

CIVIL CONSTRUCTION PLANS

Cross Lake Road

Roadway Improvements

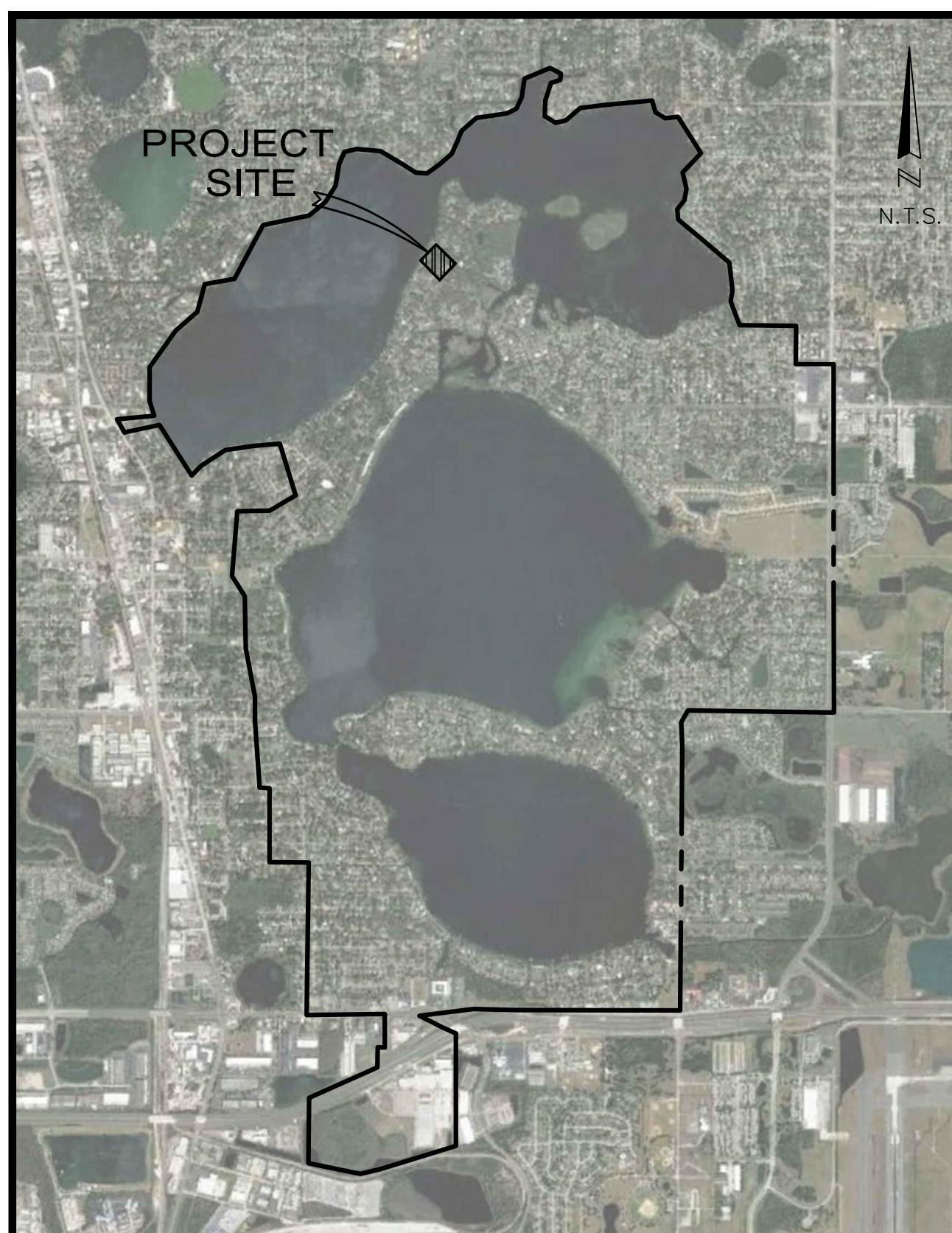
FOR

City of Belle Isle, Florida

PREPARED FOR



City of Belle Isle
1600 Nela Ave.
Belle Isle, FL 32809
Tel: 407-851-7730



LOCATION MAP

PREPARED BY

CIVIL ENGINEER
HARRIS CIVIL ENGINEERS, LLC.
1200 HILLCREST STREET, SUITE 200
ORLANDO, FL 32803
OFFICE: (407) 629-4777

SURVEYOR
IRELAND & ASSOCIATES SURVEYING, INC.
800 CURRENCY CIRCLE, SUITE 1020
LAKE MARY, FL 32746
OFFICE: (407) 678-3366

SHEET INDEX

<u>SHEET NUMBER</u>	<u>SHEET TITLE</u>
C-000	COVER SHEET
C-001	GENERAL NOTES
C-002	EXISTING CONDITIONS SURVEY
C-090	DEMOLITION AND EROSION CONTROL PLAN
C-091	DEMOLITION AND EROSION CONTROL PLAN
C-100	SITE AND GEOMETRY PLAN
C-101	SITE AND GEOMETRY PLAN
C-200	GRADING AND DRAINAGE PLAN
C-201	GRADING AND DRAINAGE PLAN
C-400	EROSION CONTROL DETAILS
C-401	SITE DETAILS
C-402	SITE DETAILS

100% CONSTRUCTION DOCUMENTS

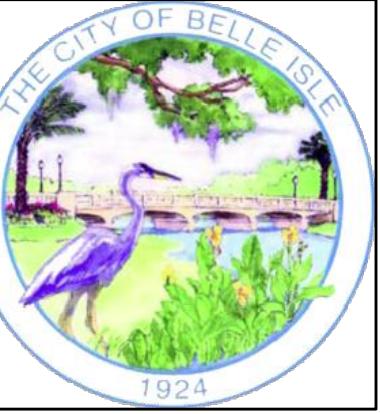
ISSUE DATE: JULY 05, 2023

HCE PROJECT No. 06958026

CALL 48 HOURS
BEFORE YOU DIG
IT IS THE LAW.
DIAL 811



C-000



HARRIS

orris Civil Engineers, LLC
00 Hillcrest Street
te 200
lando, Florida 32803
one: (407) 629-4777
x: (407) 629-7888

www.harriscivilengineers.com
9814

CROSS LAKE ROAD ROADWAY IMPROVEMENTS

**City of Belle Isle
1600 Nela Avenue
Belle Isle, Florida 32809**

Revisions:

EVOLUTION AND ROSION CONTROL LAN

Scale: SEE SCALE BAR **Design:** NZL
Date: 07/05/2023 **Drawn:** NZL
Object No.: 06958026 **Checked:** DWT

Please: 100% CD
RE: 07/05/2023

C-091

A compass rose is centered in the image. It features a central compass needle with a north arrow pointing upwards. Surrounding the needle are four primary cardinal directions: N (North), S (South), E (East), and W (West), each marked with a letter and a small arrow. The compass is enclosed in a circular border with a dashed line inside. Below the compass is a horizontal graphic scale. The scale has a black and white checkered pattern on the left side. Numerical markings are present at 0, 10', and 20'. The text 'GRAPHIC SCALE' is written in bold capital letters above the scale.

END:

— — — · — — CONSTRUCTION SETBACK

— SF — — — SILT FENCE

— TB — — — TURBIDITY BARRIER

— · — — · — — TREE PROTECTION

GEND:

- CONSTRUCTION SETBACK
- SF — SILT FENCE
- TB — TURBIDITY BARRIER
- TREE PROTECTION

MOLITION NOTES:

OVERHEAD POWER LINES AT THIS SITE!! CONTRACTOR TO USE EXTREME CAUTION.

CONTRACTOR SHALL PRESERVE ALL BENCHMARK LOCATIONS AS SHOWN ON SURVEY.

CONTRACTOR TO LOCATED ALL RESIDENTIAL SPRINKLER HEADS PRIOR TO CLEARING/GRUBBING. CONTRACTOR TO CONTACT HOMEOWNER(S) TO PROVE FUNCTIONALITY OF SYSTEM AND DOCUMENT CONDITION. CONTRACTOR TO REPAIR/REPLACE HEADS OR PIPING THAT BECOMES DAMAGED DURING CONSTRUCTION.

UNLESS OTHERWISE NOTED, ALL DEMOLISHED MATERIALS (PAVING, CURBING, ETC.) SHALL BE REMOVED AND DISPOSED OF OFF SITE. NOTHING IDENTIFIED FOR DEMOLITION SHALL BE ABANDONED IN PLACE.

CONTRACTOR SHALL TAKE CARE DURING THE DEMOLITION AND REMOVAL ACTIVITIES TO PREVENT UNWANTED DAMAGE TO EXISTING FACILITIES TO REMAIN.

DO NOT CLOSE, OBSTRUCT OR BLOCK RESIDENTIAL DRIVEWAYS AT ANY TIME DURING CONSTRUCTION.

EXISTING UTILITIES IN AREA. CONTRACTOR TO USE CAUTION WHEN DIGGING.

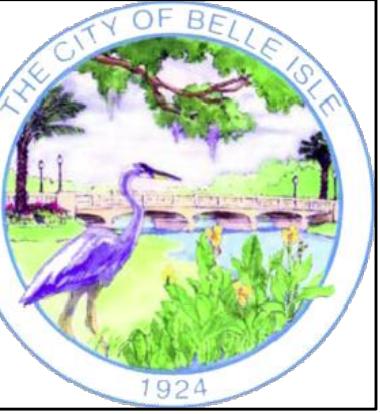
PLAN DOES NOT SHOW ALL AREAS OF SOD REMOVAL. CONTRACTOR SHALL RESTORE ALL DISTURBED AREA TO EQUAL OR BETTER CONDITIONS.

PLAN DOES NOT SHOW ALL MEANS OF EROSION CONTROL. CONTRACTOR TO EMPLOY BEST MANAGEMENT PRACTICES AND MEANS TO ENSURE NO OFF-SITE IMPACTS.

HARRIS CIVIL ENGINEERS RESERVES COPYRIGHTS AND OTHER RIGHTS RESTRICTING THIS
EVOLED AND DEVELOPED FOR USE WITH THE SPECIFIED PROJECT.

This architectural site plan details the layout and construction requirements for a property adjacent to Lake Conway. The plan includes a 'Wood Dock' and 'Covered Boat Slip' on the left, separated from the lake by a 'STAKE FLOATING TURBIDITY BARRIER TO SHORELINE'. The 'Edge of Water' is marked at Elevation 85.35' on 01/10/2022. A 'Normal High Water Line' is shown at Elevation 85.85'. A 'CONSTRUCTION SETBACK LINE' is indicated by a dashed line at Elevation 87.32'. A '100 Year Flood Line' is at Elevation 88.00'. A 'CONCRETE DRIVE TO REMAIN' is shown on the right. A 'RIGHT-OF-WAY / PROPERTY LINE (TYP.)' is marked at Elevation 25.4'. A 'Building' is located at Elevation 26.6'. A 'Palm (10')' tree is marked at Elevation 1.2'. A 'SILT FENCE (TYP.)' is shown at Elevation 1.4'. A 'CAUTION! OVERHEAD POWER LINES' and 'No Vehicle Sign' are present. A 'Danger Sign' is on a concrete pad. A 'Gate' is shown with a 'ChainLink Fence'. A 'Rules Sign' is on a concrete pad. A 'REMOVE GRATE AND WOOD BARRIER TIES' is required. A 'REMOVE GRATE ROAD' is indicated. A 'REMOVE SIGN. PROVIDE TO CITY.' is marked. A 'DEMOLISH CONCRETE PADS. REMOVE TRASH CAN AND PICNIC BENCH AND PROVIDE TO CITY.' is required. A 'REMOVE (1) CONCRETE BOLLARD' is specified. 'APPROX. CONCRETE BOLLARDS (2) TO REMAIN. PROTECT IN PLACE.' is noted. A 'PROTECT UTILITY POLE' is marked. An 'Underground Telephone Line' and 'Ground Water Line' are indicated. A 'FENCE TO REMAIN' is shown. A 'PP' stamp is present.

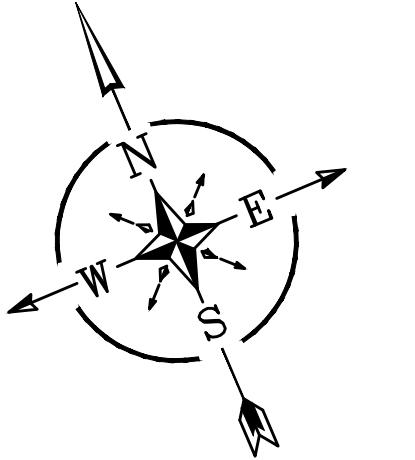
TIME: 05 JUL 2023 - 7:36PM
USER: NICOLEL
FILE NAME: C:\VIL\SMELLS\DEMOLITION FLANDERS



HARRIS

is Civil Engineers, LLC
0 Hillcrest Street
e 200
ndo, Florida 32803
ne: (407) 629-4777
(407) 629-7888

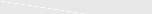
w.harriscivilengineers.com
9814



GRAPHIC SCALE

THIS PLAN MAY HAVE BEEN REDUCED IN SIZE
VERIFY BEFORE SCALING DIMENSIONS

LEGEND:

-  INSTALL ASPHALT PAVEMENT
-  MILL/REPAVE ASPHALT PAVEMENT
-  CONCRETE PAVEMENT
-  AGGREGATE PAVER GRID

GENERAL NOTES:

1. UPON GEOMETRY SET-OUT OF THE ROADS AND CURBING, CONTRACTOR SHALL SCHEDULE AN ON-SITE MEETING WITH THE CITY TO REVIEW THE EXTENTS PRIOR TO ANY PAVING WORK.
2. CITY ARBORIST TO BE ON SITE DURING ROAD SET-OUT AND EXCAVATION. CONTRACTOR TO COORDINATE WITH CITY PUBLIC WORKS DEPT.
3. AGGREGATE PAVERS TO BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

CROSS LAKE ROAD ROADWAY IMPROVEMENTS

**City of Belle Isle
1600 Nela Avenue
Belle Isle, Florida 32809**

Revisions:

SILULUMIINI | LAN

5/2023

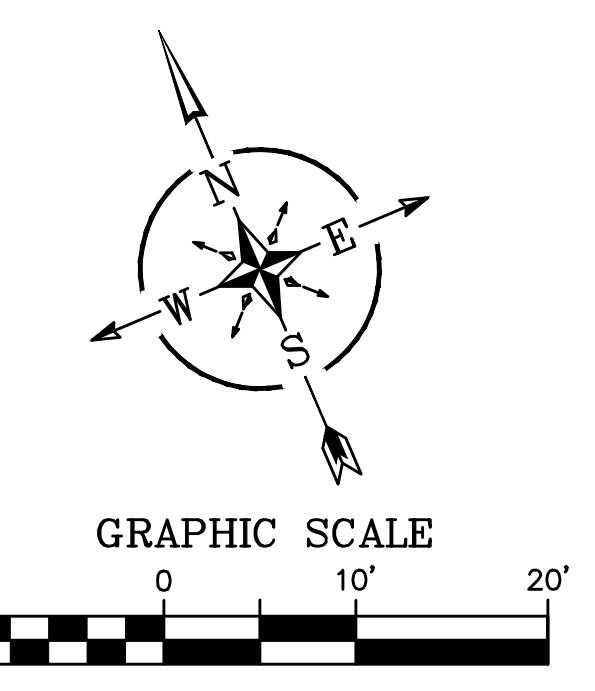
101

MATCHLINE - SEE SHEET C-100

FILE NAME: G:\PROJ\06958026\PROJECTS\CROSS LAKE\CIVIL\SHEETS\C-100 - GEOMETRY SITE PLAN.DWG
TIME: 05 JUL 2023 - 7:36PM USER: NICOLEL

Release: 100% CD
DATE: 07/05/2023

C-101



LEGEND:

---	GRADE BREAK LINE
x 91.97	PROPOSED SPOT GRADE
— 89	PROPOSED GRADE CONTOUR

hatched area: RIPRAP ROCK/BOULDERS

NOTES:

1. UNDERGROUND UTILITIES IN AREA, CONTRACTOR TO USE CAUTION WHEN DIGGING.
2. CITY ARBORIST TO BE ON SITE DURING ROAD SET-OUT AND EXCAVATION, CONTRACTOR TO COORDINATE WITH CITY PUBLIC WORKS DEPT.
3. CONTRACTOR SHALL REESTABLISH ANY DISTURBED BENCHMARK LOCATIONS THAT ARE WITHIN THE LIMITS OF WORK SHOWN.

Revisions:

No.	Date	Description

GRADING AND DRAINAGE PLAN

Release: 100% CD
DATE: 07/05/2023

Scale: SEE SCALE BAR
Design: NZL
Date: 07/05/2023
Drawn: NZL
Checked: DWT
Project No.: 06558026

Copyright © 2017. All rights reserved. This drawing is the property of HARRIS CIVIL ENGINEERS, LLC and shall be used only for the purpose for which it was prepared. Reproduction, changes or assignments are prohibited without the written permission of HARRIS CIVIL ENGINEERS, LLC.

THE CITY OF BELLE ISLE
1924

HARRIS

Harris Civil Engineers, LLC
1200 Hillcrest Street
Suite 200
Orlando, Florida 32803
Phone: (407) 629-4777
Fax: (407) 629-7888
www.harriscivilengineers.com
EB 9814

CROSS LAKE ROAD ROADWAY IMPROVEMENTS

City of Belle Isle
1600 Nela Avenue
Belle Isle, Florida 32809

C-200



HARRIS

is Civil Engineers, LLC
0 Hillcrest Street
e 200
ndo, Florida 32803
ne: (407) 629-4777
(407) 629-7888
www.harriscivilengineers.com
0214

CROSS LAKE ROAD ROADWAY IMPROVEMENTS

**City of Belle Isle
1600 Nela Avenue
Belle Isle, Florida 32809**

SINGLE AND DOUBLE SILT FENCE DETAIL

N.T.S.

1
400

NOTICE: COMPONENTS OF TYPES 1 AND 2 MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES 1 AND 2 SHALL BE AS APPROVED BY THE ENGINEER.

NTS

TREE PROTECTION DETAIL

11

2
00

The diagram illustrates a temporary fence structure designed to protect a tree or group of trees. The fence is constructed from 2x4 posts and rails, with orange construction mesh covering the top and bottom sections. The fence is set on a hatched ground surface. A vertical dimension line indicates a height of 4' from the ground to the top of the fence. A horizontal dimension line indicates a minimum width of 5' from the base of the fence to the trunk of the tree. The tree is shown with a trunk and branches, and the ground surface is indicated by a hatched pattern.

TREE OR GROUPS OF TREES TO REMAIN

2 X 4 RAILS

ORANGE CONSTRUCTION MESH

2 X 4 POSTS

FINISH GRADE

4'

5' MIN.

MIN. 24' AREA AROUND EACH TREE TO REMAIN
OR AS SITE CONSTRAINTS ALLOW
SEE NOTE 2.

NOTES

1. NO STOCKPILING OF MATERIALS, TRASH OR DEBRIS SHALL BE PERMITTED WITH THE BARRIER.
2. IF MINIMUM 24' CANNOT BE ACHIEVED, CONTRACTOR TO HAND DIG AND/OR PLACE FILL WITHIN THE TREE DRIP LINE. IT WILL NOT BE ACCEPTABLE TO USE HEAVY MACHINERY WITHIN 12' OF A TREE WITHOUT PRIOR APPROVAL OF CITY MANAGER.

EROSION CONTROL DETAILS

Scale: N.T.S. **Design:** NZL
Date: 07/05/2023 **Drawn:** NZL

Revisions:

HAZARD
Harris C.
200 H.
uite 20
Orland
hone
ax:
www.hazard.com
B 98

EROSION CONTROL
Revisions:
CROSS LAKE ROAD

release: 100% CD
DATE: 07/05/2023



HARRIS

Harris Civil Engineers, LLC
1200 Hillcrest Street
Suite 200
Orlando, Florida 32803
Phone: (407) 629-4777
Fax: (407) 629-7888
www.harriscivilengineers.com
EB 9814

CROSS LAKE ROAD ROADWAY IMPROVEMENTS

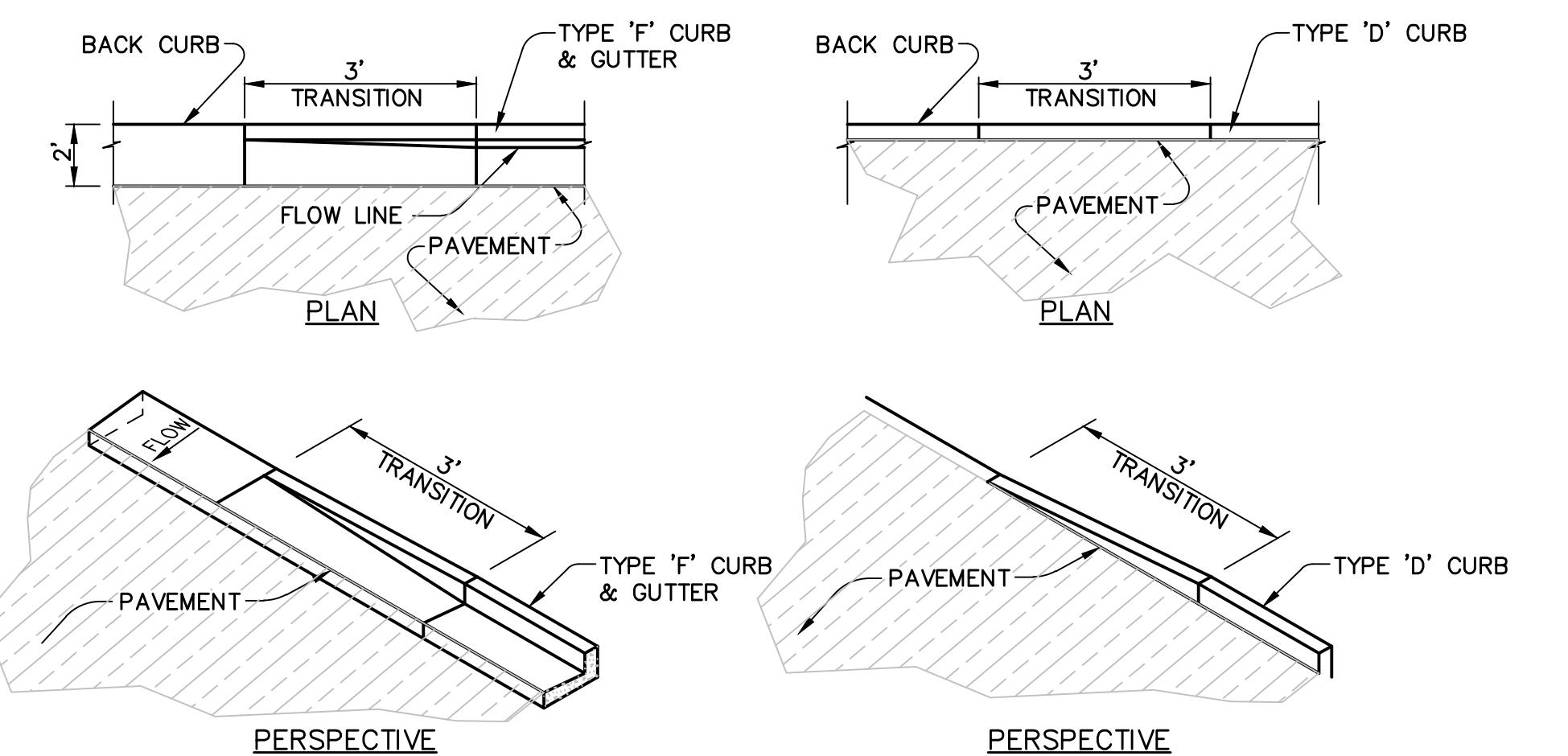
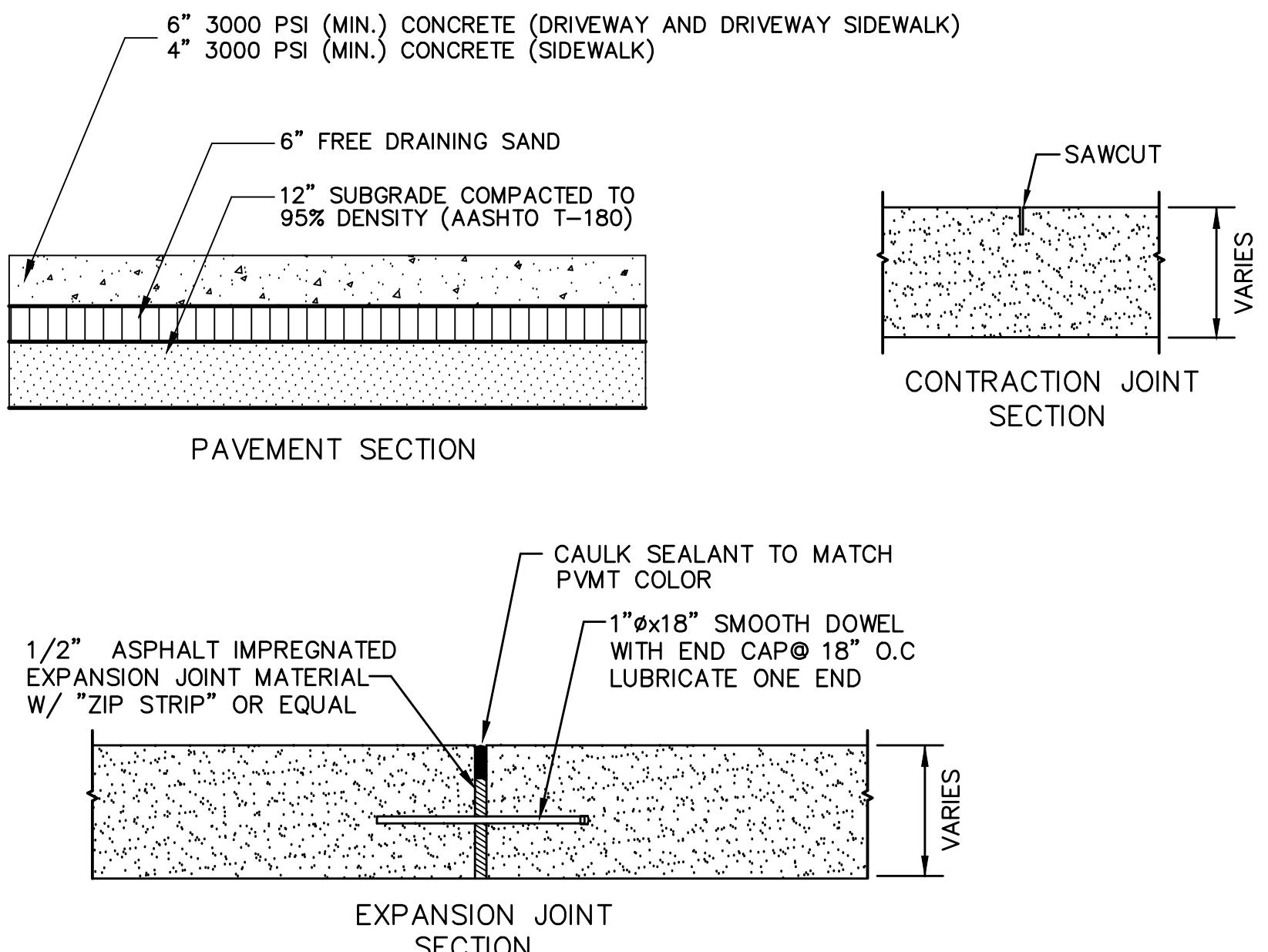
City of Belle Isle
1600 Nela Avenue
Belle Isle, Florida 32809

Revisions:

SITE DETAILS

Scale: N.Z. Design: N.Z.
Drawn: N.Z. Checked: D.W.T.
Project No.: 06558026
Release: 100% CD
Date: 07/05/2023

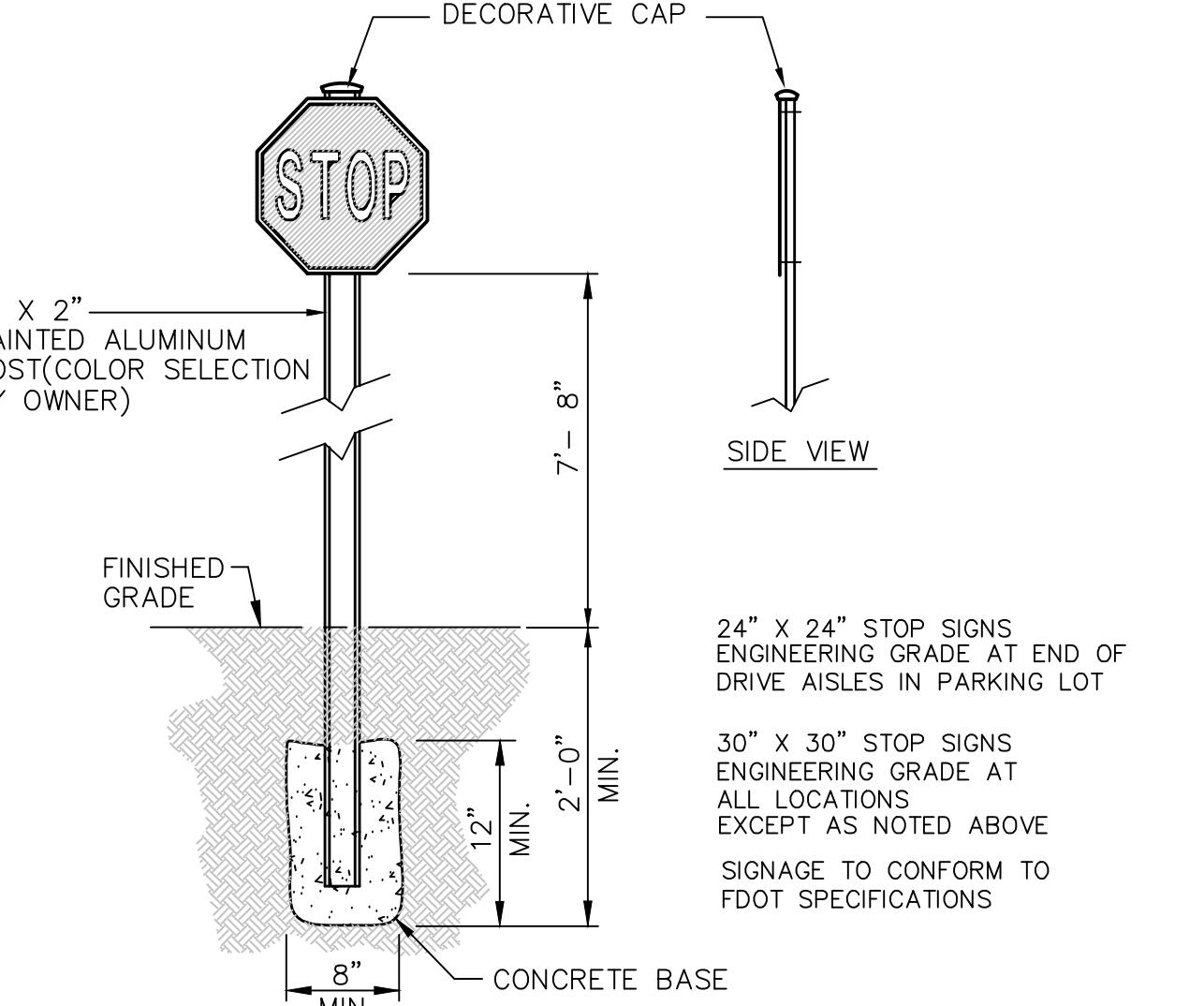
Copyright © 2017. ALL IDEAS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND THE PROPERTY OF HARRIS CIVIL ENGINEERS, LLC AND ARE CRAFTED, DRAWN, AND DEVELOPED FOR USE WITH THE SPECIFIED PROJECT. HARRIS CIVIL ENGINEERS RESERVES, AND OTHER RIGHTS RESERVING, THE DRAWING TO THE GENERAL PROJECT OR PURPOSE FOR WHICH THEY WERE PREPARED. REPRODUCTION, CHANNELS OR ASSIGNMENT ARE PROHIBITED WITHOUT THE WRITTEN PERMISSION OF HARRIS CIVIL ENGINEERS.



CURB TAPER DETAIL

N.T.S.

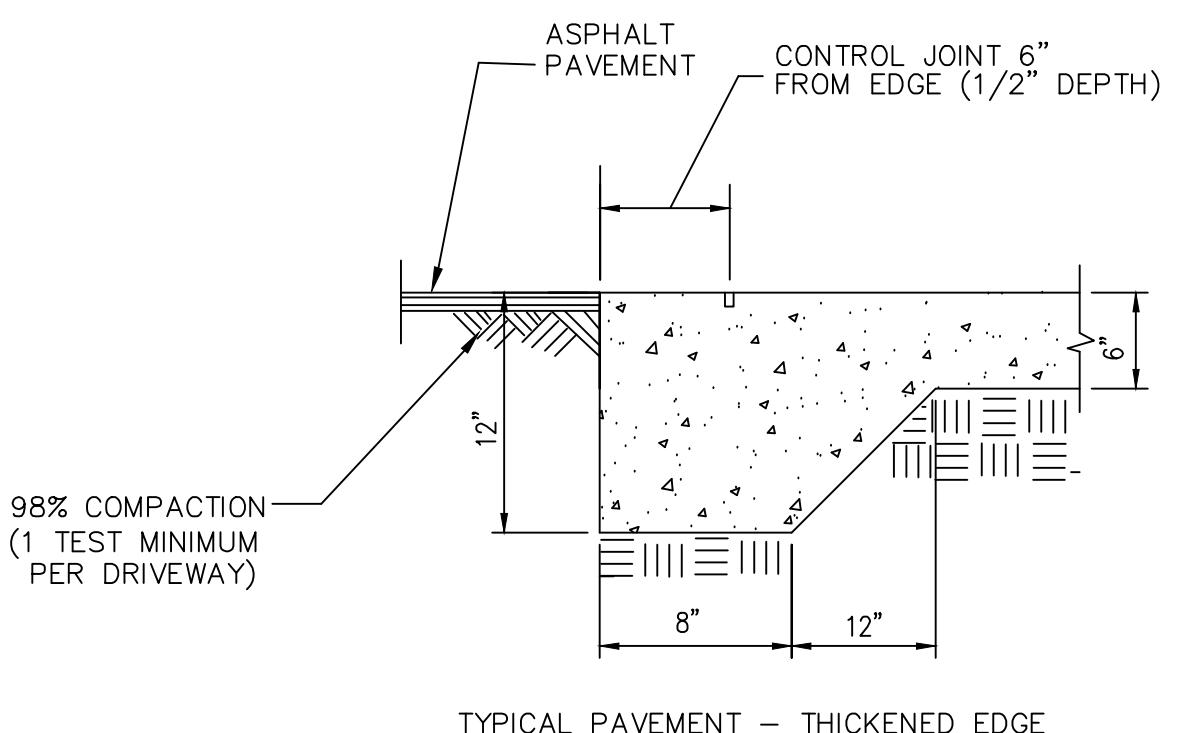
401



TYPICAL STOP SIGN DETAIL

N.T.S.

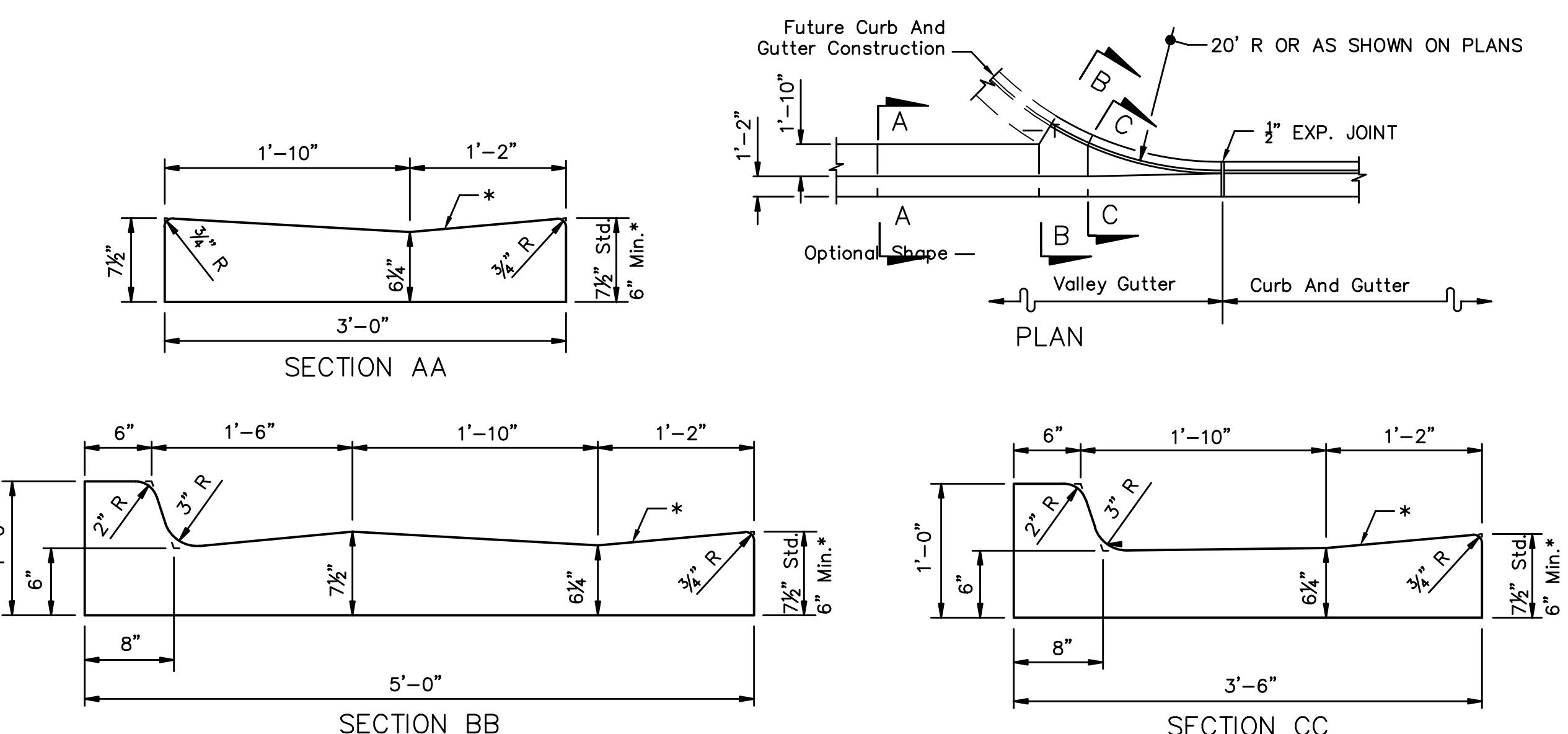
401



CONCRETE DRIVEWAY DETAIL

N.T.S.

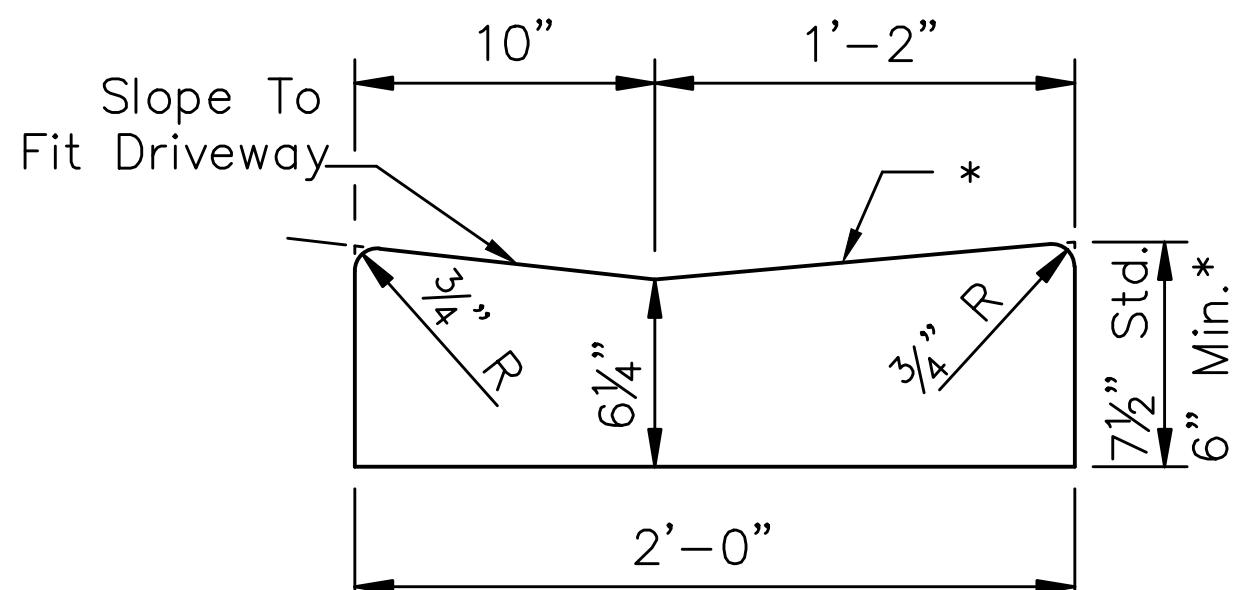
1
401



VALLEY GUTTER DETAIL

N.T.S.

5
401



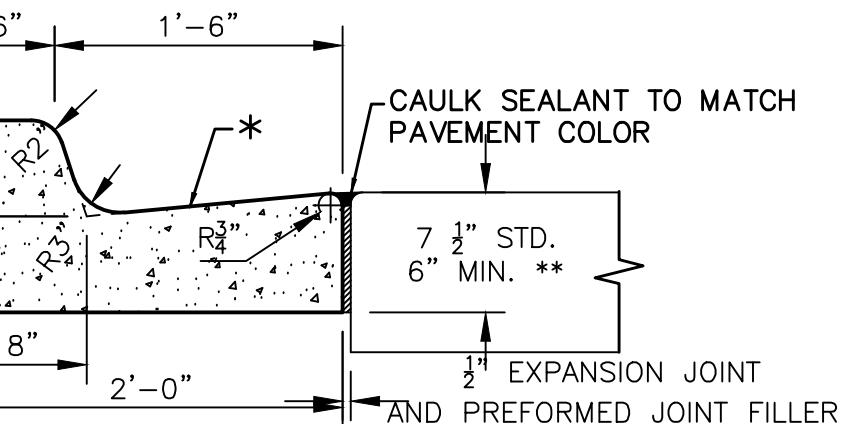
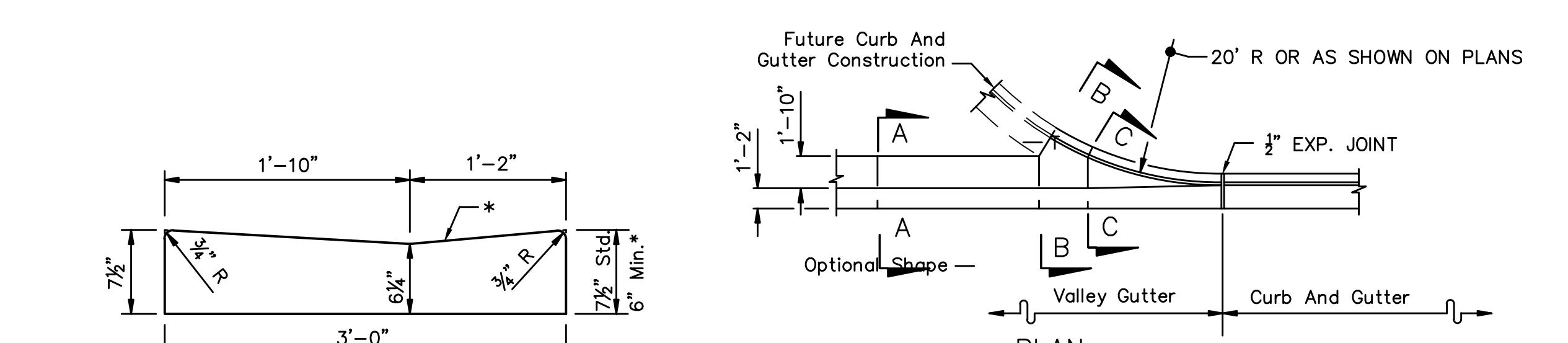
Note: To be paid for as parent curb.

* When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on plans.

DROP CURB & GUTTER

N.T.S.

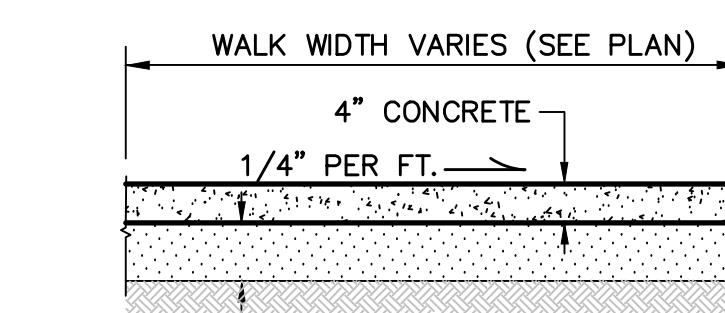
4
401



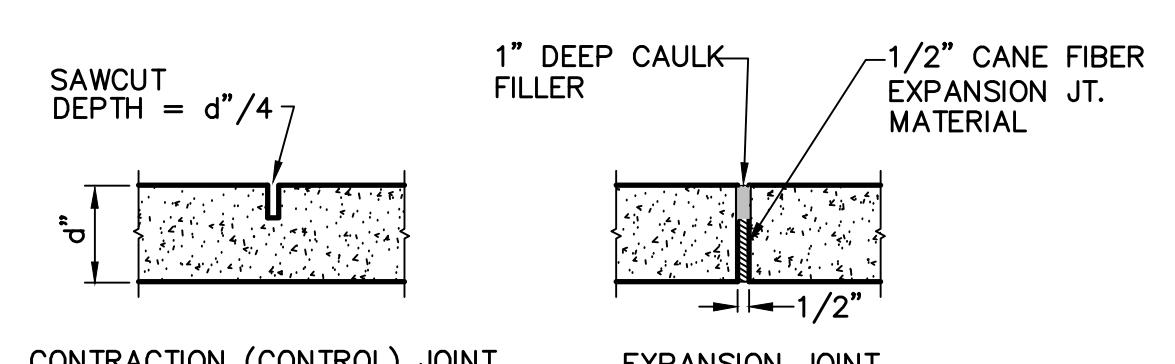
TYPE 'F' CURB & GUTTER

N.T.S.

6
401



STANDARD SIDEWALK



NOTE:
ALL CONCRETE SIDEWALKS SHALL HAVE A FULL 1/2" EXPANSION JOINT AT A MAXIMUM DISTANCE OF 25 LINEAR FEET AND A SAW CUT OR FORMED DUMMY JOINT AT EVENLY SPACED INTERVALS NOT TO EXCEED 5 LINEAR FEET. 3000PSI CLASS I CONCRETE TO BE USED.

SIDEWALK DETAIL

N.T.S.

7
401



HARRIS

Harris Civil Engineers, LLC
1200 Hillcrest Street
Suite 200
Orlando, Florida 32803
Phone: (407) 629-4777
Fax: (407) 629-7888

www.harriscivilengineers.com
EB 9814

CROSS LAKE ROAD ROADWAY IMPROVEMENTS

City of Belle Isle
1600 Nela Avenue
Belle Isle, Florida 32809

Revisions:

No.	Date	Description

SITE DETAILS

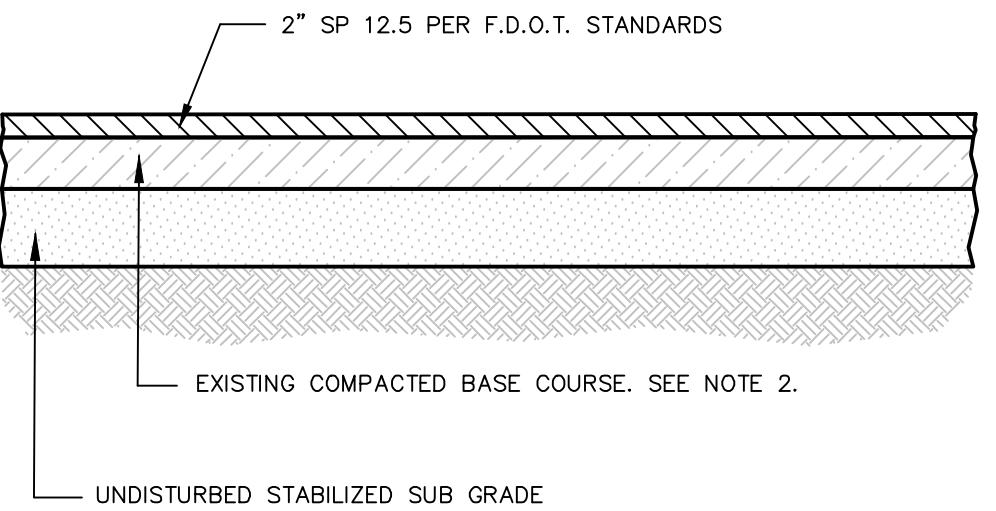
Release: 100% CD

DATE 07/05/2023

FILE NAME: G:\PROJ\06558026\PROJECTS\CROSS LAKE CIVIL SHEETS\NC-400 - GENERAL DETAILS.DWG
TIME: 05 JUL 2023 - 7:36PM
USER: NICOLEL

Scale: N.T.S. Design: NZL
Date: 07/05/2023 Drawn: NZL
Project No.: 06558026 Checked: DWT

Copyright © 2017. All rights reserved. This drawing is the property of HARRIS CIVIL ENGINEERS, LLC and is used and developed for use with the specified project. HARRIS CIVIL ENGINEERS, LLC reserves copyrights and other rights regarding this drawing to the original project or purpose for which they were prepared. Reproduction, changes or assignments are prohibited without the written permission of HARRIS CIVIL ENGINEERS, LLC.



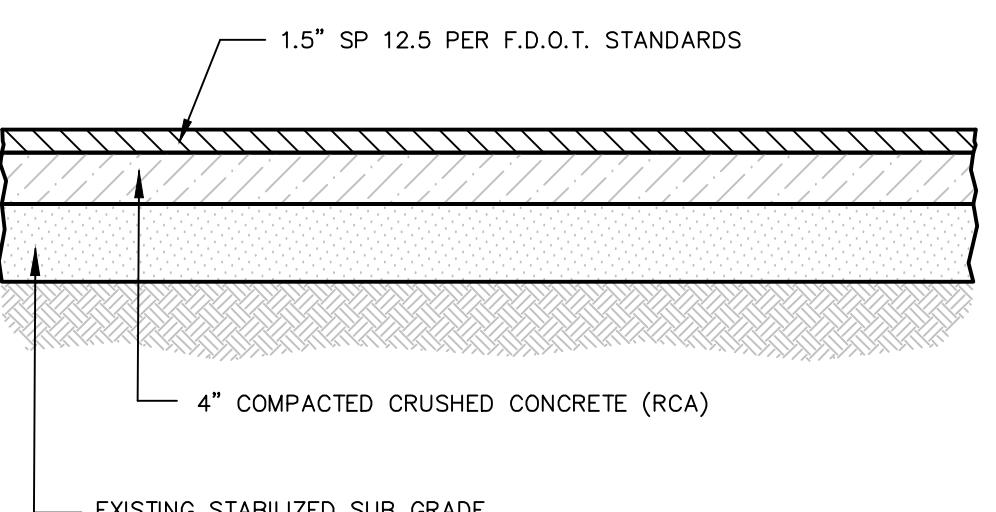
NOTES:

1. ASPHALT TO BE MILLED AND REPAVED. CONTRACTOR TO MILL TO EXISTING BASE COURSE.
2. CONFIRM EXISTING BASE COURSE MEETS COMPACTION OF 98% OF MATERIALS DRY DENSITY (AASHTO T-180, LBR-100). COMPACTION TESTING SHALL BE AT A MINIMUM OF 3 TESTS.

MILL/REPAVE ASPHALT DETAIL

N.T.S.

1
402



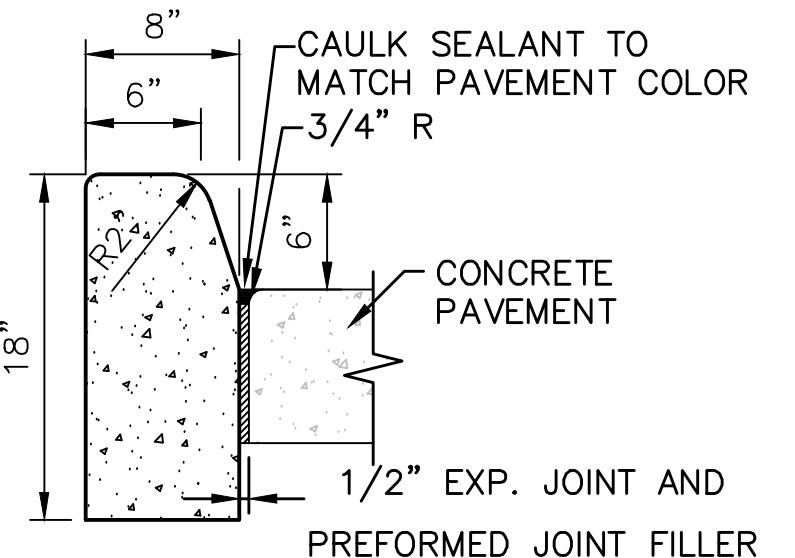
NOTES:

1. RCA BASE MATERIAL PER FDOT SPECIFICATIONS SECTION 911 (LATEST EDITION).
2. RCA BASE COMPACTED TO A MIN. DENSITY OF 98% MODIFIED PROCTOR MAXIMUM DENSITY AND A MIN. LBR OF 150. COMPACTION TESTING SHALL BE AT A MINIMUM OF 3 TESTS.
3. SUB GRADE SHALL PROVIDE A MINIMUM LBR OF 40.

ASPHALT PAVING SECTION DETAIL

N.T.S.

2
402



NOTE: FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT. DETAIL SHOWN NEXT TO CONCRETE PAVEMENT. PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN THE CURB AND CONCRETE PAVEMENT ONLY.

TYPE D CURB DETAIL

N.T.S.

3
402

C-402