CRASH TESTED AND CERTIFIED TO STOP 15,000 LB. VEHICLE AT 30 MPH IMPACT ASTM F2656-07 M30-P1 (K4)

PROPRIETARY AND CONFIDENTIAL DO NOT COPY OR REPRODUCE **ALL RIGHTS RESERVED** SINGLE STAND-ALONE BOLLARD (UNRESTRICTED SPACING) RAISED **POSITION** RETRACTABLE LIFT HANDLE **LOWERED** ONLY 35 LBS 36" - 39" **POSITION** TO RAISE OR LOWER CRASH TOP OF CONCRETE RATED AND CERTIFIED BOLLARD FLUSH WITH LID GRADE **ABOUT** 76" **DEPTH** ASTM M30 P1 (K4) CRASH RATED AND CERTIFIED. DOD APPROVED AND LISTED ON ANTI-RAM VEHICLE BARRIER LIST. ONE (1) SINGLE STAND-ALONE BOLLARD STOPS VEHICLE IMPACT 4 (UNRESTRICTED BOLLARD SPACING) ONE (1) PERSON RAISES AND RETRACTS BOLLARD WITH LESS THAN 35 LBS. 100% STAINLESS STEEL OR HOT DIP GALVANIZED COMPONENTS (NON-RUSTING) LOCKABLE IN THE RAISED OR LOWERED POSITION. OPTIONAL HEAT TRACE WITH AUTO THERMOSTAT IN COLD WEATHER REGIONS. 7. BUILT IN DRILL PUMP TO REMOVE WATER SEEPING INSIDE. FLUSH WITH PAVEMENT WHEN LOWERED. 9. MASONRY BLOCK OR 10. TRAFFIC RATED FOR HEAVY TRUCK LOADS. CHAIR TO RAISE OUTER EASILY INSTALLED AND DELIVERED PREFABRICATED AND PREASSEMBLED. 11. SLEEVE OFF OF SUBGRADE 12. AUGURED HOLE OR CONTINUOUS EXCAVATION FOR CONCRETE FOUNDATION (OPTIONS). Ø48" OR 13. ALLOWS FOR FIELD ADJUSTMENTS DURING INSTALLATION -42" WIDE TRENCH-MULTI-DIRECTIONAL STOPPING CAPABILITY. **EXCAVATION** EASY TO INSTALL WITH TURNS AND ACROSS GRADE ELEVATION CHANGES. DRAWINGS, SUBMITTALS, ENGINEERING SUPPORT AND INSTALLATION SUPPORT ARE INCLUDED.



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MANUAL RETRACTABLE BOLLARD

WEBSITE DRAWING

SHEET: 1 OF 5

20210324-01-PD

CRASH TESTED AND CERTIFIED TO STOP 15,000 LB. VEHICLE AT 30 MPH IMPACT ASTM F2656-07 M30-P1 (K4)

BOLLARD ARRAY WITH CONTINUOUS FOOTING

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48" - 60" BOLLARD SPACING GROUND RETRACTABLE RECOMENDED RETRACTABLE **BOLLARD** (UNRESTRICTED LIFT HANDLE SPACING) FRONT VIEW 36"- 39" ALL STAINLESS STEEL **BOLLARD IN ABOVE** LOWERED CONCRETE POSITION COMPONENTS (TYP) **GRADE** 76" **DEPTH** CONCRETE

ONLY 35 LBS TO RAISE OR LOWER CRASH RATED AND CERTIFIED BOLLARD

BOLLARD SPACING RECOMENDED (UNRESTRICTED SPACING) (UNRESTRICTED SPACING) 42"

48" - 60"

KEY CAPABILITIES

- 1. ASTM M30 P1 (K4) CRASH RATED AND CERTIFIED.
- 2. DOD APPROVED AND LISTED ON ANTI-RAM VEHICLE BARRIER LIST.
- 3. ONE (1) SINGLE STAND-ALONE BOLLARD STOPS VEHICLE IMPACT (UNRESTRICTED BOLLARD SPACING)
- 4. ONE (1) PERSON RAISES AND RETRACTS BOLLARD WITH LESS THAN 35 LBS.
- . 100% STAINLESS STEEL OR HOT DIP GALVANIZED COMPONENTS (NON-RUSTING)
- 6. LOCKABLE IN THE RAISED OR LOWERED POSITION.
- 7. OPTIONAL HEAT TRACE WITH AUTO THERMOSTAT IN COLD WEATHER REGIONS.
- 8. BUILT IN DRILL PUMP TO REMOVE WATER SEEPING INSIDE.
- FLUSH WITH PAVEMENT WHEN LOWERED.
- 10. TRAFFIC RATED FOR HEAVY TRUCK LOADS.
- EASILY INSTALLED AND DELIVERED PREFABRICATED AND PREASSEMBLED.
- AUGURED HOLE OR CONTINUOUS EXCAVATION FOR CONCRETE FOUNDATION (OPTIONS).
- 13. ALLOWS FOR FIELD ADJUSTMENTS DURING INSTALLATION
- 14. MULTI-DIRECTIONAL STOPPING CAPABILITY.
- 15. EASY TO INSTALL WITH TURNS AND ACROSS GRADE ELEVATION CHANGES.
- DRAWINGS, SUBMITTALS, ENGINEERING SUPPORT AND INSTALLATION SUPPORT ARE INCLUDED.



TOP VIEW

SINGLE STAND-ALONE BOLLARD (UNRESTRICTED SPACING)

EXISTING SUBGRADE (NO COMPACTION REQUIRED)

MASONRY BLOCK OR — CHAIR TO RAISE OUTER SLEEVE TO TOP OF HARDSCAPE IF NEEDED

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MANUAL RETRACTABLE BOLLARD

WEBSITE DRAWING

SHEET: 2 OF 5

20210324-01-PD

CRASH TESTED AND CERTIFIED TO STOP 15,000 LB. VEHICLE AT 30 MPH IMPACT ASTM F2656-07 M30-P1 (K4)

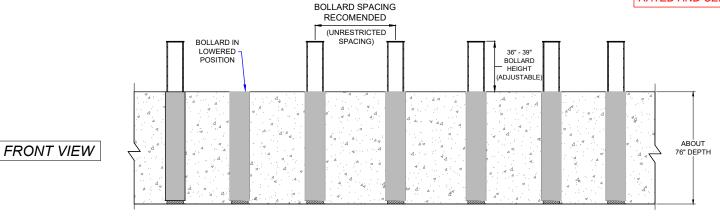
48" - 60"

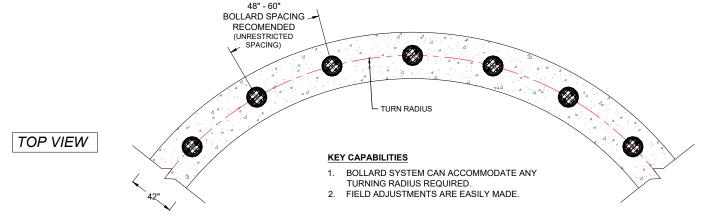
SINGLE STAND-ALONE BOLLARD (UNRESTRICTED SPACING)

BOLLARD ARRAY WITH TURN

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ONLY 35 LBS TO RAISE OR LOWER CRASH RATED AND CERTIFIED BOLLARD







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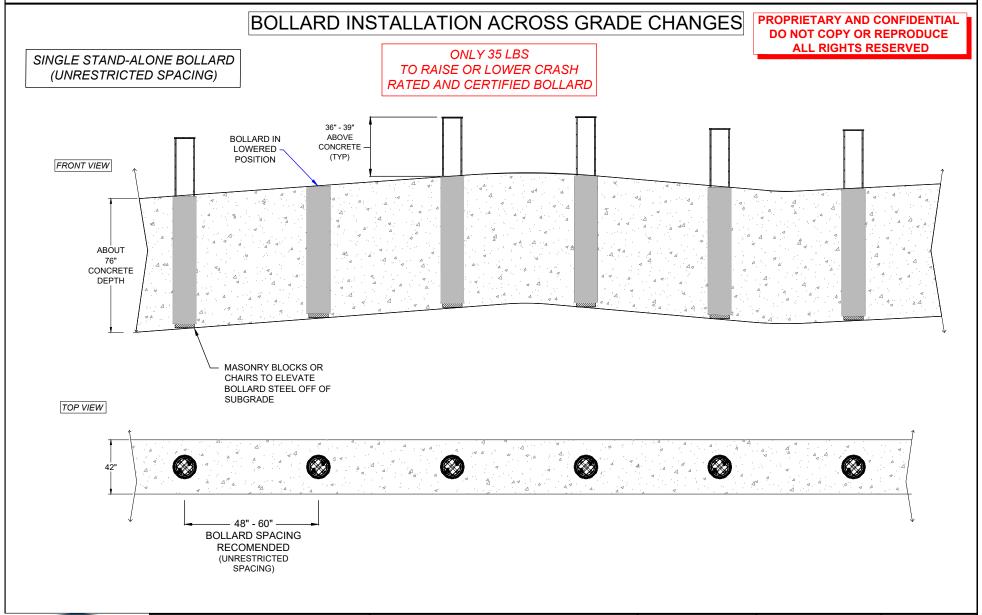
MANUAL RETRACTABLE BOLLARD

WEBSITE DRAWING

SHEET: 3 OF 5

20210324-01-PD

CRASH TESTED AND CERTIFIED TO STOP 15,000 LB. VEHICLE AT 30 MPH IMPACT ASTM F2656-07 M30-P1 (K4)





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MANUAL RETRACTABLE **BOLLARD**

WEBSITE DRAWING SHEET: 4 OF 5

20210324-01-PD

CRASH TESTED AND CERTIFIED TO STOP 15,000 LB. VEHICLE AT 30 MPH IMPACT ASTM F2656-07 M30-P1 (K4)

MATERIALS PROVIDED BY BARRIER 1

1 SINGLE PREFABRICATED AND PRE-ASSEMBLED RETRACTABLE BOLLARD. READY TO SET AND POUR CONCRETE



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SINGLE STAND-ALONE BOLLARD (UNRESTRICTED SPACING)

PROVIDED BY INSTALLER

1. ABOUT 4 C.Y. CONCRETYE PER BOLLARD.

2. CHAIRS OR MASONRY BLOCKS TO ELEVATE BOLLARD OFF SUBGRADE.

ONLY 35 LBS TO RAISE OR LOWER CRASH RATED AND CERTIFIED BOLLARD



BARRIER1 SYSTEMS

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MANUAL RETRACTABLE BOLLARD

WEBSITE DRAWING SHEET: 5 OF 5

20210324-01-PD