

INDEX OF DRAWINGS

- 1 - 3 TITLE SHEET
- 2 - 3 CONTAINMENT PLAN
- 3 - 3 DETAILS

CODE REQUIREMENTS

PLUMBING CODE - CURRENT IBC

# MISSOURI DEPARTMENT OF TRANSPORTATION

ST. LOUIS DISTRICT - EUREKA BRINE SECONDARY CONTAINMENT

ST. LOUIS COUNTY

EUREKA, MISSOURI

DESIGN BY: LARRY CARVER

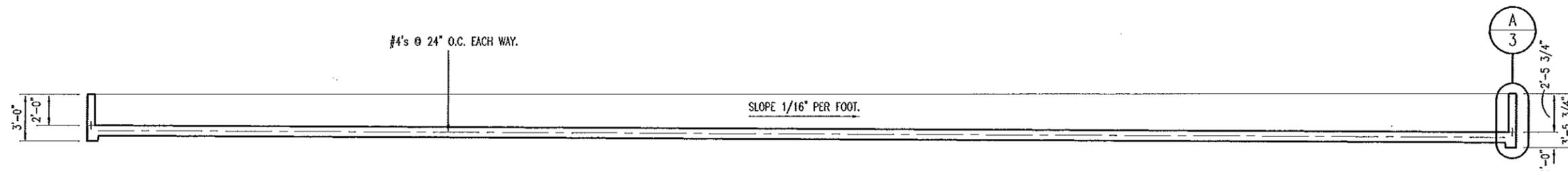
DRAWN BY: LARRY CARVER

DATE: 9-16-14

Brine Secondary Containment  
ST. LOUIS DISTRICT  
EUREKA, MISSOURI

MISSOURI DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

TITLE SHEET



**SECTION 2**  
SCALE: 1/8" = 1'-0"

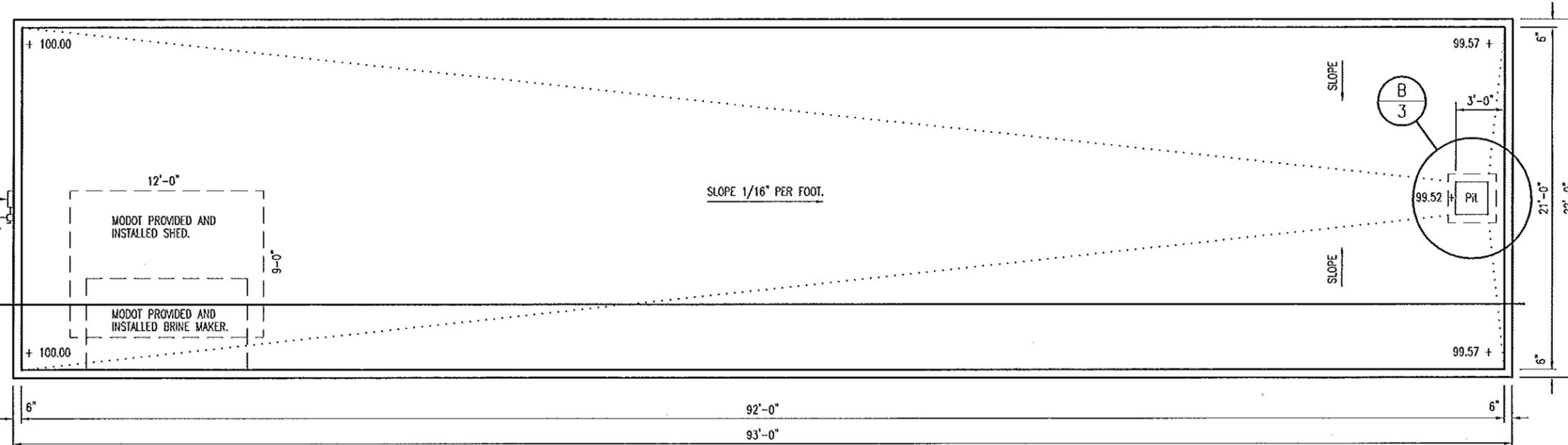
CONTRACTOR TO PROVIDE AND INSTALL:

SQUARE "D" NOOD OR EQUAL NEMA-3R, 16 SPACE PANEL. NEUTRAL BUS & GROUNDING BUS CIRCUIT BREAKERS - BOLT-IN 10000 AC  
 MAIN BUS: 100A MLO  
 VOLTS: 240/120, 1PH, 3-WIRE  
 BUS MATERIAL: COPPER  
 PROVIDE EIGHT 20A BREAKERS. MOUNT 36" TO TOP ON GALVANIZED UNISTRUTS.

INSTALL 100A FUSED NEMA 3R DISCONNECT W/100A FRN FUSE.

INSTALL #2 ECLIPSE HYDRANT OR APPROVED EQUAL. SEE DETAIL C-3.

PROVIDE 2" SCHEDULE 80 WATER LINE FOR A FUNCTIONAL SYSTEM.



**CONTAINMENT PLAN**  
SCALE: 1/8" = 1'-0"

DESIGN BY: LARRY CARVER  
 DRAWN BY: LARRY CARVER  
 DATE: 9-16-14

Brine Secondary Containment  
 ST. LOUIS DISTRICT  
 EUREKA, MISSOURI

MISSOURI DEPARTMENT  
 OF TRANSPORTATION  
 DIVISION OF GENERAL SERVICES  
 FACILITIES MANAGEMENT

CONTAINMENT PLAN

**CONTRACTOR NOTES:**

CONCRETE STRENGTH: 4,000 LB. PSI @ 28 DAYS.

CONCRETE FINISH: EXPOSED FORM FINISH SHOULD BE RUBBED DOWN OR CHIP AND SMOOTH FINS OR OTHER RAISED AREAS 1/4" OR MORE IN HEIGHT. REPAIR SURFACE DEFECTS, INCLUDING TIE HOLES, IMMEDIATELY AFTER REMOVING FORMWORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SMOOTH FINISHING OF ALL CONCRETE SLABS TO PROPER ELEVATION TO ENSURE THAT ALL SURFACE MOISTURE WILL DRAIN FREELY TO DRAIN.

TESTING: CONTRACTOR IS TO PULL ONE SAMPLE FROM FLOOR AND ONE FROM THE WALLS AND LEAVE AT EACH LOCATION. MODOT WILL PERFORM THE CYLINDER TESTING. CONTRACTOR SHOULD ALSO PROVIDE A DESIGN MIX FROM THE BATCH PLANT.

FILLING AND BACKFILLING: PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE THE SPECIFIED MOISTURE CONTENT. COMPACT EACH LAYER TO REQUIRED PERCENTAGE OF MAXIMUM DENSITY FOR THE AREA. FOOTPRINT OF CONTAINMENT STRUCTURE LEVELED BY MODOT 12" BELOW FINISHED FLOOR.

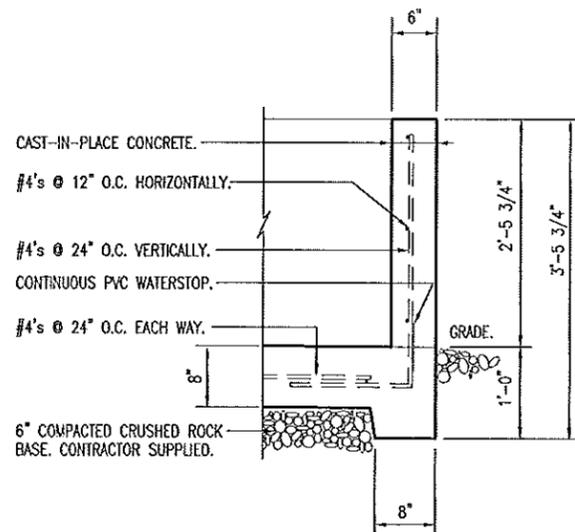
WATERSTOP: GREENSTREAK INC. - STYLE NUMBER 703, 6" x 3/16", PVC, RIBBED, SERRATED WITH CENTERBULB OR EQUAL. OPTIONAL: WATERSTOP RX WITH 2-1/2" x 1-1/2" KEYWAY.

EXCAVATION: CONTRACTOR TO SLOPE GRADE AWAY FROM NEW CONTAINMENT STRUCTURE AS REQUIRED WITH TYPE 5 ROCK BASE. (VERIFY)

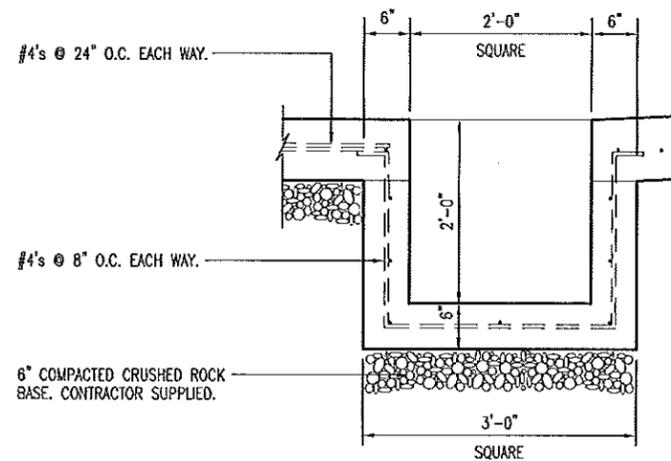
STAKING: STRUCTURE LOCATION STAKED BY CONTRACTOR AT MAINTENANCE SITE.

AIR ENTRAINMENT: EXPOSED EXTERIOR CONCRETE 6% ± 2%.

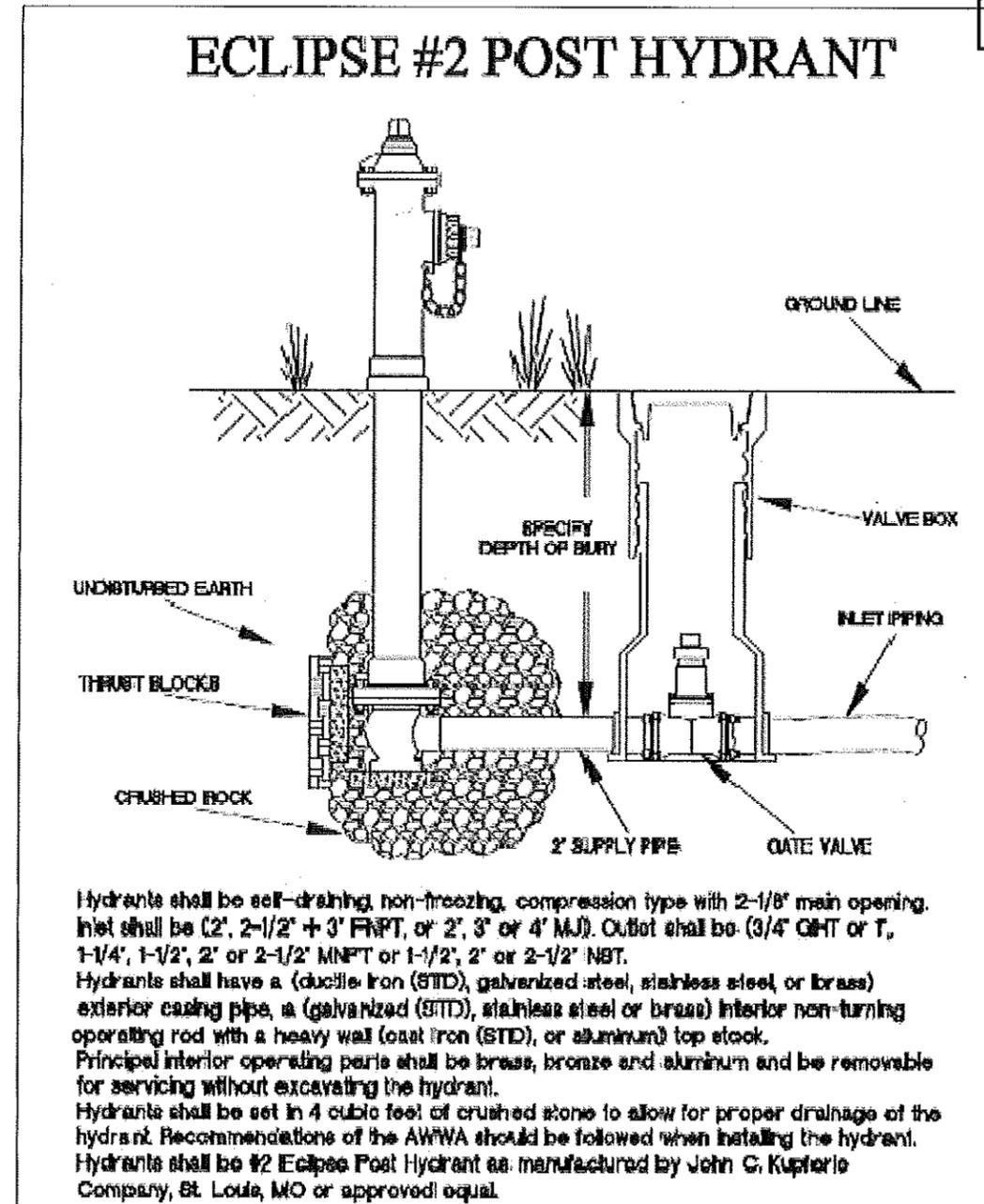
EXPANSION JOINTS: SAWCUT @ 20'-0" O.C. MAXIMUM 1-1/2" DEEP. ADD BACKER ROD AND SEALANT.



**A**  
3  
DETAIL  
SCALE: 1/2" = 1'-0"



**B**  
3  
CENTER ALONG 22'-0" WALL.  
SUMP PUMP PIT  
SCALE: 1/2" = 1'-0"



Hydrants shall be self-draining, non-freezing, compression type with 2-1/8" main opening. Inlet shall be (2', 2-1/2' + 3' FRPT, or 2', 3' or 4' MJ). Outlet shall be (3/4" GHT or T, 1-1/4", 1-1/2", 2' or 2-1/2' MNPT or 1-1/2", 2' or 2-1/2' NBT). Hydrants shall have a (ductile iron (STD), galvanized steel, stainless steel, or brass) exterior casing pipe, a (galvanized (STD), stainless steel or brass) interior non-turning operating rod with a heavy wall (cast iron (STD), or aluminum) top stock. Principal interior operating parts shall be brass, bronze and aluminum and be removable for servicing without excavating the hydrant. Hydrants shall be set in 4 cubic feet of crushed stone to allow for proper drainage of the hydrant. Recommendations of the AWWA should be followed when installing the hydrant. Hydrants shall be #2 Eclipse Post Hydrant as manufactured by John G. Kupperle Company, St. Louis, MO or approved equal.

**C**  
3  
OR EQUAL  
HYDRANT POST  
SCALE: NONE

DESIGN BY: LARRY CASPER  
DRAWN BY: LARRY CASPER  
DATE: 7-25-14

Brine Secondary Containment  
ST. LOUIS DISTRICT  
EUREKA, MISSOURI

MISSOURI DEPARTMENT  
OF TRANSPORTATION  
DIVISION OF GENERAL SERVICES  
FACILITIES MANAGEMENT

DETAILS