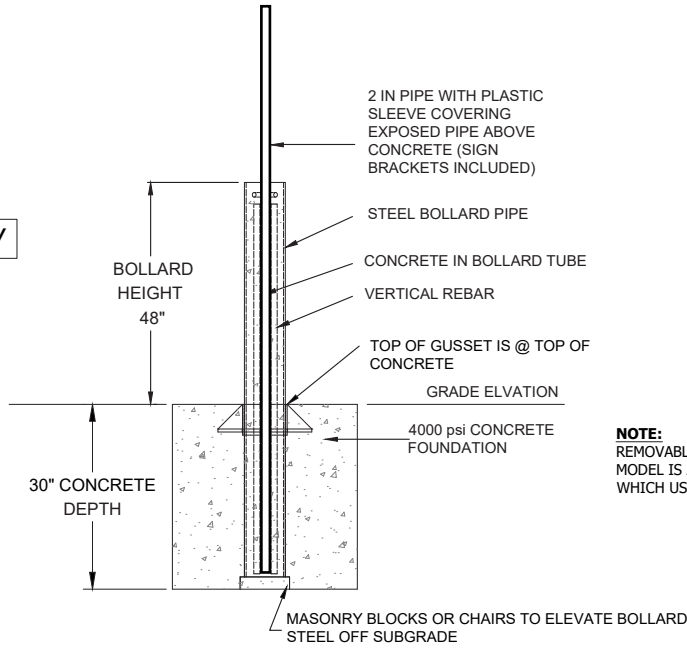


**TRAFFIC IMPACT BOLLARD (MODEL TIB-67-SA)  
SINGLE STAND ALONE, UNRESTRICTED SPACING, SET AND POUR FEATURE**

ENGINEERED & DESIGNED FOR C40, P1 (CRASH TESTED PROTOCOL) PROPERLY INSTALLED, STASTM F2656 C40, P1 (CRASH TESTED PROTOCOL) STOPS 2430 lbs PASSENGER CAR AT 40 mph AND EQUIVALENT IMPACTSOPPED 2430 lbs PASSENGER CAR AT 40MPH OR STOREFRONT EQUIVALENT ASTM F2656

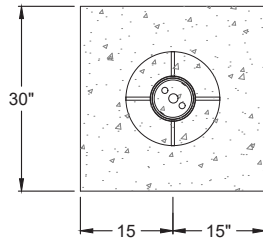
**SINGLE STAND ALONE BOLLARD  
INSTALLATION**

**FRONT VIEW**



**NOTE:**  
REMOVABLE BOLLARD MODEL IS AVAILABLE WHICH USES THE SAME COMPONENTS.

**TOP VIEW**



**KEY CAPABILITIES:**

1. UNRESTRICTED SPACING BETWEEN BOLLARDS
2. EASY AND QUICK INSTALLATION; EXCAVATE SET BOLLARD AND POUR CONCRETE
3. NO FIELD WELDING, BOLTING OR ASSEMBLY. BOLLARD IS DELIVERED PREFABRICATED AS 1 UNIT
4. SYMMETRICAL BOLLARD DESIGN, IMPACT FROM ANY ANGLE TO BOLLARD PROVIDES THE SAME STOPPING CAPABILITY



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**DETAILS  
ASTM F2656 C40 PROTOCOL  
SET & POUR BOLLARD**

**DRAWINGS**

SHEET: 1 OF 5

20190603-01-PD

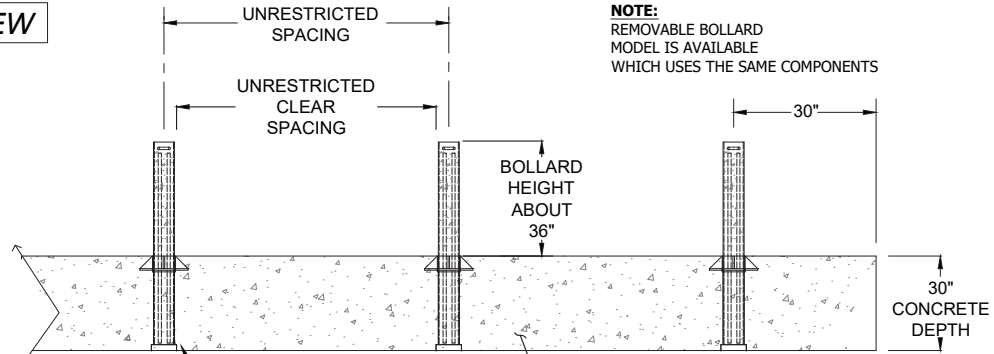
SCALE: N.T.S.

**TRAFFIC IMPACT BOLLARD (MODEL TIB-67-SA)  
SINGLE STAND ALONE, UNRESTRICTED SPACING, SET AND POUR FEATURE**

ENGINEERED & DESIGNED FOR C40, P1 (CRASH TESTED PROTOCOL) PROPERLY INSTALLED, STOPPED 2430 lbs PASSENGER CAR AT 40MPH OR STOREFRONT EQUIVALENT ASTM F2656

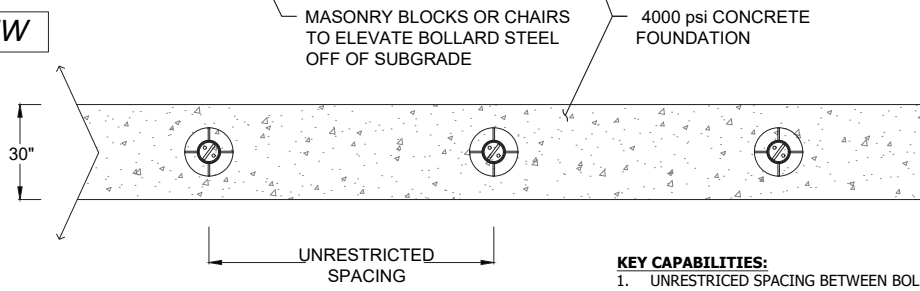
**TYPICAL BOLLARD ARRAY INSTALLATION**

**FRONT VIEW**



**NOTE:**  
REMOVABLE BOLLARD  
MODEL IS AVAILABLE  
WHICH USES THE SAME COMPONENTS

**TOP VIEW**



- KEY CAPABILITIES:**
1. UNRESTRICTED SPACING BETWEEN BOLLARDS
  2. EASY AND QUICK INSTALLATION; EXCAVATE SET BOLLARD AND POUR CONCRETE
  3. NO FIELD WELDING, BOLTING OR ASSEMBLY. BOLLARD IS DELIVERED PREFABRICATED AS 1 UNIT
  4. SYMMETRICAL BOLLARD DESIGN, IMPACT FROM ANY ANGLE TO BOLLARD PROVIDES THE SAME STOPPING CAPABILITY



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TYPICAL ARRAY  
ASTM F2656 C40 PROTOCOL  
SET & POUR BOLLARD

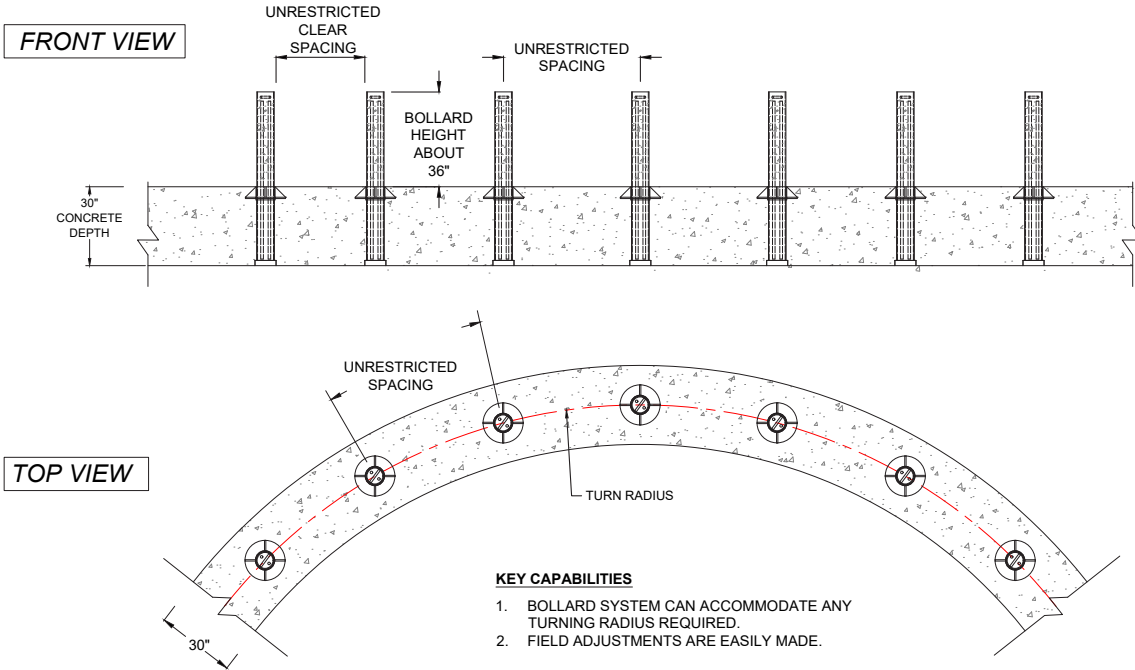
DRAWINGS

SHEET: 2 OF 5
20190603-01-PD
SCALE: N.T.S.

**TRAFFIC IMPACT BOLLARD (MODEL TIB-67-SA)  
SINGLE STAND ALONE, UNRESTRICTED SPACING, SET AND POUR FEATURE**

ENGINEERED & DESIGNED FOR C40, P1 (CRASH TESTED PROTOCOL) PROPERLY INSTALLED, STOPPED 2430 lbs PASSENGER CAR AT 40MPH OR STOREFRONT EQUIVALENT ASTM F2656

**BOLLARD INSTALLATION WITH TURN**



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ARRAY ON CURVE  
ASTM F2656 C40 PROTOCOL  
SET & POUR BOLLARD

DRAWINGS

SHEET: 3 OF 5

20190603-01-PD

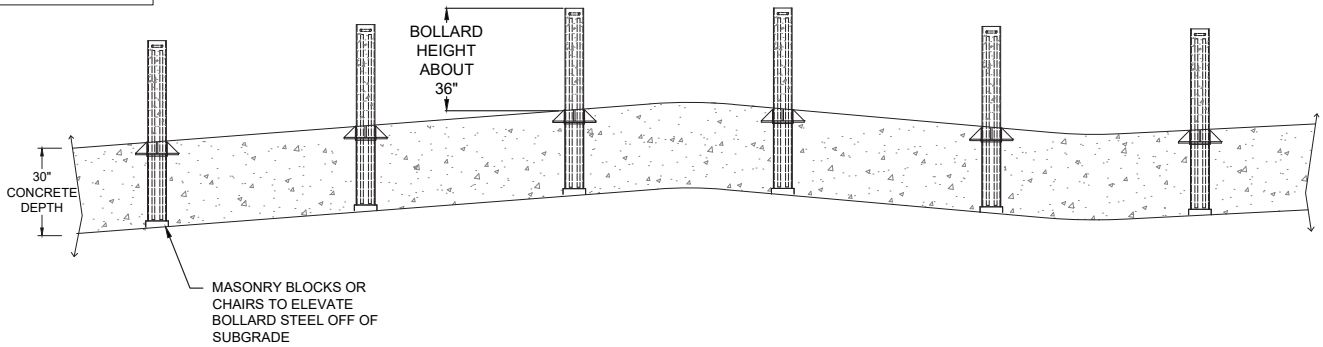
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**TRAFFIC IMPACT BOLLARD (MODEL TIB-67-SA)  
SINGLE STAND ALONE, UNRESTRICTED SPACING, SET AND POUR FEATURE**

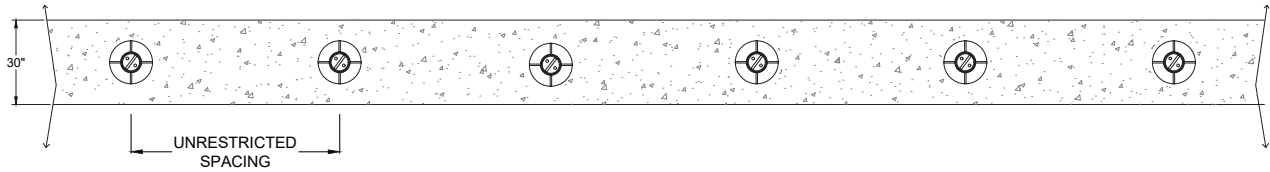
ENGINEERED & DESIGNED FOR C40, P1 (CRASH TESTED PROTOCOL) PROPERLY INSTALLED, STOPPED 2430 lbs PASSENGER CAR AT 40MPH OR STOREFRONT EQUIVALENT ASTM F2656

**BOLLARD INSTALLATION ACROSS GRADE CHANGES**

**FRONT VIEW**



**TOP VIEW**



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ARRAY ON SLOPE  
ASTM F2656 C40 PROTOCOL  
SET & POUR BOLLARD

DRAWINGS

SHEET: 4 OF 5

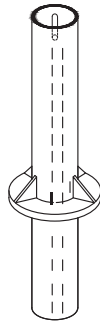
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SCALE: N.T.S.

**TRAFFIC IMPACT BOLLARD (MODEL TIB-67-SA)**  
**SINGLE STAND ALONE, UNRESTRICTED SPACING, SET AND POUR FEATURE**

ENGINEERED & DESIGNED FOR C40, P1 (CRASH TESTED PROTOCOL) PROPERLY INSTALLED, STOPPED 2430 lbs PASSENGER CAR AT 40MPH OR STOREFRONT EQUIVALENT ASTM F2656

PREFABRICATED BOLLARD MATERIALS PROVIDED



(QTY 1) EACH:  
BOLLARD TUBE



(QTY 2) EACH:  
PRE-CUT VERTICAL REBAR  
(INSIDE BOLLARD)



(QTY 1) EACH:  
BOLLARD COVER  
STYLE PER CUSTOMER

MATERIALS PROVIDED BY INSTALLER

1. CONCRETE, 1.5 CUBIC YARDS PER BOLLARD
2. CHAIRS TO ELEVATE BOLLARDS ABOVE SUBGRADE



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MATERIALS PROVIDED

DRAWINGS

SHEET: 5 OF 5

20190603-01-PD

SCALE: N.T.S.