<u>GENERAL NOTES</u>

- 1. CLASS 1 FIELD LABORATORIES SHALL CONSIST OF A WEATHERPROOF, INSULATED, TEMPORARY OFFICE TYPE TRAILER, CONSTRUCTED TO THE UNIFORM BUILDING CODES SERIES, WITH FLOOR PLAN AND EQUIPMENT LAYOUT SIMILAR TO THE DRAWING ON THIS SHEET.IT SHALL MEET OR EXCEED THE FOLLOWING REQUIREMENTS.
- 2. **DIMENSIONS:** 26 FT. LONG x 8 FT. WIDE OUTSIDE, 7 FT.-6 IN. HEIGHT INSIDE.
- 3. WINDOWS: A MINIMUM OF 4, WITH PROVISION FOR CROSS VENTILATION AND LOCKING.
- 4. DOORS: TWO, EQUIPPED WITH DEADBOLT LOCKS, 36 IN. x 80 IN., INSULATED STEEL WITH A SMALL CLEAR GLASS WINDOW. EQUIPPED WITH HORIZONTAL PUSH BAR, HEAVY DUTY DOOR CLOSER, AND PULL HANDLE MOUNTED ABOVE PUSH BAR. EACH DOOR SHALL HAVE A SET OF STEPS WITH DECK, AND HANDRAILS. THE STEPS SHALL BE PLACED SO THE DECK CAN BE ACCESSED EITHER FROM THE SIDE OR FROM THE FRONT. THE DECK, RAILS, AND STEPS SHALL MEET OSHA REQUIREMENTS.
- FLOOR: ADEQUATE INSULATION UNDER THE FLOOR. FLOOR COVERING SHALL BE SKID RESISTANT.
- 6. **HEATING:** FURNACE, 41,000 BTU, FORCED AIR TYPE.
- 7. AIR CONDITIONING: ONE, 8,300 BTU MINIMUM.
- 8. ELECTRICAL: WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE FOR 110/220 VOLTS, 60 HZ, APPLICATIONS AND PROVIDE RELIABLE UNIFORM POWER TO PROPERLY OPERATE ALL FIELD LABORATORY EQUIPMENT. ALL TRAILERS CONSTRUCTED AFTER JULY 1, 2006 SHALL HAVE AN APPROPRIATELY SIZED CIRCUIT BREAKER TO HANDLE THE LOAD OF ALL LABORATORY AND ENVIRONMENTAL EQUIPMENT OPERATING AT ONE TIME. PROVIDE A SEPARATE ELECTRICAL CIRCUIT TO SUPPLY POWER TO THE ASPHALT CONTENT GAUGE AND THE OUTLET IN THE STORAGE CABINET UNDER THE WORK BENCH.
- 9. **LIGHTING:** ADEQUATE FLUORESCENT LIGHTING DIRECTLY OVER ALL WORK BENCH AND DESK AREAS. THERE SHALL BE ONE 110 VOLT EXTERIOR PORCH LIGHT FIXTURE WITHIN 2 FT. OF EACH EXTERIOR DOOR.
- 10. VENT FAN: ONE, GENERAL VENTILATION WITH 500 CFM CAPACITY AND TWO-SPEED SWITCH. MOUNTED IN THE ROOF OR AT TOP OF WALL NEAR THE RANGE. THE THREE FANS AND TWO WORK BENCH GRILLES PREVIOUSLY REQUIRED MAY BE RETAINED IN THOSE CLASS 1 FIELD LABORATORIES PURCHASED BEFORE THE DATE OF THIS STANDARD.
- 11. FURNITURE: ONE, TWO-DRAWER, LEGAL SIZE FILE CABINET BUILT INTO DESK AREA. DESK SHALL BE BUILT-IN WITH ONE CENTER DRAWER. ONE DESK CHAIR WITH ROLLERS. TWO STOOLS FOR WORK AREA WITH HEIGHT COMPATIBLE WITH WORK BENCHES. ALL CHAIRS SHALL BE ERGONOMICALLY BUILT.
- 12. **BOOK SHELVES:** MINIMUM 10 LINEAR FT. LONG AND 10 IN. DEEP, BUILT OVER DESK AREA. TOP SHELF SHALL BE AT LEAST 14 IN. BELOW CEILING.
- 13. WORK BENCHES: 30 IN. WIDE x 36 IN. HIGH WITH A DURABLE WORKING SURFACE SUCH AS FORMICA.
- 14. STORAGE CABINETS: TWO, ONE BUILT-IN UNDER THE WORK BENCH WITH A 28 IN. x 28 IN. LOCK EQUIPPED DOOR, WITH ELECTRICAL OUTLET INSIDE. ONE REMOVABLE, WITH OPEN BOTTOM, LOCK EQUIPPED TO SECURE CABINET TO TOP OF WORK BENCH, LARGE ENOUGH TO COVER A 22 IN. x 18 IN. x 18 IN. HIGH ASPHALT CONTENT (AC) GAUGE.
- 15. **SINK:** ONE, SINGLE TUB, STAINLESS STEEL, 25 IN. x 22 IN. x 6 $\frac{1}{2}$ IN. EQUIPPED WITH SPRAY NOZZLE, ONE COMBINATION (MIXING) HOT AND COLD WATER FAUCET AND ONE SINGLE COLD WATER FAUCET. ALL FAUCETS SHALL BE EQUIPPED WITH STANDARD HOSE THREAD SPIGOTS. DRAINS SHALL HAVE NO TRAP.
- DRINKING WATER SUPPLY: DRINKING WATER DISPENSED FROM AN ACCEPTABLE WATER COOLING DEVICE.
- 17. TESTING WATER SUPPLY: ONE HUNDRED GALLON WATER CAPACITY, VENTED, WITH MEANS OF DETERMINING WATER LEVEL, WITH ONE PRESSURE PUMP, MINIMUM 30 PSI DELIVERY PRESSURE. ONE COLD WATER FAUCET WITH BACK FLOW PREVENTER LOCATED OUTSIDE OF TRAILER. WATER PIPES SHALL BE LOCATED SO THEY ARE UNEXPOSED AND PROTECTED FROM DAMAGE. WATER SHALL BE SUPPLIED BY THE CONTRACTOR. USE POTABLE WATER ONLY.

- 18. TELEPHONES: TWO TELEPHONES. TWO PRIVATE LINES (1FB) WITH TOUCH TONE SERVICE (IF AVAILABLE) FROM THE LOCAL CARRIER. ONE LINE SHALL BE SHARED BY THE TWO TELEPHONES. THE SECOND LINE SHALL BE SHARED BY A COMPUTER AND A FACSIMILE MACHINE. THE CONTRACTOR SHALL PROVIDE AN EXCLUSION SWITCH (AB SWITCH) FOR THE COMPUTER AND FAX. TRAILER WIRING SHALL INCLUDE FOUR BOXES EQUIPPED WITH RJ-11 JACKS (TWO WIRE PAIRS PER JACK). TWO AT EACH END OF THE TRAILER. LOCATIONS WHERE PRIVATE LINE SERVICE IS NOT AVAILABLE, PROVIDE ONLY ONE TELEPHONE LINE.
- 19. **FIRE EXTINGUISHER:** DNE, DRY CHEMICAL, 10 LBS. CLASS ABC, UNDERWRITERS LABORATORIES, INC. APPROVED.
- 20. SIEVE SHAKER: ONE MOTOR DRIVEN STANDARD PORTABLE SHAKER INCLUDING:

A. A SAFETY SHIELD ON DRIVE BELT.
B. AN ADJUSTABLE TIMED - ON/OFF SWITCH LOCATED NEAR THE SHAKER.
C. ADAPTERS TO HANDLE EITHER 8 IN. OR 12 IN. SIEVES.

THE SHAKER SHALL BE CAPABLE OF SHAKING A FULL SET OF 8 IN. SIEVES AS WELL AS 12 IN. SIEVES, AND SHALL BE MOUNTED 24 IN. ABOVE THE FLOOR IN A SOUND PROOF, INSULATED ENCLOSURE HAVING HINGED OPENINGS.

THE SIEVE SHAKER SHALL BE A RO-TAP, ENDOCOTT FROM SOILTEST, SS-12R FROM GILSON OR APPROVED EQUAL. THE SHAKER SHALL BE SECURELY BOLTED TO A RIGID AND STURDY SURFACE.

- 21. RANGE: 30 IN. KITCHEN RANGE, ELECTRIC OR GAS, HAVING FOUR SURFACE BURNERS AND A 3.5 CU. FT. OVEN WITH REINFORCED OVEN RACKS.
- 22. FORCED AIR OVEN: IF A FORCED AIR OVEN IS REQUIRED, THE LOCATION WHERE THE OVEN IS PLACED SHALL HAVE A MINIMUM 3 IN DIAMETER PIPE INSTALLED AND VENTED TO THE OUTSIDE. (SEE M-620-2, SHEET 2 OF 2, GENERAL NOTE 27 FOR MORE REQUIREMENTS.)
- 23. MICROWAVE OVEN: ONE, 1.5 CU. FT. WITH AT LEAST FIVE POWER LEVELS AND A REVOLVING FLOOR OR ROTATING POWER SOURCE.
- 24. **ELECTRONIC BALANCE:** THE BALANCE SHALL COMPLY WITH AASHTO M 231 FOR GENERAL PURPOSE, CLASS G2 BALANCES, AND THE FOLLOWING:

A. POWER: 115 VAC

B. MODEL: TOP LOADING

C. CAPACITY: MINIMUM OF 35 LBS.

D. READABILITY AND SENSITIVITY: 0.0005 LB.

E. ACCURACY: 0.001 LB. 0R 0.1%

F. DISPLAY PANEL SHALL BE EQUIPPED WITH THE FOLLOWING:

LED DISPLAY ON/OFF KEY, PRINT KEY, RE-ZERO KEY, WEIGHING MODE KEY, SAMPLE % KEY, SERIAL RS-232C I/O PORT, AND A CALIBRATION SWITCH.
G. WEIGHING MODES: GRAMS, POUNDS, AND PERCENT OF TARGET MASS (WEIGHT).
H. WEIGHING SURFACE DIMENSION: MINIMUM OF 9 IN. WIDE BY 12 IN. DEEP.
I. BASE: SHALL HAVE ADJUSTABLE LEVELING FEET AND A LEVEL VIAL ATTACHED.

THE BALANCE SHALL BE EQUIPPED WITH AN UNDERHOOK WEIGHING DEVICE AND ONE COPY OF THE OWNER'S MANUAL.

- 25. SECURITY: THIS SYMBOL + ON THE FLOOR PLAN DENOTES AREAS ON THE TRAILER WHERE ADEQUATE PROTECTION AGAINST ILLEGAL ENTRY, VANDALISM AND THEFT SHALL BE PROVIDED.
- 26. THE REQUIREMENTS LISTED HEREIN ARE INTENDED TO MEET THE NEEDS OF THE CDDT TESTING PERSONNEL CONCERNING TESTING FACILITIES. THERE IS NO INTENT TO SPECIFY ANY STRUCTURAL PORTIONS OF THE LABORATORY EXCEPT AS NEEDED TO SATISFACTORILY PERFORM THE REQUIRED TESTING OF MATERIALS. THE CONTRACTOR MAY SUBSTITUTE CLASS 2 FIELD LABORATORY FOR CLASS 1 FIELD LABORATORY.

	COLD WATER FAUCET
JESH OR BARS COVER ALL WINDOWS	WATER TANK PUMP SINK
MESH	ELECTRICAL OUTLET WORK RANGE BENCH O O DECK AND STEPS WITH HANDRAIL ON EACH SIDE
<u>.</u>	ACCEPTABLE LOCATION MICROWAVE *
26'	HEAT'G. UNIT HEAT'G. WIN. TREADS * 20 IN. MIN. (TYP.) THESE 2 OUTI FTS ON
F-	SIEVE SHAKER AC GAUGE CABINET SIEVE SHAKER THESE 2 OUTLETS ON SEPARATE CIRCUITS.
+	DRINKING WATER COOLER BAR
	CHAIR *
	BOOK SHELVES COND.
	FLOOR PLAN

Colorado Department of Transportation



2829 West Howard Place CDOT HQ, 3rd Floor Denver, CD 80204

Project Development Branch

Phone: 303-757-9021 FAX: 303-757-9868

FIELD LABORATORY CLASS 1

STANDARD PLAN NO.
M-620-1
Standard Sheet No. 1 of 1

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