

STORM DRAINAGE CONSTRUCTION NOTES

1. ALL STORM DRAINAGE CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE STORM DRAINAGE CONSTRUCTION NOTES LISTED HERE.
2. ALL STORM DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP) PER ASTM C76, CL III INSTALLED WITH FLEXIBLE PLASTIC (BITUMEN) GASKETS, ACCORDING TO THE MANUFACTURER'S INSTALLATION GUIDELINES. ANY STORM DRAINAGE PIPE UNDER A PROPOSED OR FUTURE TRAFFIC AREA SHALL BE RCP CL III AS A MINIMUM. RCP TO BE JACKED SHALL BE CL-V AS A MINIMUM.
3. ALL STORM DRAINAGE PIPES SHALL HAVE A MINIMUM COVER OF 24" UNLESS LOAD CALCULATIONS ARE PROVIDED. UNDER NO CIRCUMSTANCES WILL ANY PIPE HAVE LESS THAN 18" COVER FROM THE FINISH SURFACE TO THE OUTSIDE WALL OF THE PIPE.
4. ALL STORM DRAINAGE PIPES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL SD-2.
5. ALL STORM DRAINAGE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES AND IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS. ALL EXCAVATION OPERATION SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
6. ALL MANHOLE RIM ELEVATIONS GIVEN ON THESE PLANS ARE TO BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL SET THE FINAL RIM ELEVATION BASED ON THE COMPLETED FINISH SURFACE.
7. ALL STORM DRAINAGE PIPES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10' FROM ALL WATER LINES. WHERE LINES CROSS, THERE SHALL BE A MINIMUM OF 18" CLEAR VERTICAL SEPARATION.
8. ALL INLETS AND MANHOLES SHALL BE PLACED ON A MINIMUM OF 1'OF ¾" WASH ROCK. IF ADDITIONAL SUBGRADE IS DISTURBED, EXCAVATION SHALL BE BACKFILLED WITH ¾" WASH ROCK OR OTHER APPROVED STRUCTURAL SOIL COMPACTED TO 95% OF ASTM D698 UNLESS OTHERWISE INSTRUCTED BY THE INSPECTOR.

SIGNAGE AND STRIPING NOTES

1. ALL SIGNAGE AND STRIPING IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE SIGNAGE AND STRIPING NOTES LISTED HERE.
2. ALL PAINT SHALL BE 15 MIL THICK UPON INSTALLATION AND 8 MIL THICK WHEN DRY.
3. ALL PERMANENT LONGITUDINAL PAVEMENT STRIPING ON ASPHALT SURFACES (CENTERLINES, LANE LINES, BAY LINES, ETC.) SHALL BE INSTALLED USING AN APPROVED REFLECTIVE TRAFFIC PAINT OR PAVEMENT MARKING TAPE. REFLECTIVE BEADS SHALL BE APPLIED IN ACCORDANCE WITH CDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MANUFACTURER'S REQUIREMENTS. WHEN TAPE IS USED ON AN ASPHALT STREET, IT SHALL BE "ROLLED" INTO THE FINAL LIFT. ON CONCRETE SURFACES TAPE SHALL BE UTILIZED WITH A CONTRASTING BLACK EDGE AND GROOVED INTO THE PAVEMENT.
4. THERMO-PLASTIC APPLICATIONS SHALL BE AS SPECIFIED IN THE PLANS AND/OR PER TOWN CRITERIA.
5. ALL SURFACES THAT ACCEPT PAINT/THERMO-PLASTIC STRIPING OR PRE-FORMED MARKINGS SHALL BE FIRST SANDBLASTED AND THOROUGHLY CLEANED PRIOR TO INSTALLATION OF STRIPING OR MARKINGS.
6. ALL ARROW MARKINGS SHALL BE PRE-FORMED TAPE, THERMO-PLASTIC OR EPOXY-PAINTED.
7. STOP BARS SHALL BE 90 MIL THERMO-PLASTIC.
8. ALL ROADWAY SIGNAGE SHALL CONFORM TO THE MUTCD AND/OR THE TOWN'S CRITERIA.
9. ALL SIGNPOSTS SHALL UTILIZE BREAKAWAY ASSEMBLIES AND FASTENERS, PER THE TCR STANDARD DETAIL.

STREET CONSTRUCTION NOTES

1. ALL STREET CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE STREET CONSTRUCTION NOTES LISTED HERE.
2. A PAVING SECTION DESIGN, SIGNED AND SEALED BY A COLORADO REGISTERED PROFESSIONAL ENGINEER, MUST BE SUBMITTED TO THE TCR PUBLIC WORKS DEPARTMENT FOR APPROVAL PRIOR TO ANY STREET CONSTRUCTION ACTIVITY (FULL-DEPTH ASPHALT SECTIONS ARE NOT PERMITTED AT A DEPTH GREATER THAN 8" ASPHALT). THE JOB MIX SHALL BE SUBMITTED FOR APPROVAL PRIOR TO PLACEMENT OF ANY ASPHALT.
3. WHERE PROPOSED PAVING ADJOINS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT A MINIMUM DISTANCE OF 12" FROM THE EXISTING EDGE TO CREATE A CLEAN CONSTRUCTION JOINT. THE DEVELOPER SHALL BE REQUIRED TO REMOVE EXISTING PAVEMENT TO A DISTANCE WHERE A CLEAN CONSTRUCTION JOINT CAN BE MADE.
4. STREET SUBGRADES SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 12" AND RE-COMPACTED PRIOR TO SUB-BASE INSTALLATION. NO BASE MATERIAL SHALL BE LAID UNTIL THE SUBGRADE HAS BEEN INSPECTED AND APPROVED BY THE TCR CONSTRUCTION INSPECTOR.
5. VALVE BOXES ARE TO BE BROUGHT UP TO GRADE AT THE TIME OF PAVEMENT PLACEMENT OR OVERLAY. VALVE BOX ADJUSTING RINGS ARE NOT ALLOWED.

TRACER WIRE INSTALLATION NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT TOWN OF CASTLE ROCK STANDARD NOTES, DETAILS AND SPECIFICATIONS.
2. TRACER WIRE IS REQUIRED ON ALL UNDERGROUND PIPE. A MAINLINE TRACER WIRE MUST BE INSTALLED WITH ALL SERVICE LATERAL TRACER WIRES PROPERLY CONNECTED TO ENSURE FULL LOCATING CAPABILITIES FROM A SINGLE CONNECTION POINT.
3. TRACER WIRE COLORS FOR STORM SEWER, DRAIN LINES, SANITARY SEWER, AND WATER MAINS SHALL BE IN ACCORDANCE WITH AMERICAN PUBLIC WORKS ASSOCIATION (APWA) UNIFORM COLOR CODE. ALL GROUNDING WIRE SHALL BE RED OR BLACK.
4. "OPEN TRENCH" TRACER WIRE SHALL BE #8 OR #10 AWG COPPER SOLID OR #12 AWG COPPER CLAD HIGH STRENGTH WITH MINIMUM 30-MIL HDPE INSULATION THICKNESS COMPLYING WITH ASTM D-1248, AND A MINIMUM AVERAGE TENSILE BREAK LOAD OF 450 LBS.
5. TRACER WIRE SHALL BE SECURED EVERY 5 FEET TO THE TOP OF THE PIPE AND TO THE SIDES OF MANHOLES AND INLETS USING TAPE, PLASTIC TIES, OR APPROVED ADHESIVE AT 5-FOOT INTERVALS.
6. TRACER WIRE SHALL BE SECURELY BONDED TOGETHER AT ALL WIRE JOINTS WITH LOCKABLE, CORROSION PROOF, WATERTIGHT CONNECTORS SPECIFICALLY DESIGNED FOR DIRECT BURIAL, AND FILLED WITH NON-HARDENING DIELECTRIC SILICONE SEALANT.
7. ANY DAMAGE OCCURRING DURING INSTALLATION OF THE TRACER WIRE MUST BE IMMEDIATELY REPAIRED BY REMOVING THE DAMAGED WIRE AND INSTALLING A NEW SECTION OF WIRE WITH APPROVED CONNECTORS. TAPING AND/OR SPRAY COATING IS NOT ALLOWED.
8. A MINIMUM OF 2 FEET OF EXCESS/SLACK WIRE IS REQUIRED IN ALL TRACER WIRE TEST STATIONS, MANHOLES, AND INLETS AFTER MEETING FINAL ELEVATION.
9. TRACER WIRE MUST BE PROPERLY GROUNDING AT ALL DEAD ENDS (MANHOLES, INLETS, OUTFALLS, FUTURE CONNECTIONS, ETC.) USING A MAGNESIUM GROUND ROD. THE GROUND ROD WILL BE CONNECTED TO 12- OR 14-AWG COPPER-CLAD STEEL WIRE WITH 30 MIL HDPE INSULATION AND RATED FOR DIRECT BURY USE AT 30 VOLTS WITH 21% CONDUCTIVITY.
10. TEST STATIONS SHALL PROVIDE PROTECTED ACCESS FOR A DIRECT CONNECTION TO THE TRACER WIRE SYSTEM AT GROUND SURFACE.
11. TRUNK LINE TRACER WIRE SHALL BE CONTINUOUS, AND PASS AROUND THE OUTSIDE OF VALVES AND OTHER STRUCTURES ON THE NORTH OR EAST SIDE.
12. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS (EXCAVATION, CONCRETE, TRAFFIC CONTROL, ETC.) AND PROVIDE A MINIMUM TWENTY-FOUR (24) HOURS NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, TO REQUEST A TRACER WIRE INSPECTION.
13. ALL NEW TRACER WIRE INSTALLATIONS SHALL BE TESTED AND LOCATED PRIOR TO ACCEPTANCE. TESTING AND LOCATING SHALL BE PERFORMED BY THE TCR CONSTRUCTION INSPECTOR AT THE COMPLETION OF ROUGH GRADING AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT. ANY DEFICIENCIES SHALL BE CORRECTED PRIOR TO FINAL ACCEPTANCE.

SANITARY SEWER CONSTRUCTION NOTES

1. ALL SANITARY SEWER CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE SANITARY SEWER CONSTRUCTION NOTES LISTED HEREIN.
2. ALL SANITARY SEWER PIPELINES SHALL BE PVC, SDR-35, IN ACCORDANCE WITH ASTM D-3034, BELL AND SPIGOT WITH ELASTOMERIC SEAL.
3. ALL SANITARY SEWER PIPELINES SHALL HAVE A MINIMUM COVER OF 5 FEET AND MAXIMUM COVER OF 20 FEET.
4. ALL SANITARY SEWER PIPELINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL SS-8.
5. ALL MANHOLE RIM ELEVATIONS GIVEN ON THESE PLANS ARE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL SET THE FINAL RIM ELEVATION BASED ON THE COMPLETE FINISH SURFACE AND PER TCR STANDARD DETAIL SS-3.
6. SANITARY SEWER PIPELINE SHALL BE ALIGNED 6 FEET OFF THE SOUTH AND WEST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE.
7. ALL SEWER LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET EDGE-TO-EDGE FROM ALL WATER LINES. WHERE LINES CROSS, THERE SHALL BE A MINIMUM OF 18" CLEAR VERTICAL SEPARATION.
8. ALL SANITARY SEWER LINES MUST BE TESTED IN ACCORDANCE WITH SECTION 450.6 OF THE TOWN OF CASTLE ROCK CONSTRUCTION METHODOLOGY AND MATERIALS MANUAL IN THE PRESENCE OF A TCR CONSTRUCTION INSPECTOR.
9. ALL SANITARY SEWER LINE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES, IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS. ALL EXCAVATION OPERATION SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. SANITARY SEWER SERVICES SHALL BE CONNECTED A MINIMUM OF 5 FEET OUTSIDE OF MANHOLES WITH A WYE CONNECTION IN ACCORDANCE WITH TCR STANDARD DETAIL SS-2.
11. MINIMUM COVER FOR SANITARY SEWER SERVICE LINES SHALL BE 5 FEET AND THE MINIMUM SLOPE SHALL BE 2.0%.
12. ALL SANITARY SEWER SERVICE LINES SHALL BE CONSTRUCTED ALONG THE SHORTEST AND STRAIGHTEST ROUTE POSSIBLE IN CONFORMANCE WITH THE TOWN OF CASTLE ROCK WASTEWATER SYSTEM DESIGN CRITERIA MANUAL.
13. THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRYING THE SAME MATERIAL (E.G., WASTEWATER AND WASTEWATER) SHALL BE 5 FEET.
14. THE PLUM CREEK WASTEWATER AUTHORITY MUST APPROVE OIL AND GREASE INTERCEPTORS FOR COMMERCIAL INSTALLATIONS.
15. ALL MANHOLES SHALL BE PLACED ON A MINIMUM OF 1'OF ¾" WASH ROCK. IF ADDITIONAL SUBGRADE IS DISTURBED, EXCAVATION SHALL BE BACKFILLED WITH ¾" WASH ROCK OR OTHER APPROVED STRUCTURAL SOIL COMPACTED TO 95% OF ASTM D698 UNLESS OTHERWISE INSTRUCTED BY THE INSPECTOR.

LANDSCAPE NOTES

1. NON-IRRIGATED NATIVE SEED AREAS SHALL BE INSTALLED USING THE TOWN OF CASTLE ROCK GRADING EROSION AND SEDIMENT CONTROL MANUAL (GESC) STANDARD DETAIL #17.
2. NO TURF AND/OR OVERHEAD IRRIGATION ON SLOPES 3:1.
3. NO SLOPES GREATER THAN 3:1 ARE PERMITTED.
4. TOP SOIL, IF DISTURBED SHALL BE STOCK PILED AND REUSED ON THE SITE.
5. NO MORE THAN SIXTY PERCENT OF THE TOTAL COMMERCIAL LANDSCAPE AREA SHALL INCLUDE IRRIGATED TURF GRASS.
6. NO INDIVIDUAL PLANT MAY HAVE SUPPLEMENTAL WATER DEMAND GREATER THAN 15" PER GROWING SEASON.
7. ALL LANDSCAPING WITHIN THE PUBLIC ROW SHALL BE MAINTAINED BY THE ADJACENT HOMEOWNER OR THE HOA.

IRRIGATION NOTES

1. THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION ASSEMBLY APPROVED BY THE TOWN OF CASTLE ROCK.
2. IRRIGATION TAP, LINE, METER AND BACKFLOW PREVENTION ASSEMBLY MUST BE THE SAME SIZE FROM THE TAP TO A MINIMUM DISTANCE OF 10 PIPE DIAMETERS PAST THE BACKFLOW PREVENTION ASSEMBLY AND WINTERIZATION TEE.
3. WATER WASTE IS NOT ALLOWED PER THE TOWN OF CASTLE ROCK'S WATER USE MANAGEMENT PLAN. THEREFORE, ALL NOZZLES ARE TO BE FINE TUNE/ADJUSTED SO THAT OVERSPRAY ONTO HARD SURFACES IS ELIMINATED.
4. IRRIGATION IS NOT PERMITTED ON 3:1 SLOPES.
5. VELOCITY SHALL NOT EXCEED 7.5 FPS THROUGH THE WATER METER.
6. NO OVERHEAD IRRIGATION IN AREAS LESS THAN 10 FEET WIDE.
7. THERE IS TO BE NEITHER PLANT MATERIAL NOR IRRIGATION IN AREAS LESS THAN 4 FEET WIDE.

FIRE NOTES

1. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN DRIVE LANES FOR EMERGENCY VEHICLE INGRESS AND EGRESS, INCLUDING SNOW REMOVAL.
2. EMERGENCY VEHICLE ACCESS ROAD IS REQUIRED TO ALLOW ACCESS WITHIN 150' OF ALL EXTERIOR OF THE BUILDING BY AN APPROVED ROUTE.
3. FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRES APPARATUS AND SHALL BE PROVIDED WITH A SURFACE SO AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES. ACCESS ROAD SHALL BE EITHER CONCRETE, ASPHALT, OR OTHER APPROVED ALTERNATIVE MATERIAL ACCOMPANIED WITH AN ENGINEER'S STAMP STATING THE MATERIAL WILL SUPPORT A 75,000 POUND IMPOSED LOAD.
4. FIRE HYDRANT(S) ARE REQUIRED TO BE INSTALLED AND MADE SERVICEABLE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ONTO THE SITE AND DURING THE TIME OF VERTICAL CONSTRUCTION.
5. NO PARKING FIRE LANE SIGNS ARE REQUIRED IN AREAS THAT MEET THE FOLLOWING CRITERIA AND IN AREAS DESIGNATED BY THE FIRE PREVENTION BUREAU. SIGNS SHALL BE POSTED ON BOTH SIDES OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS AND DRIVEWAYS LESS THAN 26 FEET WIDE. SIGNS SHALL BE POSTED ON ONE SIDE ONLY OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS BETWEEN 26 FEET WIDE AND 32 FEET WIDE. NO SIGNAGE IS REQUIRED FOR ACCESS ROADWAY FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS EXCEEDING 32 FEET WIDE.
6. WHEN FIRE APPARATUS ACCESS ROADS OR A WATER SUPPLY FOR FIRE PROTECTION IS REQUIRED TO BE INSTALLED, SUCH PROTECTION SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO COMBUSTIBLE MATERIALS BEING BROUGHT ONTO THE SITE AND THE BUILDING CONSTRUCTION GOING VERTICAL.
7. TRACER WIRE SHALL BE INSTALLED ON ALL FIRE SERVICE LINES AND AT ALL FIRE HYDRANTS. REFER TO TOWN OF CASTLE ROCK STANDARD DETAILS, THE WATER LINE CONSTRUCTION NOTES, AND THE TRACER WIRE INSTALLATION NOTES LISTED HEREIN.

WATERLINE CONSTRUCTION NOTES

1. ALL WATER LINE CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE WATER LINE CONSTRUCTION NOTES LISTED HEREIN.
2. ALL WATER LINES SHALL BE: 1) DUCTILE IRON PIPE (DIP), CONFORMING TO THE REQUIREMENTS OF AWWA C150, C153-01, C1500 (16" AND 20"), CL350 (24"), CL360 (24") WITH PUSH-ON GASKETED JOINTS OR MECHANICAL JOINT ENDS, IN CONFORMANCE WITH AWWA C111. PIPE SHALL BE CEMENT-LINED IN ACCORDANCE WITH AWWA C104, AND AN EXTERIOR COATING IN ACCORDANCE WITH C151; OR 2) PVC PIPE, CONFORMING TO AWWA C900 FOR PIPE SIZES 8" AND 12", CL305 (DR14) AND AWWA C905 FOR PIPE SIZE OF 16", CL235 (DR18). MINIMUM DISTRIBUTION MAIN SIZE SHALL BE 8". WATER LINES THAT ARE 10', 14', AND 18" IN DIAMETER ARE NOT PERMITTED.
3. WATER LINE FITTINGS SHALL BE DIP CONFORMING TO AWWA C153 OR C110 AND SHALL HAVE A PRESSURE RATING NOT LESS THAN THE PIPE. ALL FITTINGS SHALL BE MECHANICAL JOINT, UNLESS APPROVED BY CASTLE ROCK WATER.
4. ALL DIP AND FITTINGS SHALL BE ENCASED IN POLYETHYLENE TO PREVENT CORROSION. POLYETHYLENE WRAP, TAPE AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AWWA C105.
5. GATE VALVES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C509-1 AND AWWA C515-01, AS APPROPRIATE, AND SHALL BE DUCTILE IRON BODY AND BONNET, RESILIENT-SEATED WEDGE GATE, NON-RISING STEM TYPE, O-RING SEALS, AND SLIP-ON CONNECTIONS (TAPPING VALVES, WHERE ALLOWED, SHALL BE FLANGE X M.J). VALVE ENDS SHALL BE MECHANICAL JOINT, UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE VALVES SHALL BE SUITABLE FOR A WORKING PRESSURE OF 200 PSI. THEY SHALL BE CLOSED BY TURNING CLOCKWISE, AND SHALL HAVE TWO-INCH SQUARE CAST IRON OPERATING NUTS WITH AN ARROW CAST IN THE NUT INDICATING THE DIRECTION OF OPENING. VALVES SHALL BE POLYETHYLENE WRAPPED IN ACCORDANCE WITH AWWA C105. THEY SHALL BE OF SUCH DESIGN AS TO MAINTAIN THE FULL AREA OF THE PIPE THROUGH THE VALVE WHEN OPEN AND SHALL BE DESIGNED TO TAKE FULL PRESSURE ON EITHER FACE. VALVE SHALL HAVE TYPE 304 STAINLESS STEEL BONNET BOLTS AND NUTS AND TYPE 304 STAINLESS STEEL O-RING GLAND BOLTS AND NUTS. VALVES SHALL BE MANUFACTURED BY AMERICAN FLOW CONTROL, KENNEDY OR MUELLER AND SHALL HAVE THE MANUFACTURER'S NAME OR INITIALS AND THE PRESSURE RATING CAST ON THE BODY.
6. ALL FIRE HYDRANTS SHALL BE PACER WB67-250" BY WATEROUS CO. OR "SUPER CENTURION 250" BY MUELLER CO., OPENING TO THE LEFT. REFER TO TCR STANDARD DETAIL W-11.
7. ALL WATER LINES SHALL BE BURIED AN ABSOLUTE MINIMUM OF 5 FEET FROM FINAL GRADE TO THE TOP OF THE WATER MAIN. THE MAXIMUM BURY DEPTH SHALL BE 6 FEET, UNLESS ADDITIONAL DEPTH IS REQUIRED FOR UTILITY CROSSINGS OR OTHER CONFLICTS. WHEREVER SUCH CROSSINGS OR CONFLICTS OCCUR, THE TCR STANDARD DETAIL W-17 SHALL BE USED.
8. ALL WATER LINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL W-21.
9. CONTRACTOR SHALL MAINTAIN A MINIMUM 18-INCH VERTICAL CLEARANCE AND 10-FOOT HORIZONTAL CLEARANCE EDGE-TO-EDGE BETWEEN ALL WATER LINES AND ANY OTHER PIPED UTILITIES.
10. ALL BENDS, TEES, FIRE HYDRANTS AND PLUGS AT DEAD-END MAINS SHALL BE RESTRAINED FROM THRUST BY USING MEGALUG RESTRAINTS PER TCR STANDARD DETAIL W-18 IN COMBINATION WITH CONCRETE THRUST BLOCKS PER TCR STANDARD DETAIL W-22.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL FIRE HYDRANTS AND VALVE BOXES TO FINISH GRADE IN ACCORDANCE WITH TCR STANDARD DETAILS W-10 AND W-11.
12. PRIOR TO CONNECTING TO THE TOWN'S EXISTING WATER SYSTEM, ALL NEW WATERLINES AND/OR SEGMENTS OF WATERLINES SHALL BE DISINFECTED, PRESSURE TESTED, AND BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH SECTION 450.5 OF THE TOWN OF CASTLE ROCK CONSTRUCTION METHODOLOGY AND MATERIALS MANUAL; AWWA C651-14 AND C800-5.2; AND DETAILS W-35A AND/OR W-35B. PLEASE NOTE THAT THIS DISINFECTION AND TESTING WILL BE PERFORMED WHILE THE NEW WATERLINES AND/OR SEGMENTS OF WATERLINES ARE NOT PHYSICALLY CONNECTED TO THE TOWN'S EXISTING WATER SYSTEM. TOWN AND CONTRACTOR SHALL FURNISH MATERIALS AS SHOWN ON DETAILS W-35A AND/OR W-35B. CONTRACTOR SHALL PERFORM ALL PROCEDURES FOR TESTING, FLUSHING AND DISINFECTING OF ALL WATER LINES. TESTING SHALL BE DONE IN THE PRESENCE OF THE TCR CONSTRUCTION INSPECTOR. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOUR NOTICE TO, AND OBTAIN APPROVAL FROM THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720)733-2200, PRIOR TO DISINFECTION, PRESSURE TESTING, AND BACTERIOLOGICAL TESTING OF ANY NEW WATERLINES AND/OR SEGMENTS OF WATERLINES.
13. DISTANCES FOR WATER LINES ARE HORIZONTAL DISTANCE FROM THE CENTER OF THE FITTING TO CENTER OF THE FITTING. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND FITTING DIMENSIONS.
14. ALL DOMESTIC WATER SERVICE LINES SHALL BE TYPE K COPPER INSULATED WITH POLYWRAP, FROM THE MAIN TO THE METER. THE WATER METER SHALL BE SUPPLIED BY THE TOWN AND INSTALLED BY THE CONTRACTOR. THE WATER METER WILL BE AVAILABLE FOR PICK UP AT CASTLE ROCK WATER. THE INDIVIDUAL PICKING UP THE WATER METER MUST HAVE PROOF OF A PERMIT AND MUST HAVE PAID ALL FEES ASSOCIATED WITH THE WATER METER.
15. WATER LINE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES, IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS. FOR ALL EXCAVATION OPERATIONS, SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
16. WATER LINES SHALL BE ALIGNED 6 FEET OFF THE NORTH AND EAST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE. SEE DETAIL W-13.
17. WHERE WATER LINE IMPROVEMENTS ARE DIFFICULT TO LOCATE ON THE SURFACE, THE CONTRACTOR SHALL BE REQUIRED TO INSTALL PERMANENT WATER LINE MARKERS, IN ACCORDANCE WITH TCR STANDARD DETAIL W-23, OR AT THE DISCRETION OF THE TCR CONSTRUCTION INSPECTOR.
18. TRACER WIRE SHALL BE USED ON ALL DIP AND PVC WATER MAINS, AND WARNING TAPE SHALL BE PLACED 1 FOOT ABOVE ALL DIP AND PVC PIPE. REFER TO TOWN OF CASTLE ROCK STANDARD TRACER WIRE REQUIREMENTS, IN THESE GENERAL NOTES. TEST STATIONS SHALL BE CONSTRUCTED PER STANDARD DETAIL W-28.
19. THE MINIMUM DISTANCE BETWEEN TEES, CROSSES, VALVES, AND BENDS SHALL BE 10 FEET WHEREVER POSSIBLE.
20. MAXIMUM DEFLECTION FOR WATER MAINS SHALL NOT EXCEED ONE-HALF OF THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION OR 2.5 DEGREES, WHICHEVER IS LESS.
21. ALL RESIDENTIAL WATER SERVICE LINES SHALL BE CONSTRUCTED PERPENDICULAR TO THE FRONT PROPERTY LINE IN CONFORMANCE WITH THE TOWN OF CASTLE ROCK WATER SYSTEM DESIGN CRITERIA MANUAL AND WATER DETAILS.
22. THE MAXIMUM DEFLECTION OF DOMESTIC WATER SERVICE LINES AND IRRIGATION LINES SHALL NOT EXCEED THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION.
23. THE SIZE OF THE IRRIGATION TAP, LINE, METER AND BACKFLOW PREVENTION ASSEMBLY SHALL BE THE SAME TO A MINIMUM DISTANCE OF 10 PIPE DIAMETERS PAST THE WINTERIZATION TEE.
24. THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRYING THE SAME MATERIAL (E.G., WATER AND WATER) SHALL BE 5 FEET.
25. WHEN INSTALLING CUT IN TEES OR OTHER APPURTENANCES ON/IN AN EXISTING WATER LINE, THE PIPE MATERIAL BETWEEN THE EXISTING WATER LINE AND THE CUT IN TEE OR OTHER APPURTENANCE SHALL REMAIN CONSISTENT.
26. CONTRACTOR IS RESPONSIBLE TO PROVIDE BACKFLOW PREVENTION DOWNSTREAM OF THE METER. ACCEPTABLE BACKFLOW PREVENTION ASSEMBLIES ARE AS FOLLOWS:
- COMMERCIAL POTABLE WATER SERVICE: REDUCED PRESSURE ASSEMBLY.
 - RESIDENTIAL POTABLE WATER SERVICE: DOUBLE CHECK VALVE ASSEMBLY, REDUCED PRESSURE ASSEMBLY.
 - COMMERCIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY.
 - RESIDENTIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY.
 - COMMERCIAL AND MULTIFAMILY IRRIGATION WATER SERVICE: REDUCED PRESSURE ASSEMBLY.
- THE DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) IS THE ONLY BACK FLOW PREVENTION DEVICE RATED FOR HORIZONTAL OR VERTICAL INSTALLATION.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE AGENCY, THE TOWN OF CASTLE ROCK, COLORADO, ENGINEERING DEPARTMENT, THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR

BIG ROCK CUSTOM HOMES

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BY	DATE						
REVISION	No.	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
				7/17/26	BK	BK	

GREYSTONE VILLAS

STANDARD NOTES

SHEET

C2

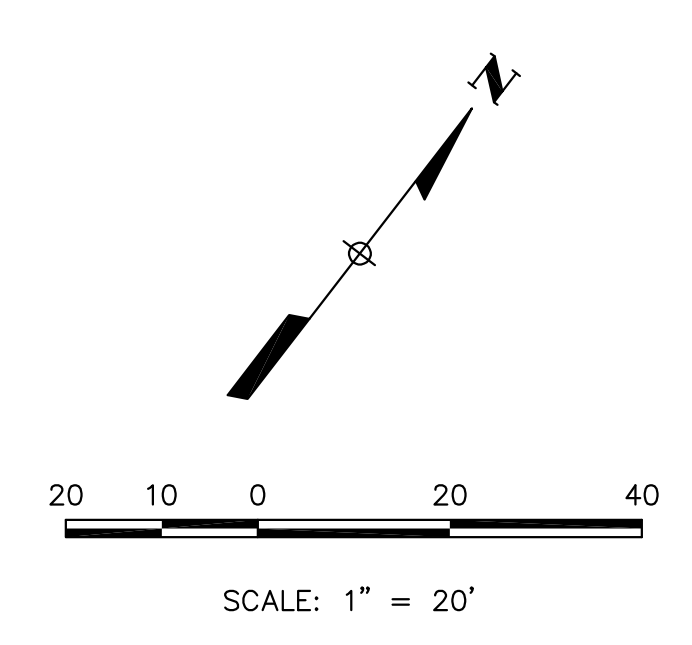
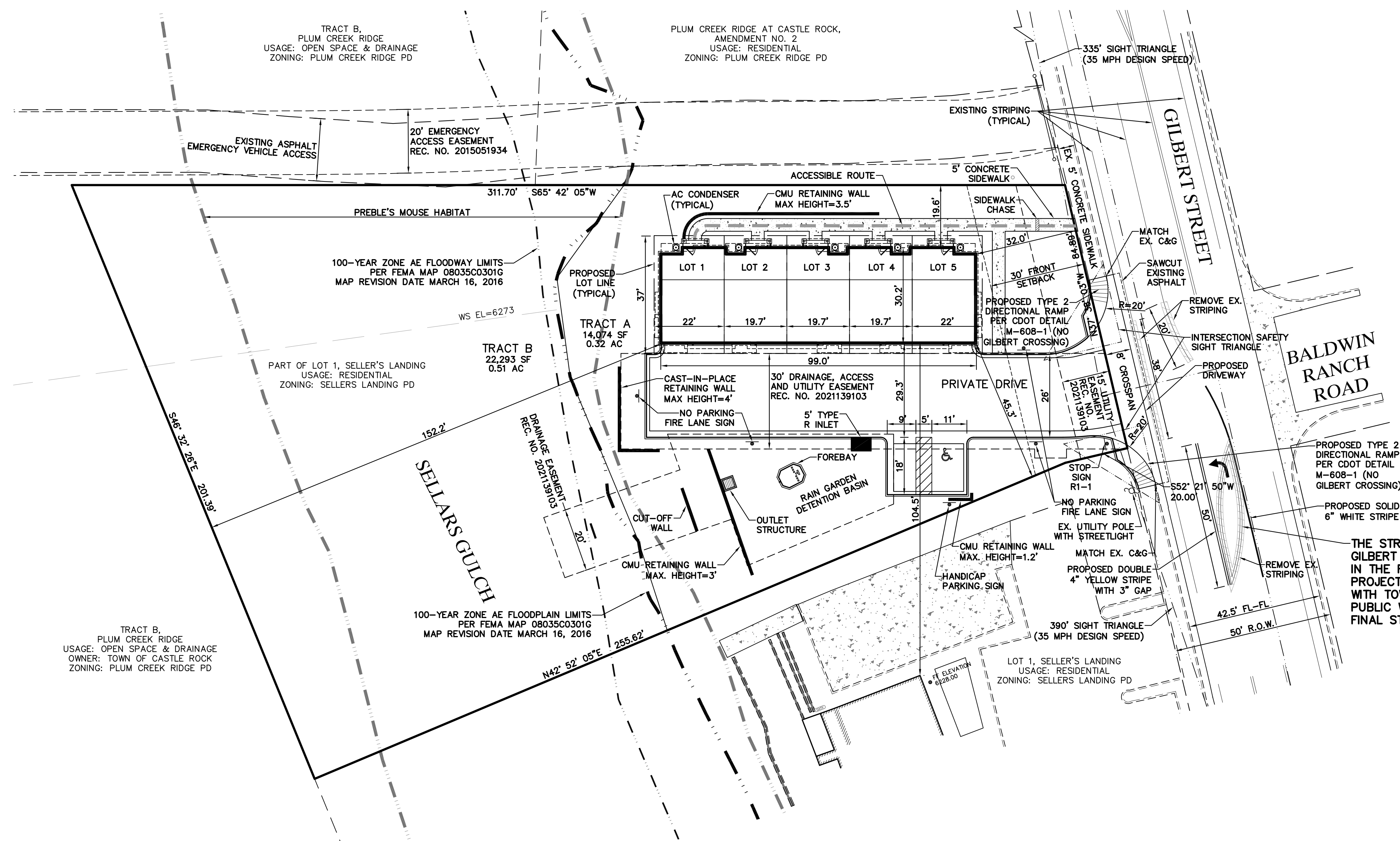
OF

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- LEGEND**
- PROPERTY LINE
 - EXISTING CURB & GUTTER
 - PROPOSED 2' CATCH CURB & GUTTER
 - PROPOSED 1' SPILL CURB & GUTTER
 - EXISTING LOT LINE
 - EXISTING EASEMENT
 - PROPOSED EASEMENT
 - SETBACK LINE
 - SIGHT DISTANCE LINE
 - INTERSECTION SAFETY SIGHT TRIANGLE
 - PROPOSED RETAINING WALL
 - FEMA FLOODPLAIN LIMITS
 - FEMA FLOODWAY LIMITS
 - ACCESSIBLE ROUTE
 - PREBLE'S MOUSE HABITAT BOUNDARY
 - CONCRETE PAVEMENT
 - EXISTING UTILITY POLE

- NOTES**
- TRUNCATED DOMES IN CURB RAMPS TO BE CAST IRON "PATINA" FINISH.
 - THE DIRECTIONAL CURB RAMPS SHOWN ON THIS PLAN ARE ONLY TO DIRECT PEDESTRIANS ACROSS THE NEW DRIVEWAY. THEY ARE NOT TO OFFER CROSSING OF GILBERT STREET.

CONSULTANT ENGINEER CERTIFICATION

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF CASTLE ROCK AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY, AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

Brian Krombein 7/17/26
BRIAN KROMBEIN, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

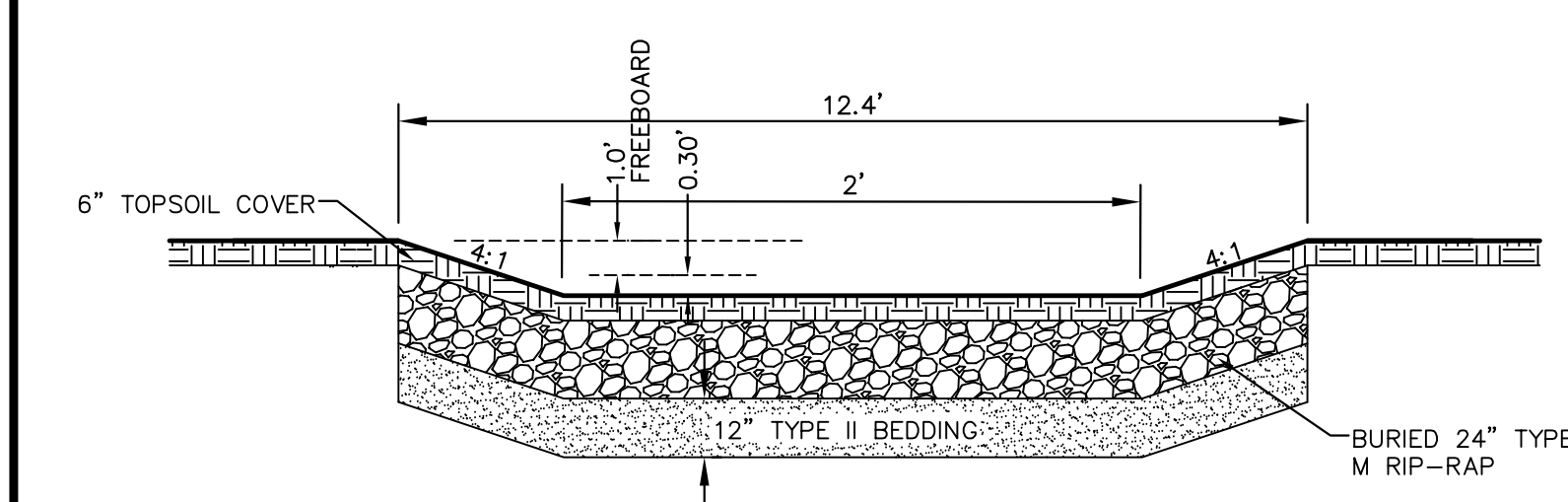
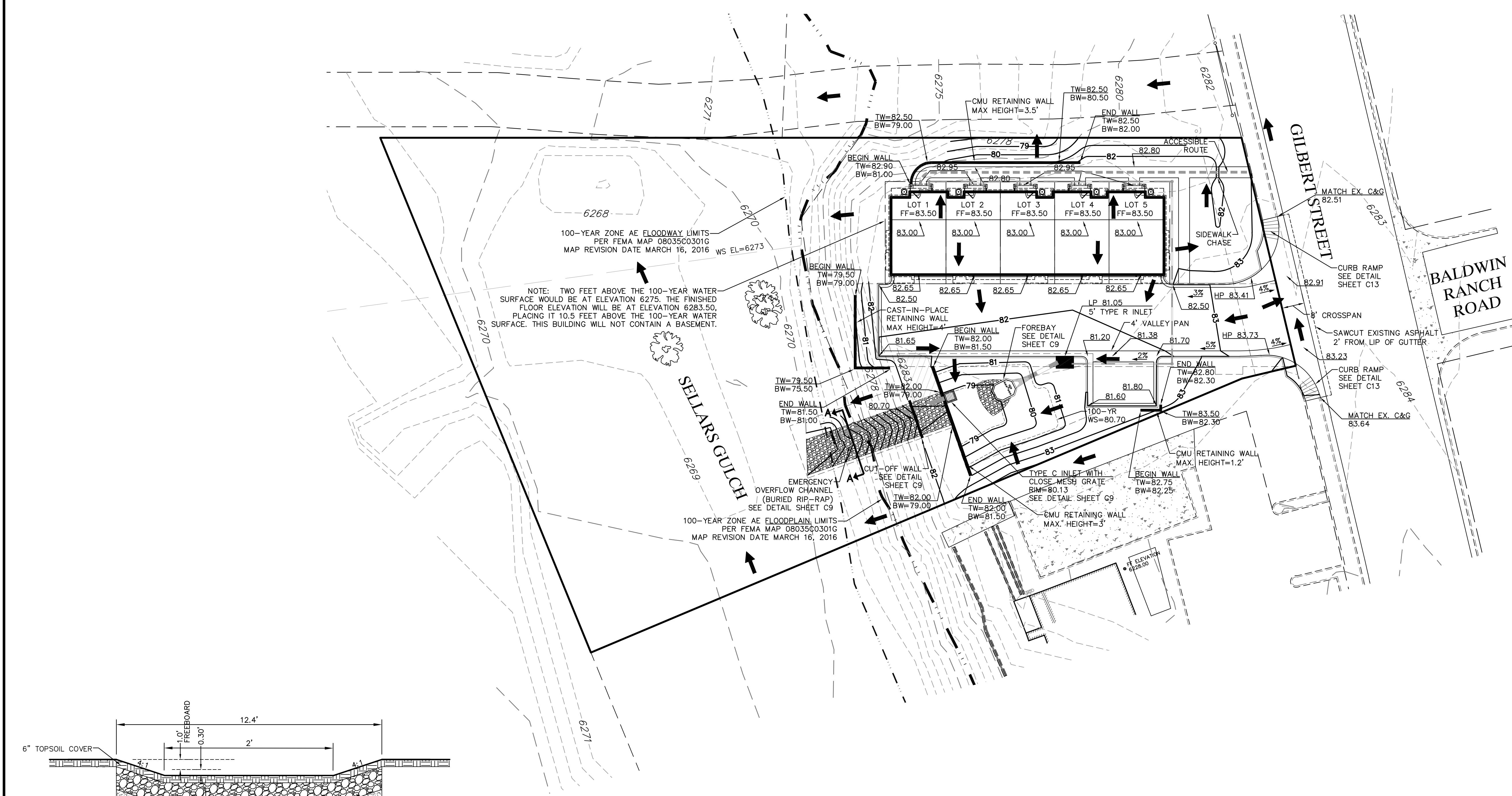
APPROVED BY: _____ DATE: _____
DEVELOPMENT SERVICES

GREYSTONE VILLAS	H-SCALE	1"=20'	No.	REVISION	BY	DATE
	V-SCALE	7/17/26				
OVERALL SITE PLAN/SIGNAGE, STRIPING AND LIGHTING PLAN	DESIGNED BY	BK				
	DRAWN BY	BK				
	CHECKED BY					
SHEET C3 OF 28						
JOB NO. 19010						

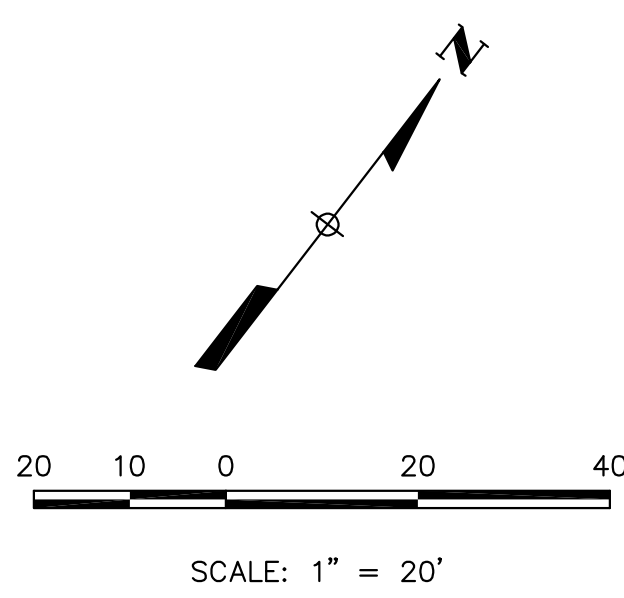
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, ENGINEERING AND ARCHITECTURAL APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
CONTACT: HEATHER UPCHURCH

Vermilion Peak Engineering
Civil Engineering & Land Surveying
1749 Shon Center Drive 4th Floor, Highlands Ranch, CO 80109
720-482-6070 / www.vermilionpeak.com



SECTION A-A
EMERGENCY OVERFLOW CHANNEL



BENCHMARK
DOUGLAS COUNTY CONTROL MONUMENT 3020015.
3-1/4" ALUMINUM CAP LOCATED IN THE NORTHEAST CORNER,
TOP OF STORM INLET, SOUTH ENTRANCE TO 959 PLUM CREEK
BLVD. ELEVATION: 6255.22 (NAVD88)

- NOTES**
1. RETAINING WALLS GREATER THAN 4 FEET REQUIRE A SEPARATE BUILDING PERMIT.
 2. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4- FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
 3. DUE TO SHALLOW SEWER, THE FINISHED FLOOR ELEVATIONS MAY NOT BE ANY LOWER THAN SHOWN ON THIS PLAN.

- LEGEND**
- PROPERTY LINE
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - DRAINAGE FLOW DIRECTION
 - EXISTING CURB & GUTTER
 - 1' SPILL CURB
 - 2' CATCH CURB
 - PROPOSED STORM SEWER
 - CONCRETE PAVEMENT
 - FEMA FLOODPLAIN LIMITS
 - FEMA FLOODWAY LIMITS
 - PROPOSED EASEMENT
 - ACCESSIBLE ROUTE
 - DETENTION BASIN ACCESS PATH
 - EXISTING TREE

CONSULTANT ENGINEER CERTIFICATION
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Brian Krombein 7/17/26
BRIAN KROMBEIN, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC

COLORADO REGISTERED
BRIAN KROMBEIN
PE & PLS
34294

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
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DEVELOPMENT SERVICES

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PREPARED FOR
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21558 E. OTTAWA CIRCLE
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No.	REVISION	BY	DATE

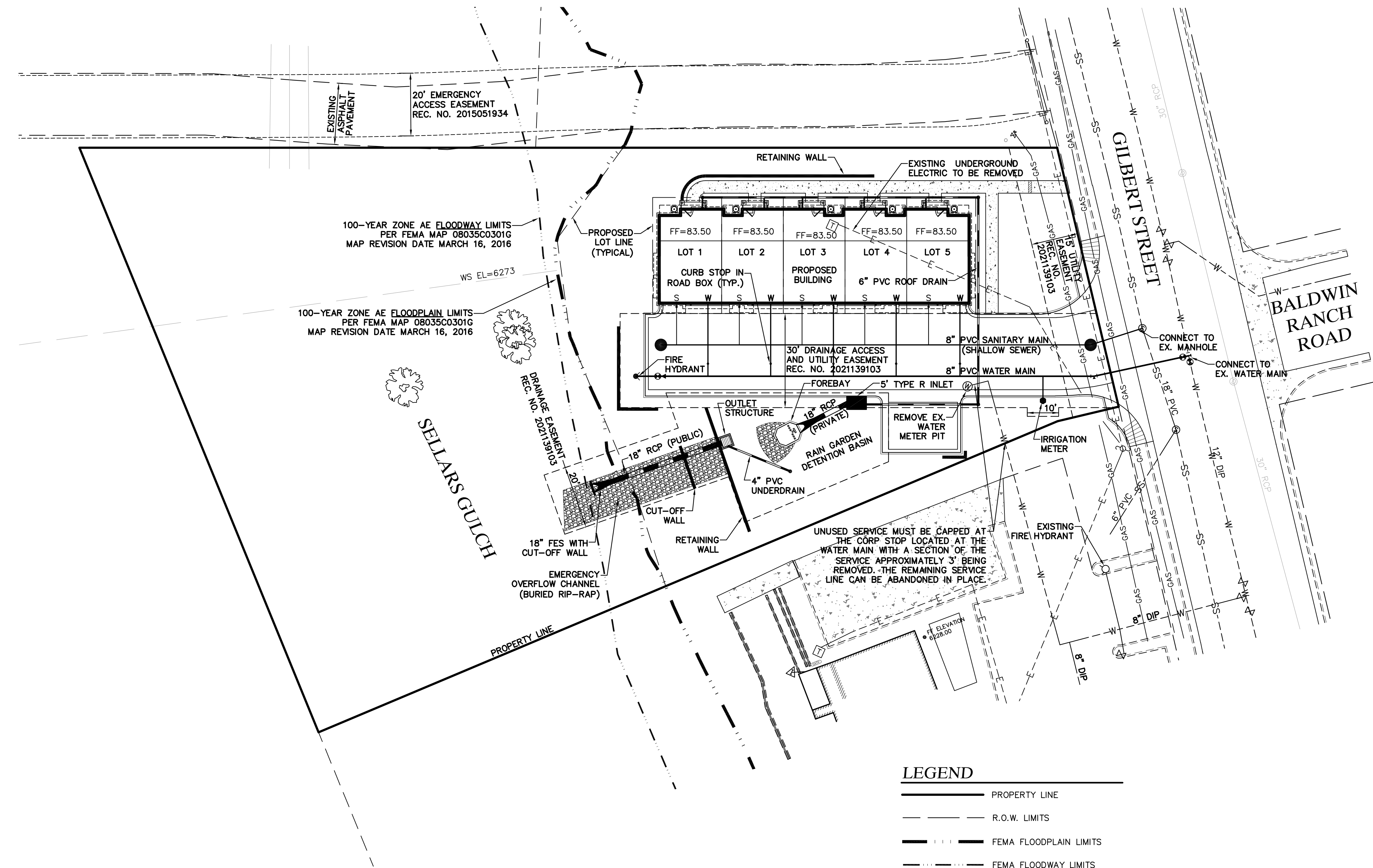
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=20'		7/17/26	BK	BK	

GREYSTONE VILLAS

FINAL GRADING PLAN

SHEET **C4** OF **28**

JOB NO. **19010**



UTILITY NOTES

- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
- ALL UTILITY CUTS WITHIN THE PUBLIC ROW ARE TO BE FILLED WITH FLOWABLE FILL. EDGE-MILL PERIMETER OF SAW-CUT, MATCH EXISTING ASPHALT DEPTH. COORDINATE WITH PUBLIC WORKS INSPECTOR.
- DUE TO SHALLOW SEWER, THE FINISHED FLOOR ELEVATIONS MAY NOT BE ANY LOWER THAN SHOWN ON THIS PLAN.
- A CR WATER TIME & MATERIALS PERMIT (TMU) IS REQUIRED PRIOR TO CONSTRUCTION AND REIMBURSABLE COSTS MAY BE REQUIRED FOR RELOCATING, SHUTTING DOWN, OR CROSSING CRITICAL INFRASTRUCTURE TO MAKE UTILITY CONNECTIONS.
- TCV20-0072 STATES THAT THE PROPOSED CURB STOPS SHALL BE LOCATED WITHIN A VALVE BOX WITH TRAFFIC RATED LID WITHIN THE PAVED DRIVE AISLE.

LEGEND

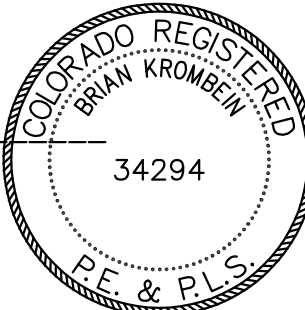
- PROPERTY LINE
- R.O.W. LIMITS
- FEMA FLOODPLAIN LIMITS
- FEMA FLOODWAY LIMITS
- EXISTING CURB & GUTTER
- EXISTING SANITARY SEWER
- EXISTING WATERLINE
- EXISTING GAS PIPE
- EXISTING ELECTRIC
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED CURB & GUTTER
- PROPOSED SANITARY MAIN
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- CONCRETE PAVEMENT
- EXISTING EASEMENT
- PROPOSED EASEMENT

CONSULTANT ENGINEER CERTIFICATION

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BRIAN KROMBEIN, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC

7/17/26



TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
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APPROVED BY:

DEVELOPMENT SERVICES

DATE

GREYSTONE VILLAS

OVERALL UTILITY PLAN

SHEET C5 OF 28

JOB NO. 19010

PREPARED FOR

BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
CONTACT: HEATHER UPCHURCH

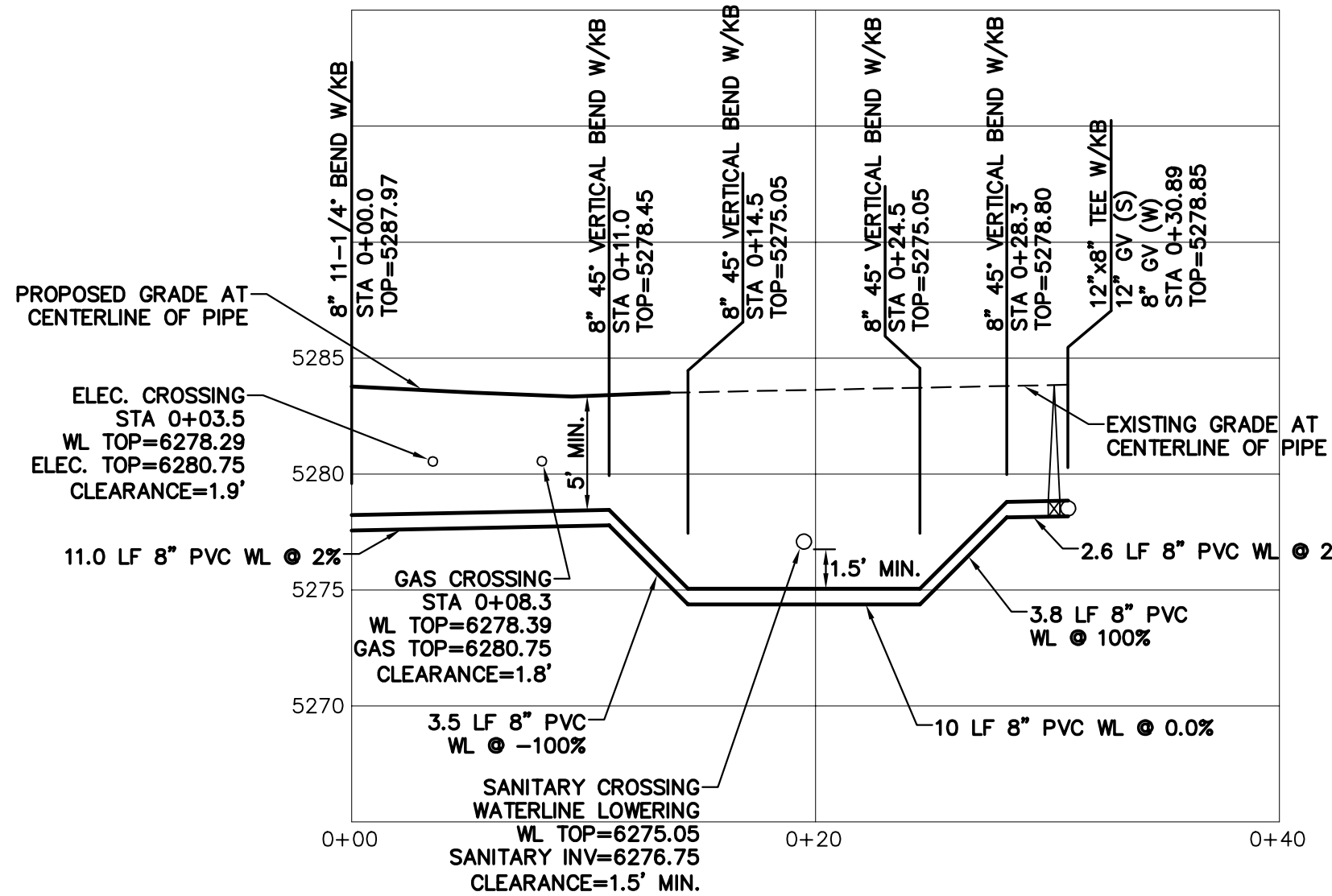


Civil Engineering & Land Surveying
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720-482-6070 / www.vermilionpeak.com

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PURPOSES DESIGNATED BY
WRITTEN AUTHORIZATION.

SANITARY SEWER CROSSING TABLE

NUMBER	WATER TOP	SAN INV.	CLEARANCE
1	6276.81	6277.91	1.5' MIN.
2	6276.73	6277.83	1.5' MIN.
3	6276.65	6277.75	1.5' MIN.
4	6276.57	6277.67	1.5' MIN.
5	6276.49	6277.59	1.5' MIN.



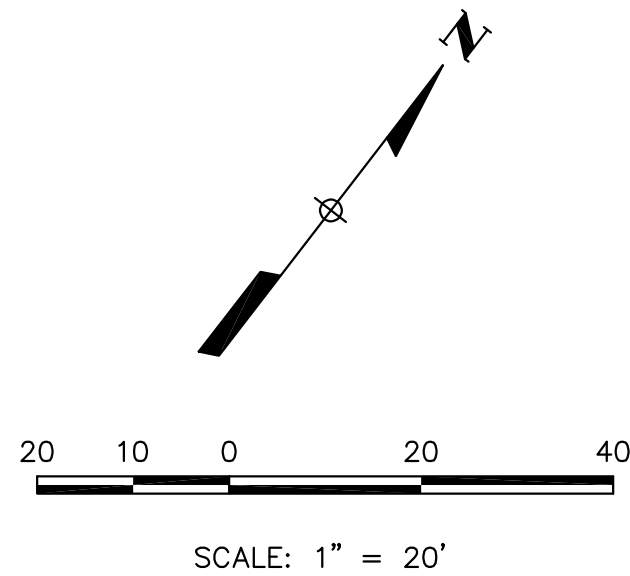
WATERLINE LOWERING PROFILE

LEGEND

	PROPERTY LINE
	R.O.W. LIMITS
	EXISTING CURB & GUTTER
	EXISTING SANITARY SEWER
	EXISTING WATERLINE
	EXISTING GAS PIPE
	EXISTING ELECTRIC
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
	PROPOSED CURB & GUTTER
	PROPOSED WATER MAIN
	PROPOSED WATER SERVICE WITH CURB STOP
	PROPOSED SANITARY SERVICE
	PROPOSED SANITARY SERVICE
	CONCRETE PAVEMENT
	EXISTING EASEMENT
	PROPOSED EASEMENT
	SANITARY CROSSING - SEE TABLE

UTILITY NOTES

- ALL PROPOSED EASEMENTS MUST BE RECORDED PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.
- THE MINIMUM SEPARATION BETWEEN WATERLINES, SANITARY SEWER AND STORM SEWER LINES IS 10 FEET.
- THE MINIMUM SEPARATION BETWEEN WATER SERVICE LINES IS 5 FEET.
- THIS SITE IS LOCATED WITHIN THE TOWN OF CASTLE ROCK BLUE WATER PRESSURE ZONE.
- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOUR NOTICE TO, AND OBTAIN APPROVAL FROM, OPERATIONS, TOWN OF CASTLE ROCK UTILITIES DEPARTMENT, (720) 733-6000; PRIOR TO MAKING ANY CONNECTIONS/TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS.
- CONTRACTOR SHALL NOTIFY THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY THE UTILITIES DEPARTMENT.
- WATER MAINS WITHIN FILL AREAS SHALL HAVE RESTRAINED JOINTS.
- THE MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SANITARY PIPES IS 18".
- ALL WATER SERVICES SHALL BE 3/4" TYPE K COPPER WITH A MINIMUM COVER OF 5 FEET.
- SEE DETAIL W-22 ON SHEET C9 FOR THRUST BLOCK DIMENSIONS.
- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR OR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY OR WATER PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL NOTIFY CASTLE ROCK WATER OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY CASTLE ROCK WATER

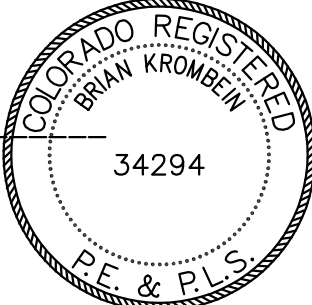


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BRIAN KROMBEIN, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC

7/17/26
DATE



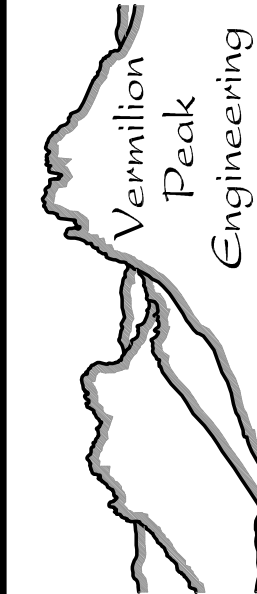
TOWN APPROVAL BLOCK

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APPROVED BY:

DEVELOPMENT SERVICES

DATE



1749 Shen Center Drive 4th Floor, Highlands Ranch, CO 80109
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PREPARED FOR
BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
CONTACT: HEATHER UPCHURCH

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GREYSTONE VILLAS

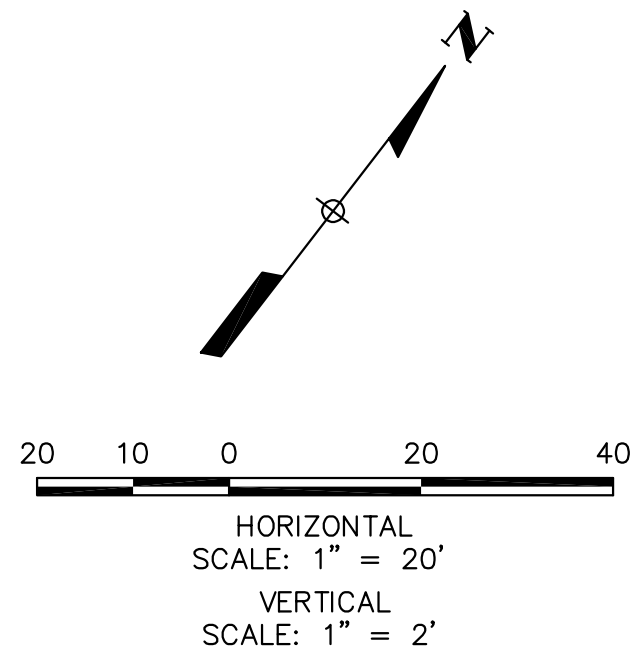
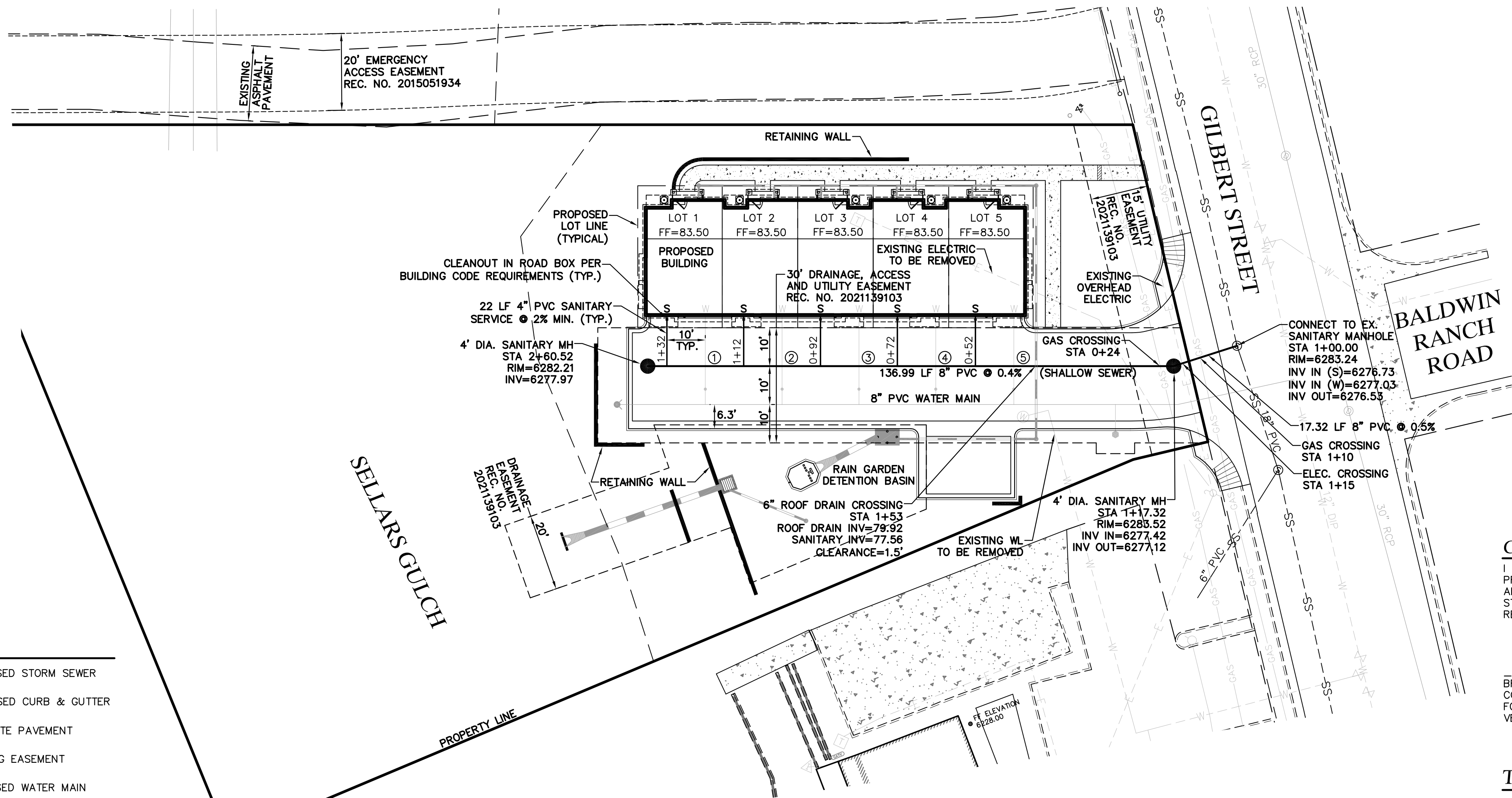
WATER DISTRIBUTION PLAN

SHEET C6 OF 28

JOB NO. 19010

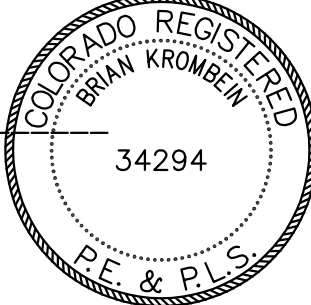
1. ALL STATIONING IS PIPE STATIONING.
2. PIPE LENGTHS MEASURED FROM CENTER OF MANHOLES, INSIDE EDGE OF INLETS, AND OUTLET OF FLARED END SECTION.
3. WHEN A WATER MAIN CROSSES UNDER A STORM SEWER, REGARDLESS OF VERTICAL CLEARANCE, ONE FULL STANDARD LENGTH SECTION OF WATER PIPE SHALL BE LOCATED SUCH THAT BOTH JOINTS WILL BE AS FAR FROM THE STORM SEWER AS POSSIBLE. IN ALL CASES, A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE SHALL BE PROVIDED AT THE CROSSING, WHICH MAY REQUIRE THAT THE WATER MAIN BE LOWERED IN CONFORMANCE WITH THE TOWN'S STANDARD DETAILS.
4. WHEN SANITARY SEWER MAINS OR FORCE MAINS CROSS A STORM SEWER REGARDLESS OF VERTICAL CLEARANCE AND WHICH PIPE CROSSES OVER THE OTHER, EACH JOINT OF THE STORM SEWER WITHIN THE TRENCH WIDTH OF THE CROSSING SHALL BE ENCASED IN A CONCRETE COLLAR AT LEAST 6 INCHES THICK AND EXTENDING AT LEAST 6 INCHES EACH SIDE OF EACH JOINT.
5. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOUR NOTICE TO, AND OBTAIN APPROVAL FROM: OPERATIONS, TOWN OF CASTLE ROCK UTILITIES DEPARTMENT, (720) 733-6000; PRIOR TO MAKING ANY CONNECTIONS/ TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS.
6. A MINIMUM OF THREE JOINTS INCLUDING THE JOINT CONNECTING THE LAST PIPE SEGMENT TO THE FES, SHALL BE MECHANICALLY LOCKED WITH JOINT FASTENERS PER FIGURE 10-2 IN THE STORMWATER DESIGN MANUAL.
7. ALL MANHOLES TO BE CONSTRUCTED PER DETAIL SS-3 ON SHEET C12.
8. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE TIE-INS WILL NOT DISRUPT SERVICE TO EXISTING OR WATER OR EXISTING CUSTOMERS. THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.
9. DUE TO SHALLOW SEWER, THE FINISHED FLOOR ELEVATIONS MAY NOT BE ANY LOWER THAN SHOWN ON THIS PLAN.
10. TC2V21-0003 STATES THAT THE PROPOSED SANITARY SEWER SHALL HAVE A MINIMUM COVER OF 3.5 FEET RATHER THAN THE TOWN STANDARD OF 5 FEET MINIMUM.

	PROPERTY LINE		PROPOSED STORM SEWER
	R.O.W. LIMITS		PROPOSED CURB & GUTTER
	PROPOSED RETAINING WALL		CONCRETE PAVEMENT
	EXISTING CURB & GUTTER		EXISTING EASEMENT
	EXISTING SANITARY SEWER		PROPOSED WATER MAIN
	EXISTING WATERLINE		PROPOSED SANITARY SERVICE
	EXISTING GAS PIPE		PROPOSED CONTOUR
	EXISTING ELECTRIC		PROPOSED WATER SERVICE WITH CURB STOP
	EXISTING STORM SEWER		PROPOSED SANITARY SERVICE
	WATERLINE CROSSING - SEE TABLE		



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BRIAN KROMBEIN, PE, PLS DATE
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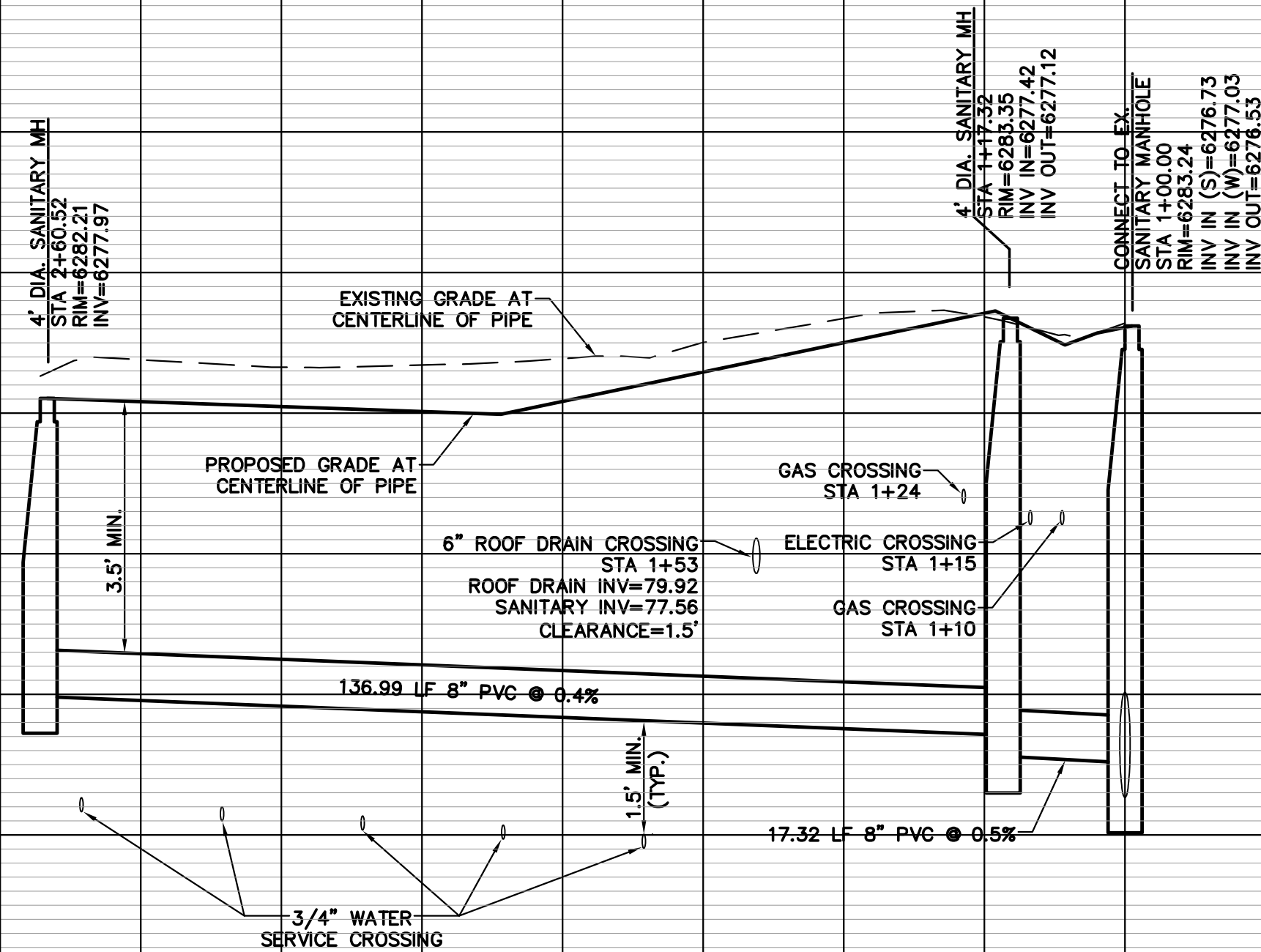


TOWN OF CASTLE ROCK APPROVAL
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APPROVED BY:

DEVELOPMENT SERVICES	DATE
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NUMBER	WATER TOP	SAN INV.	CLEARANCE
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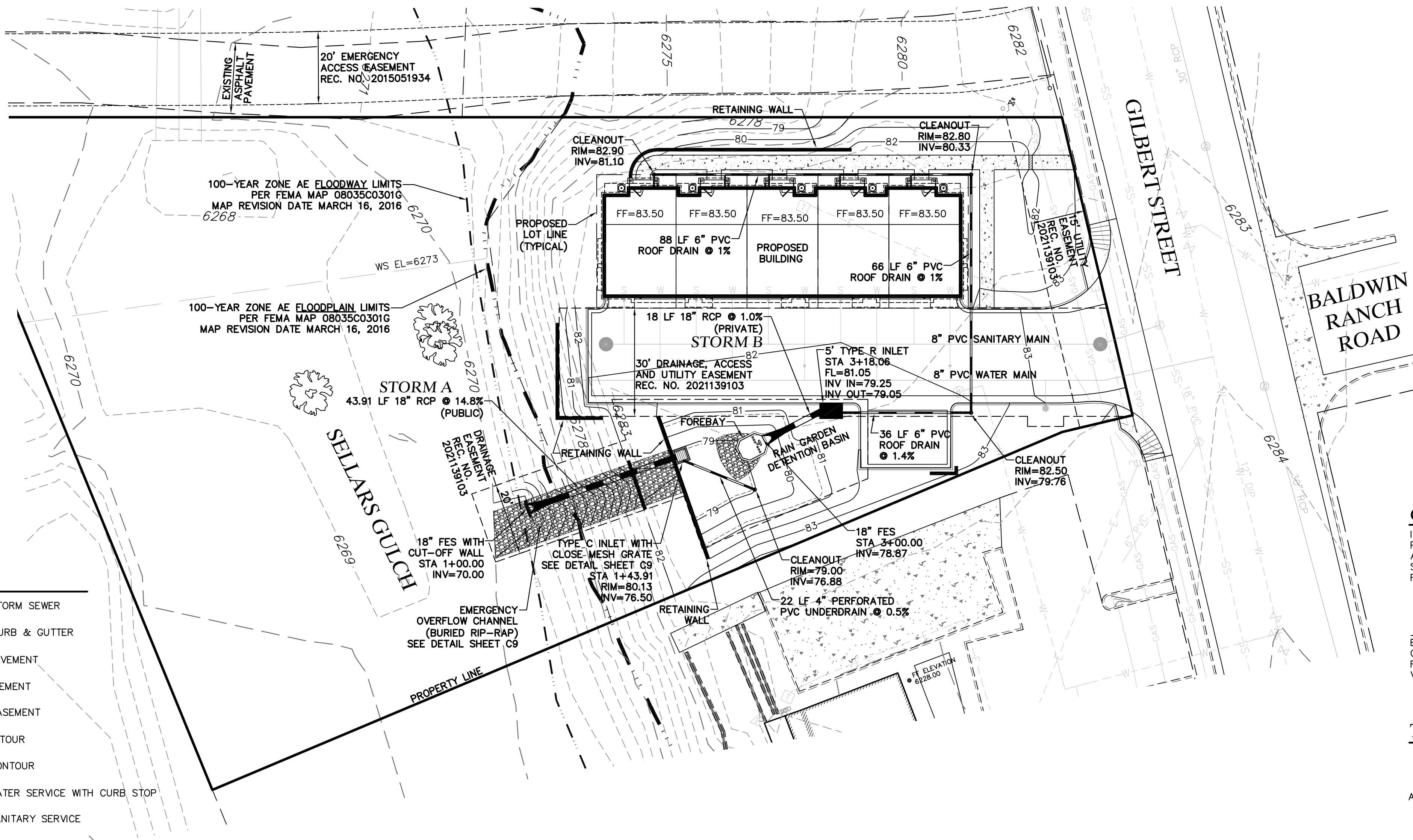
SHEET	C7	OF	28	JOB NO.	19010	GREYSTONE VILLAS	H-SCALE	1"=20'	No.	REVISION	BY	DATE
							V-SCALE	1"=2'				
						SANITARY SEWER PLAN & PROFILE	DATE	7/17/26				
							DESIGNED BY	BK				
							DRAWN BY	BK				
							CHECKED BY					

NOTES:

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5. CONTRACTOR SHALL PROVIDE A MINIMUM FORTY EIGHT (48) HOUR NOTICE TO, AND OBTAIN APPROVAL FROM: OPERATIONS, TOWN OF CASTLE ROCK UTILITIES DEPARTMENT, (720) 733-6000; PRIOR TO MAKING ANY CONNECTIONS/ TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS.
6. A MINIMUM OF THREE JOINTS INCLUDING THE JOINT CONNECTING THE LAST PIPE SEGMENT TO THE FES, SHALL BE MECHANICALLY LOCKED WITH JOINT FASTENERS PER FIGURE 10-2 IN THE STORMWATER DESIGN MANUAL.
7. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY TWO (72) HOURS NOTICE TO THE ON-SITE TCR CONSTRUCTION INSPECTOR, (720) 733-2200, PRIOR TO MAKING ANY CONNECTIONS OR TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS PROVIDED THAT THE UTILITY TIE-IN DOES NOT DISRUPT SERVICE TO EXISTING OR WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS' NOTICE TO THE TCR CONSTRUCTION INSPECTOR TO ALLOW TIME FOR CR WATER TO PROVIDE WRITTEN NOTIFICATION TO EXISTING CUSTOMERS AFFECTED BY THE TIE-IN. ALL TOWN UTILITY TIE-INS MUST BE APPROVED BY CR WATER PRIOR TO COMMENCING WORK.

LEGEND

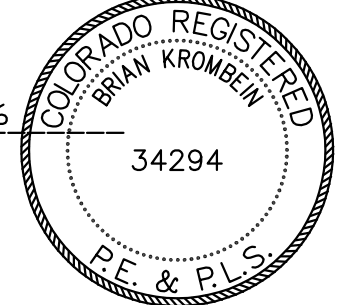
	PROPERTY LINE		PROPOSED STORM SEWER
	R.O.W. LIMITS		PROPOSED CURB & GUTTER
	PROPOSED RETAINING WALL		CONCRETE PAVEMENT
	FEMA FLOODPLAIN LIMITS		EXISTING EASEMENT
	FEMA FLOODWAY LIMITS		PROPOSED EASEMENT
	EXISTING CURB & GUTTER		EXISTING CONTOUR
	EXISTING SANITARY SEWER		PROPOSED CONTOUR
	EXISTING WATERLINE		PROPOSED WATER SERVICE WITH CURB STOP
	EXISTING GAS PIPE		PROPOSED SANITARY SERVICE
	EXISTING ELECTRIC		PROPOSED SANITARY MAIN
	EXISTING STORM SEWER		PROPOSED WATER MAIN



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Brian Krombein, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC



TOWN APPROVAL BLOCK

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BY THE APPROPRIATE
REVIEWING AGENCIES,
THESE DRAWINGS ARE NOT
TO BE USED FOR ANY
PURPOSES DESIGNATED BY
WRITTEN AUTHORIZATION.

PREPARED FOR
BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
CONTACT: HEATHER UPCHURCH

Vermilion Peak Engineering
Civil Engineering & Land Surveying
1749 Shon Center Drive 4th Floor, Highlands Ranch, CO 80129
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STORM A										STORM B									
6284										6284	6288								6288
6282										6282	6286								6286
6280										6280	6284								6284
6278										6278	6282								6282
6276										6276	6280								6280
6274										6274	6278								6278
6272										6272	6276								6276
6270										6270	6274								6274
6268										6268	6272								6272
1+00 1+40 1+80										0+00 0+40									
STORM A										STORM B									

BY	DATE	No.	REVISION	H-SCALE 1"=20'	V-SCALE 1"=2'	DATE 7/17/26	DESIGNED BY BK	DRAWN BY BK	CHECKED BY	SHEET C8	OF 28	JOB NO. 19010

GREYSTONE VILLAS
STORM SEWER
PLAN & PROFILE

NOTES:

1. ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THIS DETAIL UNLESS OTHERWISE SPECIFIED BY PUBLIC WORKS.

2. PRIOR TO PLACEMENT OF CONCRETE, ALL EDGES SHALL BE SAW CUT TO A CLEAN, STRAIGHT, AND VERTICAL EDGE.

3. PRIOR TO PLACEMENT OF ASPHALT, 18 INCHES OF ADJACENT ASPHALT SHALL BE MILLED TO 2 INCH DEPTH ON ALL SIDES TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH HSS-1.

4. WHEN SUBSTITUTING FOR BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MORE CLM STANDARDS.

5. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.

6. 95% OF ASTM D698 STANDARD COMPACTION EFFORT IS REQUIRED ON ALL TRENCHING ZONES, IN BOTH IMPROVED & UNIMPROVED AREAS.

7. IN UNIMPROVED AREAS, ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED & MULCHED.

8. IN CONCRETE ROADWAYS, A MINIMUM OF 1/2 PANEL WIDTH OR 10' x 5' SECTION WILL BE ALLOWED TO REMAIN, OTHERWISE THE ENTIRE CONCRETE PANEL MUST BE REPLACED.

9. USE #4 REBAR AT 2' CENTERS ALONG THE PERIMETER OF CONCRETE REPLACEMENT SECTIONS.

10. 6" MAXIMUM COMPACTED LIFT THICKNESS IF FLOWABLE FILL NOT REQUIRED.

11. BEDDING MATERIAL DEPTH WHEN INSTALLING STORM SEWER SHALL BE UP TO SPRING LINE, EXCEPT IN AREAS OF UNSTABLE BACKFILL, THEN BEDDING MATERIAL SHALL BE 12" ABOVE PIPE.

12. TRENCH WIDTHS LESS THAN 4' OR TRENCHING THAT EXPERIENCES CAVING-IN OR SLOUGHING SHALL REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.

Sheet Revisions

Date	Comments
3/19	REVISED PER STAFF COMMENTS
3/20	REVISED PER STAFF COMMENTS

Town of Castle Rock

100 N. Wilson St.
Castle Rock, CO 80104
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Development Services

WATER
TRENCH DETAIL

Issued By: Town of Castle Rock, Development Services March 2, 2020

DETAIL PLAN NO.

W-21

Sheet 1 of 1

16" FULL DEPTH ASPHALT OR
X/Y COMPOSITE SECTION

TRENCH WIDTH
VARIES (SEE
NOTE 11)

12" MIN.

IF THIS SECTION IS LESS THAN
4' OF EXISTING ASPHALTIC CONCRETE,
IT MUST BE REMOVED & REPLACED
PER TOWN PUBLIC WORKS STANDARDS

NEW ASPHALT CONCRETE

CLEAN ROAD BASE

EDGE OF PAVEMENT OR LIP OF
EXISTING GUTTER, JOINT
SEALING REQUIRED ON ALL
PAVEMENT EDGES

EXISTING ROAD BASE

REFLECTIVE BURIED WATER LINE TAPE,
12" ABOVE TOP OF PIPE

12" (WATER & SEWER) (SEE
NOTE #11 BELOW FOR STORM)

UTILITY CONDUIT

BEDDING MATERIAL

UNDISTURBED SOIL

COMPACTED
LIFTS OF SUITABLE
MATERIALS (SEE NOTE 12)

TRACER WIRE ALONG
ENTIRETY OF PIPE

4" MIN.
6" MAX.

BOND BREAKER 8 MIL TYPE
CLASS A AWWA C-105

BEARING SURFACE

UNDISTURBED SOIL

11 1/4, 22 1/2 & 45 BENDS

BOND BREAKER 8 MIL TYPE
CLASS A AWWA C-105

UNDISTURBED SOIL

BEARING SURFACE

TEE

BOND BREAKER 8 MIL TYPE
CLASS A AWWA C-105

BEARING SURFACE

UNDISTURBED SOIL

DEAD END

BOND BREAKER 8 MIL TYPE
CLASS A AWWA C-105

BEARING SURFACE

UNDISTURBED SOIL

6" BEDDING MATERIAL

TYPICAL CROSS SECTION

MINIMUM BEARING SURFACE AREA
(IN SQUARE FEET)

SIZE OF PIPE	1 1/4"	2 1/2"	4"	6"	8"	12"	16"	24"
11 1/4"	2.00	2.00	2.25	4.25	3.00			
22 1/2"	2.00	2.00	4.00	8.00	5.25			
45"	2.00	4.25	8.25	12.00	11.00			
60"	3.50	6.50	12.50	23.00	16.50			
72"	6.00	10.00	19.00	30.50	26.00			

NOTES:

1. BEARING AREAS SHOWN ON THE CHART ARE MINIMUM AREAS & ARE DESIGNED USING THE FOLLOWING DATA:
A. INITIAL WORKING PRESSURE - 0-150 PS.
B. RAINFALL (WATER HAMMER) PRESSURE - 0-120 PSI FOR 4", 6" & 8" DIAMETER PIPES, 10-250 PSI FOR 10", 12", & 16" DIAMETER PIPES.
C. THURSTLOCK CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.

2. ALL SIZES OF BENDS, TEES & DEAD ENDS SHALL HAVE CONCRETE THURSTLOCKS.

3. THURSTLOCKS ARE NOT A SUBSTITUTE FOR JOINT RESTRAINT.

NOTES:

1. ABANDONMENT TO INCLUDE REMOVAL OF ALL RELATED DEVICES INCLUDING, BUT NOT LIMITED TO, ALL SECTIONS OF CONCRETE METER PIT, TOP SOCKET INCLUDING LID AND INLET LID, METER YOC, CORPOT, LINE FROM MAIN TO INTERFERENCE OF METER PIT, ALL VALVES, AND VALVE BOXES.

2. VALVE WILL BE REMOVED BY A REPRESENTATIVE OF CASTLE ROCK WATERS.

3. AFTER INITIAL ABANDONMENT, ALL EQUIPMENT REMAINING PROPERTY OF THE TOWN OF CASTLE ROCK, ALL REMOVED EQUIPMENT WILL BE RETURNED TO THE TOWN. IT IS DEEMED TO BE NO LONGER USABLE, AND IS DESTROYED IN THE PROCESS OF REMOVAL, AS DETERMINED BY TOWN OF CASTLE ROCK REPRESENTATIVE.

4. CORPORATION STOP ON MAIN WILL BE SHUT-OFF AND ABANDONED PER DETAIL W-2.

5. A PLUGGING DEVICE WILL BE ABANDONED TO THE CORPORATION STOP TO PREVENT ANY LEAKAGE THAT MAY OCCUR IN THE FUTURE THAT THE CORPORATION STOP - ALLS AFTER IT - AS MAIN ABANDONED.

6. AREA TO BE REPAIRED AND REPAIRED TO MATCH THE CONDITIONS OF SURROUNDING AREA.

7. IN SOME INSTANCES, CORPORATION STOPS MAY BE FOUND THAT WERE DIRECTLY TAPPED INTO THE MAIN, INF WITH-OUT A SADDLE. IN THESE INSTANCES IT MAY BE REQUIRED TO REMOVE THE CORPORATION STOP AND INSTALL A SADDLE WITH A NEW CORPORATION STOP. THE TOWN, DEPENDING ON THE INTEGRITY OF THE EXISTING MAIN, A STAINLESS STEEL CAMP MAY BE REQUIRED IN PLACE OF A SADDLE, AT DISCRETION OF THE TOWN REPRESENTATIVE.

8. CROSS CONNECTION CONTROL, LITIGATION OR IF TOWN SHALL BE NOTIFIED OF ANY STRAIGHTENING OF BACKFLOW PREVENTION DEVICES REMOVED FROM SERVICE.

9. ABANDONMENT TEST LETTER MUST BE SUBMITTED TO CASTLE ROCK WATER BEFORE TO PROCEED WITH ABANDONMENT.

Sheet Revisions

Comments

3/19

REVISED PER STAFF COMMENTS

3/20

REVISED PER STAFF COMMENTS

3/21

REVISED PER STAFF COMMENTS

Town of Castle Rock

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Development Services

WATER SERVICE LINE
ABANDONMENT DETAIL

Issued By: Town of Castle Rock, Development Services January 1, 2023

DETAIL PLAN NO.

W-27

Sheet 1 of 1

ATTACH TRACER WIRE TO 2" RISER

TRACER WIRE

TEMPORARY BLOW-OFF ASSEMBLY FOR FUTURE CONNECTION

EASEMENT

FIRE HYDRANT

LOCKING CONNECTOR

VALVE

WATER MAIN

TEST STATION

LOCKING CONNECTOR

TRACER WIRE ACCESS MUST BE 10"-12" ABOVE GRADE

LOCATORS AND SUPPLIES TRACER WIRE KIT OR APPROVED EQUAL

EXCESS TRACER WIRE IN TEST STATION ACCESS BOX

ONE POINT OF CONNECTION TO FIRE HYDRANT

TRACER WIRE

WATER MAIN

TRACER WIRE SAMPLE PLAN

NOTES:

1. REFER TO STANDARD NOTES FOR TOWN OF CASTLE ROCK GENERAL TRACER WIRE REQUIREMENTS FOR LBS STATION AT MAIN LID, REF TO DETAIL W-25.

2. LOCATIONS WHERE LBS STATION IS NOT ALLOWED OR WHERE WATER IS NOT IN SYSTEM AND PURPLE FOR REQUIRED OR RAW WATER COMPONENTS.

3. TRACER WIRE PLAN IS SHOWN AWAY FROM PIPE FOR CLARITY. TRACER WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 6' FOOT INTERVALS.

4. LOCATIONS WHERE TIES AND CONNECTIONS, PASSING AROUND THE OUTSIDE OF VALVES AND TIES ON THE TOP OR LIFT SIDE.

5. TEST STATIONS SHALL BE INSTALLED AT EVERY FIRE HYDRANT, AS SHOWN, OR AT A MINIMUM INTERVAL OF 500 FEET. TEST STATIONS NOT LOCATED NEAR HYDRANTS MUST BE PLACED BEHIND EDGE OF PAVEMENT.

6. ALL TEMPORARY BLOW-OFFS, THE END OF THE TRACER WIRE SHALL BE CONTAINED WITHIN A CONNECTION TO THE MAIN OR A 1/2" INCH LID TO THE MAIN AND A 1/2" INCH TO THE MAIN PIPE AT GRADE WITHIN THE PAVEMENT OR R.O.W.

7. LBS STATIONS SHALL BE WITHIN 1/2" LBS LID OR PUBLIC ROW.

8. PROVIDE ADEQUATE LENGTH OF TRACER WIRE TO EXTEND 12 INCHES ABOVE GRADE.

9. TEST STATIONS NOT LOCATED AT A FIRE HYDRANT MUST BE AT GRADE WITH LOCKING LID.

CONCRETE DRIVEWAY

CONTROL JOINT

W/ EXPANSION JOINT MATERIAL

CONTROL JOINTS

CURB STOP

SIDEWALK

CURB STOP IN CONCRETE DRIVEWAY

CONCRETE DRIVEWAY

CONTROL JOINT

W/ EXPANSION JOINT MATERIAL

CONTROL JOINTS

CURB STOP

SIDEWALK

CURB STOP IN CONCRETE DRIVEWAY AT EDGE OF SIDEWALK

LID SHALL NOT REST ON CURB STOP EXTENSION

ASPHALT

ASPHALT

6" VALVE BOX (TRAFFIC RATED & SLIP TYPE) TYLER 6855 OR APPROVED EQUAL

16"

CURB STOP IN ASPHALT

CONCRETE DRIVEWAY

CONTROL JOINT

W/ EXPANSION JOINT MATERIAL

CONTROL JOINTS

CURB STOP

SIDEWALK

CURB STOP AT EDGE OF CONCRETE DRIVEWAY

CONCRETE DRIVEWAY

CONTROL JOINT

W/ EXPANSION JOINT MATERIAL

CONTROL JOINTS

CURB STOP

SIDEWALK

CURB STOP 12 TO 24 INCHES FROM PAVEMENTS (OTHER THAN SIDEWALK)

NOTES:

1. IN PAVEMENT, DEPRESS CURB STOP APPROXIMATELY 1/2" BELOW FINISHED GRADE.

2. A TECHNICAL OFFER A VARIANCE, FIELD CHANGE ORDER AND/OR ASSOCIATED FEES MAY BE REQUIRED FOR CURB STOPS PLACED IN PAVEMENTS.

3. CURB STOP SHALL BE 1/2" TOWN-OWNED IN PAVEMENTS. IF NEEDED, IT IS RESPONSIBILITY OF THE RESPONSIBLE FOR PAVEMENT AROUND CURB STOP.

4. CURB STOP SHALL BE 1/2" TOWN-OWNED IN PAVEMENTS. IF NEEDED, IT IS RESPONSIBILITY OF THE RESPONSIBLE FOR PAVEMENT AROUND CURB STOP.

5. CURB STOPS LOCATED IN RESIDENTIAL DRIVEWAYS WILL REQUIRE A FIELD CHANGE ORDER.

6. CURB STOP SHALL BE PLACED AT THE SAME ELEVATION OF THE SIDEWALK OR AT FINISHED GRADE.

APPROVED BACKFLOW ASSEMBLY

2 1/2" THROTTLE VALVE

SUPPLIED BY THE TOWN
SUPPLIED BY THE CONTRACTOR

SMOOTH, UNTHREADED SAMPLING FAUCET

THROTTLE VALVE

DISCHARGE TO GRADE
DECHLORINATION IS REQUIRED

18" MIN. ABOVE GRADE

TEMPORARY BLOW OFF ASSEMBLY PER DETAIL W-16

MAIN DISINFECTION
UP TO 12"

Issued By: Town of Castle Rock, Development Services March 2, 2020

DETAIL PLAN NO.

W-35A

Sheet 1 of 1

APPROVED BACKFLOW ASSEMBLY

2 1/2" THROTTLE VALVE

SUPPLIED BY THE TOWN
SUPPLIED BY THE CONTRACTOR

SMOOTH, UNTHREADED SAMPLING FAUCET

THROTTLE VALVE

DISCHARGE TO GRADE
DECHLORINATION IS REQUIRED

18" MIN. ABOVE FINISHED GRADE

TEMPORARY BLOW OFF ASSEMBLY PER DETAIL W-16

MAIN DISINFECTION
UP TO 12"

Issued By: Town of Castle Rock, Development Services March 2, 2020

DETAIL PLAN NO.

W-35B

Sheet 1 of 1

WATER TAP - BRASS TAP
SADDLE - 1/2" DIA. x 1/2" DIA.
OR COMPRESSION, OR
APPROX. 1/2" DIA.

A. FOR EXISTING SADDLE, ADD PLUG (AND BUSHING IF NEEDED) TO THE EXISTING CORPORATION STOP.

B. FOR DIRECT TAP, REMOVE ENTIRE CORPORATION STOP AND USE A 2-INCH LONG STAINLESS STEEL REPAIR CLAMP (TYPED OR EQUIVALENT) OVER THE REMAINING SADDLE.

C. CROSS CONNECTION CONTROL, LITIGATION OR IF TOWN SHALL BE NOTIFIED OF ANY STRAIGHTENING OF BACKFLOW PREVENTION DEVICES REMOVED FROM SERVICE.

D. ABANDONMENT TEST LETTER MUST BE SUBMITTED TO CASTLE ROCK WATER BEFORE TO PROCEED WITH ABANDONMENT.

E. CURB STOP SHALL BE PLACED AT THE SAME ELEVATION OF THE SIDEWALK OR AT FINISHED GRADE.

F. CURB STOP SHALL BE 1/2" TOWN-OWNED IN PAVEMENTS. IF NEEDED, IT IS RESPONSIBILITY OF THE RESPONSIBLE FOR PAVEMENT AROUND CURB STOP.

G. CURB STOPS LOCATED IN RESIDENTIAL DRIVEWAYS WILL REQUIRE A FIELD CHANGE ORDER.

H. CURB STOP SHALL BE PLACED AT THE SAME ELEVATION OF THE SIDEWALK OR AT FINISHED GRADE.

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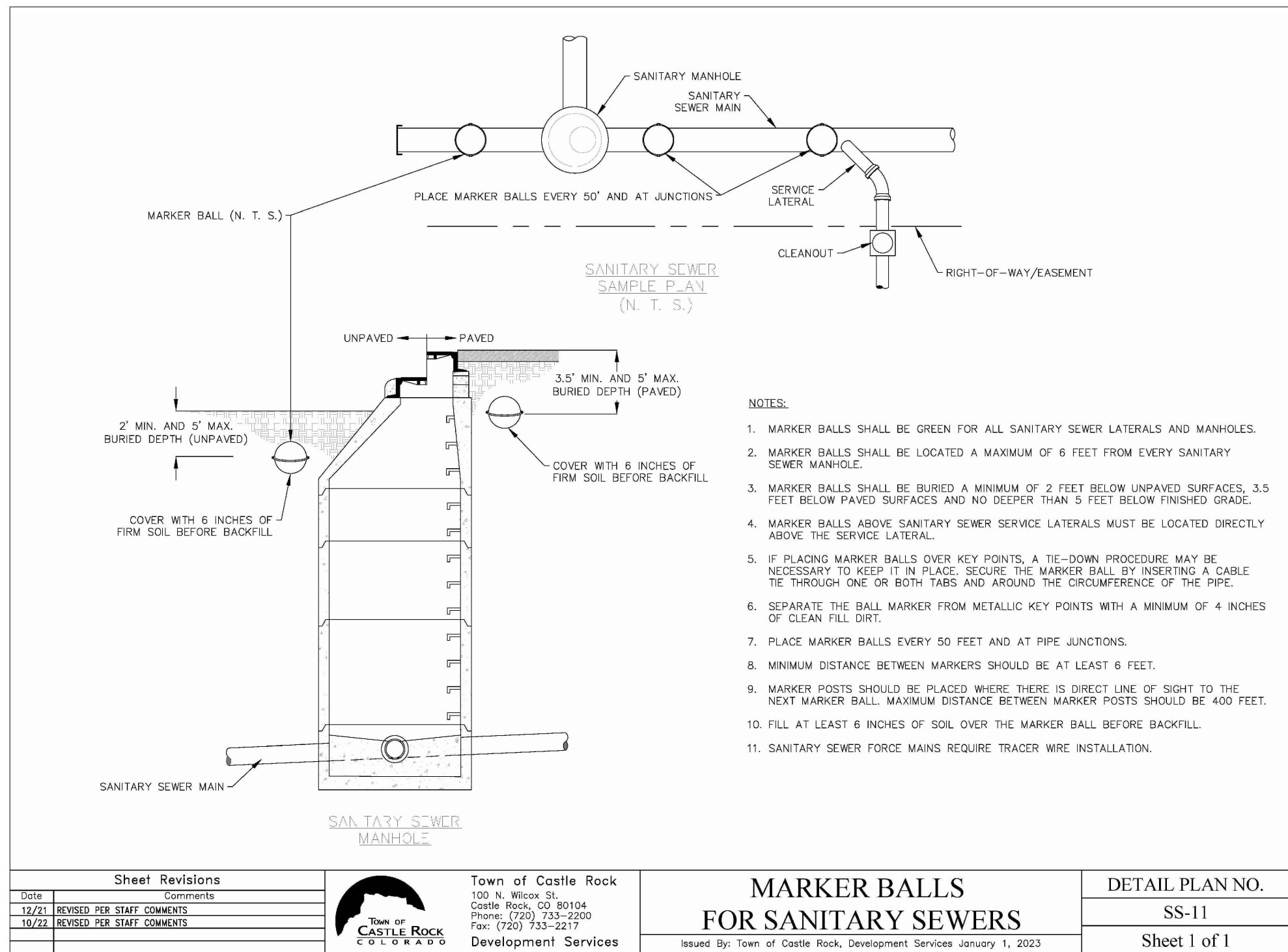
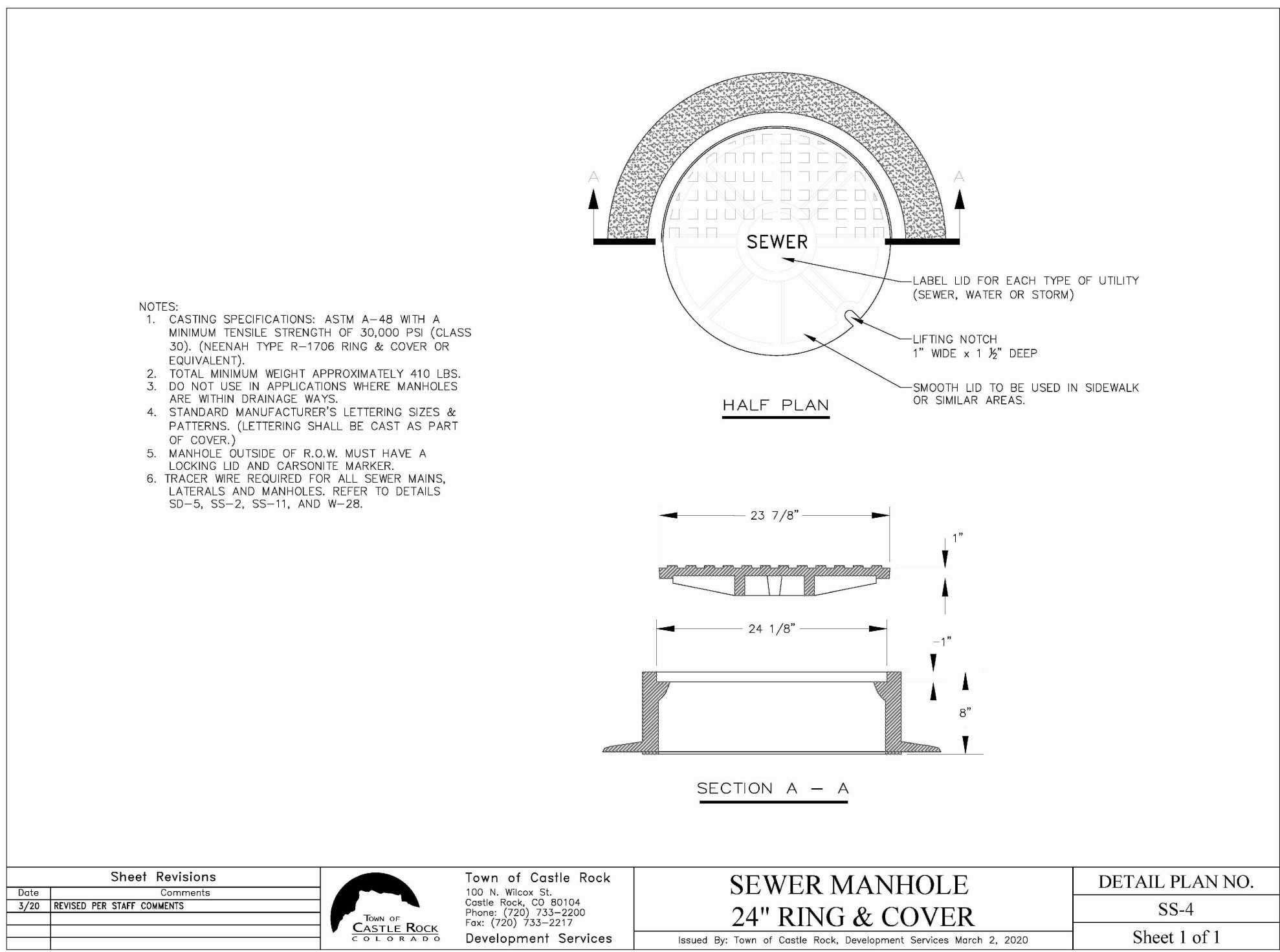
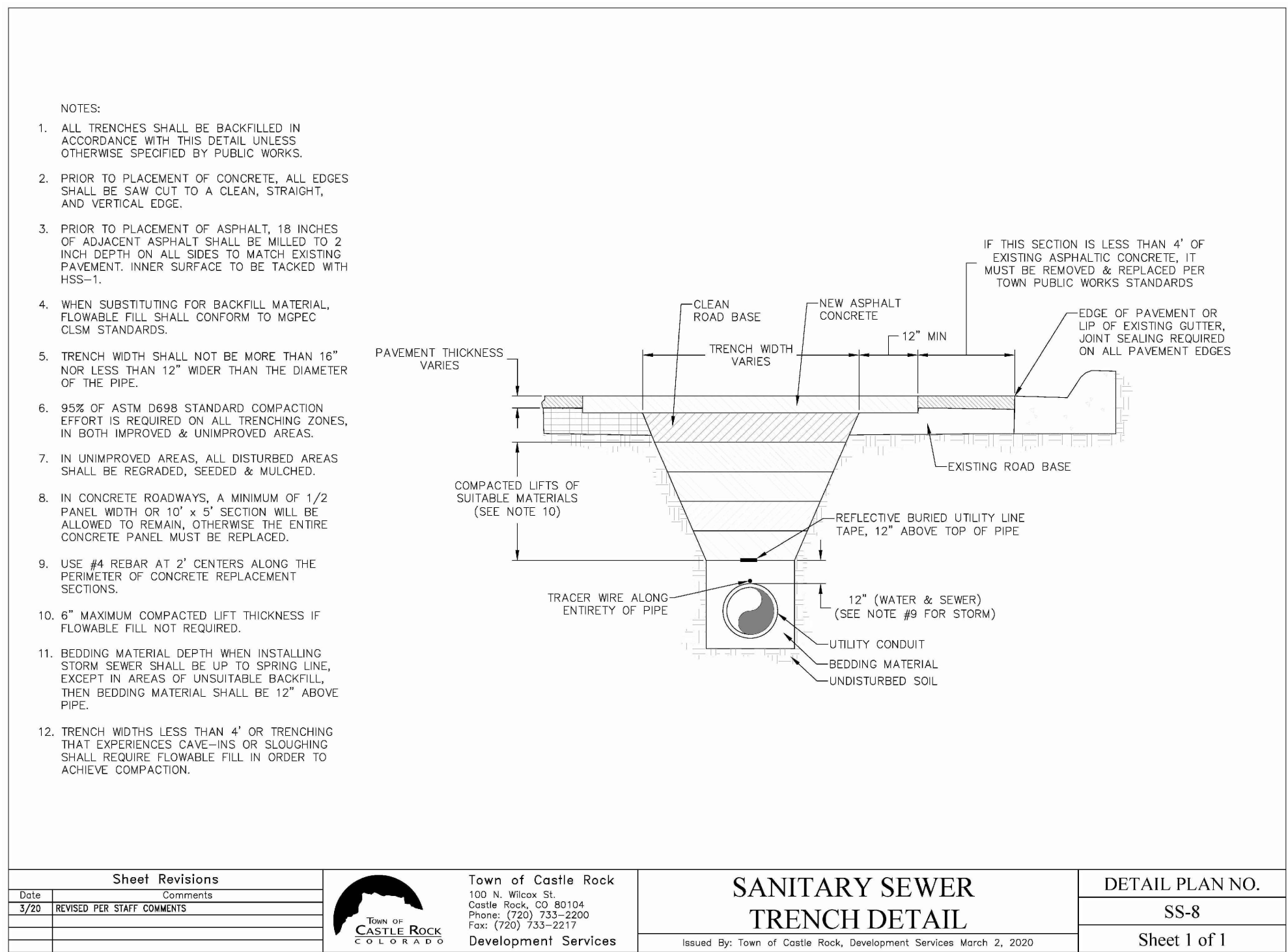
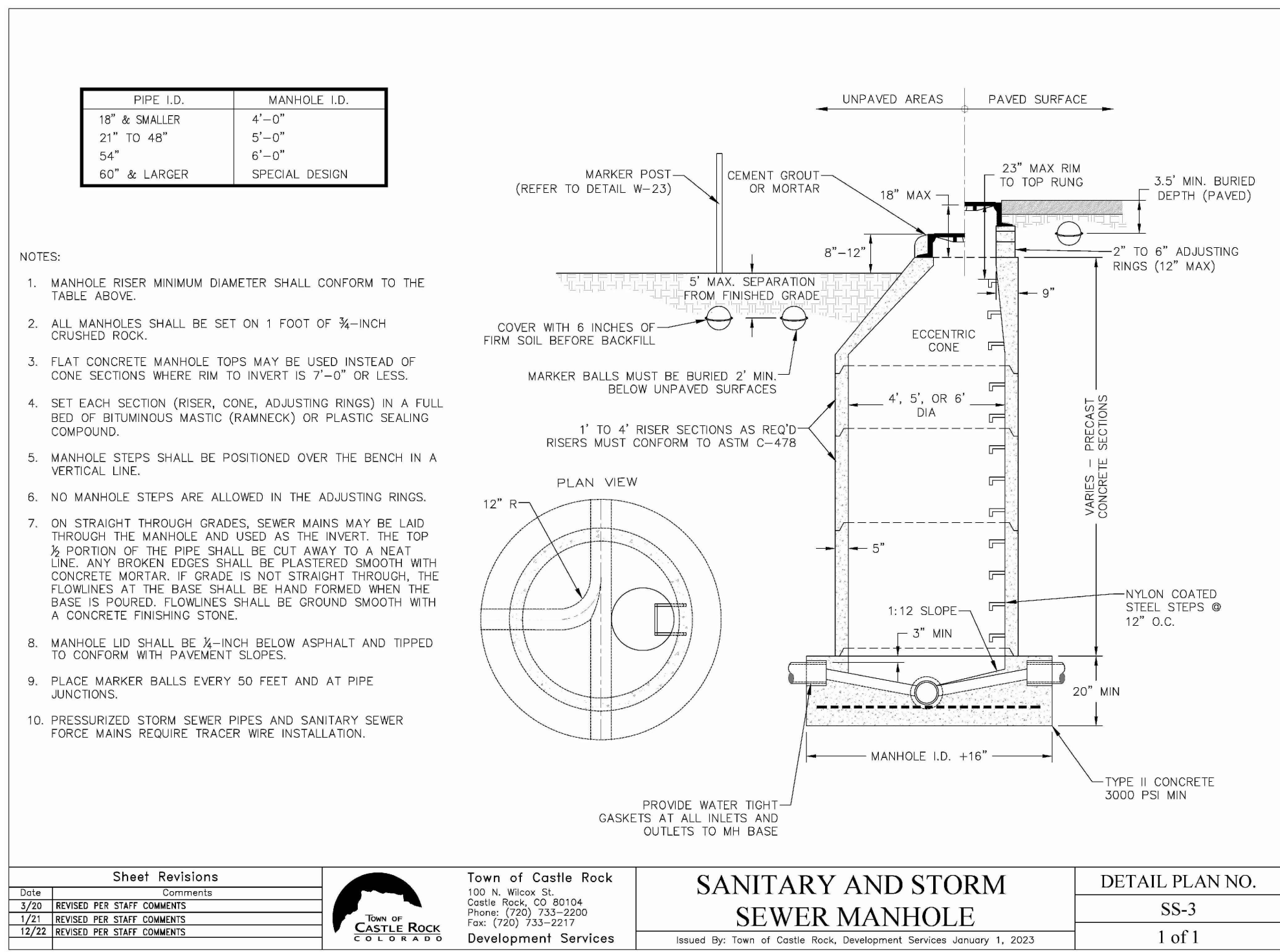
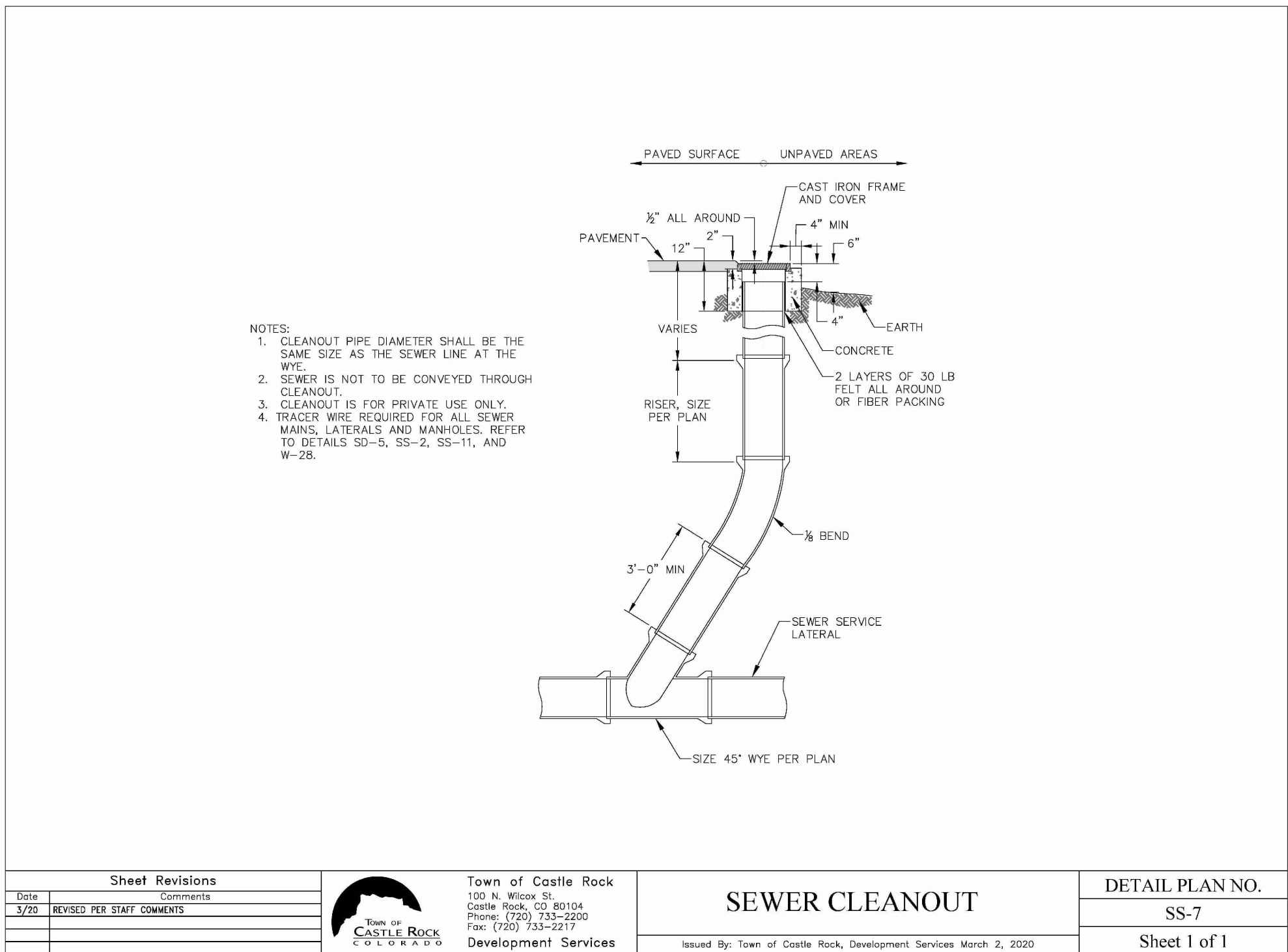
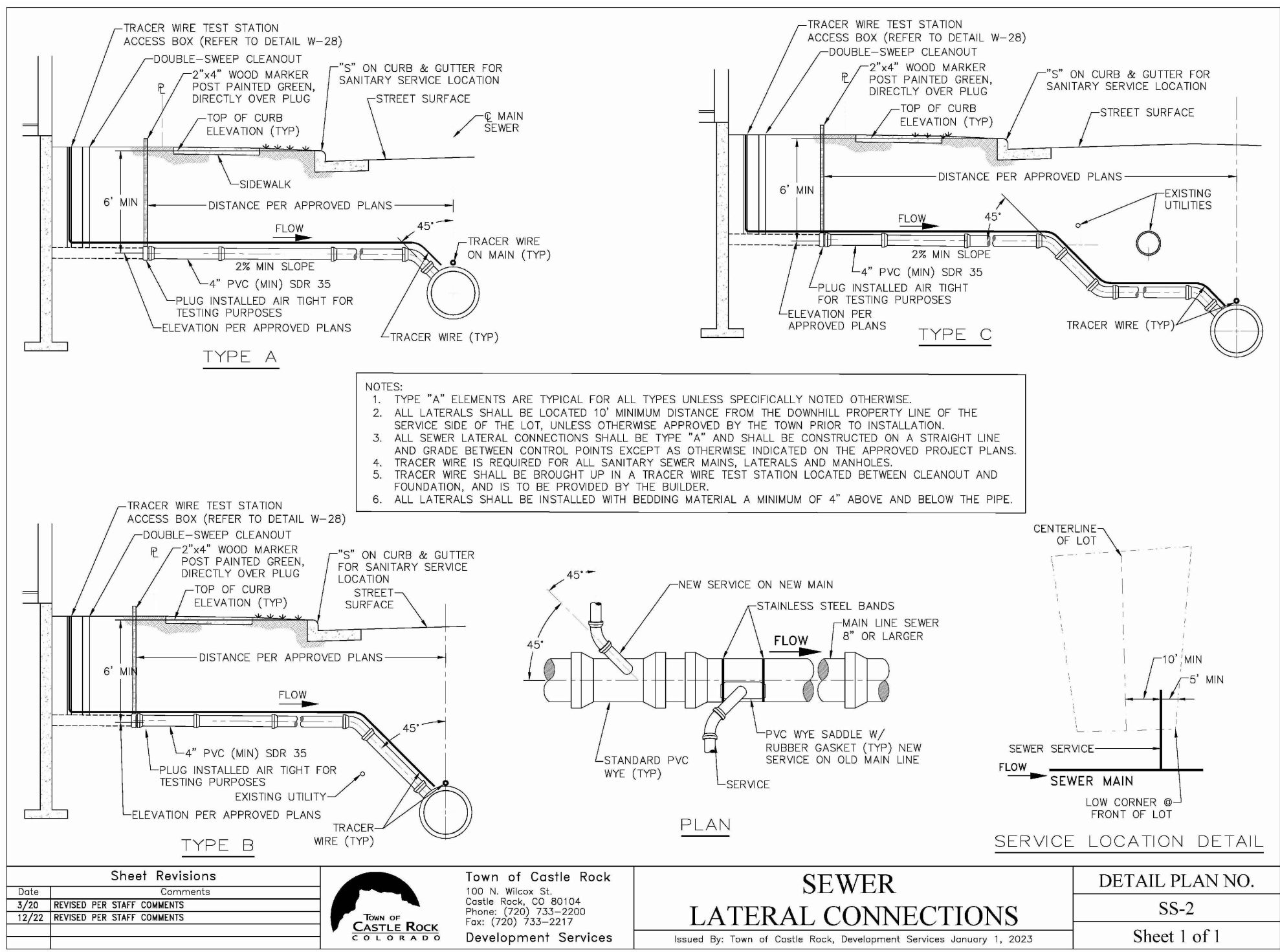
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CW. CURB STOP SHALL BE 1/2" TOWN-OWNED IN PAVEMENTS. IF NEEDED, IT IS RESPONSIBILITY OF



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BRIAN KROMBEIN, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC

7/17/26
DATE

34294

COLORADO REGISTERED
PE & PLS

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
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BY THE APPROPRIATE
TOWN OF CASTLE ROCK
ENGINEERING APPROVES
THEIR USE ONLY FOR THE
PURPOSES DESIGNATED BY
WRITTEN AUTHORIZATION.

PREPARED FOR
BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
CONTACT: HEATHER UPCHURCH

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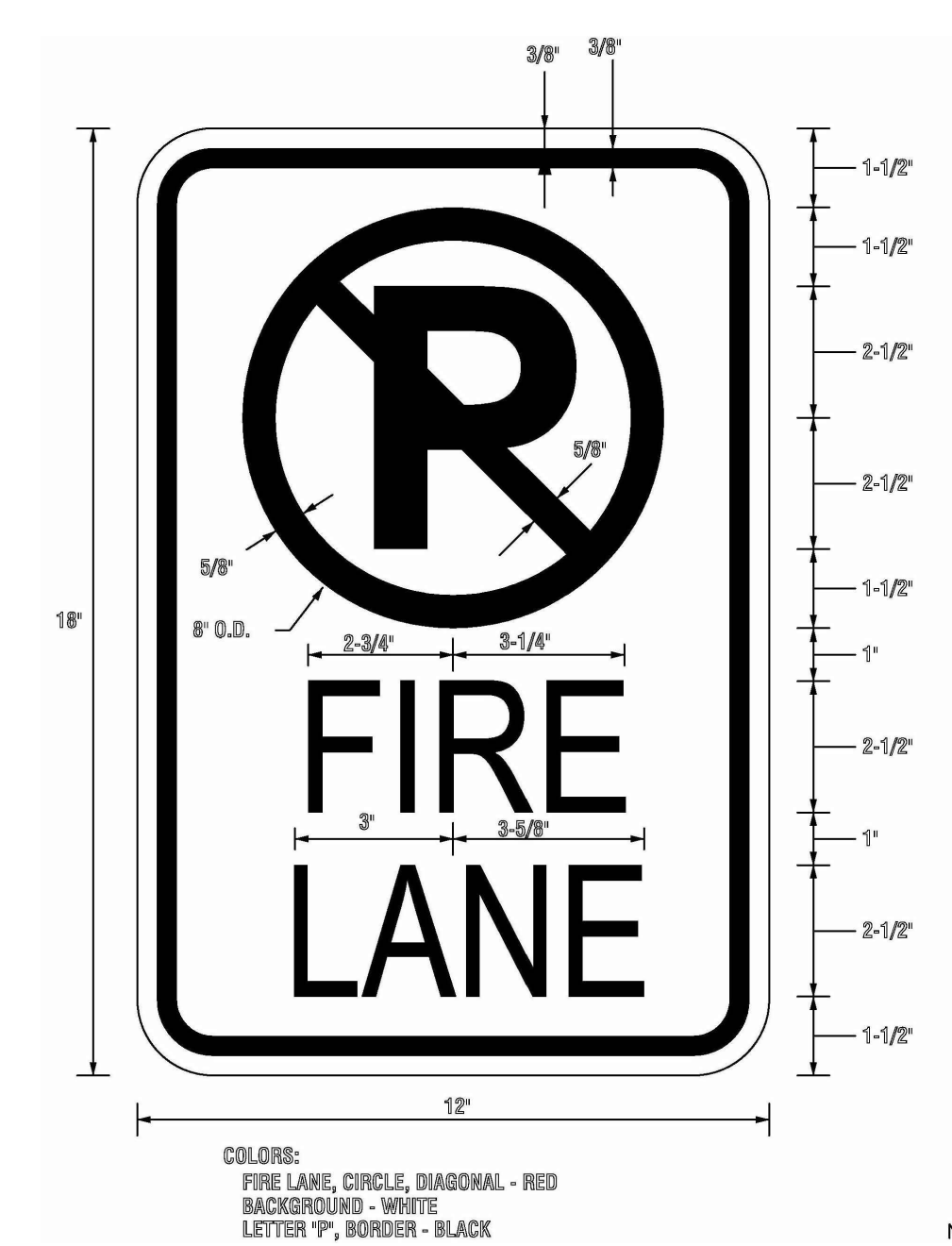
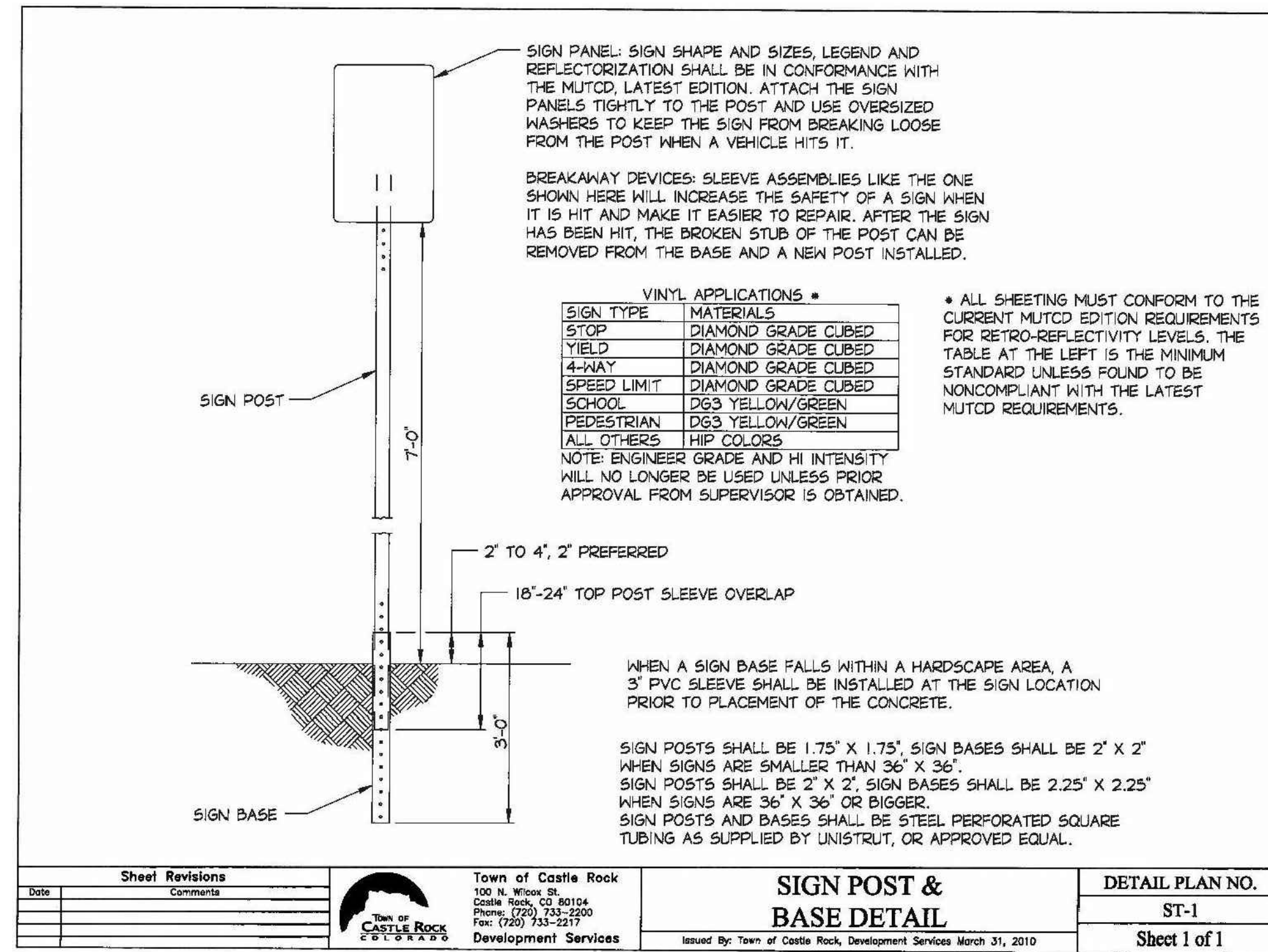
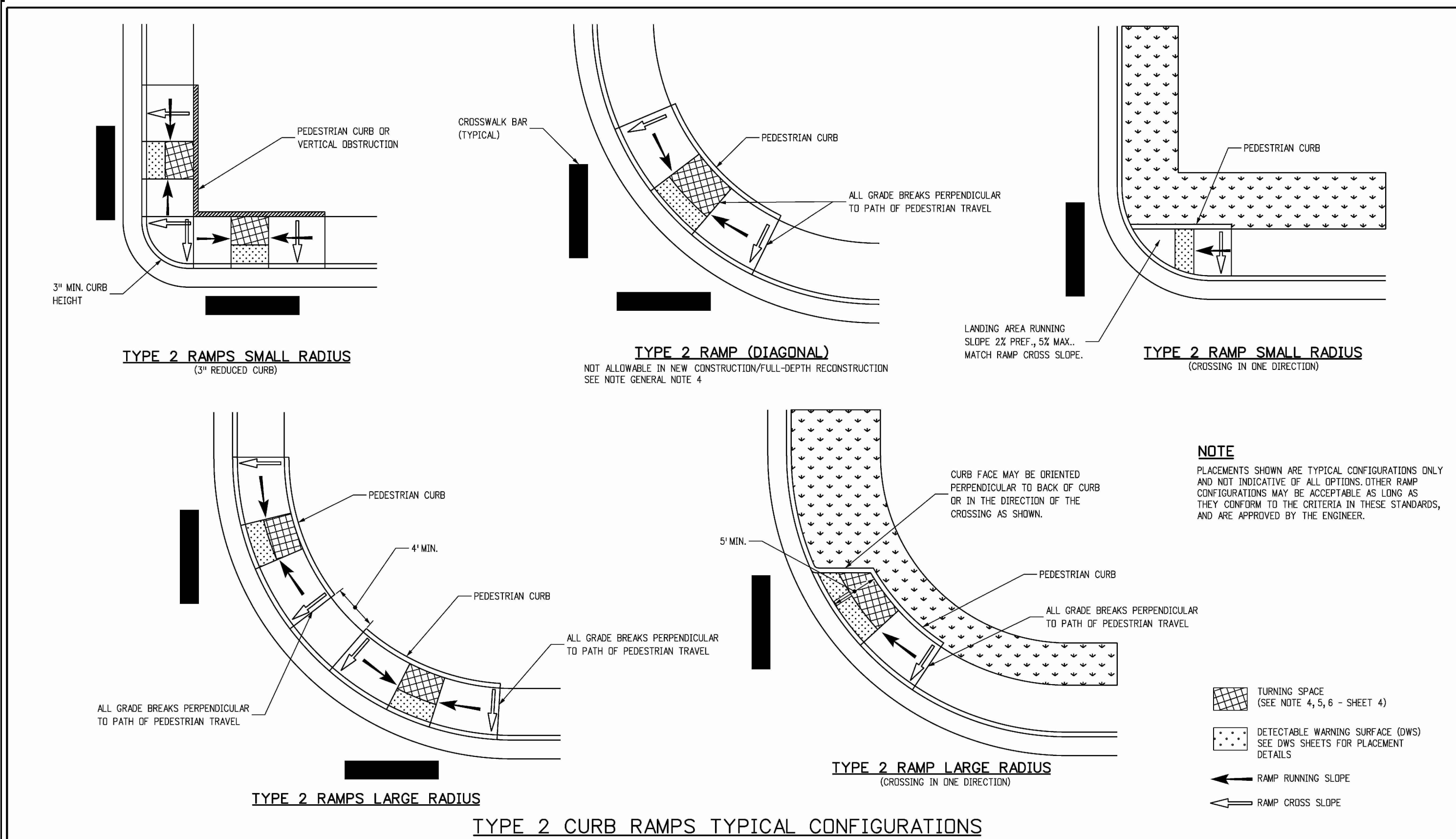
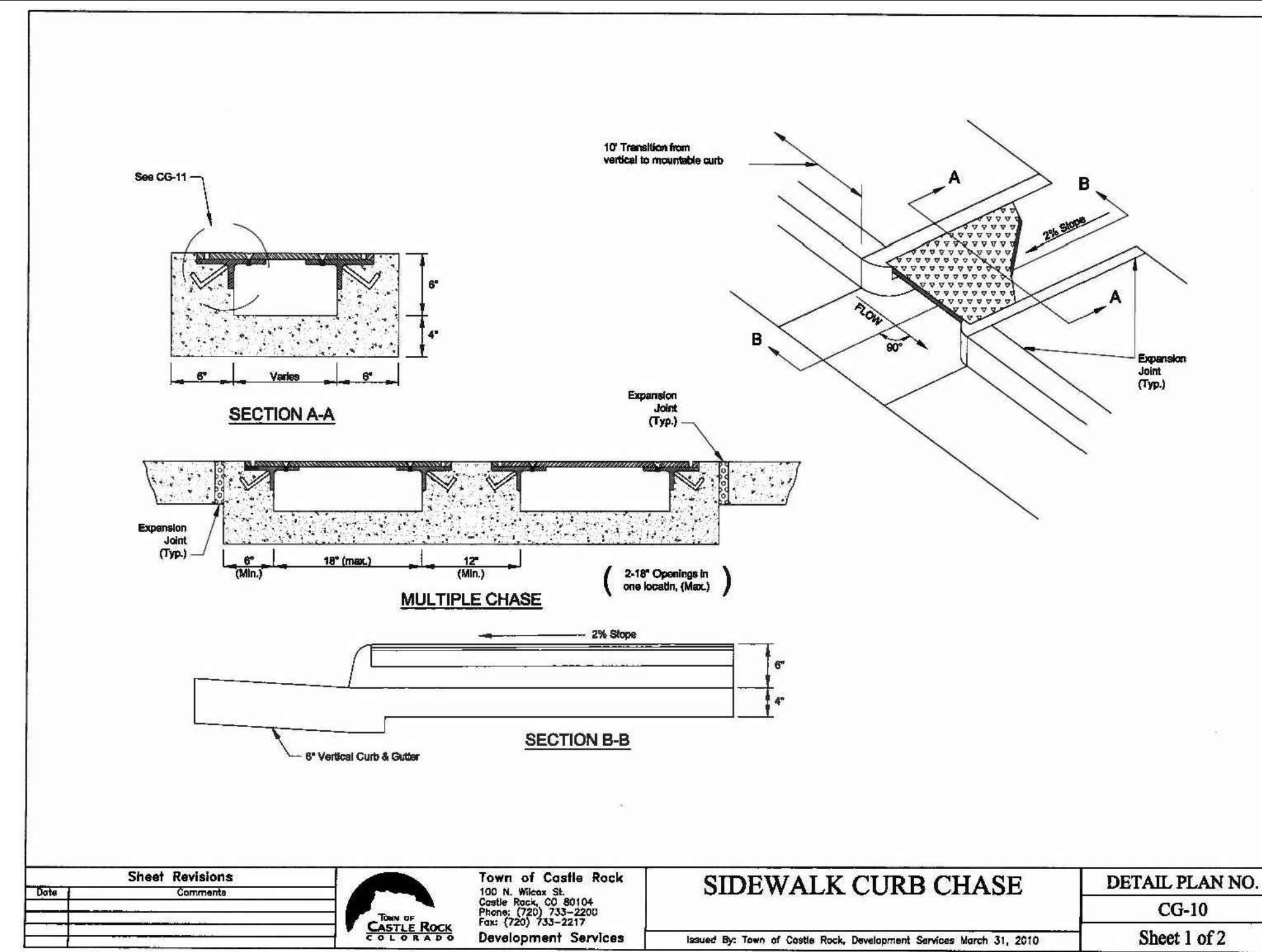
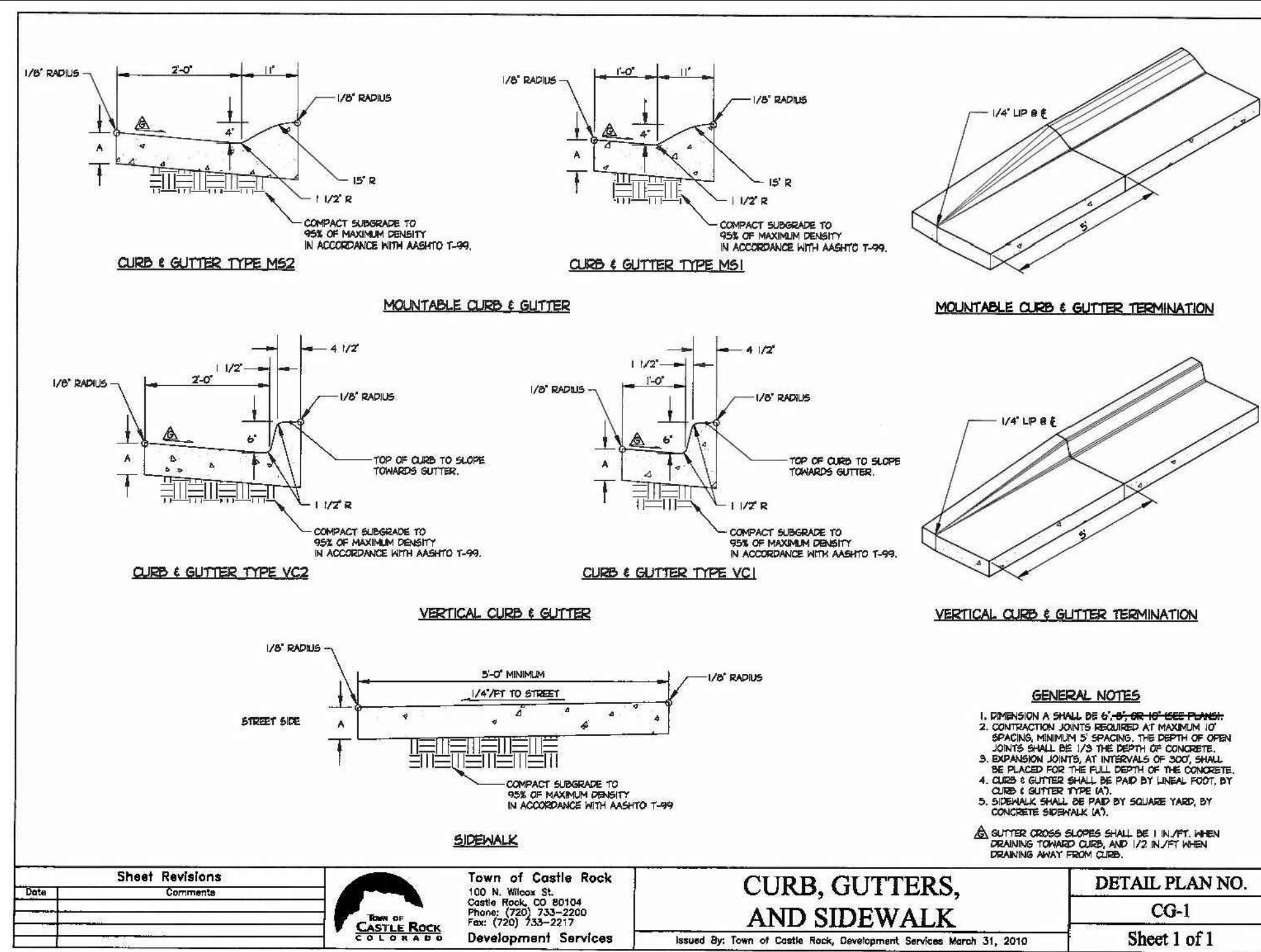
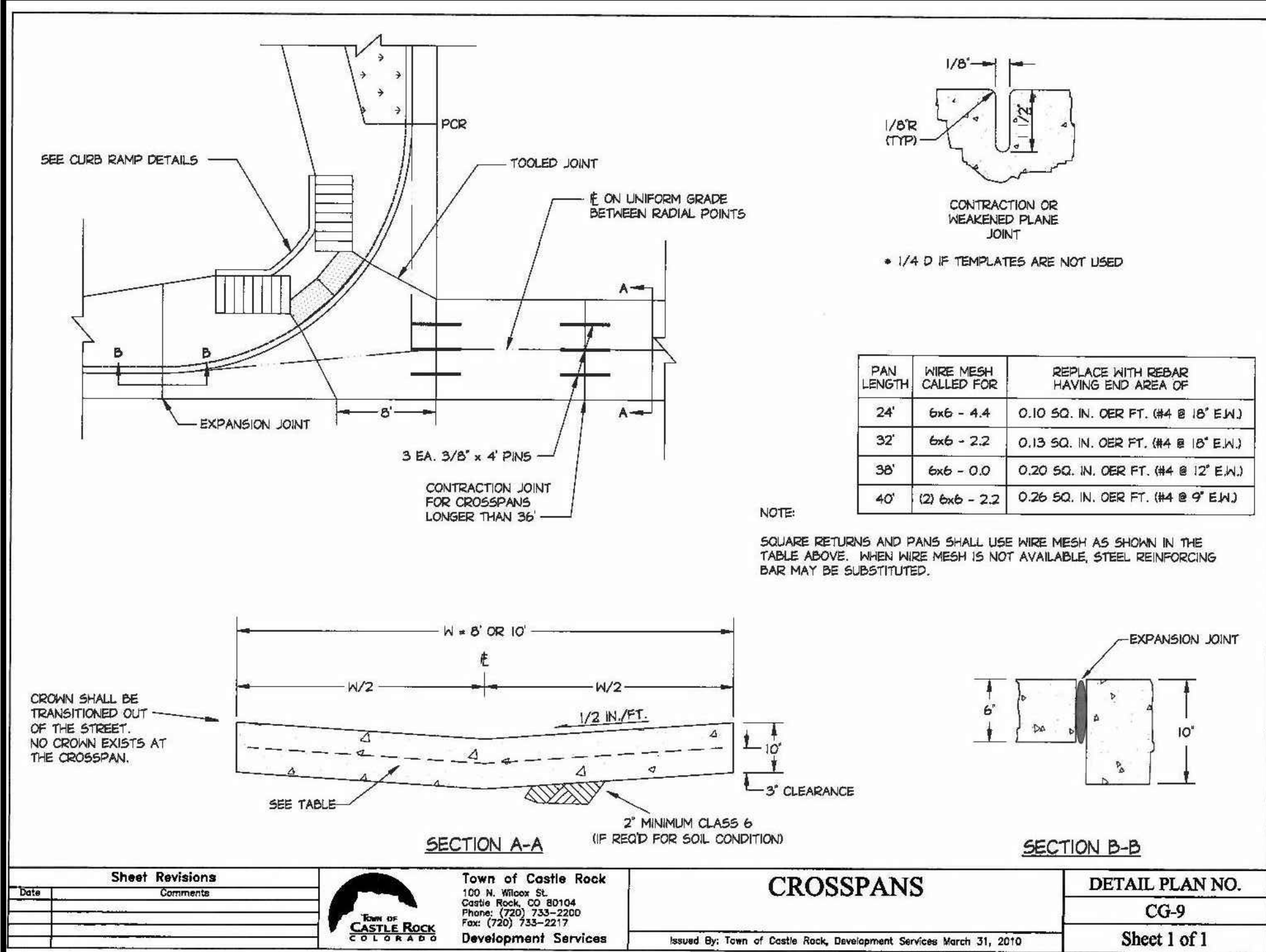
BY	DATE	REVISION	No.	AS SHOWN	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
							7/17/26	BK	BK	

GREYSTONE VILLAS

STANDARD DETAILS

SHEET C12 OF 28

JOB NO. 19010



Computer File Information		Sheet Revisions		Colorado Department of Transportation		STANDARD PLAN NO.	
Creation Date: 07/31/19		Date:	Comments:	2525 West Howard Place		M-608-1	
Designer Initials: JBK				6001 10, 3rd Floor		Standard Sheet No. 5 of 10	
Last Modification Date: 07/31/19				Denver, CO 80204			
Detailer Initials: LTA				Phone: 303-757-9021 FAX: 303-757-9868			
CAD Ver.: MicroStation V8	Scale: Not to Scale	Units: English		Project Development Branch	JBK	Issued by the Project Development Branch July 31, 2019	Project Sheet Number:

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Brian Krombein 7/17/26
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FOR AND ON BEHALF OF
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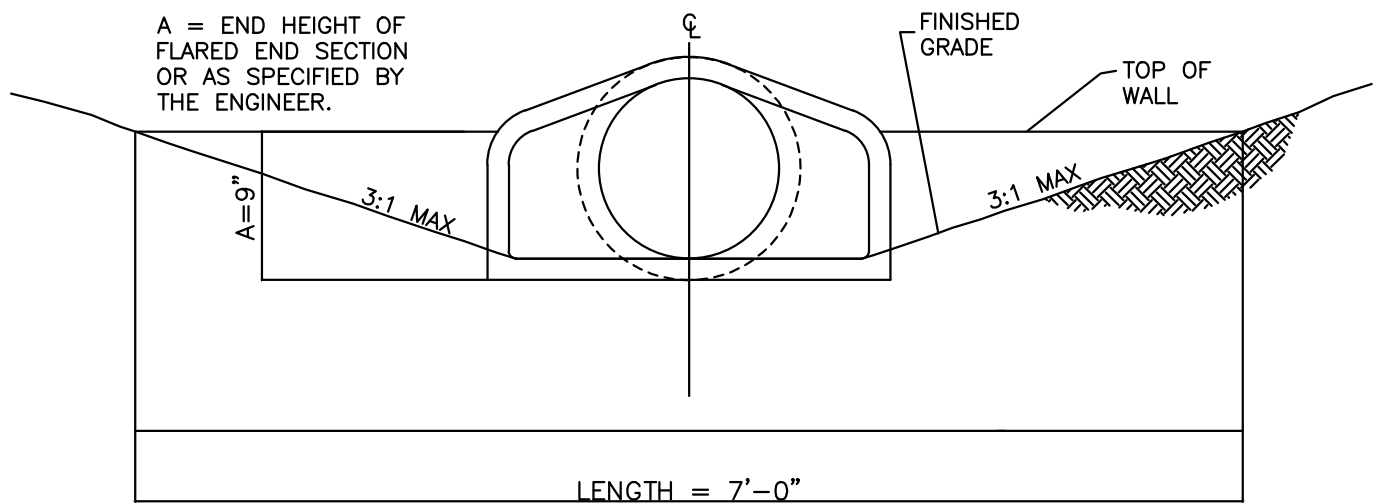
PREPARED FOR
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21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
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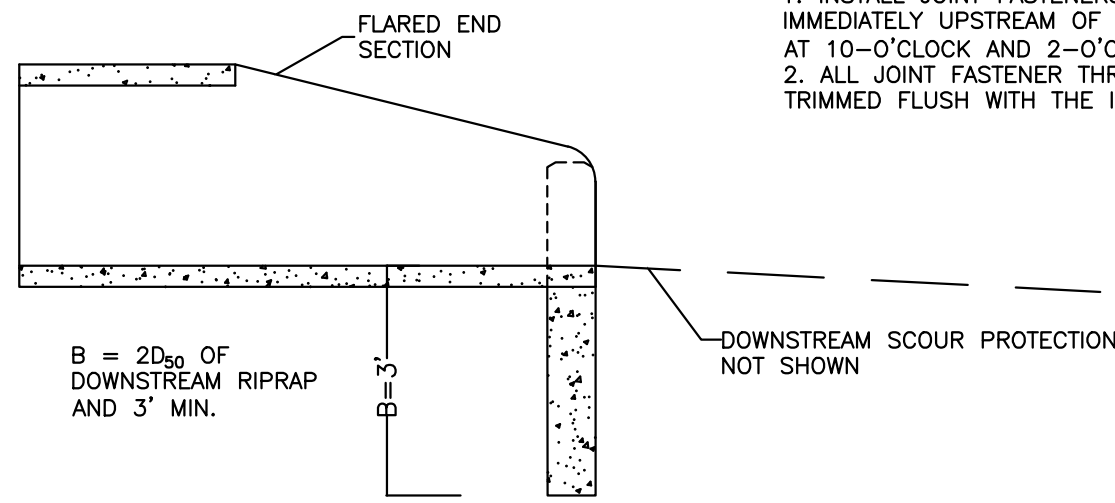
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		7/17/26	BK	BK	

GREYSTONE VILLAS
STANDARD DETAILS

SHEET C13 OF 28
JOB NO. 19010



ELEVATION VIEW

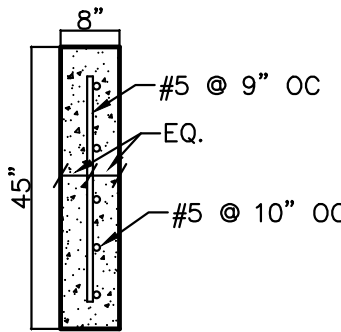


NOTES:
1. INSTALL JOINT FASTENERS TO JOINT IMMEDIATELY UPSTREAM OF OUTLET. LOCATE AT 10-O'CLOCK AND 2-O'CLOCK.
2. ALL JOINT FASTENER THREADS MUST BE TRIMMED FLUSH WITH THE INTERIOR BOLTS.

PROFILE

HEADWALL DESIGN TABLE

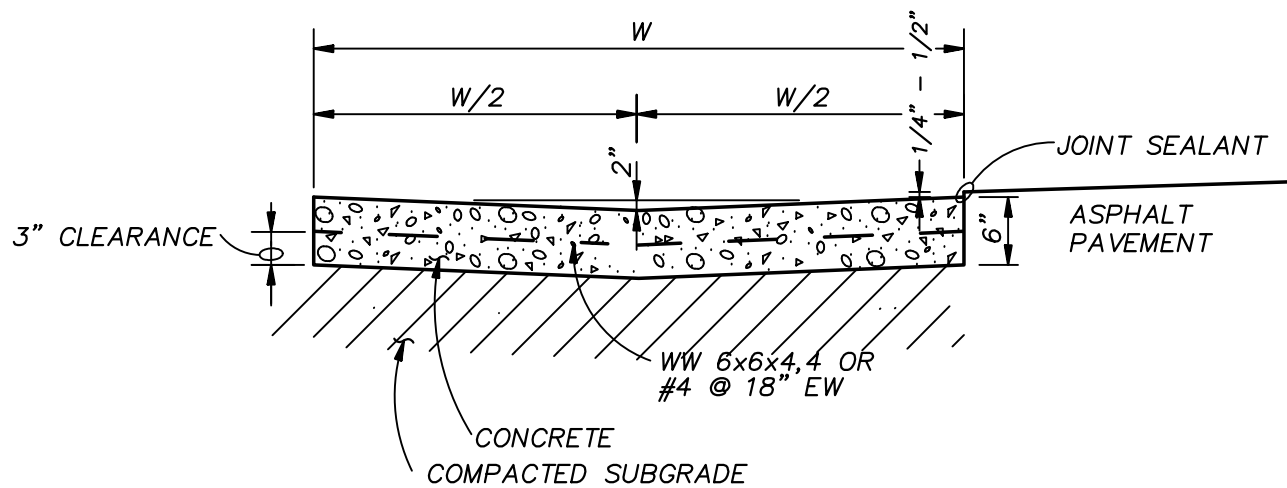
PIPE SIZE	LENGTH, MIN.
18"	7'-0"
24"	8'-0"
30"	10'-0"
36"	12'-6"
42"	15'-9"
48"	17'-6"
54"	19'-6"
60"	21'-6"
66"	22'-6"
72"	24'-0"



Side View

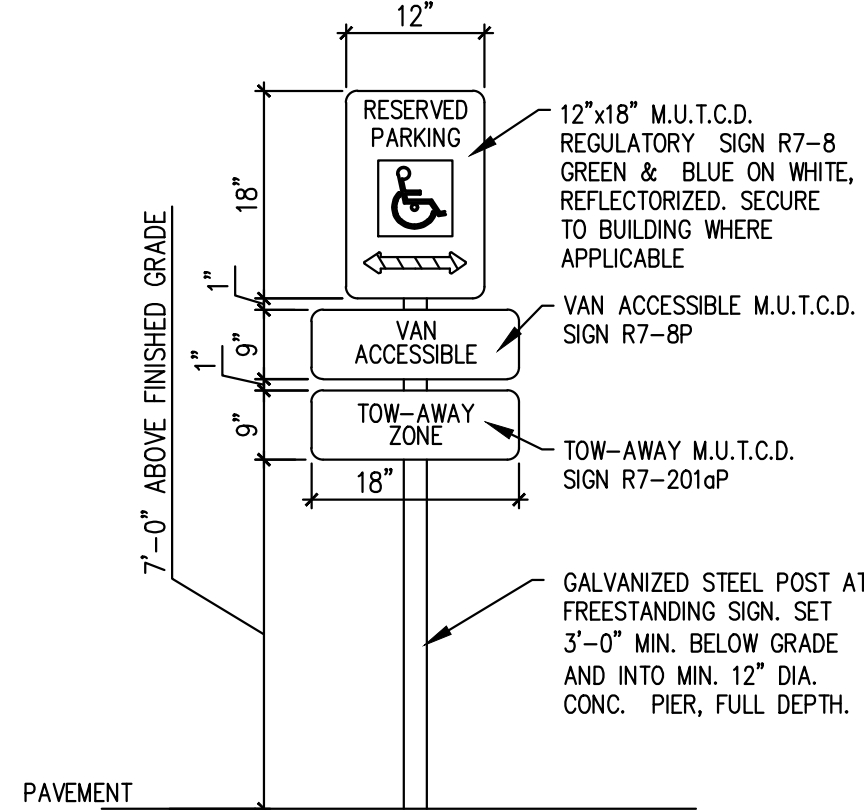
NOTE: ALL JOINT FASTENER THREADS MUST BE TRIMMED FLUSH WITH THE INTERIOR BOLTS.

FLARED END SECTION (FES) HEADWALL

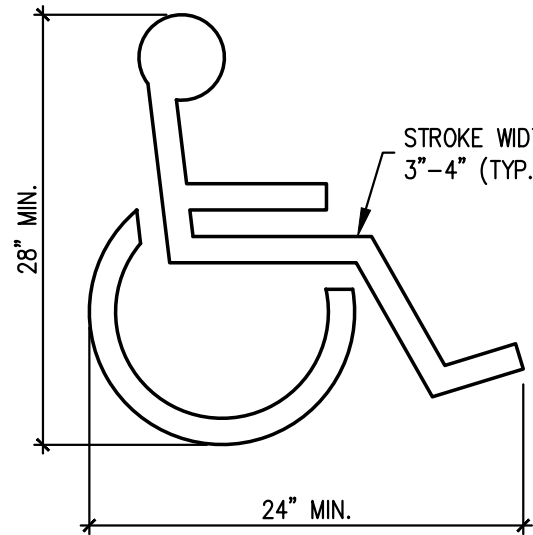


NOTE: NOT FOR USE IN PUBLIC RIGHT-OF-WAY

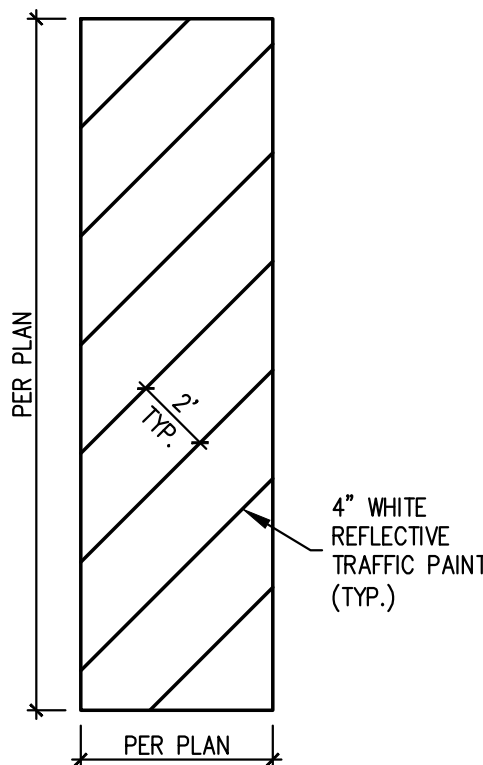
VALLEY PAN



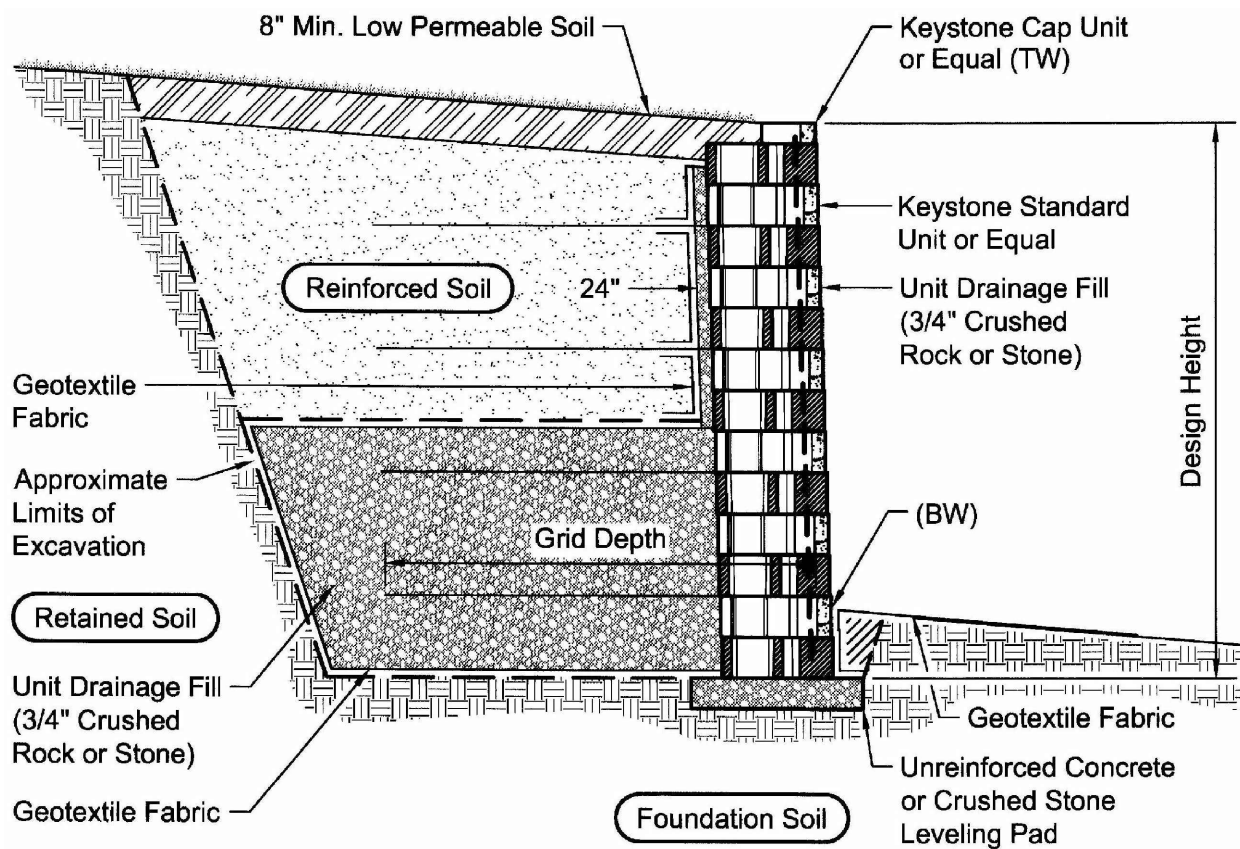
HANDICAP PARKING SIGNAGE
NOT TO SCALE



HANDICAP SYMBOL
NOT TO SCALE



HANDICAP AISLE STRIPING
NOT TO SCALE



TYPICAL CMU RETAINING WALL SECTION (PRIVATE)

N.T.S.

NOTE: THIS DETAIL MAY MAY NOT BE USED ADJACENT TO THE WEST END OF THE DRIVEWAY, NEAR THE PROPOSED WATER MAIN.

WALL DETAIL #2

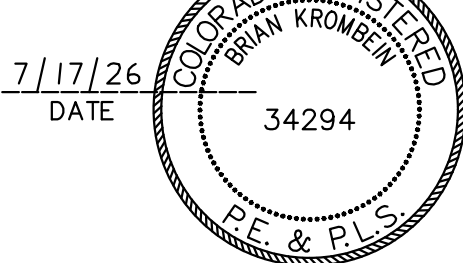


R1-1
30" x 30"

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BRIAN KROMBEIN, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC



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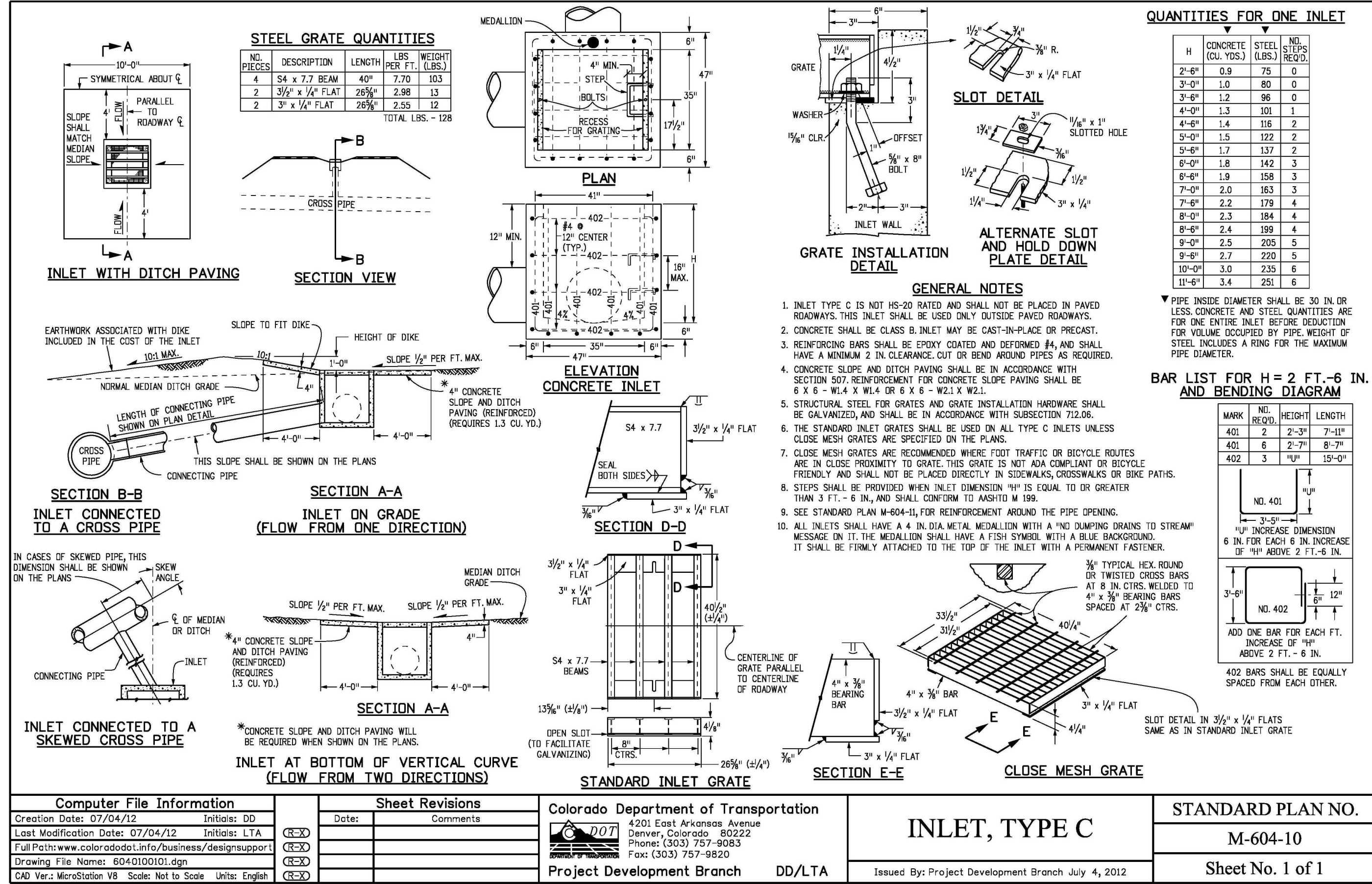
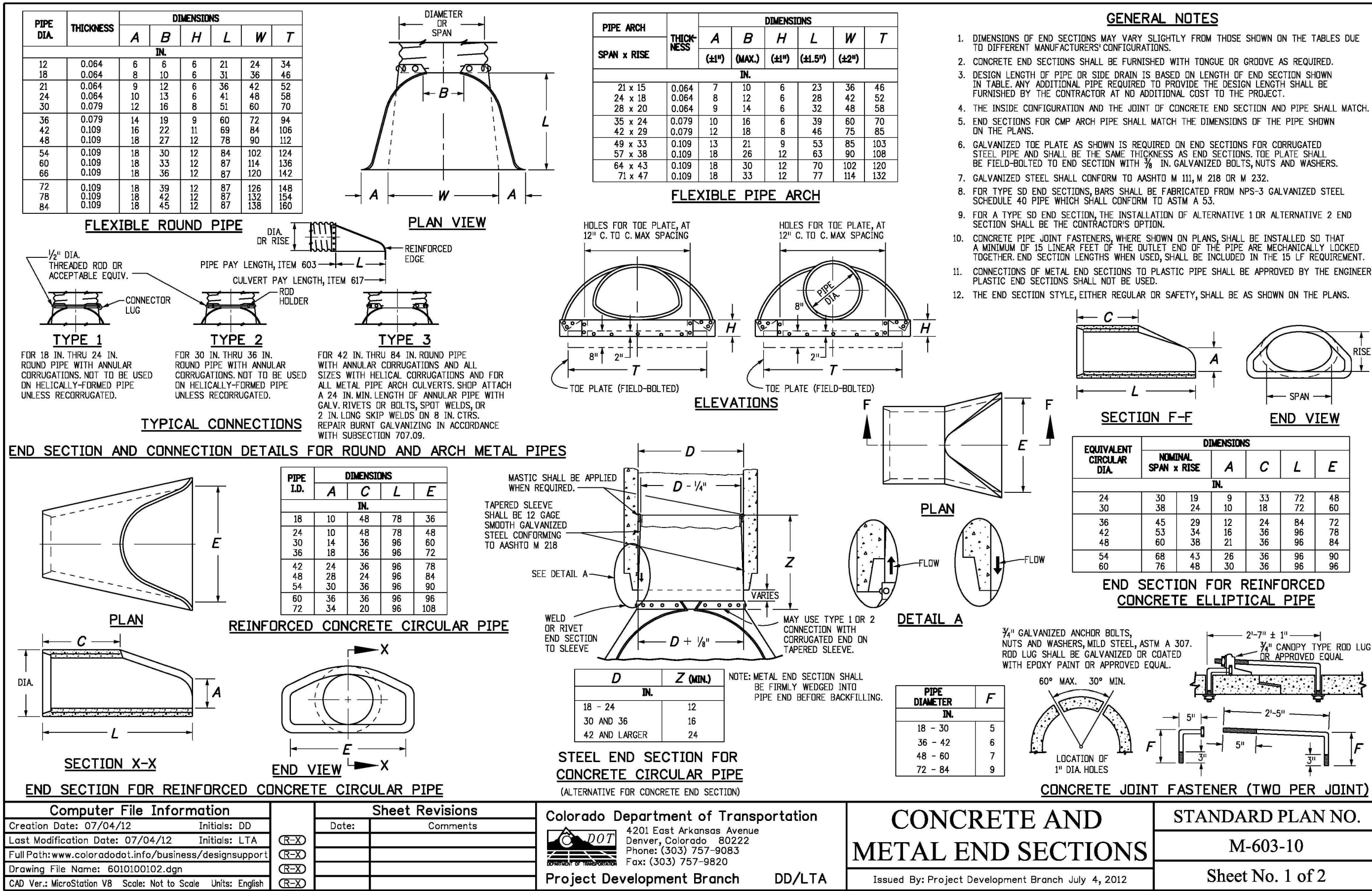
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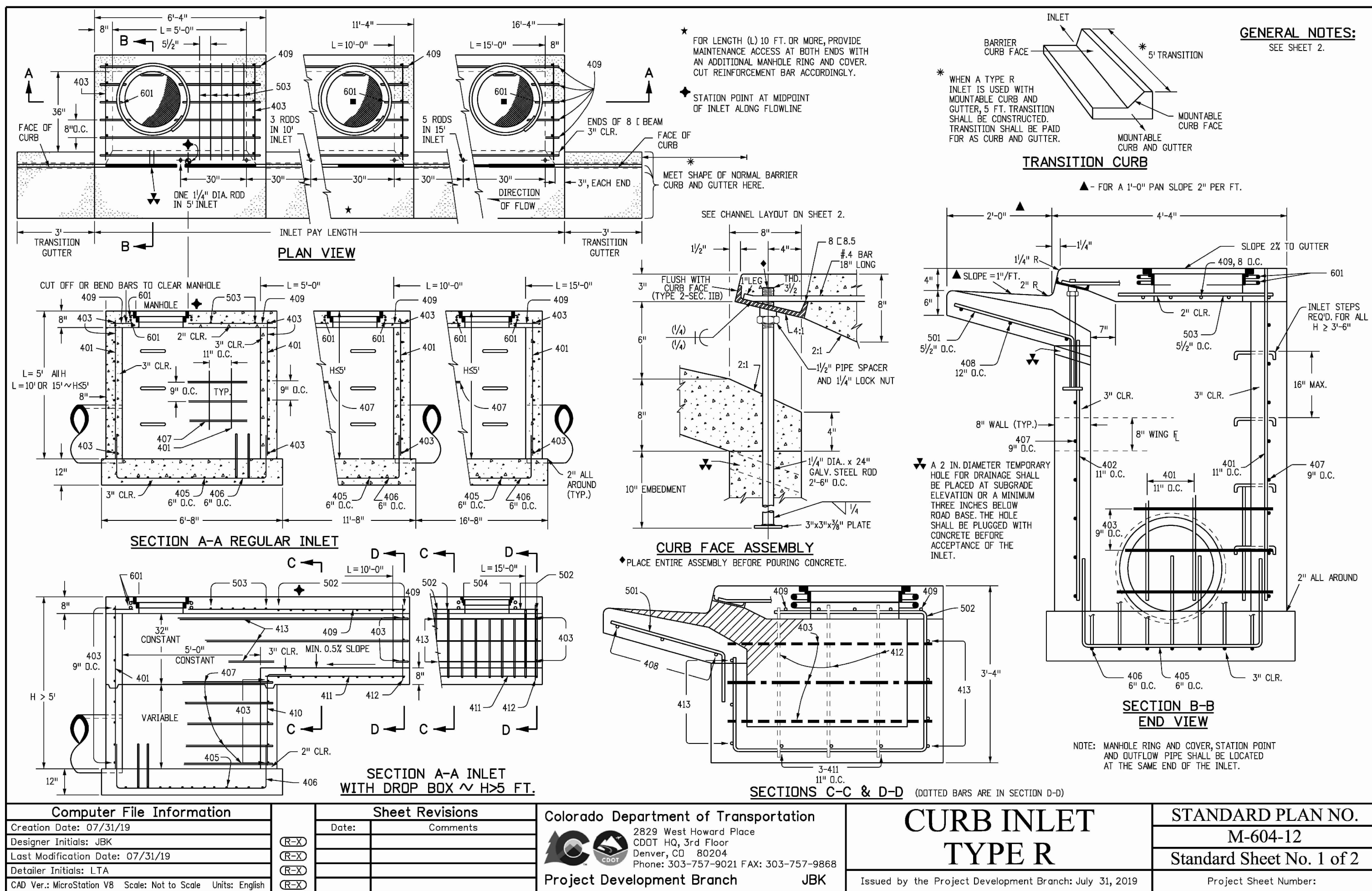
GREYSTONE VILLAS

STANDARD DETAILS

SHEET C14 OF 28

JOB NO. 19010





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Designer Initials: JBK

Last Modification Date: 07/31/19

Detaller Initials: LTA

CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English

Sheet Revisions

Colorado Department of Transportation

2829 West Howard Place

CDOT HQ, 3rd Floor

Denver, CO 80204

Phone: 303-757-9021 FAX: 303-757-9868

Project Development Branch

JBK

CURB INLET TYPE R

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-604-12

Standard Sheet No. 2 of 2

Project Sheet Number:

GENERAL NOTES:

SEE SHEET 2.

FOR LENGTH (L) 10 FT. OR MORE, PROVIDE MAINTENANCE ACCESS AT BOTH ENDS WITH AN ADDITIONAL MANHOLE RING AND COVER. CUT REINFORCEMENT BAR ACCORDINGLY.

STATION POINT AT MIDPOINT OF INLET ALONG FLOWLINE

WHEN A TYPE R INLET IS USED WITH MOUNTABLE CURB AND GUTTER, 5 FT. TRANSITION SHALL BE CONSTRUCTED. TRANSITION SHALL BE PAID FOR AS CURB AND GUTTER.

TRANSITION CURB

FOR A 1'-0" PAN SLOPE 2" PER FT.

PLAN VIEW

SECTION A-A REGULAR INLET

SECTION A-A INLET WITH DROP BOX ~ H25 FT.

SECTION B-B END VIEW

SECTIONS C-C & D-D (DOTTED BARS ARE IN SECTION D-D)

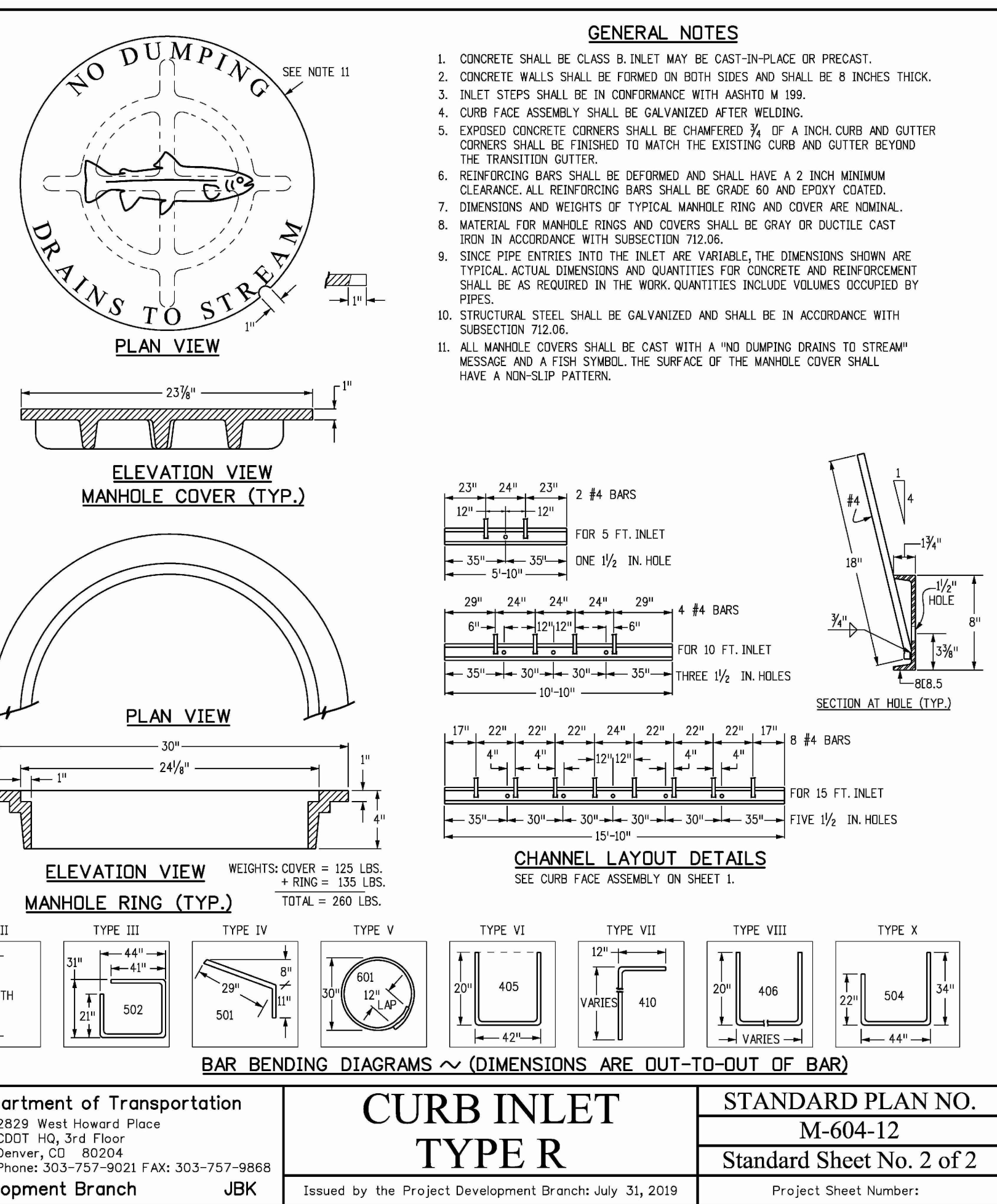
CURB FACE ASSEMBLY

PLACE ENTIRE ASSEMBLY BEFORE POURING CONCRETE.

NOTE: MANHOLE RING AND COVER, STATION POINT AND OUTFLOW PIPE SHALL BE LOCATED AT THE SAME END OF THE INLET.

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"



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		7/17/26	BK	BK	
GREYSTONE VILLAS	STANDARD DETAILS	SHEET C16 OF 28	JOB NO.	19010	

GENERAL NOTES:

1. THESE PLANS WILL BE USED FOR CONSTRUCTION AND INSPECTION BY THE TOWN OF CASTLE ROCK.
2. DRAWINGS ARE INTENDED TO BE PRINTED ON 24" X 36" PAPER. PRINTING THESE DRAWINGS AT A DIFFERENT SIZE WILL IMPACT THE SCALE. VERIFY THE GRAPHIC SCALE BEFORE REFERENCING ANY MEASUREMENTS ON THESE SHEETS. THE RECIPIENT OF THESE DRAWINGS SHALL BE RESPONSIBLE FOR ANY ERRORS RESULTING FROM INCORRECT PRINTING, COPYING, OR ANY OTHER CHANGES THAT ALTER THE SCALE OF THE DRAWINGS.
3. VERIFY ALL PLAN DIMENSIONS PRIOR TO START OF CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE TO ADDRESS ANY QUESTIONS OR CLARIFY ANY DISCREPANCIES.
4. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
5. SUBMIT A CHANGE ORDER FOR APPROVAL FOR ANY CHANGES TO WORK SCOPE RESULTING FROM FIELD CONDITIONS OR DIRECTION BY OWNER'S REPRESENTATIVE WHICH REQUIRE ADDITIONAL COST TO THE OWNER PRIOR TO PERFORMANCE OF WORK.
6. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED. ALL LAYOUT INFORMATION IS AVAILABLE IN DIGITAL FORMAT FOR USE BY THE CONTRACTOR.
7. IF A GEOTECHNICAL SOILS REPORT IS NOT AVAILABLE AT THE TIME OF CONSTRUCTION, NORRIS DESIGN RECOMMENDS A REPORT BE AUTHORIZED BY THE OWNER AND THAT ALL RECOMMENDATIONS OF THE REPORT ARE FOLLOWED DURING CONSTRUCTION. THE CONTRACTOR SHALL USE THESE CONTRACT DOCUMENTS AS A BASIS FOR THE BID. IF THE OWNER ELECTS TO PROVIDE A GEOTECHNICAL REPORT, THE CONTRACTOR SHALL REVIEW THE REPORT AND SUBMIT AN APPROPRIATE CHANGE ORDER TO THE OWNER'S REPRESENTATIVE IF ADDITIONAL COSTS ARE REQUESTED.
8. CONTRACTOR SHALL CONFIRM THAT SITE CONDITIONS ARE SIMILAR TO THE PLANS, WITHIN TOLERANCES STATED IN THE CONTRACT DOCUMENTS, AND SATISFACTORY TO THE CONTRACTOR PRIOR TO START OF WORK. SHOULD SITE CONDITIONS BE DIFFERENT THAN REPRESENTED ON THE PLANS OR UNSATISFACTORY TO THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND FURTHER DIRECTION.
9. CONTRACTOR IS RESPONSIBLE TO PAY FOR, AND OBTAIN, ANY REQUIRED APPLICATIONS, PERMITTING, LICENSES, INSPECTIONS AND METERS ASSOCIATED WITH WORK.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO ANY VIOLATIONS OR NON-CONFORMANCE WITH THE PLANS, SPECIFICATIONS, CONTRACT DOCUMENTS, JURISDICTIONAL CODES, AND REGULATORY AGENCIES.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL UTILITY LOCATES PRIOR TO ANY EXCAVATION. REFER TO ENGINEERING UTILITY PLANS FOR ALL PROPOSED UTILITY LOCATIONS AND DETAILS. NOTIFY OWNER'S REPRESENTATIVE IF EXISTING OR PROPOSED UTILITIES INTERFERE WITH THE ABILITY TO PERFORM WORK.
12. UNLESS IDENTIFIED ON THE PLANS FOR DEMOLITION OR REMOVAL, THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT OR EXISTING LANDSCAPE, ADJACENT OR EXISTING PAVING, OR ANY PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION, ESTABLISHMENT OR DURING THE SPECIFIED MAINTENANCE PERIOD. ALL DAMAGES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOGGING ANY DAMAGES PRIOR TO START OF CONSTRUCTION AND DURING THE CONTRACT PERIOD.
13. ALL WORK SHALL BE CONFINED TO THE AREA WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE PLANS. ANY AREAS OR IMPROVEMENTS DISTURBED OUTSIDE THESE LIMITS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. IN THE EVENT THE CONTRACTOR REQUIRES A MODIFICATION TO THE CONSTRUCTION LIMITS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER'S REPRESENTATIVE PRIOR TO ANY DISTURBANCE OUTSIDE OF THE LIMITS OF WORK.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE JURISDICTIONAL AGENCIES AND THE OWNER'S REPRESENTATIVE IF THEIR WORK AND OPERATIONS AFFECT OR IMPACT THE PUBLIC RIGHTS-OF-WAY. OBTAIN APPROVAL PRIOR TO ANY WORK WHICH AFFECTS OR IMPACTS THE PUBLIC RIGHTS-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THIS REQUIREMENT DURING THE CONTRACT PERIOD.
16. SIGHT TRIANGLES AND SIGHT LINES SHALL REMAIN UNOBSTRUCTED BY EQUIPMENT, CONSTRUCTION MATERIALS, PLANT MATERIAL OR ANY OTHER VISUAL OBSTACLE DURING THE CONTRACT PERIOD AND AT MATURITY OF PLANTS PER LOCAL JURISDICTIONAL REQUIREMENTS. NO PLANT MATERIAL OTHER THAN GROUND COVER IS ALLOWED TO BE PLANTED ADJACENT TO FIRE HYDRANTS AS STIPULATED BY JURISDICTIONAL REQUIREMENTS.
17. COORDINATE SITE ACCESS, STAGING, STORAGE AND CLEANOUT AREAS WITH OWNER'S REPRESENTATIVE.
18. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SAFETY FENCING AND BARRIERS AROUND ALL IMPROVEMENTS SUCH AS WALLS, PLAY STRUCTURES, EXCAVATIONS, ETC. ASSOCIATED WITH THEIR WORK UNTIL SUCH FACILITIES ARE COMPLETELY INSTALLED PER THE PLANS, SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THEIR MATERIAL STOCK PILES AND WORK FROM VANDALISM, EROSION OR UNINTENDED DISTURBANCE DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE IS ISSUED.
20. THE CONTRACTOR SHALL KNOW, UNDERSTAND AND ABIDE BY ANY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ASSOCIATED WITH THE SITE. IF A STORM WATER POLLUTION PREVENTION PLAN IS NOT PROVIDED BY THE OWNER'S REPRESENTATIVE, REQUEST A COPY BEFORE PERFORMANCE OF ANY SITE WORK.
21. MAINTAIN ANY STORM WATER MANAGEMENT FACILITIES THAT EXIST ON SITE FOR FULL FUNCTIONALITY. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ANY NEW STORM WATER MANAGEMENT FACILITIES THAT ARE IDENTIFIED IN THE SCOPE OF WORK TO FULL FUNCTIONALITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER FOR FAILURE TO MAINTAIN STORM WATER MANAGEMENT FACILITIES DURING THE CONTRACT PERIOD.
22. THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM EXITING THE SITE OR ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION OR CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS DURING THEIR CONTRACTED COURSE OF WORK.
23. THE CONTRACTOR SHALL BE RESPONSIBLE TO PREVENT ANY IMPACTS TO ADJACENT WATERWAYS, WETLANDS, OR OTHER ENVIRONMENTALLY SENSITIVE AREAS RESULTING FROM WORK DONE AS PART OF THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE STANDARDS DURING THEIR CONTRACTED COURSE OF WORK.
24. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CONSTRUCTION MATERIAL IMPORTED TO OR EXPORTED FROM THE PROJECT SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF MATERIAL DURING TRANSPORT. TRANSPORTATION METHODS ON PUBLIC RIGHT-OF WAYS SHALL CONFORM TO JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY FINES OR PENALTIES ASSESSED TO THE OWNER RELATING TO THESE REQUIREMENTS.

25. THE CLEANING OF EQUIPMENT IS PROHIBITED AT THE JOB SITE UNLESS AUTHORIZED BY THE OWNER'S REPRESENTATIVE IN A DESIGNATED AREA. THE DISCHARGE OF WATER, WASTE CONCRETE, POLLUTANTS, OR OTHER MATERIALS SHALL ONLY OCCUR IN AREAS DESIGNED FOR SUCH USE AND APPROVED BY THE OWNER'S REPRESENTATIVE.
26. THE CLEANING OF CONCRETE EQUIPMENT IS PROHIBITED AT THE JOB SITE EXCEPT IN DESIGNATED CONCRETE WASHOUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE IN THE STORM SEWER IS PROHIBITED.
27. OPEN SPACE SWALES: IF SWALES ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE CONVEYANCE OF WATER WITHIN THE SWALES DURING THE CONTRACT PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DIVERSION OR PUMPING OF WATER IF REQUIRED TO COMPLETE WORK. ANY SWALES DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE SWALE NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.
28. DETENTION AND WATER QUALITY PONDS: IF DETENTION PONDS AND WATER QUALITY PONDS ARE EXISTING ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE PONDS, DRAINAGE STRUCTURES AND SPILLWAYS DURING CONSTRUCTION. ALL PONDS, DRAINAGE STRUCTURES AND SPILLWAYS SHALL BE MAINTAINED IN OPERABLE CONDITIONS AT ALL TIMES. ANY POND OR SPILLWAY AREAS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. IF THE POND NEEDS TO BE DISTURBED OR MODIFIED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DISTURBANCE.
29. MAINTENANCE ACCESS BENCHES: IF MAINTENANCE BENCHES OR ACCESS ROADS EXIST ON SITE AND ARE NOT INTENDED TO BE MODIFIED AS PART OF THE PLANS, THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE BENCHES OR ACCESS ROADS DURING CONSTRUCTION. ANY BENCHES OR ACCESS ROADS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED/RESTORED TO THEIR ORIGINAL CONDITION. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL EXISTING BENCHES AND ACCESS ROADS DURING THE CONSTRUCTION PERIOD. IF ACCESS NEEDS TO BE BLOCKED FOR ANY REASON, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO INTERRUPTION OF ACCESS.
30. LOCAL, STATE AND FEDERAL JURISDICTIONAL REQUIREMENTS, RESTRICTIONS OR PROCEDURES SHALL SUPERSEDE THESE PLANS, NOTES AND SPECIFICATIONS WHEN MORE STRINGENT. NOTIFY THE OWNER'S REPRESENTATIVE IF CONFLICTS OCCUR.

LAYOUT NOTES:

1. WRITTEN DIMENSIONS WILL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
2. SHOULD SITE CONDITIONS BE DIFFERENT THAN WHAT IS INDICATED ON THE DRAWINGS CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
3. CURVED WALKS AND CURB EDGES ARE INTENDED TO BE CONSTRUCTED WITH SMOOTH FLOWING CURVES. ANYTHING OTHER THAN SMOOTH FLOWING CURVES WILL BE REJECTED.
4. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
5. THE CONTRACTOR SHALL PROVIDE A STAKED LAYOUT OF ALL SITE IMPROVEMENTS FOR INSPECTION BY THE OWNER'S REPRESENTATIVE AND MAKE MODIFICATIONS AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
6. THE CLEANING OF CONCRETE TRUCK DELIVERY CHUTES IS PROHIBITED AT THE JOB SITE EXCEPT IN DESIGNATED WASH OUT AREAS. THE DISCHARGE OF WATER CONTAINING WASTE CONCRETE THE STORM SEWER IS PROHIBITED.
7. THE CONTRACTOR SHALL INSTALL SLEEVING FOR IRRIGATION IMPROVEMENTS PRIOR TO INSTALLING CONCRETE FLATWORK. REFER TO IRRIGATION PLANS.
8. LAYOUT WALKS, SCORE JOINTS AND PAVING PATTERNS AS CLOSELY AS POSSIBLE TO PLANS, DETAILS, AND SPECIFICATIONS. DO NOT DEVIATE FROM PLANS UNLESS SPECIFIC APPROVAL IS OBTAINED FROM THE OWNER'S REPRESENTATIVE.
9. CONTRACTOR IS RESPONSIBLE FOR SUPERVISING ALL SAFETY SURFACING AND PAVEMENT DURING THE CURING PROCESS.

GRADING NOTES

1. ALL AREAS SHALL BE GRADED TO ACHIEVE POSITIVE DRAINAGE. MINIMUM SLOPE ON LANDSCAPED AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE (3:1).
2. MAXIMUM ALLOWED FINAL GRADES FOR LONGITUDINAL SLOPE ON WALKS AND PAVED AREAS SHALL BE 5% UNLESS OTHERWISE INDICATED ON THE PLANS.
3. ALL SLOPES EQUAL TO 3:1 ARE TO BE CALLED OUT ON THE LANDSCAPE SHEETS

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLANS AND SPECIFICATIONS AS CLOSELY AS POSSIBLE. ANY SUBSTITUTION OR ALTERATION SHALL NOT BE ALLOWED WITHOUT APPROVAL OF THE OWNER'S REPRESENTATIVE. OVERALL PLANT QUANTITY AND QUALITY SHALL BE CONSISTENT WITH THE PLANS.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES. GRAPHIC QUANTITIES TAKES PRECEDENCE OVER WRITTEN QUANTITIES.
3. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO INSPECT AND TAG ALL PLANT MATERIAL PRIOR TO SHIPPING TO THE SITE. IN ALL CASES, THE OWNER'S REPRESENTATIVE MAY REJECT PLANT MATERIAL AT THE SITE IF MATERIAL IS DAMAGED, DISEASED, OR DECLINING IN HEALTH AT THE TIME OF ONSITE INSPECTIONS OR IF THE PLANT MATERIAL DOES NOT MEET THE MINIMUM SPECIFIED STANDARD IDENTIFIED ON THE PLANS AND IN THE SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE FOR INSPECTION AND APPROVAL OF ALL MATERIALS AND PRODUCTS PRIOR TO INSTALLATION.
4. THE OWNER'S REPRESENTATIVE MAY ELECT TO UPSIZE PLANT MATERIAL AT THEIR DISCRETION BASED ON SELECTION, AVAILABILITY, OR TO ENHANCE SPECIFIC AREAS OF THE PROJECT. THE CONTRACTOR SHALL VERIFY PLANT MATERIAL SIZES WITH OWNER'S REPRESENTATIVE PRIOR TO PURCHASING, SHIPPING OR STOCKING OF PLANT MATERIALS. SUBMIT CHANGE ORDER REQUEST TO OWNER'S REPRESENTATIVE FOR APPROVAL IF ADDITIONAL COST IS REQUESTED BY THE CONTRACTOR PRIOR TO INSTALLATION. RE-STOCKING CHARGES WILL NOT BE APPROVED IF THE CONTRACTOR FAILS TO SUBMIT A REQUEST FOR MATERIAL CHANGES.
5. THE CONTRACTOR SHALL WARRANTY ALL CONTRACTED WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER SUBSTANTIAL COMPLETION HAS BEEN ISSUED BY THE OWNER'S REPRESENTATIVE FOR THE ENTIRE PROJECT UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR SPECIFICATIONS.
6. REFER TO IRRIGATION PLANS FOR LIMITS AND TYPES OF IRRIGATION DESIGNED FOR THE LANDSCAPE. IN NO CASE SHALL IRRIGATION BE EMITTED WITHIN THE MINIMUM DISTANCE FROM BUILDING OR WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT. ALL IRRIGATION DISTRIBUTION LINES, HEADS AND EMITTERS SHALL BE KEPT OUTSIDE THE MINIMUM DISTANCE AWAY FROM ALL BUILDING AND WALL FOUNDATIONS AS STIPULATED IN THE GEOTECHNICAL REPORT.
7. LANDSCAPE MATERIAL LOCATIONS SHALL HAVE PRECEDENCE OVER IRRIGATION MAINLINE AND LATERAL LOCATIONS. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
8. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS. SURFACE DRAINAGE ON LANDSCAPE AREAS SHALL NOT FLOW TOWARD STRUCTURES AND FOUNDATIONS. MAINTAIN SLOPE AWAY FROM FOUNDATIONS PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. ALL LANDSCAPE AREAS BETWEEN WALKS AND CURBS SHALL DRAIN FREELY TO THE CURB UNLESS OTHERWISE IDENTIFIED ON THE GRADING PLAN. IN NO CASE SHALL THE GRADE, TURF THATCH, OR OTHER LANDSCAPE MATERIALS DAM WATER AGAINST WALKS. MINIMUM SLOPES ON LANDSCAPE AREAS SHALL BE 2%; MAXIMUM SLOPE SHALL BE 25% UNLESS SPECIFICALLY IDENTIFIED ON THE PLANS OR APPROVED BY THE OWNER'S REPRESENTATIVE.
9. PRIOR TO INSTALLATION OF PLANT MATERIALS, AREAS THAT HAVE BEEN COMPACTED OR DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE THOROUGHLY LOOSENEED TO A DEPTH OF 8" - 12" AND AMENDED PER SPECIFICATIONS.
10. TREES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DRAINAGE AREAS, OR UTILITY EASEMENTS. CONTACT OWNER'S REPRESENTATIVE FOR RELOCATION OF PLANTS IN QUESTIONABLE AREAS PRIOR TO INSTALLATION.
11. THE CENTER OF EVERGREEN TREES SHALL NOT BE PLACED CLOSER THAN 8' AND THE CENTER OF ORNAMENTAL TREES CLOSER THAN 8' FROM A SIDEWALK, STREET OR DRIVE LANE. EVERGREEN TREES SHALL NOT BE LOCATED ANY CLOSER THAN 15' FROM IRRIGATION ROTOR HEADS. NOTIFY OWNER'S REPRESENTATIVE IF TREE LOCATIONS CONFLICT WITH THESE STANDARDS FOR FURTHER DIRECTION.
12. ALL EVERGREEN TREES SHALL BE FULLY BRANCHED TO THE GROUND AND SHALL NOT EXHIBIT SIGNS OF ACCELERATED GROWTH AS DETERMINED BY THE OWNER'S REPRESENTATIVE.
13. ALL TREES ARE TO BE STAKED AND GUYED PER DETAILS FOR A PERIOD OF 1 YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING STAKES AT THE END OF 1 YEAR FROM ACCEPTANCE OF LANDSCAPE INSTALLATION BY THE OWNER'S REPRESENTATIVE. OBTAIN APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO REMOVAL.
14. ALL TREES INSTALLED ABOVE RETAINING WALLS UTILIZING GEO-GRID MUST BE HAND DUG TO PROTECT GEO-GRID. IF GEO-GRID MUST BE CUT TO INSTALL TREES, APPROVAL MUST BE GIVEN BY OWNER'S REPRESENTATIVE PRIOR TO DOING WORK.
15. ALL TREES IN SEED OR TURF AREAS SHALL RECEIVE WOOD MULCH RINGS. OBTAIN APPROVAL FROM OWNER'S REPRESENTATIVE FOR ANY TREES THAT WILL NOT BE MULCHED FOR EXCESSIVE MOISTURE REASONS.
16. A 4" x 14 GAUGE GALVANIZED, ROLL TOP, INTERLOCKING TYPE EDGER, RYERSON OR EQUAL SHALL BE USED TO SEPARATE BEDS FROM SEED AND SOD AREAS.
17. PER THE LANDSCAPE PLANS, SHRUB BEDS ARE TO BE MULCHED WITH MIN. 4" DEPTH, 1½" MULTI-COLOR RIVER ROCK MULCH. ALL GROUND COVER AND PERENNIAL FLOWER BEDS SHALL BE MULCHED WITH 4" DEPTH, GORILLA HAIR SHREDDED CEDAR WOOD MULCH. NO WEED BARRIER IS TO BE USED IN WOOD MULCH BEDS.
18. AT SEED AREA BOUNDARIES ADJACENT TO EXISTING NATIVE AREAS, OVERLAP ABUTTING NATIVE AREAS BY THE FULL WIDTH OF THE SEEDER.
19. DISTURBED NATIVE AREAS WHICH ARE TO REMAIN SHALL BE OVER SEEDED AND RESTORED WITH SPECIFIED SEED MIX.
20. CONTRACTOR SHALL OVER SEED ALL MAINTENANCE OR SERVICE ACCESS BENCHES AND ROADS WITH SPECIFIED SEED MIX UNLESS OTHERWISE NOTED ON THE PLANS.
21. ALL SEEDED SLOPES EXCEEDING 25% IN GRADE (4:1) SHALL RECEIVE EROSION CONTROL BLANKETS. PRIOR TO INSTALLATION, NOTIFY OWNER'S REPRESENTATIVE FOR APPROVAL OF LOCATION AND ANY ADDITIONAL COST IF A CHANGE ORDER IS NECESSARY.
22. WHEN COMPLETE, ALL GRADES SHALL BE WITHIN +/- 1/8" OF FINISHED GRADES AS SHOWN ON THE PLANS.
23. CONTRACTOR SHALL PRUNE ALL DEAD BRANCHES FROM ALL EXISTING TREES TO REMAIN WITHIN THE LIMIT OF WORK SHOWN ON THE LANDSCAPE PLANS. CONTRACTOR SHALL ALSO REMOVE ANY DEAD SHRUBS WITHIN THE SAME LIMITS.
24. PROPOSED LANDSCAPE BOULDERS SHALL BE LOCATED AT LEAST 10' FROM THE GUTTER FLOW LINE.
25. EXISTING VEGETATION TO REMAIN AS SHOWN AS SHOWN ON THE PLAN.

26. PLANTING OPERATIONS WILL BE CONDUCTED UNDER FAVORABLE WEATHER CONDITIONS.
27. ADJUST SITE GRADING AS APPROPRIATE SO THAT IMPACTS ON WOODY VEGETATION CAN BE AVOIDED.
28. AVOID CLEARING AND GRUBBING WOODY VEGETATION IN AREAS OF TEMPORARY IMPACTS. IF NECESSARY, PRUNE WOODY VEGETATION TO GROUND LEVEL SO THAT IT MAY GROW BACK FOLLOWING CONSTRUCTION.
29. AVOID THE UNNECESSARY REMOVAL OF TREES OR SHRUBS (E.G., PRUNE THE AERIAL PORTIONS OF TREES AND SHRUBS THAT HANG OVER A PROJECT AREA AND INTERFERE WITH EQUIPMENT).
30. WHERE THE LANDSCAPE PLAN AND NOTES DIFFER FROM THE SPECIFICATIONS, THE LANDSCAPE PLAN AND NOTES GOVERN.
31. APPLY LAYOUT "DOUGLAS COUNTY AND CASTLE ROCK PERMANENT DRILL SEEDING MIX" IN ALL AREAS DISTURBED DURING CONSTRUCTION EXCEPT WHERE "DOUGLAS COUNTY AND CASTLE ROCK LOW- GROWTH DRILL SEEDING MIX" IS APPLIED. NO SUBSTITUTIONS SHALL BE ALLOWED, INCLUDING ADDITION OF A COVER CROP, WITHOUT WRITTEN PERMISSION OF THE PLANT ECOLOGIST. SEED TAGS MUST BE SUBMITTED TO THE PLANT ECOLOGIST.
32. THE PLANT MATERIAL LISTED IN THE PLANTING QUANTITIES TABLE SHALL BE PLANTED IN THE AREAS SHOWN ON THE LANDSCAPE PLAN.
33. NO SUBSTITUTIONS WILL BE PERMITTED WITHOUT APPROVAL OF THE PLANT ECOLOGIST. NO SUBSTITUTIONS SHALL BE MADE UNLESS SPECIFIED PLANT MATERIALS ARE UNAVAILABLE. THE CONTRACTOR MUST NOTIFY THE PLANT ECOLOGIST IF MATERIALS ARE UNAVAILABLE AND LIST PROPOSED SUBSTITUTIONS. THE PLANT ECOLOGIST MUST APPROVE ALL SUBSTITUTIONS.
34. PROVIDE HEALTHY WELL-BRANCHED VIGOROUS STOCK WITH A GROWTH HABIT NORMAL TO THE SPECIES AND VARIETY AND FREE OF DISEASES, INSECTS, AND INJURIES.
35. PLANTS WITH DRY, BROKEN, OR CRUMBLING ROOTS SHALL NOT BE ACCEPTED FOR PLANTING.
36. ALL AREAS TO RECEIVE PLANTS SHALL BE STAKED AND OBSERVED BY THE PLANT ECOLOGIST PRIOR TO PLACEMENT.

CASTLE ROCK SPECIFIC LANDSCAPE NOTES:

1. NON-IRRIGATED NATIVE SEED AREAS SHALL BE INSTALLED USING THE TOWN OF CASTLE ROCK GRADING EROSION AND SEDIMENT
2. NO TURF AND/OR OVERHEAD IRRIGATION ON SLOPES GREATER THAN 3:1.
3. NO SLOPES GREATER THAN 3:1 ARE PERMITTED.
4. TOP SOIL, IF DISTURBED SHALL BE STOCK PILED AND REUSED ON THE SITE.
5. NO MORE THAN SIXTY PERCENT OF THE TOTAL COMMERCIAL LANDSCAPE AREA SHALL INCLUDE IRRIGATED TURF GRASS.
6. NO INDIVIDUAL PLANT MAY HAVE SUPPLEMENTAL WATER DEMAND GREATER THAN 15" PER GROWING SEASON.

CASTLE ROCK CONSTRUCTION NOTES:

1. INSTALLING CONTRACTOR SHALL CONTACT CASTLE ROCK WATER AT 720.733.6017 TO SCHEDULE A PRE-CONSTRUCTION MEETING BEFORE BEGINNING THE INSTALLATION OF THE LANDSCAPING.
2. LANDSCAPE AND IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
3. SOIL INSPECTION IS REQUIRED BEFORE PLANT INSTALLATION AND SCHEDULING SOIL INSPECTION SHOULD BE DISCUSSED AT THE LANDSCAPE PRECONSTRUCTION MEETING.
4. INSTALLING CONTRACTOR IS TO PROVIDE SUBMITTAL FROM SUPPLIERS FOR SOD AND NATIVE SEED MIX AT TIME OF LANDSCAPE INSPECTION.
5. SOIL AMENDMENT SHALL BE A MINIMUM OF FOUR (4) CUBIC YARDS OF APPROVED ORGANIC MATTER PER ONE-THOUSAND SQUARE FEET. THIS SOIL AMENDMENT SHALL BE ROTOTILLED TO A DEPTH OF SIX (6) INCHES.
6. TREES, LARGE SHRUBS AND PERMANENT OBJECTS ARE NOT PERMITTED IN WATER, SANITARY AND STORM SEWER UTILITY EASEMENTS.
7. ALL LANDSCAPE IS TO BE INSTALLED PER TOWN OF CASTLE ROCK PLANTING DETAILS.
8. PLANT SPECIES AND LOCATION SHOULD FOLLOW THE APPROVED PLAN, IF SITE CONDITIONS OR PLANT AVAILABILITY REQUIRE CHANGES TO THE PLAN, THE CONTRACTOR MUST OBTAIN APPROVAL FROM THE TOWN OF CASTLE ROCK AND THE OWNER'S REPRESENTATIVE.
9. TOWN OF CASTLE ROCK IS NOT RESPONSIBLE FOR REPLACING LANDSCAPE OR IRRIGATION REMOVED IN UTILITY EASEMENTS DUE TO UTILITY LINE MAINTENANCE OR REPAIR (PWR 14.3.13)
10. TOWN PERMIT AND TOWN APPROVED LANDSCAPE PLANS ARE REQUIRED ON SITE DURING INSTALLATION OF THE LANDSCAPE AND IRRIGATION.
11. TOWN INSPECTORS WILL NOT APPROVE LANDSCAPE AND OVERHEAD IRRIGATION ON SLOPES STEEPER THAN 3:1.
12. OVERHEAD IRRIGATION IS NOT PERMITTED ON SLOPES GREATER THAN 3:1 OR IN AREAS LESS THAN 10' IN WIDTH.

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

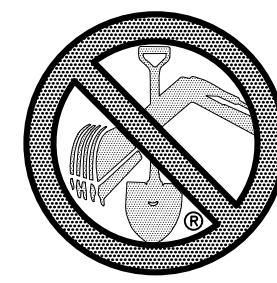
Approved By:

Development Services

Date

LANDSCAPE
CERTIFICATION:

I, JOHN M. BIRNEY, RLA, ASLA AM CERTIFIED
WITH THE TOWN OF CASTLE ROCK AS A
LANDSCAPE DESIGNER, COLORADO LICENSE
NUMBER 61655



CALL UNCC
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987
534-6700 METRO DENVER AREA
UTILITY NOTIFICATION CENTER OF COLORADO

PROJECT NO. CD26-0026

GREYSTONE VILLAS

LANDSCAPE NOTES

SHEET 17 OF 28

JOB NO. 19010

COMPOSITE LANDSCAPE WATER USE RATING CHART

LANDSCAPE ZONE	LWU RATING RANGE
VERY LOW WATER USE	0.0 to 1.5
LOW WATER USE	+1.5 to 3.0
MODERATE WATER USE	+3.0 to 4.5
HIGH WATER USE	+4.5

NOTES: THE LWUR RATING RANGE IS BASED ON POST ESTABLISHMENT WATERING SCHEDULES.

IRRIGATION ZONE	PLANT NAME (COMMON)	APPLICATION RATE (INCHES/MONTH)		LANDSCAPE ZONE	% OF IRRIGATED AREA (TA)	IA (IRRIGATED AREA IN SQ FT FOR EACH ZONE)	LWUR (LANDSCAPE WATER USE RATING)	TOTAL AREA (TA)	CLWUR (LWUR X IA)/TA
SPRAY	IRRIGATED TURF (FESCUE TURF SEED MIX)	3.0	in./mo.	LOW	12%	531	3.0	4,387	0.36
DRIP	SHRUB BED	2.0	in./mo.	LOW	67%	2,923	2.0	4,387	1.33
SPRAY ROTORS	IRRIGATED NATIVE SEED	2.5	in./mo.	LOW	21%	933	2.5	4,387	0.53
TOTALS					100	4,387		4,387	2.23
							TOTAL OF THE CLWUR		2.23

LANDSCAPE SUMMARY TABLE

LANDSCAPE TYPE	SQUARE FOOTAGE	PERCENTAGE
IRRIGATED TURF	531	1.7%
IRRIGATED NATIVE SEED	933	2.9%
NON-IRRIGATED NATIVE SEED	473	1.5%
RIPARIAN SEED MIX	1,089	3.4%
IRRIGATED BED	2,923	9.1%
COBBLE	1,006	3.1%
EXISTING NATIVE AREA TO REMAIN	25,051	78.3%
TOTAL AREA LANDSCAPE	32,006	100.0%

STREETSCAPE REQUIREMENT TABLE

STREET	LINEAR FEET	TREES REQUIRED (1 TREE / 40 LF)	TREES PROVIDED	SHRUBS REQUIRED (4 SHRUBS / 1 REQUIRED TREE)	SHRUBS PROVIDED
GILBERT ST.	59 LF	2	2*	8	8

* DUE TO OVERHEAD UTILITY LINES, SHORTER ORNAMENTAL TREES ARE PROPOSED TO MEET STREETSCAPE REQUIREMENTS. SEE TECHNICAL CRITERIA VARIANCE - TCV20-0027

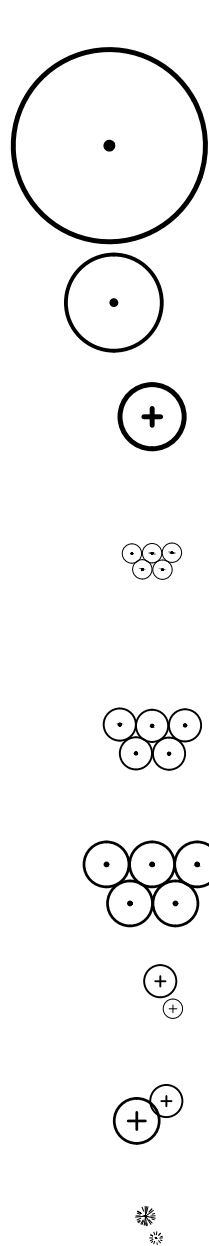
MULTI-FAMILY LANDSCAPE SITE INVENTORY

TOWN OF CASTLE ROCK REGISTERED PROFESSIONAL: JOHN BIRKEY
TOWN OF CASTLE ROCK REGISTRATION #: 15-1126
STATE OF COLORADO LICENSE LANDSCAPE ARCHITECT #: 655
COMPANY: NORRIS DESIGN
ADDRESS: 1101 BANNOCK STREET, DENVER, COLORADO 80204
PHONE: 303-892-1166
EMAIL: JBIRKEY@NORRIS-DESIGN.COM
DATE: 02/08/2021

GROSS SITE AREA	LANDSCAPE AREA IN SQ.FT.	TURFGRASS LIST SPECIES (AREA IN SQ.FT.)	NONLIVING ORNAMENTAL (AREA IN SQ.FT.)	NUMBER OF TREES REQUIRED	NUMBER OF TREES PROVIDED	NUMBER OF SHRUBS REQUIRED	NUMBER OF SHRUBS PROVIDED	SOIL PREP AMOUNT (IN CUBIC YRDS PER 1000 SQ.FT.)	SEPARATE IRRIGATION SERVICE CONNECTIONS
40,179 SQ.FT.	PROVIDED: 4,860* REQUIRED: 8,036	FESCUE TURF SEED MIX (571)	3,929**	16	16***	32	78****	4 CU.YDS PER 1000 SQ.FT.	YES
PARKING LOT (AREA IN SQ.FT.)	PARKING LOT LANDSCAPE AREA (SQ.FT.)	NUMBER OF PARKING SPACES	NONLIVING ORNAMENTAL (AREA IN SQ.FT.)	NUMBER OF INTERIOR LANDSCAPE ISLANDS	MINIMUM WIDTH OF INTERIOR LANDSCAPE ISLANDS	NUMBER OF TREES REQUIRED	NUMBER OF TREES PROVIDED	NUMBER OF SHRUBS REQUIRED	NUMBER OF SHRUBS PROVIDED
3,635	600	2	600	0	N/A	2	2	4	14****

- NOTES:
- GROSS AREA MINIMUM LANDSCAPE AREA IS 20%. PARKING AREA MINIMUM LANDSCAPE AREA IS 10%.
 - REQUIRED TREES = 2 TREES PER 1,000 SF OF REQUIRED LANDSCAPE AREA
 - REQUIRED SHRUBS = 4 SHRUBS PER 1,000 SF OF REQUIRED LANDSCAPE AREA
 - PROPOSED PARKING LOT PLANT COUNTS ARE INCLUDED WITHIN THE PROPOSED SITE LANDSCAPE PLANT TOTALS
- * PROVIDED LANDSCAPE ONLY INCLUDES IRRIGATED AREAS. COBBLE AND RIPARIAN SEED WILL NOT BE IRRIGATED.
DUE TO FLOODPLAIN EXTENTS AND FEATURES NO IRRIGATED LANDSCAPE IS PROPOSED IN THAT AREA. SEE TECHNICAL CRITERIA VARIANCE - TCV20-0028.
- ** CALCULATION INCLUDES ROCK BED MULCH AND COBBLE
*** THREE EXISTING DECIDUOUS TREES ARE INCLUDED
**** NO GRASS EQUIVALENTS ARE INCLUDED

PLANT LIST

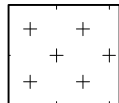


LEGEND ABBREV.	PLANT NAME (SCIENTIFIC)		PLANT NAME (COMMON)	SIZE & CONDITION	WATER USE (VERY LOW, LOW, MODERATE, HIGH)	NO. OF PLANTS
DECIDUOUS CANOPY TREES						
HAC	CELTIS OCCIDENTALIS		WESTERN HACKBERRY	2 1/2" CAL. B&B	LOW	3
KCT	GYMNOCLADUS DIOICA		KENTUCKY COFFEETREE	2 1/2" CAL. B&B	LOW	2
ORNAMENTAL TREES						
AGL	ACER GLABRUM		ROCKY MOUNTAIN MAPLE	6' HT. CLUMP, B&B	LOW	4
EVERGREEN TREES						
PIN	PINUS EDULIS		PINON PINE	6' MIN. OR AS IDENTIFIED ON PLANS, B&B*	VERY LOW	4
LIM	PINUS FLEXILIS		LIMBER PINE	6' MIN. OR AS IDENTIFIED ON PLANS, B&B*	VERY LOW	3
*HEIGHT FOR EVERGREEN TREES SHALL BE 6' UNLESS OTHERWISE NOTED ON PLAN.						
DECIDUOUS SHRUBS 2-4'						
LEA	AMORPHA CANESCENS		LEADPLANT	5 GAL. CONT.	VERY LOW	8
BMS	CARYOPTERIS X CLANDONENSIS		BLUE MIST SPIREA	5 GAL. CONT.	LOW	5
WRG	GENISTA TINCTORIA 'ROYAL GOLD'		ROYAL GOLD WOADWAXEN	5 GAL. CONT.	LOW	9
DECIDUOUS SHRUBS 5-6'						
RAB	CHRYSOTHAMNUS NAUSEOSUS		RABBITBRUSH	5 GAL. CONT.	VERY LOW	5
GLS	RHUS AROMATICA 'GRO-LOW'		GRO-LOW SUMAC	5 GAL. CONT.	VERY LOW	3
DECIDUOUS SHRUBS 7'+						
ARH	LONICERA TATARICA 'ARNOLD RED'		ARNOLD RED HONEY SUCKLE	5 GAL. CONT.	VERY LOW	7
CSS	RHUS GLABRA 'LACINIATA'		SMOOTH CUT LEAF SUMAC	5 GAL. CONT.	VERY LOW	6
BROADLEAF EVERGREEN SHRUBS						
BSG	CYTISUS PURGAN 'SPANISH GOLD'		SPANISH GOLD BROOM	5 GAL. CONT.	LOW	21
OGH	MAHONIA REPENS		CREEPING OREGON GRAPE HOLLY	5 GAL. CONT.	VERY LOW	5
EVERGREEN SHRUBS						
EPE	EPHEDRA EQUISETINA		BLUESTEM JOINT FIR	5 GAL. CONT.	LOW	3
MMO	PINUS MUGO 'MOPS'		MOPS MUGO PINE	5 GAL. CONT.	LOW	11
ORNAMENTAL GRASSES						
BLO	BOUTELLOUS GRACILLIS 'BLONDE AMBITION'		BLONDE AMBITION GRASS	5 GAL. CONT.	VERY LOW	45
FRG	CALAMAGROSTIS X ACUTIFOLIUS 'KARL FOERESTER'		FEATHER REED GRASS	5 GAL. CONT.	LOW	66

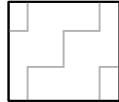
MATERIAL SCHEDULE (CONTRACTOR TO SUBMIT SAMPLES FOR ALL ITEMS IN MATERIAL SCHEDULE FOR OWNER / ARCHITECT REVIEW AND APPROVAL)

ITEM	DESCRIPTION	MANUFACTURER	SIZE / DIMENSIONS	PRODUCT NAME	COLOR / FINISH	NOTES
	CONCRETE FLATWORK	COLORADO HARDSCAPES OR APPROVED EQUAL		STANDARD GRAY, BROOM FINISH		REFER TO TOWN SPECIFICATIONS FOR CONCRETE MIX AND CONSTRUCTION
	SHRUB BED MULCH	PIONEER SAND	1-1/2"	RIVER ROCK OR APPROVED EQUAL	MULTI. COLOR, 4" DEPTH	
	COBBLE	PIONEER SAND	2-4"	RIVER ROCK OR APPROVED EQUAL	MULTI. COLOR, 4" DEPTH	

TURF AND SEED MIXES



NATIVE RIPARIAN MIX - NON-IRRIGATED		
SPECIES	% OF MIX	PLS/ACRE
NEBRASKA SEDGE	6.11	1,000
CLUSTERED FIELD SEDGE	3.05	0,500
THICKSPIKE WHEATGRASS	12.22	2,000
BALTIC RUSH	0.76	0,125
TORREY'S RUSH	0.76	0,125
SWITCHGRASS	18.32	3,000
WESTERN WHEATGRASS	36.64	6,000
THREESQUARE BULRUSH	12.22	2,000
SHOWY MILKWEED	6.11	1,000
CANADA GOLDENROD	0.76	0,125
BLUE VERVAIN	3.05	0,500
APPLY AT A RATE OF 16.375 PLS LBS. PER ACRE, DOUBLE FOR BROADCAST		



NON-IRRIGATED

DRYLAND GRASS SEED MIX (LOW 2 - HYDROZONE)			
SPECIES	VARIETY	% OF MIX	PLS/ ACRE
BIG BLUESTEM	KAW	10	1.1
YELLOW INDIANGRASS	CHEYENNE	10	1
SWITCHGRASS	BLACKWELL	10	0.4
SIDEOTS GRAMA	VAUGHN	10	0.9
WESTERN WHEATGRASS	ARRIBA	10	1.6
BLUE GRAMA	HACHITA	10	0.3
THICKSPIKE WHEATGRASS	CRITANA	10	1
PRAIRIE SANDREED	GOSHEN	10	0.7
GREEN NEEDLEGRASS	LODORM	10	1
SLENDER WHEATGRASS	PRYOR	5	0.6
STREAMBANK WHEATGRASS	SODAR	5	0.6
APPLY AT A RATE OF 9.2 PLS LBS. PER ACRE DRILLED			

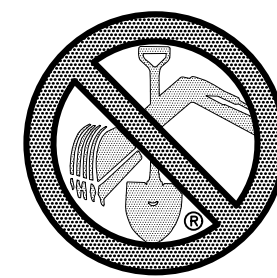
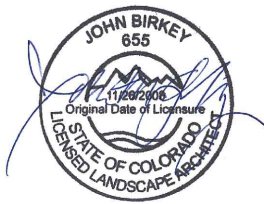
TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____

Development Services

Date

LANDSCAPE CERTIFICATION:

I, JOHN M. BIRKEY, RLA, ASLA AM CERTIFIED WITH THE TOWN OF CASTLE ROCK AS A LANDSCAPE DESIGNER, COLORADO LICENSE NUMBER 655



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534-6700 METRO DENVER AREA
UTILITY NOTIFICATION CENTER OF COLORADO

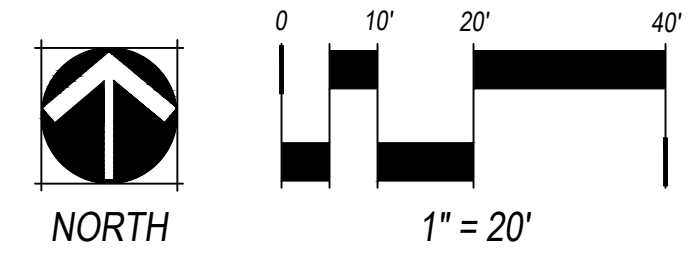
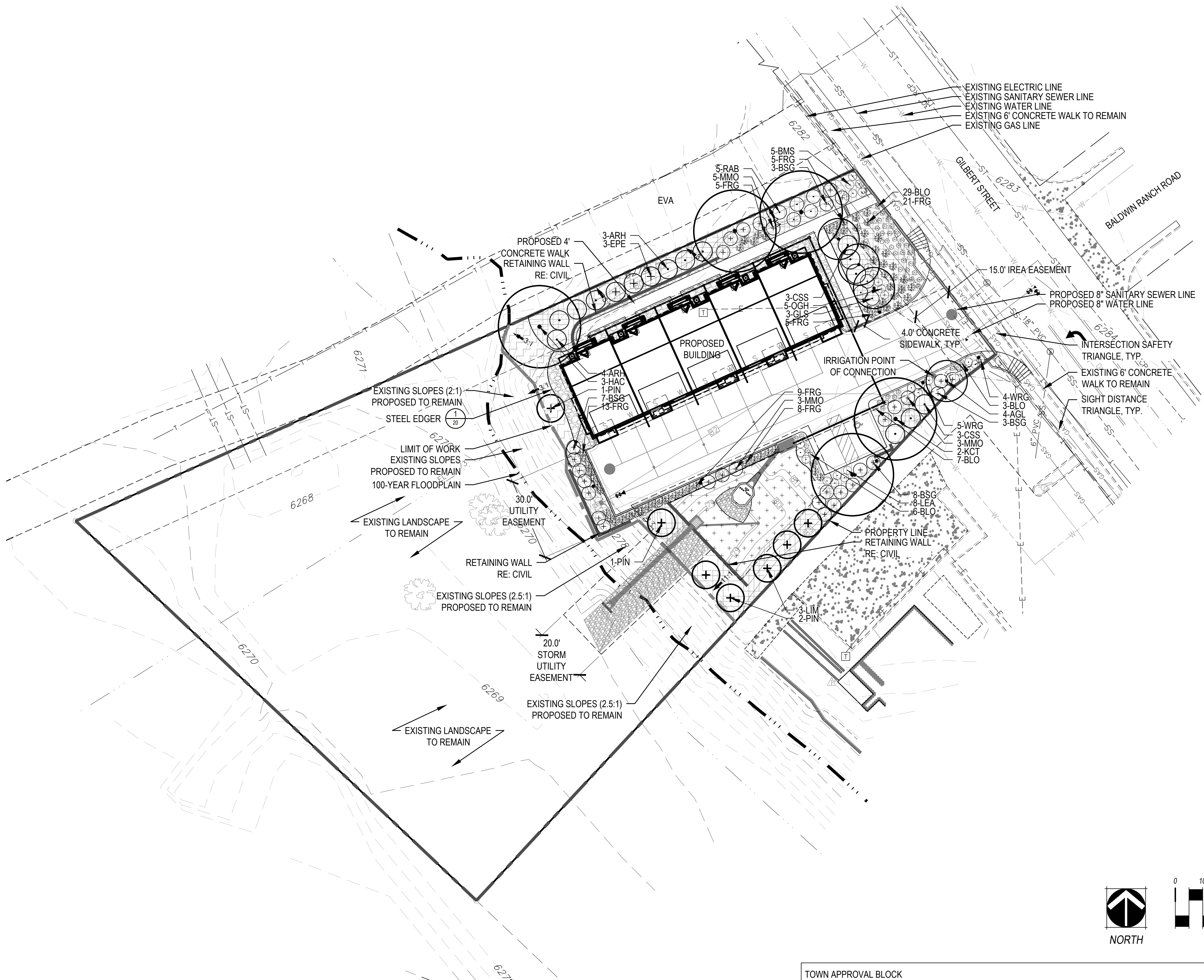
PROJECT NO. CD26-0026

GREYSTONE VILLAS

LANDSCAPE SCHEDULE

SHEET 18 OF 28

JOB NO. 19010



TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date: _____
Development Services

LANDSCAPE
CERTIFICATION:
JOHN M. BIRNEY, RLA, ASLA AND CERTIFIED
WITH THE TOWN OF CASTLE ROCK AS A
LANDSCAPE DESIGNER, COLORADO LICENSE
NUMBER 655



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LEGEND:

-
- CANOPY TREES [5]
-
- EXISTING CANOPY TREES [3]
-
- ORNAMENTAL TREES [4]
-
- EVERGREEN TREES [7]
-
- EVERGREEN SHRUBS [35]
-
- DECIDUOUS SHRUBS [43]
-
- ORNAMENTAL GRASSES [111]
-
- LANDSCAPE BED
(LOW HYDROZONE)
-
- NATIVE SEED
(NON-IRRIGATED)
-
- RIPARIAN SEED MIX
(NON-IRRIGATED)
-
- COBBLE
-
- STEEL EDGER
-
- PROPERTY LINE
-
- RETAINING WALL, RE: CIVIL

NOTES:

- ALL PROPOSED PLANTS SHALL BE LOW OR VERY LOW WATER USE.
- ALL EXISTING TREES ARE DECIDUOUS

PLANT LIST:

DECIDUOUS CANOPY TREES	
HAC	WESTERN HACKBERRY
KCT	KENTUCKY COFFEETREE
ORNAMENTAL TREES	
APM	JAPANESE MAPLE
EVERGREEN TREES	
PIN	PINON PINE
LIM	LIMBER PINE
DECIDUOUS SHRUBS 2-4'	
LEA	LEADPLANT
BMS	BLUE MIST SPIREA
WRG	ROYAL GOLD WOADWAXEN
DECIDUOUS SHRUBS 5-6'	
RAB	RABBITBRUSH
GLS	GRO-LOW SUMAC
DECIDUOUS SHRUBS 7+	
ARH	ARNOLD RED HONEY SUCKLE
CSS	SMOOTH CUT LEAF SUMAC
BROADLEAF EVERGREEN SHRUBS	
BSG	SPANISH GOLD BROOM
OGH	CREEPING OREGON GRAPE HOLLY
EVERGREEN SHRUBS	
EPE	BLUESTEM JOINT FIR
MMO	MOPS MUGO PINE
ORNAMENTAL GRASSES	
BLO	BLONDE AMBITION GRASS
FRG	FEATHER REED GRASS

PREPARED FOR
BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
CONTACT: HEATHER UPCHURCH

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REVISION	DATE	BY	DATE	BY	DATE	BY
CD18-0024	4/12/21		4/12/21			
CD26-0026	7/31/26					

H-SCALE

V-SCALE

DATE

DESIGNED BY

DRAWN BY

CHECKED BY

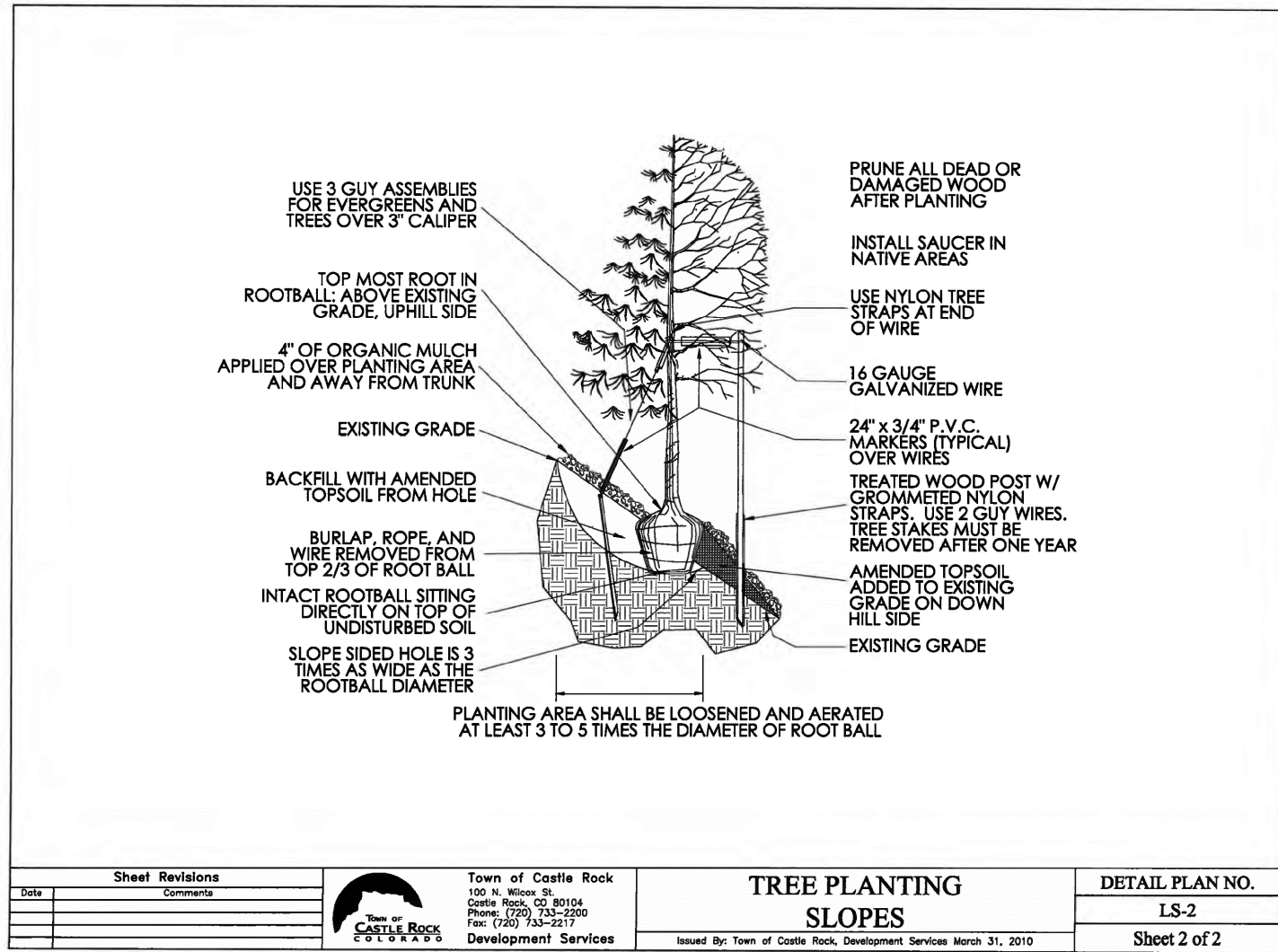
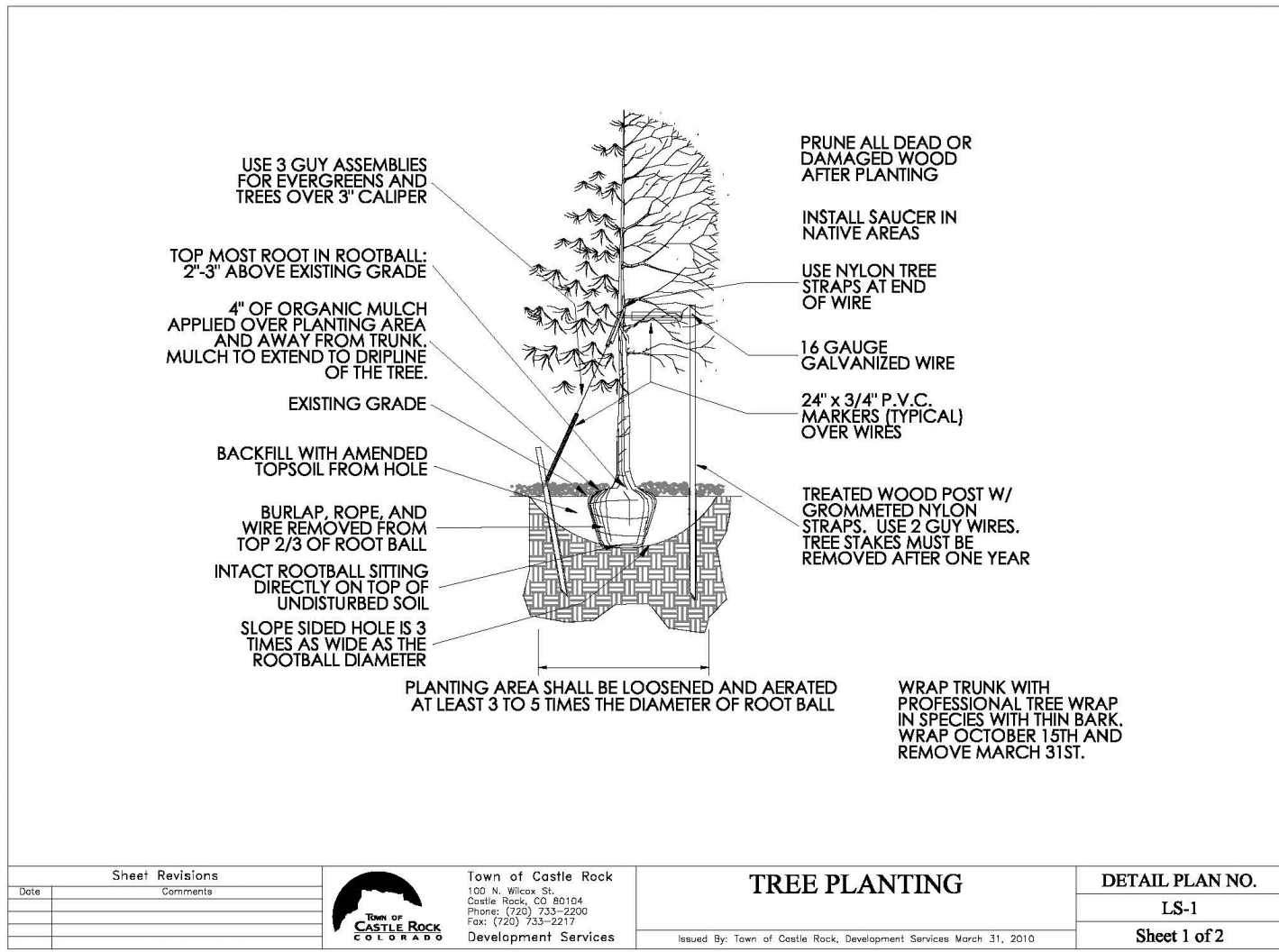
GREYSTONE VILLAS

LANDSCAPE PLAN

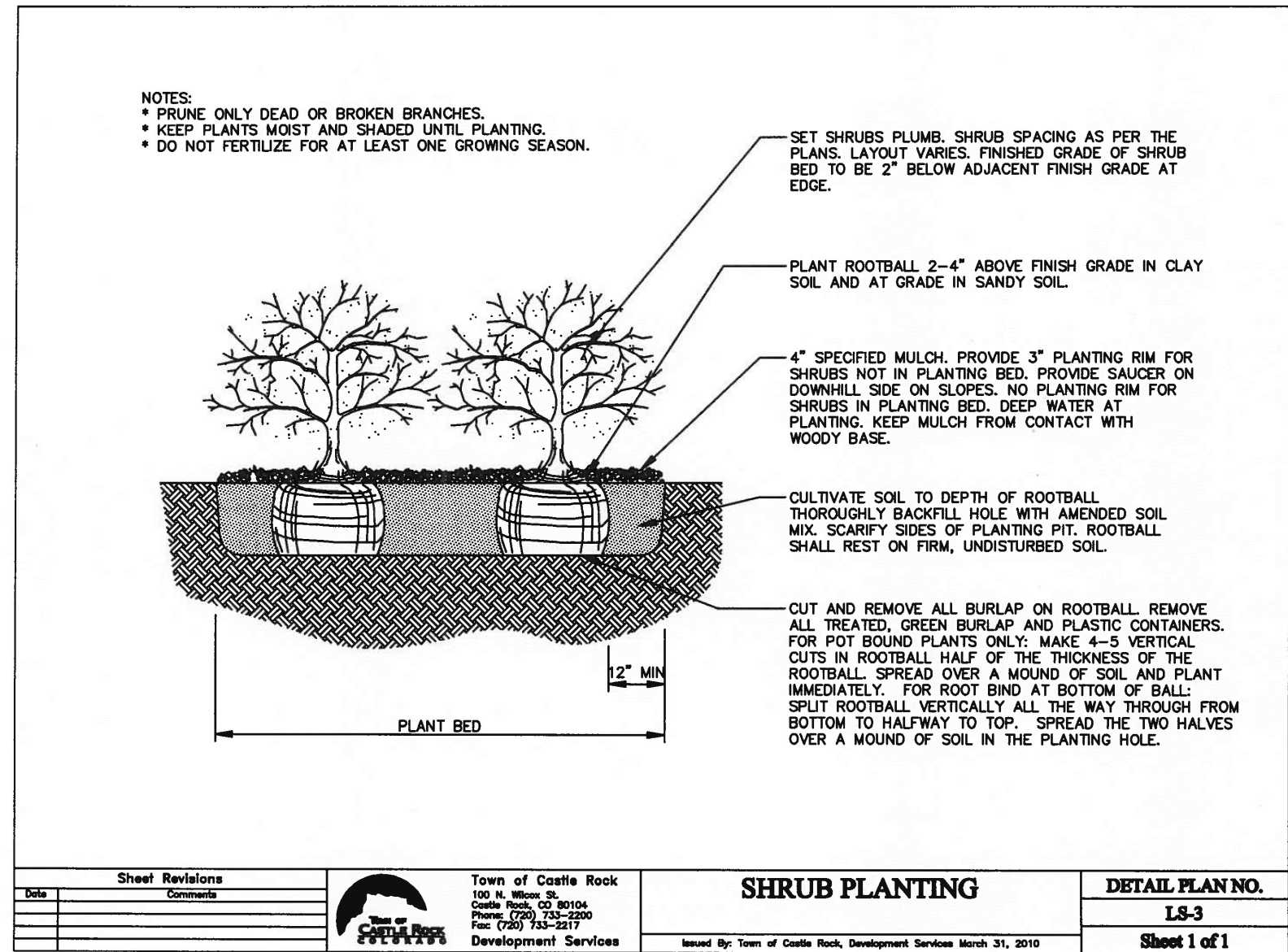
SHEET 19 OF 28

JOB NO. 19010

PAGE 19 OF 28

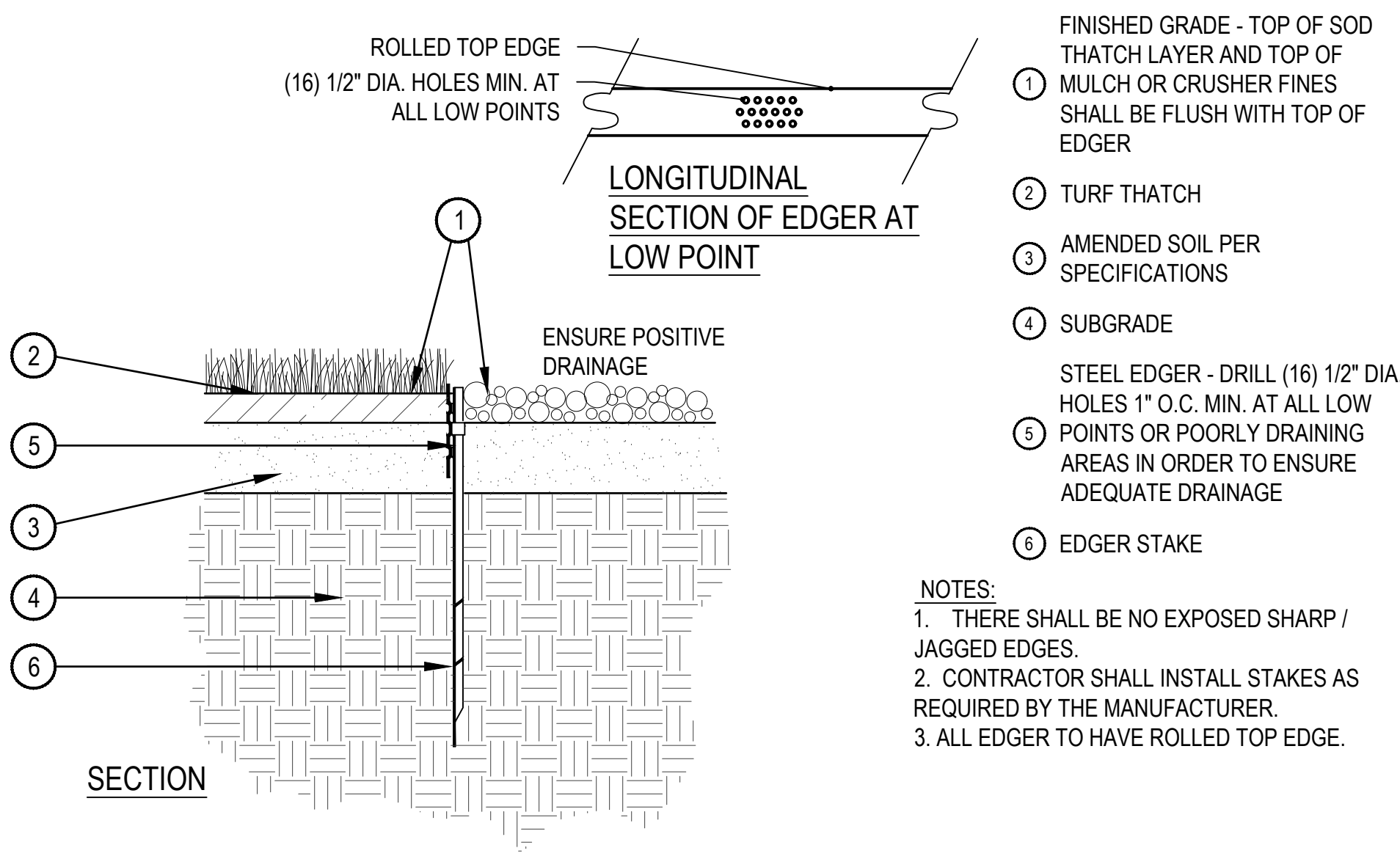


1 TREE PLANTING DETAIL



2 SHRUB PLANTING

SCALE: NTS



3 STEEL EDGER

SCALE: 1" = 1'-0"

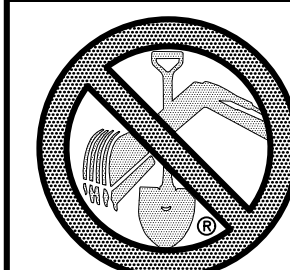
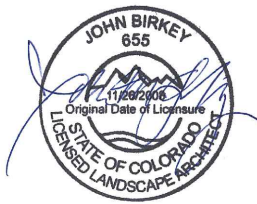
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PROJECT NO. CD26-0026

GREYSTONE VILLAS

LANDSCAPE DETAILS

SHEET 20 OF 28

JOB NO. 19010

PREPARED FOR

BIG ROCK CUSTOM HOMES
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No.	REVISION	DATE	BY
1	CD18-0024 ISSUED FOR CONSTRUCTION	4/12/21	
2	CD26-0026	4/12/21	
3		7/31/26	
4			
5			
6			

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		2/25/21	DD, TK	TK	DD

SEEDING AND MULCHING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:

AREA OF SEEDING AND MULCHING.

TYPE OF SEED MIX (PERMANENT, TEMPORARY, OR LOW-GROWTH).

2. ALL BRANDS FURNISHED SHALL BE FREE FROM SUCH NOXIOUS SEEDS AS RUSSIAN OR CANADIAN THISTLE, COARSE FESCUE, EUROPEAN BINDWEED, JOHNSON GRASS, KNAP WEED AND LEAFY SPURGE.

3. THE SEEDER SHALL FURNISH TO THE CONTRACTOR A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE. SEED TICKETS SHALL BE PROVIDED TO THE TOWN OF CASTLE ROCK UPON REQUEST.

4. DRILL SEEDING MIX SHALL CONFORM TO THE TABLE ON THE RIGHT:

5. IF THE SEED AVAILABLE ON THE MARKET DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSER PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO CONTRACTOR AND FORWARDED TO THE TOWN GESC INSPECTOR.

6. THE FORMULA USED FOR DETERMINING THE QUANTITY OF PURE LIVE SEED (PLS) SHALL BE (POUNDS OF SEED) X (PURITY) X (GERMINATION) = POUNDS OF PURE LIVE SEED (PLS).

7. PERMANENT SEED MIX SHALL BE USED UNLESS OTHERWISE APPROVED BY THE TOWN. THE USE OF TEMPORARY NURSERY CROP IN PERMANENT AND LOW GROW MIXES IS PROHIBITED.

8. ALL AREAS TO BE SEEDED AND MULCHED SHALL HAVE NATIVE TOPSOIL SPREAD TO A DEPTH OF AT LEAST 6 INCHES (LOOSE DEPTH). HAUL ROADS AND OTHER COMPACTED AREAS SHALL BE LOOSENED TO A DEPTH OF 6 INCHES PRIOR TO SPREADING TOPSOIL.

9. FOR PERMANANTLY IRRIGATED AREAS OR FOR AREAS WITH INADEQUATE TOPSOIL SHALL BE AMENDED PRIOR TO SEEDING. SOIL AMENDMENTS SHALL BE IN COMPLIANCE WITH THE TOWN OF CASTLE ROCK LANDSCAPE REGULATIONS. MINIMUM SOIL AMENDMENTS SHALL BE 4 CUBIC YARDS OF ORGANIC MATTER PER 1,000 SQUARE FEET OF SEEDED AREAS, AND SHALL BE TILLED TO A MINIMUM DEPTH OF 6 INCHES. SOIL AMENDMENTS SHALL BE TESTED TWO WEEKS IN ADVANCE OF ITS USE AND RESULTS SUBMITTED FOR APPROVAL BY THE TOWN GESC INSPECTOR.

10. SOIL IS TO BE THOROUGHLY LOOSENED (TILLED) TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO SEEDING. THE TOP 6 INCHES OF THE SEED BED SHALL BE FREE OF ROCKS GREATER THAN 4 INCHES AND SOIL CLODS GREATER THAN 2 INCHES. SEEDING OVER ANY COMPACTED AREAS THAT HAVEN'T BEEN THOROUGHLY LOOSENED SHALL BE REJECTED. SEED BED SHALL BE FREE OF WEEDS.

11. SEED IS TO BE APPLIED USING A MECHANICAL DRILL TO A DEPTH NOT LESS THAN 1/4 INCH AND NOT MORE THAN 3/4 INCH. ROW SPACING SHALL BE NO MORE THAN 6 INCHES. MATERIAL USED FOR MULCH SHALL CONSIST OF WEED-FREE LONG-STEMMED STRAW. AT LEAST 50 PERCENT OF THE MULCH, BY WEIGHT, SHALL BE 10 INCHES OR MORE IN LENGTH. MULCH SHALL BE APPLIED AND MECHANICALLY ANCHORED TO A DEPTH OF AT LEAST 4 INCHES. MULCH SHALL BE APPLIED AT A RATE OF 4000 LB. OF STRAW PER ACRE.

12. IF THE PERMITTEE DEMONSTRATES TO THE TOWN THAT IT IS NOT POSSIBLE TO DRILL SEED, SEED IS TO BE UNIFORMLY BROADCAST AT TWO TIMES THE DRILLED RATE, THEN LIGHTLY HARROWED TO PROVIDE A SEED DEPTH OF APPROXIMATELY 1/4 INCH, THEN ROLLED TO COMPACT, THEN MULCHED AS SPECIFIED ABOVE.

13. SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 30 DAYS OF INITIAL EXPOSURE OR 7 DAYS AFTER GRADING IS SUBSTANTIALLY COMPLETE IN A GIVEN AREA (AS DEFINED BY THE TOWN). THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.

14. ALL SEEDED AREAS SHALL BE MULCHED, CRIMPED AND TACKIFIED WITHIN 24-HOURS AFTER SEEDING.

15. TACKIFIER SHOULD BE UTILIZED TO HELP WITH STRAW DISPLACEMENT. THE TACKIFIER MATERIAL SHALL CONSIST OF A FREE-FLOWING, NON-CORROSIVE POWDER PRODUCED FROM THE NATURAL PLAT GUM OF PLANTAGO INSULARIS, (DESERT INDIANWHEAT), APPLIED IN A SLURRY WITH WATER AND WOOD FIBER. THE POWDER SHALL POSSESS THE FOLLOWING PROPERTIES: PROTEIN CONTENT = 1.6 +/-0.2%; ASH CONTENT = 2.7 +/-0.2%; FIBER = 4.0 +/-0.4%; PH 1% SOLUTION = 6.5 - 8.0. THE MATERIAL SHALL NOT CONTAIN ANY MINERAL FILLER, RECYCLED CELLULOSE FIBER, CLAYS, OR OTHER SUBSTANCES, WHICH MAY INHIBIT GERMINATION OR GROWTH OF PLANTS. THE WOOD FIBER AND WATER USED SHALL CONFORM TO THE COLORADO HIGHWAY SPECIFICATIONS, SUBSECTION 213.02 - PAR. 8, AND SUBSECTION 209.02, RESPECTIVELY. APPLY TACKIFIER WITH A SPRAY NOZZLE, DISPENSING A MIST THAT WILL UNIFORMLY COVER THE SURFACE.

SEEDING AND MULCHING MAINTENANCE NOTES

1. ALL SEEDED AREAS SHALL BE KEPT IN A DAMP CONDITION, FOR AT LEAST 14 DAYS AFTER SEEDING, TO AID IN GERMINATION. SOME FORM OF IRRIGATION MAY BE REQUIRED TO ACHIEVE THIS GOAL, AND IT IS THE RESPONSIBILITY OF THE GESC MANAGER TO PERFORM ANY AND ALL NECESSARY OPERATIONS TO THAT END. THE MEANS OF IRRIGATION SHALL BE APPROVED BY THE TOWN AND PROPER PERMITS OBTAINED PRIOR TO IMPLEMENTATION. DIRECT FLOWS FROM LARGE HOSES, WHICH COULD DAMAGE THE MULCH, WILL NOT BE PERMITTED.

2. SEEDED AND MULCHED AREAS SHALL BE INSPECTED FOR REQUIRED COVERAGE MONTHLY FOR A PERIOD OF TWO YEARS FOLLOWING INITIAL SEEDING. REPAIRS AND RE-SEEDING AND MULCHING SHALL BE UNDERTAKEN AFTER THE FIRST AND SECOND GROWING SEASON OR AS REQUESTED BY THE GESC INSPECTOR FOR ANY AREAS FAILING TO MEET THE REQUIRED COVERAGE.

3. RILL AND GULLY EROSION SHALL BE FILLED WITH TOPSOIL PRIOR TO RESEEDING. THE RESEEDING METHOD SHALL BE APPROVED BY THE TOWN.

4. NOXIOUS WEEDS SHALL BE CONTROLLED IN A MANNER ACCEPTABLE TO THE TOWN.

5. REQUIRED COVERAGE FOR STANDARD, OPEN SPACE AND LOW GROWTH SEED MIXES SHALL BE DEFINED AS FOLLOWS:

5.1. THREE (3) PLANTS PER SQUARE FOOT WITH A MINIMUM HEIGHT OF 3 INCHES. THE 3 PLANTS PER SQUARE FOOT SHALL BE OF THE VARIETY AND SPECIES FOUND IN THE TOWN OF CASTLE ROCK-APPROVED MIX.

5.2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).

5.3. FREE OF ERODED AREAS.

5.4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.

6. REQUIRED COVERAGE FOR TURF GRASS AREAS SHALL BE DEFINED AS FOLLOWS:

6.1. AT LEAST 80% VEGETATIVE COVER OF GRASS SPECIES PLANTED.

6.2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).

6.3. FREE OF ERODED AREAS.

6.4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.

DOUGLAS COUNTY AND CASTLE ROCK PERMANENT DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BIG BLUESTEM	KAW	PNWS	10	1.1
YELLOW INDIANGRASS	CHEYENNE	PNWS	10	1
SWITCHGRASS	BLACKWELL	PNWS	10	0.4
SIDEOATS GRAMA	VAUGHN	PNWB	10	0.9
WESTERN WHEATGRASS	ARRIBA	PNCS	10	1.6
BLUE GRAMA	HACHITA	PNWB	10	0.3
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
PRAIRIE SANDREED	GOSHEN	PNWS	10	0.7
GREEN NEEDLEGRASS	LODORM	PNCB	10	1
SLENDER WHEATGRASS	PRYOR	PNCB	5	0.6
STREAMBANK WHEATGRASS	SODAR	PNCS	5	0.6
TOTAL				9.2

DOUGLAS COUNTY AND CASTLE ROCK TEMPORARY DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
SMOOTH BROMEGRASS	LINCOLN	PICS	30	3.9
INTERMEDIATE WHEATGRASS	OAHE	PICS	30	4.5
PUBESCENT WHEATGRASS	LUNA	PICS	30	4.2
ANNUAL RYEGRASS	N/A	ANCB	10	0.8
TOTAL				13.4

DOUGLAS COUNTY AND CASTLE ROCK LOW-GROWTH DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BUFFALOGRASS	TEXOKA	PNWS	20	3.2
BLUE GRAMA	HACHITA	PNWB	20	0.6
WESTERN WHEATGRASS	ARRIBA	PNCS	20	3.2
SIDEOATS GRAMA	VAUGHN	PNWB	20	1.8
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
STREAMBANK WHEATGRASS	SODAR	PNCS	10	1.2
TOTAL				11.0

RT

000

Sheet Revisions

	3/11	GESC MANUAL UPDATES	DVD

NOTE: SCALES SHOWN ARE FOR 22"x34" SHEETS; ADJUST ACCORDINGLY FOR 11"x17" SHEETS.

SM

SEEDING AND MULCHING

17

UTILITIES DEPARTMENT

Stormwater Engineering Division

GESC

GRADING, EROSION, AND SEDIMENT CONTROL

GESC PLAN

STANDARD NOTES AND DETAILS

SHEET

10 OF 14

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL

PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL

Approved By:

Development Services

Date

LANDSCAPE CERTIFICATION:

JOHN M. BIRNEY, RLA, ASLA AM CERTIFIED WITH THE TOWN OF CASTLE ROCK AS A LANDSCAPE DESIGNER, COLORADO LICENCE NUMBER 6 655

JOHN BIRNEY 655

LANDSCAPE DESIGNER

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534-6700 METRO DENVER AREA

UTILITY NOTIFICATION CENTER OF COLORADO

PROJECT NO. CD26-0026

GREYSTONE VILLAS

LANDSCAPE DETAILS

SHEET 21 OF 28

JOB NO. 19010

PREPARED FOR

BIG ROCK CUSTOM HOMES

21558 E. OTTAWA CIRCLE

AURORA, CO 80016

303-437-9281

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1101 Bannock Street

Denver, Colorado 80204

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DATE	BY	REVISION	No.	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
4/12/21		CD18-0024 ISSUED FOR CONSTRUCTION				2/25/21			
4/12/21		CD26-0026					DD, TK	TK	DD
7/31/26									

IRRIGATION GENERAL NOTES

1.

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL THE IMPROVEMENTS SHOWN ON THE PLANS.
2.

THE CONTRACTOR SHALL COORDINATE AS NECESSARY WITH THE GENERAL CONTRACTOR AND OWNER'S REPRESENTATIVE FOR SUCCESSFUL COMPLETION OF THIS WORK.
3.

ALL IRRIGATION EQUIPMENT IS TO BE AS SPECIFIED OR APPROVED EQUAL PER THE DISCRETION OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR ASSUMES ALL LIABILITY ASSOCIATED WITH THE MODIFICATION OF THE IRRIGATION SYSTEM DESIGN WITHOUT NOTIFYING THE OWNER'S REPRESENTATIVE.
4.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT A THOROUGH SITE INSPECTION AND REVIEW OF THE PROJECT CONSTRUCTION DOCUMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LANDSCAPE PLAN, UTILITY PLAN, ARCHITECTURE PLAN, GRADING AND DRAINAGE PLAN AND ALL OTHER ASSOCIATED PLANS AND SPECIFICATIONS THAT AFFECT THIS WORK PRIOR TO START OF WORK. IF THE AND CONTRACTOR OBSERVES ANY DISCREPANCIES AMONG THE CONSTRUCTION DOCUMENTS AND THE EXISTING CONDITIONS ON SITE, IT IS THEIR RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE IMMEDIATELY.
5.

THE CONTRACTOR MUST VERIFY THE LOCATION OF ALL PUBLIC AND PRIVATE UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. IF THE CONTRACTOR FAILS TO DO SO AND DAMAGES ANY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL PAY FOR ANY REPAIR WORK ASSOCIATED WITH SAID DAMAGES.
6.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN ALL IRRIGATION DISTRIBUTION LINES AND ALL UTILITIES (EXISTING OR PROPOSED), CONDUIT, STORM WATER COMPONENTS, DRAINS, ETC.
7.

THE CONTRACTOR SHALL CONFORM TO ALL LOCAL AND STATE REGULATIONS AND INSTALL THE IRRIGATION SYSTEM AND ITS COMPONENTS PER MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS REQUIRED BY ANY LOCAL AND STATE AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION OVER THIS SITE.
8.

THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PAYING FOR CERTIFICATION OF THE BACKFLOW PREVENTER BY A STATE CERTIFIED INSPECTOR. THE CONTRACTOR SHALL PROVIDE CERTIFICATES TO OWNER'S REPRESENTATIVE PRIOR TO PROJECT ACCEPTANCE.
9.

IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN LANDSCAPE AREAS AND WITHIN THE PROJECT LIMITS. EQUIPMENT SHOWN OUTSIDE OF THESE LIMITS IS SHOWN FOR GRAPHIC CLARITY ONLY. IF THERE IS A QUESTION REGARDING THE LOCATION OF ANY COMPONENT OF THE IRRIGATION SYSTEM, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER'S REPRESENTATIVE. IF THE CONTRACTOR NEGLECTS TO NOTIFY THE NECESSARY PARTIES, THE CONTRACTOR SHALL PAY FOR ANY REPLACEMENT OR MODIFICATION TO ENSURE PROPER LOCATION AND OPERATION OF THE IRRIGATION SYSTEM AND ITS COMPONENTS.
10.

ALL IRRIGATION DISTRIBUTION LINES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO, MAINLINE, LATERALS, DRIP EMITTERS SHALL BE KEPT A MINIMUM DISTANCE OF 6' AWAY FROM ALL BUILDING AND WALL FOUNDATIONS, OR AS STIPULATED IN THE GEOTECHNICAL REPORT , WHICHEVER IS GREATER. EQUIPMENT MAY BE SHOWN IN THIS AREA FOR GRAPHIC CLARITY. COORDINATE ALL REQUIRED SETBACKS WITH OWNER'S REPRESENTATIVE PRIOR TO START OF WORK.
11.

EACH VALVE SHALL BE INSTALLED IN A SEPARATE VALVE BOX AS DETAILED. ALL VALVE BOXES AND LIDS SHALL BE COMMERCIAL GRADE, PLASTIC WITH SELF LOCKING COVERS. LID COLOR TO BE GREEN. INSTALL FLUSH TO FINISH GRADE AND PER CONSTRUCTION DETAILS. DO NOT INSTALL IN PAVED AREAS OR IN BOTTOMS OF DRAINAGE SWALES/BASINS.
12.

CONTRACTOR SHALL INSTALL DETECTABLE MARKING TAPE OR #14g DIRECT BURY TRACER WIRE IN ALL PRESSURE MAINLINE TRENCHES. SEE IRRIGATION DETAILS FOR MORE INFORMATION.
13.

PLANT MATERIAL LOCATIONS TAKE PRECEDENCE OVER ROUTING OF IRRIGATION PIPING. COORDINATE INSTALLATION OF IRRIGATION EQUIPMENT SO THAT IT DOES NOT INTERFERE WITH THE PLANTING OF TREES OR OTHER LANDSCAPE MATERIAL.
14.

THE CONTRACTOR SHALL MARK THE LOCATION OF THE MAINLINE, CONTROL VALVES, AND GATE VALVES AND SCHEDULE A REVIEW WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
15.

INSTALL SCH. 40 BALL WITH OPERATIONAL INDICATOR AT ENDS OF ALL DRIP LATERALS AS DETAILED. FLUSH ALL LATERALS THOROUGHLY BEFORE INSTALLING EMITTERS AND BUBBLERS.
16.

CONTRACTOR SHALL INSTALL A QUICK COUPLER IN 10" VALVE BOX AT THE END OF ALL BRANCHES OF THE MAINLINE, OR AS SHOWN ON PLANS. FOR WINTERIZATION AND FLUSHING OF MAINLINE.
17.

THE CONTRACTOR SHALL PERFORM A PRESSURE TEST ON ALL MAINLINES. CONTRACTOR SHALL PRESSURIZE MAINLINES TO 120 PSI AND MAINTAIN PRESSURE AT 120 PSI FOR A MINIMUM CONTINUOUS PERIOD OF TWO (2) HOURS TO ACHIEVE FINAL ACCEPTANCE.
18.

THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE DURING A THREE (3) NIGHTS PER WEEK, EIGHT (8) HOURS PER NIGHT WATERING WINDOW. LANDSCAPE ESTABLISHMENT WILL REQUIRE INCREASED IRRIGATION WATER FOR DURATION OF THE ESTABLISHMENT PERIOD AND MAY REQUIRE TWICE THE AMOUNT OF WATER AS ESTABLISHED PLANT MATERIAL. THE CONTRACTOR SHALL COORDINATE WATERING SCHEDULES AND APPLICATION RATES WITH THE OWNER'S REPRESENTATIVE PRIOR TO FINAL ACCEPTANCE.
19.

THE DESIGN IS BASED ON THE FOLLOWING PROJECTED PEAK SEASON WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND VARIABLE WEATHER CONDITIONS.

•

TREE, SHRUB, AND PERENNIAL PLANT MATERIAL 0.75" PER WEEK PEAK SEASON

20.

THE CONTRACTOR SHALL PROVIDE A SEASONAL MAINTENANCE SCHEDULE WHICH SHALL BEGIN ON APRIL 1ST AND END ON OCTOBER 1ST TO ENSURE THE EFFICIENCY AND LONGEVITY OF THE IRRIGATION SYSTEM. THE MAINTENANCE SCHEDULE SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING LIST OF BEST MANAGEMENT PRACTICES:

•

CHECK SYSTEM FOR COVERAGE AND LEAKAGE.

•

CHECK CONTROLLER PROGRAMMING AND ADJUST FOR SEASONAL CHANGES AS NECESSARY.

•

VERIFY THAT THE WATER SUPPLY AND PRESSURE ARE AS STATED IN THE DESIGN.

•

CERTIFY THE BACKFLOW PREVENTION DEVICE AND SUBMIT TEST RESULTS TO THE PROPERTY MANAGER.

•

PERIODICALLY VERIFY THE THE SENSORS IN THE IRRIGATION SYSTEM ARE OPERATING CORRECTLY.

•

WINTERIZATION AND SPRING START UP PROCEDURES.
- CASTLE ROCK STANDARD IRRIGATION NOTES
1.

INSTALLING CONTRACTOR SHALL CONTACT THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT AT 720.733.6017 TO SCHEDULE A PRE-CONSTRUCTION MEETING BEFORE BEGINNING THE INSTALLATION OF THE IRRIGATION SYSTEM.

2.

IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.

3.

THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION ASSEMBLY APPROVED BY THE TOWN OF CASTLE ROCK.

4.

BACKFLOW TO BE TESTED BY A CERTIFIED BACKFLOW TECHNICIAN APPROVED BY THE UTILITY DEPARTMENT WITHIN 10 DAYS OF THE IRRIGATION METER INSTALLATION AND ANNUALLY THEREAFTER.

5.

IRRIGATION TAP, LINE, METER AND BACKFLOW PREVENTION ASSEMBLY MUST BE THE SAME SIZE FROM THE TAP TO A MINIMUM DISTANCE OF 10 PIPE DIAMETERS PAST THE BACKFLOW PREVENTION ASSEMBLY AND WINTERIZATION TEE.

6.

WATER WASTE IS NOT ALLOWED PER THE TOWN OF CASTLE ROCK'S WATER USE MANAGEMENT PLAN. THEREFORE, ALL NOZZLES ARE TO BE FINE TUNE/ADJUSTED SO THAT OVERSPRAY ONTO HARD SURFACES IS ELIMINATED.

7.

OVERHEAD IRRIGATION IS NOT PERMITTED ON SLOPES STEEPER THAN 3:1.

8.

VELOCITY SHALL NOT EXCEED 7.5 FPS THROUGH THE WATER METER.

9.

NO OVERHEAD IRRIGATION IN AREAS LESS THAN 10 FEET WIDE.

10.

THERE IS TO BE NEITHER PLANT MATERIAL NOR IRRIGATION IN AREAS LESS THAN 4 FEET WIDE.

11.

ALL SPRINKLER HEADS TO BE ADJUSTED TO MINIMIZE/ELIMINATE OVER SPRAY ON TO HARD SURFACES OR UNINTENDED AREAS. PER TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN WATER WASTE IS NOT ALLOWED

12.

OVERHEAD IRRIGATION IN AREAS LESS THAN 10' IN WIDTH OR INSTALLED ON SLOPES EQUAL TO OR STEEPER THAN 3:1 WILL NOT BE APPROVED BY TOWN OF CASTLE ROCK INSPECTORS.

13.

ALL IRRIGATION INSTALLATIONS MUST MEET TOWN OF CASTLE ROCK DETAILS

14.

IRRIGATION EXEMPTION MUST BE OBTAINED FROM THE CASTLE ROCK WATER IF IRRIGATING THE NATIVE SEED OR THE SOD ON A DAILY BASIS FOR ESTABLISHMENT DURING THE MONTHS OF MAY, JUNE, AUGUST AND SEPTEMBER.

15.

IRRIGATION EXEMPTIONS WILL NOT BE ISSUED DURING THE MONTH OF JULY. IRRIGATION SYSTEMS MUST BE DESIGNED TO OPERATE WITHIN THE TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN. CURRENT COMMERCIAL HOURS OF OPERATION ARE A THREE FIXED DAYS A WEEK FROM 10 PM TO 6 AM.

16.

IRRIGATION SYSTEMS ARE TO BE WINTERIZED ANNUALLY IN THE FALL.

17.

A COPY OF THE STAMPED AND TOWN APPROVED IRRIGATION PLANS IS TO BE AVAILABLE ON-SITE DURING IRRIGATION INSPECTIONS.

18.

ALL (RESIDENTIAL AND NON-RESIDENTIAL) POINT-SOURCE DRIP, SUB-SURFACE DRIP, DRIPPER LINE, AND BUBBLERS MUST BE INSTALLED WITH AN OPERATIONAL INDICATOR IN EACH PLANTING BED AREA AND A FLUSH VALVE WITH AN OPERATIONAL INDICATOR AT EVERY DEAD END.
- IRRIGATION POINT OF CONNECTION NOTES
1.

POINT OF CONNECTION: THERE IS ONE (1) POINT OF CONNECTION ON THIS PROJECT.
POC #1 : 3/4" DEDICATED IRRIGATION WATER METER LOCATED AT SOUTH SIDE OF SITE ENTRANCE - SEE PLANS.

•

CONTRACTOR IS TO LOCATE AND CONNECT DOWNSTREAM OF THE DEDICATED POTABLE IRRIGATION WATER METER (PROVIDED BY OTHERS) WITH TYPE K COPPER AT A DEPTH OF 48" OR PER LOCAL CODE, WHICHEVER IS GREATER. EXTEND COPPER TO BACKFLOW PREVENTION UNIT. EXTEND COPPER TUBING MINIMUM 30" HORIZONTAL FROM BACKFLOW PREVENTER AND INSTALL ONE MANUAL DRAIN, TRANSITION TO AND EXTEND CLASS 200 PVC MAINLINE TO FLOW SENSOR, GATE VALVE, 1" QUICK COUPLER, MASTER VALVE, AND EXTEND MAINLINE TO VALVES AS SHOWN.

•

ALL PIPING FROM THE DEDICATED IRRIGATION POTABLE METER THROUGH DRAIN VALVE DOWNSTREAM OF THE BACKFLOW PREVENTION UNIT SHALL BE THE SAME SIZE AS THE METER UNLESS OTHERWISE NOTED.

•

THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES, OBTAIN AND PROVIDE PAYMENT FOR ALL PERMITS ASSOCIATED WITH THIS WORK. FINAL LOCATION OF BACKFLOW PREVENTION UNIT SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

2.

CONTROLLER LOCATION: THERE IS ONE (1) CONTROLLER ON THIS PROJECT.
CONTROLLER C : WALL MOUNTED CONTROLLER LOCATED AT SOUTH SIDE OF BUILDING - SEE PLANS.

•

CONTROLLER SHALL BE PROGRAMMED TO RUN MULTIPLE VALVES AT ONE TIME WITH A MAXIMUM TOTAL OF 10 GPM .

•

CONTROLLER TO BE MOUNTED PER DETAILS AND MANUFACTURER'S SPECIFICATIONS.

•

CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE AND ELECTRICAL PLANS FOR POWER SERVICE. ALL ELECTRICAL EQUIPMENT AND POWER CONNECTION INSTALLATION SHALL CONFORM TO ALL LOCAL CODES. INSTALL A LINE VOLTAGE SURGE DEVICE (INTERMATIC AG2401C3/ OR SQUARE D SDSA1175) FOR 120V IN A JUNCTION BOX PRIOR TO CONTROLLER.

•

RAIN/FREEZE SENSOR: MOUNT THE RAIN SENSOR ON ON BUILDING EAVE ADJACENT TO CONTROLLER. THE SENSOR SHALL BE MOUNTED IN A LOCATION IN FULL SUN AND OPEN TO RAINFALL. SENSOR SHALL BE NO MORE THAN 200' FROM WIRELESS RECEIVER. MOUNT WIRELESS RECEIVER ON OR ADJACENT TO THE IRRIGATION CONTROLLER.

3.

SYSTEM PRESSURE: THE SYSTEM HAS BEEN DESIGNED PER THE FOLLOWING SPECIFICATIONS: REQUIRED MINIMUM STATIC PRESSURE OF 61 PSI AND MAXIMUM SAFE VELOCITY OF 5 FPS IN ANY PVC PIPE AND 7.5 FPS IN ANY COPPER PIPE.

•

PER CASTLE ROCK WATER THE STATIC PRESSURE ON SITE IS APPROXIMATELY 92 PSI.

•

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESSURE IN THE FIELD AT THE POINT OF CONNECTION BEFORE CONSTRUCTION BEGINS AND FOR NOTIFYING THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCY BETWEEN THE DESIGN PRESSURE OF THE SYSTEM AND THE MEASURED PRESSURE IN THE FIELD. IF THE CONTRACTOR FAILS TO NOTIFY OWNER'S REPRESENTATIVE OF SUCH DISCREPANCIES, THEN THE CONTRACTOR ASSUMES ALL LIABILITY AND COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS TO ACCOMMODATE THE ACTUAL PRESSURE.

4.

FLOW SENSOR: SENSOR REQUIRES A MINIMUM FLOW FOR PROPER READINGS. MULTIPLE ZONES MAY BE REQUIRED TO RUN SIMULTANEOUSLY TO ACHIEVE THE MINIMUM FLOWS REQUIRED. CONTRACTOR TO SET 'K' VALUES PER MANUFACTURER.

•

FLOW SENSOR REQUIRES A MINIMUM FLOW OF 0.22 GPM.

5.

COMMUNICATION: IT IS RECOMMENDED THAT THE IRRIGATION CONTROLLER BE CONNECTED TO A WATER MANAGEMENT CONTROL SOFTWARE FOR OPTIMUM FUNCTION OF THE IRRIGATION SYSTEM. COORDINATE WITH OWNER'S REPRESENTATIVE AND CONTACT THE LOCAL CONTROLLER MANUFACTURER REPRESENTATIVE OR AUTHORIZED VENDOR PRIOR TO ORDERING CONTROLLER FOR COMMUNICATION AND CONNECTIVITY OPTIONS.
- CONVENTIONAL WIRE NOTES
1.

GROUNING FOR THE IRRIGATION CONTROLLER SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND PER THE AMERICAN SOCIETY OF IRRIGATION CONSULTANTS GUIDELINE 100-2002 FOR EARTH GROUNDING ELECTRONIC EQUIPMENT IN IRRIGATION SYSTEMS FOUND AT www.asic.org/Design_Guides.aspx. FOR TECHNICAL SUPPORT REGARDING THE IRRIGATION CONTROLLER OR GROUNDING PLEASE CONTACT THE MANUFACTURER.

2.

NEW CONTROLLER WIRE SHALL BE 14GA MIN. UL APPROVED WIRE. CONTRACTOR SHALL VERIFY EXISTING CONNECTIONS AND USE UL APPROVED WIRE STRIPPER AND 3M DBY WATERPROOF CONNECTIONS AT ALL NEW SPLICES AND CONNECTION POINTS. CONTRACTOR TO INSTALL RED ELECTRIC MARKING TAPE WITH CONTROLLER WIRE THAT IS NOT WITH MAINLINE. WIRES SHALL BE BUNDLED TOGETHER BY BLACK ELECTRICAL TAPE EVERY 10 L.F.

3.

CONTRACTOR SHALL HAVE 30" OF SPARE CONTROL WIRE PRESENT AT ALL SPLICE POINTS. SPARE WIRE SHALL BE COILED IN A NEAT AND ORDERLY FASHION AT EACH SPLICE POINT.

4.

CONTRACTOR SHALL EXTEND TWO (2) SPARE CONTROL WIRES, AND ONE (1) SPARE COMMON WIRE AT THE END OF THE MAINLINE. CONTRACTOR SHALL INSTALL ONE (1) WIRE PULL BOX AT EACH END OF THE MAINLINE.
- SLEEVING COORDINATION NOTES
1.

INSTALLATION OF IRRIGATION SLEEVING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR FOR LOCATION AND SIZING OF SLEEVES PRIOR TO THE START OF CONSTRUCTION.

2.

SLEEVES SHALL BE INSTALLED PRIOR TO THE START OF PAVING OPERATIONS.

3.

THE CONTRACTOR SHALL SLEEVE ALL IRRIGATION DISTRIBUTION LINES, VALVE CONTROL WIRES AND COMMUNICATION WIRES UNDER ALL PAVED SURFACES, WALL FOOTERS, DRAINAGE CHANNELS, INLETS, CATCH BASINS, ETC.

4.

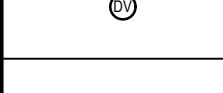
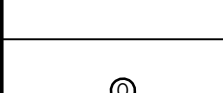
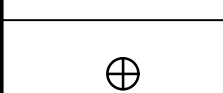
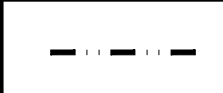
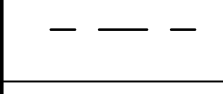
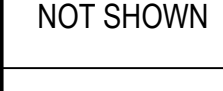
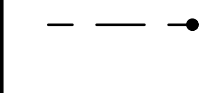
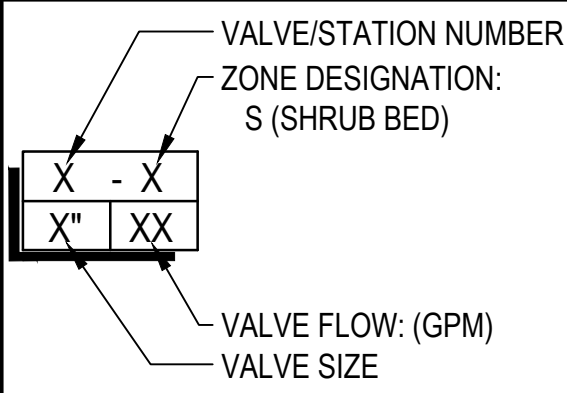
ALL SLEEVES SHALL EXTEND A MINIMUM OF 12" BEYOND EDGE OF ALL OBSTRUCTIONS. NO TEES, ELLS OR OTHER TURNS IN PIPING SHALL BE LOCATED UNDER ANY OBSTRUCTIONS.

5.

EACH PIPE SHALL BE IN A SEPARATE SLEEVE. WIRES SHALL BE IN A SEPARATE PIPE UNDER ALL PAVED SURFACES.

6.

SLEEVING SHALL BE INSTALLED PER THE SIZES AND QUANTITIES SHOWN ON THE PLANS BASED ON THE CHART BELOW.

PIPING	REQUIRED SLEEVE SIZE
MAINLINE PIPING	2" CLASS 200 PVC
LATERAL PIPING	2X NOMINAL DIAMETER OF LATERAL - CLASS 200 PVC
CONTROL WIRES	2" CLASS 200 PVC
- | IRRIGATION SCHEDULE | | | | | |
|--|------------------------------|--|--------------------|------------|-----------|
| SYMBOL | DESCRIPTION | MODEL NO. DESCRIPTION | DETAIL # AND SHEET | | |
|  | IRRIGATION METER | POC #1: 3/4" DEDICATED IRRIGATION METER
SHOWN FOR REFERENCE ONLY - REFER WATER PLANS | 1 / 2 | 25 | |
|  | IRRIGATION CONTROLLER | RAIN BIRD ESP-ME3 + LINK2WIFI MODULE
120VAC POWER REQUIRED - SEE PLANS FOR LOCATION | 5 | 25 | |
|  | RAIN SENSOR | RAIN BIRD WR2-RFC
REFER TO CONTROLLER NOTES | 6 | 25 | |
|  | BACKFLOW PREVENTER | 3/4" FEBCO 825YA WITH GUARD SHACK GS-1 LIFT OFF ENCLOSURE
ENCLOSURE POWDER COATED FOREST GREEN, WITH FROSTGUARD BLANKET | 3, 4 | 25 | |
|  | MANUAL DRAIN VALVE | MATCO-NORCA 1/2" 201X
INSTALLED IN RAIN BIRD VB10RNDH VALVE BOX | 7 | 25 | |
|  | FLOW SENSOR | RAIN BIRD UFS-100
INSTALLED IN RAIN BIRD VBSTDGL VALVE BOX | 8 | 25 | |
|  | ISOLATION GATE VALVE | MATCO-NORCA 10RS
MATCH LINE SIZE, INSTALLED IN RAIN BIRD VB10RNDH VALVE BOX | 1 | 26 | |
|  | QUICK COUPLER | RAIN BIRD 44LRC
INSTALLED IN RAIN BIRD VB10RNDH VALVE BOX | 2 | 26 | |
|  | MASTER VALVE | RAIN BIRD 100-PEB
WITH SCH 40 BALL VALVE, INSTALLED IN RAIN BIRD VBSTDGL VALVE BOX | 3 | 26 | |
|  | DRIP VALVE ASSEMBLY | RAIN BIRD KC2-100-PRB
WITH SCH 40 BALL VALVE, INSTALLED IN RAIN BIRD VBSTDGL VALVE BOX | 4 | 26 | |
|  | SLEEVING | CLASS 200 PVC
REFER TO SLEEVING NOTES | 6 | 26 | |
|  | SERVICE LINE | TYPE K COPPER
SIZE: 3/4" UNLESS OTHERWISE NOTED | NA | NA | |
|  | PVC MAINLINE | CLASS 200 PVC BE
SIZE: 1" UNLESS OTHERWISE NOTED | 5 | 26 | |
|  | DRIP LATERAL | UV RESISTANT POLYETHYLENE
SIZE: 3/4" MINIMUM UNLESS OTHERWISE NOTED | 5 | 26 | |
| NOT SHOWN | DRIP EMITTER | RAIN BIRD XB SERIES WITH DBC-025 DIFFUSER BUG CAP AND TS-025 STAKE
REFER TO DRIP EMITTER SCHEDULE FOR QTY PER PLANT | 1 | 27 | |
|  | DRIP FLUSH VALVE & INDICATOR | SCH 40 BALL VALVE WITH HUNTER ECO-ID-12 OPERATIONAL INDICATOR
INSTALLED IN RAIN BIRD VB10RNDH VALVE BOX
DRIP INDICATOR TO BE INSTALLED AT EACH PLANTING BED | 5 | 27 | |
| VALVE CALLOUT | | EMITTER SCHEDULE | | | |
|  | | PLANT TYPE | EMITTER | QTY. | TOTAL GPH |
| | | PERENNIAL / GRASSES | 0.5 GPH | TWO EACH | 1.0 GPH |
| | | DECIDUOUS SHRUBS | 1.0 GPH | TWO EACH | 2.0 GPH |
| | | EVERGREEN SHRUBS | 1.0 GPH | TWO EACH | 2.0 GPH |
| | | DECIDUOUS TREE | 1.0 GPH | EIGHT EACH | 8.0 GPH |
| | | EVERGREEN TREE | 1.0 GPH | EIGHT EACH | 8.0 GPH |
| EMITTER NOTES | | | | | |
| 1. ALL PLANT MATERIAL SHALL BE IRRIGATED WITH RAIN BIRD XB SERIES PRESSURE COMPENSATING EMITTERS.
2. EMITTER SCHEDULE IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL ADJUST EMITTER AND NUMBER OF EMITTERS BASED ON THE NEEDS OF INDIVIDUAL PLANTS OR PLANT HYDROZONES.
3. 1/4" DISTRIBUTION TUBING NOT TO EXCEED 8' IN LENGTH.
4. RAIN BIRD DBC-025 DIFFUSER BUG CAP AND TS-025 STAKE ON ALL 1/4" DISTRIBUTION TUBING EMISSION POINTS.
5. REFER TO DRIP IRRIGATION DETAILS #1 - #5, SHEET 27 | | | | | |
- PREPARED FOR

BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
CONTACT: HEATHER UPCHURCH

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Denver, Colorado 80204
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**NORRIS DESIGN**
Planning | Landscape Architecture | Project Execution

No.	REVISION	CD18-0024 ISSUED FOR CONSTRUCTION		DATE	BY	4/12/21	4/12/21	7/31/26											
		CD26-0026																	
H--SCALE	V--SCALE	2/25/21		DATE	DESIGNED BY	DD, TK	TK	DD											
GREYSTONE VILLAS																			
IRRIGATION NOTES																			
SHEET 22 OF 28																			
JOB NO. 19010																			
- | | | |
|---|----------------------------|------------|
| TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ | Development Services _____ | Date _____ |
|---|----------------------------|------------|
- JASON NAUGHTIN TOCR #19-3239
- 

CALL UNCC
TWO WORKING DAYS
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1-800-922-1987
534-6700 METRO DENVER AREA
UTILITY NOTIFICATION CENTER OF COLORADO

PROJECT NO. CD26-0026
- PAGE 22 OF 28



IRRIGATION CHART

Contact Information
Registered Irrigation Designer: Jason Naughtin
Company Name: Norris Design
Address: 1101 Bannock St, Denver, CO 80204
Phone: 303-882-1188 Email: jnaughtin@norris-design.com
Registration #: 19-3239 Exp:

Zone	Hydrozone Low (5'-10') Med. (10'-15') High (>15')	Plant Type (Turf, Native, Shrubs, Perennials, Trees, Annuals, etc.)	Head Type (Rotors, Sprays, Bubblers, Drip, SDI, etc.)	Nozzle (Nozzle/ Emitter size)	App. Rate (Inches/hour)	GPM (Per Zone)	Inches/Month (Peak not to exceed 6"/month or 1.5"/week)	Run Time (Minutes/ Month)	Run Time (Minutes/Day)	Water Usage (Gallons per month)
1	Low	Shrubs, Trees, &/or Grasses	Drip	1.0 GPH	0.60	2.1	2.0	200	15	420
2	Low	Shrubs, Trees, &/or Grasses	Drip	1.0 GPH	0.60	0.8	2.0	200	15	160
3	Low	Shrubs, Trees, &/or Grasses	Drip	1.0 GPH	0.60	1.4	2.0	200	15	280
4								0	0	0
5								0	0	0
Total								600	45	860



Irrigation System Hydraulic Worksheet

Project Name:Greystone VillasDate:July 29, 2026

Project Location:1101 S. Gilbert Street

Prepared by:Jason NaughtinCurrent TOCR Registration #19-3239

Tap Size0.75 "Source of PressureCastle Rock Water

Static Water Pressure:92 psi

Hydraulic Grade At Zone:6342CompanyNorris Design

Ft. of Copper

Pipe Size (")

K Copper

Friction Loss (from chart)

Flow-GPM

Loss/Gain

Service Line (tap to meter):16 Lf0.75K Copper3.99 /100 FT50.64

Water Meter:0.750.7050.70

Service Line (meter to backflow):5 Lf0.75K Copper3.99 /100 FT50.20

Backflow:0.7512512.00

Master Valve:11.751.70

Pressure Required at Head:40

Lateral Allowance:4.00

Control Valve Allowance:1.80

Mainline Allowances:

Length of Mainline

Pipe Material

Size

Gals.

GPM

50 LF CL200BE1.000"@5GPM0.39 /100 FT0.20

LF CL200BE"@5GPM-Looped/100 FT0.00

Elevation:

Tap elevation

6,283

High/Low:

6,283

0.00

Green shading indicates required information you must provide

Total System requirements (PSI)61.23

Available System Pressure (PSI)92.00

Town of Castle Rock provides a minimum of 43 psi

Total irrigated area for tap #1is 4,387 sq. ft.

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By:Development ServicesDate



JASON NAUGHTIN TOCR #19-3239PROJECT NO. CD26-0026

PREPARED FOR
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DATE
4/12/21
4/12/21
7/31/26

BY

REVISION
CD18-0024 ISSUED FOR CONSTRUCTION
CD26-0026

No.

H-SCALE
V-SCALE
DATE
DESIGNED BY
DRAWN BY
CHECKED BY

2/25/21
DD, TK
TK
DD

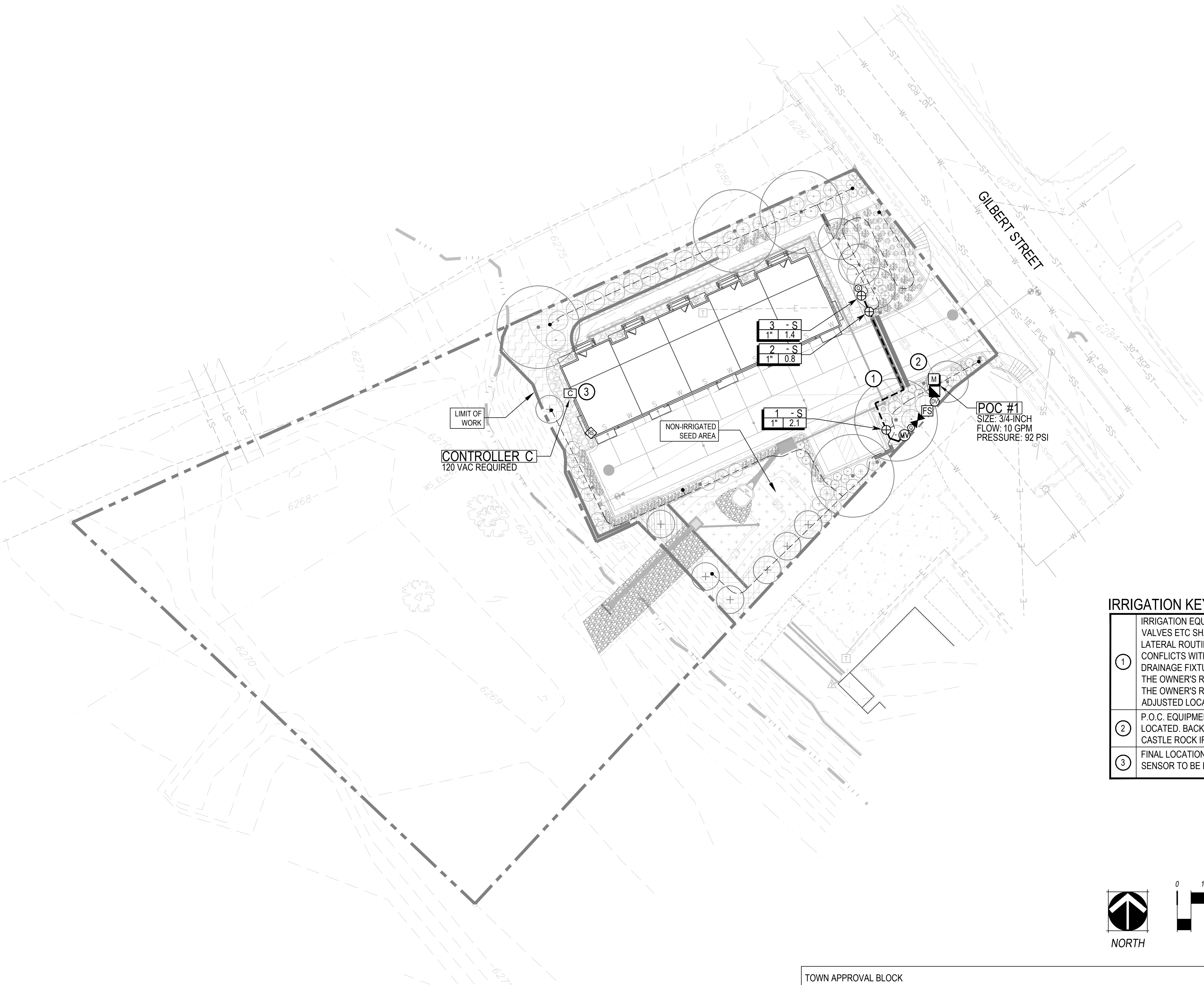
GREYSTONE VILLAS

IRRIGATION CHARTS

SHEET 23 OF 28

JOB NO. 19010

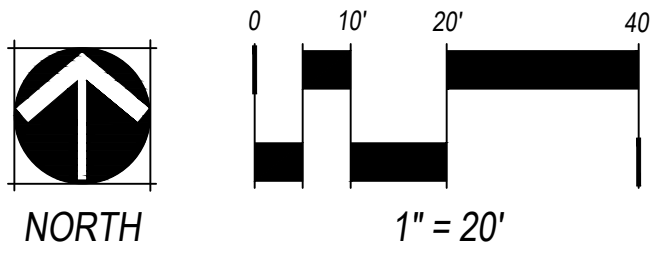
PAGE 23 OF 28



IRRIGATION SCHEDULE	
SYMBOL	DESCRIPTION
	IRRIGATION METER
	IRRIGATION CONTROLLER
	RAIN SENSOR
	BACKFLOW PREVENTER
	MANUAL DRAIN VALVE
	FLOW SENSOR
	ISOLATION GATE VALVE
	QUICK COUPLER
	MASTER VALVE
	DRIP VALVE ASSEMBLY
	SLEEVING
	SERVICE LINE
	PVC MAINLINE
	DRIP LATERAL
NOT SHOWN	DRIP EMITTER
	DRIP FLUSH VALVE & INDICATOR
VALVE CALLOUT	

IRRIGATION KEYNOTES

①	IRRIGATION EQUIPMENT IS SHOWN FOR GRAPHIC CLARITY. ALL MAINLINES, LATERALS, VALVES ETC SHALL BE LOCATED WITHIN PLANTING AREAS. IRRIGATION MAINLINE AND LATERAL ROUTING AND EQUIPMENT INSTALLATION SHALL BE ADJUSTED TO AVOID CONFLICTS WITH ELECTRICAL UTILITY, LIGHTING, DRAIN INLETS AND STORM WATER DRAINAGE FIXTURES. CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS AND THE OWNER'S REPRESENTATIVE DURING LAYOUT OF SYSTEM. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF CONFLICTS UNABLE TO BE AVOIDED AND PROVIDE ADJUSTED LOCATIONS OF ANY AND ALL EQUIPMENT ON AS-BUILT DRAWINGS.
②	P.O.C. EQUIPMENT TO BE INSTALLED IN THE PLANTER WHERE THE WATER METER IS LOCATED. BACKFLOW DEVICE NOT TO BE FURTHER THAN 5 FEET FROM WATER METER, PER CASTLE ROCK IRRIGATION GUIDELINES.
③	FINAL LOCATION OF CONTROLLER TO BE LOCATED PER OWNER'S REPRESENTATIVE. RAIN SENSOR TO BE LOCATED NO FARTHER THAN 200 FEET FROM CONTROLLER.

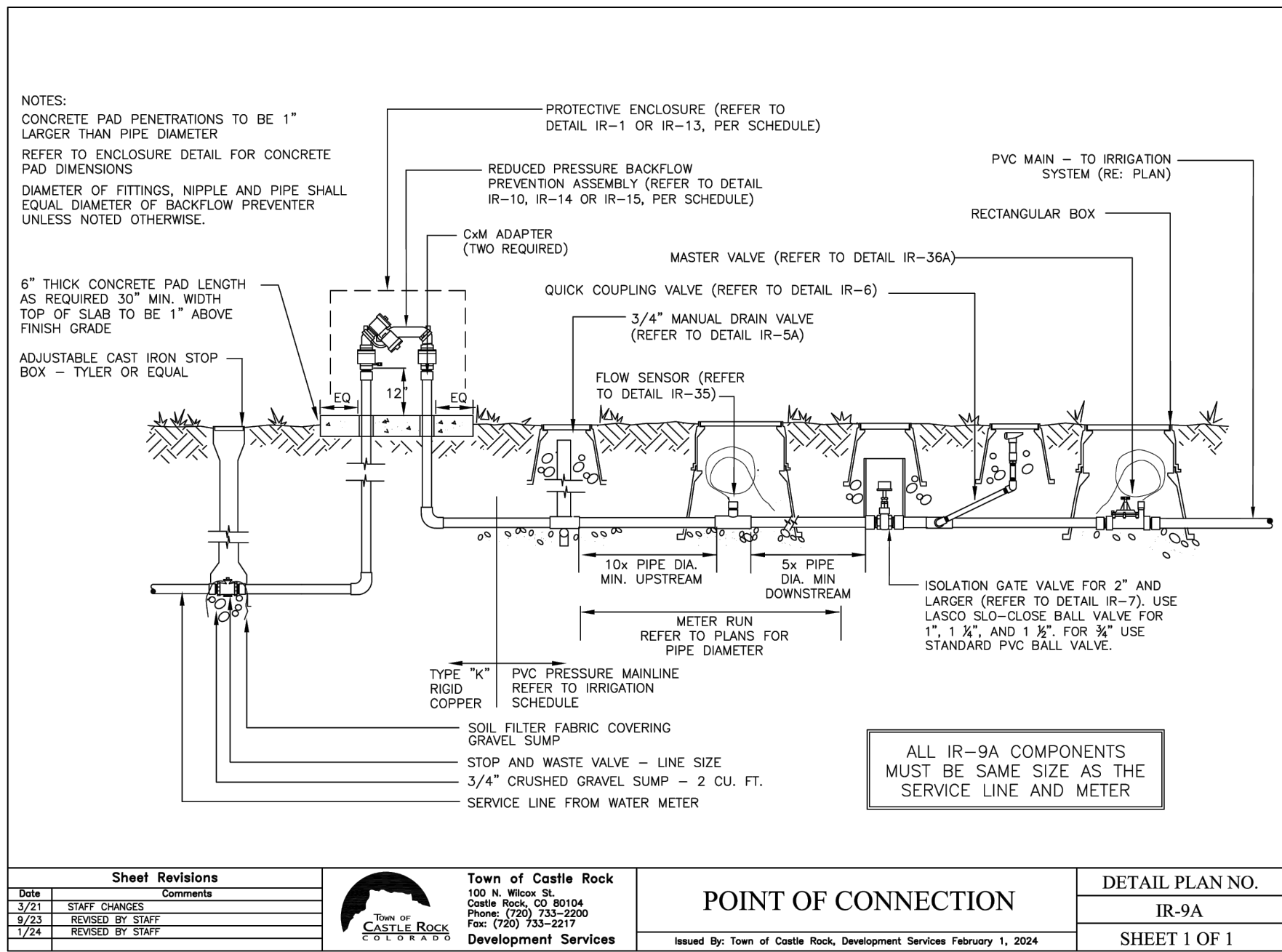


TOWN APPROVAL BLOCK TOWN OF CASTLE ROCK APPROVAL PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL Approved By: _____		Development Services	Date _____
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534-6700 METRO DENVER AREA
UTILITY NOTIFICATION CENTER OF COLORADO

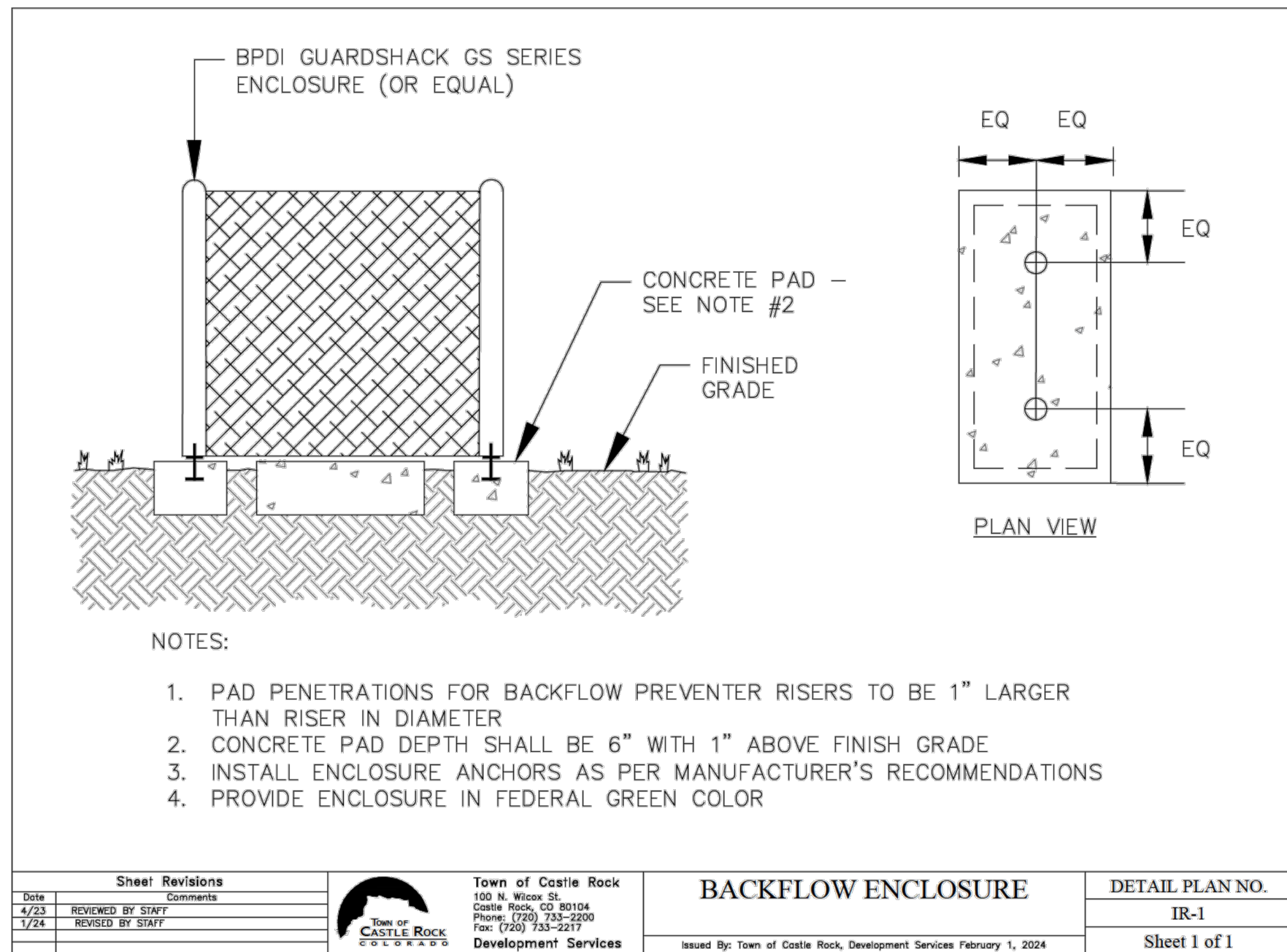
PROJECT NO. CD26-0026

GREYSTONE VILLAS	IRRIGATION PLAN	SHEET 24 OF 28	JOB NO. 19010	No.	REVISION	CD18-0024 ISSUED FOR CONSTRUCTION CD26-0026	BY	DATE	4/12/21 4/12/21 7/31/26	PREPARED FOR	BIG ROCK CUSTOM HOMES 21558 E. OTTAWA CIRCLE AURORA, CO 80016 303-437-9281 CONTACT: HEATHER UPCHURCH
1101 Bannock Street Denver, Colorado 80204 P 303.892.1166 F 303.892.1166 www.norris-design.com											



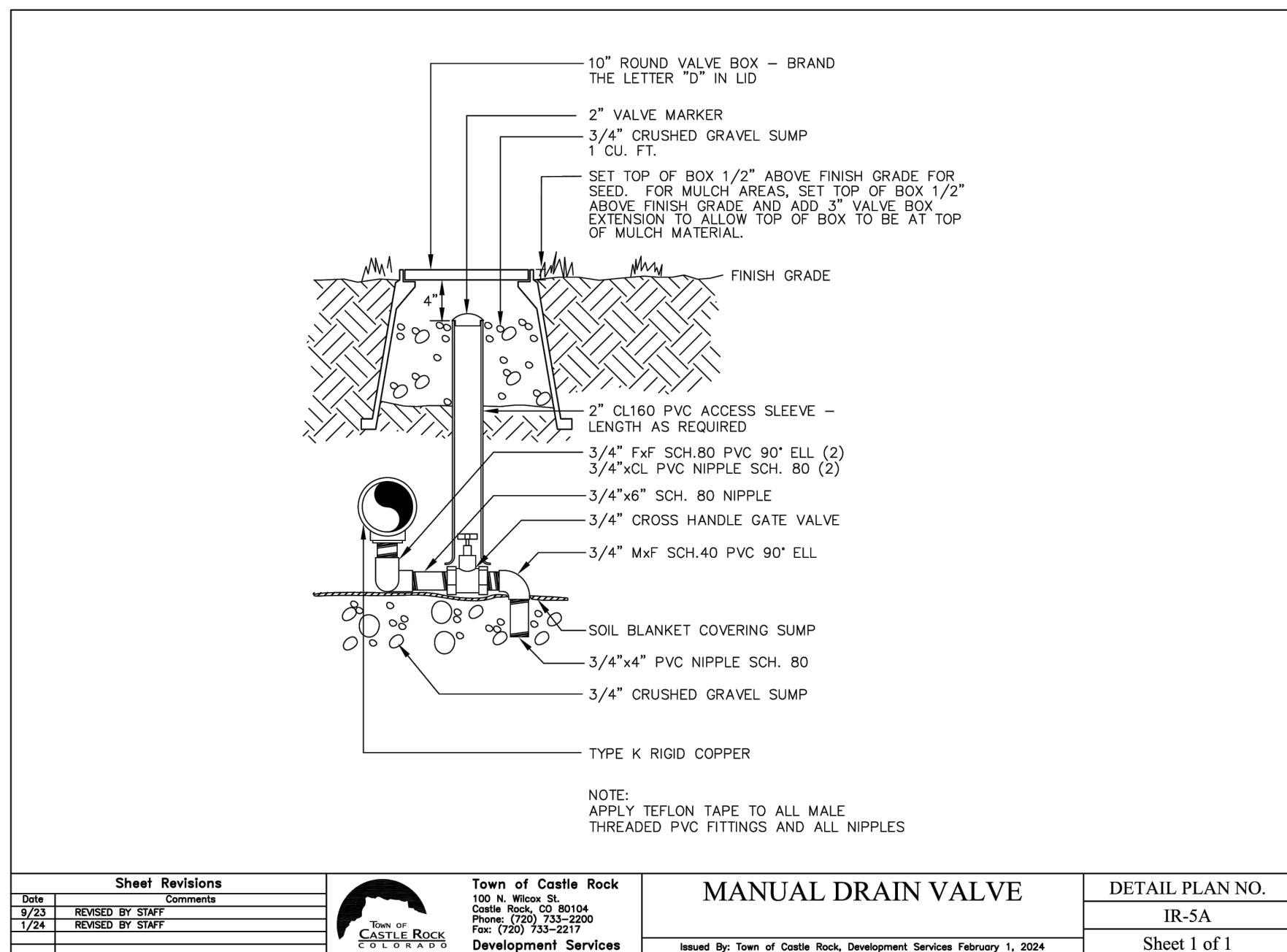
1 IRRIGATION POINT OF CONNECTION (POC)

SCALE: NTS



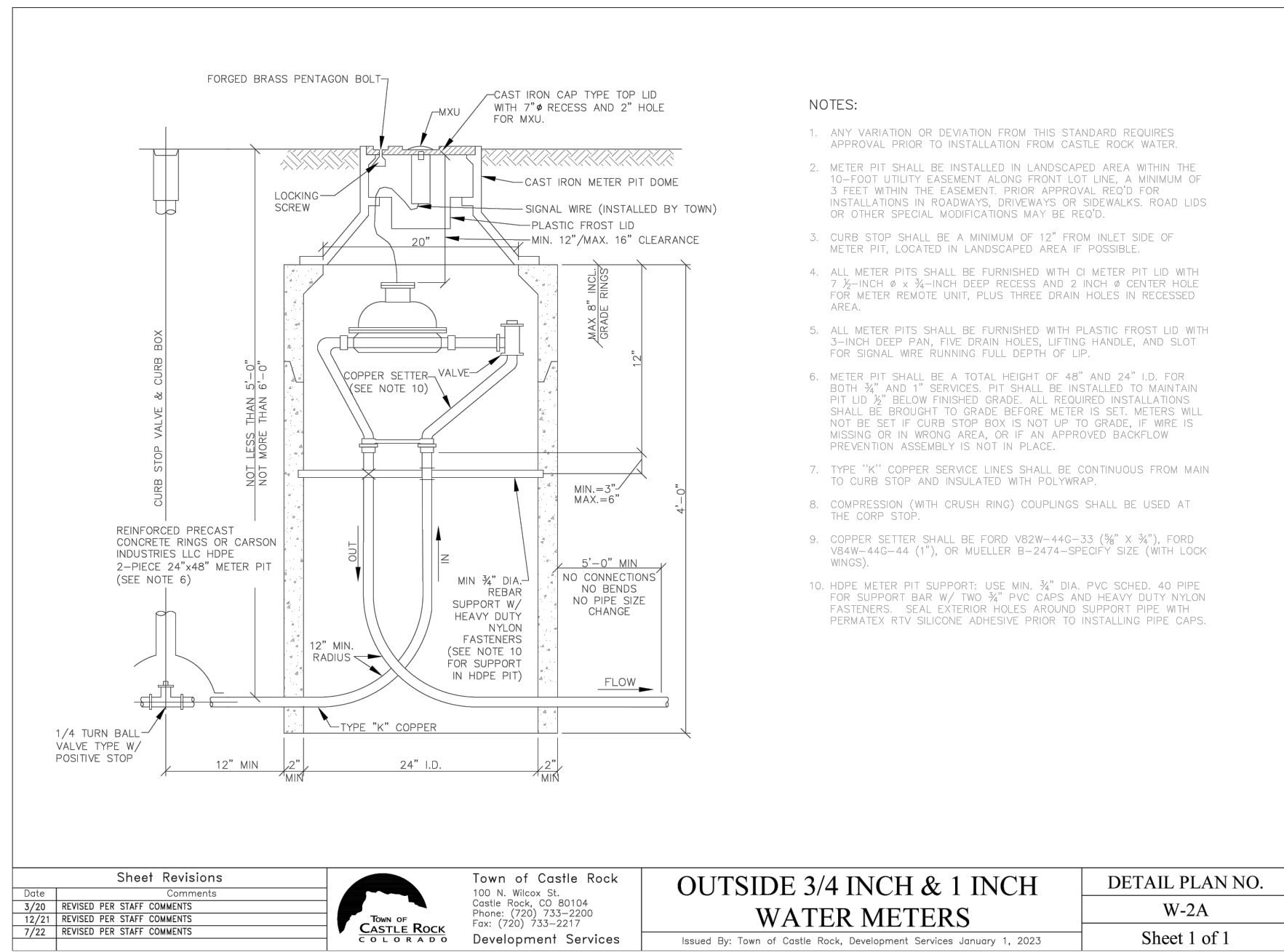
4 BACKFLOW ENCLOSURE

SCALE: NTS



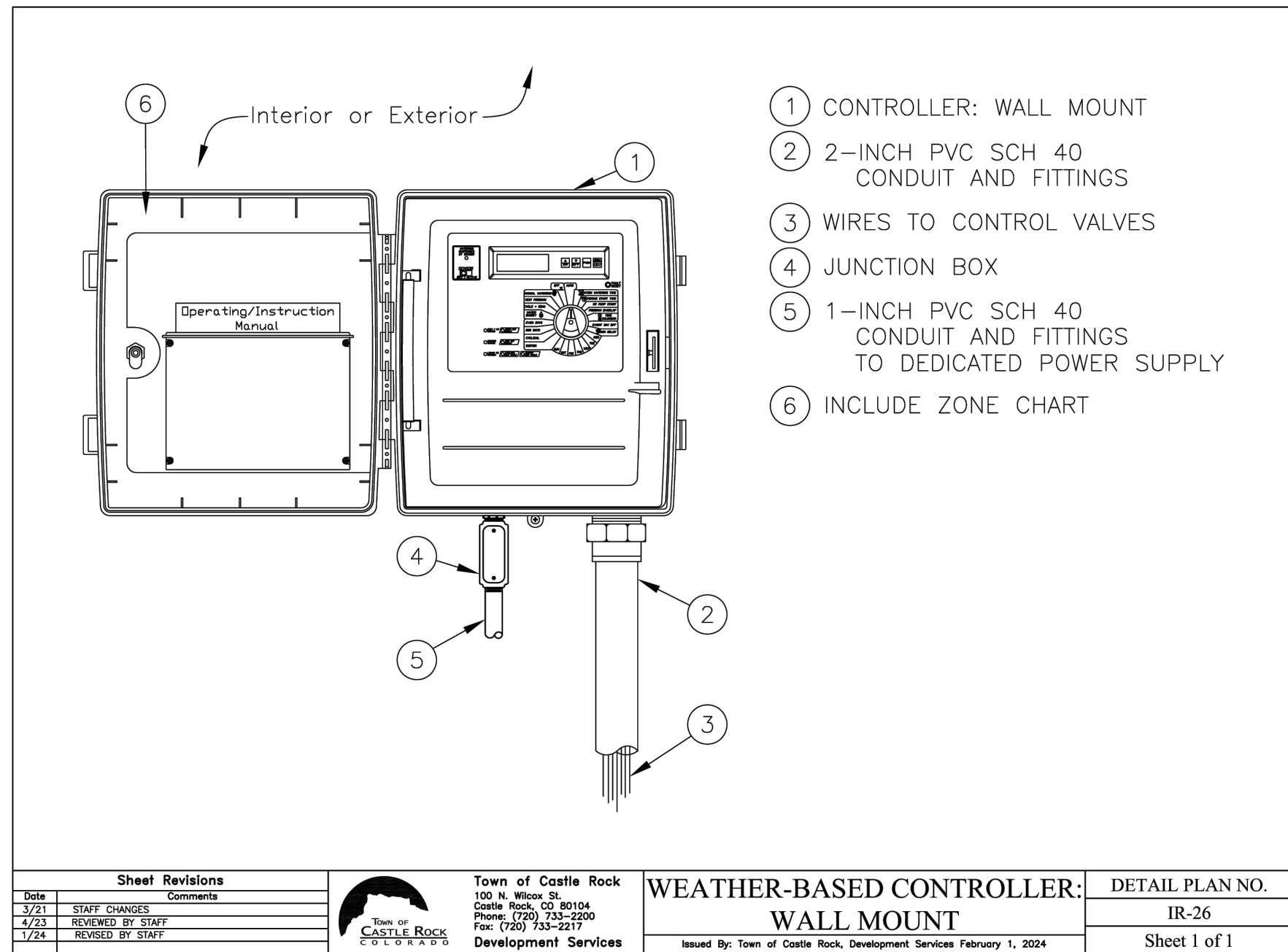
7 DRAIN VALVE

SCALE: NTS



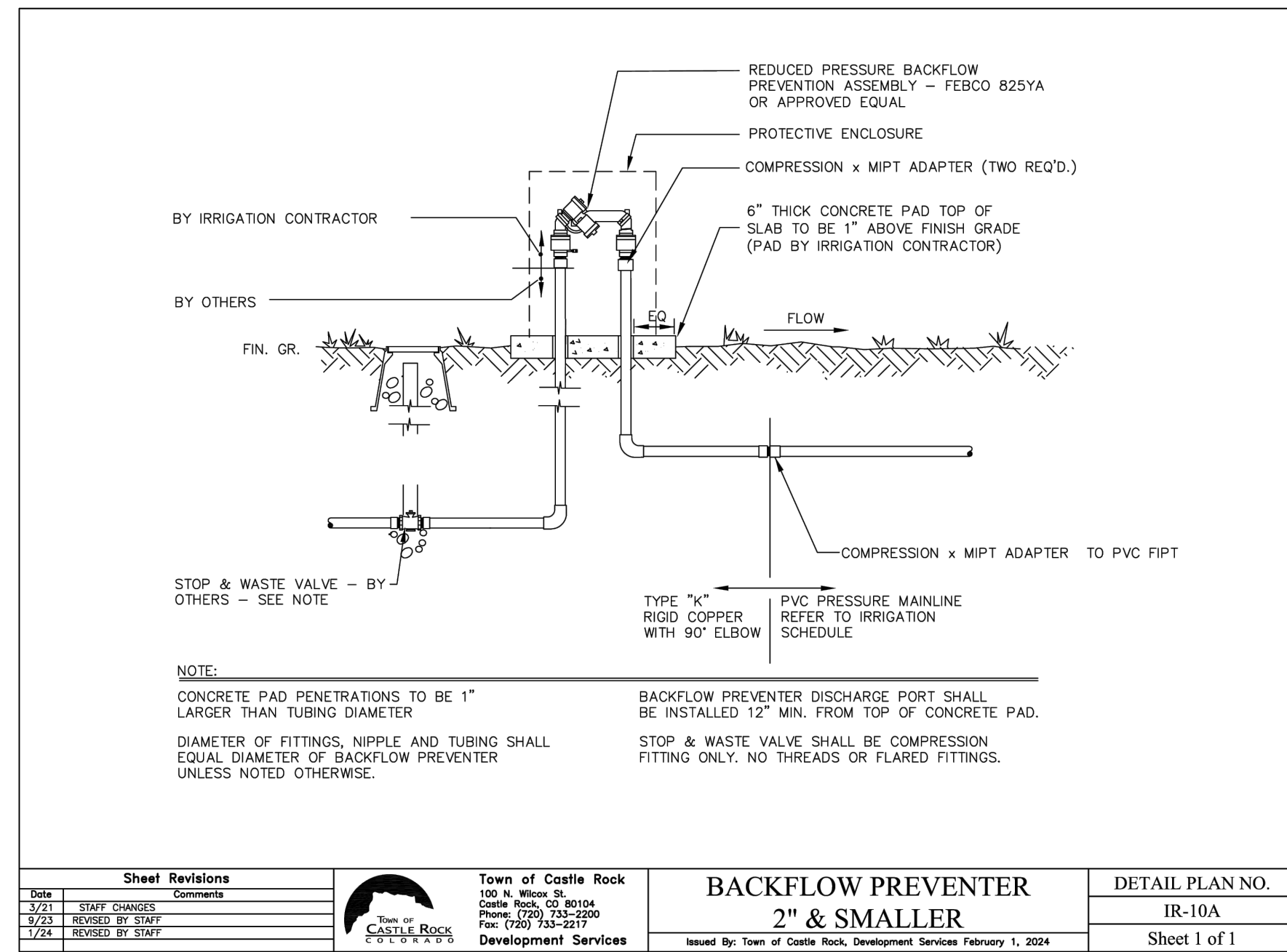
2 IRRIGATION METER - 3/4" & 1"

SCALE: NTS



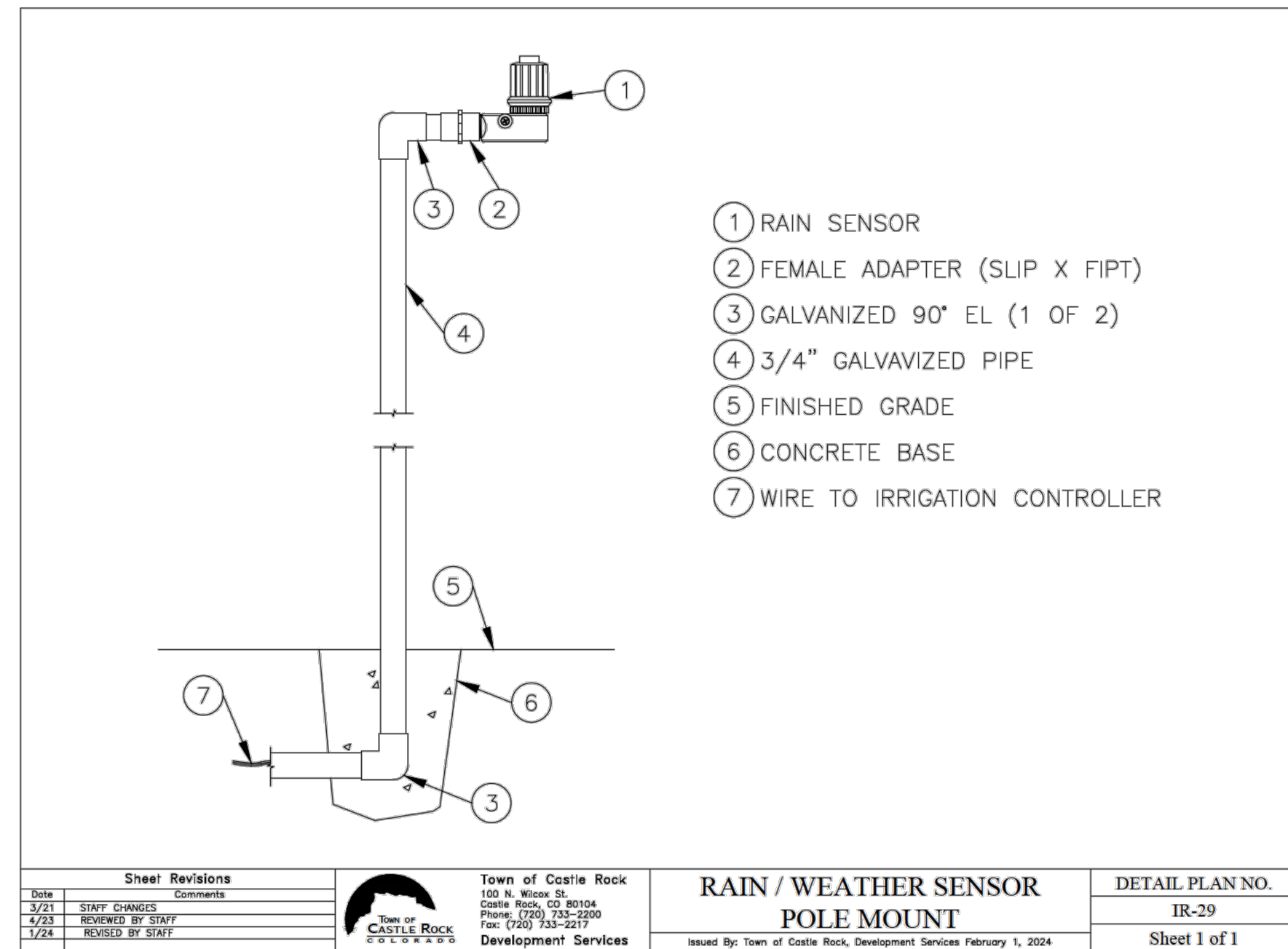
5 WALL MOUNT CONTROLLER

SCALE: NTS



3 BACKFLOW PREVENTION ASSEMBLY

SCALE: NTS



6 POLE MOUNT RAIN SENSOR

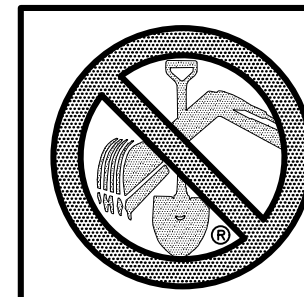
SCALE: NTS

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL

Development Services

Date

JASON NAUGHTIN TOCR #19-3239



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534-6700 METRO DENVER AREA
UTILITY NOTIFICATION CENTER OF COLORADO

PROJECT NO. CD26-0026

GREYSTONE VILLAS

IRRIGATION DETAILS

SHEET 25 OF 28

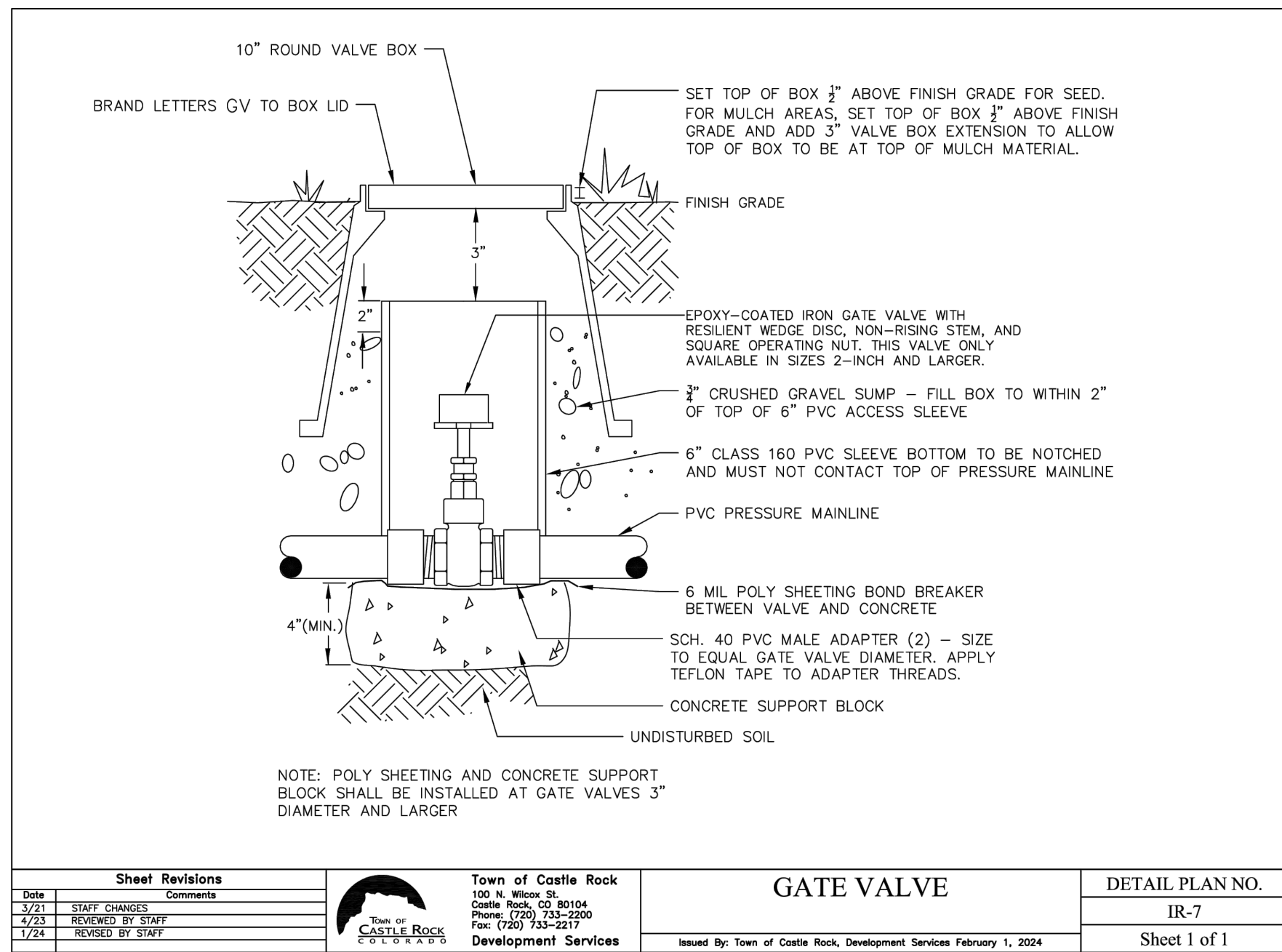
JOB NO. 19010

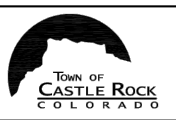
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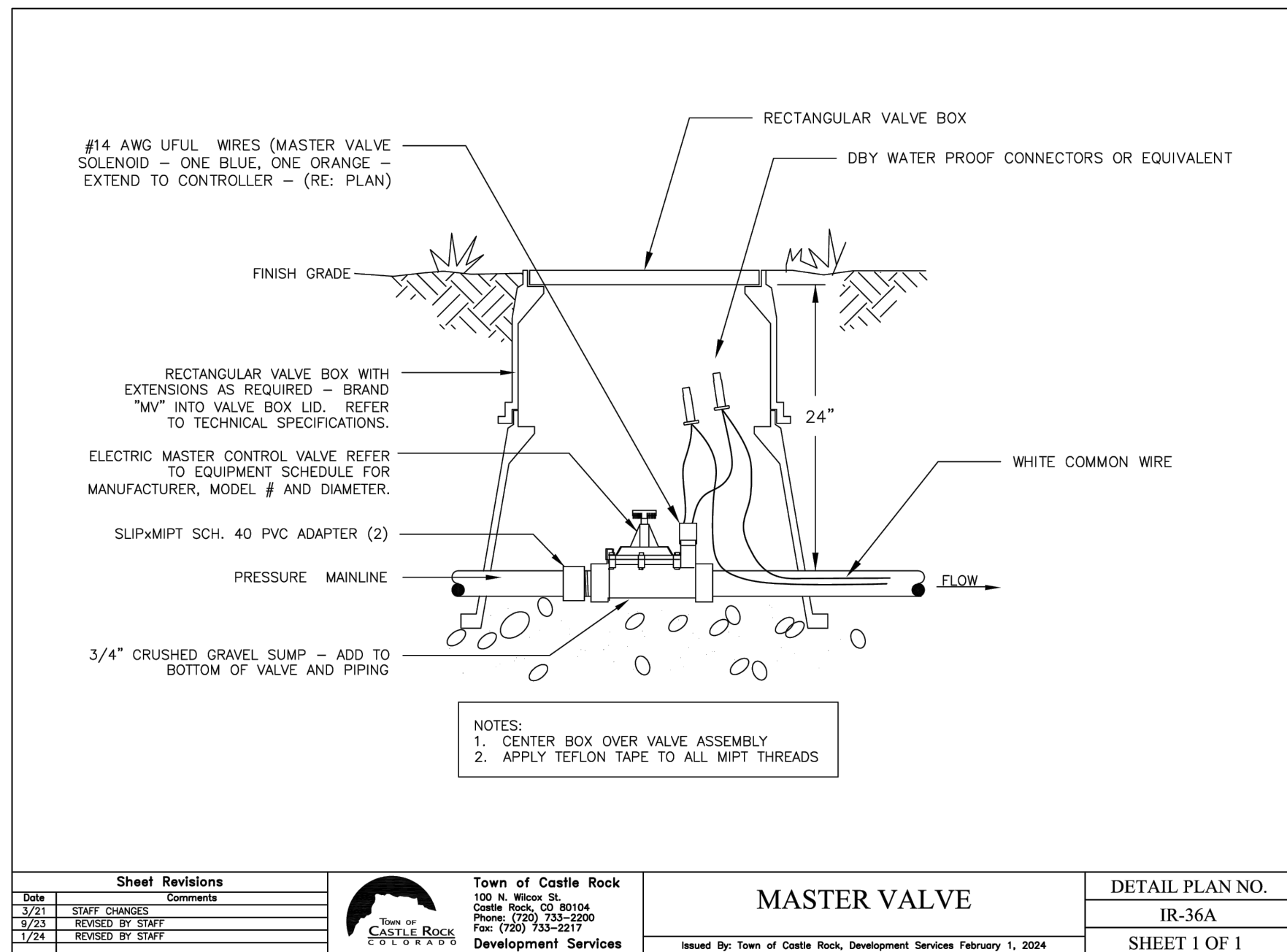
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AURORA, CO 80016
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CONTACT: HEATHER UPCHURCH



Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	GATE VALVE	DETAIL PLAN NO. IR-7
Date	Comments				
3/21	STAFF CHANGES				
4/23	REVIEWED BY STAFF				
1/24	REVISED BY STAFF			Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1

1 GATE VALVE

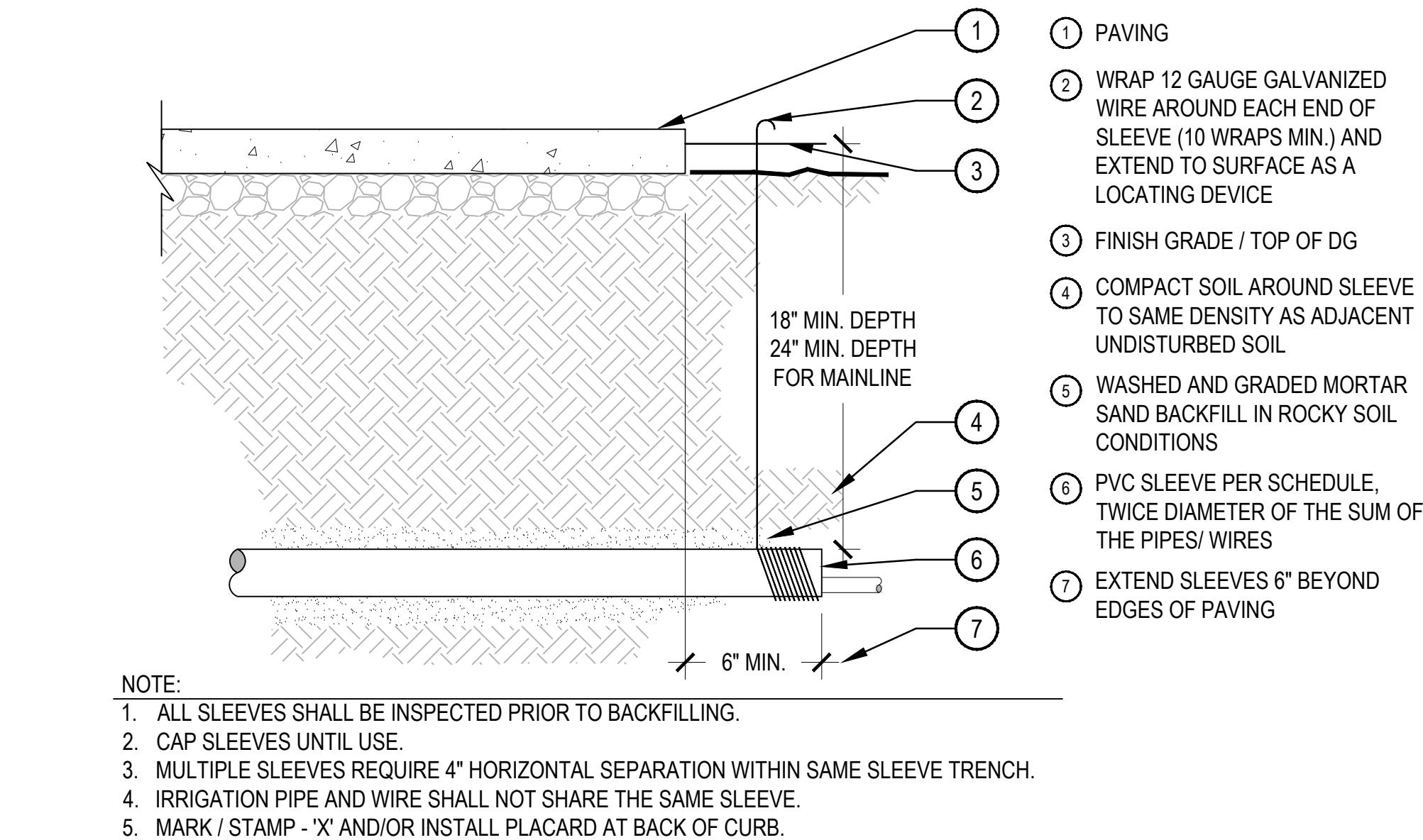
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Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	MASTER VALVE	DETAIL PLAN NO. IR-36A
Date	Comments				
3/21	STAFF CHANGES				
4/23	REVIEWED BY STAFF				
1/24	REVISED BY STAFF			Issued By: Town of Castle Rock, Development Services February 1, 2024	SHEET 1 OF 1

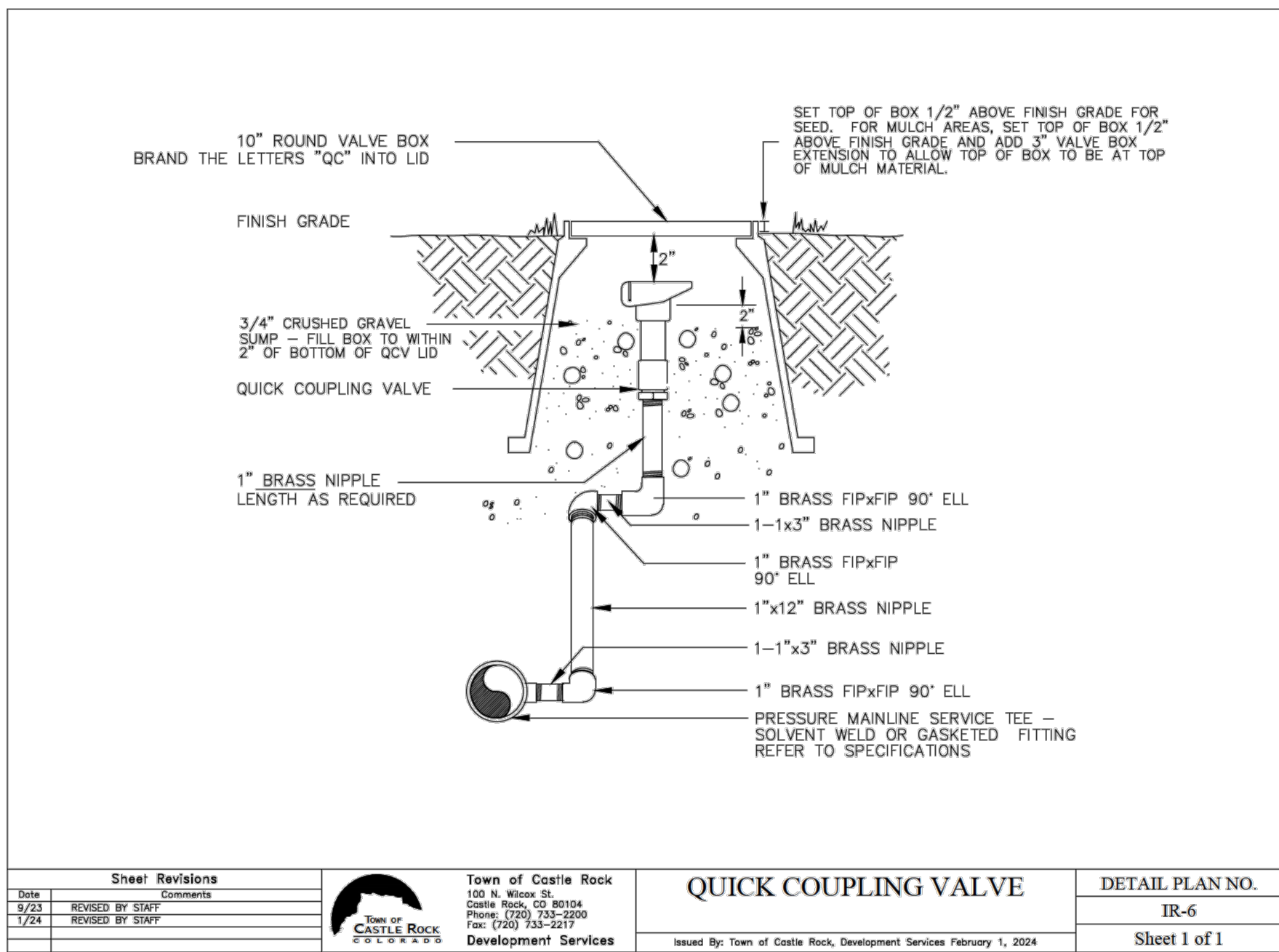
4 MASTER VALVE

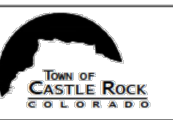
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7 PIPE SLEEVE

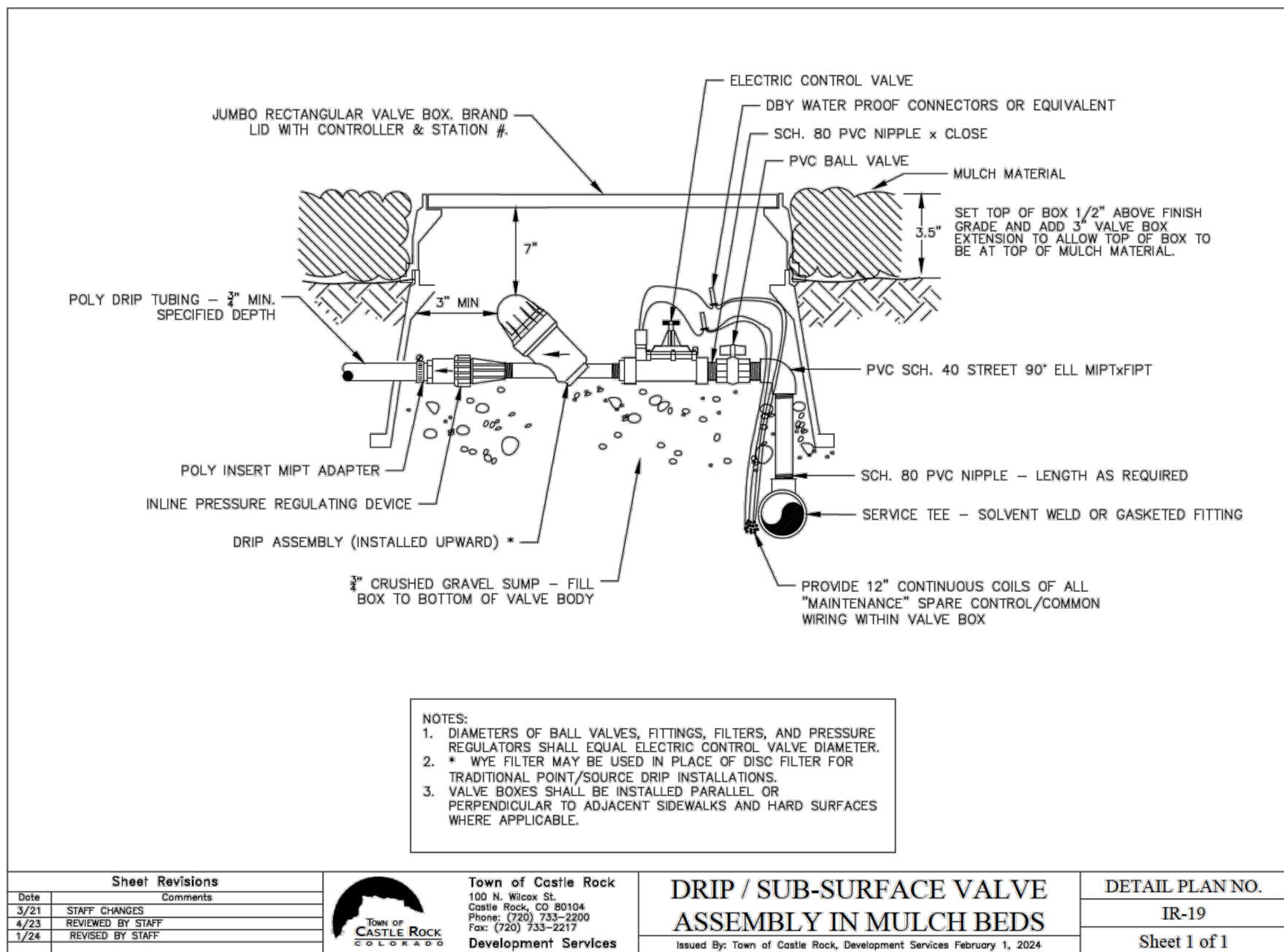
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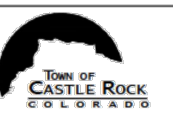


Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	QUICK COUPLING VALVE	DETAIL PLAN NO. IR-6
Date	Comments				
3/21	STAFF CHANGES				
1/24	REVISED BY STAFF				
				Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1

2 QUICK COUPLING VALVE

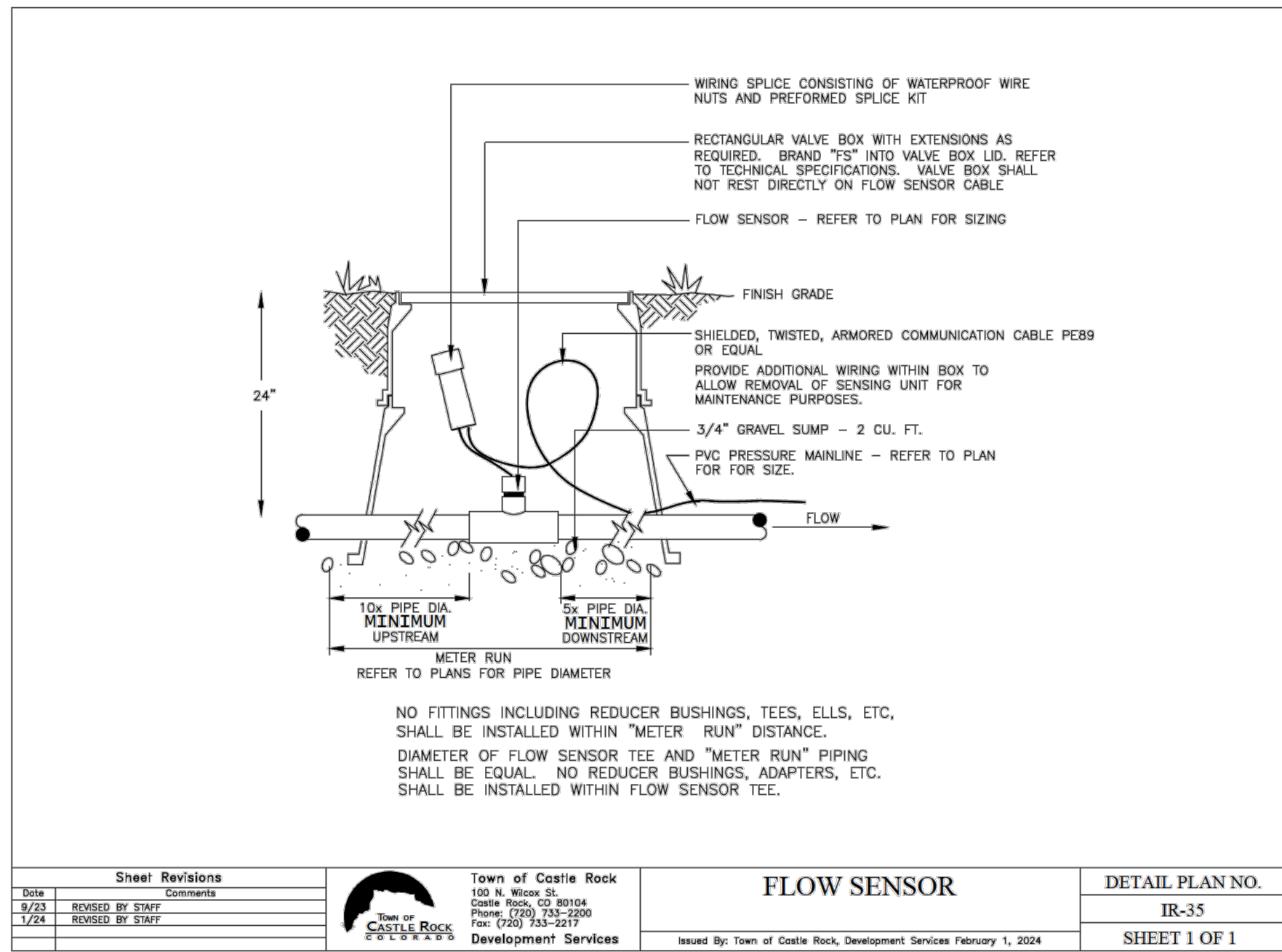
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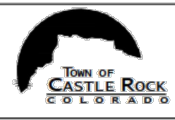


Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	DRIP / SUB-SURFACE VALVE ASSEMBLY IN MULCH BEDS	DETAIL PLAN NO. IR-19
Date	Comments				
3/21	STAFF CHANGES				
1/24	REVISED BY STAFF				
				Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1

5 DRIP VALVE ASSEMBLY

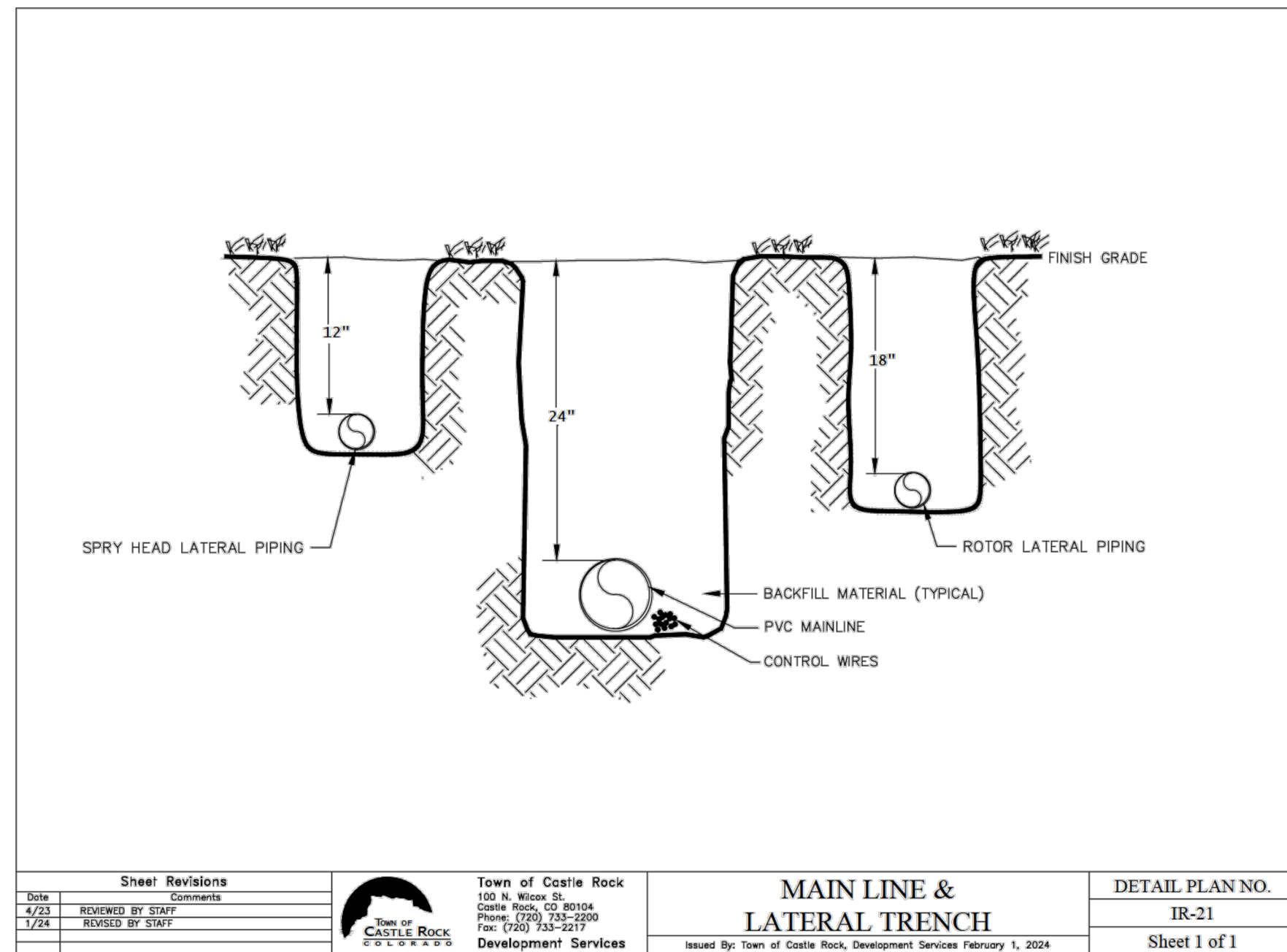
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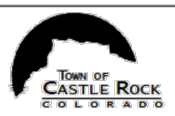


Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	FLOW SENSOR	DETAIL PLAN NO. IR-35
Date	Comments				
3/21	STAFF CHANGES				
1/24	REVISED BY STAFF				
				Issued By: Town of Castle Rock, Development Services February 1, 2024	SHEET 1 OF 1

3 FLOW SENSOR

SCALE: NTS



Sheet Revisions			Town of Castle Rock 100 N. Wilson St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	MAIN LINE & LATERAL TRENCH	DETAIL PLAN NO. IR-21
Date	Comments				
3/21	STAFF CHANGES				
1/24	REVISED BY STAFF				
				Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1

6 IRRIGATION TRENCH

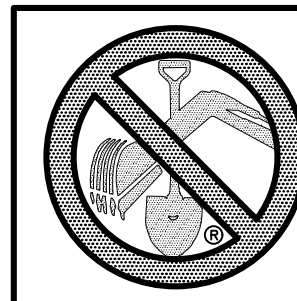
SCALE: NTS

TOWN APPROVAL BLOCK
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL
Approved By: _____ Date: _____

Development Services

Date

JASON NAUGHTIN TOCR #19-3239



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PROJECT NO. CD26-0026

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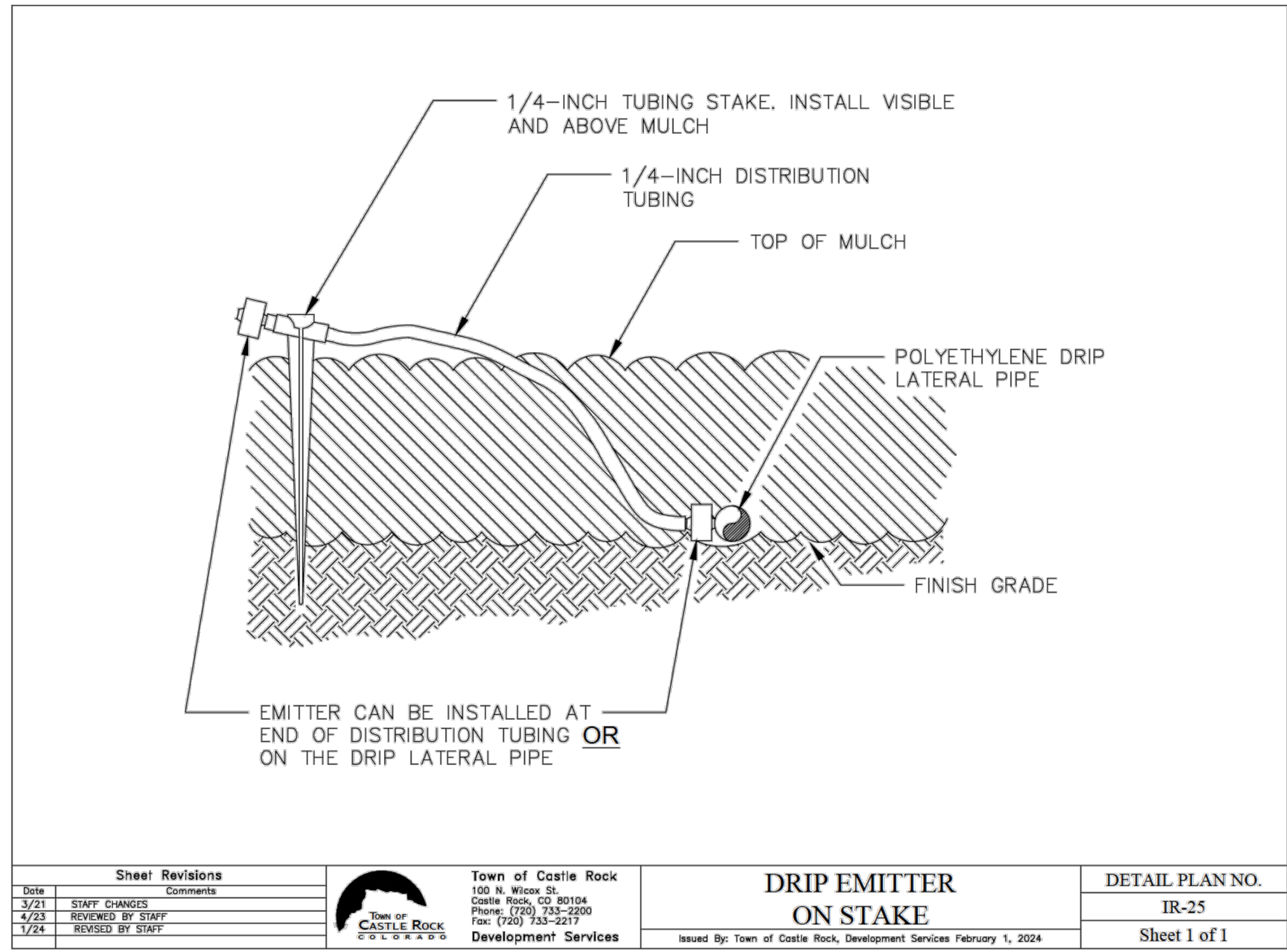
No.	REVISION	DATE	BY	DATE
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	CD26-0026	4/12/21		
		7/31/26		

GREYSTONE VILLAS

IRRIGATION DETAILS

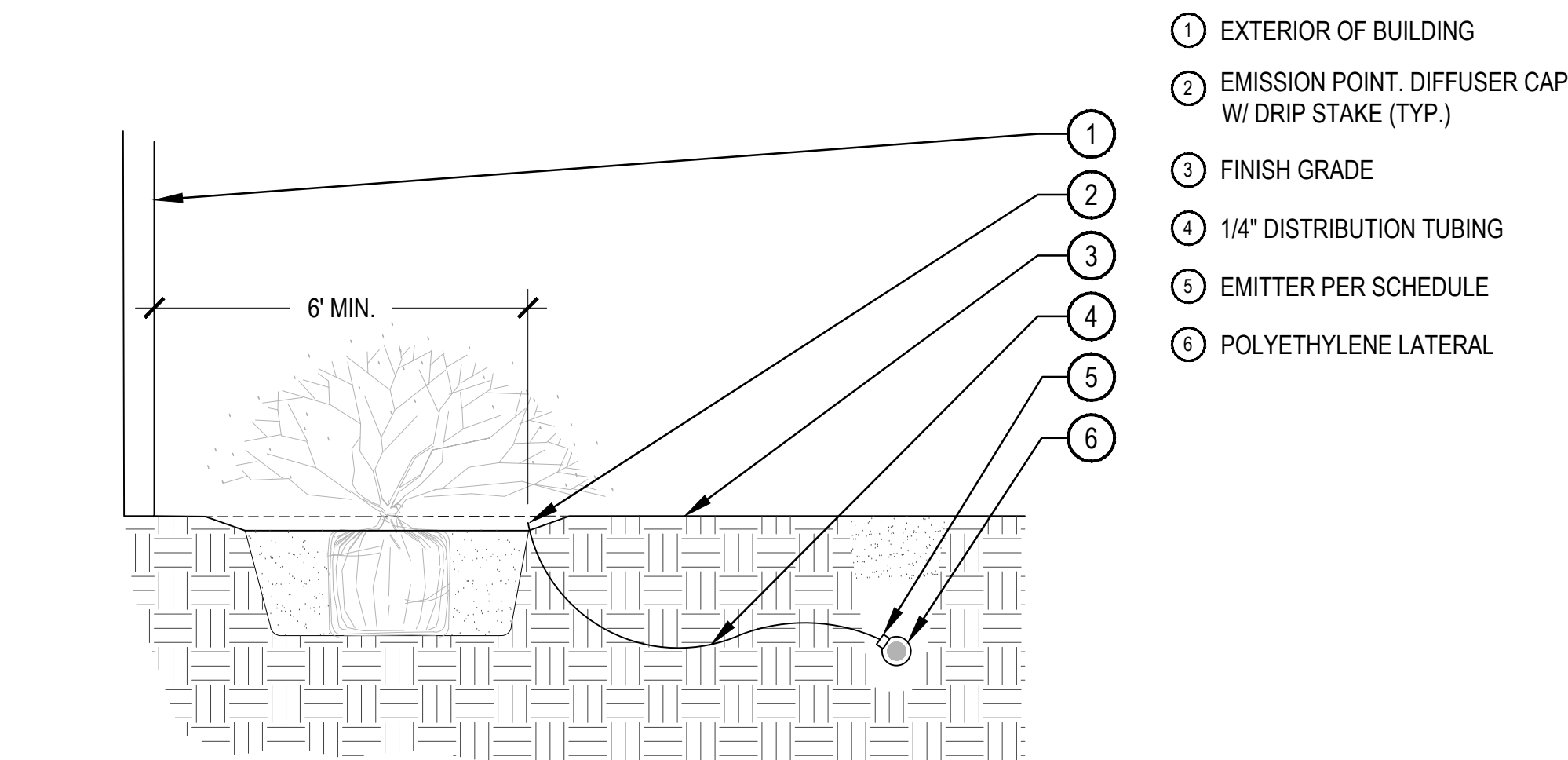
SHEET 26 OF 28

JOB NO. 19010



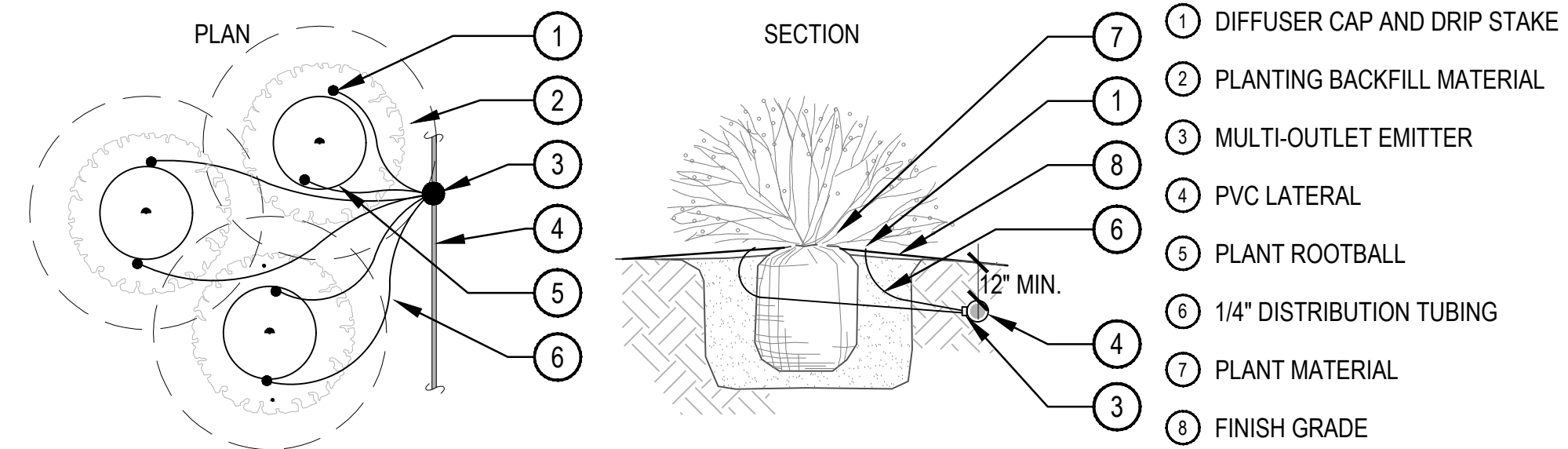
1 DRIP EMITTER

SCALE: NTS



4 EMITTER PLACEMENT NEAR BUILDING

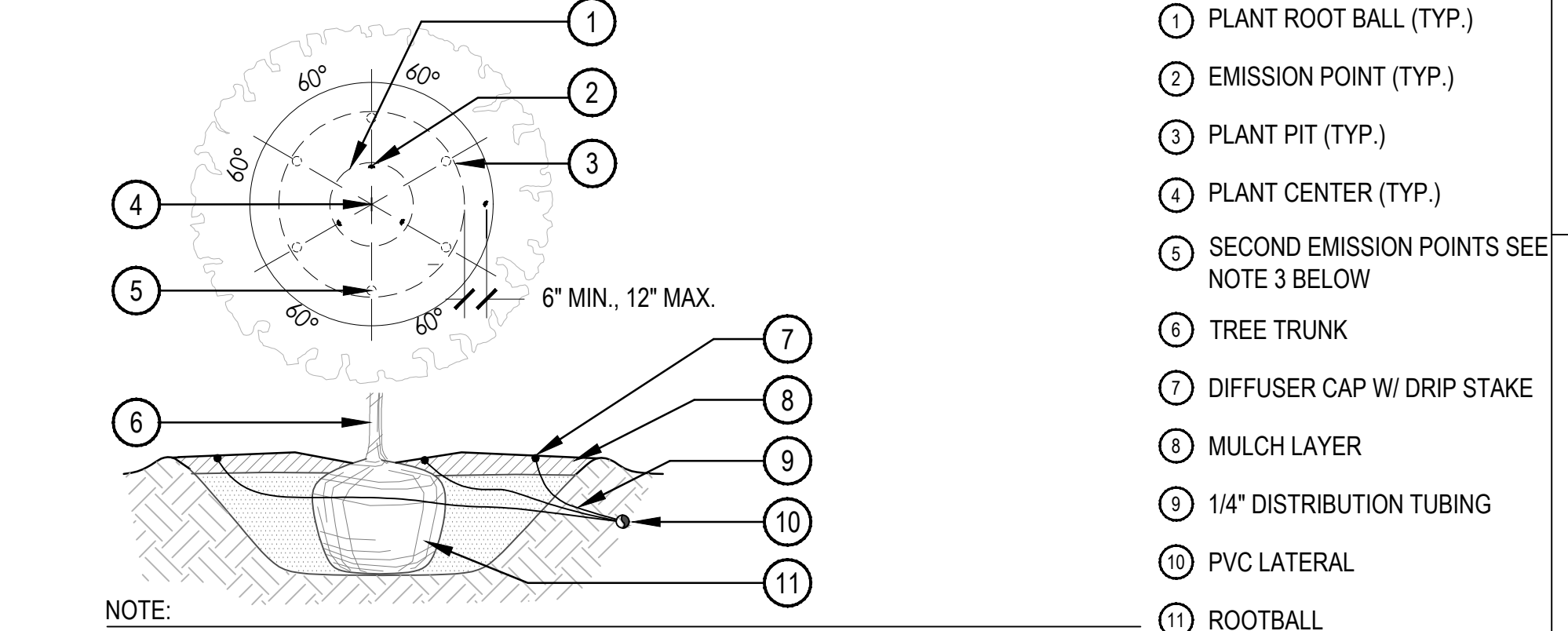
SCALE: NTS



2 SHRUB EMITTER PLACEMENT

NOTE:
1. MAXIMUM LENGTH OF ONE 1/4" DISTRIBUTION TUBE SHALL BE 8'.
2. ONE EMITTER - ON TOP OF ROOTBALL. TWO EMITTERS - SPACE ON OPPOSING SIDES OF ROOT BALL. THREE OR MORE EMITTERS - SPACE EQUALLY AROUND EDGE OF ROOTBALL.
3. FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER DISTRIBUTION TUBING PRIOR TO EMITTER INSTALLATION.
4. IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON THE UPHILL SIDE OF ROOTBALL.
5. EMITTERS SHALL BE SELF-FLUSHING PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.
6. THIS IS A WATERING GUIDE ONLY. SITE, SOIL AND PLANT CONDITIONS VARY GREATLY. CONTRACTOR MUST OBSERVE THE PLANT MATERIAL AND MAKE ADJUSTMENTS AS NECESSARY FOR PROPER PLANT WATER REQUIREMENT.

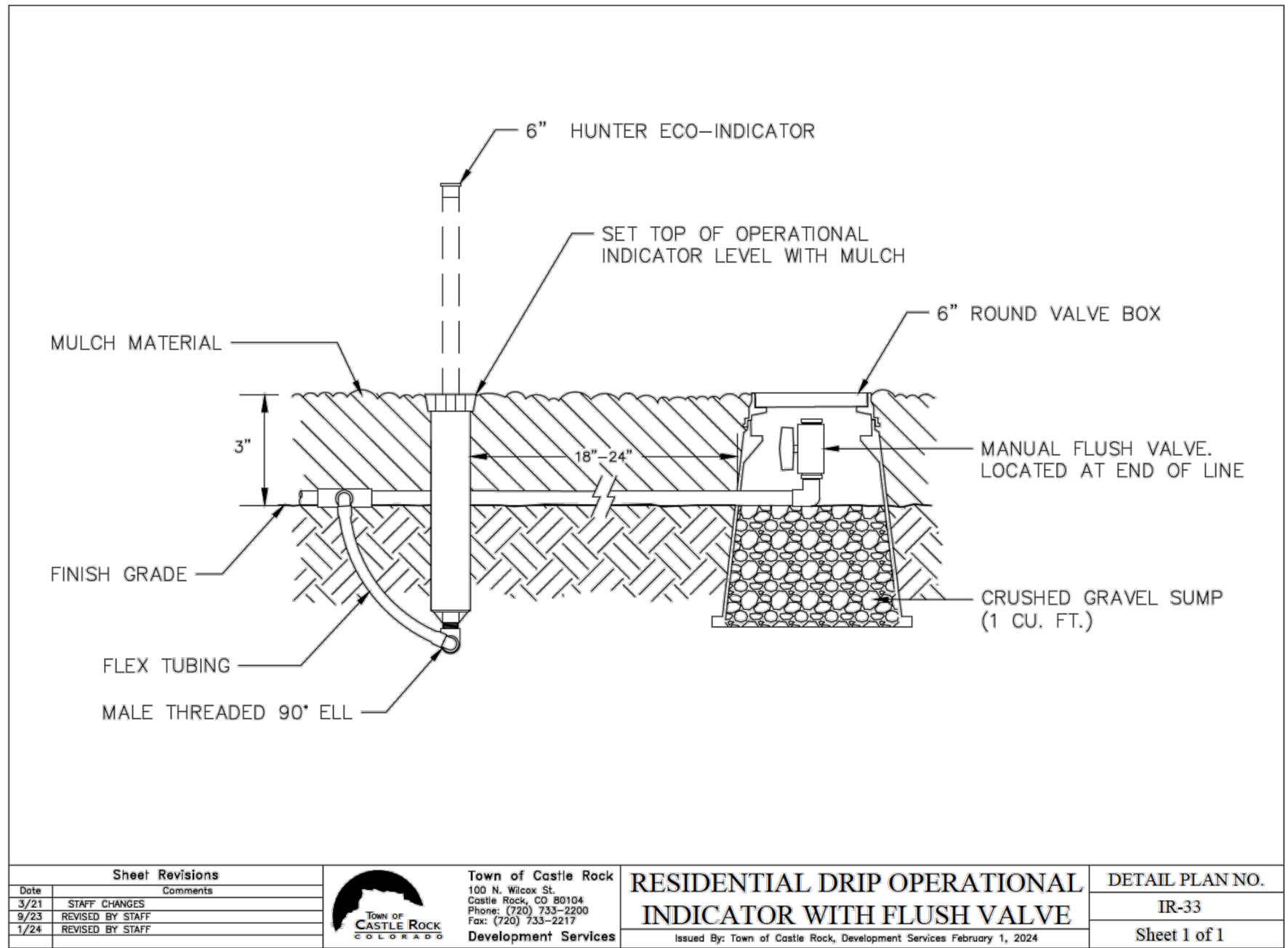
SCALE: NTS



3 TREE EMITTER PLACEMENT

NOTE:
1. MAXIMUM LENGTH OF ONE 1/4" DISTRIBUTION TUBE SHALL BE 8'.
2. ALL EMISSION POINTS SHALL BE LOCATED ON UPHILL SIDE OF PLANT MATERIAL. ONE EMISSION POINT SHALL BE DIRECTLY TO PLANT BALL AS INDICATED. ADDITIONAL EMISSION POINTS SHALL BE WITHIN PLANT PIT PERIMETER AS DIRECTED IN THE EMITTER SCHEDULE.
3. SECOND EMISSION POINTS (IF NEEDED) AS PER THE EMITTER SCHEDULE FOR TREES WITH 3" CALIPER OR GREATER OR CONIFEROUS TREES 10' OR GREATER IN HEIGHT.
4. THIS IS A WATERING GUIDE ONLY. SITE, SOIL AND PLANT CONDITIONS VARY GREATLY. CONTRACTOR MUST OBSERVE THE PLANT MATERIAL AND MAKE ADJUSTMENTS AS NECESSARY FOR PROPER PLANT WATER REQUIREMENT.

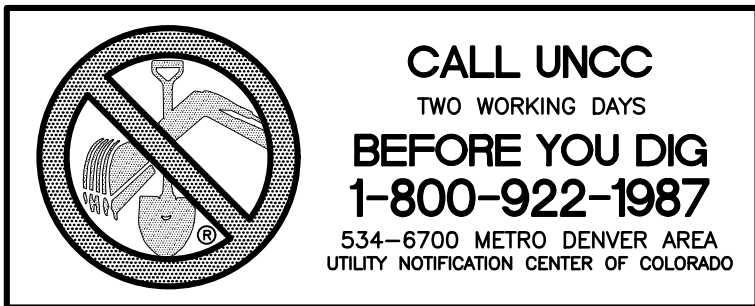
SCALE: NTS



5 FLUSH VALVE W/ OPERATIONAL INDICATOR

SCALE: NTS

TOWN APPROVAL BLOCK TOWN OF CASTLE ROCK APPROVAL PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL Approved By: _____ Date _____	
Development Services	Date



JASON NAUGHTIN TOCR #19-3239

PROJECT NO. CD26-0026

GREYSTONE VILLAS	SHEET 27		OF 28		JOB NO. 19010	
	IRRIGATION DETAILS					
	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
			2/25/21	DD, TK	TK	DD
	NO.		REVISION	ISSUED FOR CONSTRUCTION	BT	DATE
			CD18--0024			4/12/21
			CD26--0026			7/31/26
			PREPARED FOR			
			BIG ROCK CUSTOM HOMES 21558 E. OTTAWA CIRCLE AURORA, CO 80016 303-437-9281 CONTACT: HEATHER UPCHURCH			
			1101 Bannock Street Denver, Colorado 80204 P 303.892.1188 F 303.892.1186 www.norris-design.com			

LUMINAIRE SCHEDULE													
Symbol	Label	Quantity	General Description	Mounting Height	Color	Catalog Number	Lamp	LLF	Watts	Lumens	Classification	Shielding	Control
Q	SW	11	WALL SCONCE ENTRIES	SEE PLANS	BLACK	SEA GULL LIGHTING 8547901DEN3-12	LED	1.00	9.5W	800	Type 5	DARK SKY COMPLIANT	PHOTOCELL

Vist our web site at www.SeaGullLighting.com
8547901DEN3-12 - page 1 of 1



8547901DEN3-12: Small One Light Outdoor Wall
Lantern



Collection: Crowell

UPC #:785652065651

Finish: Black (12)

Dimensions:

Width: 6" Extends: 7 1/2"
Height: 10" Wire: 6" (color/Black/White)
Weight: 2.3 lbs. Mounting Proc.: Cap Nuts
Connection: Mounted To Box

Bulbs:

1 - LED Medium A19 9.5w Max. 120v - included

Features:

- ENERGY STAR® Qualified
- Dark sky friendly. Designed to emit no light above the 90° horizontal plane. Photometry unavailable.
- LED Bulbs are an efficient, versatile and durable light source that deliver exceptional performance.
- Meets Title 24 energy efficiency standards
- Title 24 compliant when used with included Joint Appendix (JAB) approved lamp.

Material List:

1 Body - Aluminum - Black

Safety Listing:

Safety Listed for Wet Locations

Instruction Sheets:

Trilingual (English, Spanish, and French) (990W8_47901-CRO)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Shade	Glass	Satin Etched	1	G560199-619			7	3 15/16				
Shade	Aluminum	White	1				7	3 3/4				

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	4 13/32	4 13/32	3/4		3 1/4	6 3/4

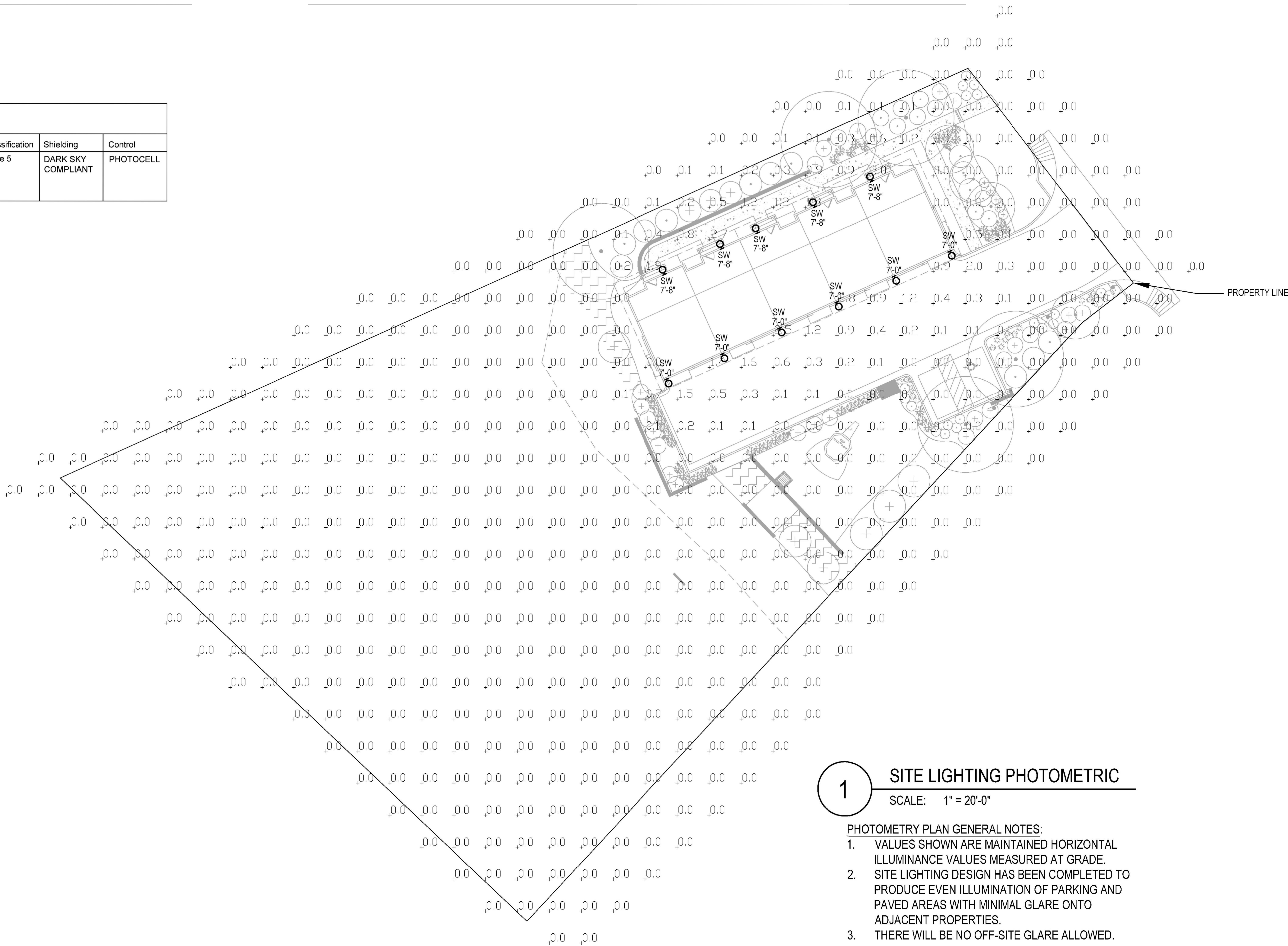
Replacement Bulb Data:

Product #	Type	Base	Watts	Watts Consumed	Volts	Hours	Lumens	Temp (°K)	CRI
97502S	Frosted	A19	Medium	9.5	9.5	120v	15000	800 230°	3000 90

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Frt. Class	UPS Ship
Individual	8547901DEN3-12	1	785652065651	13	9.25	8.25	0.574	3.1	150	Yes

See Gull Lighting reserves the right to revise the design of components of any product due to parts availability or change in safety listing standards without assuming any obligation or liability to modify any products previously manufactured and without notice. This literature depicts a product design that is the sole and exclusive property of Sea Gull Lighting. In compliance with U.S. copyright and patent requirements, notification is hereby presented in this form that this literature, or the product it depicts, is not to be copied, altered or used in any manner without the express written consent of, or contrary to the best interests of, Sea Gull Lighting, a Generation Brands Company.



1 SITE LIGHTING PHOTOMETRIC

SCALE: 1" = 20'-0"

- PHOTOMETRY PLAN GENERAL NOTES:
- VALUES SHOWN ARE MAINTAINED HORIZONTAL ILLUMINANCE VALUES MEASURED AT GRADE.
 - SITE LIGHTING DESIGN HAS BEEN COMPLETED TO PRODUCE EVEN ILLUMINATION OF PARKING AND PAVED AREAS WITH MINIMAL GLARE ONTO ADJACENT PROPERTIES.
 - THERE WILL BE NO OFF-SITE GLARE ALLOWED.

SITE LIGHTING DESIGN HAS BEEN COMPLETED TO CONFORM TO TOWN OF CASTLE ROCK EXTERIOR LIGHTING STANDARDS

TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
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DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:

DEVELOPMENT SERVICES _____ DATE _____

PREPARED FOR

BIG ROCK CUSTOM HOMES
21558 E. OTTAWA CIRCLE
AURORA, CO 80016
303-437-9281
CONTACT: HEATHER UPCHURCH

STUDIO
LIGHTNING

STUDIO LIGHTNING
63 SUNSET DR
BAILEY, CO 80421
303.242.1572

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE
1"=20'		7/17/26	JMB	JMB	JMB				

GREYSTONE VILLAS

SITE LIGHTING PHOTOMETRIC

SHEET 28 OF 28

JOB NO. 19010