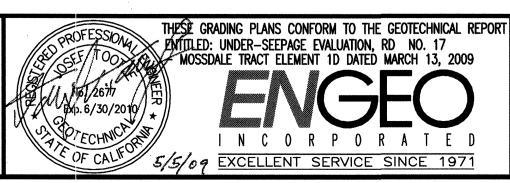
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PLANS REVIEWED AND APPROVED BY:

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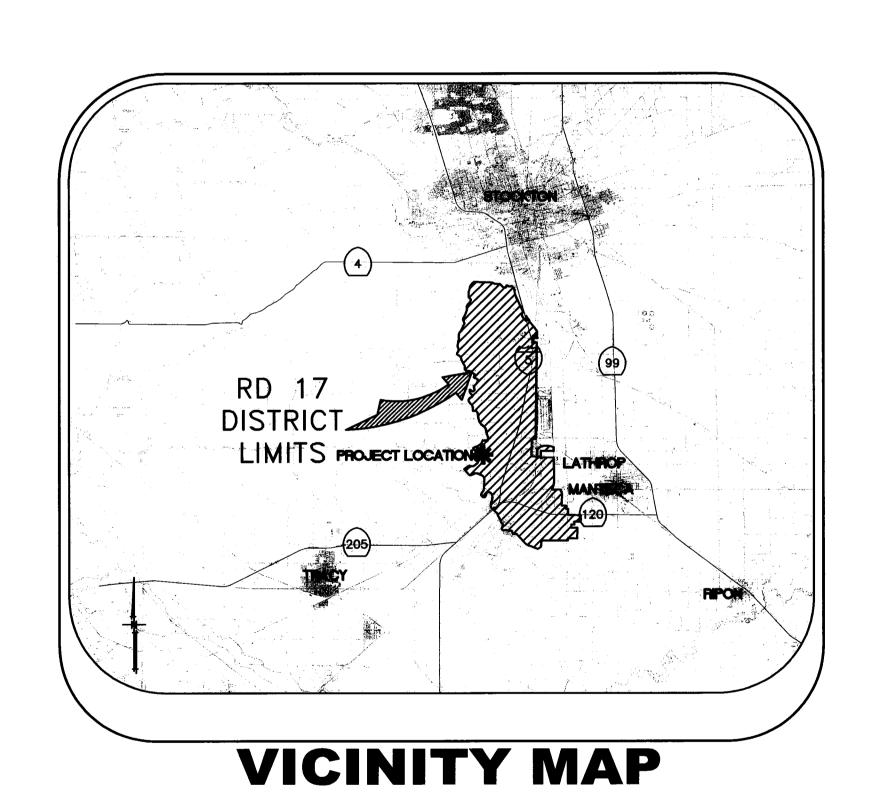
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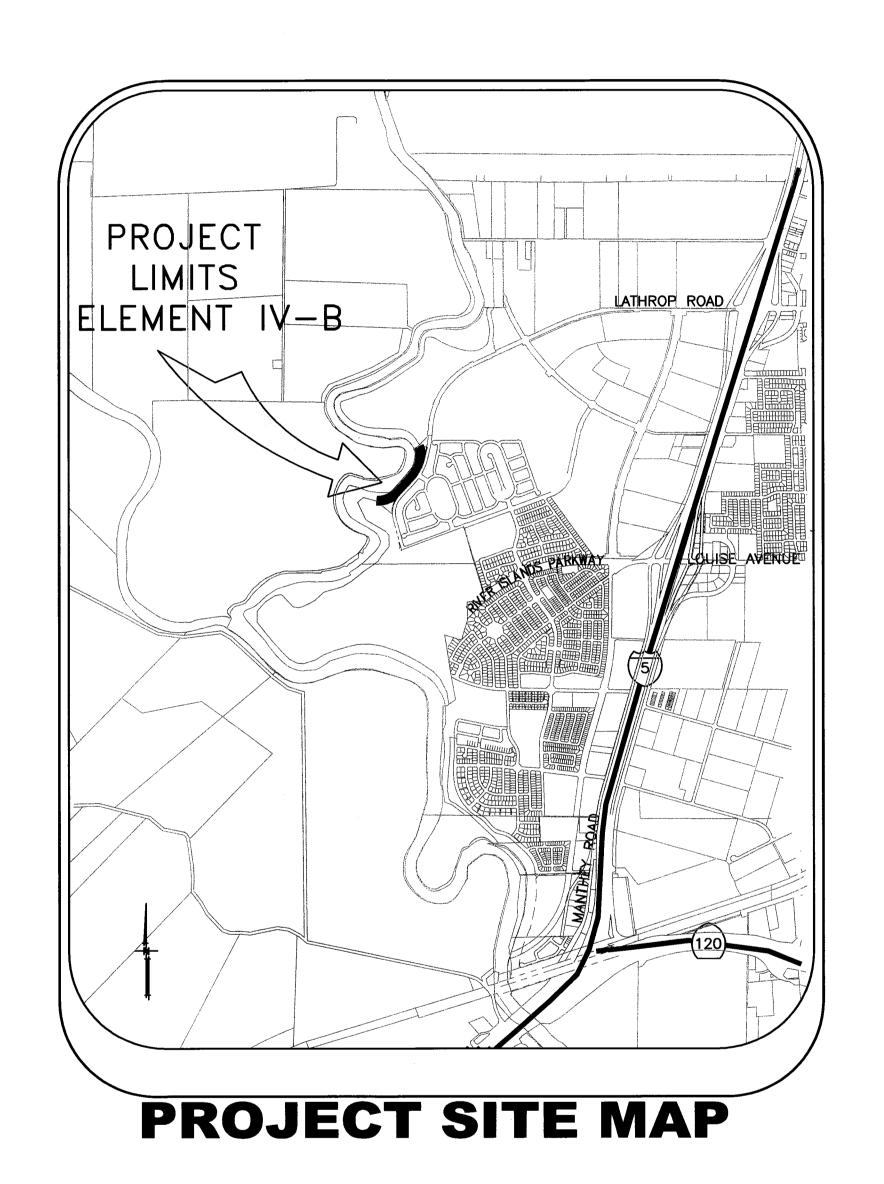
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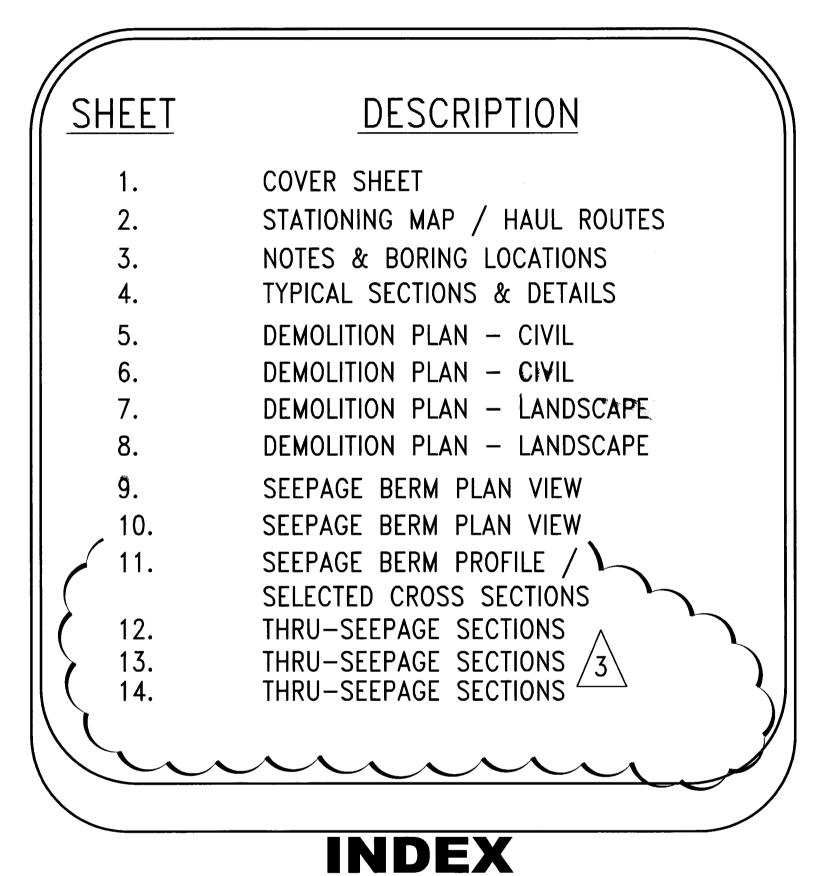
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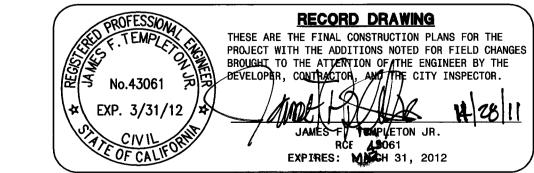
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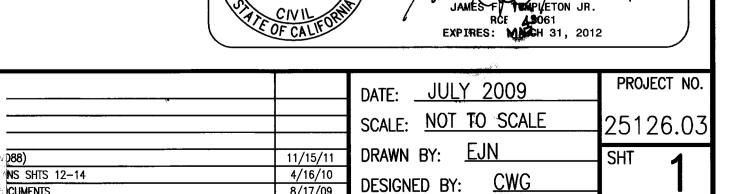


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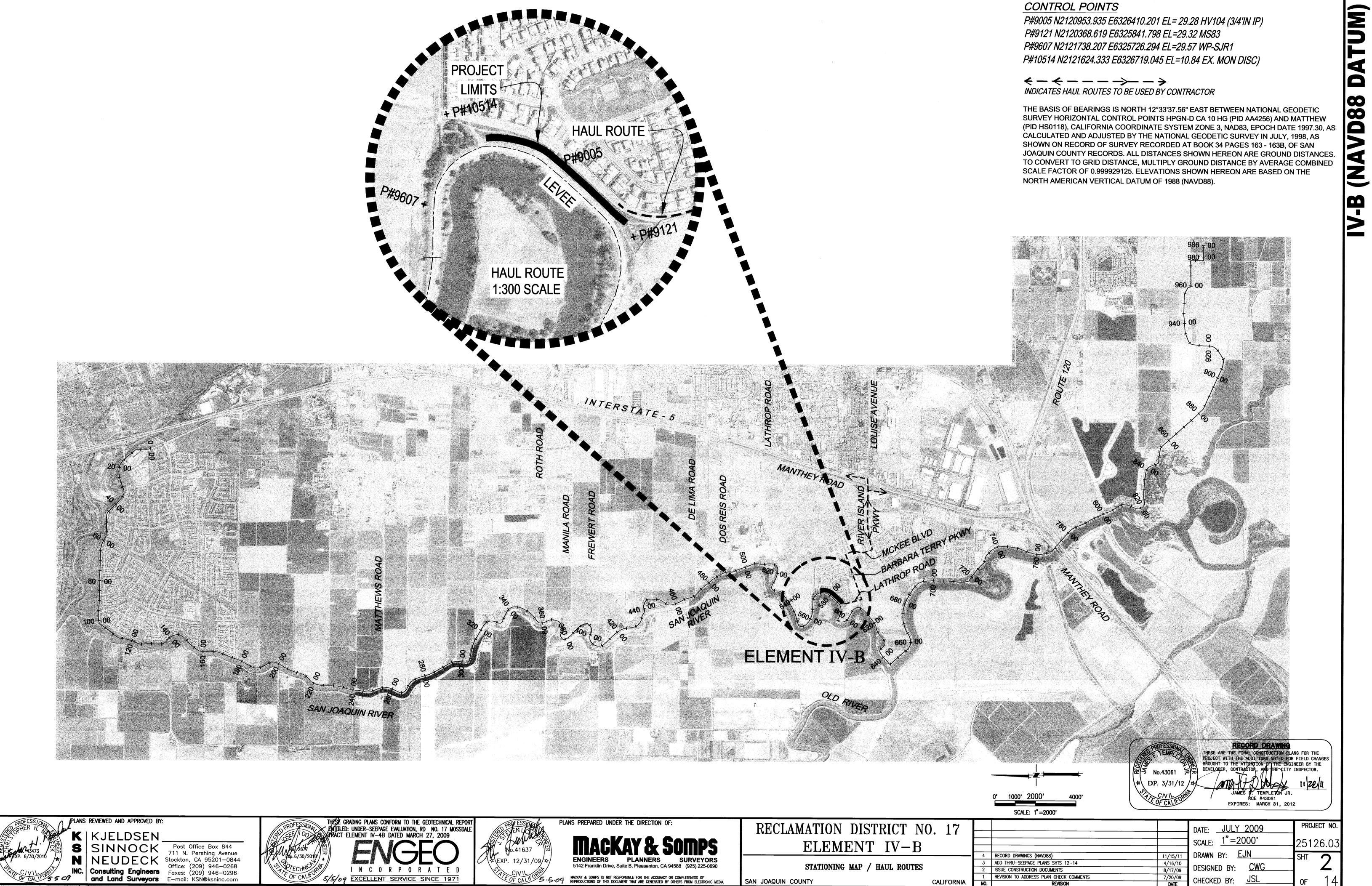
K | KJELDSEN |
SINNOCK | Post Office Box 844 |
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7/20/09 **DATE**

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REVISION TO ADDRESS PLAN CHECK COMMENTS

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DESIGNED BY:

CHECKED BY: JSL

7/20/09 DATE

STATIONING MAP / HAUL ROUTES

THE "DISTRICT" AS REFERRED TO IN THESE NOTES MEANS RECLAMATION DISTRICT 17.

THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALL CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE <u>DUST AND MUD CON</u> DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.

THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED" SURVEYS.

THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES,

MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

GENERAL NOTES:

- 1. PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE, AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRE-CONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR, AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROUTES. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS AS SHOWN ON HAUL ROUTE PLAN, UNLESS
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE CONSTRUCTION SURVEY STAKES AS DESCRIBED IN CONSTRUCTION SURVEYING SECTION. PLEASE CONTACT KJELDSEN SINNOCK AND NEUDECK WITH STAKING REQUESTS (209-946-0268) WITH AT LEAST TWO WORKING DAYS ADVANCE NOTICE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED THE CONSTRUCTION SURVEYING SECTION
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT. THE ENGINEER, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- 11. ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND/OR DEMOBILIZATION, LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED, EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS, DRAINAGE AND IRRIGATION DITCHES. AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS. THE CONTRACTOR SHALL CONTACT THE ENGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS IS TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL. IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT, TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

- 1. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING. SWEEPING AND SPRINKLING WITH WATER, OR OTHER MEANS AS NECESSARY. THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS CLEAN & CLEAR FROM CONSTRUCTION IMPACTS OR DEBRIS.
- 2. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS. WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS, OIL, BITUMEN'S, CALCIUM CHLORIDE. AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

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ENVIRONMENTAL NOTE

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- 1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROUTES, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES AND THE PROJECT SITE.
 - a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS WHICH MIGHT DAMAGE CROPS.
- b. NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS, INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK (OR MORE AS NEEDED OR DIRECTED BY THE ENGINEER) TO MAINTAIN ADEQUATE DUST CONTROL FOR THE FOLLOWING AREAS:
- a. PROJECT AREAS
- c. LEVEE TOE BERM FILL AREAS
- d. OTHER CONSTRUCTION USE AREAS
- e. CROP DAMAGE PREVENTION f. RESIDENTIAL BUILDING AREAS

- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF

- 1. THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME CAUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.
- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM & CONSISTENT WITH THE RECOMMENDATIONS OF THE SOILS REPORT.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISIONS, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC CONTROL OF THE PROJECT SPECIFICATIONS (AS PREPARED BY THE ENGINEER)

- 1. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED BY HIM IN A CLEAN AND ORDERLY CONDITION, DISPOSING OF REFUSE IN A MANNER SATISFACTORY TO THE ENGINEER.
- 2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL HAUL ROUTES AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

CONSTRUCTION NOTES: HAUL ROUTES:

LANDOWNERS.

- 1. THE CONTRACTOR SHALL IMPROVE, MAINTAIN, AND REPAIR UPON COMPLETION, THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE REPAIR AREAS.
- 2. THE CONTRACTOR SHALL REVIEW THE HAUL ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE HAUL ROUTES WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS, AND OTHER LOCAL TRAFFIC.
- 3. THE HAUL ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD DRAINAGE REQUIREMENTS.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS, MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 5. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE HAUL ROUTES AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- 7. THE HAUL ROUTES MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING REMOVAL IF REQUIRED, IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE HAUL ROUTES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS. REPAIRS TO HAUL ROUTES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE HAUL ROUTES USED AT ALL TIMES DURING CONSTRUCTION.

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LEVEE SEEPAGE BERM SECTION:

1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED MATERIALS (PER THE ENGINEERS SPECIFICATIONS) AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER TO THE DESIGNATED SEEPAGE BERM SITES.

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- 2. THE SEEPAGE BERM SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE SEEPAGE BERM AREAS PRIOR TO THE ACCEPTANCE OF THE MATERIAL.
- 4. THE CONTRACTOR SHALL DELIVER THE FILTER DRAIN MATERIAL, DRAIN ROCK, AND SEEPAGE BERM FILL TO THE REQUIRED SECTIONS AS UNIFORM MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- A. THE FILTER DRAIN MATERIAL AND SEEPAGE BERM FILL SHALL BE PLACED IN LOOSE HORIZONTAL LAYERS NOT MORE THAN EIGHT INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.
- 5. THE CONTRACTOR SHALL GRADE THE BASE OF THE SEEPAGE BERM TO MAINTAIN THE DESIGNATED GRADE AND CROSS-SECTIONS AS SHOWN ON THE PLANS. CONTRACTOR SHALL CUT AND FILL AS NECESSARY AND STOCKPILE ANY ADDITIONAL FILL FOR USE AS SEEPAGE BERM FILL.

FINISHING AND SLOPING GRADING

1. THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

COMPACTION EQUIPMENT:

 COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS.

1. THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO, INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND SEEPAGE BERM FILL MATERIALS.

<u>GEOTEXTILE FABRIC:</u>

- 1. GEOTEXTILE FABRIC SHALL BE MIRAFI FW700 WOVEN GEOTEXTILE OR AN APPROVED EQUAL
- 2. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED BETWEEN THE SEEPAGE BERM FILL AND THE DRAIN ROCK MATERIAL.
- . Measurement and payment will be by the square foot neat (without overlap) and BASED UPON THE FABRIC PLACED TO THE DIMENSIONS AND AT THE LOCATIONS DESIGNATED AND ACCEPTED BY THE ENGINEER.
- 4. FOR PAYMENT PURPOSES, MEASUREMENT OF THE FABRIC PLACED WILL NOT INCLUDE OVERLAPS AS REQUIRED BY THESE PLANS.

ROAD PREP, MAINTENANCE, AND SWPPP:

- 1. PER THE IMPROVEMENT PLANS AND SWPPP (AS PREPARED BY ENGEO). CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF REQUIRED:
- A. EROSION CONTROL FACILITIES
- B. CONSTRUCTION ENTRANCE
- C. STREET SWEEPING

E. SITE SECURITY

D. SITE/CONSTRUCTION MATERIALS MAINTENANCE

LEGEND

EXISTING FACE OF CURB EX ROW EXISTING RIGHT OF WAY ____EX_SD/EX_PERF_PIPE EXISTING STORM DRAIN NEW TOE DRAIN **EXISTING WATER LINE** EXISTING RECYCLED WATER LINE NEW SEEPAGE BERM SLOPE

METER A MORING GOLDTONI.

APPROXIMATE LOCATION OF NEAR-SURFACE SAMPLE COLLECTED → APPROXIMATE LOCATION OF SOLID FLIGHT AUGER BORING (ENGEO, 2008-2009) 072C APPROXIMATE LOCATION OF CONE PENETRATION TEST (FUGRO, 2006–2007) APPROXIMATE LOCATION OF SOIL BORING (KLEINFELDER, 1986–1989) **ELEMENT IV-B**

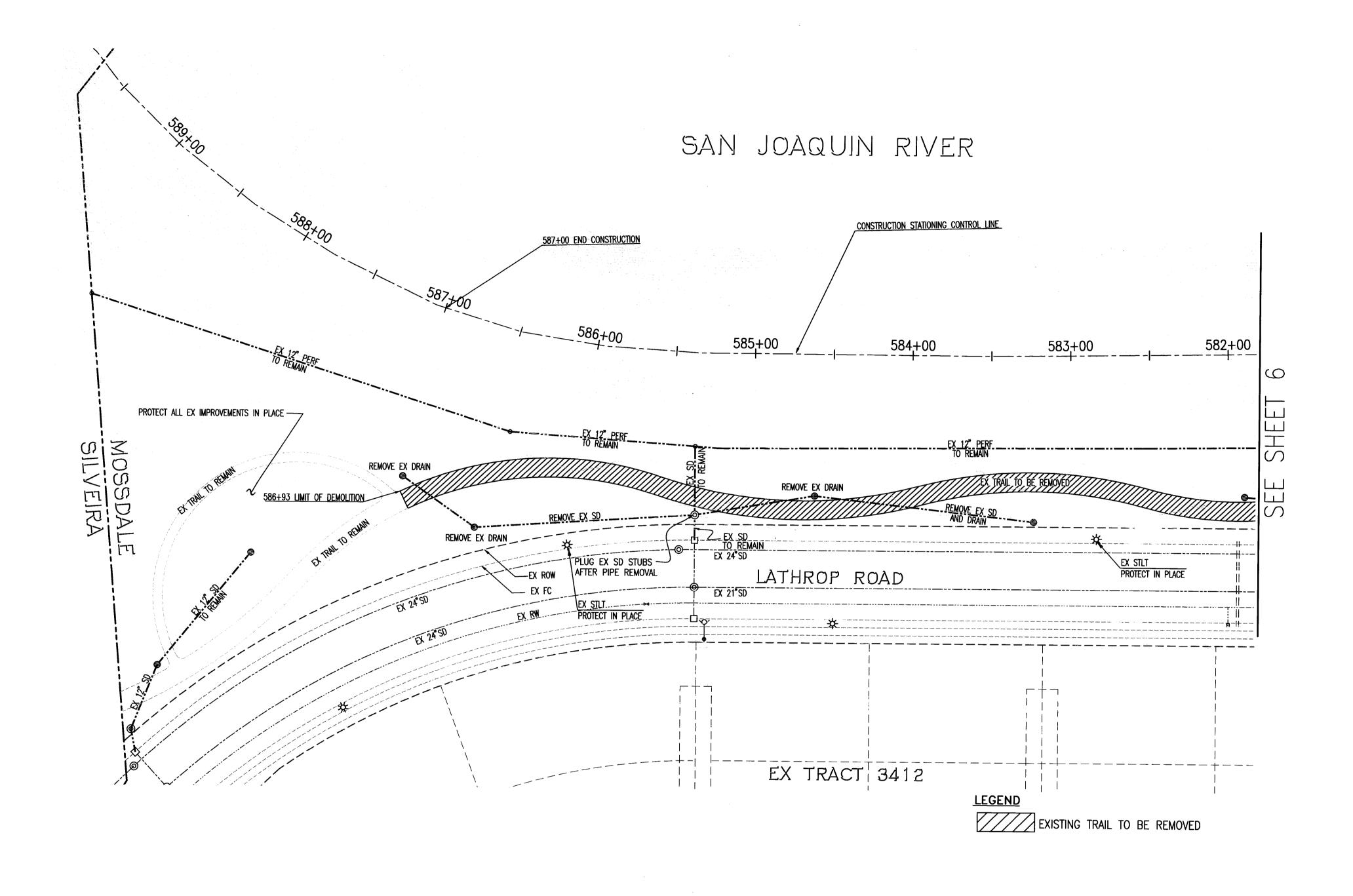
BORING LOCATIONS
SCALE 1":500'

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RECORD DRAWING THESE ARE THE FINAL CONSTRUCTION PLANS FOR THE PROJECT WITH THE ADDITIONS NOTED FOR FIELD CHANGES BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE DEVELORER, CONTRACTOR, AND THE CITY INSPECTOR. RCE #43061 EXPIRES: MARCH 31, 2012



NOTES: TREE REMOVAL SHALL COMPLETED IN ADVANCE OF THE SEEPAGE BERM CONSTRUCTION AND SHALL INCLUDE THE REMOVAL OF STUMPS AND ROOTS GREATER THAN 1/2 INCH IN DIAMETER.

WARNING • CAUTION EXISTING UNDERGROUND UTILITIES
CONTACT: UNDERGROUND SERVICE ALERT
PHONE: (800) 642-2444
FOR MARKING PRIOR TO DIGGING

TOPOLOGY SOURCE: LIDAR TOPO-SUMMER 2008 PLANS REVIEWED AND APPROVED BY: THESE GRADING PLANS CONFORM TO THE GEOTECHNICAL REPORT ENTITLED: UNDER-SEEPAGE EVALUATION, RD NO. 17 MOSSDALE PRACT ELEMENT IV-4B DATED MARCH 27, 2009 KJELDSEN SINNOCK
NEUDECK
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail: KSN@ksninc.com 5/5/09 EXCELLENT SERVICE SINCE 1971

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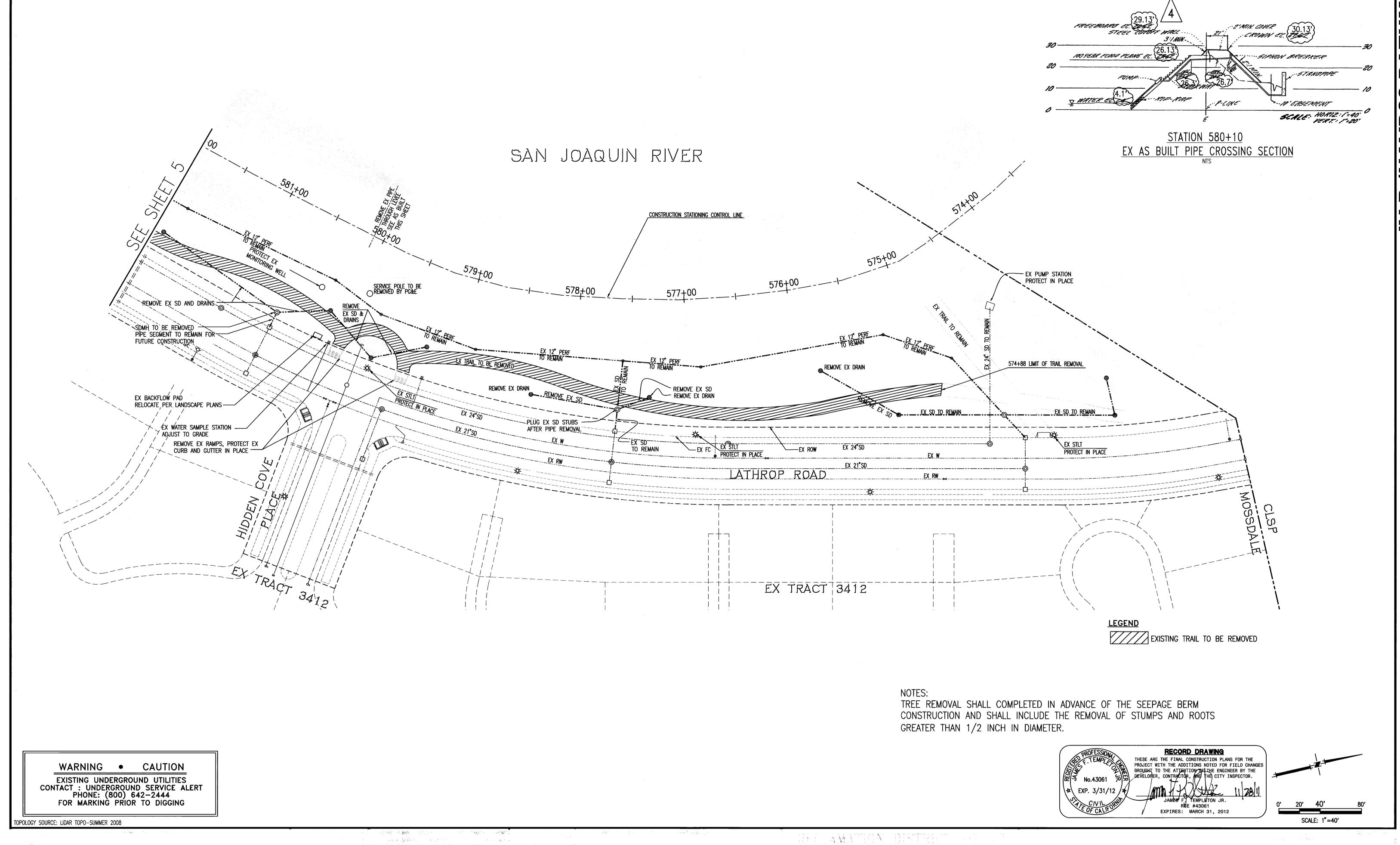
RECLAMATION DISTRICT NO. 17 ELEMENT IV-B DEMOLITION PLAN - CIVIL

SAN JOAQUIN COUNTY

ADD THRU-SEEPAGE PLANS SHTS 12-14 ISSUE CONSTRUCTION DOCUMENTS REVISION TO ADDRESS PLAN CHECK COMMENTS CALIFORNIA

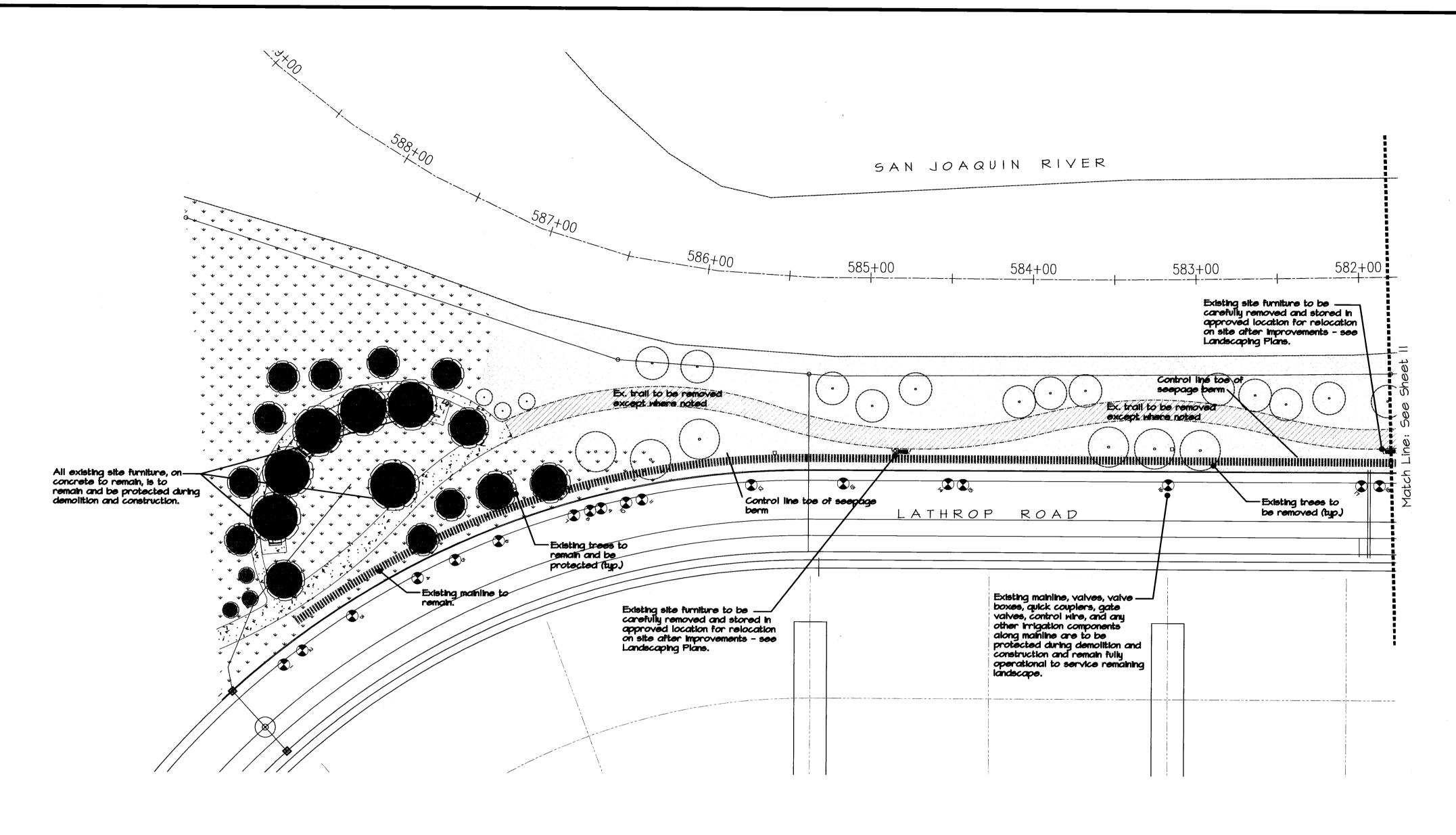
THESE ARE THE FINAL CONSTRUCTION PLANS FOR THE PROJECT WITH THE ADDITIONS NOTED FOR FIELD CHANGES BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE DEVELOPER, CONTRACTOR AND THE CITY INSPECTOR. SCALE: 1"=40'

PROJECT NO. DATE: <u>JULY 2009</u> SCALE: <u>1"=40'</u> DRAWN BY: EJN DESIGNED BY: <u>CWG</u> - CHECKED BY: JSL



EARLY & SOMPS

14



Abbreviation List

American with Disabilities Act CJ Control Joint Concrete masonry unit

Cubic yard

Expansion Joint EQ Equal FT Foot (Feet)

Gallon Gallons per minute

LB **Pound** MAX Maximum Minimum

No Common Name ∞ On Center

PSI Pounds per square inch Radius

SCH Schedule

Square feet

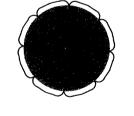
Verify in field Melded wire mesh

General Demolition Notes

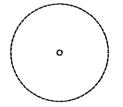
- Call USA before any demolition. Protect any encountered utilities during demolition and construction unless designated for removal.
- 2. Remove specified vegetation and irrigation as described. See
- 3. Contractor to keep existing irrigation system in operation for existing-to-remain turf throughout demolition and construction.
- 4. Unless otherwise noted on the drawings. All materials indicated to be removed and disposed of shall become the property of the contractor. Disposal of such material shall become the responsibility of the contractor and shall be made outside of the project site in an approved location. All costs associated with material removal shall be paid for by the contractor.
- 5. Demolition shown is diagrammatic and general. Perform all demolition as required for the construction of the project including all items in the way of new work whether or not specifically shown. Contact Landscape Architect for any items in question.
- 6. Demoltion contractor shall field verify the location of all pressurized irrigation mainline, valves, flow meter, gate valves, quick couplers, backflow preventer, water meter, control wires, and irrigation controller. All of these items are to be protected in place. Should any be damaged, the contractor shall notify the City Parks Maintenence Department and repair the damage under the supervision of and to the satisfaction of the City. Should any of the irrigation components be required to relocated for demolition, the contractor shall notify the Landscape Architect and City prior to relocation.

Note: Review all existing site conditions. Alert Owner and/or Land Arch of any discrepancies or required clarifications prior to commencing demolition.

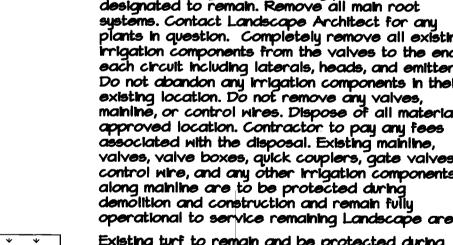
Demolition Legend

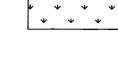


Tree to remain and be protected. See General Tree Protection During Construction.



Tree to be completely removed. Grind stump below final finish grade and remove main root system. Dispose of material in approved location. Contractor to pay any fees associated with the disposal.





Existing turf to remain and be protected during construction. Maintain existing irrigation in fully operational order. Damaged turf and/or irrigation shall be repaired in the landscape installation

Existing path and site concrete to remain and be protected during demolition and construction.

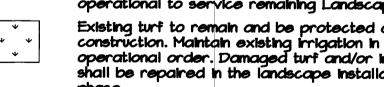
Repair any damage that occurs during demolitionFESSIONAL

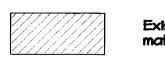




or construction.

Completely remove all trees, turf, shrubs, groundcovers, grasses and any plant material not designated to remain. Remove all main root esignated to remain. Remove all main root systems. Contact Landscape Architect for any plants in question. Completely remove all existing irrigation components from the valves to the end of each circuit including laterals, heads, and emitters. Do not abandon any irrigation components in their existing location. Do not remove any valves, mainline, or control wires. Dispose of all material in approved location. Contractor to pay any feet.



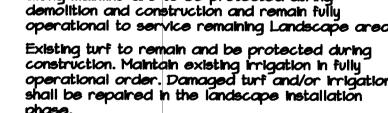


Existing path to be demolished. Dispose of material in approved offsite location.



Irrigation Mainline to remain

valves, valve boxes, quick couplers, gate valves, control wire, and any other irrigation components operational to service remaining Landscape areas.





RECORD DRAWING THESE ARE THE FINAL CONSTRUCTION PLANS FOR TH PROJECT WITH THE ADDITIONS NOTED FOR FIELD CHANGE BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE

RCE #43061

General Tree Protection During Construction

compaction which can kill the trees.)

All trees that are shown on the demolition plan specifically shown not to be removed are to remain on site and to be cared for throughout the construction process in accordance

required to replace any trees that are removed or die due to negligence or not specifically following these notes.

2. Protect root zones of trees during demolition and construction. Do not store items on the soil within the drip line of the trees. (Construction equipment and storage causes soil

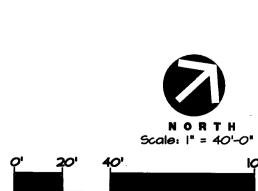
3. Utility lines and all associated trenching are to be laid-out to avoid conflict and cutting of

4. Any damage inadvertently caused to the trees such as broken branches, etc. is to be reviewed immediately by a certified arborist. The recommendations made by the arborist are to be carried out immediately to the satisfaction of the owner.

5. It is the responsibility of the General Contractor to ensure the health of all existing trees. Trees damaged or killed during construction are to be replaced at a size large enough to the satisfaction of the owner.

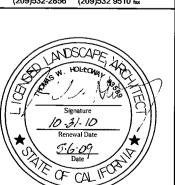
with the following notes. If there is a question as to whether a tree is to remain or be removed, ask the landscape architect or owner prior to removal. The contractor will be





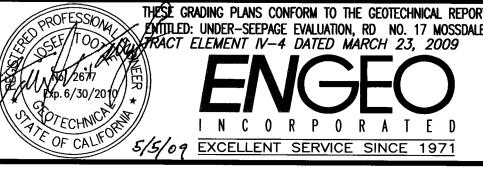


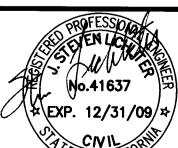
151 N. Norlin St., Sonora, CA 95370 (209)532-2856 (209)532 9510 fax



LANS REVIEWED AND APPROVED BY:

SINNOCK Post Office Box 844
711 N. Pershing Avenue NEUDECK Stockton, CA 95201-0844 Office: (209) 946-0268 Consulting Engineers Faxes: (209) 946-0296





PLANS PREPARED UNDER THE DIRECTION OF ENGINEERS PLANNERS SURVEYORS

5142 Franklin Drive, Suite B, Pleasanton, CA 94588 (925) 225-0690

	OF CALIFO	EXPIRI	ES: MARCH 31, 2012
RECLAMATION	DISTRICT NO.	17	
		4 1	
ELE.	MENT IV-B		

No.43061

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7/20/09 DATE	CHECKED BY: TWH	
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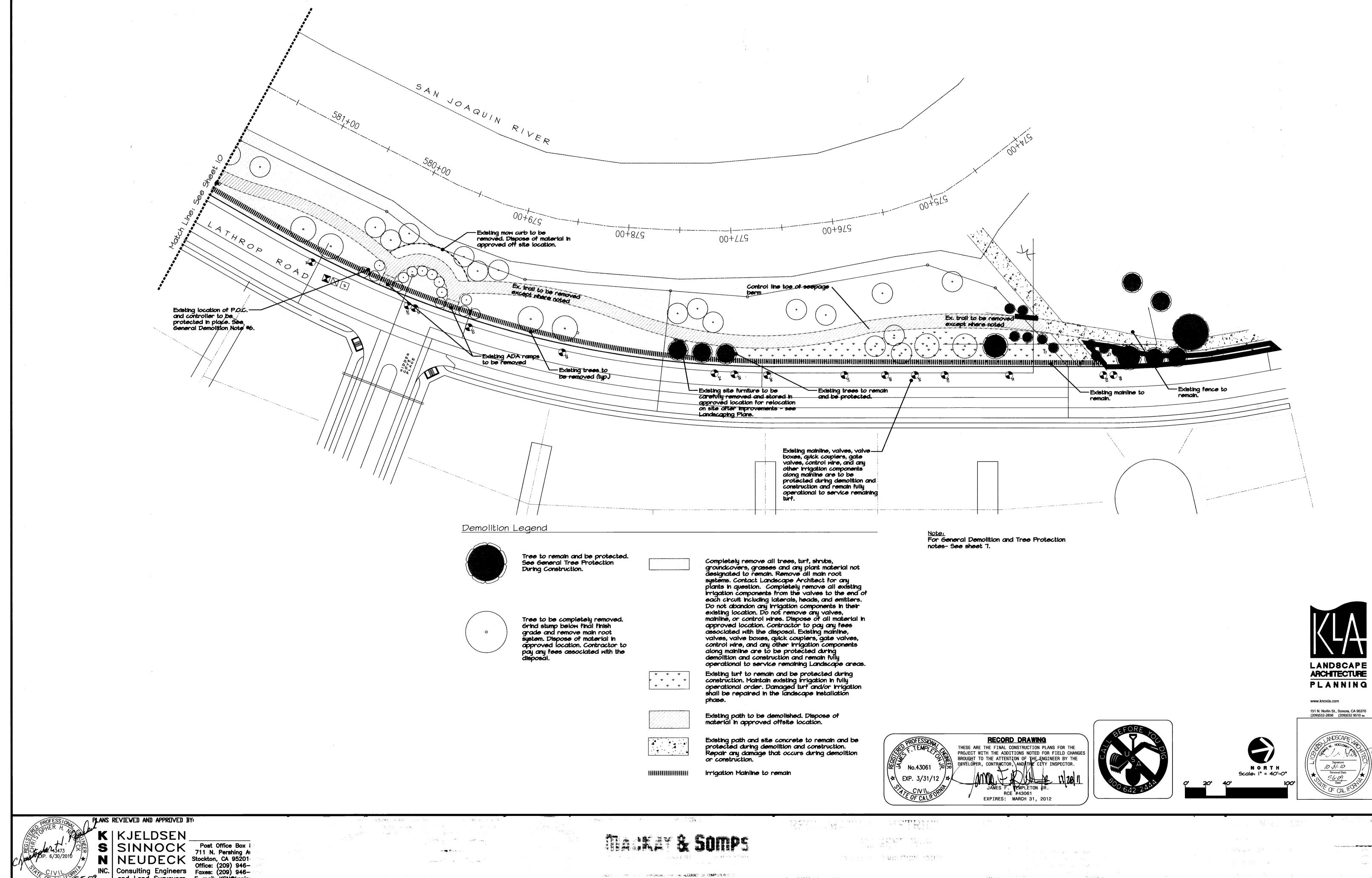
and Land Surveyors E-mail: KSNOksninc.com

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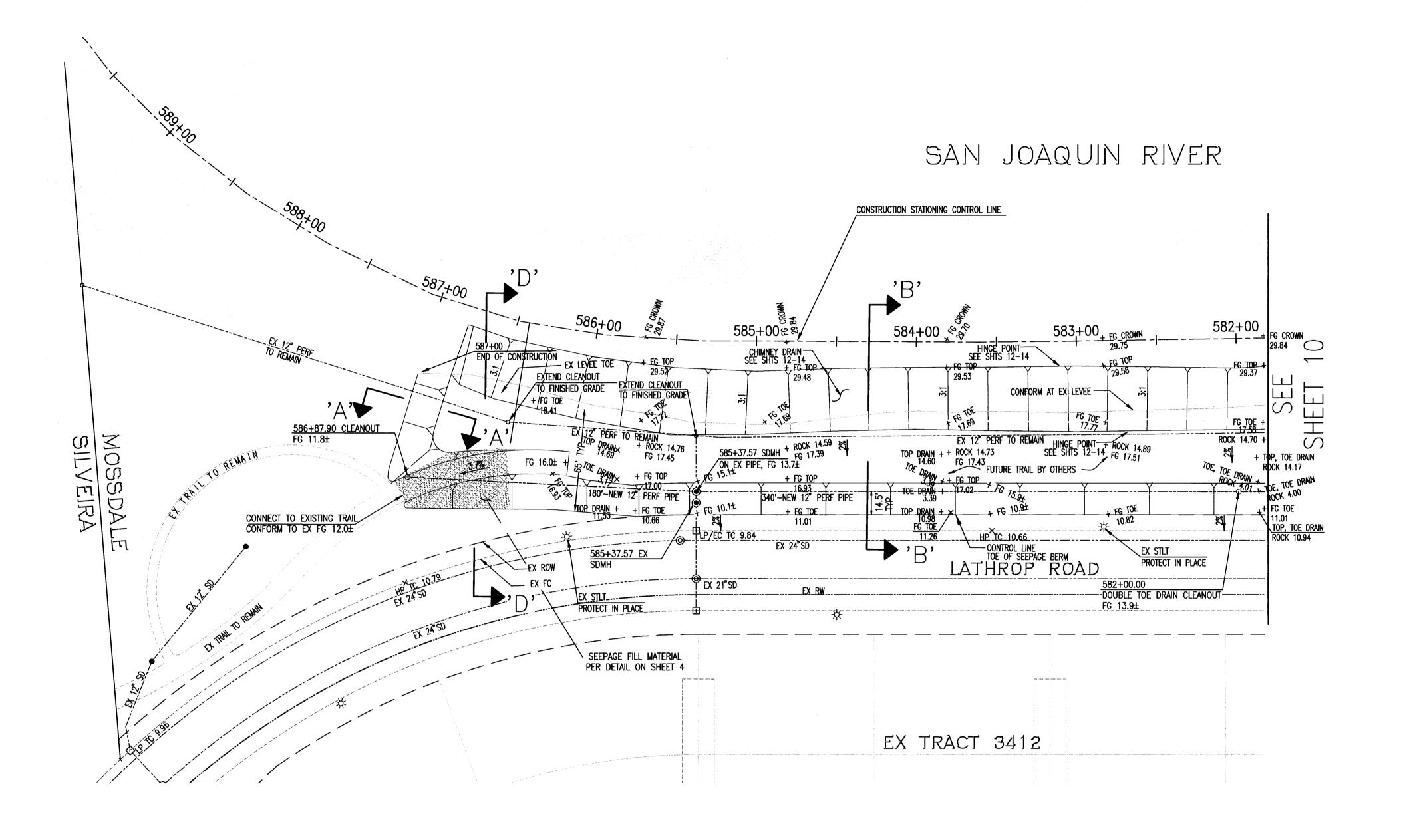
CALIFORNIA

PROJECT NO 1315



and Land Surveyors E-mail: KSNOksning

CARLO COMO A COMPANSA CARACTER CONTRACTOR CO



NOTE:

FOR 12" PERFORATED PIPE, SEE TOE DRAIN DETAIL ON SHEET 4 AND TOE DRAIN PROFILE ON SHEET 11.

WARNING • CAUTION

EXISTING UNDERGROUND UTILITIES

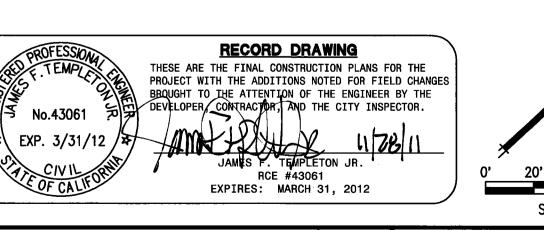
CONTACT: UNDERGROUND SERVICE ALERT

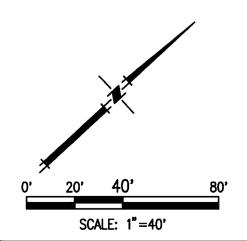
PHONE: (800) 642-2444

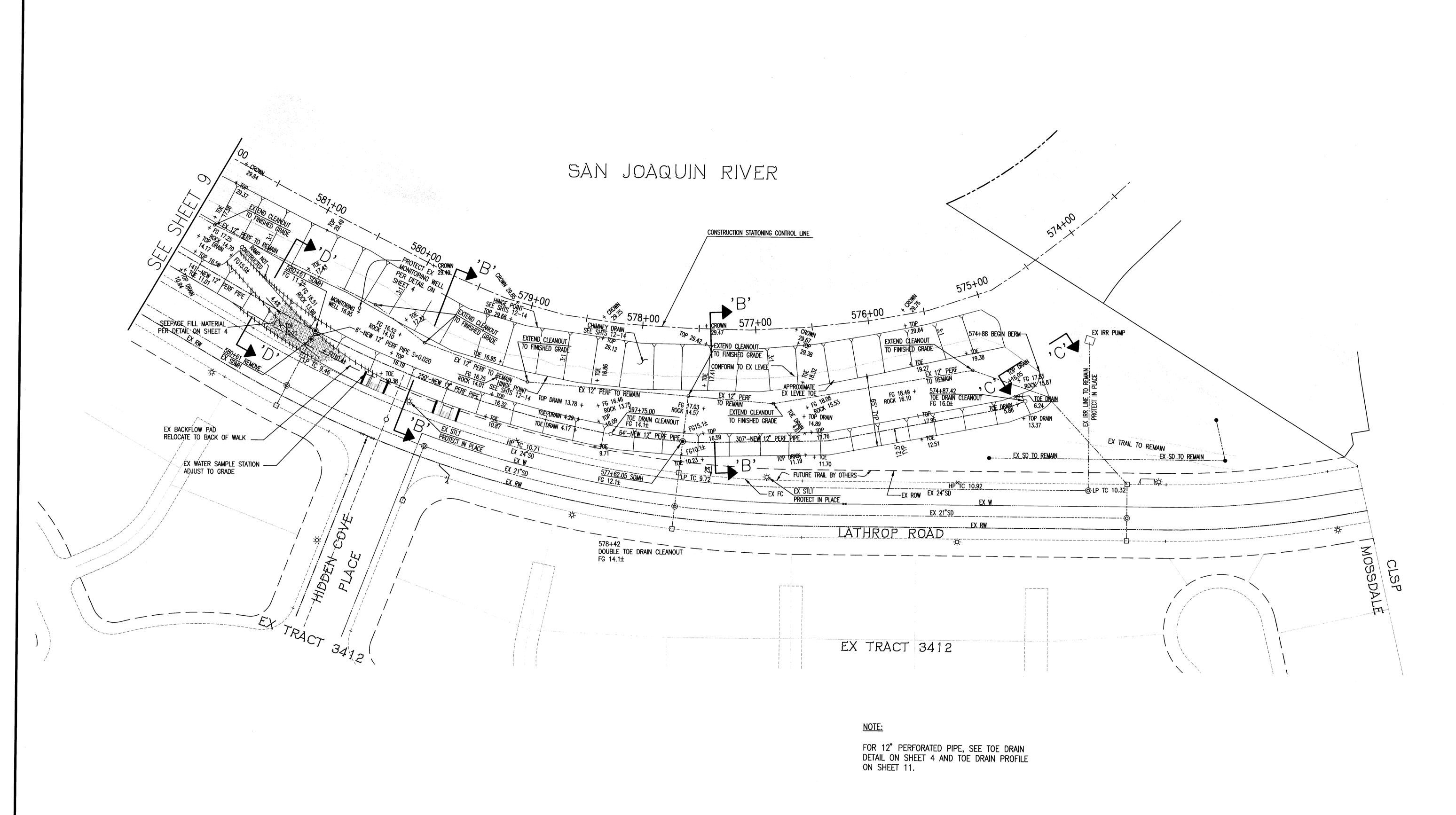
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(1967) - 「大野 中国智慧的政治,也不得自**为等等**的。

TACKEY & SOMPS

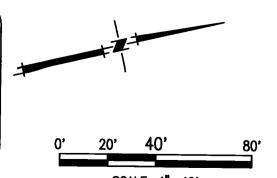






WARNING • CAUTION EXISTING UNDERGROUND UTILITIES
CONTACT: UNDERGROUND SERVICE ALERT
PHONE: (800) 642-2444
FOR MARKING PRIOR TO DIGGING RECORD DRAWING

THESE ARE THE FINAL CONSTRUCTION PLANS FOR THE PROJECT WITH THE ADDITIONS NOTED FOR FIELD CHANGES BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE DESIGN OF THE OUTPUT PROPERTY. RCE #43061 EXPIRES: MARCH 31, 2012



TOPOLOGY SOURCE: LIDAR TOPO-SUMMER 2008

PLANS REVIEWED AND APPROVED BY: KJELDSEN SINNOCK
711 N. Pershing Avenue
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail: KSN@ksninc.com

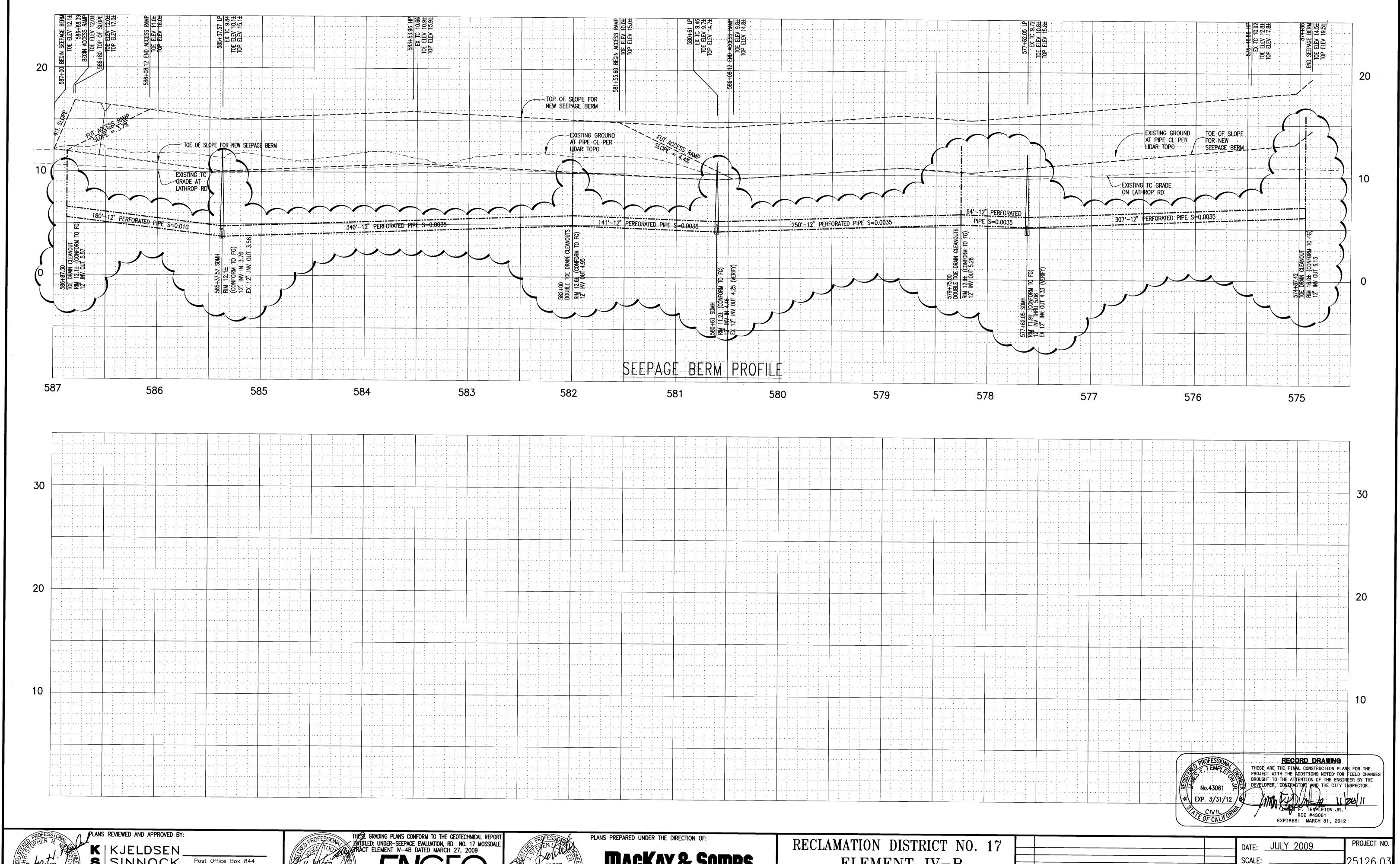
THESE GRADING PLANS CONFORM TO THE GEOTECHNICAL REPORT PATITLED: UNDER-SEEPAGE EVALUATION, RD NO. 17 MOSSDALE PRACT ELEMENT IV-4B DATED MARCH 27, 2009 5/5/09 EXCELLENT SERVICE SINCE 1971

ENGINEERS PLANNERS SURVEYORS
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RECLAMATION DISTRICT NO.	17
ELEMENT IV-B	
SEEPAGE BERM PLAN VIEW	

CALIFORNIA

	DATE: <u>JULY 2009</u>	PROJECT N
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SINNOCK
Post Office Box 844
711 N. Pershing Avenue
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail: KSN@ksninc.com

5/5/09 EXCELLENT SERVICE SINCE 1971



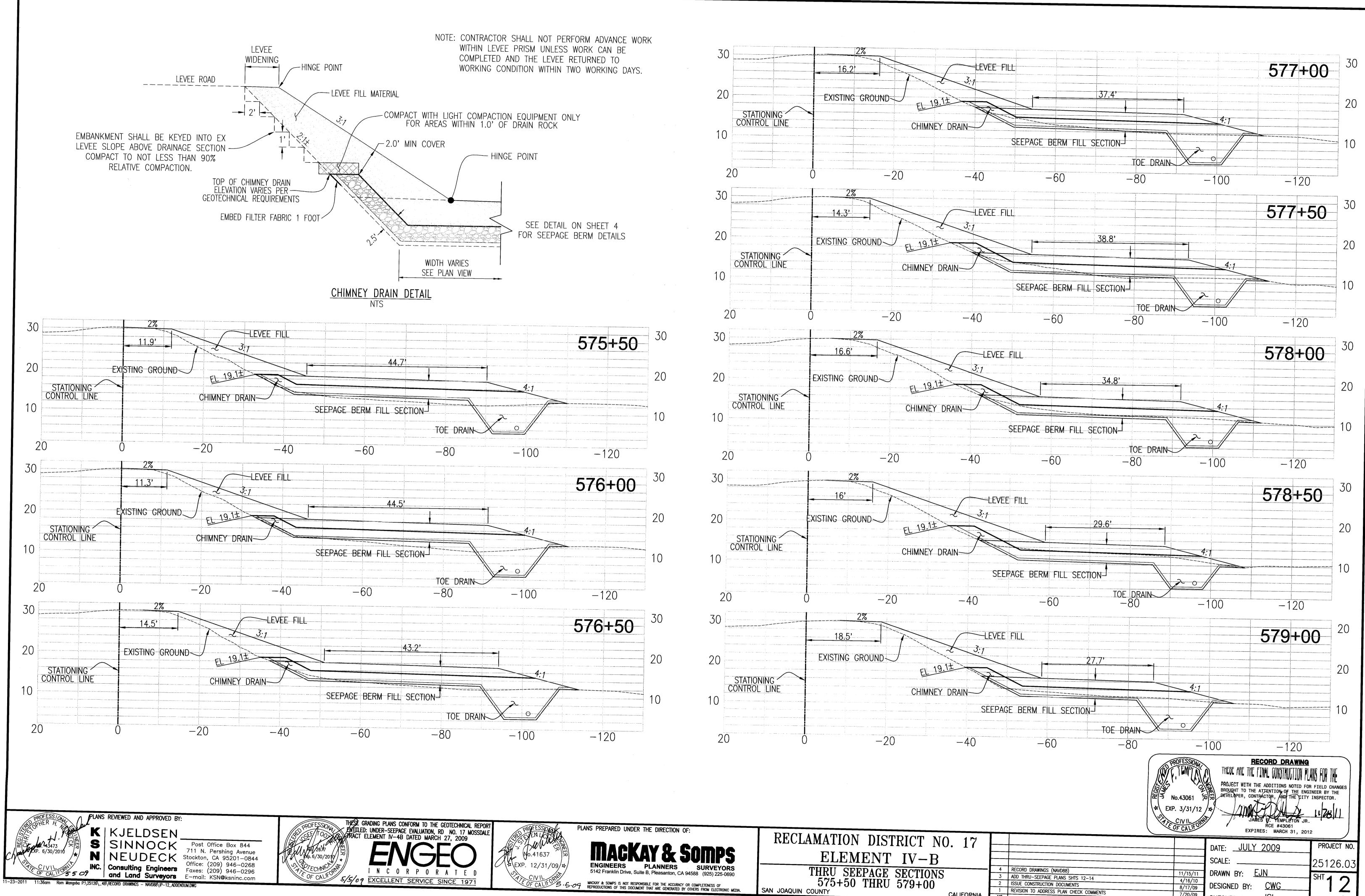
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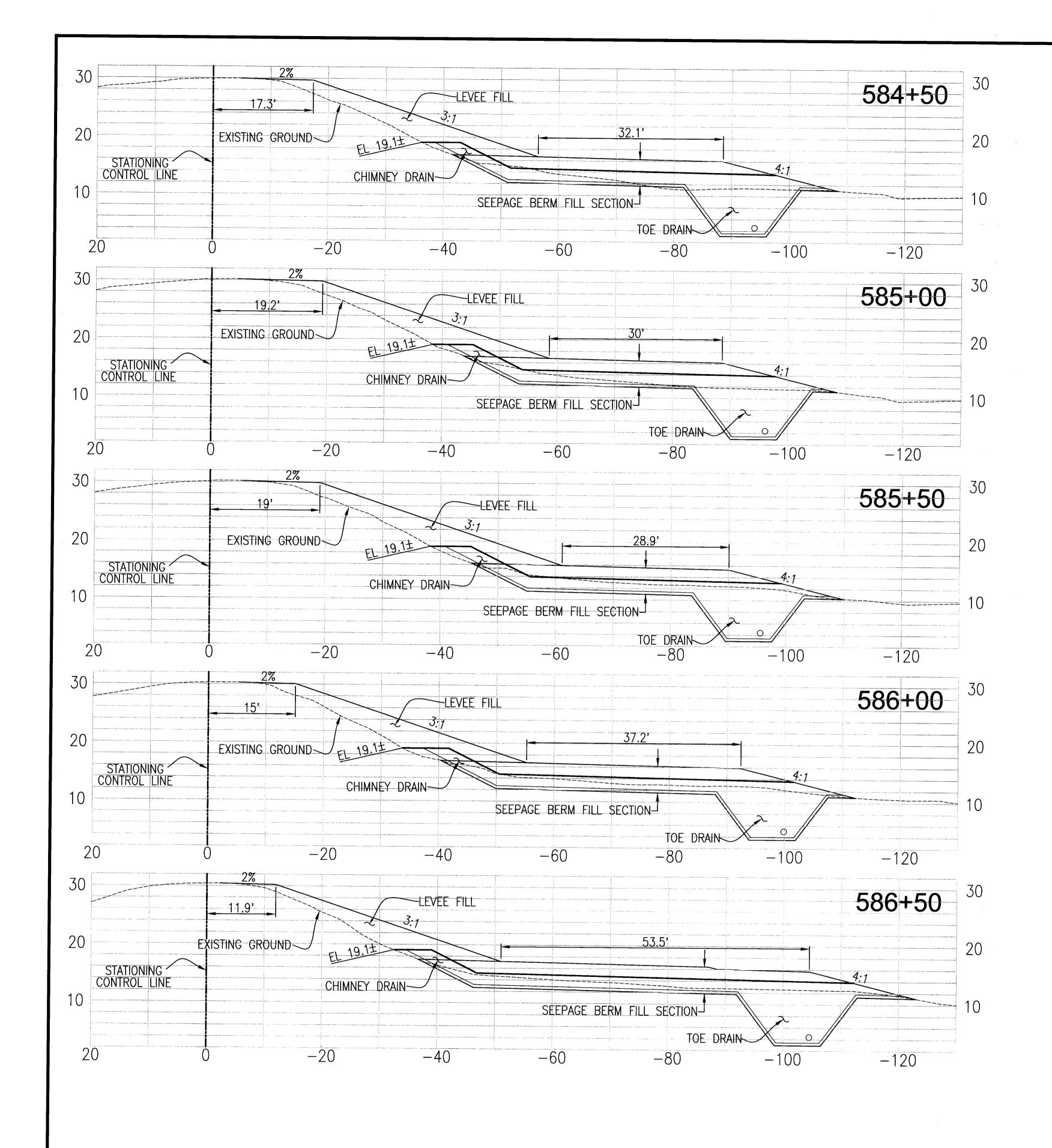
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ELEM	ENT IV-B
SEEPAGE BERM PROFILE	/ SELECTED CROSS SECTIONS

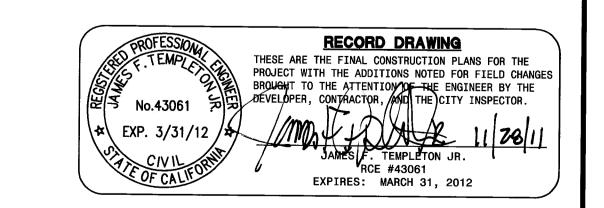
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CHECKED BY:







PLANS REVIEWED AND APPROVED BY: KJELDSEN SINNOCK
711 N. Pershing Avenue
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail: KSN@ksninc.com

THESE GRADING PLANS CONFORM TO THE GEOTECHNICAL REPORT ENTITLED: UNDER-SEEPAGE EVALUATION, RD NO. 17 MOSSDALE PRACT ELEMENT IV-4B DATED MARCH 27, 2009 INCORPORATED 5/5/09 EXCELLENT SERVICE SINCE 1971

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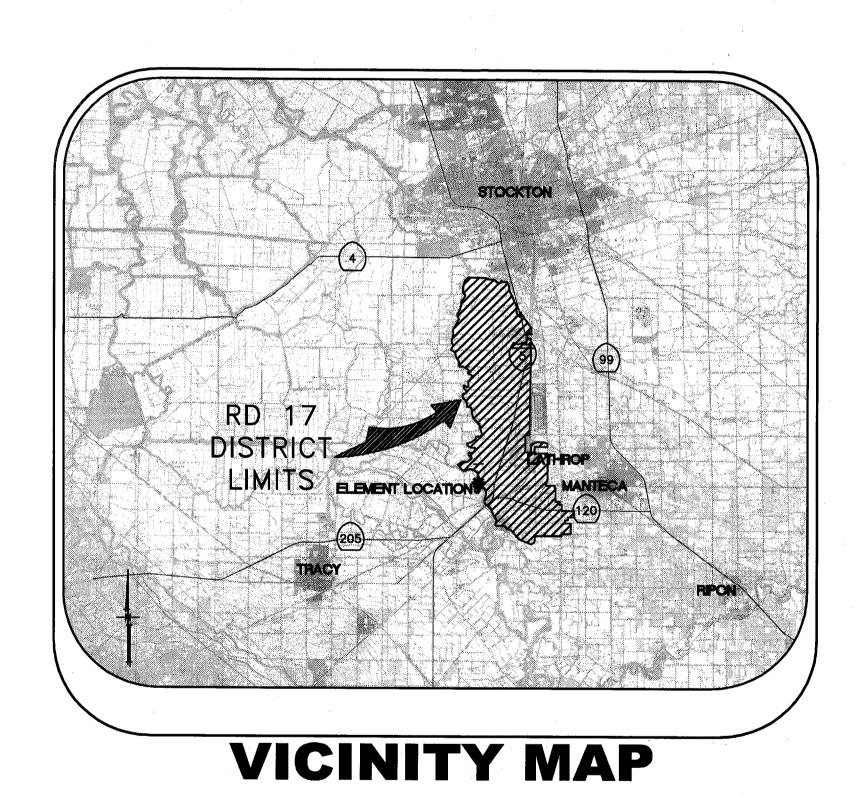
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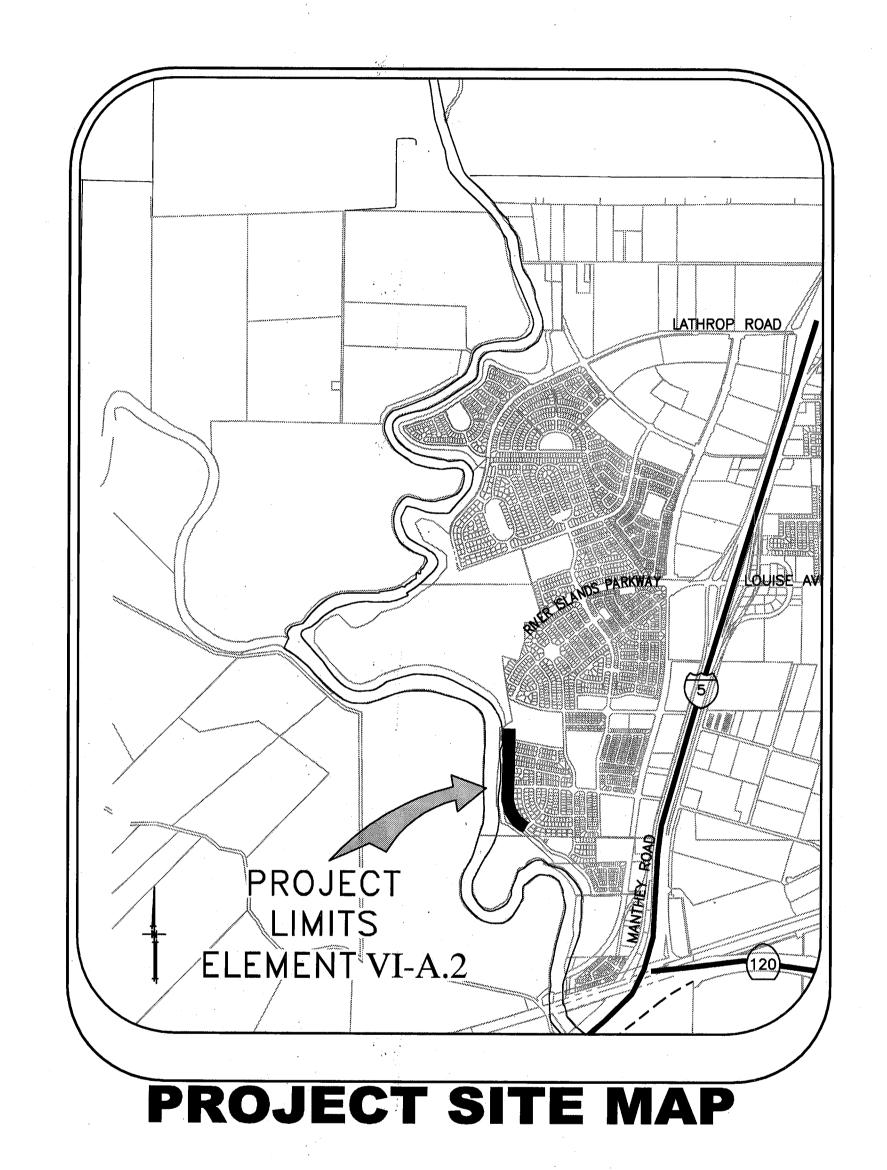
SAN JOAQUIN COUNTY

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RECLAMATION DISTRICT NO. 17 LEVEE SEPAGE PROJECT

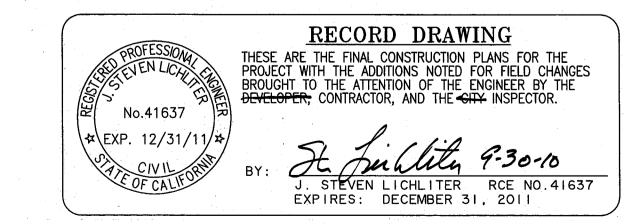
ELEMENT VI-A.2 STATION 700+00 THRU 723+47



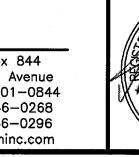


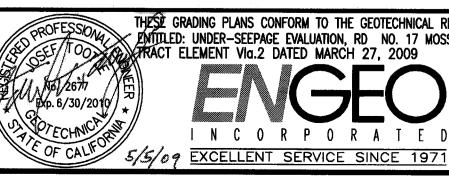
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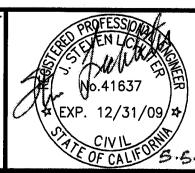
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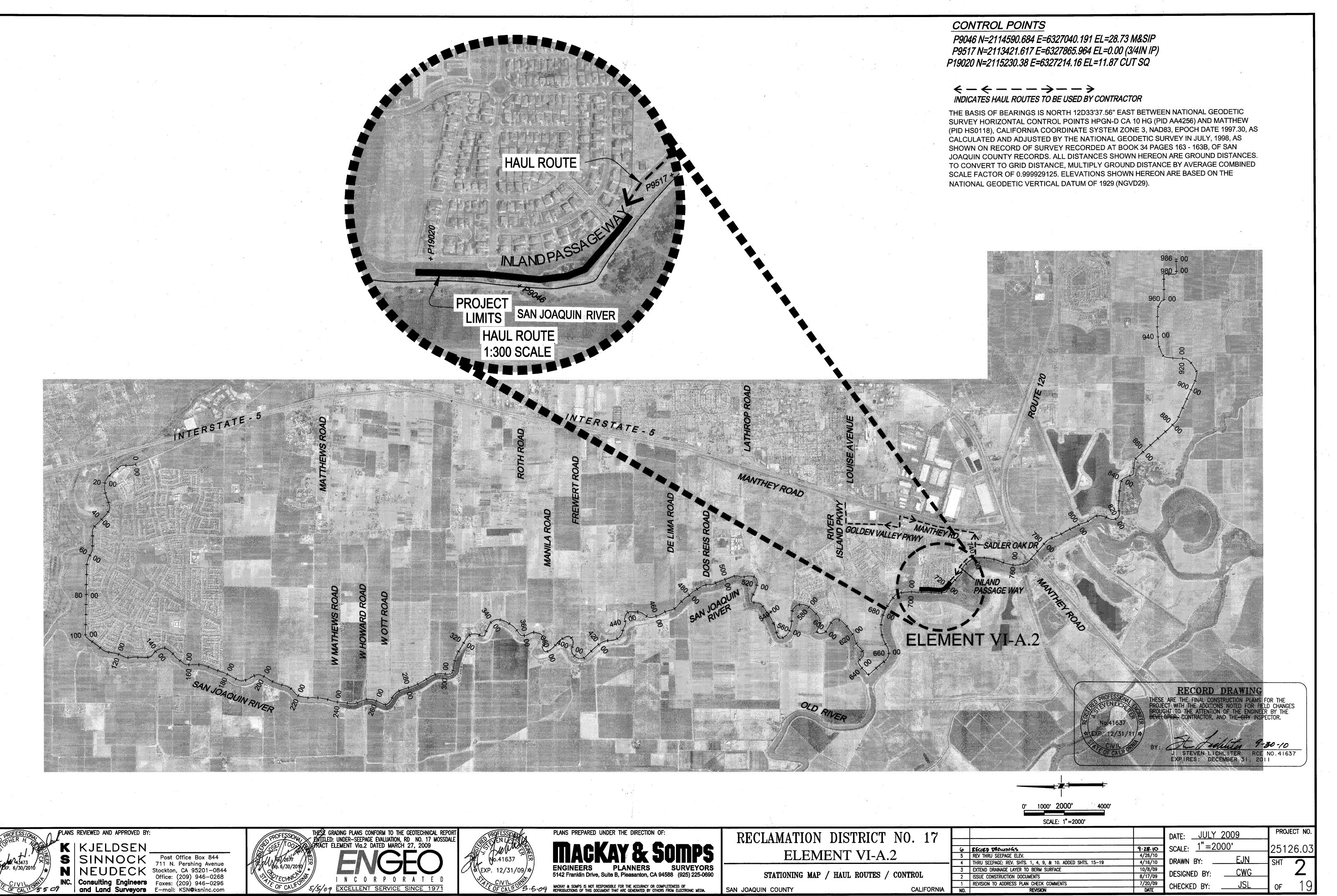
RECLAMATION DISTRICT NO. 17 ELEMENT VI-A.2

CALIFORNIA

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SAN JOAQUIN COUNTY

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ISSUE CONSTRUCTION DOCUMENTS	8/17/09	DESIGNED BY: <u>CWG</u>	4 !
REVISION TO ADDRESS PLAN CHECK COMMENTS	7/20/09	CHECKED BY:JSL	
REVISION	DATE	CHECKED BT: USL	OF



CALIFORNIA

THE "DISTRICT" AS REFERRED TO IN THESE NOTES MEANS RECLAMATION DISTRICT 17.

THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALL CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE <u>DUST AND MUD CONTROL:</u> DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.

THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED" SURVEYS.

THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES. SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

GENERAL NOTES:

- . PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE, AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRE-CONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR, AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROUTES. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS AS SHOWN ON HAUL ROUTE PLAN, UNLESS OTHERWISE APPROVED.
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE CONSTRUCTION SURVEY STAKES AS DESCRIBED IN CONSTRUCTION SURVEYING SECTION. PLEASE CONTACT KJELDSEN SINNOCK AND NEUDECK WITH STAKING REQUESTS (209-946-0268) WITH AT LEAST TWO WORKING DAYS ADVANCE NOTICE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED THE CONSTRUCTION SURVEYING SECTION
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND/OR DEMOBILIZATION. LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED, EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS, DRAINAGE AND IRRIGATION DITCHES, AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS IS TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT, TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

- 1. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER, OR OTHER MEANS AS NECESSARY, THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS CLEAN & CLEAR FROM CONSTRUCTION IMPACTS OR DEBRIS.
- 2. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS, WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS. OIL. BITUMEN'S. CALCIUM CHLORIDE, AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

ENVIRONMENTAL NOTES (cont'd):

3. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CONDITIONS CLEAN AND FREE FROM RUBBISH AND DEBRIS.

- 1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROUTES, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES AND THE PROJECT SITE.
- a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS WHICH MIGHT DAMAGE CROPS.
- b. NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS. INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK (OR MORE AS NEEDED OR DIRECTED BY THE ENGINEER) TO MAINTAIN ADEQUATE DUST CONTROL FOR THE FOLLOWING AREAS:
- HAUL ROUTES LEVEE TOE BERM FILL AREAS
- d. OTHER CONSTRUCTION USE AREAS CROP DAMAGE PREVENTION
- RESIDENTIAL BUILDING AREAS

- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY—EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF

- 1. THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME CAUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.
- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM & CONSISTENT WITH THE RECOMMENDATIONS OF THE SOILS REPORT.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISIONS, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC

CONTROL OF THE PROJECT SPECIFICATIONS (AS PREPARED BY THE ENGINEER)

- THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED SATISFACTORY TO THE ENGINEER.
- 2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL HAUL ROUTES AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

- 1. THE CONTRACTOR SHALL IMPROVE, MAINTAIN, AND REPAIR UPON COMPLETION, THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE REPAIR AREAS.
- 2. THE CONTRACTOR SHALL REVIEW THE HAUL ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE HAUL ROUTES WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS, AND OTHER LOCAL TRAFFIC.
- 3. THE HAUL ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS, MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 5. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE HAUL ROUTES AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- 7. THE HAUL ROUTES MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING REMOVAL IF REQUIRED, IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE LANDOWNERS.
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE HAUL ROUTES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS. REPAIRS TO HAUL ROUTES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE HAUL ROUTES USED AT ALL TIMES DURING CONSTRUCTION.

CLEARING & GRUBBING:

1. UNLESS OTHERWISE INDICATED, THE WORK AREAS SHALL BE CLEARED AND GRUBBED BY THE CONTRACTOR, CONTRACTOR SHALL USE CAUTION WHILE CLEARING AND GRUBBING AROUND POWER LINES & BURIED ELECTRICAL CABLES. ALL MATERIAL CLEARED AND REMOVED SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR FOR REMOVAL AND DISPOSAL OFFSITE. SOME PRUNING/TRIMMING/THINNING OF BRANCHES OR TREES MAY BE REQUIRED.

LEVEE SEEPAGE BERM SECTION:

- 1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED MATERIALS (PER THE ENGINEERS SPECIFICATIONS) AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER TO THE DESIGNATED SEEPAGE BERM SITES.
- 2. THE SEEPAGE BERM SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE SEEPAGE BERM AREAS PRIOR TO THE ACCEPTANCE OF THE MATERIAL.
- 4. THE CONTRACTOR SHALL DELIVER THE FILTER DRAIN MATERIAL, DRAIN ROCK, AND SEEPAGE BERM FILL TO THE REQUIRED SECTIONS AS UNIFORM MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- A. THE FILTER DRAIN MATERIAL AND SEEPAGE BERM FILL SHALL BE PLACED IN LOOSE HORIZONTAL LAYERS NOT MORE THAN EIGHT INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.
- 5. THE CONTRACTOR SHALL GRADE THE BASE OF THE SEEPAGE BERM TO MAINTAIN THE DESIGNATED GRADE AND CROSS-SECTIONS AS SHOWN ON THE PLANS. CONTRACTOR SHALL CUT AND FILL AS NECESSARY AND STOCKPILE ANY ADDITIONAL FILL FOR USE AS SEEPAGE BERM FILL.

FINISHING AND SLOPING GRADING

1. THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

COMPACTION EQUIPMENT:

1. COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS.

 THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO, INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND SEEPAGE BERM FILL MATERIALS.

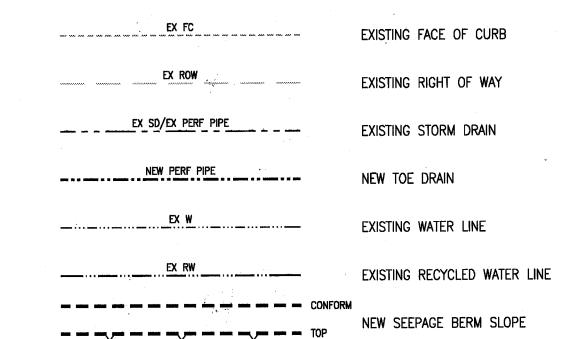
<u>GEOTEXTILE FABRIC:</u>

- 1. GEOTEXTILE FABRIC SHALL BE MIRAFI FW700 WOVEN GEOTEXTILE OR AN APPROVED EQUAL.
- 2. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED BETWEEN THE SEEPAGE BERM FILL AND THE DRAIN ROCK MATERIAL.
- 3. MEASUREMENT AND PAYMENT WILL BE BY THE SQUARE FOOT NEAT (WITHOUT OVERLAP) AND BASED UPON THE FABRIC PLACED TO THE DIMENSIONS AND AT THE LOCATIONS DESIGNATED AND ACCEPTED BY THE ENGINEER.
- 4. FOR PAYMENT PURPOSES, MEASUREMENT OF THE FABRIC PLACED WILL NOT INCLUDE OVERLAPS AS REQUIRED BY THESE PLANS.

ROAD PREP, MAINTENANCE, AND SWPPP:

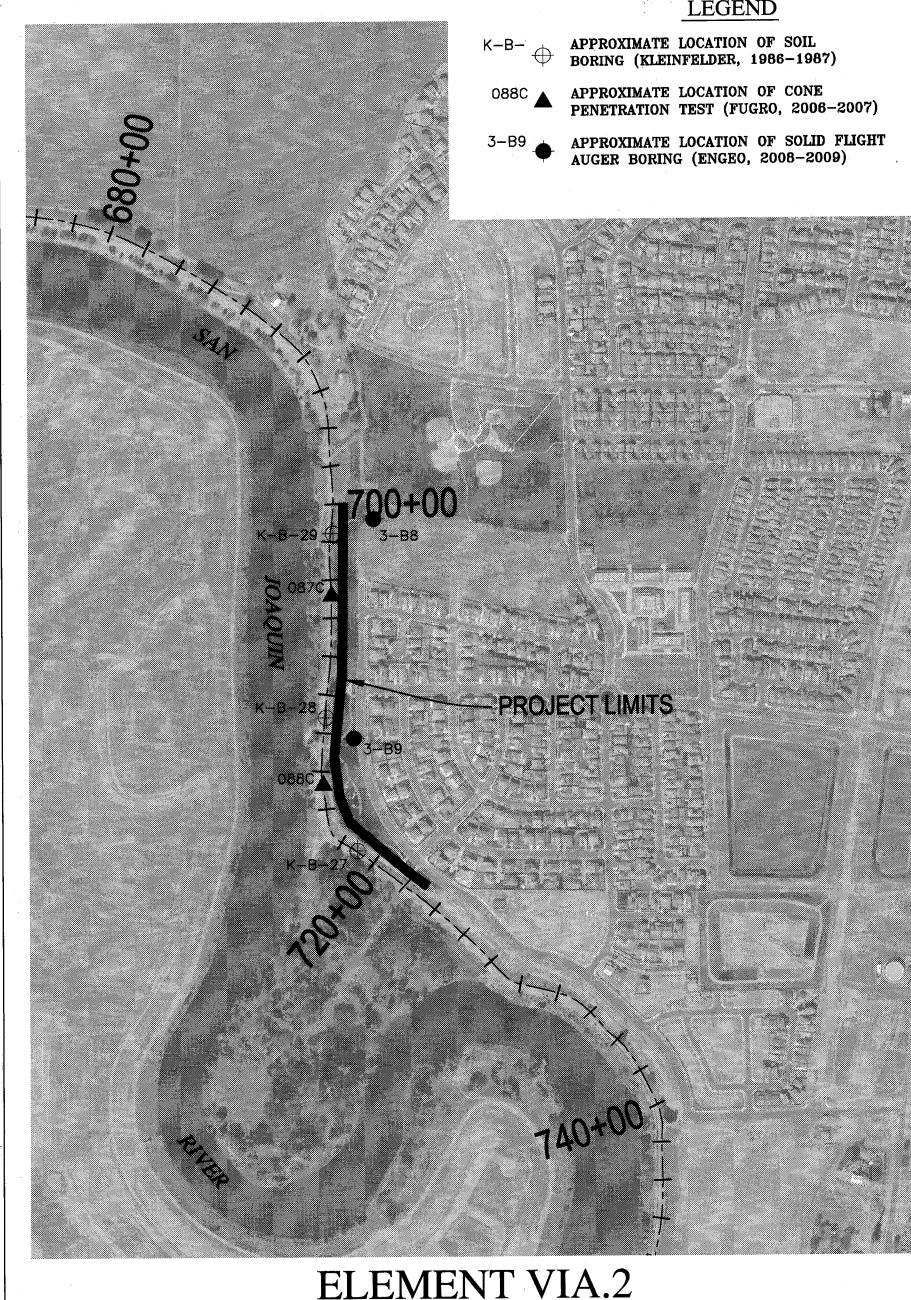
- 1. PER THE IMPROVEMENT PLANS AND SWPPP (AS PREPARED BY ENGEO), CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF REQUIRED:
- A. EROSION CONTROL FACILITIES
- B. CONSTRUCTION ENTRANCE
- C. STREET SWEEPING
- D. SITE/CONSTRUCTION MATERIALS MAINTENANCE
- E. SITE SECURITY

LEGEND

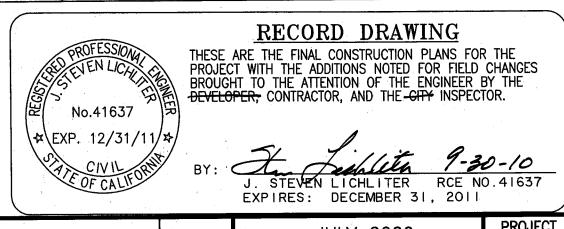


CONSTRUCTION SURVEYING:

- 1. ROUGH GRADE STAKING SET HORIZONTAL LOCATION STAKES EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES AT THE DESIGN TOE OF THE SEEPAGE BERM. ALSO, SET POINTS AND CORRESPONDING MARKERS AT LOCATIONS THAT ARE OFFSET FROM THE EASTERLY TOE OF BERM EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES. THE MARKER AT THE OFFSET POINT WILL BE LABELED WITH A VERTICAL CUT OR FILL DIMENSION FROM THE TOP OF THE POINT TO THE DESIGN ELEVATION OF THE TOE OF THE SEEPAGE BERM. WHERE GRADING FOR FUTURE TRAILS IS TO BE PROVIDED THROUGH THE FRONT SLOPE OF THE SEEPAGE BERM, THE OFFSET STAKES WILL BE MARKED ACCORDINGLY AT BEGINNING AND END OF TRAIL.
- 2. <u>New Perforated toe Drain Pipes</u> set horizontal and vertical offset stakes at 50—foot intervals on TANGENTS AND 25 FOOT INTERVALS ON CURVES. ALSO PROVIDE OFFSET STAKES FOR ALL MANHOLES AND
- 3. KEYSTONE WALLS SET HORIZONTAL AND VERTICAL OFFSET STAKES AT ENDS OF WALLS AND AT ANGLE POINTS, RADIUS POINTS AND/OR 50-FOOT INTERMEDIATE LOCATIONS.
- 4. <u>VERIFICATIONS DURING AND AFTER CONSTRUCTION</u> UPON COMPLETION OF SUBSTANTIAL PORTIONS OF WORK AND WHEN REQUESTED BY CONTRACTOR, OBTAIN "AS-GRADED" ELEVATIONS (TYPICALLY AT 500' INTERVALS) TO VERIFY THE DEPTH OF PLACED MATERIAL RELATIVE TO THE ELEVATION AT THE TOE OF THE SEEPAGE BERM. THIS CHECK WILL BE PERFORMED TWICE (ONCE AFTER PLACEMENT OF DRAIN ROCK AND ONCE AFTER PLACEMENT OF BERM FILL MATERIAL). CUT/FILL SHEETS SHOWING DEPTHS OF THE PLACED MATERIAL WILL BE PROVIDED FOR EACH SURVEYED VERIFICATION.



ELEMENT VIA.2 BORING LOCATIONS



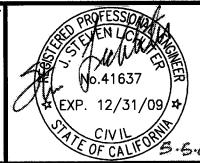
LANS REVIEWED AND APPROVED BY:



KJELDSEN SINNOCK Post Office Box 844
711 N. Pershing Avenue NEUDECK Stockton, CA 95201-0844 Consulting Engineers Faxes: (209) 946-0296

Office: (209) 946-0268 and Land Surveyors E-mail: KSN@ksninc.com

these grading plans conform to the geotechnical report ONTITUED: UNDER—SEEPAGE EVALUATION, RD NO. 17 MOSSDALE PRACT ELEMENT VIa.2 DATED MARCH 27, 2009 EXCELLENT SERVICE SINCE 197



PLANS PREPARED UNDER THE DIRECTION OF: PLANNERS 5142 Franklin Drive, Suite B, Pleasanton, CA 94588 (925) 225-0690

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ELEMENT VI-A.2

SAN JOAQUIN COUNTY

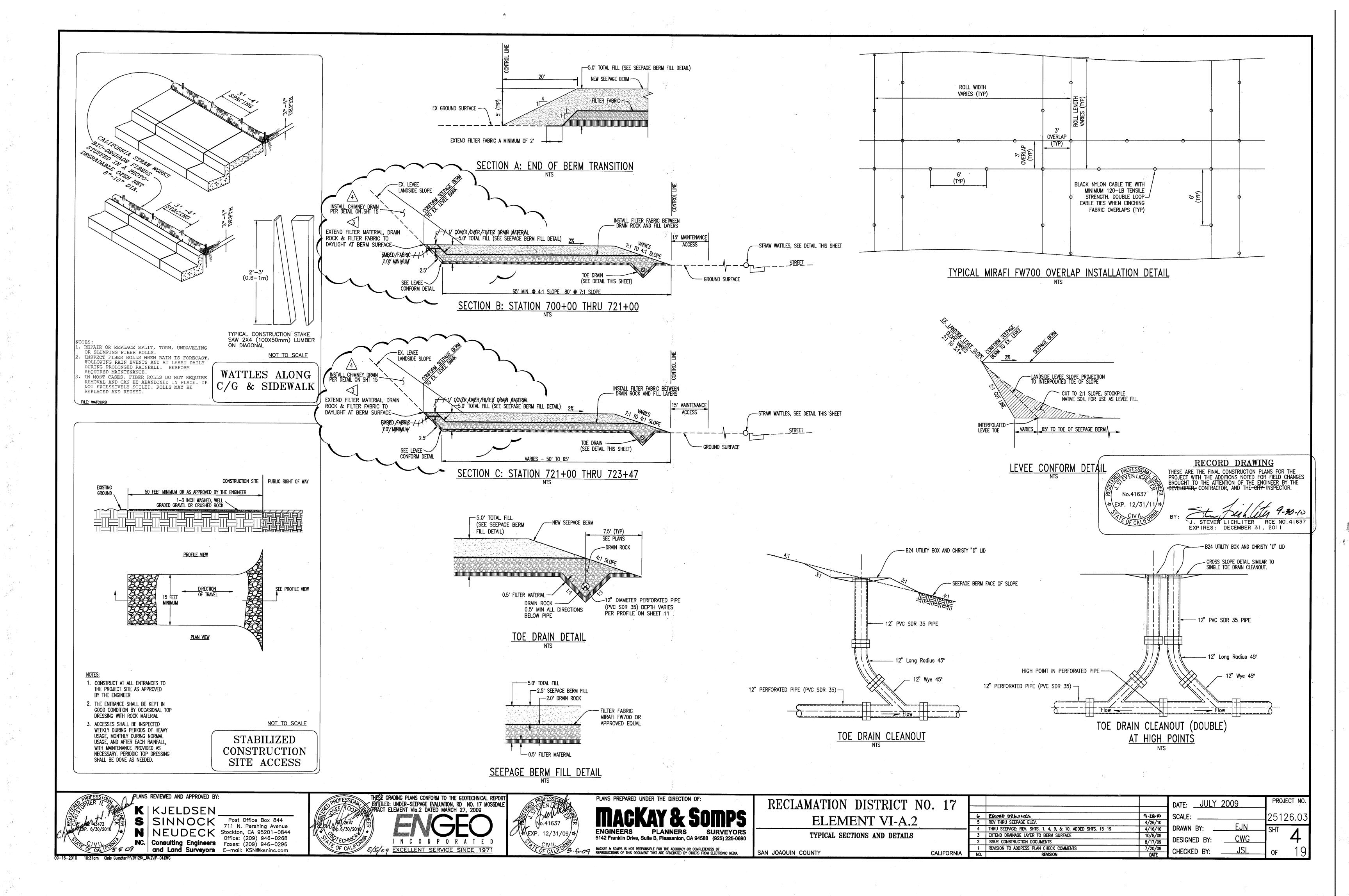
NOTES & BORING LOCATIONS

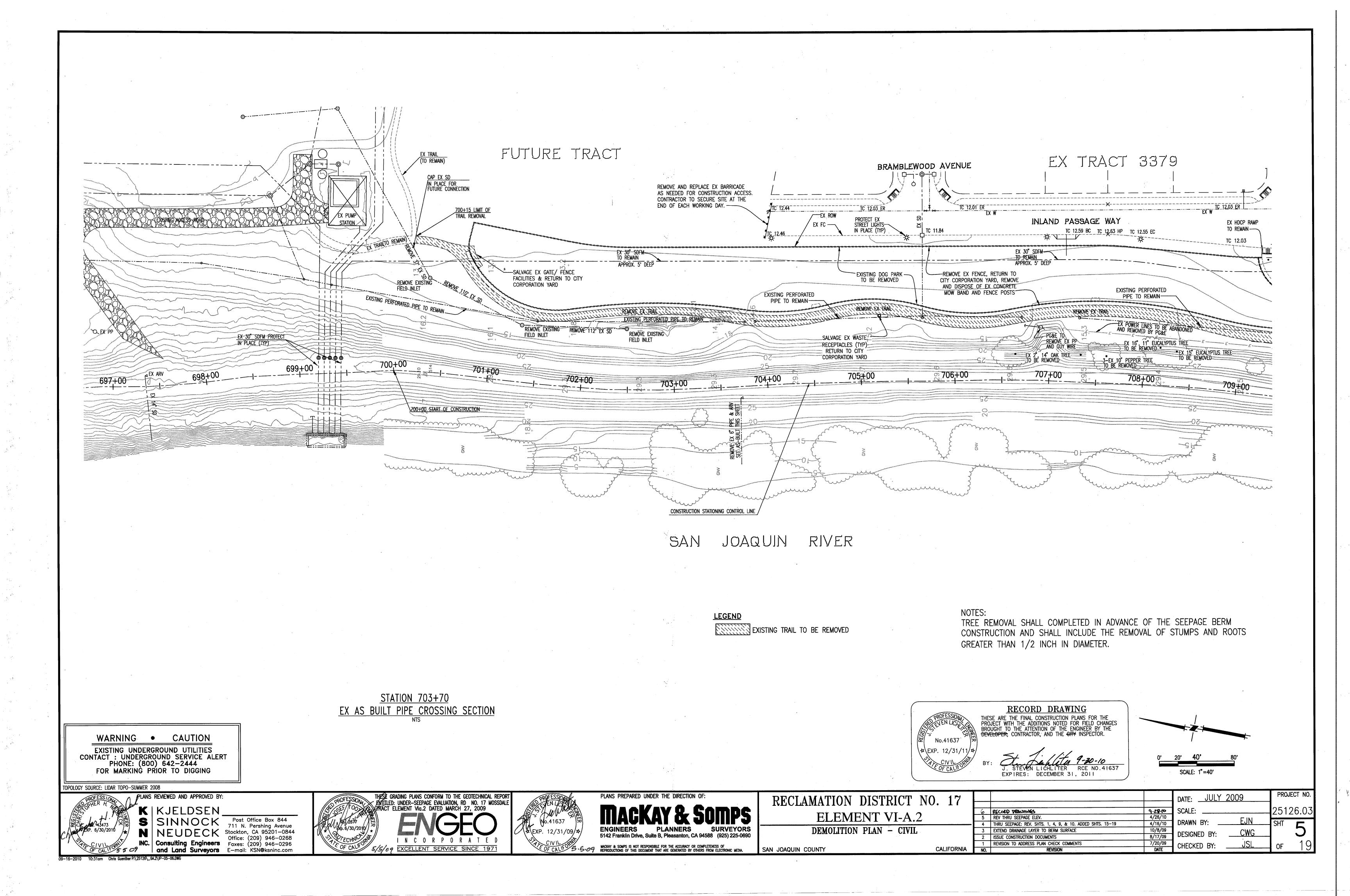
RECLAMATION DISTRICT NO. 17

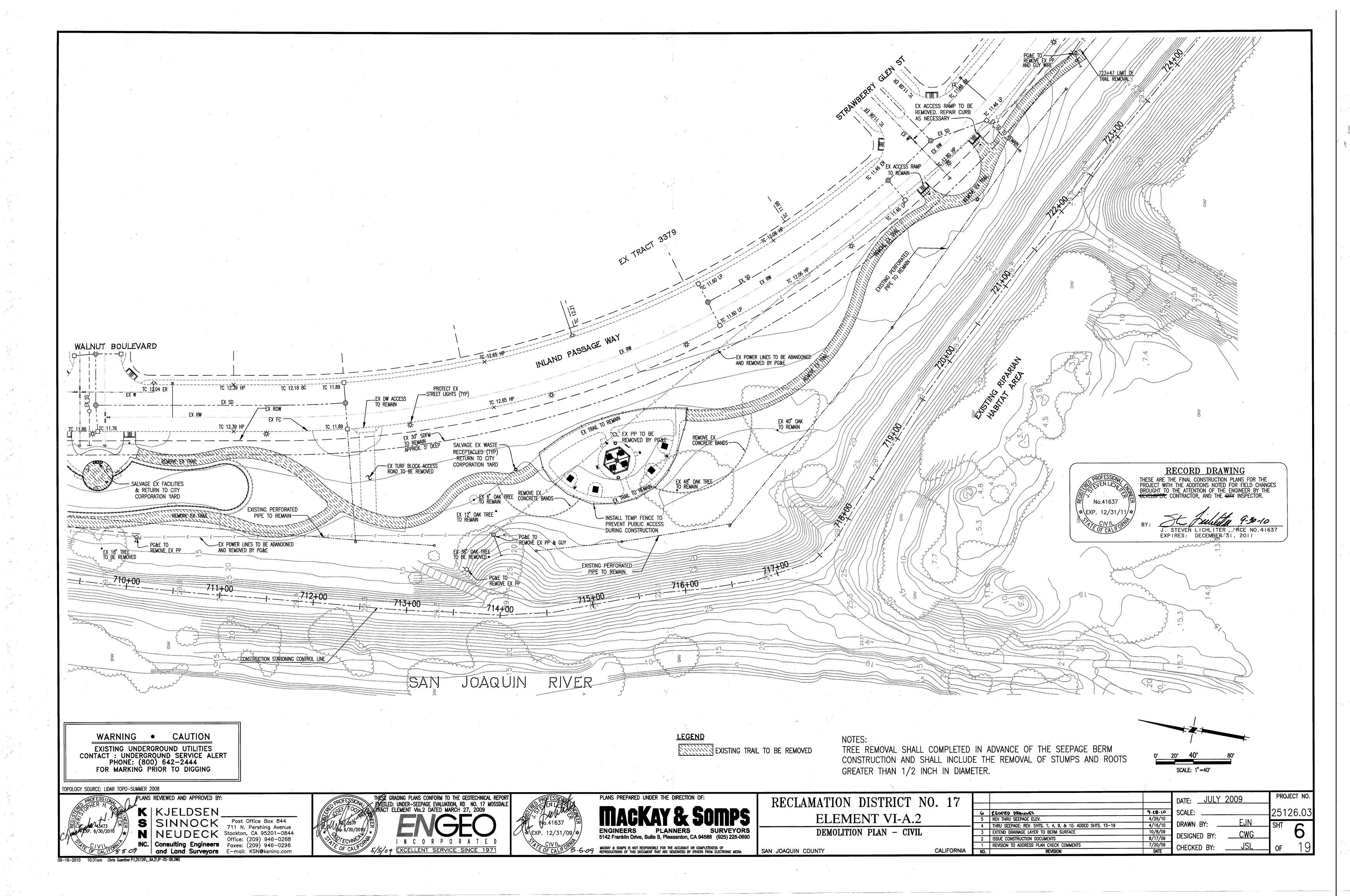
CALIFORNIA

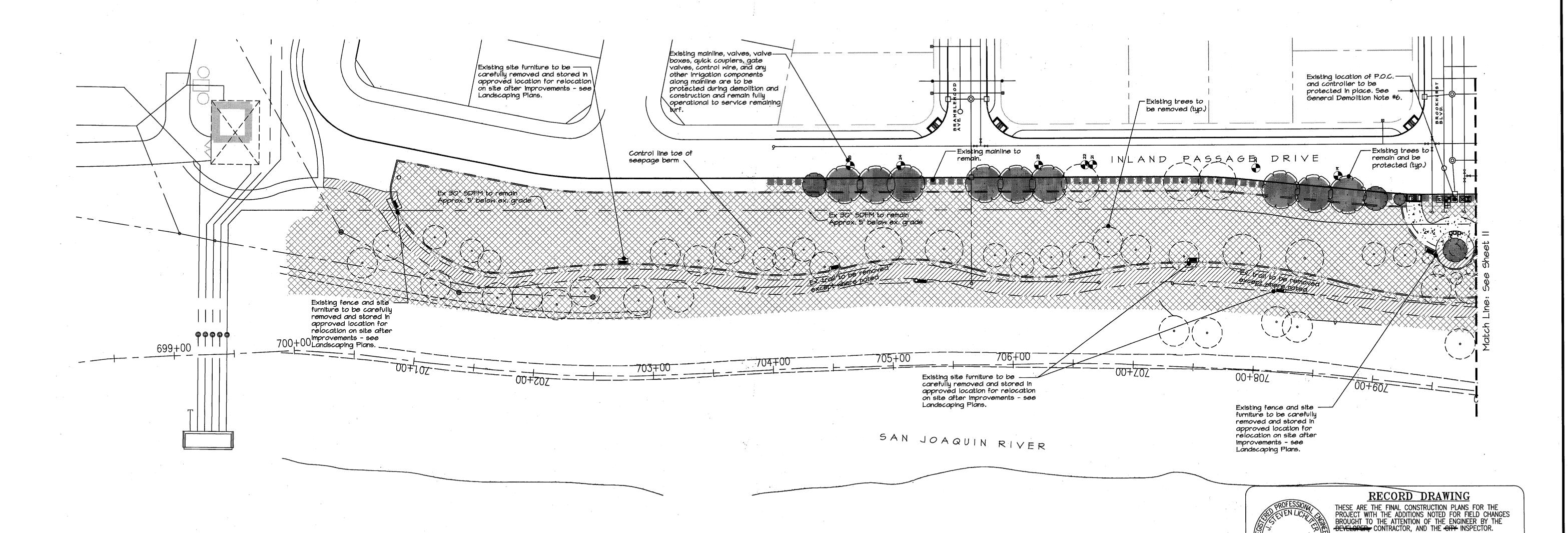
6 RECOLD PRADINGS
5 REV THRU SEEPAGE ELEV. 4/26/10 4 THRU SEEPAGE: REV. SHTS. 1, 4, 9, & 10. ADDED SHTS. 15-19 4/16/10 3 EXTEND DRAINAGE LAYER TO BERM SURFACE 10/8/09 8/17/09 2 ISSUE CONSTRUCTION DOCUMENTS 7/20/09 1 REVISION TO ADDRESS PLAN CHECK COMMENTS REVISION

PROJECT NO. DATE: JULY 2009 25126.03 SCALE: 9.28.10 DRAWN BY: **DESIGNED BY:** CHECKED BY:









Abbreviation List

American with Disabilities Act CJControl Joint CMU

Concrete masonry unit

CYRD Cubic yard ΕJ Expansion Joint

EQ Equal

Foot (Feet) GAL Gallon

Gallons per minute

Inch

LB Pound

MAX Maximum

MIN Minimum NON No Common Name

00 On Center

Pounds per square inch

SCH Schedule

Square feet Typical

VIF Verify in field Welded wire mesh

General Demolition Notes

Call USA before any demolition. Protect any encountered utilities during demolition and construction unless designated for removal.

2. Remove specified vegetation and irrigation as described. See

3. Contractor to keep existing irrigation system in operation for existing-to-remain turf throughout demolition and constuction.

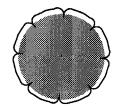
4. Unless otherwise noted on the drawings. All materials indicated to be removed and disposed of shall become the property of the contractor. Disposal of such material shall become the responsibility of the contractor and shall be made outside of the project site in an approved location. All costs associated with material removal shall be paid for by the contractor.

5. Demolition shown is diagrammatic and general. Perform all demolition as required for the construction of the project including all items in the way of new work whether or not specifically shown. Contact Landscape Architect for any items in question.

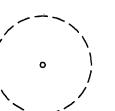
6. Demoltion contractor shall field verify the location of all pressurized irrigation mainline, valves, flow meter, gate valves, quick couplers, backflow preventer, water meter, control wires, and irrigation controller. All of these items are to be protected in place. Should any be damaged, the contractor shall notify the City Parks Maintenence Department and repair the damage under the supervision of and to the satisfaction of the City. Should any of the irrigation components be required to relocated for demolition, the contractor shall notify the Landscape Architect and City prior to relocation.

> Note: Review all existing site conditions. Alert Owner and/or Land Arch of any discrepancies or required clarifications prior to commencing demolition.

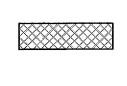
Demolition Legend



Tree to remain and be protected. See General Tree Protection During Construction.

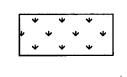


Tree to be completely removed. Grind stump below final finish grade and remove main root system. Dispose of material in approved location. Contractor to pay any fees associated with the disposal.

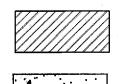


groundcovers, grasses and any plant material not designated to remain. Remove all main root systems. Contact Landscape Architect for any plants in question. Completely remove all existing irrigation components from the valves to the end of each circuit including laterals, heads, and emitters. Do not abandon any irrigation components in their existing location. Do not remove any valves, mainliné, or control wires. Dispose of all material in approved location. Contractor to pay any fees associated with the disposal. Existing mainline, valves, valve boxes, quick couplers, qate valves, control wire, and any other irrigation components along mainline are to be protected during demolition and construction and remain fully operational to service remaining Landscape areas.

Completely remove all trees, turf, shrubs,



Existing turf to remain and be protected during construction. Maintain existing irrigation in fully operational order. Damaged turf and/or irrigation shall be repaired in the landscape installation



Existing path and site concrete to remain and be protected during demolition and construction. Repair any damage that occurs during demolition

Existing path to be demolished. Dispose of material in approved offsite location.

Irrigation Mainline to remain

General Tree Protection During Construction

1. All trees that are shown on the demolition plan specifically shown not to be removed are to remain on site and to be cared for throughout the construction process in accordance with the following notes. If there is a question as to whether a tree is to remain or be removed, ask the landscape architect or owner prior to removal. The contractor will be required to replace any trees that are removed or die due to negligence or not specifically following these notes.

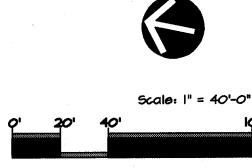
No.41637

\\$\EXP. 12/31/11/\$\

- 2. Protect root zones of trees durring demolition and construction. Do not store items on the soil within the drip line of the trees. (Construction equipment and storage causes soil compaction which can kill the trees.)
- 3. Utility lines and all associated trenching are to be laid-out to avoid conflict and cutting of
- 4. Any damage inadvertently caused to the trees such as broken branches, etc. is to be reviewed immediately by a certified arborist. The recommendations made by the arborist are to be carried out immediately to the satisfaction of the owner.
- 5. It is the responsibility of the General Contractor to ensure the health of all existing trees. Trees damaged or killed during construction are to be replaced at a size large enough to the satisfaction of the owner.





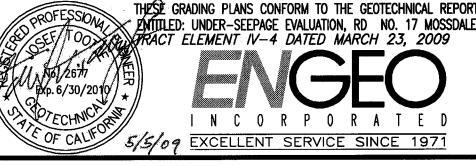


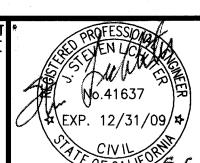


(209)532-2856 (209)532 9510 fax

LANS REVIEWED AND APPROVED BY

SINNOCK Post Office Box 844
711 N. Pershing Avenue Stockton, CA 95201-0844 Office: (209) 946-0268 Consulting Engineers Faxes: (209) 946-0296 and Land Surveyors E-mail: KSN@ksninc.com





PLANS PREPARED UNDER THE DIRECTION OF

MACKAY & SOMPS IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF REPRODUCTIONS OF THIS DOCUMENT THAT ARE GENERATED BY OTHERS FROM ELECTRONIC MEDIA.

RECLAMATION DISTRICT NO. 17 ELEMENT V1a-2

LANDSCAPE DEMOLITION EXHIBIT

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	4	THRU SEEPAGE: REV. SHTS. 1, 4, 9, & 10. ADDED SHTS. 15-19	4
	3	EXTEND DRAINAGE LAYER TO BERM SURFACE	10
	2	ISSUE CONSTRUCTION DOCUMENTS	8
	1	REVISION TO ADDRESS PLAN CHECK COMMENTS	7
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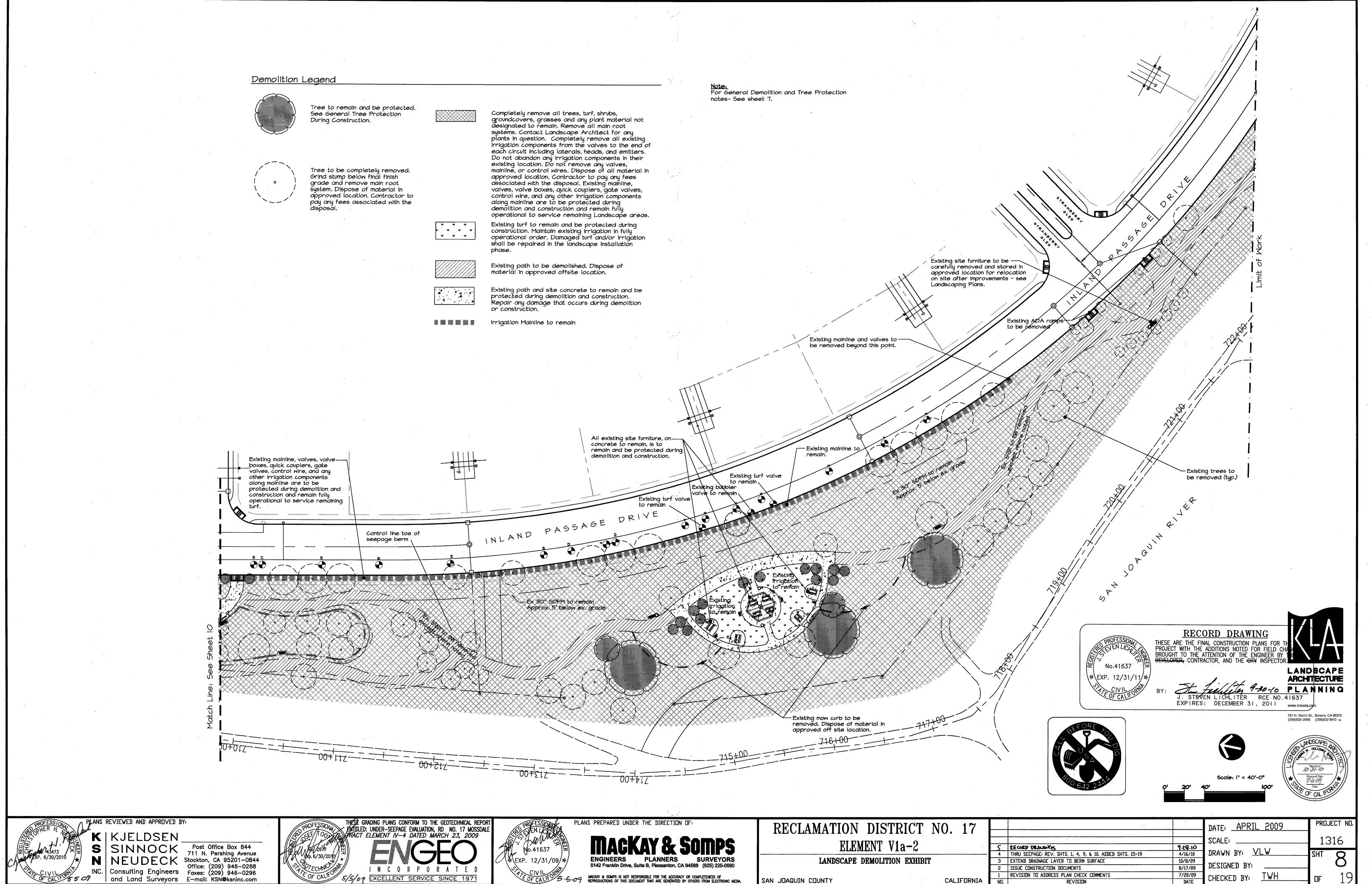
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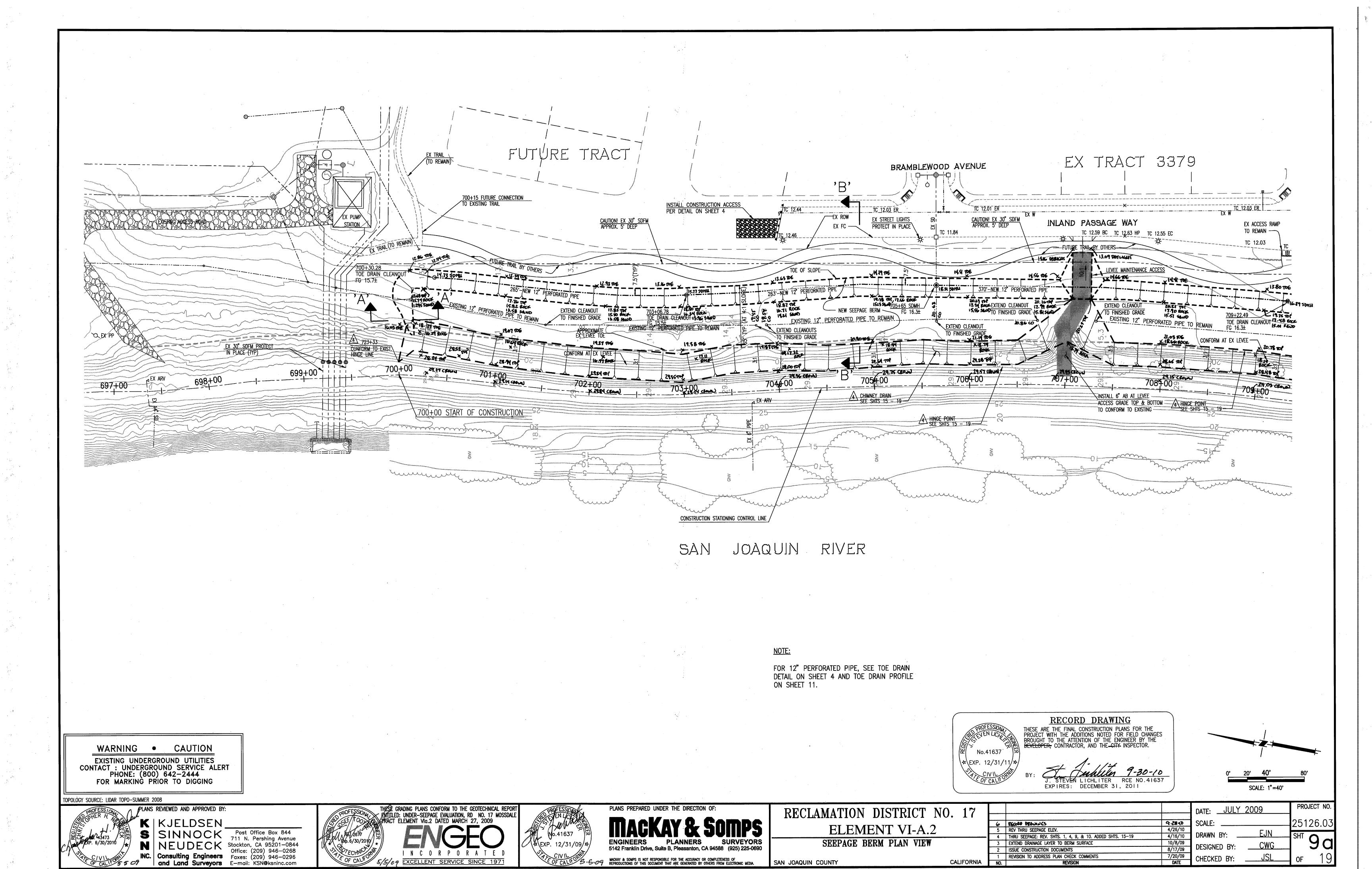
EXPIRES: DECEMBER 31, 2011

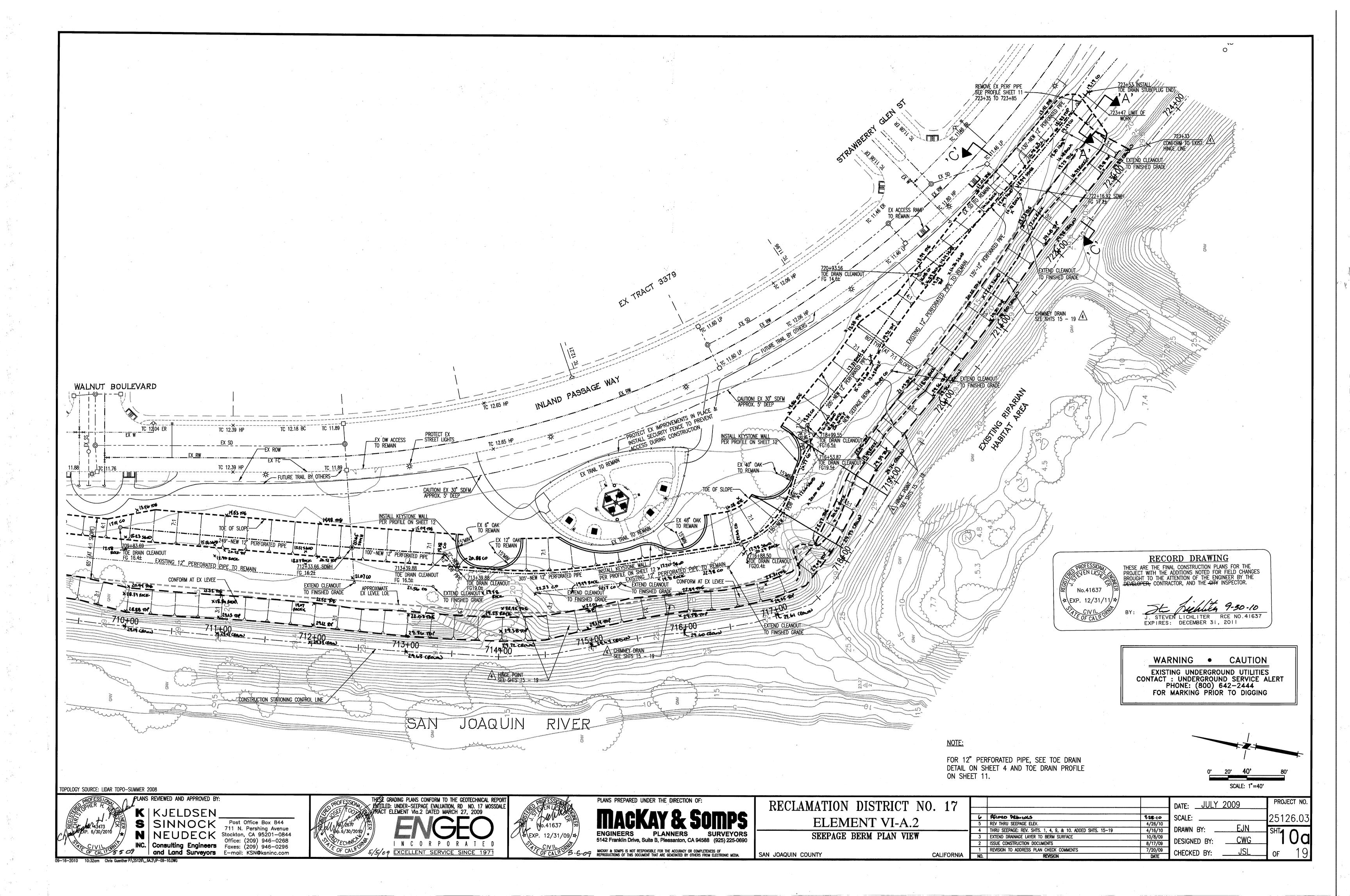
SAN JOAQUIN COUNTY

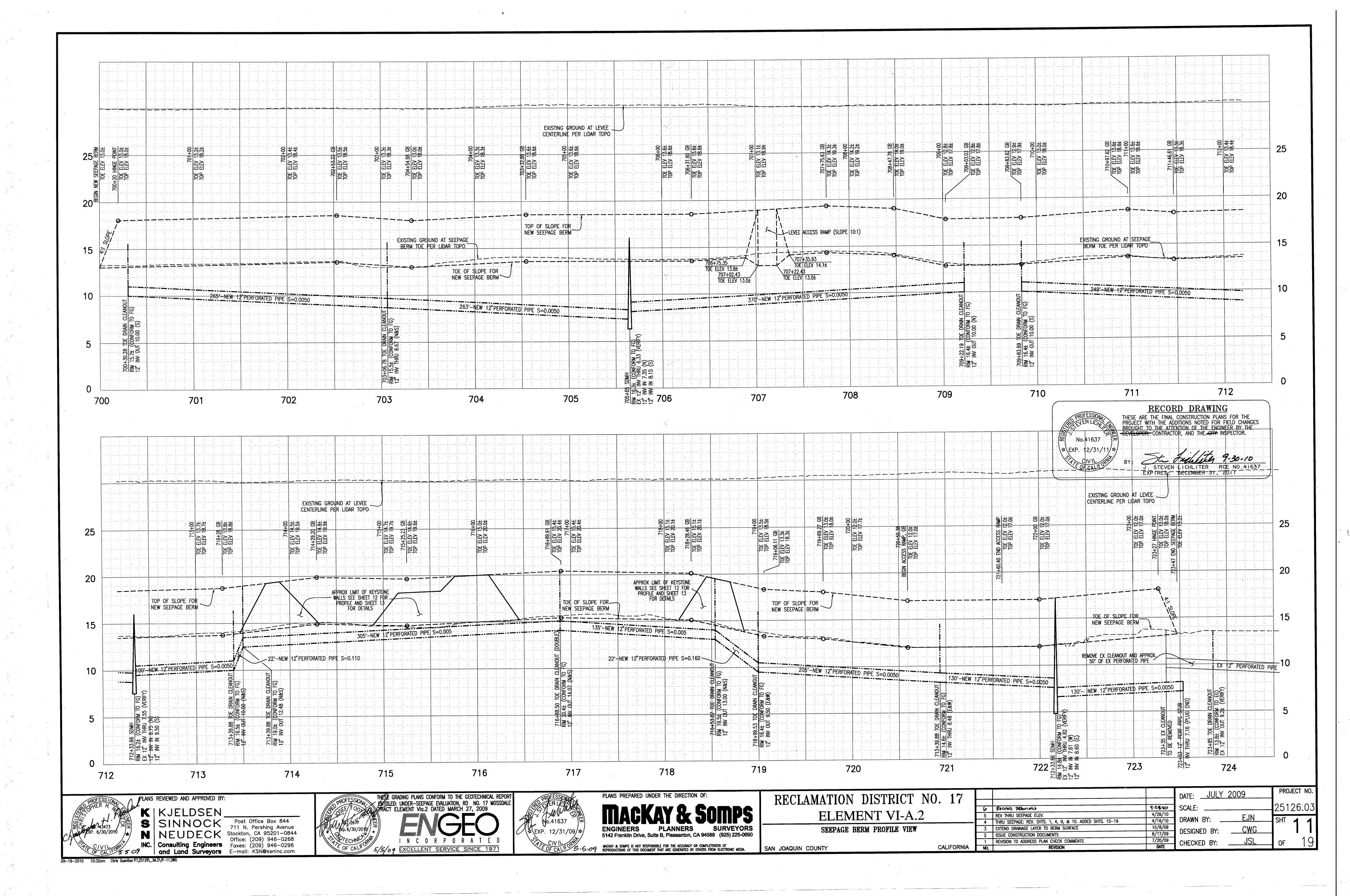
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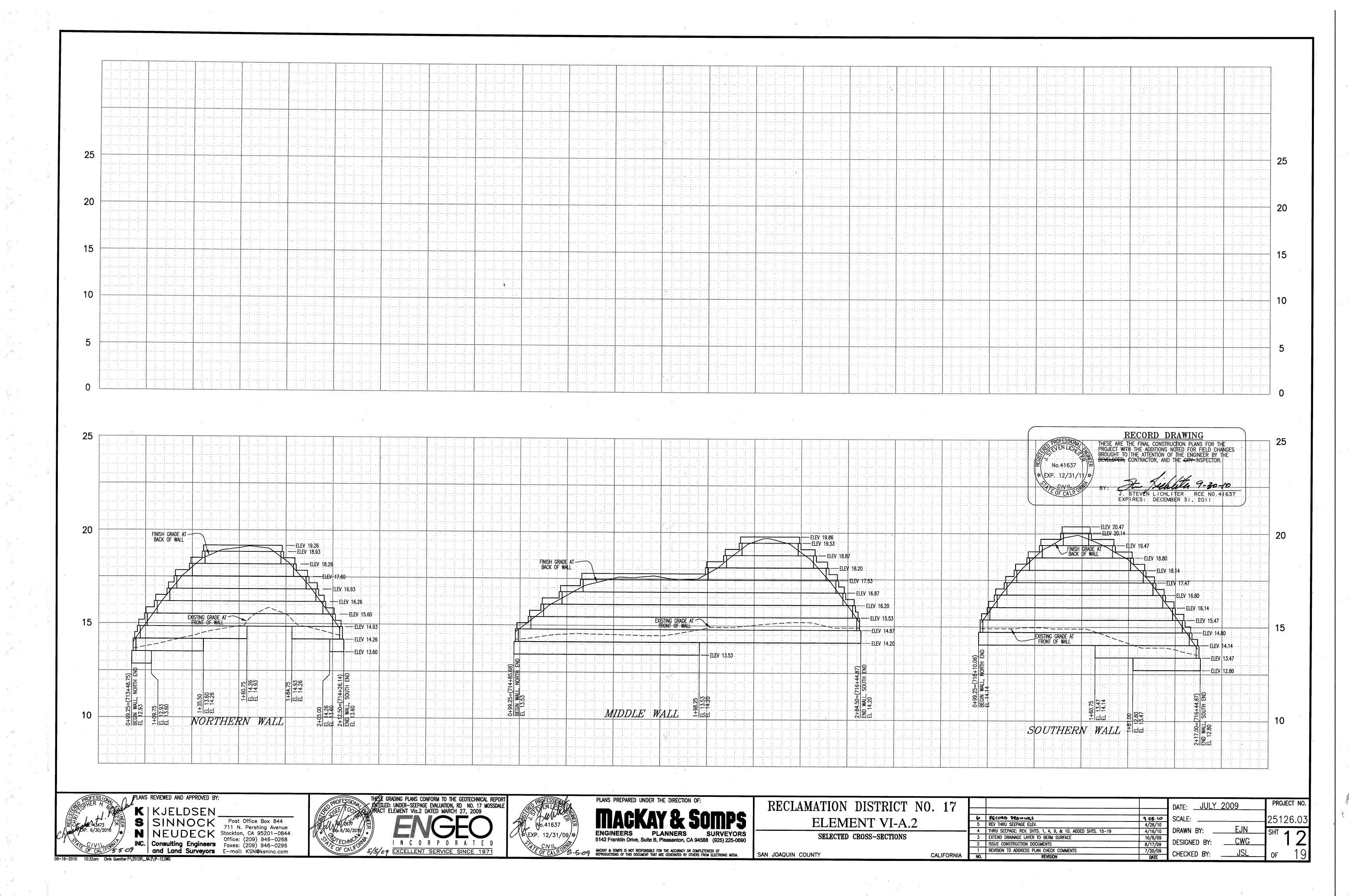


0-16-2010 10:31amChris Guenther P:\25126\ 6A2\\P-07-08 K\AD\\G



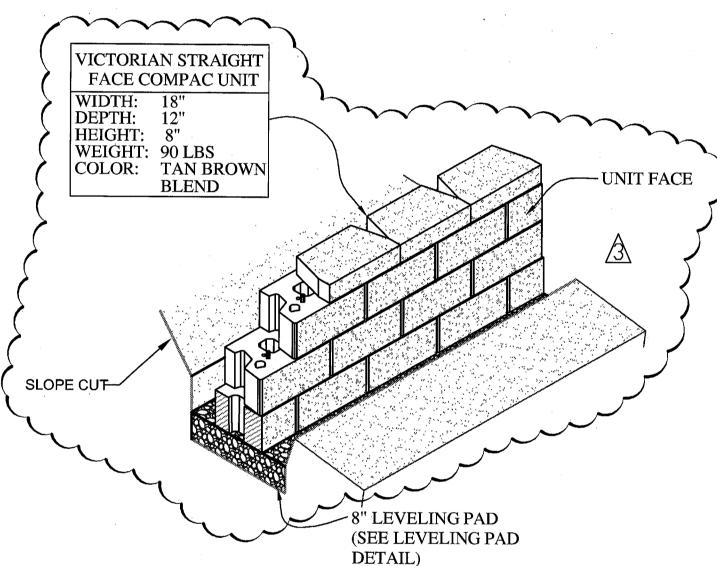






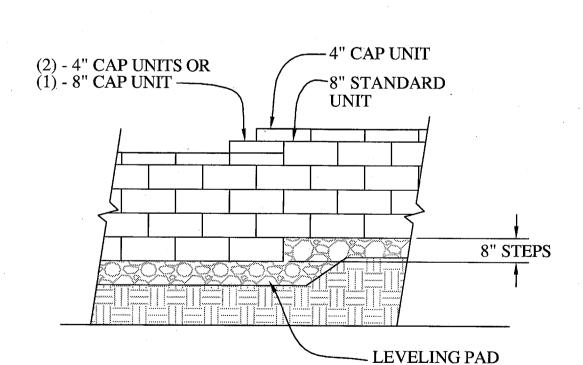
GENERAL NOTES:

- 1. ALL MODULAR WALL UNITS SHALL CONSIST OF KEYSTONE COMPAC FINNED UNITS (18" X 8" X 12"), WHICH SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C-90 AND ASTM C-140. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 POUNDS PER SQUARE INCH (PSI) WITH A MAXIMUM MOISTURE ABSORPTION OF 13 PERCENT, AS FOR A NORMAL WEIGHT CONCRETE.
- 2. THE FIBERGLASS PINS SHALL BE ½-INCH-DIAMETER RODS. THE FLEXURAL STRENGTH FOR THE CONNECTING PINS SHALL BE AT LEAST 128,000 PSI WITH A SHORT BEAM SHEAR OF 6,400 PSI.
- 3. THE ADHESIVE SHALL BE KEYSTONE KAPSEALTM CONSTRUCTION MATERIAL OR APPROVED EQUIVALENT IN CONFORMANCE WITH ASTM 2339.
- 4. LEVELING PAD SHALL CONSIST OF COMPACTED CRUSHED STONE OR CLASS 2 AGGREGATE BASE.
- 5. FILLS FOR THE MODULAR UNITS SHALL BE FREE DRAINING CRUSHED ROCK OR GRAVEL, 3/8" TO 3/4", WITH NO MORE THAN 5 PERCENT PASSING THE NO. 50 SIEVE AND IN ACCORDANCE WITH ASTM D448. GRADATION OF THE UNIT FILL SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER. PEA GRAVEL IS NOT ALLOWED.
- 6. REINFORCED BACKFILL SOILS SHALL BE CONSISTENT WITH SEEPAGE BERM MATERIAL AS SHOWN ON PROJECT GRADING PLAN.
- 7. GEOGRID REINFORCEMENT SHALL CONSIST OF STRATAGRID SG150 (AS INDICATED ON SHEET 12), OR APPROVED EQUIVALENT.
- 8. WALL DRAINAGE SHOULD BE PROVIDED USING A 4-INCH-DIAMETER PVC PERFORATED PIPE (SCHEDULE SDR 35) EMBEDDED IN CLASS 2 PERMEABLE MATERIAL OR FREE-DRAINING GRAVEL WITH THE FREE-DRAINING GRAVEL SURROUNDED BY SYNTHETIC FILTER FABRIC. THE WIDTH OF THE DRAIN BLANKET SHOULD BE AT LEAST 12 INCHES. THE DRAIN BLANKET SHOULD EXTEND TO APPROXIMATELY 18 INCHES BELOW THE FINISHED GRADES. COLLECTOR PERFORATED PIPES SHOULD BE DIRECTED TO THE 12 INCH TOE DRAIN PIPE, OR OTHER OUTLET APPROVED BY THE CIVIL ENGINEER.



CLASSIC UNIT/BASE PAD ISOMETRIC VIEW

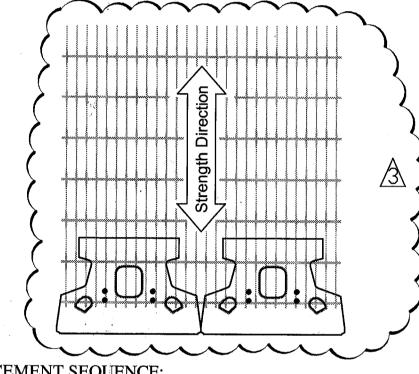
NO SCALE



TOP OF WALL STEPS

CONSTRUCTION NOTES:

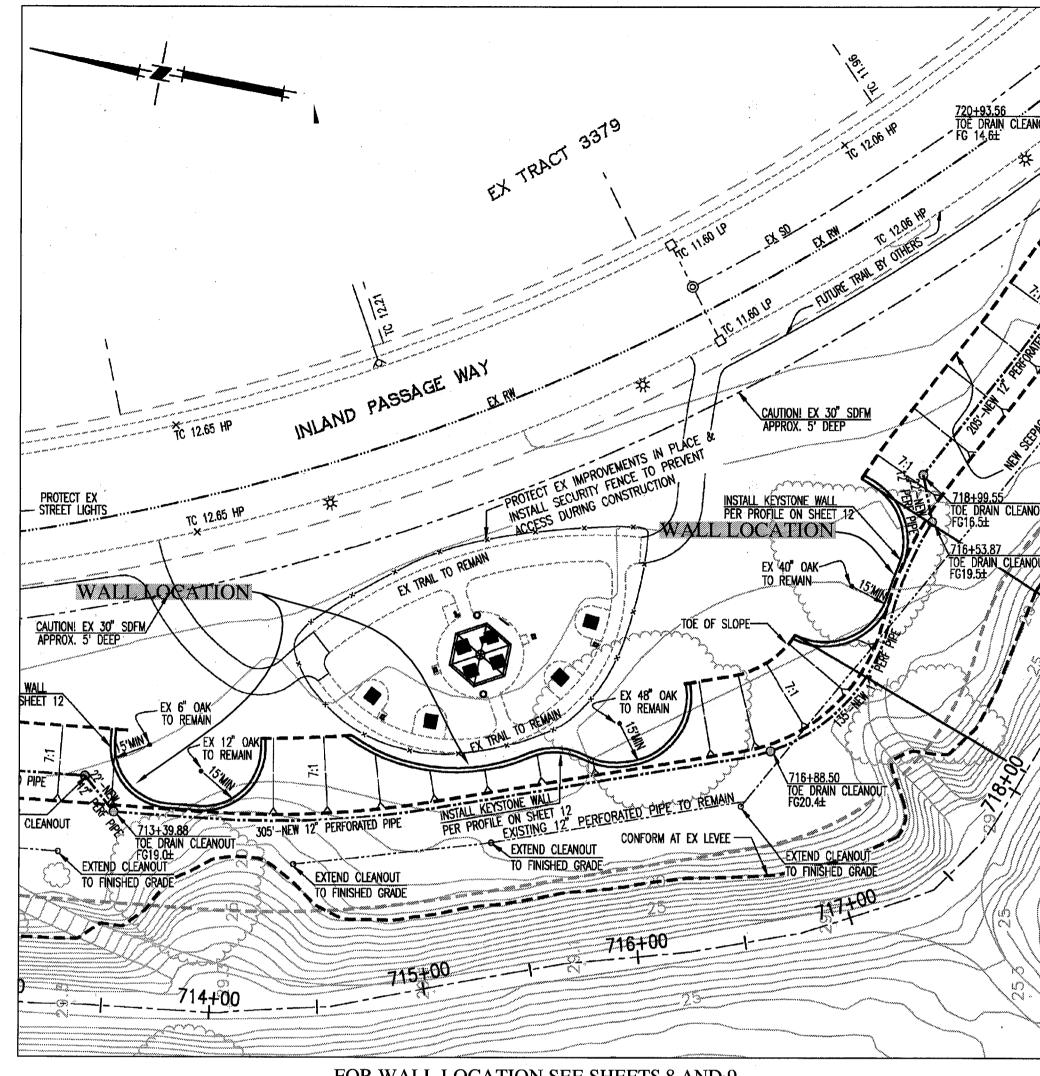
- 1. REFER TO CIVIL GRADING PLAN FOR LOCATION AND MINIMUM HEIGHTS OF ALL WALLS.
- CONSTRUCT WALL IN ACCORDANCE WITH THESE PLANS, THE KEYSTONE CONSTRUCTION MANUAL AND THE NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS. WHERE CONFLICTS OCCUR, THESE PLANS SHALL GOVERN.
- WHERE UNSUITABLE WALL SUBGRADE SOILS EXISTS, EXCAVATE THE UNSUITABLE SOIL BELOW THE WALL AND REINFORCED SOIL VOLUME FOR THE FULL LENGTH OF THE SOIL REINFORCEMENT AND TO A DEPTH AS DIRECTED BY THE SOIL ENGINEER. EXCAVATED UNSUITABLE MATERIAL SHALL BE REPLACED AND COMPACTED TO 90% COMPACTION AT A MINIMUM MOISTURE CONTENT OF 2 PERCENTAGE POINTS ABOVE OPTIMUM PER ASTM D-1557, OR AS DIRECTED BY THE SOILS ENGINEER.
- COMPACTED SOIL BACKFILL, WALL SUBGRADE, AND REINFORCED SOIL BACKFILL SHALL MEET THE REQUIREMENTS PRESENTED IN THE GEOTECHNICAL REPORT TITLE UNDER-SEEPAGE EVALUATION, DATED JULY 20, 2009 FOR THESE MATERIALS.
- 5. GRAVEL LEVELING PAD SHALL BE COMPACTED TO 90% COMPACTION AT A MINIMUM MOISTURE CONTENT OF OPTIMUM PER ASTM D-1557 OR AS DIRECTED BY THE SOILS ENGINEER.
- 6. MAINTAIN A MINIMUM 8 INCH SOIL COVER OVER TOP LAYER OF GEOGRID.
- 7. ALL WORK SHOULD BE OBSERVED BY THE SOILS ENGINEER'S REPRESENTATIVE.



PLACEMENT SEQUENCE:

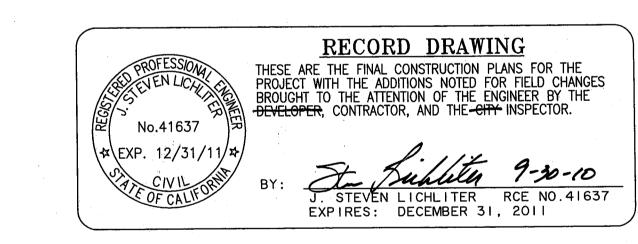
- 1. PLACE GEOGRID OVER THE FIBERGLASS PINS AND EXTEND OVER LEVEL BACKFILL BEHIND FACING UNITS.
- 2. PLACE NEXT UNIT.
- 3. PULL GRID TAUGHT AND BACKFILL (STAKE AS REQUIRED TO MAINTAIN GRID TENSION)

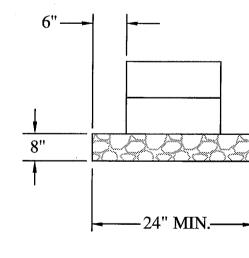




FOR WALL LOCATION SEE SHEETS 8 AND 9 NO SCALE

OF SOIL FILL IS REQUIRED BETWEEN OVERLAPPING GEOGRIDS FOR PROPER ANCHORAGE. CONSECUTIVE GEOGRIDS SHALL BE SEPARATED BY ONE COURSE FOR CORNERS AND RADII ARE TO BE CONSTRUCTED AS SPECIFIED IN THE CURRENT KEYSTONE CONSTRUCTION MANUAL. GEOGRID PLACEMENT ON CURVES (PLAN VIEW)





SECTION

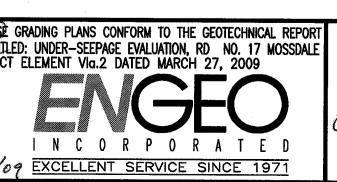
LEVELING PAD DETAIL

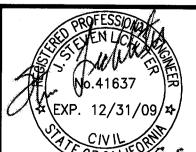
NOTE: DESIGN SHOWN ON THIS SHEET PREPARED BY ENGEO, INC.



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711 N. Pershing Avenue
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296 and Land Surveyors E-mail: KSN@ksninc.com







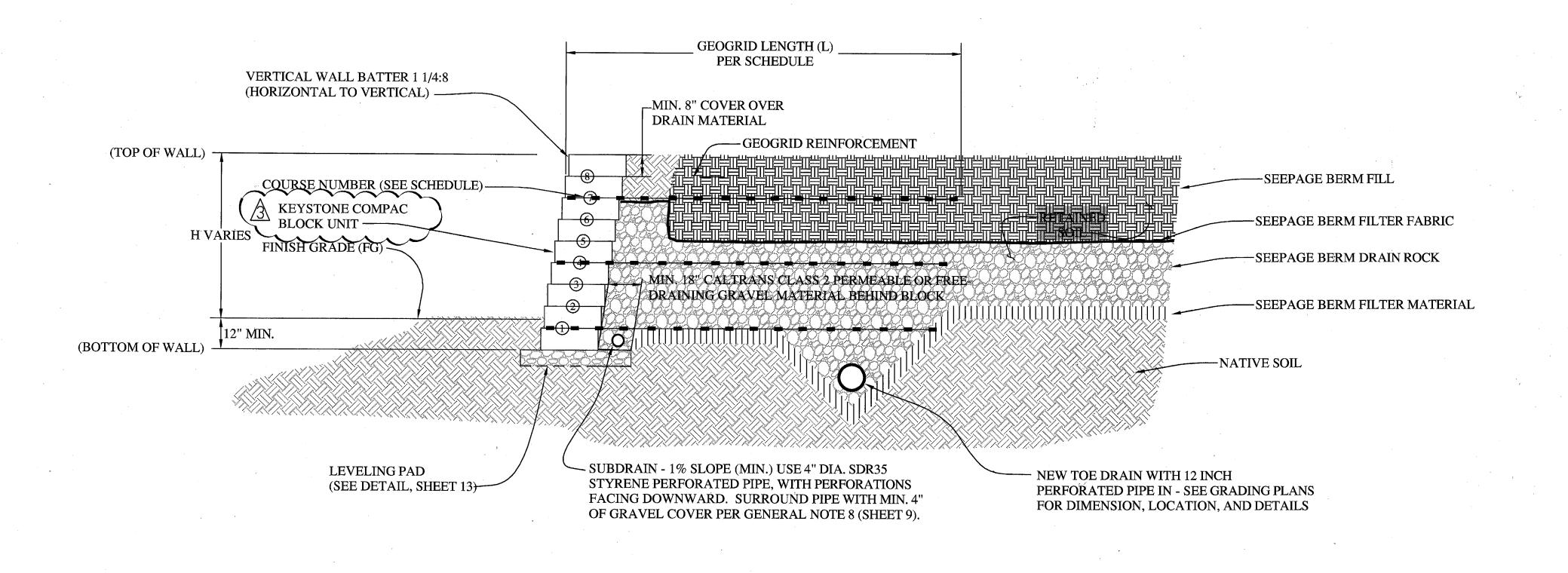
RECLAMATION DISTRICT NO. 17 **ELEMENT VI-A.2**

CALIFORNIA

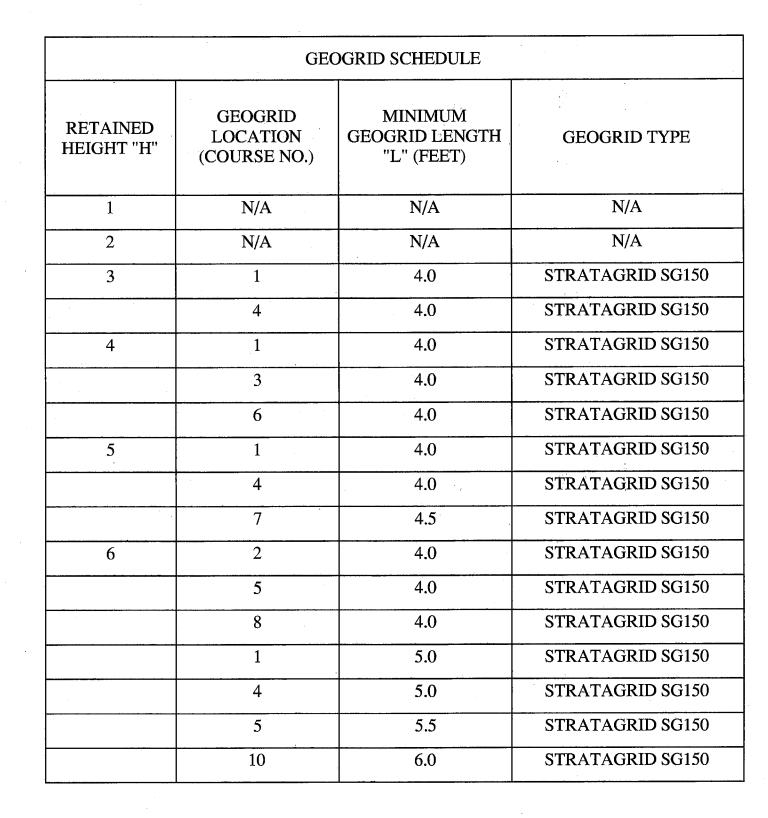
KEYSTONE WALL STRUCTURAL DESIGN

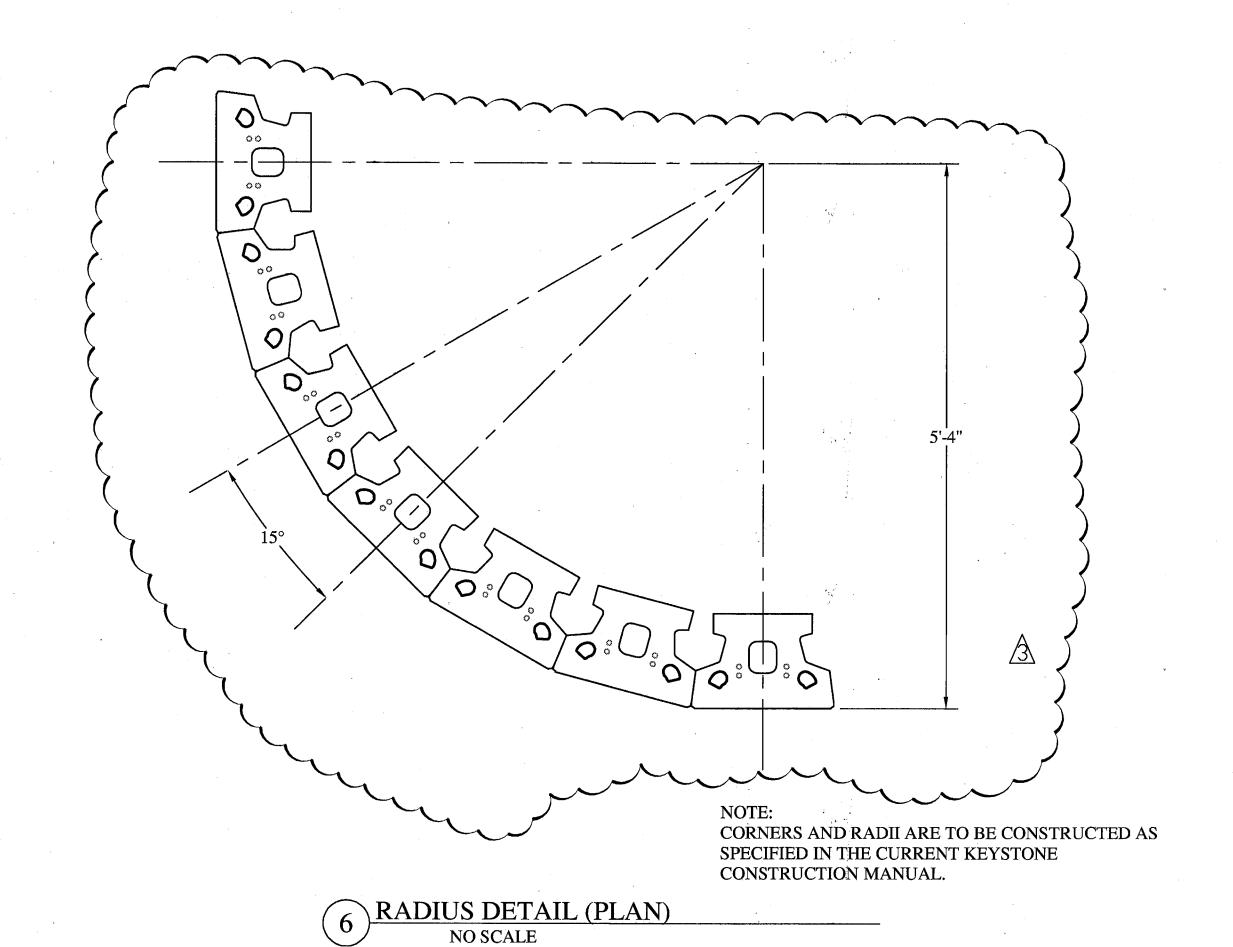
SAN JOAQUIN COUNTY

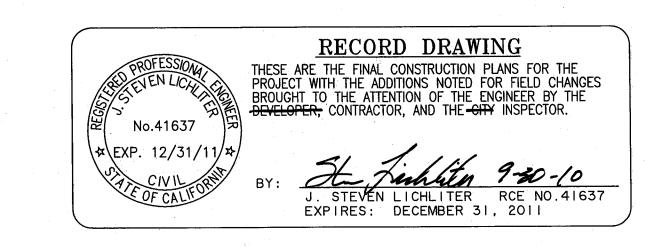
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KEYSTONE RETAINING WALL TYPICAL SECTION



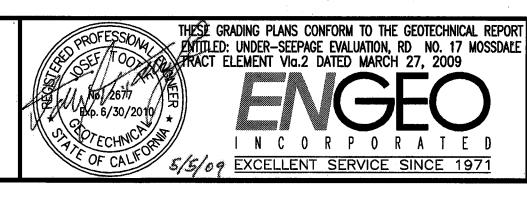




NOTE: DESIGN SHOWN ON THIS SHEET PREPARED BY ENGEO, INC.

SINNOCK
NEUDECK
Consulting Engineers and Land Surveyors

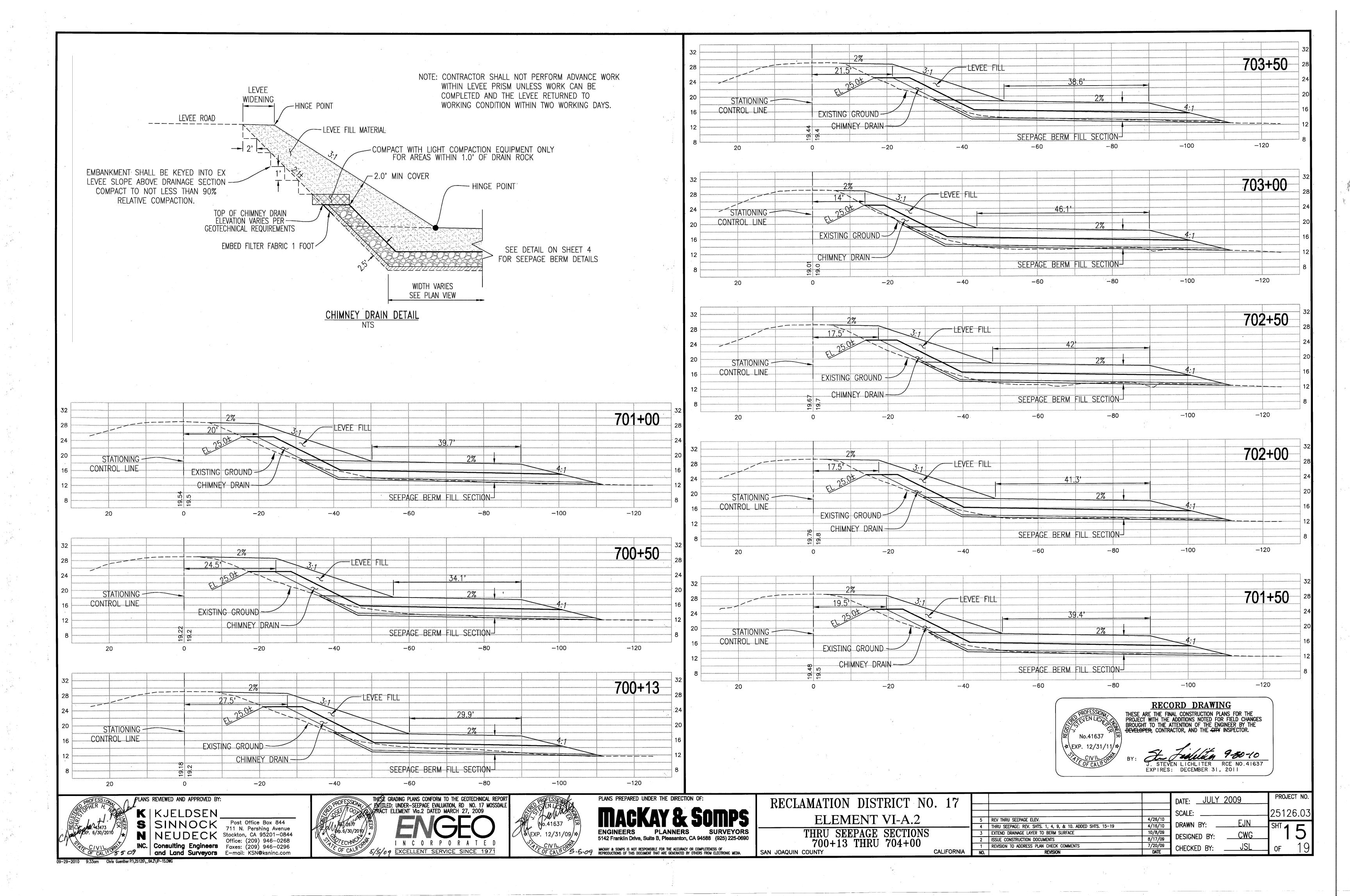
Post Office Box 844
711 N. Pershing Avenue
Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail: KSN@ksninc.com

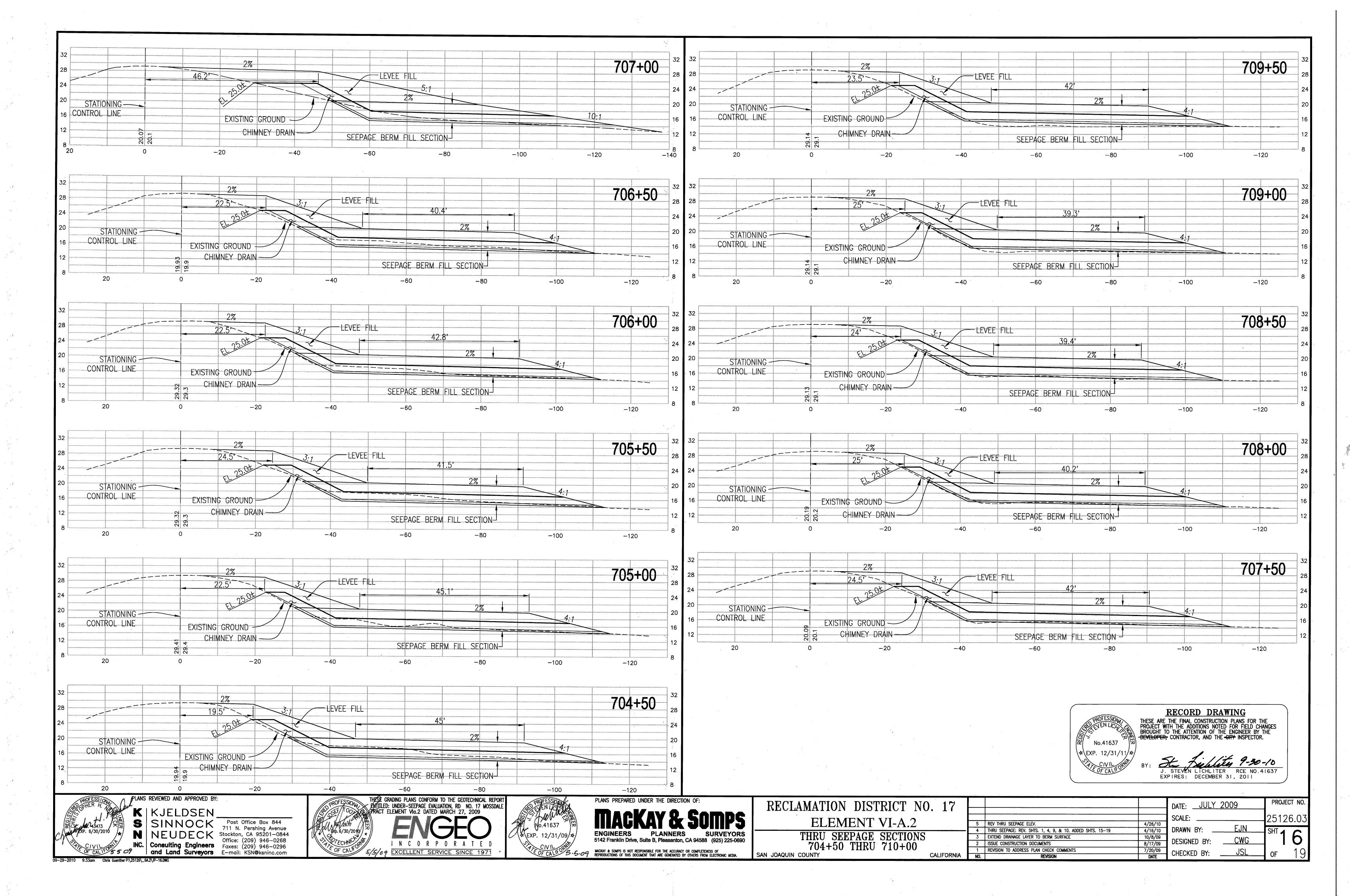


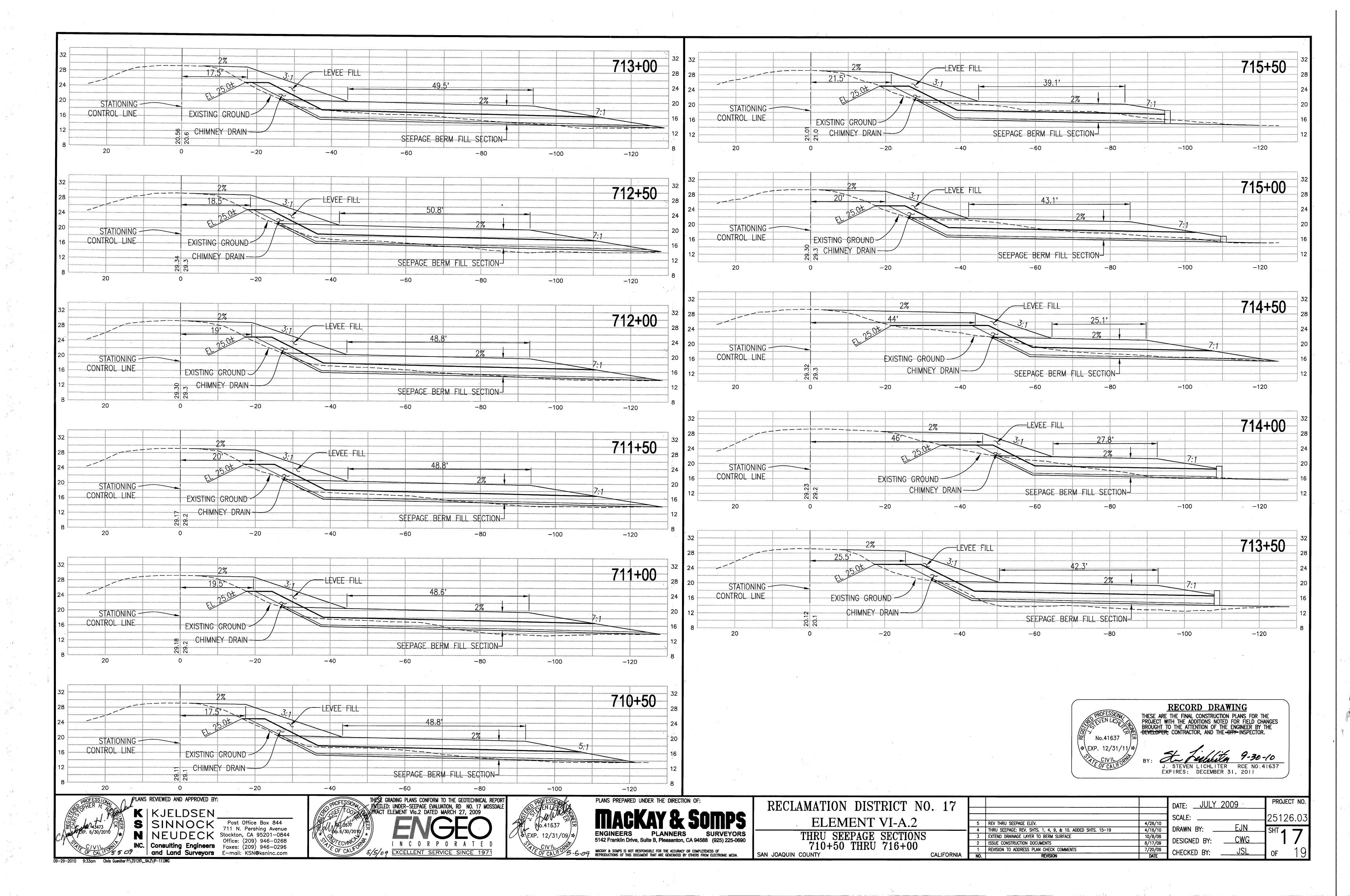
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ELEMENT VI-A.2	
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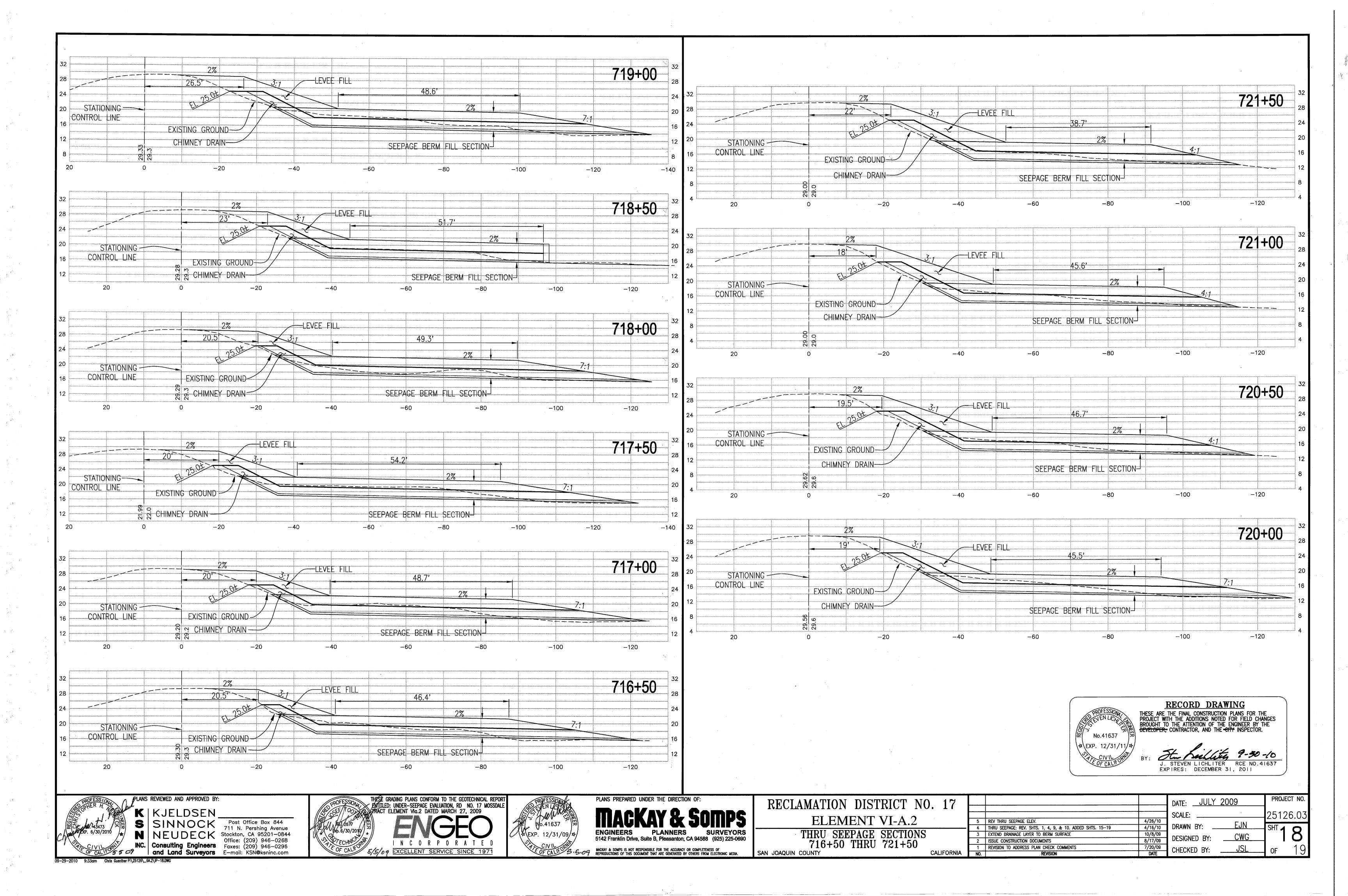
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JOAQUIN	COUNTY				CALIFORNIA

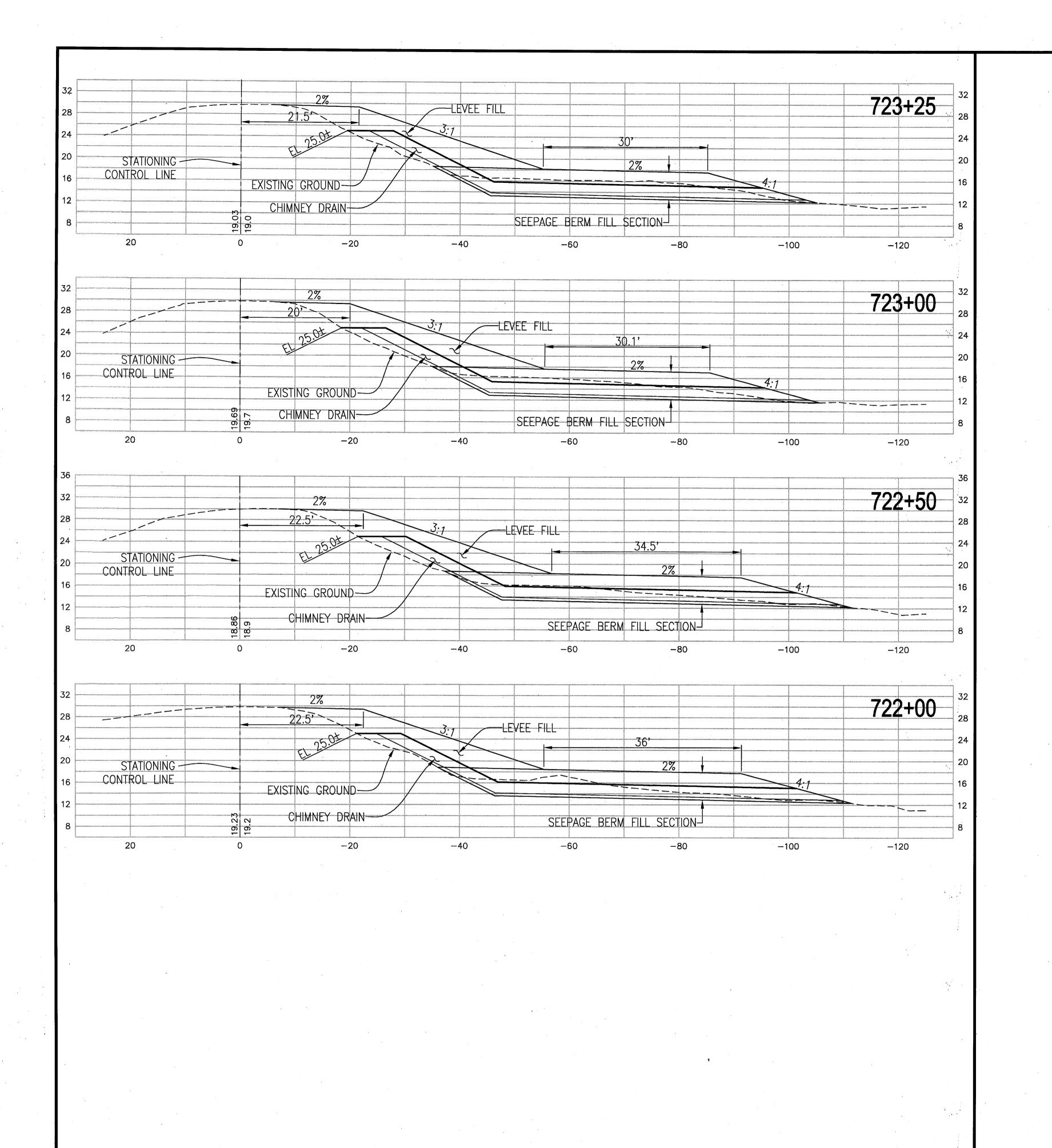
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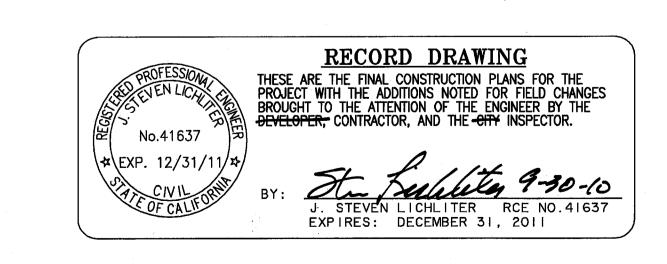


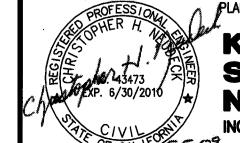






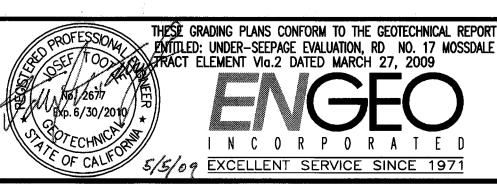






PLANS REVIEWED AND APPROVED BY:

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E-mail: KSN@ksninc.com





5142 Franklin Drive, Suite B, Pleasanton, CA 94588 (925) 225-0690

RECLAMATION DISTRICT NO.	1
ELEMENT VI-A.2	
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SAN JOAQUIN COUNTY

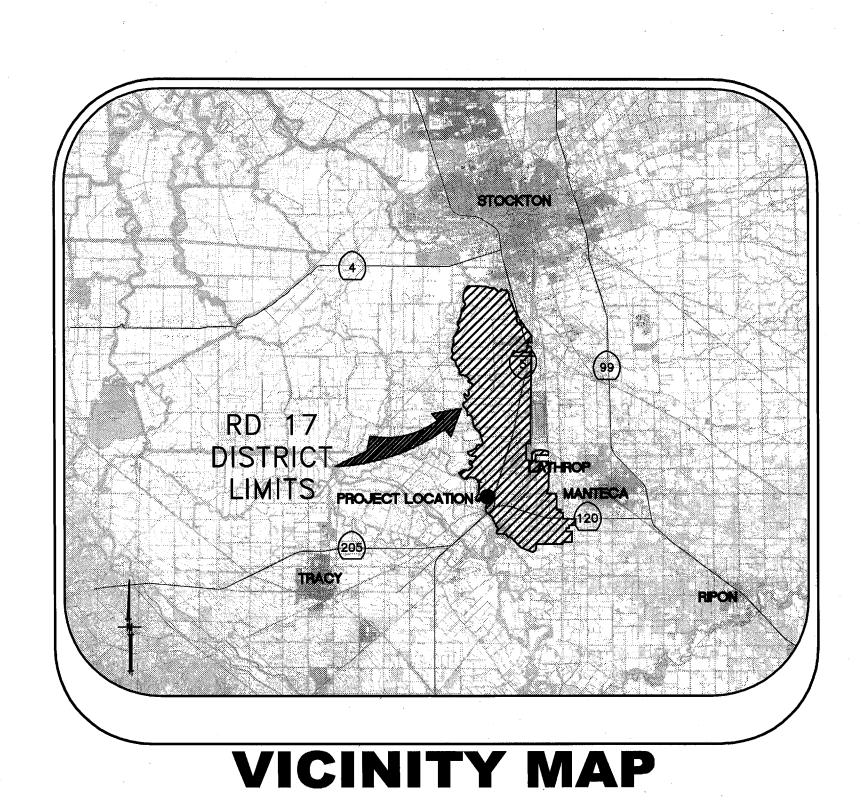
CALIFORNIA

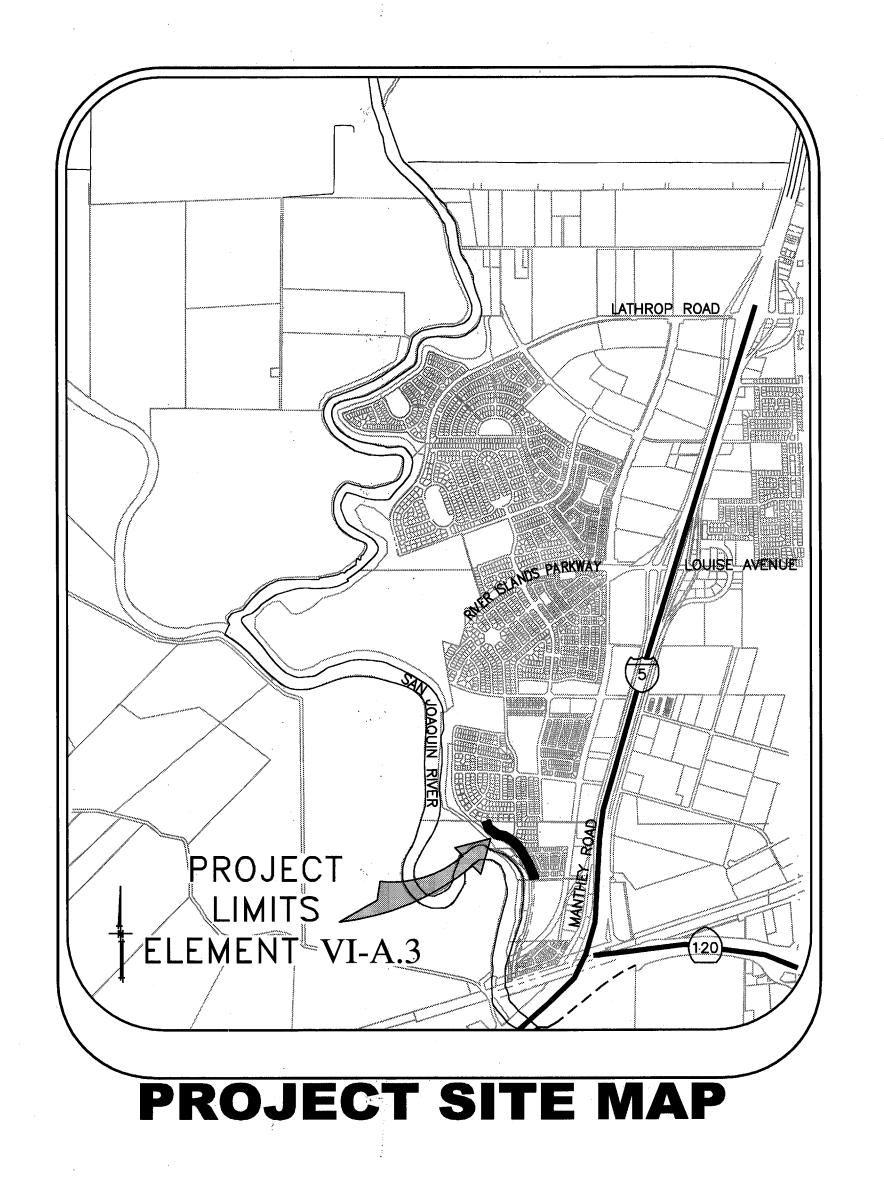
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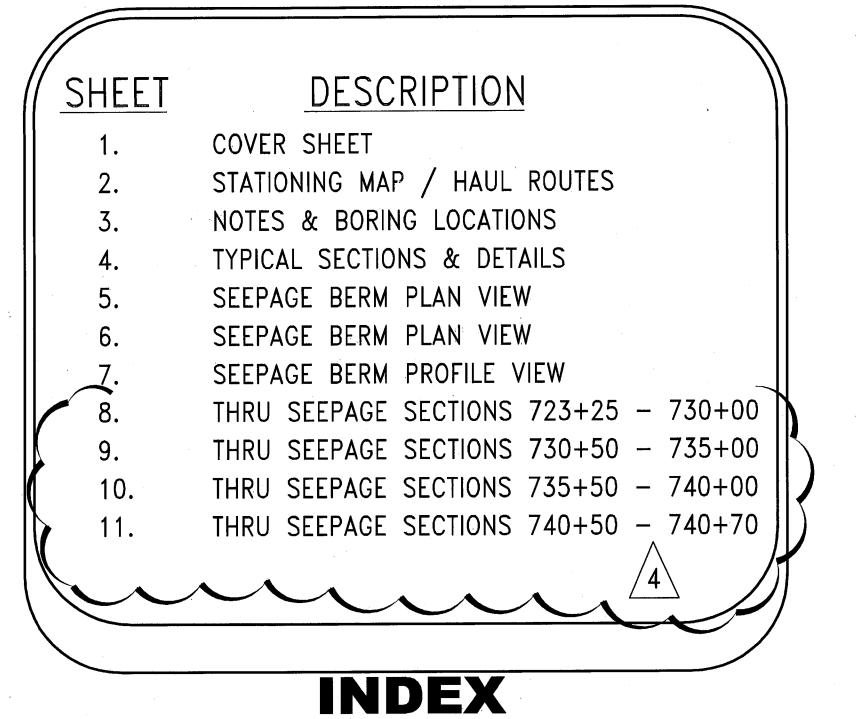
RECLAMATION DISTRICT NO. 17 LEVEE SEPAGE PROJECT

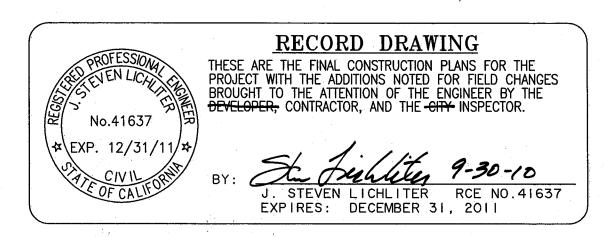
ELEMENT VI-A.3

STATION 723+47 THRU 740+98

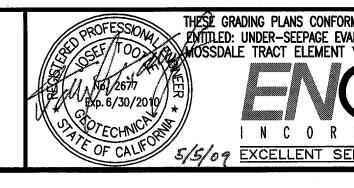


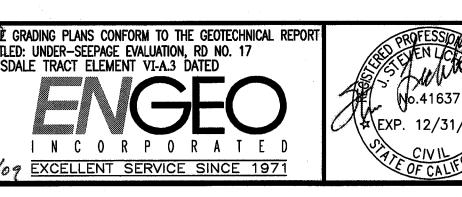












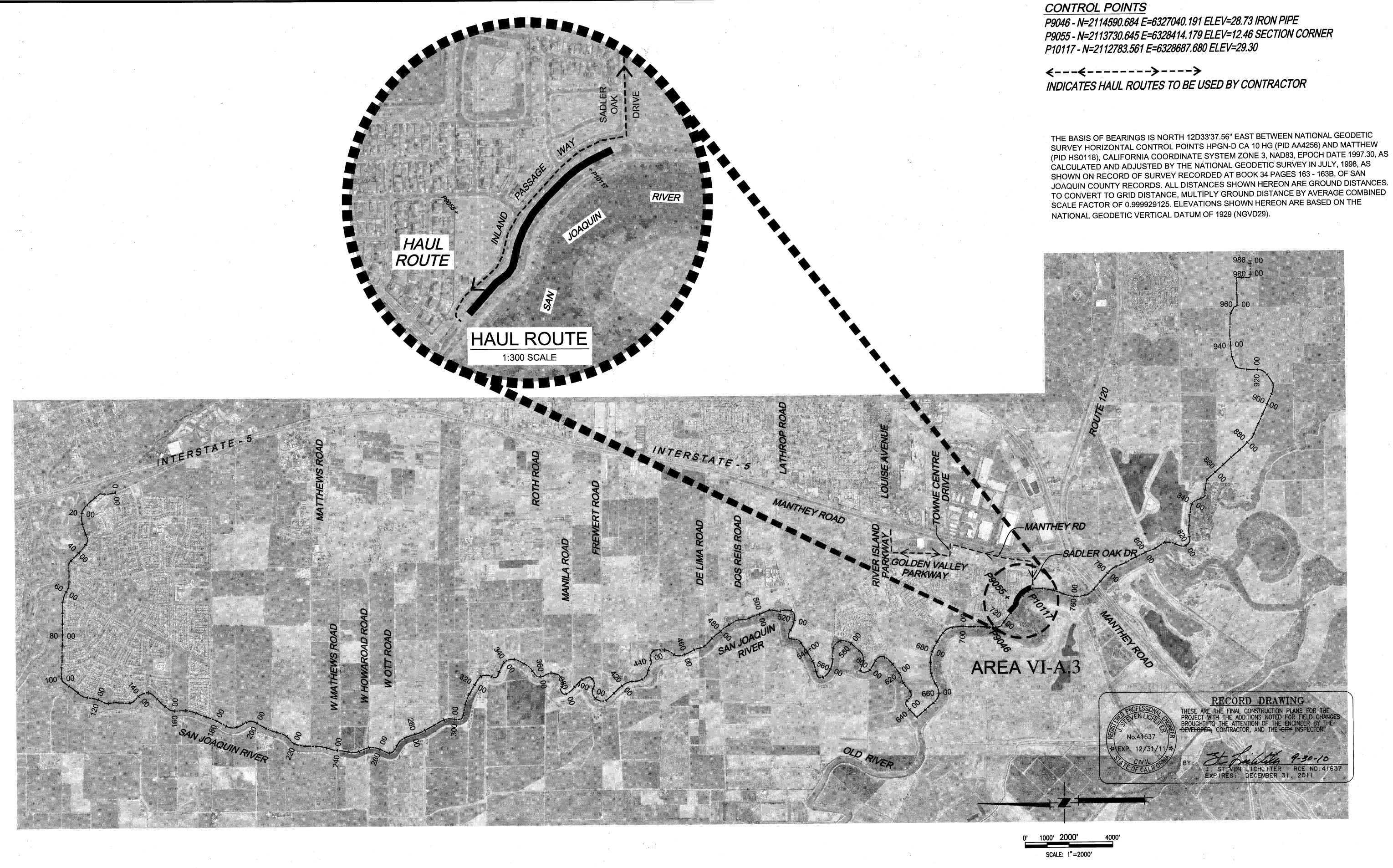


RECLAMATION	DISTRICT	NO.	17
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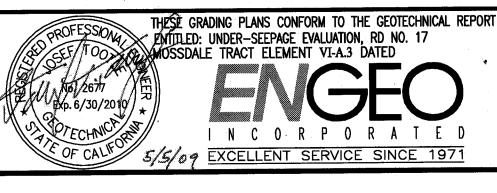
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RECLAMATION DISTRICT NO. 17 ELEMENT VI-A.3

STATIONING MAP / HAUL ROUTES

CALIFORNIA

CITY OF LATHROP, SAN JOAQUIN COUNTY

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NO.	REVISION	DATE	_`

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THE "DISTRICT" AS REFERRED TO IN THESE NOTES MEANS RECLAMATION DISTRICT 17.

THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALL CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE <u>DUST AND MUD CONTROL:</u> DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.

THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED" SURVEYS.

THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

GENERAL NOTES:

- . PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE, AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRE-CONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS. THE CONTRACTOR, AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT CONSTRUCTION.
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROUTES. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS AS SHOWN ON HAUL ROUTE PLAN, UNLESS OTHERWISE APPROVED.
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE CONSTRUCTION SURVEY STAKES AS DESCRIBED IN CONSTRUCTION SURVEYING SECTION. PLEASE CONTACT KJELDSEN SINNOCK AND NEUDECK WITH STAKING REQUESTS (209-946-0268) WITH AT LEAST TWO WORKING DAYS ADVANCE NOTICE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED THE CONSTRUCTION SURVEYING SECTION
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- 11. ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND/OR DEMOBILIZATION. LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED. EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS, DRAINAGE AND IRRIGATION DITCHES, AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14 SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE FNGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS IS TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT. TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

- I. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER, OR OTHER MEANS AS NECESSARY. THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS CLEAN & CLEAR FROM CONSTRUCTION IMPACTS OR DEBRIS.
- 2. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS, WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS, OIL, BITUMEN'S, CALCIUM CHLORIDE, AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

ENVIRONMENTAL NOTES (cont'd):

3. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CONDITIONS CLEAN AND FREE FROM RUBBISH AND DEBRIS.

- 1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROUTES, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES AND THE PROJECT SITE.
- a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS WHICH MIGHT DAMAGE CROPS.
- b. NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS, INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK (OR MORE AS NEEDED OR DIRECTED BY THE ENGINEER) TO MAINTAIN ADEQUATE DUST CONTROL FOR THE FOLLOWING AREAS:
- a. PROJECT AREAS
- b. HAUL ROUTES LEVEE TOE BERM FILL AREAS
- OTHER CONSTRUCTION USE AREAS CROP DAMAGE PREVENTION
- f. Residential building areas

- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF

- 1. THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME CAUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.
- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM & CONSISTENT WITH THE RECOMMENDATIONS OF THE SOILS REPORT.
- 1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISIONS, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC CONTROL OF THE PROJECT SPECIFICATIONS (AS PREPARED BY THE ENGINEER)

THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED BY HIM IN A CLEAN AND ORDERLY CONDITION, DISPOSING OF REFUSE IN A MANNER SATISFACTORY TO THE ENGINEER.

2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL HAUL ROUTES AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

CONSTRUCTION NOTES: HAUL ROUTES:

- THE CONTRACTOR SHALL IMPROVE, MAINTAIN, AND REPAIR UPON COMPLETION. THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE
- 2. THE CONTRACTOR SHALL REVIEW THE HAUL ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE HAUL ROUTES WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS, AND OTHER LOCAL TRAFFIC.
- 3. THE HAUL ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD DRAINAGE REQUIREMENTS.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS. MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 5. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE HAUL ROUTES AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- THE HAUL ROUTES MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE. INCLUDING REMOVAL IF REQUIRED, IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE LANDOWNERS.
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE HAUL ROUTES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS. REPAIRS TO HAUL ROUTES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE HAUL ROUTES USED AT ALL TIMES DURING CONSTRUCTION.

CLEARING & GRUBBING:

. UNLESS OTHERWISE INDICATED, THE WORK AREAS SHALL BE CLEARED AND GRUBBED BY THE CONTRACTOR. CONTRACTOR SHALL USE CAUTION WHILE CLEARING AND GRUBBING AROUND POWER LINES & BURIED ELECTRICAL CABLES. ALL MATERIAL CLEARED AND REMOVED SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR FOR REMOVAL AND DISPOSAL OFFSITE. SOME PRUNING/TRIMMING/THINNING OF BRANCHES OR TREES MAY BE REQUIRED.

- 1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED MATERIALS (PER THE ENGINEERS SPECIFICATIONS) AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER TO THE DESIGNATED SEEPAGE BERM SITES.
- 2. THE SEEPAGE BERM SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE SEEPAGE BERM AREAS PRIOR TO THE ACCEPTANCE OF THE MATERIAL.
- 4. THE CONTRACTOR SHALL DELIVER THE FILTER DRAIN MATERIAL, DRAIN ROCK, AND SEEPAGE BERM FILL TO THE REQUIRED SECTIONS AS UNIFORM MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- A. THE FILTER DRAIN MATERIAL AND SEEPAGE BERM FILL SHALL BE PLACED IN LOOSE HORIZONTAL LAYERS NOT MORE THAN EIGHT INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.
- 5. THE CONTRACTOR SHALL GRADE THE BASE OF THE SEEPAGE BERM TO MAINTAIN THE DESIGNATED GRADE AND CROSS-SECTIONS AS SHOWN ON THE PLANS. CONTRACTOR SHALL CUT AND FILL AS NECESSARY AND STOCKPILE ANY ADDITIONAL FILL FOR USE AS SEEPAGE BERM FILL.

FINISHING AND SLOPING GRADING

1. THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

1. COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS.

THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO, INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND SEEPAGE BERM FILL MATERIALS.

- 1. GEOTEXTILE FABRIC SHALL BE MIRAFI FW700 WOVEN GEOTEXTILE OR AN APPROVED EQUAL
- ?. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED BETWEEN THE SEEPAGE BERM FILL AND THE DRAIN ROCK MATERIAL.
- 3. MEASUREMENT AND PAYMENT WILL BE BY THE SQUARE FOOT NEAT (WITHOUT OVERLAP) AND BASED UPON THE FABRIC PLACED TO THE DIMENSIONS AND AT THE LOCATIONS DESIGNATED AND ACCEPTED BY THE ENGINEER.
- 4. FOR PAYMENT PURPOSES, MEASUREMENT OF THE FABRIC PLACED WILL NOT INCLUDE OVERLAPS AS REQUIRED BY THESE PLANS.

ROAD PREP, MAINTENANCE, AND SWPPP:

- 1 PFR THE IMPROVEMENT PLANS AND SWPPP (AS PREPARED BY ENGEO), CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF REQUIRED:
- A. EROSION CONTROL FACILITIES
- B. CONSTRUCTION ENTRANCE
- C. STREET SWEEPING
- D. SITE/CONSTRUCTION MATERIALS MAINTENANCE

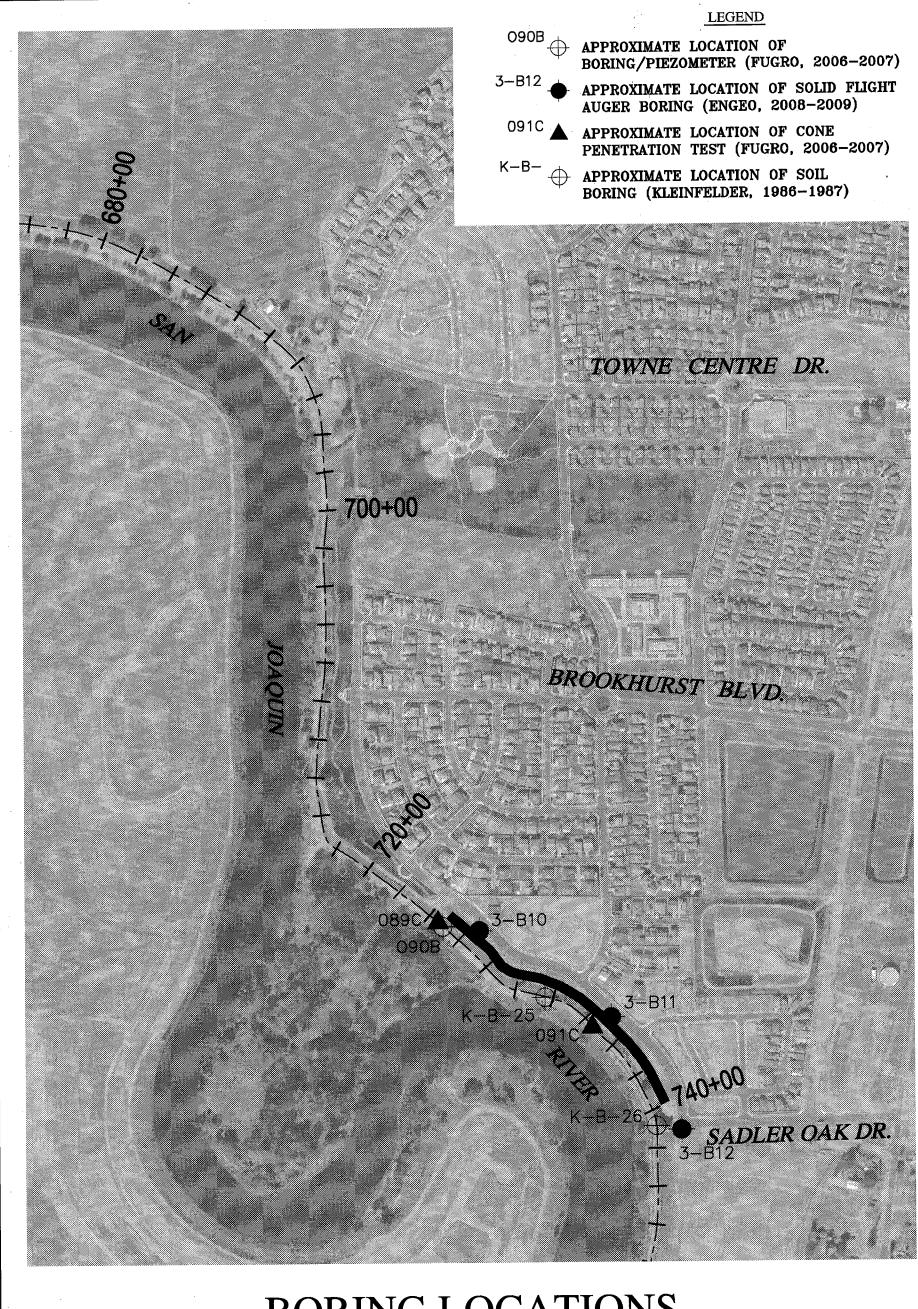
E. SITE SECURITY

EX FC EXISTING FACE OF CURB EX ROW EXISTING RIGHT OF WAY ____EX_SD/EX_PERF_PIPE_____ EXISTING STORM DRAIN NEW TOE DRAIN EXISTING WATER LINE EXISTING RECYCLED WATER LINE NEW SEEPAGE BERM SLOPE _ _ _ _ _ _ _ TOP

EX SEEPAGE BERM

CONSTRUCTION SURVEYING:

- 1. ROUGH GRADE STAKING SET HORIZONTAL LOCATION STAKES EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES AT THE DESIGN TOE OF THE SEEPAGE BERM. ALSO, SET POINTS AND CORRESPONDING MARKERS AT LOCATIONS THAT ARE OFFSET FROM THE EASTERLY TOE OF BERM EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES. THE MARKER AT THE OFFSET POINT WILL BE LABELED WITH A VERTICAL CUT OR FILL DIMENSION FROM THE TOP OF THE POINT TO THE DESIGN ELEVATION OF THE TOE OF THE SEEPAGE BERM. WHERE GRADING FOR FUTURE TRAILS IS TO BE PROVIDED THROUGH THE FRONT SLOPE OF THE SEEPAGE BERM, THE OFFSET STAKES WILL BE MARKED ACCORDINGLY AT BEGINNING AND END OF TRAIL.
- 2. VERIFICATIONS DURING AND AFTER CONSTRUCTION UPON COMPLETION OF SUBSTANTIAL PORTIONS OF WORK AND WHEN REQUESTED BY CONTRACTOR, OBTAIN "AS-GRADED" ELEVATIONS (TYPICALLY AT 500' INTERVALS) TO VERIFY THE DEPTH OF PLACED MATERIAL RELATIVE TO THE ELEVATION AT THE TOE OF THE SEEPAGE BERM. THIS CHECK WILL BE PERFORMED TWICE (ONCE AFTER PLACEMENT OF DRAIN ROCK AND ONCE AFTER PLACEMENT OF BERM FILL MATERIAL). CUT/FILL SHEETS SHOWING DEPTHS OF THE PLACED MATERIAL WILL BE PROVIDED FOR EACH SURVEYED VERIFICATION.



BORING LOCATIONS

RECORD DRAWING THESE ARE THE FINAL CONSTRUCTION PLANS FOR THE PROJECT WITH THE ADDITIONS NOTED FOR FIELD CHANGES BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE -DEVELOPER; CONTRACTOR, AND THE -GITY INSPECTOR. No.41637 **本**EXP. 12/31/11/ EXPIRES: DECEMBER 31, 2011

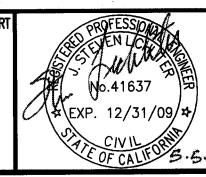
PROJECT NO.

LANS REVIEWED AND APPROVED BY:

KJELDSEN

Post Office Box 844 711 N. Pershing Avenue Stockton, CA 95201-0844 Office: (209) 946-0268 Consulting Engineers Faxes: (209) 946-0296 and Land Surveyors E-mail: KSN@ksninc.com

THESE GRADING PLANS CONFORM TO THE GEOTECHNICAL REPORT ENTITLED: UNDER-SEEPAGE EVALUATION, RD NO. 17 MOSSDALE TRACT ELEMENT VI-A.3 DATED INCORPORATED 5/5/09 EXCELLENT SERVICE SINCE 197



PLANS PREPARED UNDER THE DIRECTION OF:

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PLANNERS 5142 Franklin Drive, Suite B. Pleasanton. CA 94588 (925) 225-0690 MACKAY & SOMPS IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF REPRODUCTIONS OF THIS DOCUMENT THAT ARE GENERATED BY OTHERS FROM ELECTRONIC MEDIA.

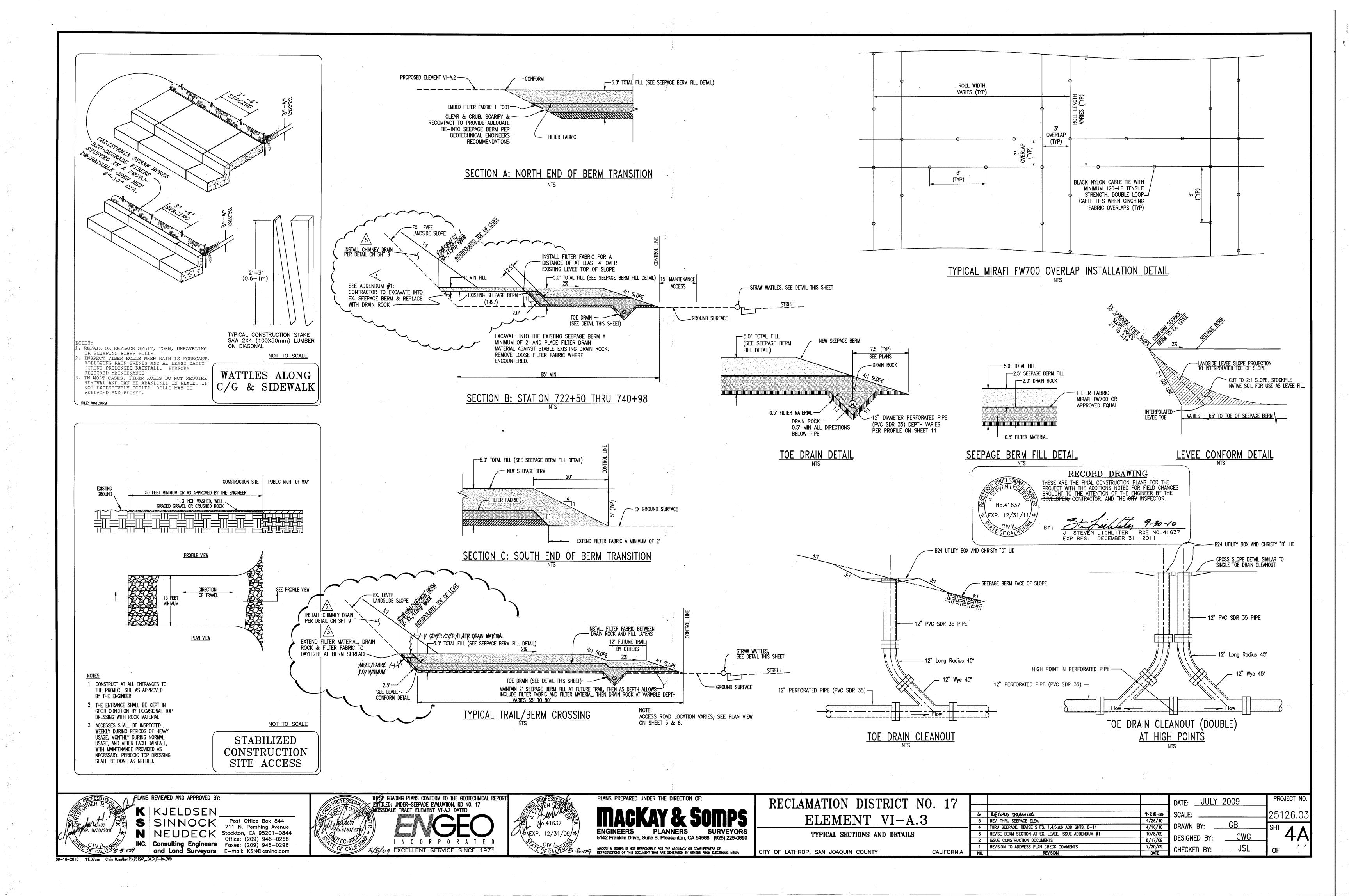
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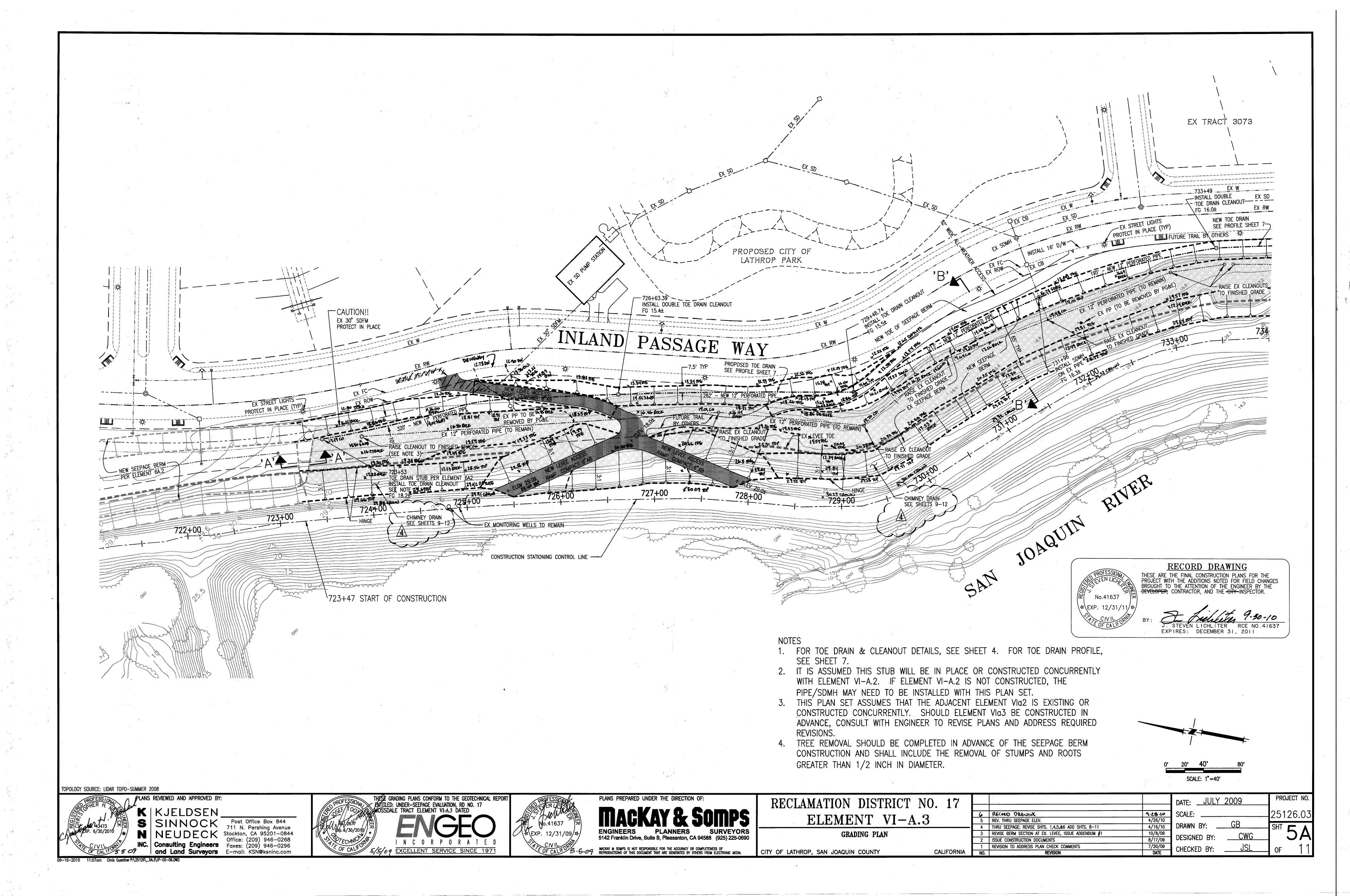
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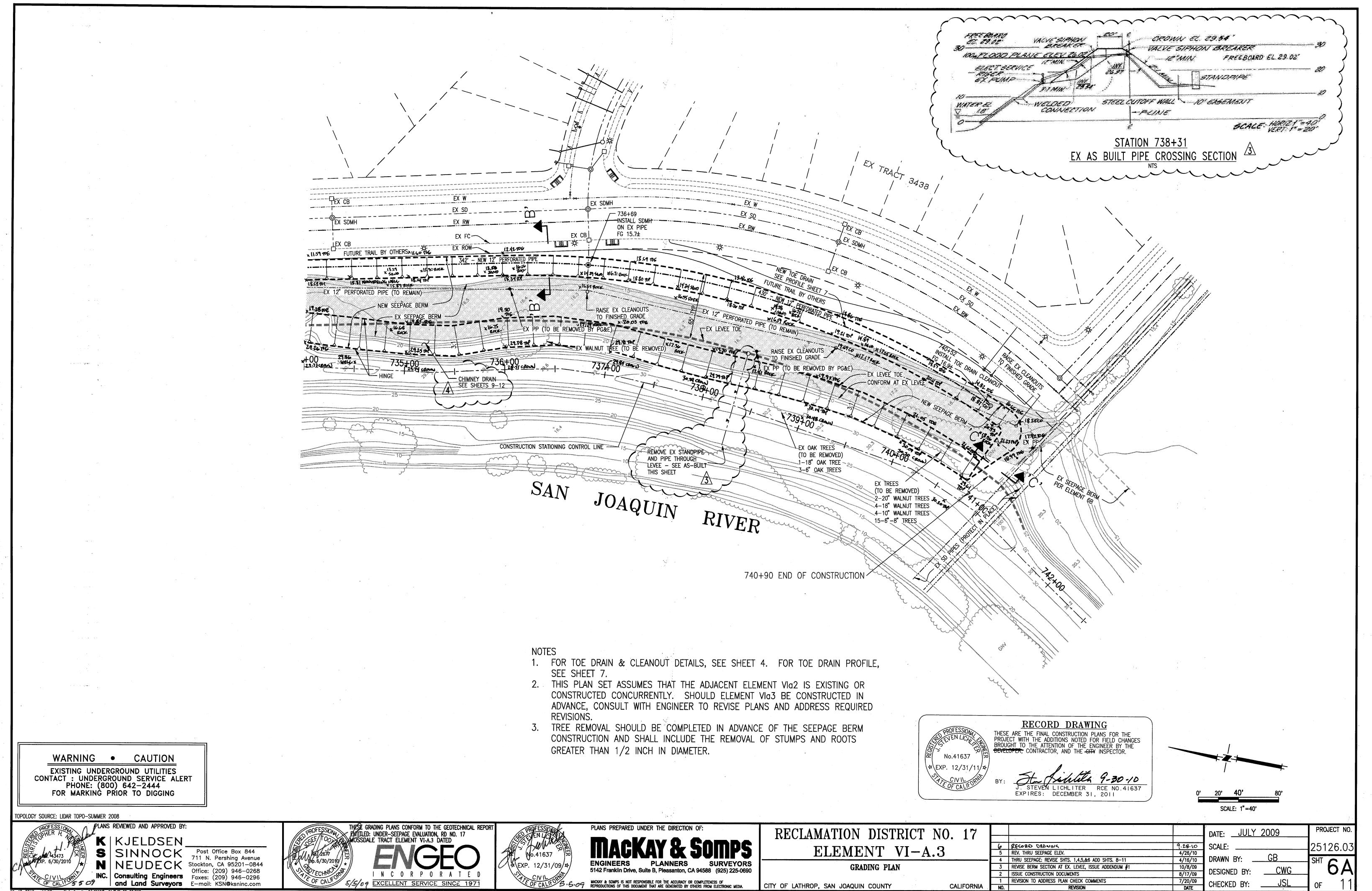
NOTES & BORING LOCATIONS

CITY OF LATHROP, SAN JOAQUIN COUNTY

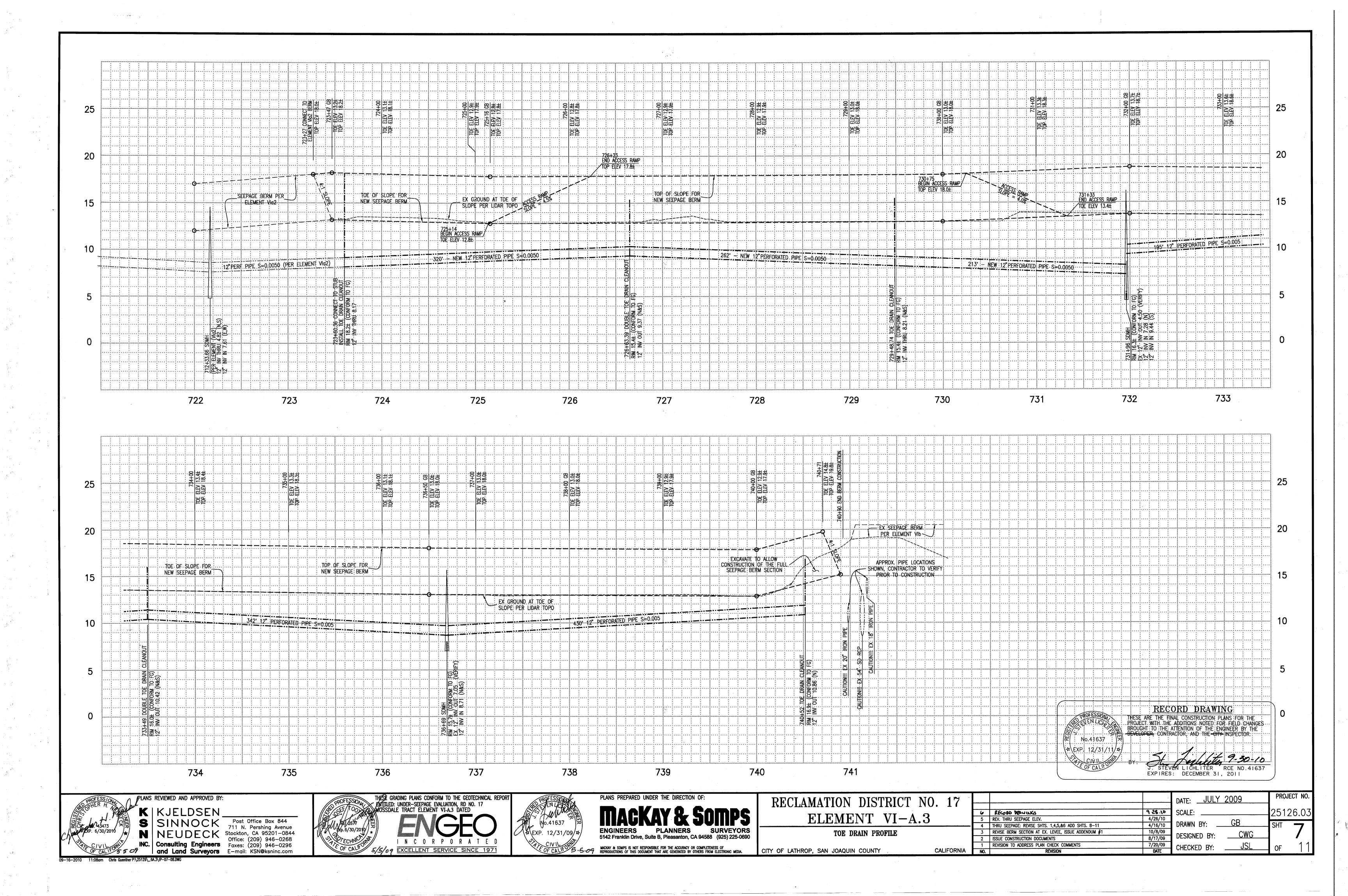
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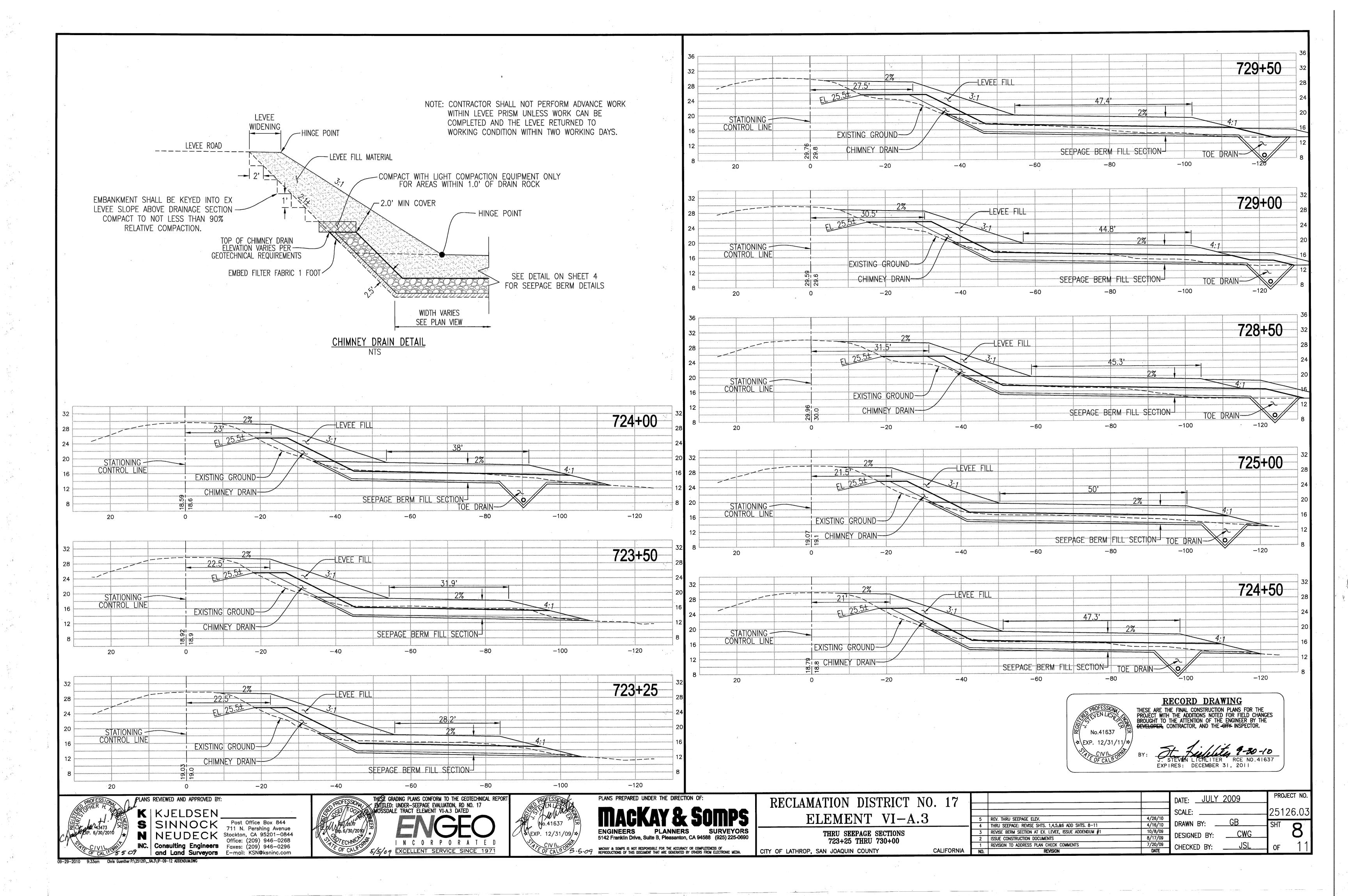


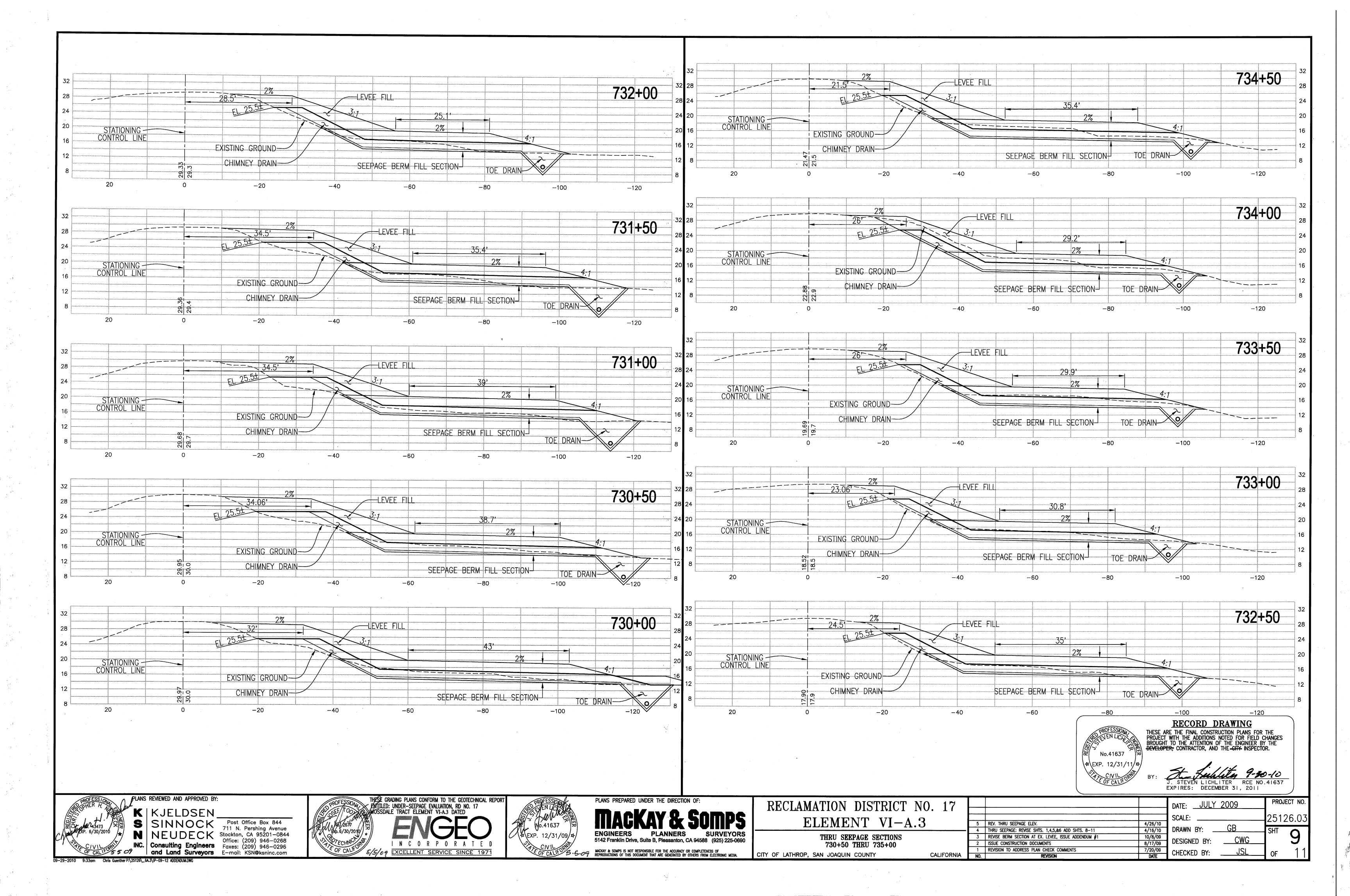


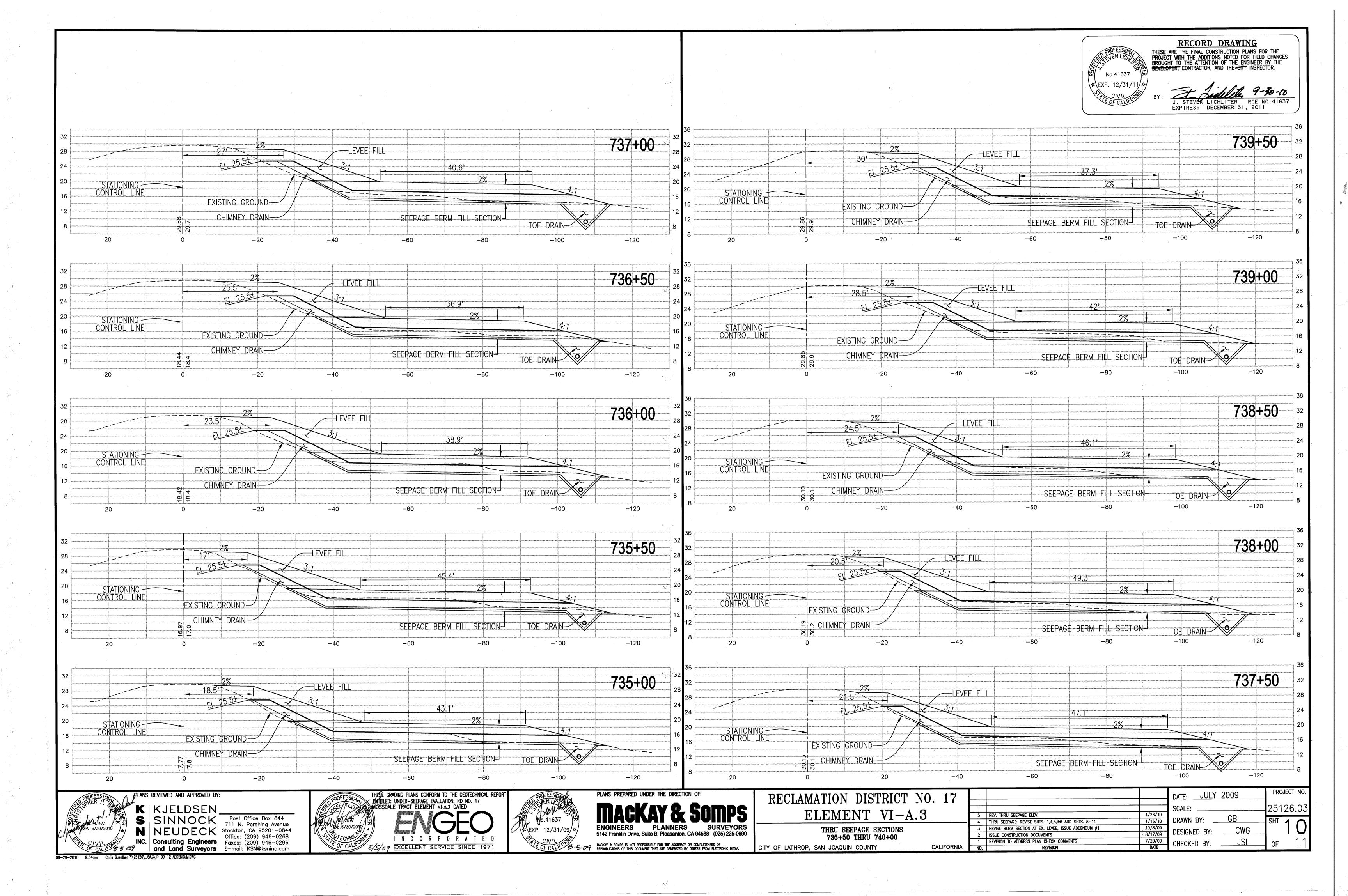


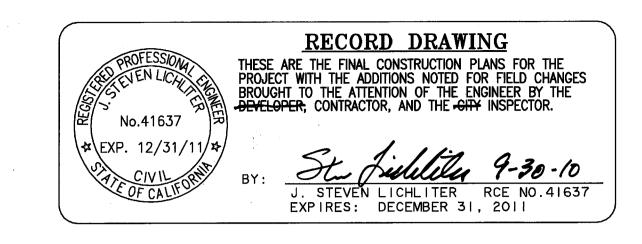
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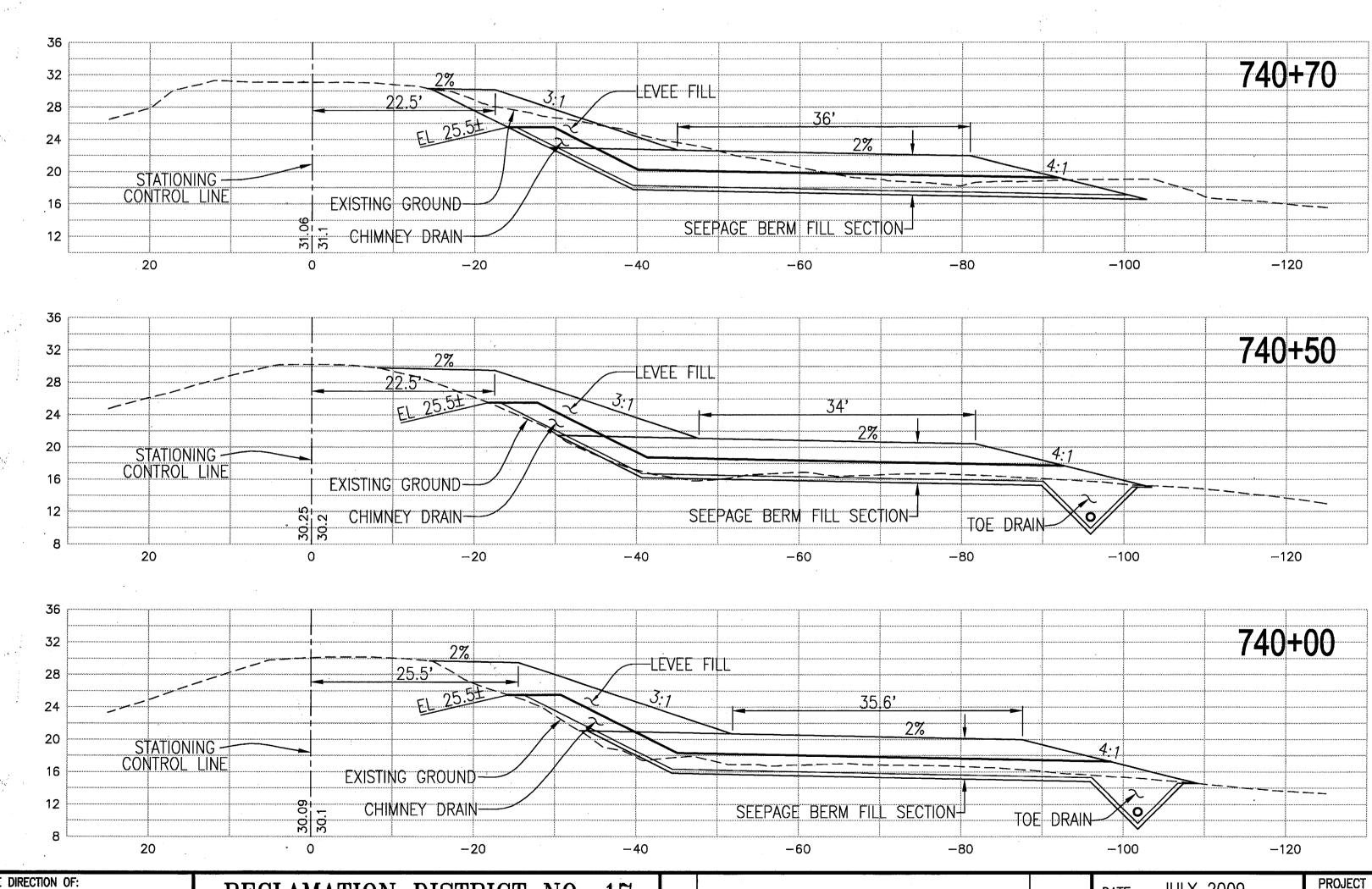












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THESE GRADING PLANS CONFORM TO THE GEOTECHNICAL REPORT ENTITLED: UNDER-SEEPAGE EVALUATION, RD NO. 17 MOSSDALE TRACT ELEMENT VI-A.3 DATED 5/5/09 EXCELLENT SERVICE SINCE 1971



RECLAMATION DISTRICT NO. 17 ELEMENT VI-A.3

CITY OF LATHROP, SAN JOAQUIN COUNTY

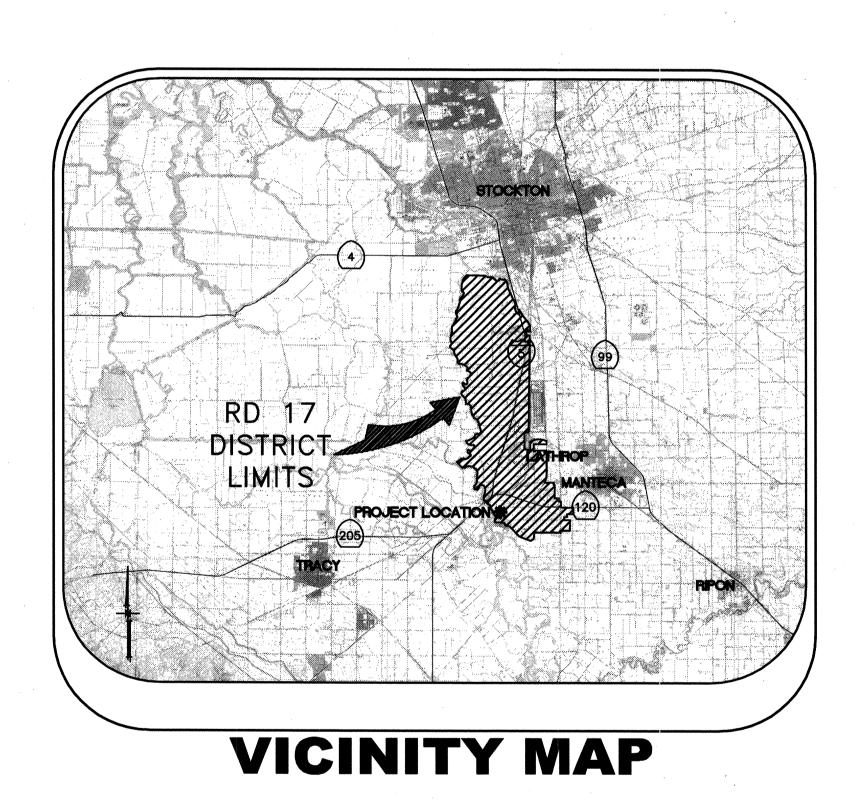
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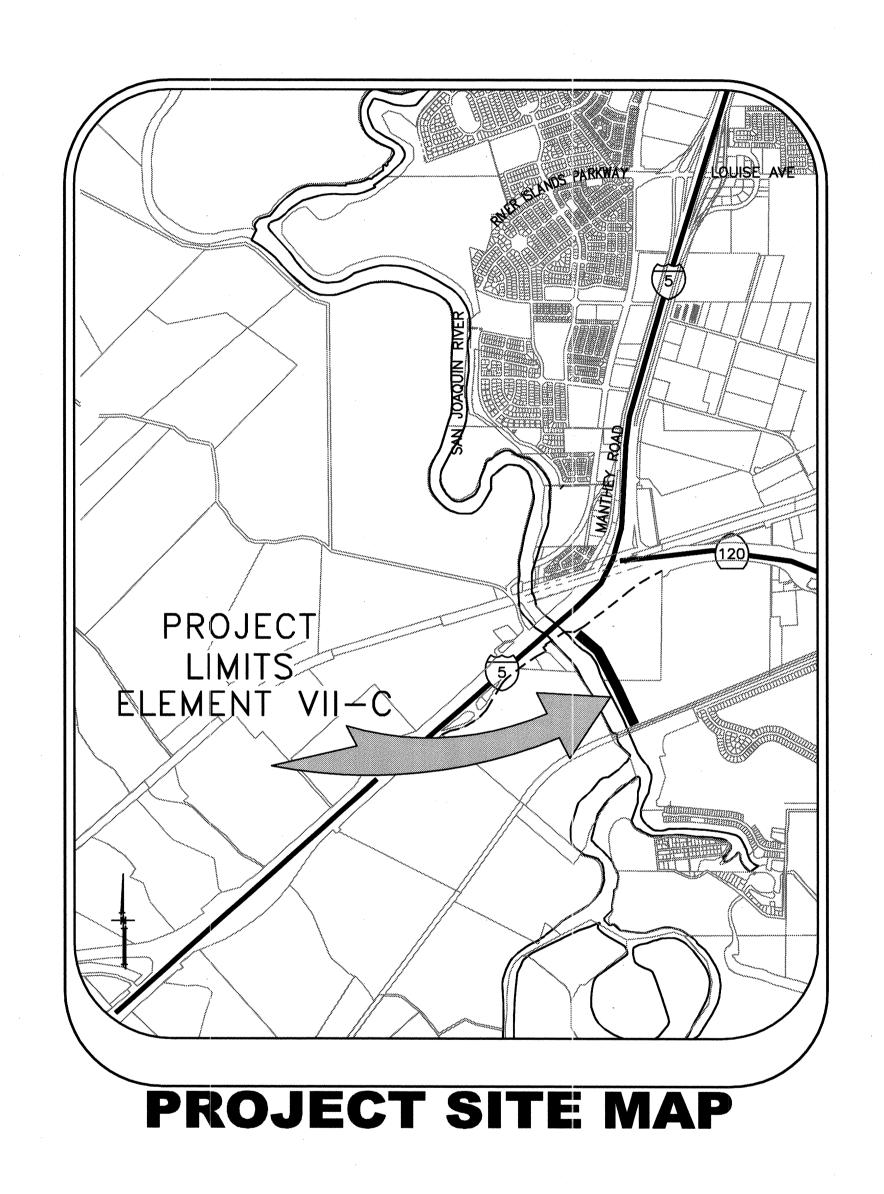
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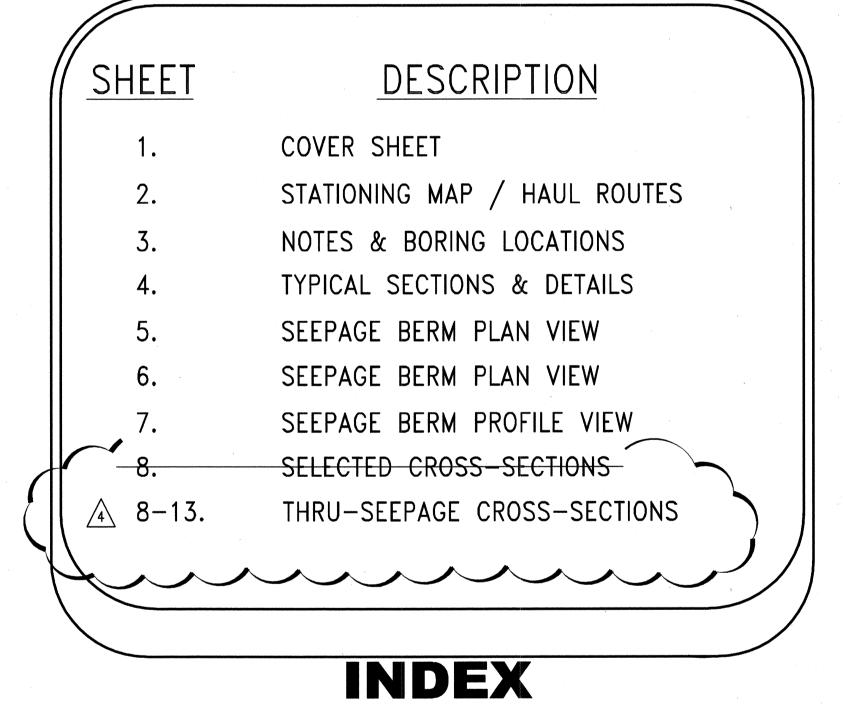
RECLAMATION DISTRICT NO. 17 LEVEE SEEPAGE PROJECT

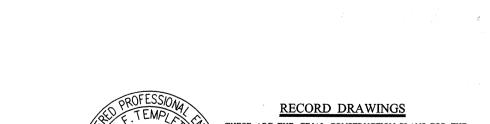
ELEMENT VII-C

STATION 778+00 THRU 799+50



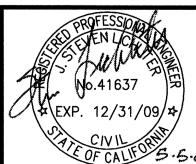








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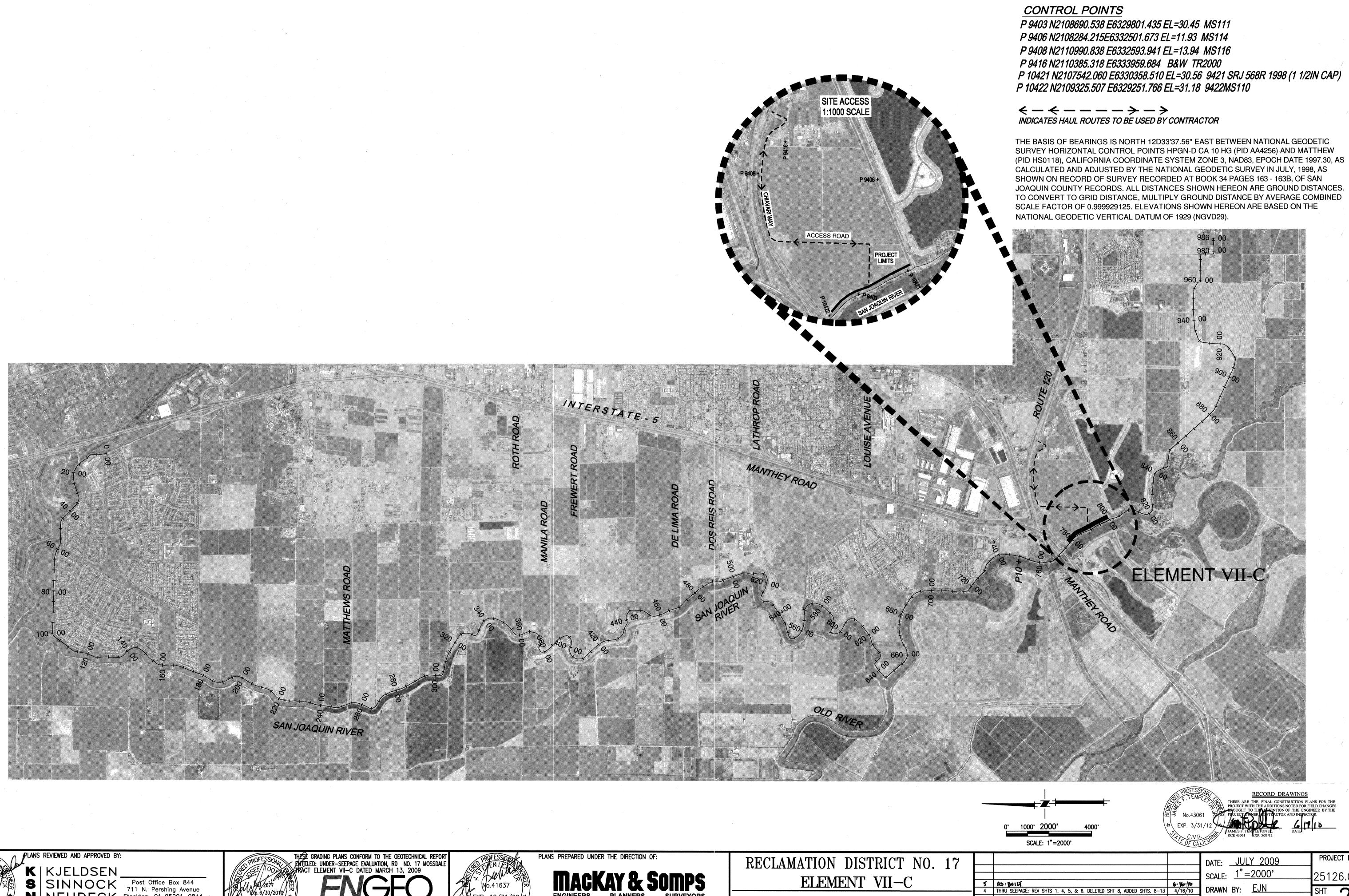
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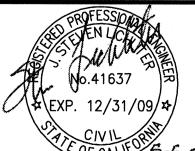
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	DATE: <u>JULY 2009</u>	PROJECT NO
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STATIONING MAP / HAUL ROUTES

			DATE: JULY 2009
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5	A5 : B014	6.16.10	
4	THRU SEEPAGE: REV SHTS 1, 4, 5, & 6. DELETED SHT 8, ADDED SHTS. 8-13	4/16/10	DRAWN BY: EJN
3	REVISE SEEPAGE BERM SECTION AT LEVEE. ADD ADDEDNDUM #1 TO PLANS	10/8/09	DESIGNED BY: CWG
2	ISSUE CONSTRUCTION DOCUMENTS	9/1/09	DESIGNED BI: CMG
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THE "DISTRICT" AS REFERRED TO IN THESE NOTES MEANS RECLAMATION DISTRICT 17.

100

THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALL CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.

THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED" SURVEYS.

THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

OTHERWISE APPROVED.

- PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE, AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRE-CONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR, AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROUTES. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS AS SHOWN ON HAUL ROUTE PLAN, UNLESS
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE CONSTRUCTION SURVEY STAKES AS DESCRIBED IN CONSTRUCTION SURVEYING SECTION. PLEASE CONTACT KJELDSEN SINNOCK AND NEUDECK WITH STAKING REQUESTS (209-946-0268) WITH AT LEAST TWO WORKING DAYS ADVANCE NOTICE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED THE CONSTRUCTION SURVEYING SECTION
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT. EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- 11. ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND FOR DEMORILIZATION. LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED. EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS. DRAINAGE AND IRRIGATION DITCHES, AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS IS TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT, TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

1. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER, OR OTHER MEANS AS NECESSARY. THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS CLEAN & CLEAR FROM CONSTRUCTION IMPACTS OR DEBRIS.

THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS. WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS, OIL, BITUMEN'S, CALCIUM CHLORIDE, AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

ENVIRONMENTAL NOTES (cont'd):

3. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CONDITIONS CLEAN ANI) FREE FROM RUBBISH AND DEBRIS.

DUST AND MUD CONTROL:

- 1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROUTES, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES AND THE PROJECT SITE.
- a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS WHICH MIGHT DAMAGE CROPS.
- b. NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS. INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK (OR MORE AS NEEDED OR DIRECTED BY THE ENGINEER) TO MAINTAIN ADEQUATE DUST CONTROL FOR THE FOLLOWING AREAS:
- HAUL ROUTES
- LEVEE TOE BERM FILL AREAS d. OTHER CONSTRUCTION USE AREAS
- CROP DAMAGE PREVENTION RESIDENTIAL BUILDING AREAS
- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY—EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF
- 1. THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME CAUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.
- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM & CONSISTENT WITH THE RECOMMENDATIONS OF THE SOILS REPORT.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISION'S, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC CONTROL OF THE PROJECT SPECIFICATIONS (AS PREPARED BY THE ENGINEER)

1. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED BY HIM IN A CLEAN AND ORDERLY CONDITION, DISPOSING OF REFUSE IN A MANNER SATISFACTORY TO THE ENGINEER.

2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL HAUL ROUTES AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

CONSTRUCTION NOTES: HAUL ROUTES:

- 1. THE CONTRACTOR SHALL IMPROVE, MAINTAIN, AND REPAIR UPON COMPLETION, THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE REPAIR AREAS.
- 2. THE CONTRACTOR SHALL REVIEW THE HAUL ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE HAUL ROUTES WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS, AND OTHER LOCAL TRAFFIC.
- 3. THE HAUL ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD DRAINAGE REQUIREMENTS.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS, MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 6. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE HAUL ROUTES AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- 7. THE HAUL ROUTES MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING REMOVAL IF REQUIRED, IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE LANDOWNERS.
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE HAUL ROUTES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS. REPAIRS TO HAUL ROUTES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE HAUL ROUTES USED AT ALL TIMES DURING CONSTRUCTION.

CLEARING & GRUBBING:

1. UNLESS OTHERWISE INDICATED, THE WORK AREAS SHALL BE CLEARED AND GRUBBED BY THE CONTRACTOR. CONTRACTOR SHALL USE CAUTION WHILE CLEARING AND GRUBBING AROUND POWER LINES & BURIED ELECTRICAL CABLES. ALL MATERIAL CLEARED AND REMOVED SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR FOR REMOVAL AND DISPOSAL OFFSITE. SOME PRUNING/TRIMMING/THINNING OF BRANCHES OR TREES MAY BE REQUIRED.

LEVEE SEEPAGE BERM SECTION:

- 1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED MATERIALS (PER THE ENGINEERS SPECIFICATIONS) AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER TO THE DESIGNATED SEEPAGE BERM SITES.
- 2. THE SEEPAGE BERM SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE SEEPAGE BERM AREAS PRIOR TO THE ACCEPTANCE OF THE MATERIAL.
- 4. THE CONTRACTOR SHALL DELIVER THE FILTER DRAIN MATERIAL, DRAIN ROCK, AND SEEPAGE BERM FILL TO THE REQUIRED SECTIONS AS UNIFORM MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- A. THE FILTER DRAIN MATERIAL AND SEEPAGE BERM FILL SHALL BE PLACED IN LOOSE HORIZONTAL LAYERS NOT MORE THAN EIGHT INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.
- 5. THE CONTRACTOR SHALL GRADE THE BASE OF THE SEEPAGE BERM TO MAINTAIN THE DESIGNATED GRADE AND CROSS--SECTIONS AS SHOWN ON THE PLANS. CONTRACTOR SHALL CUT AND FILL AS NECESSARY AND STOCKPILE ANY ADDITIONAL FILL FOR USE AS SEEPAGE BERM FILL.

FINISHING AND SLOPING GRADING

1. THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

COMPACTION EQUIPMENT:

1. COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS.

1. THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO, INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND SEEPAGE BERM FILL MATERIALS.

GEOTEXTILE FABRIC:

- 1. GEOTEXTILE FABRIC SHALL BE MIRAFI FW700 WOVEN GEOTEXTILE OR AN APPROVED EQUAL
- 2. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED BETWEEN THE SEEPAGE BERM FILL AND THE DRAIN ROCK MATERIAL.
- MEASUREMENT AND PAYMENT WILL BE BY THE SQUARE FOOT NEAT (WITHOUT OVERLAP) AND BASED UPON THE FABRIC PLACED TO THE DIMENSIONS AND AT THE LOCATIONS DESIGNATED AND ACCEPTED BY THE ENGINEER.
- 4. FOR PAYMENT PURPOSES, MEASUREMENT OF THE FABRIC PLACED WILL NOT INCLUDE OVERLAPS AS REQUIRED BY THESE PLANS.

ROAD PREP, MAINTENANCE, AND SWPPP:

- 1. PER THE IMPROVEMENT PLANS AND SWPPP (AS PREPARED BY ENGEO), CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF REQUIRED:
- A. EROSION CONTROL FACILITIES
- B. CONSTRUCTION ENTRANCE
- C. STREET SWEEPING
- D. SITE/CONSTRUCTION MATERIALS MAINTENANCE
- E. SITE SECURITY

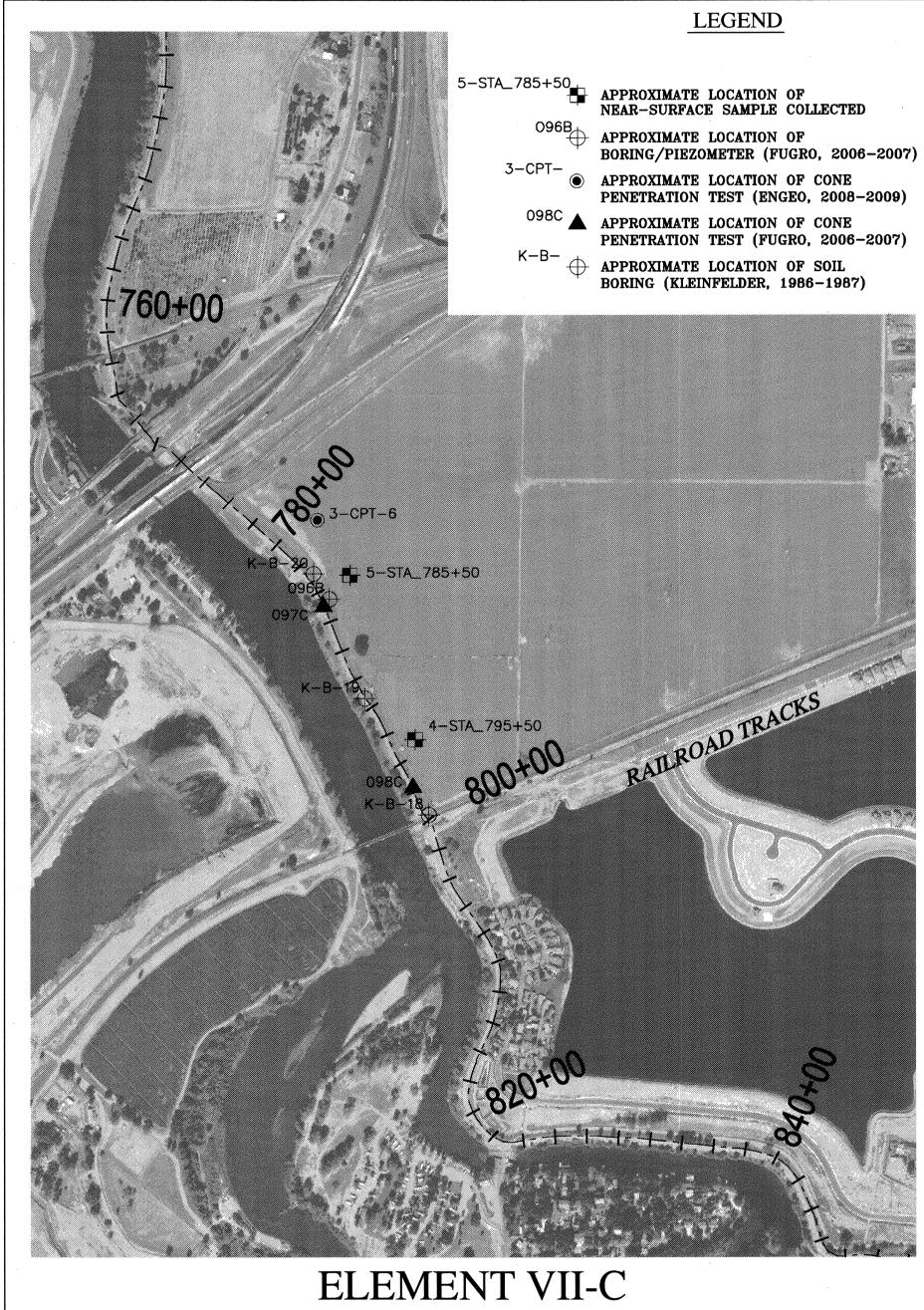
EXISTING FACE OF CURB EXISTING RIGHT OF WAY EX_SD/EX_PERF_PIPE EXISTING STORM DRAIN NEW TOE DRAIN EXISTING WATER LINE EXISTING RECYCLED WATER LINE NEW SEEPAGE BERM SLOPE - - TOP

EX SEEPAGE BERM

SAN JOAQUIN COUNTY

CONSTRUCTION SURVEYING:

- I. <u>Rough Grade Staking</u> set horizontal location stakes every 100 feet on tangents and every 50 feet ON CURVES AT THE DESIGN TOE OF THE SEEPAGE BERM. ALSO, SET POINTS AND CORRESPONDING MARKERS AT LOCATIONS THAT ARE OFFSET FROM THE EASTERLY TOE OF BERM EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES. THE MARKER AT THE OFFSET POINT WILL BE LABELED WITH A VERTICAL CUT OR FILL DIMENSION FROM THE TOP OF THE POINT TO THE DESIGN ELEVATION OF THE TOE OF THE SEEPAGE BERM. WHERE GRADING FOR FUTURE TRAILS IS TO BE PROVIDED THROUGH THE FRONT SLOPE OF THE SEEPAGE BERM, THE OFFSET STAKES WILL BE MARKED ACCORDINGLY AT BEGINNING AND END OF TRAIL.
- 2. <u>VERIFICATIONS DURING AND AFTER CONSTRUCTION</u> UPON COMPLETION OF SUBSTANTIAL PORTIONS OF WORK AND WHEN REQUESTED BY CONTRACTOR, OBTAIN "AS-GRADED" ELEVATIONS (TYPICALLY AT 500' INTERVALS) TO VERIFY THE DEPTH OF PLACED MATERIAL RELATIVE TO THE ELEVATION AT THE TOE OF THE SEEPAGE BERM. THIS CHECK WILL BE PERFORMED TWICE (ONCE AFTER PLACEMENT OF DRAIN ROCK AND ONCE AFTER PLACEMENT OF BERM FILL MATERIAL). CUT/FILL SHEETS SHOWING DEPTHS OF THE PLACED MATERIAL WILL BE PROVIDED FOR EACH SURVEYED VERIFICATION.

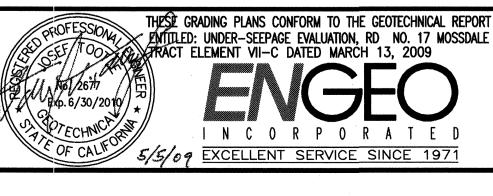


BORING LOCATIONS SCALE 1":600'



LANS REVIEWED AND APPROVED BY:

711 N. Pershing Avenue Stockton, CA 95201-0844 Office: (209) 946-0268 INC. | Consulting Engineers Faxes: (209) 946-0296 and Land Surveyors E-mail: KSN@ksninc.com





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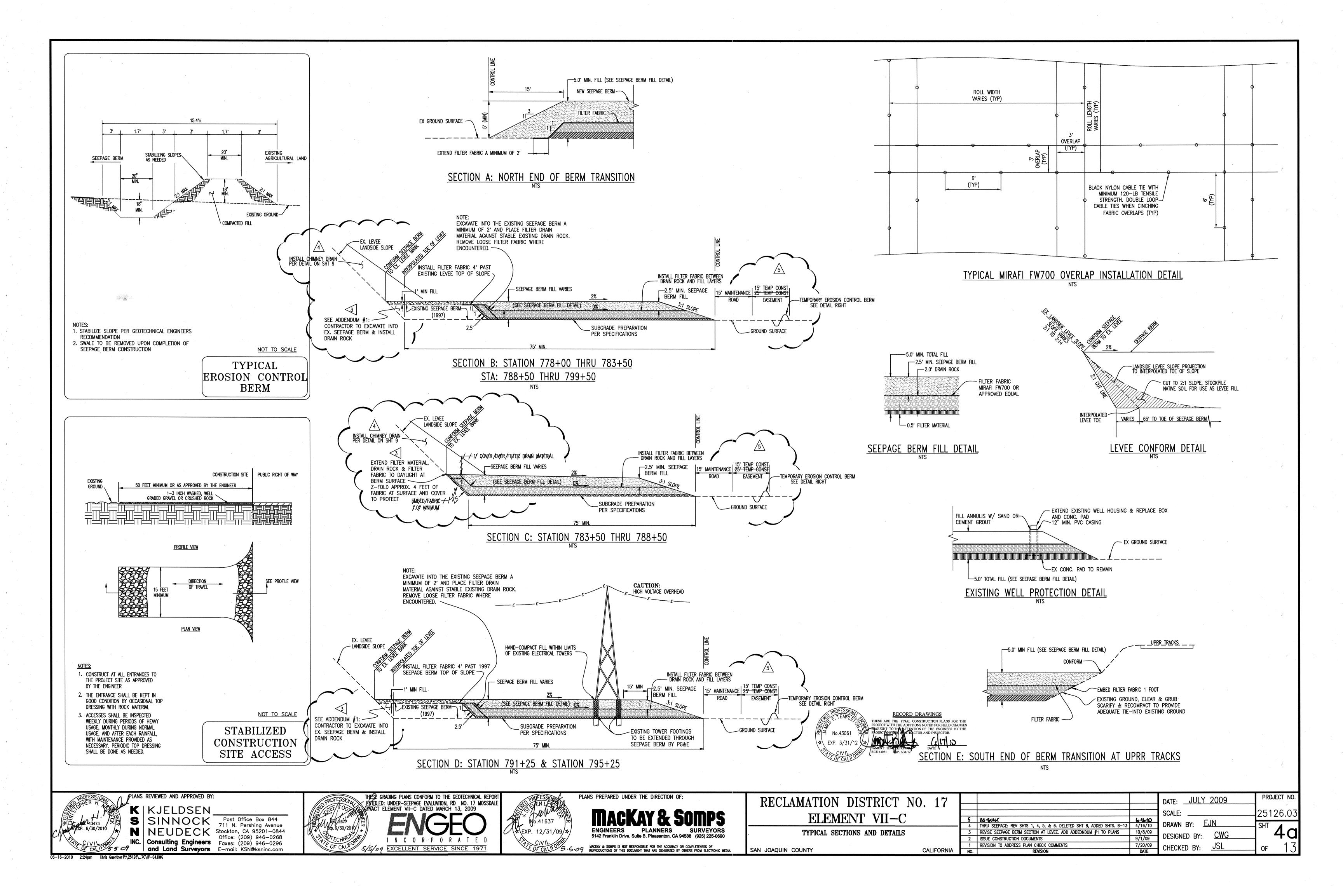
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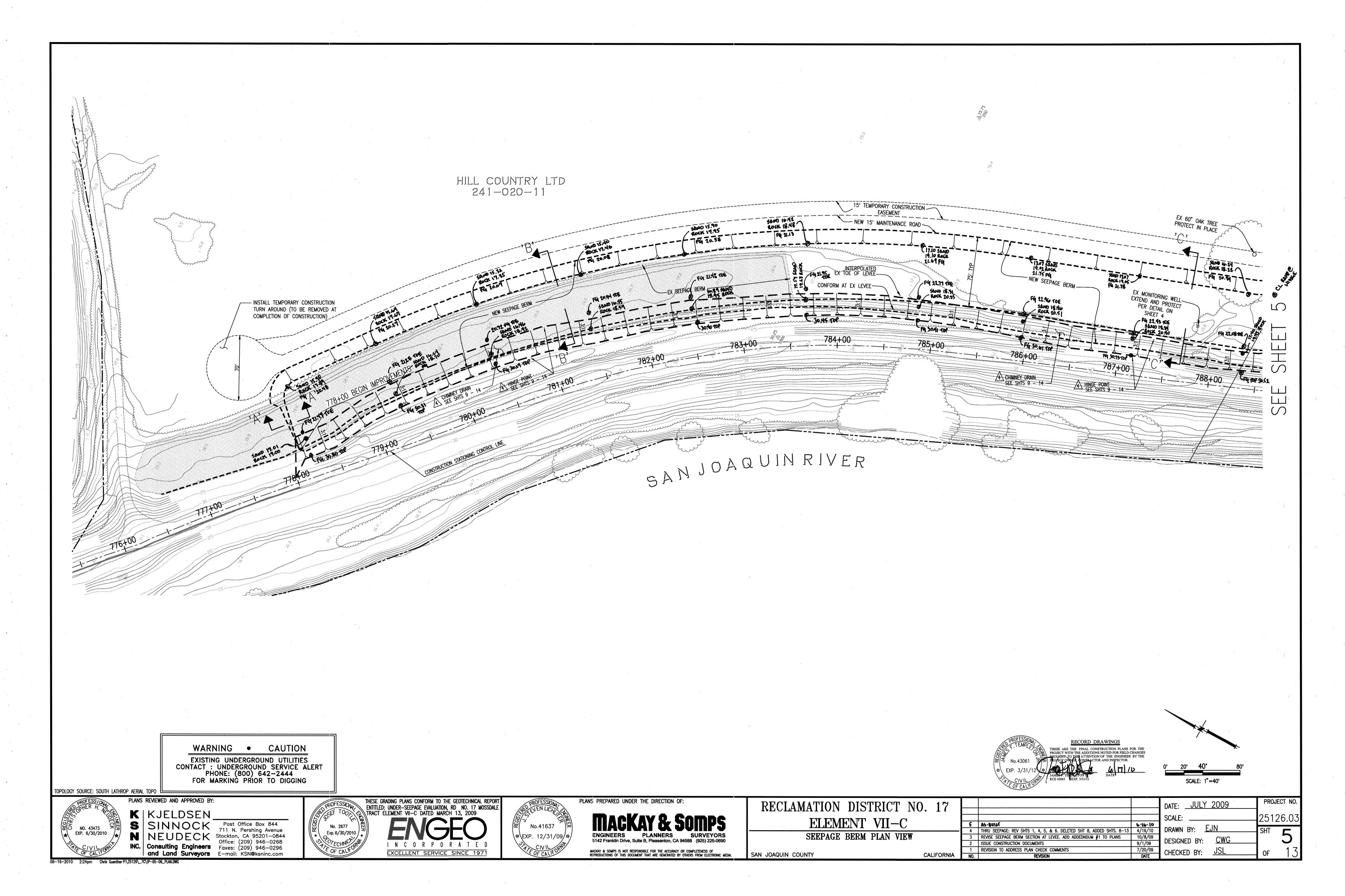
RECLAMATION DISTRICT NO. 17 ELEMENT VII-C

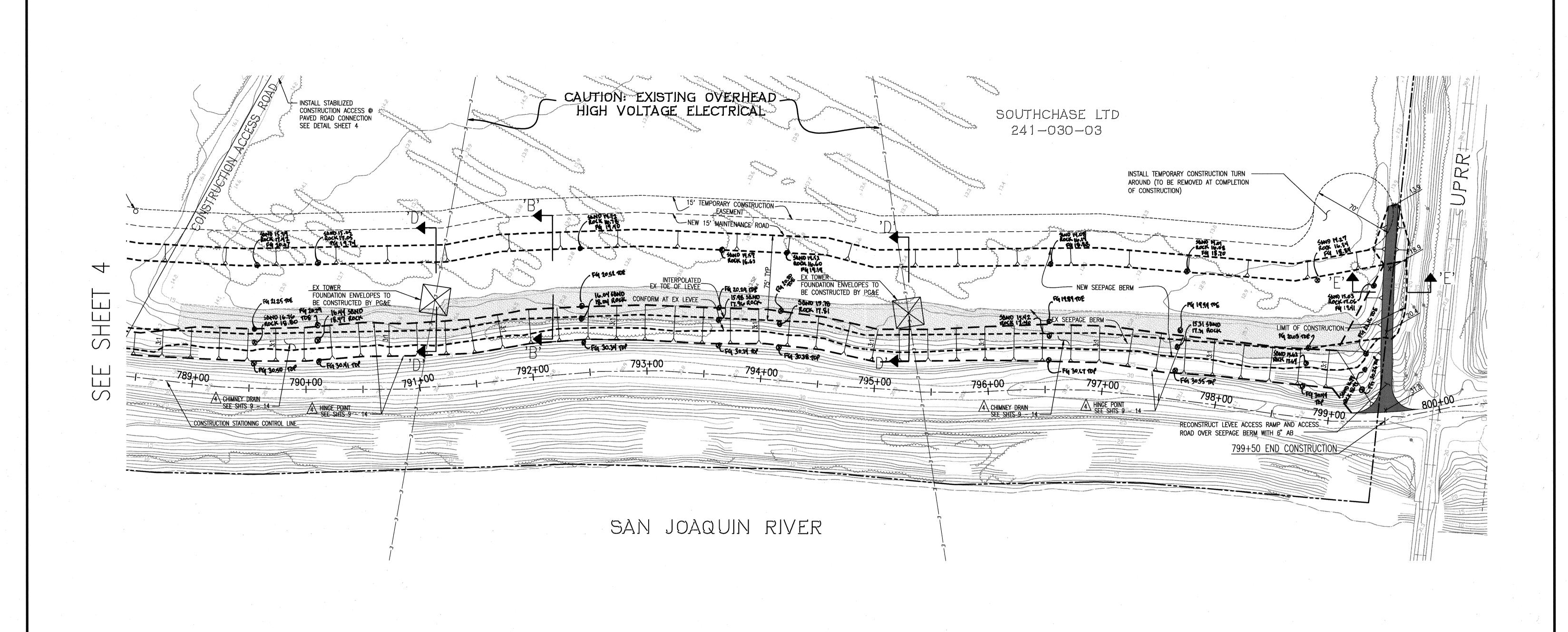
NOTES & BORING LOCATIONS

3 REVISE SEEPAGE BERM SECTION AT LEVEE, ADD ADDEDNDUM #1 TO PLANS 2 ISSUE CONSTRUCTION DOCUMENTS REVISION TO ADDRESS PLAN CHECK COMMENTS CALIFORNIA REVISION

PROJECT NO. DATE: JULY 2009 25126.03 SCALE: DRAWN BY: EJN 10/8/09 DESIGNED BY: CWG CHECKED BY:







WARNING • CAUTION

EXISTING UNDERGROUND UTILITIES

CONTACT: UNDERGROUND SERVICE ALERT

PHONE: (800) 642-2444

FOR MARKING PRIOR TO DIGGING

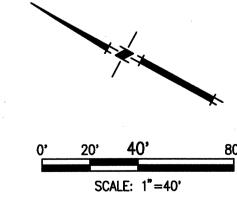
RECORD DRAWINGS

THESE ARE THE FINAL CONSTRUCTION PLANS FOR THE PROJECT WITH THE ADDITIONS NOTED FOR FIELD CHANGES BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE PROJECT OWNER OF TRACTOR AND INSPECTOR.

EXP. 3/31/12

JAMES F. TENPLETON JR.

RCE 43061 EXP. 3/31/12



PLAN

PROFESSION

PROFESSION

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EXP. 6/30/2010

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PLANS REVIEWED AND APPROVED BY:

K | KJELDSEN |
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NEUDECK |
Stockton, CA 95201-0844 |
Office: (209) 946-0268 |
Faxes: (209) 946-0296 |
E-mail: KSN@ksninc.com

Avenue 01-0844 6-0268 6-0296 inc.com THESE GRADING PLANS CONFORM TO THE GEOTECHNICAL REPORT ENTITLED: UNDER-SEEPAGE EVALUATION, RD NO. 17 MOSSDALE TRACT ELEMENT VII—C DATED MARCH 13, 2009

No. 2677

Exp. 6/30/2010

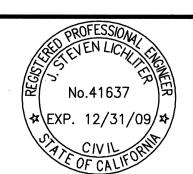
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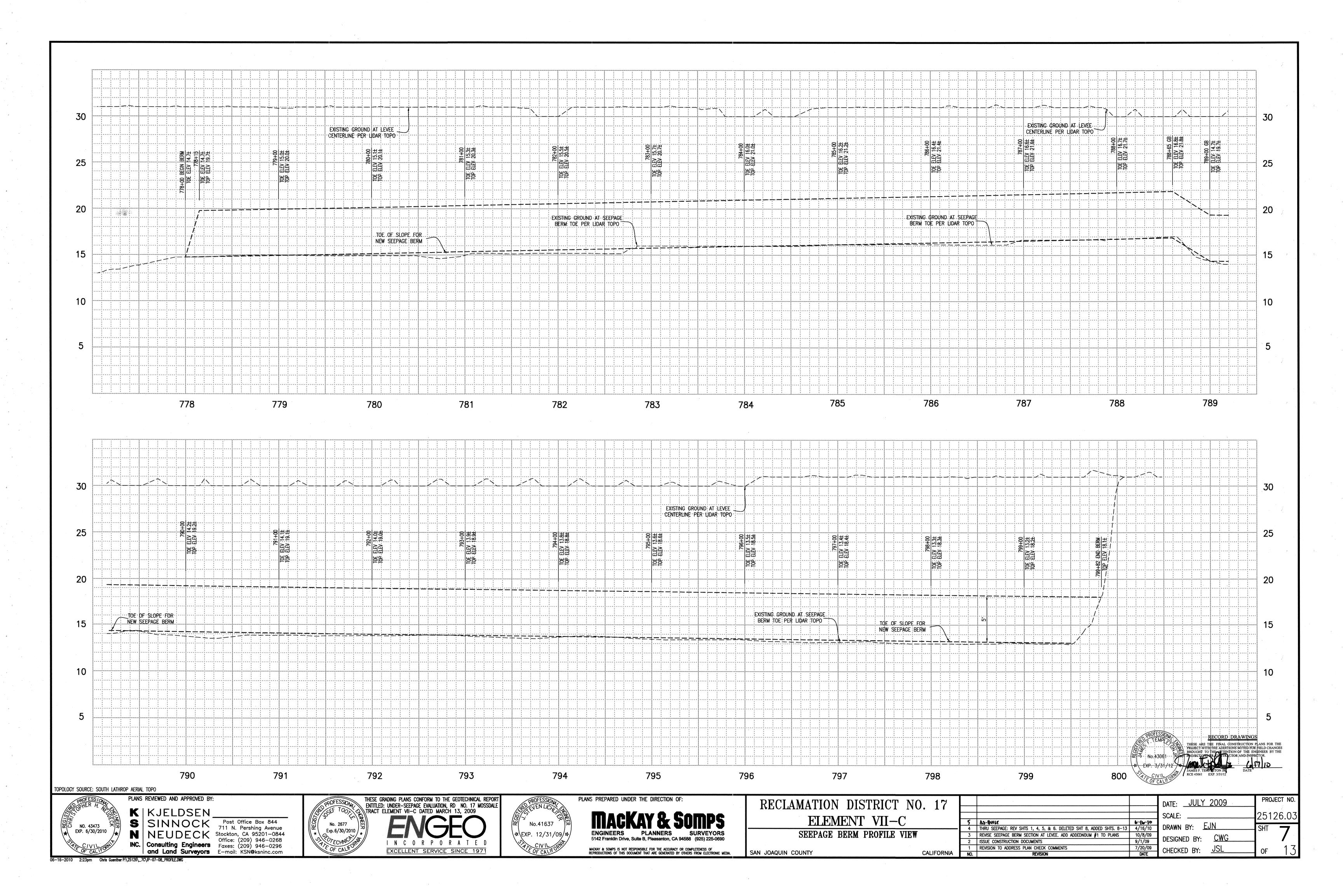
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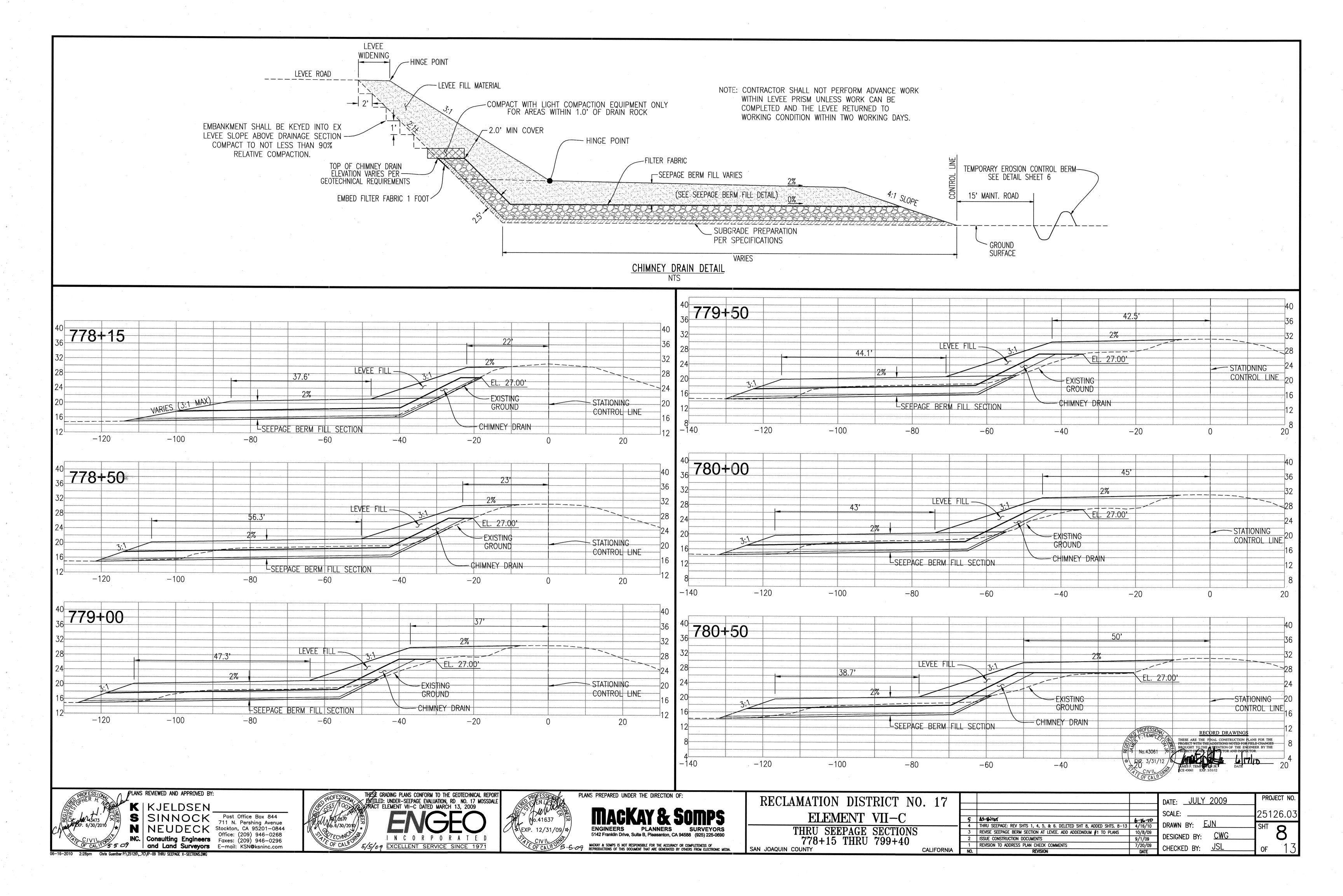
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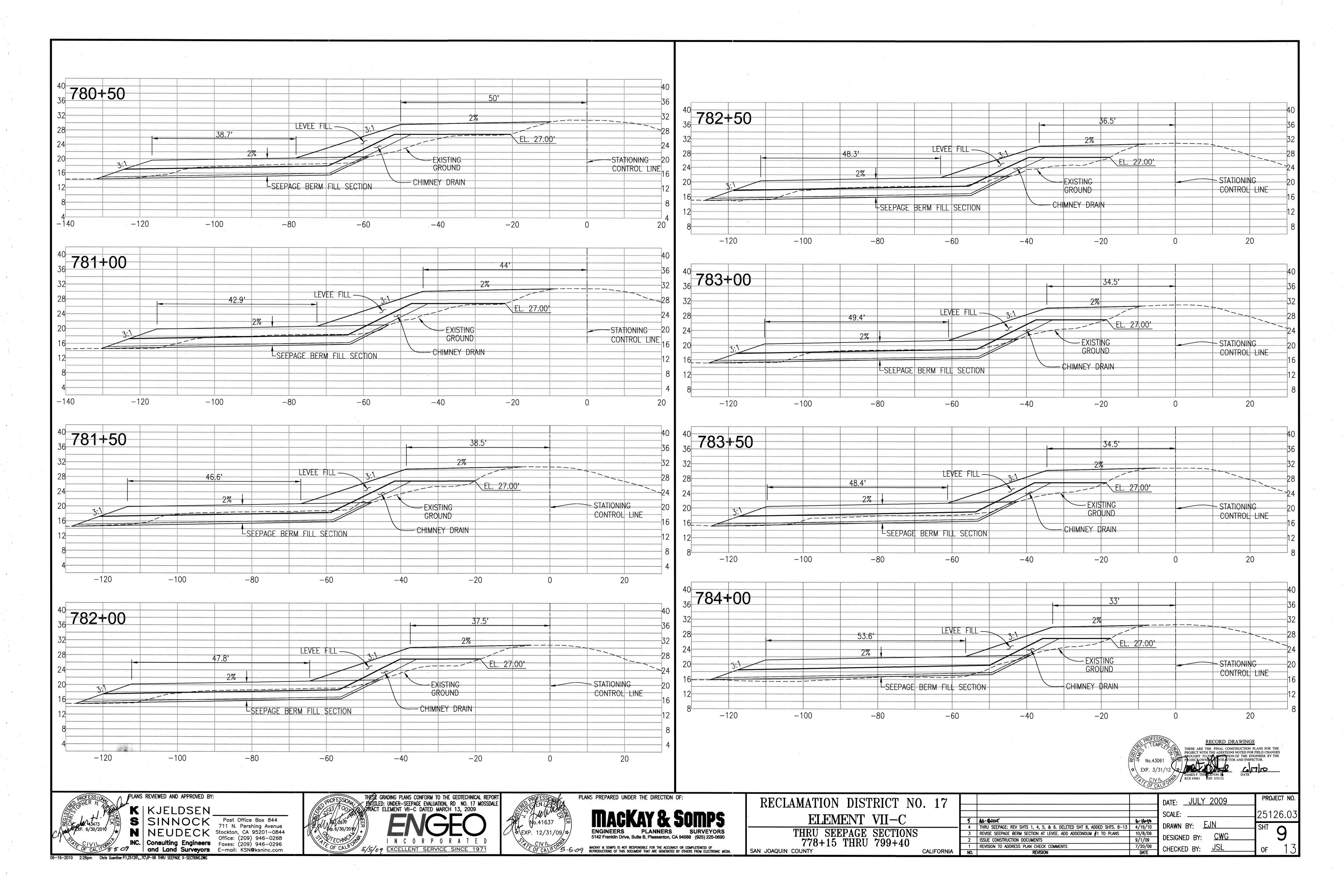
RECLAMATION DISTRICT NO.	17
ELEMENT VII-C	
SEEPAGE BERM PLAN VIEW	

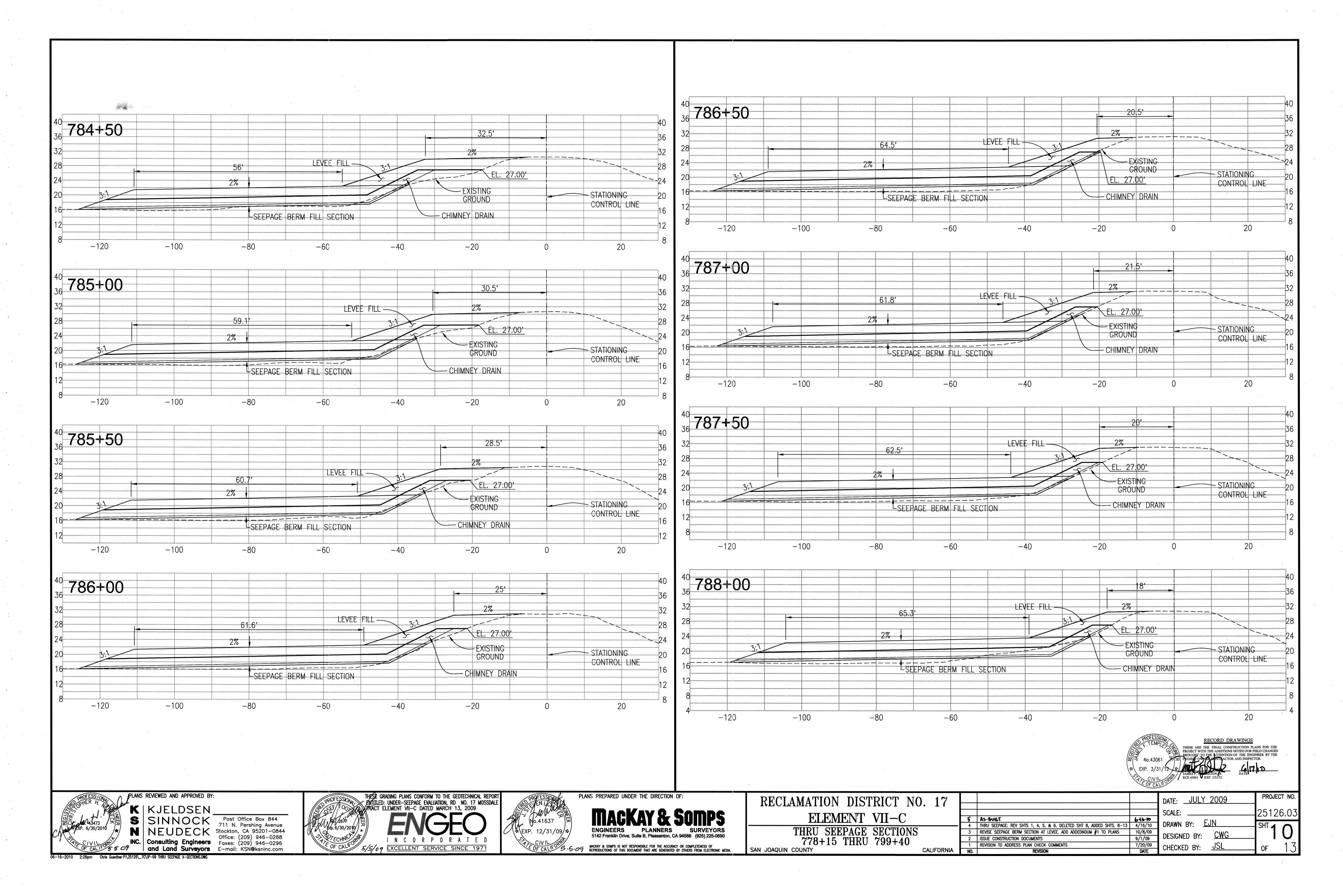
CALIFORNIA

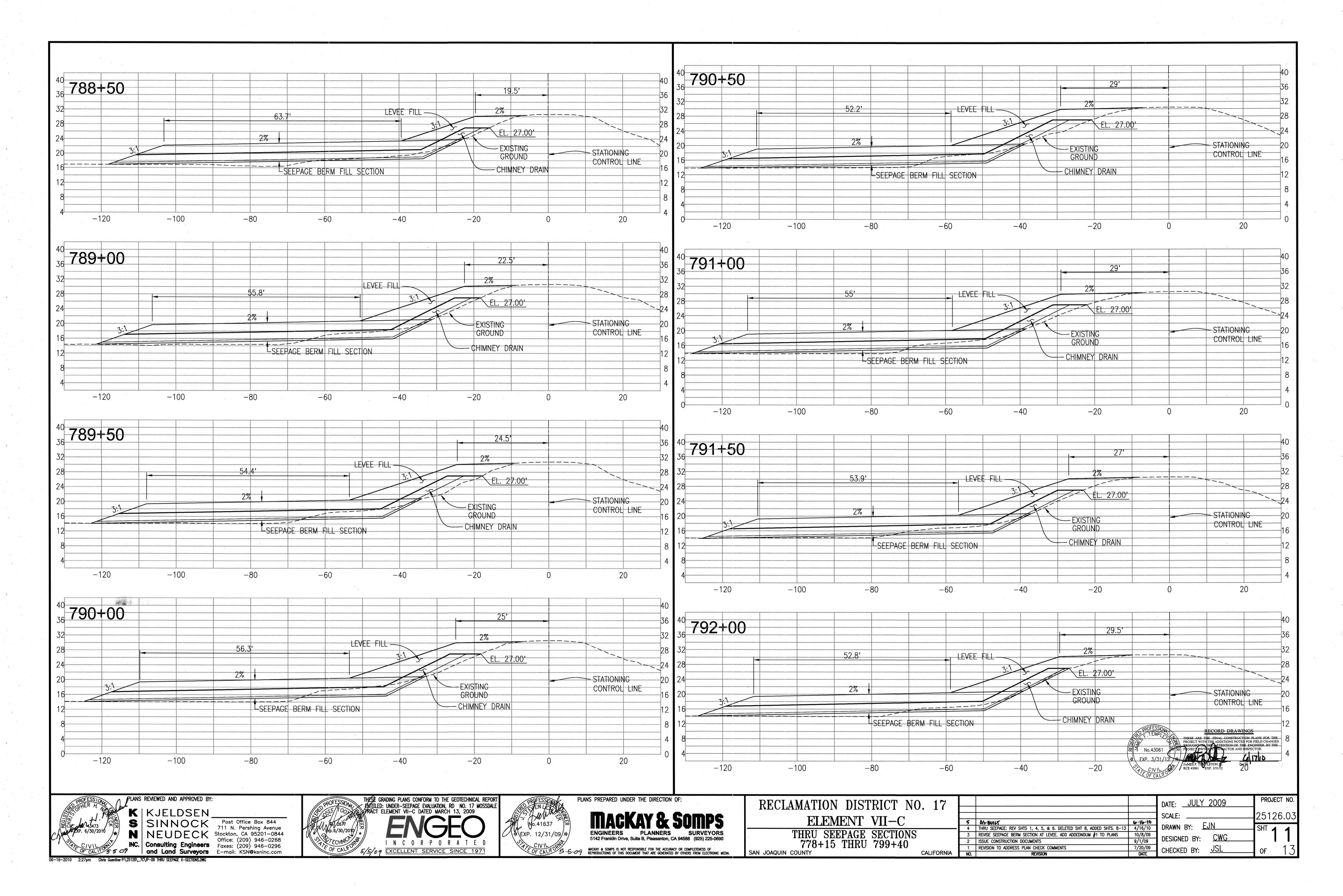
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THRU SEEPAGE: REV SHTS 1, 4, 5, & 6. DELETED SHT 8, ADDED SHTS. 8-13	4/16/10	drawn by: <u>EJN</u>	SHT
REVISE SEEPAGE BERM SECTION AT LEVEE. ADD ADDEDNOUM #1 TO PLANS	10/8/09	DESIGNED BY: CWG	ı
ISSUE CONSTRUCTION DOCUMENTS	9/1/09	DESIGNED BY: <u>CWG</u>	
REVISION TO ADDRESS PLAN CHECK COMMENTS	7/20/09	CHECKED BY: JSL	٥٦
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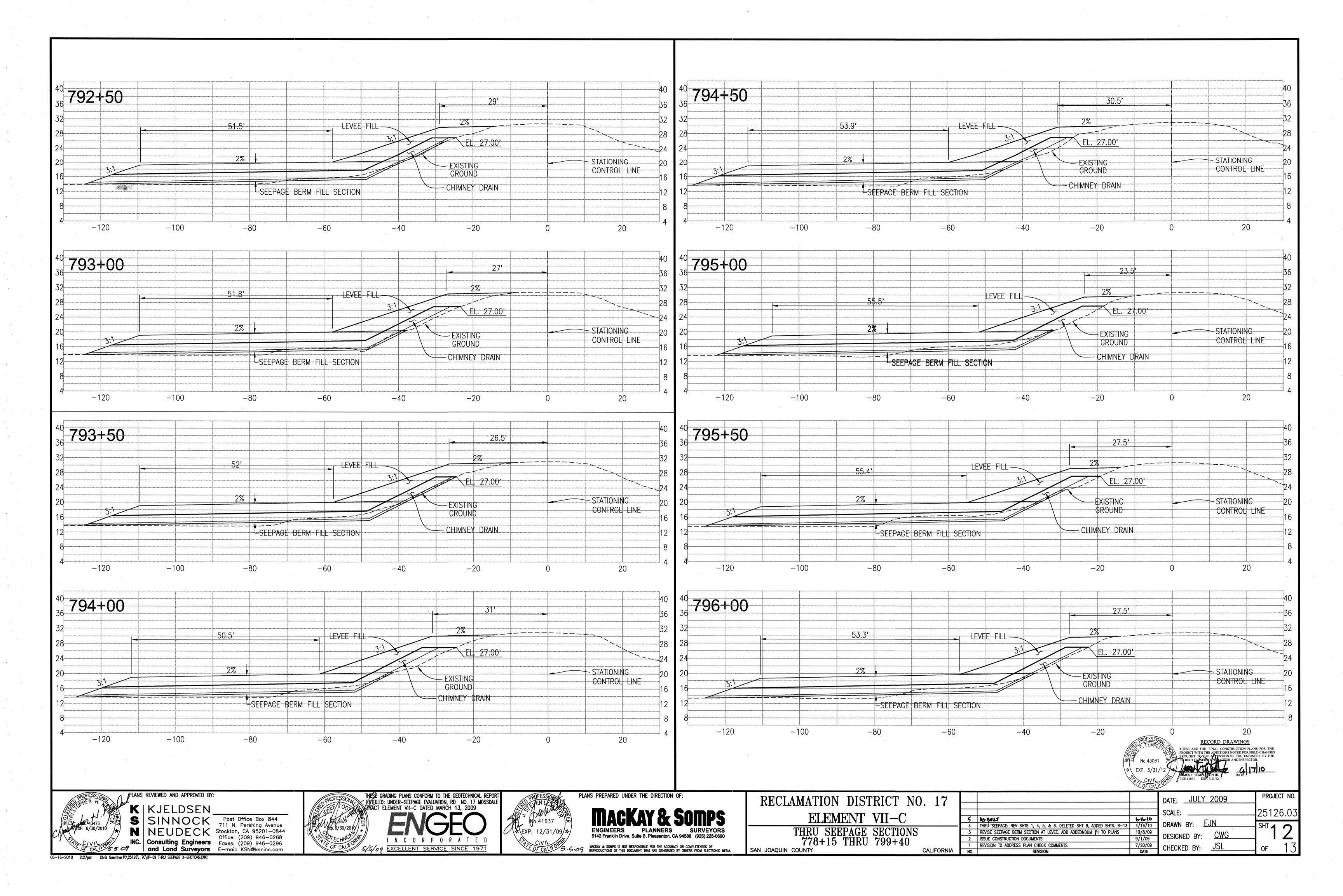


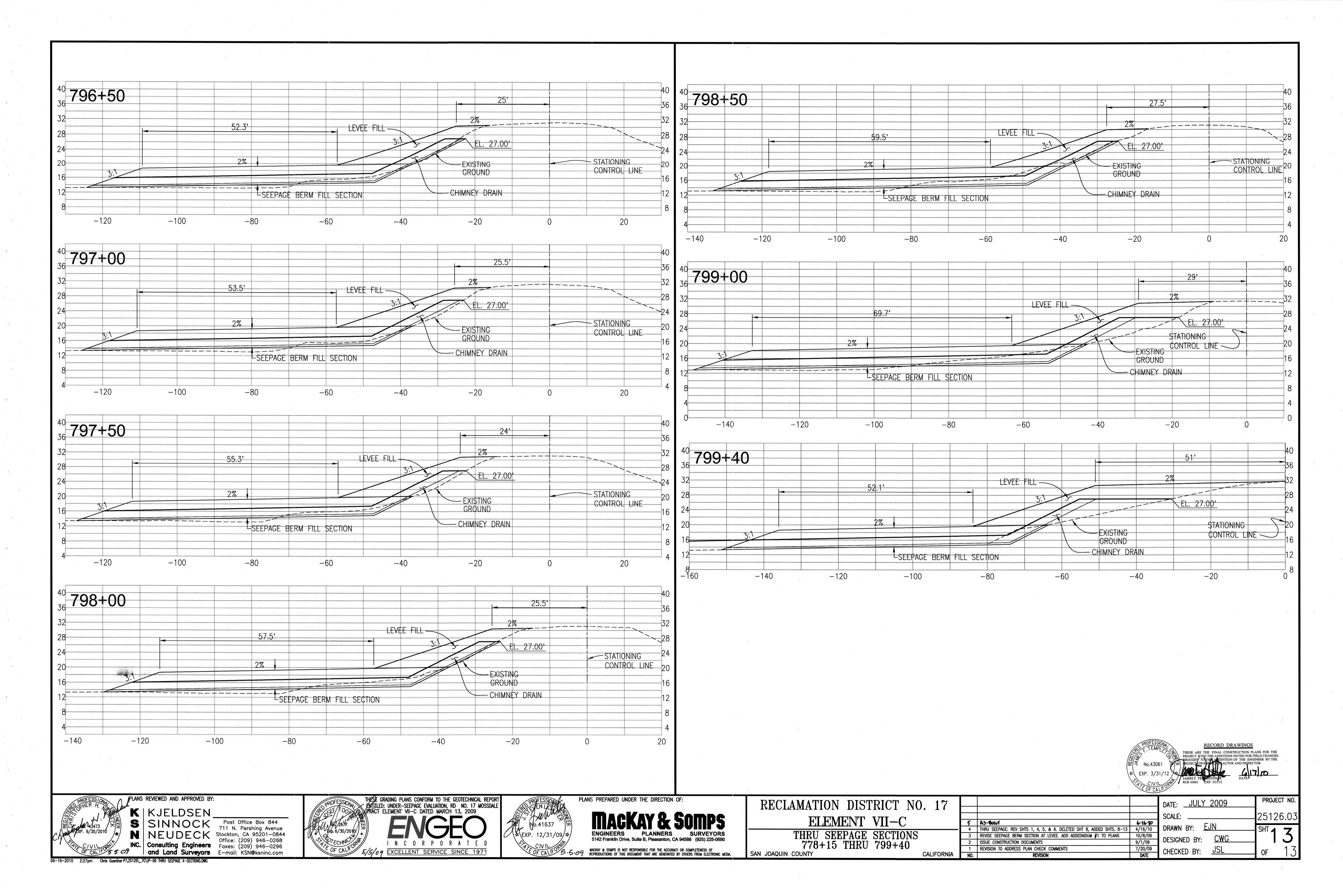








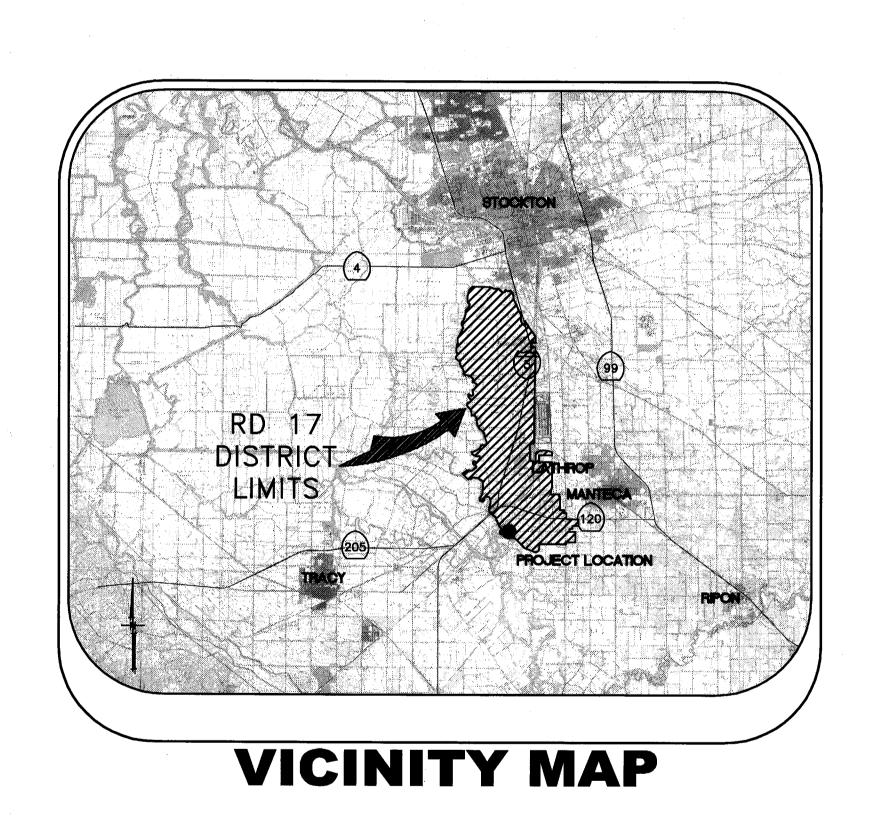


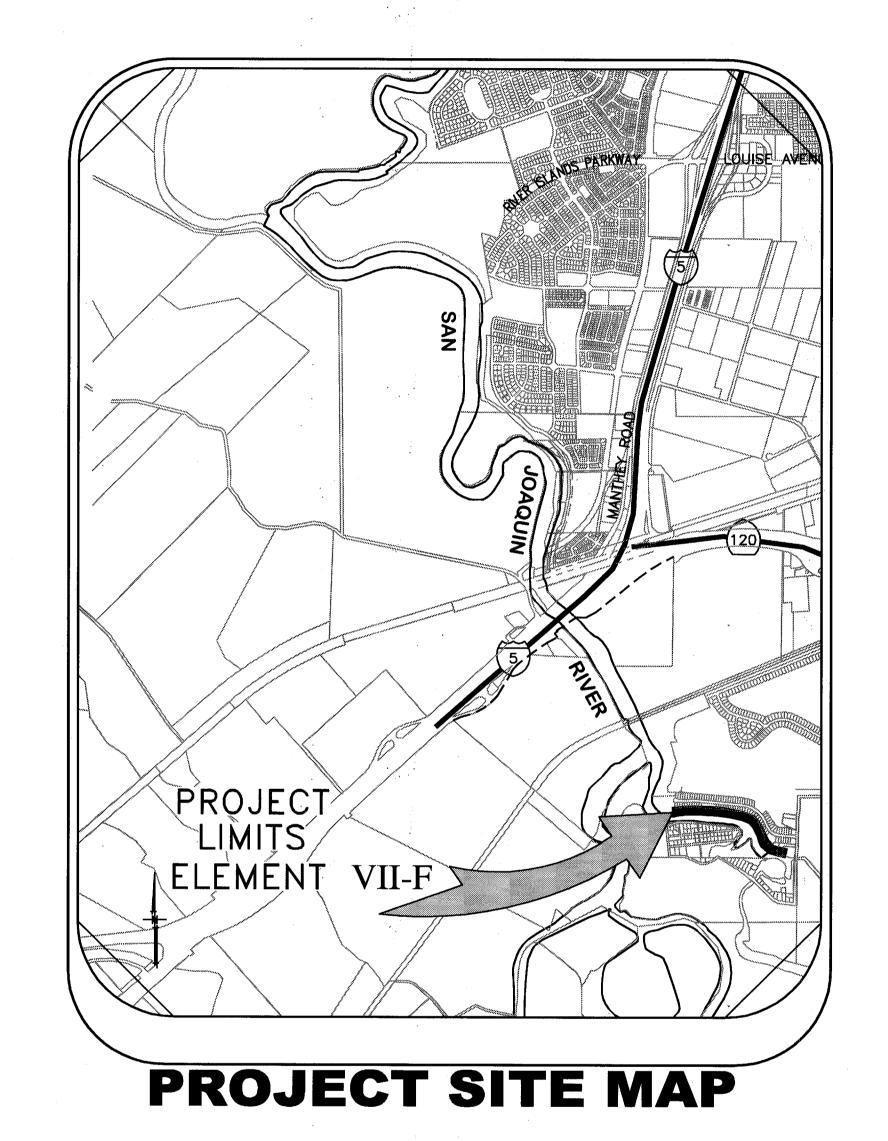


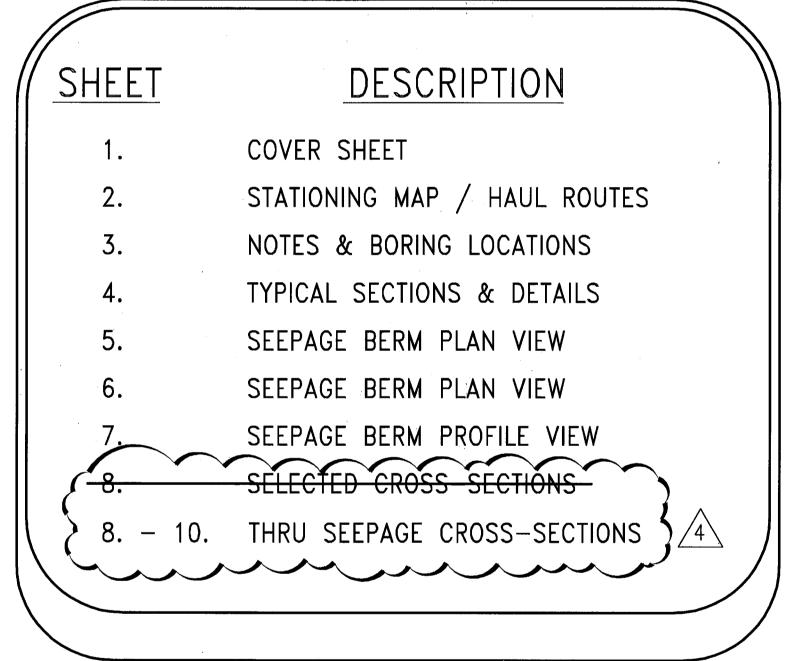
RECLAMATION DISTRICT NO. 17 LEVEL SEPAGE PROJECT

ELEMENT VII-F

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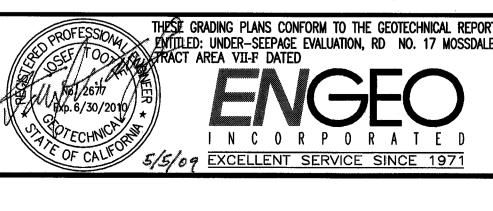


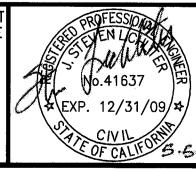




INDEX







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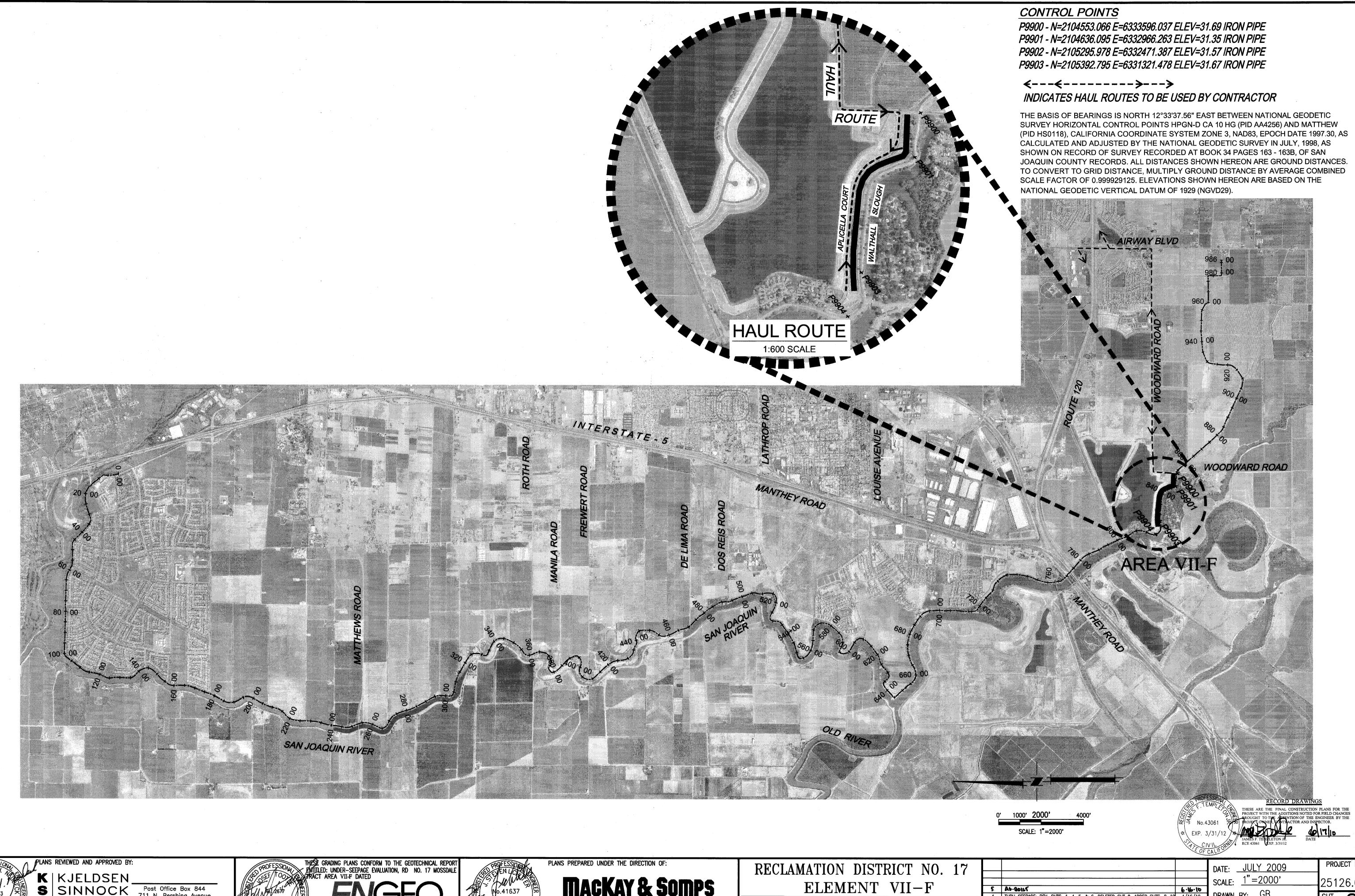
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3	REVISE BERM SECTION ADJACENT TO LEVEE	10/8/09
2	ISSUE CONSTRUCTION DOCUMENTS	9/2/09
1	REVISION TO ADDRESS PLAN CHECK COMMENTS	7/20/09
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SINNOCK
NEUDECK
Consulting Engineers and Land Surveyors

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Stockton, CA 95201-0844
Office: (209) 946-0268
Faxes: (209) 946-0296
E-mail; KSN@ksninc.com

STATIONING MAP / HAUL ROUTES SAN JOAQUIN COUNTY CALIFORNIA

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4	THRU SEEPAGE: REV. SHTS. 1, 4, 5, & 6. DELETED SHT 8. ADDED SHTS. 8-10	4/16/10	drawn by: <u>GB</u>	
3	REVISE BERM SECTION ADJACENT TO LEVEE	10/8/09	DESIGNED BY: CW	
2	ISSUE CONSTRUCTION DOCUMENTS	9/2/09	DESIGNED BY: <u>CW</u>	
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- THE "DISTRICT" AS REFERRED TO IN THESE NOTES MEANS RECLAMATION DISTRICT 17.
- THE "ENGINEER" AS REFERRED TO IN THESE NOTES MEANS THE DISTRICT ENGINEER: KJELDSEN SINNOCK AND NEUDECK. THE ENGINEER SHALL PROVIDE INSPECTION OF THE PROJECT AND OVERALL CONSTRUCTION MANAGEMENT INCLUDING COORDINATION WITH PUBLIC UTILITIES, PUBLIC AGENCIES, THE <u>DUST AND MUD CONTROL:</u> DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER.
- THE "DESIGN ENGINEER" MEANS MACKAY AND SOMPS, CIVIL ENGINEERS INC. THE DESIGN ENGINEER WILL PERFORM DISTRICT PROVIDED CONSTRUCTION STAKING AND "AS-GRADED" SURVEYS.
- THE "GEOTECHNICAL ENGINEER" MEANS ENGEO INC. THE GEOTECHNICAL ENGINEER WILL PROVIDE MATERIALS TESTING, COMPACTION TESTING AND OTHER GEOTECHNICAL RELATED TESTING.

CONTRACTOR SHALL BE RESPONSIBLE FOR SUPERVISION OF ALL CONTRACTOR'S EMPLOYEES, SUBCONTRACTORS, INCLUDING SCHEDULING AND ALL SAFETY MATTERS.

GENERAL NOTES:

- 1. PRIOR TO THE COMMENCEMENT OF WORK, A JOINT INSPECTION BETWEEN THE ENGINEER OR HIS REPRESENTATIVE, AND THE CONTRACTOR OR HIS REPRESENTATIVE, WILL BE CONDUCTED TO REVIEW THE PRE-CONSTRUCTION CONDITIONS (E.G. ROADS, PUMPS DISCHARGE PIPES, SIPHONS, RAMPS, GATES, SIGNS, ETC.) IF SUCH EXISTING FACILITIES ARE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR, AT HIS EXPENSE, SHALL REPLACE OR RESTORE THEM TO THE CONDITION THAT EXISTED PRIOR TO THE COMMENCEMENT OF WORK.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT (209) 946-0268, A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 3. THE DISTRICT RESERVES THE RIGHT TO SUSPEND CONSTRUCTION AT ANY TIME IN THE EVENT OF EXTREME HIGH OR LOW TIDES, FLOOD EVENTS, OTHER CONDITIONS OR EMERGENCIES THAT MAY JEOPARDIZE THE INTEGRITY OF THE DISTRICT'S LEVEE AND ROAD SYSTEM.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, AS REQUIRED FOR TRAFFIC CONTROL AND PUBLIC SAFETY DURING PROJECT
- 5. THE DISTRICT WILL FURNISH ALL RIGHT-OF-WAY FOR ALL LEVEE ROADS AND DESIGNATED ACCESS HAUL ROUTES. THE CONTRACTOR WILL SECURE RIGHT-OF-WAY FOR ALL OTHER AREAS NOT UNDER THE DISTRICT'S JURISDICTION.
- 6. IF DELIVERING MATERIAL OR EQUIPMENT BY TRUCK, ALL TRUCK TRAFFIC SHALL BE LIMITED TO THE DISTRICT LEVEE ROADS AND/OR PUBLIC ROADS AS SHOWN ON HAUL ROUTE PLAN, UNLESS OTHERWISE APPROVED.
- 7. MAXIMUM SPEED LIMIT ON DISTRICT LEVEE ROADS IS 30 MPH, OR AS POSTED. CONTRACTOR SHALL POST LARGE SLOW/CAUTION SIGNS AND SPEED LIMIT SIGNS FOR PURPOSES OF NOTIFYING BOTH CONTRACTOR'S EMPLOYEES AND THE PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFETY AT ALL TIMES ALONG ALL HAUL ROUTES AND IN ALL PROJECT AREAS (PUBLIC AND PRIVATE).
- 8. THE DISTRICT WILL PROVIDE CONSTRUCTION SURVEY STAKES AS DESCRIBED IN CONSTRUCTION SURVEYING SECTION. PLEASE CONTACT KJELDSEN SINNOCK AND NEUDECK WITH STAKING REQUESTS (209-946-0268) WITH AT LEAST TWO WORKING DAYS ADVANCE NOTICE.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CONSTRUCTION STAKING AND SURVEYING BEYOND THAT PROVIDED BY THE DISTRICT AS DESCRIBED THE CONSTRUCTION SURVEYING SECTION ON THIS SHEET.
- 10. THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES. THE 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 THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER AND THE GEOTECHNICAL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THE DESIGN ENGINEER OR THE GEOTECHNICAL ENGINEER.
- 11. ANY DEFICIENCIES NOTED DURING INTERIM AND FINAL INSPECTIONS BY THE ENGINEER AND/OR DISTRICT SHALL BE CORRECTED BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE BY THE DISTRICT. ANY ADDITIONAL COSTS AND EXPENSES FOR MOBILIZATION AND/OR DEMOBILIZATION, LABOR, EQUIPMENT AND OTHER ASSOCIATED COSTS REQUIRED TO CORRECT THE DEFICIENCIES NOTED, EXCEPT SPECIFIED MATERIAL(S), SHALL BE BORNE BY THE CONTRACTOR.
- 12. THE CONTRACTOR SHALL NOT CLOSE ANY ROAD, STREET, OR HIGHWAY TO THE PUBLIC EXCEPT WITH THE PERMISSION OF THE ENGINEER AND THE PROPER GOVERNMENTAL AUTHORITY. TEMPORARY PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO ENSURE CONTINUOUS ACCESS TO PUBLIC AND PRIVATE DRIVEWAYS, AND PROPER FUNCTIONING OF CULVERTS, DRAINAGE AND IRRIGATION DITCHES, AND NATURAL WATER COURSES.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER, AND HE SHALL NOTIFY THE ENGINEER WHENEVER THERE IS A CHANGE IN SITE CONDITIONS OR AN ADJUSTMENT TO BE MADE IN WORK REQUIREMENTS.
- 14. SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE ENGINEER AT (209) 946-0268 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
- 15. THE INTENT OF THESE PLANS IS TO SERVE AS A GUIDE AND TO PROVIDE THE CONTRACTOR WITH INFORMATION AND DETAILS NECESSARY TO CONSTRUCT THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. IF THE PLANS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
- 16. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS.
- 17. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE SECURITY OF HIS PLANT AND EQUIPMENT. THE DISTRICT WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED EQUIPMENT, TOOLS, OR PERSONAL BELONGINGS.

ENVIRONMENTAL NOTES:

- 1. THE CONTRACTOR SHALL NOT DISCHARGE SMOKE, DUST, OR ANY OTHER AIR CONTAMINANTS INTO THE ATMOSPHERE IN SUCH QUANTITY AS WILL VIOLATE THE REGULATIONS OF ANY LEGALLY CONSTITUTED AUTHORITY. HE SHALL ALSO ABATE DUST NUISANCE BY CLEANING. SWEEPING AND SPRINKLING WITH WATER, OR OTHER MEANS AS NECESSARY. THE USE OF WATER IN AN AMOUNT WHICH RESULTS IN MUD ON PUBLIC ROADS IS NOT ACCEPTABLE AS A SUBSTITUTE FOR SWEEPING OR OTHER METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT PUBLIC ROADS CLEAN & CLEAR FROM CONSTRUCTION IMPACTS OR DEBRIS.
- THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT STREAMS. WATERWAYS AND OTHER BODIES OF WATER FROM POLLUTION WITH FUELS, OIL, BITUMEN'S, CALCIUM CHLORIDE, AND OTHER HAZARDOUS MATERIALS AND SHALL CONDUCT AND SCHEDULE HIS OPERATIONS SO AS TO AVOID OR MINIMIZE MUDDYING AND SILTING OF SAID WATERS. CARE SHALL BE EXERCISED TO PRESERVE ROADSIDE VEGETATION BEYOND THE LIMITS OF CONSTRUCTION.

ENVIRONMENTAL NOTES (cont'd):

3. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL KEEP THE WORK SITE CONDITIONS CLEAN AND FREE FROM RUBBISH AND DEBRIS.

- 1. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP ALL CONSTRUCTION AREAS, FILL AREAS, HAUL ROUTES, OTHER ROADWAYS, AND OTHER USE AREAS WHERE DUST IS GENERATED WELL WATERED: AND DURING WET CONDITIONS, AREAS USED BY LOCAL TRAFFIC, FREE AND CLEAR FROM MUD. CONTRACTOR SHALL PROVIDE EFFORTS NECESSARY TO MINIMIZE DUST AND OTHER DISTURBANCES NEAR EXISTING RESIDENCES AND ALL BUILDINGS NEAR HAUL ROUTES
- a. CROP DAMAGE: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL TO PREVENT CROP DAMAGE AND FOR ANY AREAS IN ADDITION TO THOSE MENTIONED THAT GENERATE DUST AND/OR OTHER CONDITIONS, WHICH MIGHT DAMAGE CROPS.
- b. NON WORK DAYS: THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL THROUGHOUT THE DURATION OF THE PROJECT INCLUDING NON WORKDAYS IN ALL PROJECT AREAS, INCLUDING CONSTRUCTION ROADS AND CROP AREAS WHICH ARE USED BY THE CONTRACTOR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2. THE CONTRACTOR SHALL DEDICATE AT LEAST ONE (1) WATER TRUCK (OR MORE AS NEEDED OR DIRECTED BY THE ENGINEER) TO MAINTAIN ADEQUATE DUST CONTROL FOR THE FOLLOWING AREAS:
- a. PROJECT AREAS
- HAUL ROUTES LEVEE TOE BERM FILL AREAS
- d. OTHER CONSTRUCTION USE AREAS
- CROP DAMAGE PREVENTION RESIDENTIAL BUILDING AREAS

- 1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND, SURFACE, OVERHEAD, AND SUBMARINE IMPROVEMENTS, OR FACILITIES WHICH MAY BE SUBJECT TO DAMAGE BY REASON OF HIS OPERATIONS.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION, AND SHALL NOTIFY UTILITIES FORTY—EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION. (UNDERGROUND SERVICE ALERT. (800) 642-2444).
- 4. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES AND IRRIGATION AND DRAINAGE FACILITIES INCLUDING, BUT NOT LIMITED TO, SIPHONS, DITCHES, CROSSINGS, DISTRIBUTION BOXES, SLIDE GATES, ETC., DURING THE TERM OF THE CONTRACT. THE EXISTING IRRIGATION AND DRAINAGE FACILITIES MUST REMAIN FULLY OPERATIONAL DURING THE PERIOD OF CONSTRUCTION.
- 1. THE CONTRACTOR SHALL TAKE NOTE OF THE POWER LINES WITHIN THE CONSTRUCTION ZONE. EXTREME CAUTION SHALL BE EXERCISED WHILE WORKING AROUND THE LIVE LINES.
- 2. IF POWER POLES, LINES AND GUY WIRES ARE WITHIN THE IMMEDIATE WORK AREA, CONTRACTOR SHALL ADHERE TO ALL SAFETY STANDARDS AND REQUIREMENTS OF THE UTILITY COMPANY.
- 3. FILL AROUND POLES SHALL BE PLACED AND COMPACTED IN A MANNER SO AS TO AVOID ANY ADVERSE IMPACTS TO THE INTEGRITY OF THE EXISTING POLES AND POWER SYSTEM &

CONSISTENT WITH THE RECOMMENDATIONS OF THE SOILS REPORT.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AS DESCRIBED IN SPECIAL PROVISIONS, SECTION 1.12, "TRAFFIC CONTROL" AND DIVISION 2, SECTION 0242B "TRAFFIC CONTROL OF THE PROJECT SPECIFICATIONS (AS PREPARED BY THE ENGINEER)

- 1. THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL KEEP THE PREMISES OCCUPIED BY HIM IN A CLEAN AND ORDERLY CONDITION, DISPOSING OF REFUSE IN A MANNER SATISFACTORY TO THE ENGINEER.
- 2. THE CONTRACTOR, UPON COMPLETION OF ALL WORK, SHALL RESTORE ALL HAUL ROUTES AND PROJECT SITES IN A MANNER SATISFACTORY TO THE ENGINEER AND THE DISTRICT.

CONSTRUCTION NOTES: HAUL ROUTES:

- 1. THE CONTRACTOR SHALL IMPROVE, MAINTAIN, AND REPAIR UPON COMPLETION, THE ACCESS ROADS AND HAUL ROUTES AS REQUIRED FOR TRANSPORTATION AND HAULING MATERIAL TO THE REPAIR AREAS.
- 2. THE CONTRACTOR SHALL REVIEW THE HAUL ROUTES AND DETERMINE THE LOCATION FOR TURNOUTS, RAMPS, ROAD DRAINAGE, ALIGNMENT, ETC. UPON COMPLETION OF THE PROJECT, SOME PORTIONS OF THE HAUL ROUTES WHICH REMAIN SHALL BE LEFT IN GOOD CONDITION FOR THE DISTRICT, FARMERS, AND OTHER LOCAL TRAFFIC.
- 3. THE HAUL ROUTES FOR THIS PROJECT MAY REQUIRE THE CONTRACTOR TO MODIFY AND REWORK THE GRADING OF THE EXISTING ROADS TO MEET THE CONTRACTOR'S HAULING AND ROAD DRAINAGE REQUIREMENTS.
- 4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING ANY NECESSARY IMPROVEMENTS, MODIFICATIONS, AND ALTERATIONS TO MEET HIS REQUIREMENTS AND FOR THE MAINTENANCE OF ALL ACCESS ROADS AND HAUL ROUTES.
- 5. THE CONTRACTOR'S EQUIPMENT SHALL BE RESTRICTED TO OPERATE ONLY ON THOSE HAUL ROUTES AND WITHIN THOSE SPECIFIED WORK AREAS INDICATED ON THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER, DISTRICT, AND LANDOWNERS.
- 6. THE CONTRACTOR SHALL EXTEND, STRENGTHEN, REPLACE, OR OTHERWISE MODIFY THE EXISTING CROSSINGS (E.G. CULVERTS, SIPHONS, DRAIN PIPES, IRRIGATION PIPES, PUMP DISCHARGE PIPES, WET SPOTS, ETC.) AS NECESSARY TO ACCOMMODATE HIS EQUIPMENT. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NECESSARY TO PRESERVE, PROTECT, AND MAINTAIN THE CROSSINGS SO AS TO ENSURE CONTINUOUS AND UNINTERRUPTED CONSTRUCTION OPERATIONS DURING THE ENTIRE TERM OF THIS CONTRACT.
- 7. THE HAUL ROUTES MAY REQUIRE TEMPORARY IRRIGATION OR DISCHARGE PIPE EXTENSIONS AND RAMPING DURING CONSTRUCTION OPERATIONS. TEMPORARY EXTENSIONS AND RAMPING WILL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT HIS EXPENSE, INCLUDING REMOVAL IF REQUIRED, IN A MANNER WHICH MEETS WITH THE APPROVAL OF THE ENGINEER AND THE LANDOWNERS.
- 8. NEITHER THE DISTRICT NOR THE ENGINEER MAKES ANY WARRANTY OR GUARANTEE AS TO THE ADEQUACY OF THE EXISTING MATERIALS TO SUPPORT THE CONSTRUCTION TRAFFIC ON THE HAUL ROUTES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MAKING THE NECESSARY IMPROVEMENTS AND PROVIDING THE NECESSARY MEASURES REQUIRED TO ACCOMMODATE HIS ANTICIPATED NEEDS. REPAIRS TO HAUL ROUTES DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR MUST MAINTAIN ACCESS BY THE DISTRICT AND/OR PUBLIC (AS APPLICABLE) ON THE HAUL ROUTES USED AT ALL TIMES DURING CONSTRUCTION.

CLEARING & GRUBBING:

1. UNLESS OTHERWISE INDICATED, THE WORK AREAS SHALL BE CLEARED AND GRUBBED BY THE CONTRACTOR. CONTRACTOR SHALL USE CAUTION WHILE CLEARING AND GRUBBING AROUND POWER LINES & BURIED ELECTRICAL CABLES. ALL MATERIAL, CLEARED AND REMOVED SHALL BECOME THE PROPERTY AND RESPONSIBILITY OF THE CONTRACTOR FOR REMOVAL AND DISPOSAL OFFSITE. SOME PRUNING/TRIMMING/THINNING OF BRANCHES OR TREES MAY BE REQUIRED.

LEVEE SEEPAGE BERM SECTION:

- 1. THE CONTRACTOR SHALL FURNISH, DELIVER, AND PLACE THE SPECIFIED MATERIALS (PER THE ENGINEERS SPECIFICATIONS) AND UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER TO THE DESIGNATED SEEPAGE BERM SITES.
- 2. THE SEEPAGE BERM SHALL BE CONSTRUCTED WITH ACCEPTABLE MATERIALS SUFFICIENT TO MEET DESIGN GRADES AND SPECIFICATIONS.
- 3. ALL SUBGRADE AREAS RECEIVING THE FILTER DRAIN MATERIAL SHALL BE PREPARED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR MAY BE REQUIRED TO PERFORM ADDITIONAL SUBGRADE PREPARATION WORK WITHIN THE SEEPAGE BERM AREAS PRIOR TO THE ACCEPTANCE OF THE MATERIAL.
- 4. THE CONTRACTOR SHALL DELIVER THE FILTER DRAIN MATERIAL, DRAIN ROCK, AND SEEPAGE BERM FILL TO THE REQUIRED SECTIONS AS UNIFORM MIXTURES. THE MIXTURE SHALL BE DEPOSITED AND SPREAD TO THE REQUIRED COMPACTED THICKNESS. SEGREGATION OF MATERIAL SHALL BE AVOIDED AND EACH LAYER OF MATERIAL, AS SPREAD, SHALL BE FREE FROM POCKETS OF COARSE OR FINE MATERIAL.
- A. THE FILTER DRAIN MATERIAL AND SEEPAGE BERM FILL SHALL BE PLACED IN LOOSE HORIZONTAL LAYERS NOT MORE THAN EIGHT INCHES (8") IN THICKNESS PRIOR TO COMPACTION. THE MATERIAL SHALL BE GENTLY SPREAD OUT. UNDER NO CIRCUMSTANCES SHALL ANY MATERIAL BE DROPPED FROM ANY HEIGHT ONTO THE FILL SECTION.
- B. IF SEGREGATION OCCURS, MATERIAL SHALL BE WORKED UNTIL IT IS UNIFORMLY AND SATISFACTORILY BLENDED. AFTER SPREADING, THE MATERIAL SHALL BE WATERED AND SHAPED TO THE REQUIRED SECTION AND THEN COMPACTED AS SPECIFIED.
- C. AT THE TIME MATERIALS ARE SPREAD, IT SHALL HAVE A MOISTURE CONTENT IN CONFORMANCE WITH THE PROJECT SPECIFICATIONS. SUCH MOISTURE SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT THE MATERIAL.
- 5. THE CONTRACTOR SHALL GRADE THE BASE OF THE SEEPAGE BERM TO MAINTAIN THE DESIGNATED GRADE AND CROSS-SECTIONS AS SHOWN ON THE PLANS. CONTRACTOR SHALL CUT AND FILL AS NECESSARY AND STOCKPILE ANY ADDITIONAL FILL FOR USE AS SEEPAGE BERM FILL.

1. THE SURFACE OF THE TOP LAYER SHALL BE FINISHED TO THE DESIGNATED GRADE AND CROSS SECTION. THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE, DRESSED AND GRADED TO DRAIN AND PREVENT WATER PONDING.

COMPACTION EQUIPMENT:

1. COMPACTION SHALL BE PERFORMED WITH A NON-VIBRATORY TYPE ROLLER COMPACTOR. VIBRATORY EQUIPMENT WILL NOT BE PERMITTED ON LEVEE TOE BERM FILLS.

THE DISTRICT WILL RETAIN ENGEO, INC. TO PERFORM SAMPLING AND TESTING AS REQUIRED AND TO CHECK FOR COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR SHALL ASSIST IN THE REMOVAL OF SURFACE MATERIALS AT LOCATIONS DESIGNATED BY THE TESTING ENGINEER AT NO COST TO THE DISTRICT. ENGEO, INC. WILL SAMPLE AND PERFORM ALL REQUIRED TESTS SUCH AS MOISTURE CONTENT; GRADATION, AND MOISTURE DENSITY RELATIONSHIPS ON THE EXCAVATED AND SEEPAGE BERM FILL MATERIALS.

GEOTEXTILE FABRIC:

- 1. GEOTEXTILE FABRIC SHALL BE MIRAFI FW700 WOVEN GEOTEXTILE OR AN APPROVED EQUAL.
- 2. THE GEOTEXTILE FABRIC SHALL BE PLACED WITHIN THE AREA DESIGNATED BETWEEN THE SEEPAGE BERM FILL AND THE DRAIN ROCK MATERIAL.
- MEASUREMENT AND PAYMENT WILL BE BY THE SQUARE FOOT NEAT (WITHOUT OVERLAP) AND BASED UPON THE FABRIC PLACED TO THE DIMENSIONS AND AT THE LOCATIONS DESIGNATED AND ACCEPTED BY THE ENGINEER.
- 4. FOR PAYMENT PURPOSES, MEASUREMENT OF THE FABRIC PLACED WILL NOT INCLUDE OVERLAPS AS REQUIRED BY THESE PLANS.

ROAD PREP, MAINTENANCE, AND SWPPP:

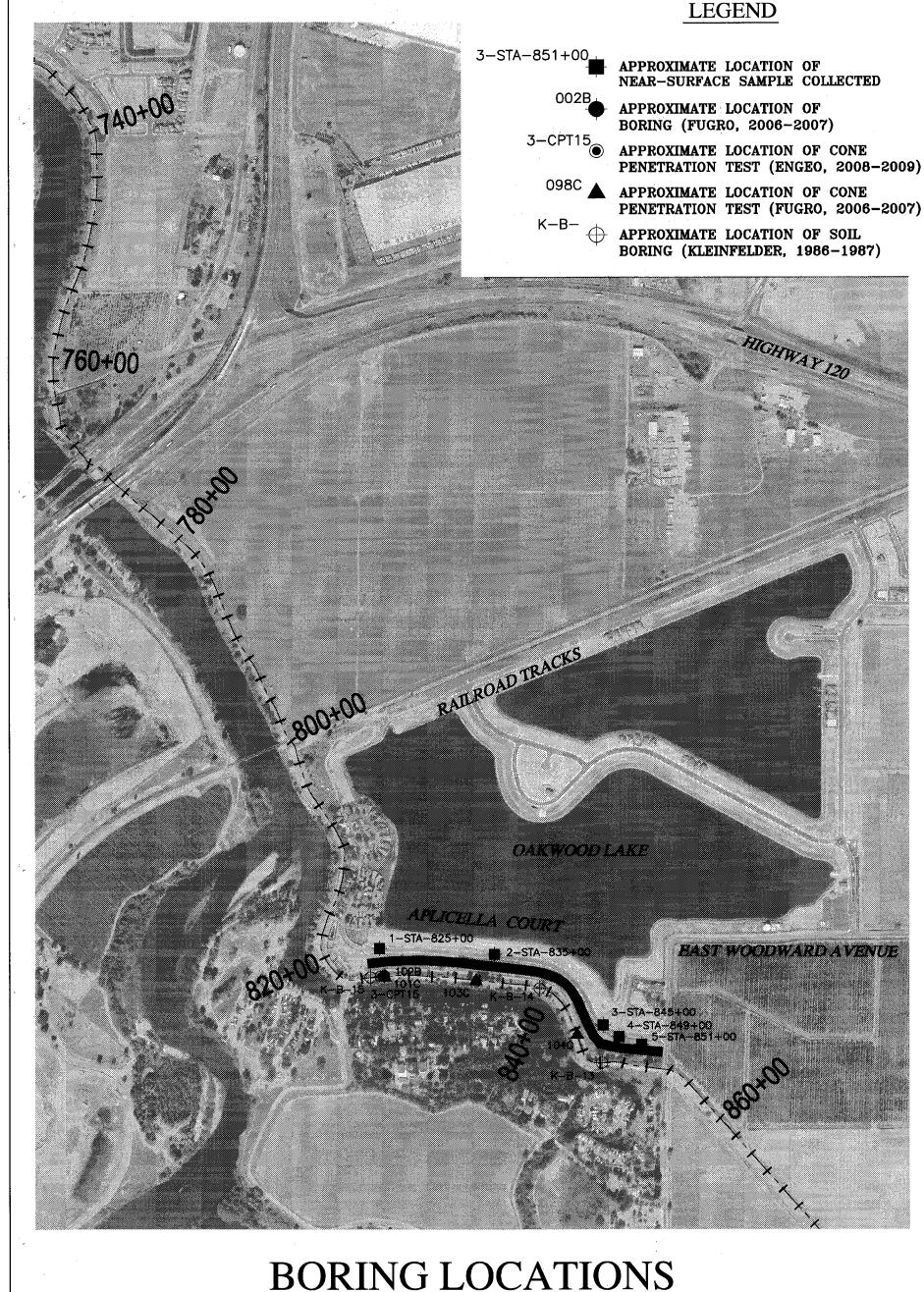
- 1. PER THE IMPROVEMENT PLANS AND SWPPP (AS PREPARED BY ENGEO), CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF REQUIRED:
- A. EROSION CONTROL FACILITIES
- B. CONSTRUCTION ENTRANCE
- C. STREET SWEEPING
- D. SITE/CONSTRUCTION MATERIALS MAINTENANCE
- E. SITE SECURITY

LEGEND

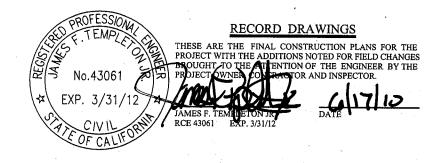
EX FC	EXISTING FACE OF CURB
EX ROW	EXISTING RIGHT OF WAY
EX_SD/EX_PERF_PIPE	EXISTING STORM DRAIN
NEW PERF PIPE	NEW TOE DRAIN
EX W	EXISTING WATER LINE
EX RW	EXISTING RECYCLED WATER LINE
	NEW SEEPAGE BERM SLOPE

CONSTRUCTION SURVEYING:

- 1. <u>Rough Grade Staking</u> set horizontal location stakes every 100 feet on tangents and every 50 feet ON CURVES AT THE DESIGN TOE OF THE SEEPAGE BERM. ALSO, SET POINTS AND CORRESPONDING MARKERS AT LOCATIONS THAT ARE OFFSET FROM THE EASTERLY TOE OF BERM EVERY 100 FEET ON TANGENTS AND EVERY 50 FEET ON CURVES. THE MARKER AT THE OFFSET POINT WILL BE LABELED WITH A VERTICAL CUT OR FILL DIMENSION FROM THE TOP OF THE POINT TO THE DESIGN ELEVATION OF THE TOE OF THE SEEPAGE BERM. WHERE GRADING FOR FUTURE TRAILS IS TO BE PROVIDED THROUGH THE FRONT SLOPE OF THE SEEPAGE BERM, THE OFFSET STAKES WILL BE MARKED ACCORDINGLY AT BEGINNING AND END OF TRAIL.
- 2. <u>NEW PERFORATED TOE DRAIN PIPES</u> SET HORIZONTAL AND VERTICAL OFFSET STAKES AT 50-F00T INTERVALS ON TANGENTS AND 25 FOOT INTERVALS ON CURVES. ALSO PROVIDE OFFSET STAKES FOR ALL MANHOLES AND
- 3. <u>VERIFICATIONS DURING AND AFTER CONSTRUCTION</u> UPON COMPLETION OF SUBSTANTIAL PORTIONS OF WORK AND WHEN REQUESTED BY CONTRACTOR, OBTAIN "AS-GRADED" ELEVATIONS (TYPICALLY AT 500' INTERVALS) TO VERIFY THE DEPTH OF PLACED MATERIAL RELATIVE TO THE ELEVATION AT THE TOE OF THE SEEPAGE BERM. THIS CHECK WILL BE PERFORMED TWICE (ONCE AFTER PLACEMENT OF DRAIN ROCK AND ONCE AFTER PLACEMENT OF BERM FILL MATERIAL). CUT/FILL SHEETS SHOWING DEPTHS OF THE PLACED MATERIAL WILL BE PROVIDED FOR EACH SURVEYED VERIFICATION.



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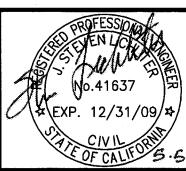
10/8/09

DATE

PLANS REVIEWED AND APPROVED BY:

Post Office Box 844 711 N. Pershing Avenue Stockton, CA 95201-0844 Office: (209) 946-0268 Consulting Engineers Faxes: (209) 946-0296 and Land Surveyors E-mail: KSN@ksninc.com





PLANS PREPARED UNDER THE DIRECTION OF: PLANNERS 5142 Franklin Drive, Suite B, Pleasanton, CA 94588 (925) 225-0690

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RECLAMATION DISTRICT NO. 17 ELEMENT VII-F

SAN JOAQUIN COUNTY

NOTES & BORING LOCATIONS

CALIFORNIA

4 THRU SEEPAGE: REV. SHTS. 1, 4, 5, & 6. DELETED SHT 8, ADDED SHTS. 8-10 4/16/10 3 REVISE BERM SECTION ADJACENT TO LEVEE ISSUE CONSTRUCTION DOCUMENTS REVISION TO ADDRESS PLAN CHECK COMMENTS REVISION

PROJECT NO. DATE: JULY 2009 25126.03 DRAWN BY: GB DESIGNED BY: CWG CHECKED BY:

