



WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

SPECIFICATIONS

FOR

BARKER ROAD SOUTH REMEDIAL ACTION

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CONSTRUCTION SPECIFICATIONS

SPOKANE RIVER METALS SITES:

BARKER ROAD SOUTH
REMEDIAL ACTION

SPOKANE VALLEY, WASHINGTON

Prepared for
WASHINGTON STATE DEPARTMENT of ECOLOGY

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BARKER ROAD SOUTH REMEDIAL ACTION

BACKGROUND

The Barker Road South site is located on the south bank of the Spokane River. The goal of this remedial action is to prevent direct contact with contaminated sediment by constructing a fence along the Centennial Trail to limit access to the river bank. The area where the fence is to be constructed is not contaminated. The Barker Road South site can be accessed from North Barker Road via exit 293 on I-90. The site is located immediately south and east of the Barker Road Bridge. There is a potential material and equipment staging area in a small parking lot just south and east of the Barker Road Bridge. Use of this staging area must be confirmed with Ecology's representative prior to the start of construction.

PART 1 GENERAL

1.1 GENERAL

- A. The Washington State Department of Ecology (Ecology) is conducting a remedial action at the Barker Road South site as part of a Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) action.
- B. The Work consists of construction of a fence adjacent to the Centennial Trail at the Barker Road South site. Complete the construction in accordance with the Drawings, Specifications, and other documents as referenced or included.
- C. Construct the work under a Public Works contract.
- D. Construction includes, but is not limited to furnishing all equipment, materials, labor, disposal of all debris and trash, and all other work necessary to complete the work as defined in the Contract Documents
- E. Contractor is responsible for setting construction limits, restricting site access, and establishing safe distances for work to take place.
- F. The Contractor shall provide a flagger during work hours and post signage on the Centennial Trail alerting trail users to the construction zone.
- G. Prospective bidders must attend a mandatory site walk will occur on August 12, 2009 at 10 a.m.

1.2 SUBMITTALS

- A. Shop drawings: Layout of fences with dimensions, details, and finishes of components, accessories, and post foundations.
- B. Product data: Manufacturer's catalog cuts indicating material compliance and specified options.

1.3 WARRANTY

- A. Provide Manufacturer's standard warranty.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Products must be manufactured by manufacturers having a minimum of five years experience manufacturing galvanized coated chain link fencing.
- B. Commercial grade galvanized coated chain link fencing and accessories only.
- C. Obtain chain link fences, including accessories, hooks, stretcher rod, fittings, and fastenings, from a single source.

2.2 CHAIN LINK FENCE FABRIC

- A. Galvanized wire: Zinc coated Wire, ASTM A 392 - 1.2oz/sf. (Wire Spec-A817-83), Class 1 or Class 2.
- B. Size: Helically wound and woven to height of 5 feet (See Drawings) with 2-inch diamond mesh, 9-gauge.

2.3 STEEL FENCE FRAMING

- A. Framing (Steel) - Type I: ASTM F 1083, standard weight Schedule 40; welded construction; minimum yield strength of 30,000 psi (205 MPa); sizes as indicated on Drawings. Hot-dipped galvanized with minimum average 1.8 oz/ft² (550 g/m²) of coated surface area.

2.4 ACCESSORIES

- A. Chain link fence accessories: [ASTM F 626] Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing.

- B. Top rail sleeves: 7-inch expansion sleeve with a minimum 0.137-inch wire diameter and 1.80-inch length spring, allowing for expansion and contraction of top rail.
- C. Tension (stretcher) rod: One piece, lengths equal to 2 inches less than full height of fabric with a minimum cross-section of 3/16-inch x 3/4-inch. Provide tension (stretcher) rod where chain link fabric meets terminal posts. Thread the rod through the fabric and attach to posts using tension bands (see Drawings).
- D. Nuts and bolts are galvanized.
- E. Fence wire: Weave fence wire in the bottom of fence fabric to add rigidity and prevent access under the fence.
- F. Use standard 9-gauge tie wires to connect fence fabric to top rail and center posts.

2.5 SETTING MATERIALS

- A. Portland Cement Concrete: [ASTM C94] Minimum 28-day compressive strength of 3,000 psi (20 MPa).

PART 3 EXECUTION

3.1 EXAMINATION

- A. No clearing and grubbing is expected to install the fence. Removal of vegetation must be pre-approved by Ecology or its representative.
- B. The fence is being constructed within Washington State Parks Land.
- C. Stake fence prior to construction. Prior to construction, verify with Ecology, or its representative, the fence alignment and tie-in locations. Abut eastern end of fence to existing vegetation. Abut the western end of the fence to an existing steel fence near the Barker Road Bridge.

3.2 CHAIN LINK FENCE FRAMING INSTALLATION

- A. Install chain link fence in accordance with ASTM F567 and manufacturer's instructions.
- B. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
- C. Space line posts uniformly at 10 feet on center.

- D. Concrete set posts: Drill post holes in firm, undisturbed or compacted soil. Post holes shall have a 12-inch diameter for posts (see Drawings). Set posts approximately 2.5 feet below ground surface. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts.
- E. Check each post for vertical (10 feet on center) and top alignment, and maintain in position during placement and finishing operations. Posts shall be set plumb, perpendicular to the ground, within ¼-inch of the post vertical centerline. Set posts in uniform and equal height above ground with a maximum fabric clearance of 3 inches above ground surface (see Drawings).
- F. Top rail: Install lengths, 10 feet. Connect joints with sleeves for rigid connections for expansion/contraction.
- G. Call 1-800-424-5555 before drilling post holes.

3.3 CHAIN LINK FABRIC INSTALLATION

- A. Fabric: The fabric shall be stretched using the stretcher rods. Attach fabric to vertical end posts using tension bands (see Drawings). For the inner posts, use standard 9-gauge tie wires to secure fence to the post and top rail.
- B. Tension (stretcher) rods: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands or clips spaced a maximum of 15 inches (381 mm) on center.

3.4 CLEANING

- A. Clean up debris and unused material; remove from the site and dispose of properly.