

**FINAL ENGINEERING PLANS
FOR
SUMMIT HOUSING GROUP - MULTIFAMILY SITE**

TRACT A, BLOCK 3

LYONS VALLEY PARK FILING NO. 8

LOCATED IN THE NW 1/4 OF SECTION 20

TOWNSHIP 3 NORTH, RANGE 70 WEST OF THE 6TH P.M.

TOWN OF LYONS, COUNTY OF BOULDER, STATE OF COLORADO

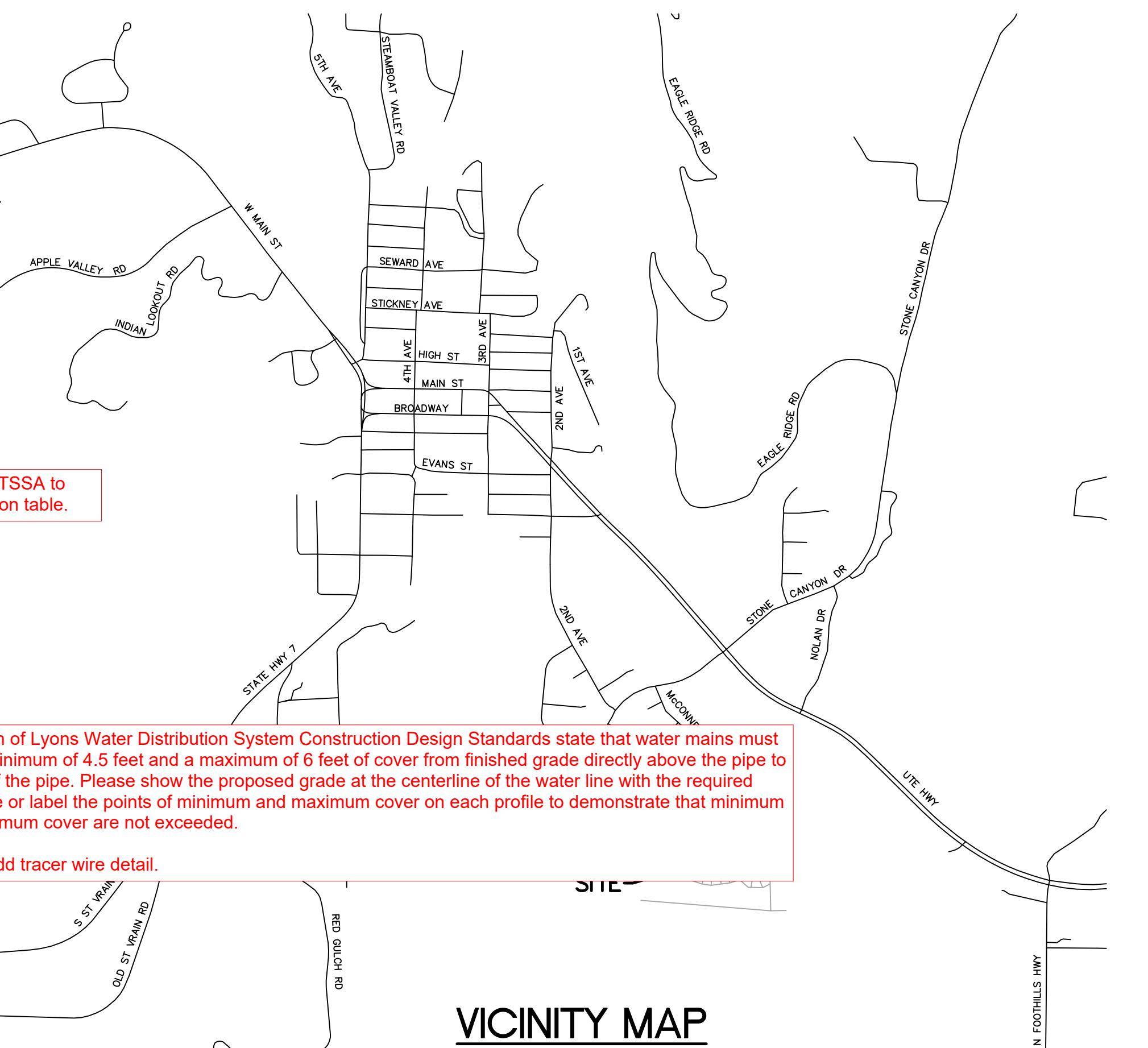
GENERAL NOTES

(APPLIES TO ALL SHEETS)

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTORS SHALL NOTIFY THE UTILITY COMPANIES IN ADVANCE OF THEIR CONSTRUCTION OPERATION TO ENABLE THEM TO FIELD LOCATE THEIR UTILITIES.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES AND REPORT FINDINGS TO THE OWNER PRIOR TO PROCEEDING WITH RELATED CONSTRUCTION. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SATISFY HIMSELF THAT ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT, HAVE BEEN PROPERLY LOCATED. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF UTILITIES AFFECTED BY THE PROSECUTION OF THIS CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE AFFECTED UTILITY COMPANY AND THE COORDINATION OF ALL WORK IN THE PROXIMITY OF THE UTILITIES.
3. IN ADVANCE OF NEW UTILITY CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO POTHOLE ALL UTILITIES TO WHICH THE NEW UTILITIES ARE TO BE CONNECTED, AND ALL UTILITIES WHICH ARE GOING TO BE CROSSED. ONCE EXPOSED, THE CONTRACTOR SHALL VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY DIFFERENCES BETWEEN ACTUAL LOCATIONS AND LOCATIONS GIVEN ON THESE PLANS. NO CONTRACTOR CLAIMS FOR EXTRA COMPENSATION WILL BE GRANTED FOR PROJECT DELAYS ASSOCIATED WITH CHANGES IN ACTUAL LOCATIONS BASED ON FIELD VERIFICATION. IF THE CONTRACTOR HAS TO REDO CONSTRUCTION TO AVOID UTILITY CONFLICTS DUE TO HIS FAILURE TO POTHOLE EXISTING STRUCTURES IN ADVANCE OF NEW UTILITY CONSTRUCTION, NO EXTRA COMPENSATION WILL BE GRANTED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL SURFACES AND RELATED STRUCTURES SUCH AS DRIVEWAYS, CURBS, GUTTERS, WALKS, AND BITUMINOUS PAVEMENTS TO ORIGINAL CONDITIONS (OR BETTER) AND GRADES, UNLESS DESIGNATED OTHERWISE ON THE DRAWINGS. THE OWNER OR OWNER'S REPRESENTATIVE AND THE CONTRACTOR SHALL TOGETHER COORDINATE THE DOCUMENTATION OF EXISTING GRADES AND OTHER INFORMATION PRIOR TO ALL CONSTRUCTION ACTIVITIES.
5. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (PHONE 1-800-922-1987) FOR THE MARKING OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES SHOWN AND OTHER UTILITY LINES OTHERWISE LOCATED.
6. THE OWNER-DEVELOPER SHALL PROVIDE THE CONTRACTOR WITH A COMPLETE AND UPDATED SET OF ENGINEERING CONSTRUCTION DRAWINGS. THESE DRAWINGS, AND ANY REQUIRED PERMITS, SHALL BE AT THE PROJECT SITE AT ALL TIMES. IF NO PLANS APPEAR ON THE PROJECT SITE, CONSTRUCTION ACTIVITIES MAY BE HALTED AT THE DISCRETION OF THE OWNER.
7. BEFORE WORK BEGINS, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND MUST NOTIFY THE REQUIRED PARTIES AT LEAST 24 HOURS IN ADVANCE OF COMMENCING CONSTRUCTION ACTIVITIES.
8. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF THE ATSSA GUIDE FOR WORK AREA TRAFFIC CONTROL AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CONSTRUCTION SIGNAGE.
9. ALL SURPLUS MATERIAL, TOOLS, AND TEMPORARY STRUCTURES, FURNISHED BY THE CONTRACTOR, SHALL BE REMOVED FROM THE PROJECT SITE BY THE CONTRACTOR. ALL DEBRIS AND RUBBISH CAUSED BY THE OPERATIONS OF THE CONTRACTOR SHALL BE REMOVED, AND THE AREA OCCUPIED DURING CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ITS ORIGINAL CONDITION, WITHIN 48 HOURS OF PROJECT COMPLETION.
10. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF INSTALLATION BETWEEN ALL UTILITIES, INCLUDING BUT NOT LIMITED TO WATER LINES, ELECTRIC, TELEPHONE, SATELLITE, SANITARY SEWER, GAS, ELECTRIC SPARKLESS CONTROL WIRING, GAS, FIRE LINES, AND WATER AND SEWER SERVICE LINES. COORDINATION INCLUDES DETERMINING THE SCHEDULING OF WHICH UTILITIES ARE INSTALLED WHEN CONTRACTOR SHOULD NOTE COORDINATION IS NEEDED BETWEEN PLACEMENT OF FILL AND UTILITY INSTALLATION.
11. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "DESIGN CRITERIA AND STANDARD SPECIFICATIONS" OF THE TOWN OF LYONS.
12. ALL TRENCHES SHALL BE BACKFILLED AND COMPAKTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY, AS DETERMINED BY ASTM D698.
13. ALL WATER MAINS TO HAVE A MINIMUM OF 5.0' OF COVER. 8 GAUGE TRACER WIRE SHALL BE INSTALLED ON ALL WATER MAINS.
14. ALL WATER MAIN DEFLECTIONS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
15. EXISTING AND PROPOSED MANHOLE RIM ELEVATIONS AND VALVE BOXES SHALL BE ADJUSTED TO FINAL GRADE AS REQUIRED.
16. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE DONE IN A WAY SO AS TO MINIMIZE DISRUPTION IN SERVICE TO EXISTING USERS.
17. WATER, FIRE, AND SEWER TAPS, METER PITS, AND SERVICE LINE SIZES, MUST BE APPROVED BY THE TOWN OF LYONS AS PART OF THE BUILDING PERMIT APPLICATION PROCESS. SIZES SHOWN ON THE PLANS MAY CHANGE AS A RESULT OF THIS APPROVAL PROCESS.
18. ALL PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF MANHOLES, INLETS, AND FITTINGS OR END TO END OF FLARED END SECTIONS.
19. ALL NEW SANITARY SEWER MAINS SHALL BE PVC ASTM D-3034 SDR 35 PIPE. AS SHOWN ON PLANS, SANITARY SEWERS IN AREAS OF SHALLOW COVER SHALL BE CLASS 50 DIP, POLYETHYLENE ENCASTMENT FOR ALL DIP AND FITTINGS WILL BE REQUIRED. SANITARY SERVICE LINES SHALL BE PVC ASTM D-3034 SDR 35 PIPE.
20. ALL NEW WATER LINES SHALL BE CLASS 200 AWWA C-900 PVC PIPE, POLYETHYLENE ENCASTMENT FOR ALL PIPE AND FITTINGS WILL BE REQUIRED. ALL NEW WATER SERVICE LINES SHALL BE TYPE K COPPER.
21. ALL NEW 18" AND LARGER STORM SEWERS AND FLARED END SECTIONS SHALL BE SMOOTH WALL CORRUGATED POLYETHYLENE PIPE AASHTO M252 OR CLASS III REINFORCED CONCRETE PIPE. ALL NEW 12" AND 15" STORM SEWERS AND FLARED END SECTIONS SHALL BE SMOOTH WALL CORRUGATED POLYETHYLENE PIPE AASHTO M252, PVC SDR 35 PIPE OR CLASS V REINFORCED CONCRETE PIPE. ALL NEW 6" AND 8" STORM SEWERS SHALL BE SMOOTH WALL CORRUGATED POLYETHYLENE PIPE AASHTO M252 OR PVC SDR 35 PIPE. ALL NEW ELIPTICAL STORM SEWERS AND FLARED END SECTIONS SHALL BE HORIZONTAL ELIPTICAL REINFORCED CONCRETE PIPE ASTM C-507.
22. ORIGIN BENCH MARK NGS POINT 7, PID L10639, FOUND BRASS CAP SET IN THE TOP OF THE SOUTHEAST END OF THE WINGWALL OF A HEADGATE OF AN IRRIGATION CANAL. ELEVATION= 5308.61' NAVD88. SITE BENCH MARK AS SHOWN. SITE BENCH MARK AS SHOWN. CONTOURS SHOWN ARE FROM A GROUND SURVEY.
23. HORIZONTAL CONTROL FOR THE UTILITY IMPROVEMENTS IS BASED ON STREET CENTERLINE STATIONING AS SHOWN ON THE PLANS.
24. THESE CIVIL DRAWINGS ARE BASED ON THE TOPOGRAPHIC SURVEY BY SCOTT, COX & ASSOCIATES, INC. DATED 04/01/19.
25. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL LAYOUT AND DIMENSIONS OF ON-SITE PRIVATE IMPROVEMENTS.
26. ALL SUBGRADE SHALL BE COMPAKTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY, AS DETERMINED BY ASTM D698. EXISTING IN PLACE SOILS THAT ARE TO BE USED FOR SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6" (INCHES) AND THEN SHALL BE RECOMPAKTED TO THE ABOVE REFERENCED DENSITY. ALL EXISTING VEGETATION AND TOPSOIL MUST BE STRIPPED PRIOR TO SUBGRADE SCARIFICATION AND RECOMPACATION.

Please add the following note:
For PVC pipe, the curvature of the pipe shall be accomplished through longitudinal bending of the pipe barrel. Deflection of the joint is not allowed and may cause leakage. Confirm the minimum radius is met per manufacturer's requirements.

Please provide documentation on how the water quality capture volume is being achieved; how water quality treatment standards and requirements from CDHPE and/or MHFD (UDFCD) are being met utilizing the existing porous landscape detention area. This water quality/detention facility that was designed and documented in a drainage report 13 years ago, please confirm that the water quality BMPs using current MHFD standards are being met.



VICINITY MAP

1" = 1000'

SHEET INDEX

C1.01	COVER SHEET
C2.01	EXISTING CONDITIONS AND DEMOLITION PLAN
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C4.01	WATER PLAN AND PROFILE
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C6.01	ROAD PLAN AND PROFILE
C7.01	CIVIL DETAILS
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C7.08	CIVIL DETAILS
C7.09	CIVIL DETAILS
C7.10	CIVIL DETAILS

Please coordinate all Sheet Titles on individual sheets with Sheet Index.

Please include approval block.

Please provide signature.

LEGEND

	EXISTING DECIDUOUS TREE
	EXISTING PINE TREE
	EXISTING CONTOUR
	FOUND MONUMENT AS NOTED
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING LIGHT POLE
	EXISTING FIRE HYDRANT
	CONTROL POINT
	EXISTING SANITARY SEWER W/ MANHOLE
	EXISTING WATER W/ FIRE HYDRANT
	EXISTING GAS LINE
	EXISTING OVERHEAD POWER
	EXISTING UNDERGROUND POWER
	EXISTING FIBER OPTIC LINE
	EXISTING STORM SEWER W/ MANHOLE
	ASPHALT DEMO LINE
	PROPOSED CONTOUR ADD 5300 TO ALL CONTOURS
	POINT WHERE PROPOSED GRADE MEETS EXISTING GRADE
	PROPOSED SPOT ELEVATION ADD 5200 TO ALL SPOT ELEVATIONS
	EXISTING SPOT ELEVATION
	HISTORIC SHEET FLOW
	PROPOSED SHEET FLOW
	DRAINAGE BASIN BOUNDARY (HISTORIC)
	PROPOSED BASIN BOUNDARY
	PROPOSED SPILL CURB
	PROPOSED CATCH CURB
	FINISHED FLOOR ELEVATION
	PROPOSED WATER METER
	PROPOSED STORM SEWER W/ MANHOLE
	PROPOSED SANITARY SEWER
	PROPOSED WATER LINE
	PROPOSED UNDERGROUND POWER
	PROPOSED UNDERGROUND GAS LINE
	EXISTING FENCE
	SILT FENCE
	VEHICLE TRACKING CONTROL (VTC)
	INLET PROTECTION (IP)
	STRAW BALE BARRIER

Please define all hatching on cover sheet or on all individual sheets where hatching is shown.

Please provide symbol for sanitary manhole.

Please provide symbol for storm manhole.

COVER SHEET
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO

	SCOTT, COX & ASSOCIATES, INC. consulting engineers • surveyors 1530 55th Street • Boulder, Colorado 80303 (303) 444 - 3051
Designed by <u>DPA</u>	Date <u>06/21/19</u> Scale <u>AS SHOWN</u> Drawing no. <u>19165C-1 C1</u>
Drawn by <u>JAS</u>	Revision <u>1</u> Description <u>TOWN COMMENTS</u> Date <u>11/12/19</u> Project no. <u>19165B</u>
Checked by <u>DPA</u>	2 REVISED SITE PLAN <u>01/31/20</u>

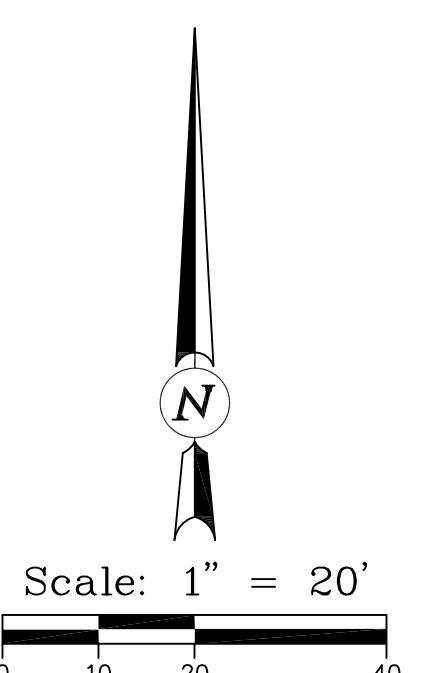
KEYED NOTES ①

1. EXISTING TRAIL TO BE REMOVED.
2. EXISTING FENCE TO BE REMOVED.
3. EXISTING PVC PIPES TO BE REMOVED.

SURVEY NOTES

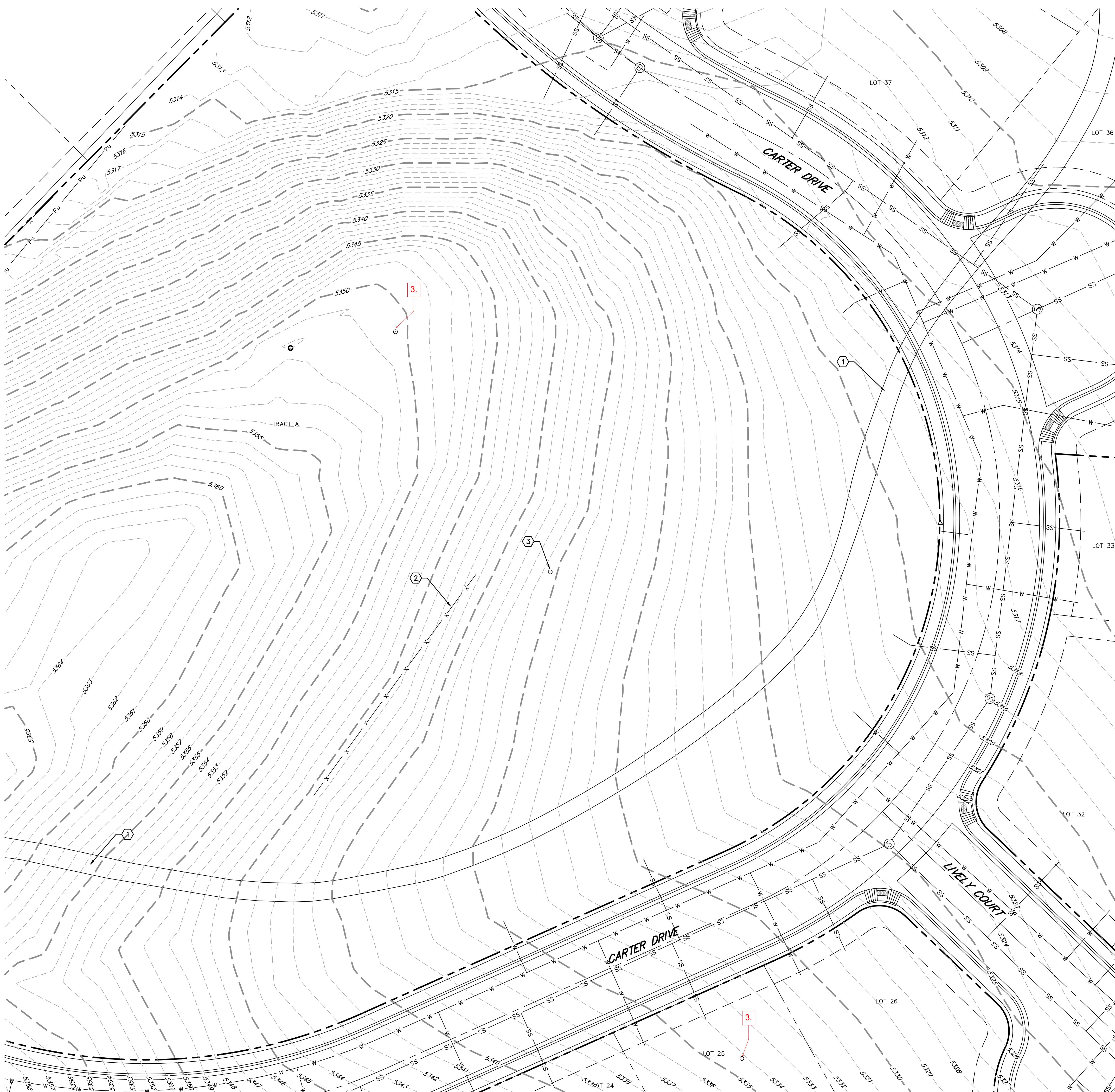
1. THE BASIS OF BEARINGS IS THE WEST 16TH LINE OF SECTION 20, T3N, R70W OF THE 6TH P.M. BETWEEN THE FOUND MONUMENTS SHOWN HEREON AND BEARS S85°24'03"E, PER THE PLAT.
2. ORIGIN BENCH MARK: NGS POINT 7, PID L10639, FOUND BRASS CAP SET IN THE TOP OF THE SOUTHEAST END OF THE WINGWALL OF A HEADGATE OF AN IRRIGATION CANAL, ELEVATION= 5308.61' NAVD88. CONTOURS SHOWN ARE FROM A GROUND SURVEY.
3. THE SIZE AND TYPE OF MONUMENTS FOUND ARE SHOWN HEREON.
4. NOTICE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED ON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON, CRS-13-80-105 (3)(c)
5. FLOOD PLAIN DESIGNATION OF THE SURVEYED PROPERTY PER FIRM MAP NUMBER 08013C0234J, MAP REVISED DECEMBER 18, 2012 IS ZONE X, BEING AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
6. THE LOCATION OF THE ABOVE GROUND UTILITIES SHOWN HEREON ARE BASED ON THE FIELD SURVEY BY SCOTT, COX & ASSOCIATES, INC. THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON SAID SURVEY AND INFORMATION PROVIDED BY UNCC, XCEL AND QWEST MAPPING. SCOTT, COX & ASSOCIATES, INC. IS NOT RESPONSIBLE FOR UTILITY INFORMATION PROVIDED BY OTHERS. SCOTT, COX & ASSOCIATES, INC. RECOMMENDS THAT THE LOCATION OF THE UTILITIES BE FIELD VERIFIED PRIOR TO ANY DIGGING ON, OR ADJACENT TO THE SUBJECT PROPERTY.
7. PLATS AND LAND SURVEY PLATS DEPOSITED AT BOULDER LAND USE DEPARTMENT, REFERENCED OR USED FOR THIS SURVEY: LYONS VALLEY PARK FILING NO. 8, RECEPTION NO. 2970292.
8. ALL ADJOINING STREETS ARE PUBLIC.
9. NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS. NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS. NO OBSERVED EVIDENCE OF WETLAND AREAS AS DELINEATED BY APPROPRIATE AUTHORITIES. NO RECORD OF OFFSITE EASEMENTS OR SERVITUDES BENEFITING THE SURVEYED PROPERTY.

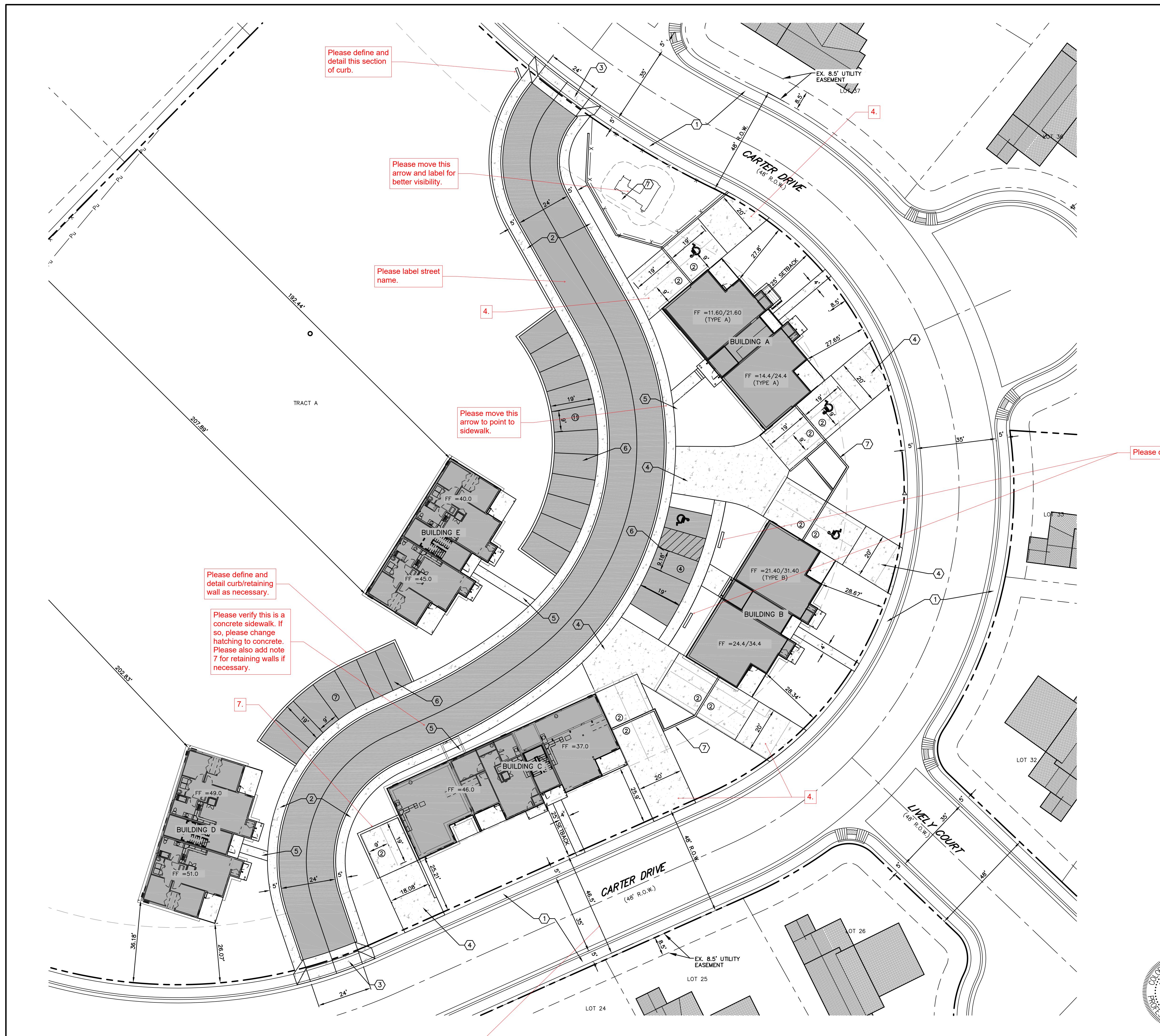
Currently, no
monuments are
shown. Please verify
this note is needed.



EXISTING CONDITIONS SUMMIT HOUSING GROUP LYONS VALLEY PARK FILING NO. 8 LYONS, COLORADO

 SCOTT, COX & ASSOCIATES, INC. consulting engineers • surveyors 1530 55th Street • Boulder, Colorado 80303 (303) 444 - 3051					
COLO. REG'D PROFESSIONAL ENGINEER RONALD P. ALEXANDER 01/31/2012 36045					
Designed by	DPA	Date	Scale	Drawing no.	Sheet
Drawn by	JAS	06/21/19	1"=20'	19165C-1 C2	C2.01
Checked by	DPA	Revision	Description	Date	Project no.
		1	TOWN COMMENTS	11/12/19	19165B
		2	REVISED SITE PLAN	01/31/20	



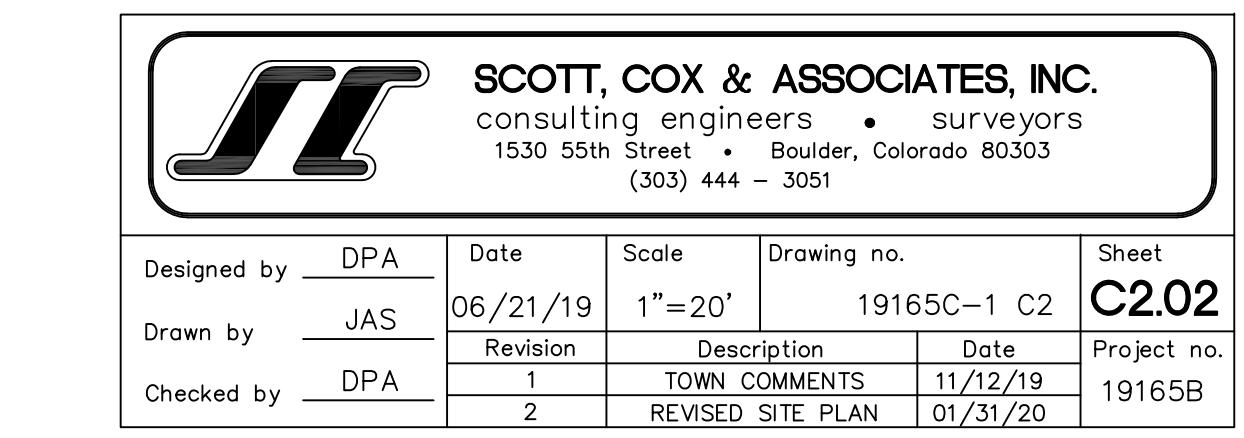


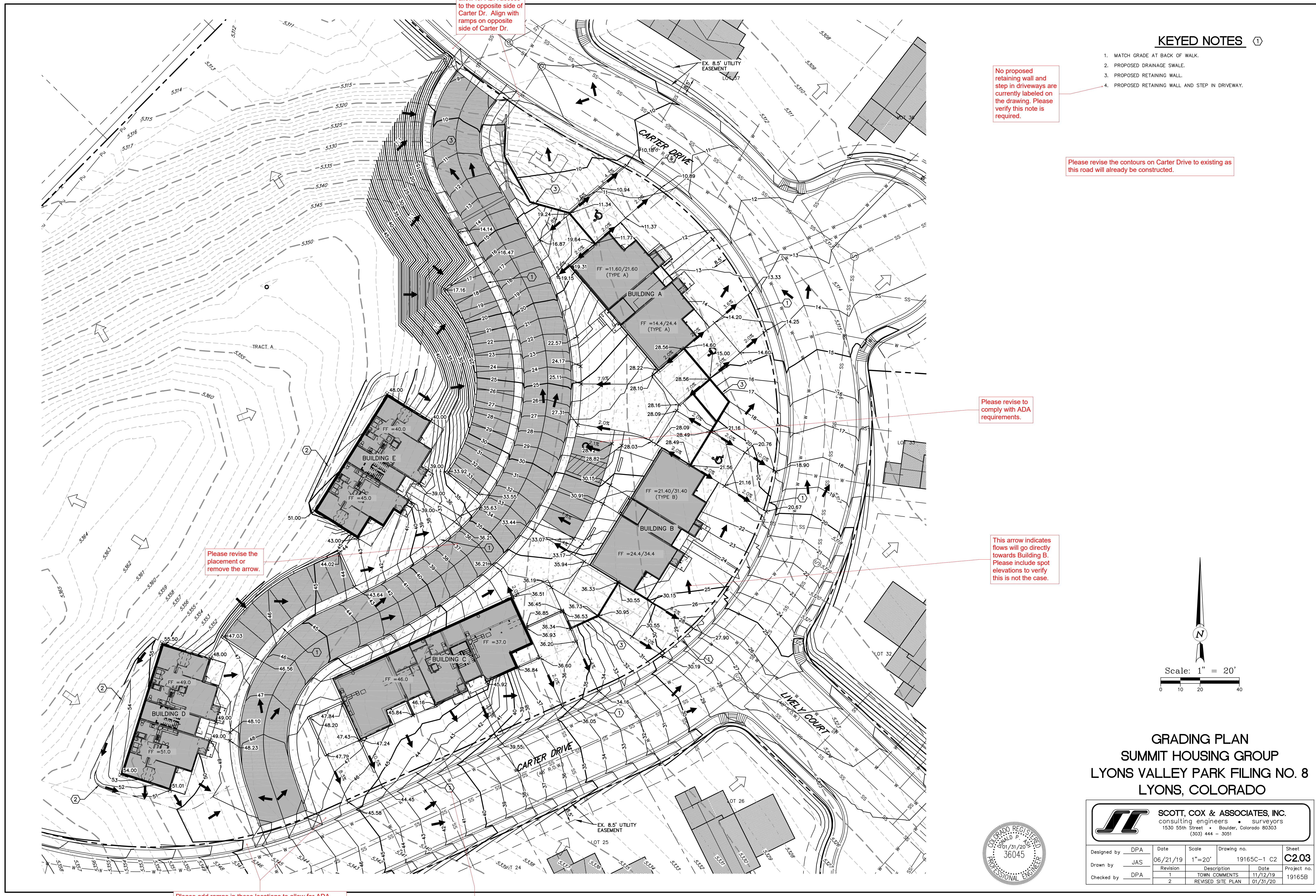
KEYED NOTES

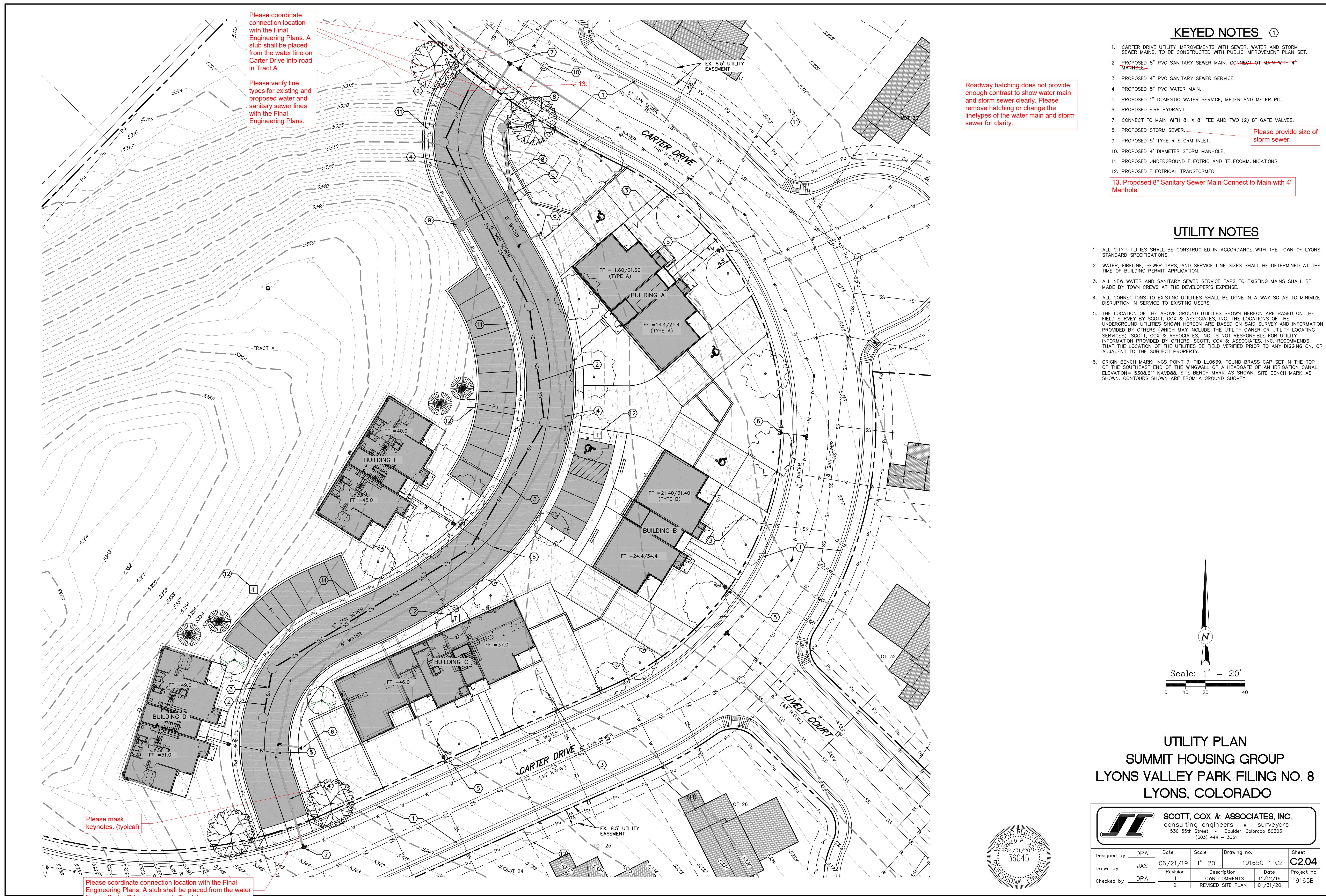
1. CARTER DRIVE STREET SECTION ASPHALT PAVEMENT, CONCRETE ROLL OVER CURB, GUTTER AND SIDEWALK, TO BE CONSTRUCTED WITH PUBLIC IMPROVEMENT PLAN SET.
2. PROPOSED PRIVATE STREET SECTION WITH ASPHALT PAVEMENT, CONCRETE ROLL OVER CURB, GUTTER AND SIDEWALK.
3. PROPOSED CONCRETE DRIVE RAMP.
4. PROPOSED CONCRETE DRIVEWAY.
5. PROPOSED CONCRETE SIDEWALK.
6. PROPOSED ASPHALT PARKING.
7. PROPOSED RETAINING WALL. (BY OTHERS).

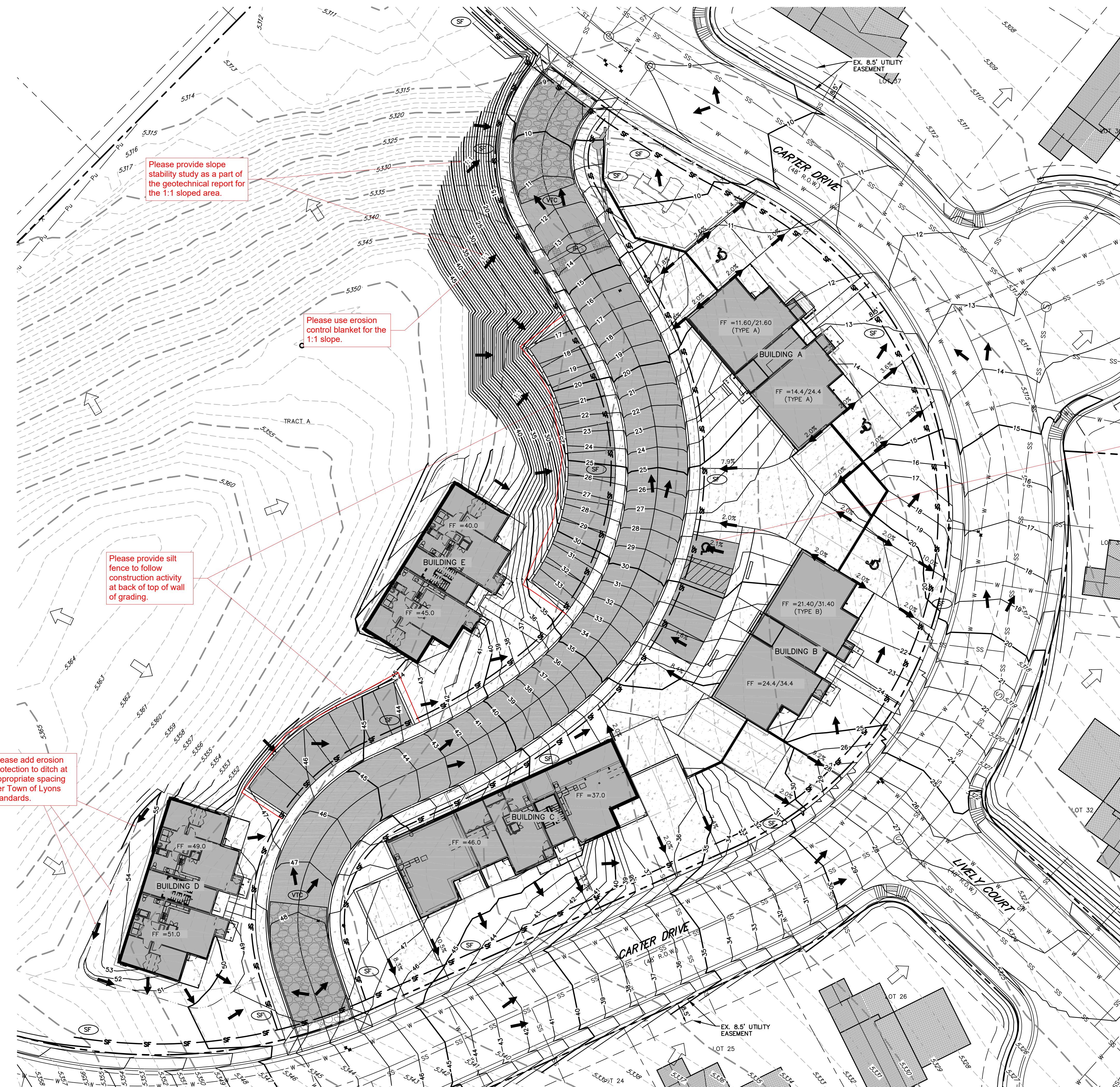
Scale: 1" = 20'

**CIVIL SITE PLAN
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO**









LEGEND

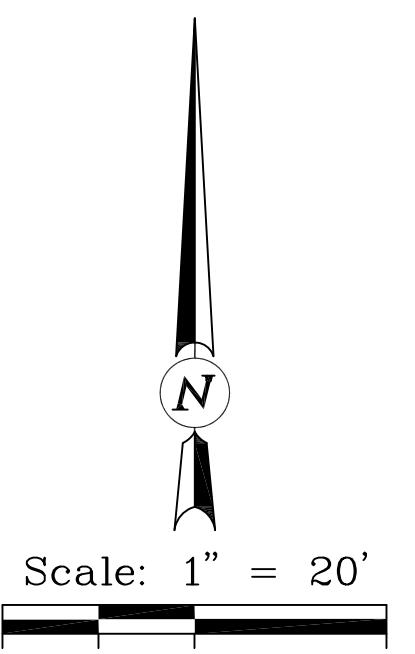
SF	SILT FENCE (SF)
SB	STRAW BALE BARRIER (SB)
EM	EROSION CONTROL MATTING (EM)
VTC	VEHICLE TRACKING CONTROL (VTC)
IP	INLET PROTECTION (IP)
IP	INLET PROTECTION (IP)
CWA	CONCRETE WASHOUT AREA (CWA)
IP	INLET PROTECTION (IP)

Roadway hatching does not provide enough contrast to show water main and storm sewer clearly. Please remove hatching or change the linetypes of the water main and storm sewer for clarity.

NARRATIVE SITE DESCRIPTION

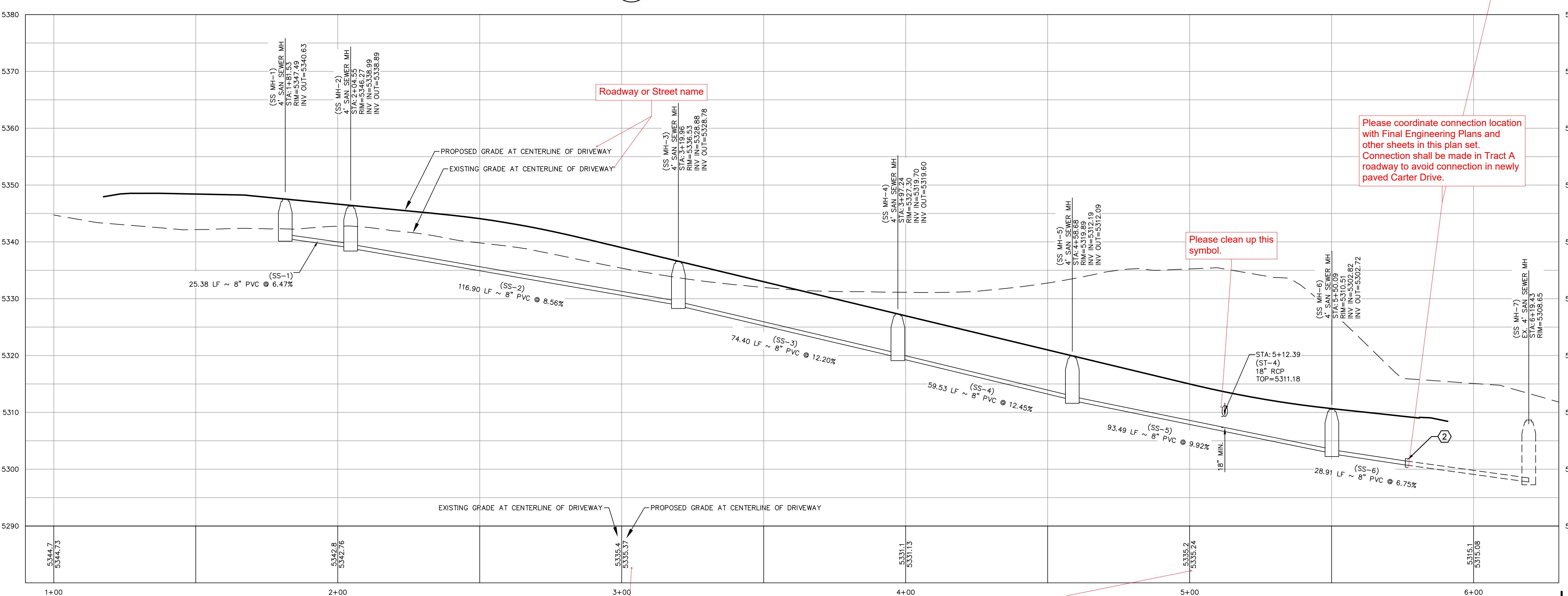
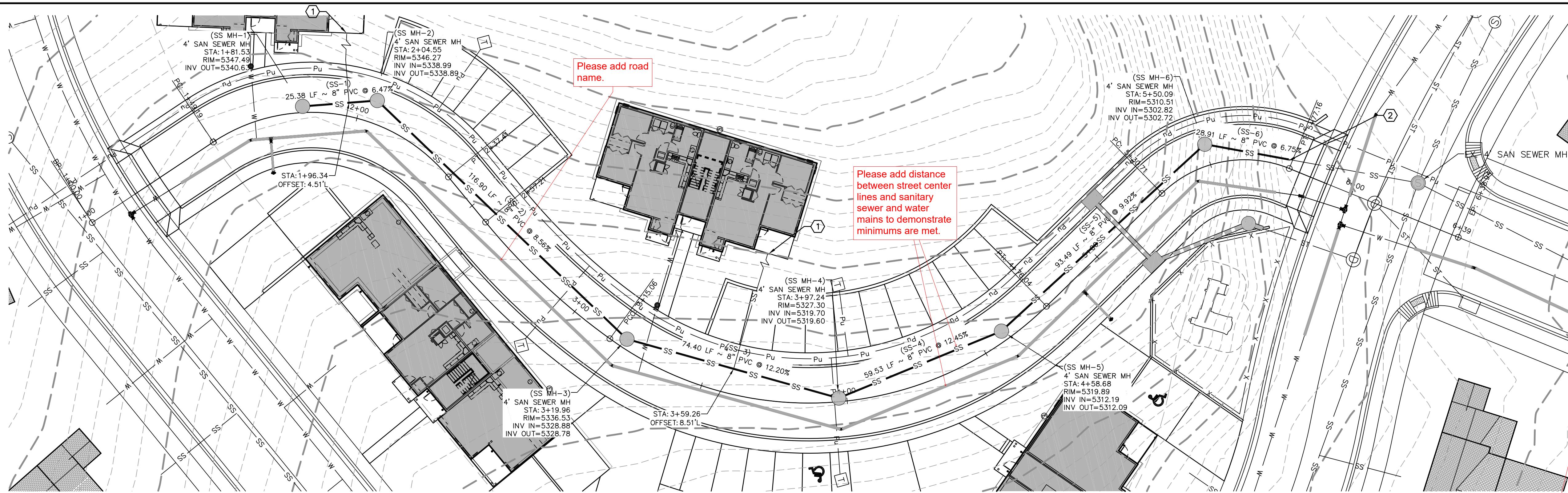
- CONSTRUCTION ACTIVITIES SHALL INCLUDE DRAINAGE FACILITIES; OVERLOT GRADING; INSTALLATION OF WATER AND SANITARY SERVICES, STORM AND DRY UTILITIES; PAVEMENT; BUILDING; AND LANDSCAPE CONSTRUCTION;
- SEQUENCE OF CONSTRUCTION WILL BE AS FOLLOWS: 1.) OVERLOT GRADING; 2.) INSTALLATION OF WATER AND SANITARY SERVICES, STORM DRAINAGE FACILITIES AND DRY UTILITIES; 3.) BUILDING CONSTRUCTION; AND 4.) CONSTRUCTION OF PARKING, DRIVES, WALKS, AND LANDSCAPING.
- THE TOTAL PROJECT AREA IS 2.14 ACRES, OF WHICH APPROXIMATELY 100% WILL UNDERGO CONSTRUCTION ACTIVITIES.
- THE 10-YEAR RUNOFF COEFFICIENT BEFORE CONSTRUCTION IS 0.25; THE RUNOFF COEFFICIENT AFTER CONSTRUCTION IS 0.25.
- THE SITE IS CURRENTLY DEVELOPED. THE PROJECT CALLS FOR REPLACING EXISTING ASPHALT.
- THERE ARE NO KNOWN POLLUTION SOURCES CURRENTLY ON THIS SITE OR PROPOSED FOR THIS PROJECT.
- THE ONLY PROPOSED NON-STORMWATER COMPONENTS OF DISCHARGE ARE LANDSCAPE IRRIGATION RETURN FLOWS.

Please provide calculations for the coefficients presented in item number 4 and update all items per current plan set.



STORMWATER MANAGEMENT PLAN SUMMIT HOUSING GROUP LYONS VALLEY PARK FILING NO. 8 LYONS, COLORADO

		SCOTT, COX & ASSOCIATES, INC. consulting engineers • surveyors 1530 55th Street • Boulder, Colorado 80303 (303) 444 - 3051	
		COLO. REG'D PROFESSIONAL ENGINEER RENEWAL P. A. 01/31/2023 36045	
Designed by	DPA	Date	Scale
Drawn by	JAS	06/21/19	1"=20'
Checked by	DPA	Description	Drawing no.
		1 TOWN COMMENTS	C2.05
		2 REVISED SITE PLAN	19165B

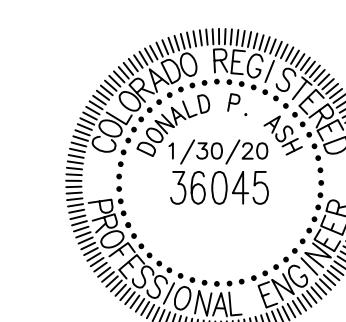


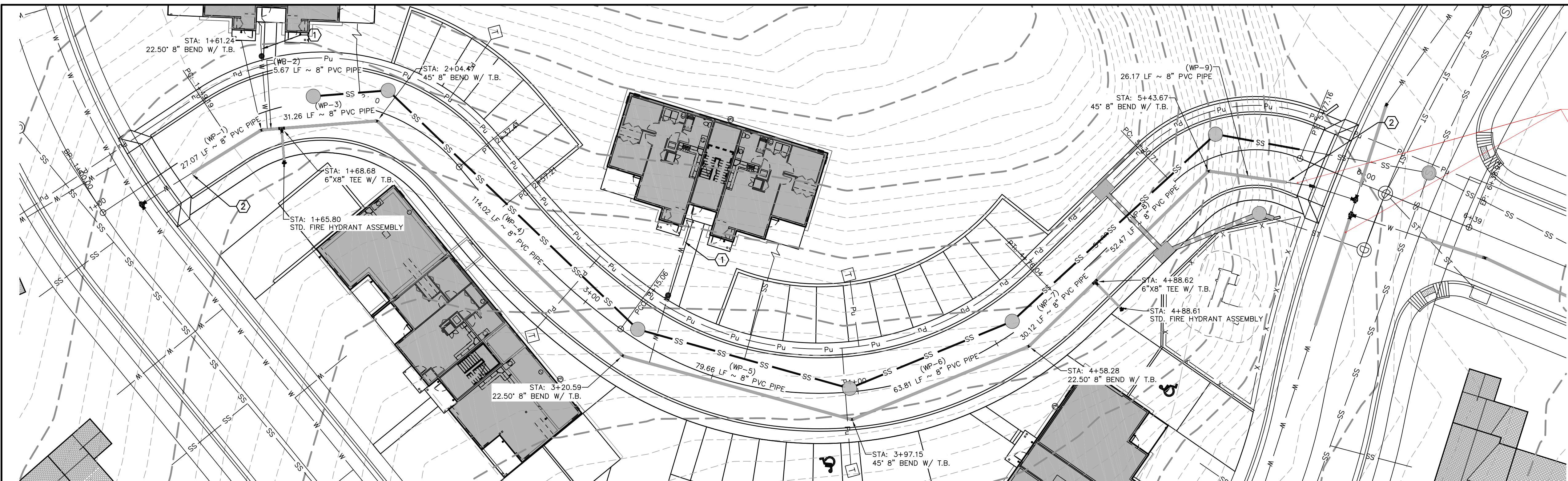
The Town of Lyons Water Distribution System Construction Design Standards state that sanitary sewer lines must have a minimum of 4.5 feet from finished grade directly above the pipe to the top of the pipe. Please show the proposed grade at the centerline of the sanitary sewer line with the required clearance or label the points of minimum and maximum cover on each profile to demonstrate that minimum and maximum cover are not exceeded.

**SAN SEWER PLAN AND PROFILE
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO**

SCOTT, COX & ASSOCIATES, INC.
consulting engineers • surveyors
1530 55th Street • Boulder, Colorado 80303
(303) 444 - 3051

Designed by	DPA	Date	Scale	Drawing no.	Sheet
Drawn by	JAS	06/21/19	1"=20'	19165C-1 C3	C3.01
Checked by	DPA	Revision	Description	Date	Project no.
		1	TOWN COMMENTS	11/12/19	19165B
		2	REVISED SITE PLAN	01/31/20	



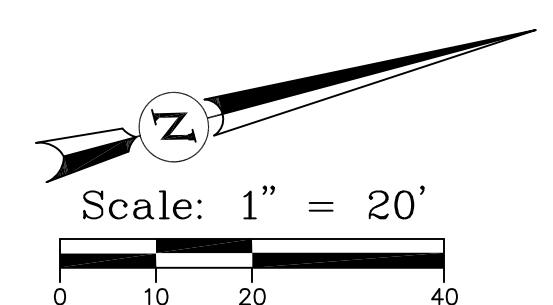


1 WATER PLAN

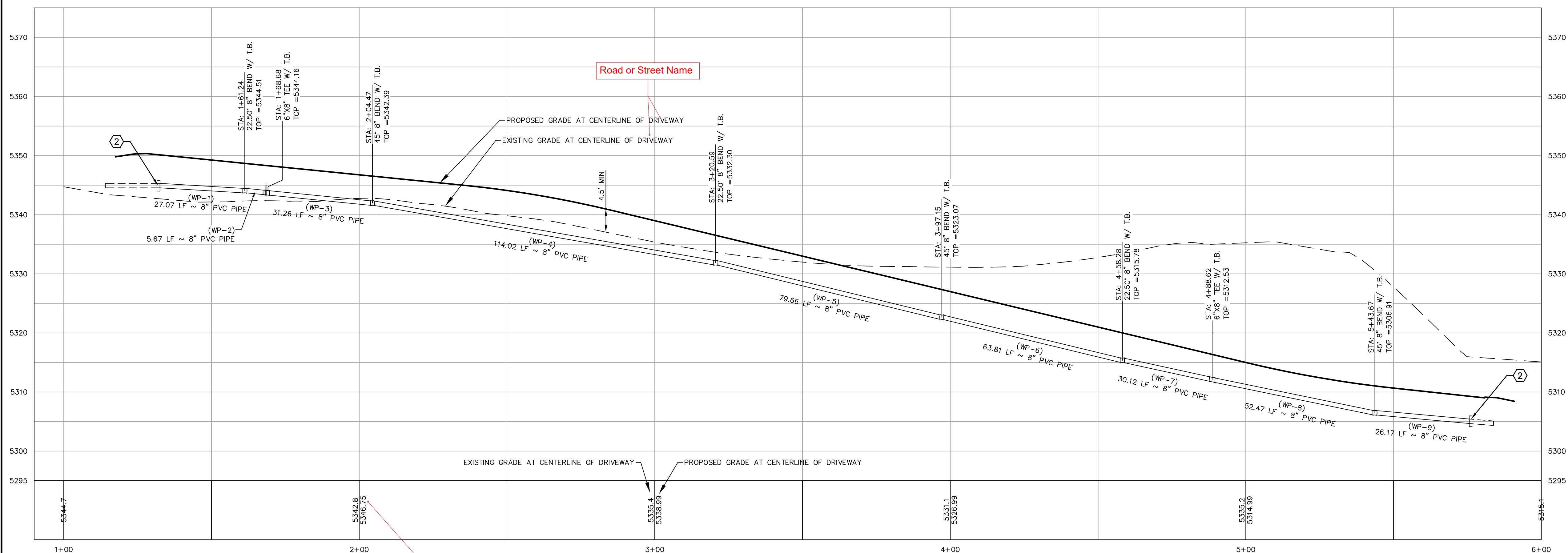
SCALE: 1"=20'

KEYED NOTES ①

1. PROPOSED 1" DOMESTIC WATER SERVICE, METER AND METER PIT.
2. CONNECT TO EXISTING 8" WATER MAIN.



The Town of Lyons Water Distribution System Construction Design Standards state that water mains must have a minimum of 4.5 feet and a maximum of 6 feet of cover from finished grade directly above the pipe to the top of the pipe. Please show the proposed grade at the centerline of the water line with the required clearance or label the points of minimum and maximum cover on each profile to demonstrate that minimum and maximum cover are not exceeded.

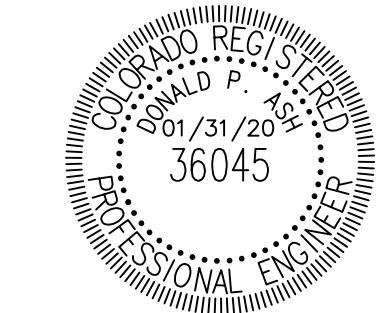


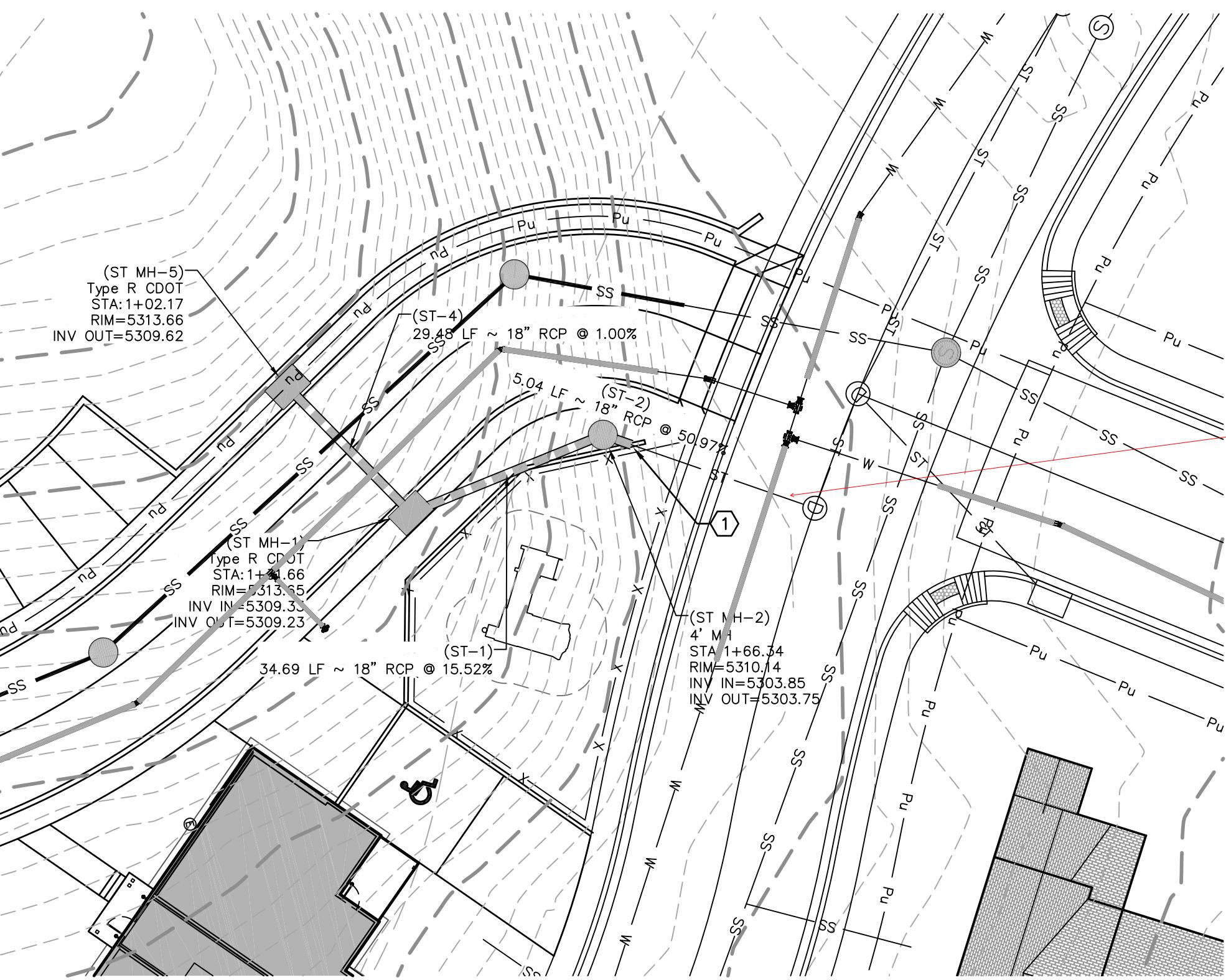
1 WATER PROFILE

SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=10'

WATER PLAN AND PROFILE
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO

		SCOTT, COX & ASSOCIATES, INC. consulting engineers • surveyors 1530 55th Street • Boulder, Colorado 80303 (303) 444 - 3051		
Designed by	DPA	Date	Scale	Drawing no.
Drawn by	JAS	06/21/19	1"=20'	19165C-1 C4
Checked by	DPA	Revision	Description	Date
		1	TOWN COMMENTS	11/12/19
		2	REVISED SITE PLAN	01/31/20

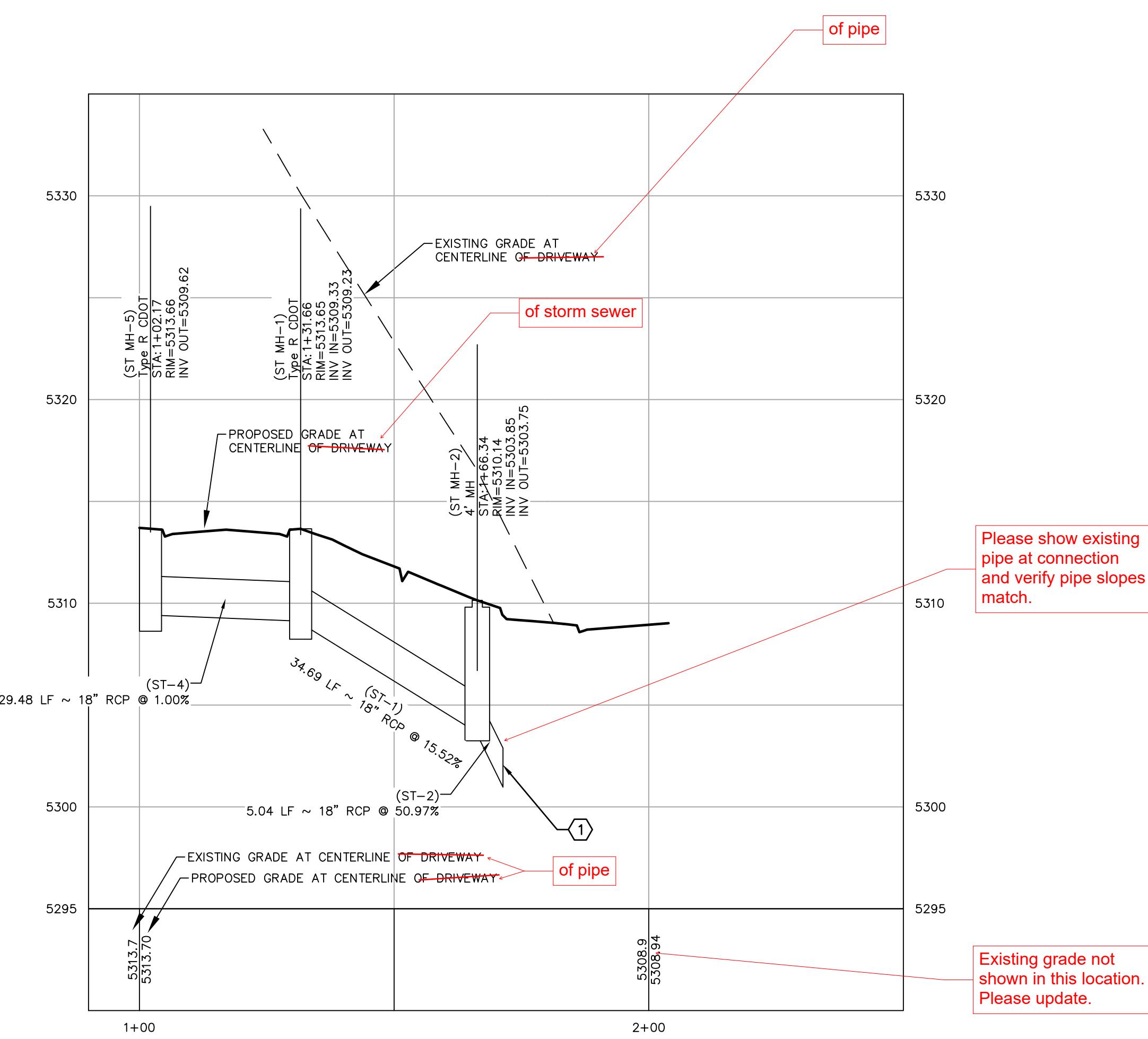
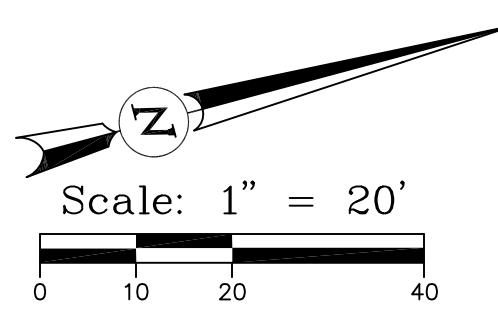




1 STORM SEWER PLAN
SCALE: 1"=20'

KEYED NOTES ①

1. CONNECT TO EXISTING 18" RCP STORM STUB.



1 STORM SEWER PROFILE
SCALE: HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

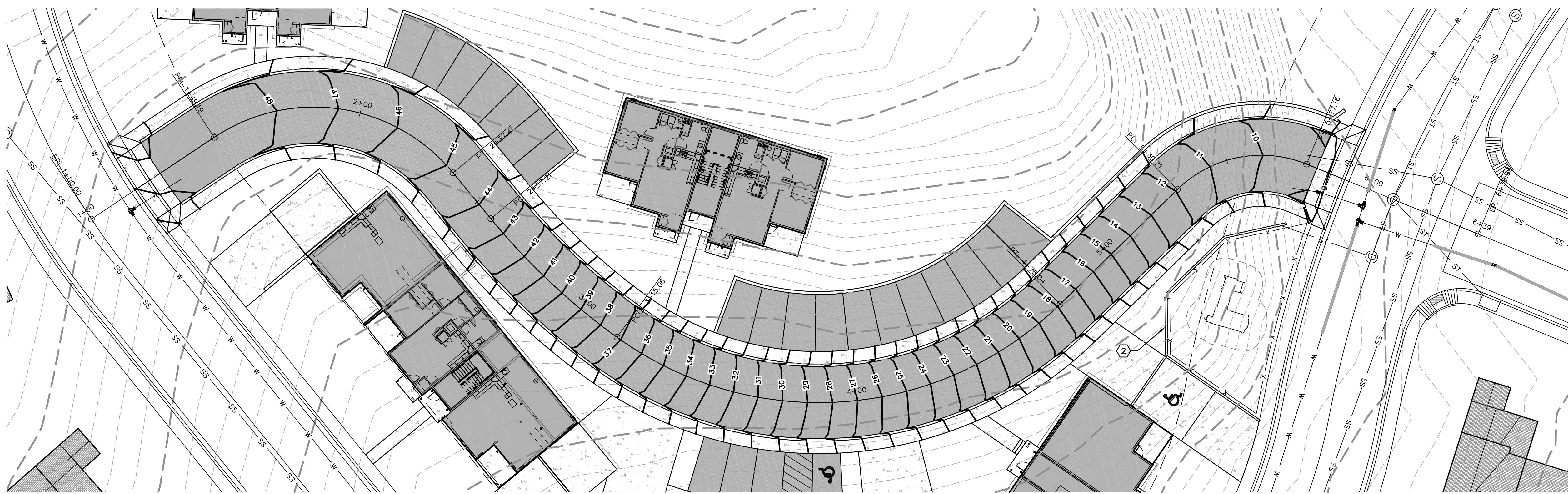
Existing grade not shown in this location.
Please update.

STORM SEWER PLAN AND PROFILE
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO



SCOTT, COX & ASSOCIATES, INC.		consulting engineers • surveyors	1530 55th Street • Boulder, Colorado 80303	(303) 444 - 3051
Designed by	DPA	Date	Scale	Drawing no.
Drawn by	JAS	06/21/19	1"=20'	19165C-1 C5
Checked by	DPA	Revision	Description	Date
		1	TOWN COMMENTS	11/12/19
		2	REVISED SITE PLAN	01/31/20

Designed by	DPA	Date	Scale	Drawing no.	Sheet
Drawn by	JAS	06/21/19	1"=20'	19165C-1 C5	C5.01
Checked by	DPA	Revision	Description	Date	Project no.
		1	TOWN COMMENTS	11/12/19	19165B
		2	REVISED SITE PLAN	01/31/20	

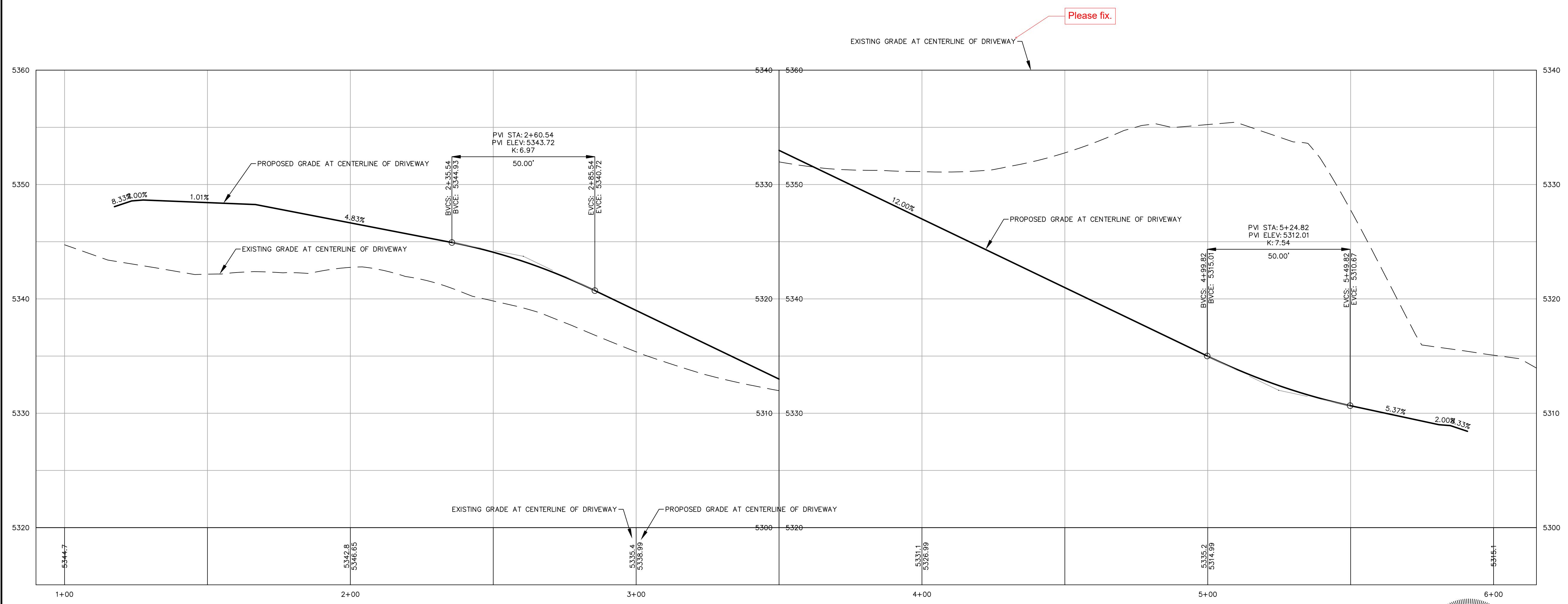
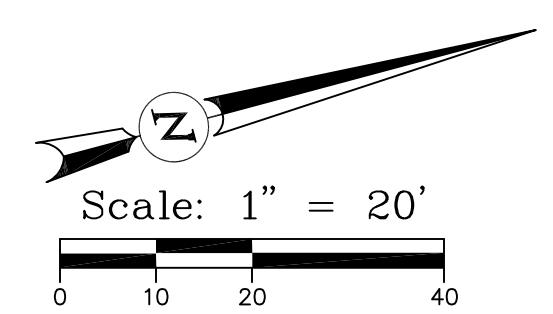


1 DRIVEWAY PLAN

SCALE: 1"=20

KEYED NOTES

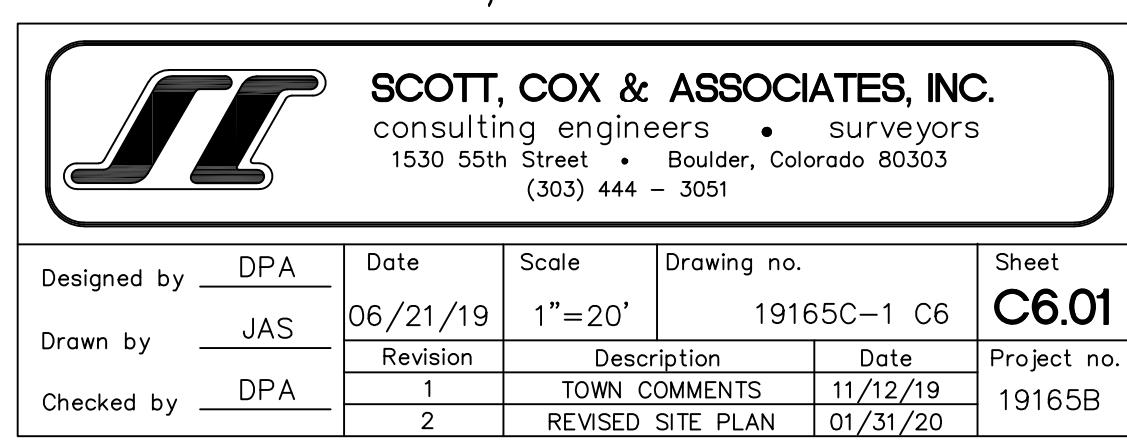
1. PROPOSED 24' WIDE ASPHALT ROADWAY WITH ROLLOVER CURB, GUTTER AND SIDEWALK PER TOWN OF LYONS STANDARDS. SEE DETAILS.
2. PROPOSED RETAINING WALL. (BY OTHERS).

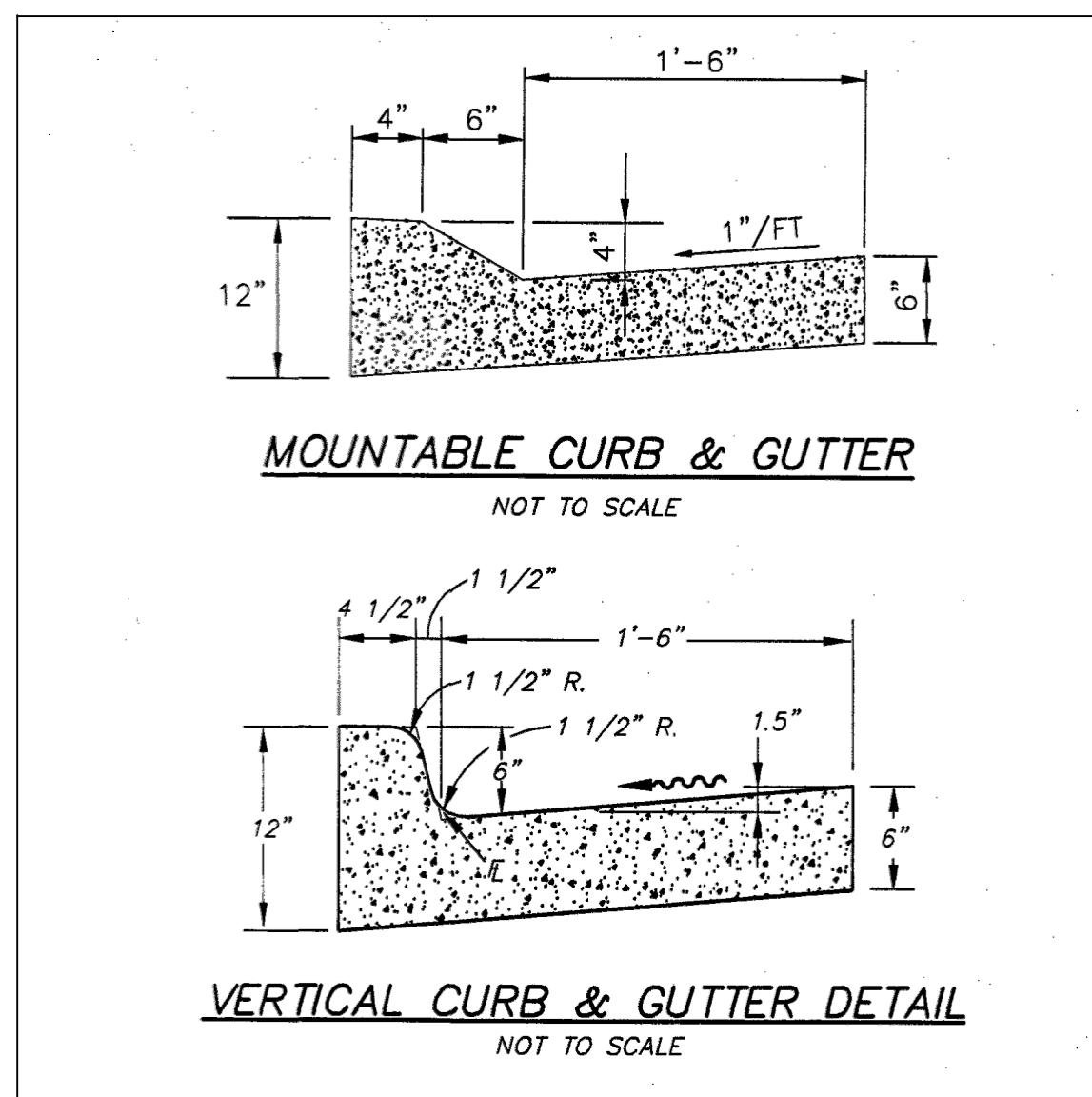
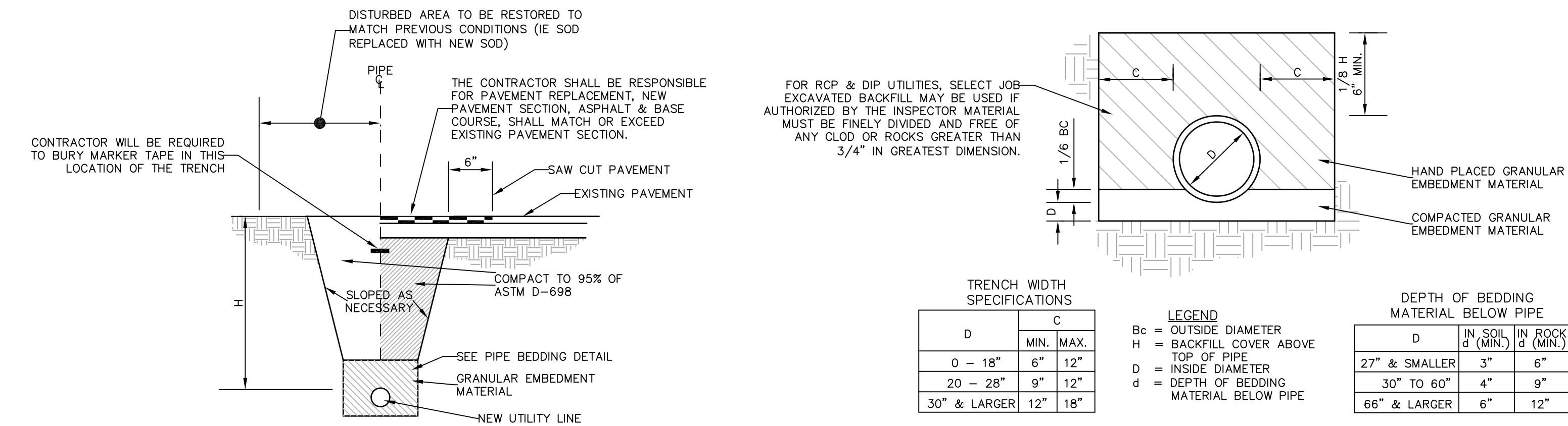
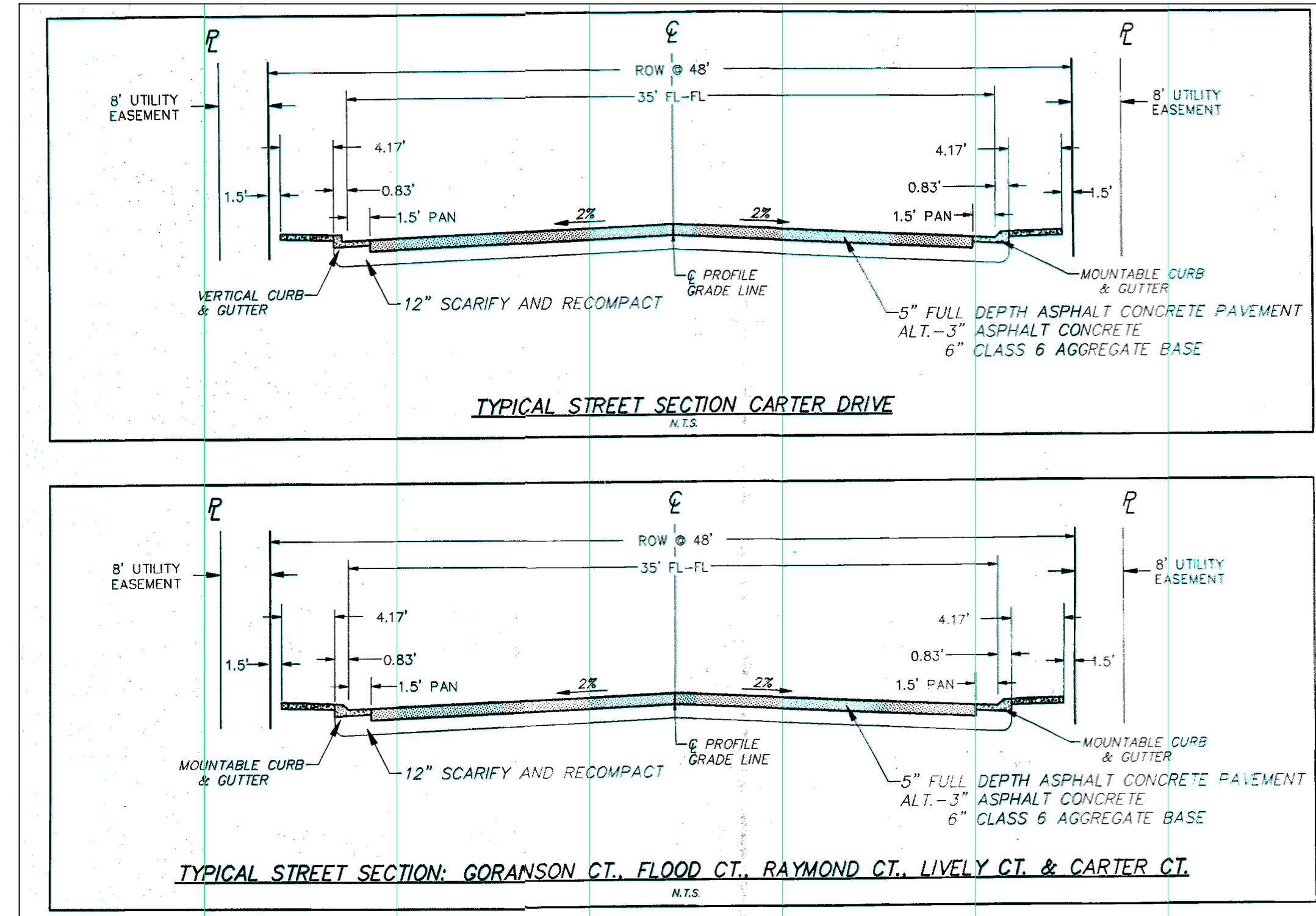


1 DRIVEWAY PROFILE

SCALE: HORZ: 1"=2
VERT: 1"=5

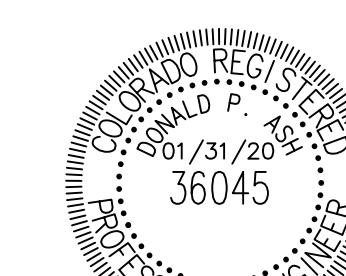
DRIVEWAY PLAN AND PROFILE
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO

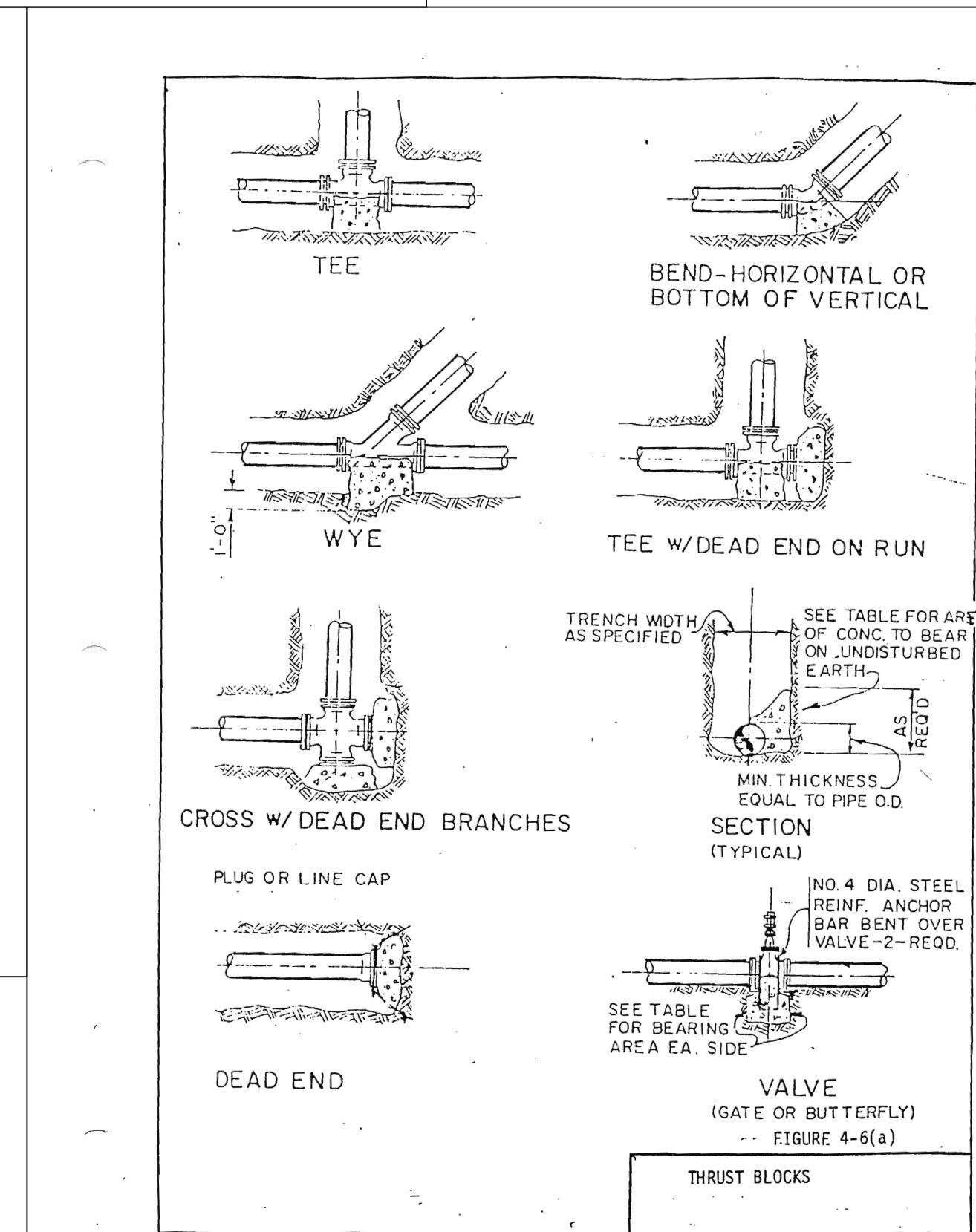
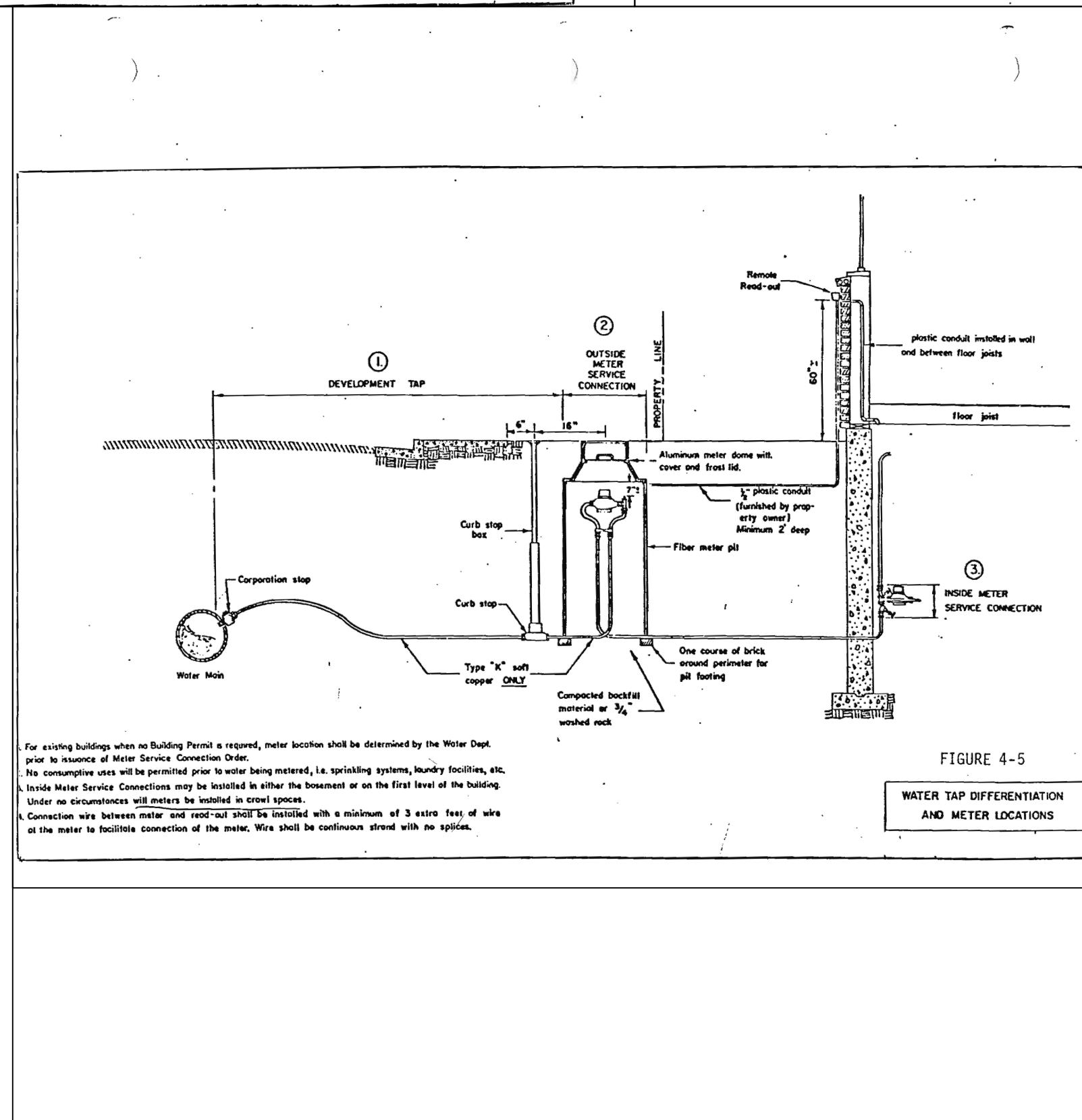
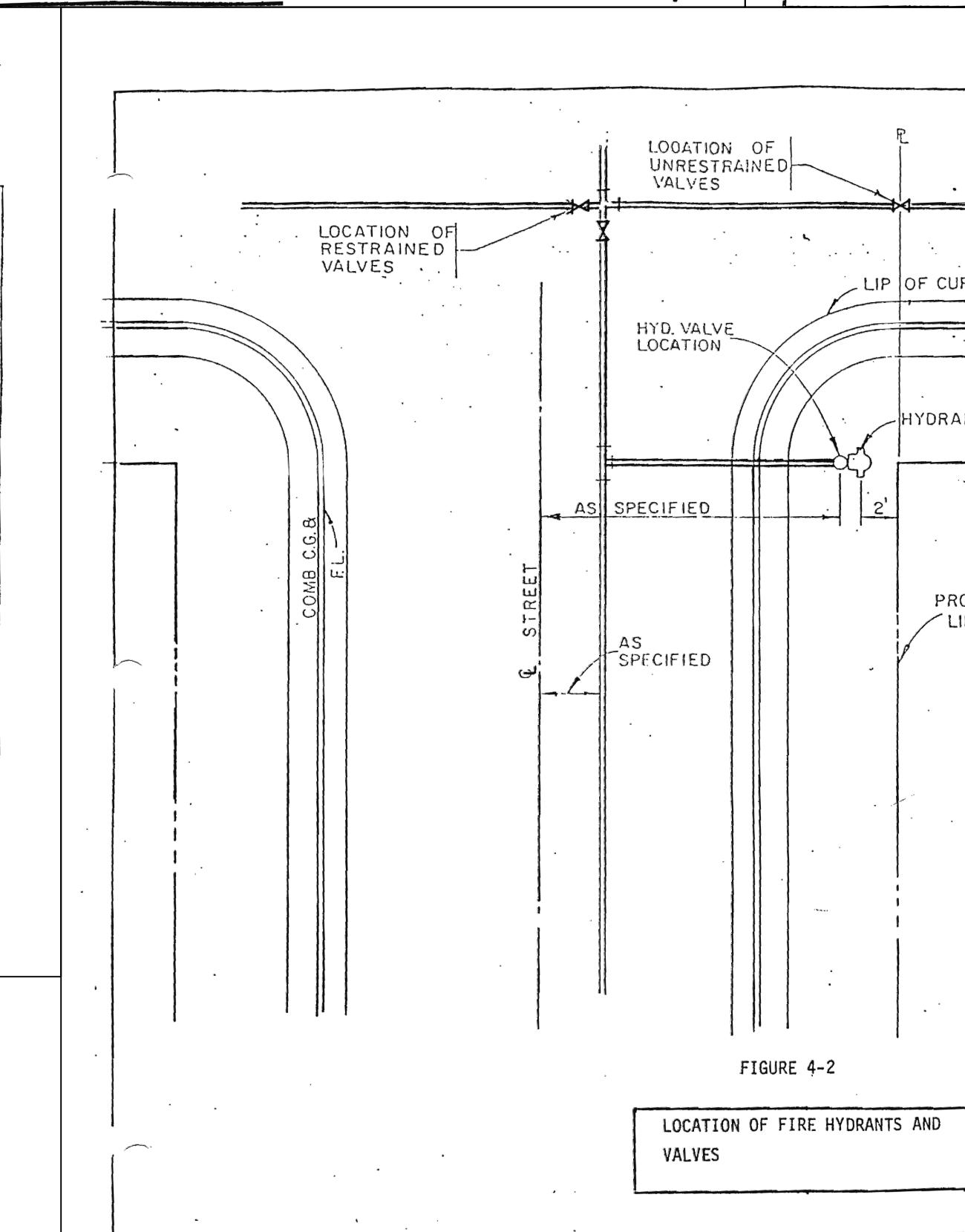
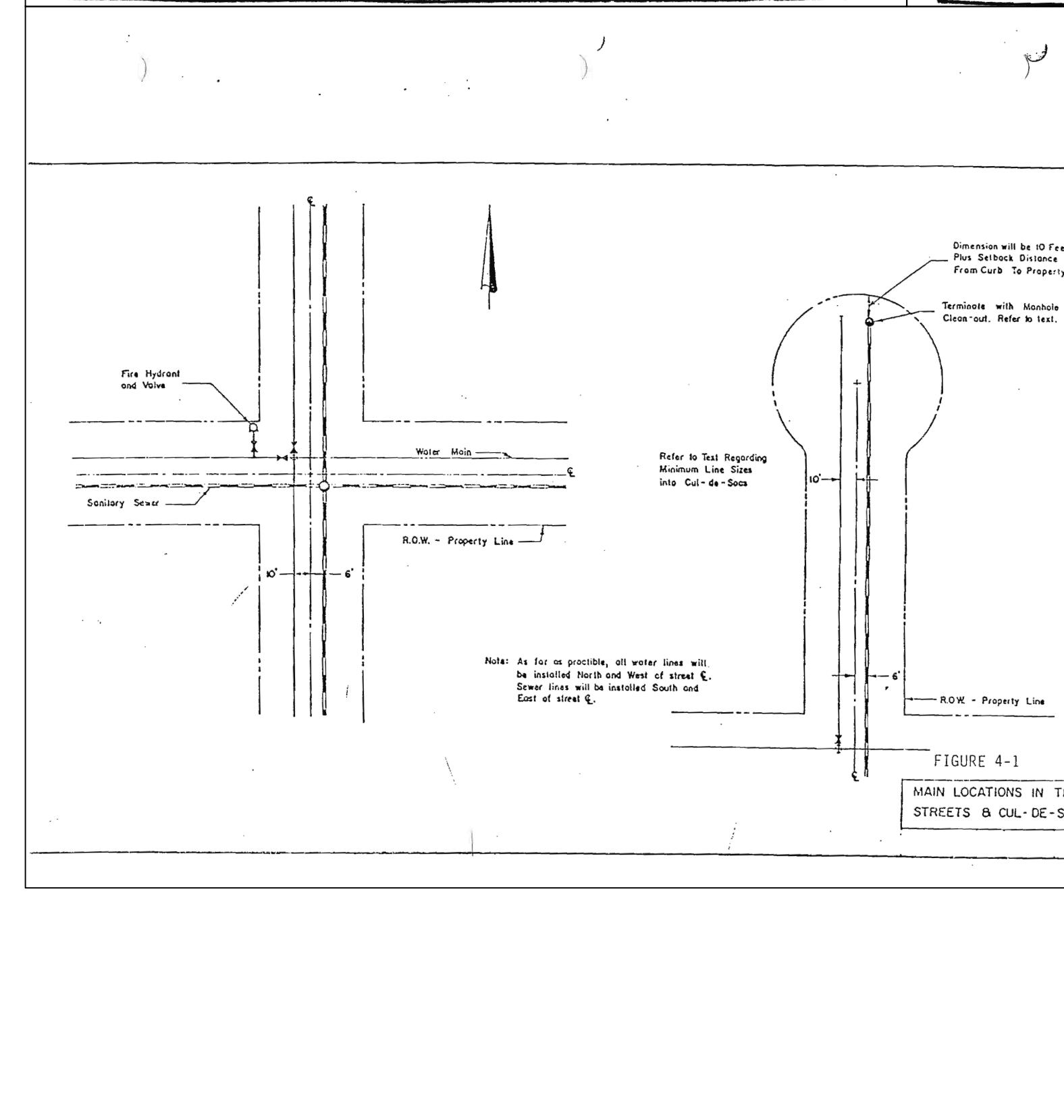
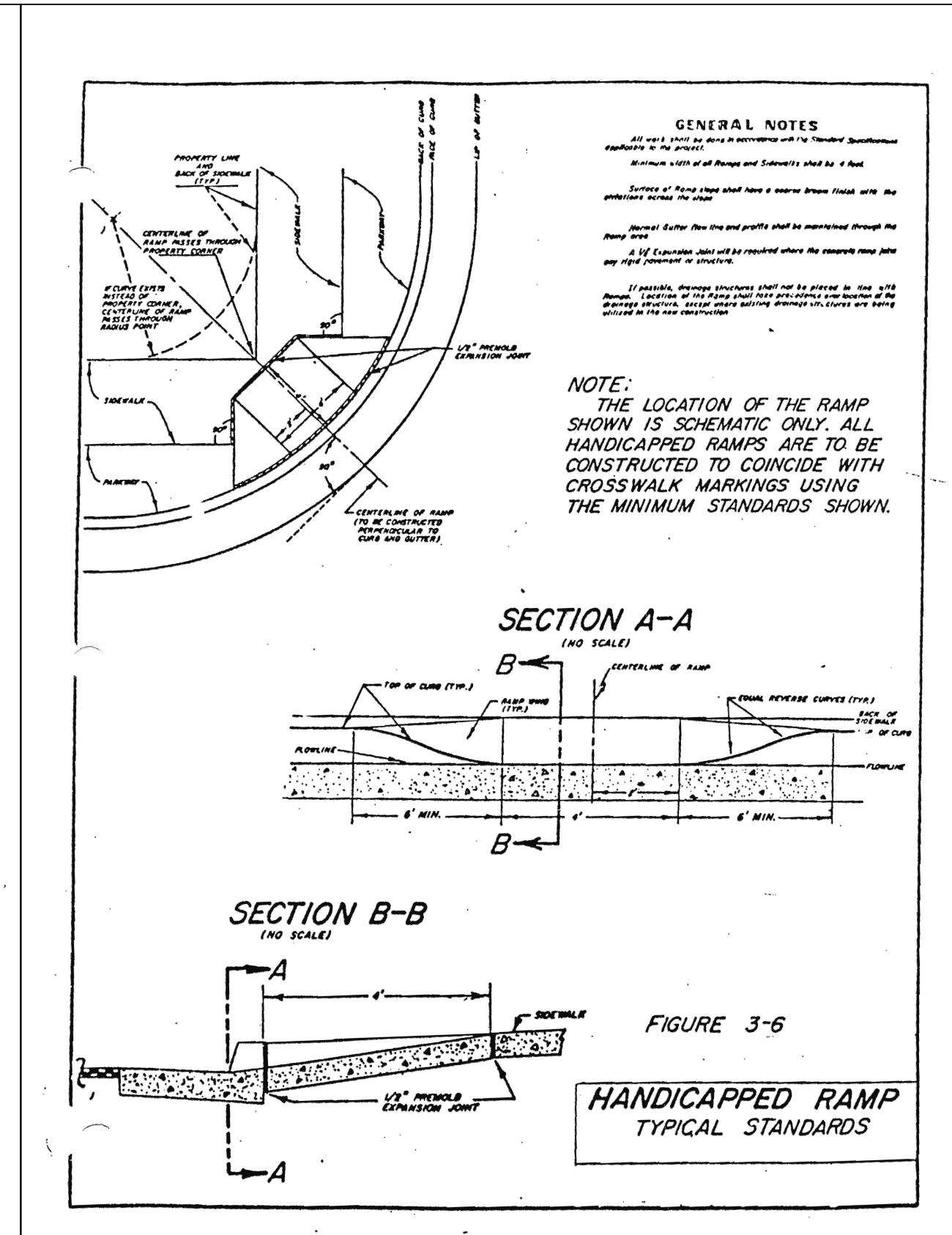
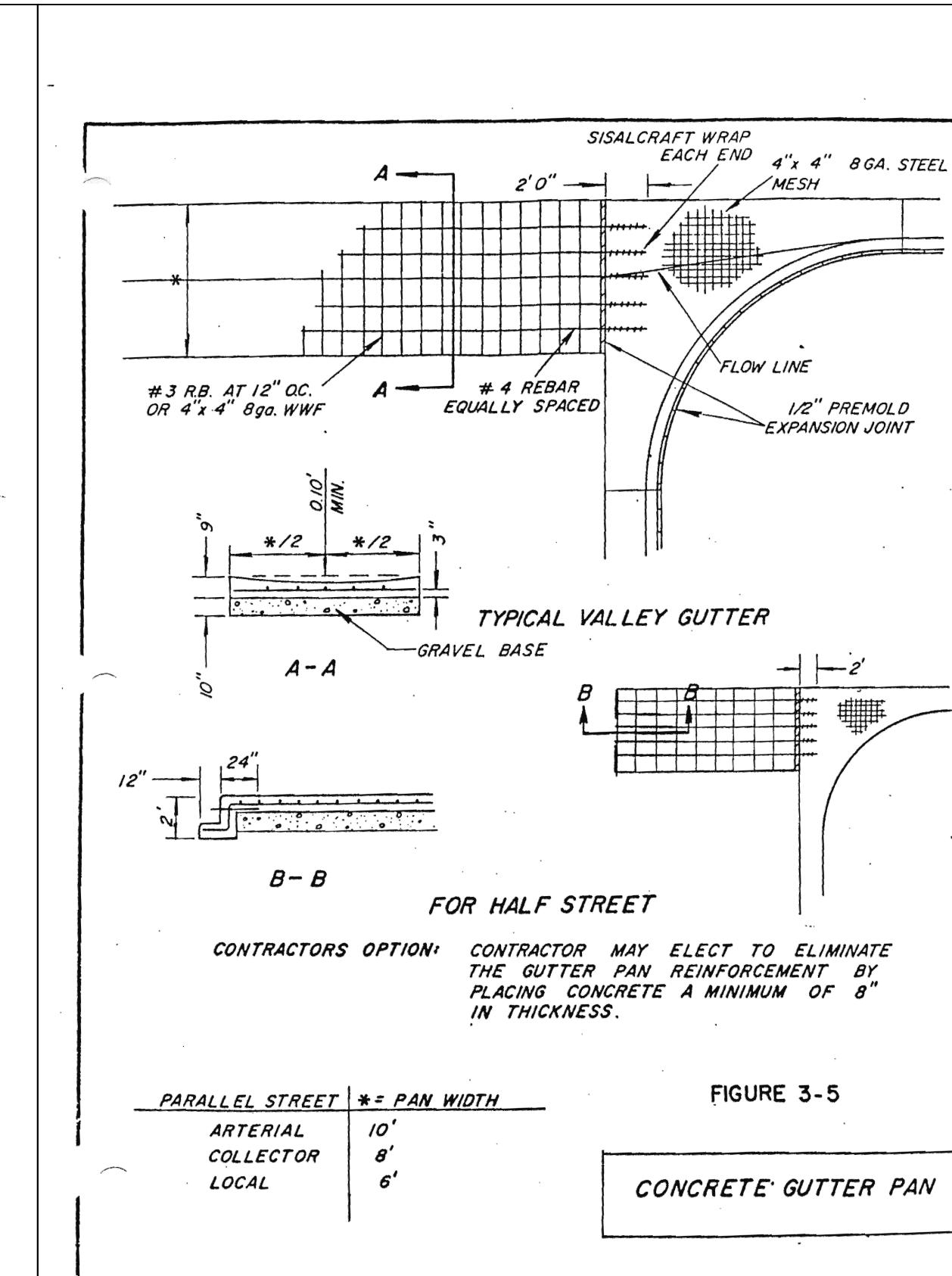
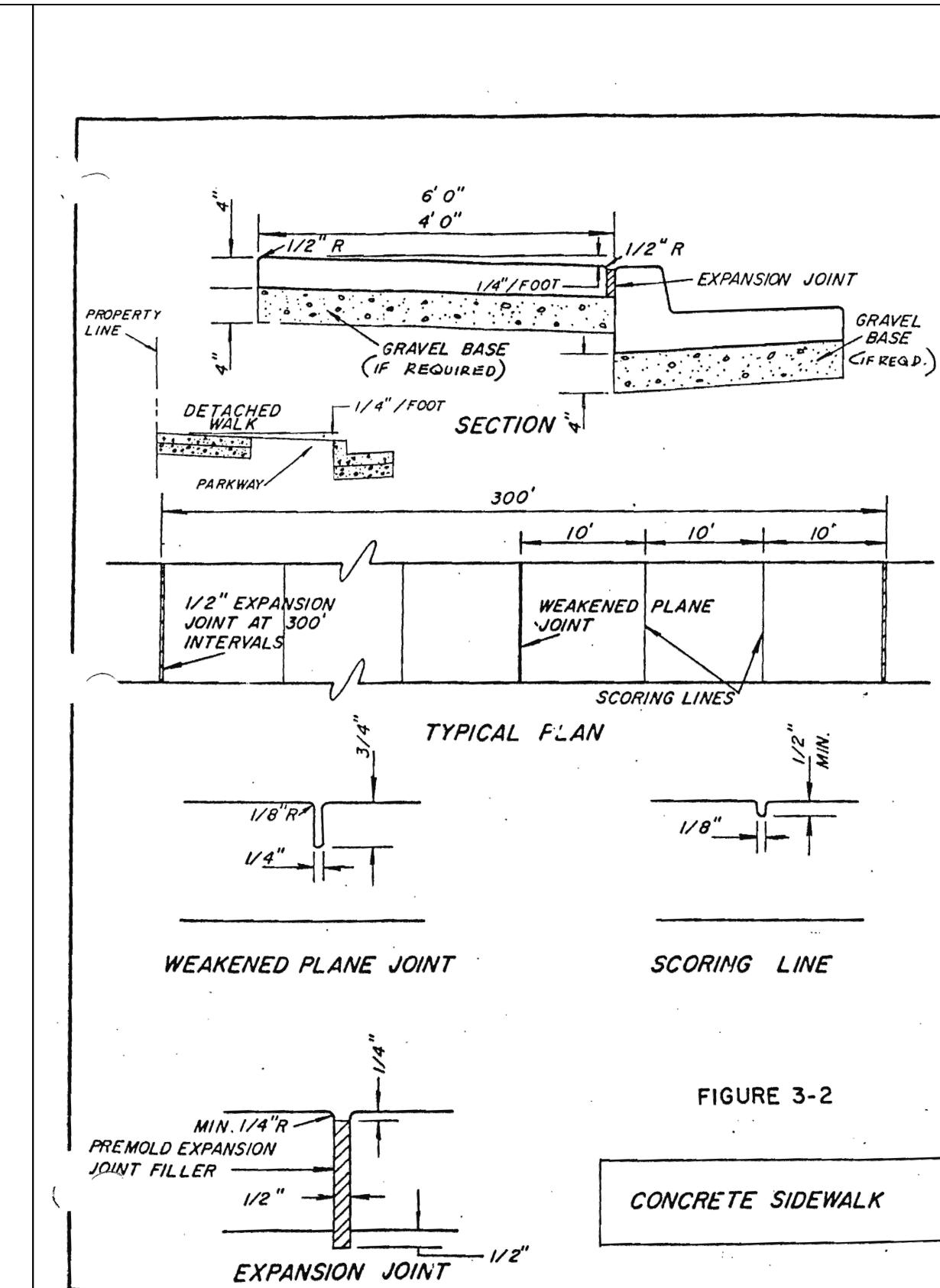
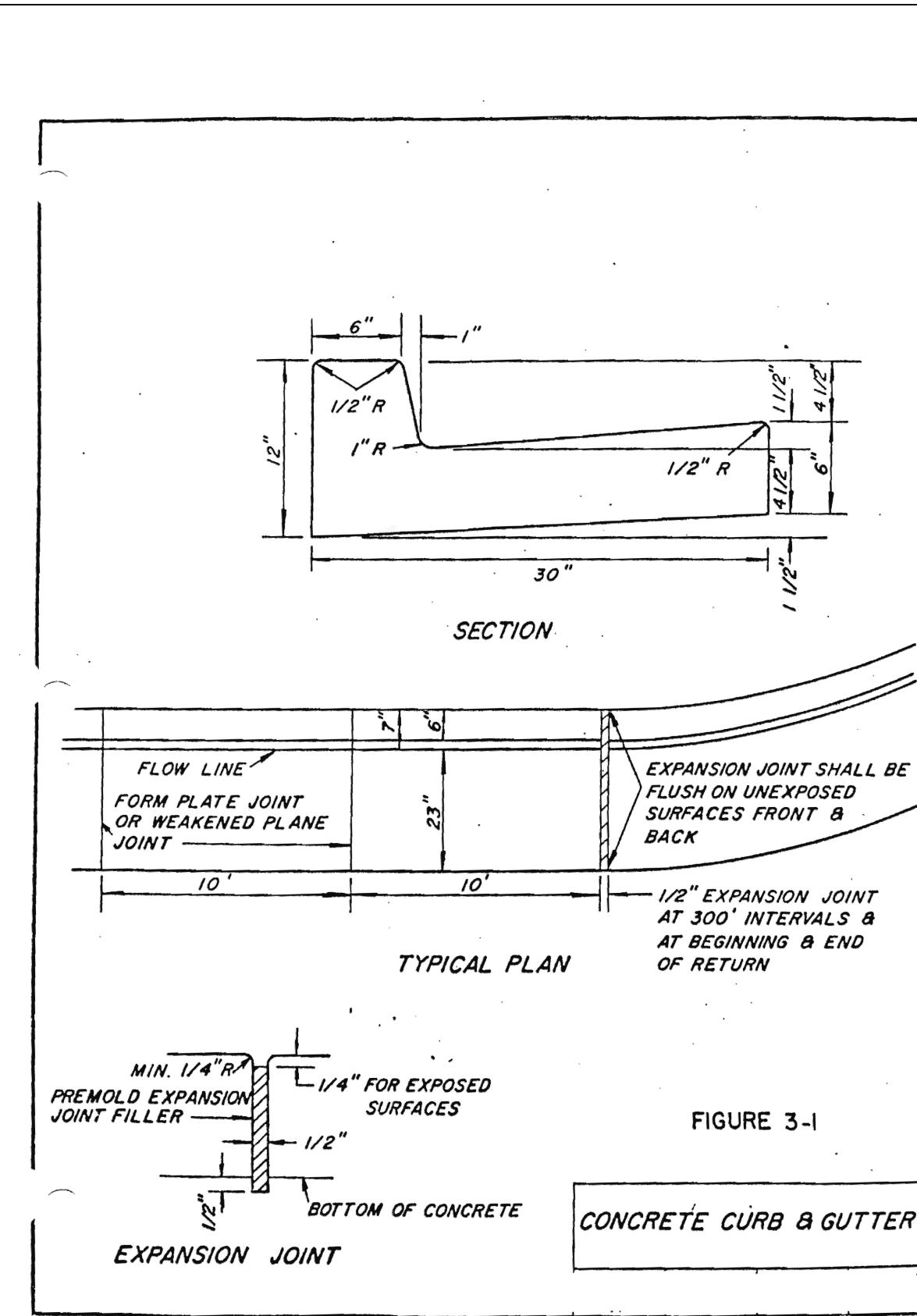




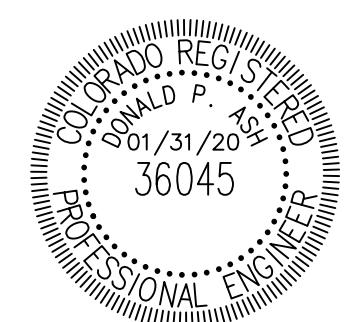
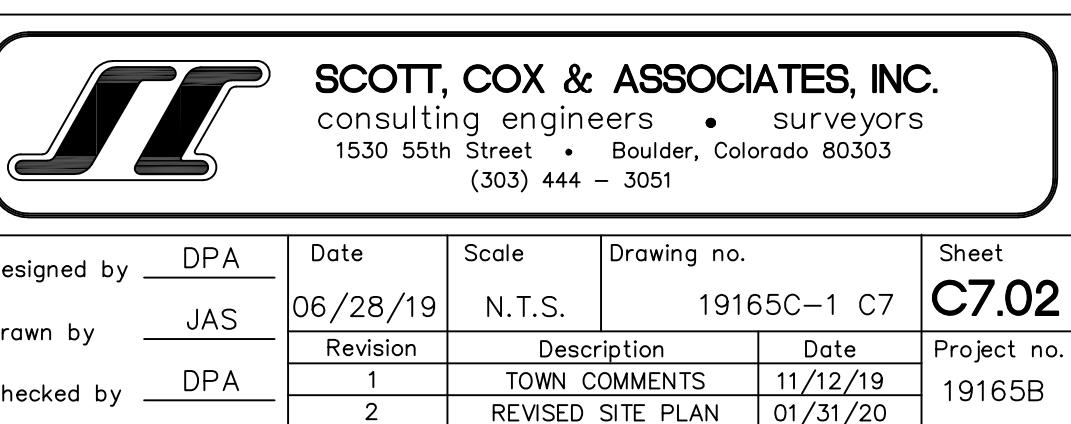
CIVIL DETAILS
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO

	SCOTT, COX & ASSOCIATES, INC.	consulting engineers • surveyors			
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Drawn by	JAS	06/28/19	N.T.S.	19165C-1 C7	C7.01
Checked by	DPA	Revision	Description	Date	Project no.
	1	TOWN COMMENTS	11/12/19		
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Designed by	DPA	Date	Scale	Drawing no.	Sheet
Drawn by	JAS	06/28/19	N.T.S.	19165C-1 C7	C7.02
Checked by	DPA	Revision	Description	Date	Project no.
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		2	REVISED SITE PLAN	01/31/20	

SIZE	BENDS				TEES	GATE VALVES	DEAD ENDS	CROSS W/CROSS 1 BRANCH 2 BRA PLUGGED PLUGGED	
	90°	45°	22 1/2°	11 1/4°					
3	1.0	0.6	0.3	0	0.7	0.5	0.7	0.7	0.7
4	1.8	1.0	0.5	0	1.3	0.5	1.3	1.3	1.3
6	4.0	2.2	1.1	0	2.8	0.7	2.8	2.8	2.8
8	7.1	3.8	2.0	1.0	5.0	2.4	5.0	5.0	5.0
10	11.1	6.0	3.0	1.5	7.8	4.5	7.8	7.8	7.8
12	16.0	8.6	4.4	2.2	11.3	7.3	11.3	11.3	11.3
14	21.7	11.8	6.0	3.0	15.4	11.0	15.4	15.4	15.4
15	25.0	13.5	7.0	3.5	17.6		17.6	17.6	17.6
16	28.4	15.3	8.0	4.0	20.0		20.0	20.0	20.0
18	36.0	19.4	10.0	5.0	25.4		25.4	25.4	25.4
20	44.2	24.0	12.2	6.1	31.4		31.4	31.4	31.4
21	49.0	26.5	13.5	6.8	34.6		34.6	34.6	34.6
22	54.0	29.0	14.8	7.4	38.0		38.0	38.0	38.0
24	64.0	34.5	17.7	8.8	45.0		45.0	45.0	45.0
30	100.0	54.0	27.6	13.8	71.0		71.0	71.0	71.0
36	144.0	78.0	40.0	20.0	102.0		102.0	102.0	102.0

AREAS GIVEN IN TABLE ARE BASED UPON AN INTERNAL STATIC PRESSURE OF 100 PSI. AND A SOIL BEARING CAPACITY OF 1000 LBS. PER SQ. FT. BEARING AREAS FOR ANY PRESSURE AND SOIL BEARING CAPACITY MAY BE OBTAINED BY MULTIPLYING THE TABULATED VALUES BY A CORRECTION FACTOR "F".

F = ACTUAL SPECIFIED TEST PRESSURE IN HUNDREDS OF LBS/SQ. IN.
ACTUAL SOIL BEARING CAPACITY IN THOUSANDS OF LBS.

FIGURE 4-6(b)

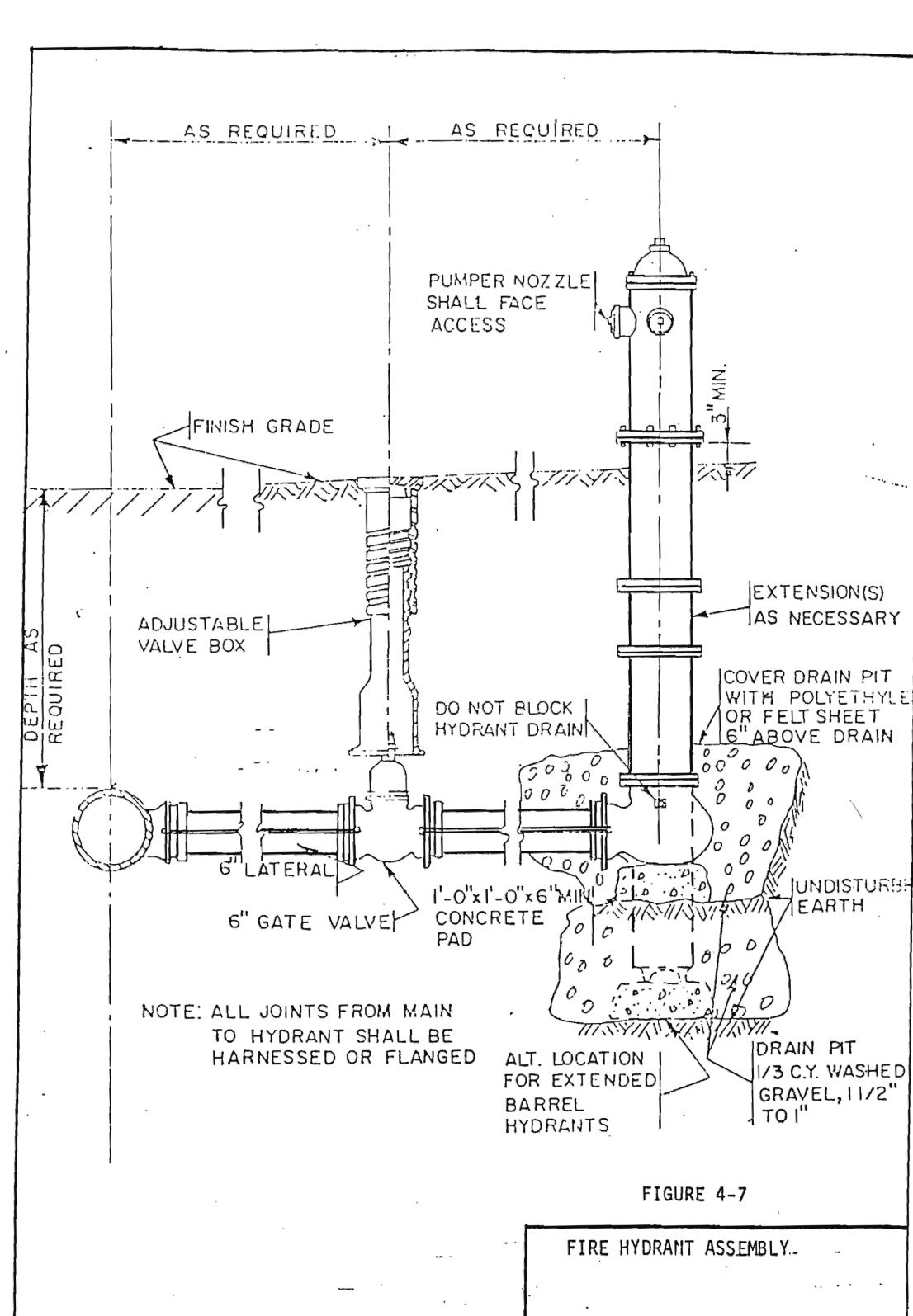
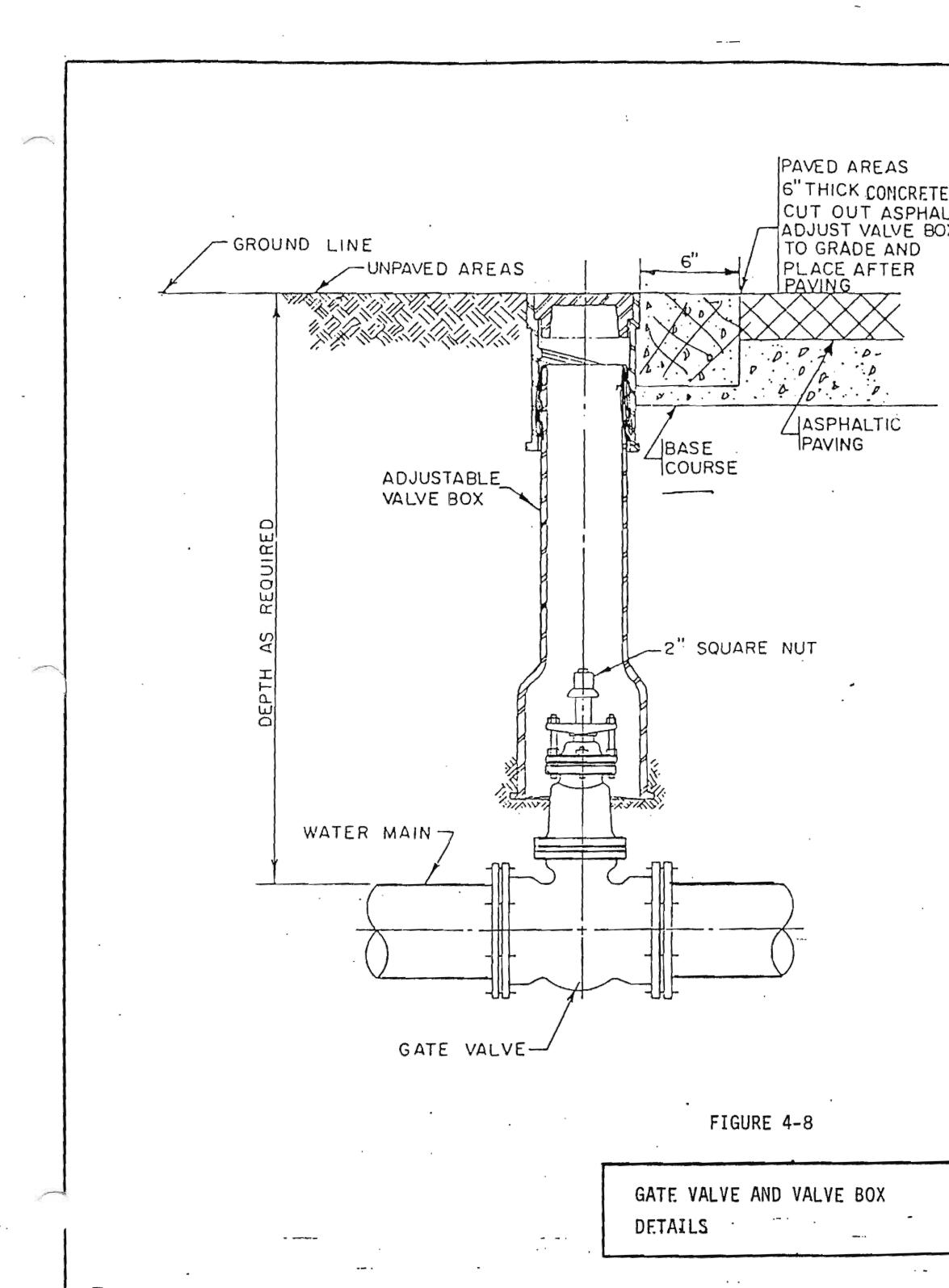


FIGURE 4-7



**GATE VALVE AND VALVE BO
DETAILS**

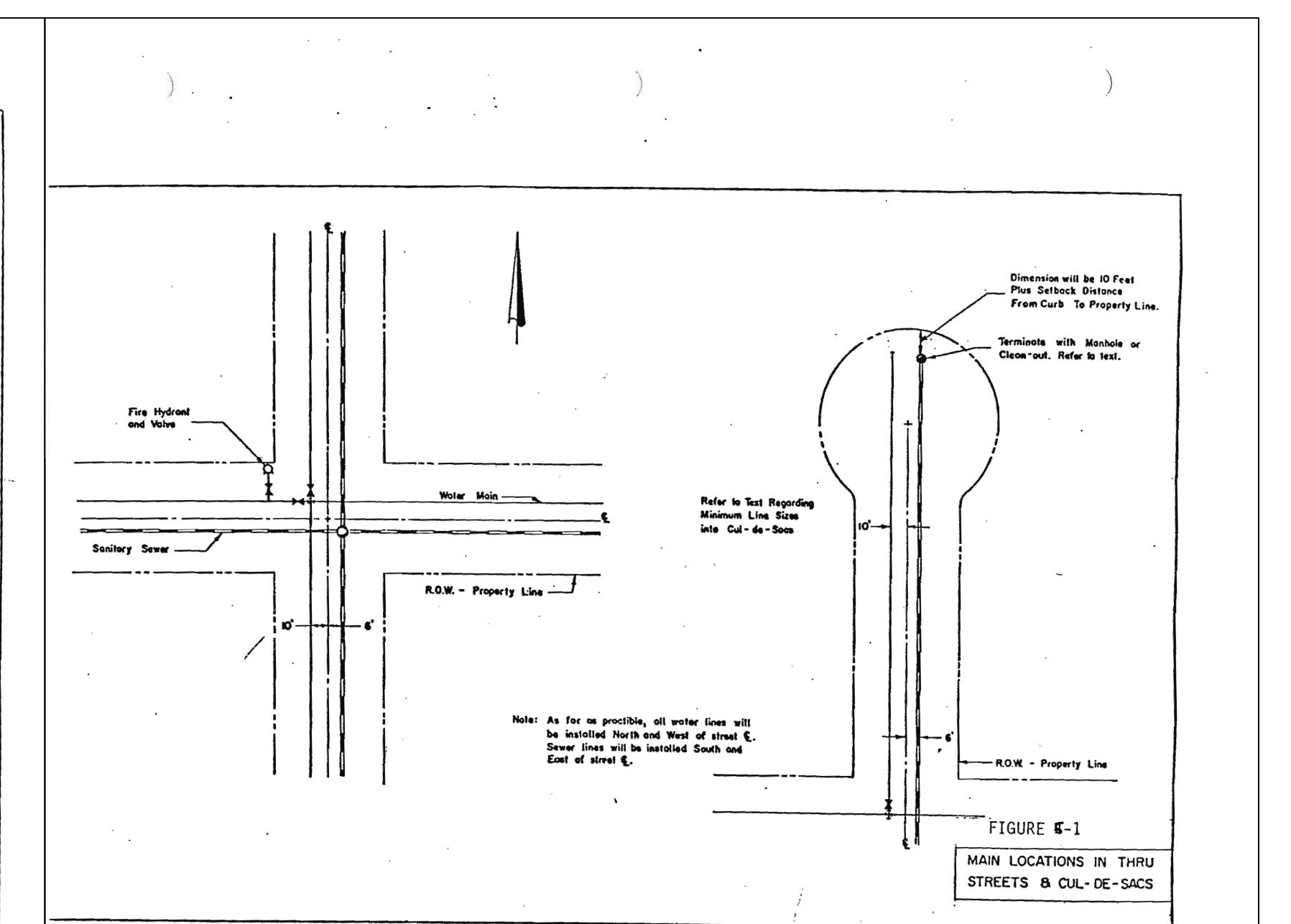
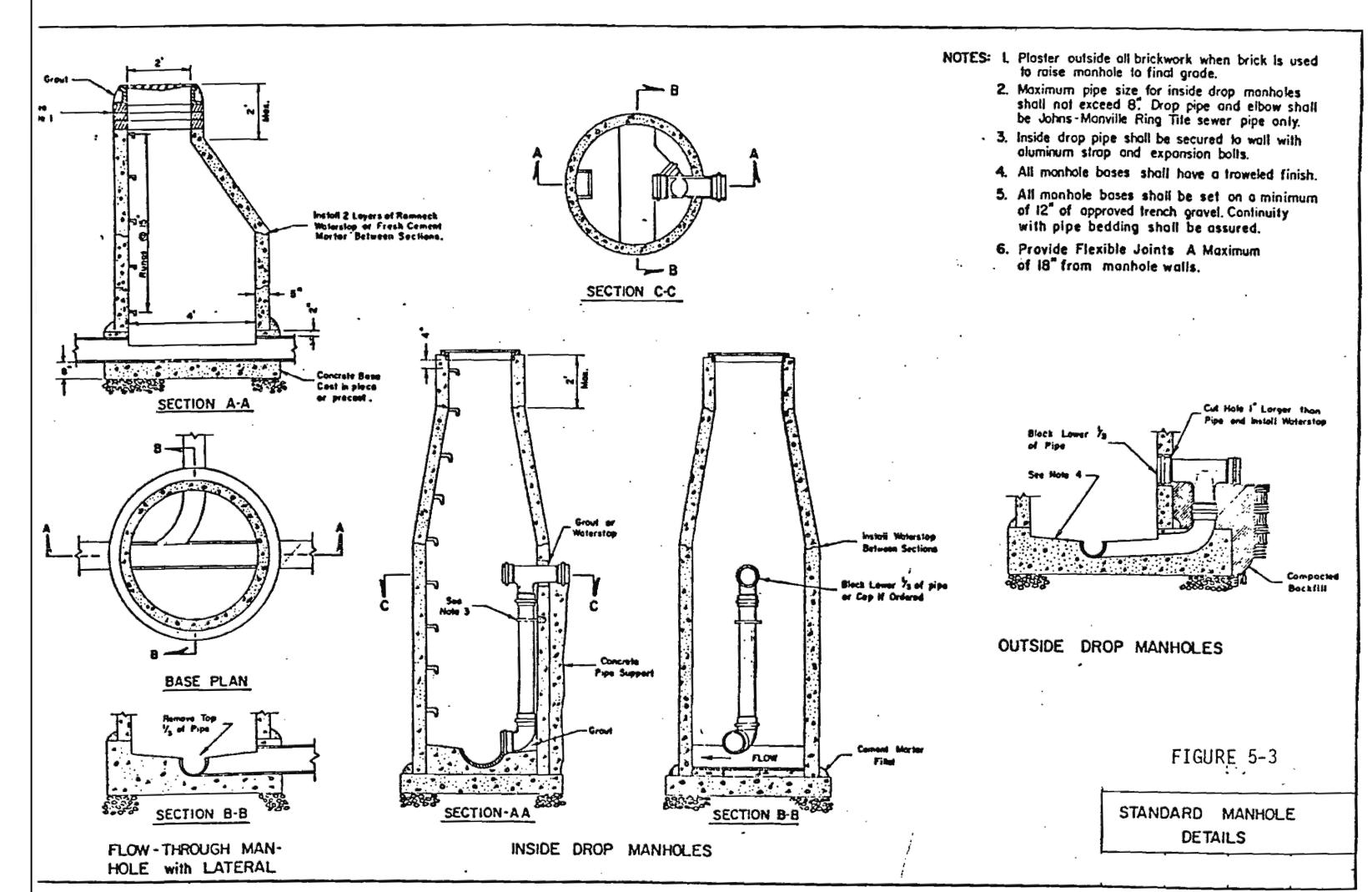
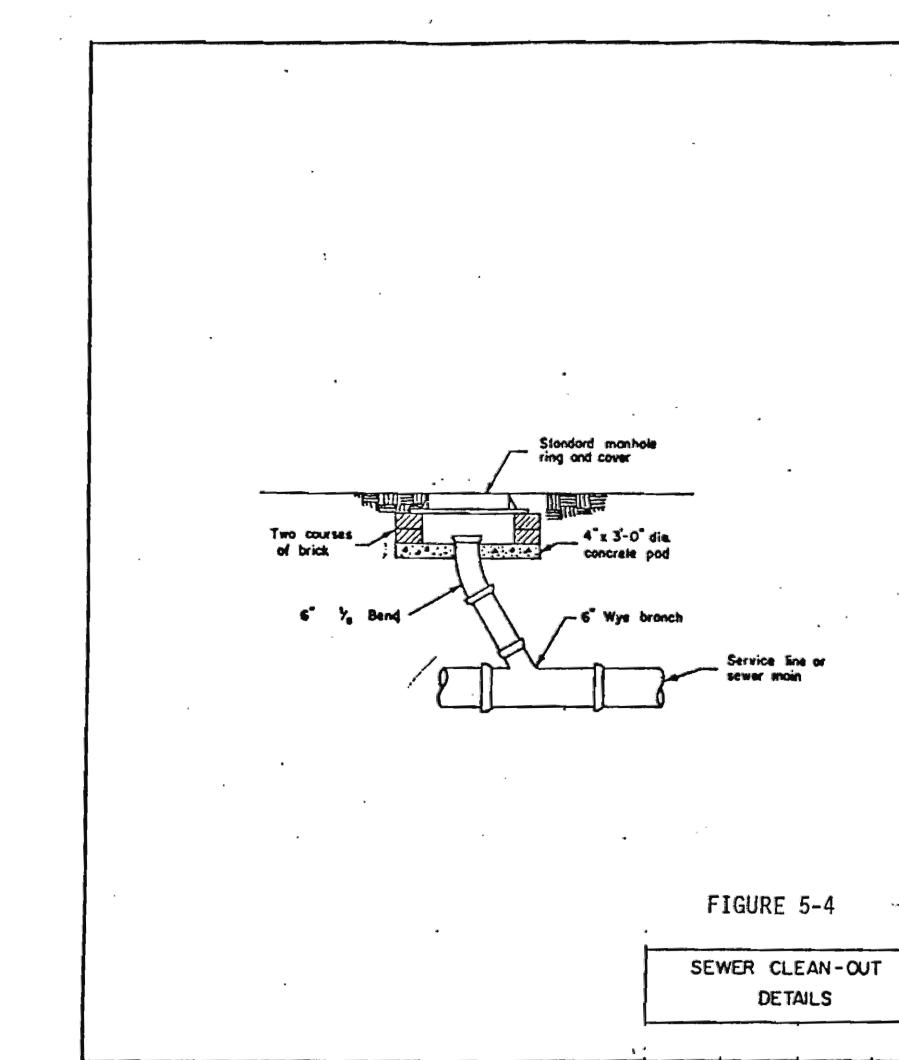


FIGURE 5-1

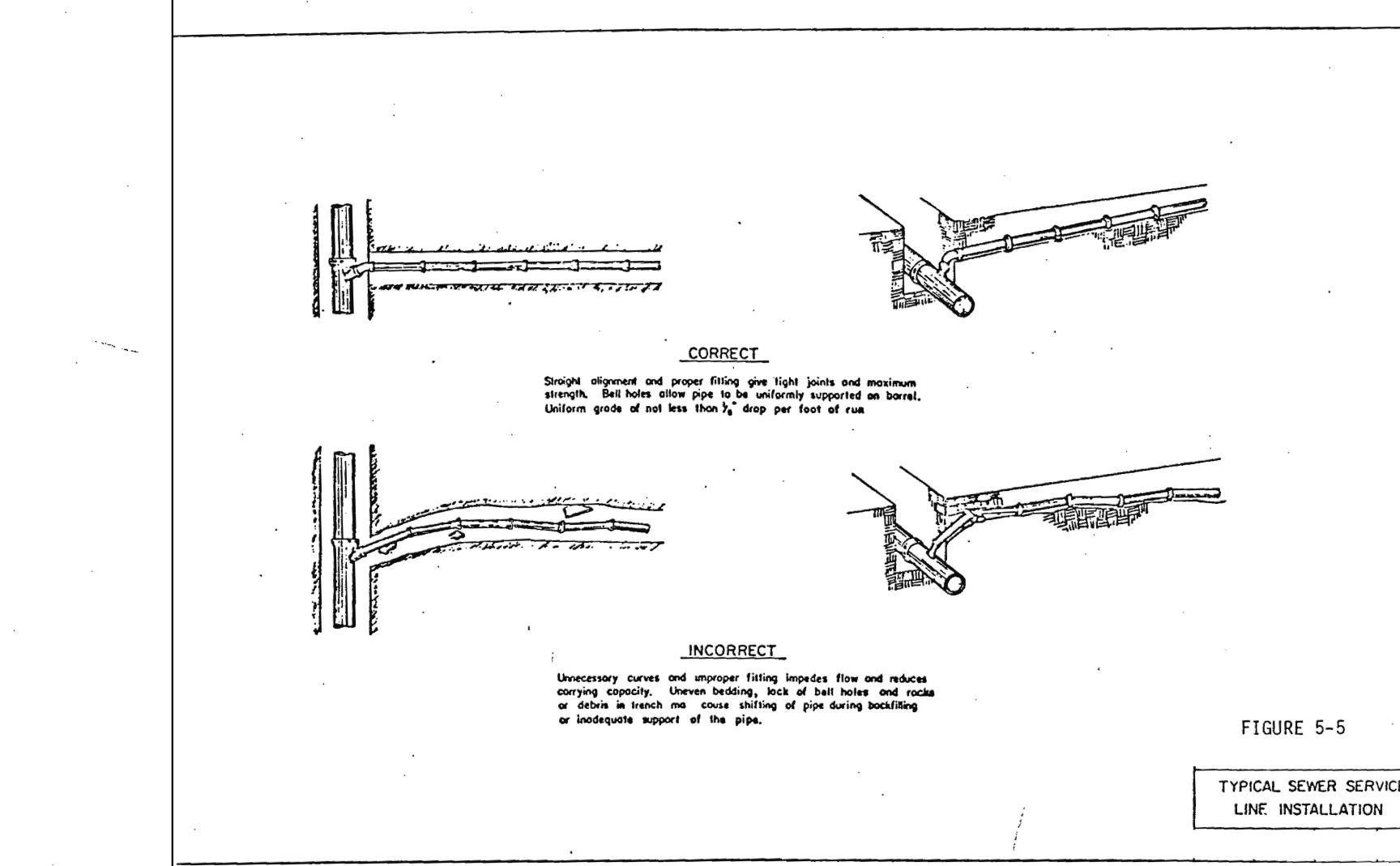
N LOCATIONS IN THRU
STREETS & CUL-DE-SACS



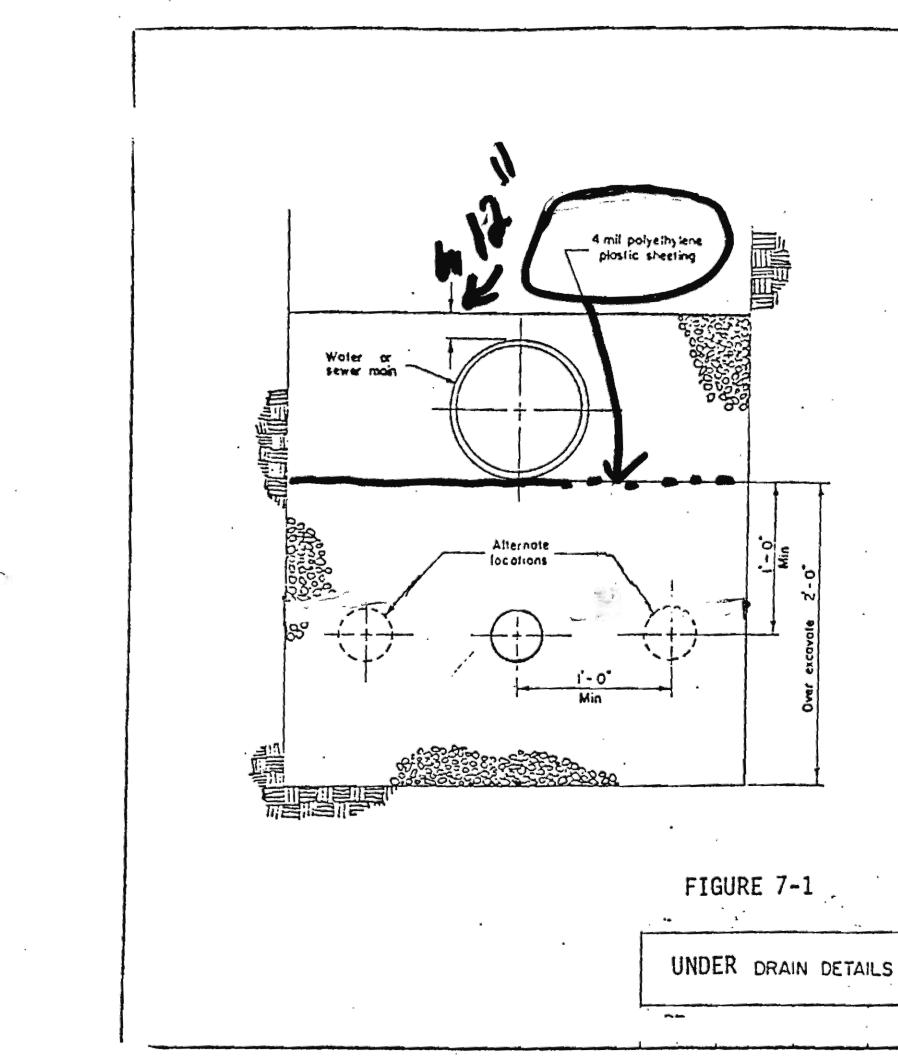
FIGURE



FIGURE



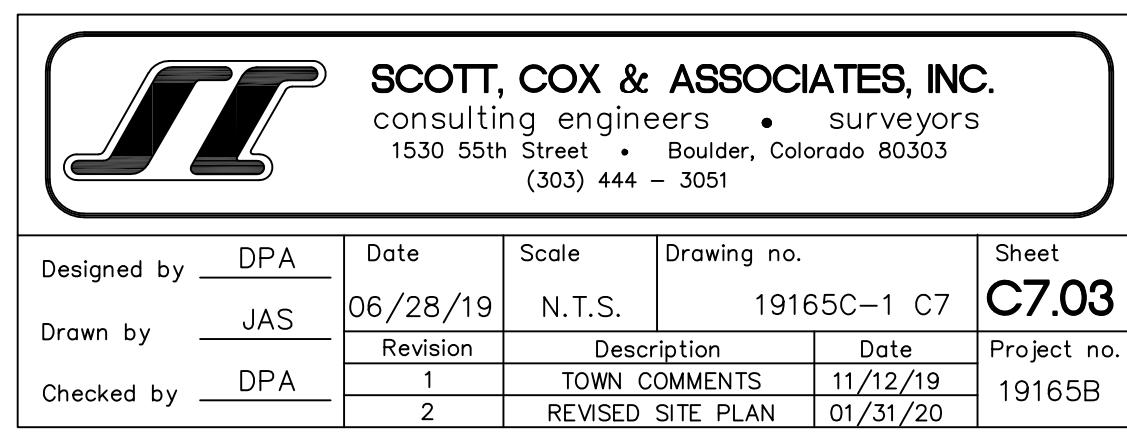
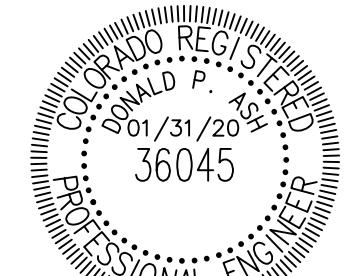
FIGU

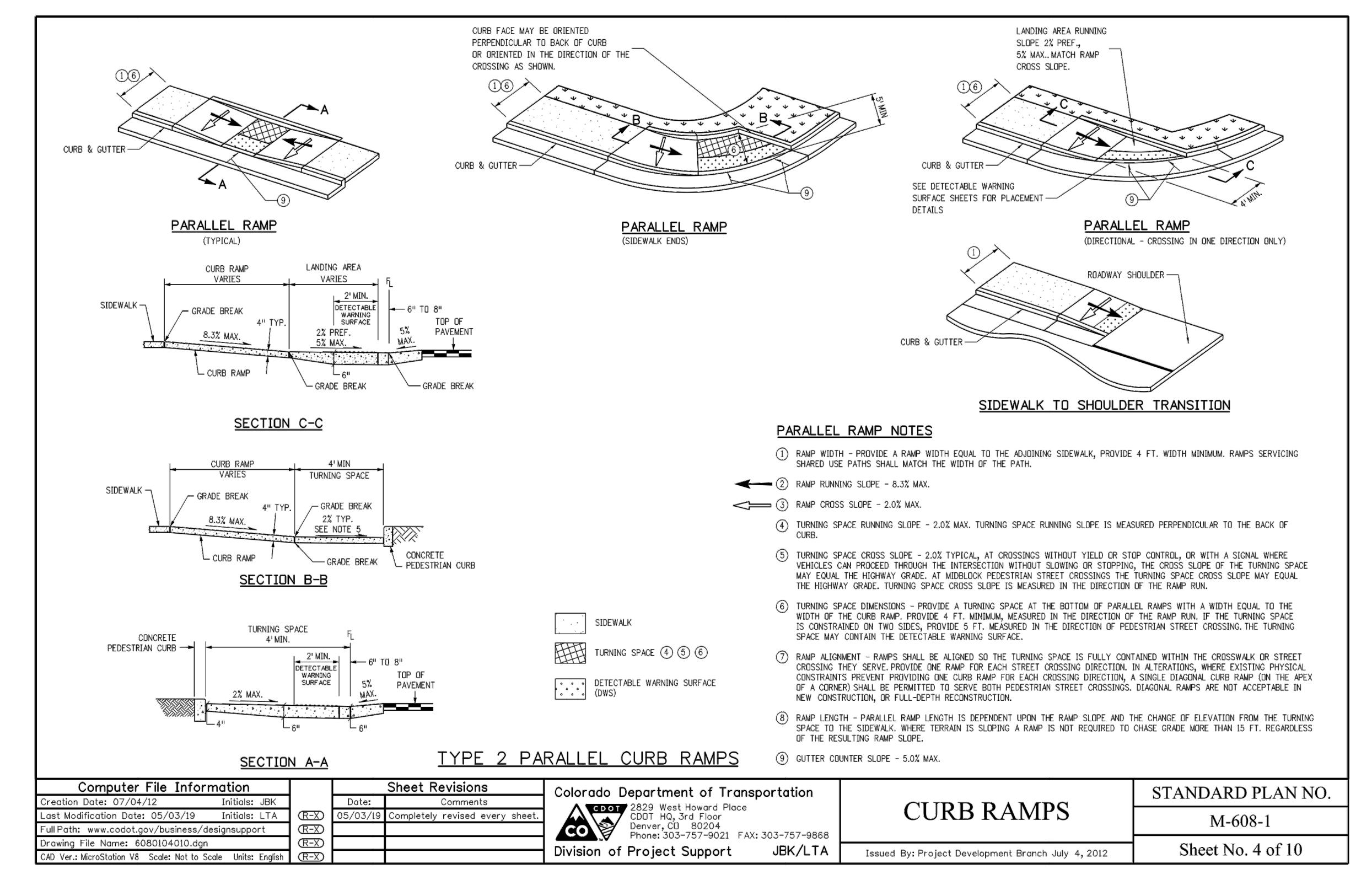
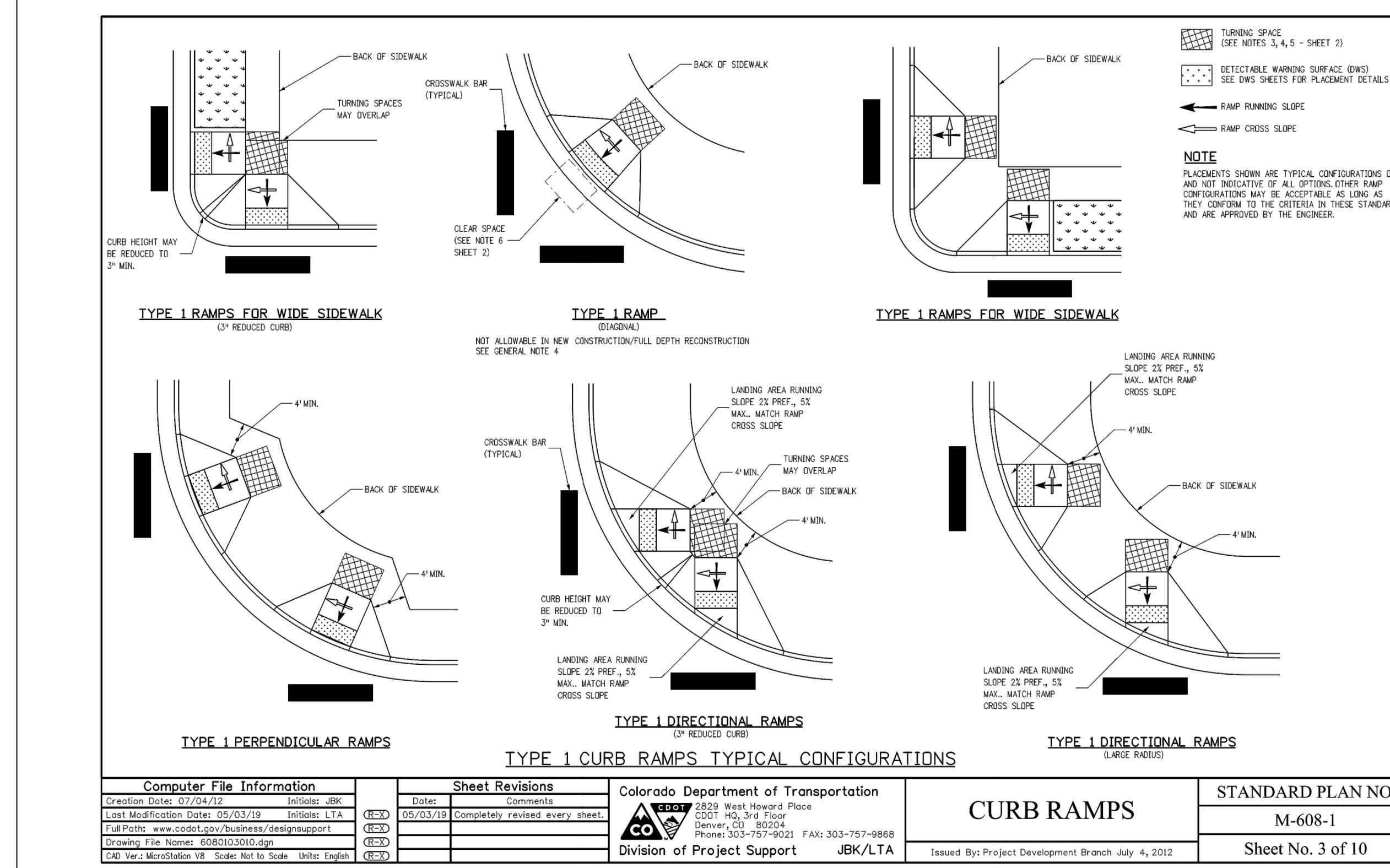
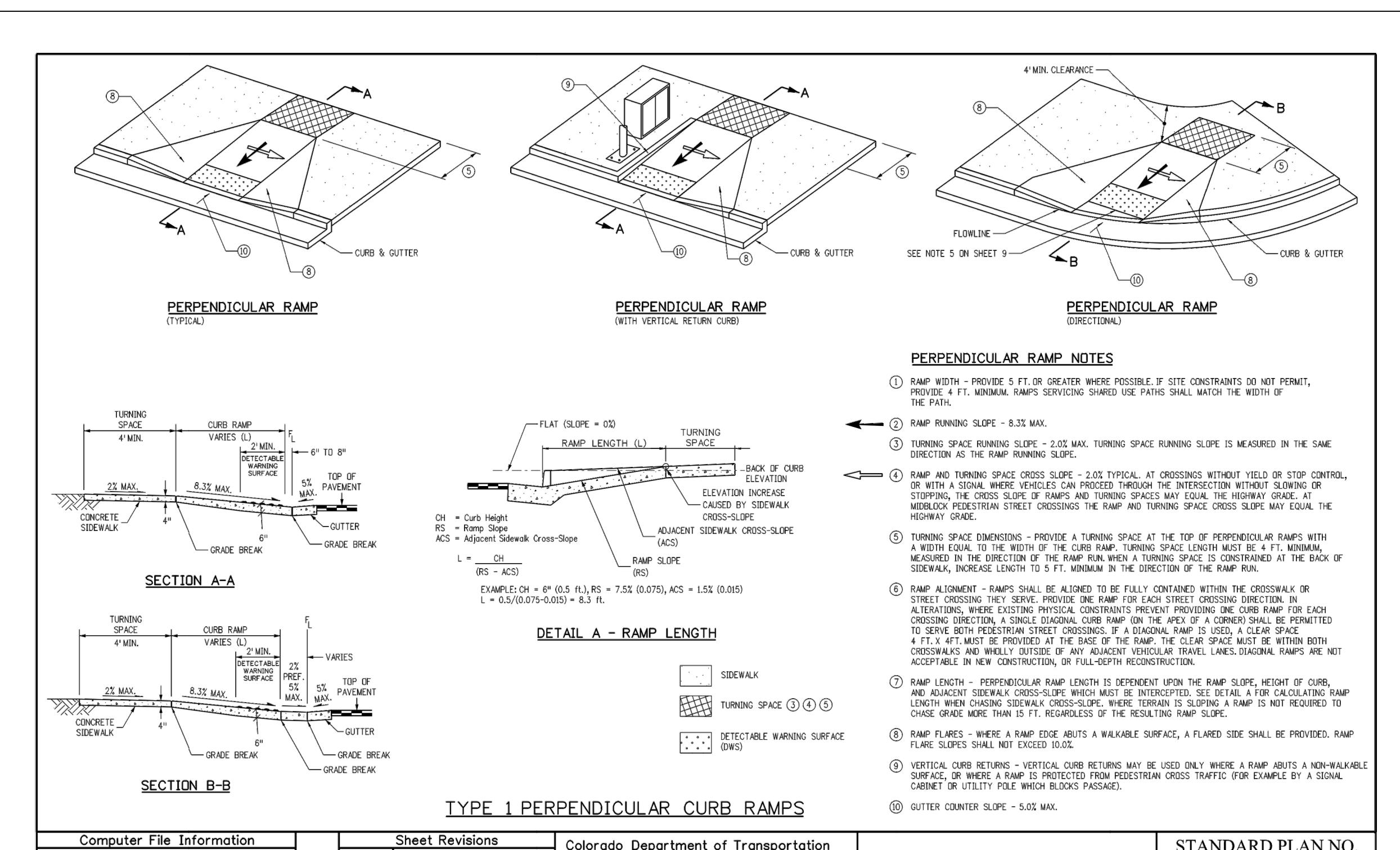
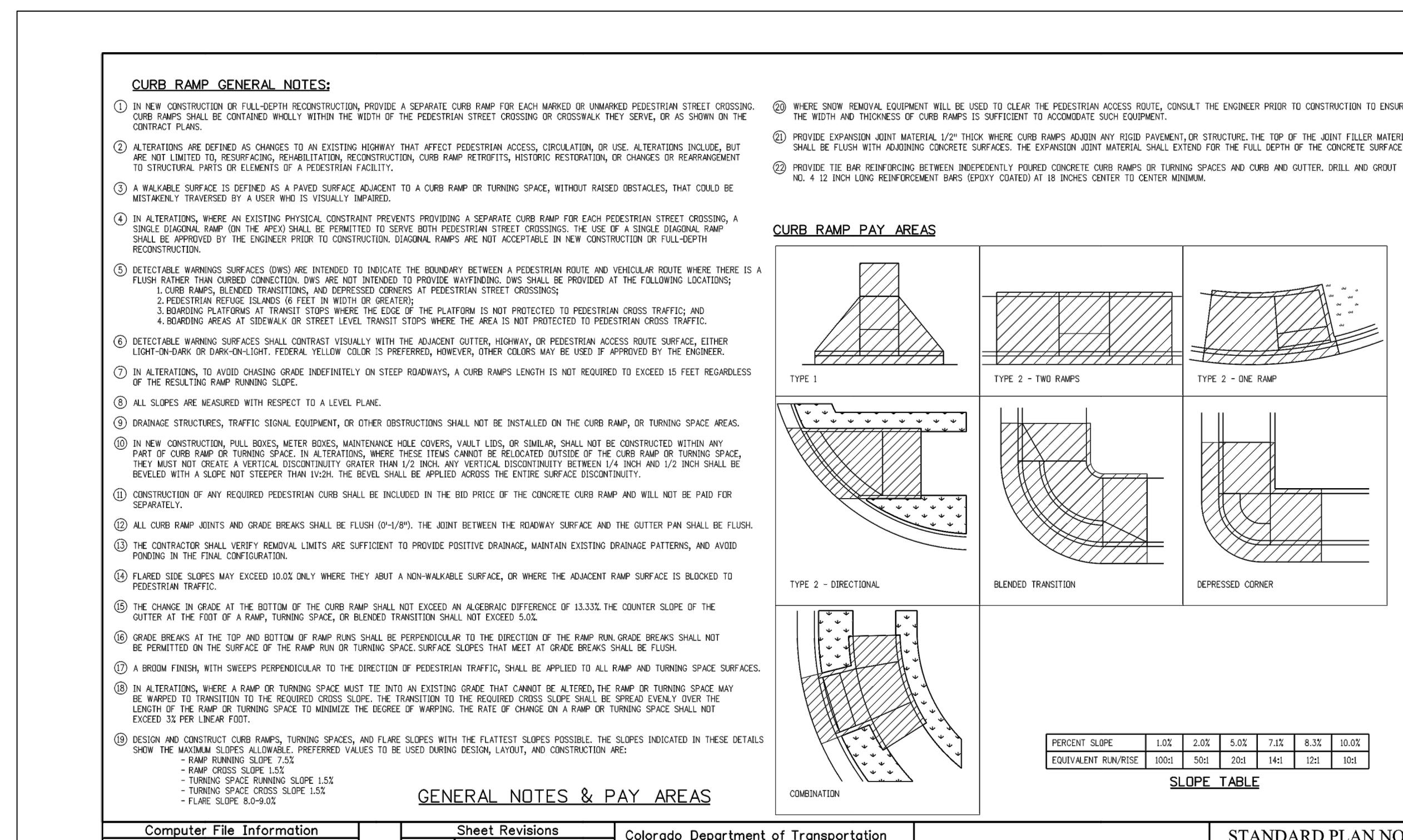


FIGURE

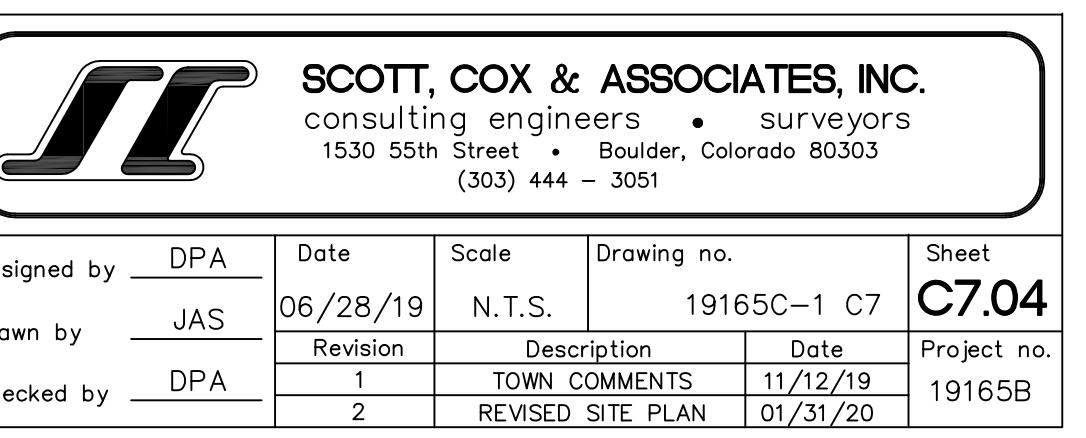
UNDER GOVERNMENT CONTROL

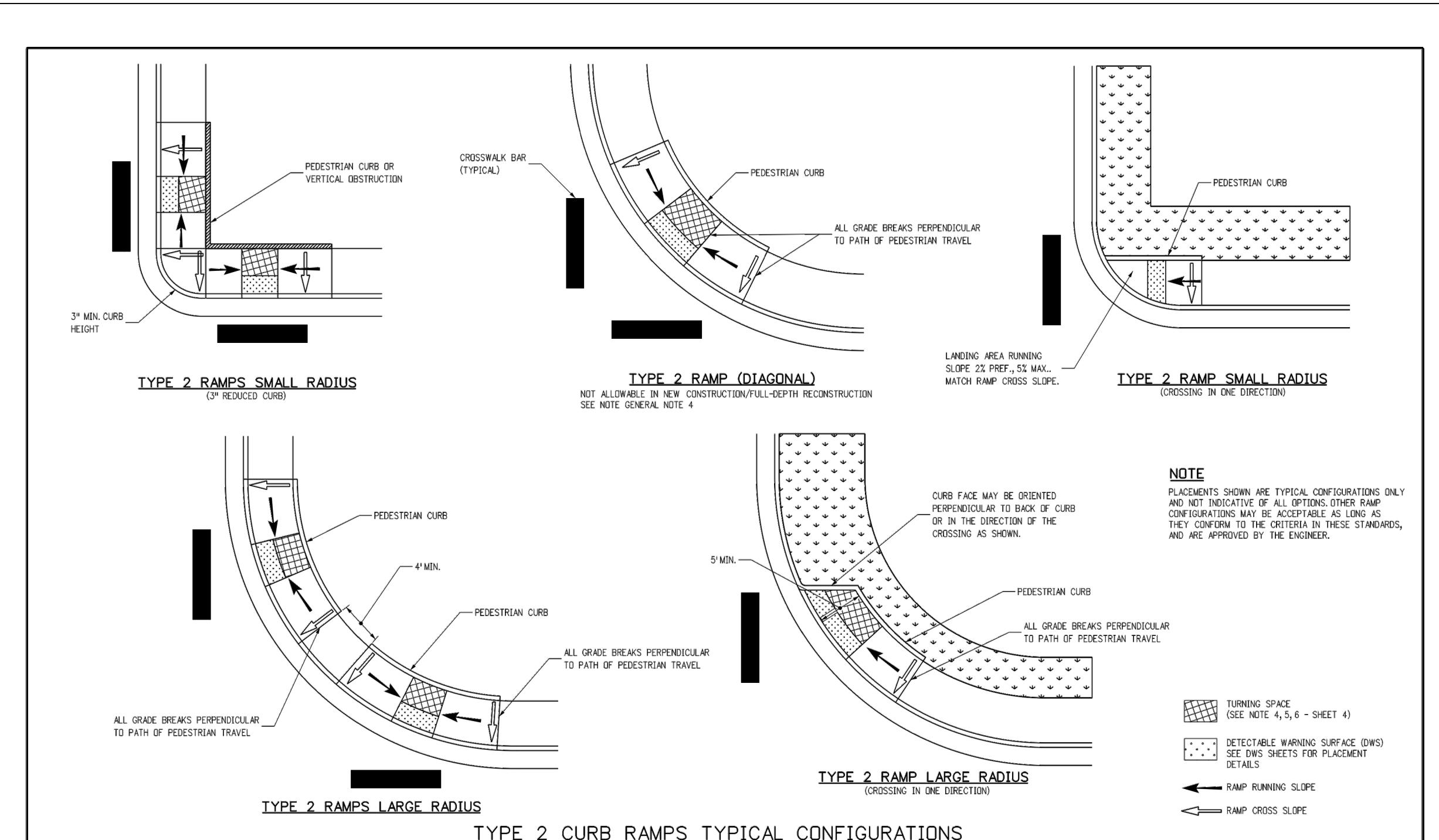
**CIVIL DETAILS
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO**





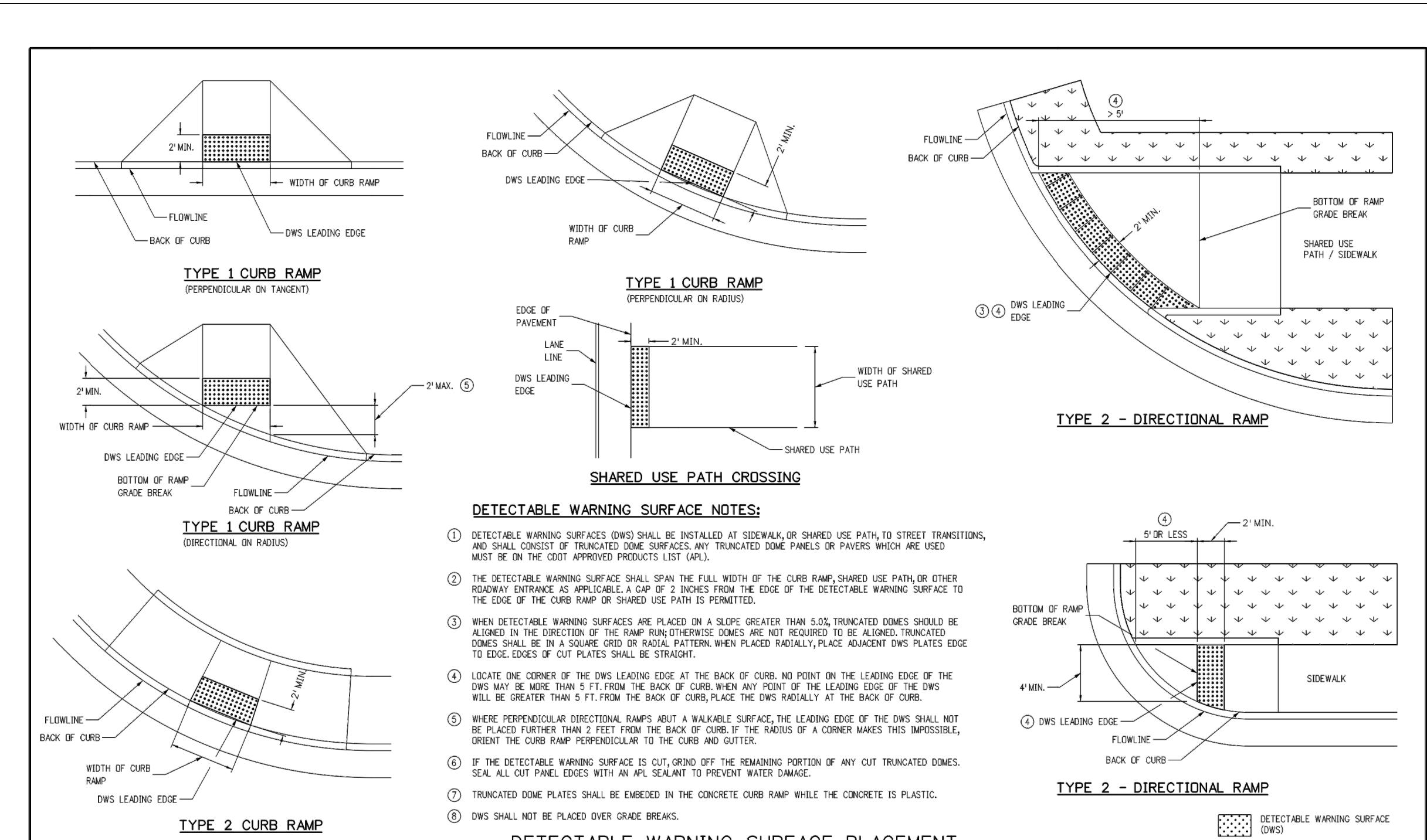
CIVIL DETAILS
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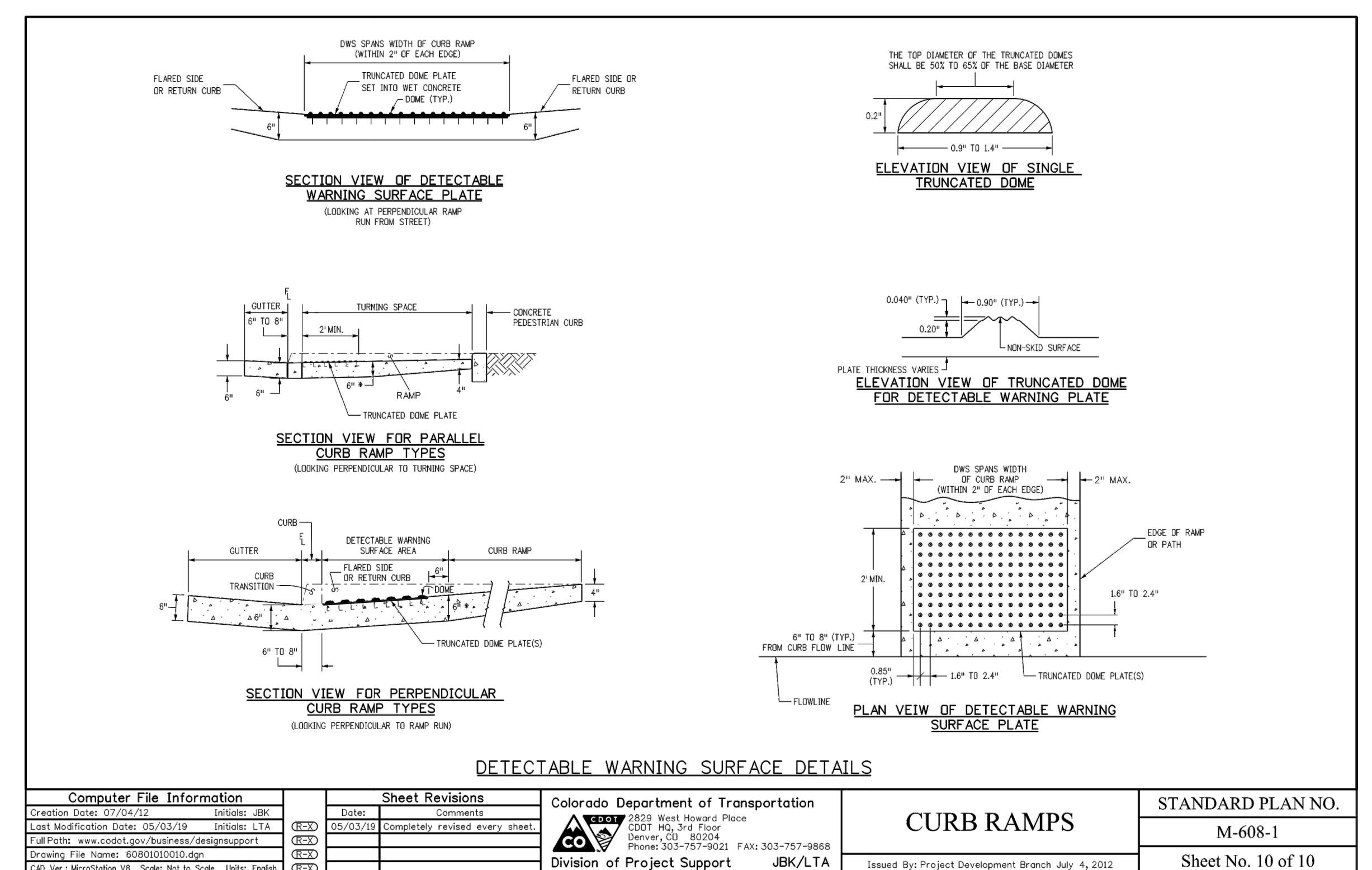
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Creation Date: 07/04/12	Initiator: JBK	Date: 05/03/19	Comments: Completely revised every sheet.	CDOT HQ, 3rd Floor	2829 West Howard Place	Division of Project Support	JBK/LTA	M-608-1	
Last Modification Date: 05/03/19	Initiator: LTA			CDOT HQ, 4th Floor	2829 West Howard Place				
Full Path: www.codot.gov/business/designsupport				Phone: 303-757-9868	Fax: 303-757-9868				
Drawing File Name: 6080105010.dgn									
CAD Ver: MicroStation V8	Scale: Not to Scale	Units: English							

TYPE 2 CURB RAMPS TYPICAL CONFIGURATIONS



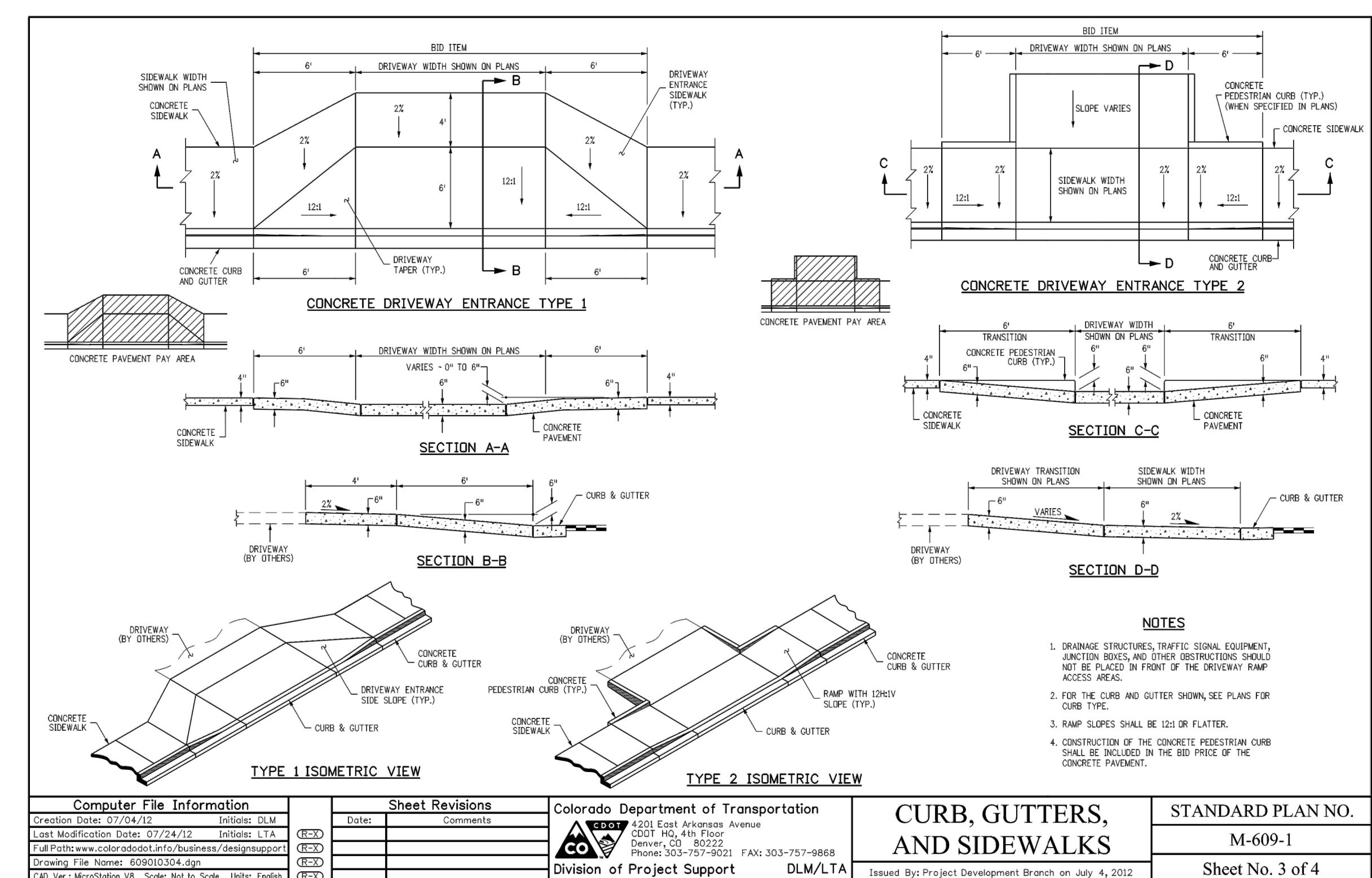
Computer File Information		Sheet Revisions		Colorado Department of Transportation		CURB RAMPS		STANDARD PLAN NO.	
Creation Date: 07/04/12	Initiator: JBK	Date: 05/03/19	Comments: Completely revised every sheet.	CDOT HQ, 3rd Floor	2829 West Howard Place	Division of Project Support	JBK/LTA	M-608-1	
Last Modification Date: 05/03/19	Initiator: LTA			CDOT HQ, 4th Floor	2829 West Howard Place				
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Drawing File Name: 6080105010.dgn									
CAD Ver: MicroStation V8	Scale: Not to Scale	Units: English							

DETECTABLE WARNING SURFACE PLACEMENT



Computer File Information		Sheet Revisions		Colorado Department of Transportation		CURB RAMPS		STANDARD PLAN NO.	
Creation Date: 07/04/12	Initiator: JBK	Date: 05/03/19	Comments: Completely revised every sheet.	CDOT HQ, 3rd Floor	2829 West Howard Place	Division of Project Support	JBK/LTA	M-608-1	
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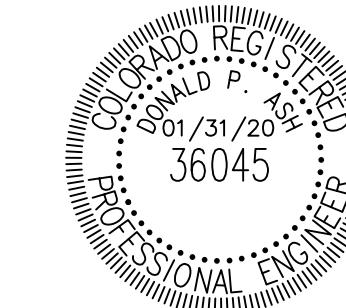
DETECTABLE WARNING SURFACE DETAILS



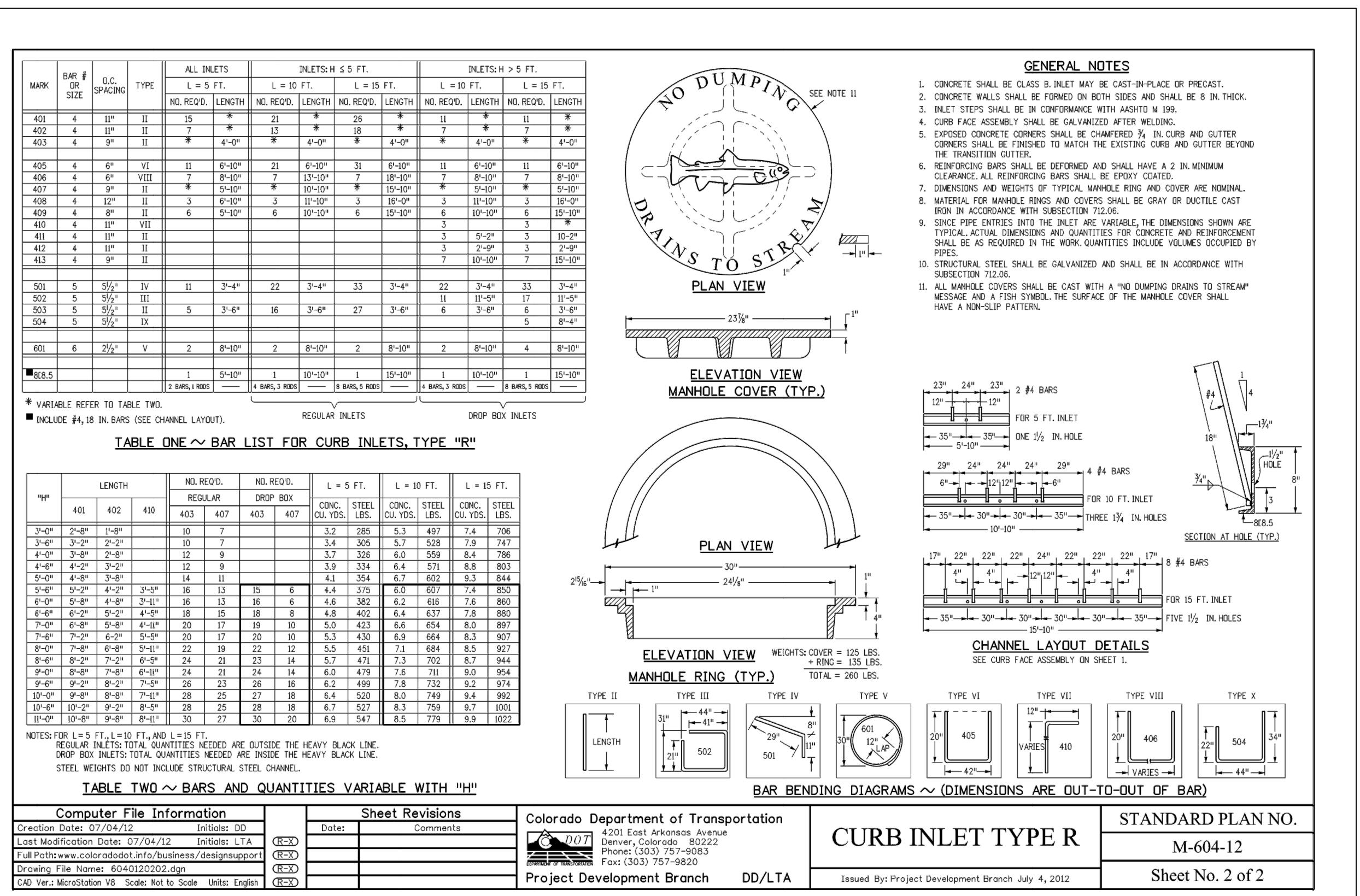
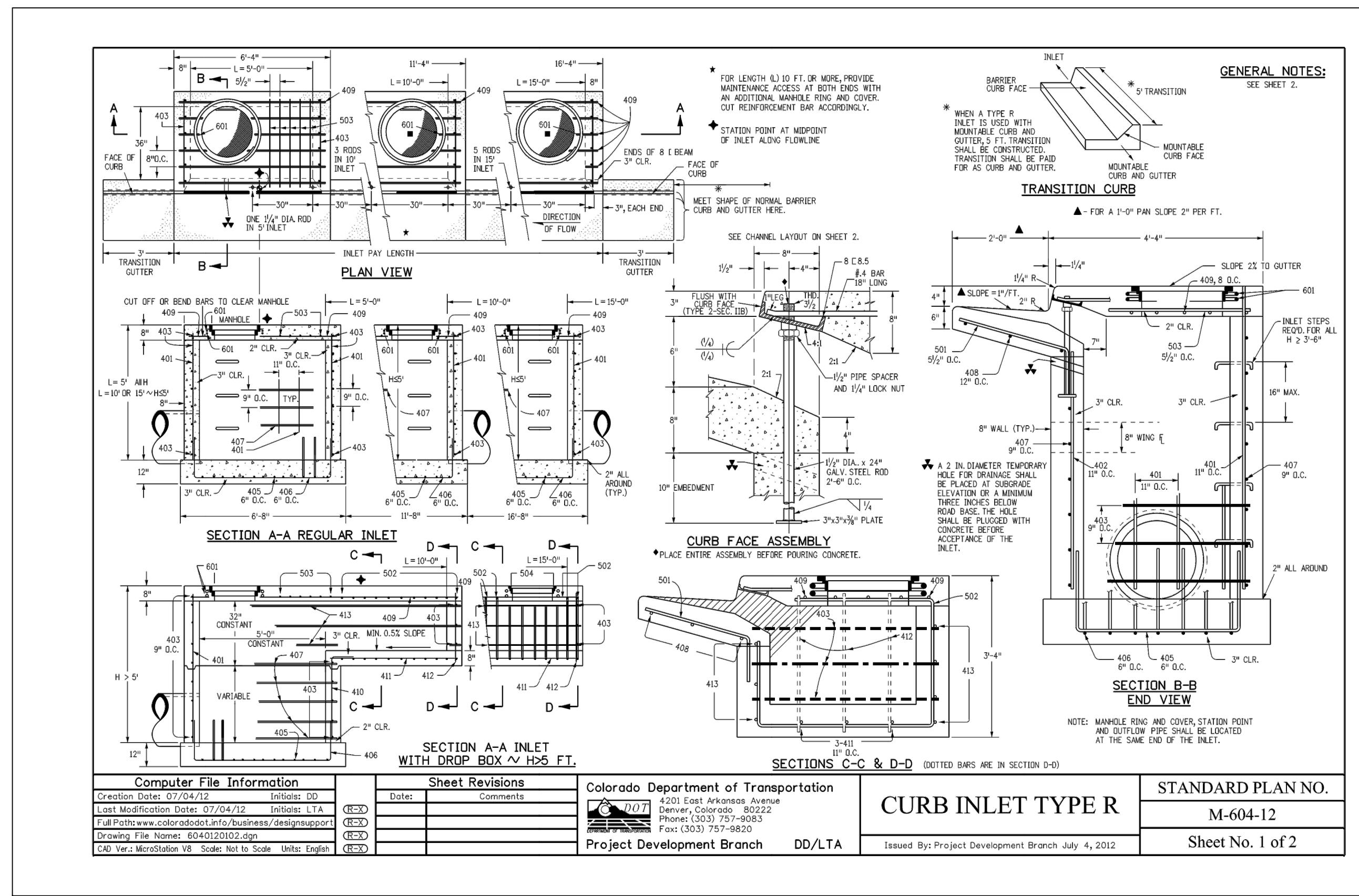
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Creation Date: 07/04/12	Initiator: DLM	Date: 07/24/12	Comments: Completely revised every sheet.	CDOT HQ, 4th Floor	2829 West Howard Place	Division of Project Support	DLM/LTA	M-609-1	
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Sheet No. 3 of 4

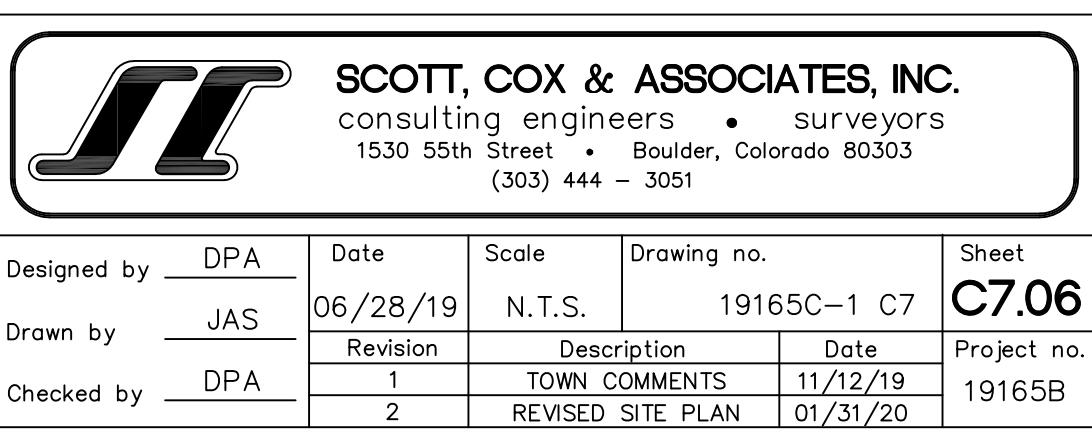
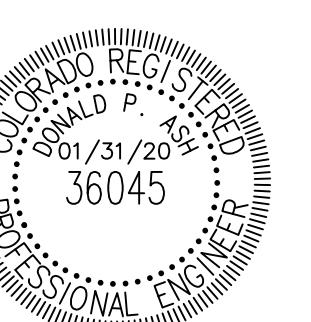
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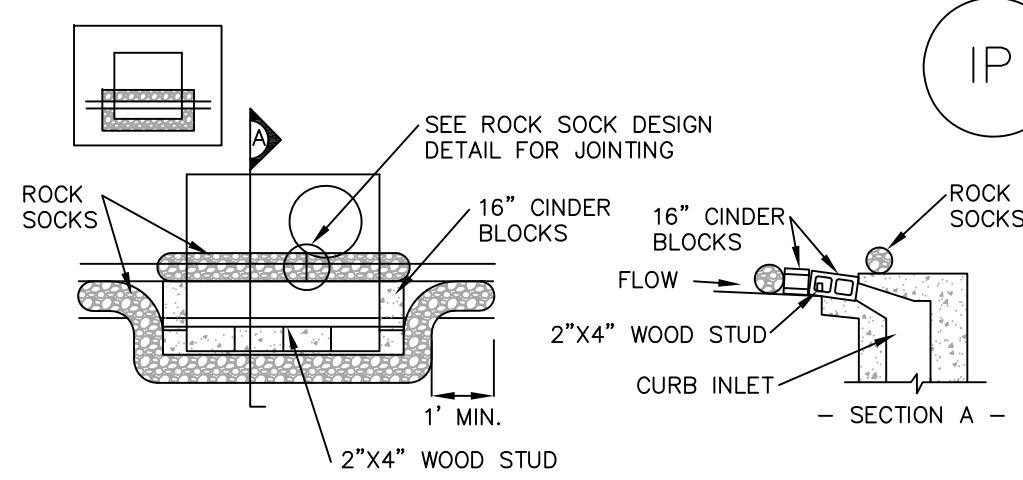


CIVIL DETAILS
SUMMIT HOUSING GROUP
LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO



**CARTER DRIVE
CIVIL DETAILS
SUMMIT HOUSING GROUP
S VALLEY PARK FILING NO. 8
LYONS, COLORADO**

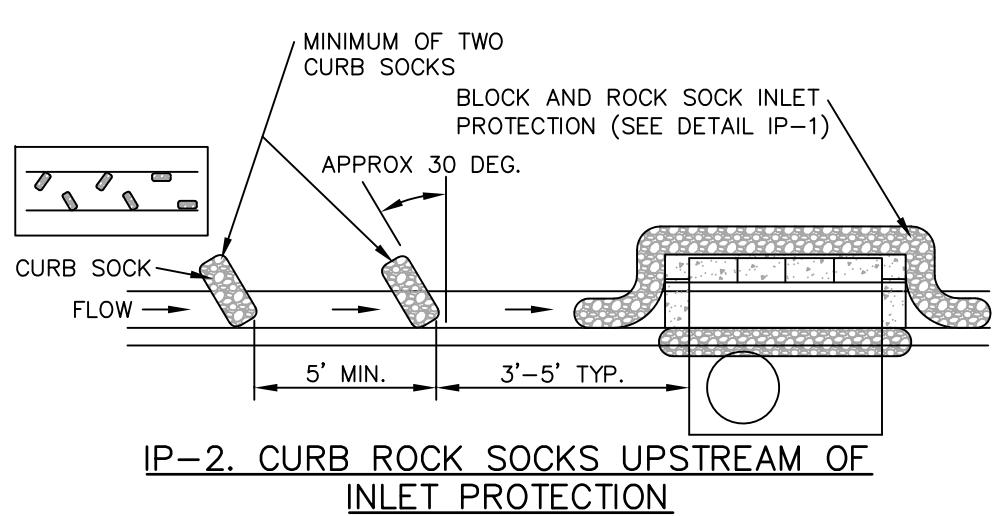




IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

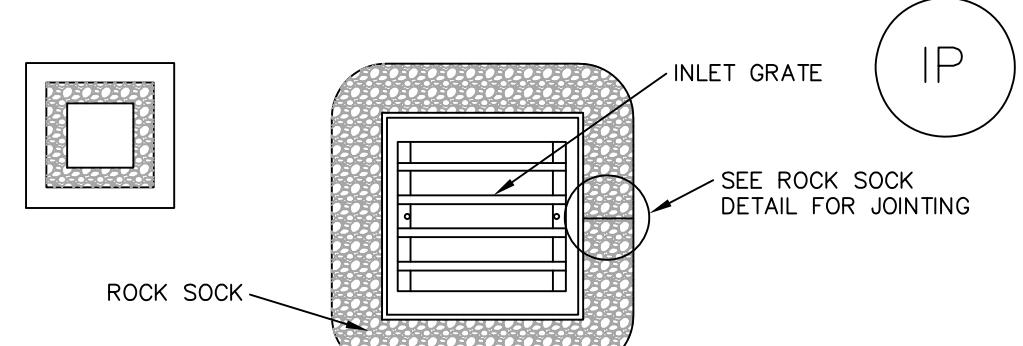
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

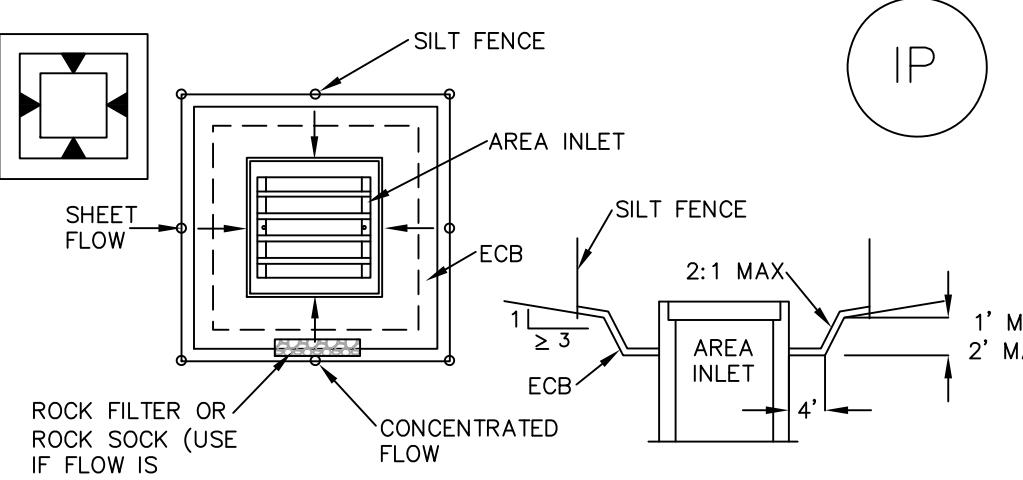
1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.
2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.



IP-3. ROCK SOCK SUMP / AREA INLET PROTECTION

ROCK SOCK SUMP / AREA INLET PROTECTION INSTALLATION NOTES

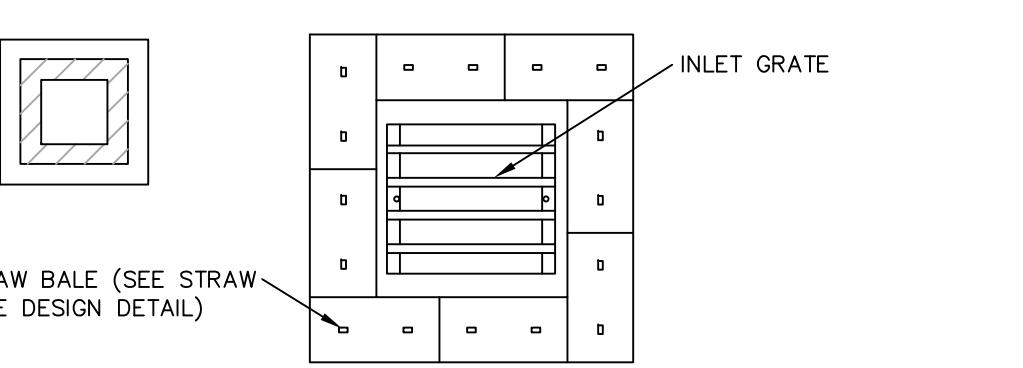
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP-5. OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.
2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.
3. SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.



IP-6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
-LOCATION OF INLET PROTECTION.
-TYPE OF INLET PROTECTION (IP-1, IP-2, IP-3, IP-4, IP-5, IP-6)
2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.
3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR 1/4 OF THE HEIGHT FOR STRAW BALES.
5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.
6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.



SILT FENCE INSTALLATION NOTES

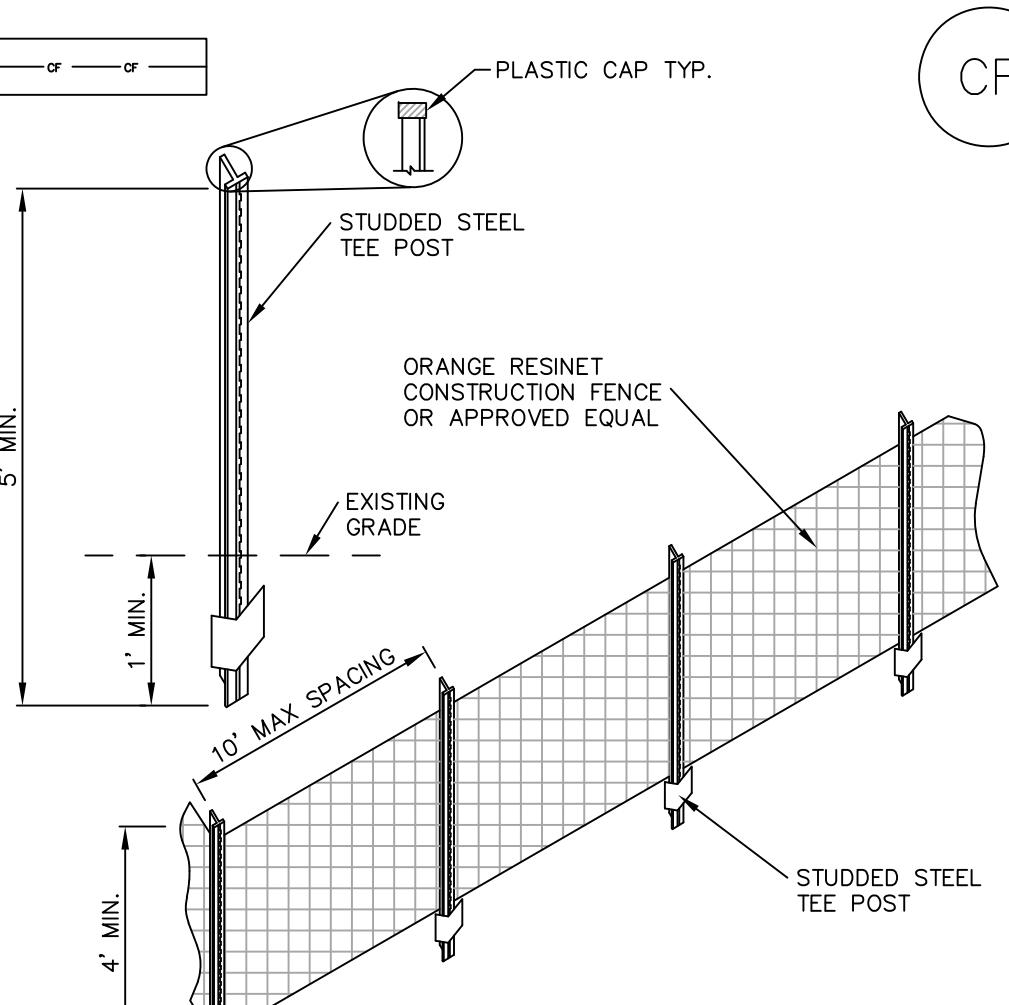
1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTATION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

SECTION A

SF-1. SILT FENCE



CF-1. PLASTIC MESH CONSTRUCTION FENCE

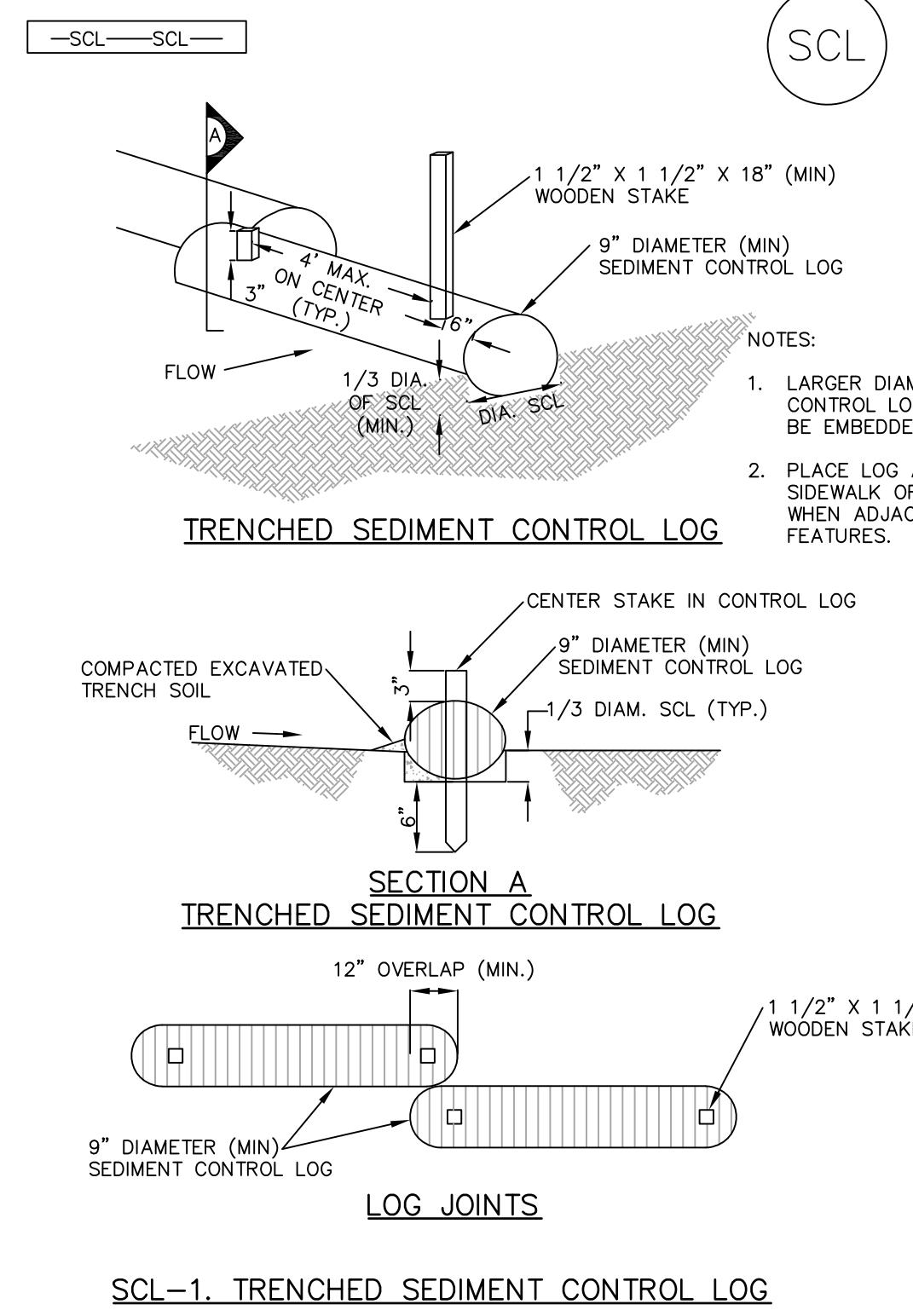
CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
-LOCATION OF CONSTRUCTION FENCE.
2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR-GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.
4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.
5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

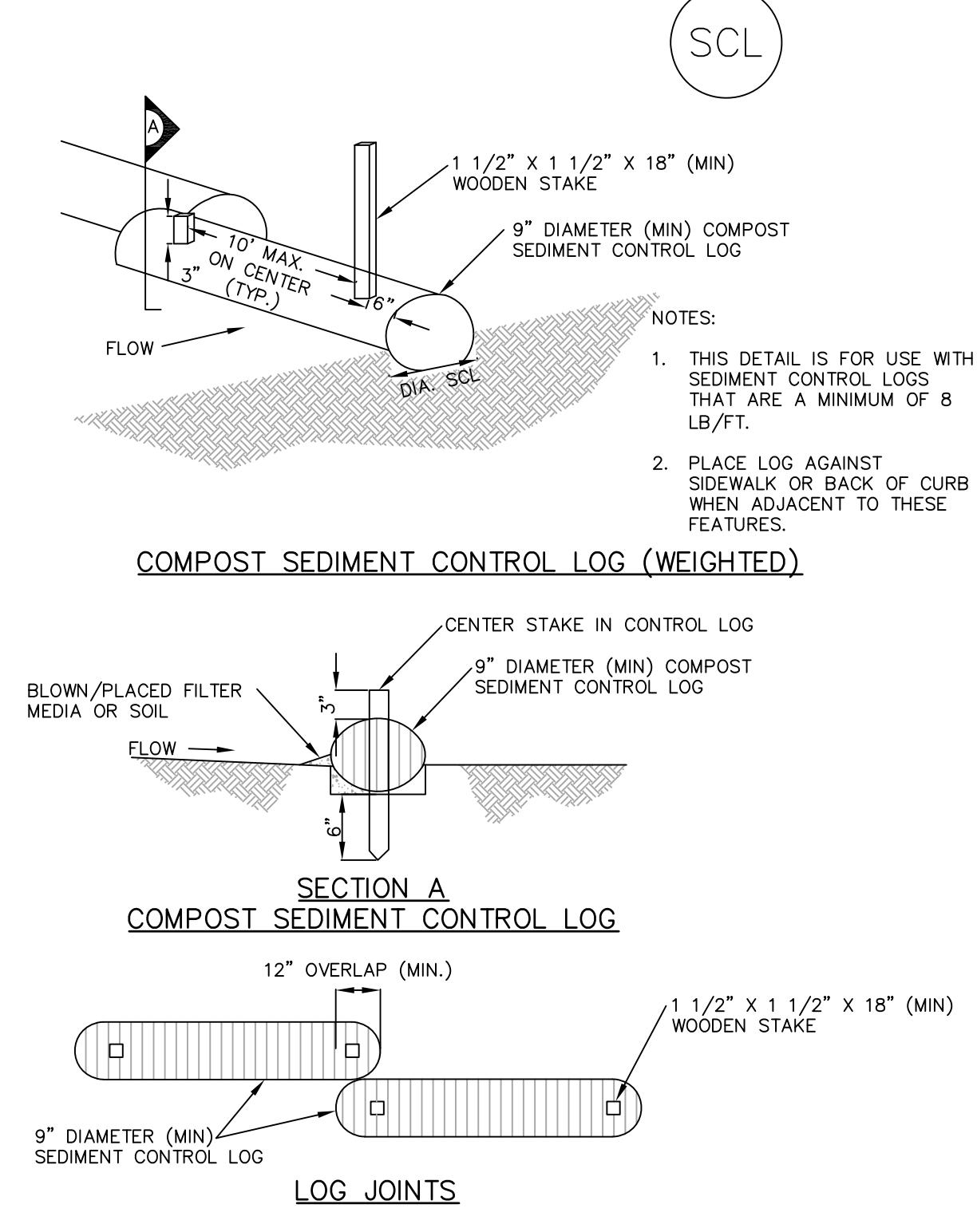


Designed by	DPA	Date	Scale	Drawing no.	C7.07
Drawn by	JAS	06/28/19	N.T.S.	19165C-1 C7	
Checked by	DPA	1	Description	Date	Project no.
		2	TOWN COMMENTS	11/12/19	19165B
			REVISED SITE PLAN	01/31/20	

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SCL-1. TRENCHED SEDIMENT CONTROL LOG



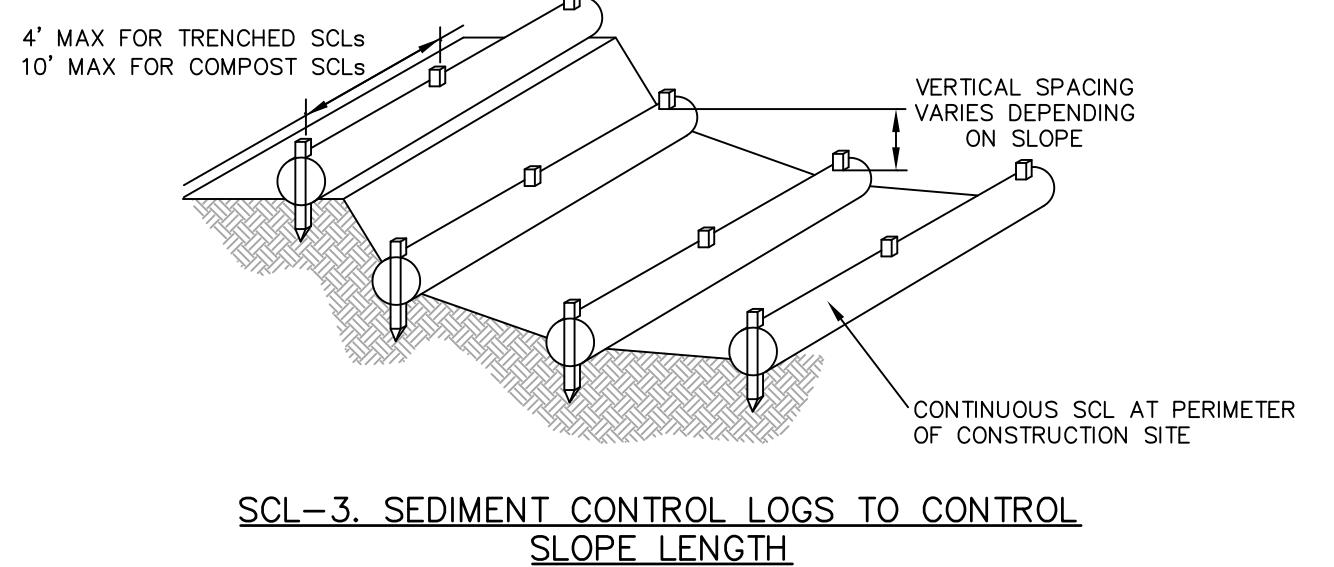
SCL-2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

SEDIMENT CONTROL LOG INSTALLATION NOTES

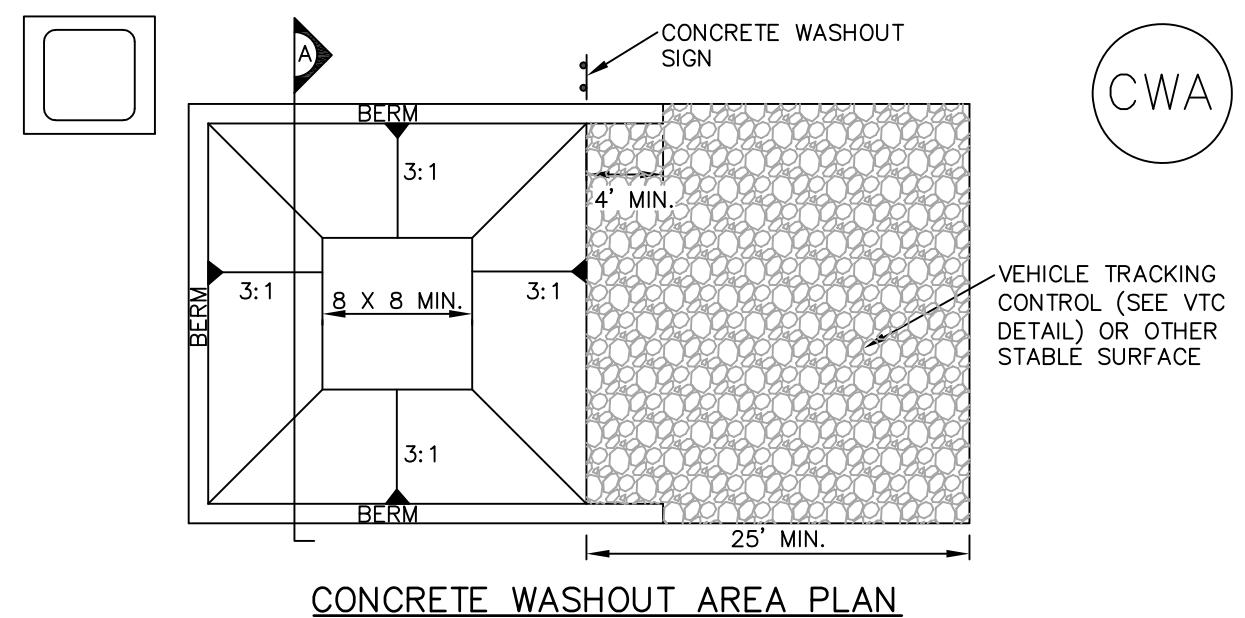
- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
- SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADE LAND-DISTURBING ACTIVITIES.
- SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
- SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.
- IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY 1/3 OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.
- THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.
- FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
- SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. REMOVED SEDIMENT LOGS MAY BE LEFT IN PLACE AS BAGS AS BAGS ARE REMOVED. DISTURBED AREAS SHOULD, IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.



SCL-3. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH



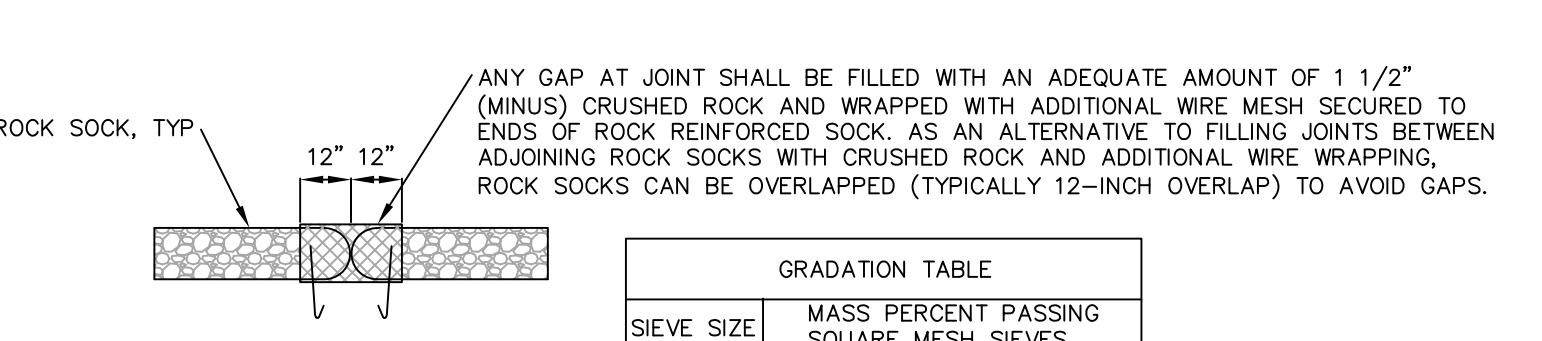
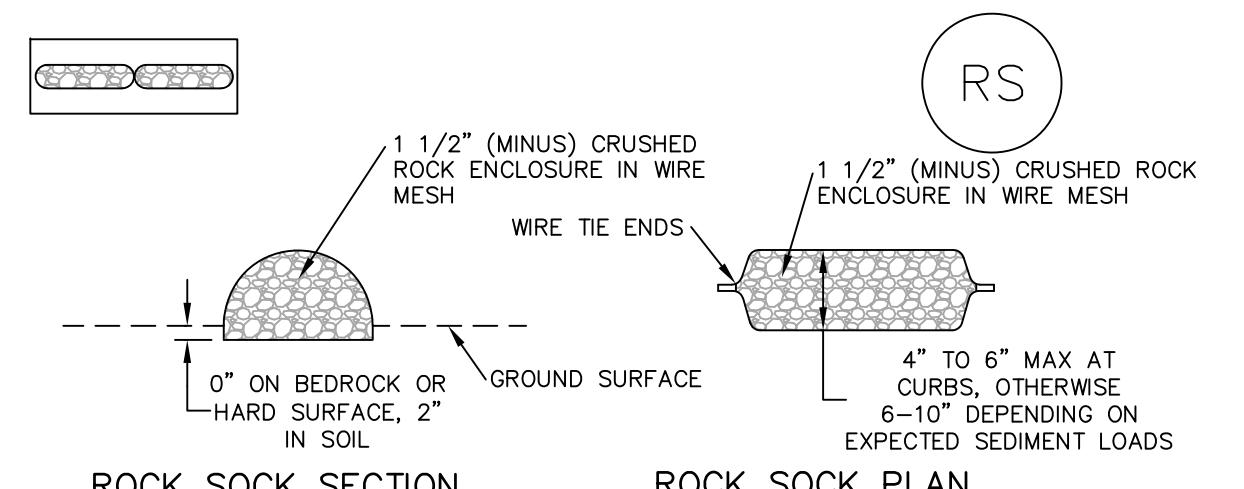
CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

- SEE PLAN VIEW FOR: -CWA INSTALLATION LOCATION.
- DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE AREA SHOULD BE USED.
- THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
- BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
- VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
- SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- THE CWA SHALL BE REPAVED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
- CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
- THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
- WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.



GRADATION TABLE	
SIEVE SIZE	MASS PERCENT PASSING SQUARE MESH SIEVES
NO. 4	
2"	100
1 1/2"	90 - 100
3/4"	20 - 55
3/8"	0 - 15
	0 - 5

MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

ROCK SOCK INSTALLATION NOTES

- SEE PLAN VIEW FOR: -LOCATION(S) OF ROCK SOCKS.
- CRUSHED ROCK SHALL BE 1 1/2" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1 1/2" MINUS).
- WIRE MESH SHALL BE FABRICATED OF 10 GAUGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF 1/2". RECOMMENDED MINIMUM ROLL WIDTH OF 48".
- WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.
- SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

RS-1. ROCK SOCK PERIMETER CONTROL

ROCK SOCK SECTION

ROCK SOCK PLAN

ROCK SOCK JOINTING

GRADATION TABLE

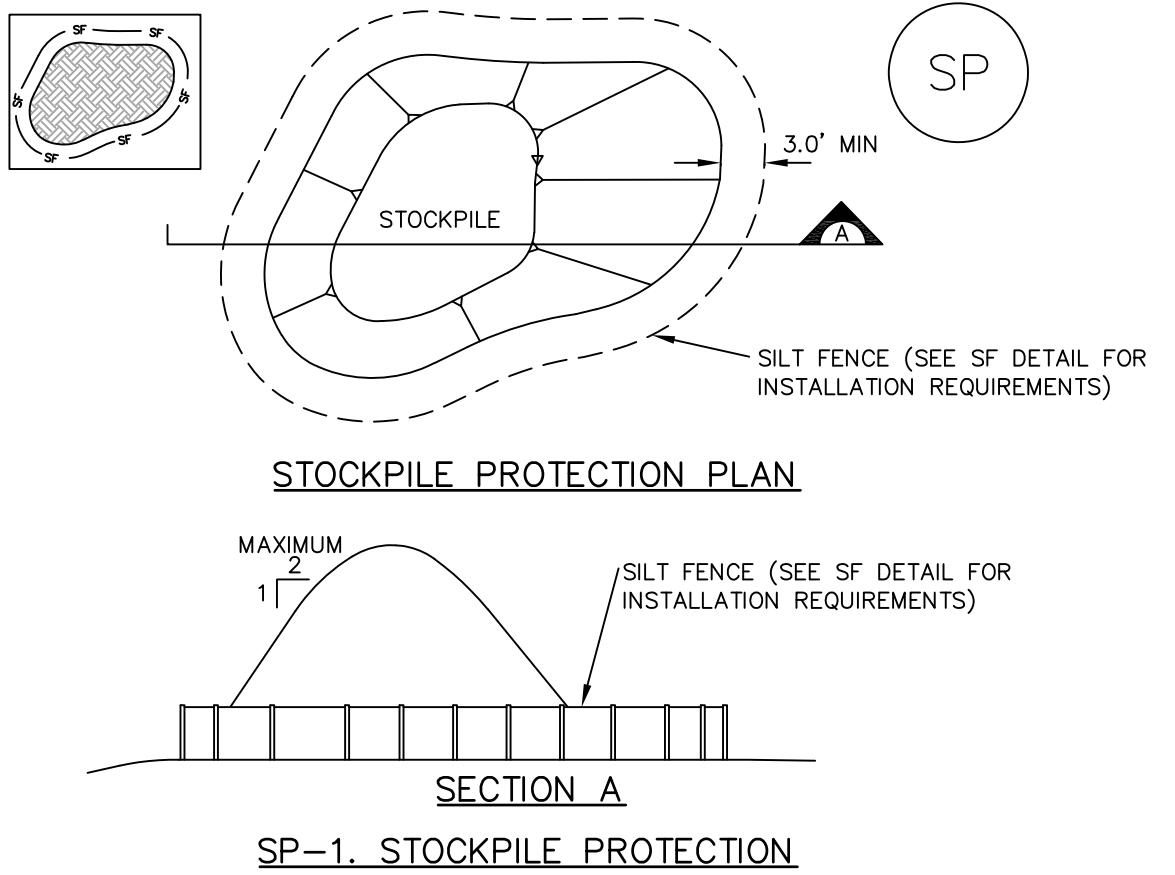
ROCK SOCK INSTALLATION NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND REPAIR.
- SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/2 OF THE HEIGHT OF THE ROCK SOCK.
- ROCK SOCKS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

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LYONS VALLEY PARK FILING NO. 8
LYONS, COLORADO

		SCOTT, COX & ASSOCIATES, INC.	consulting engineers • surveyors
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Designed by	DPA	Date	Scale
Drawn by	JAS	06/28/19	1:1
Checked by	DPA	N.T.S.	19165C-1 C7
		Revision	C7.08
		1	TOWN COMMENTS
		2	REVISED SITE PLAN
			11/12/19
			01/31/20





SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

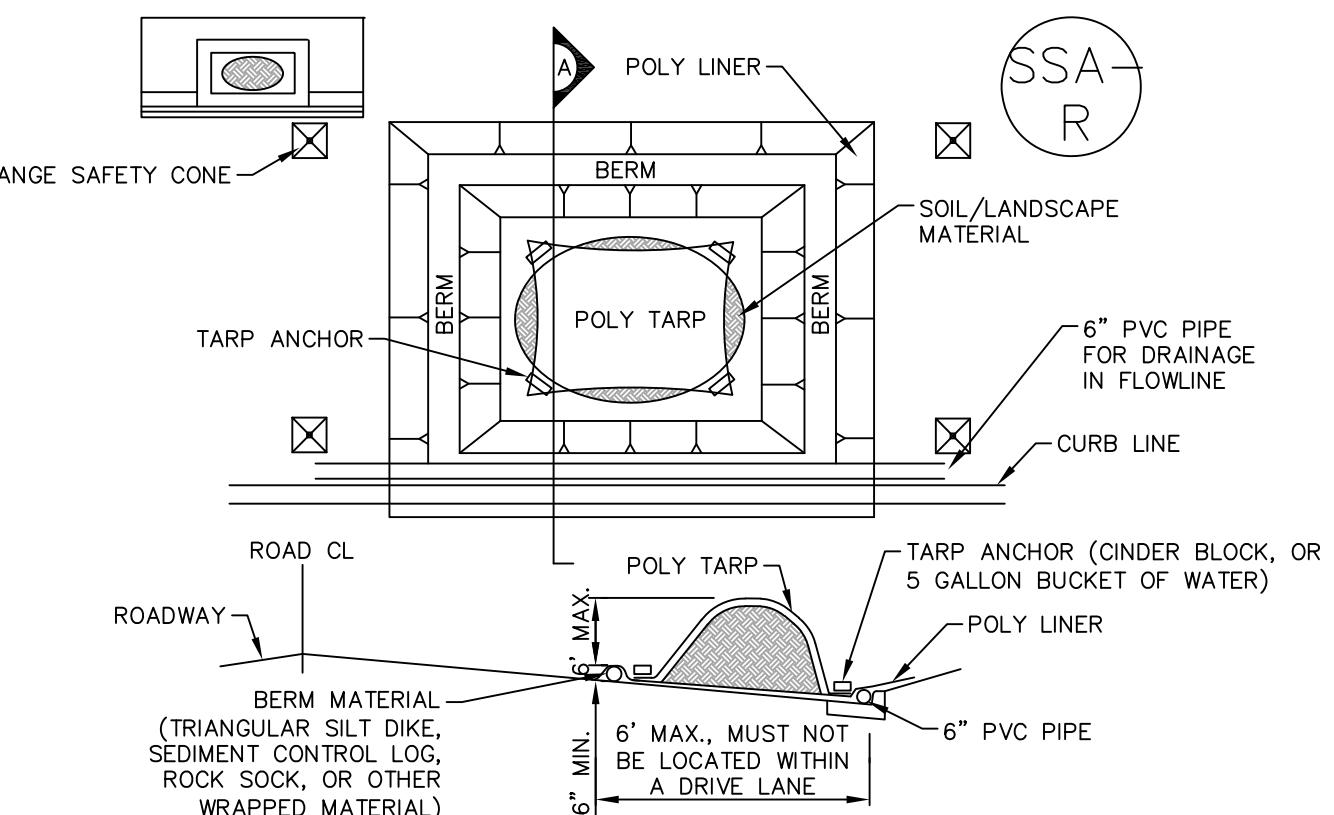
- SEE PLAN VIEW FOR:
-LOCATION OF STOCKPILES.
-TYPE OF STOCKPILE PROTECTION.
- INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE PLACEMENT HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
- STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
- FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION INSTALLATION NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
- STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

STOCKPILE PROTECTION MAINTENANCE NOTES

- IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
- STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.



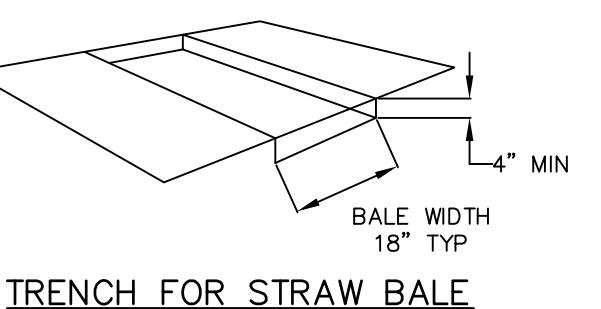
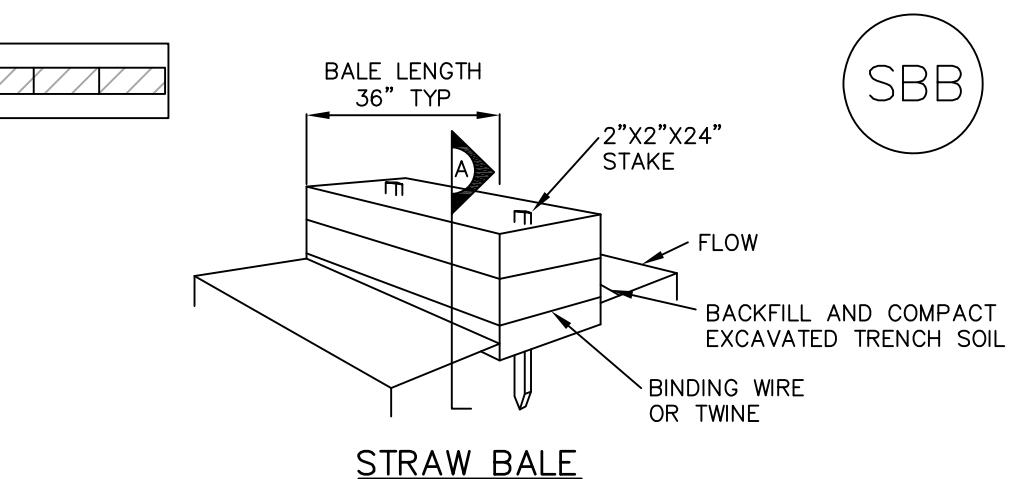
SP-2. MATERIALS STAGING IN ROADWAY

MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

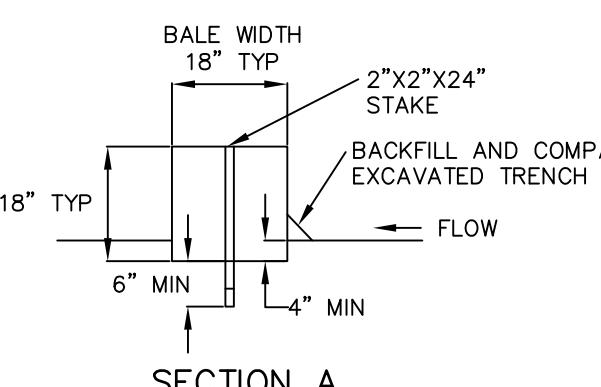
- SEE PLAN VIEW FOR:
-LOCATION OF MATERIAL STAGING AREA(S).
-CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.
- MATERIALS MUST BE STATIONED ON THE POLY LINER. ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.
- POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.
- SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.
- FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.
- THIS FEATURE CAN BE USED FOR:
-UTILITY REPAIRS.
-WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
-OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

MATERIALS STAGING IN ROADWAY MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.
- CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.



TRENCH FOR STRAW BALE



SECTION A

SBB-1. STRAW BALE

STRAW BALE INSTALLATION NOTES

- SEE PLAN VIEW FOR;
-LOCATION(S) OF STRAW BALES.
- STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE.
- STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.
- WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER.
- STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"X18"X18".
- A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) AND COMPACTED.
- TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"X2"X24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

STRAW BALE INSTALLATION NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR.
- SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 1/4 OF THE HEIGHT OF THE STRAW BALE BARRIER.
- STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

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Drawn by	JAS	06/28/19	N.T.S.	19165C-1 C7
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