

KEEP PEDESTRIANS AND STUDENTS SAFE

PEDESTRIAN SAFETY PRODUCTS BY 1254, STOPS A 15,000 LB VEHICLE @ 50MPH

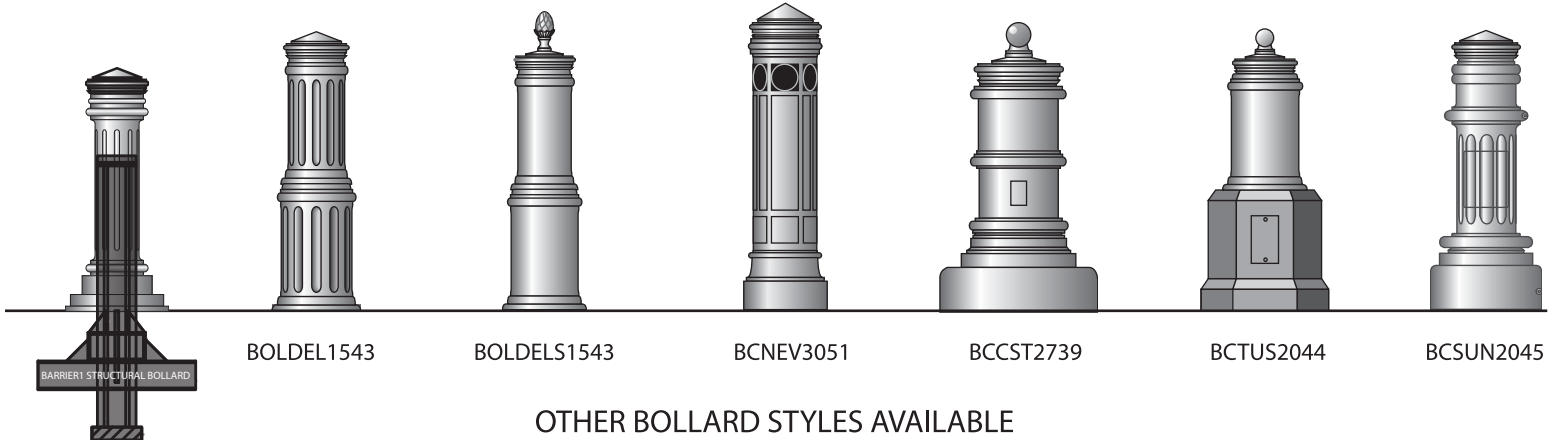
1254

TWELVE FIFTY FOUR INDUSTRIES

MODEL #: 12BOL-SM-15K50MPH



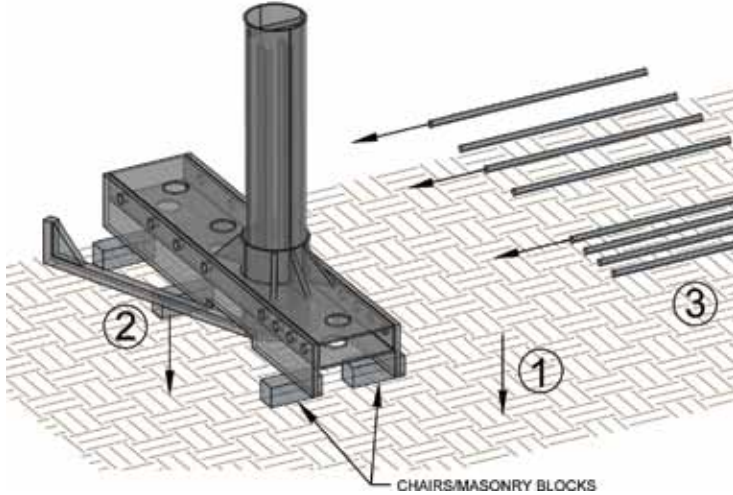
- ◆ Crash tested and certified with ASTM F2656-07 M50 rating (K12).
- ◆ Department of Defense (DoD) approved and listed on Anti-Ram Vehicle Barrier List.
- ◆ One single standalone bollard stops 15,000 lb. vehicle at 50 mph with 1.2 meters penetration.
- ◆ 2+ bollard array is ASTM M50 P1 (K12) certified. Vehicle penetration less than 1 meter.
- ◆ Unrestricted bollard spacing (any distance), while maintaining ASTM M50 P1 certification. (fewer bollards results in less costs)
- ◆ Simply set single prefabricated bollard in excavation and pour concrete (no rebar in foundation).
- ◆ No tying, bolting, welding, assembly, or specialty subgrade required.
- ◆ Excavation 48" wide by 36" deep with 4000 psi concrete.
- ◆ Easy to install with turns and across grade elevation changes using standard bollard.
- ◆ Drawings, submittals, engineering support, and installation instructions with photos are included.
- ◆ Variety of bollard covers are available including stainless steel, plastic, decorative shapes, concrete, lighted covers, and others
- ◆ Bi-directional stopping capability.
- ◆ Removeable bollard configuration is available.
- ◆ Reduce installation time and cost by about 50%
- ◆ Allows for field adjustment.



OTHER BOLLARD STYLES AVAILABLE



INSTALLATION INSTRUCTIONS



① EXCAVATE TO 12" THEN TAMP SUBGRADE WITH PLATE TAMPER

② PLACE SINGLE PREFABRICATED BOLLARD STRUCTURE. USE MASONRY BLOCK OR CHAIRS TO ELEVATE OFF SUBGRADE.

③ INSERT HORIZONTAL REBAR INSIDE HOLES TO INTERCONNECT ADJACENT BOLLARD STRUCTURES.

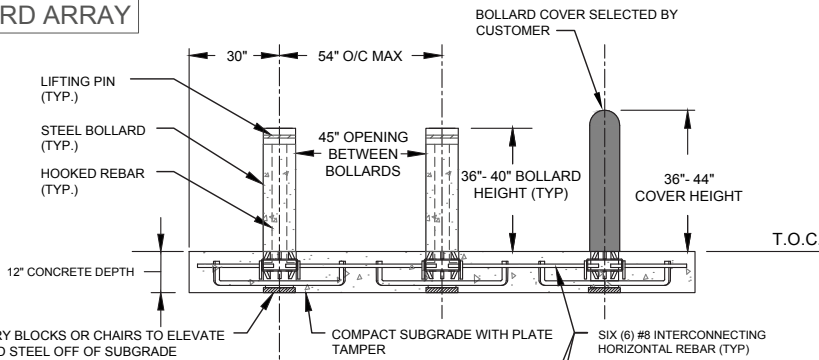
④ POUR AND VIBRATE CONCRETE.

KEY INSTALLATION ADVANTAGES

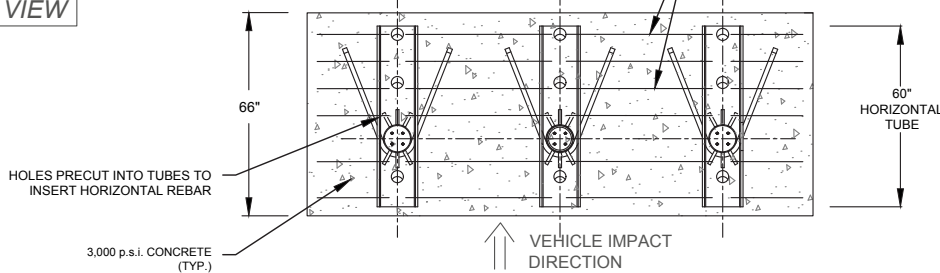
1. NO FIELD WELDING.
2. NO FIELD BOLTING.
3. STEEL BOLLARD IS DELIVERED PREFABRICATED AS ONE UNIT.
4. ACCOMMODATES TURNS AND GRADE CHANGES.
5. ALLOWS FOR FIELD ADJUSTMENTS.
6. REQUIRES ABOUT 1.5 CUBIC YARDS OF 3,000 p.s.i. CONCRETE PER BOLLARD.

TYPICAL BOLLARD ARRAY

FRONT VIEW



TOP VIEW

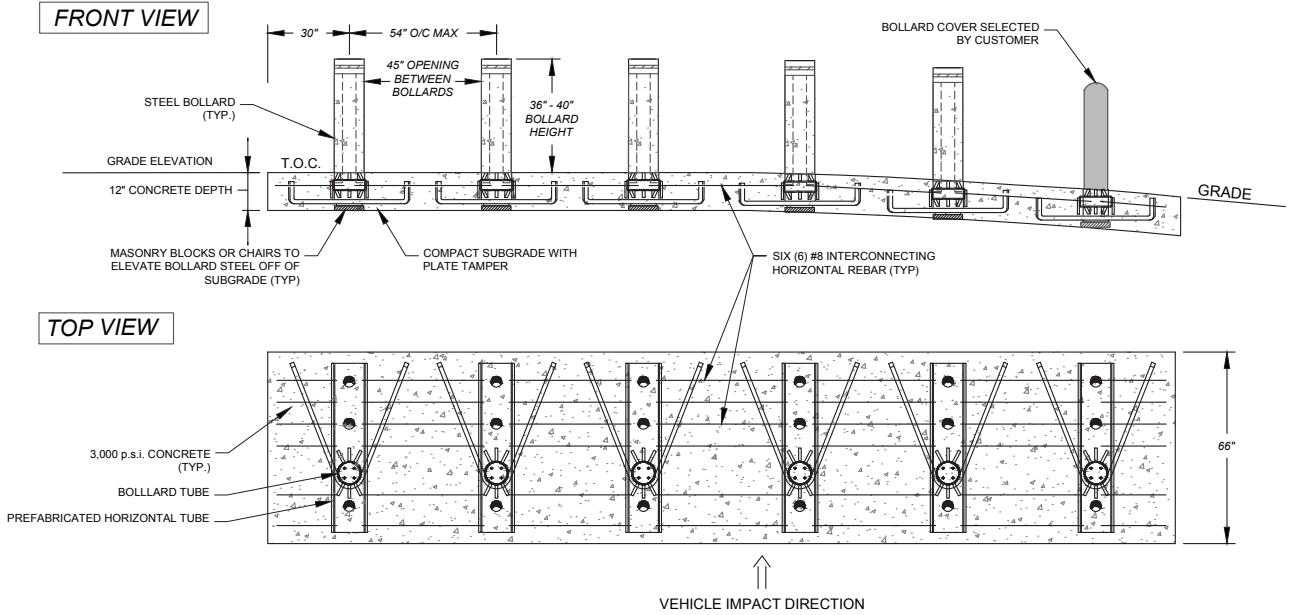


KEY CAPABILITIES

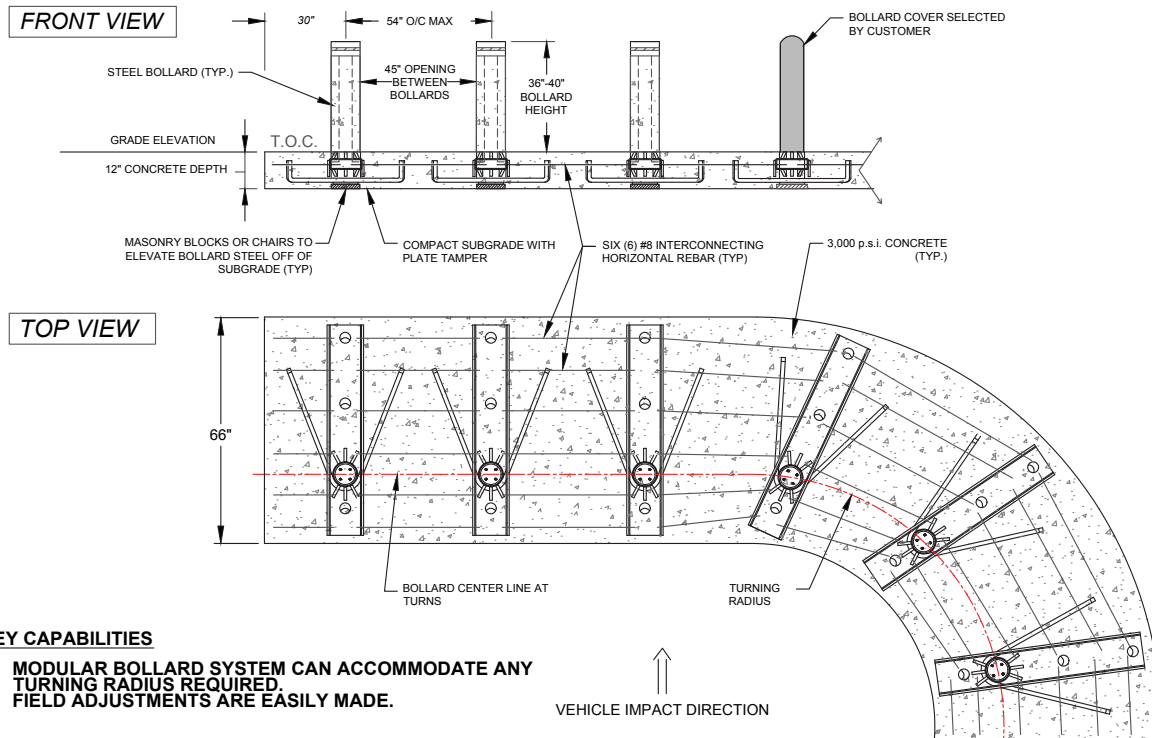
1. SIMPLE AND QUICK INSTALLATION - ONLY TWO (2) PREFABRICATED MODULAR COMPONENTS SLIDE TOGETHER. ADJACENT BOLLARDS ARE CONNECTED BY HORIZONTAL REBARS.
2. ONLY A TAMPED SUB GRADE IS REQUIRED (NO GRAVEL OR CONCRETE MUD PAD).
3. SHALLOW FOUNDATION AVOIDS UNDERGROUND UTILITIES.
4. NO FIELD WELDING OR BOLTING (REDUCES INSTALLATION TIME AND COST).
5. MODULAR BOLLARD SYSTEM ACCOMMODATES TURNS, GRADE CHANGES, AND FIELD ADJUSTMENTS.
6. NO STIRRUPS OR REBAR TYING IS NEEDED. HORIZONTAL REBAR SLIDES INTO PREDRILLED HOLES.
7. NO SPECIALTY BOLLARDS, COMPONENTS, OR PARTS REQUIRED TO MAKE TURNS OR ACROSS GRADE CHANGES.

INSTALLATION INSTRUCTIONS (cont.)

BOLLARD INSTALLATION ACROSS GRADE CHANGE



BOLLARD INSTALLATION WITH TURN



KEY CAPABILITIES

1. MODULAR BOLLARD SYSTEM CAN ACCOMMODATE ANY TURNING RADIUS REQUIRED.
2. FIELD ADJUSTMENTS ARE EASILY MADE.