

(A) ELEVATION

SEE NOTES ON SHEET 3



REMOVABLE STEEL PIPE BOLLARD - ELEVATION

REVIEWED BY THE PARK STANDARDS COMMITTEE, AND APPROVED BY THE CHIEF OF DESIGN & CONSTRUCTION

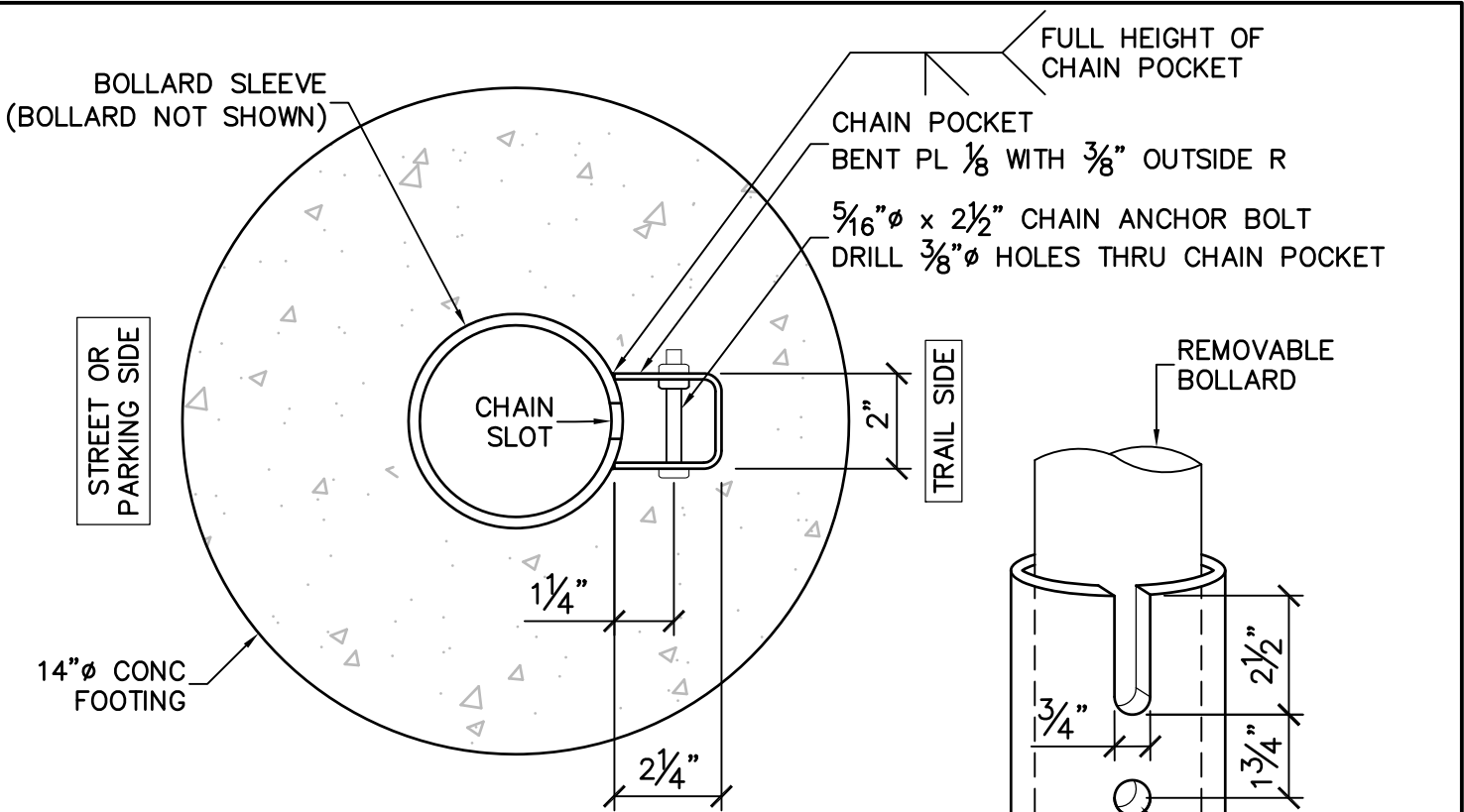
L. Gajjar

10/01/2020

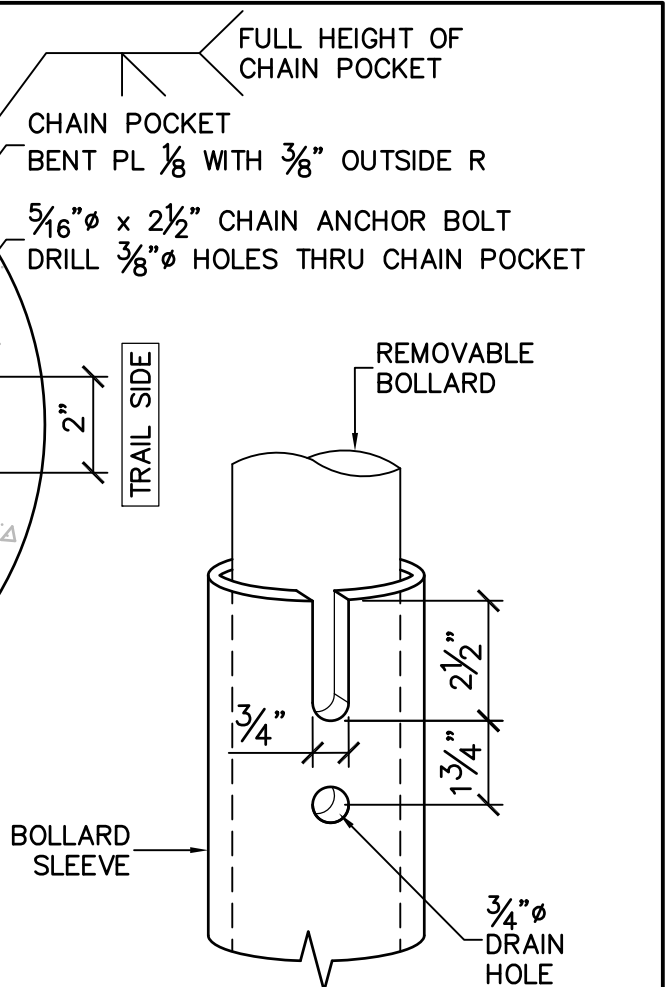
STD PLAN

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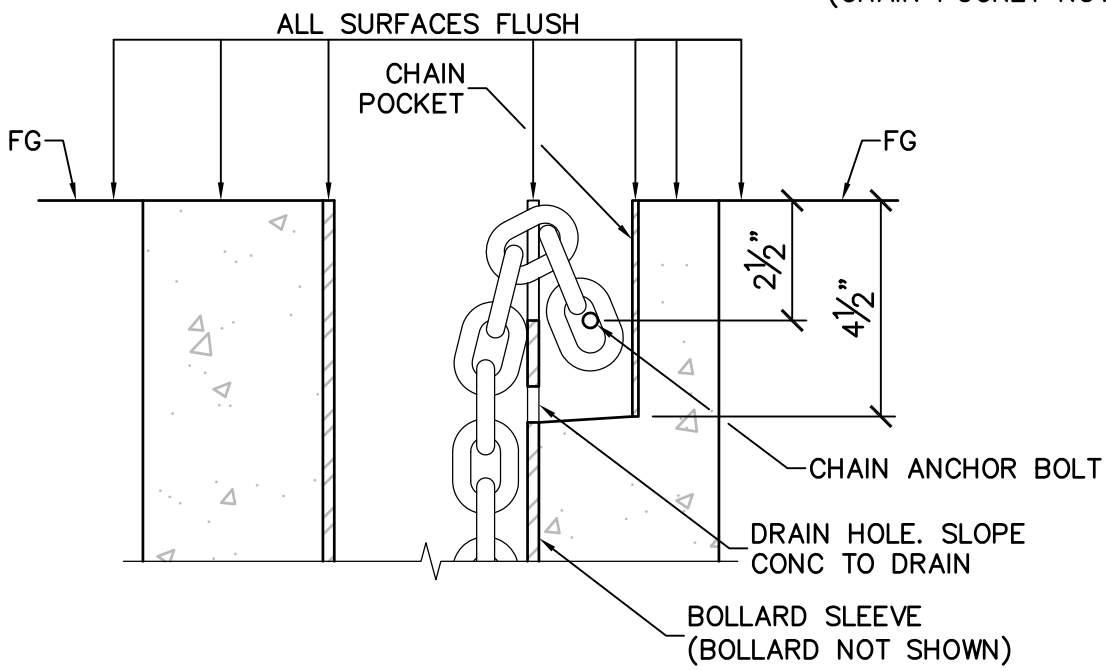
SHEET 1 OF 3
NOT TO SCALE



(B) PLAN DETAIL



(D) CHAIN SLOT & DRAIN HOLE DETAIL (CHAIN POCKET NOT SHOWN)



(C) SECTION DETAIL

SEE NOTES ON SHEET 3



REMOVABLE STEEL PIPE BOLLARD - DETAILS

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FABRICATION

1. WELDERS TO BE AWS CERTIFIED AND PREQUALIFIED FOR THE WELDING TO BE PERFORMED.
2. SMOOTH SHARP EDGES AND WELDS PRIOR TO GALVANIZING AND AGAIN PRIOR TO APPLYING FINISH COATS.
3. REMOVABLE BOLLARD
 - 3.1. SCH 10 LIGHTWEIGHT STEEL PIPE
 - 3.2. PIPE CAP SHALL BE BUTT WELD TYPE WITH BEVELED EDGE.
 - 3.3. WELD EYE TO BOLLARD. EYE TO BE EITHER:
 - $\frac{3}{8}$ " THICK FORGED PAD EYE WITH A $\frac{3}{4}$ " DIAMETER INNER OPENING
 - $\frac{3}{8}$ " STEEL ROD BENT TO FORM A 1" DIAMETER OPENING.
4. BOLLARD SLEEVE
 - 4.1. SCH 40 STANDARD WEIGHT STEEL PIPE
 - 4.2. CHAIN POCKET AND STOP PIN TO BE A-36 STEEL, OR EQUAL
5. HOT-DIP GALVANIZE REMOVABLE BOLLARD AND SLEEVE ASSEMBLY AFTER COMPLETE FABRICATION PER ASTM A123. WATER QUENCHING FOR CHROMATE CONVERSION COATING SHOULD BE AVOIDED WHEN GALVANIZING THE REMOVABLE BOLLARD AS THESE PROCESSES INTERFERE WITH PAINT ADHESION AND SURFACE PREPARATION. REFER TO ASTM D6386, "STANDARD PRACTICE FOR PREPARATION OF ZINC (HOT-DIP GALVANIZED) COATED IRON AND STEEL PRODUCT FOR PAINTING."
6. THOROUGHLY CLEAN AND PROFILE THE SURFACES TO BE PAINTED. FOLLOW RECOMMENDATIONS IN THE "GUIDE TO PREPARING HOT-DIP GALVANIZED STEEL FOR PAINT" PUBLISHED BY THE AMERICAN GALVANIZERS ASSOCIATION (AGA)
[HTTPS://GALVANIZEIT.ORG](https://galvanizeit.org)
7. PRIME AND PAINT REMOVABLE BOLLARD "EBRPD BROWN METAL" PER STD PLAN 003 PAINT SPECIFICATION. DO NOT PAINT SLEEVE.
8. CHAIN SHALL BE GALVANIZED, HIGH-TEST (GRADE 43)
9. CHAIN ANCHOR BOLT AND NUTS SHALL BE HOT-DIP GALVANIZED.

INSTALLATION

10. LOCATE UNDERGROUND UTILITIES PRIOR TO DIGGING. CALL USA (UNDERGROUND SERVICE ALERT) 1-800-277-2600, MON THRU FRI 6AM TO 7PM, A MINIMUM 2 WORKING DAYS WITH A MAXIMUM 14 CALENDAR DAYS, TO OBTAIN A TICKET. CONTACT THE DISTRICT INSPECTOR OR PARK SUPERVISOR FOR DISTRICT UTILITIES NOT LOCATED BY USA.
11. CONCRETE TO BE COMMERCIAL 5-SACK PRE-MIX CONCRETE OR EQUIVALENT.
12. INSTALL BOLLARD SLEEVE PLUMB AT CENTER OF CONCRETE FOOTING.
13. TOUCH-UP ANY DAMAGED FINISH AFTER INSTALLATION.
14. REFLECTIVE SAFETY TAPE SHALL BE 3" WIDE YELLOW, RATED FOR 5 YEAR MIN OUTDOOR LIFE AND MEET D.O.T. SPECIFICATION FP-85 FOR TYPE 2 SHEETING.



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EAST BAY REGIONAL PARK DISTRICT - STANDARD PLANS

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NOT TO SCALE