

CITY COUNCIL

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Bob Barrett

VICE MAYOR
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Dave Pearson
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Carlo Leone
Cathy Carlat

City of Peoria Engineering Department

Hatcher Road 8-Inch Waterline Township 3 North, Range 1 East, Section 26



**PROJECT NUMBER UT00098
SOLICITATION NUMBER UT00098
SUBMITTAL NUMBER (100%)**

BENCHMARK / SURVEY DATUM

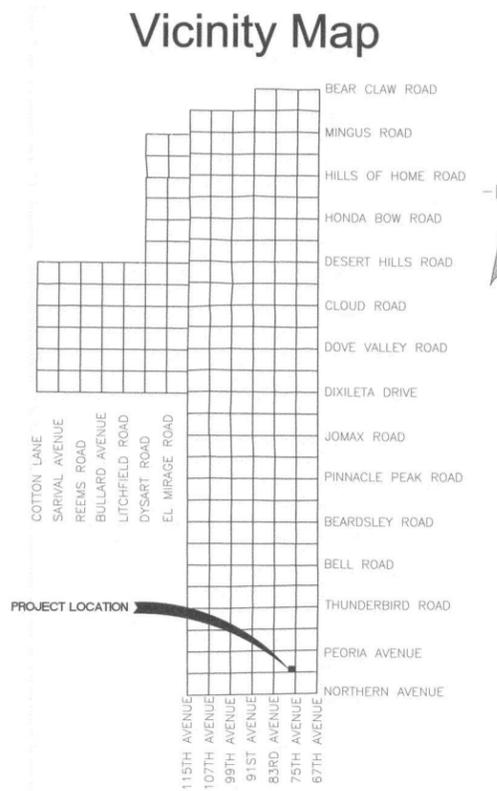
LOCATED IN A PORTION OF THE NORTHEAST CORNER OF SECTION 26, TOWNSHIP 3 NORTH, RANGE 1 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

HORIZONTAL DATUM: ARIZONA STATE PLANE CENTRAL
VERTICAL DATUM: NAVD88

CITY OF PEORIA BENCHMARK NO. 3266
BRASS CAP IN A HANDHOLE AT THE INTERSECTION OF 75TH AVENUE AND MOUNTAIN VIEW ROAD
N 336559.984
E 407523.269
ELEVATION 1142.97 FT

CITY OF PEORIA BENCHMARK NO. 3263
BRASS CAP IN A HANDHOLE AT THE INTERSECTION OF 75TH AVENUE AND PEORIA AVENUE
N 339196.824
E 407540.459
ELEVATION 1153.37 FT

SURVEYOR: ENTELLUS, INC.
2255 N. 44TH STREET
SUITE 125
PHOENIX, AZ 85008



SHEET INDEX

SHEET 1	COVER SHEET
SHEET 2	KEY MAP, LEGEND AND QUANTITIES
SHEET 3	GENERAL NOTES
SHEET 4-6	PLAN AND PROFILE SHEETS
SHEET 7	DETAILS

OWNER:

BEN WILSON, P.E.
CITY OF PEORIA
ENGINEERING DEPARTMENT
CAPITAL DIVISION
PH:623-773-7212
FAX:623-773-7211

AS-BUILT CERTIFICATION:

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

REGISTERED LAND SURVEYOR/ENGINEER _____ DATE _____

REGISTRATION NUMBER _____

APPROVALS:

ENGINEERING DIRECTOR _____ DATE _____

PUBLIC WORKS DIRECTOR _____ DATE _____

MARICOPA COUNTY ENVIRONMENTAL SERVICES _____ DATE _____

CAPITAL IMPROVEMENT ENGINEER _____ DATE _____

CITY TRAFFIC ENGINEER _____ DATE _____

UTILITY DESIGN CONTACTS

	PLANS SUBMITTED TO	DATE SENT	PLANS REVIEWED BY	PERMIT RECEIVED	PHONE NUMBER
ARIZONA PUBLIC SERVICE - ELECTRICAL	Shane Batt	11/24/09	12/15/09	N/A	623-975-5802
COX COMMUNICATIONS - CABLE TV	Terren Gutierrez	11/24/09	12/16/09	N/A	623-328-3514
ELECTRIC LIGHTWAVE/INTEGRA TELECOM - FIBER OPTIC	Jerry Smith	11/24/09	12/8/09	N/A	602-889-6007
MCI/VERIZON - FIBER OPTIC	Beth Seubert	11/24/09	10/13/09	N/A	972-729-6016
QWEST - TELEPHONE	Ron Floyd	11/24/09	12/11/09	N/A	602-690-1907
SOUTHWEST GAS CORPORATION - GAS	Jean Pacheco	11/24/09	12/3/09	N/A	602-484-5277
SRP - ELECTRICAL	John Wood	11/24/09	12/2/09	N/A	602-236-0452
SRP - IRRIGATION	Aaron Dick	11/24/09	12/9/09		602-236-2962



**CITY OF PEORIA
ENGINEERING DEPARTMENT**

8875 N 85TH AVENUE
PEORIA, AZ 85345

DESIGN: HMS	DRAWN: JD	CHK: MJB	DATE: 3/4/10
REV	DESCRIPTION	BY	DATE

**COVER SHEET
HATCHER ROAD
8-INCH WATERLINE**

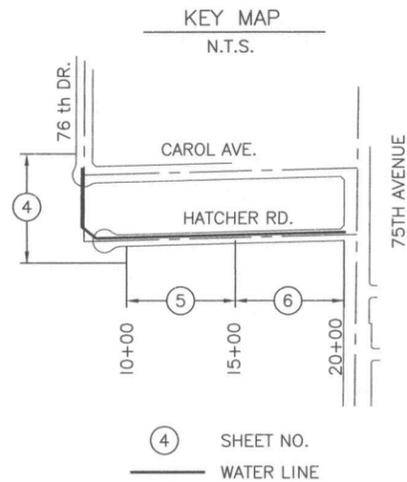
PROJECT NO. UT00098
DATE: MARCH 4, 2010



Expires 06/30/2012
SHEET NO.



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QUANTITIES

Constr. Note	Bid Item	Description	Unit	Quantity	Sheet 4	Sheet 5	Sheet 6
-	1	Construction Surveying and Layout	L.S.	1			
-	2	Mobilization/Demobilization	L.S.	1			
-	3	Traffic Control	L.S.	1			
-	4	Striping and Signage	L.S.	1			
1	5	Install new pavement, see pipe trench detail on detail sheet	S.Y.	3,263	160	1550	1553
3	6	Sawcut, remove and replace valley gutter to nearest joints per MAG Std. Det. 240	S.F.	30			30
8	7	Close and abandon valve, remove cover and housing. Backfill with CSLM (1/2 sack), see detail sheet	EA.	2		1	1
10	8	Cut and remove existing waterline	L.F.	20	20		
13	9	Abandon existing waterline in place. Backfill with CSLM (1/2 sack)	L.F.	656	408	248	
14	10	Adjust frames, covers, and valve boxes on existing non-City utilities per COP Std. Det. PE-270	EA.	5			5
17	11	Pavement replacement per MAG Std. Det. 200, Type "B", "T Top"	S.Y.	9			9
21	12	Install 12" ductile iron waterline and fittings class 350 per COP Std. Det. PE-401	L.F.	38			38
22	13	Install 8" ductile iron waterline and fittings class 350 per COP Std. Det. PE-401	L.F.	1,360	410	500	450
23	14	Install 6" ductile iron waterline and fittings class 350 per COP Std. Det. PE-401	L.F.	77	17	34	26
27	15	Install 8" resilient seated, solid wedge gate valve, box and cover per MAG Det. 301 & COP Det. PE-270	EA.	2	1	1	
43	16	Install fire hydrant assembly per COP Std. Det. PE-360-2	EA.	4	1	2	1
47	17	Install 2" universal air/vacuum valve assembly per COP Std. Det. PE-395	EA.	2	1		1
48	18	Cut and plug existing waterline per Pipe Plug Detail on detail sheet	EA.	1	1		
51	19	Connect new waterline to existing waterline, see fitting detail on detail sheet	EA.	2	1		1
63	20	Install 2-way blue reflective marker per COP Std. Det. PE-271	EA.	4	1	2	1
64	21	Install pipe support per MAG Std. Det. 403	EA.	7	4	1	2
67	22	Existing pole to be braced by APS approved contractor	L.S.	1	1		
68	23	Install 6" resilient seated, solid wedge gate valve, FLxMJ, box and cover per MAG Det 201 & COP Det PE-360-2	EA.	4	1	2	1
69	24	Guy wire to be removed and replaced by APS, contractor to coordinate	L.S.	1	1		
86	25	Install meter fittings, box and cover per Meter and Backflow Detail on detail sheet	EA.	4	1	3	
88	26	Install 1-1/2" water service pipe and fittings per and Backflow Detail on detail sheet	L.F.	24	6	18	
89	27	Install 16" x 12" tapping sleeve and valve, box and cover type "A" per MAG Std. Det. 340	EA.	1			1
91	28	Surface replacement per MAG 200, Type F	S.Y.	65	65		
93	29	Install 2" water service pipe and fittings per and Backflow Detail on detail sheet	L.F.	78	2	76	
95	30	Install 1-1/2" reduced pressure backflow prevention assembly per Meter and Backflow Detail on detail sheet	EA.	4	1	3	
97	31	Install casing pipe, see detail sheet	EA.	20	20		
-	32	Ductile iron fittings (Contingency Item)	LB.	1,000			

LEGEND

- ▲ BM BENCH MARK LOCATION
- ▲ TBM TEMPORARY BENCH MARK
- EXISTING BACKFLOW
- EXISTING STREET LIGHT
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING DOWN GUY
- EXISTING GRATE
- EXISTING CATCH BASIN
- EXISTING ELECTRIC TRANSFORMER
- EXISTING BLUESTAKE WHISKERS
- EXISTING TRAFFIC SIGNAL POLE
- EXISTING TRAFFIC SIGNAL JUNCTION BOX
- EXISTING GAS MARKER SIGN
- EXISTING ELECTRIC JUNCTION BOX
- EXISTING ELECTRIC MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING VALVE
- EXISTING WATER METER
- EXISTING SEWER MANHOLE
- EXISTING STORM MANHOLE
- EXISTING TELEPHONE MANHOLE
- EXISTING IRRIGATION MANHOLE
- EXISTING TELEPHONE RISER
- EXISTING CABLE TV RISER
- EXISTING MAILBOX
- EXISTING TRAFFIC SIGN
- EXISTING TREES
- WV-N-XXXXXX WATER VALVE NUT ELEVATION
- WVNF WATER VALVE NOT FOUND
- FO FIBER OPTIC
- MONUMENT LINE
- RIGHT OF WAY LINE
- T S EXISTING TRAFFIC SIGNAL CONDUIT
- AFD EXISTING OVERHEAD FIBER OPTIC CABLE
- UFD EXISTING UNDERGROUND FIBER OPTIC CABLE
- 15 S EXISTING SEWER LINE
- 12 W EXISTING WATER LINE
- 4 G EXISTING GAS LINE
- Te EXISTING UNDERGROUND TELEPHONE
- DHE EXISTING OVERHEAD ELECTRIC
- CATV EXISTING TELEPHONE BURIED CABLE
- 4B SD EXISTING STORM DRAIN
- 4B IRR EXISTING IRRIGATION LINE
- EXISTING FENCE (CHAINLINK)
- EXISTING FENCE (WOODEN)
- EXISTING FENCE (CMU)
- SAWCUT
- EXISTING QUADRUPLE LOOP DETECTOR
- NEW A.C. SURFACE COURSE
- A 23 LATERAL PROFILE
- NEW FIRE HYDRANT
- NEW WATER VALVE
- NEW AIR RELEASE VALVE
- NEW REDUCER
- NEW PLUG
- NEW CROSS
- NEW TEE
- NEW WATER METER

ABBREVIATIONS

- ABAND ABANDONED
- ABC AGGREGATE BASE COURSE
- AC ASPHALT CONCRETE
- AVE AVENUE
- BOT BOTTOM OF PIPE
- C CENTER LINE
- CLSM CONTROLLED LOW STRENGTH MATERIAL
- CMU CONCRETE MASONRY UNIT
- COP CITY OF PEORIA
- DTL DETAIL
- DR DRIVE
- E EAST
- E/P EXISTING EDGE OF PAVEMENT
- EA EACH
- ESMT EASEMENT
- EX EXISTING
- FL FLANGE JOINT
- FT FOOT
- HORIZ HORIZONTAL
- IE INVERT ELEVATION
- LF LINEAR FOOT
- LS LUMP SUM
- LT LEFT
- M MONUMENT LINE
- MAG MARICOPA ASSOCIATION OF GOVERNMENTS
- MIN MINIMUM
- MJ MECHANICAL JOINT
- N NORTH
- NO NUMBER
- NPI NO PAY ITEM
- NTS NOT TO SCALE
- PUE PUBLIC UTILITY EASEMENT
- R/W RIGHT-OF-WAY
- RD ROAD
- RT RIGHT
- S SLOPE
- SF SQUARE FOOT
- SPECS SPECIFICATIONS
- STA STATION
- STD STANDARD
- SY SQUARE YARD
- TELE TELEPHONE
- TOP TOP OF PIPE
- VERT VERTICAL
- WL WATERLINE

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 Mar 08, 2010 12:42pm

TWO WORKING DAYS BEFORE YOU DIG, CALL FOR THE BLUE STAKES 263-1100 BLUE STAKE CENTER CALL COLLECT	NO. AUTHORIZED BY: _____ REVISION: _____ MADE BY: _____ DATE: _____	DESIGNED BY: HMS DRAWN BY: JD CHECKED BY: MJB DATE CHECKED: 3/4/10	 CITY OF PEORIA ENGINEERING DEPARTMENT 9875 N. 85TH AVENUE PEORIA, AZ 85345	 HATCHER ROAD 8-INCH WATERLINE	KEY MAP, LEGEND, QUANTITIES, DETAILS	PROJECT NUMBER: UT00098 HORIZONTAL SCALE: NONE SHEET NUMBER: 2 OF 7
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GENERAL INFORMATION

- No person, Corporation, Contractor, or utility shall work within the right-of-way, road, street, or easements granted for public use or alleys without securing an Engineering construction permit from the Engineering Department.
- Engineering construction permits are required for Grading/drainage, erosion control, flood control structures, grading, hauling material in excess of 100 cubic yards, oiling, graveling or any surfacing of any street, alley, water system, sewer system, storm drain system, trenching, gas or any other types of pipe lines, drywells, paving, curb, gutter, sidewalks, driveways (concrete), flood irrigation, landscape/irrigation, traffic signals, striping and signage, bank stabilization and channelization, street lights, well abandonment, utility lines such as electric, telephones, television, communications and other franchised facilities.
- The City's Ordinance No. 98-04 establishes construction work hours as follows:

CONSTRUCTION TYPE:	April 2-September 29	September 30-April 1
A Concrete Work	5:00 am to 7:00 pm	6:00 am to 7:00 pm
B Other Construction (within 500 ft of residential area)	6:00 am to 7:00 pm	7:00 am to 7:00 pm
C Construction Work (more than 500 ft of residential area)	5:00 am to 7:00 pm	5:00 am to 7:00 pm
- This document establishes work hours in the public right-of-way as follows:

No interference with traffic flow on arterial streets shall be permitted during the hours of 6:00 a.m. to 8:30 a.m. or from 4:00 p.m. to 7:00 p.m. unless prior authorization is obtained in writing by the City of Peoria Traffic Engineer or their designee.
- Prior to issuance of engineering construction permits, the Contractor/Developer must provide the City of Peoria with the specific information and payment of fees listed below. Any person, Corporation, Contractor, or utility company working in the right-of-way, road, street, or easements granted for public use or alleys without securing a permit is subject to a fine in accordance with Ordinance No. 01-181.
- The Contractor shall submit a traffic control plan per the Phoenix Traffic Barricade Manual. Barricades must be continually maintained throughout the duration of the project (refer to City Ordinance #01-181). If any part of the traffic control plan falls within 300' of a signalized intersection, an off-duty officer will be required for traffic control. A Traffic Control Plan (TCP) shall be submitted to the Engineering Department and accepted a minimum of three working days; 72-hours prior to construction. An accepted TCP will be stamped and a copy returned to the Contractor. A copy of the accepted plan must remain on the job site at all times.
- Refer to the "General Information-Final Acceptance of Projects Checklist" for a list of the required close out items. Any questions should be directed to the Engineering Inspector.

GENERAL NOTES

- All construction shall conform to the latest edition of the Maricopa Association of Governments' (MAG) Uniform Standard Specifications and Details for Public Works Construction. The latest edition of the City of Peoria Infrastructure Design Guidelines, the City of Peoria Supplement to Maricopa Association of Governments Uniform Standards Details and City of Phoenix Standard Details will continue to apply where such details were not adopted or included by MAG. Alternate details and specifications may be submitted for review and acceptance by the Engineering Department. If accepted, alternate details will be shown as part of the approved plans/detail sheets.
- This set of plans has been reviewed for compliance with City requirements prior to issuance of engineering construction permits. However, such review shall not prevent the Engineering Director from requiring correction of errors or omissions in plans found to be in violation of any law or ordinance.
- Approval by the Engineering Director means for general layout in right-of-way only. This approval of construction plans is valid for a period of nine months. Engineering construction permits shall be obtained within this period or the plans shall be resubmitted for approval. Work shall also be continuously pursued in order to maintain a valid plan approval and permit. Approval is only for work within the jurisdiction of the City of Peoria.
- The Engineering Director does not warrant any quantities shown on these plans.
- Engineering construction permits for any work within the right-of-way and easements, and any grading and drainage, whether on-site or off-site, is required prior to commencing work. The building permit shall not be construed in any way as permission to commence work covered by an Engineering construction permit. It shall be the responsibility of the Contractor/Developer to understand the work covered by various permits.
- The Engineering Department, Inspection Division, shall be notified 24-hours prior to any construction work by telephone at (623) 773-8445. Any work concealed without inspection shall be subject to removal and replacement at the Contractor's/Developer's expense.
- An approved set of plans must be available on the job site at all times. The Contractor's/Developer's representative (capable of communicating with the City's representatives) shall be on the job at all times the work is being pursued.
- The Contractor/Developer is responsible to provide emergency telephone numbers to the City of Peoria at time of issuance of engineering construction permits and have personnel available 24-hours a day to respond to emergencies. If the City is required to respond and make emergency repairs on behalf of the Contractor/Developer, the Contractor/Developer is responsible to reimburse the City for all costs incurred.
- It shall be the responsibility of the permittee to arrange for the relocation and relocation costs of all utilities, and submit a utility relocation schedule prior to the issuance of an engineering construction permit.
- All underground tanks require a permit from the Fire Department prior to removal.

WATER

- A City of Peoria engineering construction permit is required. Other permits, as required, shall be secured from the appropriate agency; i.e. County permits for County Right-of-Way.
- Acceptable Water Line Materials are per City of Peoria Standard Detail PE-101. Contractor shall not deviate from the materials specified by the design engineer on the contract documents without written approval from the design engineer and the Engineering Department.
- Water line and grade stakes shall be set by a qualified Arizona Registered Land Surveyor and/or their representative prior to the construction of sewer lines. The qualified Arizona Registered Land Surveyor and/or their representative shall verify that the grades conform to the approved construction plans, and provide cut sheets to the Contractor and Engineering Inspector. After installation and prior to the Engineering Department acceptance, the Engineer of Record shall certify that water line installation conforms to the approved construction plans.
- Trench excavation, backfilling and compaction shall conform to MAG Standard Specification Section 601, except as modified herein.
- Bedding and backfill for water lines shall conform to the requirements of the City of Peoria Standard Detail PE-401, except as modified herein.
- Backfill shall be Type I as defined in Section 601.4.3 of the MAG Standard Specifications.
- The minimum cover from finish grade to top of pipe for all waterlines 16-inches in diameter or larger or any size water main located in an arterial street shall be as specified by the design engineer, but no less than 60-inches unless approved in writing by the Engineering Director.
- The minimum cover from finish grade to top of pipe for all waterlines less than 12-inches in diameter and not located in an arterial street shall be as specified by the design engineer, but no less than 48-inches unless approved in writing by the Engineering Director.
- All stub-outs shall have a 2-inch brass ball corp. stop as a blow-off, left in place with a 2-inch riser, per MAG Standard Detail 390 "A," and shall be accessible to use.
- Fire Hydrants shall conform to City of Peoria Standard Details PE-360-1 or PE-360-2, as applicable. The fire hydrant manufacturer shall be per City of Peoria Standard Detail PE-101.
- All valves 16-inches and smaller shall be per MAG 630 with resilient seat AWWA approved gate valves and shall open by turning counter-clockwise.
- Valves shall not be located in sidewalks, gutters, curb, or valley gutters.
- All valve boxes shall conform to MAG Standard Detail 391-1, Type A and City of Peoria Standard Detail PE-270.
- Contractors shall not operate valves on the existing City system.
- To request a water system shut down a "Water System Shut Down Request" form must be submitted. This form shall be submitted ten days in advance of any requests to shut down any lines in the City of Peoria's potable water distribution system. The form is to be submitted through the Engineering Inspector assigned to the project, who will in turn coordinate with necessary Utility staff. Failure to complete this form may result in delays to construction activities.
- Water lines shall be installed in such a manner to minimize dips or high points. All water lines shall be parallel to the street centerlines or property lines, or as close as possible, unless the design documents indicate otherwise. All horizontal deflections in water lines shall comply with the pipe manufacturer's recommendations for deflection at joints.
- All joints restraints shall be inspected prior to backfill. For thrust restraints, reinforcing steel and form work shall be inspected prior to placing concrete for thrust blocks. Thrust restraint shall conform to MAG Standard Specification 610.4 and MAG Standard Details 301, 340, 380 and 381.
- Water services 2-inches and smaller in diameter shall conform to the City of Peoria Standard Detail PE-363. The minimum size service connection shall be 1-inch.
- Water service lines shall not be located under driveways, concrete aprons, scuppers, catch basins, or the like.
- Water Lines shall not be located within Retention/Detention basin areas.
- All water valves located outside paved areas shall have a concrete collar, and Utility Marker per City of Peoria Standard Detail PE-101.
- All water lines require the installation of metallic locating tape, which shall be installed in accordance with MAG Spec. 616.4 with the following exceptions: the tape shall be solid blue in color, printed with the words "CAUTION POTABLE WATER LINE BELOW", and installed directly above the ABC course, approximately 1-foot above the top of the pipe.
- All pavement replacement shall conform to MAG Standard Detail 200 with a "T-Top" - modified with a one-half (1/2) sack Portland Cement ABC slurry, which conforms to MAG Standard Specification 728, (modified for one-half sack Portland cement), for trench backfill from one-foot above the top of pipe to the existing pavement subgrade. Pavement replacement thickness shall be: as specified by the design engineer on the contract documents, four-inches, or the existing asphalt pavement thickness; whichever is greater.
- Pressure testing shall not be conducted until after the Contractor has pretested 100% of the lines. Inspection testing must be called for 24-hours in advance. Water lines must pass pressure testing after Dry Utilities are installed and prior to any concrete work, street work, or final acceptance of the sewer.
- All mains shall be chlorinated in conformance with the City of Peoria Infrastructure Design Guidelines.
- The contractor shall not connect to any existing public water lines without prior approval of the Engineering Inspector.
- The following MAG Uniform Standard Details are specifically NOT approved.
 No. 345-2 4-inch, 6-inch Water Meter
 No. 360 Fire Hydrant Installation
 No. 389 Curb Stop with Valve Box & Cover
 No. 391-1 Valve Box Installation and Grade Adjustment, Types "B" & "C"

- The Contractor is responsible to notify the Engineer of Record before the water line or fittings are backfilled so "as-built" measurements may be taken. Any changes to the approved plans must be authorized by the Engineer of Record and the Engineering Director before the change is made in the field.
- A Certificate of Approval of Construction (AOC) issued by the Maricopa County Environmental Services Department, is required prior to final project acceptance. A copy shall be provided to the City Engineering Inspector. NOTE: It should be noted that the Engineer of Record or designee shall be present during testing procedures so that the requirements of the AOC can be completed in full.

PAVING

- Exact point of pavement matching, termination and/or overlay, if necessary, shall be determined in the field by the Field Engineering Division.
- All frames, covers, valve boxes and manholes shall be adjusted to finished grade upon completion of paving or related construction. The concrete collar shall be adjusted level with existing bituminous pavement. Adjustment of existing Type "A" or Type "B" water valve boxes in right-of-way shall be considered incidental.
- All Contractors/Developers shall comply with the City of Peoria Detail PE-211 for Trench Plating.
- Paving shall not start until all appropriate testing has been completed and accepted (pressure testing of utilities, density testing, videoing of sewer line, etc.). Service stubs to all platted lots shall be extended, and all conflicting utility construction completed prior to start of paving.
- Trees and shrubbery in the right-of-way, which conflict with the improvements proposed herein, are not to be removed or relocated without prior approval of the City of Peoria. The permittee shall be responsible for obtaining the necessary authorization to remove and/or relocate said trees or shrubbery.
- In all areas where new construction of curb, gutter, sidewalks, and driveways is required, and the Engineer determines the existing grade to consist of soils with swelling characteristics, the moisture content shall be brought as close as possible to optimum required for compaction by the addition of water, blending of dry suitable material or by drying of existing material. The material shall then be compacted to a relative density of 75 percent minimum to 85 percent maximum with 80 percent as ideal.
- Construction loads: During construction operations, heavy equipment may cross existing or proposed pipe. In this case, an earth fill should be constructed to at least three feet above pipe. The fill must be sufficient to prevent the lateral displacement of the pipe.
- Unless otherwise specified, the City of Peoria requires that the asphaltic concrete mix design meet the current mix design specified in Section 3.5 of the City of Peoria Infrastructure Design Guidelines.
- All street improvements for custom homes must be completed in accordance with the City of Peoria policy on unpaved roads. All private access must be constructed with an acceptable dust palliative.
- All Contractors/Developers are responsible to construct stabilized construction entrances in order to reduce or eliminate the tracking of sediment onto public rights-of-ways or streets. Gravel track-out pads shall meet current Maricopa County standards. The contractor/developer shall immediately remove any sediment tracked onto public rights-of-ways or streets.
- If any existing barricades, traffic signs or street name signs need to be removed during construction, notify the City of Peoria Public Works Streets Division at (623) 773-7432. A minimum of 48-hours notice is needed for removals. If signs and barricades belong to another agency, it is the responsibility of the contractor/developer to notify them.
- No water supply hose or ramps shall be placed across or in the arterial or collector streets. Approval in writing from the Engineering Director or his designee is required for placement of the supply hose or ramps in local street streets. Applications shall include submittals of the manufacturer's specifications, materials used, dimensions of the ramp, proposed location, proposed barricading and signage.

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 Mar 08, 2010 12:06pm

TWO WORKING DAYS BEFORE YOU DIG,
 CALL FOR THE BLUE STAKES
263-1100
 BLUE STAKE CENTER
 CALL COLLECT

DESIGNED BY: HMS
 DRAWN BY: JD
 CHECKED BY: MJB
 DATE CHECKED: 3/4/10



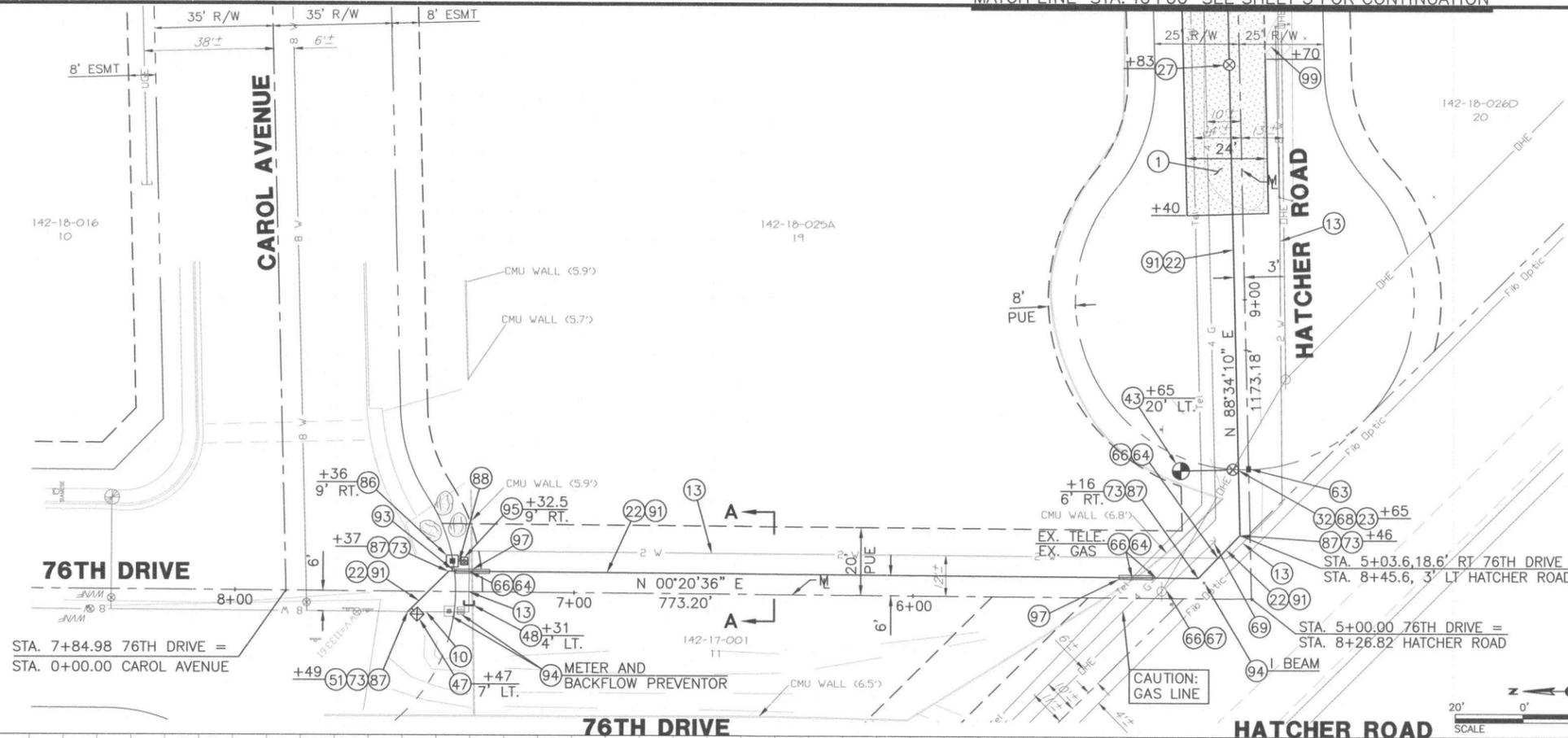
CITY OF PEORIA
ENGINEERING DEPARTMENT
 9875 N. 85TH AVENUE
 PEORIA, AZ 85345



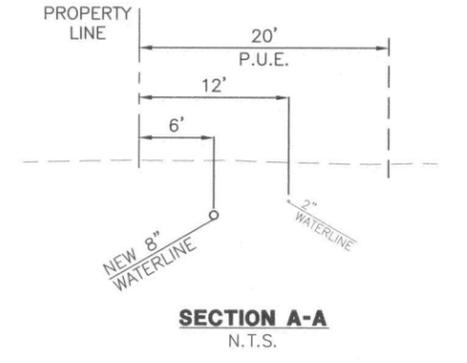
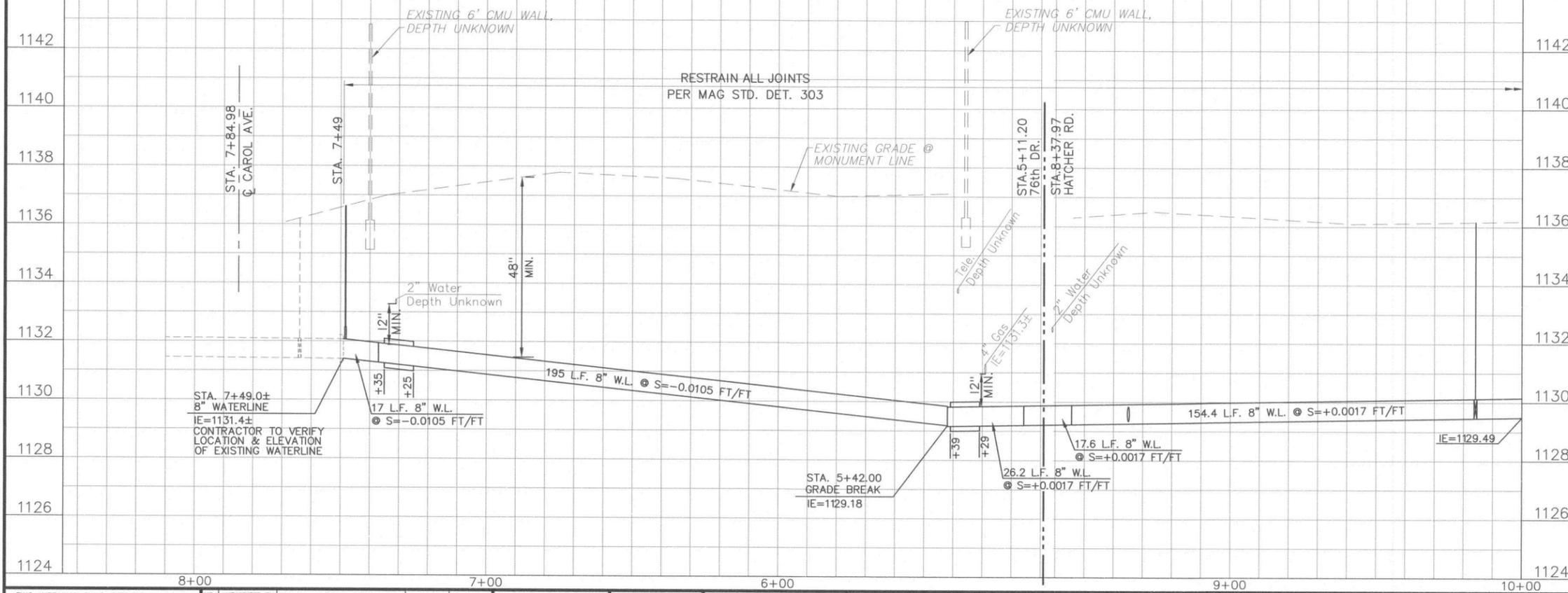
HATCHER ROAD
8-INCH WATERLINE

GENERAL NOTES

PROJECT NUMBER:
 UT00098
 HORIZONTAL SCALE:
 NONE
 SHEET NUMBER:
 3 OF 7



No.	Description	Quantity This Sheet
1	Install new pavement see Pipe Trench Detail on detail sheet.	160 S.Y.
10	Cut and remove existing waterline.	20 L.F.
13	Abandon existing waterline in place. Backfill with CLSM (1/2 sack).	408 L.F.
22	Install 8" waterline and fittings, D.I.P. class 350 per detail on detail sheet.	410 L.F.
23	Install 6" waterline and fittings, D.I.P. class 350 per C.O.P. Std. Det. PE-401.	17 L.F.
27	Install 8" resilient seated, solid wedge gate valve, box and cover per MAG Std. Det. 301 and C.O.P. Std. Det. PE-270.	1 EA.
32	Install 8"x6" tee.	N.P.I.
43	Install fire hydrant assembly per C.O.P. Std. Det. PE-360-2.	1 EA.
47	Install 2" universal air/vacuum valve assembly per C.O.P. Std. Det. PE-395.	1 EA.
48	Cut and plug existing waterline per Pipe Plug Detail on detail sheet.	1 EA.
51	Connect new waterline to existing waterline, see Fitting Detail on detail sheet.	1 EA.
63	Install 2-Way blue reflective marker per C.O.P. Std. Det. PE-271.	1 EA.
64	Install pipe support per MAG Std. Det. 403.	4 EA.
66	Protect existing utility in-place.	N.P.I.
67	Existing pole to be braced by APS approved contractor.	L.S.
68	Install 6" resilient seated, solid wedge gate valve, FLXMu, box and cover per MAG Std. Det. 301 and C.O.P. Std. Det. PE-360-2.	1 EA.
69	Guy wire to be removed and replaced by APS, contractor to coordinate.	L.S.
73	Install thrust block per MAG Std. Det. 380.	N.P.I.
86	Install meter fittings, box and cover per Meter and Backflow Detail on detail sheet. Contractor to coordinate with property owner for exact location of existing service.	1 EA.
87	Install 8" 45' bend.	N.P.I.
88	Install 1-1/2" water service pipe and fittings per and Backflow Detail on detail sheet.	6 L.F.
91	Surface replacement per MAG 200, Type F.	65 S.Y.
93	Install 2" water service pipe and fittings per Meter and Backflow Detail on detail sheet.	2 L.F.
94	Removal of existing improvements.	N.P.I.
95	Install 1-1/2" reduced pressure backflow prevention assembly per Meter and Backflow Detail on detail sheet. Contractor to coordinate with property owner for exact location of existing service.	1 EA.
97	Install casing pipe, see detail sheet.	20 L.F.
99	Temporarily move dumpster as needed for construction. Temporary location to be functional during construction. Replace dumpster after construction.	N.P.I.



TWO WORKING DAYS BEFORE YOU DIG,
CALL FOR THE BLUE STAKES
263-1100
BLUE STAKE CENTER
CALL COLLECT

NO.	AUTHORIZED BY	REVISION	MADE BY	DATE

DESIGNED BY: HMS
DRAWN BY: JD
CHECKED BY: MJB
DATE CHECKED: 3/4/10



Entellus
2255 N. 44th Street Suite 125
Phoenix, AZ 85008.3279
Tel 602.244.2566
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E-Mail: www.entellus.com

**CITY OF PEORIA
ENGINEERING DEPARTMENT**
9875 N. 85TH AVENUE
PEORIA, AZ 85345

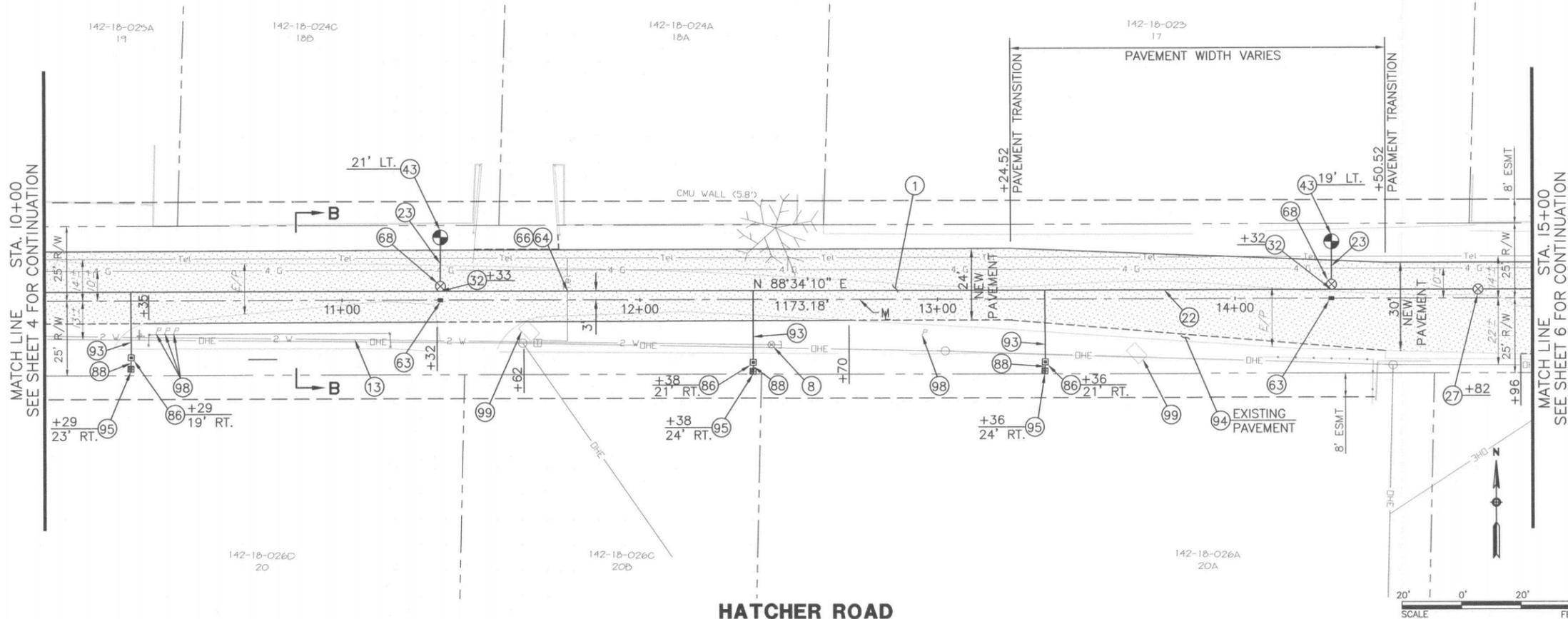


**HATCHER ROAD
8-INCH WATERLINE**

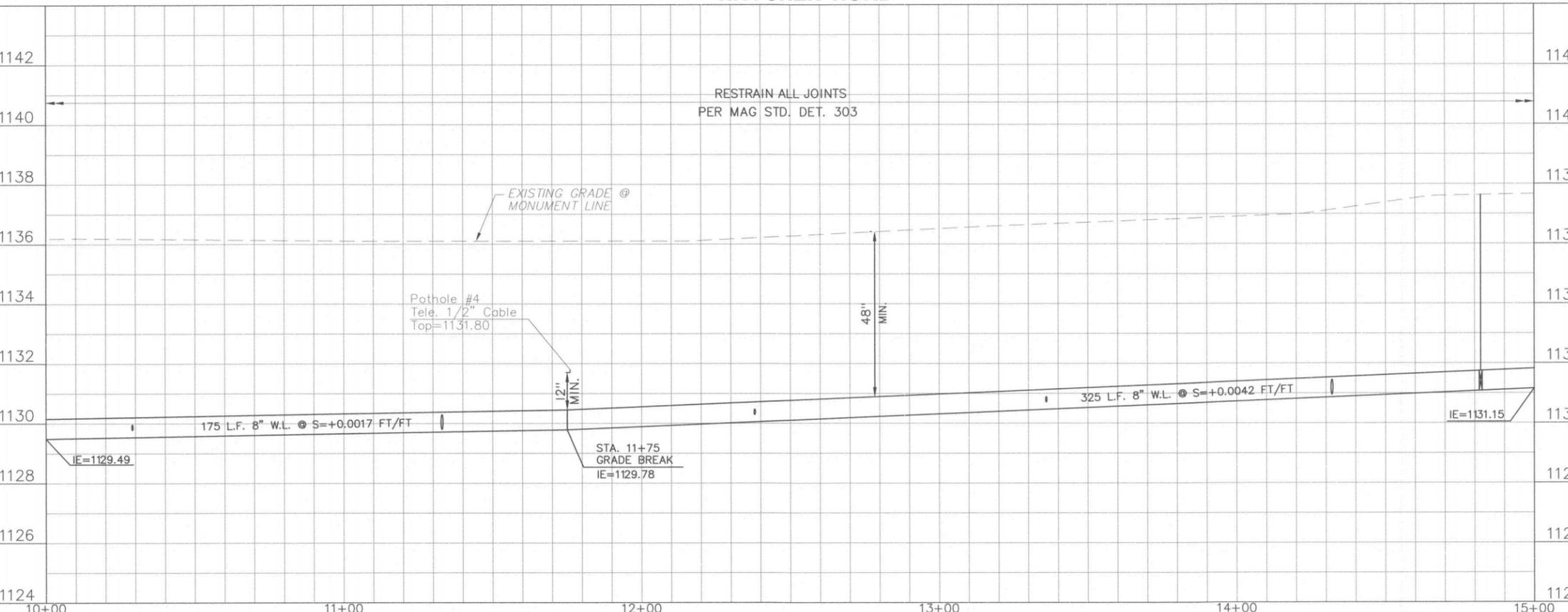
**76TH DRIVE
STA. 7+49 TO STA. 5+00.00
HATCHER ROAD
STA. 8+26.82 TO STA. 10+00**

PROJECT NUMBER: UT00098
HORIZONTAL SCALE: 1"=20'
VERT. 1"=2'
SHEET NUMBER: 4 OF 7

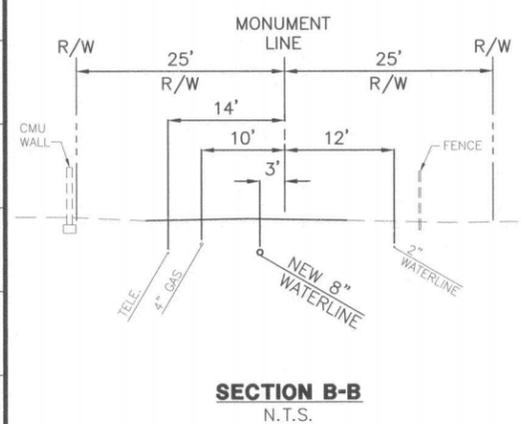
P:\3001\330016A_Hatcher_WL_Design\Cadd\08_Water\PP01_76th Dr & Hatcher.dwg
Mar 08, 2010 12:19pm



HATCHER ROAD

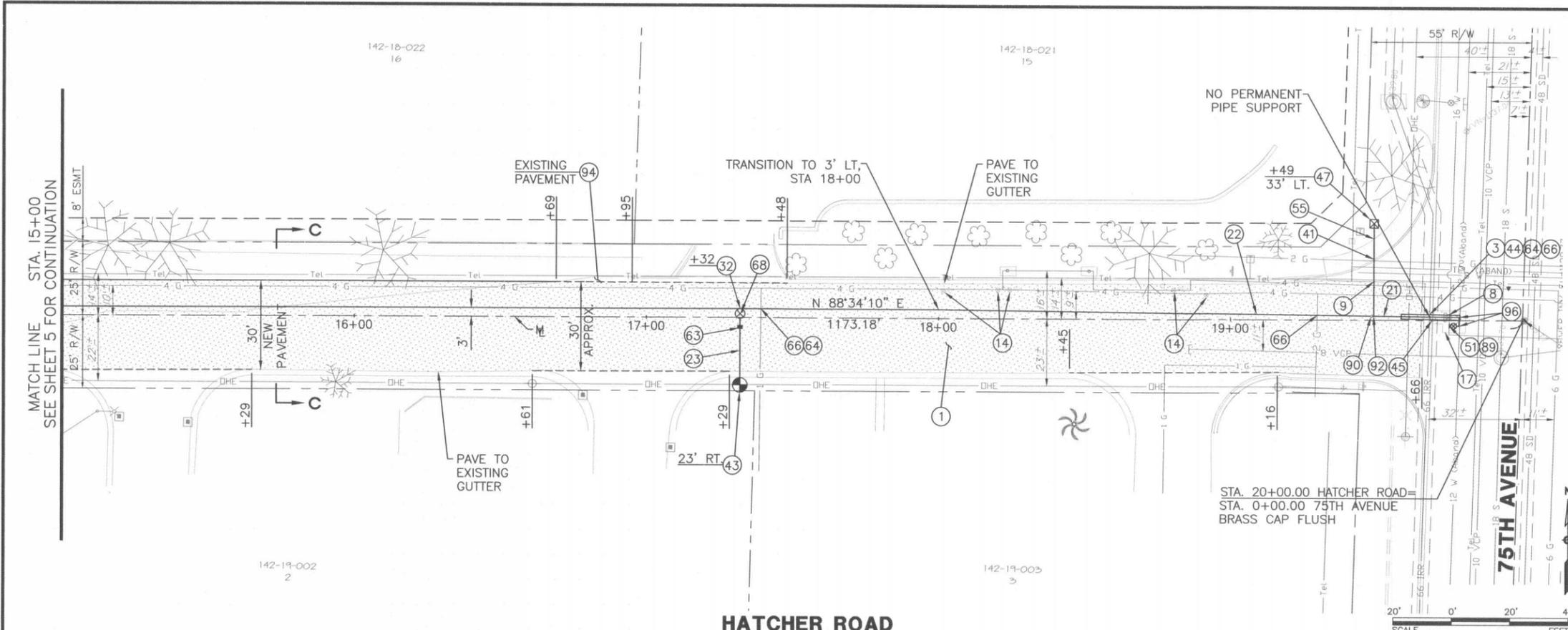


No.	Description	Quantity This Sheet
1	Install new pavement see Pipe Trench Detail on detail sheet.	1550 S.Y.
8	Close and abandon valve, remove cover and housing. Backfill with CLSM (1/2 sack), See detail sheet.	1 EA.
13	Abandon existing waterline in place. Backfill with CLSM (1/2 sack).	248 L.F.
22	Install 8" waterline and fittings, D.I.P. class 350 per detail on detail sheet.	500 L.F.
23	Install 6" waterline and fittings, D.I.P. class 350 per C.O.P. Std. Det. PE-401.	34 L.F.
27	Install 8" resilient seated, solid wedge gate valve, box and cover per MAG Std. Det. 301 and C.O.P. Std. Det. PE-270.	1 EA.
32	Install 8"x6" tee.	N.P.I.
43	Install fire hydrant assembly per C.O.P. Std. Det. PE-360-2.	2 EA.
63	Install 2-Way blue reflective marker per C.O.P. Std. Det. PE-271.	2 EA.
64	Install pipe support per MAG Std. Det. 403.	1 EA.
66	Protect existing utility in-place.	N.P.I.
68	Install 6" resilient seated, solid wedge gate valve, FLxMJ, box and cover per MAG Std. Det. 301 and C.O.P. Std. Det. PE-360-2.	2 EA.
86	Install meter fittings, box and cover per Meter and Backflow Detail on detail sheet. Contractor to coordinate with property owner for exact location of existing service.	3 EA.
88	Install 1-1/2" water service pipe and fittings per and Backflow Detail on detail sheet.	18 L.F.
93	Install 2" water service pipe and fittings per Meter and Backflow Detail on detail sheet.	76 L.F.
94	Removal of existing improvements.	N.P.I.
95	Install 1-1/2" reduced pressure backflow prevention assembly per Meter and Backflow Detail on detail sheet. Contractor to coordinate with property owner for exact location of existing service.	3 EA.
98	Temporarily move mailbox as needed for construction. Temporary location to be functional during construction. Reset mailbox after construction. Mailbox door to be 6" to 8" from road edge.	N.P.I.
99	Temporarily move dumpster as needed for construction. Temporary location to be functional during construction. Replace dumpster after construction.	N.P.I.



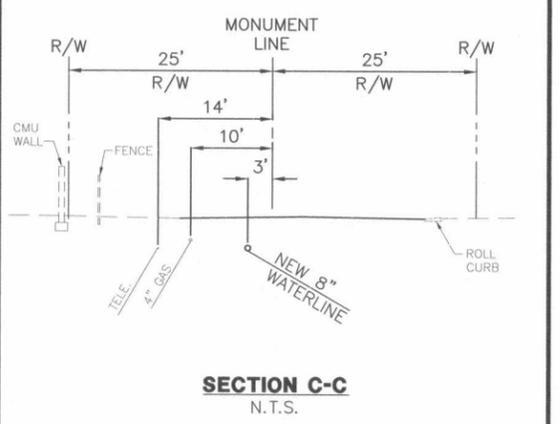
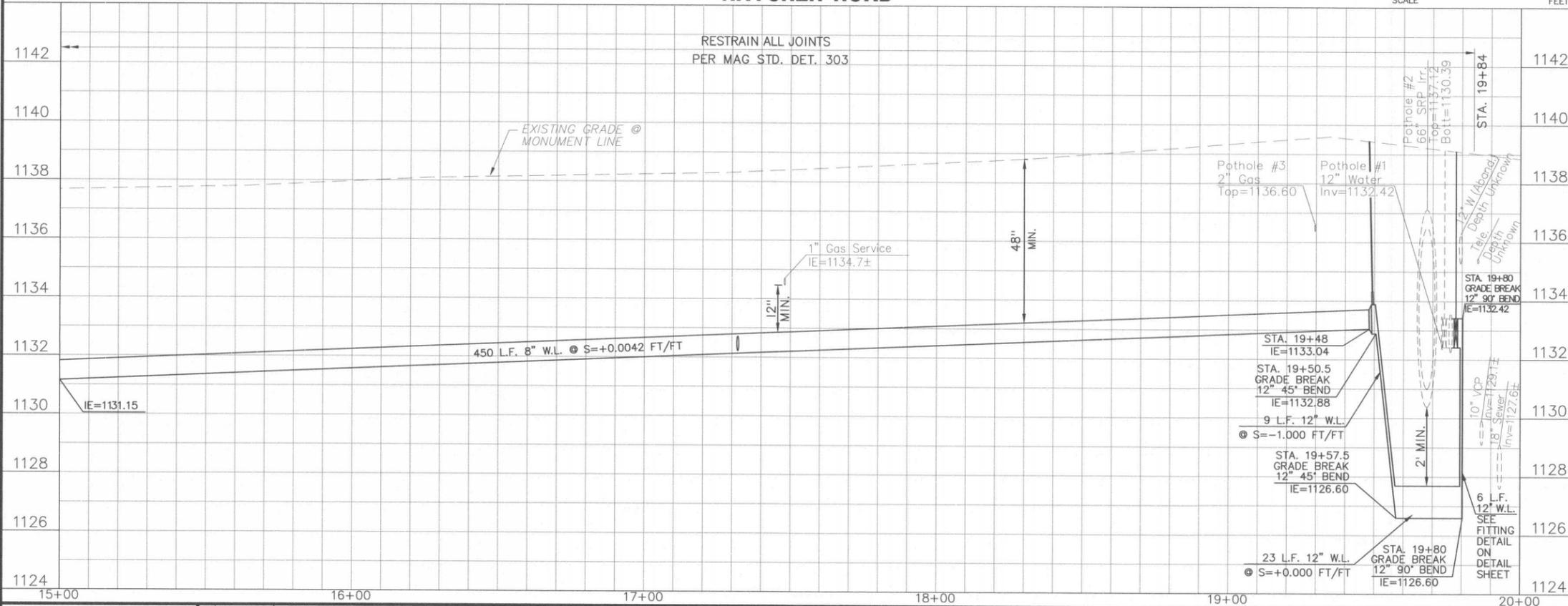
P:\3001\33001\EA_Hatcher.WL_Design\Cadd\08_Water\PP02_Hatcher 10-15.dwg
 Mar 08, 2010 12:25pm

TWO WORKING DAYS BEFORE YOU DIG, CALL FOR THE BLUE STAKES 263-1100 BLUE STAKE CENTER CALL COLLECT	NO. AUTHORIZED BY: _____ REVISION: _____ MADE BY: _____ DATE: _____ DESIGNED BY: HMS DRAWN BY: JD CHECKED BY: MJB DATE CHECKED: 3/4/10	 Entellus 2255 N. 44th Street Suite 125 Phoenix, AZ 85008.3279 Tel 602.244.2566 Fax 602.244.8947 E-Mail: www.entellus.com	CITY OF PEORIA ENGINEERING DEPARTMENT 9875 N. 85TH AVENUE PEORIA, AZ 85345	 HATCHER ROAD 8-INCH WATERLINE	HATCHER ROAD STA. 10+00 TO STA. 15+00	PROJECT NUMBER: UT00098 HORIZONTAL SCALE: HORIZ. 1"=20' VERT. 1"=2' SHEET NUMBER: 5 OF 7
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**Construction Notes
WATER LINE**

No.	Description	Quantity
1	Install new pavement see Pipe Trench Detail on detail sheet.	1553 S.Y.
3	Sawcut, remove and replace valley gutter to nearest joints per MAG Std. Det. 240.	30 L.F.
8	Close and abandon valve, remove cover and housing. Backfill with CLSM (1/2 sack). See detail sheet.	1 EA.
9	Bore under existing concrete apron.	N.P.I.
14	Adjust frames, covers, valve boxes on existing non-city utilities per C.O.P. Std. Det. PE-270.	5 EA.
17	Pavement replacement per MAG Std. Det. 200, Type "B", "T Top".	9 S.Y.
21	Install 12" ductile iron waterline and fittings class 350 per C.O.P. Std. Det. PE-401.	38 L.F.
22	Install 8" waterline and fittings, D.I.P. class 350 per detail on detail sheet.	450 L.F.
23	Install 6" waterline and fittings, D.I.P. class 350 per C.O.P. Std. Det. PE-401.	26 L.F.
32	Install 8"x6" tee.	N.P.I.
41	Bore under existing curb and gutter.	N.P.I.
43	Install fire hydrant assembly per C.O.P. Std. Det. PE-360-2.	1 EA.
44	Provide water/sanitary sewer protection Per MAG Std. Det. 404.	N.P.I.
45	Backfill with CLSM (1/2 sack).	N.P.I.
47	Install 2" universal air/vacuum valve assembly per C.O.P. Std. Det. PE-395.	1 EA.
51	Connect new waterline to existing waterline, see Fitting Detail on detail sheet.	1 EA.
55	Bore under existing sidewalk.	N.P.I.
63	Install 2-Way blue reflective marker per C.O.P. Std. Det. PE-271.	1 EA.
64	Install pipe support per MAG Std. Det. 403.	2 EA.
66	Protect existing utility in-place.	N.P.I.
68	Install 6" resilient seated, solid wedge gate valve, FLxMJ, box and cover per MAG Std. Det. 301 and C.O.P. Std. Det. PE-360-2.	1 EA.
89	Install 16"x12" tapping sleeve and valve, box and cover type "A" per MAG Std. Det. 340.	1 EA.
90	Install 12"x8" eccentric reducer.	N.P.I.
92	Install 12"x6" Tee	N.P.I.
94	Removal of existing improvements.	N.P.I.
96	Install 90° bend	N.P.I.
99	Temporarily move dumpster as needed for construction. Temporary location to be functional during construction. Replace dumpster after construction.	N.P.I.



P:\300\330016A Hatcher WL Design\Cadd\08_Water\PP03 Hatcher 15-20.dwg
Mar 08, 2010 12:26pm

TWO WORKING DAYS BEFORE YOU DIG,
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263-1100
BLUE STAKE CENTER
CALL COLLECT

NO.	AUTHORIZED BY	REVISION	MADE BY	DATE

DESIGNED BY: HMS
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CHECKED BY: MJB
DATE CHECKED: 3/4/10



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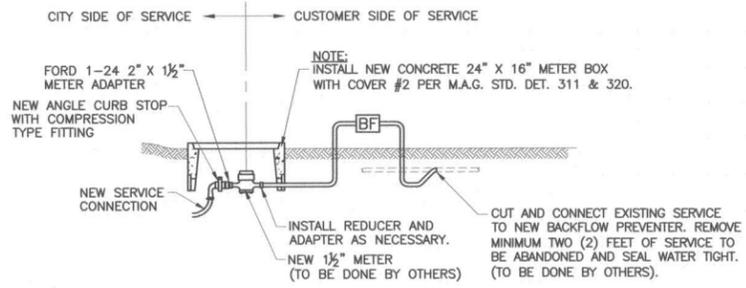
**CITY OF PEORIA
ENGINEERING DEPARTMENT**
9875 N. 85TH AVENUE
PEORIA, AZ 85345



**HATCHER ROAD
8-INCH WATERLINE**

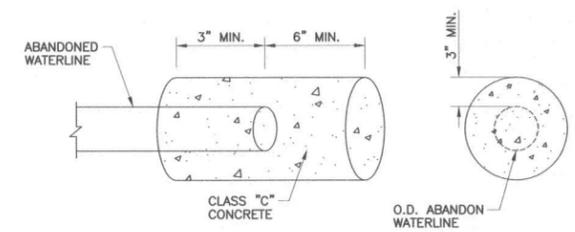
**HATCHER ROAD
STA. 15+00 TO STA. 20+00**

PROJECT NUMBER:
UT00098
HORIZONTAL SCALE:
HORIZ. 1"=20'
VERT. 1"=2'
SHEET NUMBER:
6 OF 7



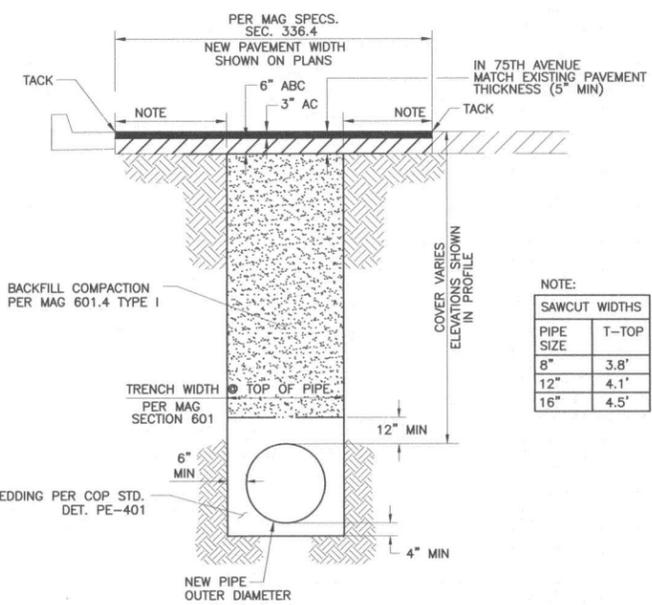
METER AND BACKFLOW DETAIL

(FOR USE WITH CITY STANDARD DETAILS PE-363 & PE-352-1)
N.T.S.



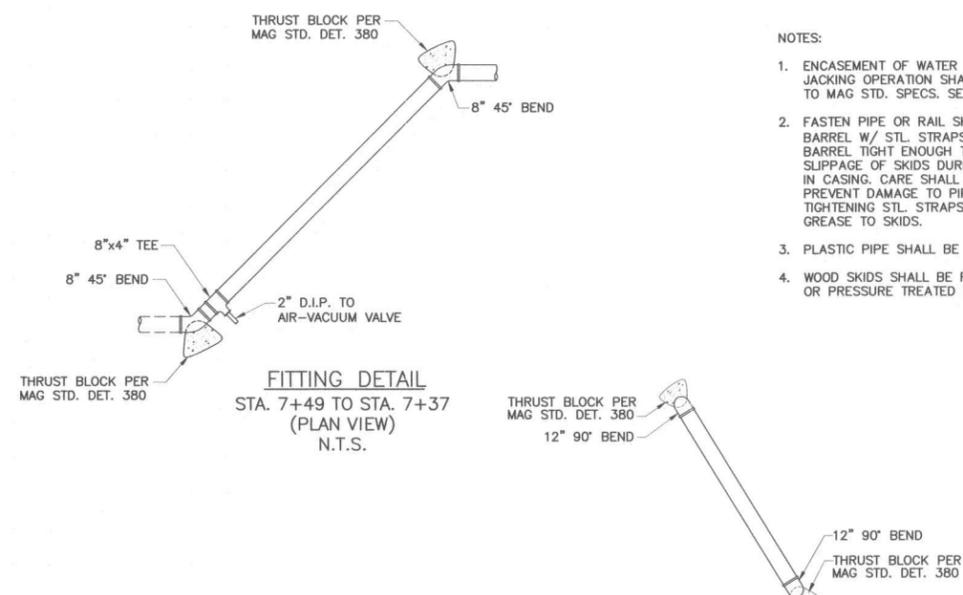
PIPE PLUG DETAIL FOR ABANDONED WATERLINES

N.T.S.



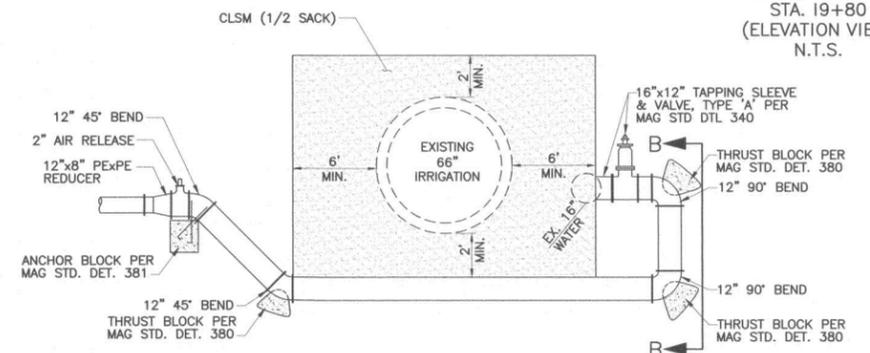
PIPE TRENCH DETAIL

(SUPERCEDES CITY STANDARD DETAIL PE-401)
N.T.S.

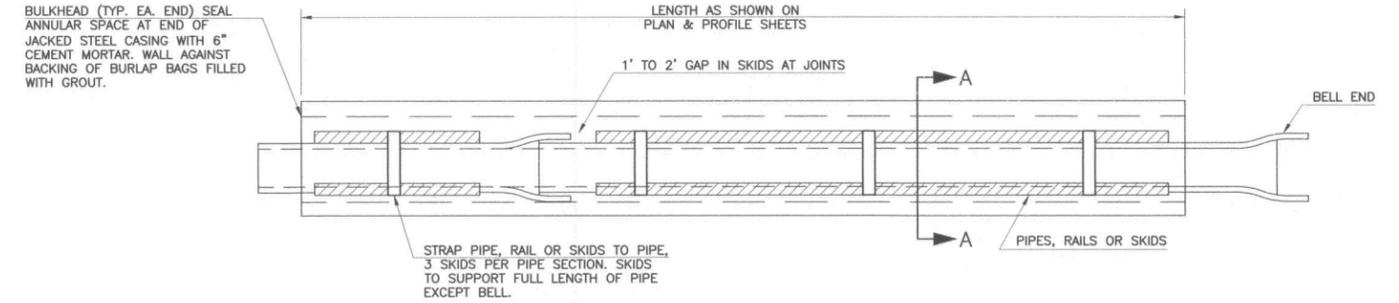


FITTING DETAIL
STA. 7+49 TO STA. 7+37
(PLAN VIEW)
N.T.S.

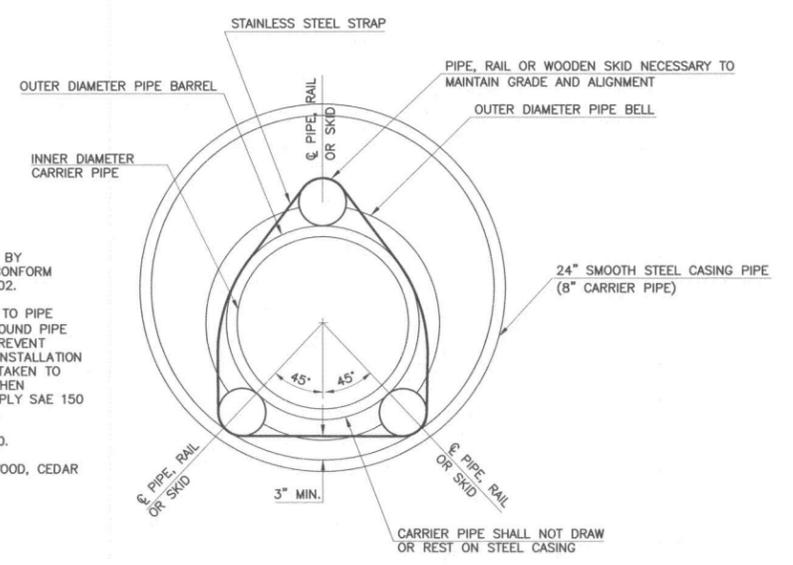
SECTION B-B
STA. 19+80
(ELEVATION VIEW)
N.T.S.



FITTING DETAIL
STA. 19+60 TO STA. 19+80
(ELEVATION VIEW)
N.T.S.

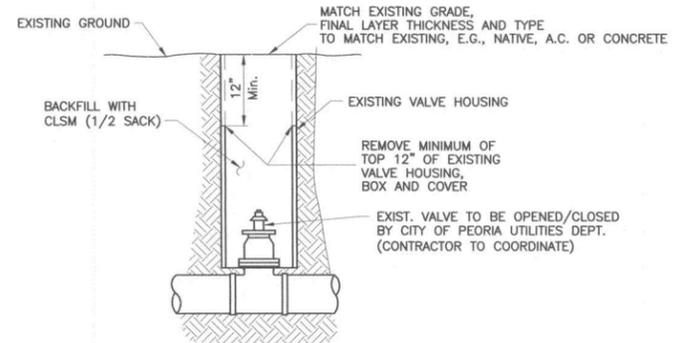


CASING DETAIL
N.T.S.



SECTION A-A
N.T.S.

- NOTES:
- ENCASEMENT OF WATER LINE BY JACKING OPERATION SHALL CONFORM TO MAG STD. SPECS. SEC. 602.
 - FASTEN PIPE OR RAIL SKIDS TO PIPE BARREL W/ STL. STRAPS AROUND PIPE BARREL TIGHT ENOUGH TO PREVENT SLIPPAGE OF SKIDS DURING INSTALLATION IN CASING. CARE SHALL BE TAKEN TO PREVENT DAMAGE TO PIPE WHEN TIGHTENING STL. STRAPS. APPLY SAE 150 GREASE TO SKIDS.
 - PLASTIC PIPE SHALL BE C900.
 - WOOD SKIDS SHALL BE REDWOOD, CEDAR OR PRESSURE TREATED FIR.



VALVE ABANDONMENT
N.T.S.

F:\3001\33001\BA Hatcher WL Design\Cadd\08_Water\07_Details.dwg Mar 08, 2010 12:25pm

<p>TWO WORKING DAYS BEFORE YOU DIG, CALL FOR THE BLUE STAKES 263-1100 BLUE STAKE CENTER CALL COLLECT</p>	NO. AUTHORIZED BY	REVISION	MADE BY	DATE	DESIGNED BY: HMS		<p>CITY OF PEORIA ENGINEERING DEPARTMENT 9875 N. 85TH AVENUE PEORIA, AZ 85345</p>		<p>HATCHER ROAD 8-INCH WATERLINE</p>	<p>DETAILS</p>	PROJECT NUMBER: UT00098
					DRAWN BY: JD						HORIZONTAL SCALE: NONE
					CHECKED BY: MJB						SHEET NUMBER: 7 OF 7
					DATE CHECKED: 3/4/10						