

**ITEM 013210**

**Item 0132101 - 4' GALVANIZED CHAIN LINK FENCE**

**Item 0132102 - 5' GALVANIZED CHAIN LINK FENCE**

**Item 0132103 - 6' GALVANIZED CHAIN LINK FENCE**

**Item 0132104 - 8' GALVANIZED CHAIN LINK FENCE**

**Item 0132105 - 10' GALVANIZED CHAIN LINK FENCE**

**Item 0132106 - 12' GALVANIZED CHAIN LINK FENCE**

**Item 0132107 - 14' GALVANIZED CHAIN LINK FENCE**

**Item 0132108 - 4' VINYL COATED GALVANIZED CHAIN LINK FENCE**

**Item 0132109 - 5' VINYL COATED GALVANIZED CHAIN LINK FENCE**

**Item 0132110 - 6' VINYL COATED GALVANIZED CHAIN LINK FENCE**

**Item 0132111 - 8' VINYL COATED GALVANIZED CHAIN LINK FENCE**

**Item 0132112 - 10' VINYL COATED GALVANIZED CHAIN LINK FENCE**

**Item 0132113 - 12' VINYL COATED GALVANIZED CHAIN LINK FENCE**

**Item 0132114 - 14' VINYL COATED GALVANIZED CHAIN LINK FENCE**

**DESCRIPTION**

This item shall include furnishing materials and installing galvanized chain link fence or vinyl coated galvanized chain link fence including terminal, corner, and line posts, horizontal rails, concrete footings, all miscellaneous hardware, excavation, backfill and repairs to lawn areas in the location as shown on the plans or as shown in the details and as further specified herein.

**REFERENCED ITEMS**

0106201 and 0106401

**REQUIRED SUBMITTALS**

Material Certificate of Compliance:

Submit 5 copies of material certificate of compliance for vinyl coating in accordance with the contract general requirements.

Certified Test Report:

Submit 5 copies of certified test reports for vinyl coating in accordance with the contract general requirements.

Shop Drawings:

Submit 5 copies of shop drawings for chain link fence in accordance with the contract general requirements.

## **MATERIALS**

### **1. CHAIN LINK FABRIC**

All fabric shall be hot dipped galvanized steel conforming to ASTM A-392-03 and coated with 1.2-oz zinc per square foot. Fabric shall be 9-gauge wire, helically woven into a two in (2") diamond mesh. Salvages shall be knuckled at one salvage and twisted at the other. Fabric to be placed to inside of framework except where noted. All chain link fence components shall be vinyl coated in accordance with the following description for vinyl coated materials if specified in the Pay Item, and/or as detailed on the plans.

### **VINYL COATED MATERIALS**

Vinyl coated chain link fence shall conform to the standards of the Colorbond II Process, as specified by Color Guard Fence Products, Inc. or approved equal.

Chain link fabric shall be coated with a vinyl bonded process. All fabric, posts, and fittings shall comply with the Munsell Color System. Color to be approved by the engineer.

### **2. FRAMEWORK**

All posts used in the construction shall be allied SS-40 galvanized pipe, manufactured from steel conforming to ASTM A-569, cold-rolled and triple coated with 1.0 +/- 0.1 oz. Zinc chromate. All threads on bolted connections shall be spot welded or destroyed in such a manner as to prevent the removal of these connections.

#### **A. Line Posts**

Line posts shall be 2-1/2" (2.375") O.D. SS-40 pipe weighing 3.12 lbs. per linear foot. All line posts shall be evenly spaced in the fence line, maximum 10' centers.

B. Terminal Posts

End, corner, and pull posts shall be 3" (2.875") O.D. SS-40 pipe weighing 4.64 lbs. per linear foot.

C. Braces

Braces shall be 1-5/8" (1.660") O.D. SS-20 pipe weighing 2.27 lbs. per linear foot. Braces shall be installed from each corner, end or gate post to the adjacent line post, securely fastened, then trussed from line post to terminal with a 3/8" diameter truss rod and turnbuckle tightener.

D. Tension Wire

Tension wire shall be 7-gauge high carbon steel coil spring wire, installed along the bottom of the fence, approximately 6" above grade.

NOTE: Where fencing is installed adjacent to baseball fields, bottom rails should be substituted for tension wire in the infield areas. All requirements of top rails should be applied to bottom rails at this location.

E. Fabric Connections

The chain link fabric shall be securely fastened to all intermediate posts with either double 13 gauge (.093 in.) steel tie wires or 6 gage steel wire clips, spacing not to exceed 12" apart; top rail middle rail (if required), and bottom rail (if required) with 13 gauge (.093 in) steel tie wires, spacing not to exceed 18" apart; terminal, corner, and gate posts by either integrally weaving into the post or by using 1/4" X 3/4" tension bars tied to the post every 12" with 11 gage 1" wide steel tension bands and 3/8" diameter bolts and nuts.

F. Top Rail and Middle Rail

The top rail shall be 1-5/8" O.D. hot-dip galvanized steel seamless pipe weighing not less than 2.27 lbs. per linear foot with 6" long outside sleeve type couplings and provision for expansion and contraction of the rail where the run is 100 foot or more. The top rail shall pass through a hole in the top fitting of line posts and shall be securely fastened to fittings on terminal posts. Middle rail shall be 1-5/8" O.D. as stated above and shall be provided for fence with a

height of 12 feet or more. All pertinent provisions shall apply to the middle rail.

G. Fittings

Fittings shall be galvanized, malleable iron or pressed steel and shall be hot dip galvanized conforming to the requirements of ASTM A-153-03. End rail clamps shall create a rigid connection between post and rail (hinged connections will not be accepted). All posts shall have top fittings of ornamental design. Top fittings on end, corner and gate posts shall fit over the pipe or tubing to prevent entry of water. All bolts shall be galvanized steel or aluminum. The minimum thickness of the metal in all fittings shall be 7/64".

All fittings shall be securely fastened with snake eye screws or other method approved by the Engineer to prevent their removal.

H. Latch, Stop and Keepers

Latch shall have the plunger-bar and arranged to engage the gate stop and for locking. Center stop shall consist of a device arranged to be set in concrete and to engage the plunger of the bar latch of the gates. Keepers shall consist of a mechanical device for securing the free end of the gate when in the full open position.

3. **CONCRETE**

All concrete materials for this work shall conform to the requirements of Section M.03 of the State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, 2004, for Class "A" concrete.

**CONSTRUCTION METHODS**

1. **POST SPACING AND SETTING**

Posts shall be spaced on the line of the fence not more than ten feet apart on centers. All posts shall be set at least forty two inches below the finished grade and shall be set in concrete. The concrete footing shall encase the line post, and at least eight inches in diameter at ground level (12" minimum diameter for fencing 8 feet or greater in height). Corner, end, and gate posts shall be a minimum of twelve inches in diameter. The top of all the footings

shall be pitched 2" from post to edge of footings to prevent water from standing around the post. The concrete shall be placed on and against undisturbed earth.

**2. WORKMANSHIP**

All posts shall be set true in line and grade. Gates shall be hung squarely, fabric shall be stretched taut. All work shall be completed by trained workers with previous experience in the erection of fencing.

**3. REPAIRS TO LAWN AREAS**

All disturbed lawn areas shall be restored to original condition at the completion of work. The contraction methods and materials for this work shall be a specified in items 0106201 and 0106401.

**METHOD OF MEASUREMENT**

This work will be measured for payment by the number of linear feet chain link fence erected and accepted.

**BASIS OF PAYMENT**

This work will be paid for at the contract unit price per linear foot of "GALVANIZED CHAIN LINK FENCE" or "VINYL COATED GALVANIZED CHAIN LINK FENCE" erected and accepted, including all equipment, tools, repair to lawn areas, labor and incidental expenses thereto.

NOTE: Transition sections will be paid for by LF cost of greater height of adjacent fence sections.

<b><u>PAY ITEM</u></b>	<b><u>DESCRIPTION</u></b>	<b><u>PAY UNIT</u></b>
0132101	4' Galvanized Chain Link Fence	LF
0132102	5' Galvanized Chain Link Fence	LF
0132103	6' Galvanized Chain Link Fence	LF
0132104	8' Galvanized Chain Link Fence	LF
0132105	10' Galvanized Chain Link Fence	LF
0132106	12' Galvanized Chain Link Fence	LF
0132107	14' Galvanized Chain Link Fence	LF
0132108	4' Vinyl Coated Galvanized Chain Link Fence	LF
0132109	5' Vinyl Coated Galvanized Chain Link Fence	LF
0132110	6' Vinyl Coated Galvanized Chain Link Fence	LF

0132111	8' Vinyl Coated Galvanized Chain Link Fence	LF
0132112	10' Vinyl Coated Galvanized Chain Link Fence	LF
0132113	12' Vinyl Coated Galvanized Chain Link Fence	LF
0132114	14' Vinyl Coated Galvanized Chain Link Fence	LF