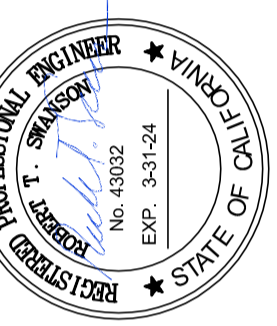
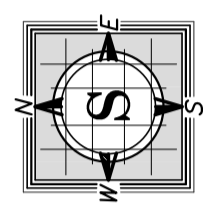


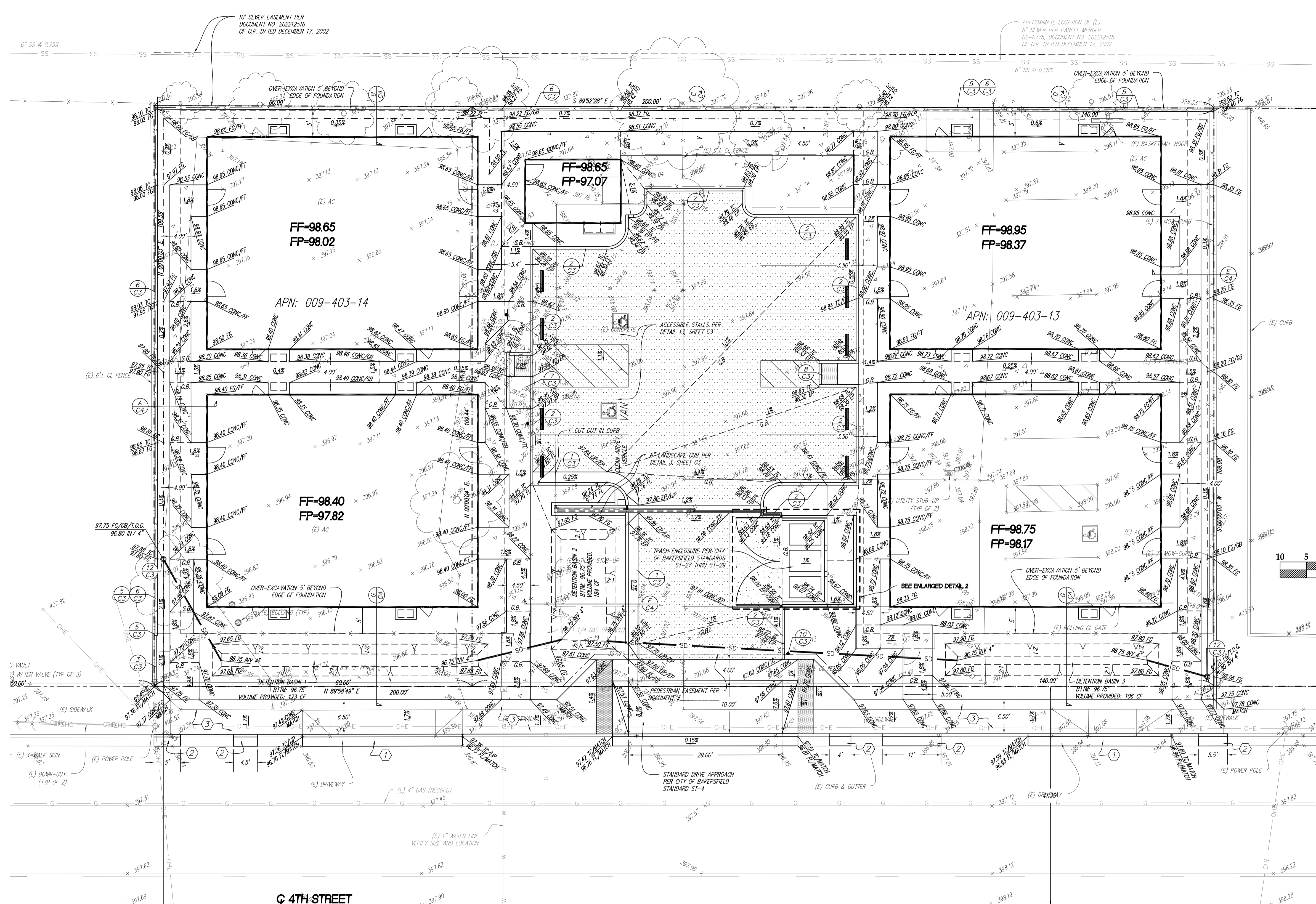
SWANSON
ENGINEERING, INC.



DATE: 05-10-2023
DATE: 22-02-2022
JOB NO.: 22-002
DESCRIPTION:
ENGINEER: BTC

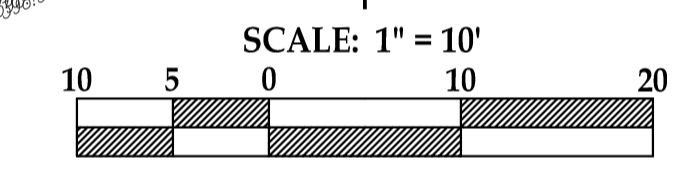
HOUSING AUTHORITY COUNTY OF KERN
610 AND 624 4TH STREET
BAKERSFIELD, CA 93304
GRADING PLAN

6.9-445
C2
SHEET 2 OF 7



LEGEND:

(E)	EXISTING	SD	EXISTING STORM DRAIN LINE
TYP.	TYPICAL	FO	EXISTING FIBER OPTIC LINE
FD.	FOUND	W	EXISTING WATER LINE
BK.	BOOK	SS	EXISTING SEWER LINE
PK.	PAGE	G	EXISTING GAS LINE
C.O.K.	COUNTY OF KERN	X	EXISTING FENCELINE
C.O.B.	CITY OF BAKERSFIELD	UGE	EXISTING ELECTRIC LINE
CONC	CONCRETE	OHE	EXISTING OVERHEAD ELECTRIC LINE
A.C.	ASPHALT PAVEMENT	---	EXISTING PROPERTY LINE
FG	FINISH GRADE	---	EXISTING RIGHT-OF-WAY
EG	EDGE OF PAVEMENT	---	EXISTING CURB & GUTTER
TC	TOP OF CURB	---	EXISTING GROUND CONTOUR LINE & ELEVATION
FL	FLOUMLINE	GB	GRADE BREAK
FF	FINISHED FLOOR	X	NEW 6" HIGH ORNAMENTAL IRON FENCE
FP	FINISHED PAD	---	SWALE
TP	TOP OF PAVEMENT	---	4" SDR35 PVC PIPE
GB	GRADE BREAK	---	
H.P.	HIGH POINT	---	
L.P.	LOW POINT	---	



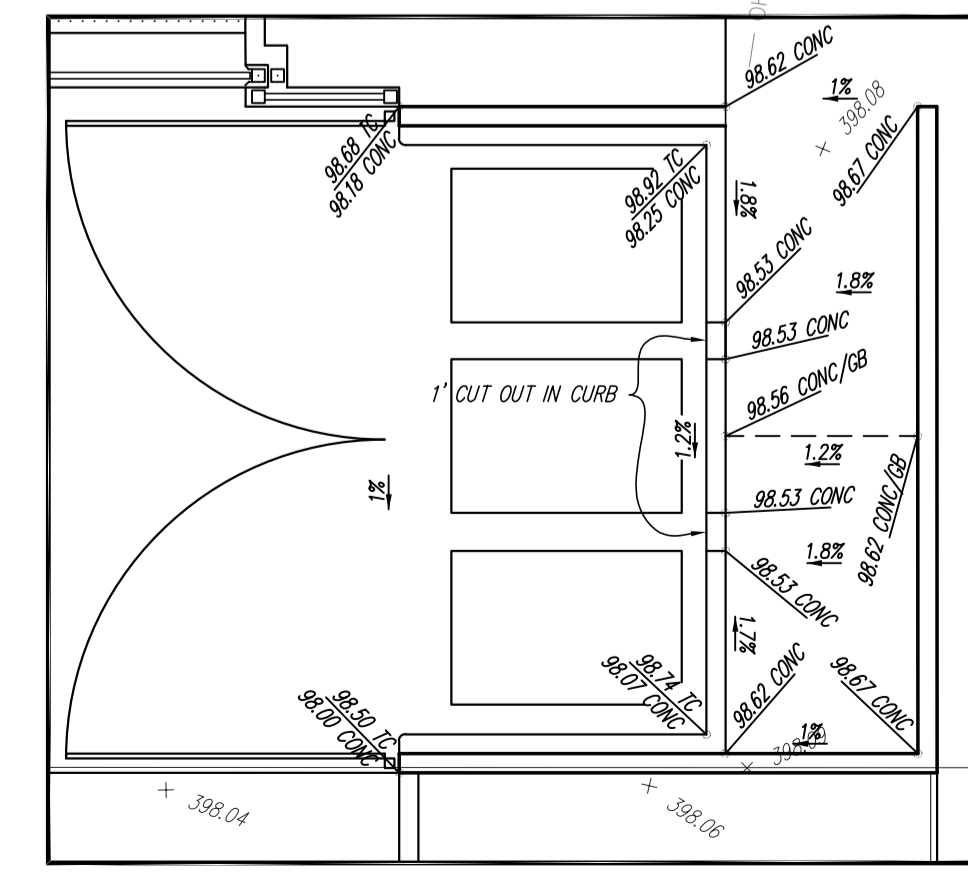
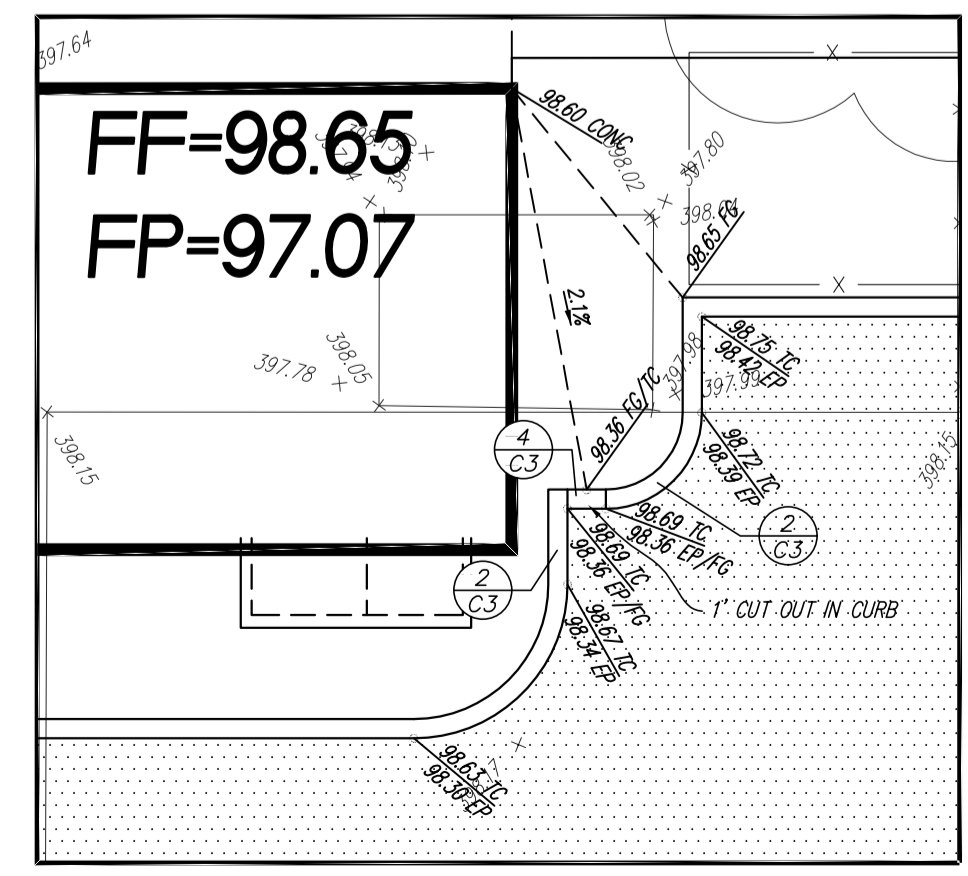
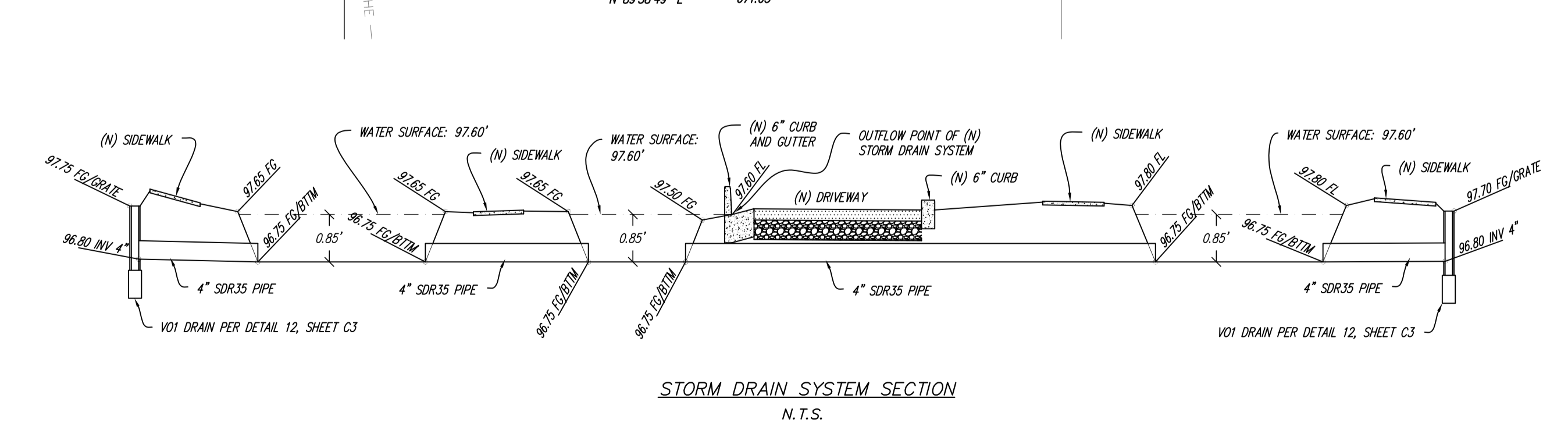
CONSTRUCTION NOTES

- (E) DRIVEWAY TO BE REMOVED AND REPLACED WITH STANDARD COMBINATION SIDEWALK + CURB AND GUTTER PER CITY OF BAKERSFIELD STANDARDS ST-1 & ST-5
- (E) CURB AND GUTTER TO BE REMOVED AND REPLACED WITH STANDARD CURB AND GUTTER TYPE "B" PER CITY OF BAKERSFIELD STANDARDS ST-1
- (E) SIDEWALK TO BE REMOVED AND REPLACED WITH STANDARD SIDEWALK PER CITY OF BAKERSFIELD STANDARDS ST-5

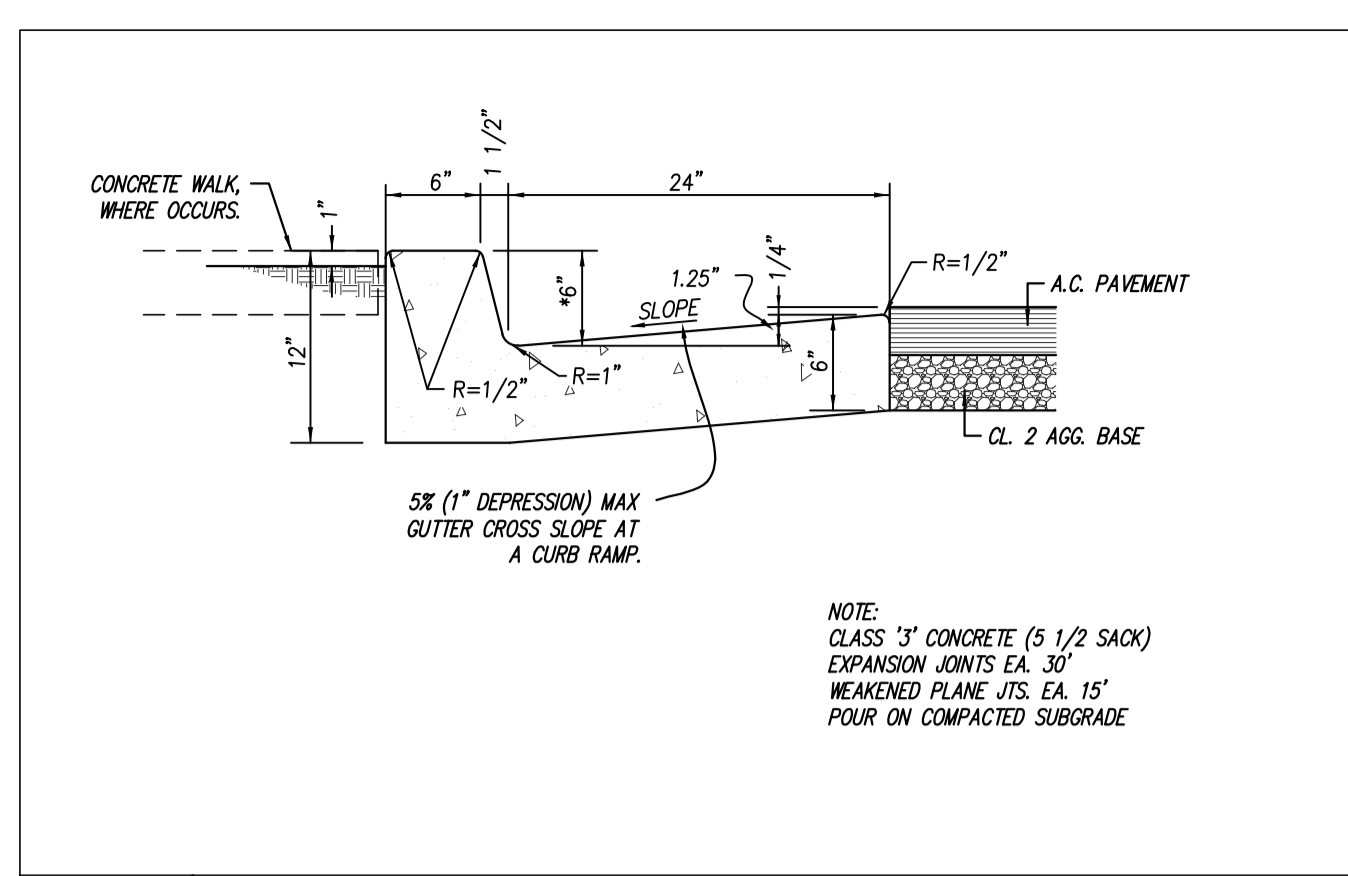
SUMP STATISTICS

VOLUME REQUIRED: 460 C.F.
 VOLUME PROVIDED:
 DETENTION BASIN #1 = 173 C.F.
 DETENTION BASIN #2 = 184 C.F.
 DETENTION BASIN #3 = 106 C.F.
 TOTAL VOLUME PROVIDED = 463 C.F.
 HIGH WATER = 97.60'
 BOTTOM ELEVATION = 96.75'

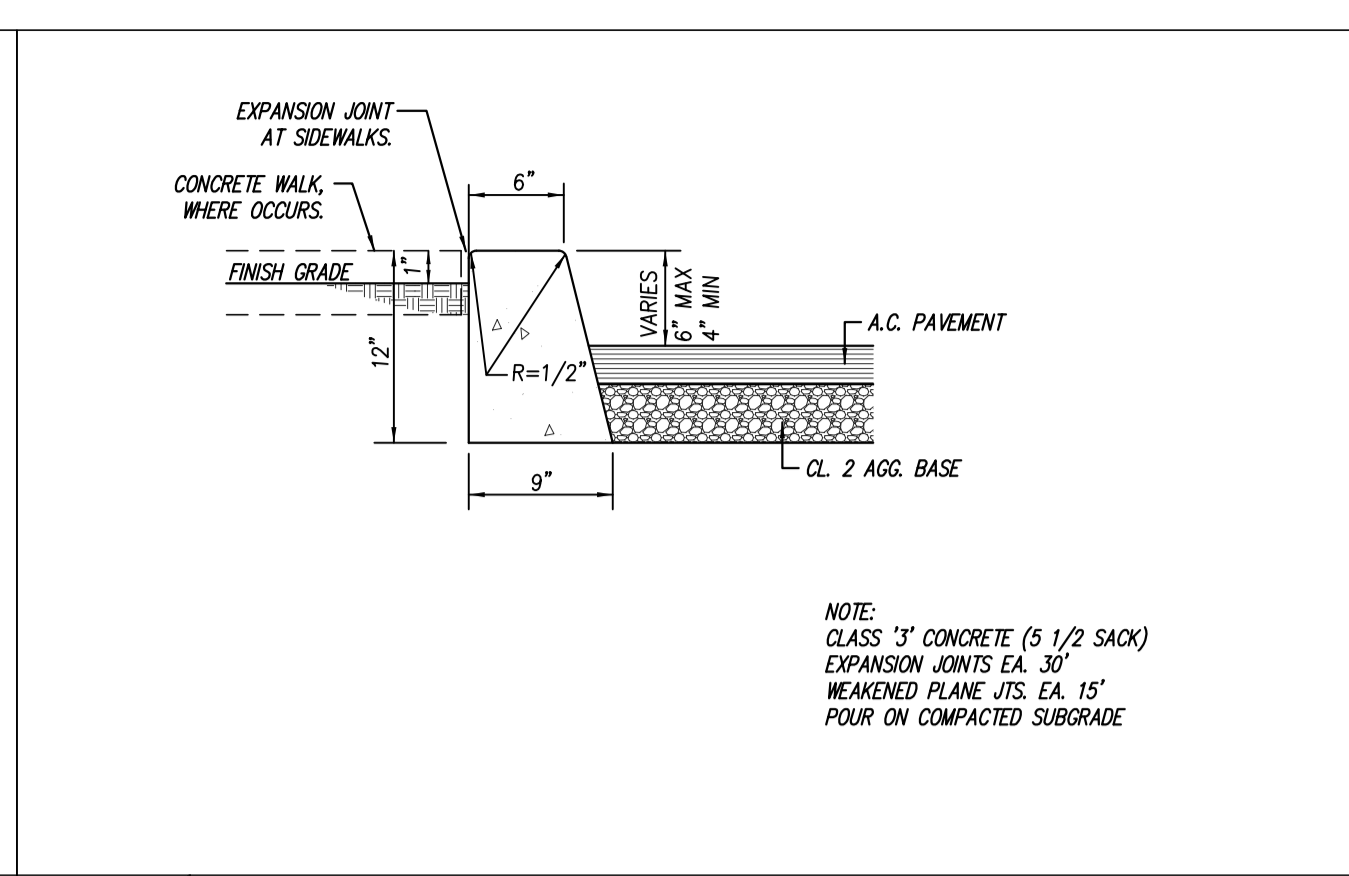
THE ONSITE STORM DRAIN SYSTEM WILL BE PRIVATELY MAINTAINED AND THE CITY OF BAKERSFIELD WILL NOT ASSUME RESPONSIBILITY OVER ITS MAINTENANCE.



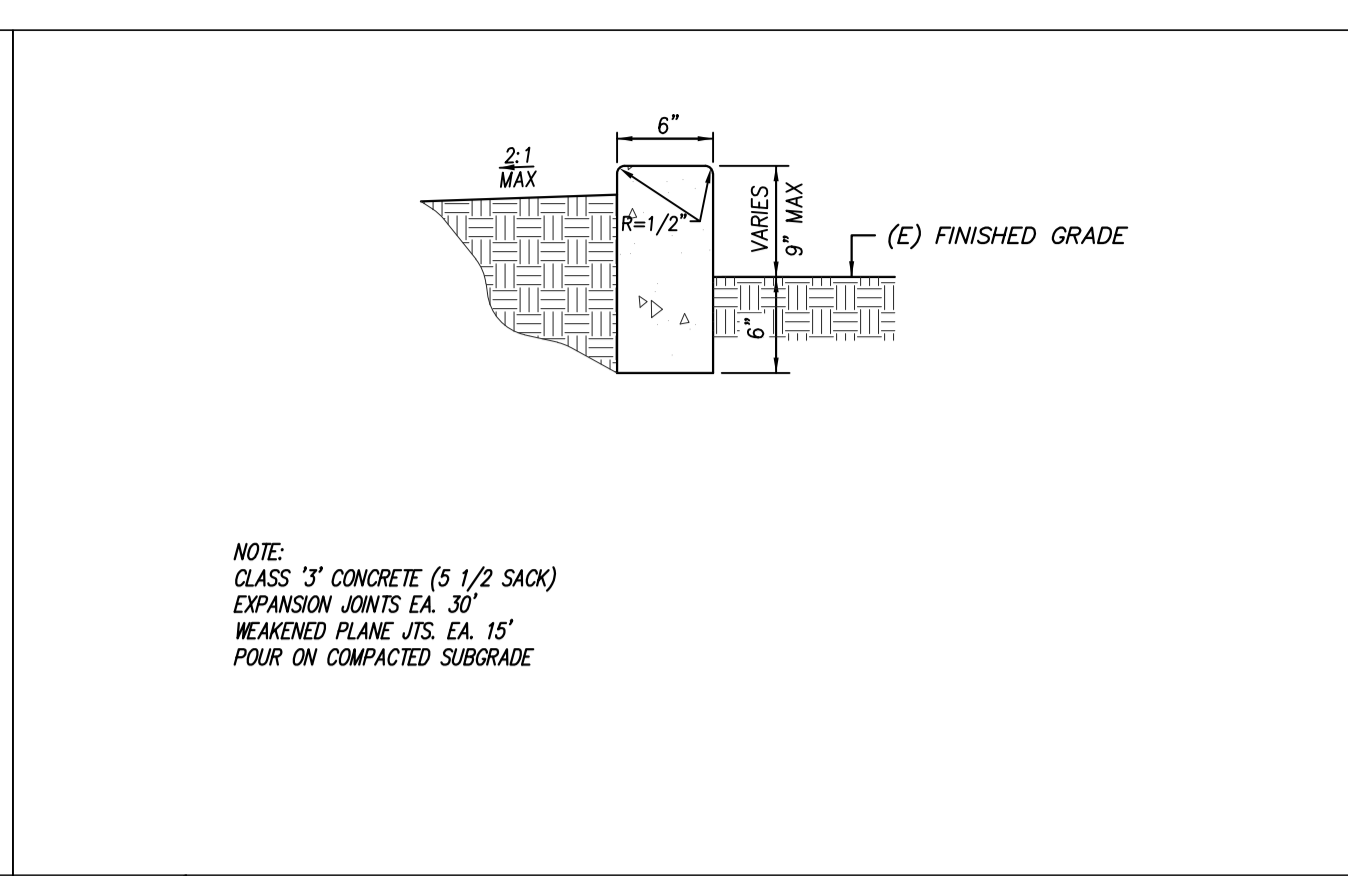
CITY RECORDS NO.:



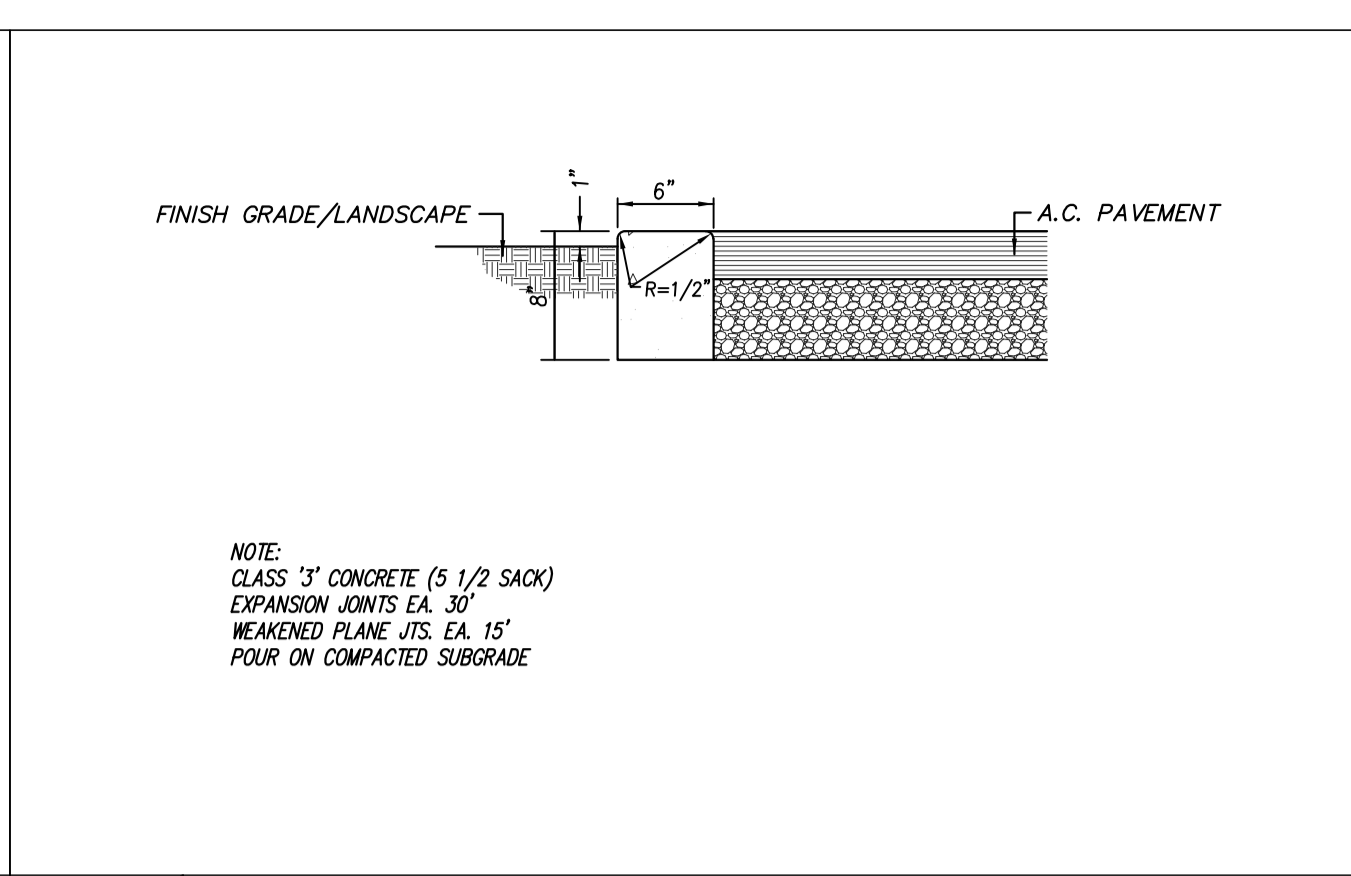
1 **C3** **6\"/>**



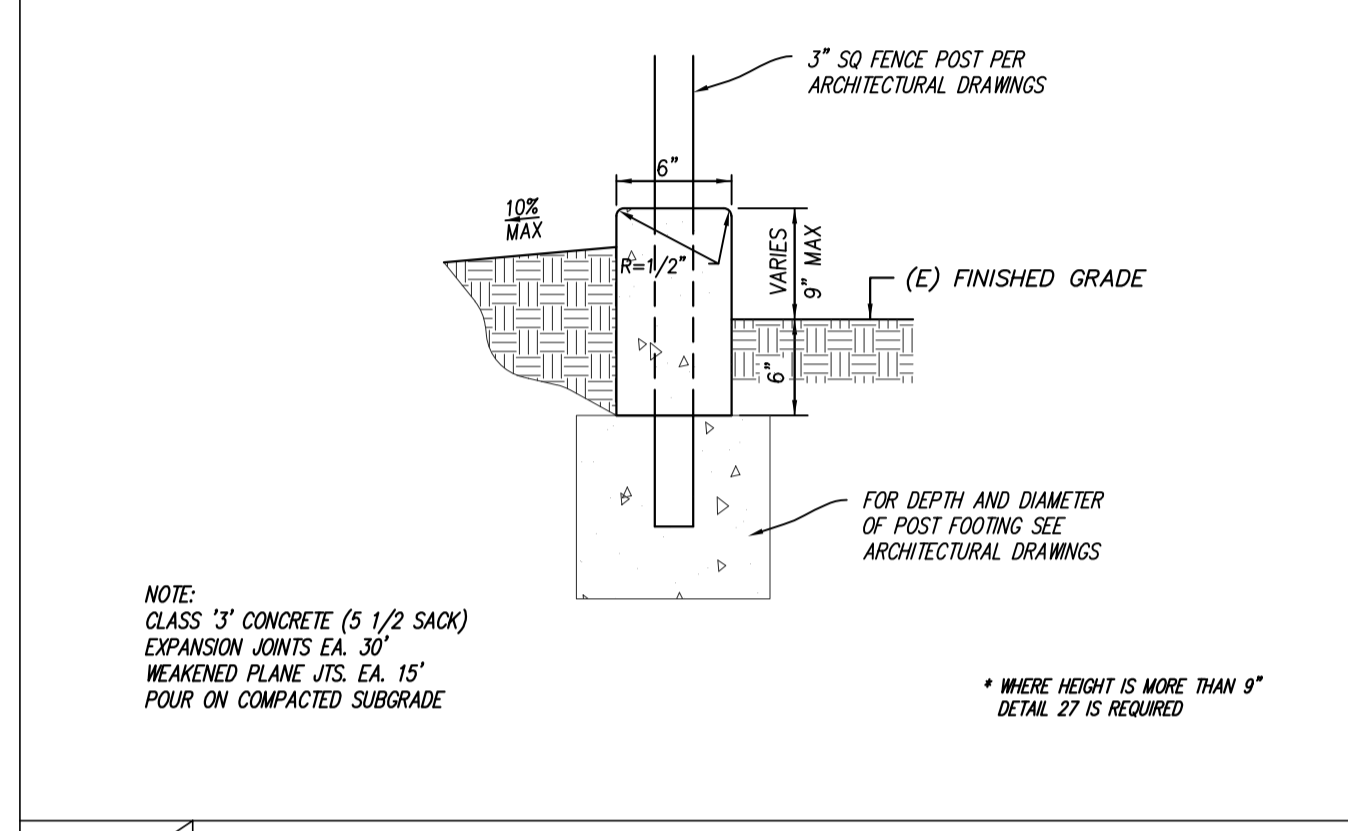
2 **C3** **VARIABLE HEIGHT CONCRETE CURB**



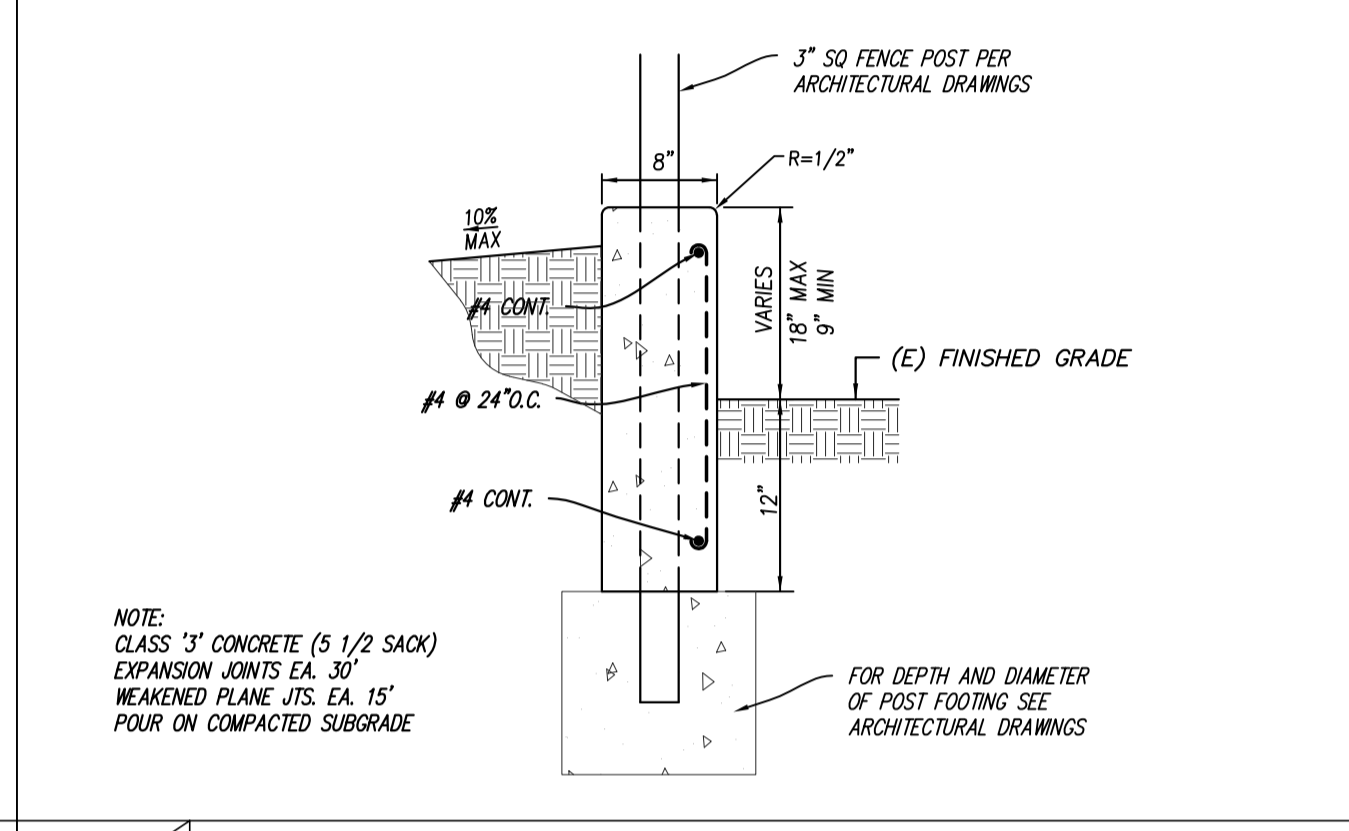
3 **C3** **LANDSCAPE CURB**



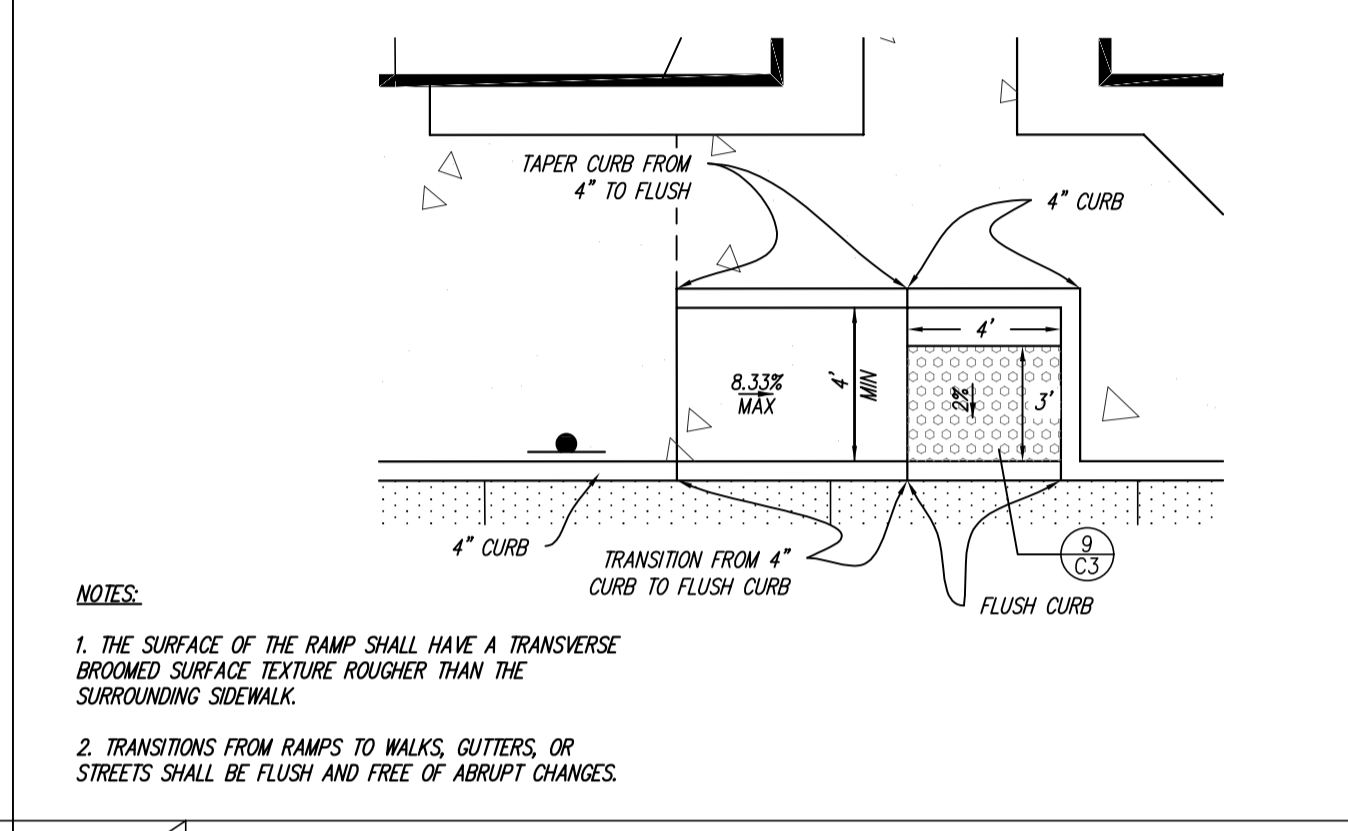
4 **C3** **FLUSH CURB**



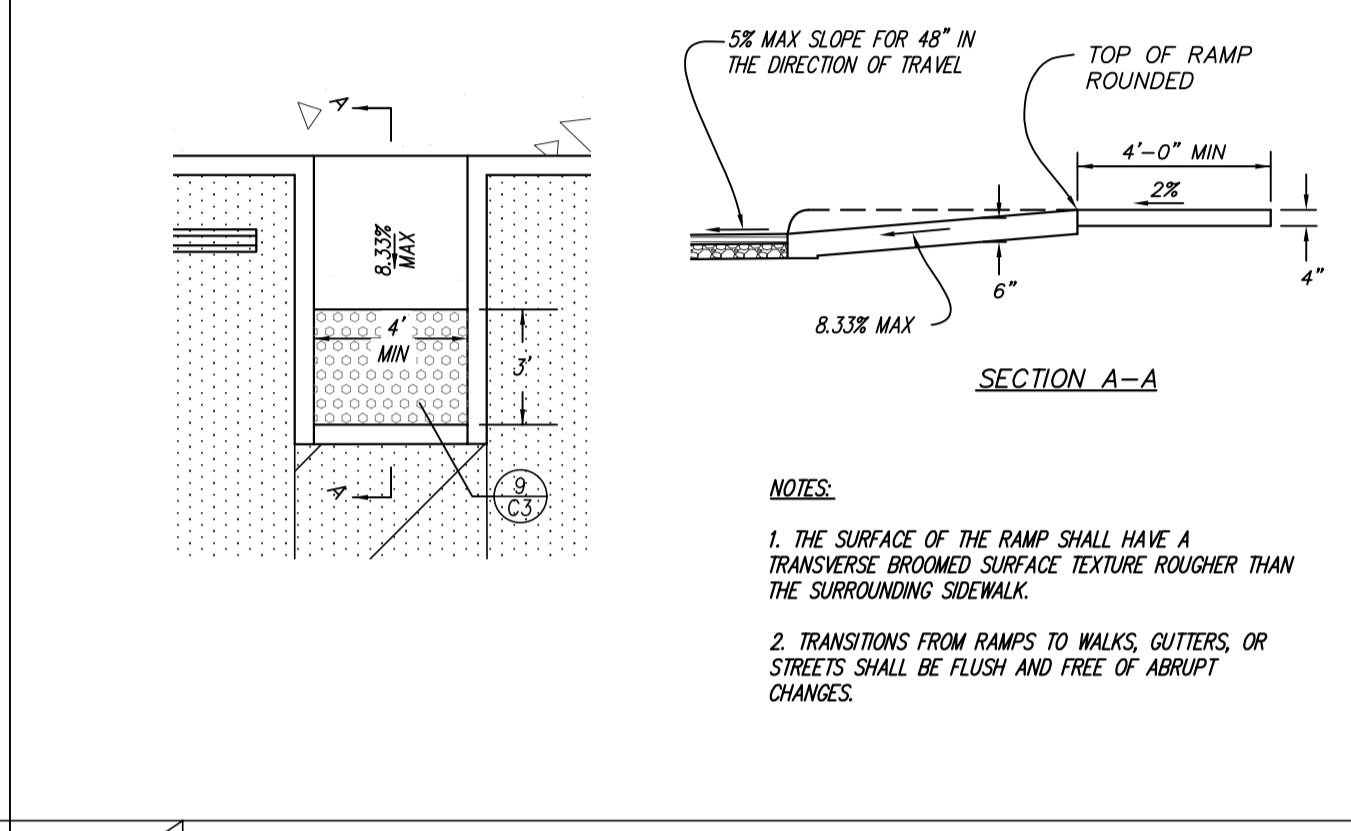
5 **C3** **PERIMETER LANDSCAPE CURB W/ FENCE < 9\"/>**



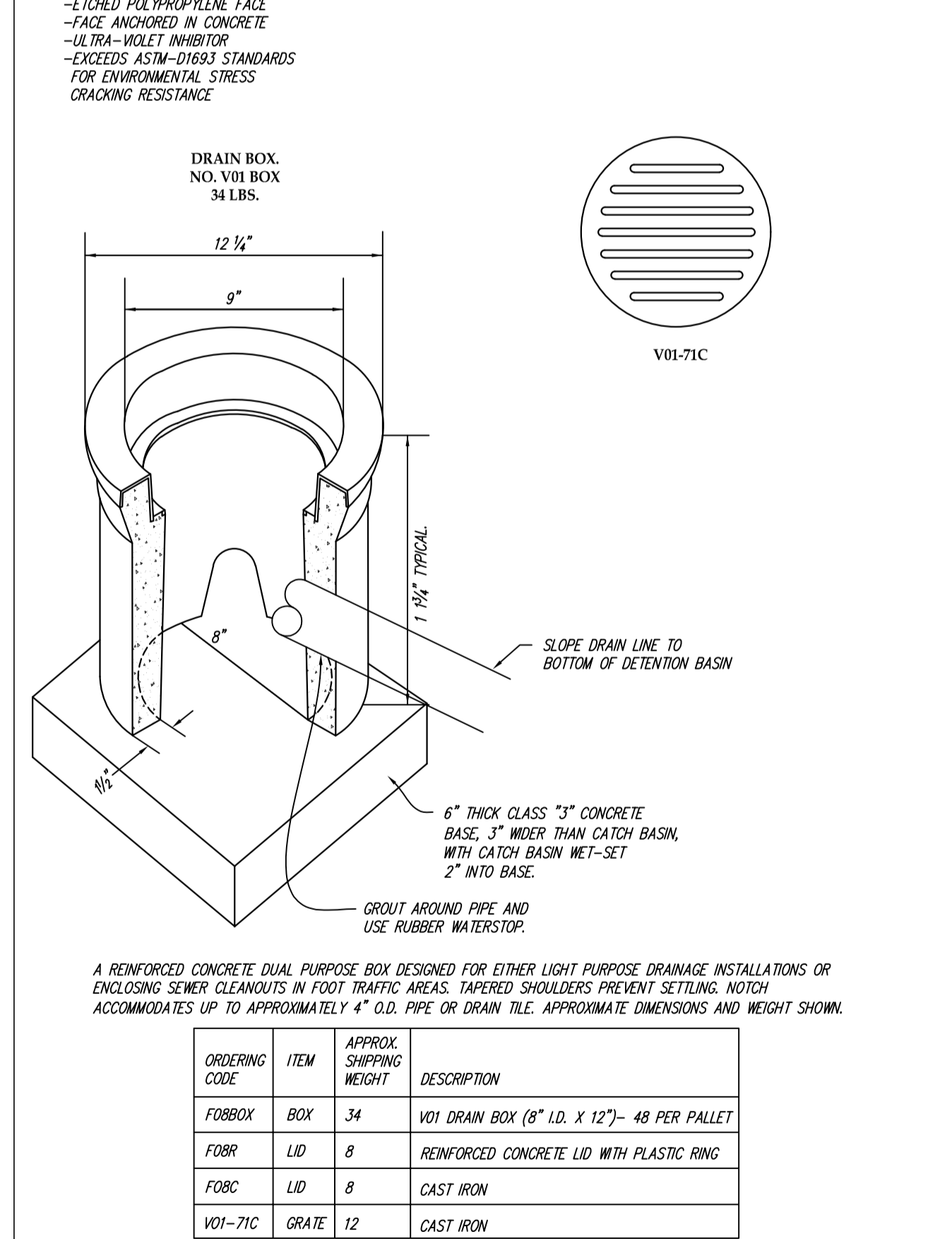
6 **C3** **PERIMETER LANDSCAPE CURB W/ FENCE > 9\"/>**



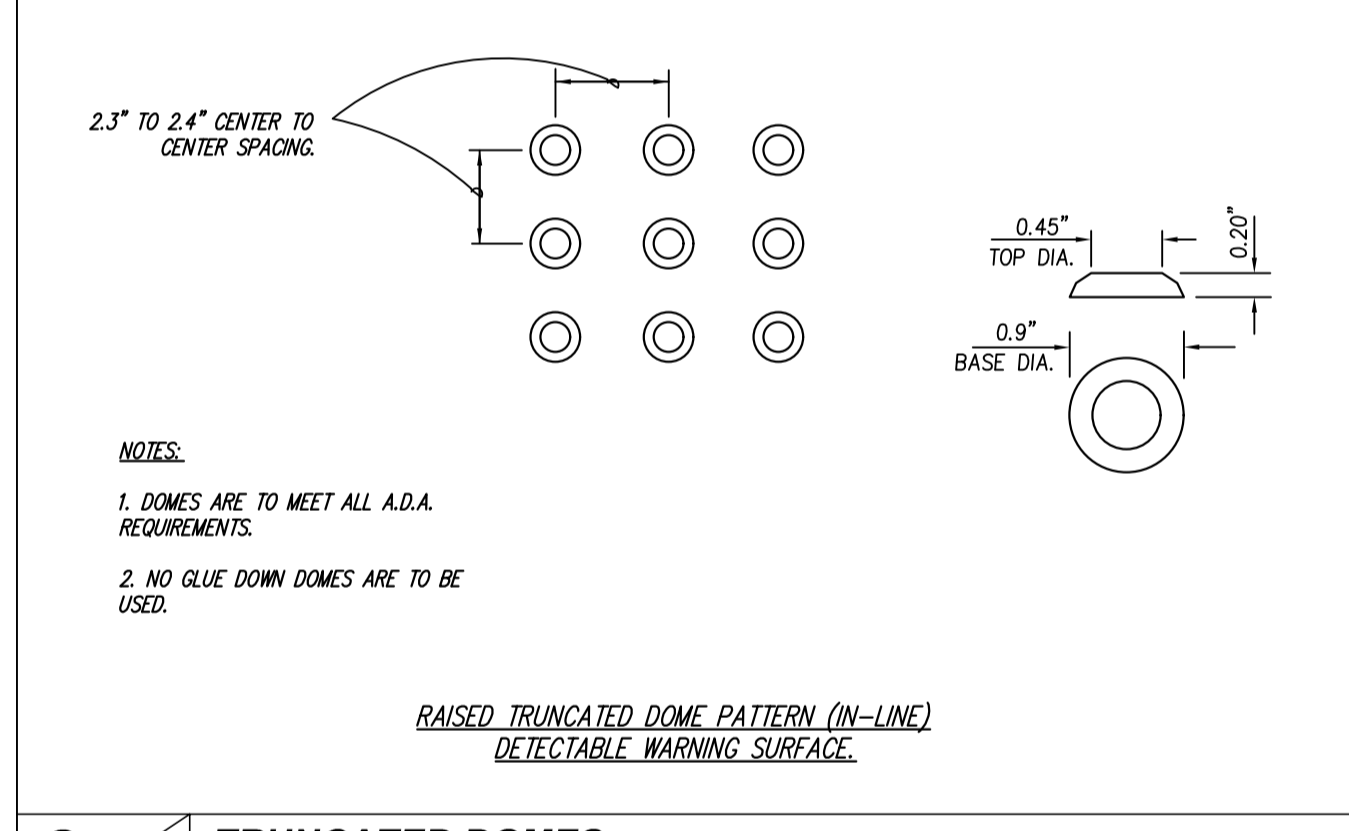
7 **C3** **ACCESSIBLE DROP-DOWN CURB RAMP**



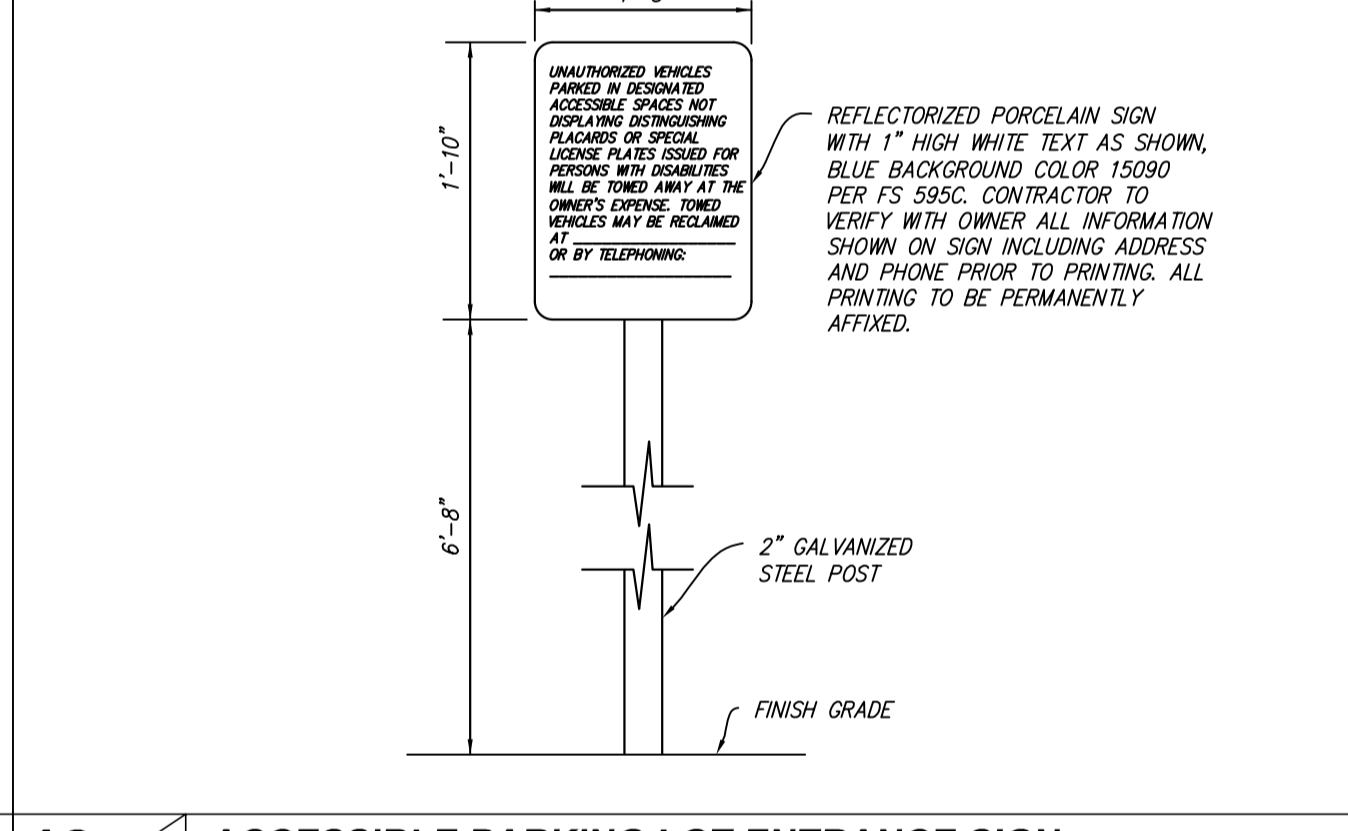
8 **C2** **ACCESSIBLE CURB RAMP**



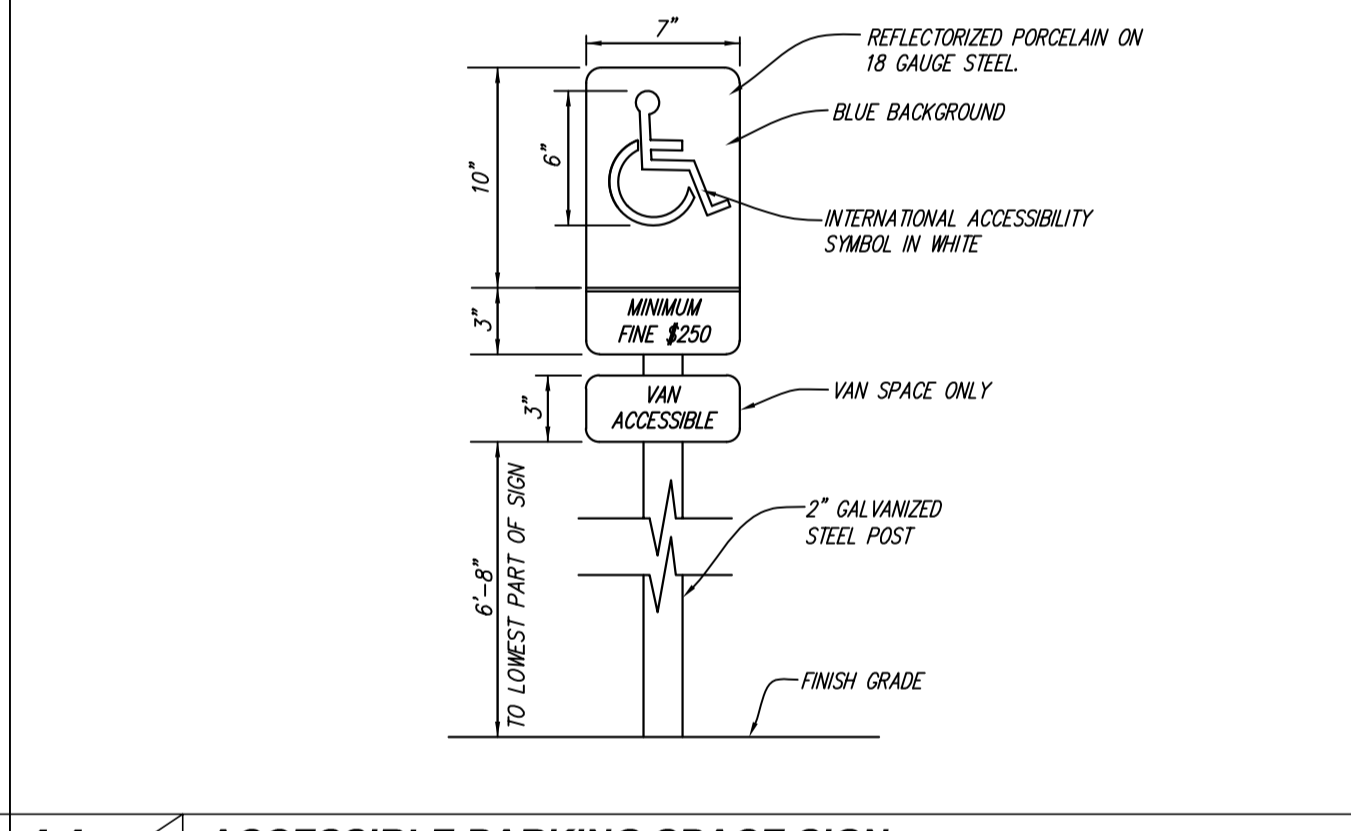
12 **C3** **VO1 BOX WITH PIPE CONNECTION AT BOTTOM**



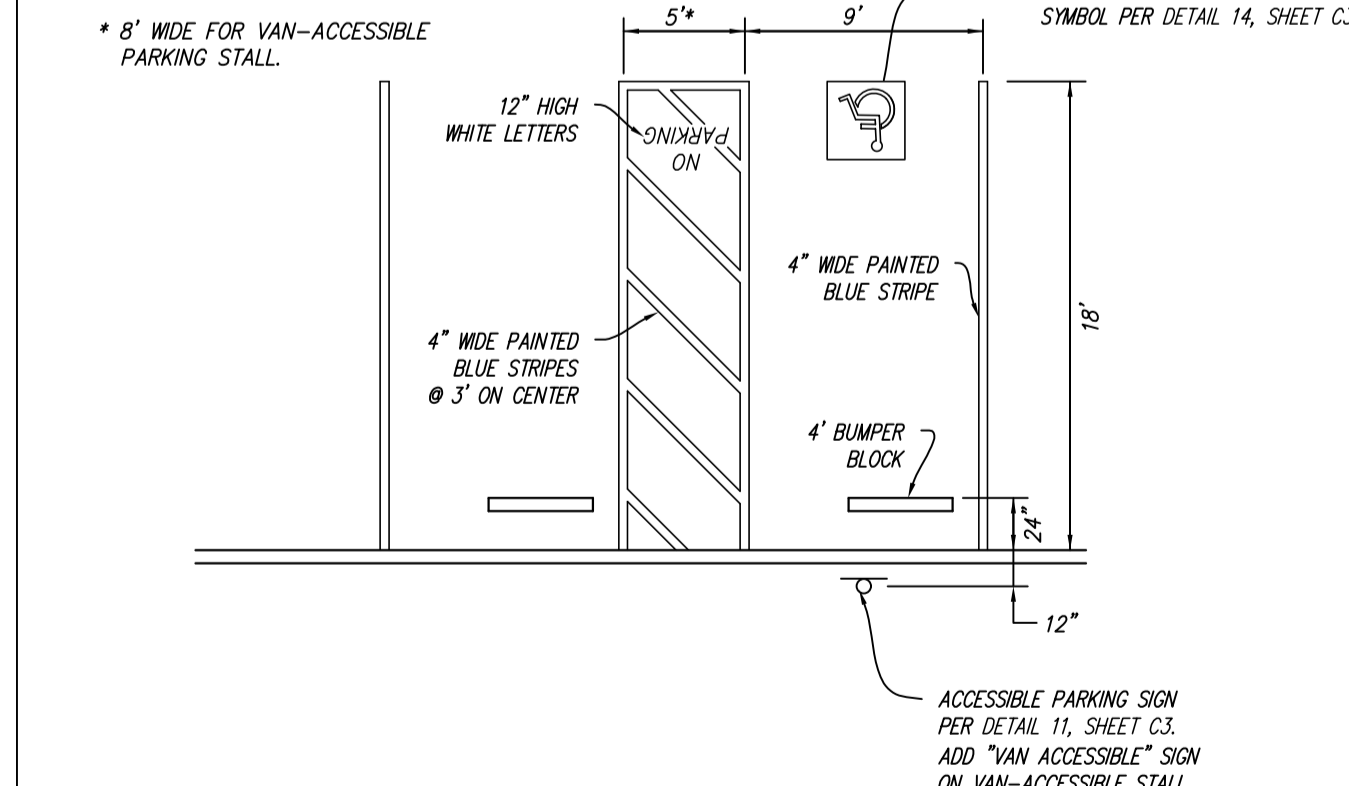
9 **C3** **TRUNCATED DOMES**



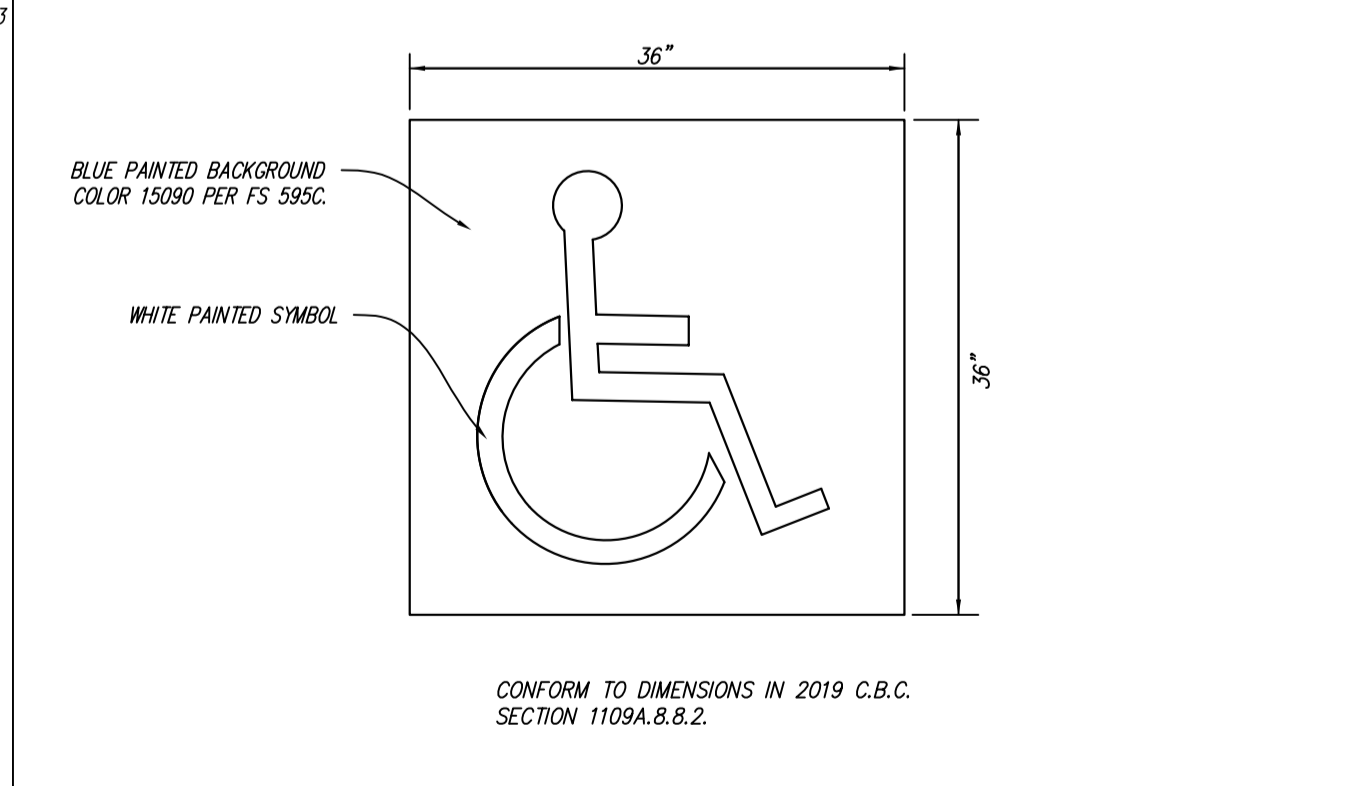
10 **C3** **ACCESSIBLE PARKING LOT ENTRANCE SIGN**



11 **C3** **ACCESSIBLE PARKING SPACE SIGN**



13 **C3** **ACCESSIBLE PARKING STALL**



14 **C3** **INTERNATIONAL ACCESSIBILITY SYMBOL**

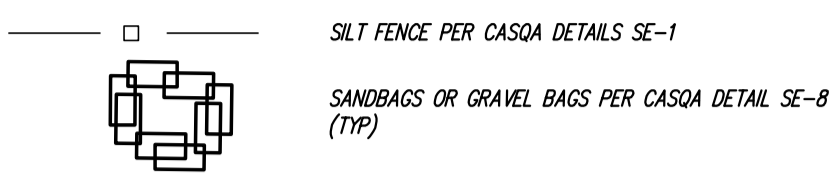
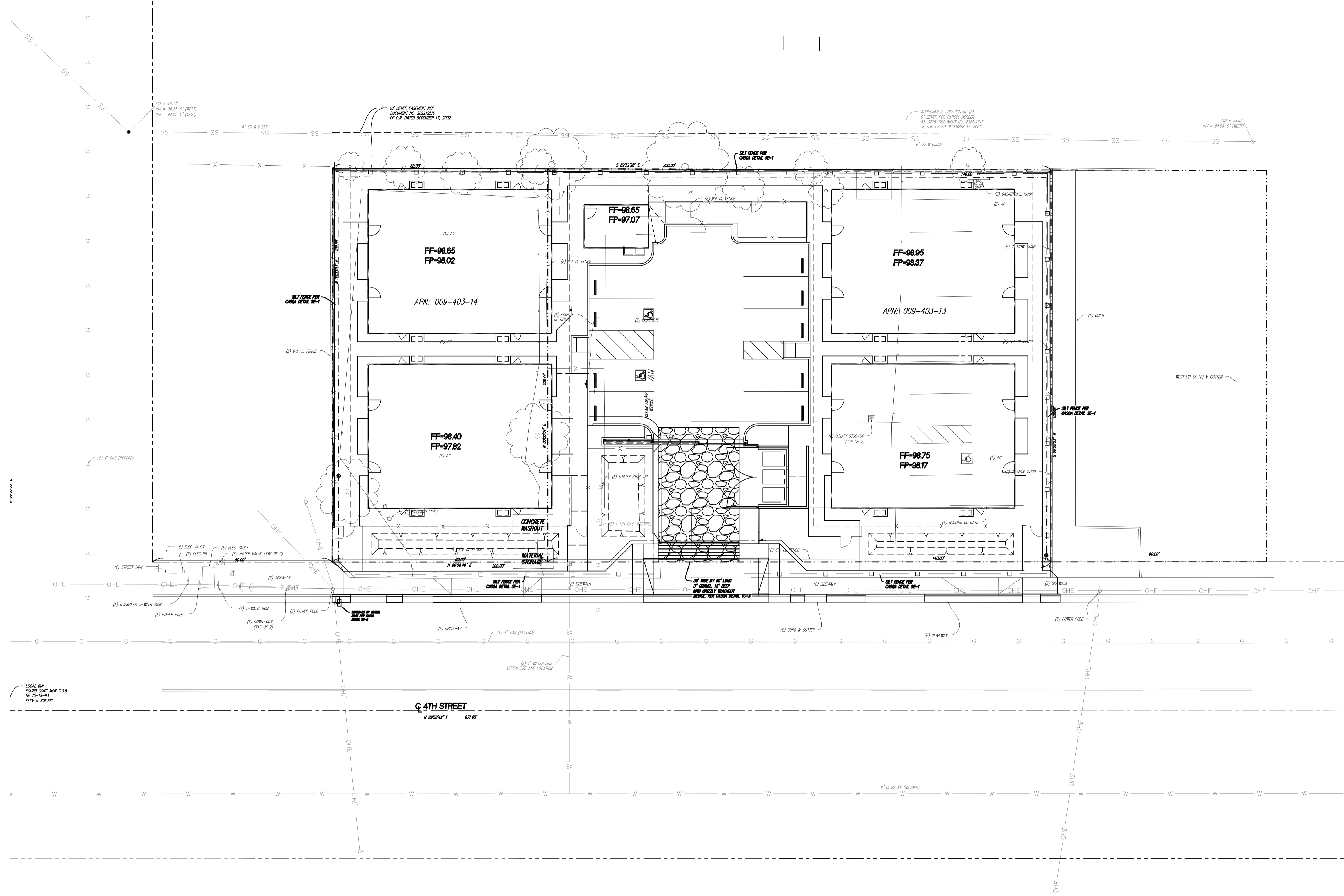
ORDERING CODE	ITEM	APPROX. SHIPPING WEIGHT	DESCRIPTION
F0BBOX	BOX	34	VO1 DRAIN BOX (8\"/>
F0BR	LID	8	REINFORCED CONCRETE LID WITH PLASTIC RING
F0BC	LID	8	CAST IRON
VO1-71C	GRATE	12	CAST IRON

SWANSON ENGINEERING, INC.
2000 Oak Street, Suite 150 - Bakersfield, CA 93301
P: (805) 831-4919; F: (805) 831-4777

REGISTERED PROFESSIONAL ENGINEER
T. SWANSON
No. 43032
Exp. 3-31-24
CALIFORNIA
STATE OF

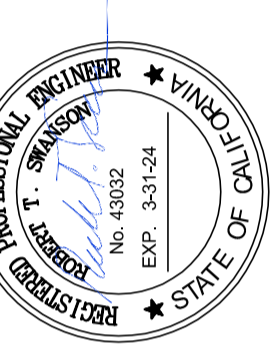
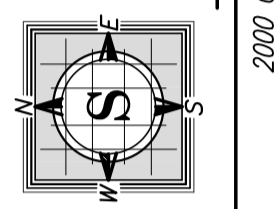
DATE	DESCRIPTION	BY

HOUSING AUTHORITY COUNTY OF KERN
610 AND 624 4TH STREET
BAKERSFIELD, CA 93304
DETAILS



- BMP NOTES:**
1. NON-STORM WATER DISCHARGES ARE PROHIBITED FROM ENTERING ANY STORM DRAIN SYSTEM.
 2. POLLUTANTS SHALL BE REMOVED FROM STORM WATER DISCHARGES TO THE MAXIMUM EXTENT PRACTICAL.
 3. PORTABLE SANITARY FACILITIES SHALL BE LOCATED ON RELATIVELY LEVEL GROUND AWAY FROM TRAFFIC AREAS, DRAINAGE COURSES, AND STORM DRAIN INLETS.
 4. EMPLOYEES, SUBCONTRACTORS AND SUPPLIERS SHALL BE EDUCATED ON ALL BMPs, INCLUDING CONCRETE WASTE STORAGE AND DISPOSAL PROCEDURES.
 5. SEDIMENT CONTROL PRACTICES SHALL EFFECTIVELY PREVENT A NET INCREASE OF SEDIMENT LOAD IN STORM WATER DISCHARGE.
 6. WATER SITE IN COMPLIANCE W/ CASQA ME-1.
 7. SWEEP STREET DAILY IN COMPLIANCE W/ CASQA SE-7.

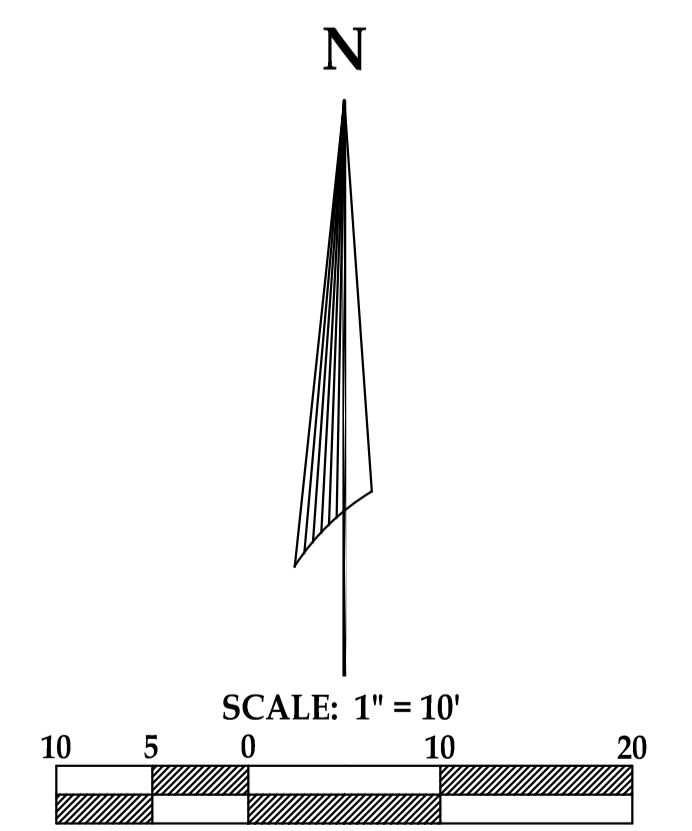
SWANSON ENGINEERING, INC.



2000 Oak Street, Suite 150 - Bakersfield, CA 93301
P: (805) 831-6919; F: (805) 831-4777

DATE	DESCRIPTION	BY

JOB NO.: 22-002 DATE: 05-10-2023 ENGINEER: BTC



6.9-445
CITY RECORDS NO.:

HOUSING AUTHORITY COUNTY OF KERN
610 AND 624 4TH STREET
BAKERSFIELD, CA 93304
BMP PLAN

Monday, June 19, 2023 3:17:12 PM 22-002_C01_4TH STREET_P1.DWG

WATER NOTES:

1. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE CALIFORNIA WATER COMPANY'S CURRENT STANDARDS AND SPECIFICATIONS FOR DOMESTIC WATER SYSTEMS.
2. CONNECTION TO CALIFORNIA WATER COMPANY WATER SYSTEM SHALL NOT BE ALLOWED AND INSPECTIONS WILL NOT OCCUR WITHOUT VERIFICATION OF PAYMENT OF ALL ASSOCIATED WATER AVAILABILITY FEES, INSPECTION/METER SET FEES, AND APPROVAL OF WATER PLANS BY THE WATER RESOURCES DEPARTMENT.
3. BACKFILL AND COMPACTION OF TRENCHES SHALL BE IN ACCORDANCE WITH CAL WATER.
4. WATERLINE TRENCHES SHALL NOT BE SHARED WITH ANY OTHER UTILITY. THIS REQUIREMENT SHALL BE CLEARLY INDICATED ON THE WATER AND UTILITY PLANS BY THE DEVELOPER.
5. CONTRACTOR SHALL VERIFY, BY POTHOLES, THE EXACT LOCATION OF ALL CONNECTION POINTS AND ALL OTHER UTILITIES OR APPURTENANCES THAT MAY POTENTIALLY INTERFERE WITH INSTALLATION OF WATER IMPROVEMENTS PRIOR TO PERFORMING ANY WORK.
6. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (811) AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, 1-800-227-2600.
7. CONTRACTOR SHALL NOTIFY CALIFORNIA WATER SERVICE COMPANY AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION, 661-837-7200.
8. CONTRACTOR SHALL ENSURE THAT ALL FIRE HYDRANTS ARE NOT PLACED WITHIN FIVE FEET OF ANY EXISTING OR PROPOSED WALLS, FENCES, STREET LIGHTS, AND LANDSCAPING OR ANY OTHER OBSTRUCTIONS.
9. ANY EXISTING OR PROPOSED TREE SHALL HAVE A MINIMUM OF FIVE FOOT (5') HORIZONTAL CLEARANCE FROM ANY WATER MAINLINE.
10. CONTRACTOR SHALL INSTALL WHARF HYDRANTS AT PHASE BOUNDARIES IF ADDING PHASES ARE NOT YET CONSTRUCTED. UPON EXTENSION OF WATER LINE, WHARF HYDRANTS SHALL BE REMOVED AND RELOCATED TO THE NEXT PHASE BOUNDARY.
11. CONTRACTOR IS RESPONSIBLE TO INSTALL METER BOXES. CALIFORNIA WATER COMPANY WILL INSTALL METERS THROUGH REQUEST OF OWNER/CONTRACTOR.
12. ALL EXISTING WATER VALVES SHALL BE OPERATED SOLELY BY AUTHORIZED CALIFORNIA WATER COMPANY PERSONNEL OR ITS REPRESENTATIVE AGENTS.

CITY OF BAKERSFIELD FIRE WATER NOTES:

1. FIRE WATER SERVICES SHALL CONFORM TO THE LATEST N.F.P.A. CHAPTER 13 SPECIFICATIONS AND SHALL BE INSPECTED AND PRESSURE TESTED BY CITY OF BAKERSFIELD WATER RESOURCES DEPARTMENT INCLUDING ALL PIPING, THRUST BLOCKS, AND CONNECTIONS FROM THE CITY WATER MAIN TO THE BUILDING, INCLUDING THE RISER.
2. FIRE SERVICE INSPECTION FEES MUST BE PAID TO WATER RESOURCES BEFORE ANY INSPECTIONS MAY BE SCHEDULED (SEE CURRENT FEE SCHEDULE ON WATER RESOURCES WEBSITE).
3. AN INSPECTION REQUEST FORM SHALL BE SUBMITTED TO THE WATER RESOURCES OFFICE AT LEAST TWO (2) FULL BUSINESS DAYS BEFORE ANY PERMANENT CONSTRUCTION. REQUEST FORMS AVAILABLE ON THE WATER RESOURCES WEB PAGE.
4. ALL ANGLE POINTS SHALL HAVE CONCRETE THRUST BLOCKS AS PER WATER RESOURCES STANDARDS.
5. FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED ON THE ADDRESS SIDE OF THE STRUCTURE AND SHALL BE A MAXIMUM DISTANCE OF 10 FEET FROM FLOWLINE OF CURB & GUTTER AND A MAXIMUM DISTANCE OF 100 FEET FROM A PUBLIC FIRE HYDRANT. FIRE HYDRANT SHALL HAVE A MINIMUM CLEARANCE OF 40 FEET FROM ANY STRUCTURE.
6. FIRE SERVICE SHALL NOT PASS THROUGH ANY FOOTINGS.
7. ANY FLOOR OR WALL PENETRATIONS SHALL BE SLEEVED WITH AN UNMODIFIED ONE PIECE PIPE TO PROVIDE A MINIMUM ANNUAL CLEARANCE OF 2" AND FLEXIBLE MATERIAL SHALL BE PROVIDED WITHIN THE ANGULAR SPACE.
8. RISERS CONSTRUCTED WITHIN A BUILDING FOOTPRINT SHALL BE A STAINLESS STEEL ONE PIECE UNIT AND SHALL MAINTAIN A ONE FOOT MINIMUM CLEARANCE (18" MAX) FROM ALL WALLS. RISER SHALL TERMINATE 12" MINIMUM ABOVE FINISH FLOOR.
9. FIRE SERVICE SHALL BE TESTED BY CONTRACTOR AND DOCUMENTED BY THE WATER RESOURCES DEPARTMENT TO PASS A 200 PSI, 2HR TEST.

SEWER NOTES:

GENERAL

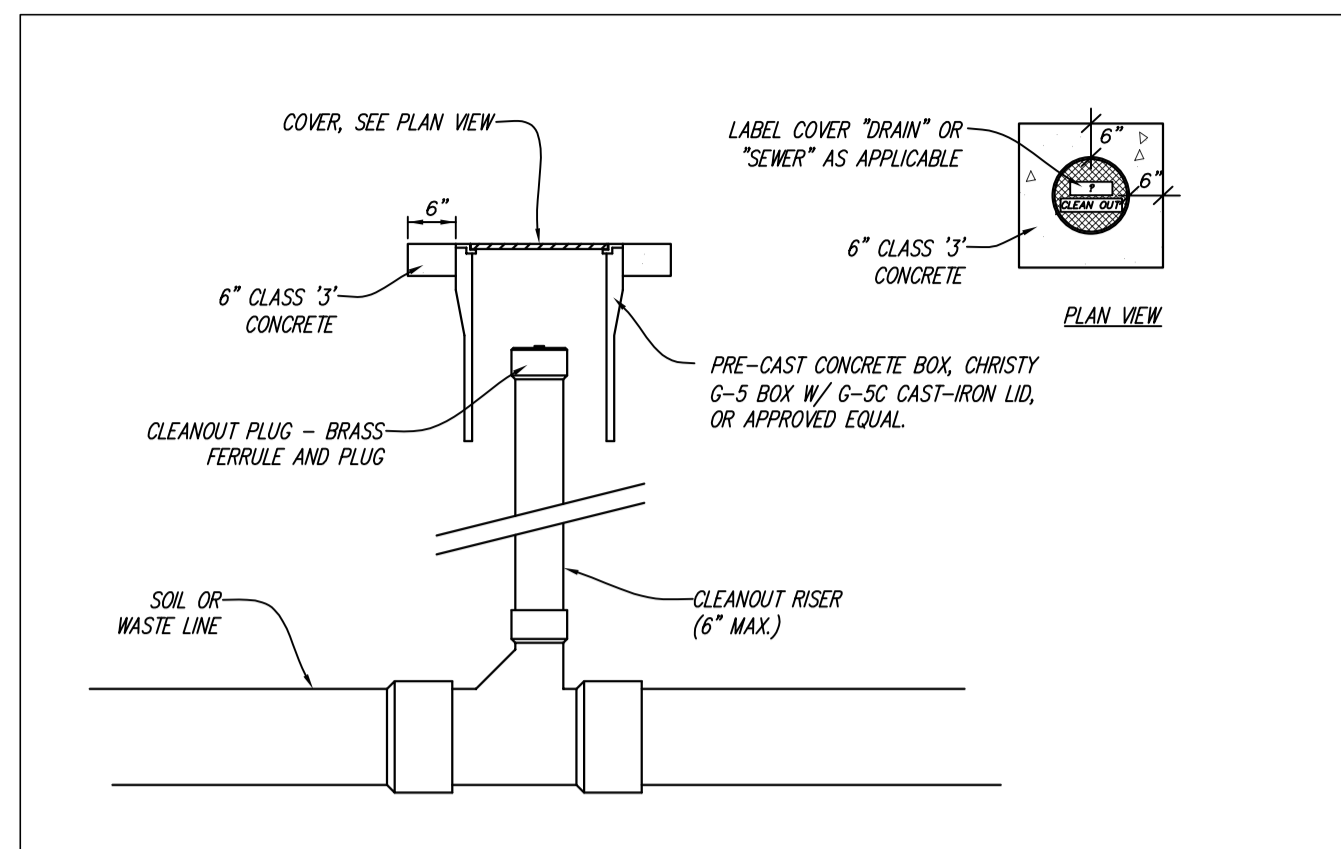
1. CONTRACTOR WILL FURNISH ALL MATERIALS, TOOLS, LABOR, EQUIPMENT, AND SUPERVISION NECESSARY TO COMPLETE INSTALLATION.
1. MATERIALS - PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF THE CURRENT ASTM SPECIFICATION D-3034 FOR SDR33 PVC. PIPE AND FITTINGS SHALL BE HOMOGENEOUS THROUGHOUT AND FREE FROM CRACKS, HOLES, FOREIGN INCLUSIONS, OR OTHER INJURIOUS DEFECTS.
2. JOINTS - USE ONLY ELASTOMERIC GASKET JOINTS. THE ASSEMBLY OF JOINTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE PVC PIPE CONNECTS TO VCP PIPE, USE ONLY COUPLINGS APPROVED BY THE CITY OF BAKERSFIELD.
3. INSTALLATION - PIPE AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT ASTM SPECIFICATION D-2321. ONLY CLASS I AND II EMBEDMENT MATERIALS WILL BE CONSIDERED SUITABLE.

SYSTEM TESTING

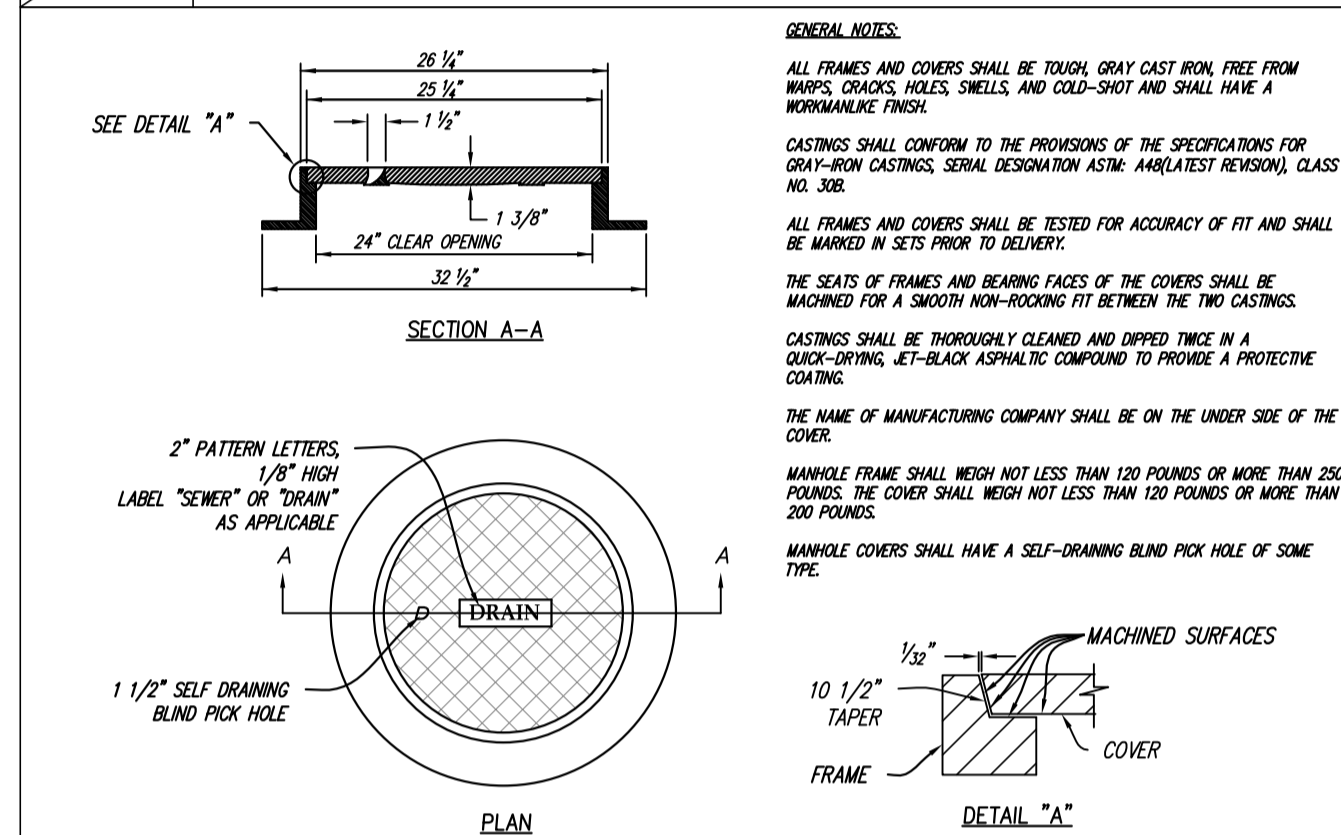
1. A PRESSURE TEST SHALL BE PERFORMED ON INSTALLED PIPE IN ACCORDANCE WITH THE CITY OF BAKERSFIELD SUBDIVISION DESIGN MANUAL AND THE RECOMMENDATIONS OF THE MANUFACTURER.

MISCELLANEOUS

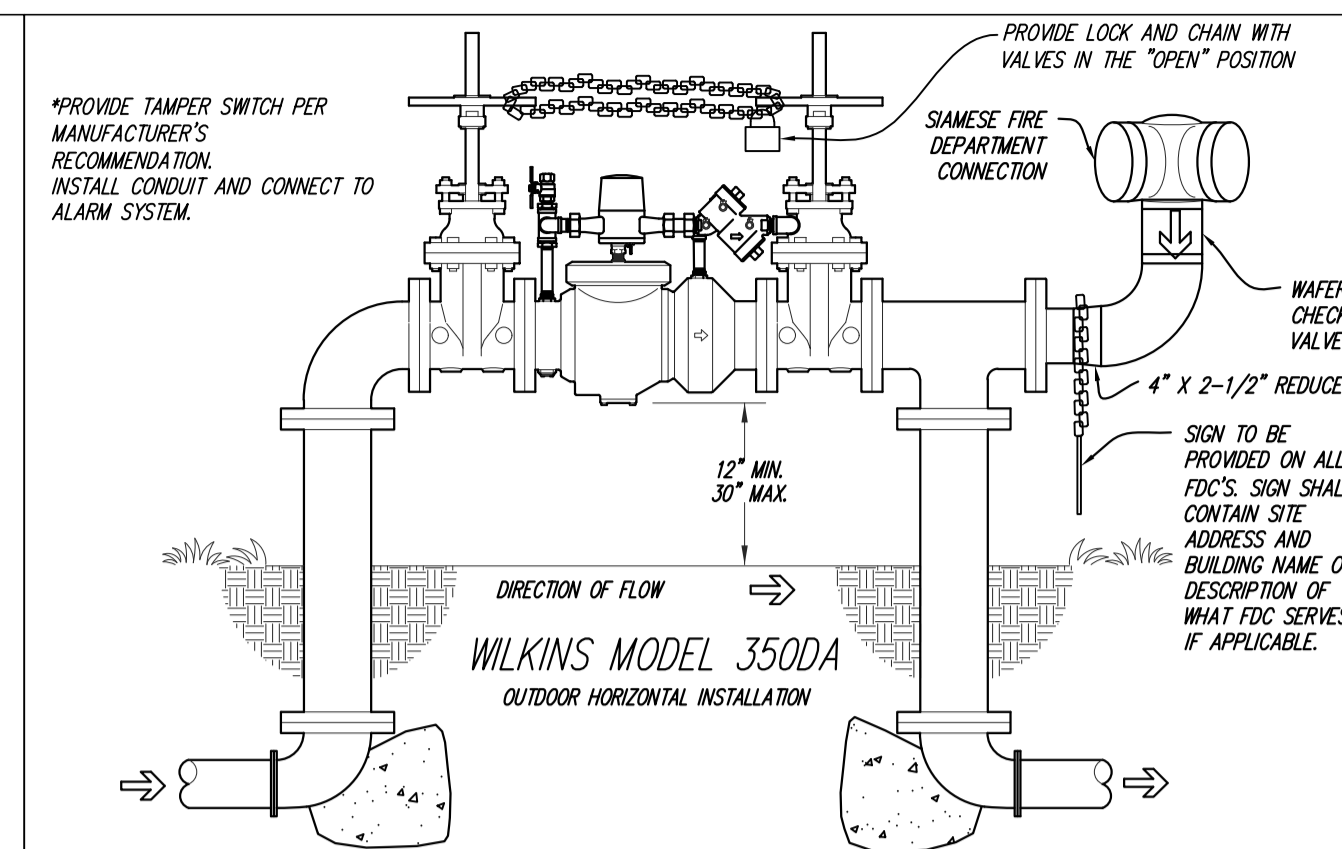
1. WYE FITTINGS SHALL BE INJECTION MOLDED IN-LINE TYPE AND SHALL BE USED FOR ALL LATERAL CONNECTIONS.
2. ALL SEWER STUBS SHALL BE CLOSED WITH A STANDARD PLASTIC PLUG, SOLVENT WELDED.
3. WATER LETTING AND FLOODING SHALL NOT BE USED FOR BACKFILL COMPACTION.
4. UNDERGROUND SERVICE ALERT (USA) SHALL BE NOTIFIED AT LEAST 2 WORKING DAYS BEFORE CONSTRUCTION. TELEPHONE (1-800-642-2444)
5. CONTRACTOR TO CALL FOR USA LOCATE AND POT HOLE ALL MARKED UTILITIES THAT CROSS OR ARE WITHIN 5' HORIZONTAL DISTANCE OF SEWER AND STORM DRAIN LINES. VERTICAL AND HORIZONTAL LOCATION SHALL BE ASCERTAINED BY THE CONTRACTOR AHEAD OF ANY EXCAVATIONS TO VERIFY THAT THE PROPOSED DESIGN DOES NOT CONFLICT WITH ANY UTILITIES. IN THE EVENT A CONFLICT EXISTS THE ENGINEER SHALL BE NOTIFIED IN ORDER TO REDESIGN THE ALIGNMENT. IF RELOCATION OF EXISTING UTILITIES IS DEEMED NECESSARY, THE CONTRACTOR SHALL BE COMPENSATED FOR INSTRUCTED RELOCATION. IF REDESIGN OF THE ALIGNMENT REQUIRES ADDITIONAL FITTINGS, PIPE, OR EXCAVATION THE CONTRACTOR SHALL BE COMPENSATED FOR REVISION. IN THE EVENT A UTILITY IS DAMAGED, THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ITS REPAIR.
6. CONTRACTOR SHALL VERIFY LOCATIONS AND ELEVATIONS OF EXISTING SEWER AND STORM DRAIN LINES THAT THE NEW SYSTEM TIES INTO PRIOR TO TRENCHING. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER SO THAT ANY NECESSARY ADJUSTMENTS MAY BE MADE. UTILITIES SHALL BE THOROUGHLY RESEARCHED AND LOCATED BY THE CONTRACTOR PRIOR TO TRENCHING. CROSSING UTILITIES SHALL BE DAYLIGHTED AND CHECKED FOR GRADE BY THE CONTRACTOR PRIOR TO TRENCHING.



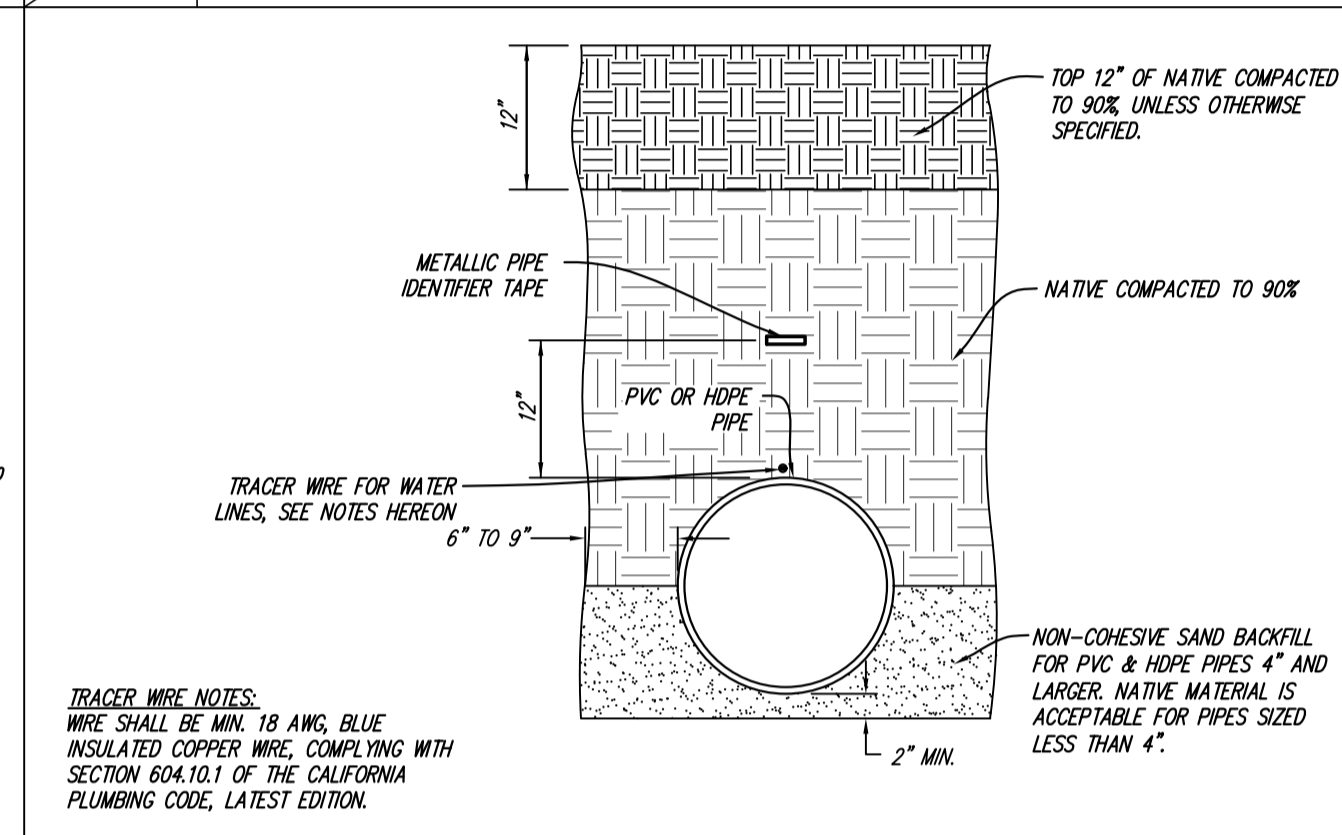
1 C6 CLEANOUT TO GRADE



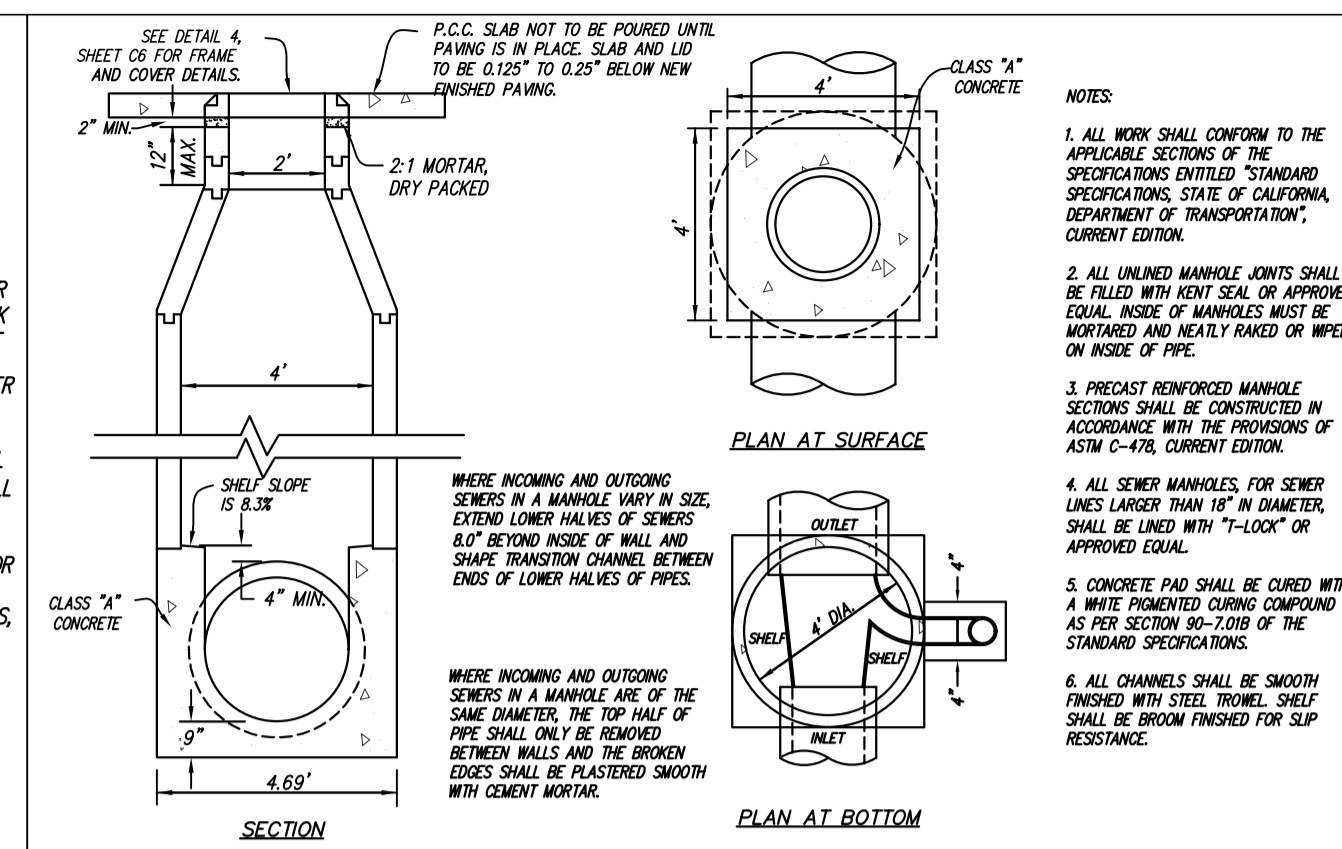
4 C6 MANHOLE FRAME AND COVER



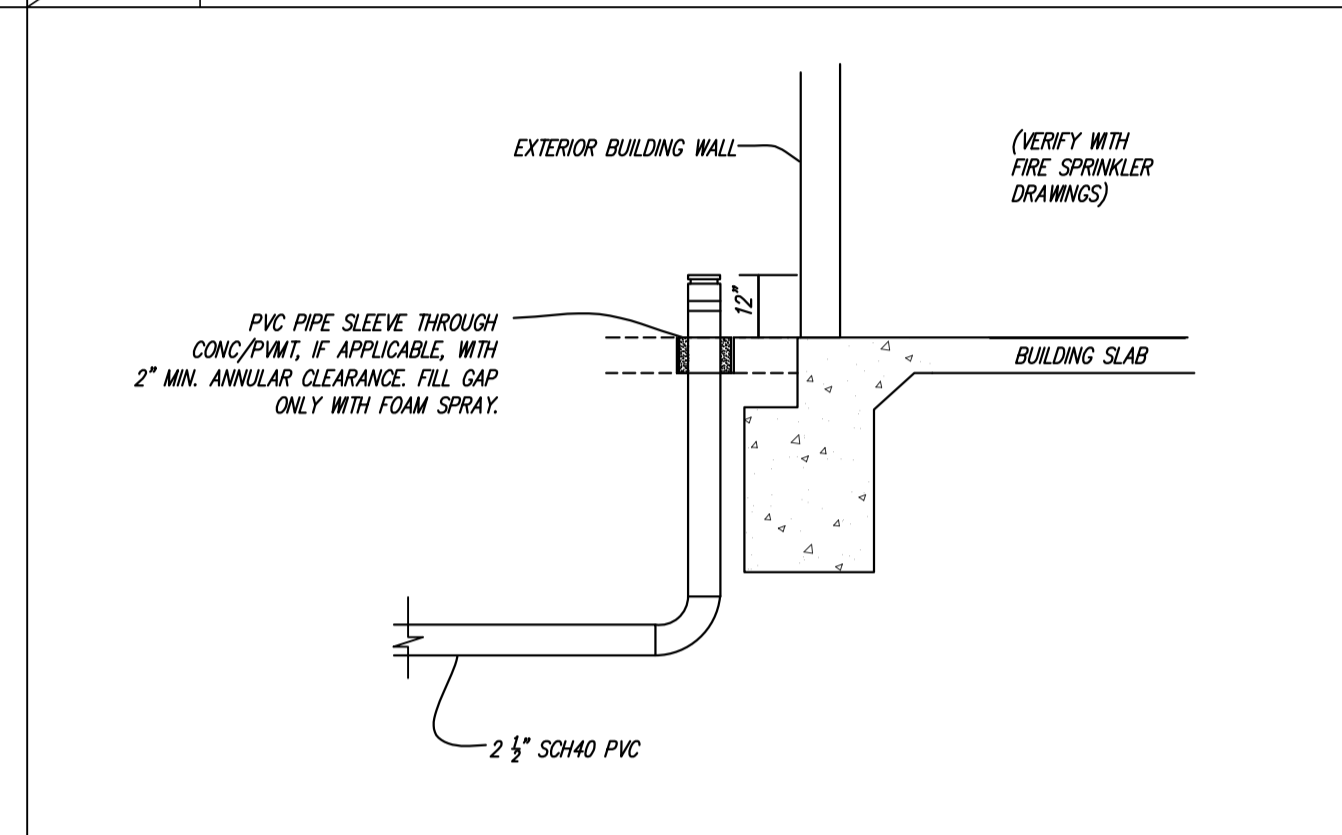
2 C6 DOUBLE DETECTOR CHECK ASSEMBLY



5 C6 PVC/HDPE TRENCH DETAIL

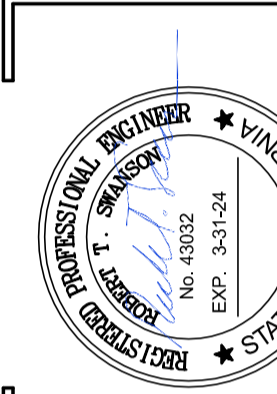
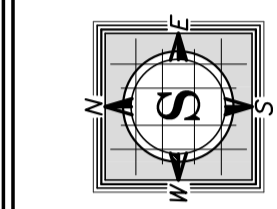


3 C6 STD. MANHOLE - TYPE 'A'



6 C6 FIRE SPRINKLER RISER - EXTERIOR

SWANSON ENGINEERING, INC.



DATE:	DESCRIPTION:

HOUSING AUTHORITY COUNTY OF KERN
610 AND 624 4TH STREET
BAKERSFIELD, CA 93304
UTILITY DETAILS

22-002 C01 4TH STREET R.T.D.W.G.
Monday, June 19, 2023 3:18:20 PM
JOB NO.: 22-002 DATE: 05-10-2023 ENGINEER: BTC

6.9-445
CITY RECORDS NO.:

C7
SHEET 7 OF 7