# MASTER ADDRESS REPOSITORY (MAR)

# **Address Standards**



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# Introduction

The Government of the District of Columbia (DC) GIS's Address Standards document has been developed to describe the addressing standards used for the Master Address Repository (MAR). The MAR is DC Government's official address database and is widely within the government. DC GIS, which is part of the Office of the Chief Technology Officer (OCTO), is primarily responsible for maintaining the MAR. For additional information regarding the MAR address standards please email DC GIS: dcgis@dc.gov.

### Purpose

The purpose of the address standards is to provide important information to those who use the Master Address Repository. These standards provide consistency when dealing with addresses, place names (aliases) and streets. The main benefit of having address standards which are widely implemented is that is allows addresses to quickly be matched to each other. An address is the most important and widely used geographic piece of data found in DC Government databases. When individuals call 911, addresses are the most commonly used type of location. An address specifies a location, for example an address, in much the same way as a geographic coordinate (X, Y coordinate) does. However, addresses are merely text strings containing an address number, address number suffix, street name, street type, quadrant, etc. In order to successfully use a geocoding-based application, for example the MAR's web-based application (MAR Sample Client), the user must follow the MAR's Address Standards. Essentially, the MAR's Address Standards provide consistency when dealing with addresses, place names and streets across the differing DC government agencies and databases.

### Application

These addressing and data format standards are to be applied to addresses that are within the corporate limits of Washington, DC. They are not intended for use with mailing addresses, including post office boxes and addresses outside of the corporate limits. The data format standards should be applied to mailing list addresses, but it is not the purpose of this document to provide standards for non-site addresses or addresses outside of Washington, DC, which are commonly contained in mailing lists. The MAR's Address Standards only apply to addresses that are within the corporate limits of Washington, DC. They are not intended for use with mailing addresses that are outside the corporate limits of Washington, DC and/or United States Postal Service-issued Post Office Box Addresses. It should be noted that DCRA also has their own Address Standards which are separate from the Master Address Repository standard, but for the most part are consistent standards.

# **Addresses & Units**

#### Components of an Address

Addresses shall be parsed into the following component parts and order:

Address Number: 4228Address Number Suffix: 1/2

Street Name: MAINStreet Type: STREET

Quadrant: NW Unit Number: B

There are six components of an address which are concatenated together when creating an address: 4228 1/2 MAIN STREET NW B

#### Address Number

- Address numbers are numeric.
- There shall be no address numbers that are higher than "8500." Fractions (for example "½") as part of an address are sometimes present and are always considered as address number suffixes.

### Address Number Suffix

Fractions (for example "1/2) and "REAR" designations are not address numbers. Rather, they are considered address number suffixes.

**Note:** Effective as of December 1, 2010, address number suffixes with an alphabetical designation (for example "B" – 1731 "B" STREET NW) are no longer classified as an "address number suffix," with an exception for addresses located on military bases or where the occupancy sits on its own property (no other addresses there) and building,; rather address number suffixes with an alphabetical designation are now classified as a unit.

#### Street Name

All street names should be spelled out fully in accordance to the MAR's Master Street Name list. Common aliases for street names, including common abbreviations (e.g., 'MLK' for 'MARTIN LUTHER KING JR') are found in the MAR's Street Name Alias table. The street name does not include the street type for example "ROAD or "STREET."

#### Street Type

Street types should be spelled out fully. Street types include, but are not limited to "ROAD", "STREET", "AVENUE", "COURT".

#### Quadrant

The quadrants are Northeast (NE), Northwest (NW), Southeast (SE) and Southwest (SW) and shall be abbreviated as shown above. All addresses in Washington DC have a quadrant attached to them (with the exception of the US Capitol building, which is at the central point of the addressing grid). These quadrant designations are critical to location of addresses in Washington DC, and must be incorporated into every address.

#### Unit Number

Unit number denotes a housing occupancy which has a secondary designation. These can be an apartment or a condo unit. Most of these units have an interior entrance to the occupancy. Examples of unit numbers are: "A", "1", "101", "B1". Unit number are stored in the MAR Residential Unit Table.

#### Case

All components of an address shall be recorded and stored in all UPPER CASE characters.

#### Use of Prefix Directional

Prefix directional designations (for example North, South, East, West, Northeast, Northwest, Southeast and Southwest) shall not be used when assigning new street names.

**Note:** There are exceptions to this rule. DC government has "grandfathered" certain street names containing the prefix directional designation (for example "SOUTH CAPITOL"). However, these prefix directional designations are considered as part of the street name, for the purposes of the MAR, and are not considered as prefix directional designation.

#### Handling of Fractions

Per MAR policy, no new fractional (example: 123 1/2 MAIN STREET NW) addresses shall be created. If the two (or more) occupancies are co-equal in a building, each shall have a separate address assignment or unit assignment. If one unit is subsidiary to another (for example a basement or garage apartment), then the subsidiary unit shall be given a unit designation and thus a unit number, for example unit '2'. Where possible, existing fractional addresses shall be replaced with unit numbers consisting of alphanumeric characters (for example 'A' or '1').

#### **Punctuation**

No punctuation shall be used within an address with the exception of the apostrophe, as found in "L'ENFANT" or "CADY'S ALLEY." Use of any punctuation is highly discouraged.

#### Address Assignment

The <u>Department of Consumer and Regulatory Affairs</u> (DCRA) is solely responsible for the assignment of new addresses within the corporate limits of Washington, DC

- Address assignment is normally carried out when a new building is built on vacant land.
- Major redevelopment of existing properties which already have existing addresses often results in the creation of additional addresses.

It is critical that new and altered addresses (the building has been reconfigured) be entered into the MAR as soon as they are created.

**Note:** When a building is razed and a new building is built in its place and if the owner applies for a new address. Then, the old address that was associated with the razed building is now classified as "RETIRE." However if the address of the new building is the same as the razed building, then the owner is not required to reapply for a new address, and the address will be classified as 'ACTIVE'.

#### Starting Point

All addresses emanate from the U.S. Capitol Building. This is the center point for the quadrants (NW, SW, NE and SE) also. The U.S. Capitol Building is the only building that does not have a quadrant in its address.

#### Even and Odd Addresses

Even address numbers are assigned on the left side in ascending order. Odd numbers are assigned on the right side of the street in ascending order. Determining which side of the street is left or right is based on one's direction facing away from the U.S. Capitol Building. There are exceptions to this rule.

Address numbers also correspond with a particular side of the street, with odd numbers on the right as one faces in the direction of increasing numbers.

This works out by quadrant as shown below (from Wikipedia):

Quadrant	East-West Streets	North-South Streets
Northwest	Odd numbers on north side	Even numbers on west side
Southwest	Odd numbers on north side	Even numbers on east side
Southeast	Odd numbers on south side	Even numbers on east side
Northeast	Odd numbers on south side	Even numbers on west side

#### Assigning of an Address Number

Generally, address numbers should be assigned along the block on an interpolated basis. Hence, a building in the middle of a hundred block should be given an address number whose last two digits is around "50," (for example "150 ADAMS STREET NW") Also, a new building's address number should also be logically consistent with the other existing addresses on the block.

#### Address Model and Linkages

The addressing model provides for addressing at up to three different levels: the land parcel, the structure, and the individual occupancy within a structure. In some cases, for example a single family residence, all three of these levels would be represented by the same address. However in a situation where a land parcel contains several apartment buildings and each apartment building is associated with a set number of residential units, there shall be an assigned address for each apartment building (primary address - 3636 16TH ST NW ) and a unit number (secondary address - 3636 16TH ST NW A1001) for each unit.

#### Location of Addresses within Building Footprint

The coordinates for addresses shall generally be located in the center of the building's footprint. In cases where there are

multiple addresses in one building, then each address, except for the main address, shall be placed near the door of that address. An example would be a large office building with ground floor retail which has separate entrances and addresses. The ground floor retail addresses would be located near their respective entrances while the main address for the office building would be located in the center of the building.

#### Number of Addresses Per Structure

The number of addresses and unit numbers per structure should be the minimum necessary in keeping with clearly identifying each individual occupancy.

**Note:** a building can be represented by no addresses (garages), one address, or have multiple addresses. An example of one building having multiple addresses is 1050 17TH STREET NW (main building)

- 1020 17TH STREET NW (separate address, part of the main building 1050 17TH STREET NW)
- 1030 17TH STREET NW (separate address, part of the main building 1050 17TH STREET NW)
- 1040 17TH STREET NW (separate address, part of the main building 1050 17TH STREET NW)

### Differences Between an Address Number Suffix and a Unit

There is often confusion in Washington, DC regarding what is considered an address number suffix and a unit. Listed below are examples of how the two are used differently:

#### **Address Number Suffix (examples)**

- 1/2 designations shall always be considered as an address number suffix
- 'REAR' designations which are a physically separate from the primary building shall always be considered as an address number suffix. However, 'REAR' designations which are physically part of the primary non REAR building are considered as non 'REAR' address and shall be considered as a unit.

#### Units (examples)

- All numeric numeric designations (for example "709 MAIN STREET SE 1") are considered to be units.
- All letter designations (for example 3312 MAIN STREET NE B) which are not on a separate property and also represent one occupancy will be considered units (except for addresses on military areas/installations).

#### Residential Units

- Residential units shall only be entered into the MAR Residential Units table. The MAR Residential Units Table should not include commercial or industrial units. Residential units are considered secondary postal designations.
- All occupancies within a building which have main entrances from an interior space (for example a hallway/corridor) shall have unit designations. These occupancies shall be stored in the MAR Residential Unit table. These unit designations can be either alphabetic or numeric characters.
- A multi-family rowhouse with a basement apartment (for example 917 D STREET NE) shall be assigned a Unit designation of "B". Currently, there are hundreds of "legacy" residential units with a "1/2" address designation in Washington, DC, which represent basement residences in multi-family rowhouses. This method is no longer used and/or accepted for designating a new basement apartment.
- A separate address shall not be issued unless there is a separate exterior entrance to the building for the occupancy. Even in the case of separate exterior entrances, a unit designation is often the preferred method.

#### What is Considered a Residential Unit:

- Apartment and condo units
- Dorm rooms (universities)
- Boarded up units / abandoned units

#### What is Not Considered a Residential Unit:

- Office Suites, office condos
- Rooms in hostels (even if people dwell there)
- Jail Cells
- Garages and unimproved land
- Horizontal condos (which are usually classified as a "townhouse") are not included. An example is the Brummel Court townhouse developments
- Loading hangars
- Warehouse numbers

#### Non-Residential Units

- For non-residential occupancies, individual occupancy addresses mainly consist of floor, suite, office or unit numbers. These are associated with the main address of the building.
- Where a building is divided into separate occupancies, each with a separate entrance from the street, and where there is no significant internal connection between occupancies in a building, separate street addresses may be granted to each occupancy. In most cases there would be retail addresses.
- Non residential units (for example office suites, retail suites,, or warehouse space) are not to be included in the MAR's Residential Unit table.

#### Building Codes for New Construction or Remodeling (office and commercial)

DC's building codes (enforced through DCRA) for new construction or the remodeling of existing office or commercial buildings with multiple street frontage must adhere to the following requirements:

- The office or commercial building shall have a primary address for the main entrance providing access to the interior of the building, elevators, and offices or residential units on the upper floors.
- Where there are separate retail or office tenancies on the ground floor of an office or commercial building with individual store-front entrances, each of these retail or office occupancies shall be assigned an individual address.

# **Non Standard Conditions**

Vacant Land

- Vacant land shall not have an address whose status is 'ACTIVE'. It should have a property identifier (Square, Suffix, and Lot SSL). When a new building is planned on the vacant land an address application needs to be submitted to the DCRA. The DCRA will determine the address for the planned building.
- Vacant land, which previously had a building that was subsequently razed, will have an address whose status is classified as 'RETIRE'.

#### Multiple buildings on one land parcel

In most cases where multiple buildings, which are not garages or storage sheds, exist on a single parcel of land, each building shall have its own address.

### One building on multiple land parcels

Attempts should be made to merge the land parcels to avoid confusion.

#### **Curved and Angled Streets**

Streets that are curved and angled shall be addressed as follows:

- Streets that are at a 30-degree angle to the grid shall be addressed as east/west streets.
- Streets at a 45-degree angle shall be determined by the Address Administrator, with assistance from the Addressing Task Force, and shall be based upon historical precedent.
- Streets that are at a 60-degree angle to the grid shall be addressed as north/south streets.
- Curved streets shall be addressed by the direction of the longest portion of the street, or according to existing addressing.
- Circles shall be addressed starting at the southernmost intersection, in a clockwise order.

#### Property without Street Frontage

- New lots without street frontage cannot be created, for more information please go to the DCRA's website.
- Existing vacant lots without street frontage that are be developed shall be assigned an address based upon its point of ingress/egress (easement or other access rights), for more information please go to the DCRA's website.
- Existing lots that are developed but do not have street frontage should be reviewed (DCRA administrative review) to determine whether their addresses matches their point of ingress/egress to a public street, for more information please go to the DCRA's website.

#### Address Anomalies

An address anomaly is an illogical address whose location does not conform to Washington, DC's addressing standards and/or addressing grid system. Most of the address anomalies have been 'grandfathered' into the MAR. All address anomalies shall be documented in the Address Anomalies Report, excluding U.S. military bases/installations.

# Streets, Alleys, Freeways, etc

#### Streets with Multiple Names

Where multiple names are utilized for a single roadway or segment of a roadway, the primary name shall be determined by the DDOT, and the alternative names shall be placed in the Street Name Alias Table. This includes such designations as a Federal Route and Interstate numbers and honorary names that have been assigned either temporarily or permanently.

#### Obsolete or Previous Names

Where a street has been renamed, the previous name shall be placed in the Street Name Alias Table and linked to the current street name.

#### Allevs

- Alleys with names shall be addressed as streets.
- Alleys without names shall not have addresses assigned to them.
- Alleys that are used as the primary access method to a building should be named.
- No new address numbers shall be assigned to buildings that front on alleys that do not have an official name.
- Alleys that have assigned names in the MAR"s Master Street Name Table shall be classified as streets for addressing purposes.

#### Freeways, Ramps, Bridges, and Tunnels

Freeways, ramps, bridges, and tunnels are not assigned an address number. However, bridges are identified in the MAR database by their "alias" names (for example the FRANCIS SCOTT KEY BRIDGE).

#### Street Name Duplication

- When a new street name is created, it must not be a duplicate of an existing street name listed in the MAR Master Street Index table.
- When a new street name is created, it must not sound similar to an existing street names listed in the MAR Master Street Index table.
- Existing cases of street names where confusion may occur should be studied by DDOT to determine if one of the streets could be renamed.

#### Abbreviations for Street Types

Street type abbreviations (for example 'ST' or 'CIR'), in accordance to the U.S. Postal Service's Standard Suffix Abbreviation list, should be spelled out to its "Primary Street Suffix Name" (for example 'ST' = 'STREET', 'CIR = CIRCLE') when using the MAR.

#### Address Ranges

The Master Address Repository contains theoretical address ranges for roadway segment found in the District. This information is stored in the MAR Block Table. The theoretical address ranges represent all possible addresses on a given street segment (as opposed to the actual addresses of existing buildings). An example is "100 - 199 BLOCK OF C

# **Aliases**

Aliases are place names which includes building names, historical sites, statues, metro station entrances, museums, federal buildings, hospitals, embassies, hotels, etc. These alias names are stored in the Address Alias table. All alias names are to be fully capitalized ('WHITE HOUSE'). All Alias names are linked to an address record. Many of these alias names do not have address numbers (street numbers).

#### Parks and Monuments

The common name of a park or monument (for example the 'LINCOLN MEMORIAL') shall be stored in the Alias Table.

#### **Building Names**

Building names (for example 'SENATE OFFICE BUILDING', 'CATHEDRAL APARTMENTS') shall be stored in the Alias Table.

#### Public Facilities

Public facilities and places of assembly, for example stadiums, police and fire stations, hospitals, schools, embassies, metro, rail and bus stations, and major government office buildings, should be included in Alias Name table.

#### Common Place Names

Common place names, such as 'JEFFERSON MEMORIAL' or 'WHITE HOUSE' or 'SECURITIES BUILDING' shall be stored in the Alias Table.

#### Vanity Addresses

Vanity addresses shall be discouraged where possible. An example of a vanity address is 'One Judiciary Square.' If a vanity address exists, it shall be stored in the Alias Table.

#### Marinas

Along the Potomac and Anacostia Rivers, there are marinas, docks, launching ramps, and other recreational boating facilities. Some of the facilities are in Virginia and Maryland, although the water area is within the District of Columbia. Each marina or dock facility shall be given a standard address. If the facility's land area is outside of DC, then the address assigned by the jurisdiction shall be used.