

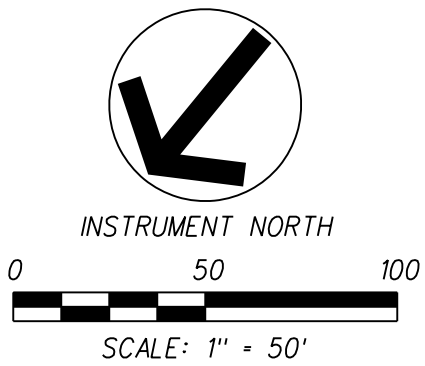
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HORIZONTAL CURVE DATA TABLE						
CURVE NO.	P.I. COORDINATES		DELTA ANGLE	RADIUS	TANGENT	LENGTH
	NORTHING	EASTING				
C1	590,611.5615	2,511,065.0762	50° 33' 01" (LT)	113.00	53.35	99.70
C2	590,449.9160	2,511,039.6725	41° 43' 12" (RT)	113.00	43.06	82.28

HILLSIDE PROTECTION AREA

HILLSIDE PROTECTION AREA DISTURBANCE CALCULATION
HILLSIDE PROTECTION AREA ON PROPERTY 14.60 AC.
DISTURBED HILLSIDE PROTECTION AREA ON PROPERTY 2.84 AC.
PERCENTAGE OF HILLSIDE PROTECTION DISTURBED 19.45 %



NOTES:

1. THE BOUNDARY DATA WAS TAKEN FROM MILLER LAND SURVEYING, LLC DATED FEBRUARY 17, 2020.
2. UNLESS NOTED OTHERWISE, DIMENSIONS ARE TAKEN FROM THE FENCE LINE, PROPERTY LINE, FACE OF CURB, EDGE OF PAVEMENT OR OUTSIDE FACE OF BUILDING.
3. THE MINERAL AGGREGATE BASE AND ASPHALTIC SURFACE COURSES SHALL MEET THE MATERIALS, EQUIPMENT, CONSTRUCTION, AND TESTING REQUIREMENTS OF THESE DRAWINGS, AND THE KNOX COUNTY DEPARTMENT OF ENGINEERING STANDARD SPECIFICATIONS.
4. CONCRETE CURB AND PAVEMENT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS. CONCRETE CURB AND PAVEMENT SHALL MEET THE MATERIALS, EQUIPMENT, AND CONSTRUCTION REQUIREMENTS OF THE KNOX COUNTY DEPARTMENT OF ENGINEERING STANDARD SPECIFICATIONS.
5. TRAFFIC CONTROL DEVICES AND PAVEMENT MARKING SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATIONS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
6. PROPERTY CONCERNED REFLECTS PARCEL 111.02 AS SHOWN IN KNOX COUNTY CLT MAP 103. A PORTION OF THE PROPERTY IS ZONED OB/TO, OFFICE & MEDICAL SERVICES DISTRICT IN THE TECHNOLOGY OVERLAY. REMAINDER OF THE PROPERTY IS ZONED PR/TO, PLANNED RESIDENTIAL IN THE TECHNOLOGY OVERLAY. TOTAL AREA = 20.0± AC.

OWNER: BOARD OF TRUSTEES OF THE UNITED METHODIST CHURCH, OAK RIDGE DISTRICT
706 SOUTH ILLINOIS AVENUE STE 102D
OAK RIDGE, TN 37830
7. BUILDING SETBACKS ARE 25-FT IN FRONT, 20-FT ON SIDE AND 20-FT IN REAR. WHERE PROPERTY ABUTS A RESIDENTIAL ZONE, BUILDING SETBACK IS 100-FT. PER TTCA DESIGN GUIDELINES, THE FRONT SETBACK IS 60-FT WHERE PARKING IS BETWEEN THE BUILDING AND THE RIGHT-OF-WAY.
8. REMOVE OVER-PAVEMENT OF ASPHALT AND STONE FROM UNDERNEATH LANDSCAPE AREAS UP TO THE LIMITS THAT HAVE BEEN SPECIFIED (REFER TO THE CURB DETAIL) IN ORDER TO PROVIDE A SOLID BASE FOR THE CONCRETE CURB.
9. REFER TO ARCHITECTURAL PLANS FOR ACTUAL BUILDING DIMENSIONS.
10. TTCA FILE NUMBER: 5-B-21-TOB.

DEVELOPMENT INTENSITY

GROUND AREA COVERAGE (GAC)
REQUIREMENT: GAC < 5,000 SF PER 2 AC.
LA = AREA COVERED BY A BUILDING 12,339 SF
GA = GROSS AREA OF LOT / 2 AC. 10.00 AC.
GAC = LA/GA 1,234 SF PER 2 AC.

FLOOR AREA RATIO (FAR)
REQUIREMENT: FAR < 50%
GAR = GROSS FLOOR AREA OF BUILDING 12,339 SF
GA = GROSS AREA OF LOT 871,200 SF
FAR = GAR/GA 1.42 %

IMPERVIOUS AREA RATIO (IAR)
REQUIREMENT: IAR < 50%
IA = GROSS IMPERVIOUS AREA 1.28 AC.
GA = GROSS AREA OF LOT 20.00 AC.
IAR = IA/GA 6.40 %

PARKING SURFACE AREA
PARKING SURFACE AREA = 32,880 SF

PARKING SUMMARY

KNOX COUNTY REQUIRED PARKING FOR CHURCH BUILDING
1 SPACE PER 4 SEATS IN MAIN WORSHIP AREA
OR 1 SPACE PER 30 SF OF USABLE FLOOR AREA OF AUDITORIUM, WHICHEVER IS GREATER
338 SEATS @ 1 SPACE PER 4 SEATS
3,595 SQ FT @ 1 SPACE PER 30 SF OF USABLE FLOOR AREA
TOTAL REQUIRED PARKING 85
120 SPACES

TTCA REQUIRED PARKING FOR CHURCH BUILDING
338 SEATS @ 1 PARKING SPACE PER 4 SEATS
IN MAIN WORSHIP AREA (MINIMUM) 85
338 SEATS @ 1 PARKING SPACE PER 3 SEATS
IN MAIN WORSHIP AREA (MAXIMUM) 113
TOTAL REQUIRED PARKING 85 SPACES
MAXIMUM ALLOWABLE PARKING 113 SPACES

TOTAL PARKING PROVIDED
STANDARD SPACES (9'x17.5') 96
HANDICAP (2 VAN ACCESSIBLE) 5
TOTAL 101 SPACES

LEGEND:

- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- PROPERTY LINE
- EXISTING PROPERTY LINE
- BUILDING SETBACK
- NUMBER OF PARKING SPACES
- TYPICAL

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10330 HARDIN VALLEY ROAD
SUITE 201
KNOXVILLE, TN 37932
OFFICE: 865.690.6419
FAX: 865.690.6448
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OUTER BUFFER RELOCATION TABLE					
BUFFER TYPE	REQUIRED (SF)	ENCROACHED INTO (SF)	PROVIDED BY RELOCATION (SF)	TOTAL PROVIDED (SF)	CHECK
KNOX COUNTY	45,104	1,573	1,800	45,331	45,331 > 45,104 OK

STUDIO FOUR DESIGN INC.

ARCHITECTURE & INTERIORS

414 Clinch Ave. Knoxville, TN 37902
p 865 523-5001 f 865 523-5003
studiofourdesign.com

Valley Church

11012 Hardin Valley Rd.
Knoxville, TN 37932



Project Phase: Concept Package

Issue Date: 04/05/2021

Revisions

No.	Description	Date
A	TTCA REVIEW	04/05/2021
B	MPC COMMENTS	04/23/2021

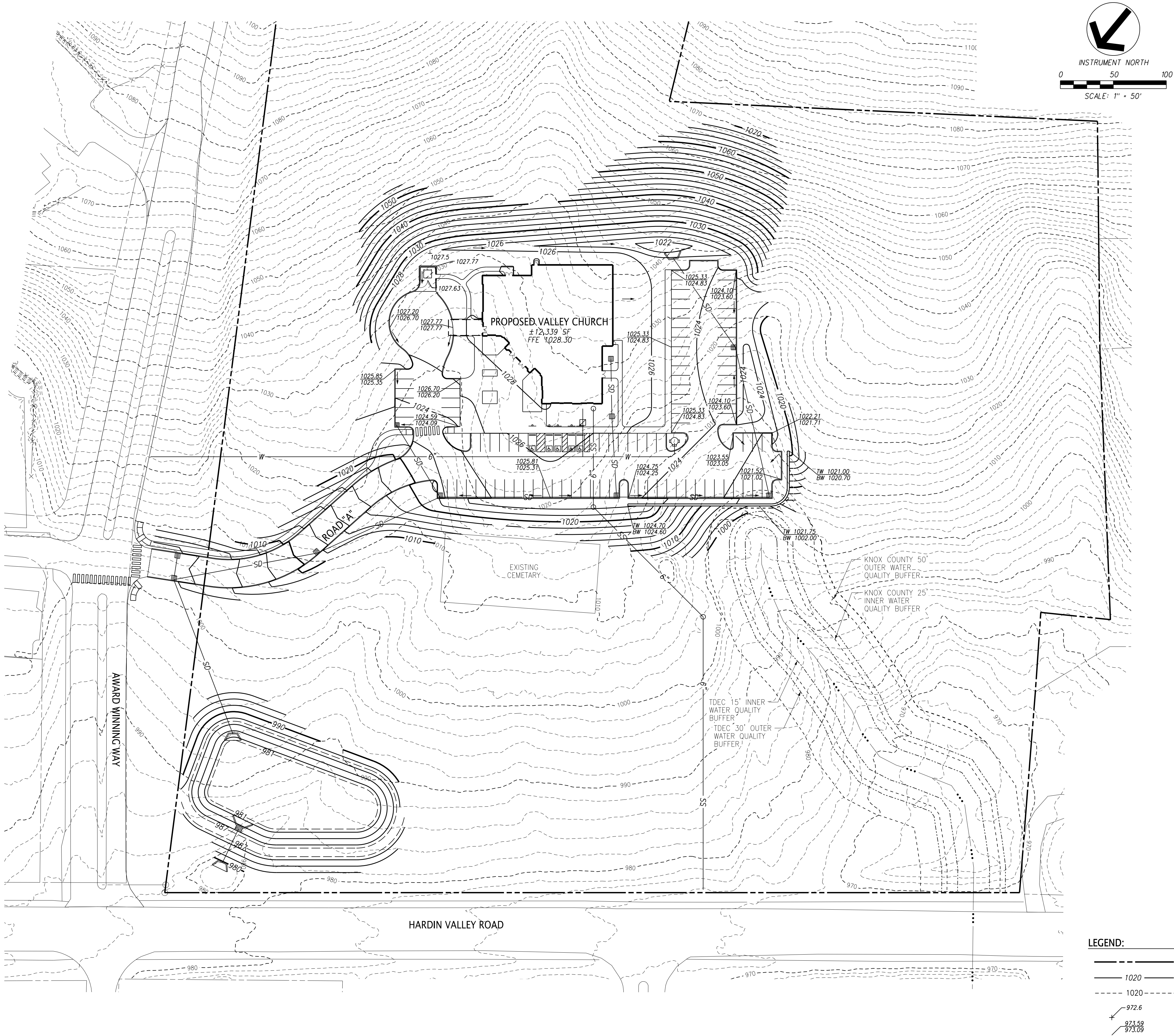
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Layout & Paving Plan

C1

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GRADING NOTES:

1. THE TOPOGRAPHIC DATA WAS TAKEN FROM AVAILABLE KGIS MAPS.
2. UNLESS NOTED OTHERWISE, THE PROPOSED GRADES SHOWN ON THESE DRAWINGS ARE FINISHED GRADE. EXISTING AND PROPOSED CONTOURS ARE SHOWN AT 2-FT. INTERVALS.
3. THE ACCURACY OF THE GRADES IS DEPENDANT ON THE DATA PROVIDED BY THE OWNER OR OWNER'S REPRESENTATIVE. FIELD VERIFY AS NECESSARY PRIOR TO CONSTRUCTION.
4. THE SITE SHALL BE CLEARED AND GRUBBED WITHIN THE LIMITS OF EXCAVATION. COMPLETELY DISPOSE OF ALL MATERIALS RESULTING FROM CLEARING AND GRUBBING OFF-SITE. BURNING SHALL NOT BE PERMITTED UNLESS PRIOR APPROVAL IS OBTAINED BY THE LOCAL FIRE DEPARTMENT. THE CONTRACTOR MUST OBTAIN A PERMIT AND MEET ALL OF THE REQUIREMENTS AS SPECIFIED BY THE FIRE DEPARTMENT.
5. ALL TREES STUMPS, BOULDERS, AND OTHER OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH OF 2 FT BELOW THE SUBGRADE. ROCK SHALL BE SCARIFIED TO DEPTH OF 1 FT BELOW SUBGRADE.
6. STRIP TOPSOIL FULL DEPTH (6-IN. MIN.) AND TEMPORARILY STOCKPILE EXCAVATED MATERIALS. INSTALL SILT FENCE OR OTHER APPROPRIATE EROSION CONTROL STRUCTURES ON THE DOWN HILL SIDE OF THE STOCKPILE.
7. PROOF ROLL ALL AREAS TO RECEIVE FILL. PROOF ROLL WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK USING A CRISS-CROSS PATTERN (4 PASSES MIN.) AREAS FAILING THE PROOF ROLLING SHALL BE UNDERCUT AND BACKFILLED USING AN ENGINEERED FILL OR STABILIZED BY A METHOD APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.
8. AREAS THAT EXHIBIT WEAK SOIL OR OTHERWISE UNSUITABLE CONDITIONS SHALL BE UNDERCUT TO A FIRM LEVEL OF SOIL FOLLOWED BY BACKFILLING THE UNDERCUT AREAS USING AN ENGINEERED FILL. TDOT NO. 57, OR TDOT NO. 67 STONE.
9. FILL MATERIAL SHALL BE SATISFACTORY MATERIAL FREE FROM ROOTS AND OTHER ORGANIC MATERIAL, FROZEN MATERIAL, AND TRASH. FILL MATERIAL SHALL ALSO BE FREE OF STONE OR OTHER MATERIAL LARGER THAN 6 IN. AND LARGER THAN 4 IN. IN THE TOP 6 IN. OF AN EMBANKMENT.
10. FILL SOILS SHALL HAVE A PI LESS THAN 30 & A MAXIMUM DRY DENSITY OF 90 PCF OR GREATER.
11. UNSATISFACTORY SOILS INCLUDE MATERIALS THAT ARE TOO WET OR TOO SOFT, EXPANSIVE SOILS AND SOILS CLASSIFIED PT, OH, AND OL. LEGALLY DISPOSE OF UNSATISFACTORY SOILS OFF-SITE UNLESS OTHERWISE APPROVED BY THE OWNER OR GEOTECHNICAL ENGINEER.
12. FILL MATERIAL SHALL BE PLACED IN LOOSE, HORIZONTAL LIFTS NOT EXCEEDING 8 IN. THICKNESS, UNLESS NOTED OTHERWISE, COMPACT EACH LAYER TO AT LEAST 98% MAXIMUM DRY DENSITY. COMPACT THE UPPER 24 IN. OF FILL BENEATH PAVEMENTS AND THE UPPER 12 IN. BENEATH BUILDING SLABS TO 100% MAXIMUM DRY DENSITY. MAINTAIN THE MOISTURE CONTENT TO WITHIN -1 TO +3 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
13. A 6 IN. (MIN.) LAYER OF TOPSOIL SHALL BE PLACED OVER THE AREAS TO BE SEEDDED AND TO THE FINISH GRADE ELEVATIONS AS SHOWN ON THE DRAWINGS.
14. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS OR POND ON-SITE. PROVIDE NECESSARY MEASURES TO KEEP THE SITE FREE-DRAINING.
15. NO SLOPE SHALL EXCEED 2:1 UNLESS PROPER SLOPE STABILIZATION MEASURES ARE IMPLEMENTED.
16. PROTECT AND MAINTAIN SUBGRADES UNTIL PLACEMENT OF THE FINAL SURFACE IS ACHIEVED.
17. CONTRACTOR IS RESPONSIBLE TO ASSURE THAT THE FINISHED GRADES CONFORM WITH THE DETENTION POND DESIGN PARAMETERS. ONCE GRADING IS COMPLETE AND PRIOR TO FINAL SEEDING, SUBMIT AN AS-BUILT SURVEY FOR THE OWNER'S REVIEW.
18. VERIFY GRADES WHEREVER NECESSARY TO BRING THE PROPOSED LINES, ELEVATIONS, SLOPES, AND CROSS-SECTIONS OF THE GRADING WORK TO WITHIN THE FOLLOWING TOLERANCES ABOVE OR BELOW THAT AS SHOWN ON THE PLANS: SUBGRADE 0.1', UNPAVED AREAS 0.1', SIDEWALKS 0.10', PAVEMENTS 0.04', AND BUILDINGS 0.04'.
19. SLOPES GREATER THAN 4:1 SLOPE AT A HEIGHT GREATER THAN 6-FT SHALL BE TESTED BY THE PROJECT GEOTECHNICAL ENGINEER TO DETERMINE STABILITY.
20. DISTURBED AREAS SHALL BE STABILIZED IN AN EXPEDIENT MANNER TO MINIMIZE TIME OF EXPOSURE TO WEATHER.

CIVIL ENGINEER:



10330 HARDIN VALLEY ROAD
SUITE 201
KNOXVILLE, TN 37932
OFFICE: 865.690.6419
FAX: 865.690.6448
www.fulghummacindoe.com
FMA PROJECT: 243.203

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FOUR
DESIGN, INC.
ARCHITECTURE & INTERIORS

414 Clinch Ave. Knoxville, TN 37902
p 865 523-5001 f 865 523-5003
studiofourdesign.com

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11012 Hardin Valley Rd.
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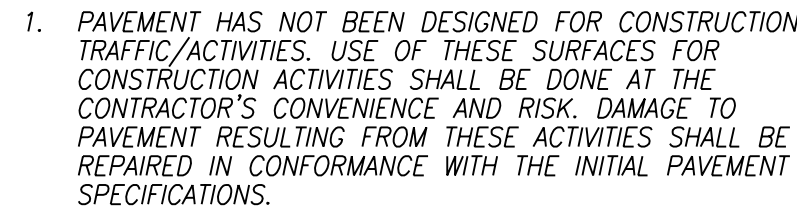
Revisions

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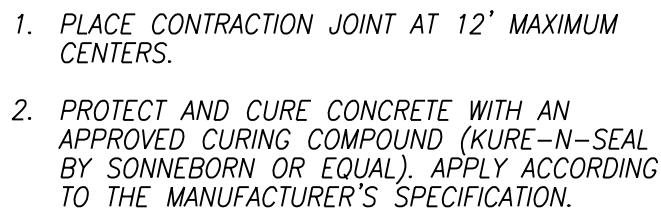
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Grading Plan

C2



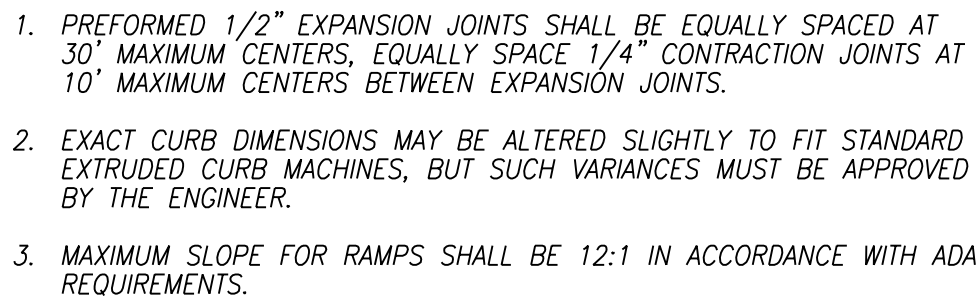
1 ASPHALT PAVEMENT SECTION
C5 NTS



CONTRACTION JOINT



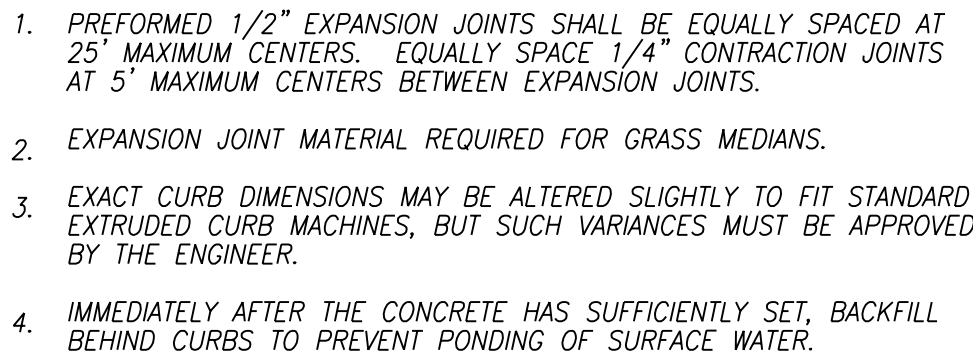
2 CONCRETE DUMPSTER PAD SECTION
C5 NTS



3 INTEGRAL CURB & SIDEWALK
C5 NTS



4 CONCRETE SIDEWALK
C5 NTS



5	EXTRUDED CURB
C5	NTS

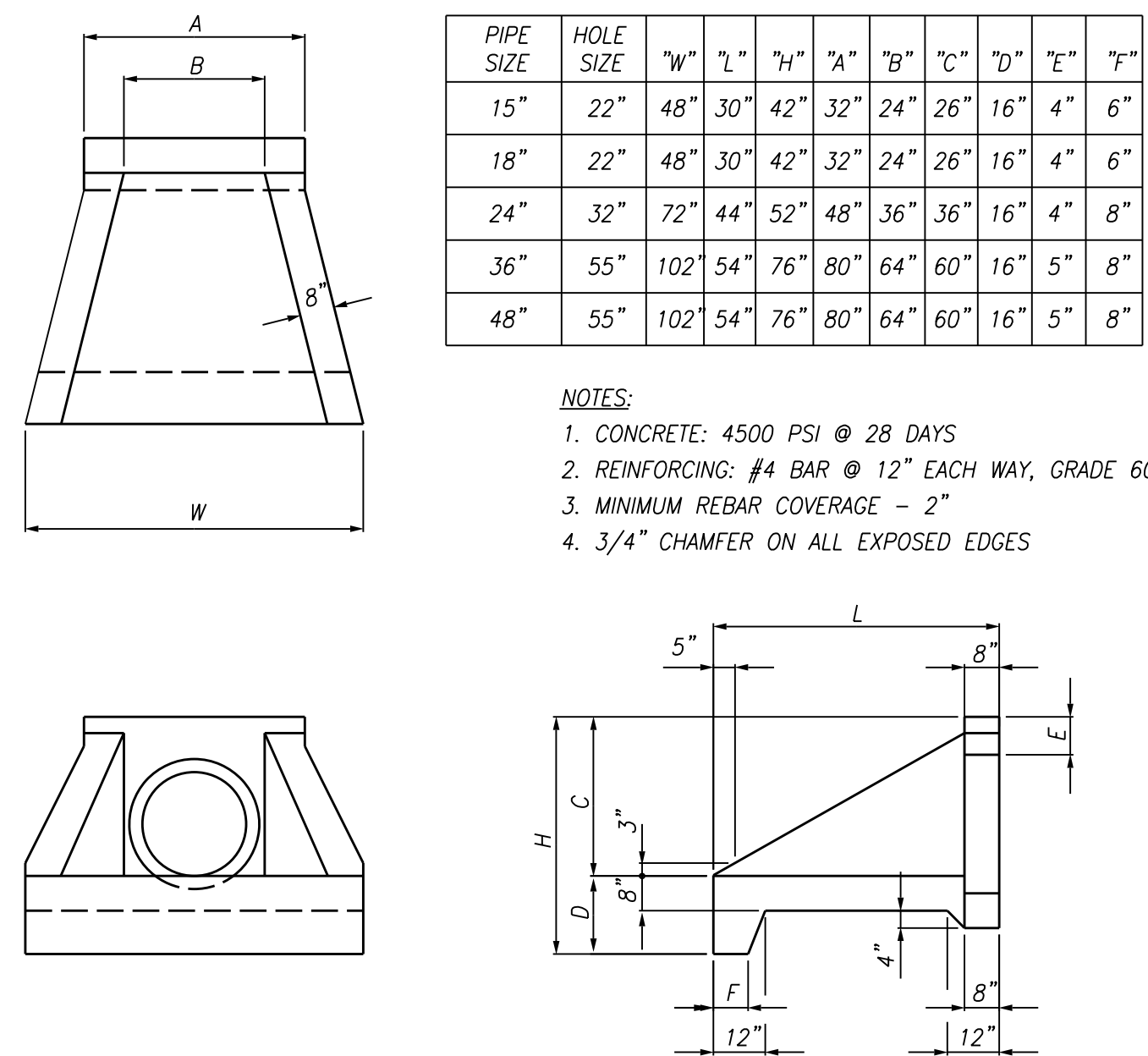
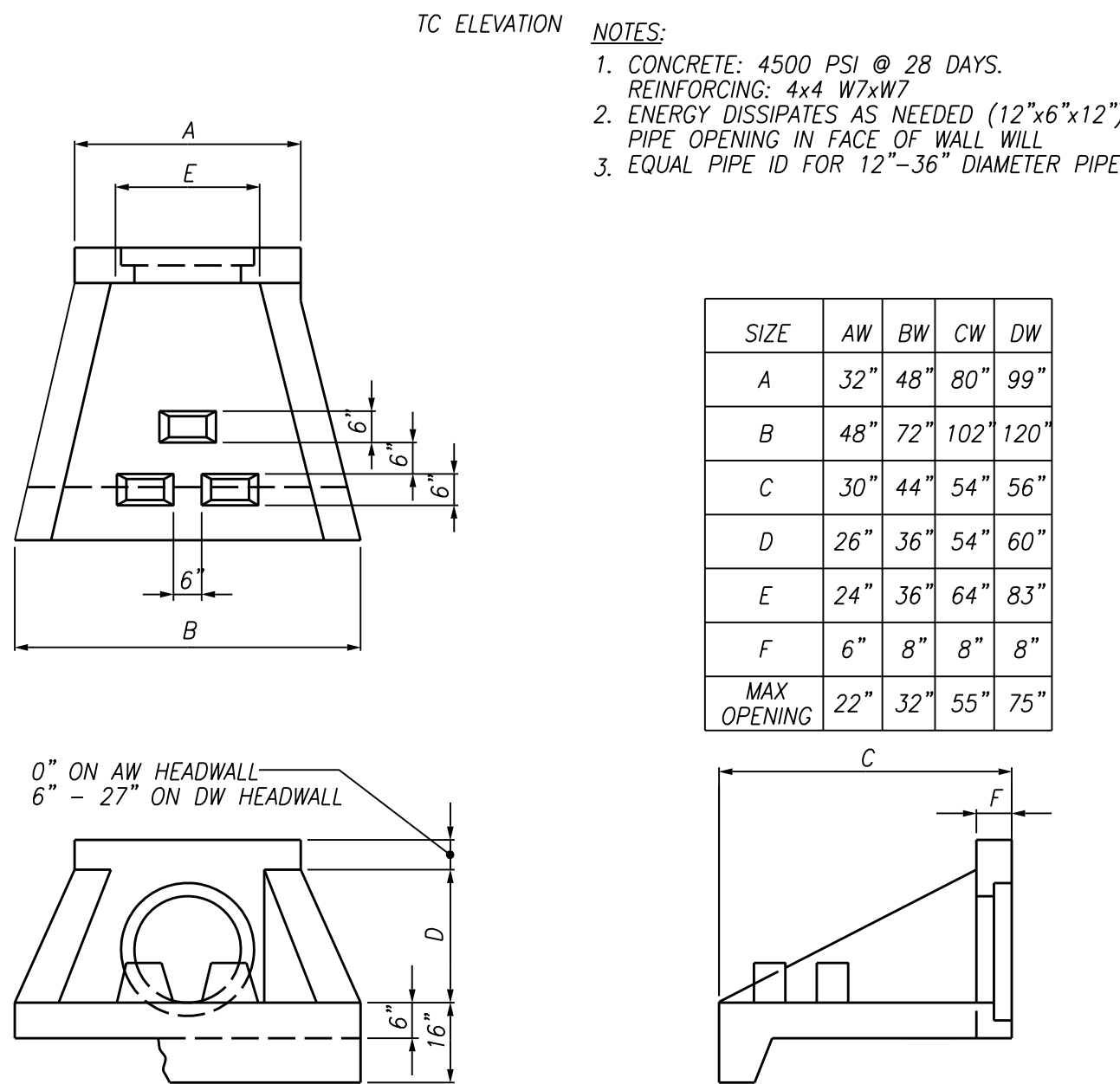
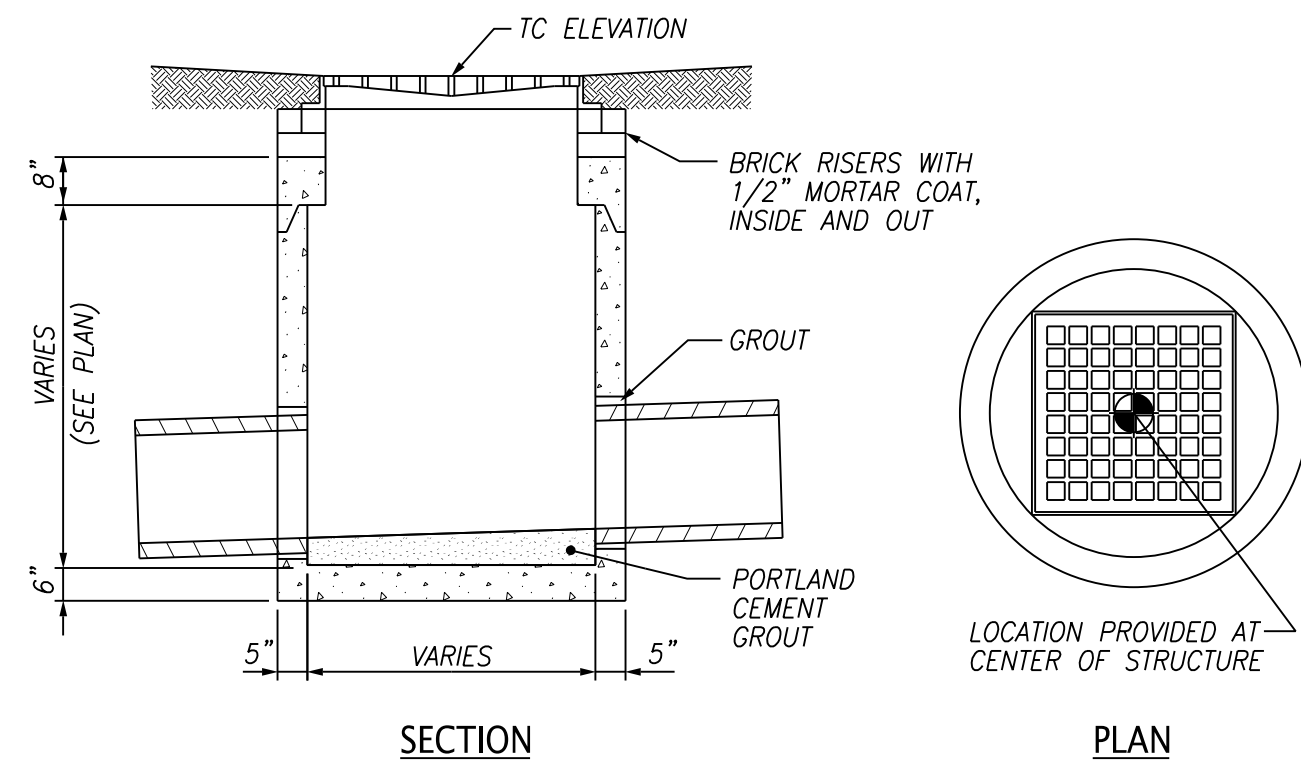
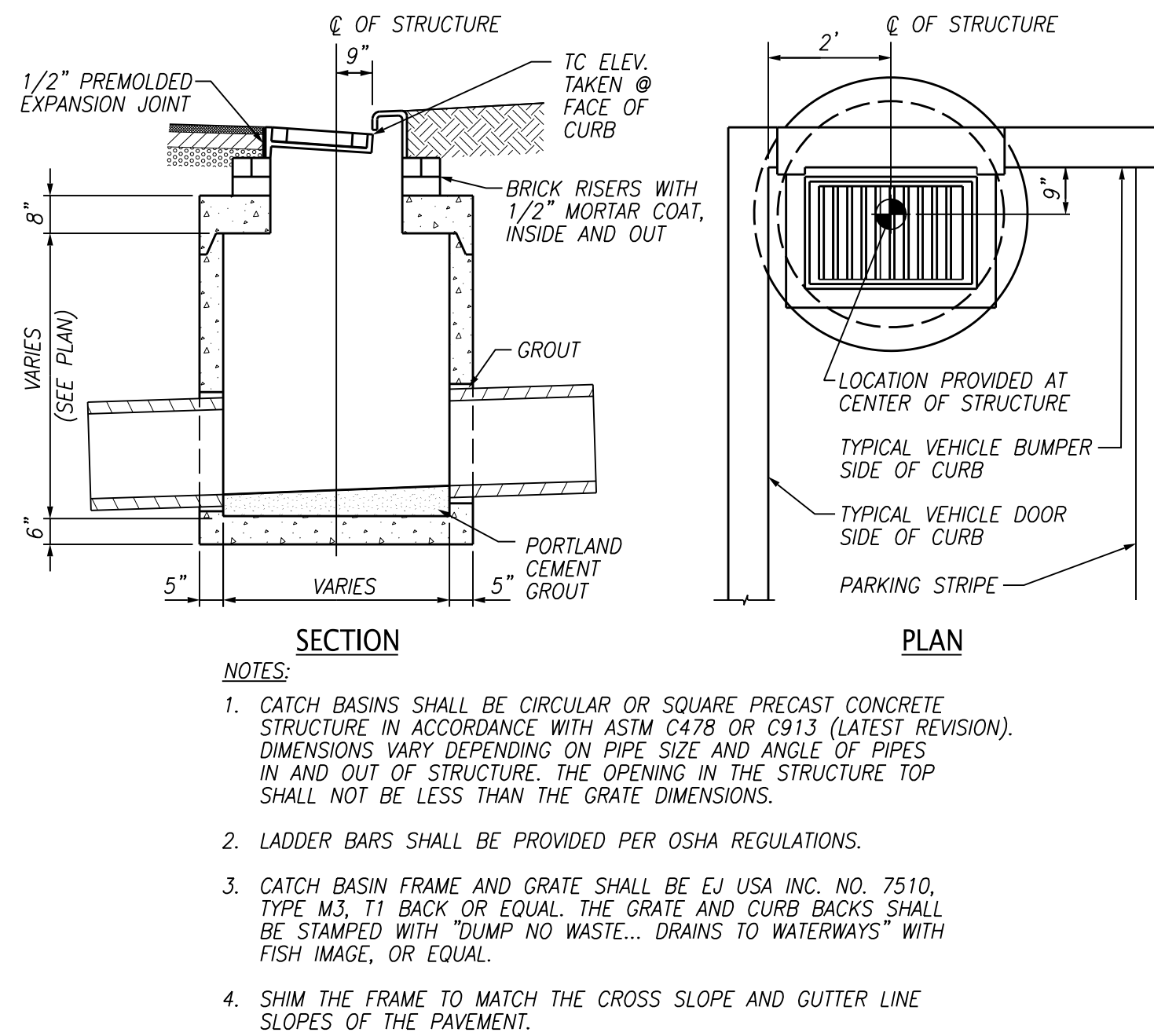
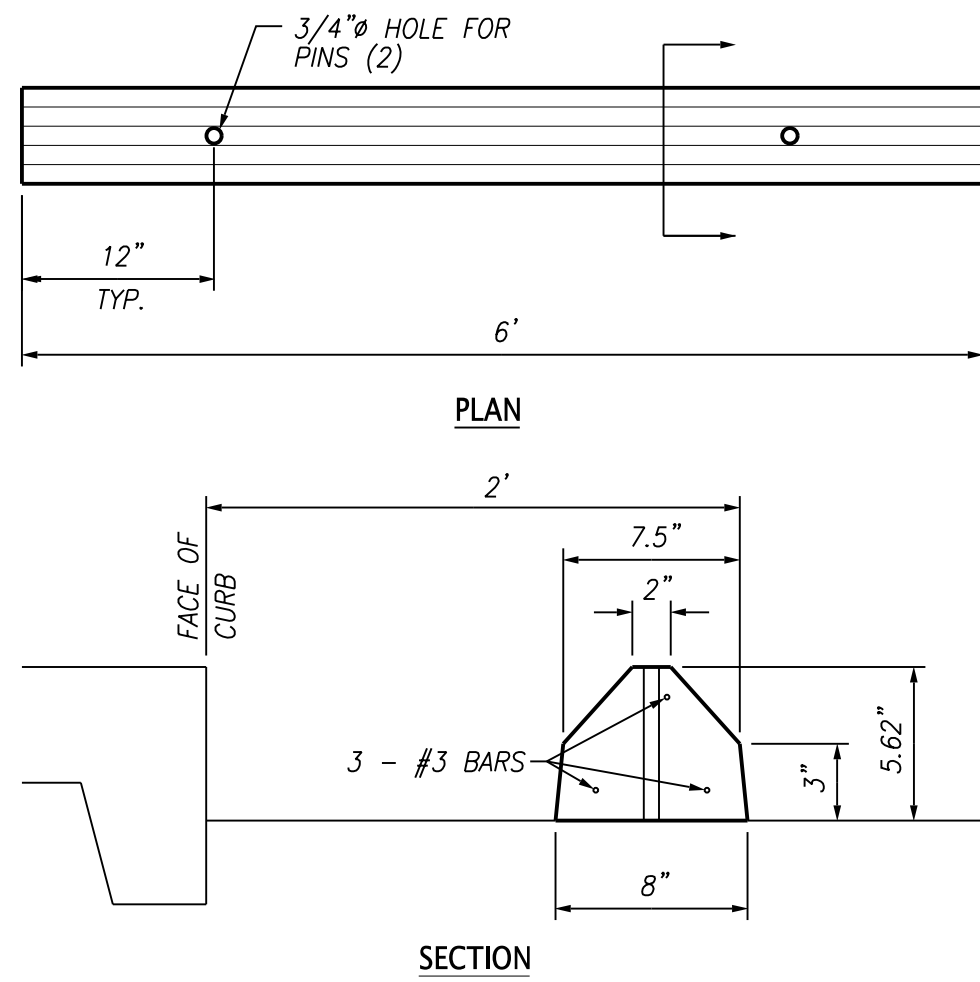
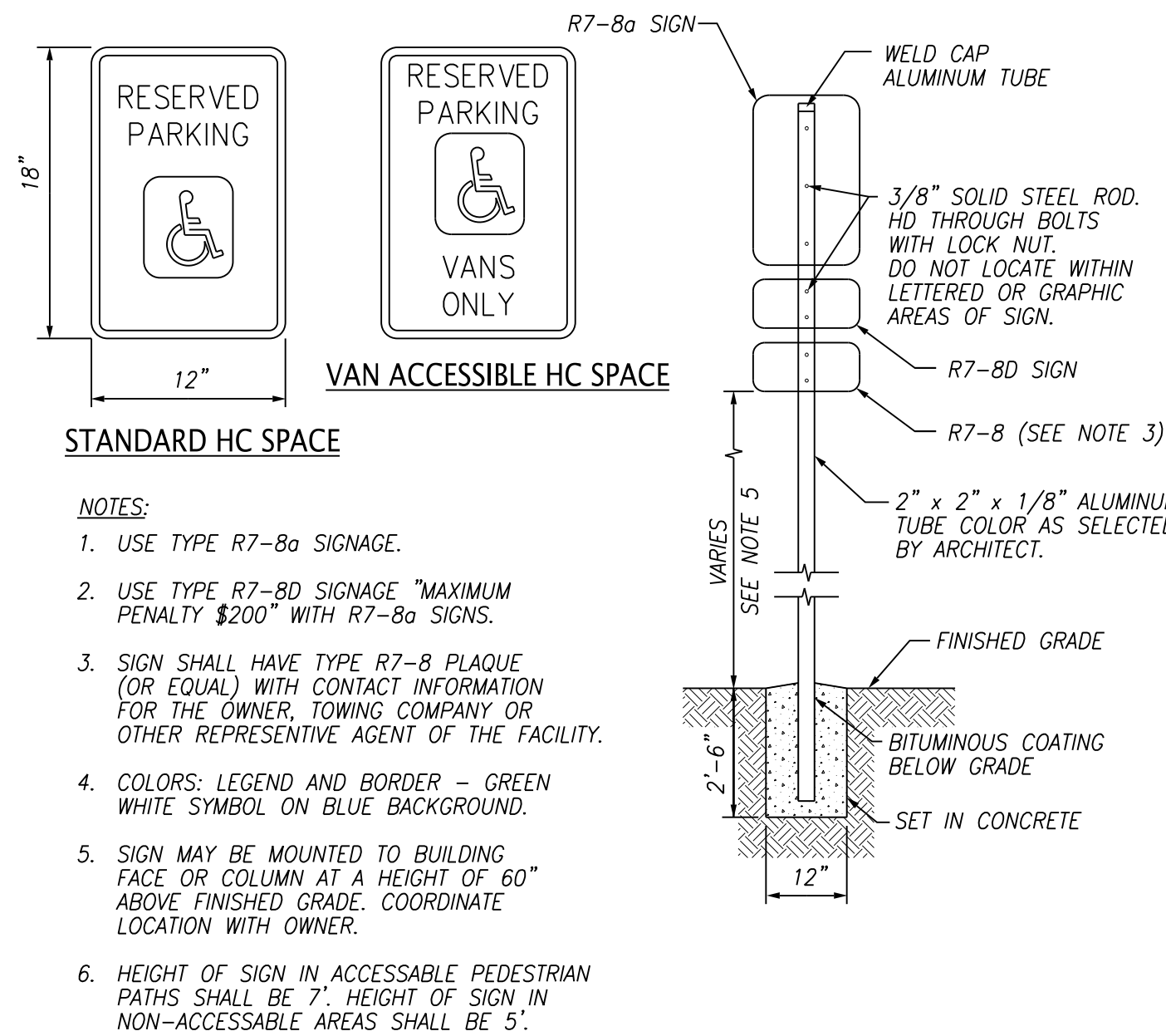


6	HANDICAP SYMBOL
C5	NTS

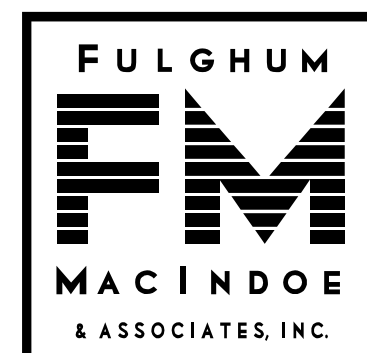
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p 865 523-5001 f 865 523-5003
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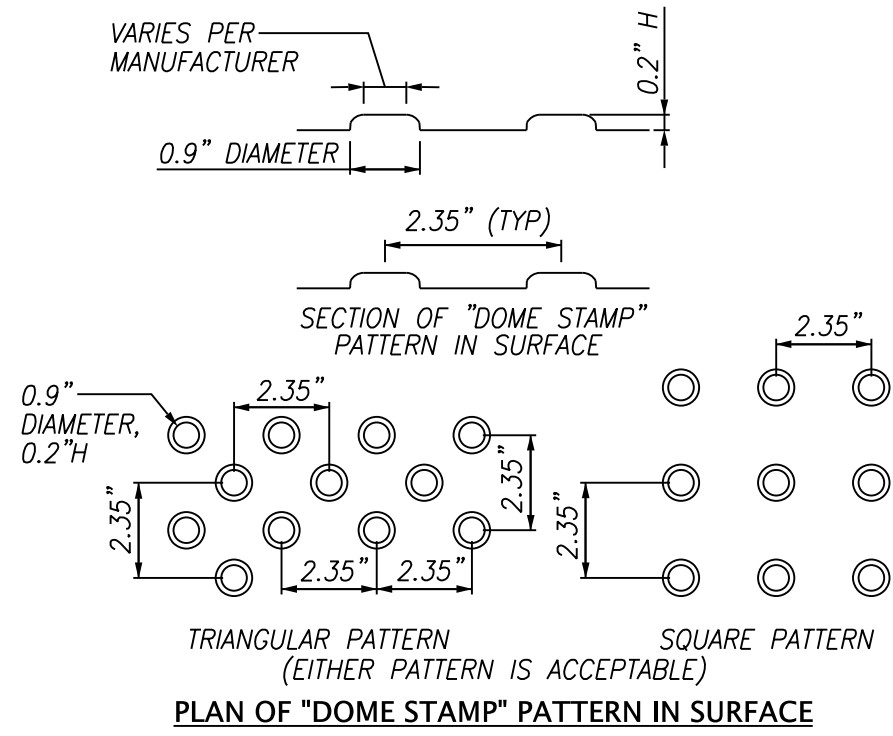
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Details

C6

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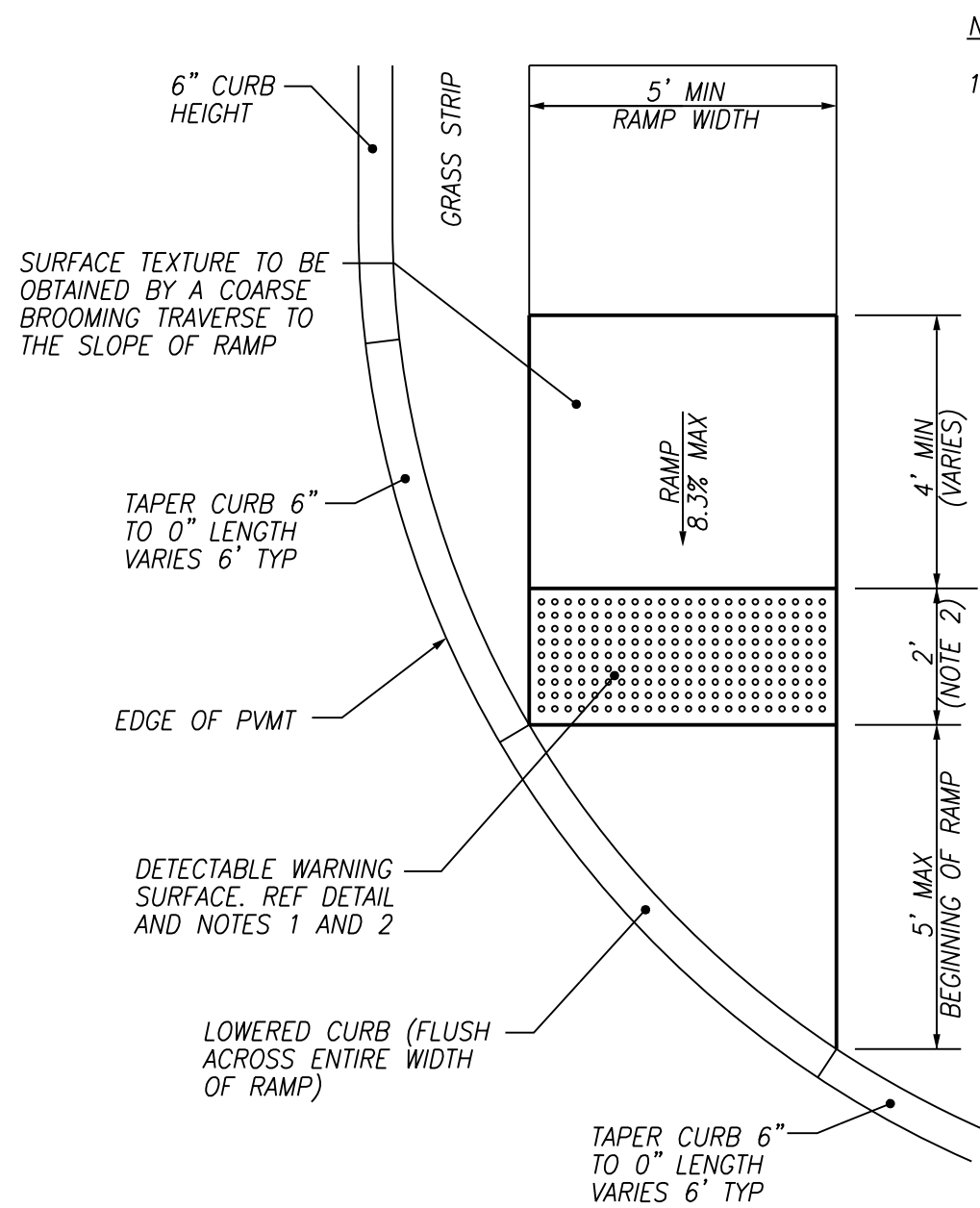
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NOTES:

1. DETECTABLE WARNING SURFACE SHALL EXTEND ACROSS THE ENTIRE WIDTH OF CURB RAMP (4' MIN).
2. DETECTABLE WARNING SURFACE SHALL EXTEND 2' IN THE DIRECTION OF PEDESTRIAN TRAVEL REGARDLESS OF THE CURB RAMP LENGTH.
3. DETECTABLE WARNING AREA SHALL BE COLORED YELLOW AT ALL LOCATIONS.
4. SURFACE APPLIED SYSTEMS SHALL HAVE BEVELED EDGES TO ELIMINATE TRIP HAZARDS.
5. USE ARMOR-TILE OR ADA SOLUTIONS TACTILE WARNING CAST-IN-PLACE SYSTEMS OR EQUAL.

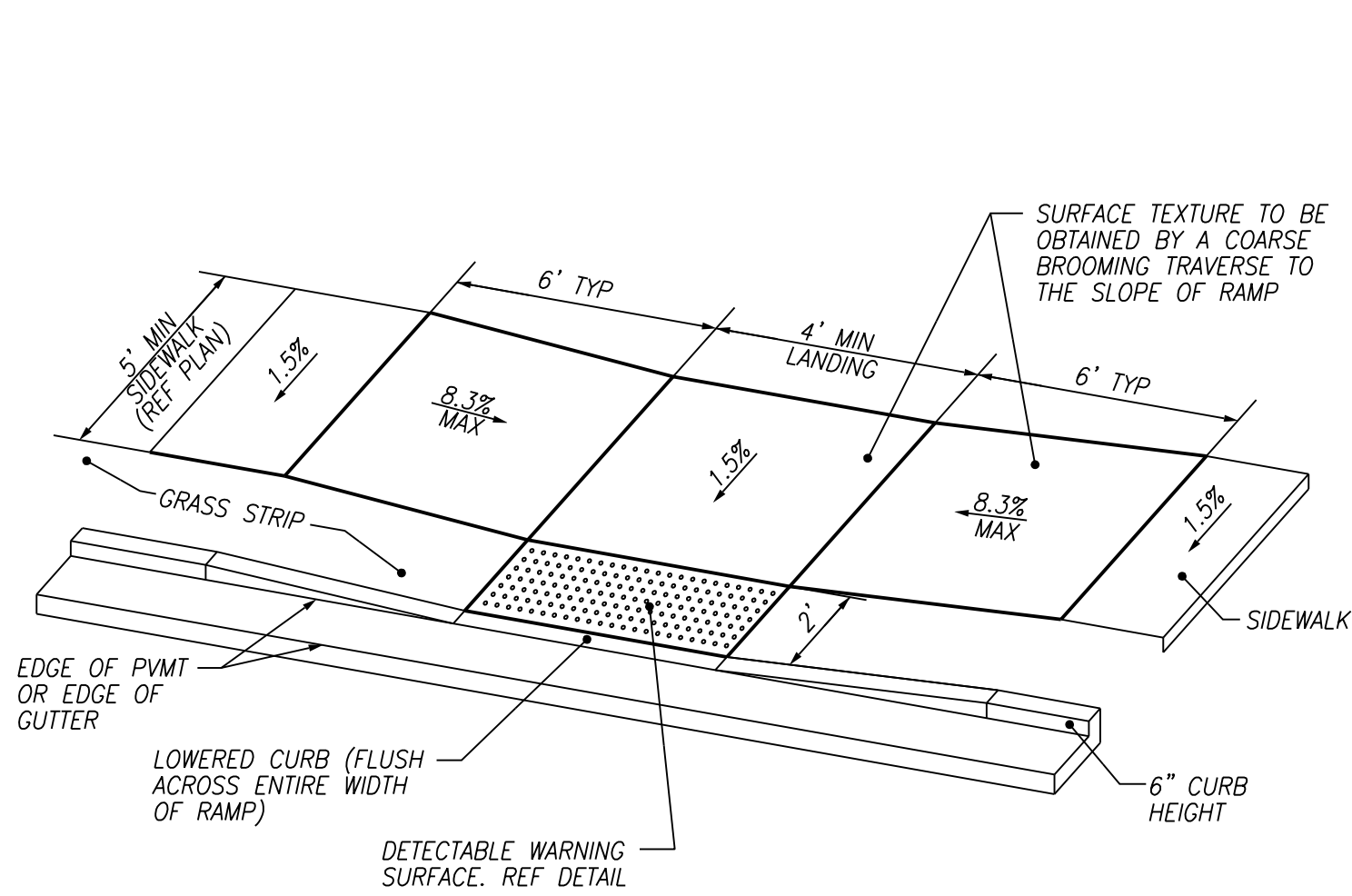
10 DETECTABLE WARNING SURFACE
C7 NTS



NOTES:

1. DETECTABLE WARNING SHALL BE INSTALLED AT ALL LOCATIONS WHERE RAMP EXITS TO VEHICULAR DRIVE PATH.

11 MONO-DIRECTIONAL PERPENDICULAR CURB RAMP
C7 NTS

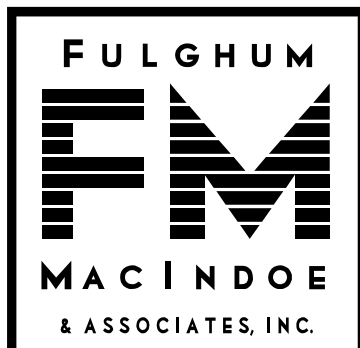


NOTES:

1. DETECTABLE WARNING SHALL BE INSTALLED AT ALL LOCATIONS WHERE RAMP EXITS TO VEHICULAR DRIVE PATH.

12 COMBINATION CURB RAMP
C7 NTS

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