

SECTION S607 – FENCING AND VEHICLE BARRIER GATE

S607-1 DESCRIPTION

Work consists of furnishing and erecting fencing including fence gates, and vehicle barrier gate, in reasonable close conformity with location, lines and grades as required in Contract Documents and as directed by Project Manager.

For purposes of this specification, all references are in accordance with *NYSDOT Standard Specifications (US Customary Units dated May 1, 2008)* edition, including any addendums.

S607-2 MATERIALS

S607-2.01 Galvanized Chain Link Fence

Materials are to be in accordance with NYSDOT Section 700 Materials Details:

Galvanized Steel Fence Fabric	710-02
Steel and Iron Posts, Rails, Braces and Fittings for Chain Link Fence	710-10

Gate frames are to be composed of tubing braced with rods, bars or angles and filled with wire mesh meeting requirements of specifications for type of fencing with which gate is to be used.

Use of reconditioned materials is unacceptable and will not be permitted.

S607-2.02 Slats

Slats are to be heavy duty polyvinyl commercial 2 inch width for installation in 2 inch mesh chain link, color as specified in Contract Documents. Slats are to be Type A-9 as manufactured by PDS Division of A & B Plastics, Inc., or approved equivalent.

S607-2.03 Stockade Fence

Fencing and posts are to be of white cedar and in length as normally supplied for stockade fencing by manufacturer. Portions of posts installed below grade are to be pre-treated with wood preservative in accordance with requirements of American Wood Preservers Association (AWPA).

S607-2.04 Vehicle Barrier Gate

Materials are to be in accordance with NYSDOT Section 700 Materials Details:

Steel and Iron Posts, Rails, Braces and Fittings for Chain Link Fence	710-10
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Vehicle barrier gate is to be capable of swinging open, rotating full circle, is to be lockable, and shop painted with safety yellow alkyd enamel paint.

Vehicle barrier gate is to be supplied with heavy-duty weatherproof security lock with 3 keys.

S607-2.05 Concrete for Post Footer

Concrete for post footer is to be Class K in accordance with Section S504 Portland Cement Concrete.

S607-3 CONSTRUCTION DETAILS

S607-3.01 General

Prior to installation, utility stake out is to be done to avoid conflict with existing underground utilities.

Clearing and grubbing is to be done as necessary to construct fence or vehicle barrier gate to required grade and alignment.

Fence is to generally follow contour of ground, set rue to line and grade. Re-grade spot areas of existing surface as necessary to provide for overall neat appearance.

Posts are to be set plumb within concrete footer. Post is to be encased within concrete footer, and top of concrete footer slightly domed above ground surface. If required, tops of posts may be cut but only as approved by Project Manager.

Posts are to be spaced equidistant in fence line, making adjustment in post spacing to account for breaks in run of fencing and for intersections with existing fences. When fence is on long curve, intermediate posts are to be evenly spaced so that strain of fence will not bend posts.

Where posts, braces, or anchors are to be imbedded in concrete footer, temporary guys or braces may be required to hold posts in proper position until such time as concrete footer has set sufficiently to hold post in place. Unless otherwise approved by Project Manager, no materials are to be installed on posts or strain placed on guys and bracing, until after 7 calendar days have elapsed from time of placement of concrete footer.

Wire or fencing is to be firmly attached to posts and braces. Wire is to be stretched taut at required elevations. Where electric transmission, distribution or secondary line crosses fence, ground is to be installed in accordance with Subsection 9 of National Electric Safety Code.

S607-3.02 Chain Link Fence

A. General

Posts are to be set generally 8 to 10 feet on center and are to be equidistant. Top rails are to pass through base of post caps and are to form continuous brace from end to end of each stretch of fence. Individual top rail sections are to be joined with sleeve couplings with expansion sleeves provided at 100 feet intervals. Top rails are to be securely fastened to end posts by means of rail end connectors. Horizontal braces with diagonal truss rods are to be provided at intermediate posts, midway between top rail and ground.

Fence fabric is to be securely fastened along bottom and to braces, top rails and posts. Bottom of fabric is to be 4 inches +/- 1 inch above ground level. Fabric is to be secured to end, corner and gate posts with stretcher bars fastened to post. Stretcher bands are to be provided at maximum of every 14 inches, and in manner permitting proper adjustment of fabric tension. Fabric ties are to be double looped.

Where one piece roll-formed fabric sections are used, fabric is to be integrally woven into fabric loops on end, corner, pull and gate posts. Fabric is to be attached to top braces and line posts.

Areas of galvanizing that are damaged in field prior to and during erection of vehicle barrier gate are to be repaired in accordance with NYSDOT Subsection 719-01 Galvanized Coatings and Repair Methods.

B. Fence Gates

Fence gates are to be constructed of type and size at location(s) as indicated in Contract Documents.

C. Slats

PDS slats are to be installed with holding channels and metal clips, in accordance with manufacturer's recommendations and as approved by Project Manager.

S607-3.03 Vehicle Barrier Gate

Vehicle barrier gate is to be installed in accordance with manufacturer's instructions. Shop drawings indicating details of all connections and locking mechanisms are to be submitted to Project Manager for approval prior to installation of gate.

Areas of galvanizing that are damaged in field prior to and during erection of vehicle barrier gate are to be repaired in accordance with NYSDOT Subsection 719-01 Galvanized Coatings and Repair Methods.

Areas of paint that are damaged in field prior to and during erection of vehicle barrier gate are to be repaired after installation is complete.

S607-3.04 Relocate Existing Fence

Existing fence including posts and gates are to be removed in such manner that existing materials are not damaged by Contractor's operations. Materials damaged by Contractor's operations must be repaired to satisfaction of Project Manager, or replaced with new materials. Posts are to be cleaned of all extraneous materials.

Existing concrete footers are to be removed and disposed of, and holes that are not to be re-used, backfilled.

Fence is to be re-installed in accordance with Subsection S607-3 Construction Details.

Galvanizing damaged in field prior to and during erection of vehicle barrier gate is to be repaired in accordance with NYSDOT Subsection 719-01 Galvanized Coatings and Repair Methods.

S607-3.05 Salvage Existing Fence

Existing fence including posts and gates are to be removed in such manner that existing materials are not damaged by Contractor's operations. Materials damaged by Contractor's operations must be repaired to satisfaction of Project Manager, or replaced with new materials. Posts are to be cleaned of all extraneous materials.

Existing concrete footers are to be removed and disposed of, and holes that are not to be re-used, backfilled.

Fence including posts and gates are to be left on owner's property.

Galvanizing damaged in field prior to and during erection of vehicle barrier gate is to be repaired in accordance with NYSDOT Subsection 719-01 Galvanized Coatings and Repair Methods.

S607-3.06 Remove and Dispose Existing Fence

Existing fence including posts, gates and concrete footers are to be removed and disposed of. Existing post holes are to be backfilled.

S607-4 METHOD OF MEASUREMENT

Quantity to be measured for payment will be number of linear feet of fence or vehicle barrier gate installed, relocated, salvaged or removed as measured along top of fence or vehicle barrier gate, center to center of end posts.

S607-5 BASIS OF PAYMENT

S607-5.01 General All Items

Unit price bid for all items includes cost of: clearing; grubbing; re-grading spot areas ground surface; disposal; excavation; backfill; and furnishing all labor, material and equipment necessary to complete work.

S607-5.02 Chain Link Fence

Unit price bid also includes cost of: furnishing and installing chain link fence complete with fence fabric, posts and gates; hardware; anchoring; concrete footer; repair of galvanizing.

Furnishing and installing PDS slats will be included in unit price bid for fence item as indicated in item description.

S607-5.03 Stockade Fence

Unit price bid also includes cost of: furnishing and installing stockade fence complete with posts; hardware; anchoring; concrete footer.

S607-5.04 Vehicle Barrier Gate

Unit price bid also includes cost of: furnishing and installing vehicle barrier gate complete with posts, gates, lock; painting; hardware; concrete footer; repair of galvanizing and/or paint;.

S607-5.05 Relocate Existing Fence

Unit price bid also includes cost of: removing and reassembling existing fence, posts and gates; repair or replacement of existing material; cleaning posts of all extraneous materials; concrete footer; removing and disposing existing concrete footer.

S607-5.06 Salvage Existing Fence

Unit price bid also includes cost of : removing existing fence, posts and gates; cleaning posts of all extraneous materials; removing and disposing existing concrete footer.

S607-5.07 Remove and Dispose Existing Fence

Unit price bid also includes cost of: removing and disposing existing fence, posts, gates and concrete footer.

Payment will be made under:

Note: XX in bid item number and X" in item description represents height of fence. i.e.: 6 foot high fence would be bid as S607.3206 6' Chain Link Fence.

ITEM NO.	ITEM	PAY UNIT
S607.32XX	X' Chain Link Fence	Linear Foot
S607.33XX	X' Chain Link Fence with PDS Slats	Linear Foot
S607.34XX	X' Stockade Fence	Linear Foot
S607.35	Relocate Existing Chain Link Fence	Linear Foot
S607.36	Relocate Existing Wood Fence	Linear Foot
S607.37	Relocate Existing Wire Fence	Linear Foot
S607.38	Salvage Existing Chain Link Fence	Linear Foot
S607.39	Salvage Existing Wood Fence	Linear Foot
S607.40	Salvage Existing Wire Fence	Linear Foot
S607.41	Remove Existing Chain Link Fence	Linear Foot
S607.42	Remove Existing Wood Fence	Linear Foot
S607.43	Remove Existing Wire Fence	Linear Foot
S607.44	Vehicle Barrier Gate	Linear Foot

REVISED August 15, 2014