City of Hilliard Sign Specifications

Street Name Signs - General Specifications

Plan Designation: Item 630 Street Name Sign, Type ( ), As Per Plan

Plan Unit: Per Each

Plan Payment: Payment for each street name sign shall include brackets, stiffeners, stickers, and all incidental hardware to mount the street name sign(s) on the designated support type.

Submittals: Sign Fabricator shall submit preliminary layout of street name signs to the City of Hilliard Engineer (lschamp@hilliardohio.gov) or the City of Hilliard sign shop (signshop@hilliardohio.gov) before manufacturing signs. Layout shall be to scale and shall include all dimensions. Failure to submit a scaled layout could result in rejection of the street name sign and replacement will be at the manufacturer's expense.

New Street Name Approval & Submittals: All new street names shall be submitted to the City of Hilliard for pre-approval (email: mkelnhofer@hilliardohio.gov). For any street name greater than ten (10) characters (including prefix or suffix), a sign layout in accordance with these specifications shall be submitted prior to pre-approval of a new street name to ensure that the street name can adequately fit on the maximum sign blade without modification to font, lettering size, or standard spacing.

The following specifications apply to all street name signs in the City of Hilliard:

- All street name signs shall be made on an aluminum sign blank (0.0080 thickness).
- All street name signs shall use a white retroreflective sheeting made with prisms (ASTM D4956 Type IV or VIII as designated for each sign type provided below) with a blue electrocut film (color: 1175 - FHWA Blue) to create a blue sign with white lettering.
- Street name legends, prefixes, and suffixes shall be printed Federal Highway Administration, Office of Transportation Operations' Clearview Font Type 2-W using standard letter spacing. Legends, prefixes, and suffixes shall be centered horizontally and vertically on the sign face. If a street name contains a drop letter (y, p, j, etc.), the name shall be shifted ½" up on the sign face. Lettering sizes and clear spacing shall conform to the various sign types provided below.
- A modified Clearview Font is only permitted for existing street names in order to fit on the maximum sign blades designated for the various sign types provided below. All new street names shall comply with the standard provisions established herein.
- All street name sign installations shall include a City of Hilliard identification sticker, which provides the month and year that the sign is installed. Stickers shall be obtained from the City of Hilliard sign shop (contact: Dave Dale - (614) 334-2355).

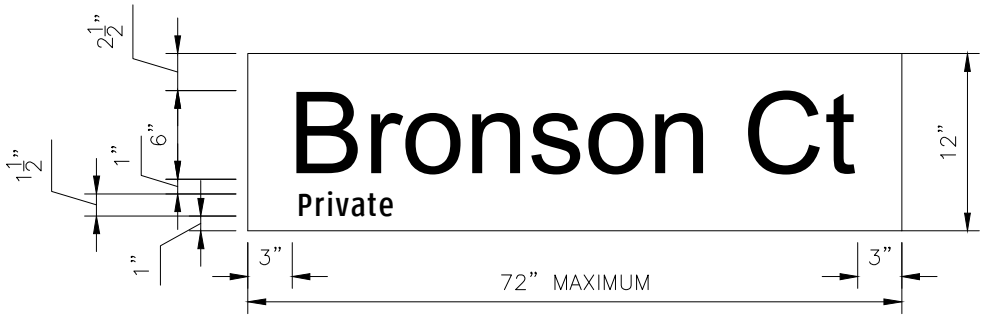
	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	GENERAL SPECIFICATIONS	1/10 TC-1

City of Hilliard Sign Specifications

Street Name Signs - General Specifications (cont.)

- These standards shall apply to all public street intersections and to intersections of a public street with a named private driveway. Non-reflective public or private street name signs within the public right-of-way are prohibited on new installations. Existing street name signs that do not meet these standards shall be upgraded as part of the normal city sign maintenance schedule.

- At locations where a named private driveway intersects a public street, the word "Private" shall be positioned beneath the private street name as shown in the example below.



	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	GENERAL SPECIFICATIONS	2/10 TC-1

City of Hilliard Street Name Sign Reference Table

		Installation			Post, Anchor & Bracket			Sign Size & Layout				
Type of Intersection	Speed Limit of Major Street	Type of Mounting	Number of signs per intersection (min)	Vertical Clearance of Sign from Street	Post Type (galvanized; black in Old Hilliard)	Anchor Type (galvanized)	Bracket Type (galvanized; black in Old Hilliard)	Sign Blade Height	Sign Blade Max Length	Initial Upper Case Letter Height	1/2-inch Rounded Border	Single or Double Sided
Type A - Signalized - Mast Arm (all new City signal installations)	any	Overhead (On Mast Arm)	one per arm	on arm	N/A	N/A	Band or Cable-Mntd	20"	96"	12"	Yes	Single
Type B - Signalized - Strain Pole (existing signals or former FCEO signals)	Any	Side/Corner (On Strain Pole)	2 signs on 2 poles (opposite corners)	15'	N/A	N/A	2 cantilevered brackets & double-tee stiffeners (4 bands per sign)	20"	72"	9"	No	Double
Type C - Roundabout	Any	2 Posts per sign (in splitter islands)	one sign per splitter island	5'	2" square x 14 gauge galvanized w/ rain caps	2-1/4" square x 42" long; 8" min lap	N/A	16"	72"	7"	Yes (& chevron-arrow)	Single
Type D - Unsignalized - Arterial or Collector - high speed (includes subdivision street at Arterial/Collector - e.g. Dublin Rd cross streets)	40+ MPH	Side/Corner & Cantilevered (On Post)	1 sign @ T intersection; 2 signs @ X intersection	12'	2" square x 12 gauge galvanized w/ rain caps	2-1/4" square x 48" long; 18" min lap	2 cantilevered brackets & double-tee stiffeners	16"	72"	8"	No	Double
Type E - Unsignalized - Arterial or Collector - low speed (includes subdivision street at Arterial/Collector - e.g. Cemetery Rd cross streets)	25 - 35 MPH	Side/Corner & Cantilevered (On Post)	1 sign @ T intersection; 2 signs @ X intersection	12'	2" square x 12 gauge galvanized w/ rain caps	2-1/4" square x 48" long; 18" min lap	2 cantilevered brackets & double-tee stiffeners	12"	72"	6"	No	Double
Type F - Unsignalized - Subdivision (e.g. internal subdivision streets - not primary street intersection with arterial or collector)	25 MPH	Side/Corner & Cross-Mounted (On Post)	One (2 if street name changes at cross street)	10'	2" square x 12 gauge galvanized - without rain caps	2-1/4" square x 30" long; 8" min lap	12" square post bracket & 12" cross piece bracket	9"	60"	5"	Yes	Double

Note:

SNS legends, prefixes, and suffixes shall be printed in FHWA **Clearview Font Type 2-W** using standard horizontal letter spacing and edge spacing. Lettering size and space reductions are permitted only on existing street names. New subdivision street names shall comply with all standards.

	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	REFERENCE TABLE	3/10 TC-1

Type A Street Name Signs

Type A signs are to be installed at all signalized intersections with mast arms.

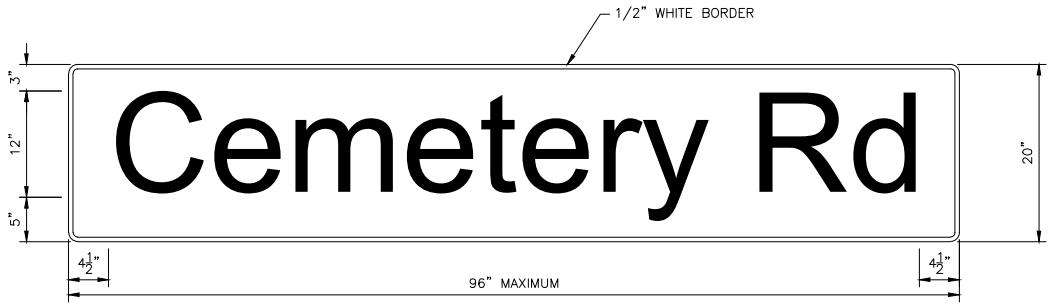
Installation. Signs shall be mounted on the mast arm. The preferred location is centered between signal heads as far left as possible over the oncoming lanes of traffic. One sign per arm.

Brackets. No brackets are required for Type A installations. Each sign shall be mounted to the arm using a band or cable-mounted system (Astro-Brac or approved equal).

Sign Size. The sign blade shall be 20” high. Maximum sign blade length shall be 96”.

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 12”. Prefixes and suffixes shall be the same size as the legend. A ½-inch white border with rounded corners shall be provided. A 4 ½ -inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be single sided with the backs of the signs painted black.



	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	TYPE A	4/10 TC-1

Type B Street Name Signs

Type B signs are to be installed at all signalized intersections with strain poles.

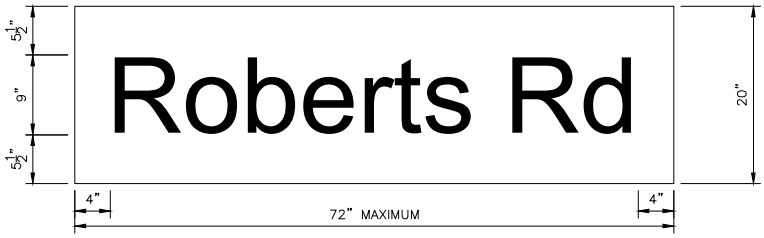
Installation. Signs shall be mounted on opposite corners on the traffic signal strain pole. Judgment may be used in determining the appropriate location based on visibility. Two signs may be installed per pole. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 15 feet.

Brackets. Two cantilevered square brackets and double tee stiffeners (Sign-Fix, Xcessories Squared, or approved equal) shall be used. Each sign shall be banded to the vertical pole using four bands.

Sign Size. The sign blade shall be 20” high. Maximum sign blade length shall be 72”.

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 9”. Prefixes and suffixes shall be the same size as the legend. No border shall be used for signs that use cantilevered brackets for installation. A 4-inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.



	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	TYPE B	5/10 TC–1

Type C Street Name Signs

Type C signs are to be installed at all roundabout locations.

Installation. Signs shall be mounted in the splitter islands with one sign per island at each leg of the roundabout. The vertical clearance between the adjacent top of curb and the bottom of the sign shall be 5 feet. The horizontal clearance between the edge of the sign and the face of the splitter island curb shall be 2' minimum.

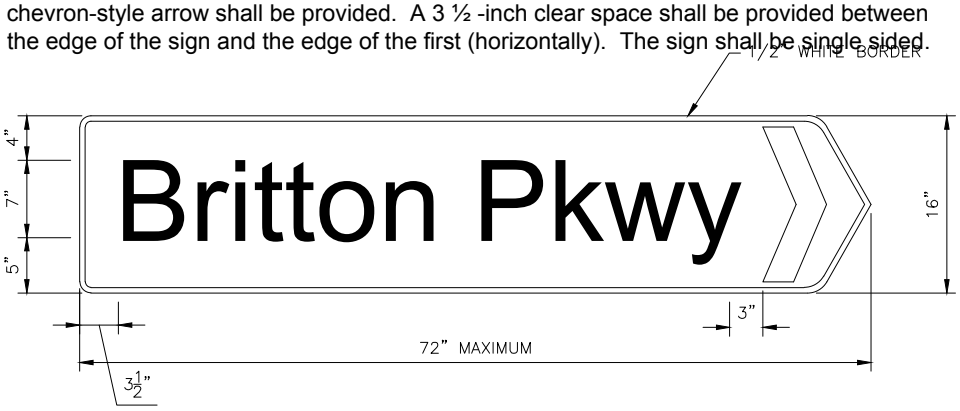
Brackets. No brackets are used for Type C sign installations.

Post/Anchor. Type C street name sign supports shall be two 2-inch square x 14 gauge square galvanized posts with die-cut knock-outs (typical regulatory sign posts). Pyramid rain caps shall be used. A single break-away anchor shall be used for each post. Anchors shall be 2 ¼-inch square, 42 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum. For all signs installed in concrete or paver islands, a six-inch PVC pipe box out shall be provided for the post anchor. The PVC box out shall be installed prior to pouring concrete or placing pavers. After the sign post anchor is installed, granular material shall be installed between the post anchor and the PVC box out.

Sign Size. The sign blade shall be 16” high. Maximum sign blade length shall be 72”.

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 7”. Prefixes and suffixes shall be the same size as the legend. A ½-inch white border with rounded corners and a chevron-style arrow shall be provided. A 3 ½ -inch clear space shall be provided between the edge of the sign and the edge of the first (horizontally). The sign shall be single sided.



	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	TYPE C	6/10 TC-1

Type D Street Name Signs

Type D signs are to be installed at unsignalized intersections along arterial or collector streets with speed limits of 40 mph or greater. This includes intersections of a primary subdivision street and the arterial/collector street. Examples include the intersections of Alton Darby Road/Strider Lane and Dublin Road/River Landings Blvd.

Installation. At four-way intersections, two pairs of signs should be installed, mounted on opposite corners. At three-way (tee) intersections, one pair of signs should be installed. Judgment may be used in determining the appropriate location based on visibility. Two signs should be installed per pole. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 12 feet. Signs shall be erected so that one sign does not block visibility of the other sign.

Brackets. Two cantilevered square brackets and double tee stiffeners (Sign-Fix, Xcessories Squared, or approved equal) shall be used.

Post/Anchor. Type D street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 ¼-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum.

Sign Size. The sign blade shall be 16” high. Maximum sign blade length shall be 72”.

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 8”. Prefixes and suffixes shall be the same size as the legend. No border shall be used for signs that use cantilevered brackets for installation. A 4-inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.

	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	TYPE D	7/10 TC–1

Type E Street Name Signs

Type E signs are to be installed at unsignalized intersections along arterial or collector streets with speed limits of 35 mph or less. This includes intersections of a primary subdivision street and the arterial/collector street. Examples include the intersections of Avery Rd/Dixon Dr, Davidson Road/Heather Ridge Dr, and Scioto Darby Rd/Hoffman Farms Dr.

Installation. At four-way intersections, two pairs of signs should be installed, mounted on opposite corners. At three-way (tee) intersections, one pair of signs should be installed. Judgment may be used in determining the appropriate location based on visibility. Two signs should be installed per pole. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 12 feet. Signs shall be erected so that one sign does not block visibility of the other sign.

Brackets. Two cantilevered square brackets and double tee stiffeners (Sign-Fix, Xcessories Squared, or approved equal) shall be used.

Post/Anchor. Type E street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 ¼-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum. When one or more sign erected on a 2-inch square post exceeds 60 inches, the anchor shall be modified with flanges to provide additional stability and reduce torque from wind loading.

Sign Size. The sign blade shall be 12” high. Maximum sign blade length shall be 72”.

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type VIII (3M Diamond Grade LDP 3970, Avery Dennison MVP Prismatic T-7500, or approved equal).

Sign Layout. The initial upper case letter height shall be 6”. Prefixes and suffixes shall be the same size as the legend. No border shall be used for signs that use cantilevered brackets for installation. A 3-inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.

	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	TYPE E	8/10 TC-1

Type F Street Name Signs

Type F signs are to be installed at unsignalized intersections within subdivisions with speed limits of 25 mph only. Type F signs apply to internal neighborhood streets, not the intersection of the primary subdivision street and the arterial/collector street.

Installation. One pair of signs should be installed unless the street name changes on either side of a street. Judgment may be used in determining the appropriate location based on visibility. Two signs should be installed per post. The vertical clearance between the adjacent ground and the bottom of the lowest sign shall be 10 feet.

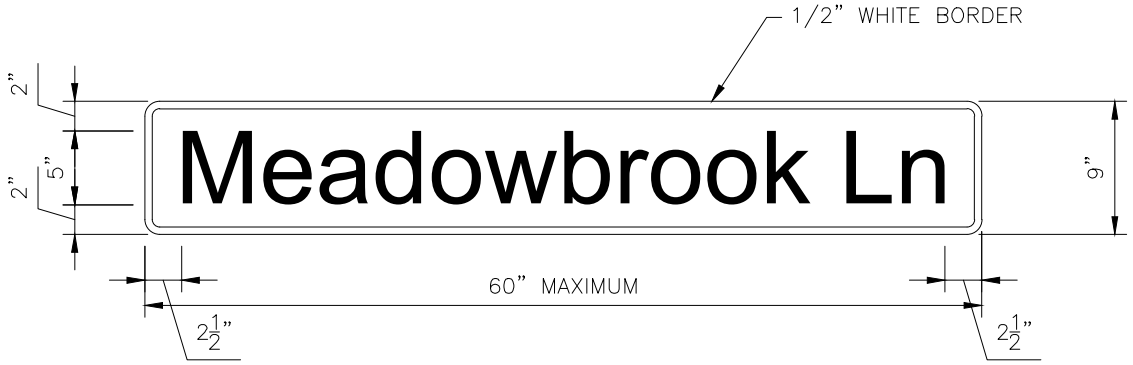
Brackets. One 12-inch square post bracket and one 12-inch cross piece bracket shall be used. Note: Type F signs are mounted using a cross-mounted system, not cantilevered like Type D and Type E street name signs.

Post/Anchor. Type F street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps are not used. A single break-away anchor shall be used. Anchors shall be 2 ¼-inch square, 30 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum.

Sign Size. The sign blade shall be 9” high. Maximum sign blade length shall be 60”.

Sign Material. Sign sheeting material shall comply with ASTM D4956 Type IV (3M High Intensity Prismatic 3930, Avery Dennison High Intensity Prismatic T-6500, or approved equal).

Sign Layout. The initial upper case letter height shall be 5”. Prefixes and suffixes shall be the same size as the legend. A ½-inch white border with rounded corners shall be provided. A 2 ½ -inch clear space shall be provided between the edge of the sign and the edge of the first and last letter (horizontally). The sign shall be double sided.



	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING
SCALE: N.T.S.	TYPE F	9/10 TC-1

Street Name Sign Support and Anchor Specifications

Plan Designation: Item 630 Street Name Sign Support and Anchor (Type ___), As Per Plan

Plan Unit: Per Each

Plan Payment: Payment for each street name sign support shall include the appropriate length anchor and the appropriate post length required to obtain the required minimum lap length and the proper vertical clearance for the various street name sign types. Payment for the sign supports shall include the pyramid rain caps, rivets, bolts, nuts, and all incidental hardware needed for a complete installation.

Type A Street Name Sign Supports and Anchors. Type A street name signs are installed on mast arms at signalized intersections. A separate support and anchor are not required.

Type B Street Name Sign Supports and Anchors. Type B street name signs are installed on strain poles at signalized intersections. A separate support and anchor are not required.

Type C Street Name Sign Supports and Anchors. Type C street name sign supports shall be two 2-inch square x 14 gauge square galvanized posts with die-cut knock-outs (typical regulatory sign posts). Pyramid rain caps shall be used. A single break-away anchor shall be used for each post. Anchors shall be 2 ¼-inch square, 42 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum. For all signs installed in concrete or paver islands, a six-inch PVC pipe box out shall be provided for the post anchor. The PVC box out shall be installed prior to pouring concrete or placing pavers. After the sign post anchor is installed, granular material shall be installed between the post anchor and the PVC box out.

Type D Street Name Sign Supports and Anchors. Type D street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 ¼-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum.

Type E Street Name Sign Supports and Anchors. Type E street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps shall be used. A single break-away anchor shall be used. Anchors shall be 2 ¼-inch square, 48 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 18 inches minimum.

Type F Street Name Sign Supports and Anchors. Type F street name sign supports shall be 2-inch square x 12 gauge square galvanized posts with die-cut knock-outs. Pyramid rain caps are not used. A single break-away anchor shall be used. Anchors shall be 2 ¼-inch square, 30 inches long, and embedded such that 2 inches of the anchor remains above ground level. The overlap of the post within the anchor sleeve shall be 8 inches minimum.

Old Hilliard District. In the Old Hilliard District, the above street name sign support and anchor specification apply except all sign supports and hardware shall be black.

Conservation District. In the Conservation District, the type C-F street name sign support and anchor specifications for unsignalized intersections are per Hilliard standard construction drawing TC-3. The vertical clearance and installation requirements provided herein the table on sheet 3/10 apply.

	TRAFFIC CONTROL NOTES AND DETAILS	CITY OF HILLIARD, OHIO	
DATE: July 30, 2015	STREET NAME SIGNS	STANDARD CONSTRUCTION DRAWING	
SCALE: N.T.S.	SUPPORT & ANCHOR SPECIFICATIONS	10/10	TC-1