PUBLIC IMPROVEMENT CONSTRUCTION PLANS

CASTLE ROCK FIRE STATION 156 AND LOGISTICS

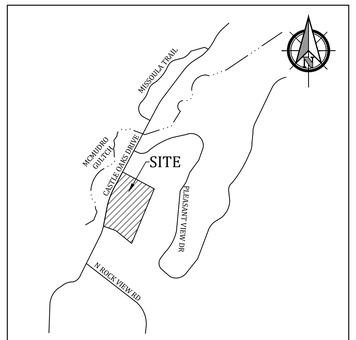
TRACT B-2-D, 8TH AMENDMENT TO THE VILLAGES AT CASTLE ROCK, 2ND AMENDMENT-LIBERTY VILLAGE PORTION LOCATED IN THE WEST HALF OF SECTION 29, TOWNSHIP 7 SOUTH, RANGE 66 WEST OF THE 6TH PM

TOWN OF CASTLE ROCK, COUNTY OF DOUGLAS, COLORADO

TOWN OF CASTLE ROCK PROJECT NO. CD25-0065

TOWN OF CASTLE ROCK COVER SHEET AND GENERAL NOTES:

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
8. 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.
9. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD UNLESS SPECIFICALLY STATED OTHERWISE.
10. 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.
11. 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.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OR RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE AND AVAILABLE TO THE TCR CONSTRUCTION INSPECTOR AT ALL TIMES.
13. 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.
14. 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 INEFFECTIVE 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.
15. 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.
16. 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.
17. THERE SHALL BE NOT 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.
18. 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.
19. THIS PROPERTY IS LOCATED WITHIN ZONE X AS PER FEMA FIRM PANEL NO. 08035C0191G DATED MARCH 16, 2016
20. BENCHMARK: ELEVATIONS ARE BASED UPON DOUGLAS COUNTY CONTROL POINT 1.009009, BEING A 3.25" ALUMINUM CAP STAMPED DOUGLAS COUNTY GIS 1.009009. ELEVATION=6289.00 NAVD88(#99).
21. BASIS OF BEARING:(GRID NAD 83) BEARINGS ARE BASED UPON THE WEST LINE OF THE NORTH WEST 1/4 OF THE SOUTH WEST 1/4 SECTION 29. T7S R66W, BEING MONUMENTED AT BOTH ENDS WITH A NO.6 REBAR AND 2" ALUMINUM CAP STAMPED RMS PLS 23515. SAID LINE BEARS S 00°04'08"E, A DISTANCE OF 1323.67 FEET PER COLORADO STATE PLANE COORDINATES.
22. TOPOGRAPHIC DESIGN MAP WAS COMPLETED FOR THE PROJECT TITLED CASTLE ROCK FIRE STATION #156 & FLEET FACILITY, PREPARED BY TRUE NORTH SURVEYING & MAPPING, LLC, DATED 5/15/2025. REFER TO THIS MAP FOR SURVEY CONTROL.
    - 22.1. HORIZONTAL DATUM (STATE PLANE COORDINATES CENTRAL AT GROUND-OPUS).
    - 22.2. GRID TO GROUND SCALE FACTOR EQUALS 0.99965466/GROUND TO GRID SCALE FACTOR EQUALS 1.000345459 (SET ON TRUE NORTH CONTROL POINT 100).
    - 22.3. ALL LAND CORNERS, PANEL POINTS AND CONTROL POINTS WERE LOCATED USING STANDARD CPS/RTK METHODS WITH A MINIMUM OF 320 EPOCHS.
    - 22.4. 3D POSITIONAL TOLERANCE:±0.20
23. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE METRO DISTRICT/HOA ON TURNING OFF THE STREETSCAPE IRRIGATION (SEASON DEPENDENT). SHOULD THE IRRIGATION BE SHUT OFF DURING REGULAR IRRIGATION SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING THE STREESCAPE UNTIL IRRIGATION REPAIRS ARE COMPLETE AND THE STREETSCAPE IRRIGATION IS BACK ONLINE. CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE IRRIGATION SYSTEM AND ENSURING IT IS FULLY OPERATIONAL WITH NO LEAKS AND SHALL WARRANTY ALL WORK FOR A MINIMUM PERIOD OF 1 YEAR.
24. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL STREESCAPE LANDSCAPING AND IRRIGATION AFFECTED BY THE PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO, IRRIGATION LINES, ELECTRICAL, VALVE BOXES, IRRIGATION HEADS, MULCHING, EDGER, AND SEEDING.
25. CONTRACTOR SHALL INSTALL TREE PROTECTION AROUND ALL EXISTING STREETSCAPE TREES AND PLANTING BEDS PRIOR TO CONSTRUCTION.



VICINITY MAP
SCALE: NTS

SITE DATA	
ZONING:	LIBERTY VILLAGE 2ND AMENDMENT-PD
MAXIMUM LOT COVERAGE:	AS LIMITED BY APPLICABLE STANDARDS
MINIMUM SIDE YARD:	REQ'D: 0 / PROVIDED: 124',362'
MINIMUM FRONT YARD:	REQ'D: 0 / PROVIDED: 111'
MINIMUM REAR YARD:	REQ'D: - / PROVIDED: 156'
MAXIMUM BUILDING HEIGHT	50'/ PROVIDED: 48'
SITE:	4.925 AC (214,523 SF), GFA=27,641SF
BUILDING FOOTPRINT:	FIRE STATION/LOGISITICS: 24,650SF
PERCENT COVERAGE:	11.5%
PARKING FOR BUILDING-PROVIDED:	38 SPACES (INCLUDES 2 HC SPACES)
TOTAL PARKING REQUIRED:	FIRE STATION=9 SPACES: 1 SPACE PER "STUDIO" UNIT (7 UNITS) PLUS 1 SPACES PER 4 DWELLING UNITS (8 DWELLING UNITS) LOGISTICS=14 SPACES: 1 SPACE PER EMPLOYEE (5 EMPLOYEES) PLUS 3 SPACES PER SERVICE BAY (3 BAYS) TOTAL=23 SPACES 1 HC SPACE PER 25 SPACES

LEGEND

- PROPOSED BUILDING
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING GRATED INLET
- EXISTING LIGHT POLE
- LIGHTPOLE, SEE SITE LIGHTING PLAN FOR LAYOUT
- PROPOSED ELECTRIC TRANSFORMER
- UTILITY TESTHOLE LOCATION
- EXISTING FACILITIES TO BE DEMOLISHED
- APPROXIMATE LIMITS OF DISTURBANCE AND PAVEMENT REMOVAL. UTILITY WORK LIMITS MAY VARY FROM WHAT IS SHOWN.
- EXISTING DECIDUOUS TREE
- EX. DECIDUOUS TREE TO BE REMOVED OR RELOCATED
- EXISTING CONIFEROUS TREE
- EX. CONIFEROUS TREE TO BE REMOVED OR RELOCATED
- EXISTING OR PROPOSED PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING CHAIN LINK FENCE
- PROPOSED FENCE OR RAILING
- EXISTING WATER LINE
- EXISTING SANITARY SEWER & FLOW DIRECTION
- EXISTING STORM SEWER
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING FIBER OPTIC LINE
- EXISTING GAS LINE
- WATER SURFACE ELEVATION
- PROPOSED SANITARY SERVICE AND CLEAN OUT
- PROPOSED WATER LINE OR SERVICE AND VALVE
- PROPOSED WATER LINE, THRUST BLOCK & MJ RSTNTS
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- UTILITY CAP/PLUG OR INTERFACE
- PROPOSED SANITARY SEWER AND MANHOLE
- PROPOSED STORM SEWER PIPE AND MANHOLE
- PROPOSED COMBINATION INLET
- CURB & GUTTER
- PROPOSED SIDEWALK
- EXISTING SIGN
- PROPSOED SIGN

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FIELD CHANGE ORDER TABLE		
FCO#	DATE	PURPOSE/DESCRIPTION

FLOODPLAIN NOTE:

1) NO FLOODPLAINS EXIST ON THE PROPERTY.

VARIANCES:

1) TCV25-0063: DETENTION BASIN OUTLET STRUCTURE ORIFICE SIZE: MINIMUM 2.5-IN DIAMETER OR 2-INCH SQUARE ORIFICE IS REQUIRED. ¾" DIAMETER ORIFICE AND WELL SCREEN ARE PROPOSED.
2) UNDEVELOPED AREAS TO REMAIN UNDEVELOPED THAT WILL NOT RECEIVE WATER QUALITY OR DETENTION REQUIRE A VARIANCE REQUEST. THERE ARE AREAS WITHIN TRACT B-2-D THAT ARE UNDEVELOPED TO REMAIN UNDEVELOPED THAT WILL NOT RECEIVE WATER QUALITY OR DETENTION.

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.

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.

Civil Engineer signature and stamp — Date
Jacob I. McMillen, PE #56736

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

Approved By:

Development Services — Date

ABBREVIATIONS

ASSY	= ASSEMBLY	MIN	= MINIMUM
BNDY	= BOUNDARY	NTS	= NOT TO SCALE
BOP	= BOTTOM OF PIPE	OD	= OUTSIDE DIAMETER
C&G	= CURB & GUTTER	PC	= POINT OF HORIZONTAL CURVATURE
CL	= CENTERLINE	PLBG	= PLUMBING
CO	= CLEAN OUT	POC	= POINT OF CONNECTION
CRA	= CONCRETE REVERSE ANCHOR	PP	= PROPOSED
CR	= POINT OF CURB RETURN	PROP	= PROPERTY
CS	= CROSS SLOPE	PT	= POINT OF HORIZONTAL TANGENCY
CTB	= CONCRETE THRUST BLOCK	PVC	= POLY VINYL CHLORIDE PIPE
DIP	= DUCTILE IRON PIPE	R	= RADIUS
DTL	= DETAIL	R	= RIGHT
EL	= ELEVATION	RCP	= REINFORCED CONCRETE PIPE
EOA	= EDGE OF ASPHALT	RD	= ROOF DRAIN (STORM LINE)
ESMT	= EASEMENT	ROW	= RIGHT OF WAY
EX	= EXISTING	RT	= RIGHT
FC	= FACE OF CURB	QL	= QUALITY LEVEL
FES	= FLARED END SECTION	SHT	= SHEET
FLG	= FLANGE	SOI	= SAND OIL INTERCEPTOR
FL	= FLOWLINE	SS	= SANITARY SEWER
GB	= GRADE BREAK	STA	= STATION
GI	= GREASE INTERCEPTOR	STD	= STANDARD
GV	= GATE VALVE	TA	= TOP OF ASPHALT
HP	= HIGH POINT	TB	= THRUST BLOCK
HORIZ	= HORIZONTAL	TC	= TOP OF CURB
HYD	= HYDRANT	TOA	= TOP OF ASPHALT
ID	= INSIDE DIAMETER	TOC	= TOP OF CONCRETE
L	= LEFT	TOP	= TOP OF PIPE
LT	= LEFT	TYP	= TYPICAL
LF	= LINEAR FEET	VC	= VERTICAL CURVE
LP	= LOW POINT		
MAX	= MAXIMUM		
MH	= MANHOLE		

PRE-EXCAVATION CHECKLIST

- ☐ GAS AND OTHER UTILITY LINES OF RECORD SHOWN ON PLANS.
- ☐ UTILITIES CENTRAL LOCATING CALLED AT LEAST 2 BUSINESS DAYS AHEAD.
- ☐ UTILITIES LOCATED AND MARKED.
- ☐ EMPLOYEES BRIEFED ON MARKING AND COLOR CODES.*
- ☐ EMPLOYEES TRAINED ON EXCAVATION AND SAFETY PROCEDURES FOR NATURAL GAS LINES.
- ☐ WHEN EXCAVATION APPROACHES GAS LINES, EMPLOYEES EXPOSE LINES BY CAREFUL PROBING AND HAND DIGGING.

*A.G.A./A.P.W.A. STANDARD UTILITY MARKING COLOR CODE

NATURAL GAS	YELLOW	WATER	BLUE
ELECTRIC	RED	WASTEWATER	GREEN

811
Know what's below.
Call before you dig.

CONTACTS

SERVICE	ENTITY	POINT OF CONTACT
WASTEWATER & WATER:	CASTLE ROCK WATER	(720) 733-6000
STORM DRAINAGE:	CASTLE ROCK WATER	(720) 733-6000
GAS:	BLACK HILLS ENERGY	(303) 217-7811
ELECTRIC:	CORE ELECTRIC	(720) 733-5488
PHONE:	CENTURY LINK	(303) 483-3800
ROADS	CASTLE ROCK PUBLIC WORKS	(720) 733-2462

CIVIL ENGINEER:
Kiowa Engineering Corporation
5951 Middlefield Rd, Suite 200
Littleton, CO 80123
303-692-0369
Contact: Jake McMillen, PE

OWNER:
Castle Rock Fire and Rescue
300 Perry Street
Castle Rock, CO 80104
303-660-1066
Contact: Chief Norris Croom

ARCHITECT:
RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
Contact: Tino Leone

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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SEAL:

SHEET TITLE:
CIVIL COVER SHEET

SHEET ID:
1
Sheet 1 of 47

PROJECT STATUS:
Site Construction Documents

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NOTE:
1. ALL TOWN OF CASTLE ROCK CD STANDARD NOTES, AS INCLUDED ON ALL SHEETS AND ON THE COVER SHEET, WILL TAKE PRECEDENCE OVER THE NON-STANDARD CD NOTES IN THE EVENT OF ANY CONFLICTING INFORMATION.

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

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

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

TOWN OF CASTLE ROCK WATER LINE CONSTRUCTION NOTES:
1. ALL WATER LINE CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WELL AS THE WATER LINE CONSTRUCTION NOTES LISTED HEREIN.
2. ALL WATER LINES SHALL BE: 1) DUCTILE IRON PIPE(DIP), CONFORMING TO THE REQUIREMENTS OF AWWA C150, CL350 (6"-12"), CL250 (16" AND 20"), CL200 (>24"), WITH PUSH-ON GASKETED JOINTS OR MECHANICAL JOINTS ENDS, IN CONFORMANCE WITH AWWA C11. PIPE SHALL BE CEMENT-LINED IN ACCORDANCE WITH AWWA C104, AND AN EXTERIOR COATING IN ACCORDANCE WITH C151; OR 2) PVC PIPE, CONFORMING TO AWWA C900 FOR PIPE SIZES 8" AND 12", CL305 (DR14) AND AWWA C905 FOR PIPE SIZE OF 16", CL235 (DR18). MINIMUM DISTRIBUTION MAIN SIZE SHALL BE 8". WATER LINES THAT ARE 10", 14", AND 18" IN DIAMETER ARE NOT PERMITTED.
3. WATER LINE FITTINGS SHALL BE DIP CONFORMING TO AWWA C153 OR C110 AND SHALL HAVE A PRESSURE RATING NOT LESS THAN THE PIPE. ALL FITTINGS SHALL BE MECHANICAL JOINT, UNLESS APPROVED BY CASTLE ROCK WATER.
4. ALL DIP AND FITTINGS SHALL BE ENCASED IN POLYETHYLENE TO PREVENT CORROSION. POLYETHYLENE WRAP, TAPE AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AWWA C105.
5. GATE VALVES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C509-1 AND AWWA C515-01, AS APPROPRIATE, AND SHALL BE DUCTILE IRON BODY AND BONNET, RESILIENT-SEATED WEDGE GATE, NON-RISING STEM TYPE, O-RING SEALS, AND SLIP-ON CONNECTIONS (TAPPING VALVES, WHERE ALLOWED, SHALL BE FLANGE X 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 AN D 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 INITIAL AND THE PRESSURE RATING CAST ON THE BODY.
6. ALL FIRE HYDRANTS SHALL BE "PACER WB67-250" BY WATEROUS CO. OR "SUPER CENTURION 250" BY MULLER CO., OPENING TO THE LEFT. REFER TO TCR STANDARD DETAIL W-11.
7. ALL WATER LINES SHALL BE BURIED AN ABSOLUTE MINIMUM OF 5 FEET FROM FINAL GRADE TO THE TOP OF THE WATER MAIN. THE MAXIMUM BURY DEPTH SHALL BE 6 FEET, UNLESS ADDITIONAL DEPTH IN REQUIRED FOR UTILITY CROSSING OR OTHER CONFLICTS. WHEREVER SUCH CROSSING OR CONFLICTS OCCUR, THE TCR STANDARD DETAIL W-17 SHALL BE USED.
8. ALL WATER LINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL W-21.
9. CONTRACTOR SHALL MAINTAIN A MINIMUM 18-INCH VERTICAL CLEARANCE AND 10-FOOT HORIZONTAL CLEARANCE EDGE-TO-EDGE BETWEEN ALL WATER LINES AND ANY OTHER PIPED UTILITIES.
10. ALL BEND, TEES, FIRE HYDRANTS AND PLUGS AT DEAD-END MAINS SHALL BE RESTRAINED FROM THRUST BY USING MEGALUG RESTRAINTS PER TCR STANDARD DETAIL W-18 IN COMBINATION WITH CONCRETE THRUST BLOCKS PER TCR STANDARD DETAIL W-22.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL FIRE HYDRANTS AND VALVE BOXES TO FINISH GRADE IN ACCORDANCE WITH TCR STANDARD DETAILS W-10 AND W-11.
12. PRIOR TO CONNECTING TO THE TOWN'S EXISTING WATER SYSTEM, ALL NEW WATERLINES AND/OR SEGMENTS OF WATERLINES SHALL BE DISINFECTED, PRESSURE TESTED, AND BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH SECTION 450.5 OF THE TOWN OF CASTLE ROCK CONSTRUCTION METHODOLOGY AND MATERIALS MANUAL; AWWA C651-14 AND C600-5.2; AND DETAILS W-35A AND/OR W-35B. PLEASE NOTE THAT THIS DISINFECTION AND TESTING WILL BE PERFORMED WHILE THE NEW WATERLINES AND/OR SEGMENTS OF WATERLINES ARE NOT PHYSIC ALLY 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 BACTERIOLOGIC AL TESTING OF ANY NEW WATERLINES AND/OR SEGMENTS OF WATERLINES.
13. DISTANCE FOR WATER LINES ARE HORIZONTAL DISTANCE FROM THE CENTER OF THE FITTING TO CENTER OF THE FITTING. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE AND COULD VARY DUE TO VERTICAL ALIGNMENT AND FITTING DIMENSIONS.
14. ALL DOMESTIC WATER SERVICE LINES SHALL BE TYPE K COPPER INSULTED WITH POLYWRAP, FROM THE MAIN TO THE METER. THE WATER METER SHALL BE SUPPLIED BY THE TOWN AND INSTALLED BY THE CONTRACTOR. THE WATER METER WILL BE AVAILABLE FOR PICK UP AT CASTLE ROCK WATER. THE INDIVIDUAL PICKING UP THE WATER METER MUST HAVE PROOF OF A PERMIT AND MUST HAVE PAID ALL FEES ASSOCIATED WITH THE WATER METER.
15. WATER LINE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES, IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS, FOR ALL EXCAVATION OPERATIONS, SAFETY ID THE RESPONSIBILITY OF THE CONTRACTOR.
16. WATER LINES SHALL BE ALIGNED 6 FEET OFF THE NORTH AND EAST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE. SEE DETAIL W-13.
17. WHERE WATER LINE IMPROVEMENTS ARE DIFFICULT TO LOCATE ON THE SURFACE, THE CONTRACTOR SHALL BE REQUIRED TO INSTALL PERMANENT EATER LINE MAKERS, IN ACCORDANCE WITH TCR STANDARD DETAIL W-23, OR AT THE DISCRETION OF THE TCR CONSTRUCTION INSPECTOR.
18. TRACER WIRE SHALL BE USED ON ALL DIP AND PVC WATER MAINS, AND WARNING TAPE SHALL BE PLACED 1 FOOT ABOVE ALL DIP AND PVC PIPE. REFER TO TOWN OF CASTLE ROCK STANDARD TRACER WIRE REQUIREMENTS, IN THESE GENERAL NOTES. TEST STATION SHALL BE CONSTRUCTED PER STANDARD DETAIL W-28.
19. THE MINIMUM DISTANCE BETWEEN TEES, CROSSES, VALVES, AND BENDS SHALL BE 10 FEET WHEREVER POSSIBLE.
20. MAXIMUM DEFLECTION FOR WATER MAINS SHALL NOT EXCEED ONE-HALF OF THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION OR 2.5 DEGREES, WHICHEVER IS LESS.
21. ALL RESIDENTIAL WATER SERVICE LINES SHALL BE CONSTRUCTED PERPENDICULAR TO THE FRONT PROPERTY LINE IN CONFORMANCE WITH THE TOWN OF CASTLE ROCK WATER SYSTEM DESIGN CRITERIA MANUAL AND WATER DETAILS.
22. HE MAXIM UM DEFLECTION OF DOMESTIC WATER SERVICE LINES AND IRRIGATION LINES SHALL NOT EXCEED THE MANUFACTURER'S MAXIMUM ALLOWABLE DEFLECTION.
23. THE SIZE OF THE IRRIGATION TAP, LINE, METER AND BLACKFLOW PREVENTION ASSEMBLY SHALL BE THE SAME TO A MINIMUM DISTANCE OF 10 PIPE DIAMETERS PAST THE WINTERIZATION TEE.
24. THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRY THE SAME MATERIAL (E.G. WATER AND WATER) SHALL BE 5 FEET.
25. WHEN INSTALLING CUT IN TEES OR OTHER APPURTENANCES ON/IN AN EXISTING WATER LINE, THE PIPE MATERIAL BETWEEN THE EXISTING WATER LINE AND THE CUT IN TEE OR OTHER APPURTENANCE SHALL REMAIN CONSISTENT.
26. CONTRACTOR IS RESPONSIBLE TO PROVIDE BACKFLOW PREVENTION DOWNSTREAM OF THE METER. ACCEPTABLE BACKFLOW PREVENTION ASSEMBLIES ARE AS FOLLOW:
    26.1. COMMERCIAL PORTABLE WATER SERVICE: REDUCED PRESSURE ASSEMBLY
    26.2. RESIDENTIAL PORTABLE WATER SERVICE DOUBLE CHECK VALVE ASSEMBLY, REDUCED PRESSURE ASSEMBLY
    26.3. COMMERCIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY
    26.4. RESIDENTIAL FIRE SERVICE: REDUCED PRESSURE DETECTOR ASSEMBLY, DOUBLE CHECK VALVE DETECTOR ASSEMBLY
    26.5. COMMERCIAL AND MULTIFAMILY IRRIGATION WATER SERVICE: REDUCED PRESSURE ASSEMBLY
27. THE DOUBLE CHECK DETECTOR ASSEMBLY (DCDA) IS THE ONLY BACK FLOW PREVENTION DEVICE RATED FOR HORIZONTAL OR VERTICAL INSTALLATION.

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

TOWN OF CASTLE ROCK SANITARY SEWER CONSTRUCTION NOTES:
1. ALL SANITARY SEWER CONSTRUCTION IS SUBJECT TO THE GENERAL NOTES ON THE COVER SHEET OF THESE PLANS AS WALL AS THE SANITARY SEWER CONSTRUCTION NOTES LISTED HERE.
2. ALL SANITARY SEWER PIPELINES SHALL BE PVC, SDR-35, IN ACCORDANCE WITH ASTM D-3034, BELL AND SPIGOT WITH ELASTOMERIC SEAL.
3. ALL SANITARY SEWER PIPELINES SHALL HAVE A MINIMUM COVER OF 5 FEET AND MAXIMUM COVER OF 20 FEET.
4. ALL SANITARY SEWER PIPELINES SHALL BE BEDDED IN ACCORDANCE WITH TCR STANDARD DETAIL SS-8.
5. ALL MANHOLE RIM ELEVATIONS GIVEN ON THESE PLANS ARE CONSIDERED TO BE APPROXIMATE. THE CONTRACTOR SHALL SET THE FINAL RIM ELEVATION BASED ON THE COMPLETE FINISHED SURFACE AND PER TCR STANDARD DETAIL SS-3.
6. SANITARY SEWER PIPELINE SHALL BE ALIGNED 6 FEET OFF THE SOUTH AND WEST GUTTER FLOW LINES OF PUBLIC STREETS WHEREVER POSSIBLE.
7. ALL SEWER LINES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 100 FEET EDGE-TO-EDGE FROM ALL WATER LINES. WHERE LINES CROSS, THERE SHALL BE A MINIMUM OF 18" CLEAR VERTICAL SEPARATION.
8. ALL SANITARY SEWER LINES MUST BE TESTED IN ACCORDANCE WITH SECTION 450.6 OF THE TOWN OF CASTLE ROCK CONSTRUCTION METHODOLOGY AND MATERIALS MANUAL IN PRESENCE OF A TCR CONSTRUCTION INSPECTOR.
9. ALL SANITARY SEWER LINE TRENCHES SHALL BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND PROTECTION OF OTHER UTILITIES, IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REQUIREMENTS. ALL EXCAVATION OPERATION SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. SANITARY SEWER SERVICES SHALL BE CONNECTED A MINIMUM OF 5 FEET OUTSIDE OF MANHOLES WITH A WYE CONNECTION IN ACCORDANCE WITH TCR STANDARD DETAIL SS-2.
11. MINIMUM COVER FOR SANITARY SEWER SERVICE LINES SHALL BE 5 FEET AND THE MINIMUM SLOPE SHALL BE 2.0%.
12. ALL SANITARY SEWER SERVICE LINE SHALL BE CONSTRUCTED ALONG THE SHORTEST AND STRAIGHTEST ROUT POSSIBLE IN CONFORMANCE WITH THE TOWN OF CASTLE ROCK WASTEWATER SYSTEM DESIGN CRITERIA MANUAL.
13. THE MINIMUM HORIZONTAL SEPARATION BETWEEN UTILITY LINES CARRYING THE SAME MATERIAL (E.G., WASTEWATER AND WASTEWATER) SHALL BE 5 FEET.
14. THE PLUM CREEK WASTEWATER AUTHORITY MUST APPROVE OIL AND GREASE INTERCEPTORS FOR COMMERCIAL INSTALLATIONS.
15. ALL MANHOLES SHALL BE PLACED ON A MINIMUM OF 1' OF 3/4" WASH ROCK. IF ADDITIONAL SUBGRADE IS DISTURBED, EXCAVATION SHALL BE BACKFILLED WITH 3/4" WASH ROCK OR OTHER APPROVED STRUCTURAL SOIL COMPACTED TO 95% OF ASTM D698 UNLESS OTHERWISE INSTRUCTED BY THE INSPECTOR.

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

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

TOWN OF 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 WATERMETER.
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.

GRADING NOTES:
1. ALL EARTHWORK AND EROSION CONTROL REQUIRED OF THIS CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS AND THE TOWN STANDARDS.
2. A GEOTECHNICAL ENGINEERING REPORT WAS PREPARED FOR THE SUBJECT SITE. THE RECOMMENDATIONS INCLUDED IN THE REPORT SHOULD BE FOLLOWED DURING CONSTRUCTION UNLESS OTHERWISE NOTED. REFER TO THE REPORT FOR SOIL BORING LOGS. FOLLOWING IS INFORMATION FROM THE REPORT, THE CONTRACTOR SHALL REFER TO THE REPORT FOR REQUIREMENTS.
    2.1. REFER TO GEOTECHNICAL ENGINEERING STUDY FOR COMPACTION REQUIREMENTS.
    2.2. REFER TO THE GEOTECHNICAL REPORT AND STRUCTURAL DRAWINGS FOR COMPACTION AND EARTHWORK REQUIREMENTS FOR THE BUILDING PADS AND ADJACENT AREAS.
3. FILL SHOULD BE PLACED AND COMPACTED IN HORIZONTAL LIFTS, USING EQUIPMENT AND PROCEDURES THAT WILL PRODUCE RECOMMENDED MOISTURE CONTENTS AND DENSITIES THROUGHOUT THE LIFT. THE PLACEMENT AND COMPACTION OF FILL AND BACKFILL SHOULD BE OBSERVED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER.
    3.1. FILL MATERIAL SHOULD BE PLACED IN MAXIMUM 8-INCH LOOSE LIFTS, UNLESS OTHERWISE NOTED. REFER TO GEOTECHNICAL REPORT FOR SPECIFIC SOIL TYPES AND THEIR RESPECTIVE COMPACTION RECOMMENDATIONS.
    3.2. FILL SHOULD BE COMPACTED TO 95% OR MORE OF THE MATERIALS STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D1557) AND TO 0 TO +2% OF THE OPTIMUM MOISTURE CONTENT FOR COURSE GRAINED SOILS AND TO 3% ABOVE THE OPTIMUM MOISTURE CONTENT FOR FINE GRAINED SOILS, UNLESS OTHERWISE NOTED.
    3.3. ON-SITE SOILS SHOULD BE SCARIFIED TO A DEPTH OF 8 TO 12 INCHES BUT NO LESS THAN 8 INCHES BELOW PLANNED GRADE, MOISTURE CONDITIONED AND PROPERLY RE-COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REQUIREMENTS.
    3.4. SANDSTONE BEDROCK MATERIALS SHOULD BE SELECTIVELY GRADED AND STOCKPILED SEPARATELY FROM SILTSTONE BEDROCK AND OVERBURDEN SOIL MATERIALS. SILTSTONE BEDROCK MATERIALS MAY NOT BE USED IN BUILDING FILL PRISM CONSTRUCTION (OVER-EXCAVATED AND RECOMPACTED SOILS). POTENTIAL EARTHWORK CONTRACTORS SHOULD BE MADE AWARE THAT AS STATED, SIGNIFICANT PROCESSING AND REPROCESSING OF THE ON-SITE MATERIALS WILL LIKELY BE REQUIRED. THIS ADDITIONAL PROCESSING IS ANTICIPATED TO BE TIME SENSITIVE AND COSTLY. THE PLACEMENT OF ON-SITE FILL MATERIALS SHOULD BE MONITORED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER, UNDER SEPARATE CONTRACT, REQUESTED BY THE OWNER. MOISTURE CONTENT AND RELATIVE COMPACTION TESTING MAY NEED TO BE CONDUCTED AT AN INCREASED FREQUENCY IN ORDER TO PROVIDE A GREATER LEVEL OF INFORMATION TO THE CONTRACTOR.
    3.5. IF IMPORTED FILL SOILS ARE USED, THEY MUST BE FREE OF ORGANIC MATERIAL AND OTHER DELETERIOUS MATERIALS.
        3.5.1. IMPORTED MATERIAL SHOULD CONSIST OF SOILS THAT HAVE LESS THAN 55 PERCENT PASSING THE NO. 200 SIEVE AND SHOULD HAVE A PLASTICITY INDEX LESS THAN 10.
4. EXISTING UTILITIES: THE LOCATIONS OF EXISTING UTILITIES ARE BASED UPON THE BEST AVAILABLE INFORMATION, ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATION AND VERIFICATION OF THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK. IF IT APPEARS THERE COULD BE A CONFLICT WITH ANY UTILITIES, WHETHER INDICATED ON THE PLANS OR NOT, THE CONTRACTOR IS TO NOTIFY THE ENGINEER AND OWNER IMMEDIATELY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES WITHIN THE CONSTRUCTION AREA AND SITE. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE THE EXISTING UTILITIES.
5. GRADING CONTOURS SHOWN ON THIS PLAN ARE TO FINAL GRADE.
6. ALL VERTICAL SPOT ELEVATIONS SHOWN ON THE GRADING PLAN ARE FLOWLINE OF CURB (FL) OR FINISH GROUND (FG), UNLESS OTHERWISE NOTED.
    6.1. GRADING ABBREVIATIONS: FL=FLOWLINE, TC=TOP OF CURB, TOC=TOP OF CONCRETE, TOA=TOP OF ASPHALT, EOC=EDGE OF CONCRETE, EOA=EDGE OF ASPHALT, HP=HIGH POINT, LP=LOW POINT, FF=FINISH FLOOR ELEVATION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION OF ADEQUATE SHORING AND/OR BRACING NECESSARY TO FACILITATE THE EXCAVATION ASSOCIATED WITH THE CONSTRUCTION OF THE WALLS, PIPELINES AND FOUNDATIONS. THE BRACING AND/OR SHORING OF EXCAVATED WALLS OR TRENCHES SHALL BE IN COMPLIANCE WITH OSHA REGULATIONS AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
8. BUILDING CONTRACTOR(S) WILL BE RESPONSIBLE FOR CONSTRUCTING POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
9. SIDEWALK SLOPES SHALL HAVE 1.7% MAXIMUM CROSS SLOPES (CODE ALLOWS 2.0% MAX) AND 4.7% MAXIMUM LONGITUDINAL SLOPES (CODE ALLOWS 5.0% MAX), UNLESS OTHERWISE NOTED. THE SLOPE IN THE HANDICAP PARKING SPACES AND ASSOCIATED STRIPED ISLAND SHALL BE 1.7% MAXIMUM IN ANY DIRECTION (CODE ALLOWS 2.0% MAX).
10. WHEN FREEZING TEMPERATURES MAY BE EXPECTED, DO NOT EXCAVATE TO THE FULL DEPTH INDICATED UNLESS THE FOOTING OR SLABS ARE TO BE POURED IMMEDIATELY AFTER THE EXCAVATION HAS BEEN COMPLETED. IF PLACING OF CONCRETE IS DELAYED, PROTECT THE BOTTOMS OF EXCAVATIONS FROM FROST UNTIL CONCRETE IS PLACED.
11. NO FILL MATERIAL SHALL BE PLACED, SPREAD OR ROLLED WHILE IT IS FROZEN OR THAWING OR DURING UNFAVORABLE WEATHER CONDITIONS. WHEN THE WORK IN PROGRESS IS INTERRUPTED BY HEAVY RAIN, FILL OPERATIONS SHALL NOT BE RESUMED UNTIL THE GEOTECHNICAL ENGINEER INDICATES THAT THE MOISTURE CONTENT AND DENSITY OF THE PREVIOUSLY PLACED FILL ARE AS SPECIFIED.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND HAULING OF UNSUITABLE FILL MATERIALS TO A SUITABLE SPOIL AREA. EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. THE COST OF HAULAGE AND SPOILING OF EXCESS EXCAVATED MATERIALS SHALL BE PAID FOR AS DOCUMENTED IN THE PROJECT SPECIFICATIONS.
13. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE ACRE OR MORE, THE OWNER OR OPERATOR OF THE CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORM WATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY CONTROL DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORM WATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT: COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY CONTROL DIVISION-PERMITS.
14. ALL EROSION CONTROL WILL BE DONE IN CONFORMANCE WITH THE TOWN STANDARDS. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE TOWN OR ENGINEER.
15. ALL SLOPES STEEPER THAN 4:1 SHALL REQUIRE EROSION CONTROL BLANKET, NORTH AMERICAN GREEN SC150BN DOUBLE NETTED OR EQUAL AS A TEMPORARY STABILIZATION MEASURE.
16. WATER SHALL BE USED AS A DUST PALLIATIVE AS REQUIRED AND SHALL BE INCLUDED IN THE COST FOR EARTHWORK ITEM(S).
17. STORMWATER QUALITY AND DETENTION VOLUME CERTIFICATION: THE CONTRACTOR SHALL PROVIDE A VOLUME CERTIFICATION FOR THE STORMWATER QUALITY AND DETENTION AREA, SIGNED AND SEALED BY A LICENSED PROFESSIONAL LAND SURVEYOR.
    17.1. DETENTION BASIN: AT A MINIMUM, THE SURVEY SHALL INCLUDE THE OUTLET STRUCTURE FLOWLINE IN AND OUT, ORIFICE PLATE ELEVATIONS, TOP OF OUTLET STRUCTURE/GRATE ELEVATIONS AT FRONT, MIDDLE AND BACK; SPILLWAY ELEVATION AND WIDTH, TOP OF EMBANKMENT ELEVATION AROUND DETENTION BASIN; FOREBAY FLOWLINE AND TOP OF WALLS; LOW FLOW CHANNEL ELEVATIONS AND A SUFFICIENT AMOUNT OF GROUND ELEVATIONS WITHIN THE DETENTION AREA TO DETERMINE THE AS-BUILT VOLUME.
    17.2. REFER TO THE "DETENTION DETAIL SHEET" FOR REQUIRED DETENTION VOLUMES AND ELEVATIONS.
    17.3. THE FINAL VOLUME CERTIFICATION SHALL BE PERFORMED AFTER THE FINAL LANDSCAPING HAS BEEN INSTALLED. IT IS RECOMMENDED THAT THE VOLUME IS CHECKED BEFORE FINAL LANDSCAPING IS PERFORMED IN CASE THE VOLUME DOES NOT MEET THE REQUIRED VOLUME.
20. BENCHMARK: ELEVATIONS ARE BASED UPON DOUGLAS COUNTY CONTROL POINT 1.009009, BEING A 3.25" ALUMINUM CAP STAMPED DOUGLAS COUNTY GIS 1.009009. ELEVATION=6289.00 NAVD88(#99).
21. BASIS OF BEARING:(GRID NAD 83) BEARINGS ARE BASED UPON THE WEST LINE OF THE NORTH WEST 1/4 OF THE SOUTH WEST 1/4 SECTION 29. T7S R66W, BEING MONUMENTED AT BOTH ENDS WITH A NO.6 REBAR AND 2" ALUMINUM CAP STAMPED RMS PLS 23515. SAID LINE BEARS S 00°04'08"E, A DISTANCE OF 1323.67 FEET PER COLORADO STATE PLANE COORDINATES.

GENERAL UTILITY NOTES:
1. THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SANITARY SEWER, STORM SEWER, WATER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF PIPE.
2. ALL STORM SEWER AND SANITARY SEWER PIPE LENGTHS AND SLOPES ARE FIGURED FROM CENTER OF MANHOLE, BEND, WYE AND THE INSIDE WALL OF INLETS. PIPE LENGTHS ARE GIVEN AS A HORIZONTAL LENGTH AND ARE APPROXIMATE.
3. ALL STORM AND SANITARY SEWER PIPE BEDDING TO BE CLASS B BEDDING, UNLESS OTHERWISE NOTED.
4. RCP STORM SEWER PIPE SHALL BE CLASS III, WALL B, UNLESS OTHERWISE NOTED.
5. ALL RCP SECTIONS SHALL BE JOINED IN SUCH A MANNER THAT THE ENDS ARE FULLY ENTERED AND THE INNER SURFACES ARE REASONABLY FLUSH. RUBBER GASKETS SHALL BE USED ON ALL PIPE JOINTS CONFORMING TO ASTM C-433. AVERAGE JOINT GAP THAT EXCEEDS 1/2 INCH SHALL BE FILLED WITH NON-SHRINK GROUT.
6. PVC STORM AND SANITARY SEWER PIPES SHALL CONFORM TO ASTM D3034 SDR 35 FOR SIZES 4-INCHES TO 15-INCHES IN DIAMETER (SOLID WALL), UNLESS OTHERWISE NOTED. GASKETS SHALL COMPLY WITH ASTM F477, CONSISTING OF A PROPERLY VULCANIZED HIGH GRADE ELASTOMERIC COMPOUND. LUBRICANTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. JOINTS SHALL BE IN CONFORMANCE WITH ASTM D3212.
7. COMPACTION OF TRENCHES SHALL BE 95% OF THE MATERIALS STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698) AND TO 0 TO +3% OF THE OPTIMUM MOISTURE CONTENT FOR CLAY SOILS AND -2 TO +2% OF THE OPTIMUM MOISTURE CONTENT FOR SANDY SOILS TO A MINIMUM DEPTH OF 8-INCHES, UNLESS OTHERWISE NOTED OR REQUIRED BY GEOTECHNICAL ENGINEER.
8. ALL STORM MANHOLES SHALL BE CONSTRUCTED WITH FILL CONCRETE TO THE CROWN OF THE HIGHEST TOP OF PIPE ENTERING OR EXITING THE MANHOLE. REFER TO TOWN OF CASTLE ROCK STANDARD DETAILS.
9. UTILITY INTERFACE BETWEEN SITE AND BUILDING DESIGN. INTERFACE IS 5.0-FT AWAY FROM BUILDING FACE, UNLESS OTHERWISE NOTED. REFER TO MECHANICAL/PLUMBING DRAWINGS FOR DESIGN OF UTILITY FROM INTERFACE TO THE BUILDING. SITE UTILITY CONTRACTOR TO COORDINATE WITH BUILDING UTILITY/PLUMBING CONTRACTOR ON THE EXACT LOCATION OF UTILITIES INTO THE BUILDING PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOUR NOTICE TO, AND OBTAIN APPROVAL FROM: OPERATIONS, TOWN OF CASTLE ROCK UTILITIES DEPARTMENT, (720) 733-6000, PRIOR TO MAKING ANY CONNECTIONS/TIE-INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS.
    10.1. CONTRACTOR SHALL NOTIFY THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY THE UTILITIES DEPARTMENT.
11. FDC: THE PIPE TO THE FDC SHALL TERMINATE WITH A 5-INCH STORZ FITTING WITH PERMANENTLY ATTACHED CAP, AND A 22-30 DEGREE ELBOW TO DIRECT THE STORZ HALFWAY BETWEEN HORIZONTAL AND THE GROUND. REFER TO THE FDC DETAIL. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
    11.1. REFER TO CRFD LIFE SAFETY DIVISION GUIDELINE, FIRE DEPARTMENT CONNECTIONS (FDC) FOR REQUIREMENTS.
12. FDC AND FIRE WATER PIPE TO BE FULLY RESTRAINED.
13. PROJECT IS LOCATED IN THE BLUE PRESSURE ZONE (LIBERTY VILLAGE BLUE). EXISTING NORMAL WATER MAIN PRESSURE: 100 PSI +/- (NORMAL HGL=6486 AND MAXIMUM HGL=6508).
    13.1. FIRE FLOW TEST COMPLETED ON OCTOBER 7, 2025. STATIC PRESSURE: 97 PSI. RESIDUAL PRESSURE: 89.3 PSI.
14. ALL UTILITY CUTS WITHIN THE PUBLIC ROW ARE TO BE FILLED WITH FLOWABLE FILL, EDGE-MILL PERIMETER OF SAW-CUT, MATCH EXISTING ASPHALT DEPTH. COORDINATE WITH PUBLIC WORKS INSPECTOR.

PAVING NOTES:
1. PAVEMENT CONSTRUCTION, INCLUDING PAVEMENT DEPTHS SHALL FOLLOW THE TOWN OF CASTLE ROCK REQUIREMENTS AND RECOMMENDATIONS INCLUDED IN GEOTECHNICAL ENGINEERING REPORT FOR THE SITE.
2. ALL PAVEMENT AREAS SHOULD BEAR ON NO LESS THAN 12 INCHES OF SCARIFIED, MOISTURE CONDITIONED AND COMPACTED SOILS OR BE 12-INCHES CLEAN FILL COMPACTED TO THE LEVEL AND MOISTURE CONTENT INDICATED IN THE GEOTECHNICAL REPORT.
    2.1. MATERIAL MEETING THE CDOT REQUIREMENTS FOR GRADING SX (1/2 INCH NOMINAL) FOR TOP LIFT AND GRADING S (3/4 INCH NOMINAL) FOR THE LOWER LAYERS IS RECOMMENDED. ASPHALT CEMENT: PG 64-22 OR PG 64-28. ASPHALT CONTENT: AS PER MIX DESIGN. PERCENT AIR VOIDS: 3-1/2% TO 5%. Ndesign=75.
3. ASPHALTIC PAVEMENT WORK SHOULD MEET THE REQUIREMENTS FOR SUPERPAVE MIXTURES IN THE COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ASPHALTIC LEVELING AND SURFACE COURSE SHALL CORRESPOND TO SECTION 703.04 STATE OF COLORADO DIVISION OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REQUIREMENTS FOR HOT PLANT MIX BITUMINOUS PAVEMENT.
4. ASPHALT MIX DESIGNS STATING THE SUPERPAVE MIXTURE PROPERTIES, SHOULD BE SUBMITTED TO THE GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION TO VERIFY THEIR ADEQUACY. MATERIALS AND CONSTRUCTION METHODS SHOULD BE IN ACCORDANCE WITH THE CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 403.
5. THE AGGREGATE BASE COURSE SHOULD BE CDOT CLASS 6 PER CDOT TABLE 703-2 AND CONSTRUCTION METHODS SHOULD CONFORM TO CDOT SECTION 304. THE AGGREGATE BASE COURSE SHOULD BE COMPACTED TO A MINIMUM OF 95% OF ASTM D698.
6. ASPHALT MATERIAL SHOULD BE PLACED IN MAXIMUM 3-INCH LIFTS (2-INCH MINIMUM THICKNESS OR TWO TIMES THE AGGREGATE SIZE WHICHEVER IS GREATER) AND SHOULD BE COMPACTED TO A MINIMUM OF 92-96% MAXIMUM THEORETICAL DENSITY.
7. AFTER FINAL SUBGRADE ELEVATION HAS BEEN REACHED AND THE SUBGRADE COMPACTED, THE MOISTURE CONTENT AND DENSITY OF THE TOP 12 INCHES OF THE SUBGRADE SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER AND THE PAVEMENT SUBGRADES SHOULD BE PROOF ROLLED WITH A HEAVY PNEUMATIC-TIRED VEHICLE (I.E. A LOADED TEN-WHEEL DUMP TRUCK) WITH A MINIMUM WEIGHT OF 15 TONS. THE GEOTECHNICAL ENGINEER SHALL OBSERVE THE PROOF ROLLING. AREAS NOT IN COMPLIANCE WITH THE REQUIRED RANGES OF MOISTURE OR DENSITY AND SUBGRADE THAT IS PUMPING OR DEFORMING EXCESSIVELY (GREATER THAN 1-INCH) SHOULD BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED. FILL AND CONSOLIDATE DEPRESSED AREAS, REMOVE UNCOMPACTED MATERIALS AND COMPACT TO 95% OF THE MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D698 STANDARD PROCTOR METHOD. PAVEMENT SHOULD NOT BE PLACED ON SOFT, WET, FROZEN OR OTHERWISE UNSUITABLE SUBGRADE.

CURB & GUTTER, SIDEWALK AND CONCRETE NOTES:
1. CONCRETE FOR SITE CURB & GUTTER AND SIDEWALK SHALL BE CDOT CLASS B. CONCRETE DRAIN PANS AND PAVEMENT SHALL BE CDOT CLASS P.
2. FINISH: CURB AND GUTTER: SACK FINISH EXPOSED SURFACES. SIDEWALKS: BROOM FINISH EXPOSED SURFACES. PAVEMENT: AS SOON AS FINISHED CONCRETE HAS SET SUFFICIENTLY TO MAINTAIN A TEXTURE AND NO BLEED WATER REMAINS ON SURFACE, THE SURFACE CAN BE DRAGGED WITH A SHORT LENGTH OF DAMP BURLAP OR OTHER MATERIAL SUCH AS SYNTHETIC TURF CARPETING. AS AN ALTERNATIVE, THE SURFACE CAN BE BROOMED TO DEVELOP A SKID-RESISTANT SURFACE AND UNIFORM APPEARANCE.
3. CONTROL (CONTRACTION) AND CONSTRUCTION JOINTS: CONTROL JOINTS SHOULD SEPARATE CONCRETE PAVEMENTS INTO PANELS AS RECOMMENDED BY ACI. THE CONTROL JOINTS SHALL BE TOOLED OR SAWCUT TO A MINIMUM DEPTH OF ONE-QUARTER (1/4) OF THE TOTAL THICKNESS OF THE CONCRETE. SAWED CONTROL JOINT MUST BE DONE NO LATER THAN 24 HOURS AFTER CONCRETE IS POURED. CONSTRUCTION JOINTS SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER
    3.1. CURB & GUTTER CONTROL JOINT SPACING (3/16" WIDE) SHALL BE 10' TYPICAL (12' MAXIMUM), UNLESS SPECIFIED OTHERWISE. ADJUST SPACING LENGTH IF ADJACENT TO CONCRETE PAVEMENT SO PAVEMENT PANEL JOINT LINES WILL BE CONTINUOUS THROUGH THE C&G. PROVIDE CONSTRUCTION JOINTS 25-FT O.C. MAX IN EACH DIRECTION (UNLESS NOTED OTHERWISE).
    3.2. SIDEWALKS SHALL HAVE CONTROL JOINTS (3/16" WIDE) WITH THE JOINTS SPACED 5-FEET APART (4-FT MINIMUM, 6-FT MAXIMUM SPACING). PROVIDE CONSTRUCTION JOINTS 25-FT O.C. MAX IN EACH DIRECTION WITH SQUARE FOOTAGE LESS THAN 400 SF AND AT CURVES, TANGENTS AND CORNERS (UNLESS NOTED OTHERWISE).
    3.3. CONCRETE PAVEMENT CONTROL JOINT WIDTH: 1/16" - 1/8" FOR UNSEALED JOINTS. AT LEAST 1/4" FOR SEALED JOINTS WITH 3/8" TYPICAL.
4. EXPANSION JOINTS: INSTALL WHEN ABUTTING EXISTING CONCRETE SLABS, INLETS, FIRE HYDRANTS, POLES AND OTHER FIXED OBJECTS. TOOLED 1/4" RADIUS EDGES. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK, EXTEND FULL DEPTH OF CONTACT SURFACE, LEAVE 1/2" BELOW TOP OF PAVEMENT AND SEAL WITH 1/4" THICK POLYURETHANE JOINT SEALANT.
    4.1. CURB AND GUTTER EXPANSION JOINT SPACING: 300-FT MAX. ON STRAIGHT SECTIONS.
    4.2. SIDEWALK EXPANSION JOINT SPACING: 100-120 FOOT SPACING ON STRAIGHT SECTIONS.
5. JOINT SEALANT: BEFORE SEALING JOINTS, THE JOINT OPENING SHOULD BE THOROUGHLY CLEANED WITH COMPRESSED AIR TO REMOVE ALL FOREIGN MATTER. ALL CONTACT SURFACES OF THE JOINT SHOULD BE CLEANED TO REMOVE LOOSE MATERIAL AND SHOULD BE SURFACE DRY. SEALANT SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS.

Know what's below. Call before you dig.

PROFESSIONAL ENGINEER CERTIFICATION

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Civil Engineer signature and stamp — Date
Jacob I. McMillen, PE #56736

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

Approved By:

Development Services — Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:	12/15/2025
REVIEWED BY:	MWE
DRAWN BY:	AMD
DESIGNED BY:	JIM
PROJECT NUMBER:	20611004000

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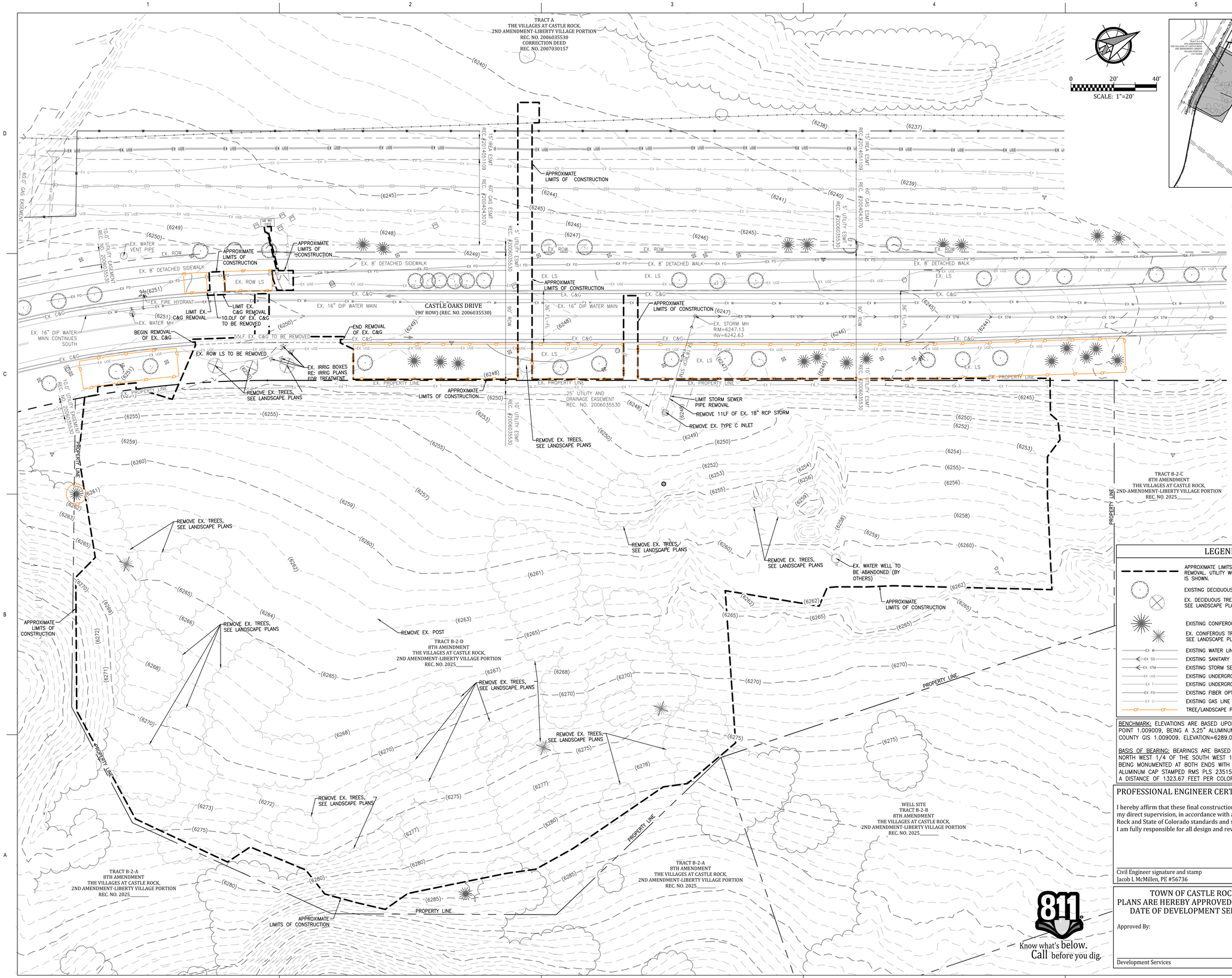
SEAL:

SHEET TITLE:
NOTES

SHEET ID:
2
Sheet 2 of 47

PROJECT STATUS:
Site Construction Documents

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LEGEND

- APPROXIMATE LIMITS OF CONSTRUCTION AND PAVEMENT REMOVAL. UTILITY WORK LIMITS MAY VARY FROM WHAT IS SHOWN.
- EXISTING DECIDUOUS TREE
- EX. DECIDUOUS TREE TO BE REMOVED OR RELOCATED SEE LANDSCAPE PLAN
- EXISTING CONIFEROUS TREE
- EX. CONIFEROUS TREE TO BE REMOVED OR RELOCATED SEE LANDSCAPE PLAN
- EX W — EXISTING WATER LINE
- EX SS — EXISTING SANITARY SEWER & FLOW DIRECTION
- EX STM — EXISTING STORM SEWER
- EX UGE — EXISTING UNDERGROUND ELECTRIC LINE
- EX T — EXISTING UNDERGROUND TELEPHONE LINE
- EX FO — EXISTING FIBER OPTIC LINE
- EX G — EXISTING GAS LINE
- CF CF — TREE/LANDSCAPE PROTECTION FENCE

BENCHMARK: ELEVATIONS ARE BASED UPON DOUGLAS COUNTY CONTROL POINT 1.009009, BEING A 3.25" ALUMINUM CAP STAMPED DOUGLAS COUNTY GIS 1.009009. ELEVATION=6289.00 NAVD 88 (#99).

BASIS OF BEARING: BEARINGS ARE BASED UPON THE WEST LINE OF THE NORTH WEST 1/4 OF THE SOUTH WEST 1/4 SECTION 29, T7S R66W, BEING MONUMENTED AT BOTH ENDS WITH A NO.6 REBAR AND 2" ALUMINUM CAP STAMPED RMS PLS 23515, SAID LINE BEARS S00°04'08"E, A DISTANCE OF 1323.67 FEET PER COLORADO STATE PLAN COORDINATES.

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PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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SEAL:

SHEET TITLE:
EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET ID:
3
Sheet 3 of 47

PROJECT STATUS:
Site Construction Documents

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TRACT A
THE VILLAGES AT CASTLE ROCK,
2ND AMENDMENT-LIBERTY VILLAGE PORTION
REC. NO. 2006035530
CORRECTION DEED
REC. NO. 2007030157

CASTLE OAKS DRIVE
(90' ROW) (REC. NO. 2006035530)

PROPOSED BUILDING
24,655± SF FOOTPRINT

WQ/DETENTION
BASIN

WELL SITE
TRACT B-2-B
8TH AMENDMENT
THE VILLAGES AT CASTLE ROCK,
2ND AMENDMENT-LIBERTY VILLAGE PORTION
REC. NO. 2025_____

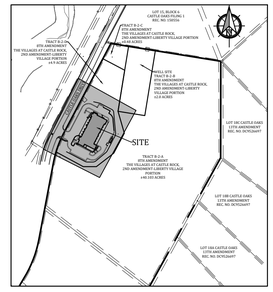
TRACT B-2-D
8TH AMENDMENT
THE VILLAGES AT CASTLE ROCK,
2ND AMENDMENT-LIBERTY VILLAGE PORTION
REC. NO. 2025_____

TRACT B-2-A
8TH AMENDMENT
THE VILLAGES AT CASTLE ROCK,
2ND AMENDMENT-LIBERTY VILLAGE PORTION
REC. NO. 2025_____

0 30' 60'
SCALE: 1"=30'

LEGEND

- PROPOSED BUILDING
- CURB SECTION -- 6" CURB & GUTTER – 1' PAN, SEE DETAIL C: CARRY SECTION, S: SPILL SECTION
- SIDEWALK (6" THK CONCRETE), UNLESS OTHERWISE NOTED ON ARCH. SITE PLAN), SEE NOTES AND CURB & GUTTER, SIDEWALK AND CONCRETE NOTES. REFER TO ARCH SITE PLAN FOR JOINTING PLAN.
- CURB RAMPS TYPICAL – REFER TO DETAILS
- HANDICAP PARKING SPACE, STRIPED ISLAND AND HANDICAP PARKING SIGN – REFER TO DETAILS.
- EXISTING SIGN
- PROPOSED SIGN
- APPROXIMATE LIMIT OF CONSTRUCTION AND ASPHALT REMOVAL
- PEDESTRIAN ACCESS
- PROPOSED FENCE
- PROPOSED HANDRAIL ABOVE SOIL NAIL WALL
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING LIGHT POLE
- LIGHTPOLE, SEE SITE LIGHTING PLAN FOR LAYOUT
- PROPOSED ELECTRIC TRANSFORMER, REFER TO ELEC DRAWINGS
- PROPERTY OR ROW LINE
- EXISTING EASEMENT



KEY MAP
SCALE:1"=500'

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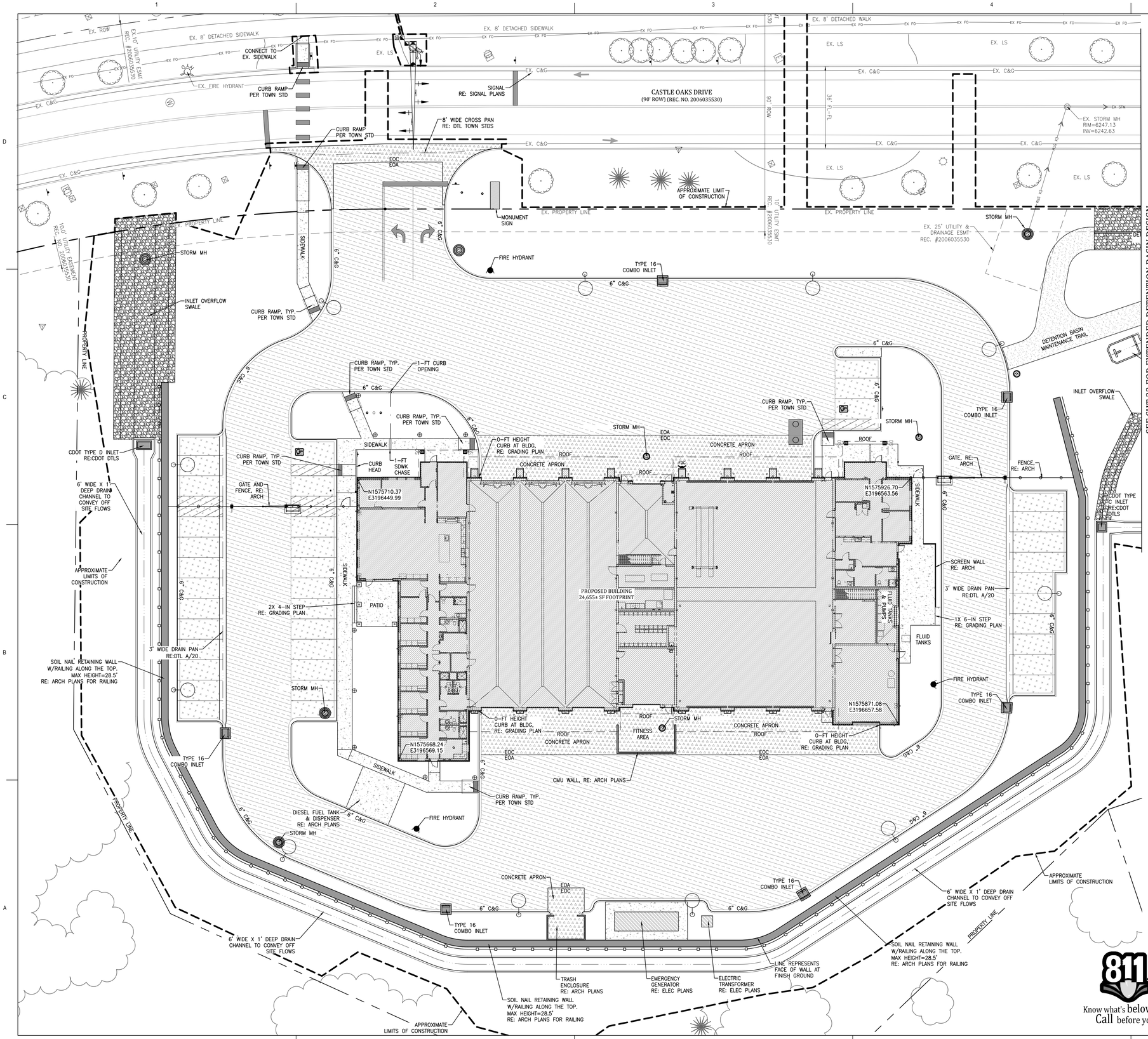
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SHEET TITLE:
OVERALL CIVIL SITE PLAN

SHEET ID:
4
Sheet 4 of 47

PROJECT STATUS:
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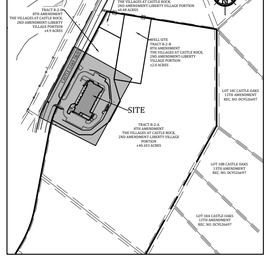
SEE SHT 22 FOR EXTENDED DETENTION BASIN DESIGN

0 20' 40'

SCALE: 1"=20'

LEGEND

- PROPOSED BUILDING
- CURB SECTION -- 6" CURB & GUTTER – 1' PAN, SEE DETAIL C: CARRY SECTION, S: SPILL SECTION
- SIDEWALK (6" THK CONCRETE), UNLESS OTHERWISE NOTED ON ARCH. SITE PLAN), SEE NOTES AND CURB & GUTTER, SIDEWALK AND CONCRETE NOTES. REFER TO ARCH SITE PLAN FOR JOINTING PLAN.
- CURB RAMPS TYPICAL – REFER TO DETAILS
- HANDICAP PARKING SPACE, STRIPED ISLAND AND HANDICAP PARKING SIGN – REFER TO DETAILS.
- EXISTING SIGN
- PROPOSED SIGN
- GENERAL PARKING AREAS:
  FULL DEPTH HMA: 5.5–INCHES ASPHALT PAVEMENT OR COMPOSITE SECTION: 4.0–INCHES ASPHALT PAVEMENT OVER 5.0–INCHES AGGREGATE BASE COURSE.
  RIGID SECTION: 6–INCHES CONCRETE OVER 6–INCHES AGGREGATE BASE COURSE. REFER TO PAVING NOTES FOR REQUIREMENTS.
- HEAVY TRUCK TRAFFIC AREAS / FIRE LANES:
  FULL DEPTH HMA: 7.0–INCHES ASPHALT PAVEMENT OR COMPOSITE SECTION: 4.5–INCHES ASPHALT PAVEMENT OVER 9.0–INCHES AGGREGATE BASE COURSE.
  RIGID SECTION: 8–INCHES CONCRETE OVER 6–INCHES AGGREGATE BASE COURSE. REFER TO PAVING NOTES FOR REQUIREMENTS.
- REINFORCED CONCRETE PAVEMENT–HEAVY TRAFFIC AREAS
  9.0–INCHES OF CDOT CLASS P REINFORCED CONCRETE PAVEMENT OVER 12.0–INCHES CDOT CLASS 5/6 AGGREGATE BASE COURSE. REFER TO STRUCTURAL PLANS FOR REINFORCEMENT AND INTEGRATION OF EXTERIOR CONCRETE APRON WITH INTERIOR STRUCTURAL FLOOR
- APPROXIMATE LIMIT OF CONSTRUCTION AND ASPHALT REMOVAL
- PROPOSED FENCE
- PROPOSED HANDRAIL
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING LIGHT POLE
- LIGHTPOLE, SEE SITE LIGHTING PLAN FOR LAYOUT
- PROPOSED ELECTRIC TRANSFORMER, REFER TO ELEC DRAWINGS
- PROPERTY OR ROW LINE
- EXISTING EASEMENT



KEY MAP
SCALE:1"=500'

BENCHMARK: ELEVATIONS ARE BASED UPON DOUGLAS COUNTY CONTROL POINT 1.009009, BEING A 3.25" ALUMINUM CAP STAMPED DOUGLAS COUNTY GIS 1.009009. ELEVATION=6289.00 NAVD 88 (#99).

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PROFESSIONAL ENGINEER CERTIFICATION

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Civil Engineer signature and stamp — Date
Jacob I. McMillen, PE #56736

TOWN OF CASTLE ROCK APPROVAL

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

Approved By:

Development Services — Date

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Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:	12/15/2025
REVIEWED BY:	MWE
DRAWN BY:	AMD
DESIGNED BY:	JIM
PROJECT NUMBER:	20611004000

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SEAL:

SHEET TITLE:
CIVIL SITE PLAN

SHEET ID:
5
Sheet 5 of 47

PROJECT STATUS:
Site Construction Documents

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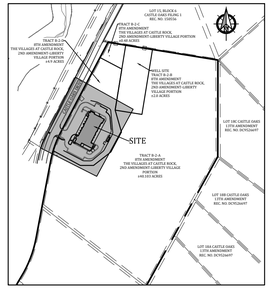
SEE SHT 22 FOR EXTENDED DETENTION BASIN DESIGN

0 20' 40'

SCALE: 1"=20'

LEGEND

- PROPOSED BUILDING
- CURB & GUTTER
- EXISTING PROPERTY LINE AND RIGHT OF WAY
- PROPOSED SIDEWALK
- CURB RAMPS TYPICAL – REFER TO DETAILS
- HANDICAP PARKING SPACE, STRIPED ISLAND AND HANDICAP PARKING SIGN – REFER TO DETAILS.
- EXISTING SIGN
- PROPOSED SIGN
- PROPOSED PAINTED ARROW, SEE DETAILS
- APPROXIMATE LIMIT OF DISTURBANCE AND ASPHALT REMOVAL
- PROPOSED FENCE
- PROPOSED HANDRAIL
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING LIGHT POLE
- LIGHTPOLE, SEE SITE LIGHTING PLAN FOR LAYOUT
- EXISTING EASEMENT



KEY MAP
SCALE:1"=500'

NOTE:
1. ALL PREFORMED THERMOPLASTIC PAVEMENT MARKINGS SHALL BE RECESSED

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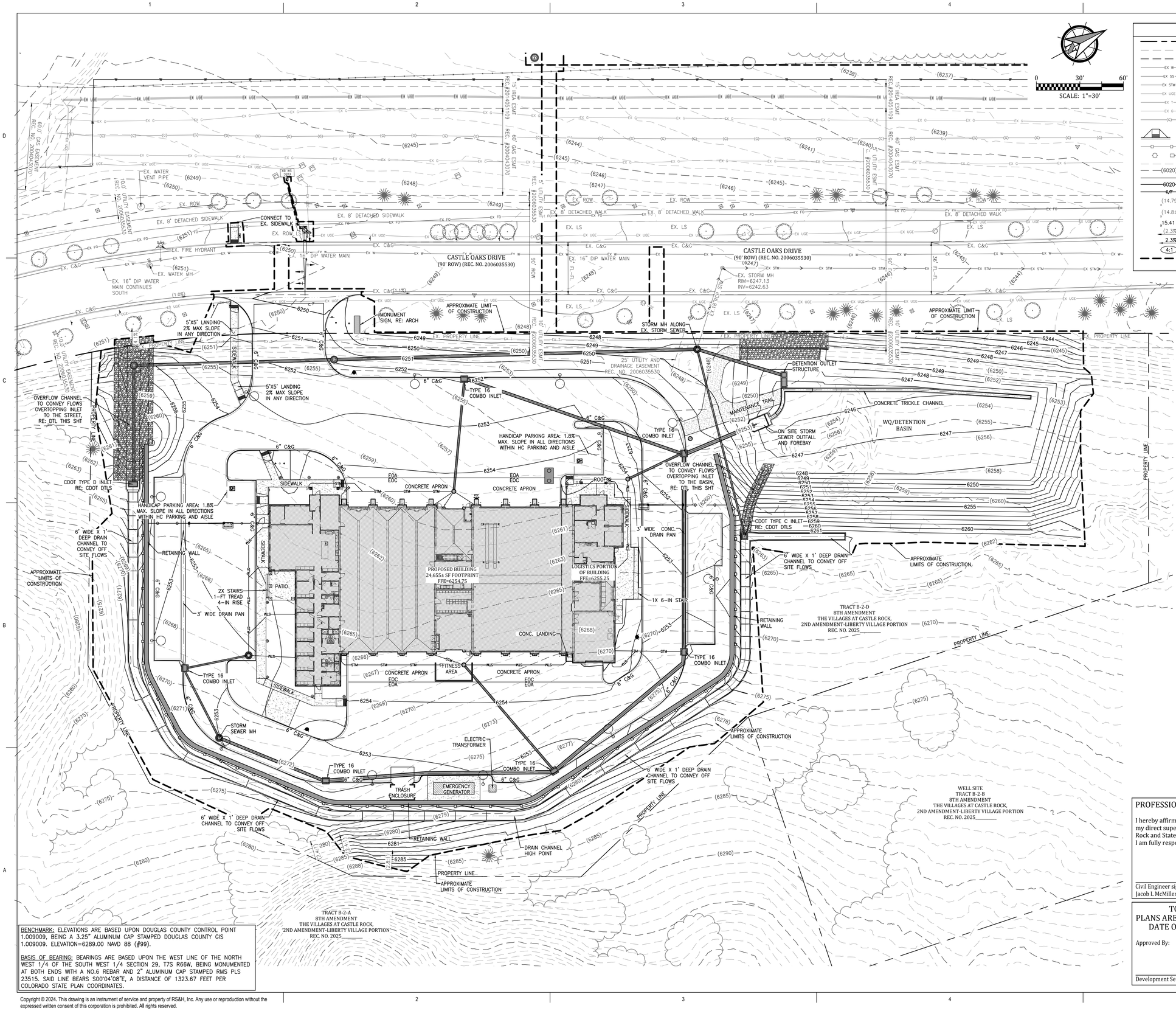
SEAL:

SHEET TITLE:
HORIZONTAL CONTROL AND SIGNAGE & STRIPING PLAN

SHEET ID:
6
Sheet 6 of 47

PROJECT STATUS:
Site Construction Documents

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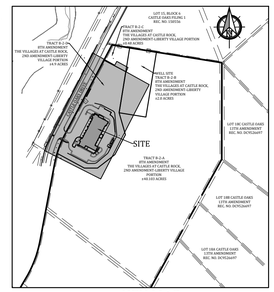


LEGEND

- PROPERTY OR ROW LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING WATER LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING GAS LINE
- ABANDONED GAS LINE
- CURB RAMPS TYPICAL – REFER TO DETAILS
- EXISTING FENCE
- EXISTING STREET LIGHT
- (6020) EXISTING CONTOURS
- 6020 PROPOSED CONTOURS
- CUT/FILL DEMARCATION LINE
- (14.79) EXISTING SPOT ELEVATION
- (14.8±) APPROXIMATE EXISTING SPOT ELEVATION. ELEVATION TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- 15.41 PROPOSED SPOT ELEVATION
- (2.3%) EXISTING FLOW DIRECTION AND SLOPE
- 2.3% PROPOSED FLOW DIRECTION AND SLOPE
- 4:1 PROPOSED SLOPE
- APPROXIMATE LIMIT OF CONSTRUCTION

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KEY MAP
SCALE:1"=500'

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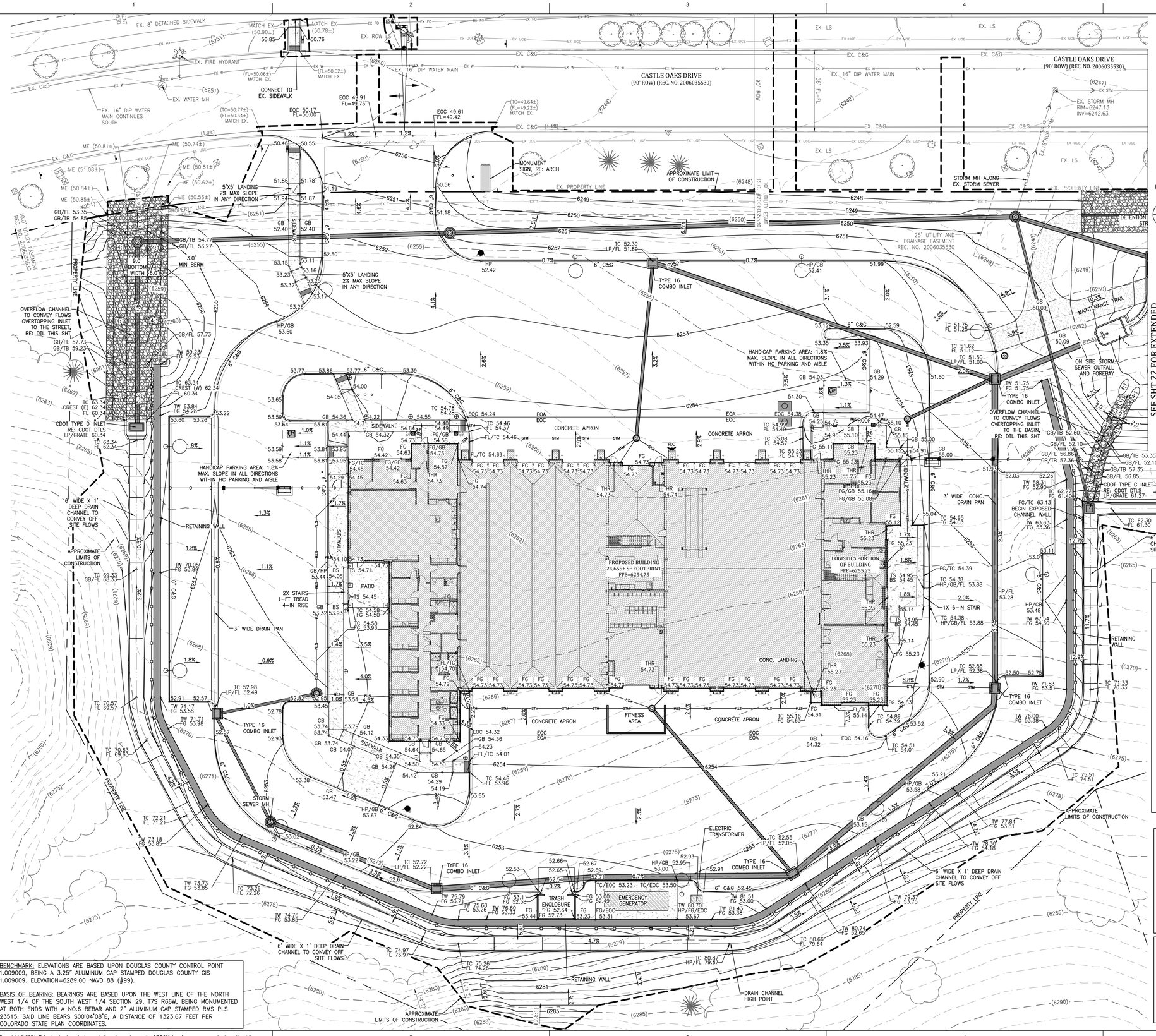
SEAL:

SHEET TITLE:
OVERALL GRADING PLAN

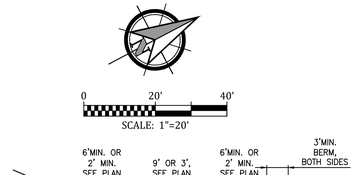
SHEET ID:
7
Sheet 7 of 47

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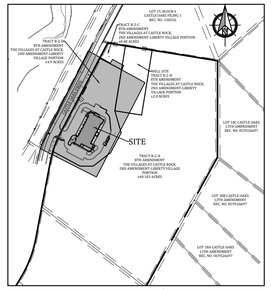


SEE SHT 22 FOR EXTENDED DETENTION BASIN DESIGN



A/9 BURIED SOIL RIPRAP OVERFLOW CHANNEL
SCALE: NTS

NOTE: OVERFLOW CHANNEL INTO SPILLWAY DOES NOT HAVE BERMS. CHANNEL SHOULD BE GRADED INTO SIDE OF DETENTION BASIN BANK



KEY MAP
SCALE:1"=500'

LEGEND

- PROPERTY OR ROW LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING WATER LINE
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING UNDERGROUND ELECTRIC LINE
- EXISTING UNDERGROUND TELEPHONE LINE
- EXISTING GAS LINE
- CURB RAMPS TYPICAL – REFER TO DETAILS
- EXISTING FENCE
- EXISTING STREET LIGHT
- (6020) EXISTING CONTOURS
- 6020 PROPOSED CONTOURS
- C/F CUT/FILL DEMARCATION LINE
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PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

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DRAWN BY:	AMD
DESIGNED BY:	JIM
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SHEET TITLE:
GRADING PLAN

SHEET ID:
8
Sheet 8 of 47

PROJECT STATUS:
Site Construction Documents

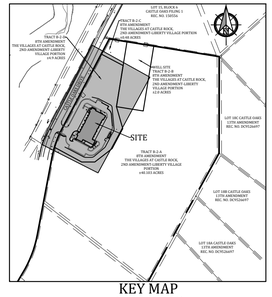
TRACT A
THE VILLAGES AT CASTLE ROCK,
2ND AMENDMENT-LIBERTY VILLAGE PORTION
REC NO. 2006035530
CORRECTION DEED
REC. NO. 2007030157

BUILDING FIRE FLOW INFORMATION	
BLDG CONSTRUCTION TYPE:	V–B
NFPA FIRE SPRINKLER SYSTEM:	YES
BUILDING FIRE AREA:	27,641 sf
FIRE FLOW REQUIRED:	2,250gpm @ 20psi Residual
(ASSUMES 50% REDUCTION FOR FIRE SPRINKLER)	
MIN # OF HYDRANTS:	2

0 20' 40'
SCALE: 1"=20'

LEGEND

- PROPOSED BUILDING
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING GRATED INLET
- EXISTING LIGHT POLE
- LIGHTPOLE, SEE SITE LIGHTING PLAN FOR LAYOUT
- ET — PROPOSED ELECTRIC TRANSFORMER
- TH — UTILITY TESTHOLE LOCATION
- EXISTING OR PROPOSED PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EX W — EXISTING WATER LINE
- EX SS — EXISTING SANITARY SEWER & FLOW DIRECTION
- EX STM — EXISTING STORM SEWER
- EX UGE — EXISTING UNDERGROUND ELECTRIC LINE
- EX T — EXISTING UNDERGROUND TELEPHONE LINE
- EX FO — EXISTING FIBER OPTIC LINE
- EX G — EXISTING GAS LINE
- SS — PROPOSED SANITARY SERVICE AND CLEAN OUT
- W — PROPOSED WATER LINE OR SERVICE AND VALVE
- PROPOSED WATER LINE, THRUST BLOCK & MJ RSTNTS
- PROPOSED FIRE HYDRANT
- M — PROPOSED WATER METER
- UTILITY CAP/PLUG OR INTERFACE
- SS — PROPOSED SANITARY SEWER AND MANHOLE
- STM — PROPOSED STORM SEWER PIPE AND MANHOLE
- PROPOSED COMBINATION INLET
- DS — PROPOSED BUILDING DOWNSPOUT



KEY MAP
SCALE:1"=500'

NOTES:
1. ALL WATER AND SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE TOWN OF CASTLE ROCK STANDARDS AND DETAILS.
2. REFER TO NOTES SHEET FOR UTILITY NOTES.
3. REFER TO THE GEOTECHNICAL REPORT FOR THE PIPE BEDDING AND BACKFILL REQUIREMENTS.
4. UTILITY INTERFACE BETWEEN SITE AND BUILDING DESIGN. INTERFACE IS 5.0–FT AWAY FROM BUILDING FACE, UNLESS OTHERWISE NOTED. REFER TO MECHANICAL/PLUMBING DRAWINGS FOR DESIGN OF UTILITY FROM INTERFACE TO THE BUILDING. SITE UTILITY CONTRACTOR TO COORDINATE WITH BUILDING UTILITY/PLUMBING CONTRACTOR ON THE EXACT LOCATION OF UTILITIES INTO THE BUILDING PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY–TWO (72) HOUR NOTICE TO, AND OBTAIN APPROVAL FROM: OPERATIONS, TOWN OF CASTLE ROCK UTILITIES DEPARTMENT, (720) 733–6000, PRIOR TO MAKING ANY CONNECTIONS/TIE–INS TO EXISTING WATER, SANITARY SEWER, AND/OR STORM SEWER SYSTEMS.
   5.1. CONTRACTOR SHALL NOTIFY THE TOWN OF CASTLE ROCK UTILITIES DEPARTMENT OF ANY WORK THAT REQUIRES SHUTDOWN OR INTERRUPTION OF SERVICE OF EXISTING WATER MAINS THREE WEEKS PRIOR TO THE PROPOSED SHUTDOWN OR INTERRUPTION UNLESS OTHERWISE APPROVED BY THE UTILITIES DEPARTMENT.
6. ALL UTILITIES UNDER REINFORCED CONCRETE APRON SHALL HAVE FLOWFILL BEDDING AND BACKFILL UP TO THE TYPICAL BACKFILL ZONE. THE EXTENT OF FLOWFILL BACKFILL AND BEDDING SHOULD EXTEND 5–FT BEYOND LIMITS OF CONCRETE APRON.
7. THE FINAL SIZE AND DESIGN OF THE GREASE INTERCEPTOR SHALL BE IN ACCORDANCE WITH THE PLUM CREEK WATER RECLAMATION AUTHORITY CODE OF RULES AND REGULATIONS.

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NO.	DESCRIPTION	DATE

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DRAWN BY: AMD
DESIGNED BY: JIM
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SEAL:

SHEET TITLE:
OVERALL UTILITY PLAN

SHEET ID:
9
Sheet 9 of 47

PROJECT STATUS:
Site Construction Documents

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SEE RIGHT THIS SHEET

SEE SHT 22 FOR EXTENDED DETENTION BASIN DESIGN

SEE LEFT THIS SHEET

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BLDG CONSTRUCTION TYPE:	V-B
NFPA FIRE SPRINKLER SYSTEM:	YES
BUILDING FIRE AREA:	27,641 sf
FIRE FLOW REQUIRED:	2,250gpm @ 20psi Residual
(ASSUMES 50% REDUCTION FOR FIRE SPRINKLER)	
MIN # OF HYDRANTS:	2

SCALE: 1"=20'

LEGEND

- PROPOSED BUILDING
- EXISTING FIRE HYDRANT
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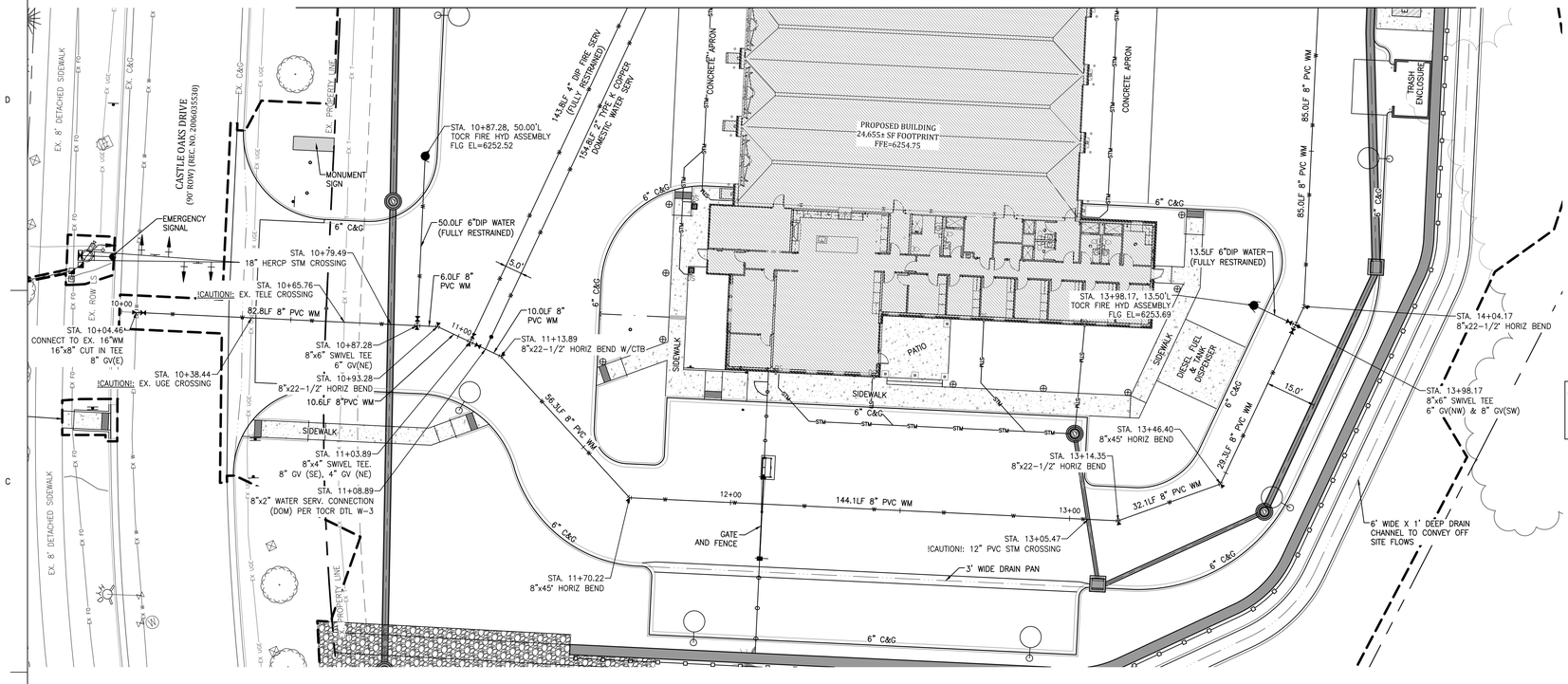
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SHEET TITLE:
UTILITY PLAN

SHEET ID:
10
Sheet 10 of 47

PROJECT STATUS:
Site Construction Documents

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0 20' 40'

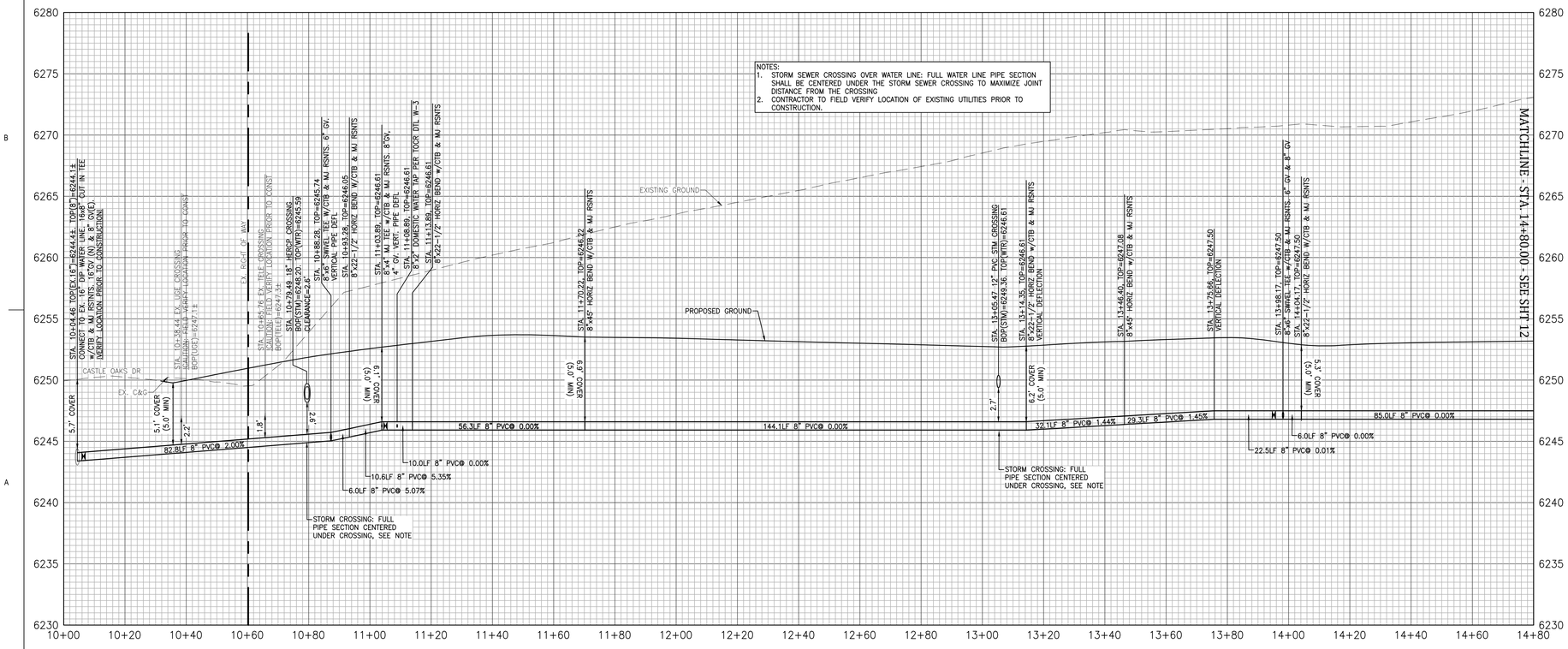
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VERT. SCALE: 1"=5'

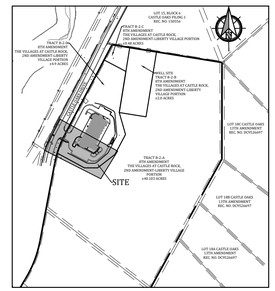
LEGEND

- PROPOSED BUILDING
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
- EXISTING GRATED INLET
- EXISTING LIGHT POLE
- LIGHTPOLE, SEE SITE LIGHTING PLAN FOR LAYOUT
- PROPOSED ELECTRIC TRANSFORMER
- UTILITY TESTHOLE LOCATION
- EXISTING OR PROPOSED PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING WATER LINE
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- UTILITY CAP/PLUG OR INTERFACE
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- PROPOSED COMBINATION INLET

NOTES:
1. ALL WATER AND SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE TOWN OF CASTLE ROCK STANDARDS AND DETAILS.
2. REFER TO NOTES SHEET FOR UTILITY NOTES.
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WATER LINE PROFILE





KEY MAP
SCALE:1"=500'

BENCHMARK: ELEVATIONS ARE BASED UPON DOUGLAS COUNTY CONTROL POINT 1.009009, BEING A 3.25" ALUMINUM CAP STAMPED DOUGLAS COUNTY GIS 1.009009. ELEVATION=6289.00 NAVD 88 (#99).

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Jacob I. McMillen, PE #56736

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Approved By:

Development Services — Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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SEAL:

811 Know what's below. Call before you dig.

SHEET TITLE:
WATER PLAN AND PROFILE

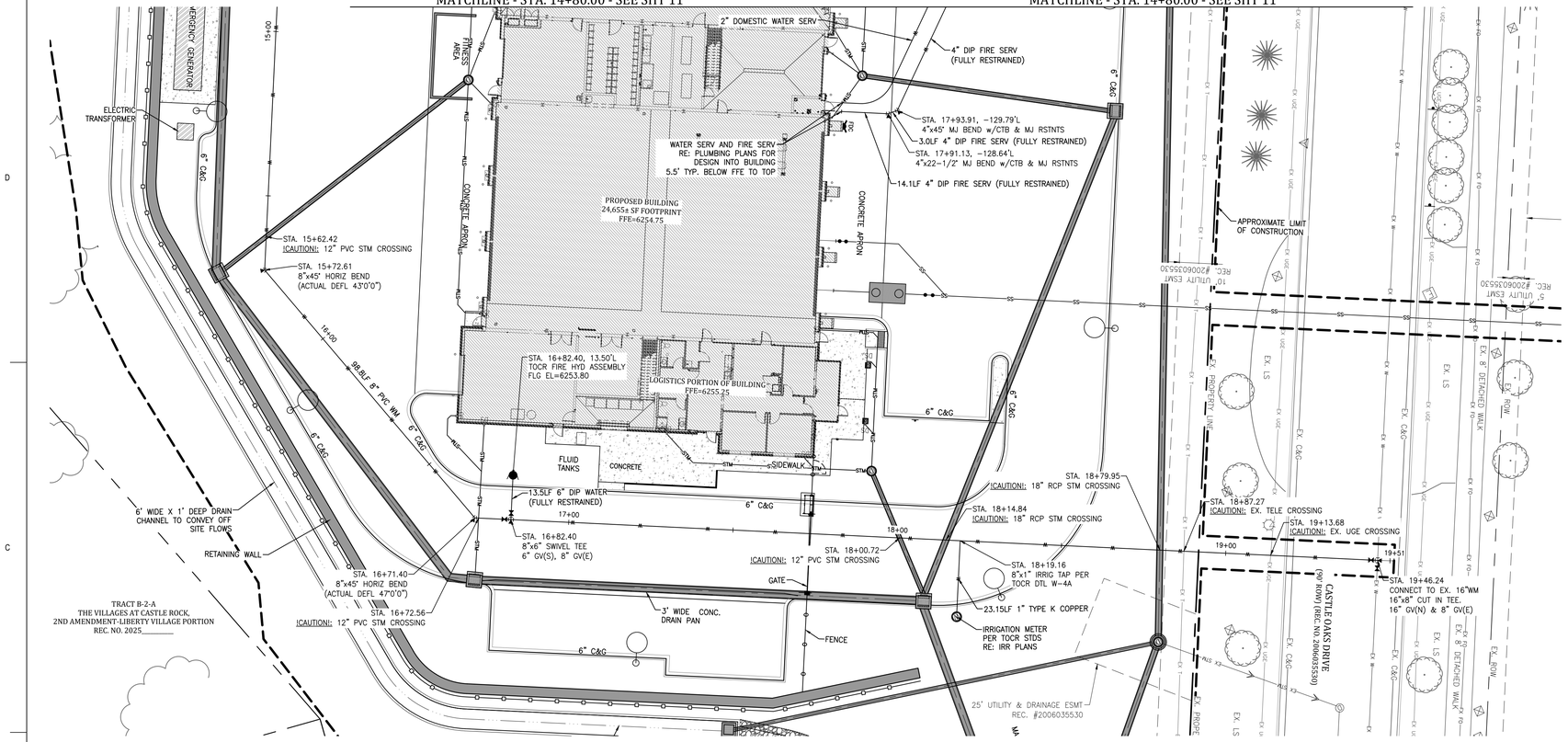
SHEET ID:
11
Sheet 11 of 47

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MATCHLINE - STA. 14+80.00 - SEE SHT 11

MATCHLINE - STA. 14+80.00 - SEE SHT 11



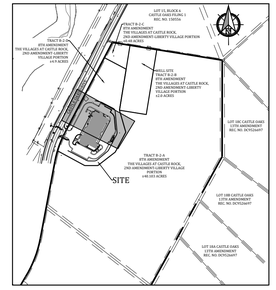
0 20' 40'

HORIZ. SCALE: 1"=20'
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LEGEND

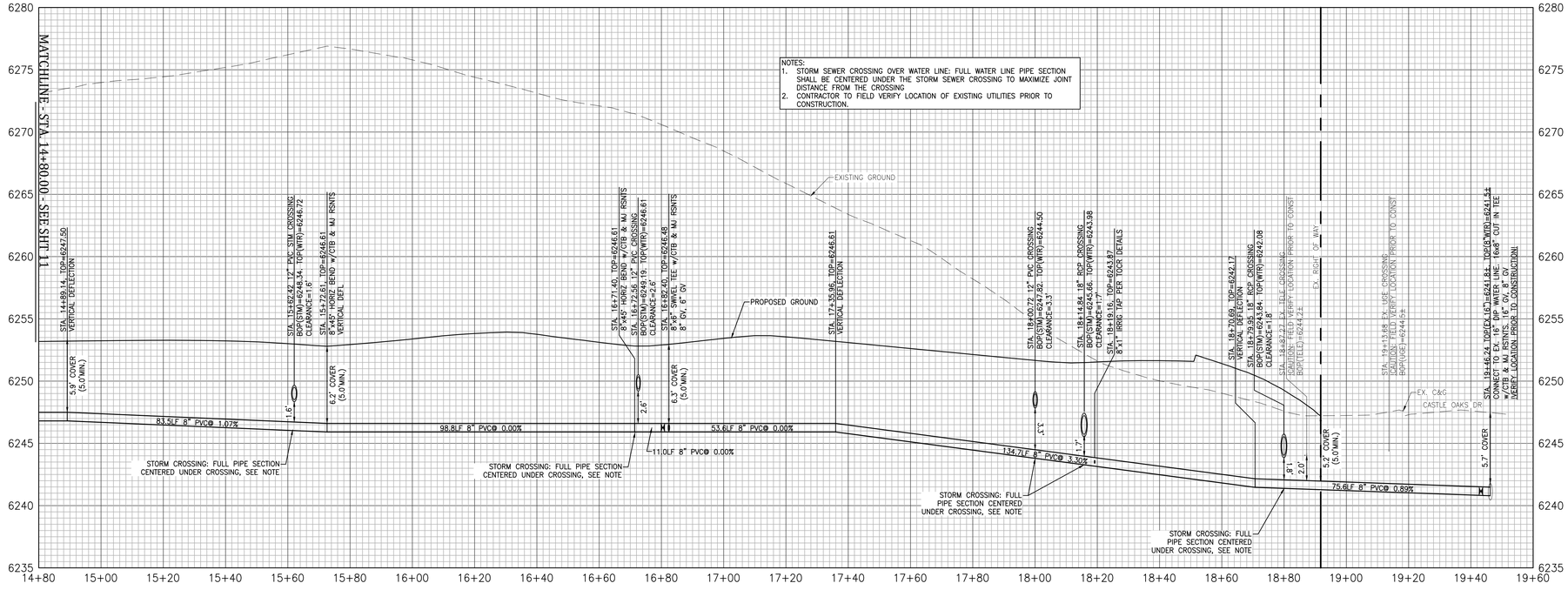
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KEY MAP
SCALE:1"=500'

WATER LINE PROFILE



NOTES:
1. STORM SEWER CROSSING OVER WATER LINE: FULL WATER LINE PIPE SECTION SHALL BE CENTERED UNDER THE STORM SEWER CROSSING TO MAXIMIZE JOINT DISTANCE FROM THE CROSSING
2. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

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DESIGNED BY:	JIM

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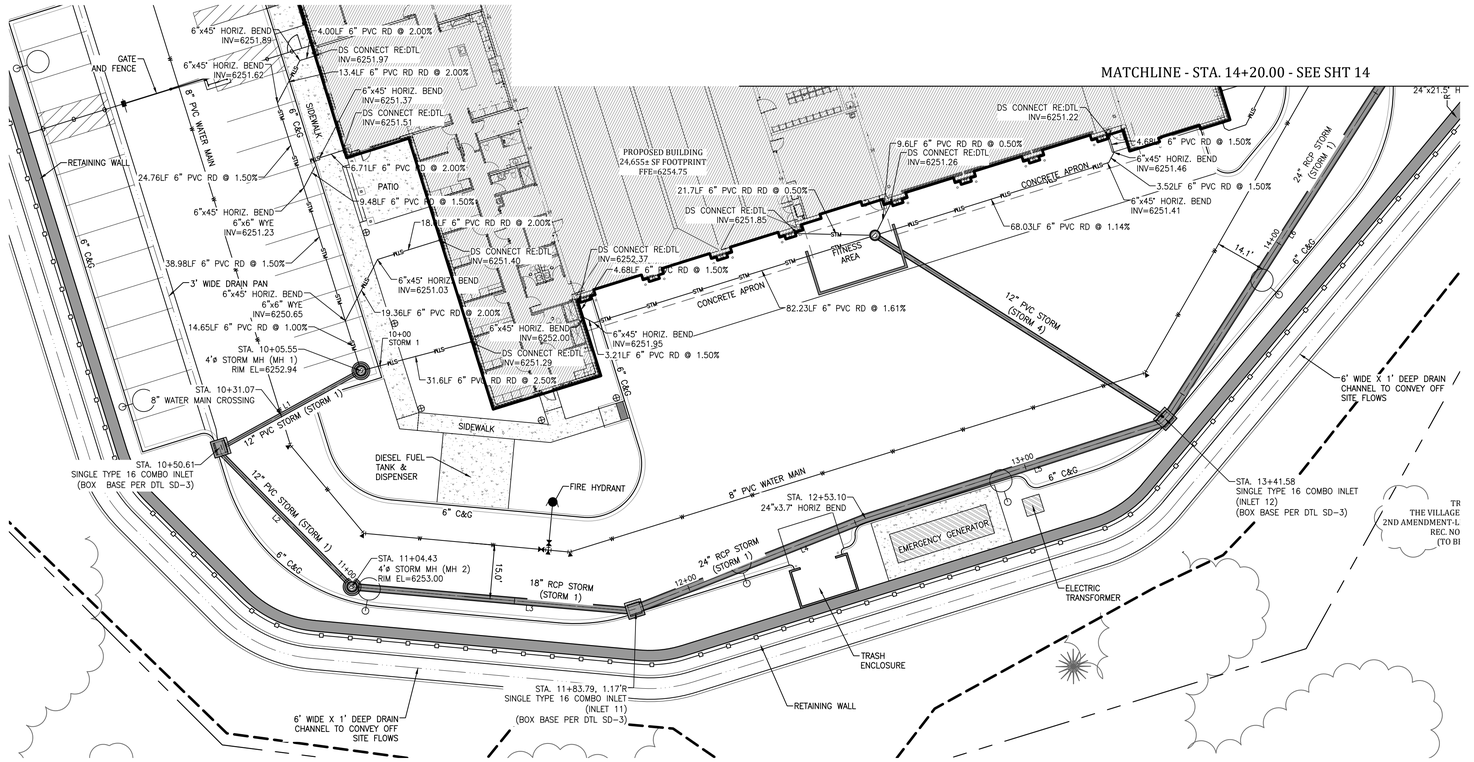
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SHEET TITLE:
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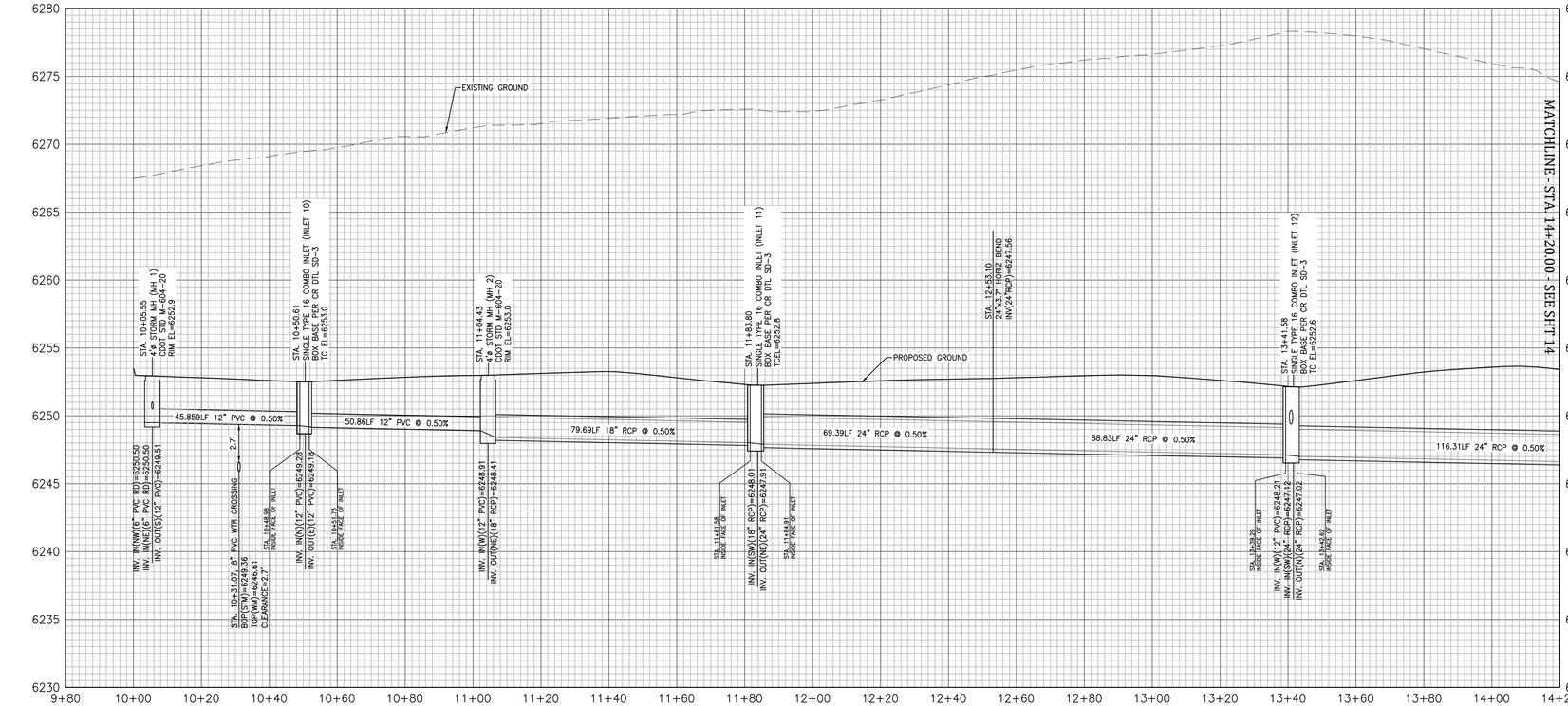
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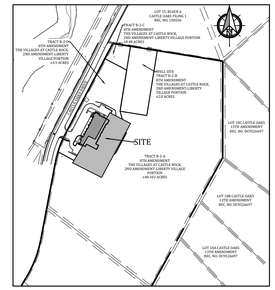
PROJECT STATUS:
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STORM 1 PROFILE





KEY MAP
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- EXISTING WATER VALVE
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LINE TABLE: ALIGNMENT

LINE #	DIRECTION	START POINT(N.E)	END POINT (N.E)
L1	S16° 06' 32.72"W	(3196535.42,1575649.71)	(3196523.24,1575607.54)
L2	S89° 30' 17.00"E	(3196524.19,1575605.73)	(3196576.34,1575605.27)
L3	N49° 58' 02.39"E	(3196576.34,1575605.27)	(3196635.83,1575655.25)
L4	N23° 27' 29.83"E	(3196637.38,1575658.20)	(3196664.30,1575720.25)
L5	N27° 09' 26.68"E	(3196664.30,1575720.25)	(3196703.93,1575797.50)
L6	N12° 18' 10.81"W	(3196703.78,1575800.82)	(3196679.39,1575912.67)

PROFESSIONAL ENGINEER CERTIFICATION

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DESIGNED BY:	JIM
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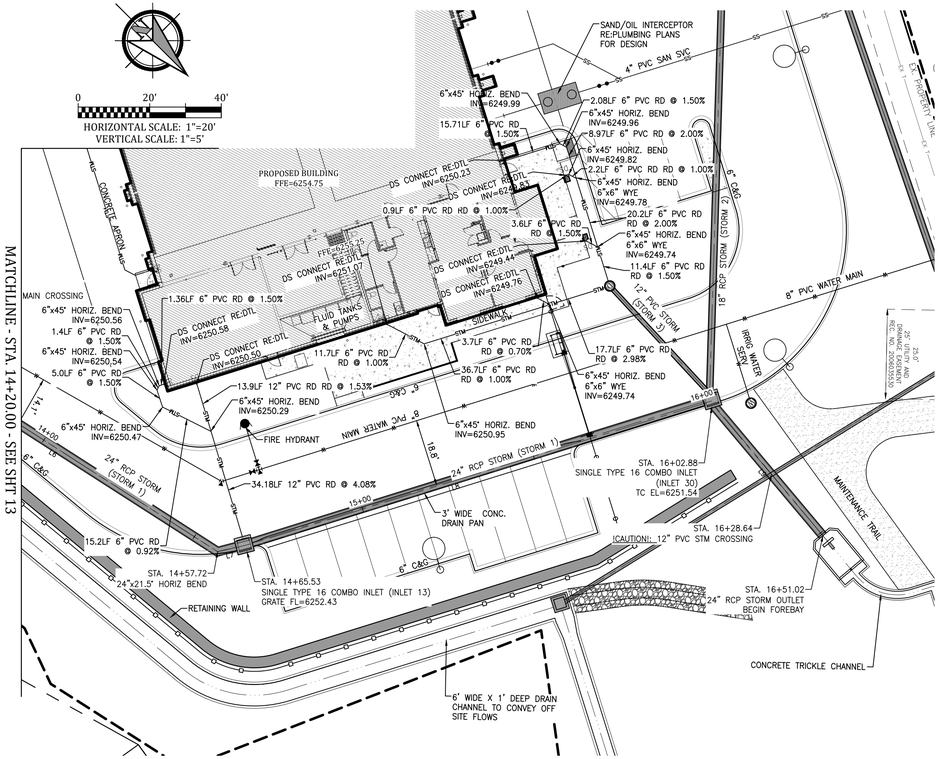
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SHEET TITLE:
STORM SEWER PLAN AND PROFILE

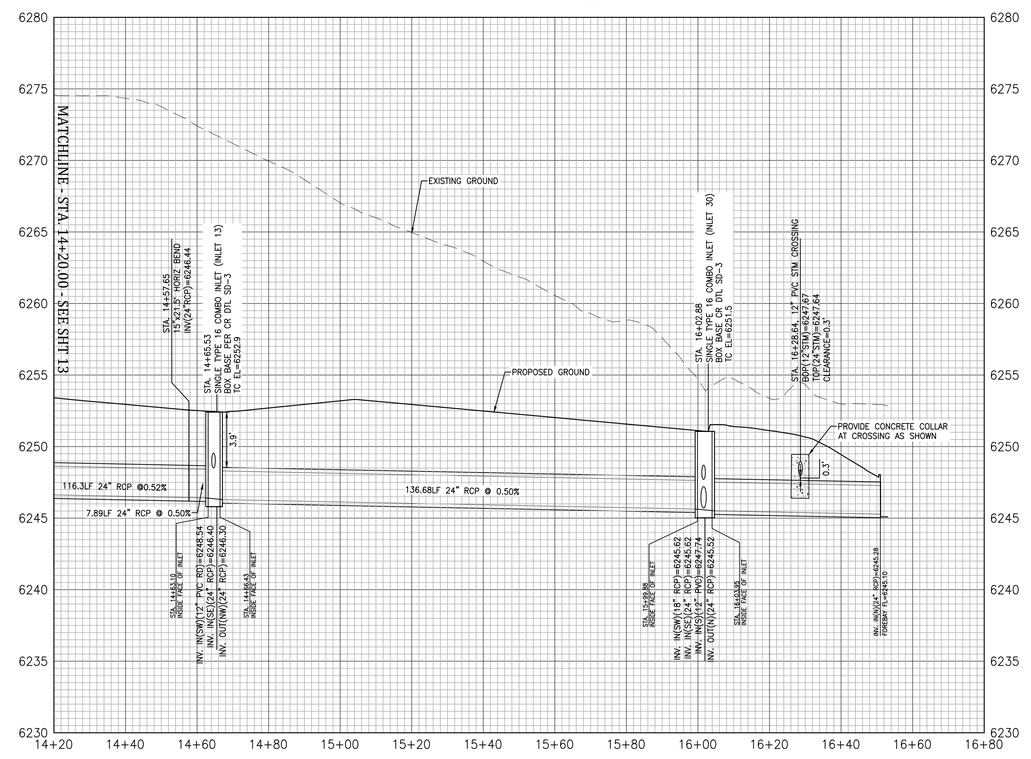
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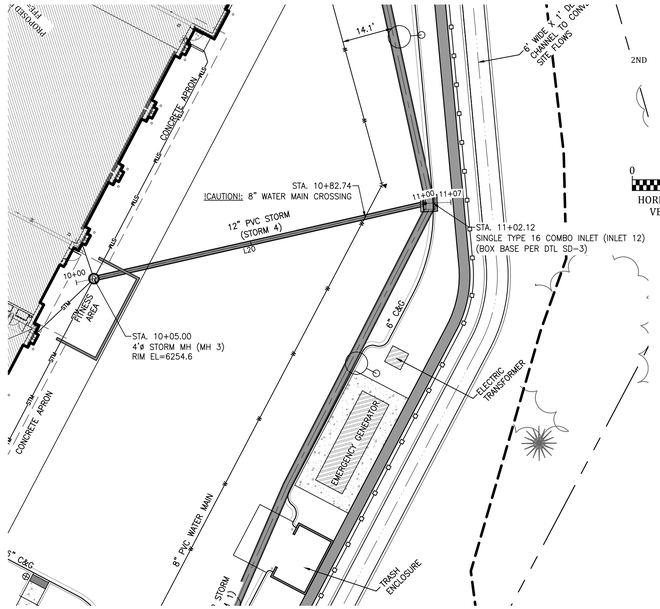
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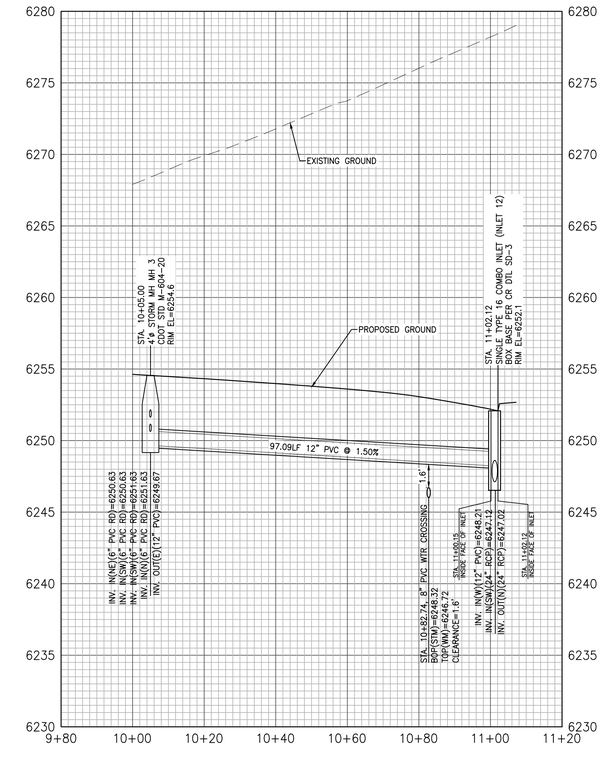


STORM 1 PROFILE





STORM 4 PROFILE

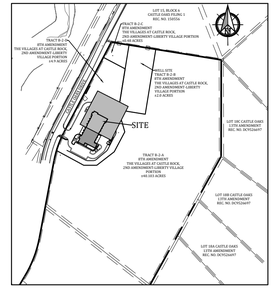




LEGEND

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LINE TABLE: ALIGNMENT			
LINE #	DIRECTION	START POINT(N,E)	END POINT (N,E)
L6	N12° 18' 10.81"W	(3196703.78,1575800.82)	(3196679.39,1575912.67)
L7	N57° 25' 45.79"W	(3196679.39,1575912.67)	(3196674.33,1575915.91)
L8	N62° 12' 48.08"W	(3196671.46,1575917.59)	(3196553.40,1575979.80)
L9	N05° 11' 20.22"E	(3196552.25,1575981.20)	(3196556.78,1576031.14)
L20	N77° 13' 21.35"E	(3196610.23,1575778.08)	(3196703.03,1575799.12)



KEY MAP
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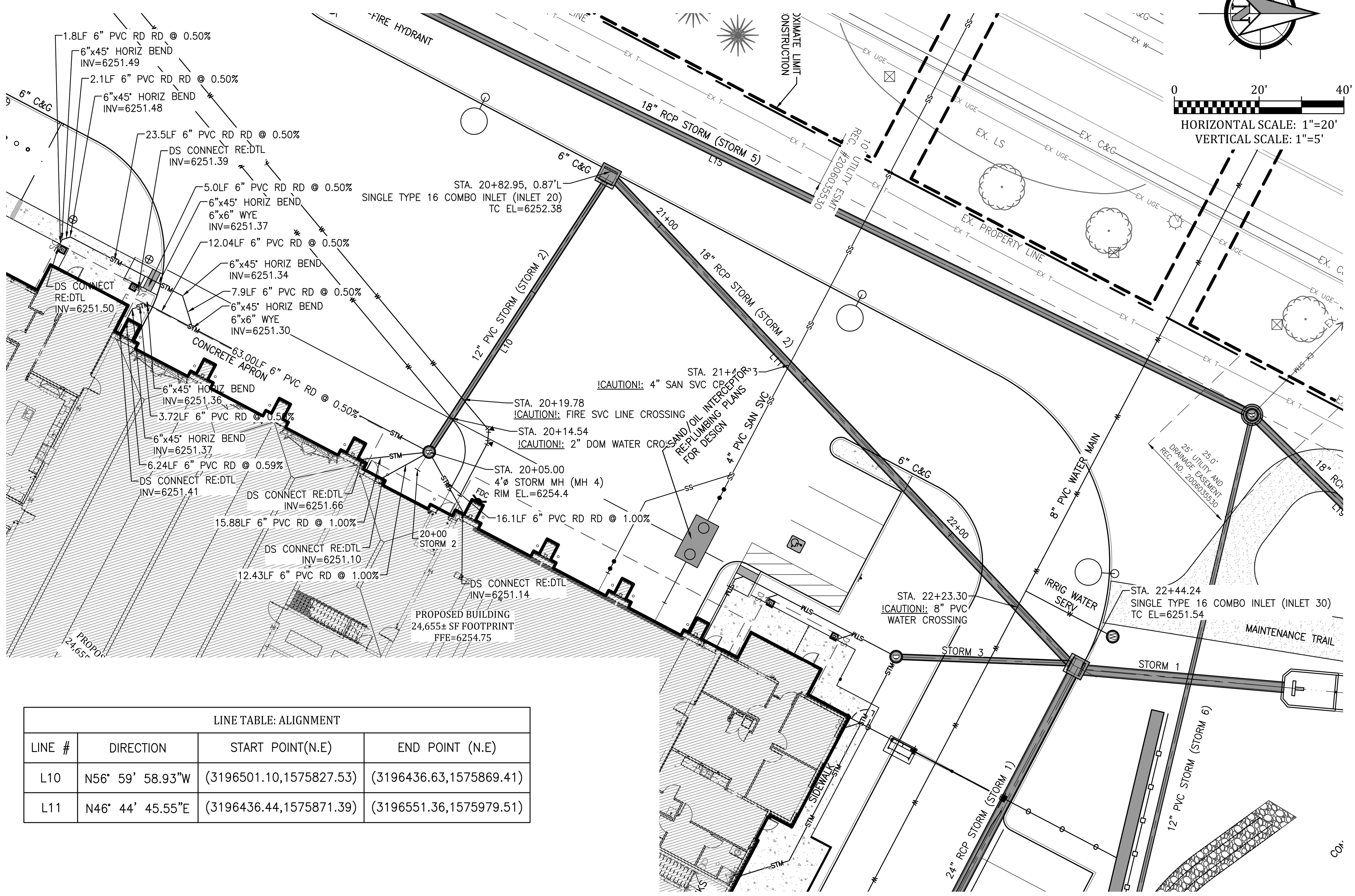
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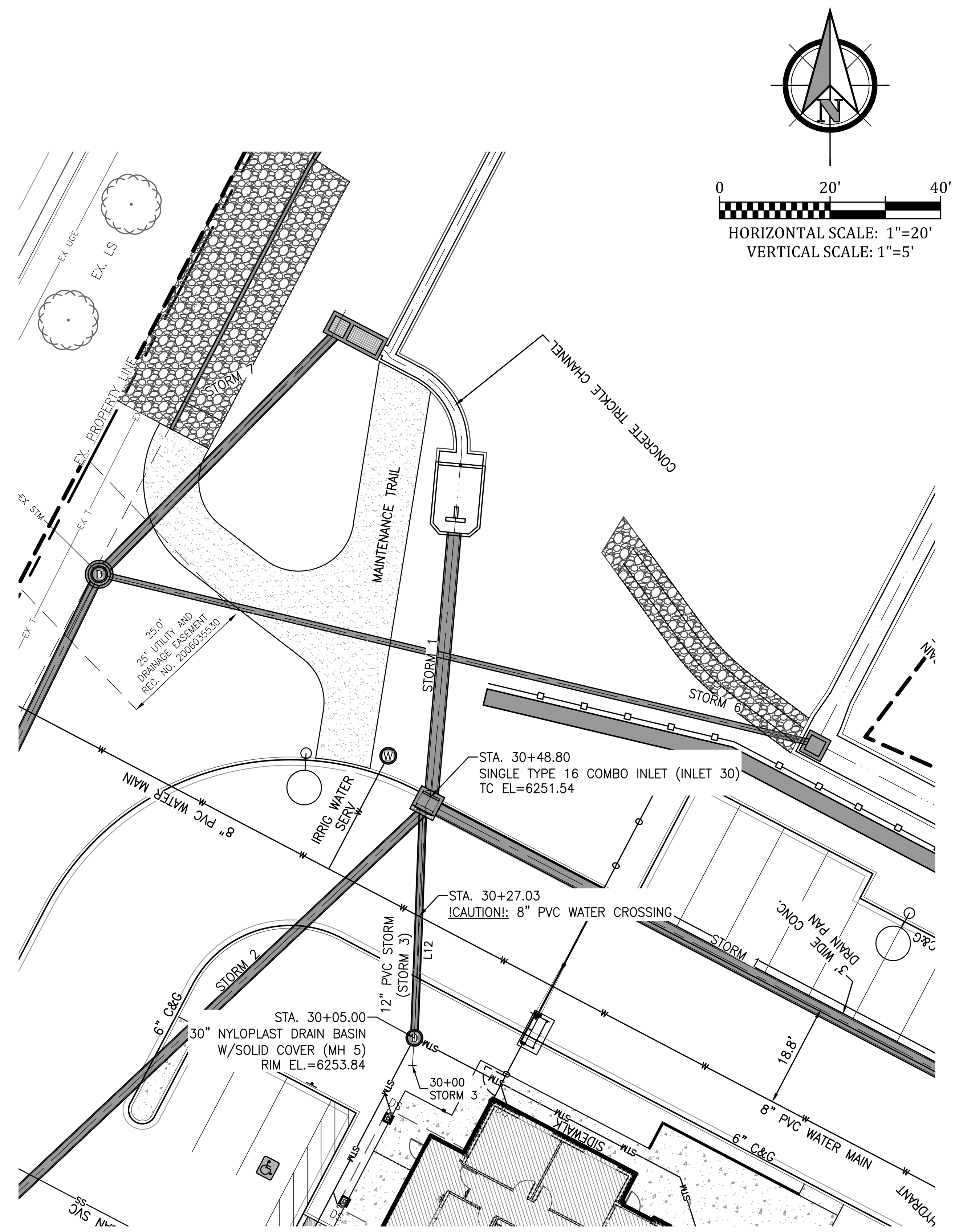
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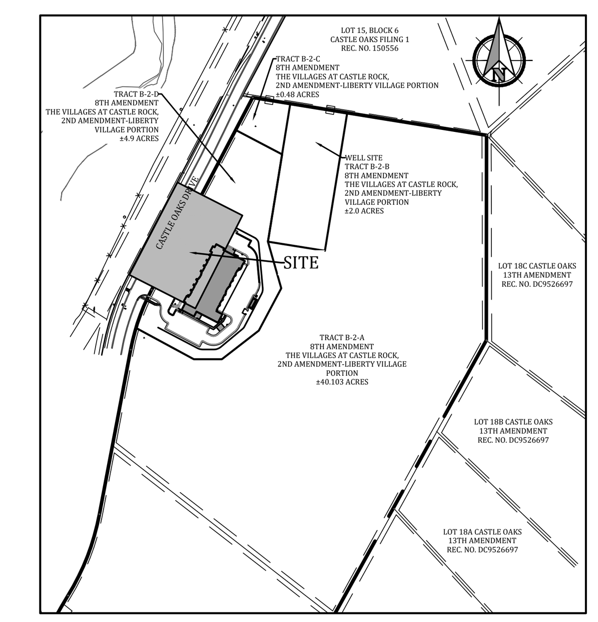
LINE TABLE: ALIGNMENT			
LINE #	DIRECTION	START POINT(N.E)	END POINT (N.E)
L10	N56° 59' 58.93"W	(3196501.10,1575827.53)	(3196436.63,1575869.41)
L11	N46° 44' 45.55"E	(3196436.44,1575871.39)	(3196551.36,1575979.51)



LINE TABLE: ALIGNMENT			
LINE #	DIRECTION	START POINT(N.E)	END POINT (N.E)
L12	N02° 43' 03.55"E	(3196549.37,1575937.67)	(3196551.36,1575979.51)

LEGEND

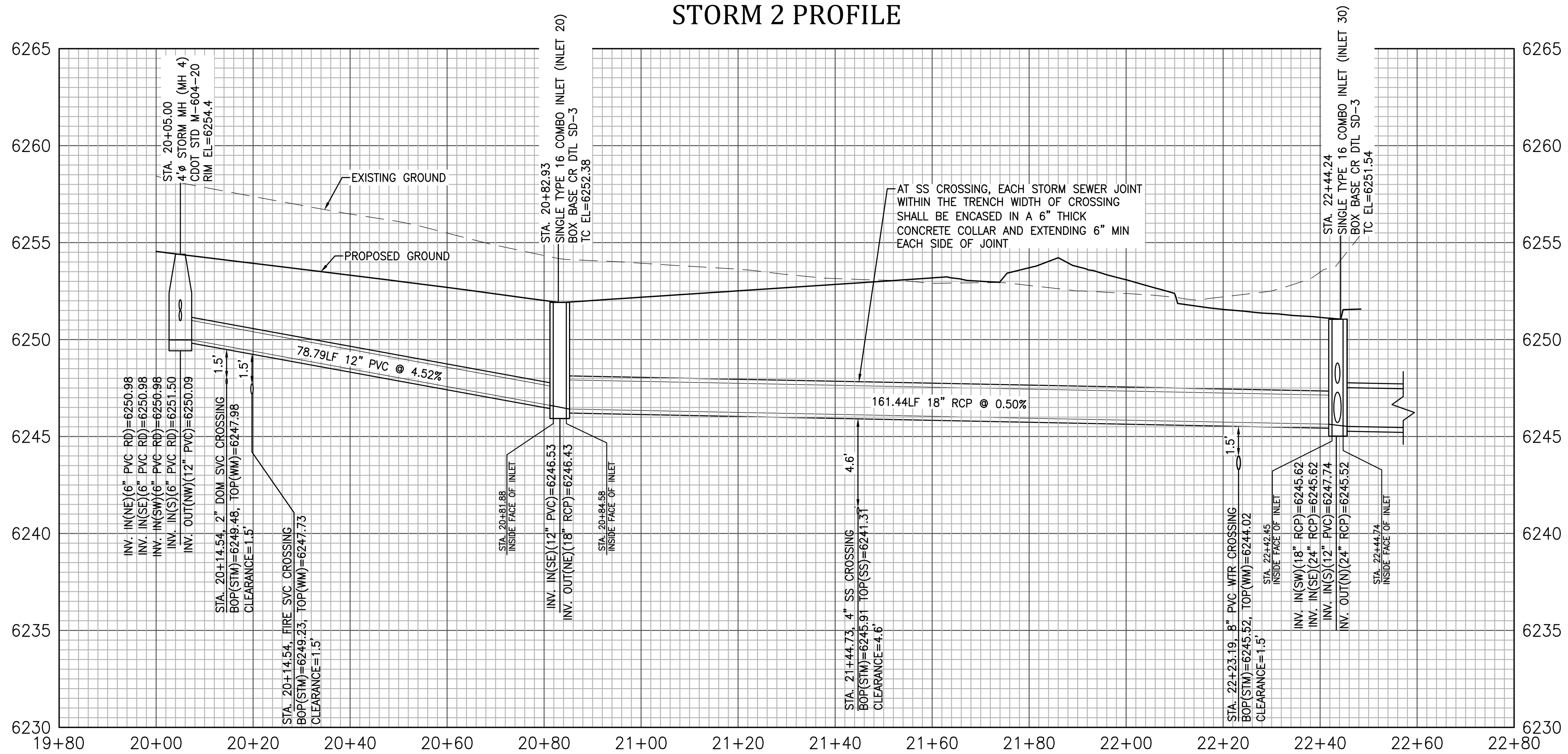
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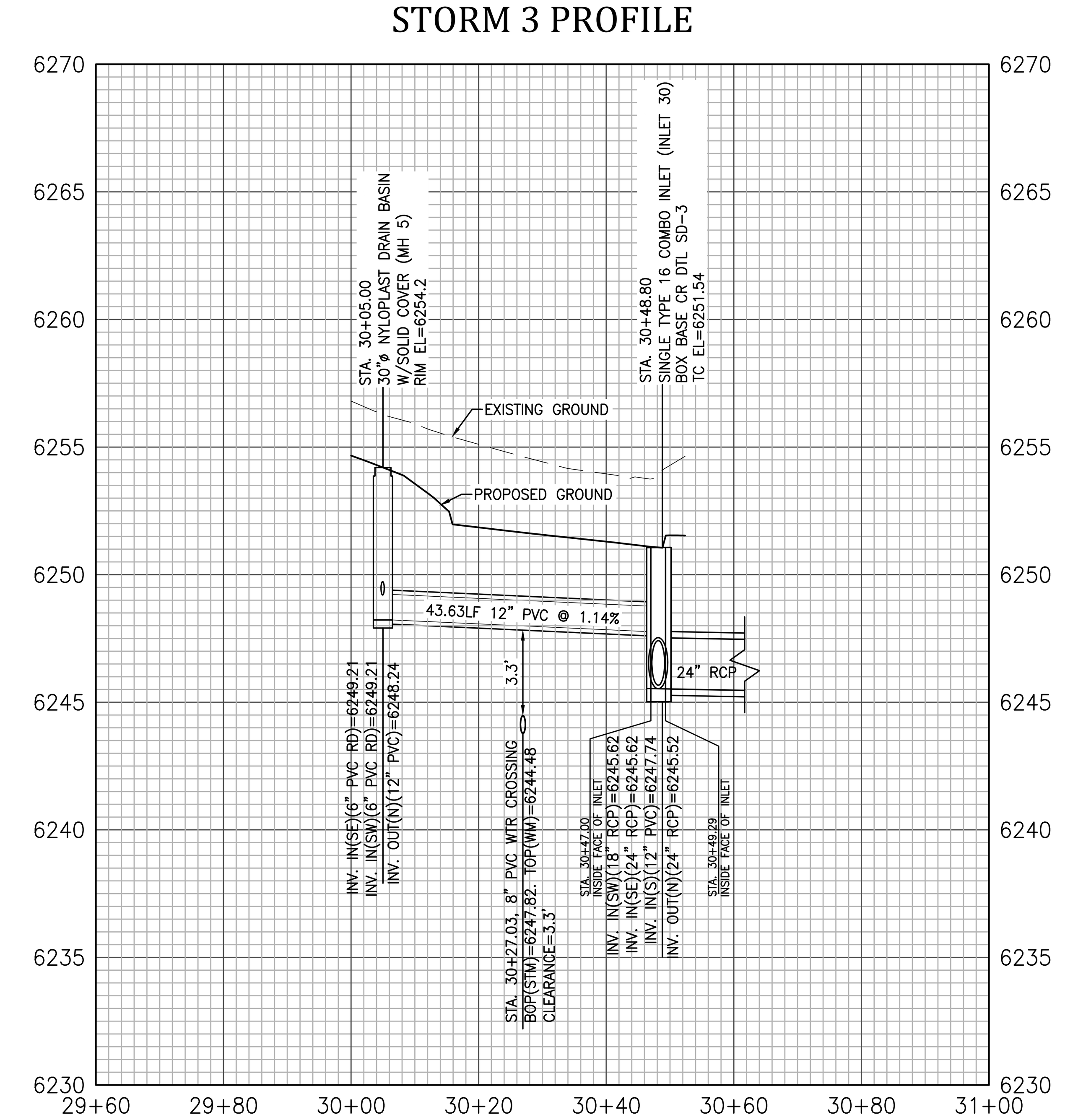
KEY MAP
SCALE:1"=500'

NOTE:
1. AT SS CROSSING, EACH STORM SEWER JOINT WITHIN THE TRENCH WIDTH OF CROSSING SHALL BE ENCASED IN A 6" THICK CONCRETE COLLAR AND EXTENDING 6" MIN EACH SIDE OF JOINT

STORM 2 PROFILE



STORM 3 PROFILE



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Civil Engineer signature and stamp — Date
Jacob I. McMillen, PE #56736

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

Approved By:

Development Services — Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:	12/15/2025
REVIEWED BY:	MWE
DRAWN BY:	AMD
DESIGNED BY:	JIM
PROJECT NUMBER:	20611004000

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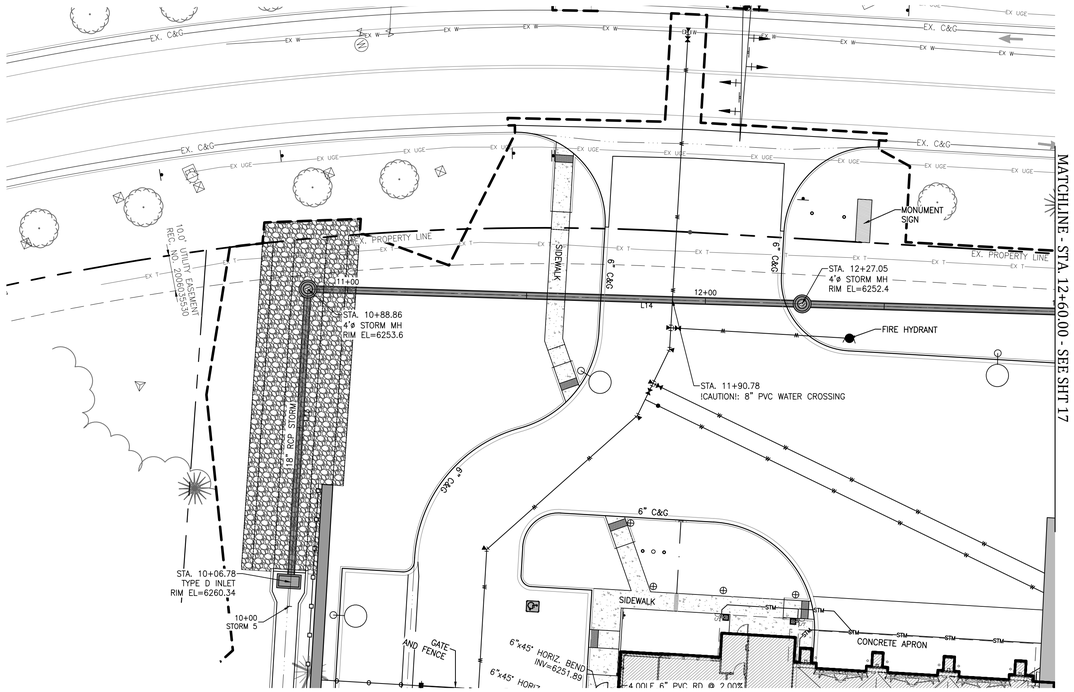
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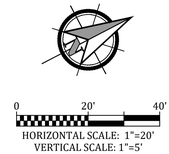
SHEET TITLE:
STORM SEWER PLAN AND PROFILE

SHEET ID:
15

PROJECT STATUS:
Site Construction Documents

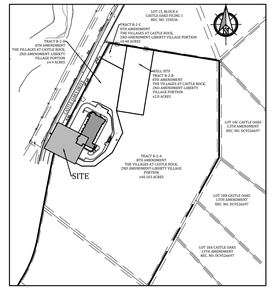
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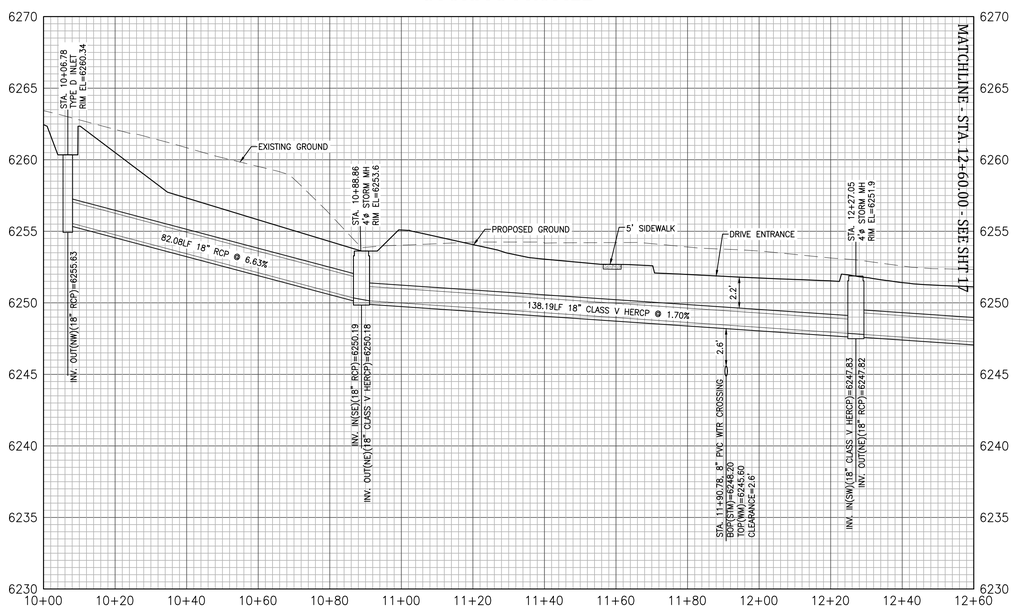
LEGEND

- PROPOSED BUILDING
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM SEWER MANHOLE
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KEY MAP
SCALE:1"=500'

STORM 5 PROFILE



LINE TABLE: ALIGNMENT			
LINE #	DIRECTION	START POINT(N.E)	END POINT (N.E)
L13	N62° 18' 15.08"W	(3196395.90,1575633.53)	(3196321.65,1575672.51)
L14	N26° 03' 10.86"E	(3196321.65,1575672.51)	(3196382.35,1575796.65)

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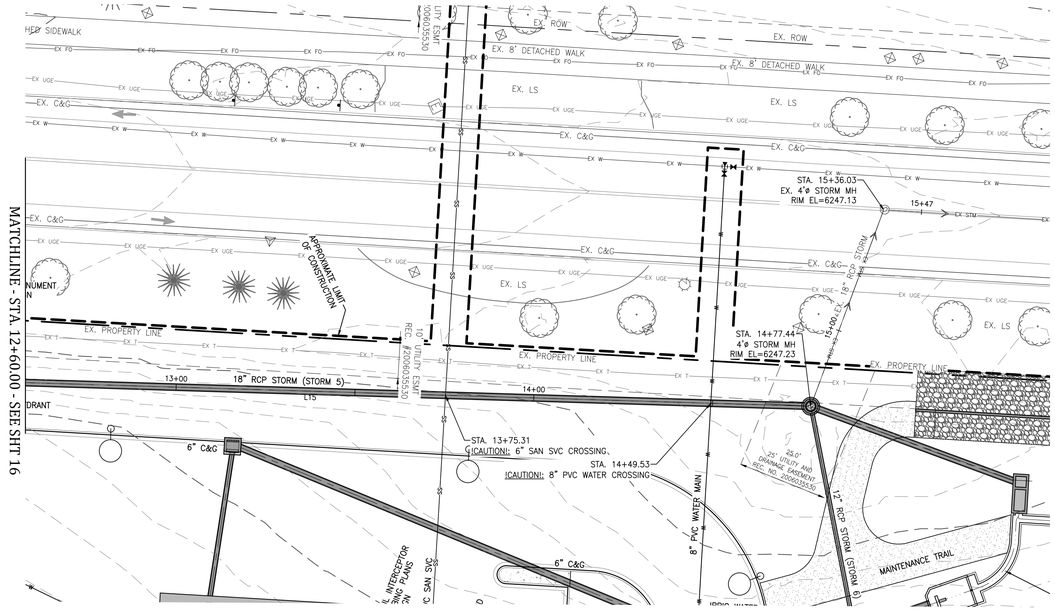
SEAL:

SHEET TITLE:
STORM SEWER PLAN AND PROFILE

SHEET ID:
16
Sheet 16 of 47

PROJECT STATUS:
Site Construction Documents

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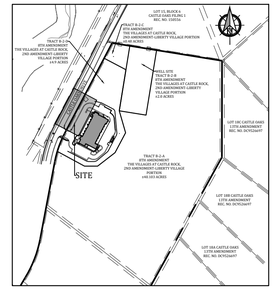


0 20' 40'

HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

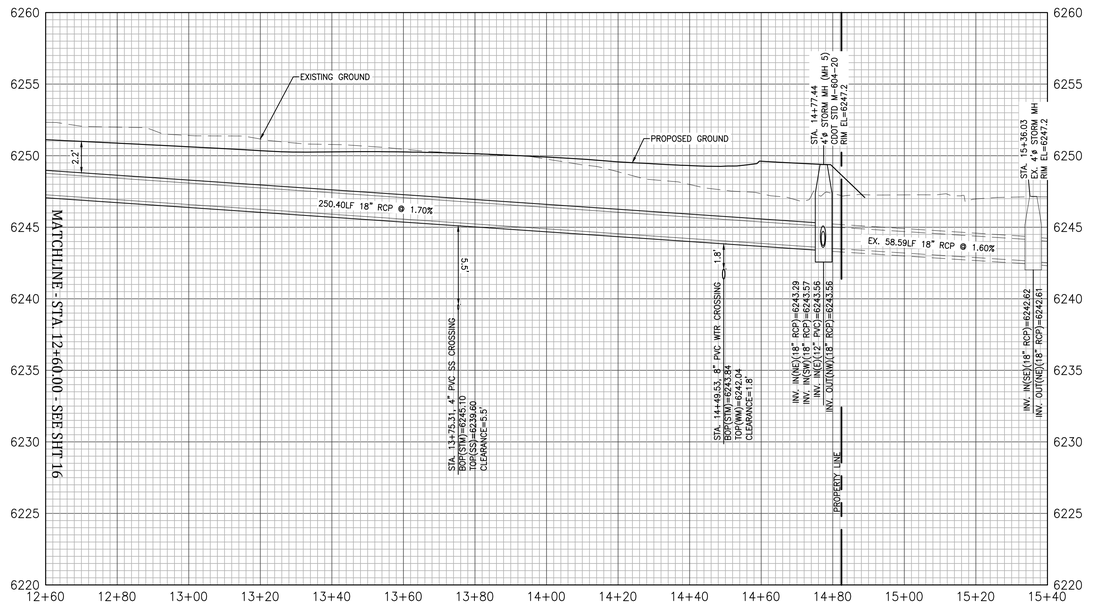
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KEY MAP
SCALE:1"=500'

STORM 5 PROFILE



LINE TABLE: ALIGNMENT				
LINE #	LENGTH	DIRECTION	START POINT(N.E)	END POINT (N.E)
L15	250.40	N26° 03' 17.60"E	(3196382.35,1575796.65)	(3196492.33,1576021.60)

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REVISIONS

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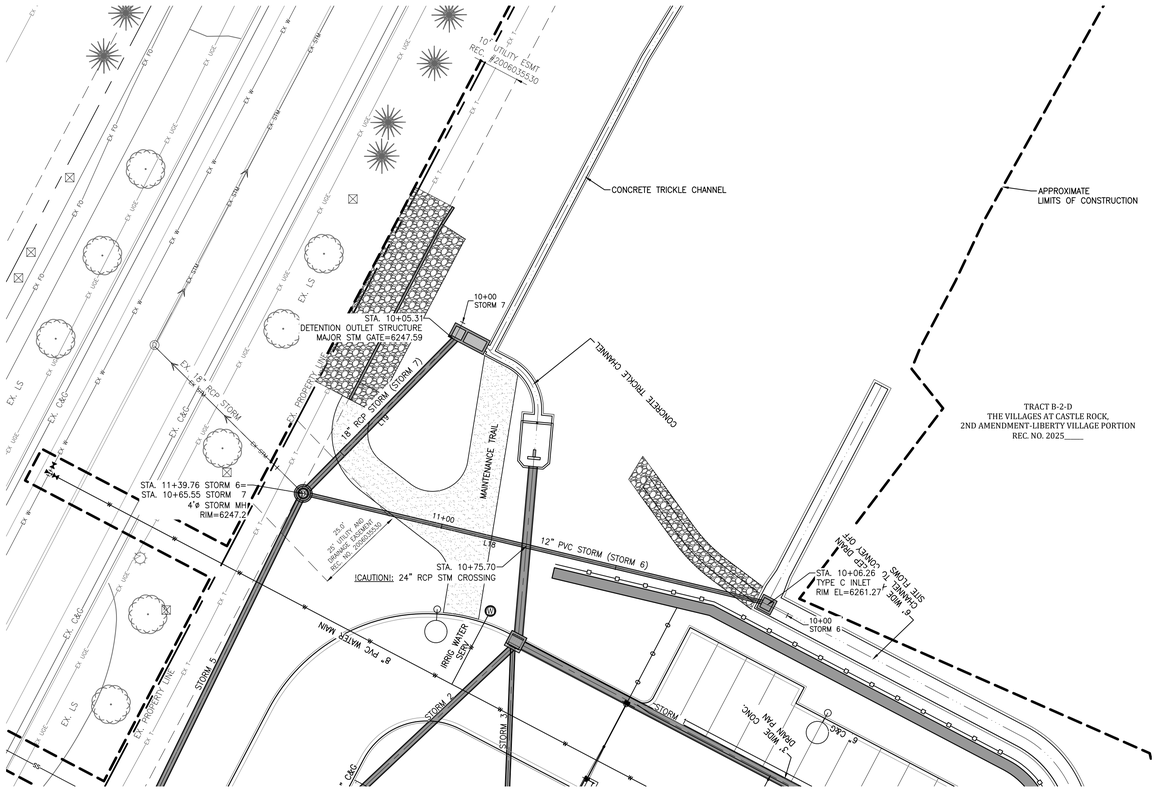
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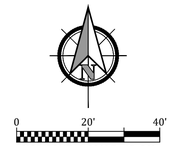
SHEET TITLE:
STORM SEWER PLAN AND PROFILE

SHEET ID:
17
Sheet 17 of 47

PROJECT STATUS:
Site Construction Documents

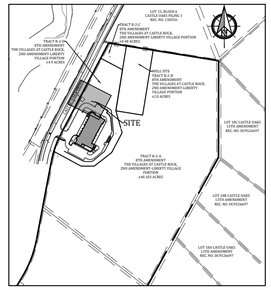
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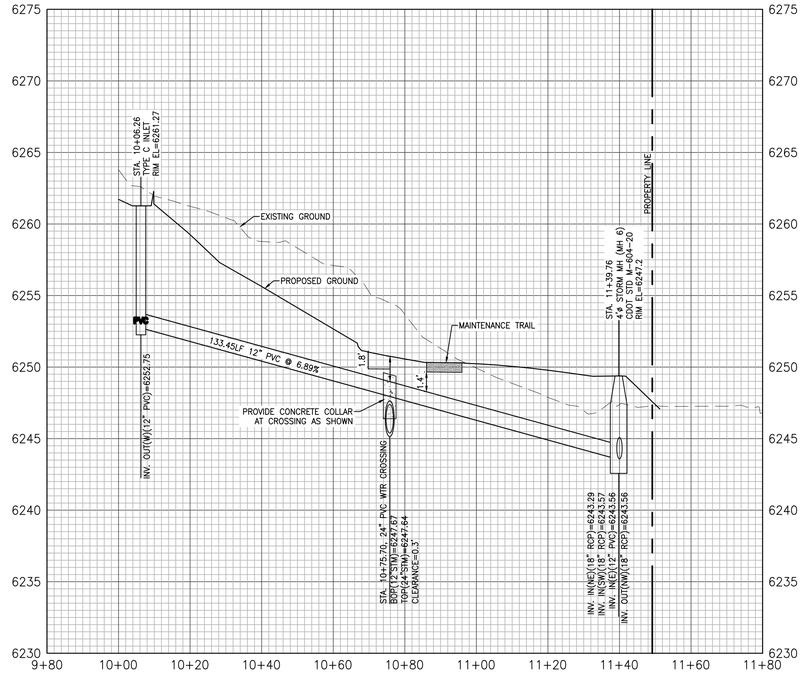
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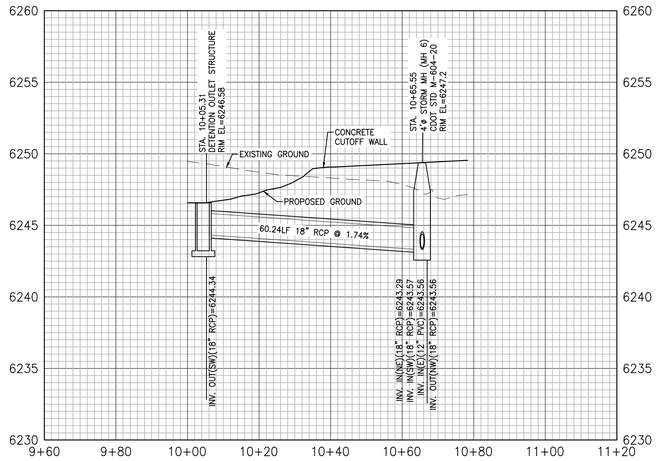


KEY MAP
SCALE:1"=500'

STORM 6 PROFILE



STORM 7 PROFILE



LINE TABLE: ALIGNMENT			
LINE #	DIRECTION	START POINT(N.E)	END POINT (N.E)
L18	N76° 41' 09.79"W	(3196620.63,1575991.24)	(3196492.33,1576021.60)
L19	S44° 21' 45.00"W	(3196534.45,1576064.67)	(3196492.33,1576021.60)

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REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
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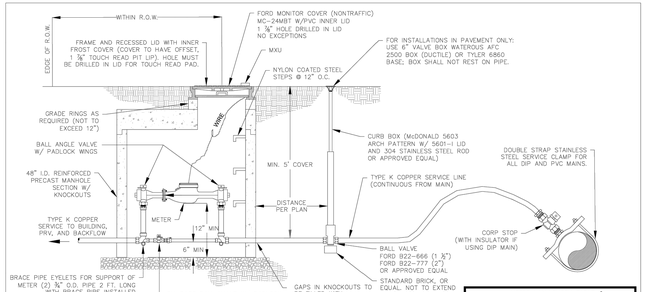
SEAL:

SHEET TITLE:
STORM SEWER PLAN AND PROFILE

SHEET ID:
18
Sheet 18 of 47

PROJECT STATUS:
Site Construction Documents

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METER LAY LENGTH TABLE *	
1 ½" METER	2" METER
13 ¾"	15 ½"

*LENGTH INCLUDES TWO (2) ¾" GASKETS

NOTES:
1. FLANGED METER AND WIRE SHALL BE SUPPLIED BY THE TOWN AND INSTALLED BY THE CONTRACTOR.
2. FORD 1 ½" CUSTOMSETTER 1 ½"–VB876–128–11–66–NL & C84–66QNL; 2" METER 2"–VB877–128–11–77–NL & C84–77QNL WITH BYPASS.
3. METER WILL NOT BE SET IF CURB STOP BOX IS NOT UP TO GRADE, IF WIRE IS IN THE WRONG AREA OR IF AN ASSEMBLY IS NOT IN PLACE.
4. THERMAL EXPANSION REQUIRED ON POTABLE SERVICES, NOT REQUIRED ON IRRIGATION SERVICES.
5. WHEN INSTALLING SENSUS OMNI METERS WITH STRAINER, A MINIMUM OF 2 ½ PIPE DIAMETERS OF STRAIGHT RUN PIPE OR EQUIVALENT FULL OPEN COMPONENTS IS REQUIRED UPSTREAM AND DOWNSTREAM OF THE METER OR STRAINER FLANGES. FULL OPEN FLOW COMPONENTS MAY CONSIST OF: STRAIGHT PIPE, FULL OPEN GATE VALVES, BYPASS TEES AND CONCENTRIC REDUCERS (1 NOMINAL PIPE SIZE REDUCTION ONLY). FOR ALL OTHER INSTALLATION CONFIGURATIONS, A MINIMUM OF 5 PIPE DIAMETERS OF STRAIGHT RUN IS REQUIRED UPSTREAM.
6. ALL COPPER PIPES REQUIRE A POLYWRAP SLEEVE TAPED DOWN AT BENDS AND AROUND CORP STOPS.
7. ALL SERVICES SHALL BE INSTALLED WITH BEDDING MATERIAL A MINIMUM OF 4" ABOVE AND BELOW THE PIPE.

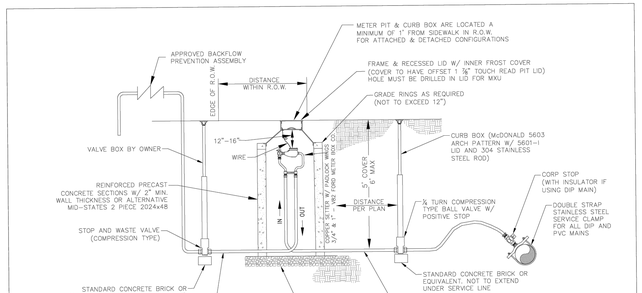
Sheet Revisions	
Date	Comments
5/20	REVISED PER STAFF COMMENTS
6/20	REVISED PER STAFF COMMENTS
6/22	REVISED PER STAFF COMMENTS

Town of Castle Rock
100 N. Wilcox St.
Castle Rock, CO 80104
Phone: (720) 733-2200
Fax: (720) 733-2217
Development Services

1-1/2 INCH & 2 INCH POTABLE WATER SERVICES

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

DETAIL PLAN NO. W-3
Sheet 1 of 1



NOTES:
1. METER AND WIRE SUPPLIED BY THE TOWN, CONTRACTOR TO INSTALL.
2. METER WILL NOT BE RELEASED TO CONTRACTOR IF CURB STOP BOX IS NOT UP TO FINISHED GRADE, IF WIRE IS IN WRONG AREA, OR IF AN ASSEMBLY IS NOT IN PLACE.
3. PRIOR TO METER RELEASE, IRRIGATION POINT OF CONNECTION MUST BE COMPLETE AS INDICATED ON TOWN DETAIL IR–9.

METER LAY LENGTH
3/4" = 7 3/4"
1" = 11 1/4"

*LAY LENGTHS INCLUDE TWO 1/8" GASKETS

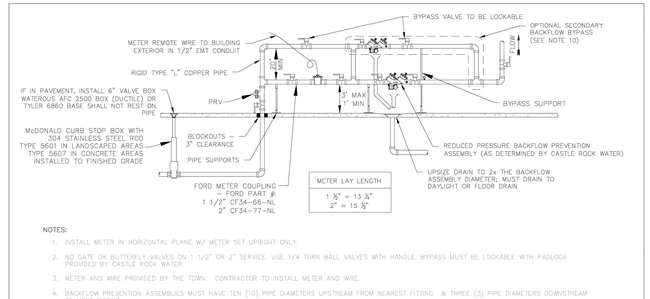
Sheet Revisions	
Date	Comments
5/19	REVISED PER STAFF COMMENTS
10/21	REVISED PER STAFF COMMENTS

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Fax: (720) 733-2217
Development Services

3/4 INCH & 1 INCH IRRIGATION METERS

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

DETAIL PLAN NO. W-4A
Sheet 1 of 1



METER LAY LENGTH
1 ½" = 13 ¾"
2" = 15 ½"

NOTES:
1. INSTALL METER IN HORIZONTAL PLANE W/ METER SET UPRIGHT ONLY.
2. NO GATE OR BUTTERFLY VALVES ON 1 1/2" OR 2" SERVICE. USE 1/4 TURN BALL VALVES WITH HANDLE. BYPASS MUST BE LOCKABLE WITH PADLOCK PROVIDED BY CASTLE ROCK WATER.
3. METER AND WIRE PROVIDED BY THE TOWN. CONTRACTOR TO INSTALL METER AND WIRE.
4. BACKFLOW PREVENTION ASSEMBLIES MUST HAVE TEN (10) PIPE DIAMETERS UPSTREAM FROM NEAREST FITTING & THREE (3) PIPE DIAMETERS DOWNSTREAM TO NEXT FITTING.
5. IF WIRE EXITS THROUGH MASONRY, IT MUST BE PLACED INSIDE A CONDUIT.
6. REDUCED PRESSURE BACKFLOW PREVENTORS, AS DETERMINED BY CASTLE ROCK WATER, SHALL CONFORM TO THE COLORADO CROSS CONNECTION CONTROL MANUAL AND THE FOUNDATION FOR CROSS CONNECTION CONTROL HYDRAULIC RESEARCH FOR PROPER APPLICATION, INSTALLATION AND INSPECTION. MIN CLEARANCE 12", MAX CLEARANCE 36" FROM FLOOR. MIN SIDE CLEARANCE WHEN TEST COCK FACES A WALL 24". WHEN TEST COCKS FACE AWAY FROM WALL MIN CLEARANCE 12". NO ELECTRICAL COMPONENTS IN THE SAME GENERAL AREA AS THE BACKFLOW ASSEMBLY. CONTRACTOR TO PROVIDE PASSING TEST RESULTS ON ALL BACKFLOW PREVENTION ASSEMBLIES TO CASTLE ROCK WATER.
7. METER AND BYPASS ASSEMBLY SHALL BE SECURED PROPERLY.
8. PLEASE SEE DETAIL W–40 IF CURBSTOP IS LOCATED IN CONCRETE.
9. METERS WILL NOT BE SET IF CURB STOP BOX IS NOT UP TO FINISHED GRADE OR IF AN ASSEMBLY IS NOT IN PLACE. METER SHALL NOT BE LOCATED IN A CRAWL SPACE.
10. IF CONTINUOUS WATER SERVICE IS REQUIRED DURING BACKFLOW TESTING, A SECONDARY BACKFLOW BYPASS WILL BE REQUIRED.

Sheet Revisions	
Date	Comments
5/20	REVISED PER STAFF COMMENTS
7/22	REVISED PER STAFF COMMENTS

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INSIDE 1 ½ INCH & 2 INCH METER SET

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

DETAIL PLAN NO. W-6B
Sheet 1 of 1

NOTES:
1. CARE SHALL BE TAKEN WHEN INSTALLING VALVES TO ASSURE PROPER SUPPORT OF THE VALVE. THE ENGINEER MAY REQUIRE 3/4" CRUSHED ROCK TO BE INSTALLED UNDER THE VALVE TO PROVIDE PROPER SUPPORT.
2. VALVES SHALL NOT BE PLACED IN CONCRETE CROSS PANS, GUTTERS, OR OTHER DRAINAGE WAYS.
3. OPERATING NUTS OR EXTENSIONS SHALL NOT BE SET CLOSER THAN THREE (3) FEET FROM FINISHED GRADE. IF OPERATING NUT IS DEEPER THAN FIVE (5) FEET FROM FINAL GRADE, PROVIDE A 1 1/4" EXTENSION SHAFT W/ CENTERING RING. OPERATOR EXTENSIONS SHALL BE CONNECTED TO THE VALVE OPERATOR NUT USING A SET SCREW.
4. GATE VALVE SHALL BE POLYETHYLENE WRAPPED (8 MIL).
5. CONCRETE COLLARS & MARKER POSTS ARE REQUIRED WHEN VALVE IS LOCATED IN AN UNPAVED AREA.
6. VALVE BOXES ARE TO BE BROUGHT UP TO GRADE @ THE TIME OF PAVEMENT PLACEMENT OR OVERLAY. VALVE BOX ADJUSTING RINGS ARE NOT ALLOWED.
7. SEE DETAILS W–13 & W–14 FOR TYPICAL VALVE LOCATIONS.
8. TRACER WIRE SHALL BE ROUTED AROUND TO NORTH OR EAST OF VALVE BOX (SEE DETAIL W–28).

Sheet Revisions	
Date	Comments
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TYPICAL VALVE BOX

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

DETAIL PLAN NO. W-10
Sheet 1 of 1

NOTES:
1. ALL HYDRANTS SHALL BE PAINTED "SAFETY YELLOW" FROM THE FACTORY. FIELD RE–PAINTING MAY BE REQUIRED BY THE PUBLIC WORKS INSPECTOR.
2. THE CONNECTIONS SHALL BE 2 TO 2 ½" NOZZLES AND 1 TO 5 ¾" PUMPER NOZZLE; ALL THREADS TO BE NATIONAL STANDARD W/ 7 ½" PENTAGONAL CAP NUTS. ALL HYDRANTS SHALL BE AWWA C–502–94 STANDARD OPEN LEFT.
3. NO TAPS SHALL BE ALLOWED BETWEEN THE HYDRANT & THE MAIN.
4. THE ENTIRE FIRE HYDRANT ASSEMBLY SHALL BE WRAPPED W/ 8 MIL POLYETHYLENE, INCLUDING THE RISER PORTION, TO FINISHED GRADE. CUT HOLE IN WRAP AT WEEP HOLE.
5. ALL FIRE HYDRANTS SHALL BE INSTALLED PLUMB & LOCATED ACCORDING TO PROJECT PLANS.
6. SEE FIRE HYDRANT LOCATION DETAILS W–13 & W–14 FOR PROPER LOCATION RELATIVE TO OTHER IMPROVEMENTS & REFER TO APPROVED PLANS.
7. THE MECHANICAL JOINTS OF THE FIRE HYDRANT ASSEMBLY SHALL BE RESTRAINED VIA MEG–A–LUG JOINT CLAMPS.
8. NO MORE THAN ONE HYDRANT EXTENSION, NOT TO EXCEED 24" MAY BE USED. OVERALL HEIGHT MAY NOT EXCEED 8'.
9. A TRACER WIRE TEST STATION IS REQUIRED; REFER TO DETAIL W–28.
10. FOR BURY DEPTHS GREATER THAN 8' REFER TO DETAIL W–11A.


TYPICAL JOINT RESTRAINT DETAIL FOR MULTIPLE JOINT ASSEMBLIES (NOT TO SCALE)

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FIRE HYDRANT ASSEMBLY

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DETAIL PLAN NO. W-11
Sheet 1 of 1

NOTES:
1. TO BE USED IN AREAS WHERE HYDRANTS ARE EXPOSED TO VEHICULAR TRAFFIC.
2. STEAMER CONNECTION ON FIRE HYDRANT SHALL BE DIRECTED AS NOTED ON PLANS.

Sheet Revisions	
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FIRE HYDRANT BOLLARDS

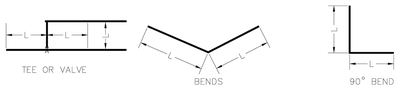
Issued By: Town of Castle Rock, Development Services August 8, 2023

DETAIL PLAN NO. W-12
Sheet 1 of 1

LENGTH OF RESTRAINED PIPE

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

LEGEND
L = LENGTH
M1 = MINIMUM OF 1 FULL LENGTH OF PIPE



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

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PIPE RESTRAINT TABLE

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

DETAIL PLAN NO. W-18
Sheet 1 of 1

NOTES:
1. ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THIS DETAIL UNLESS OTHERWISE SPECIFIED BY PUBLIC WORKS.
2. PRIOR TO PLACEMENT OF CONCRETE, ALL EDGES SHALL BE SAW CUT TO A CLEAN, STRAIGHT, AND VERTICAL EDGE.
3. PRIOR TO PLACEMENT OF ASPHALT, 18 INCHES OF ADJACENT ASPHALT SHALL BE MILLED TO 2 INCH DEPTH ON ALL SIDES TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH MSS–1.
4. WHEN SUBSTITUTING FOR BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MDPEC CLSM STANDARDS.
5. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.
6. 95% OF ASTM D698 STANDARD COMPACTION EFFORT IS REQUIRED ON ALL TRENCHING ZONES, IN BOTH IMPROVED & UNIMPROVED AREAS.
7. IN UNIMPROVED AREAS, ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED & MULCHED.
8. IN CONCRETE ROADWAYS, A MINIMUM OF 1/2 PANEL WIDTH OR 10' x 5' SECTION WILL BE ALLOWED TO REMAIN, OTHERWISE THE ENTIRE CONCRETE PANEL MUST BE REPLACED.
9. USE #4 REBAR AT 2' CENTERS ALONG THE PERIMETER OF CONCRETE REPLACEMENT SECTIONS.
10. 6" MAXIMUM COMPACTED LIFT THICKNESS IF FLOWABLE FILL NOT REQUIRED.
11. BEDDING MATERIAL DEPTH WHEN INSTALLING STORM SEWER SHALL BE UP TO SPRING LINE, EXCEPT IN AREAS OF UNSUITABLE BACKFILL, THEN BEDDING MATERIAL SHALL BE 12" ABOVE PIPE.
12. TRENCH WIDTHS LESS THAN 4' OR TRENCHING THAT EXPERIENCES CAVE–INS OR SLOUGHING SHALL REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.

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WATER TRENCH DETAIL

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

DETAIL PLAN NO. W-21
Sheet 1 of 1

NOTE:
1. INSIDE WATER METER SHALL BE USED

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.

Civil Engineer signature and stamp — Date
Jacob L. McMillen, PE #56736

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

Approved By:

Development Services — Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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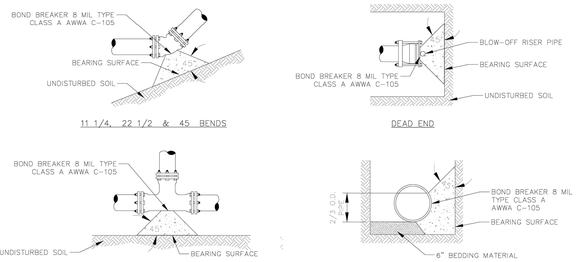
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SHEET TITLE:
DETAIL SHEET-WATER AND WASTEWATER

SHEET ID:
19
Sheet 19 of 47

PROJECT STATUS:
Site Construction Documents

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NOTES:

1. BEARING AREAS SHOWN ON THE CHART ARE MINIMUM AREAS & ARE DESIGNED USING THE FOLLOWING CRITERIA:
   A. INTERNAL WORKING PRESSURE OF 150 PSI.
   B. TRANSIENT (WATER HAMMER) PRESSURE OF 120 PSI FOR 4", 6" & 8" DIAMETER LINES, 110 PSI FOR 12" LINES, & 70 PSI FOR 20" LINES.
   C. THRUSTBLOCK CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 4500 PSI.
2. ALL SIZES OF BENDS, TEES & DEAD ENDS SHALL HAVE CONCRETE THRUSTBLOCKS.
3. THRUSTBLOCKS ARE NOT A SUBSTITUTE FOR JOINT RESTRAINT.

MINIMUM BEARING SURFACE AREA
(IN SQUARE FEET)

SIZE OF PIPE	BENDS 11 1/4°	22 1/2°	45°	90°	TEE OR DEAD END
6"	2.00	2.00	2.25	4.25	3.00
8"	2.00	2.00	4.00	8.00	5.25
12"	2.00	4.25	8.25	12.00	11.00
16"	3.50	6.50	12.50	23.00	16.50
20"	5.00	10.00	18.50	35.50	29.00

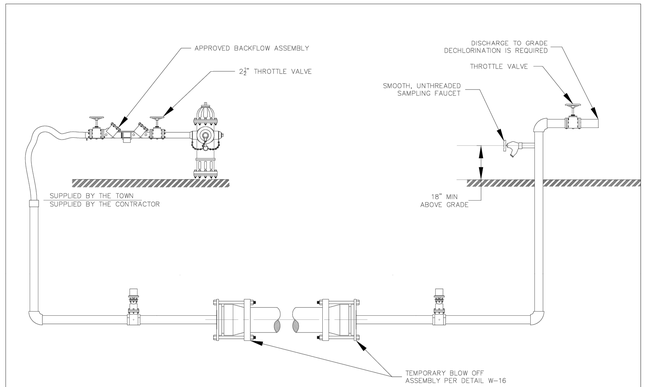
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8/22	REVISED PER STAFF COMMENTS

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HORIZONTAL BEND THRUSTBLOCKS

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DETAIL PLAN NO. W-22 Sheet 1 of 1



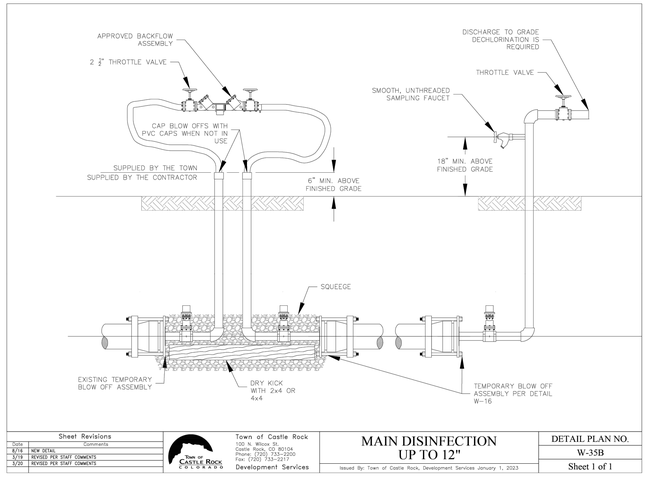
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3/20	REVISED PER STAFF COMMENTS

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MAIN DISINFECTION UP TO 12"

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DETAIL PLAN NO. W-35A Sheet 1 of 1



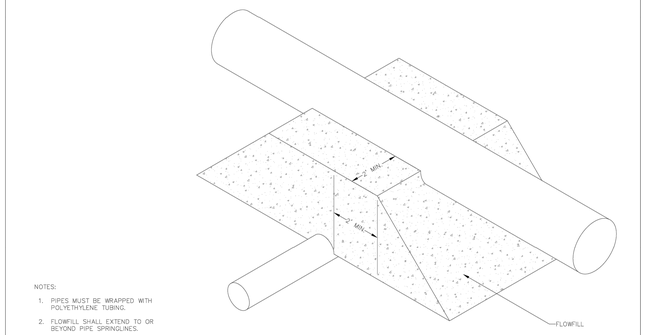
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Date	Comments
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3/19	REVISED PER STAFF COMMENTS
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MAIN DISINFECTION UP TO 12"

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DETAIL PLAN NO. W-35B Sheet 1 of 1



NOTES:

1. PIPES MUST BE WRAPPED WITH POLYETHYLENE TUBING.
2. FLOWFILL SHALL EXTEND TO OR BEYOND PIPE SPRINGLINES.

Sheet Revisions	
Date	Comments
3/19	NEW DETAIL
3/20	REVISED PER STAFF COMMENTS

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PIPE CROSSING WITH FLOW FILL

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

DETAIL PLAN NO. W-39 Sheet 1 of 1

NOTE:
1. INSIDE WATER METER SHALL BE USED

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.

Civil Engineer signature and stamp — Date
Jacob L. McMillen, PE #56736

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

Approved By:

Development Services — Date

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Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
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PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

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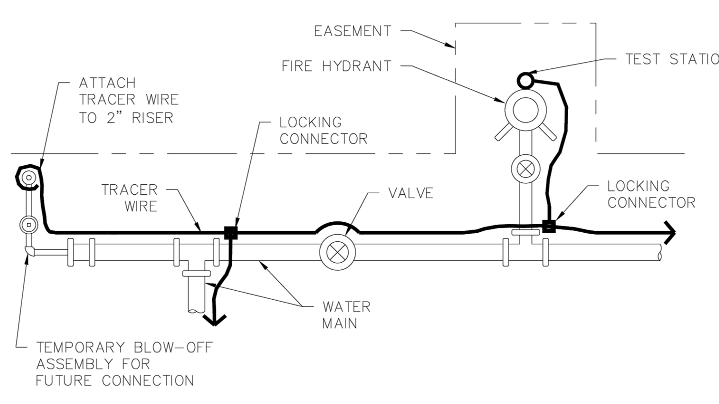
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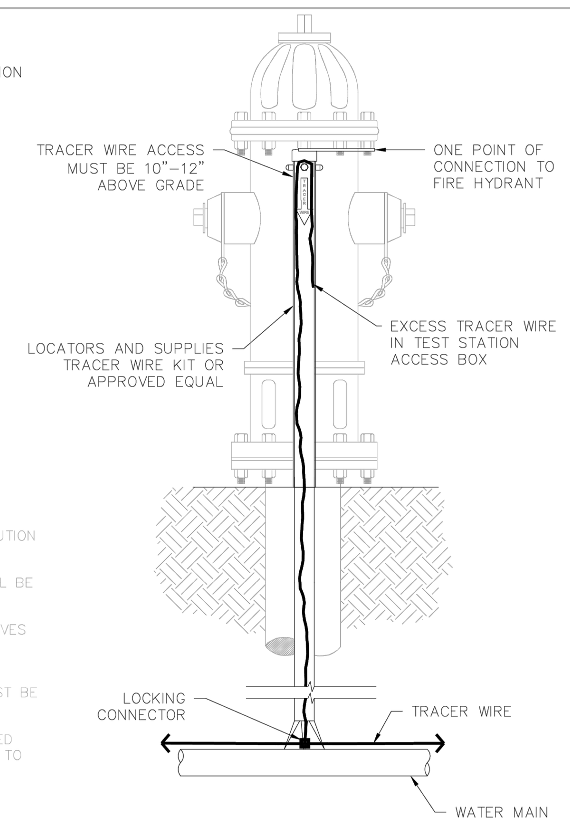
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SHEET ID:
20
Sheet 20 of 47

PROJECT STATUS:
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TRACER WIRE SAMPLE PLAN



FIRE HYDRANT TRACER WIRE DETAIL

NOTES:

1. REFER TO STANDARD NOTES FOR TOWN OF CASTLE ROCK GENERAL TRACER WIRE REQUIREMENTS. FOR TEST STATION AT MANHOLE, REFER TO DETAIL SD-5.
2. TRACER WIRE AND TEST STATION LIDS SHALL BE BLUE FOR POTABLE WATER DISTRIBUTION SYSTEM AND PURPLE FOR RECLAIMED OR RAW WATER COMPONENTS.
3. TRACER WIRE IN PLAN IS SHOWN AWAY FROM PIPE FOR CLARITY. TRACER WIRE SHALL BE FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5-FOOT INTERVALS.
4. TRACER WIRE SHALL BE LAID CONTINUOUSLY, PASSING AROUND THE OUTSIDE OF VALVES AND FITTINGS ON THE NORTH OR EAST SIDE.
5. TEST STATIONS SHALL BE INSTALLED AT EVERY FIRE HYDRANT, AS SHOWN, OR AT A MINIMUM INTERVAL OF 500 FEET. TEST STATIONS NOT LOCATED NEAR HYDRANTS MUST BE PLACED BEHIND EDGE OF PAVEMENT.
6. AT ALL TEMPORARY BLOW-OFFS, THE END OF THE TRACER WIRE SHALL BE CONTAINED WITHIN A CORROSION PREVENTION CAP, THEN BROUGHT TO SURFACE AND ATTACHED TO THE RISER PIPE AT GRADE WITHIN THE EASEMENT OR R.O.W.
7. TEST STATIONS SHALL LIE WITHIN UTILITY EASEMENT OR PUBLIC R.O.W.
8. PROVIDE ADEQUATE LENGTH OF TRACER WIRE TO EXTEND 12 INCHES ABOVE GRADE.
9. TEST STATIONS NOT LOCATED AT A FIRE HYDRANT MUST BE AT GRADE WITH LOCKING LID.

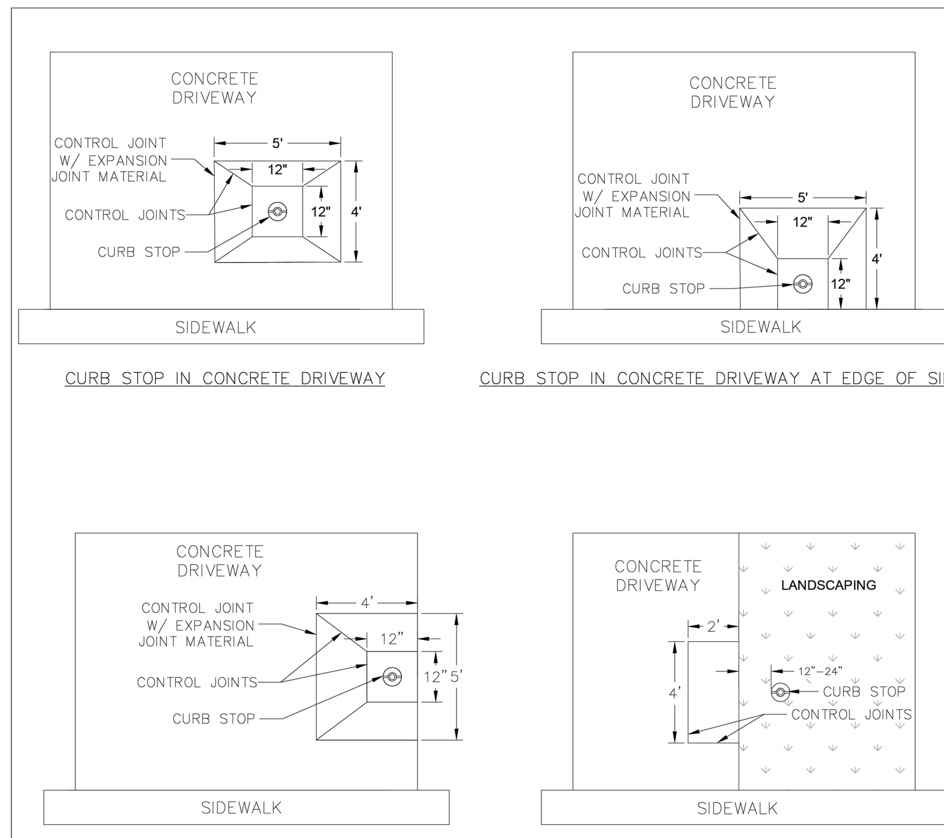
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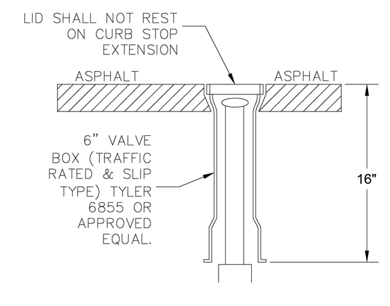
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TRACER WIRE DETAIL

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DETAIL PLAN NO. W-28
Sheet 1 of 1





CURB STOP IN ASPHALT

NOTES:

1. IN PAVEMENT, DEPRESS CURB STOP APPROXIMATELY ¼" BELOW FINISHED GRADE.
2. A TECHNICAL CRITERIA VARIANCE, FIELD CHANGE ORDER AND/OR ASSOCIATED FEES MAY BE REQUIRED FOR CURB STOPS PLACED IN PAVEMENTS.
3. UNLESS REPAIRS OF TOWN-OWNED INFRASTRUCTURE IS NEEDED, THE PROPERTY OWNER IS RESPONSIBLE FOR PAVEMENT AROUND CURB STOP.
4. CURB STOP SHALL BE McDONALD 5607 w/ 304 STANLESS STEEL ROD OR APPROVED EQUAL.
5. CURB STOPS LOCATED IN RESIDENTIAL DRIVEWAYS WILL REQUIRE A FIELD CHANGE ORDER.
6. CURB STOP SHALL BE PLACED AT THE SAME ELEVATION OF THE SIDEWALK OR AT FINISHED GRADE.

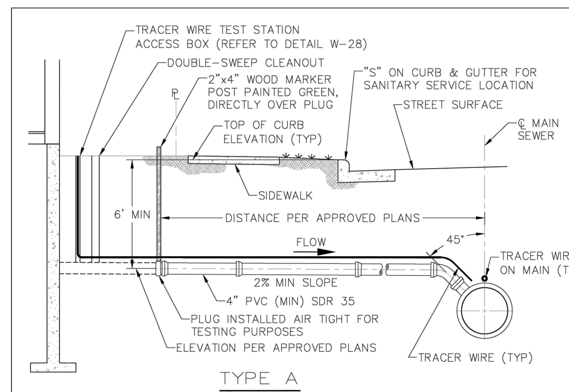
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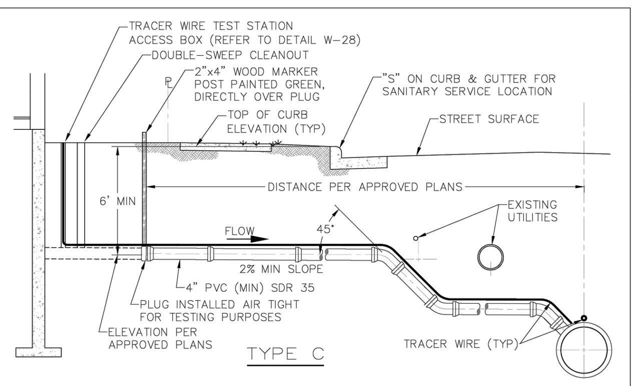
CURB STOP IN PAVEMENT

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Sheet 1 of 1

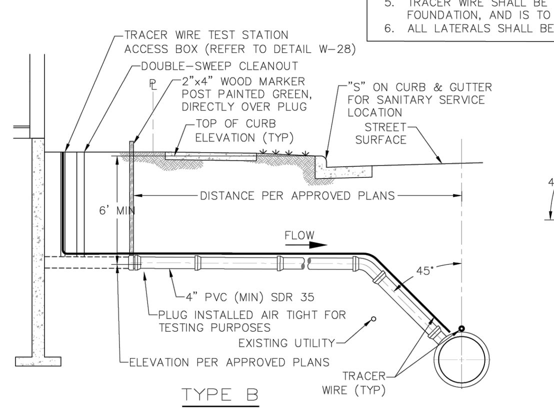


TYPE A

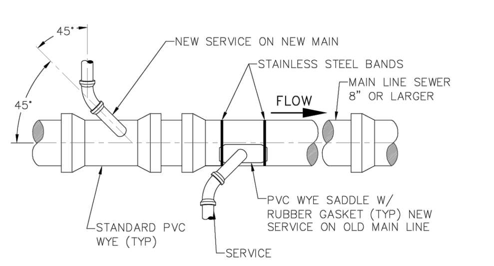


TYPE C

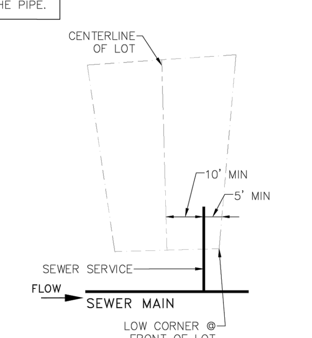
NOTES:
1. TYPE "A" ELEMENTS ARE TYPICAL FOR ALL TYPES UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL LATERALS SHALL BE LOCATED 10' MINIMUM DISTANCE FROM THE DOWNHILL PROPERTY LINE OF THE SERVICE SIDE OF THE LOT, UNLESS OTHERWISE APPROVED BY THE TOWN PRIOR TO INSTALLATION.
3. ALL SEWER LATERAL CONNECTIONS SHALL BE TYPE "A" AND SHALL BE CONSTRUCTED ON A STRAIGHT LINE AND GRADE BETWEEN CONTROL POINTS EXCEPT AS OTHERWISE INDICATED ON THE APPROVED PROJECT PLANS.
4. TRACER WIRE IS REQUIRED FOR ALL SANITARY SEWER MAINS, LATERALS AND MANHOLES.
5. TRACER WIRE SHALL BE BROUGHT UP IN A TRACER WIRE TEST STATION LOCATED BETWEEN CLEANOUT AND FOUNDATION, AND IS TO BE PROVIDED BY THE BUILDER.
6. ALL LATERALS SHALL BE INSTALLED WITH BEDDING MATERIAL A MINIMUM OF 4" ABOVE AND BELOW THE PIPE.



TYPE B



PLAN



SERVICE LOCATION DETAIL

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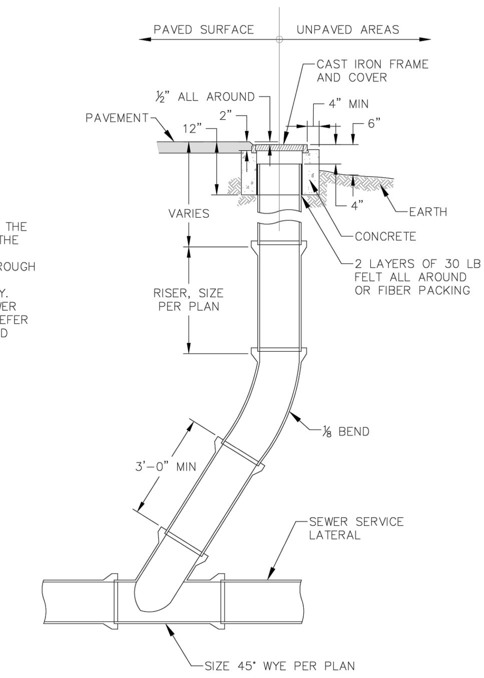
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SEWER LATERAL CONNECTIONS

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DETAIL PLAN NO. SS-2
Sheet 1 of 1

NOTES:
1. CLEANOUT PIPE DIAMETER SHALL BE THE SAME SIZE AS THE SEWER LINE AT THE WYE.
2. SEWER IS NOT TO BE CONVEYED THROUGH CLEANOUT.
3. CLEANOUT IS FOR PRIVATE USE ONLY.
4. TRACER WIRE REQUIRED FOR ALL SEWER MAINS, LATERALS AND MANHOLES. REFER TO DETAILS SD-5, SS-2, SS-11, AND W-28.



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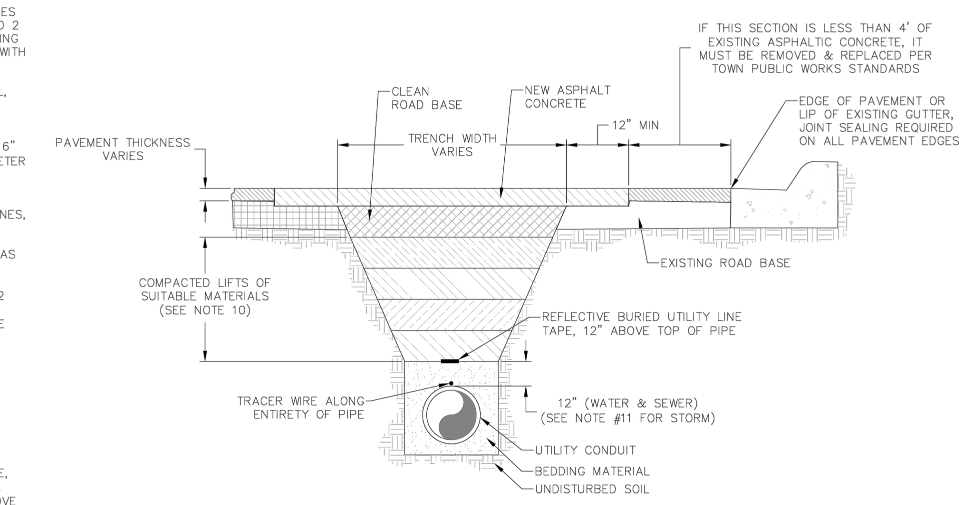
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SEWER CLEANOUT

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DETAIL PLAN NO. SS-7
Sheet 1 of 1

NOTES:
1. ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THIS DETAIL UNLESS OTHERWISE SPECIFIED BY PUBLIC WORKS.
2. PRIOR TO PLACEMENT OF CONCRETE, ALL EDGES SHALL BE SAW CUT TO A CLEAN, STRAIGHT, AND VERTICAL EDGE.
3. PRIOR TO PLACEMENT OF ASPHALT, 18 INCHES OF ADJACENT ASPHALT SHALL BE MILLED TO 2 INCH DEPTH ON ALL SIDES TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH HSS-1.
4. WHEN SUBSTITUTING FOR BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MGPEC CLSM STANDARDS.
5. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.
6. 95% OF ASTM D698 STANDARD COMPACTION EFFORT IS REQUIRED ON ALL TRENCHING ZONES, IN BOTH IMPROVED & UNIMPROVED AREAS.
7. IN UNIMPROVED AREAS, ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED & MULCHED.
8. IN CONCRETE ROADWAYS, A MINIMUM OF 1/2 PANEL WIDTH OR 10' x 5' SECTION WILL BE ALLOWED TO REMAIN, OTHERWISE THE ENTIRE CONCRETE PANEL MUST BE REPLACED.
9. USE #4 REBAR AT 2' CENTERS ALONG THE PERIMETER OF CONCRETE REPLACEMENT SECTIONS.
10. 6" MAXIMUM COMPACTED LIFT THICKNESS IF FLOWABLE FILL NOT REQUIRED.
11. BEDDING MATERIAL DEPTH WHEN INSTALLING STORM SEWER SHALL BE UP TO SPRING LINE, EXCEPT IN AREAS OF UNSUITABLE BACKFILL, THEN BEDDING MATERIAL SHALL BE 12" ABOVE PIPE.
12. TRENCH WIDTHS LESS THAN 4' OR TRENCHING THAT EXPERIENCES CAVE-INS OR SLOUGHING SHALL REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.



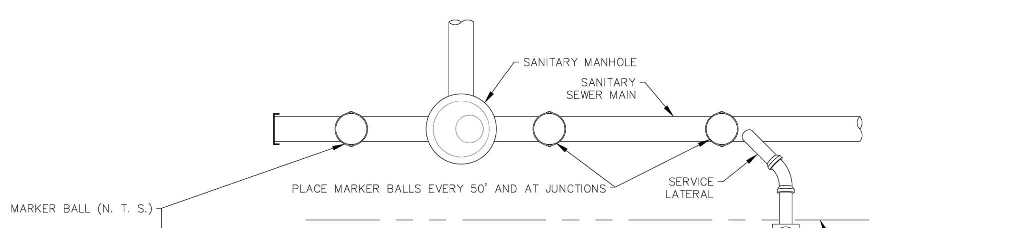
Sheet Revisions	
Date	Comments
3/20	REVISED PER STAFF COMMENTS
8/22	REVISED PER STAFF COMMENTS

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100 N. Wilcox St.
Castle Rock, CO 80104
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Fax: (720) 733-2217
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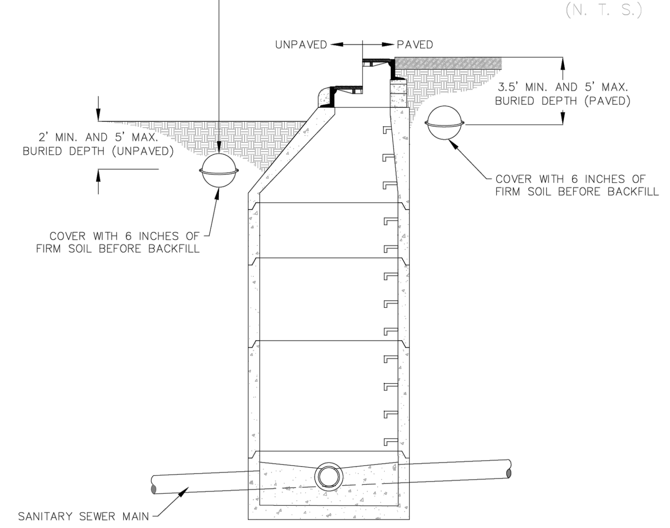
SANITARY SEWER TRENCH DETAIL

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

DETAIL PLAN NO. SS-8
Sheet 1 of 1



SANITARY SEWER SAMPLE PLAN (N. T. S.)



SANITARY SEWER MANHOLE

NOTES:

1. MARKER BALLS SHALL BE GREEN FOR ALL SANITARY SEWER LATERALS AND MANHOLES.
2. MARKER BALLS SHALL BE LOCATED A MAXIMUM OF 6 FEET FROM EVERY SANITARY SEWER MANHOLE.
3. MARKER BALLS SHALL BE BURIED A MINIMUM OF 2 FEET BELOW UNPAVED SURFACES, 3.5 FEET BELOW PAVED SURFACES AND NO DEEPER THAN 5 FEET BELOW FINISHED GRADE.
4. MARKER BALLS ABOVE SANITARY SEWER SERVICE LATERALS MUST BE LOCATED DIRECTLY ABOVE THE SERVICE LATERAL.
5. IF PLACING MARKER BALLS OVER KEY POINTS, A TIE-DOWN PROCEDURE MAY BE NECESSARY TO KEEP IT IN PLACE. SECURE THE MARKER BALL BY INSERTING A CABLE TIE THROUGH ONE OR BOTH TABS AND AROUND THE CIRCUMFERENCE OF THE PIPE.
6. SEPARATE THE BALL MARKER FROM METALLIC KEY POINTS WITH A MINIMUM OF 4 INCHES OF CLEAN FILL DIRT.
7. PLACE MARKER BALLS EVERY 50 FEET AND AT PIPE JUNCTIONS.
8. MINIMUM DISTANCE BETWEEN MARKERS SHOULD BE AT LEAST 6 FEET.
9. MARKER POSTS SHOULD BE PLACED WHERE THERE IS DIRECT LINE OF SIGHT TO THE NEXT MARKER BALL. MAXIMUM DISTANCE BETWEEN MARKER POSTS SHOULD BE 400 FEET.
10. FILL AT LEAST 6 INCHES OF SOIL OVER THE MARKER BALL BEFORE BACKFILL.
11. SANITARY SEWER FORCE MAINS REQUIRE TRACER WIRE INSTALLATION.

Sheet Revisions	
Date	Comments
12/21	REVISED PER STAFF COMMENTS
10/22	REVISED PER STAFF COMMENTS

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MARKER BALLS FOR SANITARY SEWERS

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

DETAIL PLAN NO. SS-11
Sheet 1 of 1

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.

Civil Engineer signature and stamp Date

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

Approved By:

Development Services Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000
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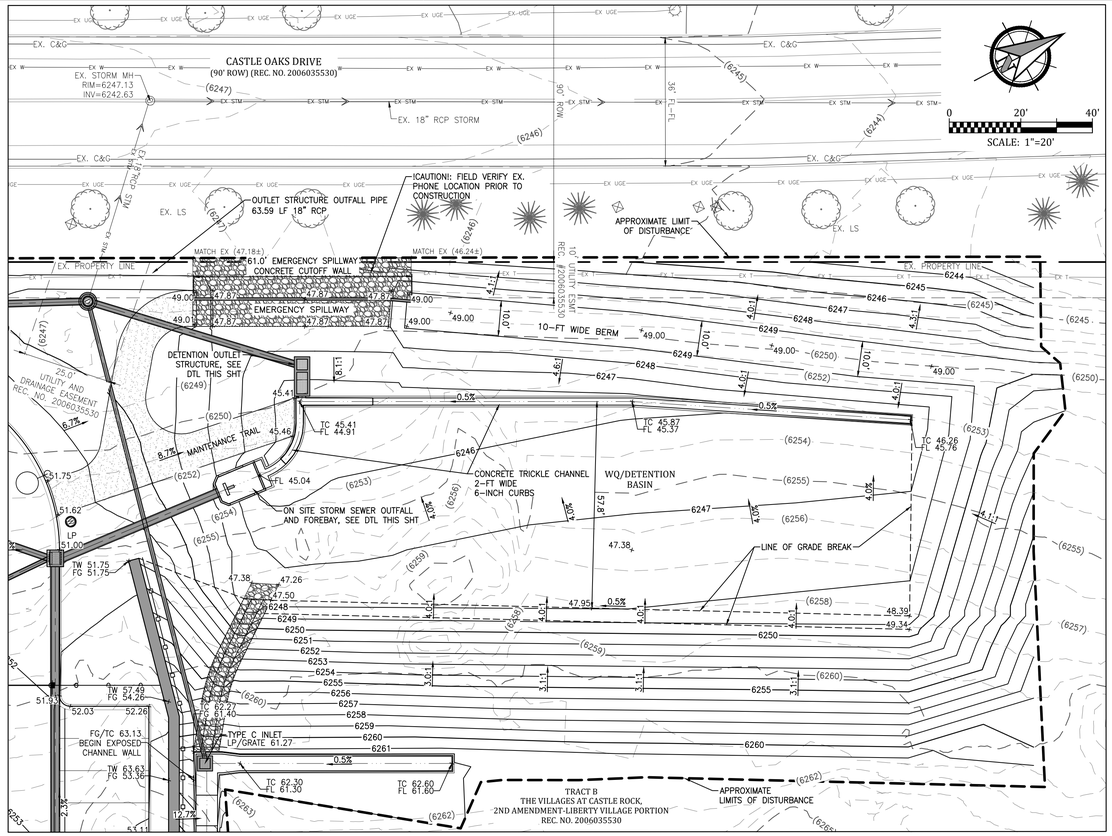
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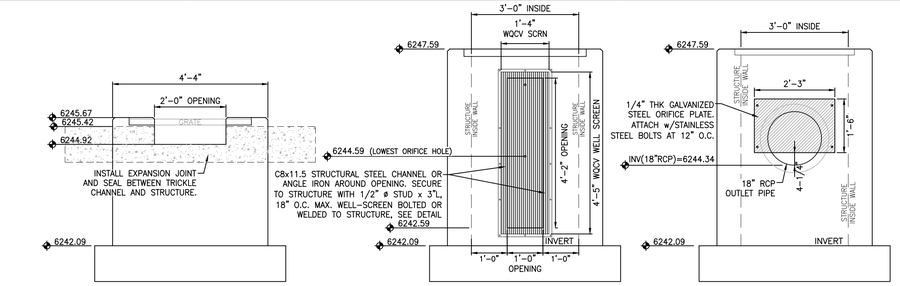
SHEET TITLE:
DETAIL SHEET-WATER AND WASTEWATER

SHEET ID:
21
Sheet 21 of 47

PROJECT STATUS:
Site Construction Documents

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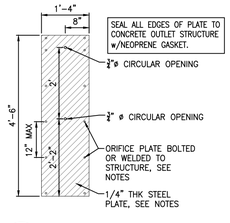




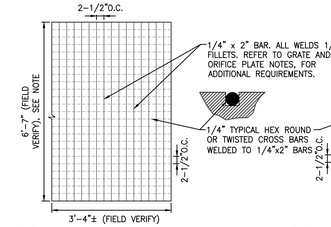
C 22 SECTION B-B
DETENTION BASIN
SCALE: NTS

D 22 SECTION C-C
DETENTION BASIN
SCALE: NTS

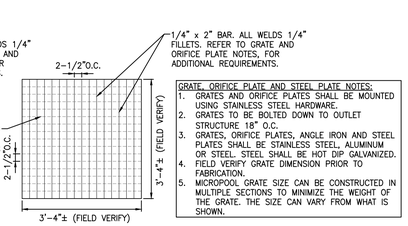
E 22 SECTION D-D
DETENTION BASIN
SCALE: NTS



F 22 WQCV ORIFICE PLATE
DETENTION BASIN
SCALE: NTS

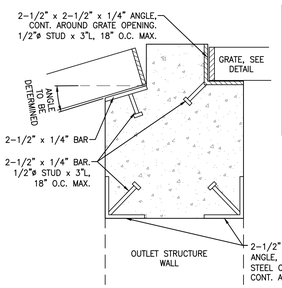


G 22 MICROPOOL GRATE DETAIL
SCALE: NTS



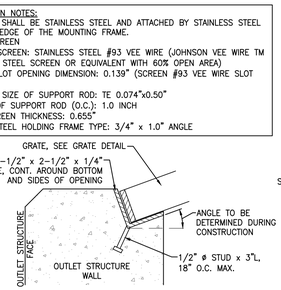
GRATE, ORIFICE PLATE AND STEEL PLATE NOTES:
1. GRATES AND ORIFICE PLATES SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE.
2. GRATES TO BE BOLTED DOWN TO OUTLET STRUCTURE 18" O.C.
3. GRATES, ORIFICE PLATES, ANGLE IRON AND STEEL PLATES SHALL BE STAINLESS STEEL, ALUMINUM OR STEEL. STEEL SHALL BE HOT DIP GALVANIZED.
4. FIELD VERIFY GRATE DIMENSION PRIOR TO FABRICATION.
5. MICROPOOL GRATE SIZE CAN BE CONSTRUCTED IN MULTIPLE SECTIONS TO MINIMIZE THE WEIGHT OF THE GRATE. THE SIZE CAN VARY FROM WHAT IS SHOWN.

H 22 MAJOR STORM GRATE DETAIL
SCALE: NTS

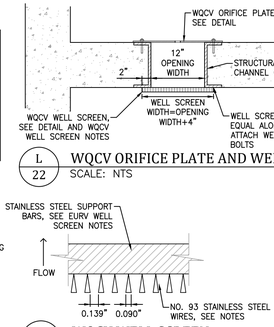


I 22 DETAIL A
SCALE: NTS

WQCV WELL-SCREEN NOTES:
1. WELL-SCREEN SHALL BE STAINLESS STEEL AND ATTACHED BY STAINLESS STEEL BOLTS ALONG EDGE OF THE MOUNTING FRAME.
2. EURV WELL SCREEN
   - TYPE OF SCREEN: STAINLESS STEEL #93 VEE WIRE (JOHNSON VEE WIRE TM STAINLESS STEEL SCREEN OR EQUIVALENT WITH 60% OPEN AREA)
   - SCREEN SLOT OPENING DIMENSION: 0.139" (SCREEN #93 VEE WIRE SLOT OPENING)
   - TYPE AND SIZE OF SUPPORT ROD: TE 0.074"x0.50"
   - SPACING OF SUPPORT ROD (O.C.): 1.0 INCH
   - TOTAL SCREEN THICKNESS: 0.655"
   - CARBON STEEL HOLDING FRAME TYPE: 3/4" x 1.0" ANGLE

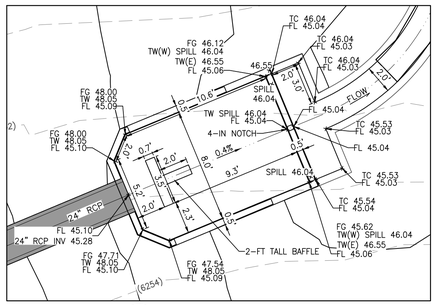


J 22 DETAIL B
SCALE: NTS

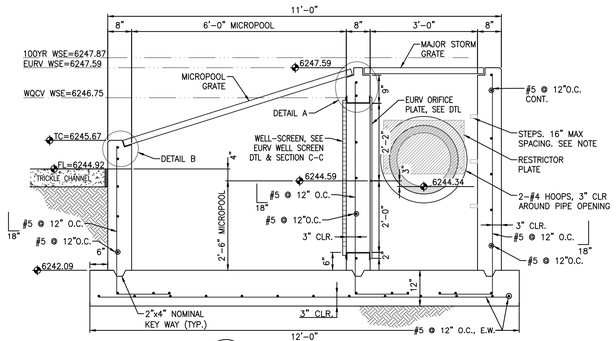


L 22 WQCV ORIFICE PLATE AND WELL SCREEN
SCALE: NTS

K 22 WQCV WELL SCREEN
SCALE: NTS



A 22 DETENTION BASIN FOREBAY
SCALE: 1"=5'

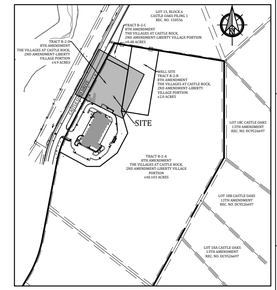


B 22 SECTION A-A
DETENTION BASIN
SCALE: NTS

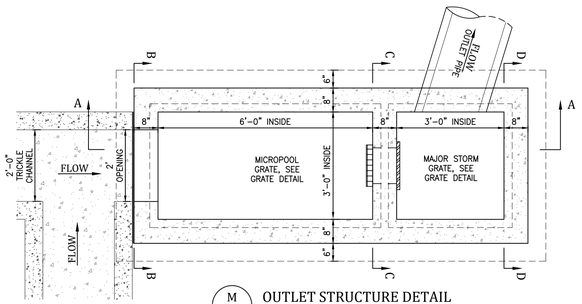
DETENTION BASIN			
	WATER SURFACE ELEV. (FT)	REQUIRED STORAGE VOLUME	RELEASE RATE
WQCV	6246.56	0.067 AC-FT	
EURV	6247.41	0.220 AC-FT	
100-YEAR	6247.87	0.342 AC-FT	2.8 CFS
SPILLWAY CREST ELEVATION: 6247.84			
TOP OF EMBANKMENT MINIMUM ELEVATION: 6249.00			

BENCHMARK: ELEVATIONS ARE BASED UPON DOUGLAS COUNTY CONTROL POINT 1.009009, BEING A 3.25" ALUMINUM CAP STAMPED DOUGLAS COUNTY GIS 1.009009. ELEVATION=6289.00 NAVD 88 (#99).

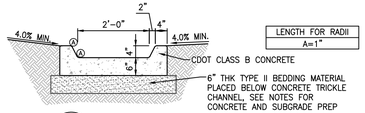
BASIS OF BEARING: BEARINGS ARE BASED UPON THE WEST LINE OF THE NORTH WEST 1/4 OF THE SOUTH WEST 1/4 SECTION 29, T7S R66W, BEING MONUMENTED AT BOTH ENDS WITH A NO.6 REBAR AND 2" ALUMINUM CAP STAMPED RMS PLS 23515. SAID LINE BEARS S00°04'08"E, A DISTANCE OF 1323.67 FEET PER COLORADO STATE PLAN COORDINATES.



KEY MAP
SCALE:1"=500'



M 22 OUTLET STRUCTURE DETAIL
DETENTION BASIN
PLAN VIEW
SCALE: NTS



LENGTH FOR RADII
A=1"

N 22 TRICKLE CHANNEL
SCALE: NTS

OUTLET STRUCTURE, FOREBAY AND RETAINING WALL NOTES:
1. PRIOR TO CONSTRUCTION, CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE.
2. GRADE 60 REINFORCING STEEL REQUIRED. SEE TABLE FOR THE MINIMUM LAP SPLICE LENGTH FOR REINFORCING BARS. ALL REINFORCING STEEL SHALL HAVE 2-INCH MINIMUM CLEARANCE FROM EDGE OF CONCRETE AND 3-INCH MIN CLEARANCE TO EDGE OF CONCRETE PLACED AGAINST SOIL, UNLESS OTHERWISE NOTED.

BAR SIZE	#4	#5	#6
MIN. SPLICE LENGTH	1'-3"	1'-7"	2'-0"

3. CONCRETE FOR THE OUTLET STRUCTURE, RETAINING WALL AND FOREBAYS SHALL BE CDOT CLASS D CONCRETE.
4. EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK, SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE AND THE JOINT SHALL BE SEALED, REFER TO DETAILS.
5. ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/4-INCH CHAMFER UNLESS OTHERWISE NOTED.
6. BACKFILLING AGAINST WALLS SHALL NOT COMMENCE UNTIL CONCRETE HAS OBTAINED ITS FULL SEVEN DAY STRENGTH.
7. SUBGRADE TO BE 12" THK CLEAN FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698 UNDER STRUCTURES.
8. OUTLET STRUCTURES STEPS SHALL CONFORM TO AASHTO M199.
9. FOREBAY: CONTROL JOINTS SHALL BE INSTALLED AT 10' O.C. MAXIMUM. THE JOINTS SHALL BE SEALED WITH A JOINT SEALANT.

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.

Civil Engineer signature and stamp — Date
Jacob I. McMillen, PE #56736

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

Approved By:

Development Services — Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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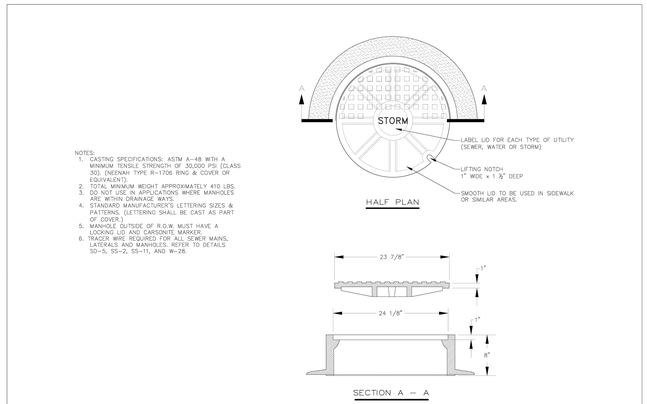
SEAL:

SHEET TITLE:
DETAIL SHEET-DETENTION

SHEET ID:
22
Sheet 22 of 47

PROJECT STATUS:
Site Construction Documents

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NOTES:
1. CASTING SPECIFICATIONS: ASTM A-48 WITH A MINIMUM TENSILE STRENGTH OF 30,000 PSI (CLASS 30). (NEENAH TYPE R-1706 RING & COVER OR EQUIVALENT).
2. TOTAL MINIMUM WEIGHT APPROXIMATELY 410 LBS.
3. DO NOT USE IN APPLICATIONS WHERE MANHOLES ARE WITHIN DRAINAGE WAYS.
4. STANDARD MANUFACTURER'S LETTERING SIZES & PATTERNS. (LETTERING SHALL BE CAST AS PART OF COVER.)
5. MANHOLE OUTSIDE OF R.O.W. MUST HAVE A LOCKING LID AND CARSONITE MARKER.
6. TRACER WIRE REQUIRED FOR ALL SEWER MAINS, LATERALS AND MANHOLES. REFER TO DETAILS SD-5, SD-2, SS-11, AND W-28.

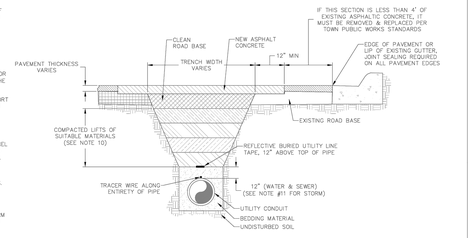
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STORM SEWER MANHOLE 24" RING & COVER

DETAIL PLAN NO.
SD-1
Sheet 1 of 1

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



NOTES:
1. ALL TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH THIS DETAIL UNLESS OTHERWISE SPECIFIED BY PUBLIC WORKS.
2. PRIOR TO PLACEMENT OF CONCRETE, ALL EDGES SHALL BE SAW CUT TO A CLEAN, STRAIGHT, AND VERTICAL EDGE.
3. PRIOR TO PLACEMENT OF ASPHALT, 18 INCHES OF ADJACENT ASPHALT SHALL BE MILLED TO 2 INCH DEPTH ON ALL SIDES TO MATCH EXISTING PAVEMENT. INNER SURFACE TO BE TACKED WITH HSS-1.
4. WHEN SUBSTITUTING FOR BACKFILL MATERIAL, FLOWABLE FILL SHALL CONFORM TO MSPEC CLSM STANDARDS.
5. TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE DIAMETER OF THE PIPE.
6. 95% OF ASTM D698 STANDARD COMPACTION EFFORT IS REQUIRED ON ALL TRENCHING ZONES, IN BOTH IMPROVED & UNIMPROVED AREAS.
7. IN UNIMPROVED AREAS, ALL DISTURBED AREAS SHALL BE REGRADED, SEEDED & MULCHED.
8. IN CONCRETE ROADWAYS, A MINIMUM OF 1/2 PANEL WIDTH OR 10' x 5' SECTION WILL BE ALLOWED TO REMAIN, OTHERWISE THE ENTIRE CONCRETE PANEL MUST BE REPLACED.
9. USE #4 REBAR AT 3' CENTERS ALONG THE PERIMETER OF CONCRETE REPLACEMENT SECTIONS.
10. 6" MAXIMUM COMPACTED LIFT THICKNESS IF FLOWABLE FILL NOT REQUIRED.
11. BEDDING MATERIAL DEPTH WHEN INSTALLING STORM SEWER SHALL BE UP TO SPRING LINE, EXCEPT IN AREAS OF UNSUITABLE BACKFILL THEN BEDDING MATERIAL SHALL BE 12" ABOVE PIPE.
12. TRENCH WIDTHS LESS THAN 4' OR TRENCHING THAT EXPERIENCES CAVE-INS OR SLOUGHING SHALL REQUIRE FLOWABLE FILL IN ORDER TO ACHIEVE COMPACTION.

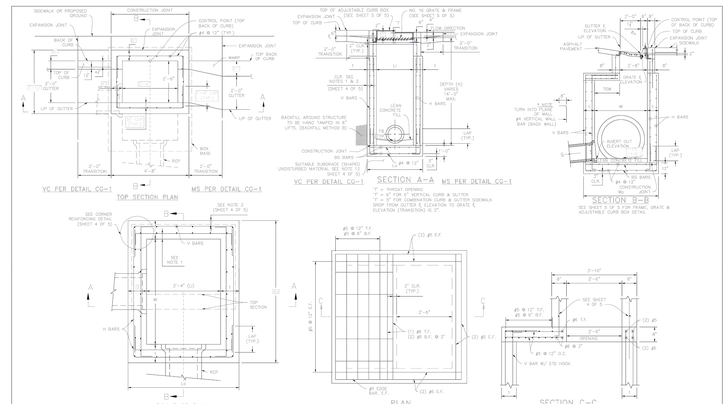
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8/22	REVISED PER STAFF COMMENTS	

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STORM SEWER TRENCH DETAIL

DETAIL PLAN NO.
SD-2
Sheet 1 of 1

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



INLET Dimension	Inside Length (IL)	Inside Width (IW)	Wall Thickness (T)	Outside Length (OL)	Outside Width (OW)	Top Slab Width (TSW)	# of Reinforcing Faces	H Bars	SS Bars	Top Splice Length (Top)
5'–10"	5'-10"	3'-4"	6"	6'-10"	4'-4"	4'-10"	1	#4 @ 9"	#5 @ 12"	#4 @ 12"
11'–10"	11'-10"	3'-4"	6"	12'-10"	4'-4"	4'-10"	1	#4 @ 9"	#5 @ 12"	#4 @ 12"
16'–10"	16'-10"	4'-4"	6"	17'-10"	5'-4"	5'-10"	1	#4 @ 9"	#5 @ 12"	#4 @ 12"
22'–10"	22'-10"	4'-4"	6"	23'-10"	5'-4"	5'-10"	1	#4 @ 9"	#5 @ 12"	#4 @ 12"
28'–10"	28'-10"	4'-4"	10"	29'-10"	5'-4"	6'-4"	1	#5 @ 12"	#5 @ 12"	#4 @ 12"
34'–10"	34'-10"	4'-4"	10"	35'-10"	5'-4"	6'-4"	2	#5 @ 9"	#5 @ 12"	#4 @ 12"
40'–10"	40'-10"	4'-4"	10"	41'-10"	5'-4"	6'-4"	2	#5 @ 9"	#5 @ 12"	#4 @ 12"
46'–10"	46'-10"	4'-4"	10"	47'-10"	5'-4"	6'-4"	2	#5 @ 9"	#5 @ 12"	#4 @ 12"
52'–10"	52'-10"	4'-4"	10"	53'-10"	5'-4"	6'-4"	2	#5 @ 9"	#5 @ 12"	#4 @ 12"
58'–10"	58'-10"	4'-4"	10"	59'-10"	5'-4"	6'-4"	2	#5 @ 9"	#5 @ 12"	#4 @ 12"
64'	5'-4"	9'-0"	10"	5'-4"	10'-0"	6'-4"	2	#5 @ 9"	#5 @ 12"	#4 @ 12"

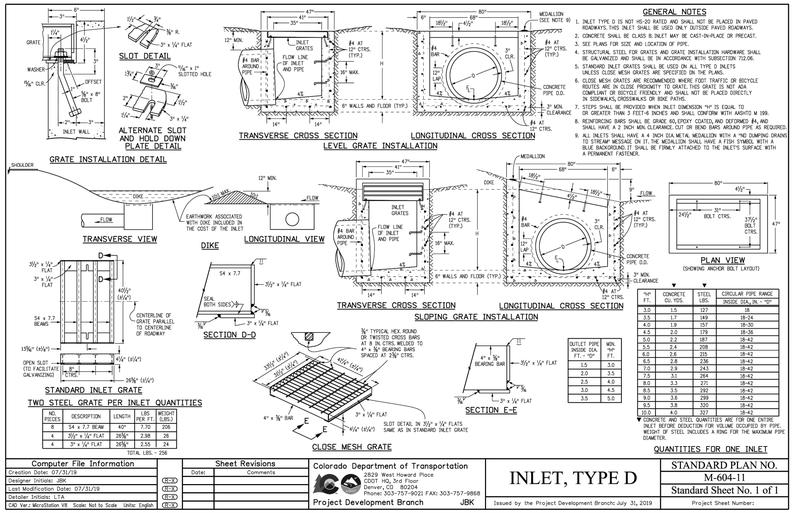
Sheet Revisions		
Date	Comments	
10/20	REVISED PER STAFF COMMENTS	

Town of Castle Rock
100 N. Wilcox St.
Castle Rock, CO 80104
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Development Services

TYPE 16 SINGLE INLET

DETAIL PLAN NO.
SD-3
Sheet 1 of 5

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



PIPE SIZE	DESCRIPTION	LENGTH	LBS PER FT.	WEIGHT (LBS.)
8	54 x 7.7 BEAM	40"	7.70	206
4	3½" x ¼" FLAT	26⅝"	2.98	26
4	3" x ¼" FLAT	26⅝"	2.55	24
TOTAL LBS. = 256				

PIPE I.D.	CONCRETE OU. I.D.	STEEL I.D.	CIRCULAR PIPE RANGE INSIDE DIA. IN. "D"
3.0	1.5	127	18
3.5	1.7	149	18–24
4.0	1.9	157	18–30
4.5	2.0	179	18–36
5.0	2.2	187	18–42
5.5	2.4	208	18–42
6.0	2.6	215	18–42
6.5	2.8	236	18–42
7.0	2.9	243	18–42
7.5	3.1	264	18–42
8.0	3.3	271	18–42
8.5	3.5	292	18–42
9.0	3.8	299	18–42
9.5	3.8	320	18–42
10.0	4.0	327	18–42

▼ CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

QUANTITIES FOR ONE INLET

OUTLET PIPE INSIDE DIA FT. – "D"	MIN. "W" FT.
1.5	3.0
2.0	3.5
2.5	4.0
3.0	4.5
3.5	5.0

GENERAL NOTES
1. INLET TYPE D IS NOT MS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
2. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
3. SEE PLANS FOR SIZE AND LOCATION OF PIPE.
4. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
5. STANDARD INLET GRATES SHALL BE USED ON ALL TYPE D INLETS UNLESS CLOSE MESH GRATES ARE SPECIFIED ON THE PLANS.
6. CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
7. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FEET-6 INCHES AND SHALL CONFORM WITH AASHTO M 199.
8. REINFORCING BARS SHALL BE GRADE 60,EPOXY COATED, AND DEFORMED #4, AND SHALL HAVE A 2 INCH MIN. CLEARANCE. CUT OR BEND BARS AROUND PIPE AS REQUIRED.
9. ALL INLETS SHALL HAVE A 4 INCH DIA METAL MEDALLION WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BLUE BACKGROUND.IT SHALL BE FIRMLY ATTACHED TO THE INLETS SURFACE WITH A PERMANENT FASTENER.

Computer File Information	
Creation Date: 07/31/19	
Designer Initials: JBK	CED
Last Modification Date: 07/31/19	CED
Detailer Initials: LTA	CED
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	CED

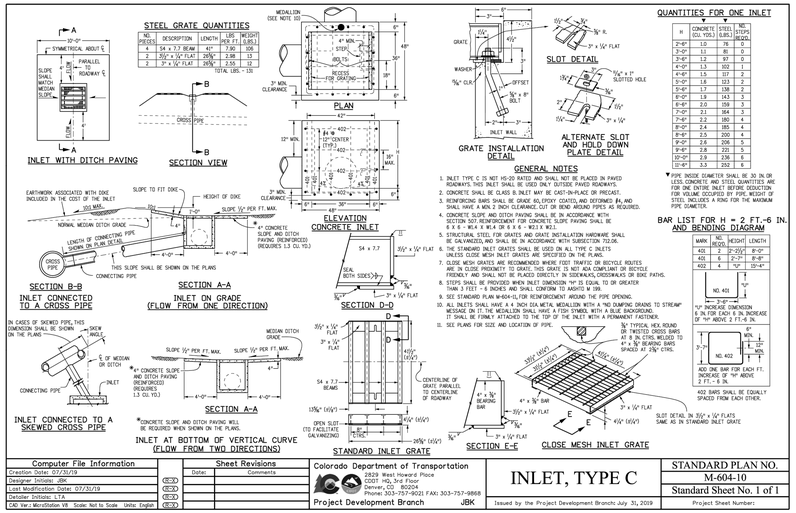
Sheet Revisions		
Date	Comments	

Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9022 FAX: 303-757-9868
Project Development Branch JBK

INLET, TYPE D

STANDARD PLAN NO.
M-604-11
Standard Sheet No. 1 of 1
Project Sheet Number:

Issued by the Project Development Branch: July 31, 2019



H	CONCRETE OU. YDS.	STEEL LBS.	NO. STEPS REQ'D.
2'-6"	1.0	76	0
3'-0"	1.1	83	0
3'-6"	1.2	97	0
4'-0"	1.3	102	1
4'-6"	1.5	117	2
5'-0"	1.6	123	2
5'-6"	1.7	138	2
6'-0"	1.8	143	3
6'-6"	2.0	159	3
7'-0"	2.1	164	3
7'-6"	2.2	180	4
8'-0"	2.4	185	4
8'-6"	2.5	200	4
9'-0"	2.6	206	5
9'-6"	2.8	221	5
10'-0"	2.9	236	6
11'-6"	3.3	252	6

▼ PIPE INSIDE DIAMETER SHALL BE 30 IN OR LESS. CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

QUANTITIES FOR ONE INLET

GENERAL NOTES
1. INLET TYPE C IS NOT MS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
2. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
3. REINFORCING BARS SHALL BE GRADE 60, EPOXY COATED, AND DEFORMED #4, AND SHALL HAVE A MIN. 2 INCH CLEARANCE. CUT OR BEND AROUND PIPES AS REQUIRED.
4. CONCRETE SLOPE AND DITCH PAVING SHALL BE IN ACCORDANCE WITH SECTION 607. REINFORCEMENT FOR CONCRETE SLOPE PAVING SHALL BE 8 X 8 – W1.4 OR 8 X 8 – W2.9 X W2.1.
5. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED, AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
6. THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS CLOSE MESH INLET GRATES ARE SPECIFIED ON THE PLANS.
7. CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
8. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FEET – 6 INCHES AND SHALL CONFORM TO AASHTO M 199.
9. SEE STANDARD PLAN M-604-CL.FLOR REINFORCEMENT AROUND THE PIPE OPENING.
10. ALL INLETS SHALL HAVE A 4 INCH DIA METAL MEDALLION WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BLUE BACKGROUND. IT SHALL BE FIRMLY ATTACHED TO THE TOP OF THE INLET WITH A PERMANENT FASTENER.
11. SEE PLANS FOR SIZE AND LOCATION OF PIPE.

BAR LIST FOR H = 2 FT.–6 IN. AND BENDING DIAGRAM

MARK	NO. REQ'D.	HEIGHT	LENGTH
401	2	2'–2½"	8'–0"
402	6	2'–2½"	8'–8"
402	4	"H" + 8"	13'–4"

NO. 401
NO. 402
*"H" INCREASE DIMENSION 6 IN FOR EACH 6 IN. INCREASE OF "H" ABOVE 2 FT.–6 IN.
ADD ONE BAR FOR EACH FT. INCREASE OF "H" ABOVE 2 FT.–6 IN.
402 BARS SHALL BE EQUALLY SPACED FROM EACH OTHER.

Computer File Information	
Creation Date: 07/31/19	
Designer Initials: JBK	CED
Last Modification Date: 07/31/19	CED
Detailer Initials: LTA	CED
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	CED

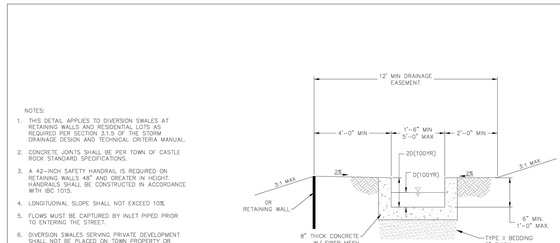
Sheet Revisions		
Date	Comments	

Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9022 FAX: 303-757-9868
Project Development Branch JBK

INLET, TYPE C

STANDARD PLAN NO.
M-604-10
Standard Sheet No. 1 of 1
Project Sheet Number:

Issued by the Project Development Branch: July 31, 2019



NOTES:
1. THIS DETAIL APPLIES TO DIVERSION SWALES AT RETAINING WALLS AND RESIDENTIAL LOTS AS REQUIRED PER SECTION 3.3.5 OF THE STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA MANUAL.
2. CONCRETE JOINTS SHALL BE PER TOWN OF CASTLE ROCK STANDARD SPECIFICATIONS.
3. A 42–INCH SAFETY HANDRAIL IS REQUIRED ON RETAINING WALLS 48" AND GREATER IN HEIGHT. HANDRAILS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IBC 1015.
4. LONGITUDINAL SLOPE SHALL NOT EXCEED 10%
5. FLOWS MUST BE CAPTURED BY INLET PIPED PRIOR TO ENTERING THE STREET.
6. DIVERSION SWALES SERVING PRIVATE DEVELOPMENT SHALL NOT BE PLACED ON TOWN PROPERTY OR OPEN SPACE.
7. DIVERSION SWALES MUST BE SHOWN ON STRUCTURAL DESIGN OF RETAINING WALL AND INCORPORATED INTO THE STRUCTURAL DESIGN AND CERTIFICATION.
8. STRUCTURAL DESIGN OF RETAINING WALL MUST INCLUDE LIVE LOAD OF MAINTENANCE VEHICLES.

TYPICAL DIVERSION SWALE

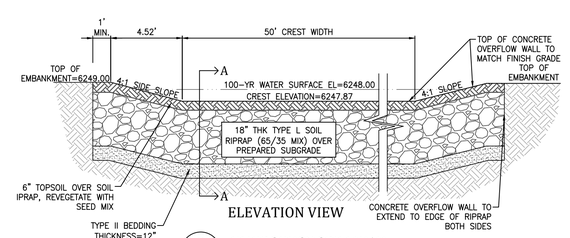
Sheet Revisions	
Date	Comments
3/20	REVISED PER STAFF COMMENTS
10/20	ISSUED FOR USE
7/22	REVISED PER STAFF COMMENTS

Town of Castle Rock
100 N. Wilcox St.
Castle Rock, CO 80104
Phone: (720) 733-2200
Fax: (720) 733-2273
Development Services

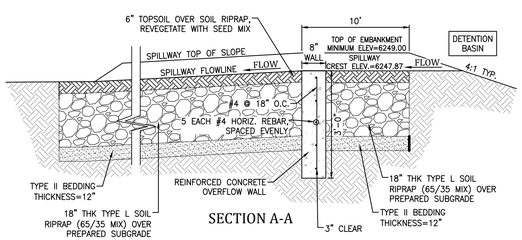
TYPICAL DIVERSION SWALE

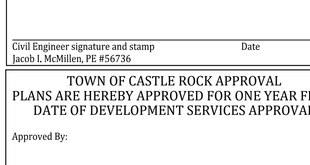
DETAIL PLAN NO.
SD-7
Sheet 1 of 1

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

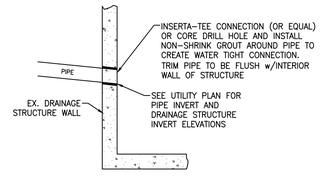


Z 22 EMERGENCY SPILLWAY DETENTION BASIN
SCALE: NTS





A 19 DOWNSPOUT CONNECTION TO STORM SEWER
SCALE: NTS



B 19 PIPE CONNECTION TO MANHOLE OR INLET
SCALE: NTS

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.

Civil Engineer signature and stamp — Date
Jacob I. McMillen, PE #56736

TOWN OF CASTLE ROCK APPROVAL

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

Approved By:

Development Services — Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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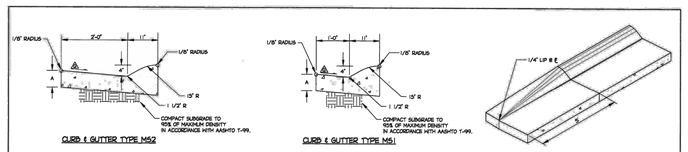
SEAL:

SHEET TITLE:
DETAIL SHEET-DRAINAGE

SHEET ID:
23
Sheet 23 of 47

PROJECT STATUS:
Site Construction Documents

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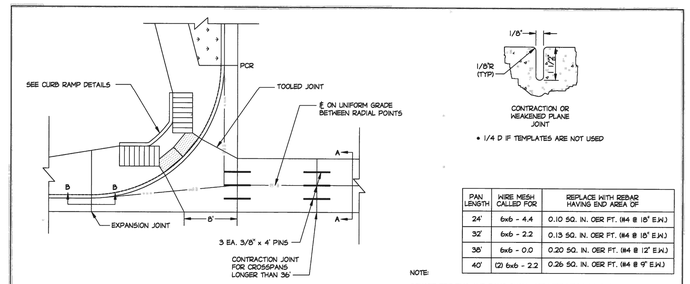


GENERAL NOTES

1. DIMENSION A SHALL BE 5', 8', OR 10' (SEE PLANS).
2. CONTRACTION JOINTS SPACED AT MAXIMUM 10' INTERVALS OR AS SHOWN ON PLANS. DEPTH OF CON JOINTS SHALL BE 1/3 THE DEPTH OF CONCRETE.
3. EXPANSION JOINTS, AT INTERVALS OF 300', SHALL BE PLACED FOR THE FULL DEPTH OF THE CONCRETE.
4. CURB & GUTTER SHALL BE PAID BY LINEAL FOOT, BY CURB & GUTTER TYPE (C).
5. SIDEWALK SHALL BE PAID BY SQUARE YARD, BY CONCRETE SIDEWALK (X").

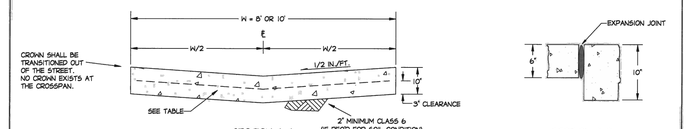
⚠ GUTTER CROSS SLOPES SHALL BE 1 IN/FT, WHEN DRAINING TOWARD CURB, AND 1/2 IN/FT WHEN DRAINING AWAY FROM CURB.

Sheet Revisions			Town of Castle Rock	CURB, GUTTERS, AND SIDEWALK	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-3217 Development Services	Issued By: Town of Castle Rock, Development Services March 31, 2010	CG-1 Sheet 1 of 1

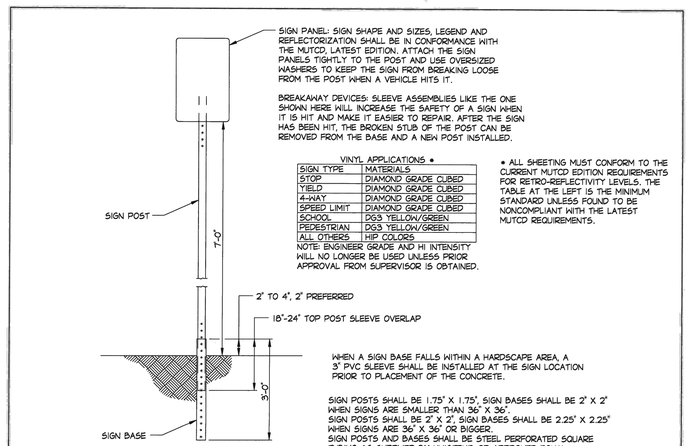


PAN LENGTH	WIRE MESH CALLED FOR	REPLACE WITH REBAR HAVING END AREA OF
24'	6x6 - 4.4	0.10 SQ. IN. PER FT. (@4 @ 18" E.W.)
32'	6x6 - 2.2	0.13 SQ. IN. PER FT. (@4 @ 18" E.W.)
36'	6x6 - 0.0	0.20 SQ. IN. PER FT. (@4 @ 12" E.W.)
40'	(2) 6x6 - 2.2	0.26 SQ. IN. PER FT. (@4 @ 9" E.W.)

NOTE:
SQUARE RETURNS AND PANS SHALL USE WIRE MESH AS SHOWN IN THE TABLE ABOVE. WHEN WIRE MESH IS NOT AVAILABLE, STEEL REINFORCING BAR MAY BE SUBSTITUTED.



Sheet Revisions			Town of Castle Rock	CROSSPANS	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-3217 Development Services	Issued By: Town of Castle Rock, Development Services March 31, 2010	CG-9 Sheet 1 of 1



VINYL APPLICATIONS *

SIGN TYPE	MATERIALS
STOP	DIAMOND GRADE CUBED
YIELD	DIAMOND GRADE CUBED
4-WAY	DIAMOND GRADE CUBED
SPEED LIMIT	DIAMOND GRADE CUBED
SCHOOL	D93 YELLOW/GREEN
PEDESTRIAN	D93 YELLOW/GREEN
ALL OTHERS	HIP COLORS

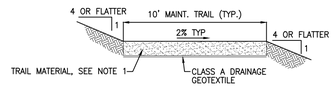
NOTE: ENGINEER GRADE AND HI INTENSITY WILL NO LONGER BE USED UNLESS PRIOR APPROVAL FROM SUPERVISOR IS OBTAINED.

* ALL SHEETING MUST CONFORM TO THE CURRENT MUTCD EDITION REQUIREMENTS FOR RETRO-REFLECTIVITY LEVELS. THE TABLE AT THE LEFT IS THE MINIMUM STANDARD UNLESS FOUND TO BE NONCOMPLIANT WITH THE LATEST MUTCD REQUIREMENTS.

Sheet Revisions			Town of Castle Rock	SIGN POST & BASE DETAIL	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St. Castle Rock, CO 80104 Phone: (720) 733-2200 Fax: (720) 733-3217 Development Services	Issued By: Town of Castle Rock, Development Services March 31, 2010	ST-1 Sheet 1 of 1

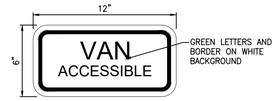
A / 20 CONCRETE DRAIN PAN
PARKING LOT
SCALE: NTS

NOTES:
1. ACCESS RAMP SHALL BE EITHER REINFORCED CONCRETE OR 8" MIN THICK COMPACTED CDOT CLASS 5 AGGREGATE OR APPROVED EQUIV. OVER SUBGRADE COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698.
2. 10% MAX SLOPE ALONG MAINT. TRAIL.

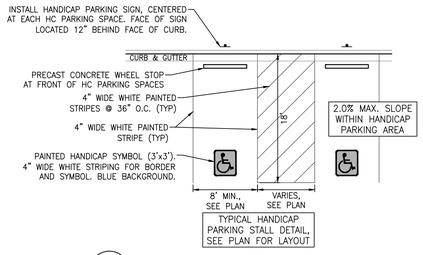


D / 20 MAINTENANCE TRAIL SECTION
SCALE: NTS

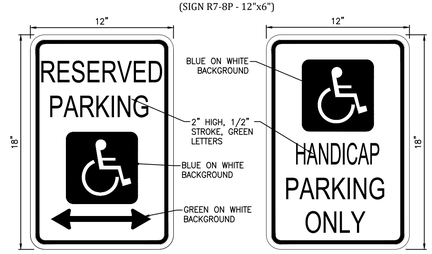
NOTES:
1. ALL TRAFFIC CONTROL AND TRAFFIC SIGNS SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE CURRENT COLORADO SUPPLEMENT AND THE APPROVED PLANS.
2. FIRE LANE SIGNS AND LOCATIONS SHALL BE IN ACCORDANCE WITH THE "FIRE LANE SIGN REQUIREMENTS, CASTLE ROCK FIRE AND RESCUE DEPARTMENT". THE MANUAL INCLUDES DIFFERENT SIGN TYPES THAT ARE ACCEPTABLE.
3. FIRE DEPARTMENT TO DETERMINE THE FIRE LANE SIGN LOCATIONS.



VAN ACCESSIBLE PARKING SIGN
(SIGN R7-8P - 12"x6")



B / 20 TYPICAL HANDICAP PARKING STALL
SCALE: NTS



HANDICAP PARKING SIGN
(SIGN R7-8)

ALTERNATE HANDICAP PARKING SIGN

C / 20 HANDICAP PARKING SIGN
SCALE: NTS

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.

Civil Engineer signature and stamp — Date
Jacob I. McMillen, PE #56736

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

Approved By:

Development Services — Date

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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SEAL:

SHEET TITLE:
DETAIL SHEET-SITE

SHEET ID:
24
Sheet 24 of 47

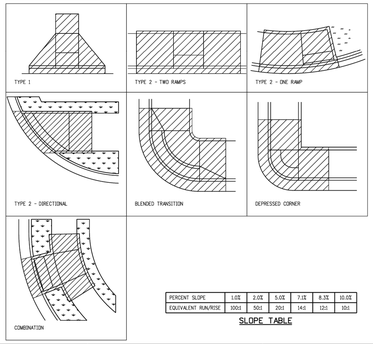
PROJECT STATUS:
Site Construction Documents

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CURB RAMP GENERAL NOTES:

1. IN NEW CONSTRUCTION OR FULL-DEPTH RECONSTRUCTION, PROVIDE A SEPARATE CURB RAMP FOR EACH MARKED OR UNMARKED PEDESTRIAN STREET CROSSING. CURB RAMPS SHALL BE CONTAINED WHOLLY WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING OR CROSSWALK THEY SERVE, OR AS SHOWN ON THE CONTRACT PLANS.
2. ALTERATIONS ARE DEFINED AS CHANGES TO AN EXISTING HIGHWAY THAT AFFECT PEDESTRIAN ACCESS, CIRCULATION, OR USE. ALTERATIONS INCLUDE, BUT ARE NOT LIMITED TO, RESURFACING, REHABILITATION, RECONSTRUCTION, CURB RAMP RETROFITS, HISTORIC RESTORATION, OR CHANGES OR REARRANGEMENT TO STRUCTURAL PARTS OR ELEMENTS OF A PEDESTRIAN FACILITY.
3. A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP OR TURNING SPACE, WITHOUT RAISED OBSTACLES, THAT COULD BE MISTAKENLY TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.
4. IN ALTERATIONS, WHERE AN EXISTING PHYSICAL CONSTRAINT PREVENTS PROVIDING A SEPARATE CURB RAMP FOR EACH PEDESTRIAN STREET CROSSING, A SINGLE DIAGONAL RAMP ON THE APEX(S) SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS. THE USE OF A SINGLE DIAGONAL RAMP SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. DIAGONAL RAMPS ARE NOT ACCEPTABLE IN NEW CONSTRUCTION OR FULL-DEPTH RECONSTRUCTION.
5. DETECTABLE WARNINGS SURFACES (DWS) ARE INTENDED TO INDICATE THE BOUNDARY BETWEEN A PEDESTRIAN ROUTE AND VEHICULAR ROUTE WHERE THERE IS A FLUSH RATHER THAN CURBED CONNECTION. DWS ARE NOT INTENDED TO PROVIDE WAYFINDING. DWS SHALL BE PROVIDED AT THE FOLLOWING LOCATIONS:
   1. CURB RAMPS, BLENDED TRANSITIONS, AND DEPRESSED CORNERS AT PEDESTRIAN STREET CROSSINGS;
   2. PEDESTRIAN REFUGE ISLANDS (6 FEET IN WIDTH OR GREATER);
   3. BOARDING AREAS AT SIDEWALK OR STREET LEVEL WHERE THE PLATFORM IS NOT PROTECTED TO PEDESTRIAN CROSS TRAFFIC; AND
   4. BOARDING AREAS AT SIDEWALK OR STREET LEVEL TRANSIT STOPS WHERE THE AREA IS NOT PROTECTED TO PEDESTRIAN CROSS TRAFFIC.
6. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH THE ADJACENT GUTTER, HIGHWAY, OR PEDESTRIAN ACCESS ROUTE SURFACE, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. FEDERAL YELLOW COLOR IS PREFERRED, HOWEVER, OTHER COLORS MAY BE USED IF APPROVED BY THE ENGINEER.
7. IN ALTERATIONS, TO AVOID CHASING GRADE INDEFINITELY ON STEEP ROADWAYS, A CURB RAMPS LENGTH IS NOT REQUIRED TO EXCEED 15 FEET REGARDLESS OF THE RESULTING RAMP RUNNING SLOPE.
8. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE.
9. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, OR OTHER OBSTRUCTIONS SHALL NOT BE INSTALLED ON THE CURB RAMP, OR TURNING SPACE AREAS.
10. IN NEW CONSTRUCTION, PULL BOXES, METER BOXES, MAINTENANCE HOLE COVERS, VAULT LIDS, OR SIMILAR, SHALL NOT BE CONSTRUCTED WITHIN ANY WALKING SURFACE, INCLUDING TURNING SPACE. IN ALTERATIONS, WHERE THESE ITEMS ARE WITHIN THE CURB RAMP OR TURNING SPACE, THEY SHALL BE FLUSH AND NOT CREATE A VERTICAL DISCONTINUITY GREATER THAN 1/2 INCH. VERTICAL DISCONTINUITY BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1V:2H. THE BEVEL SHALL BE APPLIED ACROSS THE ENTIRE SURFACE DISCONTINUITY.
11. CONSTRUCTION OF ANY REQUIRED PEDESTRIAN CURB SHALL BE INCLUDED IN THE BID PRICE OF THE CONCRETE CURB RAMP AND WILL NOT BE PAID FOR SEPARATELY.
12. ALL CURB RAMP JOINTS AND GRADE BREAKS SHALL BE FLUSH (0'-0"). THE JOINT BETWEEN THE ROADWAY SURFACE AND THE GUTTER PAN SHALL BE FLUSH.
13. THE CONTRACTOR SHALL VERIFY REMOVAL LIMITS ARE SUFFICIENT TO PROVIDE POSITIVE DRAINAGE, MAINTAIN EXISTING DRAINAGE PATTERNS, AND AVOID PONDING IN THE FINAL CONFIGURATION.
14. FLARED SIDE SLOPES MAY EXCEED 10.0% ONLY WHERE THEY ABUT A NON-WALKABLE SURFACE, OR WHERE THE ADJACENT RAMP SURFACE IS BLOCKED TO PEDESTRIAN TRAFFIC.
15. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.5% THE COUNTER SLOPE OF THE GUTTER AT THE FOOT OF A RAMP, TURNING SPACE, OR BLENDED TRANSITION SHALL NOT EXCEED 5.0%.
16. GRADE BREAKS AT THE TOP AND BOTTOM OF RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF THE RAMP RUN OR TURNING SPACE. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
17. A BROOM FINISH, WITH SWEEPS PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAFFIC, SHALL BE APPLIED TO ALL RAMP AND TURNING SPACE SURFACES.
18. IN ALTERATIONS, WHERE A RAMP OR TURNING SPACE MUST TIE INTO AN EXISTING GRADE THAT CANNOT BE ALTERED, THE RAMP OR TURNING SPACE MAY BE WARPED TO TRANSITION TO THE REQUIRED CROSS SLOPE. THE TRANSITION TO THE REQUIRED CROSS SLOPE SHALL BE SPREAD EVENLY OVER THE LENGTH OF THE RAMP OR TURNING SPACE TO MINIMIZE THE DEGREE OF WARPING. THE RATE OF CHANGE ON A RAMP OR TURNING SPACE SHALL NOT EXCEED 3% PER LINEAR FOOT.
19. DESIGN AND CONSTRUCT CURB RAMPS, TURNING SPACES, AND FLARE SLOPES WITH THE FLATTEST SLOPES POSSIBLE. THE SLOPES INDICATED IN THESE DETAILS SHOW THE MAXIMUM SLOPES ALLOWABLE. PREFERRED VALUES TO BE USED DURING DESIGN, LAYOUT, AND CONSTRUCTION ARE:
   - RAMP RUNNING SLOPE 5.0%
   - RAMP CROSS SLOPE 1.5%
   - TURNING SPACE RUNNING SLOPE 1.5%
   - TURNING SPACE CROSS SLOPE 1.5%
   - FLARE SLOPE 8.0-9.0%
20. WHERE SNOW REMOVAL EQUIPMENT WILL BE USED TO CLEAR THE PEDESTRIAN ACCESS ROUTE, CONSULT THE ENGINEER PRIOR TO CONSTRUCTION TO ENSURE THE WIDTH AND THICKNESS OF CURB RAMPS IS SUFFICIENT TO ACCOMODATE SUCH EQUIPMENT.
21. PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMPS ADJOIN ANY RIGID PAVEMENT, OR STRUCTURE. THE TOP OF THE JOINT FILLER MATERIAL SHALL BE FLUSH WITH ADJOINING CONCRETE SURFACES. THE EXPANSION JOINT MATERIAL SHALL EXTEND FOR THE FULL DEPTH OF THE CONCRETE SURFACE.
22. PROVIDE TIE BAR REINFORCING BETWEEN INDEPENDENTLY POURED CONCRETE CURB RAMPS OR TURNING SPACES AND CURB AND GUTTER. DRILL AND GROUT NO. 4 (2 INCH) LONG REINFORCEMENT BARS EPOXY COATED AT 18 INCHES CENTER TO CENTER MINIMUM.

CURB RAMP PAY AREAS

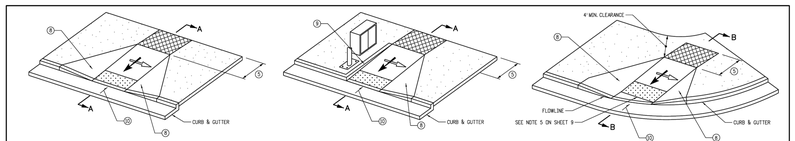


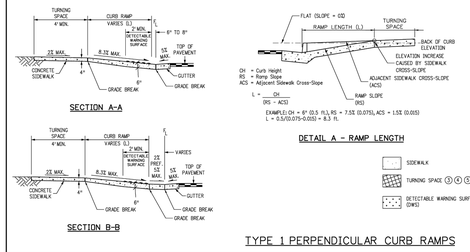
PERCENT SLOPE	1.0%	2.0%	5.0%	7.0%	8.3%	10.0%
EQUIVALENT RUN/RISE	100:1	50:1	20:1	14:1	12:1	10:1

SLOPE TABLE

GENERAL NOTES & PAY AREAS

Computer File Information		Sheet Revisions			Colorado Department of Transportation	CURB RAMPS	STANDARD PLAN NO.
Creation Date: 07/04/12 Initials: JBK		Date:	Comments		2829 West Howard Place		M-608-1
Last Modification Date: 05/03/19 Initials: LTA	(EX)	05/03/19	Completely revised every sheet.		CDOT HQ, 3rd Floor		
Full Path: www.codot.gov/business/designsupport	(EX)				Denver, CO 80204		
Drawing File Name: 608010901.dgn	(EX)				Phone:303-757-9021 FAX: 303-757-9868		Sheet No. 1 of 10
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(EX)				Division of Project Support JBK/LTA	Issued By: Project Development Branch July 4, 2012	





PERPENDICULAR RAMP NOTES

1. RAMP WIDTH - PROVIDE 5 FT.OR GREATER WHERE POSSIBLE. IF SITE CONSTRAINTS DO NOT PERMIT, PROVIDE 4 FT. MINIMUM. RAMPS SERVICING SHARED USE PATHS SHALL MATCH THE WIDTH OF THE PATH.
2. RAMP RUNNING SLOPE - 8.33 MAX.
3. TURNING SPACE RUNNING SLOPE - 2.0% MAX. TURNING SPACE RUNNING SLOPE IS MEASURED IN THE SAME DIRECTION AS THE RAMP RUNNING SLOPE.
4. RAMP AND TURNING SPACE CROSS SLOPE - 2.0% TYPICAL. AT CROSSINGS WITHOUT YIELD OR STOP CONTROL, OR WITH A SIGNAL WHERE VEHICLES CAN PROCEED THROUGH THE INTERSECTION WITHOUT SLOWING OR STOPPING, THE CROSS SLOPE OF RAMPS AND TURNING SPACES MAY EQUAL THE ROADWAY GRADE. AT CROSSINGS WITH STOP CONTROL, THE CROSSWALK THE RAMP AND TURNING SPACE CROSS SLOPE MAY EQUAL THE HIGHWAY GRADE.
5. TURNING SPACE DIMENSIONS - PROVIDE A TURNING SPACE AT THE TOP OF PERPENDICULAR RAMPS WITH A WIDTH EQUAL TO THE WIDTH OF THE CURB RAMP. TURNING SPACE LENGTH MUST BE 4 FT. MINIMUM, MEASURED IN THE DIRECTION OF THE RAMP RUN WHEN A TURNING SPACE IS CONSTRAINED AT THE BACK OF SIDEWALK, INCREASE LENGTH TO 5 FT. MINIMUM IN THE DIRECTION OF THE RAMP RUN.
6. RAMP ALIGNMENT - RAMPS SHALL BE ALIGNED TO BE FULLY CONTAINED WITHIN THE CROSSWALK OR STREET CROSSING THEY SERVE. PROVIDE ONE RAMP FOR EACH STREET CROSSING DIRECTION. IN ALTERATIONS, WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT PROVIDING ONE CURB RAMP FOR EACH CROSSING DIRECTION, A SINGLE DIAGONAL CURB RAMP CAN THE APEX OF A CORNER) SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS. IF A DIAGONAL RAMP IS USED, A CLEAR SPACE 4 FT. X 4FT. MUST BE PROVIDED AT THE BASE OF THE RAMP. THE CLEAR SPACE MUST BE WITHIN BOTH CROSSWALKS AND WHOLLY OUTSIDE OF ANY ADJACENT VEHICULAR TRAVEL LANES. DIAGONAL RAMPS ARE NOT ACCEPTABLE IN NEW CONSTRUCTION, OR FULL-DEPTH RECONSTRUCTION.
7. RAMP LENGTH - PERPENDICULAR RAMP LENGTH IS DEPENDENT UPON THE RAMP SLOPE, HEIGHT OF CURB, AND ADJACENT SIDEWALK CROSS-SLOPE WHICH MUST BE INTERCEPTED. SEE DETAIL A FOR CALCULATING RAMP LENGTH WHEN CHANGING SIDEWALK CROSS-SLOPE. WHERE TERRAIN IS SLOPING A RAMP IS NOT REQUIRED TO CHASE GRADE MORE THAN 15 FT. REGARDLESS OF THE RESULTING RAMP SLOPE.
8. RAMP FLARES - WHERE A RAMP EDGE ABUTS A WALKABLE SURFACE, A FLARED SIDE SHALL BE PROVIDED. RAMP FLARE SLOPES SHALL NOT EXCEED 10.0%.
9. VERTICAL CURB RETURNS - VERTICAL CURB RETURNS MAY BE USED ONLY WHERE A RAMP ABUTS A NON-WALKABLE SURFACE, OR WHERE A RAMP IS PROTECTED FROM PEDESTRIAN CROSS TRAFFIC (FOR EXAMPLE BY A SIGNAL CABINET OR UTILITY POLE WHICH BLOCKS PASSAGE).
10. GUTTER COUNTER SLOPE - 5.0% MAX.

TYPE 1 PERPENDICULAR CURB RAMPS

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Drawing File Name: 608010902.dgn	(EX)				Phone:303-757-9021 FAX: 303-757-9868		Sheet No. 2 of 10
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(EX)				Division of Project Support JBK/LTA	Issued By: Project Development Branch July 4, 2012	

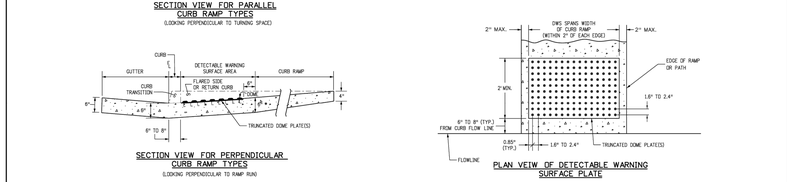


DETECTABLE WARNING SURFACE NOTES:

1. DETECTABLE WARNING SURFACES (DWS) SHALL BE INSTALLED AT SIDEWALK, OR SHARED USE PATH, TO STREET TRANSITIONS, AND SHALL CONSIST OF TRUNCATED DOME SURFACES. ANY TRUNCATED DOME PANELS OR PAVERS WHICH ARE USED MUST BE ON THE CDOT APPROVED PRODUCTS LIST (APL).
2. THE DETECTABLE WARNING SURFACE SHALL SPAN THE FULL WIDTH OF THE CURB RAMP, SHARED USE PATH, OR OTHER ROADWAY ENTRANCE AS APPLICABLE, A GAP OF 2 INCHES FROM THE EDGE OF THE DETECTABLE WARNING SURFACE TO THE EDGE OF THE CURB RAMP OR SHARED USE PATH IS PERMITTED.
3. WHEN DETECTABLE WARNING SURFACES ARE PLACED ON A SLOPE GREATER THAN 5.0%, TRUNCATED DOMES SHOULD BE ALIGNED IN THE DIRECTION OF THE RAMP RUN; OTHERWISE DOMES ARE NOT REQUIRED TO BE ALIGNED. TRUNCATED DOMES SHALL BE IN A SQUARE GRID OR RADIAL PATTERN. WHEN PLACED RADIALLY, PLACE ADJACENT DWS PLATES EDGE TO EDGE. EDGES OF CUT PLATES SHALL BE STRAIGHT.
4. LOCATE ONE CORNER OF THE DWS LEADING EDGE AT THE BACK OF CURB. NO POINT ON THE LEADING EDGE OF THE DWS MAY BE MORE THAN 5 FT. FROM THE BACK OF CURB. WHEN ANY POINT OF THE LEADING EDGE OF THE DWS WILL BE GREATER THAN 5 FT. FROM THE BACK OF CURB, PLACE THE DWS RADIALLY AT THE BACK OF CURB.
5. WHERE PERPENDICULAR DIRECTIONAL RAMPS ABUT A WALKABLE SURFACE, THE LEADING EDGE OF THE DWS SHALL NOT BE PLACED FURTHER THAN 2 FEET FROM THE BACK OF CURB. IF THE RADIUS OF A CORNER MAKES THIS IMPOSSIBLE, ORIENT THE CURB RAMP PERPENDICULAR TO THE CURB AND GUTTER.
6. IF THE DETECTABLE WARNING SURFACE IS CUT, GRIND OFF THE REMAINING PORTION OF ANY CUT TRUNCATED DOMES. SEAL ALL CUT PANEL EDGES WITH AN APL SEALANT TO PREVENT WATER DAMAGE.
7. TRUNCATED DOME PLATES SHALL BE EMBEDDED IN THE CONCRETE CURB RAMP WHILE THE CONCRETE IS PLASTIC.
8. DWS SHALL NOT BE PLACED OVER GRADE BREAKS.

DETECTABLE WARNING SURFACE PLACEMENT

Computer File Information		Sheet Revisions			Colorado Department of Transportation	CURB RAMPS	STANDARD PLAN NO.
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Drawing File Name: 608010903.dgn	(EX)				Phone:303-757-9021 FAX: 303-757-9868		Sheet No. 9 of 10
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(EX)				Division of Project Support JBK/LTA	Issued By: Project Development Branch July 4, 2012	



DETECTABLE WARNING SURFACE DETAILS

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Full Path: www.codot.gov/business/designsupport	(EX)				Denver, CO 80204		
Drawing File Name: 608010100.dgn	(EX)				Phone:303-757-9021 FAX: 303-757-9868		Sheet No. 10 of 10
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RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

Kiowa Engineering Corporation
5951 Middlefield Road, Suite 200
Littleton, Colorado 80123
(303) 692-0369

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: MWE
DRAWN BY: AMD
DESIGNED BY: JIM
PROJECT NUMBER: 20611004000

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SEAL:

SHEET TITLE:
DETAIL SHEET-SITE

SHEET ID:
25
Sheet 25 of 47

PROJECT STATUS:
Site Construction Documents

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.

Civil Engineer signature and stamp Date
Jacob I. McMillen, PE #56736

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

Approved By:

Development Services Date

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SIGNAL PHASING DIAGRAM

1. TRAFFIC SIGNAL MATERIALS AND INSTALLATION SHALL COMPLY WITH THE STATE OF COLORADO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE STATE OF COLORADO STANDARD PLANS, M AND S STANDARDS (LATEST EDITION), THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, THE NATIONAL ELECTRIC CODE (LATEST EDITION), AND ALL LOCAL ORDINANCES AND REGULATIONS THAT APPLY, EXCEPT AS NOTED IN THE PLANS OR SPECIAL PROVISIONS.
2. THE LOCATION AND QUANTITY OF PEDESTRIAN PUSH BUTTON POST ASSEMBLY SHALL BE PRE-APPROVED BY THE ENGINEER PRIOR TO THE CONTRACTOR ORDERING SUCH DEVICES. LOCATES FOR THIS PAY ITEM SHALL BE PERFORMED IN CONJUNCTION WITH THE SIGNAL POLE LOCATES.
3. ALL VEHICLE AND PEDESTRIAN INDICATIONS SHALL BE APPROVED SOLID STATE LED TYPE. ALL VEHICLE AND PEDESTRIAN HEAD HOUSINGS SHALL BE YELLOW IN COLOR. TRAFFIC SIGNALS THAT ARE MOUNTED ON MAST ARMS SHALL BE FURNISHED WITH MOUNTING BRACKET AND BLACK LOUVERED BACKING PLATES WITH 15 INCH BORDER OF YELLOW K TYPE MATERIAL PER THE LATEST CMM SWAR SWAR SHEETING REFERENCE GUIDE. MAST ARMS SHALL BE OF SUFFICIENT LENGTH TO ALLOW ALL SIGNAL HEADS TO BE CENTERED OVER OUTBOUND LANES. NEITHER LOUVERS NOR TYPE K MATERIALS SHALL BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE COST OF TRAFFIC SIGNAL FACE.
4. THE SIGNAL SHALL NOT BE PUT IN FLASH MODE OR MADE FULLY OPERATIONAL UNTIL THE CONTRACTOR HAS INSPECTED AND APPROVED THE INSTALLATION AND ALL REGULATORY SIGNING AND PAVEMENT MARKINGS ARE IN PLACE.
5. ¾ INCH PERFORATED JOINT MATERIAL SHALL BE APPLIED AROUND THE 16 INCHES OF LEVELING CONCRETE BENEATH SIGNAL POLES WHEN THE SIGNAL POLE IS INSTALLED IN EXISTING CONCRETE AND CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT BE PAID FOR SEPARATELY.
6. UNLESS OTHERWISE SPECIFIED IN THE PLANS OR CONTRACT, ALL USED OR EXCESS SIGNAL EQUIPMENT SHALL REMAIN THE PROPERTY OF TOWN OF CASTLE ROCK.
7. CONTRACTOR'S SIGNAL ELECTRICIAN IS REQUIRED TO BE ON SITE, AT A MINIMUM, DURING 8 AM TO 8 PM PEAK HOURS FOLLOWING THE NEXT DAY A SIGNAL IS TURNED ON TO OBSERVE OPERATIONS AND MAKE ADJUSTMENTS AS NEEDED. THE ENGINEER MAY REQUIRE THE SIGNAL ELECTRICIAN TO BE ON SITE DURING OFF PEAK HOURS WHEN TEMPORARY SIGNALS ARE NEEDED. THE ENGINEER MAY REQUIRE TEMPORARY INSTALLATIONS; SEE PROJECT SPECIAL PROVISIONS FOR WORK FORCE REQUIREMENTS AND THE TRAFFIC SIGNAL MAINTENANCE PLAN.
8. THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING REQUIREMENTS REGARDING TRAFFIC SIGNAL CONSTRUCTION AND MAINTENANCE PERSONNEL:
   - 8.A. MUNICIPAL SIGNAL ASSOCIATION (IMSA) LEVEL II CERTIFIED ELECTRICIAN IS REQUIRED FOR CONSTRUCTION, MAINTENANCE, AND TROUBLESHOOTING. THIS INCLUDES THE COMPLETION OF TRAINING IN CONSTRUCTION, CORRECTIVE MAINTENANCE, AND SIGNAL TURN-ON.
   - 8.B. FOR ALL WORK EXTERNAL TO THE SIGNAL CABINET, A MINIMUM LEVEL I TRAFFIC SIGNAL FIELD TECHNICIAN/ELECTRICIAN, OR TRAFFIC SIGNAL CREW TECHNICIAN/SIGNAL ELECTRICIAN, IS REQUIRED. A JOURNEYMAN ELECTRICIAN AND AN IMSA LEVEL II TRAFFIC SIGNAL ELECTRICIAN SHALL BE ON THE JOB SITE AT ALL TIMES THAT THE SIGNALIZATION WORK IS TAKING PLACE TO ENSURE PROPER CONSTRUCTION. FOR EACH JOURNEYMAN ELECTRICIAN PRESENT, A MAXIMUM OF 3 APPRENTICE ELECTRICIANS WILL BE ALLOWED FOR WORK EXTERNAL TO THE SIGNAL CABINET.
   - 8.C. A MAXIMUM RATIO OF FOUR IMSA LEVEL I TO ONE IMSA LEVEL II WILL BE ALLOWED FOR WORK EXTERNAL TO THE SIGNAL CABINET. UNITED STATES DEPARTMENT OF LABOR - BUREAU OF APPRENTICESHIP AND TRAINING MAY BE SUBSTITUTED FOR THE IMSA LEVEL I TRAFFIC SIGNAL ELECTRICIAN REQUIREMENT.
9. LUMP SUM ITEMS ARE PROJECT WIDE ITEMS. ITEM 613-00000, WIRING (LUMP SUM), SHALL INCLUDE ALL NECESSARY WIRING WORK, NOT OTHERWISE INCLUDED IN AN INDIVIDUAL PAY ITEM. ALL WIRING WORK FOR SIGNALS, LIGHTING, AND ITS WILL BE COMPLETE AND THE SYSTEMS SHALL BE FULLY FUNCTIONAL BEFORE WIRING IS PAID.
10. THE LOCAL POWER COMPANY, AS DETAILED IN THE UTILITIES SPECIFICATIONS, MUST BE COORDINATED WITH FOR ALTERATIONS TO EXISTING POWER SOURCES AND INSTALLATION OF NEW ELECTRICAL SERVICE METERS.
11. UNIFORMED TRAFFIC CONTROL SHALL BE UTILIZED WHILE MODIFYING OPERATIONS AT A SIGNALIZED INTERSECTION.
12. TWO OR MORE WEEKS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TEMPORARY PHASING AND TIMING SIGNAL PLANS TO THE ENGINEER FOR APPROVAL.
13. THE CONTRACTOR SHALL PROVIDE COPIES OF AT LEAST FOUR (4) SETS OF EQUIPMENT SPECIFICATIONS/DESCRIPTIONS AND OBTAIN APPROVALS PRIOR TO ORDERING THE EQUIPMENT.
14. ALL MANUALS, INSTALLATION GUIDES AND ASSOCIATED EQUIPMENT SHALL BE PROVIDED TO THE ENGINEER AT TIME OF INSPECTION.
15. CONCRETE CABINET BASE SHALL BE SHOWN ON THE PLANS. THE NEW SIGNAL CONTROL CABINET SHALL BE MOUNTED ON A PREFORMED FIBERGLASS OR CONCRETE BASE. SIGNAL SPECIFICATIONS SHALL INDICATE INPUT AND OUTPUT.
16. ITEM 614-86800, UNINTERRUPTIBLE POWER SUPPLY (UPS) SHALL BE PROVIDED TO RUN THE SIGNAL FOR 8 HOURS IN ALL PHASES, AND FLASH FOR FOUR ADDITIONAL HOURS.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE AND OPERATIONS OF THE SIGNALS DURING CONSTRUCTION.

TRAFFIC SIGNAL TABULATION

ITEM NO.	ITEM DESCRIPTION	UNIT	CASTLE OAKS DRIVE	TOTAL
503-00042	DRILLED SHAFT (42 INCH)	LF	17	17
613-00200	2 INCH ELECTRICAL CONDUIT	LF	40	40
613-00300	3 INCH ELECTRICAL CONDUIT	LF	10	10
613-07004	TYPE FOUR PULL BOX	EACH	1	1
613-07005	TYPE FIVE PULL BOX	EACH	1	1
613-10000	WIRING	LS	1	1
613-13000	LUMINAIRE (LED)	EACH	1	1
614-70336	TRAFFIC SIGNAL FACE (12-12-12)	EACH	5	5
614-72855	TRAFFIC SIGNAL CONTROLLER CABINET	EACH	1	1
614-72866	FIRE PREEMPTION UNIT AND TIMER (SYSTEM)	EACH	1	1
614-81145	TRAFFIC SIGNAL-LIGHT POLE STEEL (1-45 FOOT MAST ARM)	EACH	1	1
614-86105	TELEMETRY (FIELD)	EACH	1	1
614-86800	UNINTERRUPTED POWER SUPPLY	EACH	1	1
614-87320	CLOSED CIRCUIT TELEVISION CAMERA (TRAFFIC SURVEILLANCE)	EACH	1	1
614-87691	ETHERNET SWITCH	EACH	1	1

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: TJS
DRAWN BY: WWS
DESIGNED BY: WWS
PROJECT NUMBER:
20611004000

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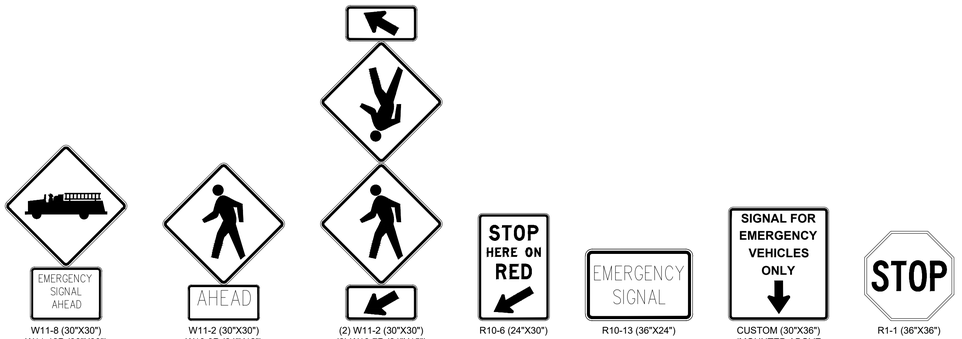
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SIGNALIZATION
GENERAL NOTES

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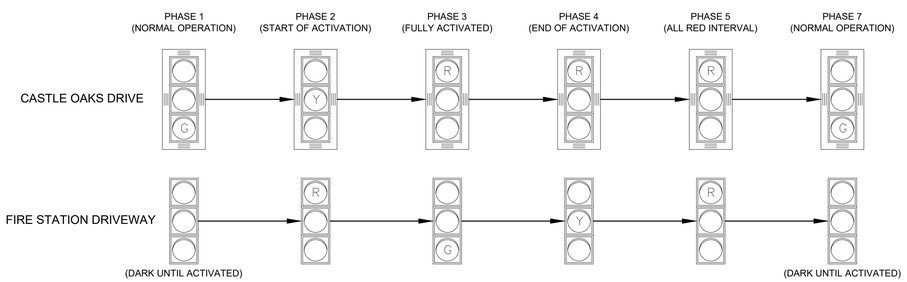
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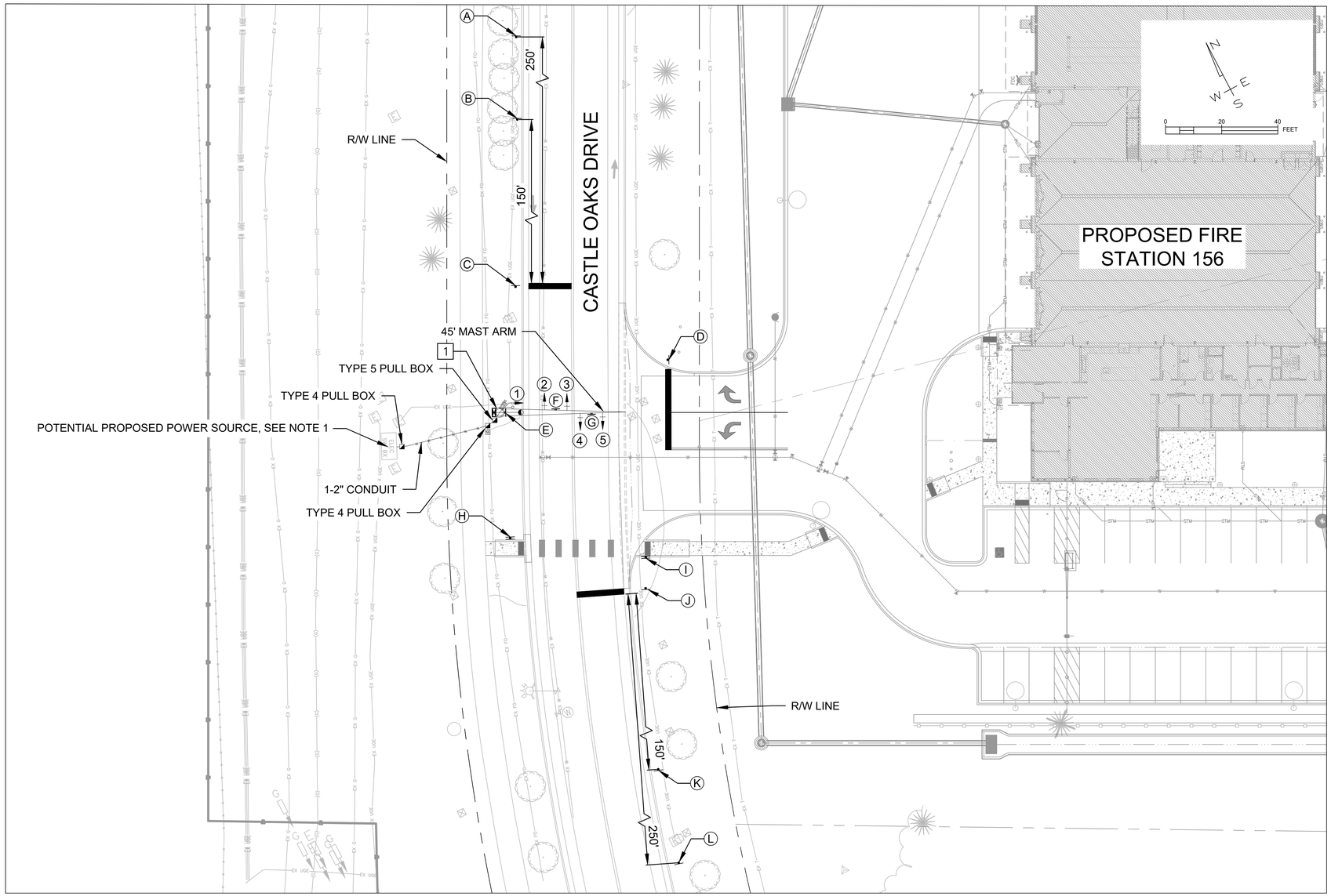
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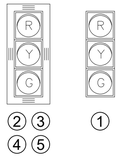


SIGN PANEL DETAILS



EMERGENCY SIGNAL PHASING SEQUENCE





SIGNAL HEADS (12"):

1	2	3	4
N/A	↓	N/A	←
5	6	7	8
N/A	↑	N/A	N/A

SIGNAL PHASING DIAGRAM

TRAFFIC SIGNAL POLE DATA	
POLE	1
NORTHING	1575820.271
EASTING	3196293.804
TOP OF CAISSON ELEV.	-
MAST ARM LENGTH	45'-0"
CAISSON DIAMETER	3'-6"
CAISSON DEPTH	16'-6"
CAISSON PAY DEPTH	17'-0"
CDOT STD. PLAN NUMBER	S-614-40

LEGEND:

- LUMINAIRE
- SIGNAL FACE
- SIGNAL FACE WITH BACKPLATE
- TRAFFIC SIGNAL CONTROLLER CABINET (MOUNTED TO MAST ARM UPRIGHT)
- M — ELECTRIC SERVICE METER CABINET
- PULL BOX - TRAFFIC
- TRAFFIC SIGNAL POLE WITH MAST ARM
- TR — TRAFFIC CONDUIT
- TRAFFIC SIGN ON MAST ARM
- CCTV — CLOSED CIRCUIT TELEVISION
- EMERGENCY VEHICLE PREEMPTIVE SYSTEM
- GROUND MOUNT SIGN POST & PANEL(S)

NOTE:

1. POWER SOURCE TO BE COORDINATED WITH CORE ELECTRIC ONCE THE PRELIMINARY SIGNAL DESIGN IS COMPLETED. POWER SOURCE SHALL BE SEPARATE FROM THE POWER SOURCE FOR THE FIRE STATION.

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: TJS
DRAWN BY: WWS
DESIGNED BY: WWS
PROJECT NUMBER: 20611004000

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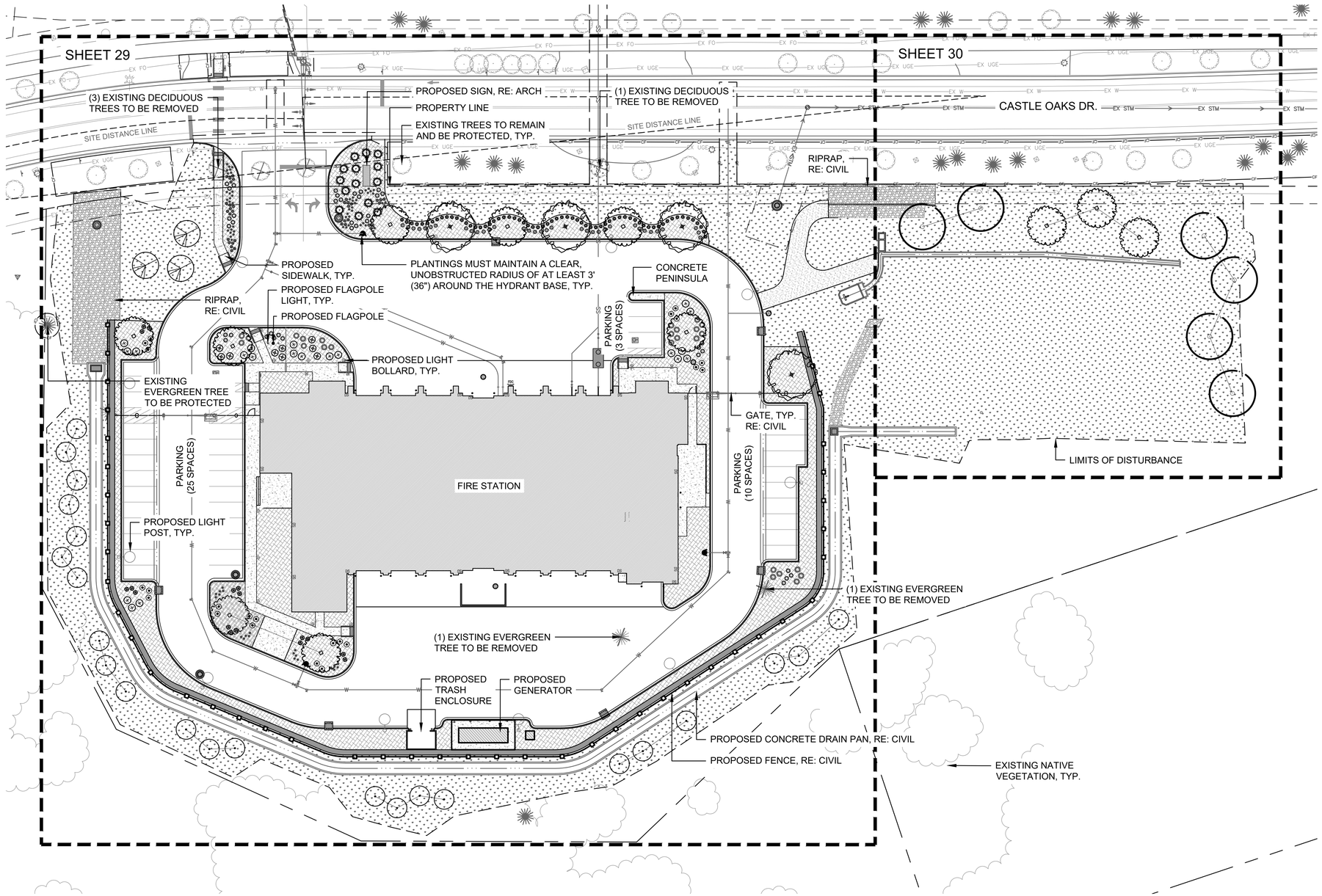
SHEET TITLE:
SITE CONSTRUCTION DOCUMENTS SIGNALIZATION PLAN

SHEET ID:
27
Sheet 27 of 47

PROJECT STATUS:
Site Construction Documents

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LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- EASEMENT LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- NATIVE GRASS SEED MIX
- CRUSHED $\frac{3}{4}$" GRANITE ROCK MULCH
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- ORANGE CONSTRUCTION FENCE
- GATE/FENCE, RE: CIVIL
- WATER UTILITY
- SANITARY UTILITY
- STORMWATER UTILITY
- FIRE HYDRANT
- STEEL EDGER
- PROPOSED FENCE
- GRAVEL ACCESS ROAD, RE: CIVIL
- CONCRETE, RE: CIVIL
- DECIDUOUS TREE
- EVERGREEN TREE
- SHRUBS

NOTE:
1. REFER TO SHEET 31 FOR PLANTING NOTES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE TO THE EXISTING IRRIGATION SYSTEM, EDGERS, MULCH AND ANY OTHER EXISTING LANDSCAPE THAT IS A RESULT OF WORK. THE REPAIR OF SUCH DAMAGE WILL BE AT NO ADDITIONAL COST TO THE OWNER.

REGISTERED LANDSCAPE ARCHITECT:
MARK WILCOX,
Signature _____, PLA License 204

0 15 30 60
SCALE: 1"=30'-0"

NORTH

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REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:	12/15/2025
REVIEWED BY:	AQ
DRAWN BY:	JN
DESIGNED BY:	AQ

PROJECT NUMBER:
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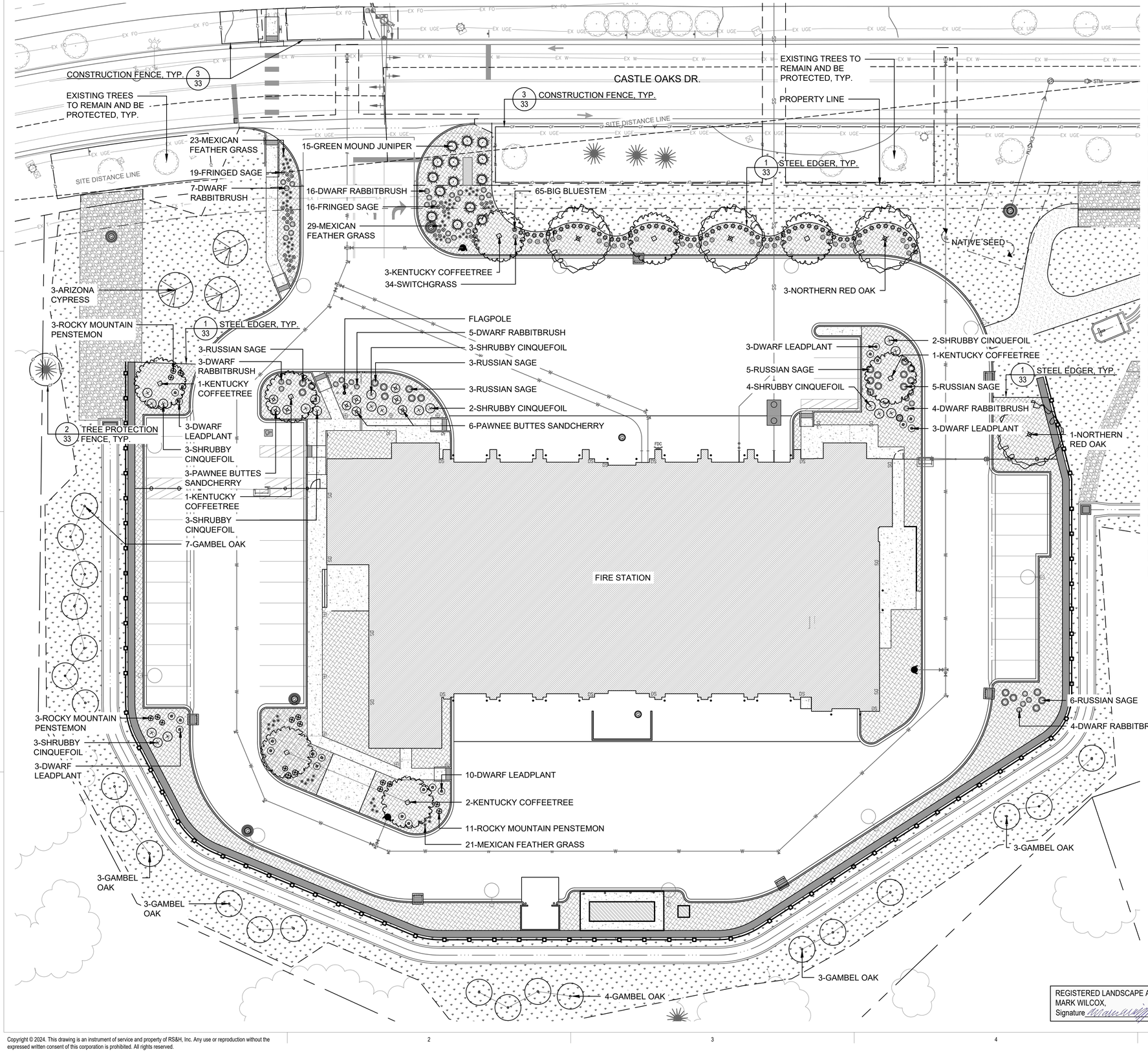
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OVERALL LANDSCAPE PLAN

SHEET ID:
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Sheet 28 of 47

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REGISTERED LANDSCAPE ARCHITECT:
MARK WILCOX,
Signature _____, PLA License 204

SCALE: 1"=20'-0" (0, 10, 20, 40)

NORTH

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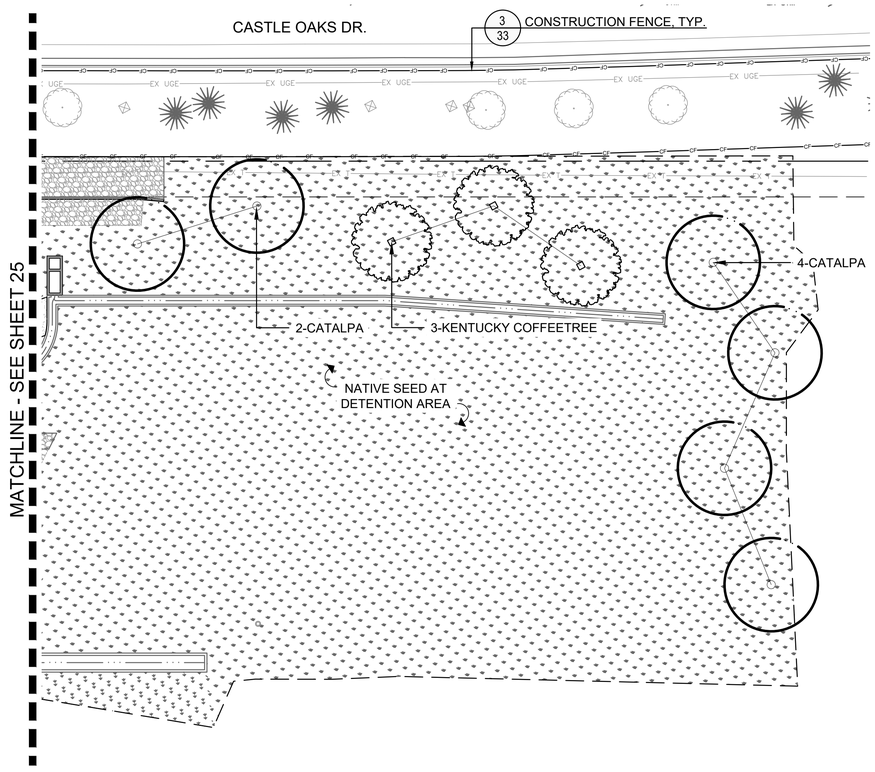
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LANDSCAPE PLAN ENLARGEMENT

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29
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- GATE/FENCE, RE: CIVIL
- W — WATER UTILITY
- SS — SANITARY UTILITY
- STM — STORMWATER UTILITY
- DECIDUOUS TREE
- EVERGREEN TREE

NOTE:
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Signature _____, PLA License 204

0 10 20 40
SCALE: 1"=20'-0"

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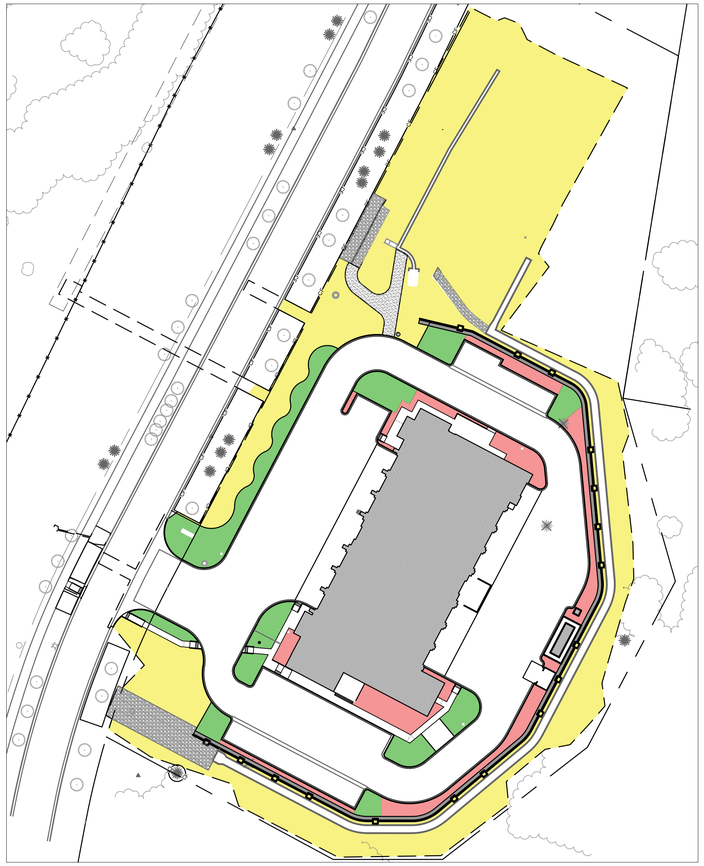
SECTION 7 LANDSCAPE SUMMARY TABLE:

Gross Site Area	Required Landscape *(10% of the gross site area)*	Existing Landscape (If Applicable)	Provided Landscape Area	Required Trees *(2 trees / 1,000 sqft)*	Provided Trees	Required Shrubs *(4 shrubs / 1,000 sqft)*	Provided Shrubs	Soil Prep Amounts (cu.yds. Per 1000 SF)
214,536	21,454	0	78,744	43	47	86	353	9
Turf Grass Square Footage (SF)*	**Required Landscape Coverage Percentage (75% minimum)**	**Existing Landscape (If Applicable)**	**Provided Landscape Coverage at Maturity (SF)**	**Required Nonliving Ornamental Percentage *(25% maximum)***	**Provided Nonliving Ornamental Area in Landscape (SF)**	**Required Large Canopy Decidious Tree (50% minimum)**	**Provided Large Canopy Decidiuous Shade Tree**	**Separate Irrigation Service Connections**
0	16,090	0	71,050	5,363	7,694	**21**	21	Yes __X__ No ____

Parking Lot*							
Parking Lot Area	**Landscaping Area Required *(10% of square footage)***	**Existing Landscape (If Applicable)**	**Landscaped Area Provided**	**Required Trees** *(2 large canopy deciduous shade trees / 1,000 sqft)*	**Provided Trees**	**Required Shrubs** *(4 shrubs / 1,000 sqft)*	**Provided Shrubs**
14,444	1,444	0	1,679	3	6	6	12

GROSS SITE AREA:	214,536 SQFT
TOTAL LANDSCAPE AREA:	78,744 SQFT (37%)
IRRIGATED LANDSCAPE:	10,300 SQFT (5%)
NON-IRRIGATED LANDSCAPE:	60,750 SQFT (29%)
NON-LIVING GROUND COVER:	7,694 SQFT (4%)

HYDROZONE MAP



HYDROZONE LEGEND

NONE

LOW - DRIP IRRIGATION

TEMPORARY IRRIGATION - INSTALLED ABOVE GRADE AND TO BE REMOVED AFTER SEEDING ESTABLISHED

NORTH
NTS

PLANTING NOTES

1. CONTRACTOR TO SPOT SEED NON-GERMINATING AREAS (3) MONTHS AFTER INITIAL SEED APPLICATION. CONTRACTOR TO RESEED ALL BARE AREAS (6'X6') AND GREATER AFTER (6) MONTHS FROM SEED GERMINATION OR AT THE BEGINNING OF THE FOLLOWING GROWING SEASON. PRIOR TO THE 11-MONTH WARRANTY INSPECTION REAPPLY SOIL GUARD AND SEED MIX TO ALL BARE AREAS (6'X6' OR GREATER) AND ON ALL SLOPES (4'X4') 3:1.
2. NATIVE SEED IN DISTURBED AREAS SHALL BE ESTABLISHED WITH TEMPORARY IRRIGATION. PLEASE SEE TOWN OF CASTLE ROCK TEMPORARY IRRIGATION FOR NON-IRRIGATED NATIVE AREAS CRITERIA 2.1.17.
3. ALL TREE LOCATIONS WITHIN NATIVE SEED AREAS ARE TO BE MULCHED WITH 4" DEPTH FIR FIBER MULCH (WITHOUT FILTER FABRIC) EXCEPT WHERE NOTED ON PLANS. ROCK MULCH WITHIN SHRUB BEDS TO BE $\frac{3}{4}$" CRUSHED GRANITE MULCH AT A MINIMUM DEPTH OF 3" OVER FILTER FABRIC. INSTALL MULCH 1" BELOW ALL CURBS AND SIDEWALKS.
4. LANDSCAPING SHALL BE PLANTED AND MAINTAINED IN A NEAT, CLEAN AND HEALTHY CONDITION BY LANDSCAPE CONTRACTOR. THIS SHALL INCLUDE PROPER PRUNING, MOWING OF LAWNS, WEEDS, REMOVAL OF LITTER AND THE REGULAR WATERING OF ALL PLANTINGS. SHOULD ANY PLANT MATERIAL DIE, LANDSCAPE CONTRACTOR, SUCCESSOR, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF THE PLANTS WITHIN 45 DAYS.

TOWN OF CASTLE ROCK LANDSCAPE NOTES

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

PLANT SCHEDULE

TOWN OF CASTLE ROCK COLORADO

Registered Professional *MARK WILCOX* PLA # *204*
Company Name *DHM Design Corp.* Address *900 S. Broadway Denver, CO 80209*
Phone *303.892.5566* Email *mwilcox@dhmdesign.com*

HydroZone	Plant Name (scientific)	Plant Name (common)	Size	Quantity
Deciduous Shade Trees				
Very Low, Low, Medium, High	*Catalpa speciosa*	Catalpa	2" cal.	6
Low, Medium	*Gymnocladus dioica*	Kentucky Coffeetree	2" cal.	11
Low, Medium	*Quercus rubra*	Northern Red Oak	2" cal.	4
Evergreen Trees				
Low	*Cupressus arizonica var. glabra*	Arizona Cypress	6' Ht.	3
Ornamental Trees				
Very Low, Low	Quercus gambelii	Gambel Oak	#5	23
Deciduous Shrubs				
Very Low	*Amorpha nana*	Dwarf Leadplant	#5	22
Low	*Artemisia frigida*	Fringed Sage	#5	35
Very Low, Low	*Chrysothamnus nauseosus 'Dwarf Blue'*	Dwarf Rabbitbrush	#5	39
Low, Medium	*Penstemon strictus*	Rocky Mountain Penstemon	#5	17
Very Low, Low	Perovskia atriplicifolia	Russian Sage	#5	25
Very Low, Low	*Potentilla fruticosa*	Shrubby Cinquefoil	#5	20
Very Low, Low	*Prunus besseyi 'Pawnee Buttes'*	Pawnee Buttes Sand Cherry	#5	9
Evergreen Shrubs				
Low	*Juniperus procumbens 'Green Mound'*	Green Mound Juniper	#1	14
Ornamental Grasses				
Very Low, Low	*Andropogon gerardii*	Big Bluestem	#1	65
Very low, Low	*Panicum virgatum*	Switchgrass	#1	34
Low, Medium	*Nassella tenuissima*	Mexican Feather Grass	#1	73

NON-IRRIGATED NATIVE SEED MIX

Botanical Name	Common Name	Mature Height	Pounds of PLS Per Acres	Hydrozone
Andropogon gerardi	Big Bluestem	12"-36"	1.1	Very Low, Low
Bouteloua curtipendula	Sideoats Grama	12"-24"	0.9	Very Low, Low
Bouteloua gracilis	Blue Grama Grass	12"-24"	0.3	Very Low, Low
Calamovilfa longifolia	Prarie Sandreed	24"-48"	0.7	Very Low, Low
Elymus lanceolatus dasystachyum	Thickspike Wheatgrass	24"-48"	1	Very Low, Low
Elymus lanceolatus	Streambank Wheatgrass	12"-24"	0.6	Very Low, Low
Elymus trachycaulus	Slender Wheatgrass	12"-24"	0.6	Very Low, Low
Panicum virgatum	Switchgrass	24"-48"	0.4	Very Low, Low
Nassella viridula	Green Needlegrass	24"-55"	1	Very Low, Low
Pascopyrum smithii	Western Wheatgrass	12"-24"	1.6	Very Low, Low
Sorghastrum nutans	Yellow Indiangrass	24"-48"	1	Very Low, Low

Drill Seeded Rate: 9.2
Mechanical Broadcast Rate: 9.2
Hand Broadcast Rate: 18.4

SOIL AMENDMENTS:						
Ground Plane Treatment	CLASS II OM AMENDMENT	NITROGEN	PHOSPHORUS	OTHER	FERTILIZER	E.C., SALT OR PH TREATMENT
Trees	4 c.u.yds/1000sf	1.5lb/1000sf (K)	2lb/1000sf (K)	0lb/1000sf (K)	10-10-10 @ 15lb./1000sf	N/A
Shrubs	4 c.u.yds/1000sf	1.5lb/1000sf (K)	2lb/1000sf (K)	0lb/1000sf (K)	10-10-10 @ 15lb./1000sf	N/A

REGISTERED LANDSCAPE ARCHITECT:
MARK WILCOX,
Signature _____, PLA License 204

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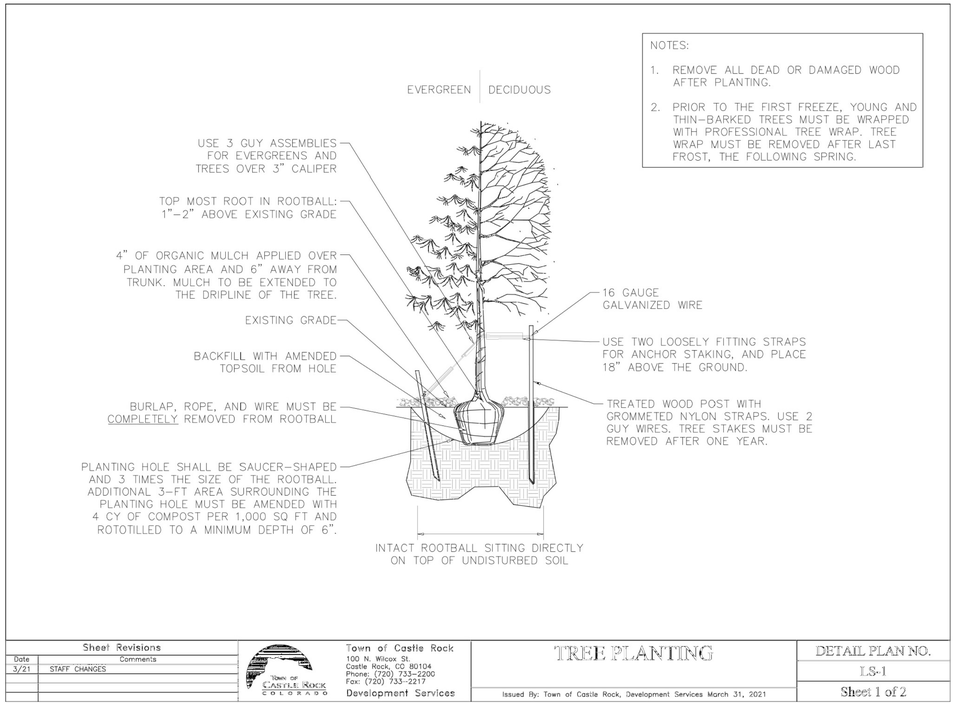
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LANDSCAPE PLANTING NOTES

SHEET ID:
31
Sheet 31 of 47

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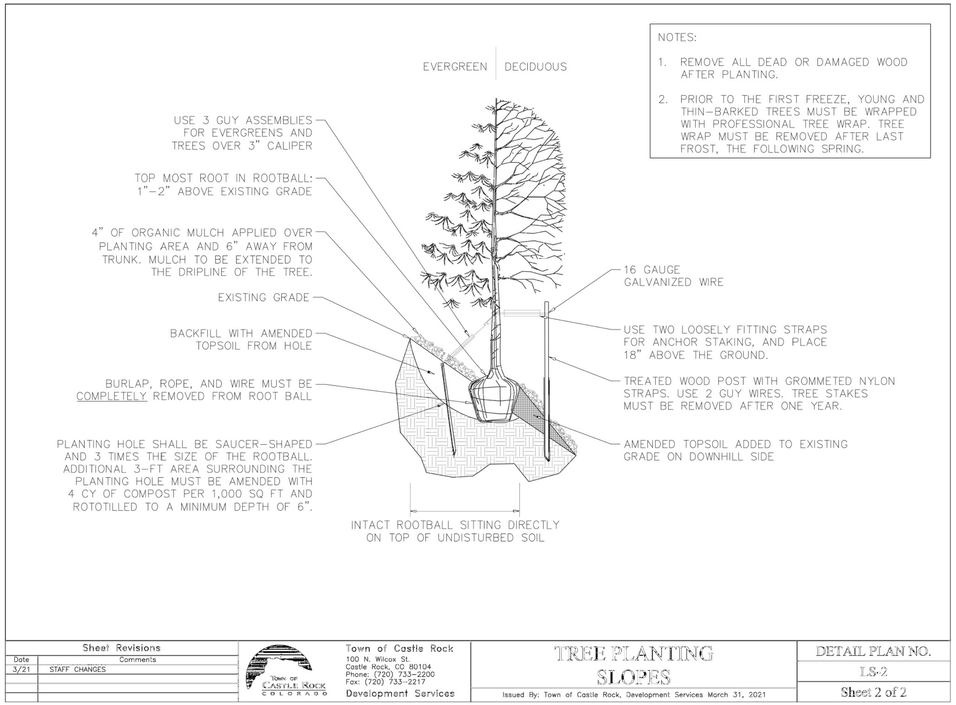
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Sheet Revisions		Town of Castle Rock	TREE PLANTING	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		LS-1
3/21	STAFF CHANGES	Castle Rock, CO 80104	Issued By: Town of Castle Rock, Development Services March 31, 2021	Sheet 1 of 2
		Phone: (720) 733–2200		
		Fax: (720) 733–2217		
		Development Services		

1/32 TYP. EVERGREEN/DECIDUOUS TREE PLANTING

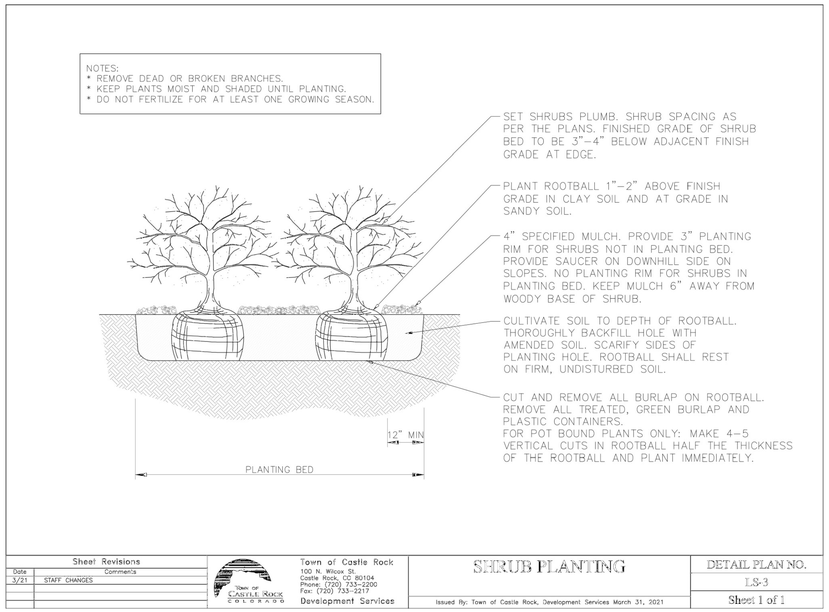
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Date	Comments	100 N. Wilcox St.		LS-2
3/21	STAFF CHANGES	Castle Rock, CO 80104	Issued By: Town of Castle Rock, Development Services March 31, 2021	Sheet 2 of 2
		Phone: (720) 733–2200		
		Fax: (720) 733–2217		
		Development Services		

2/32 TYP. EVERGREEN/DECIDUOUS TREE PLANTING ON SLOPE

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Sheet Revisions		Town of Castle Rock	SHRUB PLANTING	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		LS-3
3/21	STAFF CHANGES	Castle Rock, CO 80104	Issued By: Town of Castle Rock, Development Services March 31, 2021	Sheet 1 of 1
		Phone: (720) 733–2200		
		Fax: (720) 733–2217		
		Development Services		

3/32 TYP. SHRUB PLANTING

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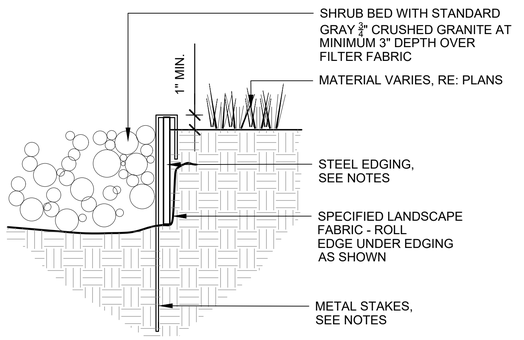
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LANDSCAPE DETAILS

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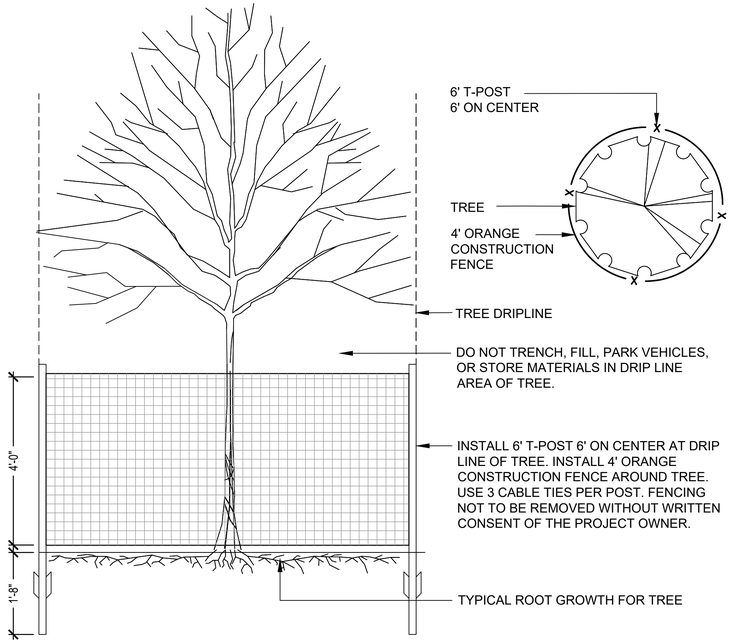
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NOTES:
1. STEEL LANDSCAPE EDGING TO BE 4" DEPTH, 16 GA THICK, ROLLED TOP, WITH LINE STAKES AND SPLICER STAKES AS RECOMMEND BY MANUFACTURER. COLOR TO BE GREEN. PRODUCT: TERRA EDGE, AS MANUFACTURED BY COYOTE LANDSCAPE PRODUCTS, OR APPROVED EQUAL
2. INSTALL STEEL EDGING WHERE INDICATED, ACCORDING TO MANUFACTURES RECOMMENDATIONS. ANCHOR WITH STEEL STAKES SPACED 12" MINIMUM INTERLOCKING, DRIVEN BELOW EDGING.
3. SET ALL EDGING 1" ABOVE FINISH GRADE AS SHOWN.
4. EDGING SHALL ABUT ALL CONCRETE CURBS AND WALKS.
5. ALL JOINTS TO BE SECURELY STAKED.

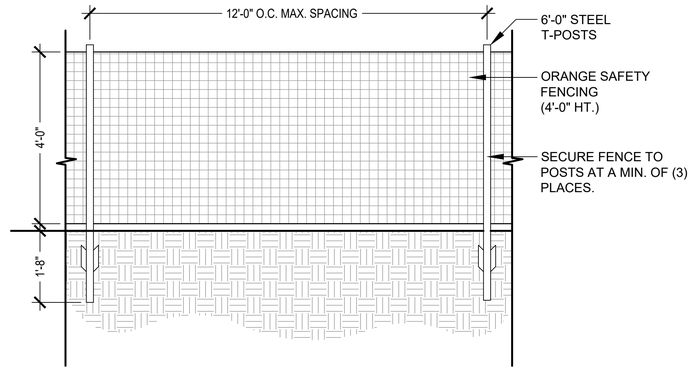
1 / 33 STEEL EDGER

NOT TO SCALE



2 / 33 TREE PROTECTION FENCE

NOT TO SCALE



3 / 33 CONSTRUCTION FENCE

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DATE ISSUED:	12/15/2025
REVIEWED BY:	AQ
DRAWN BY:	JN
DESIGNED BY:	AQ
PROJECT NUMBER:	**20611004000**

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SEAL:

SHEET TITLE:
LANDSCAPE DETAILS

SHEET ID:
33
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PROJECT STATUS:
Site Construction Documents

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IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER	MODEL NO.	DESCRIPTION	DETAIL NO.
	RAIN BIRD/TORO	1812-SAM-PRS WITH "O" PRECISION SERIES NOZZLE	HI-POP SPRAY HEAD	7
	RAIN BIRD	5012-PL-PC-SAM WITH #NOZ	HI-POP GEAR DRIVEN ROTOR	8
	RAIN BIRD/ WEATHERMATIC	PEB W/ SLDEC1	ELECTRIC CONTROL VALVE W/ DECODER	TOCR IR-16 & IR-17 & 1 & 9
	RAIN BIRD	44-LRC	QUICK COUPLING VALVE	TOCR IR-6 & TOCR IR-9B
A	WEATHERMATIC	VAR #SL4824-1YR-BDL-FLOW-M1NA WITH SLPED-ENC-SS	ELECTRIC CONTROLLER	TOCR IR-27, 2 & 3
W	RAIN BIRD	WR2-RFC	WEATHER SENSOR DEVICE	TOCR IR-29
	FEBCO	LF825YA	RP BACKFLOW PREVENTER	TOCR IR-10 & TOCR IR-9B
N/S	GUARDSHACK	GS-.5	BACKFLOW PREVENTER ENCLOSURE	TOCR IR-1 & TOCR IR-9B
N/S	OLDCASTLE / CARSON	REFER TO SPECIFICATIONS AND DETAILS	VALVE BOXES	VARIOUS
N/S	AY MACDONALD	76001 - 1/4 TURN - 1"	MANUAL DRAIN VALVE	TOCR IR-5A & TOCR IR-9B
		LINE SIZE - 2½" AND SMALLER	GATE VALVE -RESILIENT WEDGE	TOCR IR-7 & TOCR IR-9B
	RAIN BIRD/ WEATHERMATIC	PEB W/ SLDEC1	MASTER CONTROL VALVE W/ DECODER	TOCR IR-36A, TOCR IR-9B & 1
FS	FLOMEC	QS-100-15 WITH LXIVM-SEN/ICD-SEN	FLOW SENSOR WITH SENSOR DECODER	TOCR IR-35 & TOCR IR-9B
		CLASS 200 BE - 2½" & SMALLER	PVC MAINLINE	TOCR IR-21
		TYPE K COPPER	HARD COPPER PIPE	TOCR IR-10
		CLASS 200 BE	PVC LATERAL	TOCR IR-21 & 10
		CLASS 160	PVC SLEEVING	4
	RAIN BIRD/ WEATHERMATIC	XCZ-100-PRB-COM W/ SLDEC1	DRIP VALVE ASSEMBLY W/ DECODER	TOCR IR-18, TOCR IR-19 & 1
	TORO	BLUE STRIPE	POLY DRIP TUBING -¾" MIN. WIDTH	TOCR IR-18, TOCR IR-19, TOCR IR-25, TOCR IR-32, TOCR IR-34 & 5
N/S	RAIN BIRD	XBCV - XERI-BUG WITH CHECK VALVE	DRIP EMITTERS	TOCR IR-25 & 5
	HUNTER / NIBCO	ECO-ID-12 WITH NIBCO BALL VALVE	DRIP LINE BLOW-OUT STUB AND INDICATOR HEAD	TOCR IR-32
	HUNTER	ECO-ID-12	INDICATOR HEAD	TOCR IR-34
N/S	WEATHERMATIC	SLDEC1	VALVE DECODER	1
N/S	WEATHERMATIC	SLWIRE(12)2	2-WIRE DECODER CABLE	1 & 3
A	WEATHERMATIC	SLGDT LIGHTNING ARRESTOR	GROUNDING LOCATION	6
			CONTROLLER GROUNDING	2
WS			WIRE SPLICE	NOT SHOWN
M			WATER METER	BY OTHERS

CONTROLLER & STATION NO.
CONTROL VALVE SIZE

IRRIGATION CONSTRUCTION NOTES

1. DRAWINGS AND BASE INFORMATION - ALL BASE AND PLANTING INFORMATION HAVE BEEN PROVIDED BY DHM DESIGN. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY HYDROSYSTEMS*KDI OF ANY DISCREPANCIES BETWEEN THE UTILITY OR PLANTING PLANS AND THE IRRIGATION PLAN. IF CONTRACTOR FAILS TO NOTIFY HYDROSYSTEMS*KDI AND MAKES CHANGES TO THE IRRIGATION SYSTEM DESIGN, HE ASSUMES ALL COSTS AND LIABILITIES ASSOCIATED WITH THOSE FIELD CHANGES. REFER TO SPECIFICATIONS FOR ADDITIONAL PROJECT REQUIREMENTS. CONTACT IRRIGATION CONSULTANT FOR CURRENT SPECIFICATIONS IF NOT PROVIDED.

2. SYSTEM PRESSURE - HYDROSYSTEMS*KDI HAS CONTACTED THE LOCAL WATER DISTRICT THAT SERVES THIS SITE AND THEY HAVE BEEN TOLD THAT THE STATIC WATER PRESSURE IN THIS AREA SHOULD BE **95** PSI. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY PRESSURE PRIOR TO COMMENCING ANY CONSTRUCTION AND NOTIFY HYDROSYSTEMS*KDI OF ANY VARIANCE FROM THE STATED PRESSURE IMMEDIATELY. WRITTEN DOCUMENTATION OF PRESSURE TEST AND RESULTS SHALL BE PROVIDED TO HYDROSYSTEMS*KDI AT CONSTRUCTION ONSET. IF CONTRACTOR FAILS TO FIELD VERIFY PRESSURE AND/OR NOTIFY HYDROSYSTEMS*KDI OR ANY VARIATIONS FROM THIS PRESSURE, THEN HE ASSUMES ALL CONSTRUCTION AND ENGINEERING COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS REQUIRED TO ACCOMMODATE ACTUAL SITE PRESSURE. THIS SYSTEM HAS BEEN DESIGNED FOR A REQUIRED STATIC PRESSURE OF **84 PSI**.

3. IRRIGATION SYSTEM OPERATION INTENT - THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO IRRIGATE THE ESTABLISHED LANDSCAPE WITHIN A THREE NIGHT PER WEEK, EIGHT HOUR PER NIGHT WATERING WINDOW. ESTABLISHMENT WATERING WILL REQUIRE UP TO TWICE AS MUCH IRRIGATION FOR A FOUR TO SIX WEEK PERIOD. THE DESIGN IS BASED ON THE FOLLOWING PROJECTED WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES ARE BASED ON A 30-YEAR AVERAGE WEATHER DATA AND WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND WEATHER CONDITIONS ABOVE AND BELOW THE AVERAGE VALUES UTILIZED.
   - ORNAMENTAL PLANTINGS 0.54" PER WEEK PEAK SEASON
   - NATIVE SEED MIXES 0.38" PER WEEK PEAK SEASON (TWO SEASONS)

   NOTE: IT IS THE INTENT OF THIS DESIGN THAT NATIVE AREAS WOULD ONLY BE IRRIGATED FOR ESTABLISHMENT. SYSTEM WILL REMAIN FOR USE DURING YEARS WITH LESS THAN NORMAL RAINFALL.

4. EQUIPMENT INSTALLATION - IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN PROPERTY LIMITS AND WITHIN LANDSCAPED AREAS. INSTALLATION SHALL BE COORDINATED WITH OTHER UTILITY WORK. ALL OTHER UTILITIES SHALL TAKE PRECEDENCE OVER IRRIGATION LOCATION. ANY EQUIPMENT OTHER THAN VALVE BOXES OR SLEEVING THAT CONTAINS PIPE OR WIRES 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 UNLESS SPECIFICALLY INDICATED ON PLANS. BOXES INSTALLED IN OPEN TURF AREAS SHALL BE KEPT TO EDGES AND STAKED FOR REVIEW IF ALONG HIGH TRAFFIC AREAS. ALL VALVE BOXES SHALL BE PLACED A MINIMUM OF 3'-0" FROM THE CENTERLINE OF ANY DRAINAGE SWALE. ALL VALVE BOXES WITHIN PAVEMENT SHALL BE TIER 15 RATED BOXES FOR HEAVY DUTY NON-DELIBERATE TRAFFIC. BOX LID COLOR SHALL MATCH ADJACENT MATERIALS, I.E. GREEN IN TURF, TAN IN WOOD MULCH, GRAY IN STONE MULCH, PURPLE FOR RECLAIMED WATER SYSTEMS (IF REQUIRED). REFER TO LANDSCAPE PLANS FOR MATERIAL COLORS AND TYPES. ALL BOXES SHALL BE INSTALLED TO BE FLUSH WITH GRADE AND IN AN ORDERLY MANNER. WHERE MORTAR PAVING LIDS ARE INSTALLED ABOVE BOXES, IRRIGATION BOX WITH LID SHALL BE LOWERED TO ACCOMMODATE PAVING LID. REFER TO LANDSCAPE FOR ADDITIONAL INFORMATION, TO BE INSTALLED PER MANUFACTURE RECOMMENDATIONS.

5. PIPING INSTALLATION – IRRIGATION PIPING SHALL MAINTAIN A MINIMUM DISTANCE FROM BUILDING FOUNDATIONS OF 5 FEET OR AS DESCRIBED IN SOILS REPORT, WHICHEVER IS GREATER. NO SPRAY IRRIGATION SHALL OCCUR WITHIN 10 FEET OF THE FOUNDATION. NO DRIP IRRIGATION SHALL OCCUR WITHIN 5 FEET OF THE FOUNDATION UNLESS SOIL MOISTURE SENSORS ARE INSTALLED ON VALVES SERVICING THESE AREAS. ALL IRRIGATION PIPING AND EMISSION DEVICES LOCATED ON TOP OF OR WITHIN BUILDING STRUCTURE SHALL CONFORM TO WATERPROOFING CONSULTANT REQUIREMENTS. PIPE ROUTING MAY BE SHOWN WITHIN THESE DISTANCES FOR GRAPHICAL CLARITY ONLY.

6. MANUAL DRAIN VALVES - CONTRACTOR TO INSTALL ONE MANUAL DRAIN VALVE ON PRESSURE SUPPLY LINE DIRECTLY DOWNSTREAM OF BACKFLOW PREVENTER AND AT ALL LOW POINTS AND DEAD ENDS OF PRESSURE SUPPLY PIPING TO ENSURE COMPLETE DRAINAGE OF SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THESE LOCATIONS IN-FIELD AND INSTALLATION LOCATIONS SHALL BE NOTED ON AS-BUILTS.

7. POP-UP SPRAY NOZZLES - CONTRACTOR TO INSTALL PLASTIC NOZZLES ON ALL POP-UP SPRAY HEADS. INSTALL 15 SERIES NOZZLES ON ALL HEADS SPACED AT 12' TO 14'. INSTALL 12 SERIES NOZZLES ON ALL HEADS SPACED 10' TO 11'. INSTALL 10 SERIES NOZZLES ON ALL HEADS SPACED AT 8' TO 9'. INSTALL 8 SERIES NOZZLES ON ALL HEADS SPACED AT 6' TO 7'. INSTALL 5' NOZZLES ON ALL HEADS SPACED AT 5'. INSTALL SIDE STRIP NOZZLES ON ALL HEADS WITH AN "S" DESIGNATION AND RIGHT AND LEFT CORNER STRIP NOZZLES ON ALL HEADS WITH AN "L" OR "R" DESIGNATION. VARIABLE ARC NOZZLES SHOULD BE UTILIZED ADJACENT TO CURVILINEAR SHRUB BEDS OR FOR ANY ANGLES THAT ARE NOT A STANDARD NOZZLE ANGLE. **NO OVERHEAD IRRIGATION IN AREAS LESS THAN 10' WIDE.

8. DRIP IRRIGATION - REFER TO IRRIGATION DETAIL SHEET FOR DRIP EMITTER QUANTITIES AND PLACEMENT.

9. UNLABELED PIPING - ALL UNLABELED LATERAL PIPING SHALL BE 1" MINIMUM UNLESS OTHERWISE NOTED.

10. SLEEVING - ALL SLEEVING UNDER PAVED SURFACES SHOWN ON PLANS IS BY CONTRACTOR UNLESS OTHERWISE NOTED. SLEEVING SHALL BE INSTALLED IN THE SIZES AND QUANTITIES SHOWN ON PLANS OR BASED ON THE SCHEDULE BELOW. WHERE SLEEVES ARE SHOWN, BUT NOT LABELED, FOLLOW THE SCHEDULE BELOW. ALL MAINLINE, CONTROL WIRES AND DRIP LINES UNDER PAVED SURFACES ARE TO BE INSTALLED IN SLEEVING. ALL MAINLINE SLEEVE LOCATIONS TO INCLUDE A SEPARATE WIRE SLEEVE.

SLEEVED PIPE SIZE/WIRE QUANTITY	REQUIRED SLEEVE SIZE & (QUANTITY)
¾" - 1¼" PIPING	2" PVC (1)
1½" - 2" PIPING	4" PVC (1)
2½" PIPING	6" PVC (1)
2-WIRE CABLE	2" PVC (1)

11. 2-WIRE SYSTEM NOTES - CONTRACTOR SHALL INSTALL ALL TWO-WIRE COMPONENTS PER MANUFACTURER'S RECOMMENDATIONS AND STANDARDS.
    - 11.1. CONTRACTOR SHALL USE ONLY MANUFACTURED 2-WIRE DECODER CABLE (SEE SCHEDULE FOR SPECIFIC 2-WIRE CABLE).
    - 11.2. ONLY USE SINGLE STATION DECODERS (SEE SCHEDULE FOR SPECIFIC MODEL).
    - 11.3. LOOP 5' OF 2-WIRE DECODER CABLE INTO ALL VALVE BOXES (WITH DECODERS AND SPLICES) FOR MAINTENANCE.
    - 11.4. LOOP 2' OF 2-WIRE DECODER CABLE AS AN EXPANSION LOOP AT ALL CHANGES OF DIRECTION.
    - 11.5. USE ONLY 3M DBR-6 WATERPROOF CONNECTORS ON ALL WIRE SPLICES AND ALL WIRE SPLICES ARE TO BE MADE WITHIN A VALVE BOX WITH CONTROL VALVES OR A SEPARATE 10" ROUND VALVE BOX FOR WIRE SPLICES.
    - 11.6. INSTALL SURGE PROTECTOR RODS OR PLATES 8 LF. PERPENDICULARLY FROM VALVES, DECODERS, AND COMMUNICATION WIRE. WHERE 8 LF IS NOT AVAILABLE, REFER TO ASIC GUIDELINES FOR PLATE LAYOUT.
    - 11.7. GROUNDING SHALL BE IN AN IRRIGATED AREA.
    - 11.8. GROUND ALL DECODERS AND DECODER WIRE A MINIMUM OF EVERY 500' OF WIRE AND AT ALL ENDS OF 2-WIRE DECODER CABLE RUN.

10. ADJUSTMENT - CONTRACTOR SHALL FINE TUNE/ADJUST THE IRRIGATION SYSTEM TO REDUCE/AVOID OVERSPRAY ONTO HARD SURFACES BY ADJUSTING NOZZLE DIRECTION AND NOZZLE RADIUS.

11. PLANS AND SPECIFICATIONS - CONTRACTOR RESPONSIBLE TO ENSURE WORK CONFORMS TO PLANS AND SPECIFICATIONS. AT ONSET OF CONSTRUCTION, VERIFY PLANS ARE CURRENT. WHERE REQUIRED BY CITY OR TOWN, CONTRACTOR SHALL CONSTRUCT ONLY OFF CITY OR TOWN STAMPED PLANS. REVISIONS TO CITY OR TOWN STAMPED PLANS SHALL CONFORM TO CITY OR TOWN FIELD CHANGE PROCEDURES AND DOCUMENTATION.

12. SIMULTANEOUS ZONE OPERATION - THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO OPERATE MULTIPLE ZONES SIMULTANEOUSLY BASED ON INDIVIDUAL ZONE FLOW. THE DESIGN IS INTENDED TO OPERATE MULTIPLE VALVES, UP TO THE MAXIMUM FLOW IN THE POINT OF CONNECTION NOTE. REFER TO CONTROLLER SPECIFICATION FOR MAXIMUM SIMULTANEOUS VALVE COUNT.

13. BACKFLOW DEVICES: ALL CONNECTION COMPONENTS AND BACKFLOW DEVICES SHALL BE LEAD-FREE. CONTRACTOR SHALL CONTACT WATER SERVICE PROVIDER FOR ANY ADDITIONAL REQUIREMENTS REGARDING BACKFLOW TESTING.

14. CITY DETAILS - HYDROSYSTEMS-KDI WILL BE RESPONSIBLE FOR THE IRRIGATION DESIGN ITSELF. DETAILS LABELED AS TOWN OF CASTLE ROCK ARE A STANDARD DETAILS DESIGNED AND SPECIFIED BY THE APPLICABLE GOVERNING AUTHORITY, TOWN OF CASTLE ROCK. HYDROSYSTEMS*KDI DID NOT DESIGN AND SPECIFY THESE DETAILS. HYDROSYSTEMS*KDI IS NOT RESPONSIBLE, AND ACCEPTS NO RESPONSIBILITY, FOR THE SELECTION AND SPECIFICATION OF THESE DETAILS, AND HYDROSYSTEMS*KDI MAKES NO REPRESENTATIONS WITH REGARD TO THESE DETAILS.

15. WATER BUDGETS AND PROJECTIONS - HYDROSYSTEMS-KDI HAS BASED THE IRRIGATION DESIGN AND THE ASSOCIATED PROJECTED WATER USE UPON SUCH FACTORS AS CITY OR WATER DISTRICT IMPOSED REQUIREMENTS, PUBLISHED PLANT SPECIES WATER NEEDS, SELECTED IRRIGATION METHOD EFFICIENCIES AS REPORTED BY INDEPENDENT TESTING FACILITIES, HISTORICAL WEATHER DATA FOR THE PROJECT LOCATION, AND PROPER MAINTENANCE PROCEDURES. HYDROSYSTEMS*KDI IS NOT RESPONSIBLE, AND ACCEPTS NO RESPONSIBILITY, FOR THE ACTUAL WATER USAGE VARIATION THAT IS A RESULT OF FIELD MODIFICATIONS TO THE SYSTEM NOT MATCHING CONSTRUCTION DOCUMENTS, IMPROPER MAINTENANCE, WASTE DUE TO SYSTEM DAMAGE OR VANDALISM, OR WEATHER CONDITIONS THAT DEVIATE FROM PUBLISHED 30 YEAR HISTORICAL AVERAGES.

CASTLE ROCK STANDARD NOTES

1. INSTALLING CONTRACTOR SHALL CONTACT THE TOWN OF CASTLE ROCK WATER AT 720.733.6017 TO SCHEDULE A PRE-CONSTRUCTION MEETING BEFORE BEGINNING THE INSTALLATION OF THE IRRIGATION SYSTEM.
2. IRRIGATION SHALL BE INSTALLED BY A TOWN OF CASTLE ROCK REGISTERED LANDSCAPE CONTRACT PROFESSIONAL.
3. 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 CASTLE ROCK WATER IF IRRIGATING THE NATIVE SEED OR THE SOD ON A DAILY BASIS FOR ESTABLISHMENT DURING THE MONTHS OF MAY, JUNE AUGUST AND SEPTEMBER. 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 THREE DAYS PER WEEK 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. NO IRRIGATION ALLOWED IN AREAS 4' IN WIDTH OR LESS.
7. ALL IRRIGATION INSTALLATIONS MUST MEET TOWN OF CASTLE ROCK DETAILS.
8. 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.
9. IRRIGATION SYSTEMS ARE TO BE WINTERIZED ANNUALLY IN THE FALL.
10. 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.
11. A COPY OF THE STAMPED AND TOWN APPROVED IRRIGATION PLANS IS TO BE AVAILABLE ON-SITE DURING IRRIGATION INSPECTIONS.
12. CONTRACTOR TO SUBMIT IRRIGATION SUBMITTALS TO THE TOWN OF CASTLE ROCK PARKS DEPARTMENT FOR THE IRRIGATION EQUIPMENT AND COMPONENTS USED FOR THE PLD PARK SITE.

Registered Landscape Professional/Irrigation Designer:
Jill Bersano #15-1080

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KDI HydroSystems
Irrigation Consulting & Water Management
13949 W. Colfax Ave, Suite 260 Lakewood, Colorado 80401
o: 303.980.5327 www.hydrosystemskdi.com

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7083
www.rsandh.com

DHM DESIGN

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

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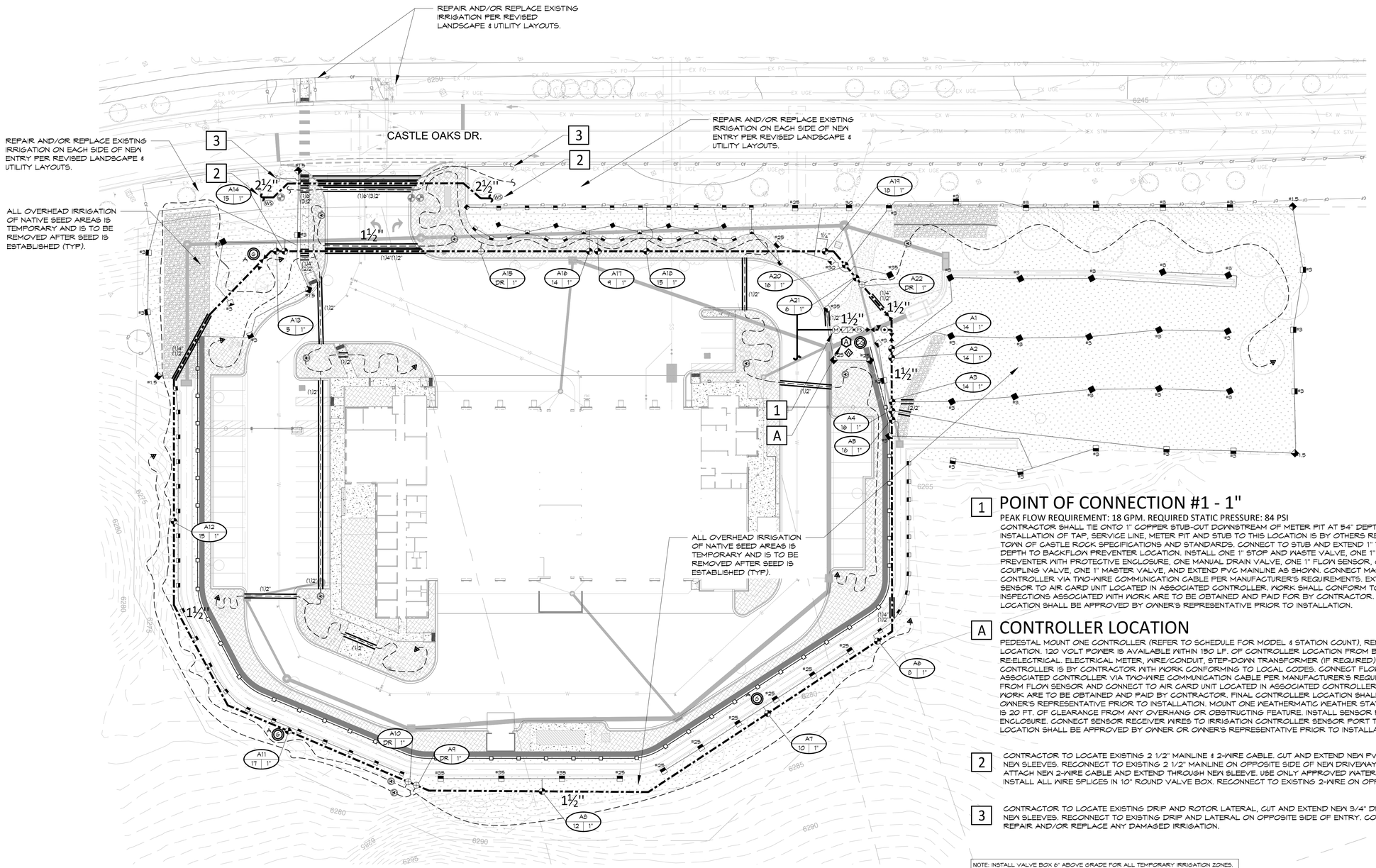
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IRRIGATION NOTES & SCHEDULE

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1 POINT OF CONNECTION #1 - 1"

PEAK FLOW REQUIREMENT: 18 GPM. REQUIRED STATIC PRESSURE: 84 PSI
CONTRACTOR SHALL TIE ONTO 1" COPPER STUB-OUT DOWNSTREAM OF METER PIT AT 54" DEPTH IN THIS APPROXIMATE LOCATION. INSTALLATION OF TAP, SERVICE LINE, METER PIT AND STUB TO THIS LOCATION IS BY OTHERS RE=CIVIL. INSTALL ONE 1" METER PER TOWN OF CASTLE ROCK SPECIFICATIONS AND STANDARDS. CONNECT TO STUB AND EXTEND 1" TYPE K SOFT COPPER AT 54" MINIMUM DEPTH TO BACKFLOW PREVENTER LOCATION. INSTALL ONE 1" STOP AND WASTE VALVE, ONE 1" REDUCED PRESSURE BACKFLOW PREVENTER WITH PROTECTIVE ENCLOSURE, ONE MANUAL DRAIN VALVE, ONE 1" FLOW SENSOR, ONE GATE VALVE, ONE QUICK COUPLING VALVE, ONE 1" MASTER VALVE, AND EXTEND PVC MAINLINE AS SHOWN. CONNECT MASTER VALVE TO ASSOCIATED CONTROLLER VIA TWO-WIRE COMMUNICATION CABLE PER MANUFACTURER'S REQUIREMENTS. EXTEND SHIELDED CABLE FROM FLOW SENSOR TO AIR CARD UNIT LOCATED IN ASSOCIATED CONTROLLER. WORK SHALL CONFORM TO LOCAL CODE. FEES, PERMITS AND INSPECTIONS ASSOCIATED WITH WORK ARE TO BE OBTAINED AND PAID FOR BY CONTRACTOR. FINAL BACKFLOW PREVENTER LOCATION SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

A CONTROLLER LOCATION

PEDESTAL MOUNT ONE CONTROLLER (REFER TO SCHEDULE FOR MODEL & STATION COUNT), REMOTE READY, AT INDICATED LOCATION. 120 VOLT POWER IS AVAILABLE WITHIN 150 LF. OF CONTROLLER LOCATION FROM BUILDING PANEL, BY OTHERS RE:ELECTRICAL. ELECTRICAL METER, WIRE/CONDUIT, STEP-DOWN TRANSFORMER (IF REQUIRED) AND POWER CONNECTION TO CONTROLLER IS BY CONTRACTOR WITH WORK CONFORMING TO LOCAL CODES. CONNECT FLOW SENSOR AND MASTER VALVE TO ASSOCIATED CONTROLLER VIA TWO-WIRE COMMUNICATION CABLE PER MANUFACTURER'S REQUIREMENTS. LOCATE SHIELDED CABLE FROM FLOW SENSOR AND CONNECT TO AIR CARD UNIT LOCATED IN ASSOCIATED CONTROLLER. FEES AND PERMITS ASSOCIATED WITH WORK ARE TO BE OBTAINED AND PAID BY CONTRACTOR. FINAL CONTROLLER LOCATION SHALL BE APPROVED BY OWNER OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. MOUNT ONE WEATHERMATIC WEATHER STATION SENSOR ON POLE WHERE THERE IS 20 FT. OF CLEARANCE FROM ANY OVERHANG OR OBSTRUCTING FEATURE. INSTALL SENSOR RECEIVER IN CONTROLLER ENCLOSURE. CONNECT SENSOR RECEIVER WIRES TO IRRIGATION CONTROLLER SENSOR PORT THROUGH CONDUIT. FINAL SENSOR LOCATION SHALL BE APPROVED BY OWNER OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

2 CONTRACTOR TO LOCATE EXISTING 2 1/2" MAINLINE & 2-WIRE CABLE. CUT AND EXTEND NEW PVC MAINLINE, AS SHOWN, THROUGH NEW SLEEVES. RECONNECT TO EXISTING 2 1/2" MAINLINE ON OPPOSITE SIDE OF NEW DRIVEWAY. LOCATE 2-WIRE CABLE, CUT AND ATTACH NEW 2-WIRE CABLE AND EXTEND THROUGH NEW SLEEVE. USE ONLY APPROVED WATER PROOF WIRE CONNECTIONS AND INSTALL ALL WIRE SPLICES IN 10" ROUND VALVE BOX. RECONNECT TO EXISTING 2-WIRE ON OPPOSITE SIDE OF NEW ENTRY.

3 CONTRACTOR TO LOCATE EXISTING DRIP AND ROTOR LATERAL, CUT AND EXTEND NEW 3/4" DRIP AND LATERAL LINE THROUGH NEW SLEEVES. RECONNECT TO EXISTING DRIP AND LATERAL ON OPPOSITE SIDE OF ENTRY. CONTRACTOR TO ADJUST IN FIELD AND REPAIR AND/OR REPLACE ANY DAMAGED IRRIGATION.

NOTE: INSTALL VALVE BOX 6" ABOVE GRADE FOR ALL TEMPORARY IRRIGATION ZONES. EXTEND PIPING TO HEADS ABOVE GROUND, AS SHOWN, AFTER ESTABLISHMENT PERIOD. ALL PIPING AND HEADS TO BE REMOVED. REMOVE VALVE BOX AND ELECTRIC CONTROL VALVE ASSEMBLY DOWN TO SERVICE TEE. INSTALL MPT PVC PLUG IN TEE. CONNECT CONTROL WIRES USING APPROVED WATER PROOF SPLICES AND INSTALL IN 10 INCH ROUND VALVE BOX. BRAND AS WIRE SPLICES BOX.

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SCALE: 1"=30'-0" (0, 15, 30, 60) NORTH

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Registered Landscape Professional/Irrigation Designer:
Jill Bersano #15-1080

HydroSystems KDI
Irrigation Consulting & Water Management
13949 W. Colfax Ave, Suite 260 Lakewood, Colorado 80401
o: 303.980.5327 www.hydrosystemskdi.com

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7083
www.rsandh.com

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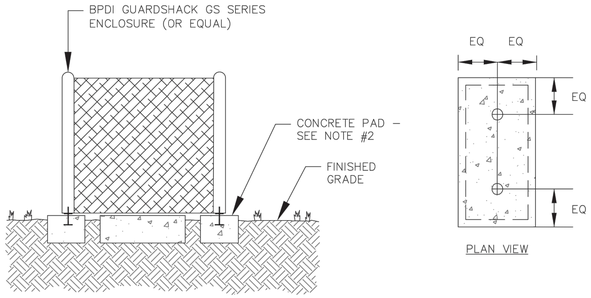
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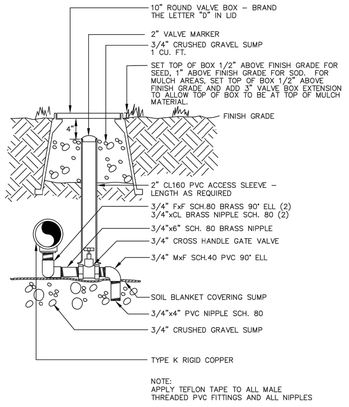
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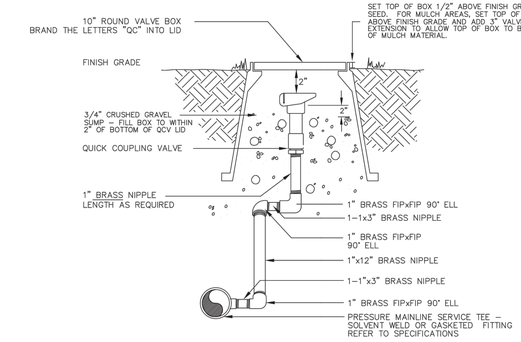
1. PAD PENETRATIONS FOR BACKFLOW PREVENTER RISERS TO BE 1" LARGER THAN RISER IN DIAMETER
2. CONCRETE PAD DEPTH SHALL BE 6" WITH 1" ABOVE FINISH GRADE
3. INSTALL ENCLOSURE ANCHORS AS PER MANUFACTURER'S RECOMMENDATIONS
4. PROVIDE ENCLOSURE IN FEDERAL GREEN COLOR

Sheet Revisions			Town of Castle Rock	BACKFLOW ENCLOSURE	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-1
1/24	REVISED BY STAFF		Castle Rock, CO 80104		
			Phone: (720) 733-2200		Sheet 1 of 1
			Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services February 1, 2024	

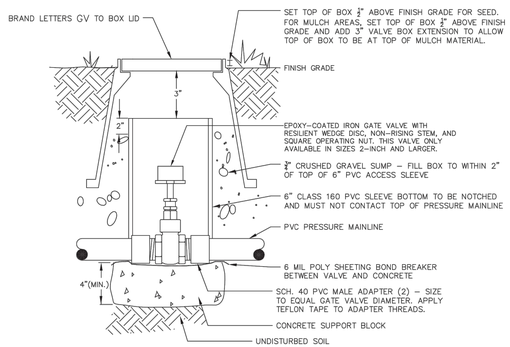


NOTE:
APPLY TEFLON TAPE TO ALL MALE
THREADED PVC FITTINGS AND ALL NIPPLES

Sheet Revisions			Town of Castle Rock	MANUAL DRAIN VALVE	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-5A
9/23	REVISED BY STAFF		Castle Rock, CO 80104		
1/24	REVISED BY STAFF		Phone: (720) 733-2200		Sheet 1 of 1
			Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services February 1, 2024	

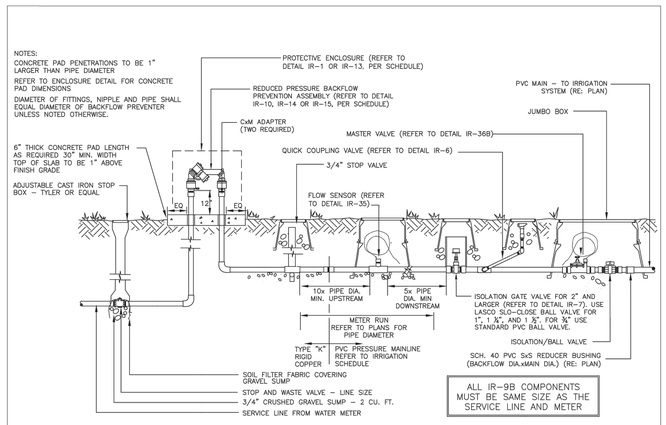


Sheet Revisions			Town of Castle Rock	QUICK COUPLING VALVE	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-6
9/23	REVISED BY STAFF		Castle Rock, CO 80104		
1/24	REVISED BY STAFF		Phone: (720) 733-2200		Sheet 1 of 1
			Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services February 1, 2024	



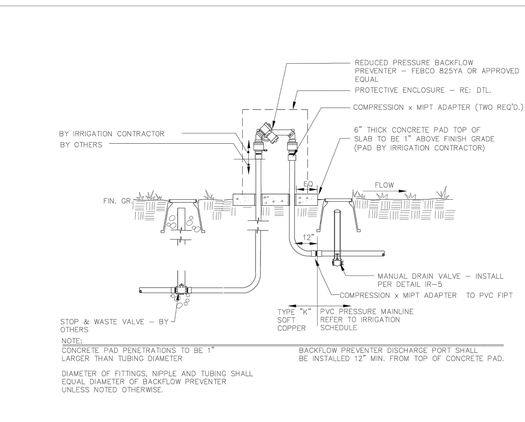
NOTE: POLY SHEETING AND CONCRETE SUPPORT BLOCK SHALL BE INSTALLED AT GATE VALVES 3" DIAMETER AND LARGER

Sheet Revisions			Town of Castle Rock	GATE VALVE	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-7
3/21	STAFF CHANGES		Castle Rock, CO 80104		
4/23	REVIEWED BY STAFF		Phone: (720) 733-2200		Sheet 1 of 1
1/24	REVISED BY STAFF		Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services February 1, 2024	



ALL IR–9B COMPONENTS MUST BE SAME SIZE AS THE SERVICE LINE AND METER

Sheet Revisions			Town of Castle Rock	POINT OF CONNECTION (Town Owned)	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-9B
3/21	STAFF CHANGES		Castle Rock, CO 80104		
9/23	REVISED BY STAFF		Phone: (720) 733-2200		SHEET 1 OF 1
1/24	REVISED BY STAFF		Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services February 1, 2024	

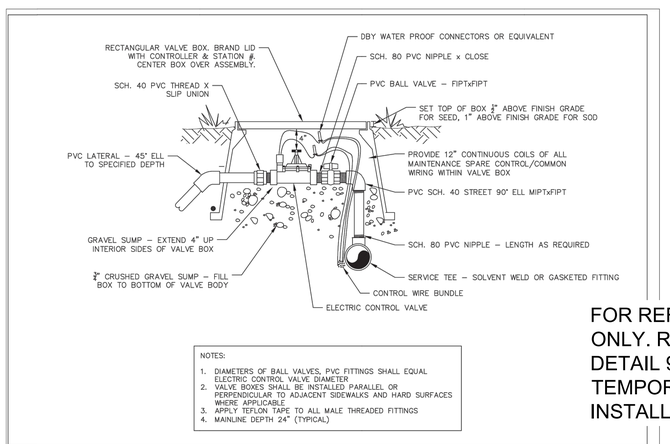


NOTE:
CONCRETE PAD PENETRATIONS TO BE 1" LARGER THAN TUBING DIAMETER

DIAMETER OF FITTINGS, NIPPLE AND TUBING SHALL EQUAL DIAMETER OF BACKFLOW PREVENTER UNLESS NOTED OTHERWISE.

BACKFLOW PREVENTER DISCHARGE PORT SHALL BE INSTALLED 12" MIN. FROM TOP OF CONCRETE PAD.

Sheet Revisions			Town of Castle Rock	BACKFLOW PREVENTER 2" & SMALLER	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-10
3/21	STAFF CHANGES		Castle Rock, CO 80104		
			Phone: (720) 733-2200		Sheet 1 of 1
			Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services March 31, 2021	

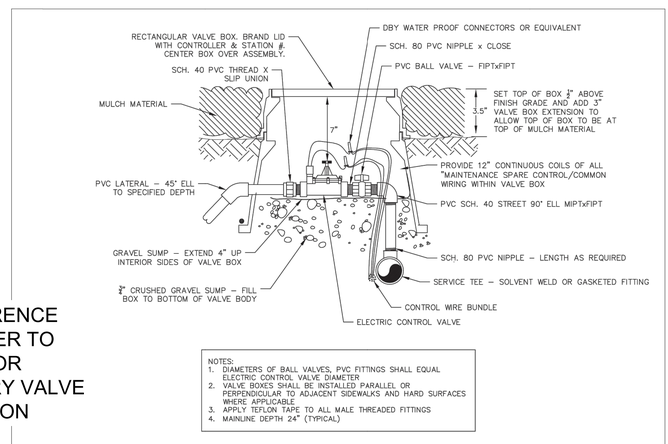


NOTES:

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

FOR REFERENCE ONLY. REFER TO DETAIL 9 FOR TEMPORARY VALVE INSTALLATION

Sheet Revisions			Town of Castle Rock	ELECTRIC CONTROL VALVE	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-16
3/21	STAFF CHANGES		Castle Rock, CO 80104		
9/23	REVISED BY STAFF		Phone: (720) 733-2200		Sheet 1 of 1
1/24	REVISED BY STAFF		Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services February 1, 2024	



NOTES:

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

Sheet Revisions			Town of Castle Rock	ELECTRIC CONTROL VALVE IN MULCH BEDS	DETAIL PLAN NO.
Date	Comments		100 N. Wilcox St.		IR-17
3/21	STAFF CHANGES		Castle Rock, CO 80104		
9/23	REVISED BY STAFF		Phone: (720) 733-2200		Sheet 1 of 1
1/24	REVISED BY STAFF		Fax: (720) 733-3217		
			Development Services	Issued By: Town of Castle Rock, Development Services February 1, 2024	

Registered Landscape
Professional/Irrigation Designer:
Jill Bersano #15-1080

DIRECTORY

IRRIGATION SCHEDULE	34
IRRIGATION NOTES	34
IRRIGATION PLANS	35
IRRIGATION DETAILS	36 - 39
IRRIGATION CHARTS	40

811
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Irrigation Consulting & Water Management
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Lakewood, Colorado 80401
o: 303.980.5327
www.hydrosystemskdi.com

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7083
www.rsandh.com

DHM DESIGN

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: JB
DRAWN BY: TT
DESIGNED BY: TT
PROJECT NUMBER:
20611004000

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SEAL:

SHEET TITLE:

IRRIGATION DETAILS

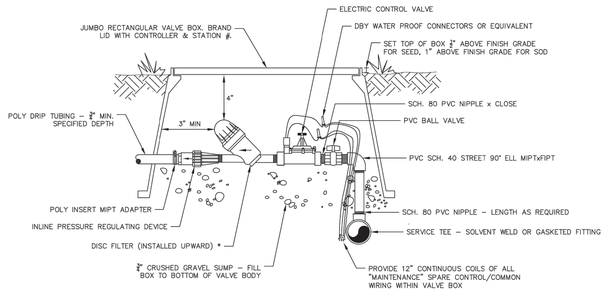
SHEET ID:

36
Sheet 36 of 47

PROJECT STATUS:
Site Construction Documents

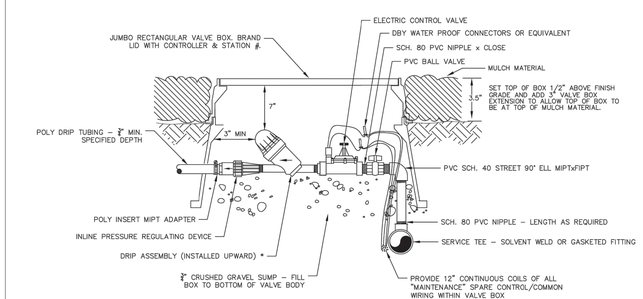
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Autodesk Docs://16322_Castle Rock Fire Station 156 & Fleet Facility/16322_Castle Rock Fire 156 and Fleet_A_R24.rvt
10/16/2025 11:38:18 AM



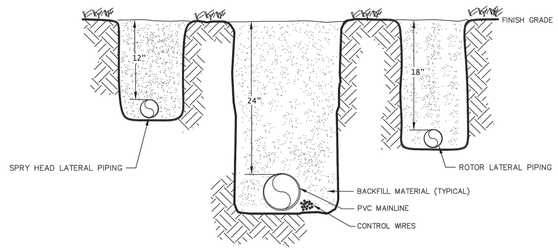
NOTES:
1. DIAMETERS OF BALL VALVES, FITTINGS, FILTERS, AND PRESSURE REGULATORS SHALL EQUAL ELECTRIC CONTROL VALVE DIAMETER.
2. * WYE FILTER MAY BE USED IN PLACE OF DISC FILTER FOR TRADITIONAL POINT/SOURCE DRIP INSTALLATIONS.
3. VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT SIDEWALKS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

Sheet Revisions		Town of Castle Rock	DRIP / SUB-SURFACE VALVE ASSEMBLY	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-18
3/21	STAFF CHANGES	Castle Rock, CO 80104		
4/23	REVIEWED BY STAFF	Phone: (720) 733-2200		
1/24	REVISED BY STAFF	Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		

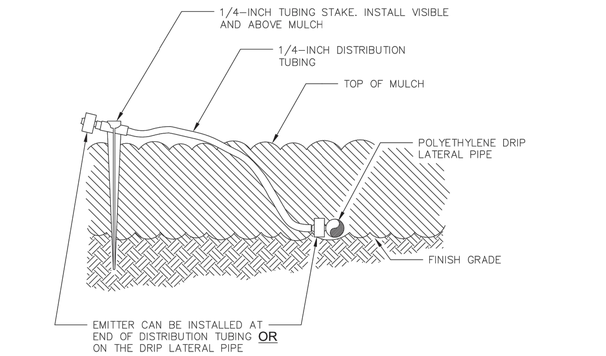


NOTES:
1. DIAMETERS OF BALL VALVES, FITTINGS, FILTERS, AND PRESSURE REGULATORS SHALL EQUAL ELECTRIC CONTROL VALVE DIAMETER.
2. * WYE FILTER MAY BE USED IN PLACE OF DISC FILTER FOR TRADITIONAL POINT/SOURCE DRIP INSTALLATIONS.
3. VALVE BOXES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO ADJACENT SIDEWALKS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

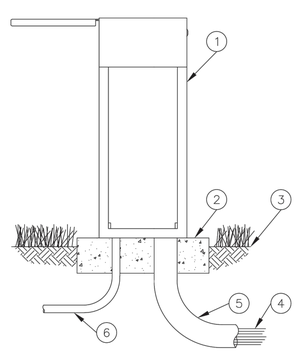
Sheet Revisions		Town of Castle Rock	DRIP / SUB-SURFACE VALVE ASSEMBLY IN MULCH BEDS	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-19
3/21	STAFF CHANGES	Castle Rock, CO 80104		
4/23	REVIEWED BY STAFF	Phone: (720) 733-2200		
1/24	REVISED BY STAFF	Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		



Sheet Revisions		Town of Castle Rock	MAIN LINE & LATERAL TRENCH	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-21
4/23	REVIEWED BY STAFF	Castle Rock, CO 80104		
1/24	REVISED BY STAFF	Phone: (720) 733-2200		
		Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		

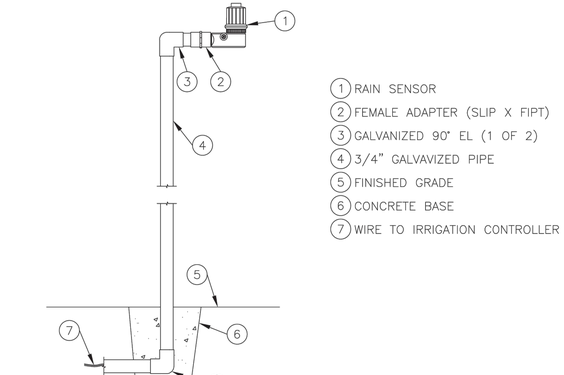


Sheet Revisions		Town of Castle Rock	DRIP EMITTER ON STAKE	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-25
3/21	STAFF CHANGES	Castle Rock, CO 80104		
4/23	REVISED BY STAFF	Phone: (720) 733-2200		
1/24	REVISED BY STAFF	Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		



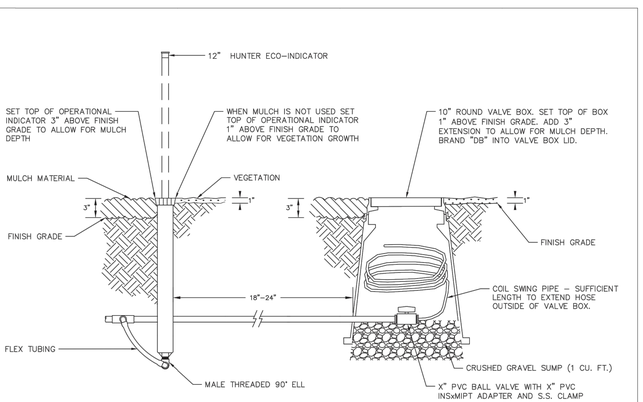
1. PEDESTAL MOUNT CONTROLLER
2. CONCRETE PAD: 6" MINIMUM THICKNESS – INSTALLED TO LEVEL
3. FINISH GRADE
4. WIRES TO CONTROL VALVES
5. 3" PVC SCH 40 CONDUIT, FITTINGS AND SWEEP ELL
6. 1" PVC SCH 40 CONDUIT, FITTINGS AND SWEEP ELL TO DEDICATED POWER SUPPLY

Sheet Revisions		Town of Castle Rock	WEATHER BASED CONTROLLER: PEDESTAL MOUNT	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-27
3/21	STAFF CHANGES	Castle Rock, CO 80104		
4/23	REVIEWED BY STAFF	Phone: (720) 733-2200		
1/24	REVISED BY STAFF	Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		

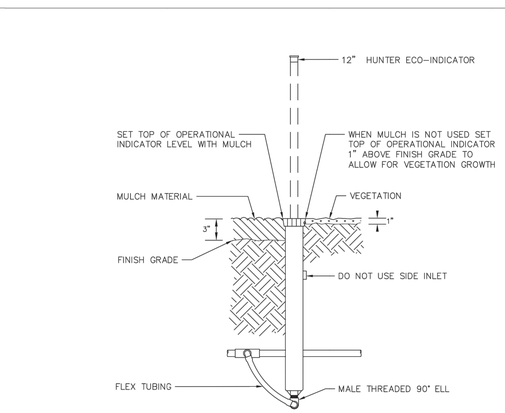


1. RAIN SENSOR
2. FEMALE ADAPTER (SLIP X FIPT)
3. GALVANIZED 90° EL (1 OF 2)
4. 3/4" GALVAVIZED PIPE
5. FINISHED GRADE
6. CONCRETE BASE
7. WIRE TO IRRIGATION CONTROLLER

Sheet Revisions		Town of Castle Rock	RAIN / WEATHER SENSOR POLE MOUNT	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-29
3/21	STAFF CHANGES	Castle Rock, CO 80104		
4/23	REVIEWED BY STAFF	Phone: (720) 733-2200		
1/24	REVISED BY STAFF	Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		



Sheet Revisions		Town of Castle Rock	NON-RESIDENTIAL FLUSH-OUT & OPERATIONAL INDICATOR	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-32
3/21	STAFF CHANGES	Castle Rock, CO 80104		
4/23	REVISED BY STAFF	Phone: (720) 733-2200		
1/24	REVISED BY STAFF	Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		



Sheet Revisions		Town of Castle Rock	NON-RESIDENTIAL OPERATIONAL INDICATOR	DETAIL PLAN NO.
Date	Comments	100 N. Wilcox St.		IR-34
3/21	STAFF CHANGES	Castle Rock, CO 80104		
4/23	STAFF CHANGES	Phone: (720) 733-2200		
1/24	REVISED BY STAFF	Fax: (720) 733-2217	Issued By: Town of Castle Rock, Development Services February 1, 2024	Sheet 1 of 1
		Development Services		

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7083
www.rsandh.com

DHM DESIGN

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: JB
DRAWN BY: TT
DESIGNED BY: TT
PROJECT NUMBER: 20611004000

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SEAL:

Registered Landscape Professional/Irrigation Designer:
Jill Bersano #15-1080

SHEET TITLE:
IRRIGATION DETAILS

SHEET ID:
37
Sheet 37 of 47

PROJECT STATUS:
Site Construction Documents

DIRECTORY

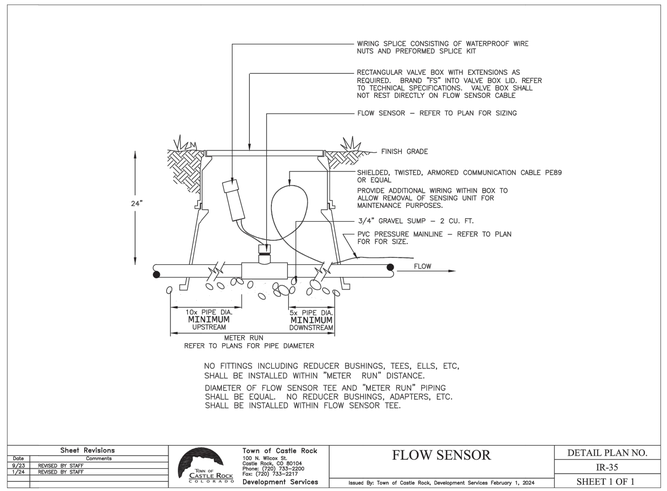
IRRIGATION SCHEDULE	34
IRRIGATION NOTES	34
IRRIGATION PLANS	35
IRRIGATION DETAILS	36 - 39
IRRIGATION CHARTS	40

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Irrigation Consulting & Water Management
13949 W. Colfax Ave, Suite 260 Lakewood, Colorado 80401
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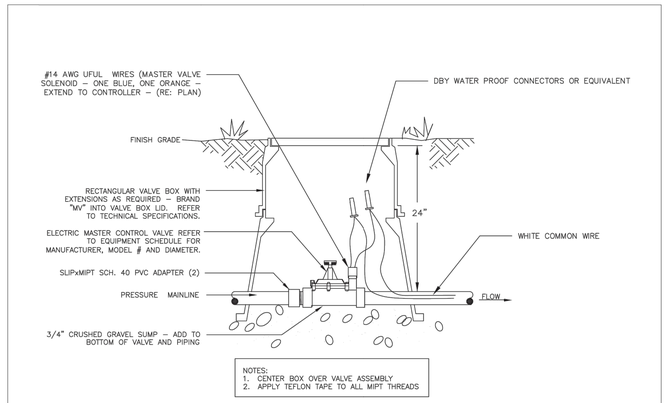
NO FITTINGS INCLUDING REDUCER BUSHINGS, TEES, ELLS, ETC, SHALL BE INSTALLED WITHIN "METER RUN" DISTANCE.

DIAMETER OF FLOW SENSOR TEE AND "METER RUN" PIPING SHALL BE EQUAL. NO REDUCER BUSHINGS, ADAPTERS, ETC. SHALL BE INSTALLED WITHIN FLOW SENSOR TEE.

Sheet Revisions		
Date	Comments	
8/23	REVISED BY STAFF	
1/24	REVISED BY STAFF	

Town of Castle Rock
100 N. Wilcox St.
Castle Rock, CO 80104
Phone: (720) 733-2200
Fax: (720) 733-2223
Development Services

FLOW SENSOR	DETAIL PLAN NO.
Issued By: Town of Castle Rock, Development Services February 1, 2024	IR-35
	SHEET 1 OF 1

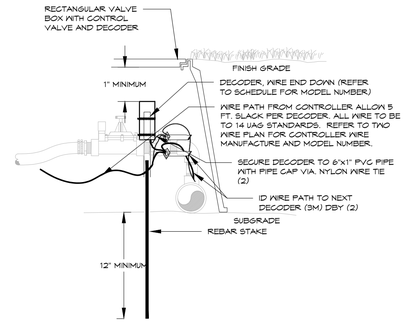


NOTES:
1. CENTER BOX OVER VALVE ASSEMBLY
2. APPLY TEFLON TAPE TO ALL MIPT THREADS

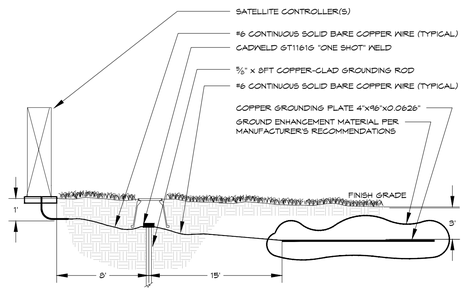
Sheet Revisions		
Date	Comments	
3/21	STAFF CHANGES	
9/23	REVISED BY STAFF	
1/24	REVISED BY STAFF	

Town of Castle Rock
100 N. Wilcox St.
Castle Rock, CO 80104
Phone: (720) 733-2200
Fax: (720) 733-2223
Development Services

MASTER VALVE	DETAIL PLAN NO.
Issued By: Town of Castle Rock, Development Services February 1, 2024	IR-36A
	SHEET 1 OF 1

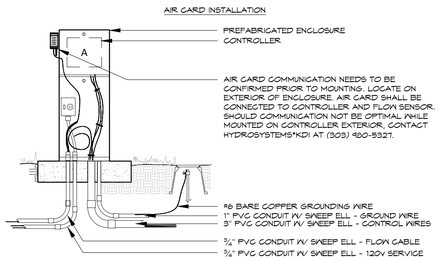


DECODER INSTALLATION
TWO-WIRE SYSTEM — 1

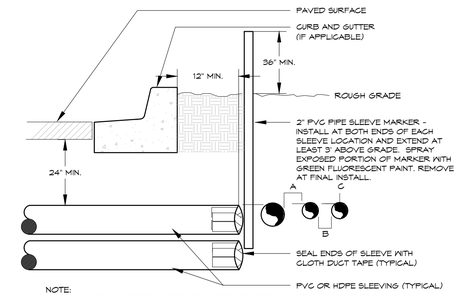


GROUNDING MUST MEET ALL MANUFACTURER'S REQUIREMENTS. IN ADDITION, GROUNDING PLATE DESIGN CONSISTS OF ONE VERTICAL 8-FOOT COPPER CLAD GROUNDING ROD (AT LEAST EIGHT FEET FROM THE EQUIPMENT), AND ONE COPPER GROUNDING PLATE PER 40 STATIONS REQUIRING GROUNDING. INSTALL GROUNDING PLATE HORIZONTALLY, THREE FEET DEEP AND 15' FROM THE GROUNDING ROD. SHOULD MULTIPLE RODS/PLATES BE REQUIRED, THEY SHALL BE PLACED A MINIMUM OF 3 LINEAR FEET FROM EACH OTHER. PERFORM CADWELD CONNECTION TO GROUNDING ROD(S) AND PLACEMENT OF GROUNDING PLATE(S) IN OWNER'S PRESENCE PRIOR TO BACKFILL. REFER TO ASIC STANDARDS FOR MORE INFORMATION.

CONTROLLER GROUNDING
TWO-WIRE SYSTEM - Pedestal Mount — 2

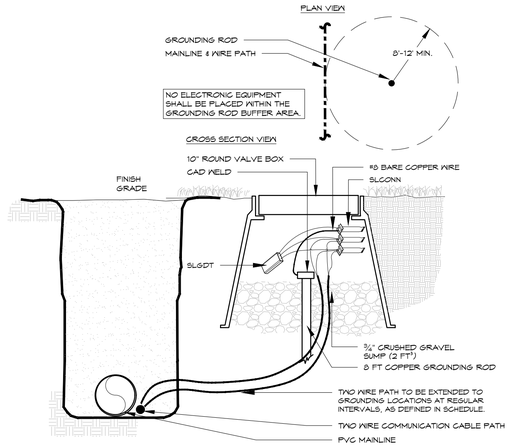


ELECTRIC CONTROLLER
PEDESTAL — 3

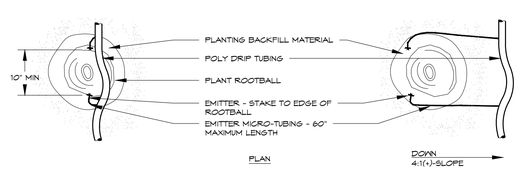


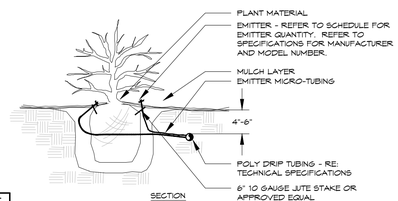
NOTE:
- ALL SLEEVE MATERIAL PER IRRIGATION SCHEDULE, SIZE AS NOTED ON PLAN.
- INSTALL SLEEVES IN SIDE-BY-SIDE CONFIGURATION WHERE MULTIPLE SLEEVES ARE TO BE INSTALLED. SPACE SLEEVES 4" TO 6" APART. DO NOT STACK SLEEVES VERTICALLY.
- CONTRACTOR TO COORDINATE WITH FLATWORK INSTALLER TO BRAND A "V" IN SIDEWALK OR CURB AT BOTH ENDS OF SLEEVE CROSSING.
- SLEEVING THROUGH OR UNDER RETAINING WALLS, PLANTER WALLS, POND LINING, OR WATER QUALITY AREAS SHALL BE COORDINATED WITH CIVIL WORK AT APPROXIMATE LOCATIONS SHOWN.
- AN INDIVIDUAL SLEEVE SHALL CONTAIN NO MORE THAN ONE PIPE OR WIRE BUNDLE.

IRRIGATION SLEEVING
TYPICAL — 4



DECODER GROUNDING
VIA GROUNDING ROD — 5





PLANT SIZE	EMITTER FLOW RATE	EMITTER QTY. AT MULCHED BED LOCATIONS	EMITTER QTY. AT NATIVE SEED LOCATIONS
1 - 2 GALLON MATERIAL	0.5 GPH	ONE EACH	ONE EACH
5 GALLON MATERIAL	0.5 GPH	TWO EACH	TWO EACH
1½" CALIPER TREE	1.0 GPH	THREE EACH	FOUR EACH
2" CALIPER TREE	1.0 GPH	FOUR EACH	SIX EACH
2½" CALIPER TREE	1.0 GPH	SIX EACH	EIGHT EACH
3" CALIPER TREE	1.0 GPH	EIGHT EACH	TEN EACH
3½" CALIPER TREE	1.0 GPH	NINE EACH	ELEVEN EACH
4" CALIPER TREE	1.0 GPH	TEN EACH	TWELVE EACH
6 FT. CONIFEROUS TREE	1.0 GPH	FOUR EACH	SIX EACH
8 FT. CONIFEROUS TREE	1.0 GPH	SIX EACH	NINE EACH
10 FT. CONIFEROUS TREE	1.0 GPH	EIGHT EACH	TWELVE EACH
12 FT. CONIFEROUS TREE	1.0 GPH	TEN EACH	FOURTEEN EACH

NOTES:
- INSTALL EMITTERS ON OPPOSING SIDES OF ROOTBALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.
- EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM OF 2".
- FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.
- IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.
- EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITHIN TECHNICAL SPECIFICATIONS.
- DRIP VALVE ZONES ARE DESIGNED TO ACCOUNT FOR DIFFERENCES IN PLANT REQUIREMENTS (HYDROZONES) AND SUN EXPOSURE.
- CONTRACTOR SHALL ENSURE HYDROZONES ARE VALVED SEPARATELY AS SHOWN ON PLAN.
- SITE CONDITIONS MAY DICTATE THAT MULTIPLE SUN EXPOSURES ARE VALVED TOGETHER DURING THE DESIGN PROCESS. CONTRACTOR SHALL ADJUST EMITTER SCHEDULE AS FOLLOWS:
  - EMITTER QUANTITIES SHALL REMAIN THE SAME BUT EMITTER GALLONAGES SHALL BE DOUBLED FOR PLANTS WITH SOUTH AND WEST EXPOSURES.
  - EMITTER QUANTITIES AND GALLONAGE SHALL BE AS SHOWN IN SCHEDULE FOR PLANTS WITH NORTH AND EAST EXPOSURES.
  - PLANTINGS WITH NORTH AND EAST EXPOSURE SHALL DICTATE VALVE RUN-TIMES AND CONTRACTOR SHALL ADJUST SCHEDULING ACCORDINGLY.

DRIP EMITTER
BELOW GRADE — 6

Registered Landscape Professional/Irrigation Designer:
Jill Bersano #15-1080

DIRECTORY

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RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7083
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DHM DESIGN

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: JB
DRAWN BY: TT
DESIGNED BY: TT
PROJECT NUMBER: 20611004000

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SEAL:

SHEET TITLE:
IRRIGATION DETAILS

SHEET ID:
38
Sheet 38 of 47

PROJECT STATUS:
Site Construction Documents

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Appendix A

Castle Rock Water
Securing our future drop by drop

TEMPORARY IRRIGATION

1. Criteria

The purpose of temporary irrigation is to germinate native seed and establish native vegetation, it is not intended for continuous use during establishment period (assumed to be two (2) years). This means that the temporary system will not be operated on a three (3) day per week watering schedule after the initial thirty (30) day irrigation exemption period.

a. The native soil must be amended with three (3) cu yds. of organic compost per one thousand (1,000) sq. ft.
b. This amendment must be incorporated into the soil via tractor ripping.

2. Seeding

Seeding shall take place as recommended by Town. Seasonal weather conditions shall be taken into consideration when scheduling seed and mulch installation. Seeding shall not occur between June 15th and September 1st. Coordinate with Castle Rock Water's Conservation Division for guidance. Generally, if a Red Flag Warning and/or local fire restriction has been issued, no seeding shall commence until such time that the warnings/restrictions have been released.

a. Drill seeding is required.
b. Slopes steeper than 3:1 are not permitted.
c. Temporary irrigation systems and irrigation exemptions will meet the following specifications:

i. The irrigation system must be above ground and removed at the end of the approved establishment period.
ii. Sprinkler heads used for temporary irrigation must have an application rate not to exceed .75"/hour. Traditional spray heads/nozzles are not allowed.
iii. The irrigation exemption shall not exceed thirty (30) days.
iv. Seed ticket(s) for areas temporarily irrigated are to be provided to Castle Rock Water.
v. Town of Castle Rock hydraulic worksheet (required on construction documents) will show both permanent and temporary irrigated areas. These should be listed separately and not combined.
vi. Tap sizing will be determined by the permanent irrigated plant material.

3. Irrigation

Watering shall occur between the hours of 12 a.m. and 8 a.m. No watering will be permitted outside of these times.

Appendix A

a. A hydrant meter issued by the Town may be used to meter temporary irrigation water. Hydrant meter assembly shall be secured with anti-theft cage and protected from freezing. Hydrant meter shall be connected to 2" fitting on hydrant. The 4" fitting shall be reserved for the fire department to use in fighting fires. Hydrant meter assembly will be removed at end of growing season and returned to the Town. Applicant will follow hydrant meter permit requirements.
b. Water will be billed at the applicable tier two (2) irrigation rate (see current year rates and fees). An establishment water budget will be implemented as follows:

i. For the first four weeks:
- Two 9 minute cycles per zone @ .4"/hour = .12" of water per day
- .12"/day x 7 days/week = .84"/week
- .84"/week x 4 weeks = 3.36" for the first 4 weeks
- 3.36" x .62 = 2.0832 gallons / square foot
- 2.0832 gallons/square foot x 43,560 square feet in an acre = 90,744 gallons/acre

ii. For the second four weeks (transition to fixed three days per week as indicated on the standard non-residential schedule):
- One 15 minute cycle per zone @ .4"/hour = .1" of water per day
- .1"/day x 3 days/week = .3"/week
- .3"/week x 4 weeks = 1.2" for the second 4 weeks
- 1.2" x .62 = .744 gallons / square foot
- .744 gallons/square foot x 43,560 square feet in an acre = 32,409 gallons/acre

iii. Moving forward continue to transition to as-needed only, not to exceed 1" per month:
- 1" per month x .62 = .62 gallons per square foot
- .62 gallons per square foot x 43,560 square feet in an acre = 27,007 gallons per acre

All water used in excess of the budget will be billed at the applicable tier three (3) excess rate. These rates are subject to change annually based on an annual rates and fees study by the Town.

c. A waterproof sign measuring a minimum of 2 feet by 2 feet shall be visible from each adjacent road. The sign shall contain:
- **TEMPORARY IRRIGATION.**
- Dates of the temporary irrigation.
- Contractor's contact information.

(See example on next page)

4. Conclusion

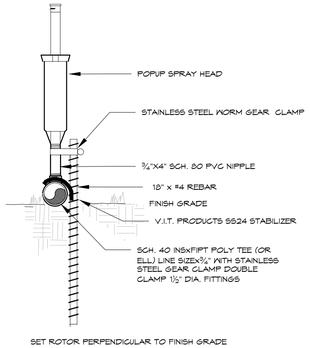
a. The contractor must contact Castle Rock Water, Stormwater hotline at 720-733-2235, a minimum of one week prior to the expiration of the temporary irrigation exemption to evaluate the level of establishment.
b. Upon expiration of the approved establishment period, all components of the temporary irrigation system must be removed. Equipment to be removed includes: irrigation controller, 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.

Appendix A

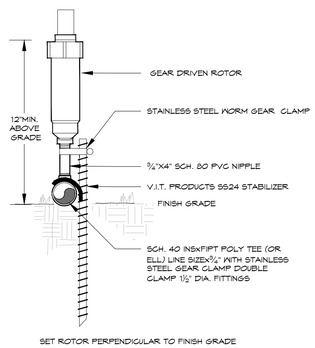
TEMPORARY IRRIGATION

05/01/2021 - 05/30/2021

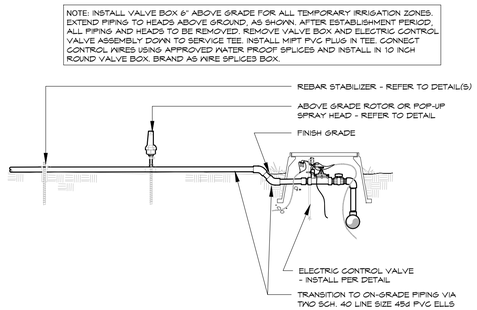
ABC BUILDER, 303-555-5555



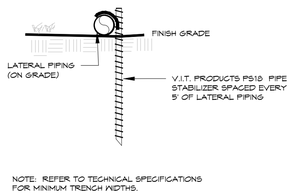
POP-UP SPRAY HEAD
ON GRADE — 7



GEAR DRIVEN ROTOR
ON GRADE — 8



ELECTRIC CONTROL VALVE
ON GRADE SYSTEM — 9



PIPING STABILIZATION
ON GRADE PIPING — 10

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Registered Landscape Professional/Irrigation Designer:
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www.rsandh.com

DHM DESIGN

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: JB
DRAWN BY: TT
DESIGNED BY: TT
PROJECT NUMBER: 20611004000

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SEAL:

SHEET TITLE:
IRRIGATION DETAILS

SHEET ID:
39
Sheet 39 of 47

PROJECT STATUS:
Site Construction Documents

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Project Name:	**8316 - Castle Rock Fire Station 156**
Project Location:	***Castle Rock***
Tap Description:	***Tap 1***
Date prepared:	***12-Dec-25***

Seasonal Water Use and Peak Flow Projections Prepared By HydroSystems-KDI, Inc.

Description	Irrigated Area (Acre)	Month	Application Rate (in/mo/sqft)	Water Application (gallons)	Peak Season Projected Demand (GPM)
		May	1.17	41,920	
Native Tall Grass	1.32	June	1.56	55,780	
Spray Irrigated		July	**1.68**	**60,260**	**9.4**
		August	1.46	52,400	
		September	1.13	40,568	
Irrigation Season Totals			7.00	250,928	
				0.77	acre-feet
		May	1.67	11,732	
Shrubs & Trees	0.26	June	2.22	15,611	
Drip Irrigated		July	**2.40**	**16,864**	**2.6**
		August	2.09	14,665	
		September	1.62	11,353	
Irrigation Season Totals			10.00	70,225	
				0.22	acre-feet
Site Totals					
Irrigated Area:		***68,774***	***Sq.Ft.***	***1.58***	***Acres***
Water Use per Year:		***321,152***	***Gallons***	***0.99***	***Acre-feet***
Average Water per Year:		***4.67***	***Gallons/SqFt***	***7.49***	***Inches/SqFt***
Peak Season Monthly Water Use:		***77,124***	***Gallons***	***0.24***	***Acre-feet***
Average Peak Season Flow:		***12***	***GPM***		
Required Tap Size:		***1***	***Inches***		

Projections are based on a three day per week, eight hour per day, peak season watering schedule.
Peak season application for Native Tall Grass is 0.38" per week.
Peak season application for Shrubs & Trees is 0.54" per week.

WATER USE CHART

C2

Project Name:	**8316 - Castle Rock Fire Station 156**
Project Location:	***Castle Rock***
Tap Description:	***Tap 1***
Tap Size:	***1"***
Irrigation System Hydraulic Worksheet	
Prepared by HydroSystems-KDI, Inc.	
Date:	***10-Dec-25***
Static Water Pressure:*	***95*** ***From: Julia Wells***
****This value has been decreased by safety factor of:***	***10%*** ***of: Castle Rock Water***

Equipment or Material	Quantity (one if not specified)	Nominal Size	Equipment or Pipe Material	Friction Loss Through Pipe per Chart (psi)		Velocity through pipes (ft/sec)	Flow Rate (gpm)	Loss/Gain (psi)
Corp Stop:		1	" Typical Corp. Stop				18	0.90
Svc Line (tap to meter):	25 LF	1	" K Copper	10.47	/100 FT	7.42	18	2.62
Curb Stop:		1	" Typical Curb Stop				18	0.50
Water Meter:		1	" Typical Meter				18	1.80
Svc Line (meter to backflow):	10 LF	1	" K Copper	10.47	/100 FT	7.42	18	1.05
Stop & Waste:		1	" Typical Stop & Waste Valve				18	0.50
Backflow:		1	" Febco 825YA				18	12.50
Point of Connection (POC) Subtotal:								**19.86**
Pressure downstream of POC:								**74.64**
Master Valve:		1	" Rain Bird PEB				18	2.90
Flow Sensor:		1	" CST FSI				18	1.00
Gate Valve:	5	1 1/2"	Typical Bronze Gate Valve				18	0.10
Pressure Required at Head:			5000 Rotors					35.00
Lateral Allowance:								3.00
Control Valve allowance:		1	" Rain Bird PEB				18	2.90
Mainline allowances:								
	50 LF	1 1/2"	CL 200 PVC	0.64	/100 FT	3.48	18	0.32
	1300 LF looped	1 1/2"	CL 200 PVC	0.18	/100 FT	1.24	18	2.34
Mainline Fitting allowance:			10% of Mainline allowances					0.27
Elevation:								
	Tap Elev. 6252		Control Valve Elev. 6280					12.12
Factor of Safety:			5% System Losses					3.99
Total System Hydraulic Losses (PSI)								***83.81***
Provided Water Pressure (PSI)								***94.50***
Residual Pressure (PSI)								***10.69***

Irrigated Area: 68898 sqft
Town of Castle Rock provides a minimum of 43 psi

HYDRAULICS CHART

C3

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Castle Rock Fire Station 156

December 10, 2025

LANDSCAPE ZONE	LWU RATING RANGE
Very Low Water Use	0.0 to 1.5
Low Water Use	>1.5 to 3.0
Moderate Water Use	>3.0 to 4.5
High Water Use	>4.5

LANDSCAPE TYPE	LANDSCAPE ZONE	LANDSCAPE USE	IRRIGATION	IRRIGATION WATER REQUIREMENT (IWR)	LWU RATING (IWR/5.0) (LWUR)	IRRIGATED AREA (IA)	COMPOSITE LANDSCAPE WATER USE RATING (CLWUR=Σ LWUR IA/TA)	TOTAL AREA (TA)
Upland Prairie	Low	Perimeter Open Space	Spray	10	in./Yr.	2	57,508	115,016	57,508
Trees and Shrubs Mix	Low	Open Space	Drip	10	in./Yr.	2	11,266	22,533	11,266
								115,016	57,508

OVERALL PROJECT COMPOSITE LANDSCAPE WATER USE RATING (CLWUR=Σ LWUR IA/TA)	2.00

NOTES:

CLWUR CHART

C1

Zone	Hydrozone (Low (5"-10") Med. (10"-15") High (>15")	Plant Type (Turf, Native, Shrubs, Perennials, Trees, Annuals, etc.)	Head Type (Rotors, Sprays, Bubblers, Drip, SDI, etc.)	Nozzle* (Nozzle/Emitter size)	App. Rate (inches/hour)	GPM (Per Zone)	Inches/Month (Peak not to exceed 6"/month or 1.5"/week)	Run Time (Minutes/ Month)	Run Time (Minutes/Day)	Water Usage (Gallons per month)
A1	Low	Native Tall Grass	Head - Rotor	#3 FC	0.18	14	1.7	560	42	7845
A2	Low	Native Tall Grass	Head - Rotor	#3 FC	0.18	14	1.7	560	42	7845
A3	Low	Native Tall Grass	Head - Rotor	#3 FC	0.18	14	1.7	560	42	7845
A4	Low	Native Tall Grass	Head - Rotor	#3 PC	0.36	16	1.7	280	21	4483
A5	Low	Native Tall Grass	Head - Rotor	#3 PC	0.36	16	1.7	280	21	4483
A6	Low	Native Tall Grass	Head - Popup	10	1.52	8	1.7	66	5	531
A7	Low	Native Tall Grass	Head - Rotor	mpr	0.56	10	1.7	180	14	1801
A8	Low	Native Tall Grass	Head - Rotor	mpr	0.56	12	1.7	180	14	2161
A9	Low	Shrubs & Trees	Drip - Point Source	0.5gph - 1.0gph	0.50	3	2.4	288	22	865
A10	Low	Shrubs & Trees	Drip - Point Source	0.5gph - 1.0gph	0.50	3	2.4	288	22	865
A11	Low	Native Tall Grass	Head - Popup	15	1.58	17	1.7	64	5	1085
A12	Low	Native Tall Grass	Head - Popup	12	1.74	15	1.7	58	4	870
A13	Low	Native Tall Grass	Head - Rotor	#3 FC	0.18	5	1.7	560	42	2802
A14	Low	Native Tall Grass	Head - Rotor	#3 PC	0.36	15	1.7	280	21	4203
A15	Low	Shrubs & Trees	Drip - Point Source	0.5gph - 1.0gph	0.50	5	2.4	288	22	1441
A16	Low	Native Tall Grass	Head - Popup	12	1.74	14	1.7	58	4	812
A17	Low	Native Tall Grass	Head - Popup	12	1.74	9	1.7	58	4	522
A18	Low	Native Tall Grass	Head - Popup	15	1.58	15	1.7	64	5	958
A19	Low	Native Tall Grass	Head - Rotor	mpr	0.56	18	1.7	180	14	3242
A20	Low	Native Tall Grass	Head - Rotor	#3 PC	0.36	16	1.7	280	21	4483
A21	Low	Native Tall Grass	Head - Rotor	mpr	0.56	6	1.7	180	14	1081
A22	Low	Shrubs & Trees	Drip - Point Source	0.5gph - 1.0gph	0.50	3	2.4	288	22	865
Total								**Min/Month**	**Min/cycle**	**Gallons/Month**
								5043	379	53238

*Zones noting "Assorted" nozzles contain a mix of popup heads from the same family, in multiple throw radii. Refer to plans & construction notes for spacing and throw of

CONTROLLER CHART

C4

NOTE: INSTALL VALVE BOX 6" ABOVE GRADE FOR ALL TEMPORARY IRRIGATION ZONES. EXTEND PIPING TO HEADS ABOVE GROUND, AS SHOWN. AFTER ESTABLISHMENT PERIOD, ALL PIPING AND HEADS TO BE REMOVED. REMOVE VALVE BOX AND ELECTRIC CONTROL VALVE ASSEMBLY DOWN TO SERVICE TEE. INSTALL MPT PVC PLUG IN TEE. CONNECT CONTROL WIRES USING APPROVED WATER PROOF SPLICES AND INSTALL IN 10 INCH ROUND VALVE BOX. BRAND AS WIRE SPLICES BOX.

Town of Castle Rock Colorado

CRFS156 IRRIGATION CONTROLLER CHART

Contact Information

Registered Landscaper	See Stamp, Same Sheet
Company Name	HydrosystemsKDI
Address	13949 W. Colfax Ave. Suite 260
Phone	303.980.5327
Email	See Stamp, Same Sheet

Registered Landscape Professional/Irrigation Designer:
Jill Bersano #15-1080

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DHM DESIGN

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PROJECT NUMBER: 20611004000

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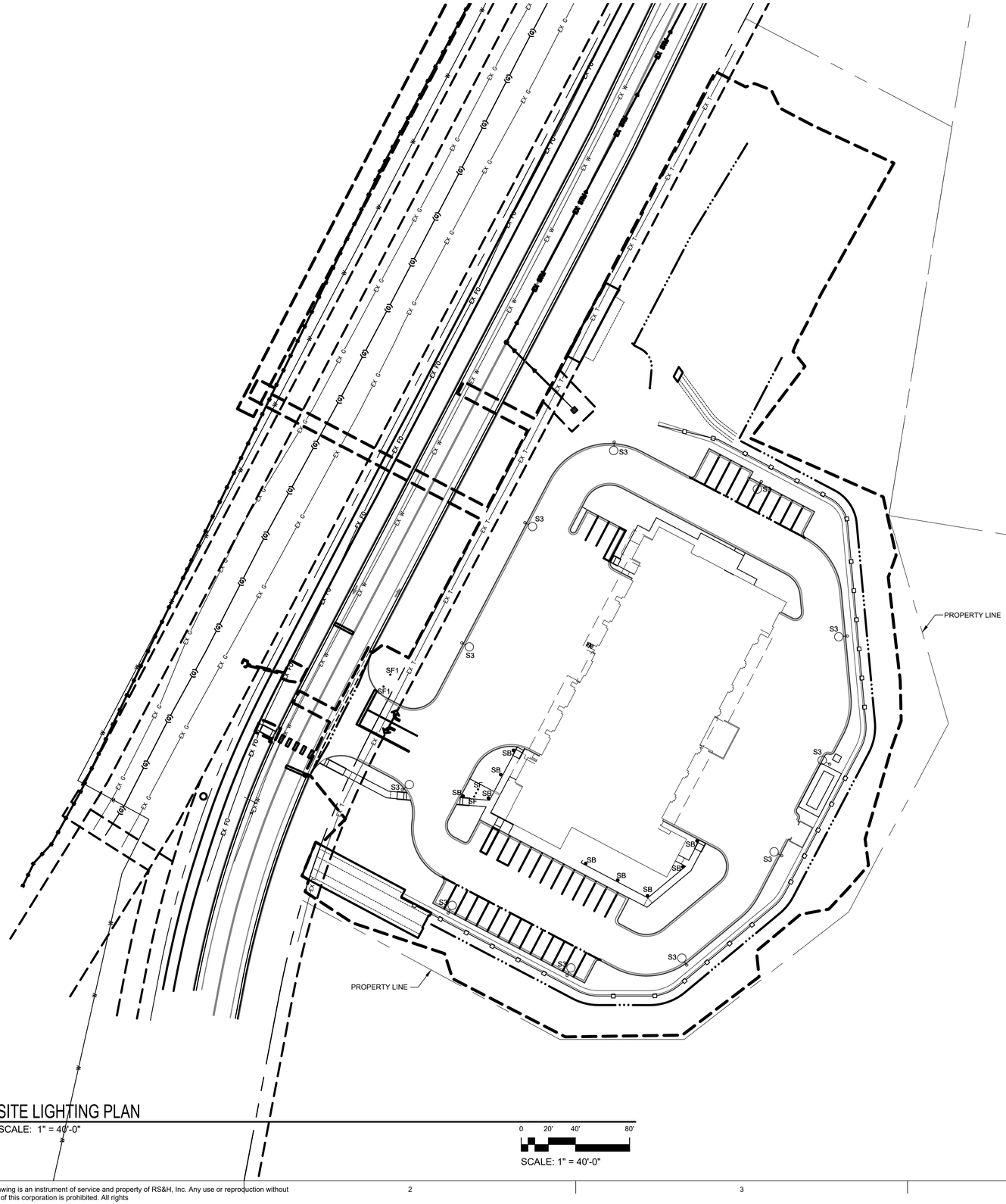
SHEET TITLE:
IRRIGATION CHARTS

SHEET ID:
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Sheet 40 of 47

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SITE LIGHTING PLAN
SCALE: 1" = 40'-0"

0 20' 40' 80'
SCALE: 1" = 40'-0"

GENERAL NOTES

A. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OR PIPELINE COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE, OR BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.

B. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF WORK IN ADVANCE OF AN DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL, AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES, IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OTHERWISE.

C. ALL EXTERIOR LIGHTING CONDUITS SHALL BE 1" SCHEDULE 40 PVC UNLESS OTHERWISE INDICATED.

D. ALL EXTERIOR LIGHTING CONDUCTORS SHALL BE #8 UNLESS OTHERWISE INDICATED.

E. ALL ELECTRICAL EQUIPMENT AND ASSOCIATED SUPPORT EQUIPMENT TO BE PAINTED TO MATCH SURROUNDING BUILDING AS SELECTED BY ARCHITECT.

F. EXACT LOCATION OF LIGHT FIXTURE TO BE COORDINATED IN THE FIELD WITH LANDSCAPE ARCHITECT AND WITH FINAL APPROVAL BY ARCHITECT.

G. ARROW ADJACENT TO LIGHT FIXTURE INDICATES DIRECTION OF REFLECTOR.

H. EXTERIOR LIGHTING CONTROL
1. SIGN LIGHTING LUMINAIRES, TYPE "SF1", SHALL BE ON PHOTOCELL ON-TIMED OFF CONTROL AS PER 2021 IECC ARTICLE 701.4.6.4.1.2, EXCEPTION 1.
2. FLAG POLE LUMINAIRES, TYPE "SF", SHALL BE ON PHOTOCELL ON-PHOTOCELL OFF CONTROL.
3. PARKING LOT AND BOLLARD LUMINAIRES, TYPE "S3" AND "SB", SHALL BE AUTOMATICALLY DIMMED 50% FROM MIDNIGHT TO 6:00AM AS PER 2021 IECC ARTICLE C405.2.7.3.
4. LIGHT LOSS FACTOR IS TO BE 1.
5. EXTERIOR LIGHTING FOR EGRESS TRAVEL (TO THE PUBLIC WAY) SHALL COMPLY WITH CURRENT ADOPTED BUILDING CODES.
6. ALL BUILDING MOUNTED LIGHT FIXTURES SHALL HAVE 0% UPLIGHT.

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PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: SMF/WMB
DRAWN BY: RJO
DESIGNED BY: WMB
PROJECT NUMBER: 20611004000

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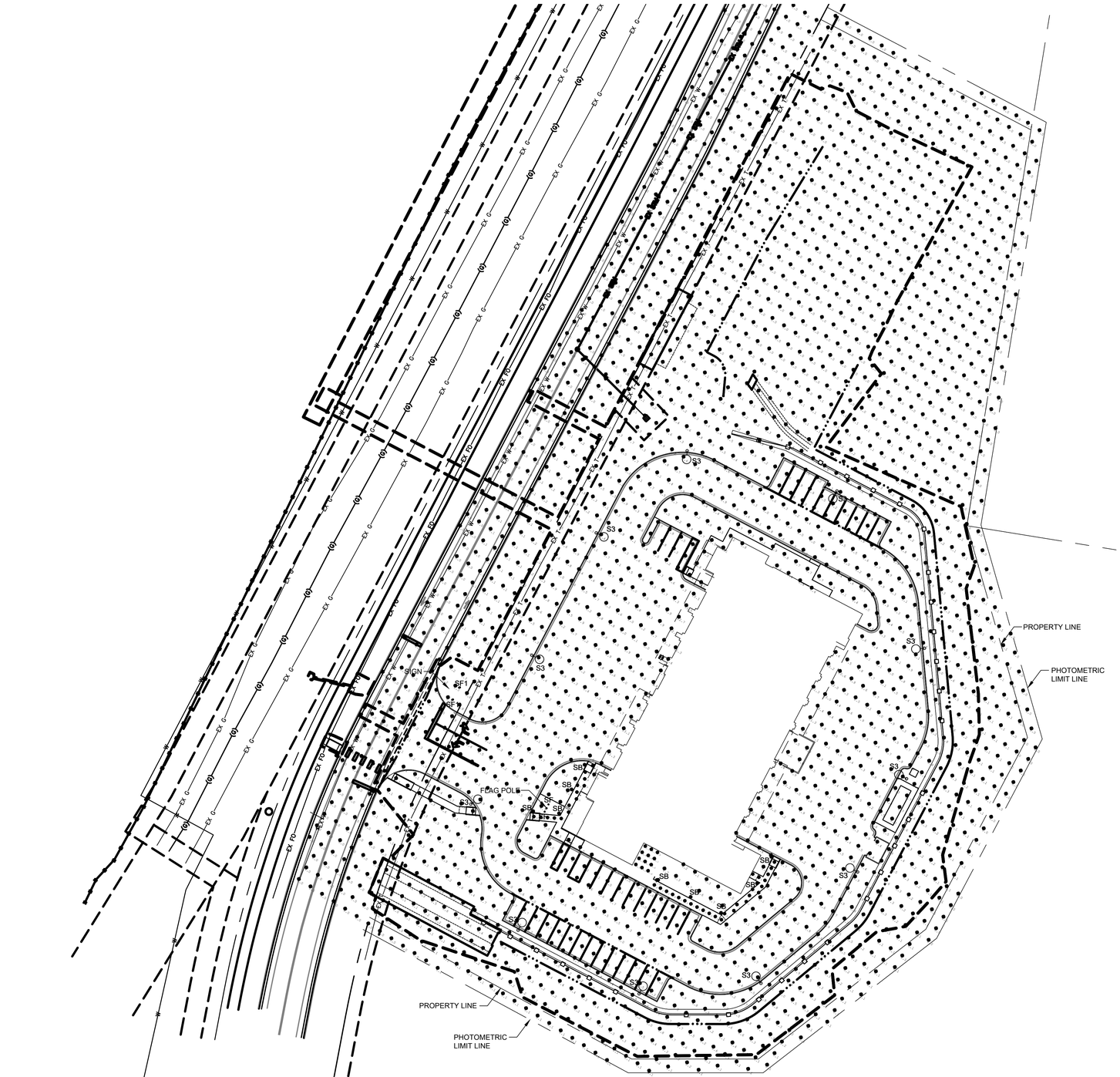
SHEET TITLE:
SITE LIGHTING PLAN

SHEET ID:
41
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PROJECT STATUS:
Site Construction Documents

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SITE PHOTOMETRIC PLAN
SCALE: 1" = 40'-0"

0 20' 40' 80'
SCALE: 1" = 40'-0"

GENERAL NOTES

A. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE UTILITY OR PIPELINE COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE, OR BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.

B. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF WORK IN ADVANCE OF AN DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL, AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES, IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OTHERWISE.

C. ALL EXTERIOR LIGHTING CONDUITS SHALL BE 1" SCHEDULE 40 PVC UNLESS OTHERWISE INDICATED.

D. ALL EXTERIOR LIGHTING CONDUCTORS SHALL BE #8 UNLESS OTHERWISE INDICATED.

E. ALL ELECTRICAL EQUIPMENT AND ASSOCIATED SUPPORT EQUIPMENT TO BE PAINTED TO MATCH SURROUNDING BUILDING AS SELECTED BY ARCHITECT.

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6. ALL BUILDING MOUNTED LIGHT FIXTURES SHALL HAVE 0% UPLIGHT.

Calculation Summary List the Use Area / Zone Type

Label	Calc Type	Units	Average	Min	Max	AVG Min Max
AREA		fc	1.24	0	13.1	N/A
WALKWAY		fc	2.59	0.4	4.6	6.48
CANOPY		fc	18.86	9.9	30.8	2.43

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CASTLE ROCK FIRE STATION 156 & LOGISTICS

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED: 12/15/2025
REVIEWED BY: SMF/WMB
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DESIGNED BY: WMB
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SEAL:

SHEET TITLE:
SITE PHOTOMETRIC PLAN

SHEET ID:
42
Sheet 42 of 47

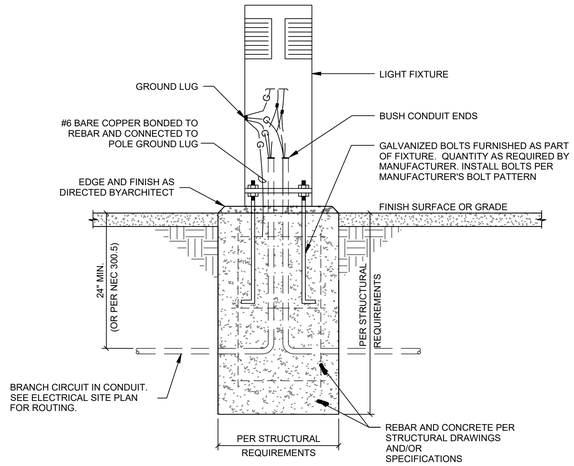
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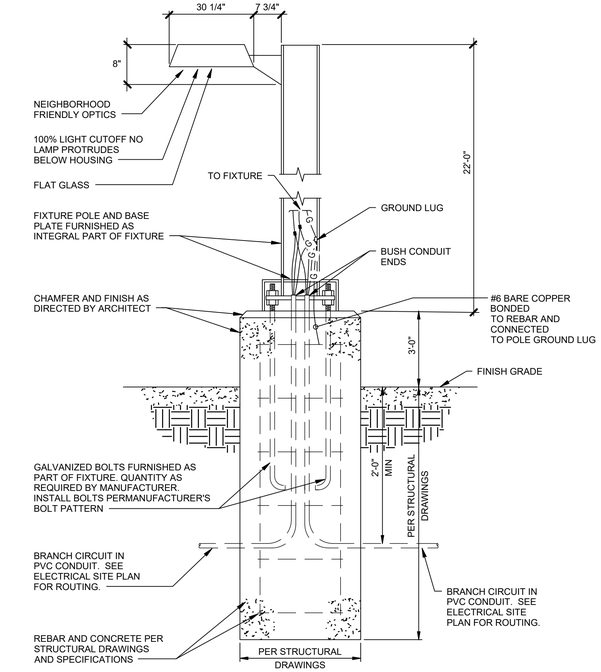
Site Luminaire Summary Table

Luminaire												Lamps						
ID/ Symbol	Manufacturer	Model	Catolog 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
C6	ALPHABET	NU	#NU6-RD-XTM19-20LM-35K-83-HE60-277-DIM10-NC-FINISH-FINISH	WET LOCATION DOWNLIGHT	YES	60° DOWNLIGHT	UNV	0-10%	4	CANOPY RECESSED	10'	ARRAY	LED	28	1710	3500K/80	1	BY ARCHITECT
DSF	KIM	WALL DIRECTOR	#WDM/D/48L/65/4K7/3/UNV/FINISH	WET LOCATION WALL LUMINAIRE	YES	TYPE III	UNV	0-10%	12	WALL SURFACE	15'	ARRAY	LED	65	8662	4000K/70	1	BY ARCHITECT
SB	KIM	VRB1	#VRB1-15L-4K-UV-FINISH	BOLLARD	YES	TYPE III	UNV	0-10%	9	BOLLARD	42" HIGH	ARRAY	LED	13	3414	4000K/70	1	BY ARCHITECT
S3	BEACON	VIPER	#VP/MICRO-STRIKE/2/320L-145/4K7/3/UNV/A/FINISH/SHD-2-HSS-90-B/ADD/SSS-B-25-50-B-1-FINISH	AREA	YES	TYPE III	UNV	0-10%	11	POLE	25'	ARRAY	LED	150	19,293	4000K/70	1	BY ARCHITECT
SF	KIM	LIGHT VAULT	#LTVB2-FF-SP-18L-4K-UNV	IN-GRADE/FLAGPOLE	NO	SPOT	UNV	0-10%	2	IN-GRADE	N/A	ARRAY	LED	22	1857	4000K/70	1	N/A
SF1	KIM	LIGHTSCAPER	#LSP-LSCS	SIGN LIGHTER	NO	WIDE	UNV	0-10%	2	STANCHION	N/A	ARRAY	LED	8.1	1025	4000K/70	1	BY ARCHITECT



1 - BOLLARD FIXTURE MOUNTING

NONE



2 - EXTERIOR LUMINAIRE POLE CONNECTION DETAIL

N.T.S.

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DESIGNED BY:	WMB

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SHEET TITLE:
ELECTRICAL DETAILS

SHEET ID:
43
Sheet 43 of 47

PROJECT STATUS:
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3 WEST (FRONT) ELEVATION - LOGISTICS SIDE

SCALE: 1/8" = 1'-0"

0 4' 8' 16'



2 WEST (FRONT) ELEVATION - FIRE STATION SIDE

SCALE: 1/8" = 1'-0"

0 4' 8' 16'



1 WEST (FRONT) ELEVATION

SCALE: 3/32" = 1'-0"

0 8' 16' 24'

ELEVATION KEYNOTES

1 ASPHALT SHINGLES
2 HORIZONTAL METAL PANEL, WOOD GRAIN WALNUT
3 ADHERED MANUFACTURED STONE VENEER
4 VERTICAL METAL PANEL, 12-INCH PROFILE
5 STANDING SEAM ROOF, DARK BRONZE
6 METAL PANEL, DARK BRONZE
7 STEEL STRUCTURE AND ACCENTS, DARK BRONZE
8 APPARATUS BAY OVERHEAD SECTIONAL DOORS, DEEP RED
9 SPLIT FACE CMU, LIGHT TAN
10 METAL PANEL SHINGLE SIDING, ALMOND
11 ALUMINUM STOREFRONT, DARK BRONZE
12 OPERABLE ALUMINUM WINDOWS, DARK BRONZE
13 H.M. DOORS AND FRAMES, PAINTED DARK BRONZE
14 CASTLE ROCK FIRE RESCUE DEPARTMENT LOGO SIGNAGE
15 DIMENSIONAL LETTER SIGNAGE, LIGHT GRAY COLOR
16 DOWNSPOUT, DARK BRONZE U.N.O.
17 DOWNSPOUTS ALONGSIDE STONE PILASTERS, PAINT TO MATCH STONE
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26 SCUPPER AND DOWNSPOUT
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28 FIRE SPRINKLER ROOM
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30 COILING DOOR, DARK BRONZE
31 CORNERSTONE LAID INTO STONE VENEER, EXACT SIZE T.B.D.
32 PAINT EXPOSED PIPING, CONDUIT, AND EQUIPMENT TO MATCH WALL SURFACE COLOR, TYPICAL
33 BACKLIT DIMENSIONAL LETTER SIGNAGE 30" TALL, RED

EXTERIOR MATERIAL LEGEND

ASPHALT SHINGLES
BASIS OF DESIGN: OWENS CORNING, TRUDEFINITION DURATION FLEX (CLASS 4 HAIL RESISTANCE)
COLOR: DRIFTWOOD

VERTICAL METAL WALL PANEL
BASIS OF DESIGN: BERRIDGE
STYLE: HS-12
COLOR: ALMOND

METAL WALL PANEL SHINGLES
BASIS OF DESIGN: BERRIDGE FISH SCALE SHINGLES
COLOR: ALMOND

ADHERED MANUFACTURED STONE VENEER
BASIS OF DESIGN: SUNSET STONE
STYLE & COLOR: 70/30 BLEND OF NATURAL COBBLE AND NATURAL LEDGE STONE

STANDING SEAM ROOF
BASIS OF DESIGN: BERRIDGE CEE-LOCK PANEL
COLOR: DARK BRONZE

HORIZONTAL METAL PANEL
BASIS OF DESIGN: HS-8
COLOR: WOOD GRAIN WALNUT

FOUR-FOLD / OVERHEAD DOORS
COLOR: RED

OVERHEAD DOORS
COLOR: DARK BRONZE

SPLIT-FACE CMU WALL
COLOR: LIGHT TAN

STEEL STRUCTURE AND ACCENTS
COLOR: DARK BRONZE

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COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

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DATE ISSUED:	12/15/2025
REVIEWED BY:	TL
DRAWN BY:	MD
DESIGNED BY:	MD

PROJECT NUMBER:
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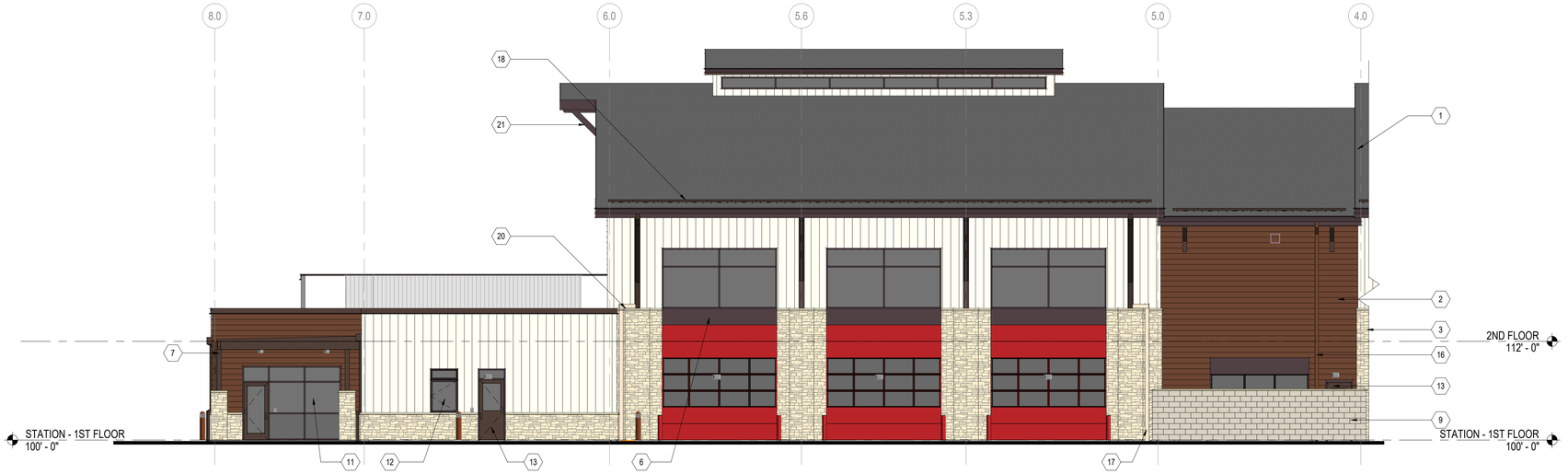
SHEET TITLE:
BUILDING ELEVATIONS

SHEET ID:
44
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PROJECT STATUS:
Site Construction Documents

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2 EAST (BACK) ELEVATION - FIRE STATION

SCALE: 1/8" = 1'-0"

0 4' 8' 16'



3 EAST (BACK) ELEVATION - LOGISTICS

SCALE: 1/8" = 1'-0"

0 4' 8' 16'



1 EAST (BACK) ELEVATION

SCALE: 3/32" = 1'-0"

0 8' 16' 24'

ELEVATION KEYNOTES

1 ASPHALT SHINGLES
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32 PAINT EXPOSED PIPING, CONDUIT, AND EQUIPMENT TO MATCH WALL SURFACE COLOR, TYPICAL
33 BACKLIT DIMENSIONAL LETTER SIGNAGE 30" TALL, RED

EXTERIOR MATERIAL LEGEND

ASPHALT SHINGLES
BASIS OF DESIGN: OWENS CORNING, TRUDEFINITION DURATION FLEX (CLASS 4 HAIL RESISTANCE)
COLOR: DRIFTWOOD

VERTICAL METAL WALL PANEL
BASIS OF DESIGN: BERRIDGE
STYLE: HS-12
COLOR: ALMOND

METAL WALL PANEL SHINGLES
BASIS OF DESIGN: BERRIDGE FISH SCALE SHINGLES
COLOR: ALMOND

ADHERED MANUFACTURED STONE VENEER
BASIS OF DESIGN: SUNSET STONE
STYLE & COLOR: 70/30 BLEND OF NATURAL COBBLE AND NATURAL LEDGE STONE

STANDING SEAM ROOF
BASIS OF DESIGN: BERRIDGE CEE-LOCK PANEL
COLOR: DARK BRONZE

HORIZONTAL METAL PANEL
BASIS OF DESIGN: HS-8
COLOR: WOOD GRAIN WALNUT

FOUR-FOLD / OVERHEAD DOORS
COLOR: RED

OVERHEAD DOORS
COLOR: DARK BRONZE

SPLIT-FACE CMU WALL
COLOR: LIGHT TAN

STEEL STRUCTURE AND ACCENTS
COLOR: DARK BRONZE

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NO.	DESCRIPTION	DATE

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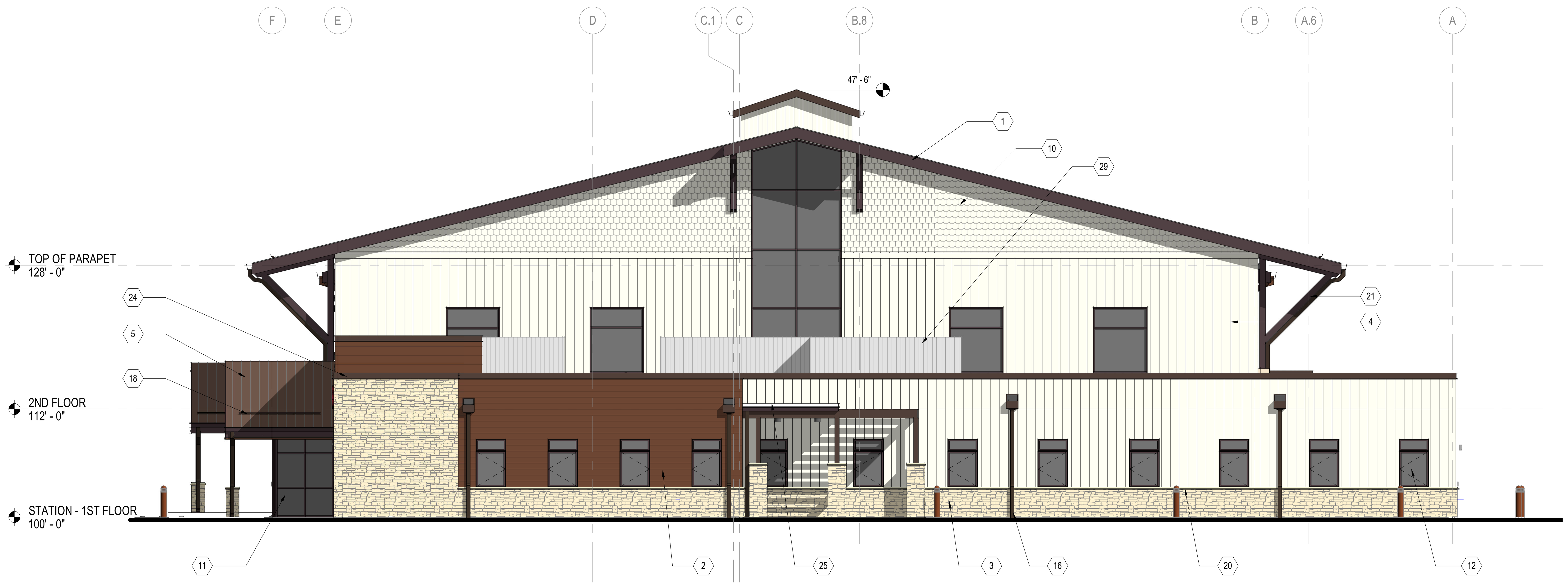
SHEET TITLE:
BUILDING ELEVATIONS

SHEET ID:
45
Sheet 45 of 47

PROJECT STATUS:
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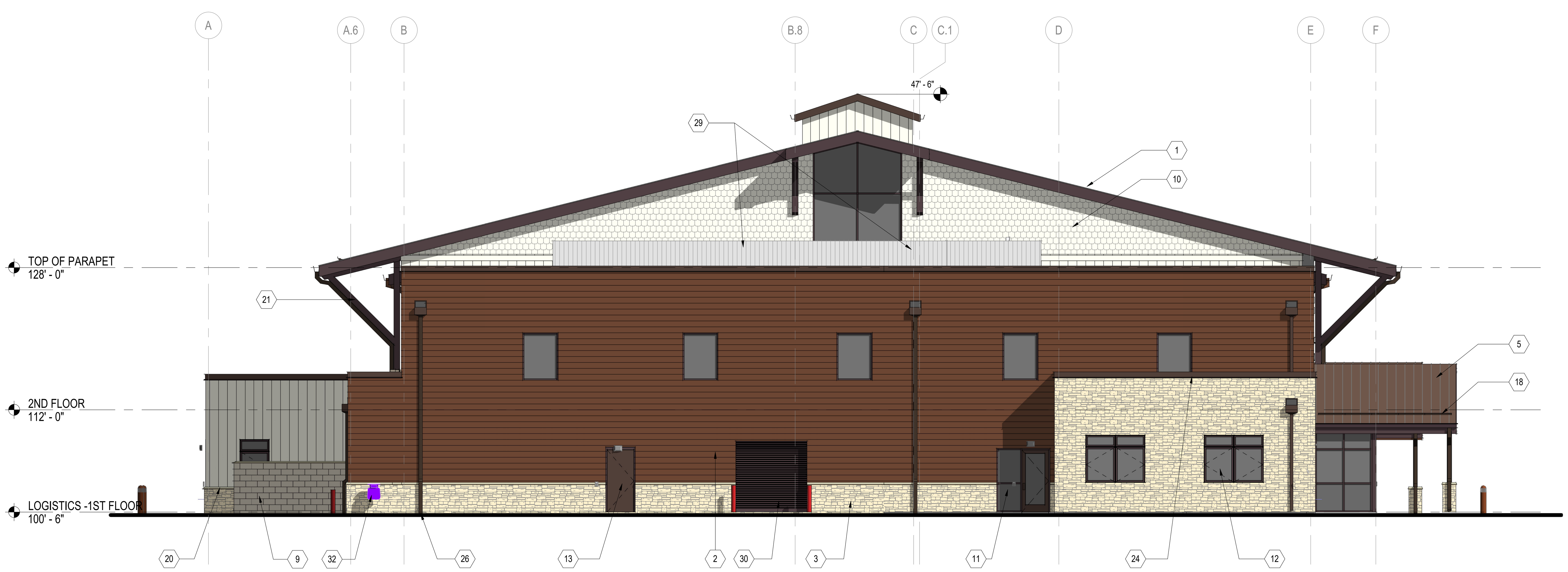
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2 SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

0 4' 8' 16'



1 NORTH ELEVATION

SCALE: 1/8" = 1'-0"

0 4' 8' 16'

ELEVATION KEYNOTES

1	ASPHALT SHINGLES
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COLOR: LIGHT TAN

STEEL STRUCTURE AND ACCENTS
COLOR: DARK BRONZE

8 0 8 16

SCALE: 1/8" = 1'-0"

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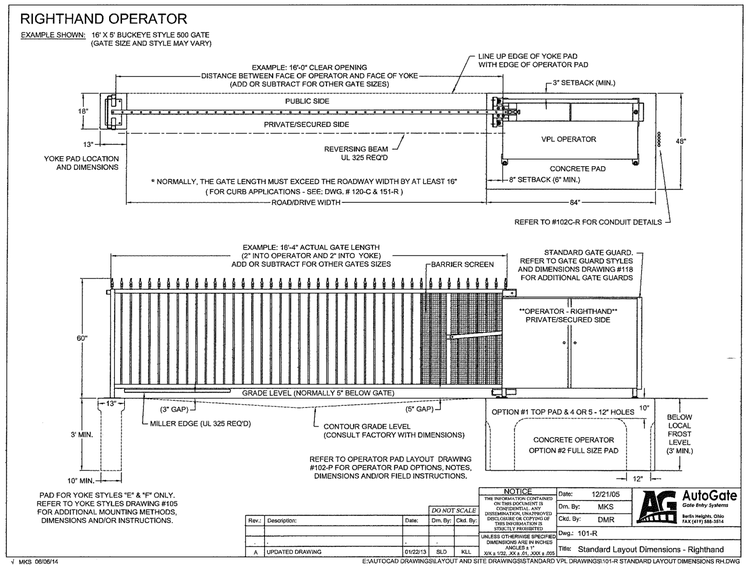
SHEET TITLE:
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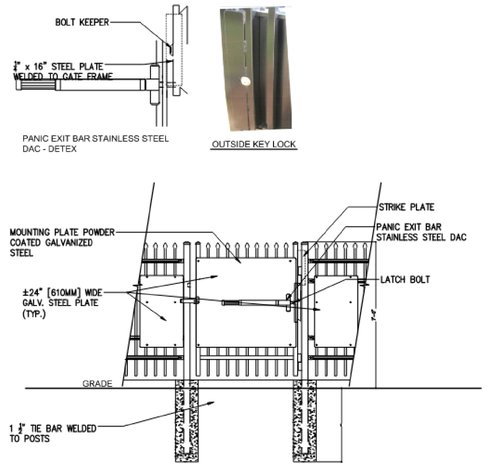
PROJECT STATUS:
Site Construction Documents

Autodesk Docs://16322_Castle Rock Fire Station 156 & Fleet Facility/16322_Castle Rock Fire 156 and Fleet_A_R24.rvt
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NOTE: FENCE COLOR SHALL BE BLACK

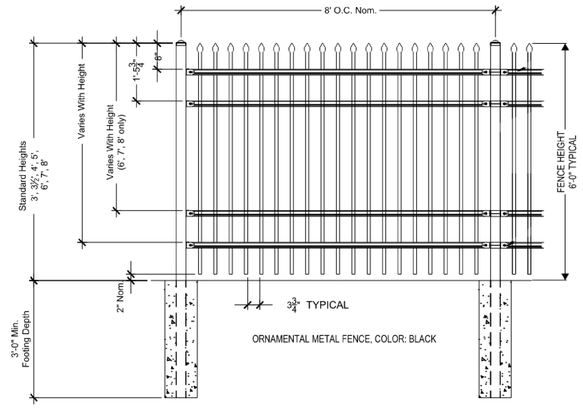


2 4' PEDESTRIAN GATE WITH PANIC BAR

AS SUPPLIED BY AMERISTAR, TULSA, OK (1-888-333-3422) OR APPROVED EQUAL
MODEL:6' HEIGHT MONTAGE II CLASSIC 3 RAIL SINGLE

NOT TO SCALE

NOTE: FENCE COLOR SHALL BE BLACK

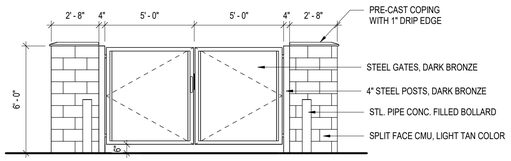


1 SECURITY FENCE - 6' HEIGHT

AS SUPPLIED BY AMERISTAR, TULSA, OK (1-888-333-3422) OR APPROVED EQUAL
MODEL: MONTAGE II CLASSIC 4 RAIL FENCE
COLOR: BLACK

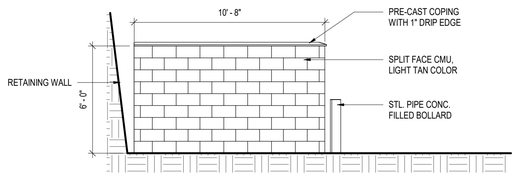
NOT TO SCALE

NOTE: FENCE COLOR SHALL BE BLACK



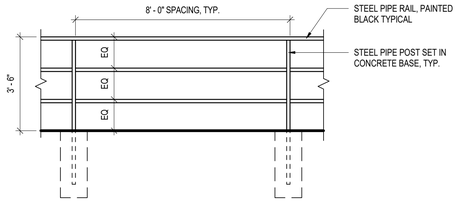
4 TRASH ENCLOSURE - FRONT ELEVATION

SCALE: 1/4" = 1'-0"



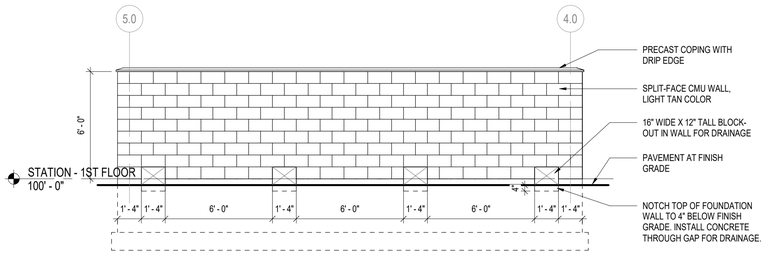
5 TRASH ENCLOSURE - SIDE ELEVATION

SCALE: 1/4" = 1'-0"



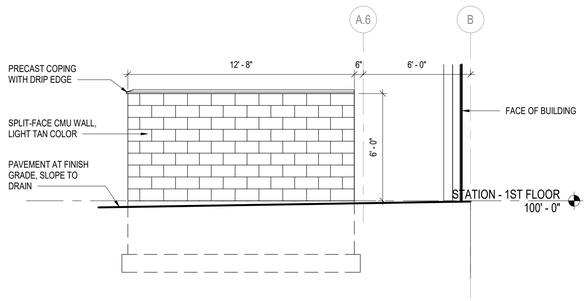
6 RAILING AT TOP OF RETAINING WALL

SCALE: 3/8" = 1'-0"



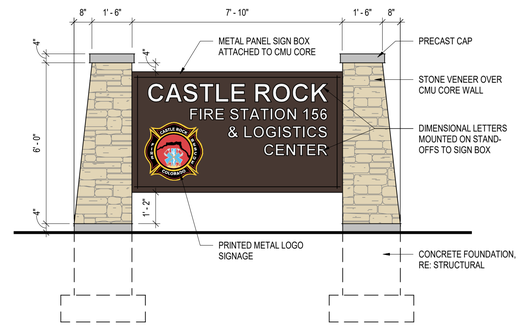
1 FITNESS PATIO SITE WALL - FRONT ELEVATION

SCALE: 1/4" = 1'-0"



2 FITNESS PATIO SITE WALL - SIDE ELEVATION

SCALE: 1/4" = 1'-0"



3 MONUMENT SIGN - ELEVATION

SCALE: 3/8" = 1'-0"

RS&H
102 East Moreno Avenue
Colorado Springs, CO 80903
719-473-7063
www.rsandh.com

PROJECT TITLE:
CASTLE ROCK FIRE STATION 156 AND LOGISTICS CENTER

PROJECT ADDRESS:
COBBLESTONE OPEN SPACE - CASTLE OAKS DRIVE

REVISIONS

NO.	DESCRIPTION	DATE

DATE ISSUED:	12/15/2025
REVIEWED BY:	TL
DRAWN BY:	MD
DESIGNED BY:	MD

PROJECT NUMBER:
20611004000

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SEAL:

SHEET TITLE:
SITE DETAILS

SHEET ID:
47
Sheet 47 of 47

PROJECT STATUS:
Site Construction Documents

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