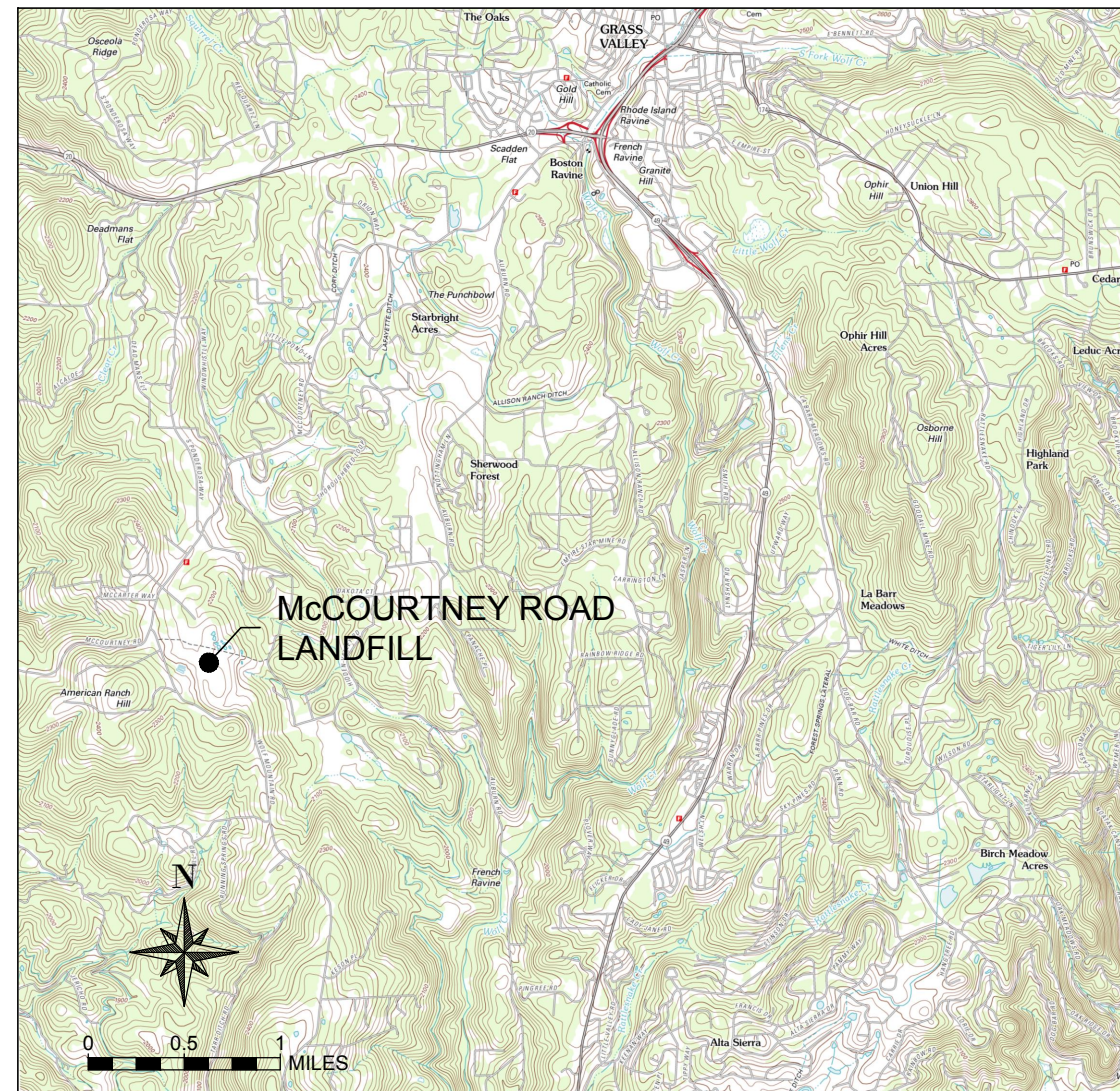
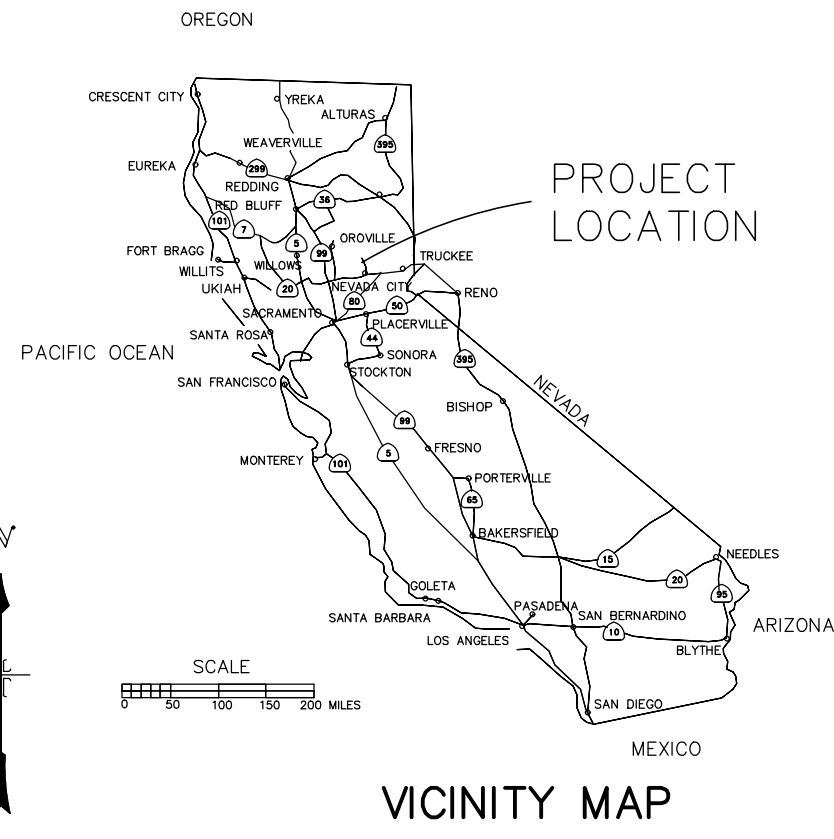


# MCCOURTNEY ROAD LANDFILL

## WEST DITCH DRAINAGE IMPROVEMENTS

### JULY 2019



INDEX TO DRAWINGS	
DRAWING	DRAWING TITLE
	COVERSHEET & LOCATION
1.0	SITE PLAN
2.0	V-DITCH PLAN AND PROFILE
3.0	CROSS SECTIONS
4.0	CROSS SECTIONS

OWNER: COUNTY OF NEVADA  
950 MAIDU AVE.  
NEVADA CITY, CA 95959



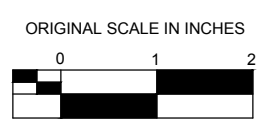
PLANS PREPARED FOR: HOLDREGE AND KULL/NV5  
792 SEARLS AVE.  
NEVADA CITY, CA 95959



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NO.	DATE	REVISIONS	BY	CHK

PROJECT NO: 013007.00	PROJECT ID:
DRAWN BY: D. ZAITZ	SCALE: AS SHOWN
ENGINEER: D. BROWN	DATE: 7/24/2019
CHECKED BY: C. COLES	DATE: 7/24/2019



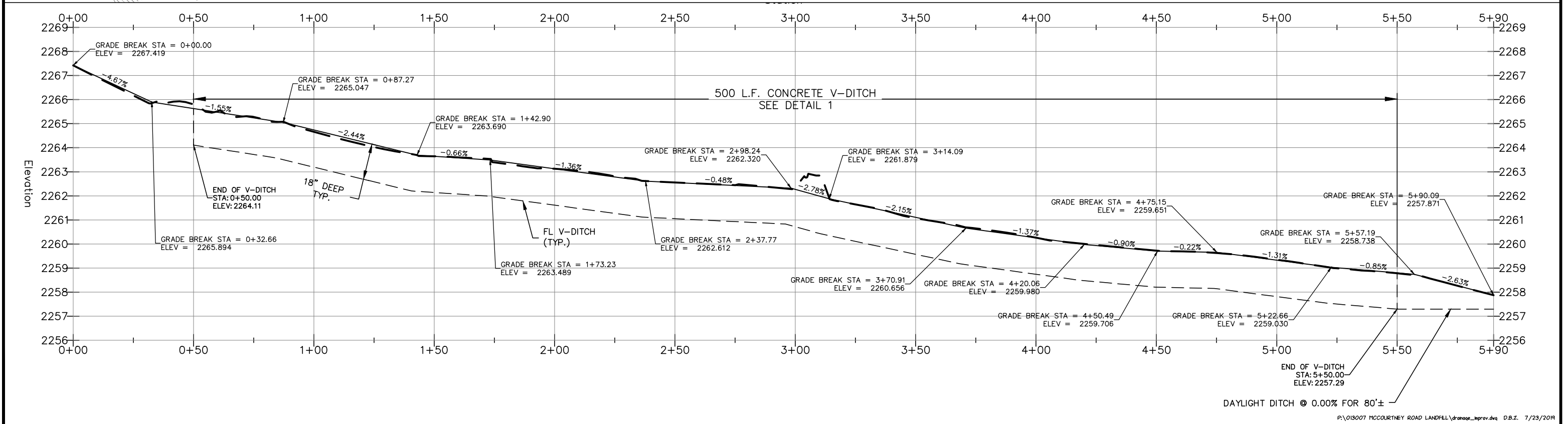
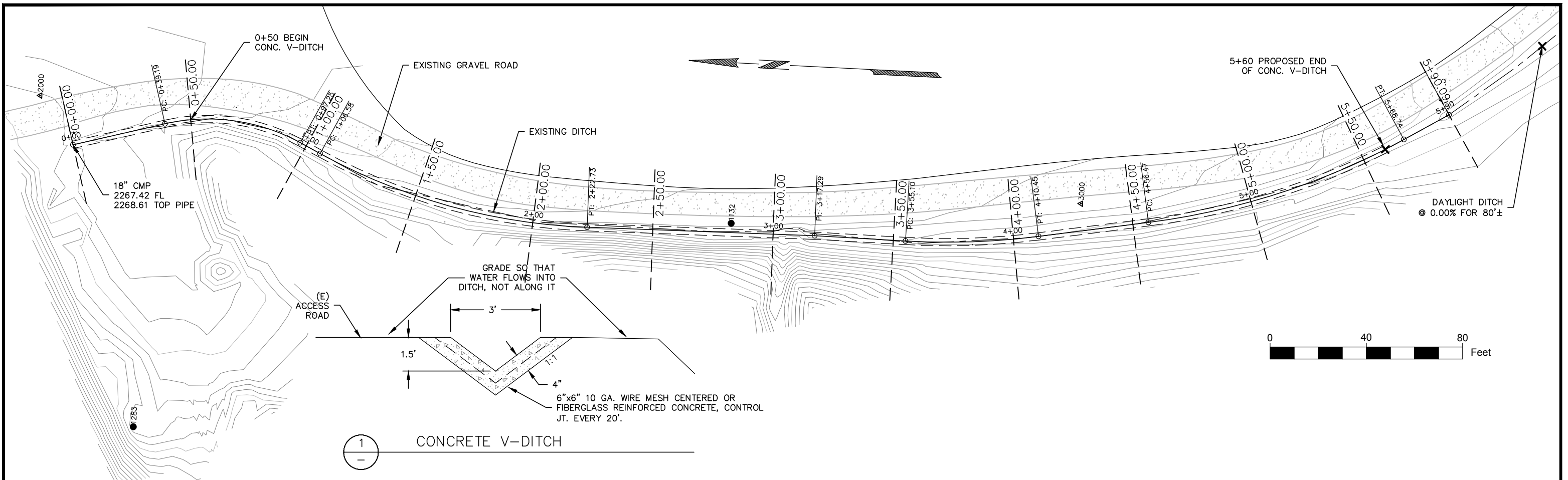
**DRAINAGE IMPROVEMENTS**

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**MCCOURTNEY ROAD LANDFILL**

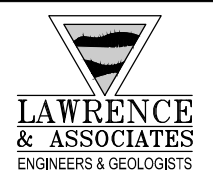
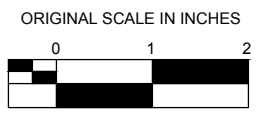
**SITE PLAN**

DRAWING: <b>1.0</b>
SHEET: OF
DATE: 7/24/2019



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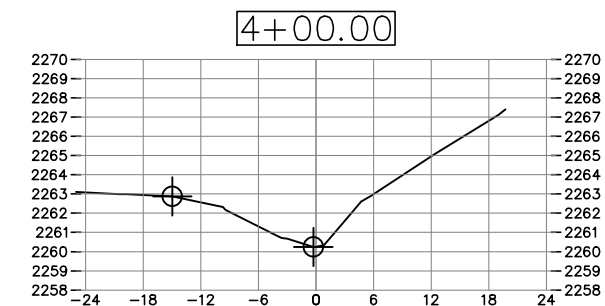
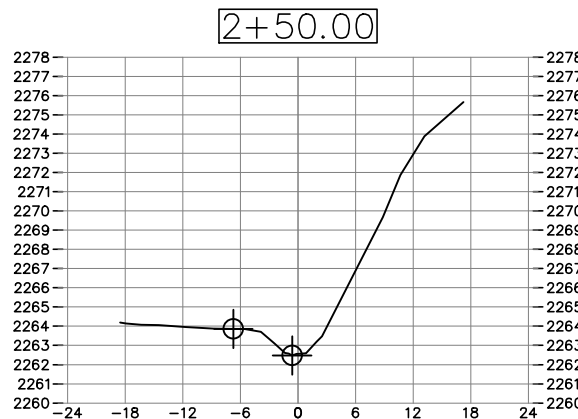
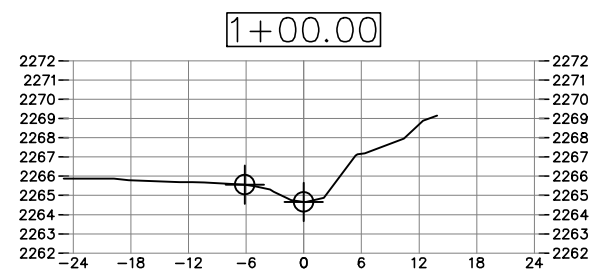
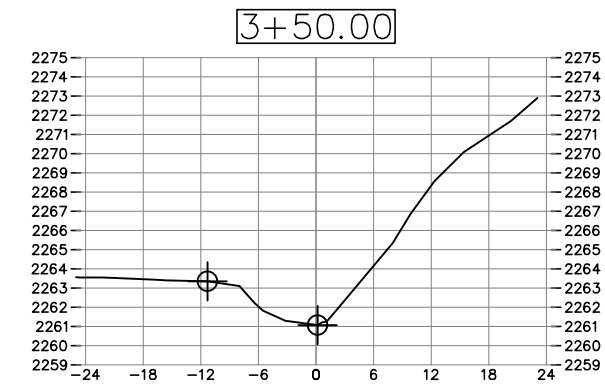
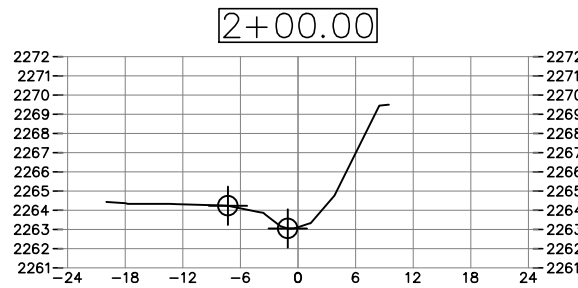
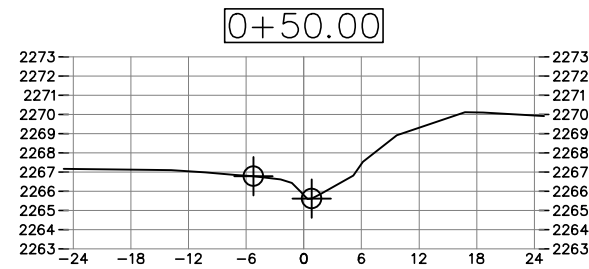
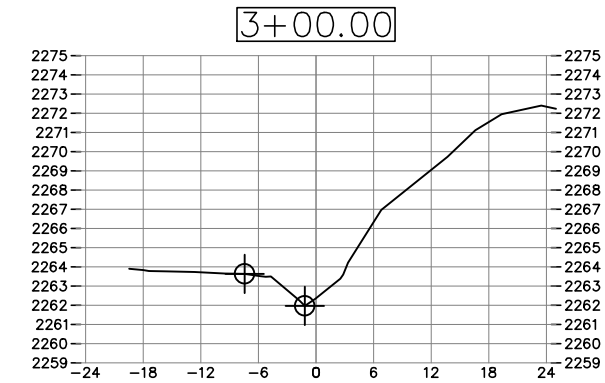
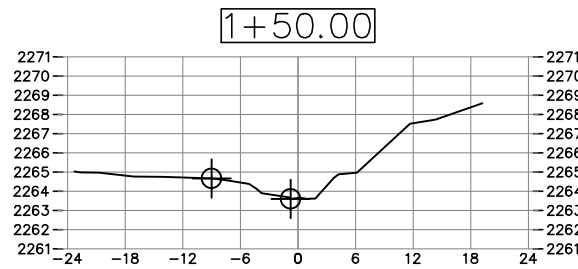
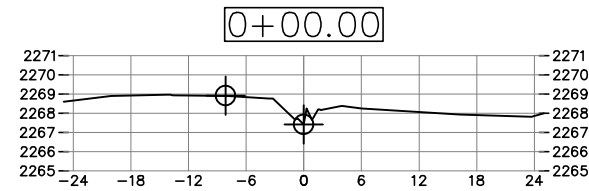


**DRAINAGE IMPROVEMENTS**  
**MCCOURTNEY ROAD LANDFILL**

**WEST V-DITCH**  
**PLAN AND PROFILE**

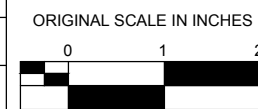
DRAWING:	<b>2.0</b>
SHEET:	OF
DATE:	7/23/2019

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NO.	DATE	REVISIONS	BY	CHK

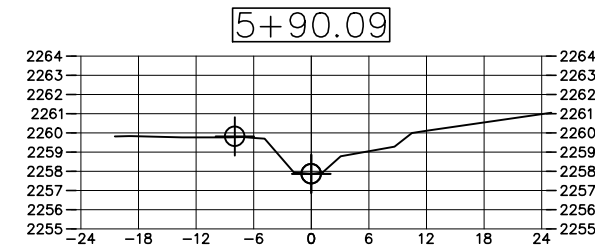
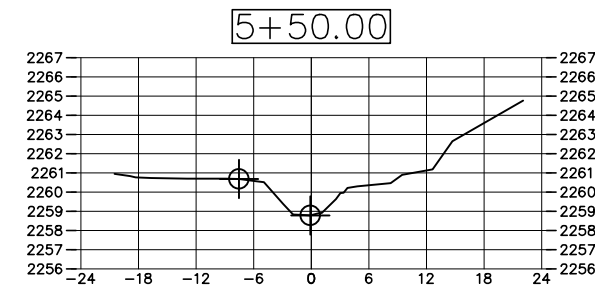
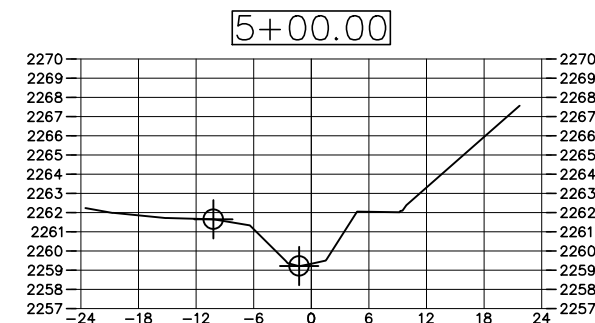
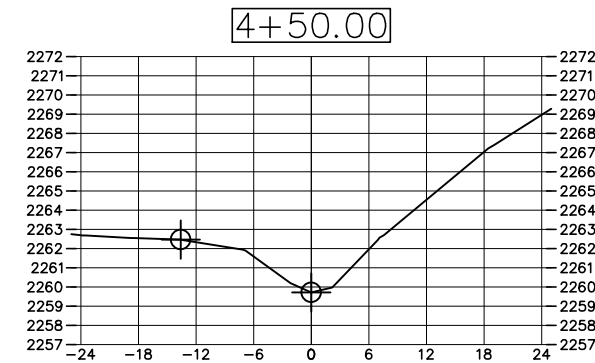
PROJECT NO: 013007.00	PROJECT ID:
DRAWN BY: D. ZAITZ	SCALE: AS SHOWN
ENGINEER: D. BROWN	DATE: 7/23/2019
CHECKED BY: C. COLES	DATE: 7/23/2019



**DRAINAGE IMPROVEMENTS**  
**MCCOURTNEY ROAD LANDFILL**

**CROSS SECTIONS**

DRAWING: <b>3.0</b>
SHEET: OF
DATE: 7/23/2019



**STANDARD GENERAL NOTES**

- THE CONSTRUCTION AND INSTALLATION OF IMPROVEMENTS SHALL CONFORM TO THESE PLANS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK – CURRENT EDITION).
- ANY CHANGES TO THESE PLANS MUST RECEIVE PRIOR APPROVAL FROM LAWRENCE & ASSOCIATES.
- NOTIFY THE OWNER 48 HOURS IN ADVANCE OF ANY WORK.
- CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND NOTIFY LAWRENCE & ASSOCIATES OF ANY DIFFERENCE FROM THAT SHOWN ON THE PLAN.
- 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. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED, AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING, AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL EFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING, SHORING, BRACING, OR EQUIVALENT METHOD, FOR THE PROTECTION OF LIFE OR LIMB.
- CONTRACTOR'S CONSTRUCTION PRACTICES SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF THE JOB SITE.
- ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER.
- SHOULD IT APPEAR THAT THE WORK TO BE DONE, OR ANY MATTER RELATIVE THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED WITHIN THESE PLANS, THE CONTRACTOR SHALL CONTACT LAWRENCE & ASSOCIATES AT (530) 275-4800 FOR FURTHER EXPLANATION, AS MAY BE NECESSARY.
- UNLESS OTHERWISE NOTED, THE WORD "INSTALL" SHALL INCLUDE THE PURCHASE, DELIVERY, PLACEMENT, AND CONNECTION OF ITEMS DESCRIBED ON THESE PLANS AND ALL APPURTENANCES REQUIRED FOR A COMPLETE INSTALLATION.

**SCOPE OF WORK**

THIS PROJECT INCLUDES PREPARATION FOR, AND CONSTRUCTION OF A CONCRETE V-DITCH NEAR THE WESTERN PORTION OF THE FACILITY.

THE V-DITCH IS ALIGNED ALONG THE EXISTING SWALE ADJACENT TO THE ACCESS ROAD. THE DESIGN FLOWING IS 18-INCHES BELOW EXISTING GRADE.

SEQUENCE OF CONSTRUCTION IS GENERALLY ANTICIPATED AS FOLLOWS:

- MOBILIZATION
- CLEARING AREAS TO BE EXCAVATED
- EXCAVATION/GRADING OF V-DITCH, INCLUDING DAYLIGHT AT DOWN-GRADE TERMINATION.
- CONCRETE FORMING AND PLACEMENT OF REINFORCING
- CONCRETE V-DITCH CONSTRUCTION
- DE-MOBILIZATION.

**STRUCTURAL CONCRETE**

- RESPONSIBILITIES AND COORDINATION: THE CONTRACTOR IS RESPONSIBLE FOR THE WORK DESCRIBED IN THIS SECTION. THIS SECTION INCLUDES:
  - CONCRETE FORMWORK.
  - CONCRETE REINFORCEMENT.
  - CONCRETE PLACING, CURING, FINISHING.
- SUBMITTALS:
  - CONTRACTOR TO FURNISH STATEMENT OF COMPOSITION OF CONCRETE MIX AND EVIDENCE THAT THE MIX MEETS THE SPECIFIED QUALITY.
  - DESCRIPTION OF THE MACHINE PROPOSED FOR CONCRETE EXTRUDING OR SLIP-FORMING.
- QUALITY ASSURANCE:
  - ALL CONCRETE FOR THE PROJECT SHALL BE CONTROLLED CONCRETE OF SPECIFIED STRENGTHS, OF UNIFORM COLOR, AND FREE FROM DEFECTS LIABLE TO ADVERSELY AFFECT STRENGTH, DURABILITY OR APPEARANCE OF THE STRUCTURE OR ITS COMPONENTS.
  - REPAIR OF DEFECTIVE CONCRETE SURFACES SHALL BE DONE IN THE FOLLOWING MANNER WHEN, IN THE OPINION OF THE ENGINEER, SUCH DEFECTS MAY BE REPAIRED AND AT NO ADDITIONAL COST TO THE OWNER.
  - ROCK POCKETS, VOIDS, SPALLS, CRACKS AND EXPOSED REINFORCING SHALL BE REPAIRED WITH 1:2 CEMENT MORTAR OR CUT OUT AND PATCHED. PREPARE SURFACES AND BOND CEMENT MORTAR WITH CONCRETE ADHESIVE AS HEREINAFTER SPECIFIED.
- TESTS:
  - THE CONTRACTOR SHALL TAKE THREE (3) TEST CYLINDERS IN TOTAL FOR THE TRAPEZOIDAL-DITCH PROJECT. CYLINDERS SHALL BE MADE AND STORED AS PER INSTRUCTIONS GIVEN BY THE PROJECT ENGINEER. CYLINDERS MAY BE TESTED FOR ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE WITH ONE CYLINDER TESTED AT THE AGE OF 7 DAYS AND THE OTHER CYLINDER (FROM THE SAME BATCH) TESTED AT THE AGE OF 28 DAYS. TESTS WILL BE MADE BY A RECOGNIZED TEST LABORATORY SELECTED BY THE OWNER AND APPROVED BY THE ENGINEER. OWNER WILL PAY FOR SERVICES OF TESTING LAB TO PERFORM CYLINDER BREAK TESTS FOR CONCRETE WORK.
  - CYLINDERS NOT MEETING THE REQUIRED DESIGN STRESSES SHALL INDICATE DEFECTIVE CONCRETE AND SUCH CONCRETE SHALL BE REMOVED AND REPLACED AT NO INCREASE IN COST TO THE OWNER. CORE TESTS REQUESTED BY THE CONTRACTOR TO ESTABLISH DESIGN STRESSES, WHEN CYLINDER TESTS INDICATE DEFECTIVE CONCRETE, SHALL BE PAID FOR BY THE CONTRACTOR.
- CONCRETE REINFORCEMENT
  - REINFORCING STEEL: ASTM A615; REINFORCING BARS OF SIZE NO. 4 OR SMALLER MAY BE 40 GRADE OR 60 GRADE. ALL REBAR TO BE DEFORMED BILLET STEEL BARS, UNFINISHED. ALL SPLICES SHALL NOT BE LESS THAN 30 BAR DIAMETERS. HORIZONTAL LAPS IN ADJACENT BARS SHALL BE STAGGERED 5-FOOT, 0-INCH MINIMUM.
  - WELDED WIRE FABRIC: REFER TO THE DETAILS, ASTM DESIGNATION A185.
  - ADMIXTURES: AS APPROVED BY THE PROJECT ENGINEER. EXCEPT FOR REINFORCING
  - CALCIUM CHLORIDE WILL NOT BE PERMITTED FOR USE IN CONCRETE UNDER ANY CIRCUMSTANCES.
- CONCRETE DESIGN AND COMPRESSIVE STRENGTH:
  - CONCRETE TYPE: CLASS A, 3/4" AND 1" AGGREGATE BASE, 6.0 SACK CEMENT PER YARD.
  - MAXIMUM WATER CEMENT RATIO: 5.5 GALLONS OF WATER PER 94 LBS. SACK OF CEMENT
  - MINIMUM ULTIMATE 28-DAY COMPRESSIVE STRENGTH: 2,500 PSI
- REINFORCING STEEL:
  - V-DITCHES: REINFORCING SHALL BE PROVIDED BY EITHER 6 X 6 STEEL WELDED WIRE MESH AS DESCRIBED ABOVE, IN THE CENTER OF THE CONCRETE.
- CONCRETE FINISHES:
  - ALL CONCRETE SURFACES MAY RANGE FROM SMOOTH TO EQUIVALENT OF MEDIUM BROOM FINISH OR AS OTHERWISE APPROVED BY THE OWNER.
  - CURING: PREVENT RAPID DRYING BY COVERING EXPOSED SURFACES WITH CRAFT PAPER, MATS, EARTH, WET BURLAP OR AN APPROVED MEMBRANE CURING COMPOUND FOR AT LEAST 7 DAYS.
  - PROTECTION: AFTER PLACEMENT IN FORMS, MAINTAIN CONCRETE AT A TEMPERATURE OF NO LESS THAN 50 DEGREES F. FOR A PERIOD OF 72 HOURS, AND AT A TEMPERATURE ABOVE 32 DEGREES F. FOR AN ADDITIONAL PERIOD OF 3 DAYS.
- CONTRACTION JOINTS MAY BE EITHER SAWN OR TOOLED NO FARTHER THAN EVERY 20 FEET.

**GENERAL CONDITIONS**

- THE GENERAL CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, UTILITIES, AND OTHER FACILITIES, UNLESS SPECIFICALLY STATED OTHERWISE IN THESE DOCUMENTS. ANY ITEMS DAMAGED OR DESTROYED BY THE CONTRACTOR OR HIS SUBCONTRACTORS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL SUBCONTRACTORS AND INSPECTION OF THEIR WORK. THE GENERAL CONTRACTOR WILL BE HELD RESPONSIBLE AND FINANCIALLY ACCOUNTABLE FOR DEFICIENCIES IN SUBCONTRACTORS WORK.
- ALL WORK SHALL BE PROVIDED COMPLETE IN PLACE, INCLUDING ALL LABOR, MATERIALS, EQUIPMENT, FEES, AND APPURTENANCES TO INSTALL THE WORK IN OPERATING CONDITION IN A WORKMAN LIKE MANNER.

**INSTALLATION OF NEW MATERIALS**

- PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL PROVIDE TO THE OWNER, A SCHEDULE SHOWING DEADLINES FOR COMPLETION OF SIGNIFICANT GROUPS OF WORK.

**LICENSING AND EXPERIENCE REQUIREMENTS**

- THE CONTRACTOR SHALL POSSESS A CALIFORNIA CONTRACTORS LICENSE WITH THE CLASS APPROPRIATE FOR THE WORK SHOWN AS PART OF THIS PROJECT.

**PAYMENT**

PAYMENT SHALL INCLUDE ALL MOBILIZATION, SALES TAXES, SHIPPING, TRANSPORTATION MATERIALS, LABOR, SUPERINTENDENCE, AND INCIDENTALS TO CONSTRUCT THE WORK COMPLETE IN PLACE.

IF THE OWNER REQUESTS A CHANGE IN WORK, THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST FOR CHANGE ORDER FOR APPROVAL BEFORE PERFORMING THE WORK. EXTRA WORK PERFORMED WITHOUT PRIOR APPROVAL WILL NOT BE PAID.

**SITE SAFETY**

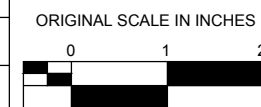
- THE CONTRACTOR SHALL MAINTAIN A CURRENT COPY OF THEIR GENERAL COMPANY SAFETY PLAN EITHER ON SITE OR WITHIN 1/2 HOUR ROUND-TRIP TRAVEL TIME OF THE SITE. A SITE-SPECIFIC SITE-SAFETY AND HEALTH PLAN SHALL BE KEPT ON SITE ANYTIME WORK IS CONDUCTED WITH HAZARDOUS MATERIALS. THE PLAN SHALL INCLUDE ALL POTENTIAL HAZARDS AND METHODS FOR MITIGATING THE HAZARDS. THE PLAN SHALL INCLUDE DIRECTIONS AND A MAP SHOWING THE WAY TO THE NEAREST HOSPITAL, A LIST OF EMERGENCY PHONE NUMBERS, INCLUDING EMERGENCY SERVICES, THE OWNER, AND THE RESPONSIBLE CONTRACTOR'S BUSINESS, AND HOME PHONE NUMBERS.
- CONTRACTOR SHALL COMPLY WITH ALL OWNER SAFETY POLICIES AND PROCEDURES.

**DISPOSAL OF CONSTRUCTION DEBRIS**

- ALL CONSTRUCTION DEBRIS, NOT INCLUDING CLEAN FILL AND SPOILS, SHALL BE DISPOSED OF APPROPRIATELY.

NO.	DATE	REVISIONS	BY	CHK

PROJECT NO: 013007.00	PROJECT ID:
DRAWN BY: D. ZAITZ	SCALE: AS SHOWN
ENGINEER: D. BROWN	DATE: 7/25/2019
CHECKED BY: C. COLES	DATE: 7/25/2019



**DRAINAGE IMPROVEMENTS**  
**MCCOURTNEY ROAD LANDFILL**

**CROSS SECTIONS**

DRAWING: <b>4.0</b>
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