GRADING AND SITEWORK SPECIFICATIONS

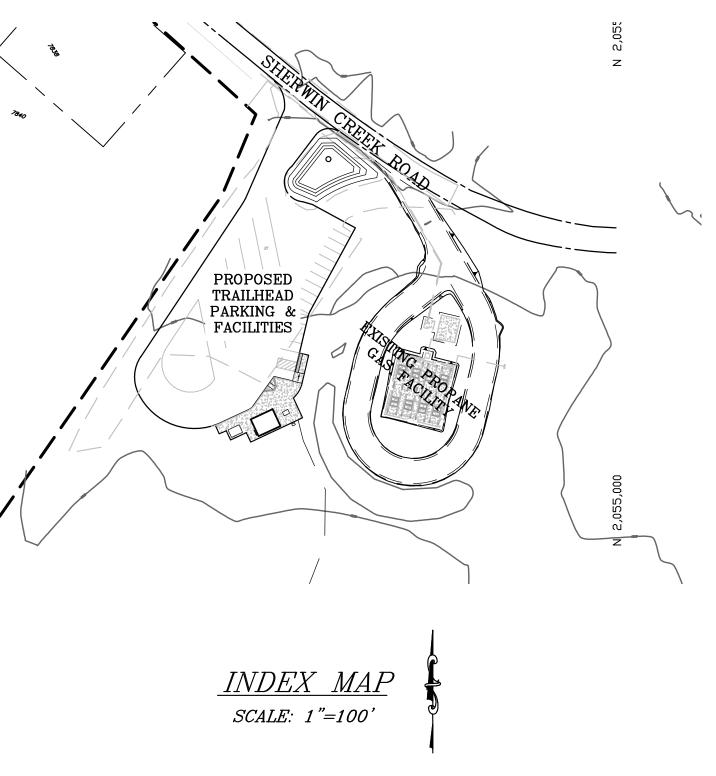
- 1. ALL WORK SHALL CONFORM TO THE "CALTRANS STANDARDS AND SPECIFICATIONS" (CSS), AND THESE PLANS. IN THE EVENT OF CONFLICT BETWEEN THE CSS AND THE PLANS, THE CSS SHALL PREVAIL. ALL WORK IN TOWN OF MAMMOTH LAKES RIGHT-OF-WAY SHALL COMPLY WITH THE TERMS, CONDITIONS, AND REQUIREMENTS OF THE TOWN GRADING PERMIT
- 2. AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT U.S.A. - UNDERGROUND SERVICE ALERT - AT (800) 227-2600 AND REQUEST THAT UTILITY OWNERS MARK OR OTHERWISE INDICATE THE LOCATION OF THEIR FACILITIES. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ALL UTILITIES AND ALL STRUCTURES FOUND AT THE SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. UTILITIES SHOWN ARE FROM AVAILABLE RECORDS AND FIELD MEASUREMENTS.
- CONTRACTOR SHALL TAKE ALL SUCH MEASURES NECESSARY TO CONTROL DUST IN CONSTRUCTION AREAS OR ON ACCESS ROADS. SUFFICIENT WATER TRUCKS SHALL BE MADE AVAILABLE FOR DUST CONTROL PURPOSES. ALL EXPOSED SOIL SURFACES SHALL BE MOISTENED AS REQUIRED TO AVOID NUISANCE CONDITIONS AND INCONVENIENCES FOR LOCAL RESIDENTS AND TRAVELERS OF NEARBY ROADWAYS.
- 4. ANY EVIDENCE OF THE HISTORICAL PRESENCE OF MAN FOUND DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE MAMMOTH LAKES PLANNING DEPARTMENT AND CONSTRUCTION SHALL STOP UNTIL FURTHER NOTICE.
- HOURS OF WORK SHALL BE IN ACCORDANCE WITH THE ENCROACHMENT PERMIT, OR BETWEEN 7:00 AM AND 8:00 PM MONDAY THROUGH SATURDAY, THE ENCROACHMENT PERMIT TAKING PRECEDENCE. OPERATIONS ON SUNDAYS AND TOWN HOLIDAYS ARE PERMITTED ONLY ON APPROVAL OF THE TOWN MANAGER OR TOWN ENGINEER AND LIMITED TO 9:00 AM TO 5:00 PM.
- 6. ONE SET OF SURVEY STAKES SHALL BE PROVIDED FOR EACH PHASE OF THE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL BEAR THE COST OF RESETTING STAKES DESTROYED BY CONSTRUCTION OPERATIONS.
- TREE REMOVAL SHALL BE PERFORMED BY A LICENSED TIMBER OPERATOR ONLY. TIMBER OPERATOR SHALL NOTIFY CALIFORNIA DEPT. OF FORESTRY (714–782–4140) PRIOR TO COMMENCING WORK. ALL TREE REMOVAL SHALL CONFORM TO THE APPROVED TIMBER HARVEST PLAN, IF REQUIRED, & CALIFORNIA DEPARTMENT OF FORESTRY
- 8. THE LIMITS OF CONSTRUCTION SHALL BE CAREFULLY AND FULLY FLAGGED PRIOR TO START OF CONSTRUCTION, AND POSTED SO AS TO PREVENT DAMAGE TO VEGETATION AND DISTURBANCE TO SOILS OUTSIDE OF THE AREA OF CONSTRUCTION.
- CONTRACTOR SHALL CONDUCT ALL GRADING OPERATIONS IN ACCORDANCE WITH THE TOWN OF MAMMOTH LAKES ORDINANCES AND STANDARDS AND IN CONFORMANCE WITH THE CONSTRUCTION SAFETY ORDERS OF THE STATE OF CALIFORNIA. DEPARTMENT OF INDUSTRIAL RELATIONS, DIVISION OF INDUSTRIAL SAFETY. IN ADDITION, CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF GENERAL OSHA STANDARDS FOR THE PROTECTION OF WORKMEN AND THE GENERAL PUBLIC. OSHA PERMITS REQUIRED FOR DEEP TRENCHES.
- 10. AREAS TO BE GRADED SHALL BE CLEARED OF BRUSH, VEGETATION, LARGE BOULDERS, AND OTHER DELETERIOUS MATERIALS. CLEARED MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR ONLY AT SITES APPROVED BY MAMMOTH LAKES DEPARTMENT OF PUBLIC WORKS. TOPSOIL SHALL BE STOCKPILED WITHIN THE CONSTRUCTION PERIMETER OR IN AREAS APPROVED BY THE TOWN OF MAMMOTH LAKES PLANNING DEPARTMENT FOR USE ON SLOPES AND DISTURBED AREAS.
- 11. WITH THE EXCEPTION OF TEMPORARY EXCAVATION FOR MASS GRADING AND AREAS SHOWN TO BE LANDSCAPED, CUT AND FILL SLOPES SHALL NOT EXCEED A STEEPNESS OF 2:1, UNLESS OTHERWISE NOTED, AND SHALL BE REVEGETATED TO CONTROL EROSION. STOCKPILED TOPSOIL WILL BE SPREAD EVENLY TO A DEPTH OF 6" MINIMUM OVER SLOPES AND DISTURBED AREAS. AND LANDSCAPED OR SEEDED TO PREVENT EROSION AS SHOWN ON LANDSCAPE PLAN.
- 12. FINISHED GRADES IN ALL AREAS SHALL COMPLY WITH PLAN ELEVATIONS. NO AREAS SHALL BE LEFT SUCH THAT A PONDING CONDITION OCCURS.
- 13. AT NO TIME SHALL THE CONTRACTOR DEWATER THE SITE BY PUMPING INTO THE EXISTING STORM DRAIN OR SUBDRAIN SYSTEM WITHOUT AGENCY APPROVED FILTRATION.
- 14. ANY EARTH MATERIAL IMPORTED OR EXCAVATED ON THE PROPERTY MAY BE UTILIZED IN THE FILL, PROVIDED THAT EACH MATERIAL HAS BEEN DETERMINED TO BE SUITABLE BY THE GEOTECHNICAL ENGINEER. ALL FILL SHALL BE FREE OF ORGANIC AND OTHER DELETERIOUS MATERIAL. SOILS OF POOR GRADATION, EXPANSION POTENTIAL. OR STRENGTH CHARACTERISTICS SHALL BE PLACED IN AREAS DESIGNATED BY THE CONSULTANT OR SHALL BE MIXED WITH OTHER SOILS TO SERVICE AS SATISFACTORY SOIL MATERIAL.
- 15. ALL SITE WORK SHALL BE COMPLETED PRIOR TO OCT 15 OF EACH YEAR. ANY WORK PROPOSED AFTER THIS DATE REQUIRES APPROVAL BY THE TOWN ENGINEER.
- 16. GROUND IN AREAS TO BE PAVED SHALL BE SCARIFIED, MOISTENED, AND COMPACTED TO A MINIMUM 95% OF MAXIMUM DENSITY FOR THE UPPER 12 INCHES. EXISTING SLOPES STEEPER THAN 5:1 SHALL BE KEYED WITH EQUIPMENT WIDTH BENCHES BEFORE PLACEMENT OF FILL.
- 17. EXISTING UTILITIES AND STRUCTURES ARE SHOWN IN THEIR APPROXIMATE LOCATION AND EXTENT. CONTRACTOR SHALL VERIFY AND TAKE PRECAUTIONS TO PROTECT EXISTING UTILITIES AND STRUCTURES.
- 18. THE CONTRACTOR SHALL CONSTRUCT THE INTERIM EROSION CONTROL AND ADHERE TO THE LAHONTAN GUIDELINES FOR EROSION CONTROL FOR THE TOWN OF MAMMOTH LAKES
- 19. AGGREGATE BASE SHALL BE CLASS 2, 3/4" MAXIMUM GRADING, AND SHALL CONFORM TO THE PROVISIONS OF SECTION 26, "AGGREGATE BASES," OF THE CSS AND SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 (LATEST EDITION).
- 20. ASPHALT CONCRETE SHALL BE TYPE B, 3/4" MAXIMUM GRADING FOR ARTERIAL & COLLECTOR ROADS, 1/2" MAXIMUM GRADING FOR PATHS AND SHALL CONFORM TO THE PROVISIONS IN SECTION 39, "HOT MIX ASPHALT", OF THE TECHNICAL PROVISIONS. SEAL COAT OF SS-1 OR CSS-1 ASPHALT SHALL BE APPLIED TO ALL ASPHALT CONCRETE PAVING. TACK COAT BETWEEN PAVEMENT LIFTS (2 1/2" MAX. LIFT) OR FOR CAPPING EXISTING PAVEMENT SHALL BE CSS-1 OR SS-1 APPLIED AT 0.1 GALLONS PER SQUARE YARD PER SECTION 94 "ASPHALTIC EMULSIONS" OF THE TECHNICAL PROVISIONS.
- 21. ALL SITE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 34.5MPA (5000 P.S.I.), FIBERMESH SHALL BE ADDED AT A RATE OF 1.5 LBS/CUBIC YARD. REINFORCING STEEL, IF REQUIRED, SHALL BE DEFORMED BILLET-STEEL BARS CONFORMING TO THE SPECIFICATIONS OF ASTM A 615 GRADE 420.
- 23. WATER FOR CONSTRUCTION PURPOSES SHALL BE SUPPLIED BY MCWD. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN PERMIT FROM MCWD.



- STATE.
- MATERIAL FROM THE SITE.
- MEASURES.

- DISPOSAL.
- STABILIZATION METHODS.

PRELIMINARY IMPROVEMENT PLANS S.H.A.R.P. TRAILHEAD FACILITIES SHERWIN CREEK ROAD MAMMOTH LAKES, CA 93546



EROSION PROTECTION AND STORMWATER MANAGEMENT NOTES:

1. SURPLUS OR WASTE MATERIAL SHALL NOT BE PLACED IN DRAINAGE WAYS. 2. ALL LOOSE PILES OF SOIL, SILT, CLAY, SAND, DEBRIS, OR EARTHEN MATERIALS SHALL BE PROTECTED IN A REASONABLE MANNER TO PREVENT ANY DISCHARGE TO WATERS OF THE

3. DEWATERING SHALL BE DONE IN A MANNER SO AS TO PREVENT THE DISCHARGE OF EARTHEN

4. ALL DISTURBED AREAS SHALL BE STABILIZED BY APPROPRIATE SOIL STABILIZATION

5. ALL WORK PERFORMED BETWEEN OCTOBER 15 AND MAY 1 OF EACH YEAR SHALL BE CONDUCTED IN SUCH A MANNER THAT THE PROJECT CAN BE WINTERIZED WITHIN 48 HOURS. 6. WHERE POSSIBLE, EXISTING DRAINAGE PATTERNS SHALL NOT BE SIGNIFICANTLY MODIFIED.

7. AFTER COMPLETION OF A CONSTRUCTION PROJECT, ALL SURPLUS OR WASTE EARTHEN MATERIAL SHALL BE REMOVED FROM THE SITE AND DEPOSITED AT A LEGAL POINT OF

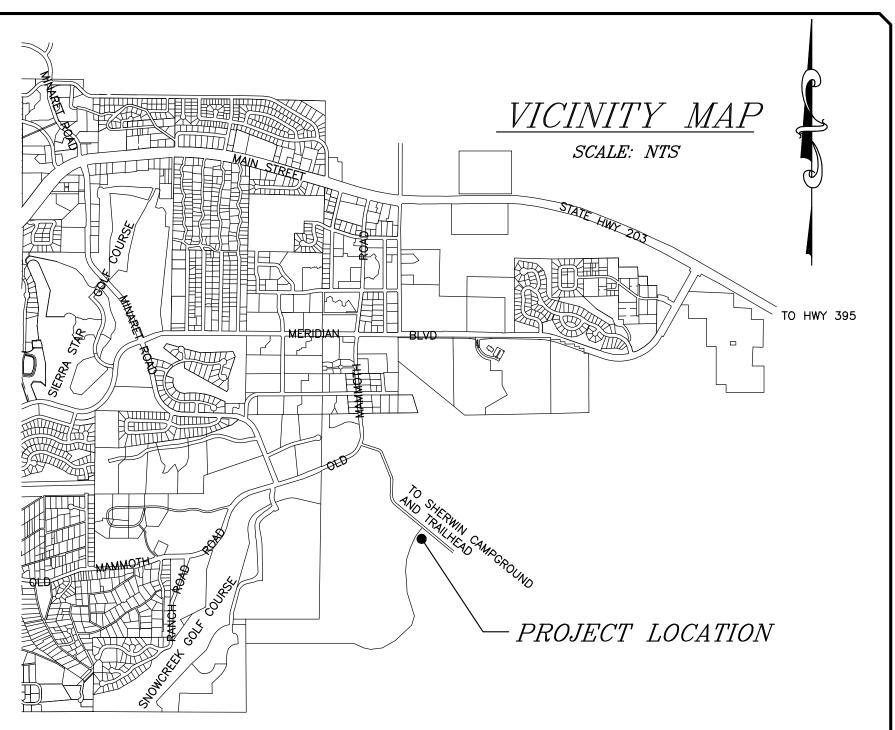
8. DRAINAGE SWALES DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE STABILIZED BY THE ADDITION OF CRUSHED ROCK OR RIP RAP AS NECESSARY OR OTHER APPROPRIATE

9. ALL NON-CONSTRUCTION AREAS SHALL BE IDENTIFIED WITH STAKES AND PROTECTED BY FENCING OR OTHER MEANS TO PREVENT UNNECESSARY DISTURBANCE.

10. DURING CONSTRUCTION, TEMPORARY EROSION CONTROL FACILITIES, (E.G., IMPERMEABLE DIKES, FILTER FENCES, ETC.) SHALL BE USED AS NECESSARY TO PREVENT DISCHARGE OF EARTHEN MATERIALS FROM THE SITE DURING PERIODS OF PRECIPITATION OR RUNOFF.

11. REVEGETATED AREAS SHALL BE CONTINUALLY MAINTAINED IN ORDER TO ASSURE ADEQUATE GROWTH AND ROOT DEVELOPMENT. PHYSICAL EROSION CONTROL FACILITIES SHALL BE PLACED ON A ROUTINE MAINTENANCE AND INSPECTION PROGRAM TO PROVIDE CONTINUED EROSION CONTROL INTEGRITY.

12. WHERE CONSTRUCTION ACTIVITIES INVOLVE THE CROSSING AND/OR ALTERATION OF A STREAM CHANNEL, SUCH ACTIVITIES SHALL BE TIMED TO OCCUR DURING THE PERIOD IN WHICH STREAM FLOW IS EXPECTED TO BE LOWEST FOR THE YEAR.



INDEX TO SHEETS

SHEET 1 – TITLE SHEET AND NOTES SHEET 2 – PRELIMINARY SITE IMPROVEMENT PLAN

UTILITY COORDINATION

<u>ELECTRIC</u>:

SOUTHERN CALIFORNIA EDISON CONTACT - DIANA POE MAMMOTH LAKES, CA 93546 (760) 924–4802

<u>GAS</u>: AMERIGAS

CONTACT - JEFF PAHLOW MAMMOTH LAKES CA 93546 (760) 873–6371

PRIVATE ENGINEER'S NOTICE TO CONTRACTORS

THE EXISTANCE AND LOCATION OF UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THIS PLAN WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITES SHOWN AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES, CROSSINGS AND POINTS OF CONNECTION PRIOR TO STARTING WORK.

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND, WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS".

THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTOR'S AND SUBCONTRACTOR'S COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND, WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS".

THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR CIVIL ENGINEER.

CIVIL ENGINEER/SURVEYOR:

TRIAD/HOLMES ASSOCIATES 549 OLD MAMMOTH RD. SUITE 202 P.O. BOX 1570 MAMMOTH LAKES, CA 93546 CONTACT: TOM PLATZ

BENCHMARK

TEMPORARY BENCHMARK PER TOWN OF MAMMOTH LAKES DATUM. PROJECT BENCHMARK IS SET MAG NAIL IN BIKE LANE NORTH SIDE OF LAKE MARY ROAD. ELEVATION=8029.82'

EARTHWORK QUANTITIES

CUT = XX CUBIC YARDSFILL = XX CUBIC YARDS

ANGPT

BCR

CI

ЕC

ECR

EΧ

FL

INV

SDDI

STA

TOML

TC

EARTHWORK QUANTITIES DO NOT INCLUDE ANY ADJUSTMENTS FOR SHRINKAGE. ROCK LOSS. STRIPPING. FOUNDATION AND TRENCH SPOILS. COMPACTION AND CONSOLIDATION OR OVEREXCAVATION. THE CONTRACTOR SHALL MAKE AN INDEPENDENT QUANTITY TAKEOFF AND BASE HIS BID ON QUANTITIES SO CALCULATED.

LEGEND & ABBREVIATIONS

ANGLE POINT BEGIN CURVE BEGIN CURB RETURN CENTERLINE END CURVE END CURB RETURN EXISTING FLOWLINE INVERT
1 20 1121112
STORM DRAIN INLET
STA TION
TOP OF CURB
TOWN OF MAMMOTH LAKE

REVIEWED BY: TOWN OF MAMMOTH LAKES PUBLIC WORKS DEPARTMENT

GRADY DUTTON PUBLIC WORKS DIRECTOR DA TE

SHEET 1 OF 2



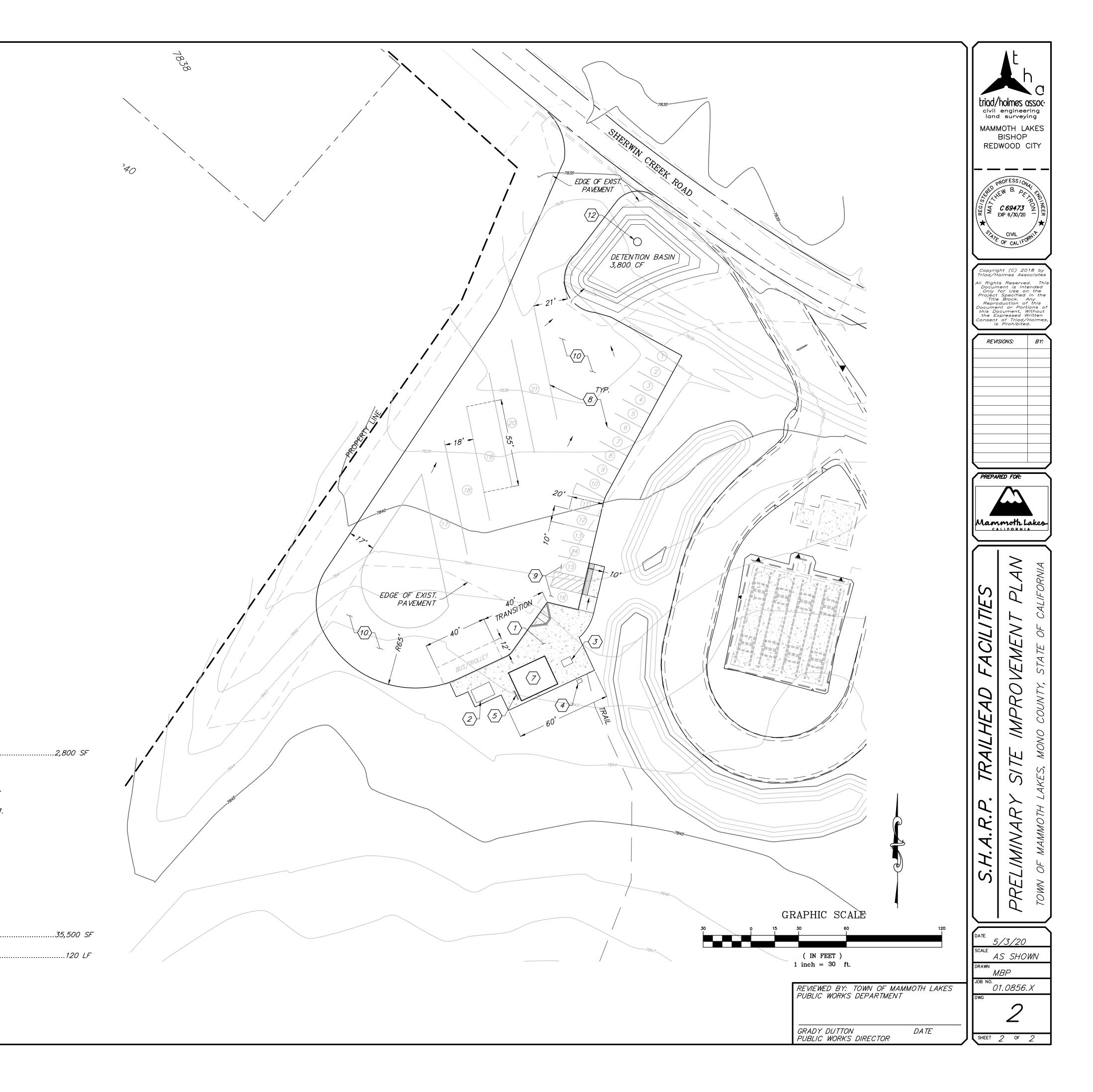
<u>PARKING</u>	
STANDARD:	14
ADA:	2
TRAILER:	5
TOTAL:	21

<u>CONSTRUCTION NOTES</u>

- (1) CONSTRUCT 4" THICK PCC WALK ON NATIVE SOIL COMPACTED TO MIN. 95% OF MATERIALS MAX. DRY DENSITY FOR THE UPPER 12".....
- 2 CONSTRUCT TRANSIT STOP PER T.O.M.L. STD PLAN XXX
- (3) CONSTRUCT WAYFINDINGS SIGN PER T.O.M.L. STD PLAN 602-1.
- (4) CONSTRUCT INTERPRETIVE SIGN PER T.O.M.L. STD PLAN 604-1.
- 5 CONSTRUCT BIKE RACK PER T.O.M.L. STD PLAN XXX
- 6 CONSTRUCT DOG & RECYCLING WASTE SYSTEM PER...
- (7) CONSTRUCT RESTROOM FACILITY.
- 8 APPLY 4" WIDE WHITE PARKING STRIPING PER DIMENSIONS SHOWN HEREON.
- 9 CONSTRUCT ADA PARKING STALLS PER DETAIL HEREON.
- (10) CONSTRUCT 4" ASPHALT OVER 6" CLASS II BASE....
- (11) CONSTRUCT 6" CONCRETE CURB PER T.O.M.L. STD. PLAN XXX...
- (12) CONSTRUCT DRYWELL PER T.O.M.L. STD. PLAN XXX

moth\856–5 SHARP Trailhead\dwq\01.0856.5 SHARP.dwg May 04,2020 – 8:45am, mpetr





S.H.A.R.P. Trailhead Facilities

ltem No.	ltem Code	Item Description	Unit of Measure	Qty	Unit Price		Item Total		
1	999990	MOBILIZATION	LS	1	\$	10,000.00	\$	10,000.00	
2	120090	CONSTRUCTION AREA SIGNS	LS	1	\$	1,500.00	\$	1,500.00	
3	130100	JOB SITE MANAGEMENT	LS	1	\$	8,000.00	\$	8,000.00	
4	130200	PREPARATION AND MANAGEMENT OF STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	LS	1	\$	12,000.00	\$	12,000.00	
5	130640	TEMPORARY FIBER ROLL	LF	500	\$	5.50	\$	2,750.00	
6	130730	STREET SWEEPING	LS	1	\$	5,000.00	\$	5,000.00	
7	130900	TEMPORARY CONCRETE WASHOUT	LS	1	\$	1,500.00	\$	1,500.00	
8	170103	CLEARING AND GRUBBING (LS)	LS	1	\$	4,000.00	\$	4,000.00	
9	190101	FINISH GRADING	CY	800	\$	80.00	\$	64,000.00	
10	190123	RETENTION BASIN EXCAVATION	CY	150	\$	100.00	\$	15,000.00	
11	210430	HYDROSEED	SQFT	20,000	\$	0.30	\$	6,000.00	
12	260203	CLASS 2 AGGREGATE BASE (CY)	CY	660	\$	200.00	\$	132,000.00	
13	390132	HOT MIX ASPHALT (TYPE A)	TON	850	\$	100.00	\$	85,000.00	
14	374002	FOG SEAL	TON	17.0	\$	600.00	\$	10,200.00	
15	397005	TACK COAT	TON	1.7	\$	2,000.00	\$	3,400.00	
16	398001	REMOVE ASPHALT CONCRETE PAVEMENT (SQFT)	SQFT	44,000	\$	0.80	\$	35,200.00	
17	730070	DETECTABLE WARNING SURFACE	SQFT	60	\$	45.00	\$	2,700.00	
18	730010	MINOR CONCRETE (CURB) (LF)	LF	120	\$	45.00	\$	5,400.00	
19	641000	4" PLASTIC PIPE (SNOWPOLE SLEEVE)	EA	5	\$	80.00	\$	400.00	
20	731521	MINOR CONCRETE (4" THK SIDEWALK)	CY	35	\$	650.00	\$	22,750.00	
21	731623	MINOR CONCRETE (CURB RAMP)	CY	1.4	\$	2,000.00	\$	2,800.00	
22	733000	PRE/POST CONSTRUCTION SURVEYS	EA	1	\$	3,500.00	\$	3,500.00	
23		TYPE 2, INTERPRETIVE, REGULATORY & OTHER ANCILLARY SIGNAGE	LS	1	\$	20,000.00	\$	20,000.00	
24		SMALL TOML TRANSIT SHELTER	EA	1	\$	80,000.00	\$	80,000.00	
25		DOUBLE VAULT TOILET	EA	1	\$	80,000.00	\$	80,000.00	
26	840656	PAINT PARKING STRIPING	LF	950	\$	2.50	\$	2,375.00	
27	840666	PAINT ACCESSIBLE PARKING STALL MARKINGS	EA	2	\$	500.00	\$	1,000.00	
28		DRYWELL	EA	1	\$	20,000.00	\$	20,000.00	
		•	SUBTC	TAL COSTS:	\$			636,475.00	

ENGINEERS ESTIMATE OF PROBABLE COST

	SUPPLEMENTAL WORK									
ltem No.	ltem Code	Item Description	Unit of Measure	Qty	Unit Price		Qty Unit Price		Item Total	
			LS	0	\$	-	\$	-		
			LS	0	\$	-	\$	-		
			LS	0	\$	-	\$	-		
	SUPPLEMENTAL WORK SUBTOTAL COSTS: \$ -									

PROJECT TOTAL				
PROJECT SUBTOTAL	\$	636,475.00		
SUPPLEMENTAL WORK SUBTOTAL	\$	-		
PROJECT TOTAL	\$	636,475.00		
5% CONTINGENCIES:	\$	31,823.75		
ESTIMATED TOTAL COSTS:	\$	668,298.75		