# **PA Historical Marker Specifications**

# **Exhibit A – General Specifications**

<u>Marker samples</u> – As part of a response to the Invitation for Bid (IFB), bidders must furnish Marker material samples for testing purposes as needed to PHMC Marker Program Coordinator. Marker samples must be postmarked for delivery by the closing date of the (IFB). The contract shall be awarded to the lowest responsible bidder whose submission, including the described marker samples, is found to be responsive to the given specifications. The following samples must be submitted:

- 1. A one-time sample of unfinished cast aluminum not less than 8" x 8" x .3125" thick that is cast using a suitable secondary aluminum alloy indicated by the Aluminum Association designation 3XX.X or approved equal.
- 2. A one-time sample of secondary aluminum alloy indicated by the Aluminum Association designation 3XX.X or approved equal not less than 8" x 8" x .3125" thick with applied finish to plate, lettering and topcoat that conforms to the specified *material*, *color*, and *finish*.

Material samples must be delivered to:

Alli Davis
PHMC Marker Program Coordinator
Keystone Commonwealth Building, 2<sup>nd</sup> Floor
400 North Street
Harrisburg, PA 17120-0093

The Commission has erected over 2,500 Pennsylvania historical markers. There are such markers in every county of the Commonwealth. Upon request, the Commission will supply information regarding the markers. Please refer to the marker website to obtain location information for the purpose of examination: http://www.pahistoricalmarkers.com.

### Exhibit B (Roadside)

#### Marker plate:

<u>Material</u> - marker plate is to be cast of a suitable secondary aluminum alloy designated by the Aluminum Association as 3XX.X or approved equal. No junk or scrap aluminum is to be used.

<u>Size of marker</u> – marker plate shall have a cap and an ornament cast integrally with the plate making an overall size of marker 45.125" x 46" (see drawing).

Construction of marker plate – the plate rail shall be at least .75" thick after milling and center panel shall be at least .3125" thick. The rail shall be .625" wide around the ornament at the top edge and for 7" below the top edge on each side. At 7" below the top edge on each side, the rail shall step out to 1.5" in width by .625" thick; at 17" below the top edge, on each side, it shall further step out to 2.325" by .5" thick. The rail and cap shall be given a smooth finish, and the body of the marker plate shall have a textured finish.

<u>Cap</u> – the cap shall have wings of butterfly design and shall be not less than .3125" thick in thinnest section. The tip of the cap shall extend to the inner edge of the marker plate rail. It shall be cast of such tolerance that it will fit over the top of the marker post firmly and solidly without any rocking.

Marker plate, rail and cap shall be cast integrally into one (1) piece; this one (1) piece to be set upon post and attached to it firmly by the use of six (6) .5" by 1" stainless steel allen screws. The cap shall be drilled and tapped to accept these screws. This operation plus supplying of screws and allen wrench is furnished by the manufacturer.

Additional steps are to be taken by the manufacturer to eliminate shrinkage strains between thick and thin sections of all castings.

<u>Lettering</u> – shall be cast integrally with marker plate in letters .094" thick and of a design standard for Pennsylvania historical markers (see attached photograph). The body of the text shall be in standard capital and lower case letters with a maximum height of 1.5" for all new markers. Some replacement markers may have a maximum height of 2." Lettering shall appear on both sides of the marker plate with identical copy (or different, if so specified by the Commission). Titles of the plate shall be in 2" capital letters, providing said title is of appropriate length of copy. If title is too long, 1.5" capital letters with 2" capital first letters of each word shall be used; if title is still too long, 1.5" capital letters alone shall be used; if title still remains too long, 1.5" capital letters and 1" lower case letters shall be used. All letters shall have flat surfaces and shall be machine finished after casting to a common horizontal plate. Letter faces shall then be polished or buffed. All blow holes and other such imperfections shall be removed or filled in such a manner as to be permanent and not to show in the finished marker.

<u>Keystone and bars</u> – at a suitable location between the title and the text of the marker, there will be a keystone and bars. The keystone will have a vertical axis of 1.5" or 1.125" and a horizontal axis, at its greatest point, of 1.5" or 1.125". Bars will be 5" in length, tapering from .3125" to .1875". (see drawing)

Ornament (coat of arms) – the coat of arms of the Commonwealth of Pennsylvania shall be cast integrally with the plate and shall be 8.5" along its horizontal axis and 6.1875" along its vertical axis. A rail .625" shall completely enclose the coat of arms giving the enclosed area an oval shape 13" wide and 10" high. The coat of arms shall appear on both sides of the plate and the features shall be molded in .094" relief and finished with a coating of regal yellow in such a manner as to adhere permanently to the aluminum (see drawing).

Marker post – to be supplied on standard orders. Will be stated in the order – see Exhibit E.

<u>Finish on marker plate</u> – the marker plate (including rail and cap) is to be completely free from any elements that would tend to lessen adherence. It is to receive pretreatment by cleaning, degreasing and degassing prior to powder coating process. Powder shall be electrostatically applied using one (1) coat thermosetting polyester-tgic powder; thickness no less than 3-5 mils, color: Penn blue, Axalta (DuPont) #pfkf254s9 (or equivalent); then fully cured in a powder coating bake out oven per powder manufacturer specifications.

<u>Finish on lettering</u> – letter faces are to be brought to a common plane, polished and buffed to a finish approved by the Commission. Following above specified procedure, a coating of Sherwin Williams quick dry enamel paint, color: regal yellow, #f77y00016 shall be applied to all letter faces in such a manner as to permanently adhere to powder coated surface.

<u>Protective clear topcoat</u>- the finished marker plate and lettering is to be given one (1) clear protective top coat of thermosetting polyester-tgic powder; thickness no less than 1-3 mils, color: clear, Axalta (DuPont) #pfc400s9 (or equivalent); then fully cured in powder coating bake out oven per powder manufacturer specifications.

<u>Pennsylvania Historical and Museum Commission and Year on Marker</u> – the name of this Commission and the year of manufacture shall be cast integrally with the marker plate in .5" ribbon style capital letters at the bottom of the plate. There shall be no abbreviations of any word in "Pennsylvania Historical and Museum Commission", which shall be centered between the left and right-hand margins of the text. The year shall be set on the same line, ending about 2.75" from the right-hand margin of the text and shall be separated from the name of the Commission by approximately 2.5"

<u>Copy for lettering</u> – copy for lettering on marker plate shall be furnished by the Pennsylvania Historical and Museum Commission, and shall not exceed thirteen (13) lines including title. After receipt of copy and after the lettering is setup, manufacturer will send an e-mail containing a digital photo of the finished lettering to a Commission representative, who shall approve the set-up or make corrections, if necessary. Once this is done, the wording shall become official, and any changes made thereafter are subject to extra charges. If the marker is not manufactured according to copy or according to the approved wording, errors will be corrected at the manufacturer's expense.

<u>Delivery and delivery time</u> – All orders shall include an "expect to ship" or "needed by" date. Manufacturer and Commission shall agree upon this date and manufacturer will further guarantee to ship marker to reach its final destination by said date (although manufacturer cannot be responsible for delays caused by the common carrier once marker leaves its premises). On orders that do not include a shipping date by the Commission, shipping shall begin within four (4) weeks of date of approval of "official" wording; or within a greater time interval if so specified.

# **Exhibit C (City-Type)**

#### Marker plate:

#### Specifications shall be identical to that of the roadside marker with the following exceptions:

<u>Size of marker</u> – marker plate shall be 27" wide by 35.125" high plus an ornament cast integrally with the plate making an overall size of plate 27" x 41.375" (see drawing).

<u>Construction of marker plate</u> – the plate rail shall be at least .875" thick after milling and center panel shall be at least .3125" thick. The rail shall be .625" wide around the ornament at the top edge. At 11" below the top edge, on each side, a second rail .5" thick shall extend outward beyond the inner plate rail 1.5". The width of this second rail shall be .5". The area between the two rails shall be .3125" thick.

<u>Lettering</u> – shall be cast integrally with marker plate in letters .094" thick and of a design standard for Pennsylvania historical markers (see attached photograph). The body of the text shall be in standard capital and lower case letters with a maximum height of 1.5." Lettering shall appear on both sides of the marker plate with identical copy (or different) if so specified by the Commission. Titles of the plate shall be in 2" or 1.5" capital letters depending on the length of title. If title is too long, 1.5" capital with 1" lower case letters shall be used. All letters shall have flat surfaces and shall be machine finished after casting to a common horizontal plate. Letter faces shall then be polished or buffed. All blow holes and other such imperfections shall be removed or filled in such a manner as to be permanent and not to show in the finished marker.

<u>Keystone and bars</u> – at a suitable location between the title and the text of the marker, there will be a keystone and bars. The keystone will have a vertical axis of 1.125" or .875" and a horizontal axis, at its greatest point, of 1.125" or .875". Bars will be 3.25" in length, tapering from .3125" to .1875" (see drawing).

Ornament (coat of arms) – the coat of arms of the Commonwealth of Pennsylvania shall be cast integrally with the plate and shall be 7" along its horizontal axis and 5" along its vertical axis. A rail .625" shall completely enclose the coat of arms giving the enclosed area an oval shape 9" wide and 7" high. The coat of arms shall appear on both sides of the plate and the features shall be molded in .094" relief and finished with a coating of regal yellow in such a manner as to adhere permanently to the aluminum (see drawing).

<u>Pennsylvania Historical and Museum Commission year on marker</u> – the name of this Commission and the year of manufacture shall be cast integrally with the marker plate in .375" ribbon style capital letters at the bottom of the plate. There shall be no abbreviations of any word in "Pennsylvania Historical and Museum Commission". The name and year shall be centered between the left and right margins of the text. The year shall be set on the same line, near the right-hand margin.

<u>Copy for lettering</u> – copy for lettering on marker plate shall be furnished by the Pennsylvania Historical and Museum Commission, and shall not exceed fourteen (14) lines including title. After receipt of copy and after the lettering is setup, manufacturer will send an e-mail containing a digital photo of the finished lettering to a Commission representative, who shall approve the set-up or make corrections, if necessary. Once this is done, the wording shall become official, and any changes made thereafter are subject to extra charges. If the marker is not manufactured according to copy or according to the approved wording, errors will be corrected at the manufacturer's expense.

<u>Delivery and delivery time</u> – All orders shall include an "expect to ship" or "needed by" date. Manufacturer and Commission shall agree upon this date and manufacturer will further guarantee to ship marker to reach its final destination by said date (although manufacturer cannot be responsible for delays caused by the common carrier once marker leaves its premises). On orders that do not include a shipping date by the Commission, shipping shall begin within four (4) weeks of date of approval of "official" wording; or within a greater time interval if so specified.

# **Exhibit D (Mounting Cap)**

<u>Material</u> – mounting cap is to be cast of a suitable secondary aluminum alloy designated by the Aluminum Association as 3XX.X or approved equal. No junk or scrap aluminum is to be used.

Size of (see drawing).

<u>Construction of Cap</u> – the cap shall have wings of butterfly design and shall be not less than .3125" thick in thinnest section. The tip of the cap shall extend to the inner edge of the marker plate rail. It shall be cast of such tolerance that it will fit over the top of the marker post firmly and solidly without any rocking.

Cap shall be cast integrally into one (1) piece. This one (1) piece to be set upon post and attached firmly by the use of six (6) .5" x 1" allen screws. The cap shall be drilled and tapped to accept these screws. This operation plus supplying of screws and allen wrench is furnished by the manufacturer.

Additional steps are to be taken by the manufacturer to eliminate shrinkage strains between thick and thin sections of the castings.

<u>Finish on cap</u> – the cap is to be completely free from any elements that would tend to lessen adherence. It is to receive pretreatment by cleaning, degreasing and degassing prior to powder coating process. Powder shall be electrostatically applied using one (1) coat thermosetting polyester-tgic powder; thickness no less than 3-5 mils, color: Penn blue, Axalta (DuPont) #pfkf254s9 (or equivalent); then fully cured in a powder coating bake out oven per powder manufacturer specifications.

<u>Delivery and delivery time</u> – Prices quoted do not include delivery charge to final destination. All orders shall include an "expect to ship" or "needed by" date. Manufacturer and Commission shall agree upon this date and manufacturer will further guarantee to ship yoke to reach its final destination by said date (although manufacturer cannot be responsible for delays caused by the common carrier once marker leaves its premises). On orders that do not include a shipping date by the Commission, shipping shall begin within four (4) weeks of date of approval of "official" wording; or within a greater time interval if so specified.

# **Exhibit E (Post)**

<u>Material & construction</u> - the post shall be aluminum pipe. Post shall be round in shape, measuring 3.5" inside diameter and 4" outside diameter having a wall thickness between .1875" and .225". Post shall not be threaded on either end.

<u>Size of post</u> - the post shall be either the standard, 10'0" in length, or the special 7'0" post with bottom flange, as specified by the Commission at the time of ordering. The cast aluminum flange shall be welded to the bottom of the 7'0" post, and shall measure 8" x 8" x 3/4". It shall have four 1/2" holes, one in each quadrant, to accept 6" long anchor bolts (not provided), allowing it to be flush-mounted to a sidewalk.

<u>Finish</u> - it shall receive pretreatment by cleaning, degreasing and degassing prior to powder coating process. Powder shall be electrostatically applied using one (1) coat thermosetting polyester-tgic powder; thickness no less than 3-5 mils, color: Penn blue, Axalta (DuPont) #pfkf254s9 (or equivalent); then fully cured in a powder coat bake out oven per powder manufacturer specifications.

<u>Delivery and delivery time</u> – Prices quoted do not include delivery charge to final destination. All orders shall include an "expect to ship" or "needed by" date. Manufacturer and Commission shall agree upon this date and manufacturer will further guarantee to ship post to reach its final destination by said date (although manufacturer cannot be responsible for delays caused by the common carrier once marker leaves its premises). On orders that do not include a shipping date by the Commission, shipping shall begin within four (4) weeks of date of approval; or within a greater time interval if so specified.

# **Exhibit F (Lettering)**

#### Individual Lettering:

<u>Material</u> - marker plate is to be cast of a suitable secondary aluminum alloy designated by the Aluminum Association as 3XX.X or approved equal. No junk or scrap aluminum is to be used.

Individual Replacement Lettering — shall be cast in letters .094" thick and of a design standard for Pennsylvania historical markers (see attached photograph). The lettering shall be in standard capital and lower case letters with a maximum height of 1.5" for all new markers. Some replacement lettering may have a maximum height of 2." All letters shall have flat surfaces and shall be machine finished after casting. Letter faces shall then be polished or buffed. All blow holes and other such imperfections shall be removed or filled in such a manner as to be permanent and not to show in the finished marker.

<u>Delivery and delivery time</u> – Prices quoted do not include delivery charge to final destination. All orders shall include an "expect to ship" or "needed by" date. Manufacturer and Commission shall agree upon this date and manufacturer will further guarantee to ship post to reach its final destination by said date (although manufacturer cannot be responsible for delays caused by the common carrier once marker leaves its premises). On orders that do not include a shipping date by the Commission, shipping shall begin within four (4) weeks of date of approval; or within a greater time interval if so specified.