AUGUST 2009

INDEX OF DRAWINGS

DEMOLITION PLAN-OAK TO CEDAR

PAVING DETAILS & SECTIONS

WATER DETAILS & SHUTOFF PLAN

DEMOLITION PLAN-CEDAR TO SPRUCE

CONSTRUCTION PLAN-OAK TO MULBERRY

HANDICAP RAMP AND DRIVEPAD DETAILS

STRIPING & SIGNAGE PLAN-OAK TO CEDAR

STRIPING & SIGNAGE PLAN-CEDAR TO SYCAMORE

STRIPING & SIGNAGE PLAN-ASH TO UNIVERSITY-& DETAILS

STRIPING & SIGNAGE PLAN-SYCAMORE TO ASH

CONSTRUCTION PLAN-MULBERRY TO CEDAR

CONSTRUCTION PLAN-CEDAR TO SPRUCE (S.)

CONSTRUCTION PLAN-SPRUCE (S.) TO SPRUCE (N.)

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Asa Nilsson-Weber of the firm of Isaacson & Arfman, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the water, sanitary sewer, storm drain and paving infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by Lenore R. Armijo of the firm Adam's Land & Construction Surveys, NMPS number 15511.



TITLE

COVER SHEET

IRRIGATION PLAN

IRRIGATION PLAN

PLANTING PLAN

PLANTING PLAN

IRRIGATION DETAILS

NMPE No. 17631

12-08-10



SUMMARY OF WORK & TYPICAL STREET SECTIONS

CITY OF ALBUQUERQUE

MARTIN LUTHER KING, JR. AVE.

STREETSCAPE IMPROVEMENTS



SHEET NO.

EACH WORK ORDER AND SHALL CONTINUE FOR TWO YEARS. WARRANTY ON IRRIGATION SYSTEM SHALL INCLUDE REPLACEMENT OF DEFECTIVE MATERIALS AND/OR WORKMANSHIP, REPAIR OF DAMAGE DUE TO LINE BREAKS CAUSED BY DEFECTIVE MATERIAL AND/OR WORKMANSHIP, SEASONAL PROGRAMMING OF THE CONTROLLER, ADJUSTMENT OF HEADS, REPAIR OF ANY SETTLEMENT OF TRENCHES, AND GENERAL MONITORING AND ADJUSTMENT OF THE SYSTEM AS REQUIRED TO INSURE HEALTH OF THE PLANTS. CONTRACTOR SHALL COMPLETE REPAIR OF DEFECTIVE MATERIAL WITHIN 24 HOURS OF THE SYSTEM FAILURE AND SHALL COMPLETE REPAIR OF DAMAGES DUE TO LINE BREAKS WITHIN 48 HOURS OF THE LINE BREAK, WARRANTY SHALL INCLUDE ANNUAL TESTING OF THE BACKFLOW PREVENTER. WARRANTY ON PLANTS SHALL INCLUDE WATERING, WEEDING, CULTIVATING. REMOVAL AND REPLACEMENT OF DEAD MATERIAL, REMOVAL OF DEBRIS (INCLUDING REMOVAL OF

GRAVEL MULCH THAT HAS BEEN DISPLACED FROM THE LANDSCAPE AREAS), RESETTING TREES TO AN UPRIGHT POSITION, RESTORATION OF EARTH BASINS. RESTORATION OF DISTURBED MULCHED AREAS AND SUCH OTHER OPERATIONS AS MAY BE NECESSARY FOR THE HEALTH OF THE PLANTED STOCK AND THE GENERAL APPEARANCE OF THE PROJECT AREA. WEEDING, REMOVAL OF DEBRIS (INCLUDING DISPLACED GRAVEL MULCH), REMOVAL OF DEAD PLANTS, RESETTING TREES. RESTORATION OF EARTH BASINS, RESTORATION OF DISTURBED MULCHED AREAS. AND SUCH OTHER OPERATIONS NECESSARY FOR THE HEALTH OF THE PLANTS AND THE GENERAL APPEARANCE OF THE PROJECT AREA SHALL BE PERFORMED ON A WEEKLY

EXTENDED WARRANTY OF LANDSCAPE

CONTRACTOR SHALL PROVIDE A TWO-YEAR WARRANTY ON THE PROJECT.

WARRANTY SHALL BEGIN UPON FINAL ACCEPTANCE OF THE CONSTRUCTION OF

WARRANTY SHALL INCLUDE REPAIR OR REPLACEMENT OF IRRIGATION, PLANTS, AND/OR MULCH DAMAGED BY TRESPASS, EROSION (INCLUDING WATERING), WEATHER DISEASE AND THE LIKE. WARRANTY SHALL NOT INCLUDE REPAIR OR RÉPLACEMENT OF IRRIGATION MATERIALS OR PLANTS THAT ARE DAMAGED AS A RESULT OF VANDALISM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF WATER AND ELECTRICITY DURING CONSTRUCTION AND DURING THE TWO YEAR WARRANTY.

DEAD, DAMAGED OR UNHEALTHY PLANTS SHALL BE REPLACED MONTHLY. CONTRACTOR SHALL REMOVE A DEAD OR DYING PLANT WITHIN ONE WEEK OF THE DATE IT IS NOTED TO BE DEAD OR DYING. PLANT SHALL BE REPLACED WITHIN THREE WEEKS OF REMOVAL.

PAYMENT FOR EXTENDED WARRANTY SERVICES SHALL BE BASED ON ACTUAL PERFORMANCE. FAILURE TO PERFORM APPROPRIATE EXTENDED WARRANTY SERVICES SHALL RESULT IN EXTENSION OF THE EXTENDED WARRANTY PERIOD.

COA SPEC. SECTION 1001.5.24, SYSTEM MAINTENANCE AND WARRANTY, SHALL BE

COA SPEC. SECTION 1005.6, MAINTENANCE AND PROTECTION: FIRST PARAGRAPH, SHALL BE DELETED IN ITS ENTIRETY.

COA SPEC. SECTION 1005.6.2, WATER, SHALL BE DELETED IN ITS ENTIRETY EXTENEDED WARRANTY IS FOR LANDSCAPE IMPROVEMENTS ONLY. ROADWORK, UTILITY WORK, CURB AND GUTTER, SIDEWALKS, DRIVES, AND RELATED 'HARD CONSTRUCTION' ITEMS ARE NOT INCLUDED IN THE EXTENDED WARRANTY.

PROJECT LIMITS

ZONE MAP K-15

GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986 EDITION AS AMENDED WITH UPDATE NO. 7. INCLUDING AMENDMENT 1.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE & VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM DELAY.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, NM ONE CALL SYSTEMS, INC. @ 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER WHICH WILL MINIMIZE INTERFERENCE WITH LOCAL TRAFFIC. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY, AND TO PROTECT THEM FROM DAMAGE. INJURY. OR LOSS. CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS, THROUGHOUT THE DURATION OF THE PROJECT. CONTRACTOR SHALL ADHERE TO SECTION 19 OF THE GENERAL CONDITIONS OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. 1986, AS AMENDED WITH UPDATE NO. 7.
- THE CONTRACTOR AGREES THAT HE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE 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 HARMLESS THE OWNER & ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR
- 7. <u>SUPPLEMENTAL SPECIFICATION</u> TRAFFIC CONTROL: <u>SEVEN (7)</u> WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY CONSTRUCTION COORDINATION ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE SPECIFICATIONS. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY CONTRACTOR TO LOCATION AS EXISTING OR AS SHOWN IN THIS
- 8. WHEN ABUTTING EXISTING PAVEMENT TO NEW, SAWCUT EXISTING PAVEMENT TO A STRAIGHT EDGE AND AT A RIGHT ANGLE, OR AS APPROVED BY THE FIELD ENGINEER. REMOVAL OF BROKEN OR CRACKED PAVEMENT WILL ALSO BE REQUIRED.
- 9. EXISTING CURB AND GUTTER NOT TO BE REMOVED UNDER THE CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE PER COA STD DWG #2415A.
- 10. <u>SUPPLEMENTAL SPECIFICATION</u>: ALL FINAL BACKFILL FOR RENCHES SHALL BE COMPACTED TO A MINIMUM <u>95%</u> MAXIMUM DENSITY PER ASTM D-1557.
- 11. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR PRIVATE ROADWAY EASEMENTS SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET OR INTO ANY PUBLIC DRAINAGE FACILITY.
- 12. PROPOSED WATERLINE MATERIALS SHALL BE EITHER PVC PIPE MEETING AWWA C900 DR-18 REQUIREMENTS (6"-12") OR DUCTILE IRON PIPE, THICKNESS CLASS 50 (6"-16").
- 13. ALL FITTINGS ON WATERLINES SHALL HAVE RESTRAINED JOINTS AS NOTED ON THE PLANS.
- 14. THE CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO ENSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS 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 THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS UPDATE #7.

- 15. PNM WILL PROVIDE AT NO COST TO THE CITY OR THE CONTRACTOR THE REQUIRED PERSONNEL FOR INSPECTION OR OBSERVATION DEEMED NECESSARY BY PNM WHILE THE CONTRACTOR IS EXPOSING PNM'S CABLES. HOWEVER, THE CONTRACTOR SHALL BE CHARGED THE TOTAL COST ASSOCIATED WITH REPAIRS TO ANY DAMAGED CABLES OR FOR ANY COST ASSOCIATED WITH SUPPORTING OR RELOCATING THE POLES AND CABLES DURING CONSTRUCTION
- 16. WARNING--EXISTING UTILITY LINE LOCATIONS ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION OF ANY SUCH EXISTING LINES IS BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANY. THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES. RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES, IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.
- 17. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650
- 18. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFIT FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- 19. THE CONTRACTOR WILL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS, INCLUDING, BUT NOT LIMITED TO HAZARDOUS WASTE AT DISPOSAL SITES APPROVED BY GOVERNMENTAL AGENCIES REGULATING THE DISPOSAL OF SUCH MATERIALS.
- 20. TACK COAT FOR SURFACE COURSE REQUIREMENTS WILL BE DETERMINED BY THE ENGINEER.
- 21. PERMANENT PAVEMENT STRIPING AND MARKINGS WILL BE PLACED BY THE CONTRACTOR. THE ROAD SHALL NOT BE OPENED TO THE TRAFFIC UNTIL IT IS STRIPED. ALL STRIPING, PAVEMENT MARKINGS INCLUDING CROSSWALKS, ARROWS AND LINE MARKINGS ARE TO BE CONSTRUCTED OF PREFORMED THERMO-PLASTIC IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- 22. ELECTRONIC MARKER SPHERES (EMS) WILL BE PLACED ACCORDING TO SECTION 170 OF THE CITY OF ALBUQUERQUE SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7.
- 23. ALL WATER VALVE BOXES AND MANHOLES IN THE STREET CONSTRUCTION ARE TO BE ADJUSTED TO FINISH GRADE AND WILL BE MEASURED AND PAID PER EACH.

- 24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE EXECUTION OF THE WATER VALVE SHUT-OFF PLAN WITH ABCWUA. ALL WATER VALVES TO BE SHUT-OFF WILL BE OPERATED BY ABCWUA. CONTRACTOR SHALL NOTIFY ABCWUA AT 857-8200 TWENTY FOUR (24) HOURS PRIOR TO WATERLINE CONSTRUCTION AND SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK WHICH MAY AFFECT EXISTING PUBLIC WATER FACILITIES IN COMPLIANCE WITH SECTION 18 OF THE STANDARD SPECIFICATIONS.
- 25. CONTRACTOR SHALL SUPPORT ALL EXISTING, UNDERGROUND UTILITY LINES WHICH BECOME EXPOSED DURING CONSTRUCTION. PAYMENT FOR SUPPORTING WORK SHALL BE INCIDENTAL TO WATERLINE AND/OR SEWER LINE COSTS.
- 26. CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF RECORD DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- 27. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNING UNTIL PROJECT HAS BEEN ACCEPTED BY THE CITY.
- 28. THE CONTRACTOR SHALL NOTIFY THE ALBUQUERQUE TRAFFIC ENGINEERING DIVISION THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK THAT REMOVES, RÈLOCATES, OR REINSTALLS ANY EXISTING REGULATORY SIGNS.
- 29. RCP PIPE JOINTS SHALL BE INSTALLED SO THAT THE JUINT GAP AT THE HOME POSITION SHALL CONFORM TO THE APPROVED MANUFACTURER'S RECOMMENDATIONS. MANUFACTURER'S RECOMMENDED JOINT GAP TOLERANCES FOR EACH PIPE SIZE AND TYPE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF PIPE. RCP JOINTS SHALL NOT BE GROUTED UNLESS DIRECTED BY THE ENGINEER AFTER CITY
- 30. IF FEMENT DROP-OFF IS CREATED DURING CONSTRUCTION, RACTOR SHALL INITIATE PROTECTIVE MEASURES TO ABRUPT PAVEMENT CHANGES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 31. ONLY ABONDA PERSONNEL ARE AUTHORIZED TO OPERATE PUBLIC VALVES.
- 32. RELOCATION OF EXISTING WATER METERS SHALL INCLUDE A NEW SERVICE LINE FROM MAIN TO METER SETTER.
- .33. THE CITY SHALL NOT BE HELD ACCOUNTABLE FOR ANY + ALL DAMAGE TO PRIVATE PROPERTY OR IMPROVEMENTS WHICH RESULT FROM THE ACTIVITIES OF THE CONTRACTOR OF HIS DESIGNATED REPRESENTATIVES.

APPROVED FOR RECORD DRAWINGS

20

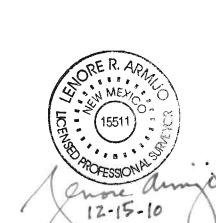
ISAACSON & ARFMAN, P.A. MORROW REARDON Consulting Engineering Associates WILKINSON MILLER, LTD., LANDSCAPE ARCHITECTS Albuquerque, New Mexico 87108 Ph. 505-268-8828 Fax. 505-268-2632 mrwemrwnm.com Chales Chorsen 4/2/10 Ollan Porter Bradly & Bohn REV. SHEETS DATE USER DEPARTMENT DATE USER DEPARTMENT LANDSCAPE ARCHITECT'S SEAL DATE | ********** APPROVED FOR CONSTRUCTION ECE Tals N-Uronson 8/7/09 Juny 1/8 92428-7-09 (Mand fentila 8/7/09 **TRANSPORTATION** HYDROLOGI PARKS & RECREATION CONSTR. COORD.

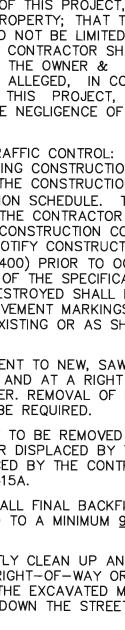
ENV. HEALTH

City Project Number

772291







CHANGE ORDER #2 (SHEETS 21 THRU 37) - SEE SHEET 21 FOR INDEX OF DRAWINGS

LEGAL DESCRIPTION: PUBLIC R.O.W. OF MARTIN LUTHER KING, JR. AVENUE NE BETWEEN OAK STREET NE AND SPRUCE STREET NE

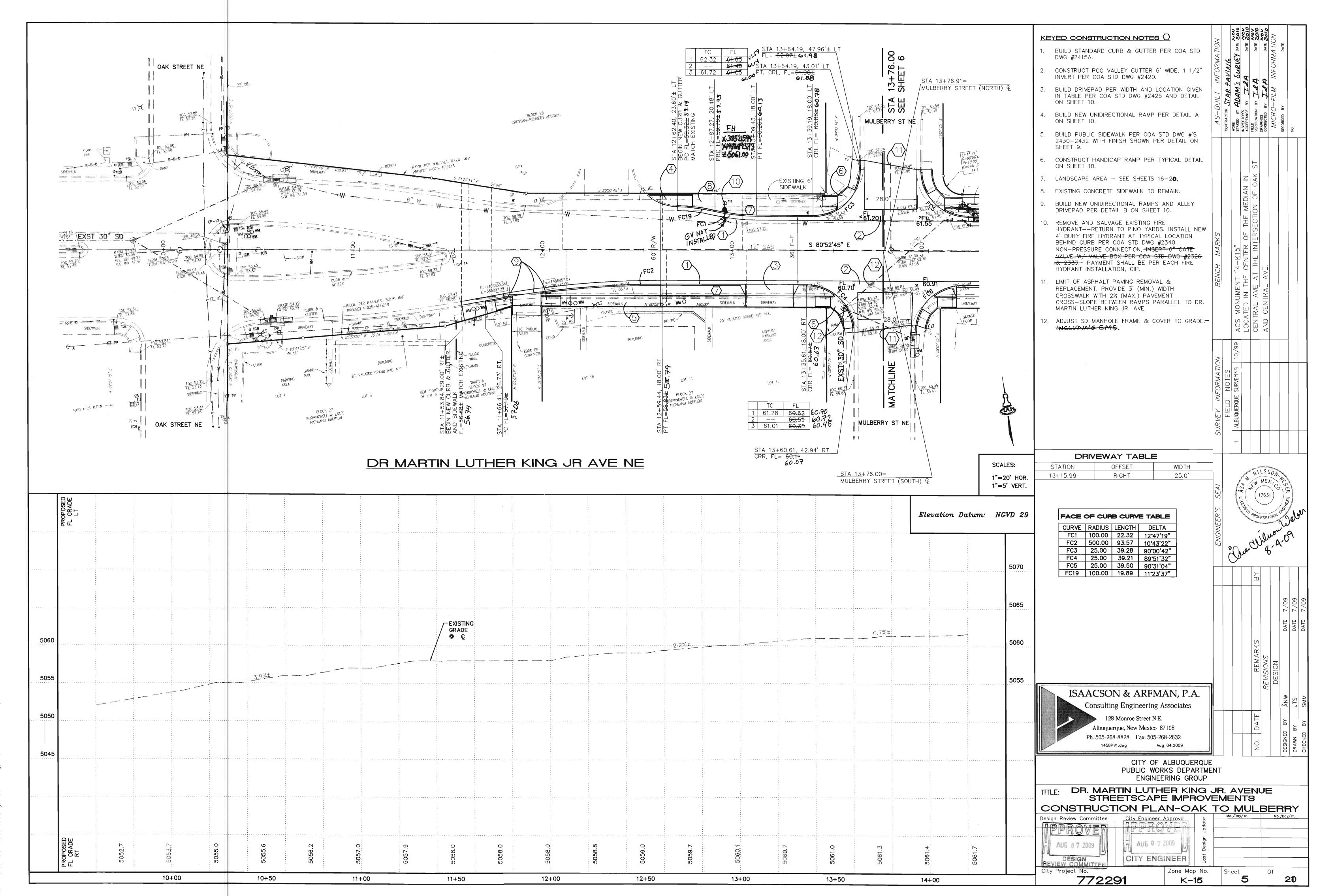
M:\CAD FILES\1400-1499\1458\dwg\1458SUMMARY.dwg, 8/4/2009 9:39:45 AM, t

77229	91	K-1	15	ļ	3		2
roject No.		Zöne Map	No.	Sheet		Of	
W COMMITTEE	CITY ENGI	NEER	La				
DESIGN	OLTY ENGL	NEED	ast [
UG 0 7 2009	AUG 0 7 2	1009	Design				
THE VE)				
DROVED		VEN	pdat				
AND STATE OF THE S		10010101					

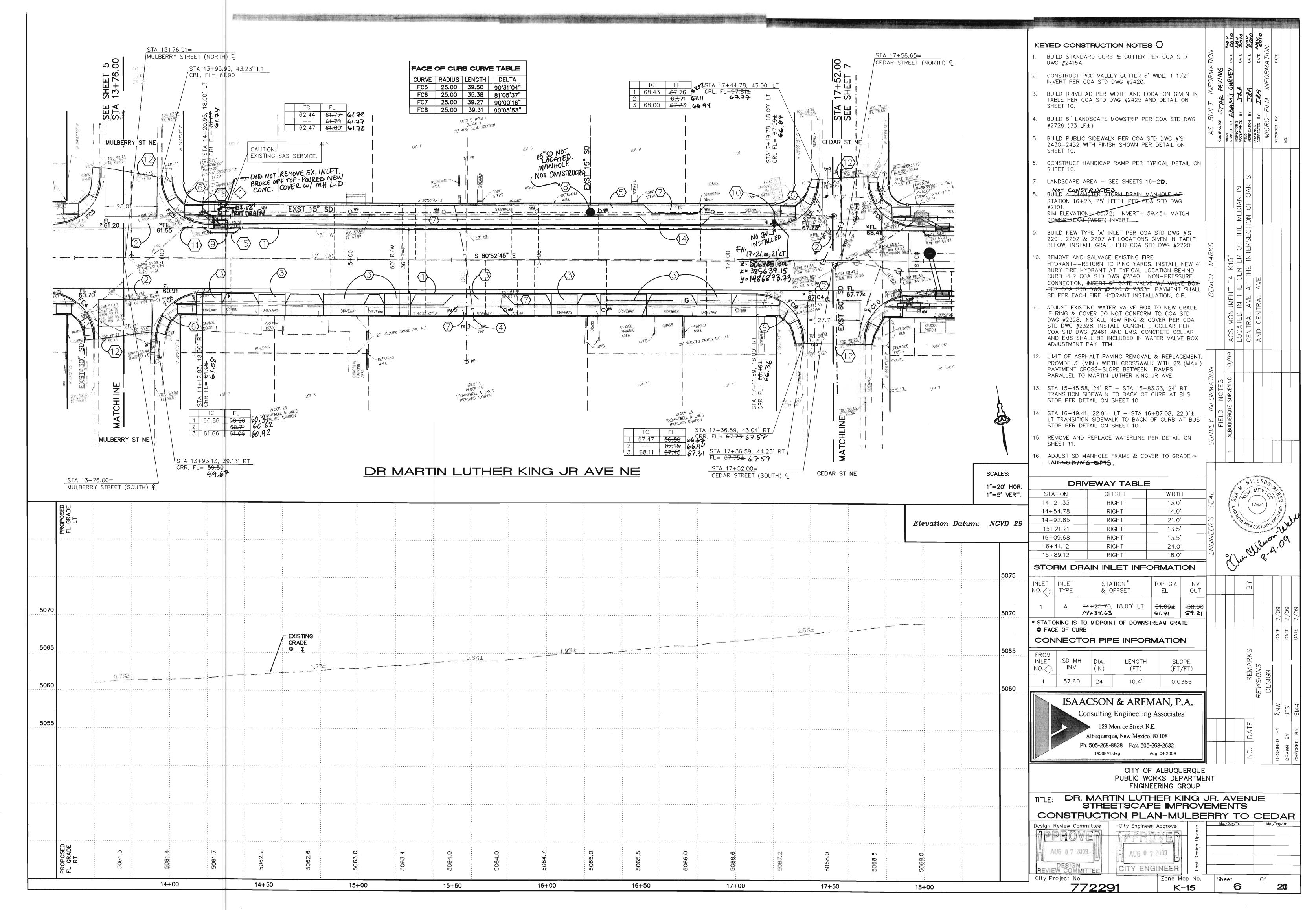
772291

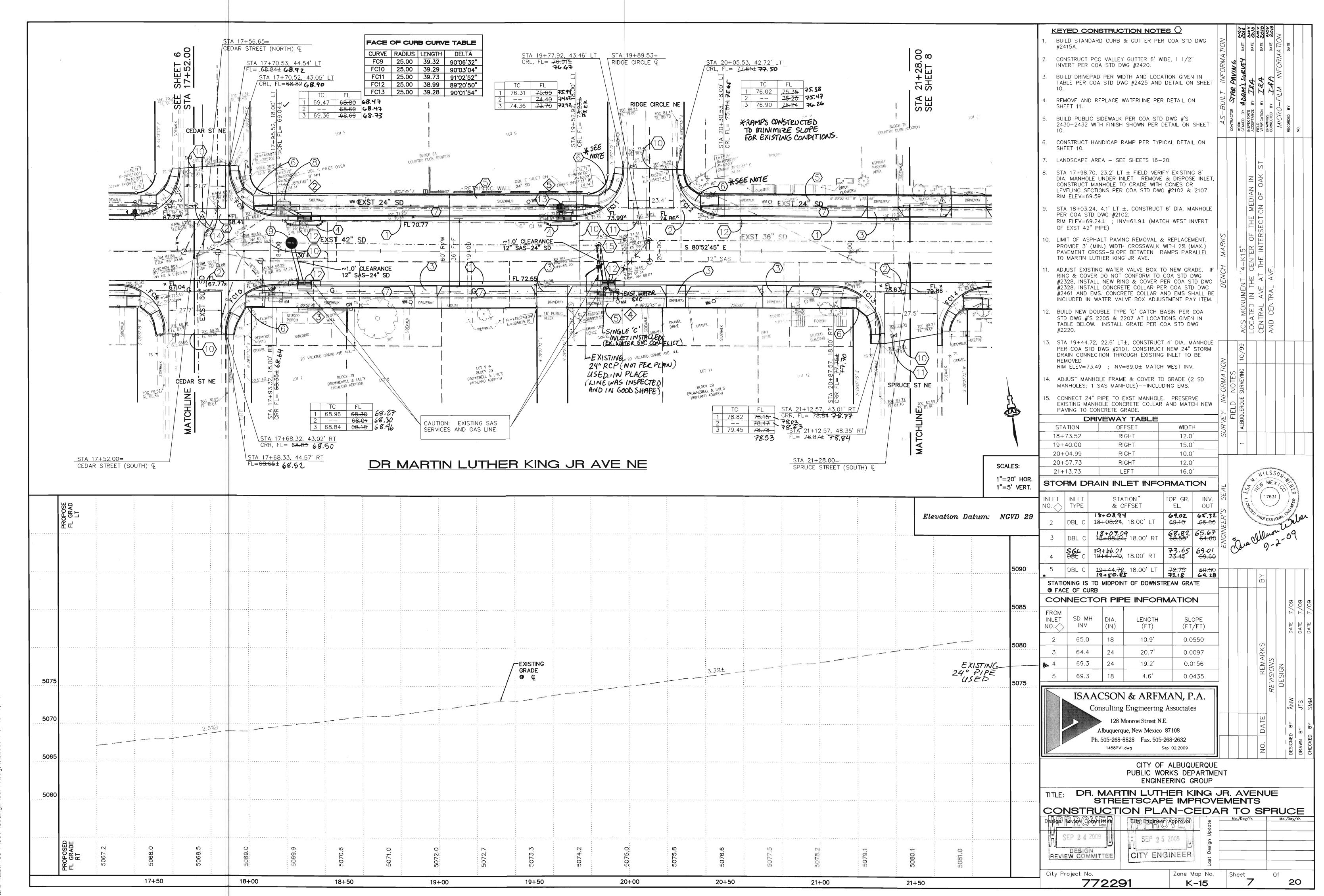
K-15

20

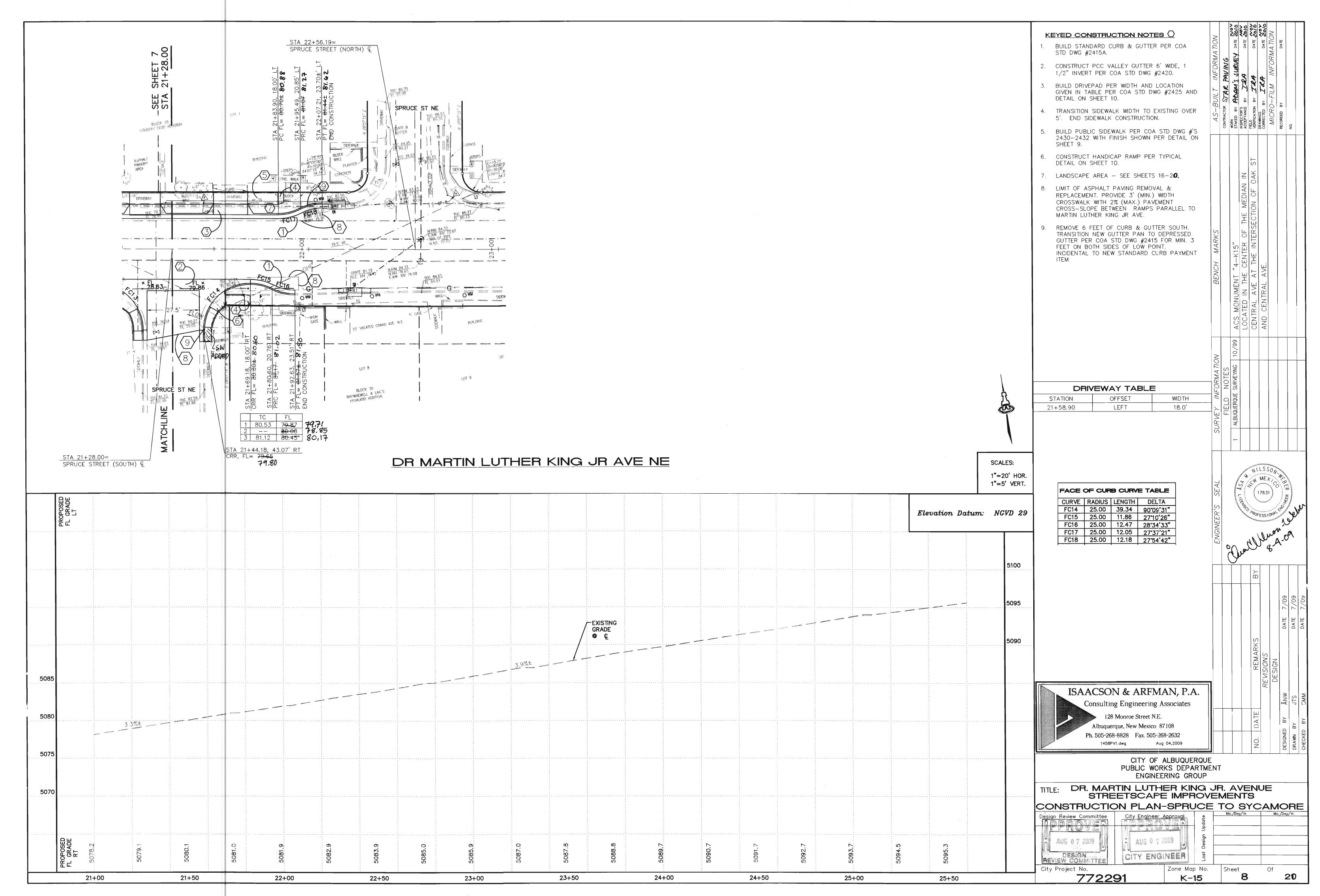


M:\CAD FILES\1400-1499\1458\dwa\1458PV1.dwa.8/4/2009 9:44:55 AM, t

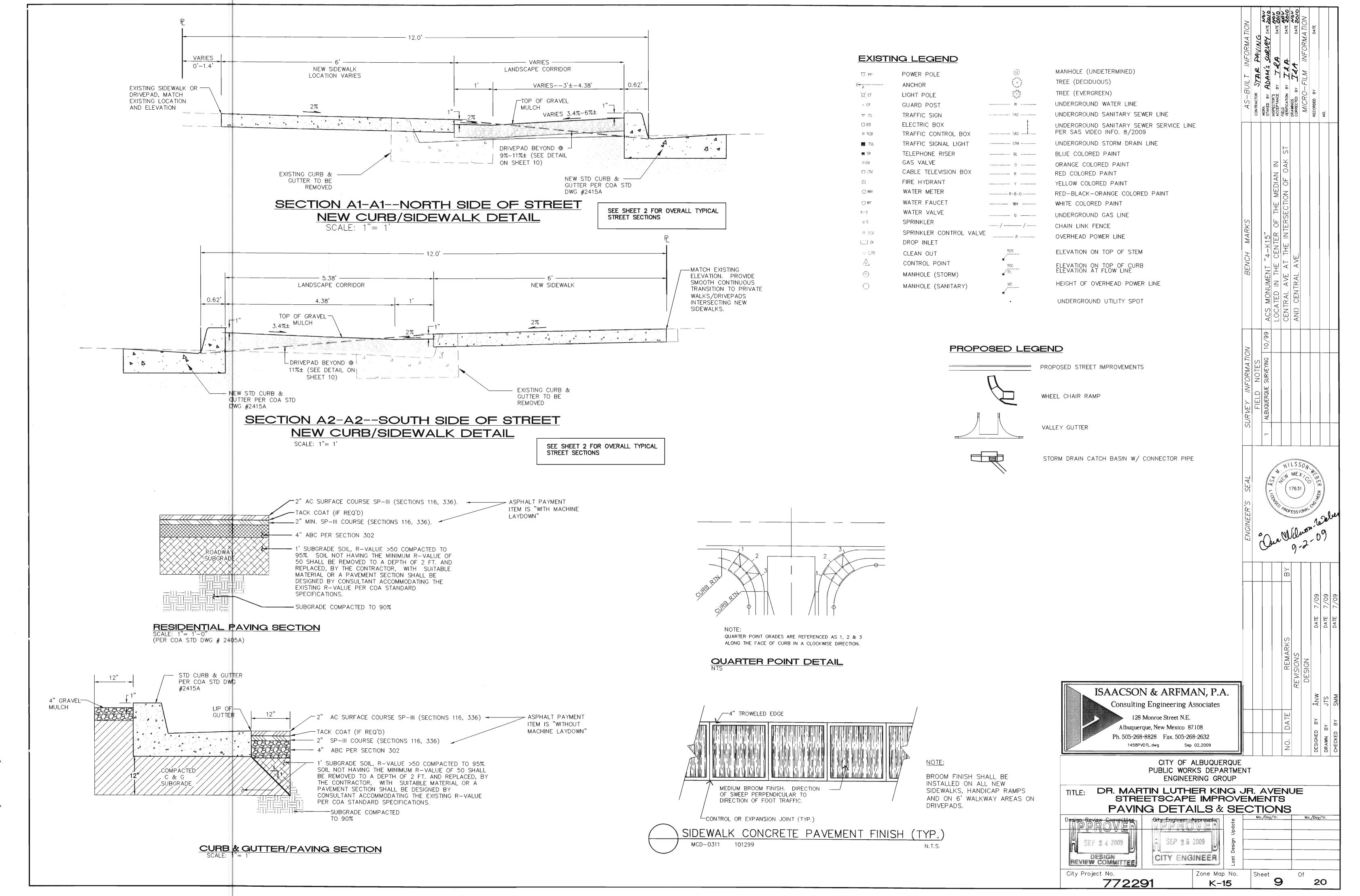




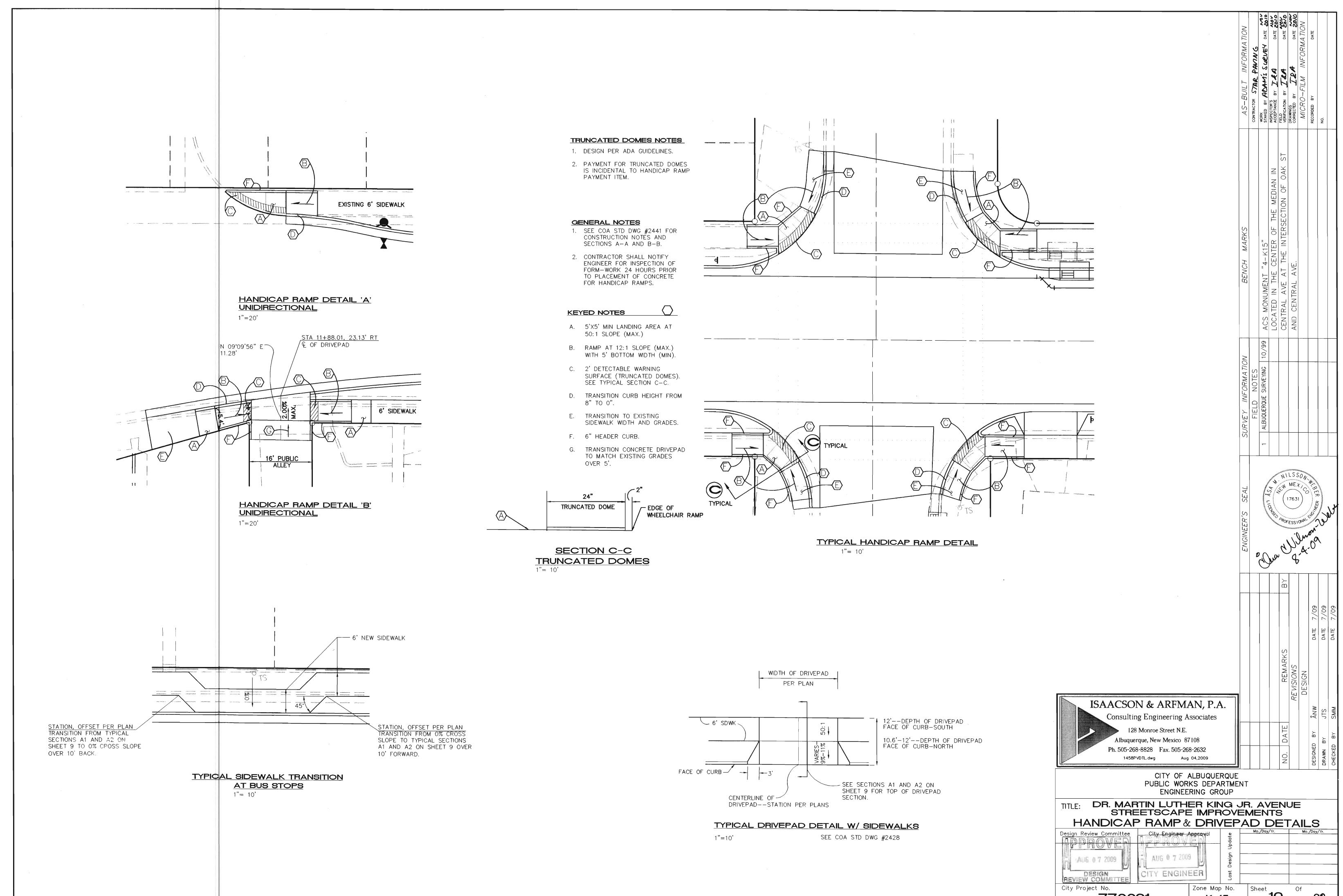
M:\CAD FILES\1400-1499\1458\dwa\1458PV1.dwa. 9/2/2009 1:47:43 PM.AN



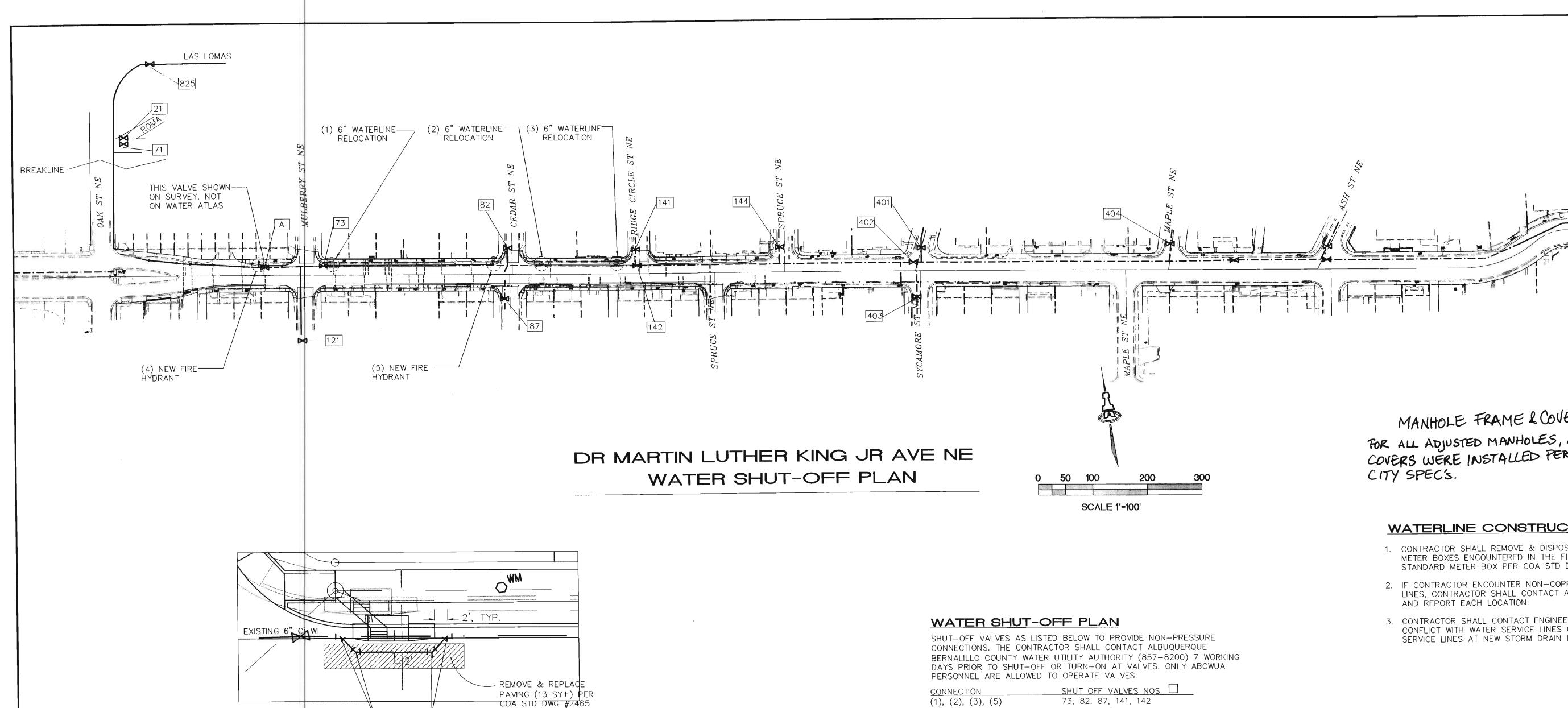
M:\CAD FILES\1400-1499\1458\dwg\1458PV1.dwg, 8/4/2009 9:46:14 AM, thor



M:\CAD FILES\1400-1499\1458\dwa\1458PVDTL.dwa, 9/2/2009 1:14:29 PM, A



HANDICAL		<u> </u>			AIL	.S
Design Review Committee	City Engineer /	Jop roval	Update	Mo./Day/Yr.	Mo.,	/Day/Yr.
AUG 0 7 2009	AUG 0 7 2009		Design Up			
DESIGN REVIEW COMMITTEE	CITY ENGIN	EER	Last D	<u> </u>		
City Project No.		Zone Map	No.	Sheet	Of	
7722	91	K-1	15	10		20



IF EXISTING 6" CI WATERLINE IS LOCATED CLOSER THAN 2' FROM THE NEW INLET BOX, CONTRACTOR SHALL RE-ALIGN WATERLINE AS FOLLOWS: NON-PRESSURE CONNECTION

REMOVE & DISPOSE 19 LF± 6" CI WL ADJACENT TO NEW INLET. INSTALL 4-6" 45° BENDS AND 22 LF± 6" WL. REMOVE & REPLACE PAVING (13 SY±) PER COA STD DWG #2465

\4-6" 45° HOR. BENDS

PAYMENT FOR EACH WATERLINE RE-ALIGNMENT SHALL INCLUDE NON-PRESSURE CONNECTION, REMOVAL & DISPOSAL OF OLD WL, NEW FITTINGS, GLANDS, NEW WL PIPE, TRENCHING & BACKFILL (95% MIN.), AND PAVEMENT REMOVAL & REPLACEMENT PER COA STD DWG #2465

WATERLINE RE-ALIGNMENT AT NEW INLETS

(1), (2), (3), (5)

73, 82, 87, 141, 142 A, 21, 71, 825

	RESTRAINED JOINT	LENGTHS, L.,
	FOR TEES	
ALL JO		MUST BE RESTRAINED.
SIZE	RUN	BRANCH
40 40 40	1.5	17
12x12x12	15	
12×12×10	10	18
12x12x8	6	19
12x12x6	3	19
12x12x4	1	19
10×10×10	12	18
10x10x8	8	15
10×10×6	4	16
10x10x4	2	4
8×8×8	9	20
8x8x6	5	17
8x8x4	2	15
6x6x6	6	20
6x6x4	2	20

THIS TABLE IS BASED UPON THE FOLLOWING CRITERIA:

DEPTH OF BURY: FACTOR OF SAFETY: MATERIAL:

3.0 FT. MINIMUM 1.25 PVC PIPE

GM/SM - SILTY GRAVELS AND SILTY SOIL TYPE: SANDS, GRAVEL-SAND-SILT MIXTURES. TEST PRESSURE:

TRENCH TYPE 4:

PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH MINIMUM; BACKFILL COMPACTED TO TOP OF PIPE.

DIFFERENT CRITERIA, E.G., DUCTILE IRON PIPE, GREATER DEPTH OF BURY, ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.

> RESTRAINED JOINT LENGTHS FOR WATERLINE FITTINGS

RESTRAINED JOINT LENGTHS, L _T , FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS, (FT.)						
HORZ. BENDS VA					VALVES & DEAD	
SIZE	90,	45°	22 1/2	11 1/4	ENDS	
12	30	12	6	3	85	
10	26	11	5	3	72	
8	22	9	4	2	60	
6	17	7	3	2	46	
4	12	5	2	1	32	

RESTRAINED JOINT LENGTHS, L _T , FOR REDUCERS, (FT.) MINIMUM UNOBSTRUCTED, STRAIGHT—RUN LENGTH: RESTRAIN EITHER LARGE PIPE, OR SMALL PIPE.						
SIZE	LARGE SIDE	SMALL SIDE	SIZE	LARGE SIDE	SMALL SIDE	
12x10	25	30	10x6	44	73	
12×8	45	68	10×4	58	141	
12x6	62	121	8x6	25	33	
12x4	74	213	8×4	43	83	
10x8	24	30	6x4	24	35	

- 1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
- 2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
- 3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ON THIS SHEET.
- 4. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

MANHOLE FRAME & COVER NOTE: FOR ALL ADJUSTED MANHOLES, NEW FRAMES & COVERS WERE INSTALLED PER CURRENT CITY SPEC'S. WATERLINE CONSTRUCTION NOTES: 1. CONTRACTOR SHALL REMOVE & DISPOSE ANY WOODEN WATER METER BOXES ENCOUNTERED IN THE FIELD AND REPLACE WITH A STANDARD METER BOX PER COA STD DWG NOS 2361 & 2362. 2. IF CONTRACTOR ENCOUNTER NON-COPPER WATER SERVICE LINES, CONTRACTOR SHALL CONTACT ABCWUA AT 768-2713 AND REPORT EACH LOCATION. 3. CONTRACTOR SHALL CONTACT ENGINEER IF THERE IS A CONFLICT WITH WATER SERVICE LINES OR SANITARY SEWER SFRVICE LINES AT NEW STORM DRAIN INLET LOCATIONS. HILSSON. ISAACSON & ARFMAN, P.A. Consulting Engineering Associates

128 Monroe Street N.E.

Albuquerque, New Mexico 87108

Ph. 505-268-8828 Fax. 505-268-2632

Jul 22,2009

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

ENGINEERING GROUP

STREETSCAPE IMPROVEMENTS

WATER DETAILS & SHUTOFF PLAN

Zone Map No.

K-15

Of

20

Sheet

City Engineer Approval

CITY ENGINEER

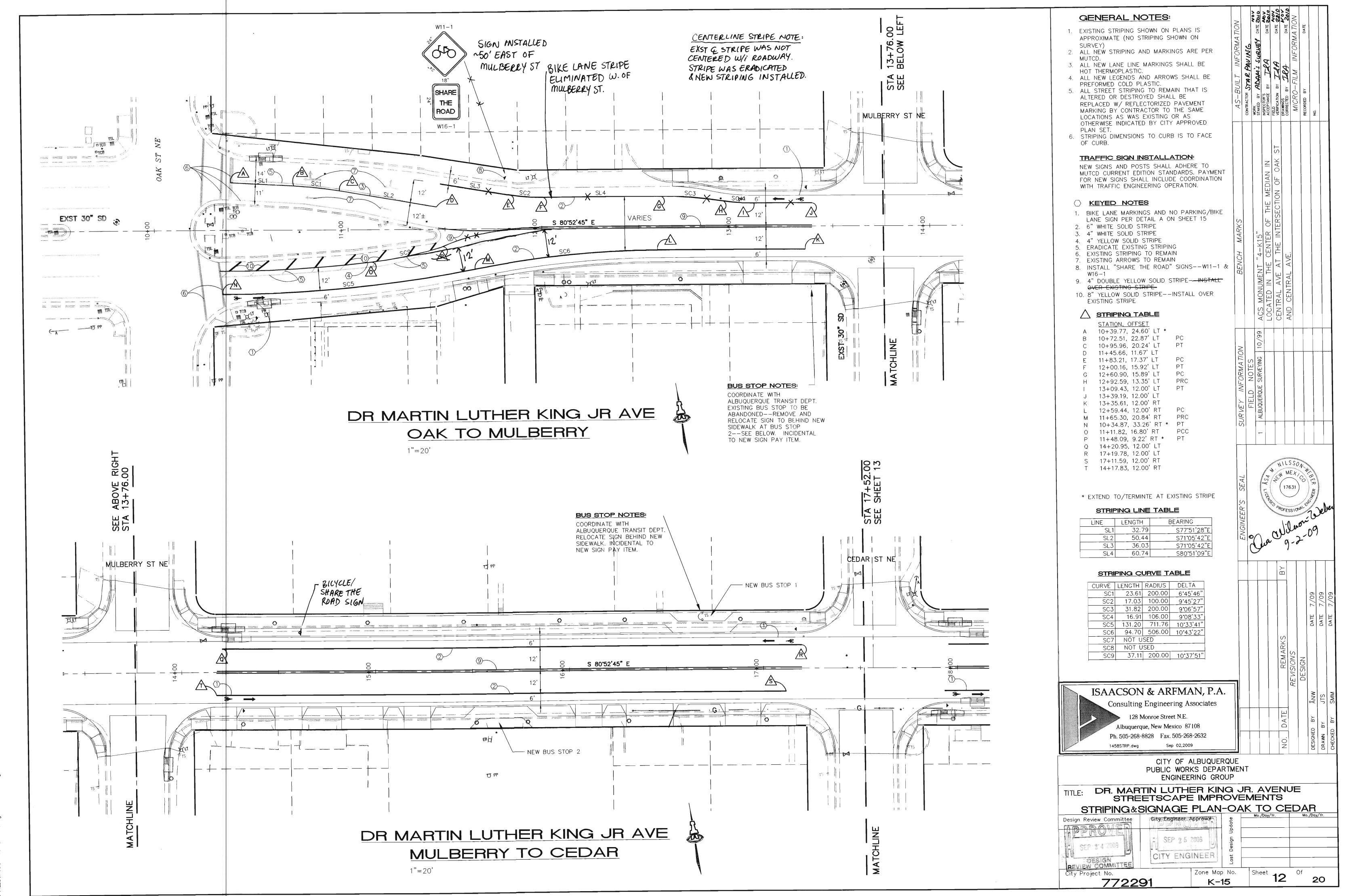
DR. MARTIN LUTHER KING JR. AVENUE

1458UDTL.dwg

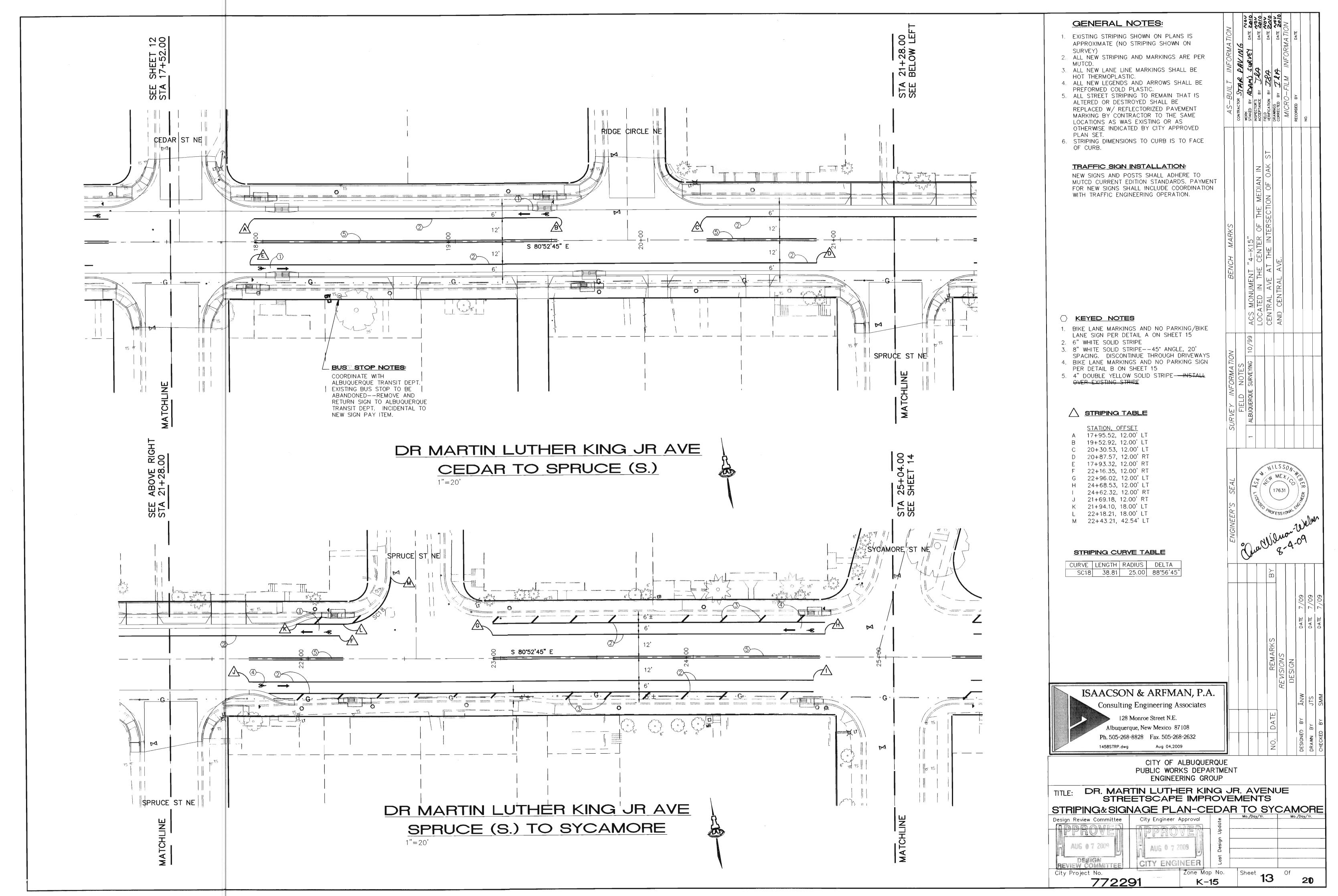
D<u>esign Review</u> Committee

772291

City Project No.

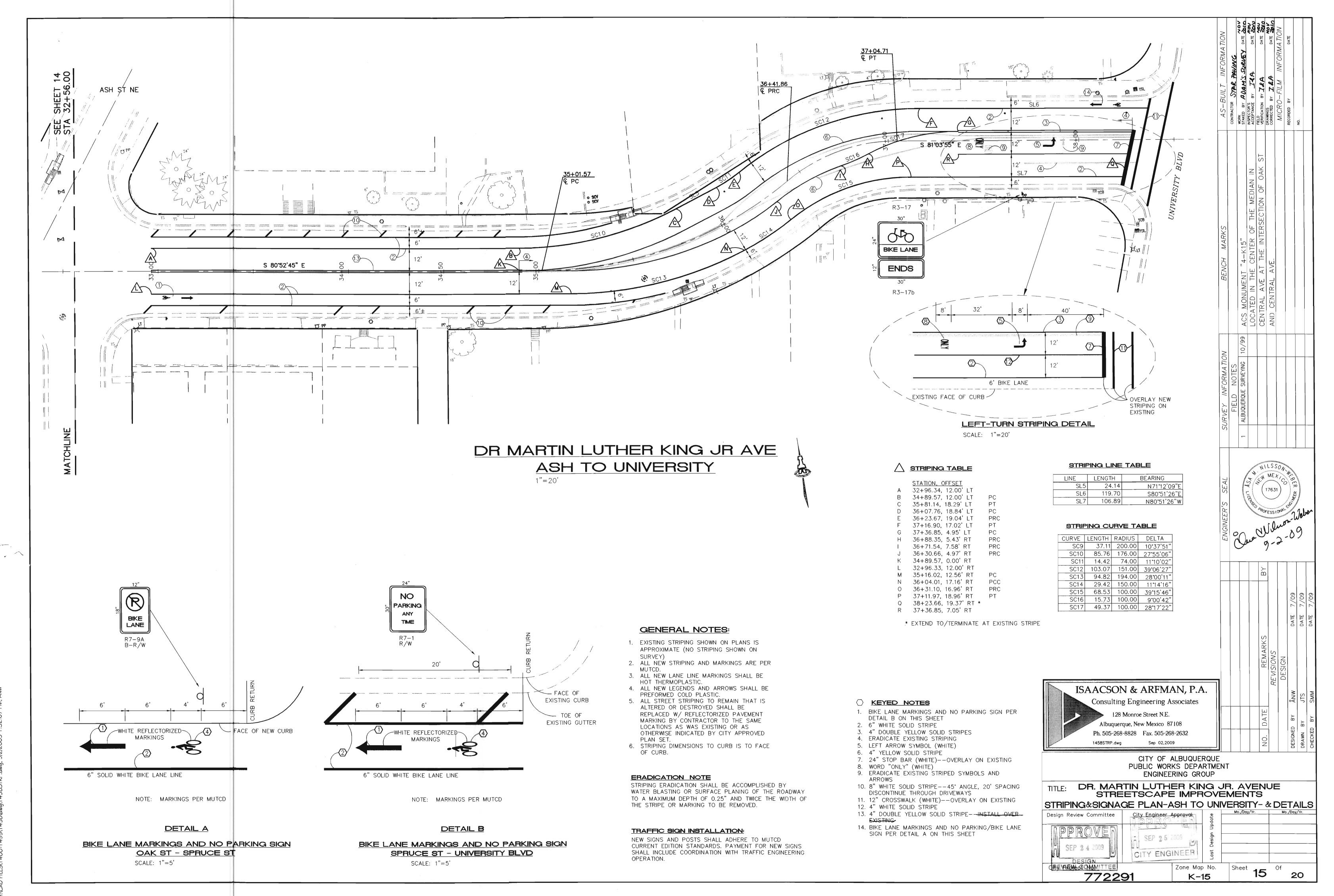


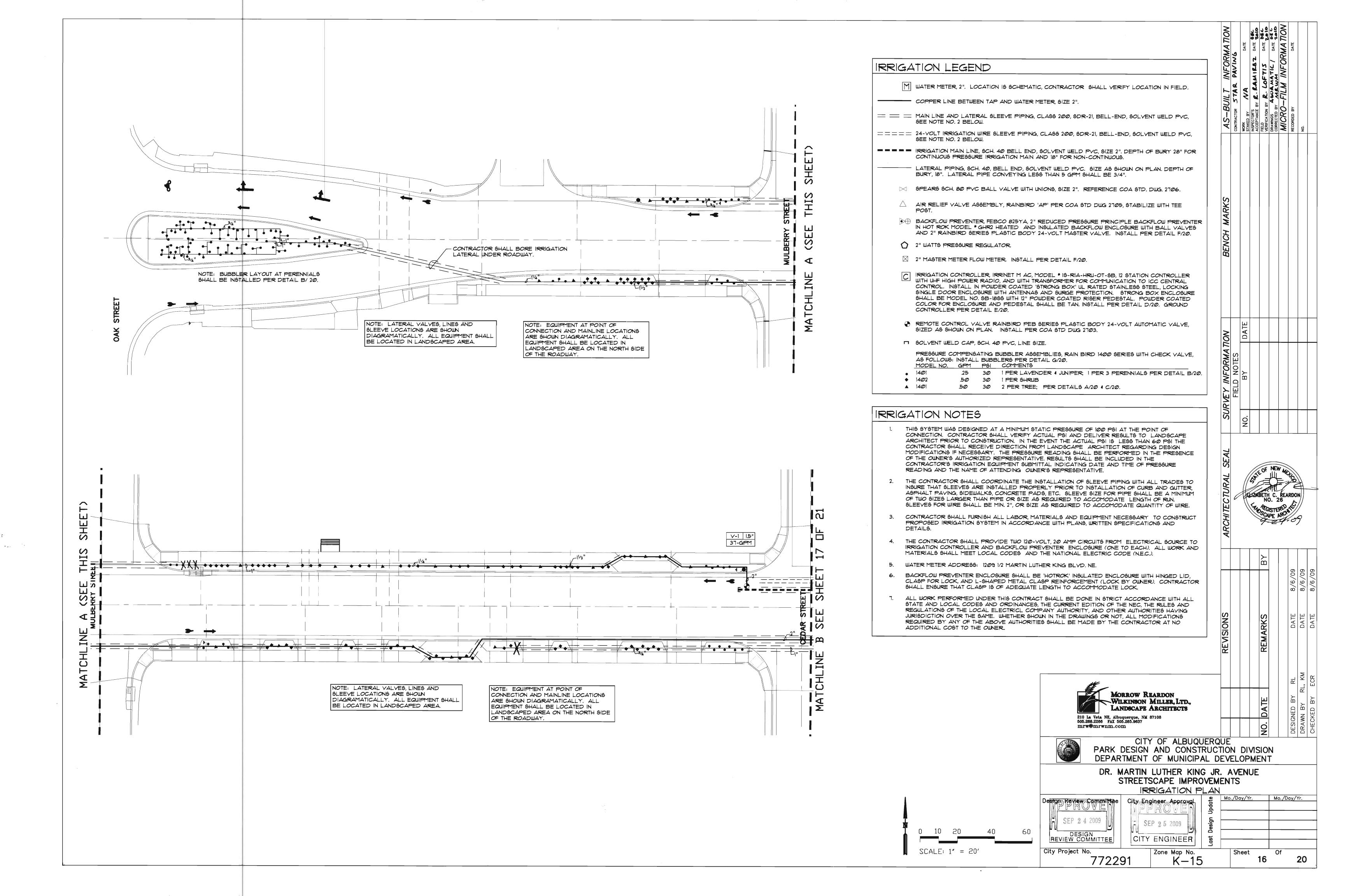
M:\CAD FILES\1400-1499\1458\dwa\1458STRP.dwa, 9/2/2009 1:21:17

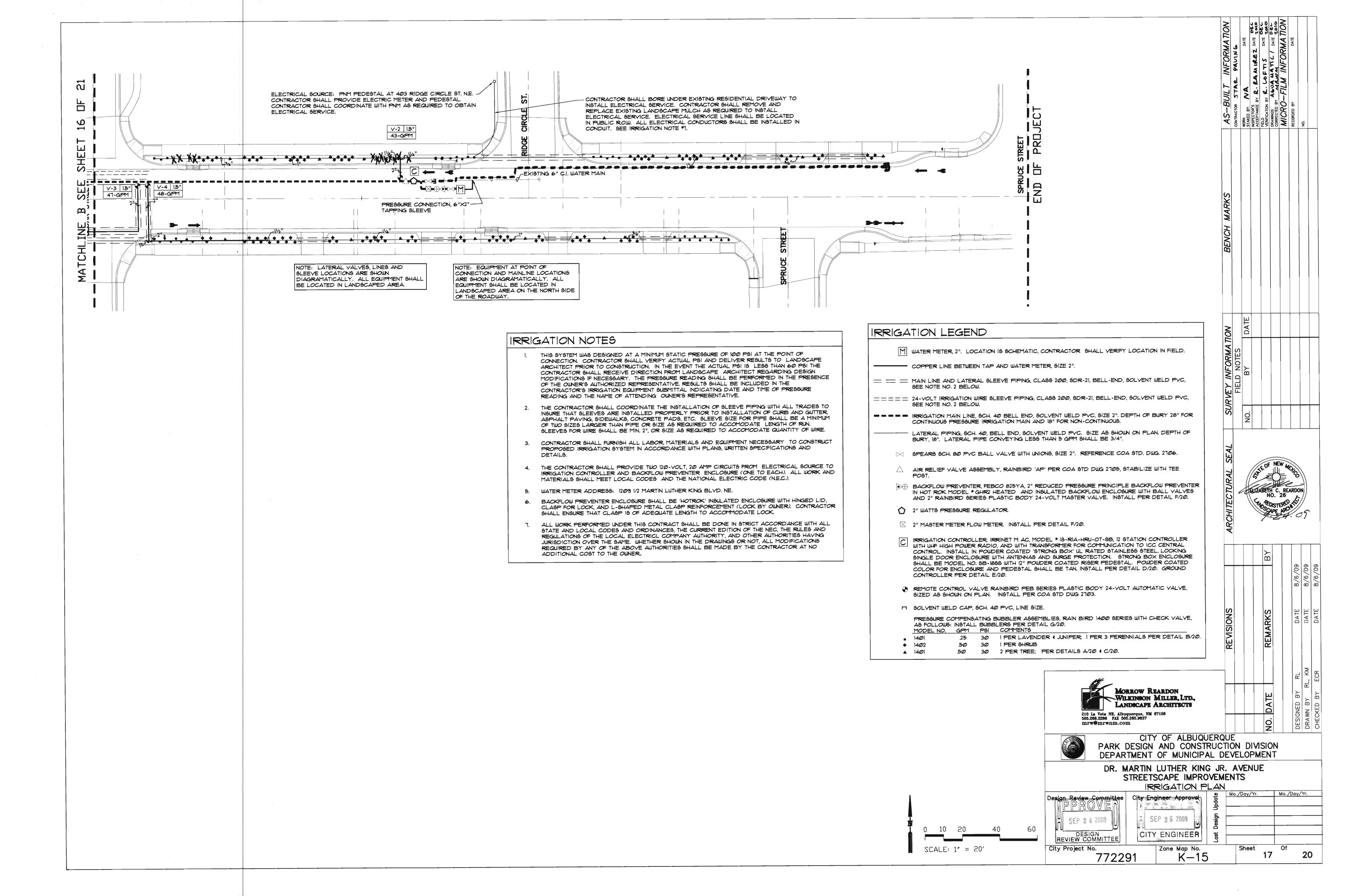


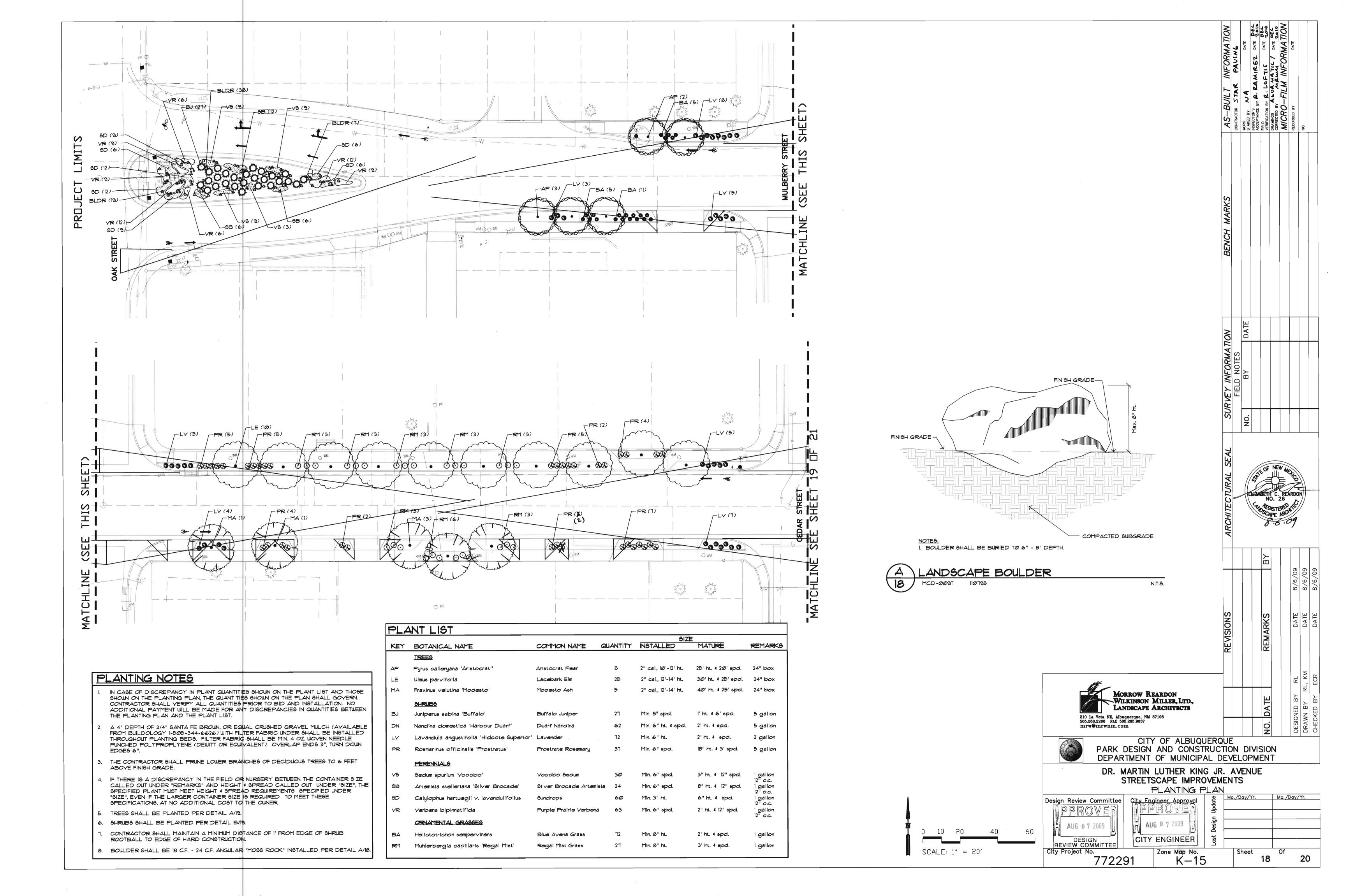
M:\CAD FILES\1400-1499\1458\dwg\1458STRP.dwg, 8/4/2009 9:51:00 A

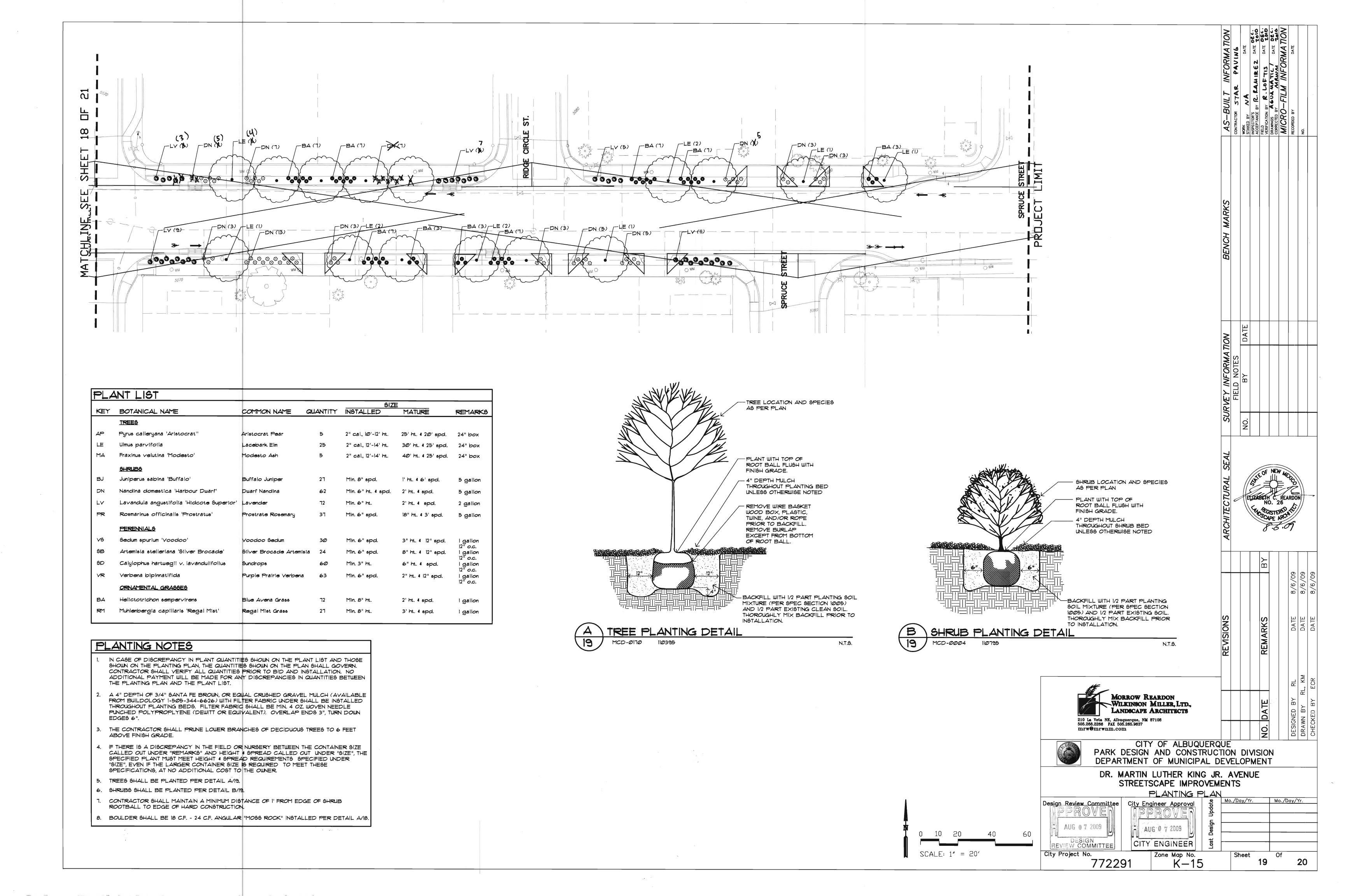
M:\CAD FILES\1400-1499\1458\dwa\1458STRP.dwa, 8/4/2009 9:51:29 AM, thor

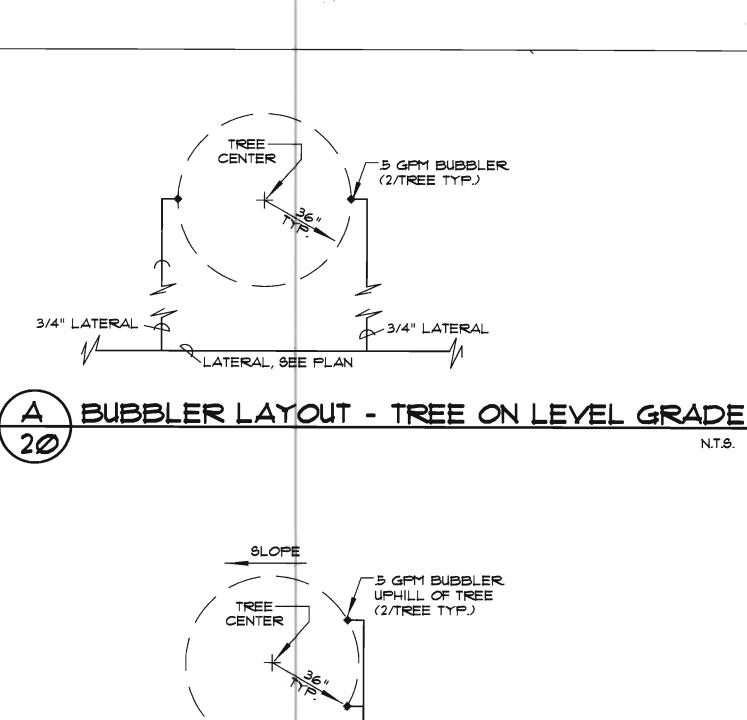


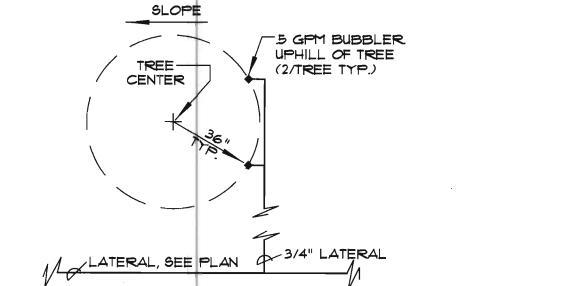








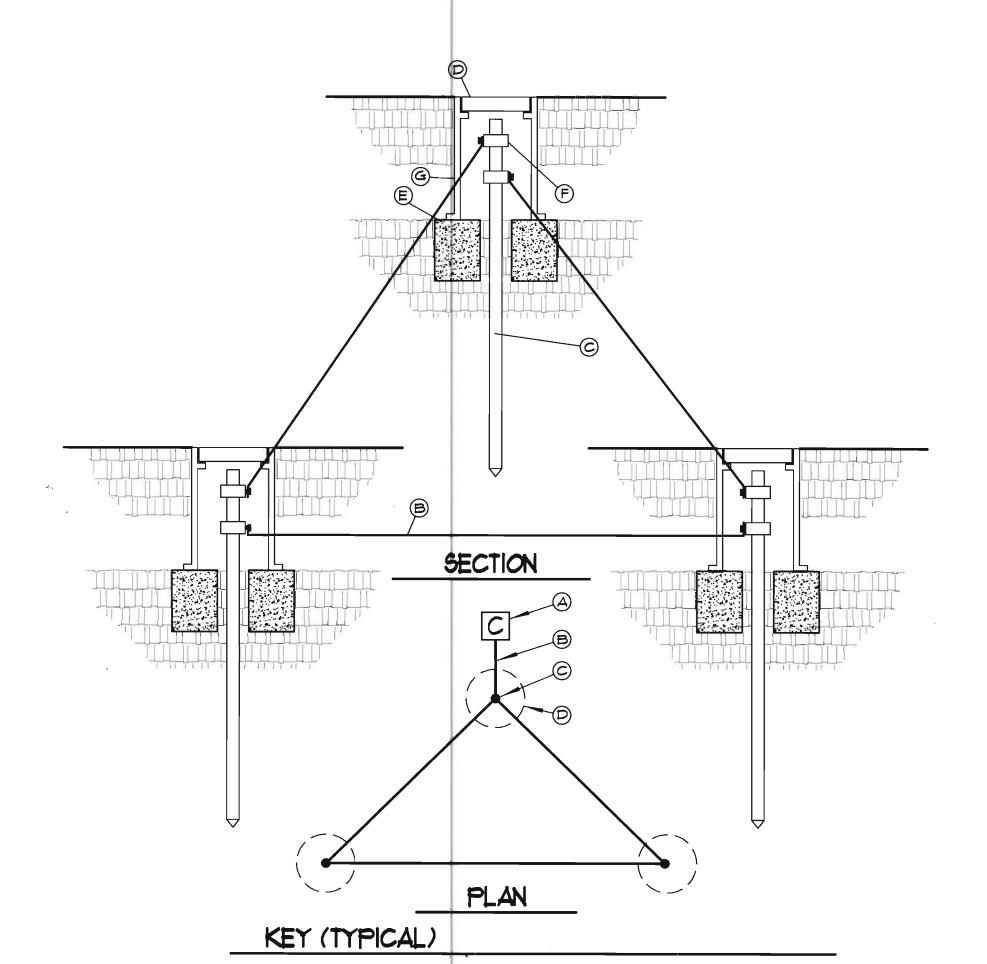




BUBBLER LAYOUT - TREE ON SLOPE

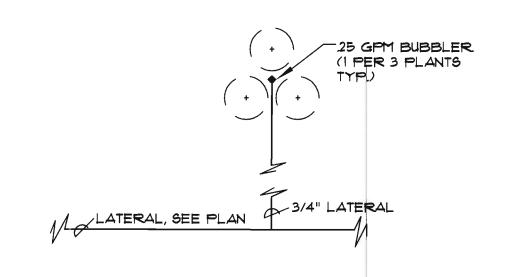
20/

20)

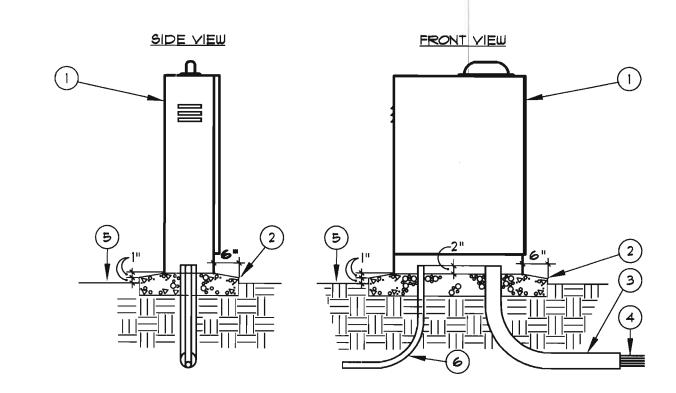


- (A) IRRIGATION CONTROLLER, SEE IRRIGATION LEGEND.
- (B) #10 AWG WIRE FROM IRRIGATION CONTROLLER TO GROUND ROD CLAMP. WIRE SHALL BE INSTALLED STRAIGHT AND TAUT.
- (C) 8' LENGTH GROUND ROD, PLACE IN IRRIGATED AREA A MINIMUM OF 16' FROM ONE ANOTHER W/ ONE ROD A MIN. 12' FROM CONTROLLER. (OPTION: REPLACE GROUNDING RODS W/ 1 EA. 1/8" \times 12" \times 18" COPPER, BURIED @ 12" DEPTH. SOLDER % BARE COPPER WIRE TO PLATE).
- (D) 1" DIAMETER x 9" DEEP BROOKS 100 SERIES VALVE BOX WITH COVER 8"x8"x16" SOLID CMU BLOCK F) GROUND ROD CLAMP
- (G) DRILL A SMALL OPENING IN VALVE BOX TO MAINTAIN WIRE TAUTNESS.

CONTROLLER GROUNDING DETAIL



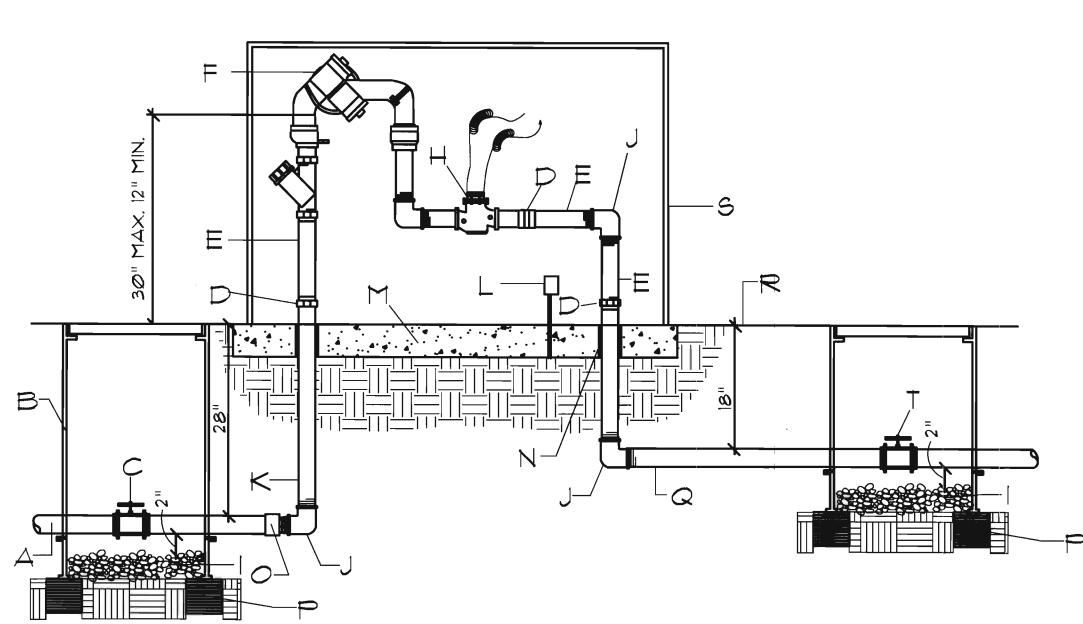
BUBBLER LAYOUT - PERENNIALS



- (1) IRRIGATION CONTROLLER AND ENCLOSURE WITH PEDESTAL, SEE IRRIGATION LEGEND. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- 2 3000 PSI CONCRETE BASE 6" MINIMUM THICKNESS. ALL EDGES SHALL BE TOOLED WITH 1/2" RADIUS.
- (3) 4" RIGID PVC LONG SWEEP ELL EXTEND 12" BEYOND CONCRETE BASE.
- 4 24-VOLT WIRES FROM CONTROLLER TO AUTOMATIC VALVES, SEE SPECIFICATIONS.

N.T.S.

- (5) FINISH GRADE. 6 120-VOLT SERVICE IN CONDUIT, PER N.E.C.
- IRRIGATION CONTROLLER AND PEDESTAL MCD-0165



CONSTRUCTION NOTES:

B. BROOKS PRODUCTS INC.,

J. GALVANIZED ELL

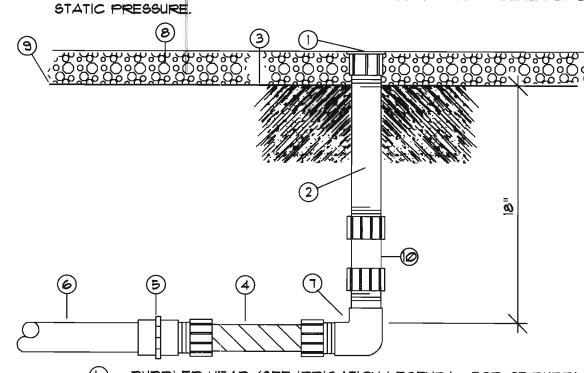
- A. SERVICE LINE TO WATER METER
- 1730 PB-18BODY (ABS) VALVE BOX W/ BOLT DOWN COVER (ABS) AND ONE 8" EXTENSION C. TRUE UNION SCHEDULE 80 PVC BALL VALVE
- D. GALVANIZED UNION (min. 4" above grade)
- E. GALVANIZED NIPPLE F. FEBCO MODEL 825YA RPBP BACKFLOW PREVENTER
- G. (NOT USED) H. RAINBIRD PEB PLASTIC BODY 24 VOLT
- AUTOMATIC MASTER VALVE
- I. I" DIA, WASHED ROCK
- K GALVANIZED RISER
- L. 110V ELECTRICAL OUTLET FOR HEATED PROTECTIVE ENCLOSURE. PLACE AWAY FROM RELIEF VALVE.
- M. MIN. 4" THICK 3000 PSI CONCRETE SLAB.
- N. PVC SLEEVING & INSULATION (MIN. 1" THICK).
- O. PVC MIP ADAPTER
- P. 8" × 8" × 16" SOLID CMU BLOCK
- Q. NON-CONSTANT PRESSURE IRRIGATION MAINLINE.
- R FINISH GRADE.
- 5. HOT ROK GRH2, AVAIL. FROM HOT BOX. COLOR: CLAY T. MASTER METER
- RPBA WITH MASTER VALVE AND FLOW METER

NTS

GENERAL NOTES: 1. BUBBLERS SHALL BE INSTALLED 12" FROM THE EDGE OF THE ROOTBALL FOR TREES AND 12" FROM THE CENTER OF THE ROOTBALL FOR SHRUBS.

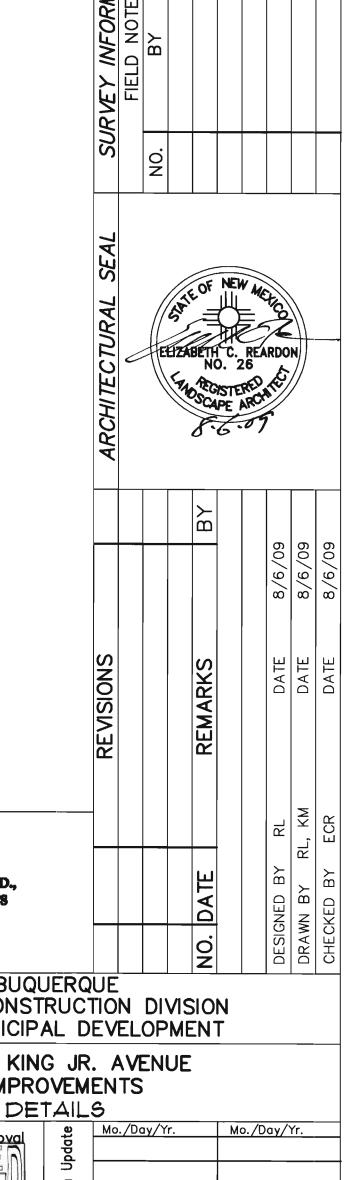
2. LATERAL LINE PRESSURE TESTING SHALL BE COMPLETED PRIOR TO INSTALLATION OF FLEX PIPE ASSEMBLY. LATERAL LINE TESTING SHALL BE ACCOMPLISHED BY INSTALLING A PLUG IN THE OUTLET OF LATERAL LINE TEES

3. BUBBLERS SHALL ALWAYS BE INSTALLED ON THE UPHILL SIDE OF THE SHRUB. 4. SPRING CHECK VALVES SHALL BE SET TO HOLD BACK A MINIMUM OF 8 PSI OF



- BUBBLER HEAD (SEE IRRIGATION LEGEND) TOP OF BUBBLER LEVEL WITH TOP OF MULCH.
- 1/2" SCH. 80 PVC THREADED NIPPLE, LENGTH AS REQUIRED.
- WEED CONTROL FABRIC. SEE PLANTING PLAN.
- 1/2" × 6" PVC FLEX NIPPLE.
- 3/4" X 1/2" SCH. 80 PVC FEMALE ADAPTER
- PVC LATERAL PIPING.
- 1/2" SCH 40 PVC ELBOW (FIPT X FIPT).
- TOP OF MULCH, SEE PLANTING NOTES FOR DEPTH OF MULCH.
- FINISH GRADE, SEE PLAN.
- SPEARS MODEL SII01-05, 1/2" MIPT x FIPT ADJUSTABLE SPRING CHECK

BUBBLER ASSEMBLY WITH CHECK YALVE BUBBLER WITH CHECK YALVE



Morrow Reardon
Wilkinson Miller, Ltd., LANDSCAPE ARCHITECTS 210 La Veta NE, Albuquerque, NM 87108 505.268.2266 FAX 505.265.9637 mrw@mrwnm.com CITY OF ALBUQUERQUE PARK DESIGN AND CONSTRUCTION DIVISION DEPARTMENT OF MUNICIPAL DEVELOPMENT

DR. MARTIN LUTHER KING JR. AVENUE STREETSCAPE IMPROVEMENTS

IRRIGATION DETAILS						
AUG 0 7 2009 DESIGN REVIEW COMMITTEE	City Engineer Approva	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.		
y Project No	Zone Man No		Chast	<u>Of</u>		

772291

20

N.T.S.

20) MCD-2701-B

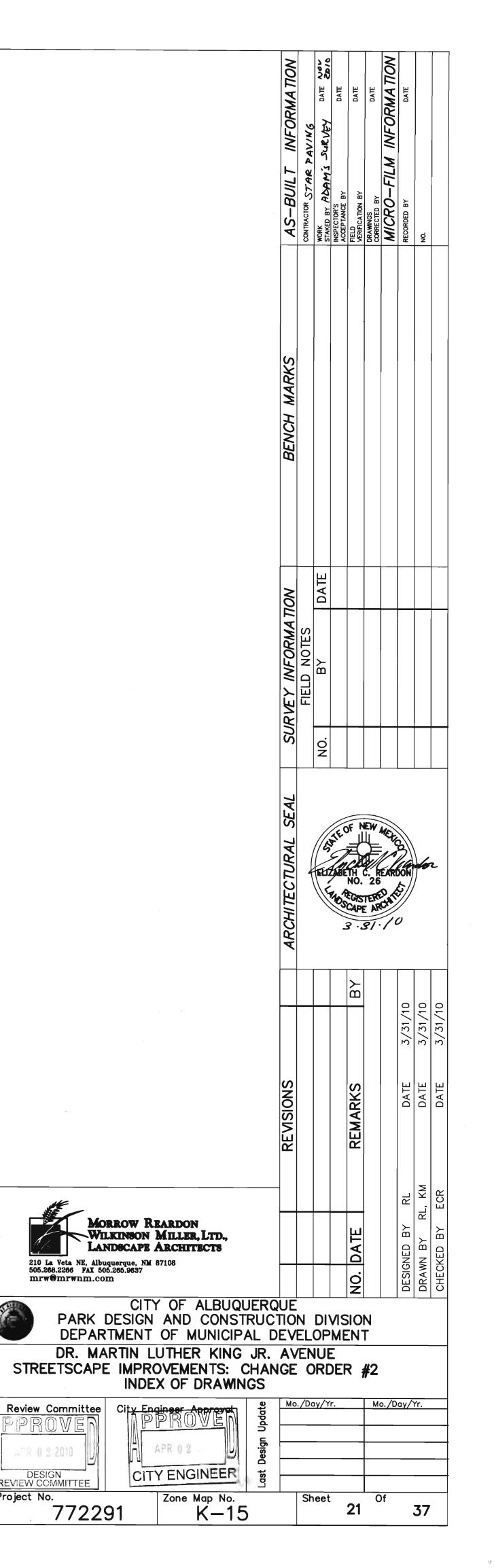
8/02

City Project No.

K - 15

CHANGE ORDER #2 INDEX OF DRAWINGS

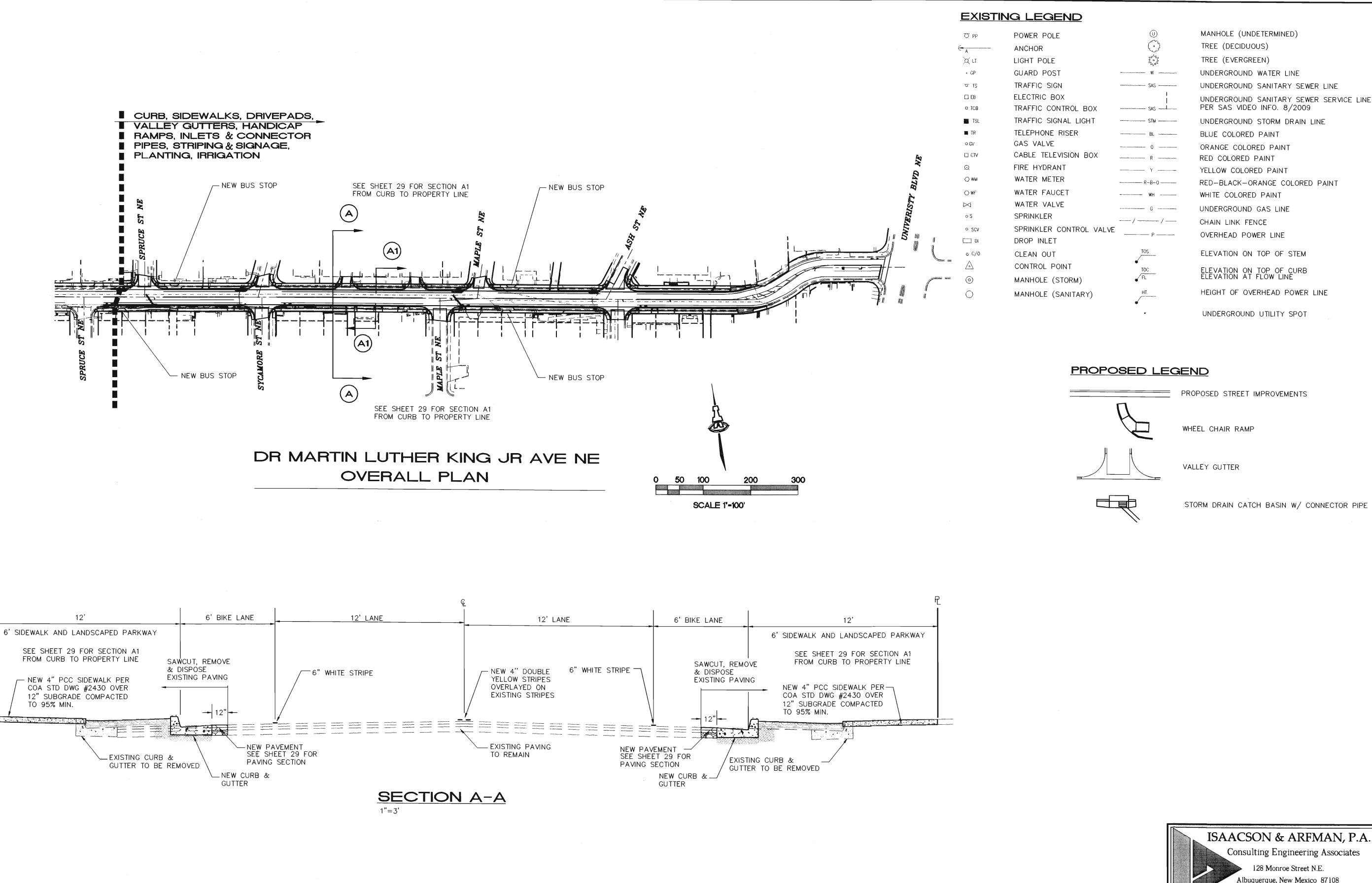
TITLE	SHEET NO.
INDEX OF DRAWINGS & GENERAL NOTES	21
SUMMARY OF WORK & TYPICAL STREET SECTIONS	22
DEMOLITION PLAN-SPRUCE TO MAPLE	23
DEMOLITION PLAN-MAPLE TO UNIVERSITY	24
CONSTRUCTION PLAN-SPRUCE TO SYCAMORE	25
CONSTRUCTION PLAN-SYCAMORE TO MAPLE	26
CONSTRUCTION PLAN-MAPLE TO ASH	27
CONSTRUCTION PLAN-ASH TO EAST END	28
PAVING DETAILS & SECTIONS	29
HANDICAP RAMP AND DRIVEPAD DETAILS	30
HANDICAP RAMP DETAILS	31
WATER DETAILS & SHUTOFF PLAN	32
STRIPING & SIGNAGE PLAN-CEDAR TO SYCAMORE	33
STRIPING & SIGNAGE PLAN-SYCAMORE TO ASH	34
STRIPING & SIGNAGE PLAN-ASH TO UNIVERSITY	35
IRRIGATION PLAN	36
PLANTING PLAN	37



Design Review Committee

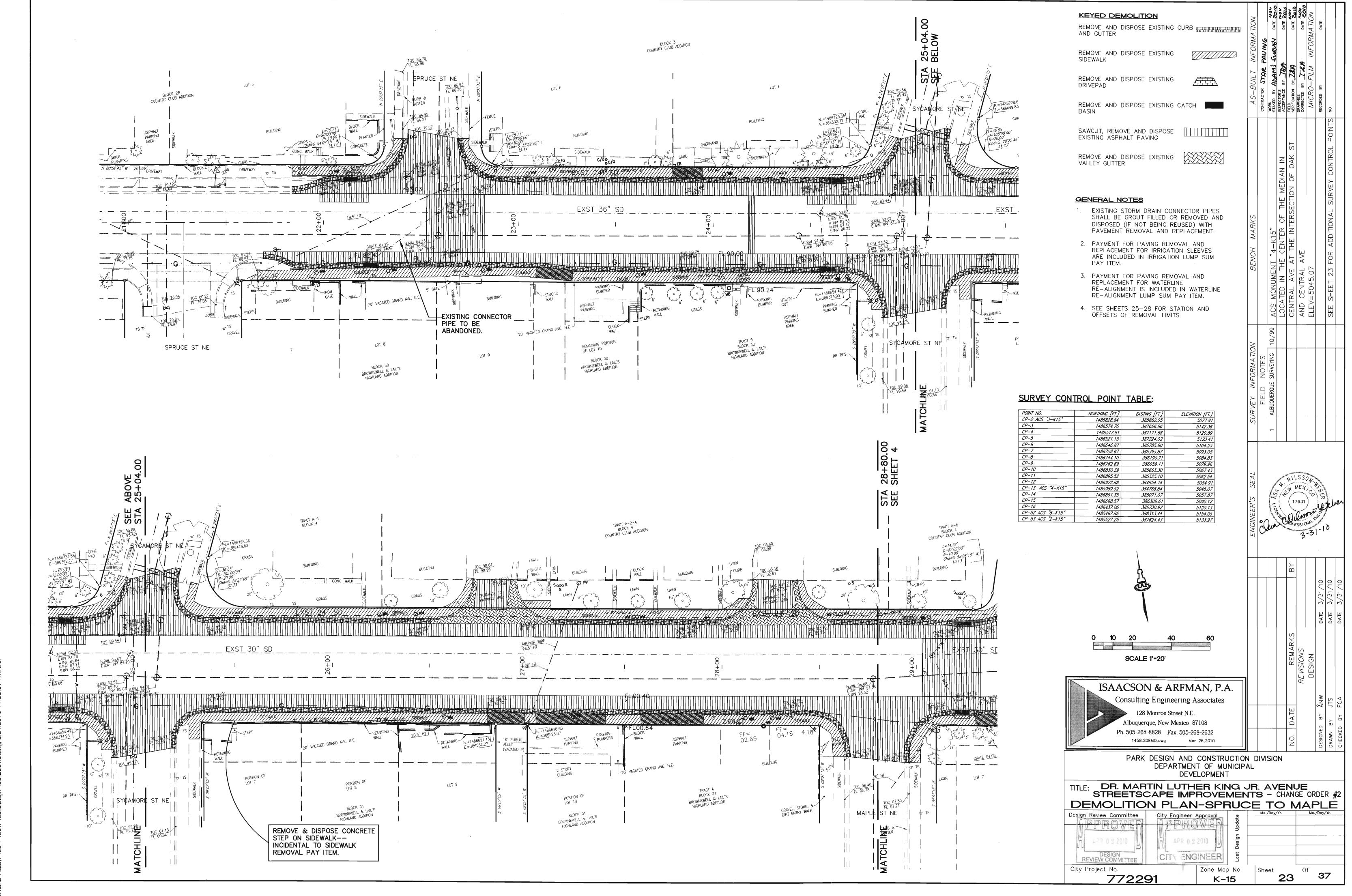
DESIGN REVIEW COMMITTEE

City Project No.



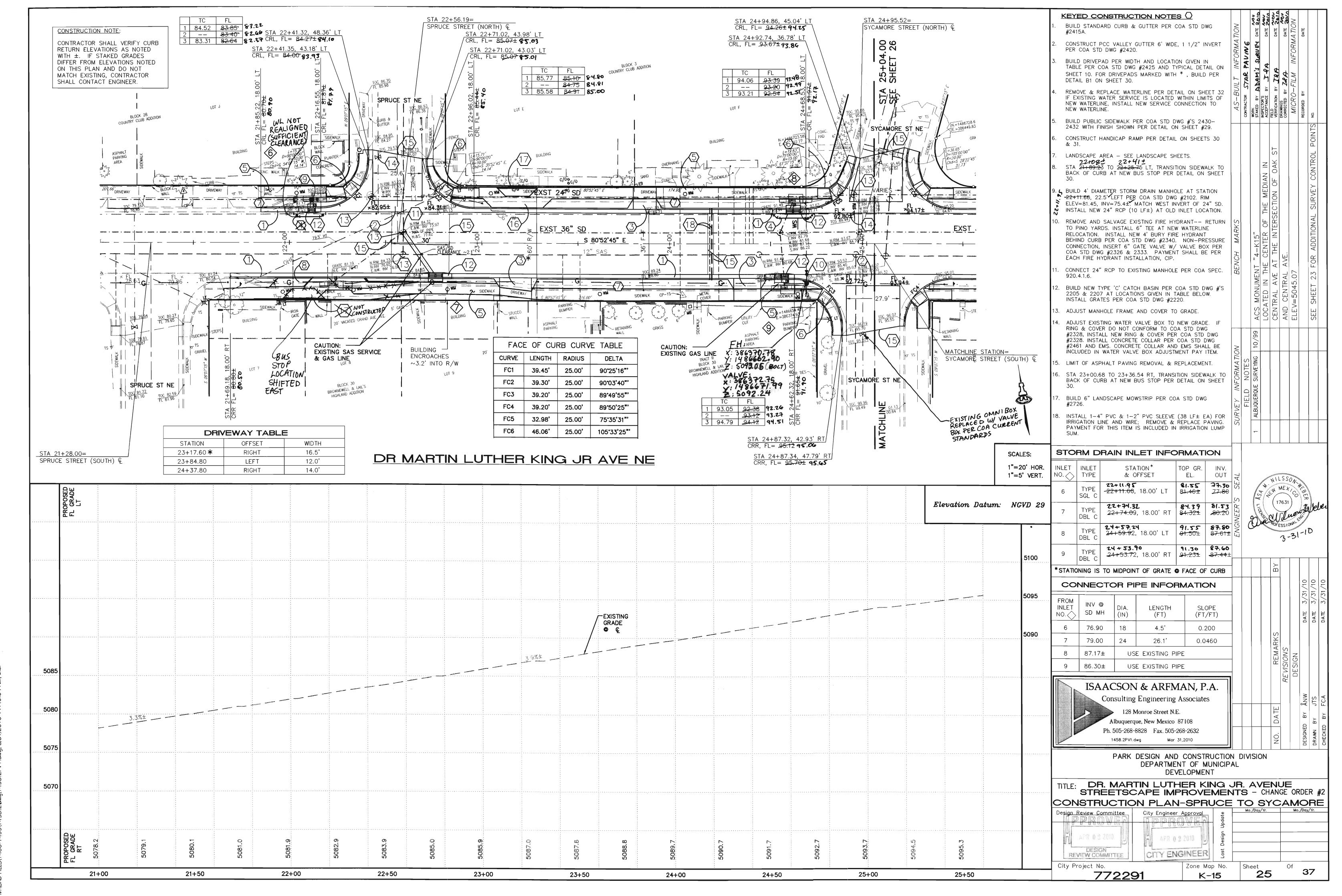
ISAACSON & ARFMAN, P.A. Consulting Engineering Associates Albuquerque, New Mexico 87108 Ph. 505-268-8828 Fax. 505-268-2632 1458.2SUMMARY.dwg Mar 30,2010 PARK DESIGN AND CONSTRUCTION DIVISION DEPARTMENT OF MUNICIPAL DEVELOPMENT TITLE: DR. MARTIN LUTHER KING JR. AVENUE STREETSCAPE IMPROVEMENTS - CHANGE ORDER #2 SUMMARY OF WORK & TYPICAL STREET SECTION Design Review Committee CITY ENGINEER A COMMITTEE City Project No. Zone Map No. Sheet 37 772291 22 K-15

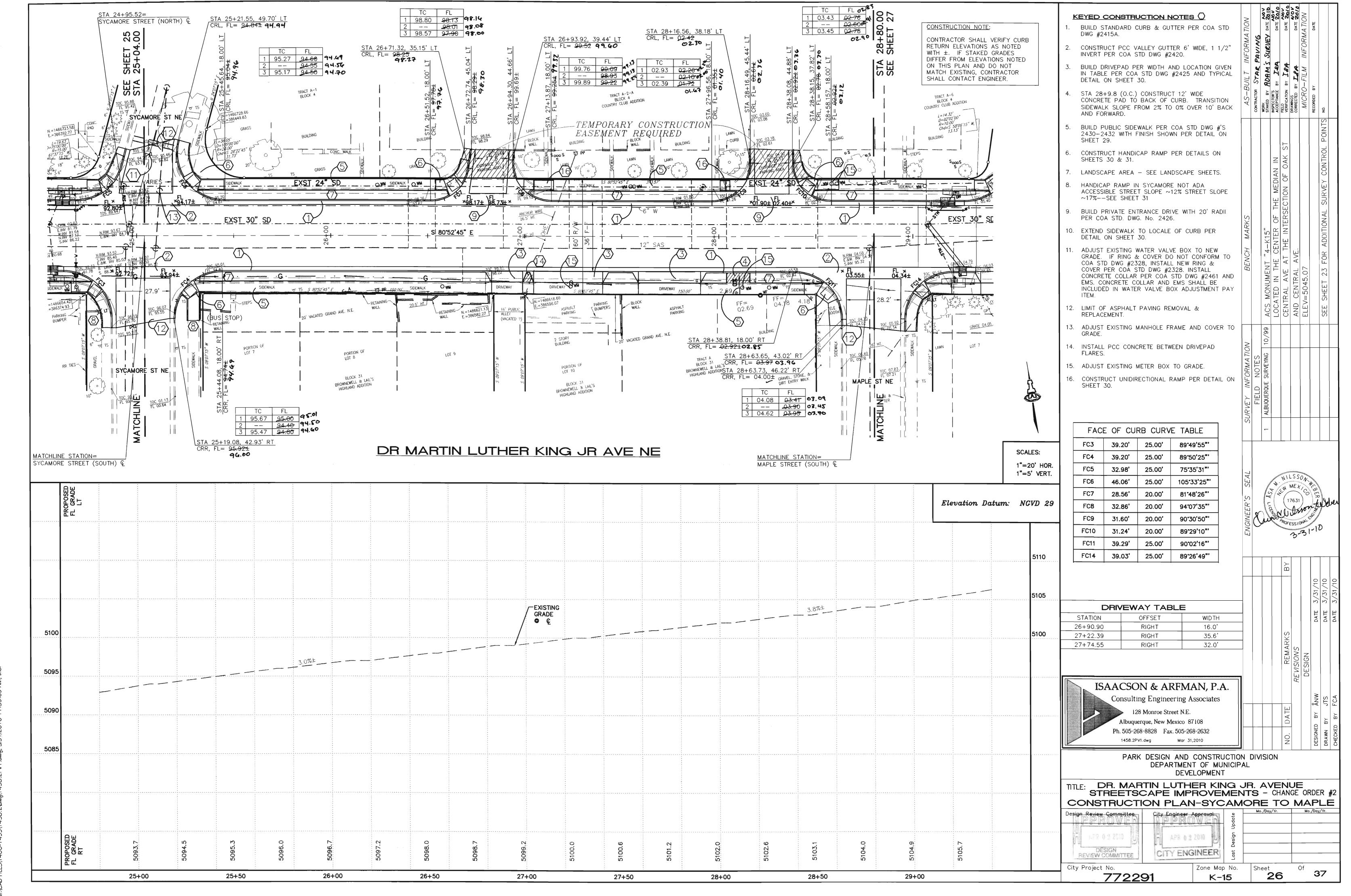
M:\CAD FILES\1400-1499\1458.2\dwg\1458.2SUMMARY.dwg, 3/31/2010 11:31:58

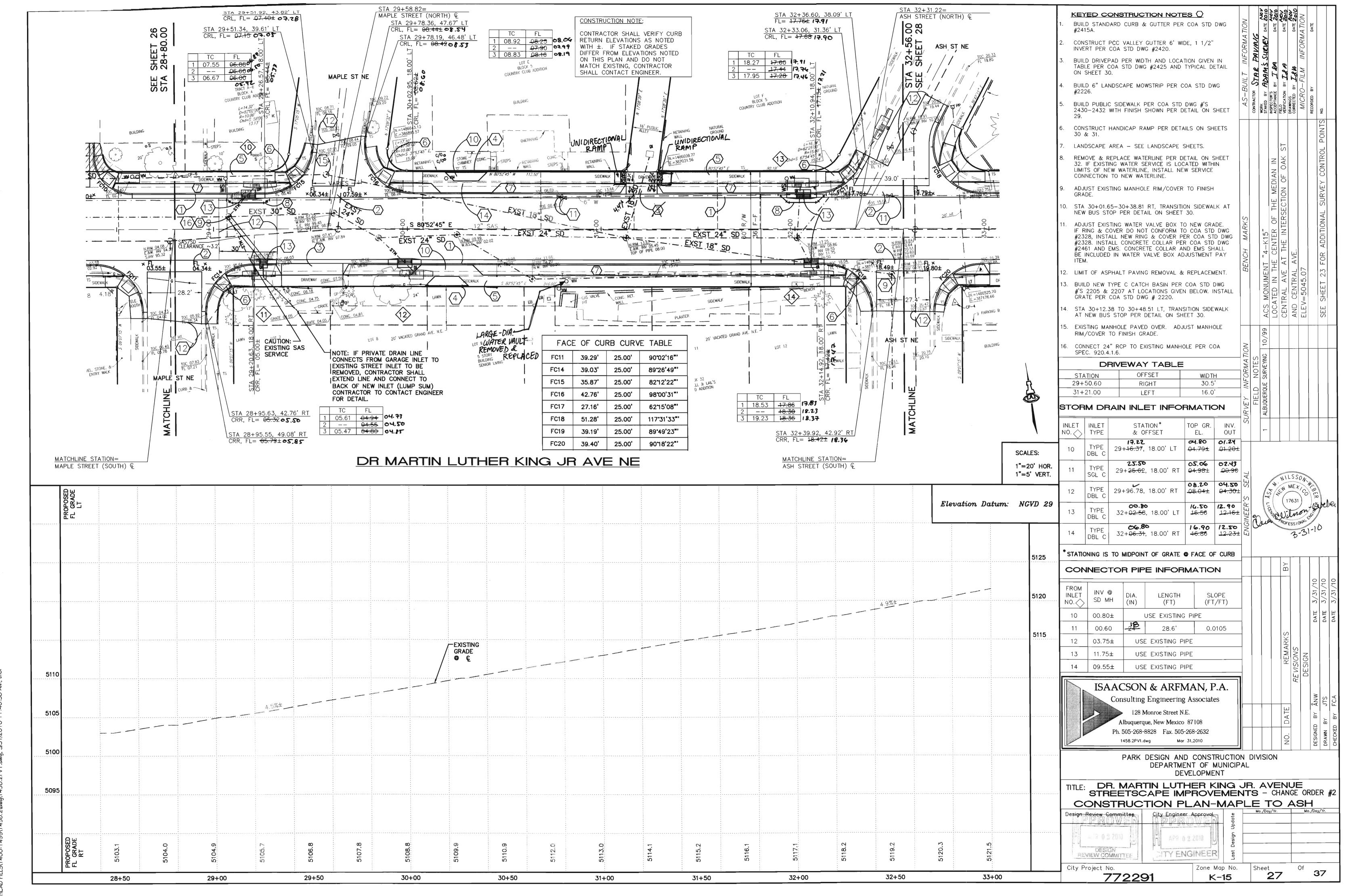


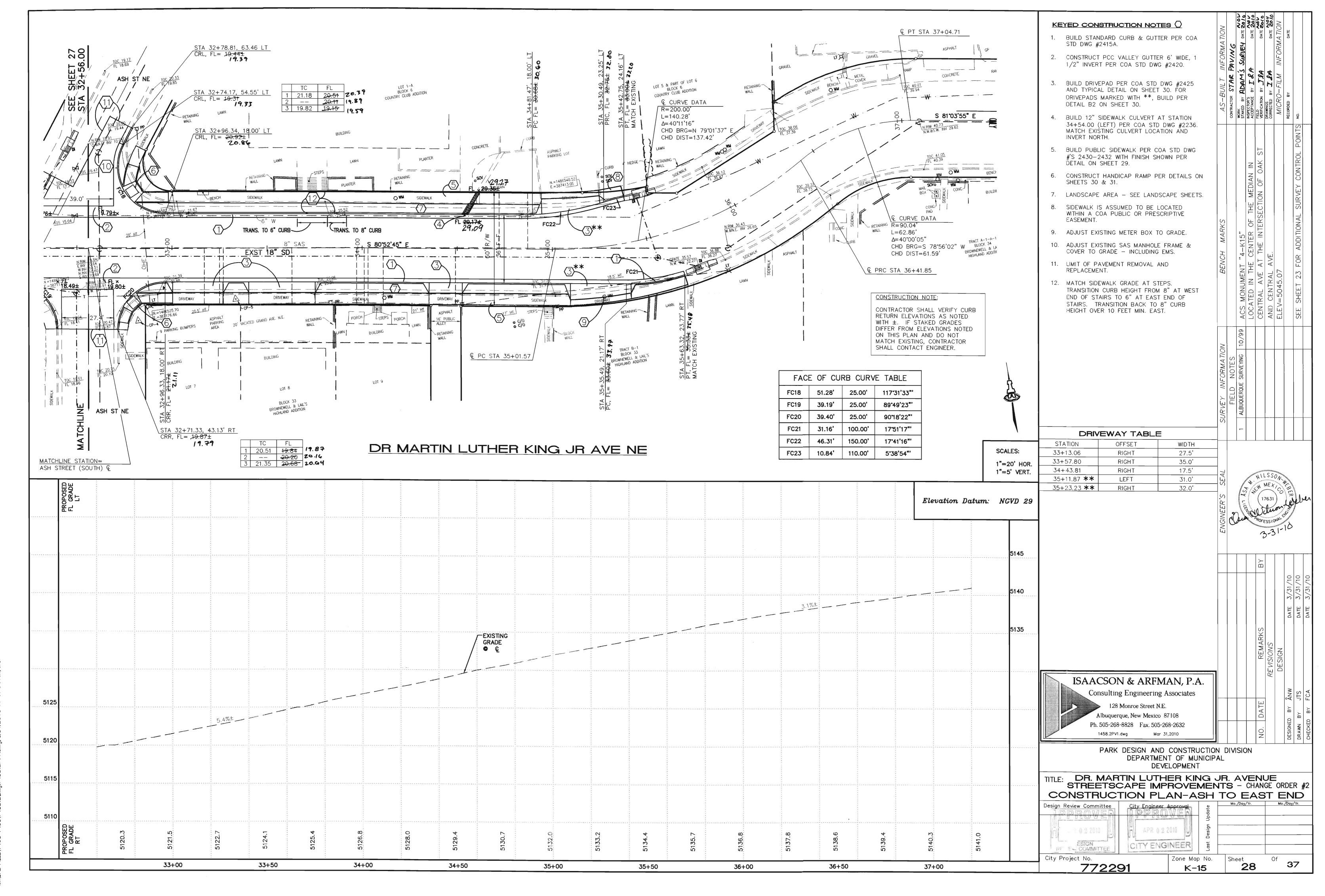
M:\CAD FILES\1400-1499\1458.2\dwa\1458.2DEMO.dwa, 3/31/2010 11:33:57 AM

M:\CAD FILES\1400-1499\1458.2\dwa\1458.2DEMO.dwa, 3/31/2010 11:34:25 AM, tho

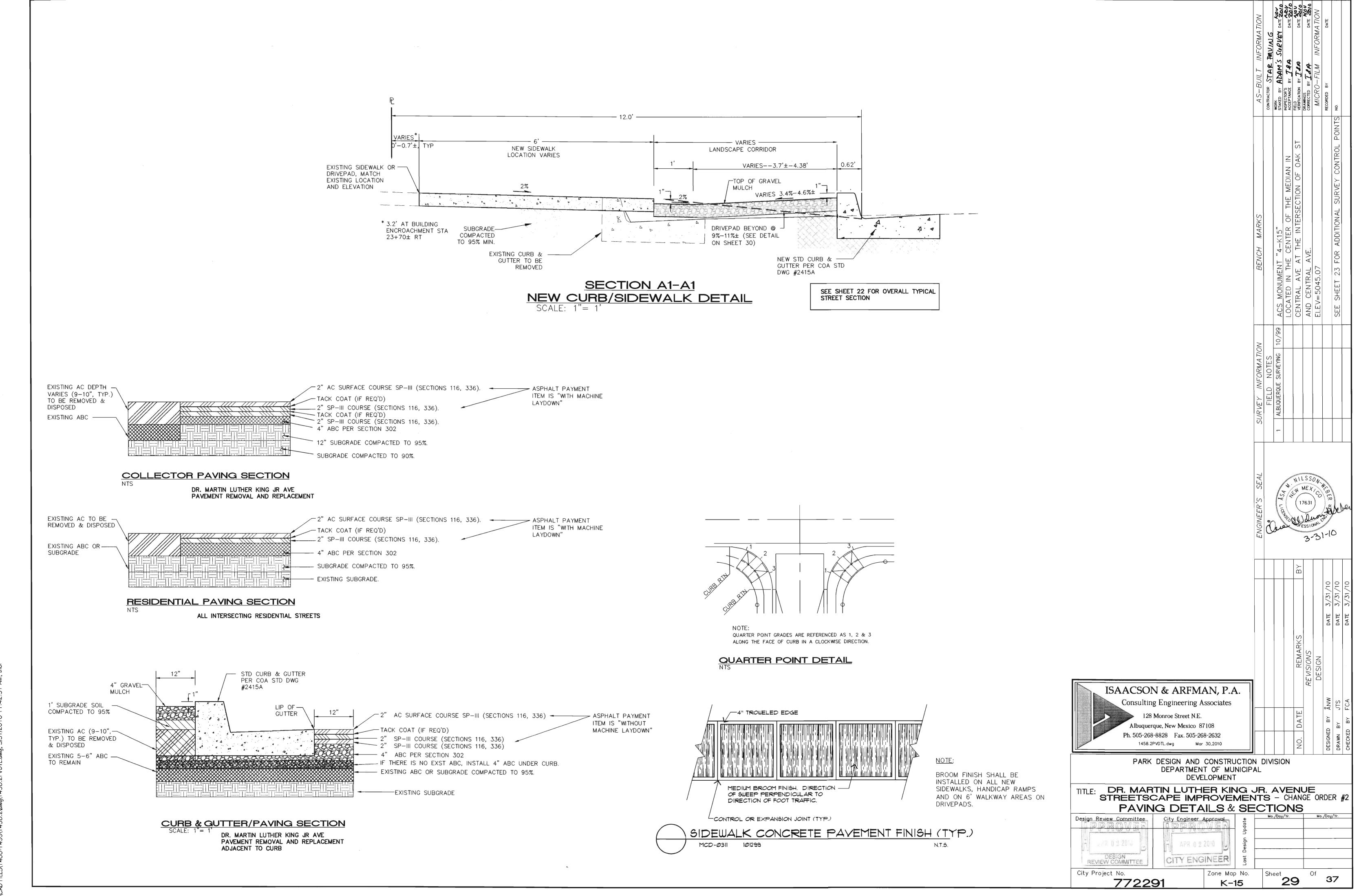


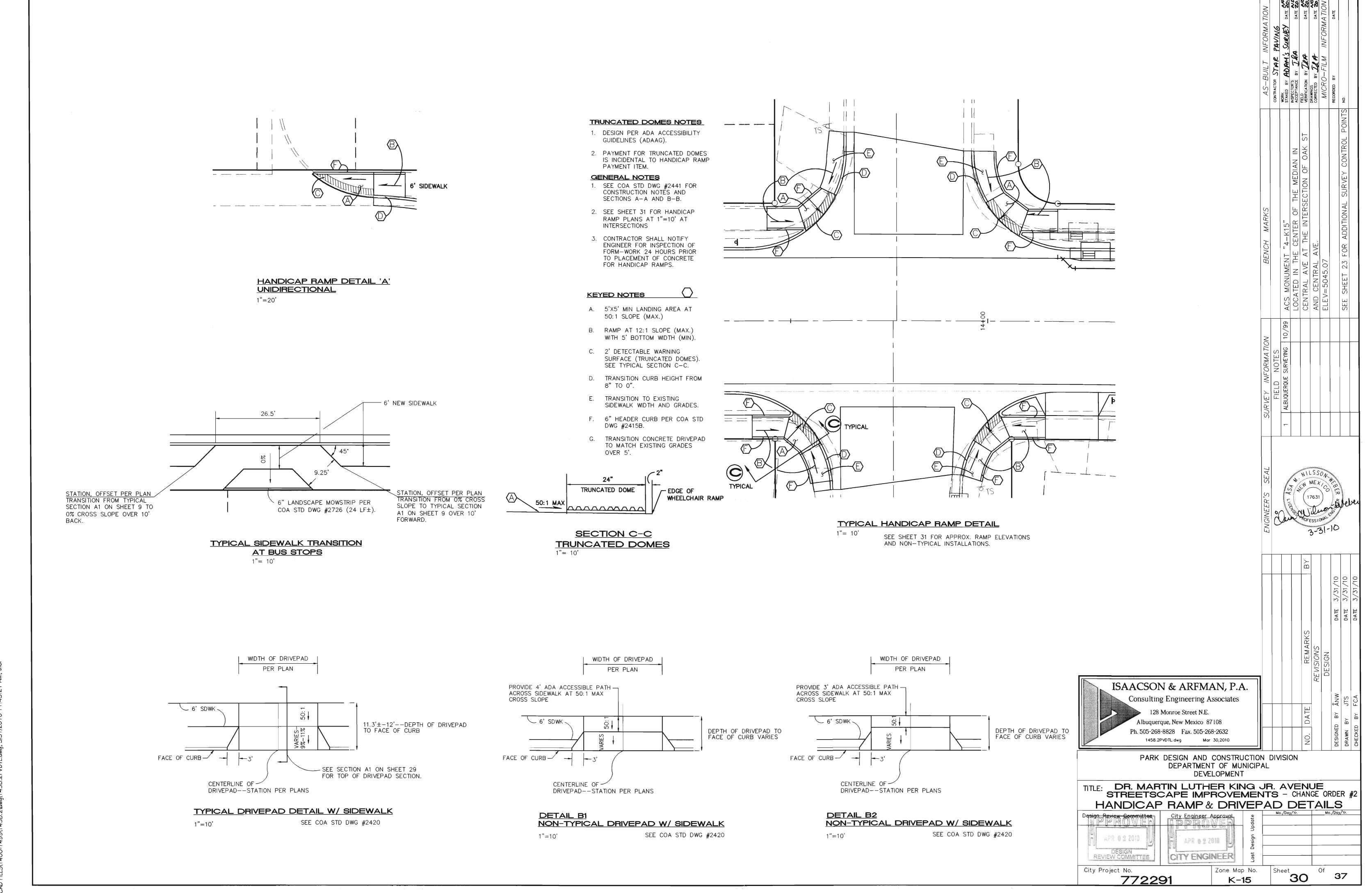




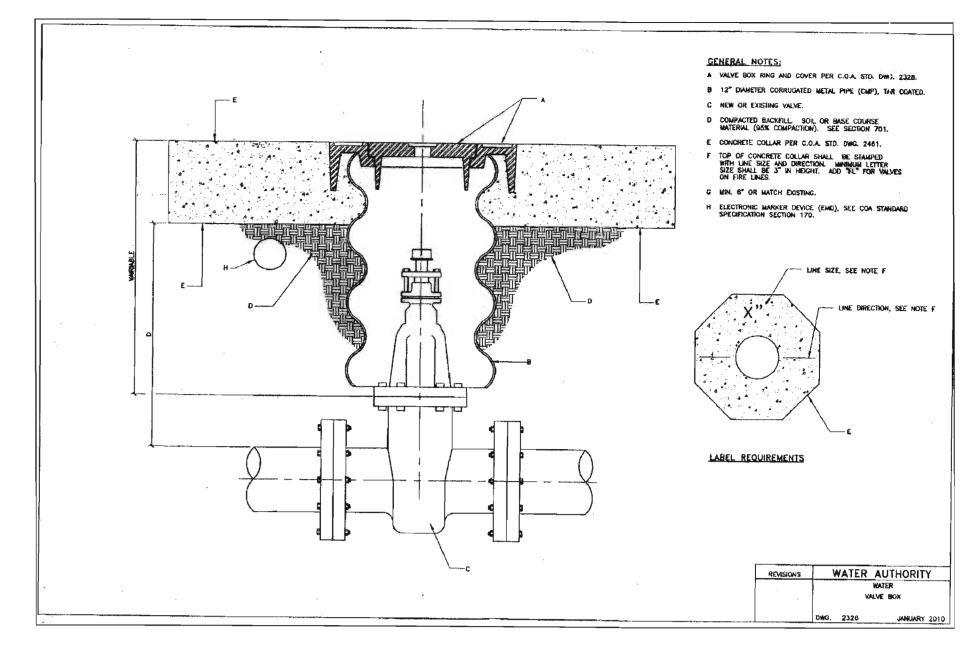


M:\CAD FILES\1400-1499\1458 24wa\1458.2PV1.dwa_3/31/2010 11:41:04 A

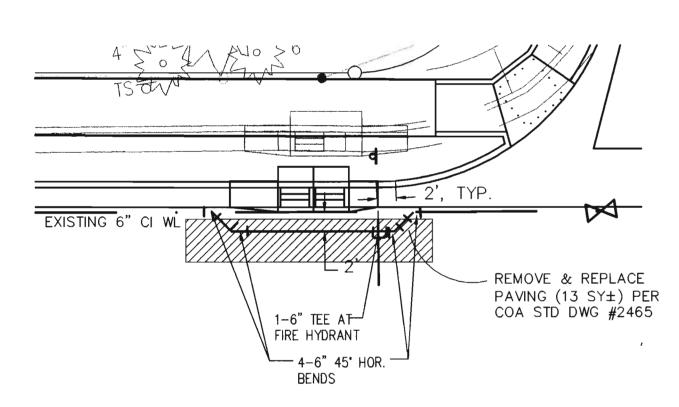




M:\CAD FILES\1400-1499\1458.2\dwg\1458.2PVDTL.dwg, 3/31/2010 11:44:05 AM, thor



COA STD DWG 2326--WATER VALVE BOX



IF EXISTING 6" CI WATERLINE IS LOCATED CLOSER THAN 2' FROM THE NEW INLET BOX, CONTRACTOR SHALL RE-ALIGN WATERLINE AS FOLLOWS: NON-PRESSURE CONNECTION

REMOVE & DISPOSE 19 LF± 6" CI WL ADJACENT TO NEW INLET. INSTALL 4-6" 45" BENDS AND 22 LF± 6" WL. REMOVE & REPLACE PAVING (13 SY±) PER COA STD DWG #2465. INSERT 1-6" GATE VALVE W/ VALVE BOX & INSTALL 1-6" TEE AT FIRE HYDRANT CONNECTION.

PAYMENT FOR EACH WATERLINE RE-ALIGNMENT SHALL INCLUDE NON-PRESSURE CONNECTION, REMOVAL & DISPOSAL OF OLD WL, NEW FITTINGS, GLANDS, NEW WL PIPE, TRENCHING & BACKFILL (95% MIN.), AND PAVEMENT REMOVAL & REPLACEMENT PER COA STD DWG #2465

WATERLINE RE-ALIGNMENT AT NEW INLETS

1"=10'

WATER SHUT-OFF PLAN

WATER SHUT-OFF PLAN

SHUT-OFF VALVES AS LISTED BELOW TO PROVIDE NON-PRESSURE CONNECTIONS. THE CONTRACTOR SHALL CONTACT ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY (857-8200) 7 WORKING DAYS PRIOR TO SHUT-OFF OR TURN-ON AT VALVES. ONLY ABCWUA

PERSONNEL PARE PRESONED T	O OI LIVITE TALTES.
CONNECTION	SHUT OFF VALVES NOS.
(1), (2), (5)	142-144, 401-403
(3)	401-404, B
(4)	404, B, 411, 412

WATERLINE CONSTRUCTION NOTES:

50 100

SCALE 1"-100"

- CONTRACTOR SHALL REMOVE & DISPOSE ANY WOODEN WATER METER BOXES ENCOUNTERED IN THE FIELD AND REPLACE WITH A STANDARD METER BOX PER COA STD DWG NOS 2361 & 2362. CONTRACTOR SHALL REPORT EACH LOCATION TO PROJECT MANAGER (MRWM) AT 268-2266.
- IF CONTRACTOR ENCOUNTER NON-COPPER WATER SERVICE LINES, CONTRACTOR SHALL CONTACT ABCWUA AT 768-2713 AND REPORT EACH LOCATION.
- 3. CONTRACTOR SHALL CONTACT ENGINEER IF THERE IS A CONFLICT WITH WATER SERVICE LINES OR SANITARY SEWER SERVICE LINES AT NEW STORM DRAIN INLET LOCATIONS.

RESTRAINED JOINT LENGTHS, LT,					
FOR TEES, (FT.) ALL JOINTS AT THE TEE MUST BE RESTRAINED.					
SIZE	RUN	BRANCH			
12x12x12	15	17			
12×12×10	10	18			
12x12x8	6	19			
12x12x6	3	19			
12x12x4	1	19			
10x10x10	12	18			
10x10x8	8	15			
10x10x6	4	16			
10x10x4	2	4			
8x8x8	9	20			
8x8x6	5	17			
8x8x4	2	15			
6x6x6	6	20			
6×6×4	2	20			

THIS TABLE IS BASED UPON THE FOLLOWING CRITERIA:

DEPTH OF BURY: FACTOR OF SAFETY: MATERIAL:

3.0 FT. MINIMUM 1.25

PVC PIPE GM/SM - SILTY GRAVELS AND SILTY SANDS, GRAVEL-SAND-SILT MIXTURES. 150 PSI

TEST PRESSURE: TRENCH TYPE 4:

SOIL TYPE:

PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH MINIMUM; BACKFILL COMPACTED TO TOP OF PIPE.

DIFFERENT CRITERIA, E.G., DUCTILE IRON PIPE, GREATER DEPTH OF BURY, ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY ABCWUA

> RESTRAINED JOINT LENGTHS FOR WATERLINE FITTINGS

RESTRAINED JOINT LENGTHS, L _J , FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS, (FT.)							
		VALVES &					
SIZE	90.	45°	22 1/2	11 1/4	ENDS		
12	30	85					
10	26	11	5	3	72		
8	22	9	4	2	60		

RESTRAINED JOINT LENGTHS, L _T , FOR REDUCERS, (FT.) MINIMUM UNOBSTRUCTED, STRAIGHT—RUN LENGTH: RESTRAIN EITHER LARGE PIPE, OR SMALL PIPE.						
SIZE	LARGE SIDE	SMALL SIDE	SIZE	SIZE LARGE SIDE		
12×10	25	30	10x6	44	73	
12x8	45 68 10×4 58 141					
12x6	62	121	121 8x6 25 33			
12×4	74 213 8x4 43 83					
10x8	24	30	6×4	24	35	

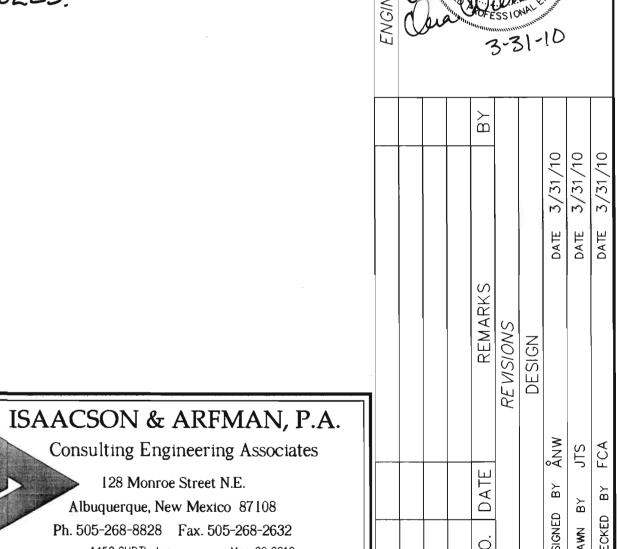
NOTES:

- 1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
- 2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ON THIS SHEET.
- THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

WATER METER BOXES AND MANOLES IN SIDEWALK

MINOR ADJUSTMENTS TO WATER METER BOXES AND MANHOLES IN SIDEWALK WHERE PROPOSED SIDEWALK GRADES MATCH EXISTING SHALL BE INCIDENTAL TO SIDEWALK CONSTRUCTION PAY ITEM.

MANHOLE FRAME AND COVER NOTE: NEW FRAMES & COVERS WERE INSTALLED FOR ALL ADJUSTED EXST. MANHOLES.



1458.2UDTL.dwg Mar 29,2010 PARK DESIGN AND CONSTRUCTION DIVISION DEPARTMENT OF MUNICIPAL DEVELOPMENT

_					
ITLE	DR. MAR	TIN LUTHER KINCAPE IMPROVEN	1G .	JR. AVEN	JE
	STREETS	CAPE IMPROVE	MEN	ITS - CHAN	GE ORDER
	WATE	R DETAILS & SH	UTC	OFF PLAN	
esian	Review Committee	City Engineer Approval	· · ·	Mo./Day/Yr.	Mo./Day/Yr.

APR 0 2 2010 CITY ENGINEER City Project No.

Consulting Engineering Associates

128 Monroe Street N.E.

Albuquerque, New Mexico 87108

Ph. 505-268-8828 Fax. 505-268-2632

Zone Map No. 772291 32 K-15

