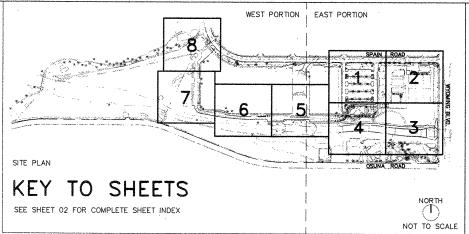
OCTOBER 15, 1999 BID DOCUMENTS

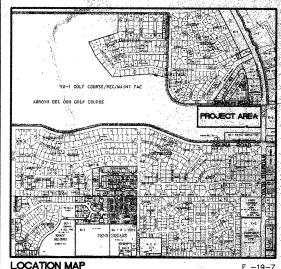
# PHASÉ 1/MPROVEMENTS DYO DEL OSO PARK

BOULEVARD, NE

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- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONSTRUCTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) DIVISION A DETAILED CONSTRUCTION, THE CONTRACTOR SHALL WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE. ENGINEER (768—2551) PRIOR TO OCCUPYING AN INTERSECTION, REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD
- 5. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
- CONTRACTOR SHALL COORDINATE WITH WATER SYST IN SOME THAT (857-8200) FIVE WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION THREE DAYS PRIOR TO TO NEEDING VALVES TURNED ON OR OFF.
- CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS DEFEN DECORDED.
- CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK, IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY, MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY OF ALBUQUEROUE SURVEY SECTION. WHEN A CHANGE IS MADE IN THE FINISH ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO NEW GRADE, UNLESS OTHERWISE SPECIFIED.
- ALL WATER LINES TO BE C900 PVC, AND ALL SEWER LINES TO BE SDR35 PVC.

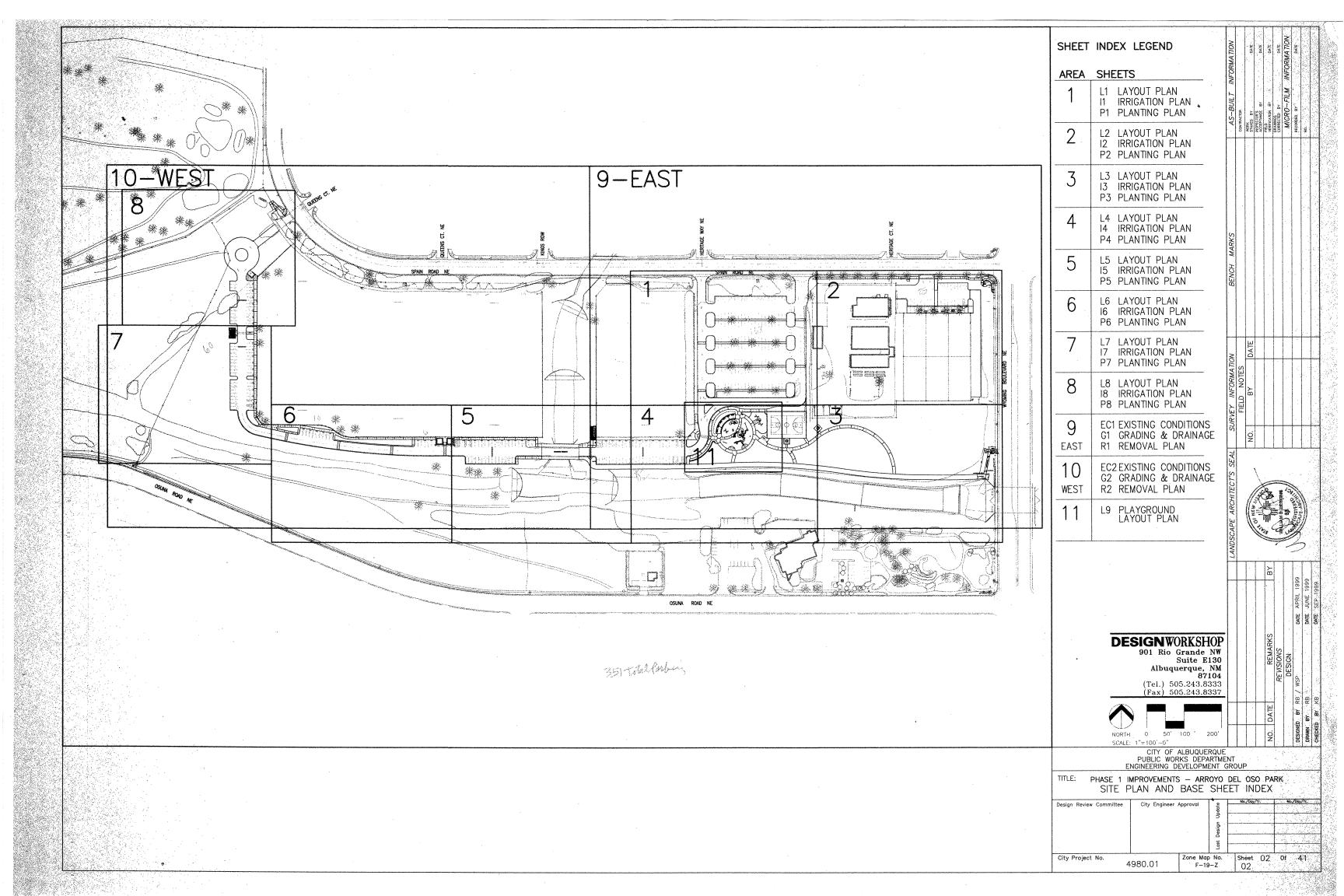
**DESIGN**WORKSHOP 901 Rio Grande NW Suite E130

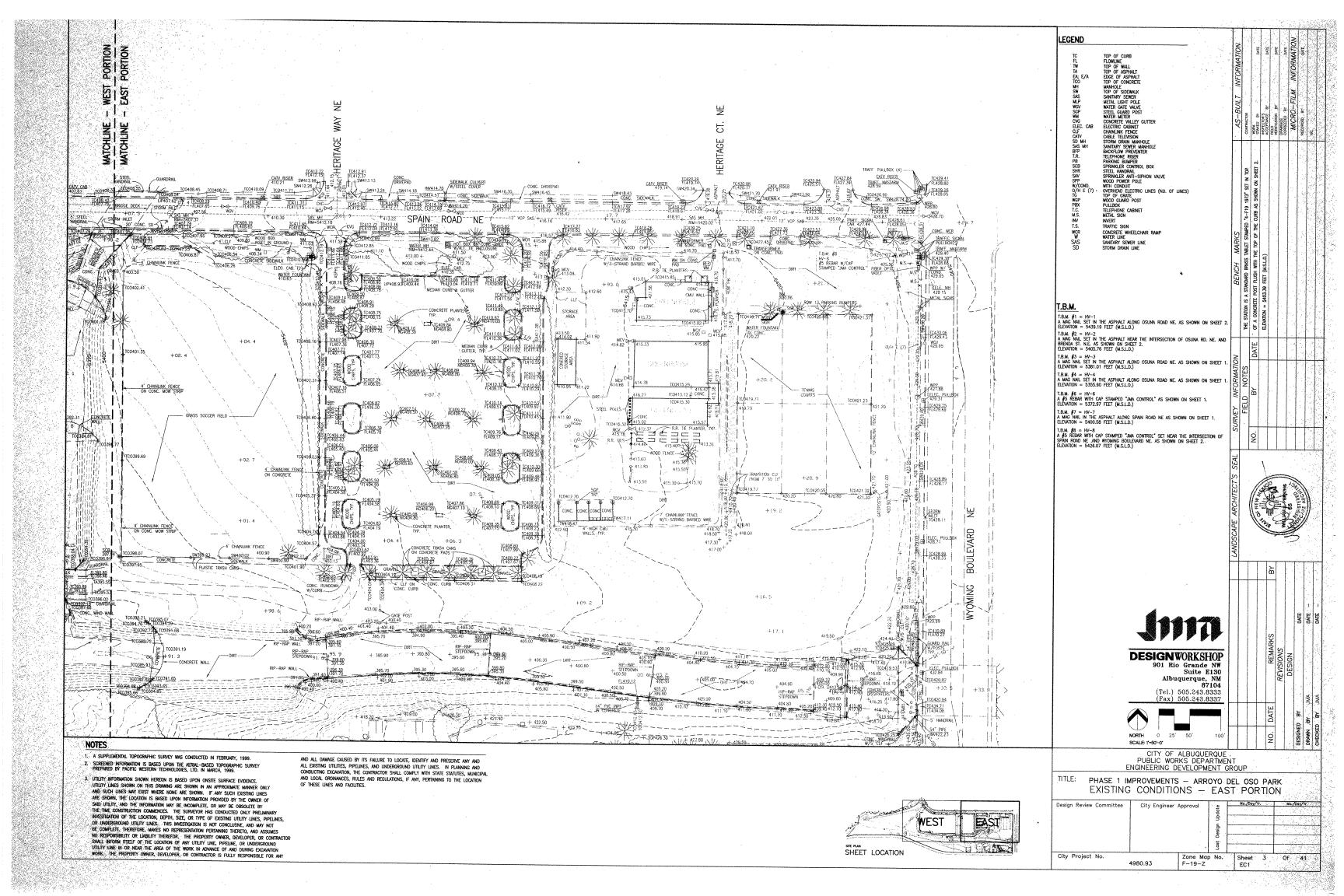
(Tel.) 505.243.8333

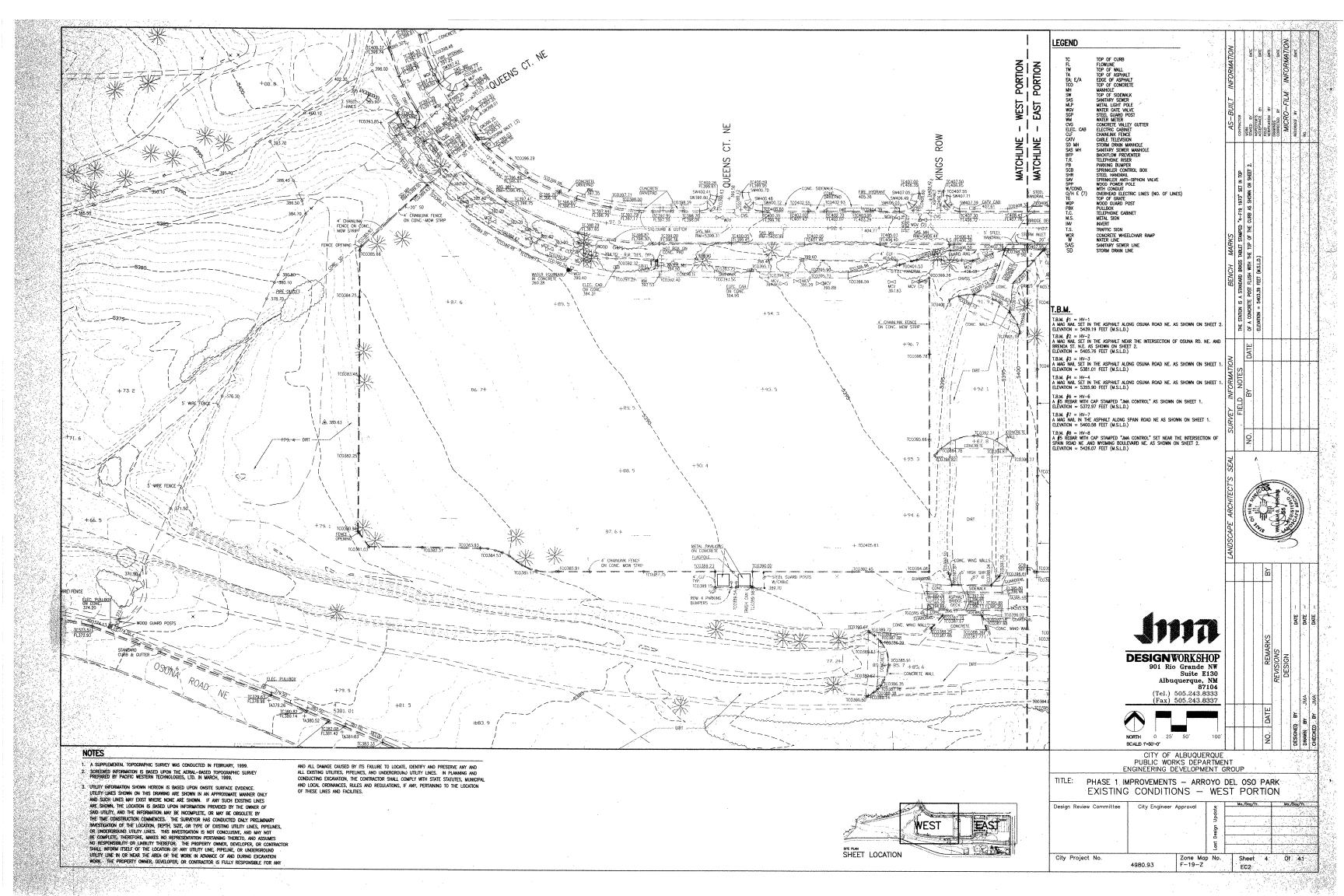
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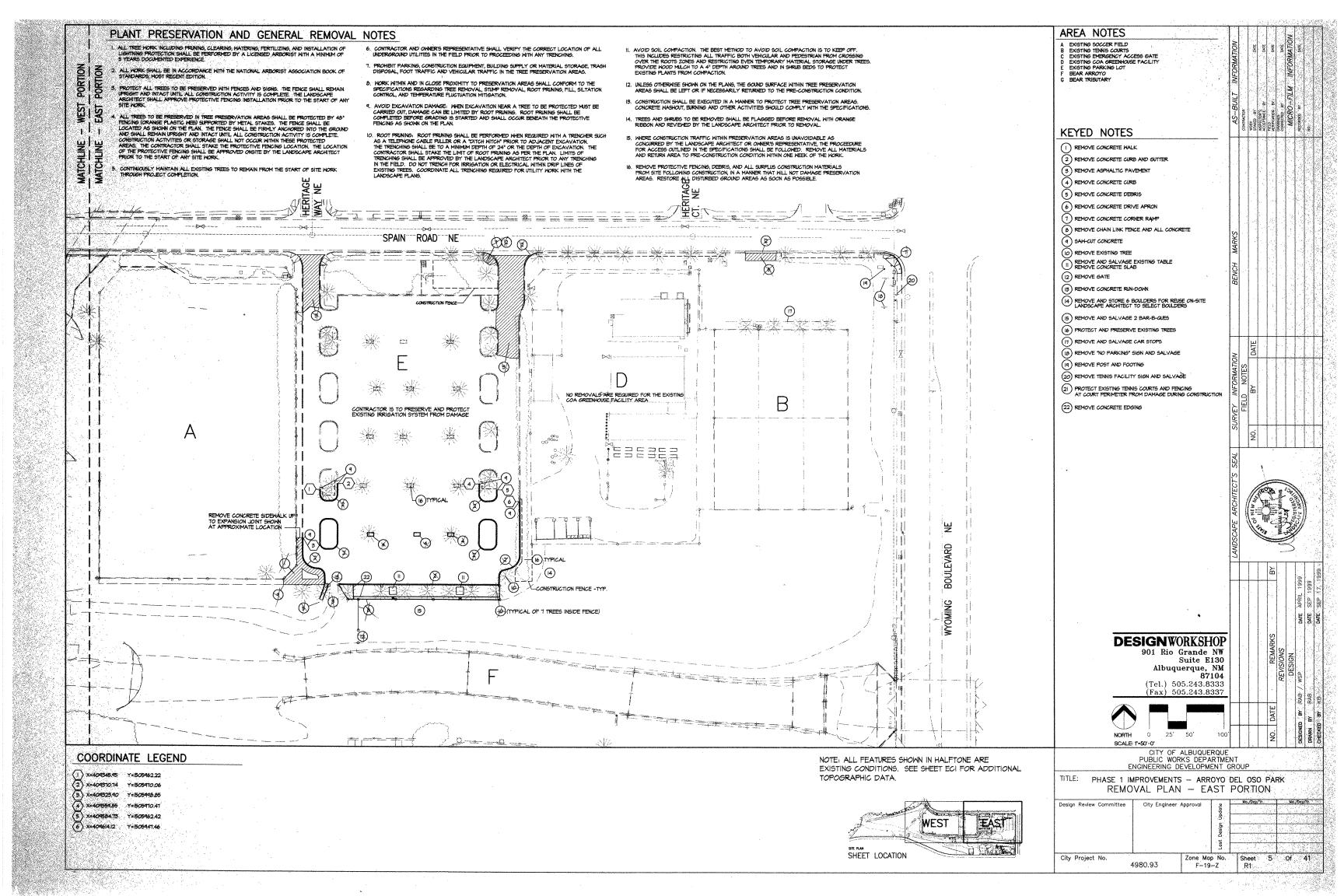
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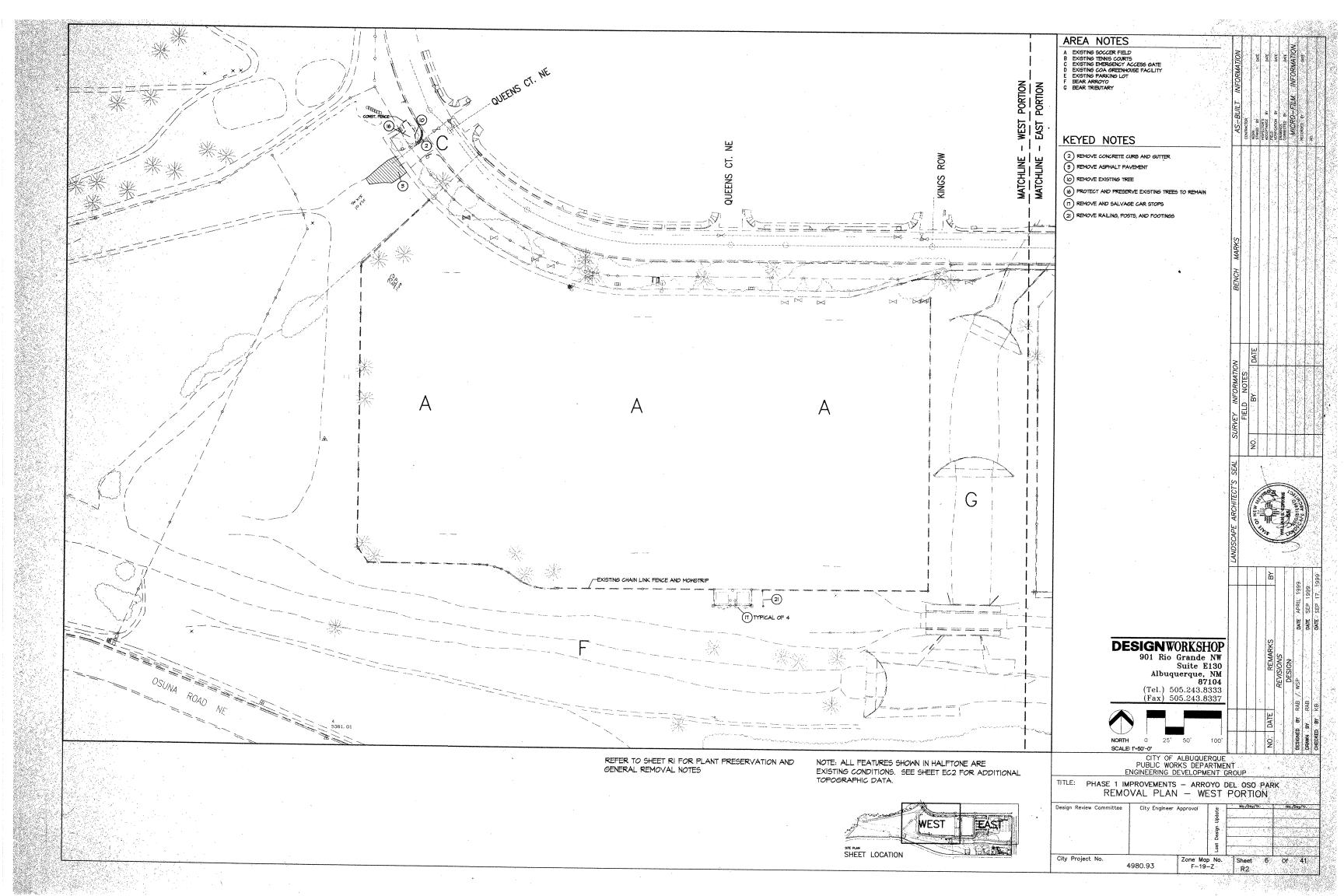
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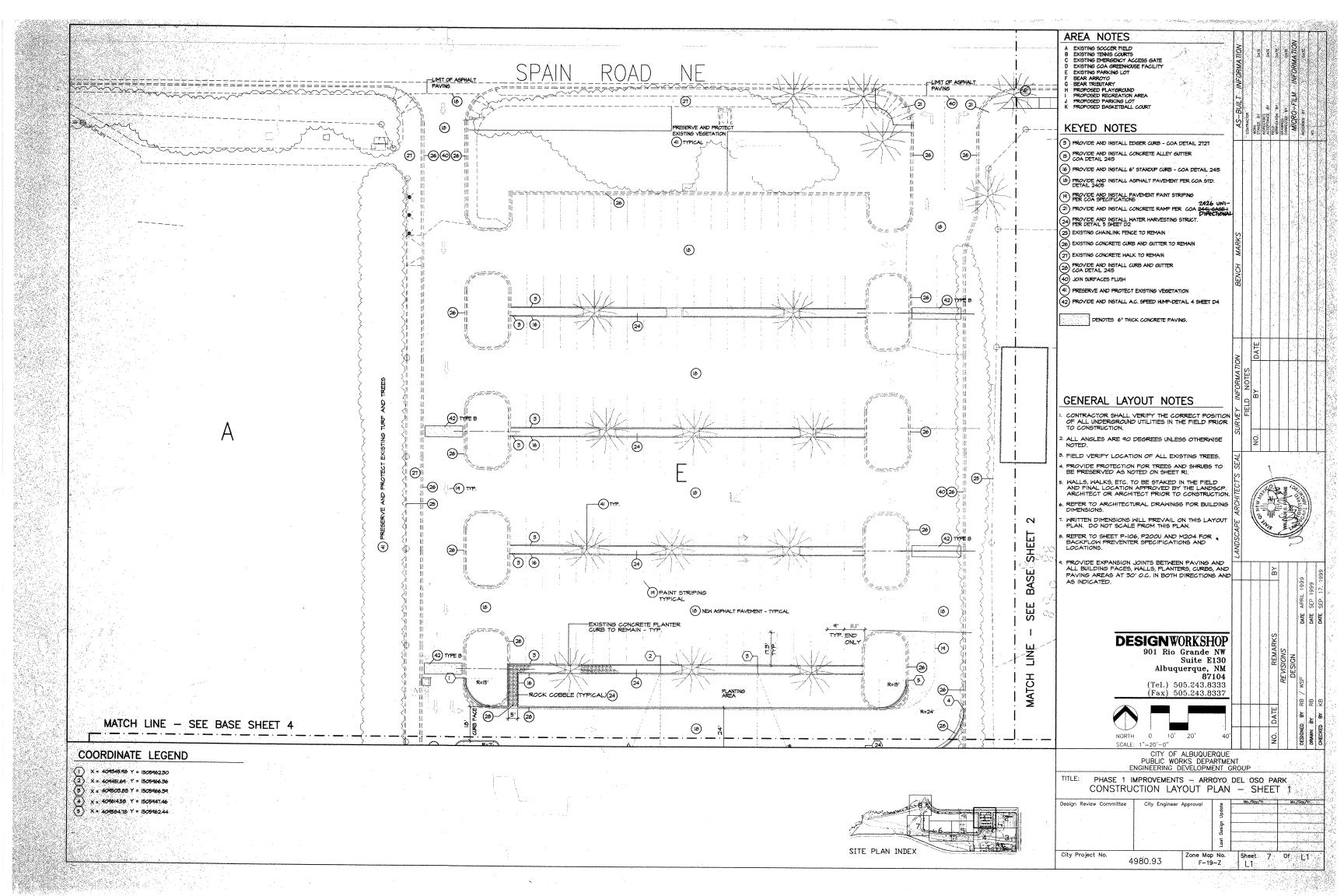


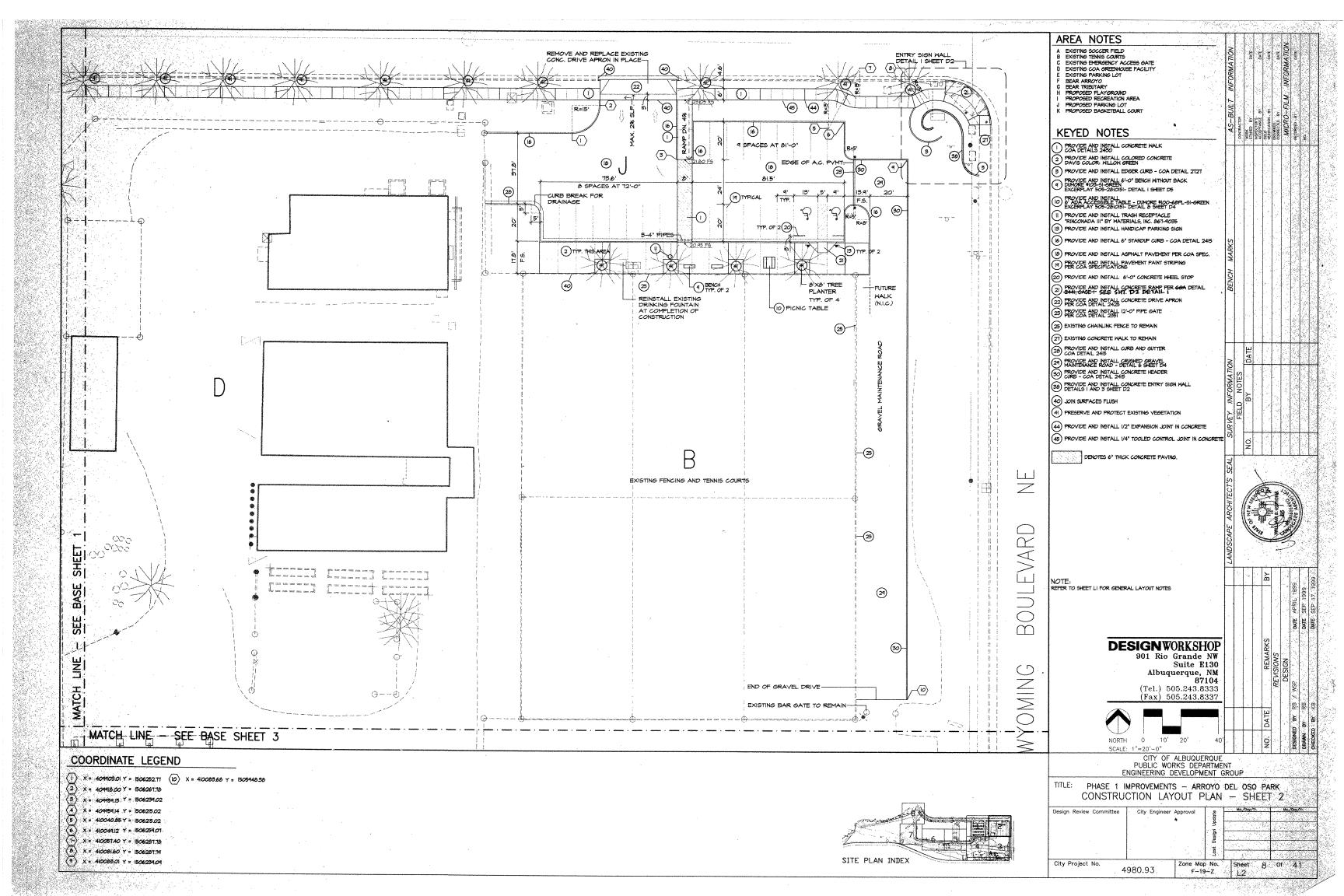


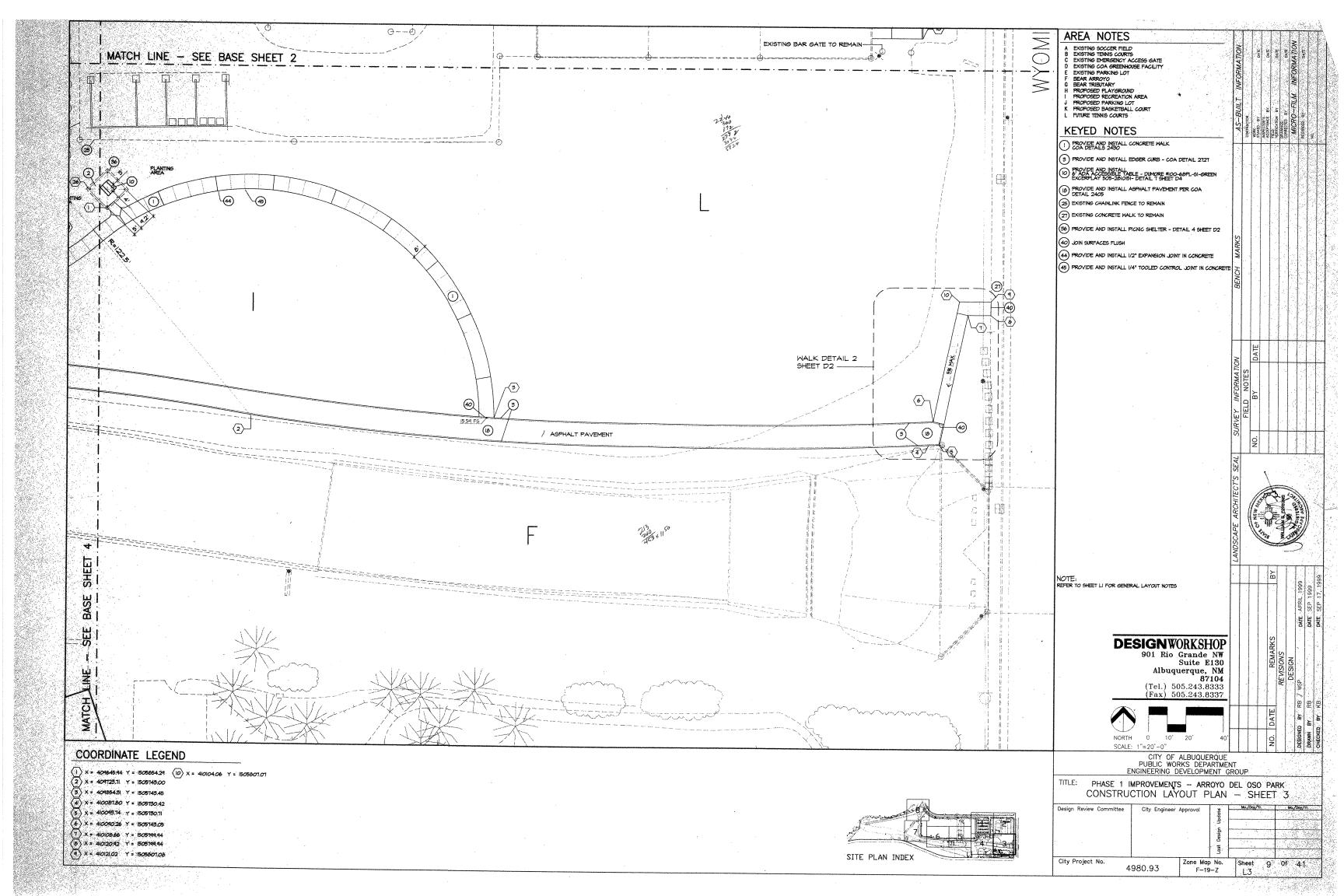


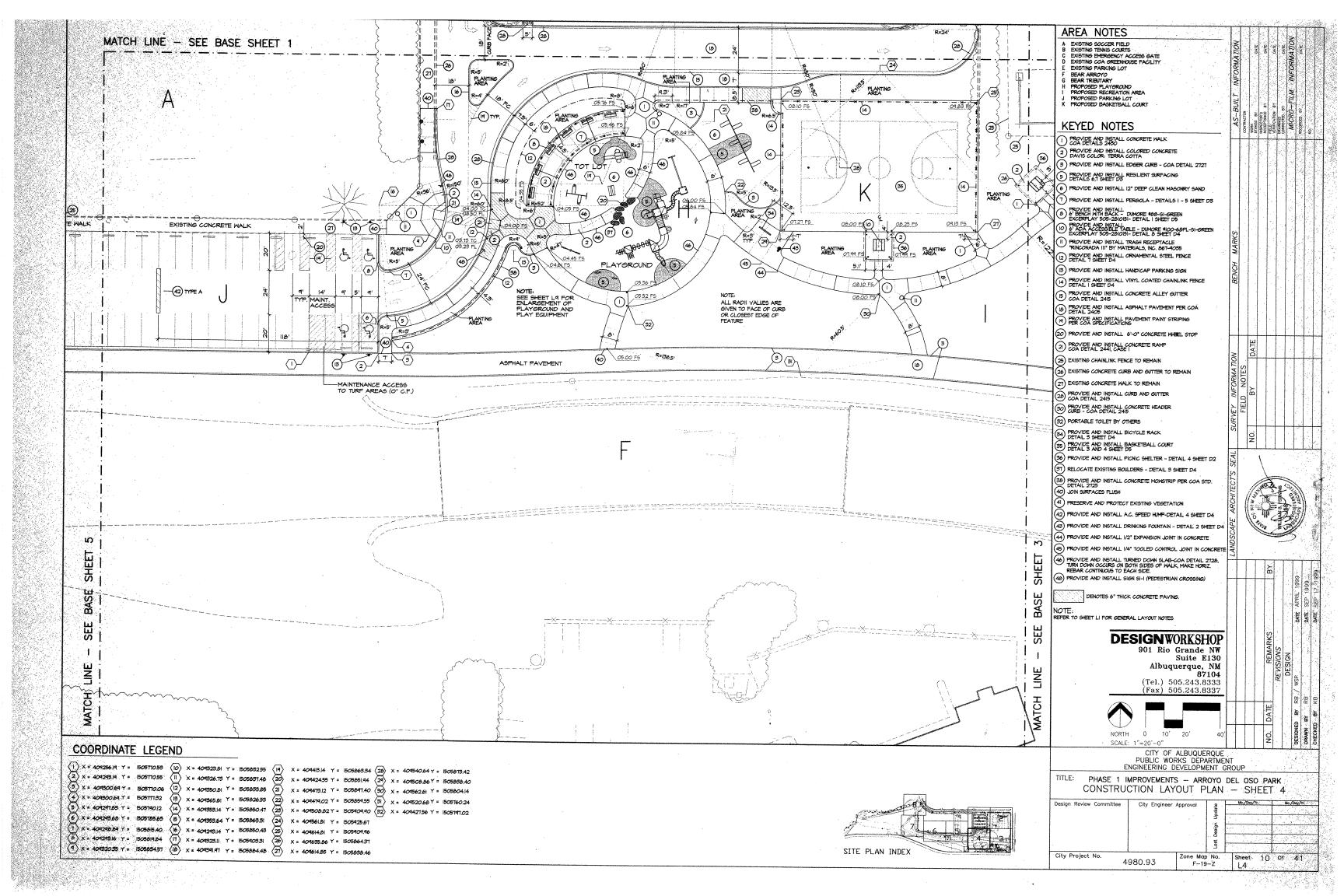


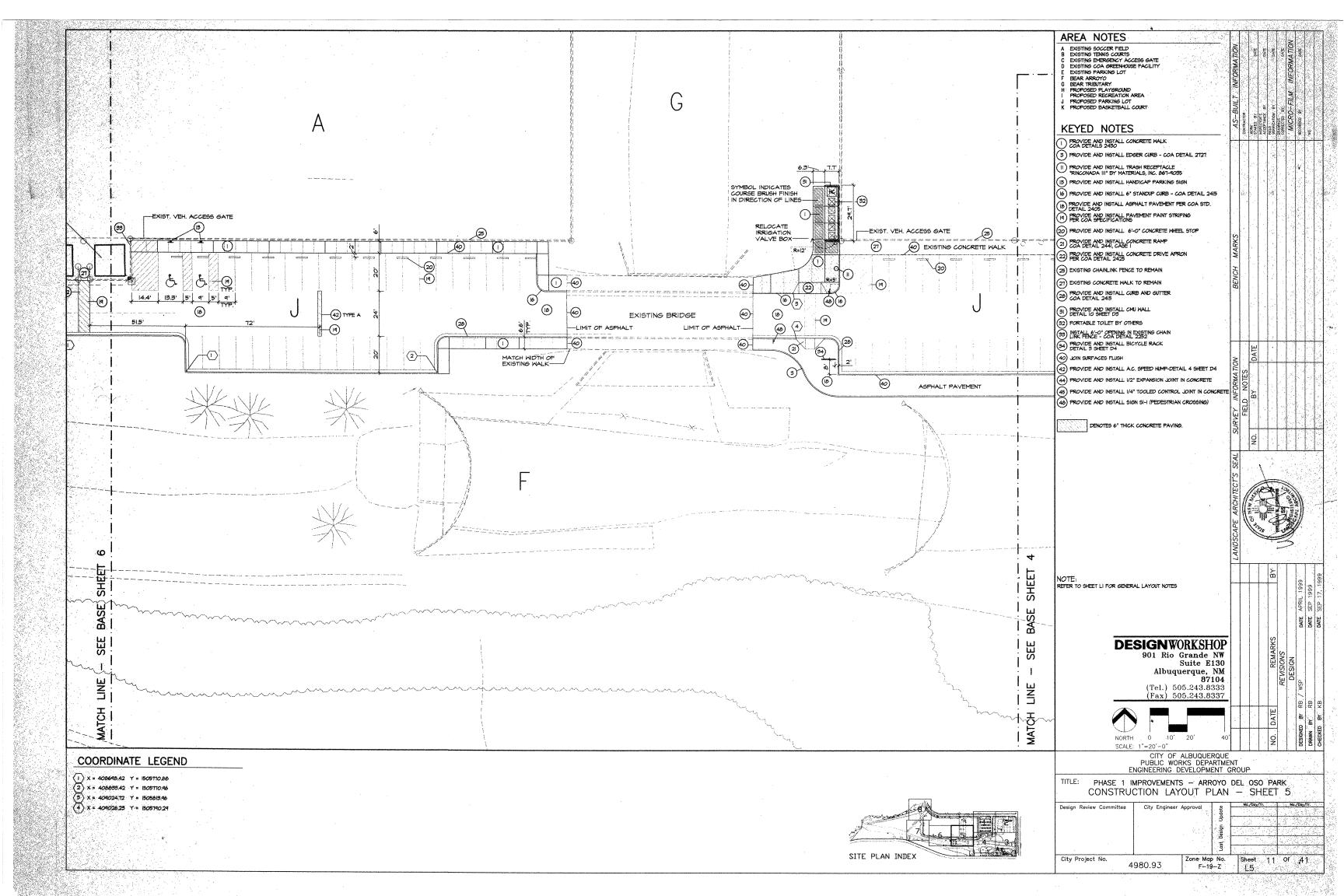


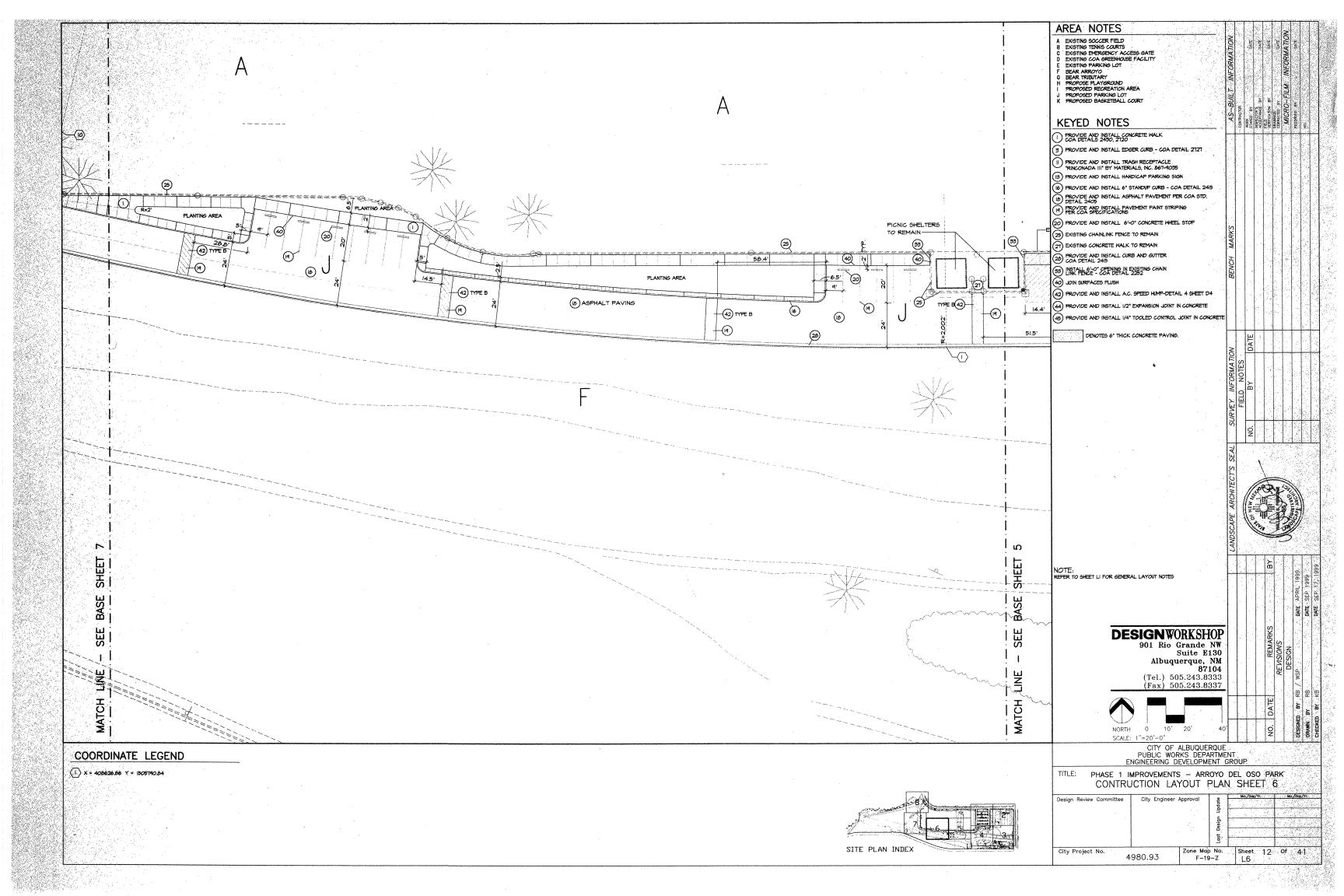


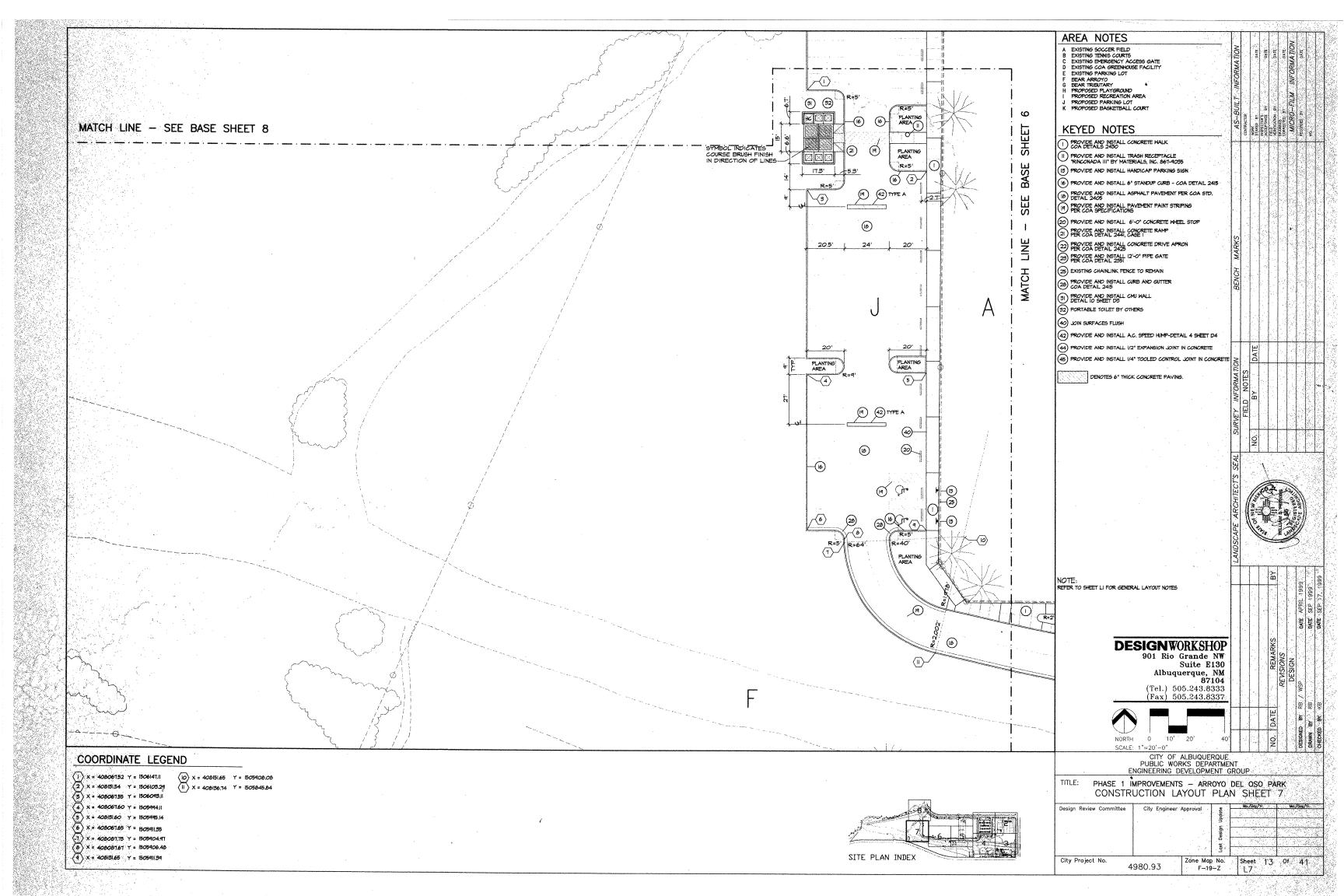


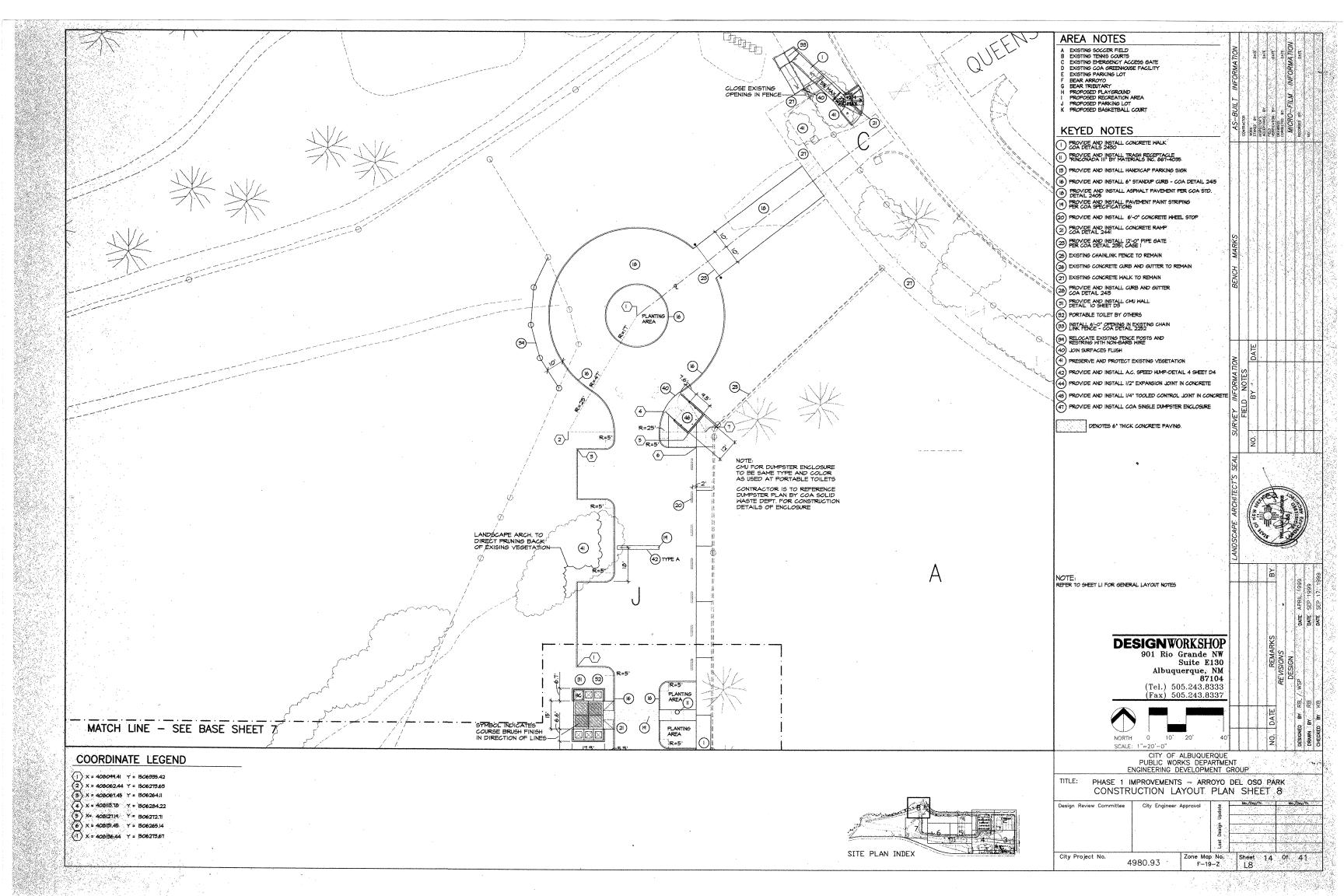


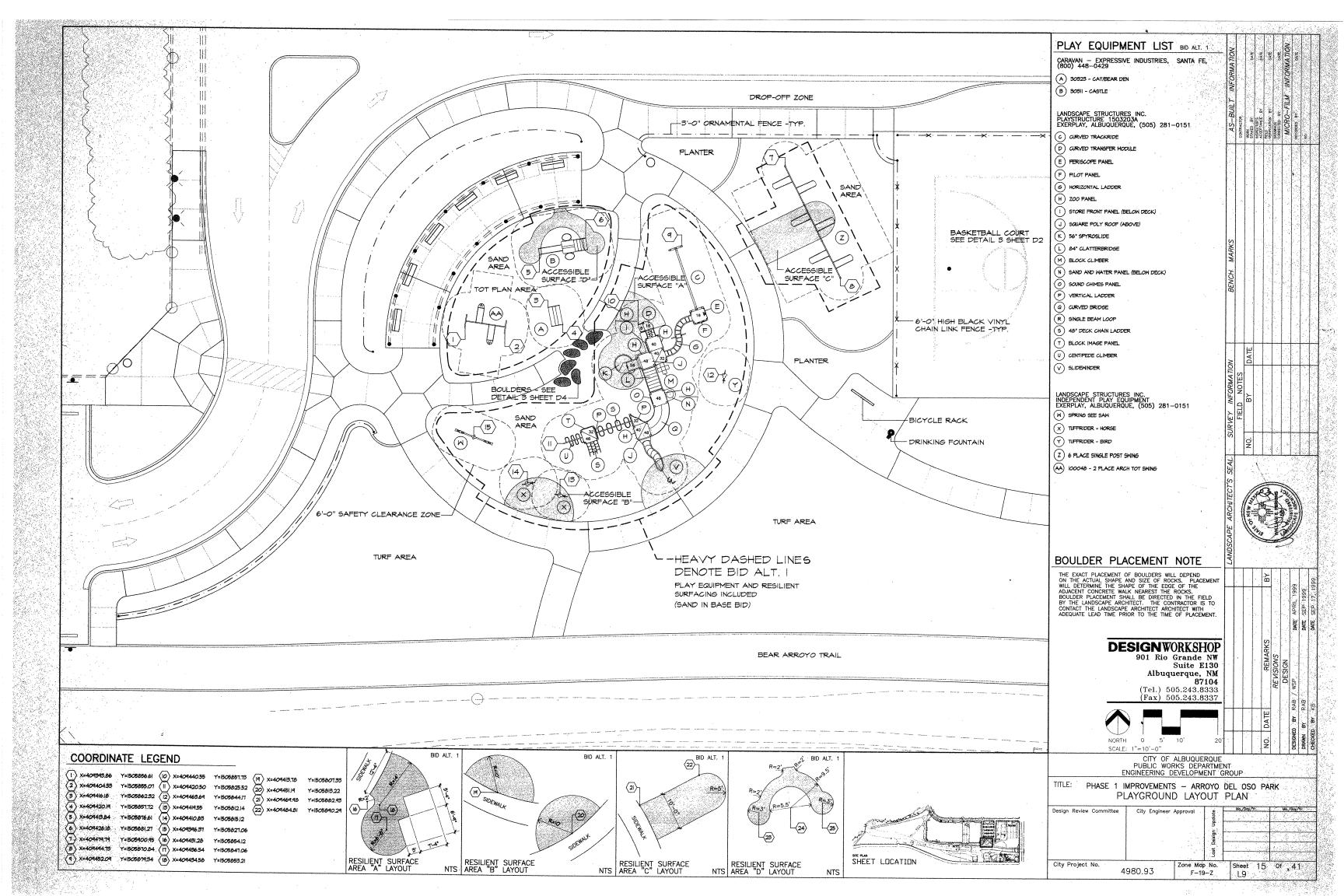


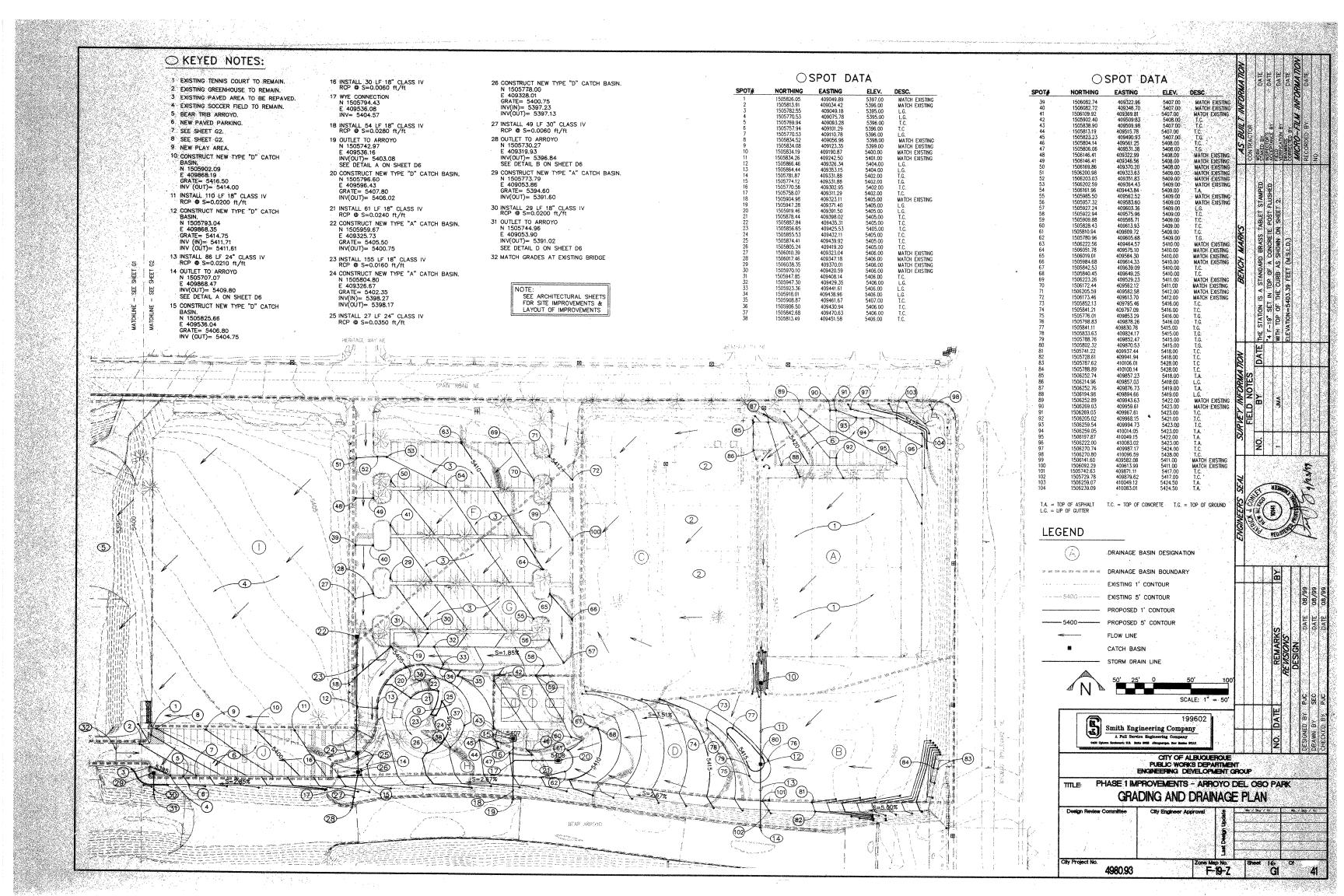


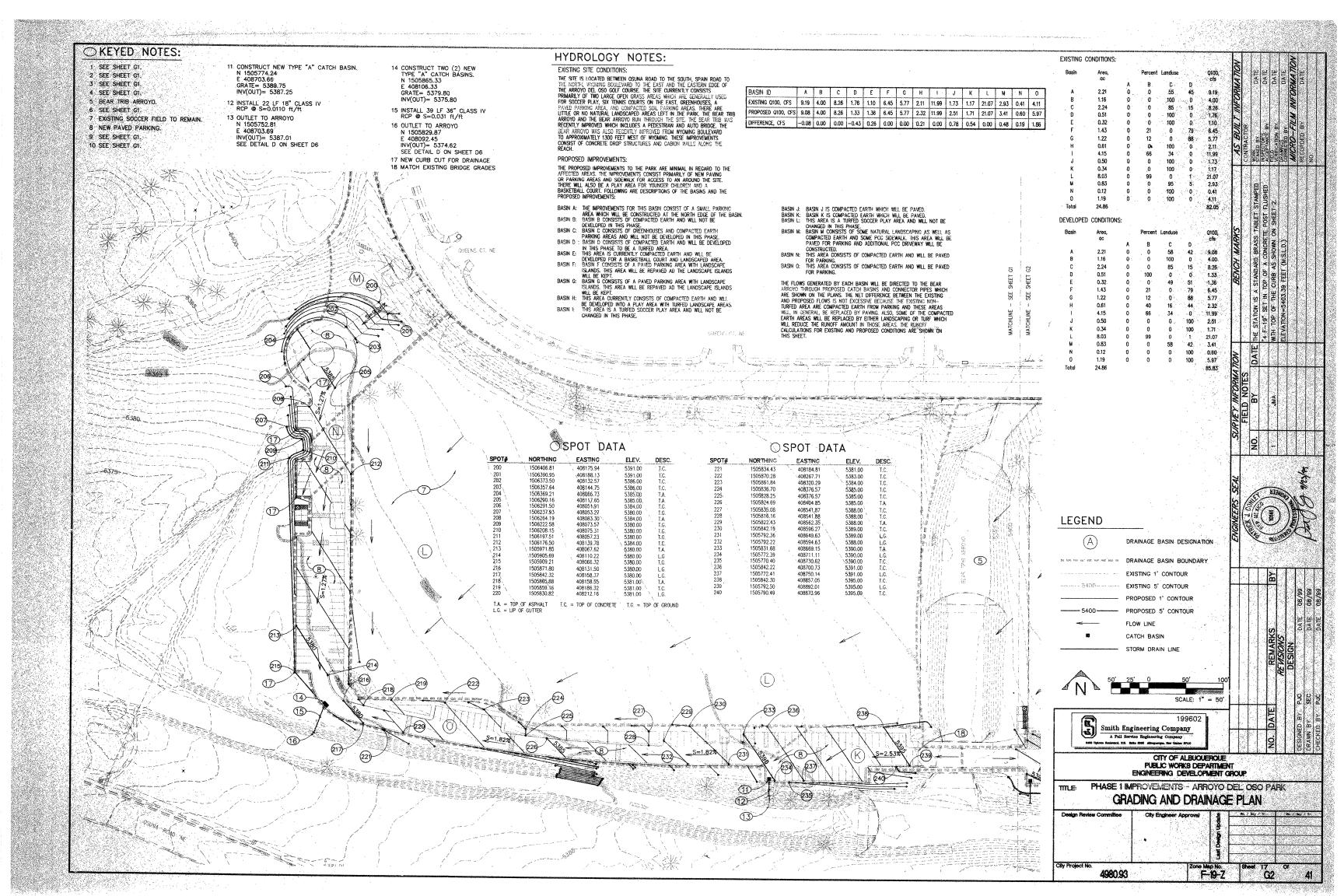


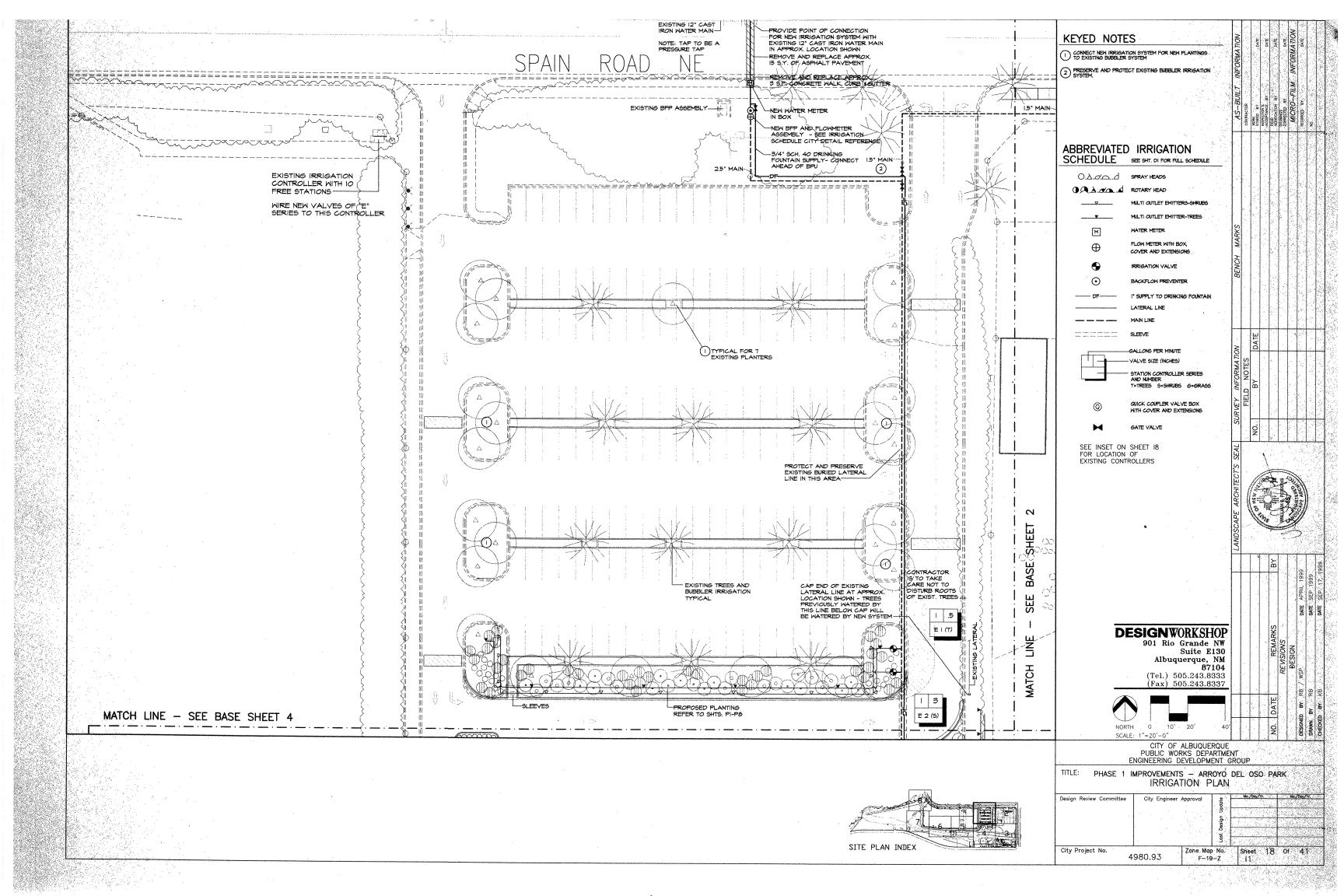


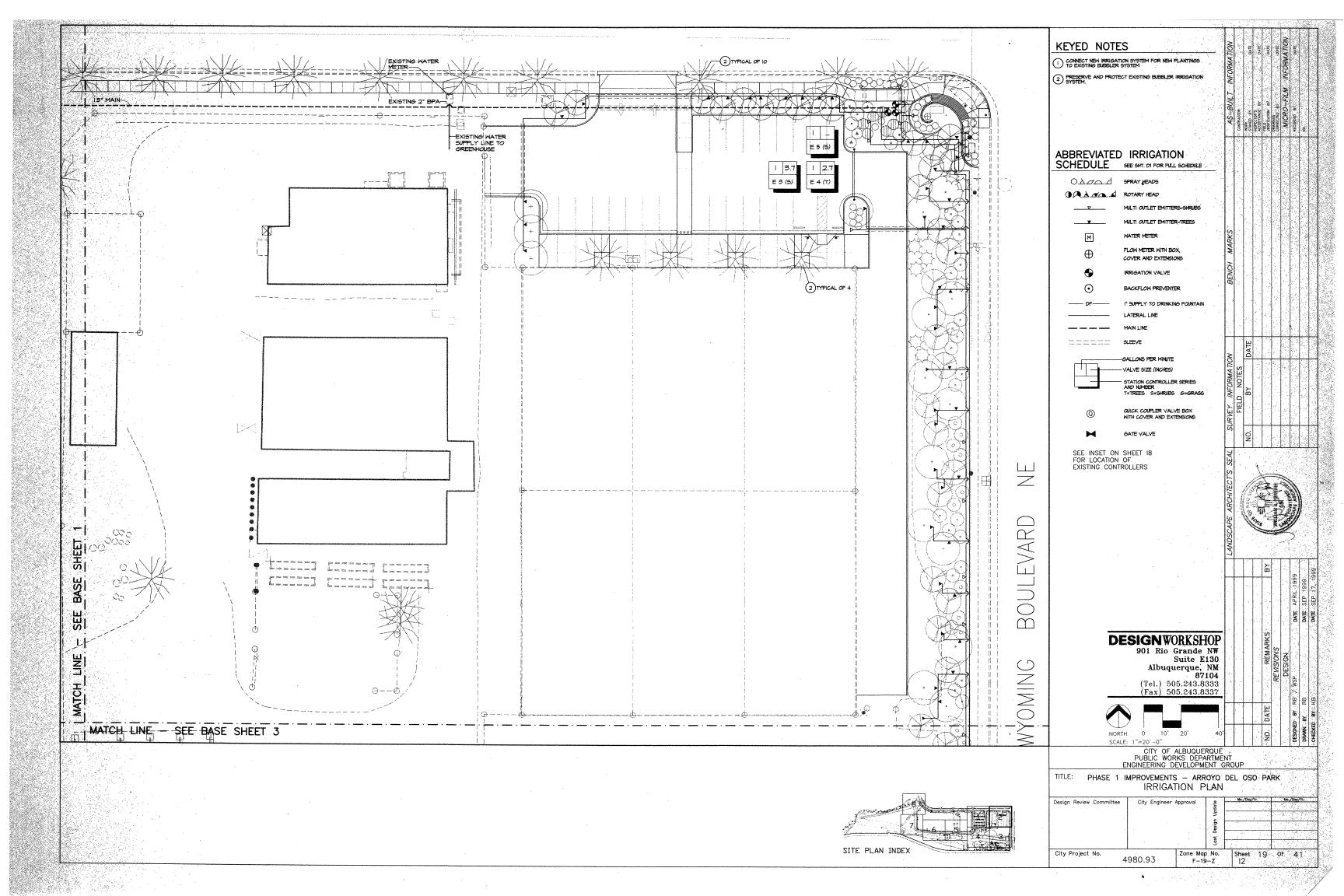


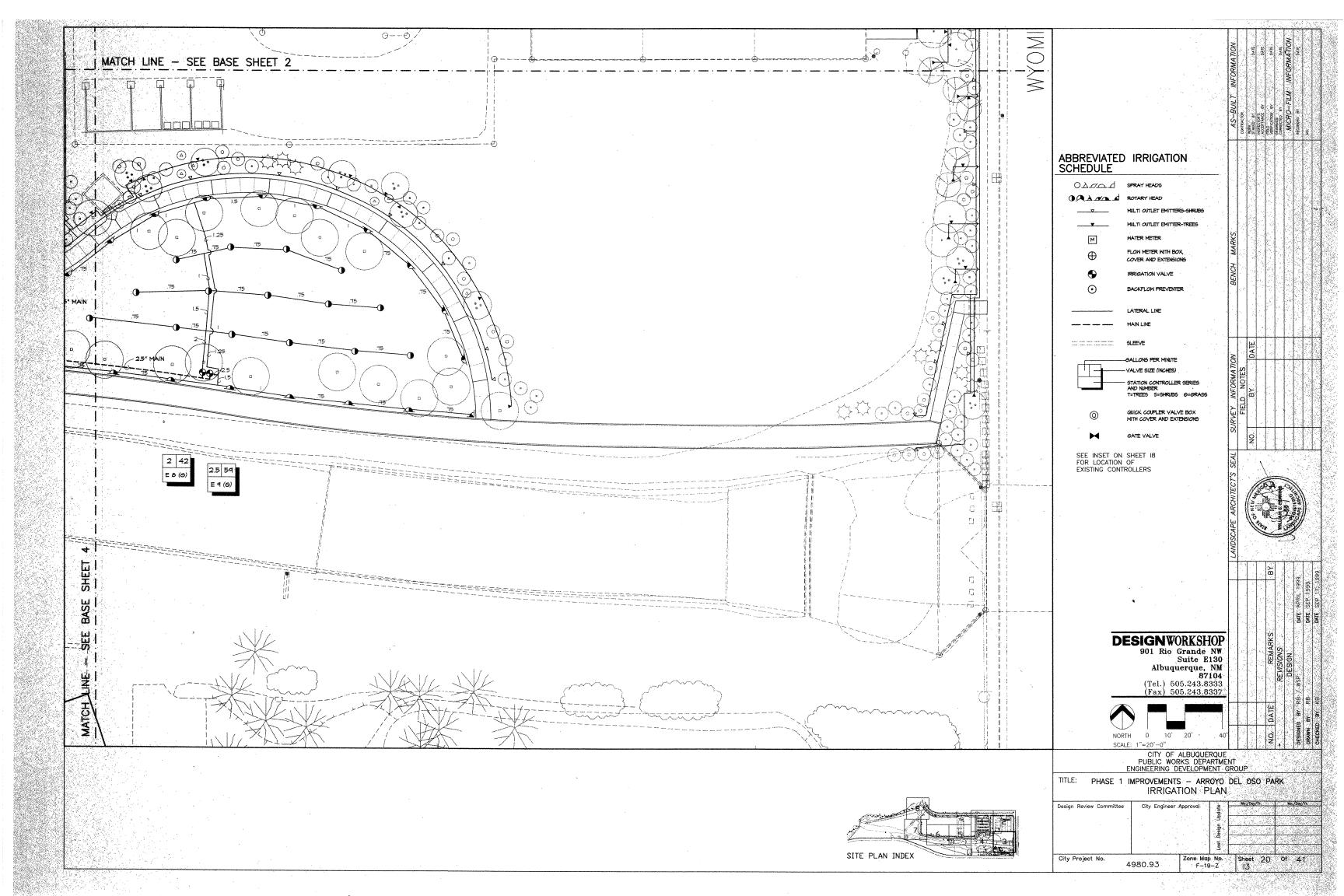


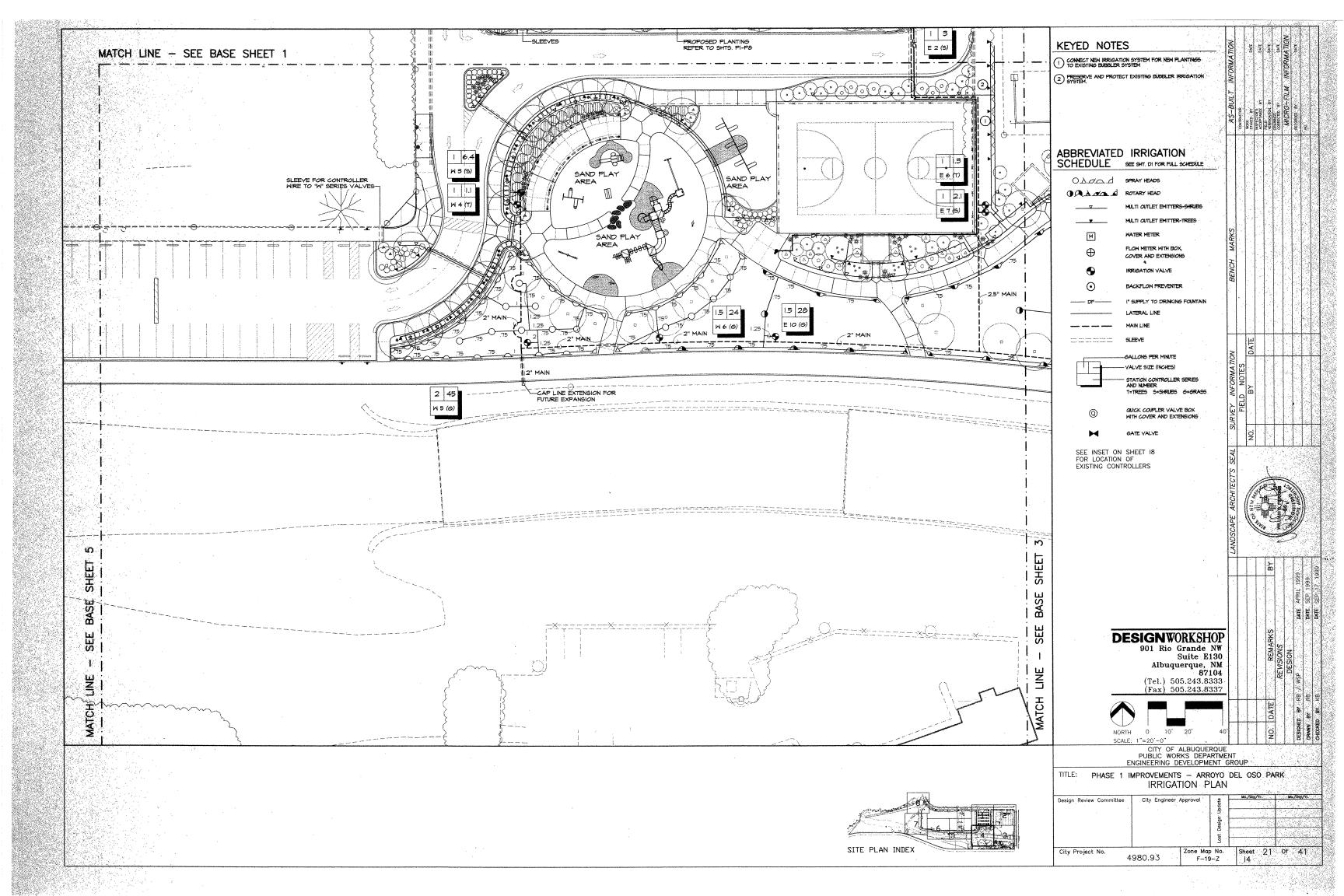


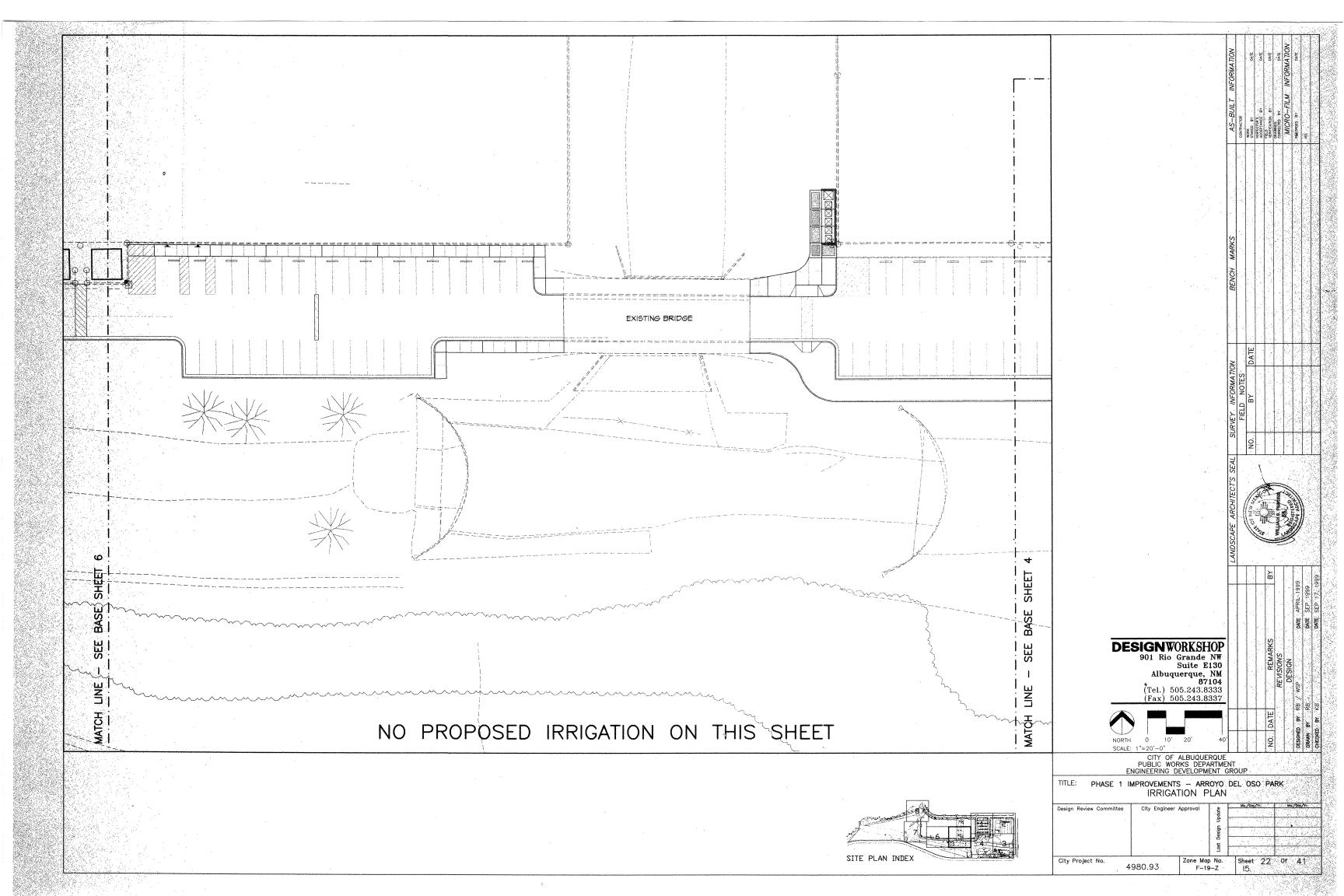


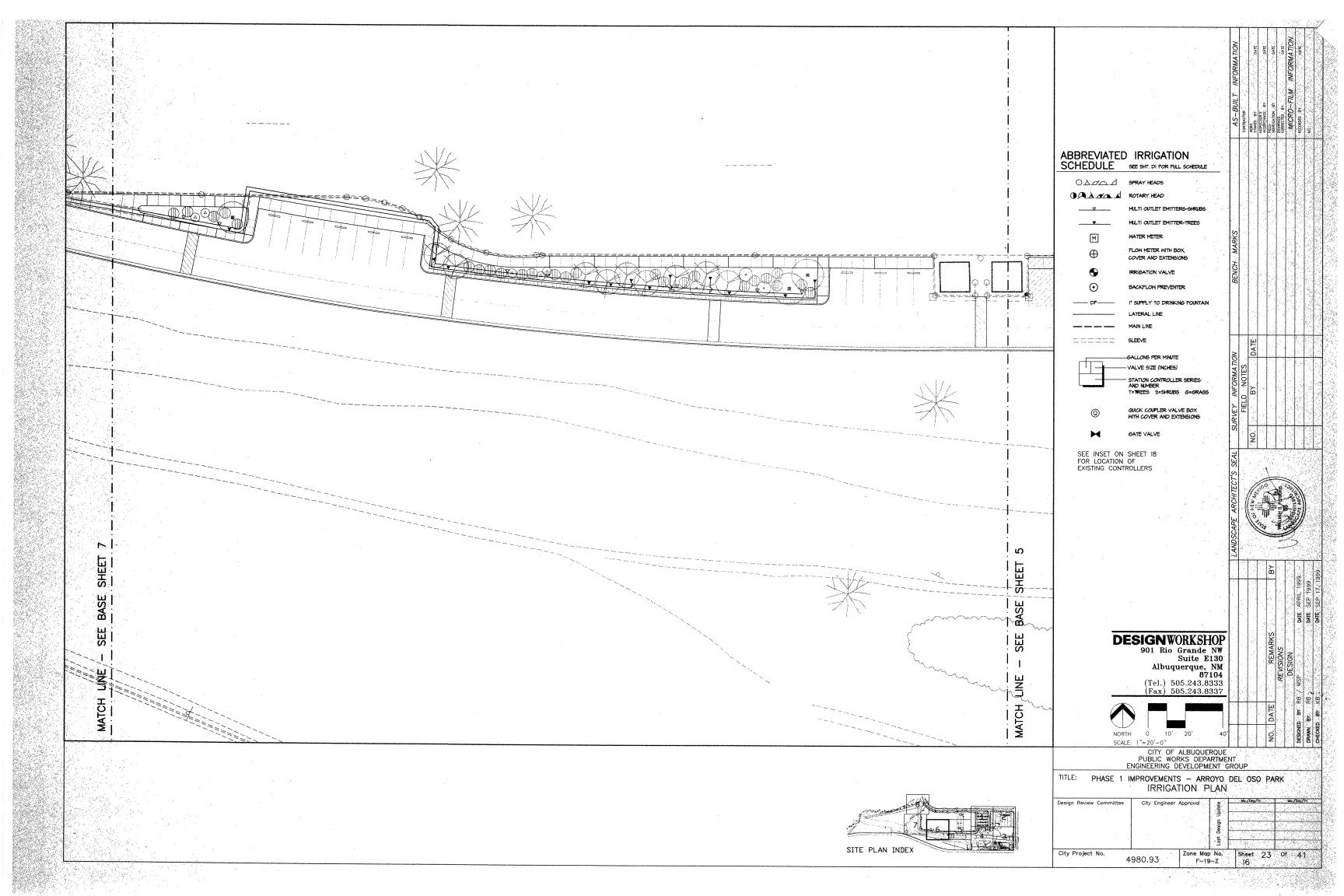


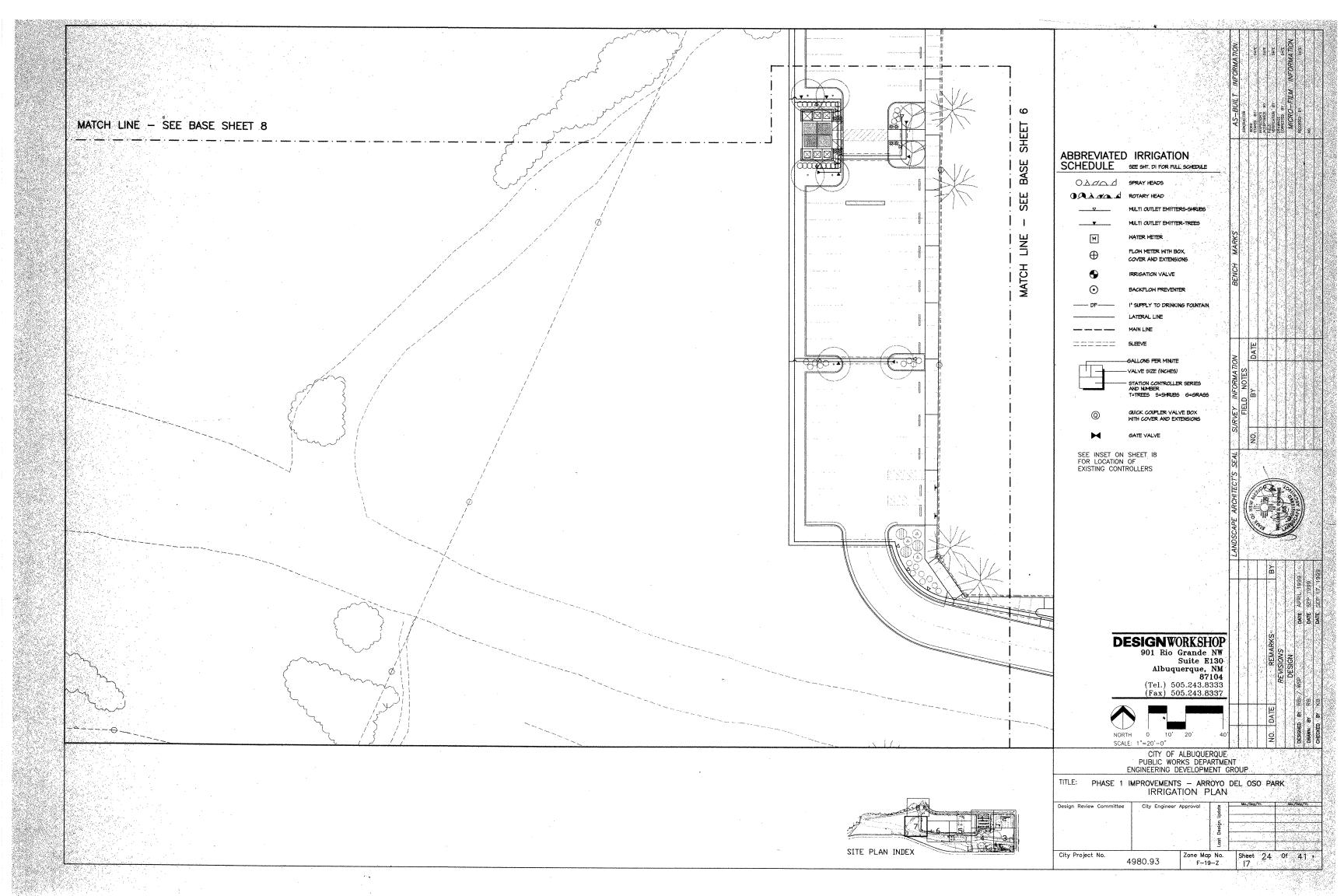


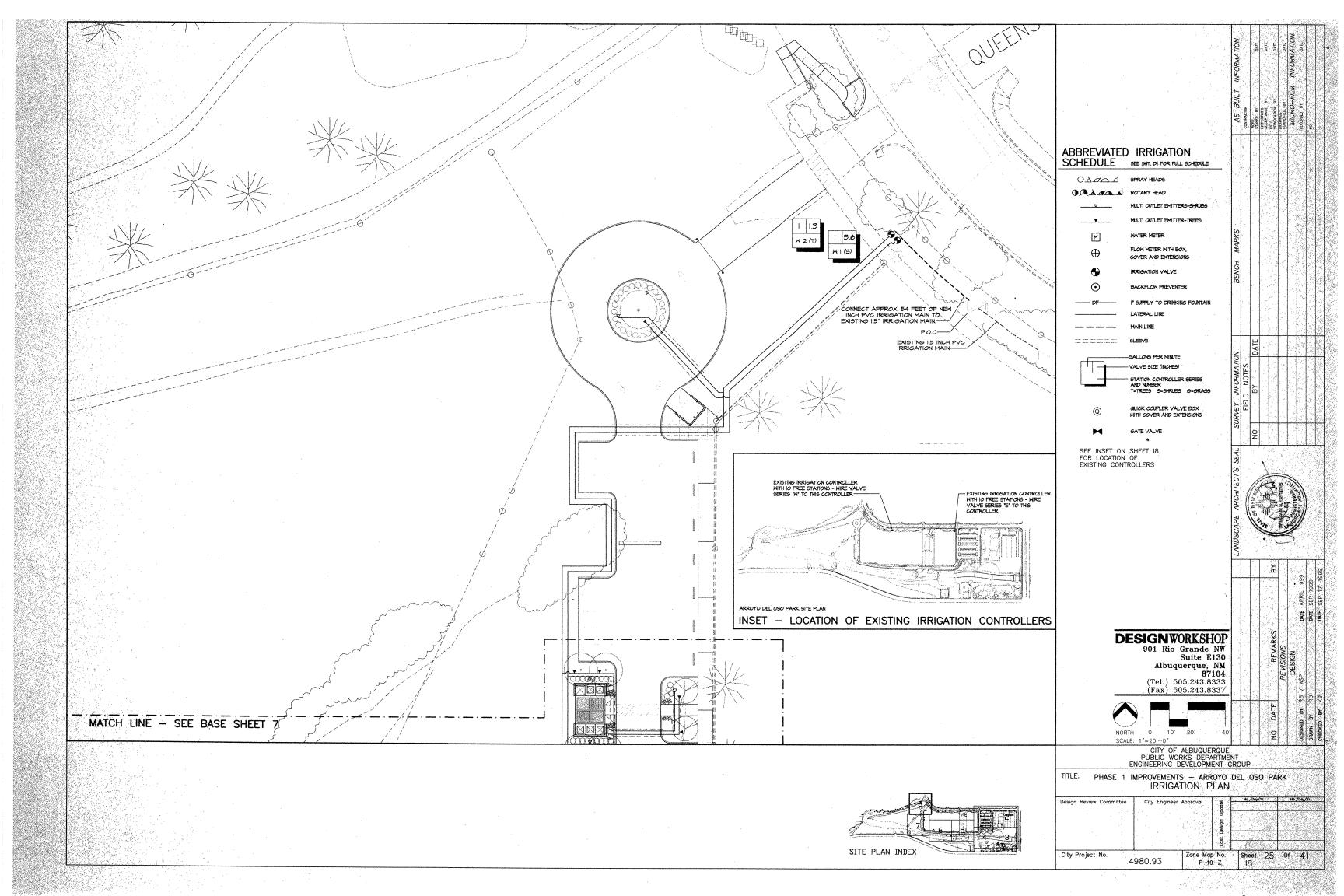


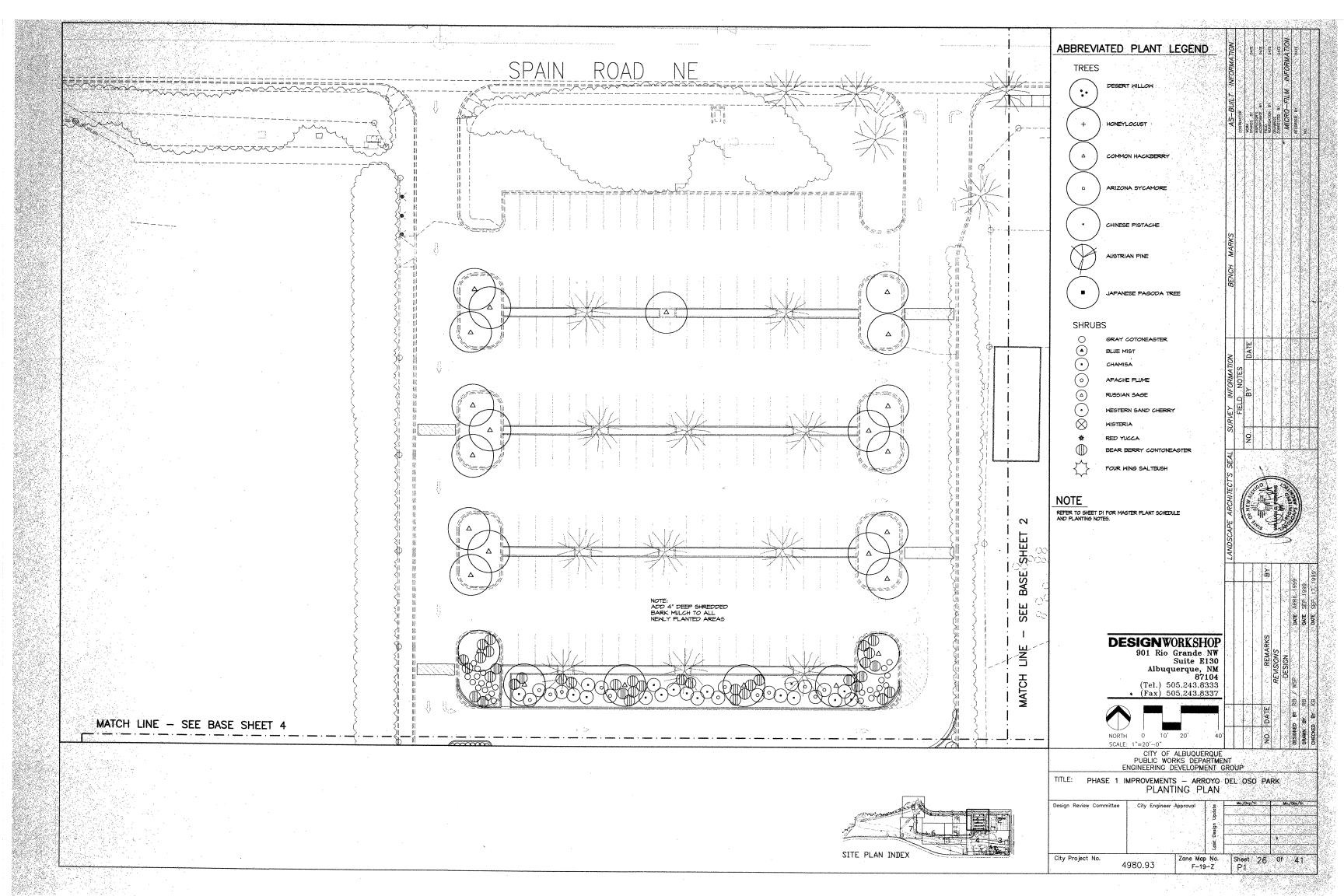


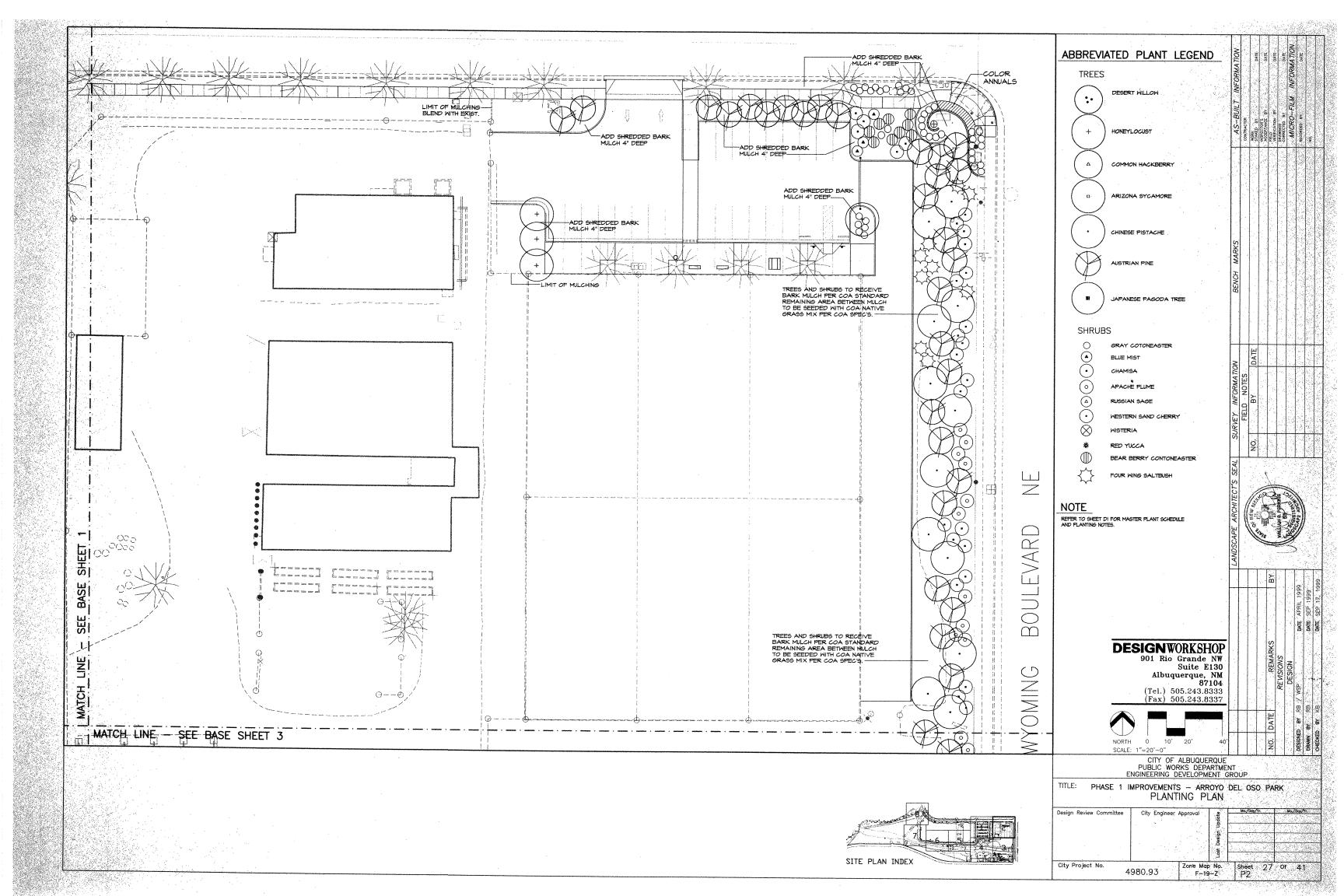


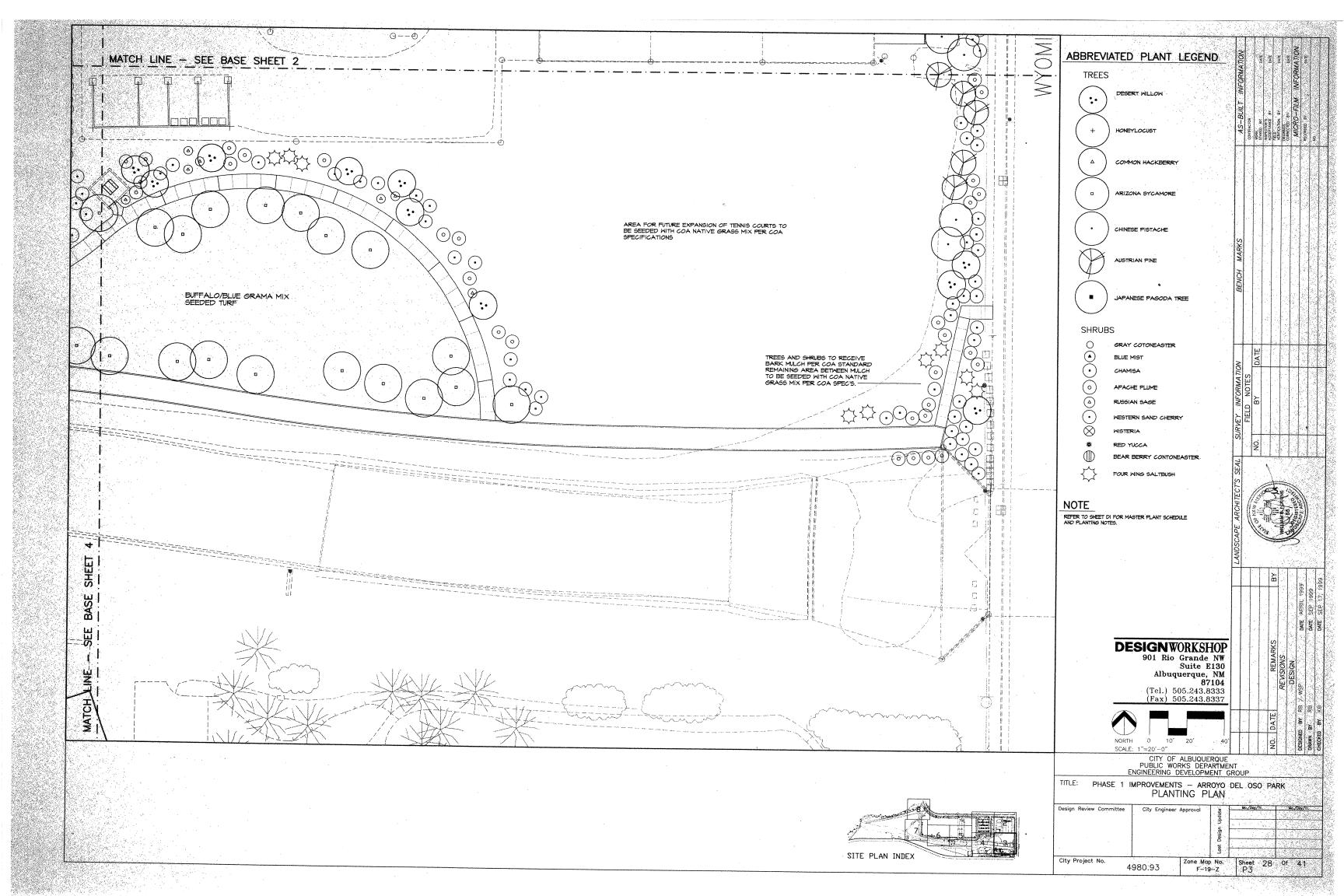


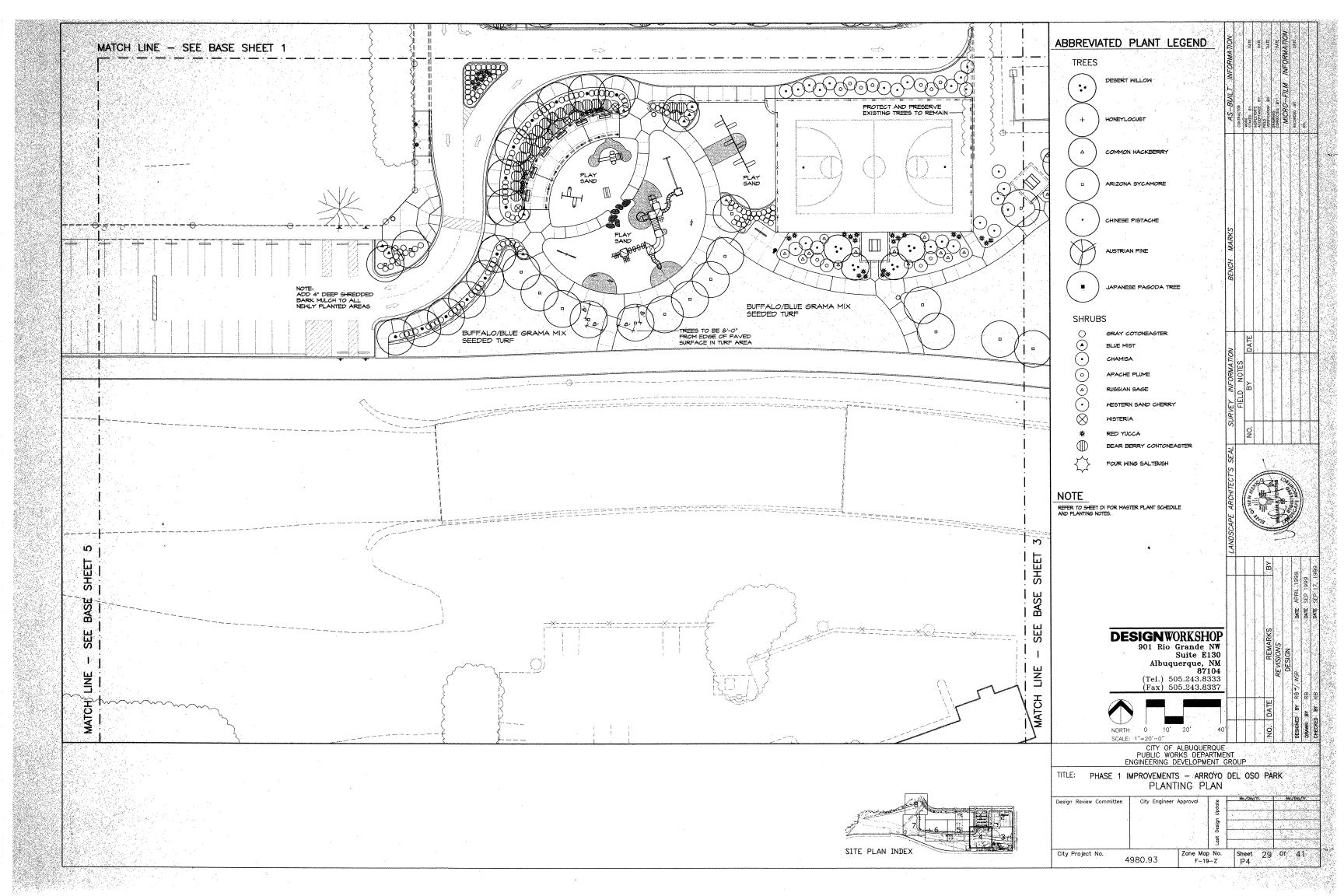


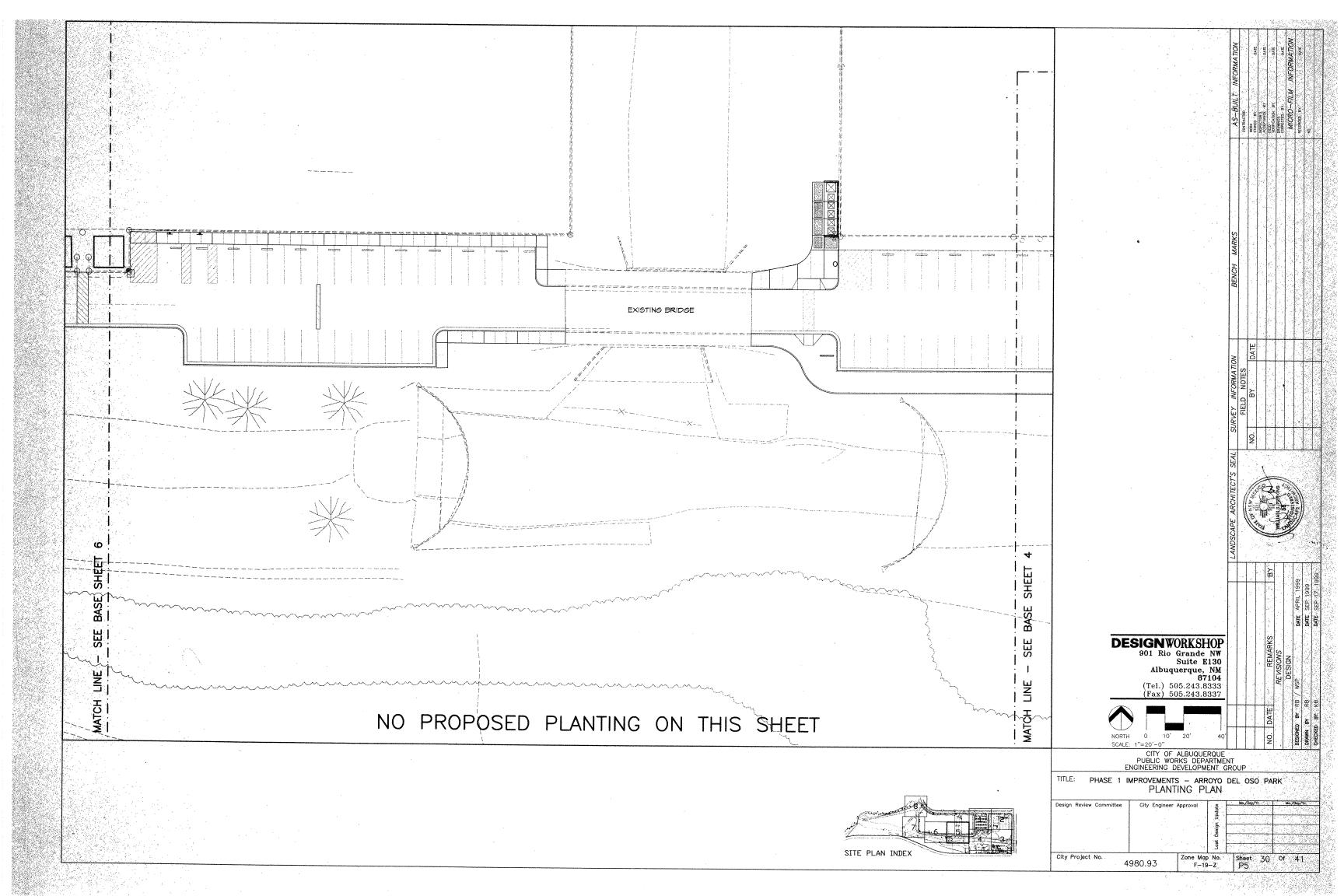


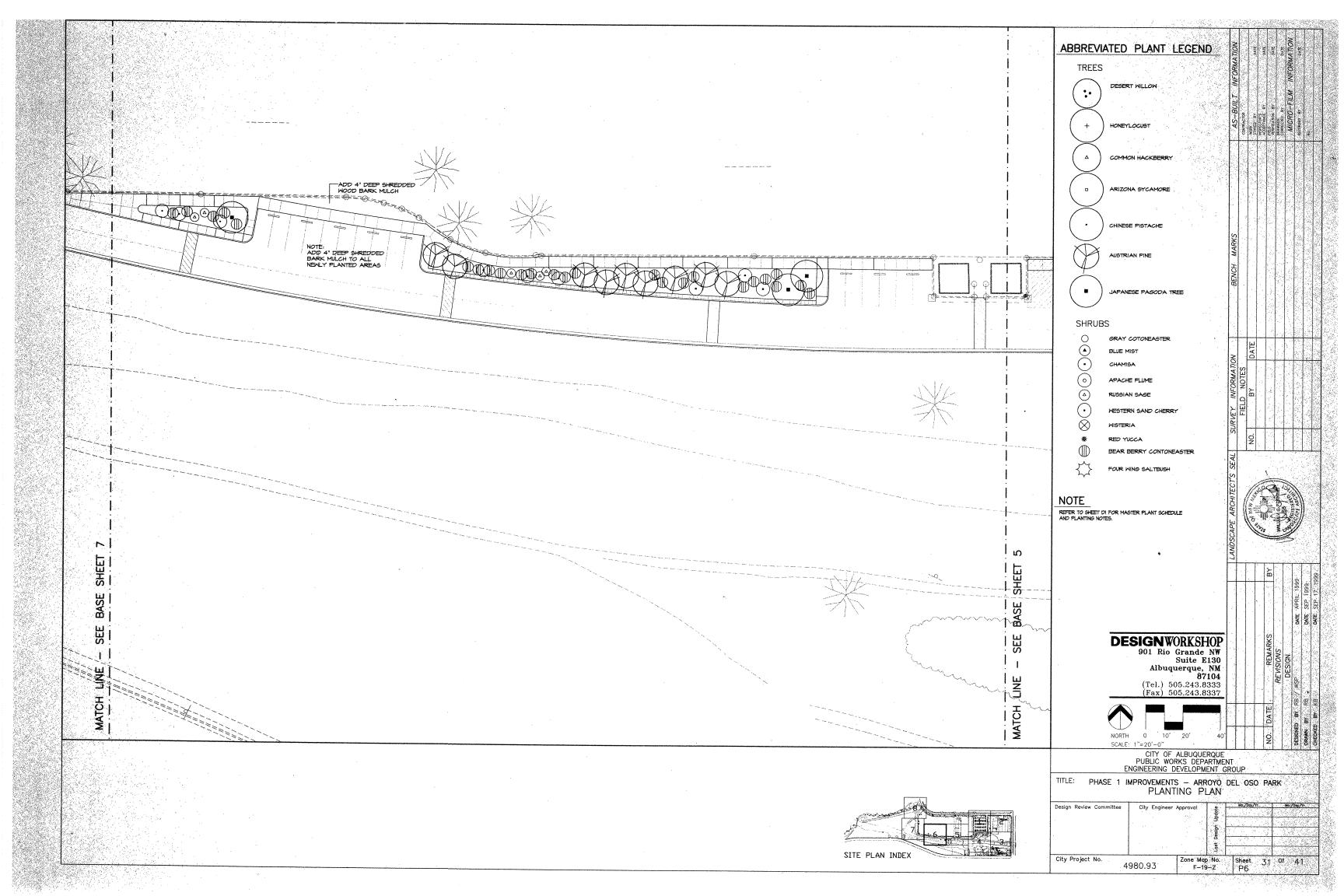


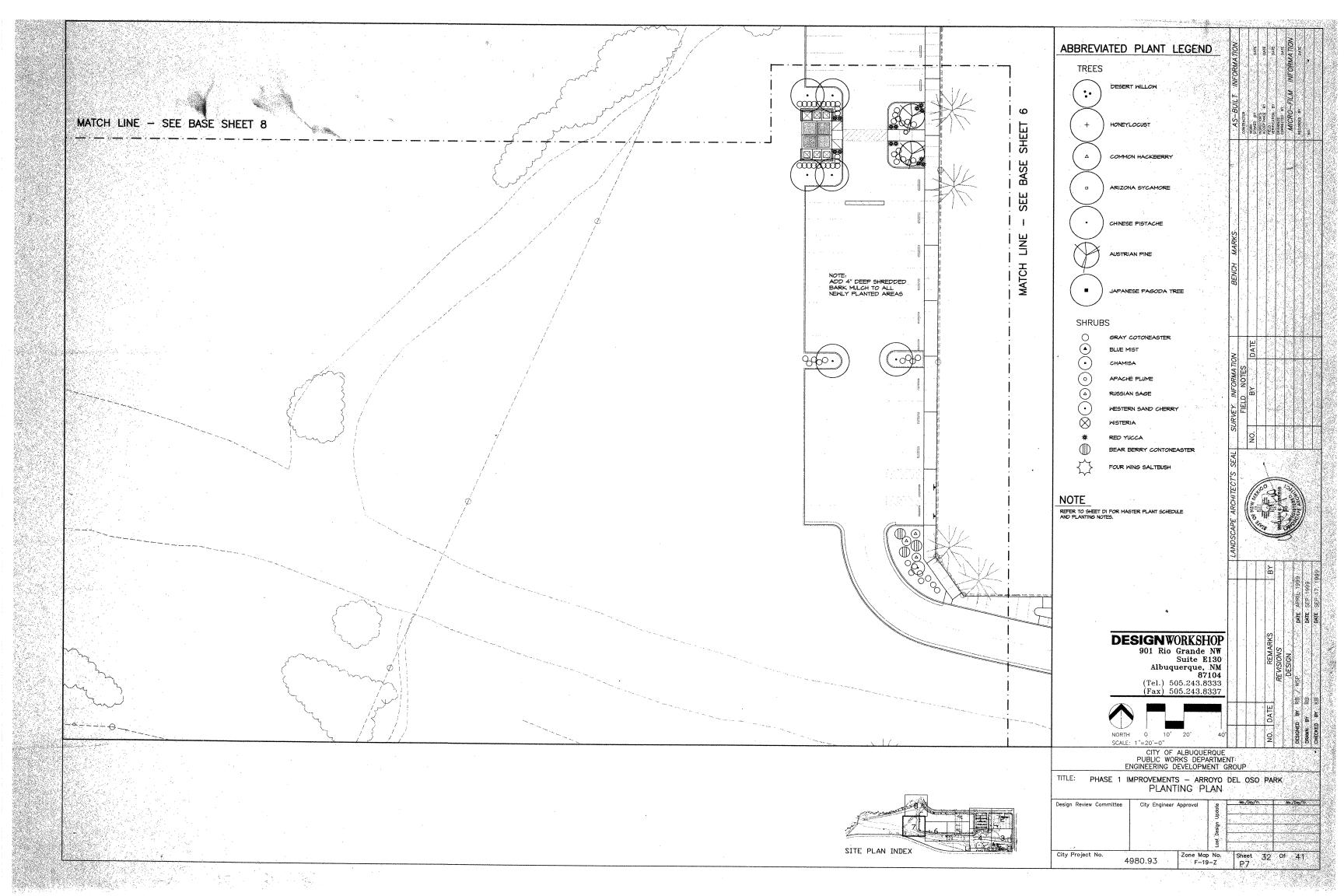


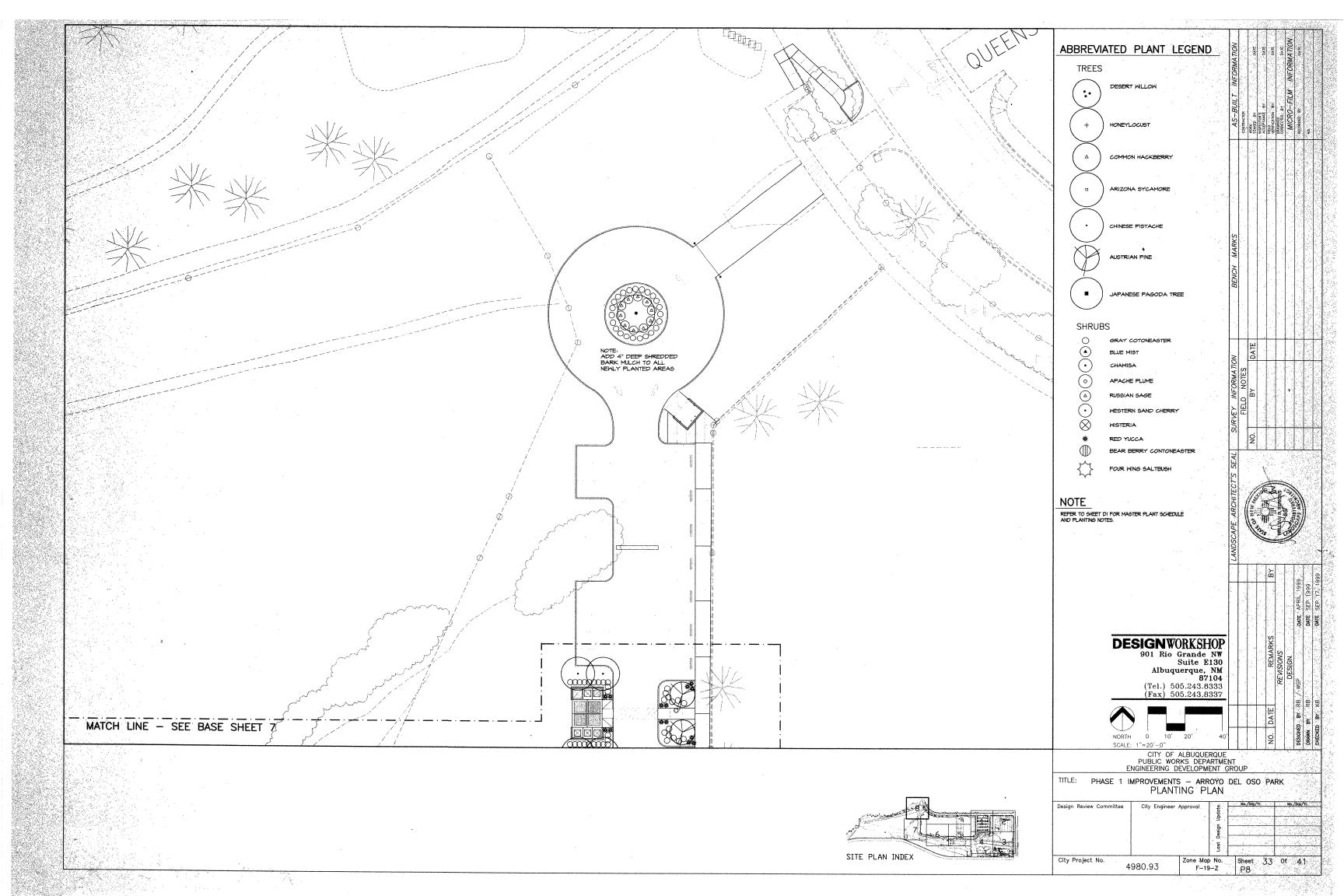












SYM	APPROX.	BOTANICAL NAME	COMMON NAME	SIZE	COND	EMITTER SCHEDULE PER PLANT	NOTES
	QUANTITY		·		7	PER PLANT	
$(\cdot, \cdot)$	TREES						
	14	CHILOPSIS LINEARIS	DESERT WILLOW	2" CALIPER	B4B	4 - I GAL. PER HOUR EA.	
+)	4	GLEDITSIA TRIACANTHOS SHADEMASTER'	HONEY LOCUST	2" CALIPER	24" BOX	4 - I GAL. PER HOUR EA. 6 - I GAL. PER HOUR (IN PLANTER)	
	28	CELTIS OCCIDENTALIS	COMMON HACKBERRY	2" CALIPER	24" Box	4 - I GAL. PER HOUR EA. 6 - I GAL. PER HOUR (IN PLANTER)	
0	33	PLATANUS MRIGHTII	ARIZONA SYCAMORE	2" CALIPER	24" BOX	4 - I GAL. PER HOUR EA. 6 - I GAL. PER HOUR (IN PLANTER)	STRONG CENTRAL LEADE SYMETRICAL FORM
$\overline{\cdot}$	3	SOPHORA JAPONICA	JAPANESE PAGODA TREE	2" CALIPER	24" BOX	4 - I GAL. PER HOUR EA. 6 - I GAL. PER HOUR (IN PLANTER)	
D	<b>45</b>	PINUS NIGRA	AUSTRIAN PINE	8'-9' TALL	B4B	4 - I GAL. PER HOUR EA.	FULL BRANCHING TO THE GROUND
•	34	PISTACHIA CHINENSIS	CHINESE PASTACHE	2" CALIPER	24" BOX	4 - I GAL. PER HOUR EA.	
	SHRUBS			!			
0	270	COTONEASTER BUXIFOLIUS	GRAY COTONEASTER	5 GAL	CONTAINER	2- I GAL. PER HOUR EA.	MINIMUM SPACING 3' O.C.
•	12	CARYOPTERIS CLANDONENSIS	BLUE MIST SPIREA	5 6AL	CONTAINER	2- I GAL. PER HOUR EA.	MINIMUM SPACING 5' O.C.
$\odot$	67	CHRYSOTHAMNUS NAUSEOUSUS	CHAMISA	5 <i>G</i> AL	CONTAINER	NO IRRIGATION	MINIMUM SPACING 5' O.C.
<u></u>	63	FALLUGIA PARADOXA	APACHE PLUME	5 GAL	CONTAINER	2- I GAL. PER HOUR EA.	MINIMUM SPACING 5' O.C.
<b>(a)</b>	25	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SASE	5 GAL	CONTAINER	2- I GAL. PER HOUR EA.	MINIMUM SPACING 5' O.C.
$\odot$	7	PRUNUS BESSEYI	WESTERN SAND CHERRY	5 GAL	CONTAINER	2- I GAL. PER HOUR EA.	MINIMUM SPACING 5' O.C.
$\otimes$	4	WISTERIA FLORIBUNDA	JAPANESE WISTERIA	5 GAL	CONTAINER	2- I GAL. PER HOUR EA.	. 100 - P. Le Callegar Commission (Long London Control Proposition Control Long Con
茶	55	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL	CONTAINER	2- I GAL. PER HOUR EA.	MINIMUM SPACING 3' O.C.
•	٩ı	COTONEASTER DAMMERI 'CORAL BEAUTY'	BEAR BERRY CONTONEASTER	5 GAL	CONTAINER	2- I GAL. PER HOUR EA.	MINIMUM SPACING 3' O.C.
<b>\}</b>	18	ATRIPLEX CANESCENS	FOUR WING SALTBUSH	5 GAL	CONTAINER	NO IRRIGATION	MINIMUM SPACING 5' O.C.
	1 TURF				1		

- TURF GRASS SEED AND INSTALLATION TO BE PER C.O.A. STD SPECIFICATIONS.
- AMENDED SOIL IS TO BE PLANTING SOIL AS SPECIFIED IN THE C.O.A. STD. SPECIFICATIONS MIXED WITH EXISTING SOIL FROM THE EXCAVATION OF THE PLANTING PIT. MIX PART PLANTING MIX TO 2 PARTS EXISTING SOIL FOR
- ALL DISTURBED AREAS ARE TO BE SEEDED WITH NATIVE GRASS AS SPECIFIED PER COA STANDARD SPECIFICATIONS SECTION 1012.4.1.2
- ALL SHRUB AND TREE PLANTING AREAS ARE TO RECEIVE SHREDDED WOOD BARK MULCH PLACED 4 INCHES DEEP ON THE SOIL SURFACE.

#### **PLANTING NOTES:**

- ALL PLANT MATERIAL SHALL CONFORM TO THE SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE WITH THE 'AMERICAN STANDARD FOR NURSERY STOCK', LATEST EDITION.
- ALL PLANTING SHALL BE IN ACCORDANCE WITH STANDARD AMERICAN NURSERYMEN PROCEDURES AND SPECIFICATIONS.
- ALL PLANT MATERIAL IS SUBJECT TO FINAL APPROVAL BY LANDSCAPE ARCHITECT OBTAIN APPROVAL FROM THE OWNER OR LANDSCAPE ARCHITECT BEFORE MAKING ANY SUBSTITUTIONS OR CHANGES.
- DRAWN PLANS TAKE PRECEDENCE OVER PLANT LIST PROVIDED AND BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES IF ANY DISCREPANCY OCCURS.
- LOCATION AND ORIENTATION OF ALL TREES MUST BE APPROVED BY THE LANDSCAPE ARCHITECT FRIOR TO INSTALLATION. CONTRACTOR TO STAKE TREE LOCATIONS FOR APPROVAL PRIOR TO ANY EXCAVATION FOR TREE HOLES.
- PLANTING SHALL BE DONE IN ACCORDANCE WITH THE SPECIFIC DETAIL FOR EACH SITUATION AS SHOWN IN THE PLANTING DETAILS. CONTRACTOR OR OWNER'S REPRESENTATIVE SHALL VERIFY THE CORRECT LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO INSTALLATION OF ANY PLANT MATERIAL OR IRRIGATION SYSTEMS.
- ALL EXISTING LANN AREAS TO REMAIN SHALL BE RENOVATED BY SIFTING IN COMPOST AND AERATING, FOLLONED BY OVERSEEDED OF LAWN AREAS.

  BACKFILL MIX FOR SHRUBS AND TREES: BACKFILL MIX BY VOLUME SHALL CONSIST OF LEART COMPOSTED COTTON BURRS TO 2 PARTS NATIVE SOIL. NATIVE SOIL IS TO BE CLEARED OF ALL STONE DEBRIS, OR OTHER DELETERIOUS MATERIAL. ALL STONES OVER I INCH DIAMETER SHALL BE REMOVED.

- IO ALL EXISTING PLANTING AREA SOIL TO BE AMENDED BY PLACING 4 INCHES OF SOIL AMENDMENT (YUM-YUM MIX OR APPROVED EQUAL) ON TOP OF THE PLANT BED AND FILLING IT IN TO A DEPTH OF 8-12 INCHES. AVOID TILLING WITHIN 3 FEET OF EXISTING TREES AND LARGE SHRUBS.
- SOIL PREPARATION FOR PERENNIAL BEDS SHALL CONSIST OF PLACING 4 INCHES OF SOIL AMENDMENT ON TOP OF THE PLANT BED AND TILLING IT IN TO A DEPTH OF 8 INCHES. MULCH AS SPECIFIED.
- 12 SOIL AMENDMENT SHALL CONSIST OF COMPOSTED COTTON BURRS THAT HAVE BEEN FREEZE DEFOLIATED. SOURCE: SOIL CONDITIONER BACK TO EARTH RESOURCES (214) 375-6716, OR APPROVED EQUIA.
- 13 MULCH FOR PERENNIALS BEDS: 1/2 INCH DIAMETER STONE MULCH, PLACED TO A 3 INCH DEPTH, EXCEPT AT PLANT STEMS, (REFER TO DETAIL). SUBMIT SAMPLE TO LANDSCAFE ARCHITECT OR OWNER'S REPRESENTATIVE FOR APPROVAL, PRIOR TO PURCHASE.
- 14 MILCH FOR ALL SHRUB BEDS AND TREE PITS: MULCH SHALL CONSIST OF FINEL SKADED (12-3/4 INCH) MOOD MULCH, INSTALLED TO A 4 INCH DEPTH. CREATE A 6 FOOT DIAMETER MOOD MULCH RING ARCUND ALL TREES.
- IS FERTILIZER, FERTILIZER SHALL BE GRO-PONER 1 GRAM PLANTING TABLETS, PROVIDE 6 TABLETS PER FIVE GALLON SHRIBS, 2 TABLETS PER 1 GALLON CONTAINERS AND 1 TABLET PER 4 INCH POT, 10 PER TREE OF 2 INCHES IN CALIPER OR LESS AND 24 PER TREE OF 1/2 INCHES IN CALIPER OR LARGER

### IRRIGATION SCHEDULE

SYM	TYPE	MANUFACTURER	MODEL	DESCRIPTION	NOTES
M	2.5" WATER METER				BY OTHERS
•	2" REDUCED PRESSURE TYPE HOT BOX ENCLOSURE CONCRETE SLAB	FEBCO	825Y	BACKFLOW PREVENTION ASSEMBLY	INSTALL PER COA DETAIL 2701A
$\oplus$	FLOWMETER, MASTER VALVE, BOX, COVER, AND EXTENSIONS	2" "MASTER METER" BROOKS	P28 18, 910, F	PROVIDE AND INSTALL 2" FLOWMETER AND ASSEMBLY	INSTALL PER COA DETAIL 2701 (DETAIL REVISED 1998)
40 <i>a</i>	6" POP-UP SPRAY HEADS	HUNTER	PS-06-(15)-A	SRS POP-UP SPRAY HEADS 15' RADIUS	INSTALL PER COA DETAIL 2709
	4" POP-UP ROTOR HEADS	HUNTER	1-20-AD5-2.5LA	I-20 LOW ANGLE POP-UP ROTOR IRRIGATION HEAD 30' RADIUS WITH S.S. RISER	INSTALL PER COA DETAIL 2709
DRIP VALVES	PLASTIC REMOTE CONTROL ZONE VALVE, BALL VALVE BOX WITH LOCKING COVER	RAINBIRD - RC VALVE SPEARS - BALL VALVE BROOKS - VALVE BOX	PEB-PRS-B SERIES	REMOTE CONTROL VALVE WITH FILTER AND PRESSURE REDUCER	INSTALL PER COA DETAIL 2709A RED WIRES FOR VALVES WHITE WIRES FOR COMMON GREEN BOX LID IN LAWN TAN BOX LID OUTSIDE LAWN
SPRAY VALVES	PLASTIC REMOTE CONTROL ZONE VALVE, BALL VALVE BOX WITH LOCKING COVER	RAINBIRD - RC VALVE SPEARS - BALL VALVE BROOKS - VALVE BOX	PEB-PRS-B SERIES	REMOTE CONTROL VALVE	INSTALL PER COA DETAIL 2703 RED WIRES FOR VALVES WHITE WIRES FOR COMMON GREEN BOX LID IN LAWN TAN BOX LID OUTSIDE LAWN
	MULTI-OUTLET EMITTER - SHRUBS	RAINBIRD	XBD-80	MULTI-OUTLET EMITTER IN BOX	INSTALL PER DETAIL I SHEET D2
	MULTI-OUTLET EMITTERS- TREES	RAINBIRD	XBD-80	MULTI-OUTLET EMITTER IN BOX	INSTALL PER DETAIL I SHEET D2
SEE INSET ON SHEET IS FOR LOCATION	COA SCORPIO SYSTEM	EXISTING		2 EXISTIN IRRIGATION CONTROLLERS WITH TEN FREE STATIONS EACH	
A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	SCHEDULE 40 PVC	LASCO OR EQUAL		LATERAL LINE	SIZE AS INDICATED ON PLAN
	SCHEDULE 40 PVC	LASCO OR EQUAL	:	MAIN LINE	SIZE AS INDICATED ON PLAN
DF	SCHEDULE 40 PVC	LASCO OR EQUAL	- Control of the Cont	3/4" SUPPLY LINE	
AND A SECURE OF THE PROPERTY O	SCHEDULE 200 PVC	LASCO OR EQUAL	:	SLEEVE	SIZE 2 TIMES LARGER THAN PIPE SIZE. ONE SLEEVE PER PIPE



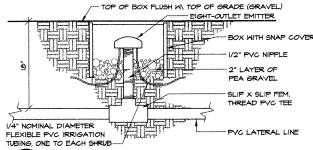
- VALVE SIZE

- Station no. and plant type (T)=TREES (S)=SHRUBS (G)=GRASS (P)=PERENNIALS

NOTE: CONTRACTOR IS TO PROVIDE A WATER AUDIT PER CITY OF ALBUQUERQUE ORDINANCE TO DEMONSTRATE THAT WATER USE BY THE IRRIGATION SYSTEM AS DESIGNED AND INSTALLED IS CONSISTENT WITH CITY WATER CONSERVATION REQUIREMENTS.

#### VALVE SCHEDULE

VALVE	VALVE	GALLONS PER	HEAD	PRECIP.	RUN TIME	INCHES/	PLANT	EXISTING CONTROLLE
NO.	SIZE (INCHES)	MINUTE	TYPE	RATE	MINUTES/DAY	MONTH	MATERIAL	WEST, EAST
EI	1	.5	DRIP EMITTERS				TREES	EAST
E2	1	3	DRIP EMITTERS				SHRUBS	EAST
E3	I	3.7	DRIP EMITTERS	T. Carlotte			SHRUBS	EAST
E4	1	2.7	DRIP EMITTERS				TREES	EAST
E5	1	-	DRIP EMITTERS		VIII. (19) 100 100 100 100 100 100 100 100 100 10		ANNUALS	EAST
E6	1	1.3	DRIP EMITTERS	]	and the second s		TREES	EAST
E7	1	2.1	DRIP EMITTERS	AND THE RESERVE OF THE PARTY OF			SHRUB5	EAST
E8	2	42	ROTOR	.62 IN/HR.	48		NATIVE TURFGRASS	EAST
Eq	2.5	59	ROTOR	.39 IN/HR.	51		NATIVE TURFGRASS	EAST
EIO	1.5	28	ROTOR	.76 IN/HR.	40		NATIVE TURFORASS	EAST
M	1	3.6	DRIP EMITTERS	-,-			SHRUBS	WEST
W2	1	1.3	DRIP EMITTERS		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		TREES	WEST
MB	1	6.4	DRIP EMITTERS		2010 - 1120 2017 12 200		SHRUBS	WEST
W4	†	li li	DRIP EMITTERS	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	anna aparanan aparaga araba arabana kinana Philippia kiniba kiniba kiniba kiniba kiniba kiniba kiniba kiniba k	The state of the s	TREES	WEST
W5	2 .	45	SPRAY	1.23 IN./HR.	24		NATIVE TURFGRASS	WEST
W6	15	24	SPRAY	1.18 IN/HR.	25	-	NATIVE TURFGRASS	WEST



RAINDIRD XERIBIRD XBD-80 8-OUTLET THREADED EMITTER ON RISER IN BOX INSTALL MITH:
RAINBIRD DT-025 1/4" VINYL DISTRIBUTION TUBING
RAINBIRD DBC-025 BUS CAP
NDS-100 BC-5, SAND COLORED VALVE BOX WITH SCREW IN LID RAINBIRD XERIBUG XB-20 EMITTERS FOR TREES, RAINBIRD XERIBUG XB-10 EMITTERS FOR SHRUBS (UNLESS NOTED OTHERWISE) ONE XBD-80 PER

6-8 SHRUBS RAINBIRD RYB-100-150 " WYE FILTER, 150 MESH

1 EIGHT-OUTLET DRIP EMITTER D2/

## **GENERAL IRRIGATION NOTES:**

- LOCATIONS OF IRRIGATION LINES, VALVES, HEADS, AND ALL OTHER RELATED IRRIGATION APPURTENANCES SHOWN ON THESE DRAWINGS ARE DIAGRAMMATIC ONLY. THE EXACT LOCATION OF THE ABOVE NEED TO BE APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT.
- 2. STAKE ALL UTILITIES, INCLUDING SEMER AND DRAINAGE PRIOR TO ANY EXCAVATION FOR IRRIGATION.
- 3. SIMULTANEOUS FIELD STAKING OF PLANT MATERIAL AND IRRIGATION LAYOUT IS REQUIRED FOR LANDSCAPE ARCHITECTS APPROVAL BEFORE PROCEEDING WITH THE IRRIGATION WORK.
- . MAINLINE IS TO BE BURIED A MINIMUM OF 42". THE LATERAL LINES ARE TO BE BURIED A MINIMUM OF 18".
- 5. ALL IRRIGATION PIPE UNDER PAYEMENT TO BE PLACED IN A SLEEVE TWO SIZES LARGER THAN THE PIPE BEING SLEEVED, OR THE COMBINED DIAMETERS OF THE PIPES BEING SLEEVED, COORDINATE WITH CONCRETE MORK TO PLACE SLEEVES UNDER PAYEMENT.
- RADIUS ADJUSTMENTS SHALL BE MADE ON ALL HEADS FOR OPTIMM COVERAGE AND MINIMIZE OVERSPRAY ONTO PAVEMENT SURFACES OR WALLS.
- MALLS.

  IRRIGATION SYSTEM IS DESIGNED TO OPERATE AT 25-35 PSI AT
  THE HEADS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING
  THAT SUFFICIENT PRESSURE IS AVAILABLE AT EHE SOURCE FOR
  THE SYSTEM TO OPERATE AS DESIGNED AT THE SPECIFIED PRESSURE

PIPE 9/ZING CHART

USE THE FOLLOWING CHART TO SIZE SCHEDULE
40 PVC LATERAL PIPES. SIZE TO BE BASED
ON THE MAXIMUM FLOW THROUGH THE SECTION
OF PIPE.

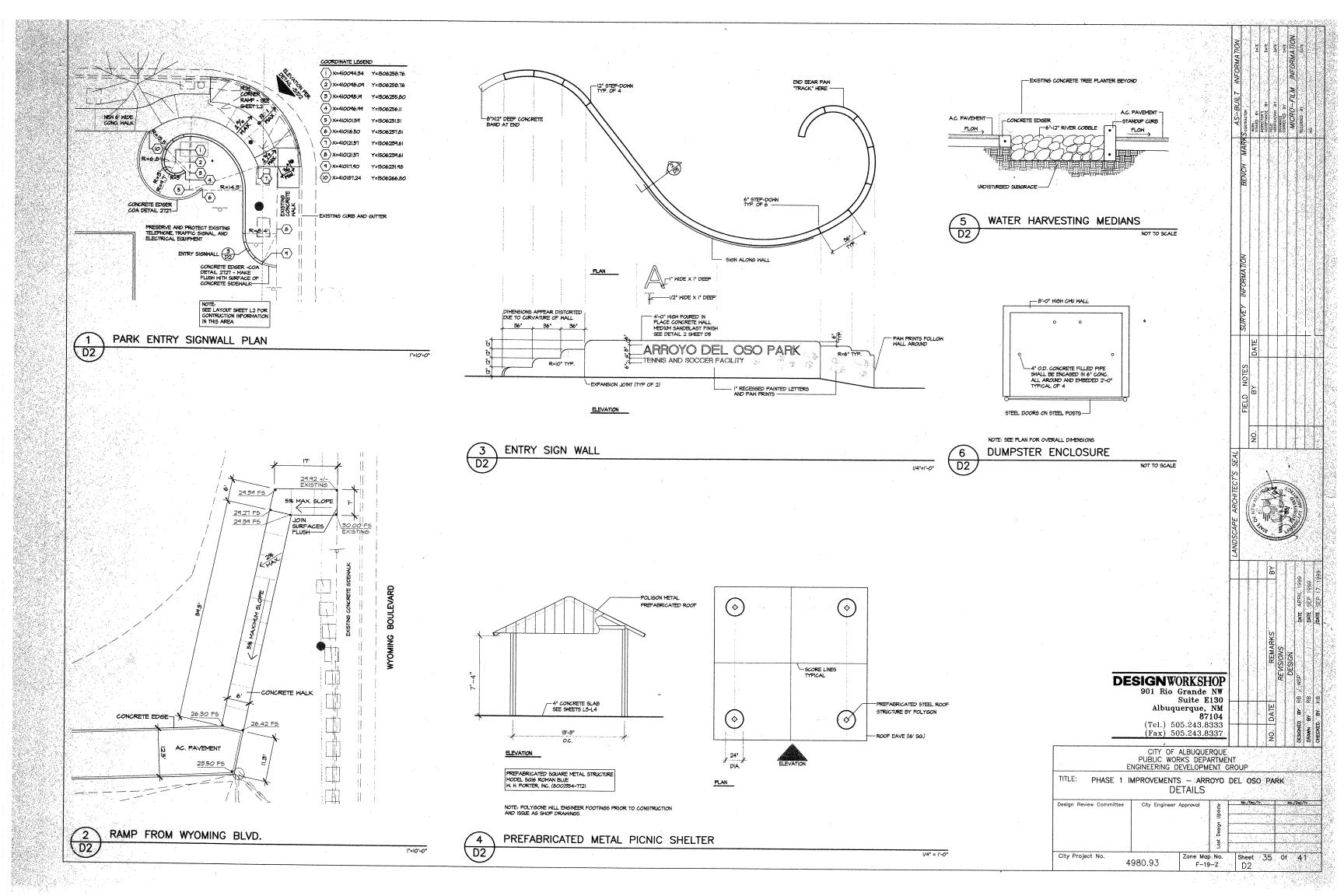
PIPE SIZE FLOW RATE RANGE O to 8 GPM 8 to 12 GPM 13 to 21 GPM 22 to 30 GPM 31 to 50 GPM 51 to 70 GPM 1.25" 1.5" 2" 2.5" MINIMUM PIPE SIZE IS .75"

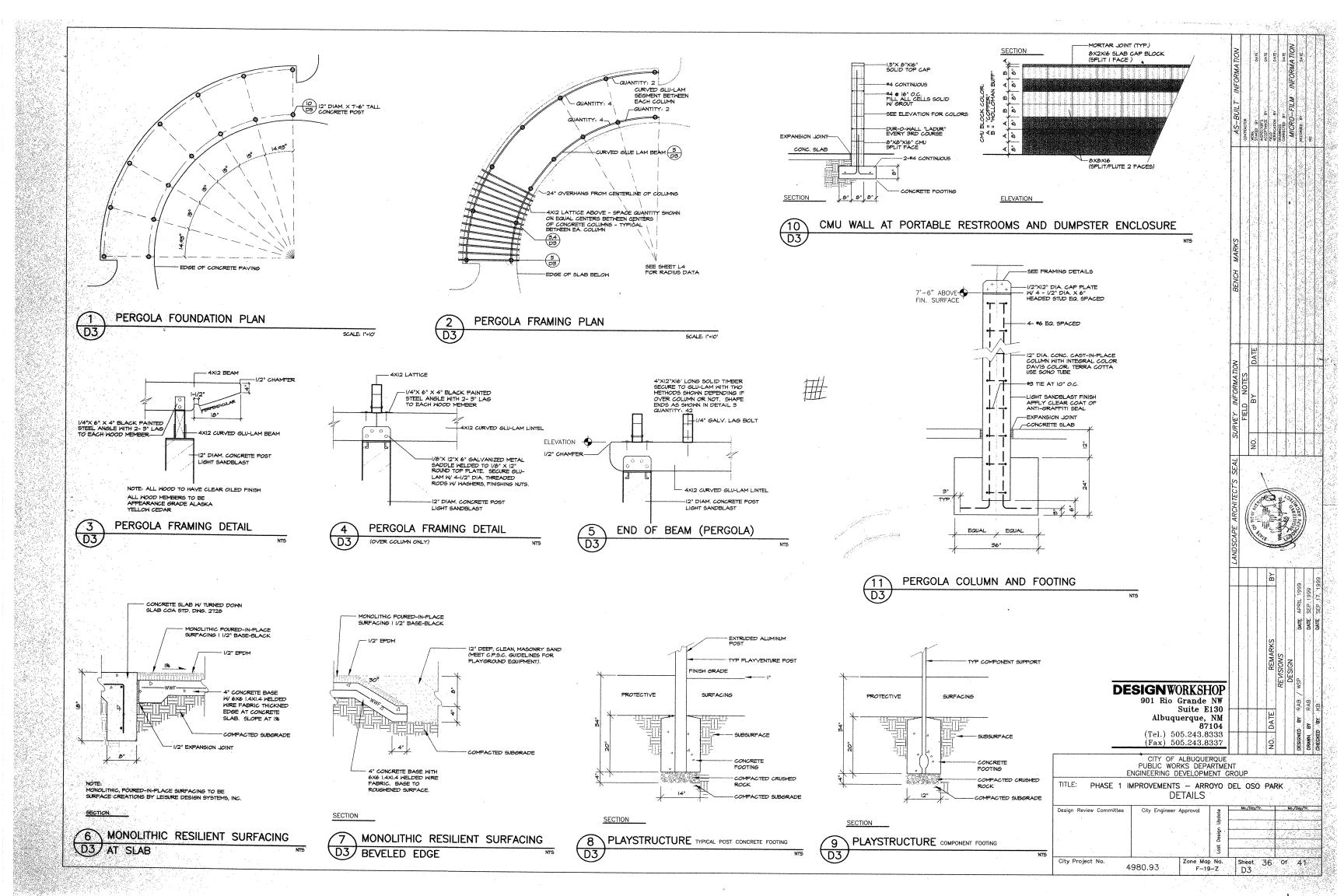
### **DESIGNWORKSHOP** 901 Rio Grande NW Suite E130 Albuquerque, NM 87104 (Tel.) 505 243 8333 (Fax) 505.243.8337

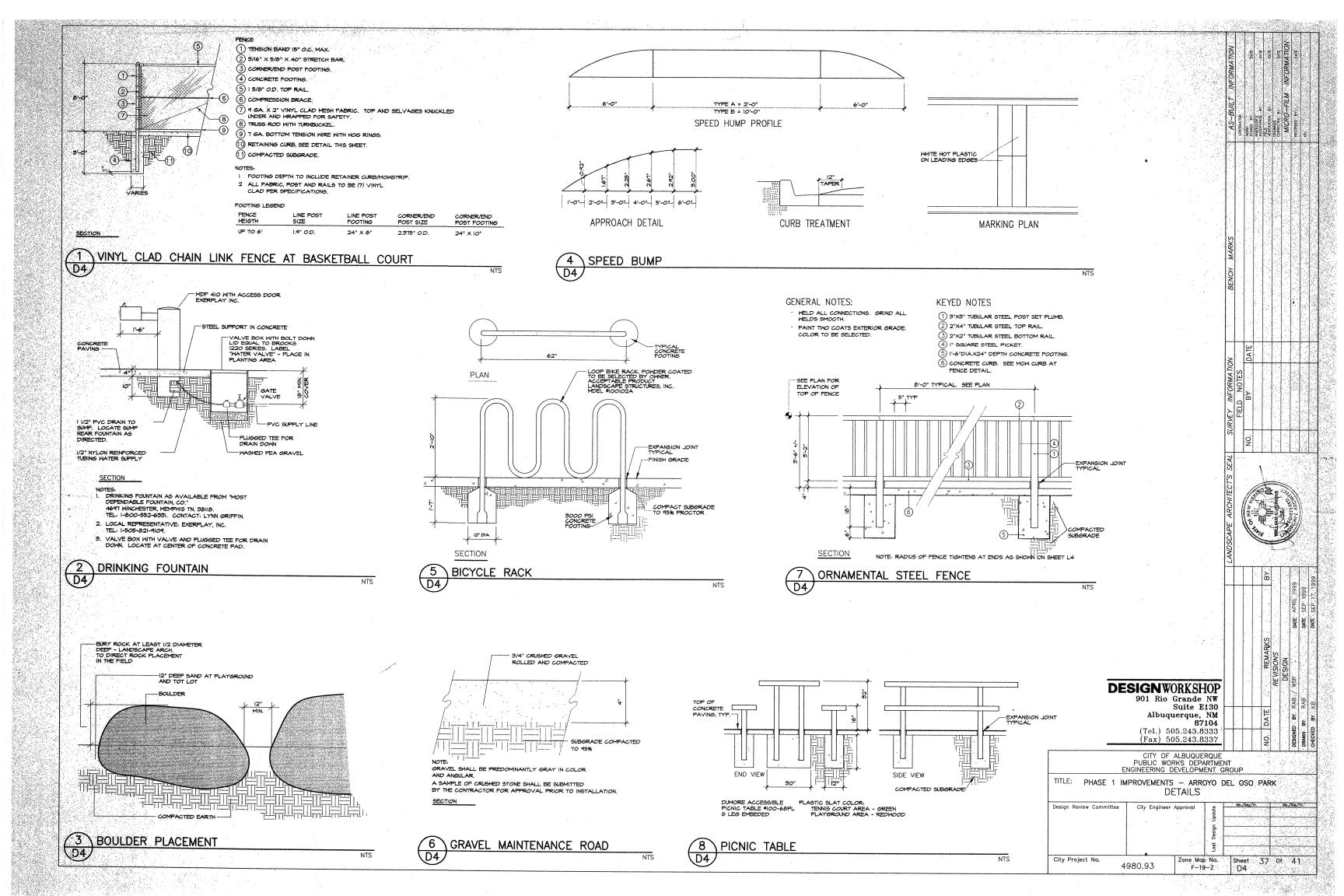
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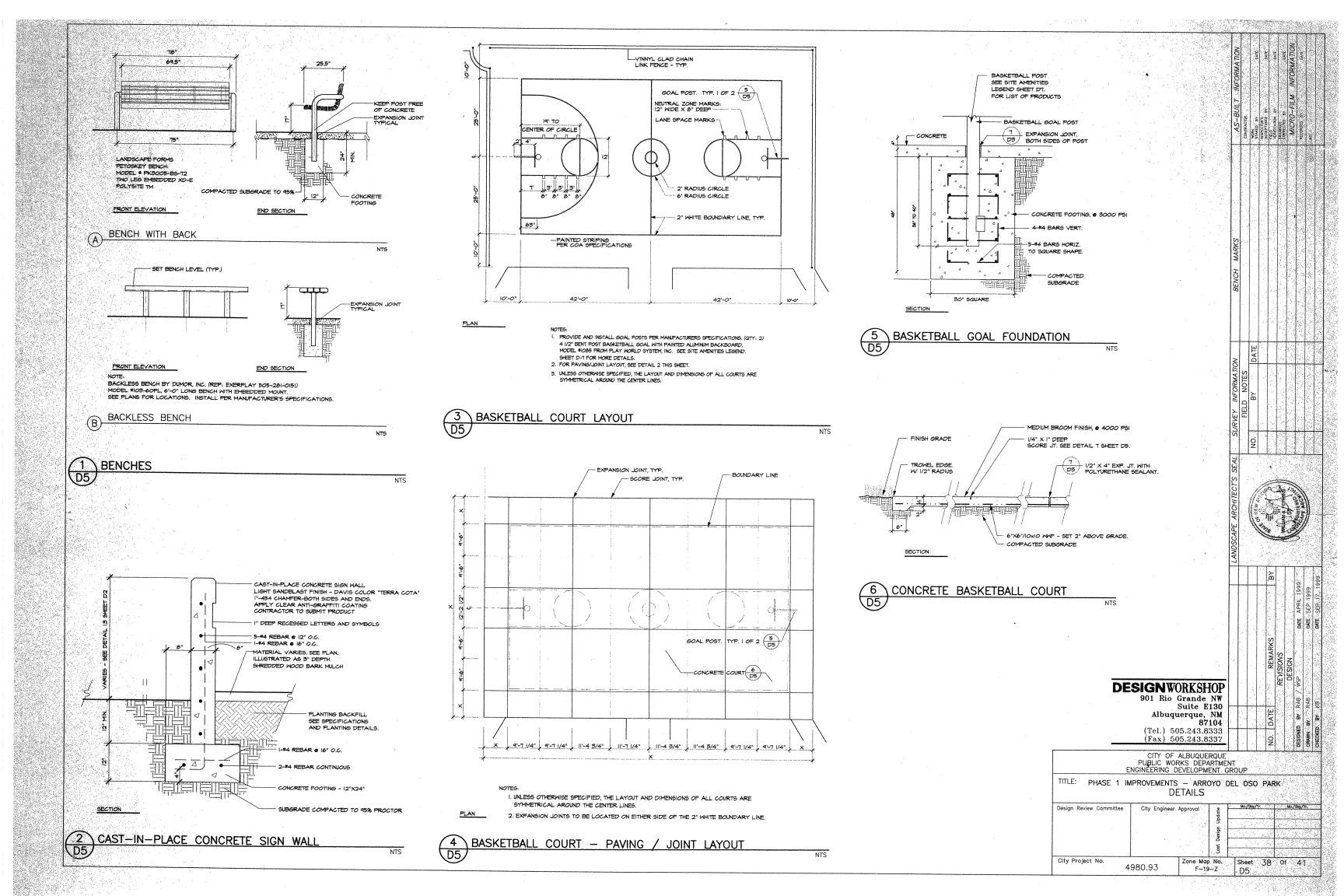
	PUBLIC	WORKS DEPA	RTMENT		
	1 IMPROVEME & PLANTIN			DETAILS	s, notes
esign Review Comn	nittee City Engi	neer Approval	Last Design Update	Mo./Doy/Yr.	Mo./Day/Yr.
city Project No.	4980.93	Zone Map F-19		Sheet 34 D1	of 41

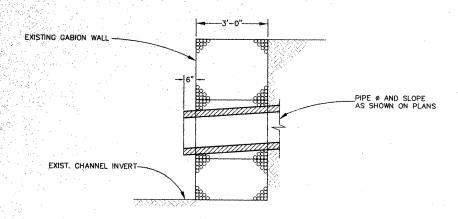
CITY OF ALBUQUEROUS





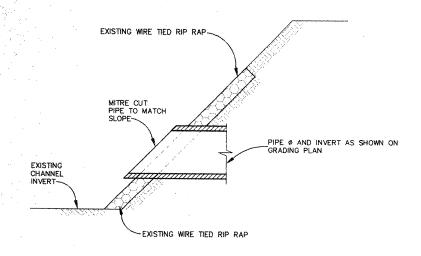




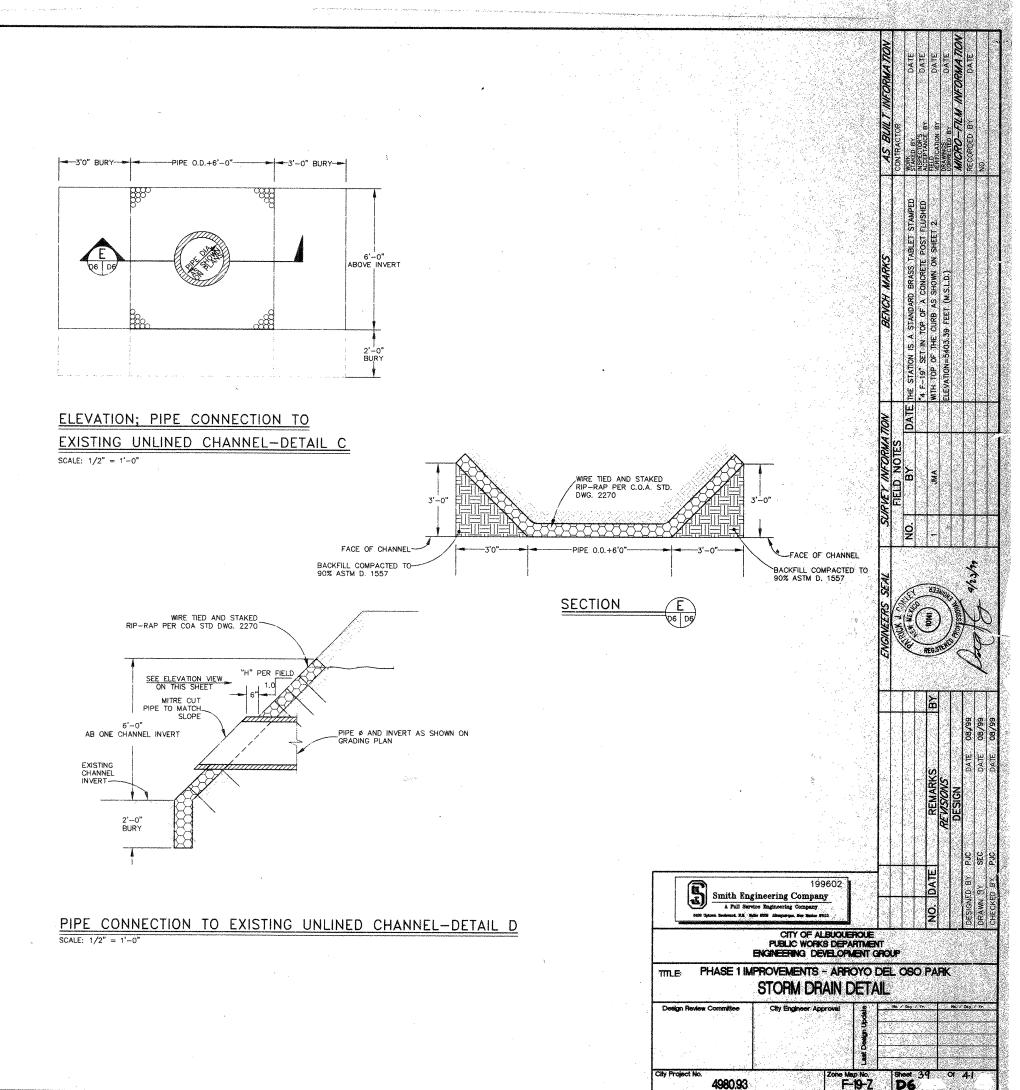


## TYPICAL PIPE PENETRATION DETAIL FOR EXISTING GABION WALL-DETAIL A

SCALE: 1/2" = 1'-0"



PIPE CONNECTION TO EXISTING LINED CHANNEL-DETAIL B
SCALE: 1/2" = 1'-0"



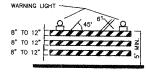
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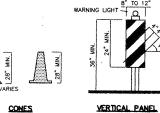
## CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

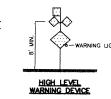
- CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
- 2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
- 3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
- 4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- 5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
- 6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.

  IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST FOITION
- 7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR
- 8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
- 9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
- 10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
- 11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS A 24HOUR PER DAY BASIS UNTIL COMPLETED.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
- EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE
- 15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- 17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
- 18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCH, LATEST EDITION.
- 19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL
- 20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION

- 21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- 22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING 1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER
- 23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WO WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED
- 24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.
- $25.\ \ TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE GONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.$
- 26. ADVANCE WARNING SIGNS SHALL BE  $36"\times36"$  MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGTH AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D. 3
- 27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY. 4







#### ZZZZ WORK AREA BARRICADE - TYPE I, TYPE II, OR BARREL BARRICADE - TYPE III

WARNING SIGN

SPEED

30

35

105

150

205

500

550

115

165 .

270 295 320

550

VERTICAL PANEL

DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET FLAGMAN POSITION

SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET

**LEGEND** 

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENTS

125

180

600

225 245 8 35

MINIMUM MAXIMUM DEVICE NUMBER SPACING IN FEET

TAPER

20

25

30

40

50

13 55

10 X SPEED LIMIT 10 X SPEED LIMIT

5

6

9

13

ALONG AFTER

TAPER

20

25

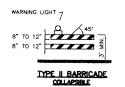
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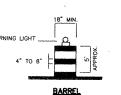
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TAPER LENGTH - SEE CHART BELOW

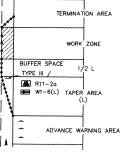




TO 12



# BUFFER SPACE R11-2a



45 450 495 540 13 45

605 660

	NDED SIGN SPA	
	E WARNING SI	
SPEED MILES		TANCE IN FEET
PER HOUR	BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT '
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40~45	10 X SPEED LIMIT	10 X SPEED LIMIT

JAPER CRITERI	Δ
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER: MERGING TAPER SHIFTING TAPER SHOULDER TAPER TWO-WAY TRAFFIC TAPER	L MINIMUM 1/2 L MINIMUM 1/2 L MINIMUM 100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

#### TAPER LENGTH COMPUTATION

40 MPH OR LESS	L	=	<u>WS</u>
45 MPH OR GREATER	L	=	W

S = POSTED SPEED OR OFF-PEAK

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

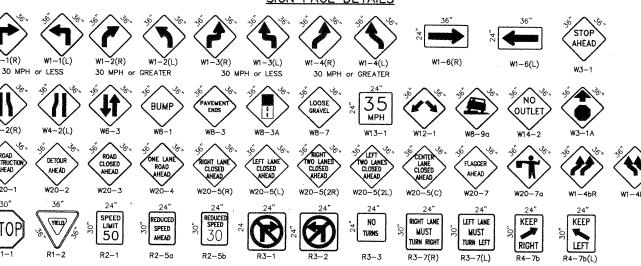
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL

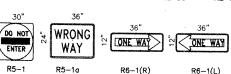
= TAPER LENGTH W = WIDTH OF OFFSET IN FEET

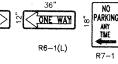
PROJECT

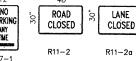
∞ **₹DETOUR**□ END CONSTRUCTION M4-10(R) M4-10(L)

## SIGN FACE DETAILS





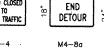




ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.



60"







DETOUR



SPECIAL

