

GENERAL NOTES:

- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE LOCAL JURISDICTION MUNICIPAL CODE, TECHNICAL MANUALS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE TECHNICAL MANUAL OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY PUBLIC WORKS OR UTILITIES INSPECTOR.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE.
- THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE TOWN/CITY 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.
- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE CRITERIA AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ONSITE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
- IF DURING THE CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT PUBLIC WORKS INSPECTOR IMMEDIATELY.
- ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH MUTCD TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (TOWN/CITY, COUNTY OR STATE) FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR AS DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED UNLESS SPECIFICALLY NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE AND AVAILABLE TO PUBLIC WORKS INSPECTOR AT ALL TIMES.
- DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTANT ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
- THE CONTRACTOR SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO PERMIT FOR STORM WATER DISCHARGE (IF APPLICABLE), THE STORM WATER MANAGEMENT PLAN, AND THE EROSION CONTROL PLAN.
- ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO ANY OTHER EARTH-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR LANDSCAPING.
- THE CONTRACTOR SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF THE WATER LINES AND DRY UTILITIES.
- THERE SHALL BE NO SITE CONSTRUCTION ACTIVITIES ON SATURDAYS UNLESS SPECIFICALLY APPROVED BY PUBLIC WORKS INSPECTOR AND NO SITE CONSTRUCTION ACTIVITIES ON SUNDAYS OR HOLIDAYS UNLESS THERE IS PRIOR WRITTEN APPROVAL BY THE PUBLIC WORKS DIRECTOR.
- NO SOLID OBJECT (EXCLUDING FIRE HYDRANTS AND TRAFFIC CONTROL DEVICES AND TRAFFIC SIGNS) EXCEEDING THIRTY (30) INCHES IN HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET, INCLUDING BUT NOT LIMITED TO BUILDINGS, UTILITY CABINETS, WALLS, FENCES, LANDSCAPE PLANTINGS, CROPS, CUT SLOPES, AND BERMS, SHALL BE PLACED WITHIN SIGHT DISTANCE LINES AND SIGHT DISTANCE EASEMENTS.

BENCHMARK:

ELEVATIONS ARE BASED ON COLORADO SPRINGS UTILITIES FACILITIES INFORMATION SYSTEM (FIMS) "BLT 167", A 2" ALUMINUM CAP IN CONCRETE LOCATED ON AN ELECTRIC TRANSFORMER PAD AT THE SOUTHEAST CORNER OF WOODMEN ROAD AND MERIDIAN ROAD, WITH AN ELEVATION OF 6873.18 (NGVD 29).

BASS OF BEARING:

S 89° 49'00" W BETWEEN SOUTHEAST CORNER, SECTION1, T13S, R65W, SIXTH P.M. AND THE SOUTH ¼ CORNER, SECTION1 T13S, R65W, SIXTH P.M.

LEGAL DESCRIPTION:

LOT 10 , FALCON MARKETPLACE, ACCORDING TO THE PLAT AS RECORDED DECEMBER 23, 2019 AT RECEPTION NO. 219714441, COUNTY OF EL PASO, STATE OF COLORADO.

ENGINEERS CERTIFICATION:

THESE CONSTRUCTION DRAWINGS WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF THE STORM DRAINAGE AND SANITARY CONSTRUCTION DETAILS AND TECHNICAL SPECIFICATIONS AND THE STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA OF THE COUNTY OF EL PASO.

THOMAS PANNELL, P.E.
COLORADO NO. 53615

SITE DEVELOPMENT PLANS FOR SUPER STAR CAR WASH FALCON MARKETPLACE LOT 10

LOCATED IN A PORTION OF THE SE ¼ OF SECTION 1, TOWNSHIP 13 SOUTH,
RANGE 65 WEST OF THE 6TH. P.M.
EL PASO COUNTY, STATE OF COLORADO



VICINITY MAP

SCALE= 1" = 500'

PROPERTY OWNER:

SUPER STAR CAR WASH
1830 N 95TH AVE, SUITE 106
PHOENIX, AZ 85037
CONTACT: TIM VARLEY
PHONE: (801) 651-1748

ENGINEER:

BOWMAN CONSULTING
1526 COLE BLVD, SUITE 100
LAKEWOOD, CO 80401
CONTACT: THOMAS PANNELL, PROJECT MANAGER
PHONE: (303) 801-2900

SURVEYOR:

BOWMAN CONSULTING
1526 COLE BLVD, SUITE 100
LAKEWOOD, CO 80401
CONTACT: BRIAN SOCIA, DIRECTOR OF SURVEY
PHONE: (303) 801-2900

DEVELOPER:

EVERGREEN
2390 EAST CAMELBACK ROAD,
PHOENIX, AZ 85016
CONTACT: KAREN LEVITT ORTIZ, DEVELOPMENT MANAGER
PHONE: (602) 808-8600

ARCHITECT:

CAWLEY ARCHITECTS
730 NORTH 52ND STREET, SUITE 203
PHOENIX, AZ 85008
CONTACT: CHRISTOPHER BARTA, SENIOR PROJECT MANAGER
PHONE: (602) 393-5060

COUNTY:

EL PASO COUNTY
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, CO 80910
CONTACT: RYAN HOWSER, PLANNER 1
PHONE: (719) 520-6300

Sheet List Table	
Sheet Number	Sheet Title
C1.0	COVER
C1.1	GENERAL NOTES
C1.2	LOCAL GENERAL NOTES
C2.0	INITIAL EROSION CONTROL PLAN
C2.1	FINAL EROSION CONTROL PLAN
C2.2	EROSION CONTROL DETAILS
C2.3	EROSION CONTROL DETAILS
C3.0	SITE PLAN
C4.0	GRADING PLAN
C5.0	UTILITY PLAN
C6.0	STORM PLAN & PROFILE
C7.0	SANITARY PLAN AND PROFILE
C8.0	CONSTRUCTION DETAILS
C8.1	CONSTRUCTION DETAILS
C8.2	WATER DETAILS
C8.3	SANITARY DETAILS
Ld.01	LANDSCAPE PLAN
Ld.02	IRRIGATION PLAN
Ld.03	LANDSCAPE& IRRIGATION NOTES
DR1.0	ELECTRICAL SITE LIGHTING PLAN
DR2.0	ELECTRICAL SITE PHOTOMETRICS – PRE-CURFEW
DR2.1	ELECTRICAL SITE PHOTOMETRICS – POST-CURFEW

ENGINEERS STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

ENGINEER OF RECORD SIGNATURE

DATE

OWNERS STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN AND ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

OWNER SIGNATURE

DATE

ENGINEER OF RECORD:

THE GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS.

ENGINEER OF RECORD SIGNATURE

DATE

REVIEW ENGINEER:

THE GRADING AND EROSION CONTROL PLAN WAS REVIEWED AND FOUND TO MEET THE CHECKLIST REQUIREMENTS EXCEPT WHERE OTHERWISE NOTED OR ALLOWED BY AN APPROVED DEVIATION REQUEST.

REVIEW ENGINEER

DATE

Bowman
CONSULTING

1526 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 801-2900
www.bowmanconsulting.com

COVER

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

EL PASO COUNTY

COLORADO

SEAL

DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE	H: 1" = XXX' V: 1" = XXX'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
SHEET		
C1.0		

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE	
	ADJACENT PROPERTY LINE	
	LOT LINE	
	RIGHT OF WAY	
	CENTERLINE	
	FLOOD PLAIN	
	LIMITS OF CONSTRUCTION	
	LIMITS OF DISTURBANCE	
	SWALE / STREAM FLOWLINE	
	OVERFLOW RELIEF PATH	
	FENCE LINE	
	EASEMENT	
	EDGE OF PAVEMENT	
	VERTICAL CURB AND GUTTER	
	MOUNTABLE CURB AND GUTTER	
	CONCRETE SIDEWALK	
	ASPHALT SIDEWALK	
	HANDICAP PARKING	
	SIGN(S)	
	PARKING COUNT INDICATOR	
	VEHICLES PER DAY INDICATOR	
	TEST PIT	
	MONITORING WELL	
	MAJOR CONTOUR	
	MINOR CONTOUR	
	GRADE BREAK	
	RIDGELINE	
	SPOT ELEVATION	
	RIP RAP	
	WATER LINE	
	WATER METER	
	WATER VALVE	
	WATER REDUCER	
	WATER FITTINGS	
	FIRE HYDRANT	
	SANITARY MANHOLE	
	SANITARY CLEANOUT	
	STORM SEWER PIPE	
	STORM SEWER MANHOLE	
	STORM SEWER INLET	
	STORM SEWER FLARED END SECTION	
	STORM SEWER HEADWALL	
	OVERHEAD UTILITY	
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	UTILITY POLE	
	STREET LIGHT	
	CABLE TV SERVICE	
	TELECOM SERVICE	
	FIBER OPTIC SERVICE	
	NATURAL GAS SERVICE	
	TREE	
	TREE LINE	
	WETLANDS	

LEGEND NOTES

1.

THIS IS A STANDARD SHEET, THEREFORE SOME ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT BE USED ON THE PROJECT.
2.

ADDITIONAL LEGENDS AND NOTES MAY BE FOUND ON OTHER SHEETS ASSOCIATED WITH THIS PLAN. THESE LEGENDS AND NOTES ARE TO BE REFERENCED IN ADDITION TO THIS STANDARD SHEET.

ABBREVIATIONS

A	AREA OF ARC	K	SIGHT DISTANCE COEFFICIENT OR
ASHTO	AMERICAN ASSOCIATION OF STATE HWY & TRANS. OFFICIALS	Ke	CULVERT ENTRANCE LOSS COEFFICIENT
AB	AS-BUILT	L	LENGTH
AC	ACRE	LAT	LATERAL
AD	ALGEBRAIC DIFFERENCE IN GRADE	LCC	LIMITS OF CLEARING & GRADING
ADJ	ADJACENT	LF	LINEAR FEET
AGGR	AGGREGATE	LIP	LIP OF PAN
AHD	AND	LOW	LOWEST WATER LEVEL
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	LOS	LINE OF SIGHT
APT	ANGLE POINT	LP	LOW POINT
APPROX	APPROXIMATE	LS	LOADING SPACE
ARCH	ARCHITECTURAL	LT	LEFT
ASPH	AMERICAN SOCIETY FOR TESTING AND	M	MONUMENT FOUND
ASTM	MATERIALS	MAX	MAXIMUM
AWWA	AMERICAN WATER WORKS ASSOCIATION	ME	MATCH EXISTING
		MECH	MECHANICAL
		MH	MANHOLE
		MI	MILE
		MIN	MINIMUM
		MISC	MISCELLANEOUS
		MPH	MILES PER HOUR
		MS	MEDIAN STRIP
		MSL	MEAN SEA LEVEL
		N	NORTHING/NORTH
BOV	BREATH	N/A	NOT APPLICABLE
BRG	BACK OF CURB	NBL	NORTH BOUND LANE
BRL	BASIMENT FLOOR	NOM	NOM OR FORMERLY
BF	BUILDING	NFA	NET FLOOR AREA
BLDG	BENCHMARK	NO. & #	NUMBER
BM	BEST MANAGEMENT PRACTICES	NTS	NOT TO SCALE
BMP	(WATER QUALITY)		
	BLOW OFF VALVE		
	BEARING		
	BUILDING RESTRICTION LINE		
	BEGINNING VERTICAL CURVE ELEVATION		
	BEGINNING VERTICAL CURVE STATION		
	BOTTOM OF WALL		
	CENTER CORRECTION ON VERTICAL CURVE		
	RUNOFF COEFFICIENT		
	CABLE TELEVISION		
	CATCH BASIN		
	CALIFORNIA BEARING RATIO		
	CENTER TO CENTER		
	COLORADO DEPT. OF TRANSPORTATION		
	CUBIC FEET		
	CUBIC FEET PER SECOND		
	CURB AND GUTTER (REVERSE SLOPE)		
	CHORD		
	CHORD BEARING		
	CAST IRON PIPE		
	CENTERLINE		
	CLEAR		
	CUBIC METERS		
	CORRUGATED METAL PIPE		
	CUBIC METERS PER SECOND		
	RUNOFF CURVE NUMBER		
	CONTINUOUS		
	CLEAN OUT		
	CONCRETE		
	CURB STOP		
	COURT		
	CENTER		
	CONTROL LINE		
	CUBIC YARD		
	DEPTH		
	DRAINAGE AREA		
	DEED BOOK		
	DIVERSION DIKE		
	DETAIL		
	DIAMETER		
	DUCTILE IRON PIPE		
	DROP INLET		
	DIP		
	DIST		
	DR		
	DL		
	DM		
	DR		
	DRNG		
	DRN		
	DOWN SPOUT		
	DS		
	DW		
	DWG		
	D/W		
	DELTA		
	EASTING/EAST		
	EACH		
	EA		
	EBL		
	EC		
	ECC		
	EDGE OF GUTTER		
	ENERGY GRADIENT LINE		
	ELEVATION		
	ELEC		
	ELEVATION		
	ENGINEER		
	ENGR		
	ENT		
	EDGE OF ASPHALT		
	EOA		
	EDGE OF CONCRETE		
	EOC		
	EDGE OF PAVEMENT		
	EOP		
	EQUIP		
	EXISTING TO BE DEMOLISHED		
	EXISTING TO REMAIN		
	ETR		
	EXISTING TO BE RELOCATED		
	ETRL		
	ENDING VERTICAL CURVE ELEVATION		
	EVCE		
	ENDING VERTICAL CURVE STATION		
	EVCS		
	END WALL		
	EXISTING		
	EX		
	ENVIRONMENTAL QUALITY CORRIDOR		
	EOC		
	FIRE LINE		
	FLOOR AREA RATIO		
	FACE OF CURB		
	FDC		
	FLOOR DRAIN		
	FO		
	FLARED END SECTION		
	FES		
	FIRST FLOOR OR FINISH FLOOR		
	FT		
	FINISH GRADE		
	FG		
	FIRE HYDRANT		
	FL		
	FLOW LINE		
	FOUNDATION		
	FND		
	FOYER		
	FLOOD PLAIN		
	FOY		
	FEET PER SECOND		
	FPS		
	FIRE SERVICE OR FACTOR OF SAFETY		
	FS		
	FOOT OR FEET		
	FT		
	GAS		
	GAR		
	GRADE BREAK		
	GB		
	GROSS FLOOR AREA		
	GFA		
	GUARD RAIL OR GRATE INLET		
	GR		
	GATE VALVE		
	GV		
	HEAD		
	HANDICAP		
	H		
	HORIZONTAL BEND		
	HB		
	HOT BITUMINOUS PAVEMENT		
	HBP		
	HYDRAULIC GRADE LINE		
	HQL		
	HORIZONTAL		
	HORZ		
	HP		
	HAND RAIL		
	HR		
	HEIGHT		
	HEADWATER		
	HT		
	RAINFALL INTENSITY		
	INSIDE DIAMETER OR IDENTIFICATION		
	I		
	INVERT ELEVATION		
	IE		
	INCH		
	INV		
	IRON PIPE		
	IP		
	IRON PIPE FOUND		
	IPF		
	IRON PIPE SET		
	IPS		
	IRRIGATION		
	IRR		
	JUNCTION BOX		
	JB		
	JOINT		
	JNT		

GENERAL NOTES

1.

UTILITY CONFLICTS: ALL EXISTING UTILITIES SHOWN WERE COMPILED USING THE BEST AVAILABLE INFORMATION AND FIELD OBSERVATION. BOWMAN CONSULTING INC. DOES NOT GUARANTEE THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON. CONTRACTOR TO BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION OF AND PROTECTING ALL EXISTING UTILITIES, INCLUDING THOSE NOT SHOWN OR SHOWN INCORRECTLY ON THE PLANS. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED IN A TIMELY FASHION TO THE SATISFACTION OF THE APPROPRIATE GOVERNING AGENCY AND THE OWNER OF THE IMPACTED UTILITY AT THE CONTRACTOR'S EXPENSE.
2.

ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS FOR THE APPROPRIATE GOVERNING AGENCY. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT THE JOB SITE AT ALL TIMES THE APPROPRIATE GOVERNING AGENCY'S PUBLIC WORKS MANUAL, ALL APPROVED EASEMENT AGREEMENTS, AND ONE (1) SIGNED COPY OF THE PLANS AS APPROVED BY THE APPROPRIATE GOVERNING AGENCY. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE APPROPRIATE GOVERNING AGENCY FOR ANY VARIANCE TO THE ABOVE DOCUMENTS.
3.

CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARDS, SPECIFICATIONS, PERMITS, BONDS, ETC., WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.
4.

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS AT AND ADJACENT TO THE JOB SITE INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND MUST COMPLY WITH OSHA REGULATIONS.
5.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER/DEVELOPER AND ENGINEER OF ANY PROBLEM CONFORMING TO THE APPROVED PLANS FOR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO ITS CONSTRUCTION.
6.

THE CONTRACTOR SHALL REPAIR ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY HIS/HER CONSTRUCTION.
7.

THE CONTRACTOR SHALL NOTIFY THE LOCAL JURISDICTION AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION. THE APPROPRIATE FIRE DEPARTMENT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CLOSURES AND IN THE EVENT THAT ANY FIRE HYDRANTS ARE TO BE TEMPORARILY REMOVED FROM SERVICE, THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROVIDING AT LEAST 48 HOURS ADVANCED NOTICE OF ANY NEED TO SHUT DOWN ANY PORTION OF THE EXISTING WATER SYSTEM AND FOR OBSERVATIONS AND/OR INSPECTIONS REQUIRED.
8.

THE CONTRACTOR SHALL PROVIDE ALL SIGNS, BARRICADES, FLAGMEN, LIGHTS OR OTHER DEVICES NECESSARY FOR SAFE TRAFFIC CONTROL IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND AS MODIFIED BY THE COLORADO SUPPLEMENT TO THE MUTCD. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE APPROPRIATE GOVERNING AGENCY PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMIT FOR WORK WITHIN THE RIGHT-OF-WAY.
9.

THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 AT LEAST 2 BUSINESS DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH ANY AFFECTED UTILITY COMPANY.
10.

THE CONTRACTOR SHALL OBTAIN COPIES OF THE "SOILS AND INVESTIGATION" REPORT FROM GEOTECHNICAL ENGINEER ALONG WITH THE "PAVEMENT THICKNESS DESIGN REPORT". THE CONTRACTOR MUST HAVE COPIES OF SAME ON THE SITE AT ALL TIMES.
11.

THE CONTRACTOR IS REQUIRED TO PROVIDE AS-CONSTRUCTED HORIZONTAL AND VERTICAL CONSTRUCTION INFORMATION, INCLUDING THE LOCATIONS OF ALL SANITARY LINES AND SERVICES, WATER LINES AND SERVICES, AND OTHER UTILITY LINES AND SERVICES TO THE ENGINEER FOR PREPARATION OF AS-BUILT DOCUMENTS.
12.

LIMITS OF CONSTRUCTION EASEMENTS AND RIGHTS-OF-WAY SHALL BE DELINEATED WITH TEMPORARY STAKING BY THE CONTRACTOR. SAFETY FENCING SHALL BE PER APPROPRIATE GOVERNING AGENCY.
13.

WHERE EXCAVATION IS REQUIRED UNDER EXISTING ASPHALT OR CONCRETE PAVEMENT, THE EXISTING PAVEMENT SHALL BE SAW CUT IN A MANNER TO EFFECT A SMOOTH, STRAIGHT-CUT EDGE. ASPHALT PATCH SHALL BE PER APPROPRIATE GOVERNING AGENCY STANDARDS.
14.

REFER TO FINAL RECORDED PLAT FOR ACTUAL LOT, TRACT, PARCEL, AND EASEMENT LOCATIONS AND DESIGNATIONS.
15.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL MATERIALS WITHIN DEDICATED RIGHT-OF-WAYS AND ALL MATERIALS AND WORKMANSHIP SHALL MEET THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS OF THE APPROPRIATE GOVERNING AGENCY.
16.

THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY TO THE PROJECT WORK SITE (SEE THE EROSION CONTROL PLAN). THE CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY (IF APPLICABLE) TO COMPLETE THE CONSTRUCTION AND SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
17.

WATER WILL BE PROVIDED BY THE CONTRACTOR TO KEEP WIND EROSION IN CHECK. USE OF WATER AS A DUST PREVENTATIVE SHALL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE COST OF THE WORK.
18.

ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE PROPERTY LIMITS DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR.
19.

ANY CONSTRUCTION DEBRIS OR MUD TRACKING IN THE PUBLIC RIGHT-OF-WAY RESULTING FROM THIS DEVELOPMENT SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL IMMEDIATELY FIX ANY EXCAVATIONS OR PAVEMENT FAILURES CAUSED BY THE DEVELOPMENT AND SHALL PROPERLY BARRICADE THE SITE UNTIL CLEAN UP OR REPAIR IS COMPLETE.
20.

IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO GRADE STREET CORES, RIGHT-OF-WAY TEMPLATES, AND LOTS ACCORDING TO GRADING INSTRUCTIONS SHOWN ON PLANS.
21.

STREET CONTOURS SHOWN AT PROPOSED STREET LOCATIONS REPRESENT FINISHED GRADE ELEVATION TO TOP OF ASPHALT.
22.

COMPACTION FILL MATERIAL SHALL BE COMPACTED ACCORDING TO THE APPROPRIATE GOVERNING AGENCY REGULATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
23.

TOLERANCE ROUGH GRADING: TOLERANCE SHALL BE +/- 0.1 FEET.
24.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE ALL APPROPRIATE PERMITS FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY HAVE BEEN OBTAINED PRIOR TO GRADING. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL TEMPORARY WATER DIVERSION/CONTROL DEVICES AND EROSION CONTROL DEVICES NECESSARY TO PROTECT ADJACENT PROPERTIES, WATERWAYS AND PUBLIC RIGHT-OF-WAY. CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF SAID DEVICES THROUGHOUT CONSTRUCTION AND UNTIL THE PERMANENT PROTECTION NECESSARY HAS BEEN COMPLETED.
25.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE MOST CURRENT APPROVED ARCHITECTURAL/MECHANICAL/ELECTRICAL/PLUMBING/STRUCTURAL PLANS AND COORDINATE SAME WITH THE SITE PLAN, PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.
26.

WHEN DURING THE COURSE OF CONSTRUCTION, ANY OBJECT OF AN UNUSUAL NATURE IS ENCOUNTERED, THE CONTRACTOR SHALL CEASE WORK IN THAT AREA AND IMMEDIATELY NOTIFY THE OWNER, APPROPRIATE GOVERNING AGENCY, AND/OR THE ARCHITECT/ENGINEER.
27.

THE EXISTING UNDERGROUND UTILITIES SHOW HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUANCE OF SERVICE.
28.

ALL STEPS WITH THREE OR MORE RISERS SHALL HAVE HAND RAILS, PER LOCAL CODE.
29.

A SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF EXISTING ROAD TO PROPOSED CURB AND GUTTER AND/OR PROPOSED EDGE OF PAVEMENT TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER IN THE ROADWAY. REMOVE AND RECONSTRUCT EXISTING PAVEMENT AND/OR CURB AS DICTATED BY FIELD CONDITIONS TO PROVIDE POSITIVE DRAINAGE AT TIE-IN-POINTS.
30.

OVERLAY OF EXISTING PAVEMENT SHALL BE MINIMUM OF 1 1/2 INCH DEPTH; ANY COST ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE CONTRACTOR.
31.

ALL RIGHT-OF-WAY DEDICATED FOR PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
32.

AN AIR QUALITY PERMIT SHALL BE OBTAINED IF REQUIRED.
33.

ANY LIGHTING SHOWN HEREON IS AS SPECIFIED BY THE CLIENT AND IS INCLUDED FOR INFORMATION PURPOSES ONLY, AS DIRECTED BY THE OWNER AND/OR PUBLIC AGENCY REQUIREMENTS. BOWMAN CONSULTING GROUP, LTD. HAS NOT PERFORMED THE LIGHTING DESIGN, AND THEREFORE DOES NOT WARRANT AND IS NOT RESPONSIBLE FOR THE DEGREE AND/OR ADEQUACY OF ILLUMINATION ON THIS PROJECT.
34.

THE CONTRACTOR WILL BE REQUIRED TO NOTIFY ALL RESIDENCES WITHIN VICINITY OF THE PROPERTY BOUNDARY TEN (10) DAYS PRIOR TO ANY BLASTING IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY REQUIREMENTS.
35.

NO BLASTING SHALL BE PERMITTED WITHIN 25' OF EXISTING UTILITY LINES OR STRUCTURES. BLASTING TO BE EXTENDED 25' BEYOND PROPOSED STRUCTURES IF CONDITIONS WARRANT FUTURE EXTENSIONS.
36.

ALL RETAINING WALLS 4' IN HEIGHT AND OVER (MEASURED FROM BOTTOM OF FOOTER TO TOP OF WALL) REQUIRE A SEPARATE BUILDING PERMIT.
37.

THE APPROVAL OF THIS PLAN DOES NOT CONSTITUTE THE APPROVAL OF FUTURE WORK.
38.

ALL HANDICAPPED SPACES SHALL HAVE AN ABOVE GRADE IDENTIFICATION SIGN MEETING APPROPRIATE GOVERNING AGENCY STANDARDS.
39.

WHERE A PROPOSED PIPE CROSSES OR PARALLELS A STREET OR DRIVE AISLE, THE ASPHALT SHALL BE NEATLY SAWCUT TO FULL DEPTH. AFTER INSTALLATION OF THE PIPE, THE ROADWAY SHALL BE PATCHED IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AGENCY STANDARDS.

GENERAL NOTES (CONT.)

41.

THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND MAKE ALL INSPECTIONS NECESSARY IN ORDER TO DETERMINE THE FULL EXTENT OF THE WORK REQUIRED TO MAKE THE PROPOSED WORK CONFORM TO THE DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE NATURE AND LOCATION OF THE WORK, CONDITIONS, AND CONFIRMATION AND CONDITION OF EXISTING GROUND SURFACE AND THE CHARACTER OF THE EQUIPMENT AND FACILITIES NEEDED PRIOR TO AND DURING EXECUTION OF THE WORK. THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE CHARACTER, QUANTITY AND QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED. ANY INACCURACIES OR DISCREPANCIES BETWEEN THE DRAWINGS AND SPECIFICATIONS MUST BE BOUGHT TO THE OWNER'S ATTENTION IN ORDER TO CLARIFY THE EXACT NATURE OF THE WORK TO BE PERFORMED PRIOR TO THE COMMENCEMENT OF ANY WORK.
42.

THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING ROADS AND UTILITIES WHICH OCCURS AS A RESULT OF THE PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO THE EXISTING RIGHT-OF-WAY.
43.

ALL STREET CUT AND PATCH WORK IN PUBLIC RIGHT-OF-WAY REQUIRED FOR UTILITIES INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH CITY, COUNTY, AND/OR APPROPRIATE GOVERNING AGENCY STANDARDS AND SPECIFICATIONS.
44.

THE APPROVAL OF THIS PLAN SHALL IN NO WAY GRANT PERMISSION FOR THE CONTRACTOR TO TRESPASS ON OFF-SITE PROPERTIES.
45.

THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS.
46.

THESE PLANS MAKE NO REPRESENTATION AS TO THE SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES.
47.

THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING ALL NECESSARY INSPECTIONS.
48.

EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
49.

ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER.
50.

THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
51.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE DIGGING OF TEST HOLES PRIOR TO BEGINNING OF ANY CONSTRUCTION ON THE PROJECT. IF CONFLICTS ARE DISCOVERED AS A RESULT OF TEST HOLE FINDINGS, NOTIFY OWNER'S REPRESENTATIVE IMMEDIATELY.
52.

EXCAVATION SUPPORT SYSTEMS SHALL CONFORM TO THE PROVISIONS OF OSHA CONSTRUCTION STANDARD 29 CFR PART 1926 SUBPART P, OR CURRENT EDITION.
53.

AT LOCATIONS WHERE THE FINAL SURFACE COURSE OF ASPHALT PAVEMENT IS TO BE FEATHERED INTO THE EXISTING SURFACE COURSE, THE EXISTING SURFACE COURSE IS TO BE SCABBLED TO A MINIMUM DEPTH OF 1" AND A TACK COAT APPLIED PRIOR TO FINAL PAVING TO INSURE A SMOOTH, WELL BONDED JOINT.
54.

ANY NEW PAVEMENT OPENED TO TRAFFIC SHALL RECEIVE A TACK COAT PRIOR TO PLACEMENT OF ANY OVERLYING ASPHALT COURSE.
55.

ALL SIDEWALKS TO BE 4" THICK CONCRETE UNLESS OTHERWISE SHOWN ON THE PLAN.
56.

ALL DEMOLITION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE APPROPRIATE GOVERNING AGENCY.
57.

ALL APPLICABLE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCING DEMOLITION.
58.

ITEMS SHOWN TO BE RELOCATED SHALL BE CAREFULLY REMOVED AND STORED BY THE CONTRACTOR UNTIL SUCH TIME AS THEY CAN BE PLACED IN THEIR NEW LOCATION. CONTRACTOR SHALL VERIFY THESE ITEMS WITH THE OWNER, PRIOR TO CONSTRUCTION.
59.

CONTRACTOR SHALL COORDINATE REMOVAL OR RELOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD ELECTRICAL, TELEPHONE AND CABLE TV LINES AND REMOVAL OF UTILITY POLES, PEDESTALS AND TRANSFORMERS WITH UTILITY COMPANIES AND WITH DEVELOPER PRIOR TO DEMOLITION.
60.

CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTMENTS AND/OR RECONSTRUCTION OF ALL UTILITY COVER (MANHOLE FRAMES AND COVERS, VALVE BOX COVERS, ETC.) TO MATCH THE FINISHED GRADES OF THE AREAS EFFECTED BY THE CONSTRUCTION.
61.

THE CONTRACTOR MUST HAVE THE APPROVED CONSTRUCTION DRAWINGS IN POSSESSION PRIOR TO THE START OF CONSTRUCTION. AT LEAST ONE (1) COPY OF THE APPROVED PLANS, WITH REVISIONS, MUST BE KEPT ON-SITE AT ALL TIMES.
62.

ALL HANDICAP RAMPS SHALL BE BUILT IN ACCORDANCE WITH THE MOST CURRENT EDITION OF THE APPROPRIATE GOVERNING AGENCY STANDARDS, CDOT STANDARDS, AND CURRENT ADA REQUIREMENTS.
63.

THE STORM DRAIN, STORMWATER MANAGEMENT AND WATER QUALITY FACILITIES MUST BE MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME AS THEY ARE NOT ONLY 100% COMPLETE, BUT ALSO THAT 100% OF THE DRAINAGE AREA TO EACH FACILITY IS PERMANENTLY STABILIZED. SEED AND MULCH DOES NOT CONSTITUTE STABILIZATION IN TERMS OF THE CONTRACTOR MAINTENANCE OF THE STORM DRAIN, STORMWATER MANAGEMENT, AND WATER QUALITY FACILITIES. AS STORM DRAIN, STORMWATER MANAGEMENT AND WATER QUALITY FACILITIES SHALL BE TURNED OVER TO THE OWNER COMPLETELY CLEAN AND FREE FROM ANY CONSTRUCTION RELATED SEDIMENT OR DEBRIS.
64.

THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL ADA ACCESSIBLE SIDEWALKS MAINTAIN SLOPES NOT TO EXCEED 5% LONGITUDINALLY AND 2% CROSS SLOPES. SLOPES AT ACCESSIBLE PARKING SPACES AND ACCESS AISLE SHALL BE A MAXIMUM OF 2%, AND THE MANEUVERING CLEARANCE AT EXTERIOR ENTRANCES SHALL HAVE A MAXIMUM SLOPE OF 2%.
65.

DURING CONSTRUCTION, NO TEMPORARY CONNECTIONS TO FIRE HYDRANTS MAY BE MADE WITHOUT THE EXPRESS AUTHORIZATION OF THE UTILITY OWNER.

GENERAL EROSION CONTROL NOTES

1.

THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE FLOWLINES AND PUBLIC RIGHTS-OF-WAY OF THE APPROPRIATE GOVERNING AGENCY AS A RESULT OF THIS CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER.
2.

THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLL

STANDARD NOTES FOR EL PASO COUNTY
GRADING AND EROSION CONTROL PLANS

1.

STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.

2.

NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.

3.

A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.

4.

ONCE THE ESQCP IS APPROVED AND A NOTICE TO PROCEED HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED DEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.

5.

CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.

6.

ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN PRIOR TO IMPLEMENTATION.

7.

TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE STABILIZED.

8.

FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.

9.

ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECOM ADMINISTRATOR PRIOR TO IMPLEMENTATION.

10.

ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS INFEASIBLE.

11.

COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.

12.

ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.

13.

CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUT SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY.

14.

DEWATERING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT MAY NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF.

15.

EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.

16.

BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMPs MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.

17.

VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.

18.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.

19.

THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.

20.

THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.

21.

NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECOM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.

22.

BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL HAVE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.

23.

NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCH FLOW LINE.

24.

INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT"(TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT"(33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECOM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.

25.

ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.

26.

PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.

27.

A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.

28.

THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY _____ AND SHALL BE CONSIDERED A PART OF THESE PLANS.

29.

AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER 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
WOOD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

WOODMAN HILLS METROPOLITAN DISTRICT GENERAL NOTES

1.

ALL UTILITY CONSTRUCTION TO BE CONDUCTED IN CONFORMANCE WITH THE CURRENT WOODMEN HILLS METROPOLITAN DISTRICT (WHMD, THE DISTRICT) SPECIFICATIONS.

2.

ALL PLANS ON THE JOB SITE SHALL BE SIGNED BY THE DISTRICT AND THE DISTRICT'S ENGINEER. ANY REVISION TO THE PLANS SHALL BE SO NOTED WITH THE OLD DRAWING MARKED NOT VALID.

3.

ALL STATIONING IS CENTER LINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE CENTER LINE UNLESS OTHERWISE NOTED.

4.

ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE DISTRICT. THE DISTRICT RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.

5.

ALL OVER-LOT GRADING MUST BE COMPLETED TO WITHIN ONE (1) FOOT OF FINAL GRADE PRIOR TO INSTALLATION OF WATER AND WASTEWATER INFRASTRUCTURE.

6.

ALL WATER AND SEWER SERVICE LOCATIONS SHALL BE CLEARLY MARKED ON EITHER THE CURB HEAD OR THE FACE OF THE CURB, WITH AN "S" FOR SEWER AND A "W" FOR WATER.

7.

DUCTILE IRON PIPES, INCLUDING FITTINGS, VALVES AND FIRE HYDRANTS, SHALL BE WRAPPED WITH POLYETHYLENE TUBING, DOUBLE BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED. BONDING AND ANODE CONNECTIONS SHALL BE THOROUGHLY COATED WITH BITUMINOUS COATINGS.

8.

ALL DUCTILE IRON PIPE LESS THAN 12 INCHES AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING. ALL DUCTILE IRON PIPE, 12 INCHES AND GREATER AND FITTINGS SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 300 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING.

9.

ALL PIPE MATERIAL, BACKFILL AND INSTALLATION SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS, COLORADO DEPARTMENT OF TRANSPORTATION, EL PASO COUNTY DEPARTMENT OF TRANSPORTATION, COLORADO SPRINGS UTILITIES AND THE GEOTECHNICAL ENGINEER.

10.

COMPACTION TESTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE DISTRICT OR HIGHER STANDARD AS IMPOSED BY ANOTHER AGENCIES HAVING RIGHT-OF-WAY JURISDICTION. THIS SHALL INCLUDE ALL VALVES, FIRE HYDRANT RUNS, WATER & SEWER SERVICE LINES AND MANHOLES. ALL REPORTS SHALL BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL.

11.

THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY. THE LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE DISTRICT SHALL BE NOTIFIED OF ANY DEVIATIONS TO THE LINE AND/OR GRADE AS DEPICTED ON THE PLANS. CONTRACTOR SHALL SUBMIT TO THE DISTRICT AND THE ENGINEER OF RECORD A REPORT OF THE FIELD VERIFIED INFORMATION PRIOR TO THE START OF CONSTRUCTION.

12.

ALL BENDS SHALL BE FIELD STAKED PRIOR TO THE START OF CONSTRUCTION.

13.

BENDS, DEFLECTION & CUT PIPE LENGTHS SHALL BE USED TO HOLD HORIZONTAL ALIGNMENT OF SEWER AND WATER LINES TO NO MORE THAN 0.5' FROM THE DESIGNED ALIGNMENT. CONSTRUCTION STAKES TO BE AT 25' INTERVALS ALONG CURVES

14.

TO ASSURE LOCATION OF PIPE LINE CONSTRUCTION.

15.

AT ALL LOCATIONS WHERE CAP AND STUB IS NOTED ON DRAWINGS, PROVIDE A PLUG AT THE END OF THE PIPE JOINT NEAREST THE SPECIFIED STATION. PROVIDE A REVERSE ANCHOR AT ALL WATER LINE PLUGS.

16.

ALL UNUSED SALVAGED WATER UTILITY MATERIAL SHALL BE RETURNED TO THE METROPOLITAN DISTRICT AS REQUESTED.

17.

AT THE CONTRACTOR'S EXPENSE, ALL UTILITY MAINS SHALL BE SUPPORTED AND PROTECTED SUCH THAT THEY SHALL FUNCTION CONTINUOUSLY DURING CONSTRUCTION OPERATIONS. SHOULD A UTILITY MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATION, IT SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR OR BY THE DISTRICT AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR/DEVELOPER.

18.

PUMPING OR BYPASS OPERATIONS SHALL BE REVIEWED AND APPROVED BY BOTH THE DISTRICT AND THE DISTRICT ENGINEER PRIOR TO EXECUTION.

19.

THE CONTRACTOR SHALL REPLACE OR REPAIR DAMAGE TO ALL SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, LANDSCAPING, CURB AND GUTTER AND/OR ASPHALT THAT MAY BE CAUSED DURING CONSTRUCTION.

20.

ALL CONTRACTORS WORKING ON OR NEAR A WATER OR SEWER FACILITY (TO INCLUDE SERVICE LINES) SHALL HAVE LIABILITY INSURANCE NAMING THE DISTRICT AS AN ADDITIONAL INSURED AND SHALL PROVIDE A CURRENT COPY OF WORKERS COMPENSATION INSURANCE ON FILE WITH THE DISTRICT. NO WORK CAN PROCEED WITHOUT CURRENT CERTIFICATES ON FILE AT THE DISTRICT'S OFFICE.

21.

THE CONTRACTOR SHALL NOTIFY THE DISTRICT AND ALL AFFECTED UTILITY COMPANIES ADJACENT TO THE PROPOSED UTILITY CONSTRUCTION A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. A WEEKLY CONSTRUCTION MEETING SHALL BE REQUIRED WITH THE CONTRACTOR, DISTRICT ENGINEER AND ALL OTHER PARTIES AS DEEMED NECESSARY BY THE DISTRICT.

22.

COMMENCEMENT OF CONSTRUCTION OF WATER/SEWER SYSTEMS WITHIN METROPOLITAN DISTRICT:
A) PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING IS REQUIRED A MINIMUM OF 48 HOURS IN ADVANCE OF COMMENCEMENT OF WORK. A REPRESENTATIVE OF THE OWNER OR DEVELOPER, A REPRESENTATIVE OF THE CONTRACTOR AND DESIGN ENGINEER ARE REQUIRED TO ATTEND. CONTACT THE DISTRICT TO SCHEDULE THE PRE-CONSTRUCTION MEETING. NO PRE-CONSTRUCTION MEETING CAN BE SCHEDULED PRIOR TO FOUR (4) SIGNED/APPROVED PLAN SETS ARE RECEIVED BY THE DISTRICT.
B) THE CONTRACTOR IS REQUIRED TO NOTIFY THE DISTRICT A MINIMUM OF 48 HOURS AND A MAXIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION ADJACENT TO THE KNOWN UTILITY LINES.

23.

TESTING OF FACILITIES:
A) THE CONTRACTOR SHALL NOTIFY THE DISTRICT A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TESTING.
B) ALL SECTIONS OF WATER LINE ARE TO MEET THE FOLLOWING PRESSURE TESTING REQUIREMENTS
• TEST 100 % OF ALL LINES
• MUST PASS PRESSURE TEST TO 200 PSI FOR TWO HOURS (UNLESS OTHERWISE APPROVED ON THE PLANS).
C) ALL SANITARY SEWER FACILITIES ARE TO MEET THE FOLLOWING TESTING REQUIREMENTS
• ALL LINES SHALL BE JET CLEANED PRIOR TO VACUUM OR PRESSURE TESTING
• ALL MANHOLES SHALL BE VACUUM TESTED WITH DISTRICT STAFF PRESENT PRIOR TO CCTV INSPECTION.
• SEWER MAINS TO BE PRESSURE TEST PRIOR TO CCTV INSPECTION
• ALL LINES SHALL BE CCTV INSPECTED AND VIDEO SHALL TO BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL.

24.

PRELIMINARY ACCEPTANCE SHALL BE DEFINED AS THE POINT IN TIME THAT THE DISTRICT ACCEPTS THE FACILITY FOR USE. ALL SURFACE IMPROVEMENTS AND RESTORATION SHALL BE COMPLETED WITHIN 30 DAYS OF COMMENCEMENT. SHOULD THE CONTRACTOR FAIL TO COMPLETE ALL SURFACE IMPROVEMENTS AND RESTORATION WITHIN 30 DAYS OF COMMENCEMENT OF SERVICE, THE DISTRICT, AT THEIR DISCRETION, MAY ELECT TO COMPLETE THE IMPROVEMENTS AT THE CONTRACTORS COST.

25.

FINAL ACCEPTANCE BY THE DISTRICT OF ANY LINE OR SYSTEM SHALL NOT OCCUR UNTIL COMPLETION OF FINAL ASPHALT LAYERS AND/OR FINAL COMPLETION AND/OR RESTORATION OF ALL SURFACE IMPROVEMENTS. THE WARRANTY PERIOD FOR FINAL ACCEPTANCE SHALL BE 24 MONTHS COMMENCING AFTER PRELIMINARY ACCEPTANCE.

26.

ACCEPTANCE:
A) THE DISTRICT MAY GIVE PRELIMINARY ACCEPTANCE ONCE ALL OF THE TESTS ON ALL THE LINES HAVE BEEN COMPLETED AND A WALK-THRU HAS OCCURRED.
B) A SECOND ACCEPTANCE MAY OCCUR ONCE FIRST LIFT OF ASPHALT GOES DOWN AND A SECOND WALK-THRU OF THE SYSTEM OCCURS. IF ALL FACILITIES ARE CLEAN AND ACCESSIBLE, A FINAL ACCEPTANCE MAY OCCUR (THE DISTRICT MAY REQUIRE CLEANING AND RE-VIDEO OF THE SYSTEM, DEPENDING ON THE SEVERITY OF THE CONTAMINATION).

27.

ALL WATER AND SEWER MAINS, INCLUDING SERVICE LINES, SHALL HAVE "AS-BUILT" DRAWINGS PREPARED AND APPROVED PRIOR TO PRELIMINARY ACCEPTANCE BY THE DISTRICT.

28.

ALL COMMERCIAL/BUSINESS DEVELOPMENTS SHALL HAVE AN EIGHT INCH (MIN.) WATER MAIN LOOPED THROUGH THE PROPOSED PROPERTY WITH GATE VALVES LOCATED WHERE THE MAIN ENTERS THE PROPERTY LINE. AN EIGHT INCH SEWER MAIN SHALL BE INSTALLED FOR SERVICE TO COMMERCIAL/BUSINESS DEVELOPMENTS, AND A MANHOLE SHALL BE LOCATED WHERE THE MAIN ENTERS THE PROPERTY. THE END OF THE MAINS SHALL BE MARKED WITH THE APPROPRIATE COLORED CARSONITE MARKER ALONG WITH TRACER WIRE.

29.

AFTER REVIEW AND APPROVAL OF PLANS FOR THE EXTENSION OF LINES, FACILITIES AND/OR SERVICES, CONSTRUCTION MUST BE COMMENCED WITHIN 18 MONTHS FOR RESIDENTIAL SUBDIVISIONS AND 12 MONTHS FOR ANY COMMERCIAL INSTALLATIONS.

30.

INSPECTION FEES: CALL THE DISTRICT (719-495-2500) FOR FEE SCHEDULE.

WATER SYSTEM INSTALLATION NOTES

31.

ALL WATER AND FORCE MAIN PIPE SHALL BE AWWA C900 PVC, OR EQUAL, PRESSURE CLASS 200. ALL WATER AND FORCE MAIN FITTINGS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER AND FORCE MAIN PIPE SHALL HAVE A MINIMUM COVER DEPTH OF FIVE AND ONE-HALF (5.5) FEET.

32.

ALL WATER VALVES ASSOCIATED WITH THE POTABLE WATER SYSTEM SHALL BE OPEN CLOCKWISE. ALL VALVES INSTALLED IN LANDSCAPED AREAS AND/OR NOT WITHIN PAVED STREETS SHALL BE MARKED WITH CARSONITE MARKERS. ALL VALVES ASSOCIATED WITH THE RAW WATER SYSTEM SHALL BE OPEN COUNTERCLOCKWISE AND MARKED WITH CARSONITE MARKERS AS APPLICABLE.

33.

THE DEVELOPER OR HIS ENGINEER SHALL LOCATE ALL FIRE HYDRANTS AND SERVICE STUB OUTS FOR FUTURE DEVELOPMENT. ANY REQUIRED REALIGNMENT, (HORIZONTAL OR VERTICAL), SHALL BE AT THE EXPENSE OF THE DEVELOPER. FIRE HYDRANT LOCATION SHALL BE REVIEWED AND APPROVED BY THE APPLICABLE FIRE AUTHORITY.

34.

FIRE HYDRANTS SHALL BE OPEN RIGHT WITH 7/8"X 7/8" SQUARE TAPERED ALONG WITH SERVICE CAPS. LUBRICATION TYPE: (GREASE). ACCEPTABLE BRANDS ARE AMERICAN AVK SERIES 2700 (MODERN) AND KENNEDY GUARDIAN (K810, K81A AND K81AM). EACH FIRE HYDRANT LOCATION SHALL ALSO BE USED AS TEST STATION.

35.

ALL MAIN LINES (PVC & DUCTILE IRON) SHALL BE INSTALLED WITH COATED #12 TRACER WIRE WITH TEST STATIONS AT INTERVALS NO GREATER THAN 500 FT (VALVE BOXES CAN BE USED AT INTERSECTIONS AND SERVICE STUBS).

36.

CONTRACTOR SHALL MAKE CONNECTIONS TO EXISTING WATER LINE WITHOUT SHUTDOWN, OR ELSE NOTIFY THE DISTRICT OF ANY SERVICE SHUTDOWNS NECESSARY TO CONNECT TO EXISTING LINES.

37.

IRRIGATION SERVICES SHALL HAVE A STOP AND WASTE CURB STOP VALVE INSTALLED ALONG WITH TRACER WIRE EXTENDING BACK TO THE MAIN LINE.

38.

COMMENCEMENT OF USE OF WATER LINES AND/OR SYSTEMS:
A) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL AFTER THE COMPLETION OF ALL PRESSURE TESTING, FLUSHING, BAC-T TESTING, COMPACTION TESTING, AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE DISTRICT.
B) NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.
C) ALL EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE DISTRICT, AND RECORDED.

WASTEWATER SYSTEM INSTALLATION NOTES

39.

SANITARY SEWER LENGTHS ARE MH CENTER-MH CENTER. ALL SANITARY SEWER PIPES SHALL BE SDR 35 PVC OR EQUAL. SEWER LINES MAY NOT EXCEED 7% GRADE FOR ANY SIZE WITHOUT PRIOR APPROVAL OF THE DISTRICT. ALL NEWLY CONSTRUCTED RESIDENTIAL SANITARY SEWER TAPS SHALL USE PRE-MANUFACTURED IN-LINE PVC PUSH-ON WIPES. TAPPING SADDLES MAY ONLY BE USED FOR TAPPING PRE-EXISTING MAINS.

40.

COMMENCEMENT OF USE OF SEWER LINES AND/OR SYSTEMS:
A) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL THE COMPLETION OF ALL JET CLEANING, PRESSURE TESTING, VACUUM TESTING, CCTV INSPECTION, COMPACTION TESTING, AND AS-BUILT DRAWINGS ARE SUBMITTED AND APPROVED BY THE DISTRICT.
B) NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL ALL SERVICE LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, ANY REQUIRED SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.
C) ALL NECESSARY EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED BY THE DISTRICT, AND RECORDED.
D) DOWNSTREAM PLUG CAN BE REMOVED ONCE FIRST LIFT OF ASPHALT IS DOWN AND THE ABOVE REQUIREMENTS ARE MET.

LOCAL GENERAL NOTES

SEAL

DESIGN
SWK

DRAWN
SWK

CHKD
TOP

SCALE: H: 1" = XXX'
V: 1" = XXX'

JOB No. 020441-01-001

DATE : 02/09/2021

SHEET
C1.2

REVISIONS

DATE

DESCRIPTION

REVISION

EL PASO COUNTY

LOCAL GENERAL NOTES

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10

SITE DEVELOPMENT PLAN

COLORADO

Bowman

C O N S U L T I N G

1525 Cole Blvd, Suite 100
Lakewood, CO 80401

Phone: (303) 901-2500
www.bowmanconsulting.com

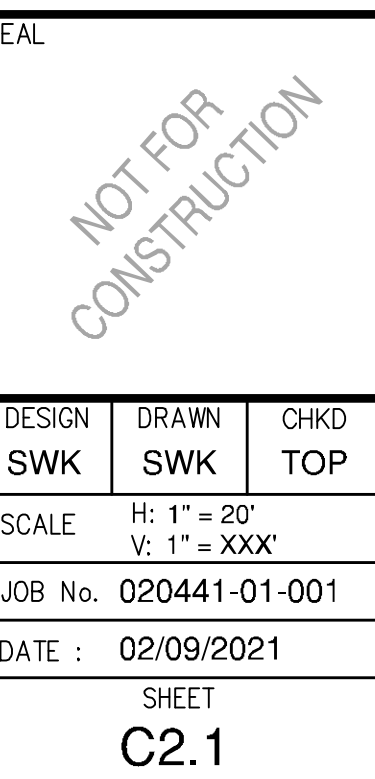
Cad file name: V:\020441 -- Super Star Car Wash\020441-01-001 (ENG) -- Super Star Car Wash-- Falcon, CO\Engineering\Engineering Plans\SDP\020441-01-001-CVR.dwg



LIMITS OF DISTURBANCE = 1.07 ACRES

- 20 0 10 20 40
- (IN FEET)
- 1 inch = 20 ft.





RECOMMENDED ANNUAL GRASSES				
SPECIES (COMMON NAME)	GROWTH SEASON	SEEDING DATE	POUNDS OF PURE LIVE SEED (PLS) (PL/5ACRE)	PLANTING DEPTH (INCHES)
1. OATS	COOL	MARCH 16 - APRIL 30	35-50	1-2
2. SPRING WHEAT	COOL	MARCH 16 - APRIL 30	25-35	1-2
3. SPRING BARLEY	COOL	MARCH 16 - APRIL 30	25-35	1-2
4. ANNUAL RYEGRASS	COOL	MARCH 16 - JUNE 30	10-15	1/2
5. MILLET	WARM	MAY 16 - JULY 15	3-15	1/2-3/4
6. SUDANGRASS	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
7. SORGHUM	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
8. WINTER WHEAT	COOL	SEPTEMBER 1 - 30	20-35	1-2
9. WINTER BARLEY	COOL	SEPTEMBER 1 - 30	20-35	1-2
10. WINTER RYE	COOL	SEPTEMBER 1 - 30	20-35	1-2
11. TRITICALE	COOL	SEPTEMBER 1 - 30	25-40	1-2

THIS TABLE WAS TAKEN FROM UDFCD FOR RECOMMENDED ANNUAL GRASSES FOR THE DENVER METROPOLITAN AREA. THIS TABLE MAY BE USED UNLESS A SITE-SPECIFIC SEED MIX IS REQUESTED AND APPROVED.

TABLE TS-1

TEMPORARY SEEDING NOTES

INSTALLATION REQUIREMENTS

1. DISTURBED AREAS ARE TO BE SEEDED WITHIN 21 DAYS AFTER CONSTRUCTION ACTIVITY OR GRADING ENDS IF SEASON ALLOWS.
2. IF NECESSARY, SOIL IS TO BE CONDITIONED FOR PLANT GROWTH BY APPLYING TOPSOIL, FERTILIZER, OR LIME.
3. SOIL IS TO BE TILLED IMMEDIATELY PRIOR TO APPLYING SEEDS. COMPACT SOILS ESPECIALLY NEED TO BE LOOSENEED.
4. SEEDBED DEPTH IS TO BE 4 INCHES FOR SLOPES FLATTER THAN 2:1, AND 1 INCH FOR SLOPES STEEPER THAN 2:1.
5. ANNUAL GRASSES LISTED IN TABLE TS-1 ARE TO BE USED FOR TEMPORARY SEEDING. SEED MIXES ARE NOT TO CONTAIN ANY NOXIOUS WEED SEEDS INCLUDING RUSSIAN OR CANADIAN THISTLE, KNAWEED, PURPLE LOOSESTRIPE, EUROPEAN BINDWEED, JOHNSON GRASS, AND LEAFY SPURGE.
6. TABLE TS-1 ALSO PROVIDES REQUIREMENTS FOR SEEDING RATES, SEEDING DATES, AND PLANTING DEPTHS FOR THE APPROVED TYPES OF ANNUAL GRASSES.
7. SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR ACCESS IS LIMITED THEN HYDRAULIC SEEDING MAY BE USED.
8. ALL SEEDED AREAS ARE TO BE MULCHED (SEE FACTSHEET ON MULCHING).
9. IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID SEEDS BECOMING ENCAPSULATED IN THE MULCH.

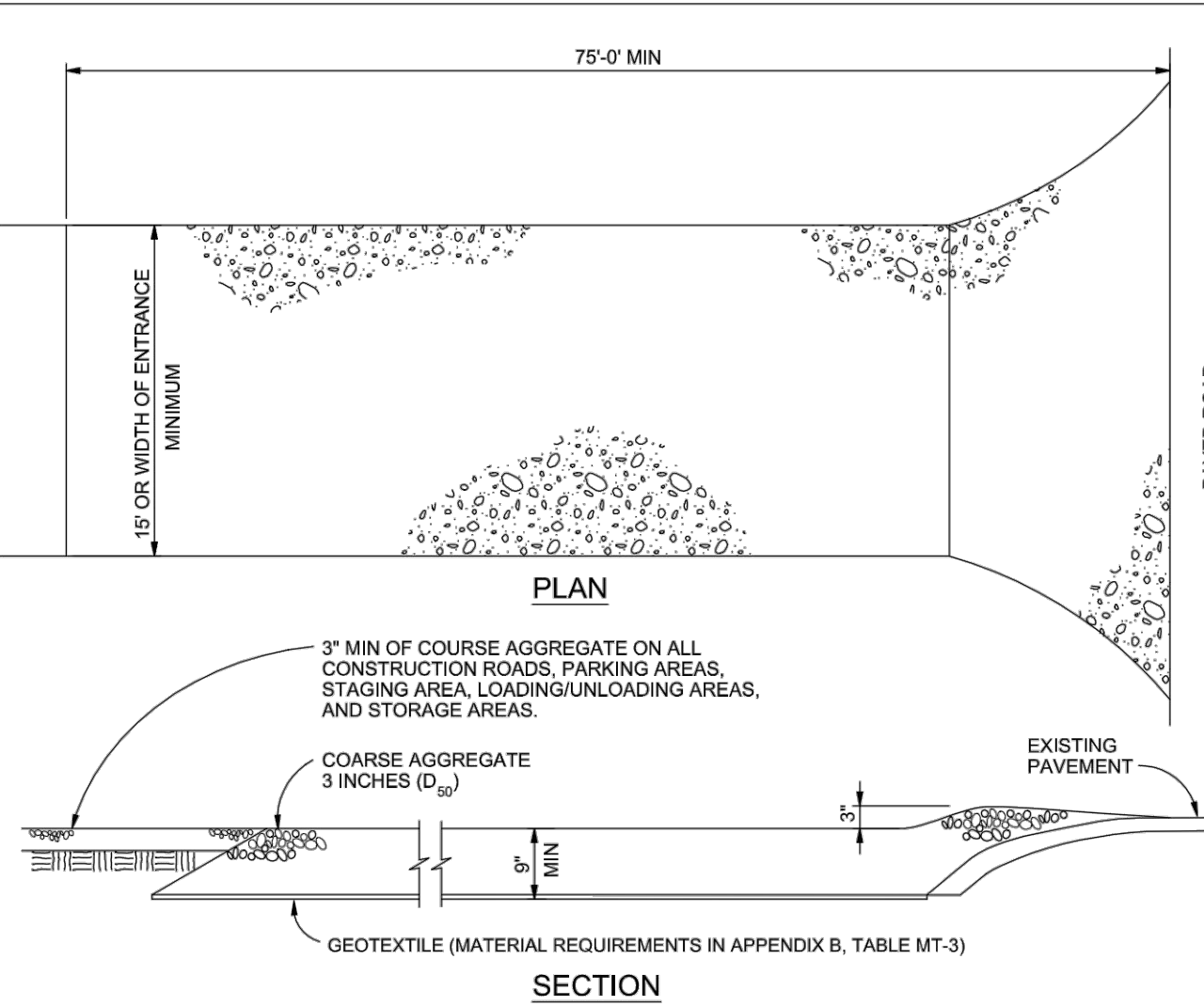
MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL SEEDED AREAS TO ENSURE GROWTH.
2. AREAS WHERE GROWTH IS NOT OCCURRING QUICKLY OR THE MULCH HAS BEEN REMOVED SHALL BE RE-SEEDED AS SOON AS POSSIBLE AND RE-MULCHED IF NEEDED.
3. SEEDED AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR VEHICLES.

City of Colorado Springs
Stormwater Quality

Figure TS-1
Temporary Seeding
Construction Detail and Maintenance
Requirements

3-47



VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

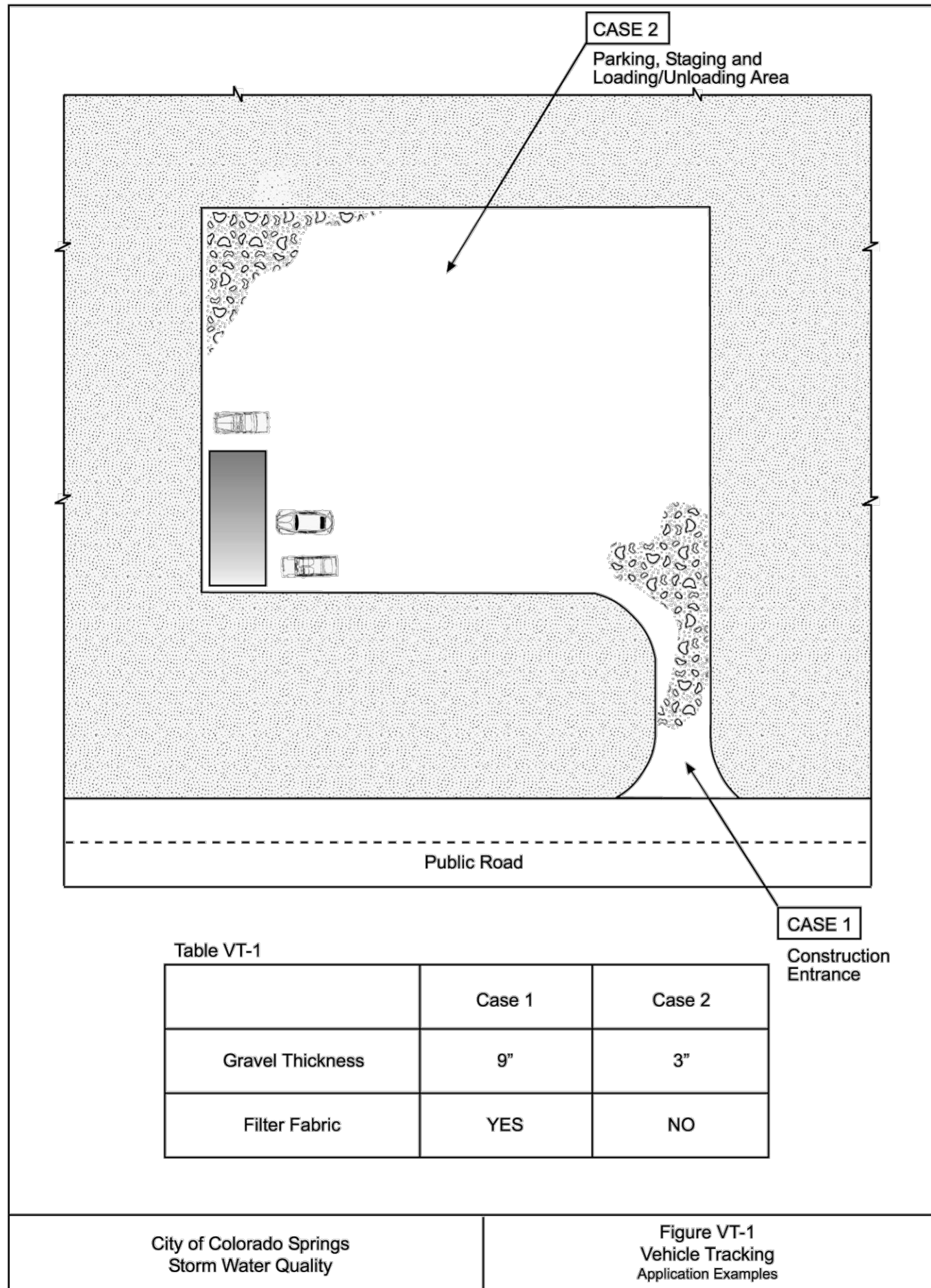
MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs
Stormwater Quality

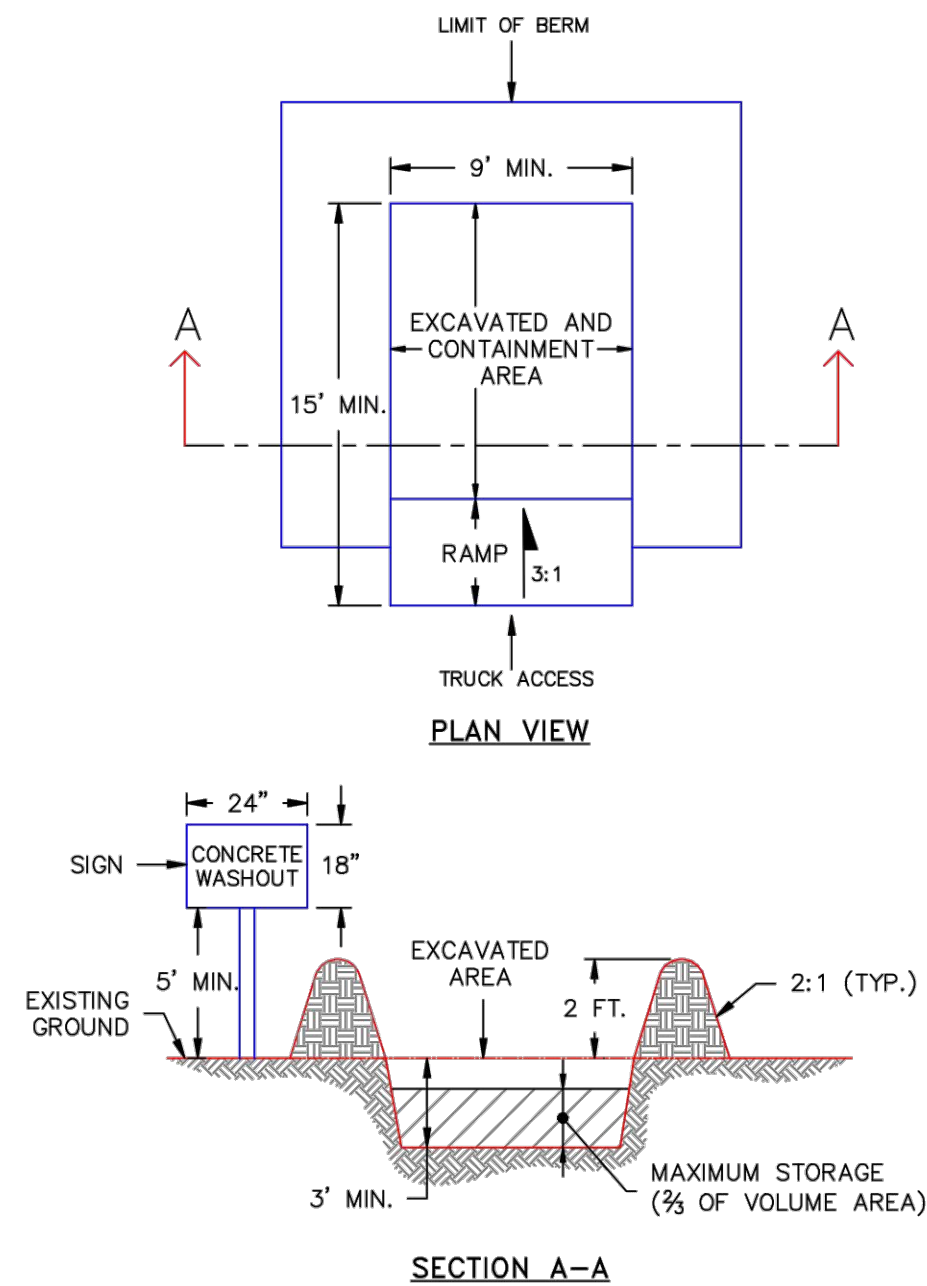
Figure VT-2
Vehicle Tracking
Application Examples

3-54



DEN/MI153722.CS.CBPrigVT-1-19-99

3-53



- NOTES:
1. SIGN MATERIAL, EXCAVATION, AND RESTORATION ARE INCLUDED IN THE COST OF THE CONCRETE WASHOUT STRUCTURE.
 2. EROSION BALES MAY BE USED AS AN ALTERNATIVE FOR THE BERM.

1/1/08 DATE APPROVED:	Concrete Washout Structure Standard Drawing	
John A. McCarty DEPARTMENT OF TRANSPORTATION	REVISION DATE: 7/17/07 FILE NAME: SD_3-84	



Know what's below.
Call before you dig.

Bowman
CONSULTING

Phone: (930) 801-2500
www.bowmanconsulting.com

1526 Cole Blvd, Suite 100
Lakewood, CO 80401

REVISIONS	DESCRIPTION	DATE	REVISION

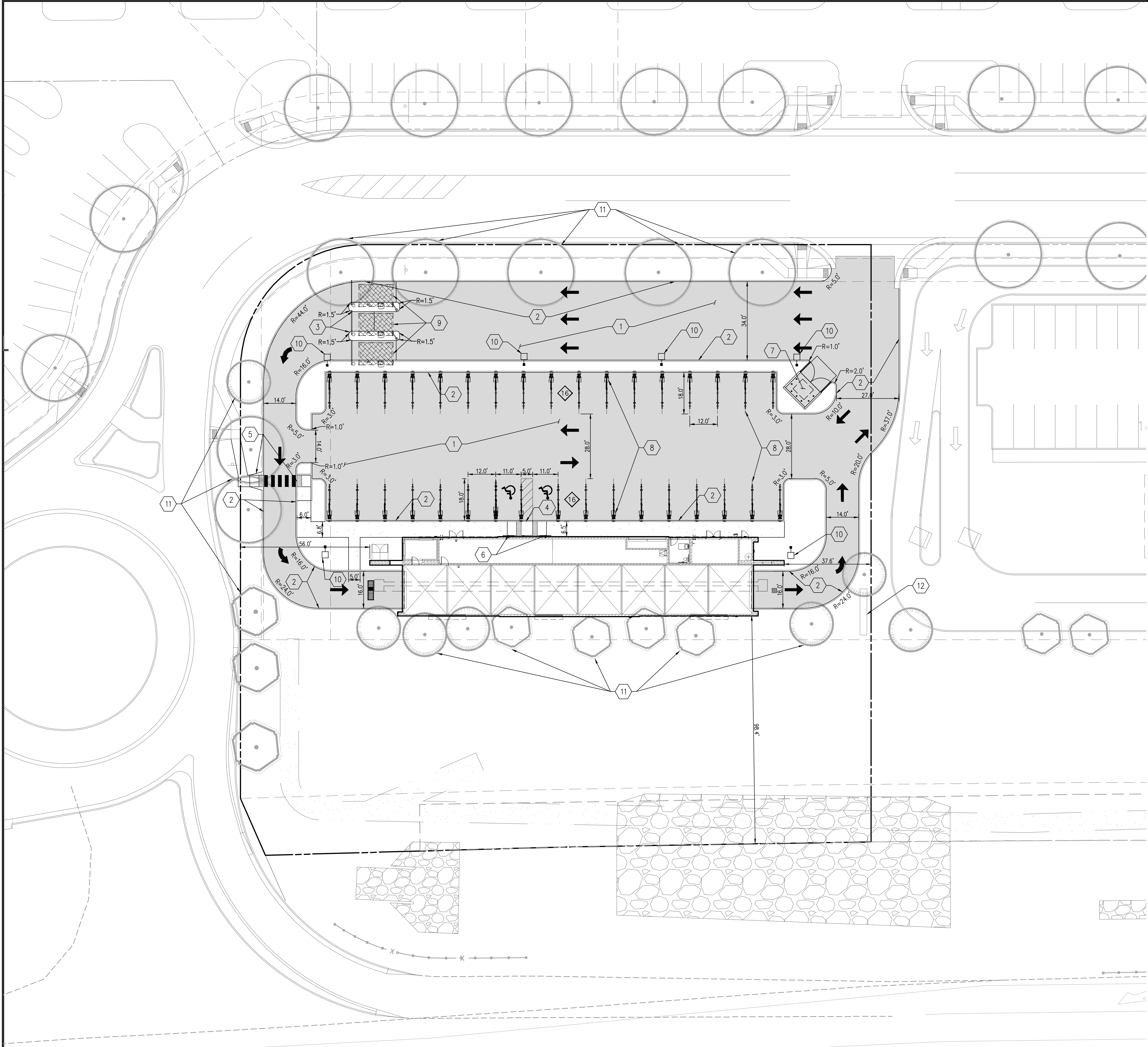
EROSION CONTROL DETAILS

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

COLORADO

EL PASO COUNTY

SEAL NOT FOR CONSTRUCTION		
DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE	H: 1" = XXX' V: 1" = XXX'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
	SHEET C2.3	



EXISTING	LEGEND DESCRIPTION	PROPOSED
	PROPERTY LINE	
	ADJACENT PROPERTY LINE	
	LOT LINE	
	RIGHT OF WAY	
	FENCE LINE	
	EASEMENT	
	VERTICAL CURB AND GUTTER	
	CONCRETE SIDEWALK	
	SIGN(S)	
	PARKING COUNT INDICATOR	
	TREE	

- KEY NOTES**
- 1 PROPOSED CONCRETE PAVEMENT
 - 2 PROPOSED 6" INTEGRAL CURB
 - 3 PROPOSED RAISED CONCRETE SLAB
 - 4 PROPOSED ADA RAMP (SEE DETAIL ON SHEET C8.0)
 - 5 PROPOSED ADA RAMP (SEE DETAIL ON SHEET C8.1)
 - 6 PROPOSED ADA PARKING SIGN
 - 7 PROPOSED TRASH ENCLOSURE
 - 8 PROPOSED VACUUM STATION (SEE ARCHITECTURAL PLANS)
 - 9 PROPOSED CANOPY (SEE ARCHITECTURAL PLANS)
 - 10 PROPOSED SITE LIGHT
 - 11 PROPOSED TREE (BY OTHERS)
 - 12 DEVELOPMENT MONUMENT SIGN (BY OTHERS)

Bowman
CONSULTING

1526 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 801-2500
www.bowmanconsulting.com

REVISION	DESCRIPTION	DATE

SITE PLAN

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

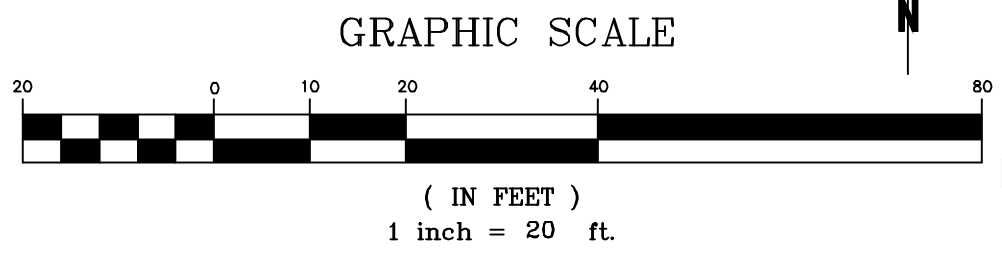
EL PASO COUNTY

COLORADO

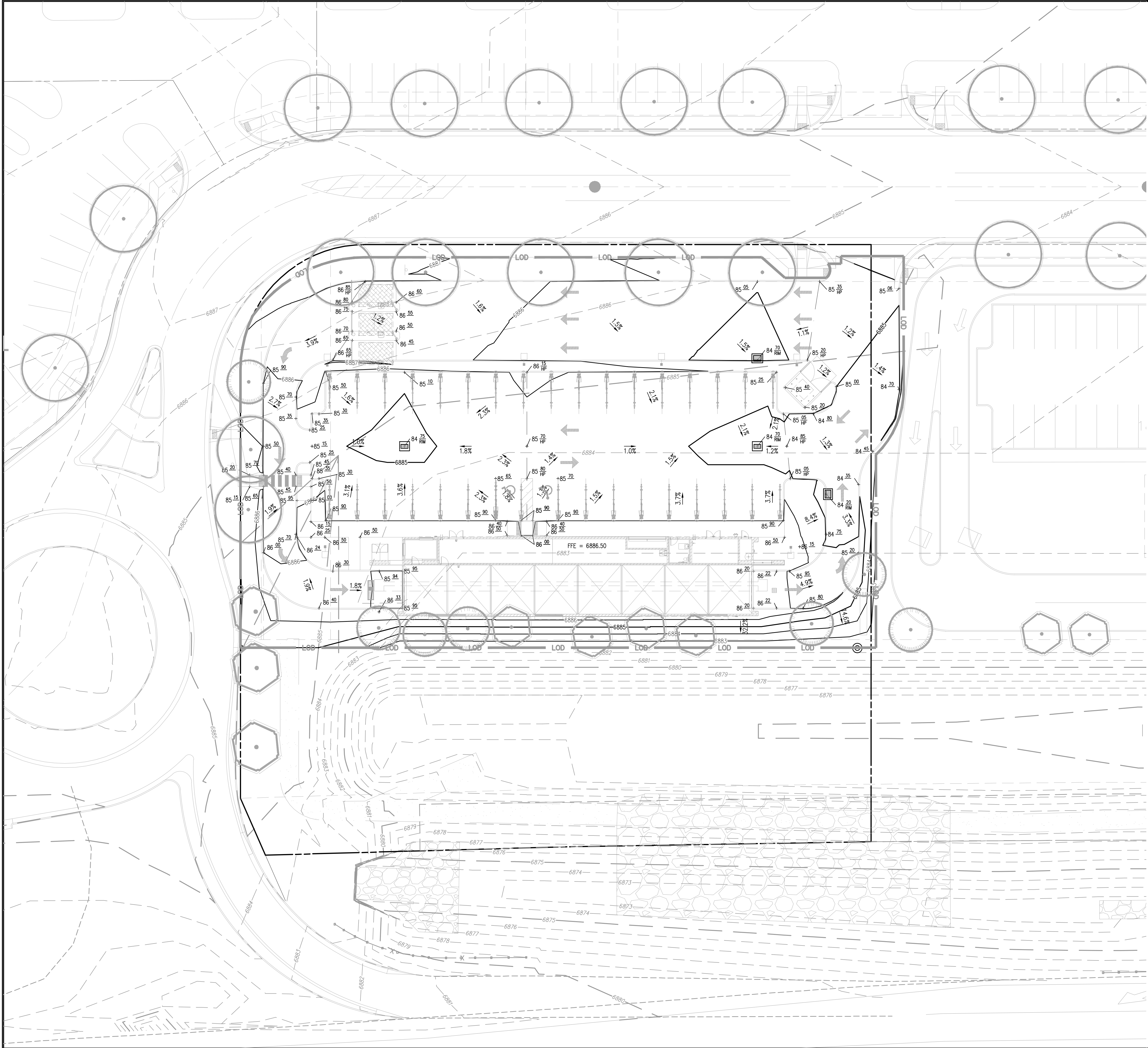
SEAL

NOT FOR
CONSTRUCTION

DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE: H: 1" = 20' V: 1" = XXX'		
JOB No. 020441-01-001		
DATE : 02/09/2021		
SHEET C3.0		

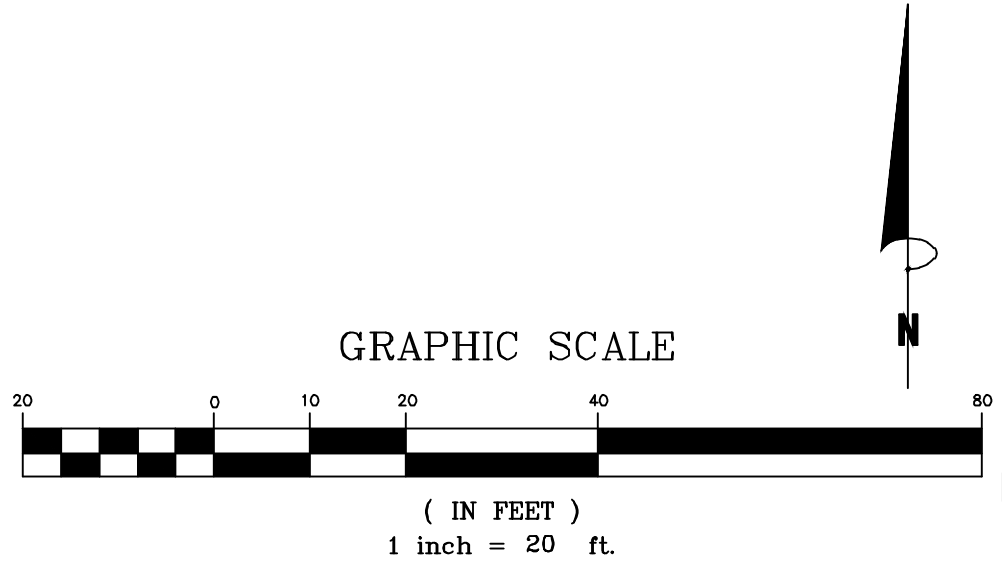


Know what's below.
Call before you dig.



EXISTING	LEGEND DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	ADJACENT PROPERTY LINE	---
---	LOT LINE	---
---	RIGHT OF WAY	---
---	LIMITS OF DISTURBANCE	---
---	FENCE LINE	---
---	EASEMENT	---
---	VERTICAL CURB AND GUTTER	---
---	CONCRETE SIDEWALK	---
---	MAJOR CONTOUR	---
---	MINOR CONTOUR	---
---	GRADE BREAK	---
---	SPOT ELEVATION	---
---	STORM SEWER MANHOLE	---
---	STORM SEWER INLET	---
---	TREE	---

NOTES:
1. RIM ELEVATION AT CURB INLETS ARE FLOW LINE ELEVATION



Bowman
CONSULTING

1525 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 801-2500
www.bowmanconsulting.com

REVISIONS		DATE
REVISION	DESCRIPTION	

GRADING PLAN

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

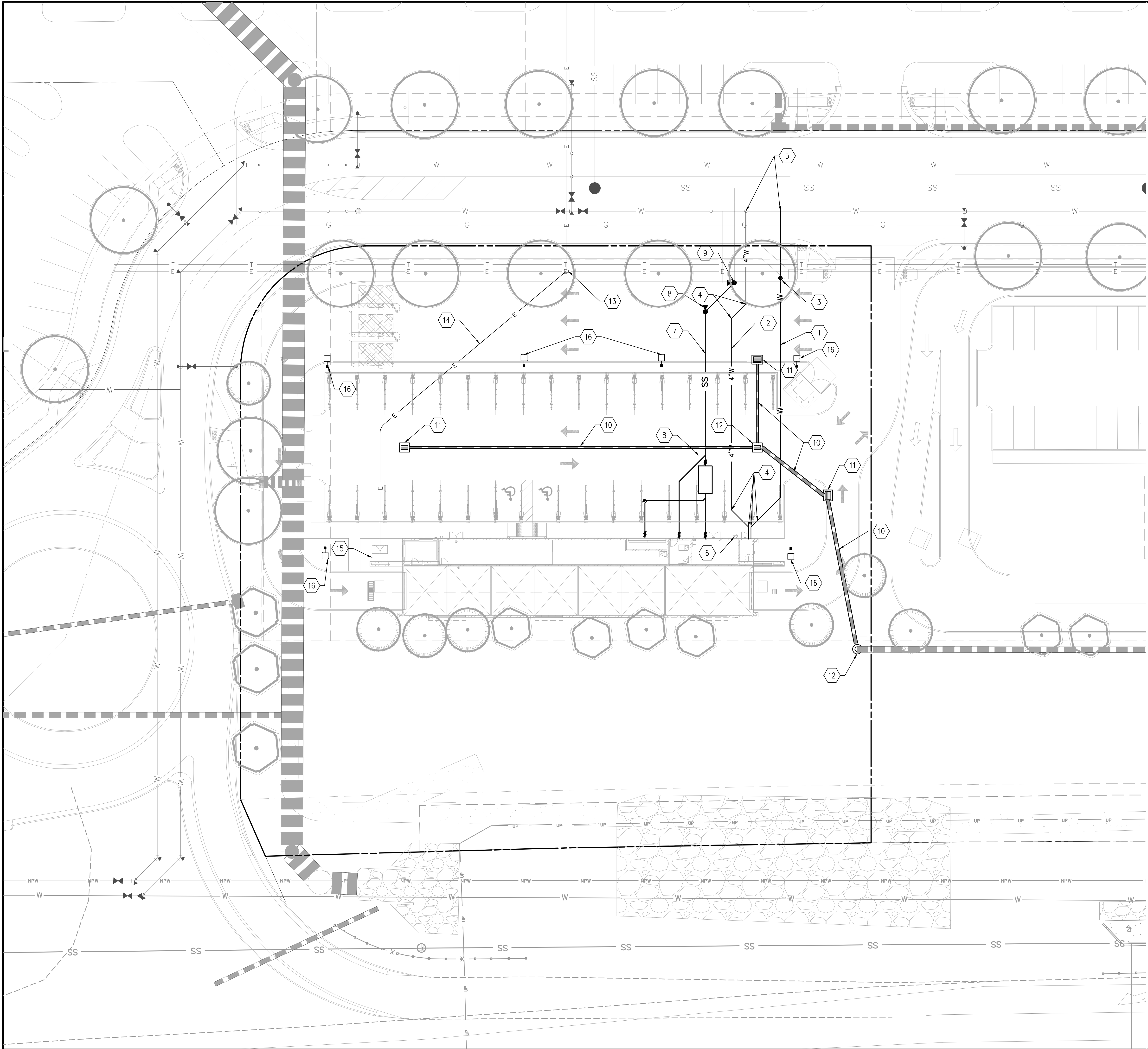
EL PASO COUNTY

COLORADO

SEAL

NOT FOR CONSTRUCTION

DESIGN	DRAWN	CHKD
SWK	SWK	TOP
SCALE	H: 1" = 20' V: 1" = XXX'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
SHEET	C4.0	



LEGEND		
EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	ADJACENT PROPERTY LINE	---
---	LOT LINE	---
---	RIGHT OF WAY	---
-x-	FENCE LINE	-x-
- - -	EASEMENT	- - -
---	VERTICAL CURB AND GUTTER	---
---	CONCRETE SIDEWALK	---
W	WATER LINE	W
M	WATER METER	M
W	WATER VALVE	W
SS	FIRE HYDRANT	SS
SS	SANITARY LINE	SS
S	SANITARY MANHOLE	S
S	SANITARY CLEANOUT	S
SS	STORM SEWER PIPE	SS
S	STORM SEWER MANHOLE	S
S	STORM SEWER INLET	S
SS	STORM SEWER FLARED END SECTION	SS
SS	STORM SEWER HEADWALL	SS
E	UNDERGROUND ELECTRIC	E
T	STREET LIGHT	T
T	TELECOM SERVICE	T
T	NATURAL GAS SERVICE	T
Tree Symbol	TREE	Tree Symbol

- KEY NOTES**
- 1. PROPOSED 2 1/2" PVC DOMESTIC WATER SERVICE (SEE DETAIL ON SHEET C8.2)
 - 2. PROPOSED 4" PVC FIRE WATER SERVICE
 - 3. PROPOSED 2" WATER METER
 - 4. PROPOSED 45" WATER BEND
 - 5. PROPOSED CONNECTION TO WATERMAIN
 - 6. PROPOSED FDC
 - 7. PROPOSED 6" PVC SANITARY SEWER
 - 8. PROPOSED SANITARY SEWER CLEANOUT (SEE DETAIL ON SHEET C8.3)
 - 9. PROPOSED 45" SANITARY SEWER BEND CONNECTION TO LATERAL
 - 10. PROPOSED HP STORM PIPE
 - 11. PROPOSED STORM INLET
 - 12. PROPOSED STORM MANHOLE
 - 13. PROPOSED TRANSFORMER BY OTHERS
 - 14. PROPOSED ELECTRIC SECONDARY
 - 15. PROPOSED SERVICE ENTRANCE SECTION (SEE ARCHITECTURAL PLANS)
 - 16. PROPOSED SITE LIGHT

NOTES:
1. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES
2. WATER TO BE INSTALLED MINIMUM OF 4' BELOW FINAL GRADE
3. ALL WATER SERVICE SHALL BE AWWA C900 PVC OR EQUAL
4. SANITARY SEWER SHALL BE INSTALLED A MINIMUM OF 6' BELOW FINAL GRADE
5. ALL SANITARY SHALL BE SDR-35 OR EQUAL

1526 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 801-2500
www.bowmanconsulting.com

REVISIONS		DATE
REVISION	DESCRIPTION	

UTILITY PLAN

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10

SITE DEVELOPMENT PLAN

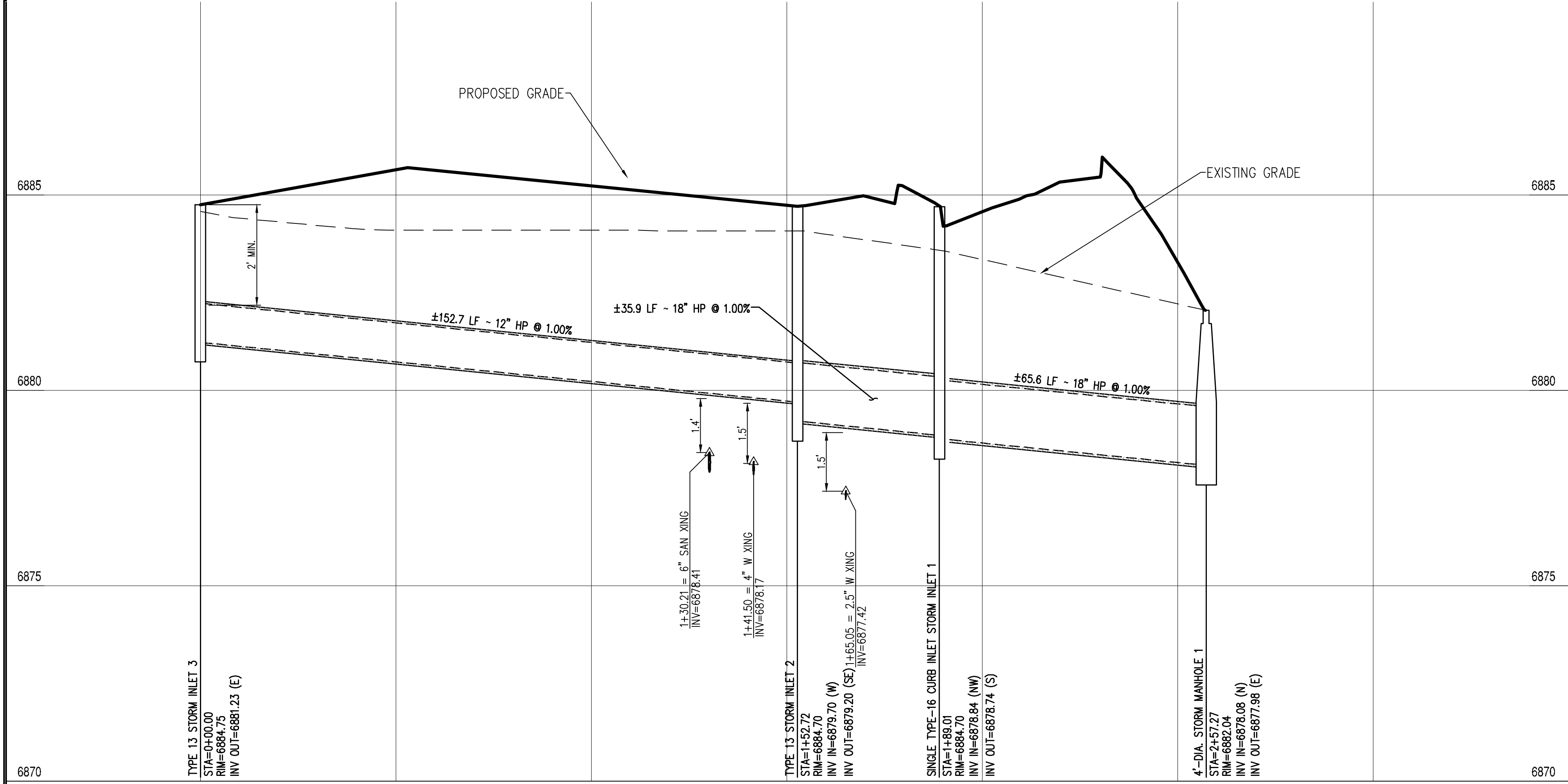
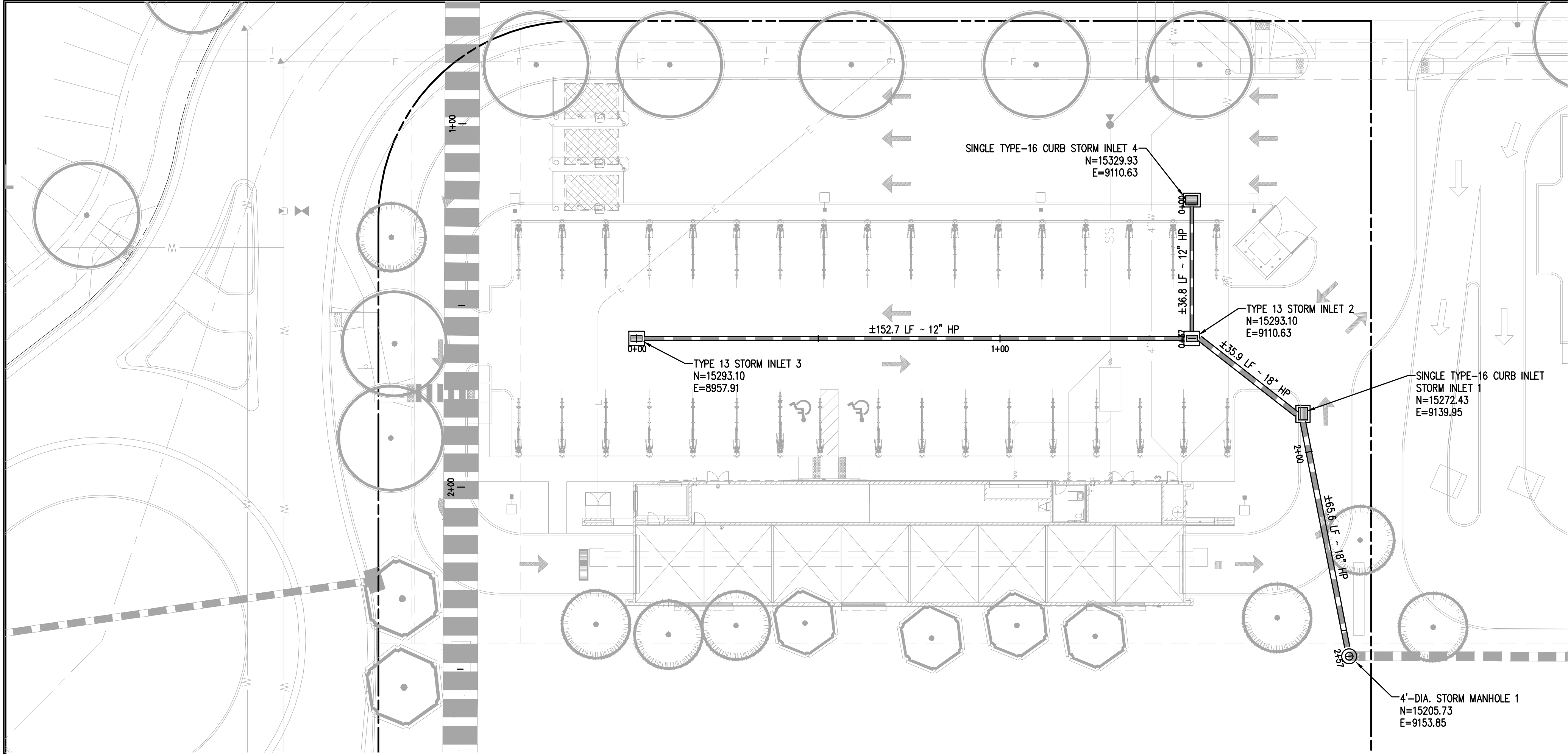
COLORADO

EL PASO COUNTY

SEAL

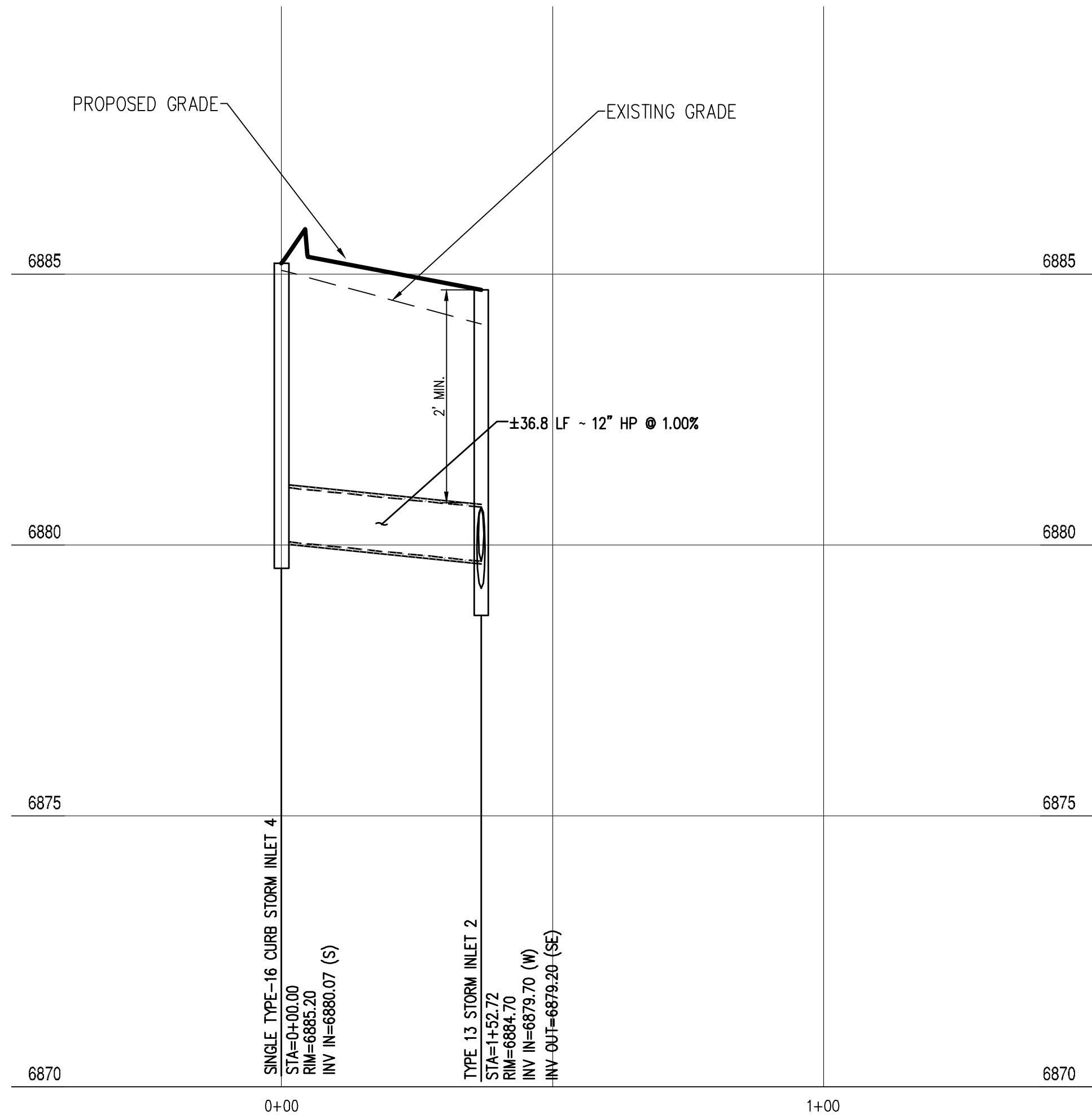
NOT FOR CONSTRUCTION

DESIGN	DRAWN	CHKD
SWK	SWK	TOP
SCALE	H: 1" = 20' V: 1" = XXX'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
	SHEET	
	C5.0	



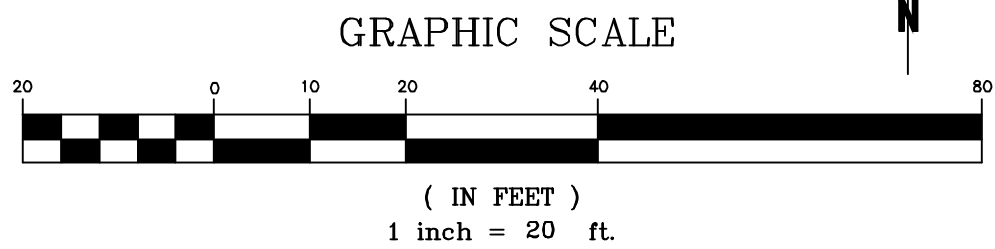
Alignment - STORM PROFILE VIEW
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'

EXISTING	LEGEND DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	ADJACENT PROPERTY LINE	---
---	LOT LINE	---
---	RIGHT OF WAY	---
---	EASEMENT	---
---	VERTICAL CURB AND GUTTER	---
---	CONCRETE SIDEWALK	---
---	WATER LINE	---
---	WATER METER	---
---	WATER VALVE	---
---	FIRE HYDRANT	---
---	SANITARY LINE	---
---	SANITARY MANHOLE	---
---	SANITARY CLEANOUT	---
---	STORM SEWER PIPE	---
---	STORM SEWER MANHOLE	---
---	STORM SEWER INLET	---
---	STORM SEWER FLARED END SECTION	---
---	STORM SEWER HEADWALL	---
---	UNDERGROUND ELECTRIC	---
---	STREET LIGHT	---
---	TELECOM SERVICE	---
---	NATURAL GAS SERVICE	---
---	TREE	---



Alignment - Storm Inlet 2 PROFILE VIEW
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'

- NOTES:
- RIM ELEVATION AT CURB INLETS ARE FLOW LINE ELEVATION



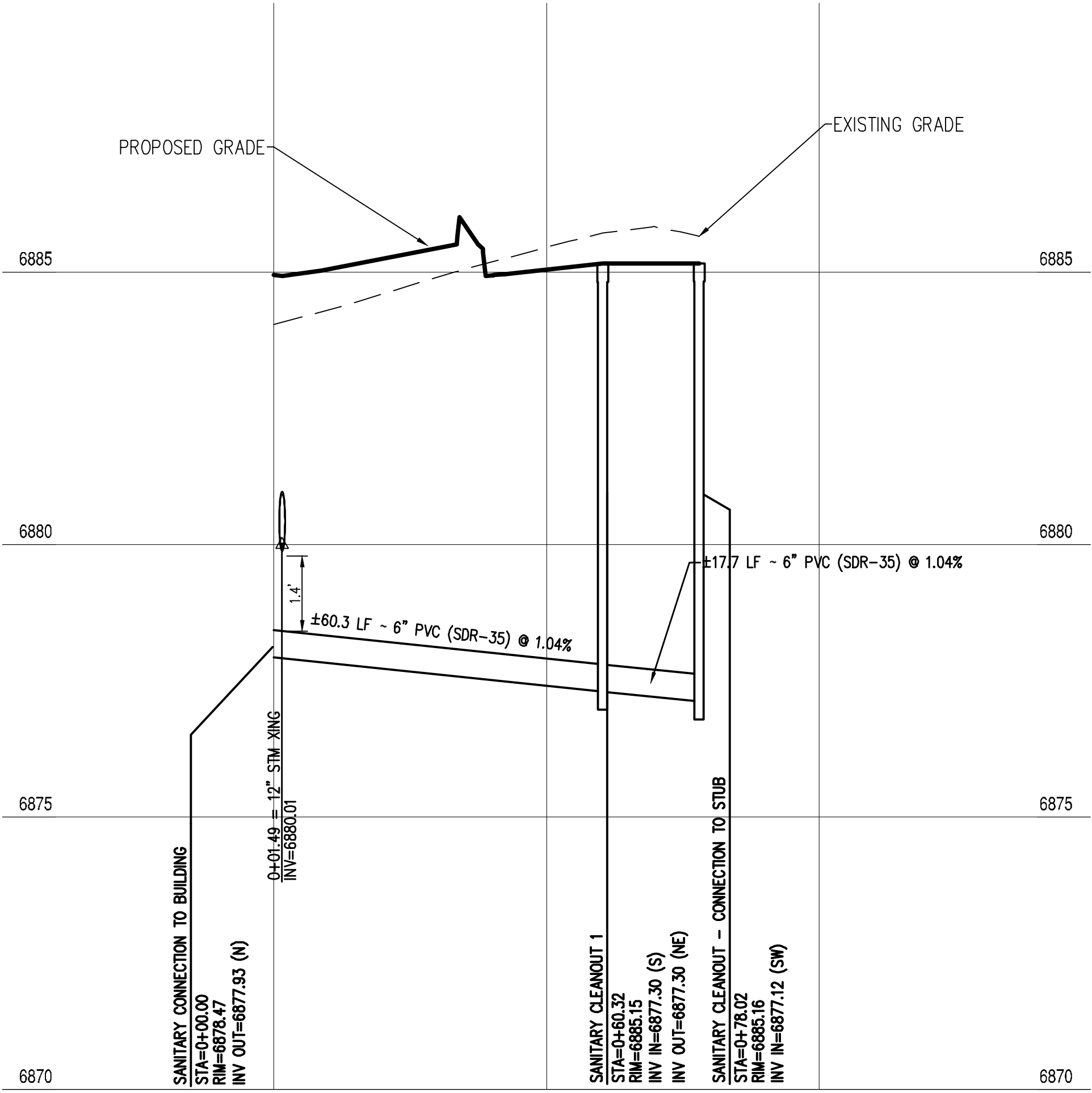
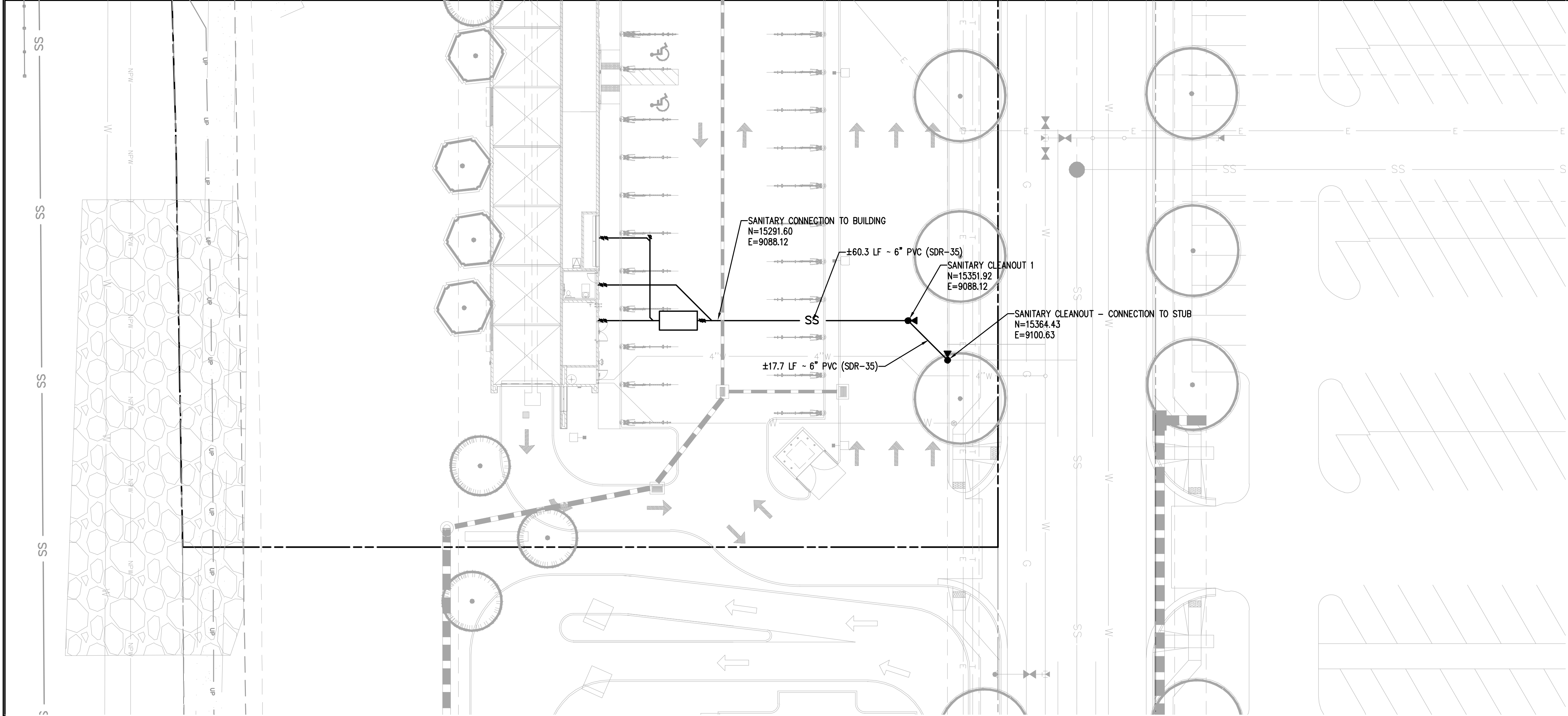
Bowman
CONSULTING
1526 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 801-2500
www.bowmanconsulting.com

REVISIONS		DATE
REVISION	DESCRIPTION	

STORM PLAN & PROFILE
SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN
EL PASO COUNTY
COLORADO

NOT FOR CONSTRUCTION

DESIGN	DRAWN	CHKD
SWK	SWK	TOP
SCALE	H: 1" = 20' V: 1" = 2'	
JOB No.	020441-01-001	
DATE	02/09/2021	
SHEET	C6.0	



Alignment - SANITARY PROFILE VIEW
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'

EXISTING	LEGEND DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	ADJACENT PROPERTY LINE	---
---	LOT LINE	---
---	RIGHT OF WAY	---
---	EASEMENT	---
---	VERTICAL CURB AND GUTTER	---
---	CONCRETE SIDEWALK	---
---	WATER LINE	---
---	WATER METER	---
---	WATER VALVE	---
---	FIRE HYDRANT	---
---	SANITARY LINE	---
---	SANITARY MANHOLE	---
---	SANITARY CLEANOUT	---
---	STORM SEWER PIPE	---
---	STORM SEWER MANHOLE	---
---	STORM SEWER INLET	---
---	STORM SEWER FLARED END SECTION	---
---	STORM SEWER HEADWALL	---
---	UNDERGROUND ELECTRIC	---
---	STREET LIGHT	---
---	TELECOM SERVICE	---
---	NATURAL GAS SERVICE	---
---	TREE	---

- NOTES:
1. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES
 2. WATER TO BE INSTALLED MINIMUM OF 4' BELOW FINAL GRADE
 3. ALL WATER SERVICE SHALL BE AWWA C900 OR EQUAL
 4. SANITARY SEWER SHALL BE INSTALLED A MINIMUM OF 6' BELOW FINAL GRADE
 5. ALL SANITARY SHALL BE SDR-35 OR EQUAL

GRAPHIC SCALE

200

0

10

20

40

80

(IN FEET)
1 inch = 20 ft.

811

Know what's below.
Call before you dig.

REVISIONS

REVISION	DESCRIPTION	DATE

SEAL

NOT FOR CONSTRUCTION

SANITARY PLAN AND PROFILE

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

EL PASO COUNTY

COLORADO

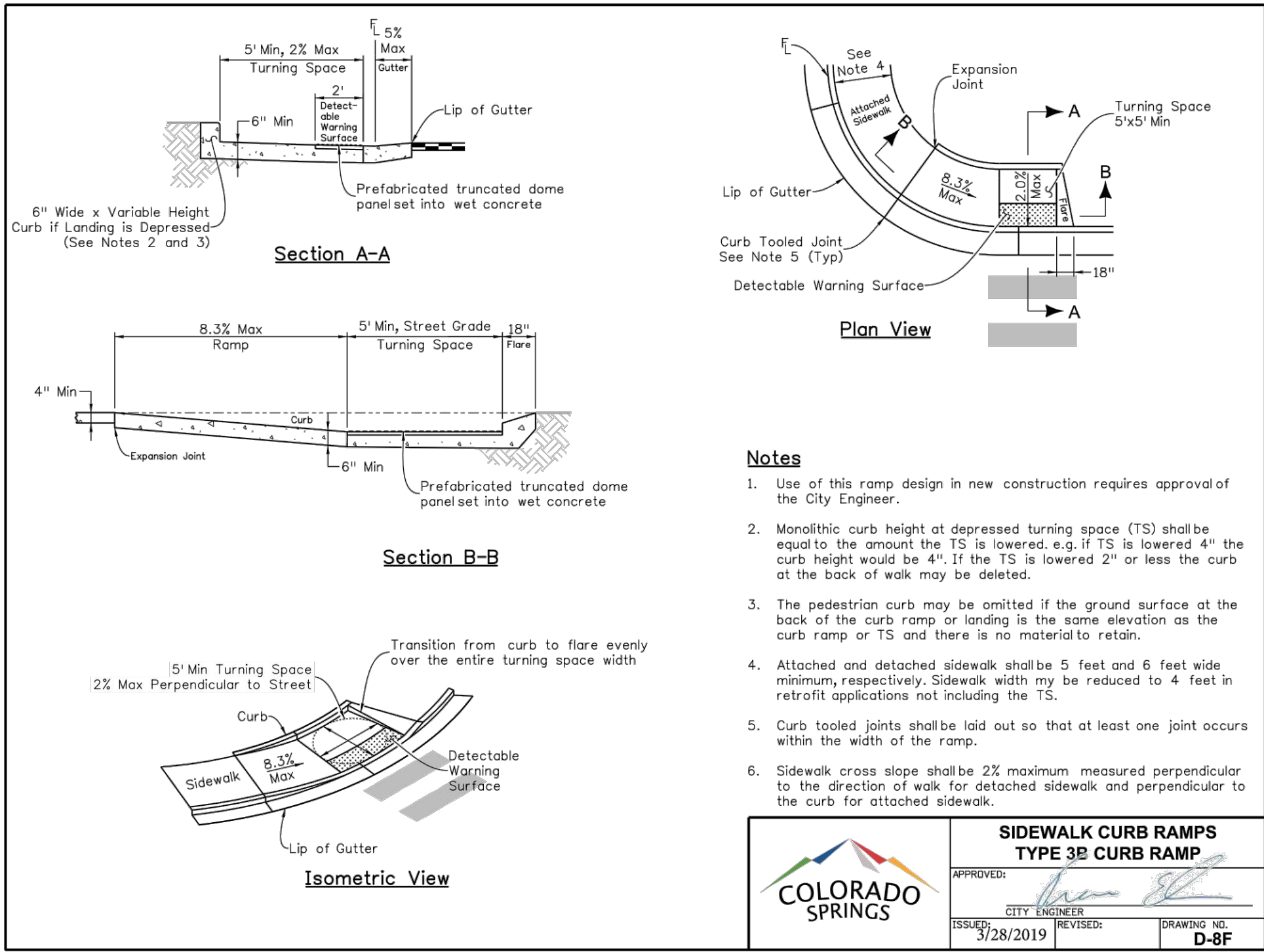
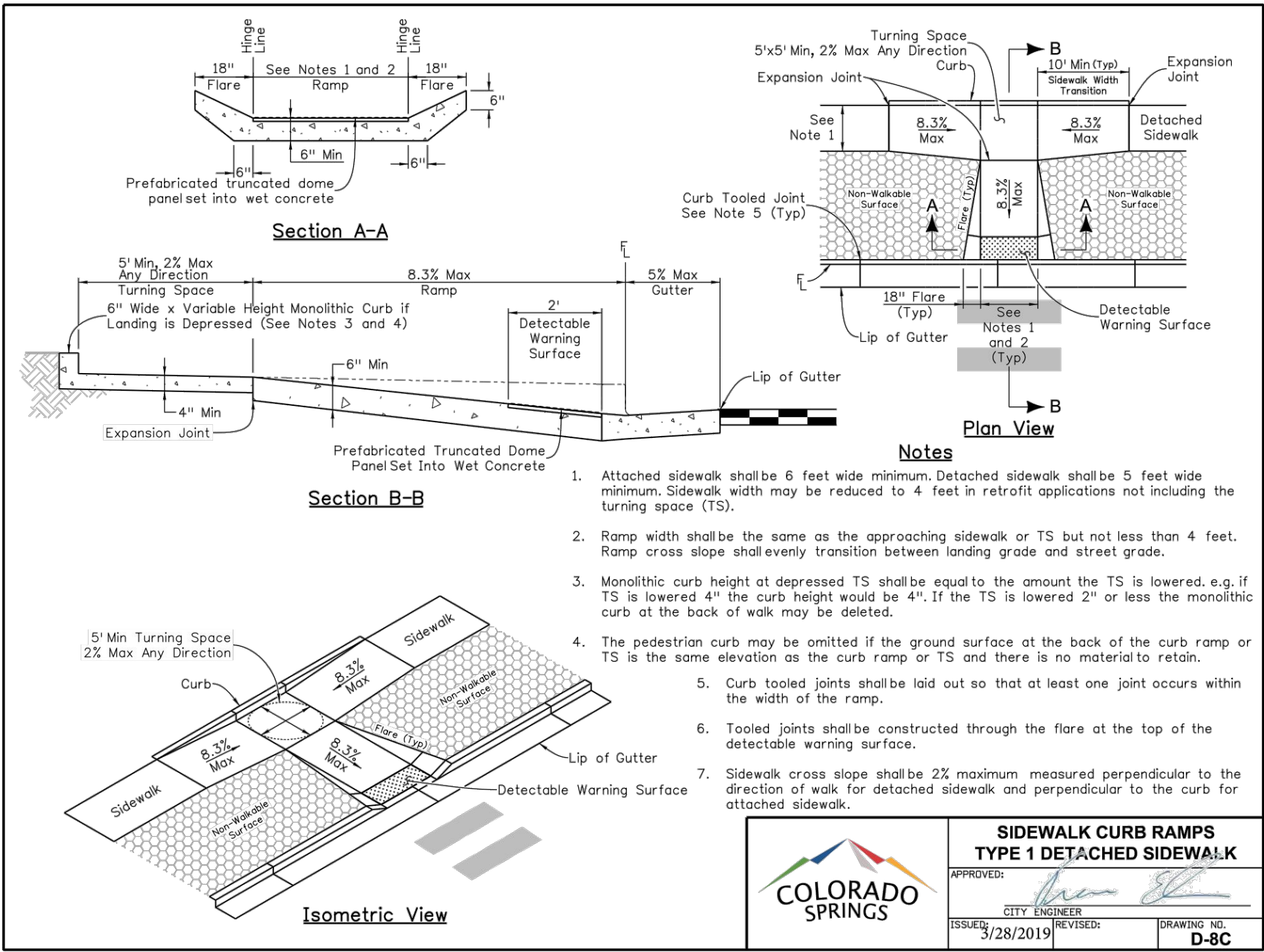
DESIGN	DRAWN	CHKD
SWK	SWK	TOP
SCALE	H: 1" = 20' V: 1" = 2'	
JOB No.	020441-01-001	
DATE :	02/09/2021	
SHEET	C7.0	

Bowman

C O N S U L T I N G

1526 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 801-2500
www.bowmanconsulting.com

Cad file name: V:\020441 - Super Star Car Wash\020441-01-001 (ENG) - Super Star Car Wash- Falcon, CO\Engineering\Engineering Plans\SDP\020441-01-001-SAN.dwg

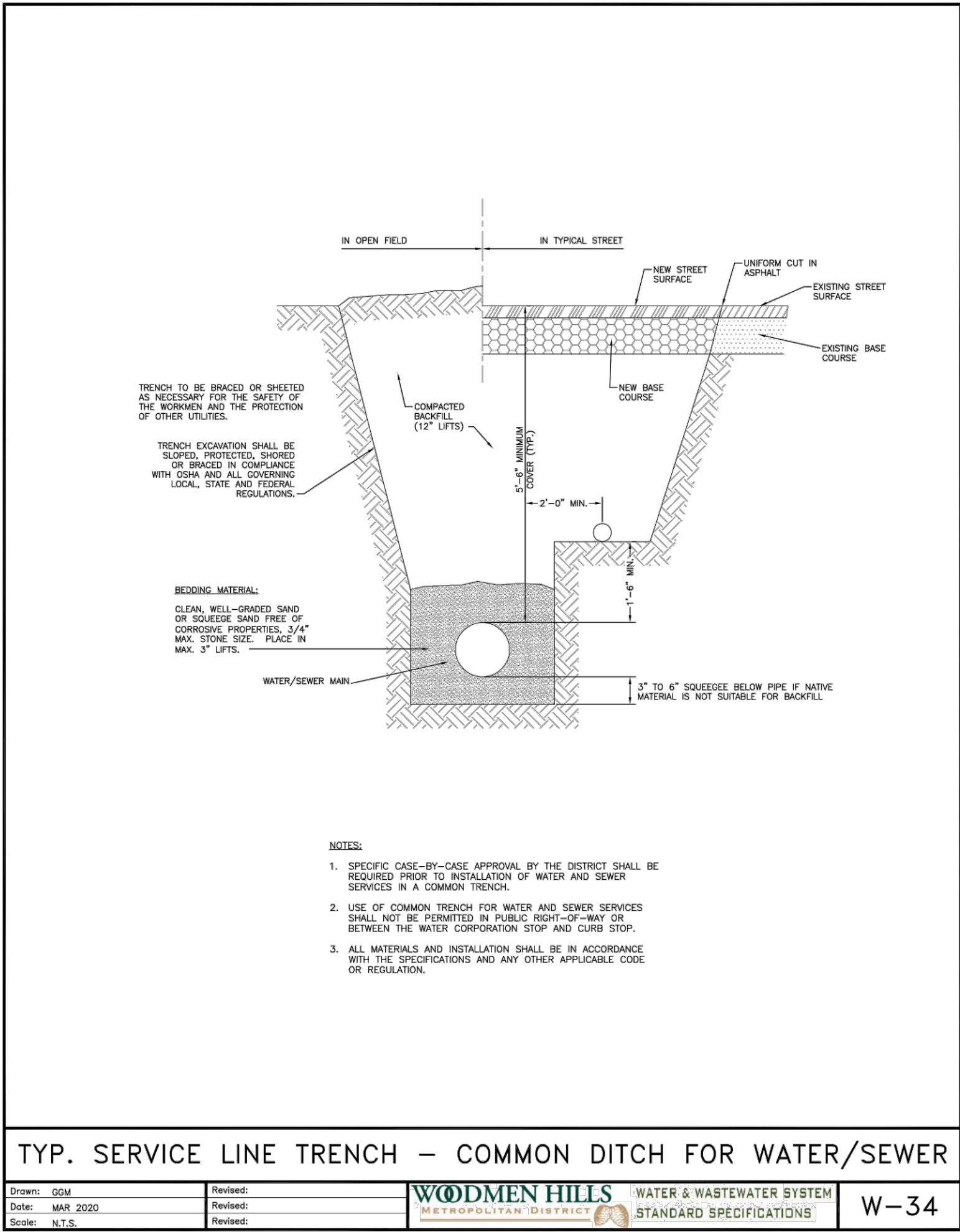
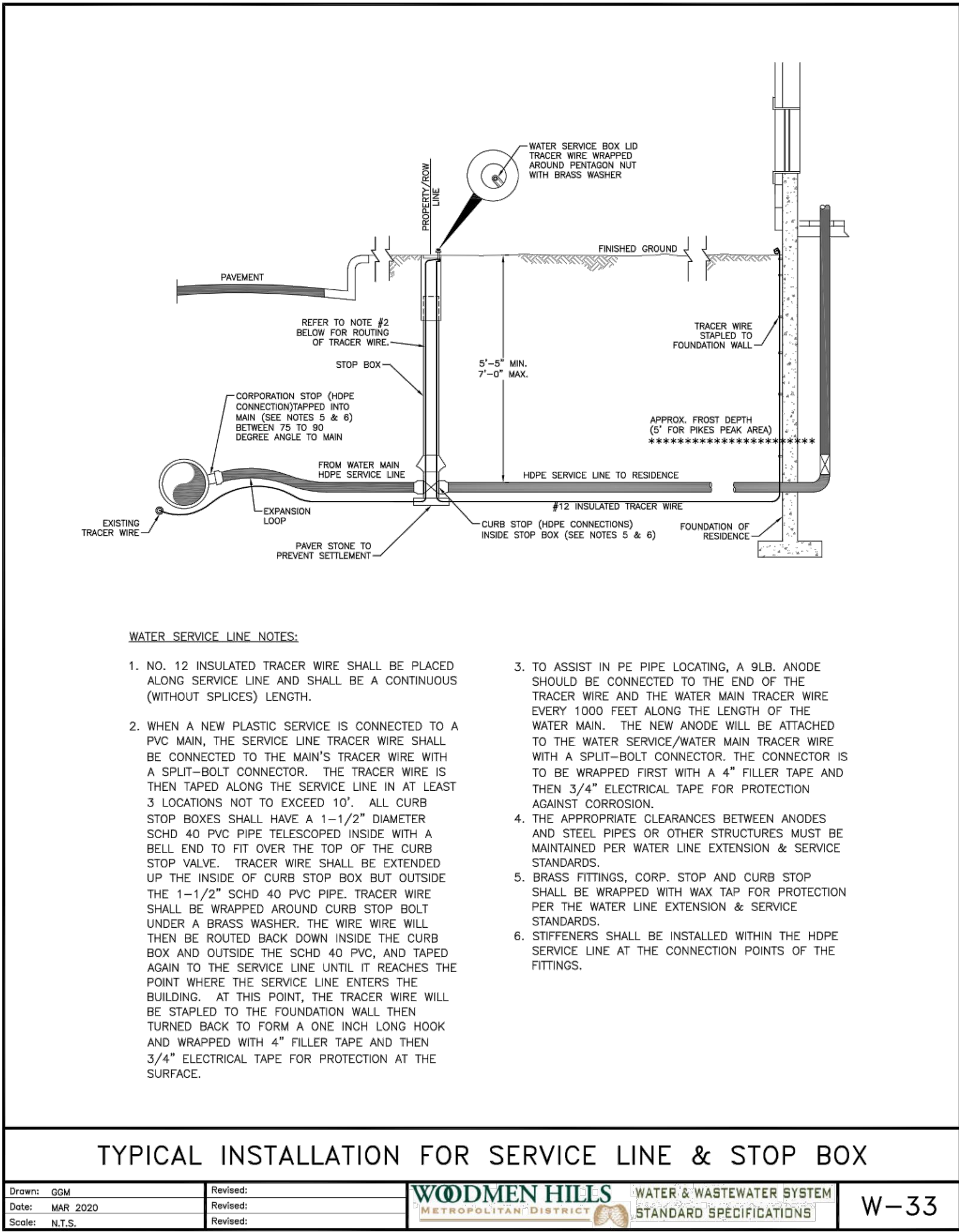
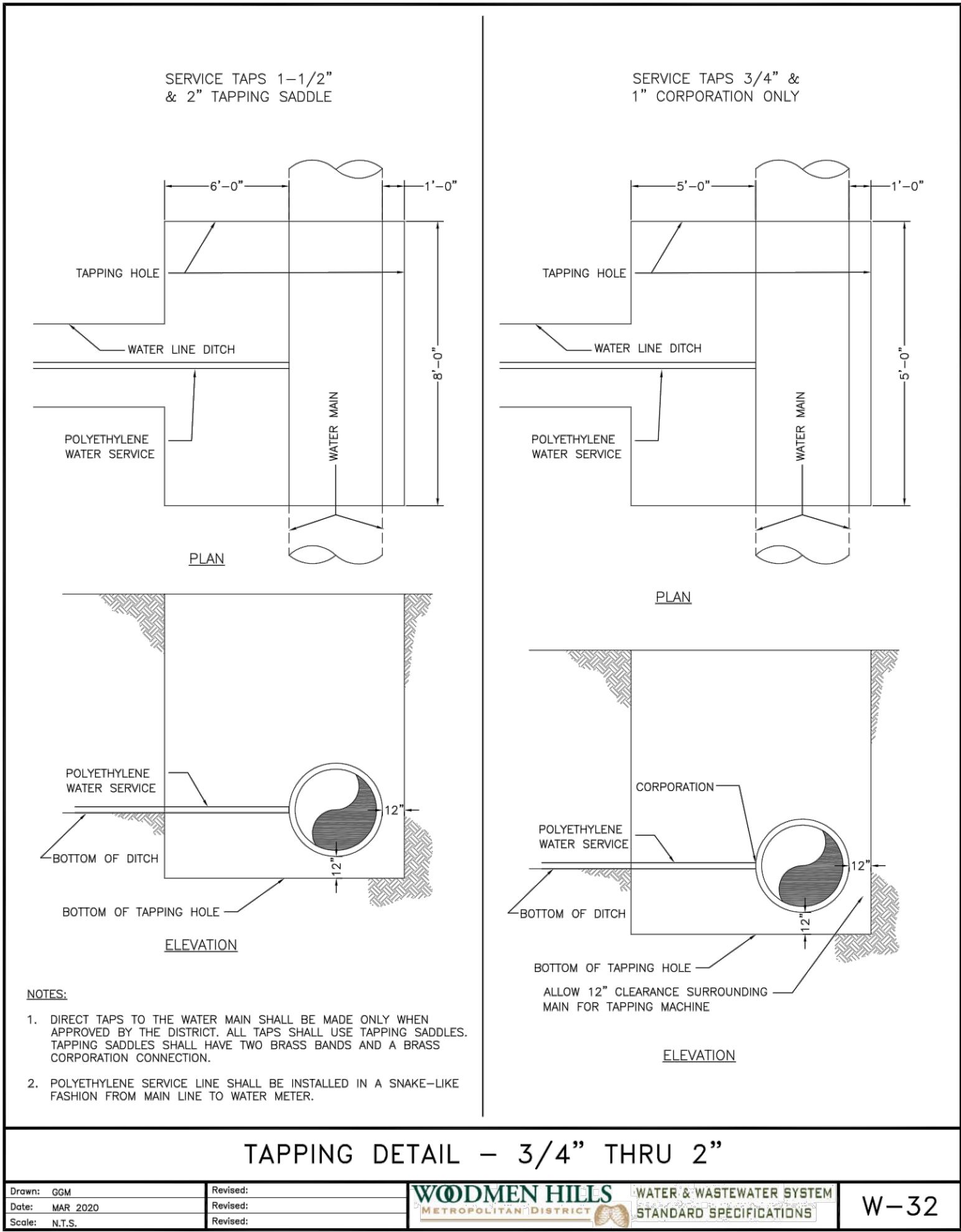
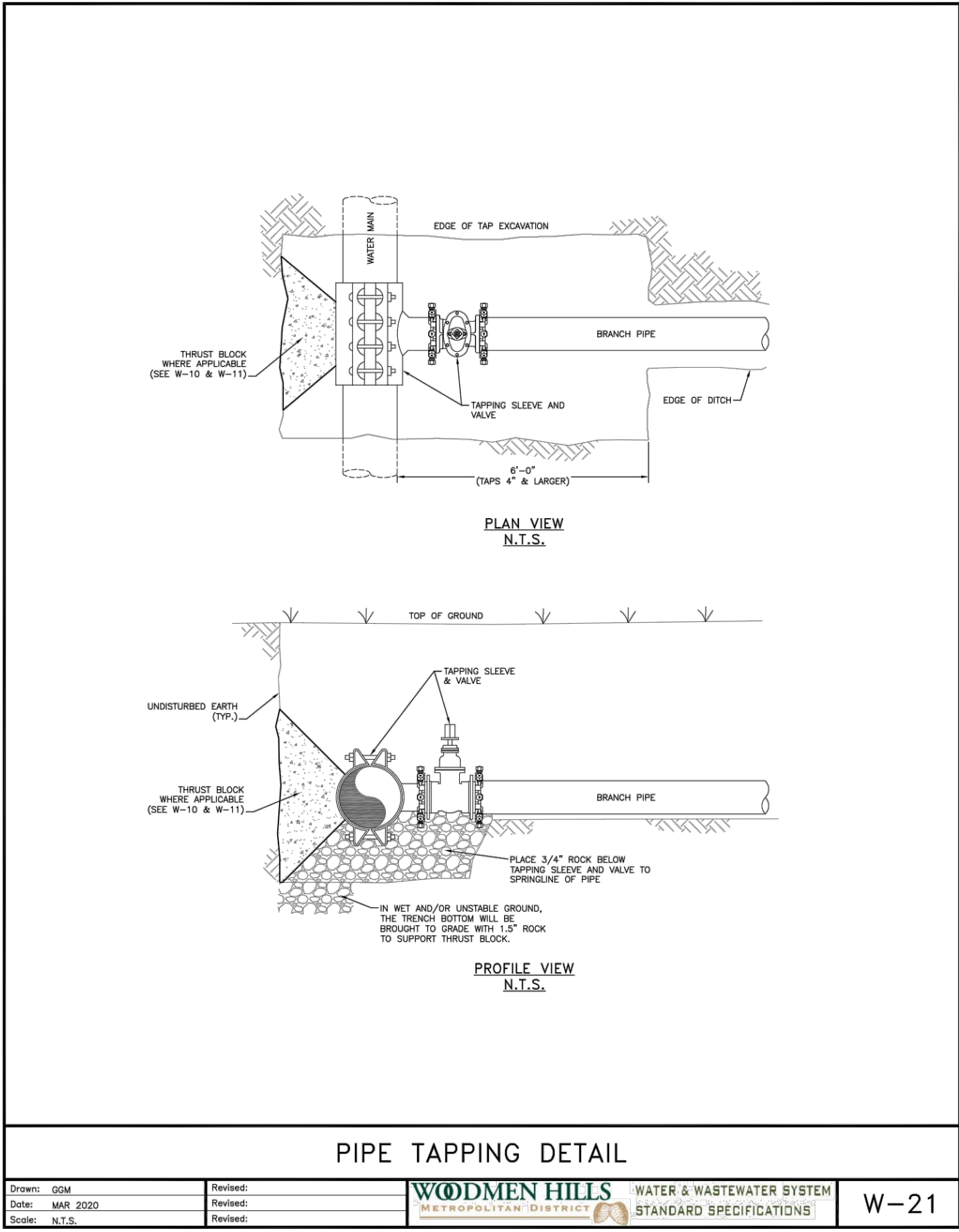
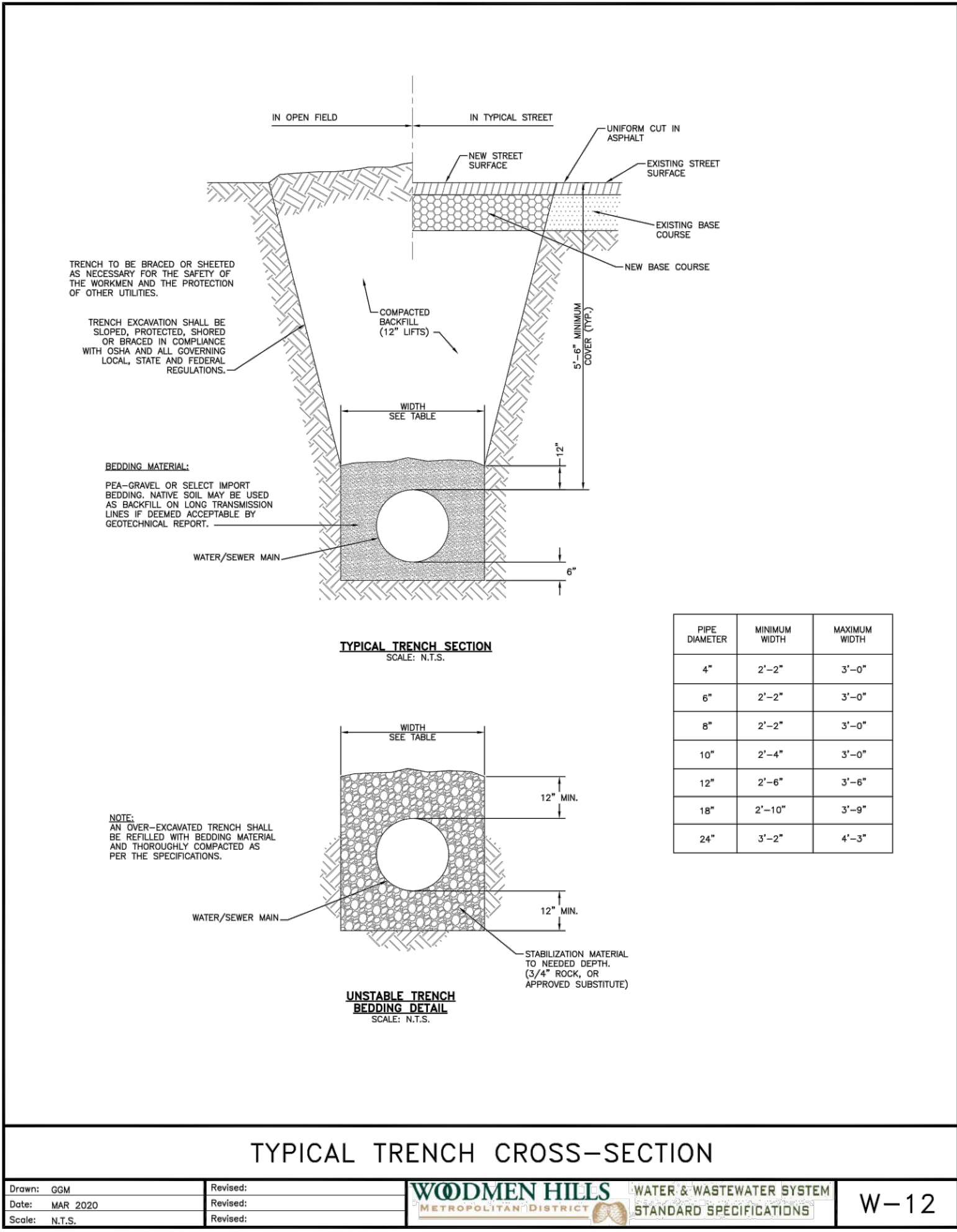
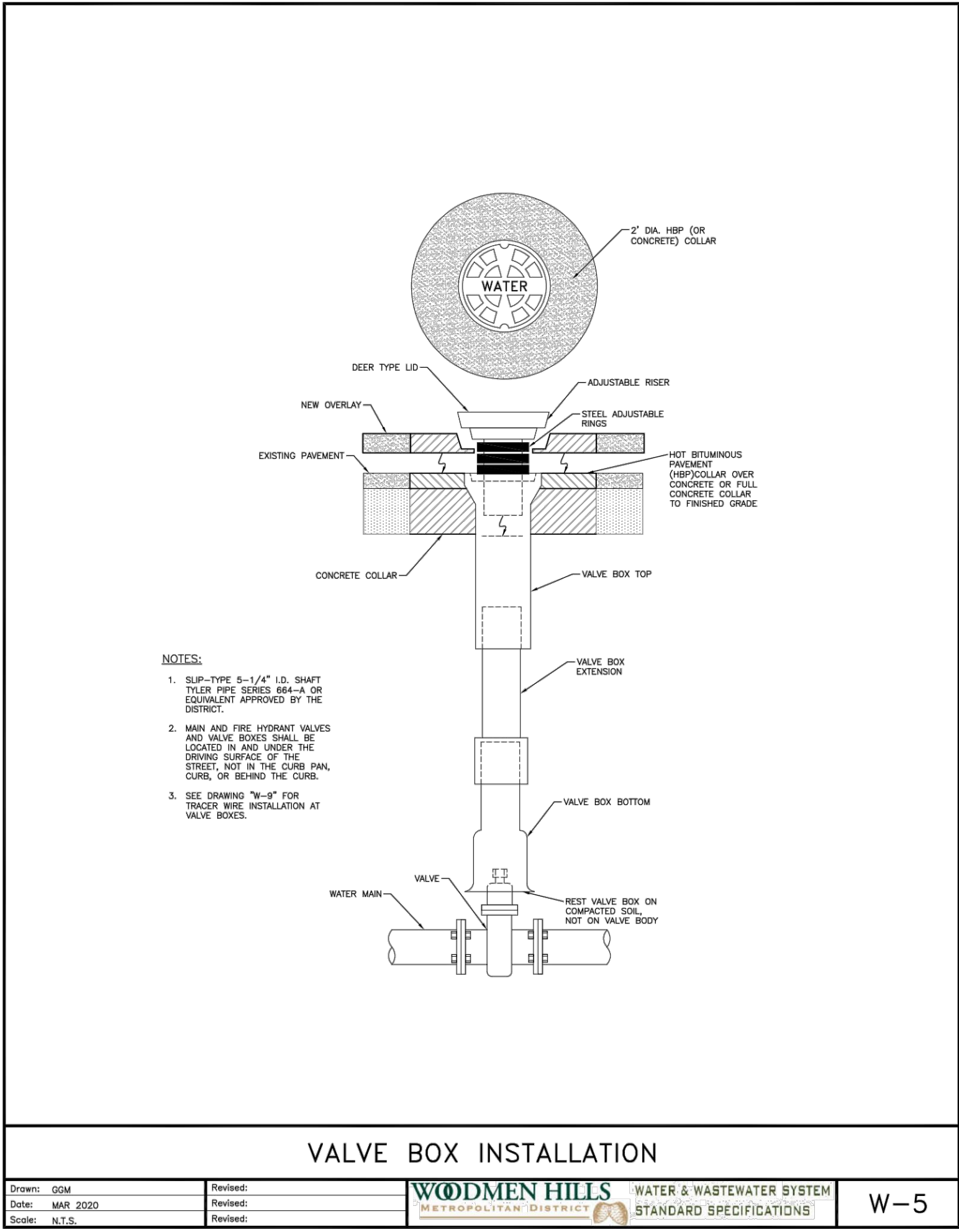


Know what's below.
Call before you dig.

REVISIONS			CONSTRUCTION DETAILS		
REVISION	DESCRIPTION	DATE	SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10 SITE DEVELOPMENT PLAN		
			EL PASO COUNTY		
			COLORADO		
			NOT FOR CONSTRUCTION		
DESIGN	DRAWN	CHKD			
SWK	SWK	TOP			
SCALE	H: 1" = XXX' V: 1" = XXX'				
JOB No.	020441-01-001				
DATE	02/09/2021				
	SHEET				
	C8.1				

Bowman
CONSULTING

1525 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 901-2500
www.bowmanconsulting.com



811

Know what's below.
Call before you dig.

DESIGN

SWK

DRAWN

SWK

CHKD

TOP

SCALE

H: 1" = XXX'
V: 1" = XXX'

JOB No.

020441-01-001

DATE :

02/09/2021

SHEET

C8.2

WATER DETAILS

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

EL PASO COUNTY

COLORADO

REVISIONS

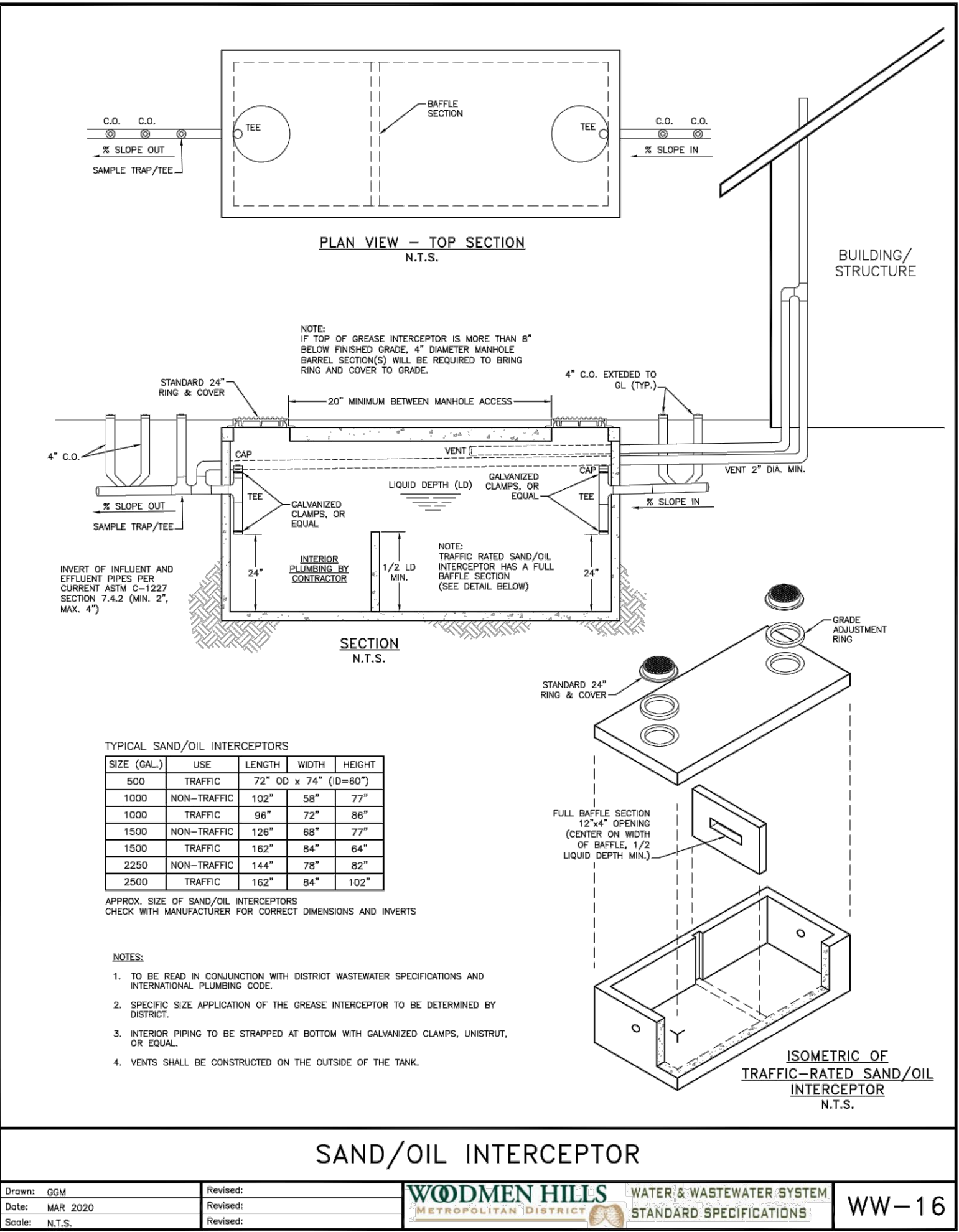
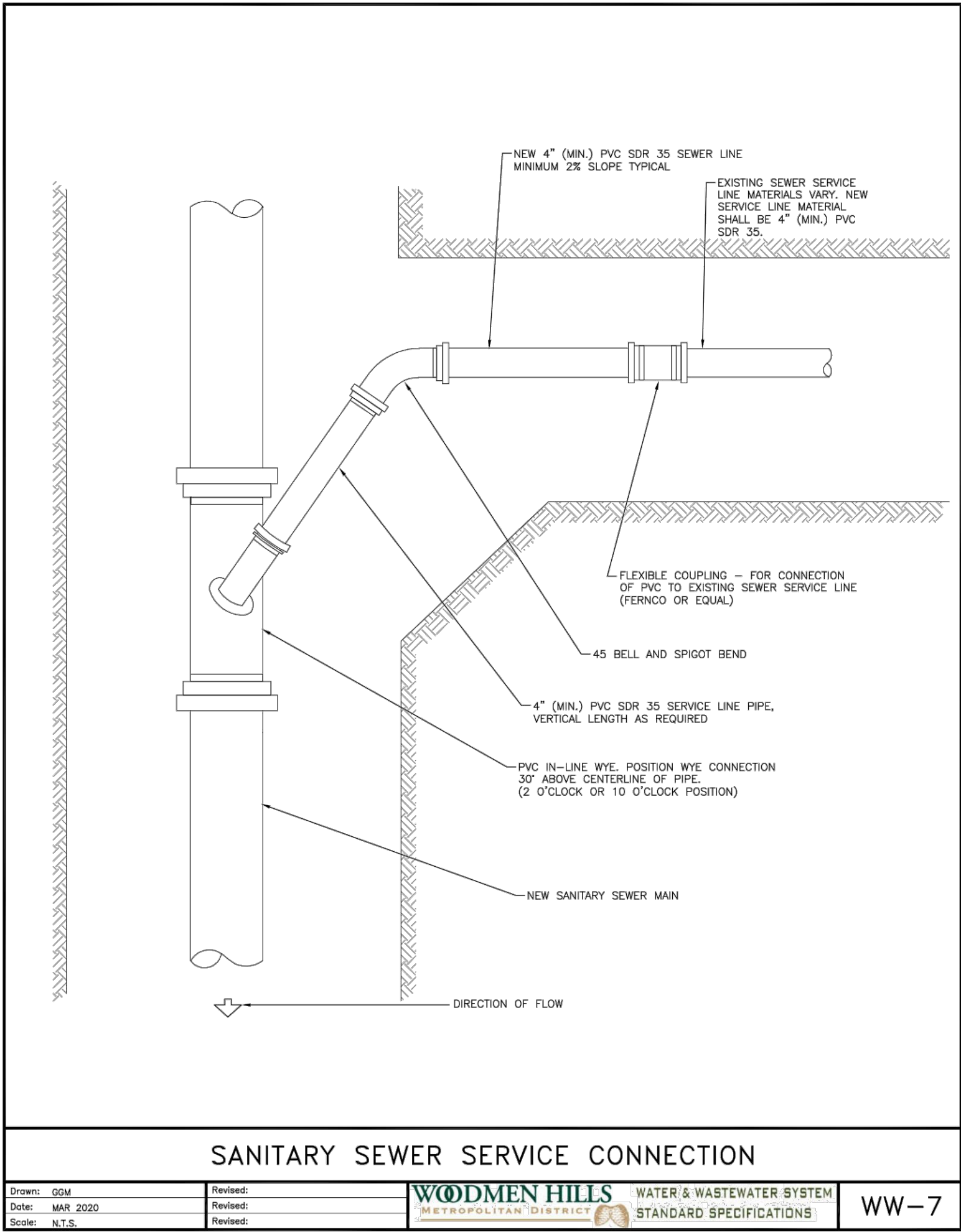
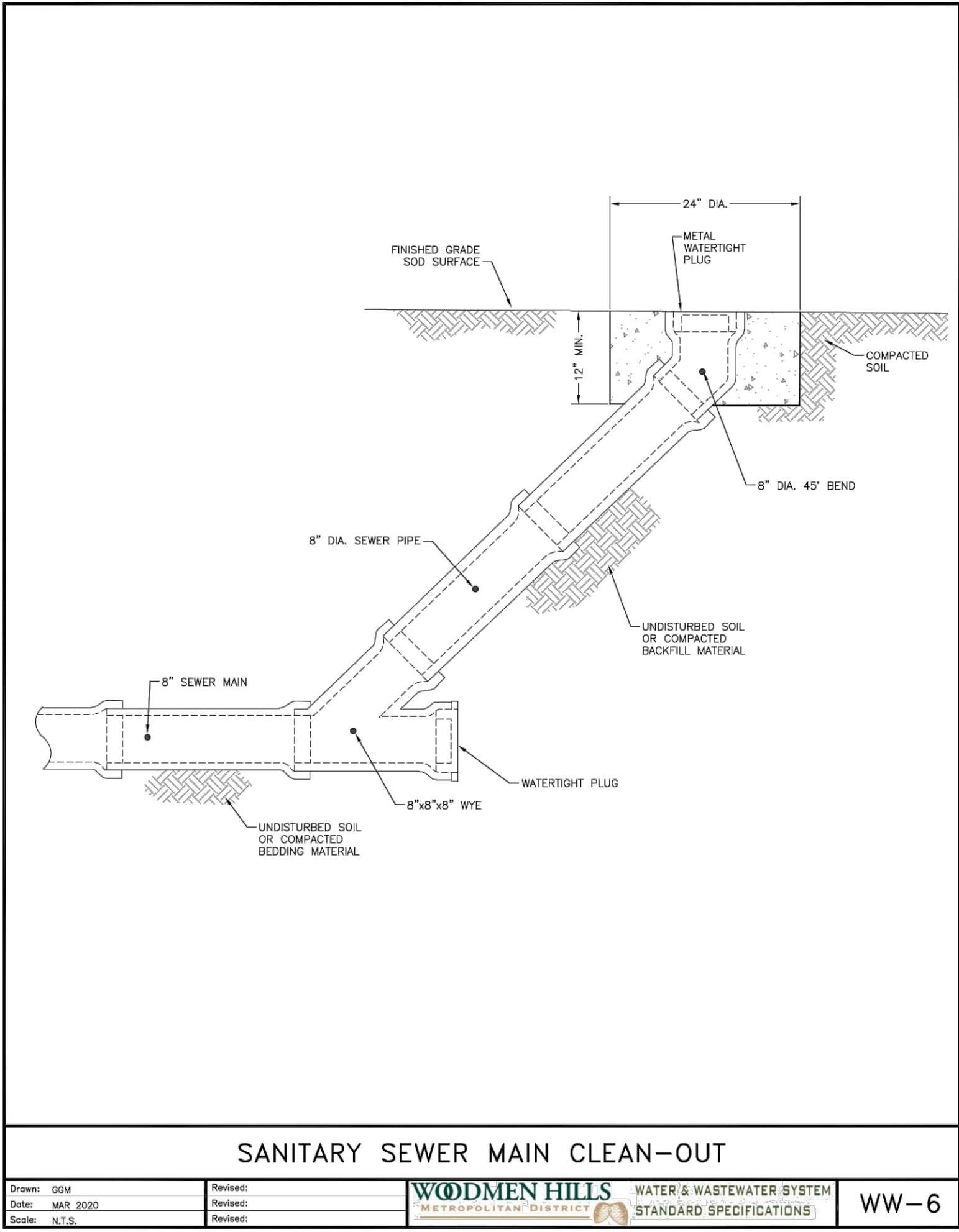
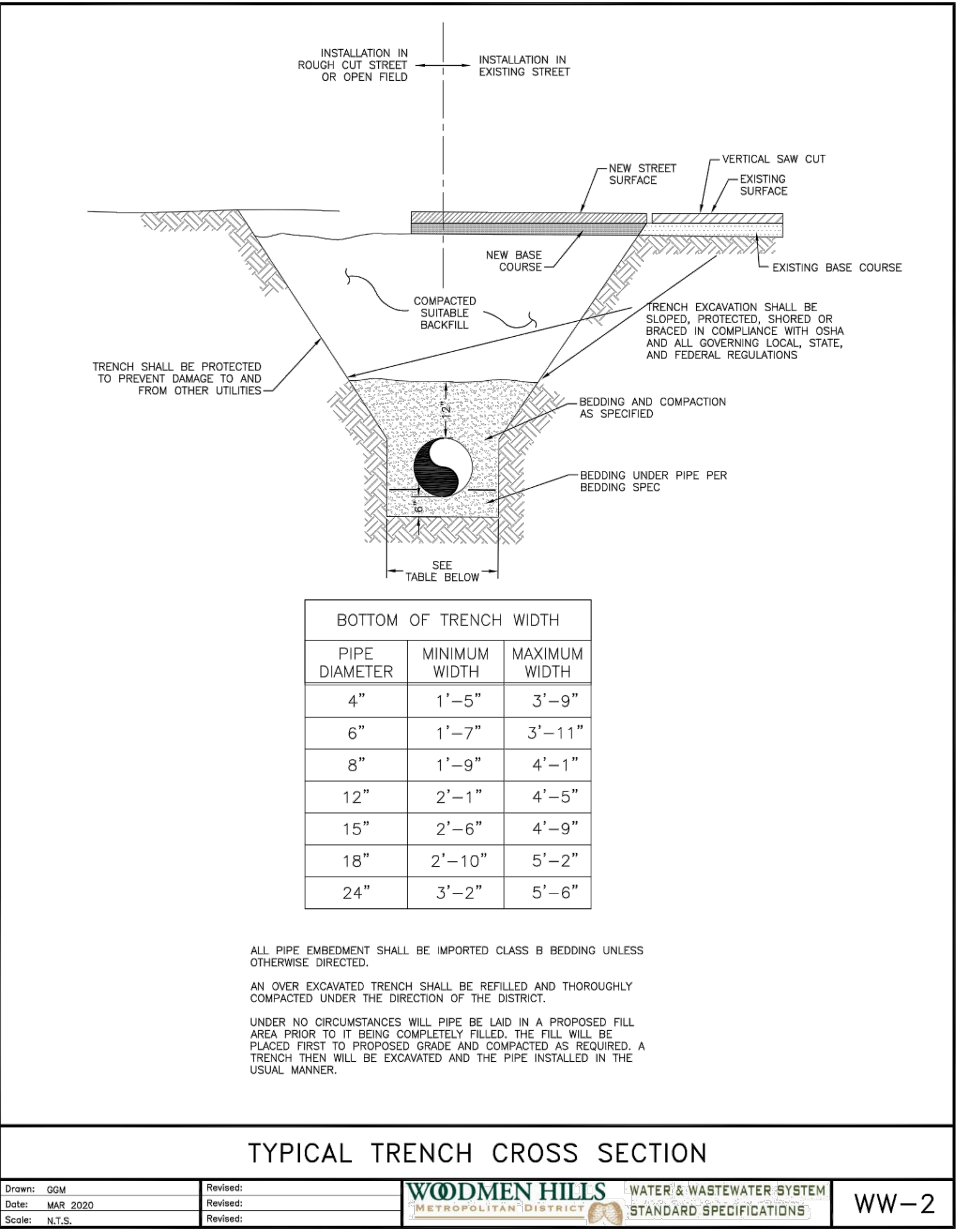
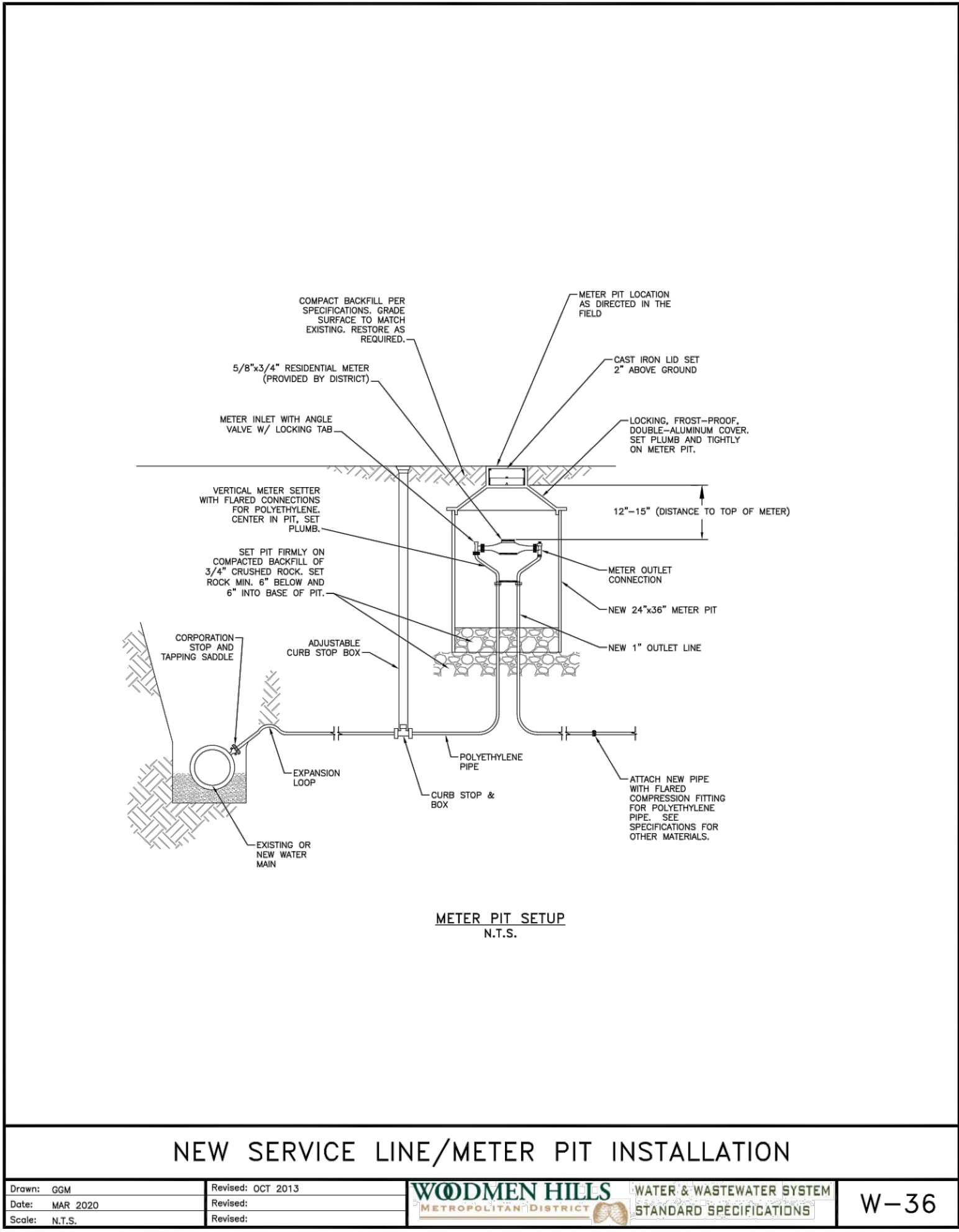
DATE

DESCRIPTION

REVISION

NOT FOR CONSTRUCTION

Cad file name: V:\020441 - Super Star Car Wash\020441-01-001 (ENG) - Super Star Car Wash- Falcon, CO\Engineering\Engineering Plans\SDP\020441-01-001-DET.dwg



Bowman
CONSULTING

1525 Cole Blvd, Suite 100
Lakewood, CO 80401
Phone: (303) 901-2500
www.bowmanconsulting.com

REVISION	DATE	DESCRIPTION

SANITARY DETAILS

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

COLORADO

EL PASO COUNTY

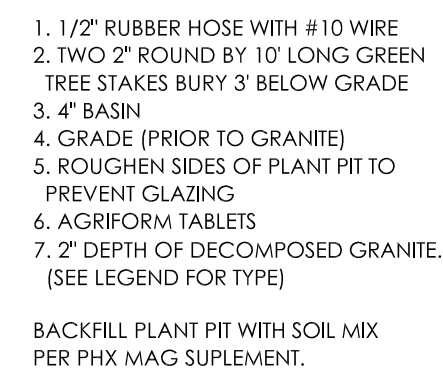
811

Know what's below.
Call before you dig.

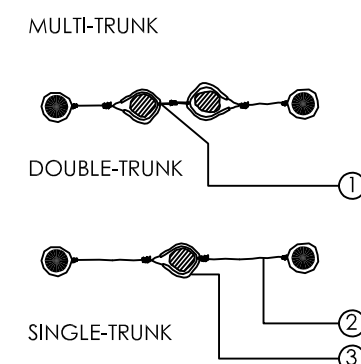
DESIGN	DRAWN	CHKD
SWK	SWK	TOP

SCALE	H: 1" = XXX'	V: 1" = XXX'
JOB No.	020441-01-001	

DATE	SHEET
02/09/2021	C8.3



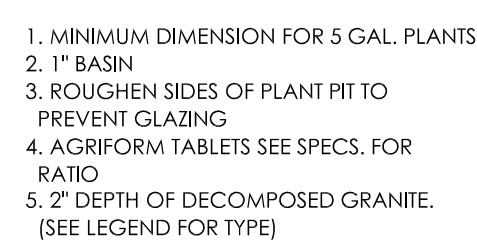
NOT TO SCALE
©



1. NOTCH TUBING LOOP
WIRE THROUGH
EXPOSED WIRE
2. #10 WIRE RUBBER COATED
3. 1/2" RUBBER HOSE



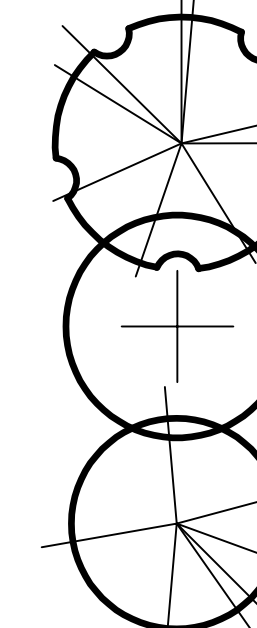
NOT TO SCALE



BACKFILL PLANT PIT WITH SOIL MIX
PER PHX MAG SUPPLEMENT.



NOT TO SCALE



GLEDITSIA TRICANTHOS 'SHADEMASTER'
SHADEMASTER LOCUST
2" CALIP., 6.5'T, 4.5"W (7)

PSEUDOTSUGA MENZIEI 'GLAUCA'
ROCK MTN. DOUGLAS FIR
2" CALIP., 6'-8' T, 4"W (5)

ACER TARTICUM 'GARANN'
HOT WINGS MAPLE
2" CALIP. 6'T, 4.5'W (MULTI) (13)

PEROVSKIA ATRIPLICIFOLIA
RUSSIAN SAGE
5 GALLON (43)

POTENTILLA FRUTICOSA 'GOLD FINGER'
GOLD FINGER POTENTILLA
5 GALLON (61)

JUNIPERUS SABINA 'BUFFALO'
BUFFALO JUNIPER
5 GALLON (25)

JUNIPERUS HORIZONTALIS 'BLUE CHIP'
BLUE CHIP JUNIPER
5 GALLON (68)

PANICUM VIRGATUM 'SHENANDOAH'
RED SWITCH GRASS
1 GALLON (49)

ACHILLEA MILLEFOLEUM 'PAPRIKA'
PAPRIKA YARROW
1 GALLON (52)

SALVIA SYLVESTRIS 'MAINACHT'
MAY NIGHT SALVIA
1 GALLON (108)

ROCK COBBLE MULCH (TO MATCH ADJACENT)
25%-75% ARKANSAS RIVER ROCK
3" DEPTH IN ALL LANDSCAPE AREAS

14 GAGE, 4" HIGH, 1/8" THICK (BLACK)
STEEL EDGING
TO MATCH ADJACENT DEVELOPMENTS

XERISCAPE SEED MIX
GRASS SEED
TO MATCH ADJACENT DEVELOPMENTS

LANDSCAPE PLAN

LANDSCAPE ARCHITECTURE
URBAN DESIGN
SITE PLANNING

10450 N. 74th Street , Suite 120
Scottsdale, Arizona 85258

EMAIL: timmcqueen@tjmla.net

T.J. McQUEEN & ASSOC., INC. LANDSCAPE ARCHITECTURE (TJMLA) EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IF COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESSED WRITTEN PERMISSION & CONSENT FROM TJMLA.

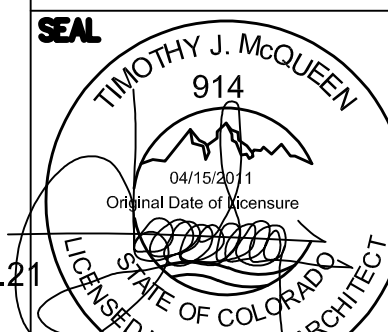


Know what's **below**.
Call before you dig.

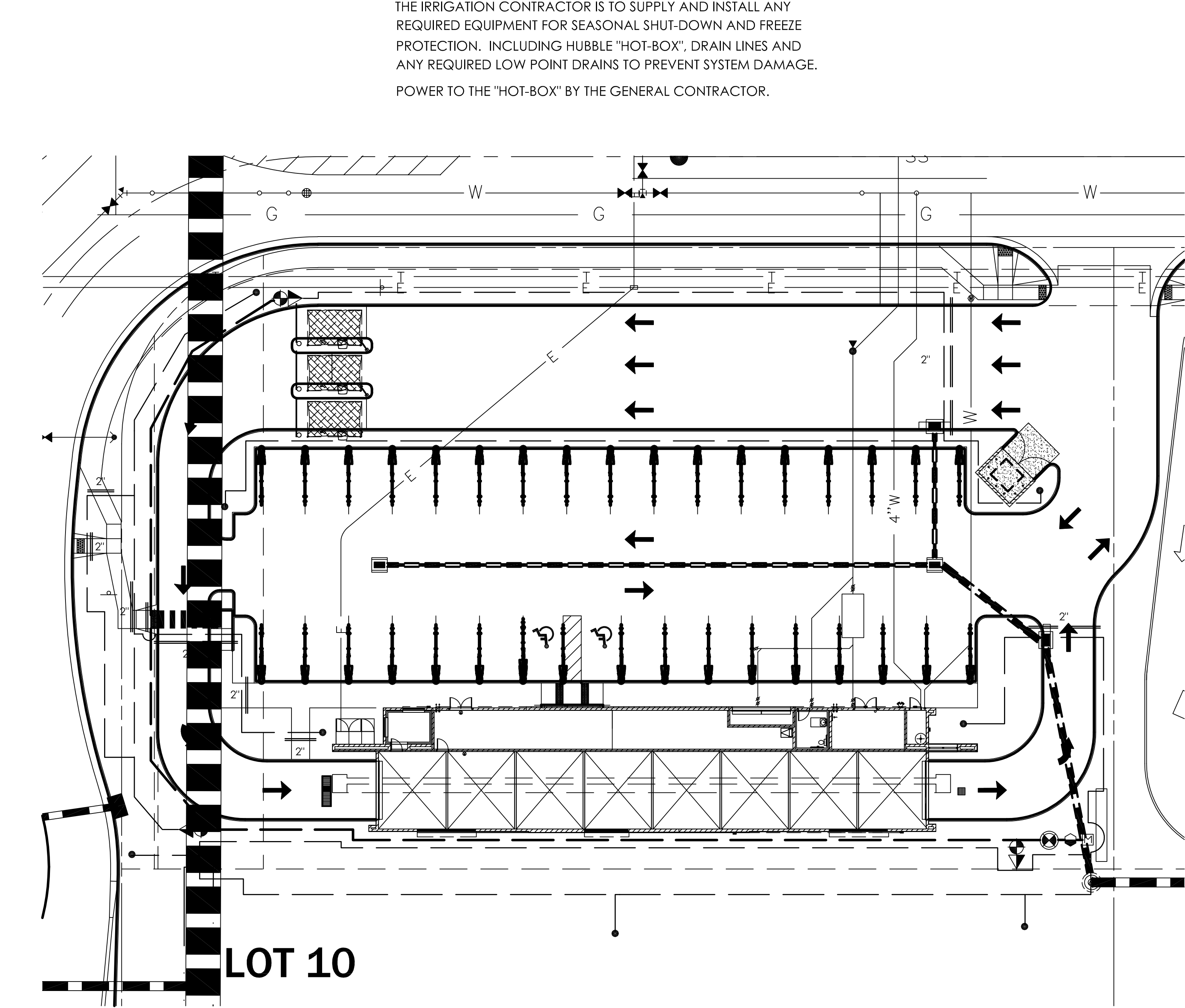
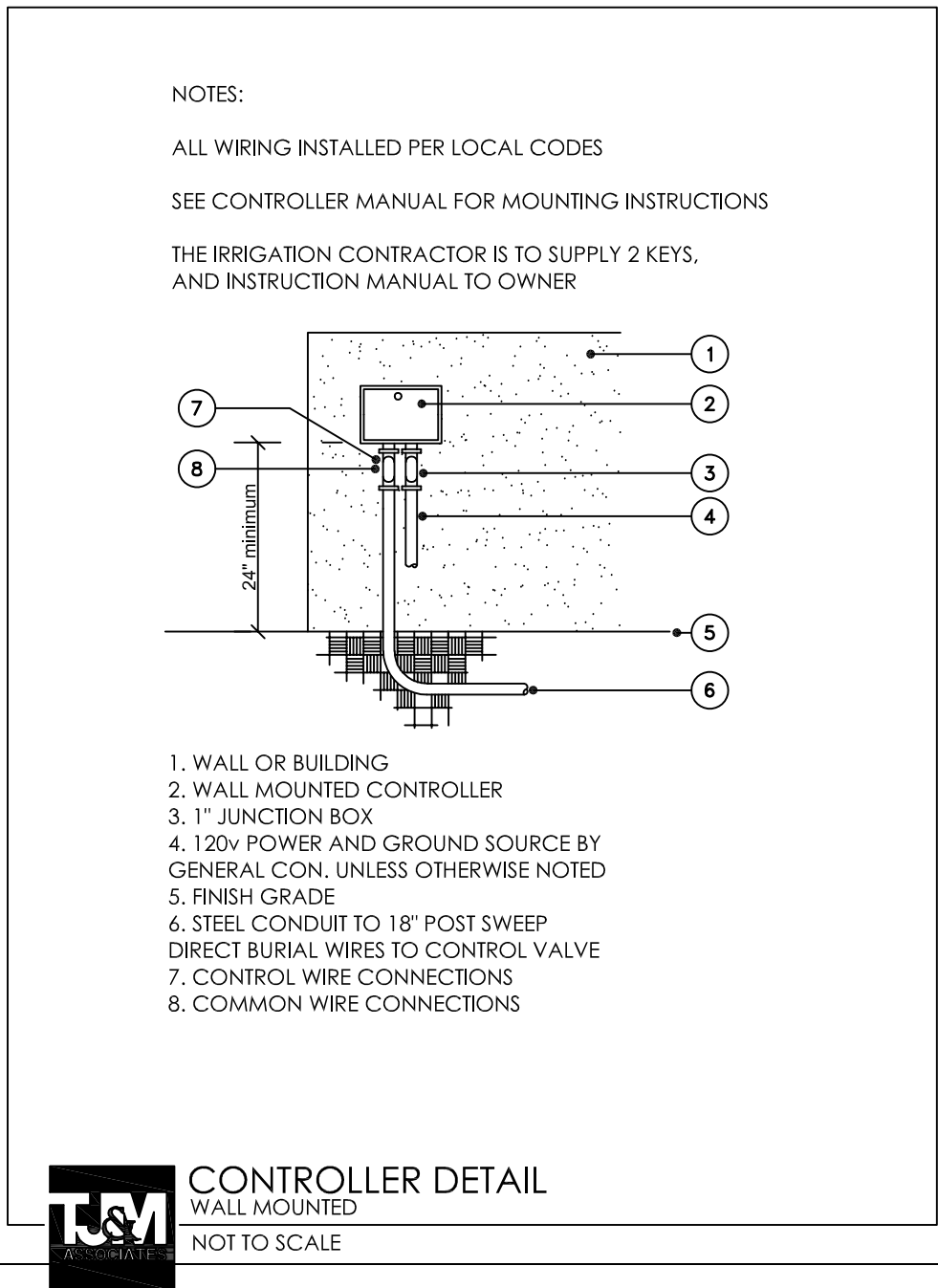
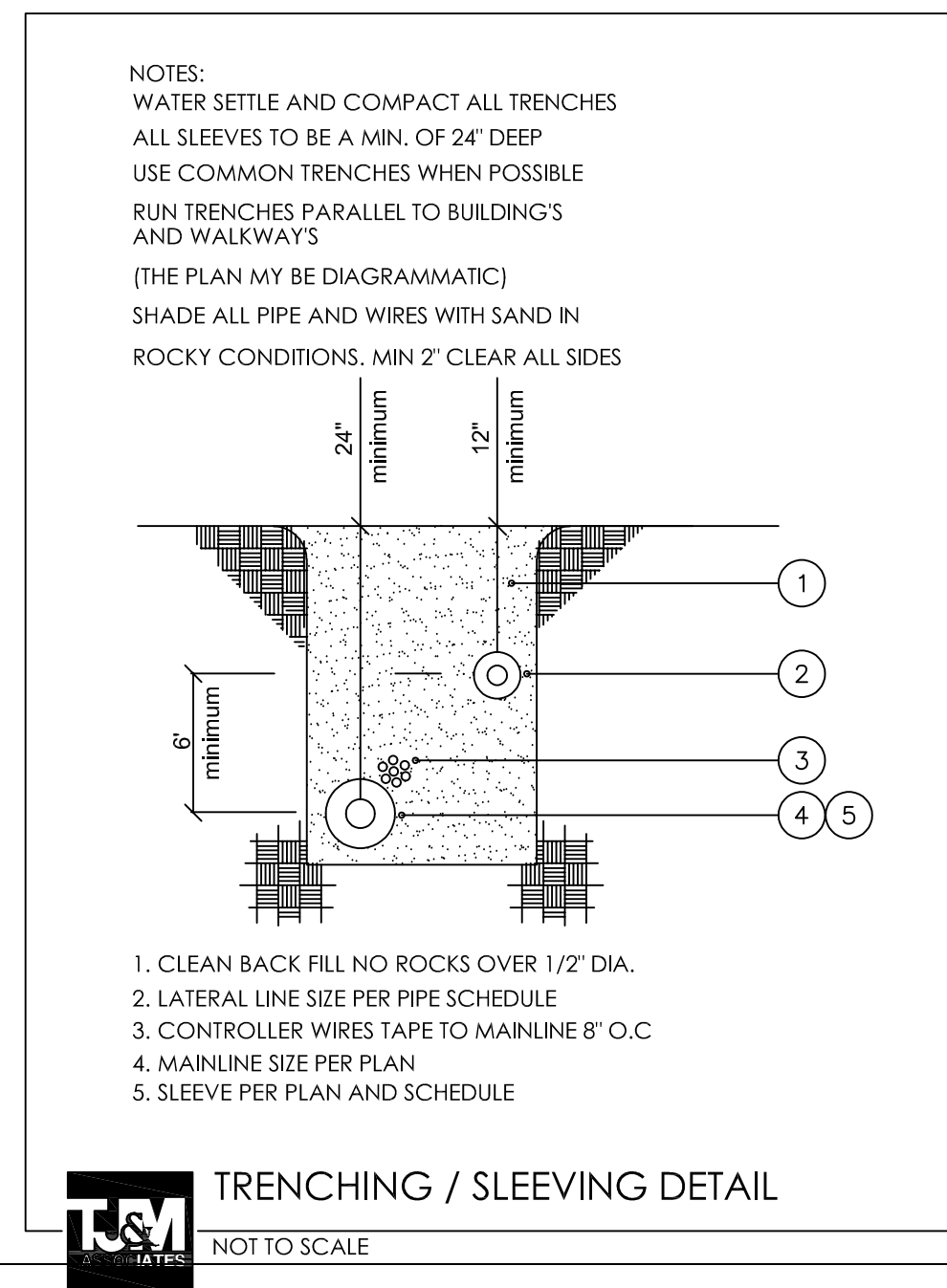
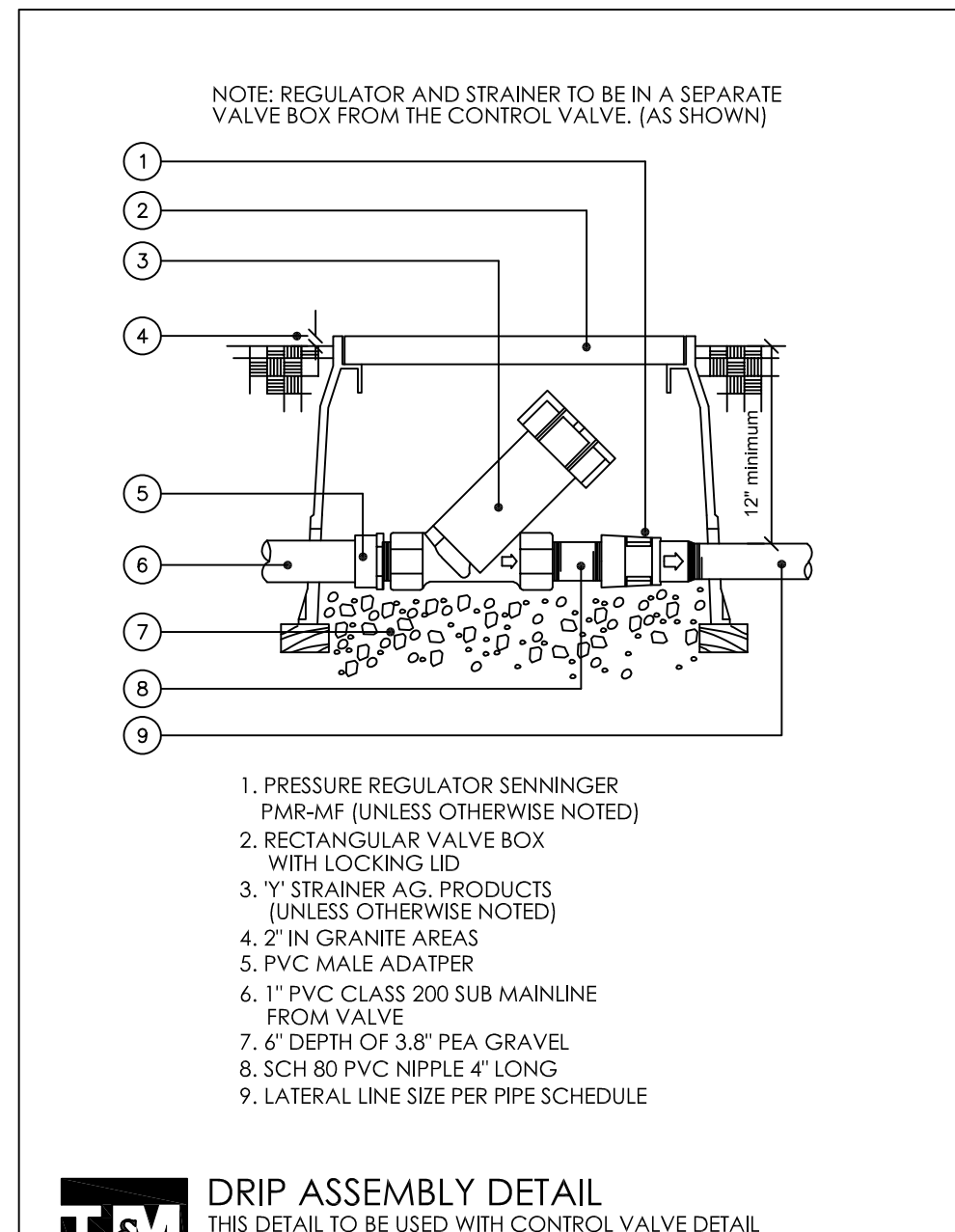
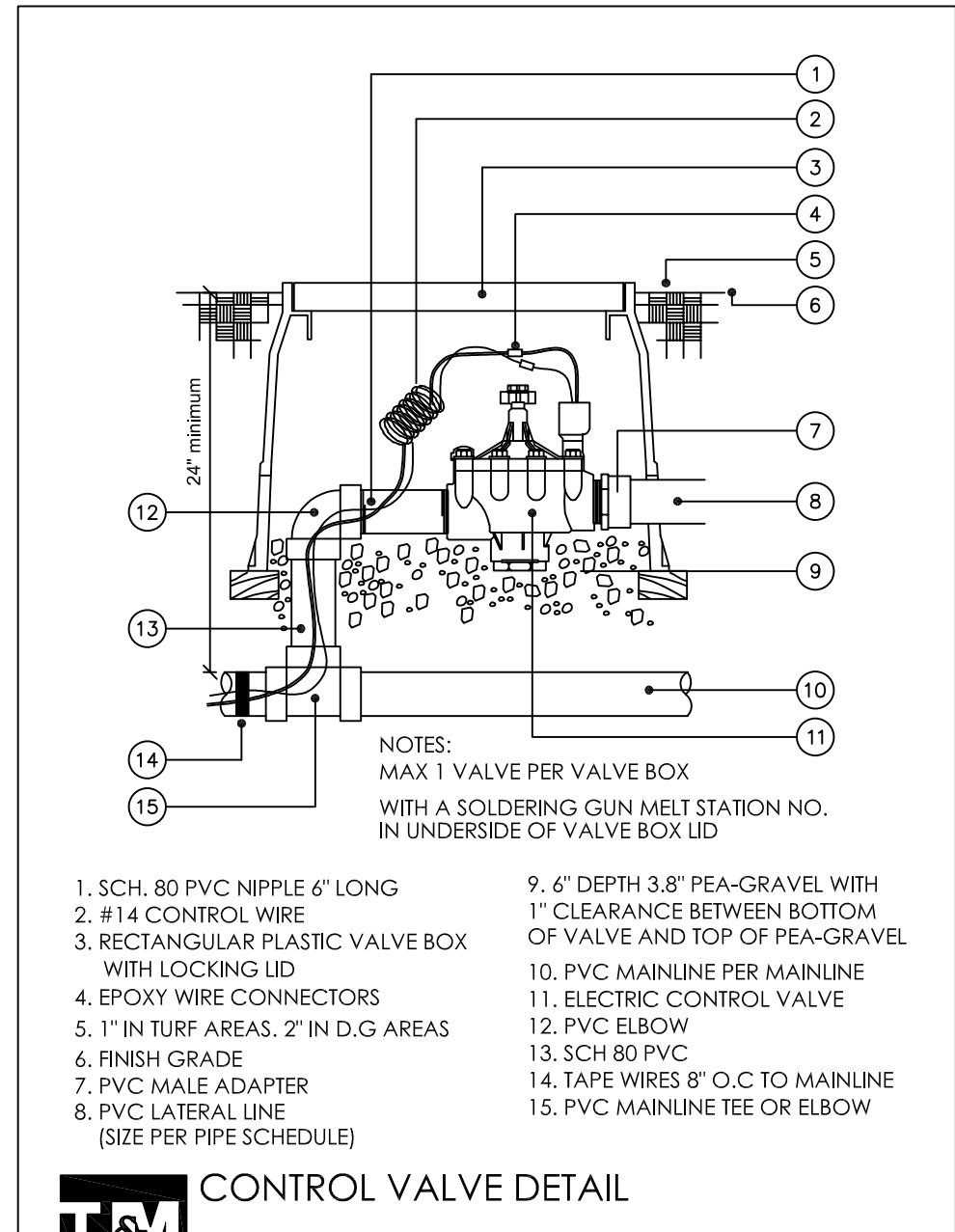
[illegible]

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

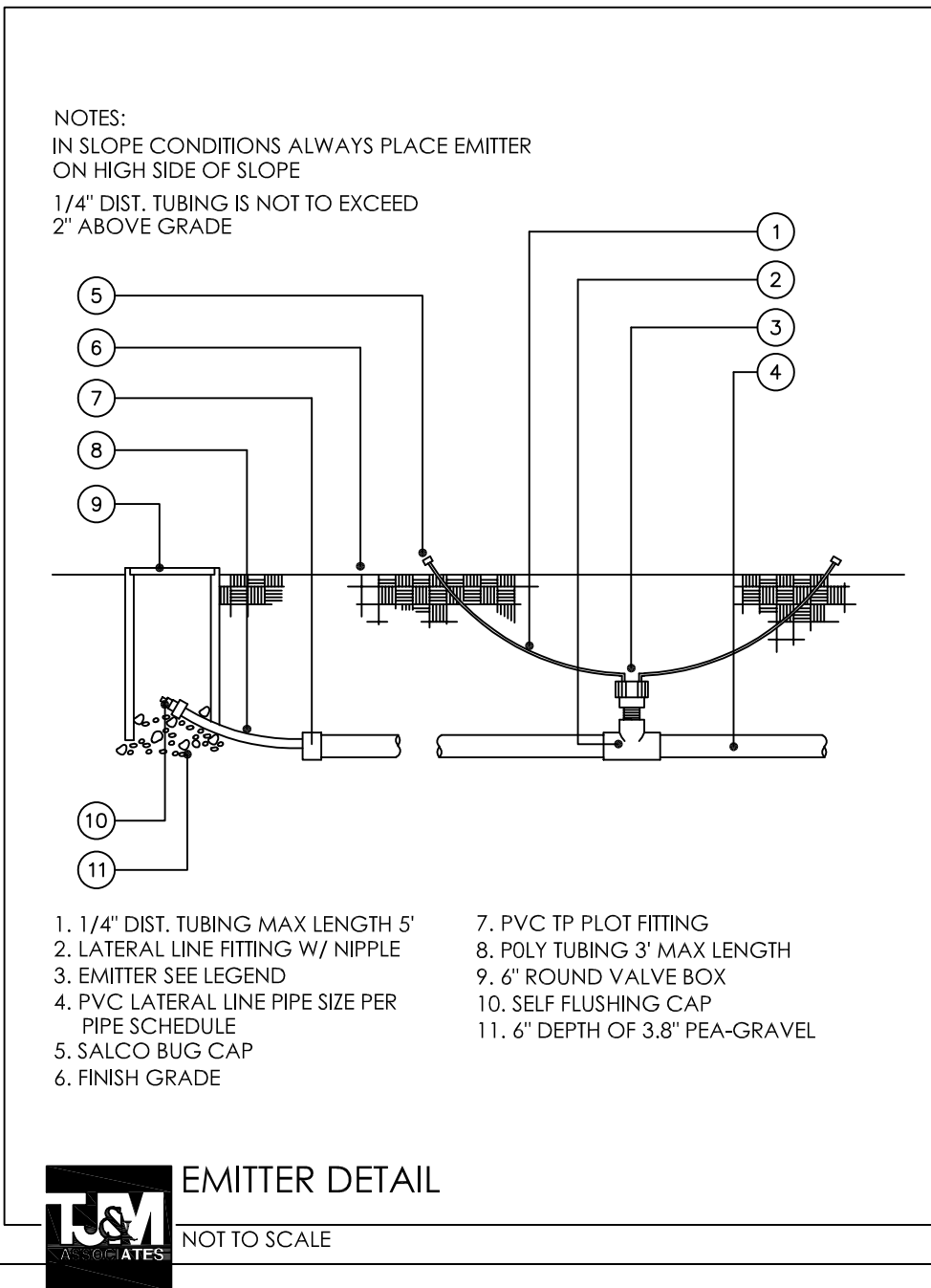
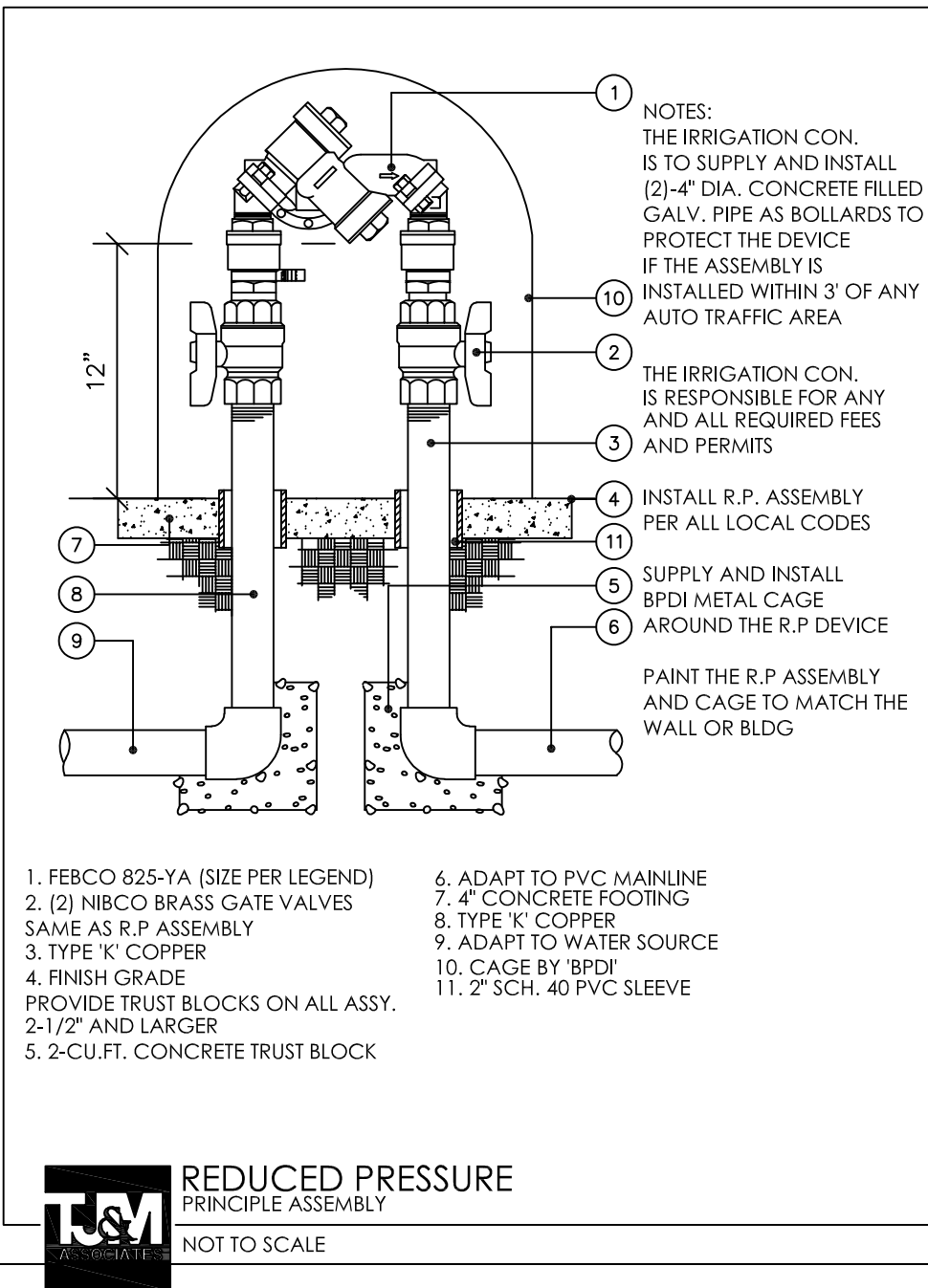
EL PASO COUNTY



DESIGN SWK	DRAWN SWK	CHECKED TOP
SCALE	H: V:	
JOB No.	020441-01-001	
DATE :	02/05/2021	
SHEET Lg.01		



COLD WEATHER CLIMATE:
THE IRRIGATION CONTRACTOR IS TO SUPPLY AND INSTALL ANY REQUIRED EQUIPMENT FOR SEASONAL SHUT-DOWN AND FREEZE PROTECTION. INCLUDING HUBBLE "HOT-BOX", DRAIN LINES AND ANY REQUIRED LOW POINT DRAINS TO PREVENT SYSTEM DAMAGE.
POWER TO THE "HOT-BOX" BY THE GENERAL CONTRACTOR.



CLARITY NOTE:
FOR GRAPHIC CLARITY THE EMITTERS HAVE NOT BEEN SHOWN
VERIFY EMITTER COUNT WITH PLANT COUNT AND EMITTER SCHEDULE.

FOR GRAPHIC CLARITY THE SLEEVES HAVE NOT BEEN SHOWN. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR ALL SLEEVES PER THE FOLLOWING SCHEDULE.

SLEEVING SCHEDULE:
WIRES 2" SCH. 40 PVC (QTY AS REQUIRED)
MAIN LINE 4" SCH. 40 PVC (OR DBL THE MAINLINE SIZE)
DRIP LATERAL 2" SCH. 40 PVC
TURF LATERAL 3" SCH. 40 PVC (OR DBL THE LATERAL LINE SIZE)

PLANT SIZE	GA. PER HR.	EMITTER SIZE
36" BOX	6	(1) HUNTER MPE-20
24" BOX	4	(1) HUNTER MPE-20
15 GALLON	4	(1) HUNTER MPE-10
5 GALLON	1	(1) HUNTER HEB-10
1 GALLON	1	(1) HUNTER HEB-10

NOTES:
EMITTER SIZING AND QUANTITIES MAY VARY DEPENDING ON SOIL TYPE AND CLIMATE CONDITIONS VERIFY PRIOR TO BID. ALL NON-METALIC WATER AND IRRIGATION PIPING LARGER THAN 2" REQUIRE MIN. 18 AWA INSULATED COPPER TRACER WIRE SUITABLE FOR DIRECT BURIAL

THE IRRIGATION CONTRACTOR MAY SUBSTITUTE
(1) MULTI EMITTER FOR (6) SINGLE EMITTERS IN GROUND AREAS AS LONG AS DIST. TUBING DOES NOT EXCEED 5 FT

FOUNDATION NOTE:
NO END CAPS ARE TO BE PLACED WITHIN 15' OF ANY FOUNDATION OR FOOTING. ADJUST LAYOUT AS REQUIRED.
NO HIGH WATER USE. OR HIGH FLOW PRODUCTS ARE TO BE USED WITHIN 15' OF ANY FOUNDATION OR FOOTING. THE IRRIGATION IS TO BE MONITORED ON A REGULAR BASIS TO AVOID SOIL SATURATION AROUND FOUNDATIONS AND FOOTINGS. THIS IRRIGATION PLAN IS DIAGRAMATIC ADJUST LAYOUT AS REQUIRED.

- IRRIGATION LEGEND**
- 1" LANDSCAPE METER
 - FEBCO 825-YA-1" R.P. ASSY. W/ GUARDSHACK CAGE PAINTED TO MATCH BUILDING
 - HUNTER ICV-(SIZE PER MAINLINE) MASTER VALVE INSTALL IN VALVE BOX ADJACENT TO BACKFLOW
 - HUNTER DRIP CONTROL ZONE KIT PCZ-101-25 (30gph to 600gph) (.5gpm to 10gpm) ICZ-101-25 (601gph to 1,200gph) (10gpm to 20gpm)
 - HUNTER I-CORE-1C-600-M (MODULES AS REQUIRED) 6 STATION CONTROLLER (POWER PER GENERAL CONTRACTOR)
 - HUNTER HEB-10 (1/2" THREADED) PRESSURE COMP. SINGLE PORT EMITTER
 - HUNTER MPE-(SIZE PER SCHEDULE) (1/2" THREADED) PRESSURE COMP. MULTI PORT EMITTER
 - 1.5" MAINLINE (SCH40)
 - CLASS 200-3/4" DRIP LATERAL LINE
 - AG. PRODUCTS SELF FLUSHING ENDCAP (SEE FOUNDATION NOTE)
 - SCH 40 PVC SLEEVE (SEE SLEEVING SCHEDULE)

PIPE SIZE	GPM	PIPE CLASS
1/2"	0-5	315
3/4"	6-10	200
1"	11-15	200
1 1/4"	16-25	200
1 1/2"	26-35	200
2"	36-60	200

T.J. McQUEEN & ASSOCIATES, INC.
LANDSCAPE ARCHITECTURE
URBAN DESIGN
SITE PLANNING
10450 N. 74th Street, Suite 120
Scottsdale, Arizona 85258
P. (602)265-0320

EMAIL: timmqueen@tjmla.net



Know what's below.
Call before you dig.

REVISIONS

DATE

DESCRIPTION

REVISION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

1

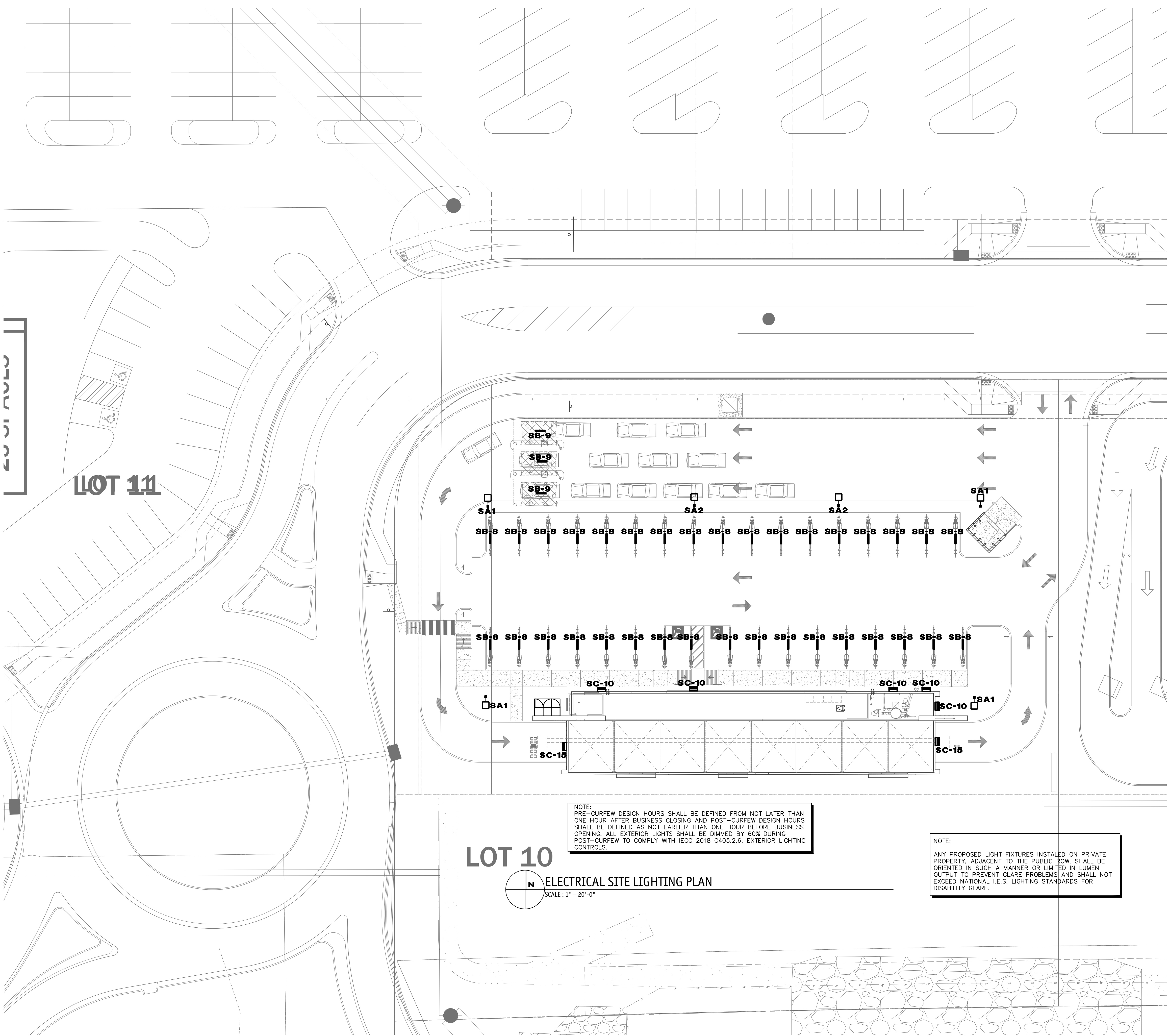
2

3

4

<

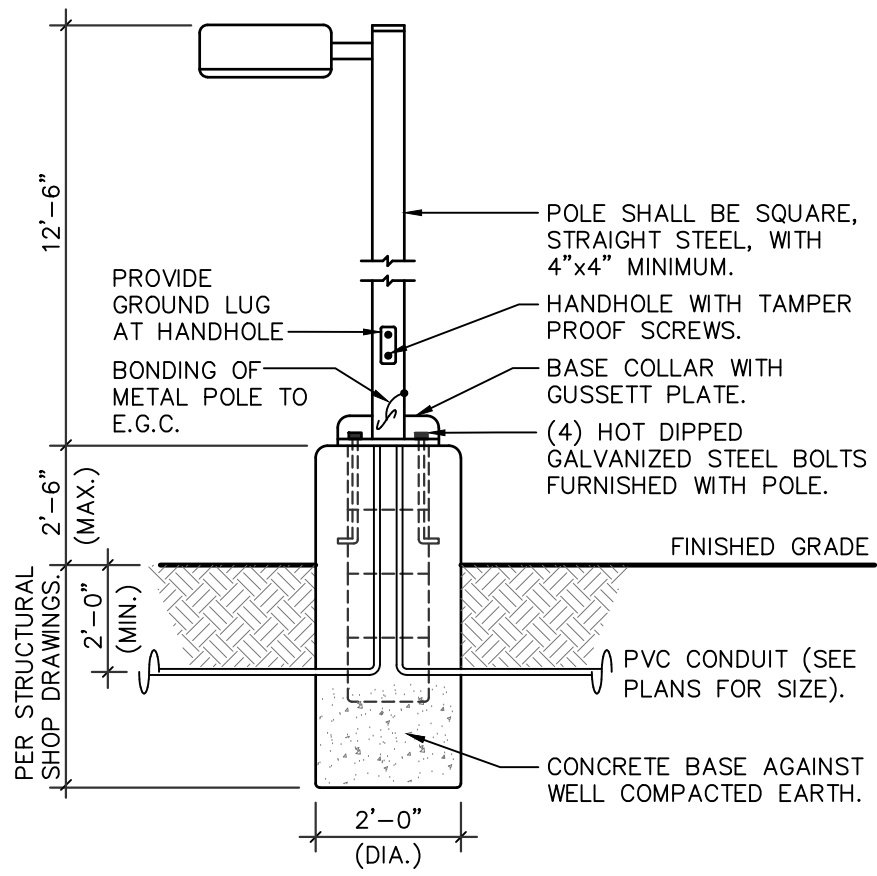
UNDERGROUND SPRINKLER SYSTEM			operating system.			only. Verify plant counts with plan. In case of discrepancy, plan shall govern.			4. Roll and sand sod when required to remove minor depressions or irregularities.		
Part 1 – General			B. All electrical work shall be done in accordance with the National Electrical Code and local ordinances.			H. Each plant shall be properly identified with legible waterproof tags securely fastened. Tags shall remain on the plants until after final acceptance and then be promptly removed by the Contractor.			5. Control growth of weeds in sod. When using herbicides, apply in accordance with manufacturer's instructions. Remove damage resulting from negligent or improper use of herbicides.		
1.01 WORK INCLUDED			C. All wire connections, at remote control valves (either direct buried or in control boxes) and at all wire splices, shall be left with sufficient "slack" so that in case of repair the valve bonnet or splice may be brought to the surface without disconnecting the wires.			PART 3 – INSTALLATION			6. Immediately repair or replace any sodded areas which show deterioration or bare spots.		
A. The work included under these specifications shall consist of the furnishing of all labor, materials, permits, tools, and equipment necessary for the complete installation of a sprinkler irrigation system in accordance with the following specifications and accompanying drawings.			D. Each remote control valve or group of remote control valves, which are to be connected to one station of a controller, shall have wire sizes as shown in the wiring diagrams on the drawings or as specified. All remote control valves, which are to be connected to the same controller, shall be connected to a common ground wire to size as shown on the drawings or as specified. Each individual controller shall have a separate common ground wire system entirely independent of the common ground wire system of all other controllers. Only those remote control valves which are being controlled by one specific controller shall be connected to that controller's common ground wire system.			3.01 INSPECTION OF PLANT MATERIAL			3.09 INSPECTION FOR ACCEPTANCE		
B. It is the intent of these drawings and specifications to form a guide for a complete installation, and although some items may not be specifically noted, but are reasonably necessary for a complete installation, they shall be furnished under this contract. Sprinklers shall be located and spaced so that adequate overlapping of the spray will provide uniform head to head(100%) coverage. The system shall efficiently and evenly irrigate all areas, and shall be complete in every respect, ready for operation by the Owner.			3.09 TESTING			A. Plants shall be subject to inspection and approval by Landscape Architect at place of growth and upon delivery. Written request for inspection of plant materials at place of growth shall be submitted to Landscape Architect at least ten (10) calendar days prior to delivery. This written request shall state place of growth and quantity of plants to be inspected. Landscape Architect reserves the right to waive inspection. Such approval shall not impair the right of inspection and rejection upon delivery at the project site or during the progress of the work for size and condition of balls or roots, diseases, insects, and latent defects or injuries. Rejected plants must be immediately removed from the project site.			A. Inspection of the landscaping work to determine completion of contract work, exclusive of the possible replacement of plants, will be made by the Landscape Architect at the conclusion of the maintenance period.		
C. It is the responsibility of the Irrigation Contractor to provide 100% coverage to all landscape areas.			A. After all supports, anchors, and thrust blocks are in place, the line shall be tested at a pressure of 150 psi for 30 minutes. Should any leaks be found, they shall be repaired and the line retested until satisfactory. Zone lines shall be tested at 80 psi in like manner. After testing, the system shall be thoroughly flushed out before the heads may be installed. Upon completion, an operating test shall be performed to visually check the coverage of the system. Any heads, which do not function according to the manufacturer's data shall be replaced with sprinklers that do or the installation shall be otherwise corrected to provide satisfactory performance. Final adjustment to the sprinkler heads and automatic equipment will be done by the Contractor upon completion of the installation to the satisfaction of the Landscape Architect. Minor adjustment from then on shall be made by the Owner's Maintenance Staff.			B. Certificates of inspection of plant materials as may be required by Federal, State or other authorities to accompany shipments and be furnished to Owner upon completion of project.			B. Acceptance: After inspection, the Contractor will be notified in writing by the Landscape Architect of acceptance of all work of this Section, exclusive of the possible replacement of plants subject to reinspection and guarantee, or if there are any deficiencies of the requirements for completion of the work.		
1.02 CONTRACTOR'S QUALIFICATIONS			3.10 DRAWINGS OF RECORD			3.02 DIGGING AND HANDLING			C. Upon acceptance made by the Landscape Architect, the Contractor maintenance is terminated and the guarantee period begins.		
A. Installers shall be licensed irrigation contractors with experience in the installation of automatic underground lawn sprinkling systems. All work shall be performed in a professional workmanlike manner by mechanics skilled in the trade.			A. The Contractor shall provide and keep up to date a complete "as-built" record set of mylar sepals which shall be corrected to show any changes from the original drawings. These record drawings shall show location of all control lines, valves, valve boxes, main lines, flush caps, controllers, and any substitutions as well as any deviation in piping or location of buried valves, etc. with accurate dimensions indicated.			A. Digging shall be done the same season of planting and shall be done by hand as to not injure plants and to meet size requirements. No plant other than the required samples shall be dug or delivered to the site until the required inspections have been made and the plants or samples approved.			3.10 PLANT GUARANTEE AND REPLACEMENT/FINAL ACCEPTANCE		
B. The Contractor shall be responsible for any damage to any covered by these specifications, under his care and custody, until final acceptance of his work.			B. After completion of the sprinkler installation, the Contractor shall deliver to the Owner three prints of the correct and completed "as-built" set of drawings, along with three bound instruction folders covering the equipment installed. Contractor shall present the above information as a condition precedent to his completion payment.			B. Dig balled and burlapped (BB) plants with firm, unbroken natural balls of earth, of sufficient diameter and depth to include the fibrous and feeding roots. No synthetic or mudded in balls will be accepted. No plants moved with a ball will be accepted if the ball is cracked or broken before or during planting operations.			A. The guarantee is for a period of one year from date of acceptance by the Landscape Architect. The guarantee is for all new plant material, lawns, transplants, and existing plant material.		
C. The Contractor shall obtain all permits from, pay required fees to, and arrange any necessary inspections by any government agency having jurisdiction over the work.			3.11 GUARANTEE			3.03 FERTILIZING SOD SUBSOIL			B. At the end of the guarantee period, the Landscape Architect shall reinspect all guaranteed work for Final Acceptance upon written request of Contractor. Request shall be received at least ten (10) calendar days before anticipated date for final inspection.		
1.03 VERIFICATION OF DRAWINGS AND SPECIFICATIONS			A. Within ten (10) days after the Contractor's notification that the sprinkler installation is complete, the Landscape Architect will inspect the system and, if necessary, submit a "punch list" to the Contractor. Acceptance by the Landscape Architect of these corrections will signify final acceptance by the Owner.			A. Apply fertilizer at a rate recommended by manufacturer. Apply after fine grading and prior to compaction. Mix thoroughly into upper two (2) inches of topsoil.			C. Portions of lawns and/or plantings may be accepted in part upon Landscape Architect's approval.		
A. It shall be the Contractor's responsibility to carefully examine the drawings and specifications, and to visit the site in order to check existing conditions prior to bidding. Any conflict or errors shall be immediately brought to the attention of the Landscape Architect for interpretation or instructions. Otherwise, any changes necessary to meet existing conditions, shall be made at the Contractor's expense.			B. The entire sprinkler system shall be guaranteed for a period of one year from this final acceptance date. The Contractor shall promptly replace, without cost to the Owner, any defective materials of faulty workmanship which may develop within this guarantee period, including restoration of any properly damaged during repairs. He shall also be responsible for damages resulting from leaks which may occur in the piping system installed by him, and he shall repair, at his expense, all damage so caused, in a manner satisfactory to the Owner. However the Contractor shall not be held liable for damages occasioned by strikes, fire, weather, violence or theft, acts of God, acts of other contractors, or by any other caused beyond the control of the Contractor.			B. Lightly water to aid the breakdown of fertilizer.			PART 4 – MISCELLANEOUS AND GENERAL NOTES		
B. It is the Irrigation Contractor's responsibility to verify water pressure, water source, and size in the field prior to construction. Should a discrepancy exist between design pressure and the field pressure the Landscape Architect shall be notified immediately.			C. It will be the Owner's responsibility to maintain the system in working order during the guarantee period, performing necessary minor maintenance, keeping grass from obstructing the sprinkler heads, protecting against vandalism and preventing damage during the landscape maintenance operation.			C. Apply fertilizer within 48 hours before laying sod.			4.01 FINISH GRADING AND GRADING		
1.04 WORKING CONDITIONS			D. The Contractor shall service the system at the Owner's request during the guarantee period, and shall be paid for work performed which is not covered by the guarantee, in accordance with a predetermined schedule of fees.			A. Lay sod as soon as possible after delivery to prevent deterioration.			A. The General Contractor to provide Landscape Contractor finish grade within + 0.1 of a foot as shown on the civil grading plan and landscape plan.		
A. The Contractor shall confine his operations to the areas allotted to him by the Owner, for his work for material and equipment storage.			LANDSCAPING			B. Lay sod closely joint together with no open joints visible, and pieces not overlapped. Lay smooth and flush with adjoining grass areas. Finish grade to be one and a half inches (1-1/2") below paving and top of surface curbs.			B. All mounding, berms and finish grading to be approved by the Landscape Architect prior to planting or irrigation work.		
B. The Contractor shall continuously maintain a competent superintendent, satisfactory to the Owner, on the work during progress, with authority to act for the Contractor in all matters pertaining to the work.			PART 1 – GENERAL			C. Immediately water sodded areas after installation. Water in sufficient amounts to saturate sod and upper four (4) inches of soil.			4.02 GENERAL NOTES		
C. The Contractor shall not assign nor sublet any portion of this work without written approval by the Owner.			1.01 WORK INCLUDED			D. After sod and soil has dried sufficiently to prevent damage, roll sodded areas to ensure good bone between sod and soil and to remove minor depressions and irregularities. Ensure rolling equipment weight not over 250 lbs. or less than 150 lbs.			A. The Landscape Contractor at his own expense shall procure all permits, certificates, and licenses required of him by law for the execution of this work. He shall comply with all state, county, and local laws, ordinances, rules or regulations relating to the performance of this work. All deductions or additions will be made through a change order issued by the Architect. Changes made with a change order are not considered part o the contract and payment cannot be guaranteed.		
D. The Contractor shall be responsible for staking out the system from the drawings, using the property lines and building dimensions as a guide.			A. The work included under these specifications shall consist of the furnishing of all labor, material, permits, tools, and equipment necessary for the complete installation of the landscaping materials as shown on the drawings and as described in the following specifications.			3.05 TIME OF PLANTING			B. The Contractor shall visit and inspect site to thoroughly inform himself of all existing conditions. Any discrepancies between existing conditions and those shown on drawings should immediately be brought to the attention of the Landscape Architect.		
E. The Contractor shall coordinate his work with that of the other trades, so as to avoid any conflict, and carry the installations to a rapid completion without any unnecessary delays.			1.02 QUALITY ASSURANCE			A. The contractor shall notify the Landscape Architect in writing when other divisions of the work have progressed sufficiently to commence landscaping work, including placing of topsoil to finish grade. Thereafter, conduct planting operations under favorable weather conditions.			NOTES:		
PART 2 – PRODUCTS			A. For standard products, the manufacturer's analysis will be acceptable. For all other materials, analysis shall be by a recognized laboratory.			B. Any plant material installed during typical off seasons (not summer months or freezing winter months) shall be done at the Contractor's own risk and the Contractor shall be held responsible for replacement of any plant material damaged due to these adverse conditions.			1. Locate all irrigation equipment in landscape areas – some lines are schematic.		
2.01 PIPING			B. Analysis shall be made in accordance with the current methods of the Association of Official Agricultural Chemists.			3.06 PLANTING OPERATIONS			2. Coordinate programs to avoid station overlap.		
A. All pressure main piping, on the supply side of the zone valves, shall be class 200 PVC with integrally formed bell–tite joint couplers. All fittings shall be solvent welded, schedule 40 PVC.			C. Soils shall be analyzed for their composition and fertility in sustaining plant growth and health.			A. General			3. Reduce radius as necessary to prevent overspray on turf and shrub sprays.		
B. All lateral piping, on the discharge side of the zone valves, two inches (2") and under, shall be class 200 PVC. Fittings shall be schedule 40 PVC material. 1/2" pvc to be class 315			D. All plants furnished under this specification shall be from nursery grown stock, and they shall meet the ARIZONA NURSERY ASSOCIATION of the American Association of Nurserymen, Inc. requirements as to sizing, grading, and quality. Plant materials specified shall conform with the nomenclature of STANDARDIZED PLANT NAMES, Second Edition. The Landscape Architect reserves the right to refuse all plant material based on overall appearance and quality regardless of specifications.			1. The Contractor shall coordinate all aspects of a the landscape operations with all aspects of the site construction. The work shall proceed as the indicated portions of the site become available, consistent with the seasonal limitations for landscape planting.			4. Size and provide Schedule 40 PVC sleeves (approx. twice diameter of pipe) under all walkways, kooldeck, curbs & drives as necessary on all irrigation equipment, at a depth of 24" below grade.		
C. All plastic to metal shall be made with PVC schedule 40 male adapters or PVC schedule 80 nipples. Joint compound for such connections shall be Permatex Type II teflon tape or a prior approved equivalent.			E. Plants of the species specified shall be furnished in the variety, size, grade and quality indicated. Specifications and planting plans shall be strictly adhered to and no changes or substitutions will be allowed prior to bidding without written permission of the Landscape Architect, Owner, or Owner's Representative.			2. The Contractor shall be responsible for any damage to utilities construction, sitework construction, and underground sprinkler systems and shall bear the full cost to repair the damage. Accomplishment of repairs shall be equal to the original installation prior to damage. Any damage shall be immediately reported to the Landscape Architect and repairs shall be approved by him before it is buried.			5. Unless otherwise directed by Landscape Architect, indication of plant drawings is to be interpreted as including digging of hole, furnishing plant of specified size, work of planting, mulching, guying, staking, wrapping and watering.		
D. Where pipes are installed under roads, drives, parking areas or walks, schedule 40 PVC sleeves shall be provided for the lines. In planting areas, where cultivation might damage shallow plastic piping, protective sleeves must be provided, unless copper tubing is installed. Risers in flower beds and shrubbery shall be schedule 80 PVC.			F. By submitting a proposal and accepting award of the Contract, the Contractor acknowledges that he has investigated the supply of planting stock available and has obtained firm commitments from his suppliers assuring delivery of the specific plant materials as required for completion of the project.			3. Maintain all trench or grade stakes for work under other Sections until their removal is approved by the Landscape Architect.			6. Any substitutions are to be approved by the Landscape Architect.		
2.02 SPRINKLER HEADS			G. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			4. The Contractor shall stake plant location, shrub pits and other planting areas and secure the Landscape Architect's approval before starting excavation of same, making adjustments as necessary.			7. Length of poly to be no greater than five (5) feet from PVC lateral (typical for all rigid drip systems).		
A. Emitter heads shall be on PVC laterals, or prior approved equivalent.			H. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			5. Unless otherwise directed by Landscape Architect, indication of plant drawings is to be interpreted as including digging of hole, furnishing plant of specified size, work of planting, mulching, guying, staking, wrapping and watering.			8. Install vacuum breaker twelve (12) inches above highest head or lateral pipe in system. Install per local plumbing codes.		
2.03 AUTOMATIC CONTROLLER			I. Planting, sodding and seeding shall be performed by personnel familiar with planting procedures and under the supervision of a qualified planting foreman.			B. Plant Pits and Beds			9. Contractor shall guarantee 100% coverage in all landscape areas.		
A. Unit features shall include mechanical time control design, adjustable time setting up to 60 minutes per station, 24–hour clock, 14–day calendar, and automatic rapid advance. Unit shall be UL listed and shall operate on 120 volt, 1 phase, 60 Hertz power. General Contractor to bring power to controller. Irrigation Contractor to hardwire to controller, see detail.			J. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. Plant pits shall be excavated with vertical sides, large enough to allow twelve (12) inches of space around the ball in all directions. Adjust depth as necessary to permit a minimum of twelve (12) inches planting soil under the ball when the plant is set at the proper depth.			10. Contour or berm planter areas to achieve adequate coverage from flood bubblers.		
2.04 QUICKCOUPLING VALVES			K. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			2. Planting pit backfill for all trees and shrub shall be as follows:			11. All heads to be adjusted so that there is minimum overthrow onto pavement, walls and buildings.		
A. Furnish and install where shown on the drawings quick–coupler with swivel and hose bib, 3/4" size or prior approved equivalent. They shall be mounted on one inch (1") copper swing joint risers, and the tops shall be set flush with the top of the planters. Furnish and deliver to the Owner double–lug coupler key complete with one inch (1") hose swivel for connecting to the above valves. Also furnish two (2) locktop cover key.			L. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. 2/3 parts by volume of native soil.			12. All pits and palms to be on a separate valve.		
2.05 ELECTRICAL CONTROL CABLE			M. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			2. 1/3 parts by volume forest mulch.			13. Contractor to receive a minimum 48 hour notice prior to sleeving.		
A. All electrical control and ground wire shall be irrigation control cable of size as required. All wiring to be used for connecting the automatic remote control valve to the automatic controllers shall be Type "UF", 600 volt, stranded, or solid copper, single conductor wire with PVC insulation and bear UL approval for direct underground burial feeder cable.			N. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			3. One pound 16–20–0 per cubic yard of mix.			14. Mainline to have a minimum of twenty four (24) inches of cover. Lateral lines to have a minimum twelve (12) inches of cover.		
B. All control or "hot" wires shall be on one color and all common or "ground" wire shall be or another color(white).			O. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			3. Planting pits shall be backfilled with prepared backfill and be water settled to a grade sufficient that in the setting of the plant, the finish grade level after settlement will be the same as at which plants were grown. Agriform tablets to be used with each planting (six for 36–inch box, three for 15 gallon, two for 5 gallon, and one for 1 gallon).			15. All drawings to be bid per plan. No value engineering or substitutions will be accepted during bidding.		
C. Verifications of wire types and installation procedures shall be checked to conform to local codes.			P. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			C. Installations					
D. All electric control cable shall be of size as determined by the equipment manufacturer and shall be installed in the piping trenches wherever possible and in the manner recommended by the manufacturer, leaving slack in the wire. Expansion joints in the wire may be provided at 200–foot intervals by making 5 or 6 turns of the wire around a piece of 1/2 inch pipe. Where it is necessary to run wire in a separate trench, the wire shall be a minimum cover of twelve (12) inches.			Q. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. Set plants in center of pits, plumb and straight and at such a level that after settlement the crown of the plant shall be two (2) inches below the finish grade and forming a shallow trough directly over the ball of earth and slightly smaller than the pit to facilitate watering. Space all plants as shown.					
PART 3 – INSTALLATION			R. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			2. Set balled and burlapped plants upon a well tamped layer of planting soil. Backfill around ball with planting soil in six to eight (6 – 8) inch lifts, each thoroughly tamped and puddled to top of pit. Avoid air pockets. Remove all ropes and wires from tops and sides of balls. No burlap shall be pulled out from under the balls.					
3.01 PROTECTION OF UTILITIES, IRRIGATION SYSTEM, ETC.			S. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			3. Plants supplied in other plantings shall be installed immediately upon being removed from their containers. Removal of plants from containers shall be in a manner that will not disturb the root system of the soil in which they were planted. Under no conditions shall the plant be removed from the containers by pulling on the main stem or plant growth. No plants shall be installed with their containers remaining attached.					
A. The Contractor shall verify the location of all utilities and note location of utilities, irrigation piping and underground obstructions. The Contractor shall be responsible for the cost of repairing buried conduit, cables or pipelines damaged during the installation of the irrigation system.			T. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			4. Before install bare root plants, planting soil shall be placed and compacted to a depth of twelve (12) inches in the bottom of the plant pit. The plants shall be installed with their roots evenly distributed and spread in their natural position, with the planting soil being carefully placed and compacted around the roots so as to leave no air space.					
B. The Contractor shall clearly make and maintain markers showing locations of irrigation system wiring and piping installed in order that other contractors may avoid damaging this work.			U. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			5. Unless otherwise directed by Landscape Architect, indication of plant drawings is to be interpreted as including digging of hole, furnishing plant of specified size, work of planting, mulching, guying, staking, wrapping and watering.					
C. The Contractor shall take necessary precautions to protect site conditions and plant materials which are to remain. Should damage be incurred, Contractor shall repair damage to its original condition or furnish and install equal replacement at his expense.			V. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			C. Installations					
D. The Contractor shall coordinate with the Landscape Architect to provide irrigation to existing materials.			W. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			D. Pruning, Wrapping, Mulching, Staking and Spraying					
E. Contact blue stake prior to digging.			X. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			1. Pruning					
3.02 EXCAVATION			Y. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			a. Plants shall not be pruned prior to delivery unless Landscape Architect gives written permission. Pruning will occur only at time of planting and according to standard horticultural practice and at the direction of the Landscape Architect. Amount of pruning shall be limited and is not to exceed thirty–three percent (33%) of total plant size as necessary to remove dead or injured twigs and branches and to compensate for root loss resulting from transplanting. Do not cut leaders.					
A. The Contractor shall do all necessary excavation for the proper installation of his work. Machine trenchers used on the site shall be of an approved type to cut smooth–bottom trenches on uniform slopes. Trenches shall be no wider than necessary to lay the pipe, except where necessary to make joints. Over excavating shall be backfilled and carefully tamped to provide a smooth and firm bearing surface for laying the pipe. When necessary, Contractor must provide barricades and lights for proper protection. Minimum depth of cover shall be at least twenty four (24) inches for the main piping, and at least twelve (12) inches for the lateral branch lines.			Z. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			b. Remove all dead wood, suckers, and broken or badly bruised branches.					
3.03 PIPE INSTALLATION			AA. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			c. Pruning shall be done with clean, sharp tools according to standard horticultural practices. Cuts shall be made flush leaving no splits.					
A. All pipe lines shall be installed in the locations and of the sizes indicated, and of the materials specified. Parallel piping may be installed in the same trench. Piping shall be laid accurately to the line and grade required, with full uniform bearing on the trench bottom. No piping shall be laid on soft fill or other unstable material. No direct contact, other piping or structures, will be permitted at crossing. Interior of piping shall be kept clear of foreign matter before installation and shall be kept clean by means of plugged or capped ends after lowering into the trench. The supply main lines shall be flushed out and tested for leaks, with control valves in place, before backfilling the joints. All lateral piping sections shall be flushed out before sprinkler heads are attached. All pipe shall be installed in strict accordance with recommendations of the manufacturer. This shall apply to thrust blocking, handling, storage, depth of cover, expansion allowance, testing, etc.			AB. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			d. Cuts over 1/2 inch diameter shall be painted over with approved tree paint. Paint shall cover all exposed wood surfaces as well as other exposed living tissue. Injured cambium and bruises and scars shall be tracked back to living tissue and removed. Smooth and shave wounds so as not to retain water. Treat wound with paint.					
B. Under existing pipes or sidewalks, the Contractor shall either saw cut concrete and replace it to the former condition or install the pipe by boring or jacking under the area. pvc sleeves to be at a 24" depth			AC. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			e. Staking and Guying					
3.04 BACKFILLING			AD. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			a. Stake or guy all trees per detail. Trees which blow down, sway excessively, or are otherwise injured because of improper bracing shall be replaced at Contractor's expense.					
A. As soon as the work has been installed, inspected and accepted, all excavations and trenches shall be filled and water settled with fine earth materials, free from clods, rocks, or other unsuitable substances. Trenches must be left flush with adjacent finished grade after compacting to the original density of the soil. Flooding of trenches will be permitted downstream of zone valves. Care shall be taken to place any previously tilled and fertilized soil in the top portion of the trench, and subsoil will not be allowed in the top six (6) inches of the backfill.			AE. All plants shall be freshly dug. No heeled in plant or plants from cold storage will be accepted. Plants shall be typical of their species or variety and have normal habits of growth, be healthy and vigorous, well branched and have dense foliage when in leaf. All plants, including root systems, shall be free of disease, disfiguring knots, sunscald, insect pests, eggs or larvae, dead or broken branches, bark abrasions, and have healthy well developed root systems. The root system of container grown plants shall be sufficiently developed to hold the earth intact upon removal of the container.			b. All ground cover and non–lawn areas shall be treated with pre–emergent.					



GENERAL NOTES - SITE

- 1. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND COMPLETE CONTRACTUAL OBLIGATIONS.
- 2. ELECTRICAL CONTRACTOR SHALL CONTACT TELEPHONE COMPANY REGARDING EXACT LOCATION OF ALL PRIMARY SERVICE EQUIPMENT, TRENCH LOCATION, ETC.
- 3. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY TELEPHONE TRENCHING, BACKFILL, AND CONDUIT STUBS INTO TRENCH AS REQUIRED BY TELEPHONE COMPANY AND TO THEIR SPECIFICATIONS.
- 4. ALL WIRING FOR OUTSIDE LIGHTING SHALL BE A MINIMUM OF #10 COPPER WITH TYPE THWN INSULATION. RUN UNDERGROUND CIRCUITS IN P.V.C. AND PROVIDE A #10 COPPER BOND IN ADDITION TO CIRCUIT CONDUCTORS. UNDERGROUND WIRING SHALL COMPLY WITH APPLICABLE CODES OF THE NEC.
- 5. ELECTRICAL CONTRACTOR SHALL PROVIDE NECESSARY SECONDARY CONDUCTORS, POWER TRENCHING, BACKFILL AND CONCRETE PADS FOR TRANSFORMERS AND SERVICE EQUIPMENT. ADDITIONALLY PROVIDE CONDUIT STUBS INTO TRENCH PER POWER COMPANY SPECIFICATIONS AND REQUIREMENTS.
- 6. ALL WIRING SHALL BE COPPER. WIRING #4 AWG AND LARGER SHALL BE XHHW TYPE INSULATION.

POLE MOUNTED FIXTURE DETAIL



FIXTURE TYPE 'SA1' / 'SA2'

THE POLE CONCRETE BASE DETAIL IS SHOWN FOR ELECTRICAL ROUGH-IN AND SHALL NOT BE USED FOR THE ACTUAL BASE CONSTRUCTION. POLE BASE SHALL BE DESIGNED BY A REGISTERED STRUCTURAL PROFESSIONAL ENGINEER AND CONSTRUCTED PER STRUCTURAL ENGINEERS SEALED CONSTRUCTION DOCUMENT.

NOTE: ELECTRICAL CONTRACTOR SHALL BOND METAL POLE PER NEC 410.30(B)(5) AS SHOWN IN DETAIL.

LUMINAIRE SCHEDULE

- 1. PROVIDE 90 MINUTE EMERGENCY BATTERY BACK-UP FOR ALL EMERGENCY FIXTURES. SEE SCHEDULE BELOW FOR SPECIFICATIONS AND LUMEN REQUIREMENTS.
- 2. MODULAR WIRING SYSTEM FOR LIGHT FIXTURES IS AN ACCEPTABLE ALTERNATE.
- 3. BASE BID FOR LUMINAIRES SHALL BE BASED ON MANUFACTURERS LISTED IN CONTRACT DOCUMENTS. UPON AWARD OF PROJECT, ALTERNATES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED WITH WRITTEN OWNER APPROVAL & AN INTIMIZED DEDUCT TO BASE BID.
- 4. ALTERNATE FIXTURE SELECTIONS MAY REQUIRE ADDITIONAL TIME FOR SUBMITTAL REVIEW & POSSIBLE ENGINEERING DESIGN CHANGES, TO BE BILLED TO THE CONTRACTOR.
- 5. PROVIDE MINIMUM 10 MINUTE TIME DELAY ON EMERGENCY FIXTURES WHEN HID AREA LIGHTING IS USED.

MARK	MANUFACTURER MODEL NUMBER	VOLTS	LAMPS CRI/CCT INPUT WATTS	REMARKS/MOUNTING
SA1	LITHONIA DSX0-LED-P1-40K-TSM-MVOLT-SSS	MVOLT	LED 38W	POLE MOUNTED FIXTURE. REFER TO POLE MOUNTED FIXTURE DETAIL THIS SHEET.
SA2	LITHONIA DSX0-LED-P1-40K-T3M-MVOLT-HS-SSS	MVOLT	LED 38W	POLE MOUNTED FIXTURE. REFER TO POLE MOUNTED FIXTURE DETAIL THIS SHEET.
SB-8	LITHONIA DMW2-2000LM-MD-PFL-MVOLT-40K-90CRI	MVOLT	LED 19W	2' UNDER CANOPY FIXTURE.
SB-9	LITHONIA DMW2-2000LM-MD-PFL-MVOLT-40K-90CRI	MVOLT	LED 19W	2' UNDER CANOPY FIXTURE.
SC-10	LITHONIA WST-LED-P1-40K-VW-MVOLT	MVOLT	LED 12W	WALL MOUNTED LED AREA LIGHT. PROVIDE WITH 90 MINUTE BATTERY BACKUP WHERE NOTED 'EM'.
SC-15	LITHONIA WST-LED-P1-40K-VW-MVOLT	MVOLT	LED 12W	WALL MOUNTED LED AREA LIGHT. PROVIDE WITH 90 MINUTE BATTERY BACKUP WHERE NOTED 'EM'.

PRELIMINARY
NOT FOR CONSTRUCTION

DESIGN CODES
IBC, 2018 NEC, 2017

ELECTRICAL CONTRACTOR SHALL NOTIFY DESIGNER/ENGINEER PRIOR TO ANY DEVIATION FROM THIS SET OF ELECTRICAL DESIGN PLANS. ANY CHANGES TO THE DESIGN, IF APPROVED BY ENGINEER, WILL REQUIRE REVISIONS TO PLANS AND POSSIBLE ADDITIONAL SERVICE FEE.



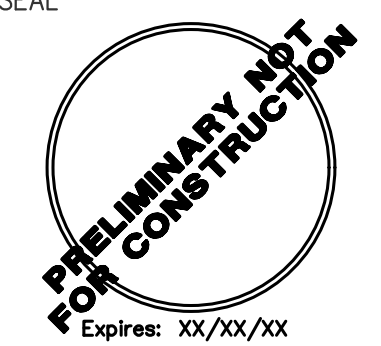
Project Contact/Designer: **Chad Curry**
Project # **20473**
HAWKINS DESIGN GROUP INC.
ELECTRICAL CONSULTING ENGINEERS
140 WEST HARVEL ROAD
MESA, ARIZONA 85233
PH 480.813.9000 FAX 480.813.9001
EMAIL email@hawkinsdsg.com

All concepts, designs and data indicated on these drawings are the sole property of the Hawkins Design Group, Inc., and shall not be used for any other purpose other than originally intended without written permission of the engineer.

IF DRAWING IS NOT PLOTTED AT 24 X 36 THEY ARE NOT FULL SIZE

REVISIONS	DATE	DESCRIPTION
REVISION		

SEAL



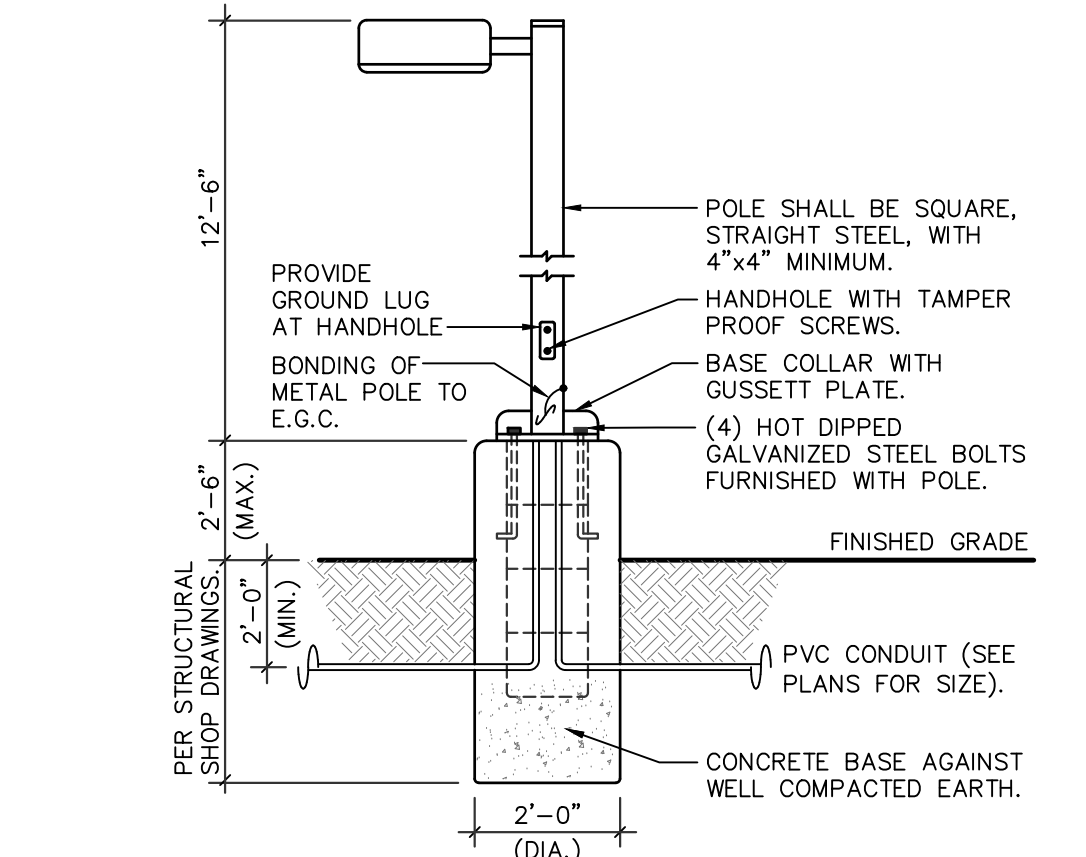
PRELIMINARY NOT FOR CONSTRUCTION
Expires: XX/XX/XX

DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE	H: V:	
JOB No.	020441-01-001	
DATE	02/05/2021	
SHEET	DR1.0	

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF	Wattage
	SA1	4	Lithonia Lighting	DSX0 LED P1 40K T5M MVOLT/ SSS POLE MOUNT AT15'	DSX0 LED P1 40K T5M MVOLT	LED	4891	0.65	38
	SA2	2	Lithonia Lighting	DSX0 LED P1 40K T3M MVOLT HS/ SSS POLE MOUNT AT15'	DSX0 LED P1 40K T3M MVOLT with houseside shield	LED	3708	0.65	38
	SB-8	34	Lithonia Lighting	DMW2 2000LM MD PFL MVOLT 40K 90CRI	DMW2 L24 2000LM MD PFL MVOLT GZ1 40K 90CRI (GLEDs), MOUNTED @ 8'-0" AFG	LED	1823	0.65	18.78
	SB-9	3	Lithonia Lighting	DMW2 2000LM MD PFL MVOLT 40K 90CRI	DMW2 L24 2000LM MD PFL MVOLT GZ1 40K 90CRI (GLEDs), MOUNTED @ 9'-0" AFG	LED	1823	0.65	18.78
	SC-10	5	Lithonia Lighting	WST LED P1 40K VW MVOLT (FINISH)	WST LED, Performance package 1, 4000 K, visual comfort wide, MVOLT. MOUNTED @ 10'-0" AFG	LED	1659	0.65	12
	SC-15	2	Lithonia Lighting	WST LED P1 40K VW MVOLT (FINISH)	WST LED, Performance package 1, 4000 K, visual comfort wide, MVOLT. MOUNTED @ 15'-0" AFG	LED	1659	0.65	12

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PROPERTY LINE - FC @ GRADE	X	0.1 fc	0.3 fc	0.0 fc	N/A	N/A
SITE - FC @ GRADE	+	2.6 fc	11.3 fc	0.2 fc	56.5:1	13.0:1

POLE MOUNTED FIXTURE DETAIL

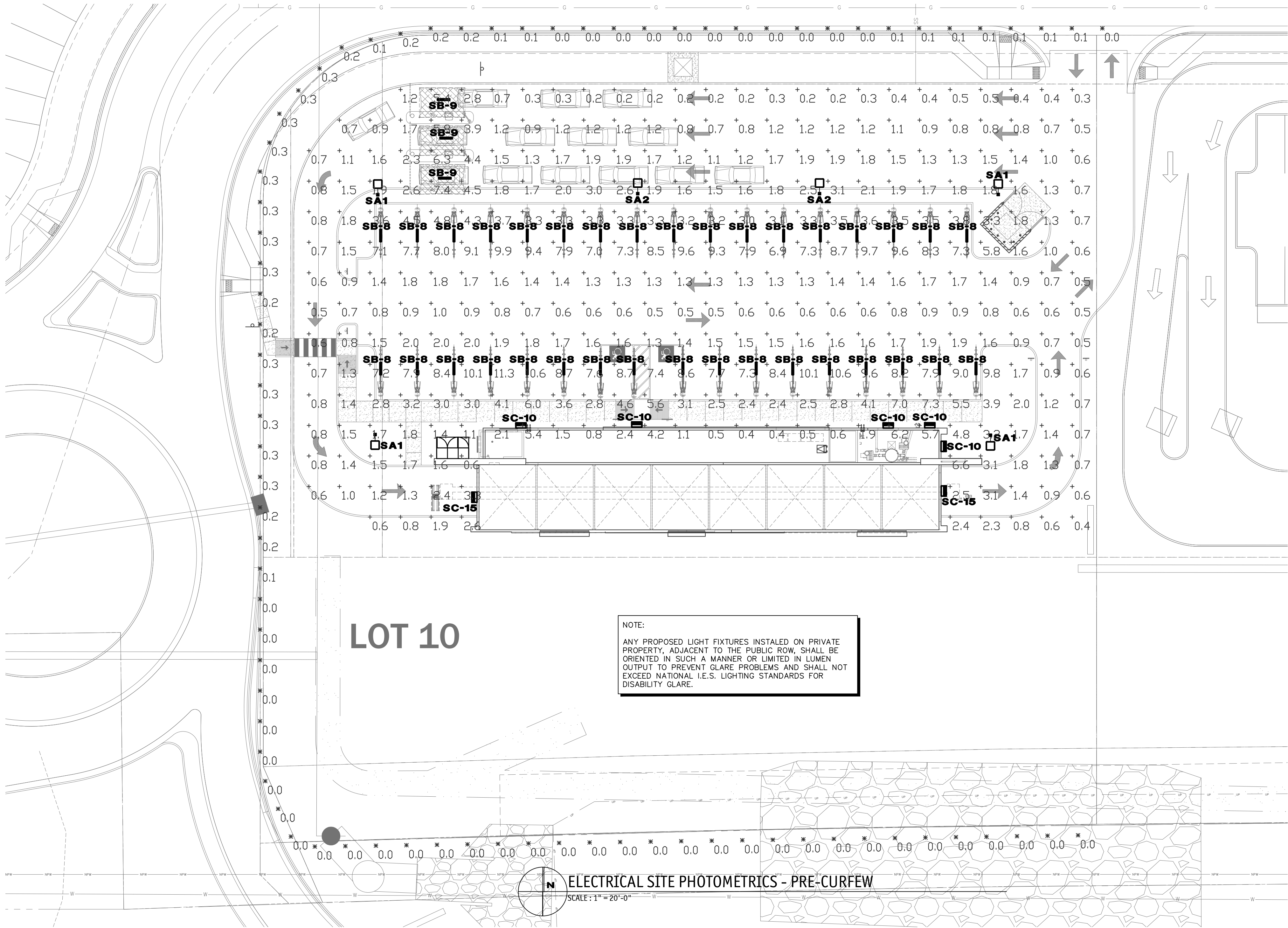


FIXTURE TYPE 'SA1' / 'SA2'

THE POLE CONCRETE BASE DETAIL IS SHOWN FOR ELECTRICAL ROUGH-IN AND SHALL NOT BE USED FOR THE ACTUAL BASE CONSTRUCTION. POLE BASE SHALL BE DESIGNED BY A REGISTERED STRUCTURAL PROFESSIONAL ENGINEER AND CONSTRUCTED PER STRUCTURAL ENGINEERS SEALED CONSTRUCTION DOCUMENT.

NOTE: ELECTRICAL CONTRACTOR SHALL BOND METAL POLE PER NEC 410.30(B)(5) AS SHOWN IN DETAIL.

NOTE: PRE-CURFEW DESIGN HOURS SHALL BE DEFINED FROM NOT LATER THAN ONE HOUR AFTER BUSINESS CLOSING AND POST-CURFEW DESIGN HOURS SHALL BE DEFINED AS NOT EARLIER THAN ONE HOUR BEFORE BUSINESS OPENING. ALL EXTERIOR LIGHTS SHALL BE DIMMED BY 60% DURING POST-CURFEW TO COMPLY WITH IECC 2018 C405.2.6. EXTERIOR LIGHTING CONTROLS.



NOTE:
ANY PROPOSED LIGHT FIXTURES INSTALLED ON PRIVATE PROPERTY, ADJACENT TO THE PUBLIC ROW, SHALL BE ORIENTED IN SUCH A MANNER OR LIMITED IN LUMEN OUTPUT TO PREVENT GLARE PROBLEMS AND SHALL NOT EXCEED NATIONAL I.E.S. LIGHTING STANDARDS FOR DISABILITY GLARE.

PRELIMINARY
NOT FOR CONSTRUCTION


DESIGN CODES
IBC, 2018 NEC, 2017

ELECTRICAL CONTRACTOR SHALL NOTIFY DESIGNER/ENGINEER PRIOR TO ANY DEVIATION FROM THIS SET OF ELECTRICAL DESIGN PLANS. ANY CHANGES TO THE DESIGN, IF APPROVED BY ENGINEER, WILL REQUIRE REVISIONS TO PLANS AND POSSIBLE ADDITIONAL SERVICE FEE.



Project Contact/Designer: **Chad Curry**
Project # **20473**
HAWKINS DESIGN GROUP INC.
ELECTRICAL CONSULTING ENGINEERS
140 WEST HARVEL ROAD
MESA, ARIZONA 85233
Ph 480.813.9000 Fax 480.813.9001
EMAIL: email@hawkinsdg.com

IF DRAWING IS NOT PLOTTED AT 24 X 36 THEY ARE NOT FULL SIZE



Phone: (303) 801-2900
www.bowmanconsulting.com

1526 Cole Blvd, Suite 100
Lakeview, CO 80401

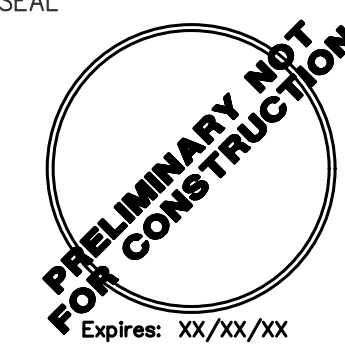
REVISIONS	DATE	DESCRIPTION	REVISION

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10
SITE DEVELOPMENT PLAN

COLORADO

EL PASO COUNTY

SEAL



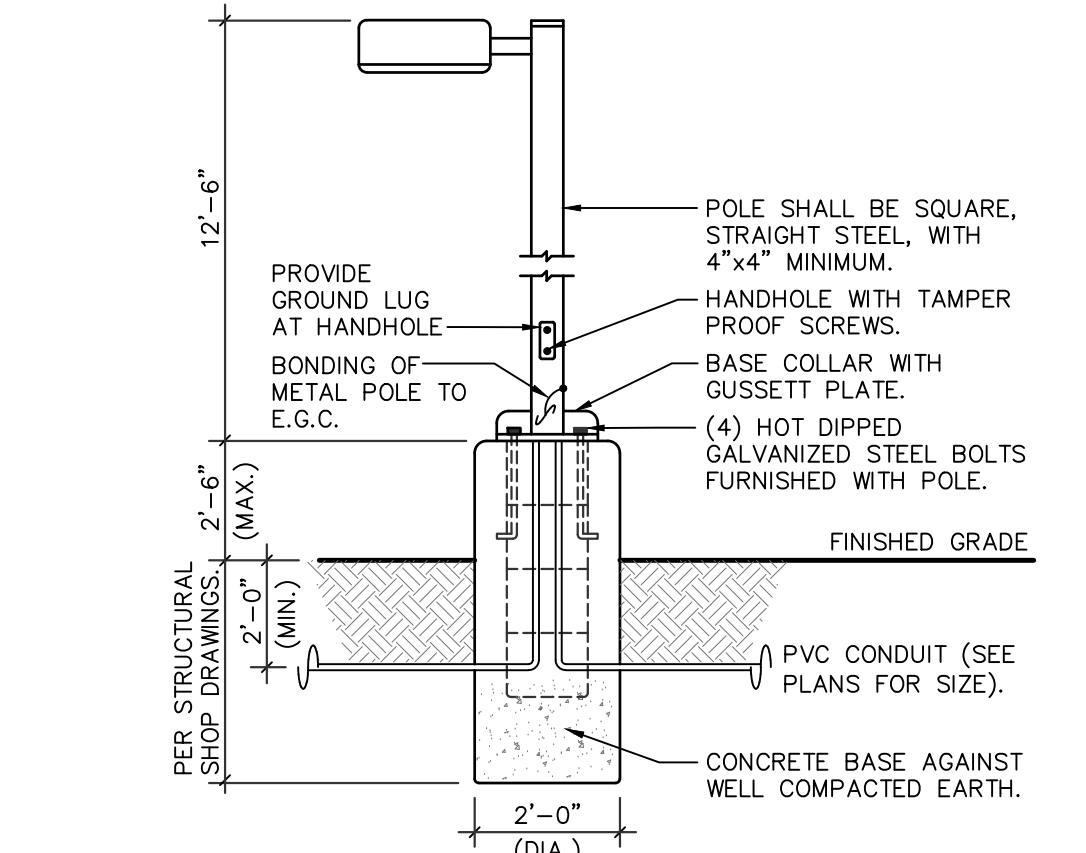
PRELIMINARY NOT FOR CONSTRUCTION
Expires: XX/XX/XX

DESIGN SWK	DRAWN SWK	CHKD TOP
SCALE:	H: V:	JOB No. 020441-01-001
DATE : 02/05/2021		SHEET DR2.0

Schedule									
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF	Wattage
	SA1	4	Lithonia Lighting	DSX0 LED P1 40K T5M MVOLT/ SSS POLE MOUNT AT15'	DSX0 LED P1 40K T5M MVOLT	LED	4891	0.65	38
	SA2	2	Lithonia Lighting	DSX0 LED P1 40K T3M MVOLT HS/ SSS POLE MOUNT AT15'	DSX0 LED P1 40K T3M MVOLT with houseside shield	LED	3708	0.65	38
	SB-8	34	Lithonia Lighting	DMW2 2000LM MD PFL MVOLT 40K 90CRI	DMW2 L24 2000LM MD PFL MVOLT GZ1 40K 90CRI (GLEDs), MOUNTED @ 8'-0" AFG	LED	1823	0.65	18.78
	SB-9	3	Lithonia Lighting	DMW2 2000LM MD PFL MVOLT 40K 90CRI	DMW2 L24 2000LM MD PFL MVOLT GZ1 40K 90CRI (GLEDs), MOUNTED @ 9'-0" AFG	LED	1823	0.65	18.78
	SC-10	5	Lithonia Lighting	WST LED P1 40K VW MVOLT (FINISH)	WST LED, Performance package 1, 4000 K, visual comfort wide, MVOLT, MOUNTED @ 10'-0" AFG	LED	1659	0.65	12
	SC-15	2	Lithonia Lighting	WST LED P1 40K VW MVOLT (FINISH)	WST LED, Performance package 1, 4000 K, visual comfort wide, MVOLT, MOUNTED @ 15'-0" AFG	LED	1659	0.65	12

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PROPERTY LINE - FC @ GRADE	X	0.1 fc	0.3 fc	0.0 fc	N/A	N/A
SITE - FC @ GRADE	+	1.9 fc	8.1 fc	0.2 fc	40.5:1	9.5:1

POLE MOUNTED FIXTURE DETAIL

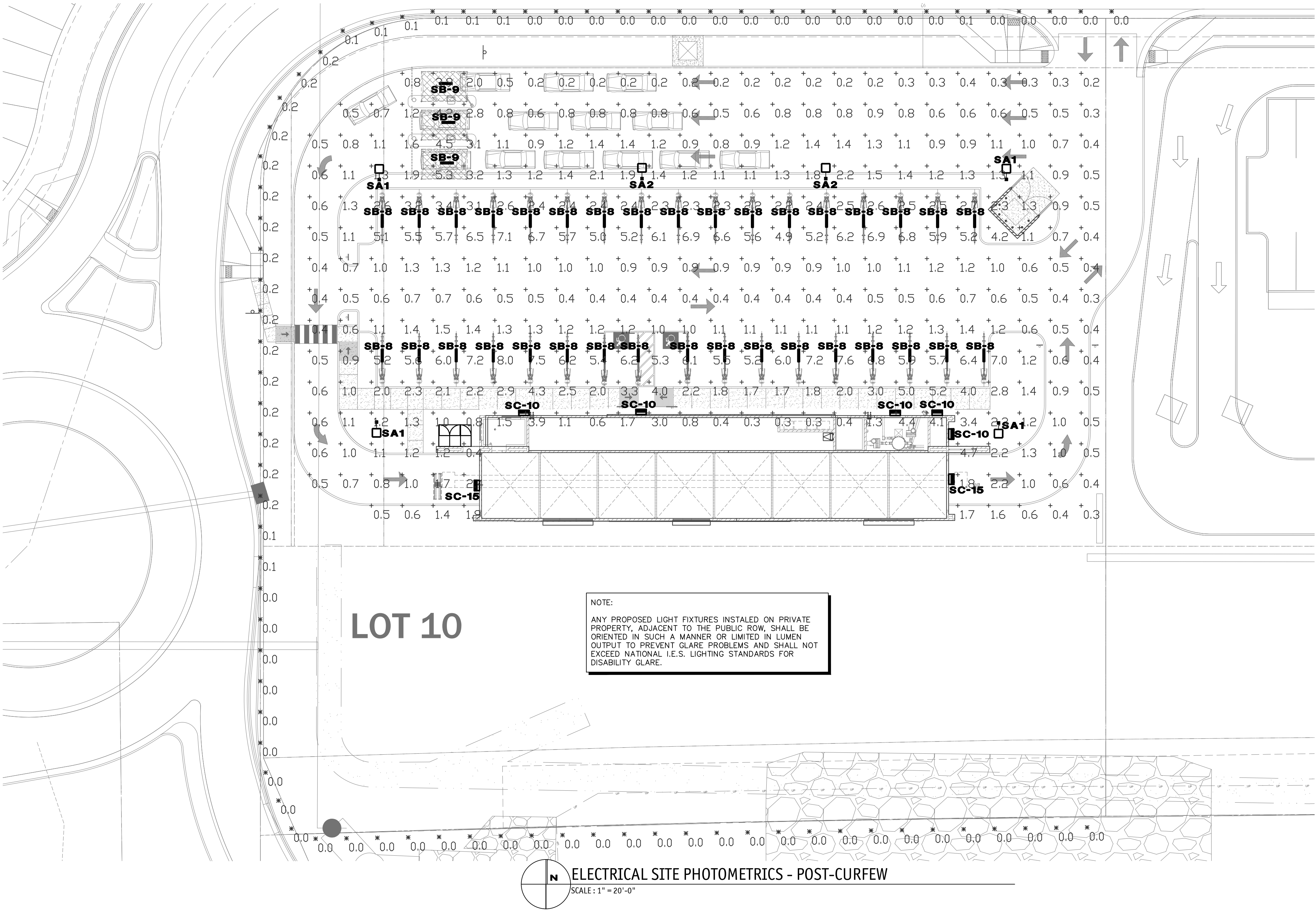


FIXTURE TYPE 'SA1' / 'SA2'

THE POLE CONCRETE BASE DETAIL IS SHOWN FOR ELECTRICAL ROUGH-IN AND SHALL NOT BE USED FOR THE ACTUAL BASE CONSTRUCTION. POLE BASE SHALL BE DESIGNED BY A REGISTERED STRUCTURAL PROFESSIONAL ENGINEER AND CONSTRUCTED PER STRUCTURAL ENGINEERS SEALED CONSTRUCTION DOCUMENT.

NOTE: ELECTRICAL CONTRACTOR SHALL BOND METAL POLE PER NEC 410.30(B)(5) AS SHOWN IN DETAIL.

NOTE:
PRE-CURFEW DESIGN HOURS SHALL BE DEFINED FROM NOT LATER THAN ONE HOUR AFTER BUSINESS CLOSING AND POST-CURFEW DESIGN HOURS SHALL BE DEFINED AS NOT EARLIER THAN ONE HOUR BEFORE BUSINESS OPENING. ALL EXTERIOR LIGHTS SHALL BE DIMMED BY 60% DURING POST-CURFEW TO COMPLY WITH IECC 2018 C405.2.6. EXTERIOR LIGHTING CONTROLS.



PRELIMINARY
NOT FOR CONSTRUCTION

DESIGN CODES
IBC, 2018 NEC, 2017

ELECTRICAL CONTRACTOR SHALL NOTIFY DESIGNER/ENGINEER PRIOR TO ANY DEVIATION FROM THIS SET OF ELECTRICAL DESIGN PLANS. ANY CHANGES TO THE DESIGN, IF APPROVED BY ENGINEER, WILL REQUIRE REVISIONS TO PLANS AND POSSIBLE ADDITIONAL SERVICE FEE.

Project Contact/Designer: **Chad Curry**
Project # **20473**
HAWKINS DESIGN GROUP INC.
ELECTRICAL CONSULTING ENGINEERS
140 WEST HARVEL ROAD
MESA, ARIZONA 85233
PH 480.813.9000 FAX 480.813.9001
EMAIL email@hawkinsdsg.com
All concepts, designs and data indicated on these drawings are the sole property of the Hawkins Design Group, Inc., and shall not be used for any other purpose other than originally intended without written permission of the engineer.

IF DRAWING IS NOT PLOTTED AT 24 X 36 THEY ARE NOT FULL SIZE

REVISIONS

DATE

DESCRIPTION

REVISION

DATE

DESCRIPTION

REVISION

SEAL

PRELIMINARY NOT FOR CONSTRUCTION

Expires: XX/XX/XX

DESIGN SWK

DRAWN SWK

CHKD TOP

SCALE

H: V:

JOB No.

020441-01-001

DATE :

02/05/2021

SHEET

DR2.1

Bowman

CONSULTING

1526 Cole Blvd, Suite 100
Lakeview, CO 80401

Phone: (303) 801-2900
www.bowmanconsulting.com

SUPER STAR CAR WASH - FALCON MARKETPLACE LOT 10

SITE DEVELOPMENT PLAN

COLORADO

EL PASO COUNTY