

FIRE LINE PLAN

FOR

SAHUARO ELEMENTARY SCHOOL

12835 NORTH 33RD AVENUE PHOENIX, ARIZONA 85029

CITY OF PHOENIX FIRELINE NOTES:

- ALL CONSTRUCTION IN CITY OF PHOENIX RIGHT-OF-WAY TO CONFORM TO M.A.G. SPECIFICATIONS AND DETAILS AND CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIFICATIONS AND DETAILS, UNLESS MODIFIED ON THE PLANS.
- PLANNING AND DEVELOPMENT DEPARTMENT'S CIVIL/SITE INSPECTION STAFF SHALL BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS, TELEPHONE (602) 262-7811.
- IT IS REQUIRED THAT A FORMAL WRITTEN REQUEST FOR A FIRELINE TURN-ON BE RECEIVED BY CIVIL ENGINEERING OF THE PLANNING AND DEVELOPMENT DEPARTMENT FROM CITY OF PHOENIX FIRE PREVENTION UPON COMPLETION OF THE FIRE LINE WORK. THIS JOB IS NOT COMPLETE UNTIL THIS HAS BEEN DONE AND THE LINE TURNED ON BY THE WATER SERVICES DEPARTMENT.
- THE FOLLOWING M.A.G. DETAILS ARE SPECIFICALLY NOT APPROVED:
 - 346 FIRE LINE DETECTOR CHECK VALVE
 - 390 CURB STOP WITH FLUSHING PIPE
 - 391-1 VALVE BOX INSTALLATION
- 12"x2" TAPPED CAP WITH BALL VALVE RATE 300 PSI OR GREATER AT THE END OF OFFSITE WORK IS REQUIRED IF ONSITE WORK IS NOT CONCURRENT WITH OFFSITE CONSTRUCTION. THE TAPPED CAP MUST BE INSTALLED BEFORE THE BACKFLOW PREVENTION DEVICE.
- FIRELINE CONNECTION TO CITY MAINS SHALL BE USED FOR FIRE PROTECTION SYSTEM ONLY. NO METERED SERVICES CAN BE CONNECTED TO A FIRELINE.
- BACKFLOW PREVENTION DEVICES ARE REQUIRED ON ALL FIRE LINES. CONNECTIONS ARE TO BE IN ACCORDANCE WITH UNIVERSITY OF SOUTHERN CALIFORNIA - MANUAL OF CROSS-CONNECTION CONTROL. SEE BUILDING SAFETY FOR DETAILS. BACKFLOW DEVICES ARE TO BE SHOWN ON THE OFFSITE PLAN. FIRE LINES THAT ARE PROPOSED WITH BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED TO PROVIDE A CERTIFICATE OF APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH (USC-FCCCHR), PRIOR TO FIRE LINE PERMIT ISSUANCE, PER ARIZONA ADMINISTRATIVE CODE R18-4-1150.
- BACKFLOW PREVENTION DEVICES SHALL NOT BE LOCATED IN DRIVEWAYS, VISIBILITY TRIANGLES, OR OTHER LOCATIONS WHERE ACCIDENTAL DAMAGE OR VISIBILITY OBSTRUCTION WOULD BE A LIKELY CONSEQUENCE.
- BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED OUTSIDE OF RIGHT OF WAY AT (OR NEAR) THE PROPERTY LINE (POINT OF SERVICE) AND SHALL BE FULLY ACCESSIBLE FOR THE PERIODIC TESTING, REPAIRS, AND REPLACEMENT. THERE SHALL BE AN UNOBSTRUCTED RADIUS OF NO LESS THAN THREE (3) FEET FROM THE OUTER PERIMETER OF THE BACKFLOW PREVENTION DEVICE PER THE 2006 PHOENIX FIRE CODE (INTERNATIONAL FIRE CODE) SECTION 901.10.
- IN THE ABSENCE OF SPECIFIC PRESSURE DROP INFORMATION, THE DIAMETER OF THE INLET OR OUTLET OF ANY BACKFLOW PREVENTION DEVICE OR ITS CONNECTING PIPING SHALL NOT BE LESS THAN THE DIAMETER OF SUCH WATER DISTRIBUTION PIPING TO THE FIXTURES SERVED BY THE DEVICE, PER UPC 610.2. IF AVAILABLE, PRESSURE DROP INFORMATION SHALL BE PROVIDED WITH THE SUBMITTED PLANS.
- LOOPED ONSITE FIRE LINE SYSTEMS SHALL BE PROVIDED A BACKFLOW PREVENTOR AT EACH POINT OF CONNECTION TO THE PUBLIC WATER SYSTEM, PER UPC 603.3.11.
- ALL WORK MUST COMPLY WITH THE REQUIREMENTS OF THE CURRENT CITY OF PHOENIX TRAFFIC BARRICADE MANUAL.
- PAVEMENT REPLACEMENT THICKNESS AND TYPE ARE TO BE PER MAG SECTION 336 AND COP DETAIL P1200 - TYPE B. CURB AND GUTTER REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL SECTION, PER MAG STANDARD DETAIL 220. SIDEWALK REPLACEMENT SHALL BE A MINIMUM OF ONE (1) FULL PANEL PER COP DETAIL P1230. AT THE DISCRETION OF THE CITY OF PHOENIX PLANNING AND DEVELOPMENT OFFSITE INSPECTOR, TUNNELING UNDER EXISTING CURB AND GUTTER, IN THE CITY OF PHOENIX R.O.W, WILL BE ALLOWED. TUNNELING UNDER EXISTING SIDEWALK WILL NOT BE ALLOWED IN THE CITY OF PHOENIX R.O.W.
- MINIMUM COVERAGE OVER THE TOP OF PIPE SHALL BE FOUR (4) FEET IF THE MAIN IS LOCATED IN A MAJOR STREET OR THE MAIN IS 12" OR LARGER. OTHERWISE, THREE (3) FEET OF COVER OVER THE TOP OF THE PIPE IS REQUIRED.
- COMPACTION SHALL COMPLY WITH M.A.G. SEC. 601, 95% MINIMUM IN A PUBLIC STREET.
- ASPHALT RESTORATION IS REQUIRED FOR ANY STREET CUT. REFER TO STREET PAVEMENT POLICY (TRT 00164 AND ORDINANCE G-6308).
- APPROVAL OF THESE PLANS SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE OR OTHER HEALTH/SAFETY ISSUE.
- PLAN APPROVAL IS VALID FOR 12 MONTHS. PRIOR TO PLAN APPROVAL EXPIRATION, ALL ASSOCIATED PERMITS SHALL BE PURCHASED OR THE PLANS SHALL BE RESUBMITTED FOR EXTENSION OF PLAN APPROVAL. THE EXPIRATION, EXTENSION, AND REINSTATEMENT OF CIVIL ENGINEERING PLANS AND PERMITS SHALL FOLLOW THE SAME GUIDELINES AS THOSE INDICATED IN THE PHOENIX BUILDING CONSTRUCTION CODE ADMINISTRATIVE PROVISIONS SECTION 105.3 FOR BUILDING PERMITS.

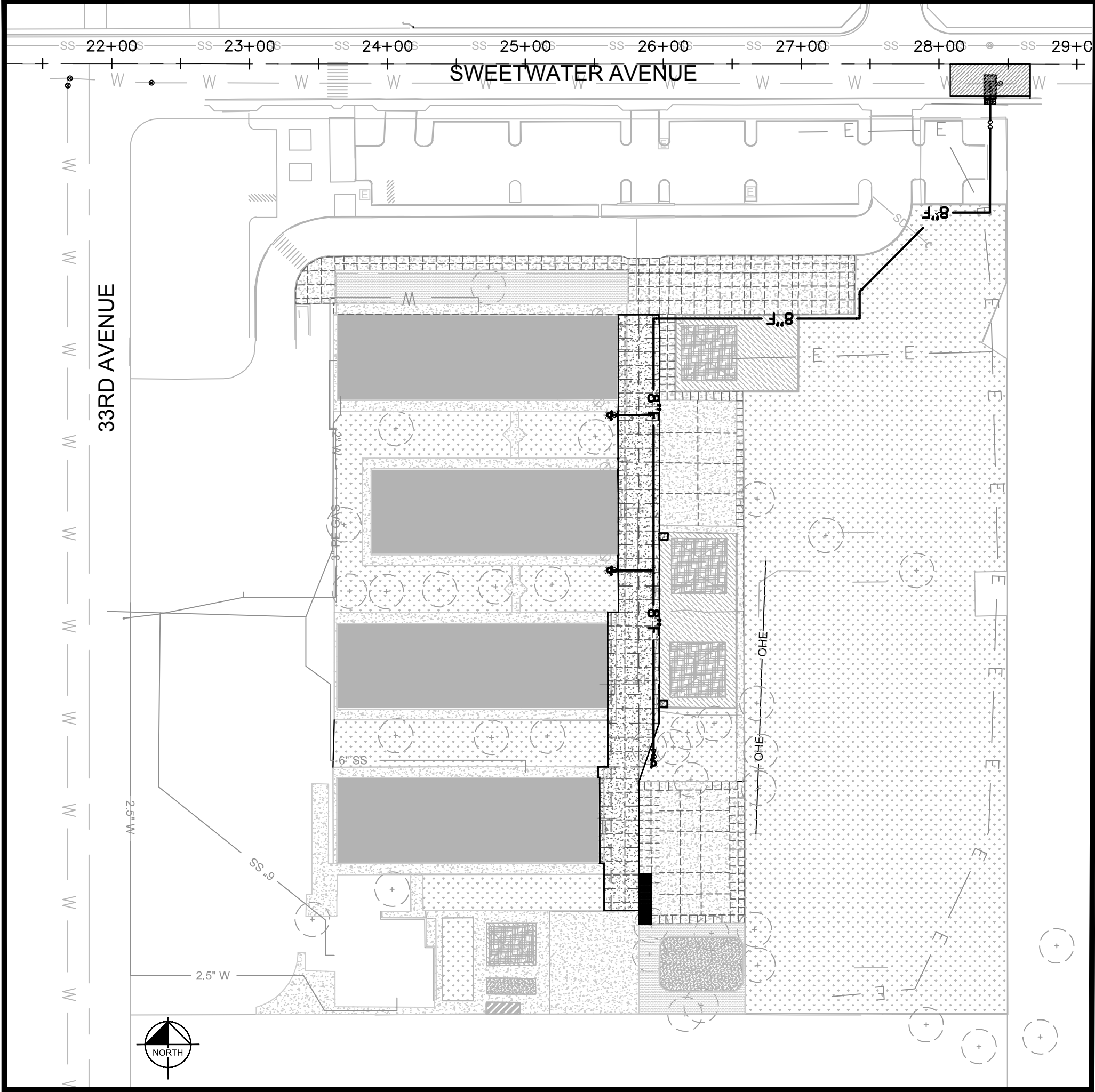
NOTES:

- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY THE PRESENCE AND LOCATION OF ANY AND ALL EXISTING OVERHEAD AND/OR UNDERGROUND UTILITIES THAT MAY INTERFERE WITH THE CONSTRUCTION, WHETHER OR NOT SAID UTILITIES ARE SHOWN ON THE CONSTRUCTION PLANS FOR THIS PROJECT. CONTRACTOR SHALL ADEQUATELY PROTECT AND MAINTAIN SUCH UTILITIES.
- THE CONTRACTOR SHALL EXPOSE ALL REQUIRED UTILITY CONNECTION POINTS A MINIMUM OF 10 FEET TO VERIFY APPROPRIATE HORIZONTAL LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION STAKING. ANY VARIATION OF CONNECTION LOCATIONS FOUND IN THE FIELD SHALL BE REPORTED TO THE DESIGN ENGINEER AND OWNER PRIOR TO THE START OF CONSTRUCTION STAKING.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATIONS AND INSTALLATIONS OF FRANCHISE UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.

UTILITY CONFLICT NOTICE				
UTILITY	UTILITY COMPANY	UTILITY COMPANY REPRESENTATIVE	TELEPHONE NUMBER	DATE SENT
ELECTRIC	SRP	ANDRE BENAVIDEZ	(602) 236-3586	10/24/2022
TELEPHONE	CENTURY LINK	KEVIN WAGNER	(815) 245-9640	10/24/2022
NATURAL GAS	SOUTHWEST GAS	SCOTT SUASO	(480) 730-3843	10/24/2022
CABLE TV	COX COMM.	GARETTE GOLDING	(602) 501-5755	10/24/2022

LEGEND

✕ PANEL POINT	D/W ACCESS DRIVEWAY	⊙ GAS METER	⊠ TRAFFIC SIGNAL PULL BOX	⊕ STORM MANHOLE	— — — — — PROPERTY LINE
△ PK/WASHER	TOP OF SLOPE	⊠ GAS PRESSURE REDUCER	⊠ TRAFFIC SIGNAL VAULT	⊠ STORM DRAIN GRATE	— — — — — PROPERTY LINE (OTHER)
✕ CHISELED X	TOE TOE OF SLOPE	⊠ GAS MARKER	⊕ TELEPHONE MANHOLE	⊕ DRY WELL	— — — — — RIGHT-OF-WAY LINE
• SPIKE	W/IF WROUGHT IRON FENCE	⊕ ELECTRIC MANHOLE	⊕ TELEPHONE PULL BOX	⊕ STORM CLEANOUT	— — — — — MONUMENT LINE
⊙ COTTON PICKER SPINDLE	SW SIDEWALK	⊕ ELECTRICAL PULL BOX	⊕ TELEPHONE VAULT	⊕ CATCH BASIN	— — — — — CENTERLINE
⊕ ALUMINUM CAP FLUSH	PRPT TOP OF PARAPET	⊕ ELECTRIC METER	⊕ TELEPHONE PEDESTAL	⊕ PALM TREE	— — — — — EASEMENT LINE
⊕ ALUMINUM CAP IN HANDHOLE	WL TOP OF WALL	⊕ ELECTRIC EQUIPMENT	⊕ TELEVISION RISER	⊕ SAGUARO	— — — — — LEASE LINE
⊕ BRASS CAP FLUSH	CLF CHAIN LINK FENCE	⊕ ELECTRIC SWITCH	⊕ POWER POLE	⊕ CACTUS	— — — — — CHAIN LINK FENCE
⊕ BRASS CAP IN HANDHOLE	CMU CONCRETE MASONRY UNIT	⊕ ELECTRICAL TRANSFORMER	⊕ DOWN GUY	⊕ DECIDUOUS TREE	— — — — — WOOD OR IRON FENCE
▲ SUBDIVISION CORNER	CS CONCRETE	⊕ ELECTRIC CABINET	⊕ LIGHT POST	⊕ BUSH	— — — — — WIRE OR BARBED WIRE FENCE
● FOUND AS NOTED	MCR MARICOPA COUNTY RECORDER	⊕ ELECTRIC VAULT	⊕ STREET LIGHT W/ MAST ARM	⊕ CONIFEROUS TREE	— — — — — OVERHEAD ELECTRIC LINE
○ SET REBAR	1419.18 SPOT ELEVATION	⊕ FIBER VAULT	⊕ FIRE DEPT. CONNECTION	⊕ SIGN	— — — — — U/G ELECTRIC LINE
△ CONTROL POINT	FS FINISHED SURFACE	⊕ FIBER CABINET	⊕ FIRE HYDRANT	⊕ DOUBLE SIGN	— — — — — U/G TELECOMMUNICATION LINE
NG NATURAL GRADE	EL ELEVATION	⊕ FIBER MANHOLE	⊕ WATER VALVE	⊕ BOLLARD	— — — — — UNDERGROUND TV LINE
BLDG TOP OF BUILDING	VG VALLEY GUTTER	⊕ SANITARY SEWER MANHOLE	⊕ WATER METER	⊕ FLAG POLE	— — — — — U/G FIBER OPTIC LINE
TBC TOP BACK OF CURB	AC AIR CONDITIONING UNIT	⊕ SANITARY SEWER CLEANOUT	⊕ BACKFLOW PREVENTER	⊕ CURB STOP	— — — — — U/G GAS LINE
R/W RIGHT OF WAY	X GAS VALVE	⊕ TRAFFIC SIGNAL	⊕ WATER MANHOLE	⊕ HANDICAP	— — — — — SANITARY SEWER LINE
PV ASPHALT	⊙ GAS MANHOLE	⊕ TRAFFIC SIGNAL WITH MAST	⊕ IRRIGATION CONTROL VALVE	⊕ BREAKLINE	— — — — — STORM SEWER LINE
			⊕ IRRIGATION MANHOLE		— — — — — WATER LINE



LOCATION MAP
NTS

BASIS OF BEARING

BASIS OF BEARINGS:
SOUTH 89° 58' 53" EAST ALONG THE NORTH LINE OF THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 3 NORTH, RANGE 2 EAST, ALSO BEING THE MONUMENT LINE OF SWEETWATER AVENUE BETWEEN 35TH AVENUE AND 31ST AVENUE, PROJECTED FROM THE U.S. STATE PLANE NAD83 COORDINATE SYSTEM ARIZONA STATE PLANE COORDINATE ZONE CENTRAL, DETERMINED BY GPS OBSERVATIONS COLLECTED DURING THIS SURVEY.

BENCHMARK

CITY OF PHOENIX BRASS CAP FLUSH LOCATED AT THE INTERSECTION OF 31ST AVENUE AND SWEETWATER AVENUE. AN ELEVATION OF 1272.35 (NGVD 29)

PROJECT INFORMATION

ASSESSOR'S PARCEL NUMBER (APN): 149-43-131

SHEET INDEX	
SHEET	DESCRIPTION
FL1.0	FIRELINE COVER SHEET
FL1.1 - FL1.2	FIRELINE PLAN

THE QUANTITIES LISTED BELOW ARE APPROXIMATE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF THE QUANTITIES INVOLVED AND BASE HIS/HER BID ON HIS/HER OWN ESTIMATE.

PUBLIC FIRELINE QTY

INSTALL 12"x8" TAPPING SLEEVE AND VALVE PER MAG STD DET 340 AND MAG SPEC SUBSECTION 630.4.2(A)(1). INSTALL VALVE BOX AND COVER PER COP STD DET P1391 AND ADJUST TO FINISHED GRADE PER COP STD DET PER COP STD DET P1270.	1 EA
INSTALL 8" PRESSURE CLASS 350 DIP WATER MAIN POLYWRAPPED WITH TRACER WIRE, LENGTH PER PLAN.	26 LF
INSTALL 8" GATE VALVE AND VALVE BOX PER COP STD DET P1391, TYPE "A".	1 EA
SAWCUT, REMOVE, AND REPLACE ASPHALT PAVEMENT PER MAG SPEC 336 AND COP STD DET P1200.	15 SY
CRACK FILL AND SEAL PROPOSED PAVEMENT SAWCUT LINE PER MAG SPEC 337. MICROSURFACE FULL ROAD WIDTH PER MAG SPEC 331 AND COP STREET PAVEMENT CUT POLICY.	1,350 SF
WET UTILITY CROSSING. MAINTAIN VERTICAL SEPARATION AS NOTED. PROVIDE EXTRA PROTECTION PER MAG STD DET 404 AS NECESSARY.	1 EA
REMOVE AND REPLACE TYPE 'A' 6" VERTICAL CURB AND GUTTER PER MAG STD DET 220. REMOVE ENTIRE JOINT TO JOINT, TYP.	8 LF
REMOVE AND REPLACE CONCRETE SIDEWALK AS PER MAG STD DET 230. REMOVE FULL PANEL, JOINT TO JOINT, TYP.	30 SF

PRIVATE FIRELINE QTY

INSTALL 8" PVC C900 WATER LINE, PRESSURE CLASS 150 MIN, WITH TRACER WIRE, LENGTH PER PLAN. 4" MIN COVER.	660 LF
INSTALL 8" WILKINS 350 OR FEBCO LF850 DOUBLE CHECK VALVE ASSEMBLY PER COP STD DETAIL P1352. CONTRACTOR SHALL MAINTAIN AN UNOBSTRUCTED RADIUS OF NO LESS THAN THREE FEET FROM THE OUTER PERIMETER OF THE BACKFLOW PREVENTOR.	1 EA
INSTALL 6" PVC C900 WATER LINE, PRESSURE CLASS 150 MIN, WITH TRACER WIRE, LENGTH PER PLAN. 3" MIN COVER.	68 LF
INSTALL FIRE HYDRANT ASSEMBLY (VALVE INCLUDED) PER MAG STD DET 360 AND COP STD DET P1362, WITH WHITE REFLECTIVE BONNETS. VALVE SHALL BE PLACED WITHIN 20' OF HYDRANT.	3 EA
INSTALL 8" BEND, ANGLE PER PLAN, WITH THRUST BLOCKS PER 2013 NFPA 24 10.8.2 AND DETAIL ON SHEET FR3.	5 EA
INSTALL 8"x6" TEE WITH THRUST BLOCKS PER NFPA 24 10.8.2 AND MAG STD DETAIL 380.	2 EA
WET UTILITY CROSSING. MAINTAIN VERTICAL SEPARATION AS NOTED. PROVIDE EXTRA PROTECTION PER PLUMBING CODE AS NECESSARY WITH VERTICAL SEPARATION OF WATER LINE WITH VERTICAL DIP AS PER MAG STD DTL. 404-1, TYP.	2 EA

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF ADDING A FIRE LINE FOR THE ADDITION OF PRIVATE FIRE HYDRANTS FOR THE EXISTING WASHINGTON ELEMENTARY SCHOOL DISTRICT SAHUARO ELEMENTARY SCHOOL TO COINCIDE WITH THE CONSTRUCTION OF A CONCRETE FIRE LANE UNDER A SEPARATE PROJECT WITH THE SCHOOL FACILITY BOARD.

THE PROPOSED FIRELINE WILL BE CONNECTED TO THE EXISTING 12" ACP WATER MAIN IN SWEETWATER AVENUE. THE PROPOSED FIRELINE WILL BE CONSTRUCTED WITH 8" CL. 350 DIP WATER LINE PIPE. WITHIN THE RIGHT-OF-WAY AND 8" PVC C-900 WATER LINE ONSITE.

ONSITE FIRE HYDRANTS WILL BE PLACED IN ACCORDANCE WITH FIRE DEPARTMENT REQUIREMENTS.

APPROVED FOR:
THE CITY OF PHOENIX

PLANNING & DEVELOPMENT DEPARTMENT _____ DATE _____

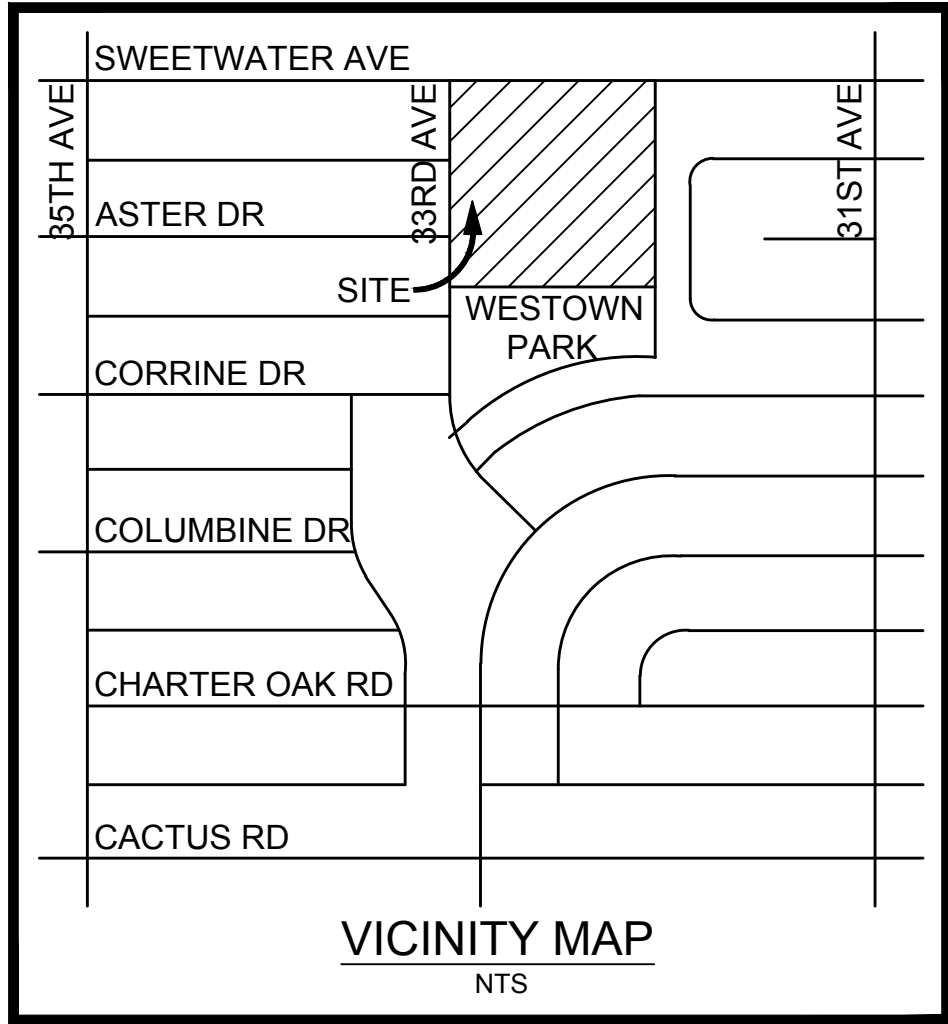
AS BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED ENGINEER/LAND SURVEYOR _____

REGISTRATION NO. _____

DATE _____



OWNER

WASHINGTON ELEMENTARY SCHOOL DISTRICT
4650 WEST SWEETWATER AVENUE
GLENDALE, ARIZONA 85304
PHONE: (602) 347-4835
FAX: (602) 347-4836
CONTACT: MIKE KRAMER

ENGINEER

KIMLEY-HORN & ASSOCIATES
7740 NORTH 16TH STREET, SUITE 300
PHOENIX, ARIZONA 85020
PHONE: (602) 944-5500
FAX: (602) 944-7423
CONTACT: SEAN WOZNY

LANDSCAPE ARCHITECT

KIMLEY-HORN & ASSOCIATES
7740 NORTH 16TH STREET, SUITE 300
PHOENIX, ARIZONA 85020
PHONE: (602) 944-5500
FAX: (602) 944-7423
CONTACT: SEAN WOZNY

UTILITY COMPANIES

SANITARY SEWER AND WATER:
CITY OF PHOENIX
PLANNING AND DEVELOPMENT DEPARTMENT
200 WEST WASHINGTON STREET
PHOENIX, ARIZONA 85003-1611
PH: (602) 262-7004
FAX: (602) 495-5784

GOVERNING AGENCY

CITY OF PHOENIX
PLANNING AND DEVELOPMENT DEPARTMENT
200 WEST WASHINGTON STREET
PHOENIX, ARIZONA 85003-1611
PH: (602) 262-7004
FAX: (602) 495-5784

FIRELINE CONTRACTOR



SAHUARO ELEMENTARY SCHOOL

COVER SHEET

FIRE LANE IMPROVEMENTS

12835 NORTH 33RD AVENUE, PHOENIX, AZ 85029



PROJECT NO.
191907008

DRAWING NAME
FL1.0

1 OF 3

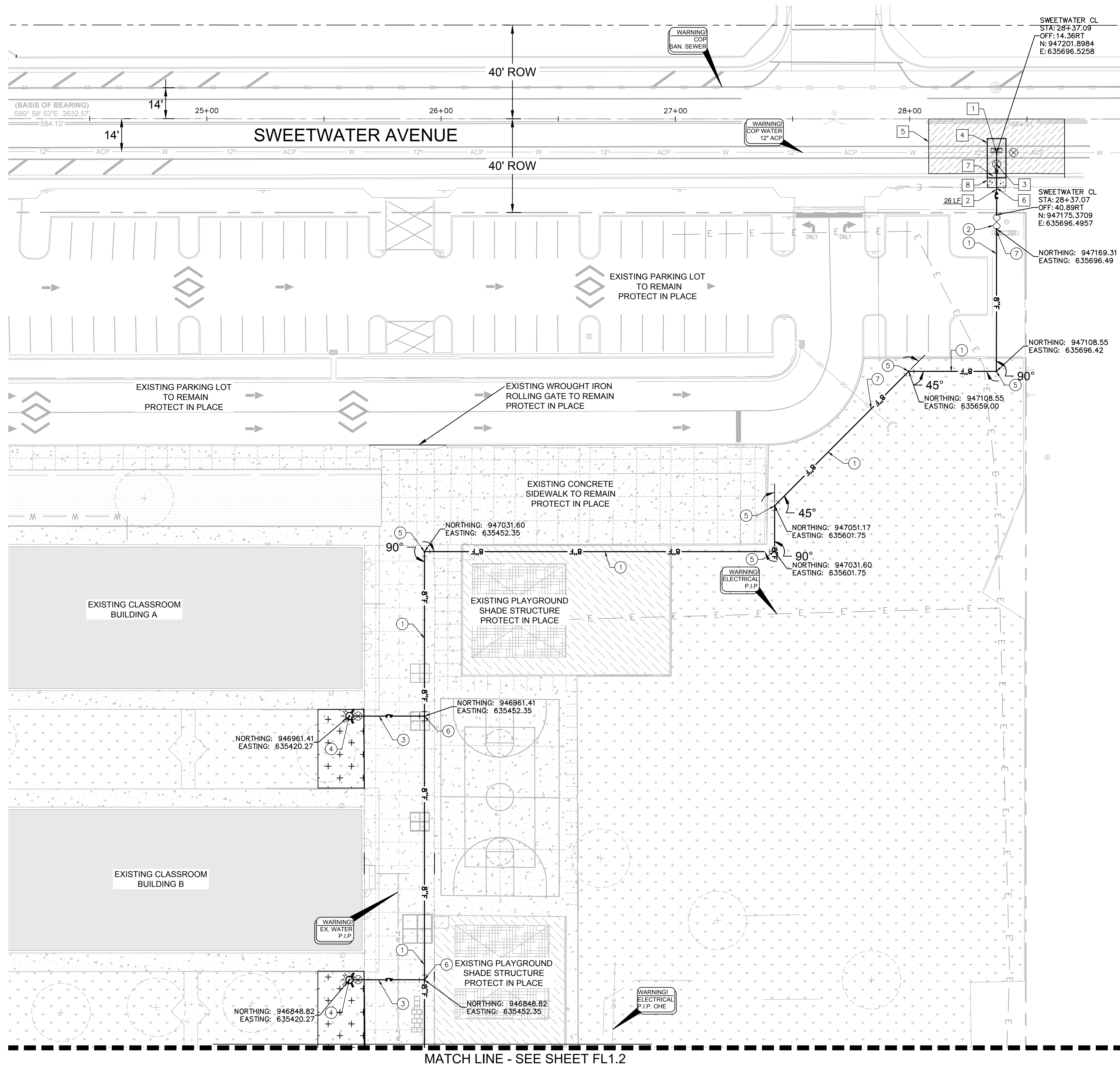
Kimley»Horn

©2022 KIMLEY-HORN AND ASSOCIATES, INC.
7740 North 16th Street, Suite 300
Phoenix, Arizona 85020 (602) 944-5500

SCALE (H) AS SHOWN
SCALE (V) AS SHOWN
DESIGNED BY: SW
DRAWN BY: MFP
CHECKED BY: SW
DATE: 10/24/2022

REVISION
BY DATE APPR.

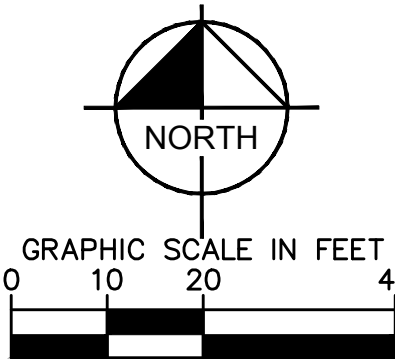
K:\PLANS\19197008_19197008_School_Elements_Coverage_Plan.dwg Nov 30, 2022 Sean Wozny
XREFS: 19197008.TELK 0909178 WEEDY SAHUARO SCHOOL CDDP JDM 01/19/2009 P.L.
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, IS AN INSTRUMENT OF SERVICE. IT IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER
RELANCE ON THIS DOCUMENT, WITHOUT AUTHORIZATION AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.



PUBLIC FIRELINE NOTES		QTY
1	INSTALL 12"x8" TAPPING SLEEVE AND VALVE PER MAG STD DET 340 AND MAG SPEC SUBSECTION 630.4.2(A)(1). INSTALL VALVE BOX AND COVER PER COP STD DET P1391 AND ADJUST TO FINISHED GRADE PER COP STD DET PER COP STD DET P1270.	1 EA
2	INSTALL 8" PRESSURE CLASS 350 DIP WATER MAIN POLYWRAPPED WITH TRACER WIRE, LENGTH PER PLAN.	26 LF
3	INSTALL 8" GATE VALVE AND VALVE BOX PER COP STD DET P1391, TYPE "A".	1 EA
4	SAWCUT, REMOVE, AND REPLACE ASPHALT PAVEMENT PER MAG SPEC 336 AND COP STD DET P1200.	15 SY
5	CRACK FILL AND SEAL PROPOSED PAVEMENT SAWCUT LINE PER MAG SPEC 337. MICROSURFACE FULL ROAD WIDTH PER MAG SPEC 331 AND COP STREET PAVEMENT CUT POLICY.	1,350 SF
6	WET UTILITY CROSSING. MAINTAIN VERTICAL SEPARATION AS NOTED. PROVIDE EXTRA PROTECTION PER MAG STD DET 404 AS NECESSARY.	1 EA
7	REMOVE AND REPLACE TYPE 'A' 6" VERTICAL CURB AND GUTTER PER MAG STD DET 220. REMOVE ENTIRE JOINT TO JOINT, TYP.	8 LF
8	REMOVE AND REPLACE CONCRETE SIDEWALK AS PER MAG STD DET 230. REMOVE FULL PANEL, JOINT TO JOINT, TYP.	30 SF

PRIVATE FIRELINE NOTES		QTY
1	INSTALL 8" PVC C900 WATER LINE, PRESSURE CLASS 150 MIN, WITH TRACER WIRE, LENGTH PER PLAN. 4" MIN COVER.	560 LF
2	INSTALL 8" WILKINS 350 OR FEBCO LF850 DOUBLE CHECK VALVE ASSEMBLY PER COP STD DETAIL P1352. CONTRACTOR SHALL MAINTAIN AN UNOBSTRUCTED RADIUS OF NO LESS THAN THREE FEET FROM THE OUTER PERIMETER OF THE BACKFLOW PREVENTOR.	1 EA
3	INSTALL 6" PVC C900 WATER LINE, PRESSURE CLASS 150 MIN, WITH TRACER WIRE, LENGTH PER PLAN. 3" MIN COVER.	60 LF
4	INSTALL FIRE HYDRANT ASSEMBLY (VALVE INCLUDED) PER MAG STD DET 360 AND COP STD DET P1362, WITH WHITE REFLECTIVE BONNETS. VALVE SHALL BE PLACED WITHIN 20' OF HYDRANT.	2 EA
5	INSTALL 8" BEND, ANGLE PER PLAN, WITH THRUST BLOCKS PER 2013 NFPA 24 10.8.2 AND DETAIL ON SHEET FR3.	5 EA
6	INSTALL 8"x6" TEE WITH THRUST BLOCKS PER NFPA 24 10.8.2 AND MAG STD DETAIL 380.	2 EA
7	WET UTILITY CROSSING. MAINTAIN VERTICAL SEPARATION AS NOTED. PROVIDE EXTRA PROTECTION PER PLUMBING CODE AS NECESSARY WITH VERTICAL SEPARATION OF WATER LINE WITH VERTICAL DIP AS PER MAG STD DTL. 404-1, TYP.	2 EA

- NOTES**
- STATION AND OFFSETS ON THIS SHEET ARE BASED UPON SWEETWATER AVENUE.
 - ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
 - ALL PVC C900 PIPE AND FITTINGS SHALL CONFORM TO NSF 61.
 - FIRE LINE MUST HAVE MINIMUM 48" OF COVER IF DIAMETER IS 8" OR GREATER OR LOCATED IN RIGHT-OF-WAY/EASEMENT. OTHERWISE PROVIDE 36" COVER MINIMUM.
 - ALL ON-SITE FIRE LINES AND APPURTENANCES REQUIRE C.O.P. FIRE PREVENTION APPROVAL.
 - ALL OFF-SITE FIRE LINE TAPS REQUIRE APPROVAL FROM C.O.P. WATER SERVICES DEPARTMENT.
 - CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO UTILIZE UTILITY PRIVATE LOCATOR PRIOR TO START OF CONSTRUCTION ACTIVITIES TO VERIFY EXISTING UTILITIES HORIZONTAL AND VERTICAL LOCATION ON SITE WITHIN SCHOOL PROPERTY. CONTRACTOR TO PROVIDE UTILITY POTHOLE LOCATION INFORMATION TO ENGINEER. ANY UTILITY CONFLICTS SHALL BE IDENTIFIED AND COORDINATED WITH THE ENGINEER AND DISTRICT PRIOR TO CONSTRUCTION.
 - QUANTITIES HAVE BEEN PROVIDED FOR ENGINEERING PURPOSES ONLY. CONTRACTOR TO CONDUCT THEIR OWN QUANTITIES FOR BIDDING. ANY DISCREPANCIES SHALL BE IDENTIFIED AND BROUGHT TO THE ENGINEER DURING BID PERIOD.



SAHUARO ELEMENTARY SCHOOL
FIRE LINE PLAN
FIRE LANE IMPROVEMENTS
12835 NORTH 33RD AVENUE, PHOENIX, AZ 85029

DESIGNED BY: SW
DRAWN BY: MFP
CHECKED BY: SW

DATE: 10/24/2022

SCALE (H) AS SHOWN
SCALE (V) AS SHOWN

DESIGNED BY: SW
DRAWN BY: MFP
CHECKED BY: SW

DATE: 10/24/2022

PROJECT NO.
19197008

DRAWING NAME
FL1.1

2 OF 3

44745
SEAN R. WOZNY
10-24-2022
PHOENIX, ARIZONA U.S.A.
SINCE 05/30/2014

PROJECT NO.
19197008

DRAWING NAME
FL1.1

2 OF 3

KIMLEY-HORN
© 2022 KIMLEY-HORN AND ASSOCIATES, INC.
7740 North 16th Street, Suite 300
Phoenix, Arizona 85020 (602) 944-5500

BY DATE APPR.
NO.

K:\P\1\19107008_19107008_School_Improvements.dwg Nov 30, 2022 Sean Wozny
XREFS: 19107008.TBK 0609178 WESLEY SAHUARO SCHOOL CDD 19107008.dwg
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, IS AN INSTRUMENT OF SERVICE. IT IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND MODIFICATION OF THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

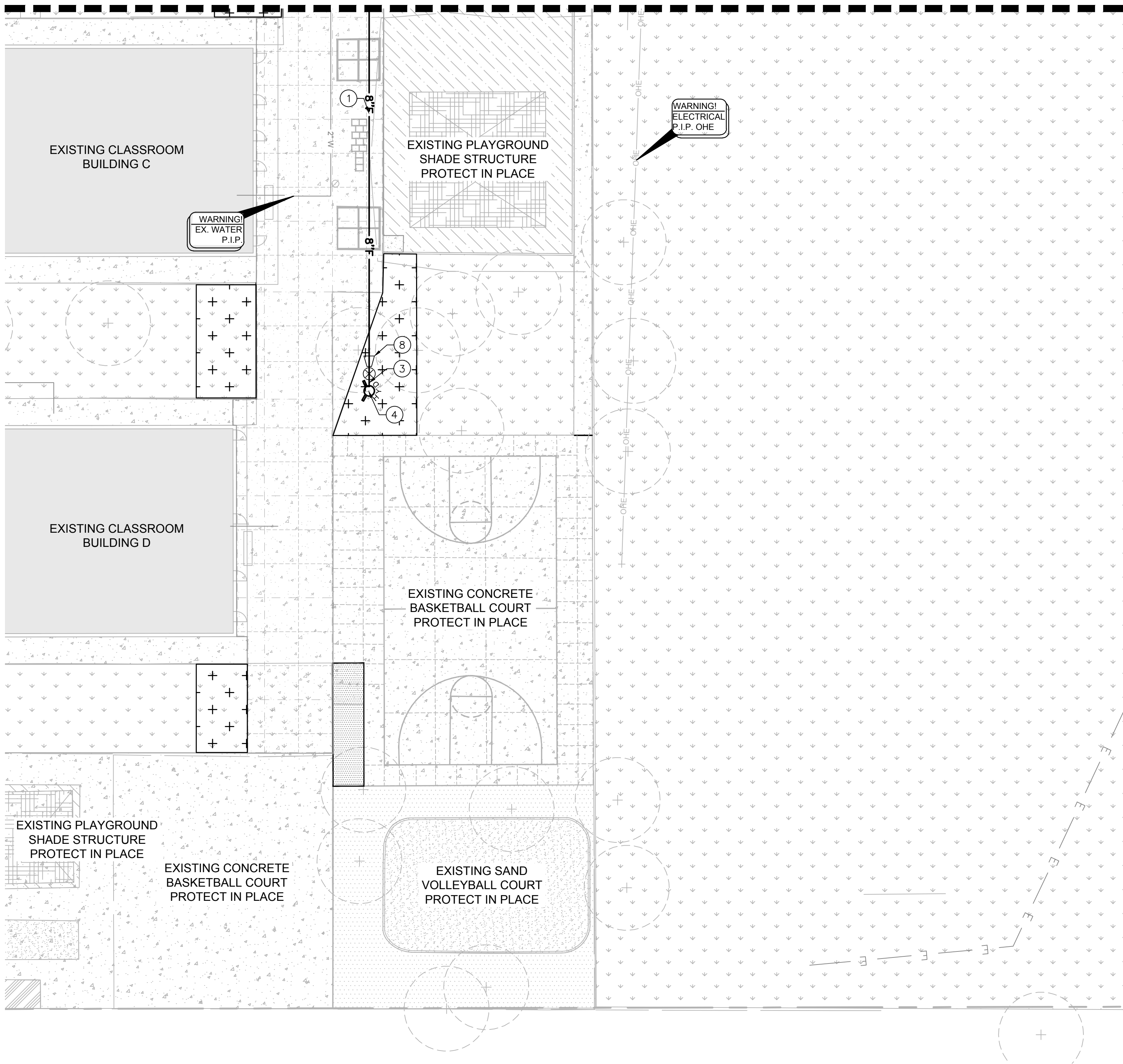
ENGINEER'S NOTES

1. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED ACCORDING TO INFORMATION PROVIDED BY THE AGENCY OPERATING EACH UTILITY. LOCATIONS SHOWN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. CALL BLUE STAKE FOR FIELD LOCATION AT (1-800-782 5348).
3. THE DESIGN ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATIONS OR VARIANCE FROM THESE PLANS. ANY VARIATION FROM THESE PLANS SHALL BE PROPOSED ON A CONSTRUCTION FIELD PRINT SET AND TRANSMITTED TO THE ENGINEER.
4. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE PLAN SET SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. INSPECTIONS BY GOVERNMENT AGENCIES, UTILITIES, OR THE ENGINEER, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.
6. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.
7. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PERMITS REQUIRED AT HIS OWN EXPENSE.
8. THE CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT THE REVISION OF THESE PLANS IF NECESSARY DUE TO A CONFLICT BETWEEN A FACILITY PROPOSED HEREIN AND AN EXISTING FACILITY.
9. ANY POTENTIAL EXTRA CHARGES BY THE CONTRACTOR WILL BE BROUGHT TO THE ATTENTION OF THE OWNERS, OR THEIR REPRESENTATIVES, PRIOR TO THE OWNER INCURRING THE COST.
10. THE CONTRACTOR AGREES THAT HE, SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
11. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK THE CONTRACTOR WILL BE REQUIRED TO CLEAN AND REPAIR ADJACENT (OFF-SITE/PROJECT) ROADWAYS USED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.
12. ALL WORK SHALL BE IN ACCORDANCE WITH CITY OF PHOENIX AND MARICOPA ASSOCIATION OF GOVERNMENT'S STANDARD SPECIFICATIONS AND DETAILS UNLESS OTHERWISE STATED ON THE PROJECT PLANS OR SPECIFICATIONS. SHOULD THESE DOCUMENTS CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL GOVERN AS DETERMINED BY THE ENGINEER.
13. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE DRAINAGE AND EROSION & SEDIMENT CONTROL ON THE CONSTRUCTION SITE PER CITY, FEDERAL, STATE AND COUNTY REQUIREMENTS AND MAINTAINED FOR THE WHOLE DURATION OF THE PROJECT.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND RETAINING SYSTEMS. SYSTEMS SHALL BE DESIGNED AND SEALED BY A LICENSED STRUCTURAL ENGINEER, WHO IS REGISTERED IN THE STATE OF ARIZONA. ALL DESIGNS SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVED PRIOR TO INSTALLATION.
15. ALL WORK SHALL BE IN ACCORDANCE WITH THE SOILS REPORT PREPARED BY RAMM ENGINEERING (PROJECT NO. 618334) DATED 01-20-2011. IN CASE OF DISCREPANCY WITH PLANS PLEASE CONTACT ENGINEER PRIOR TO SOF THESE PLANS IF NECESSARY DUE TO A CONFLICT BETWEEN A FACILITY PROPOSED HEREIN AND AN EXISTING FACILITY.

UNDERGROUND UTILITY NOTES

1. A REASONABLE ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION AND SHALL DETERMINE THE EXACT LOCATION OF UTILITIES AND MAKE THE ENGINEER AWARE, IN ADVANCE OF CONSTRUCTION.
2. THE CONTRACTOR SHALL FIELD-VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IF ACTUAL LOCATIONS DIFFER FROM THOSE SHOWN ON THE PLANS.
3. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR SUBCONTRACTOR.
4. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS, UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5. ALL EXISTING ELEVATIONS OF UTILITIES, SURVEY MONUMENTS, NATURAL GRADE, AND ALL EXISTING IMPROVEMENTS WERE PROVIDED TO THE ENGINEER BY AN INDEPENDENT REGISTERED SURVEYOR (SURVEY INNOVATION GROUP, INC.). THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ERRORS IN SURVEY INFORMATION THAT WAS PROVIDED BY THE INDEPENDENT REGISTERED SURVEYOR.

MATCH LINE - SEE SHEET FL1.1

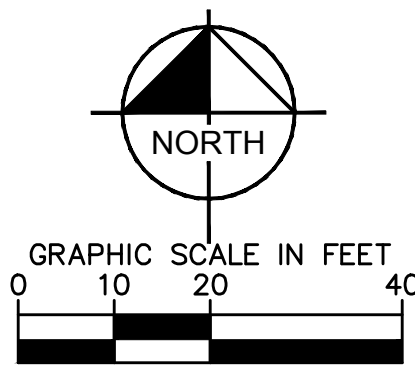


PRIVATE FIRELINE NOTES

- | | | |
|---|---|--------|
| 1 | INSTALL 8" PVC C900 WATER LINE, PRESSURE CLASS 150 MIN, WITH TRACER WIRE, LENGTH PER PLAN. 4' MIN COVER. | 110 LF |
| 3 | INSTALL 6" PVC C900 WATER LINE, PRESSURE CLASS 150 MIN, WITH TRACER WIRE, LENGTH PER PLAN. 3' MIN COVER. | 8 LF |
| 4 | INSTALL FIRE HYDRANT ASSEMBLY (VALVE INCLUDED) PER MAG STD DET 360 AND COP STD DET P1362, WITH WHITE REFLECTIVE BONNETS. VALVE SHALL BE PLACED WITHIN 20' OF HYDRANT. | 1 EA |
| 8 | INSTALL 8"x6" REDUCER, TYP. | 1 EA |

NOTES

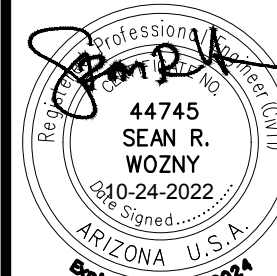
1. STATION AND OFFSETS ON THIS SHEET ARE BASED UPON SWEETWATER AVENUE.
2. ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL PVC C900 PIPE AND FITTINGS SHALL CONFORM TO NSF 61.
4. FIRE LINE MUST HAVE MINIMUM 48" OF COVER IF DIAMETER IS 8" OR GREATER OR LOCATED IN RIGHT-OF-WAY/EASEMENT. OTHERWISE PROVIDE 36" COVER MINIMUM.
5. ALL ON-SITE FIRE LINES AND APPURTENANCES REQUIRE C.O.P. FIRE PREVENTION APPROVAL.
6. ALL OFF-SITE FIRE LINE TAPS REQUIRE APPROVAL FROM C.O.P. WATER SERVICES DEPARTMENT.
7. CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION.
8. CONTRACTOR TO UTILIZE UTILITY PRIVATE LOCATOR PRIOR TO START OF CONSTRUCTION ACTIVITIES TO VERIFY EXISTING UTILITIES HORIZONTAL AND VERTICAL LOCATION ONSITE WITHIN SCHOOL PROPERTY. CONTRACTOR TO PROVIDE UTILITY POTHOLE LOCATION INFORMATION TO ENGINEER. ANY UTILITY CONFLICTS SHALL BE IDENTIFIED AND COORDINATED WITH THE ENGINEER AND DISTRICT PRIOR TO CONSTRUCTION.
9. QUANTITIES HAVE BEEN PROVIDED FOR ENGINEERING PURPOSES ONLY. CONTRACTOR TO CONDUCT THEIR OWN QUANTITIES FOR BIDDING. ANY DISCREPANCIES SHALL BE IDENTIFIED AND BROUGHT TO THE ENGINEER DURING BID PERIOD.



Kimley»Horn
©2022 KIMLEY-HORN AND ASSOCIATES, INC.
7740 North 16th Street, Suite 300
Phoenix, Arizona 85020 (602) 944-5500

SCALE (H) AS SHOWN
SCALE (V) AS SHOWN
DESIGNED BY: SW
DRAWN BY: MP
CHECKED BY: SW
DATE: 10/24/2022

SAHUARO ELEMENTARY SCHOOL
FIRE LINE PLAN
FIRE LANE IMPROVEMENTS
12835 NORTH 33RD AVENUE, PHOENIX, AZ 85029



PROJECT NO.
191907008
DRAWING NAME
FL1.2
3 OF 3