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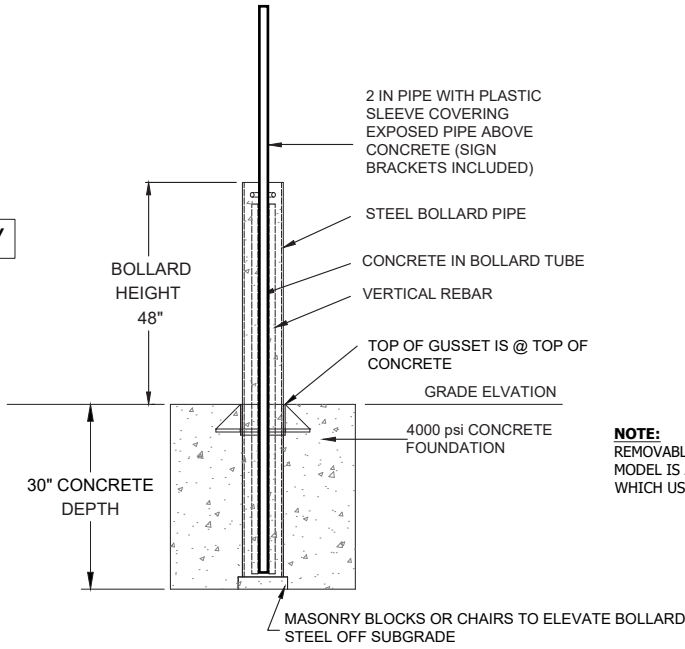## SINGLE STAND ALONE, UNRESTRICTED SPACING, SET AND POUR FEATURE

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
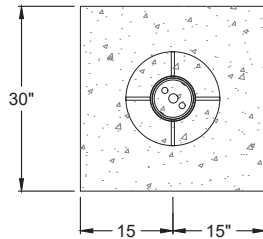
SINGLE STAND ALONE BOLLARD
INSTALLATION

FRONT VIEW

2 IN PIPE WITH PLASTIC SLEEVE COVERING EXPOSED PIPE ABOVE CONCRETE (SIGN BRACKETS INCLUDED)

STEEL BOLLARD PIPE

CONCRETE IN BOLLARD TUBE

VERTICAL REBAR

TOP OF GUSSET IS @ TOP OF CONCRETE

GRADE ELVATION

4000 psi CONCRETE FOUNDATION

BOLLARD HEIGHT 48"

30" CONCRETE DEPTH

MASONRY BLOCKS OR CHAIRS TO ELEVATE BOLLARD STEEL OFF SUBGRADE

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

TOP VIEW

30"

15 — 15"

KEY CAPABILITIES:
1. UNRESTRICED 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

JPI SITE EXPERTS
Safeguarding Your Image

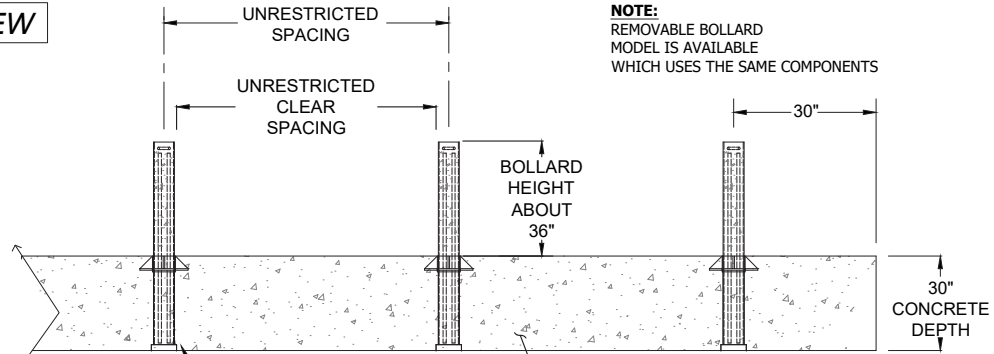| DETAILS ASTM F2656 C40 PROTOCOL SET & POUR BOLLARD	DRAWINGS	SHEET: 1 OF 5
		20190603-01-PD
		SCALE: N.T.S.

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
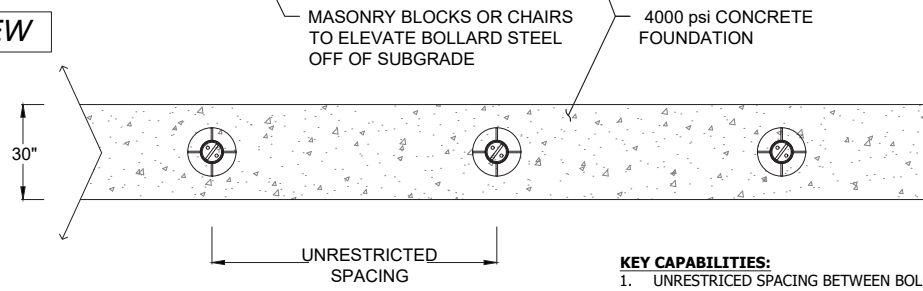
TYPICAL BOLLARD ARRAY INSTALLATION

FRONT VIEW

UNRESTRICTED SPACING

UNRESTRICTED CLEAR SPACING

30"

BOLLARD HEIGHT ABOUT 36"

30" CONCRETE DEPTH

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

MASONRY BLOCKS OR CHAIRS TO ELEVATE BOLLARD STEEL OFF OF SUBGRADE

4000 psi CONCRETE FOUNDATION

TOP VIEW

30"

UNRESTRICTED SPACING

KEY CAPABILITIES:
1. UNRESTRICED 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

JP SITE EXPERTS — *Safeguarding Your Image*

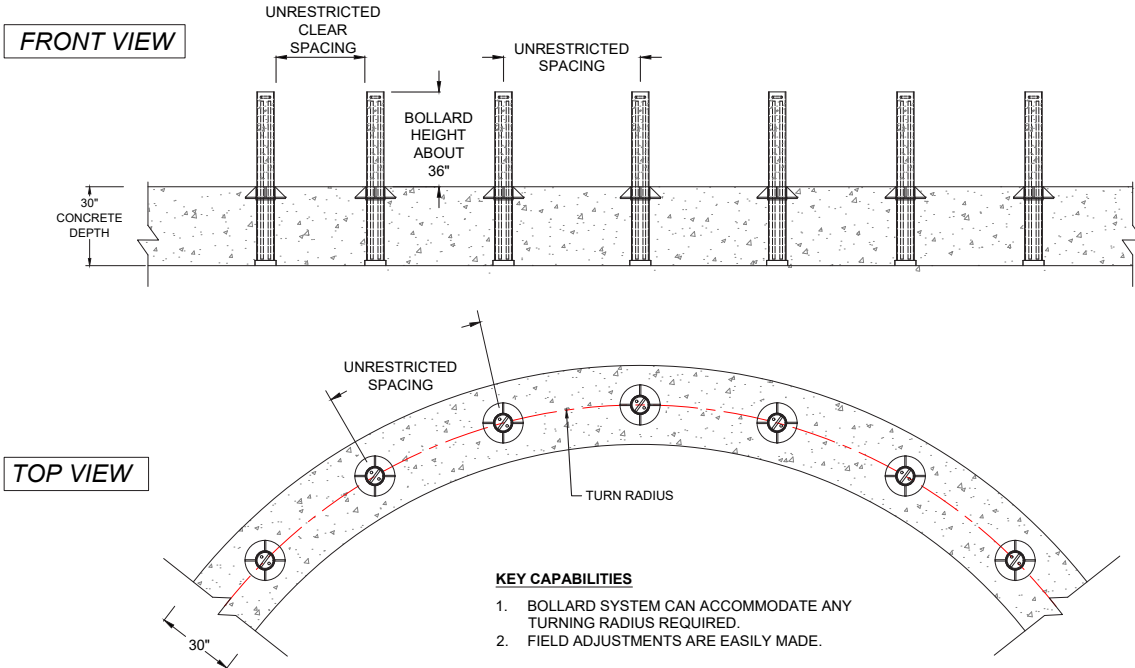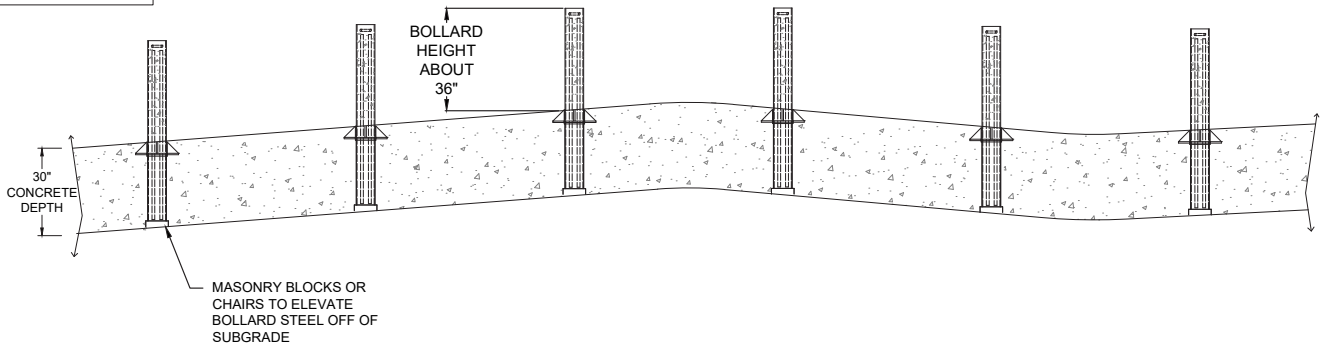| TYPICAL ARRAY ASTM F2656 C40 PROTOCOL SET & POUR BOLLARD	DRAWINGS	SHEET: 2 OF 5
		20190603-01-PD
		SCALE: N.T.S.

TRAFFIC IMPACT BOLLARD (MODEL TIB-67-SA)
SINGLE STAND ALONE, UNRESTRICTED SPACING, SET AND POUR FEATURE
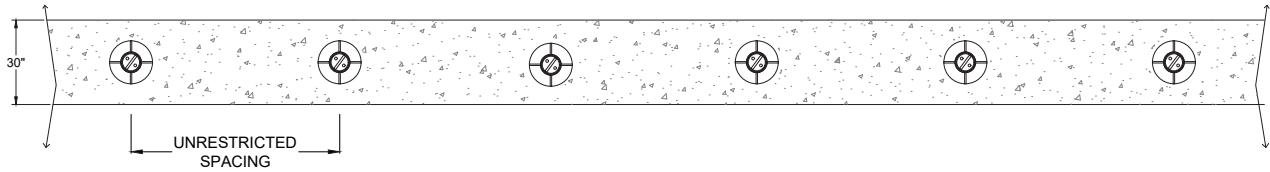
ENGINEERED & DESIGNED FOR C40, P1 (CRASH TESTED PROTOCOL) PROPERLY INSTALLED, STOPPED 2430 lbs PASSENGER CAR AT 40MPH OR STOREFRONT EQUIVALENT ASTM F2656

BOLLARD INSTALLATION WITH TURN

FRONT VIEW

UNRESTRICTED CLEAR SPACING

UNRESTRICTED SPACING

BOLLARD HEIGHT ABOUT 36"

30" CONCRETE DEPTH

TOP VIEW

UNRESTRICTED SPACING

TURN RADIUS

30"

KEY CAPABILITIES

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

JPI SITE EXPERTS
Safeguarding Your Image

ARRAY ON CURVE ASTM F2656 C40 PROTOCOL SET & POUR BOLLARD

DRAWINGS

SHEET: 3 OF 5

20190603-01-PD

SCALE: N.T.S.

BOLLARD INSTALLATION ACROSS GRADE CHANGES

FRONT VIEW

BOLLARD
HEIGHT
ABOUT
36"

30"
CONCRETE
DEPTH

MASONRY BLOCKS OR
CHAIRS TO ELEVATE
BOLLARD STEEL OFF OF
SUBGRADE

TOP VIEW

30"

UNRESTRICTED
SPACING

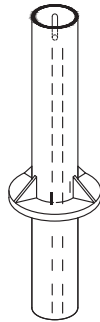|		
SITE EXPERTS *Safeguarding Your Image*	**ARRAY ON SLOPE** **ASTM F2656 C40 PROTOCOL** **SET & POUR BOLLARD**	**DRAWINGS**

SHEET: 4 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

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

SITE EXPERTS
Safeguarding Your Image

MATERIALS PROVIDED	DRAWINGS	SHEET: 5 OF 5
		20190603-01-PD
		SCALE: N.T.S.