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SITE PLANS FOR

DOC ICIW ROAD REPAIR AND TUNNEL INFILL

IOWA CORRECTIONAL INSTITUTION FOR WOMEN

CITY OF MITCHELLVILLE, POLK COUNTY, IOWA

DAS # 9541.00

OWNER

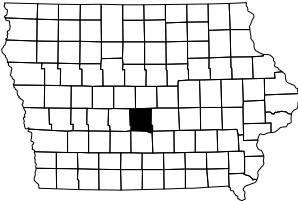
IOWA CORRECTIONAL INSTITUTION FOR WOMEN
420 MILL STREET SW.
MITCHELLVILLE, IA. 50169

PROJECT INFORMATION

DAS PROJECT # 9541
RFB # 954100-01



VICINITY MAP



INDEX OF SHEETS

- C.1 TITLE SHEET
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- C.7 STRUCTURAL DETAILS

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Tyler N. Jensen 07/23/2026
Tyler N. Jensen, P.E. Date

License Number P24526
My License Renewal Date is December 31, 2027

Pages or sheets covered by this seal:
C.1-C.7

DOC ICIW ROAD REPAIR AND TUNNEL INFILL

TITLE SHEET

MITCHELLVILLE, IOWA

SNYDER & ASSOCIATES, INC.

2727 SW SNYDER BLVD
ANKENY, IA 50023
515-964-2020 | WWW.SNYDER-ASSOCIATES.COM



Project No: 126.0792

Sheet C.1

MARK	REVISION	DATE	BY
Engineer: TNJ	Checked By: JFG		
Technician: JDS	Date: 7/22/2026		
T-R-S:			Sheet C.1
DAS # 9541.00			Project No: 126.0792

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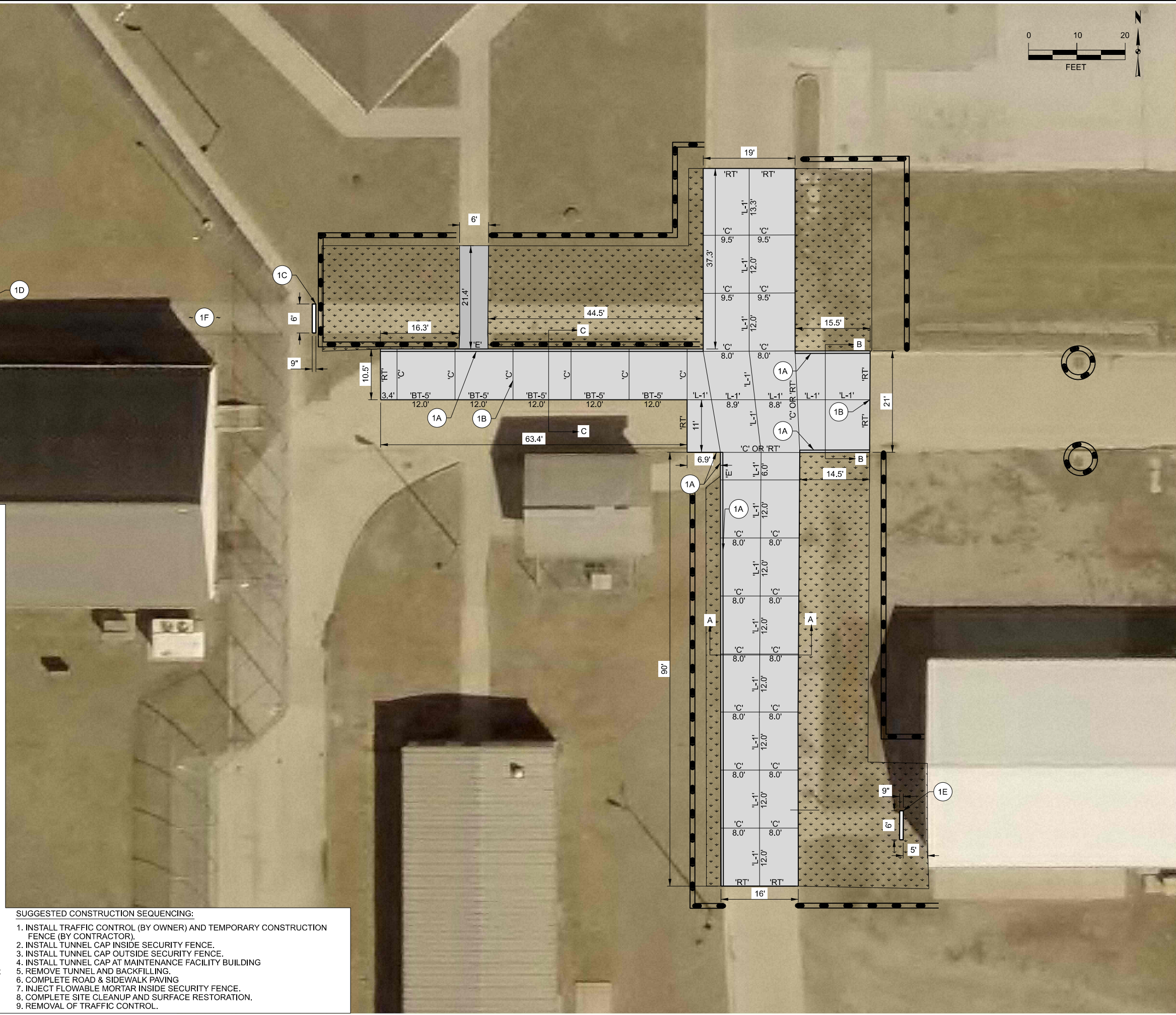
- LEGEND
- 7" PCC PAVEMENT
 - 4" PCC PAVEMENT SIDEWALK
 - SEEDING - SUDAS TYPE 1 SEED MIX
 - 12" FILTER SOCK

- KEYED NOTES
- 1 MISCELLANEOUS
- A. INSTALL 1/2" LIP CURB THROUGH SIDEWALK ENTRANCE OPENING. REFER TO DETAIL 4 ON SHEET C.5 FOR CURB DETAILS.
 - B. MATCH EXISTING TRANSVERSE JOINTS
 - C. INSTALL STRUCTURAL CAP AT TUNNEL. REFER TO DETAIL 3 ON SHEET C.7.
 - D. INSTALL STRUCTURAL CAP AT TUNNEL. REFER TO DETAIL 4 ON SHEET C.7.
 - E. INSTALL STRUCTURE CAP AT TUNNEL. REFER TO DETAILS 3 AND 5 ON SHEET C.7
 - F. REFER TO NOTES ON SHEET C.7 FOR SEALING CORE HOLES FOR FLOWABLE MORTAR PLACEMENT.

- GRADING PLAN NOTES
- CONTRACTOR TO STRIP AND STOCKPILE TOPSOIL ON ALL AREAS NECESSARY FOR OVER EXCAVATION FOR THE REMOVAL OF THE TUNNEL. RE-SPREAD TO MINIMUM 6" DEPTH TO FINISH GRADE.
 - CONTRACTOR TO FURNISH 6" OF CLEAN TOPSOIL FOR TUNNEL FOOTPRINT REMOVAL.
 - NO SPOTS GRADE ELEVATION TO BE GIVEN FOR THE PROJECT. CONTRACTOR TO MATCH EXISTING GRADES FOR SIDEWALK & ROADWAY PAVEMENT REPLACEMENT, AND FOR BACKFILLING OF TUNNEL REMOVAL.

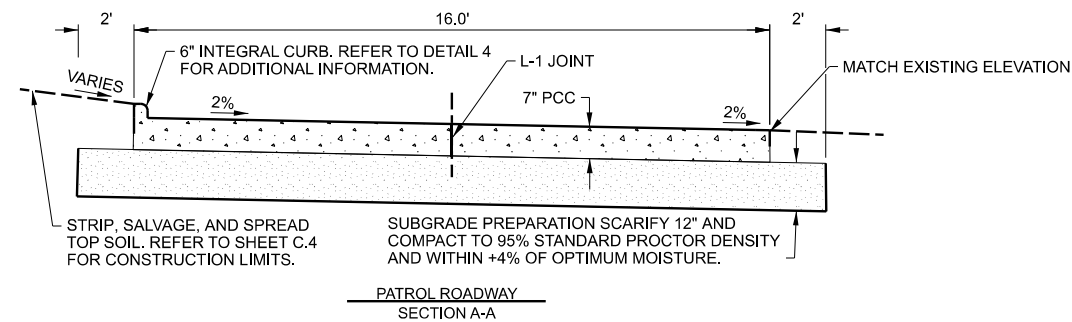
- EROSION CONTROL AND SWPPP NOTES
- EROSION CONTROL: SEED ALL DISTURBED LIMITS AFTER ROUGH GRADING HAS BEEN COMPLETED. PLACE FILTER SOCK AND MAINTAIN PROBLEM AREAS AFTER GROUND COVER HAS BEEN ESTABLISHED. COMPLY WITH EROSION CONTROL LAW.
 - SUDAS TYPE 1 SEED MIX WITH BONDED FIBER MATRIX (BFM) AS MULCHING AGENT SHALL BE USED.
 - CONTRACTOR TO INSTALL FILTER SOCKS AT INLETS PER SUDAS AT THE LOCATIONS INDICATED.
 - REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE FINAL STABILIZATION IS REACHED.

- SUGGESTED CONSTRUCTION SEQUENCING:
- INSTALL TRAFFIC CONTROL (BY OWNER) AND TEMPORARY CONSTRUCTION FENCE (BY CONTRACTOR).
 - INSTALL TUNNEL CAP INSIDE SECURITY FENCE.
 - INSTALL TUNNEL CAP OUTSIDE SECURITY FENCE.
 - INSTALL TUNNEL CAP AT MAINTENANCE FACILITY BUILDING
 - REMOVE TUNNEL AND BACKFILLING.
 - COMPLETE ROAD & SIDEWALK PAVING
 - INJECT FLOWABLE MORTAR INSIDE SECURITY FENCE.
 - COMPLETE SITE CLEANUP AND SURFACE RESTORATION.
 - REMOVAL OF TRAFFIC CONTROL.

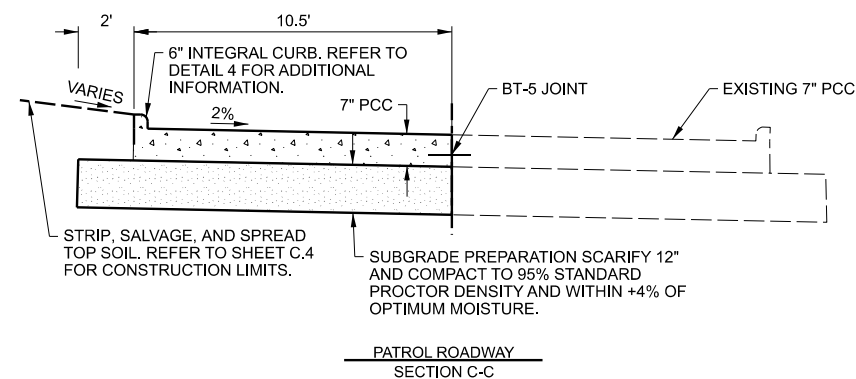


DOC ICIW ROAD REPAIR AND TUNNELL INFILL		MITCHELLVILLE, IOWA	
DIMENSION AND LAYOUT PLAN			
SNYDER & ASSOCIATES, INC.		2727 SW SNYDER BLVD ANKENY, IA 50023 515-964-2020 WWW.SNYDER-ASSOCIATES.COM	
Project No: 126.0792		Sheet C.4	

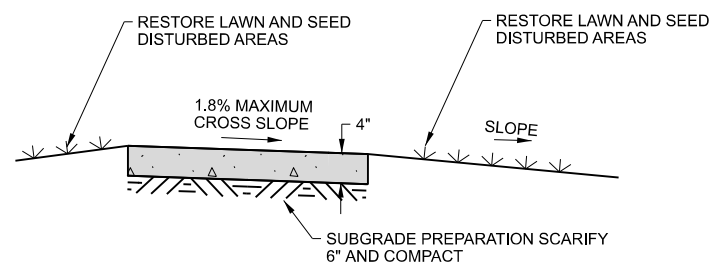
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Engineer: ENG	Checked By: TNU		
Technician: IDS	Date: 7/23/2026		
DAS # 9541.00		Project No: 126.0792	
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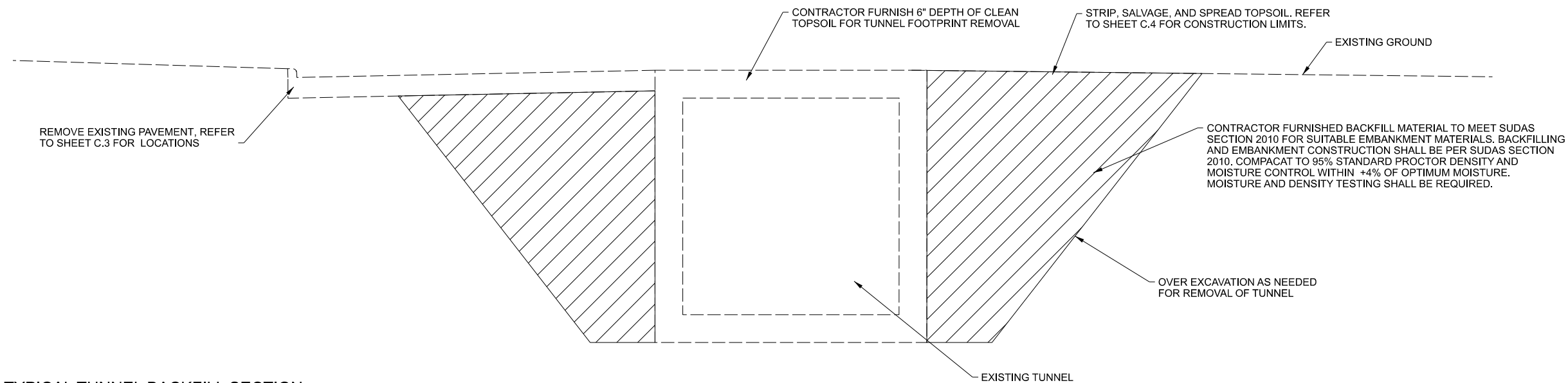
1 TYPICAL PCC PAVING SECTION (A-A)
C.5 NO SCALE



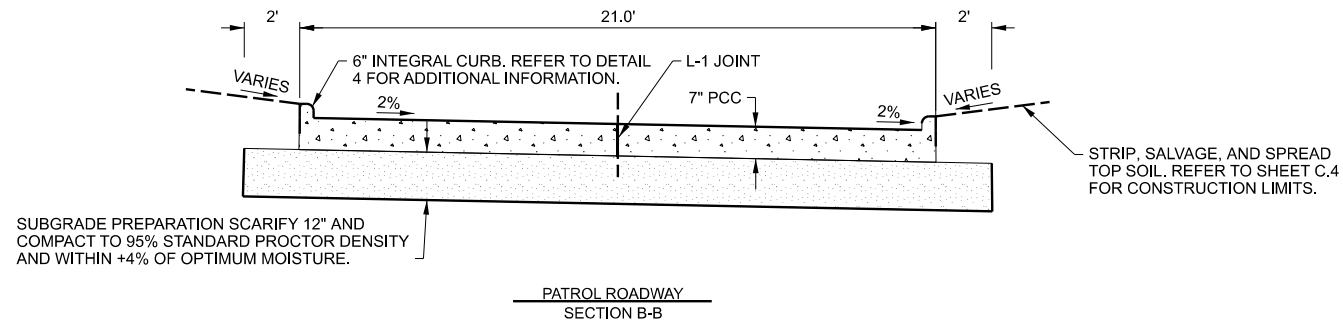
3 TYPICAL PCC PAVING SECTION (C-C)
C.5 NO SCALE



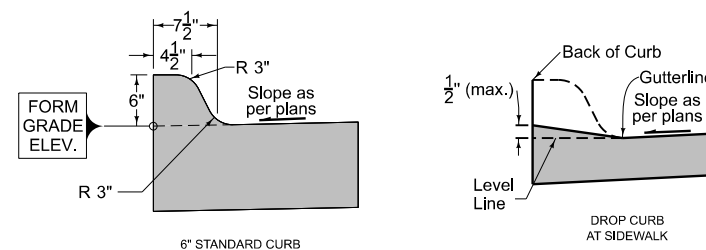
5 PCC SIDEWALK TYPICAL SECTION
C.5 NO SCALE



6 TYPICAL TUNNEL BACKFILL SECTION
C.5 NO SCALE



2 TYPICAL PCC PAVING SECTION (B-B)
C.5 NO SCALE



4 PV-102 CURB DETAILS
C.5 NO SCALE

NOTES

GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION.
2. ALL OF THE WORK TO BE DONE UNDER THIS CONTRACT SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS, THE GENERAL REQUIREMENTS OF DIVISION ONE, THE GENERAL CONDITIONS, THE SPECIFICATIONS, AND ANY ADDENDA THERETO.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ACQUAINT THEMSELVES AND ALL SUPERVISORY PERSONNEL WITH THE ABOVE-NAMED DRAWINGS AND DOCUMENTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTING THE SITE OF THE PROJECT PRIOR TO SATISFY THEMSELVES AS TO THE EXISTING CONDITIONS RELATIVE TO THE CONTRACT.
5. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TEMPORARY SHORING/BRACING OF WALLS, SLABS, COLUMNS, ETC., AS REQUIRED BY ALL FEDERAL, STATE AND LOCAL AGENCIES HAVING JURISDICTION, UNTIL ALL PERMANENT FRAMING IS INSTALLED.
6. ALL CONSTRUCTION SHALL CONFORM TO INTERNATIONAL BUILDING CODE 2024 UNLESS NOTED OTHERWISE.
7. DIMENSIONS MARKED +/- REQUIRE VERIFICATION BY THE CONTRACTOR.
8. IN ANY CASE OF CONFLICT BETWEEN THE NOTES, DETAILS AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN. CONTRACTOR SHALL MAKE NO DEVIATION FROM DESIGN DRAWINGS WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
9. PROTECTIVE FENCE TO BE INSTALLED BY CONTRACTOR DURING WORK PREVENTING ENTRANCE TO EXCAVATED AREA. PROTECTIVE FENCE TO BE USED AND MAINTAINED THROUGHOUT CONSTRUCTION.

DEMOLITION AND SHORING

3. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO ENSURE THAT PARTS OF THE STRUCTURE TO BE PRESERVED ARE NOT DAMAGED BY THE APPLICATION OF EXCESSIVE LOADS OR BY ANY OTHER MEANS, AND THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE CAUSED.
2. ENSURE SAFE PASSAGE OF PERSONS AROUND AREA OF DEMOLITION AND CONSTRUCTION. CONDUCT OPERATIONS TO PREVENT INJURY TO ADJACENT BUILDINGS, STRUCTURES, EQUIPMENT AND OTHER FACILITIES AND PERSONS.
3. EXISTING STRUCTURE SHALL BE TEMPORARILY SHORED AS REQUIRED TO PERFORM CONSTRUCTION SHOWN HEREIN. MEMBERS SHALL BE REMOVED IN SUCH A MANNER AS NOT TO DAMAGE EXISTING STRUCTURE.
4. ALL REMOVALS OF EXISTING SHALL BE INITIATED WITH A NEAT, 3/4" MIN. DEEP STRAIGHT.
5. PROTECT EXISTING REINFORCING STEEL IN PLACE. EXERCISE EXTREME CARE TO AVOID DAMAGING EXISTING REINFORCEMENT.
6. EXACT LOCATION OF EXISTING REINFORCEMENT IS TO BE DETERMINED BY THE CONTRACTOR USING A REBAR LOCATOR OR SIMILAR METHOD.
7. LOCATE HOLES FOR BOLTS TO AVOID EXISTING REINFORCEMENT.
8. CONTRACTOR RESPONSIBLE TO REPAIR DAMAGED EXISTING REINFORCEMENT TO THE SATISFACTION OF THE ENGINEER/OWNER. CONTRACTOR RESPONSIBLE FOR ALL COSTS AND DELAYS ASSOCIATED WITH THE REPAIR.
9. IN THE EVENT OF CONFLICTS, NOTIFY ENGINEER PRIOR TO FIELD MODIFICATIONS OF DETAILS, CONNECTIONS, OR DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS.

DRILLED-IN-DOWELS AND ANCHOR BOLTS

1. HOLES FOR DOWELS SHALL BE DRILLED INTO THE EXISTING CONCRETE AT THE LOCATIONS AND OF THE SIZE SHOWN ON THE PLANS. EMBED DRILLED-IN-DOWELS 15 BAR OR ANCHOR BOLT DIAMETERS MINIMUM, UNLESS NOTED OTHERWISE. AFTER HOLES ARE DRILLED, THEY SHALL BE BLOWN CLEAN WITH OIL-FREE COMPRESSED AIR BEFORE THE EPOXY RESIN IS PLACED IN THE HOLES. THE EPOXY RESIN SHALL BE MIXED TO A LEVEL SUCH THAT AFTER THE BAR IS INSERTED, THE EPOXY WILL RISE TO THE SURFACE OF THE HOLE. IN OVERHEAD APPLICATIONS, WORK AND SECURE ENOUGH EPOXY RESIN INTO THE HOLE SUCH THAT WHEN THE DOWEL IS INSERTED, THE EPOXY RESIN COMPLETELY FILLS THE VOID AROUND THE DOWEL. SECURE THE EPOXY RESIN IN PLACE BY CURING BY PLUGGING THE HOLE AROUND THE SHANK OF THE DOWEL. PLUGGING SHALL BE DONE IMMEDIATELY AFTER THE DOWEL IS SHOWN ON THE PLANS SHALL BE INSERTED INTO THE HOLE IMMEDIATELY AFTER THE EPOXY RESIN IS PLACED. THE EPOXY RESIN SHALL BE PERMITTED TO SET BEFORE NEW CONCRETE IS PLACED AROUND THE ANCHOR.

CONCRETE

1. CONCRETE TO BE IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301 CURRENT EDITION)".
2. REINFORCING STEEL TO BE BENT AND PLACED IN ACCORDANCE WITH MANUAL OF STD. PRACTICE FOR DETAILING CONCRETE STRUCTURES (ACI 315 CURRENT EDITION)".
3. ALL CONCRETE SHALL BE 4000 PSI AT 28 DAYS.
4. COARSE AGGREGATE FOR SLABS AND EXPOSED WALLS TO BE CRUSHED LIMESTONE.
5. MAXIMUM AGGREGATE SIZE TO BE 1" - U.N.O.
6. ALL AGGREGATE IN ACCORDANCE WITH ASTM C33. LIMIT SHALE, CHERT, COAL AND IRON OXIDE.
7. 4000 PSI CONCRETE TO HAVE A MIN. 6 SACKS CEMENT/MAX. 5 GAL. OF WATER/SACK.
8. WATER REDUCER REQUIRED FOR ALL WALLS AND SLABS.
9. CONCRETE WATER-CEMENT RATIO INDICATED FOR DESIGN MIXES TO HAVE CEMENT CONTENT ADJUSTED TO PROVIDE A WORKABLE MIX.
10. USE OF CALCIUM CHLORIDES PROHIBITED.
11. ALL REINFORCING STEEL TO BE ASTM A615 - GRADE 60.
12. CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR TO BE:
3" CAST AGAINST EARTH
2" SLABS ON GRADE (DISTANCE FROM TOP OF SLAB TO NEAR BAR)
2" STRUCTURAL SLABS
13. ALL REINFORCING STEEL SHALL BE SECURELY WIRED IN PLACE BEFORE CONCRETE IS PLACED.
14. MAXIMUM SPACING OF BAR SUPPORTS TO BE 3'-0" O.C. EACH WAY.
15. PROVIDE CLASS B TENSION LAP SPLICES FOR CONTINUOUS BARS UNLESS OTHERWISE SHOWN.
16. ALL REINFORCING BARS SHALL BE LAPPED AS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. WHERE NOT SPECIFICALLY INDICATED ON THE DRAWINGS, ALL REINFORCING BARS SHALL BE LAPPED AS FOLLOWS: LAP WALL/BEAM TOP HORIZONTAL REINFORCEMENT AT CENTER OF SPAN. LAP WALL/BEAM BOTTOM HORIZONTAL REINFORCEMENT AT SUPPORT. TERMINATE CONTINUOUS BARS AT DISCONTINUOUS ENDS WITH STANDARD HOOKS.
17. NEW WATERSTOPS TO BE BENTONITE SELF ADHERING STRIPS 1"x3/4"
18. CONCRETE ANCHORS SHALL BE HILTI HIT-HY 200 OR APPROVED EQUAL. THREADED RODS SHALL BE HILTI HAS-S STANDARD RODS OR GRADE 36 THREADED RODS UNLESS NOTED OTHERWISE.

SPECIAL INSPECTION

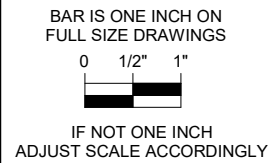
1. SPECIAL INSPECTION IN ACCORDANCE WITH SECTION 1704 OF THE 2024 INTERNATIONAL BUILDING CODE, AND ICBO MODEL PROGRAM FOR SPECIAL INSPECTION.
2. THE OWNER WILL EMPLOY AN APPROVED AGENCY TO PERFORM THE SPECIAL INSPECTION SERVICES.
3. SPECIAL INSPECTION WILL BE PERFORMED IN ACCORDANCE WITH AND IN ADDITION TO THE INSPECTION AND TESTING REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.
4. THE FOLLOWING ITEMS ARE INCLUDED IN THE SPECIAL INSPECTION:

CONCRETE: AIR-ENTRAINMENT
SLUMP
COMPRESSIVE STRENGTH TESTING
REINFORCING PLACEMENT

SOIL: PAVEMENT SUBGRADE AND FILL COMPACTION.

FLOWABLE FILL

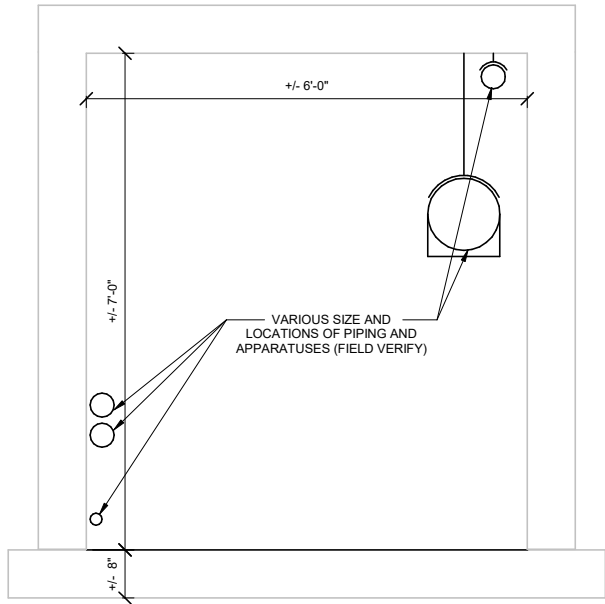
1. MATERIALS SHALL CONFORM TO APPLICABLE REQUIREMENTS OF:
ASTM D6103 – FLOWABLE CONTROLLED LOW STRENGTH MATERIAL (CLSM).
ACI 229R – CONTROLLED LOW-STRENGTH MATERIALS.
2. FLOWABLE FILL SHALL CONSIST OF A CEMENTITIOUS SLURRY DESIGNED TO BE SELF-LEVELING AND SELF-CONSOLIDATING, ELIMINATING THE NEED FOR MECHANICAL COMPACTION.
3. 28 DAY COMPRESSIVE STRENGTH OF 50 TO 150 PSI
4. FURNISH AND PLACE CONTROLLED LOW STRENGTH MATERIAL (CLSM), ALSO KNOWN AS FLOWABLE FILL, CONTROLLED DENSITY FILL (CDF), LEAN MIX BACKFILL, OR UNSHRINKABLE FILL, AT LOCATIONS INDICATED ON THE PLANS.
5. PLACE MATERIAL CONTINUOUSLY TO PREVENT COLD JOINTS WHENEVER PRACTICAL.
6. CONTRACTOR SHALL SUBMIT MIX DESIGN FOR REVIEW PRIOR TO PLACEMENT.



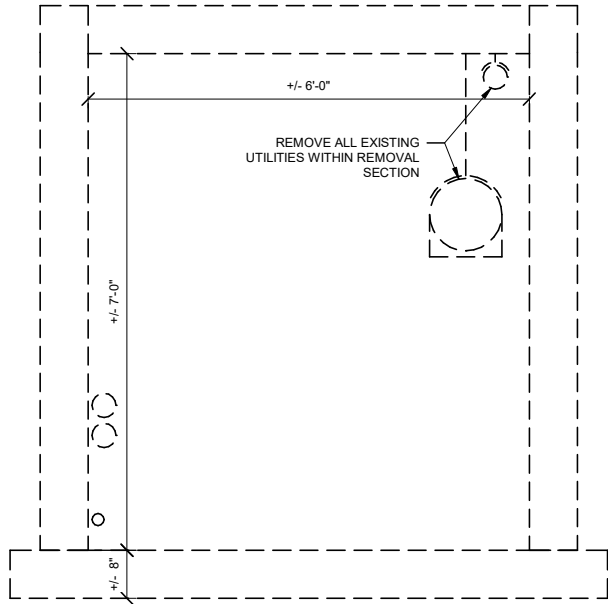
DETAILS

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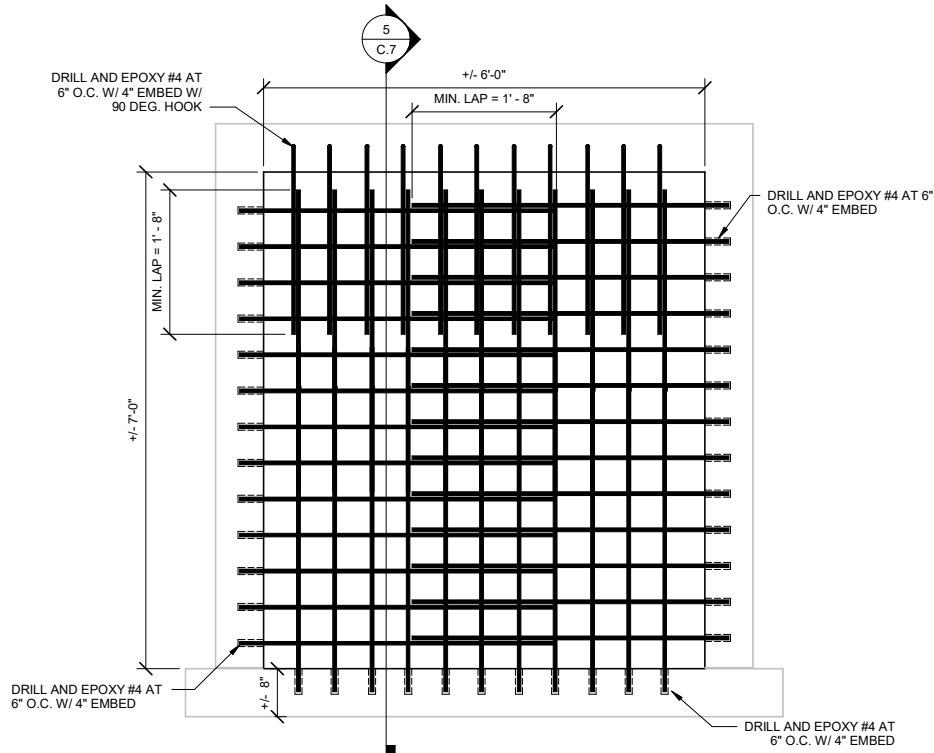


1 TYPICAL TUNNEL SECTION
3/4" = 1'-0"



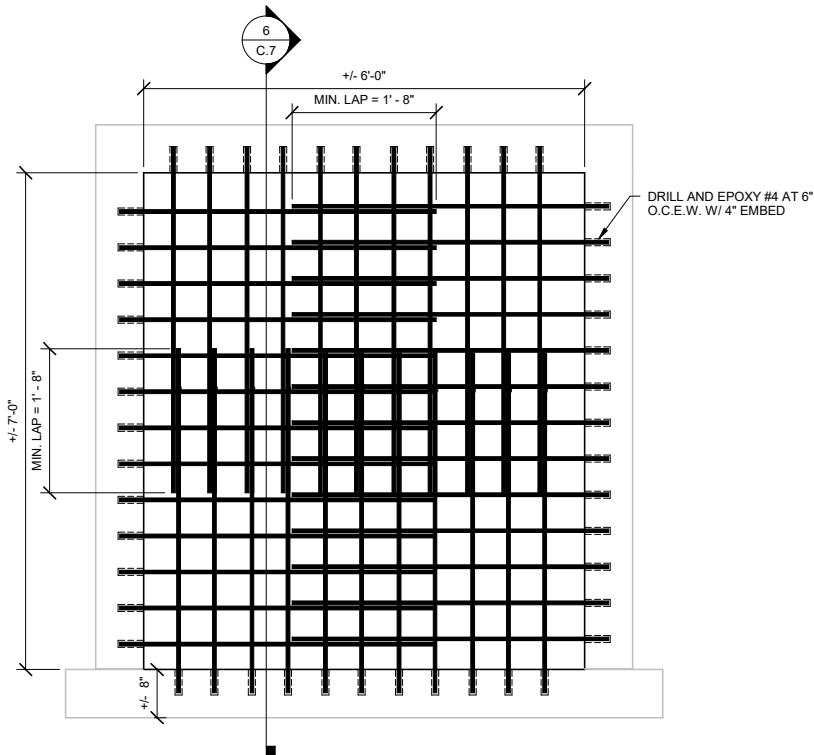
2 TUNNEL REMOVAL
3/4" = 1'-0"

TUNNEL REMOVAL NOTES:
1. THE CONTRACTOR SHALL DETERMINE THE MOST APPROPRIATE METHOD FOR REMOVAL OF EXISTING UTILITIES.
A. THE INTENDED DESIGN APPROACH IS TO SAW-CUT AND REMOVE THE CAP OF THE EXISTING TUNNEL AS REQUIRED FOR UTILITIES REMOVAL, FOLLOWED BY REMOVAL OF ALL UTILITIES WITHIN THE TUNNEL.
2. REMOVE THE EXISTING TUNNEL STRUCTURE IN ITS ENTIRETY WITHIN THE REMOVAL LIMITS. (LIMITS OF REMOVAL ON C.3)

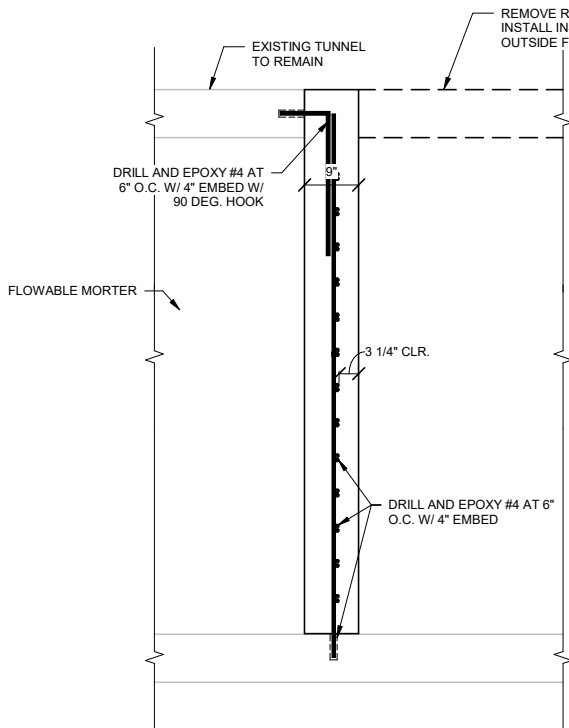


3 TUNNEL CAP OUTSIDE FENCE
3/4" = 1'-0"

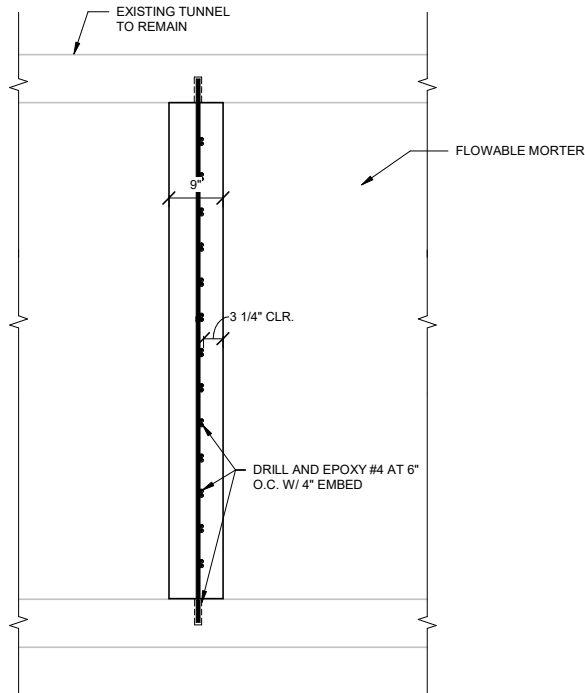
TUNNEL CAP / FILL WITH FLOWABLE MORTAR NOTES:
1. THE CONTRACTOR SHALL REMOVE THE TUNNEL OR TUNNEL LID THAT IS TO BE REMOVED AS REQUIRED TO GAIN ACCESS TO THE PORTION OF THE TUNNEL THAT WILL REMAIN. (LIMITS OF INFILL ON C.3)
2. THE CONTRACTOR SHALL REMOVE ALL UTILITIES FROM EXISTING TUNNEL.
3. CAP THE EXISTING TUNNEL AS INDICATED IN THE PLANS.
4. CORE HOLES AT 10-FOOT INTERVALS ON CENTER WITHIN THE FENCE LIMITS TO FACILITATE PLACEMENT AND VENTING OF FLOWABLE MORTAR WITHIN THE TUNNEL TO REMAIN.
5. FILL THE TUNNEL USING A STEPPED PROCESS, BEGINNING AT THE FIRST ACCESS HOLE AND PROGRESSING SEQUENTIALLY BACK TOWARD THE BUILDING AND THEN TOWARD THE FENCE.
6. UPON COMPLETION, VERIFY THAT THE FLOWABLE MORTAR HAS FILLED THE TUNNEL COMPLETELY AND HAS REACHED THE ELEVATION OF THE BOTTOM OF THE SIDEWALK. POUR NEW SIDEWALK PATCHING (8" THICK) NEW SIDEWALK 4000 PSI CONCRETE NOT FLOWABLE MORTAR.



4 TUNNEL CAP INSIDE FENCE
3/4" = 1'-0"



5 SECTION
3/4" = 1'-0"
(WEST OUTSIDE FENCE CAP SHOWN, EAST OUTSIDE FENCE CAP SIMILAR)



6 SECTION
3/4" = 1'-0"

BAR IS ONE INCH ON FULL SIZE DRAWINGS
0 1/2" 1"
IF NOT ONE INCH
ADJUST SCALE ACCORDINGLY

DOC ICIW ROAD REPAIR AND TUNNEL INFILL

DETAILS

MITCHELLVILLE, IOWA

SNYDER & ASSOCIATES, INC.

2727 SW SNYDER BLVD
ANKENY, IA 50023

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Project No: 126.0792

Sheet C.7

MARK	REVISION		DATE
Engineer: BFK	Checked By: CGG	Scale: (AS NOTED)	
Technician: CMH	Date: 7/22/2026	Field Bk: Pg:	
DAS # 9541.00		Sheet C.7	
Project No: 126.0792			