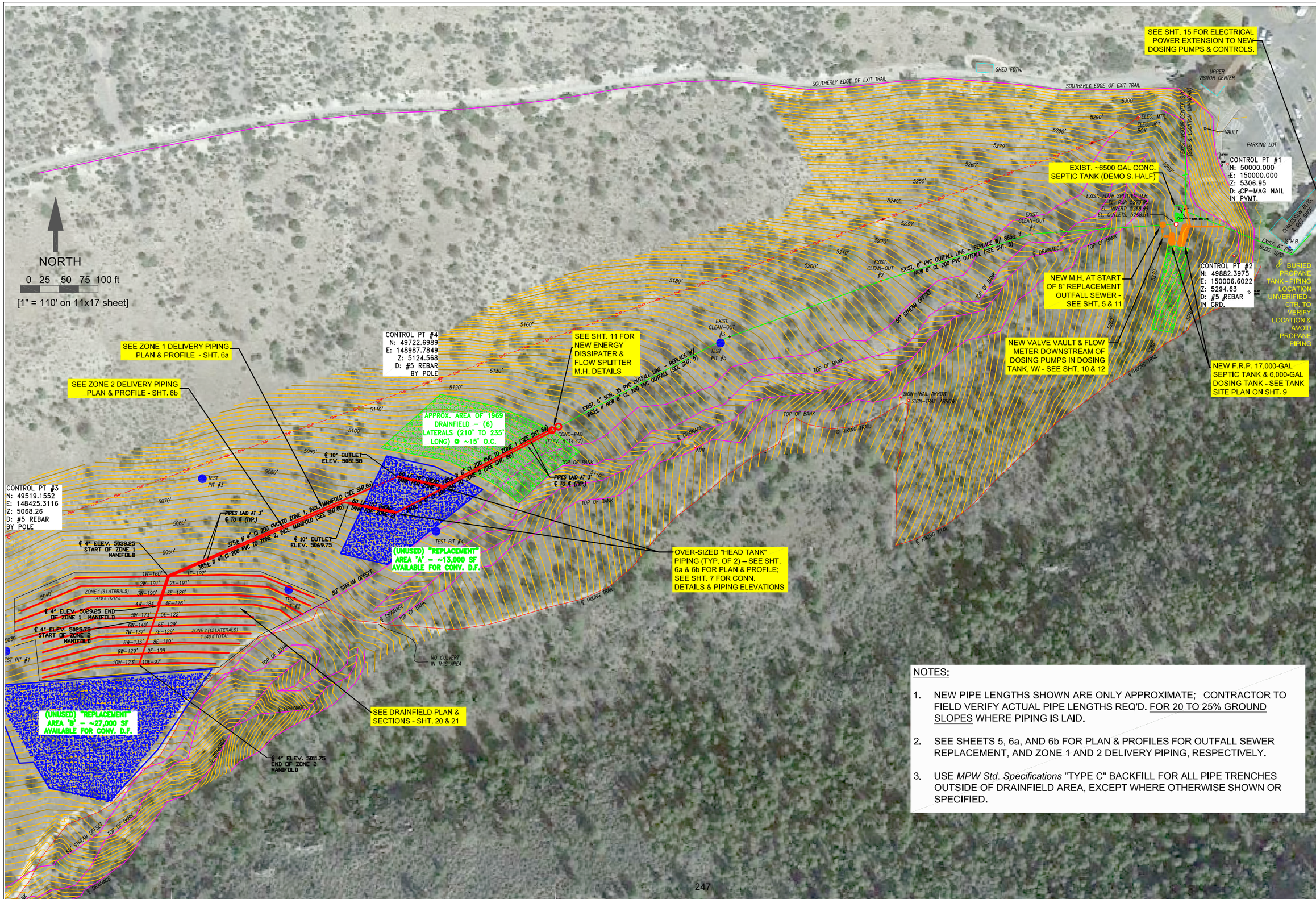
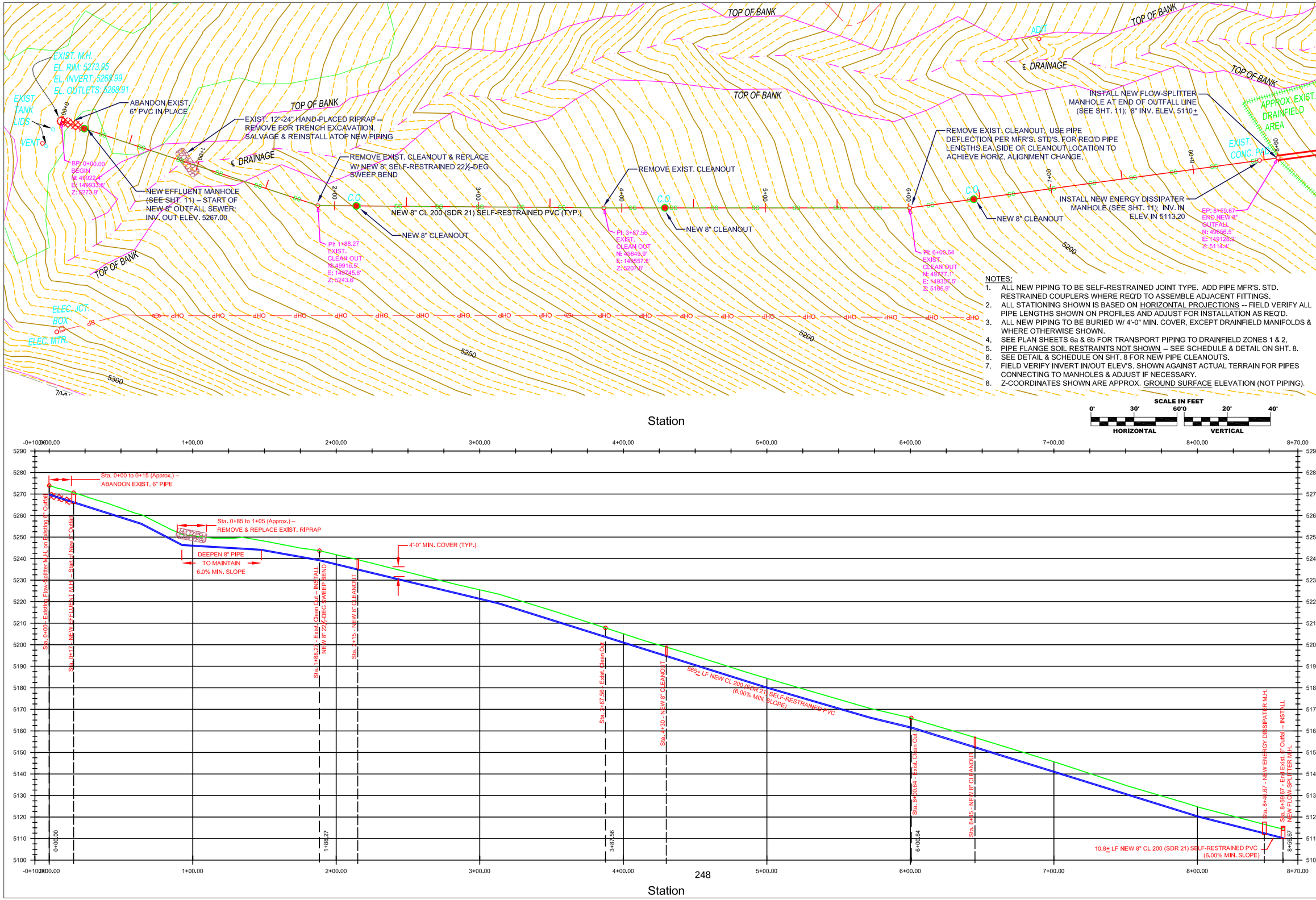


NOTES:

1. NEW PIPE LENGTHS SHOWN ARE ONLY APPROXIMATE; CONTRACTOR TO FIELD VERIFY ACTUAL PIPE LENGTHS REQ'D. FOR 20 TO 25% GROUND SLOPES WHERE PIPING IS LAID.
2. SEE SHEETS 5, 6a, AND 6b FOR PLAN & PROFILES FOR OUTFALL SEWER REPLACEMENT, AND ZONE 1 AND 2 DELIVERY PIPING, RESPECTIVELY.
3. USE *MPW Std. Specifications* "TYPE C" BACKFILL FOR ALL PIPE TRENCHES OUTSIDE OF DRAINFIELD AREA, EXCEPT WHERE OTHERWISE SHOWN OR SPECIFIED.

designed: Alden G. Beard. P.E.
date: July 31, 2017
revised: Feb. 21, 2019

Lewis & Clark Caverns State Park
Upper Visitor Center Septic Replacement
SITE PLAN WITH IMPROVEMENTS



NOTES:

1. ALL NEW PIPING TO BE SELF-RESTRAINED JOINT TYPE. ADD PIPE MFR'S. STD. RESTRAINED COUPLERS WHERE REQ'D TO ASSEMBLE ADJACENT FITTINGS.
2. ALL STATIONING SHOWN IS BASED ON HORIZONTAL PROJECTIONS -- FIELD VERIFY ALL PIPE LENGTHS SHOWN ON PROFILES AND ADJUST FOR INSTALLATION AS REQ'D.
3. ALL NEW PIPING TO BE BURIED W/ 4'-0" MIN. COVER, EXCEPT DRAINFIELD MANIFOLDS & WHERE OTHERWISE SHOWN.
4. SEE PLAN SHEETS 6a & 6b FOR TRANSPORT PIPING TO DRAINFIELD ZONES 1 & 2.
5. PIPE FLANGE SOIL RESTRAINTS NOT SHOWN -- SEE SCHEDULE & DETAIL ON SHT. 8.
6. SEE DETAIL & SCHEDULE ON SHT. 8 FOR NEW PIPE CLEANOUTS.
7. FIELD VERIFY INVERT IN/OUT ELEV'S. SHOWN AGAINST ACTUAL TERRAIN FOR PIPES CONNECTING TO MANHOLES & ADJUST IF NECESSARY.
8. Z-COORDINATES SHOWN ARE APPROX. GROUND SURFACE ELEVATION (NOT PIPING).

SCALE IN FEET
0' 30' 60'0 HORIZONTAL
20' 40' VERTICAL

Station

Station

sheet 5 of 25

designed: Alden G. Beard. P.E.
date: Dec. 21, 2018
revised: Feb. 21, 2019

Lewis & Clark Caverns State Park
Upper Visitor Center Septic Replacement
OUTFALL SEWER REPLACEMENT PLAN & PROFILE

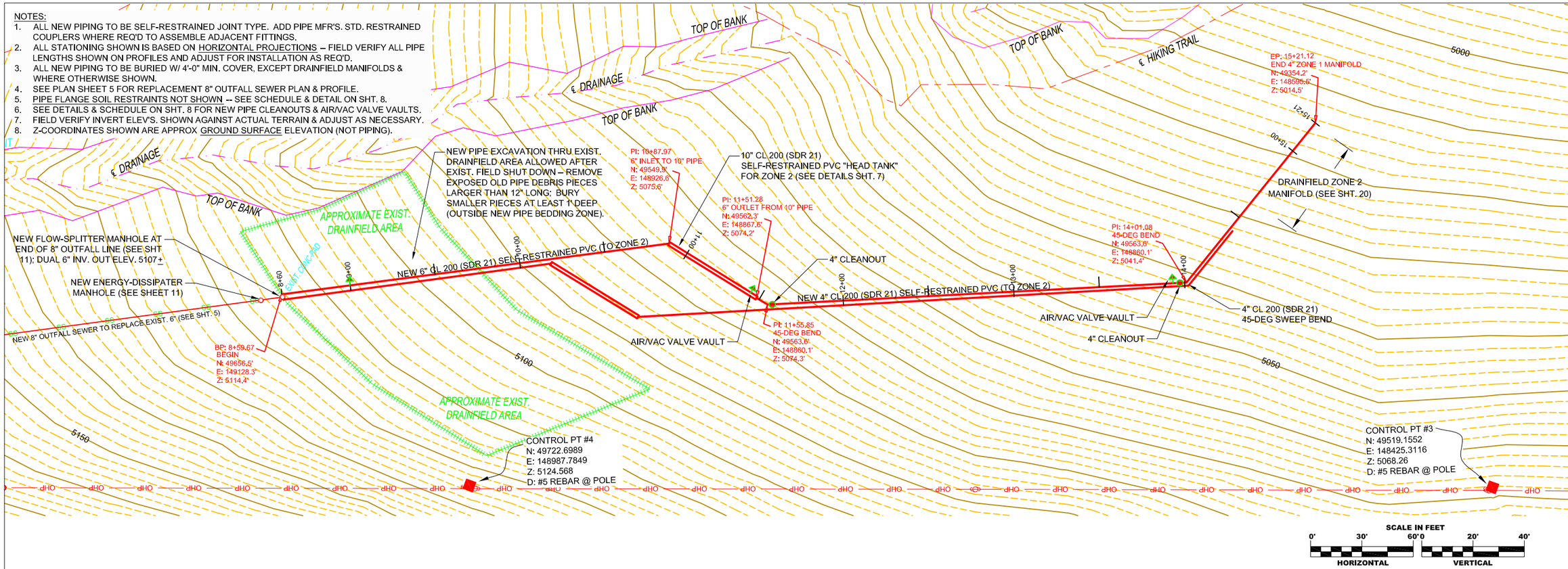
NOTES:
1. ALL NEW PIPING TO BE SELF-RESTRAINED JOINT TYPE. ADD PIPE MFR'S. STD. RESTRAINED COUPLERS WHERE REQ'D TO ASSEMBLE ADJACENT FITTINGS.
2. ALL STATIONING SHOWN IS BASED ON HORIZONTAL PROJECTIONS -- FIELD VERIFY ALL PIPE LENGTHS SHOWN ON PROFILES AND ADJUST FOR INSTALLATION AS REQ'D.
3. ALL NEW PIPING TO BE BURIED W/ 4'-0" MIN. COVER, EXCEPT DRAINFIELD MANIFOLDS & WHERE OTHERWISE SHOWN.
4. SEE PLAN SHEET 5 FOR REPLACEMENT 8" OUTFALL SEWER PLAN & PROFILE.
5. PIPE FLANGE SOIL RESTRAINTS NOT SHOWN -- SEE SCHEDULE & DETAIL ON SHT. 8.
6. SEE DETAILS & SCHEDULE ON SHT. 8 FOR NEW PIPE CLEANOUTS & AIR/VAC VALVE VAULTS.
7. FIELD VERIFY INVERT ELEV'S. SHOWN AGAINST ACTUAL TERRAIN & ADJUST AS NECESSARY.
8. Z-COORDINATES SHOWN ARE APPROX. GROUND SURFACE ELEVATION (NOT PIPING).

sheet 6a of 25

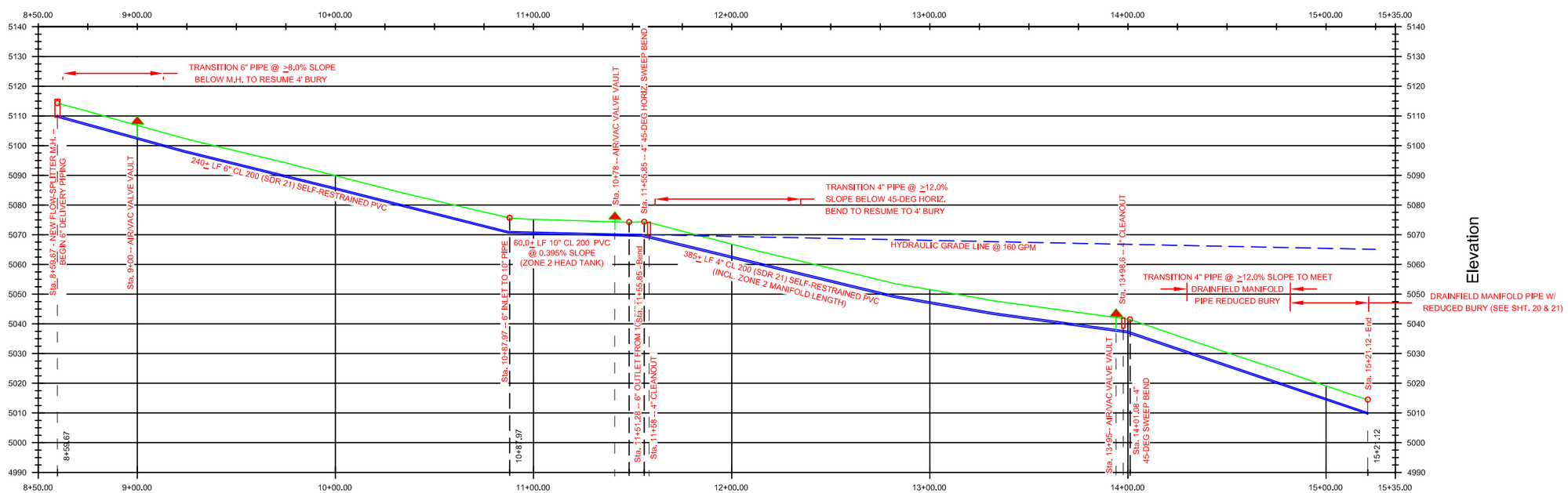
designed: Alden G. Beard. P.E.
date: Dec. 21, 2018
revised: Feb. 21, 2019

Lewis & Clark Caverns State Park
Upper Visitor Center Septic Replacement
DRAINFIELD ZONE 1 DELIVERY PIPING PLAN & PROFILE

NOTES:
1. ALL NEW PIPING TO BE SELF-RESTRAINED JOINT TYPE. ADD PIPE MFR'S. STD. RESTRAINED COUPLERS WHERE REQ'D TO ASSEMBLE ADJACENT FITTINGS.
2. ALL STATIONING SHOWN IS BASED ON HORIZONTAL PROJECTIONS – FIELD VERIFY ALL PIPE LENGTHS SHOWN ON PROFILES AND ADJUST FOR INSTALLATION AS REQ'D.
3. ALL NEW PIPING TO BE BURIED W/ 4'-0" MIN. COVER, EXCEPT DRAINFIELD MANIFOLDS & WHERE OTHERWISE SHOWN.
4. SEE PLAN SHEET 5 FOR REPLACEMENT 8" OUTFALL SEWER PLAN & PROFILE.
5. PIPE FLANGE SOIL RESTRAINTS NOT SHOWN -- SEE SCHEDULE & DETAIL ON SHT. 8.
6. SEE DETAILS & SCHEDULE ON SHT. 8 FOR NEW PIPE CLEANOUTS & AIR/VAC VALVE VAULTS.
7. FIELD VERIFY INVERT ELEV'S. SHOWN AGAINST ACTUAL TERRAIN & ADJUST AS NECESSARY.
8. Z-COORDINATES SHOWN ARE APPROX GROUND SURFACE ELEVATION (NOT PIPING).



SCALE IN FEET
0' 30' 60' 0 20' 40'
HORIZONTAL VERTICAL



sheet 6b of 25

designed: Alden G. Beard. P.E.
date: Dec. 21, 2018
revised: Feb. 21, 2019

Lewis & Clark Caverns State Park
Upper Visitor Center Septic Replacement
DRAINFIELD ZONE 2 DELIVERY PIPING PLAN & PROFILE