

Park Avenue Boat Launch

Highland Park, IL

January 19, 2022
BID DOCUMENTS

SmithGroup Project Number: 13258.00

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CV-100	EXISTING CONDITIONS PLAN
CD-100	SITE PREPARATION PLAN
CD-500	SITE PREPARATION DETAILS
CS-100	SITE LAYOUT AND MATERIALS PLAN
CS-101	SITE FURNISHINGS PLAN
CS-500	SITE DETAILS
CS-501	SITE FURNISHING DETAILS
CS-502	SITE DETAILS - BOAT LAUNCH
S-100	SHEET PILE & TIE BACK LAYOUT PLAN
S-500	SHEETPILE & TIE BACK DETAILS

Prepared for:

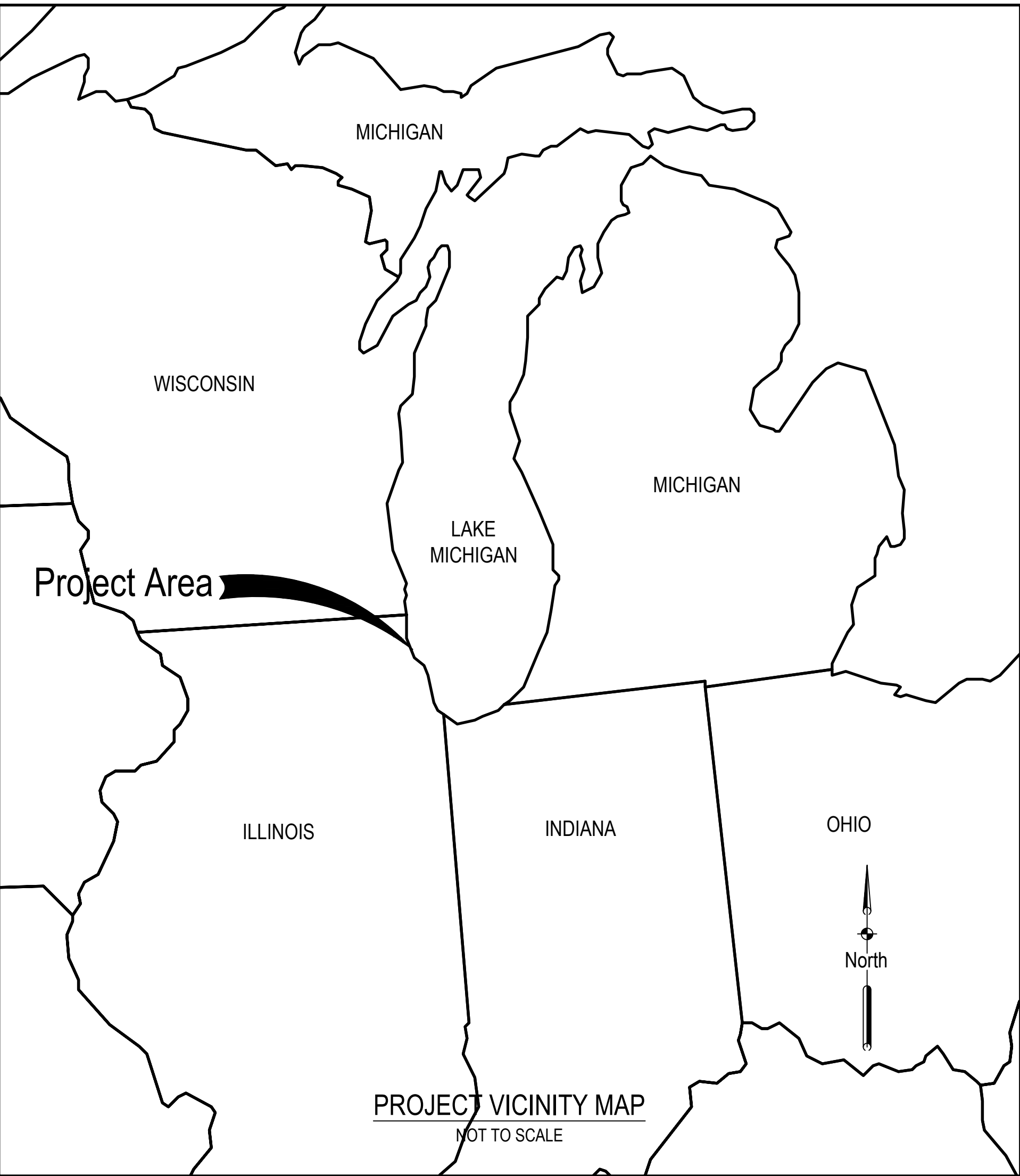
Park District of Highland Park
636 Ridge Road
Highland Park, IL 60035



Prepared by:

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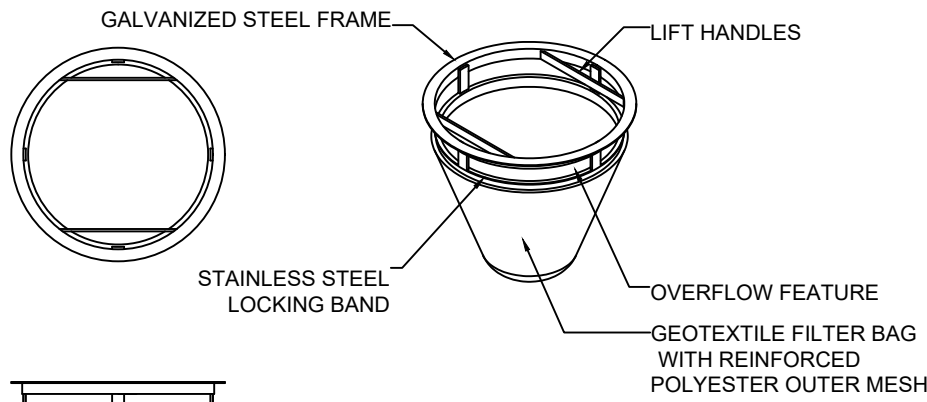
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NOT FOR CONSTRUCTION

G-002

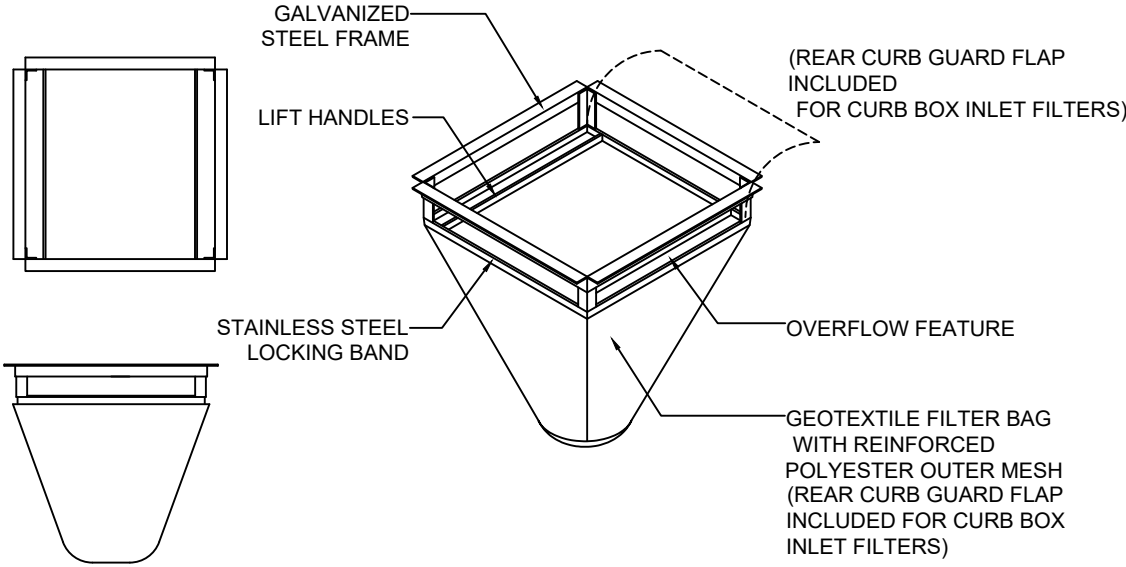
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ROUND INLET FILTER

NOTE:

TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL CATCH BASINS AND STORM INLETS. INLET FILTER TO BE ROUND PP INLET FILTER AS MANUFACTURED BY INLET & PIPE PROTECTION, INC. (847-722-0690) OR APPROVED OTHER. CLEAN FILTER AS NEEDED.



RECTANGLE INLET FILTER

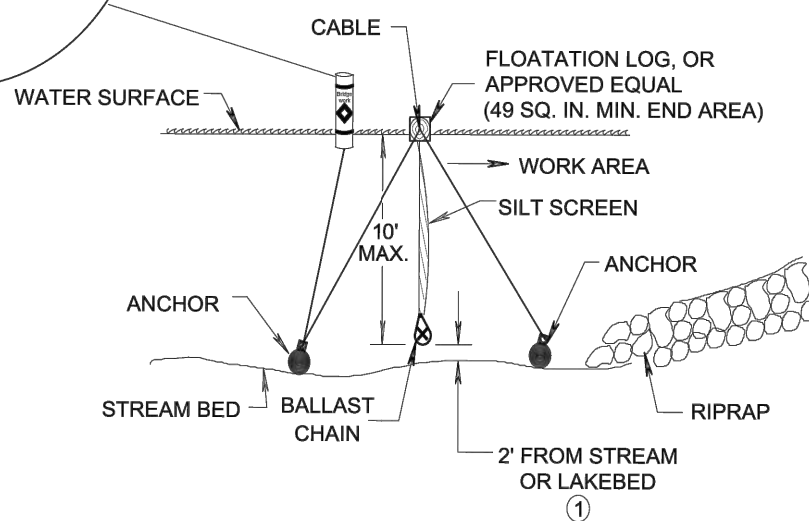
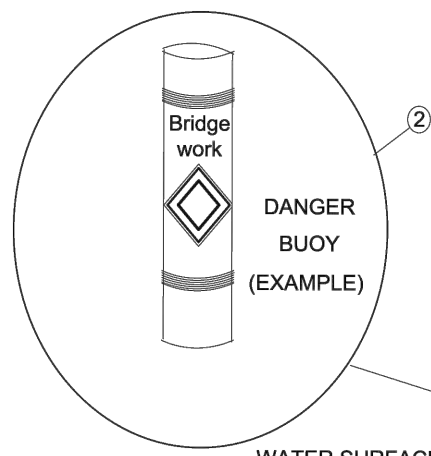
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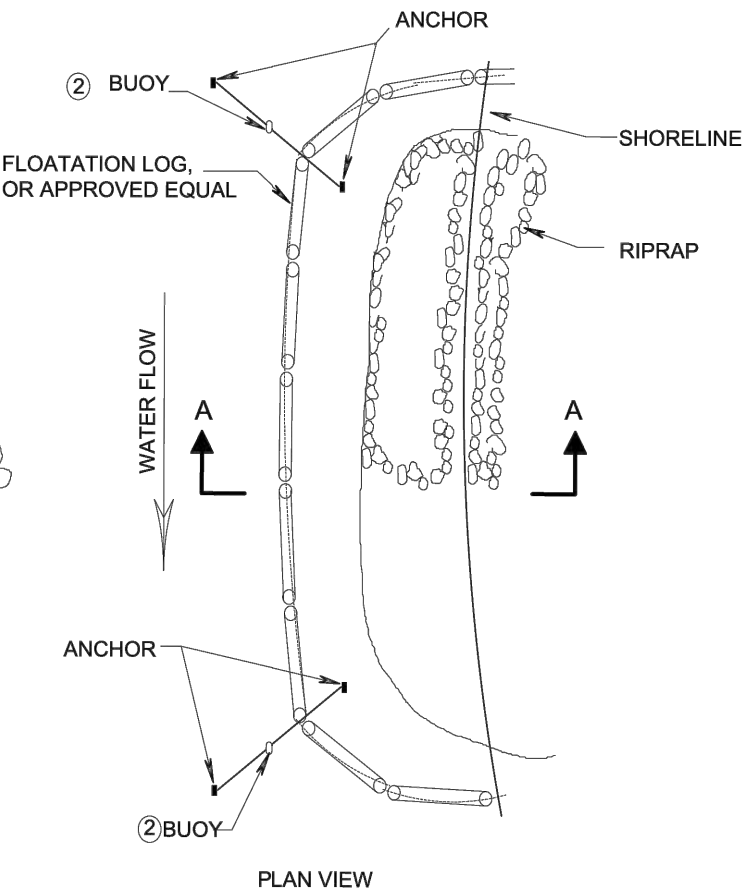
1 INLET PROTECTION

SCALE: 1/2" = 1'

NOT TO SCALE



SECTION A-A



PLAN VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD AND THE APPLICABLE SPECIAL PROVISIONS

1 2' SHALL BE MAINTAINED DURING CONSTRUCTION PERIOD

2 USE AS DIRECTED BY COAST GUARD OR WDNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS

FIGURE 1. SILT CURTAIN PLACEMENT DETAIL

This drawing based on Wisconsin Department of Transportation Standard Detail Drawing 8 E 12-1.

2 TURBIDITY CURTAIN

SCALE: NTS

PARK AVENUE
BOAT LAUNCH

31 PARK AVENUE
HIGHLAND PARK, IL 60035

Owner:

PARK DISTRICT
OF HIGHLAND PARK

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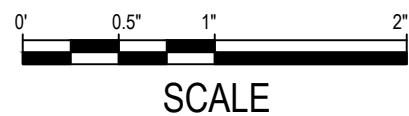
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SEALS AND SIGNATURES

KEY PLAN

DRAWING TITLE
SITE PREPARATION DETAILS



SCALE

SCALE 13258.000

PROJECT NUMBER

CD-500

DRAWING NUMBER



1 LAYOUT AND MATERIALS - PLAN


SCALE: 1" = 10'

SHEET NOTES












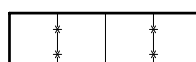



1. SEE BOLLARD & CHAIN SCHEDULE
2. SEE SHEET CS100 FOR ADDITIONAL NOTES.

KEYED NOTES

- | | |
|---|---|
| A | 12" MOORING CLEAT, SPACE ~10' O.C. @ PAN-OUT, TYP.
(ALT-4, 13 TOTAL) |
| B | BENCH, SPACE 30' O.C. AND SET BACK 5' FROM
PAVEMENT EDGE, TYP. (NIC) |
| C | BOLLARD WITH REMOVABLE SINGLE CHAIN (ALT-3) |
| D | BOLLARD WITH REMOVABLE DOUBLE CHAIN (ALT-3) |
| E | NORTHWEST REMOVABLE BOLLARD WITH NO CHAIN
(BASE BID) |
| F | NORTH SIDE BOLLARD WITH NO CHAIN (BASE BID) |
| G | LADDERS |

- 

LEGEND

- | | |
|---|-----------------------------|
|  | LIMITS OF WORK |
|  | ORDINARY HIGH WATER MARK |
|  | EDGE OF WATER |
|  | BOLLARD CHAIN |
|  | BOLLARD |
|  | REMOVABLE TRAFFIC BOLLARD |
|  | POLE MOUNTED SOLAR LIGHT |
|  | POLE MOUNTED NAVIGATION AID |
|  | 12" MOORING CLEAT |
|  | BENCH (N.I.C.) |
|  | SAFETY LADDER |
|  | CONCRETE PAVEMENT |
|  | CONTROL JOINT |
|  | ISOLATION (EXPANSION) JOINT |
|  | ASPHALT PAVEMENT |

BOLLARD SCHEDULE				
BOLLARD	QUANTITY	CHAIN	BID ITEM	NOTES
R-7091	39	SINGLE	ALT-3	RECURVED CROWN WALL
R-7583	35	DOUBLE	ALT-3	SOUTH & WEST SIDE OF PIER
R-7091	3	NO	BASE	NORTHWEST CORNER - REMOVABLE
R-7091	3	NO	BASE	NORTH SIDE - PERMANENT
TOTAL	80			

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SEALS AND SIGNATURES

KEY PLAN



DRAWING TITLE
SITE FURNISHINGS PLAN



SCALE 13258.000

PROJECT NUMBER

CS-101

DRAWING NUMBER

31 PARK AVENUE
HIGHLAND PARK, IL 60035

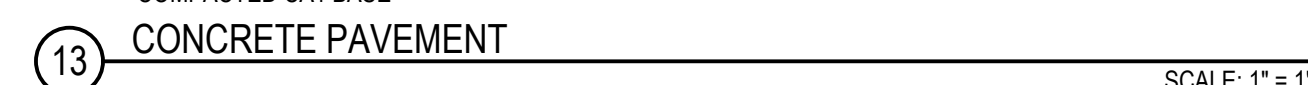
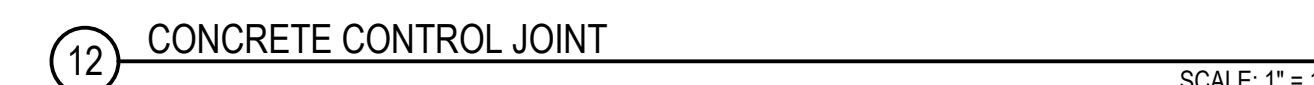
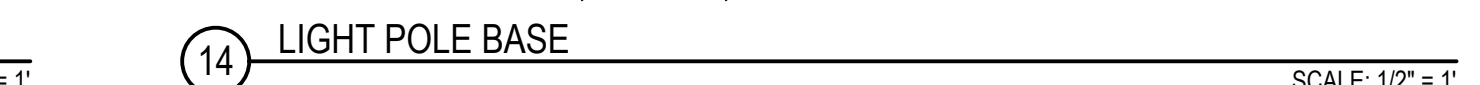
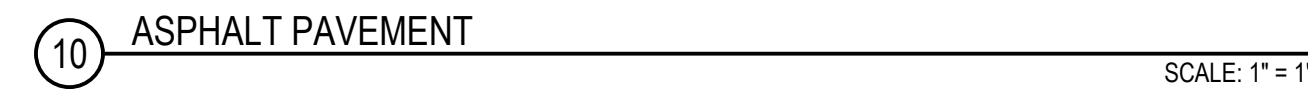
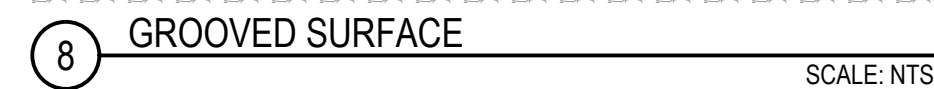
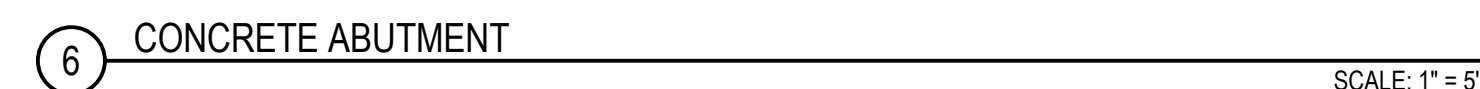
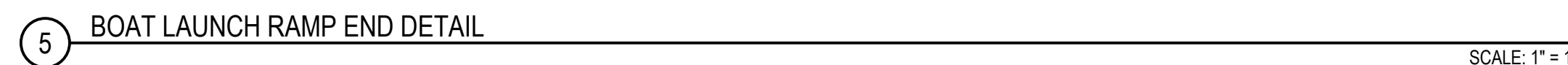
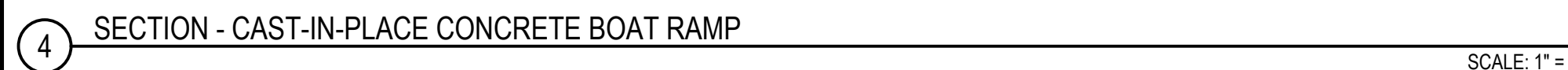
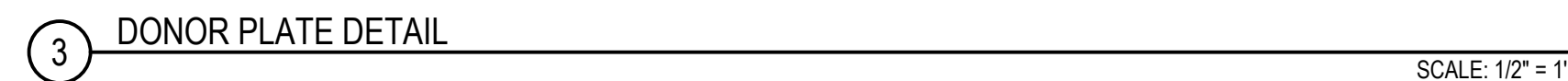
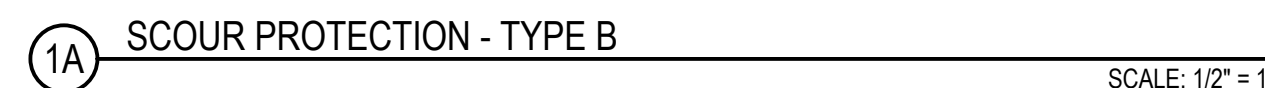
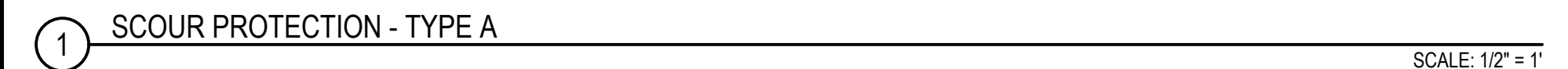
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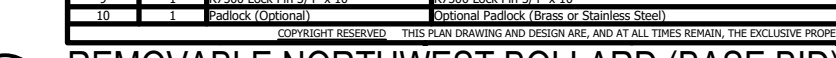
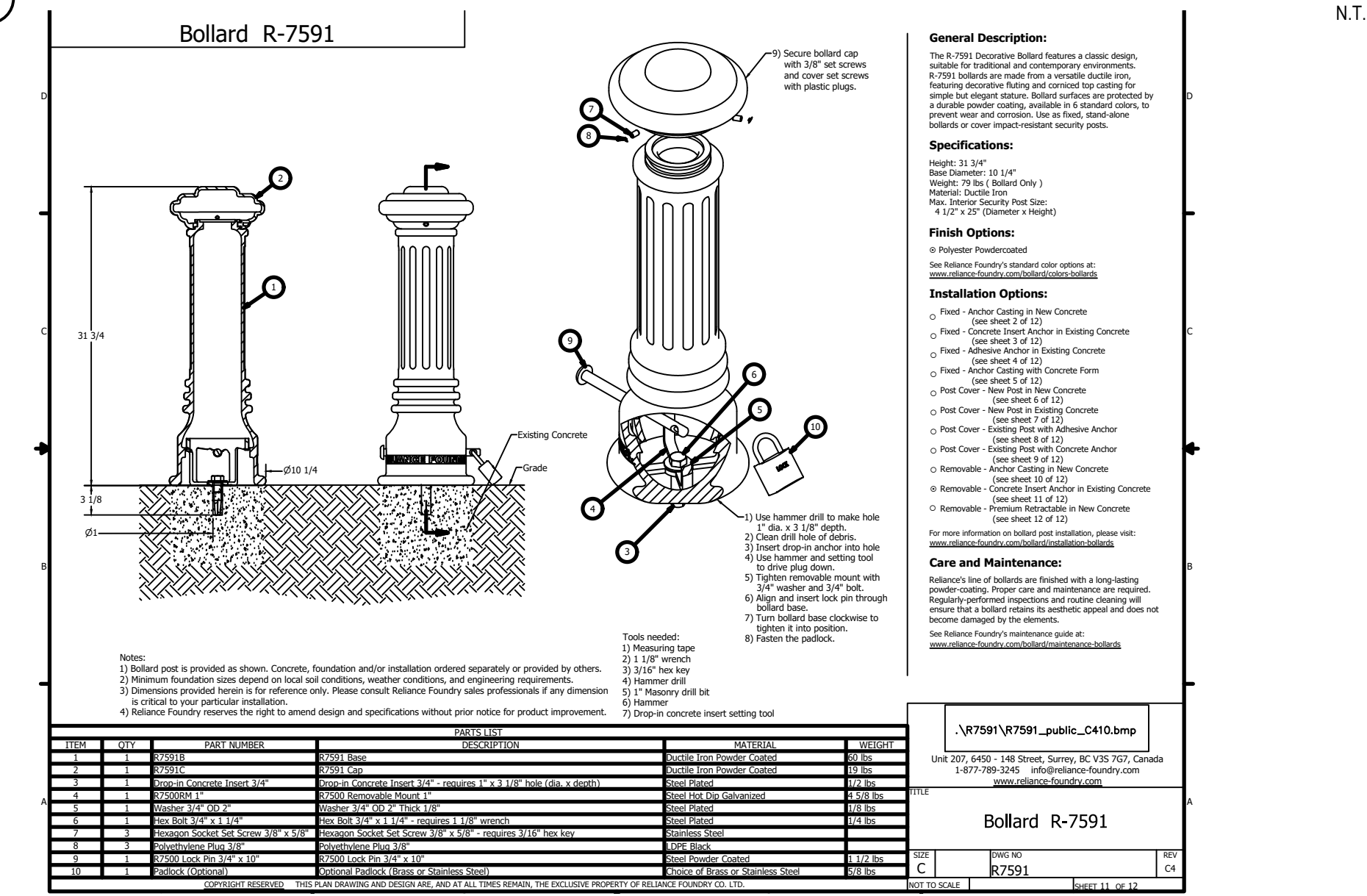
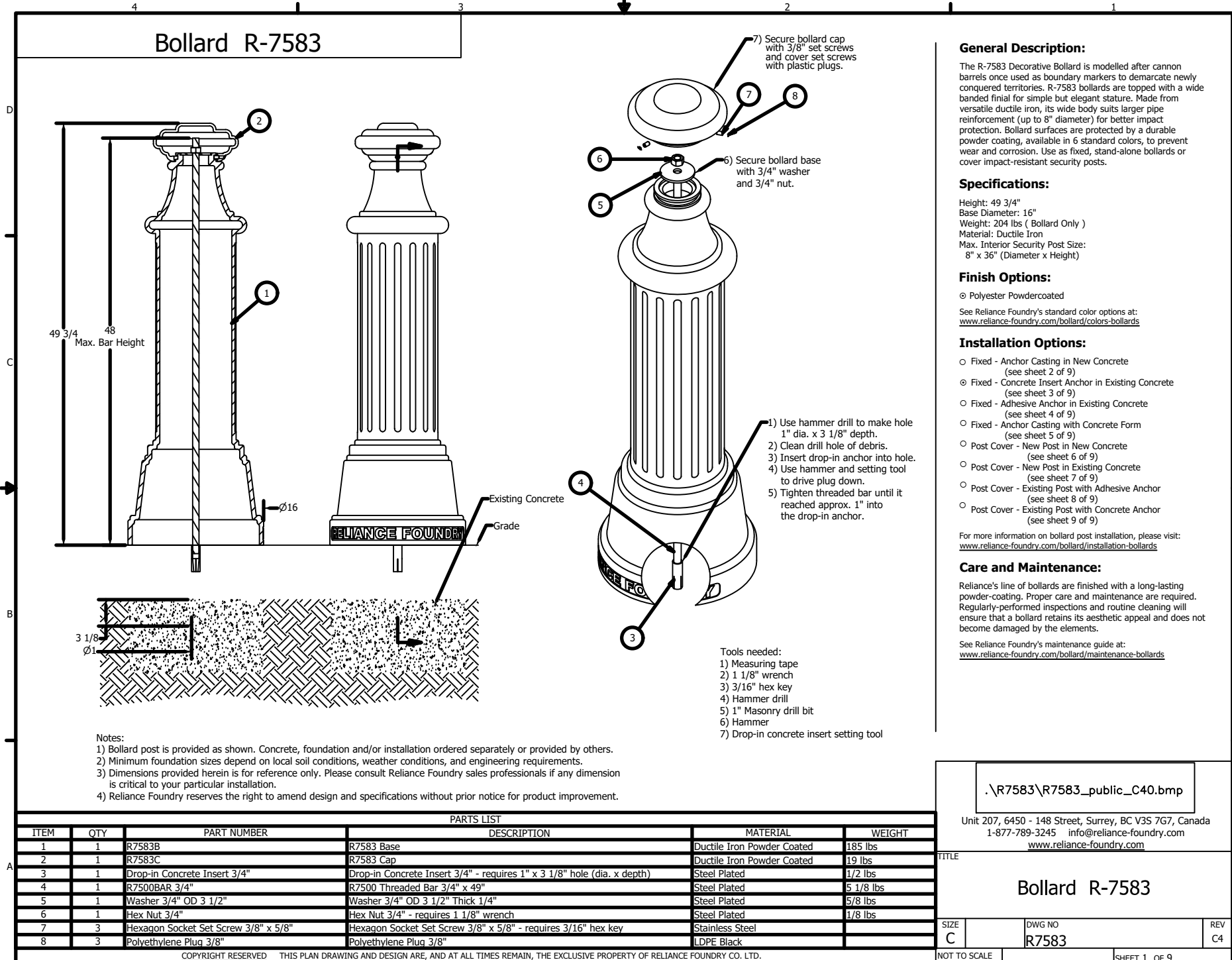
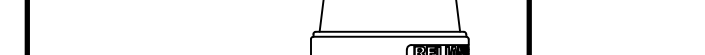
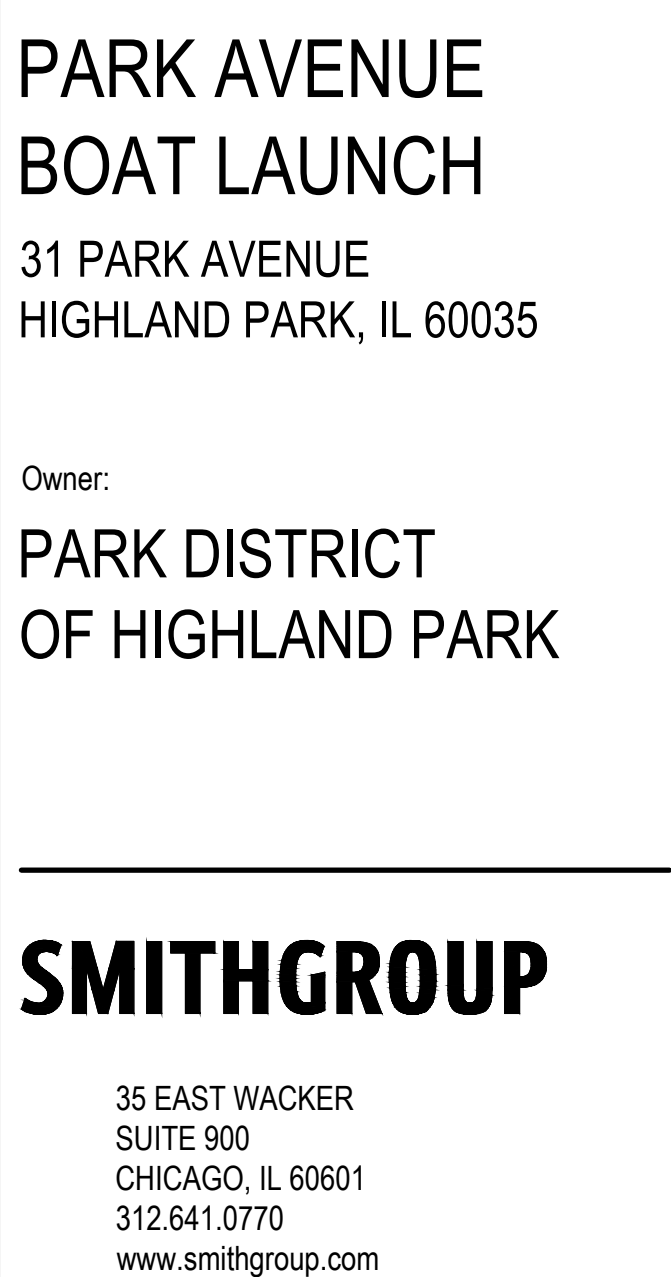
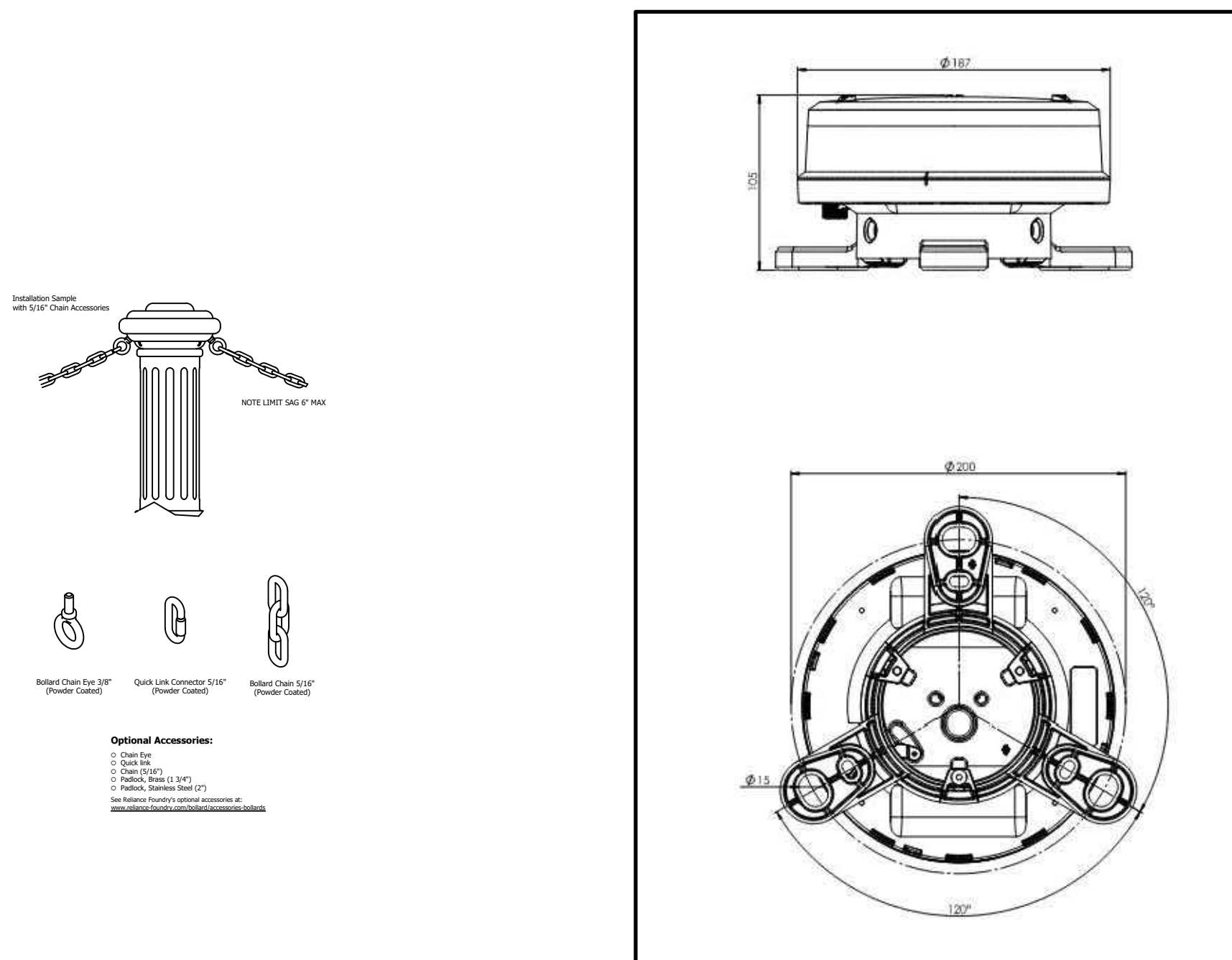
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KEY PLAN

DRAWING NUMBER

CS-500





KEY PLAN

SCALE _____

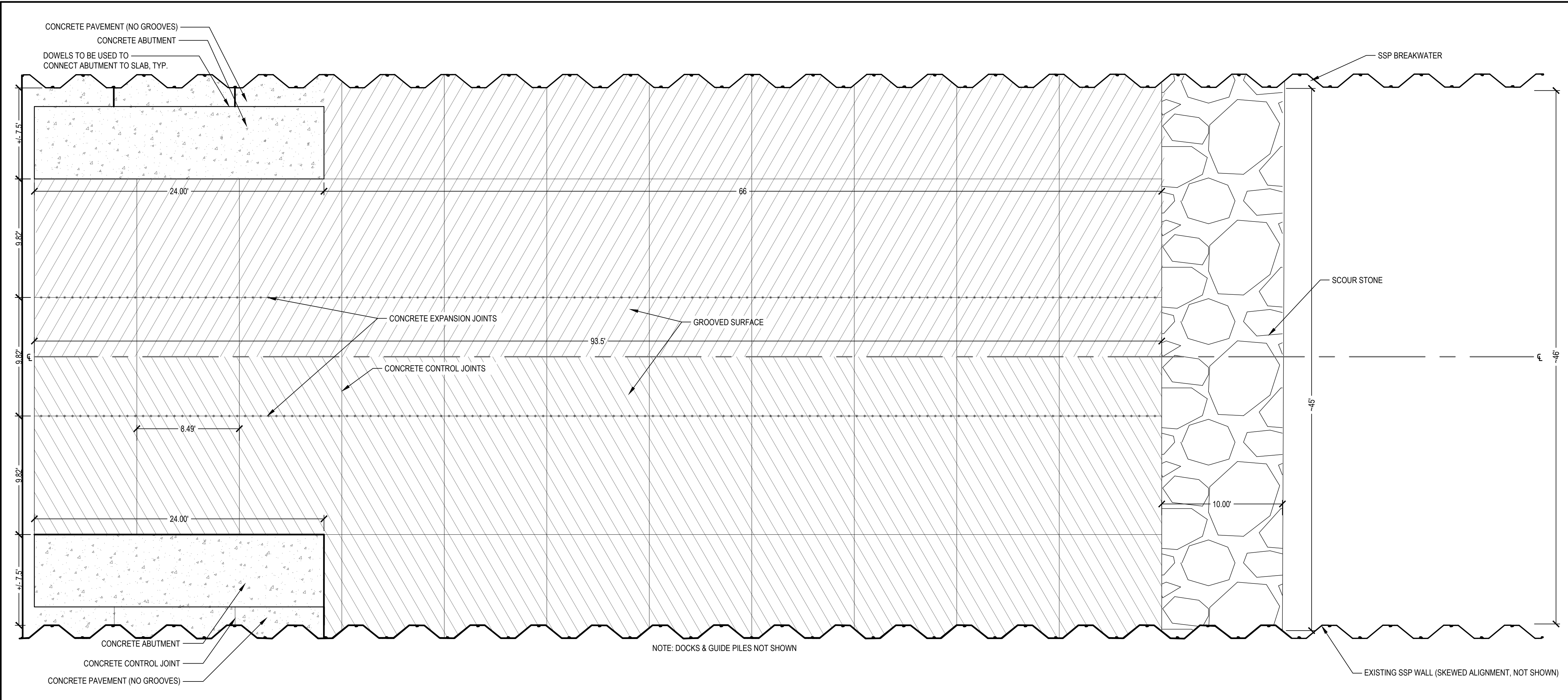
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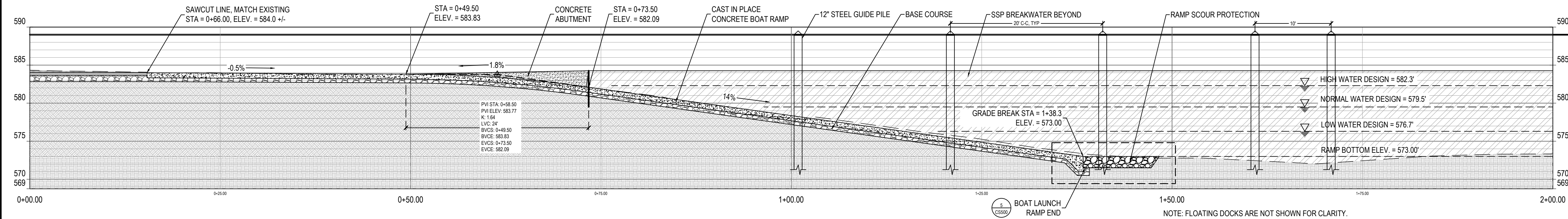
CS-501

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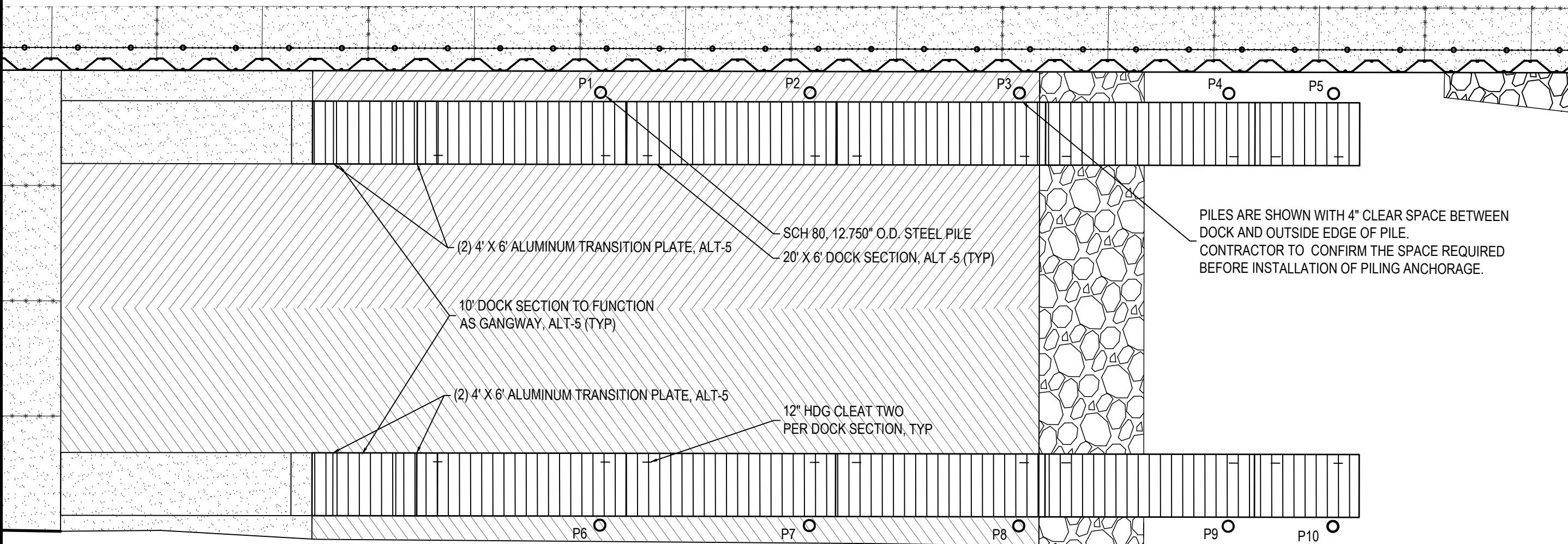
1 PLAN - CAST-IN-PLACE CONCRETE BOAT RAMP

HORIZ SCALE: 1" = 5'



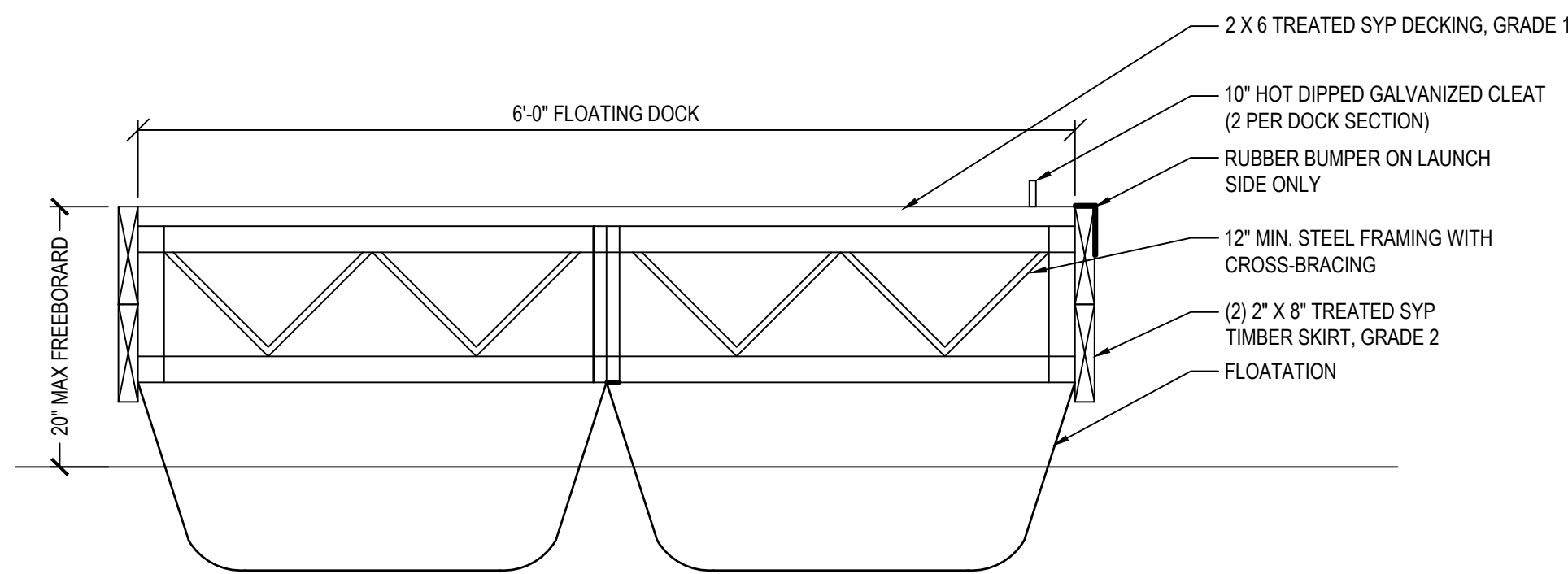
2 SECTION - CAST-IN-PLACE CONCRETE BOAT RAMP

HORIZ SCALE: 1" = 8'



3 DOCK LAYOUT PLAN

HORIZ SCALE: 1" = 10'



4 TYPICAL FLOATING DOCK SECTION, ALT-5

HORIZ SCALE: 1" = 5'

SHEET NOTES

- FLOATING DOCKS ARE PART OF ALTERNATE 1.
- DOCK MANUFACTURER SHALL DESIGN STEEL GUIDE PILE CONNECTION, TRANSITION PLATES, AND ALL DOCK CONNECTIONS.

KEYED NOTES

LEGEND

PARK AVENUE BOAT LAUNCH

31 PARK AVENUE
HIGHLAND PARK, IL 60035

Owner:

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OF HIGHLAND PARK

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01/19/2022

SEALS AND SIGNATURES

KEY PLAN



DRAWING TITLE

SITE DETAILS - BOAT
LAUNCH



SCALE

SCALE

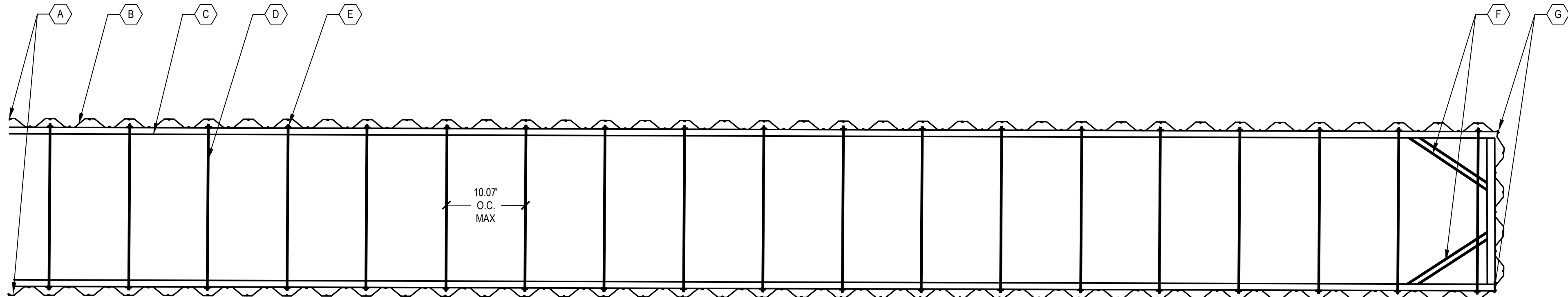
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PROJECT NUMBER

CS-502

DRAWING NUMBER

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NOTES:

- EXTREME CARE SHOULD BE TAKEN NOT TO DAMAGE EXISTING STEEL SHEET PILE WALLS. ANY OBSERVATION OF MOVEMENT OF EXISTING WALL SECTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- CONTRACTOR TO FIELD VERIFY EXISTING SHEET PILE DIMENSIONS.
- REVETMENT IN FRONT OF EXISTING BARGE SHALL BE SALVAGED AND PLACED PER DETAIL.
- SEE ECS GEOTECHNICAL DATA DATED JULY 18, 2018.
- APPROXIMATE ELEVATIONS ARE SHOWN. FIELD VERIFICATION IS REQUIRED BY CONTRACTOR.
- ALL CONCRETE SHALL CONFORM TO THE FOLLOWING:
 - COMPRESSIVE STRENGTH AT 28 DAYS = 4,500 PSI
 - MAXIMUM AGGREGATE SIZE = $\frac{3}{4}$ INCH
 - PORTLAND CEMENT TYPE 1 - ASTM C150
 - MAXIMUM WATER / CEMENT RATIO = 0.45
 - AIR CONTENT = 6 PERCENT \pm 1.5
 - SLUMP = 3 INCHES \pm 1 INCH
- ALL CAP REINFORCING SHALL BE EPOXY COATED, INCLUDING DOWELS, AND CONFORM TO ASTM A775, GRADE 60.
- STEEL REBAR SHALL COMPLY WITH ASTM A615 AND A706 GRADE 60.
- REINFORCING BARS, BAR DOWELS, THREADED RODS, BOLTS, ETC. WHICH ARE INDICATED TO BE DOWELED OR ADHESIVE ANCHORED INTO CONCRETE SHALL BE ICC-ES APPROVED HILTI HIT-RE 500 V3 ADHESIVE ANCHORS, OR ICC-ES APPROVED EQUIVALENT.
- DEFORMED BAR ANCHORS (DBA) SHALL COMPLY WITH ASTM 1064.
- COMPLY WITH AWS D1.1 STRUCTURAL WELDING CODE WITH THE EXCEPTION AS LISTED IN AISC 360-05 SPECIFICATION SECTION 12, APPLY IN LIEU OF AWS PROVISIONS.
- WELDING STRENGTH (FEXX) = 70KSI.
- ALL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE NOTED:
 - PLATES, ANGLES ASTM A36
 - CHANNELS A572 GRADE 50
 - CASING PIPE ASTM A53, A500, OR A1085
 - SHEET PILES ASTM A572 GRADE 60
 - STEEL PIPE PILES ASTM A252 GRADE 3
 - HEADED STUDS ASTM A108
 - TIE RODS ASTM A615 GRADE 80
 - THREADED RODS ASTM F1554 GRADE 105
- WEATHERING STEEL A588 TO BE USED FOR STEEL MEMBERS.
- BOLTS FOR STRUCTURAL STEEL CONNECTIONS SHALL BE $\frac{3}{4}$ " A325 UON.
- SOLAR LIGHT POLE FOUNDATION DESIGN IS BASED ON 6" DIAMETER POST AT 15' HEIGHT FROM THE GROUND. TOTAL POLE HEIGHT SHALL BE 20' OR LESS. CONTRACTOR SHALL CONSULT THE ENGINEER IF ANY OF THE MENTIONED PARAMETERS IS DIFFERENT THAN INSTALLED FLAG POLE.
- TIE ROD TO BE COATED WITH COAL TAR EPOXY AND ENCASED IN PVC SLEEVE. COAT TURNBUCKLE AND ENCASE PVC AFTER TIGHTENING.
- CONTRACTOR TO DRIVE PIPE PILES TO THE SPECIFIED ELEVATION AND CONFIRM MINIMUM BEARING CAPACITY IN ACCORDANCE WITH THE MODIFIED GATE DYNAMIC FORMULA.
- PLACE BACKFILL AND FILL SOIL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS.
- COMPACT SOIL MATERIALS TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT.
- SPECIAL SHEET PILE CONNECTOR TO BE USED AT CORNERS AND WHERE CONNECTING TO EXISTING WALLS TO ENSURE SHEET PILE CONTINUITY.
- PIPE PILE CAPACTY REQUIRED: 50 KIPS COMPRESSION (FOS 2.0), 60 KIPS TENSION (FOS 6.0). PILE CAPACITY SHALL BE VERIFIED BY PILE LOAD TESTS, DYNAMIC MEASUREMENTS OF INSTRUMENTED PILES OR SIMILAR METHODS.

SHEET NOTES

- IN PROGRESS

KEYED NOTES

- A

SECURE PROPOSED SHEET PILE TO EXISTING CONCRETE/SHEET PILE WITH ANGLE AND CORNER PILE (NUCOR SKYLINE E22 OR APPROVED EQUAL).

B

SHEET PILE (NUCOR SKYLINE NZ14 OR APPROVED EQUAL)

C

WALER; SEE DETAIL SHEET

D

TIE ROD; SEE DETAIL SHEET

E

ALIGN TIE RODS WITH CENTER OF BELLY-OUT SHEET PILE, 10.07' O.C. MAX

F

CROSS BRACE

G

CORNER PILE (NUCOR SKYLINE LARSEN T OR APPROVED EQUAL)
- 1

S-500

2/5

S-500

3

S-500

4

S-500

LEGEND

- LIMITS OF WORK
- ARMOR STONE
- SCOUR STONE
- EDGE OF WATER
- ORDINARY HIGH WATER MARK

PARK AVENUE
BOAT LAUNCH

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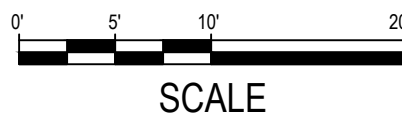
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SEALS AND SIGNATURES

KEY PLAN

DRAWING TITLE
SHEET PILE & TIE BACK
LAYOUT PLAN



SCALE
PROJECT NUMBER
13258.000

DRAWING NUMBER

S-100

31 PARK AVENUE
HIGHLAND PARK, IL 60035

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