

N:\jobs\1971.00\Drawings\197100 UTIL.dwg 3/23/2020 11:28:10 AM

NOTE: ALL EXISTING UNDERGROUND AND ABOVE GROUND UTILITY LOCATIONS, INVERTS AND SIZES ARE APPROXIMATE ONLY AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION. TIE IN POINTS SHALL BE POTHOLED AND LOCATIONS, INVERTS AND SIZES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

UTILITY SERVICE PLAN NOTES:

THE CONTRACTOR SHALL NOTIFY CHEROKEE METRO DISTRICT'S INSPECTIONS OFFICE (NORTH: 668-4396 OR SOUTH: 668-4658) A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

GENERAL:

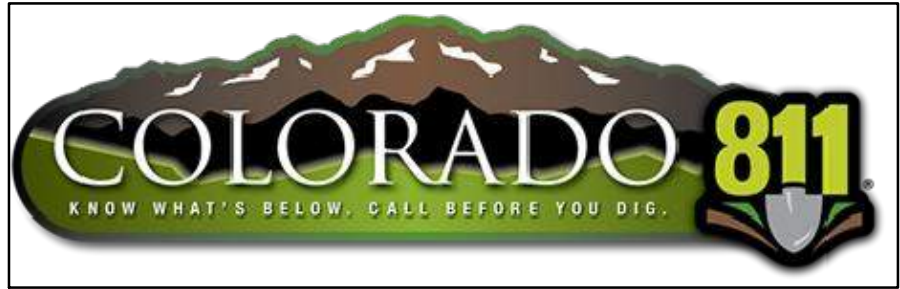
- ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET *COLORADO SPRINGS UTILITIES' WASTEWATER AND WATER LINE EXTENSION AND SERVICE STANDARDS (WATER/WASTEWATER LESS)*.
- IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE DESIGN ENGINEER IMMEDIATELY.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF CHEROKEE METRO DISTRICT.
- ALL FIELD STAKING SHALL COMPLY WITH THE *WATER/WASTEWATER LESS*.
- CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE *WATER/WASTEWATER LESS*.
- FINAL LOCATION OF ALL WASTEWATER AND WATER SERVICES SHALL BE APPROVED IN THE FIELD BY THE CHEROKEE METRO DISTRICT INSPECTOR.
- ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE *CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS MANUAL AND SECTION 5.18 OF THE WATER LESS*.

WASTEWATER:

- SERVICE STUBS SHALL BE INSTALLED A MINIMUM OF SEVEN FEET (7') INTO THE PROPERTY, UNLESS OTHERWISE SHOWN, AND THE END OF THE STUB SHALL BE MARKED WITH A 2"x4"x12' STEEL OR WOODEN POST.
 - SERVICES SHALL BE CONNECTED A MINIMUM OF FIVE FEET (5') FROM THE OUTSIDE EDGE OF ANY MANHOLE ON THE MAIN LINE AND SHALL MAINTAIN TWO FEET (2') OF SEPARATION BETWEEN TAPS CENTER TO CENTER.
 - ALL CLEANOUTS SHALL BE THE SAME SIZE AS THE SERVICE LINE.
 - THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT WHEN ANY SEPTIC TANK IS TO BE ABANDONED AND PAY ALL FEES NECESSARY TO OBTAIN A PERMIT.
- WATER:**
- SERVICE STUBS SHALL BE INSTALLED WITH THE CURB STOP AT OR NEAR PROPERTY LINE AND SHALL NOT BE INSTALLED WITHIN DRIVEWAYS OR SIDEWALKS (SEE DETAIL DRAWING B2-3).
 - SERVICE TAPS SHALL BE MADE A MINIMUM OF THREE FEET (3') FROM THE BELL OR APPURTENANCE ON THE WATER MAIN. TAPS SHALL BE A MINIMUM OF THREE FEET (3') APART ON THE SAME SIDE OF THE WATER MAIN AND A MINIMUM OF ONE-AND-A-HALF FEET (1.5') WHEN TAPS ARE MADE ON OPPOSITE SIDES OF THE WATER MAIN.
 - ALL SERVICES FOR COMMERCIAL USE AND SOME RESIDENTIAL USES REQUIRE INSTALLATION OF A BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY AFTER THE METER. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE APPROVED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH OF THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC-FCCCHR) AND INSTALLED IN ACCORDANCE WITH THIS LISTING. PLEASE REFERENCE THE WATER LINE EXTENSION STANDARDS FOR ADDITIONAL REQUIREMENTS.
 - ALL TAPS ON CHEROKEE METRO DISTRICT WATER MAINS SHALL BE PERFORMED BY CHEROKEE METRO DISTRICT. ALL OTHER TAPS SHALL BE PERFORMED BY THE CONTRACTOR.
 - ANY ABANDONED SERVICES MUST BE PHYSICALLY DISCONNECTED AT THE MAIN. ANY NECESSARY REPAIRS TO THE MAIN AND/OR SHUT DOWN OF THE TAPPING VALVE SHALL BE AS DIRECTED BY CHEROKEE METRO DISTRICT.
 - ALL WATER SERVICE LINES SHOULD ENTER THE BUILDING WITHIN 3 FEET OF AN EXTERIOR WALL. EXPOSED WATER PLUMBING SHALL BE MINIMIZED INSIDE THE BUILDING PRIOR TO THE WATER METER AND/OR APPROVED BACKFLOW PREVENTION ASSEMBLY OR METHOD.
 - ALL HDPE WATER SERVICE LINES MUST EXTEND A MINIMUM OF 6 INCHES ABOVE THE FLOOR AND BE 90 DEGREES FROM THE FLOOR PLAN TO ALLOW FOR BRACING AND TRANSITION TO THE METER LOOP ASSEMBLY.

WATER PLAN NOTES:

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL MEET *COLORADO SPRINGS UTILITIES' WATER LINE EXTENSION AND SERVICE STANDARDS (WATER LESS)*.
- THE CONTRACTOR SHALL OBTAIN LOCATES PRIOR TO ANY EXCAVATION.
- IF FIELD CONDITIONS ARE FOUND TO BE DIFFERENT THAN SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE INSPECTOR AND THE ENGINEER OF RECORD IMMEDIATELY.
- NO TREES OR STRUCTURES ARE PERMITTED WITHIN FIFTEEN FEET (15') OF A WATER MAIN.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITY FACILITIES AS A RESULT OF HIS ACTIONS. THE CONTRACTOR SHALL MAKE ALL THE REQUIRED REPAIRS IMMEDIATELY TO THE SATISFACTION OF CHEROKEE METRO DISTRICT.
- ALL FIELD STAKING SHALL COMPLY WITH THE *WATER LESS*.
- THE CONTRACTOR SHALL MAKE THEIR BEST EFFORT TO ENSURE THAT WATER SERVICE TO ADJACENT PROPERTIES IS MAINTAINED DURING CONSTRUCTION.
- CORROSION PROTECTION MEASURES SHALL COMPLY WITH THE *WATER LESS*.
- NO SERVICE TAPS WILL BE ALLOWED UNTIL THE MAIN IS EXTENDED TO THE NEXT MAIN-LINE VALVE.
- NO SERVICE TAPS SHALL BE MADE UNTIL AUTHORIZATION HAS BEEN GRANTED BY THE CHEROKEE METRO DISTRICT'S INSPECTOR.
- ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION AND THE STATIONING ON THE FIELD STAKES SHALL MATCH THE STATIONING ON THE PLANS.
- FIELD MODIFICATIONS TO A FIRE SERVICE LINE OR FIRE HYDRANT DESIGN OR LOCATION MAY NEED TO BE APPROVED BY THE DESIGN ENGINEER, FIRE DEPARTMENT AND CHEROKEE METRO DISTRICT, AS REQUIRED BY THE INSPECTOR.
- REUSE OR SALVAGE OF ANY MATERIAL IS LEFT TO THE DISCRETION OF THE CHEROKEE METRO DISTRICT'S INSPECTOR.
- ALL TRENCH BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE *CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS MANUAL*.
- ALL WATER SERVICE LINES SHOULD ENTER THE BUILDING WITHIN 3 FEET OF AN EXTERIOR WALL. EXPOSED WATER PLUMBING SHALL BE MINIMIZED INSIDE THE BUILDING PRIOR TO THE WATER METER AND/OR APPROVED BACKFLOW PREVENTION ASSEMBLY OR METHOD.

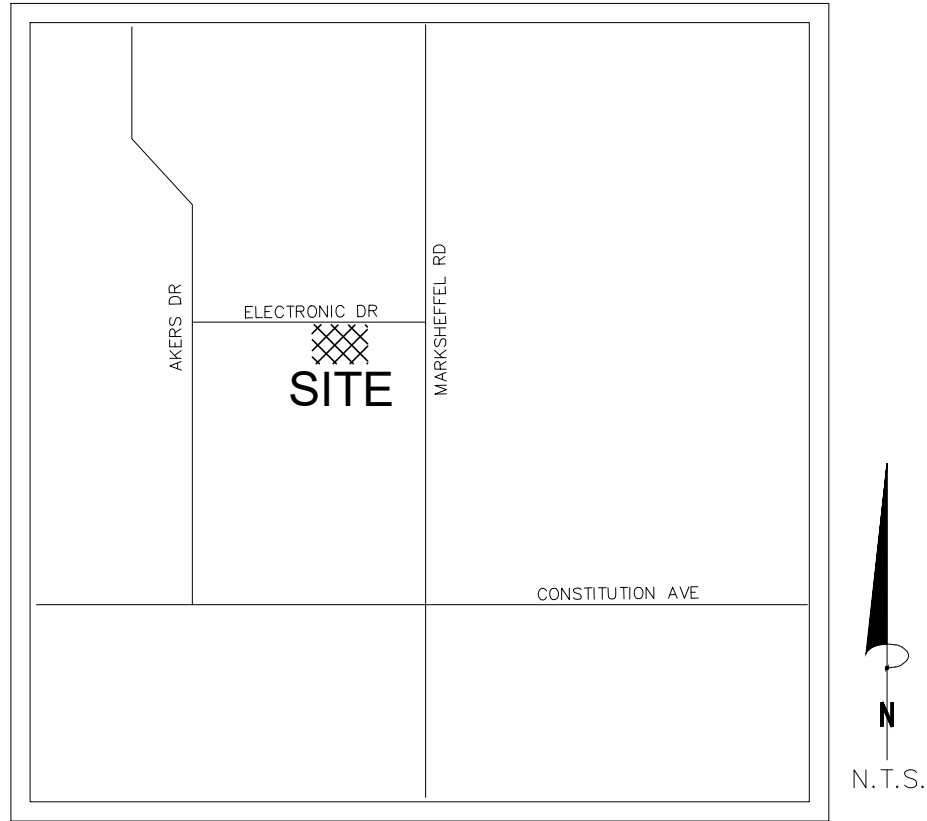


BUILDING DATA	
BUILDING TYPE	II-B
SQUARE FOOTAGE	77,568
SPRINKLED	YES
FM REQ'D	3
FIRE FLOW REQ'D	3,000
FIRE FLOW PROVIDED	###
FLOW DURATION	4 HRS
FM SPACING	400 FT
HOSE LAY	225 FT
AREA SEPARATION WALL	NO
MAX STATIC PRESSURE: ### PSI	

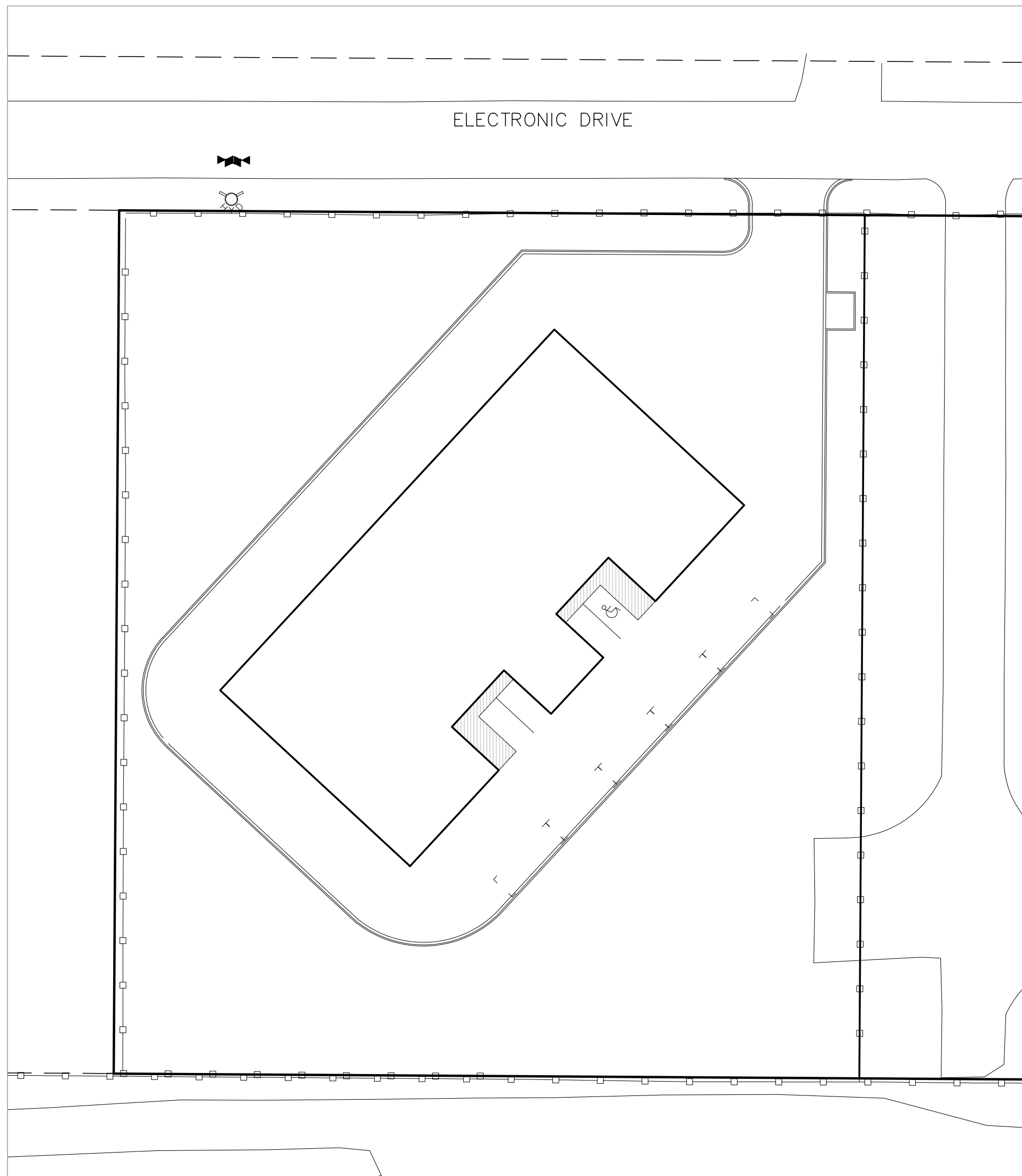
FIRE FLOW

*ACCORDING TO CALCULATIONS REVIEWED BY THE COLORADO SPRINGS UTILITIES, THE THEORETICAL AVAILABLE FIRE FLOW AT EACH FIRE HYDRANT NODE UNDER MAXIMUM DAY DEMAND CONDITIONS WITH A 20 PSI RESIDUAL IS AS FOLLOWS (ACTUAL FIRE FLOW MAY VARY DUE TO VARIOUS PARAMETERS):

NODE	FIRE FLOW (GPM)	PSI @ MDD
DhA	###	###
DhC	###	###
DhD	###	###



VICINITY MAP
N.T.S.



SHEET INDEX

COVER SHEET	1
UTILITY SERVICE PLAN	2
WATER PLAN	3
WATER MAIN PLAN & PROFILE	4

SITE ADDRESS

7765 +/- ELECTRONIC DRIVE

TAX ID

5332002019 (WILL CHANGE WITH PLAT)

LEGAL DESCRIPTION

LOT 2 MOUNTAIN STATES PIPE AND SUPPLY

BENCHMARKS

#5 REBAR WITH ORANGE PLASTIC CAP MARKED "CSAM, LLC PLS 32439", FLUSH WITH GROUND - ELEV.=6513.85 (NAVD-1988) [NORTHWEST PROPERTY CORNER]

CONTACT INFORMATION:

OWNER:	D. STEFANO-BUILDING & RESTORATION, INC. 520 WEST 21ST STREET, G-2 #710 NORFOLK, VA 23517 (757) 333-3144
CIVIL ENGINEER:	TERRA NOVA ENGINEERING, INC. 721 S. 23RD STREET COLORADO SPRINGS, COLORADO 80904 DANE FRANK, P.E., (719) 635-6422
EL PASO COUNTY	PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, COLORADO 80910 (719) 520-6300
FALCON FIRE PROTECTION DISTRICT	STATION 3 / HEADQUARTERS 7030 OLD MERIDIAN ROAD PEYTON, COLORADO 80831 (719) 495-4050
CHEROKEE METRO DISTRICT	6250 PALMER PARK BOULEVARD COLORADO SPRINGS, COLORADO 80915 (719) 597-5080

APPROVALS

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF TERRA NOVA ENGINEERING, INC.

DANE FRANK, COLORADO P.E. #50207

DATE

OWNER/DEVELOPER PLAN APPROVAL

THE UNDERSIGNED OWNER/DEVELOPER AGREES THAT THEY SHALL, AT THEIR EXPENSE, BE SOLELY RESPONSIBLE FOR 1) THE INSTALLATION OF THE PROPOSED UTILITY INFRASTRUCTURE IN ACCORDANCE WITH THESE PLANS, AND 2) ALL DAMAGES AND DEFECTS ARISING FROM, OR RELATED TO, THE INSTALLATION, MAINTENANCE OR OPERATION OF THE PUBLIC UTILITY INFRASTRUCTURE FROM THE DATE OF PRELIMINARY ACCEPTANCE FOR A PERIOD OF TWO YEARS, OR UNTIL FINAL ACCEPTANCE, WHICHEVER IS LATER.

THE UNDERSIGNED UNDERSTANDS THAT ALL PRIVATE UTILITY INFRASTRUCTURE, AS INDICATED ON THESE PLANS, SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE MAINTAINED BY THE OWNER, AS REQUIRED BY "COLORADO SPRINGS UTILITIES' LINE EXTENSION AND SERVICE STANDARDS".

☐ PUBLIC FACILITIES PROPOSED

☒ PRIVATE FACILITIES PROPOSED

SIGNED: _____ DATE: _____
OWNER/DEVELOPER

OWNER/DEVELOPER (PRINT NAME)

DBA: _____

ADDRESS: _____

EMAIL ADDRESS: _____

PHONE: _____

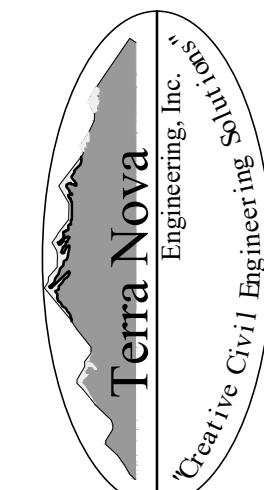
CHEROKEE METROPOLITAN DISTRICT
UTILITY SERVICE PLAN APPROVAL

APPROVED BY: _____ DATE: _____

CHEROKEE METROPOLITAN DISTRICT
WATER PLAN APPROVAL

APPROVED BY: _____ DATE: _____

PREPARED FOR:
D. STEFANO-BUILDING &...
ATTN: DAVID STEFANO
520 W 21ST ST, G-2 #710
NORFOLK, CA 23517
757.333.3144



721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnainc.com

ELECTRONIC STORAGE

WATER & UTILITY SERVICE PLAN
COVER SHEET

DESIGNED BY DLF
DRAWN BY DLF
CHECKED BY LD
H-SCALE AS SHOWN
V-SCALE N/A

JOB NO. 1971.00
DATE ISSUED 03/23/20
SHEET NO. 1 OF 4

##-##-###



ELECTRONIC STORAGE

WATER & UTILITY SERVICE PLAN

UTILITY SERVICE PLAN

MARCH 2020

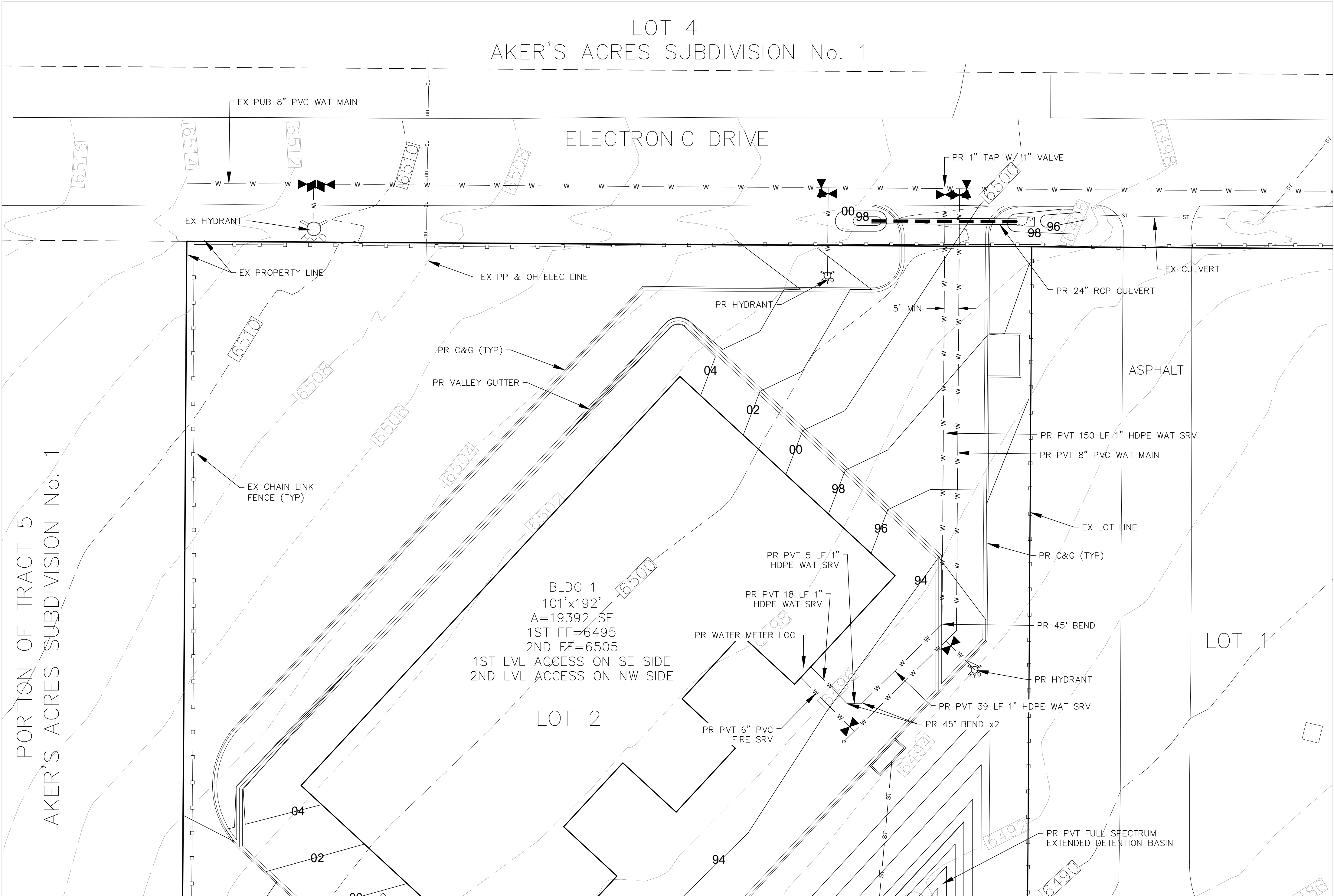
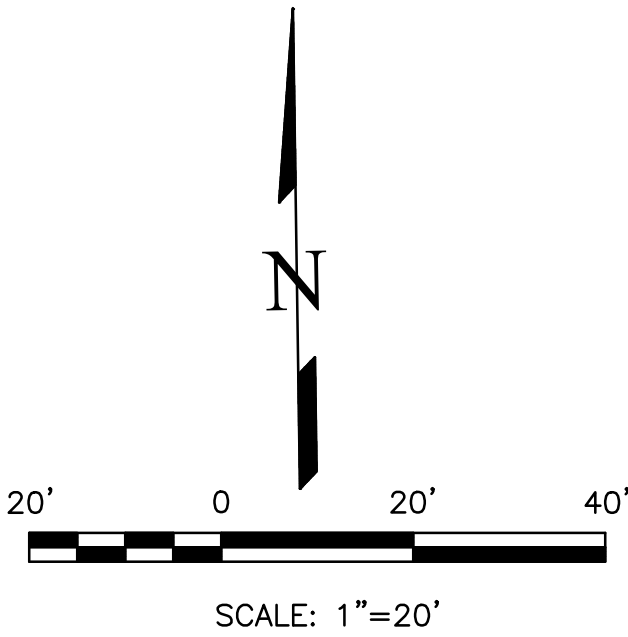
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NOTES

1. SEWER DISPOSAL FOR THE BUILDING IS PROVIDED BY AN ONSITE SEPTIC SYSTEM (NOT INCLUDED IN THESE PLANS).

LEGEND

EXISTING CONTOURS - MINOR	---	6132	---
EXISTING CONTOURS - MAJOR	---	6130	---
GRADE & DIRECTION		2.2%	
PROPOSED CONTOUR		62	
PROPOSED		PR	
EXISTING		EX	
WATER LINE	---	W	---
SEWER LINE	---	SS	---
STORM LINE	---	ST	---
OVERHEAD ELECTRICAL LINE	---	OE	---
CHAIN LINK FENCE	---		---
FIRE HYDRANT			



REVISIONS		DESCRIPTION	DATE
NO.			
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE REVIEWING AGENCIES, TERRA NOVA ENGINEERING, INC. APPROVES THEIR USE ONLY FOR THE PROJECT DESIGNATED BY WRITTEN AUTHORIZATION.			

PREPARED FOR:
D. STEFANO-BUILDING &...
ATTN: DAVID STEFANO
520 W 21ST ST, G-2 #710
NORFOLK, CA 94557
757.333.3144

721 S. 23RD STREET
COLORADO SPRINGS, CO 80904
OFFICE: 719-635-6422
FAX: 719-635-6426
www.tnecinc.com

ELECTRONIC STORAGE	
WATER & UTILITY SERVICE PLAN	
UTILITY SERVICE PLAN	

DESIGNED BY DLF
DRAWN BY DLF
CHECKED BY LD
H-SCALE 1" = 20'
V-SCALE N/A
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SHEET NO. 1 OF 4

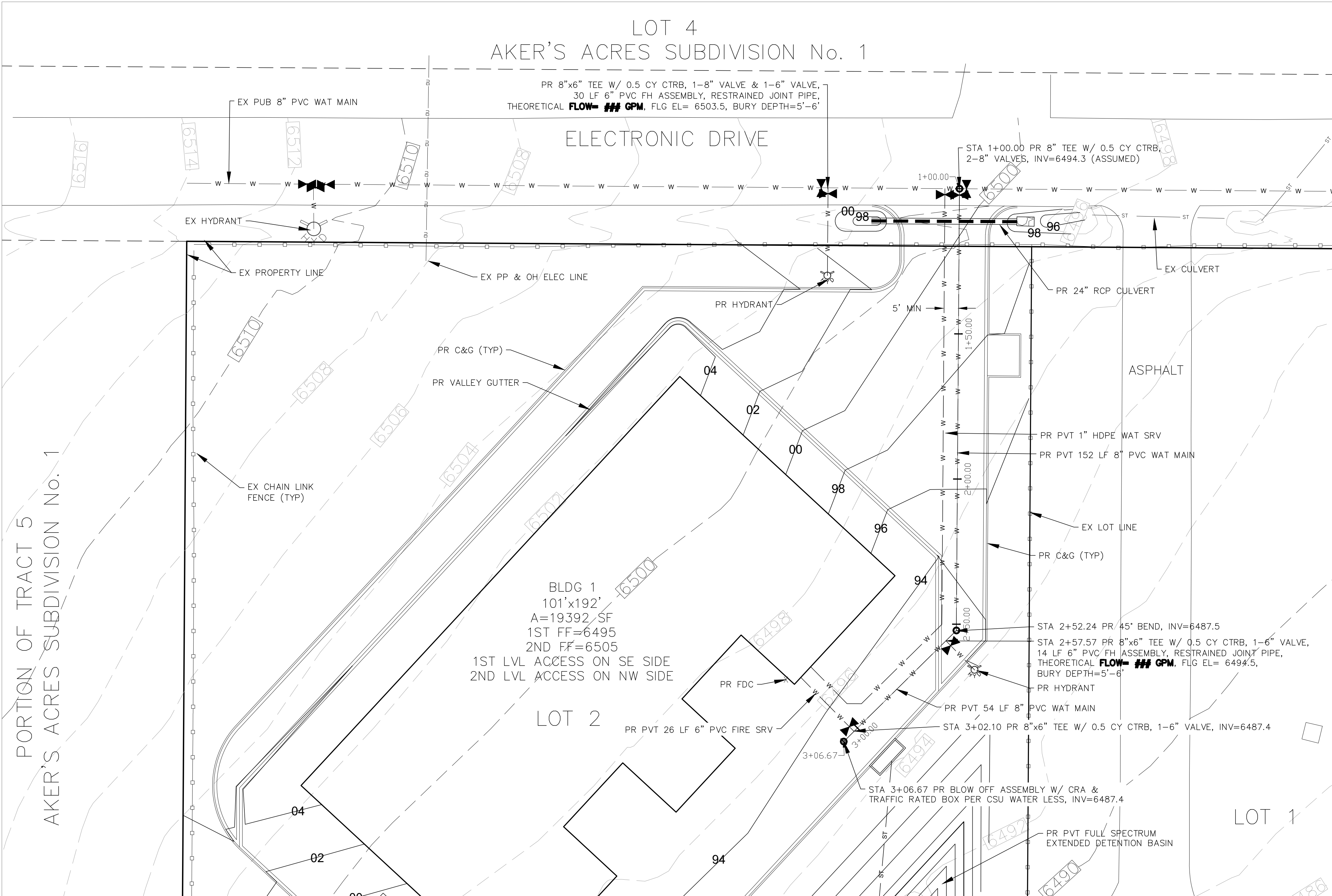
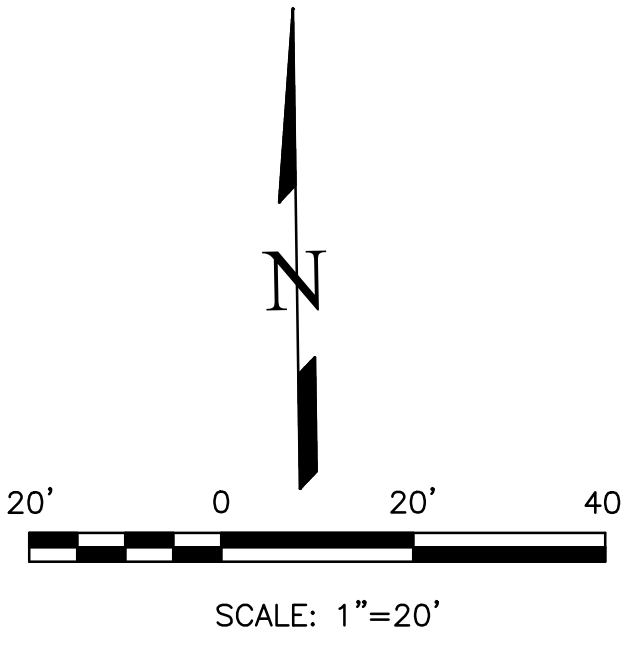


ELECTRONIC STORAGE
WATER & UTILITY SERVICE PLAN
WATER PLAN
MARCH 2020

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PREPARED FOR:

D. STEFANO-BUILDING &...
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NORFOLK, CA 94551
757.333.3144

Terra Nova
Engineering, Inc.
Creative Civil Engineering

721 S. 23RD STREET
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www.tnecinc.com

ELECTRONIC STORAGE

WATER & UTILITY SERVICE PLAN
WATER PLAN

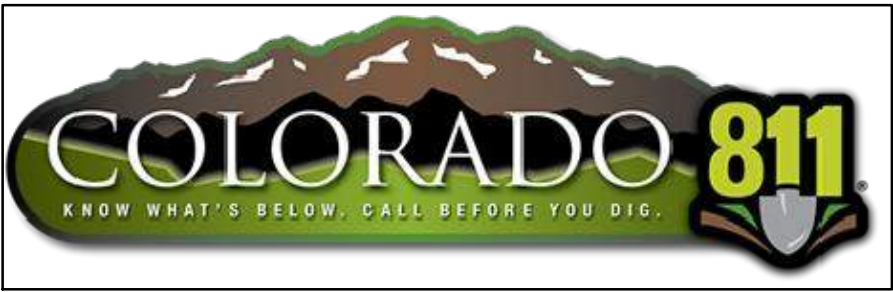
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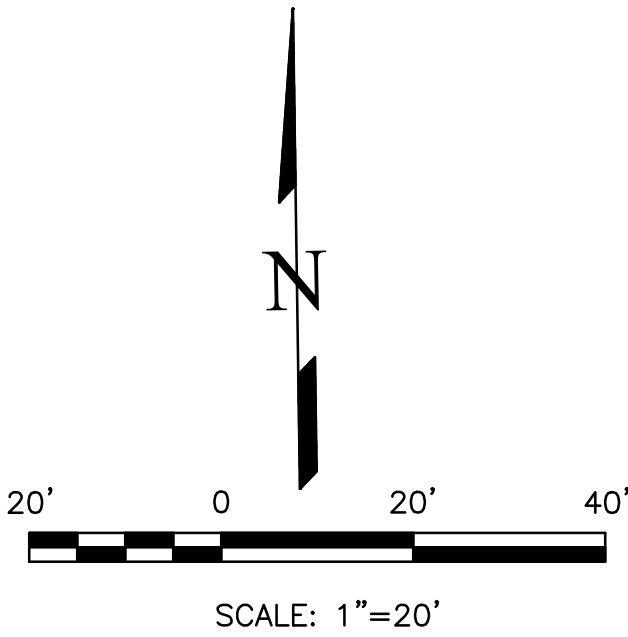
ELECTRONIC STORAGE
WATER & UTILITY SERVICE PLAN
WATER MAIN PLAN & PROFILE
MARCH 2020



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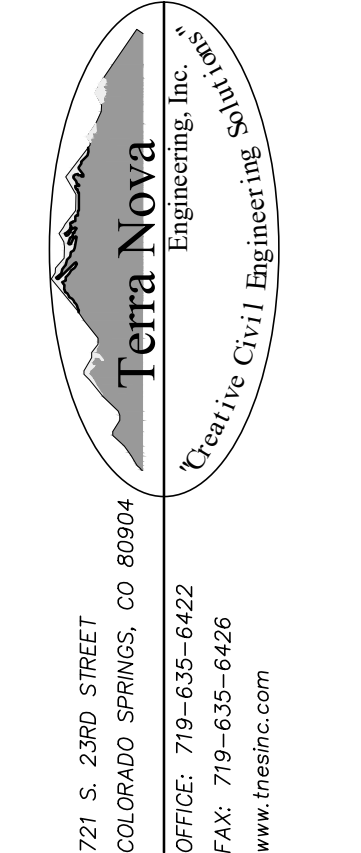
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ELECTRONIC STORAGE	WATER & UTILITY SERVICE PLAN WATER MAIN PLAN & PROFILE
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H-SCALE 1" = 20'	
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