SECTION S561 – STONE WALL

S561-1 DESCRIPTION

Work consists of construction of medina or granite stone wall 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 addenda.

S561-2 MATERIALS

S561-2.01 General

Stone wall is to be built using salvaged medina or granite stone curb. Only stone curb that is in good condition and is approved by Project Manager as acceptable for use, is to be used for constructing stone wall. Stone curb is to be solid, without being cracked, chipped, or show any other forms of deterioration.

Radial and unusually shaped pieces of stone curb are not acceptable for use.

Stone curb is to be either as excavated from Project site, or imported from another location. Regardless of source, general overall size and color of all pieces of stone curb is to be consistent, and match as close as possible so any differences are not readily noticeable.

S561-2.02 Setting Bed

Setting bed material is to be subbase course type 1 in accordance with NYSDOT Section 304 Subbase Course, and is to meet following gradation requirements:

Screen Size	Percent Passing by Weight	
3 inch	100%	
2 inch	90 to 100%	
1/4 inch	30 to 65%	
No.40	5 to 40%	
No.200	0 to 10%	

S561-2.03 Backfill

Backfill material is to be washed #1 coarse aggregate in accordance with NYSDOT Section 703-02 Coarse Aggregate, and after washing is to meet following gradation requirements:

Screen Size	Percent Passing by Weight	
1 inch	100%	
1/2 inch	90 to 100%	
1/4 inch	0 to 15%	

S561-3 CONSTRUCTION DETAILS

S561-3.01 General

Stone curb that is to be used for construction of stone wall is to be carefully excavated and removed to avoid any unnecessary breakage. Extraneous materials, including concrete, are to be removed from stone curb in such manner as to be non-deleterious to stone curb. Removed stone curb is to be stored at location that is safe and secure from damage by Contractor's ongoing operations, and from vandalism, theft or other mishap. Individual stone curb pieces are to be placed on level ground to provide even bearing across stone curb surface. Stone curb pieces that are broken during excavation or salvage operations, or found to be unacceptable for reuse by Project Manager, are to be properly disposed of.

If necessary stone curb pieces are to be redressed. Ends of stone curb are to redressed such as to provide for good fit with adjacent stone curb pieces.

Existing embankment is to be cleared and grubbed only to extent that is necessary to construct stone wall. Existing embankment is not to be left unsupported for more than 2 days.

When constructing stone wall, individual stone curb pieces are not to be dropped upon or slid over other pieces of stone curb. Stone curb pieces are to be carefully set without jarring already laid pieces of stone curb, and are to be handled in manner so as not to cause any form of damage to stone curb.

Stone wall is to be constructed on layer of setting bed material. Setting bed material is to be placed in maximum 6 inch lifts, thoroughly compacted to required thickness after compaction, moist but not saturated, with uniformly even surface.

Underdrain is to be installed under setting bed material, and connected into street underdrain. Underdrain trench is to be wrapped with geotextile fabric.

Stone wall is to be constructed on and backed with 10 mil thick sheet of black polyethylene. Sheeting is to be placed on top of bedding material, with 6 inch lap under stone wall. Sheeting is to run up back of stone wall, placed under top most piece of stone curb, with 6 inch lap.

Stone curb pieces are to be cleaned before being set. Stone curb pieces are to be well bedded and settled in place with suitable wooden maul. Each subsequent layer of stone curb is to be stepped back from vertical by 1/2 inch.

Adjoining pieces of stone curb are not to touch each other, with space between individual pieces of stone curb not being less than 1/8 inch nor more than 1/2 inch.

Stone wall is to be built true to line and grade. Top of stone wall must be level, presenting uniformly even surface. Vertical joints are to be offset in subsequent courses.

Geotextile fabric is to be placed against excavated portion of embankment, and void between stone wall and embankment backfilled with #1 stone in accordance with Subsection S561-2.03 Backfill. Backfill material is to be placed in maximum 6 inch lifts, thoroughly compacted, moist but not saturated.

Area between stone wall and curb is to be finished with Class K concrete. Concrete is to be placed in accordance with Section S608 Sidewalk and Driveway. Concrete surface is to receive light broom finish with broom pattern running perpendicular to curb.

Stone wall is to be kept clean, in its alignment, and protected from damage until completion of Contract.

S561-4 METHOD OF MEASUREMENT

Quantity to be measured for payment will be number of square feet of medina or granite stone wall constructed, as measured along front face of wall from top of wall to bottom most surface of wall.

S561-5 BASIS OF PAYMENT

Unit price bid includes cost of: protection of work from damage, vandalism or other mishap; excavation; clearing and grubbing embankment; preparation of subgrade; removing, cleaning, redressing, and storing existing stone curb; constructing and maintaining stone wall; polyethylene sheeting; setting bed material; backfill material; water; barricades; site cleanup; and furnishing all labor, material and equipment necessary to complete work.

Furnishing and placing of geotextile fabric, underdrain tubing with filter material, Class K concrete, and regrading and restoration of adjacent embankment area will be paid for under separate bid items.

Excavation that is included in pay item does not include rock excavation. Rock excavation will be paid for under separate bid item.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
S561.01	Medina Stone Wall	Square Foot
S561.02	Granite Stone Wall	Square Foot