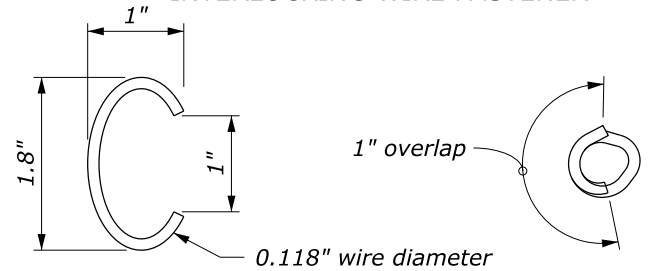


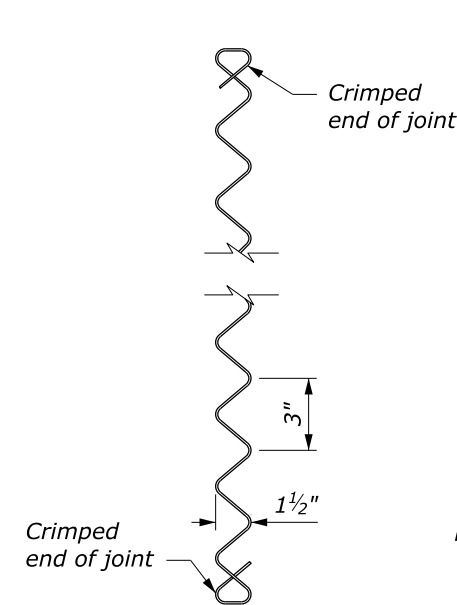
BEFORE CLOSURE AFTER CLOSURE  
**INTERLOCKING WIRE FASTENER**



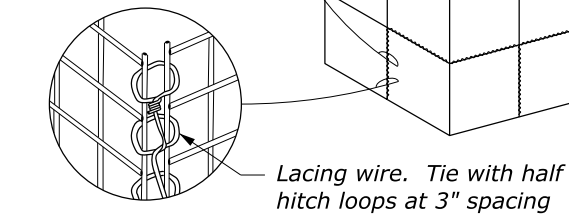
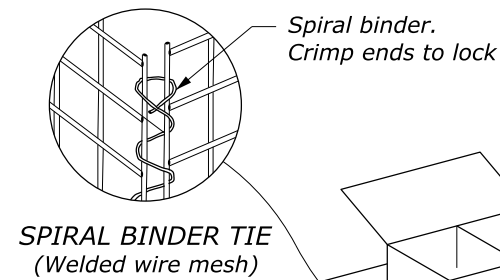
BEFORE CLOSURE AFTER CLOSURE  
**OVERLAPPING RING WIRE FASTENER**  
(Not allowed for basket to basket connection)

**ALTERNATE TYING FASTENERS**

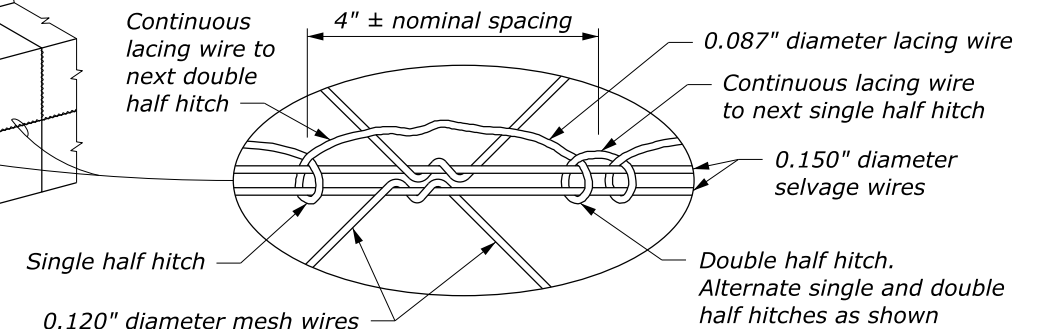
Note: All fastener dimensions are nominal.



**0.150" DIAMETER SPIRAL BINDER**



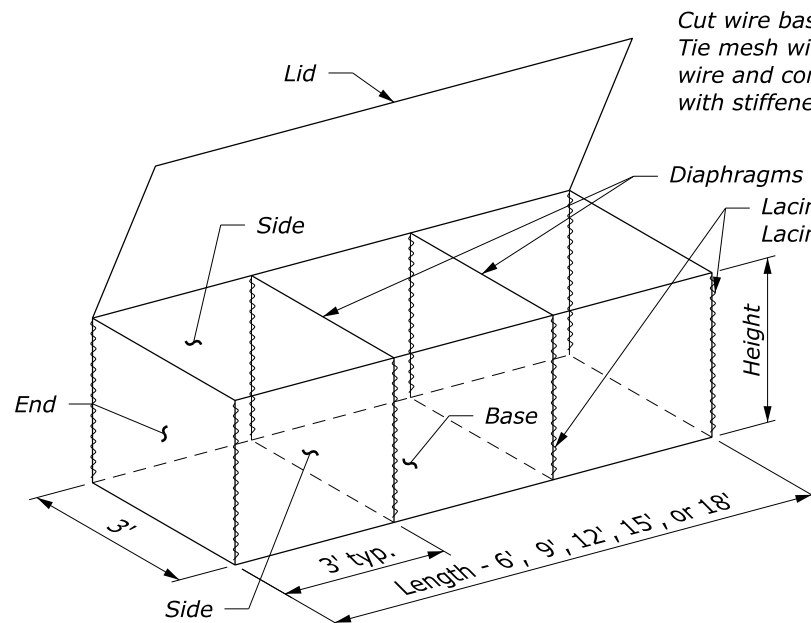
**HALF HITCH LACING DETAIL (Welded wire mesh)**



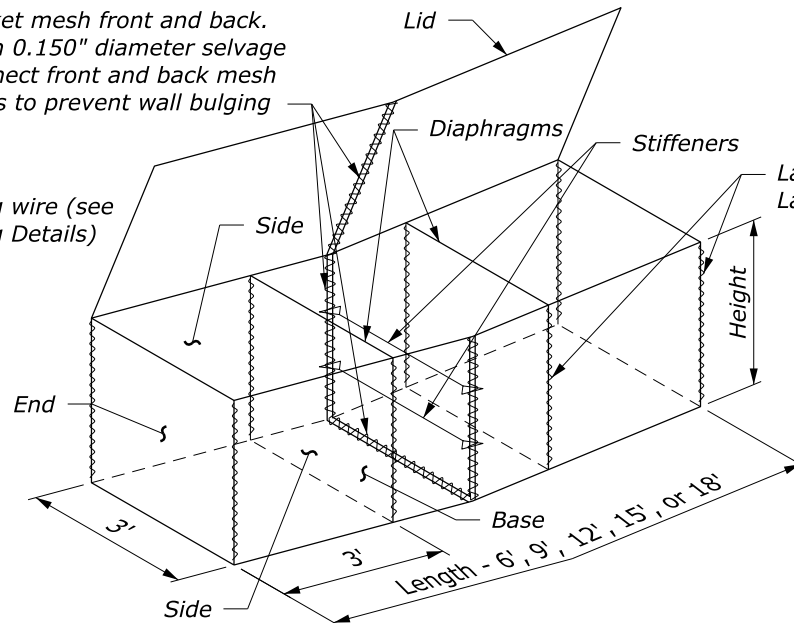
**HALF HITCH LACING DETAIL (Twisted wire mesh)**

**TYPICAL INSTALLATION GABION BASKETS**

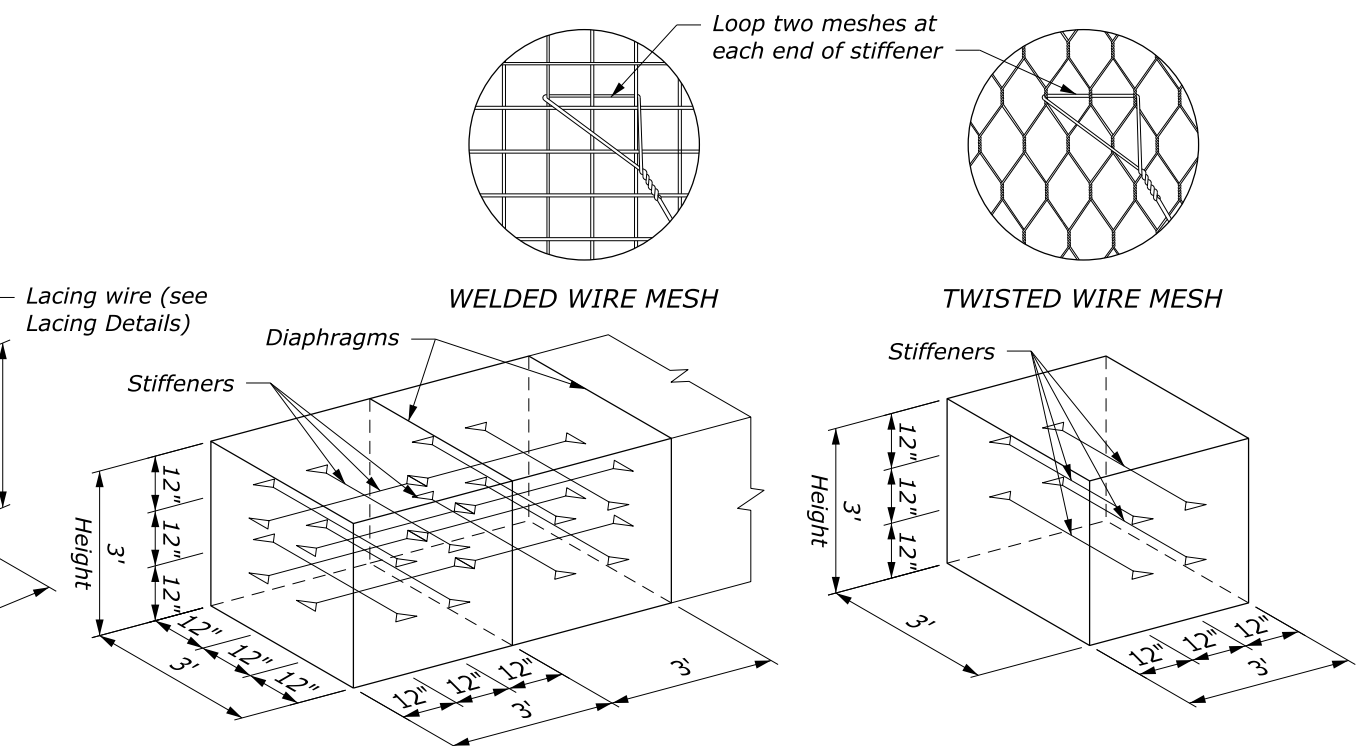
Cut wire basket mesh front and back. Tie mesh with 0.150" diameter selvage wire and connect front and back mesh with stiffeners to prevent wall bulging



**TYPICAL ASSEMBLED GABION BASKET**



**ASSEMBLED GABION BASKET IN WALL GRADE TRANSITION AREAS**

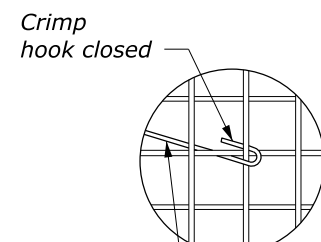


**ALL END GABION CELLS**

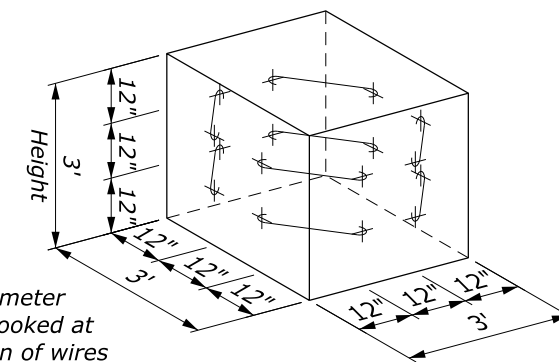
**ALL INTERIOR GABION CELLS**

**TYPICAL STIFFENERS**

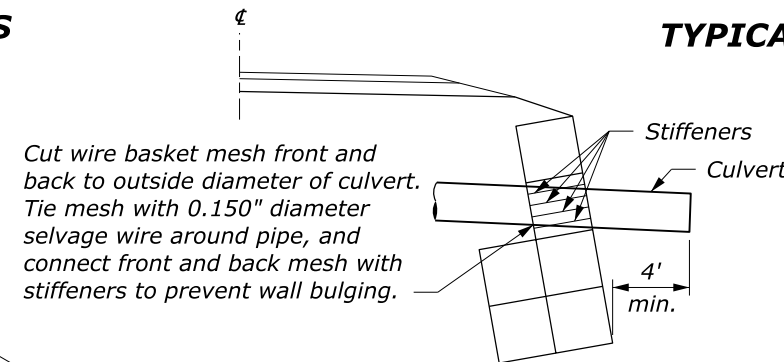
GABION BASKET NOMINAL SIZES AND CAPACITY				
Size Code Letter	Size in feet Length	Size in feet Height	Diaphragm Partitions	Capacity (CUYD)
A	6	3.0	1	2.00
B	9	3.0	2	3.00
C	12	3.0	3	4.00
X	15	3.0	4	5.00
Y	18	3.0	5	6.00
D	6	1.5	1	1.00
E	9	1.5	2	1.50
F	12	1.5	3	2.00
G	6	1.0	1	0.67
H	9	1.0	2	1.00
I	12	1.0	3	1.33



0.150" diameter stiffener hooked at intersection of wires



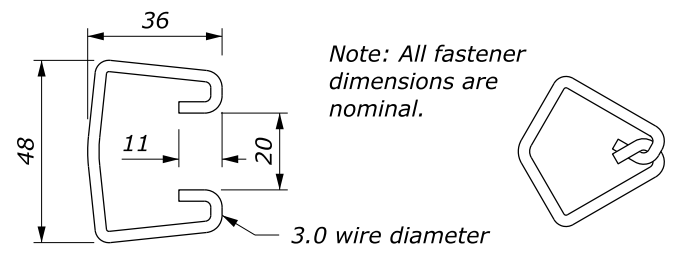
**OPTIONAL STIFFENERS WELDED WIRE GABION BASKET**



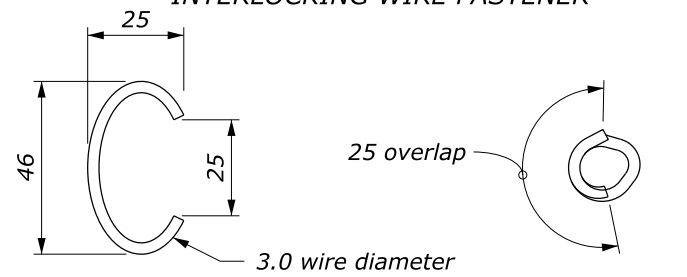
**TYPICAL CULVERT INSTALLATION THROUGH GABION WALL**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W253-1
<b>GABION BASKET</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 9/2011



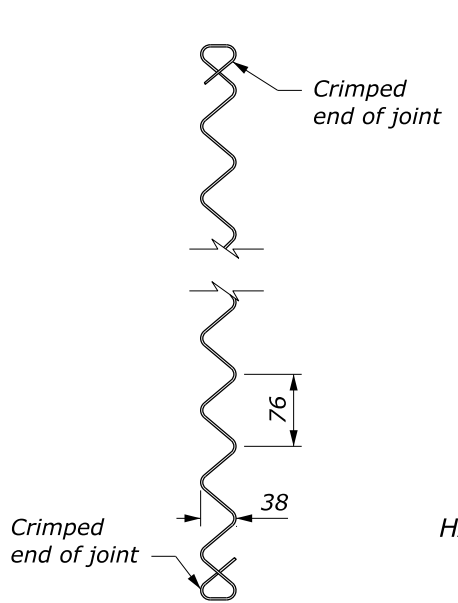
BEFORE CLOSURE AFTER CLOSURE  
**INTERLOCKING WIRE FASTENER**



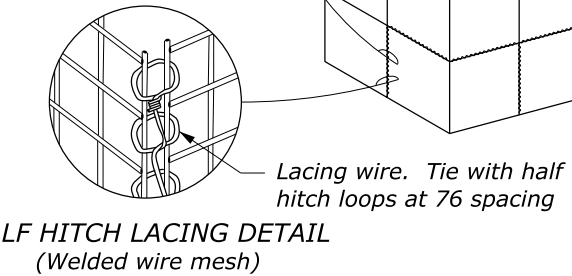
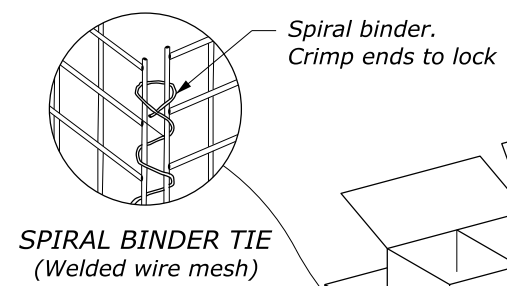
BEFORE CLOSURE AFTER CLOSURE  
**OVERLAPPING RING WIRE FASTENER**  
(Not allowed for basket to basket connection)

**ALTERNATE TYING FASTENERS**

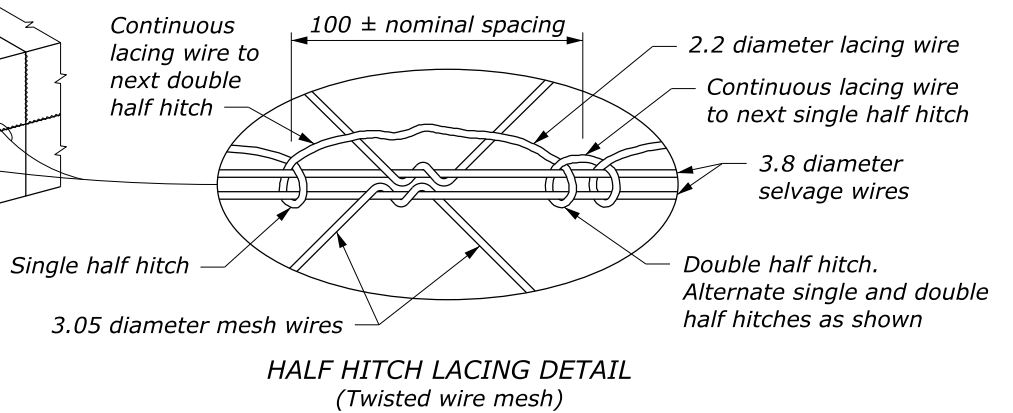
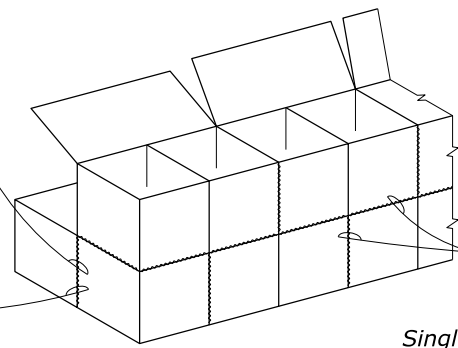
Note: All fastener dimensions are nominal.



**3.8 mm DIAMETER SPIRAL BINDER**

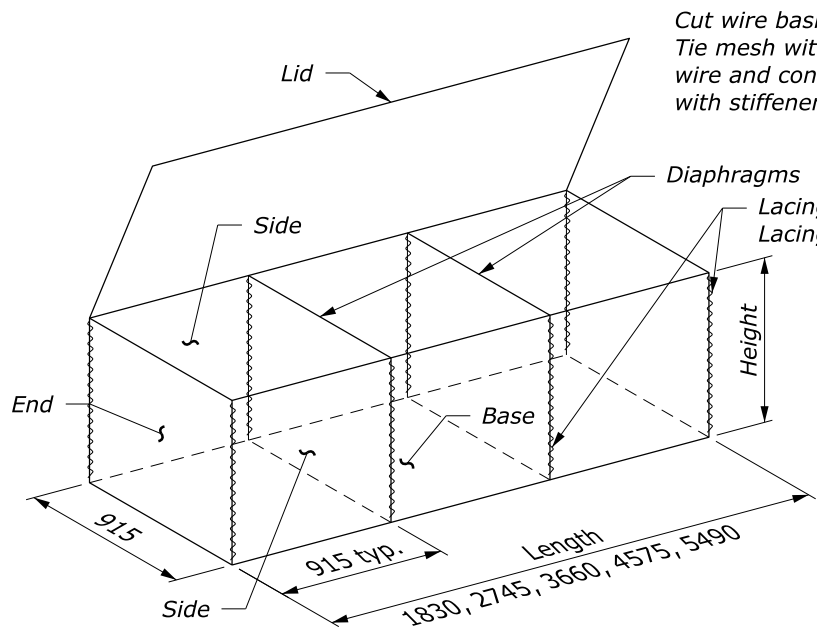


**HALF HITCH LACING DETAIL (Welded wire mesh)**

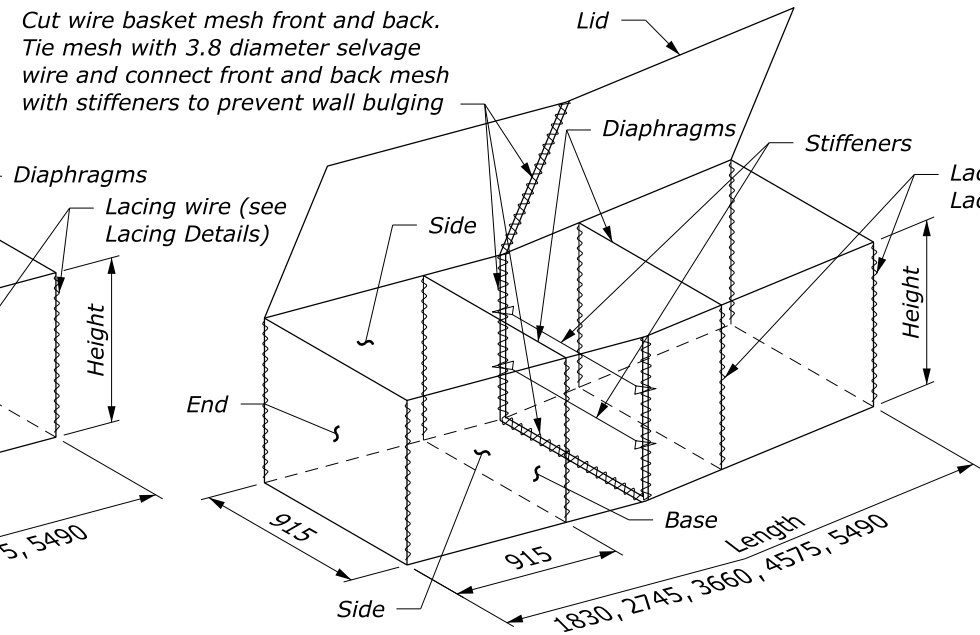


**HALF HITCH LACING DETAIL (Twisted wire mesh)**

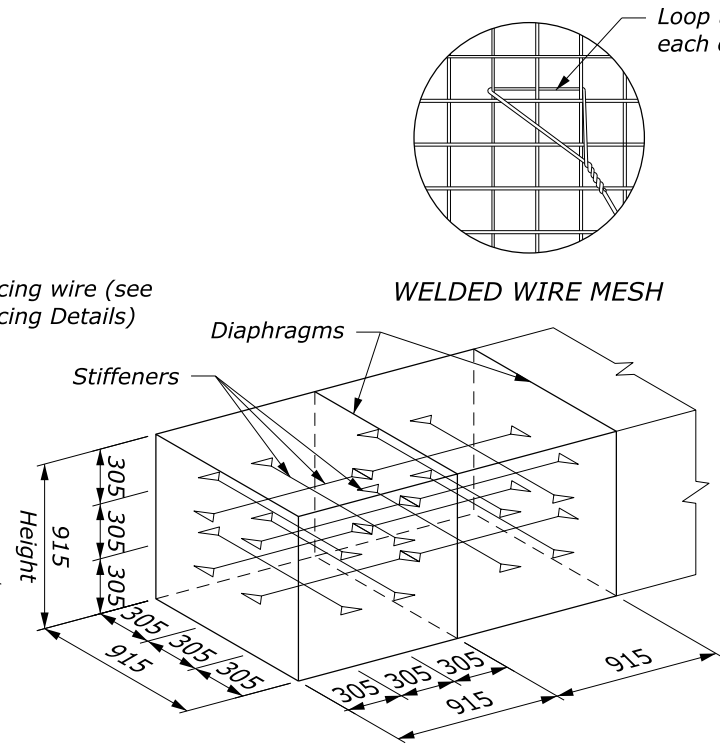
**TYPICAL INSTALLATION GABION BASKETS**



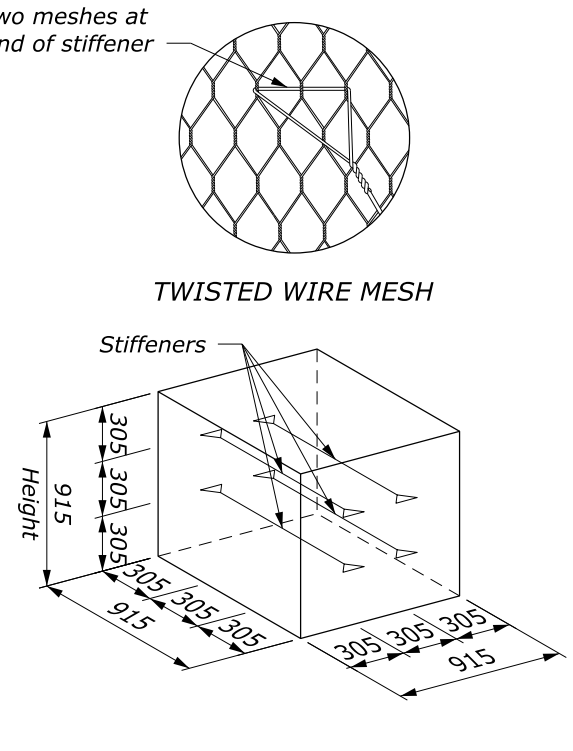
**TYPICAL ASSEMBLED GABION BASKET**



**ASSEMBLED GABION BASKET IN WALL GRADE TRANSITION AREAS**



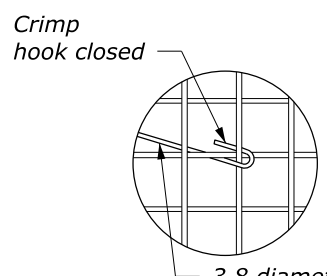
**ALL END GABION CELLS**



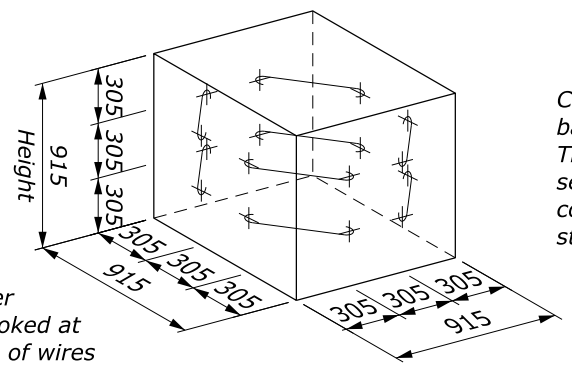
**ALL INTERIOR GABION CELLS**

**TYPICAL STIFFENERS**

GABION BASKET NOMINAL SIZES AND CAPACITY				
Size Code Letter	Size in meters Length	Size in meters Height	Diaphragm Partitions	Capacity (m <sup>3</sup> )
A	1.83	0.915	1	1.5
B	2.75	0.915	2	2.3
C	3.66	0.915	3	3.1
X	4.58	0.915	4	3.8
Y	5.49	0.915	5	4.6
D	1.83	0.45	1	0.8
E	2.75	0.45	2	1.1
F	3.66	0.45	3	1.5
G	1.83	0.30	1	0.5
H	2.75	0.30	2	0.8
I	3.66	0.30	3	1.0



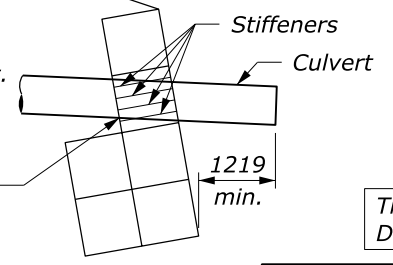
**3.8 diameter stiffener hooked at intersection of wires**



**ALL GABION CELLS**

**OPTIONAL STIFFENERS WELDED WIRE GABION BASKET**

Cut wire basket mesh front and back to outside diameter of culvert. Tie mesh with 3.8 diameter selvage wire around pipe, and connect front and back mesh with stiffeners to prevent wall bulging.

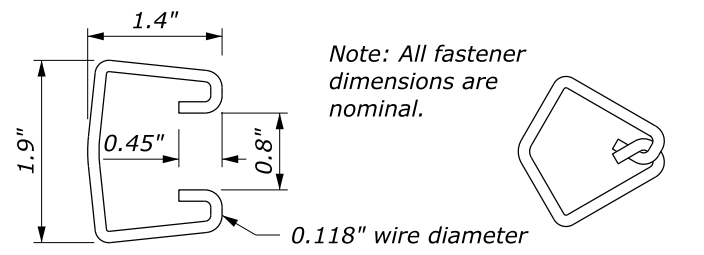


**TYPICAL CULVERT INSTALLATION THROUGH GABION WALL**

NO SCALE

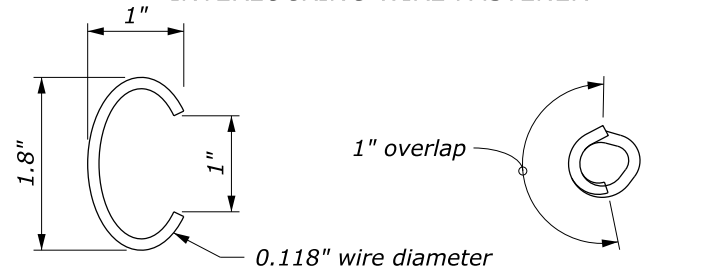
This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD WM253-1
<b>GABION BASKET</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 9/2011



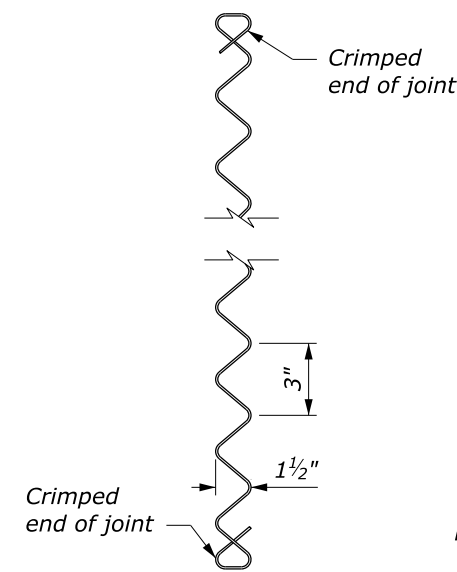
Note: All fastener dimensions are nominal.

**INTERLOCKING WIRE FASTENER**

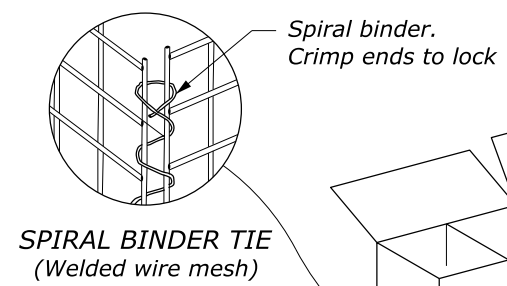


**OVERLAPPING RING WIRE FASTENER**

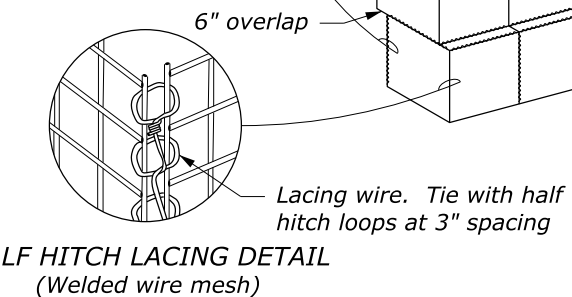
**ALTERNATE TYING FASTENERS**



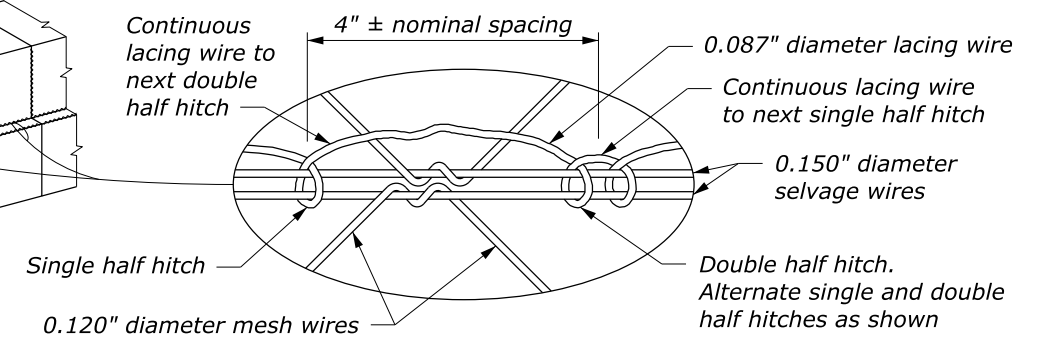
**0.150" DIAMETER SPIRAL BINDER**



**SPIRAL BINDER TIE (Welded wire mesh)**

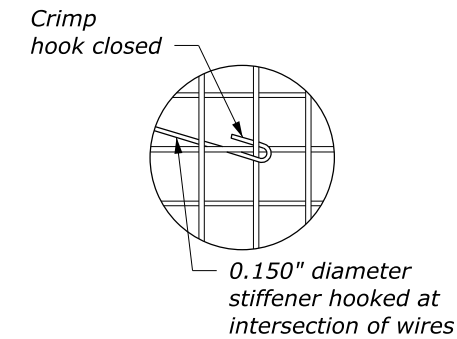


**HALF HITCH LACING DETAIL (Welded wire mesh)**

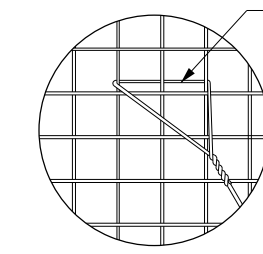


**HALF HITCH LACING DETAIL (Twisted wire mesh)**

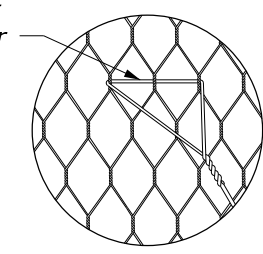
**TYPICAL INSTALLATION GABION BASKETS**



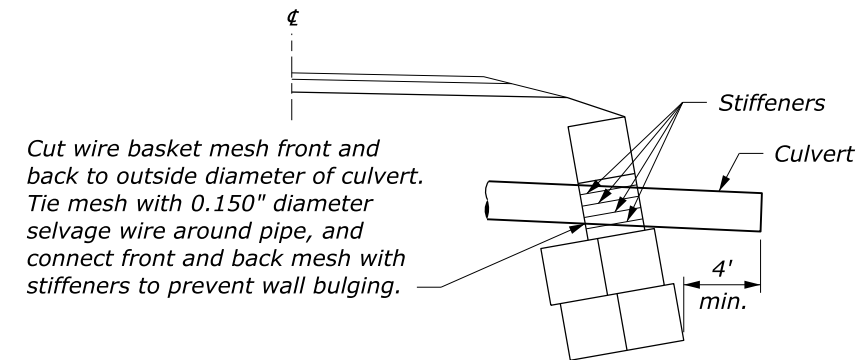
**0.150" diameter stiffener hooked at intersection of wires**



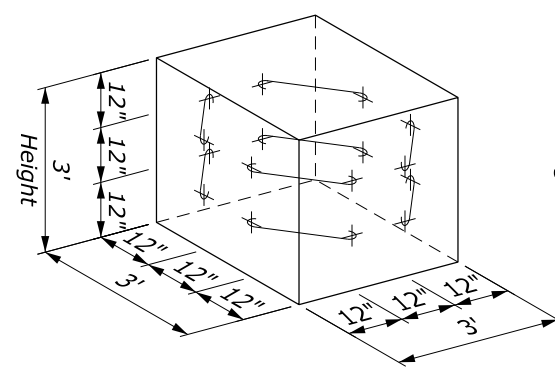
**WELDED WIRE MESH**



**TWISTED WIRE MESH**

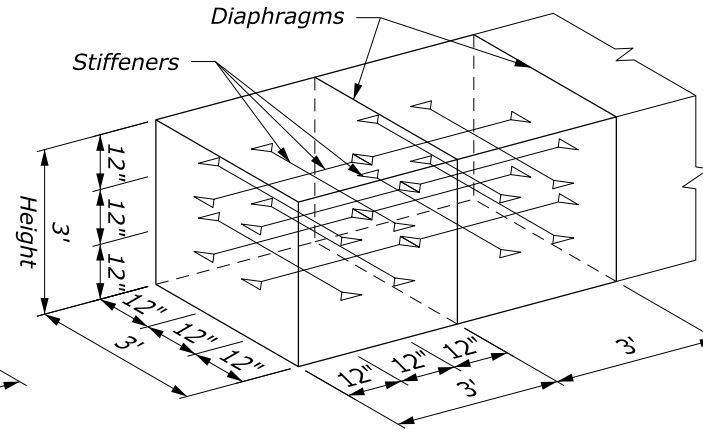


**TYPICAL CULVERT INSTALLATION THROUGH GABION WALL**

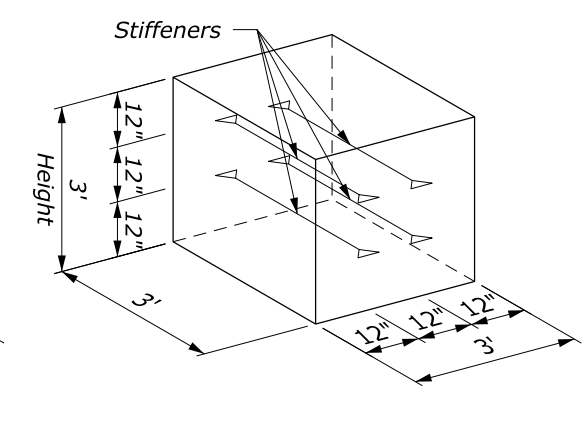


**ALL GABION CELLS**

**OPTIONAL STIFFENERS WELDED WIRE GABION BASKET**

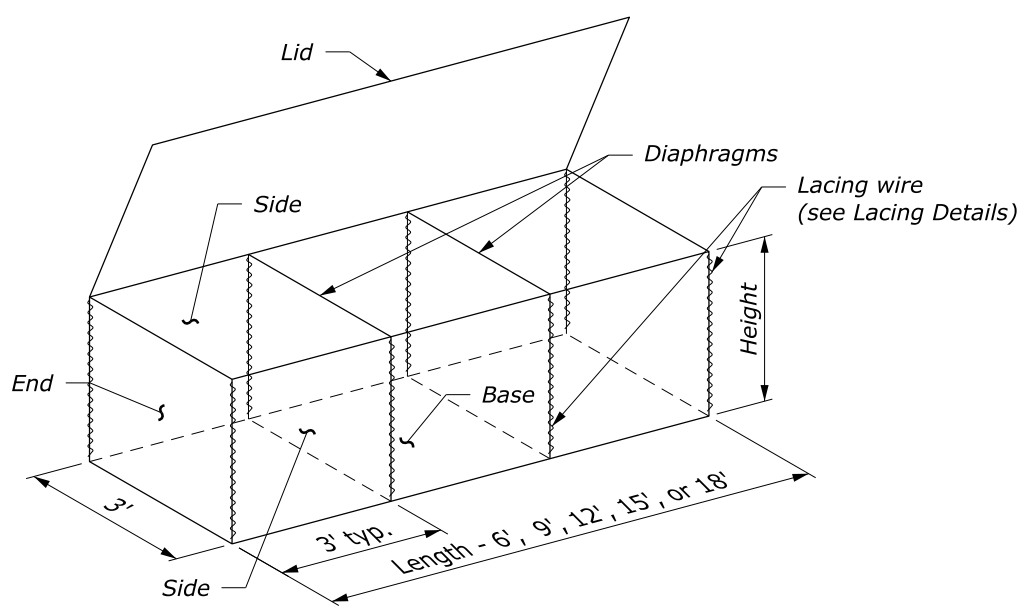


**ALL END GABION CELLS**



**ALL INTERIOR GABION CELLS**

**TYPICAL STIFFENERS**

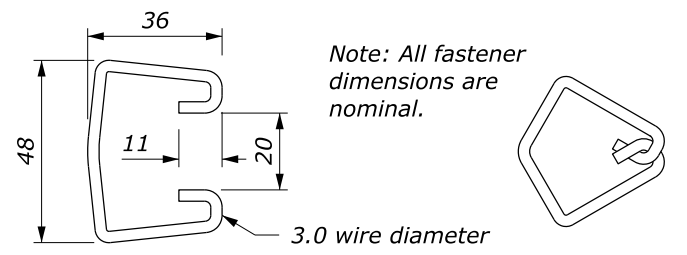


**TYPICAL ASSEMBLED GABION BASKET**

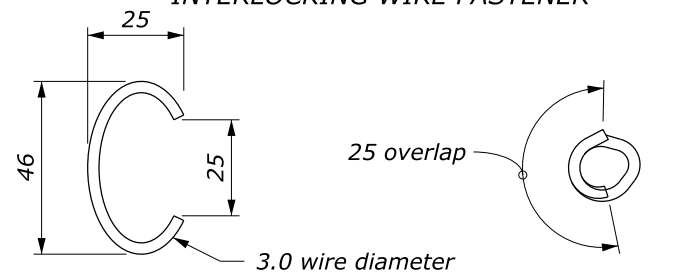
GABION BASKET NOMINAL SIZES AND CAPACITY				
Size Code Letter	Size in feet Length	Height	Diaphragm Partitions	Capacity (CUYD)
A	6	3.0	1	2.00
B	9	3.0	2	3.00
C	12	3.0	3	4.00
X	15	3.0	4	5.00
Y	18	3.0	5	6.00

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD W253-2
<b>GABION FACED WALL</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 9/2011



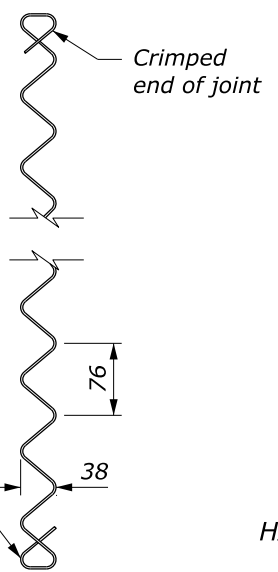
**INTERLOCKING WIRE FASTENER**



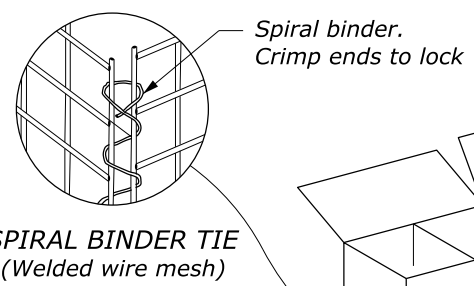
**OVERLAPPING RING WIRE FASTENER**

**ALTERNATE TYING FASTENERS**

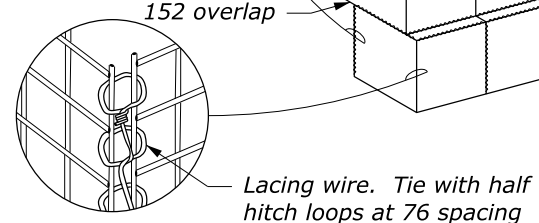
Note: All fastener dimensions are nominal.



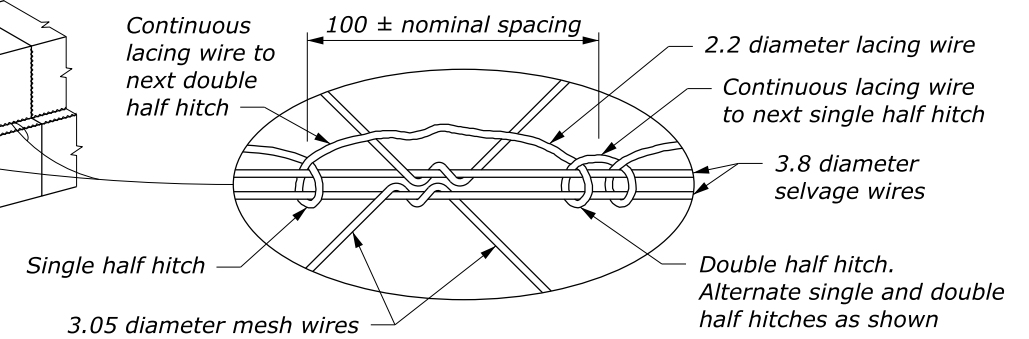
**3.8 mm DIAMETER SPIRAL BINDER**



**SPIRAL BINDER TIE (Welded wire mesh)**

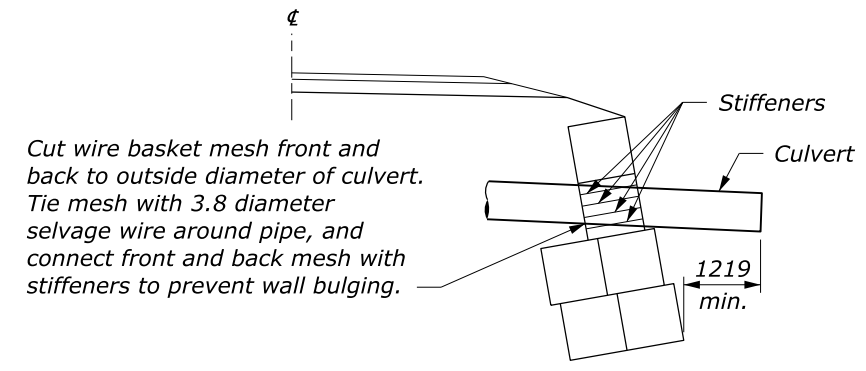


**HALF HITCH LACING DETAIL (Welded wire mesh)**

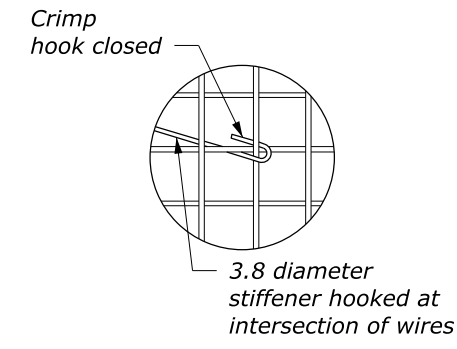


**HALF HITCH LACING DETAIL (Twisted wire mesh)**

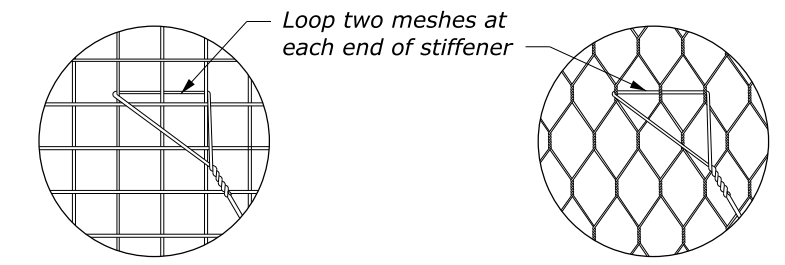
**TYPICAL INSTALLATION GABION BASKETS**



**TYPICAL CULVERT INSTALLATION THROUGH GABION WALL**

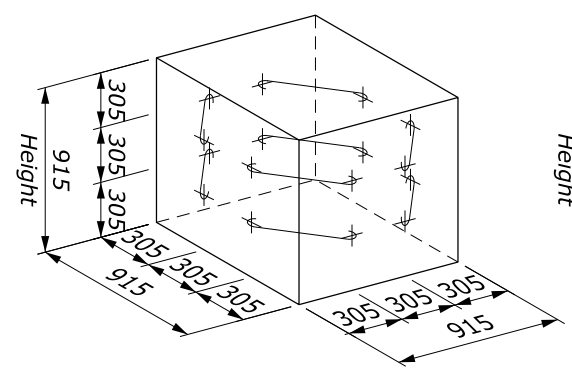


**3.8 diameter stiffener hooked at intersection of wires**

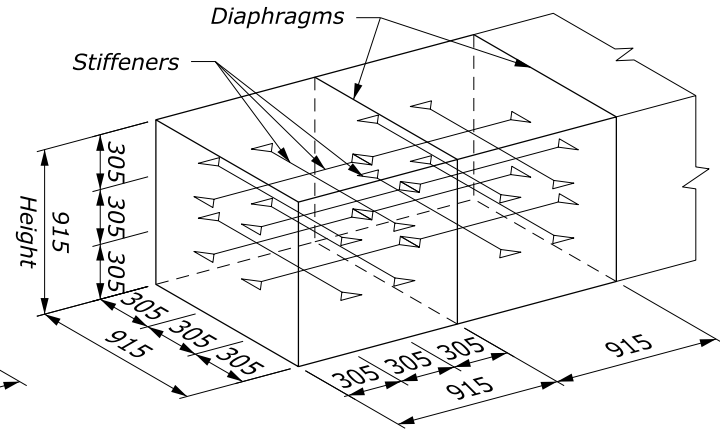


**WELDED WIRE MESH**

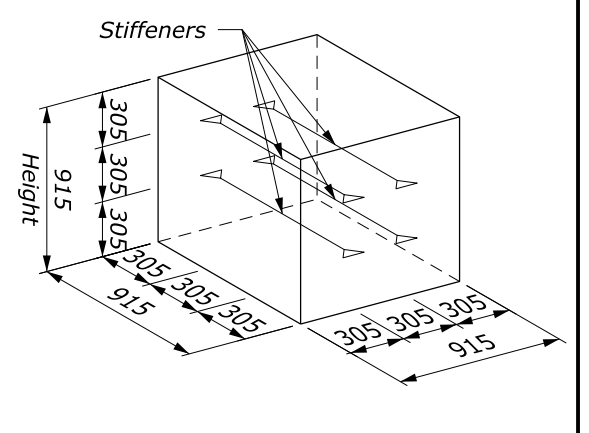
**TWISTED WIRE MESH**



**ALL GABION CELLS**



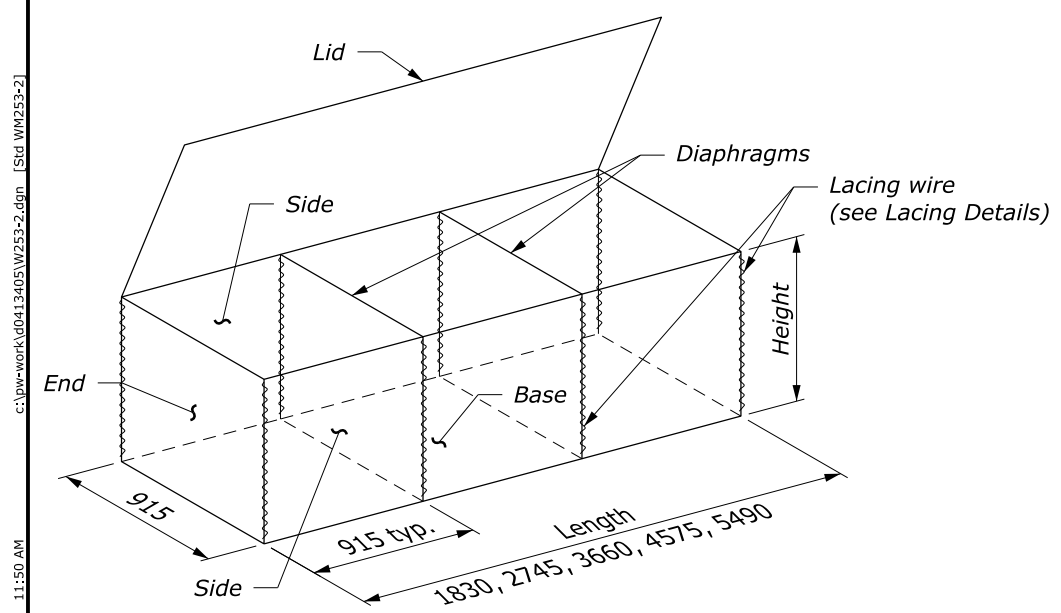
**ALL END GABION CELLS**



**ALL INTERIOR GABION CELLS**

**OPTIONAL STIFFENERS WELDED WIRE GABION BASKET**

**TYPICAL STIFFENERS**



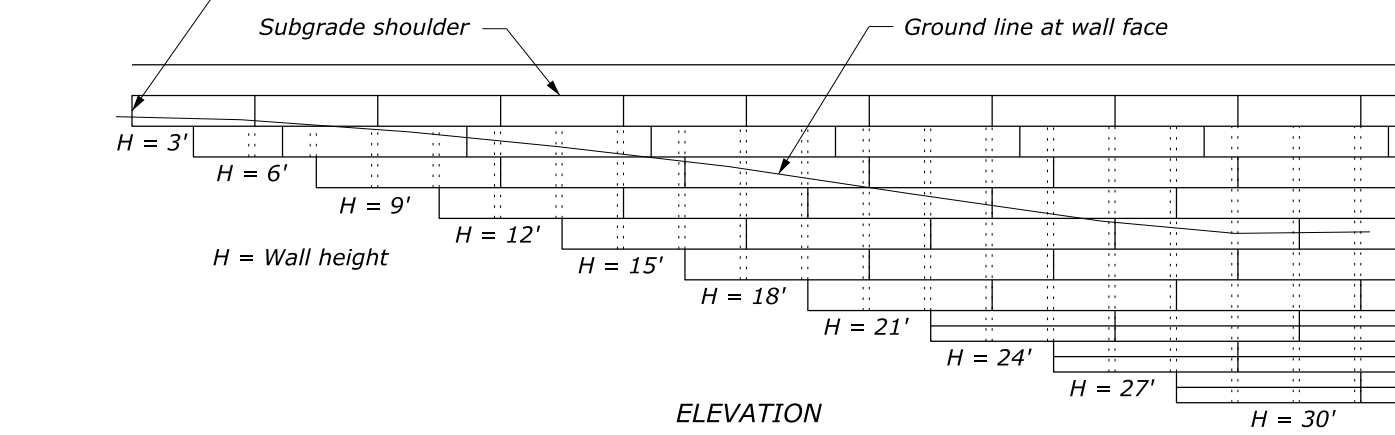
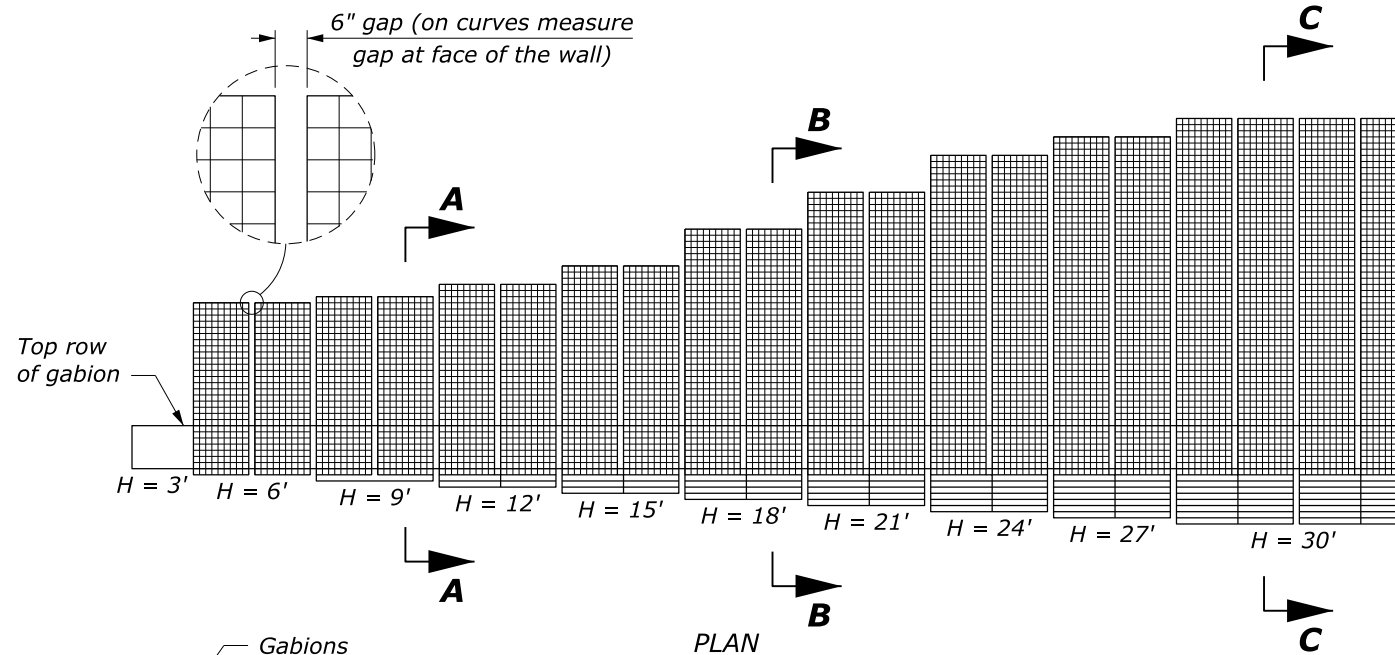
**TYPICAL ASSEMBLED GABION BASKET**

GABION BASKET NOMINAL SIZES AND CAPACITY				
Size Code Letter	Size in meters Length	Height	Diaphragm Partitions	Capacity (m <sup>3</sup> )
A	1.83	0.915	1	1.5
B	2.75	0.915	2	2.3
C	3.66	0.915	3	3.1
X	4.58	0.915	4	3.8
Y	5.49	0.915	5	4.6

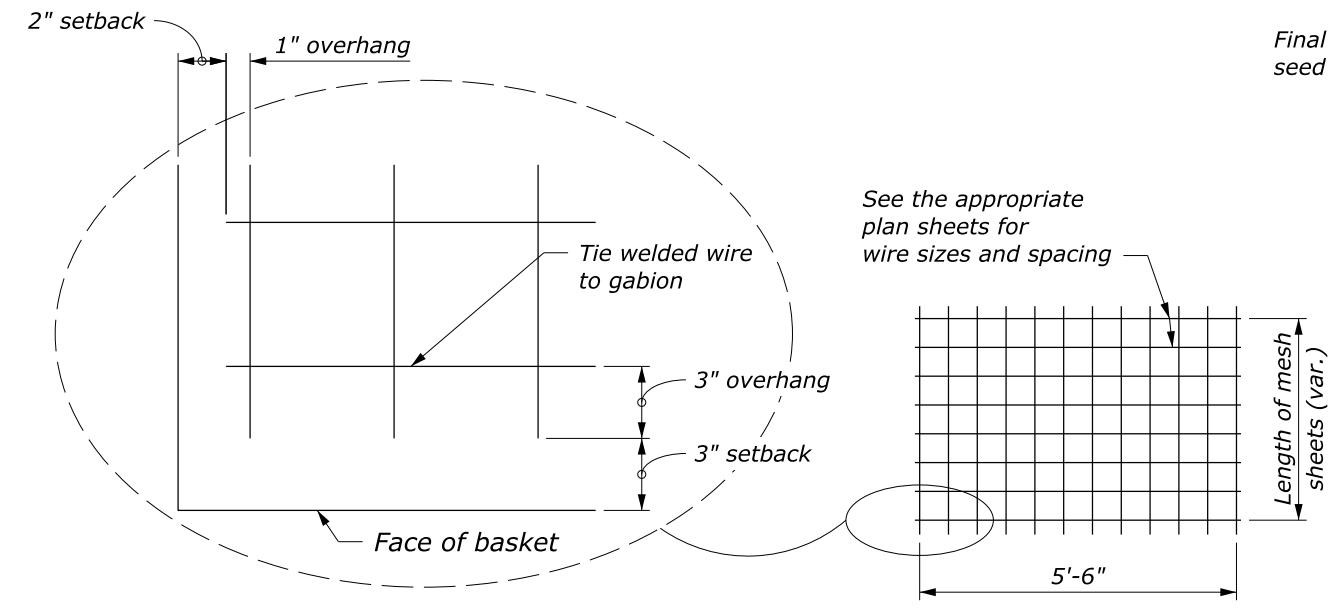
This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFL STANDARD WM253-2
<b>GABION FACED WALL</b>	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 9/2011

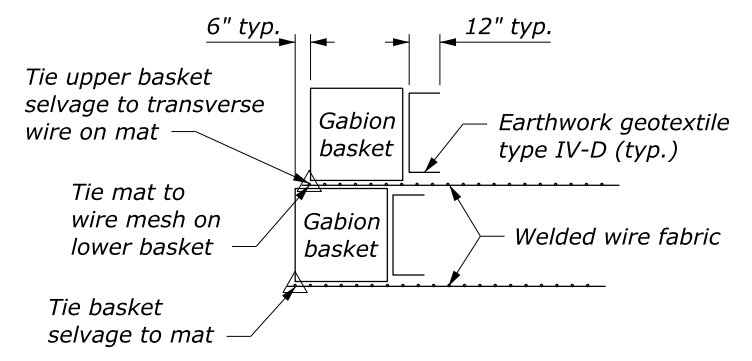
NO SCALE



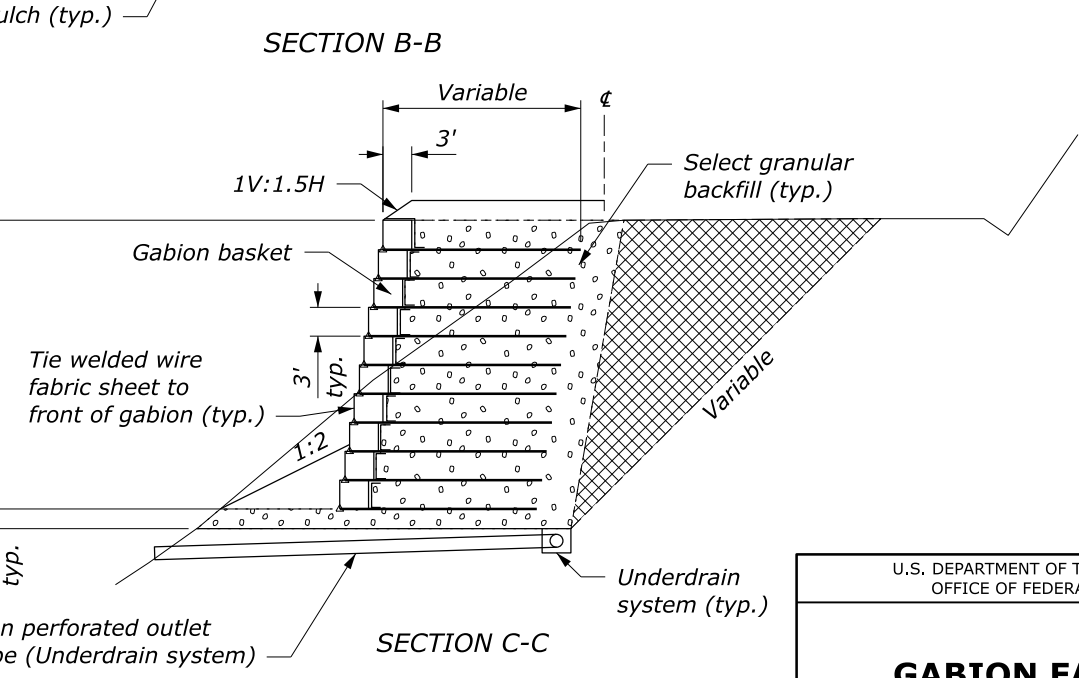
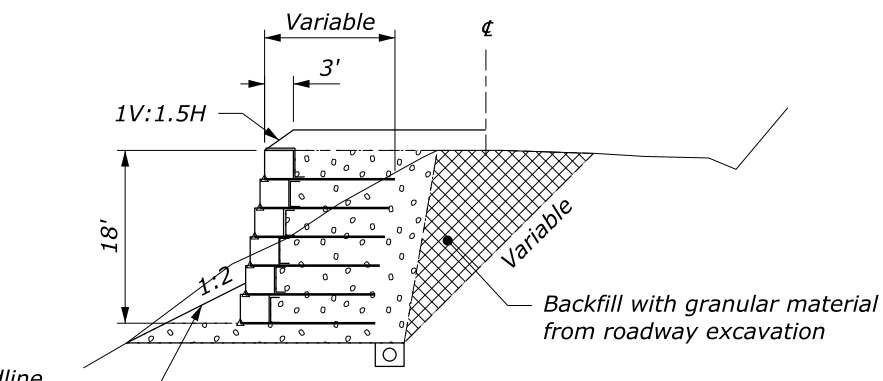
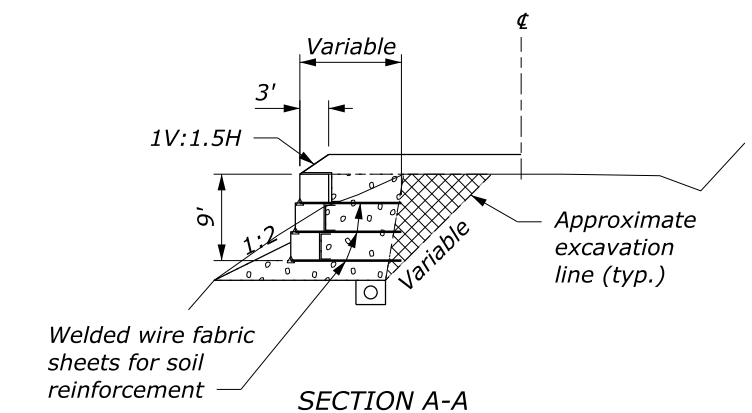
**TYPICAL GABION WALL**



**WELDED WIRE FABRIC SHEETS FOR SOIL REINFORCEMENT**



**TYPICAL CONNECTION DETAIL**



NO SCALE

**NOTE:**

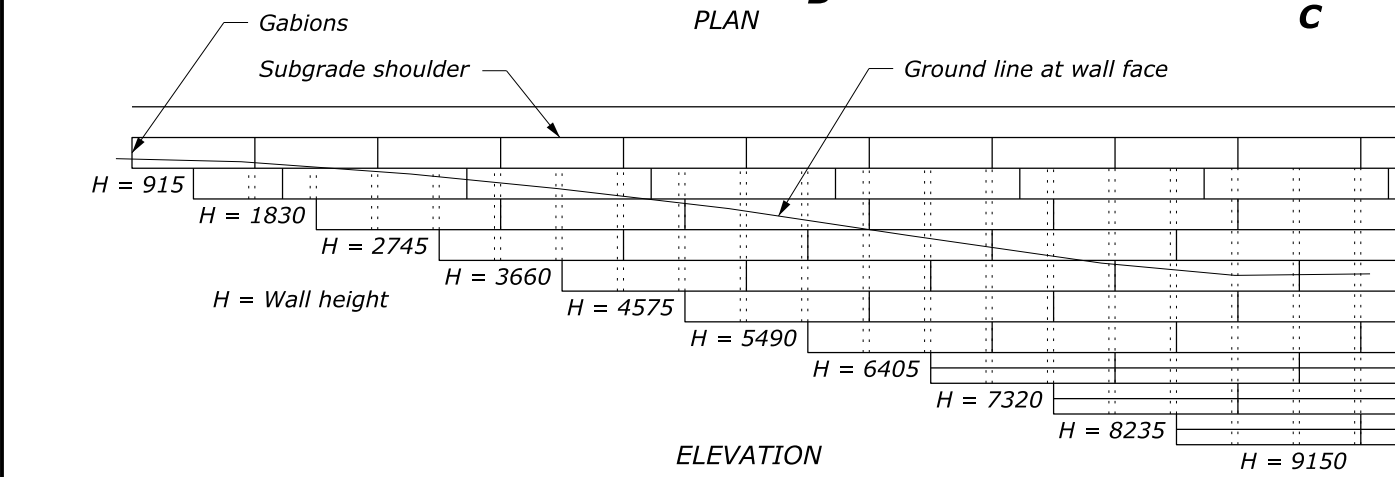
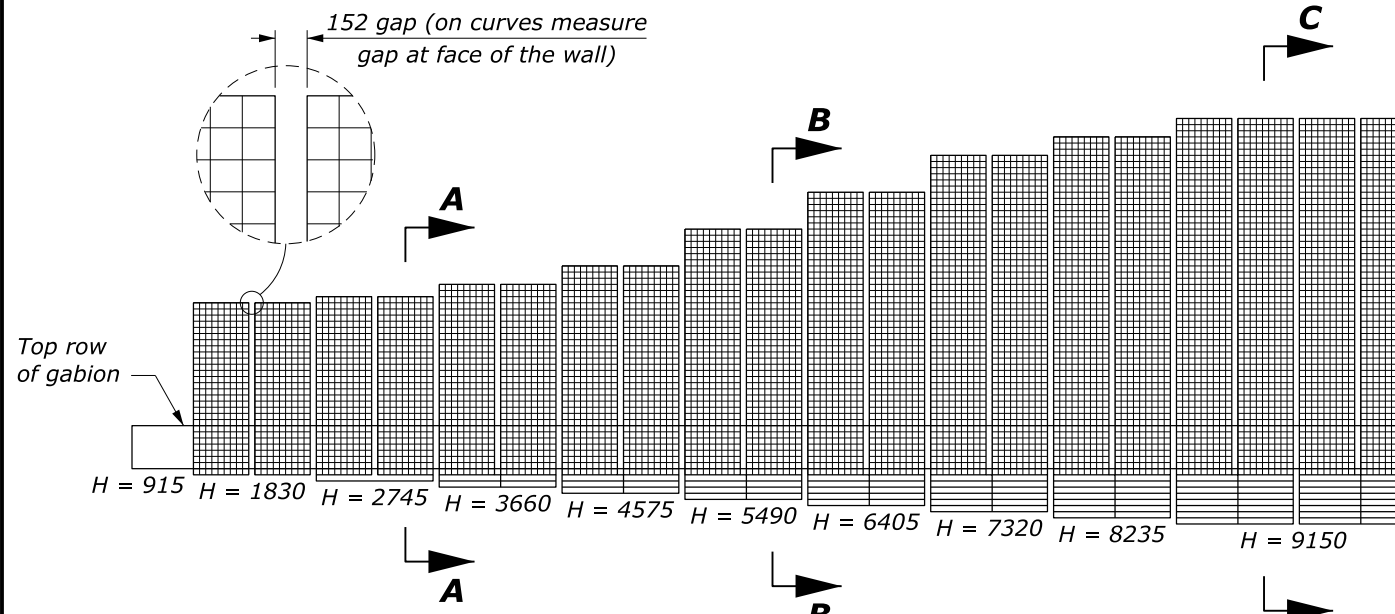
1. The welded wire fabric sheets vary in length within each wall. The height (H) of the vertical face of the wall determines the length of the welded wire fabric for the entire section. See other plan sheets for fabric lengths, wire sizes and spacing and number of mats. Where the wall construction requires the width of the welded wire fabric sheets to be less than 5.5 feet, the fabric wire may be field cut to fit. Cut fabric at center of mesh of welded wire fabric sheets.
2. Place layers of welded wire fabric sheets with 6 inch gaps between sheets. The 6 inch gaps are measure at the face of the wall. Connect the welded wire fabric sheets with spiral binders or tie wire to the front edge of each gabion basket.
3. The heights and quantities are subject to field adjustment. Any increase in wall heights over those shown on the plans require investigation to determine that the safe bearing pressure is not exceeded.
4. Average design assumption values. See the Geotechnical Report, if available, for site specific values.  
 Unit weight of backfill material 125 pcf  
 Unit weight of filled gabions 105 pcf  
 $\phi$  angle = 35° for backfill material

U.S. DEPARTMENT OF TRANSPORTATION, FHWA  
OFFICE OF FEDERAL LANDS HIGHWAY

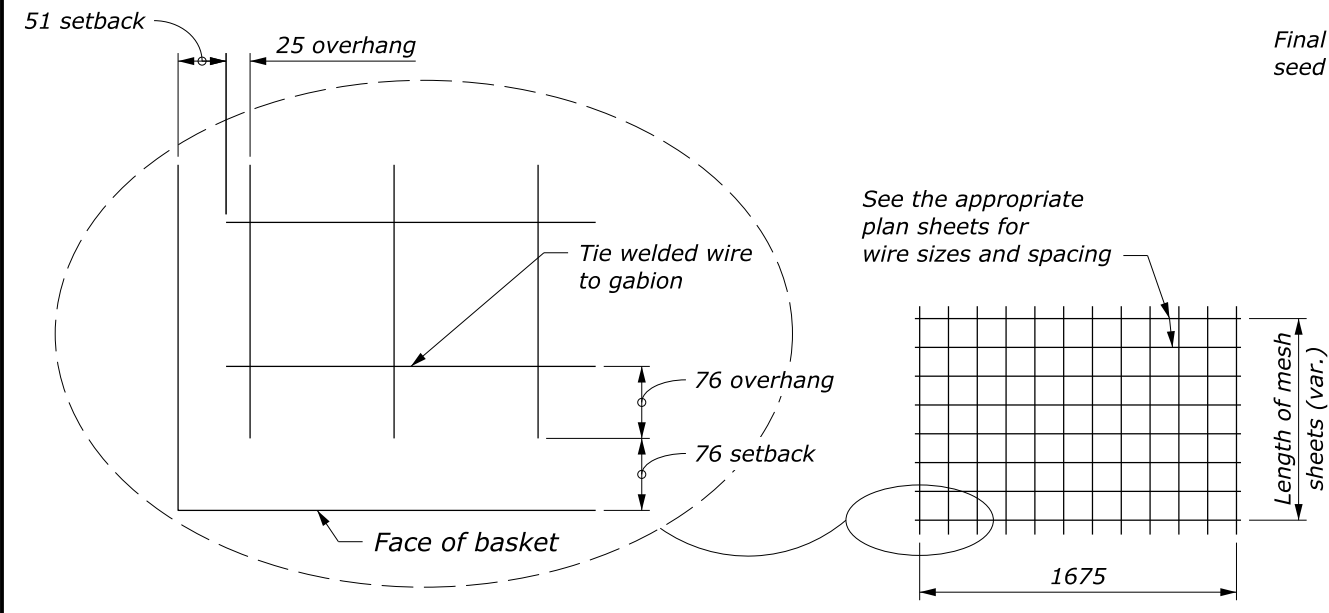
WFL STANDARD  
W253-3

**GABION FACED WALL**

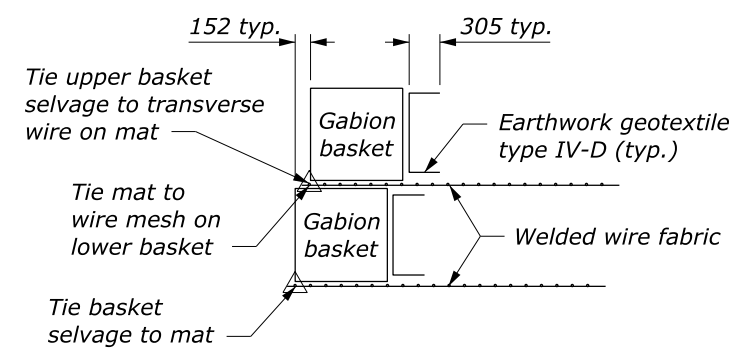
SPECIFICATION  
FP-24, FP-14  
APPROVED FOR USE  
9/2011



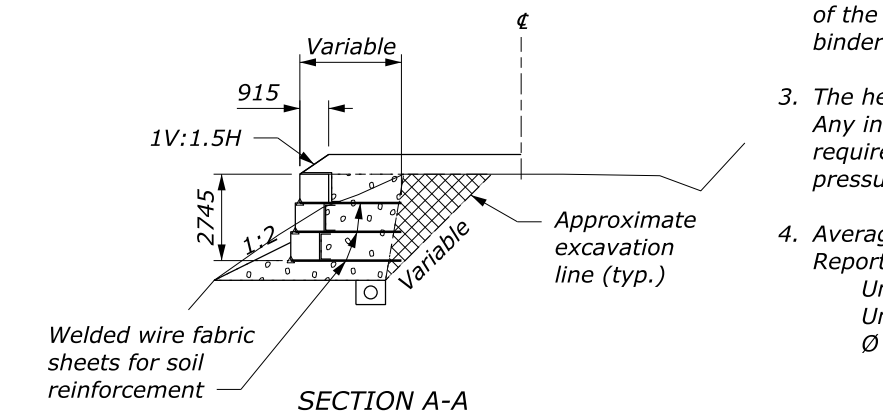
**TYPICAL GABION WALL**



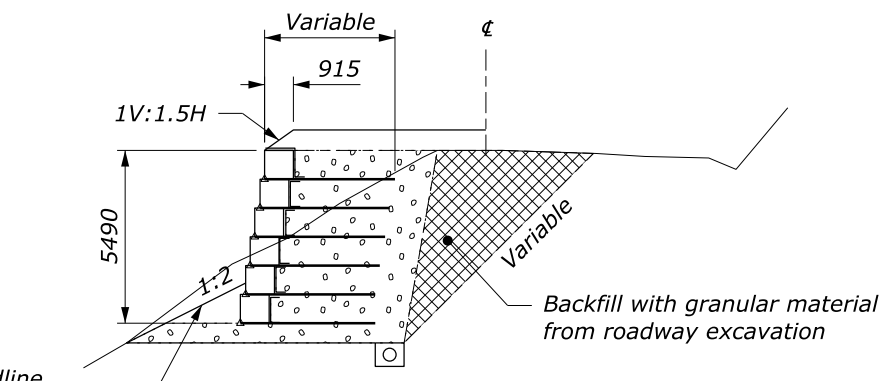
**WELDED WIRE FABRIC SHEETS FOR SOIL REINFORCEMENT**



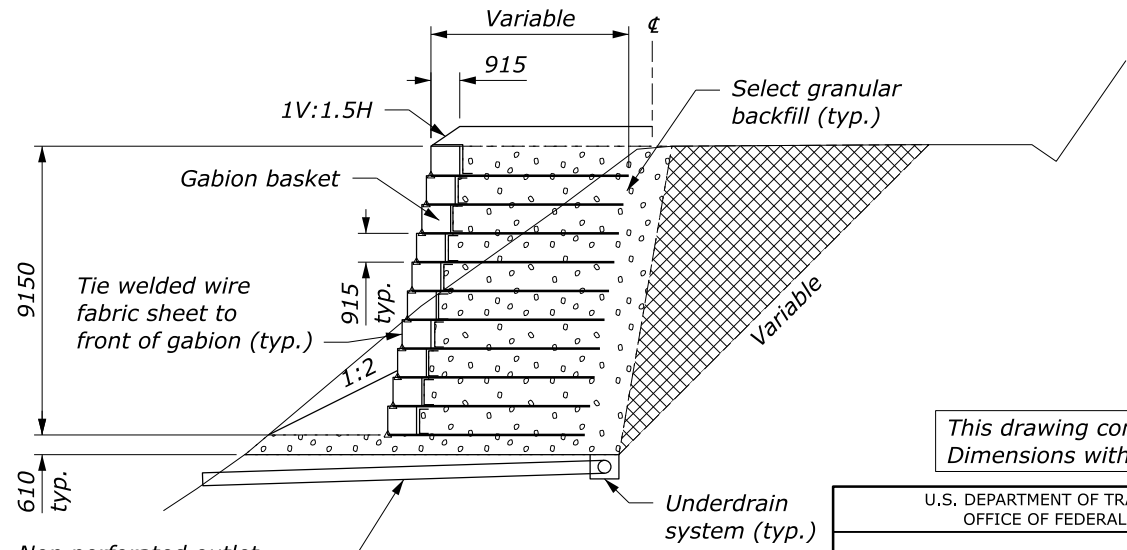
**TYPICAL CONNECTION DETAIL**



**SECTION A-A**



**SECTION B-B**



**SECTION C-C**

**NOTE:**

1. The welded wire fabric sheets vary in length within each wall. The height (H) of the vertical face of the wall determines the length of the welded wire fabric for the entire section. See other plan sheets for fabric lengths, wire sizes and spacing and number of mats. Where the wall construction requires the width of the welded wire fabric sheets to be less than 1650 mm, the fabric wire may be field cut to fit. Cut fabric at center of mesh of welded wire fabric sheets.
2. Place layers of welded wire fabric sheets with 150 mm gaps between sheets. The 150 mm gaps are measure at the face of the wall. Connect the welded wire fabric sheets with spiral binders or tie wire to the front edge of each gabion basket.
3. The heights and quantities are subject to field adjustment. Any increase in wall heights over those shown on the plans require investigation to determine that the safe bearing pressure is not exceeded.
4. Average design assumption values. See the Geotechnical Report, if available, for site specific values.  
Unit weight of backfill material 20.8 kN/m<sup>3</sup>  
Unit weight of filled gabions 17.6 kN/m<sup>3</sup>  
Ø angle = 35° for backfill material

This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	WFLHD DETAIL WM253-3
<b>GABION FACED WALL</b>	
SPECIFICATION FP-24, FP-14	
APPROVED FOR USE 9/2011	

NO SCALE