

STATEMENT OF WORK

Farmstead Energy Improvement

CODE (374)

DESIGN

Deliverables:

1. Design documents that demonstrate criteria in NRCS practice standard have been met and are compatible with planned and applied practices;
 - a. Practice purpose(s) as identified in the conservation plan;
 - b. List of required permits to be obtained by the client and regulations to be met along with other participant (client) responsibilities (Reference Form CO-ENG-13, Notification of Participant Responsibilities);
 - c. List of facilitating practices;
 - d. Practice standard criteria-related computations and analyses to develop plans and specifications; and
 - e. A copy of the most current energy audit report that forms the basis for the site specific recommended improvements.
2. 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. All applicable State and Federal (OSHA) safety requirements shall be addressed in the plans and specifications where appropriate;
3. An operation and maintenance plan;
4. Certification that the design meets practice standard criteria and comply with applicable laws and regulations;
5. Itemized cost estimate and list of materials; and
6. A summary of design modifications, if any, that were made during installation.

INSTALLATION

Deliverables

1. Conduct a pre-installation conference with client (Reference Form CO-ENG-13, Notification of Participant Responsibilities) ;
2. Provided verification that client has obtained all, if any, required permits;
3. A record of guidance provided during the installation process;
4. A record of assistance and information provided to the client and original designer as needed to facilitate and implement any required design modifications;
5. A record of all advise provided to the client/NRCS on compliance issues with federal, state, tribal, and local laws, regulations and NRCS policies during installation; and
6. Observation records and verification that the installation process and materials meets design and permit requirements. Form CO-ENG-1 may be used for this verification.

CHECK OUT

Deliverables

1. Implementation Records;
 - a. A description of the actual farm energy improvements that were completed in accordance with the practice standard and audit recommendations; and
 - b. A description of the actual materials used, including quantities where applicable.
2. Certification that the completed farm energy improvements meets NRCS standards, specifications and all design requirements and is in compliance with all applicable permits. Form CO-ENG-12 may be used for this certification; and
3. Progress reporting.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard 374 – Farmstead Energy Improvement
- CO-ENG Forms: eFOTG Section IV, Tools
- American Society of Agricultural and Biological Engineers. 2003. Heating, ventilating and cooling greenhouses. ANSI/ASAE EP406.4 JAN2003 (R2008). ASABE, St. Joseph, MI.
- American Society of Agricultural and Biological Engineers. 2008. Guidelines for selection of energy efficient agricultural ventilation fans. ASAE EP566.1 AUG 2008. ASABE, St. Joseph, MI.
- American Society of Agricultural and Biological Engineers. 2009. Performing On-Farm Energy Audits. ANSI/ASABE S612 JUL2009. ASABE, St. Joseph, MI.
- American Society of Heating, Refrigerating and Air Conditioning Engineers. 2010. Energy standard for buildings except low-rise residential buildings. ANSI/ASHRAE/IES, Standard 90.1. ASHRAE, Atlanta, GA.
- National Electric Manufacturing Association. 2006. Motors and generators. NEMA MG1 – 2009 (R2010). Rosslyn, VA.
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook