

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 32 11 16.01 Granular base
- Section 32 15 40 Crush stone

1.2 MEASUREMENT PROCEDURES

- .1 Global price includes excavation and preparation of foundation bed supply and installation of graded stone fill and backfill.

1.3 REFERENCE STANDARDS

- .1 American Society for Testing and Materials (ASTM)
 - .1 ASTM A313/A313M-98, Standard Specification for Stainless Steel Spring Wire.
 - .2 ASTM A764-95(2001), Standard Specification for Metallic Coated Carbon Steel Wire, Coated at Size and Drawn to Size For Mechanical Springs.
- .2 Canadian Standards Association (CSA)
 - .1 CAN/CSA-G164-M92 (R1998) , Hot Dip Galvanizing of Irregularly Shaped Articles.

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19- Waste Management and Disposal.
- .2 Collect and separate corrugated cardboard, plastic, paper packaging, in accordance with Waste Management Plan.
- .3 Place materials defined as hazardous or toxic in designated containers.
- .4 Fold up metal banding, flatten and place in designated area for recycling.
- .5 Divert left over aggregate material from landfill to a local facility as approved by Departmental Representative.
- .6 Divert left over metal materials to a local recycling facility as approved by Departmental Representative.

Part 2 Products

2.1 MATERIALS

- .1 Gabion baskets:
 - .1 Factory fabricated so that sides, ends, lid and internal diaphragms can be readily assembled at site into rectangular baskets of sizes as indicated.
 - .2 Single unit construction or with joints having strength and flexibility equal to that of mesh.

.3	Provide diaphragms of same mesh as gabion walls, when length exceeds horizontal width. Diaphragms to divide basket into equal cells of length not to exceed horizontal width.																
.4	Wire mesh gabions: <table> <tr> <td>.1</td><td>Wire mesh: uniform hexagonal pattern wire woven in triple twist pattern with openings of approximately 80 x 100 mm, non-ravelling.</td></tr> <tr> <td>.2</td><td>Securely selvedge perimeter edges to form joints connecting selvedges with same strength as mesh body.</td></tr> <tr> <td>.3</td><td>Wire to have following dimensions: <table> <tr> <td>.1</td><td>Mesh: 3.0 PVC covered wire 2.4 mm diameter.</td></tr> <tr> <td>.2</td><td>Selvedges: PVC covered wire 3.4, 3.8 mm diameter.</td></tr> <tr> <td>.3</td><td>Binding: 2.0 mm diameter.</td></tr> </table> </td></tr> <tr> <td>.4</td><td>Wire: hot dip galvanized with minimum coverage of 260 g/m² to CAN/CSA G164. Cover with minimum 0.5 mm thick polyvinyl chloride coating.</td></tr> <tr> <td>.5</td><td>Interlocking wire fasteners: galvanized steel to ASTM A764, finish 1, class 1, type 3.</td></tr> </table>	.1	Wire mesh: uniform hexagonal pattern wire woven in triple twist pattern with openings of approximately 80 x 100 mm, non-ravelling.	.2	Securely selvedge perimeter edges to form joints connecting selvedges with same strength as mesh body.	.3	Wire to have following dimensions: <table> <tr> <td>.1</td><td>Mesh: 3.0 PVC covered wire 2.4 mm diameter.</td></tr> <tr> <td>.2</td><td>Selvedges: PVC covered wire 3.4, 3.8 mm diameter.</td></tr> <tr> <td>.3</td><td>Binding: 2.0 mm diameter.</td></tr> </table>	.1	Mesh: 3.0 PVC covered wire 2.4 mm diameter.	.2	Selvedges: PVC covered wire 3.4, 3.8 mm diameter.	.3	Binding: 2.0 mm diameter.	.4	Wire: hot dip galvanized with minimum coverage of 260 g/m ² to CAN/CSA G164. Cover with minimum 0.5 mm thick polyvinyl chloride coating.	.5	Interlocking wire fasteners: galvanized steel to ASTM A764, finish 1, class 1, type 3.
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.3	Geotextile filter: in accordance with Section 31 32 19.16- Geotextile.																

Part 3 Execution

3.1 INSTALLATION

- .1 Install gabions and geotextiles to lines and grades as indicated. Follow manufacturer's instructions in assembling baskets.
- .2 Excavate for and backfill behind gabions in accordance with Section 31 23 33.01- Excavating Trenching and Backfilling.

3.2 PLACING GABIONS

- .1 Wherever possible, place baskets in position prior to filling with stones.

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- .2 Join adjacent baskets together at corners as recommended by manufacturer, to ensure joints are as strong as mesh.
 - .3 For underwater placement, prefill gabions. Provide special devices to handle filled baskets and mats without distortion and to place them in position. Connect adjacent gabions together when in place using a diver.

3.3 FILLING BASKETS

- .1 Tension geogrid gabions according to manufacturer's instructions before filling with stone. Do not release wall tension until sufficient stone fill has been placed to prevent wall slackening.
- .2 On exposed faces of gabions, place stones by hand with flattest surfaces bearing against face mesh to produce satisfactory alignment and appearance.
- .3 For wire mesh gabions, fill gabion cells in lifts not to exceed 300 mm and connect opposite walls with two tie wires after each lift.
- .4 For geogrid gabions, fill cells in lifts not to exceed 300 mm and connect opposite walls with two polyethylene braids after each lift.

END OF SECTION