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PROJECT TEAM

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P: (417) 576-6620

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TRJ ARCHITECTS
1790 S. BRENTWOOD BLVD.
ST LOUIS, MO 63144
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ENGINEERING CONSULTANT

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3801 E. FLORIDA AVE, SUITE 425
DENVER, CO 80210
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P: (970) 380-7054

TOWN OF CASTLE ROCK PUBLIC WORKS DEPARTMENT

4175 CASTLETON COURT
CASTLE ROCK, CO 80109
P: (720) 733-2462

UTILITIES

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CORE ELECTRIC
5496 N. US HIGHWAY 85,
SEDALIA, CO 80135
CONTACT: BROOKS KAUFMAN
P: (800) 332-9540

FIBER OPTIC
TBD BY CONTRACTOR
AT TIME OF CONSTRUCTION

OIL & GAS
BLACK HILLS ENERGY

WATER & SANITARY
CASTLE ROCK WATER, CRWATER
175 KELLOGG COURT
BUILDING 171
CASTLE ROCK, CO 80109
P: (720) 733-6000

STORMWATER
CASTLE ROCK WATER, CRWATER
175 KELLOGG COURT
CASTLE ROCK, CO 80109
P: (720) 733-2235

LEGAL DESCRIPTION

LOT 6G-3A-3, THE MEADOWS FILING NO. 17, AREA NO. 4, AMENDMENT NO. 17 RECORDER UNDER RECEPTION NO. 2023048782 IN THE OFFICIAL RECORDS OF THE DOUGLAS COUNTY, COLORADO CLERK AND RECORDER'S OFFICE.

BENCHMARKS:

BENCHMARK: DOUGLAS COUNTY MONUMENT BEING A 3-1/4" ALUMINUM CAP STAMPED (DCGIS 2.015030), LOCATED 425 FEET MORE OR LESS EAST OF THE RAILROAD TRACKS AND 3200 FEET MORE OR LESS NORTH OF MEADOWS PARKWAY.

NAVD88 ELEV=6082.185'

BASIS OF BEARING:

BEARINGS SHOWN HEREON ARE RECORD BEARINGS PER THE MEADOWS FILING NO. 17, AREA 4, AMENDMENT NO 15 AND ARE BASED UPON THE EASTERLY LINE OF LOT 6G-3A, BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR SOUTH 11°23'45" WEST, A DISTANCE OF 379.51 FEET.

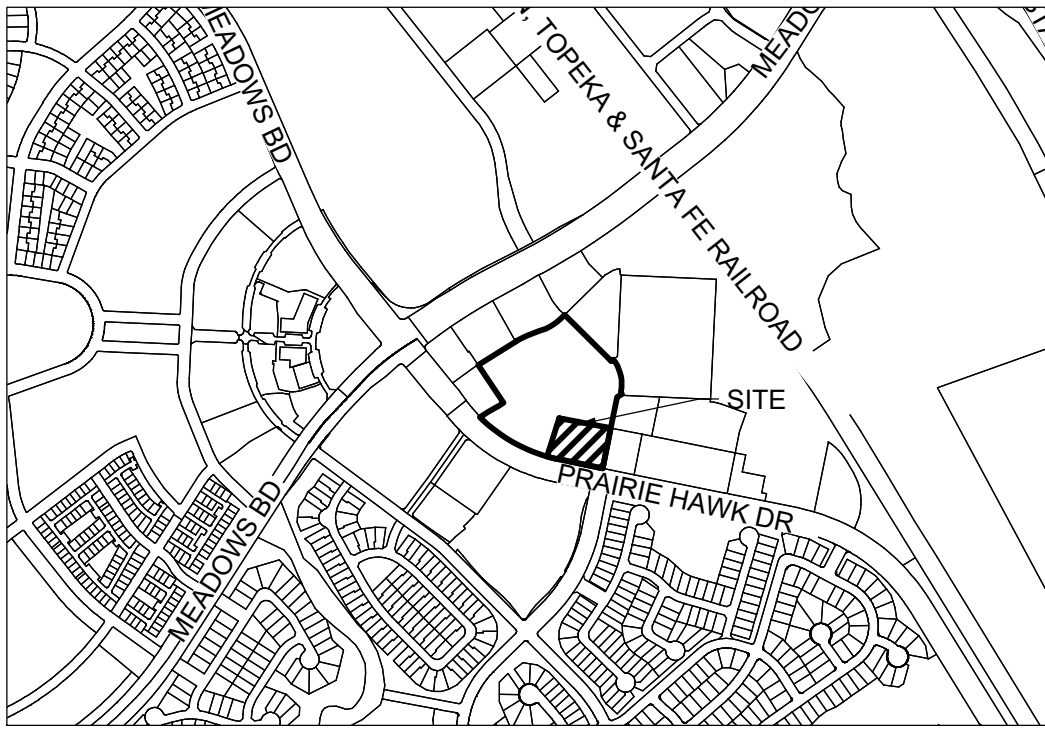
GEOTECHNICAL ENGINEER
VIVID ENGINEERING GROUP, INC.
1053 ELKTON DRIVE
COLORADO SPRINGS, CO
CONTACT: THOMAS J. NEVIN
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VALERIAN
970 YUMA STREET, SUITE 130
DENVER, CO 80204
CONTACT: MACK FLEMING
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AZTEC CONSULTANTS, INC.
300 E. MINERAL AVE. #1
LITTLETON, CO 80122
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OWNER
ALDER REAL ESTATE.
3033 EAST 1ST AVE.
DENVER CO 80206
CONTACT: LAURA RICKOFF
P: 303 394-5510

PUBLIC IMPROVEMENT CONSTRUCTION PLANS
LOT 6G-3A-3, THE MEADOWS FILING NO. 17, AREA NO. 4, AMENDMENT NO.17,
SITUATED IN THE NORTHWEST QUARTER OF SECTION 34, TOWNSHIP 7 SOUTH, RANGE 67 WEST OF THE
6TH P.M., TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS, STATE OF COLORADO
CD24-0008 & FCO25-0001



VICINITY MAP

SCALE: 1" = 1000'

COVER SHEET 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 CR 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 TRACKED FROM THE SITE. 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 ZONE X AS PER FEMA FIRM PANEL NO. 08035C0169G DATED MARCH 16, 2016.
- BENCHMARK: DOUGLAS COUNTY MONUMENT BEING A 3-1/4" ALUMINUM CAP STAMPED (DCGIS 2.015030), LOCATED 425 FEET MORE OR LESS EAST OF THE RAILROAD TRACKS AND 3200 FEET MORE OR LESS NORTH OF MEADOWS PARKWAY: NAVD88 ELEV=6082.185'
- BEARINGS SHOWN HEREON ARE RECORD BEARINGS PER THE MEADOWS FILING NO. 17, AREA 4, AMENDMENT NO 15 AND ARE BASED UPON THE EASTERLY LINE OF LOT 6G-3A, BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR SOUTH 11°23'45" WEST, A DISTANCE OF 379.51 FEET.

FIELD CHANGE ORDER TABLE		
FCO#	DATE	PURPOSE/DESCRIPTION
FCO25-0001	2/21/2025	PRIVATE WATERMAIN RECONFIGURATION

- TECHNICAL CRITERIA VARIANCES: TCV25-0008
- SECTION 4.4.10.3 VERTICAL BENDS ON THE PROPOSED FIRE HYDRANT LATERAL TO AVOID CLASHING WITH THE EXISTING STORM SEWER ON LIMELIGHT AVENUE.

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11 OF 21	C5.2 STORM DETAILS 2
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21 OF 21	P2.1 PHOTOMETRIC DETAILS

INDEMNIFICATION AND ADHERENCE TO STANDARDS STATEMENTS

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.

TOWN APPROVAL BLOCK

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

APPROVED BY:



By jkirkpatrick
on 03/18/2025

APPROVED SERVICES

APPROVED

Record Document on File

DEVELOPMENT SERVICES

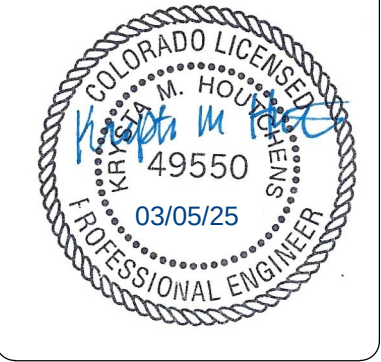
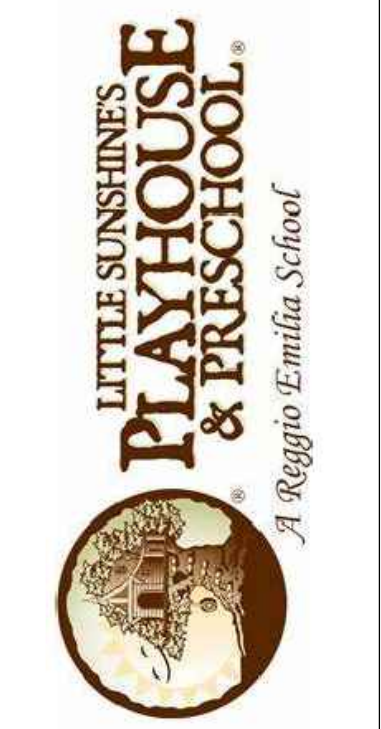
DATE

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.

Krysta Houtchens 03/05/25
Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

No.	REVISION	BY	DATE
1	SCHEDULE UPDATED AS CLOUDED	AB	11/11/2024
2	FCO25-0001 PRIVATE WATERMAIN RECONFIGURATION	CB	2/21/2025



CONSTRUCTION DOCUMENTS	COVER SHEET
LITTLE SUNSHINE'S PLAYHOUSE & PRESCHOOL	
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE	
PROJECT NO:	
DESIGNED BY:	LCG
DRAWN BY:	LCG
DATE:	06/28/2024
C0.0	
SHEET 1 OF 22	

P:\PLAYHOUSE DEVELOPMENT\CO, CASTLE ROCK - PRAIRIE HAWK AND LIMELIGHT\08 CAD\CD\COVER SHEET.DWG



CALL UTILITY NOTIFICATION CENTER OF COLORADO

1-800-922-1987 or 811

Know what's below.
Call before you dig.

CALL 3-BUSINESS DAYS (NOT INCLUDING INITIAL DAY OF CONTACT) IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

STREET CONSTRUCTION NOTES

- 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.
- 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.
- 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.
- 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.
- VALVE BOXES ARE TO BE BROUGHT UP TO GRADE AT THE TIME OF PAVEMENT PLACEMENT OR OVERLAY. VALVE BOX ADJUSTING RINGS ARE NOT ALLOWED.

SIGNAGE AND STRIPING NOTES

- 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.
- ALL PAINT SHALL BE 15 MIL THICK UPON INSTALLATION AND 8 MIL THICK WHEN DRY.
- 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.
- THERMO-PLASTIC APPLICATIONS SHALL BE AS SPECIFIED IN THE PLANS AND/OR PER TOWN CRITERIA.
- ALL SURFACES THAT ACCEPT PAINT/THERMO-PLASTIC STRIPING OR PRE-FORMED MARKINGS SHALL BE FIRST SAND/BLASTED AND THOROUGHLY CLEANED PRIOR TO INSTALLATION OF STRIPING OR MARKINGS.
- ALL ARROW MARKINGS SHALL BE PRE-FORMED TAPE, THERMO-PLASTIC OR EPOXY-PAINTED.
- STOP BARS SHALL BE 90 MIL THERMO-PLASTIC.
- ALL ROADWAY SIGNAGE SHALL CONFORM TO THE MUTCD AND/OR THE TOWN'S CRITERIA.
- ALL SIGNPOSTS SHALL UTILIZE BREAKAWAY ASSEMBLIES AND FASTENERS, PER THE TCR STANDARD DETAIL.

FIRE NOTES

- IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN DRIVE LANES FOR EMERGENCY VEHICLE INGRESS AND EGRESS, INCLUDING SNOW REMOVAL.
- EMERGENCY VEHICLE ACCESS ROAD IS REQUIRED TO ALLOW ACCESS WITHIN 150' OF ALL EXTERIOR OF THE BUILDING BY AN APPROVED ROUTE.
- 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.
- 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.
- "NO PARKING FIRE LANE" SIGNS ARE REQUIRED IN AREAS THAT MEET THE FOLLOWING CRITERIA AND IN AREAS DESIGNATED BY THE FIRE PREVENTION BUREAU. SIGNS SHALL BE POSTED ON BOTH SIDES OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS AND DRIVEWAYS LESS THAN 26 FEET WIDE. SIGNS SHALL BE POSTED ON ONE SIDE ONLY OF FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS BETWEEN 26 FEET WIDE AND 32 FEET WIDE. NO SIGNAGE IS REQUIRED FOR ACCESS ROADWAY FIRE DEPARTMENT ACCESS ROADWAYS, PUBLIC OR PRIVATE ROADWAYS OR DRIVEWAYS EXCEEDING 32 FEET WIDE.
- 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.
- 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.

STORM DRAINAGE CONSTRUCTION NOTES

- 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.
- 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.
- 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.
- ALL STORM DRAINAGE PIPES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL SD-2.
- 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.
- 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.
- 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.
- 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.

SANITARY SEWER CONSTRUCTION NOTES

- 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.
- ALL SANITARY SEWER PIPELINES SHALL BE PVC, SDR-35, IN ACCORDANCE WITH ASTM D-3034, BELL AND SPIGOT WITH ELASTOMERIC SEAL.
- ALL SANITARY SEWER PIPELINES SHALL HAVE A MINIMUM COVER OF 5 FEET AND MAXIMUM COVER OF 20 FEET.
- ALL SANITARY SEWER PIPELINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL SS-8.
- 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.
- SANITARY SEWER PIPELINE SHALL BE ALIGNED 6 FEET OFF THE SOUTH AND WEST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE.
- 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.
- 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.
- 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.
- 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.
- MINIMUM COVER FOR SANITARY SEWER SERVICE LINES SHALL BE 5 FEET AND THE MINIMUM SLOPE SHALL BE 2.0%.
- 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.
- THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRYING THE SAME MATERIAL (E.G., WASTEWATER AND WASTEWATER) SHALL BE 5 FEET.
- THE PLUM CREEK WASTEWATER AUTHORITY MUST APPROVE OIL AND GREASE INTERCEPTORS FOR COMMERCIAL INSTALLATIONS.
- 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.

WATER LINE CONSTRUCTION NOTES

- 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.
- 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.
- 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.
- ALL DIP AND FITTINGS SHALL BE ENCASED IN POLYETHYLENE TO PREVENT CORROSION. POLYETHYLENE WRAP, TAPE AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AWWA C105.
- GATE VALVES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C509-I 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 MJ). 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.
- ALL FIRE HYDRANTS SHALL BE "PACER WB67-250" BY WATERLOUS CO. OR "SUPER CATERING 250" BY MUELLER CO. OPENING TO THE LEFT. REFER TO TCR STANDARD DETAIL W-11.
- 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.
- ALL WATER LINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL W-21.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL DOMESTIC WATER SERVICE LINES SHALL BE TYPE K COPPER INSULATED WITH POLYWRAP, FROM THE MAIN TO THE METER. THE WATER METER SHALL BE SUPPLIED BY THE TOWN AND INSTALLED BY THE CONTRACTOR. THE WATER METER WILL BE AVAILABLE FOR PICK UP AT CASTLE ROCK WATER. THE INDIVIDUAL PICKING UP THE WATER METER MUST HAVE PROOF OF A PERMIT AND MUST HAVE PAID ALL FEES ASSOCIATED WITH THE WATER METER.
- 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.
- WATER LINES SHALL BE ALIGNED 6 FEET OFF THE NORTH AND EAST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE. SEE DETAIL W-13.
- 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.
- 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.
- THE MINIMUM DISTANCE BETWEEN TEES, CROSSES, VALVES, AND BENDS SHALL BE 10 FEET WHEREVER POSSIBLE.
- MAXIMUM DEFLECTION FOR WATER MAINS SHALL NOT EXCEED ONE-HALF OF THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION OR 2.5 DEGREES, WHICHEVER IS LESS.
- 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.
- THE MAXIMUM DEFLECTION OF DOMESTIC WATER SERVICE LINES AND IRRIGATION LINES SHALL NOT EXCEED THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION.
- 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.
- THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRYING THE SAME MATERIAL (E.G., WATER AND WATER) SHALL BE 5 FEET.
- 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.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE BACKFLOW PREVENTION DOWNSTREAM OF THE METER. ACCEPTABLE BACKFLOW PREVENTION ASSEMBLIES ARE AS FOLLOWS:

- COMMERCIAL POTABLE WATER SERVICE: REDUCED PRESSURE ASSEMBLY.
- RESIDENTIAL POTABLE WATER SERVICE: DOUBLE CHECK VALVE ASSEMBLY, REDUCED PRESSURE ASSEMBLY.
- COMMERCIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY.
- RESIDENTIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY.
- COMMERCIAL AND MULTIFAMILY IRRIGATION WATER SERVICE: REDUCED PRESSURE ASSEMBLY. THE DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) IS THE ONLY BACK FLOW PREVENTION DEVICE RATED FOR HORIZONTAL OR VERTICAL INSTALLATION.

LANDSCAPE NOTES

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

IRRIGATION NOTES

- THE IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A BACKFLOW PREVENTION ASSEMBLY APPROVED BY THE TOWN OF CASTLE ROCK.
- 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.
- 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.
- IRRIGATION IS NOT PERMITTED ON 3:1 SLOPES.
- VELOCITY SHALL NOT EXCEED 7.5 FPS THROUGH THE WATER METER.
- NO OVERHEAD IRRIGATION IN AREAS LESS THAN 10 FEET WIDE.
- THERE IS TO BE NEITHER PLANT MATERIAL NOR IRRIGATION IN AREAS LESS THAN 4 FEET WIDE.

TRACER WIRE INSTALLATION NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT TOWN OF CASTLE ROCK STANDARD NOTES, DETAILS AND SPECIFICATIONS.
- 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.
- 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.
- "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.
- 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.
- 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.
- 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.
- A MINIMUM OF 2 FEET OF EXCESS/SLACK WIRE IS REQUIRED IN ALL TRACER WIRE TEST STATIONS, MANHOLES, AND INLETS AFTER MEETING FINAL ELEVATION.
- TRACER WIRE MUST BE PROPERLY GROUNDED AT ALL DEAD ENDS (MANHOLES, INLETS, OUTFALLS, FUTURE CONNECTIONS, ETC.) USING A MAGNESIUM GROUND ROD. THE GROUND ROD WILL BE CONNECTED TO 12- OR 14-AWG COPPER-CLAD STEEL WIRE WITH 30 MIL HDPE INSULATION AND RATED FOR DIRECT BURY USE AT 30 VOLTS WITH 21% CONDUCTIVITY.
- TEST STATIONS SHALL PROVIDE PROTECTED ACCESS FOR A DIRECT CONNECTION TO THE TRACER WIRE SYSTEM AT GROUND SURFACE.
- TRUNK LINE TRACER WIRE SHALL BE CONTINUOUS, AND PASS AROUND THE OUTSIDE OF VALVES AND OTHER STRUCTURES ON THE NORTH OR EAST SIDE.
- 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.
- 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.

TOWN APPROVAL BLOCK

APPROVED BY:



TOWN OF
CASTLE ROCK
COLORADO

By *jkirkpatrick*
on 12/04/2024

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

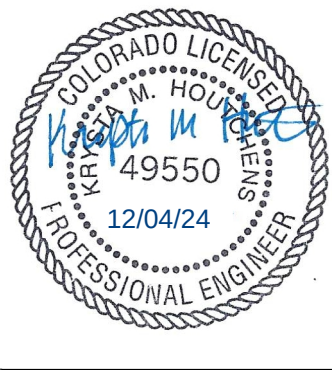
PROFESSIONAL ENGINEER CERTIFICATION

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.

Krysta Houtchens
Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550

12/04/2024
DATE

No.	REVISION	BY	DATE
1	SCHEDULE UPDATED AS CLOUDED	AB	11/11/2024



CONSTRUCTION DOCUMENTS

LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

CONSTRUCTION NOTES

PROJECT NO:	
DESIGNED BY:	LCG
DRAWN BY:	LCG
DATE:	06/28/2024

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SHEET 2 OF 22

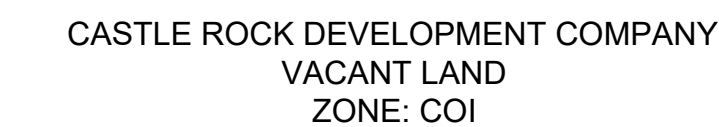


Know what's below.
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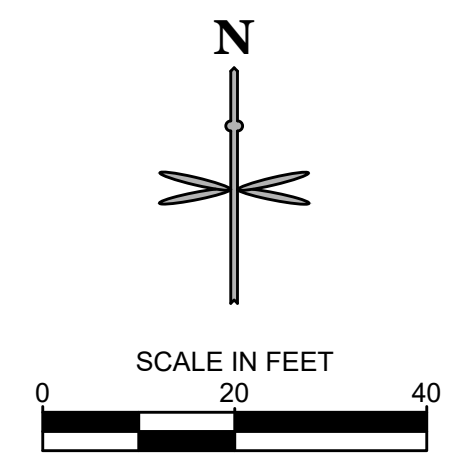
HEALTHSPAN DEVELOPMENT, LLC
VACANT LAND
ZONE: COI

LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL
11,229 SF
FFE =6145.00'

1" CORE EASEMENT
C. NO. 2005086302

EXISTING SLOPE
EASEMENT
432, PG 1037

PRAIRIE HAWK DRIVE
(120' WIDE PUBLIC ROW)



IF BAR DOES NOT MEASURE
1 INCH THEN DRAWING IS
NOT TO SCALE

	PROPOSED PROPERTY BOUNDARY
	EXISTING EASEMENT
	PROPOSED BUILDING OVERHANG
	EXISTING CURB AND GUTTER
	PROPOSED CATCH CURB AND GUTTER
	PROPOSED SPILL CURB AND GUTTER
	PROPOSED WALL
	ADA ACCESSIBLE ROUTE
	LIMITS OF CONSTRUCTION
	FIRE LANE CURB MARKING
	PARKING COUNT
	PROPOSED CONCRETE PAVEMENT
	DENOTES TRAFFIC FLOW PATTERNS

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

APPROVED BY:

TOWN OF
CASTLE ROCK

By jkirkpatrick
on 12/04/2024
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- 1 EXISTING ADA RAMP TO REMAIN.
- 2 EXISTING SIDEWALK TO REMAIN.
- 3 EXISTING STORM STRUCTURE TO REMAIN.
- 4 EXISTING SANITARY MANHOLE TO REMAIN.
- 5 EXISTING ELECTRICAL TRANSFORMER PAD TO REMAIN
- 6 EXISTING SIGN TO REMAIN.
- 7 EXISTING CURB AND GUTTER TO REMAIN.
- 8 BEGIN CURB CUT. MATCH EXISTING CURB AND PROVIDE AN EXPANSION JOINT AT THE INTERFACE WITH EXISTING (BY OTHERS).
- 9 PROPERTY LINE.
- 10 PR. 6" CURB & GUTTER (TYP.) PER TOC STD DETAIL CG-1, VC1.
- 11 8'X8' ELECTRICAL TRANSFORMER PAD.
TRANSFORMER AND PAD TO BE INSTALLED BY UNITED POWER.
SMALLER RECTANGLE IS PRIVATE SWITCH CABINET. TO BE
INSTALLED BY DEVELOPER'S CONTRACTOR.
- 12 PR. INFANT PLAYGROUND (APPROX. 2,500 S.F.). REFER TO
PLAYGROUND ELEVATIONS.
- 13 PR. PLAYGROUND (APPROX. 5,200 S.F.). REFER TO
PLAYGROUND ELEVATIONS.
- 14 PR. CONCRETE SIDEWALK PER TOC STD DETAIL CG-1.
- 15 PR. ASPHALT PAVEMENT SEE GEOTECHINCAL REPORT.
- 16 PR. TRASH ENCLOSURE. REFER TO TRASH ENCLOSURE
ELEVATIONS.
- 17 PR. STOP SIGN + STOP BAR .
- 18 PR. ADA PARKING SIGNAGE R7-8.
- 19 PR. ADA HANDICAP VAN ACCESSIBLE SIGN R7-8 AND R7-8A.
- 20 PR. PAINT HC PARKING SYMBOL .
- 21 PR. ADA RAMP PER CDOT M-608-1.
- 22 PR. PAINT 4" SOLID WHITE PARKING STRIPES AT 16" O.C. AT 45° TO THE
DIRECTION OF TRAFFIC. BORDER TO BE 4" SOLID WHITE LINE.
- 23 PR. PAINT 4" 90° SOLID WHITE PARKING STRIPE (TYP.).
- 24 PR. CROSSWALK STRIPING. 10'L X 2'W STRIPES, WITH 4'
SEPARATIONS.
- 25 FACILITY MAIN PUBLIC ENTRY.
- 26 PR. REMOTE FIRE DEPARTMENT CONNECTION
- 27 PR. FIRE RISER ROOM.
- 28 SCREENED AREA DEFINES ADA COMPLIANT ZONE OF ACCESSIBILITY AT
HANDICAP PARKING STALLS. CROSS SLOPE NOT TO EXCEED 2% IN ALL
DIRECTIONS.
- 29 PROPOSED STORM MANHOLE
- 30 6' PROPOSED PLAYGROUND FENCE. SEE ELEVATION SHEETS.
- 31 SECONDARY ENTRANCE.
- 32 PROPOSED STORM INLET
- 33 24 LF FLUSH CURB AND GUTTER.
- 34 PR. MONUMENT SIGN REFER TO ELEVATION SHEETS.
- 35 PR. 5 BIKE WAVE RACK PER DETAIL ON C5.1.
- 36 PR. PORTE COCHERE ROOF. SEE ELEVATION PLANS.
- 37 PR. FIRE ACCESS W/ HD PAVEMENT PER GEOTECHNICAL
PLAN.
- 38 APPROX. LOCATION OF PR. LIGHT POLES, BASE, AND FIXTURE.
REFER TO PHOTOMETRIC PLAN UNDER SEPARATE COVER. (TYP)
- 39 EX. FIRE HYDRANT TO REMAIN.
- 40 PR. 2' SAWCUT ADJACENT TO PR. SITE ACCESS.
- 41 PR. HS-20 TRAFFIC RATED SANITARY SEWER CLEANOUT.
- 42 BEGIN TRANSITION OF 15 LF FLUSH-WITH-PAVEMENT TO 6" SPILL
CURB AND GUTTER.
- 43 PR. RETAINING WALL 6 FT MAX HEIGHT.
- 44 PR. SANITARY MANHOLE (BY OTHERS).
- 45 PR. SIGHT TRIANGLE
- 46 TEMPORARY SWALE
- 47 PROPOSED HYDRANT.
- 48 PROPOSED AREA INLET
- 49 PROPOSED 3'X4' ELECTRICAL USER CABINET W/ METER
- 50 PROPOSED CONCRETE PAN
- 51 1,000 GALLON PRECAST GREASE INTERCEPTOR PER PLUM CREEK'S
CRITERIA



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Krysta Houtchens

12/04/2024

Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

No.	REVISION	BY	DATE
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CONSTRUCTION DOCUMENTS

LITTLE SUNSHINE'S PLAYHOUSE & PRESCHOOL

PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

SITE PLAN

PROJECT NO. _____

DESIGNED BY: LCG

DRAWN BY: LCG

DATE: 06/28/2024

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SHEET 3 OF 22

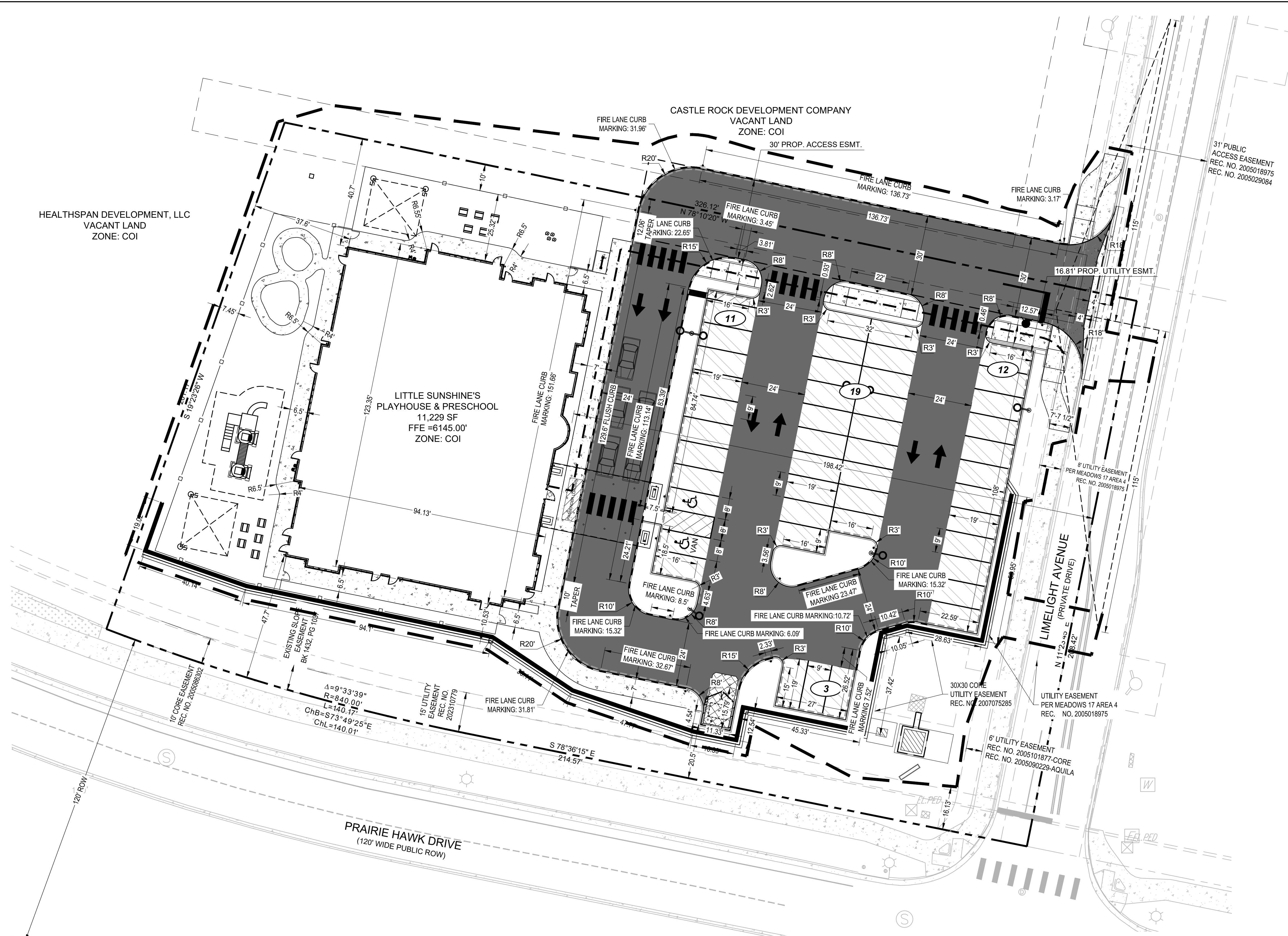
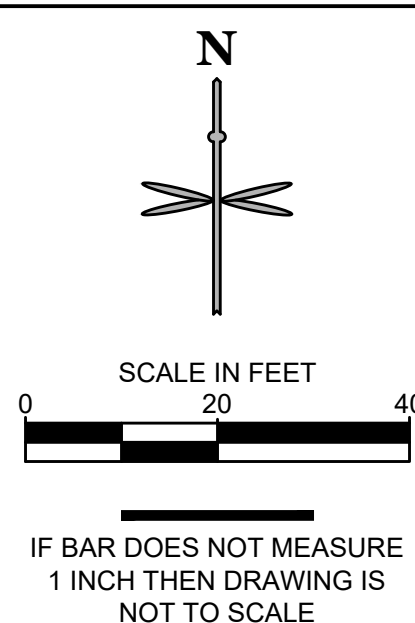


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PAVING PLAN LEGEND

	PROPOSED PROPERTY BOUNDARY
	PROPOSED EASEMENT
	EXISTING EASEMENT
	PROPOSED BUILDING OUTLINE
	PROPOSED BUILDING OVERHANG
	EXISTING CURB AND GUTTER
	PROPOSED CATCH CURB AND GUTTER
	PROPOSED SPILL CURB AND GUTTER
	PROPOSED WALL
	ADA ACCESSIBLE ROUTE
	LIMITS OF CONSTRUCTION
	FIRE LANE CURB MARKING
	PROPOSED SIDEWALK
	PROPOSED CONCRETE WALK
	PROPOSED FIRE ACCESS AND SERVICE TRUCK ROUTE - HEAVY DUTY ASPHALT CONCRETE AREA
	PROPOSED PARKING AREA- STANDARD DUTY ASPHALT CONCRETE AREA
	PROPOSED TRASH ENCLOSURE AND DRIVE ACCESS - HEAVY DUTY PORTLAND CEMENT CONCRETE
	PARKING COUNT
	DENOTES TRAFFIC FLOW PATTERNS

- HORIZONTAL CONTROL NOTES:**
- ALL DIMENSIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED.
 - UNLESS OTHERWISE NOTED, ALL RADI ON PARKING ISLAND SHALL BE 3'.
 - THE CONTRACTOR SHALL OBTAIN THE LATEST CAD FILE OF SITE IMPROVEMENTS FROM THE ENGINEER OF RECORD FOR HORIZONTAL AND VERTICAL SURVEY CONTROL PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY WITH ENGINEER OF RECORD ANY DISCREPANCIES BETWEEN THE CAD FILES AND CONSTRUCTION PLANS PRIOR TO INSTALLATION OF PLAN IMPROVEMENTS.
 - SEE ARCHITECTURAL PLANS FOR BUILDING, SCREENING WALL, AND TRASH ENCLOSURE DIMENSIONS.

TOWN APPROVAL BLOCK

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

DEVELOPMENT SERVICES

APPROVED BY:  **APPROVED**

By jkirpatrick on 12/04/2024

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DEVELOPMENT SERVICES DATE

PROFESSIONAL ENGINEER CERTIFICATION

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Krysta M. Houtchens 12/04/2024
Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

Table 8 Pavement Section Thickness Recommendations		
PAVEMENT AREA	PORTLAND CEMENT CONCRETE/ AGGREGATE BASE COURSE (INCHES) ¹	ASPHALT CONCRETE/ AGGREGATE BASE COURSE (INCHES) ¹
Light Duty Use	5/6	4/6
Heavy Duty Use	6/6	4.5/7

1) Overlaying a properly prepared subgrade as described in Section 4.7.3.

CONSTRUCTION DOCUMENTS

**LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL**

PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

HORIZONTAL CONTROL & PAVING PLAN

PROJECT NO:

DESIGNED BY: LCG

DRAWN BY: LCG

DATE: 06/28/2024

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SHEET 4 OF 22

NO. REVISION

1 SCHEDULE UPDATED AS CLOUDED

DATE

11/11/2024



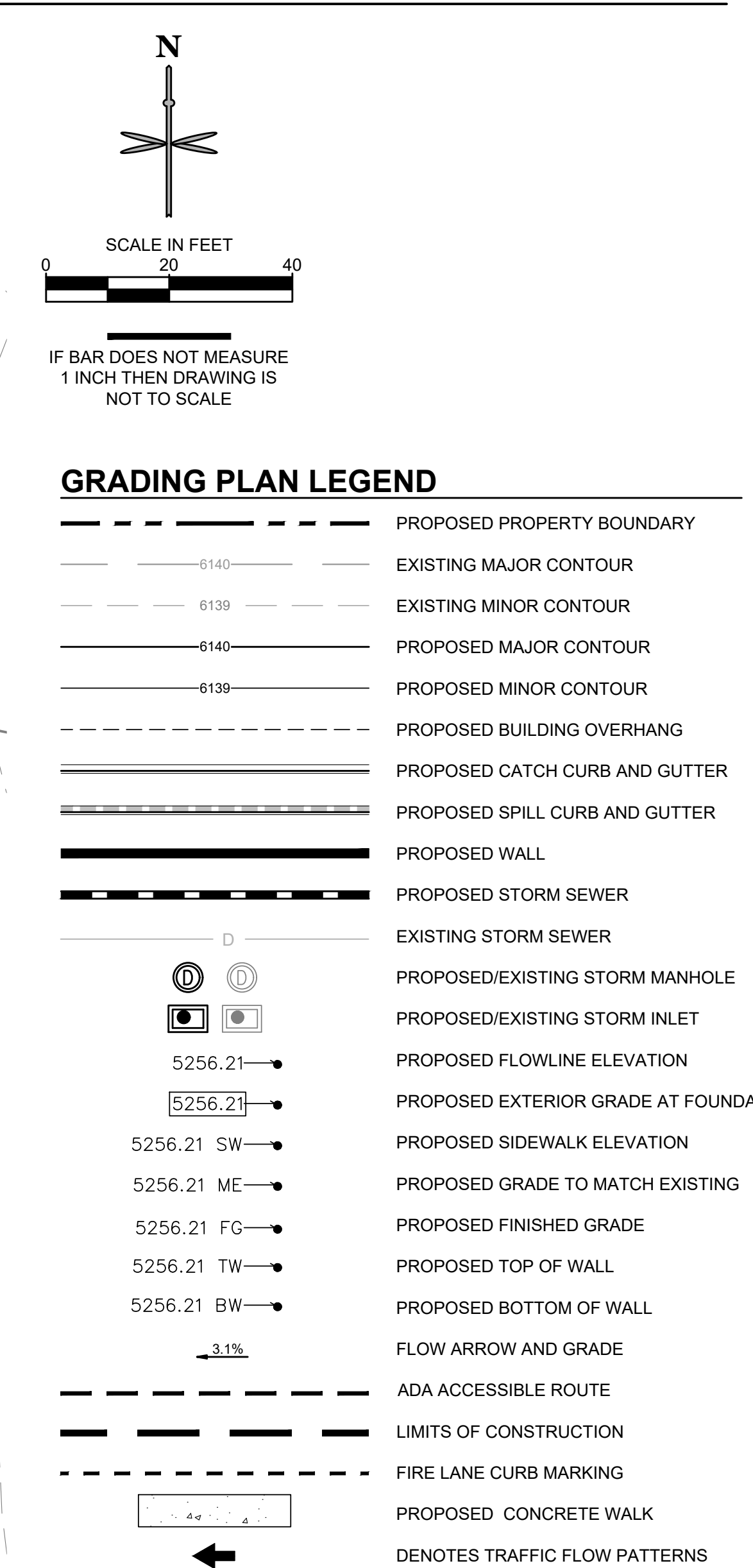
**K2 CIVIL
CONSULTANTS**



**LITTLE SUNSHINE'S
PLAYHOUSE
& PRESCHOOL**

A Reggio Emilia School





GRADING NOTES:

1. NO WORK IS TO BEGIN UNTIL ALL PERMITS HAVE BEEN OBTAINED.
2. FINAL GRADES ARE SUBJECT TO MINOR CHANGE BY CONTRACTOR. NO GRADE CHANGES IN EXCESS OF 0.05' WITHOUT ENGINEER APPROVAL.
3. ANY FILL MATERIAL REQUIRED TO BRING THE SITE TO GRADE SHALL BE CLEAN FILL APPROVED BY GEOTECHNICAL ENGINEER. SEE "SOIL PREPARATION NOTE" THIS SHEET.
4. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MINIMIZING DEPOSITION OF ONSITE SEDIMENTS ONTO SURROUNDING PUBLIC STREETS DURING CONSTRUCTION.
5. SEE THE SITE SURVEY FOR SURVEY INFORMATION.
6. GRADES SHOWN ARE FLOWLINE UNLESS OTHERWISE NOTED.
7. GUTTER GRADES SHALL BE A MINIMUM 0.60%.
8. CONTRACTOR TO ENSURE SMOOTH TRANSITION BETWEEN PRIVATE DRIVE AND TRASH ENCLOSURE.
9. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4-FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE ISSUANCE OF THE PUBLIC WORKS PERMIT.
10. RETAINING WALLS, SECTIONS OF RETAINING WALLS 4-FEET IN HEIGHT OR HIGHER OR TIERED WALLS MUST BE DESIGNED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF COLORADO AND MUST RECEIVE A BUILDING PERMIT FROM THE TOWN OF CASTLE ROCK PRIOR TO THE

TOWN APPROVAL BLOCK

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

APPROVED BY:  **APPROVED**

By jkirpatrick
on 12/04/2014

APPROVED-CD24-0008 Plans.pdf
Record Document on File

DEVELOPMENT SERVICES DATE

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 REGULATIONS, RESPECTIVELY; AND THAT I AM FULLY
RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

Krysta Houtchens 12/04/2014

Krysta M. Houtchens, PE

811
CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987 or 811
CALL 3-BUSINESS DAYS (NOT INCLUDING INITIAL
DAY OF CONTACT) IN ADVANCE BEFORE YOU DIG,
GRADE, OR EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES.

SOIL PREPARATION NOTE

SOIL PREPARATION FOR NON-LANDSCAPE AREAS SHALL BE PER RECOMMENDATIONS FROM A GEOTECHNICAL REPORT PREPARED FOR THIS SITE AS FOLLOWS:

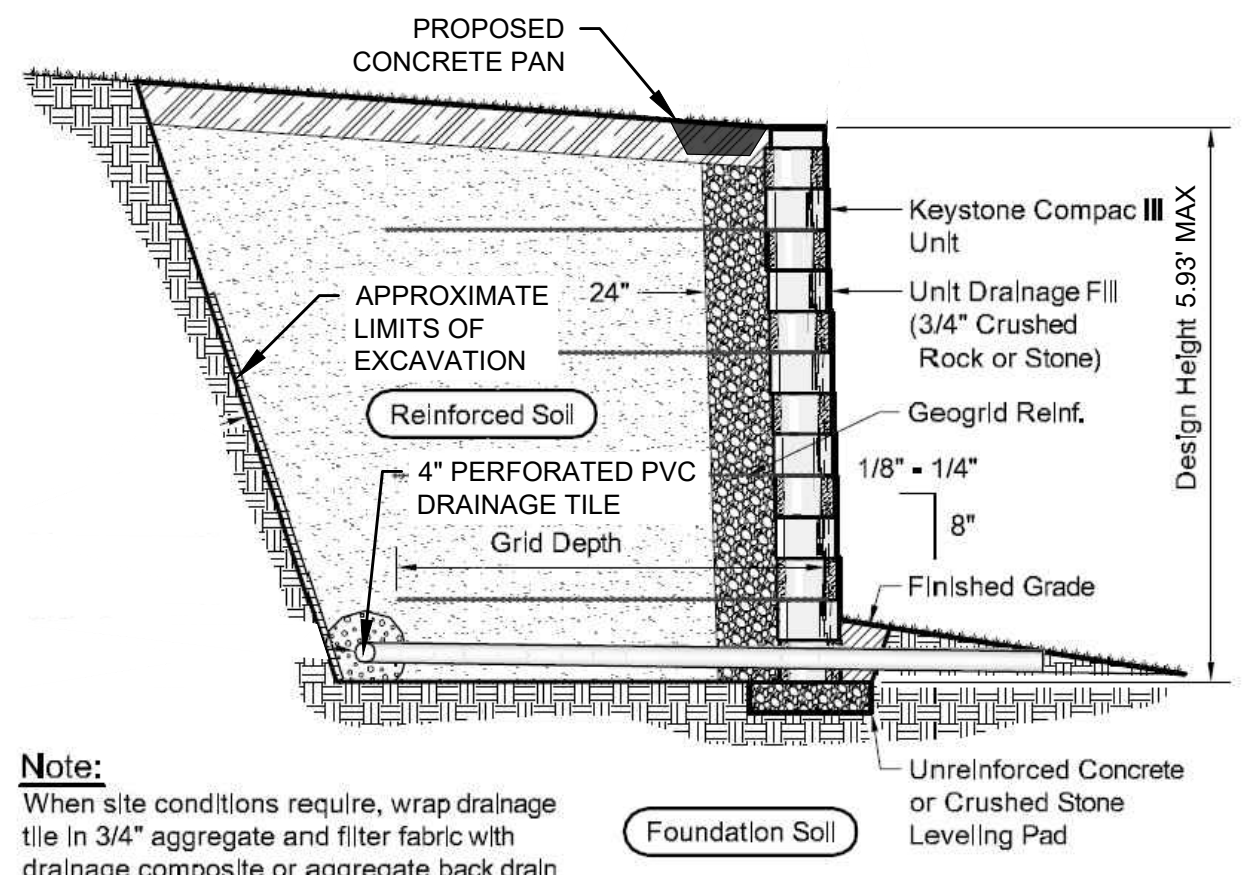
GEOTECHNICAL ENGINEER: VIVID ENGINEERING GROUP
PROJECT NO.:D23-1-355, DATED AUGUST 22, 2023

THE CONTRACTOR MUST FULLY REVIEW THIS REPORT PRIOR TO CONSTRUCTION. INFORMATION IN THIS GEOTECHNICAL REPORT SUPERSEDES ANY CONFLICTING INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. REFER TO GENERAL STRUCTURAL NOTES FOR SPECIFIC SOIL PREPARATION AT SITE STRUCTURES. REFER TO THE LANDSCAPE PLANS FOR SPECIFIC PLANTING AREA SOIL AMENDMENT PROCEDURES.



COLOR: SANDSTONE/BROWN

PROPOSED RETAINING WALL BLOCK

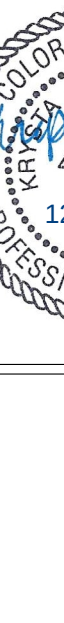


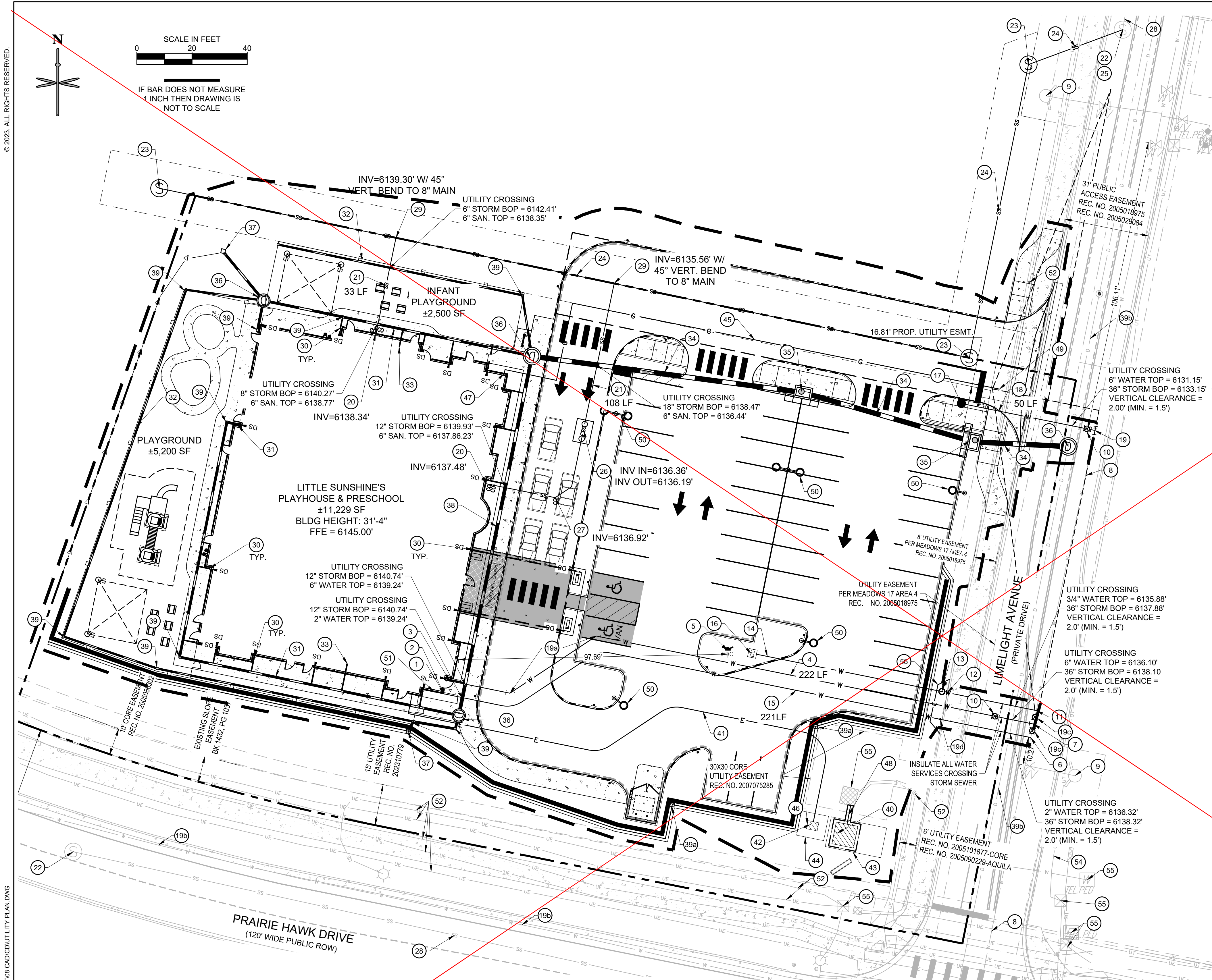
Note:
When site conditions require, wrap drainage tile in 3/4" aggregate and filter fabric with drainage composite or aggregate back drain system, as directed by geotechnical engineer.

Foundation Soil

DETAIL NOT FOR CONSTRUCTION. DESIGN BUILD BY WALL MANUFACTURE..

Typical Reinforced Wall Section

CONSTRUCTION DOCUMENTS		PROJECT NO:	
LITTLE SUNSHINE'S		DESIGNED BY: LCG	
PLAYHOUSE & PRESCHOOL		DRAWN BY: LCG	
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE		DATE: 06/28/2024	
GRADING PLAN		C3.0	
SHEET 5 OF 22			
			
			
			
			
			
			



UTILITY LEGEND

	PROPOSED PROPERTY BOUNDARY		EXISTING UNDERGROUND TELEPHONE		EXISTING FIRE HYDRANT
	EXISTING EASEMENT		LIMITS OF CONSTRUCTION		PROPOSED SITE LIGHT
	EXISTING SANITARY SEWER		PROPOSED BUILDING OVERHANG		EXISTING WATER VALVE
	EXISTING WATER		PROPOSED CATCH CURB AND GUTTER		PROPOSED WATER METER
	EXISTING STORM SEWER		PROPOSED SPILL CURB AND GUTTER		PROPOSED FIRE HYDRANT
	EXISTING UNDERGROUND ELECTRIC		PROPOSED SANITARY SEWER		ADA ACCESSIBLE ROUTE
	EXISTING UNDERGROUND COMMUNICATION		PROPOSED WATER		LIMITS OF CONSTRUCTION
	EXISTING GAS		PROPOSED STORM SEWER		FIRE LANE CURB MARKING
			PROPOSED ELECTRIC LINE		PROPOSED CONCRETE WALK
			PROPOSED GAS		DENOTES TRAFFIC FLOW PATTERNS
	EXISTING STORM INLET AND MANHOLE				
	PROPOSED STORM INLET AND MANHOLE				
	EXISTING STREET LIGHT				

UTILITY NOTES

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6. ALL SEWER SERVICE PIPE SHALL BE POLYVINYL CHLORIDE GRAVITY PIPE (PVC) SDR 35, MINIMUM BURY DEPTH PER TOWN OF CASTLE ROCK.
7. CONTRACTOR TO FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, WHETHER SHOWN ON THE PLANS OR NOT. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
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16. REFER TO MEP PLANS UNDER SEPARATE COVER FOR DIAGRAMMATIC LOCATIONS OF ELECTRICAL CONDUIT.
17. REFER TO STORM PLAN AND PROFILE SHEET FOR STORM DESIGN.
18. CONTRACTOR TO MATCH EXISTING PAVEMENT THICKNESS FOR ALL STREET CUTS AND TO SEAL ALL JOINTS BETWEEN NEW AND EXISTING PAVING.
19. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOURS' NOTICE TO THE ON-SITE TOWN OF CASTLE ROCK 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 CASTLE ROCK WATER CUSTOMERS. IF THE TIE-IN WILL DISRUPT UTILITY SERVICE, THEN CONTRACTOR SHALL PROVIDE A MINIMUM 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.

WATER

1. PROPOSED 2" TYPE K COPPER DOMESTIC WATER SERVICE LINE INSTALLED OFF 5' STUB TO BLDG. REFER TO PLUMBING PLANS UNDER SEPARATE COVER FOR CONTINUATION
2. 1.5" METER IN BUILDING
3. PROPOSED 6" DIP FIRE SERVICE LINE CONNECTION TO BUILDING. REFER TO PLUMBING PLANS UNDER SEPARATE COVER FOR CONTINUATION
4. PROPOSED 6" DIP FIRE SERVICE LINE
5. PROPOSED REMOTE FDC WITH APPROVED KNOX PLUGS/CAPS.
6. PROPOSED 1.5" DOMESTIC WATER TAP CONNECTION TO PROPOSED 12" PVC WATER MAIN, W/ TAPPING SADDLE
7. PROPOSED 6" DIP FIRE SERVICE CONNECTION TO PROPOSED 12" PVC WATER MAIN, WITH 6" X 12" TEE, 6" VALVE AND 12" VALVE.
8. EX. 12" POTABLE WATER MAIN
9. EXISTING FIRE HYDRANT
10. 6" GATE VALVE
11. 3/4" X 12" TAPPING SLEEVE W/ 104 LF OF IRRIGATION LINE
12. 3/4" IRRIGATION CURB STOP VALVE
13. 3/4" IRRIGATION METER PIT
14. 1" IRRIGATION LINE. SEE IRRIGATION PLANS FOR CONTINUATION
15. 2" TYPE K COPPER DOMESTIC WATER SERVICE LINE
16. IRRIGATION BACKFLOW PREVENTER
17. FIRE HYDRANT ASSEMBLY
18. 6" FIRE HYDRANT LINE
19. HYDRANT LINE TEE CONNECTION TO EX. WATER MAIN.
- 19a. 6" DIP 45° BEND W/ THRUSTBLOCK.
- 19b. EX. 12" RAW WATER MAIN
- 19c. 12" GATE VALVE
- 19d. 2" CURB STOP VALVE + CONCRETE COLLAR

SANITARY SEWER

20. PROPOSED 6" SANITARY SEWER STUB 5 FEET OFF BUILDING. REFER TO PLUMBING PLANS UNDER SEPARATE COVER FOR CONTINUATION
21. PROPOSED 6" PVC SDR 35 SANITARY SEWER SERVICE @ MIN. 2% SLOPE
22. EXISTING SANITARY MANHOLE. PROTECT IN PLACE
23. PROPOSED SANITARY MANHOLE (BY OTHERS)
24. PROPOSED 8" SANITARY MAIN (BY OTHERS)
25. CONNECT TO EX. MANHOLE
26. 1,000 GALLON PRECAST GREASE INTERCEPTOR PER PLUM CREEK'S CRITERIA.
27. PRIVATE HS-20 TRAFFIC RATED SANITARY SEWER CLEANOUT
28. EXISTING 8" PVC SANITARY SERVICE MAIN
29. CONNECT TO PR. SANITARY MAIN

STORM SEWER

30. PROPOSED DOWNSPOUT LOCATION WITH 6" SCH35 OR 40 PVC OR DUAL-WALL HDPE AND WATERTIGHT FITTINGS. UNDERGROUND STUB PIPES CONNECTED TO TRUNKLINES
31. PROPOSED DOWNSPOUT TRUCKLINE. 8" SCH 35 PVC OR DUAL-WALL HDPE WITH WATERTIGHT FITTINGS
32. PROPOSED TURF DRAIN
33. 6" INTERNAL ROOF DRAIN
34. PROPOSED STORM SEWER
35. PROPOSED TYPE R INLET
36. PROPOSED 6" MANHOLE
37. PROPOSED AREA INLET
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39. PRIVATE STORM SEWER BEND
- 39a. PROPOSED AREA INLET W/ PIPE THROUGH WALL AND LAMBS TONGUE.
- 39b. EXISTING 36" RCP STORM

DRY UTILITIES

40. PROPOSED 8' X 8' ELECTRICAL TRANSFORMER PAD. GENERAL CONTRACTOR TO PROVIDE CONCRETE PAD PER MANUFACTURER'S SPECIFICATIONS. REFER TO MEP PLANS FOR TRANSFORMER DESIGN UNDER SEPARATE COVER
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51. PROPOSED FIRE RISER ROOM
52. EXISTING UNDERGROUND ELECTRIC TO REMAIN
53. EXISTING UNDERGROUND GAS LINE
54. EXISTING UNDERGROUND COMMUNICATION LINE
55. EXISTING UTILITY MANHOLE/STRUCTURE/BOX
56. REROUTE EXISTING ELECTRIC AROUND PROPOSED WATER

TOWN APPROVAL BLOCK

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

APPROVED

By *jkirkpatrick* on 12/04/2024

APPROVED-CD24-0008 Plans.pdf
Record Document on File

DEVELOPMENT SERVICES DATE

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Krysta M. Houtchens 12/04/2024
Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

CONSTRUCTION DOCUMENTS

LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL

PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

UTILITY PLAN

PROJECT NO:

DESIGNED BY: LCG

DRAWN BY: LCG

DATE: 06/28/2024

C4.0

SHEET 6 OF 22

DATE

11/11/2024

REVISION

1 SCHEDULE UPDATED AS CLOUDED

NO.

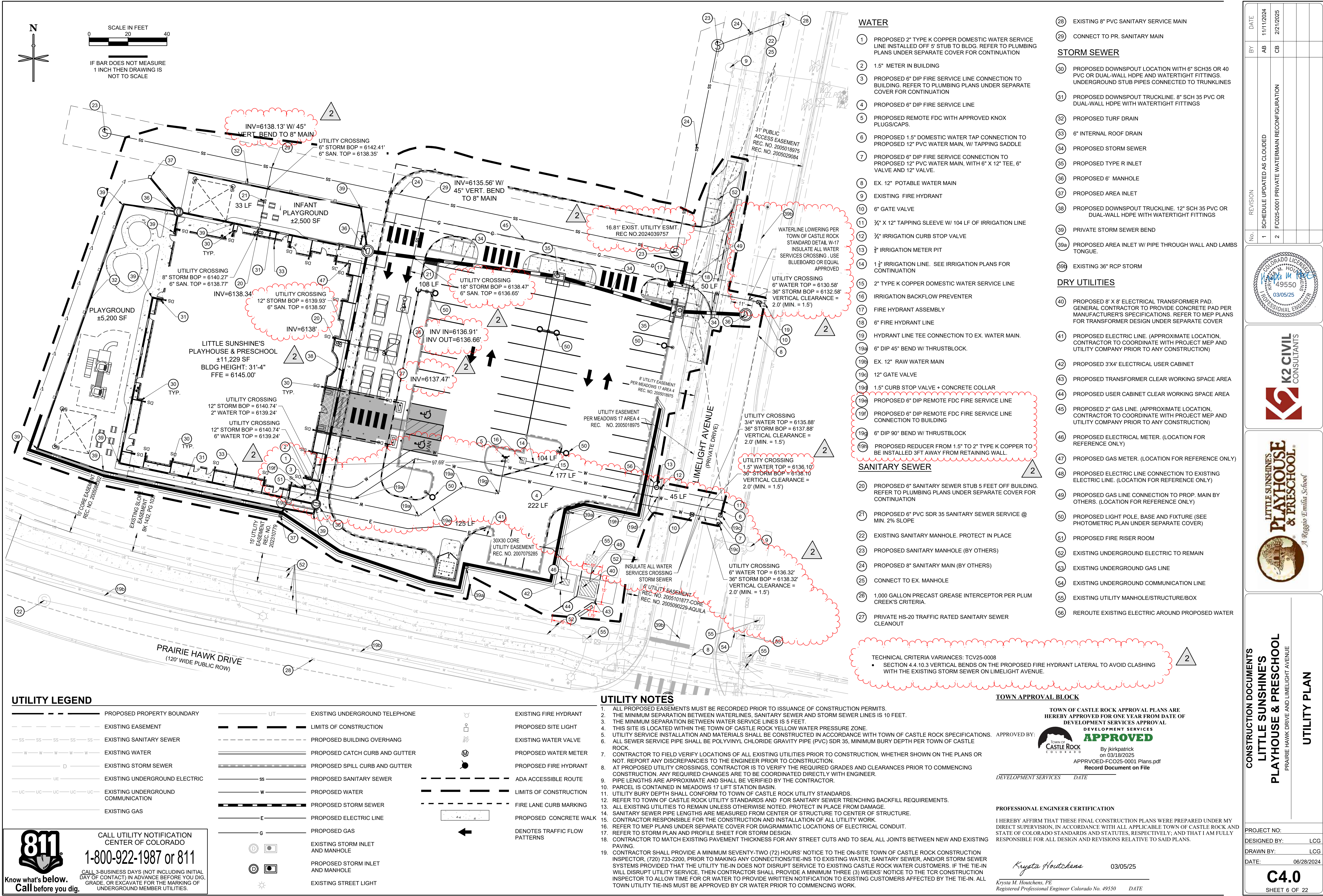
1

PROFESSIONAL ENGINEER

COLORADO LICENSE

49550

12/04/24



UTILITY LEGEND

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	EXISTING WATER		PROPOSED CATCH CURB AND GUTTER
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	EXISTING UNDERGROUND COMMUNICATION		PROPOSED WATER
	EXISTING GAS		PROPOSED STORM SEWER
			PROPOSED ELECTRIC LINE
			PROPOSED GAS
			EXISTING STORM INLET AND MANHOLE
			PROPOSED STORM INLET AND MANHOLE
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			PROPOSED SITE LIGHT
			EXISTING WATER VALVE
			PROPOSED WATER METER
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- 19d. 1.5" CURB STOP VALVE + CONCRETE COLLAR
- 19e. PROPOSED 6" DIP REMOTE FDC FIRE SERVICE LINE
- 19f. PROPOSED 6" DIP REMOTE FDC FIRE SERVICE LINE CONNECTION TO BUILDING
- 19g. 6" DIP 90° BEND W/ THRUSTBLOCK
- 19h. PROPOSED REDUCER FROM 1.5" TO 2" TYPE K COPPER TO BE INSTALLED 3FT AWAY FROM RETAINING WALL.

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27. PRIVATE HS-20 TRAFFIC RATED SANITARY SEWER CLEANOUT

TECHNICAL CRITERIA VARIANCES: TC25-0008
SECTION 4.4.10.3 VERTICAL BENDS ON THE PROPOSED FIRE HYDRANT LATERAL TO AVOID CLASHING WITH THE EXISTING STORM SEWER ON LIMELIGHT AVENUE.

TOWN APPROVAL BLOCK

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

APPROVED

By Jkrpatrick
03/13/2025
APPROVED-FC025-0001 Plans.pdf
Record Document on File

DEVELOPMENT SERVICES DATE

PROFESSIONAL ENGINEER CERTIFICATION

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Krysta M. Houtchens
03/05/25
Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

EXISTING 8" PVC SANITARY SERVICE MAIN

CONNECT TO PR. SANITARY MAIN

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56. REROUTE EXISTING ELECTRIC AROUND PROPOSED WATER

CONSTRUCTION DOCUMENTS

LITTLE SUNSHINE'S PLAYHOUSE & PRESCHOOL

PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

UTILITY PLAN

DATE	11/11/2024
BY	AB CB
REVISION	1 SCHEDULE UPDATED AS CLOUDED
No.	2 FC025-0001 PRIVATE WATERMAIN RECONFIGURATION

PROJEC

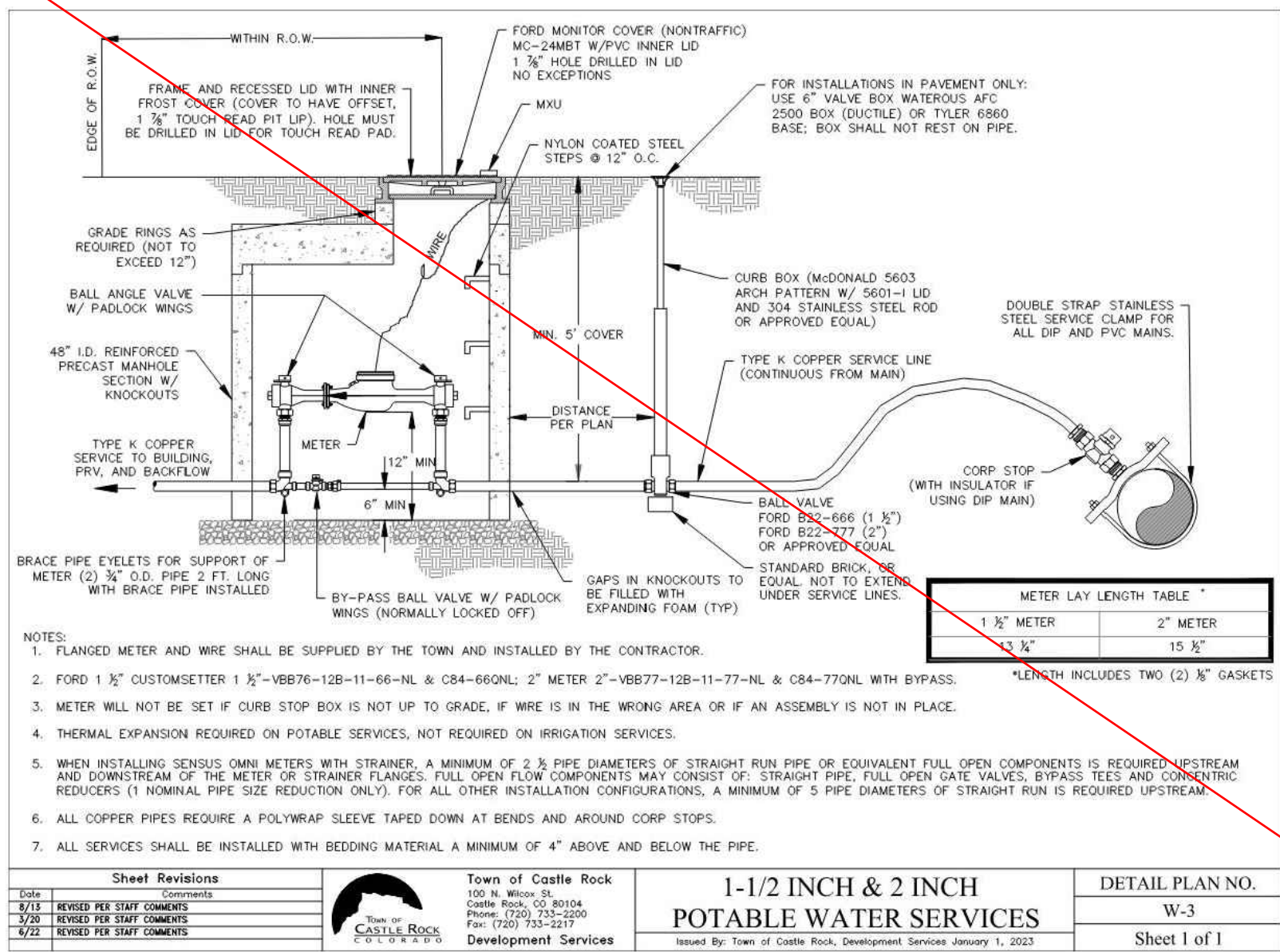
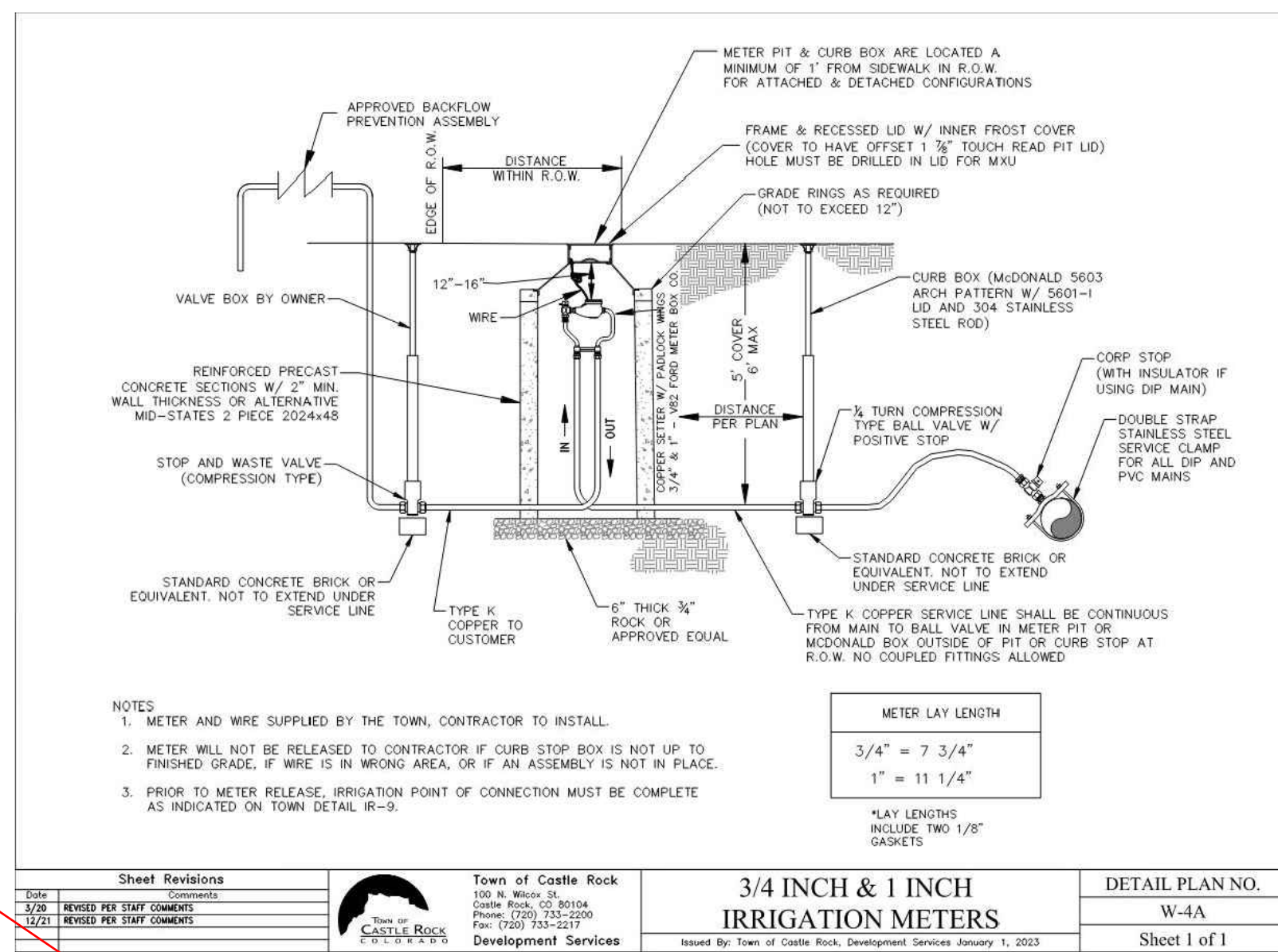
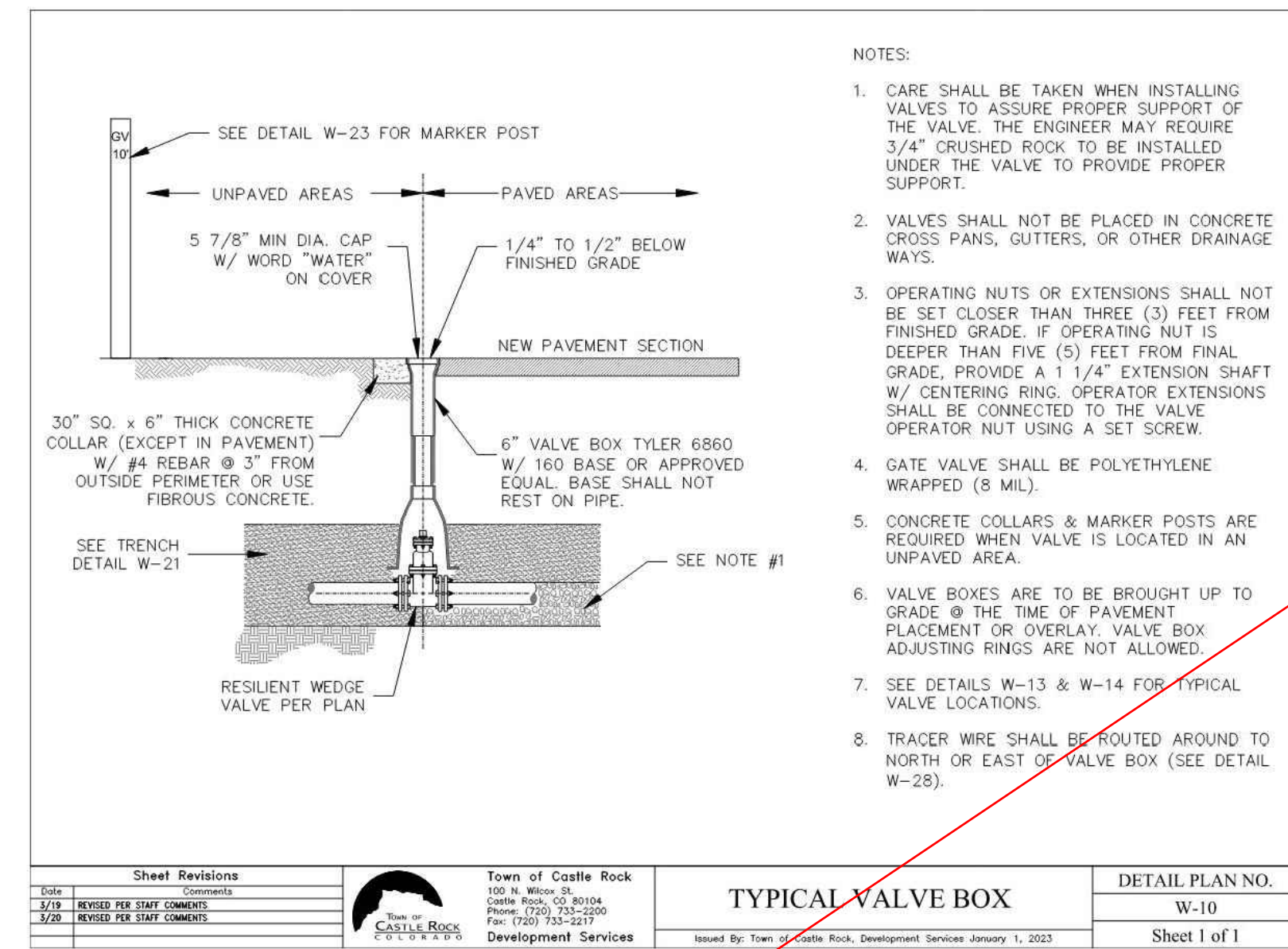
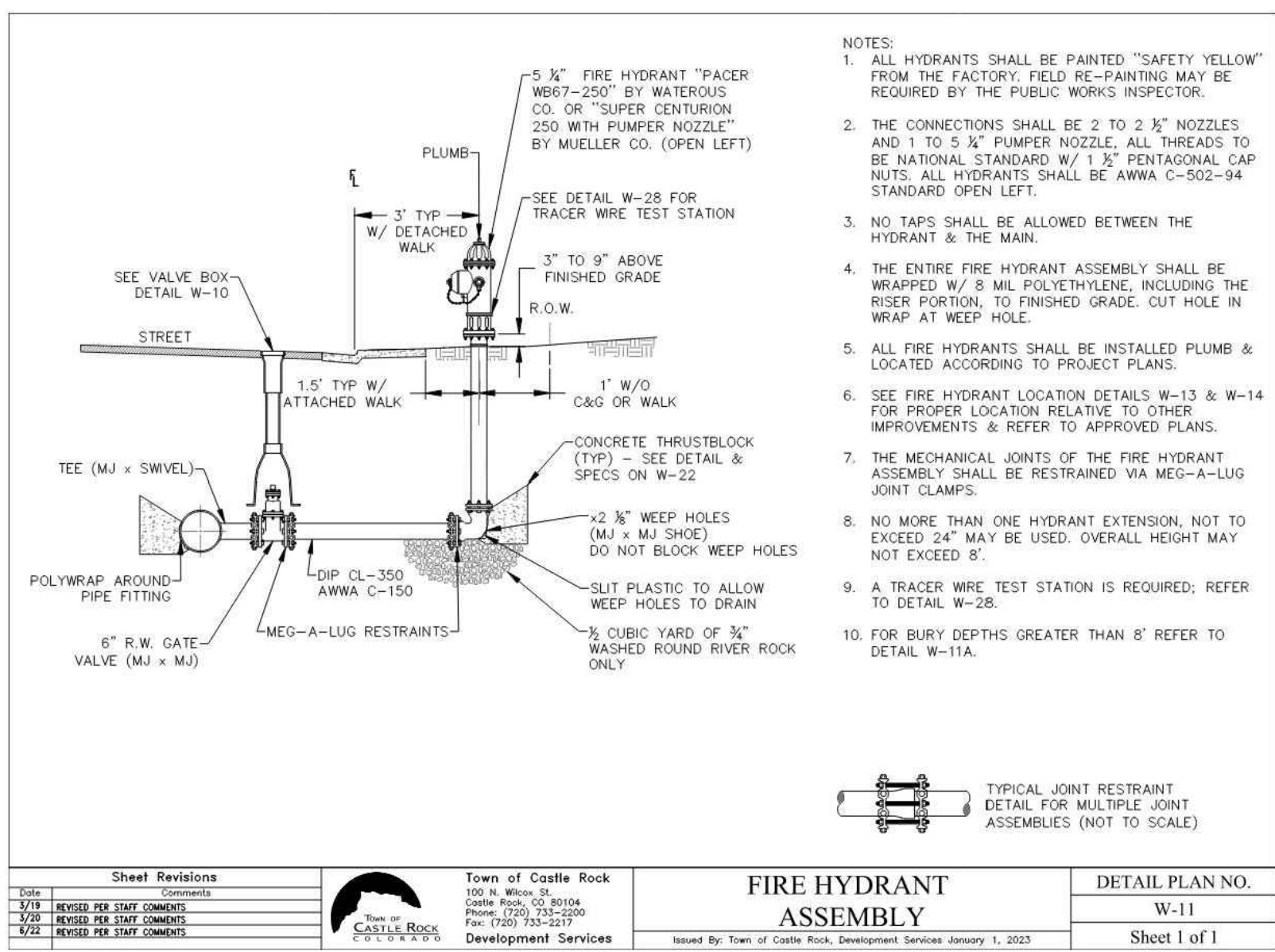
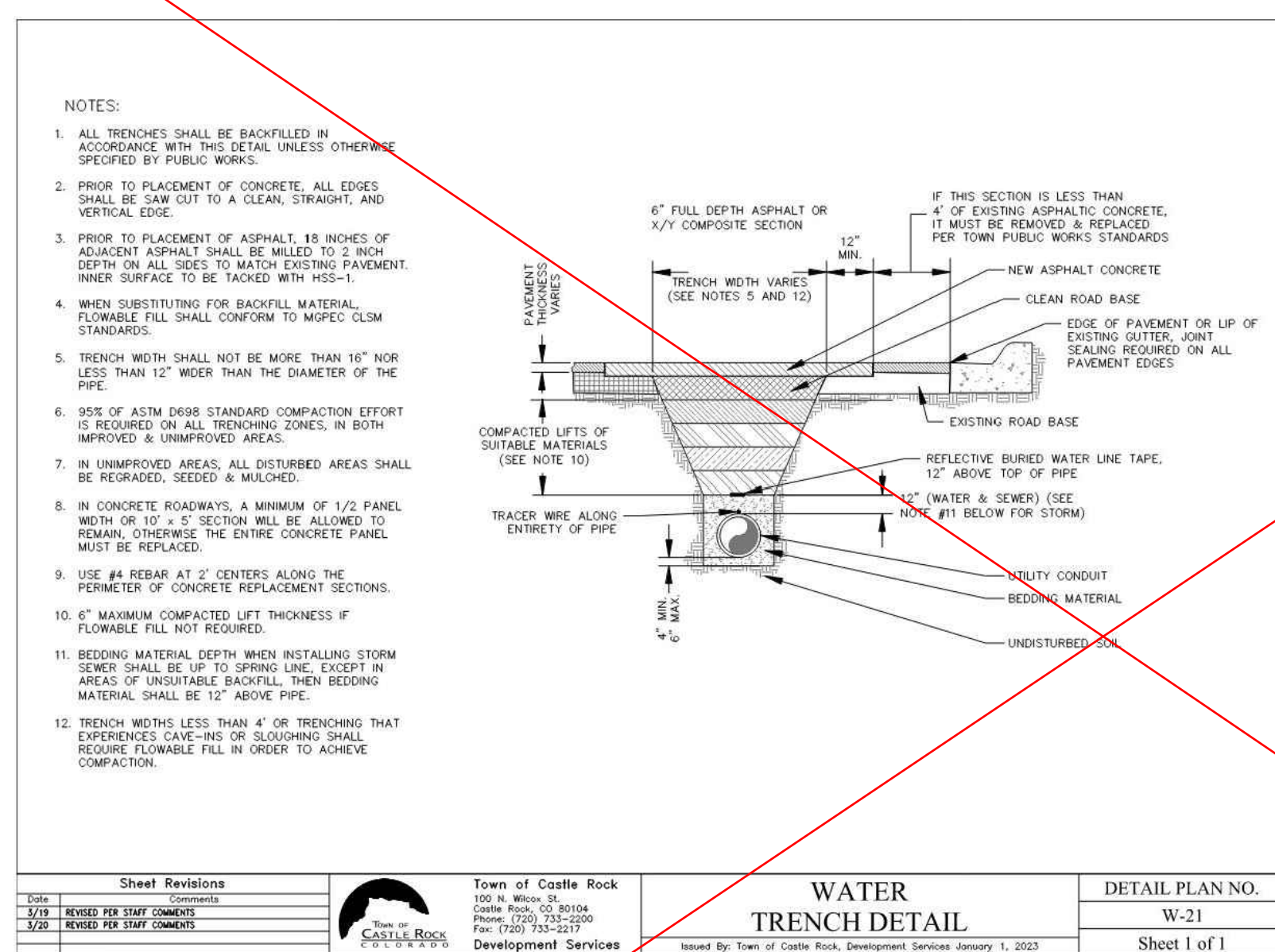
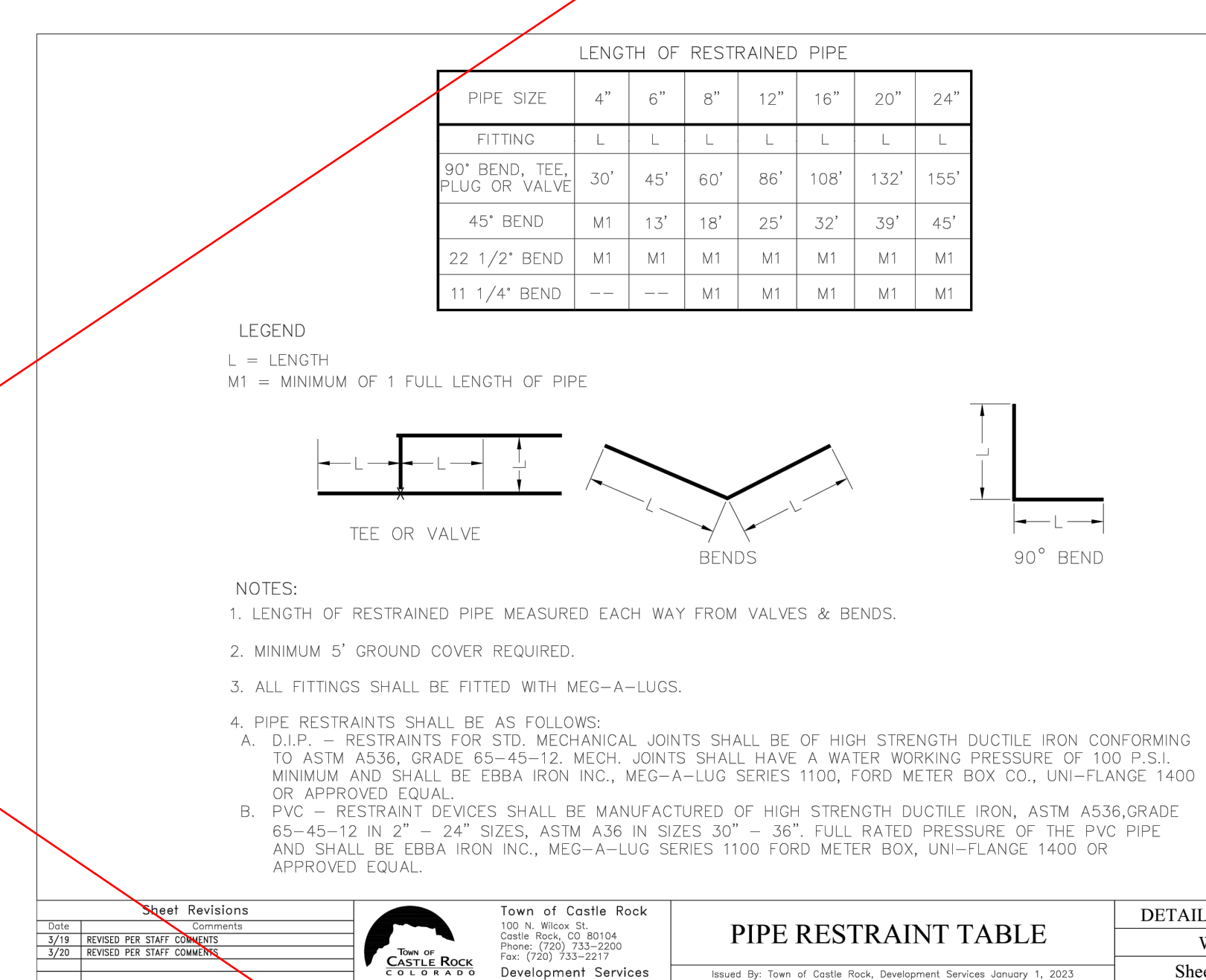
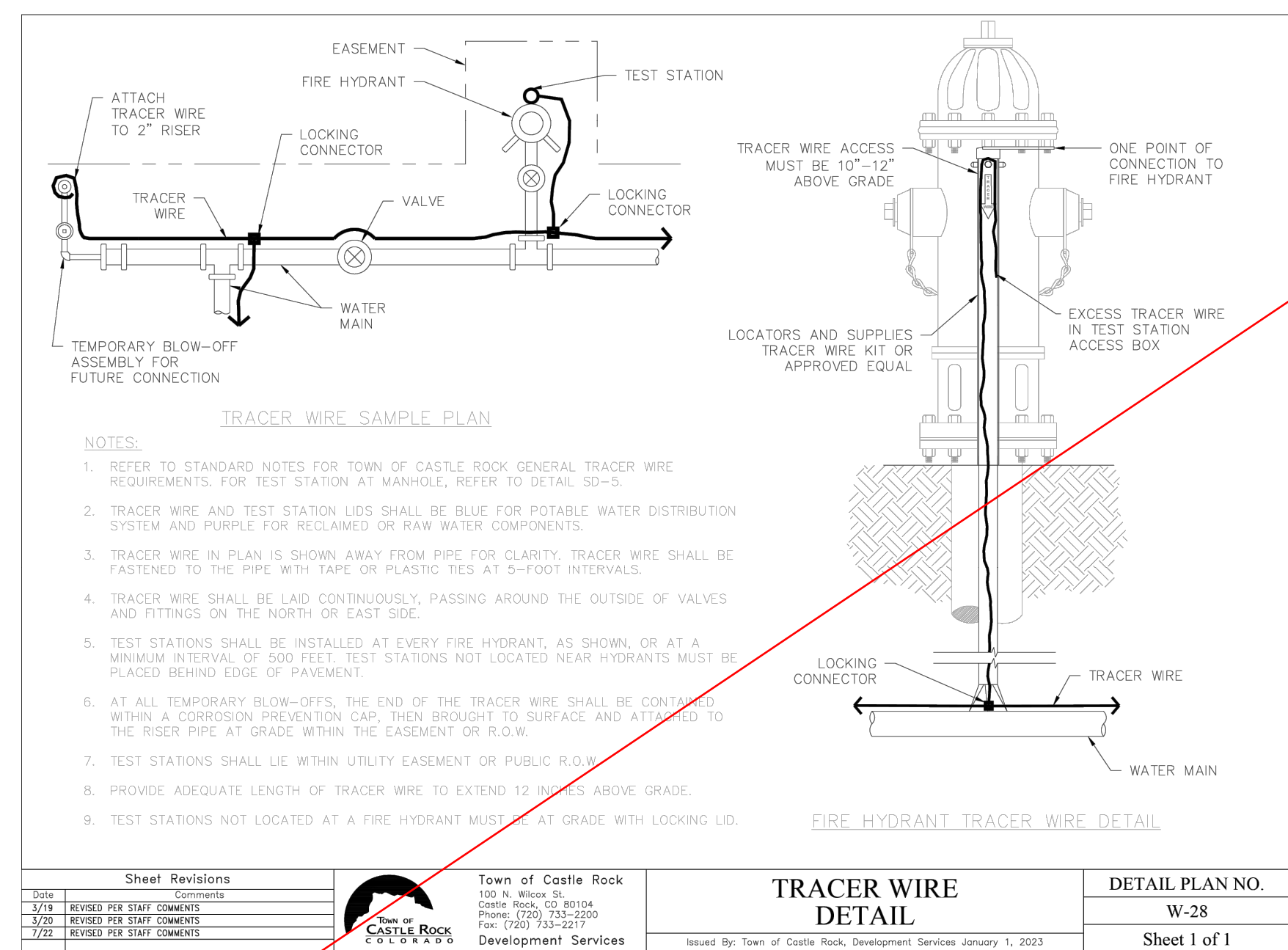
DESIGNED BY: LCG

DRAWN BY: LCG

DATE: 06/28/2024

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SHEET 6 OF 22



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CALL 3-BUSINESS DAYS (NOT INCLUDING INITIAL DAY OF CONTACT) 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: By Kirkpatrick on 12/04/2024
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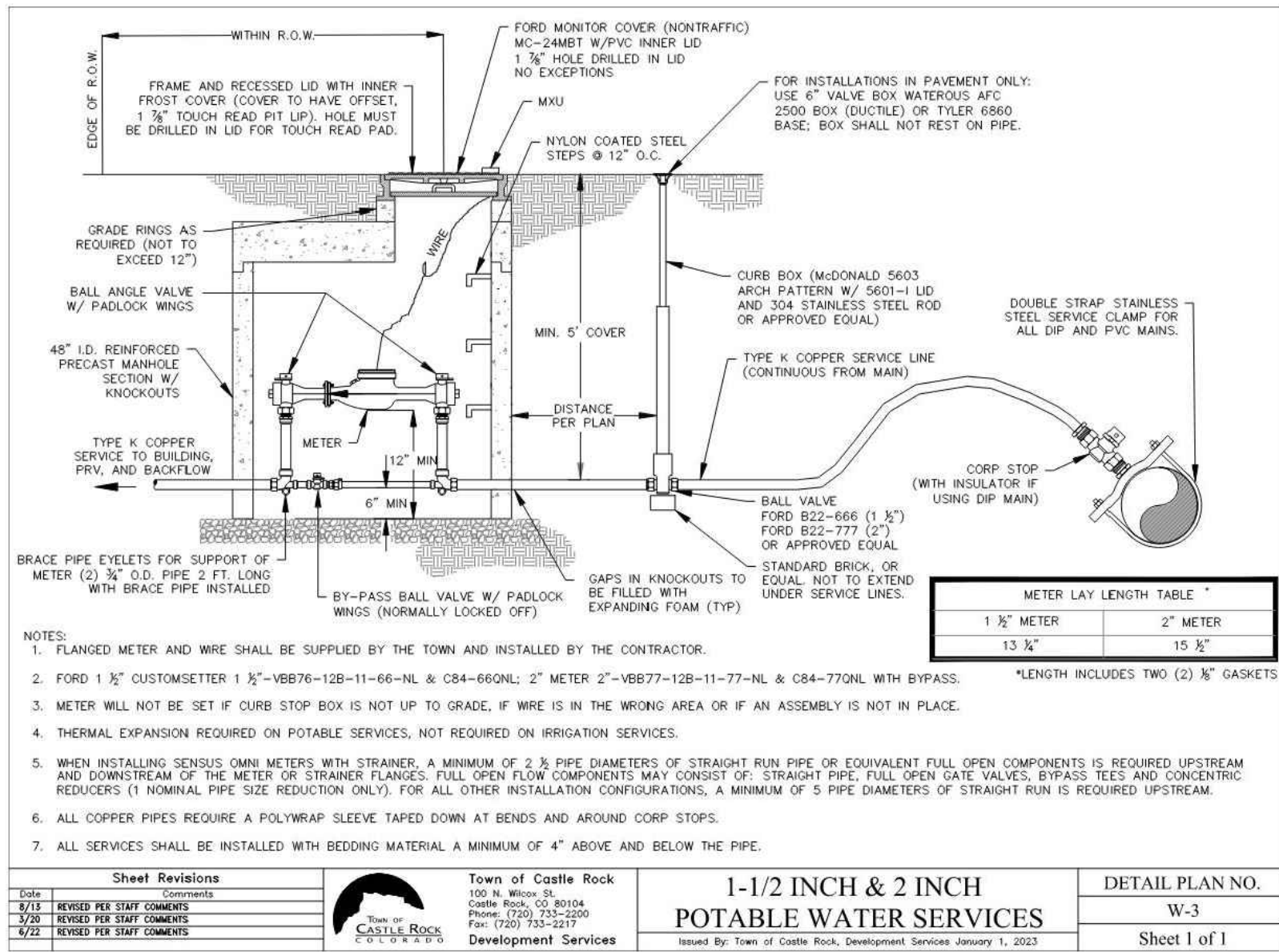
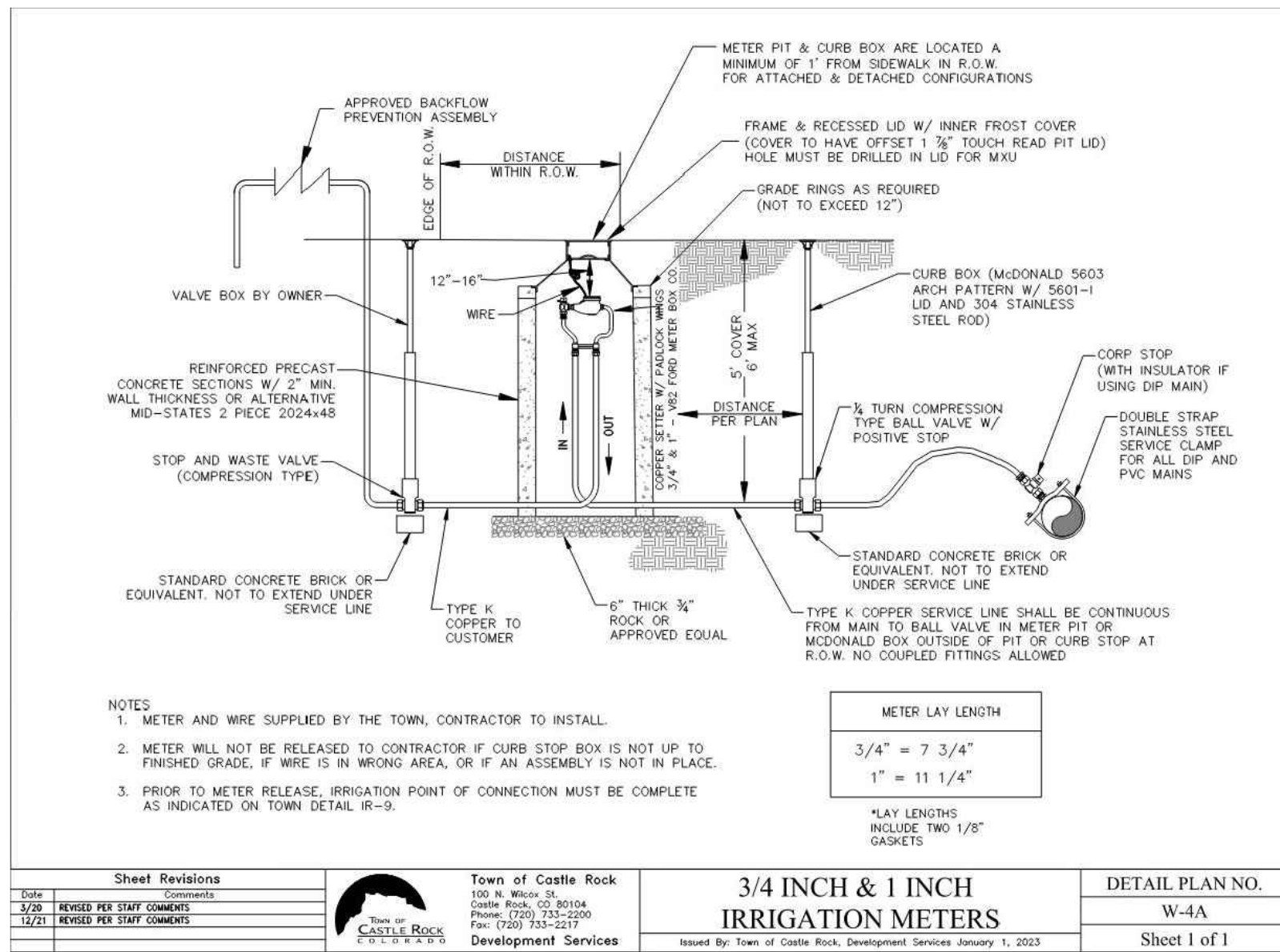
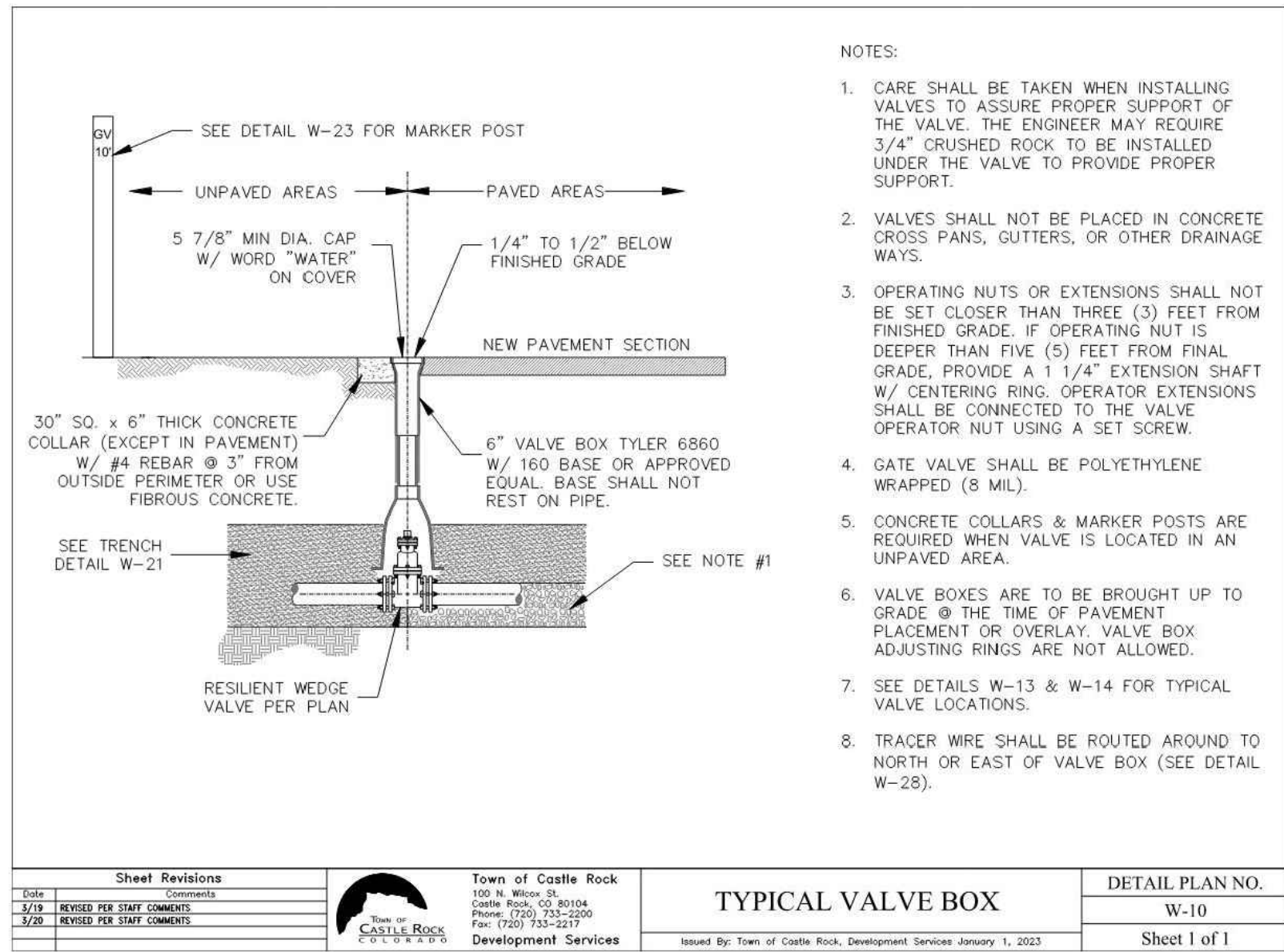
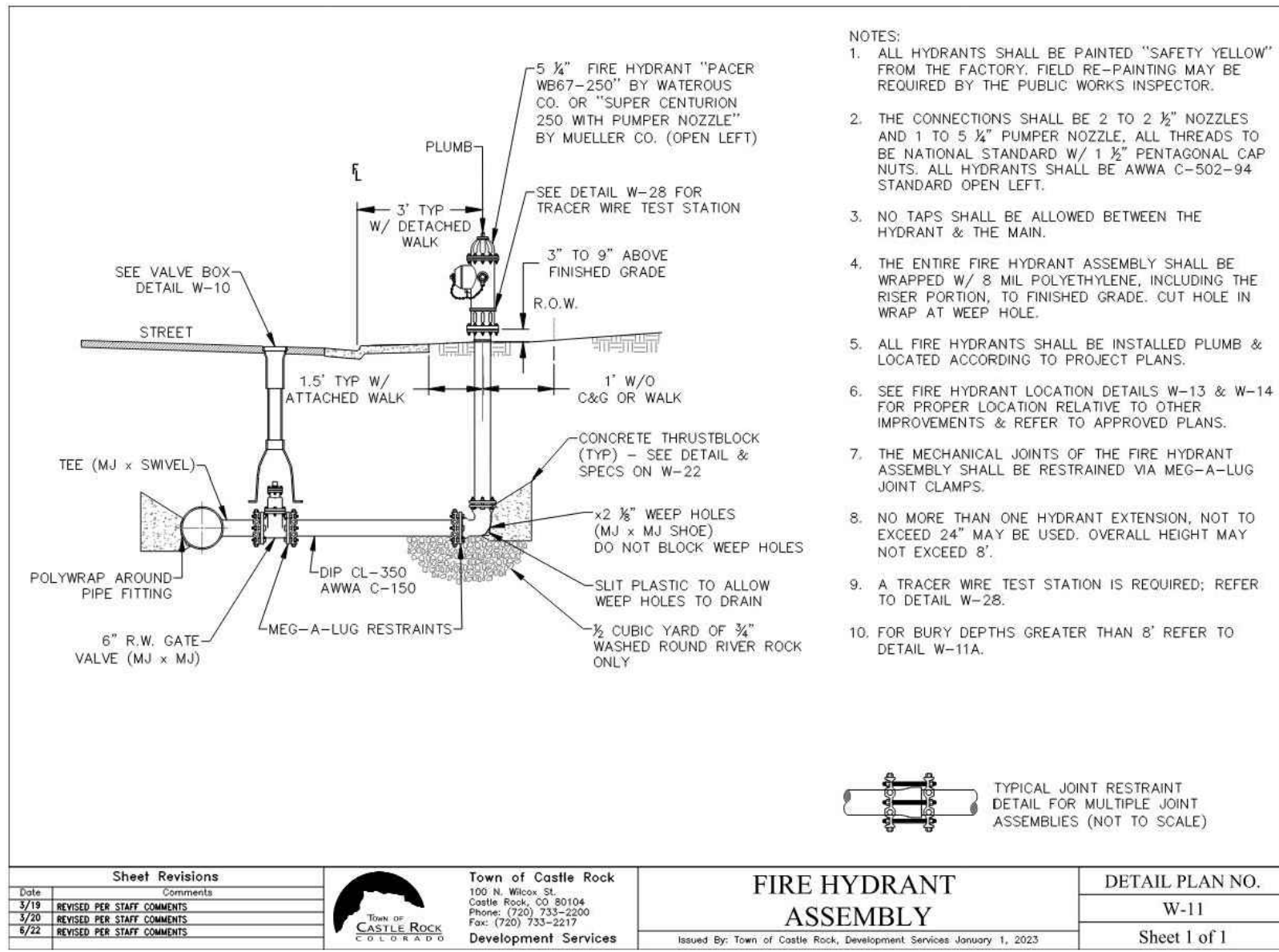
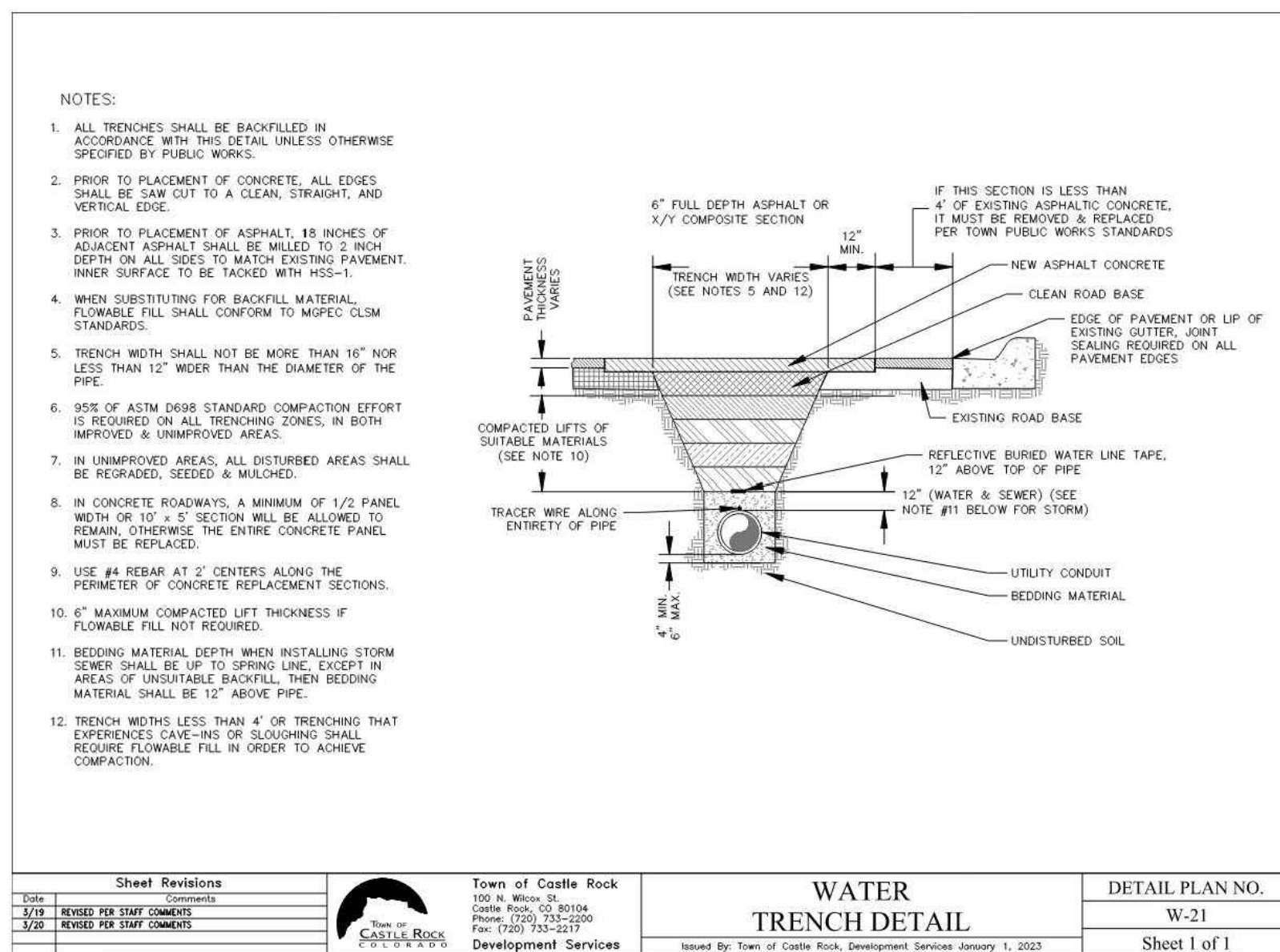
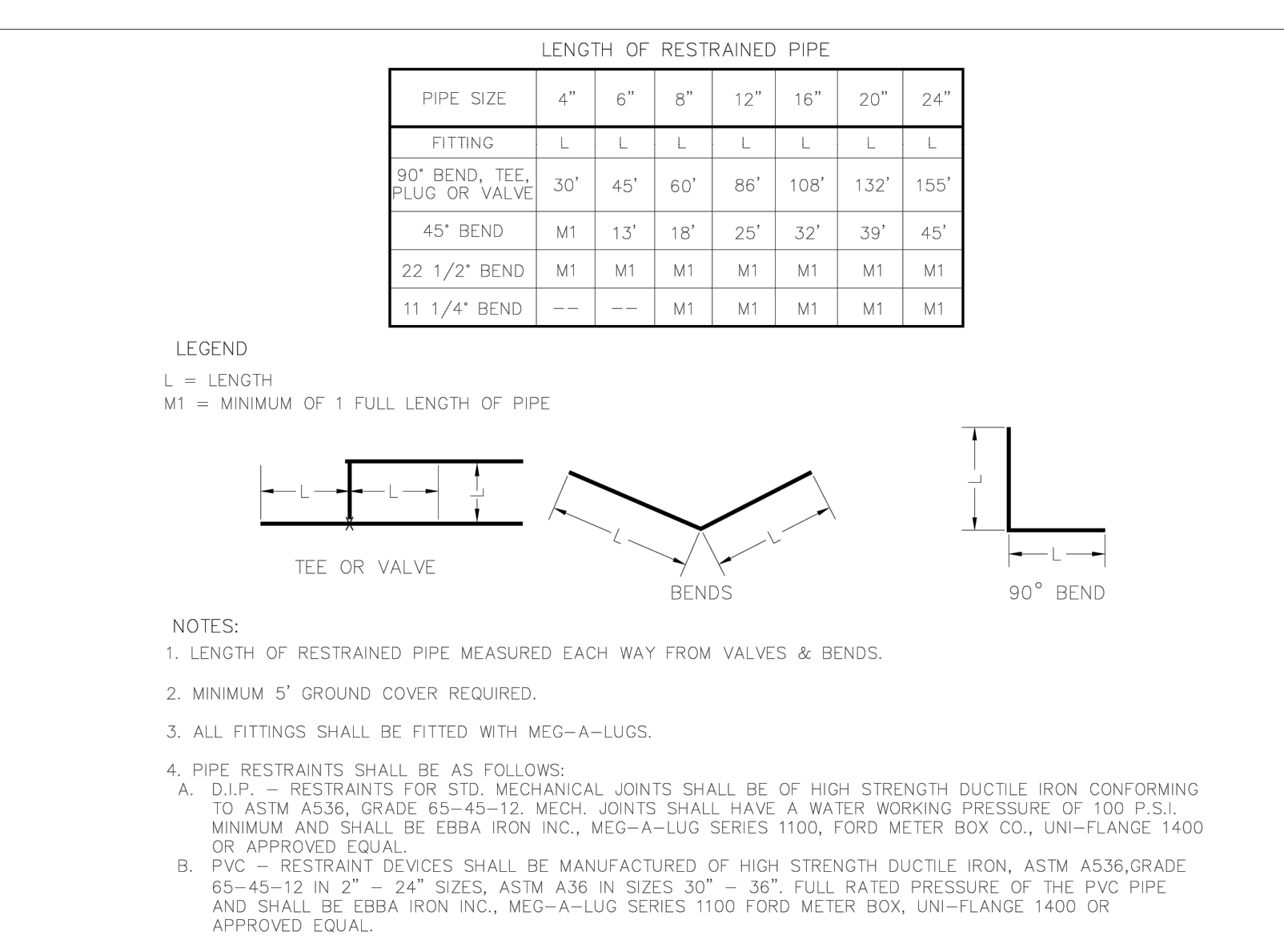
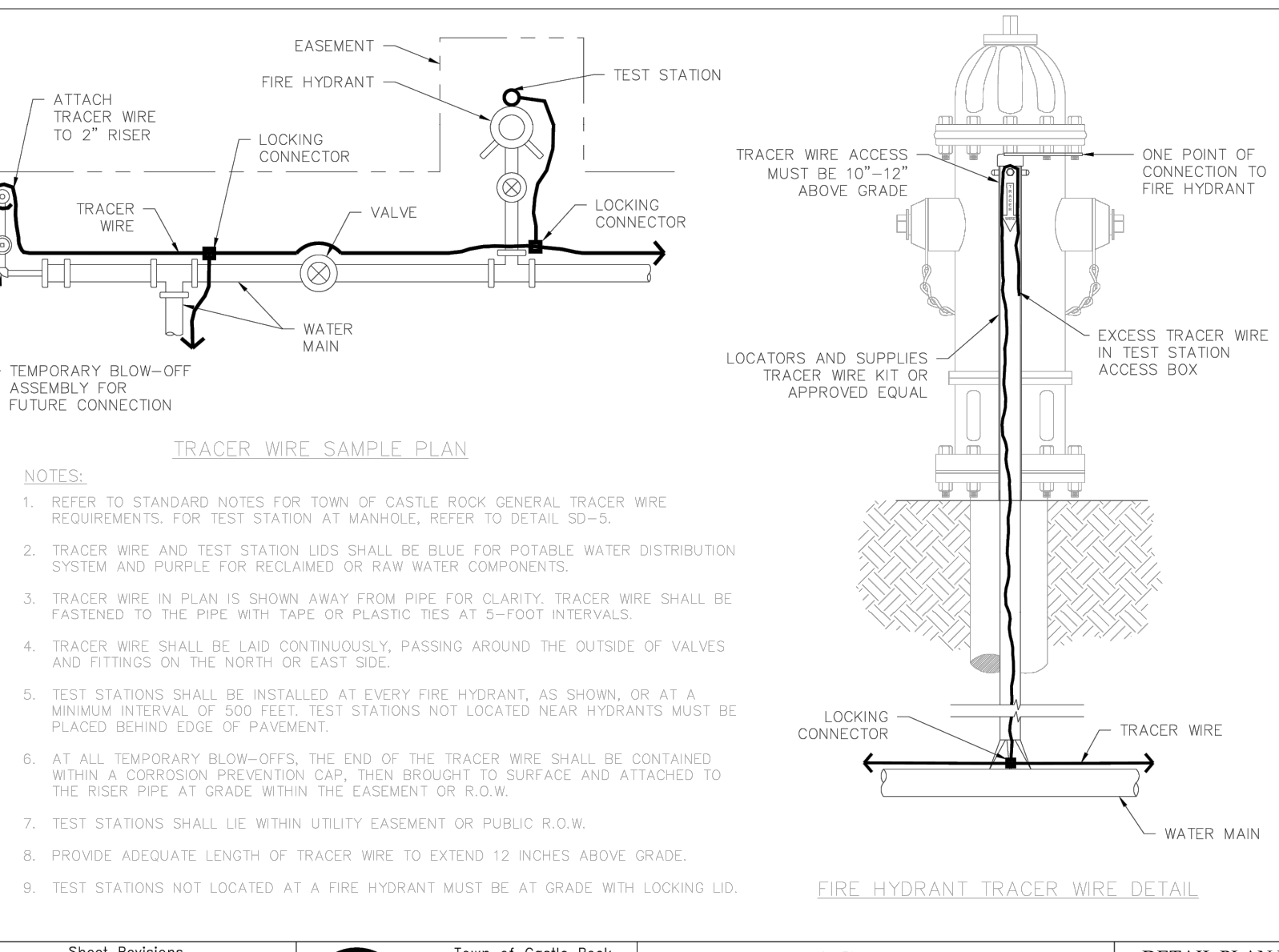
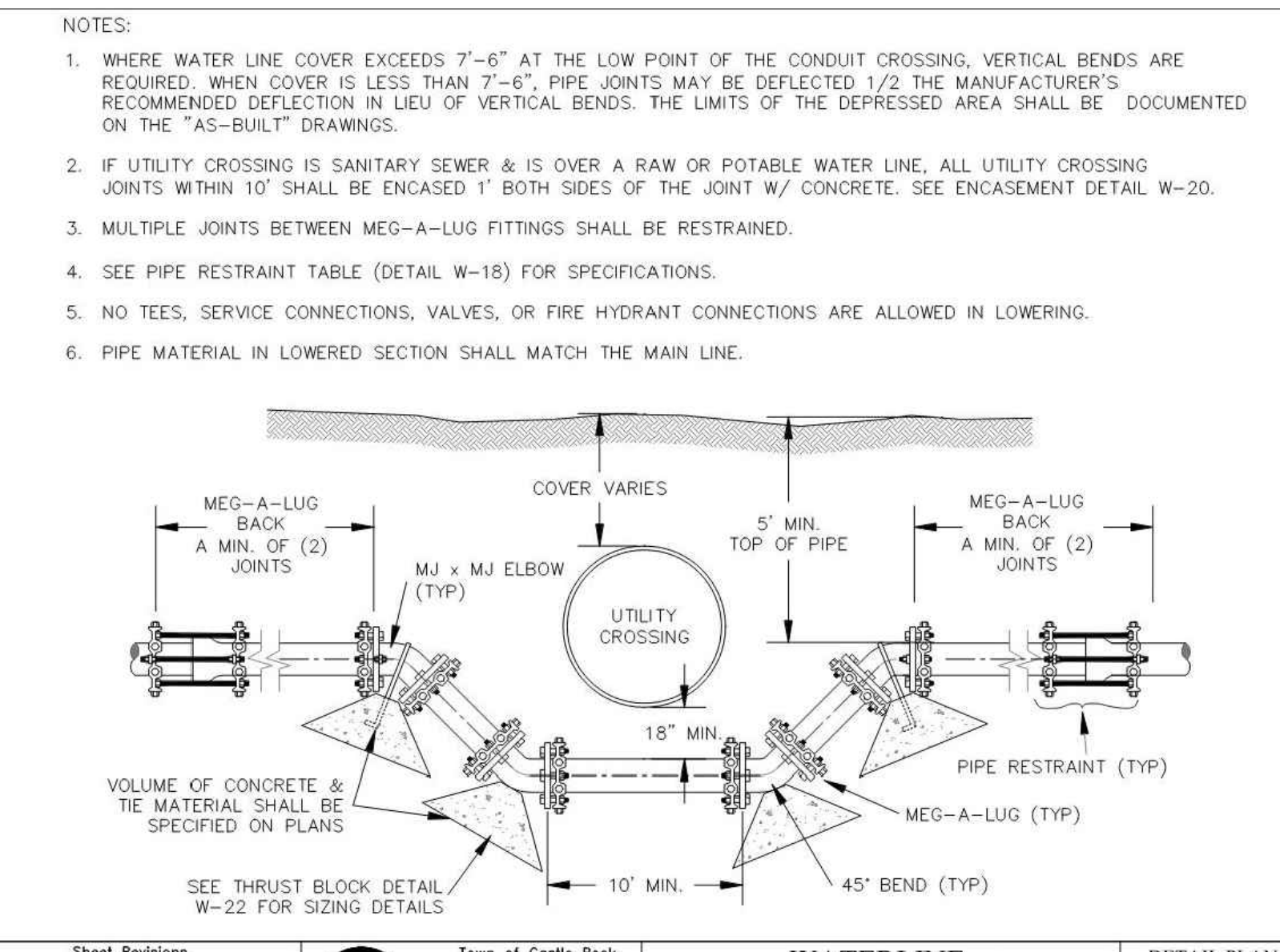
PROFESSIONAL ENGINEER CERTIFICATION

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Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550
DATE 12/04/2024

CONSTRUCTION DOCUMENTS
LITTLE SUNSHINE'S PLAYHOUSE & PRESCHOOL
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE
WATER DETAILS

PROJECT NO.:
DESIGNED BY: LCG
DRAWN BY: LCG
DATE: 06/28/2024
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SHEET 7 OF 22





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TOWN APPROVAL BLOCK

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APPROVED BY:  DEVELOPMENT SERVICES

By *jkirkpatrick* on 03/18/2025

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Krysta Houtchens 03/05/25
Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

CONSTRUCTION DOCUMENTS

LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL

PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

WATER DETAILS

PROJECT NO:

DESIGNED BY: LCG

DRAWN BY: LCG

DATE: 06/28/2024

C4.1
SHEET 7 OF 22

DATE: 11/11/2024

BY: AB CB

REVISION

No. 1 2

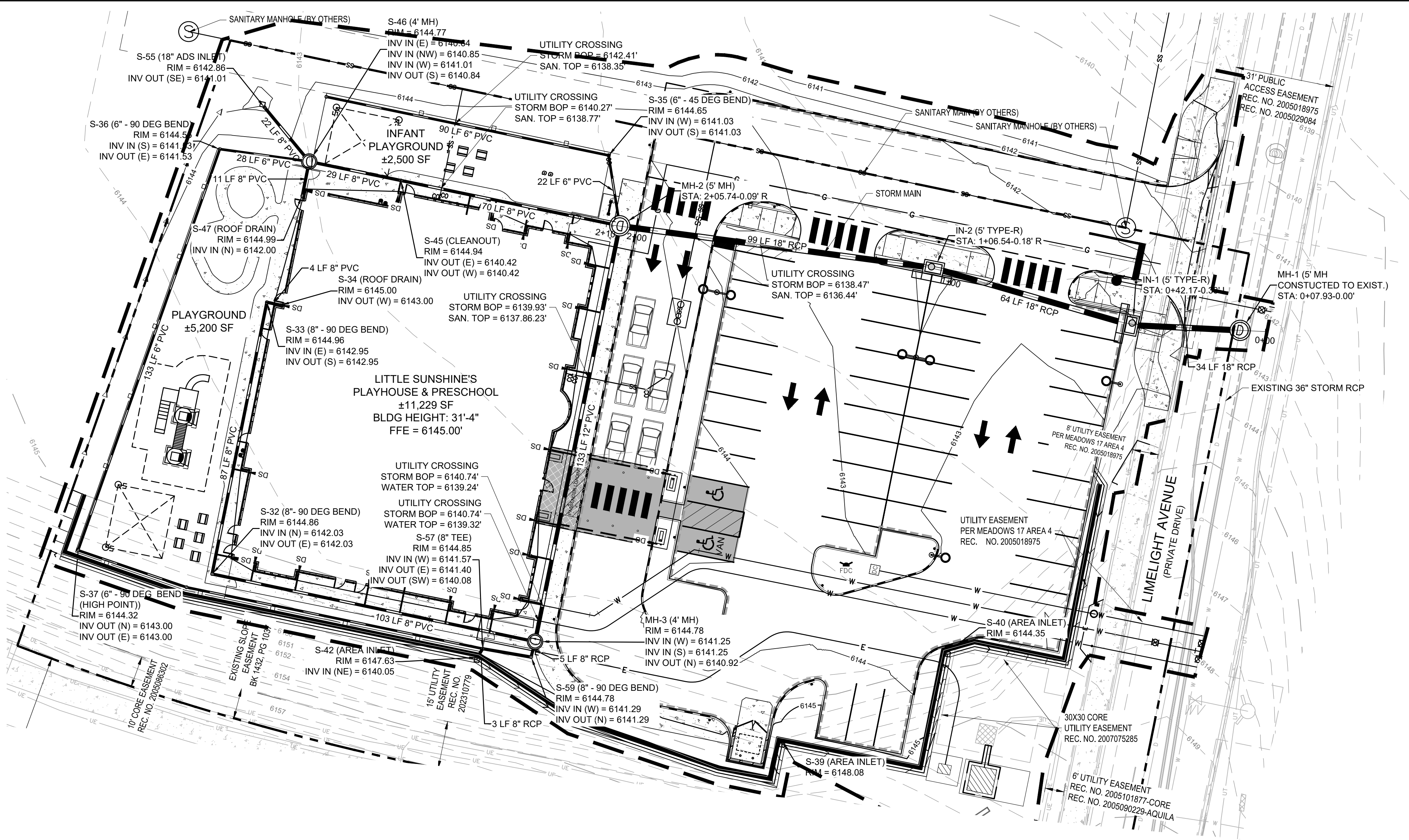
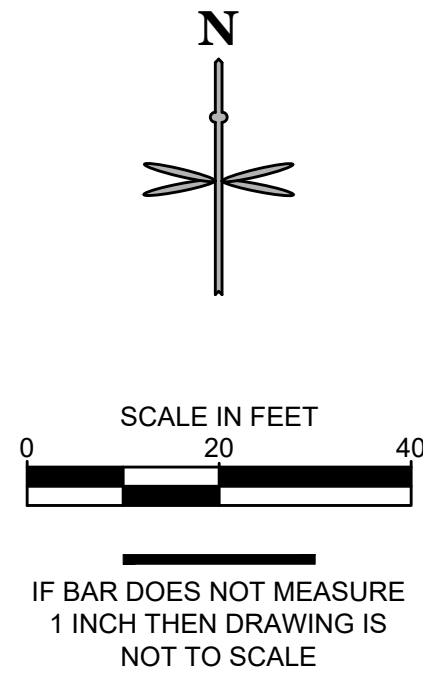
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FC025-0001 PRIVATE WATERMAIN RECONFIGURATION

COLORADO LICENSE
No. 49550
03/05/25
PROFESSIONAL ENGINEER

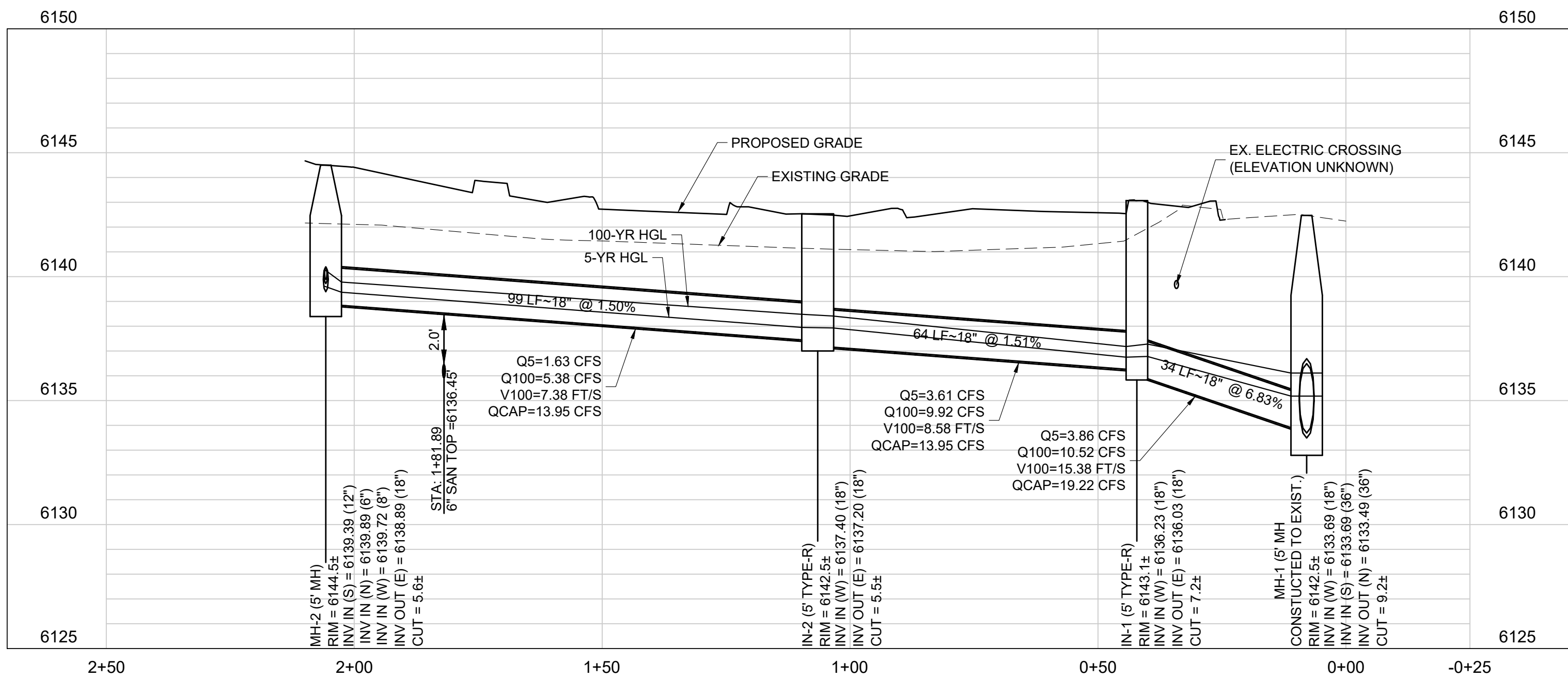
K2 CIVIL CONSULTANTS

LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL
A Reggio Emilia School



UTILITY LEGEND

- PROPOSED PROPERTY BOUNDARY
- EXISTING EASEMENT
- EXISTING SANITARY SEWER
- EXISTING WATER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND COMMUNICATION
- EXISTING GAS
- EXISTING UNDERGROUND TELEPHONE
- LIMITS OF CONSTRUCTION
- PROPOSED BUILDING OVERHANG
- PROPOSED CATCH CURB AND GUTTER
- PROPOSED SPILL CURB AND GUTTER
- PROPOSED SANITARY SEWER
- PROPOSED WATER
- PROPOSED STORM SEWER
- PROPOSED ELECTRIC LINE
- PROPOSED GAS
- EXISTING STORM INLET AND MANHOLE
- PROPOSED STORM INLET AND MANHOLE
- EXISTING STREET LIGHT
- EXISTING FIRE HYDRANT
- PROPOSED SITE LIGHT
- EXISTING WATER VALVE
- PROPOSED WATER METER
- PROPOSED FIRE HYDRANT
- ADA ACCESSIBLE ROUTE
- LIMITS OF CONSTRUCTION
- FIRE LANE CURB MARKING
- PROPOSED CONCRETE WALK
- DENOTES TRAFFIC FLOW PATTERNS



PROFILE STORM MAIN (STA: -0+25 TO 2+50)

SCALES: 1"=20' HORIZONTAL, 1"=4' VERTICAL

TOWN APPROVAL BLOCK

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

APPROVED BY:  **APPROVED**

By jkirpatrick on 12/04/2024

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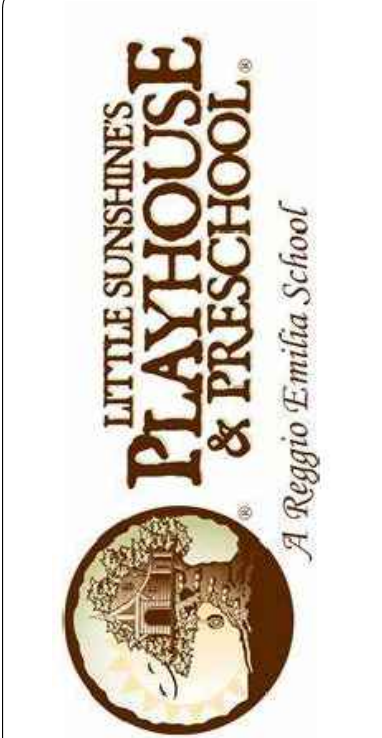
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Krysta M. Houtchens 12/04/2024
Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

DATE	11/11/2024
BY	AB
REVISION	
No.	1
SCHEDULE UPDATED AS CLOUDED	



CONSTRUCTION DOCUMENTS
**LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL**
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

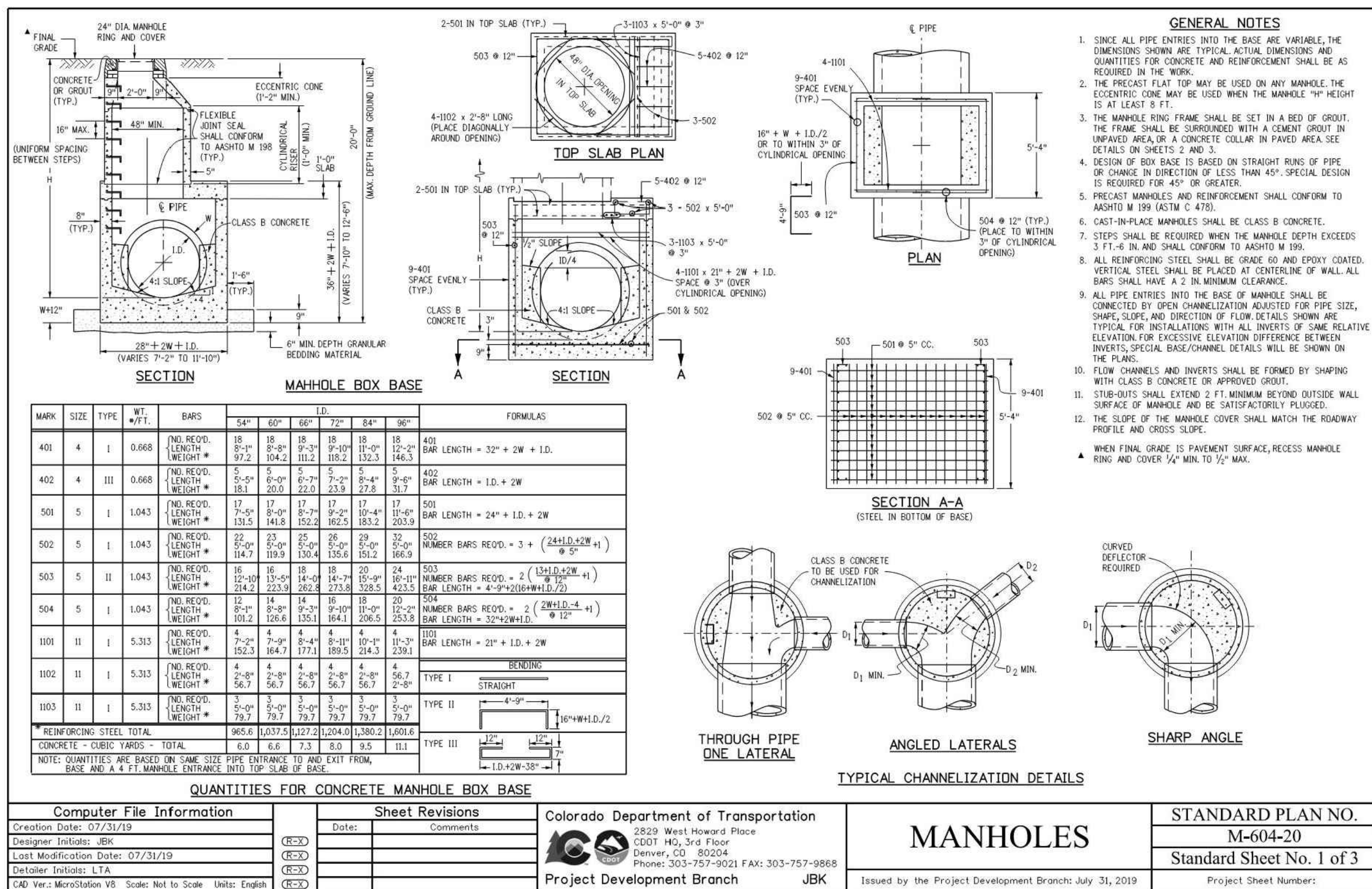
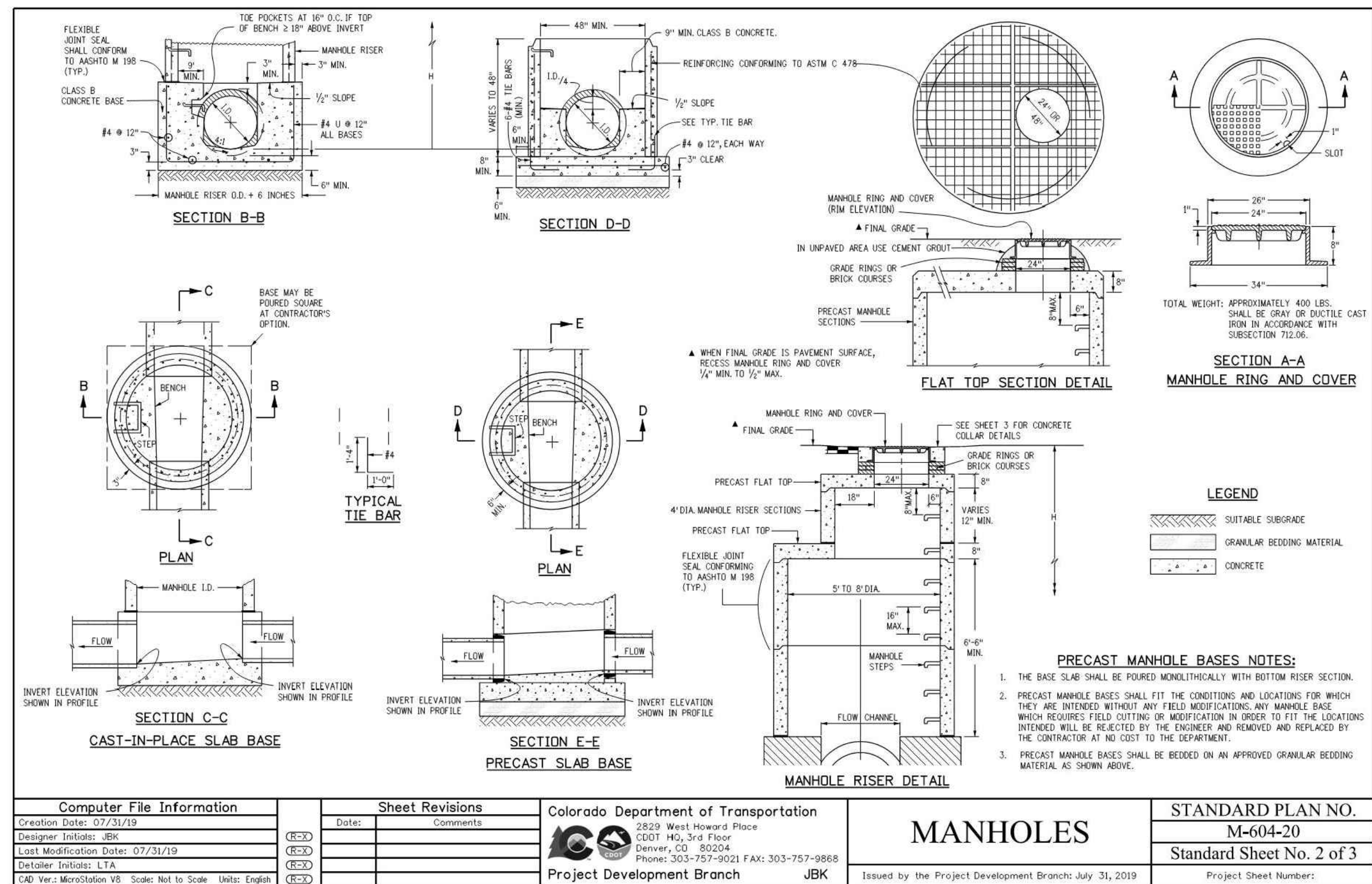
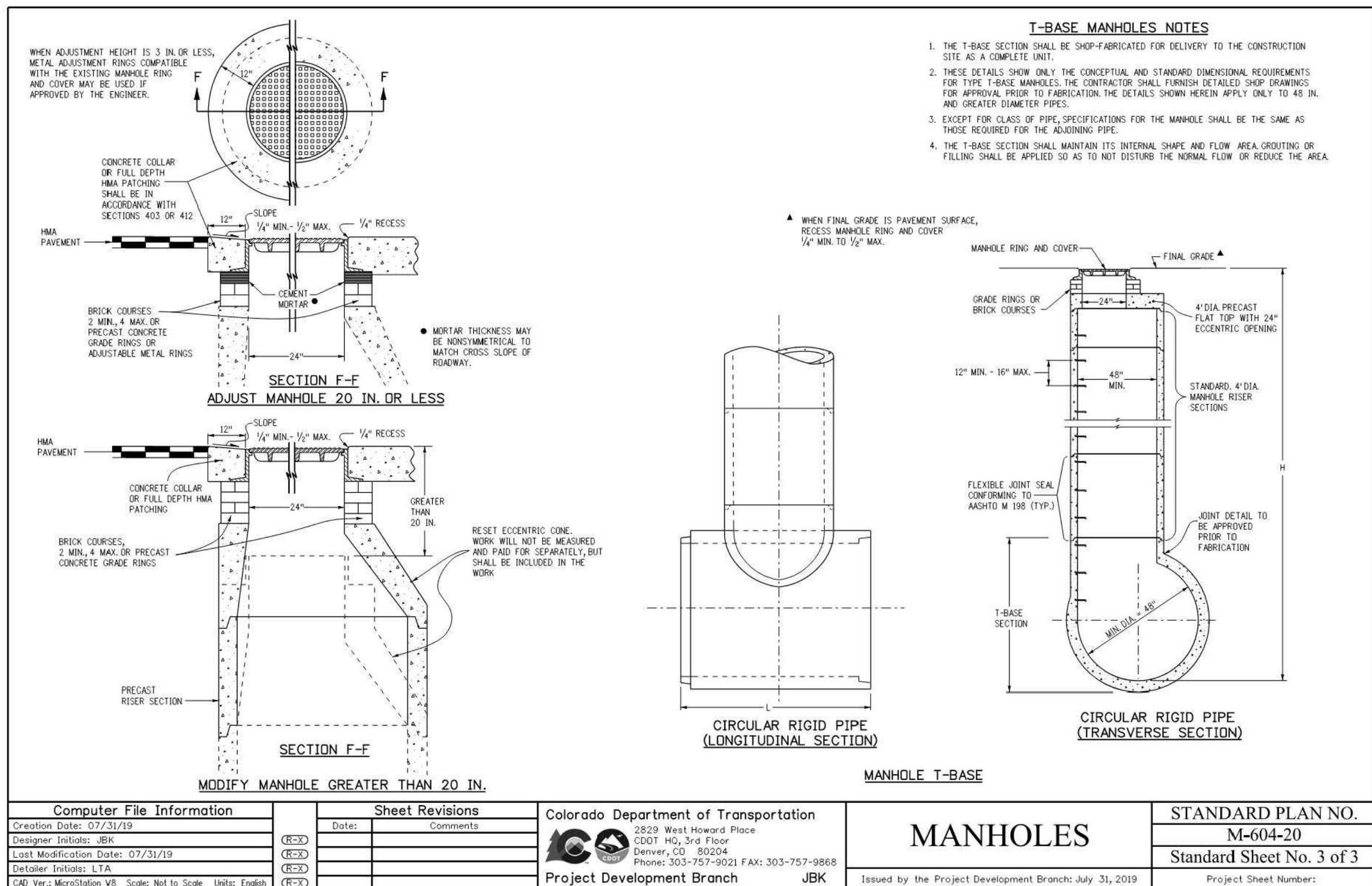
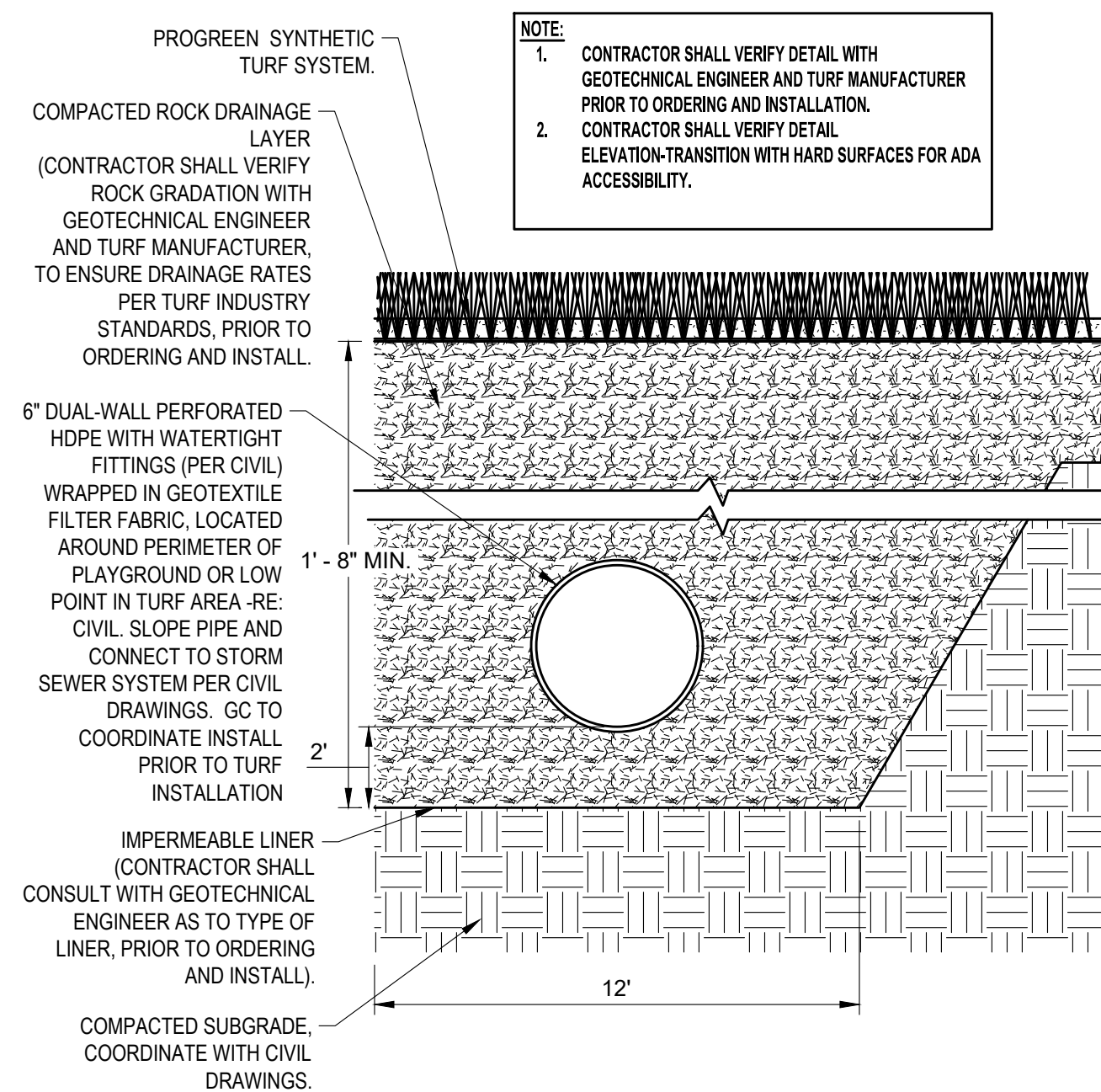
STORM PLAN AND PROFILE

PROJECT NO:
DESIGNED BY: LCG
DRAWN BY: LCG
DATE: 06/28/2024

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SHEET 9 OF 22

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TYPICAL PERIMETER - TURF DRAIN DETAIL

TOWN APPROVAL BLOCK

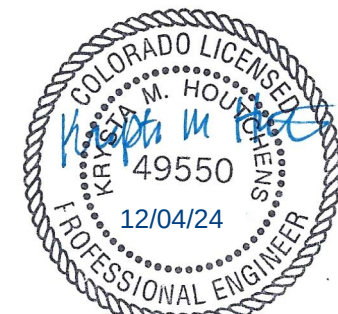
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APPROVED
By jkirpatrick
on 12/04/2024
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No.	REVISION	BY	DATE
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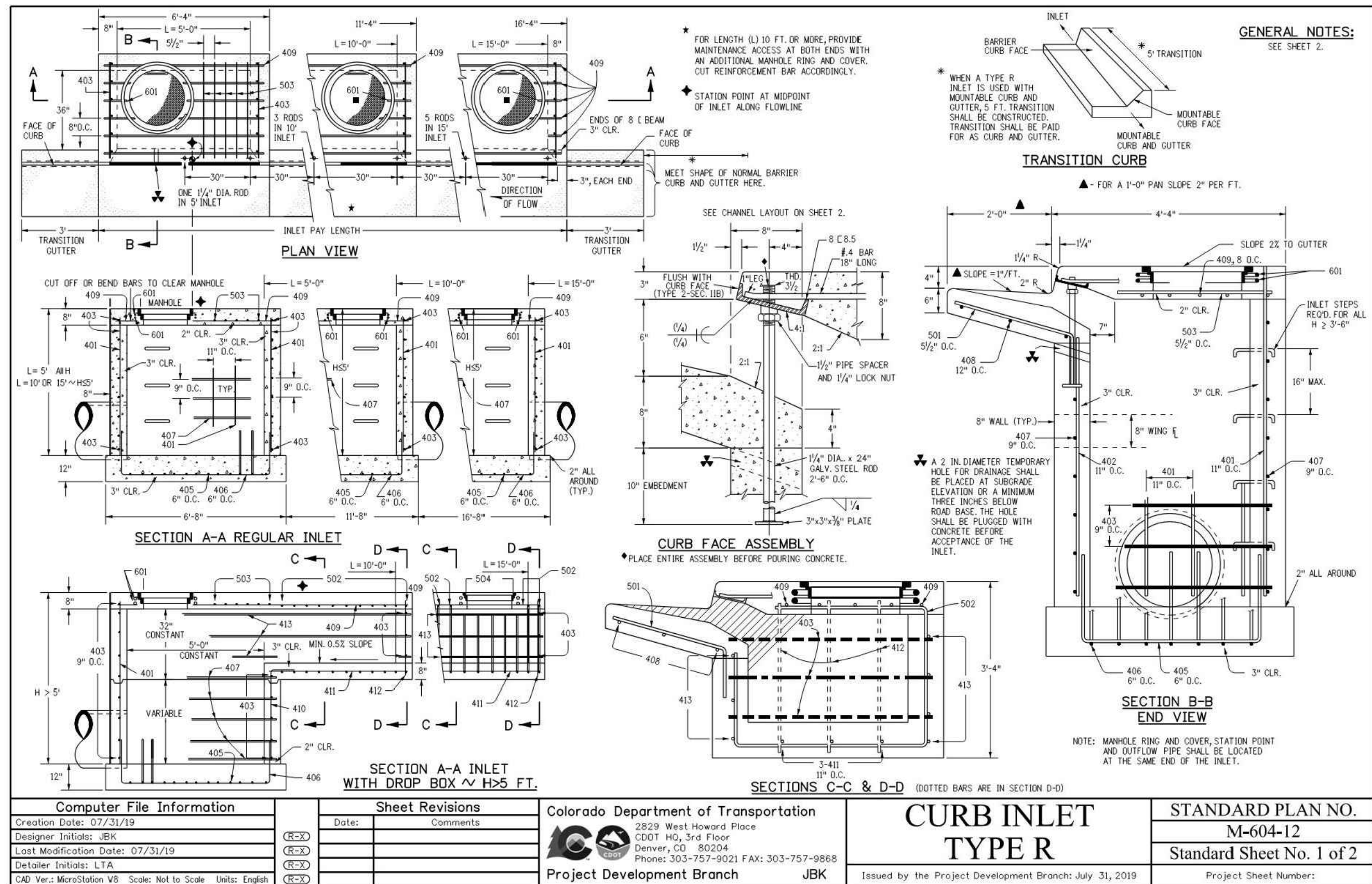
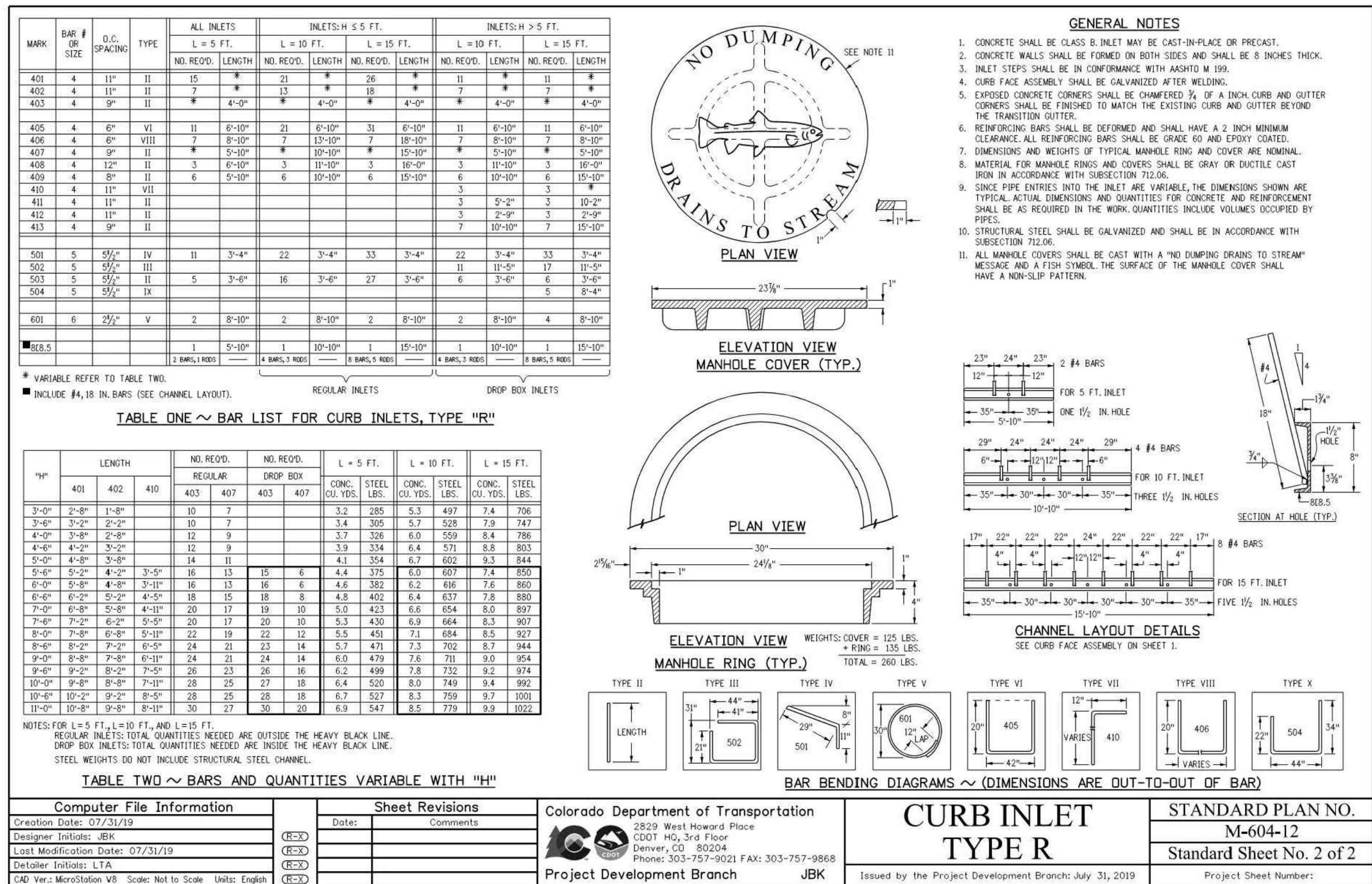


**CONSTRUCTION DOCUMENTS
LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE**

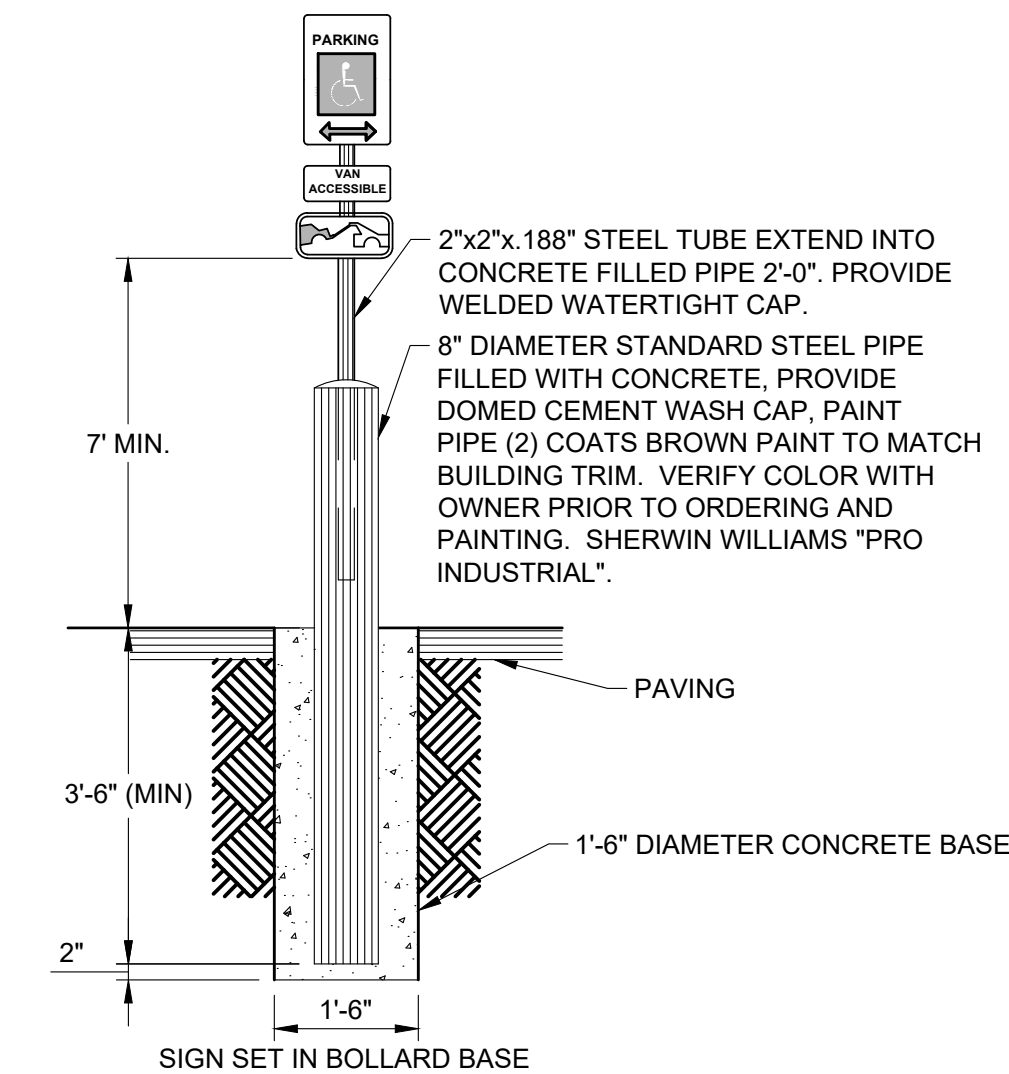
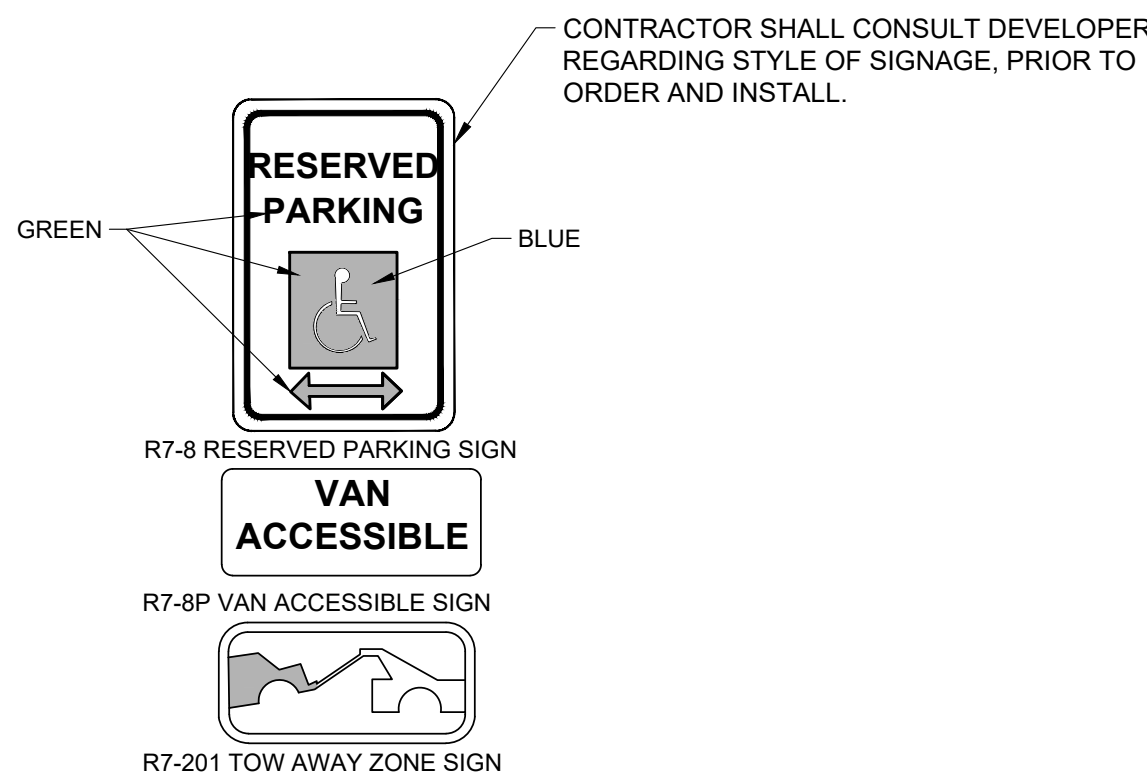
STORM DETAILS 1

PROJECT NO:	
DESIGNED BY:	LCG
DRAWN BY:	LCG
DATE:	06/28/2024

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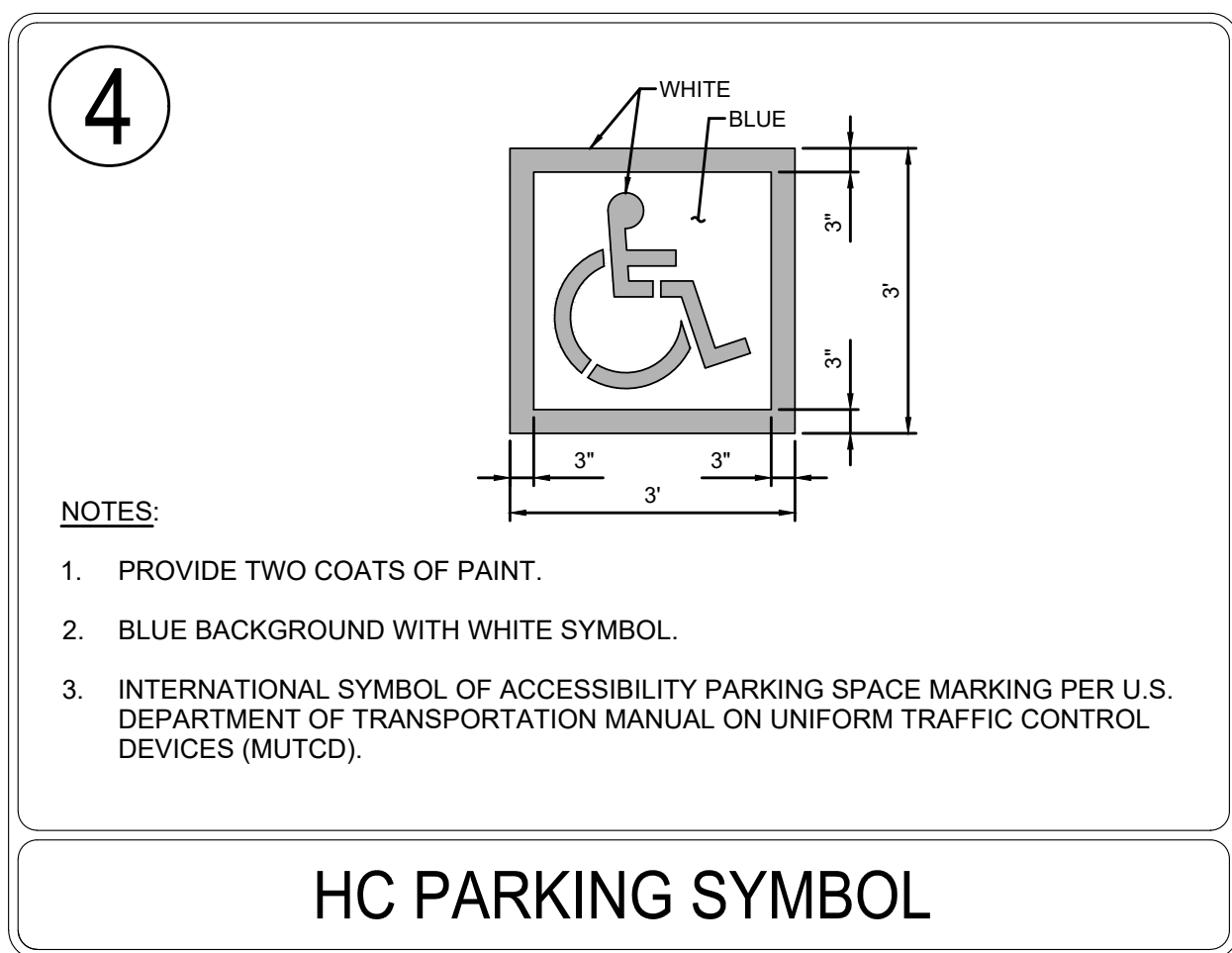
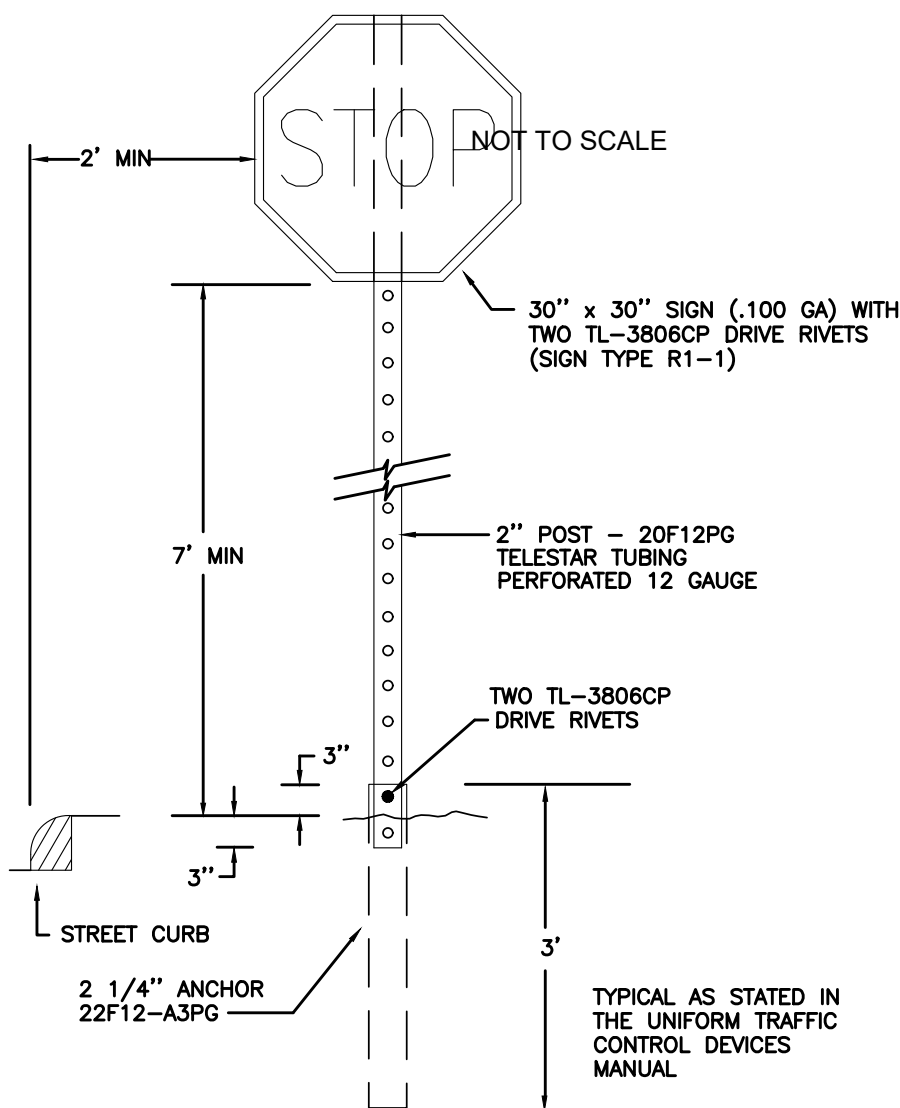


1. ALL DESIGNATED LANES SHALL BE ACCOMPANIED WITH CURB MARKINGS IN A WEATHER-RESISTANT RED PAINT. REFLECTIVE PAINT MAY BE USED FOR HIGHER VISIBILITY.
2. CURBING SHALL BE LABELED, "NO PARKING – FIRE LANE" IN ALL UPPER-CASE LETTERS
3. LETTERING SHALL BE NO LESS THAN THREE (3") INCHES HIGH WITH WHITE LETTERS ON A RED BACKGROUND AND PLACED ON THE FACE AND TOP OF THE CURB.
4. 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.

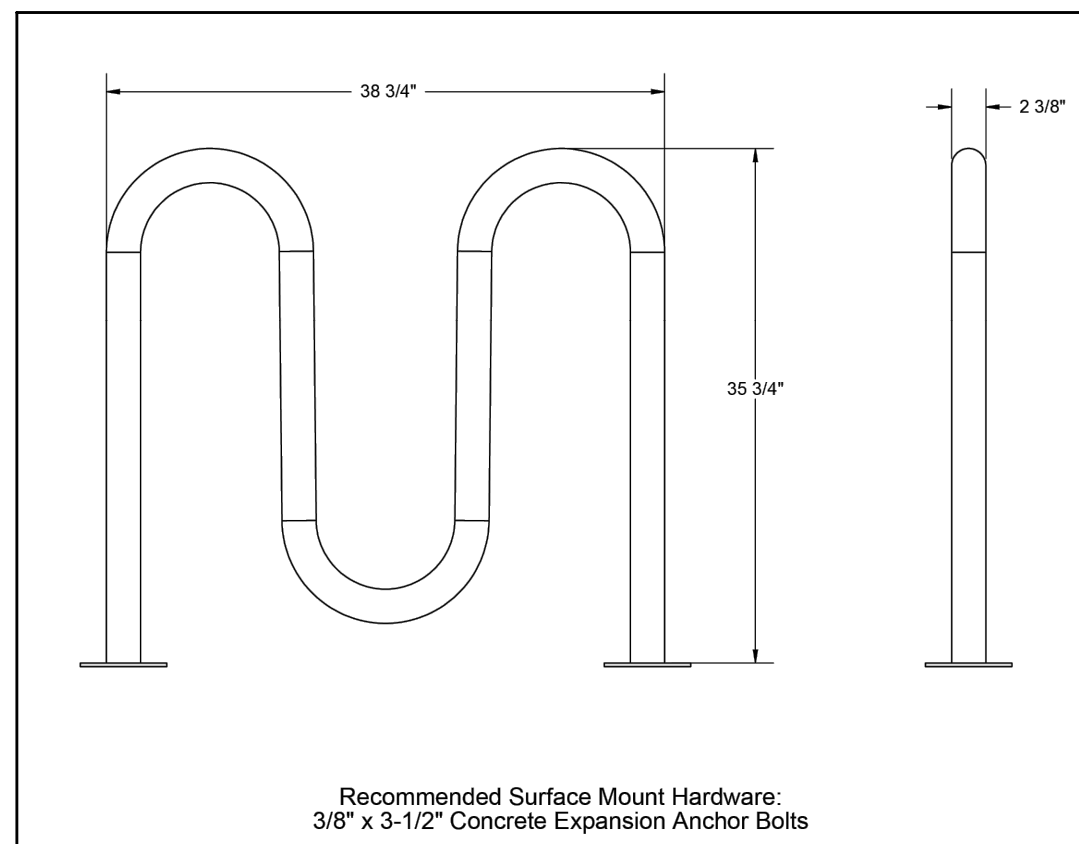


1. FABRICATE ALL SIGNS FROM 16GA. ALUM.
2. POST MOUNT: USE NON-CORROSIVE 3/8" DIA. MACHINE BOLTS W/WASHERS, 2 PER SIGN. 2"X2" GALV. STEEL TUBE.
3. VAN ACCESSIBLE SIGNS SHOWN AS EXAMPLE, SEE SITE PLAN AND INSTALL ACCORDINGLY.
4. CONTRACTOR SHALL VERIFY SIGNAGE WITH ALL PERMITTING JURISDICTIONS, PRIOR TO ORDER AND INSTALL.

ADA SIGNAGE



STOP SIGN DETAIL



5 BIKE WAVE RACK - 2 3/8 " HEAVY DUTY - SURFACE MOUNT DETAIL

No.	REVISION	BY	DATE
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CONSTRUCTION DOCUMENTS
LITTLE SUNSHINE'S

PLAYHOUSE & PRESCHOOL
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

CIVIL DETAILS

PROJECT NO:

DESIGNED BY: LCG

DRAWN BY: LCG

DATE: 06/28/2024

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SHEET 12 OF 22

TOWN APPROVAL BLOCK

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DEVELOPMENT SERVICES APPROVAL
DEVELOPMENT SERVICES**

APPROVED BY:



APPROVED

By jkirkpatrick
on 12/04/2024

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Krysta Houtchens

12/04/2024

Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550

TYPE 1 CURB RAMP
PERPENDICULAR ON TANGENT

TYPE 2 - DIRECTIONAL RAMP

TYPE 2 CURB RAMP

SHARED USE PATH CROSSING

DETECTABLE WARNING SURFACE NOTES:

- DETECTABLE WARNING SURFACES SHALL BE INSTALLED AT SIDEWALK OR SHARED USE PATH TO STREET TRANSITIONS, WHERE THEY EXIST ORY TO TRANSITION CURB SURFACES TO SHARED USE PATHS OR OTHER SURFACES, WHEN SUCH TRANSITIONS ARE REQUIRED BY THE ADOPTED PRELIMINARY DESIGN.
- WHEN DETECTABLE WARNING SURFACES ARE PLACED ON A SLOPE GREATER THAN ONE PERCENT, DETECTABLE SURFACES SHOULD BE ALIGNED IN THE DIRECTION OF THE RAMP PLACEMENT. DETECTABLE SURFACES SHALL NOT BE PLACED PARALLEL TO THE RAMP SURFACES. DETECTABLE SURFACES SHALL BE 2' WIDE OR GREATER THAN THE WIDTH OF THE DETECTABLE WARNING SURFACE TO BE PLACED ON THE CURB RAMP OR SHARED USE PATH TO BE PROTECTED.
- LOCATE ONE CORNER OF THE DETECTABLE SURFACES ON THE LEADING EDGE OF THE DETECTABLE WARNING SURFACE TO BE PLACED ON THE CURB RAMP OR SHARED USE PATH TO BE PROTECTED.
- WHEN DETECTABLE WARNING SURFACES ARE PLACED ON A SLOPE GREATER THAN ONE PERCENT, DETECTABLE SURFACES SHOULD BE ALIGNED IN THE DIRECTION OF THE RAMP PLACEMENT. DETECTABLE SURFACES SHALL NOT BE PLACED PARALLEL TO THE RAMP SURFACES. DETECTABLE SURFACES SHALL BE 2' WIDE OR GREATER THAN THE WIDTH OF THE DETECTABLE WARNING SURFACE TO BE PLACED ON THE CURB RAMP OR SHARED USE PATH TO BE PROTECTED.
- LOCATE ONE CORNER OF THE DETECTABLE SURFACES ON THE LEADING EDGE OF THE DETECTABLE WARNING SURFACE TO BE PLACED ON THE CURB RAMP OR SHARED USE PATH TO BE PROTECTED.
- WHERE PERPENDICULAR DIRECTIONAL RAMP, ABOUT A WALKABLE SURFACE, THE LEADING EDGE OF THE DETECTABLE SURFACES SHALL BE PLACED SPHERICALLY 5' FEET FROM THE BACK OF CURB OF THE RAMP. IF THE RAMP IS A CORNER, THESE DETECTABLE SURFACES SHALL BE PLACED PERPENDICULAR TO THE CURB AND SIDEWALK.
- IF THE DETECTABLE WARNING SURFACE IS CUT-GRIND BY THE REMAINING PORTION OF ANY CUT TRANSITIONED DOWNS, SEAL ALL CUT PANEL EDGES WITH AN AIR SEALANT TO PREVENT WATER INGRESS.
- DETECTABLE DOWNS PLATES SHALL BE ORIENTED IN THE CONCRETE CURB RAMP WHILE THE CONCRETE IS PLACED.
- DETECTABLE SURFACES SHALL BE PLACED OVER THE DOWNS.

SECTION VIEW OF DETECTABLE WARNING SURFACE PLATE
ELEVATING PERPENDICULAR TO RAMP RUN (R/W CONCRETE DOME, TYP.)

SECTION VIEW FOR PARALLEL CURB RAMP TYPES
ELEVATING PERPENDICULAR TO TURNING SPACE

SECTION VIEW FOR PARALLEL CURB RAMP TYPES
ELEVATING PERPENDICULAR TO RAMP RUN

ELEVATION VIEW OF SINGLE TRUNCATED DOME

ELEVATION VIEW OF TRUNCATED DOME FOR DETECTABLE WARNING PLATE

PLAN VIEW OF DETECTABLE WARNING SURFACE PLATE

NOTES:

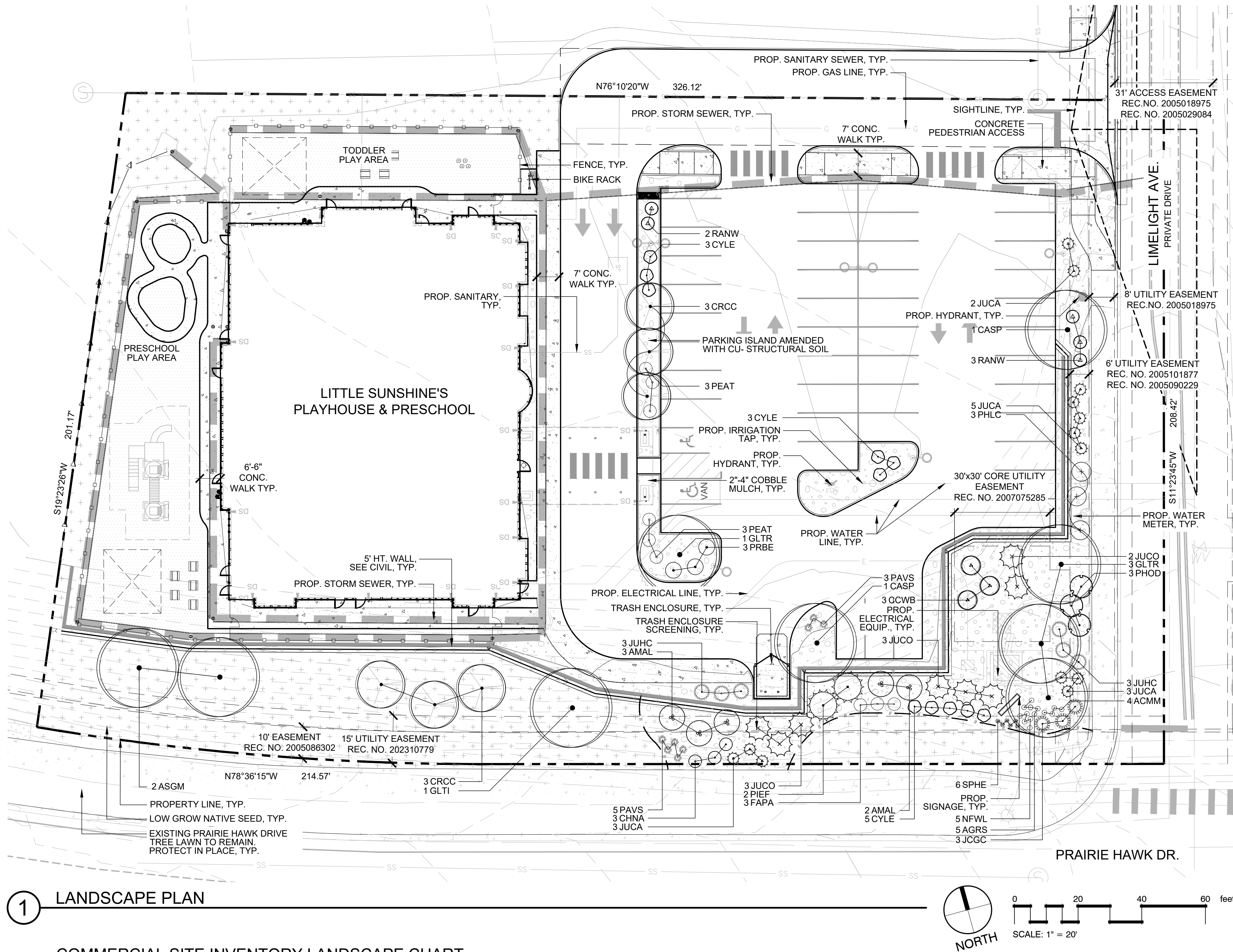
1. DETECTABLE WARNING SURFACES SHALL BE PLACED IN ALIGNMENT WITH THE BACK OF CURB.
2. FLARED CURES ARE PREFERRED ON RAMPED INTERSECTION ISLANDS AND SHOULD BE PROVIDED ON ISLANDS WHOSE CURES EXCEED ONE FOOT IN HEIGHT.
3. FOR CUB-THROUGH MEDIAN ISLANDS, DETECTABLE WARNING SURFACE SHALL BE PLACED IN ALIGNMENT WITH THE BACK OF CURB AND BE SEPARATED BY A MINIMUM 5 FOOT SPACE WITHOUT CURB IF 4.2 FEET SEPARATION IS MET. DETECTABLE WARNING SURFACE SHALL BE PROVIDED ON DETECTABLE WARNING SURFACE SHALL BE DETAIL.
4. CURB RAMP AND CUB-THROUGH RAMPING SHOULD BE THE SAME WIDTH AS THE SIDEWALK OR SHOULD NOT EXCEED WIDTH SIDE.
5. DETECTABLE WARNING SURFACES SHALL BE PLACED IN ALIGNMENT WITH THE BACK OF CURB.

Krysta M. Houtchens 12/04/2024

Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE

Krysta Houtchens 12/04/2024

Krysta M. Houtchens, PE
Registered Professional Engineer Colorado No. 49550 DATE



1 LANDSCAPE PLAN

COMMERCIAL SITE INVENTORY LANDSCAPE CHART

GROSS SITE AREA	LANDSCAPE AREA SF REQUIRED / PROVIDED	TURFGRASS SPECIES AREA SF	NONLIVING AREA SF	TREES REQUIRED	TREES PROVIDED	SHRUBS REQUIRED	SHRUBS PROVIDED	SOIL PREP AMOUNT - 4 CU YDS / 1,000 SF	SEPARATE IRRIGATION SERVICE CONNECTION
70,942 SF	10% REQ = 7,942 SF / PROVIDED 21,005 SF	0 SF	1,050 SF	16	17	32	86	21,005 SF = 21 x 4 CU = 84 CU YDS	YES

PARKING LOT AREA SF	PARKING LOT LANDSCAPE AREA SF	PARKING SPACES	NONLIVING AREA SF	NUMBER OF INTERIOR ISLANDS	MIN WIDTH OF INTERIOR LANDSCAPE ISLANDS	TREES REQUIRED	TREES PROVIDED	SHRUBS REQUIRED	SHRUBS PROVIDED
14,686 SF	4,415 SF	46	480 SF	4	8'	4	4	16	16

STREETSCAPE ROW LANDSCAPE CHART

LIMELIGHT AVENUE ROW LF	TREES REQUIRED (1 TREE PER 40 LF)	TREES PROVIDED	% OF LARGE DECIDUOUS TREES (75% REQUIRED)	SHRUBS REQUIRED (4 SHRUBS PER 1 TREE)	SHRUBS PROVIDED
160 LF	4	4	100%	16	16

* STREETSCAPE/ROW LANDSCAPE ALONG PRAIRIE HAWK DRIVE IS EXISTING AND
INSTALLED BY OTHERS

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	H' X W'	HYDROZONE
DECIDUOUS TREES							
ASGM	2	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	B & B	2"CAL	50' X 25'	L
CASP	2	CATALPA SPECIOSA	WESTERN CATALPA	B & B	2"CAL	50' X 30'	L
GLTR	4	GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER'	SHADEMASTER LOCUST	B & B	2"CAL		L
GLTI	1	GLEDITSIA TRIACANTHOS INERMIS 'SUNBURST'	SUNBURST HONEYLOCUST	B & B	2"CAL	45' X 40'	L

EVERGREEN TREES

PIEF	2	PINUS EDULIS 'FARMY'	FARMY PINYON PINE	B & B	6-8' HT	10' X 10'	VL
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ORNAMENTAL TREES

CRCC	6	CRATAEGUS LAEVIGATA 'CRIMSON CLOUD'	CRIMSON CLOUD HAWTHORN	B & B	MULTI-STEM
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CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	H' X W'
DECIDUOUS SHRUBS					
AMAL	5	AMELANCHIER ALNIFOLIA	SASKATOON SERVICEBERRY	#5	15' X 15' L
CHNA	3	CHRYSOTHAMNUS NAUSEOSUS 'NAUSEOSUS'	RABBITBRUSH	#5	3' X 3' VL
CCWB	3	COTINUS COGGYGRIA 'WITCHCRAFT BLACK'	WITCHCRAFT BLACK SMOKE TREE	#5	6' X 6' L
CYLE	11	CYTISUS X 'LENA'	LENA BROOM	#5	3' X 4' L
FAPA	3	FALLUGIA PARADOXA	APACHE PLUME	#5	6' X 6' VL
PEAT	6	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	#5	5' X 4' VL
PHLC	3	PHILADELPHUS LEWISII 'CHEYENNE'	CHEYENNE MOCKORANGE	#5	5' X 6' L
PHOD	3	PHYSCARPUS OPULIFOLIUS 'DIABLO'	DIABLO NINEBARK	#5	8' X 8' L
PRBE	3	PRUNUS BESSEYI 'PAWNEE BUTTES'	PAWNEE BUTTES SAND CHERRY	#5	2' X 5' L
RANW	5	ROSA X 'NEARLY WILD'	NEARLY WILD FLORIBUNDA ROSE	#5	2' X 3' L

EVERGREEN SHRUBS

JUCA	13	JUNIPERUS CHINENSIS 'ARMSTRONGII'	ARMSTRONG JUNIPER	#5	4' X 4'	VL
JUHC	6	JUNIPERUS CHINENSIS 'HETZLI COLUMNARIS'	HETZLI COLUMN JUNIPER	#5	15' X 5'	VL
JCGC	3	JUNIPERUS COMMUNIS 'GREEN CARPET'	GREEN CARPET COMMON JUNIPER	#5	10' X 6'	VL
JUCO	8	JUNIPERUS SCOPULORUM 'COLOGREEN'	COLOGREEN JUNIPER	#5	20' X 8'	VL

ORNAMENTAL GRASSES

PAVS	8	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	#1	5' X 3'	L
SPHE	6	SPOROBOLUS HETEROLEPIS	PRAIRIE DROPSEED	#1	3' X 3'	L

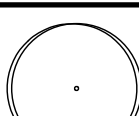
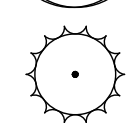
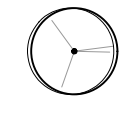
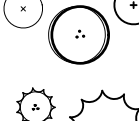
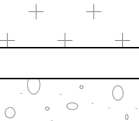
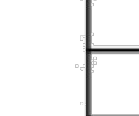
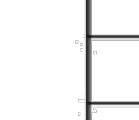
PERENNIALS

ACMM	4	ACHILLEA MILLEFOLIUM 'MOONSHINE'	MOONSHINE YARROW	#1	2'5" X 2'	VL
AGRS	5	AGASTACHE RUPESTRIS 'SUNSET'	SUNSET HYSOPP	#1	3' X 3'	VL
NFWL	5	NEPETA X FAASSENII 'WALKERS LOW'	WALKERS LOW CATMINT	#1	1.5' X 2.5'	VL

<u>CODE</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>CONT @</u>	<u>REMARKS</u>
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GROUND COVERS			
	11,418 SF	SHORT GRASS PRAIRIE NATIVE SEED MIX	NATIVE SEED
			SEED

LEGEND

	SIZE	CONTAINER	HYDROZONE
	DECIDUOUS TREE	2" CAL	B&B
	EVERGREEN TREE	6'-8' HT.	B&B
	ORNAMENTAL TREE	6' HT. MULTI-STEM	B&B
	DECIDUOUS SHRUBS	#5	CONT.
	EVERGREEN SHRUBS	#5	CONT.
	ORNAMENTAL GRASS & PERENNIALS	#1	CONT.
	LOW GROW NATIVE SEED		
	2-4" ROCK COBBLE MULCH		
	PLAY AREA, BY OTHERS		
	LANDSCAPE EDGER		

DOUGLAS COUNTY AND CASTLE ROCK LOW-GROWTH DRILL SEEDING MIX

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BUFFALOGRASS	TEXOKA	PNWS	20	3.2
BLUE GRAMA	HACHITA	PNWB	20	0.6
WESTERN WHEATGRASS	ARRIBA	PNCS	20	3.2
SIDEOKS GRAMA	VAUGHN	PNWB	20	1.8
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
STREAMBANK WHEATGRASS	SODAR	PNCS	10	1.2
NOTE: SEE SHEET 1.4 FOR FEEDING NOTES			TOTAL	11.0

NOTE:
SEE SHEET L1.1 FOR SEEDING NOTES.

TOWN OF CASTLE ROCK PROFESSIONAL: CASSIE KASLO
TOWN OF CASTLE ROCK REGISTRATION #: 18-2635
STATE OF COLORADO LANDSCAPE ARCHITECTURE #: 974
COMPANY NAME: VALERIAN
PHONE: 303.347.1200
EMAIL: CASSIE@VALERIANLLC.COM

LOT 6G-3A-3, THE MEADOWS FILING 17. AREA 4, AMENDMENT 17
TOWN OF CASTLE ROCK, PROJECT NO. CD23-0038

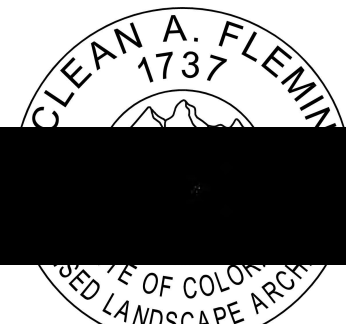
TOWN APPROVAL BLOCK

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

APPROVED BY  **APPROVED**
By jkirkpatrick

DEVELOPMENT SERVICES	Record Document on D.
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.



DATE: NOVEMBER 8, 2024

No.	REVISION	BY	DATE
1	SUBMITTAL #2	MF	06.28.24
2	SUBMITTAL #3	MF	08.07.24
3	SUBMITTAL #4	MF	10.17.24
4	SUBMITTAL #5	MF	11.07.24



**CONSTRUCTION DOCUMENTS
LITTLE SUNSHINE'S**

**LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL**

LANDSCAPE PLAN

PROJECT NO:	23-039
DESIGNED BY:	MF
DRAWN BY:	MF
DATE:	04/22/2024

L1.0

GENERAL NOTES:

1. VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. BE AWARE OF ANY UNDERGROUND UTILITIES. PROTECT ALL EXISTING SITE FEATURES TO REMAIN FROM POTENTIAL DAMAGE BY SITE CONSTRUCTION OPERATIONS. AVOID ANY WORK BEYOND SCOPE OF PROJECT AREA.
2. COORDINATE ALL DISCIPLINES AND SITE CONSTRUCTION THAT WILL BE NEEDED TO COMPLETE THE PROJECT IN THE TIME FRAME GIVEN AND WITHIN BUDGET. ALL ACCESS TO SITE, USE OF UTILITIES, STORAGE, AND OTHER REQUIREMENTS SHALL BE COORDINATED PRIOR TO BEGINNING WORK.
3. CONTRACTOR IS RESPONSIBLE TO INSPECT AND CONFIRM SITE CONDITIONS PRIOR TO BEGINNING WORK. COMMENCEMENT OF WORK SHALL SIGNIFY ALL CONDITIONS ARE ACCEPTABLE AND NO ALLOWANCE WILL BE MADE FOR UNRECOGNIZED CONDITIONS AFTER START OF WORK.
4. NOTIFY OWNER/LANDSCAPE ARCHITECT IMMEDIATELY UPON DISCOVERY OF UNFORESEEN SITE CONDITIONS OR PLAN DISCREPANCIES. NO CHANGE TO SPECIFIED WORK SHALL BE COMPLETED WITHOUT VERIFICATION OF EXISTING CONDITIONS AND WRITTEN APPROVAL OF MODIFICATION BY THE LANDSCAPE ARCHITECT.

CLEARING & GRADING:

1. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL CODES AND DEVELOPMENT STANDARDS; UNIFORM BUILDING CODES; PERMIT CONDITIONS; AND ALL OTHER APPLICABLE CODES, ORDINANCES, STANDARDS, AND POLICIES.
2. A COPY OF THE APPROVED PLANS MUST BE ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY OTHER RELATED OR REQUIRED PERMITS PRIOR TO BEGINNING CONSTRUCTION.
4. ALL LOCATIONS OF EXISTING UTILITIES HAVE BEEN ESTABLISHED BY FIELD SURVEY OR OBTAINABLE RECORDS AND SHOULD, THEREFORE, BE CONSIDERED APPROXIMATE ONLY AND NOT NECESSARILY COMPLETE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR (1) TO INDEPENDENTLY VERIFY THE ACCURACY OF ALL UTILITY LOCATIONS AND (2) TO DISCOVER AND AVOID ANY OTHER UTILITIES NOT SHOWN WHICH MAY BE AFFECTED BY THE IMPLEMENTATION OF THIS PLAN.

SOIL SPECIFICATIONS:

1. ANY PLANTING AREA THAT DOES NOT MEET THE FOLLOWING SOIL PREPARATION REQUIREMENTS ARE SUBJECT TO REJECTION AT OWNER/OWNERS REPRESENTATIVES DISCRETION.
2. LANDSCAPE CONTRACTOR IS REQUIRED TO NOTIFY OWNER/OWNERS REPRESENTATIVE A MINIMUM OF 24 HOURS PRIOR TO BEGINNING SOIL PREP WORK. SOIL PREP NOT INSPECTED BY OWNER/OWNERS REPRESENTATIVE IS SUBJECT TO REJECTION AT ANYTIME PRIOR TO INITIAL ACCEPTANCE.
3. LANDSCAPE CONTRACTOR SHALL SUBMIT DELIVERY (TRIP) TICKETS TO OWNER/OWNERS REPRESENTATIVE FOR ALL ORGANIC SOIL AMENDMENTS WITHIN 24 HOURS AFTER DELIVERY.
4. IMPORTED TOPSOIL SHALL BE FERTILE, FRIABLE, SANDY LOAM FROM THE 'A' HORIZON AND SHALL BE FREE OF STONES OVER .75" IN DIAMETER, REFUSE, PLANTS OR THEIR ROOTS, STICKS, NOXIOUS WEEDS, SALTS, SOIL STERILANTS, OR OTHER MATERIAL WHICH WOULD BE DETRIMENTAL TO PLANT GROWTH.
5. ORGANIC SOIL AMENDMENT SHALL CONSIST OF DRY, WELL-ROTTED, PULVERIZED, AGED MINIMUM ONE YEAR ORGANIC COMPOST CLASS 1 TYPE SUCH AS AVAILABLE FROM A-1 COMPOST, JENSEN SALES. PULVERIZED HORSE, SHEEP OR DAIRY COW MANURE **NOT ACCEPTABLE**. SUBMIT DATED RECENT MATERIAL ANALYSIS TO OWNER/OWNERS REPRESENTATIVE TO GUARANTEE PRODUCT CONDITION AND PROOF NO LIVE WEED SEEDS AND CHEMICAL ADDITIVES ARE PRESENT.
6. PREPARED BACKFILL FOR TREE/SHRUB PLANTING SHALL BE A MIX OF 2/3 IMPORTED/SALVAGED SOIL AND 1/3 ORGANIC SOIL AMENDMENT. WHERE TREES AND SHRUBS ARE LOCATED IN LARGE BEDS PROVIDE SOIL AMENDMENT AT A RATE OF FIVE CUBIC YARDS PER ONE THOUSAND SQUARE FEET AND TILL EIGHT INCHES INTO THE SOIL THROUGHOUT THE ENTIRE PLANTING BED, NOT JUST IN EXCAVATED PLANTING HOLES.
7. CU STRUCTURAL SOIL IS REQUIRED FOR LARGE CANOPY DECIDUOUS TREES PLANTED IN AREAS LESS THAN 10'.

PLANTING NOTES:

1. LANDSCAPE CONTRACTOR SHALL LOCATE ALL TREES, SHRUBS AND PLANTING BEDS ACCORDING TO LOCATIONS SHOWN ON DRAWINGS. ALL PLANTING LOCATIONS SHALL BE SUBJECT TO REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO THE START OF PLANTING OPERATIONS. LANDSCAPE CONTRACTOR SHALL MAKE MODIFICATIONS IN LOCATIONS AS DIRECTED BY LANDSCAPE ARCHITECT.
2. THE PLANT SCHEDULE IS FOR CONTRACTOR'S CONVENIENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND REPORTING IN WRITING TO THE LANDSCAPE ARCHITECT ANY CONFLICTS RELATIVE TO IMPLEMENTATION OF THE LANDSCAPE CONSTRUCTION DOCUMENTS. VALERIAN LLC. SHALL NOT ASSUME ANY ERRORS OR OMISSIONS IN THE PLANT SCHEDULE LISTED HEREIN. THE PLANT SYMBOLS SHOWN ON THE LANDSCAPE PLAN SHALL PREVAIL, SHOULD THERE BE ANY DISCREPANCIES IN QUANTITIES BETWEEN THE PLAN AND PLANT SCHEDULE.
3. LANDSCAPE CONTRACTOR SHALL PROVIDE PLANT PROTECTION AND MAINTENANCE THROUGHOUT INSTALLATION AND UNTIL FINAL ACCEPTANCE OF LANDSCAPE INSTALLATION AS FOLLOWS:
 - A) ALL PLANT MATERIAL SHALL BE PROTECTED, FROM TIME OF DIGGING TO TIME OF FINAL ACCEPTANCE, FROM INJURY, EXCESSIVE DRYING FROM WINDS, IMPROPER VENTILATION, OVER-WATERING, FREEZING, HIGH TEMPERATURES, OR ANY OTHER CONDITION DAMAGING TO PLANTS.
 - B) PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY IF POSSIBLE. ALL PLANTS NOT PLANTED ON THE DAY OF DELIVERY SHALL BE PLACED IN A TEMPORARY NURSERY AND KEPT MOIST, SHaded, AND PROTECTED FROM THE SUN AND WIND. EACH ROOTBALL SHALL BE COVERED ENTIRELY WITH MULCH. ALL PLANT MATERIALS SHALL BE INSTALLED PER THE PLAN DRAWINGS AND SPECIFICATIONS.
 - C) LANDSCAPE CONTRACTOR SHALL PROVIDE PLANT MATERIALS THAT COMPLY WITH THE REQUIREMENTS OF THE MOST RECENT ANSI Z 60.1 "STANDARDS FOR NURSERY STOCK" UNLESS OTHERWISE SPECIFIED. CALIPER OF B&B TREES SHALL BE TAKEN 6 INCHES ABOVE THE GROUND UP TO AND INCLUDING 4 INCH CALIPER SIZE, AND 12 INCHES ABOVE THE GROUND FOR LARGER SIZES.
 - D) PLANTING MAINTENANCE SHALL INCLUDE WATERING, WEEDING, CULTIVATING, RESETTING PLANTS TO PROPER GRADES OR POSITION, REESTABLISHING SETTLED GRADES. HERBICIDE IS NOT RECOMMENDED FOR ONE YEAR FOLLOWING LANDSCAPE INSTALLATION.
 - E) PLANT MAINTENANCE SHALL INCLUDE THOSE OPERATIONS NECESSARY TO PROPER GROWTH AND SURVIVAL OF ALL PLANT MATERIALS. CONTRACTOR SHALL PROVIDE THIS WORK IN ADDITION TO SPECIFIC WARRANTY/GUARANTEES.
4. CONTRACTOR SHALL VERIFY AND MAINTAIN ALL SETBACKS, CLEAR ZONES AND SIGHT TRIANGLES REQUIRED BY ALL LOCAL AND MUNICIPAL CODES WHERE APPLICABLE.
5. LANDSCAPE CONTRACTOR SHALL ENSURE THAT THE LANDSCAPE INSTALLATION IS COORDINATED WITH THE PLANS PREPARED BY OTHER CONSULTANTS SO THAT THE PROPOSED GRADING, STORM DRAINAGE OR OTHER PROPOSED CONSTRUCTION DOES NOT CONFLICT WITH NOR PRECLUDE INSTALLATION AND MAINTENANCE OF LANDSCAPE ELEMENTS AS DESIGNATED ON THIS PLAN.
6. ALL LANDSCAPE AREAS SHALL BE IRRIGATED BY AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM SHALL BE PROPERLY ZONED TO SEPARATE PLANT MATERIAL BY WATER REQUIREMENT. ALL SHRUB BEDS AND TREES IN NATIVE SEED AREAS SHALL BE IRRIGATED BY USING LOW WATER/D RIP TECHNIQUES. ALL TURF AREAS SHALL BE IRRIGATED USING POP-UP SPRAY OR ROTOR APPLICATION.

MULCH

1. PLANTING BEDS (AS SPECIFIED) SHALL CONTAIN 1" GRAY CHIPPED GRANITE MULCH AT A MINIMUM DEPTH OF 3" WITH A DOUBLE SHREDDED CEDAR MULCH RING AROUND EACH TREE, SHRUB, GRASS, AND PERENNIAL. WOOD MULCH RING SHALL BE 1.5X THE CONTAINER SIZE OF THE SHRUB, GRASS OR PERENNIAL. DEPRESS MULCH 2" BELOW SURROUNDING CURBS AND WALKS. PLACE WITH TIGHT JOINTS. TREE MULCH RING SHALL BE GREEN INDUSTRY STANDARD SIZE.
2. GEOTEXTILE FABRIC (FILTER FABRIC) UNDERLAYMENT SHALL BE MIRAFI, MIRASCAPE, DUPONT TYPAR 3301 OR APPROVED EQUAL (SUBMIT SAMPLE).

SEEDING AND MULCHING INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 - AREA OF SEEDING AND MULCHING.
 - TYPE OF SEED MIX (PERMANENT, TEMPORARY, OR LOW-GROWTH).
2. ALL BRANDS FURNISHED SHALL BE FREE FROM SUCH NOXIOUS SEEDS AS RUSSIAN OR CANADIAN THISTLE, COARSE FESCUE, EUROPEAN BINWEED, JOHNSON GRASS, KNAF WEED AND LEAFY SPURGE.
3. THE SEEDER SHALL FURNISH TO THE CONTRACTOR A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY. SEED WHICH HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE. SEED TICKETS SHALL BE PROVIDED TO THE TOWN OF CASTLE ROCK UPON REQUEST.
4. DRILL SEEDING MIX SHALL CONFORM TO THE TABLE ON THE RIGHT:
5. IF THE SEED AVAILABLE ON THE MARKET DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSER PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO CONTRACTOR AND FORWARDED TO THE TOWN TESC INSPECTOR.
6. THE FORMULA USED FOR DETERMINING THE QUANTITY OF PURE LIVE SEED (PLS) SHALL BE (POUNDS OF SEED) X (PURITY) X (GERMINATION) = POUNDS OF PURE LIVE SEED (PLS).
7. PERMANENT SEED MIX SHALL BE USED UNLESS OTHERWISE APPROVED BY THE TOWN. THE USE OF TEMPORARY NURSERY CROP IN PERMANENT AND LOW GROW MIXES IS PROHIBITED.
8. ALL AREAS TO BE SEEDDED AND MULCHED SHALL HAVE NATIVE TOPSOIL SPREAD TO A DEPTH OF AT LEAST 6 INCHES (LOOSE DEPTH). HAIL ROADS AND OTHER COMPACTED AREAS SHALL BE LOOSENED TO A DEPTH OF 6 INCHES PRIOR TO SPREADING TOPSOIL.
9. FOR PERMANENTLY IRRIGATED AREAS OR FOR AREAS WITH INADEQUATE TOPSOIL SHALL BE AMENDED PRIOR TO SEEDING. SOIL AMENDMENTS SHALL BE IN COMPLIANCE WITH THE TOWN OF CASTLE ROCK LANDSCAPE REGULATIONS. MINIMUM SOIL AMENDMENTS SHALL BE 3 CUBIC YARDS OF ORGANIC MATTER PER 1,000 SQUARE FEET OF SEEDDED AREAS, AND SHALL BE TILLED TO A MINIMUM DEPTH OF 6 INCHES. SOIL AMENDMENTS SHALL BE TESTED TWO WEEKS IN ADVANCE OF ITS USE AND RESULTS SUBMITTED FOR APPROVAL BY THE TOWN GESC INSPECTOR.
10. SOIL IS TO BE THOROUGHLY LOOSENED (TILLED) TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO SEEDING. THE TOP 6 INCHES OF THE SEED BED SHALL BE FREE OF ROCKS GREATER THAN 4 INCHES AND SOIL CLODS GREATER THAN 2 INCHES. SEEDING OVER ANY COMPACTED AREAS THAT HAVEN'T BEEN THOROUGHLY LOOSENED SHALL BE REJECTED. SEED BED SHALL BE FREE OF WEEDS.
11. SEED IS TO BE APPLIED USING A MECHANICAL DRILL TO A DEPTH NOT LESS THAN 1/4" INCH AND NOT MORE THAN 3/4" INCH. ROW SPACING SHALL BE NO MORE THAN 6 INCHES. MATERIAL USED FOR MULCH SHALL CONSIST OF WEED-FREE LONG-STEMMED STRAW. AT LEAST 50 PERCENT OF THE MULCH, BY WEIGHT, SHALL BE 10 INCHES OR MORE IN LENGTH. MULCH SHALL BE APPLIED AND MECHANICALLY ANCHORED TO A DEPTH OF AT LEAST 4 INCHES. MULCH SHALL BE APPLIED AT A RATE OF 4000 LB. OF STRAW PER ACRE.
12. IF THE PERMITTEE DEMONSTRATES TO THE TOWN THAT IT IS NOT POSSIBLE TO DRILL SEED, SEED IS TO BE UNIFORMLY BROADCAST AT TWO TIMES THE DRILLED RATE, THEN LIGHTLY HARROWED TO PROVIDE A SEED DEPTH OF APPROXIMATELY 1/4" INCH, THEN ROLLED TO COMPACT, THEN MULCHED AS SPECIFIED ABOVE.
13. SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 30 DAYS OF INITIAL EXPOSURE OR 7 DAYS AFTER GRADING IS SUBSTANTIALLY COMPLETE IN A GIVEN AREA (AS DEFINED BY THE TOWN). THIS MAY REQUIRE MULTIPLE MOBILIZATIONS FOR SEEDING AND MULCHING.
14. ALL SEEDDED AREAS SHALL BE MULCHED, CRIMPED AND TACKIFIED WITHIN 24-HOURS AFTER SEEDING.
15. TACKIFIER SHOULD BE UTILIZED TO HELP WITH STRAW DISPLACEMENT. THE TACKIFIER MATERIAL SHALL CONSIST OF A FREE-FLOWING, NON-CORROSIVE POWDER PRODUCED FROM THE NATURAL PLAT GUM OF PLANTAGO INSULARIS, (DESERT INDIANWHEAT), APPLIED IN A SLURRY WITH WATER AND WOOD FIBER. THE POWDER SHALL POSSESS THE FOLLOWING PROPERTIES: PROTEIN CONTENT = 1.6 +/-0.2%; ASH CONTENT = 2.7 +/-0.2%; FIBER = 4.0 +/-0.4%; PH 1% SOLUTION = 6.5 - 8.0. THE MATERIAL SHALL NOT CONTAIN ANY MINERAL FILLER, RECYCLED CELLULOSE FIBER, CLAYS, OR OTHER SUBSTANCES, WHICH MAY INHIBIT GERMINATION OR GROWTH OF PLANTS. THE WOOD FIBER AND WATER USED SHALL CONFORM TO THE COLORADO HIGHWAY SPECIFICATIONS, SUBSECTION 213.02. - PAR. 8, AND SUBSECTION 209.02, RESPECTIVELY. APPLY TACKIFIER WITH A SPRAY NOZZLE, DISPENSING A MIST THAT WILL UNIFORMLY COVER THE SURFACE.

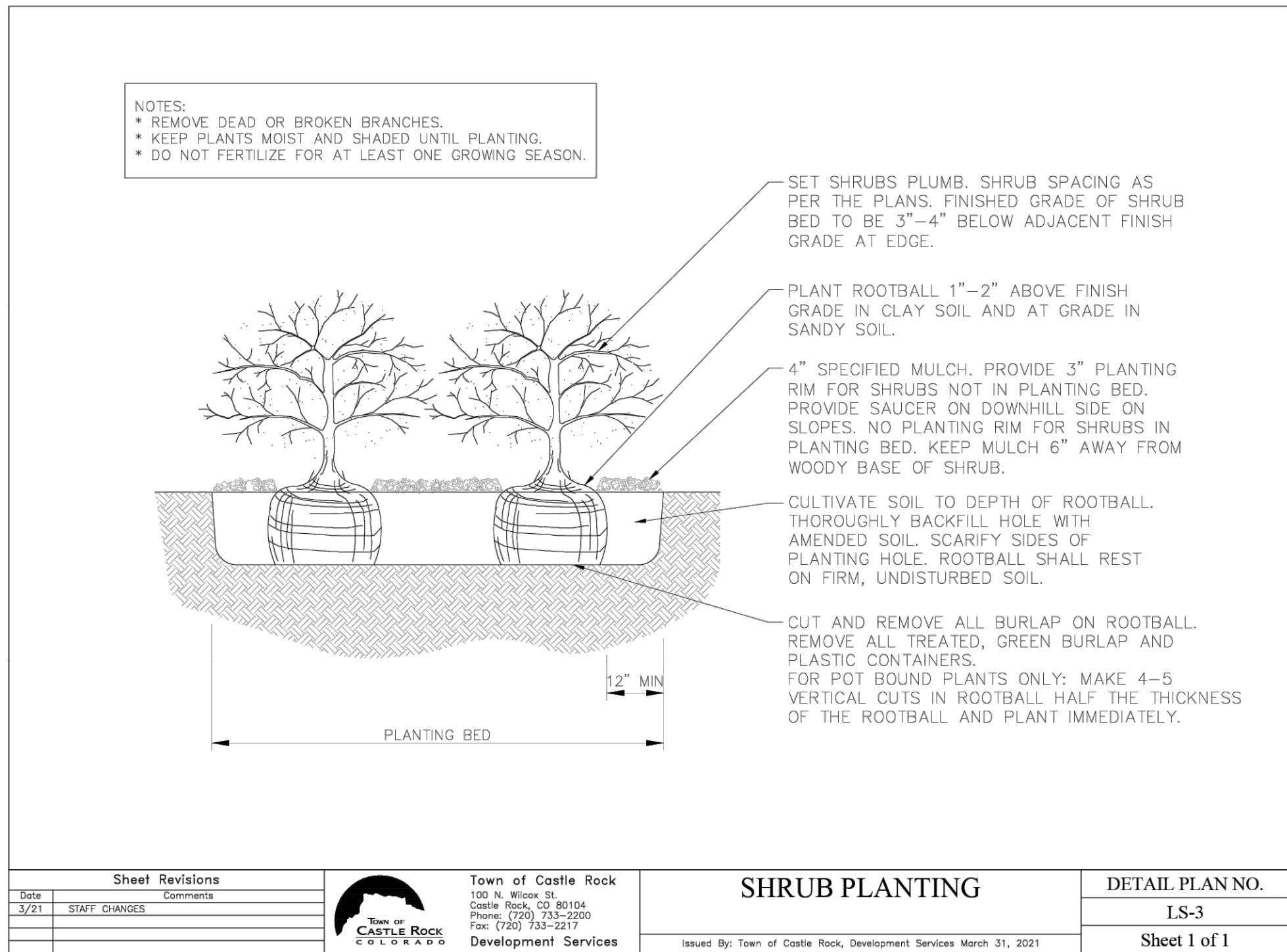
SEEDING AND MULCHING MAINTENANCE NOTES

1. ALL SEEDDED AREAS SHALL BE KEPT IN A DAMP CONDITION, FOR AT LEAST 14 DAYS AFTER SEEDING, TO AID IN GERMINATION. SOME FORM OF IRRIGATION MAY BE REQUIRED TO ACHIEVE THIS GOAL, AND IT IS THE RESPONSIBILITY OF THE TESC MANAGER TO PERFORM ANY AND ALL NECESSARY OPERATIONS TO THAT END. THE MEANS OF IRRIGATION SHALL BE APPROVED BY THE TOWN AND PROPER PERMITS OBTAINED PRIOR TO IMPLEMENTATION. DIRECT FLOWS FROM LARGE HOSES, WHICH COULD DAMAGE THE MULCH, WILL NOT BE PERMITTED.
2. SEEDDED AND MULCHED AREAS SHALL BE INSPECTED FOR REQUIRED COVERAGE MONTHLY FOR A PERIOD OF TWO YEARS FOLLOWING INITIAL SEEDING. REPAIRS AND RE-SEEDING AND MULCHING SHALL BE UNDERTAKEN AFTER THE FIRST AND SECOND GROWING SEASON OR AS REQUESTED BY THE TESC INSPECTOR FOR ANY AREAS FAILING TO MEET THE REQUIRED COVERAGE.
3. RILL AND GULLY EROSION SHALL BE FILLED WITH TOPSOIL PRIOR TO RESEEDING. THE RESEEDING METHOD SHALL BE APPROVED BY THE TOWN.
4. NOXIOUS WEEDS SHALL BE CONTROLLED IN A MANNER ACCEPTABLE TO THE TOWN.
5. REQUIRED COVERAGE FOR STANDARD, OPEN SPACE AND LOW GROWTH SEED MIXES SHALL BE DEFINED AS FOLLOWS:
 - 5.1. A UNIFORM VEGETATIVE COVER WITH AN INDIVIDUAL PLANT DENSITY OF AT LEAST 70 PERCENT OR PRE-DISTURBANCE LEVELS AND NO LESS THAN THREE (3) PLANTS PER SQUARE FOOT WITH A MINIMUM HEIGHT OF 3 INCHES. THE PLANTS SHALL BE OF THE VARIETY AND SPECIES FOUND IN THE TOWN OF CASTLE ROCK-APPROVED MIX.
 - 5.2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).
 - 5.3. FREE OF ERODED AREAS.
 - 5.4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE TESC CRITERIA MANUAL.

DOUGLAS COUNTY AND CASTLE ROCK LOW-GROWTH DRILL SEEDING MIX

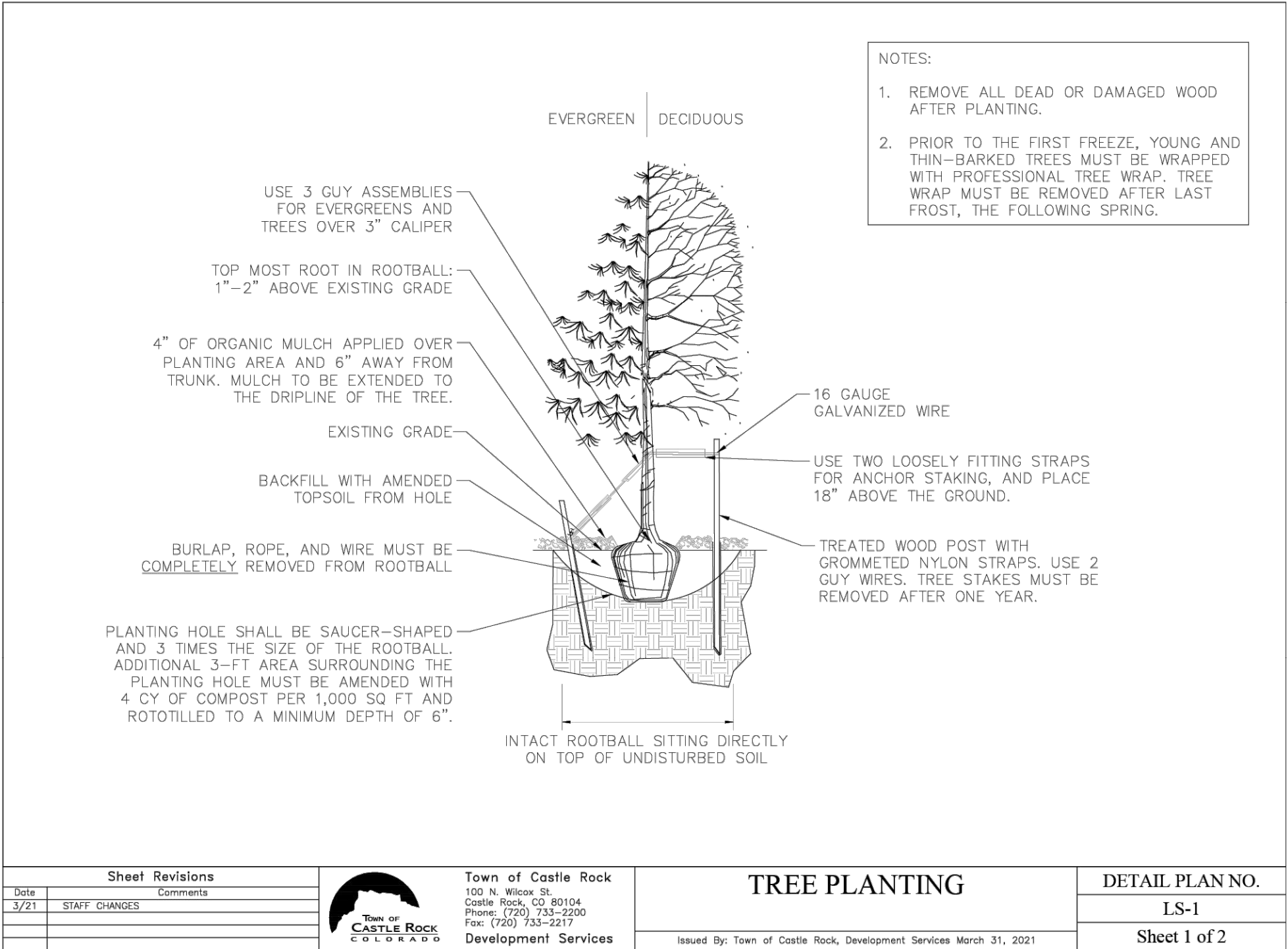
SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BUFFALOGRASS	TEXOKA	PNWS	20	3.2
BLUE GRAMA	HACHITA	PNWB	20	0.6
WESTERN WHEATGRASS	ARRIBA	PNCS	20	3.2
SIDEOTS GRAMA	VAUGHN	PNWB	20	1.8
THICKSPIKE WHEATGRASS	CRITANA	PNCS	10	1
STREAMBANK WHEATGRASS	SODAR	PNCS	10	1.2
TOTAL				11.0

6. REQUIRED COVERAGE FOR TURF GRASS AREAS SHALL BE DEFINED AS FOLLOWS:
 - 6.1. AT LEAST 80% VEGETATIVE COVER OF GRASS SPECIES PLANTED.
 - 6.2. NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FEET BY TWO-FEET OR EQUIVALENT).
 - 6.3. FREE OF ERODED AREAS.
 - 6.4. FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE TESC CRITERIA MANUAL.



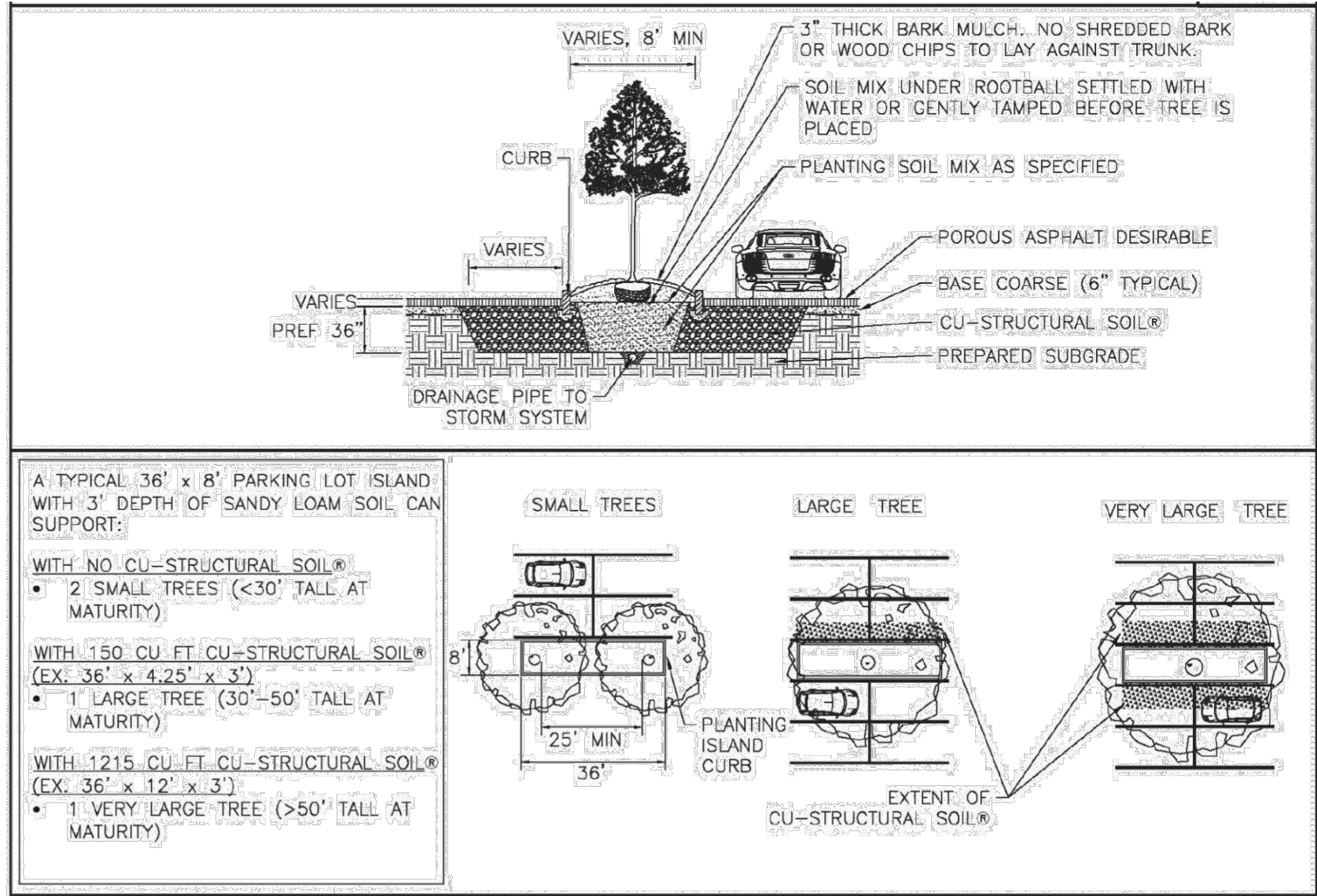
1 TOCR SHRUB PLANTING

NOT TO SCALE



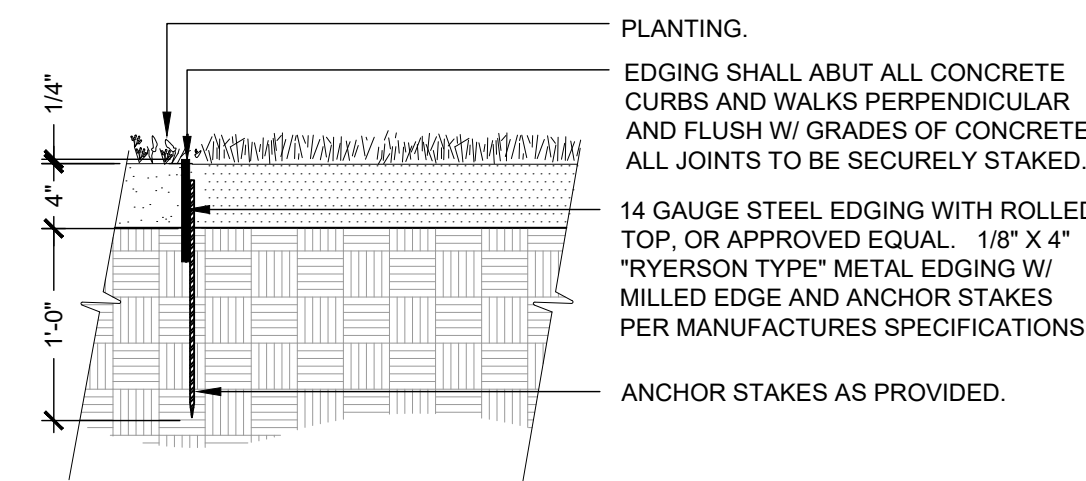
2 TOCR TREE PLANTING

NOT TO SCALE



3 CU STRUCTURAL SOIL

NOT TO SCALE



4 STEEL EDGING

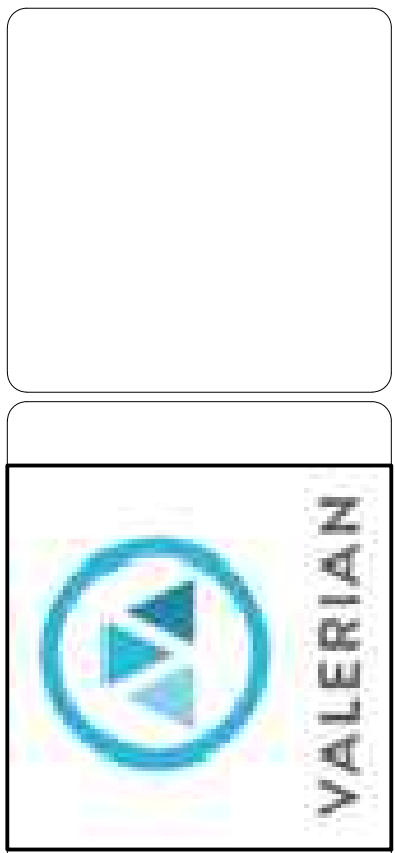
1" = 1'-0"

329413.23-01

LOT 6G-3A-3, THE MEADOWS FILING 17 AREA 4, AMENDMENT 17
TOWN OF CASTLE ROCK, PROJECT NO. CD23-0038

DATE: NOVEMBER 8, 2024

DATE	BY	REVISION	No.	SUBMITTAL #1	SUBMITTAL #2	SUBMITTAL #3	SUBMITTAL #4	SUBMITTAL #5
06.28.24	MF		1					
08.07.24	MF		2					
10.17.24	MF		3					
11.07.24	MF		4					

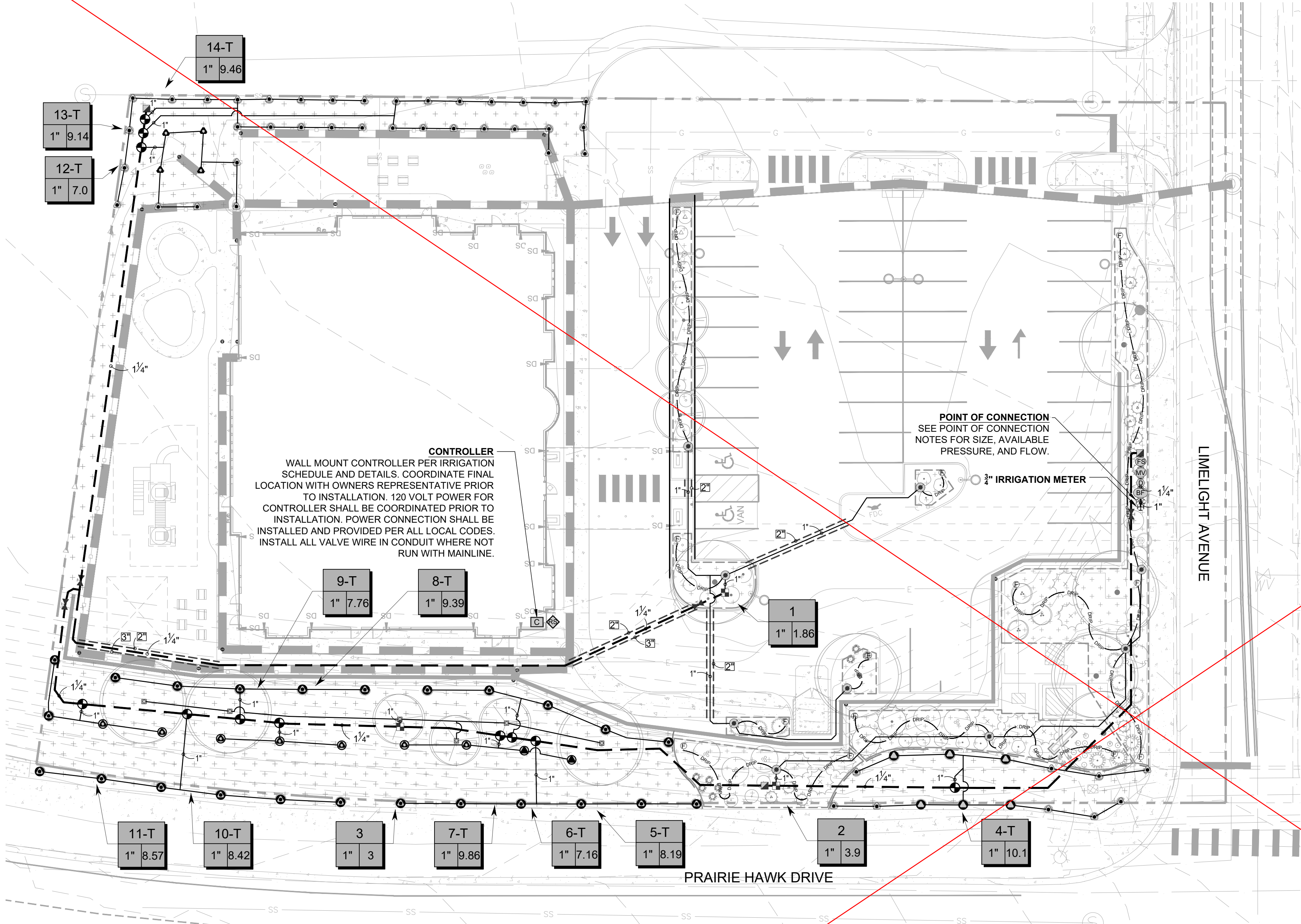


CONSTRUCTION DOCUMENTS
LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

LANDSCAPE NOTES & DETAILS

PROJECT NO: 23-039
DESIGNED BY: MF
DRAWN BY: MF
DATE: 04/22/2024

L1.1



1 IRRIGATION PLAN

CASTLE ROCK IRRIGATION CONSTRUCTION NOTES:

1. INSTALLING CONTRACTOR SHALL CONTACT THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT AT 720.733.6017 TO SCHEDULE A PRECONSTRUCTION MEETING BEFORE BEGINNING THE INSTALLATION OF THE IRRIGATION SYSTEM.
2. IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
3. BACKFLOW TO BE TESTED BY A CERTIFIED BACKFLOW TECHNICIAN APPROVED BY THE UTILITY DEPARTMENT WITHIN 10 DAYS OF THE IRRIGATION METER INSTALLATION AND ANNUALLY THEREAFTER.
4. IRRIGATION EXEMPTION MUST BE OBTAINED FROM THE CASTLE ROCK WATER IF IRRIGATING THE NATIVE SEED OR THE SOD ON A DAILY BASIS FOR ESTABLISHMENT DURING THE MONTHS OF JUNE AND AUGUST. IRRIGATION EXEMPTIONS WILL NOT BE ISSUED DURING THE MONTH OF JULY.
5. IRRIGATION SYSTEMS MUST BE DESIGNED TO OPERATE WITHIN THE TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN. CURRENT COMMERCIAL HOURS OF OPERATION ARE A THREE FIXED DAYS A WEEK FROM 10 PM TO 6 AM.
6. OVERHEAD IRRIGATION IN AREAS LESS THAN 10' IN WIDTH OR INSTALLED ON SLOPES STEEPER THAN 3:1 WILL NOT BE APPROVED BY TOWN OF CASTLE ROCK INSPECTORS
7. ALL IRRIGATION INSTALLATIONS MUST MEET TOWN OF CASTLE ROCK DETAILS
8. PLEASE NOTE THAT THE 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.
9. ALL SPRINKLER HEADS TO BE ADJUSTED TO MINIMIZE/ELIMINATE OVER SPRAY ON TO HARD SURFACES OR UNINTENDED AREAS. PER TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN WATER WASTE IS NOT ALLOWED
10. IRRIGATION SYSTEMS ARE TO BE WINTERIZED ANNUALLY IN THE FALL.
11. THE TEMPORARY IRRIGATION SYSTEM MUST BE INSTALLED ABOVE GROUND AND UPON EXPIRATION OF THE APPROVED ESTABLISHMENT PERIOD, ALL COMPONENTS OF THE TEMPORARY IRRIGATION SYSTEM MUST BE REMOVED. EQUIPMENT TO BE REMOVED INCLUDES: CONTROL VALVES, MANUAL BALL VALVES, ALL FITTINGS USED TO CONNECT VALVES TO MAINLINE, VALVE BOXES, ABOVE GROUND LATERAL PIPING, SPRINKLER HEADS, AND ALL ASSOCIATED STAKING MATERIALS. BELOW GROUND IRRIGATION MAINLINE AND WIRING CAN BE ABANDONED IN PLACE.

CASTLE ROCK 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.

POINT OF CONNECTION (P.O.C.) NOTES:

POINT OF CONNECTION #1 - CONNECT TO 3/4" SERVICE LINE DOWNSTREAM OF 3/4" WATER METER (RE-CIVIL PLANS) IN APPROXIMATE LOCATION INDICATED ON PLANS WITH 3/4" TYPE 'K' COPPER STUB. EXTEND 3/4" TYPE 'K' COPPER PIPE TO 3/4" BACKFLOW.

AVAILABLE WATER PRESSURE: THE AVAILABLE PSI AT THE POINT OF CONNECTION 'A' IS 90 PSI.

DESIGN PRESSURE: 90 PSI

DESIGN FLOW : 10.1 GPM MAX, (SINGLE VALVE OPERATING AT ONE TIME)
MAX CAPACITY AND PEAK FLOW OF THE IRRIGATION SYSTEM BASED ON THE FLOW FROM THE PROPOSED IRRIGATION SYSTEM.

1. THE IRRIGATION SYSTEM IS DESIGNED WITHIN A WATER WINDOW AND SIZED TO ACCOMMODATE MULTIPLE VALVE STARTS NOT TO EXCEED DESIGN FLOW LISTED. CONTRACTOR TO PROGRAM CONTROLLER ACCORDINGLY AND COORDINATE SCHEDULING WITH OWNER.
2. CONTRACTOR TO COORDINATE CONTROLLER LOCATIONS WITH OWNERS REPRESENTATIVE PRIOR TO INSTALLATION. INSTALL CONTROLLERS IN LANDSCAPE BED OR INSIDE OF MECHANICAL ROOM, COORDINATE WITH LANDSCAPE INSTALLATION TO SCREEN CONTROLLERS FROM ADJACENT HOMES AND RIGHT-OF-WAYS AND TRIM PROPOSED IRRIGATION HEADS TO ELIMINATE OVERSPRAY ONTO THE IRRIGATION CONTROLLER, BACKFLOW ENCLOSURE.
3. ALL ENCLOSURES SHALL BE SECURELY MOUNTED AND LOCKABLE TO PREVENT VANDALISM, DAMAGE AND/OR THEFT. TURN KEYS OVER TO OWNER AT COMPLETION OF WORK AS PER SPECIFICATIONS.
4. ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED PER THE TOWN OF CASTLE ROCK STANDARDS AND SPECIFICATIONS.
5. RAIN SENSOR, MOUNT WIRELESS RAIN SENSOR WITHIN OPTIMAL RANGE FROM CONTROLLER, PER MANUFACTURERS RECOMMENDATIONS. INSTALL SENSOR ON LIGHT/UTILITY POLE A MINIMUM OF 10' ABOVE GRADE TO MINIMIZE DAMAGE/VANDALISM, CLEARLY NOTE LOCATION AND PROVIDE INFORMATION TO OWNERS REPRESENTATIVE.
6. EXISTING IRRIGATION ZONES HAVE BEEN CREATED TO PROPERLY HYDROZONE THE SITE BASED ON SITE CONDITIONS AND MICROCLIMATES AT THE TIME OF INSTALLATION. IF FIELD ADJUSTMENTS ARE TO BE MADE IRRIGATION EQUIPMENT IRRIGATING A NORTH AND EAST EXPOSURE SHOULD NOT BE INSTALLED ON THE SAME ZONE AS IRRIGATION EQUIPMENT ON THE SOUTH AND WEST EXPOSURES TO ALLOW FOR MICROCLIMATE ADJUSTMENTS IN THE CONTROLLER PROGRAMMING.

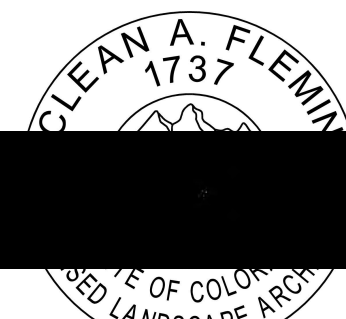
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	12" POP-UP WITH R-VAN14 RAIN BIRD R-VAN14 1812-SAM-P40, 8'-14' 40-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 12" POP-UP, WITH CHECK VALVE AND 40 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	49	40
	12" POP-UP WITH R-VAN18 RAIN BIRD R-VAN18 1806-SAM-P40, 13'-18' 40-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 12" POP-UP, WITH CHECK VALVE AND 40 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	8	40
	12" POP-UP WITH R-VAN24 RAIN BIRD R-VAN24 1806-SAM-P40, 17'-24' 40-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 12" POP-UP, WITH CHECK VALVE AND 40 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	31	40
	TREE DRIPLINE LOOP 1401 XFS-06-12 SUBSURFACE DRIP TUBING WITH 0.60 GPH, PRESSURE COMPENSATING EMITTERS INTERNALLY INSTALLED IN THE DRIP TUBING AT 12" O.C. SPACING. DRIP TUBING SHALL BE INSTALLED 2" BELOW FINISHED SOIL GRADE (NOT COUNTING GROUND COVER MATERIAL) AND IN A DUAL "RING" AROUND THE TRUNK TO BE 50 FEET IN LENGTH AND CONTAIN APPROXIMATELY 50 DRIP EMITTERS FOR A TOTAL FLOW RATE OF 0.5 GPM (50 X 0.5 GPH = 30 GPH = 0.5 GPM). SEE DETAIL DRAWING FOR ALL THE COMPONENTS REQUIRED FOR INSTALLATION OF EACH TREE DRIP ASSEMBLY.	6	30
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
	DRIP CONTROL VALVE ASSEMBLY RAIN BIRD XCZ-100-LC, WIDE FLOW DRIP CONTROL KIT, FOR LIGHT COMMERCIAL USES. 1IN. PEB VALVE, WITH 1IN. PRESSURE REGULATING 40PSI BASKET FILTER. 0.3-20 GPM	3	
	PIPE TRANSITION POINT PIPE TRANSITION FROM PVC LATERAL TO DRIP TUBING WITH RISER IN 6" DRIP BOX.	9	
	FLUSH VALVE 3/4" PVC BALL VALVE IN 10" VALVE BOX.	13	
	AREA TO RECEIVE DRIP EMITTERS AREA FOR DRIP EMITTERS RAIN BIRD XB-PC SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5GPH=BLUE, 1.0GPH=BLACK, AND 2.0GPH=RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. 3/4" DRIP TUBING FOR DISTRIBUTION LINE SHALL BE INSTALLED. Emitter Notes: 0.5 GPH emitters (2 assigned to each #1 plant) 1.0 GPH emitters (2 assigned to each #5 plant) 2.0 GPH emitters (6 assigned to each B & B, 2"Cal plant) 2.0 GPH emitters (6 assigned to each B & B, 6-8" HT plant) 2.0 GPH emitters (6 assigned to each B & B, Multi-Stem plant)	5,008 S.F.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
	REMOTE CONTROL VALVE RAIN BIRD PGA-PRS-D GLOBE, 1IN., 1-1/2IN., 2IN. ELECTRIC REMOTE CONTROL VALVE, GLOBE WITH PRESSURE REGULATOR MODULE.	11	
	QUICK COUPLER VALVE RAIN BIRD 44-RC 1" BRASS QUICK-COUPLING VALVE, WITH CORROSION-RESISTANT STAINLESS STEEL SPRING, THERMOPLASTIC RUBBER COVER, AND 2-PIECE BODY.	3	
	GATE VALVE - 2-1/2" AND SMALLER MATCO-NORCA 514T BRASS GATE VALVE, FULL PORT, WITH SOLID WEDGE. IPS. WHEEL HANDLE. SAME SIZE AS MAINLINE PIPE.	4	
	MASTER VALVE - NORMALLY CLOSED 1" RAIN BIRD EFB-CP BRASS MASTER VALVE, THAT IS CONTAMINATION PROOF W/SELF-FLUSHING FILTER SCREEN AND FD-101TURF DECODER. GLOBE CONFIGURATION, RECLAIMED WATER COMPATIBLE.	1	
	MANUAL DRAIN VALVE MUELLER ORISEAL #H-10283, WITH BRASS SWING JOINT ASSEMBLY. INSTALL PER INSTALLATION DETAIL.	1	
	REDUCED PRESSURE BACKFLOW PREVENTER 3/4" FEBCO 825YA	1	
	SMART CONTROLLER RAIN BIRD ESP4ME3 WITH (3) ESP-SM6, 22 STATION, HYBRID MODULAR OUTDOOR CONTROLLER, FOR RESIDENTIAL OR LIGHT COMMERCIAL USE. LNK WIFI MODULE AND FLOW SENSOR READY.	1	
	RAIN SENSOR RAIN BIRD WR2-RFC, WIRELESS RAIN AND FREEZE SENSOR COMBO, INCLUDES 1 RECEIVER AND 1 RAIN/FREEZE SENSOR TRANSMITTER.	1	
	FLOW SENSOR RAIN BIRD FS-100-B, 1IN. FLOW SENSOR, BRASS MODEL. SUGGESTED OPERATING RANGE 2.0 GPM TO 40.0 GPM. POINT OF CONNECTION 3/4"	1	
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21	1,753 L.F.	
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	819.4 L.F.	
	IRRIGATION MAINLINE: TYPE K COPPER PIPE	4.2 L.F.	
	PIPE SLEEVE: PVC CLASS 160 SDR 26	151.9 L.F.	
	Valve Callout # + Valve Number # + Valve Flow # + Valve Size		

LOT 6G-3A-3, THE MEADOWS FILING 17, AREA 4, AMENDMENT 17
TOWN OF CASTLE ROCK, PROJECT NO. CD23-0038

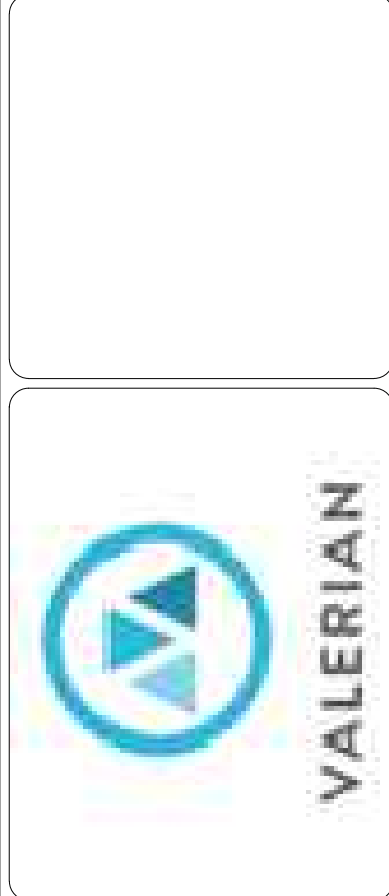
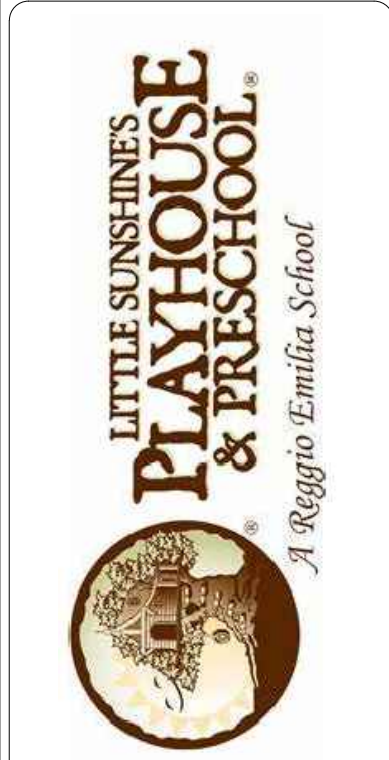
TOWN APPROVAL BLOCK	
TOWN OF CASTLE ROCK APPROVAL PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM DATE OF DEVELOPMENT SERVICES APPROVAL	
APPROVED BY:	 J. Jankovich By Jankovich on 12/04/2024 APPROVED-CD24-0008 Plans.pdf Record Document on File
DEVELOPMENT SERVICES	DATE
PROFESSIONAL ENGINEER CERTIFICATION	

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.



DATE: NOVEMBER 8, 2024

DATE	BY	REVISION
06.28.24	MF	#2
08.07.24	MF	#3
10.17.24	MF	#4
11.07.24	MF	#5



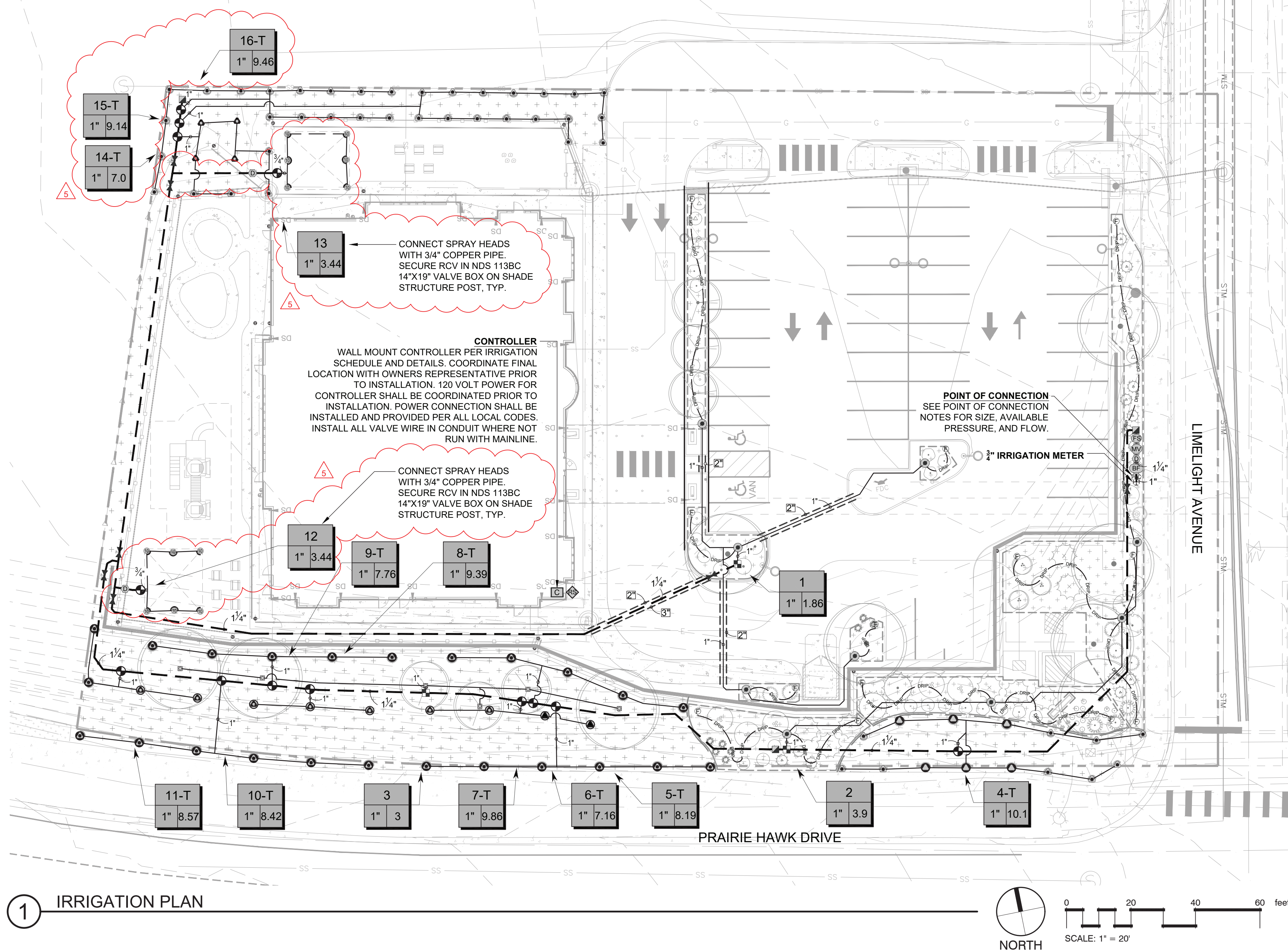
CONSTRUCTION DOCUMENTS
**LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL**
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE
IRRIGATION PLAN

PROJECT NO: 23-039
DESIGNED BY: MF
DRAWN BY: MF
DATE: 04/22/2024

IR1.0

Know what's below.
Call before you dig.

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987 or 811
CALL 3-BUSINESS DAYS (NOT INCLUDING INITIAL
DAY OF CONTACT) IN ADVANCE BEFORE YOU DIG,
GRADE, OR EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES.



1 IRRIGATION PLAN



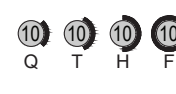
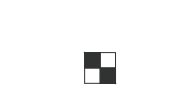
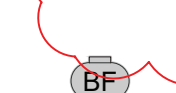
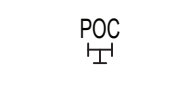
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GRADE, OR EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES.

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
	ORBIT 54052 10 SERIES ORBIT 54052 NOZZLE ON COMPATIBLE FIXED RISER. MISTING NOZZLE. 30 PSI. NO PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	12	30
	12" POP-UP WITH R-VAN14 RAIN BIRD R-VAN14 1812-SAM-P40, 8'-14' 40-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 12" POP-UP. WITH CHECK VALVE AND 40 PSI IN-STEM PRESSURE REGULATOR. 1/2" NPT FEMALE THREADED INLET.	49	40
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SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
	DRIP CONTROL VALVE ASSEMBLY RAIN BIRD XCZ-100-LC, WIDE FLOW DRIP CONTROL KIT, FOR LIGHT COMMERCIAL USES. 1IN. PEB VALVE, WITH 1IN. PRESSURE REGULATING 40PSI BASKET FILTER. 0.3-20 GPM.	3	
	PIPE TRANSITION POINT PIPE TRANSITION FROM PVC LATERAL TO DRIP TUBING WITH RISER IN 6" DRIP BOX.	9	
	FLUSH VALVE 3/4" PVC BALL VALVE IN 10" VALVE BOX.	13	
	AREA TO RECEIVE DRIP EMITTERS AREA FOR DRIP EMITTERS RAIN BIRD XBP-2 SINGLE OUTLET, PRESSURE COMPENSATING DRIP EMITTERS. FLOW RATES OF 0.5GPH-BLUE, 1.0GPH-BLACK, AND 2.0GPH-RED. COMES WITH A SELF-PIERCING BARB INLET X BARB OUTLET. 3/4" DRIP TUBING FOR DISTRIBUTION LINE SHALL BE INSTALLED. Emitter Notes: 0.5 GPH emitters (2 assigned to each #1 plant) 1.0 GPH emitters (2 assigned to each #5 plant) 2.0 GPH emitters (6 assigned to each B & B, 2"Cal plant) 2.0 GPH emitters (6 assigned to each B & B, 6-8' HT plant) 2.0 GPH emitters (6 assigned to each B & B, Multi-Stem plant)	5,008 SF	
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	GATE VALVE - 2-1/2" AND SMALLER MATCO-NORCA 514T BRASS GATE VALVE, FULL PORT, WITH SOLID WEDGE. IPS. WHEEL HANDLE. SAME SIZE AS MAINLINE PIPE.	7	
	MASTER VALVE - NORMALLY CLOSED 1" RAIN BIRD EFB-CP BRASS MASTER VALVE, THAT IS CONTAMINATION PROOF W/SELF-FLUSHING FILTER SCREEN AND FD-101TURF DECODER. GLOBE CONFIGURATION, RECLAIMED WATER COMPATIBLE.	1	
	MANUAL DRAIN VALVE MUELLER ORISEAL #H-10283, WITH BRASS SWING JOINT ASSEMBLY. INSTALL PER INSTALLATION DETAIL.	3	
	REDUCED PRESSURE BACKFLOW PREVENTER 3/4" FEBCO 825YA	1	
	SMART CONTROLLER RAIN BIRD ESP4ME3 WITH (3) ESP-SM6, 22 STATION, HYBRID MODULAR OUTDOOR CONTROLLER. FOR RESIDENTIAL OR LIGHT COMMERCIAL USE. LNK WIFI MODULE AND FLOW SENSOR READY.	1	
	RAIN SENSOR RAIN BIRD WR2-RFC, WIRELESS RAIN AND FREEZE SENSOR COMBO, INCLUDES 1 RECEIVER AND 1 RAIN/FREEZE SENSOR TRANSMITTER.	1	
	FLOW SENSOR RAIN BIRD FS-100-B, 1IN. FLOW SENSOR, BRASS MODEL. SUGGESTED OPERATING RANGE 2.0 GPM TO 40.0 GPM. POINT OF CONNECTION 3/4"	1	
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21	1,753 LF	
	IRRIGATION LATERAL LINE: TYPE K COPPER PIPE	117.4 LF	
	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21	860.0 LF	
	IRRIGATION MAINLINE: TYPE K COPPER PIPE	4.2 LF	
	PIPE SLEEVE: PVC CLASS 160 SDR 26	109.8 LF	

TOWN APPROVAL BLOCK

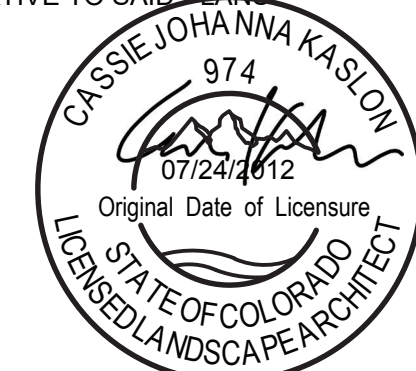
TOWN OF CASTLE ROCK APPROVAL
PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM
DATE OF DEVELOPMENT SERVICES APPROVAL

APPROVED BY:  By 
on 03/18/2025
APPROVED-FC025-0001, Plans.pdf
Record Document on File

DEVELOPMENT SERVICES DATE

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.



02/24/2025

DATE:

CONSTRUCTION DOCUMENTS

LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL

PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

IRRIGATION PLAN

PROJECT NO: 23-039

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DRAWN BY: MF

DATE: 04/22/2024

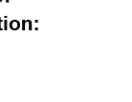
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IRRIGATION NOTES:

1. THE CONTRACTOR SHALL INSTALL SYSTEM COMPONENTS IN A MANNER THAT WILL PROVIDE ADEQUATE WATER SUPPLY TO THE EXISTING IRRIGATION SYSTEM.
2. REFER TO IRRIGATION SCHEDULE, NOTES, AND SPECIFICATIONS AND DETAILS FOR PRODUCT TYPES, SIZES AND INSTALLATION REQUIREMENTS.
3. CONTRACTOR SHALL MEET ALL APPLICABLE LOCAL AND MUNICIPAL CODES FOR WORK NECESSARY IN IRRIGATION SYSTEM INSTALLATION.
4. VERIFY ALL SITE INFORMATION PRIOR TO CONSTRUCTION. NOTIFY OWNER OF ANY DISCREPANCIES FROM PREPARED IRRIGATION PLANS.
5. LOCATE ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING OF WORK. CONTRACTOR SHALL COORDINATE WITH ALL OTHER DISCIPLINES ON UTILITY INFORMATION PRIOR TO START OF WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UNDERGROUND UTILITIES AND DRAINAGE SYSTEMS CAUSED BY INSTALLATION OF SYSTEM COMPONENTS.
6. CONTRACTOR IS TO REFER TO AND COORDINATE IRRIGATION SYSTEM INSTALLATION AND SITE PLANS. AVOID CONFLICTING LOCATIONS BETWEEN PIPING AND EXISTING LANDSCAPE MATERIAL, EDGING, ETC. IRRIGATION PLAN EQUIPMENT LOCATIONS ARE DIAGRAMMATIC AND ARE LOCATED FOR GRAPHIC CLARITY ONLY. IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED IN LANDSCAPED AREAS AND WITHIN THE COMMON LANDSCAPE TRACT PROPERTY LIMITS (NOT WITHIN PRIVATE LOT AREAS). ANY EQUIPMENT SHOWN OUTSIDE OF THESE LIMITS IS SHOWN IN THAT LOCATION FOR GRAPHICAL CLARITY ONLY. ALL VALVE BOXES SHALL BE INSTALLED A MINIMUM OF 2'-0" FROM EDGE OF ANY PAVED SURFACES AND A MINIMUM OF 3'-0" FROM THE CENTERLINE OF ANY DRAINAGE SWALES.
7. CONTRACTOR IS TO PROVIDE ALL NECESSARY PIPE, VALVES, ETC. DOWNSTREAM FROM POINT OF CONNECTION NOT INSTALLED BY OTHER DISCIPLINES IN ACCORDANCE WITH THE CITY OF THORNTON STANDARDS, DETAILS AND SPECIFICATIONS.
8. CONTRACTOR IS TO VERIFY AVAILABLE PRESSURE AND FLOW AT POINT OF CONNECTION PRIOR TO INSTALLATION OF IRRIGATION SYSTEM EQUIPMENT AND NOTIFY OWNER WITH VERIFICATION FIGURES. FAILURE TO NOTIFY OF VERIFICATION WILL RESULT IN CONTRACTOR TAKING RESPONSIBILITY FOR ANY ALTERATIONS TO THE PLAN DUE TO VARIATIONS OF PRESSURE OR FLOW AT HIS/HER OWN RISK.
9. CONTRACTOR TO COORDINATE INSTALLATION OF SLEEVING. ALL SLEEVING UNDER PAVED SURFACES SHOWN ON PLANS IS BY CONTRACTOR UNLESS OTHERWISE NOTED. ALL MAINLINES, LATERAL LINES, DRIP LINES AND WIRES UNDER PAVED SURFACES ARE TO BE INSTALLED IN SLEEVING. INSTALL SLEEVING AS PER DETAIL AND IRRIGATION SCHEDULE.
10. ALL PIPING, PVC ELECTRICAL SLEEVES, ETC. UNDER PAVING SHALL BE INSTALLED PRIOR TO PAVING WORK. NO TEES, ELLS OR OTHER TURNS IN PIPING SHALL BE LOCATED UNDER PAVING. CAP ALL ENDS HAND TIGHT PRIOR TO BACKFILL.
11. CONTRACTOR IS TO MAINTAIN ELECTRICAL POWER TO THE AUTOMATIC CONTROLLER AND COORDINATE WITH UTILITY PROVIDER AND OWNER ON CONNECTION TO NEW CONTROLLER.
12. CONTRACTOR SHALL EXTEND ONE YELLOW 14 GAUGE TRACER WIRE FROM THE BACKFLOW ASSEMBLY TO THE END OF THE NEW MAINLINE PIPE.
13. MASTER VALVE/FLOW SENSOR WIRE SHALL BE CONTINUOUS/STRAIGHT RUNS (WITHOUT SPLICES) TO CONTROLLER LOCATION. WIRE SHALL BE SHIELDED PER THE SPECIFICATIONS.
14. CONTRACTOR SHALL GROUND THE IRRIGATION CONTROLLER PER RAINBIRD SPECIFICATIONS AND RECOMMENDATIONS.
15. INSTALL ALL MATERIALS AND EQUIPMENT AS SHOWN IN DETAILS. USE TEFLON TAPE OR TEFLON PIPE DOPE ON ALL MALE PIPE THREADS ON ALL IRRIGATION SWING JOINT AND VALVE ASSEMBLIES.
16. ALL TRENCHES TO BE PUDDLED AND COMPACTED TO THE SAME DENSITY AS THE UNDISTURBED ADJACENT SOIL. TRENCH SETTLEMENT SHALL BE REPAIRED THROUGHOUT THE WARRANTY PERIOD.
17. CONTRACTOR SHALL WARRANTY THE IRRIGATION EQUIPMENT FOR A MINIMUM OF 1 YEAR AFTER FINAL ACCEPTANCE.
18. CONTRACTOR SHALL REPAIR ANY EXISTING LANDSCAPE OR IRRIGATION DAMAGE DUE TO CONSTRUCTION OPERATIONS WITHIN THE LIMIT OF WORK AT NO ADDITIONAL COST TO THE OWNER.

 Torrans of Castle Rock Water Irrigation System Design Worksheet									
Project Name: Castle Rock Little Sunshine Playhouse			Date: _____		August 6, 2024				
Project Location: _____									
Prepared by: Lindsay Rappa			Current TOCR Registration # 22-0853						
Tap Size			0.75" 90 psi		Source of Pressure		Castle Rock Fire Flow Test		
Static Water Pressure: _____									
Hydraulic Grade At Zone: 6350					Company		Valerian LLC		
			Pipe Size (")		Friction Loss (from chart)		Flow-GPM		Loss/Gain
Service Line (to meter):			10 LF		0.75		10		0.16
Water Meter:					0.75		5.00		10
Service Line (meter to backflow):			5 LF		0.75		1.55 /100 FT		10
Backflow:					0.75		11.3		10
Master Valve:			1				0.71		10
Pressure Required at Head:									40.00
Lateral Allowance:									5.00
Control Valve Allowance:									5.90
Mainline Allowances:									
Length of Mainline			610 LF CL200BE 0 LF CL200BE		Size 1.250" @ @		Gals. 10		GPM 0.68 /100 FT GPM-Looped /100 FT
Elevation:			Tap elevation 6,143				High/Low: 6,154		4.76
Green shading indicates <u>required</u> information you must provide									
Total System requirements (PSI)									77.05
Available System Pressure (PSI)									90.00
Torrans of Castle Rock provides a minimum of 43 psi									
Total Irrigated area for tap # 1 is 7,570 sq. ft.									

CASTLE ROCK IRRIGATION CONSTRUCTION NOTES:

1. INSTALLING CONTRACTOR SHALL CONTACT THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT AT 720.733.6017 TO SCHEDULE A PRECONSTRUCTION MEETING BEFORE BEGINNING THE INSTALLATION OF THE IRRIGATION SYSTEM.
2. IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
3. BACKFLOW IS TO BE TESTED BY A CERTIFIED BACKFLOW TECHNICIAN APPROVED BY THE UTILITY DEPARTMENT WITHIN 10 DAYS OF THE IRRIGATION METER INSTALLATION AND ANNUALLY THEREAFTER.
4. IRRIGATION EXEMPTION MUST BE OBTAINED FROM THE CASTLE ROCK WATER IF IRRIGATING THE NATIVE SEED OR THE SOD ON A DAILY BASIS FOR ESTABLISHMENT DURING THE MONTHS OF JUNE AND AUGUST. IRRIGATION EXEMPTIONS WILL NOT BE ISSUED DURING THE MONTH OF JULY.
5. IRRIGATION SYSTEMS MUST BE DESIGNED TO OPERATE WITHIN THE TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN. CURRENT COMMERCIAL HOURS OF OPERATION ARE A THREE FIXED DAYS A WEEK FROM 10 PM TO 6 AM.
6. OVERHEAD IRRIGATION IN AREAS LESS THAN 10' IN WIDTH OR INSTALLED ON SLOPES STEEPER THAN 3:1 WILL NOT BE APPROVED BY TOWN OF CASTLE ROCK INSPECTOR.
7. ALL IRRIGATION INSTALLATIONS MUST MEET TOWN OF CASTLE ROCK DETAILS
8. PLEASE NOTE THAT THE 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.
9. ALL SPRINKLER HEADS TO BE ADJUSTED TO MINIMIZE/ELIMINATE OVER SPRAY ON TO HARD SURFACES OR UNINTENDED AREAS. PER TOWN OF CASTLE ROCK WATER USE MANAGEMENT PLAN WATER WASTE IS NOT ALLOWED
10. IRRIGATION SYSTEMS ARE TO BE WINTERIZED ANNUALLY IN THE FALL.
11. THE TEMPORARY IRRIGATION SYSTEM MUST BE INSTALLED ABOVE GROUND AND UPON EXPIRATION OF THE TEMPORARY ESTABLISHMENT PERIOD, ALL COMPONENTS OF THE TEMPORARY IRRIGATION SYSTEM MUST BE REMOVED. ITEMS TO BE REMOVED INCLUDES: CONTROL VALVES, MANUAL BALL VALVES, ALL FITTINGS USED TO CONNECT VALVES TO MAINLINE, VALVE BOXES, ABOVE GROUND LATERAL PIPING, SPRINKLER HEADS, AND ALL ASSOCIATED STAKING MATERIALS. BELOW GROUND IRRIGATION MAINLINE AND WIRING CAN BE ABANDONED IN PLACE.

CASTLE ROCK 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 TUNED/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.

POINT OF CONNECTION (P.O.C.) NOTES:

POINT OF CONNECTION #1 - CONNECT TO 3/4" SERVICE LINE DOWNSTREAM OF 3/4" WATER METER (RE: CIVIL PLANS) IN APPROXIMATE LOCATION INDICATED ON PLANS WITH 3/4" TYPE 'K' COPPER STUB. EXTEND 3/4" TYPE 'K' COPPER PIPE TO 3/4" BACKFLOW.

AVAILABLE WATER PRESSURE: THE AVAILABLE PSI AT THE POINT OF CONNECTION 'A' IS 90 PSI.

DESIGN PRESSURE: 90 PSI

DESIGN FLOW : 10.1 GPM MAX, (SINGLE VALVE OPERATING AT ONE TIME)
MAX CAPACITY AND PEAK FLOW OF THE IRRIGATION SYSTEM BASED ON THE FLOW FROM THE PROPOSED IRRIGATION SYSTEM.

1. THE IRRIGATION SYSTEM IS DESIGNED WITHIN A WATER WINDOW AND SIZED TO ACCOMMODATE MULTIPLE VALVE STARTS NOT TO EXCEED DESIGN FLOW LISTED. CONTRACTOR TO PROGRAM CONTROLLER ACCORDINGLY AND COORDINATE SCHEDULING WITH OWNER.
2. CONTRACTOR TO COORDINATE CONTROLLER LOCATIONS WITH OWNERS REPRESENTATIVE PRIOR TO INSTALLATION. INSTALL CONTROLLERS IN LANDSCAPE BED OR INSIDE OF MECHANICAL ROOM. COORDINATE WITH LANDSCAPE INSTALLATION TO SCREEN CONTROLLERS FROM ADJACENT HOMES AND RIGHT-OF-WAYS AND TRIM PROPOSED IRRIGATION HEADS TO ELIMINATE OVERSPRAY ONTO THE IRRIGATION CONTROLLER, BACKFLOW ENCLOSURE.
3. ALL ENCLOSURES SHALL BE SECURELY MOUNTED AND LOCKABLE TO PREVENT VANDALISM, DAMAGE AND/OR THEFT. TURN KEYS OVER TO OWNER AT COMPLETION OF WORK AS PER SPECIFICATIONS.
4. ALL IRRIGATION EQUIPMENT SHALL BE INSTALLED PER THE TOWN OF CASTLE ROCK STANDARDS AND SPECIFICATIONS.
5. RAIN SENSOR, MOUNT WIRELESS RAIN SENSOR WITHIN OPTIMAL RANGE FROM CONTROLLER, PER MANUFACTURERS RECOMMENDATIONS. INSTALL SENSOR ON LIGHT/UTILITY POLE A MINIMUM OF 10' ABOVE GRADE TO MINIMIZE DAMAGE/VANDALISM, CLEARLY NOTE LOCATION AND PROVIDE INFORMATION TO OWNERS REPRESENTATIVE.
6. EXISTING IRRIGATION ZONES HAVE BEEN CREATED TO PROPERLY HYDROZONE THE SITE BASED ON SITE CONDITIONS AND MICROCLIMATES AT THE TIME OF INSTALLATION. IF FIELD ADJUSTMENTS ARE TO BE MADE IRRIGATION EQUIPMENT IRRIGATING A NORTH AND EAST EXPOSURE SHOULD NOT BE INSTALLED ON THE SAME ZONE AS IRRIGATION EQUIPMENT ON THE SOUTH AND WEST EXPOSURES TO ALLOW FOR MICROCLIMATE ADJUSTMENTS IN THE CONTROLLER PROGRAMMING.

IRRIGATION CHART

Registered Professional		Lindsay Rappa		Registration #		22-0853		Date		7/24/2025									
Company Name				Valerian LLC				Address				165 South Union Boulevard, Suite 366, Lakewood, CO 80228							
Phone				303-347-1200				Email				lindsay@valerianllc.com							
				Clock Make				RainBird				Model				ESP-4ME3			
☒ Monday, Wednesday, Friday (west side of I-25)																			
Zone	Hydrozone	Plant Type	Head Type	Nozzle	App. Rate	GPM	Inches/Month	Run Time	Run Time	Water Usage									
		(all natives, shrubs, perennials, trees, annuals, etc.)	(jetter, sprayer, bubbler, drip, etc., etc.)	(nozzle/emitter/spacer)	(inches/hour)	(per zone)	(peak not to exceed 6" per month or 1.5" per week)	(minutes per month)	(minutes per day)	(gallons per month)									
1	L	Shrubs/Trees	Drip	0.03	0.5	2	2.76	331	33	583									
2	L	Shrubs/Trees	Drip	0.03	0.5	4	2.76	331	33	1,265									
3	L	Trees	Drip	0.06	0.5	3	2.76	331	33	994									
4	L	Native	Rotary Spray	RVAN 14/18	0.62	10	2.76	267	27	2,685									
5	L	Native	Rotary Spray	RVAN 24	0.61	8	2.76	271	27	2,223									
6	L	Native	Rotary Spray	RVAN 24	0.61	7	2.76	271	27	1,944									
7	L	Native	Rotary Spray	RVAN 18/24	0.62	10	2.76	267	27	2,634									
8	L	Native	Rotary Spray	RVAN 24	0.61	9	2.76	271	27	2,545									
9	L	Native	Rotary Spray	RVAN 24	0.61	8	2.76	271	27	2,107									
10	L	Native	Rotary Spray	RVAN 24	0.61	8	2.76	271	27	2,286									
11	L	Native	Rotary Spray	RVAN 24	0.61	9	2.76	271	27	2,327									
12	N/A	Overhead Mist	Rotary Spray	Orbitl 54052	0.5	3	2.76	331	33	1,155									
13	N/A	Overhead Mist	Rotary Spray	Orbitl 54052	0.5	3	2.76	331	33	1,136									
14	L	Native	Rotary Spray	RVAN 14	0.62	7	2.76	267	27	1,870									
15	L	Native	Rotary Spray	RVAN 14	0.62	9	2.76	267	27	2,441									
16	L	Native	Rotary Spray	RVAN 14	0.62	9	2.76	267	27	2,527									
17								0	0	0									
18								0	0	0									
19								0	0	0									
20								0	0	0									
21								0	0	0									
22								0	0	0									
23								0	0	0									
24								0	0	0									
25								0	0	0									
26								0	0	0									
27								0	0	0									
28								0	0	0									
29								0	0	0									
30								0	0	0									
Total								4,820	482	30,725									
								Min/month	Min/cycle	Gallons/month									

NOTE:

1. ZONES 4-11 AND 14-16 ARE TEMPORARY (AS MARKED BY A 'T' ON THE VALVE CALLOUT ON THE PLANS). THESE ZONES ARE INTENDED ONLY FOR ESTABLISHMENT OF NATIVE SEED.
2. ZONES 12 & 13 ARE NOT USED TO IRRIGATE PLANT MATERIAL. SEE IRRIGATION PLANS.

CLWUR (Composite landscape water use rating) Chart

 **TOWN OF
CASTLE ROCK**
COLORADO

Project Name: Little Sunshine Playhouse

Site Development Plan (SDP) Number: 23-0038

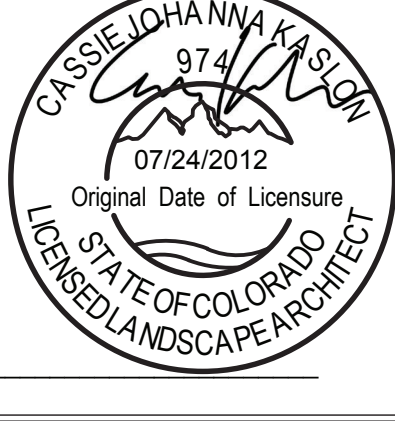
Irrigation Spray or Drip?	Plant Group by Hydrozone	Appl. Rate (inches/month)	Zone (VL,L,Mod,HW)	% of Total Area	IA Irrigated area (in sq. ft. for each zone)	LWUR Landscape Water Use Rating	TA Total Area of all Irrigated Landscape Zones	CLWUR (LWUR x IA) / TA
	LOW HYDROZONE	2	L	100	7,570	2	7,570	2
D RIP	DECIDUOUS TREES	2	L		2			
D RIP	DECIDUOUS SHRUBS	2	L		2			
D RIP	EVERGREEN SHRUBS	2	L		2			
D RIP	ORNAMENTAL GRASS	2	L			2		
						Total of the CLWUR		2

Reference Chapter 13.20 of the Castle Rock Municipal Code

NOTE: ZONES 4-14 ARE TEMPORARY (AS MARKED BY A 'T' ON THE VALVE CALLOUT ON THE PLANS). THESE ZONES ARE INTENDED ONLY FOR ESTABLISHMENT OF NATIVE SEED.

A rectangular stamp with a black border. At the top, it says "TOWN APPROVAL BLOCK" in a large, bold, sans-serif font. Below this, the text "TOWN OF CASTLE ROCK APPROVAL" is centered. Underneath, "PLANS ARE HEREBY APPROVED FOR ONE YEAR FROM" is followed by a blank space for a date. Below the blank space is "DATE OF DEVELOPMENT SERVICES APPROVAL". In the center is the Town of Castle Rock logo, which features a stylized mountain and the text "TOWN OF CASTLE ROCK" and "EST. 1991". To the right of the logo, the word "APPROVED" is written in large, bold, green, sans-serif capital letters. Below "APPROVED" is the signature "By: jkirpatrick" and the date "on: 03/28/2025". At the bottom, it says "APPROVED: FCD25-0001 Plans.pdf" and "Record Document on File". At the very bottom, there are two fields: "DEVELOPMENT SERVICES" and "DATE", both with blank lines for input. Below these fields is the text "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.



02/24/2025

DATE: _____

LOT 6G-3A-3, THE MEADOWS FILING 17. AREA 4, AMENDMENT 17
TOWN OF CASTLE ROCK, PROJECT NO. CD23-0038



CONSTRUCTION DOCUMENTS		IRRIGATION NOTES & CHARTS	
LITTLE SUNSHINE'S PLAYHOUSE & PRESCHOOL			
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE			
PROJECT NO:		23-039	
DESIGNED BY:		MF	
DRAWN BY:		MF	
DATE:		04/22/2024	
			
			
No.	REVISION	BY	DATE
1	SUBMITTAL #2	MF	06.28.24
2	SUBMITTAL #3	MF	08.07.24
3	SUBMITTAL #4	MF	10.17.24
4	SUBMITTAL #5	MF	11.07.24
5	FC025--0001 PRIVATE WATERMAIN RECONFIGURATION	LR	02.24.25

10" ROUND VALVE BOX BRAND THE LETTERS "OC" INTO LID

SET TOP OF BOX 1/2" ABOVE FINISH GRADE FOR SEED, 1" ABOVE FINISH GRADE FOR SOD. MULCH AREAS SET TOP OF BOX 1/2" ABOVE FINISH GRADE AND ADD 3" VALVE BOX EXTENSION TO ALLOW TOP OF BOX TO BE AT TOP OF MULCH MATERIAL.

FINISH GRADE

3/4" CRUSHED GRAVEL SUMP - FILL BOX TO WITHIN 2" OF BOTTOM OF QCV LID

QUICK COUPLING VALVE

1" BRASS NIPPLE LENGTH AS REQUIRED

1" SCH-80 PVC FIPxP 90° ELL

1-1x3" SCH-80 PVC NIPPLE

1" SCH-80 PVC FIPxP 90° ELL

1"x12" SCH-80 PVC NIPPLE

1-1"x3" SCH-80 PVC NIPPLE

1" SCH-80 PVC FIPxP 90° ELL

PRESSURE MAINLINE SERVICE TEE - SOLVENT WELD OR GASKETED FITTING REFER TO SPECIFICATIONS

APPLY TEFLON TAPE TO ALL MALE PVC THREADED FITTINGS AND NIPPLES

QUICK COUPLING VALVE

DETAIL PLAN NO. IR-6

Sheet 1 of 1

RECTANGULAR VALVE BOX BRAND LID WITH CONTROLLER & STATION # CENTER BOX OVER ASSEMBLY.

SCH. 40 PVC REDUCING MALE ADAPTER

SCH. 80 PVC NIPPLE x CLOSE

PVC BALL VALVE - NPTxMPT

SET TOP OF BOX 2" ABOVE FINISH GRADE FOR SEED, 1" ABOVE FINISH GRADE FOR SOD

PVC LATERAL - 45° ELL TO SPECIFIED DEPTH

PROVIDE 12" CONTINUOUS COILS OF ALL "MAINTENANCE" SPARE CONTROL/COMMON WIRING WITHIN VALVE BOX

PVC SCH. 40 STREET 90° ELL MPTxMPT

WEED BARRIER FABRIC INSTALLED OVER GRAVEL SUMP - EXTEND 4" UP INTERIOR SIDES OF VALVE BOX

3" CRUSHED GRAVEL SUMP - FILL BOX TO BOTTOM OF VALVE BODY

SERVICE TEE - SOLVENT WELD OR GASKETED FITTING

ELECTRIC CONTROL VALVE

NOTES:

- DIAMETERS OF BALL VALVES, PVC FITTINGS AND NIPPLES SHALL EQUAL ELECTRIC CONTROL VALVE DIAMETER.
- VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT SIDEWALKS AND HARD SURFACES WHERE APPLICABLE.
- APPLY TEFLON TAPE TO ALL MALE THREADED FITTINGS AND THREADED NIPPLES
- MAINLINE DEPTH 24" (TYPICAL)

ELECTRIC CONTROL VALVE

DETAIL PLAN NO. IR-16

Sheet 1 of 1

1 RAIN SENSOR

2 FEMALE ADAPTER (SLIP X FIP)

3 GALVANIZED 90° EL (1 OF 2)

4 3/4-INCH GALVANIZED PIPE

5 FINISHED GRADE

6 CONCRETE BASE

7 WIRE TO IRRIGATION CONTROLLER

RAIN / WEATHER SENSOR POLE MOUNT

DETAIL PLAN NO. IR-29

Sheet 1 of 1

36" COIL #14 AWG UFPL WRING (SPARE MASTER VALVE WIRE) - BROWN

#14 AWG UFPL WIRES (MASTER VALVE SOLENOID - ONE BLUE, ONE ORANGE - EXTEND TO CONTROLLER - (RE: PLAN)

FINISH GRADE

RECTANGULAR VALVE BOX WITH EXTENSIONS AS REQUIRED - BRAND "M" INTO VALVE BOX LID. REFER TO TECHNICAL SPECIFICATIONS.

ELECTRIC MASTER CONTROL VALVE REFER TO EQUIPMENT SCHEDULE FOR MANUFACTURER, MODEL # AND DIAMETER.

SUPxMPT SCH. 40 PVC ADAPTER (2)

PRESSURE MAINLINE

3/4" CRUSHED GRAVEL SUMP - ADD TO BOTTOM OF VALVE AND PIPING

NOTES:

- CENTER BOX OVER VALVE ASSEMBLY
- APPLY TEFLON TAPE TO ALL MPT THREADS

MASTER VALVE

DETAIL PLAN NO. IR-34

SHEET 1 OF 1

SET BOTTOM OF CAP AT FINISH GRADE FOR SEED, 1" ABOVE FINISH GRADE FOR SOD.

HARD EDGE (I.e. SIDEWALK, CURBS, ETC.)

12" HI-POP SPRAY HEAD W/ PRESSURE REGULATING STEM AND INTERNAL CHECK VALVE

DO NOT USE SIDE INLET

MxP SCH. 40 PVC 90° ELL (2)

6" SCH. 80 PVC NIPPLE

MxP SCH. 40 PVC 90° ELL

PVC LATERAL PIPING W/ SCH. 40 PVC SUPxPPT FITTING

NOTE: SET HEAD PERPENDICULAR TO FINISH GRADE

SWING JOINT ASSEMBLY SHALL BE ATTACHED TO BOTTOM SPRAY HEAD INLET ONLY

APPLY TEFLON TAPE TO ALL MALE PVC THREADED FITTINGS AND NIPPLES

HI-POP (12") SPRAY HEAD

DETAIL PLAN NO. IR-2

Sheet 1 of 1

NOTES:

- PAD PENETRATIONS FOR BACKFLOW PREVENTER INSERTS TO BE 1" LARGER THAN RISER DIAMETER
- TOP SURFACE OF CONCRETE PAD SHALL BE 1" ABOVE FINISH GRADE.

BPOI: GUARDSHAK GS SERIES ENCLOSURE (OR EQUAL)

CONCRETE PAD

INSTALL ENCLOSURE AND ANCHORS AS PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE OWNER WITH KEYPAD LOCK FOR ENCLOSURE

PROVIDE ENCLOSURE IN FEDERAL GREEN COLOR

BACKFLOW ENCLOSURE

DETAIL PLAN NO. IR-1

Sheet 1 of 1

JUNBO RECTANGULAR VALVE BOX BRAND LID WITH CONTROLLER & STATION #

ELECTRIC CONTROL VALVE

SET TOP OF BOX 2" ABOVE FINISH GRADE FOR SEED, 1" ABOVE FINISH GRADE FOR SOD

SCH. 80 PVC NIPPLE x CLOSE

PVC BALL VALVE

PVC SCH. 40 STREET 90° ELL MPTxMPT

SCH. 80 PVC NIPPLE - LENGTH AS REQUIRED

SERVICE TEE - SOLVENT WELD OR GASKETED FITTING

PROVIDE 12" CONTINUOUS COILS OF ALL "MAINTENANCE" SPARE CONTROL/COMMON WIRING WITHIN VALVE BOX

3" CRUSHED GRAVEL SUMP - FILL BOX TO BOTTOM OF VALVE BODY

NOTES:

- DIAMETERS OF BALL VALVES, FITTINGS, NIPPLES, FILTERS, AND PRESSURE REGULATORS SHALL EQUAL ELECTRIC CONTROL VALVE DIAMETER.
- * WYE FILTER MAY BE USED IN PLACE OF DISC FILTER FOR TRADITIONAL POINT/SOURCE DRIP INSTALLATIONS.
- VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT SIDEWALKS AND HARD SURFACES WHERE APPLICABLE.

DRIP / SUB-SURFACE VALVE ASSEMBLY

DETAIL PLAN NO. IR-18

Sheet 1 of 1

FINISH GRADE

SPRAY HEAD LATERAL PIPING

ROTOR LATERAL PIPING

BACKFILL MATERIAL (TYPICAL)

PVC MAINLINE

CONTROL WIRES

MAIN LINE & LATERAL TRENCH

DETAIL PLAN NO. IR-21

Sheet 1 of 1

SET TOP OF SPRAY HEAD / OPERATIONAL INDICATOR 4" ABOVE FINISH GRADE TO ALLOW FOR MULCH DEPTH

MULCH MATERIAL

12" POP-UP SPRAY HEAD WITH CLOSED NOZZLE AND SWING PIPE (ZONE OPERATIONAL INDICATOR). HUNTER ECO-INDICATOR CAN BE SUBSTITUTED AS EQUAL FOR THE 12" POP-UP SPRAY HEAD.

10" ROUND VALVE BOX SET TOP OF BOX 2" ABOVE FINISH GRADE, ADD 3" EXTENSION TO ALLOW FOR MULCH DEPTH. BRAND "DS" INTO VALVE BOX LID.

COIL SWING PIPE - SUFFICIENT LENGTH TO EXTEND HOSE OUTSIDE OF VALVE BOX.

DO NOT USE SIDE INLET

1" PVC EXHAUST HEADER PIPING

1"x1"x 3" SCH. 40 5x5x4 TEE W/ 1"x 3" 5x4 REDUCER BUSHING

3" INS x MALE ADAPTER W/ S.S. CLAMP

3" PVC BALL VALVE WITH 3" PVC INSMPT ADAPTER AND S.S. CLAMP

CRUSHED GRAVEL SUMP (1 CU. FT.)

DRIPPERLINE FLUSH-OUT & OPERATIONAL INDICATOR

DETAIL PLAN NO. IR-32

Sheet 1 of 1

JUNBO RECTANGULAR VALVE BOX BRAND LID WITH CONTROLLER & STATION #

ELECTRIC CONTROL VALVE

SCH. 80 PVC NIPPLE x CLOSE

PVC BALL VALVE

MULCH MATERIAL

SET TOP OF BOX 1/2" ABOVE FINISH GRADE AND ADD 3" VALVE BOX EXTENSION TO ALLOW TOP OF BOX TO BE AT TOP OF MULCH MATERIAL.

3.5"

PVC SCH. 40 STREET 90° ELL MPTxMPT

SCH. 80 PVC NIPPLE - LENGTH AS REQUIRED

SERVICE TEE - SOLVENT WELD OR GASKETED FITTING

PROVIDE 12" CONTINUOUS COILS OF ALL "MAINTENANCE" SPARE CONTROL/COMMON WIRING WITHIN VALVE BOX

3" CRUSHED GRAVEL SUMP - FILL BOX TO BOTTOM OF VALVE BODY

NOTES:

- DIAMETERS OF BALL VALVES, FITTINGS, NIPPLES, FILTERS, AND PRESSURE REGULATORS SHALL EQUAL ELECTRIC CONTROL VALVE DIAMETER.
- * WYE FILTER MAY BE USED IN PLACE OF DISC FILTER FOR TRADITIONAL POINT/SOURCE DRIP INSTALLATIONS.
- VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT SIDEWALKS AND HARD SURFACES WHERE APPLICABLE.

DRIP / SUB-SURFACE VALVE ASSEMBLY IN MULCH BEDS

DETAIL PLAN NO. IR-19

Sheet 1 of 1

Interior or Exterior

1 CONTROLLER: WALL MOUNT

2 2-INCH PVC SCH. 40 CONDUIT AND FITTINGS

3 WIRES TO CONTROL VALVES

4 JUNCTION BOX

5 1-INCH PVC SCH. 40 CONDUIT AND FITTINGS TO DEDICATED POWER SUPPLY

WEATHER-BASED CONTROLLER: WALL MOUNT

DETAIL PLAN NO. IR-26

Sheet 1 of 1

EASY FIT COMPRESSION ELBOW RAINBIRD MDCFEL (QTY AS REQUIRED)

ROOTBALL OF TREE (SEE PLANTING PLANS)

TIE DOWN STAKE RAIN BIRD TDS-050 W/BEND (QTY. AS REQUIRED)

TREE TRUNK

LANDSCAPE DRIPLINE TUBING: RAINBIRD MODEL XFD-060-12

EASY FIT COMPRESSION TEE RAINBIRD MDCFTTEE (QTY AS REQUIRED)

EASY FIT REMOVABLE FLUSH CAP: RAINBIRD MDCFCAP (QTY AS REQUIRED)

LATERAL PIPING AS PER IRRIGATION PLAN.

NOTES:

- CONTRACTOR TO INSTALL ALL DRIP TUBING IN TURF AND NATIVE AREAS 2-3" BELOW GRADE.
- DIAMETER OF DRIP RINGS ARE DEPENDENT ON TREE CANOPY SIZE.

TREE DRIP TUBING LAYOUT

N.T.S.

328413.56-101

NOTES:

- ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT
- MECHANICALLY TAMP TO DENSITY OF SURROUNDING SOIL

4" MIN CLEARANCE BETWEEN SLEEVES

PAVING TRENCH

SLEEVES

PAVING, TYP

PIPE CAP, TO MATCH LOCATER PIPE MATERIAL TYP

LOCATER PIPE, REMOVE ONCE SLEEVED PIPE IS INSTALLED

FINISHED GRADE

NOTCH CURB/WALK WITH 'V' AT ALL SLEEVE LOCATIONS

IRRIGATION SLEEVE, SIZE AND MATERIAL AS NOTED ON PLAN

SLEEVING

3/8" = 1'-0"

328409.76-82

LOT 6G-3A-3, THE MEADOWS FILING 17, AREA 4, AMENDMENT 17
TOWN OF CASTLE ROCK, PROJECT NO. CD23-0038

TOWN APPROVAL BLOCK

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

APPROVED BY:  **APPROVED** on 12/04/2024

APPROVED-CD24-0008 Plans.pdf
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DEVELOPMENT SERVICES DATE

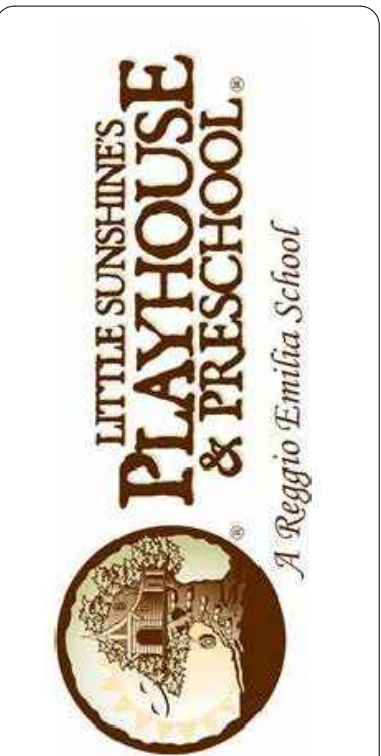
PROFESSIONAL ENGINEER CERTIFICATION

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.



DATE: NOVEMBER 8, 2024

REVISION	DATE
1	06.28.24
2	08.07.24
3	10.17.24
4	11.07.24



CONSTRUCTION DOCUMENTS

LITTLE SUNSHINE'S PLAYHOUSE & PRESCHOOL

PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

IRRIGATION DETAILS

PROJECT NO: 23-039

DESIGNED BY: MF

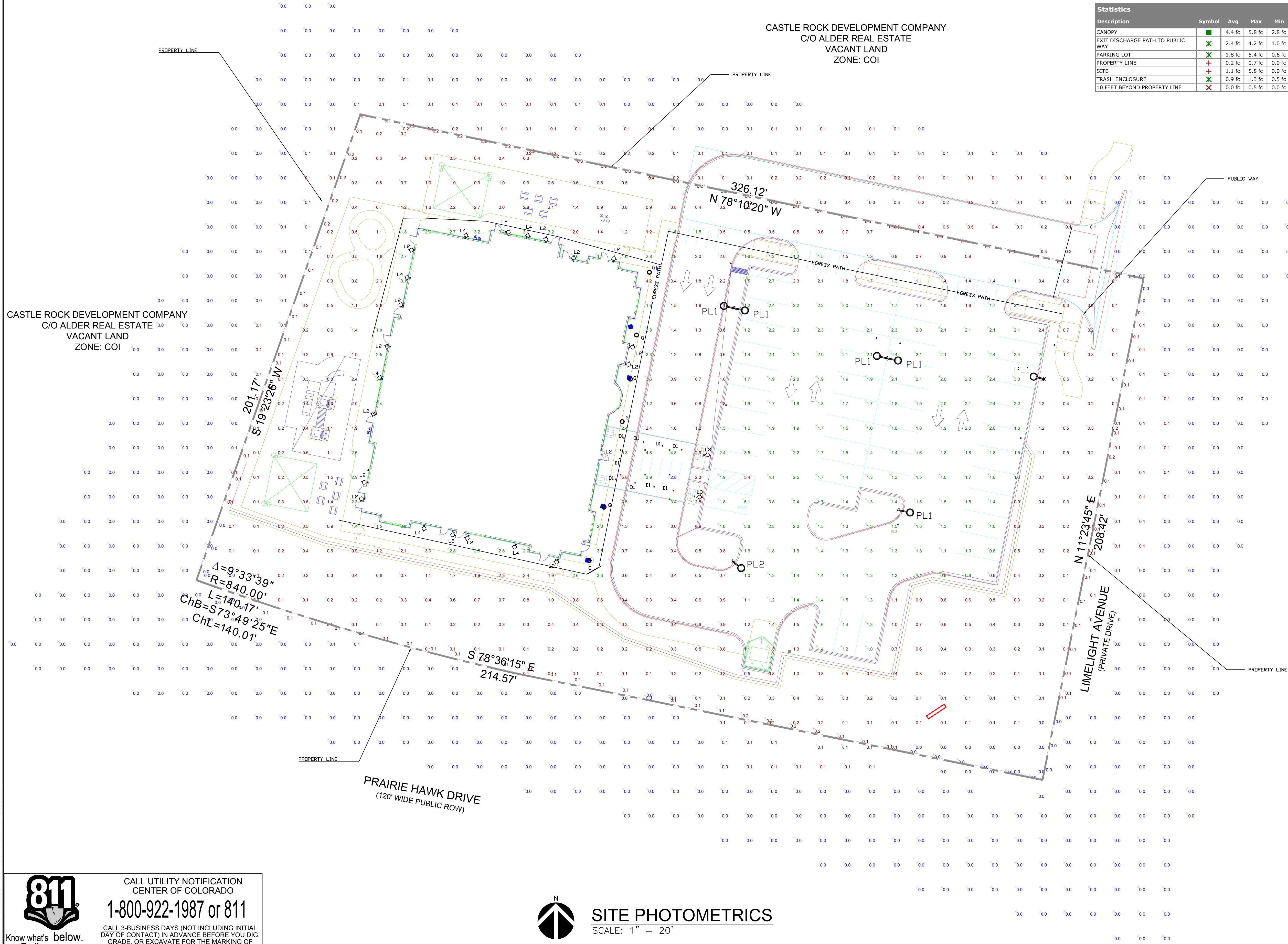
DRAWN BY: MF

DATE: 04/22/2024

IR1.2

Site Luminary Summary Table

Luminaire											Lamps							
ID/ Symbol	Manufacturer	Model	Catalog Number	Description	Full Cut Off (Y/N)	Distribution	Voltage	Dimming	Quantity	Mounting	Mounting Height	Quantity	Type	Watts	Lumens	Color Temp/CRI	Light loss factor	Fixture Finish
D1	 JUNO LIGHTING	IC22	IC22-27C-WH	6" IC OPEN ROUND DOWNLIGHT, WET LABEL.	Y	TYPE V	120V	N	9	UNDER CANOPY	14'	1	INCANDESCENT	50	600	3000K	1	CLEAR
G	 ALCON LIGHTING	9092	9092-40K-BR	BOLLARD LIGHT. LED, 25W	Y	TYPE V	120-277V	N	7	BOLLARD	6"	1	LED	31	1325	4000K	1	BLACK
L2	 MINKA-LAVERY	ARTISAN LANE	72251-66	WALL LIGHT. (1) GU10 HALOGEN BULB, 35W.	Y	TYPE V	120V	Y	15	WALL	8'	1	INCANDESCENT	35	558	3000K	1	CLEAR SEEDED
L3	 MINKA-LAVERY	ARTISAN LANE	72253-66	WALL LIGHT. (2) GU10 HALOGEN BULBS, 35W.	Y	TYPE V	120V	Y	2	WALL	8'	2	INCANDESCENT	70	1116	3000K	1	CLEAR SEEDED
L4	 WILLIAMS	VWMH Horizontal	VWMH-L20-740-T3-BLK-CGL-UNV	WALL LIGHT. (4) LUXEON M 4000K LEDs, 27W.	Y	TYPE III	120-277V	Y	12	WALL	8'	4	LED	27	2868	4000K	1	BLACK
PL1	 MCGRAW-EDISON	GLEON	GALN-SA1A-740-U-T3	GALLEON POLE LIGHT WITH SINGLE HEAD.	Y	TYPE III	120-277V	Y	6	POLE	24'	16	LED	34	4589	4000K	1	BLACK
PL2	 MCGRAW-EDISON	GLEON	GALN-SA1A-740-U-SLL	GALLEON POLE LIGHT WITH SINGLE HEAD.	Y	TYPE III	120-277V	Y	1	POLE	24'	16	LED	33	3989	4000K	1	BLACK



Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
CANOPY	■	4.4 fc	5.8 fc	2.8 fc	2.1:1	1.6:1
EXIT DISCHARGE PATH TO PUBLIC WAY	✕	2.4 fc	4.2 fc	1.0 fc	4.2:1	2.4:1
PARKING LOT	✕	1.8 fc	5.4 fc	0.6 fc	9.0:1	3.0:1
PROPERTY LINE	+	0.2 fc	0.7 fc	0.0 fc	N/A	N/A
SITE	+	1.1 fc	5.8 fc	0.0 fc	N/A	N/A
TRASH ENCLOSURE	✕	0.9 fc	1.3 fc	0.5 fc	2.6:1	1.8:1
10 FEET BEYOND PROPERTY LINE	✕	0.0 fc	0.5 fc	0.0 fc	N/A	N/A

LIGHTING STANDARD NOTES:

1. LIGHT LOSS FACTOR IS 1 (AS SHOWN IN SITE LUMINARY SUMMARY TABLE).
2. EXTERIOR LIGHTING (TYPES D1, G, L2, L3, L4, PL1, AND PL2) SHALL BE CONTROLLED BY COMBINATION PHOTOCELL/TIMECLOCK.
A. ALL EXTERIOR LIGHTS SHALL COME ON AT DUSK AND TURN OFF AT TIME DETERMINED BY OWNER, BUT NO LATER THAN MIDNIGHT.
B. ALL EXTERIOR LIGHTS SHALL TURN ON ONE HOUR BEFORE BUSINESS OPENING IF STILL DARK AND TURN OFF AT DUSK.
C. POST CURFEW CONTROL METHOD SHALL BE A LOCAL SWITCH ADJACENT TO THE TIME SWITCH.
3. THE OBJECTIVE OF EACH AREA OF THE SITE FOR LIGHTING IS AS FOLLOWS:
A. CANOPY AREA IS INTENDED TO BE USED FOR DRIVE-UP DROP-OFF AND PICK-UP, AND UNDER CANOPY DOWNLIGHTS PROVIDE PROPER ILLUMINATION FOR THESE ACTIVITIES TO OCCUR SAFELY IN LOW-LIGHT CONDITIONS.
B. EXIT DISCHARGE PATH TO PUBLIC WAY IS INTENDED TO BE USED FOR THE EGRESS OF INDIVIDUALS DURING NORMAL AND EMERGENCY SITUATIONS. POLE AND WALL LIGHTS PROVIDE NOT LESS THAN 1 NOR MORE THAN 5 FC WITH A MAX TO MIN LESS THAN 4:1 FOR SAFE NAVIGATION THROUGH THIS AREA IN LOW AMBIENT LIGHT CONDITIONS.
C. PARKING LOT AREA IS INTENDED TO BE USED FOR THE PARKING OF VEHICLES, AND POLE LIGHTS PROVIDE AN APPROPRIATE LEVEL OF ILLUMINATION FOR SAFE NAVIGATION THROUGH THIS AREA IN LOW-LIGHT CONDITIONS.
D. PROPERTY LINE AREA IS INTENDED TO SHOW THE DIVISION BETWEEN SITE PROPERTY AND NEIGHBORING PROPERTIES, AND THE LUMEN OUTPUT AND DIRECTION OF LUMINARIES PREVENTS AN UNNECESSARY AMOUNT OF LIGHT FROM SHINING ACROSS THE PROPERTY LINE.
E. SITE AREA IS INTENDED TO REPRESENT THE SITE PROPERTY AND ALL RELATED STRUCTURES WITHIN ITS BOUNDS, AND THE SHOWN LIGHTING DESIGN PROVIDES PROPER ILLUMINATION DURING LOW-LIGHT CONDITIONS IN AREAS WHERE INDIVIDUALS CAN BE EXPECTED TO BE TRAVERSING DURING NORMAL OPERATING CONDITIONS ON THE SITE.
F. TRASH ENCLOSURE AREA IS USED FOR THE TEMPORARY STORAGE OF DISPOSABLES, AND THE SITE LIGHTING PROVIDES ENOUGH ILLUMINATION FOR INDIVIDUALS AND TRASH VEHICLES TO SAFELY NAVIGATE THE AREA DURING LOW-LIGHT CONDITIONS.
G. 10 FEET BEYOND PROPERTY LINE AREA IS INTENDED TO REPRESENT THE BEGINNING OF NEIGHBORING PROPERTIES, AND THE LUMEN OUTPUT AND DIRECTION OF LUMINARIES PREVENTS AN UNNECESSARY AMOUNT OF LIGHT FROM POLLUTING THE NEIGHBORING PROPERTIES FROM THE SITE PROPERTY.
4. THE MITIGATION OF LIGHTING EFFECTS ON NEIGHBORING PROPERTIES IS ACCOMPLISHED THROUGH THE USE OF FULL CUT-OFF LUMINARIES WITH LENSED OPTICS AND BACK LIGHT CONTROL ON APPROPRIATELY LOCATE FIXTURES ON PROPER SCALE POLES.
5. EXTERIOR LIGHTING FOR EGRESS TRAVEL TO THE PUBLIC WAY SHALL COMPLY WITH THE CURRENTLY ADOPTED BUILDING CODE.
6. FORWARD THROW LUMINARIES: THE FOLLOWING LIGHTING TYPES ARE PROHIBITED: FORWARD THROW LUMINARIES (TYPE IV DISTRIBUTION), POLE-MOUNTED LIGHTS AIMED AT A BUILDING'S FACADE, AND UNSHIELDED WALL PACKS ARE PROHIBITED.

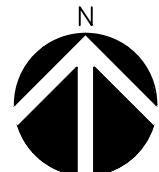
LEGEND	
—	PROPERTY LINE
○	POLE LIGHT FIXTURE
✕	WALL MOUNTED LIGHT FIXTURE
○	RECESSED CEILING LIGHT FIXTURE
○	BOLLARD FIXTURE



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Know what's below.
Call before you dig.



SITE PHOTOMETRICS
SCALE: 1" = 20'



DEVELOPMENT SERVICES
APPROVED
By jkirpatrick
on 12/04/2024
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CONSTRUCTION DOCUMENTS
**LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL**
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

PROJECT NO:
DESIGNED BY: SSC
DRAWN BY: SSC
DATE: 11/07/2024

SHEET 19 OF 21

DATE
BY
REVISION
No.



11/08/24



SSC Engineering, Inc.
1830 35th Street
Chesterfield, MO 63005
www.sscengineering.com



1 of 2

Project	LITTLE SUNSHINE PLAYHOUSE	Catalog #	GLEON-SAIA-740-U-T3	Type	PL1
Prepared by		Notes		Date	

McGraw-Edison GALN Galleon II

Area / Site Luminaire

Product Features

Product Certifications

Connected Systems

- WaveLink Lite
- WaveLink

Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 55W)
- T7 optical distributions
- Efficacy up to 159 lumens per watt

Dimensional Details

Standard Pole Mount Arm

Pole Drilling Pattern

Number of Light Sources	Pole Dia. \"	Hanging Length \"	Weight each Standard or Custom Head	CFM each Standard or Custom Head
3-4	10'	22"	29 lb.	0.55
5-6	12"	22"	29 lb.	0.55
7-8	12"	28-10"	48 lb.	1.1

*Minimum wire requirements established for an anchoring steel section.

NOTES:
1. All units are factory configured to operate on standard voltage. All end customer units will be shipped.

2. All units are factory configured to operate on standard voltage. All end customer units will be shipped.

PDS0000000 Page 1
Revised: 03/2020 LIT PL1

1 of 1

thegreatoutdoors[®] L2

A WEATHER-READY UNIT

Item #: 72251-66	UPVC Code: 747396078571
Product Family Name:	Essent
Artisan Line:	Black
Category Type:	
OUTDOOR WALL MOUNT COLLECTION	
Collection:	3057374
Part Number:	
Notes:	L2

Image File Name: 72251-66.jpg

MEASUREMENTS

Height: 5.5	Length: 14.0	Height: 13.0	Extension: 4.75
Height Adjustment: Min Overall Height:	Max Overall Height:	No	Min Overall Height:
No	Chain Length:	Safety Cable Included:	No
Yes	Net Weight: 7.0	Net Weight: 3.44	Net Weight: 7.25
Canopy Width: 4.63	Canopy Height: 11.5	Canopy Length: 5.75	Canopy to Bottom: 7.25
Canopy Depth: 4.63	Canopy to Top: 5.75		

Clearance:	MINIMUM CLEARANCE REQUIRED
Height:	GLASS
Width:	1
Depth:	LENGTH
Weight:	3.00

No. of Bulbs:	Light Type:
Max Bulb Voltage:	G10 HALOGEN
Dimmable:	Bulb:
Bulb/E.D. Included:	Base:
Color Temp.:	Rated Life:
	Power/Factor:
	No
	Unbalanced Load:
	Unbalanced Load:

SHIPPING

Carton Width: 6.75	Carton Height: 15.39	Carton Length: 7.0
Carton Weight: 4.18	Carton Cubic Feet: 0.421	Small Package Shipable: Yes
Master Pack Width: 6.75	Master Pack Height: 15.39	Master Pack Length: 7.0
Master Pack Weight: 4.18	Master Cubic Feet: 0.421	Master Pack Shipable: Yes

Dark Sky

Weather

ETL Interlock

WARNING: Handling this product may expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands with soap and water after handling, cleaning or otherwise working this product. For more information go to: www.P65Warnings.ca.gov.
For additional information please contact Customer Care: 1-800-251-7077. Product assembly and use must be performed in United States Federal and/or State laws including UL Patent. Trademark and Copyright and under competition laws. Unauthorized reproduction or use carries severe legal penalties.

Rev 10/2017 10-27 AM

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1 of 1

TYPE G

Project Name: Little Sunlight - Caffee Rock, CO

SHOP NOW >

Type: **Universal** Quantity: **7**

FIGURE SPECIFICATIONS

INTENDED USE

The Balzo LED Round Top High Efficiency Bolted Pathway Lighting is designed as an energy saving replacement of Metal Halide and High Pressure sodium lamps with a driver inside. The Balzo is an ideal solution for providing effective lighting for perimeter areas, public spaces, and other varieties of exterior spaces.

AVAILABLE FINISHES

Standard	Dark Bronze	RAL 8011
Non Standard	Let us know the change we would like to request for non standard finishes.	
	ALBONE	RAL 8000
	Dark Grey	RAL 7001
	Traffic Grey	RAL 7002
	White	RAL 9003

ORDERING INFORMATION Example (9000-300-8P)

Model	9002	Color Temp	4000K	Finish	JB
9000	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9001	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9002	Flat Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9003	Flat Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9004	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9005	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9006	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9007	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9008	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9009	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9010	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9011	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9012	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9013	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9014	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9015	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9016	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9017	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9018	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9019	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9020	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9021	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9022	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9023	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9024	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9025	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9026	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9027	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9028	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9029	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9030	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9031	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9032	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9033	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9034	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9035	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9036	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9037	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9038	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9039	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9040	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9041	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9042	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9043	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9044	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9045	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9046	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9047	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9048	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9049	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9050	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9051	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9052	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
9053	Round Top Sand Blasted	20K	3000K	DR	Dark Bronze (Standard)
9054	Round Top Gated	20K	3000K	DR	Dark Bronze (Standard)
905					

CONSTRUCTION DOCUMENTS		PROJECT NO:	
LITTLE SUNSHINE'S		DESIGNED BY: SSC	
PLAYHOUSE & PRESCHOOL		DRAWN BY: SSC	
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE		DATE: 11/07/2024	
			
(630) 930-7770 6807 Edison Ave. Suite 1000 www.sscengineering.com		COLORADO LICENSED PROFESSIONAL ENGINEER 42389 11/08/24	
No.		REVISION	
BY		DATE	

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CONSTRUCTION DOCUMENTS
LITTLE SUNSHINE'S
PLAYHOUSE & PRESCHOOL
PRAIRIE HAWK DRIVE AND LIMELIGHT AVENUE

PROJECT NO:	
DESIGNED BY:	SSC
DRAWN BY:	SSC
DATE:	11/07/2024

SHEET 21 OF 21

No.	REVISION	BY	DATE



11/08/24



1 of 6

Project	LITTLE SUNSHINE PLAYHOUSE	Catalog #	GLEON-SA1A-740-U-SLL	Type	PL2
Propensity	Notes			Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaires

Product Features

Interactive Menu

- Ordering Information page 2
- Mounting Details page 4
- Optical Distributions page 6
- Product Specifications page 9
- Energy and Performance Data page 11
- Control Options page 11

Quick Facts

- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 17 optical distributions
- Efficiency up to 159 lumens per watt

Dimensional Details

Standard Pole Mount Arm		Standard Pole Mount Arm	
Number of Optics	Width "W"	Height Length "H"	Weight with Standard 6' Pole Mount
1-4	16"	22"	29 lb
5-6	22"	27"	39 lb
7-9	22"	28-1/4"	48 lb

NOTE: Pole luminaire dimensions are published by UL, see mounting details section.

Product Certifications

Connected Systems

- WaveLink Lite
- WaveLink

Pole Drilling Pattern

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September 6, 2023 12:23:14

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McGraw-Hill

GALN Galleon II

Ordering Information

SAMPLE NUMBER: GALN-542C-240 or 247F

PL2

Product Family	Configuration	Order Code	Gate Description	Voltage	Distribution	Package	Pinout
40000 Series 74ALS00 74ALS01 74ALS02 74ALS04 74ALS08 74ALS10 74ALS11 74ALS12 74ALS13 74ALS14 74ALS15 74ALS16 74ALS17 74ALS18 74ALS20 74ALS21 74ALS22 74ALS23 74ALS24 74ALS25 74ALS26 74ALS27 74ALS28 74ALS29 74ALS30 74ALS31 74ALS32 74ALS33 74ALS34 74ALS35 74ALS36 74ALS37 74ALS38 74ALS39 74ALS40 74ALS41 74ALS42 74ALS43 74ALS44 74ALS45 74ALS46 74ALS47 74ALS48 74ALS49 74ALS50 74ALS51 74ALS52 74ALS53 74ALS54 74ALS55 74ALS56 74ALS57 74ALS58 74ALS59 74ALS60 74ALS61 74ALS62 74ALS63 74ALS64 74ALS65 74ALS66 74ALS67 74ALS68 74ALS69 74ALS70 74ALS71 74ALS72 74ALS73 74ALS74 74ALS75 74ALS76 74ALS77 74ALS78 74ALS79 74ALS80 74ALS81 74ALS82 74ALS83 74ALS84 74ALS85 74ALS86 74ALS87 74ALS88 74ALS89 74ALS90 74ALS91 74ALS92 74ALS93 74ALS94 74ALS95 74ALS96 74ALS97 74ALS98 74ALS99 74ALS100 74ALS101 74ALS102 74ALS103 74ALS104 74ALS105 74ALS106 74ALS107 74ALS108 74ALS109 74ALS110 74ALS111 74ALS112 74ALS113 74ALS114 74ALS115 74ALS116 74ALS117 74ALS118 74ALS119 74ALS120 74ALS121 74ALS122 74ALS123 74ALS124 74ALS125 74ALS126 74ALS127 74ALS128 74ALS129 74ALS130 74ALS131 74ALS132 74ALS133 74ALS134 74ALS135 74ALS136 74ALS137 74ALS138 74ALS139 74ALS140 74ALS141 74ALS142 74ALS143 74ALS144 74ALS145 74ALS146 74ALS147 74ALS148 74ALS149 74ALS150 74ALS151 74ALS152 74ALS153 74ALS154 74ALS155 74ALS156 74ALS157 74ALS158 74ALS159 74ALS160 74ALS161 74ALS162 74ALS163 74ALS164 74ALS165 74ALS166 74ALS167 74ALS168 74ALS169 74ALS170 74ALS171 74ALS172 74ALS173 74ALS174 74ALS175 74ALS176 74ALS177 74ALS178 74ALS179 74ALS180 74ALS181 74ALS182 74ALS183 74ALS184 74ALS185 74ALS186 74ALS187 74ALS188 74ALS189 74ALS190 74ALS191 74ALS192 74ALS193 74ALS194 74ALS195 74ALS196 74ALS197 74ALS198 74ALS199 74ALS200 74ALS201 74ALS202 74ALS203 74ALS204 74ALS205 74ALS206 74ALS207 74ALS208 74ALS209 74ALS210 74ALS211 74ALS212 74ALS213 74ALS214 74ALS215 74ALS216 74ALS217 74ALS218 74ALS219 74ALS220 74ALS221 74ALS222 74ALS223 74ALS224 74ALS225 74ALS226 74ALS227 74ALS228 74ALS229 74ALS230 74ALS231 74ALS232 74ALS233 74ALS234 74ALS235 74ALS236 74ALS237 74ALS238 74ALS239 74ALS240 74ALS241 74ALS242 74ALS243 74ALS244 74ALS245 74ALS246 74ALS247 74ALS248 74ALS249 74ALS250 74ALS251 74ALS252 74ALS253 74ALS254 74ALS255 74ALS256 74ALS257 74ALS258 74ALS259 74ALS260 74ALS261 74ALS262 74ALS263 74ALS264 74ALS265 74ALS266 74ALS267 74ALS268 74ALS269 74ALS270 74ALS271 74ALS272 74ALS273 74ALS274 74ALS275 74ALS276 74ALS277 74ALS278 74ALS279 74ALS280 74ALS2							

2 of 2

VWM LED

Voltaire Mini Architectural Wall Pack

L4

FXTURE PERFORMANCE DATA

	LED MODULE	DESCRIPTOR	CRI	CCT	WATTAGE	CUM LUMEN (LM)		FOOT LUMEN (LM)		BOD NUMBER
						DELIVERED LUMEN	EFFECTIVE LUMEN	DELIVERED LUMEN	EFFECTIVE LUMEN	
DOWN	L10	80	0000	3000	10	260	80	100	30	B1-60-01
		80	0000	3500	10	175	85	100	30	
		80	0000	4000	10	160	90	100	30	
		80	0000	5000	10	160	90	100	30	
		80	0000	5600	10	160	90	100	30	
	L17	80	0000	3000	17	393	120	200	60	B1-60-01
		80	0000	3500	17	267	125	200	60	
		80	0000	4000	17	242	130	200	60	
		80	0000	5000	17	242	130	200	60	
		80	0000	5600	17	242	130	200	60	
DOWN	L20	80	0000	3000	20	468	140	240	80	B1-60-01
		80	0000	3500	20	312	145	240	80	
		80	0000	4000	20	287	150	240	80	
		80	0000	5000	20	287	150	240	80	
		80	0000	5600	20	287	150	240	80	
	L23	80	0000	3000	23	540	160	280	90	B1-60-01
		80	0000	3500	23	360	165	280	90	
		80	0000	4000	23	330	170	280	90	
		80	0000	5000	23	330	170	280	90	
		80	0000	5600	23	330	170	280	90	

* Dependent on input voltage and ambient temperature. All wattage based on 120V and 30°C ambient temperature. Actual

performance may vary.

* Reported LUMEN (LM) is based on 120V and 30°C ambient temperature. Actual

* Reported LUMEN (LM) is based on 120V and 30°C ambient temperature. Actual

LUMEN MAINTENANCE¹⁰

LUMEN TYPE	PERCENT LUMEN REMAINING
27°C	>= 80.0%
35°C	>= 70.0%
40°C	>= 60.0%
45°C	>= 50.0%
50°C	>= 40.0%

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