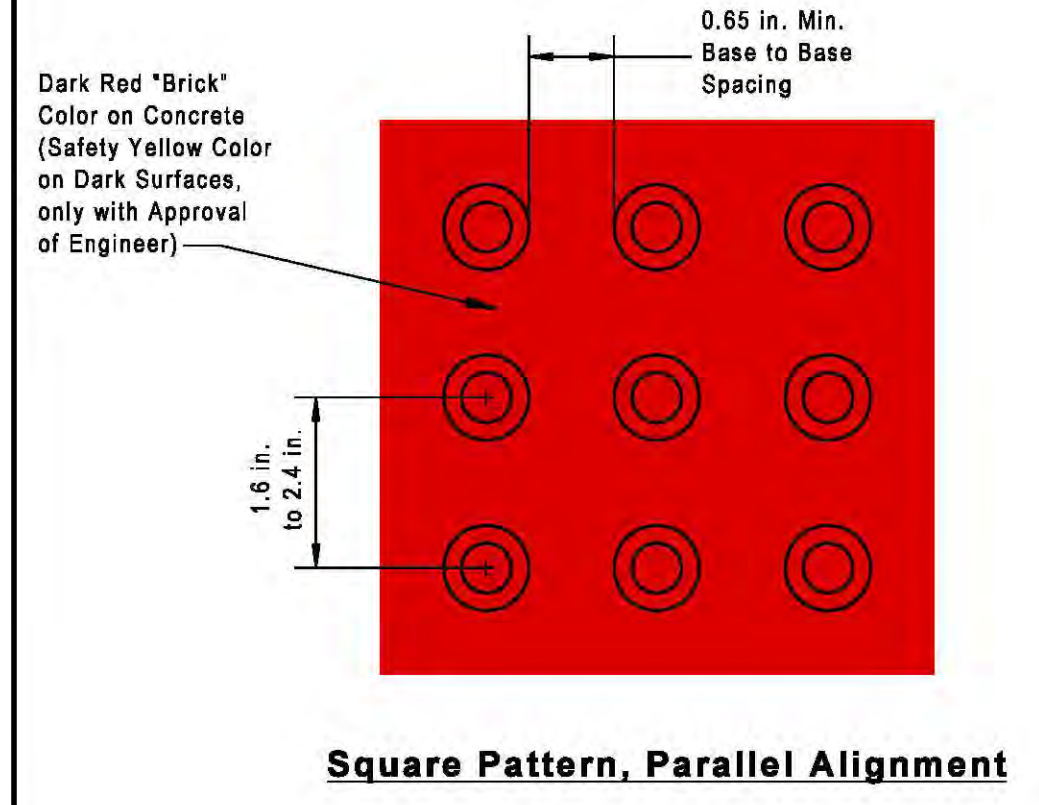
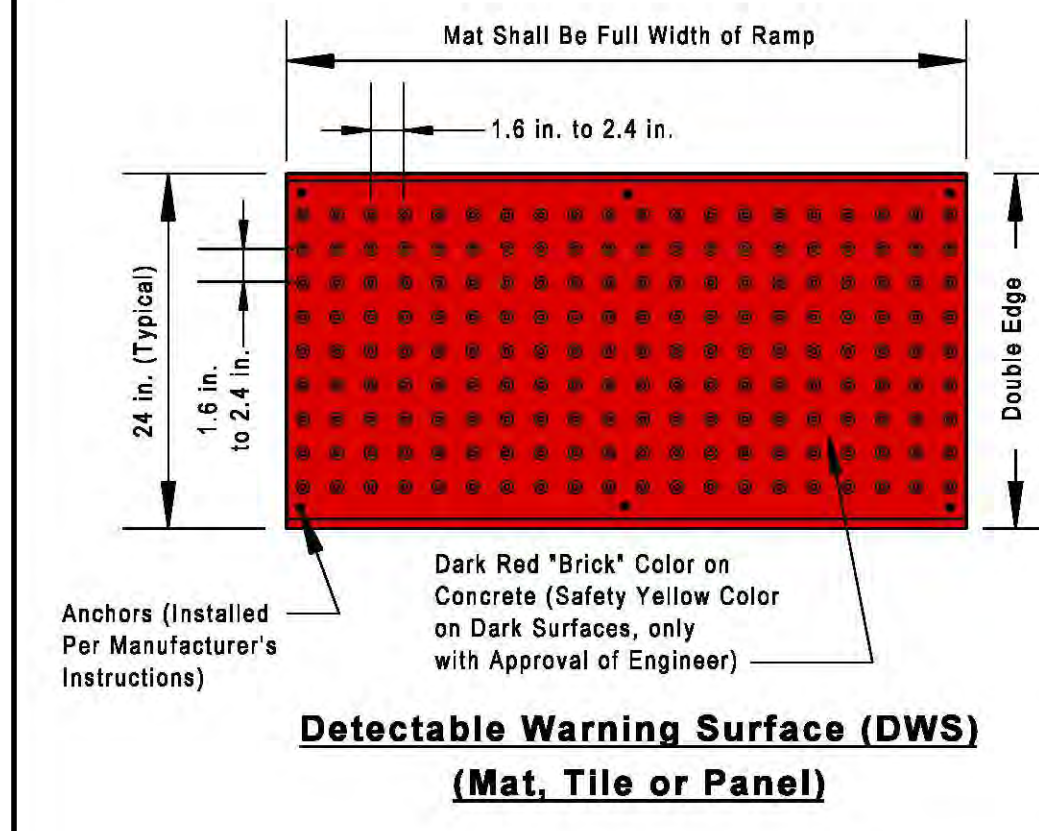


**General Notes**

- Do not scale drawings, follow dimensions.
  - The surface shall be compliant with the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)", Detectable Warnings (Paragraph 4.29), and Curb Ramps (Paragraph 4.7), and Ramps (Paragraph 4.8). Non-compliance shall be removed and corrected at contractor's expense.
  - The contractor and/or manufacturer must provide a performance warranty on the product and installation of the Detectable Warning Surface (DWS) for a minimum period of 1-year from the date of project acceptance or installation (whichever date is later). The performance warranty shall guarantee that the DWS is free from defects in workmanship and material including deformation, breakage, excessive wear or breakage of truncated domes, color fastness, delamination, or attachment to pavement surface.
  - The Detectable Warning Surface (DWS) type shall be "Cast-In-Place with Screw Anchoring" (both new and retrofit applications) or "Surface Applied with Adhesive" (retrofit only), with the approved manufacturers listed on the "MoDOT Qualified Lists, Qualified Material Guidelines, FS-1087 Table 1" (also see MoDOT Std. Dwg. C608.10N). The MoDOT "Qualified Lists" are located on the internet at: [www.modot.org/business/materials/pdf/main/tables.pdf](http://www.modot.org/business/materials/pdf/main/tables.pdf)
  - Refer to St. Louis County Standard Drawings C608.40 through C608.50 for sidewalk and curb ramp details and typical configurations. Truncated dome mats, tiles or panels are required on all raised concrete channelization islands with curb ramps (see Standard Drawing C608.49).
  - SAFETY MEASURES** - Using barricades, cones or other safety devices, block off work area to pedestrian and vehicle traffic during installation process. Have work crew be prepared to offer alternate access pathway to disabled pedestrians during the time work is being performed and adhesive is curing.
  - Contractors or manufacturers shall at the request of this Department, provide product literature, installation procedures, maintenance instructions, detectable warning (truncated dome) samples (minimum 12 in. x 12 in.), and if necessary current test reports in accordance with ASTM guidelines, and possible test installation by the contractor or manufacturer.
- 8) MATERIALS**
- Cast-in-place composite tiles or mats shall be made of polyester/vinyl ester reinforced compression molded material or similar approved material, throughout the thickness of the detectable warning surface. Colors shall be dark red "Brick" color (on concrete surface) and Safety Yellow (on dark surfaces with the approval of the engineer). DWS shall meet the Federal standard colors for tactile panels. UV stabilization protection (fade resistance) shall be homogeneous throughout the composite material and not rely on any type of painted or coated surface to achieve color or UV code compliance. Mats or tiles shall have a minimum of six (6) corrosion resistant anchors with color coordinated corrosion resistant fasteners.
- 9) Detectable Warning Surface (DWS) shall consist of a surface of truncated domes aligned in a square or radial grid pattern. The pattern shall be aligned with the edge of pavement in the direction of travel. The DWS shall extend 24 inches in the direction of travel and span the full width of the curb ramp (exclusive of flares), landing or blended transition. The DWS shall contrast visually with the ramp or landing surface (dark-on-light surface, or light-on-dark surface), with a slip resistant surface or pattern (comply with ADA and ADAAG guidelines). Truncated domes shall be aligned parallel to the running slope of a ramp, in a square grid, when installed in the direction of pedestrian travel, to permit wheels to roll between the domes. DWS shall be installed 6 in. to 8 in. from the face of curb, the full width of the ramp (max. of 2 in. from each side of the ramp or landing - see Detail "A" on Std. Dwg. C608.40). DWS in a cut-through island, shall be installed full width, aligned with the face of the cut-through island curb (see Std. Dwg. C608.49).
- 10) The DWS, truncated dome mats, tiles or panels used, shall be consistent throughout the project and are required to be installed on all curb ramps at public and private street intersections; signalized entrances; and at all channelized and raised islands where a curb ramp or cut-through is provided. DWS shall be omitted on curb ramps adjacent to private entrances. The DWS type and location shall be approved by the Engineer prior to installation. No direct payment will be made for detectable warning surfaces.
- 11) Truncated dome mats, tiles or panels shall be a cast-in-place product (new construction) or surface applied (retrofit applications), and approved by the project engineer prior to usage. Tiles or mats shall be pre-formed or pre-cast and installed per manufacturer's recommendations and instructions. Stamped concrete truncated domes or grooves will not be accepted.



SAINT LOUIS COUNTY  
DEPARTMENT OF HIGHWAYS AND TRAFFIC  
CLAYTON, MISSOURI

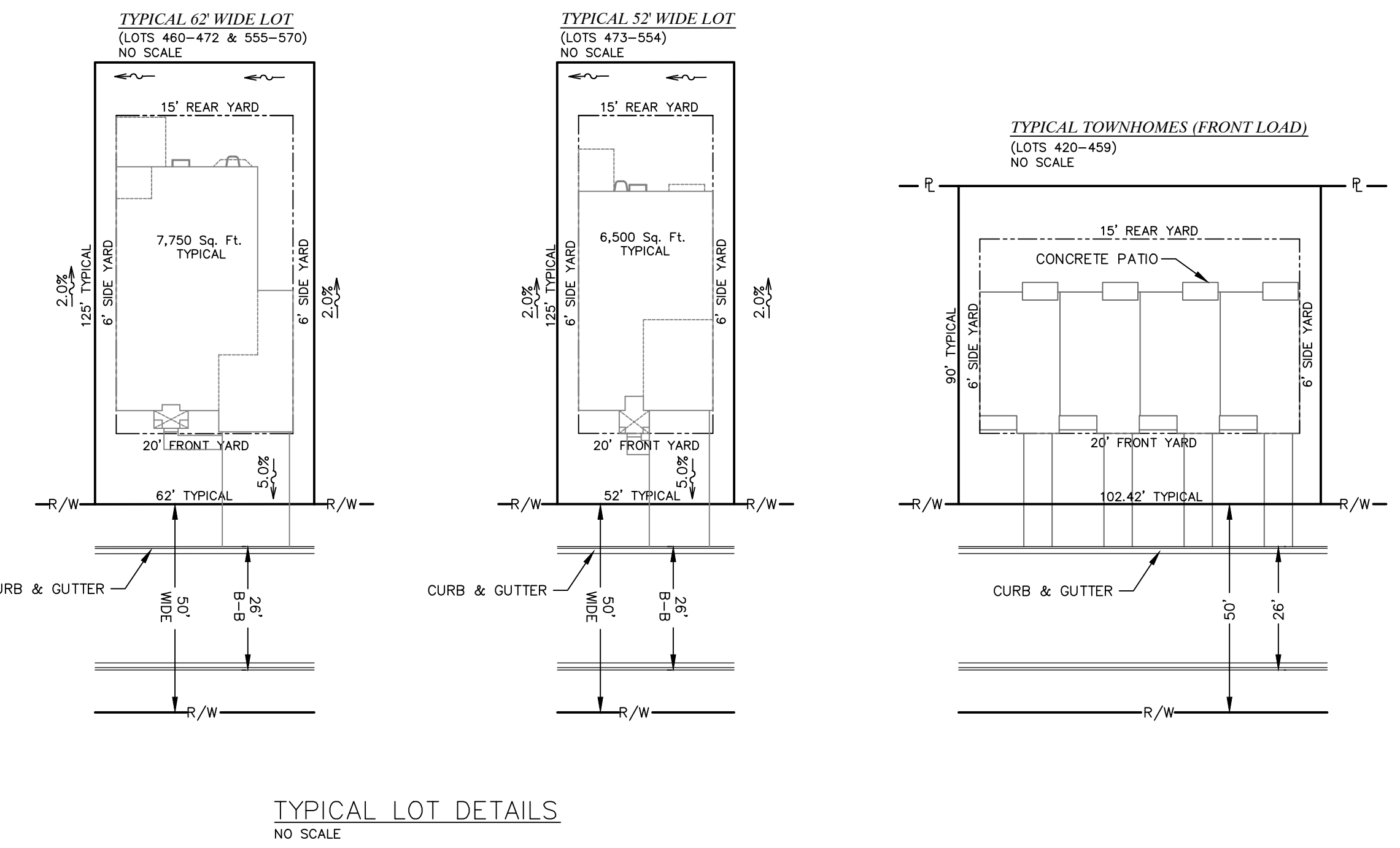
**DETECTABLE WARNING SURFACE FOR NEW CONSTRUCTION AND RETROFITTING OF CURB RAMPS**

REVISION DATE: July 6, 2011

DRAWING C608.51

SLOPES SHALL BE A MINIMUM OF TWO (2) PERCENT AWAY FROM THE BUILDING. PLOT PLANS WILL PROVIDE SPOT GRADES OF INDIVIDUAL LOTS.

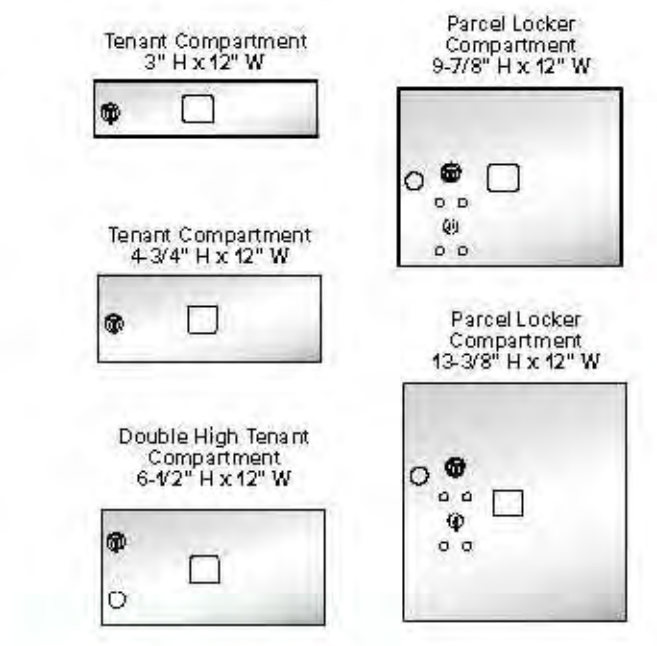
ALL ON-SITE UTILITY EASEMENTS REQUIRED FOR THIS DEVELOPMENT WILL BE SHOWN ON THE RECORD PLAT.



TYPICAL LOT DETAILS  
NO SCALE

**Cluster Box Units**  
FEATURES & OPTIONS

**CBU STANDARD COMPARTMENT SIZES**  
All CBU models are USPS Approved and pre-configured with standard tenant and parcel locker compartment heights which meet specific USPS regulations.



**DOOR ID OPTIONS**

**Decals:** All CBUs come standard with silver adhesive decals which are 1-1/2" H x 1-3/4" W. Black lettering can contain up to five characters (alpha and numeric) per decal.

**Engraving:** Custom engraving utilizes the USPS Standard US Block font and is 3/4" tall. All engraving can include up to 12 characters on one or two lines.



[florencemailboxes.com/CBU](http://florencemailboxes.com/CBU)

**COLOR OPTIONS**

All cluster box unit types are available in six different architectural color options; all in a durable, powder coat finish.



\*Note: Postal Gray is USPS Approved for replacement only and is not intended for new installations.

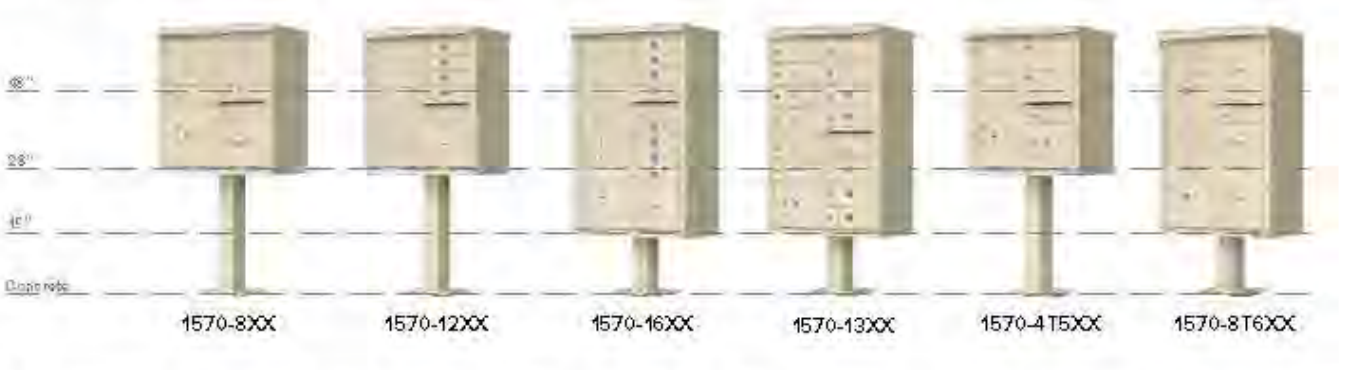
**Cluster Box Units**

**PRODUCT SELECTIONS**

CONTRACTOR SHALL VERIFY MODEL # AND COLOR WITH DEVELOPER PRIOR TO ORDERING MATERIALS

**vital™ Cluster Box Units**

Pre-configured units include parcel lockers and outgoing mail collection to be used alone or in large groupings. Pedestal included ensures mailboxes and parcel lockers comply with USPS installation regulations. Available in six architectural colors (see page 7).



MODEL #	CBU TYPE	INSTALLED HEIGHT	INSTALLED WIDTH	INSTALLED DEPTH	FEDESTAL HEIGHT	WEIGHT (LBS)	STANDARD TENANT COMPARTMENT DIMENSIONS	MAILBOX COMPARTMENTS	PARCEL LOCKERS
1570-8XX	vital™ Type I CBU	62"	30-1/2"	18"	28-1/2"	144	3" H x 12" W x 15" D	8	2
1570-12XX	vital™ Type II CBU	62"	30-1/2"	18"	28-1/2"	144	3" H x 12" W x 15" D	12	1
1570-16XX	vital™ Type III CBU	62"	30-1/2"	18"	14-1/2"	175	3" H x 12" W x 15" D	16	2
1570-18XX	vital™ Type IV CBU	62"	30-1/2"	18"	14-1/2"	167	4-3/4" H x 12" W x 15" D	13	1
1570-415XX	vital™ Type V CBU	62"	30-1/2"	18"	28-1/2"	145	6-1/2" H x 12" W x 15" D	4	2
1570-816XX	vital™ Type VI CBU	62"	30-1/2"	18"	14-1/2"	176	3" H x 12" W x 15" D	8	4

Note: Package "00" is Model # above for two-digit color reference. Black BK Dark Bronze DB Sandstone SD Postal Gray PG White WH Forest Green FG

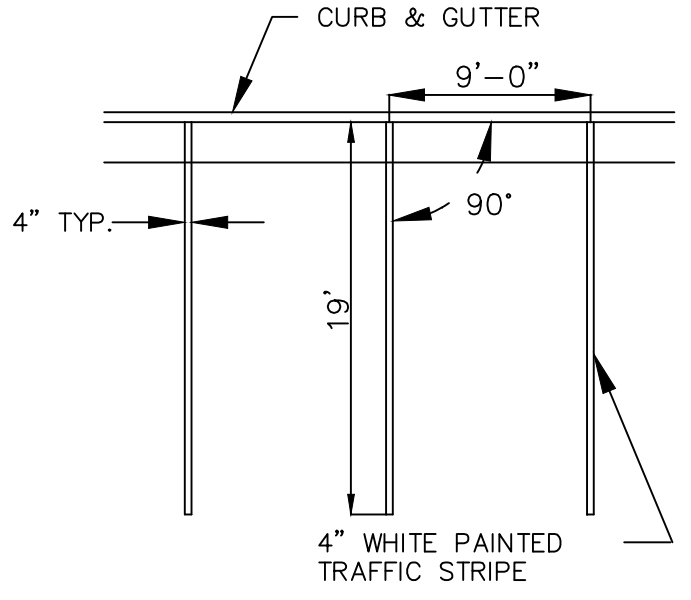
**valliant™ Outdoor Parcel Lockers**

Industry unique package delivery system with key-trapping locks can be used alone or with CBU installation to accommodate USPS-delivered packages in a secure locker.

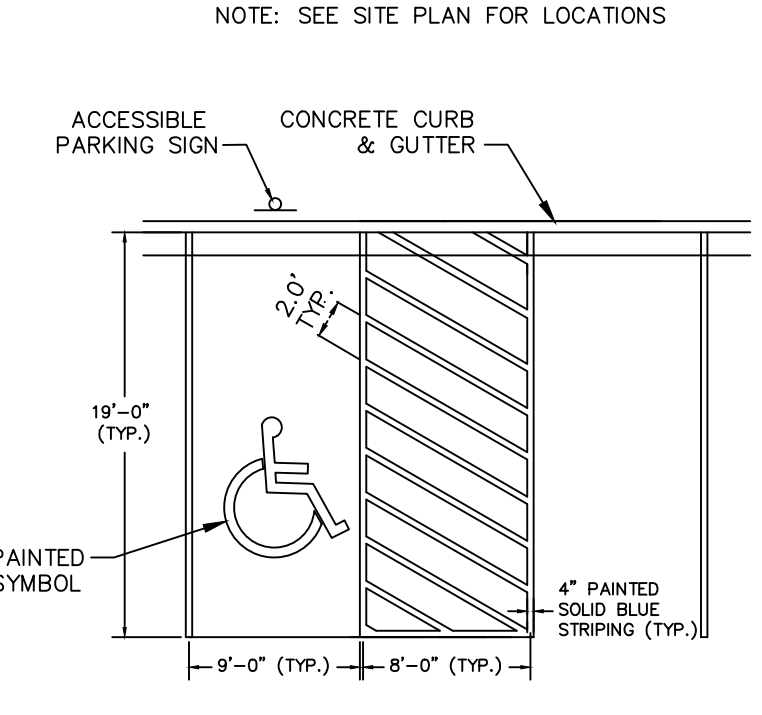


MODEL #	OPL TYPE	INSTALLED HEIGHT	INSTALLED WIDTH	INSTALLED DEPTH	FEDESTAL HEIGHT	WEIGHT (LBS)	STANDARD TENANT COMPARTMENT DIMENSIONS	MAILBOX COMPARTMENTS	PARCEL LOCKERS
1590-T1XX	valliant™ Type I OPL	62"	30"	18"	14-1/2"	100	15-5/8" H x 12" W x 15" D	0	2
1590-T2XX	valliant™ Type II OPL	62"	30-1/2"	18"	14-1/2"	139	15-5/8" H x 12" W x 15" D	0	4

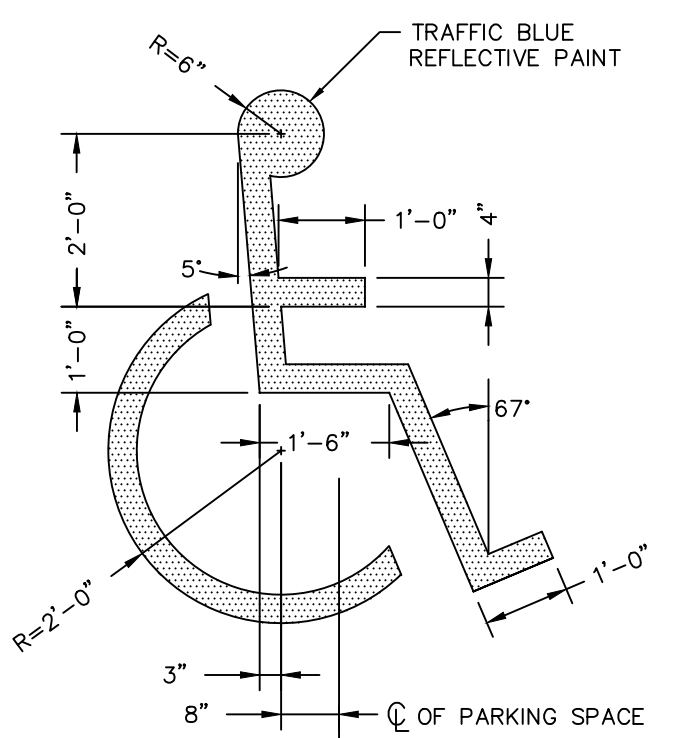
Note: Package "00" is Model # above for two-digit color reference. Black BK Dark Bronze DB Sandstone SD Postal Gray PG White WH Forest Green FG



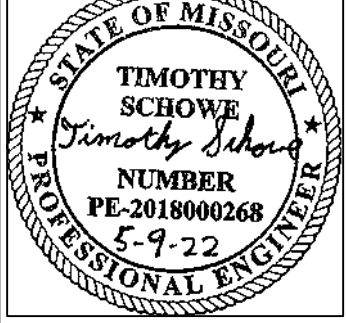
STRIPING DETAIL  
NO SCALE



ACCESSIBLE PARKING DETAIL  
NO SCALE



ACCESSIBLE PARKING SYMBOL  
NO SCALE



Three working days prior to the start of any excavation call 1-800-UGC-BRITE for utility location information.

All OSHA rules & regulations construction required by these plans shall be strictly followed (ie. trenching, blasting, etc.)

636-594-0540 (tel.)  
636-594-0512 (fax)  
malle@ochran.com  
Civil Engineering  
Land Surveying  
Architecture  
Site Development  
General Consulting  
Master Planning

530A E. Independence Dr.  
Union, Missouri 63084

**OCHRAN**

Missouri State Certificate of Authority Numbers:  
Survey : 000380  
Engineering : 001655  
Architecture : 2002104240

Drawing name: E:\17-6821 - 260 Acre Tract along Hwy 40, O'Fallon, MO\AutoCad Drawings\6821 - Plan Sheets\Construction Drawings\PH4 Residential Plans\39\_Detail Sheet - Phase 4.dwg Tab: C14.02 Plotted on: May 13, 2022 - 5:47pm Plotted by: jmeyer