



PURCHASING AND CENTRAL SERVICES

Telephone No.: (845) 808-1088

Fax No.: (845) 808-1914

Contract Award Notification

Title: PRECAST MODULAR BLOCK RETAINING WALL UNITS

Contract Period: One Year from Date of Award

Bid Opening Date: August 17, 2016

BID No: RFB-37-16

Authorized User: County Agencies, All Political Subdivisions

Description: PRECAST MODULAR BLOCK RETAINING WALL UNITS

**Contractor Information: MID HUDSON CONCRETE PRODUCTS
3504 Route 9
Cold Spring, NY 10516
845-265-3265**

PURCHASING AGENT: Alex Mays **DATE:** 8/17/16

DEPARTMENT HEAD: Jed Rein **DATE:** 8/17/16

COUNTY EXECUTIVE: Maryellen Odell **DATE:** 8.19.16

COUNTY OF PUTNAM - PURCHASING
 40 Gleneida Ave.-1st Floor-Room 105, Carmel, NY 10512
 TELEPHONE: 845-808-1088 / TELEFAX: 845-808-1914

TITLE: PRECAST MODULAR BLOCK RETAINING WALL UNITS

BID NUMBER: RFB-37-16

PARTICULAR BID SPECIFICATIONS

PRECAST MODULAR BLOCK RETAINING WALL UNITS

A. All units for the project shall be obtained from the same manufacturer. The manufacturer shall be licensed and authorized to produce the retaining wall units by the precast modular block system patent holder/licensor and shall document compliance with the published quality control standards of the proprietary precast modular block system licensor for the previous three (3) years or the total time the manufacturer has been licensed, whichever is less.

B. Concrete used in the production of the precast modular block units shall be first-purpose, fresh concrete. It shall not consist of returned, reconstituted, surplus or waste concrete. It shall be an original production mix meeting the requirements of ASTM C94 and exhibit the following:

1. Minimum 28-day compressive strength of 4,000 psi (27.6 MPa).
2. Shall be free of water soluble chlorides and chloride based accelerator admixtures.
3. 6% +/- 1½% air-entrainment in conformance ASTM C94.
4. Maximum slump of 5 inches +/- 1½ inches (125 mm +/- 40 mm) per ASTM C143 for conventional concrete mix designs.
5. Slump Flow for Self-Consolidating Concrete (SCC) mix designs shall be between 18 inches and 32 inches (450 mm and 800 mm) as tested in accordance with ASTM C1611.

C. Each concrete block shall be cast in a single continuous pour without cold joints. With the exception of half-block units, corner units and other special application units, the precast modular block units shall conform to the nominal dimensions listed in the table below and be produced to the dimensional tolerances shown.

Block Type	Dimension	Nominal Value	Tolerance
28" (710 mm) Block	Height	18" (457 mm)	+/- 3/16" (5 mm)
	Length	46-1/8" (1172 mm)	+/- 1/2" (13 mm)
	Width*	28" (710 mm)	+/- 1/2" (13 mm)
41" (1030 mm) Block	Height	18" (457 mm)	+/- 3/16" (5 mm)
	Length	46-1/8" (1172 mm)	+/- 1/2" (13 mm)
	Width*	40-1/2" (1030 mm)	+/- 1/2" (13 mm)
60" (1520 mm) Block	Height	18" (457 mm)	+/- 3/16" (5 mm)
	Length	46-1/8" (1172 mm)	+/- 1/2" (13 mm)
	Width*	60" (1520 mm)	+/- 1/2" (13 mm)

* Excluding Variable Face Texture

D. Individual block units shall have a nominal height of 18 inches (457 mm).

E. With the exception of half-block units, corner units and other special application units, the precast modular block units shall have two (2), circular dome shear knobs that are 10 inches (254 mm), 7.5 inches (190 mm), or 6.75 inches (171 mm) in diameter and 4 inches (102 mm) or 2 inches (51 mm) in height. The shear knobs shall fully index into a

Any alterations to this document made by the Offeror may be grounds for rejection of the proposal, cancellation of any subsequent award, or any legal remedies available to the County of Putnam.

COUNTY OF PUTNAM - PURCHASING
 40 Gleneida Ave.-1st Floor-Room 105, Carmel, NY 10512
 TELEPHONE: 845-808-1088 / TELEFAX: 845-808-1914

**TITLE: PRECAST MODULAR BLOCK RETAINING
 WALL UNITS**

BID NUMBER: RFB-37-16

continuous semi-cylindrical shear channel in the bottom of the block course above. The Peak interlock shear between any two (2) vertically stacked precast modular block units, with 10 inch (254 mm) diameter shear knobs, measured in accordance with ASTM D6916 shall exceed 6,500 lb/ft (95 kN/m) at a minimum normal load of 500 lb/ft (7kN/m). as well as an ultimate peak interface shear capacity in excess of 11,000 lb/ft (160 kN/m). The peak interlock shear between any two (2) vertically stacked precast modular block units, with 7.5 inch (190 mm) or 6.75 inch (171 mm) diameter shear knobs, measured in accordance with ASTM D6916 shall exceed 1,850 lb/ft (27 kN/m) at a minimum normal load of 500 lb/ft (7kN/m) as well as an ultimate peak interface shear capacity in excess of 10,000 lb/ft (146 kN/m).

F. The 28" (710 mm) and 41" (1030 mm) precast modular block units shall be cast with a 13" (330 mm) wide, continuous vertical core slot that will permit the insertion of a 12" (305 mm) inch wide strip of geogrid reinforcement to pass completely through the block. When installed in this manner, the geogrid reinforcement shall form a non-normal load dependent, positive connection between the block unit and the reinforcement strip.

G. Without field cutting or special modification, the precast modular block units shall be capable of achieving a minimum radius of 14 ft 6 in (4.42 m).

H. The precast modular block unit face texture shall be selected by the owner from the available range of textures available from the precast modular block manufacturer. Each textured block facing unit shall be a minimum of 5.76 square feet (0.54 square meters) with a unique texture pattern that repeats with a maximum frequency of once in any 15 square feet (1.4 square meters) of wall face.

I. The block color/texture that may be selected by the owner from the precast modular block manufacturer is listed on the proposal sheet.

J. All precast modular block units shall be sound and free of cracks or other defects that would interfere with the proper installation of the unit, impair the strength or performance of the constructed wall. PMB units to be used in exposed wall construction shall not exhibit chips or cracks in the exposed face or faces of the unit that are not otherwise permitted. Chips smaller than 1.5" (38 mm) in its largest dimension and cracks not wider than 0.012" (0.3 mm) and not longer than 25% of the nominal height of the PMB unit shall be permitted. PMB units with bug holes in the exposed architectural face smaller than 0.75" (19 mm) in its largest dimension shall be permitted. Bug holes, water marks, and color variation on non-architectural faces are acceptable. PMB units that exhibit cracks that are continuous through any solid element of the PMB unit shall not be accepted regardless of the width or length of the crack.

K. Manufacturers.

1. Manufacturers of Redi-Rock Retaining Wall Systems as licensed by Redi-Rock International, LLC, 05481 US 31 South, Charlevoix, MI 49720 USA; telephone (866) 222-8400; website www.redi-rock.com. Or approved equal.

L. Proposal

Block sizes and types are listed on the proposal sheet. The quantities listed are for bid purposes only. Actual quantities ordered for a project may be more or less. All pricing shall include delivery to any job site as required within Putnam County.

Mid Hudson Concrete Products
3504 Route 9
Cold Spring, NY 10516

ITEM #	BLOCK DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED PRICE
ALL ITEMS ON THIS PAGE ARE TO BE PRICED FOR LEDGESTONE FACE TEXTURE				
RETAINING BLOCKS				
1	28" TOP	12	\$110.00	\$1,320.00
2	28" HALF TOP	12	\$95.00	\$1,140.00
3	28" FLAT TOPS	12	\$110.00	\$1,320.00
4	28" HALF FLAT TOPS	12	\$95.00	\$1,140.00
5	28" MIDDLE	12	\$115.00	\$1,380.00
6	28" HALF MIDDLE	12	\$95.00	\$1,140.00
7	28" BOTTOM	12	\$115.00	\$1,380.00
8	28" HALF BOTTOM	12	\$95.00	\$1,140.00
9	41" TOP	12		\$0.00
10	41" HALF TOP	12	\$95.00	\$1,140.00
11	41" MIDDLE	12	\$125.00	\$1,500.00
12	41" HALF MIDDLE	12	\$95.00	\$1,140.00
13	41" BOTTOM	12	\$125.00	\$1,500.00
14	41" HALF BOTTOM	12	95	\$1,140.00
FREESTANDING/ACCESSORIES				
15	CORNER MIDDLE	6	\$110.00	\$660.00
16	CORNER BOTTOM	6	\$110.00	\$660.00
17	CORNER TOP	6	\$110.00	\$660.00
18	STRAIGHT MIDDLE	6	\$110.00	\$660.00
19	FLAT TOP	6	\$110.00	\$660.00
20	6" CAPS 2 SIDED	6	\$75.00	\$450.00
21	6" CAPS 3 SIDED	6	\$75.00	\$450.00
22	6" CAPS 4 SIDED	6		\$0.00
EXTENDED PRICE TOTAL-ALL ITEMS 1 THROUGH 22				\$20,580.00

No bid

Item 9 & 22

ALL PRICING MUST INCLUDE DELIVERY TO ANY JOB SITE AS REQUIRED WITHIN PUTNAM COUNTY

QUANTITIES LISTED ARE FOR BID PURPOSES ONLY

ITEM #	BLOCK DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	EXTENDED PRICE
ALL ITEMS ON THIS PAGE ARE TO BE PRICED WITH COBBLESTONE OR LIMESTONE FACE TEXTURE				
RETAINING BLOCKS				
23	28" TOP	12	\$100.00	\$1,200.00
24	28" HALF TOP	12	\$85.00	\$1,020.00
25	28" FLAT TOPS	12	\$100.00	\$1,200.00
26	28" HALF FLAT TOPS	12	\$85.00	\$1,020.00
27	28" MIDDLE	12	\$105.00	\$1,260.00
28	28" HALF MIDDLE	12	\$85.00	\$1,020.00
29	28" BOTTOM	12	\$105.00	\$1,260.00
30	28" HALF BOTTOM	12	\$85.00	\$1,020.00
31	41" TOP	12		\$0.00
32	41" HALF TOP	12	\$85.00	\$1,020.00
33	41" MIDDLE	12	\$115.00	\$1,380.00
34	41" HALF MIDDLE	12	\$85.00	\$1,020.00
35	41" BOTTOM	12	\$115.00	\$1,380.00
36	41" HALF BOTTOM	12	\$85.00	\$1,020.00
FREESTANDING/ACCESSORIES				
37	CORNER MIDDLE	6	\$100.00	\$600.00
38	CORNER BOTTOM	6	\$100.00	\$600.00
39	CORNER TOP	6	\$100.00	\$600.00
40	STRAIGHT MIDDLE	6	\$100.00	\$600.00
41	FLAT TOP	6	\$100.00	\$600.00
42	6" CAPS 2 SIDED	6	\$65.00	\$390.00
43	6" CAPS 3 SIDED	6	\$65.00	\$390.00
44	6" CAPS 4 SIDED	6		\$0.00
EXTENDED PRICE TOTAL-ALL ITEMS 23 THROUGH 44				\$18,600.00
GRAND TOTAL ITEMS 1-44				\$39,180.00

No bid Item 32 & 44