

**48 HOURS  
BEFORE EXCAVATING  
CALL "U.S.A." TOLL FREE  
800 642-2444  
UNDERGROUND SERVICE  
ALERT**

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

**SPECIAL NOTE:**  
WHERE UNDERGROUND AND SURFACE STRUCTURES ARE SHOWN ON THE PLANS, THE LOCATIONS, DEPTH AND DIMENSIONS OF STRUCTURES ARE BELIEVED TO BE REASONABLY CORRECT, BUT ARE NOT GUARANTEED. SUCH STRUCTURES ARE SHOWN FOR THE INFORMATION OF THE CONTRACTOR, BUT INFORMATION IS NOT TO BE CONSTRUED AS A REPRESENTATION THAT SUCH STRUCTURES WILL, IN ALL CASES, BE FOUND WHERE SHOWN, OR THAT THEY REPRESENT ALL OF THE STRUCTURES WHICH MAY BE ENCOUNTERED.

CONTRACTOR SHALL NOTIFY "USA" (UNDERGROUND SERVICE ALERT) AT (800) 642-2444, 48 HOURS BEFORE COMMENCING EXCAVATION AND ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING POSSIBLE INTEREST IN THE WORK, OF CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES, AND CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES WITHIN THE WORK AREA.

**UTILITY NOTE:**  
1. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES IN SERVICE AREA BEFORE ANY WORK BEGINS AND CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES WITH THE DISCREPANCIES.

2. CONTRACTOR SHALL RECONNECT ALL UTILITIES BACK TO THE EXISTING SYSTEM AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

- SPECIAL NOTE:**
- ⑤ POINT OF CONNECTION, SEE PLUMBING PLANS FOR CONNECTION TO BUILDING SEWER.
  - ④ POINT OF CONNECTION, SEE PLUMBING PLANS FOR CONNECTION TO BUILDING WATER.
  - ③ POINT OF CONNECTION, SEE PLUMBING PLANS FOR CONNECTION TO BUILDING FIRE.
  - ② POINT OF CONNECTION, SEE IRRIGATION PLANS FOR CONNECTION TO LANDSCAPE IRRIGATION.
- NOTE:**  
A SEPARATE BUILDING PERMIT IS REQUIRED FOR THE FIRE SPRINKLER LINE.

BENCHMARK  
CITY BM: 887  
ELEVATION = 309.797 U.S.S.  
BRASS CAP ON ISLAND TRP, NORTH SIDE OF HERNDON, CENTERLINE SPRUCE (POK SOUTH)

**WATER NOTES:**

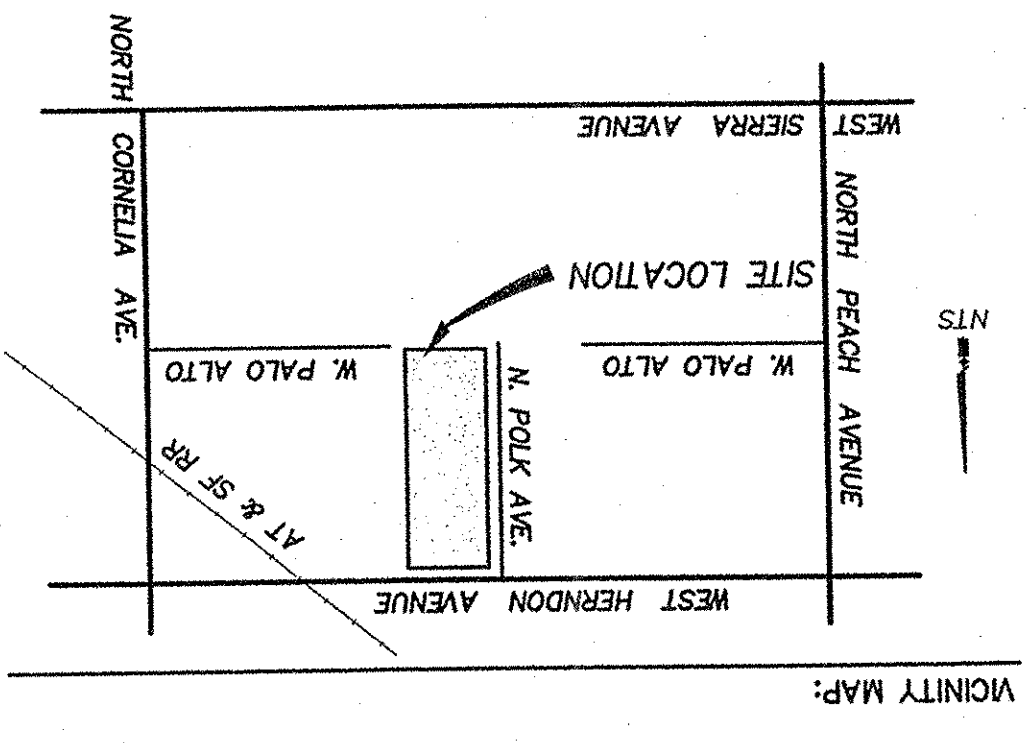
1. WATER PIPE FOR FIRE LINE SHALL BE POLY VINYL CHLORIDE (PVC) PIPE CONFORMING TO MWMA 0800 CLASS 150 WHICH WILL MEET OR EXCEED A WORKING PRESSURE OF 150 PSI AND SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
2. BLOCKING FOR PVC PRESSURE PIPE SHALL BE INSTALLED PER CALIFORNIA BUILDING CODE (2001 EDITION).
3. WATER PIPE 4 INCHES OR SMALLER CAN BE THE MATERIAL MENTIONED FOR THE FIRE LINE OR POLY VINYL CHLORIDE (PVC) SCHEDULE 40 AND INSTALLED PER MANUFACTURER'S REQUIREMENTS.
4. ALL EXISTING UTILITY LOCATIONS ON THIS PLAN ARE TAKEN FROM RECORD DRAWINGS. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) 800-642-2444 PRIOR TO BEGINNING ANY EXCAVATION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROTECTION OF ALL UNDERGROUND UTILITIES.
5. TRENCH COMPACTON IN PAVED AREAS SHALL BE 95% MIN. RELATIVE COMPACTON FOR THE TOP TWO FEET, BACKFILL BELOW TWO FEET AND YARD AREAS SHALL BE 85% MIN. RELATIVE COMPACTON.
6. MINIMUM WATER PIPE COVER SHALL BE 36" FOR FIRE LINE, 36" FOR DOMESTIC LINE UNDER PAVED AREAS AND 30" FOR YARD AREAS.
7. FIRE SPRINKLER CONTRACTOR TO SUBMIT DRAWING AND CALCULATION TO CITY OF FRESNO FOR APPROVAL PRIOR TO INSTALLATION.
8. ALL ON-SITE WATER PIPE 4" AND LARGER SHALL BE CLAMBERED AND TESTED BY AN APPROVED AGENCY AND THE RESULTS SUBMITTED TO THE CITY OF FRESNO INSPECTION DIVISION-PLUMBING SECTION (AWMA C-601).
9. FOR FIRE SPRINKLER DESIGN PURPOSES, USE CURVE "C", STATIC 40 PSI, RESIDUAL 25 PSI, FLOW 1500 OR 1900 GPM, PER FIRE DEPARTMENT REQUIREMENTS.
10. WATER MAIN SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF FRESNO STANDARDS AND INSPECTED BY THE CITY.
11. OPEN STREET CUTS ARE NOT PERMITTED: ALL UTILITY CONNECTIONS MUST BE BORED.
12. EACH BACKFLOW PREVENTER SHALL BE LABELED FOR THE BUILDING SERVICE, PROVIDE METAL TAGS OR PERMANENT LABELS ON BACKFLOW PREVENTERS.
13. PROVIDE THRUST BLOCKS PER CODE IF RUBBER GASKETED JOINT FIRE SYSTEM PIPING IS PROPOSED.
14. PRESSURE TESTING OF FIRE SERVICE UNDERGROUND PIPING SHALL BE DONE AGAINST A BLIND FLANGE AS REQUIRED BY THE CITY OF FRESNO WATER DIVISION.
15. ALL ON-SITE PRIVATE WATER SERVICES SHALL BE SCHEDULE 40 PVC PIPE MATERIAL.
16. ALL FIRE LATERALS TO FIRE SPRINKLER RISERS AND PRIVATE FIRE HYDRANTS REQUIRE DETECTOR CHECKS. ALL DETECTOR CHECKS SHALL BE INSTALLED PER PUBLIC WORKS SDB 10-16, 17 & 18. ANY SHALL BE LOCATED IN THE PUBLIC RIGHT OF WAY (UNLESS SPECIALLY APPROVED BY THE WATER DIVISION DISTRIBUTION SUPERVISOR). A STREET WORK PERMIT IS REQUIRED FOR THE INSTALLATION OF DETECTOR CHECKS OBTAINABLE FROM THE ENGINEERING SERVICES COUNTER, 4th FLOOR, CITY HALL, 2800 FRESNO ST.

**SEWER NOTES:**

1. SEWER MAINS SHALL BE SDR-35 PVC GRAVITY SEWER PIPE AND FITTINGS, AND SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
2. ALL WORK SHALL BE IN CONFORMANCE WITH THE UNIFORM PLUMBING CODE AND LATEST EDITION.
3. ON-SITE SEWER PIPES WITH LESS THAN 2% SLOPE SHALL BE STAKED BY A LICENSED ENGINEER OR SURVEYOR.
4. TRENCH COMPACTON IN PAVED AREAS SHALL BE 95% MIN. RELATIVE COMPACTON FOR THE TOP TWO FEET, BACKFILL BELOW TWO FEET AND YARD AREAS SHALL BE 85% MIN. RELATIVE COMPACTON AT THE LOWEST POINT OF THE SYSTEM (E. AT THE MANHOLE OR THE END OF AN EXISTING MAIN). THE INSTALLATION OF SEWER MAINS SHALL ALWAYS PROCEED UPSTREAM IN ALL LOCATIONS.
5. THE CONSTRUCTION OF SEWER MAINS SHALL COMMENCE AT THE MANHOLE IN A CITY APPROVED MANNER.
6. ALL PIPING PENETRATING THE MANHOLE CORE SHALL EXTEND 4" INTO THE MANHOLE IN A CITY APPROVED MANNER.
7. INSTALL SEWER CLEANOUTS AT 100' INTERVALS TO SEWER SERVICE MAIN.
8. OPEN STREET CUTS ARE NOT PERMITTED: ALL UTILITY CONNECTIONS MUST BE BORED.

**LEGEND:**

- 6" WATER
- 6" SEWER
- 15" PVC SD
- PROPOSED WATER LINE, SIZE AS NOTED
- PROPOSED SEWER LINE, SIZE AS NOTED
- PROPOSED STORM DRAIN LINE, SIZE AS NOTED
- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- PROPOSED STORM DRAIN INLET
- EXISTING STORM DRAIN INLET
- PROPOSED STORM DRAIN MANHOLE
- EXISTING STORM DRAIN MANHOLE
- PROPOSED SEWER MANHOLE
- EXISTING SEWER MANHOLE
- PROPOSED CHRISTY V-64 DRAIN INLET
- EXISTING STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLET
- EXISTING STORM DRAIN INLET
- PROPOSED STORM DRAIN INLET
- EXISTING STORM DRAIN INLET
- PROPOSED ELEVATION
- 132.60
- FF
- FINISH FLOOR
- FD
- FINISH DIRT
- FL
- FLOWLINE
- GR
- GRATE
- S
- SLOPE
- PIV
- POST INDICATOR VALVE
- WM
- WATER METER, SIZE AS NOTED
- RP
- INSTALL CITY APPROVED "RP" TYPE BACKFLOW PREVENTER
- PUE
- PUBLIC UTILITY EASEMENT
- LP
- LIGHT POLE
- MW
- PROPOSED WATER VALVE
- EW
- EXISTING WATER VALVE
- TH
- EXISTING FIRE HYDRANT
- PH
- PROPOSED FIRE HYDRANT
- FOC
- PROPOSED FIRE DEPARTMENT CONNECTION
- FS
- PROPOSED FIRE SERVICE
- WS
- PROPOSED WATER SERVICE



CITY OF FRESNO  
DEVELOPMENT DEPARTMENT  
DATE: 9-30-06  
BACK CHECKED

PROJECT TITLE	ASHWOOD PROPERTY 5430 WEST PALO ALTO AVENUE CITY OF FRESNO
DR. BY: BR	
CH. BY: BR	
DATE: 09/28/08	
REV.	
JOB No. 04-188	
SHEET DESCRIPTION	UTILITY PLAN NOTES
SHEET NO.	3 OF 3

YAMABE & HORN ENGINEERING, INC.  
CIVIL ENGINEERS - LAND SURVEYORS  
1300 E. SHAW AVE, SUITE 176, FRESNO, CALIFORNIA 93710  
PHONE: (559) 244-3123 FAX: (559) 244-3120  
APN: 506-010-04

