

REQUEST FOR PROPOSALS FENCE AND GATE

Sussex County is requesting proposals for the installation of a split rail fence and a farm gate at the Woodland Park in Seaford, Delaware. Woodland Park is located at the site of the former Woodland Golf Park at 27866 Woodland Road, Seaford, DE (Tax Map ID 5-31.00-15.00 Parcel 21). The work includes fence framework, excavation for post bases; concrete foundation for posts, and manual gates and hardware.

A site plan and drawings are included as part of this solicitation.

1.1 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.
- B. American Concrete Institute (ACI)
- C. ACI 301 – Standard Specifications for Structural Concrete
- D. ASTM International (ASTM)
 - 1. ASTM A36 – Carbon Structural Steel
 - 2. ASTM A47 – Ferritic Malleable Iron Castings
 - 3. ASTM A123 – Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products
 - 4. ASTM A153 – Zinc Coating (Hot-Dip) on Iron and Steel Hardware
 - 5. AASTM A392 – Zinc-Coated Steel Chain-Link Fence Fabric
 - 6. ASTM A491 – Aluminum-Coated Steel Chain-Link Fence Fabric
 - 7. ASTM A569 – Steel, Carbon (0.15 Maximum Percent), Hot-Rolled Sheet and Strip Commercial Quality
 - 8. ASTM B6 – Zinc
 - 9. ASTM C33 – Concrete Aggregates
 - 10. ASTM C94 (1996) – Ready-Mixed Concrete
 - 11. ASTM C131 – Resistance to Degradation of Small-sized Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
 - 12. ASTM C150 – Portland Cement
 - 13. ASTM C260 – Air-Entraining Admixtures for Concrete

1.2 SUBMITTALS

- A. Action Submittals
 - 1. Project Data: Provide data on fabric, posts, accessories, fittings and hardware.
 - 2. Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, and schedule of components.
- B. Informational Submittals
 - 1. Manufacturer’s Installation Instructions: Indicate installation requirements.
 - 2. Certificates: Mill certificates indicating material conformity to yield strengths specified herein.

- C. Closeout Submittals
 - 1. Project Record Documents: Accurately record actual locations of property perimeter posts relative to property lines and easements.
 - 2. Locks and Keys: Provide locks that are keyed alike and 2 keys for each lock.

1.3 QUALITY CONTROL

- A. Perform Work in accordance with manufacturer's instruction.
- B. Submit manufacturer's erection and installation drawings and instructions that detail proper assembly and materials in the design for fence, gate, hardware and accessories.
- C. Submit erection and installation drawings along with manufacturer's catalog data for complete fence assembly, gate assembly, hardware assembly and accessories.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to site in an undamaged condition.
- B. Store materials off the ground.
- C. Protect materials from damage. Materials will be subject to inspection to ensure suitable condition prior to and during the work.
- D. Replace damaged fence materials at no additional cost to the Owner.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

PART 2 - PRODUCTS

2.1 SPLIT RAIL POSTS

- A. Posts
 - 1. Line posts:
 - a. 4-inch x 4-inch (nominal) pressure treated wood
 - b. 6-foot minimum length
 - c. Three (3) 4.5-inch high x 2.5-inch wide vertical slots spaced 10-inches apart.
 - 1) Slots cut through post
 - d. 45 degree beveled angle cut at top of post on 4 sides.
 - 2. Terminal posts:
 - a. 4-inch x 4-inch (nominal) pressure treated wood
 - b. Three (3) 4.5-inch x 2.5-inch wide vertical slots spaced 10-inches apart.
 - 1) Slots cut into one side of the post 2-inches deep
 - c. 45 degree beveled angle cut at top of post on 4 sides.

- B. Top rails and brace rails
 - 1. 4-inch x 2-inch (nominal) pressure treated wood with tapered tips;

2.2 FARM GATE AND POSTS

- A. Terminal posts:
 - 1. 2.5-inch (nominal) Schedule 40 steel pipe, weighing at least 5.79 pounds per linear foot, and cut with plain ends;
 - 2. Galvanized in accordance with ASTM A123 and ASTM A153
- B. Post-top castings
 - 1. Flat style post top per ASTM A47 and fit over the outside of posts.
- C. Gate
 - 1. Frame
 - a. 2-1/2-inch square tubing weighing 5.59 pounds per linear foot
 - 2. Cross Bars
 - a. 2-inch (nominal) 16 gauge steel pipe weighing
 - 3. Galvanized in accordance with ASTM A123 and ASTM A153
 - 4. Painted green using exterior paint appropriate for galvanized metal or provide manufacturer vinyl coating.
 - a. Sherwin Williams or approved equal.
- D. Hardware
 - 1. Galvanized hinges
 - 2. Galvanized fulcrum latch with strike strap.

2.3 CONCRETE

- A. ASTM C94, Alternate No. 3, compressive strength no less than 3,000 psi at 28 days.
- B. Slump: between 3 inches and 5 inches.
- C. Ensure concrete contains amount of Portland cement required for size of aggregate used, as noted in Table 3.8.5.1b, ACI 301.
- D. Less Portland cement maybe used if supplier can demonstrate to the satisfaction of the Owner that the proposed portions will produce concrete of acceptable durability and surface hardness, and will meet the strength requirements specified.
- E. Provide air entrained concrete with an air content of 5 percent, $\pm \frac{1}{2}$ percent.
- F. Portland cement
 - 1. ASTM C150, Type I or II.
 - 2. Do not use air-entrained Portland cement. Instead, add air-entraining admixture conforming to ASTM C260 (mixed in strict accordance with the manufacturer's directions) to the mix at the batch plant.
- G. Aggregate

1. ASTM C33. Coarse aggregate conforming to Gradation No. 57.
2. Abrasion loss for coarse aggregate: Do not exceed 40 percent when tested in accordance with ASTM C131.

PART 3 - EXECUTION

3.1 ERECTION OF SPLIT RAIL FENCE

- A. Install split rail fence at post height of 54-inches.

3.2 POSTS

- A. Set line posts no more than 10 feet on centers and to a depth of 18 inches below finished grade.
- B. Set posts at locations shown on the Drawings and where otherwise required, to a minimum depth of 18 inches below finished grade.
- C. Install rails between fence posts.

3.3 FARM GATE AND POSTS

- A. Set posts in concrete, 6 inches deeper than the bottom of the post, and not less than 12 inches in diameter.
- B. Finish top of each concrete base with a 1-inch crown from post to edge of base at finished grade.
- C. Mount gate on post using hinges and latching hardware.

INSTRUCTIONS TO BIDDERS:

- Bids shall be submitted to Ms. Juel Gibbons by or before **2PM on October 30, 2015**, Third Floor, Sussex County Administration Building, 2 The Circle, P.O. Box 589, Georgetown, DE 19947, ATTN: Juel Gibbons. Bids may also be submitted by email (jgibbons@sussexcountyde.gov), or via fax to 302-855-7799.
- All bids shall remain valid for 30 calendar days from the time set for bid opening. A bidder may withdraw their bid after it has been submitted, only if the request to do so has been submitted in writing and received prior to the time set for bid opening.
- All bidders are hereby notified that Sussex County Engineering Department reserves the right to reject any or all bids, and to waive informalities at its discretion.

SCHEDULE:

A purchase order will be provided to the vendor after the proposal is awarded. The work must be completed within **thirty (30) days** from Return Receipt of Approved Submittals.

BID FORM:

LINE #	QTY	Units	DESCRIPTION	UNIT PRICE	LINE TOTAL
1	1,400	L.F.	SPLIT RAIL FENCE		
2	1	Each	FARM GATE		
			TOTAL BID:		