

CALL UNCC
TWO WORKING DAYS
BEFORE YOU DIG
CALL 811
METRO DENVER AREA
UTILITY NOTIFICATION CENTER OF COLORADO

GENERAL NOTES

- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE TOWN OF CASTLE ROCK (TCR) MUNICIPAL CODE, TCR TECHNICAL MANUALS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE TECHNICAL MANUAL OR ANY APPLICABLE STANDARDS, THE MORE STRINGENT STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE TCR CONSTRUCTION INSPECTOR.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE.
- THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE TOWN AND ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS OF EXISTING UTILITIES DURING CONSTRUCTION AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.
- 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/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.
- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE CRITERIA AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ONSITE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
- IF DURING THE CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE TCR CONSTRUCTION INSPECTOR IMMEDIATELY.
- ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH MUTCD TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (TOWN, COUNTY OR STATE) FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR AS DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED UNLESS SPECIFICALLY NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE AND AVAILABLE TO THE TCR CONSTRUCTION INSPECTOR AT ALL TIMES.
- DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTANT ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
- ALL INITIAL SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PER THE TEMPORARY EROSION & SEDIMENT CONTROL (TESC) PLAN PRIOR TO ANY EARTH-DISTURBING ACTIVITY. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION AT ALL TIMES. REMOVAL OF CONTROL MEASURES SHALL NOT OCCUR WITHOUT THE APPROVAL OF THE STORMWATER INSPECTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKS. THE CONTRACTOR SHALL ALSO COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO CONSTRUCTION GENERAL PERMIT FOR STORMWATER DISCHARGES.
- THE CONTRACTOR SHALL PROVIDE AN ACTION PLAN IMMEDIATELY FOLLOWING THE PRE-CONSTRUCTION MEETING DETAILING SUFFICIENT MEANS TO MITIGATE DUST ON SITE DURING OVERLOT GRADING, ROCK CRUSHING OR OTHER EARTHWORK ACTIVITIES. IF THE CONTRACTOR FAILS TO CONTROL DUST, ALL EARTH DISTURBING ACTIVITIES SHALL BE STOPPED UNTIL SUFFICIENT MEASURES ARE TAKEN TO THE TOWN'S SATISFACTION. THE CONTRACTOR SHALL ALSO COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO AIR QUALITY REGULATIONS FOR LAND DEVELOPMENT, AS REQUIRED.
- THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF THE WATER LINES AND DRY UTILITIES.
- THERE SHALL BE NO SITE CONSTRUCTION ACTIVITIES ON SATURDAYS UNLESS SPECIFICALLY APPROVED BY THE TCR CONSTRUCTION INSPECTOR AND NO SITE CONSTRUCTION ACTIVITIES ON SUNDAYS OR HOLIDAYS UNLESS THERE IS PRIOR WRITTEN APPROVAL BY THE PUBLIC WORKS DIRECTOR.
- NO SOLID OBJECT (EXCLUDING FIRE HYDRANTS AND TRAFFIC CONTROL DEVICES AND TRAFFIC SIGNS) EXCEEDING THIRTY (30) INCHES IN HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET, INCLUDING BUT NOT LIMITED TO BUILDINGS, UTILITY CABINETS, WALLS, FENCES, LANDSCAPE PLANTINGS, CROPS, CUT SLOPES, AND BERMS, SHALL BE PLACED WITHIN SIGHT DISTANCE LINES AND SIGHT DISTANCE EASEMENTS.
- THIS PROPERTY IS LOCATED WITHIN ZONES AE AND X AS PER FEMA FIRM PANEL NO. 08035C0301G DATED MARCH 16, 2016. PORTIONS OF THE PROPERTY ARE LOCATED WITHIN A DESIGNATED 100-YEAR FLOODPLAIN ZONE A/AE.

STREET IMPROVEMENTS NOTE

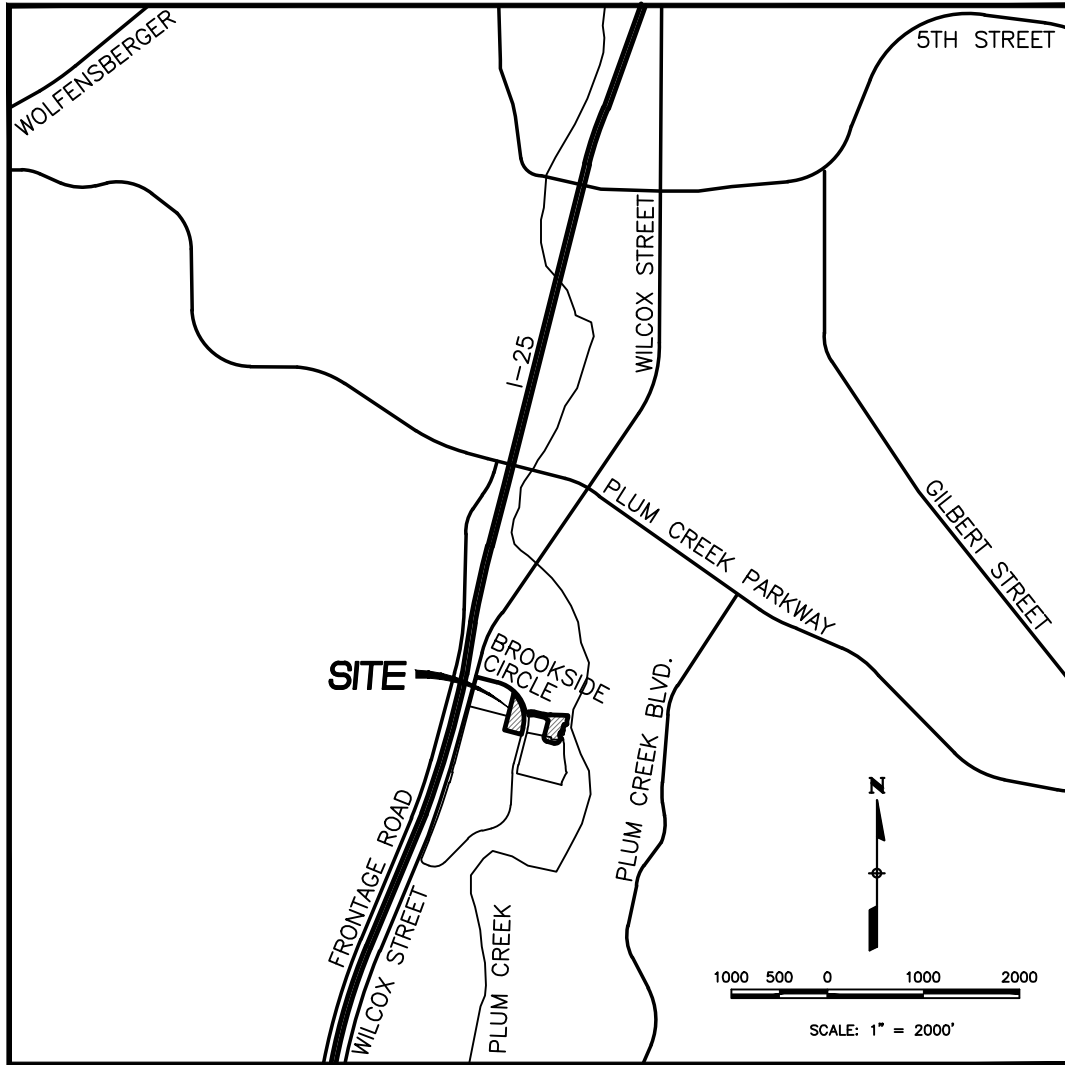
PER PROJECT AGR22-0018, THE PARTIES AGREE THAT A BUILDING PERMIT MAY BE ISSUED FOR CONSTRUCTION IN PHASE I PRIOR TO CONSTRUCTION OF THE REQUIRED PUBLIC IMPROVEMENTS TO SOUTH WILCOX STREET AND BROOKSIDE DRIVE. ALL PUBLIC IMPROVEMENTS TO SOUTH WILCOX STREET AND BROOKSIDE DRIVE MUST BE COMPLETED IN PHASE II PRIOR TO THE ISSUANCE OF ANY TCO'S OR COO'S FOR THE CONSTRUCTION COMPLETED IN PHASE I. PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS AND COMMENCEMENT OF ANY CONSTRUCTION IN PHASE II, THE PARTIES ACKNOWLEDGE THAT A TOWN COUNCIL APPROVED VACATION OF RIGHT-OF-WAY (THE "ROW VACATION") FOR BROOKSIDE CIRCLE IS REQUIRED. THE PARTIES AGREE THAT IF THE ROW VACATION IS NOT APPROVED THE DEVELOPER SHALL BE RESPONSIBLE FOR SUBMITTING REVISED CONSTRUCTION DOCUMENTS PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS FOR PHASE II. (THE ROW VACATION WAS APPROVED PER RECEPTION NUMBER 2022078582.)

PUBLIC IMPROVEMENT CONSTRUCTION PLANS

CDR+J PHASE 2

LOT 2, BLOCK 1, FIRST AMENDMENT TO BROOKSIDE BUSINESS CENTER FILING NO. 2 AND
LOTS 1 AND 2, SECOND AMENDMENT TO BROOKSIDE BUSINESS CENTER FILING NO. 4

LOCATED IN THE NW 1/4, SECTION 14, T8S, R67W, 6TH P.M.
TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS, STATE OF COLORADO
TOWN OF CASTLE ROCK PROJECT NO. CD23-0039



VICINITY MAP
SCALE: 1"=2000'

FLOODPLAIN NOTES

- A PORTION OF THIS SITE IS LOCATED WITHIN THE ZONE X AND AE FLOODWAY OF THE 100-YEAR FLOODPLAIN AS DEFINED BY THE F.E.M.A. FLOOD INSURANCE RATE MAP NUMBER 08035C0301G, DATED MARCH 16, 2016. FLOODPLAIN LIMITS ARE SHOWN HEREON.
- THIS SITE IS REQUIRED TO PROVIDE A NO RISE CERTIFICATION WITH FLOODPLAIN DEVELOPMENT PERMIT.

MOUSE NOTES

- THIS PROJECT WILL BE LOCATED WITHIN 300 FEET OF THE 100 YEAR FLOODPLAIN FOR SELLAR GULCH. THEREFORE, APPROVAL FROM THE U.S. FISH AND WILDLIFE SERVICE WILL BE REQUIRED FOR POTENTIAL DISTURBANCE OF THE PREBLE'S MEADOW JUMPING MOUSE HABITAT. PLEASE SEE THE FOLLOWING LINK FOR INFORMATION RELATED TO THE PREBLE'S MEADOW JUMPING MOUSE.
HTTP://WWW.FWS.GOV/MOUNTAIN-PRAIRIE/SPECIES/MAMMALS/PREBLE/
- NO CONSTRUCTION SHALL BE PERFORMED WITHIN PHASE 2 OF THIS DEVELOPMENT PRIOR TO ACCEPTANCE OF THE HABITAT CONSERVATION PLAN BY USFS.

NOTICE TO CONTRACTOR

- BY ACCEPTING AND UTILIZING THESE PLANS THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSON AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CIVIL ENGINEER.
- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED FROM RECORDS MADE AVAILABLE BY THE SERVICE PROVIDER. VERMILION PEAK ENGINEERING ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE LOCATION, PROTECTION OF AND ANY DAMAGE TO SAID FACILITIES.
- THE CONTRACTOR SHALL CONTACT VERMILION PEAK ENGINEERING (720-402-6070) PRIOR TO THE CONSTRUCTION OF ANY IMPROVEMENTS, IF ANY DISCREPANCY BETWEEN THE PLANS AND THE EXISTING CONDITIONS ARE DISCOVERED, OR IF ANY ERROR OR OMISSION IS DISCOVERED IN THE PLANS.

BENCHMARK

NGS BENCHMARK DESIGNATION "Y 396", PID "KK1332" BEING A STEEL ROD UNDER LOGO CAP 101 FEET EAST OF I-25 MILEPOST 180, 80.4 FEET SOUTHEAST OF THE CENTER OF A CONCRETE DRAINAGE PIPE, 42.3 FEET EAST OF THE CENTERLINE OF A FRONTAGE ROAD, 3.3 FEET SOUTH OF A UTILITY POLE. ELEVATION: 6276.49 FEET (NAVD88)

BASIS OF BEARINGS

THE NORTHWEST LINE OF LOT 1, SECOND AMENDMENT TO BROOKSIDE BUSINESS CENTER FILING NO. 2 BEARS N14°30'27"E PER SAID PLAT.

FIELD CHANGE ORDER TABLE

FCD#	APPROVAL DATE	PURPOSE/DESCRIPTION

ABBREVIATIONS

BW	SOIL SURFACE AT BASE OF WALL
C&G	CURB & GUTTER
EX	EXISTING
LOC	LIMITS OF CONSTRUCTION
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
TB	THRUST BLOCK
TOF	TOP OF FOOTING
TW	TOP OF WALL
TYP	TYPICAL

AGENCY LIST

TOWN OF CASTLE ROCK
PUBLIC WORKS DEPARTMENT
4175 CASTLETON COURT
CASTLE ROCK, CO 80109
303-660-1025

TOWN OF CASTLE ROCK
CASTLE ROCK WATER
175 KELLOGG COURT
CASTLE ROCK, CO 80109
720-733-6000

QWEST COMMUNICATIONS
LOCAL NETWORK OPERATIONS
9750 E. COSTILLA AVENUE
ENGLEWOOD, CO 80112
303-792-6090

BLACK HILLS ENERGY
1075 ATCHISON COURT
CASTLE ROCK, CO 80104
1-800-303-0752

TOWN OF CASTLE ROCK
DEVELOPMENT SERVICES
100 NORTH WILCOX STREET
CASTLE ROCK, CO 80104
720-733-2200

CORE ELECTRIC COOPERATIVE
PO DRAWER A
5496 N. US HWY. 85
SEDALIA, CO 80135
303-688-3100

COMCAST
6805 S. TUCSON WAY
ENGLEWOOD, CO 80112
303-603-5000

OWNER/DEVELOPER

FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
720-404-0347
CONTACT: DOUG KEITH

CIVIL ENGINEER

BRIAN KROMBEIN, PE, PLS
VERMILION PEAK ENGINEERING LLC
1745 SHEA CENTER DRIVE, 4TH FLOOR
HIGHLANDS RANCH, CO 80129
720-402-6070

LAND SURVEYOR

BRIAN KROMBEIN, PE, PLS
VERMILION PEAK ENGINEERING LLC
1745 SHEA CENTER DRIVE, 4TH FLOOR
HIGHLANDS RANCH, CO 80129
720-402-6070

LANDSCAPE ARCHITECT

TIM DUNN LANDSCAPE ARCHITECTURE
720-350-2411
CONTACT: TIM DUNN

VARIANCES

TCV22-0083 WATER QUALITY EXCLUSION APPROVED 2/16/23
STORM DRAINAGE DESIGN CRITERIA MANUAL SECTION 13.1.5

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IDEMNIFICATION AND ADHERENCE TO STANDARDS STATEMENT

THESE PLANS HAVE BEEN REVIEWED BY THE TOWN OF CASTLE ROCK FOR CONCEPT ONLY. THE REVIEW DOES NOT IMPLY RESPONSIBILITY BY THE REVIEWING DEPARTMENT, THE TOWN ENGINEER, OR THE TOWN OF CASTLE ROCK FOR ACCURACY AND CORRECTNESS OF THE CALCULATIONS. FURTHERMORE, THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE TOWN FOR ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF CASTLE ROCK MUNICIPAL CODE, TECHNICAL MANUALS AND/OR OTHER TOWN-APPROVED APPLICABLE STANDARDS.

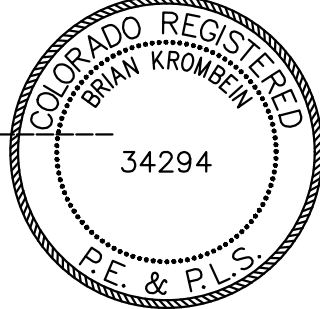
PROFESSIONAL ENGINEER CERTIFICATION

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

2/22/23

DATE



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

PROJECT NO. CD23-0039

PREPARED FOR

FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH



Civil Engineering & Land Surveying
1740 Shea Center Drive 4th Floor, Highlands Ranch, CO 80129
720-402-6070 / www.vermilionpeak.com

DATE	BY	REVISION	No.

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		2/22/24	BK	BK	

CDR+J PHASE 2

COVER SHEET

SHEET C1 OF 27

JOB NO. 21007

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 GROUNDIED AT ALL DEAD ENDS (MANHOLES, INLETS, OUTFALLS, FUTURE CONNECTIONS, ETC.) USING A MAGNESIUM GROUND ROD. THE GROUND ROD WILL BE CONNECTED TO 14- 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 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, CL350 (6"-12"), CL250 (16" AND 20"), CL200 (>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 V). 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 CENTURIUM 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 C600-5.2; 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 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 (DCCA) IS THE ONLY BACK FLOW PREVENTION DEVICE RATED FOR HORIZONTAL OR VERTICAL INSTALLATION.

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

PROJECT NO. CD23--0039

UNTIL SUCH TIME AS THESE
DRAWINGS ARE APPROVED
BY THE APPROPRIATE
PERMITS DEPARTMENT.
REVISIONS WILL BE
ENGINEERING APPROVES
THEIR USE ONLY FOR THE
PURPOSES DESIGNATED BY
WRITTEN AUTHORIZATION.

PREPARED FOR
FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH



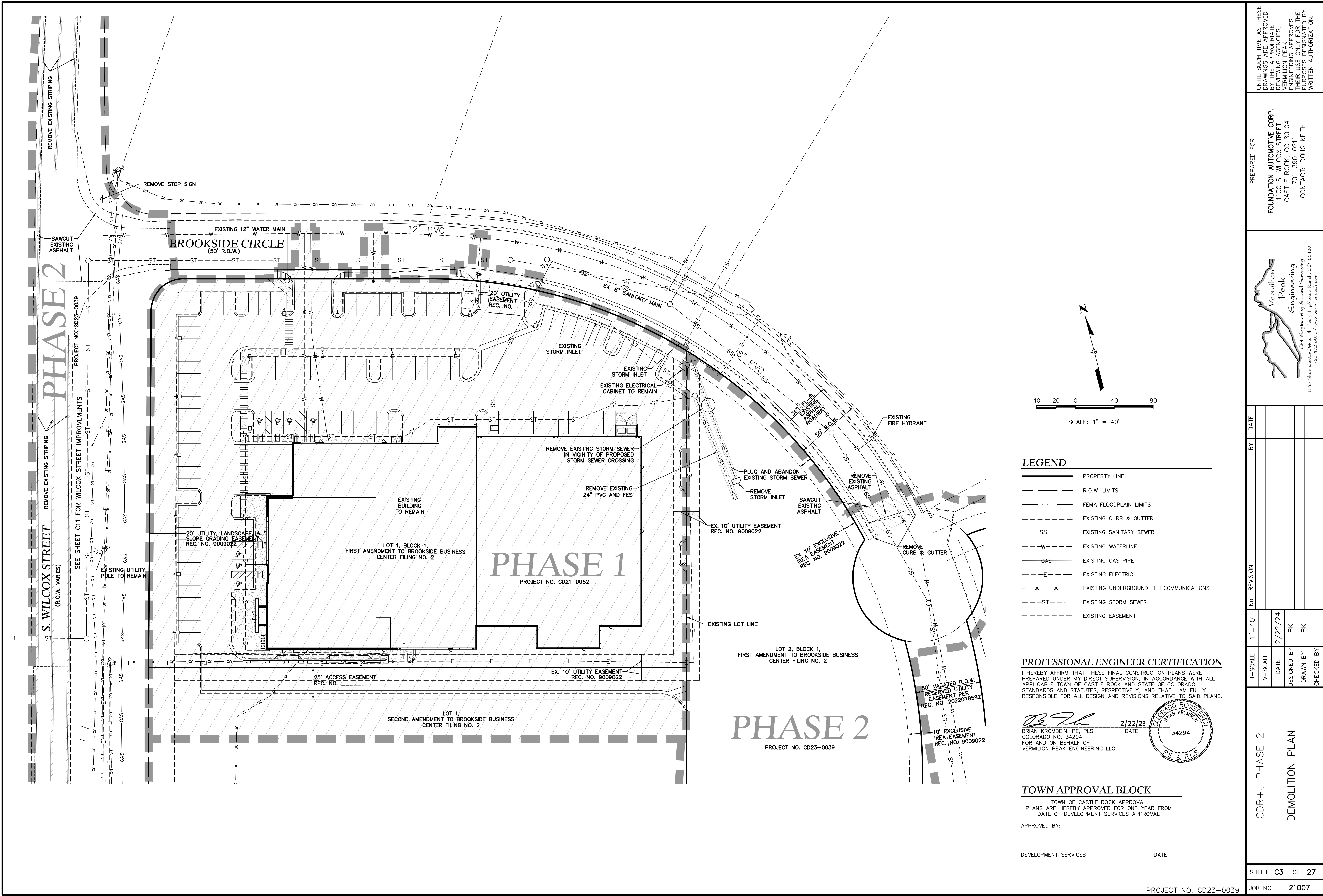
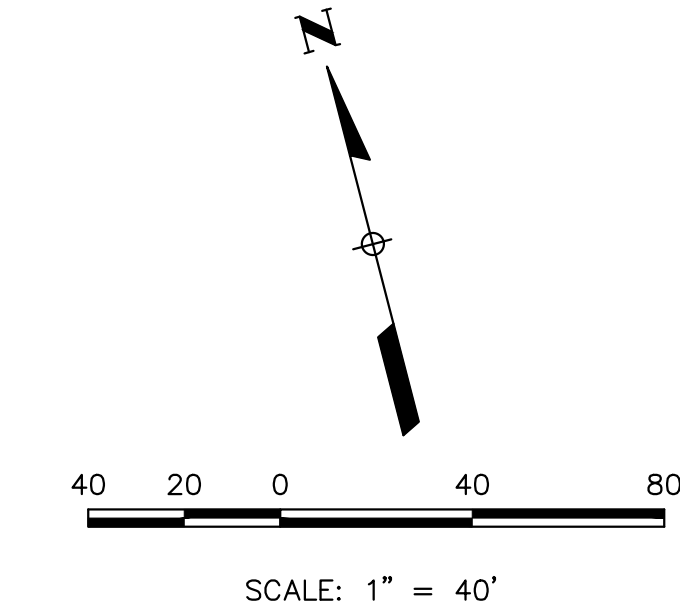
Vermilion
Peak
Engineering
Civil Engineering & Land Surveying
720-482-6070 / www.vermilionpeak.com

No.	REVISION	BY	DATE

CDR+J PHASE 2

STANDARD NOTES

SHEET	C2	OF	27
JOB NO.	19010		

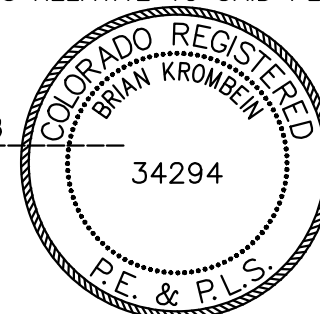


LEGEND			
	PROPERTY LINE		
	R.O.W. LIMITS		
	FEMA FLOODPLAIN LIMITS		
	EXISTING CURB & GUTTER		
	EXISTING SANITARY SEWER		
	EXISTING WATERLINE		
	EXISTING GAS PIPE		
	EXISTING ELECTRIC		
	EXISTING UNDERGROUND TELECOMMUNICATIONS		
	EXISTING STORM SEWER		
	EXISTING EASEMENT		

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

2/22/23
DATE



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 _____

UNTIL SUCH TIME AS THESE
DRAWINGS ARE APPROVED
BY THE APPROPRIATE
TOWN OF CASTLE ROCK
VERMILION PEAK
ENGINEERING APPROVES
THEIR USE ONLY FOR THE
PURPOSES DESIGNATED BY
WRITTEN AUTHORIZATION.

PREPARED FOR
FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH



BY		DATE	
No.	REVISION	1"=40'	
H-SCALE	V-SCALE	DATE	DESIGNED BY
		2/22/24	BK
		DRAWN BY	BK
		CHECKED BY	

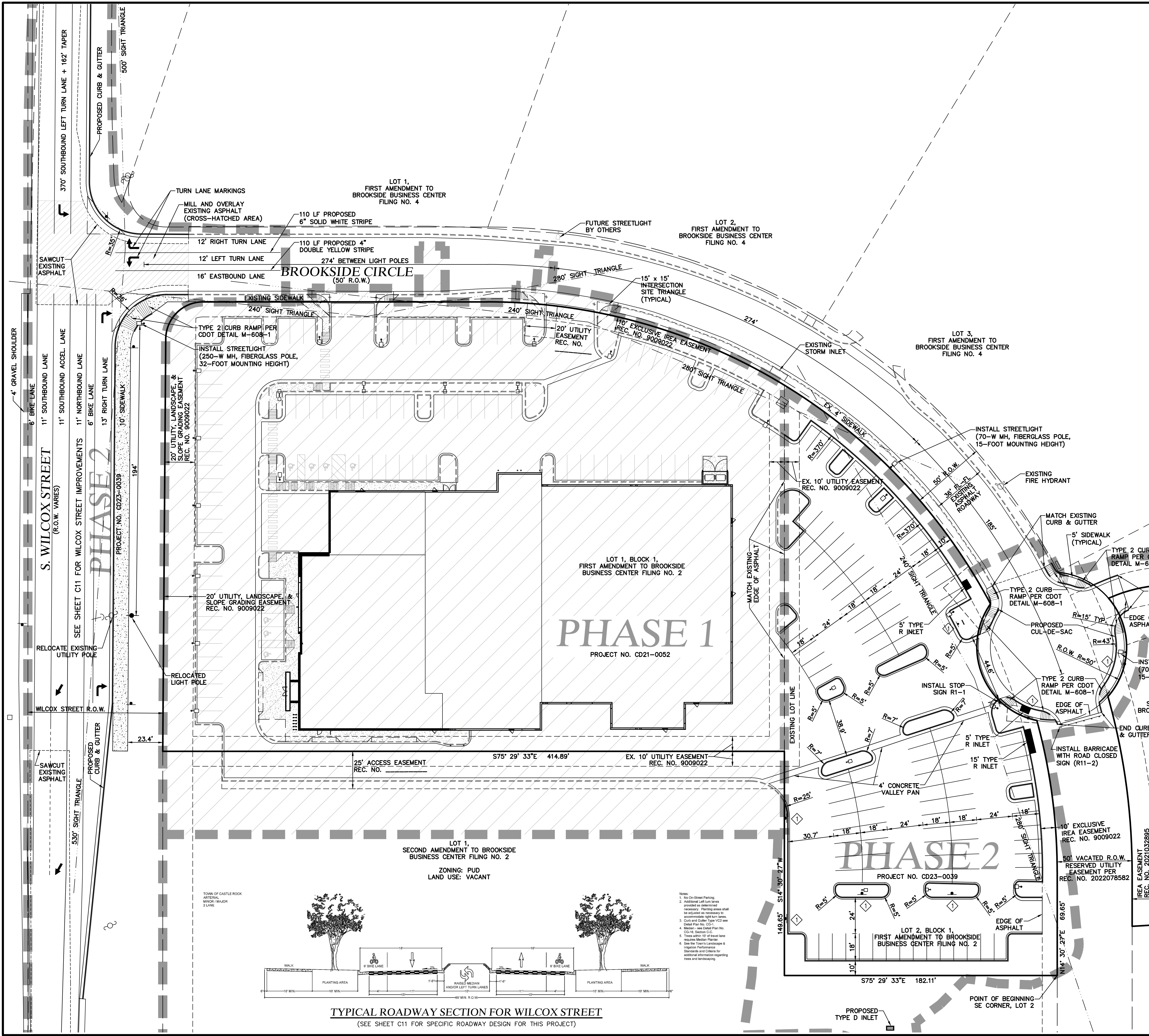
CDR+J PHASE 2

DEMOLITION PLAN

SHEET **C3** OF **27**

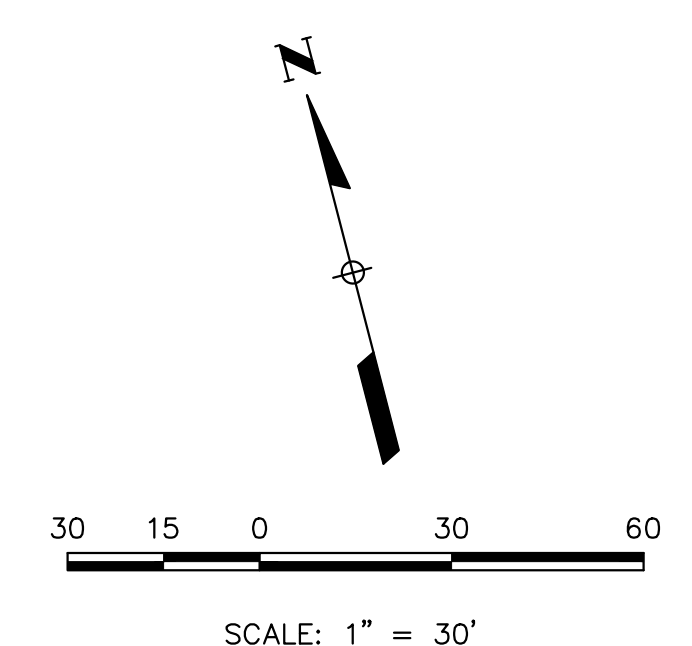
JOB NO. **21007**

PROJECT NO. CD23-0039



- LEGEND**
- PROPERTY LINE
 - EXISTING CURB & GUTTER
 - PROPOSED 2' CATCH CURB & GUTTER
 - PROPOSED 1' SPILL CURB & GUTTER
 - EXISTING LOT LINE
 - EXISTING EASEMENT
 - PROPOSED EASEMENT
 - SIGHT DISTANCE LINE
 - INTERSECTION SAFETY SIGHT TRIANGLE
 - CONCRETE PAVEMENT
 - EXISTING UTILITY POLE
 - PROPOSED LIGHT POLE
 - NO PARKING - FIRE LANE SIGN

- NOTES**
- TRUNCATED DOMES IN CURB RAMPS TO BE CAST IRON "PATINA" FINISH.
 - CURB RETURN RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
 - ADDITIONAL MILLING ON S. WILCOX MAY BE REQUIRED TO MAINTAIN CROWN OF ROAD AT CENTERLINE.
 - FIRE LANE SIGNAGE REQUIREMENTS:
 - AT A HEIGHT OF AT LEAST 7'
 - MOUNTED AT A 30 TO 40 DEGREE ANGLE SO THAT THE SIGNS ARE VISIBLE WHEN ATTEMPTING TO PARK
 - A SIGN NEEDS TO BE INSTALLED AT THE ENDS OF EACH NO PARKING ZONE WITH ARROWS POINTING IN THE DIRECTION OF THE ZONE
 - ADEQUATE SIGNAGE NEEDS TO BE INSTALLED TO PROVIDE DRIVERS WITH REASONABLE IDENTIFICATION OF THE FIRE LANE.
 - FIRE LANE NO PARKING CURB MARKING REQUIREMENTS:
 - ALL DESIGNATED LANES SHALL BE ACCOMPANIED WITH CURB MARKINGS IN A WEATHER-RESISTANT RED PAINT. REFLECTIVE PAINT MAY BE USED FOR HIGHER VISIBILITY.
 - CURBING SHALL BE LABELED, "NO PARKING - FIRE LANE" IN ALL UPPER-CASE LETTERS
 - LETTERING SHALL BE NO LESS THAN THREE (3") INCHES HIGH WITH WHITE LETTERING ON A RED BACKGROUND AND PLACED ON THE FACE AND TOP OF THE CURB.
 - LETTERING SHALL BE LOCATED NO MORE THAN FIFTY FEET (50') APART AND WITHIN FIVE FEET (5') OF THE BEGINNING AND END OF ANY FIRE LANE.



PROFESSIONAL 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 2/22/23 DATE
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
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY: _____ DATE _____
DEVELOPMENT SERVICES

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

PREPARED FOR
FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH

VERMILION
Peak
Engineering
Civil Engineering & Land Surveying
1745 Shenandoah Drive 4th Floor Highlands Ranch, CO 80129
720-402-6070 / www.vermilionpeak.com

No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=30'	2/22/24		BK	BK	

CDR+J PHASE 2

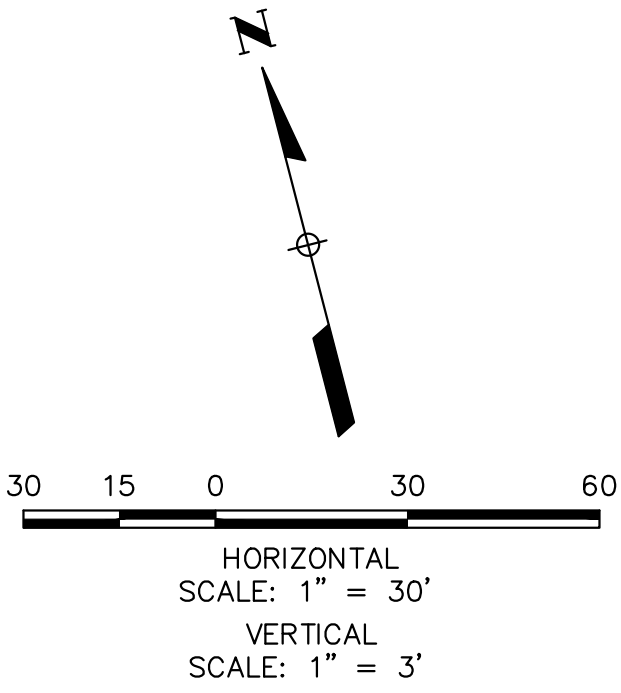
OVERALL SITE PLAN / SIGNAGE,
STRIPING AND LIGHTING PLAN

SHEET **C4** OF **27**

JOB NO. **21007**

PROJECT NO. CD23-0039

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Profile view diagram showing existing and proposed grades at flowline. The diagram includes stationing from 0+00.00 to 0+95.67, elevations, and grades of 3.28% and -5.01%.

Station	Existing Grade at Flowline (ELEV)	Proposed Grade at Flowline (ELEV)
0+00.00	6255.47	6254.62
0+15.80	6254.95	-
0+25.00	-	6254.01
0+30.80	6254.46	-
0+45.80	6253.71	-
0+79.70	-	6252.01
0+95.67	6251.21	-

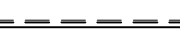
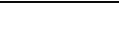
Grades: 3.28% (from STA 0+00.00 to 0+25.00), -5.01% (from STA 0+25.00 to 0+95.67).

Labels: EXISTING GRADE AT FLOWLINE, PROPOSED GRADE AT FLOWLINE, MATCH EX. C&G.

CURB RETURN PROFILE

(SOUTHEAST CORNER OF WILCOX & BROOKSIDE)

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 |
|  | PROPOSED EASEMENT |
|  | ACCESSIBLE ROUTE |
|  | MAINTENANCE ACCESS PATH |
|  | PROPOSED RIP-RAP |

EARTHWORK QUANTITIES

TOTAL USABLE CUT MATERIAL = 10,965 CY
EXCESS USABLE CUT = 7,202 CY

TOTAL REQUIRED FILL MATERIAL = 3,763 CY
IMPORT REQUIRED = 0 CY

BENCHMARK

NGS BENCHMARK DESIGNATION "Y 396", PID "KK1332" BEING A STEEL ROD UNDER LOGO CAP 101 FEET EAST OF 1-25 MILEPOST 180, 80.4 FEET SOUTHEAST OF THE CENTER OF A CONCRETE DRAINAGE PIPE, 42.3 FEET EAST OF THE CENTERLINE OF A FRONTAGE ROAD, 3.3 FEET SOUTH OF A UTILITY POLE. ELEVATION: 6276.49 FEET (NAVD88)

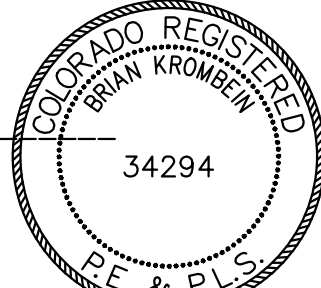
NOTES

1. RETAINING WALLS GREATER THAN 4 FEET REQUIRE A SEPARATE BUILDING PERMIT.
2. EXISTING VALVE BOXES, MANHOLE RIMS, DRAINAGE STRUCTURES, UTILITY ACCESS STRUCTURES, VAULT LIDS, ETC., SHALL BE BROUGHT TO THE FINISHED SURFACE AT THE TIME OF PAVEMENT PLACEMENT IN ACCORDANCE WITH TOWN STANDARD DETAILS.

PROFESSIONAL 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, 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:

DEVELOPMENT SERVICES

DATE _____

PROJECT NO. CD23-0039

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

FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH



Civil Engineering & Land Surveying
1745 Shea Center Drive, 4th Floor, Highlands Ranch, CO 80129
790.409.6070 / info@smallworld.com

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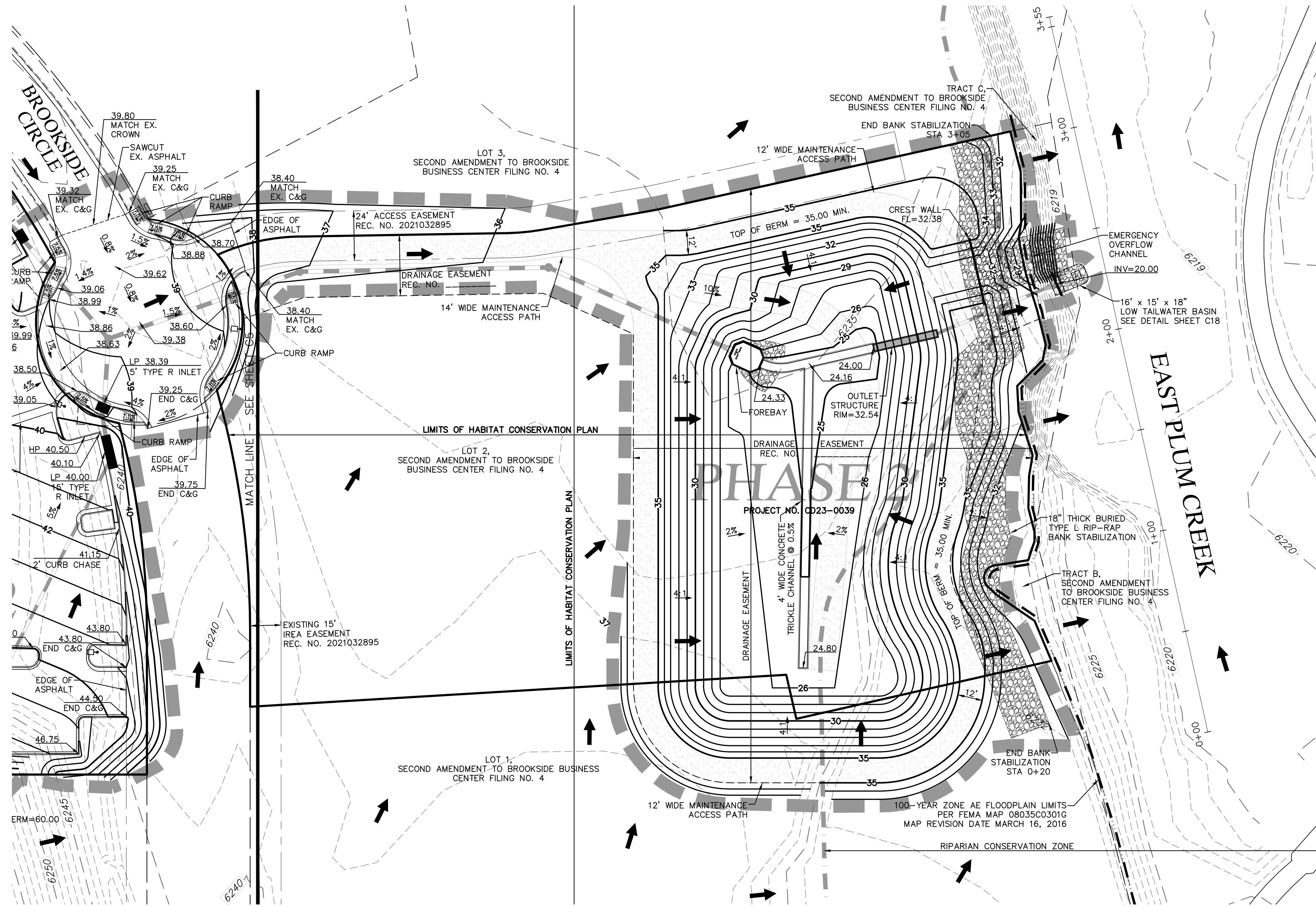
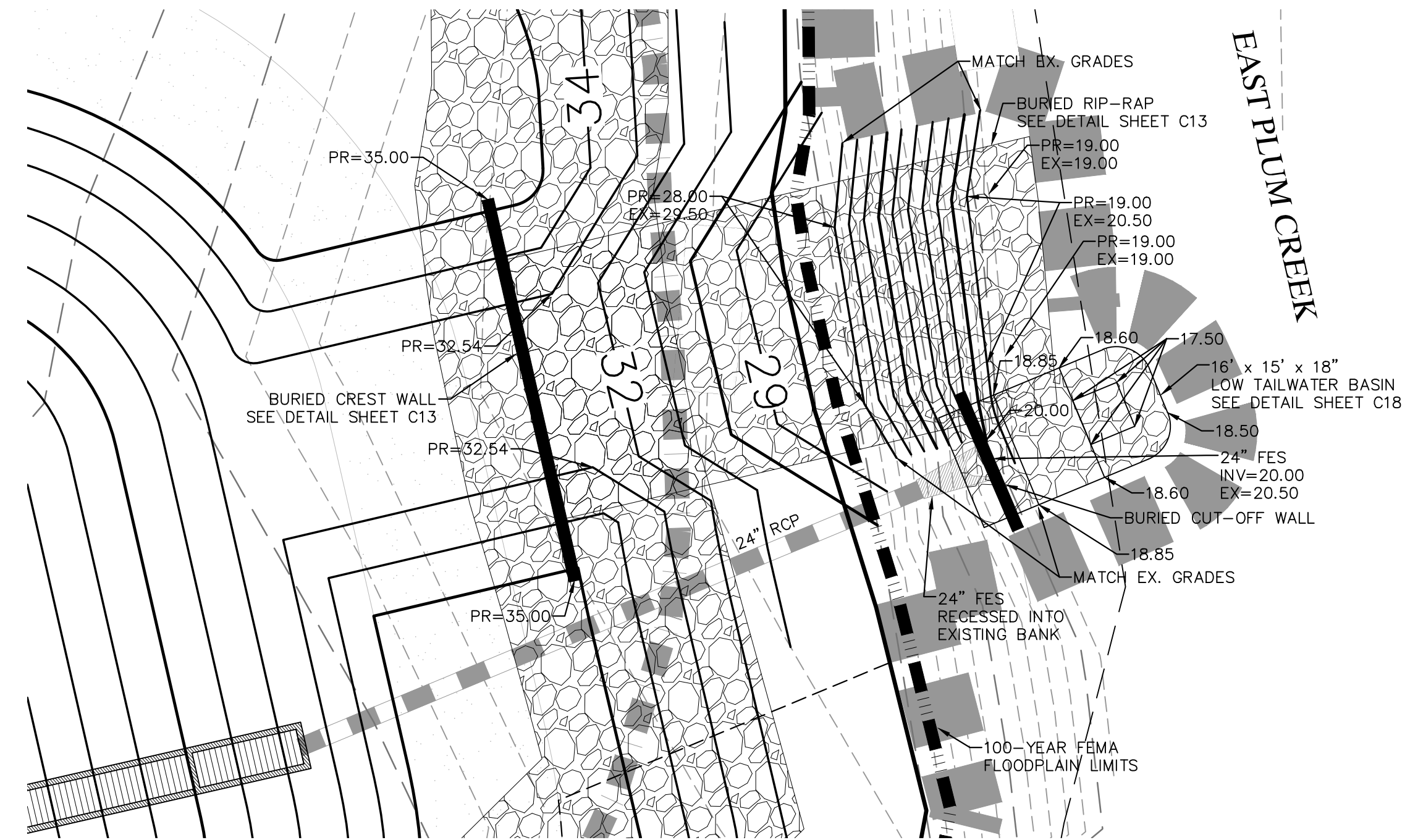
H-SCALE	1" = 30'
V-SCALE	
DATE	2/22/24
DESIGNED BY	BK
DRAWN BY	BK
CHECKED BY	

CDR+J PHASE 2

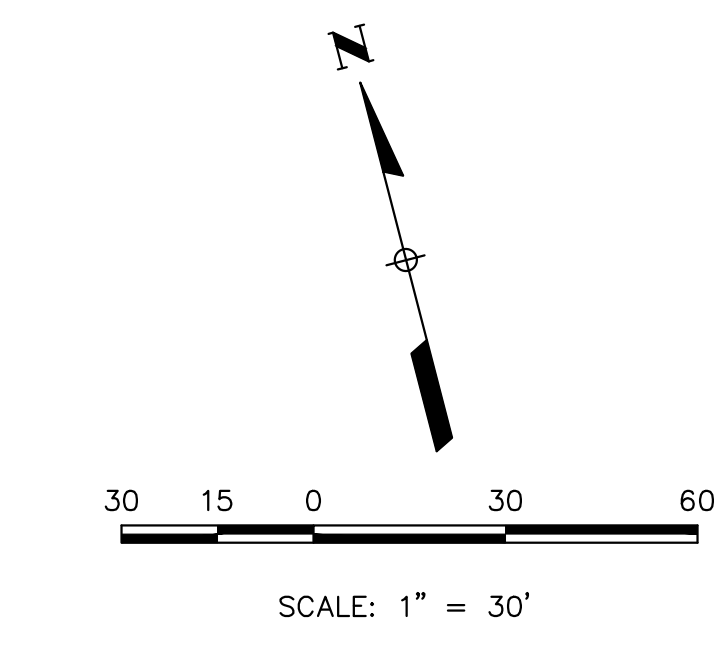
FINAL GRADING PLAN

SHEET C5 OF 27

JOB NO. 21007



EMERGENCY OVERFLOW CHANNEL BLOW-UP
SCALE: 1"=10'



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
- PROPOSED EASEMENT
- ACCESSIBLE ROUTE
- LIMITS OF RIPARIAN ZONE
- MAINTENANCE ACCESS PATH
- PROPOSED RIP-RAP
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION

BENCHMARK

NGS BENCHMARK DESIGNATION "Y 396", PID "KK1332" BEING A STEEL ROD UNDER LOGO CAP 101 FEET EAST OF 1-25 MILEPOST 180, 80.4 FEET SOUTHEAST OF THE CENTER OF A CONCRETE DRAINAGE PIPE, 42.3 FEET EAST OF THE CENTERLINE OF A FRONTAGE ROAD, 3.3 FEET SOUTH OF A UTILITY POLE. ELEVATION: 6276.49 FEET (NAVD88)

NOTES

- RETAINING WALLS GREATER THAN 4 FEET REQUIRE A SEPARATE BUILDING PERMIT.
- ABSOLUTELY NO FILL MAY BE PLACED WITHIN THE 100-YEAR FLOODPLAIN FOR EAST PLUM CREEK. PROPOSED GRADES AND IMPROVEMENTS LOCATED IN THE FLOODPLAIN MUST BE EQUAL TO OR LOWER IN ELEVATION THAN THE EXISTING GRADES AT ALL LOCATIONS.

PROFESSIONAL ENGINEER CERTIFICATION

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Brian Krombein
BRIAN KROMBEIN, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
VERMILION PEAK ENGINEERING LLC
DATE 2/22/23



TOWN APPROVAL BLOCK

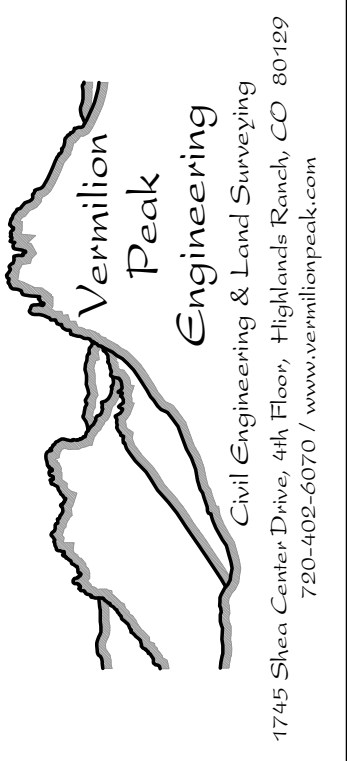
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

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DEVELOPMENT SERVICES DATE

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DRAWINGS ARE APPROVED
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VERMILION PEAK
ENGINEERING APPROVES
THEIR USE ONLY FOR THE
PURPOSES DESIGNED BY
WRITTEN AUTHORIZATION.

PREPARED FOR
FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH



NO.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=30'	2/22/24	BK	BK		

CDR+J PHASE 2	FINAL GRADING PLAN
SHEET C6	OF 27
JOB NO.	21007

RIPRAP DESIGNATION	% SMALLER THAN GIVEN SIZE BY WEIGHT	INTERMEDIATE ROCK DIMENSION (INCHES)	D ₅₀ * (INCHES)
TYPE VL	70 - 100 50 - 70 35 - 50 2 - 10	12 9 6 2	6
TYPE L	70 - 100 50 - 70 35 - 50 2 - 10	15 12 9 3	9
TYPE M	70 - 100 50 - 70 35 - 50 2 - 10	21 18 12 4	12
TYPE H	70 - 100 50 - 70 35 - 50 2 - 10	30 24 18 6	18

*D₅₀ = MEAN ROCK SIZE

Figure 8-34. Riprap and soil riprap placement and gradation (part 1 of 3)

SOIL RIPRAP NOTES:

- ELEVATION TOLERANCES FOR THE SOIL RIPRAP SHALL BE 0.10 FEET. THICKNESS OF SOIL RIPRAP SHALL BE NO LESS THAN THICKNESS SHOWN AND NO MORE THAN 2-INCHES GREATER THAN THE THICKNESS SHOWN.
- WHERE "SOIL RIPRAP" IS DESIGNATED ON THE CONTRACT DRAWINGS, RIPRAP VOIDS ARE TO BE FILLED WITH NATIVE SOIL. THE RIPRAP SHALL BE PRE-MIXED WITH THE NATIVE SOIL AT THE FOLLOWING PROPORTIONS BY VOLUME: 65PERCENT RIPRAP AND 35 PERCENT SOIL. THE SOIL USED FOR MIXING SHALL BE NATIVE TOPSOIL AND SHALL HAVE A MINIMUM FINES CONTENT OF 15 PERCENT. THE SOIL RIPRAP SHALL BE INSTALLED IN A MANNER THAT RESULTS IN A DENSE, INTERLOCKED LAYER OF RIPRAP WITH RIPRAP VOIDS FILLED COMPLETELY WITH SOIL. SEGREGATION OF MATERIALS SHALL BE AVOIDED AND IN NO CASE SHALL THE COMBINED MATERIAL CONSIST PRIMARILY OF SOIL. THE DENSITY AND INTERLOCKING NATURE OF RIPRAP IN THE MIXED MATERIAL SHALL ESSENTIALLY BE THE SAME AS IF THE RIPRAP WAS PLACED WITHOUT SOIL.
- WHERE SPECIFIED (TYPICALLY AS "BURIED SOIL RIPRAP"), A SURFACE LAYER OF TOPSOIL SHALL BE PLACED OVER THE SOIL RIPRAP ACCORDING TO THE THICKNESS SPECIFIED ON THE CONTRACT DRAWINGS. THE TOPSOIL SURFACE LAYER SHALL BE COMPACTED TO APPROXIMATELY 85% OF MAXIMUM DENSITY AND WITHIN TWO PERCENTAGE POINTS OF OPTIMUM MOISTURE IN ACCORDANCE WITH ASTM D698. TOPSOIL SHALL BE ADDED TO ANY AREAS THAT SETTLE.
- ALL SOIL RIPRAP THAT IS BURIED WITH TOPSOIL SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ANY TOPSOIL PLACEMENT.

GRADATION FOR GRANULAR BEDDING		
U.S. STANDARD SIEVE SIZE	PERCENT PASSING BY WEIGHT	
	TYPE I CDOT SECT. 703.01	TYPE II CDOT SECT. 703.09 CLASS A
3 INCHES	—	90 - 100
1½ INCHES	—	—
¾ INCHES	—	20 - 90
½ INCHES	100	—
#4	95 - 100	0 - 20
#16	45 - 80	—
#50	10 - 30	—
#100	2 - 10	—
#200	0 - 2	0 - 3

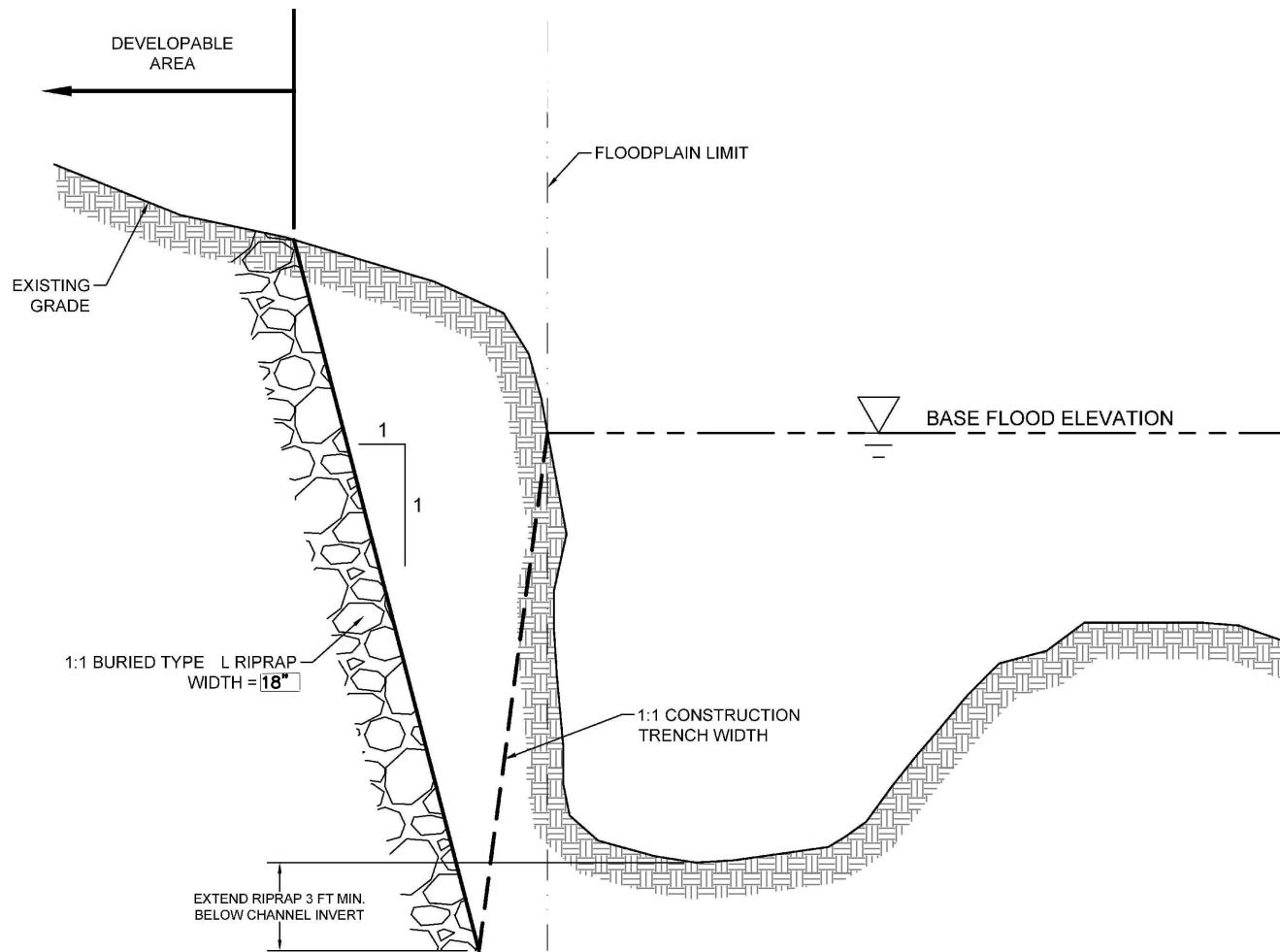
RIPRAP BEDDING

Figure 8-34. Riprap and soil riprap placement and gradation (part 2 of 3)

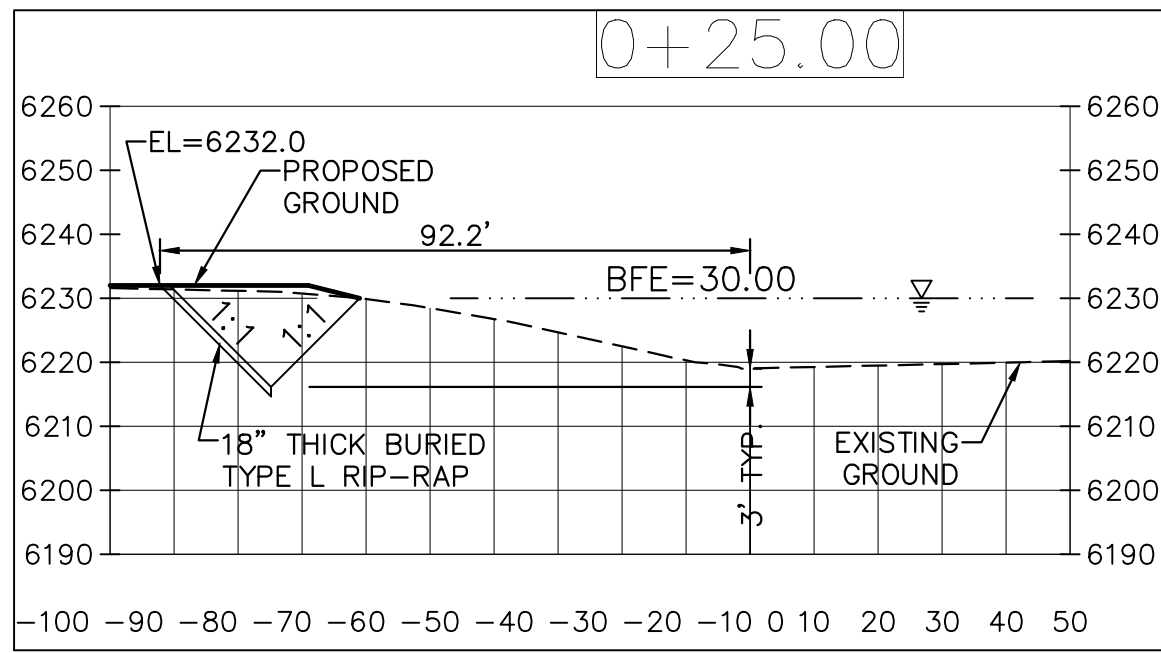
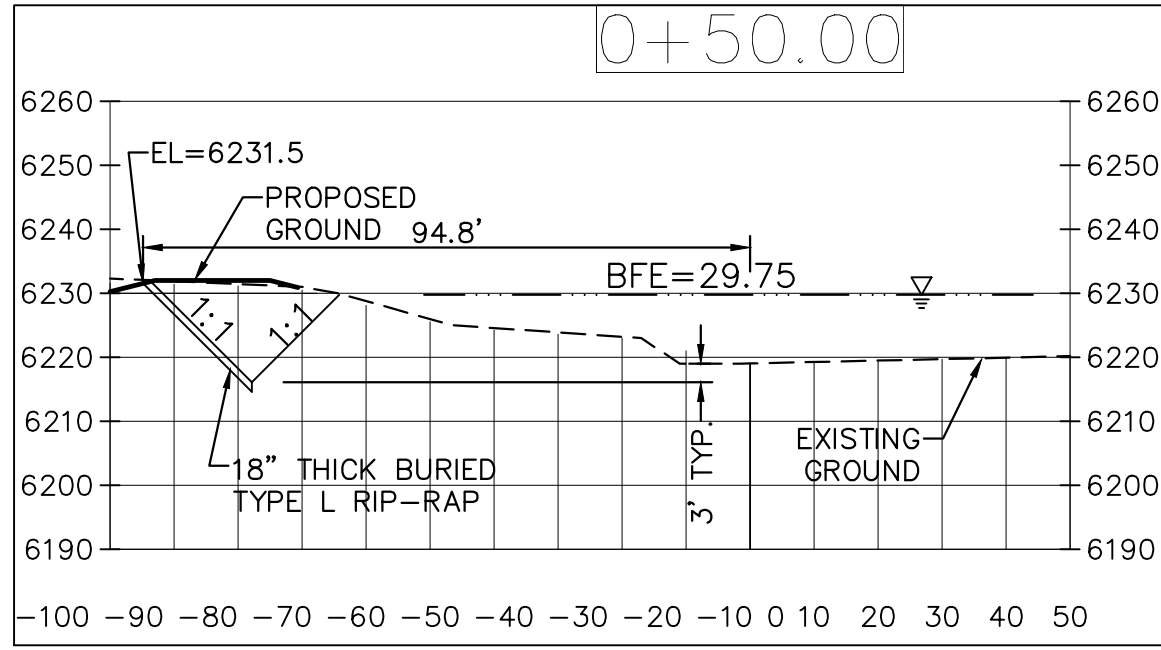
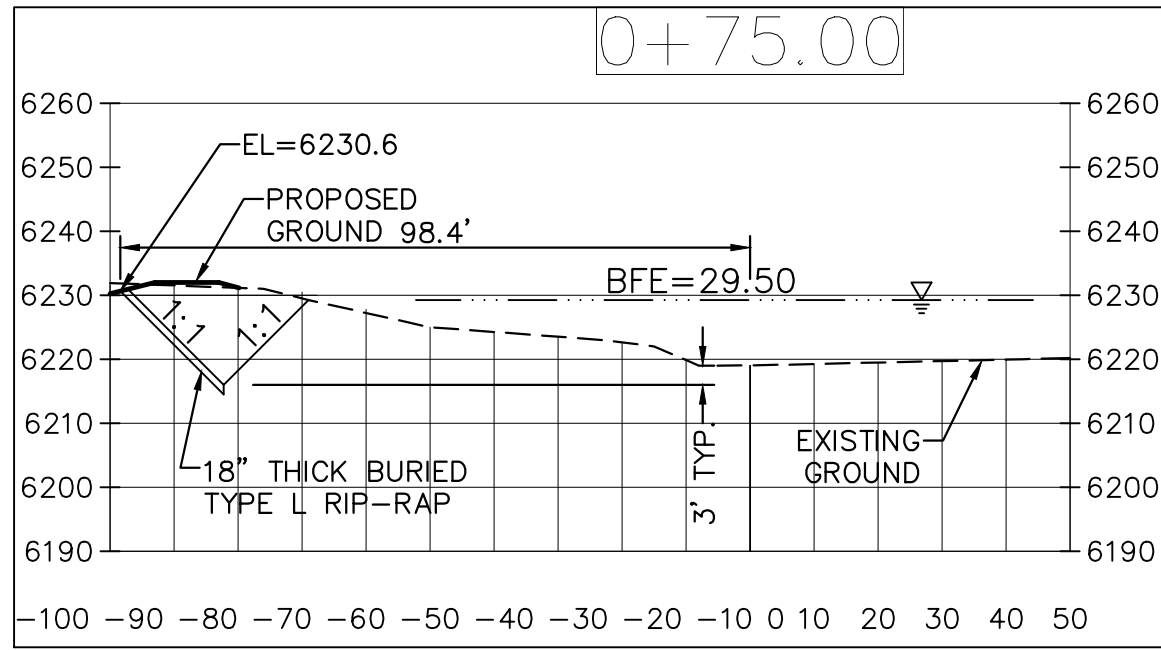
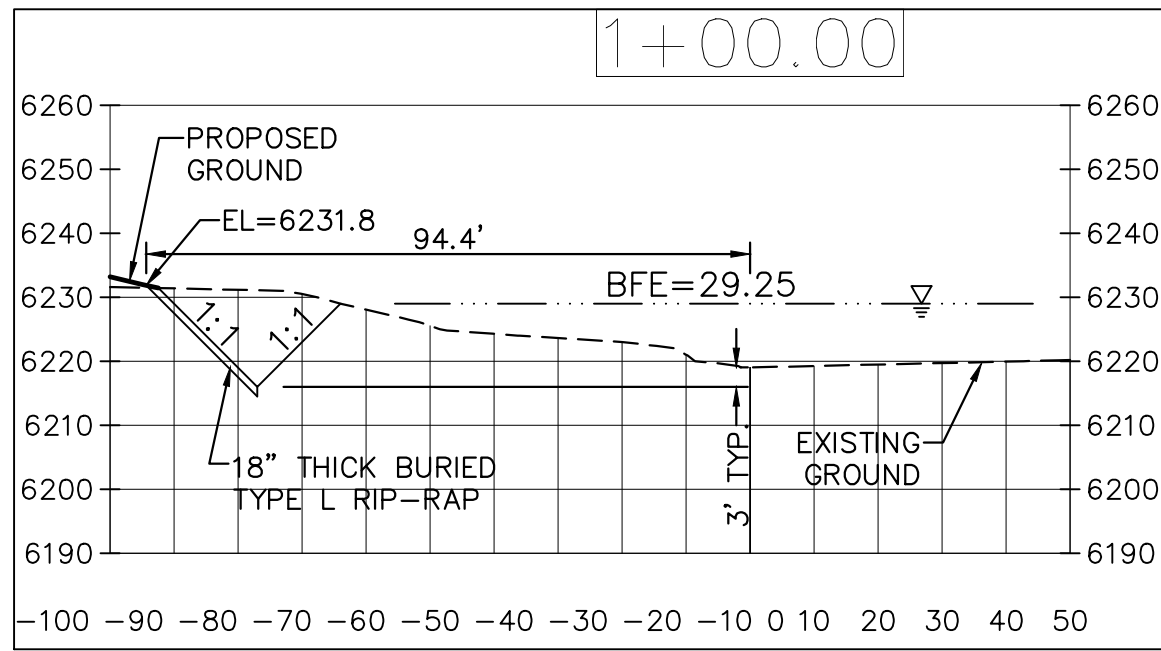
THICKNESS REQUIREMENTS FOR GRANULAR BEDDING			
RIPRAP DESIGNATION	MINIMUM BEDDING THICKNESS (INCHES)		
	FINE-GRAINED SOILS ¹		COARSE-GRAINED SOILS ²
	TYPE I (LOWER LAYER)	TYPE II (UPPER LAYER)	TYPE II
VL (D ₅₀ = 6 IN)	4	4	6
L (D ₅₀ = 9 IN)	4	4	6
M (D ₅₀ = 12 IN)	4	4	6
H (D ₅₀ = 18 IN)	4	6	8
VH (D ₅₀ = 24 IN)	4	6	8

- NOTES:
- MAY SUBSTITUTE ONE 12-INCH LAYER OF TYPE II BEDDING. THE SUBSTITUTION OF ONE LAYER OF TYPE II BEDDING SHALL NOT BE PERMITTED AT DROP STRUCTURES. THE USE OF A COMBINATION OF FILTER FABRIC AND TYPE II BEDDING AT DROP STRUCTURES IS ACCEPTABLE.
 - FIFTY PERCENT OR MORE BY WEIGHT RETAINED ON THE #40 SIEVE.

Figure 8-34. Riprap and soil riprap placement and gradation (part 3 of 3)



1 PLUM CREEK - TYPICAL CROSS SECTION

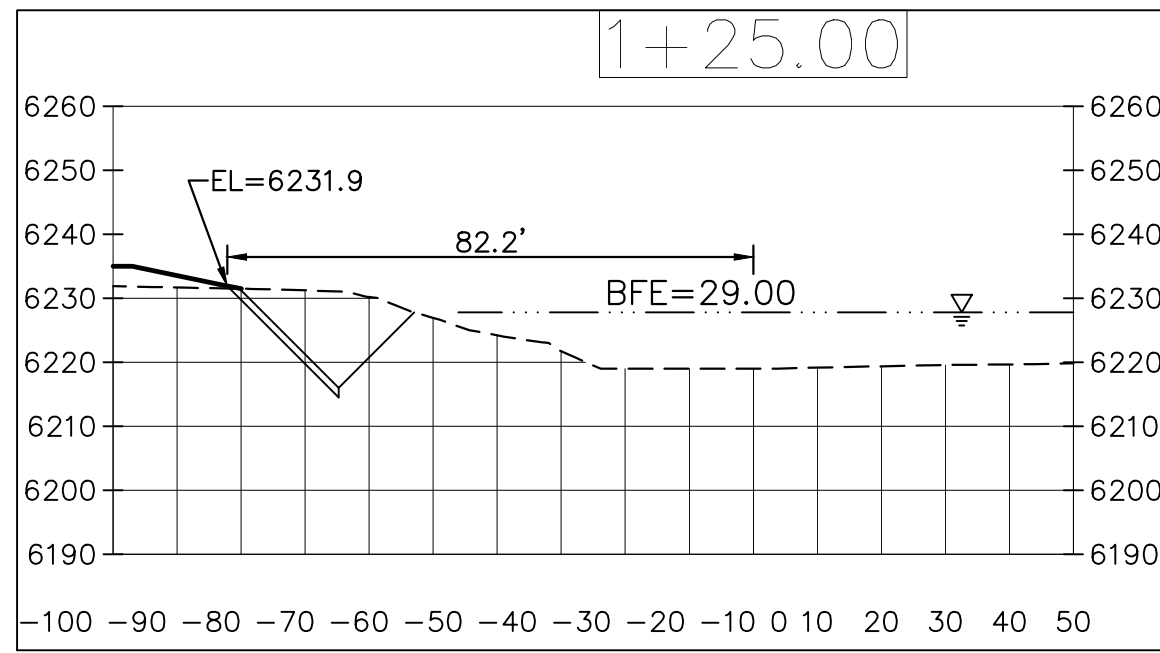
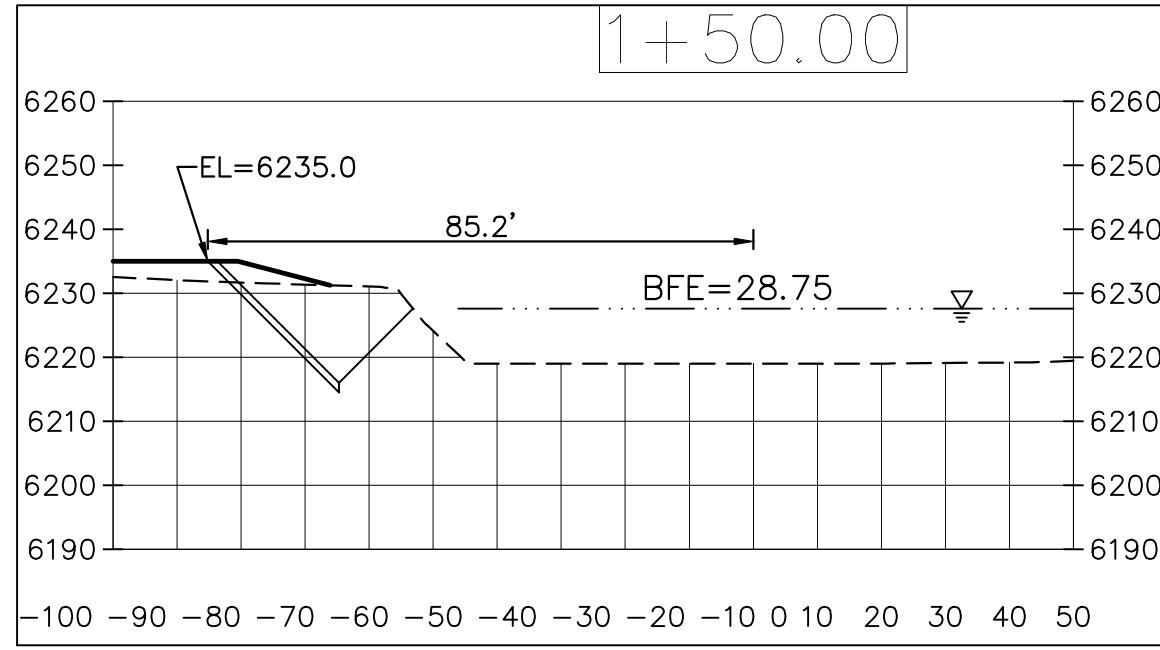
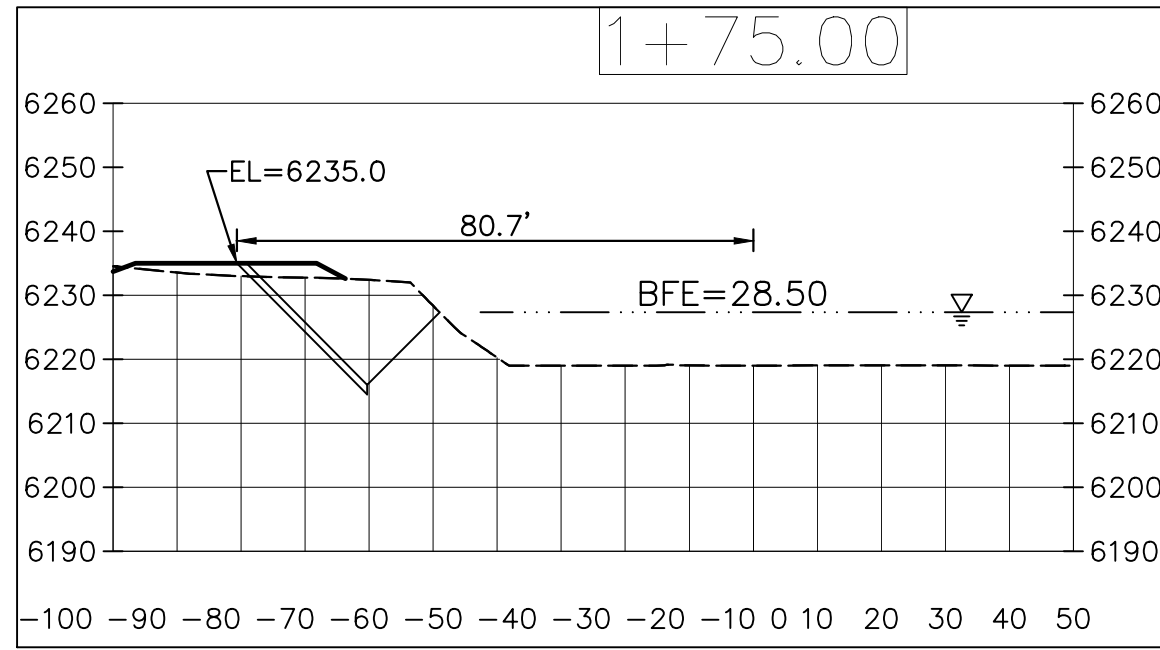
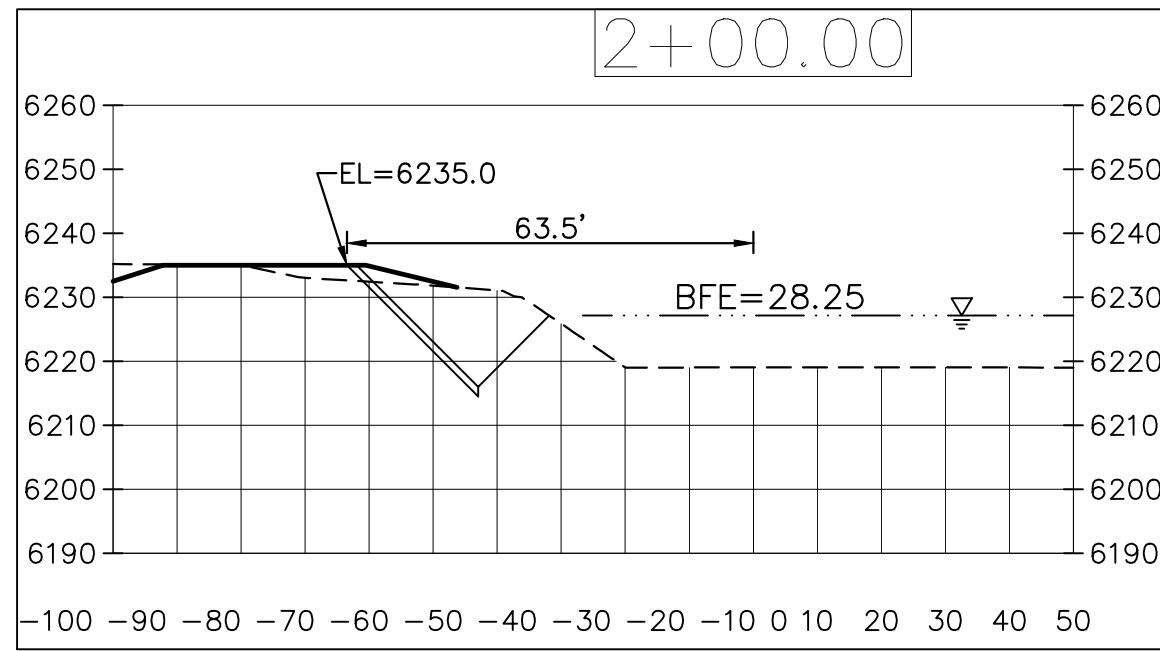
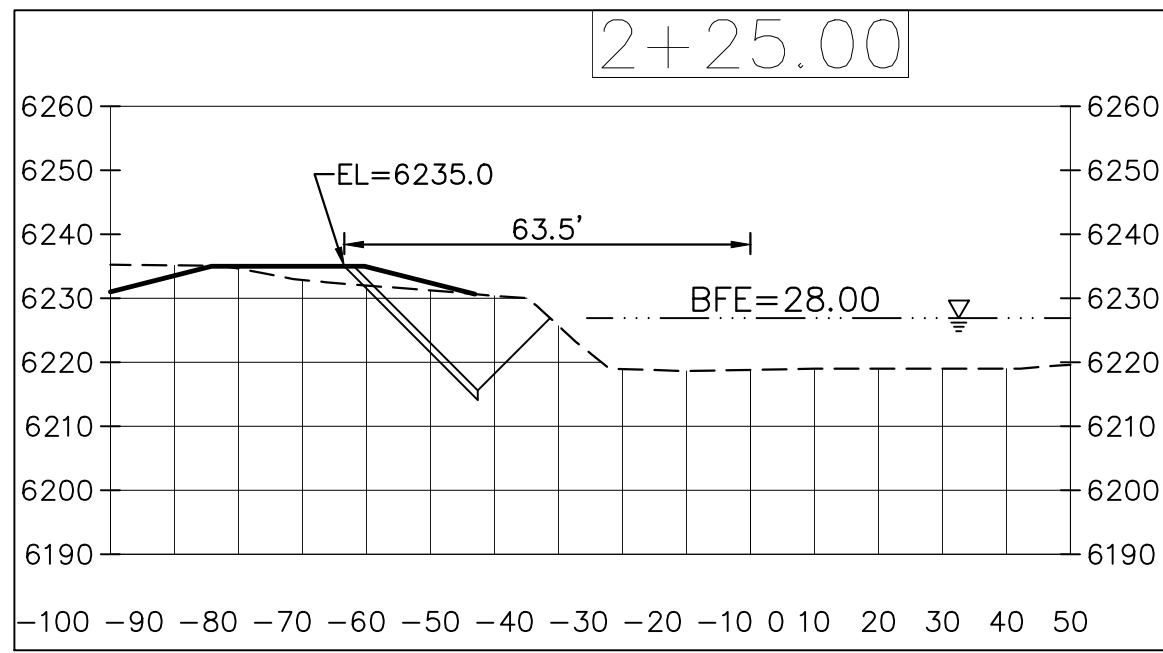
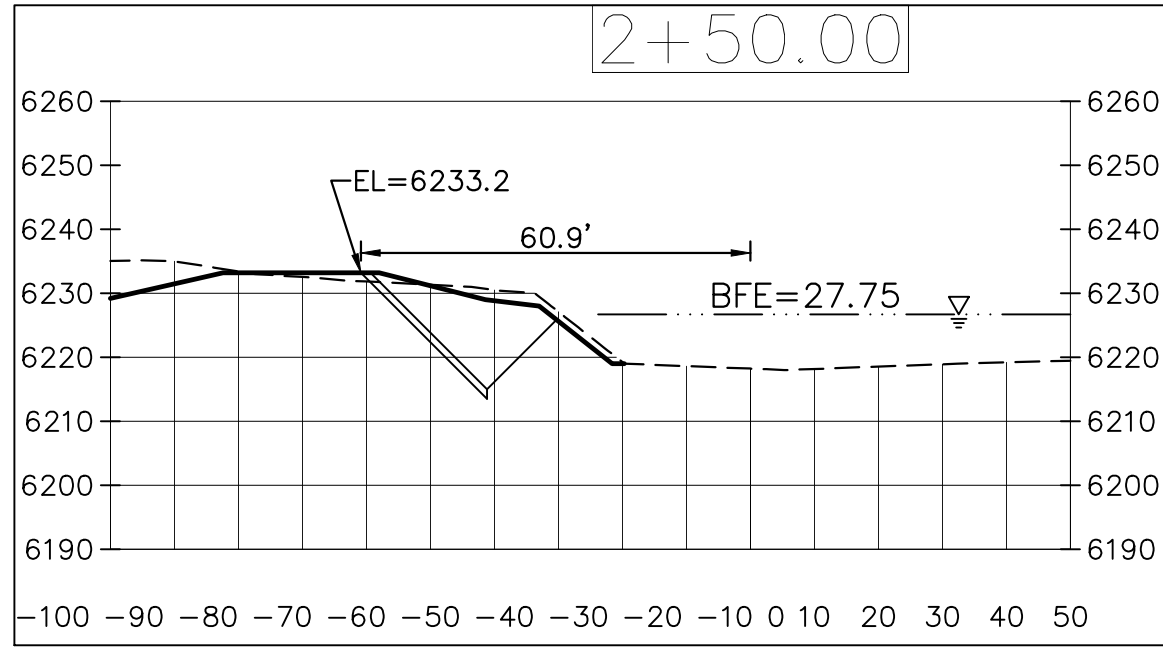
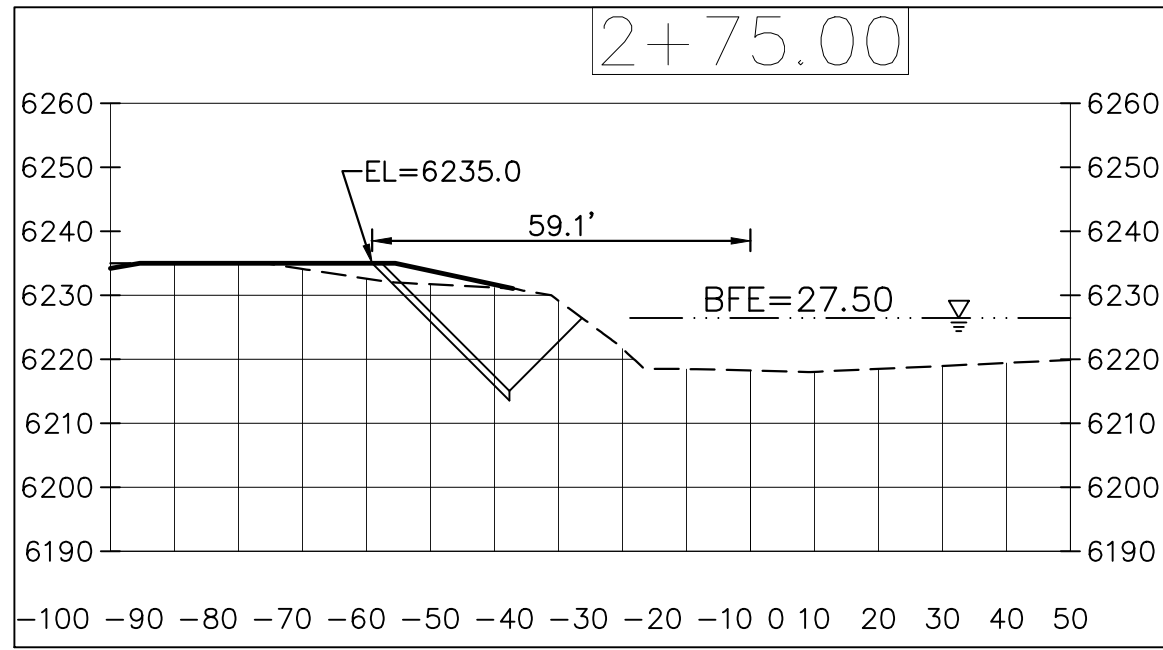
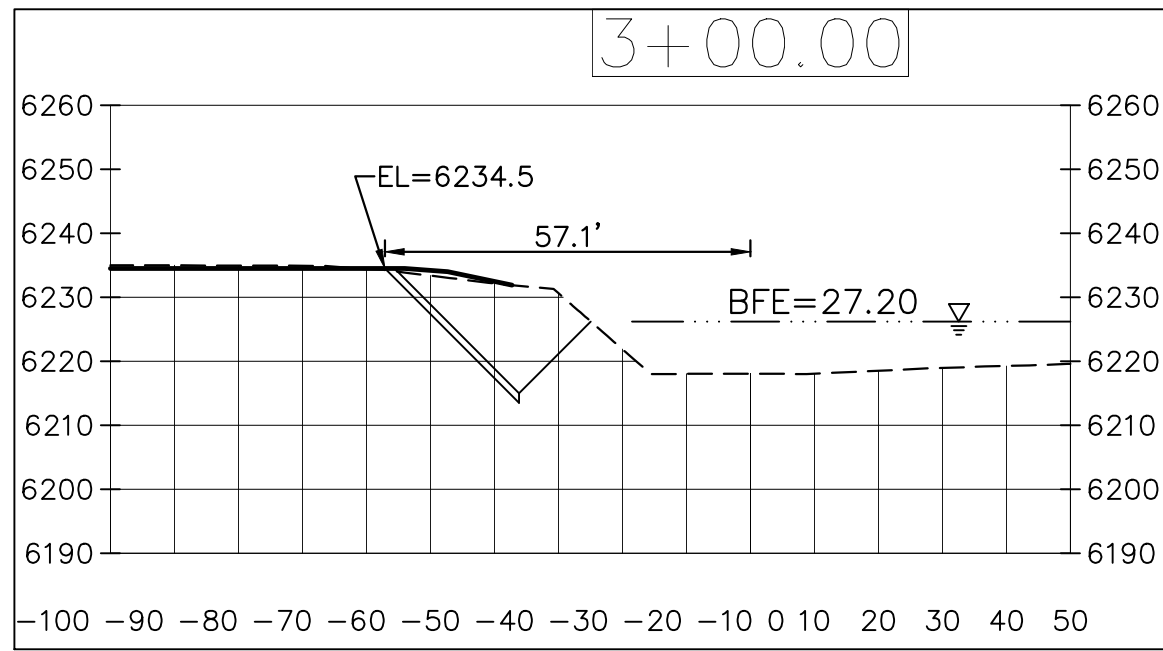


HORIZONTAL
SCALE: 1" = 30'

VERTICAL
SCALE: 1" = 3'

BENCHMARK

NGS BENCHMARK DESIGNATION "Y 396", PID "KK1332" BEING A STEEL ROD UNDER LOGO CAP 101 FEET EAST OF I-25 MILEPOST 180, 80.4 FEET SOUTHEAST OF THE CENTER OF A CONCRETE DRAINAGE PIPE, 42.3 FEET EAST OF THE CENTERLINE OF A FRONTAGE ROAD, 3.3 FEET SOUTH OF A UTILITY POLE. ELEVATION: 6276.49 FEET (NAVOD88)

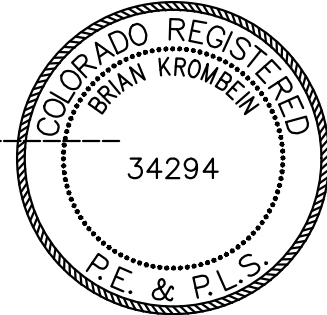


PROFESSIONAL ENGINEER CERTIFICATION

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

2/22/23
DATE



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

CDR+J PHASE 2

EAST PLUM CREEK
CHANNEL CROSS-SECTIONS

SHEET C7 OF 27

JOB NO. 21007

PROJECT NO. CD23-0039

PHASE 2

S. WILCOX STREET
(R.O.W. VARIES)

PROJECT NO. CD23-0039

EXISTING 12" WATER MAIN

12" PVC

BROOKSIDE CIRCLE (50' R.O.W.)

20' UTILITY EASEMENT
REC. NO.

EXISTING ELECTRICAL
CABINET TO BE RAISED

18" PVC

EXISTING FIRE HYDRANT

RELOCATED ELECTRICAL
CUBICLE

RELOCATE EXISTING
ELECTRIC CUBICLE

24' EXISTING ACCESS
EASEMENT REC. NO.
2021032895

LOT 3,
SECOND AMENDMENT TO
BROOKSIDE BUSINESS CENTER
FILING NO. 4

TRACT C,
SECOND AMENDMENT TO BROOKSIDE
BUSINESS CENTER FILING NO. 4

EAST PLUM CREEK

RELOCATED UTILITY POLE

EXISTING UTILITY
POLE TO BE RELOCATED

REMOVE 24" STORM SEWER
AND FES WHICH WAS
CONSTRUCTED IN PHASE 1

PLUG AND ABANDON
EXISTING STORM SEWER

PHASE 1
PROJECT NO. CD21-0052

LOT 1, BLOCK 1,
FIRST AMENDMENT TO BROOKSIDE
BUSINESS CENTER FILING NO. 2

EX. 10' UTILITY EASEMENT
REC. NO. 9009022

5' TYPE R INLET
(PUBLIC)

DRAINAGE EASEMENT
REC. NO.

30" RCP
(PUBLIC)

5' TYPE R INLET
(PUBLIC)

DRAINAGE EASEMENT
REC. NO.

15' TYPE R INLET
(PRIVATE)

PHASE 2
PROJECT NO. CD23-0039

LOT 2, BLOCK 1,
FIRST AMENDMENT TO BROOKSIDE
BUSINESS CENTER FILING NO. 2

PROPOSED
TYPE D INLET

LOT 1,
SECOND AMENDMENT TO BROOKSIDE
BUSINESS CENTER FILING NO. 4

EXISTING 15' IREA EASEMENT
REC. NO. 2021032895

LIMITS OF HABITAT CONSERVATION PLAN

LOT 2,
SECOND AMENDMENT TO
BROOKSIDE BUSINESS CENTER
FILING NO. 4

PHASE 2
PROJECT NO. CD23-0039

TOP OF DETENTION
BASIN EMBANKMENT

100-YEAR ZONE AE FLOODPLAIN LIMITS
PER FEMA MAP 08035C0301G
MAP REVISION DATE MARCH 16, 2016

TRICKLE CHANNEL

DRAINAGE EASEMENT
REC. NO.

FOREBAY

OUTLET
STRUCTURE/
MICROPOOL

24" RCP
(PUBLIC)

EASEMENT

DRAINAGE EASEMENT
REC. NO.

EXTENDED
DETENTION
BASIN

EMERGENCY
OVERFLOW
CHANNEL

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 TYPE K COPPER WITH A MINIMUM COVER OF 5 FEET.
- SEE DETAIL W-22 ON SHEET C14 FOR PIPE RESTRAINT 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 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.
- 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
- ALL UTILITY CUTS WITHIN THE RIGHT-OF-WAY TO BE FILLED WITH FLOWABLE FILL. EDGE-MILL PERIMETER OF SAWCUT. MATCH EXISTING ASPHALT DEPTH. COORDINATE WITH PUBLIC WORKS INSPECTOR.

LEGEND

- | | |
|-----------|---------------------------|
| --- | PROPERTY LINE |
| --- | R.O.W. LIMITS |
| --- | FEMA FLOODPLAIN LIMITS |
| --- | EXISTING CURB & GUTTER |
| ---SS--- | EXISTING SANITARY SEWER |
| ---W--- | EXISTING WATERLINE |
| ---GAS--- | EXISTING GAS PIPE |
| ---E--- | EXISTING ELECTRIC |
| ---ST--- | EXISTING STORM SEWER |
| --- | PROPOSED STORM SEWER |
| --- | PROPOSED CURB & GUTTER |
| --- | PROPOSED WATER MAIN |
| W | PROPOSED WATER SERVICE |
| S | PROPOSED SANITARY SERVICE |
| --- | CONCRETE PAVEMENT |
| --- | EXISTING EASEMENT |
| --- | PROPOSED EASEMENT |
| --- | LIMITS OF RIPARIAN ZONE |



40 20 0 40 80

SCALE: 1" = 40'

PROFESSIONAL ENGINEER CERTIFICATION

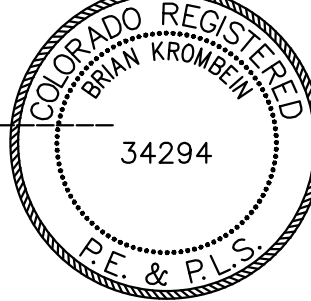
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Brian Krombein

2/22/23

DATE

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



TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
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APPROVED BY:

DEVELOPMENT SERVICES

DATE

PROJECT NO. CD23-0039

PREPARED FOR

FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH



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

BY

DATE

No.

REVISION

1"=40'

H-SCALE

V-SCALE

DATE

DESIGNED BY

DRAWN BY

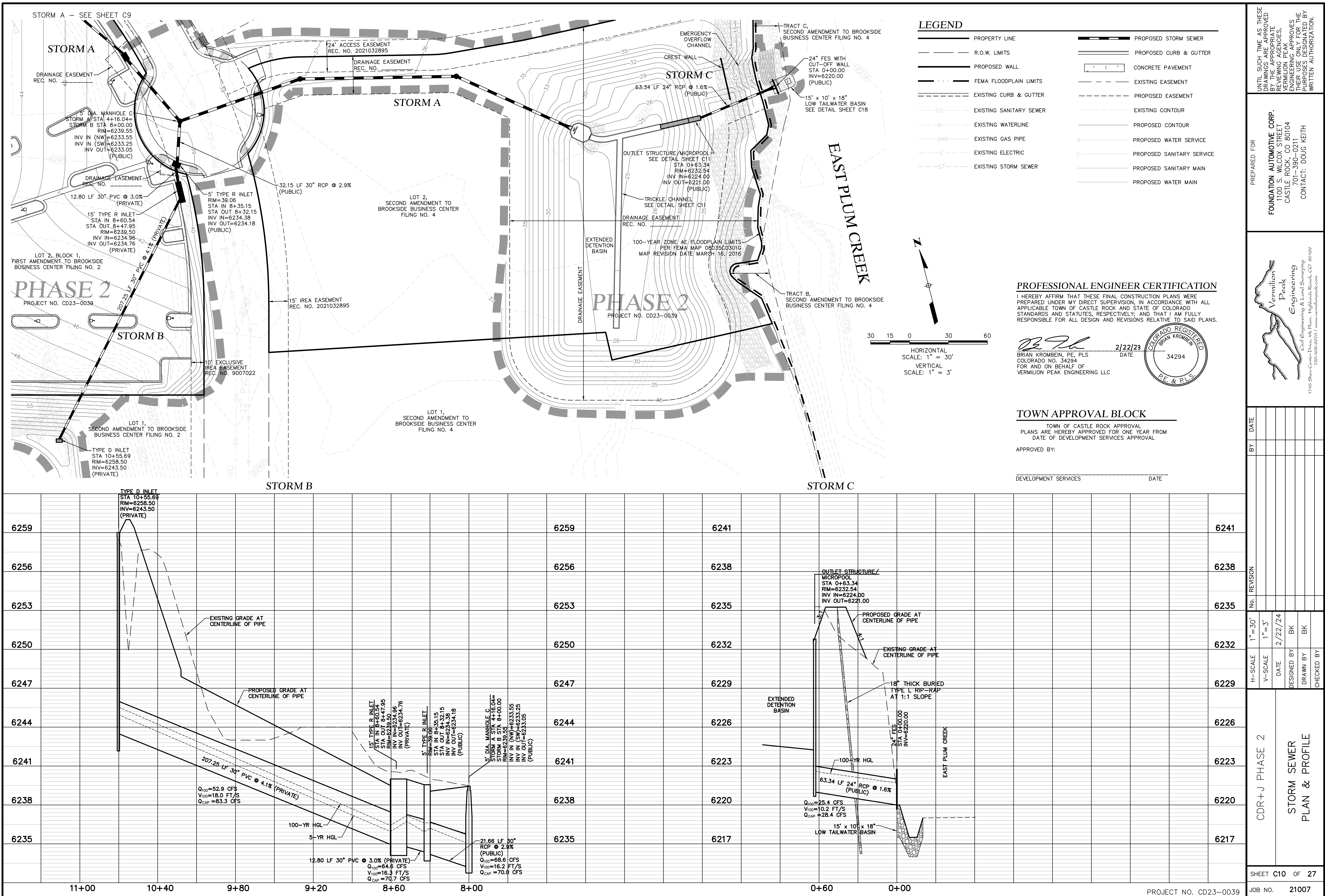
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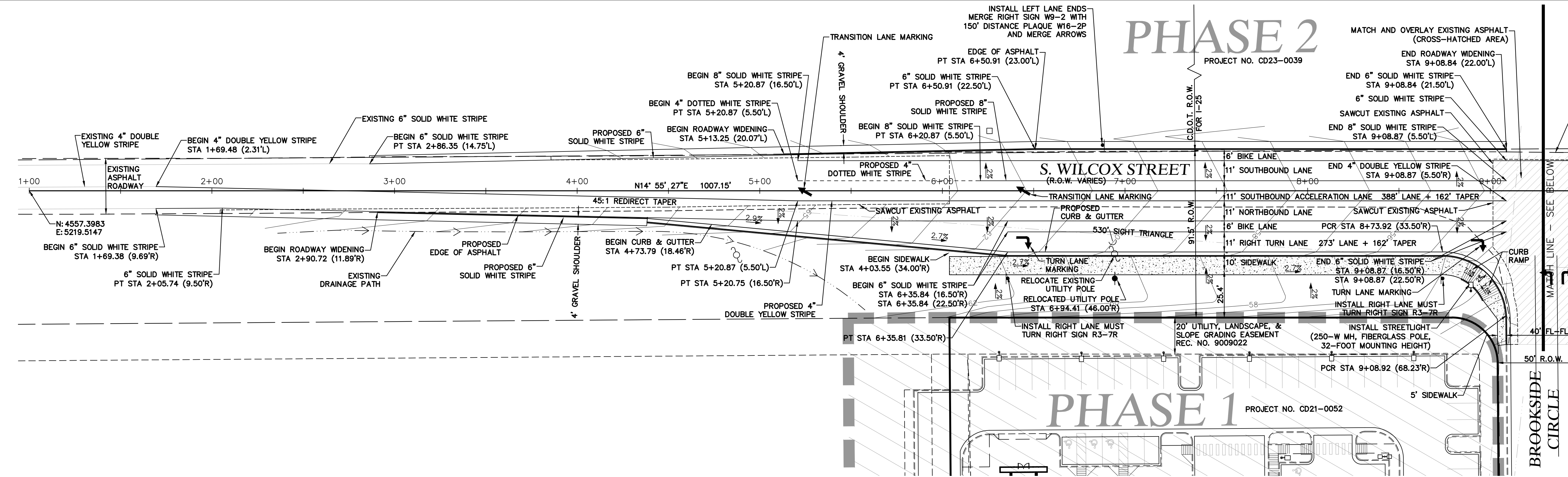
CDR+J PHASE 2

OVERALL UTILITY PLAN/
WATER DISTRIBUTION PLAN

SHEET C8 OF 27

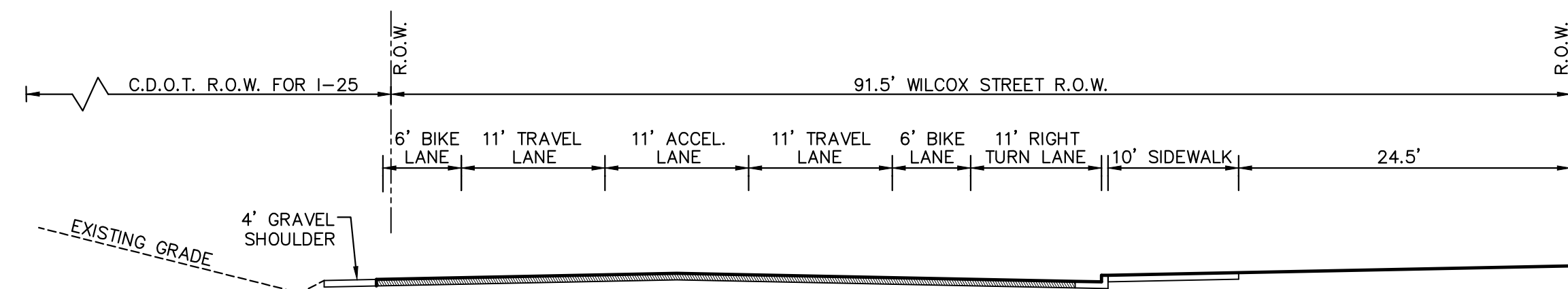
JOB NO. 21007





LEGEND

---	PROPERTY LINE
---	EXISTING CURB & GUTTER
---	PROPOSED 2' CATCH CURB & GUTTER
---	PROPOSED 1' SPILL CURB & GUTTER
---	EXISTING LOT LINE
---	EXISTING EASEMENT
---	PROPOSED EASEMENT
---	CONCRETE PAVEMENT
---	EXISTING UTILITY POLE



S. WILCOX STREET
TYPICAL CROSS-SECTION

SCALE: 1"=30'

NOTES

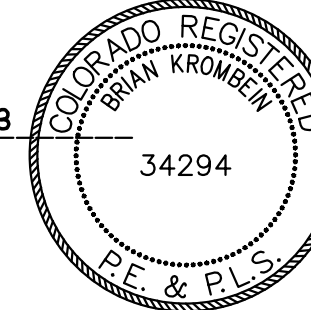
- TRUNCATED DOMES IN CURB RAMPS TO BE CAST IRON "PATINA" FINISH.
- ALL NEW LANES ARE TO BE CONSTRUCTED OF MOISTURE TREATED SUBGRADE, OVERLAIN BY 12 INCHES OF ABC, OVERLAIN BY 8 INCHES OF ASPHALT.
- EDGE MILL THE PERIMETER OF ALL SAWCUTS.
- EXISTING VALVE BOXES, MANHOLE RIMS, DRAINAGE STRUCTURES, UTILITY ACCESS STRUCTURES, VAULT LIDS, ETC., SHALL BE BROUGHT TO THE FINISHED SURFACE AT THE TIME OF PAVEMENT PLACEMENT IN ACCORDANCE WITH TOWN STANDARD DETAILS.
- REFER TO APPROVED GEOTECHNICAL REPORT FOR PAVEMENT DESIGN.

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

2/22/23
DATE



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

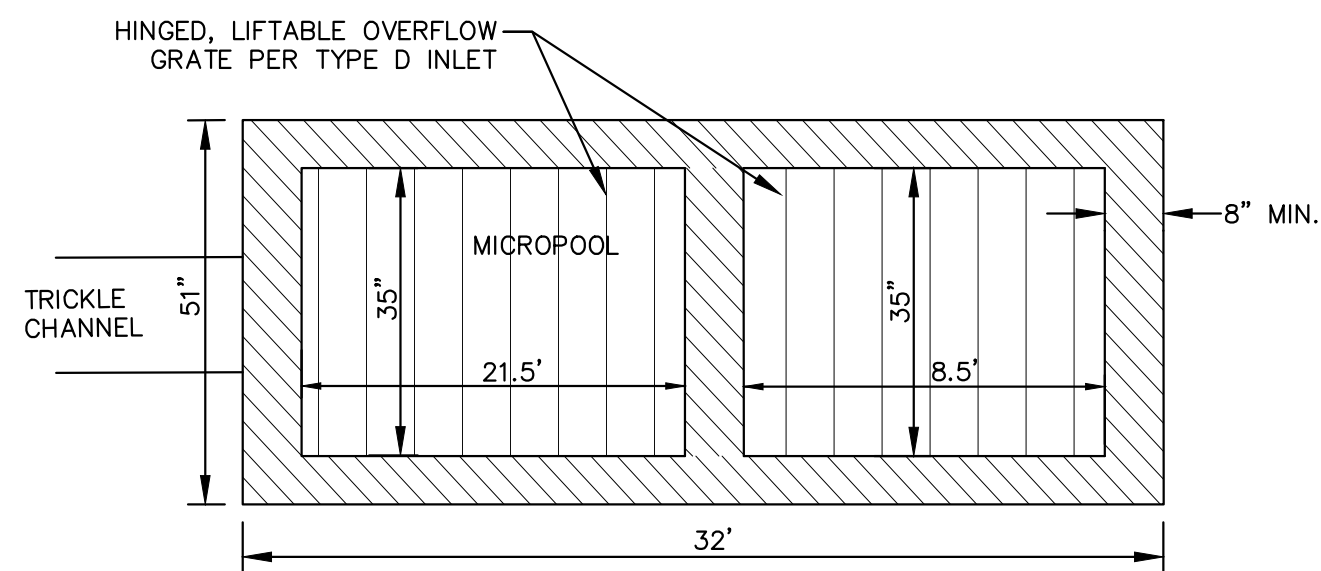
CDR+J PHASE 2

STREET IMPROVEMENT PLAN

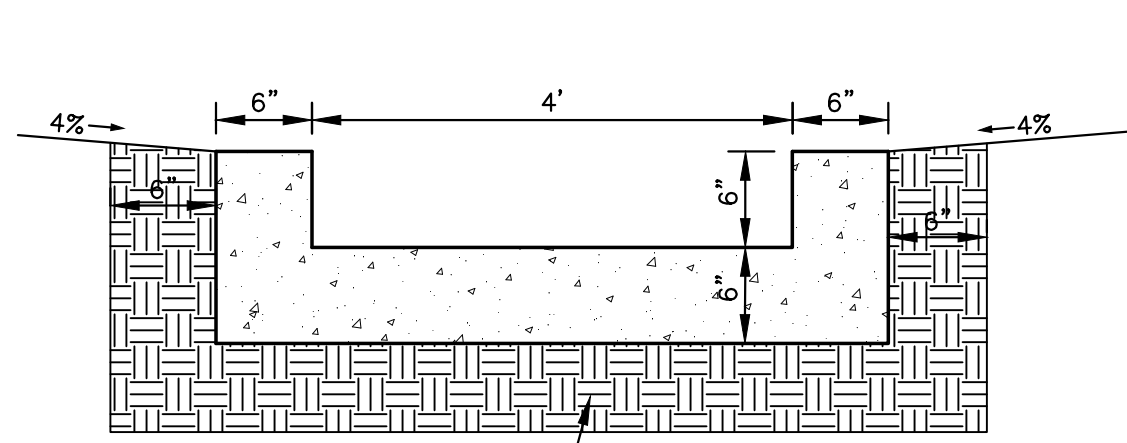
SHEET C11 OF 27

JOB NO. 21007

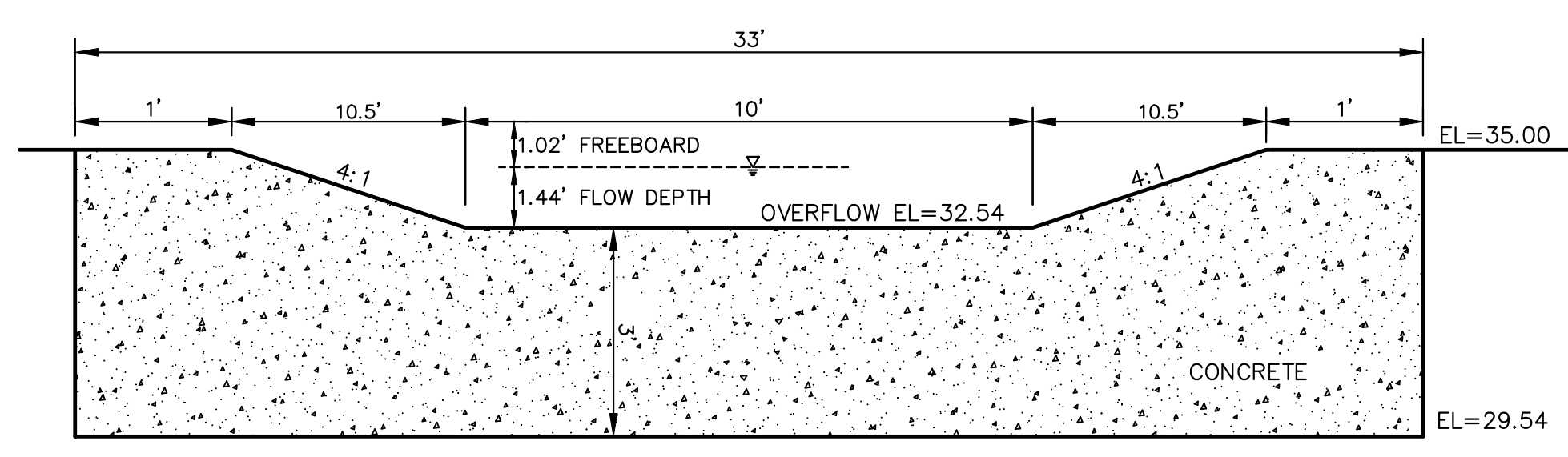
PROJECT NO. CD23-0039



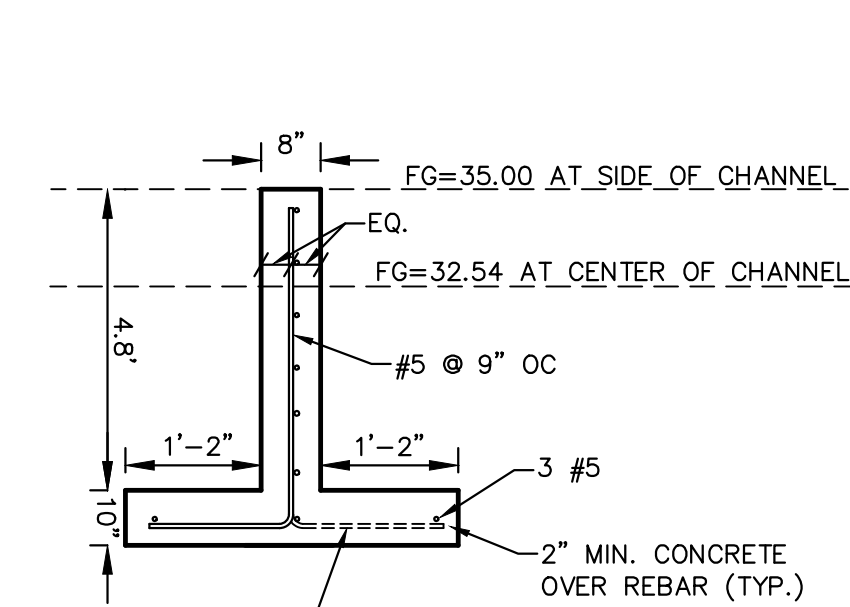
TOP VIEW



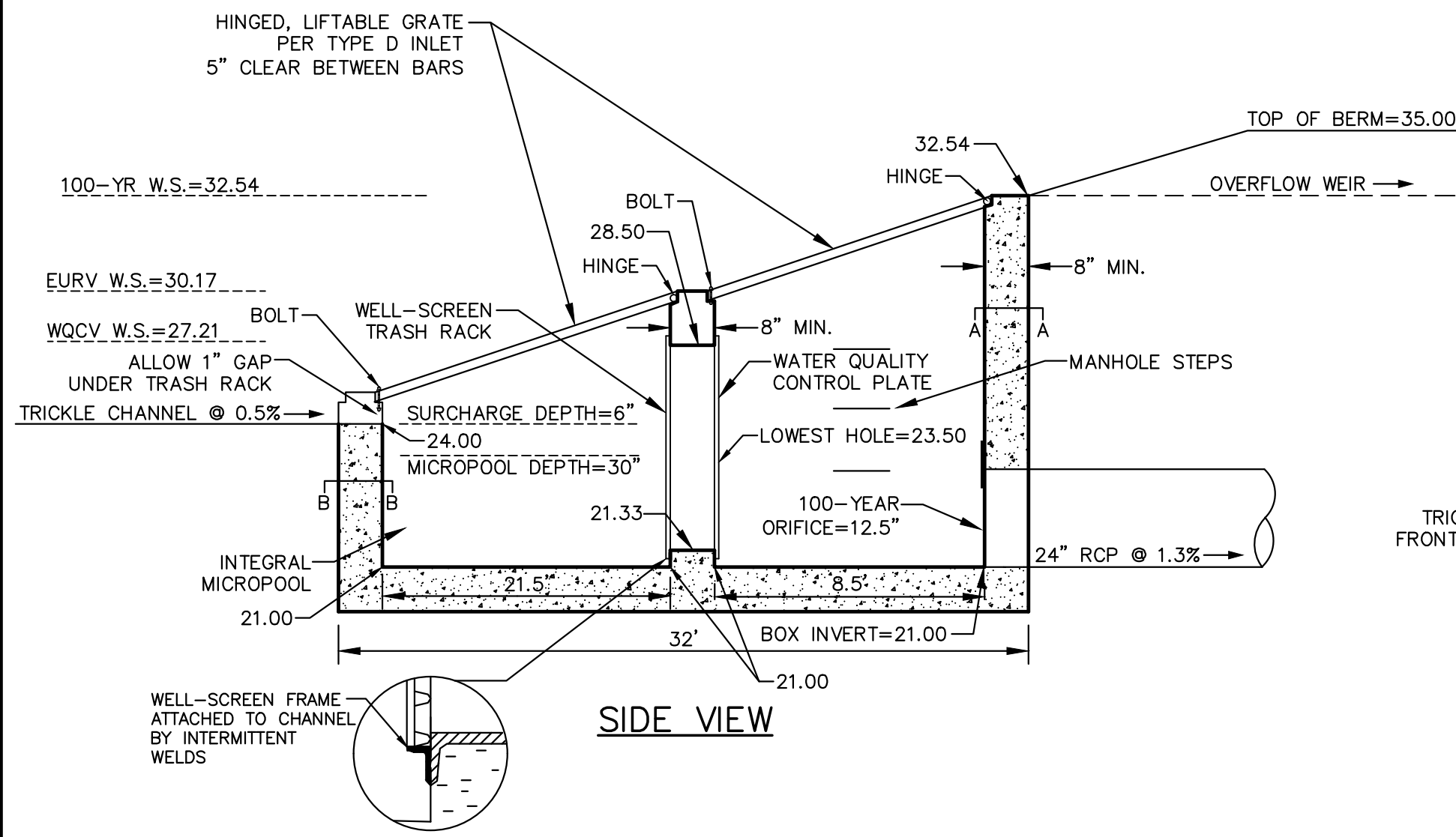
4' TRICKLE CHANNEL
NTS



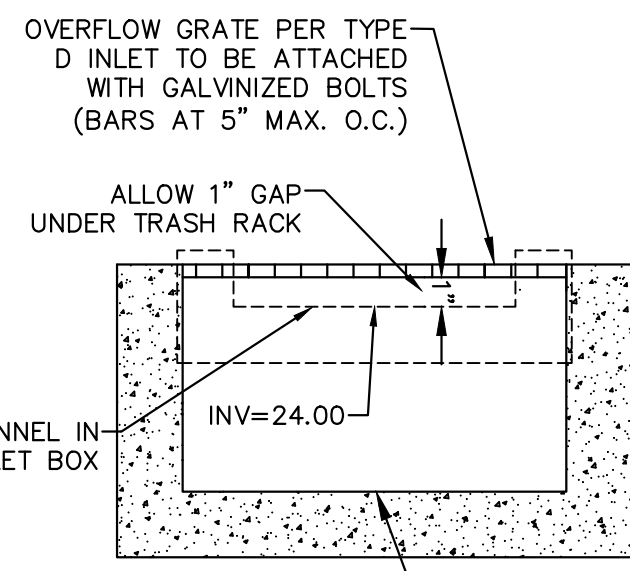
CREST WALL
NTS



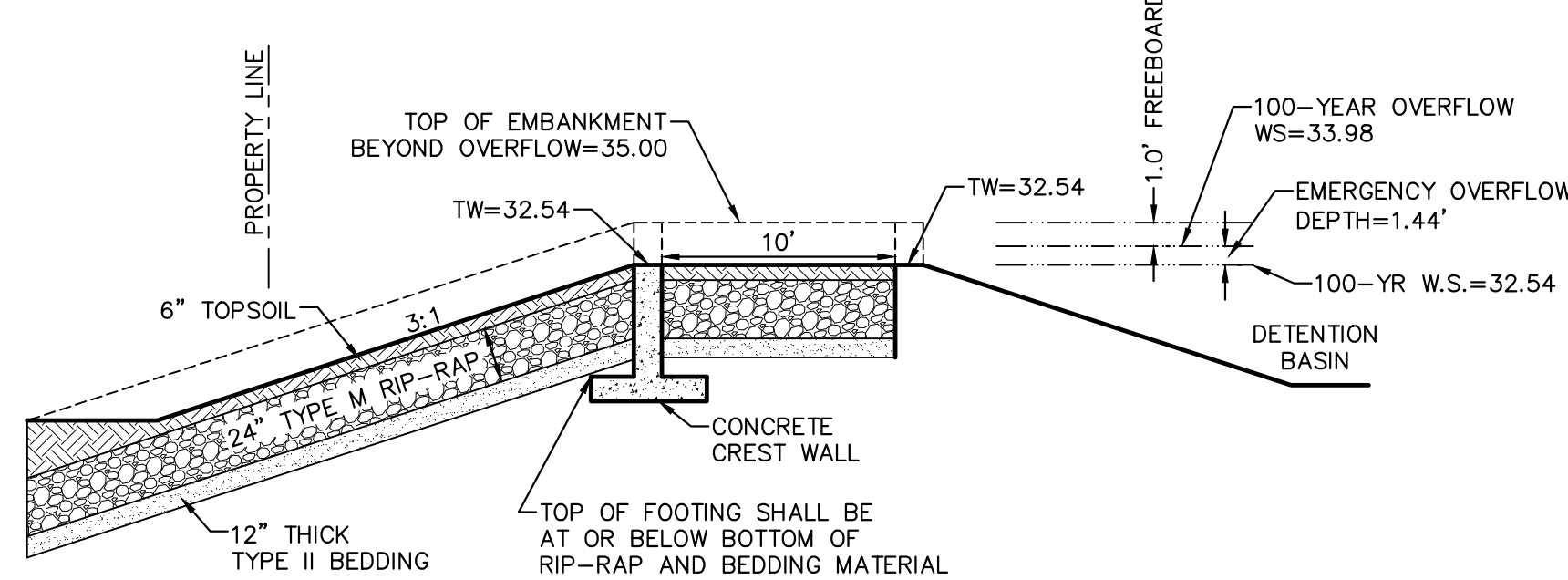
CREST WALL SECTION
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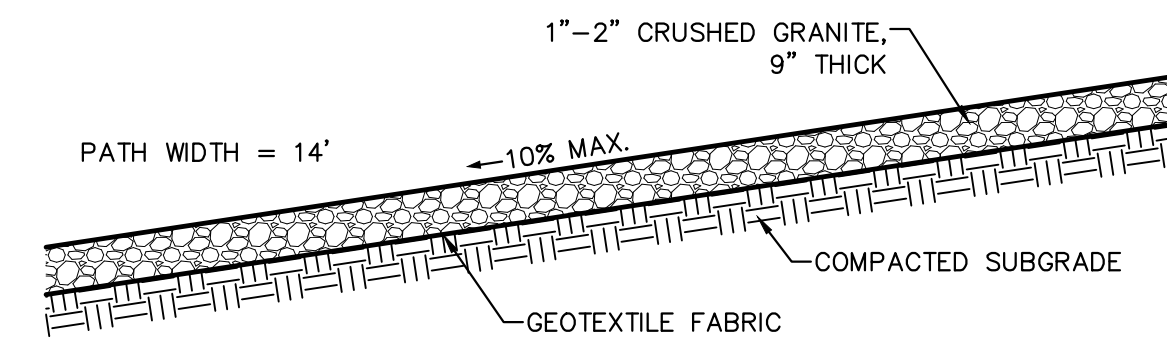
SIDE VIEW



SECTION B-B

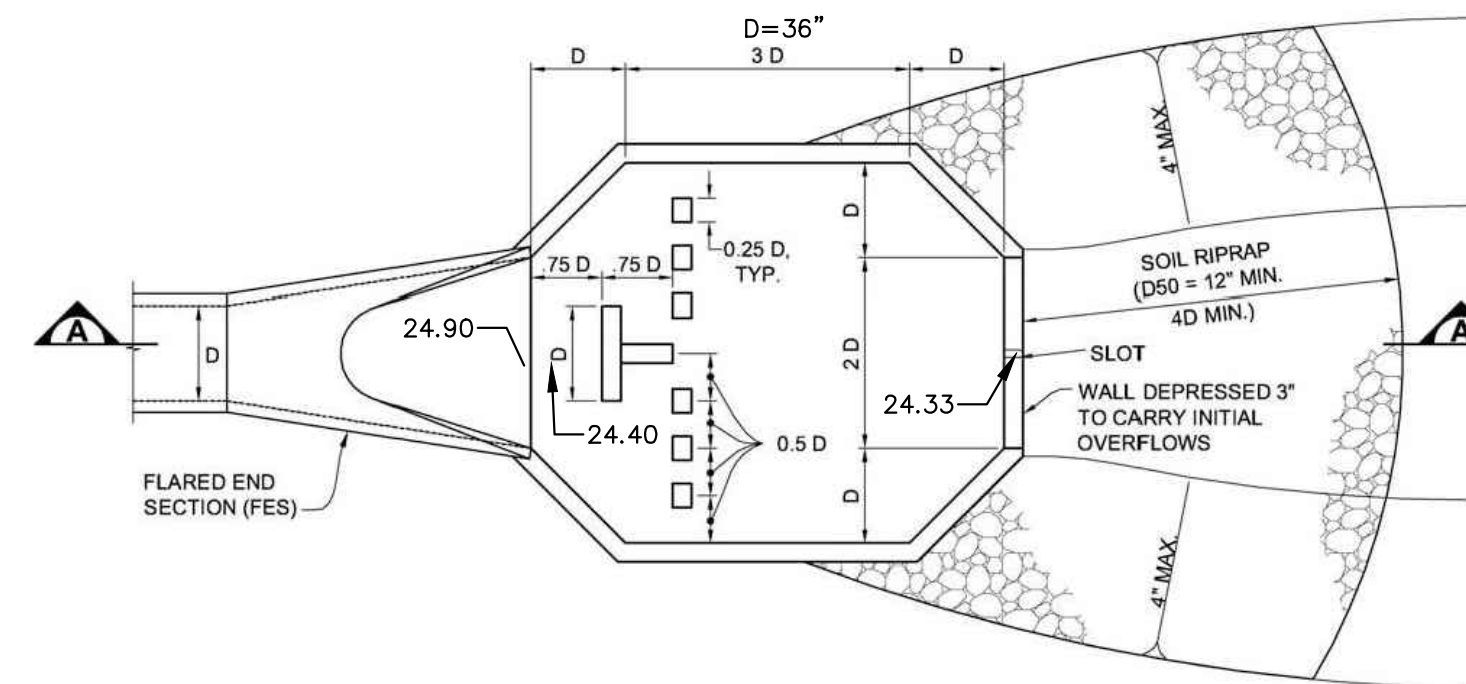


EMERGENCY OVERFLOW CHANNEL PROFILE

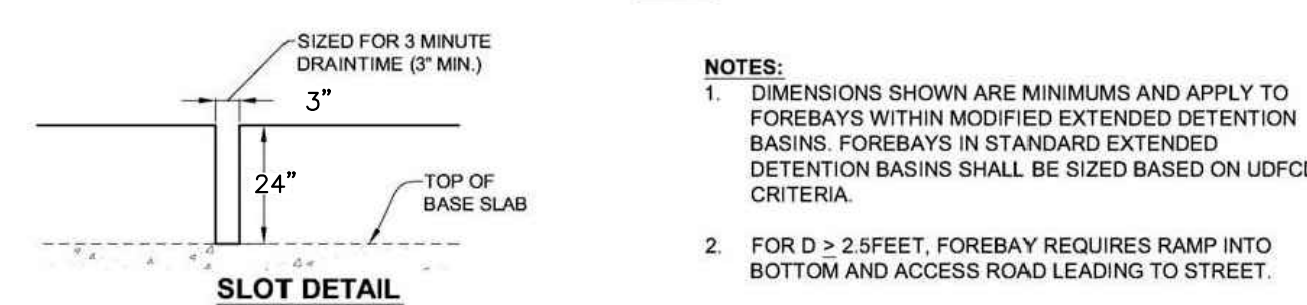


MAINTENANCE ACCESS PATH
NTS

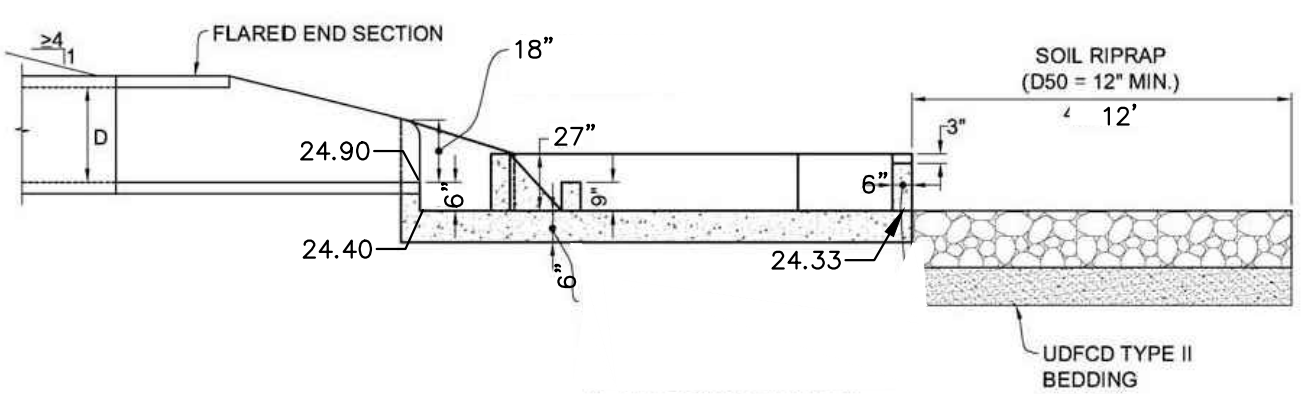
FIGURE 14-9
CONCEPT FOR INTEGRAL FOREBAY AT END SECTION



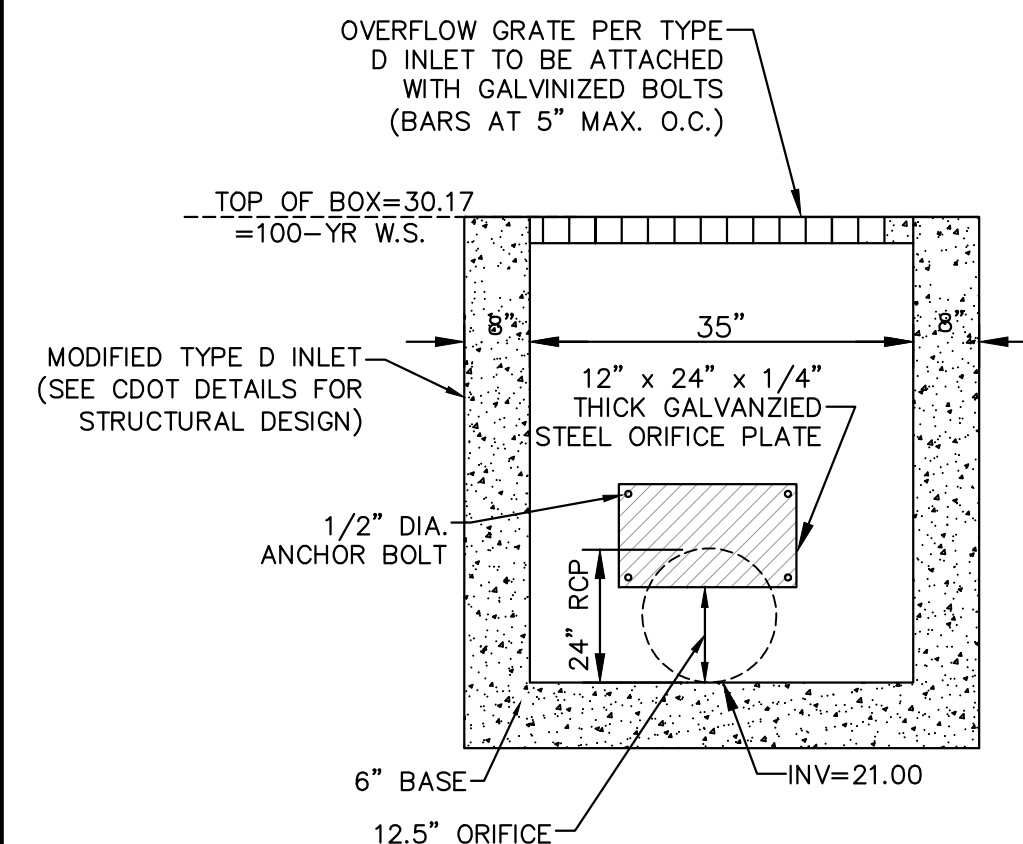
PLAN



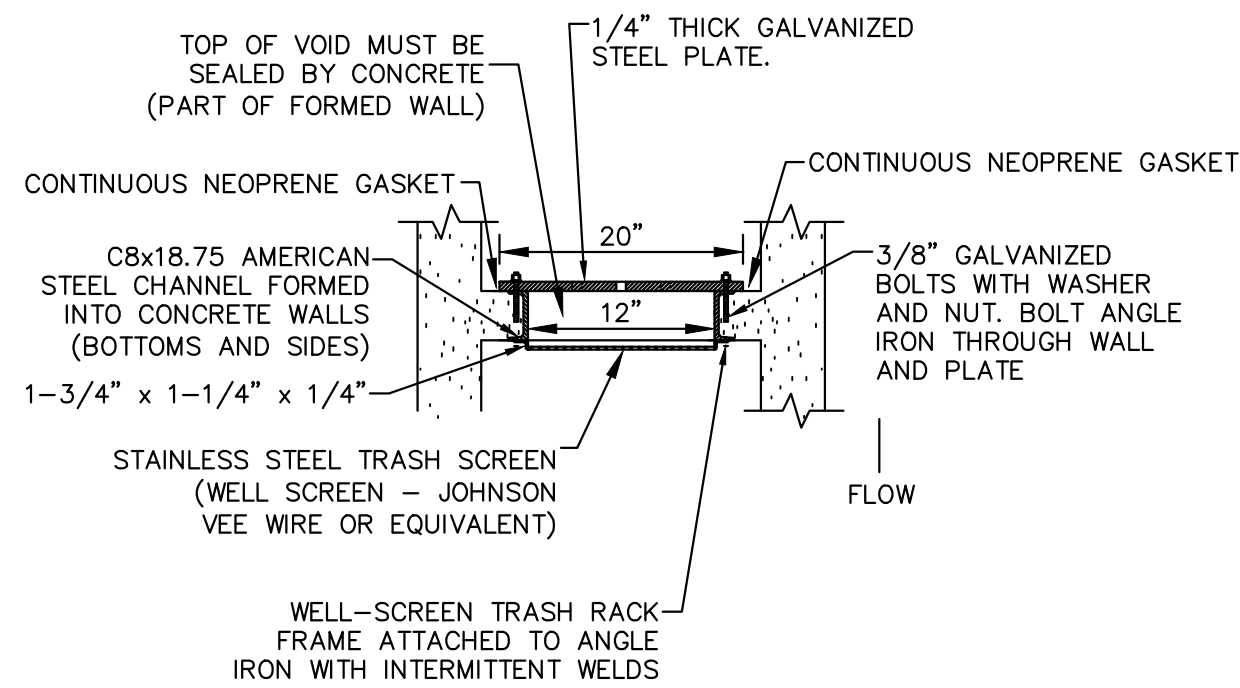
SLOT DETAIL



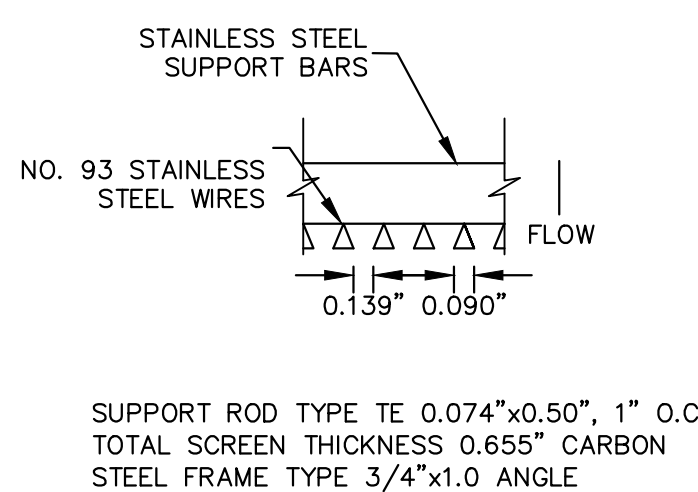
SECTION A-A



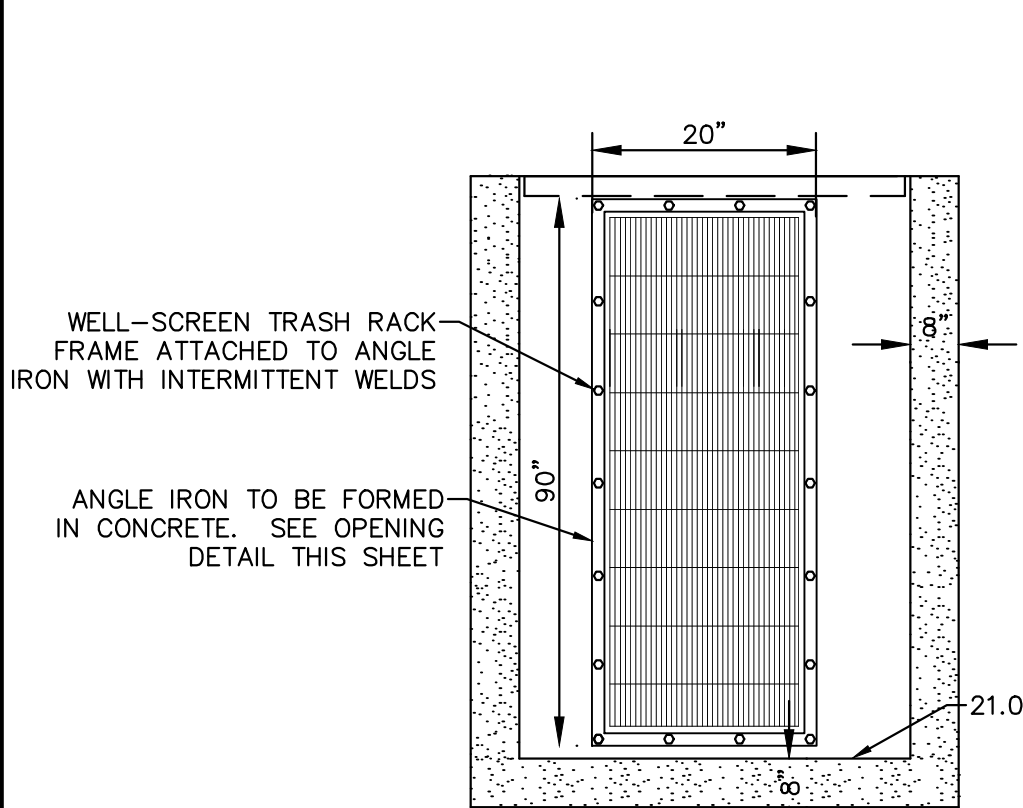
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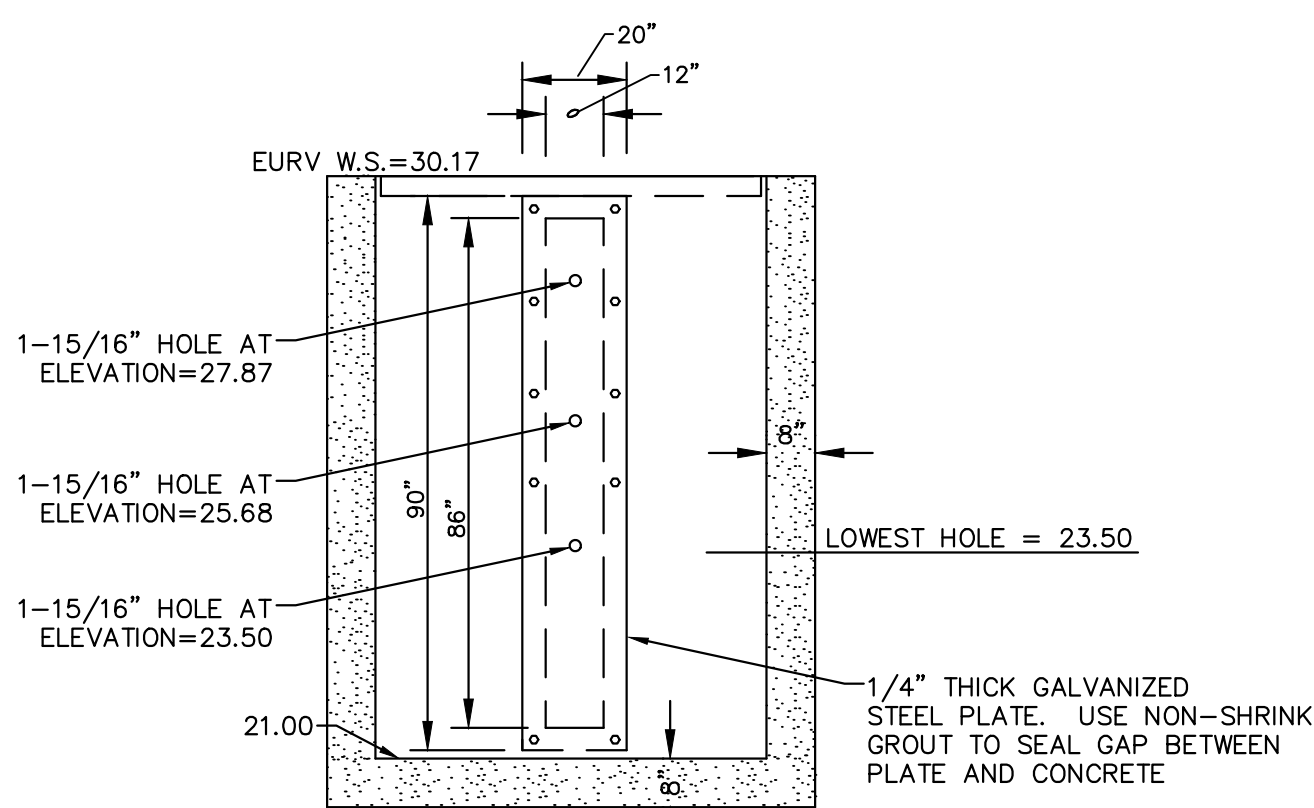
OPENING DETAIL



WELL-SCREEN BLOW-UP



WELL-SCREEN TRASH RACK



WATER QUALITY CONTROL PLATE

DETENTION FACILITY OUTLET STRUCTURE
(MODIFIED TYPE D INLET)

CDOT CLASS A FILTER MATERIAL AND TYPE II BEDDING:

CDOT CLASS A FILTER MATERIAL AND TYPE II BEDDING SHALL BE FREE DRAINING CRUSHED STONE MEETING THE MATERIAL AND GRADATION SPECIFICATIONS SET FORTH FOR CLASS A FILTER MATERIAL IN DIVISION 700, SECTION 703 OF THE CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

CDOT CLASS C FILTER MATERIAL:

CDOT CLASS C FILTER MATERIAL SHALL BE FREE DRAINING SAND MEETING THE MATERIAL AND GRADATION SPECIFICATIONS SET FORTH FOR CLASS C FILTER MATERIAL IN DIVISION 700, SECTION 703 OF THE CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

AASHTO NO. 8 AGGREGATE:

AASHTO NO. 8 AGGREGATE SHALL BE A COARSE AGGREGATE MEETING THE MATERIAL AND GRADATION SPECIFICATIONS SET FORTH FOR NO. 8 COARSE AGGREGATE PER AASHTO M43 AS DEFINED IN DIVISION 700, SECTION 703 OF THE CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

CLASS 5 AGGREGATE BASE COURSE:

CLASS 5 AGGREGATE BASE COURSE SHALL BE AN AGGREGATE MEETING THE MATERIAL AND GRADATION SPECIFICATIONS SET FORTH FOR CLASS 5 AGGREGATE BASE COURSE AS DEFINED IN DIVISION 700, SECTION 703 OF THE CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

AGGREGATE GRADATION TABLE:

Sieve Size	No. 357 Coarse Aggregate (AASHTO M43)	No. 4 Coarse Aggregate (AASHTO M43)	No. 8 Coarse Aggregate (AASHTO M43)	Class 5 Aggregate Base Course	Class A Filter Material	Class C Filter Material
Mass Percent of Material Passing Designated Sieve Size						
75 mm (3")					100	
63 mm (2 1/2")	100					
50.0 mm (2")	95-100	100				
37.5 mm (1 1/2")		90-100		100		
25.0 mm (1")	35-70	20-55		95-100		
19.0 mm (3/4")		0-15			20-90	100
12.5 mm (1/2")	10-30		100			
9.5 mm (3/8")		0-5	85-100			
4.75 mm (#4)	0-5		10-30	30-70	0-20	60-100
2.36 mm (#60)			0-10			
1.18 mm (#16)			0-5			
600 µm (#30)						
300 µm (#60)						10-30
150 µm (#100)						0-10
75 µm (#200)				3-15	0-3	0-3

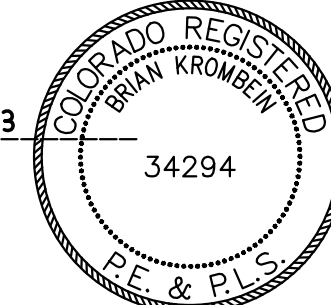
NOTE: In addition to the gradation provided in the table above, all material must meet the specifications set forth in Division 700, Section 703 of the CDOT Standard Specifications for Road and Bridge Construction.

PROFESSIONAL ENGINEER CERTIFICATION

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

2/22/23
DATE



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DATE

PROJECT NO. CD23-0039

UNTIL SUCH TIME AS THESE
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BY THE APPROPRIATE
VERMILION PEAK
ENGINEERING APPROVES
THEIR USE ONLY FOR THE
PURPOSES DESIGNATED BY
WRITTEN AUTHORIZATION.

PREPARED FOR
FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH

Vermilion
Peak
Engineering
Civil Engineering & Land Surveying
1745 Shen Center Drive 4th Floor Highlands Ranch, CO 80129
720-402-6070 / www.vermilionpeak.com

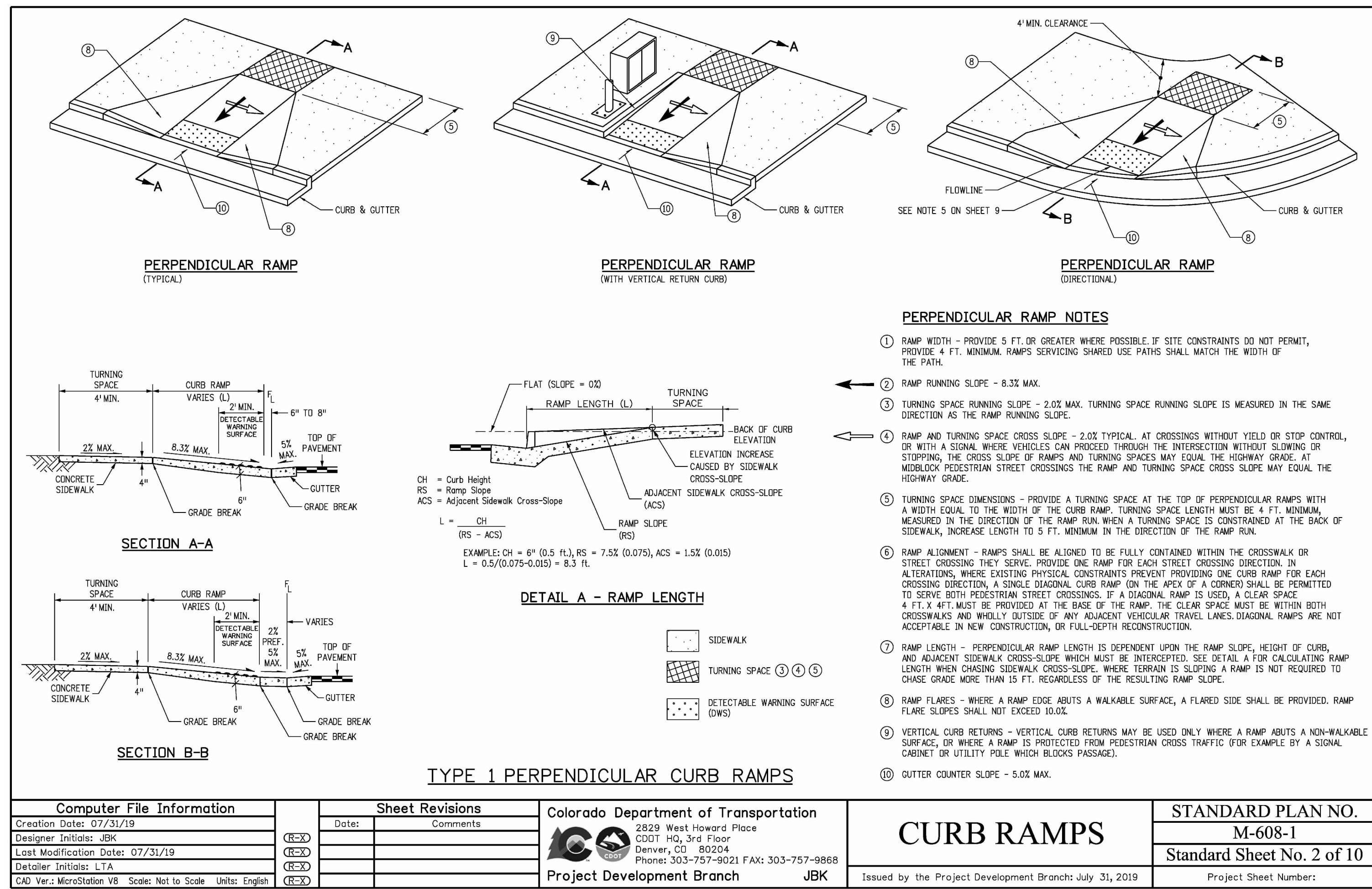
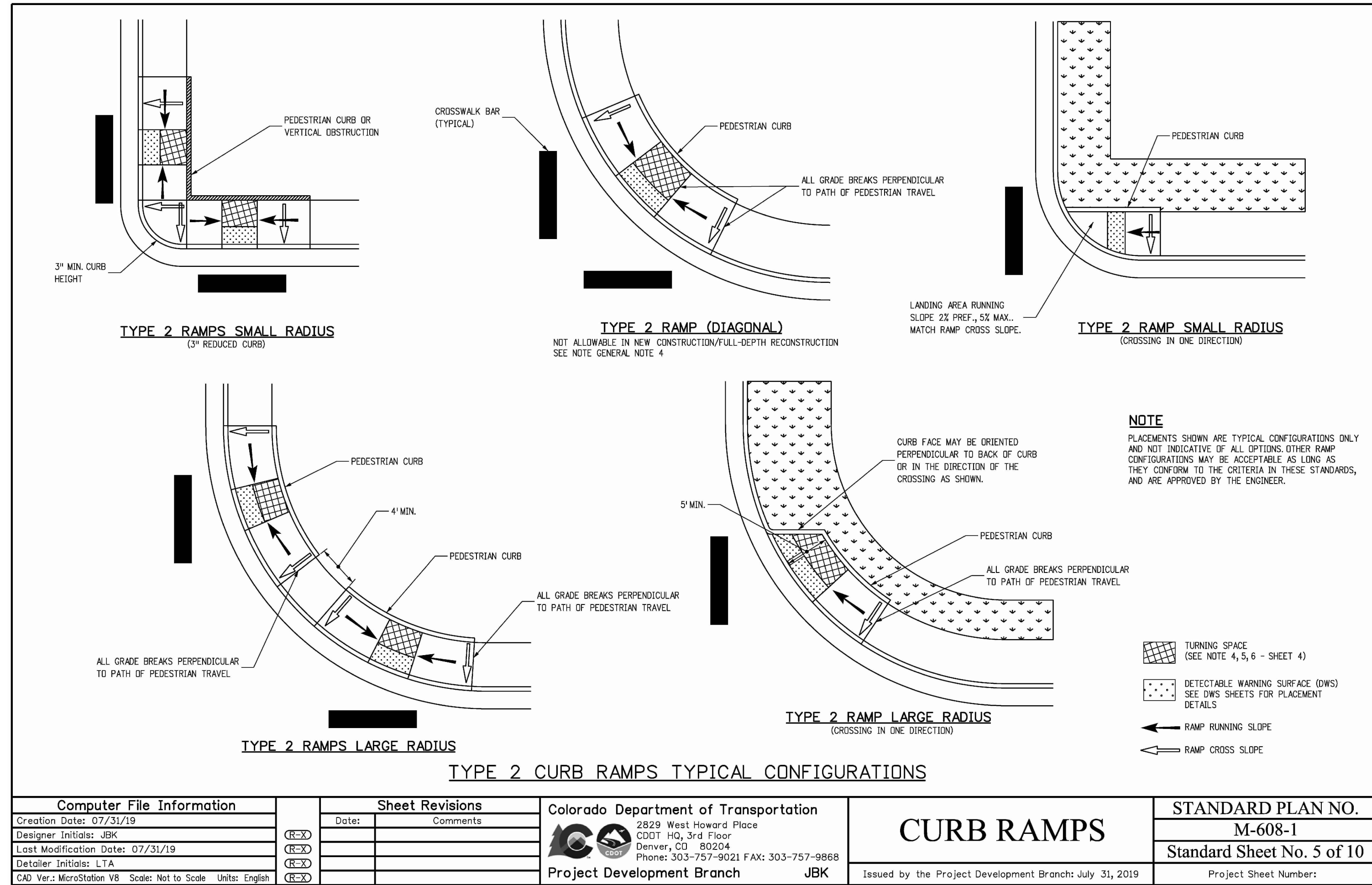
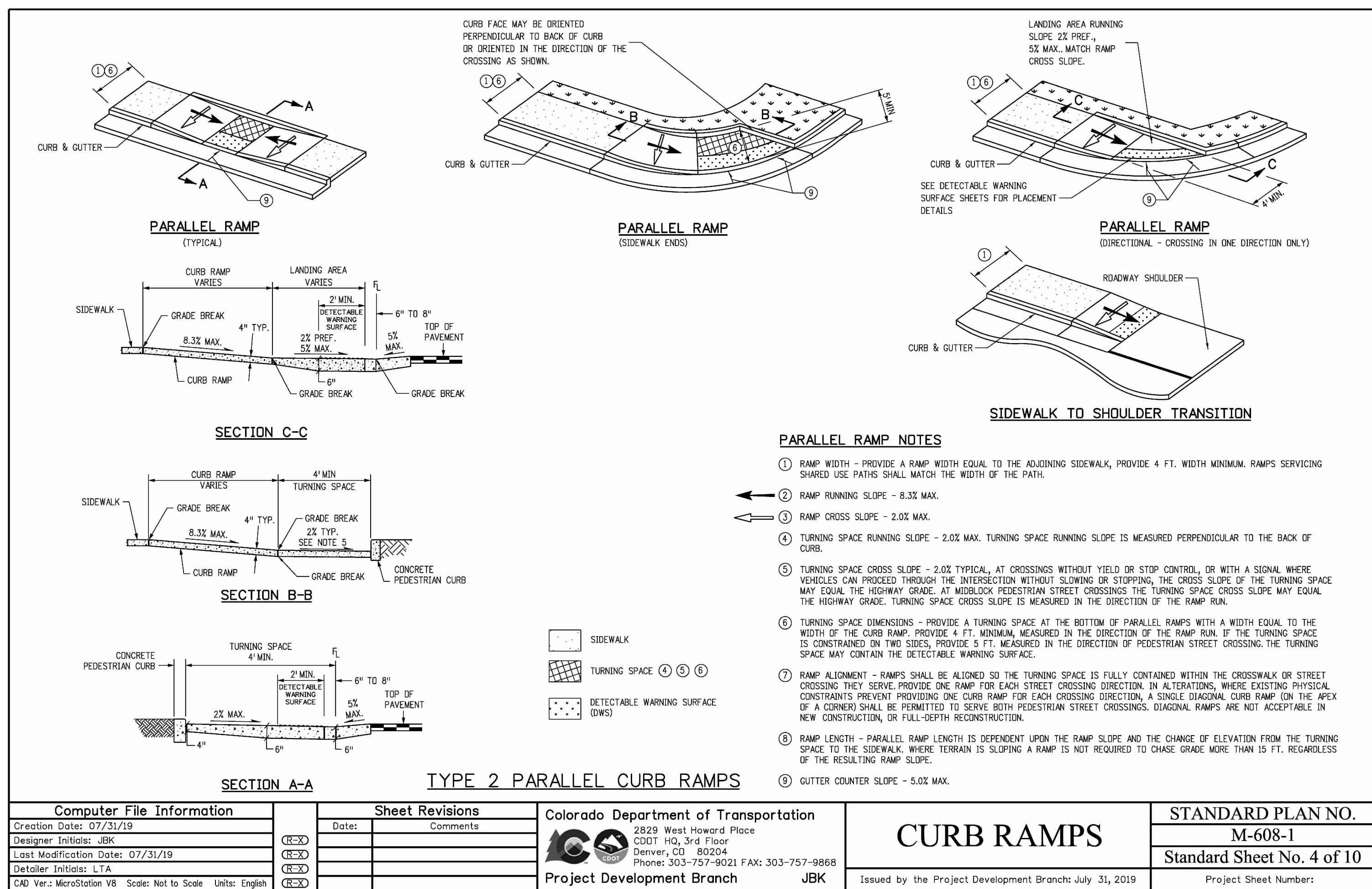
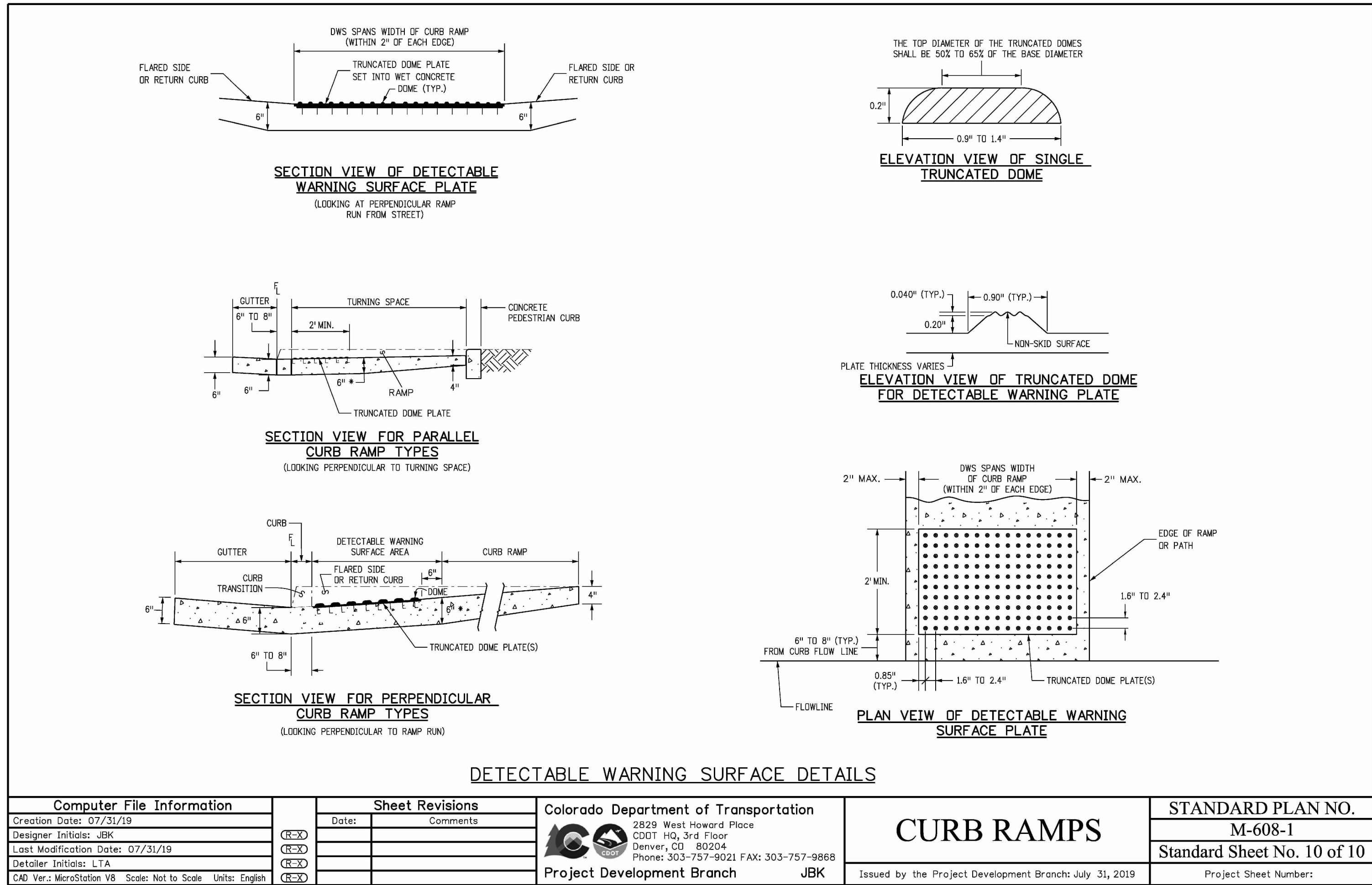
BY	DATE	REVISION	AS SHOWN	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
						2/22/24	BK	BK	

CDR+J - PHASE 2

STANDARD DETAILS

SHEET C12 OF 27

JOB NO. 21007



TOWN APPROVAL BLOCK

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PROJECT NO. CD23-0039

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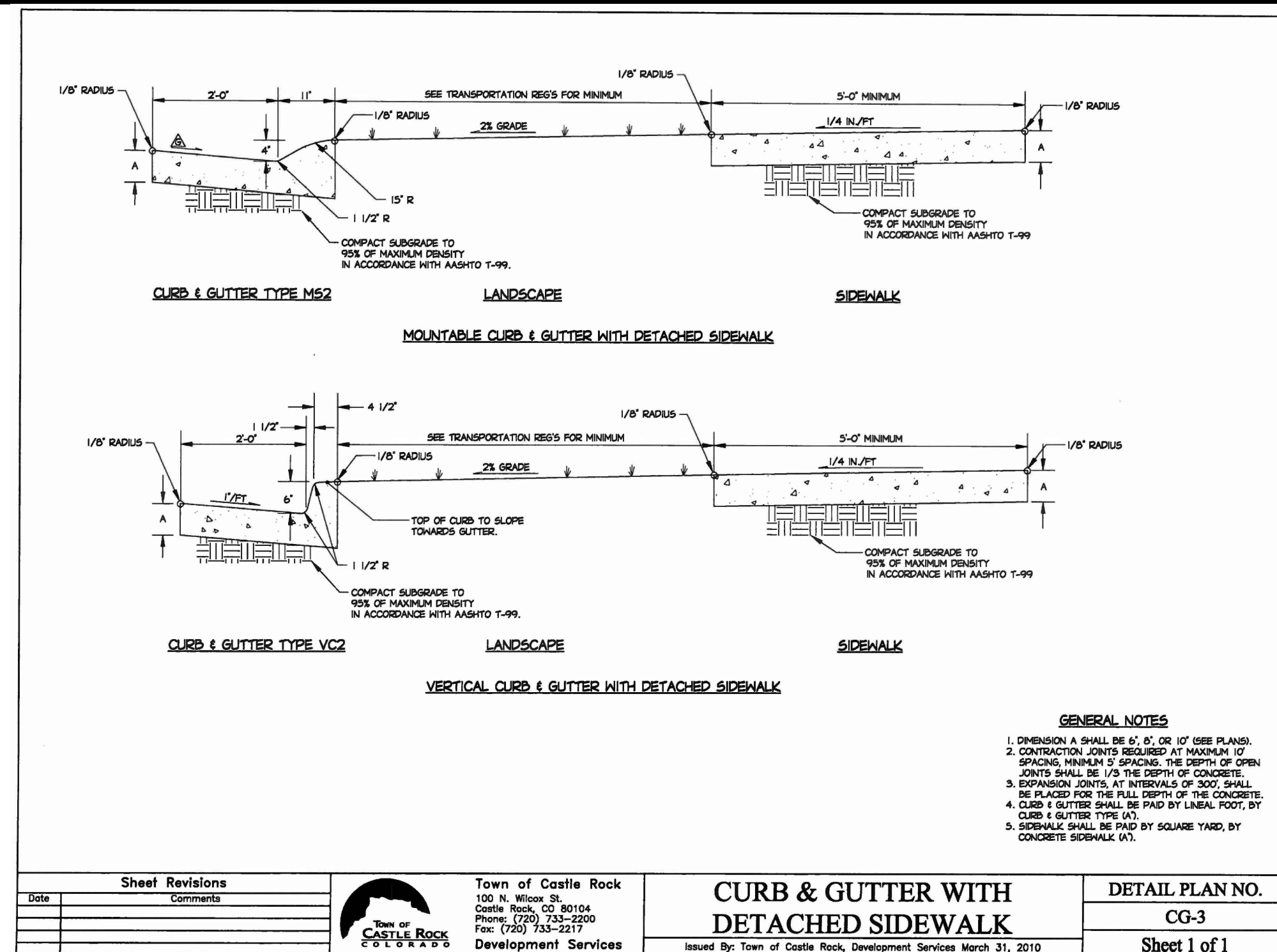
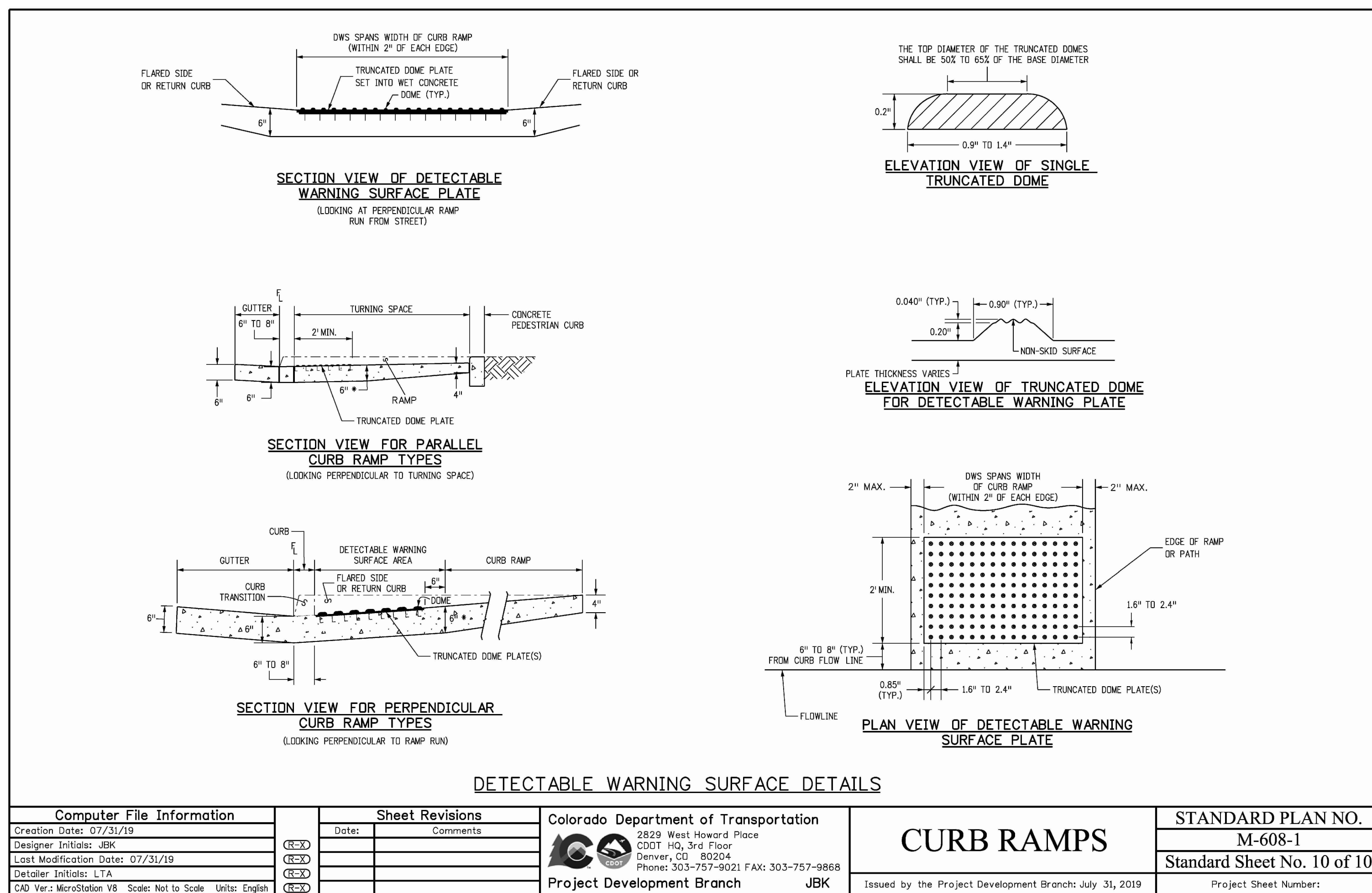
DATE	BY	REVISION	No.	AS SHOWN	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
							2/22/24	BK	BK	

CDR+J PHASE 2

STANDARD DETAILS

SHEET C13 OF 27

JOB NO. 21007

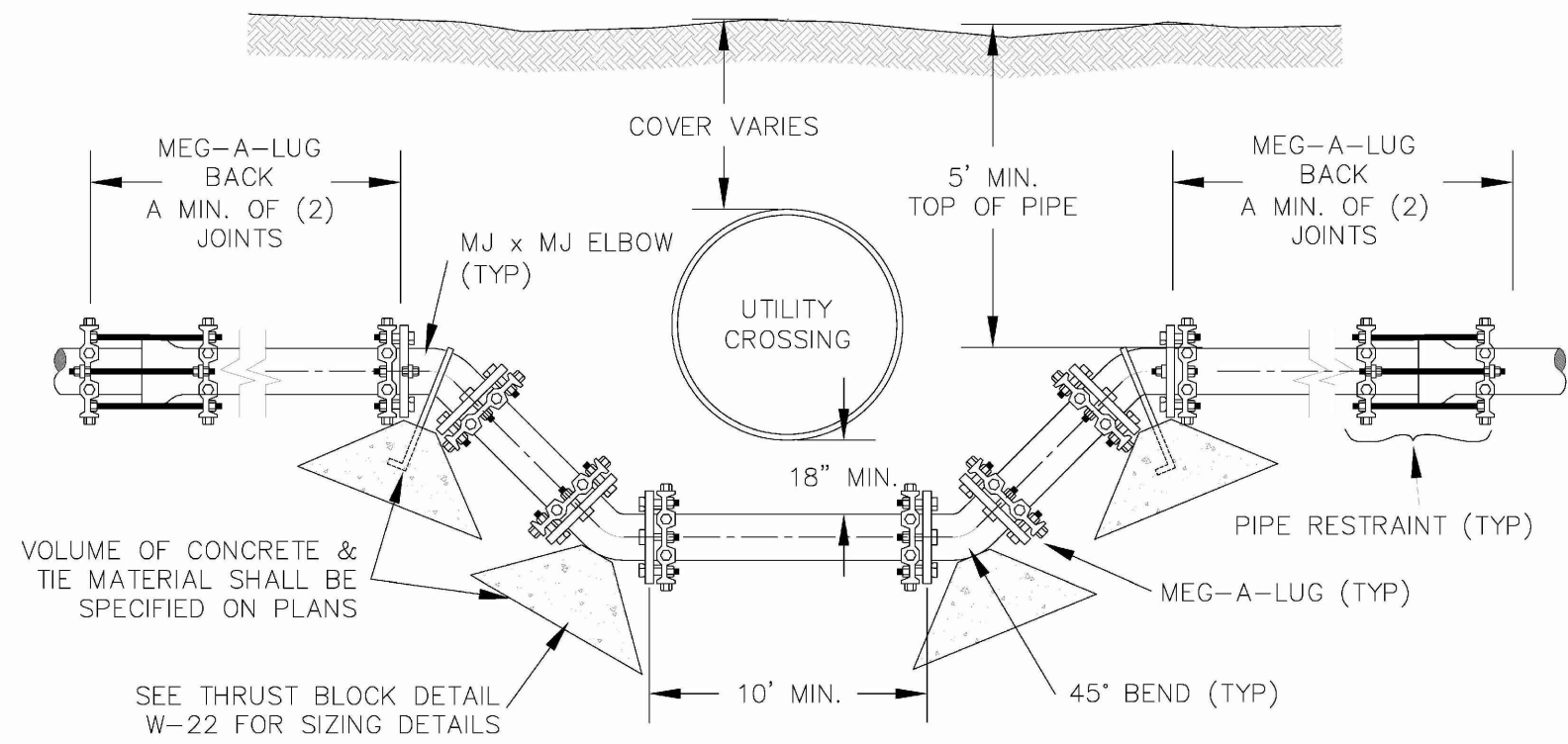


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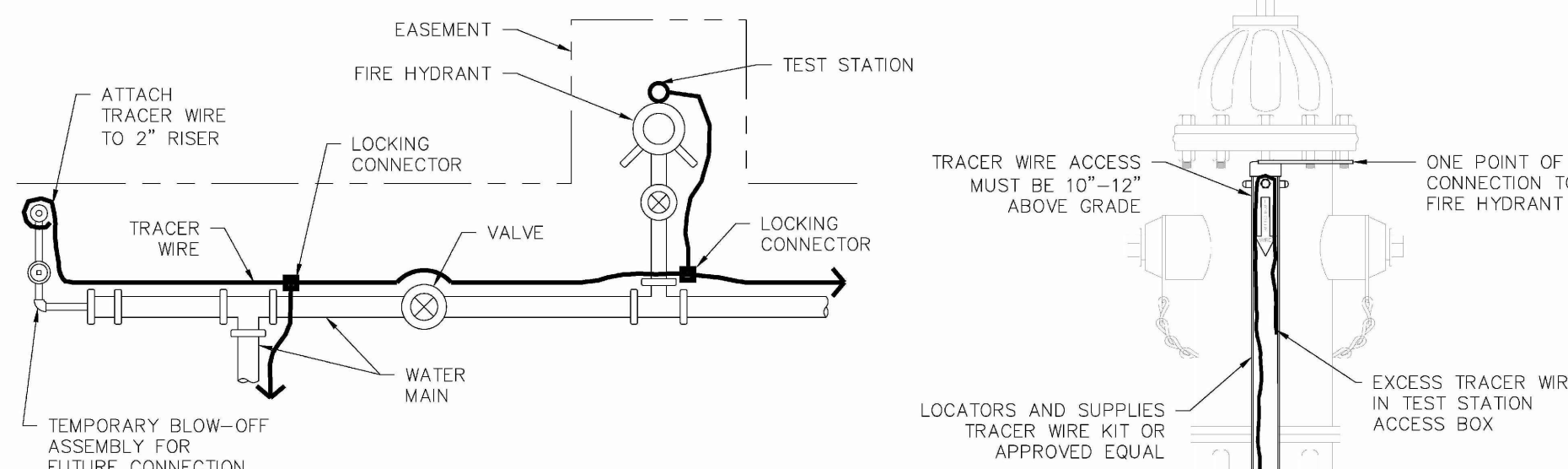
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NOTES:

- WHERE WATER LINE COVER EXCEEDS 7'-6" AT THE LOW POINT OF THE CONDUIT CROSSING, VERTICAL BENDS ARE REQUIRED. WHEN COVER IS LESS THAN 7'-6", PIPE JOINTS MAY BE DEFLECTED 1/2 THE MANUFACTURER'S RECOMMENDED DEFLECTION IN JEU OF VERTICAL BENDS. THE LIMITS OF THE DEPRESSED AREA SHALL BE DOCUMENTED ON THE "AS-BUILT" DRAWINGS.
- UTILITY CROSSING IS SANITARY SEWER & S OVER A RAW OR POTABLE WATER LINE. ALL UTILITY CROSSING JOINTS WITHIN 10' SHALL BE ENCASED 1' BOTH SIDES OF THE JOINT W/ CONCRETE. SEE ENCASEMENT DETAIL W-20.
- MULTIPLE JOINTS BETWEEN MEG-A-LUG FITTINGS SHALL BE RESTRAINED.
- SEE PIPE RESTRAINT TABLE (DETAIL W-18) FOR SPECIFICATIONS.
- NO TEES, SERVICE CONNECTIONS, VALVES, OR FIRE HYDRAN CONNECTIONS ARE ALLOWED IN LOWERING.
- P-P MATERIAL IN TOWER SECTION SHALL MAINTAIN MAIN LINE.



Sheet Revisions			Town of Castle Rock 100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	WATERLINE LOWERING	Issued By: Town of Castle Rock, Development Services January 1, 2023	DETAIL PLAN NO.	
Date	Comments					W-17	
3/19	REVISED PER STAFF COMMENTS						
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1	



TRACER WIRE SAMPLING PLAN

NOTES:

- REFERENCE TO STANDARD NOTES FOR TOWN OF CASTLE ROCK GENERAL TRACER WIRE REQUIREMENTS. FOR TEST STATION AT MAX. DEPTH, REFERENCE TO DETAIL SD-5.
- TRACER WIRE AND TEST STATION LIDS SHALL BE BLUE FOR POTABLE WATER DISTRIBUTION SYSTEM AND PURPLE FOR SEWAGE AND RAW WATER CONNECTIONS.
- TRACER WIRE IN TRENCH IS SHOWN AWAY FROM PIPE FOR CLARITY. TRACER WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5' FOOT INTERVALS.
- TRACER WIRE SHALL BE CAUTIONOUSLY PASSING AROUND THE OUTSIDE OF VALVES AND FITTINGS ON THE NORTH OR EAST SIDE.
- 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 EDGES OF PAVEMENT.
- AT ALL TEMPORARY BLOW-OFFS, THE END OF THE TRACER WIRE SHALL BE CONTAINED WITHIN A CORROSION PROTECTANT CAP, THEN BROUGHT TO SURFACE AND ATTACHED TO THE RISER PIPE AT GRADE WITHIN THE EASEMENT OR ROW.
- TEST STATIONS SHALL BE WITHIN 10' OF EASEMENT OR PUBLIC ROW.
- PROVIDE ADEQUATE LENGTH OF TRACER WIRE TO EXTEND 12 INCHES ABOVE GRADE.
- TEST STATIONS NOT LOCATED AT A FIRE HYDRANT MUST BE AT GRADE WITH A LOCKING LID.

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Date	Comments					W-28	
3/19	REVISED PER STAFF COMMENTS						
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1	

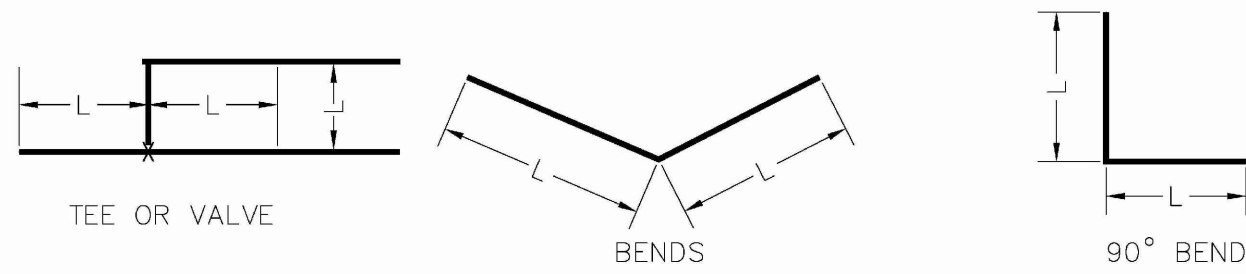
LENGTH OF RESTRAINED PIPE

PIPE SIZE	4"	6"	8"	12"	16"	20"	24"
FITTING	L	L	L	L	L	L	L
90° BEND, TEE, PLUG OR VALVE	30'	45'	60'	86'	108'	132'	155'
45° BEND	M1	13'	18'	25'	32'	39'	45'
22 1/2° BEND	M1	M1	M1	M1	M1	M1	M1
11 1/4° BEND	--	--	M1	M1	M1	M1	M1

LEGEND

L = LENGTH

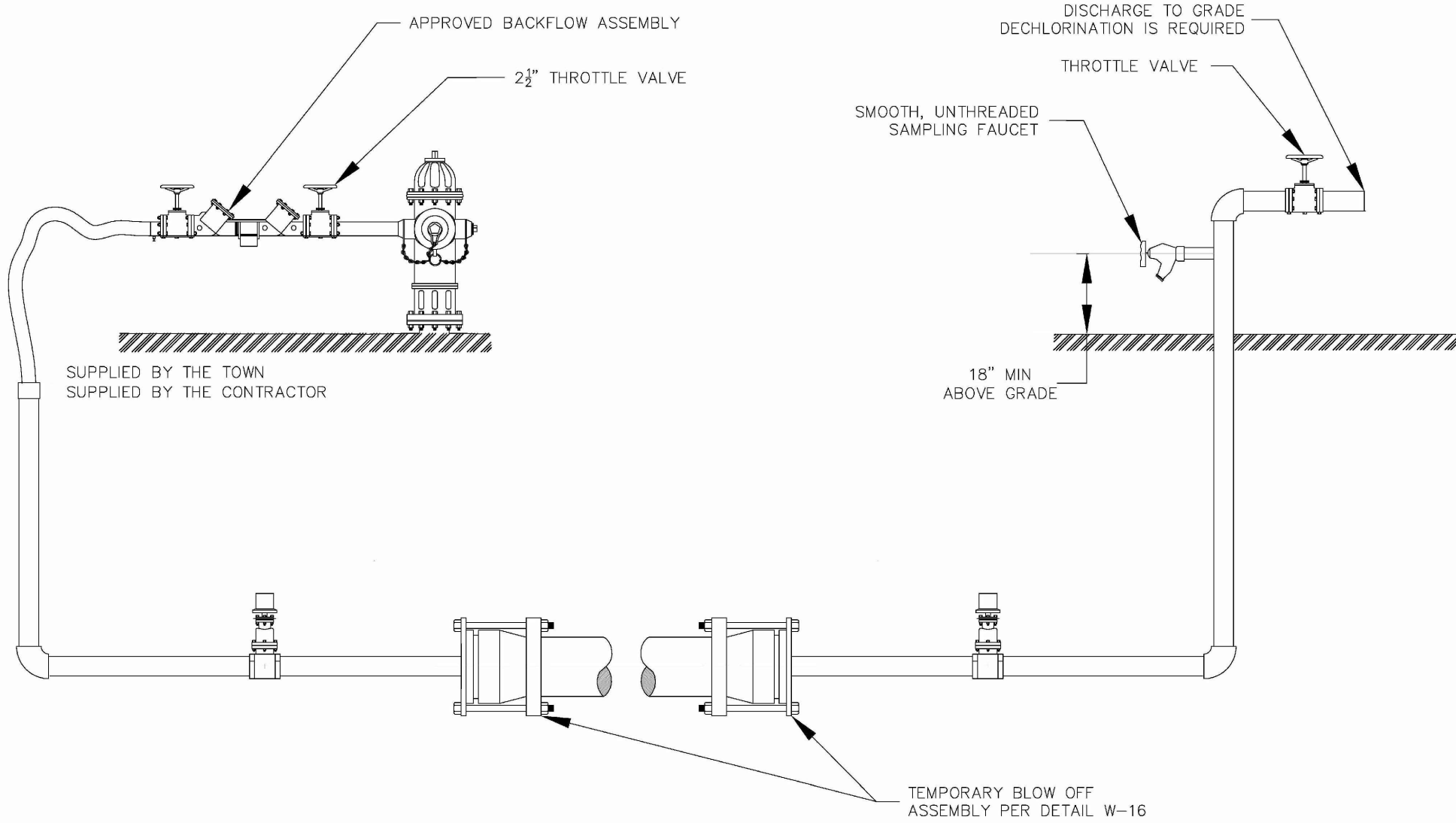
M1 = MINIMUM OF 1 FULL LENGTH OF PIPE



NOTES:

- LENGTH OF RESTRAINED PIPE MEASURED EACH WAY FROM VALVES & BENDS.
- MINIMUM 5' GROUND COVER REQUIRED.
- ALL FITTINGS SHALL BE FITTED WITH MEG-A-LUGS.
- PIPE RESTRAINTS SHALL BE AS FOLLOWS:
A. D.I.P. - RESTRAINTS FOR STD. MECHANICAL JOINTS SHALL BE OF HIGH STRENGTH DUCTILE IRON CONFORMING TO ASTM A536, GRADE 65-45-12. MECH. JOINTS SHALL HAVE A WATER WORKING PRESSURE OF 100 P.S.I. MINIMUM AND SHALL BE EBBA IRON INC., MEG-A-LUG SERIES 1100, FORD METER BOX CO., UNI-FLANGE 1400 OR APPROVED EQUAL.
B. PVC - RESTRAINT DEVICES SHALL BE MANUFACTURED OF HIGH STRENGTH DUCTILE IRON, ASTM A536, GRADE 65-45-12 IN 2" - 24" SIZES, ASTM A36 IN SIZES 30" - 36". FULL RATED PRESSURE OF THE PVC PIPE AND SHALL BE EBBA IRON INC., MEG-A-LUG SERIES 1100 FORD METER BOX, UNI-FLANGE 1400 OR APPROVED EQUAL.

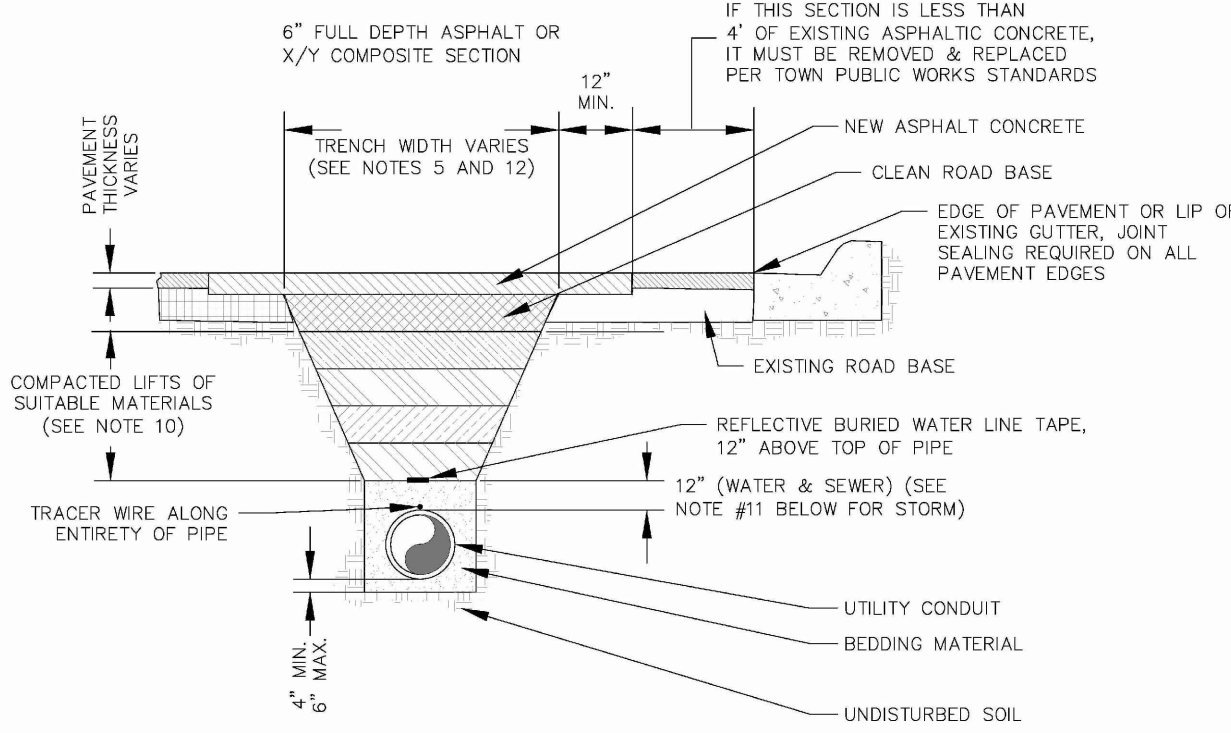
Sheet Revisions			Town of Castle Rock 100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	PIPE RESTRAINT TABLE	Issued By: Town of Castle Rock, Development Services January 1, 2023	DETAIL PLAN NO.	
Date	Comments					W-18	
3/19	REVISED PER STAFF COMMENTS						
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1	



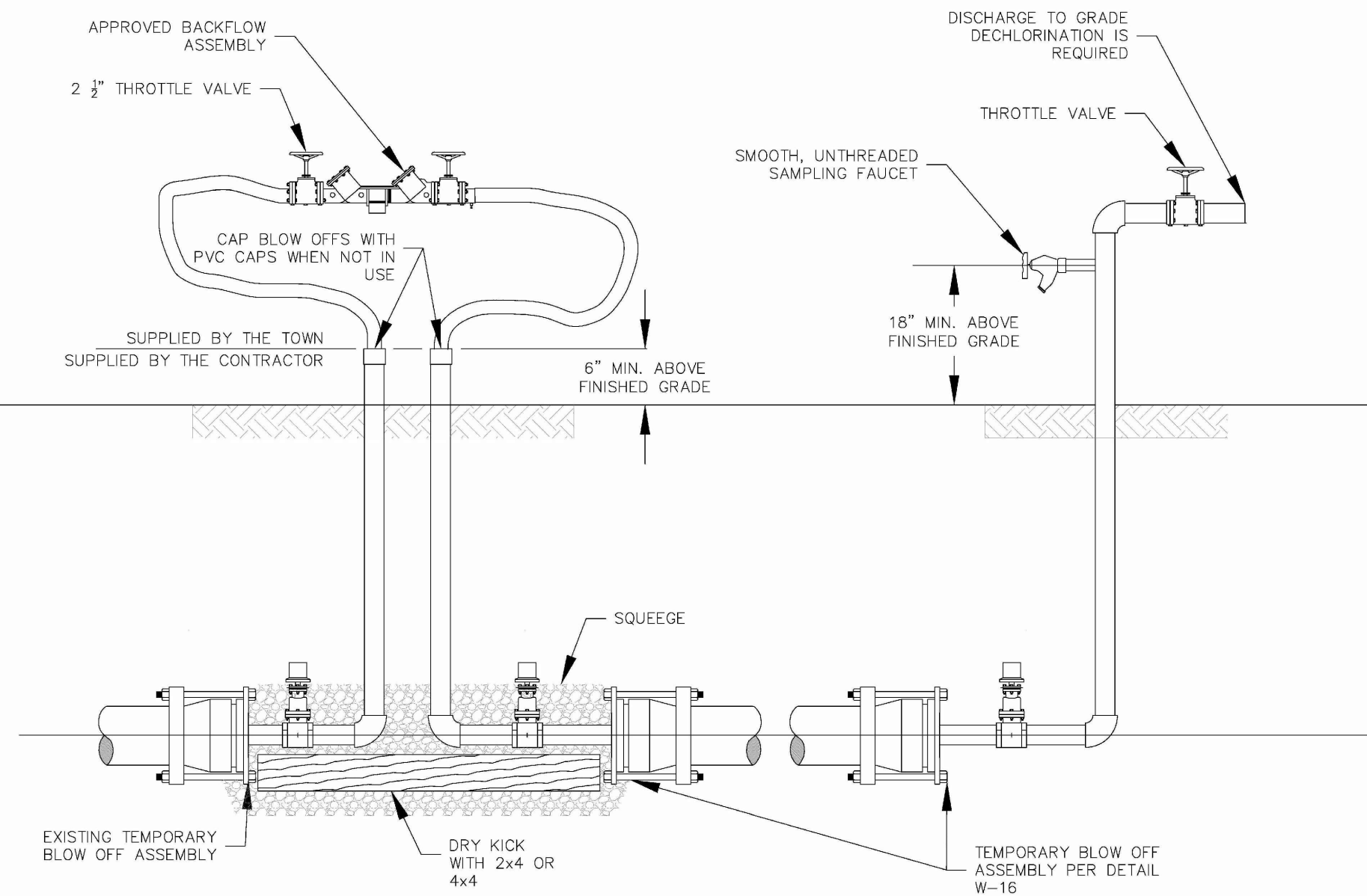
Sheet Revisions			Town of Castle Rock 100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	MAIN DISINFECTION UP TO 12"	Issued By: Town of Castle Rock, Development Services January 1, 2023	DETAIL PLAN NO.	
Date	Comments					W-35A	
8/16	NEW DETAIL						
3/19	REVISED PER STAFF COMMENTS					Sheet 1 of 1	

NOTES:

- ALL BRANCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THE DESIGNER'S SPECIFICATIONS FOR PUBLIC WORKS.
- PRIOR TO PLACEMENT OF CONCRETE, ALL EDGES SHALL BE SAW CUT TO A CLEAN, STRAIGHT, AND VERTICAL EDGE.
- PRIOR TO PLACEMENT OF ASPHALT, 6 INCHES OF EXISTING ASPHALT SHALL BE VULCANIZED TO 2 INCH DEPTH ON ALL SIDES TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH ASP-1.
- WHEN SUBSTITUTING FOR BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MPEC CLSM STANDARDS.
- TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.
- 8 INCH O.D. ASTM 3688 STANDARD COMPACTION 5-FORM IS REQUIRED ON ALL TRENCHING ZONES. IN BOTH IMPROVED & UNIMPROVED AREAS.
- IN UNIMPROVED AREAS, ALL DISTURBED AREAS SHALL BE REGRADED, SEEDING & MULCHED.
- IN CONCRETE ROADWAYS, A MINIMUM OF 1/2" PAVEMENT OR 10' x 5' SECTION WILL BE ALLOWED TO REMAIN. OTHERWISE, THE 1/2" CONCRETE PAVEMENT MUST BE REPAIRED.
- USL #4 FILL AT 2' INTERVALS ALONG THE PERIMETER OF CONCRETE REPAIRS SHALL BE REQUIRED.
- 6" MAXIMUM COMPACTED LIFT THICKNESS IF FLOWABLE FILL NOT REQUIRED.
- EXISTING MATERIAL DIRT - WHEN INSTALLING STORM SEWER SHALL BE LIFT TO SPRING LINE AND EXIST IN AREAS OF UNSUITABLE BACKFILL. WHEN EXISTING MATERIAL SHALL BE 12" ABOVE GRADE.
- TRENCH WIDTHS LESS THAN 4' OR TRENCHING THAT EXCEEDS 10' SHALL BE 12" ABOVE GRADE. REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.



Sheet Revisions			Town of Castle Rock 100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-2217 Development Services	WATER TRENCH DETAIL	Issued By: Town of Castle Rock, Development Services January 1, 2023	DETAIL PLAN NO.	
Date	Comments					W-21	
3/19	REVISED PER STAFF COMMENTS						
3/20	REVISED PER STAFF COMMENTS					Sheet 1 of 1	

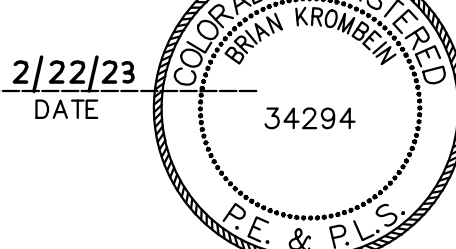


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Date	Comments					W-35B	
8/16	NEW DETAIL						
3/19	REVISED PER STAFF COMMENTS					Sheet 1 of 1	

PROFESSIONAL ENGINEER CERTIFICATION

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Brian Krombein, PE, PLS
COLORADO NO. 34294
FOR AND ON BEHALF OF
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PROJECT NO. CD23-0039

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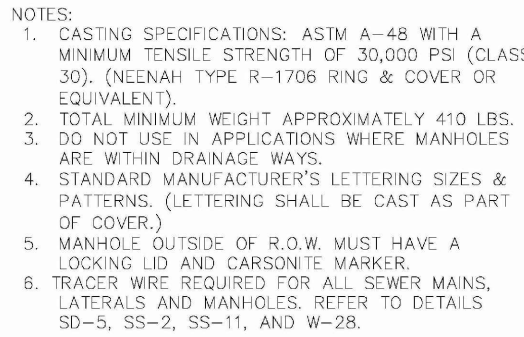
H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	No.	REVISION	BY	DATE
		2/22/24	BK	BK					

CDR+J PHASE 2

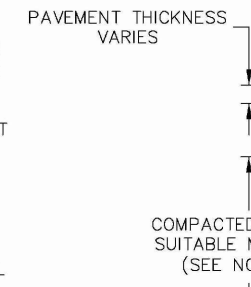
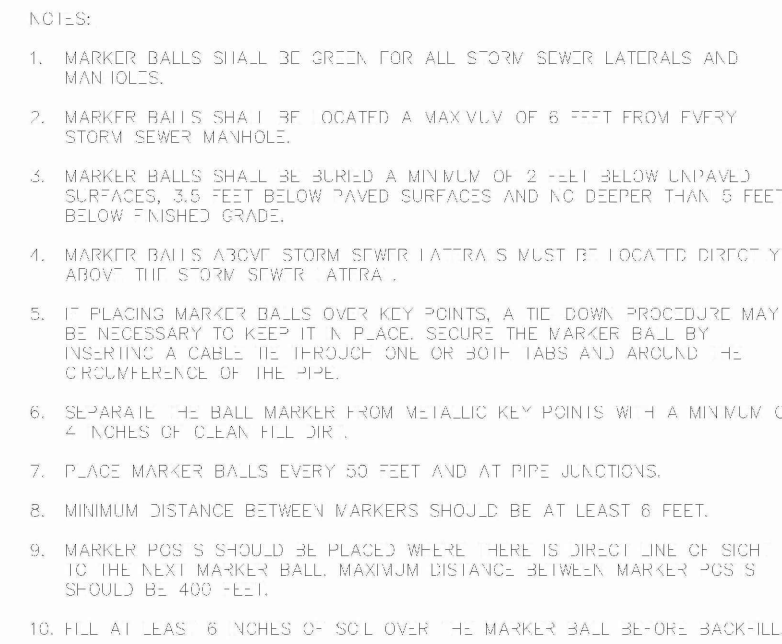
STANDARD DETAILS

SHEET C15 OF 27

JOB NO. 21007



1. ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THIS MANUAL, 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 INCHES DEEP IN ORDER TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH EMULSION.
4. WHEN SUBSTITUTING FOR BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MPEC C3.5M STANDARDS.
5. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR DEEPER THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.
6. 95% OF ASTM D698 STANDARD COMPACTION EFFORT SHALL BE MET IN ALL TRENCH 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 JOINTS $\times$ 5' SPACING SHALL BE ALLOWED IN ORDER TO REMOVE THE ENTIRE CONCRETE PANEL WITHOUT DAMAGING.
9. MAKE #4 REBAR AT 2' CENTERS ALONG THE PERIMETER OF CONCRETE REPLACEMENT SECTIONS.
10. #6 MAXIMUM COMPACTED FILL THICKNESS IF FLOWABLE FILL NOT REQUIRED.
11. BEDDING MATERIAL DEPTH WHEN INSTALLING STORM SEWER SHALL BE 4" MINIMUM. EXCEPT IN AREAS OF UNSUITABLE BACKFILL, THEN BEDDING DEPTH SHALL BE 6" MINIMUM.
12. TRENCH WIDTHS LESS THAN 4' OR TRENCHING THAT EXPERIENCES DAVE-INS OR SLOUGHING SHALL REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.

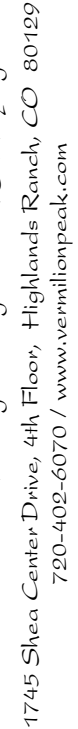


Town of
CASTLE ROCK
COLORADO

APPROVED BY:

DATE _____

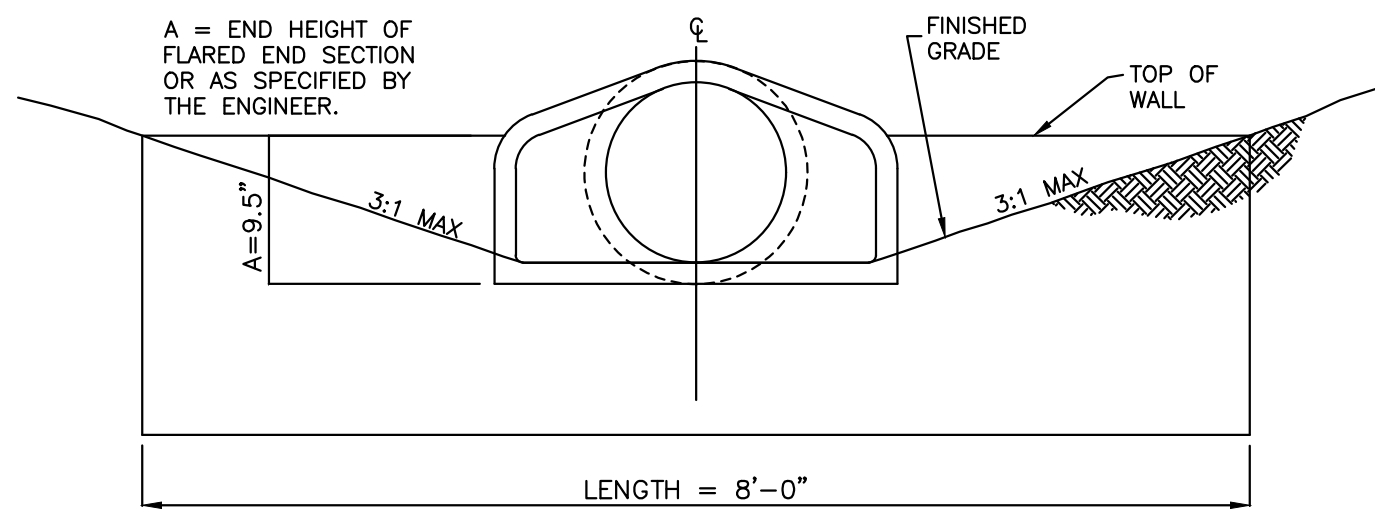
PREPARED FOR
FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH

CDR+J PHASE 2

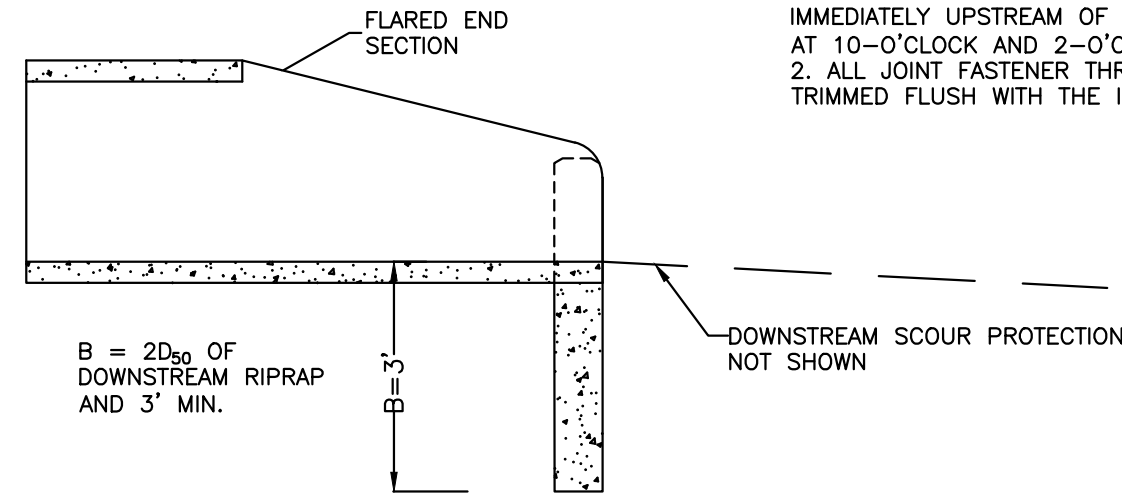
STANDARD DETAILS

SHEET C16 OF 27

JOB NO. 21007



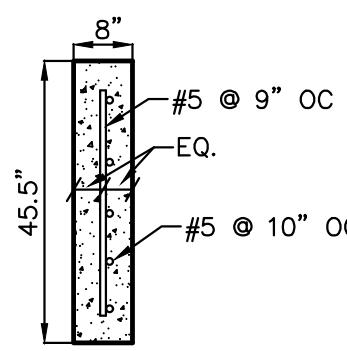
ELEVATION VIEW



PROFILE

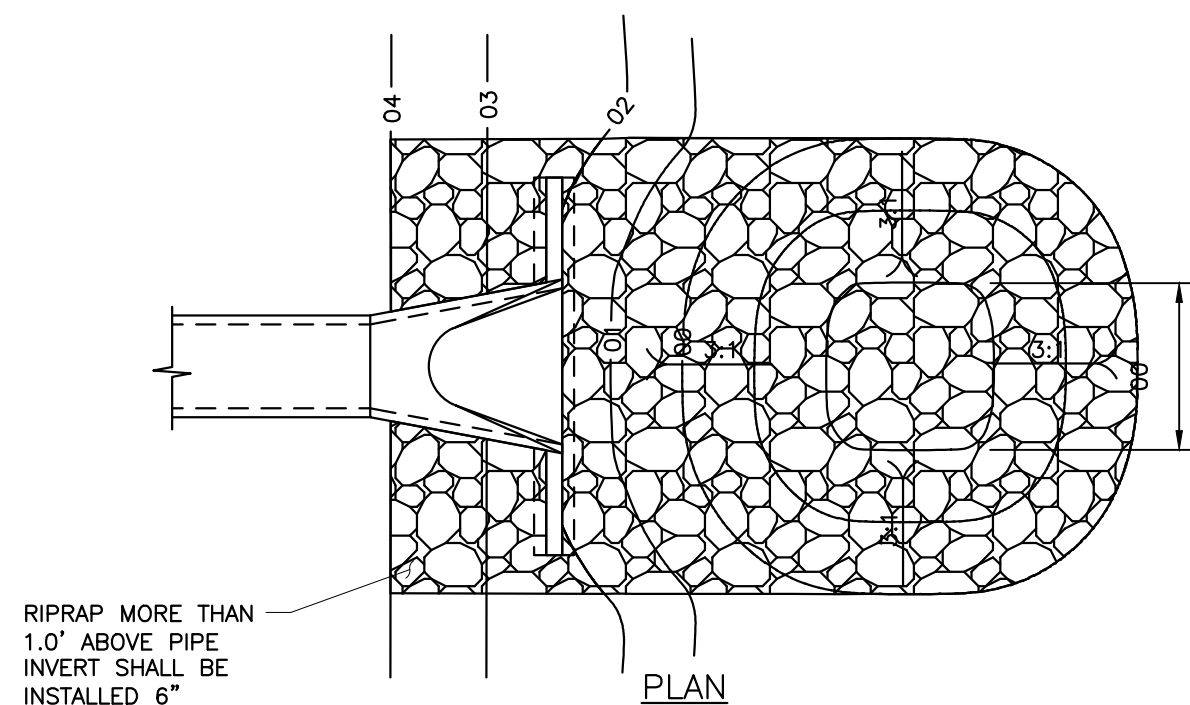
HEADWALL DESIGN TABLE

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"

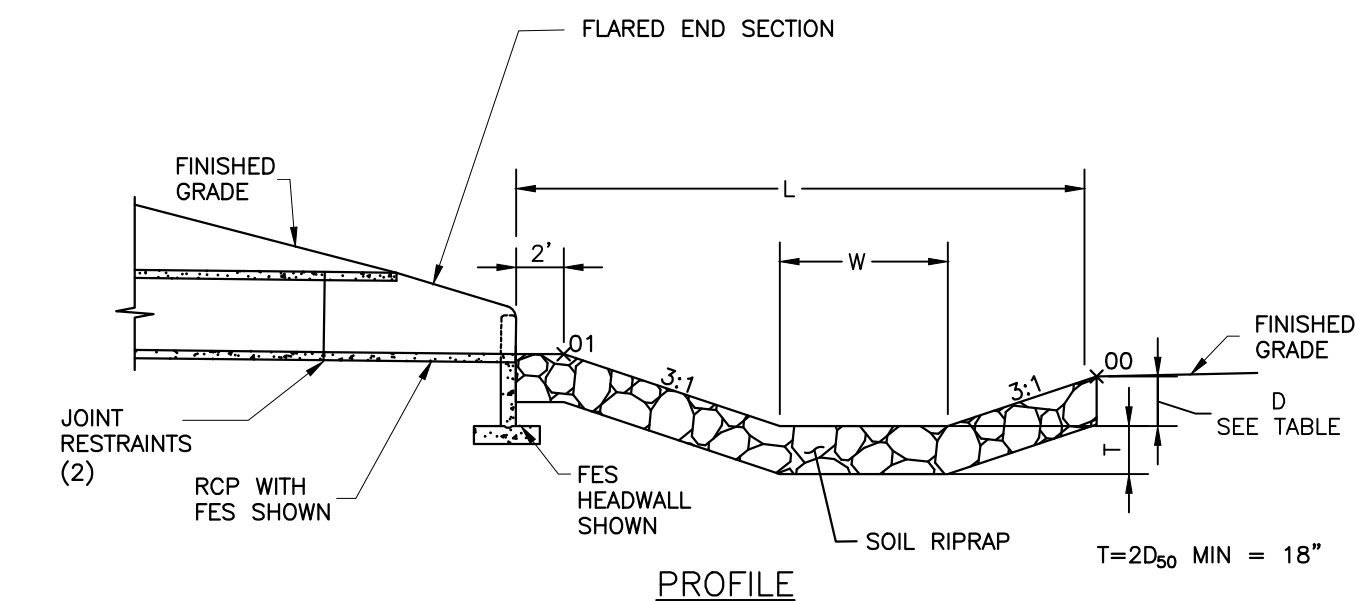


Side View

FLARED END SECTION (FES) HEADWALL



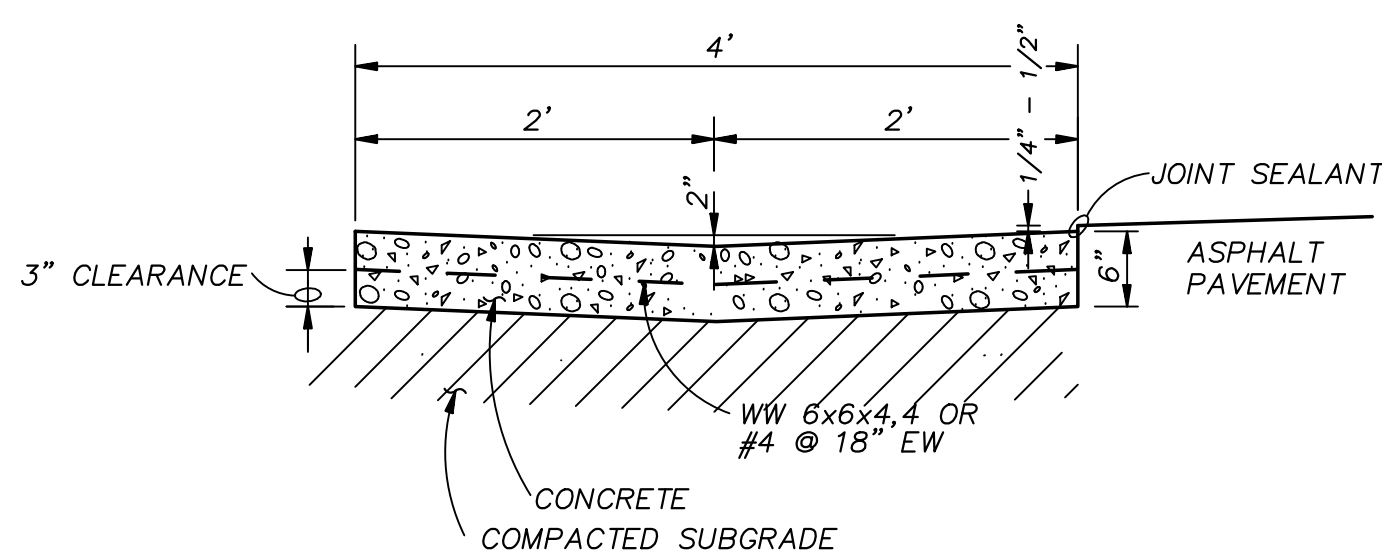
PLAN



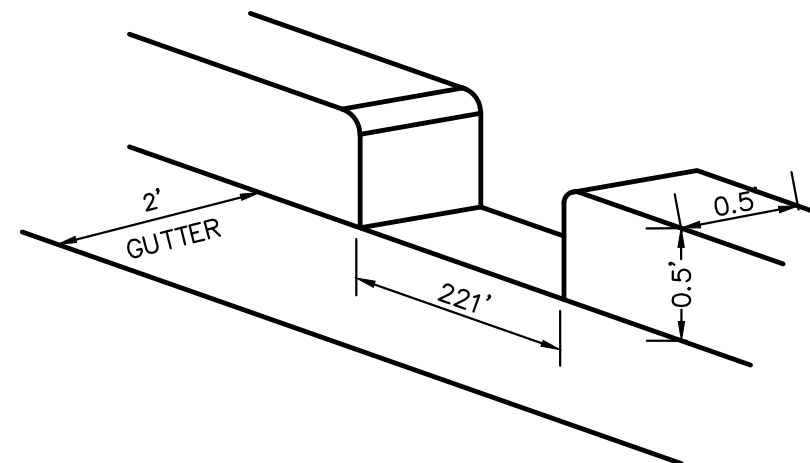
PROFILE

PIPE SIZE OR BOX HEIGHT	D	W	L
18" - 24"	1'-0"	4'	15'
30" - 36"	1'-6"	6'	20'
42" - 48"	2'-0"	7'	24'
54" - 60"	2'-6"	8'	28'
66" - 72"	3'-0"	9'	32'

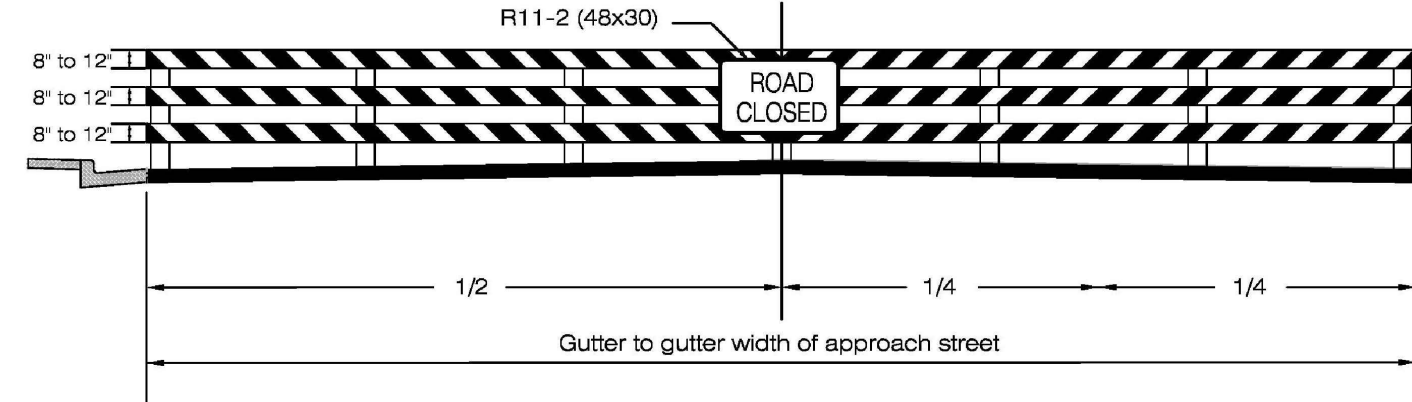
LOW TAILWATER RIPRAP BASIN



4' VALLEY PAN (PRIVATE)



2' CURB CUT (PRIVATE)



DETACHED OR SIDEWALK DOES NOT END AT BARRICADE

ATTACHED / SIDEWALK ENDS AT BARRICADE

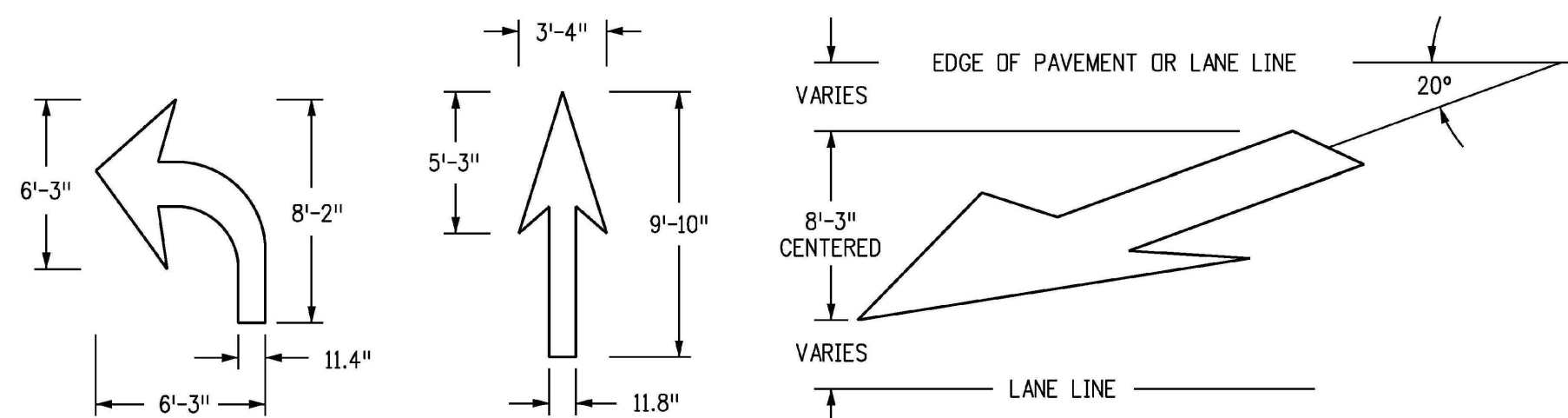
- NOTES:
1. Rails shall be nominal lumber dimension.
 2. Posts shall be 6" x 6" pressure treated, rot-resistant lumber.
 3. Use 6" wide reflectorized orange stripes on reflectorized white background, front side only, paint back and edges white.
 4. Other options may be used as approved by Local Entity Engineer.

These signs and barricades must be installed by the Developer at the end of all new streets that dead end on a temporary basis, and must be maintained by the Developer until the street is extended by future development.

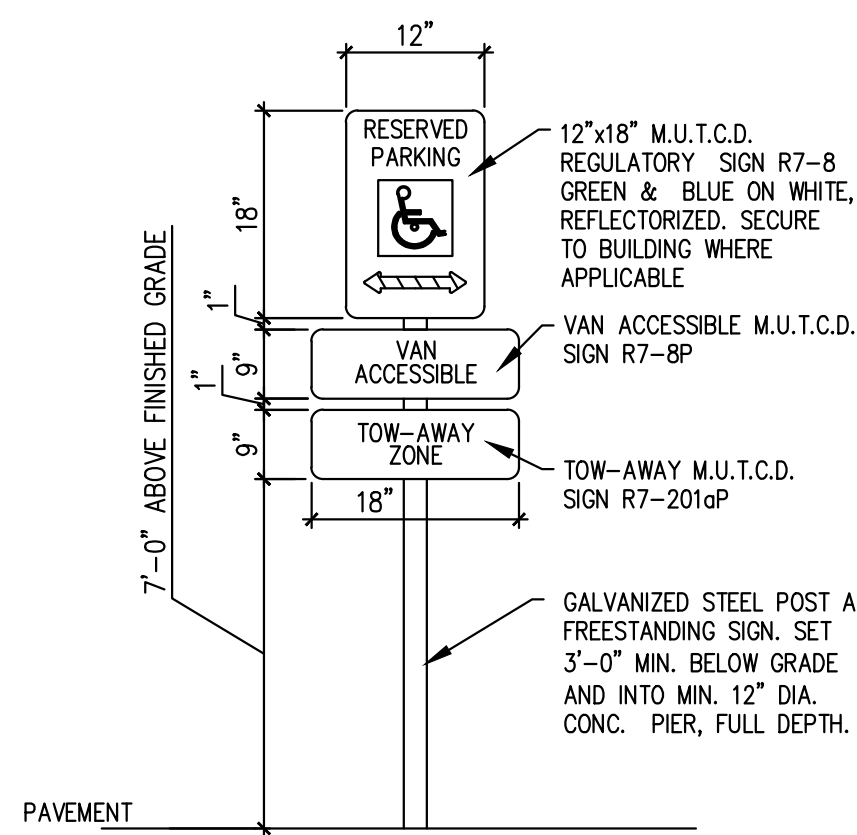
TEMPORARY DEAD END BARRICADES



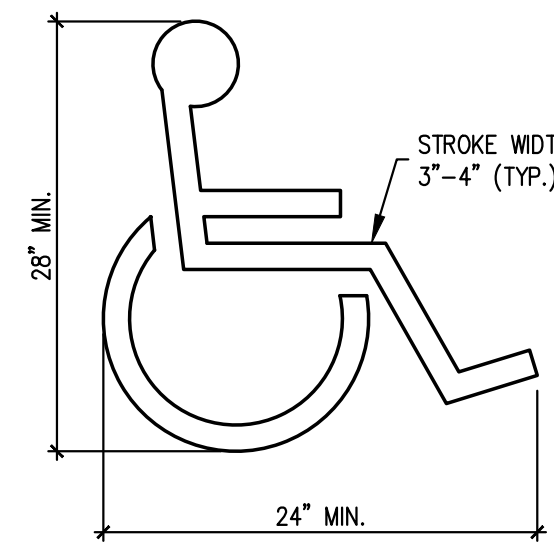
R11-2
30" x 24"



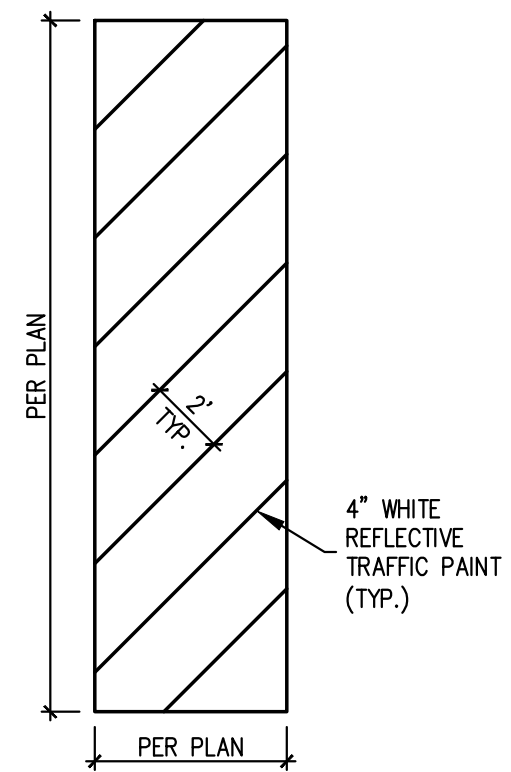
PAVEMENT MARKINGS



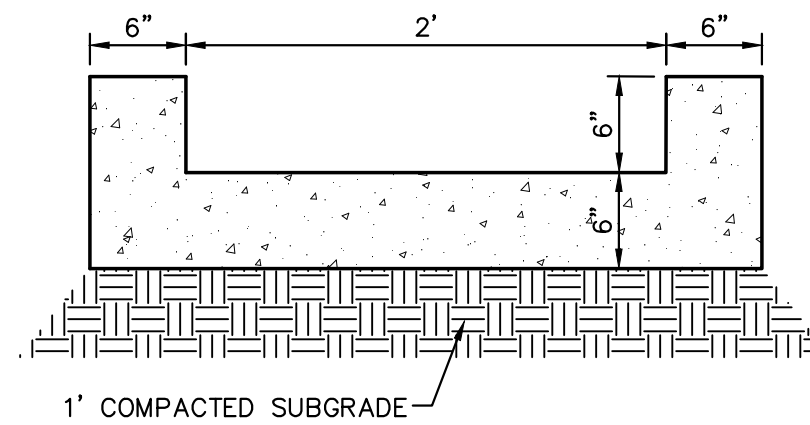
HANDICAP PARKING SIGNAGE



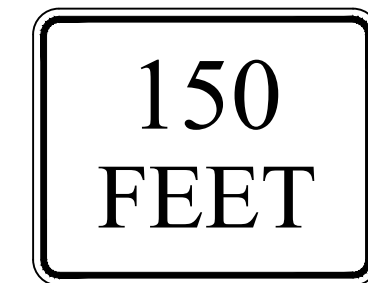
HANDICAP SYMBOL



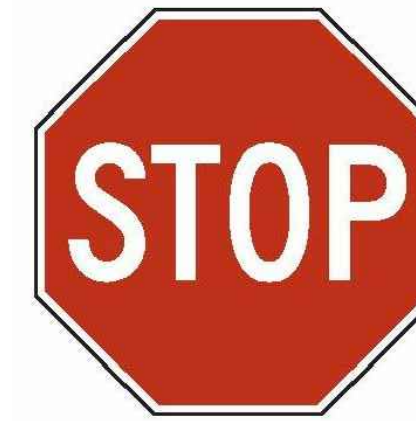
HANDICAP AISLE STRIPING



CURB CHASE (PRIVATE)



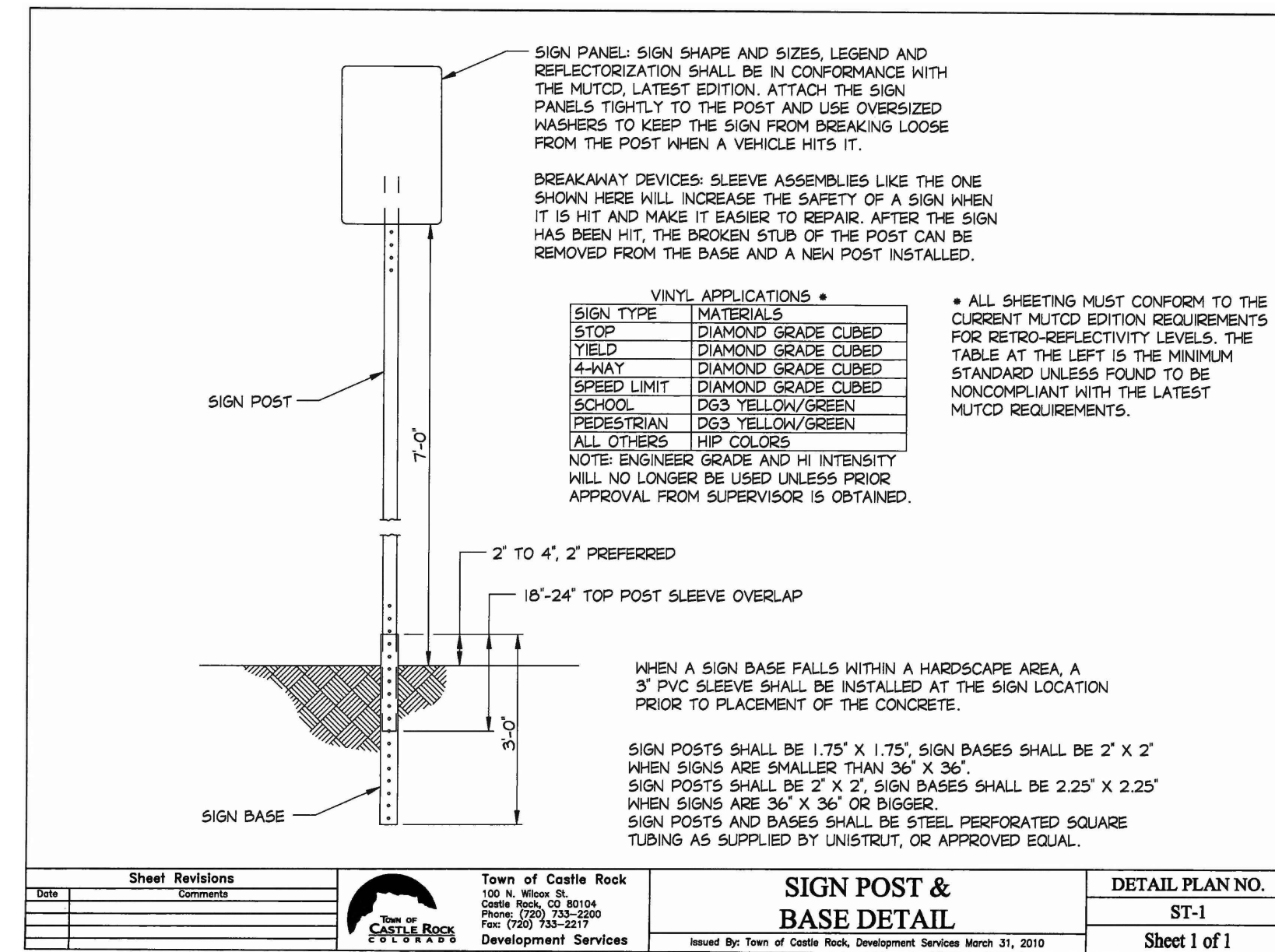
W16-2P
24" x 18"



R1-1
30" x 30"



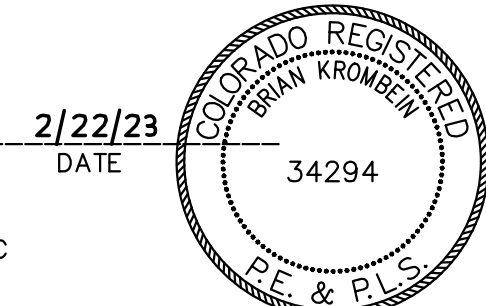
R3-7R
30" x 30"



PROFESSIONAL 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, 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:

DEVELOPMENT SERVICES DATE

PROJECT NO. CD23-0039

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

FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH

Vermilion Peak Engineering
Civil Engineering & Land Surveying
1745 Shen Center Drive 4th Floor Highlands Ranch, CO 80129
720-402-6070 / www.vermilionpeak.com

DATE	BY	REVISION	NO.	AS SHOWN	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
							2/22/24	BK	BK	

CDR+J PHASE 2
STANDARD DETAILS

SHEET C17 OF 27
JOB NO. 21007

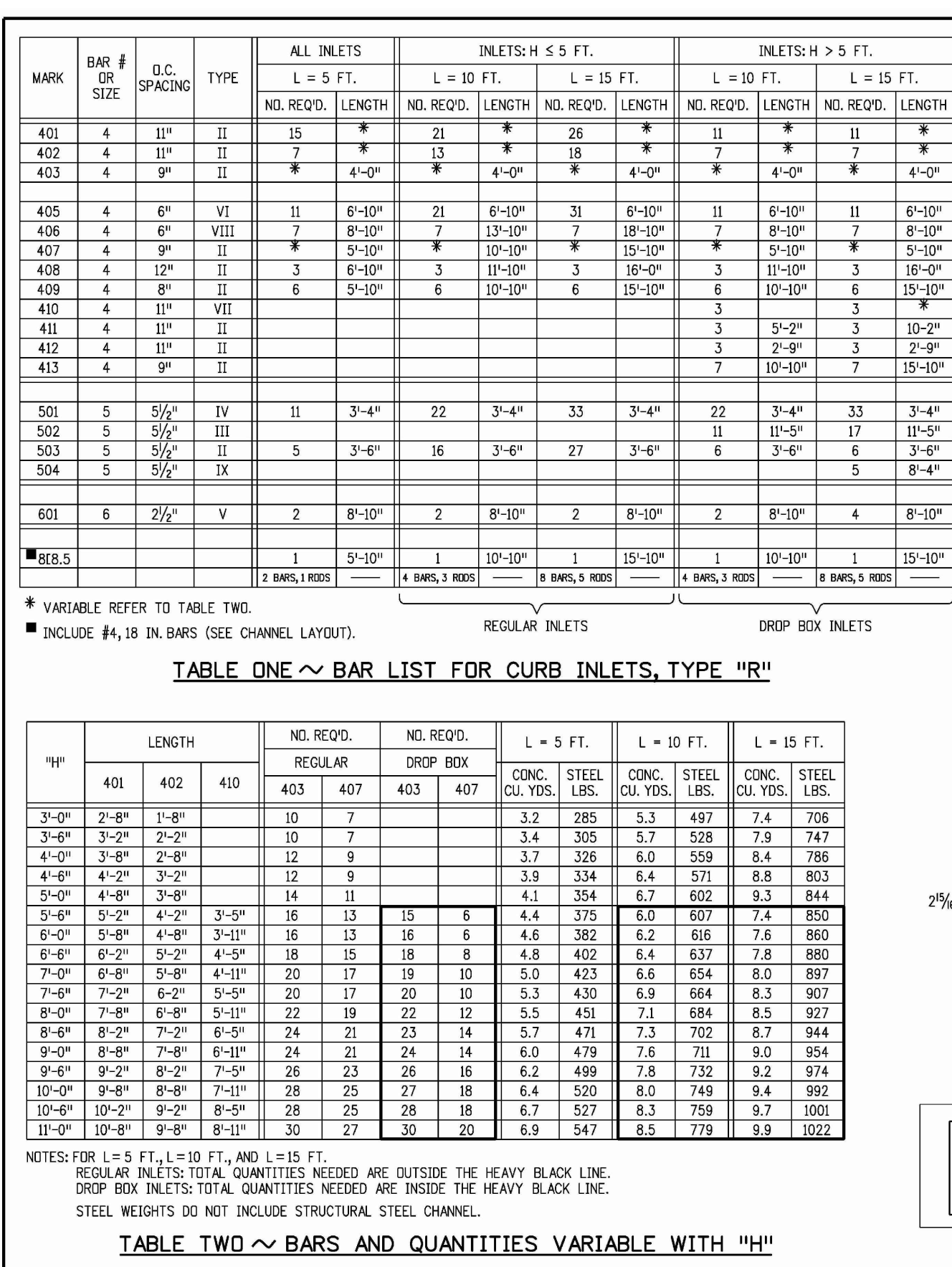
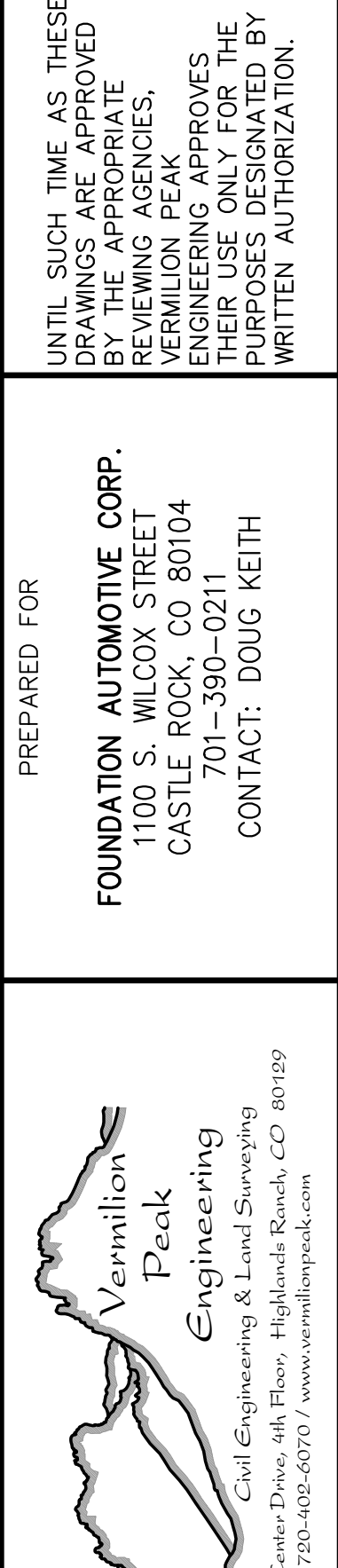


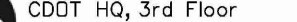

 BRIAN KROMBEIN, PE, PLS. _____
 COLORADO NO. 34294 _____
 FOR AND ON BEHALF OF _____
 VERMILION PEAK ENGINEERING LLC _____

DATE 2/22/23

COLORADO REGISTERED
 BRIAN KROMBEIN
 34294

SHEET 018 OF 27



Computer File Information		Sheet Revisions		Colorado Department of Transportation		CURB INLET TYPE R		STANDARD PLAN NO.	
Creation Date: 07/31/19		Date: _____ Comments: _____		 2825 West Howard Place 3207 Hq, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868		M-604-12 Standard Sheet No. 2 of 2		Issued by the Project Development Branch: July 31, 2019 Project Sheet Number: _____	
Designer Initials: JBK		(R-X)							
Last Modification Date: 07/31/19		(R-X)							
Detailer Initials: LTA		(R-X)							
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English		(R-X)		Project Development Branch		JBK			

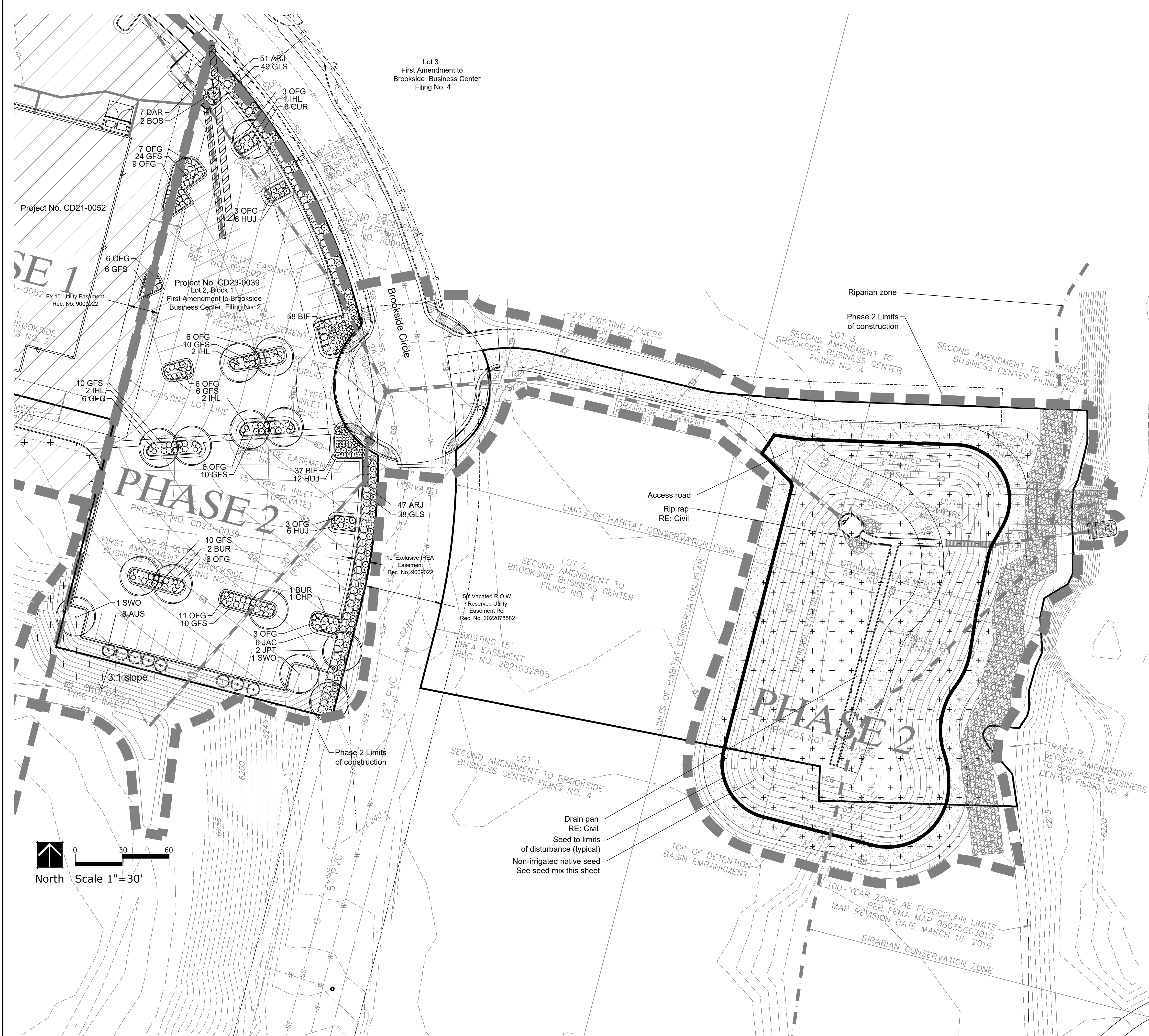


<p><u>PROFESSIONAL ENGINEER CERTIFICATION</u></p> <p>I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL</p>	<p><u>TOWN APPROVAL BLOCK</u></p> <p>TOWN OF CASTLE ROCK APPROVAL PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM</p>
--	---

TOWN APPROVAL BLOCK

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

APPROVED BY:



PHASE ONE & PHASE TWO			
PLANT TYPE	TOTAL PLANT QUANTITIES		
	ON-SITE	RIGHT OF WAY	
2" Caliper Deciduous Trees	25		
Ornamental Trees 1.5" cal. or 6'-8" ht. multi-stem	8	8	
6' Evergreen Trees	19	3	
TOTAL TREES	52	11	
5 Gallon Evergreen Shrubs	212		
5 Gallon Deciduous Shrubs	312	31	
TOTAL SHRUBS	529	31	
Shrub Hydrozone Type			
Very Low	138		
Low	391		
Moderate	0		

LEGEND

2" Caliper Deciduous Trees

1.5" Caliper Ornamental Trees

6' Evergreen Trees

5 Gallon Evergreen Shrubs

5 Gallon Deciduous Shrubs

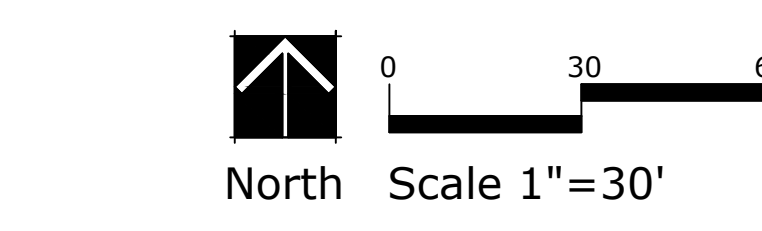
1 Gallon Ornamental Grasses

IRRIGATED FESCUE TURF SEED MIX
SR 3000 Hard Fescue 30%
Chewings Fescue 30%
Creeping Red Fescue 25%
SR 4000 Perennial Ryegrass 15%

IRRIGATED SEED MIX
Pawnee Buttes- PBST Native Lawn Mix
Buffalograss, Blue Grama
Application rate of 5 lbs/1,000 sf

NON-IRRIGATED SEED MIX
Pawnee Buttes Native Prairie Mix
Blue Grama, Buffalo Grass, Sideoats Grama, Western Wheatgrass,
Green Needlegrass, Sand Dropped
Application rate of 20 lbs/ acre

Phase 2 Construction Line



BEFORE YOU DIG

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE
YOU DIG. GRADE OR EXCAVATE FOR THE MARKING
OF UNDERGROUND MEMBER UTILITIES

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 _____

TIM DUNN A.S.L.A. R.L.A.
TIM DUNN DESIGN LANDSCAPE ARCHITECTURE
tadunn1959@gmail.com 720-350-2411
www.timdunnlandscapearchitect.com

DATE	3.21.22
REV. NO.	CD City Comments #2
DESCRIPTION	Brookside Circle revisions
1	Brookside Circle revisions
2	CD Comments
3	

CDR+J - PHASE TWO
LANDSCAPE PLAN
SOUTH WILCOX ST. & BROOKSIDE CIRCLE
CASTLE ROCK, COLORADO

PROJ NO: _____
DRAWN BY: TAD
DATE: 2.16.22

SHEET NUMBER
L.1
20 OF 27

PHASE ONE & PHASE TWO

SITE UTILIZATION TABLE

Open Space/Landscaping	.49 ac	21,238 sf	12.1 %
Sidewalks	.10 ac	4,481 sf	2.6 %
Building Coverage	1.04 ac	45,114 sf	25.8%
Parking & Drive	2.39 ac	104,074 sf	59.5 %
TOTAL	4.02 ac	174,907 sf	100%

COMPOSIT 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

CLWUR CHART FOR THE TOWN OF CASTLE ROCK - (LWUR x IA) / TA								
Irrig. Zone	Plant Name (Common)	App. rate Inches / month	Landscape Zone	% of total area	IA (Irrigated area in sf for each zone	LWUR Landscape water use rating	TA Total area of all irrigated landscape zones	CLWUR LWUR x IA/TA
	Non Irrigated Native Seed Mix			10%	2,541 sf			
Drip	Shrub beds	3.0	Moderate	30%	14,406 sf	2	26,484 sf	1.08
Spray	Irrigated Native Seed Mix	2.0	Low	60%	12,078 sf	2	26,484 sf	0.91
TOTALS				100%	26,484 sf		26,484 sf	
Trees in non-irrigated native to recieve drip irrigation						TOTAL OF THE CLWUR		1.99

TOTAL OF THE CLWUR 1.99 (2)

LANDSCAPE SUMMARY TABLE

Landscape Type	Square Footage	Percentage
Irrigated Native Seed Mix	12,078	45%
Non-irrigated Seed Mix	2,541	5%
Irrigated Shrub Beds	14,406	45%
TOTAL LANDSCAPE AREA	26,484 sf	100%

LANDSCAPE BUFFER

	Required Buffer	Provided Buffer	
South Wilcox Street	20 FT	20 FT	
Brookside Circle	10 FT	20 FT	
South Boundary	15 FT	15 FT	

STREETSCAPE REQUIREMENT TABLE

Street Name	Frontage Linear Feet (LF)	Trees				Shrubs	
		Required trees	Canopy shade trees min. 75% of total provided	Non-canopy shade trees provided	Provided trees total	Required shrubs	Provided shrubs
S. Wilcox Street	307	8		11	11	31	31
Brookside Circle	872	22	15	6	16	88	313

*Notes:
 1). There is no planting area along Brookside Circle with attached walk. Right-of-way is at back of walk.
 Street trees and shrubs are provided per standards, plants are planted on site adjacent to walk.
 2) Due to CORE regulations, no trees can be planted within 20' of the existing overhead powerline. A variance is being requested to plant trees east of the walk and a minimum of 20' from the power line. See TCY21-0090.

COMMERCIAL LANDSCAPE SITE INVENTORY

Town of Castle Rock Registered Landscape Professional: Tim A. Dunn
 State of Colorado License Landscape Architect # 400
 Company Name: Tim Dunn Design Address: 6948 Davenport Place, Castle Rock, Colorado 80108
 Phone: 720-350-2411 Email: tadunn1958@gmail.com Date: 7.7.21
 Project Name: CDR+J Site Development Plan

CLWUR Total = 1.99 (2) (LWU rating Low Water Use)

Gross Site	Landscape Area Required 10% landscape 17,490 sf	Turfgrass List Species	Non-Living Ornamental (area in sq ft)	Number of Trees Required	Number of Trees Provided	Number of Shrubs Required	Number of Shrubs Provided	Soil Prep. Amounts (in cu yds1,000 sf)	Separate Irrigation Service Connections
174,907 sf Total	21,238 sf Provided	Fescue Turf 0 sf	262 sf	35	41	85	333	5 cy/1,000 sf	yes

Parking Lot (not including drive area leading to parking)	Parking Lot Landscape (Area in sq ft)	No. of Parking Spaces (surface parking)	Non-Living Ornamental (area in sq ft)	No. of Interior Landscape Medians	Min. width of Landscape Medians	Number of Trees Required	Number of Trees Provided	Number of Shrubs Required	Number of Shrubs Provided
83,767 sf	9,180 sf	209	0	13	8'	20	20	40	196

PLANT SCHEDULE / LEGEND - Phase Two Plant Quantities

QUAN.	KEY	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION	HYDROZONE	MATURE SIZE height/width
DECIDUOUS CANOPY TREE							
	HL	IMPERIAL HONEY LOCUST	Gleditsia triacanthos var.inermis 'Imperial'	2" CAL.	B&B	2	45'x40'
3	BUR	BUR OAK	Quercus robur	2" CAL.	B&B	2	70'x50'
	NRO	NORTHERN RED OAK	Quercus rubrum	2" CAL.	B&B	2	60'x40'
2	SWO	SWAMP WHITE OAK	Quercus bicolor	2" CAL.	B&B	2	60'x60'
2	JPT	JAPANESE PAGODA TREE	Sophora japonica 'Millstone'	2" CAL.	B&B	2	40'x50'
ORNAMENTAL TREE							
e	TAR	TARTARIAN MAPLE	Acer tartaricum	1.5" CAL.	B&B	2	20'x20'
1	CHP	CHANTICLEER PEAR	Pyrus calleryana 'Chanticleer'	1.5" CAL.	B&B	2-3	15'x35'
EVERGREEN TREES							
16	AUS	AUSTRIAN PINE	Pinus nigra	6" HT.	B&B	2	50'x30'
6	BOS	BOSNIAN PINE	Pinus heldreichii	6" HT.	B&B	2	25'x15'
EVERGREEN SHRUBS							
98	ARJ	ARCADIA JUNIPER	Juniperus sabina 'Arcadia'	5 GAL.	CONTAINER	2	2'x4'
25	HUJ	HUGHES JUNIPER	Juniperus horizontalis 'Hughes'	5 GAL.	CONTAINER	2	2'x8'
DECIDUOUS SHRUBS							
8	DAR	DARTS GOLD NINEBARK	Physocarpus opulifolius 'Darts Gold'	5 GAL.	CONTAINER	2	5'x5'
87	GLS	GRO-LOW SUMAC	Rhus aromatica 'Gro-Low'	5 GAL.	CONTAINER	1-2	2'x4'
80	GFS	GOLD FLAME SPIREA	Spiraea japonica 'Goldflame'	5 GAL.	CONTAINER	2	3'x3'
6	JAC	JACKMAN POTENTILLA	Potentilla fruticosa 'Jackmannii'	5 GAL.	CONTAINER	2	3'x4'
6	CUR	ALPINE CURRANT	Ribes alpinum	5 GAL.	CONTAINER	2-3	6'x6'
CLUMP/ ORNAMENTAL GRASS							
	MLM	MORNING LIGHT MISCANTHUS	Miscanthus sinensis 'Morning Light'	1 GAL.	CONTAINER	3	5'x3'
75	OFG	ORNAMENTAL FOUNTAIN GRASS	Pennisetum orienatale	1 GAL.	CONTAINER	2	3'x2'
93	BIF	BLUE IDAHO FESCUE GRASS	Festuca idahoensis 'Siskiyou Blue'	1 GAL.	CONTAINER	2	1.5'x2'
	FRG	FEATHER REED GRASS	Calamagrostis acutiflora 'Karl Foerster'	1 GAL.	CONTAINER	2	4'x2'

TOWN OF CASTLE ROCK STANDARD CONSTRUCTION NOTES

- INSTALLING CONTRACTOR SHALL CONTACT CASTLE ROCK WATER AT 720.733.6017 TO SCHEDULE A PRE-CONSTRUCTION MEETING BEFORE BEGINNING LANDSCAPING.
- LANDSCAPE & IRRIGATION SHALL BE INSTALL BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE PROFESSIONAL
- SOIL INSPECTION IS REQUIRED BEFORE PLANT INSTALLATION & SCHEDULING SOIL INSPECTION SHOULD BE DISCUSSED AT THE LANDSCAPE PRE-CONSTRUCTION MEETING.
- INSTALLING CONTRACTOR IS TO PROVIDE SUBMITTAL FROM SUPPLIERS FOR SOD & NATIVE SEED MIX AT TIME OF LANDSCAPE INSPECTION.
- SOIL AMENDMENT SHALLBE A MINIMUM OF 4 FOUR (4) CUBIC YARDS OF ORGANIC MATTER PER ONE-THOUSAND SQUARE FEET. THIS SOIL AMENDMENT SHALL BE ROTOTILLED TO A DEPTH OF SIX (6) INCHES.
- TREES, LARGE SHRUBS AND PERMANENT OBJECTS ARE NOT PERMITTED IN WATER, SANITARY & STORM SEWER UTILITY EASEMENTS.
- ALL LANDSCAPE IS TO BE INSTALLED PER TOWN OF CASTLE ROCK PLANTING DETAILS.
- PLANT SPECIES & 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 & THE OWNER'S REPRESENTATIVE.
- 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)
- TOWN PERMIT & TOWN APPROVED LANDSCAPE PLANS ARE REQUIRED ON SITE DURING INSTALLATION OF THE LANDSCAPE & IRRIGATION.
- TOWN INSPECTORS WILL NOT APPROVE LANDSCAPE & OVERHEAD IRRIGATION ON SLOPES STEEPER THAN 3:1.
- OVERHEAD IRRIGATION IS NOT PERMITTED ON SLOPES STEEPER THAN TO 3:1 OR IN AREAS LESS THAN 10' IN WIDTH.

LANDSCAPE NOTES

- ALL WORK SHALL CONFORM TO LOCAL CITY AND COUNTY CODES. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THE LANDSCAPE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- THE OWNER, SUCCESSORS, AND ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN OR LANDSCAPE PLANS ON FILE WITH THE CITY PLANNING DEPARTMENT. ALL LANDSCAPING SHALL BE INSTALLED AS SHOWN ON THE LANDSCAPE PLANS PRIOR TO THE ISSUANCE FOR THE CERTIFICATE OF OCCUPANCY,
- CONTRACTOR SHALL VERIFY (CALL FOR UTILITY LOCATES) LOCATION OF ALL EXISTING UTILITIES AND STRUCTURES PRIOR TO EXCAVATION OR TRENCHING.
- CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OF ANY SETTLING DUE TO EXCAVATION AND TRENCHING.
- CONTRACTOR SHALL PROTECT AND PRESERVE ALL EXISTING ADJACENT PROPERTY'S AMENITIES/ IMPROVEMENTS, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF ANY DAMAGE DUE TO PROJECT'S CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPAIR TO UTILITIES, ADJACENT LANDSCAPE, AND THE SUBCONTRACTOR'S OPERATIONS DURING CONSTRUCTION AND/ OR THE SPECIFIED MAINTENANCE PERIOD. THE CONTRACTOR SHALL FULLY COMPENSATE THE OWNER FOR ANYTHING DISTURBED AND/ OR DESTROYED THAT IS NOT DESIGNATED FOR DEMOLITION.
- ALL UTILITY EASEMENTS SHALL REMAIN UNOBSTRUCTED AND FULLY ACCESSIBLE ALONG THEIR ENTIRE LENGTH FOR USE OF MAINTENANCE EQUIPMENT ENTRY.
- SEE CIVIL ENGINEER'S DRAWINGS FOR GRADING AND DRAINAGE, EROSION CONTROL, PAVING AND SLEEVES, UTILITIES, AND OTHER ENGINEERED DETAILS.
- ALL PLANTS SHALL BE PLANTED USING AN EQUALLY SPACED, UNLESS OTHERWISE NOTED AND/ OR SHOWN ON THE LANDSCAPE DRAWINGS.
- CONTRACTOR SHALL REPORT ANY DISCREPANCY FOUND IN THE FIELD VERSUS THE LANDSCAPE DRAWINGS IMMEDIATELY TO THE LANDSCAPE ARCHITECT, OWNER'S REPRESENTATIVE, AND/ OR THE CITY/ COUNTY PRIOR TO ANY CONSTRUCTION OR DEMOLITION ACTIVITY. FAILURE TO MAKE SUCH CONFLICTS KNOWN WILL RESULT IN THE CONTRACTOR'S LIABILITY TO RELOCATE OR REPAIR.

- THE FINAL LOCATION OF ALL PLANTS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE A TWO YEAR WARRANTY FOR ALL PLANT MATERIAL FROM THE DATE OF FINAL INSPECTION, UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT, OWNER, OR CITY/ COUNTY.
- ALL PLANTING BEDS AND TREES SHALL BE DRIP IRRIGATED, SEE APPROVED IRRIGATION PLANS.

GENERAL MAINTENANCE NOTES

- WEED CONTROL: ALL LANDSCAPE AREAS SHALL BE KEPT FREE OF WEEDS. WEEDING MAY BE DONE MANUALLY OR BY THE USE OF HERCICES. WEEDING SHALL BE DONE ON A WEELY BASIS.
- MULCH: ALL BEDS SHALL BE MAINTAINED WITH 4" SHREDDED DEPTH CEDAR MULCH, CONTRACTOR TO REPLACE MULCH AS NEEDED.
- IRRIGATION: CONTRACTOR WILL BE EXPECTED TO ENERGIZE THE SYSTEM IN SPRING AND WINTERIZE THE SYSTEM IN THE FALL, ADJUST HEADS, REPAIR LEAKS IN A TIMELY MANNER AND PREVENT ANY INTERRUPTIONS IN THE WATERING SCHEDULE/CYCLE FOR ALL LANDSCAPING.
- TREE, SHRUB & PLANT CARE: ALL TREES SHRUBS AND PLANT MATERIAL SHALL BE MAINTAINED BY THE CONTRACTOR TO ENSURE THE HEALTH VIGOR AND AESTHETIC APPEARANCE ACCORDING TO ACCEPTED HORTICULTURAL PRACTICES. PRUNE TREES AND SHRUBS AS NEEDED.
- LITTER REMOVAL: ALL AREAS SHALL HAVE TRASH AND UNDESIRABLE DEBRIS PICKED UP ONCE A WEEK FROM THE ENTIRE PROPERTY.
- WINTER SNOW REMOVAL: ALL WALKS AND DRIVES SHALL BE KEPT FREE OF SNOW AND ICE AT ALL TIMES.

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

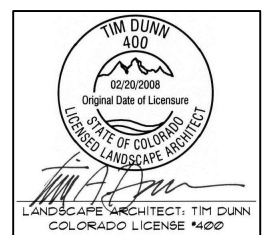
Date



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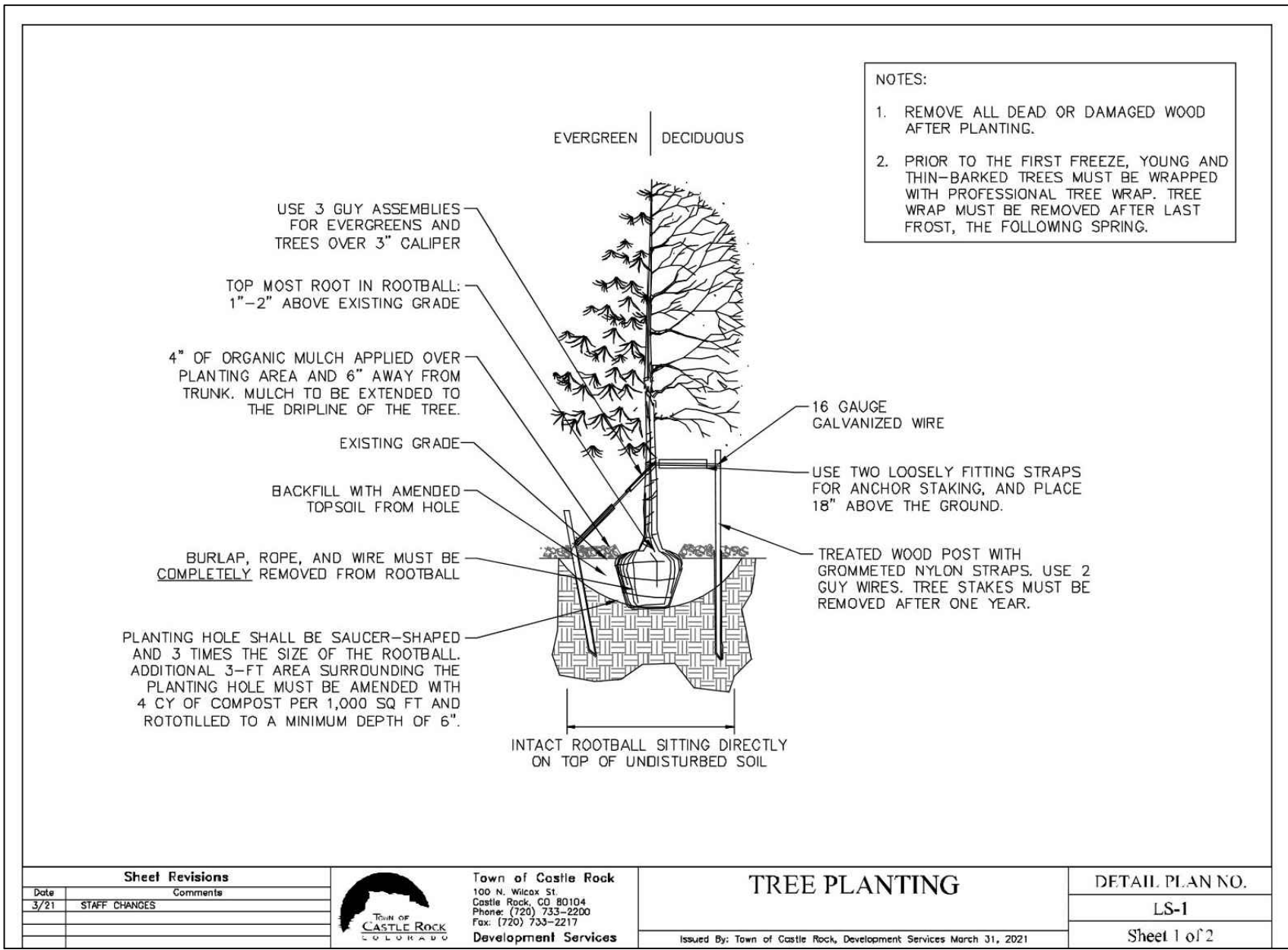
REV. NO.	DESCRIPTION	DATE
1	CD City Comments #2	3.21.22
2	Brookside Circle revisions	6.14.23
3	CD Comments	7.22.24

CDR+J
TOWN OF CASTLE ROCK NOTES & PLANT SCHEDULE
SOUTH WILCOX ST. & BROOKSIDE CIRCLE
CASTLE ROCK, COLORADO

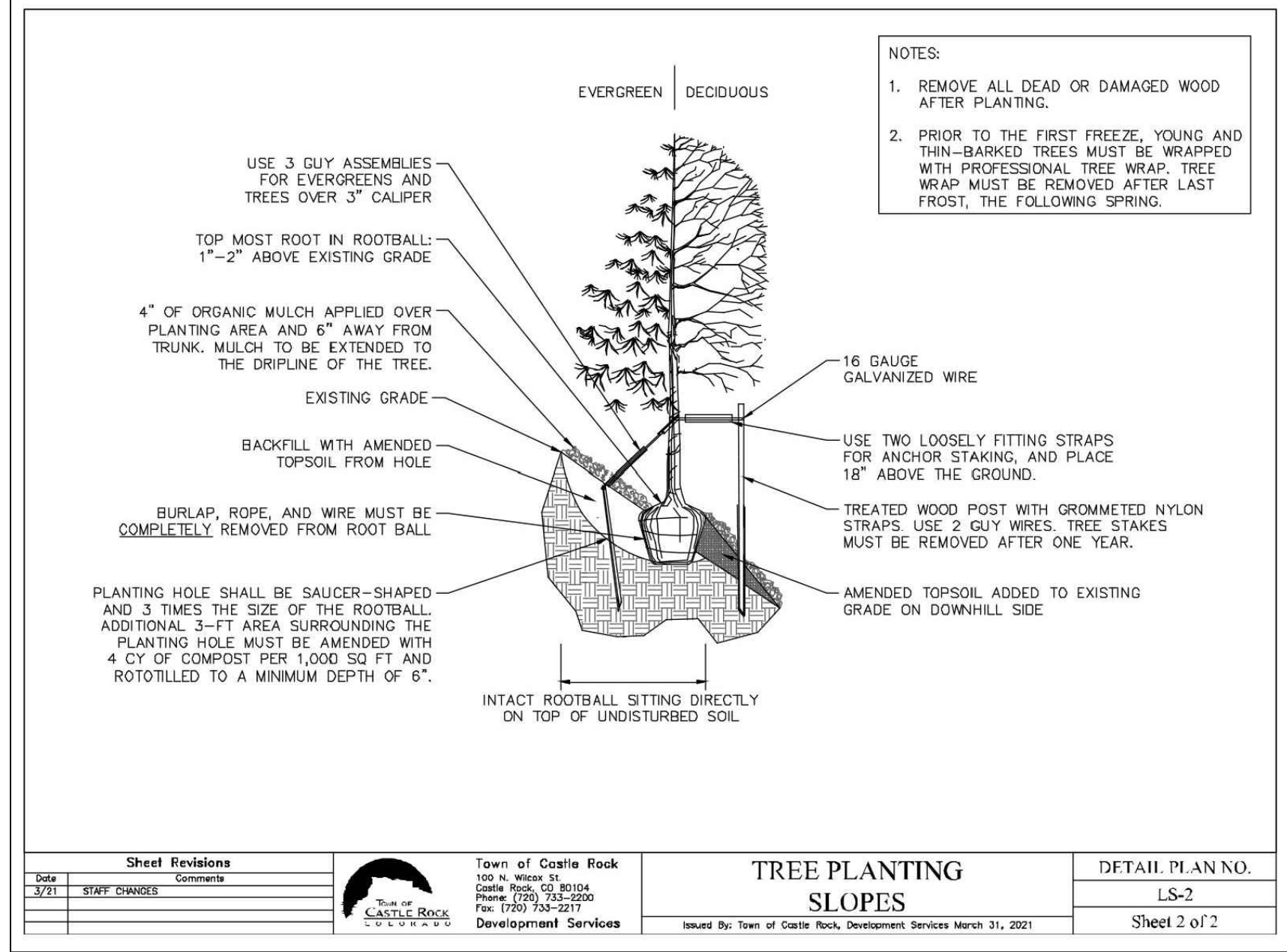


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DATE : 2.16.22

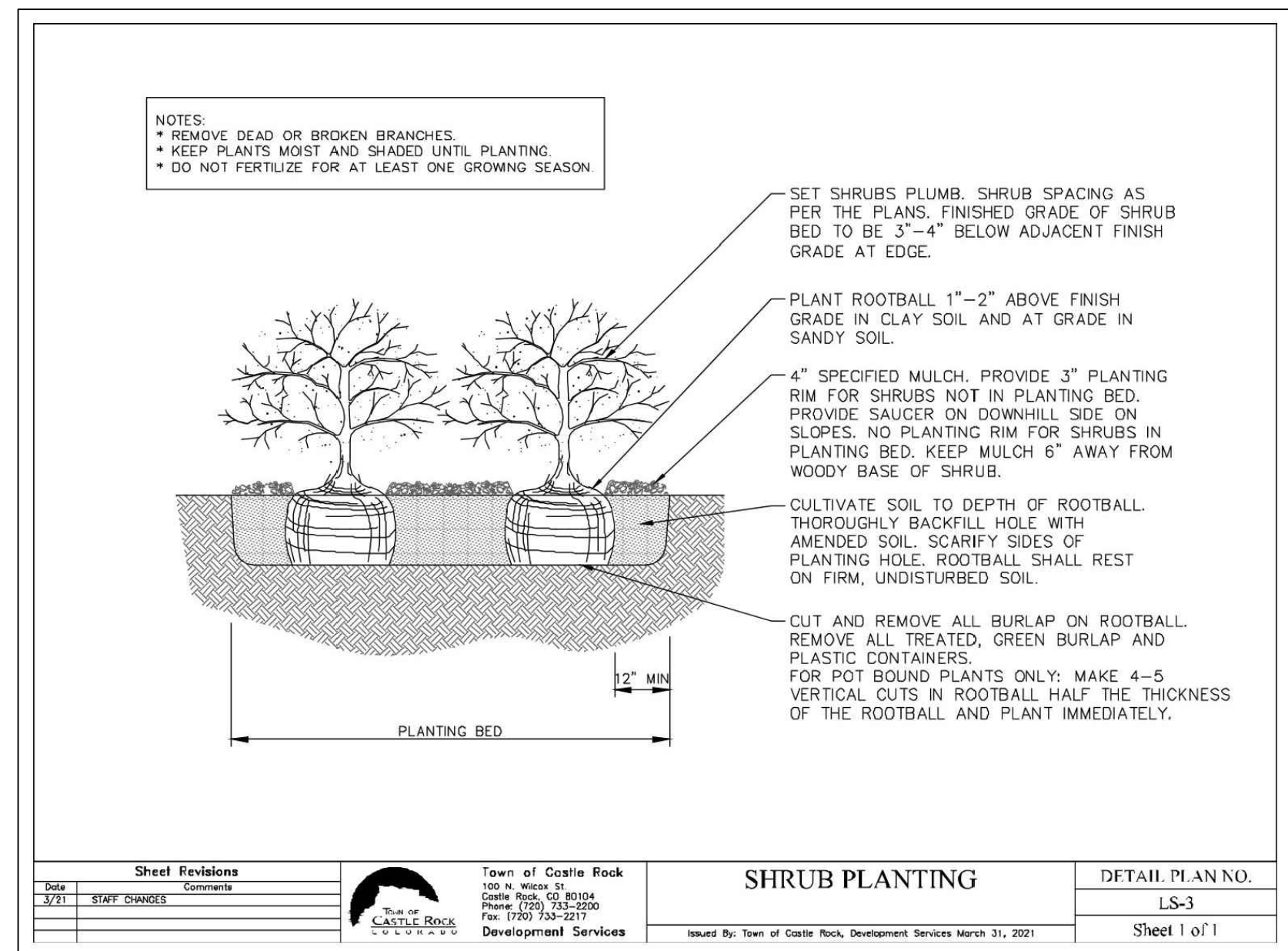
SHEET NUMBER
L.2
21 OF 27



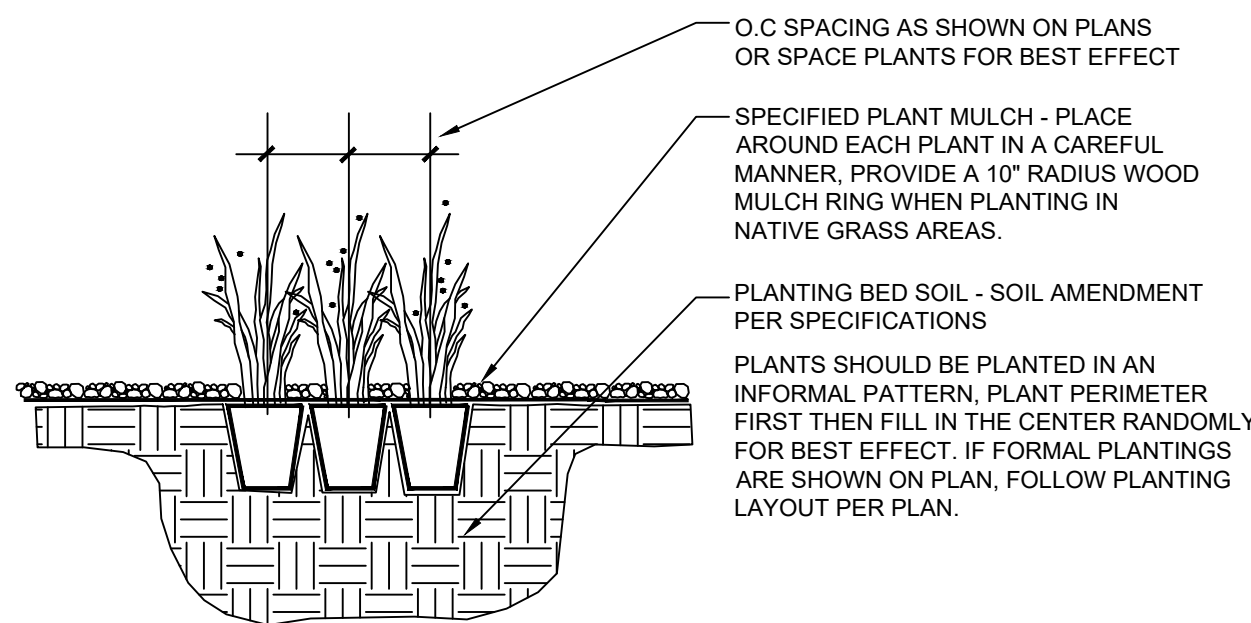
1 Tree Planting Detail
L.3 Town of Castle Rock Detail



2 Tree Planting Detail on Slopes
L.3 Town of Castle Rock Detail



3 Shrub Planting Detail
L.3 Town of Castle Rock Detail



3 Grass & Perennial Planting Detail
L.3

LANDSCAPE SPECIFICATIONS

AREAS PLANTING AREAS SHALL BE GRADED TO A SUITABLE GRADE (+/- .10'). AREAS SHALL BE TILLED TO A 6" DEPTH INCORPORATING 4 CU.YDS./1,000 SF. COMPOST UNIFORMLY INTO THE SOIL. AREAS SHALL BE SETTLED, LEVELED, AND RAKED TO A FINISHED GRADE. DEBRIS, VEGETATION, ROCKS, ETC. NOT PASSING THROUGH A HAND RAKE SHALL BE REMOVED FROM THE SURFACE. SURFACE SHALL BE FINE GRADED SMOOTH AND FIRM (NON-COMPACTED) PRIOR TO PLANTING, LEAVING NO DEPRESSIONS WHERE WATER MAY COLLECT.

PLANT MATERIAL QUALITY SHALL COMPLY WITH CURRENT AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS FOR #1 GRADE NURSERY STOCK. PLANTS SHALL MEET OR EXCEED SPECIFIED SIZES. TREES SHALL HAVE WELL BRANCHED TOPS WITH REASONABLY STRAIGHT, WELL DEVELOPED SINGLE LEADERS (UNLESS OTHERWISE NOTED). THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT PLANTS OF INFERIOR QUALITY. NO PLANTS SHALL BE PLANTED DURING INCLEMENT WEATHER OR INTO FROZEN GROUND (UNLESS SPECIFICALLY ALLOWED WITH WRITTEN APPROVAL).

SEE TOWN OF CASTLE ROCK PLANTING DETAILS SHEET L.8. PRIOR TO BACK FILLING PLANTING PITS, CONTRACTOR SHALL REMOVE ALL WIRE BASKETS AND OTHER PROTECTIVE MATERIALS (E.G. BURLAP) FROM THE ROOT BALLS. ALL FLAGS, TAGS, ETC. SHALL BE REMOVED FROM ALL PLANTS.

PLANTS SHALL BE FERTILIZED AT THE TIME OF PLANTING WITH 21 GRAM "AGRIFORM" 20-10-5 SLOW RELEASE FERTILIZER TABLETS (OR APPROVED EQUAL) ACCORDING TO THE FOLLOWING QUANTITIES: 1 TABLET PER FT. OF TREE HT. (OR 1/2" CALIPER); 3 TABLETS PER #5 CONTAINER SHRUB. TABLETS SHALL BE PLACED IN THE PLANT PIT DURING BACK FILLING ACCORDING TO MFR. SPECS.

TREES SHALL BE GUYED AND STAKED TO THE EXTENT NECESSARY TO KEEP THEM IN A PLUMB POSITION UNTIL THE TREE IS ESTABLISHED. TREES OVER 2" CAL. (OR 5' HT.) SHALL BE SECURELY GUYED AND STAKED WITH 3 WIRES (MIN.) SPACED EQUALLY AROUND THE TREE. TREES UNDER 2" CALIPER (OR 6' HT.) SHALL BE SECURED WITH 2 WIRES SPACED EQUALLY AROUND THE TREE. STAKES SHALL BE BLACK OR GREEN PAINTED 5' LONG STEEL T-POSTS (OR APPROVED EQUAL). STAKES SHALL BE SET IN UNDISTURBED SOIL AT SLIGHT ANGLE FACING AWAY FROM THE TREE TRUNK. TRUNKS SHALL BE SECURED WITH #12 GAUGE GALVANIZED STEEL WIRE AND NYLON STRAP WITH GROMMETS. CONTRACTOR SHALL BE RESPONSIBLE FOR GUY WIRES ADJUSTMENTS DURING THE GUARANTEE PERIOD, AND REMOVAL OF STAKES AND WIRES UPON COMPLETION OF THE GUARANTEE PERIOD.

TRUNKS OF FALL PLANTED DECIDUOUS OVER 2" CAL. SHALL BE WRAPPED WITH AN APPROVED TREE WRAP SPIRALLY FROM GROUND TO HEIGHT OF SECOND BRANCH. WRAPPING SHALL BE SECURED TO TRUNK IN AN ACCEPTABLE MANNER. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENT TO WRAPPING DURING THE GUARANTEE PERIOD AND SHALL REMOVE WRAPPING UPON COMPLETION OF THE GUARANTEE PERIOD.

PLANT MATERIAL SHALL BE FULLY (100%) GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF WORK ACCEPTANCE. REPLACED PLANT MATERIAL SHALL BE FULLY (100%) GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF REPLACEMENT. DURING THE GUARANTEE PERIOD, THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING OF ANY MAINTENANCE DEFICIENCIES.

SEE PLANS FOR LOCATIONS OF WOOD MULCH AND ROCK MULCH. WOOD MULCHED AREAS ARE TO BE A WITH 4" DEPTH. ROCK MULCH AREAS ARE TO BE 1.5" DIAMETER CRUSHED GRANITE MULCH SHALL (OR APPROVED EQUAL) PLACED IN A UNIFORM 4" THICK LAYER. AREAS SHALL BE FINE GRADED PRIOR TO PLACEMENT OF MULCH, REMOVING ALL DEBRIS, ROCKS, ETC. OVER 1" DIA. FROM THE SURFACE. THE TOP OF THE MULCH SURFACE SHALL BE 1" BELOW ADJACENT EDGINGS. AREAS TO BE WOOD MULCHED SHALL BE TREATED WITH "TREFLAN" GRANULAR PRE-EMERGENT HERBICIDE ACCORDING TO MFR. SPECIFICATIONS. EVEN DISTRIBUTION OF HERBICIDE IS IMPERATIVE.



TOWN APPROVAL BLOCK

TOWN OF CASTLE ROCK APPROVAL
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Approved by:

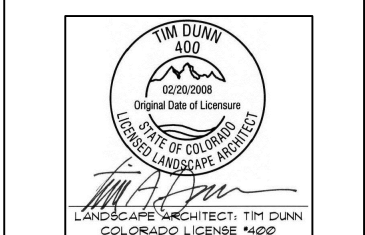
Development Services Date

PROJECT NUMBER CD23-0039

TIM DUNN A.S.L.A. R.L.A.
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tadunn195@gmail.com 720-350-2411
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REV. NO.	DESCRIPTION	DATE
1	CD City Comments #2	3.21.22
2	Brookside Circle revisions	10.11.23
3	CD Comments	2.22.24

CDR+J
LANDSCAPE DETAILS
SOUTH WILCOX ST. & BROOKSIDE CIRCLE
CASTLE ROCK, COLORADO



PROJ NO:
DRAWN BY: TAD
DATE : 2.16.22

SHEET NUMBER
L.3
22 OF 27

SEEDING & MULCHING INSTALLATION NOTES

1. SEE PLAN FOR LOCATIONS OF SEEDING AND MULCHING AND TYPE OF SEED MIX USED.
2. PERMANENT SEEDING IN AREAS THAT ARE NOT IRRIGATED MAY BE PERFORMED YEAR ROUND ASSUMING THE SOIL IS WORKABLE AND NOT FROZEN. PREFERRED SEASONS FOR SEEDING ARE SPRING AND FALL, SEEDING DURING TIMES OF EXTREME TEMPERATURES SHALL BE AVOIDED IF POSSIBLE.
3. ALL SEED MIXES SHALL BE FREE OF NOXIOUS WEEDS AND MUST BE CERTIFIED.
4. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR STORAGE WILL NOT BE ACCEPTABLE.
5. ALL AREAS TO BE SEEDED AND MULCHED SHALL BE SURFACE ROUGHENED PRIOR TO SEEDING. SURFACE ROUGHENING SHALL OCCUR AFTER THE SPREADING OF TOP SOIL OR SOIL AMENDMENT. AREAS THAT HAVE NOT BEEN PROPERLY ROUGHENED WILL BE REJECTED.
6. SEED IS TO BE INSTALLED USING A RANGELAND DRILL SEEDER. SEED SHALL BE PLACED AT A DEPTH OF $\frac{1}{4}$ TO $\frac{1}{2}$ INCH. ROW SPACING SHALL BE NO MORE THAN 6 INCHES. THE USE OF GRAIN DRILL SEEDERS, MECHANICAL BROADCAST SEEDERS, DRUM SEEDERS OR ANY OTHER TYPE OF SEEDER IS PROHIBITED.
7. ALL AREAS INCAPABLE OF BEING DRILL SEEDED SHALL BE SURFACED ROUGHENED USING A HARROW OR HARD TIPPED RAKE. ALL AREAS SHALL BE UNIFORMLY HAND BROADCASTED WITH THE PROPER SEED MIX APPLIED AT TWO TIMES THE DRILL SEEDED RATE.
8. AFTER SEEDING HAS BEEN COMPLETED, MULCH SHALL BE UNIFORMLY APPLIED AT A RATE OF 2 TONS/ACRE (4000 LBS/AC.). MULCH SHALL BE MECHANICALLY CRIMPED TO A DEPTH OF 2 INCHES USING A CRIMPER. MULCH SHALL BE HAND CRIMPED AND COVERED WITH A TACKIFIER IN AREAS WHERE MECHANICAL CRIMPING IS NOT POSSIBLE. ALL MULCH SHALL BE CRIMPED SUCH THAT THE INDIVIDUAL PIECES OR STRAY OR HAY FORM EXAGGERATED V-SHAPES PROTRUDING OUT OF THE GROUND SEVERAL INCHES. STRAW OR HAY IN A STAGE OF DECOMPOSITION OR OLD, DRY MULCH WHICH BREAKS DURING THE APPLICATION OR CRIMPING PROCESS WILL NOT BE ACCEPTED.
9. THE SEEDED AREA SHALL BE MULCHED AND CRIMPED WITHIN 4 HOURS AFTER SEEDING. AREAS NOT MULCHED AND CRIMPED WITHIN 4 HOURS AFTER SEEDING OR PRIOR TO PRECIPITATION OR WINDY CONDITIONS ON SITE SHALL BE RESEEDED WITH SPECIFIED SEED MIX PRIOR TO MULCHING AND CRIMPING.
10. IN CERTAIN INSTANCES, IT MAY BE NECESSARY TO APPLY A TACKIFIER IN ORDER TO HELP WITH THE STRAW DISPLACEMENT. TACKIFIER SHALL BE APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
11. MULCH SHALL CONSIST OF CERTIFIED WEED FREE OR MARSH STRAW OF HAY DERIVED FROM OATS, BARLEY, WHEAT, RYE, OR TRITICALE.
12. MULCH SHALL BE INSPECTED FOR ANY REGIONALLY CERTIFIED WEED FREE BASED ON THE REGIONALLY DESIGNATED NOXIOUS WEED AND UNDESIRABLE PLANT LIST FROM COLORADO, WYOMING, MONTANA, NEBRASKA, UTAH, IDAHO, KANSAS, SOUTH DAKOTA OR ANY OTHER STATE NOT LISTED THAT SERVED AS THE PLACE OF ORIGIN FOR THE STRAW MULCH.
13. THE CONTRACTOR SHALL PROVIDE A TRANSIT CERTIFICATE THAT HAS BEEN FILLED OUT AND SIGNED BY THE GROWER AND BY THE DEPARTMENT OF AGRICULTURE INSPECTOR.
14. THE CONTRACTOR MAY OBTAIN A CURRENT LIST OF COLORADO WEED FREE FORAGE CROP PRODUCERS WHO HAVE COMPLETED CERTIFICATION BY CONTACTING THE COLORADO DEPARTMENT OF AGRICULTURE, DIVISION OF PLANT INDUSTRY.

GENERAL SEEDING NOTES

Seed shall be labeled in accordance with the U.S. Department of Agriculture, Rules and Regulations and the Federal Seed Act. Seed shall be equal in quality to the standards for "Certified Seed" and shall be furnished in the sealed unopened, standard containers. Seed shall be fresh, clean, pure live seed with the following varieties, mixed in proportions by weight shown and meeting the minimum percentages of purity and germination specified.

Seed shall be applied at a rate shown by mix. Seed shall pass government test for germination of eighty percent (80%) and for purity of ninety percent (90%). The Pure Live Seed shall not be less than 67.5% for any one variety, with the average of the mixture, no less than seventy two percent (72%). All seed shall be free of Poa annua and all noxious objectionable weeds with a maximum crop of .10% and maximum weed of .10%. If seed available on the market does not meet the minimum purity and germination percentages specified, the Contractor must compensate by furnishing sufficient additional seed to equal the specified product. Product comparison shall be made on the basis of pure live seed in pounds. The formula for determining the quality of pure live seed (PLS) shall be:

Pounds of Seed x (% Purity x % Germination) = pounds of Pure Live Seed (PLS)

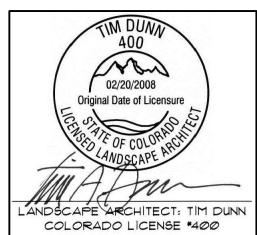
WEED MANAGEMENT NOTES

1. ALL HERBICIDES SHALL BE APPLIED BY COMMERCIAL PESTICIDE APPLICATORS LICENSED BY THE COLORADO DEPARTMENT OF AGRICULTURE AS QUALIFIED APPLICATORS. THE CONTRACTOR SHALL FURNISH DOCUMENTATION OF SUCH LICENSING PRIOR TO HERBICIDE APPLICATION.
2. HERBICIDE APPLICATION METHOD SHALL BE SUCH THAT PLANT GROWTH OUTSIDE THE DESIGNATED TREATMENT AREAS WILL NOT BE DAMAGED. ALL DAMAGE CAUSED BY IMPROPER HERBICIDE APPLICATION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
3. A NON-SELECTIVE HERBICIDE SUCH AS ROUND-UP PRO OR AN APPROVED EQUAL SHALL BE APPLIED TO ALL EXPOSED AREAS TO BE SEEDBED IF THERE IS ANY PRESENCE OF WEED GROWTH PRIOR TO SURFACE ROUGHENING FOR PERMANENT SEEDING AND MULCHING. ROUND-UP PRO SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.
4. HERBICIDES SHALL BE APPLIED DURING GROWING SEASONS WHEN TARGET PLANTS ARE ACTIVELY GROWING.
5. ROUND-UP PRO SHALL BE APPLIED WHEN THE PROBABILITY OF FORECASTED RAINFALL IS MINIMAL FOR A PERIOD OF 48 HOURS.
6. A PERIOD OF 48 HOURS SHALL PASS AFTER THE HERBICIDE APPLICATION BEFORE THE TREATED AREAS ARE SURFACE ROUGHENED, SEEDBED, AND MULCHED.
7. AFTER THE GRASS SEED IS ESTABLISHED, APPROPRIATE HERBICIDES SHALL BE APPLIED TO CONTROL THE REMAINING WEEDS AND ENSURE A TIMELY RETURN OF THE FINANCIAL SECURITY. GRASS PLANTS NEED TO BE AT A MINIMUM OF THE THREE-TILLER STAGE, OR 6 TO 8 INCHES IN HEIGHT, PRIOR TO THE HERBICIDE APPLICATION. PROPER TIMING OF HERBICIDE APPLICATIONS ARE NECESSARY TO ACHIEVE THE SUPPRESSION OF WEED SEED PRODUCTION AND DEPLETION OF WEED ROOT MASS.
8. HERBICIDE TREATMENTS SHALL CONTINUE AT A RATE OF TWO TIMES PER YEAR UNTIL IT IS EVIDENT THAT WEED GROWTH PRESENCE AND GROWTH IS MINIMAL AND MAY BE CONTROLLED THROUGH MOWING.
9. ONLY DISTURBED AREAS SHALL BE MAINTAINED FOR WEEDS. NATIVE AREAS IN THEIR UNDISTURBED CONDITION SHALL REMAIN AS IS.

REV. NO.	DESCRIPTION	DATE
1	CD City Comments #2	3.21.22
2	Brookside Circle revisions	10.11.23
3	CD Comments	2.22.24

CDR+J
SEEDING SPECIFICATION & MAINTENANCE NOTES

SOUTH WILCOX ST. & BROOKSIDE CIRCLE
CASTLE ROCK, COLORADO



PROJ NO: _____
DRAWN BY: TAD _____
DATE : 2.16.22 _____

SHEET NUMBER

L.4

23 OF 27



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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PROJECT NUMBER CD23-0039

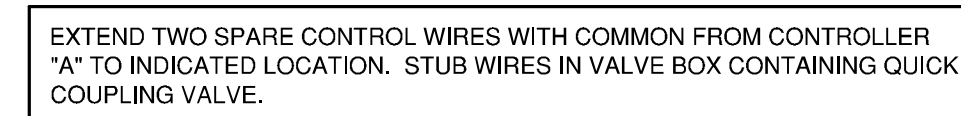
SYMBOL	MANUFACTURER	MODEL NO.	DESCRIPTION	DETAIL NO.	COMMENTS
	RAIN BIRD	44 LRC	QUICK COUPLING VALVE	8	
		EXISTING	GATE VALVE		
	RAIN BIRD	XCZ-100-PRB-LC	DRIP VALVE ASSEMBLY	6	
		LINE SIZE	DRIP LINE BLOW-OUT STUB WITH OPERATIONAL INDICATOR	5	
		CLASS 200 SOLVENT WELD	PVC SLEEVING		
	CENTENNIAL PLASTICS	3/4" I.D.	POLY DRIP TUBING	1 & 2	
		CLASS 200 SOLVENT WELD	PVC MAINLINE	7	
	HUNTER	PROS-12-PSI30-CV	INTERMEDIATE DRIP OPERATIONAL INDICATOR	4	
	NETAFIM	TLCV-09-18	IN-LINE DRIP TREE RING	2	
	RAIN BIRD	XBD-80	MULTI-PORT EMITTER	3	
 CONTROLLER & STATION NO.  CONTROL VALVE SIZE					



IRRIGATION LIMIT OF PHASE 2 WORK

TIE ONTO EXISTING PHASE 1 GATE VALVE AND EXTEND NEW MAINLINE AS SHOWN. EXTEND THREE RED CONTROL, TWO BLACK SPARE AND ONE WHITE COMMON EXISTING WIRES FROM POINT OF CONNECTION TO NEW ELECTRIC VALVES AND WIRE STUB-OUT LOCATIONS.

TIE ONTO STUBBED POLY DRIP TUBING AT INDICATED LOCATION AND
EXTEND NEW DRIP TUBING AS SHOWN.



0 15 30 60

NORTH



Irrigation Plans prepared by David Zickerman
TOCR Registration No. 15-1032

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

DEVELOPMENT SERVICES	DATE
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Avocet
IRRIGATION DESIGN
17114 W. JEFFERSON AVENUE, SUITE 201
LAKEWOOD, COLORADO 80235
VOICE: 303.986.2175
FAX: 303.989.5814

Project No. CD23-0039

REV. NO.	DESCRIPTION	DATE
2	Brookside Circle Revisions	10/11/23
3	Town Comments	11/30/23

CDR+J
IRRIGATION plan

SOUTH WILCOX ST. & BROOKSIDE CIRCLE
CASTLE ROCK, COLORADO

DATE : 10/10/2023

4 OF 27

1/4-INCH TUBING STAKE

1/4-INCH DISTRIBUTION TUBING

TOP OF MULCH

POLYETHYLENE DRIP LATERAL PIPE

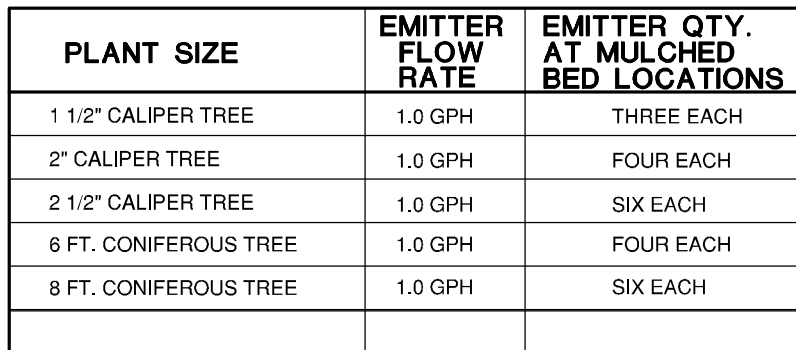
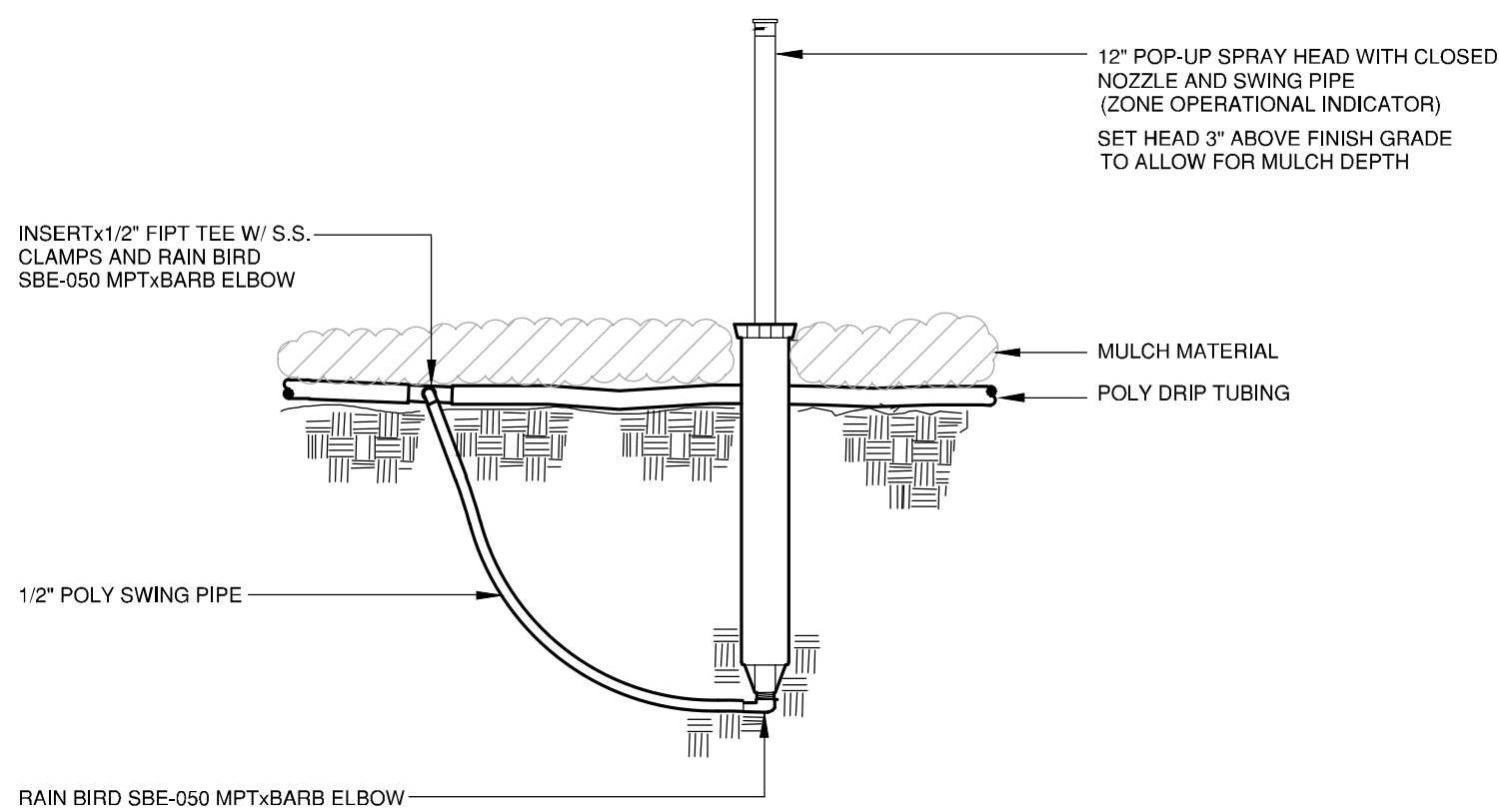
EMITTERS SHALL BE RAIN BIRD XBCV SERIES EQUIPPED WITH INTERNAL CHECK VALVES

FINISH GRADE

STAKE TUBING AT 8 FT. INTERVALS

EMITTER CAN BE INSTALLED AT END OF DISTRIBUTION TUBING OR ON THE DRIP LATERAL PIPE

1

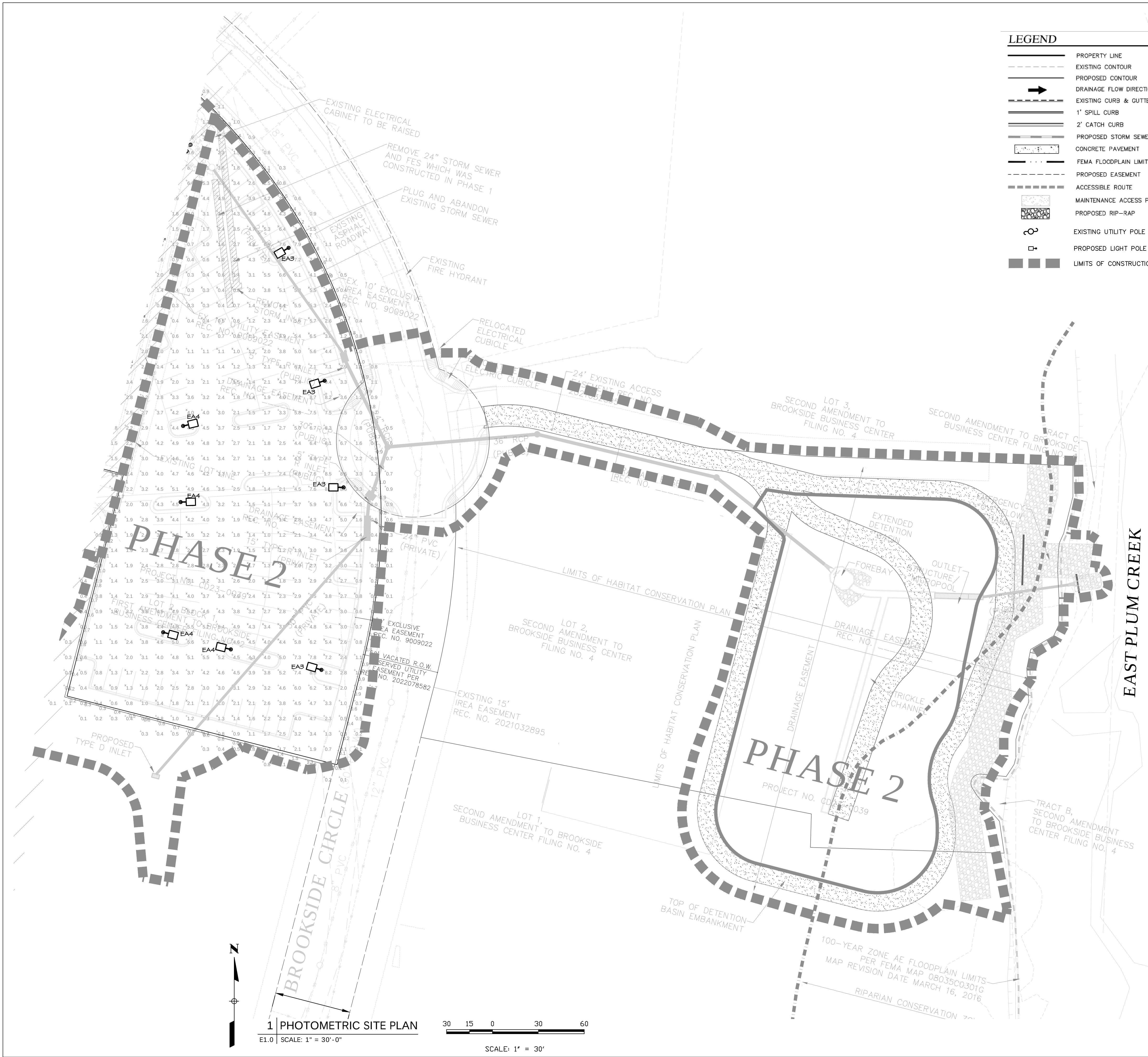


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12. A COPY OF THE STAMPED AND TOWN-APPROVED IRRIGATION PLANS IS TO BE AVAILABLE ON-SITE DURING IRRIGATION INSPECTIONS

Project No. CD23-0039

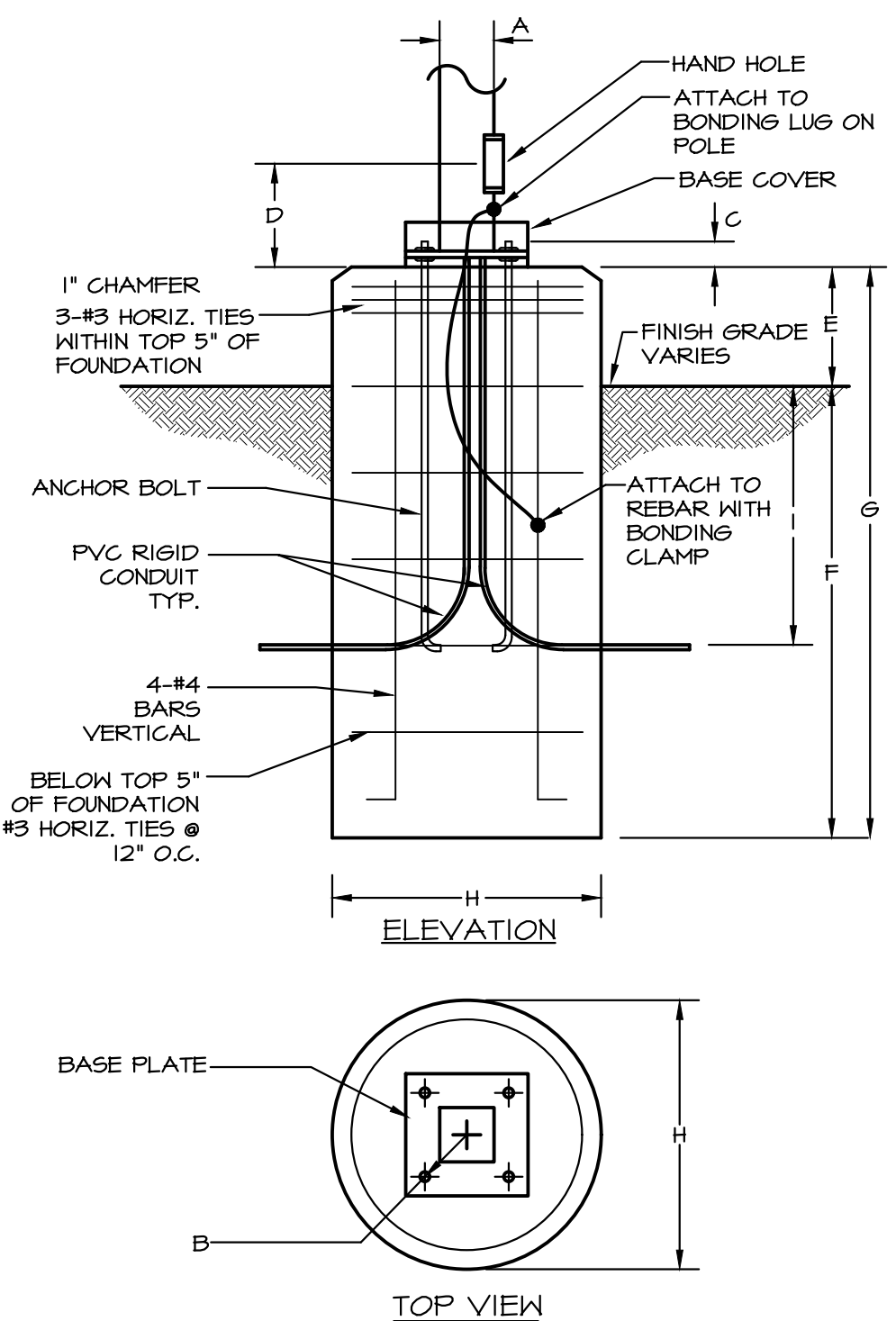
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LEGEND	
	PROPERTY LINE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	DRAINAGE FLOW DIRECTION
	EXISTING CURB & GUTTER
	1' SPILL CURB
	2' CATCH CURB
	PROPOSED STORM SEWER
	CONCRETE PAVEMENT
	FEMA FLOODPLAIN LIMITS
	PROPOSED EASEMENT
	ACCESSIBLE ROUTE
	MAINTENANCE ACCESS PATH
	PROPOSED RIP-RAP
	EXISTING UTILITY POLE
	PROPOSED LIGHT POLE
	LIMITS OF CONSTRUCTION

GENERAL NOTES	
A.	ALL FIXTURES ARE FULL CUTOFF
B.	ALL FIXTURES SHALL BE CONTROLLED BY AN ASTRONOMICAL TIMECLOCK.
C.	ALL LIGHTING SHALL TURN ON 30 BEFORE SUNSET AND TURN OFF 30 MINUTES AFTER SUNRISE. ONE HOUR AFTER CLOSE OF BUSINESS, ALL LIGHTING ALONG THE FRONT ROW OF PARKING FOR DISPLAY SHALL REMAIN AT 100%. ALL OTHER LIGHTING SHALL BE REDUCED TO 50%.
D.	LIGHTING CALCULATIONS WERE MADE USING A LIGHT LOSS FACTOR OF 1.0.
E.	CALCULATION POINTS WERE TAKEN AT GRADE LEVEL ON A 10'X10' GRID. CALCULATIONS DO NOT REPRESENT ANY SLOPE OF ELEVATION CHANGE.
F.	LIGHTING HAS DESIGNED PER CASTLE ROCK COLORADO'S MUNICIPAL CODE CHAPTER 17.58.

Statistics					
Description	Avg	Max	Min	Max/Min	Avg/Min
DISPLAY/GUEST PARKING	11.9 ft	22.8 ft	1.7 ft	13.4:1	7.0:1
EMPLOYEE/SERVICE/INVENTORY PARKING	2.9 ft	9.1 ft	0.3 ft	30.3:1	9.6:1
FRONT ROW PARKING	21.7 ft	28.3 ft	10.0 ft	2.8:1	2.2:1
OVERALL SITE	5.9 ft	28.3 ft	0.0 ft	N/A	N/A
PROPERTY LINE	1.2 ft	8.3 ft	0.0 ft	N/A	N/A



POLE KEY	OVERALL HEIGHT	A	ANCHOR BOLT DATA		D	E	F	G	H	I
			B	SIZE	C					
EAI	15'0"	4"	PER MANUFACTURER			2'0"	6'0"	8'0"	24"	36"
EAI	20'0"	4"	PER MANUFACTURER			2'0"	6'0"	8'0"	24"	36"
EA2	20'0"	4"	PER MANUFACTURER			2'0"	6'0"	8'0"	24"	36"
EA3	20'0"	4"	PER MANUFACTURER			2'0"	6'0"	8'0"	24"	36"

2 LIGHT POLE BASE DETAIL

E1.0 | SCALE: N.T.S.

TOWN APPROVAL BLOCK

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DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:

DEVELOPMENT SERVICES DATE

PROJECT NO. CD23-0039



0048815
02-21-2024
PROFESSIONAL ENGINEER

PREPARED FOR

FOUNDATION AUTOMOTIVE CORP.
1100 S. WILCOX STREET
CASTLE ROCK, CO 80104
701-390-0211
CONTACT: DOUG KEITH



AE DESIGN
Integrated Lighting and Electrical Solutions
1000 W. Main Street #205 Denver, CO 80202 303.296.3834
ae@ae-design.com

No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		2/22/24	AED	EDR	EDR

CDR+J PHASE 2

PHOTOMETRIC SITE PLAN

SHEET E1.0 OF 27

JOB NO.