

**STATEMENT OF WORK**  
**Livestock Pipeline (516)**  
**Missouri**

**These deliverables apply to this individual practice. For other planned practice deliverables refer to those specific Statements of Work.**

## **DESIGN**

---

### **Deliverables:**

1. Topographical information shall be determined for each project.
  - a. Vertical elevations will be determined for all projects. Methods for determining elevations are included in Missouri Livestock Watering Systems Handbook.
  - b. Horizontal distances will be determined for all projects.
2. Detailed survey deliverables, when a detailed survey is required.
  - a. Survey notes shall be in accordance with NRCS Technical Release 62, Engineering Field Handbook, Chapter 1 and/or standard industry practice.
  - b. If survey equipment with automatic / electronic data collection devices is used, a print out of the data shall be included in the file.
  - c. A copy of the design elevation data shall be maintained in the file.
3. Design documentation that will demonstrate that the criteria in NRCS practice standard have been met and are compatible with other planned and applied practices.
  - a. Practice purpose(s) as identified in the conservation plan.
  - b. List of applicable permits to be obtained by the client.
  - c. Impacts on adjacent properties and structures.
  - d. Compliance with NRCS national and state utility safety policy (NEM Part 503-Safety, Subpart A - Engineering Activities Affecting Utilities 503.00 through 503.06).
  - e. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
    - i. Capacity
    - ii. Hydraulics
    - iii. Materials
    - iv. Backflow prevention
    - v. Climatic Considerations (e.g. freezing)
    - vi. Vegetation (See practice standard 342-Critical Area Planting)
4. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the requirements to install the practice and obtain necessary permits.
5. Design Report and Inspection Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512, Subpart D Quality Assurance Activities, 512.30 through 512.32).
6. Operation and Maintenance Plan
7. Certifications that the design meets practice standard criteria and comply with applicable laws and regulations (NEM Subpart A, 505.03(b)(2)).
8. Design modifications during installation as required.

## **INSTALLATION**

---

### **Deliverables**

1. Pre Installation conference with client and contractor.
2. Verification that client has obtained applicable permits.
3. Staking and layout according to plans and specifications including applicable layout notes.
4. Installation inspection (according to inspection plan as appropriate).
  - a. Actual materials used.
  - b. Inspection records
5. Facilitate and implement required design modifications with client and original designer.
6. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.
7. Certification that the installation process and materials meets design and permit requirements.

**STATEMENT OF WORK  
Livestock Pipeline (516)  
Missouri**

**CHECK OUT**

---

**Deliverables**

1. As-Built documentation.
  - a. Extent of practice units applied
    - Manufacturer and markings on pipe, length of lines by size, class of pipe, depth of installation, location and size of stands, vents, checks, air release valves, air vacuum valves, and pressure relief valves, number and location of outlets by size and type, location of thrust blocks, pressure test results.
  - b. Drawings
    - As built location map with pipe diameter(s) and segment length indicated.
  - c. Final quantities
  - d. Pressure acceptance test results
2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits (NEM Subpart A, 505.03(c)(1)).
3. Progress reporting.

**REFERENCES**

---

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard – Livestock Pipeline, 516
- NRCS National Engineering Manual (NEM).
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook
- NRCS Missouri Livestock Watering Systems Handbook