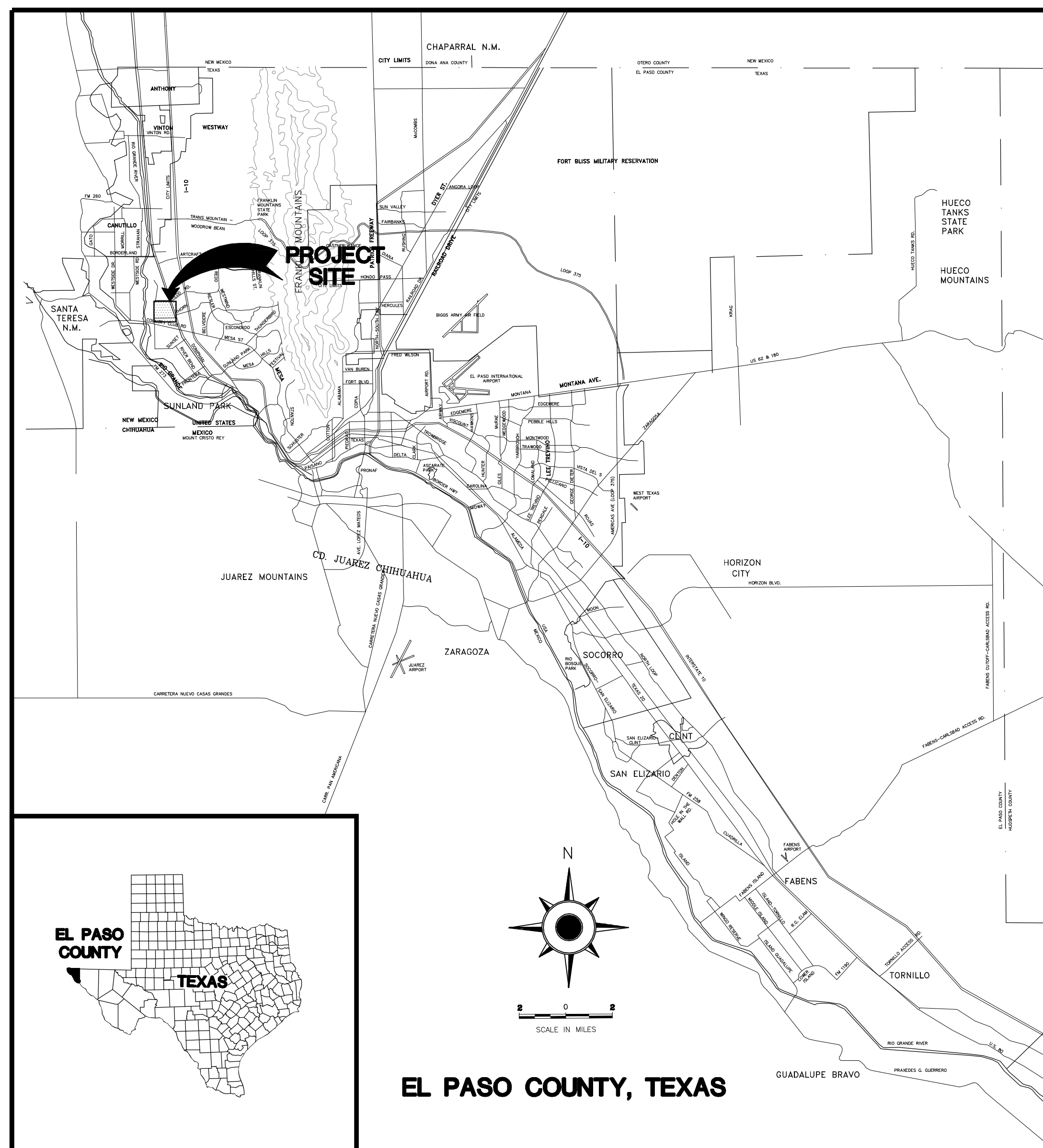


GARDEN VALLEY SUBDIVISION

SUBDIVISION IMPROVEMENT PLANS

TRACT 9D, BLOCK 5, UPPER VALLEY,
CITY OF EL PASO, EL PASO COUNTY, TEXAS.
AREA 2.14 ACRES ±
AUGUST 2012

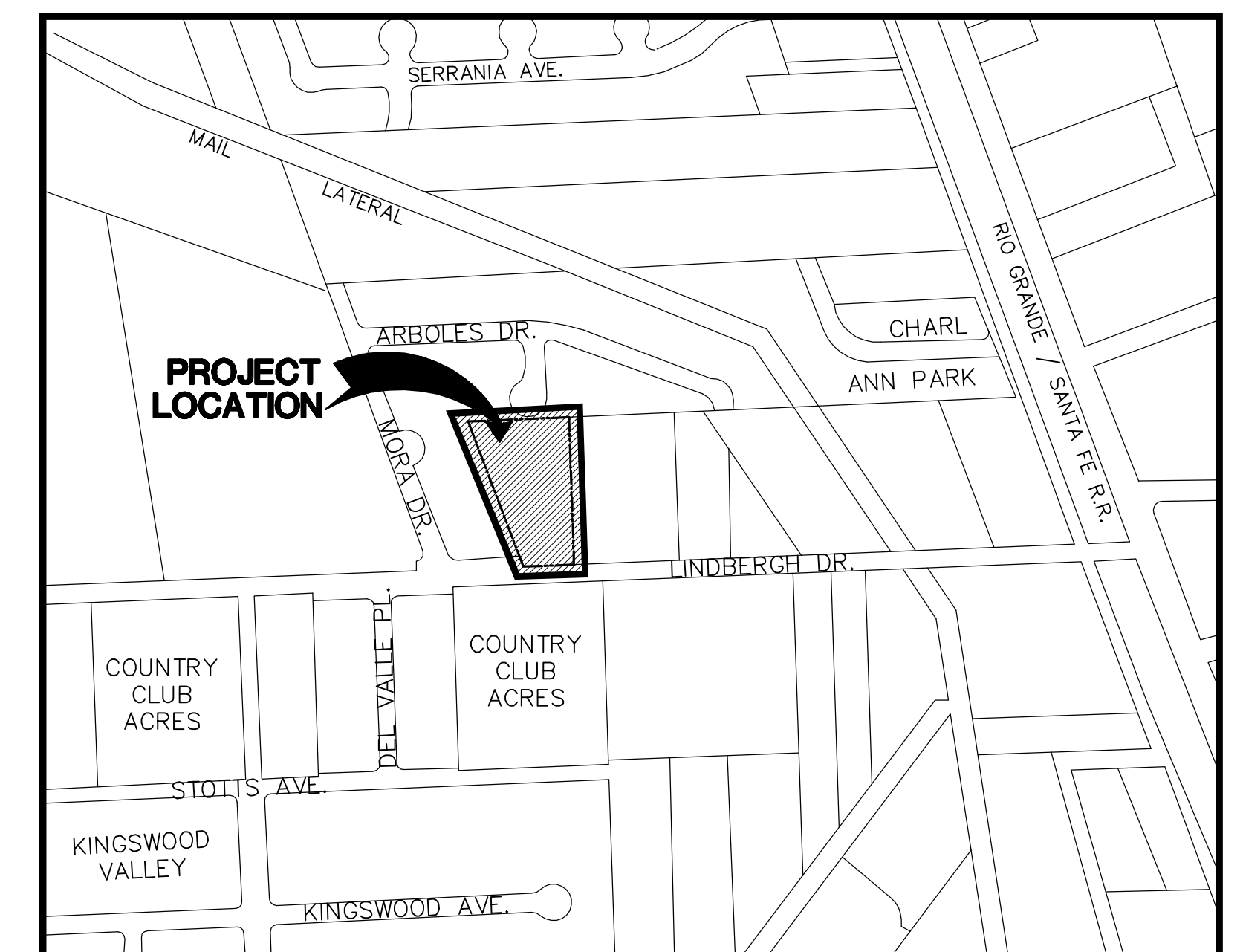
VICINITY MAP



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LOCATION MAP



GARDEN VALLEY

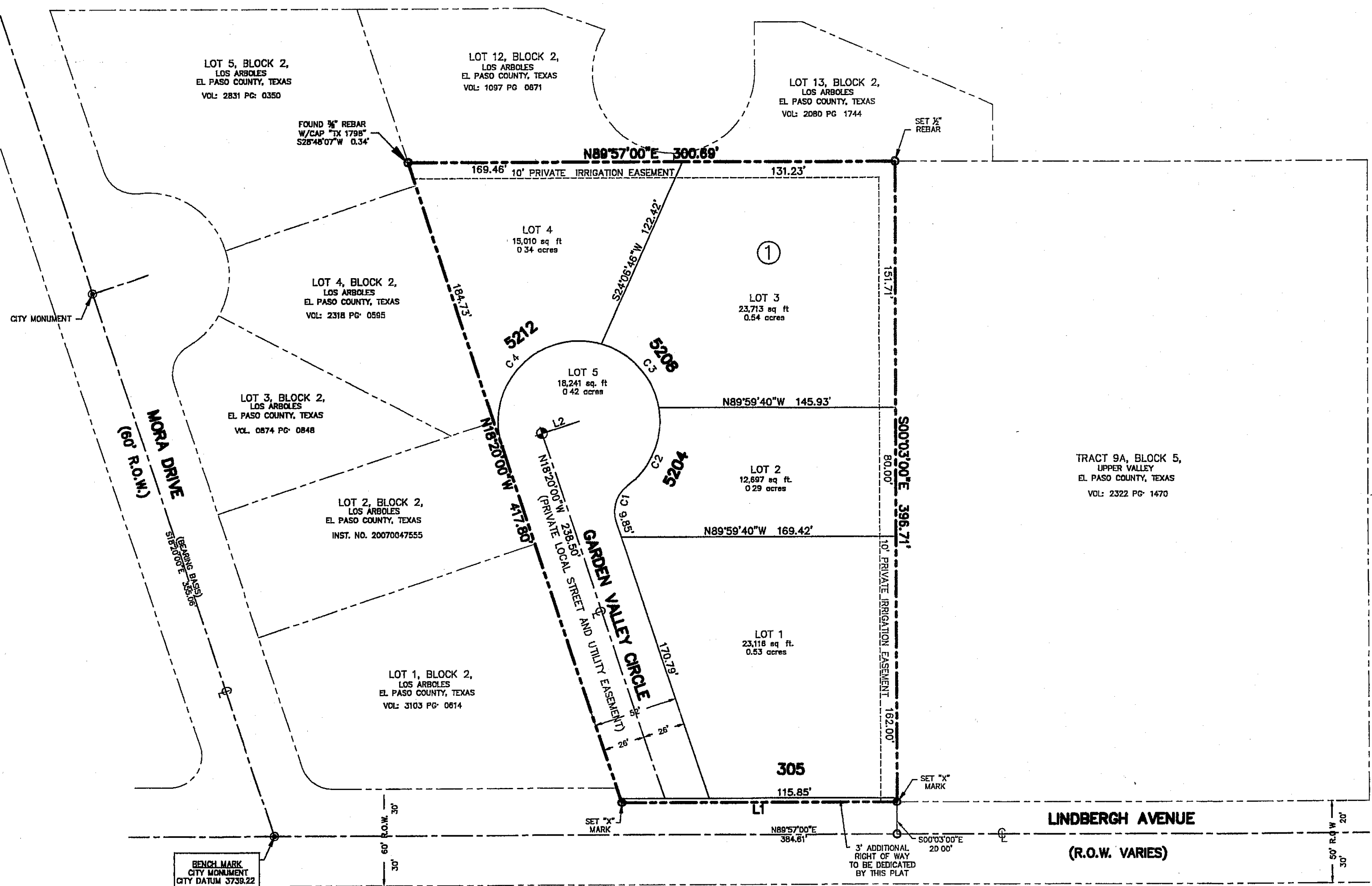
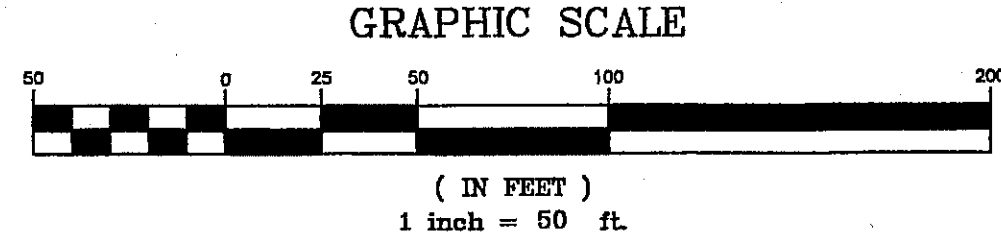
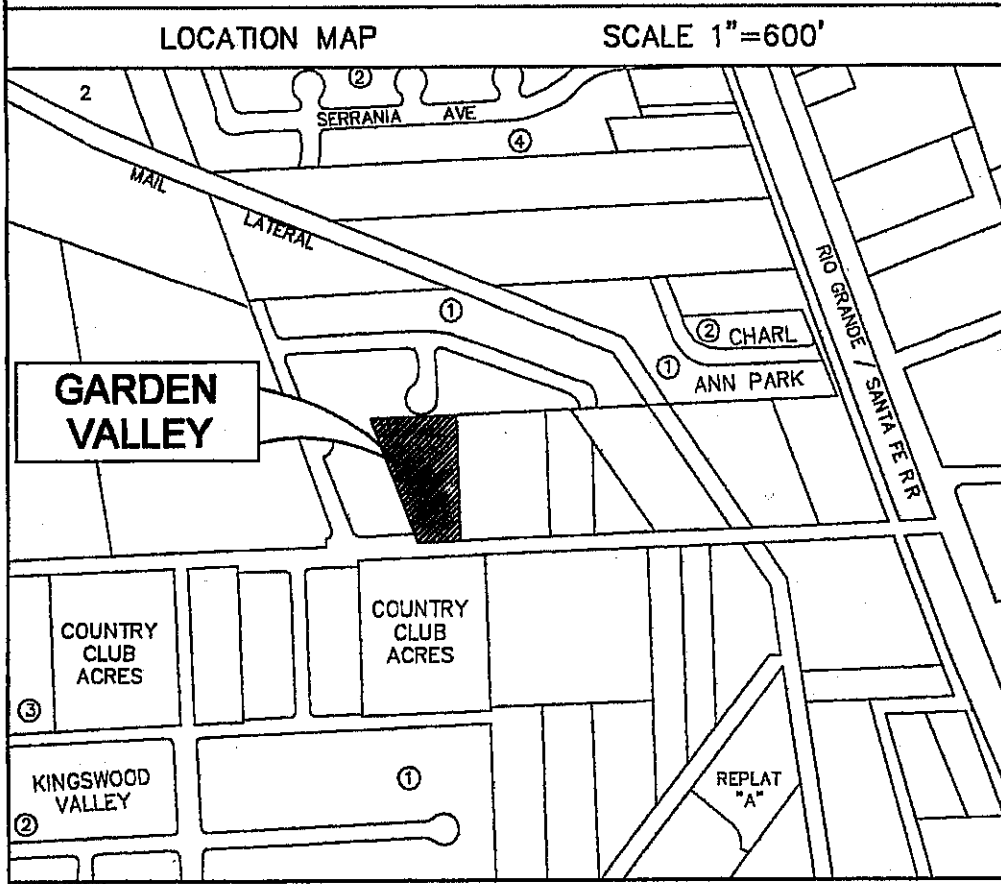
TRACT 9D, BLOCK 5,
UPPER VALLEY,
CITY OF EL PASO,
EL PASO COUNTY, TEXAS.
AREA 2.14 ACRES ±

PLAT NOTES & RESTRICTIONS

- THIS IS TO CERTIFY THAT WATER AND SEWER SERVICES WILL BE PROVIDED TO GARDEN VALLEY BY THE EL PASO WATER UTILITIES/PUBLIC SERVICE BOARD IN ACCORDANCE WITH THEIR RULES AND REGULATIONS AND WITH SECTION 16.543 OF THE TEXAS WATER CODE. WATER AND SEWER SERVICES WILL BE EXTENDED TO THE SUBDIVISION FROM EXISTING FACILITIES LOCATED ON LINDBERGH AVENUE TO SERVE THE SUBDIVISION.
- TAX CERTIFICATE(S) FOR THIS SUBDIVISION ARE IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION, INSTRUMENT NO. 2012-004885-516 DATE 12/3/12
- RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION, INSTRUMENT NO. 2012-004885-516 DATE 12/3/12
- SUBDIVISION IMPROVEMENTS AGREEMENT & GUARANTEE FOR THIS SUBDIVISION IS FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION, INSTRUMENT NO. 2012-004885-516 DATE 12/3/12
- SET 1/2" REBAR WITH CAP STAMPED "B&A INC" AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE NOTED
- THIS PROPERTY MAY BE SUBJECT TO EASEMENTS WHETHER OF RECORD OR NOT, (NOT SHOWN).
- DEED RESTRICTIONS SHALL BE ENFORCED BY INJUNCTIVE RELIEF WITHOUT THE REQUIREMENT FOR BOND OR OTHER SECURITY
- SUBJECT PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN ZONE C, "AREAS OF MINIMAL FLOODING", PER F.I.R.M. PANEL NUMBER 4802140021D, LAST REVISION DATE JANUARY 1, 1997. THIS SURVEYOR MAKES NO GUARANTEES AS TO THE ACCURACY OF THE ABOVE INFORMATION. THE LOCAL F.E.M.A. AGENT SHOULD BE CONTACTED FOR VERIFICATION.
- DEED REFERENCE: INSTRUMENT NO 20110087289
- SCHOOL DISTRICT - EL PASO INDEPENDENT SCHOOL DISTRICT THIS SUBDIVISION LIES WITHIN THE EL PASO INDEPENDENT SCHOOL DISTRICT 6531 BOEING DR, EL PASO, TX 79925
- U.S. POSTAL SERVICE DELIVERY WILL BE PROVIDED THROUGH NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS.
- THE EASEMENT ON VOL.1348, PG. 520 MAY AFFECT THIS PROPERTY.
- FINAL PERCOLATION TEST WITH GEOTECHNICAL RECOMMENDATION, SOIL TEST AND BORING LOG WITH WATER TABLE ELEVATION INFORMATION SHALL BE SUBMITTED PRIOR TO STREET ACCEPTANCE AND/BUILDING PERMITS SUBMIT

ON-SITE PONDING NOTES

- ALL LOTS IN THE SUBDIVISION ARE SUBJECT TO ON-SITE PONDING. LOT OWNERS ARE RESPONSIBLE FOR MAINTAINING ADEQUATE PROVISIONS TO ACCOMMODATE ALL STORMWATER RUNOFF GENERATED FROM THEIR RESPECTIVE LOT PLUS ONE-HALF THE RUNOFF GENERATED FROM ALL ADJUTING STREET RIGHT-OF-WAYS DIRECTLY FRONTING THE LOT. POND DEPTH AND LOT GRADING REQUIREMENTS ARE AS PER APPROVED GRADING AND DRAINAGE PLAN FOR THE SUBDIVISION.
- WALLS CONSTRUCTED ADJUTING STREET RIGHT-OF-WAYS SHALL BE CONSTRUCTED WITH A SERIES OF DRAIN PIPES ALLOWING THE STREET RUNOFF TO BE CONVEYED TO THE SUBJECT PROPERTY.
- ON-SITE PONDING AREAS SHALL HAVE MAXIMUM ONE (VERTICAL) TO THREE (HORIZONTAL) SIDE SLOPES AND A MAXIMUM DEPTH OF TWELVE (12) INCHES BASED ON A ONE HUNDRED YEAR STORM.
- PERMANENT ELEVATION MARKERS SHALL BE INSTALLED TO DEFINE THE LEVELS TO BE MAINTAINED TO ENSURE THE EFFECTIVENESS OF ON-SITE PONDING. PERMANENT ELEVATION MARKERS SHALL NOT BE MOVED, COVERED, OR ALTERED WITHOUT PERMISSION FROM THE CITY ENGINEER.
- THE CITY AND/OR ITS REPRESENTATIVE IS GRANTED PERMANENT RIGHT OF ACCESS TO INSPECT THE PONDING AREAS AND PERMANENT ELEVATION MARKERS.
- FILLING OR CHANGING THE POND, OR ALLOWING THE POND TO BE FILLED OR CHANGED TO AN ELEVATION GREATER THAN ESTABLISHED BY THE PERMANENT ELEVATION MARKERS, IS PROHIBITED.
- ON-SITE PONDING AREAS AND PERMANENT ELEVATION MAKERS SHALL BE CONSTRUCTED AND INSPECTED PRIOR TO BUILDING OCCUPANCY. PERMANENT CERTIFICATE OF OCCUPANCY, REQUIRED TO OBTAIN UTILITY SERVICES, WILL BE ISSUED ONLY AFTER THE CITY OF EL PASO HAS PERFORMED THE INSPECTION.
- NO PERSON SHALL BE PERMITTED TO IMPAIR THE FUNCTIONALITY OF AN ON-SITE POND NO MORE THAN FIFTY-PERCENT (50%) OF THE AREA OF ANY RESIDENTIAL LOT CONVEYED BY DEED SHALL BE COVERED BY IMPROVEMENTS, EITHER TEMPORARY OR PERMANENT, WHICH SHED STORMWATER, INCLUDING BUT NOT LIMITED TO, BUILDINGS, DRIVEWAYS, PATIOS, DECKS, OR LANDSCAPING UNDERLAIN WITH PLASTIC SHEETING OR OTHER IMPERMEABLE MATERIAL.
- IN THE EVENT THAT THE FUNCTIONALITY OF AN ON-SITE POND BECOMES IMPAIRED WHETHER BY ACT OF MAN OR NATURE, THE OWNER OF THE LOT ON WHICH THE IMPAIRED POND IS LOCATED SHALL PERFORM ALL CORRECTIVE ACTIONS REQUIRED TO RESTORE THAT FUNCTIONALITY.
- ANY OWNER NOTIFIED IN WRITING BY THE CITY ENGINEER OF CORRECTIVE ACTIONS REQUIRED TO RESTORE THE FUNCTIONALITY OF AN ON-SITE POND OR DRAINAGE PROBLEM SHALL COMPLY WITHIN FORTY-FIVE CALENDAR DAYS OF RECEIPT OF SUCH NOTICE, PROVIDED, HOWEVER, THAT NOTHING HEREIN SHALL PREVENT THE CITY FROM MANDATING AN EARLIER TIME FOR COMMENCEMENT OF COMPLETION DURING TIMES OF EMERGENCY, WHERE THERE IS IMMINENT DANGER OF LOSS OF LIFE, LIMB OR PROPERTY.
- OWNER OF PROPERTY, UTILIZING THE ON-SITE PONDING WAIVES ANY CLAIM OR CAUSE OF ACTION AGAINST THE CITY, EPWU-PSB, OFFICIALS OR EMPLOYEES, FOR ANY DEATH, INJURY OR PROPERTY DAMAGE RESULTING FROM ALTERATION OF THE PONDING CAPACITY FOR THAT LOT, INCLUDING LACK OF MAINTENANCE.
- THESE ON-SITE PONDING REQUIREMENTS SHALL BE ENFORCED BY INJUNCTIVE RELIEF WITHOUT THE REQUIREMENT FOR BOND OR OTHER SECURITY.
- THE CONVEYANCE OF PROPERTY PERMITTING ON-SITE PONDING SHALL DECLARE IN CONSPICUOUS LANGUAGE IN THE DEED THAT THE PROPERTY IS SUBJECT TO ON-SITE PONDING REQUIREMENTS, MAINTENANCE OF ELEVATION MARKERS, STANDING ON WATER LOT, AND INGRESS AND EGRESS FOR INSPECTION AS STATED ON THE PLAT.



LINE TABLE		
LINE	BEARING	LENGTH
L1	S89°57'00"W	169.62'
L2	N71°40'00"E	24.00'

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	DELTA	CHORD
C1	25.02'	20.00'	14.45'	71°40'56"	S17°30'28"W 23.42'
C2	46.55'	50.00'	25.12'	53°20'40"	N26°40'37"E 44.89'
C3	64.48'	50.00'	37.60'	73°53'21"	N36°56'24"W 60.10'
C4	108.60'	50.00'	94.93'	124°26'55"	S43°53'28"W 88.48'

PRINCIPAL CONTACTS					
Name	Address	City & Zip	Phone	Fax	
OWNER: Edgar O. Gonzalez and Lizbeth Halguin	701 Bluff Canyon	El Paso, TX 79912			
SURVEYOR: Barragan and Associates Inc.	10950 Pellicano Dr. Bldg. F,	El Paso, TX 79935	(915)591-5709	(915)591-5706	
ENGINEER: Quantum Engineering Consultants, Inc.	414 Executive Center Blvd. Suite 200	El Paso, TX 79902	(915)532-7272	(915)532-7373	

DEDICATION

Edgar O. Gonzalez and Lizbeth Halguin, as property owners of this land, do hereby present this map and dedicate their respective portions of property to the use of the public, street right-of-way, and utility easements as hereon laid down and designated, including easements for overhead of service wires for pole type utilities and the right for installation of service poles alongside lot lines as may be required, easements for buried service wires, conduits and pipes for underground utilities, and the right to ingress and egress for service and construction, and the right to trim interfering trees and shrubs.

Witness my signature this 1st day of November 2012.
 Edgar O. Gonzalez
 Lizbeth Halguin

ACKNOWLEDGEMENT

STATE OF TEXAS
 COUNTY OF EL PASO
 Before me, the undersigned authority, on this day personally appeared Edgar O. Gonzalez, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed for the purpose and consideration herein expressed.

Given under my hand and seal of office this 1st day of November 2012.
 Notary Public in and for El Paso County
 My Commission Expires 03-27-2016

Before me, the undersigned authority, on this day personally appeared Lizbeth Halguin, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed for the purpose and consideration herein expressed.

Given under my hand and seal of office this 1st day of November 2012.
 Notary Public in and for El Paso County
 My Commission Expires 03-27-2016

CITY PLANNING COMMISSION

This subdivision is hereby approved as to the platting and as to the condition of the dedication in accordance with Chapter 212 of the Local Government Code of Texas this 15th day of Nov, 2012.
 Chairperson
 Executive Secretary

Approved for filing this 26th day of November, 2012.
 City Development Director

FILING

Filed and recorded in the office of the County Clerk of El Paso County, Texas, this 30th day of DECEMBER 2012, in File No. 2012006885T of the Plat Records.
 County Clerk
 by Deputy

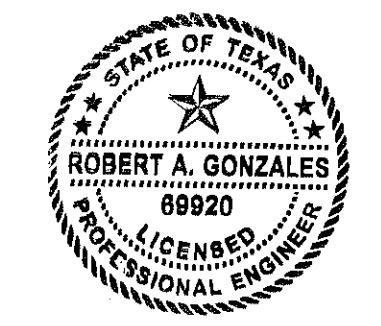
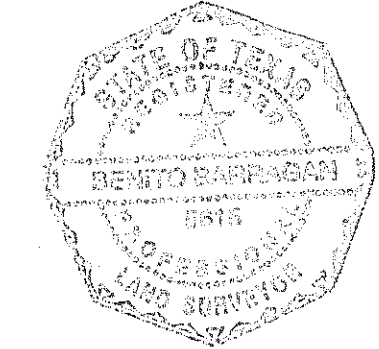
This plat represents a survey made on the ground by me or under my supervision and complies with the current Texas Board of Professional Land Survey Professional and Technical Standards.

Subdivision improvement plans prepared by and under the supervision of Robert A. Gonzales, P.E., Registered Professional Engineer No. 69920

Benito Barragan TX, R.P.L.S. No. 5615

ROBERT A. GONZALES, P.E. TX 69920

SURVEYOR
Barragan & Associates Inc.
 LAND PLANNING & LAND SURVEYING
 10950 Pellicano Dr Bldg F - El Paso TX 79935
 Phone (915) 591-5709 Fax (915) 591-5706
 CONTACT BENITO BARRAGAN, R.P.L.S.



GROUNDWATER NOTES:

1. DEPENDENT ON SEASONAL GROUNDWATER CONDITIONS, LOCALIZED DRAINAGE IMPROVEMENTS, IT IS RECOMMENDED THAT THE PROPOSED IMPROVEMENTS BE MONITORED THROUGHOUT CONSTRUCTION TO ENSURE PROPER DRAINAGE PLANNING.
2. GROUNDWATER LEVELS SHALL BE MONITORED TO ENSURE THAT ADJACENT PROPERTIES ARE NOT AFFECTED BY DRAINAGE OPERATIONS.
3. FOLLOWING CONSTRUCTION, THE GROUNDWATER SHOULD BE ALLOWED TO RETURN TO A STABLE LEVEL AT A GRADUAL RATE. PUMPING SHOULD NOT BE SUDDENLY TERMINATED, BUT SOME DECREASED PUMPING SHOULD BE MAINTAINED TO PREVENT FLOODING. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
4. A COPY OF THE GEOTECHNICAL REPORT IS AVAILABLE FOR REVIEW BY THE CONTRACTOR UPON REQUEST AT ACD DESIGNS, 21 NORTH FLORENCE, SUITE 204.
5. THE INFORMATION SOIL STRATIGRAPHY, SOIL CHARACTERISTICS AND GROUNDWATER TABLE ELEVATIONS SHOWN ON THE GEOTECHNICAL REPORT ARE FOR DESIGN PURPOSES ONLY.

NOTE:

1. FINAL "ON-SITE" RETENTION PONDS LOCATED WITHIN EACH LOT SHALL BE CONSTRUCTED IN THEIR ENTIRETY, INCLUDING, BUT NOT LIMITED TO, EQUALIZATION SHELTERS, WATER HARVESTING STRUCTURES AND/OR SURFISURFACE SYSTEMS AT THE TIME EACH RESPECTIVE LOT IS DEVELOPED.
2. THE DESIGN ENGINEER FOR EACH RESPECTIVE LOT WITHIN THIS SUBDIVISION SHALL BE RESPONSIBLE FOR RETAINING TANK OR POND DESIGN, INCLUDING, BUT NOT LIMITED TO, APPROVAL, GRADING AND DRAINAGE PLANS, COMPLETE PONDING DESIGN CALCULATIONS AND DRAINAGE AREA MAPPING.
3. GRADING PERMITS, STORM WATER POLLUTION PREVENTION PLANS AND NOTICE-OF-INTENT (NOI) WILL BE REQUIRED AT THE TIME OF BUILDING PERMITS.

REMARKS NOTES:

ALONG WITH THIS SUBDIVISION ARE SUBJECT TO ON-SITE PONDING OF STORM WATER RUNOFF. EACH RESPECTIVE LOT WITHIN THIS SUBDIVISION SHALL BE RESPONSIBLE FOR RETAINING TANK OR POND DESIGN, INCLUDING, BUT NOT LIMITED TO, APPROVAL, GRADING AND DRAINAGE PLANS, COMPLETE PONDING DESIGN CALCULATIONS AND DRAINAGE AREA MAPPING. AND HALF OF LINDBERGH DRIVE IN ACCORDANCE WITH THE CURRENT CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION AND THE DRAINAGE DESIGN MANUAL (DDM) ARCHITECT AND/OR INCORPORATING WATER HARVESTING TECHNIQUES INTO THE SITE DESIGN.

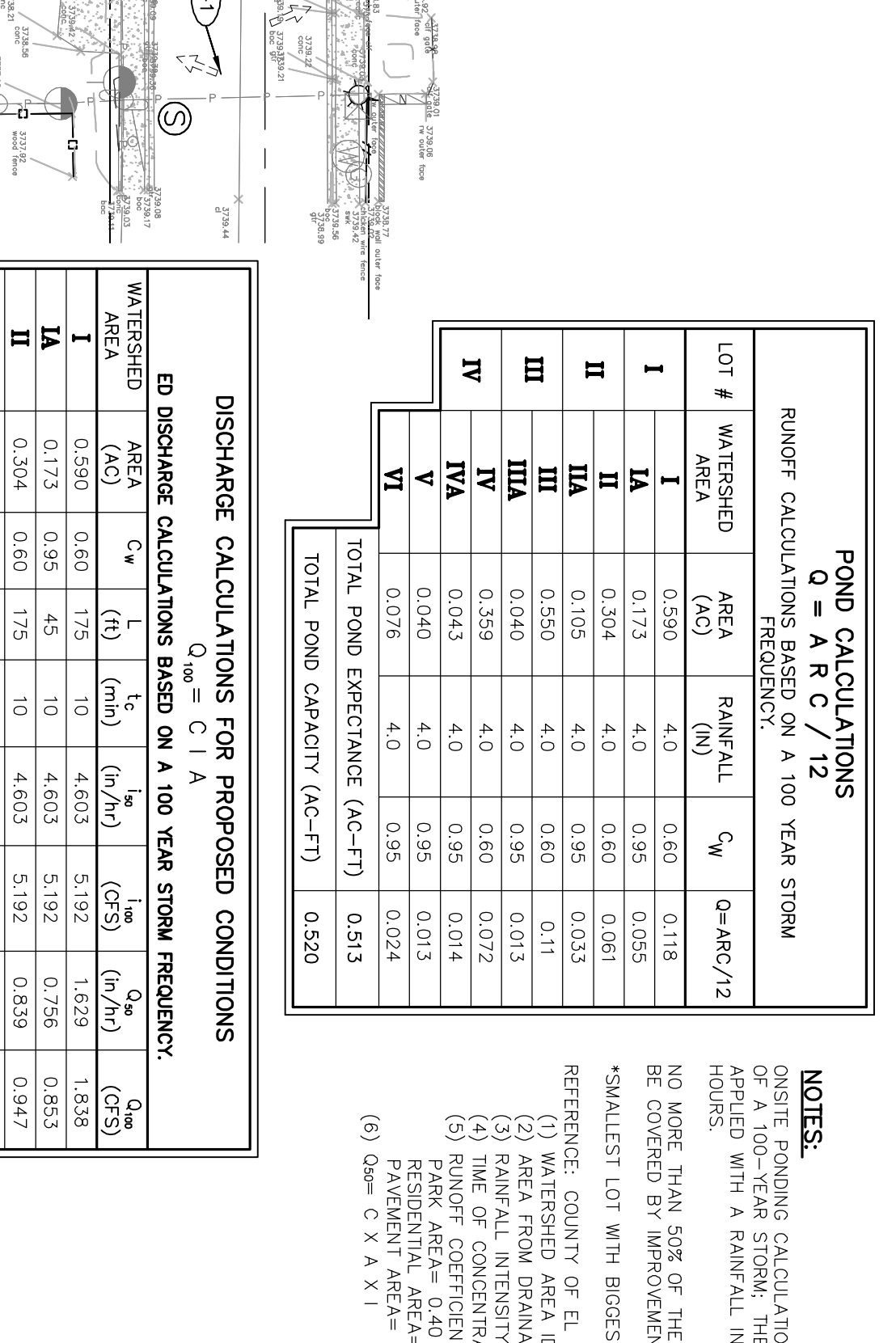
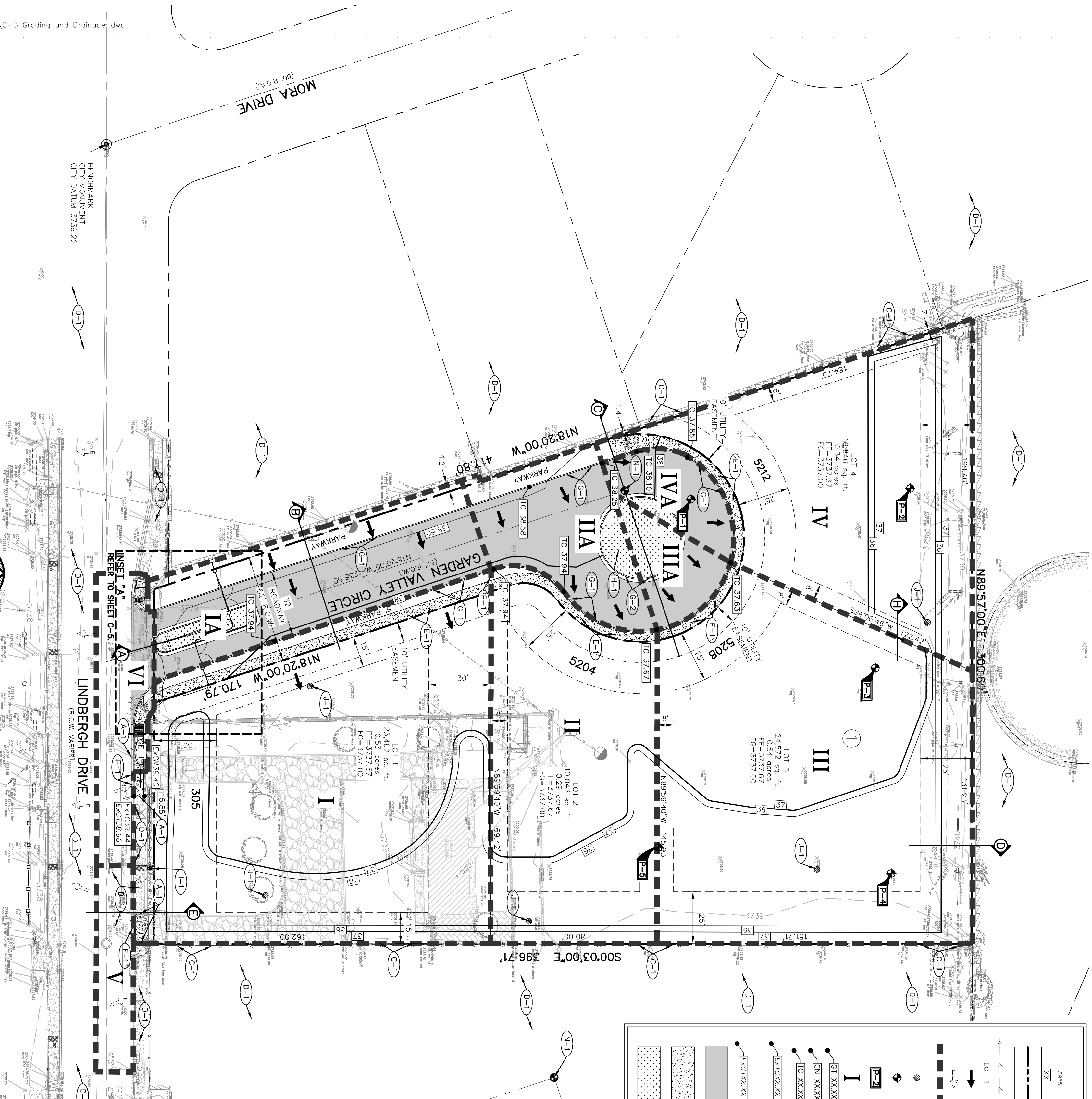
DEMOGRAPHIC NOTES:

ASSIGNED SITE IMPROVEMENTS LOCATED WITHIN THE PLATTED AREA AND ADJACENT AREAS SHALL BE REFERRED TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

SOIL PERCOLATION TEST RESULT
 (REFER TO GENERAL SOILS INVESTIGATION REPORT)

HOLE NO.	APPROXIMATE TEST DEPTH (FT)	APPROXIMATE GROUNDWATER AT BOTTOM OF BENCHMARK	VISUAL SOIL DESCRIPTION	READING INTERVAL/TOTAL TEST TIME	ESTIMATED AVG. PERCOLATION RATE AT TEST DEPTH: MIN./IN.
P-1	4	BELOW 6"	SAND, FINE GRAINED, SILTY, BROWN	10 MIN./60 MIN.	10
P-2	4	6"	SAND, FINE GRAINED, SILTY, BROWN	10 MIN./60 MIN.	20
P-3	4	6"	SAND, FINE GRAINED, SILTY, BROWN	10 MIN./60 MIN.	20
P-4	4	7"	SAND, FINE GRAINED, MULTICOLORED	10 MIN./60 MIN.	10
P-5	4	7"	SAND, FINE GRAINED, SILTY, BROWN	10 MIN./60 MIN.	10

GRADING AND DRAINAGE PLAN
 SCALE: 1" = 30'



POND CALCULATIONS
 $Q = A \cdot R \cdot C / 12$
 RUNOFF CALCULATIONS BASED ON A 100 YEAR STORM FREQUENCY.

LOT #	WATERSHED AREA (AC)	RAINFALL (IN)	C_p	$Q_{P-ACC/12}$
I	0.590	4.0	0.60	0.118
II	0.173	4.0	0.95	0.025
III	0.304	4.0	0.60	0.061
IV	0.050	4.0	0.95	0.033
V	0.040	4.0	0.60	0.013
VI	0.339	4.0	0.60	0.072
VII	0.043	4.0	0.95	0.014
VIII	0.040	4.0	0.95	0.013
IX	0.076	4.0	0.95	0.024
X	0.040	0.95	1.0	0.513
TOTAL POND CAPACITY (AC-FT)				0.530

DISCHARGE CALCULATIONS FOR PROPOSED CONDITIONS
 DISCHARGE CALCULATIONS BASED ON A 100 YEAR STORM FREQUENCY.

WATERSHED AREA (AC)	C_p	$Q_{P-ACC/12}$	$Q_{P-ACC/12}$	$Q_{P-ACC/12}$
I	0.590	0.60	0.118	0.038
II	0.173	0.95	0.025	0.008
III	0.304	0.60	0.061	0.020
IV	0.050	0.95	0.033	0.011
V	0.040	0.60	0.013	0.004
VI	0.339	0.60	0.072	0.022
VII	0.043	0.95	0.014	0.005
VIII	0.040	0.95	0.013	0.004
IX	0.076	0.95	0.024	0.007
X	0.040	0.95	0.5192	0.175
XI	0.076	0.95	1.35	0.332
TOTAL POND CAPACITY (AC-FT)				0.332

LEGEND:

- EXISTING CONTOURS
- FINAL CONTOUR ELEVATION
- PERIMETER BOUNDARY LINE
- LOT LINE
- SHADE
- SUBDIVISION LOT NUMBER
- DRAINAGE FLOW DIRECTION
- EXISTING DRAINAGE FLOW DIRECTION
- LIMITS OF PROPOSED WATERSHED BOUNDARY
- NEW WATER ELEVATION MARKERS
- PERCOLATION TEST LOCATION
- REGULATION TEST NUMBER, REFER TO THIS SHEET
- NEW DRAINAGE AREA
- TOP OF CONCRETE ELEVATION
- TOP OF CURB ELEVATION
- EXISTING TOP OF CURB ELEVATION, PRIOR TO CONSTRUCTION.
- EXISTING TOP OF FIELD VENT, PRIOR TO CONSTRUCTION.
- NEW ASPHALTIC PAVEMENT, REFER TO DETAIL SHEET C-6.
- NEW CONCRETE SIDEWALK, REFER TO DETAIL SHEET C-6.
- NEW LANDSCAPING AREA, REFER TO ARCHITECTURAL PLANS.

KEY NOTES:

- (C-1) MATCH TO EXISTING ELEVATIONS, CONTRACTOR TO FIELD VERIFY.
- (C-2) EXISTING AREA TO REMAIN UNDISTURBED.
- (C-3) NEW 5" CONCRETE SIDEWALK, 2% MAX CROSS SLOPE, REFER TO DETAIL ON SHEET C-6.
- (C-4) NEW 6" CONCRETE CURB & GUTTER, REFER TO DETAIL ON SHEET C-6.
- (C-5) NEW 6" CONCRETE HEADER CURB, REFER TO DETAIL ON SHEET C-6.
- (C-6) NEW 4" ROLLED CURB, REFER TO DETAIL ON SHEET C-6.
- (C-7) NEW LANDSCAPED AREA, REFER TO LANDSCAPE PLANS.
- (C-8) NEW 12" DRAINAGE WALL OPENING, REFER TO DETAIL SHEET C-6.
- (C-9) NEW WATER ELEVATION MARKERS, REFER TO DETAIL ON SHEET C-6.
- (C-10) NEW WATER ELEVATION MARKERS, REFER TO DETAIL ON SHEET C-6. (FINAL LOCATION SHALL BE COORDINATED WITH PROPERTY OWNER).
- (C-11) NEW MANUFACTURED WAINING SURFACE COMPOSITE PAVEMENT AS MANUFACTURED BY ADA SOLUTIONS INC OR APPROVED EQUIVALENT, REFER TO DETAIL ON SHEET C-6.
- (C-12) NEW UTILITY ELITE SERIES LAGOON-5 VEHICULAR SWING GATE, REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- (C-13) NEW CITY MONUMENT, REFER TO ARCHITECTURAL PLANS.
- (C-14) NEW ADA ACCESSIBLE WHEELCHAIR RAMP, REFER TO DETAIL ON SHEET C-6.
- (C-15) NEW FIRE HYDRANT LOCATION, CONTRACTOR TO COORDINATE WITH UTILITY COMPANY HAVING JURISDICTION, ARCHITECT AND OWNER.
- (C-16) EXISTING FIRE HYDRANT AND ALL ASSOCIATED APPEARANCES TO BE REMOVED AND RELOCATED IN NEW LOCATION, CONTRACTOR TO COORDINATE WITH UTILITY COMPANY HAVING JURISDICTION, ARCHITECT AND OWNER.

- GENERAL NOTES:**
1. THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING HIS BID.
 2. THE CONTRACTOR SHALL SCHEDULE AND PERFORM HIS WORK SO AS TO INSURE THE SAFE AND EFFICIENT PASSAGE OF STORMWATER RUNOFF DURING THE COURSE OF HIS OPERATIONS. ALL REQUIRED LABOR, TOOLS, EQUIPMENT, AND SUPPLIES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO OWNER. SCHEDULE WITH THE OWNER. ALL AFFECTED UTILITY COMPANIES, AND ALL OTHER ENTITIES HAVING JURISDICTION OVER THE PROJECT.
 3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES PRIOR TO COMMENCING WITH THE WORK. ANY DISCREPANCIES NOTED SHALL BE REPORTED IMMEDIATELY TO THE PROJECT ARCHITECT AND CIVIL ENGINEER. DISCREPANCIES SHALL NOT BE REPERTED ON ANY PHASE OF THIS PROJECT UNLESS APPROVED IN WRITING BY THE PROJECT CIVIL ENGINEER. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN STRICT COMPLIANCE WITH ALL CURRENT SAFETY CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO, OSHA REQUIREMENTS.
 4. THE EXISTING TOPOGRAPHIC/BOUNDARY INFORMATION ON THIS DRAWING WAS OBTAINED FROM A PROFESSIONAL LAND SURVEYOR. THE PROJECT CIVIL ENGINEER DOES NOT WARRANT THE ACCURACY OF THIS INFORMATION.
 5. WARNING: BEFORE YOU DIG, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES. WARNING: BEFORE YOU DIG, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES. CONTRACTOR SHALL WATER CONSTRUCTION SITE AREA A MINIMUM OF TWICE A DAY TO KEEP DUST TO A MINIMUM - ONCE IN THE MORNING AND ONCE IN THE AFTERNOON.
 6. THIS GRADING PLAN SHALL BE COORDINATED WITH THE ARCHITECTURAL CONSTRUCTION DRAWINGS FOR SITE IMPROVEMENT DETAILS, DIMENSIONS AND FIELD MATERIAL FOR SITE GRADING AND BACKFILL. MATERIAL SHALL BE ON SITE AND/OR IMPORTED MATERIALS IN COMPLIANCE WITH THE GEOTECHNICAL INVESTIGATION.
 7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING IMPROVEMENTS IN THE PROJECT AREA AND ITS VICINITY. ANY DAMAGES RESULTING FROM CONTRACTOR'S WORK AND/OR VANDALISM SHALL BE OBLIGATED TO ITS ORIGINAL CONDITION BY CONTRACTOR, AT NO COST TO THE OWNER.
 8. CONTRACTOR SHALL INSURE THE FOLLOWING: ALL ACCESSIBLE ROUTES SHALL NOT EXCEED A RUNNING SLOPE GREATER THAN 1:20. WHERE SHALL THE CROSS SLOPE OF AN ACCESSIBLE ROUTE EXCEED 1:50. MAXIMUM SLOPES OF ADJOINING CURBS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB AND ACCESS SIZES SHALL BE STEVE WITH SURFACE SLOPES NOT EXCEEDING 1:50 IN ALL DIRECTIONS. NEW WHEELCHAIR RAMPS SHALL NOT EXCEED A SLOPE OF 1:12.
 9. REFER TO ARCHITECTURAL DRAWINGS FOR DETAILS OF ALL PROPOSED LOT IMPROVEMENTS (FUTURE).
 10. GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL REVIEW AND APPROVE THE ENTIRE SET OF DRAWINGS AND PROJECT MANUAL TO ENSURE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS DURING CONSTRUCTION ACTIVITY.
 11. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL ENVIRONMENTAL FINES RESULTING FROM HIS/HER WORK AND SHALL HOLD THE OWNER HARMLESS IN SUCH CASES.
 12. ALL EXISTING VEGETATION WITHIN THE GRADING LIMITS SHALL BE REMOVED AND PROPERLY DISPOSED UNLESS OTHERWISE INDICATED.
 13. THE CONTRACTOR SHALL EXERCISE CARE TO PRESERVE THE NATURAL AND CULTURAL HERITAGE OF THE PROJECT AREA. THE CONTRACTOR SHALL CONDUCT HIS CONSTRUCTION OPERATION SO AS TO PRESENT ANY DAMAGE TO EXISTING FEATURES, EXCEPT WHERE CLEANING IS REQUIRED FOR PERMANENT WORK AND FOR EXCAVATION OPERATIONS. TREES, NATIVE SHRUBBERY, AND VEGETATION SHALL BE PROTECTED FROM DAMAGE WHICH MAY BE CAUSED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS AND SHALL BE REPLACED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS AND SHALL BE REPLACED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS.
 14. COORDINATE FINAL GRADING WITH LANDSCAPING PLANS FOR SHADES, BERMS AND OTHER LANDSCAPE FEATURES AS REQUIRED.
 15. FINAL PAVEMENT DESIGN SUBJECT TO CHANGE BASED ON GEOTECHNICAL INVESTIGATION REPORT, CAR TEST RESULTS AND APPROVAL BY CITY LAND DEVELOPMENT SERVICES.

REFERENCES - BENCHMARK

DATE	REVISION	BY

WARNING! BEFORE YOU DIG

COORDINATION WITH UTILITIES

CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION AND/OR RELOCATION OF EXISTING UTILITIES INDICATED BY THE CONSTRUCTION WORK.

EL PASO WATER UTILITIES
 50 WEST SAN ANTONIO STREET
 EL PASO, TEXAS 79901
 (910) 244-4540

EL PASO WATER UTILITIES
 1899 SAN PABLO CIRCLE
 EL PASO, TEXAS 79907
 (910) 621-6300

TEXAS GAS SERVICE
 4700 FLOUROS STREET
 EL PASO, TEXAS 79905
 (910) 244-4577

AT&T COMMUNICATIONS
 1008 GOMPHALE PARK CIRCLE
 EL PASO, TEXAS 79902
 (910) 244-4443

WERNER BUSINESS SERVICES
 2000 N. CENTRAL BLVD.
 EL PASO, TEXAS 79906
 (910) 244-4443

TEXAS ELECTRIC SERVICE
 2000 N. CENTRAL BLVD.
 EL PASO, TEXAS 79906
 (910) 244-4443

FLOOD ZONE INFORMATION:

SUBJECT PROPERTY SHOWN HEREON APPEARS TO BE LOCATED WITHIN A FLOOD ZONE. THE CONTRACTOR SHALL VERIFY THE FLOOD ZONE INFORMATION FROM THE LOCAL F.E.M.A. ASPECT OF THE ABOVE INFORMATION. LAST REVISION DATE: JANUARY 3, 1997. THIS SURVEYOR MAKES NO GUARANTEES AS TO THE ACCURACY OF THE ABOVE INFORMATION. THE LOCAL F.E.M.A. ASPECT SHOULD BE OBTAINED FROM THE DESIGNATION.

LEGAL DESCRIPTION:
 TRACT 90, BLOCK 5,
 UPPER VALLEY,
 CITY OF EL PASO,
 TEXAS,
 AREA 214 ACRES ±.

BENCHMARK
 EXISTING CITY MONUMENT AT THE INTERSECTION
 OF GARDEN VALLEY DRIVE AND MORA DRIVE.
 ELEV. = 3729.22

PROJECT TITLE
GARDEN VALLEY SUBDIVISION
 EL PASO COUNTY, TEXAS

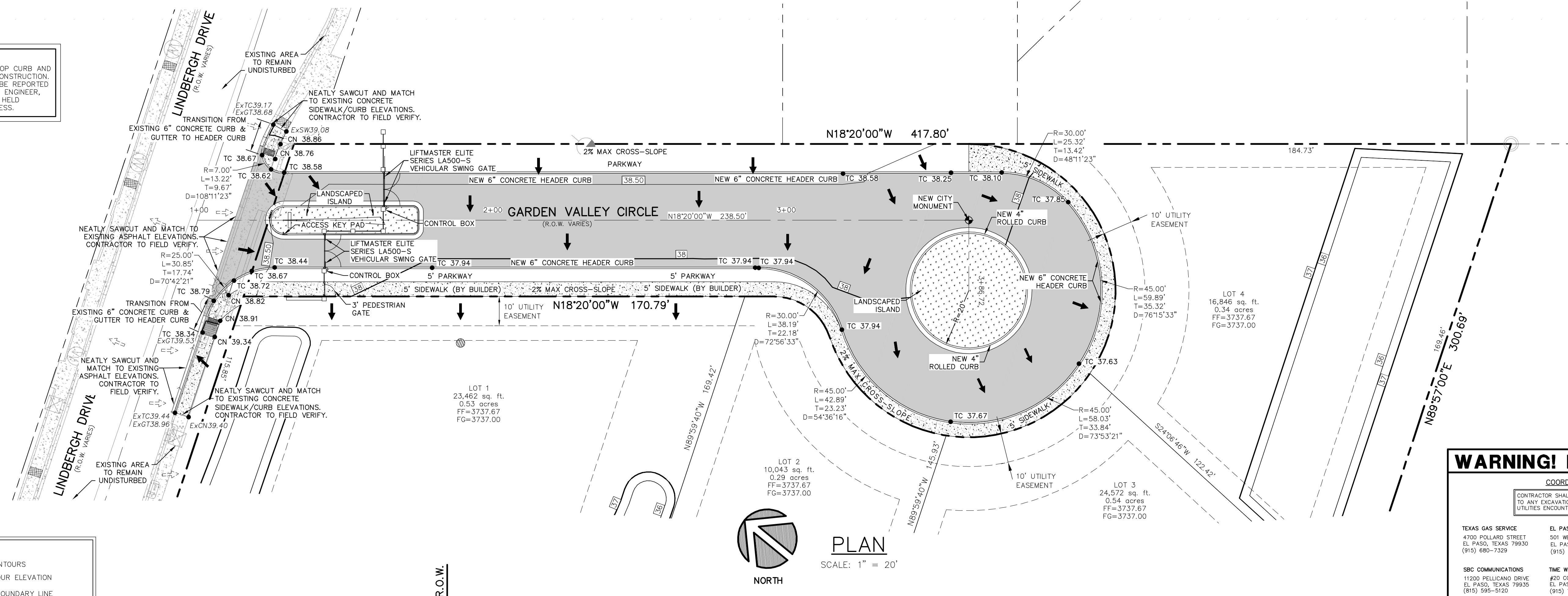
SCALE:
 HORIZONTAL: 1" = 30'
 VERTICAL: N/A
 CONTOUR INTERVAL: 3'

DATE: 08-13-12
 DESIGN BY: B.B.
 DRAWN BY: CADD
 CHECKED BY: R.A.G.
 APPVD BY: R.A.G.
 JOB NO. 1203

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QUANTUM
 engineering consultants incorporated
 414 Executive Center Blvd
 Ste 200 El Paso TX 79902
 P 915.532.7272
 F 915.532.7373
 Texas Registered Engineering Firm F-005146

NOTE:
 CONTRACTOR TO VERIFY EXISTING TOP CURB AND PAVEMENT ELEVATIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES NOTED SHALL BE REPORTED IMMEDIATELY TO THE PROJECT CIVIL ENGINEER. OTHERWISE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.



PLAN
 SCALE: 1" = 20'
 NORTH

WARNING! BEFORE YOU DIG

COORDINATION WITH UTILITIES:
 CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION AND/OR RELOCATION OF EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION WORK.

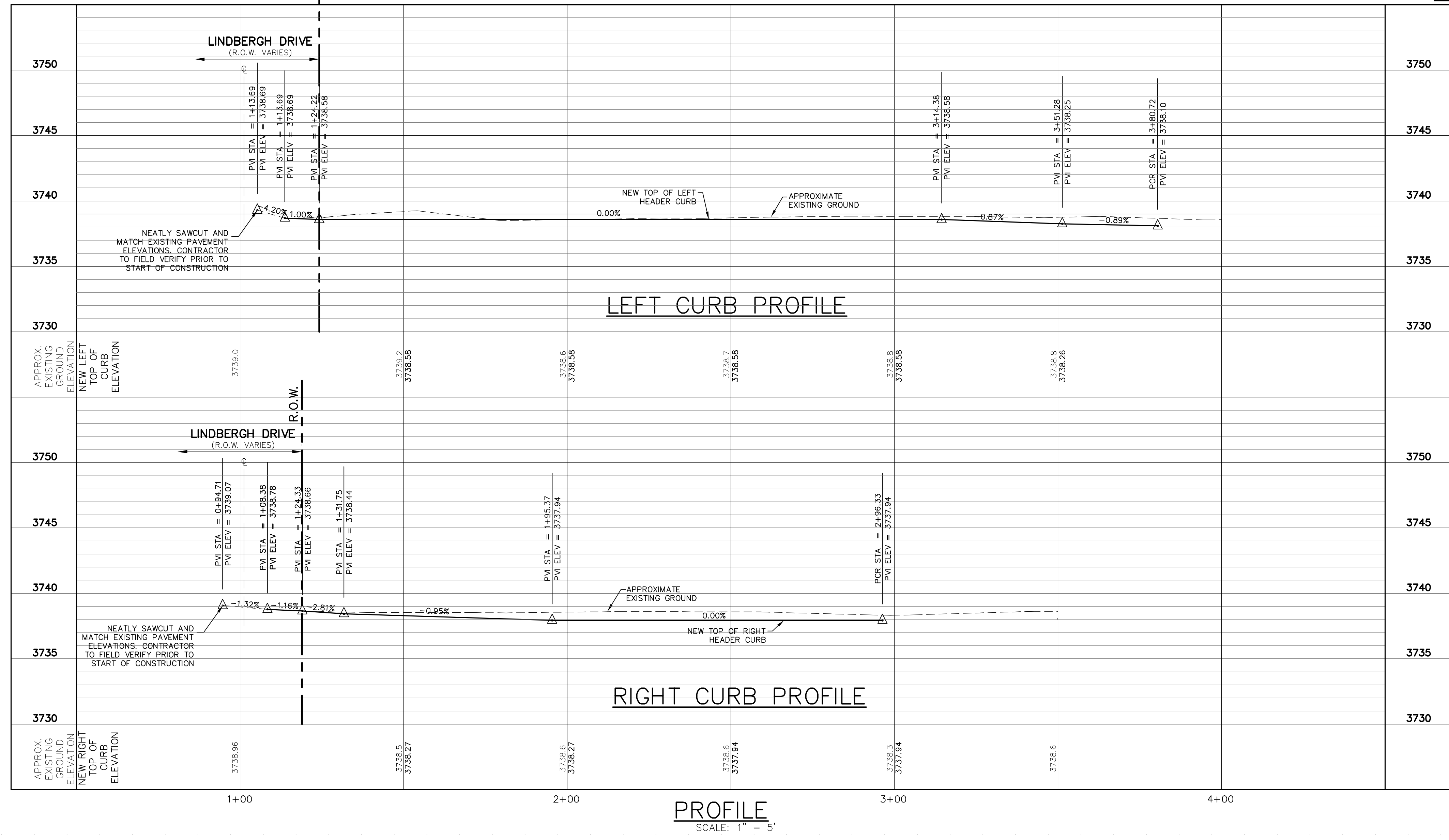
TEXAS GAS SERVICE 4700 POLLARD STREET EL PASO, TEXAS 79930 (915) 680-7329	EL PASO ELECTRIC CO. 501 WEST SAN ANTONIO STREET EL PASO, TEXAS 79901 (915) 543-5970	EL PASO WATER UTILITIES PUBLIC SERVICE BOARD 1154 HAWKINS BLVD. EL PASO, TEXAS 79925 (915) 594-5528
SBC COMMUNICATIONS 11200 PELLICANO DRIVE EL PASO, TEXAS 79935 (815) 595-5120	TIME WARNER COMMUNICATIONS SYSTEM #20 CONCORD STREET EL PASO, TEXAS 79908 (915) 779-7414	TEXAS EXCAVATION SAFETY SYSTEM ANYWHERE IN TEXAS (800) 344-8377

LEGEND:

- 3985 --- EXISTING CONTOURS
- XX --- FINAL CONTOUR ELEVATION
- PERIMETER BOUNDARY LINE
- LOT LINE
- SWALE
- LOT 1
- DRAINAGE FLOW DIRECTION
- EXISTING DRAINAGE FLOW DIRECTION
- NEW WATER ELEVATION MARKERS
- GT XX.XX TOP OF GUTTER ELEVATION
- CN XX.XX TOP OF CONCRETE ELEVATION
- TC XX.XX TOP OF CURB ELEVATION
- EXTCXX.XX EXISTING TOP OF CURB ELEVATION, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION
- EXGTXX.XX EXISTING TOP OF GUTTER ELEVATION, CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION
- NEW ASPHALTIC PAVEMENT. REFER TO DETAIL SHEET C-6.
- NEW CONCRETE SIDEWALK. REFER TO DETAIL SHEET C-6.
- NEW LANDSCAPED AREA. REFER TO LANDSCAPING PLANS.

GROUNDWATER NOTES:

- DEPENDENT ON SEASONAL GROUNDWATER CONDITIONS, LOCALIZED DEWATERING MAY BE REQUIRED TO COMPLETE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. IT IS RECOMMENDED THAT GROUNDWATER DEPTHS BE MONITORED AT THE PROJECT AREA UP TO THE TIME OF CONSTRUCTION TO PROVIDE INFORMATION FOR CONSTRUCTION PLANNING.
- GROUNDWATER LEVELS SHALL BE MONITORED TO ENSURE THAT ADJACENT PROPERTIES ARE NOT AFFECTED BY DEWATERING OPERATIONS.
- FOLLOWING CONSTRUCTION, THE GROUNDWATER SHOULD BE ALLOWED TO RETURN TO A STABLE LEVEL AT A GRADUAL RATE. PUMPING SHOULD NOT BE SUDDENLY TERMINATED, BUT SLOWLY DECREASED TO ALLOW FOR A SLOW STEADY AND UNIFORM RISE OF GROUNDWATER. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.
- A COPY OF THE GEOTECHNICAL REPORT IS AVAILABLE FOR REVIEW BY THE CONTRACTOR UPON REQUEST AT ACM DESIGNS, 211 NORTH FLORENCE, SUITE 204.
- THE INFORMATION SOIL STRATIGRAPHY, SOIL CHARACTERISTICS, AND GROUNDWATER TABLE ELEVATIONS SHOWN ON THE GEOTECHNICAL REPORT ARE FOR DESIGN PURPOSES ONLY.



REFERENCES - BENCHMARK

DATE	REVISION	BY

414 Executive Center Blvd
 Ste 200 El Paso TX 79902
 P 915.532.7272
 F 915.532.7373

QUANTUM
 engineering
 consultants
 incorporated
 Texas Registered Engineering Firm F-005146

THE SEAL REPRESENTS ONLY THE DOCUMENT WAS AUTHORIZED BY ROBERT A. GONZALES, REGISTERED PROFESSIONAL ENGINEER, NO. 69070, STATE OF TEXAS. THE SEAL DOES NOT GUARANTEE THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

PROFESSIONAL ENGINEER
 ROBERT A. GONZALES
 69070
 REGISTERED PROFESSIONAL ENGINEER

SCALE:
 HORIZONTAL: 1" = 20'
 VERTICAL: 1" = 5'
 CONTOUR INTERVAL: 1/2'

DATE: 08-13-12
 DESIGN BY: B.R.
 DRAWN BY: CAD
 CHKD BY: R.A.G.
 APPVD BY: R.A.G.
 JOB NO.: 1203

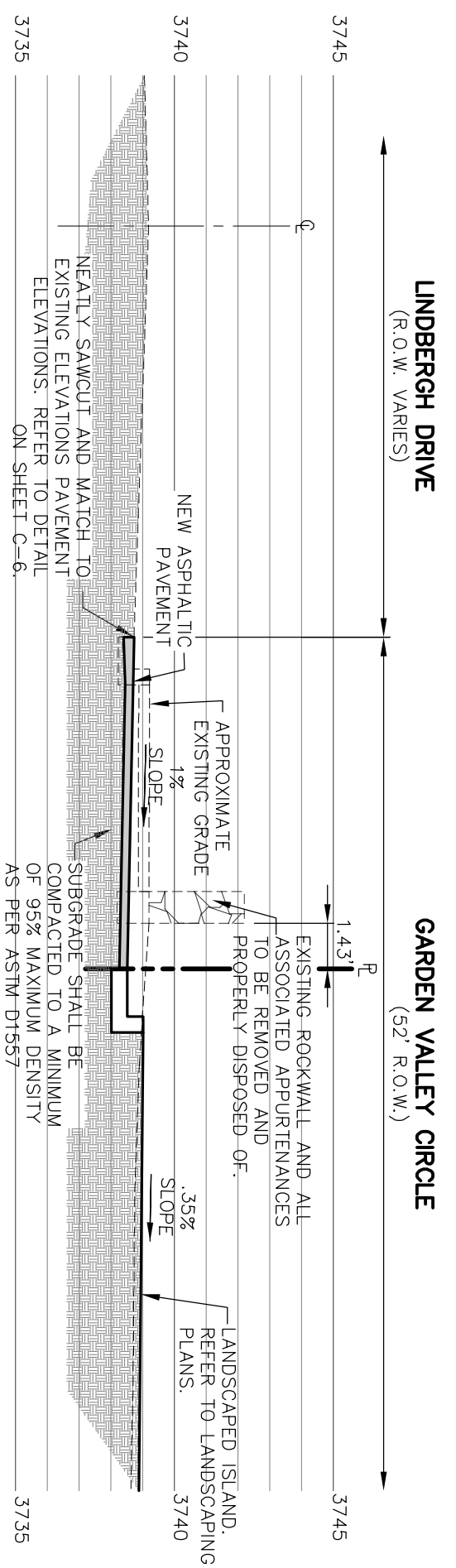
PROJECT TITLE
GARDEN VALLEY SUBDIVISION
 EL PASO COUNTY, TEXAS

SHEET TITLE
 GARDEN VALLEY CIRCLE
 1+00-3+86.72

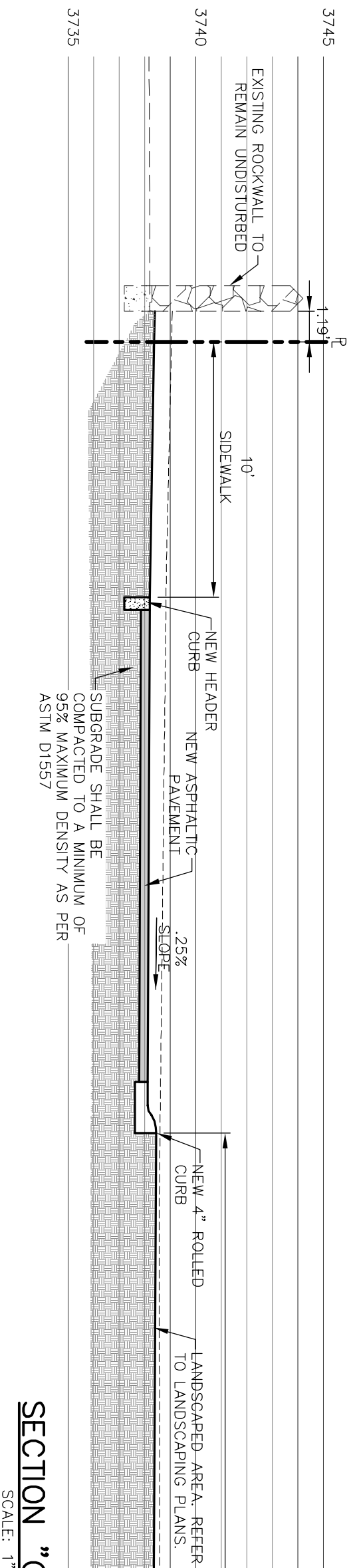
SHEET NO.
C-4

4 OF 19 SHEETS

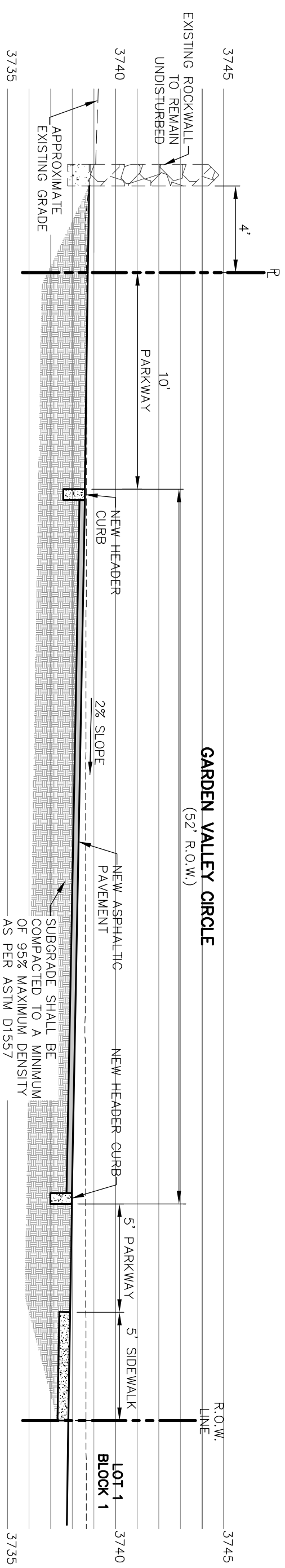
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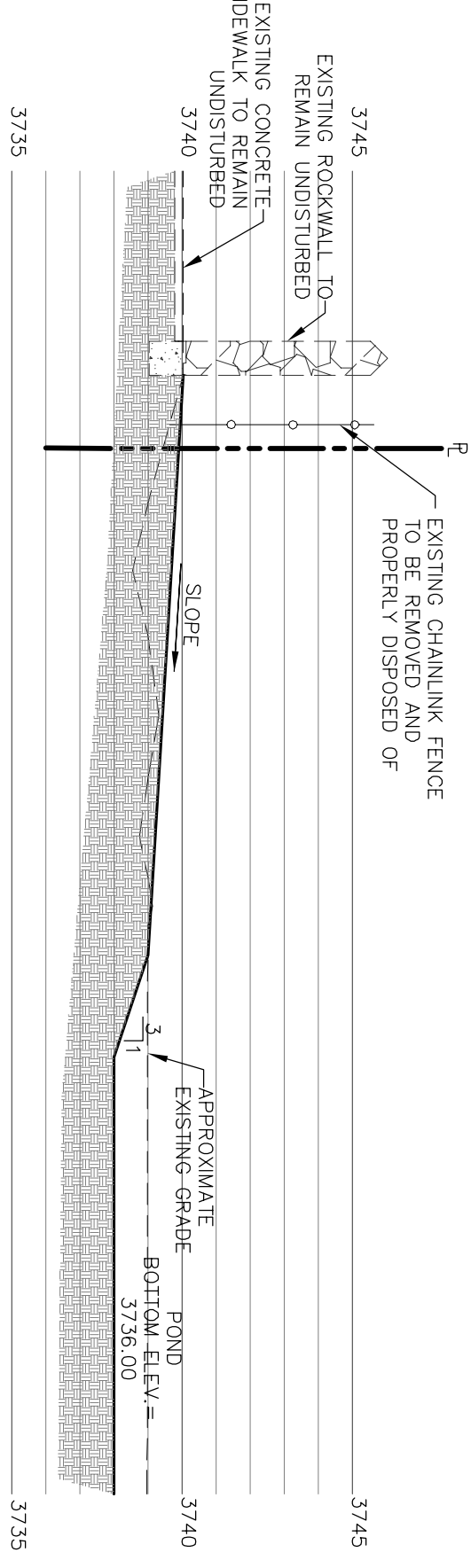
SECTION "A"
 SCALE: 1"=5'



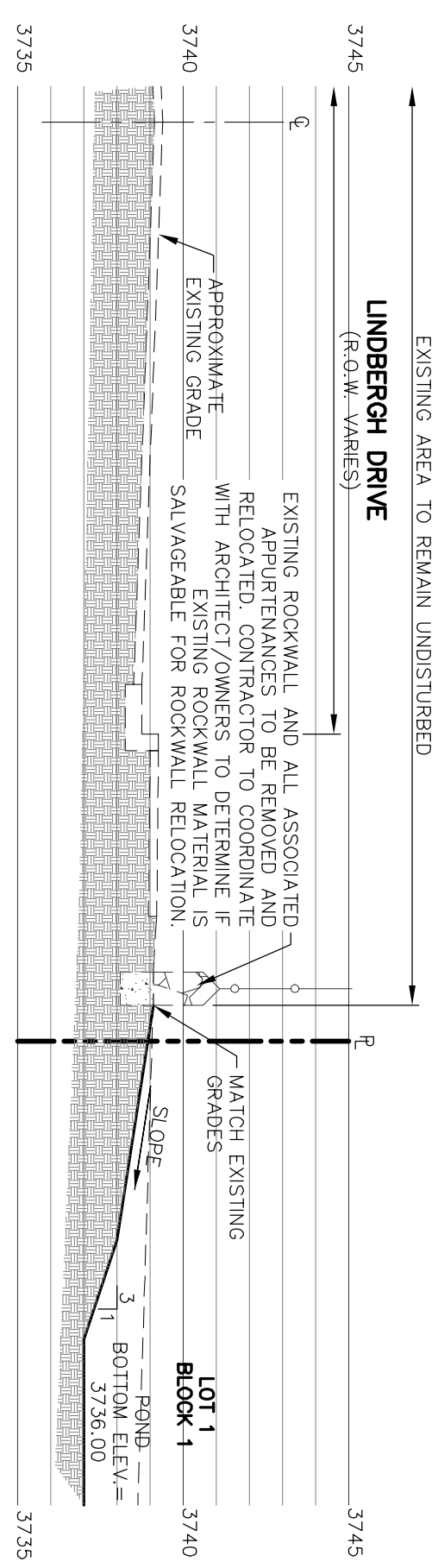
SECTION "C"
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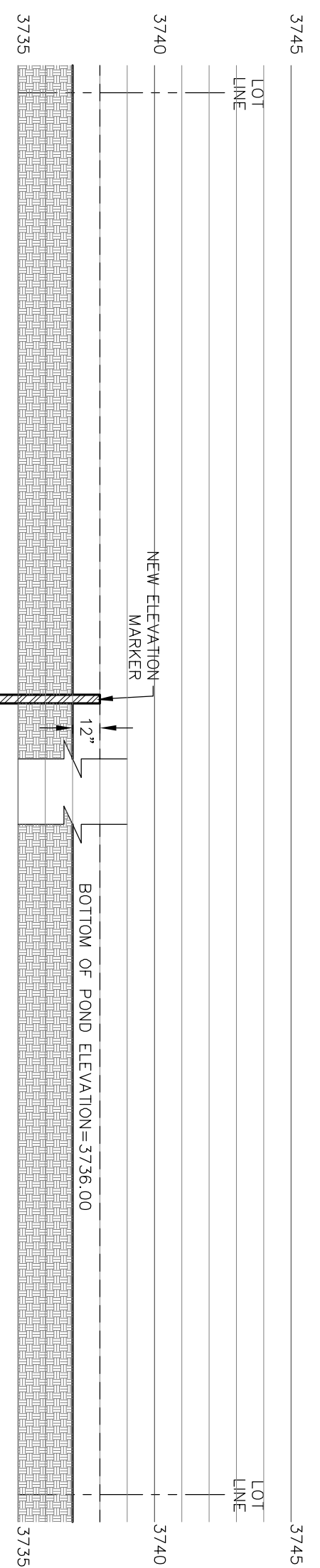
SECTION "B"
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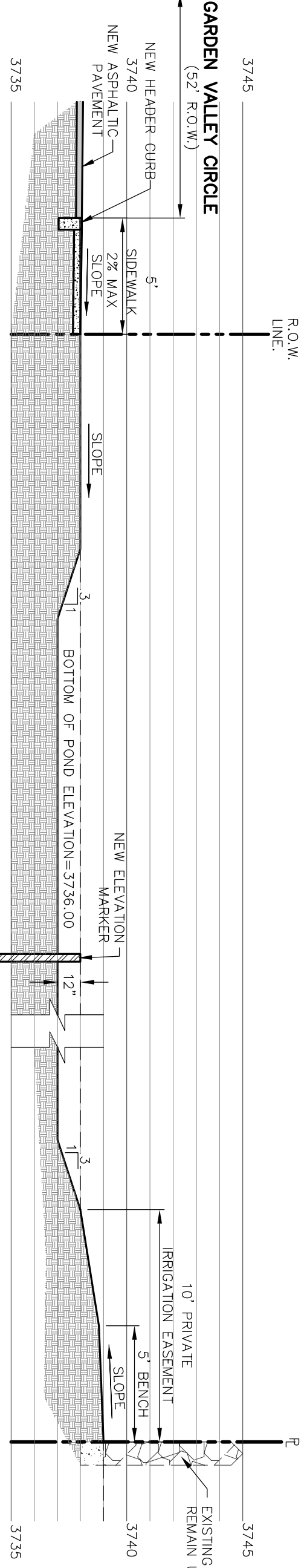
SECTION "D"
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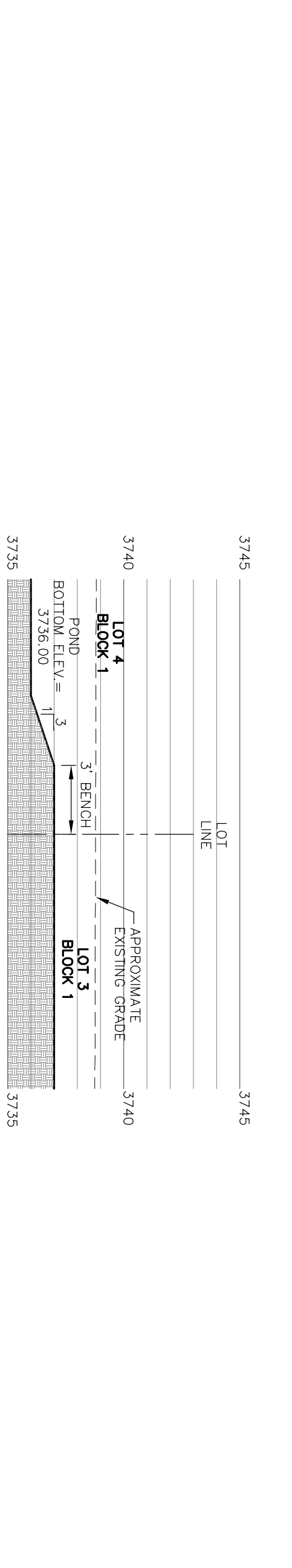
SECTION "E"
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SECTION "F"
 SCALE: 1"=5'

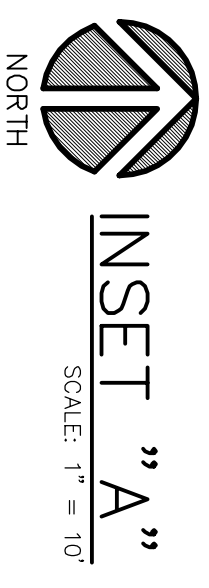
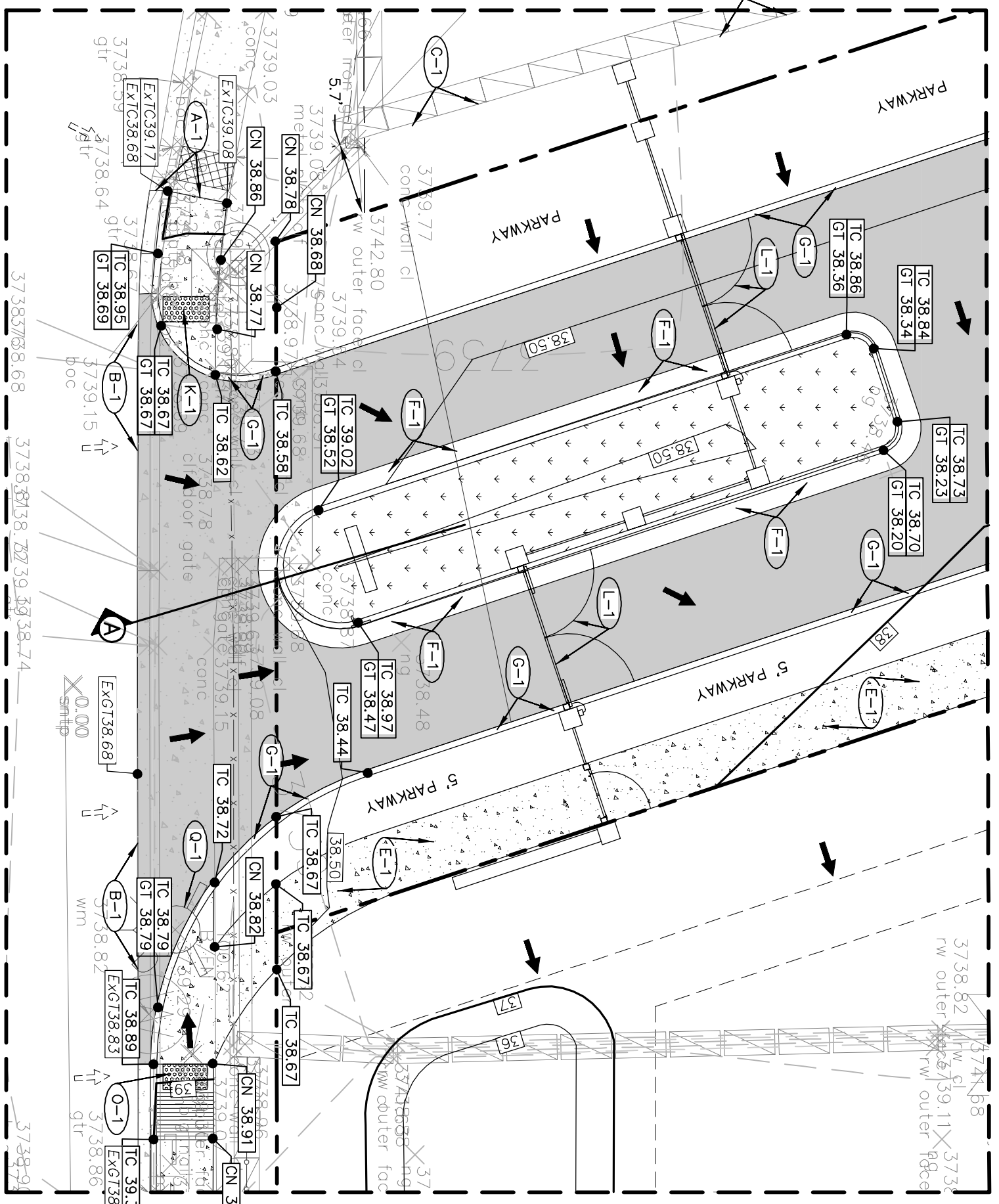


SECTION "G"
 SCALE: 1"=5'



SECTION "H"
 SCALE: 1"=5'

- KEY NOTES:**
- (A-1) SAWCUT & MATCH EXISTING CONCRETE SIDEWALK/CURB ELEVATIONS
 - (B-1) SAWCUT AND MATCH EXISTING PAVEMENT ELEVATIONS, JUNCTURE SHEET C-6
 - (C-1) MATCH TO EXISTING ELEVATIONS, CONTRACTOR TO FIELD VERIFY.
 - (D-1) EXISTING AREA TO REMAIN UNDISTURBED
 - (E-1) NEW 6" CONCRETE SIDEWALK, 2% MAX CROSS SLOPE, REFER TO DETAIL ON SHEET C-6
 - (F-1) NEW 6" CONCRETE CURB & OUTER, REFER TO DETAIL ON SHEET C-6
 - (G-1) NEW 6" CONCRETE HEADER CURB, REFER TO DETAIL ON SHEET C-6
 - (H-1) NEW LANDSCAPED AREA, REFER TO LANDSCAPE PLANS.
 - (I-1) NEW DETECTABLE WARNING SURFACE CONCRETE PAVEMENT TILE AS MANUFACTURED BY ADA SOLUTIONS, INC. OR APPROVED EQUIVALENT. REFER TO DETAIL ON SHEET C-6
 - (J-1) NEW LIFTMASTER ELITE SERIES L4501-S VEHICULAR SWING GATE. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
 - (K-1) NEW ADA ACCESSIBLE WHEELCHAIR RAMP, REFER TO DETAIL ON SHEET C-6



REFERENCES - BENCHMARK		
DATE	REVISION	BY

QUANTUM
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 F 915.532.7373
 Texas Registered Engineering Firm F-005146

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ROBERT A. GONZALES
 REGISTERED PROFESSIONAL ENGINEER

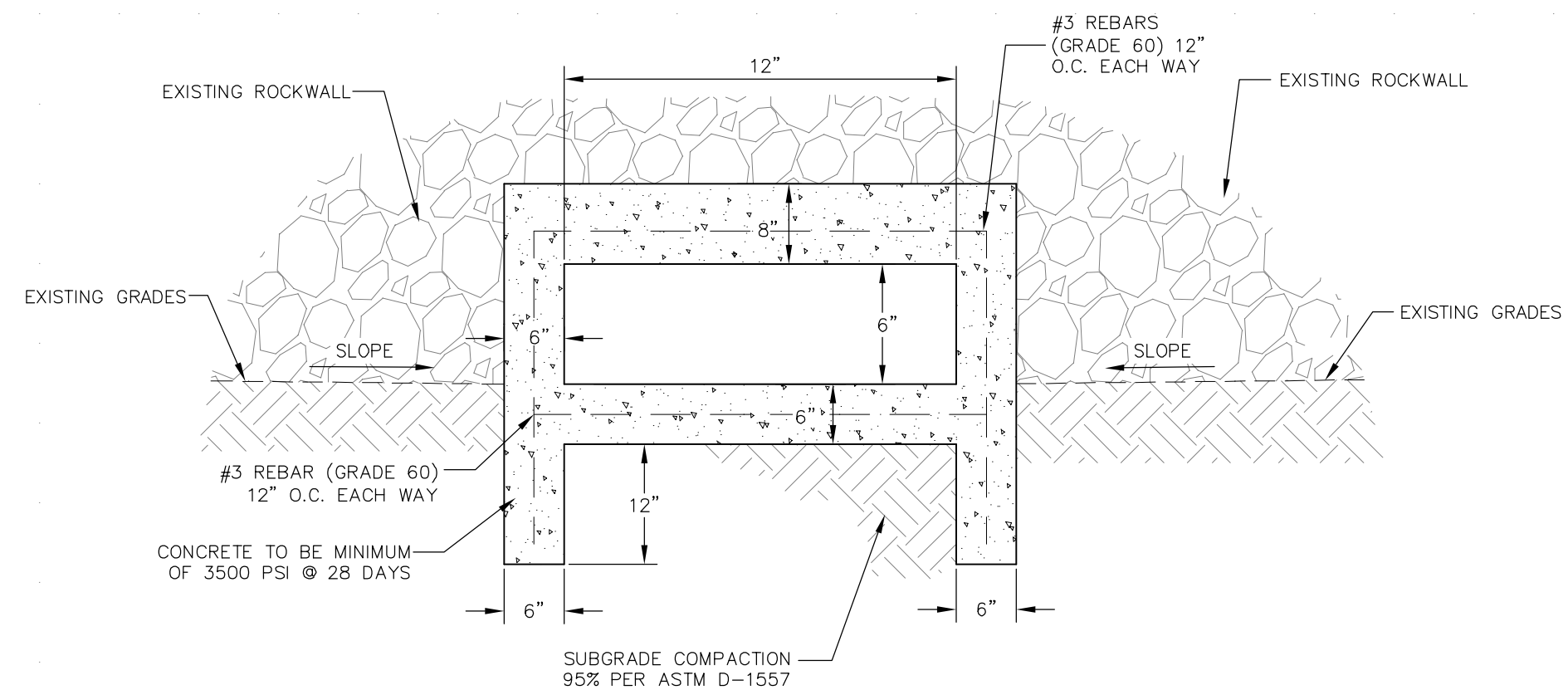
SCALE:
 HORIZONTAL: 1" = 5'
 VERTICAL: N/A
 CONTOUR INTERVAL: N/A
 DATE: 08-13-12
 DESIGN BY: B.R.
 DRAWN BY: CADD
 CHKD BY: R.A.G.
 APPVD BY: R.A.G.
 JOB NO. 1203

PROJECT TITLE
GARDEN VALLEY SUBDIVISION
 EL PASO COUNTY, TEXAS

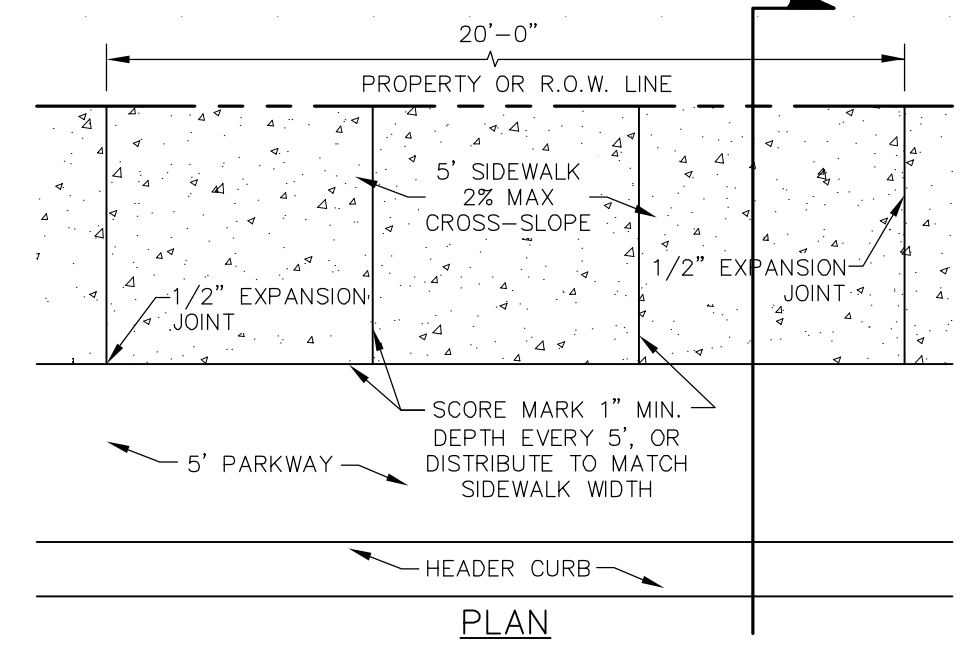
SHEET TITLE
 TYPICAL SECTIONS & INSETS

SHEET NO.
C-5

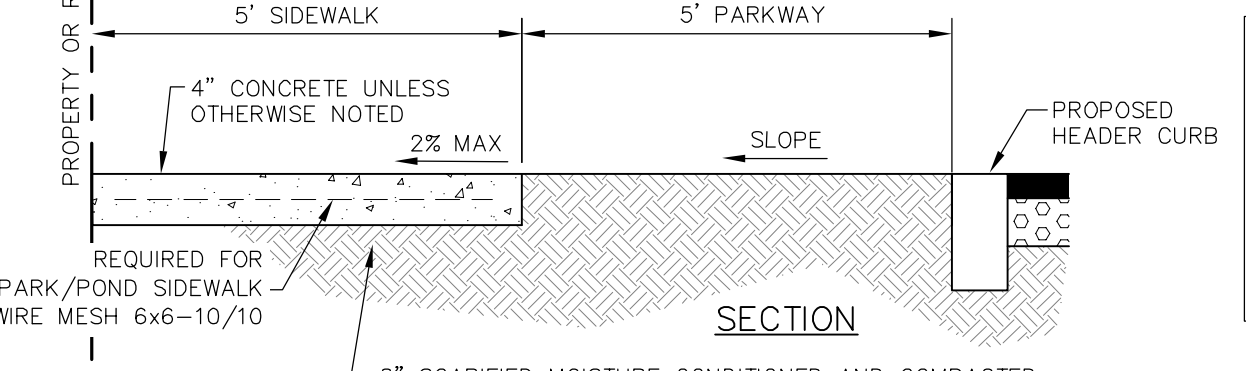
5 OF 19 SHEETS



ROCKWALL OPENING
SCALE: N.T.S.



- SIDEWALK NOTES:**
1. CONCRETE SIDEWALK SHALL BE 3,000 P.S.I.
 2. DUMMY JOINTS REQUIRED AT 5' O.C.
 3. EXPANSION JOINTS SHALL BE AT 20' O.C. MAXIMUM. USE 1/2" PRE-MOLDED BITUMINOUS EXPANSION JOINTS (AASHTO M-33)
 4. EXPANSION JOINT FILLER SHALL BE PLACED WHEREVER SIDEWALK ABUTS ROCK OR MASONRY STRUCTURES SUCH AS CURBS OR BUILDINGS.
 5. SUBGRADE TO BE COMPACTED TO 95% ASTM D1557.
 6. JOINT SEALANT SHALL BE SIKAFLEX.



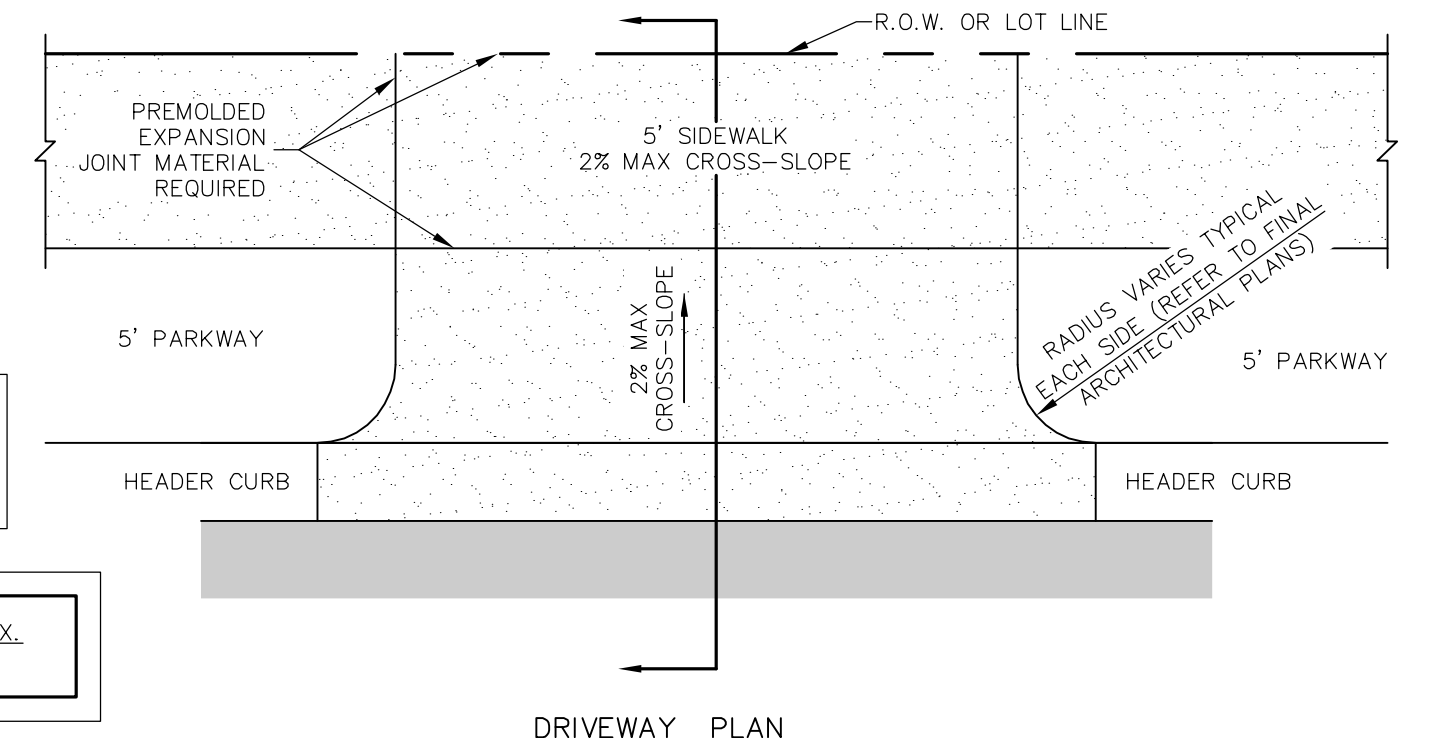
CONCRETE SIDEWALK DETAIL
SCALE: N.T.S.

RESIDENTIAL
6" CONC. WITH 6x6-10/10

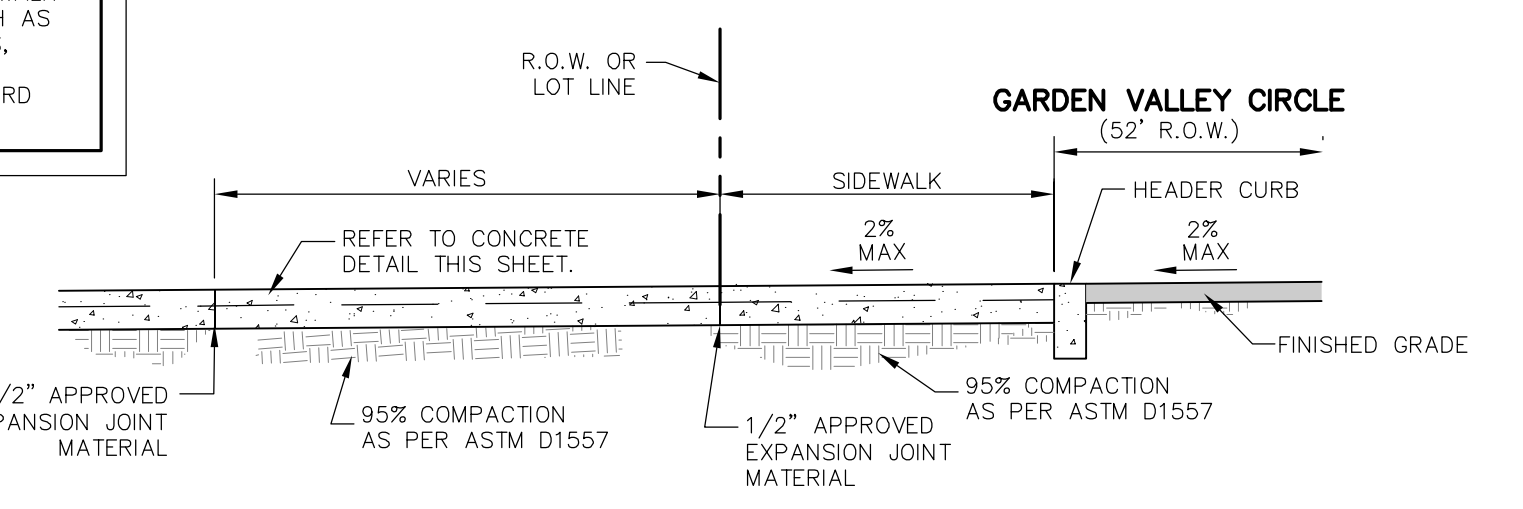
DRIVEWAY WIDTH
RESIDENTIAL

MIN	MAX
12'	24'

- NOTE:**
1. WHENEVER DRIVEWAYS AND/OR SIDEWALK ABUTS CONCRETE STRUCTURES SUCH AS CURBS, OTHER DRIVES OR BUILDINGS, EXPANSION JOINT FILLER SHALL BE PLACED IN ACCORDANCE TO STANDARD SPECIFICATIONS.

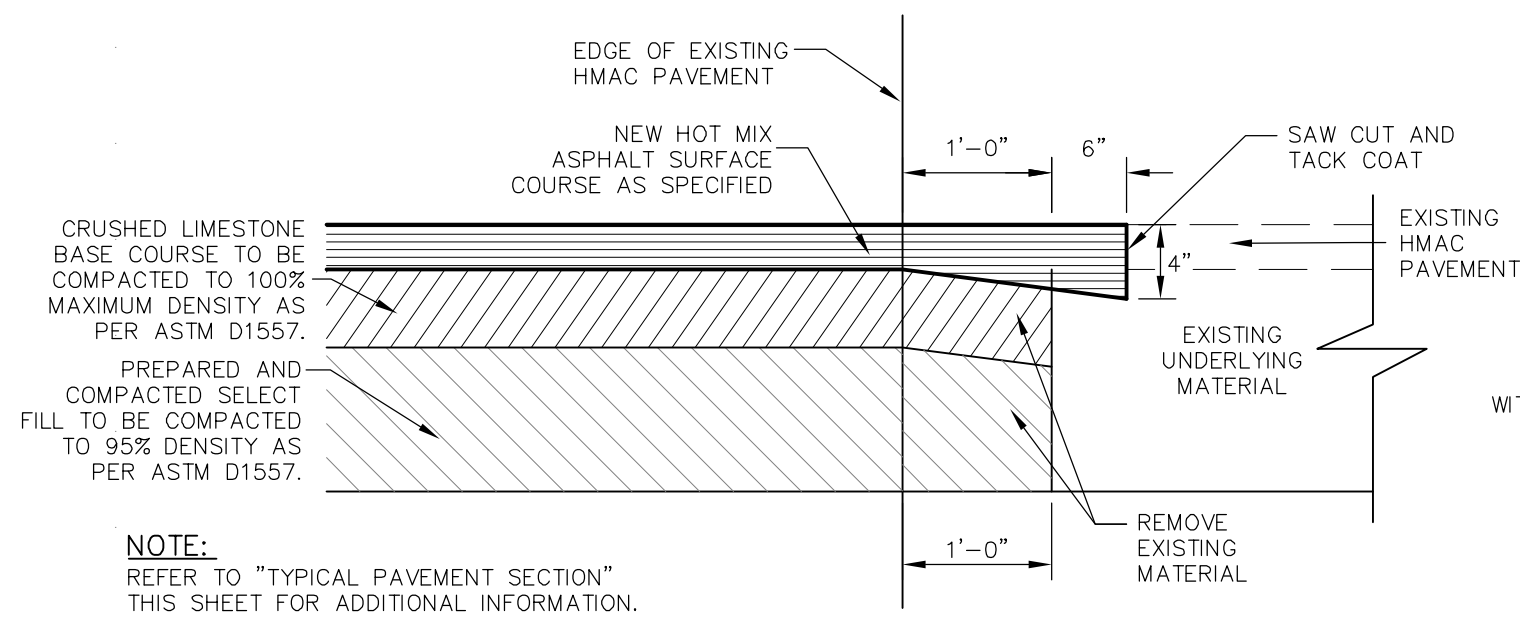


DRIVEWAY PLAN

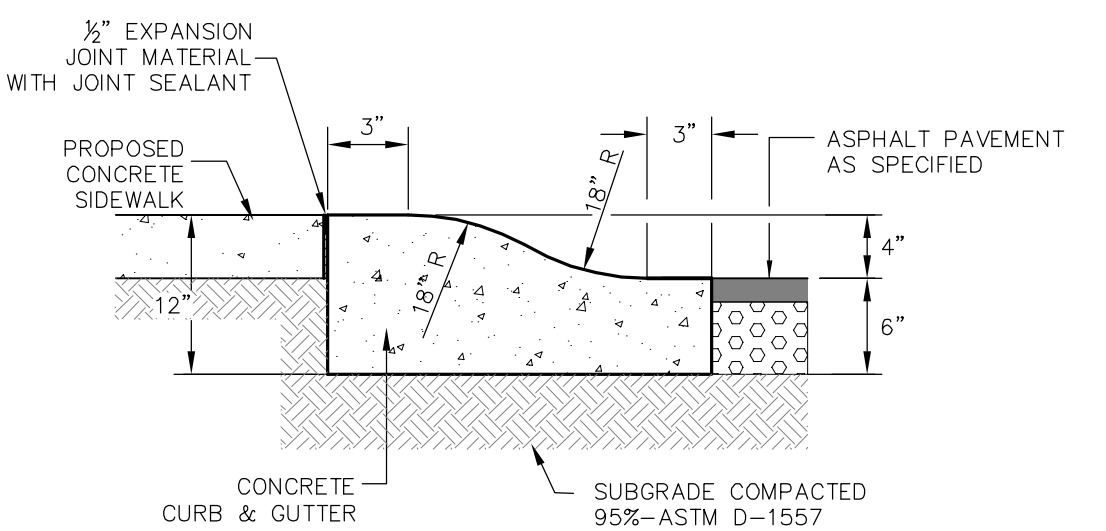


DRIVEWAY SECTION
(REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION)

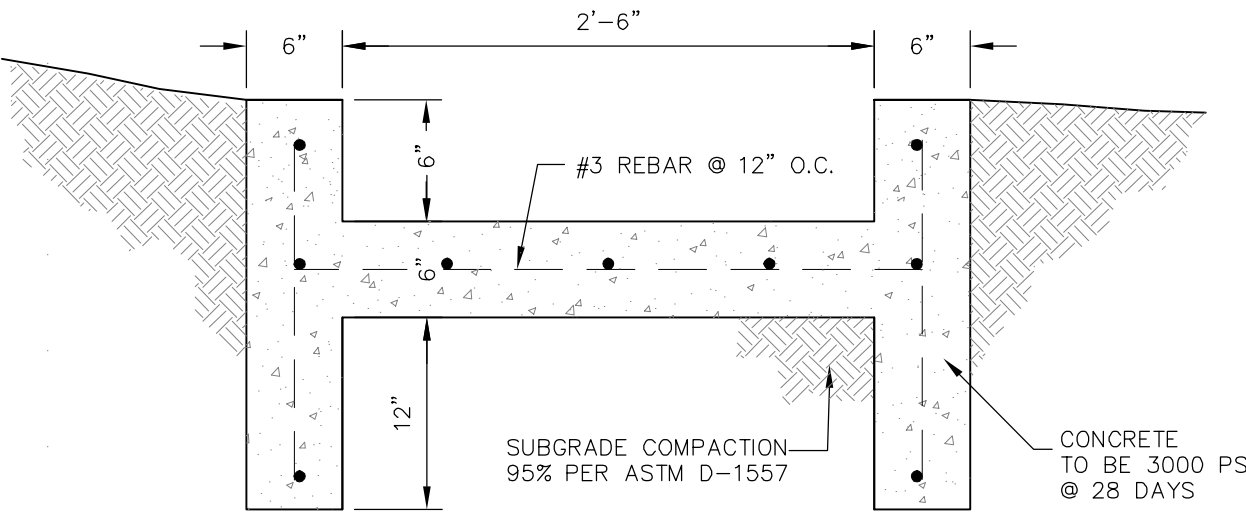
FUTURE LOT DRIVEWAY FOR ON-SITE PONDING
SCALE: N.T.S.



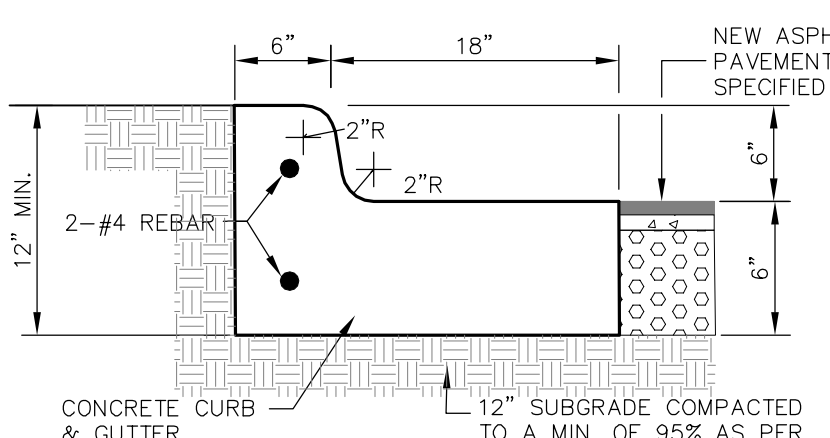
JUNCTURE OF NEW HMAc PAVEMENT AND EXISTING HMAc PAVEMENT
SCALE: N.T.S.



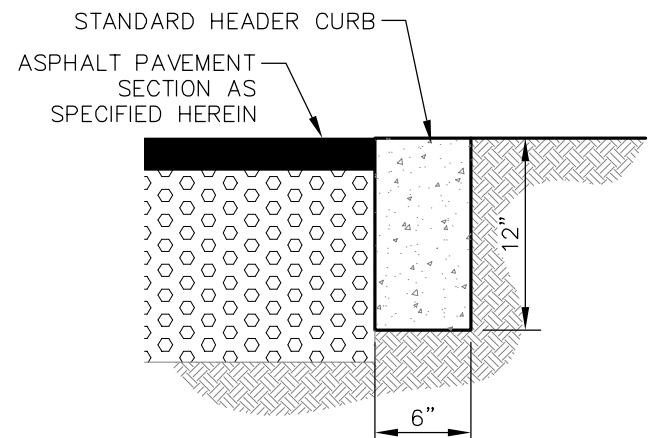
4" ROLLED CURB DETAIL
SCALE: N.T.S.



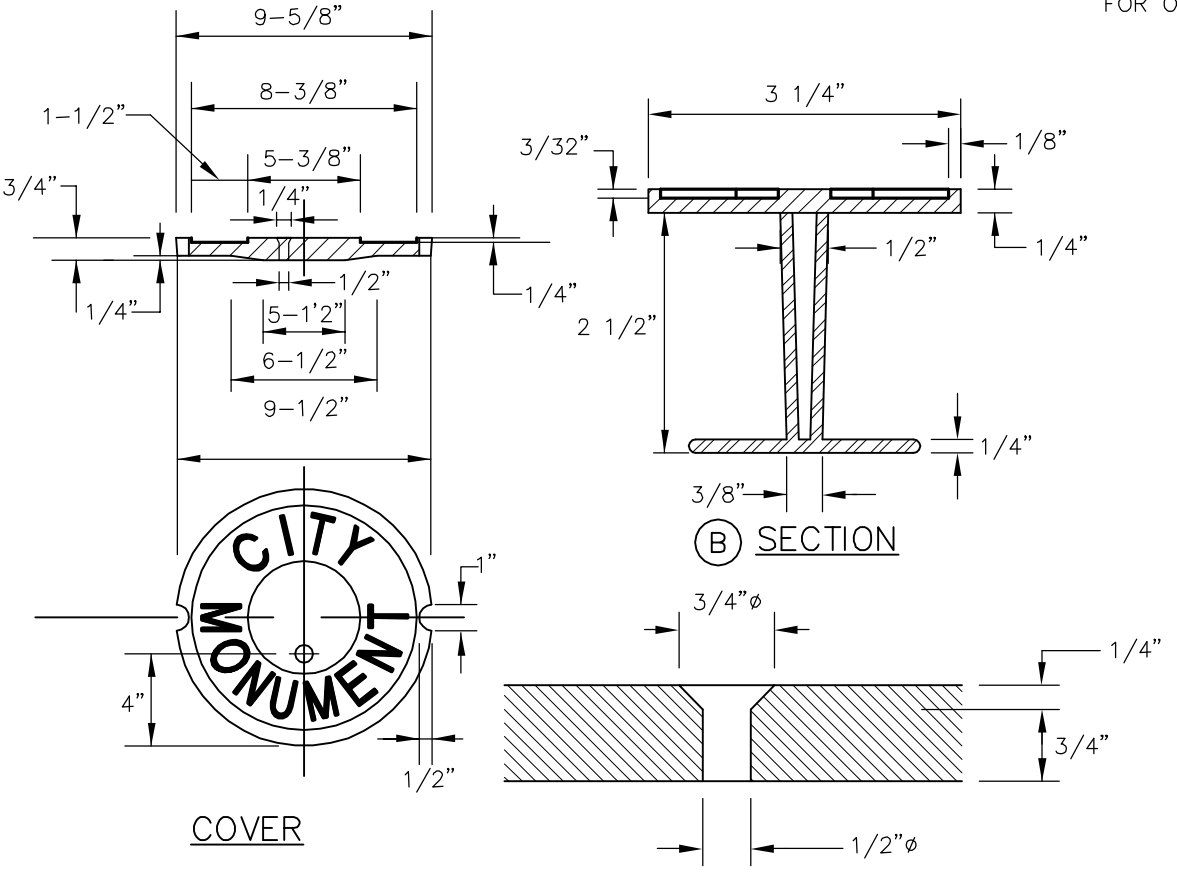
CONCRETE FLUME DETAIL
SCALE: N.T.S.



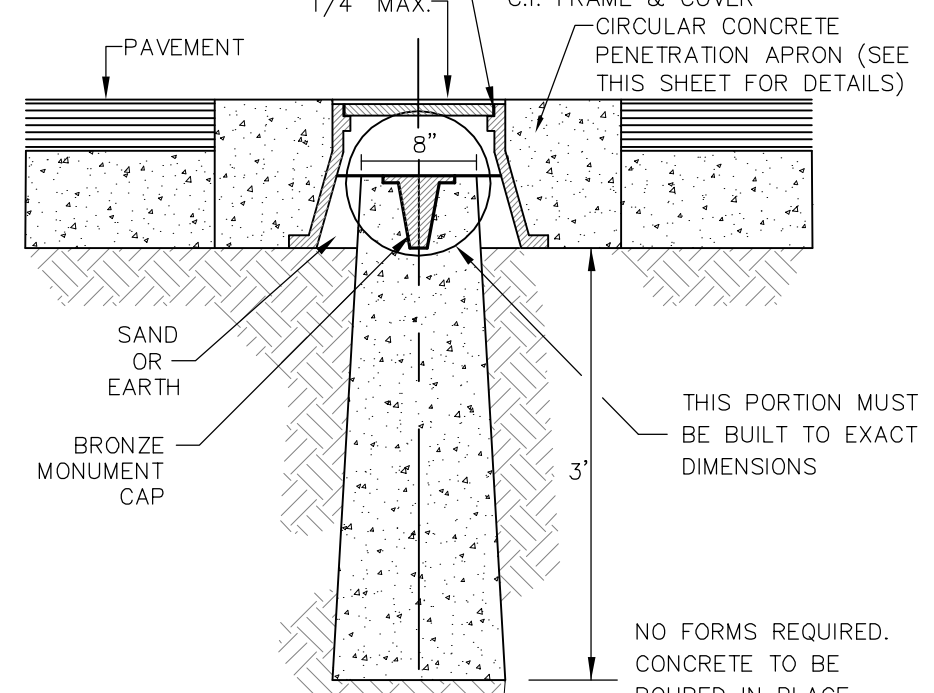
CONCRETE CURB AND GUTTER DETAIL



CONCRETE HEADER CURB DETAIL

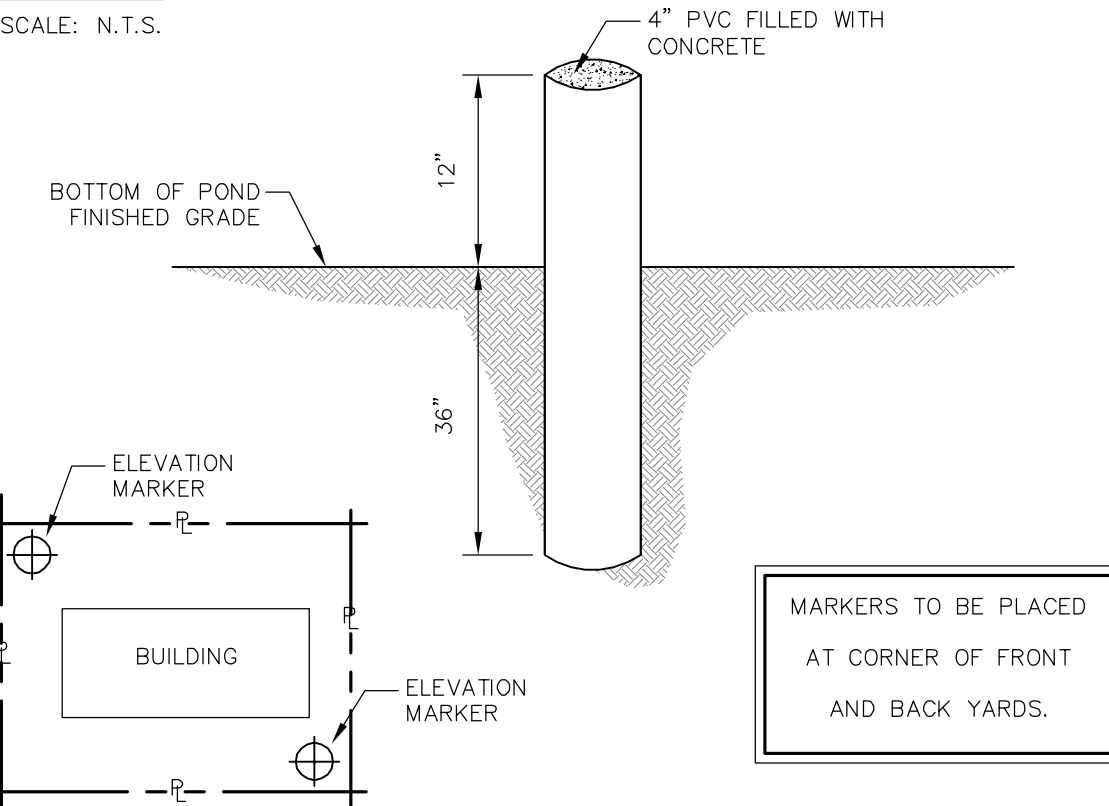


COUNTERSUNK DETAIL

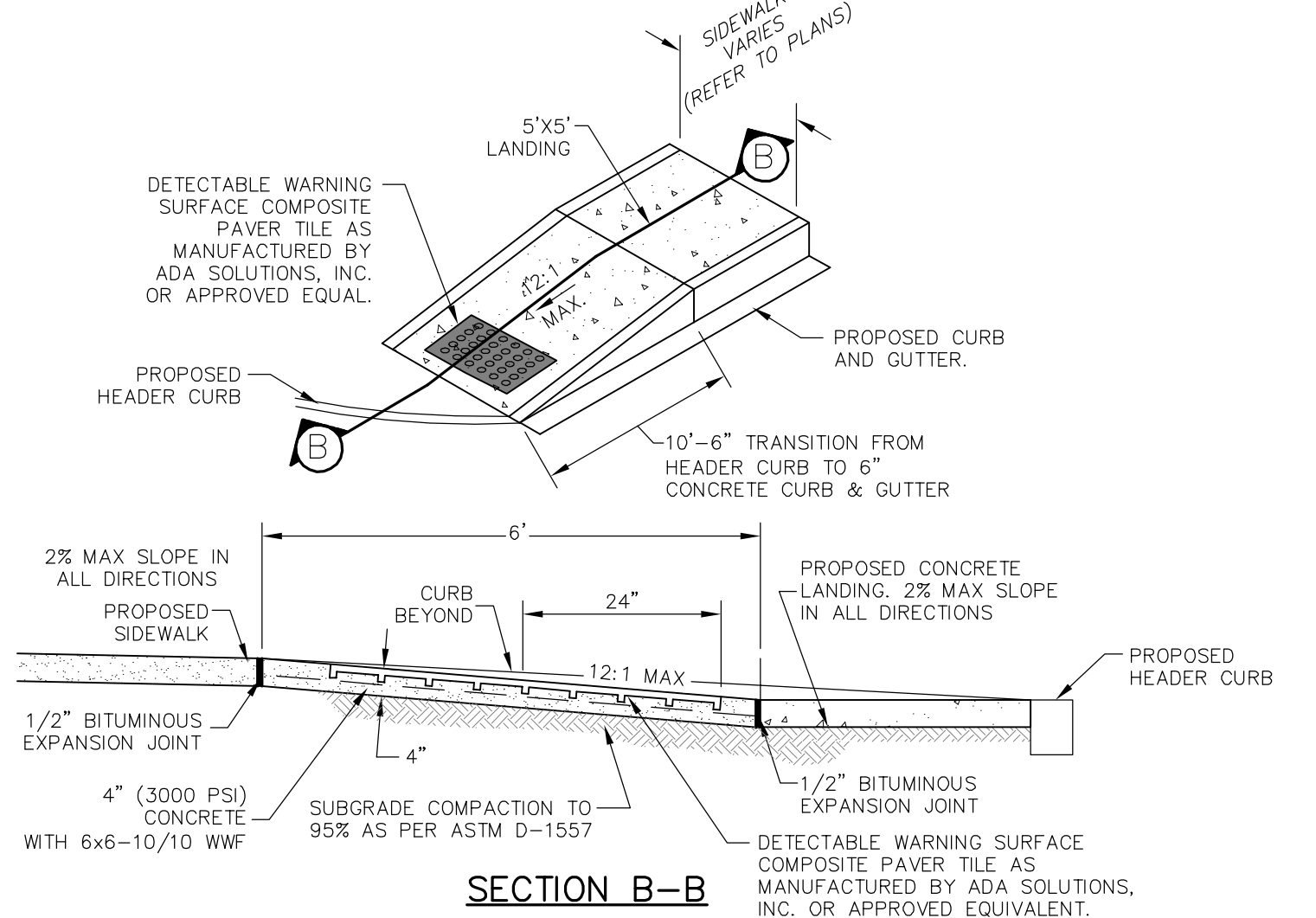


CITY MONUMENT DETAIL
SCALE: N.T.S.

PERMANENT ELEVATION MARKER FOR ON SITE PONDING
SCALE: N.T.S.



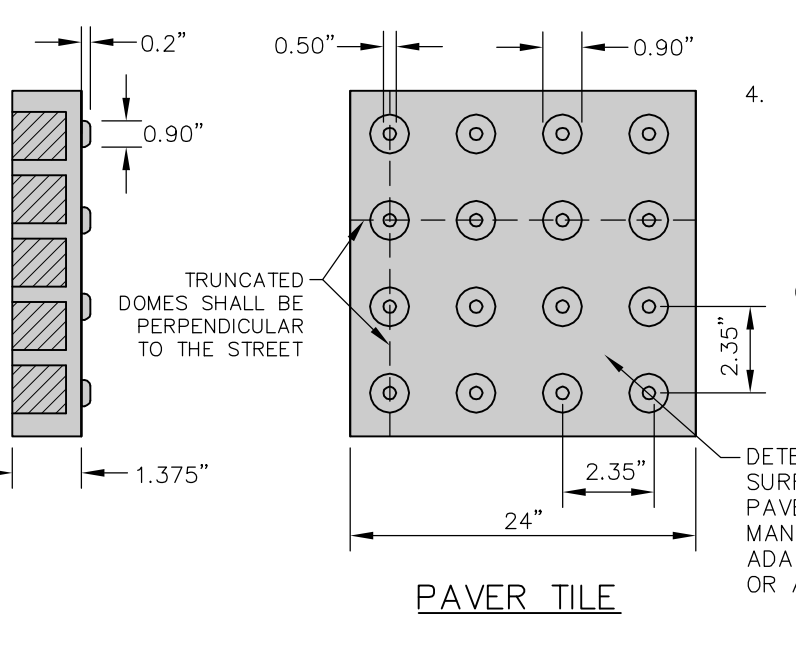
MARKERS TO BE PLACED AT CORNER OF FRONT AND BACK YARDS.



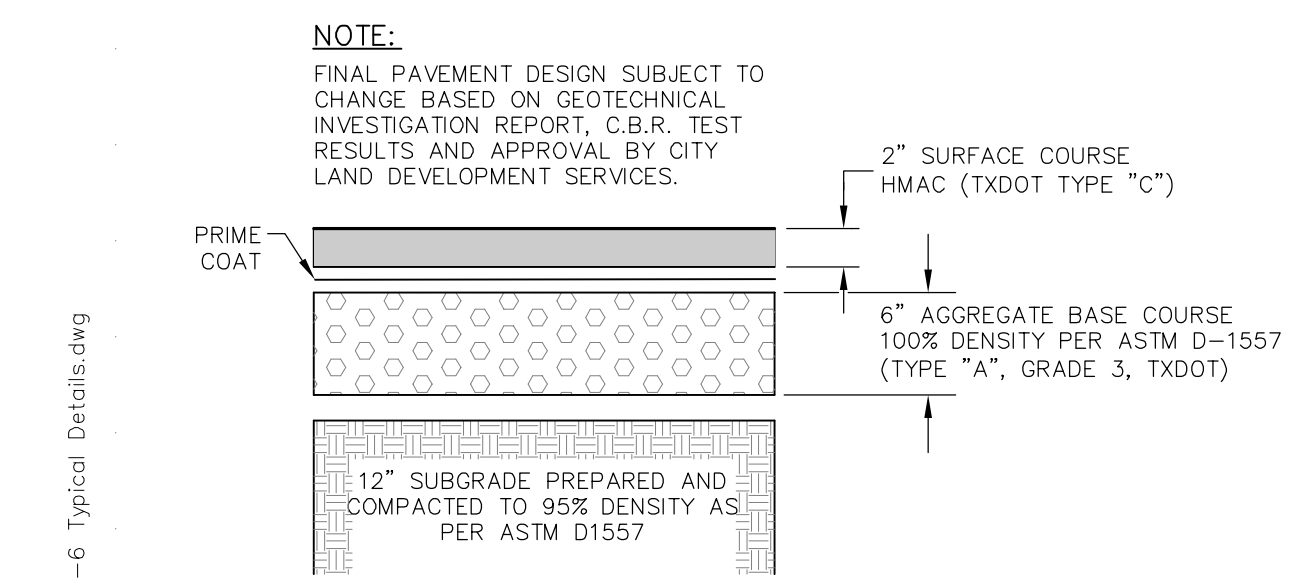
DIRECTIONAL WHEELCHAIR RAMP DETAIL
SCALE: N.T.S.

- NOTES:**
1. ALL NEW RAMPS SHALL COMPLY WITH T.A.S. AND A.D.A. REQUIREMENTS. ANY SECTIONS NOT CONFORMING WILL BE REMOVED AT THE CONTRACTOR'S EXPENSE.
 2. CONTRACTOR SHALL USE COMPOSITE PAVEMENT TILE THROUGHOUT THE DETECTABLE WARNING SURFACE SHOWN ON PLANS AND AS SPECIFIED IN THIS DETAIL.
 3. **DOMES SIZE AND SPACING.** TRUNCATED DOMES SHALL HAVE A DIAMETER OF NOMINAL 0.9 INCHES AT THE BOTTOM, A DIAMETER OF 0.5" INCH AT THE TOP, A HEIGHT OF NOMINAL 0.2 INCHES, AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCHES MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT.
 4. **DOMES ALIGNMENT.** DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING SURFACES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION.
- CONTRAST:** THERE SHALL BE A MINIMUM OF 70 PERCENT CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE, OR THE DETECTABLE WARNING SHALL BE "BRICK RED" COLOR, UNLESS OTHERWISE DIRECTED BY THE OWNER.

NOTE:
COMPOSITE PAVEMENT TILE SHALL BE EMBEDDED IN CONCRETE WHILE IN PLASTIC STATE. SURFACE APPLIED PAVEMENT TILE WILL NOT BE ACCEPTED.



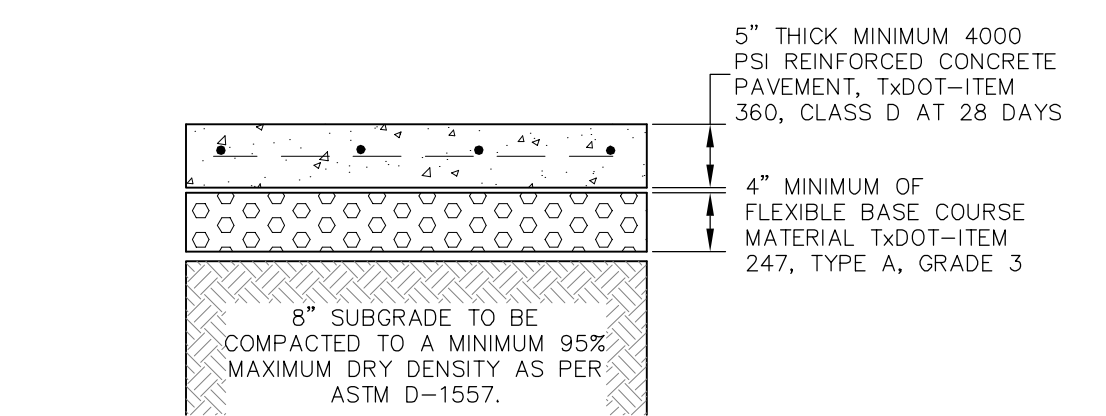
PAVER TILE
SCALE: N.T.S.



TYPICAL PAVEMENT SECTION
SCALE: N.T.S.

- NOTES:**
1. CONCRETE TO BE 3000 PSI MIN. @ 28 DAYS.
 2. CONCRETE CURB, GUTTER, AND RETURNS SHALL BE ASTM TYPE II, PORTLAND CEMENT.
 3. DUMMY JOINT REQUIRED AT 10' O.C. FOR CURB & GUTTER AND 5' O.C. FOR SIDEWALK.
 4. EXPANSION MATERIAL REQUIRED AT CURB RETURNS, WITH 1/2" PRE-MOLDED ASPHALT IMPREGNATED EXPANSION MATERIAL OR EQUAL.
 5. SUBGRADE UNDER CURB MUST BE FORMED AND COMPACTED TO 95% ASTM D1557.
 6. EXPANSION JOINTS REQUIRED AT 50' O.C. WHEN FORMING FOR CURBS.
 7. EXPANSION JOINTS REQUIRED FOR SIDEWALK AT 20' O.C.

CONCRETE CURB AND GUTTER DETAILS
SCALE: N.T.S.



TYPICAL CONCRETE PAVEMENT
SCALE: N.T.S.

REFERENCES - BENCHMARK	
DATE	REVISION

414 Executive Center Blvd
Ste 200 El Paso TX 79902
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F 915.532.7373

QUANTUM
Engineering
incorporated
Texas Registered Engineering Firm F-005146

THE SEAL REPRESENTS AN INDICATION THAT THE DESIGNER HAS AUTHORIZED BY THE BOARD OF ARCHITECTS OF THE STATE OF TEXAS TO SEAL AND SIGN THE DRAWINGS FOR THE PROJECT DESCRIBED HEREIN.



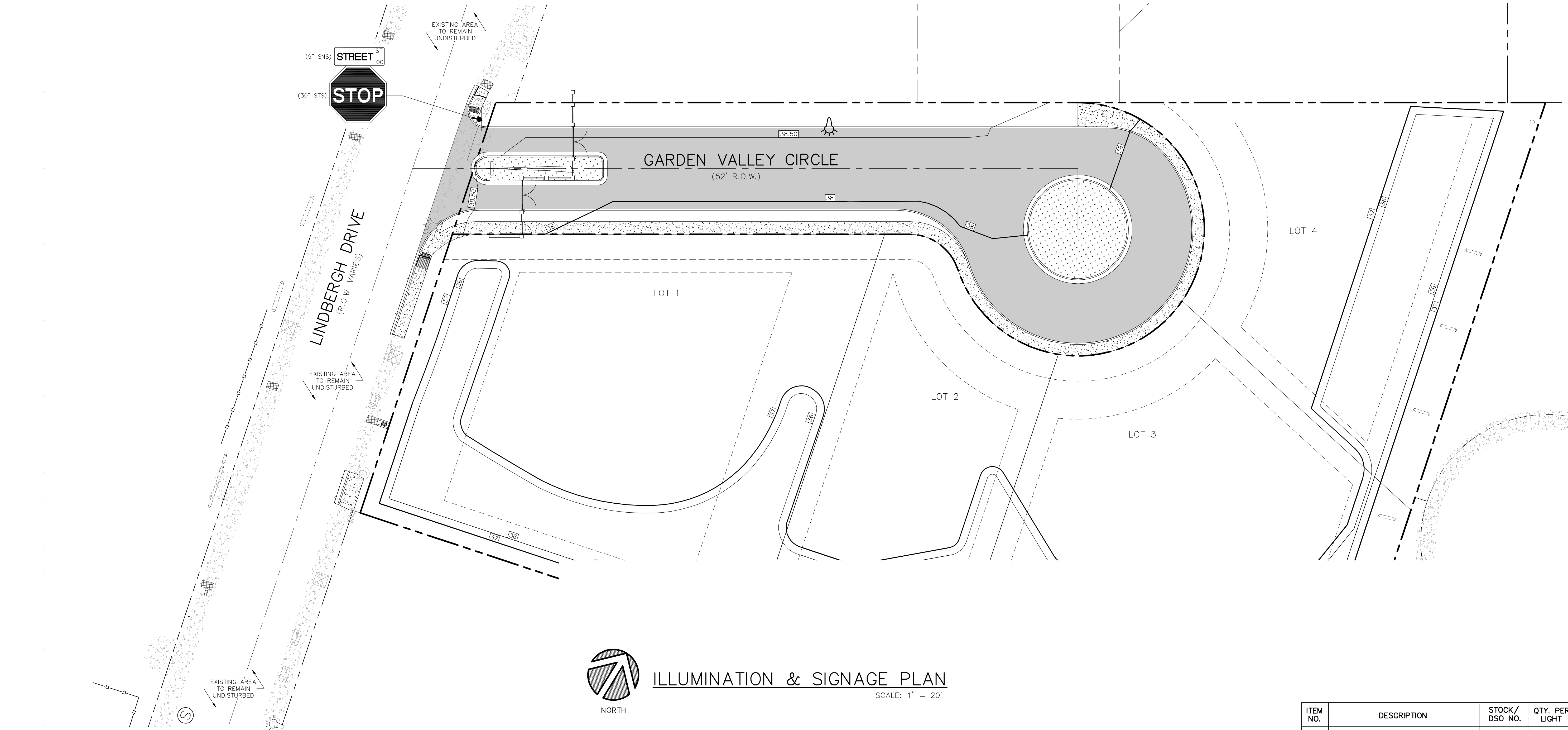
SCALE:	N/A
HORIZONTAL:	N/A
VERTICAL:	N/A
CONTOUR INTERVAL:	N/A
DATE:	08-13-12
DESIGN BY:	B.R.
DRAWN BY:	CADD
CHKD BY:	R.A.G.
APPROV BY:	R.A.G.
JOB NO.:	1203

PROJECT TITLE
GARDEN VALLEY SUBDIVISION
EL PASO COUNTY, TEXAS

SHEET TITLE
TYPICAL DETAILS

SHEET NO.
C-6
6 OF 19 SHEETS

Aug 13, 2012 10:04am R4m
c:\active\Drawings\1203_305_Lindbergh\Civil\CEEP_2nd Comments (07-26-12)\C-6 Typical Details.dwg



ILLUMINATION & SIGNAGE PLAN

SCALE: 1" = 20'

- NOTES:**
- CONSTRUCTION FOR ALL LIGHTING AND APPURTENANCES SHALL ADHERE TO CURRENT CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION AND/OR THE EL PASO ELECTRIC COMPANY DISTRIBUTION STANDARDS.
 - ALL NEW SIGNS SHALL COMPLY TO CURRENT CITY OF EL PASO SPECIFICATIONS AND REQUIREMENTS.
 - ALL EXISTING SIGNAGE LOCATED WITHIN THE PROJECT LIMITS SHALL BE REMOVED TO ACCOMMODATE THE PROPOSED IMPROVEMENTS AND RELOCATED IN ITS APPROXIMATE ORIGINAL LOCATION, UNLESS OTHERWISE SHOWN ON PLANS. EXISTING SIGN POSTS TO BE UPGRADED, WHEN RELOCATED, TO TxDOT APPROVED SLIP BASE TYPE POSTS. CONTRACTOR SHALL COORDINATE WITH COEP DEPARTMENT OF TRANSPORTATION (915) 621-6750
 - ALL EXISTING STREET NAME BLADE ASSEMBLIES (NOT CONFORMING TO CURRENT CITY OF EL PASO STANDARDS), SHALL BE UPGRADED TO CURRENT CITY OF EL PASO (COEP) STANDARDS. CONTRACTOR SHALL COORDINATE WITH COEP DEPARTMENT OF TRANSPORTATION (915) 621-6750
 - CONTRACTOR SHALL COORDINATE WITH EPDPT PRIOR TO RELOCATION OF SIGNS. EPDPT SHALL BE PROVIDED THE OPPORTUNITY TO INSPECT AND REPLACE ANY EXISTING DETERIORATING SIGN PRIOR TO INSTALLATION.
 - CONTRACTOR SHALL VERIFY NEW AND RELOCATED UTILITIES AND SIGNS TO BE INSTALLED IN A LOCATION TO PROVIDE A MINIMUM 3' WIDE ADA ACCESSIBLE PATH ALONG SIDEWALK ROUTES.
 - CONTRACTOR TO COORDINATE WITH OWNER ON THE PROPOSED LOCATIONS OF NEW STREET LIGHTS AND RELOCATION OF EXISTING STREET LIGHTS BEFORE PROPOSED SIDEWALKS ARE INSTALLED.



NOTES:
ALL ROADWAYS INTERSECTING EXISTING PUBLIC ROADWAYS SHALL REMAIN COMPLETELY CLOSED FOR PUBLIC USE UNTIL ACCEPTED FOR MAINTENANCE BY THE CITY.

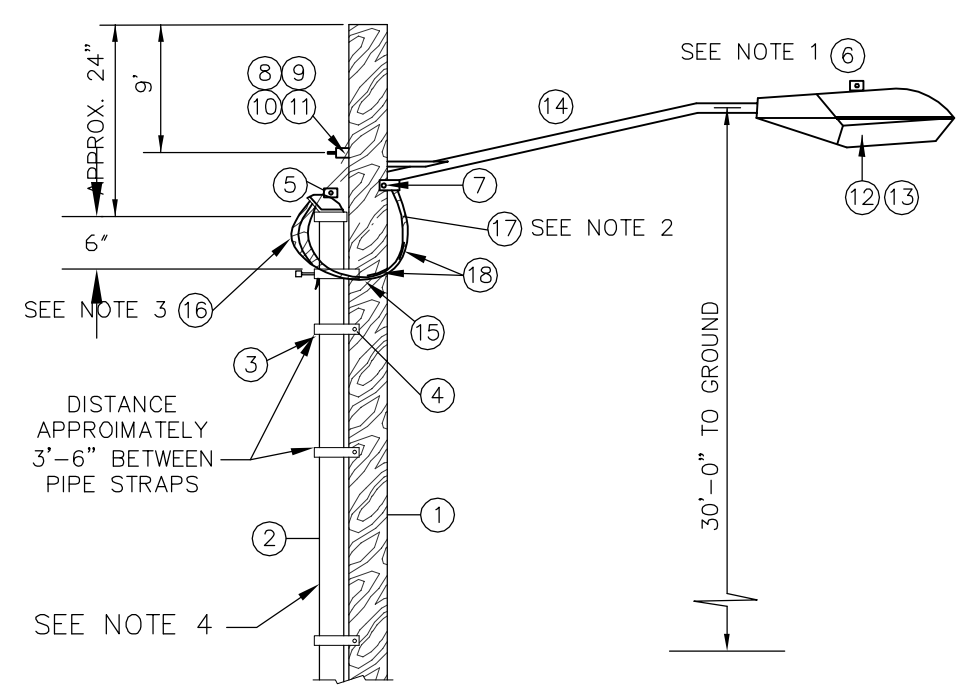
NOTES:
1. ALL STREET LIGHTS SHALL BE LOCATED WITHIN THE PARKWAY, A MINIMUM OF 24" AWAY FROM BACK OF CURB.
2. DETAILS SHOWN ON THIS SHEET ARE FOR REFERENCE PURPOSES ONLY. CONSTRUCTION FOR ALL LIGHTING AND APPURTENANCES SHALL ADHERE TO CURRENT CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION.

KEYED NOTES

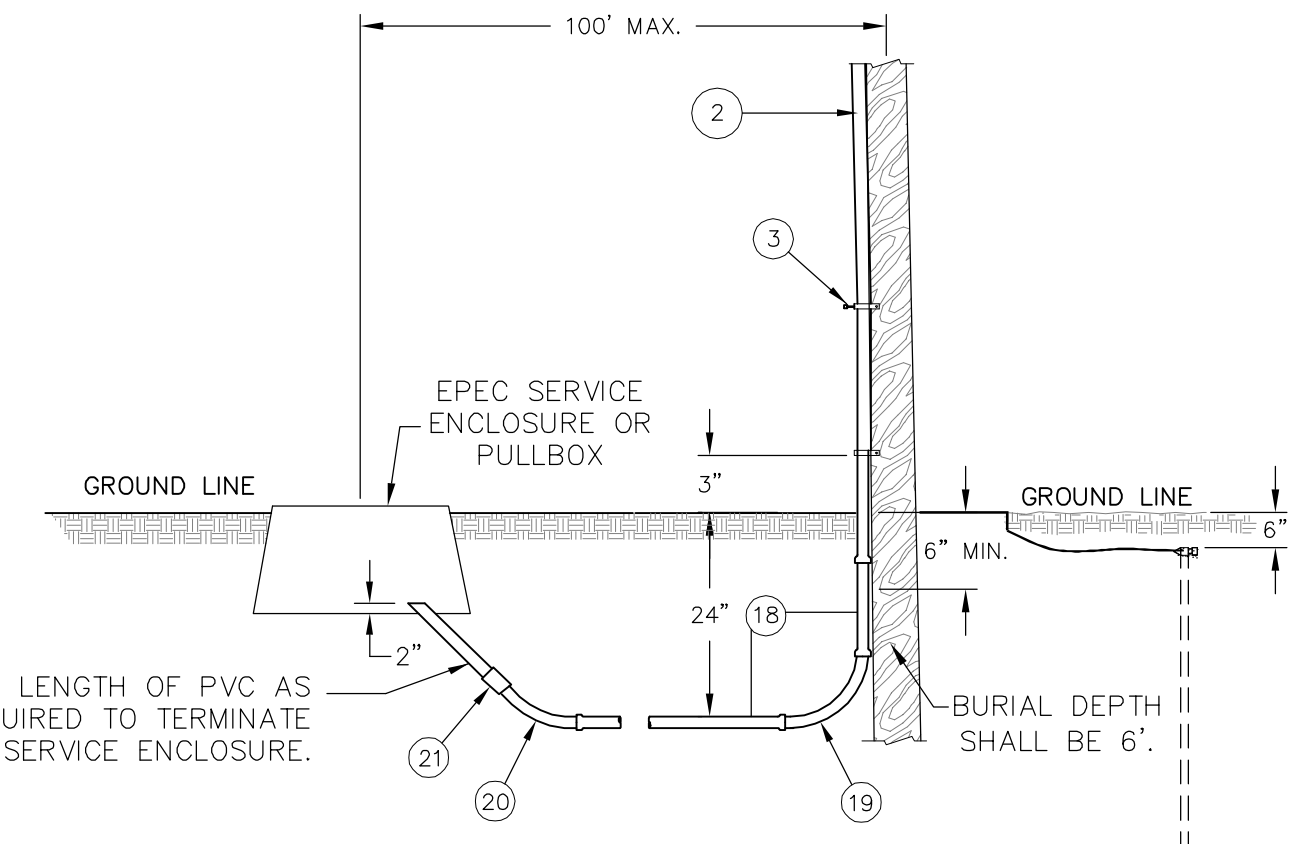
- MOUNT SO THAT PHOTO CELL IS FACING NORTH.
- ITEM 17 SHALL NOT BE SPLICED INSIDE ITEM 14.
- THE WIRE LEADS FROM THE WEATHER HEAD TO THE MAST ARM SHALL HAVE A MINIMUM 4" DRIP LOOP BELOW THE WEATHER HEAD.
- THE CONDUIT RISER SHALL BE INSTALLED ON THE BACK OF THE WOOD (AWAY FROM THE STREET)

DESIGN NOTES

- INSTALLATION MUST COMPLY WITH ALL LOCAL CODE REQUIREMENTS.
- FOR ANY CLARIFICATION, EXCEPTIONS OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.



STREET LIGHT WOOD POLE DETAIL
SCALE: N.T.S.



WOOD POLE RISER DETAIL
SCALE: N.T.S.

ITEM NO.	DESCRIPTION	STOCK/DSO NO.	QTY. PER LIGHT
1	POLE, 35 FT.-CLASS IV	009-035	1
2	SCHEDULE 80 1" PVC CONDUIT	017-280	30'
3	PIPE STRAP FOR 1" CONDUIT, 2-HOLE	017-283	9
4	NAIL, STAINLESS STEEL SCREW 2.5"	014-427	25
5	SERVICE ENTRANCE CAP FOR 1" PVC CONDUIT	017-281	1
6	PHOTOCELL, 240V-SEE NOTE 1	021-225	1
7	LAG BOLT, 3/8" X 3"	002-343	2
8	MACHINE BOLT, 5/8" X 12"	002-470	1
9	SQUARE GALV. WASHER, 2 1/4" X 2 1/4"	002-760	1
10	COIL-SPRING WASHER, 5/8"	002-786	1
11	LOCK NUT, 5/8"	002-705	1
12	LUMINAIRE, 100W H.P.S.	021-335	1
13	HPS LAMP, 100W	021-085	1
14	MAST ARM, 6' X 1 1/4"	021-200	1
15	COPPER CABLE, #12, SOLID, 600V, BLUE	013-702	60'
16	CABLE, #10, 2 CONDUCTOR, 600V, UF	013-600	8'
17	SLEEVES, #12-10	005-140	2
18	1" PVC CONDUIT	017-299	AS REQUIRED
19	1" PVC 90° ELBOW	017-297	1
20	1" PVC 45° ELBOW	017-298	1
21	1" PVC COUPLING	017-296	1

WARNING! BEFORE YOU DIG

COORDINATION WITH UTILITIES:
CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION AND/OR RELOCATION OF EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION WORK.

TEXAS GAS SERVICE 4700 POLLARD STREET EL PASO, TEXAS 79930 (915) 680-7329	EL PASO ELECTRIC CO. 501 WEST SAN ANTONIO STREET EL PASO, TEXAS 79901 (915) 543-5970	EL PASO WATER UTILITIES PUBLIC SERVICE BOARD 1154 HAWKINS BLVD. EL PASO, TEXAS 79925 (915) 594-5528
AT&T INCORPORATED 11200 HELICARD DRIVE EL PASO, TEXAS 79935 (800) 344-8377 (800) 252-1133 (FIBER OPTIC)	TIME WARNER COMMUNICATIONS #20 CONCORD STREET EL PASO, TEXAS 79906 (915) 775-7414	TEXAS EXCAVATION SAFETY SYSTEM ANYWHERE IN TEXAS (800) 344-8377

PROJECT TITLE
GARDEN VALLEY SUBDIVISION
EL PASO COUNTY, TEXAS

SHEET TITLE
ILLUMINATION & SIGNAGE PLAN

SHEET NO.
C-7
7 OF 19 SHEETS

REFERENCES - BENCHMARK

DATE	REVISION

414 Executive Center Blvd
Ste 200 El Paso TX 79902
P 915.532.7272
F 915.532.7373

QUANTUM
ENGINEERING
CONSULTANTS
INCORPORATED
Texas Registered Engineering Firm F-005146

THE SEAL REPRESENTS ONLY THE DESIGN PROFESSIONAL'S AUTHORITY TO SEAL AND SIGN. IT DOES NOT REPRESENT A GUARANTEE OF THE ACCURACY OF THE INFORMATION CONTAINED HEREIN. THE SEAL OF THE ENGINEER IS THE PROPERTY OF THE ENGINEER AND SHALL BE RETURNED TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

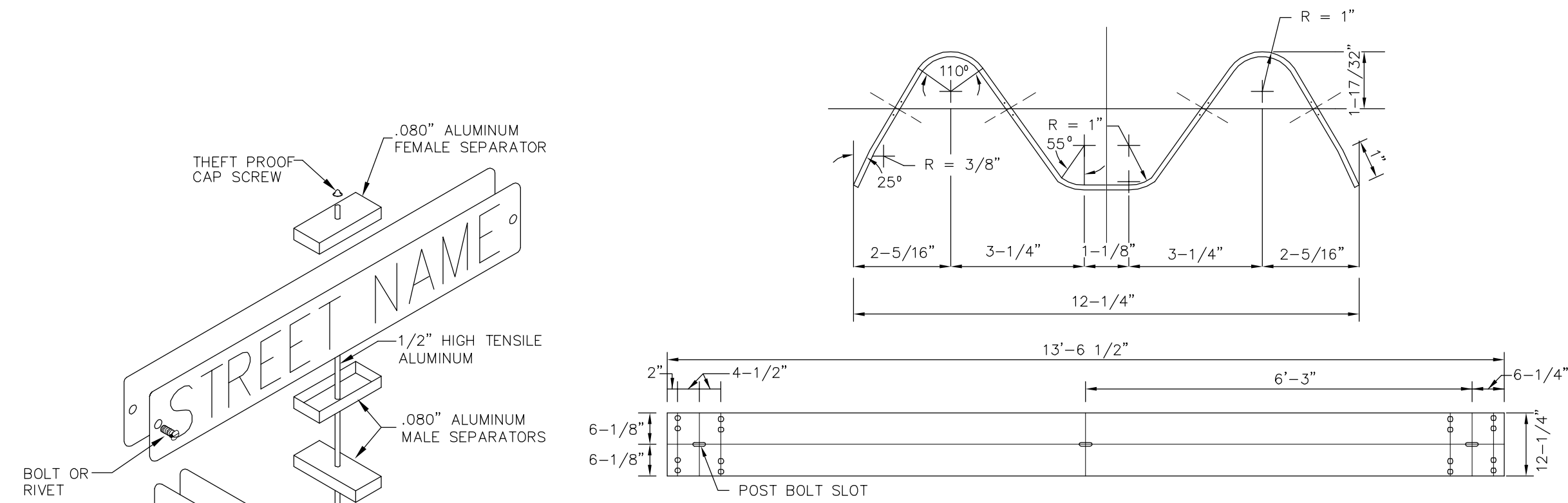
ROBERT A. CONZALES
REGISTERED PROFESSIONAL ENGINEER
61970
EL PASO, TEXAS

SCALE: HORIZONTAL: 1" = 20'
VERTICAL: CONTOUR INTERVAL: 5'
DATE: 08-13-12
DESIGN BY: B.R.
DRAWN BY: C.A.D.
CHKD BY: R.A.G.
APPROV BY: R.A.G.
JOB NO.: 1203

Aug 11, 2012 10:14am Rkm
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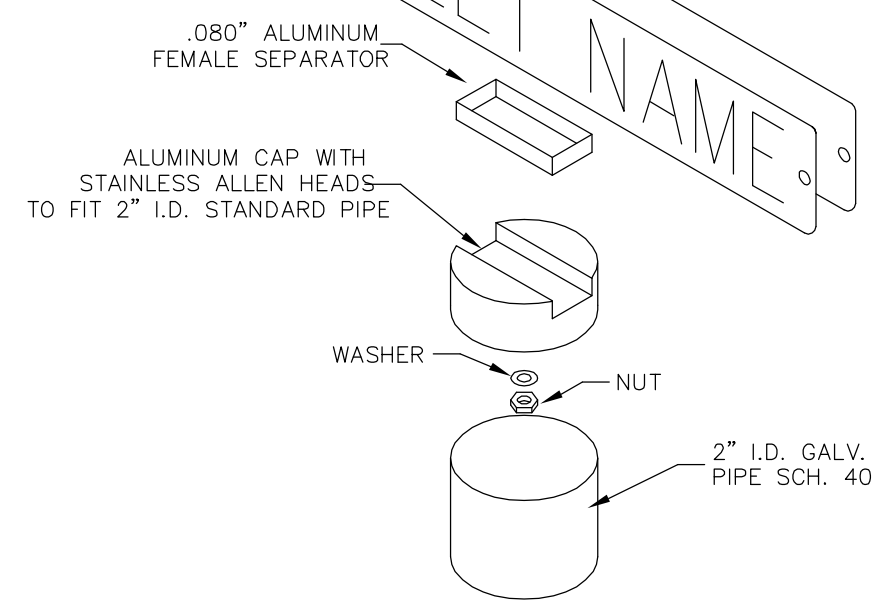
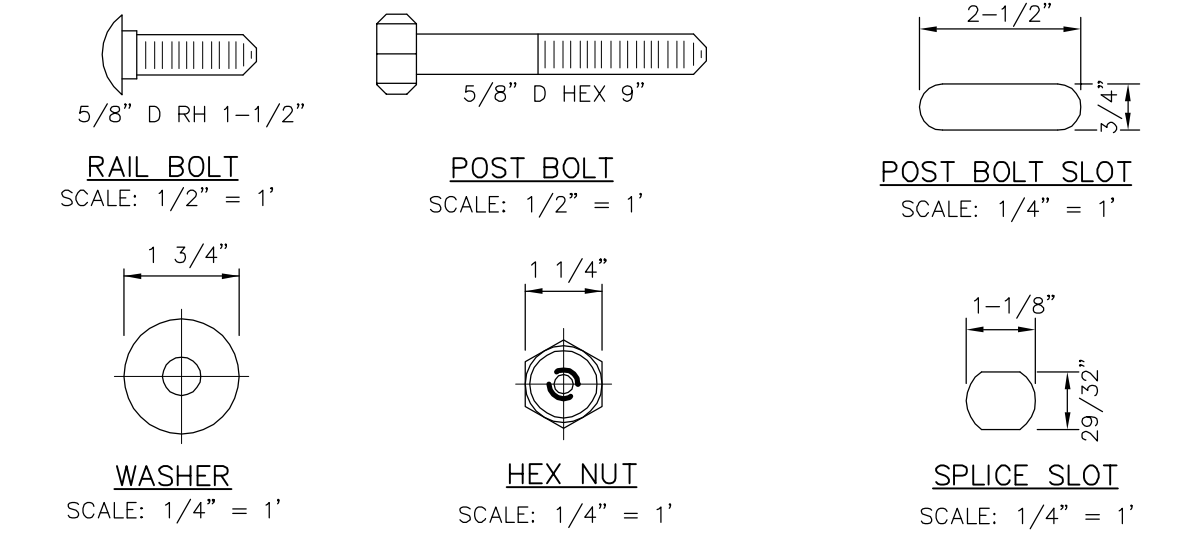
**CITY OF EL PASO
SPECIFICATION FOR REFLECTORIZED
STREET NAME SIGNS**

- COLOR OF SIGN:** THE FINISHED SIGN MUST HAVE A REFLECTORIZED GREEN BACKGROUND. THE GREEN MUST CONFORM WITH THE BUREAU OF PUBLIC ROADS HIGHWAY GREEN. THE LEGEND MUST BE REFLECTORIZED SILVER WHITE (GREEN REVERSE SCREENED BACKGROUND WITH SILVER COPY).
- LETTER DESIGN:** THE LETTERING OF ALL LEGENDS MUST BE UPPER CASE LETTERS IN ACCORDANCE WITH "STANDARD ALPHABETS FOR HIGHWAY SIGN" PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- LETTER SPACING:** THE CONTROL FOR THE SPACING VALUES IN TRAFFIC LAYOUT IS THE DISTANCE RECOGNIZED AS AESTHETIC SPACING BETWEEN TWO STRAIGHT LETTERS (HN). A SPACING CONTROL OF TWO TIMES THE WIDTH OF THE STROKE OF THE LETTER SERIES TO BE USED MUST BE THE AESTHETIC CONTROL (100%). TWO AND ONE-HALF TIMES (2-1/2) THIS CONTROL MUST BE USED AS THE AESTHETIC WORD SPACE BETWEEN ELEMENTS IN THE PRIMARY LEGEND.
- LAYOUT:** THE MAXIMUM NUMBER OF LETTERS TO BE ACCOMMODATED ON A GIVEN LENGTH STREET NAME FACE MUST BE DETERMINED BY THE WIDEST LETTER SERIES POSSIBLE FOR THAT LEGEND AND THE SPACING CONTROL (100%) FOR THE SERIES USED MUST BE EXPANDED OR CONDENSED UP TO 25% IN 5% INCREMENTS.
- THE SPACING CONTROL (100%) FOR THE SERIES USED MUST BE EXPANDED OR CONDENSED UP TO 25% IN 5% INCREMENTS FOR THE END MARGIN WITH MINIMUM OF 1".
- THE WORD SPACE MUST BE EXPANDED UP TO 25% IN 5% INCREMENTS BUT NOT CONDENSED.
- SPACE BETWEEN PRIMARY AND BLOCK NUMBER AREA MUST BE 1/2 THE AESTHETIC WORK SPACE USED IN THE PRIMARY LEGEND.
- SIZE OF LEGEND:** FOR 9" STREET NAME SIGNS, THE PRIMARY LEGEND, OR STREET NAME MUST HAVE CAPITAL LETTERS SIX INCHES (6") HIGH AND ALL SECONDARY LEGENDS, INCLUDING THE SUFFIX, BLOCK NUMBERS, MUST HAVE UPPER CASE LETTERS TWO AND ONE-HALF INCHES (2 1/2") HIGH.
- SUFFIX LETTER SIZE FOR ALL LENGTH MUST BE 2 1/2" CAPITALS, C SERIES, EXCEPT THAT SERIES A OR B WHERE SUFFIX ABBREVIATION EXCEEDS TWO LETTERS, MAY BE USED.
- POSITION OF LEGEND:** EACH SIGN FACE WILL CONSIST OF THE STREET NAME, SUFFIX AND TWO ZEROS OF THE BLOCK NUMBER. THE ADDITIONAL NUMBERS OF THE BLOCK NUMBER WILL BE APPLIED BY THE CITY OF EL PASO. THE SUFFIX WILL BE LOCATED IN THE UPPER RIGHT CORNER AND THE BLOCK NUMBER IN THE LOWER RIGHT CORNER OF THE SIGN FACE AND THE STREET NAME CENTERED IN THE REMAINING SPACE.
- SIGN FABRICATION:** THE SIGN FACE MUST BE FABRICATED BY REVERSE SCREENING GREEN TRANSPARENT COLOR OVER SILVER REFLECTIVE SHEETING. TRANSPARENT PROCESS COLORS MUST BE AS RECOMMENDED BY THE SHEETING MANUFACTURER. CUT-OUT OR APPLIED LEGENDS ARE NOT PERMITTED. SIGN FACE MUST BE COMPRISED OR ONE PIECE OR PANEL OF REFLECTIVE SHEETING.
- TYPE OF SHEETING:** ENGINEER GRADE REFLECTIVE SHEETING MUST BE USED IN THE FABRICATION OF THE STREET NAME SIGN FACES.

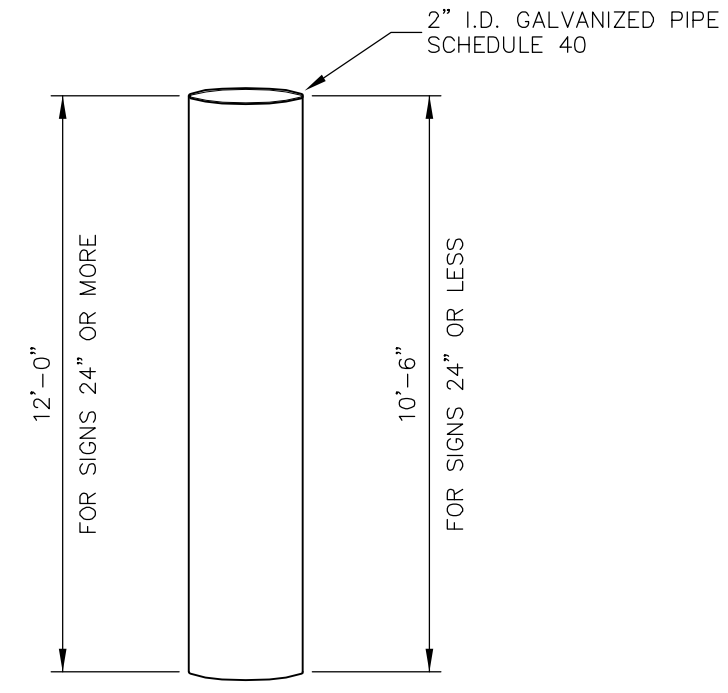


RAIL PLATE
SCALE: 1" = 2"

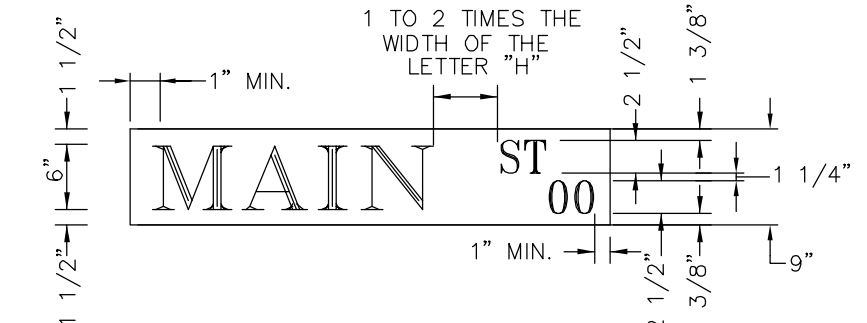
TERMINAL PLATE
SCALE: 1" = 1"



SIGN CLASS	SIGN LENGTH	PRIMARY LETTERS SIZE & SERIES	SUFFIX & BLOCK NUMBER SIZE AND SERIES
9"	36"	6" C,D, SERIES	3" C SERIES
ARTERIAL STREETS	42"	6" C,D, SERIES	3" C SERIES
	48"	6" A,B,C,D, SERIES	3" C SERIES

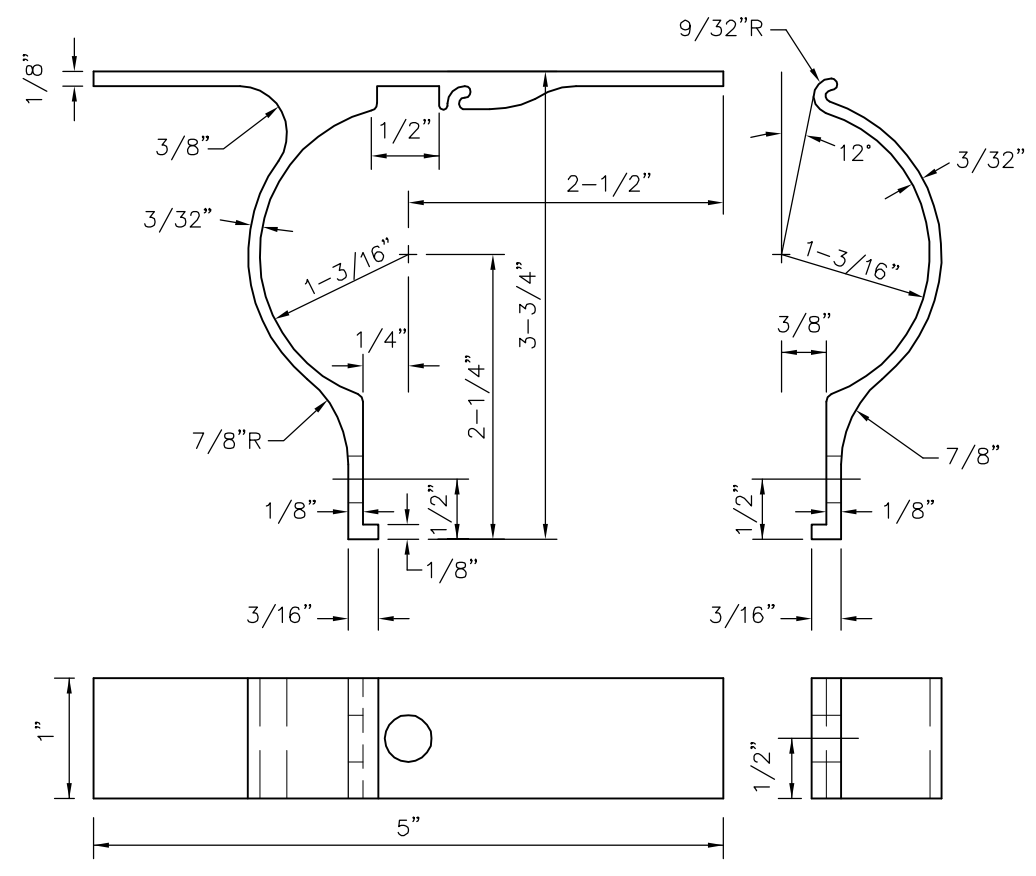


- NOTES:**
- WELD ALONG ITS LENGTH TO FORM VIRTUALLY SEAMLESS.
 - POST SHALL BE HOT-DIPPED ZINC GALVANIZED UNIFORMLY ON THE OUTSIDE WITH A NOMINAL ZINC WEIGHT OF 1.0 OUNCE PER SQUARE FOOT.
 - THE ZINC COATING IS TO BE OVER-COATED WITH A CHROMITE CONVERSION AND ACRYLIC COATING TO PROVIDE RESISTANCE TO RUSTING AND CORROSION.
 - THE INSIDE OF THE POST SHALL BE COATED WITH AN ORGANIC MATERIAL FOR PROTECTION AGAINST RUST.
 - BOTH ENDS ARE TO BE SQUARELY CUT WITHOUT FLARE.
 - POST SHALL BE FREE OF WARPS, CORROSION, OR OTHER DEFECTS.
 - RING WELDS OR SPLICES WILL NOT BE ACCEPTABLE.
 - BENDING STRENGTH AS SPECIFIED BY AASHTO FOR SCHEDULE 40 PIPE.
 - POST SHALL BE BUNDLE WITH METAL STRAPS AND SHALL NOT EXCEED 37 POST PER BUNDLE.



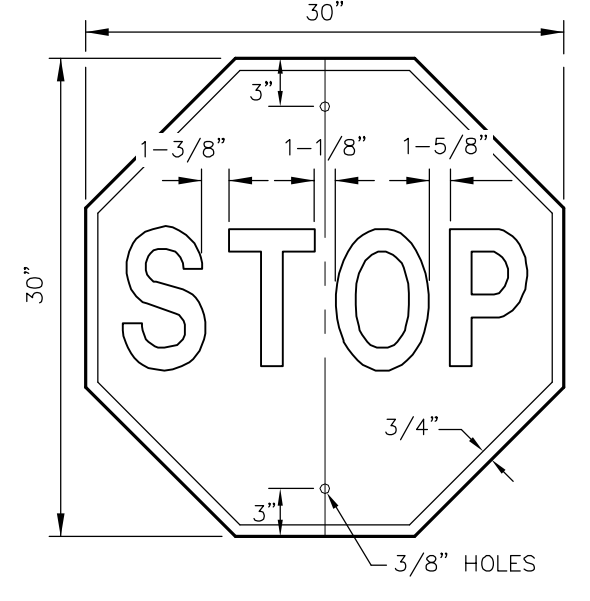
LAYOUT FOR 9" STREET NAME SIGN
SCALE: N.T.S.

SIGN POSTS SPECIFICATIONS
SCALE: N.T.S.



- NOTES:**
- ALL HOLES 3/8" PUNCH.
 - FILLETS & ROUNDS 1/16"= R.
 - FURNISH THE FOLLOWING HARDWARE FOR EACH BRACKET :
1 - 5/16" x 3/4" BOLTS
1 - 5/16" x 1 1/4" BOLT
2 - 5/16" x NUTS & WASHERS
2 - FLAT WASHERS
 - THE BRACKET IS TO BE MADE FROM HIGH STRENGTH ALUMINUM ALLOY. THE BRACKET IS TO EMPLOY AN EXTRUDED INTERLOCKING FEATURE OFFERING A RIGID MEANS OF ATTACHING A FLAT SIGN TO A STANDARD 2" I.D. TUBULAR POST.

ALUMINUM SIGN CLAMP BRACKET
SCALE: N.T.S.



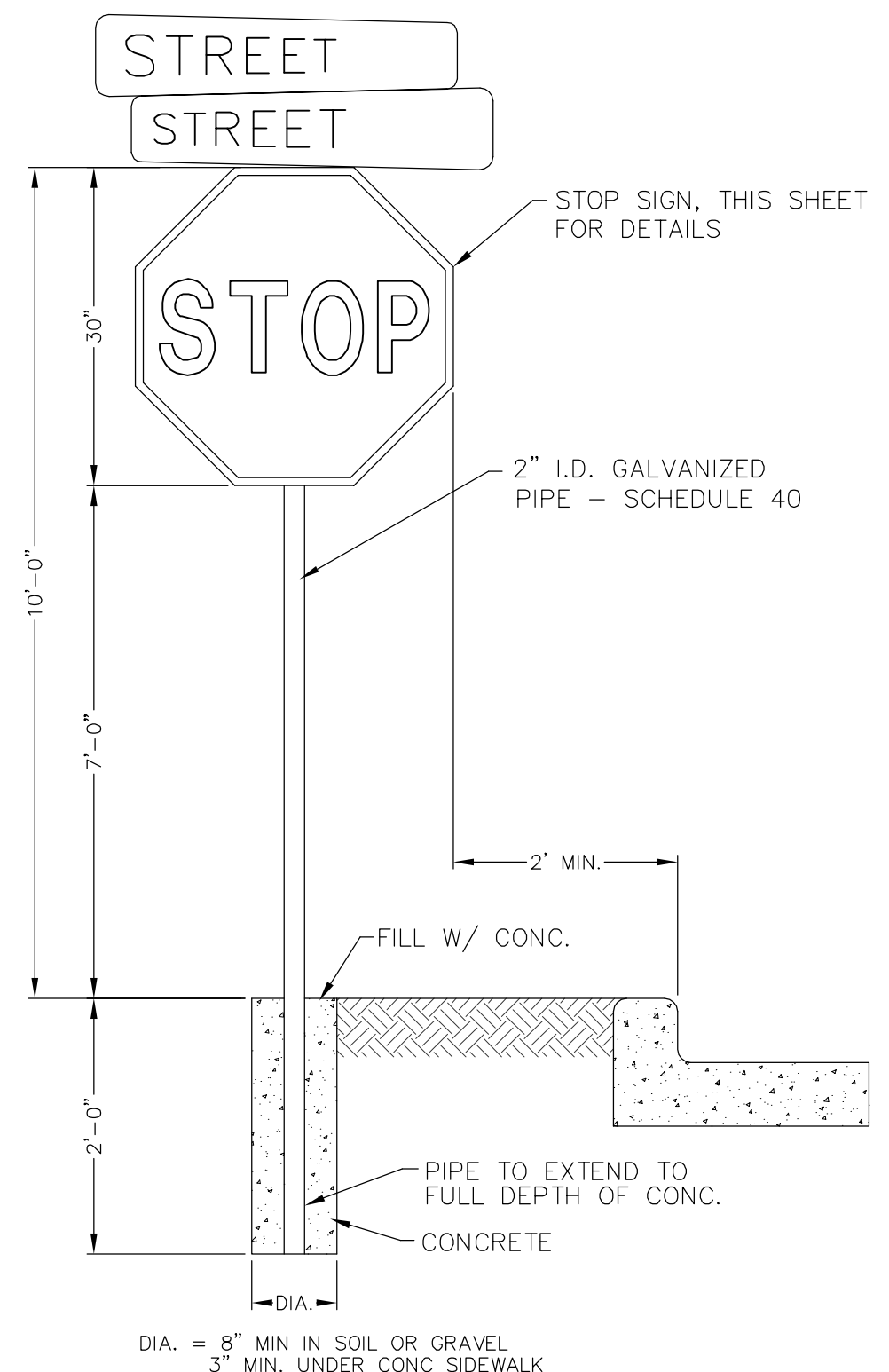
LETTERS - WHITE REFLECTIVE
BORDER - WHITE REFLECTIVE
BACKGROUND - RED REFLECTIVE
(REFER TO STREET DEPARTMENT SIGN SPECIFICATIONS)

STOP SIGN DETAIL
SCALE: 1" = 5"

SPECIFICATIONS FOR ALUMINUM SIGN BLANKS

- THESE SPECIFICATIONS DESCRIBE DETAILS AND MINIMUM REQUIREMENTS FOR ALUMINUM SIGN BLANKS, TO WHICH REFLECTIVE SHEETING WILL BE
- ALL MATERIALS SHALL BE NEW AND UNWEATHERED AND SHALL BE OF DOMESTIC ORIGIN, MILLED, ROLLED AND FINISHED IN DOMESTIC MILLS.
 - SIGN BLANKS SHALL BE .080 GAUGE ALDIZED TREATED ALUMINUM, 5052-H38 ALLOY, FREE OF BURRS, CORROSION, WHITE RUST AND DIRT, SUITABLE FOR APPLICATION OF REFLECTIVE SHEETING APPLIED, WITHOUT FURTHER PREPARATION.
 - EDGES OF BLANKS SHALL BE CUT TRUE AND SQUARE, CORNER RADII, HOLE DIAMETERS AND HOLE LOCATIONS SHALL BE AS DESCRIBED IN THE ALUMINUM SIGN BLANK BID D.H.T. STANDARD.
 - ALL SIGN BLANKS WILL BE TREATED AS FOLLOWS:

- A. DEGREASING**
- VAPOR DEGREASING** - BY TOTAL IMMERSION OF SIGN BLANK IN A SATURATED VAPOR OF TRICHLOROETHYLENE OR PERCHLOROETHYLENE. TRADEMARK PRINTING SHALL BE REMOVE WITH LACQUER THINNER BEFORE DEGREASING.
- OR
- ALKALINE DEGREASING** BY TOTAL IMMERSION OF THE SIGN BLANK IN A TANK CONTAINING ALKALINE SOLUTIONS, CONTROLLED AND TRITURATED TO THE SOLUTION MANUFACTURER'S SPECIFICATION FOR TIME, TEMPERATURE AND CONCENTRATION. IMMERSION TIME SHALL DEPEND UPON THE AMOUNT OF SOIL PRESENT, GAUGE OF THE METAL AND SOLUTION STRENGTH, RINSE THOROUGHLY WITH RUNNING WATER.
- B. ETCHING**
- ACID ETCH** - ETCH WELL IN 6-8% PHOSPHORIC ACID SOLUTION AT 100 DEGREES F OF PROPRIETARY ACID ETCHING SOLUTION. RINSE THOROUGHLY WITH RUNNING WATER.
- OR
- ALKALINE ETCH** - ETCH WELL THE PRE-CLEANED ALUMINUM SURFACE IN AN ALKALINE ETCHING MATERIAL THAT IS CONTROLLED BY TITRATION. USE TIME, TEMPERATURE, AND CONCENTRATION SPECIFIED BY THE SOLUTION MANUFACTURER. RINSE THOROUGHLY. REMOVE SMUT WITH AN ACIDIC CHROMIUM COMPOUND-TYPE SOLUTION AS SPECIFIED BY THE SOLUTION MANUFACTURER AND THEN RINSE THOROUGHLY.
- C. CHROMATE CONVERSION COATING**
- COAT THE ALUMINUM BLANKS ACCORDING TO THE CHROMATE CONVERSION COATING MANUFACTURER'S INSTRUCTIONS. THE COATING SHALL CONFORM TO ASTM-B448067, CLASS 2, AND SHALL RANGE IN COLOR FROM SILVERY IRIDESCENT TO PALE YELLOW. THE COATING WEIGHT SHALL BE 10 TO 35 MG PER SQ. FT. WITH A MEDIAN OF 25 MG PER SQ. FT. AS THE OPTIMUM COATING WEIGHT.



SIGN POST INSTALLATION
SCALE: N.T.S.

NOTES:
DETAILS SHOWN ON THIS SHEET ARE FOR REFERENCE PURPOSES ONLY. REFER TO CURRENT CITY OF EL PASO SUBDIVISION IMPROVEMENT DESIGN STANDARDS FOR MORE ADDITIONAL SPECIFICATIONS.

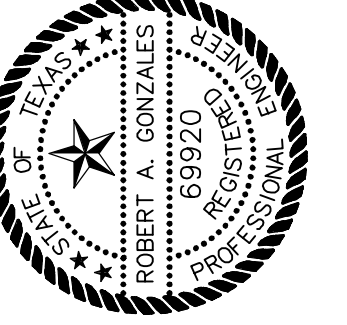
REFERENCES - BENCHMARK

BY	
REVISION	
DATE	

414 Executive Center Blvd
Ste 200 El Paso TX 79902
P 915.532.7272
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QUANTUM
Engineering
incorporated
Texas Registered Engineering Firm F-005146

THE SEAL, SIGNATURE OR THE DOCUMENT WAS AUTHORIZED BY ROBERT A. GONZALES, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS. THE REGISTERED ENGINEER IS NOT PROVIDING ANY PROFESSIONAL ENGINEERING SERVICE.



SCALE:

HORIZONTAL:	N/A
VERTICAL:	N/A
CONTOUR INTERVAL:	N/A
DATE:	08-13-12
DESIGN BY:	B.R.
DRAWN BY:	CADD
CHKD BY:	R.A.G.
APPRO BY:	R.A.G.
JOB NO.:	1203

PROJECT TITLE

**GARDEN VALLEY
SUBDIVISION**

EL PASO COUNTY, TEXAS

SHEET TITLE

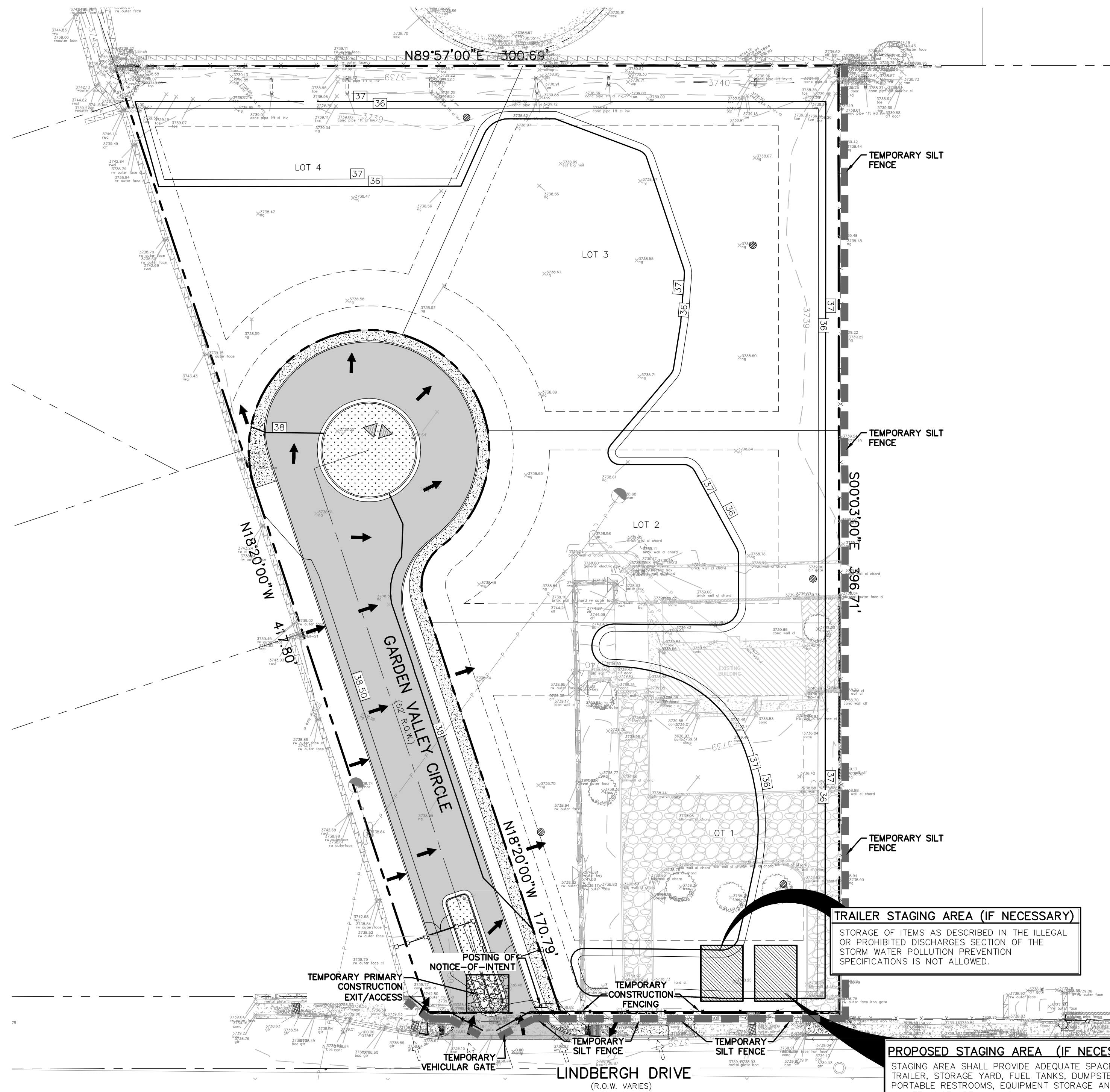
TYPICAL SIGN
DETAILS

SHEET NO.

C-8

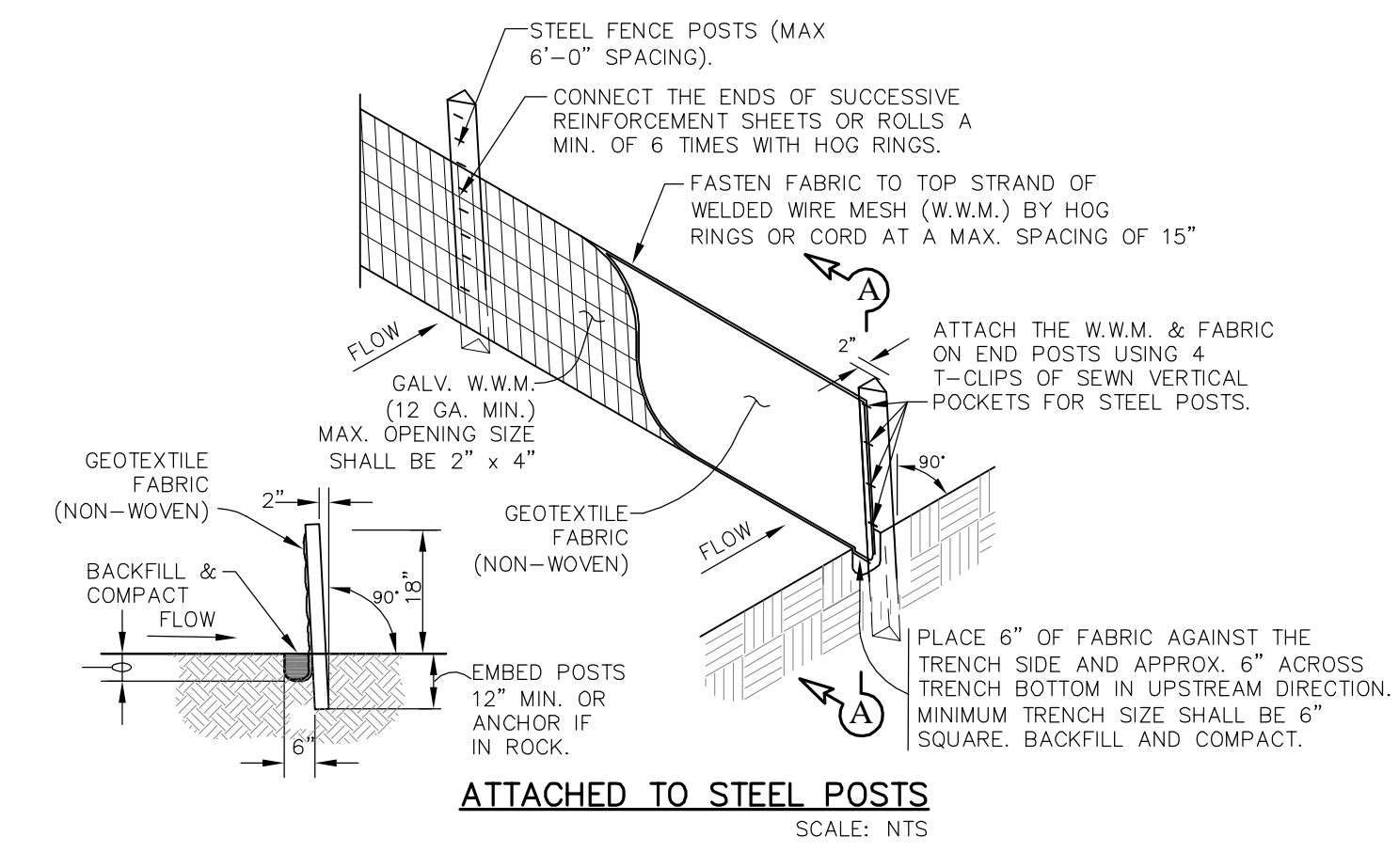
8 OF 19 SHEETS

Aug 31, 2012 12:11pm flen
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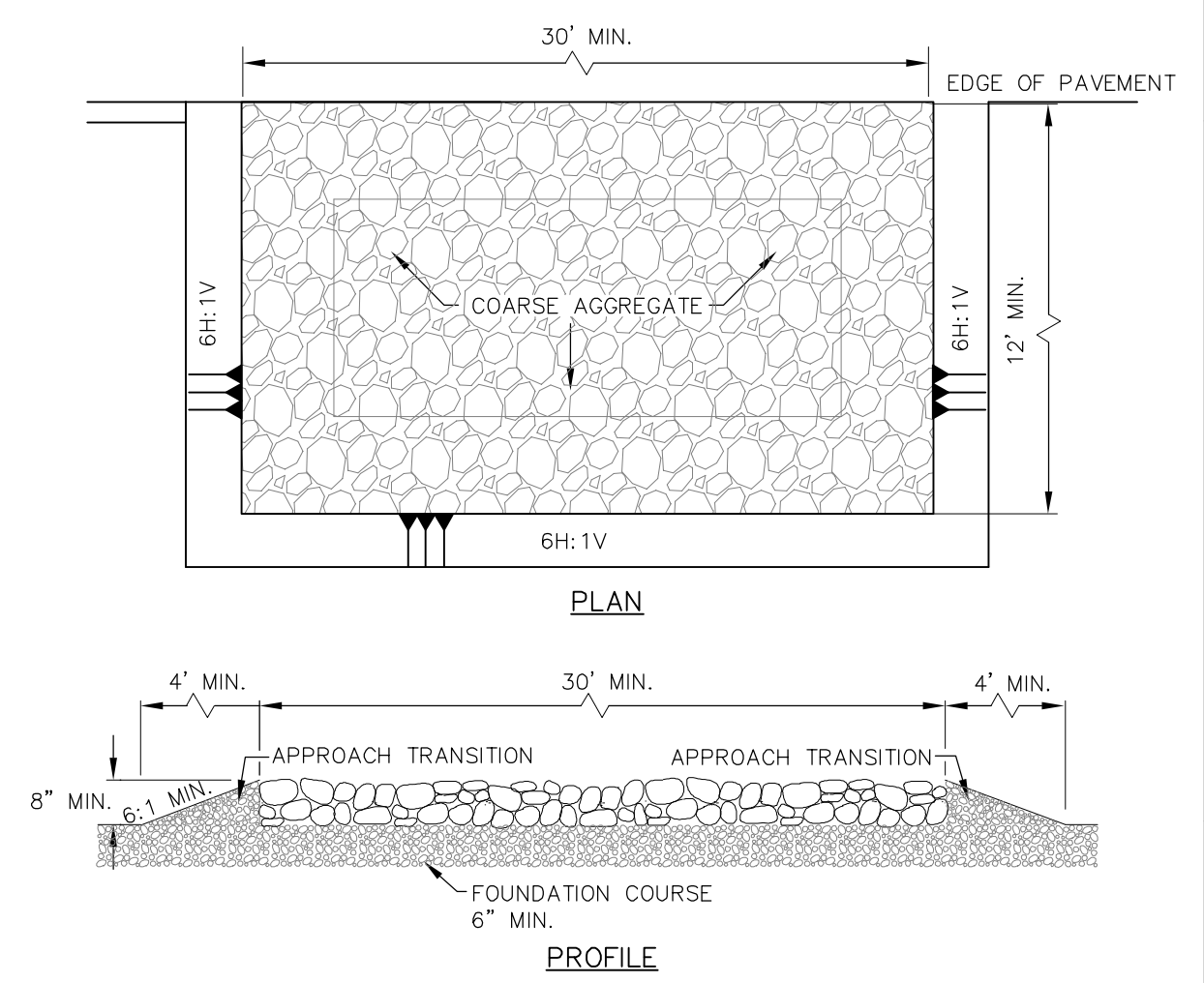
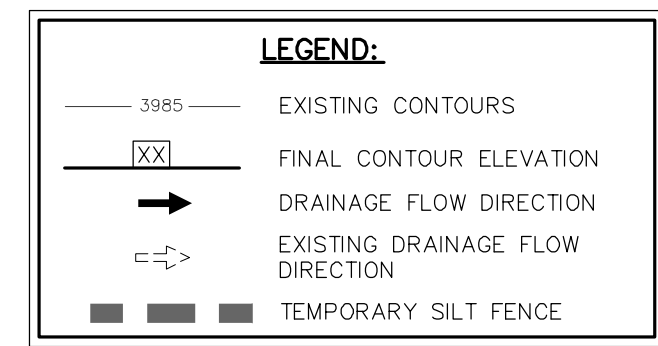
STORMWATER POLLUTION PREVENTION PLAN

SCALE: 1" = 30'



- SEDIMENT CONTROL FENCE NOTES:**
- STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POSTS MUST BE EMBEDDED A MINIMUM OF 12".
 - THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF THE FLOW. WHERE FENCE CAN NOT BE TRENCHED INTO THE SURFACE (E.G. PAVEMENT) THE FABRIC SHALL BE WEIGHTED DOWN WITH ROCK OR 1" X 4" LUMBER SECURELY FASTENED TO THE SURFACE, ON THE UPSTREAM SIDE TO PREVENT FLOW UNDER THE FENCE.
 - THE TRENCH MUST BE A MINIMUM OF 6" DEEP AND 6" WIDE TO ALLOW FOR THE NON-WOVEN FILTER FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
 - THE NON-WOVEN FILTER FABRIC SHALL BE SECURELY FASTENED TO THE WOVEN WIRE BACKING, WHICH IN TURN IS SECURELY FASTENED TO THE STEEL FENCE POST.
 - ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6". THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTRATION.
 - INSPECTION SHALL BE MADE WEEKLY AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY, IF NEEDED.
 - SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED.

TEMPORARY SILT FENCE
 SCALE: N.T.S.



- GENERAL NOTES:**
- THE LENGTH OF THE TYPE 1 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 30'.
 - THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
 - THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
 - THE CONSTRUCTION EXIST FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OF OTHER MATERIAL AS APPROVED BY THE ENGINEER.
 - THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
 - THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

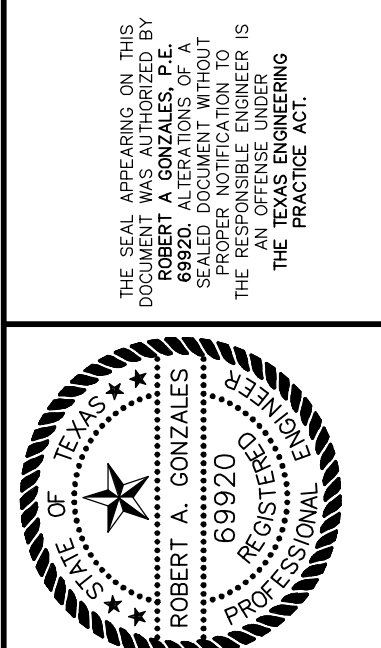
TEMPORARY CONSTRUCTION EXIT (TYPE I)
 SCALE: N.T.S.

- SEDIMENT CONTROL FENCE USAGE GUIDELINES**
- A SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED. SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAX. FLOW THROUGH RATE OF 0.22 CFS/FT. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA LARGER THAN 2 ACRES. SILT FENCING AT RIGHT-OF-WAY SHALL BE PLACED SO AS NOT TO BLOCK ANY EXISTING DRIVEWAYS.

- GENERAL NOTES:**
- THE FENCE REQUIRES FREQUENT INSPECTION AND PROMPT MAINTENANCE TO MAINTAIN ITS EFFECTIVENESS.
 - INSPECT THE FENCE AFTER EACH RAINFALL.
 - CHECK FOR AREAS WHERE RUN-OFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE WAS CAUSED TO SAG OR COLLAPSE.
 - ALL NEEDED REPAIRS SHALL BE PERFORMED IMMEDIATELY.
 - REMOVE AND PROPERLY DISPOSE OF SEDIMENT WHEN IT IS ONE-THIRD TO ONE-HALF THE HEIGHT OF THE FENCE OR AFTER EACH STORM.
 - 4" MIN. STEEL OR WOOD POSTS SPACED AT 6' O.C. SOFTWOOD POSTS SHALL HAVE A 3" MIN. DIAMETER OR NOMINAL 2"x4". HARDWOOD POSTS SHALL HAVE A MINIMUM CROSS SECTION OF 1.5"x1.5".

REFERENCES - BENCHMARK
BY
REVISION
DATE

QUANTUM
 CONSULTANTS
 INCORPORATED
 414 Executive Center Blvd
 Ste 200 El Paso TX 79902
 P 915.532.7272
 F 915.532.7373
 Texas Registered Engineering Firm F-005146



SCALE: 1" = 30'
HORIZONTAL: N/A
VERTICAL: N/A
CONTOUR INTERVAL: 08'-13'-12'
DATE: 08-13-12
DESIGN BY: B.R.
DRAWN BY: C.A.D.
CHKD BY: R.A.G.
APPVD BY: R.A.G.
JOB NO.: 1203

PROJECT TITLE
GARDEN VALLEY SUBDIVISION
 EL PASO COUNTY, TEXAS

SHEET TITLE
 STORMWATER POLLUTION PREVENTION PLAN

SHEET NO.
C-9
 9 OF 19 SHEETS

SITE DESCRIPTION

PROJECT NAME AND LOCATION: GARDEN VALLEY CIRCLE SUBDIVISION

PROJECT DESCRIPTION: SEVERAL SITE IMPROVEMENTS WILL BE BUILT...

EXISTING CONDITIONS: IT APPEARS THAT THE SITE IS RELATIVELY FLAT AND MODERATELY COVERED WITH VEGETATION...

MAJOR SOIL DISTURBING ACTIVITIES: SOIL DISTURBING ACTIVITIES WILL CONSIST OF CLEARING AND GRUBBING...

TOTAL PLATTED AREA: 2.14 ACRE±

TOTAL AREA (PROJECT AREA) TO BE DISTURBED: 2.14 ACRE±

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.80

EXISTING CONDITION OF SOIL AND VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: THE SITE IS IRREGULAR WITH SPARSE VEGETATION...

NAME OF RECEIVING WATERS: ALL STORMWATER FROM THE IMPACTING WATERSHEDS ARE SUBJECT TO "ON-SITE" PONDING...

OWNER CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION...

OWNER : SIGNED DATE

OWNER : NAME DATE

TITLE DATE

EROSION AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES

- TEMPORARY SEEDING
PERMANENT PLANTING, SODDING, OR SEEDING
MULCHING
SOIL RETENTION BLANKET
BUFFER ZONES
PRESERVATION OF NATURAL RESOURCES
OTHER: WATERING

STRUCTURAL PRACTICES:

- SILT FENCES
SILT SOCKS
HAY BALES
ROCK BERMS
DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
PIPE SLOPE DRAINS
CONCRETE FLUMES/SWALES
TIMBER MATTING AT CONSTRUCTION EXIT
CHANNEL LINERS
SEDIMENT TRAPS
SEDIMENT BASINS
STORM INLET SEDIMENT TRAP
STONE OUTLET STRUCTURES
CURBS AND GUTTERS
STORM DRAINS
VELOCITY CONTROL DEVICES
VEGETATED SWALES & NATURAL DEPRESSIONS

SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES AND APPROXIMATE DURATIONS:

- BEGIN CONSTRUCTION - MOBILIZATION (6 DAYS)
INSTALL INITIAL STORMWATER POLLUTION PREVENTION (SWPPP) MEASURES AS INDICATED IN THE SWPPP PLAN. (6 DAYS)
CLEARING, GRUBBING AND SELECTIVE DEMOLITION (2 WEEKS)
SITE GRADING - CUTTING, FILLING AND COMPACTING (5 WEEKS)
PERFORM PERIODIC INSPECTIONS OF THE SWPPP STRUCTURES.
PERFORM MAINTENANCE OR REPLACEMENTS AS NEEDED. (DURATION OF CONSTRUCTION)
EXCAVATION FOR SITE UTILITIES (3 MONTHS)
CONSTRUCTION OF SITE IMPROVEMENTS (2 MONTHS)
END CONSTRUCTION - FINAL STABILIZATION, DEMOBILIZATION, REMOVAL OF SWPPP CONTROLS AND SUBMIT NOTICE OF TERMINATION.

GENERAL CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT...

SIGNED: COMPANY:
NAME: ADDRESS:
TITLE: TELEPHONE:
DATE:

SUB - CONTRACTOR CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I WILL COORDINATE, EITHER THROUGH THE GENERAL CONTRACTOR, OWNER, OR DIRECTLY, WITH THE CONTRACTOR(S) AND/OR SUBCONTRACTOR(S) IDENTIFIED IN THE POLLUTION PREVENTION PLAN...

SIGNED: COMPANY:
NAME: ADDRESS:
TITLE: TELEPHONE:
DATE:

INSPECTION AND MAINTENANCE REPORT FORM

TO BE COMPLETED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.5 INCHES OR MORE

INSPECTOR: DATE:

INSPECTOR'S QUALIFICATIONS:

DAYS SINCE LAST RAINFALL: AMOUNT OF LAST RAINFALL: INCHES

STABILIZATION MEASURES

Table with 6 columns: DRAINAGE AREA, DAY SINCE LAST DISTURBANCE, DAY SINCE NEXT DISTURBANCE, STABILIZED YES/NO, STABILIZED WITH, CONDITION

STABILIZATION REQUIRED:

TO BE PERFORMED BY ON OR BEFORE:

SEDIMENT BASIN:

Table with 4 columns: DEPTH OF SEDIMENT BASIN, CONDITIONS OF BASIN SIZE SLOPES, ANY EVIDENCE OF OVERTOPPING OF CUTFALL FROM THE EMBANKMENT, CONDITION OF SEDIMENT BASIN

MAINTENANCE REQUIRED FOR SEDIMENT BASIN:

TO BE PERFORMED BY ON OR BEFORE:

OTHER CONTROLS

STABILIZED CONSTRUCTION ENTRANCE:

Table with 4 columns: DOES MUCH SEDIMENT GET TRACKED ON TO ROAD, IS THE GRAVEL CLEAN OR IS IT FILLED WITH SEDIMENT, DOES ALL TRAFFIC USE THE STABILIZED ENTRANCE TO LEAVE THE SITE, IS THE CULVERT BENEATH THE ENTRANCE WORKING

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE:

TO BE PERFORMED BY ON OR BEFORE:

PERIMETER STRUCTURAL CONTROLS

DATE:

SILT FENCE AND STRAW BAILS

Table with 4 columns: DRAINAGE AREA PERIMETER, HAS SILT REACHED 1/3 OF FENCE HEIGHT, IS FENCE PROPERTY SECURED?, IS THERE EVIDENCE OF WASHOUT OR OVERTOPPING

MAINTENANCE REQUIRED FOR SILT FENCE AND STRAW BAILS:

TO BE PERFORMED BY ON OR BEFORE:

CHANGES REQUIRED TO THE POLLUTION PLAN:

REASONS FOR CHANGES

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED...

SIGNATURE: DATE:

BEST MANAGEMENT PRACTICES CONTROLS

I WASTE MATERIALS: ALL WASTE MATERIALS, INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER...

II HAZARDOUS WASTE: AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS: PAINT, ACIDS FOR CLEANING MASONRY SURFACES...

III SANITARY WASTE: ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY OR AS REQUIRED, CHAPTER 18.08 (BUILDING CODE)...

IV SPILL PREVENTION: THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.

V GOOD HOUSEKEEPING: A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB B. NEATLY STORE MATERIALS ON-SITE IN AN ORDERLY MANNER...

VI HAZARDOUS PRODUCTS: PRACTICES USED TO REDUCE RISKS: A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE...

VII PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE...

VIII SPILL CONTROL PRACTICES: A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES...

IX MAINTENANCE AND INSPECTION PROCEDURES: ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE A MONTH OR WITHIN 24-HOURS PRIOR TO ANTICIPATED STORM EVENT...

X REMARKS: DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT...

XI BATCH / ASPHALT PLANT: NO CONCRETE OR ASPHALT MATERIAL WILL BE BATCHED ON-SITE. THESE CONSTRUCTION MATERIALS SHALL BE OBTAINED FROM A SUPPLIER PRODUCING THESE MATERIALS OFF-SITE...

XII LISTED ENDANGERED OR THREATENED SPECIES AND CRITICAL HABITAT: THE PROJECT SITE IS LOCATED IN AN UNDEVELOPED TRACT OF LAND, THE EL PASO COUNTY LIST OF ENDANGERED OR THREATENED SPECIES WAS REVIEWED AND NO SPECIES HAVE BEEN IDENTIFIED AT THE PROPOSED SITE.

XIII HISTORIC IMPACT: A REVIEW OF AVAILABLE TEXAS HISTORICAL COMMISSION (THC) AND NATIONAL REGISTER OF HISTORIC PLACES (NRHP) INFORMATION INDICATED THAT THERE ARE NO KNOWN SITES ELIGIBLE FOR HISTORIC RECORD LISTING WITHIN THE AREA OF THE PROPOSED PROJECT.

XIV SOURCES OF NON-STORM WATER DISCHARGES: THE FOLLOWING SUBSTANCES ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION: CONCRETE, FUEL TANKS, LUBRICANTS, DETERGENTS, FERTILIZERS, CLEANING SOLVENTS, PAINTS, CURING COMPOUNDS, ASPHALTIC PRODUCTS, DUMPSTERS AND PORTABLE TOILETS.

DESIGNATED AREAS FOR EQUIPMENT MAINTENANCE, REPAIR AND WASH DOWN (INCLUDING CONCRETE TRUCK WASH-DOWN) SHALL HAVE APPROPRIATE POLLUTANT CONTROLS INCLUDING, BUT NOT LIMITED TO, EARTHEN BERMS, ETC.

XV ALLOWABLE DISCHARGES: NO PERSON SHALL INTRODUCE OR CAUSE TO BE INTRODUCED INTO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OR WATERS WITHIN THE JURISDICTION OF THE CITY ANY DISCHARGE THAT IS NOT COMPOSED ENTIRELY OF STORMWATER...

- 1. A DISCHARGE RESULTING FROM FIREFIGHTING;
2. AGRICULTURAL STORMWATER RUNOFF;
3. A DISCHARGE FROM LAWN WATERING, LANDSCAPE IRRIGATION, OR OTHER IRRIGATION WATER;
4. A DISCHARGE FROM UNCONTAMINATED PUMPED GROUNDWATER OR RISING GROUNDWATER;
5. UNCONTAMINATED GROUNDWATER INFILTRATION;
6. UNCONTAMINATED DISCHARGE FROM A FOUNDATION DRAIN, CRAWL SPACE PUMP, FOOTING DRAIN OR SUMP PUMP;
7. A DISCHARGE FROM WATER USED IN STREET WASHING; PROVIDED, THAT THE WATER IS NOT CONTAMINATED WITH ANY HARMFUL CLEANING SUBSTANCE;

XVI OFFSITE VEHICLE TRACKING: IN ADDITION TO THE STABILIZED CONSTRUCTION ENTRANCES, THE FOLLOWING MEASURES SHALL BE OBSERVED DURING CONSTRUCTION: X HAUL ROADS SHALL BE DAMPENED FOR DUST CONTROL...

XVII ILLEGAL OR PROHIBITED DISCHARGES: NO PERSON SHALL INTRODUCE OR CAUSE TO BE INTRODUCED INTO THE MS4 ANY DISCHARGE THAT CAUSES OR CONTRIBUTES TO CAUSING THE CITY TO VIOLATE A WATER QUALITY STANDARD...

- 1. ANY USED MOTOR OIL, ANTIFREEZE, OR ANY OTHER MOTOR VEHICLE FLUID;
2. ANY INDUSTRIAL WASTE;
3. ANY HAZARDOUS WASTE, INCLUDING HAZARDOUS HOUSEHOLD WASTE;
4. ANY DOMESTIC SEWAGE OR SEPTIC TANK WASTE, GREASE TRAP WASTE, OR GRIT TRAP WASTE;
5. ANY WASTEWATER FROM A COMMERCIAL CARWASH FACILITY; FROM ANY NEW OR USED AUTOMOBILE OR OTHER VEHICLE DEALERSHIP, RENTAL AGENCY, BODY SHOP, REPAIR SHOP, OR MAINTENANCE FACILITY;
6. ANY WASTEWATER FROM A COMMERCIAL MOBILE POWER WASHER OR FROM THE WASHING OR OTHER CLEANING OF BUILDING EXTERIOR WHERE THE WASTEWATER CONTAINS ANY HARMFUL CLEANING SUBSTANCE;
7. ANY WASTEWATER FROM COMMERCIAL FLOOR, RUG, OR CARPET CLEANING;
8. ANY WASTEWATER FROM THE WASHDOWN OR OTHER CLEANING OF PAVEMENT THAT CONTAINS ANY HARMFUL QUANTITY OF ANY CLEANING SUBSTANCE; OR ANY WASTEWATER FROM THE WASHDOWN OR OTHER CLEANING OF ANY PAVEMENT WHERE ANY SPILL, LEAK, OR OTHER RELEASE OF OIL, MOTOR FUEL, OR OTHER PETROLEUM OR HAZARDOUS SUBSTANCE HAS OCCURRED, UNLESS ALL HARMFUL QUANTITIES OF SUCH RELEASED MATERIAL HAVE BEEN PREVIOUSLY REMOVED;
9. ANY EFFLUENT FROM A COOLING TOWER, CONDENSER, COMPRESSOR, EMISSIONS SCRUBBER, EMISSIONS FILTER, OR THE BLOWDOWN FROM A BOILER;
10. ANY READY-MIXED CONCRETE, MORTAR, CERAMIC, OR ASPHALT BASE MATERIAL OR HYDROMULCH MATERIAL, OR FROM THE CLEANING OF COMMERCIAL VEHICLES OR EQUIPMENT CONTAINING, OR USED IN TRANSPORTING OR APPLYING, SUCH MATERIAL;
11. ANY FILTER BACKWASH FROM A SWIMMING POOL, FOUNTAIN, OR SPA;
12. ANY SWIMMING POOL OR SPA WATER;
13. ANY DISCHARGE FROM WATER LINE DISINFECTION BY SUPERCHLORINATION OR OTHER MEANS IF IT CONTAINS ANY HARMFUL QUANTITY OF CHLORINE OR ANY OTHER CHEMICAL USED IN LINE DISINFECTION;
14. ANY WATER FROM A WATER CURTAIN IN A SPRAY ROOM USED FOR PAINTING VEHICLES OR EQUIPMENT;
15. ANY CONTAMINATED RUNOFF FROM A VEHICLE WRECKING YARD;
16. ANY SUBSTANCE OR MATERIAL THAT WILL DAMAGE, BLOCK, OR CLOG THE MS4;
17. ANY RELEASE FROM A PETROLEUM STORAGE TANK (PST), OR ANY LEACHATE OR RUNOFF FROM SOIL CONTAMINATED BY A LEAKING PST, OR ANY DISCHARGE OF PUMPED, CONFINED, OR TREATED WASTEWATER FROM THE REMEDIATION OF ANY SUCH PST RELEASED UNLESS THE DISCHARGE COMPLIES WITH ALL STATE AND FEDERAL STANDARDS AND REQUIREMENTS.

NO PERSON SHALL INTRODUCE OR CAUSE TO BE INTRODUCED INTO THE MS4 OR WATERS WITHIN THE JURISDICTION OF THE CITY ANY HARMFUL QUANTITY OF SEDIMENT, SILT, EARTH, SOIL, OR OTHER MATERIAL ASSOCIATED WITH CLEARING, GRADING, EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES, OR ASSOCIATED WITH LANDFILLING OR OTHER PLACEMENT OR DISPOSAL OF SOIL, ROCK, OR OTHER EARTH MATERIALS...

NO PERSON SHALL CONNECT A LINE CONVEYING SANITARY SEWAGE, DOMESTIC OR INDUSTRIAL, TO THE MS4, OR ALLOW SUCH A CONNECTION TO CONTINUE.

REGULATION OF PESTICIDES, HERBICIDES, AND FERTILIZERS:

- 1. ANY SALE, DISTRIBUTION, APPLICATION, LABELING, MANUFACTURE, TRANSPORTATION, STORAGE, OR DISPOSAL OF A PESTICIDE, HERBICIDE, OR FERTILIZER MUST COMPLY FULLY WITH ALL STATE AND FEDERAL STATUTES AND REGULATIONS INCLUDING, WITHOUT LIMITATION, THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA) AND ALL FEDERAL REGULATIONS PROMULGATED PURSUANT TO FIFRA; CHAPTERS 63, 75, AND 76 OF THE TEXAS AGRICULTURE CODE AND ALL STATE REGULATIONS PROMULGATED PURSUANT THERETO; AND ANY OTHER STATE OR FEDERAL REQUIREMENT.
2. NO PERSON SHALL USE OR CAUSE TO BE USED ANY PESTICIDE OR HERBICIDE CONTRARY TO ANY DIRECTIONS FOR USE ON ANY LABELING REQUIRED BY STATE OR FEDERAL STATUTE OR REGULATION.
3. NO PERSON SHALL DISPOSE OF, DISCARD, STORE, OR TRANSPORT A PESTICIDE, HERBICIDE, OR FERTILIZER, OR A PESTICIDE, HERBICIDE, OR FERTILIZER CONTAINER, IN A MANNER THAT THE PERSON KNOWS, OR REASONABLY SHOULD KNOW, IS LIKELY TO CAUSE, OR DOES CAUSE, A HARMFUL QUANTITY OF THE PESTICIDE, HERBICIDE, OR FERTILIZER TO ENTER THE MS4 OR WATERS OF THE UNITED STATES.

USED OIL REGULATION: NO PERSON SHALL:

- 1. DISCHARGE USED OIL INTO THE MS4 OR A SEWER, DRAINAGE SYSTEM, SEPTIC TANK, SURFACE WATER, GROUNDWATER, OR WATERCOURSE;
2. KNOWINGLY MIX OR COMMINGLE USED OIL WITH SOLID WASTE THAT IS TO BE DISPOSED OF IN A LANDFILL OR KNOWINGLY DIRECTLY DISPOSE OF USED OIL ON LAND OR IN ALL LANDFILL OR KNOWINGLY DISCHARGE USED OIL ONTO THE GROUND;
3. INTRODUCE USED OIL INTO THE ENVIRONMENT BY ANY METHOD, INCLUDING APPLICATION OF USED OIL TO A ROAD OR LAND FOR DUST SUPPRESSION, WEED ABATEMENT, OR OTHER SIMILAR USE.

A RETAIL DEALER WHO ANNUALLY SELLS DIRECTLY TO THE PUBLIC MORE THAN FIVE HUNDRED GALLONS OF OIL IN CONTAINERS FOR USE OFF-PREMISES SHALL POST IN A PROMINENT PLACE A SIGN PROVIDED BY THE STATE INFORMING THE PUBLIC THAT IMPROPER DISPOSAL OF USED OIL IS PROHIBITED BY LAW. THE SIGN SHALL PROMINENTLY DISPLAY THE TOLL-FREE TELEPHONE NUMBER OF THE STATE USED OIL INFORMATION CENTER. (ORD. 13477 § 1 (PART), 1998)

Vertical sidebar containing: REFERENCES - BENCHMARK, PROJECT TITLE (GARDEN VALLEY SUBDIVISION), SCALE, SHEET TITLE (STORMWATER POLLUTION PREVENTION PLAN SPECIFICATIONS), SHEET NO. (C-10), and 10 OF 19 SHEETS.

GARDEN VALLEY

TRACT 9D, BLOCK 5,
UPPER VALLEY,
CITY OF EL PASO,
EL PASO COUNTY, TEXAS.
AREA 2.14 ACRES ±

D E D I C A T I O N

Egdon O. Gonzalez and Lizabeth Holguin, as property owners of this land, do hereby present this map and dedicate their respective portions of property to the use of the public, street right-of-way, and utility easements as herein laid down and designated, including easements for overhead or service wires for pole lines, and easements for buried service wires, conduits and pipes for underground utilities, and the right to ingress and egress for service and construction, and the right to trim interfering trees and shrubs.

Witness my signature this _____ day of _____, 2012.

Egdon O. Gonzalez _____ Lizabeth Holguin _____

A C K N O W L E D G E M E N T

STATE OF TEXAS
COUNTY OF EL PASO
Before me, the undersigned authority, on this day personally appeared Egdon O. Gonzalez, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed for the purpose and consideration herein expressed.

Given under my hand and seal of office this _____ day of _____, 2012.

Notary Public in and for El Paso County _____ My Commission Expires _____

Before me, the undersigned authority, on this day personally appeared Lizabeth Holguin, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed for the purpose and consideration herein expressed.

Given under my hand and seal of office this _____ day of _____, 2012.

Notary Public in and for El Paso County _____ My Commission Expires _____

C I T Y P L A N N I N G C O M M I S S I O N

This subdivision is hereby approved as to the platting and as to the condition of the dedication in accordance with Chapter 212 of the Local Government Code of Texas this _____ day of _____, 2012.

Chairperson _____ Executive Secretary _____

Approved for filing this _____ day of _____, 2012.

City Development Director _____

F I L L I N G

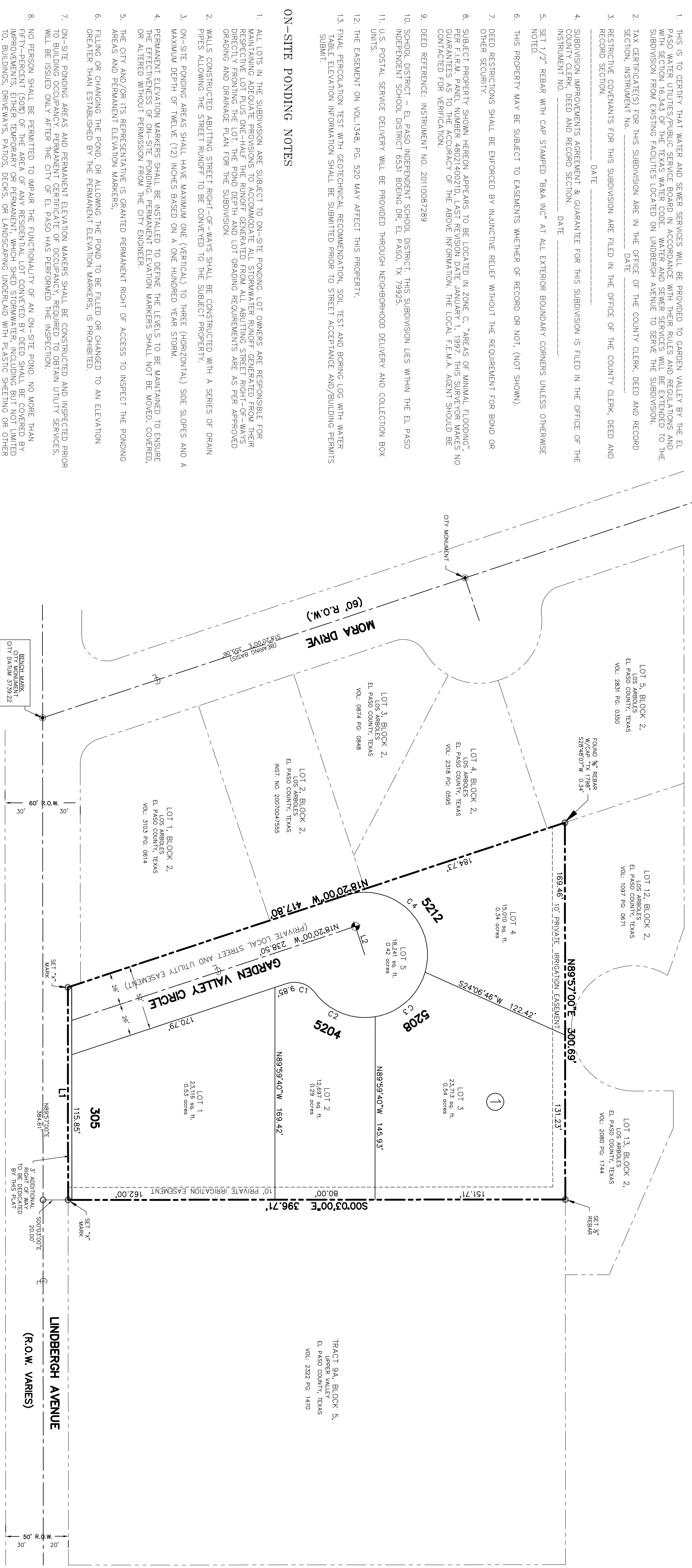
Filed and recorded in the office of the County Clerk of El Paso County, Texas, this _____ day of _____, 2012, in File No. _____ of the Plat Records.

County Clerk _____ by Deputy _____

This plat represents a survey made on the ground by me or under my supervision and complies with the provisions of the Surveyors' Code of Ethics, Professional and Technical Standards, Registered Professional Engineer No. 59520

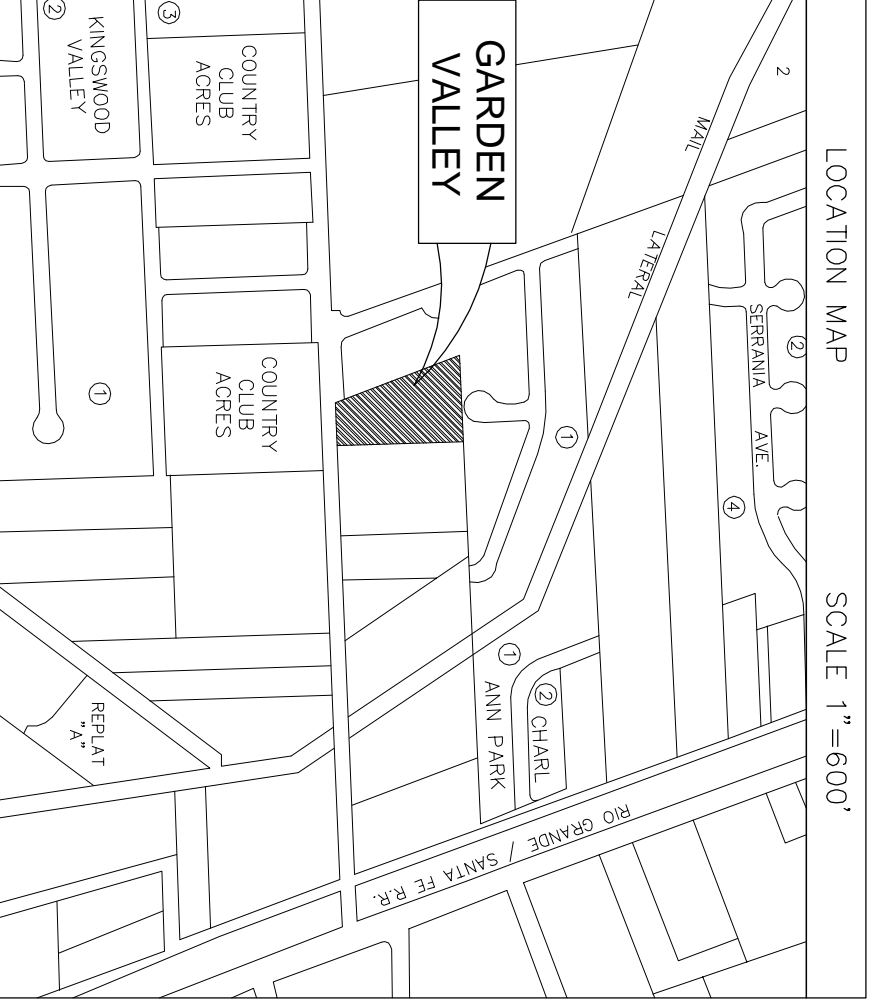
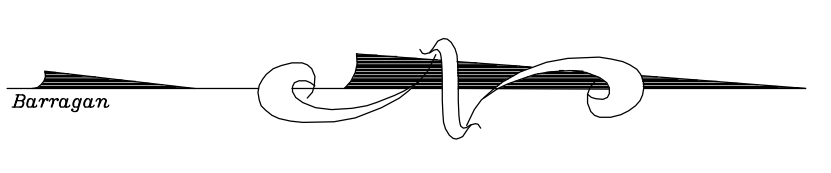
Banito Barragan, TX, R.P.L.S. No. 5615 _____ ROBERT A. GONZALES, P.E., TX 69920

Name	Address	City & Zip	Phone	Fax
OWNER:	Egdon O. Gonzalez and Lizabeth Holguin 701 Bluff Canyon	El Paso, TX 79912	(915)591-5709	(915)591-5706
SURVEYOR:	Barragan and Associates Inc. 10950 Pelicano Dr., Bldg. F,	El Paso, TX 79935	(915)532-7272	(915)532-7373
ENGINEER:	Quantum Engineering Consultants, Inc. 414 Executive Center Blvd. Suite 200	El Paso, TX 79902	(915)532-7272	(915)532-7373



CURVE	LENGTH	RADIUS	TANGENT	DELTA	BEARING	CHORD
C1	25.02'	20.00'	14.45'	71.40.56"	S17.50.28"W	23.42'
C2	48.55'	50.00'	25.12'	53.20.40"	N26.14.07"E	44.89'
C3	64.48'	50.00'	37.60'	73.53.21"	N36.56.24"W	60.10'
C4	108.60'	50.00'	94.93'	124.26.55"	S43.53.28"W	88.48'

LINE	BEARING	LENGTH
L1	S89.57.00"W	169.62'
L2	N71.40.00"E	24.00'



PLAT NOTES & RESTRICTIONS

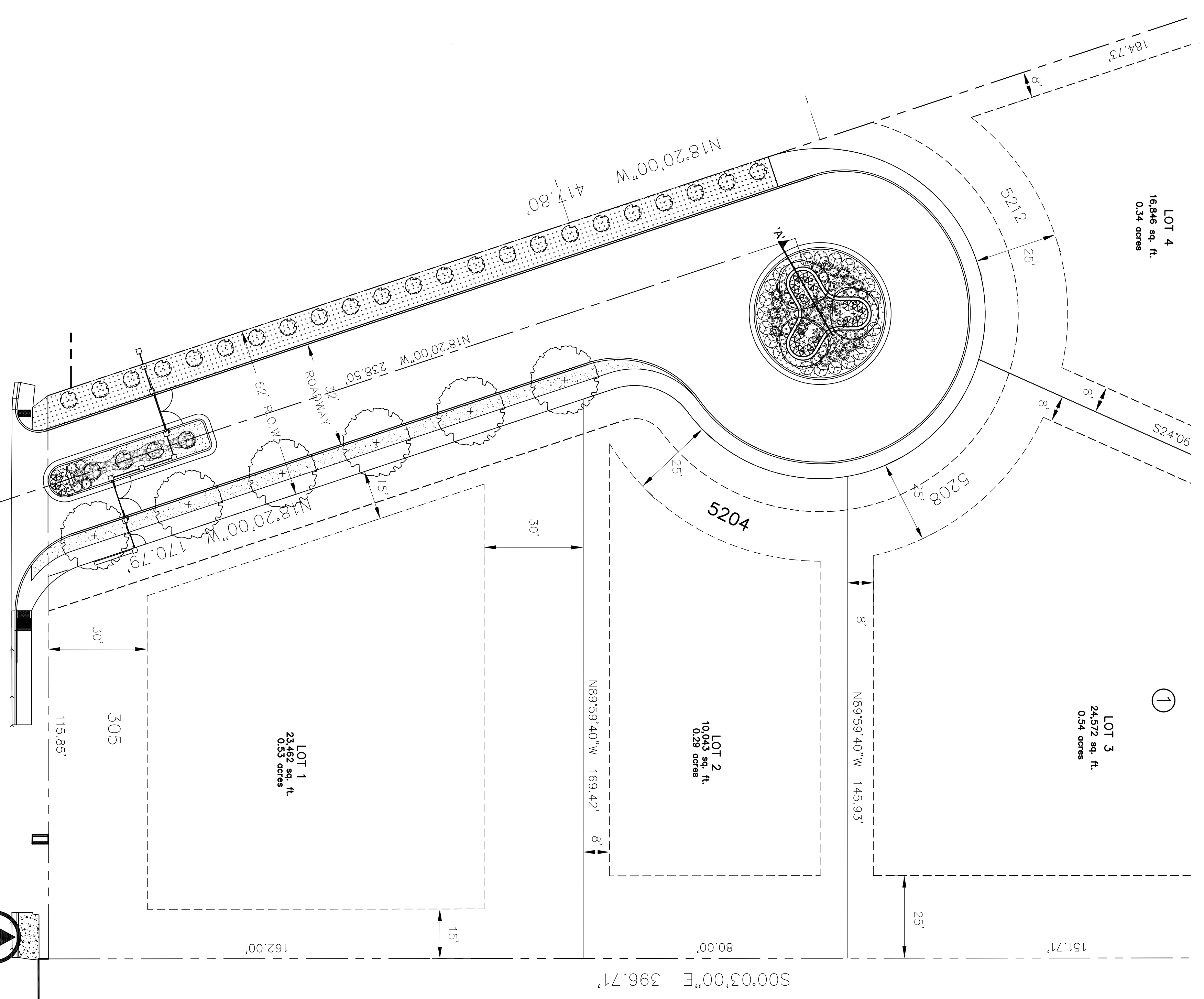
- THIS IS TO CERTIFY THAT WATER AND SEWER SERVICES WILL BE PROVIDED TO GARDEN VALLEY BY THE EL PASO WATER UTILITIES/PUBLIC SERVICE BOARD IN ACCORDANCE WITH THEIR RULES AND REGULATIONS AND WIRELESS SERVICES WILL BE PROVIDED BY SPRINT. WATER AND SEWER SERVICES WILL BE EXTENDED TO THE SUBDIVISION FROM EXISTING TRUNK LINES LOCATED ON UNDERBERG AVENUE TO SERVE THE SUBDIVISION.
- TAX CERTIFICATE(S) FOR THIS SUBDIVISION ARE IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION, INSTRUMENT NO. _____ DATE _____
- RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION. DATE _____
- SUBDIVISION IMPROVEMENTS AGREEMENT & GUARANTEE FOR THIS SUBDIVISION IS FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION. DATE _____ INSTRUMENT NO. _____
- SECTION 1/2" REBAR WITH CAP STAMPED "8KA INC" AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE NOTED.
- THIS PROPERTY MAY BE SUBJECT TO EASEMENTS WHETHER OF RECORD OR NOT. (NOT SHOWN)
- DEED RESTRICTIONS SHALL BE ENFORCED BY INJUNCTIVE RELIEF WITHOUT THE REQUIREMENT FOR BOND OR OTHER SECURITY.
- SUBJECT PROPERTY SHOWN HEREON APPEARS TO BE LOCATED IN ZONE C, "AREAS OF MINIMAL FLOODING" PER F.I.M.A. PANEL NUMBER 4802140021D, LAST REVISION DATE JANUARY 1, 1997. THIS SURVEYOR MAKES NO GUARANTEES AS TO THE ACCURACY OF THE ABOVE INFORMATION. THE LOCAL F.I.M.A. AGENT SHOULD BE CONTACTED FOR VERIFICATION.
- DEED REFERENCE: INSTRUMENT NO. 20110087289
- SCHOOL DISTRICT - EL PASO INDEPENDENT SCHOOL DISTRICT, THIS SUBDIVISION LIES WITHIN THE EL PASO INDEPENDENT SCHOOL DISTRICT 8531 BOBING DR. EL PASO, TX 79925.
- U.S. POSTAL SERVICE DELIVERY WILL BE PROVIDED THROUGH NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS.
- THE EASEMENT ON VOL.1348, PG. 520 MAY AFFECT THIS PROPERTY.
- FINAL PERCOLATION TEST WITH GEOTECHNICAL RECOMMENDATION, SOIL TEST AND BORING LOG WITH WATER TABLE ELEVATION INFORMATION SHALL BE SUBMITTED PRIOR TO STREET ACCEPTANCE AND/BUILDING PERMITS SUBMITTAL.

ON-SITE PONDING NOTES

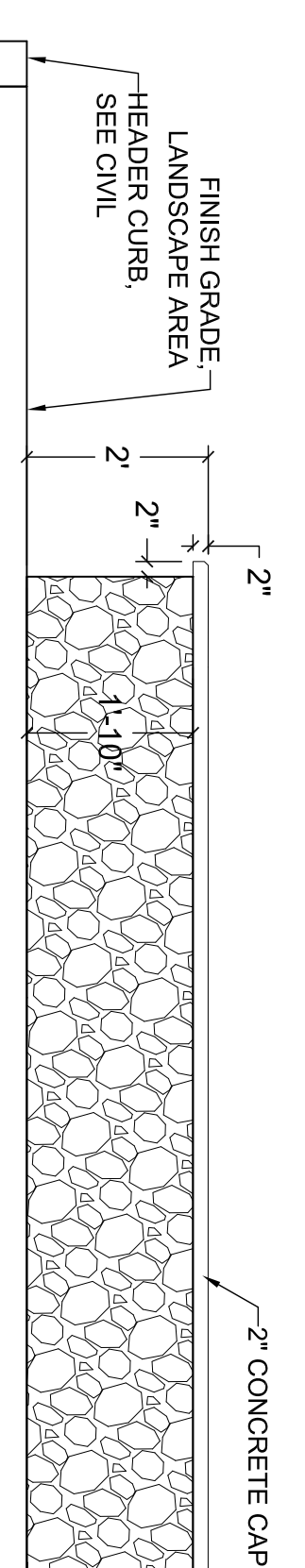
- ALL LOTS IN THE SUBDIVISION ARE SUBJECT TO ON-SITE PONDING. LOT OWNERS ARE RESPONSIBLE FOR THE PROTECTION OF THE PONDING AREAS FROM DAMAGE TO THE PONDING AREAS. THE PONDING AREAS SHALL BE DIRECTLY FRONTING THE LOT. THE POND DEPTH AND LOT GRADING REQUIREMENTS ARE AS PER APPROVED GRADING AND DRAINAGE PLAN FOR THE SUBDIVISION.
- WALLS CONSTRUCTED ADJUTING STREET RIGHT-OF-WAYS SHALL BE CONSTRUCTED WITH A SERIES OF DRAIN PIPES ALLOWING THE STREET RIMHOFF TO BE CONNECTED TO THE SUBJECT PROPERTY.
- ON-SITE PONDING AREAS SHALL HAVE MAXIMUM ONE (VERTICAL) TO THREE (HORIZONTAL) SLOPE SLOPES AND A MAXIMUM DEPTH OF TWELVE (12) INCHES BASED ON A ONE HUNDRED YEAR STORM.
- PERMANENT ELEVATION MARKERS SHALL BE INSTALLED TO DEFINE THE LEVELS TO BE MAINTAINED TO ENSURE THE EFFECTIVENESS OF ON-SITE PONDING. PERMANENT ELEVATION MARKERS SHALL NOT BE MOVED, COVERED, OR ALTERED WITHOUT PERMISSION FROM THE CITY ENGINEER.
- THE CITY AND/OR ITS REPRESENTATIVE IS GRANTED PERMANENT RIGHT OF ACCESS TO INSPECT THE PONDING AREAS AND PERMANENT ELEVATION MARKERS.
- FLUING OR CHANGING THE POND OR ALLOWING THE POND TO BE FILLED OR CHANGED TO AN ELEVATION GREATER THAN ESTABLISHED BY THE PERMANENT ELEVATION MARKERS, IS PROHIBITED.
- ON-SITE PONDING AREAS AND PERMANENT ELEVATION MARKERS SHALL BE CONSTRUCTED AND INSPECTED PRIOR TO BUILDING OCCUPANCY. PERMANENT CERTIFICATE OF OCCUPANCY REQUIRED TO OBTAIN UTILITY SERVICES WILL BE ISSUED ONLY AFTER THE CITY OF EL PASO HAS PERFORMED THE INSPECTION.
- NO PERSON SHALL BE PERMITTED TO IMPAIR THE FUNCTIONALITY OF AN ON-SITE POND, NO MORE THAN FIFTY-PERCENT (50%) OF THE AREA OF ANY RESIDENTIAL LOT COVERED BY DEED SHALL BE COVERED BY IMPROVEMENTS, EITHER TEMPORARY OR PERMANENT, WHICH SHED STORMWATER, INCLUDING BUT NOT LIMITED TO PATIOS, DECKS, OR LANDSCAPING UNDERLAD WITH PLASTIC SHEETING OR OTHER IMPERMEABLE MATERIAL.
- IN THE EVENT THAT THE FUNCTIONALITY OF AN ON-SITE POND BECOMES IMPAIRED WHETHER BY ACT OF MAN OR NATURE, THE OWNER OF THE POND ON WHICH THE IMPAIRED POND IS LOCATED SHALL FURNISH ALL CORRECTIVE ACTIONS REQUIRED TO RESTORE THAT FUNCTIONALITY.
- ANY OWNER NOTICED IN WRITING BY THE CITY ENGINEER OF CORRECTIVE ACTIONS REQUIRED TO RESTORE THE FUNCTIONALITY OF AN ON-SITE POND OR DRAINAGE PROBLEM SHALL COMPLY WITHIN FORTY-FIVE (45) CALENDAR DAYS OF RECEIPT OF SUCH NOTICE. PROVIDED, HOWEVER, THAT NOTHING HEREIN SHALL PREVENT THE CITY ENGINEER FROM TAKING IMMEDIATE OR EMERGENCY ACTION TO PROTECT PUBLIC SAFETY OR TO PREVENT DAMAGE TO OTHER PROPERTY.
- OWNERS OF PROPERTY UTILIZING THE ON-SITE PONDING MAKES ANY CLAIM OR CAUSE OF ACTION AGAINST THE CITY OF EL PASO, THE CITY ENGINEER, THE CITY ENGINEER'S EMPLOYEES, AGENTS, OR CONTRACTORS, FROM ALTERATION OF THE PONDING CAPACITY FOR THAT LOT, INCLUDING LACK OF MAINTENANCE, REQUIREMENT FOR BOND OR OTHER SECURITY.
- THE CONVEYANCE OF PROPERTY PERMITTING ON-SITE PONDING SHALL DECLARE IN CONSPICUOUS PLACES THE LOCATION OF PERMANENT ELEVATION MARKERS AND THE LOCATION OF PERMANENT ELEVATION MARKERS, STANDING ON WATER LOT, AND INGRESS AND EGRESS FOR INSPECTION AS STATED ON THE PLAT.

LANDSCAPE PLAN

SCALE: 1" = 20'

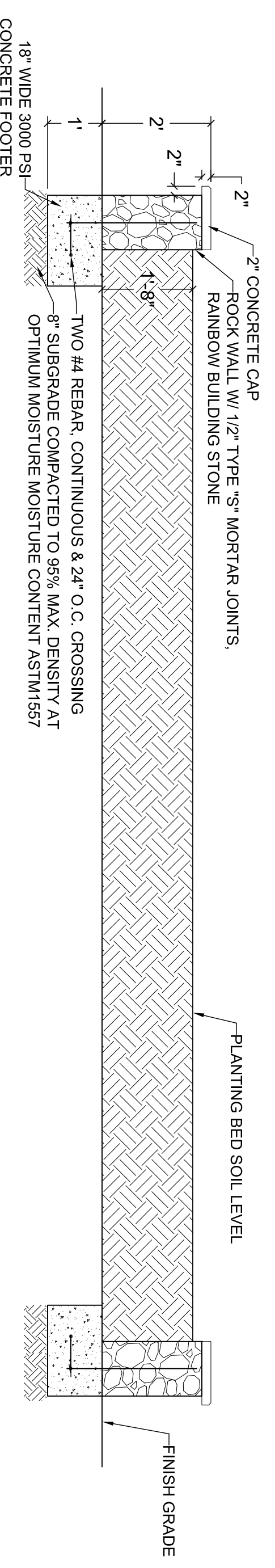


ROUNDABOUT - ELEVATION



ROUNDABOUT - SECTION 'A'

NOT TO SCALE

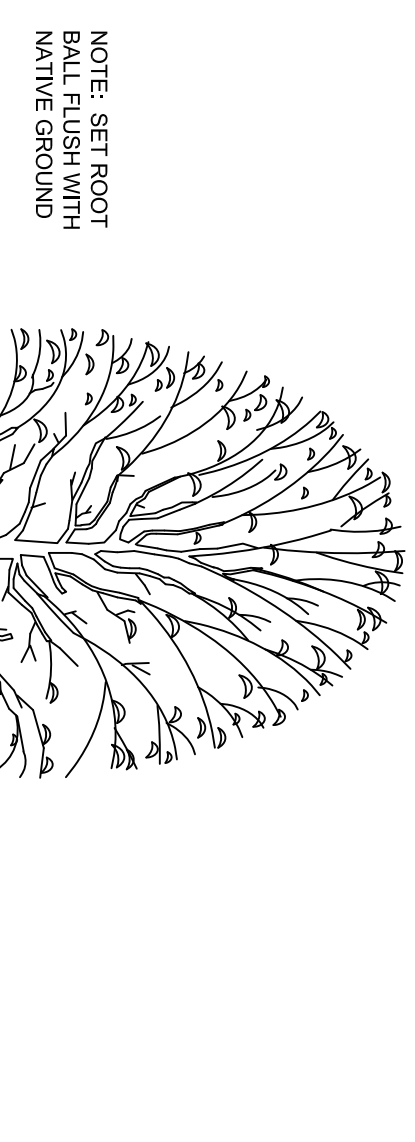


LANDSCAPE LEGEND

SYMBOL	COMMON NAME	BOTANICAL NAME	QTY
	2\"/>		
	TECAS RED OAK	QUERCUS BUCKLEYI	6
	VITEX	VITEX AGNUS-CASTUS	3
	2\"/>		
	ITALIAN SYPRRESS	CUPRESSUS VIRENS	27
	5 GALLON SHRUB - 18\"/>		
	REGAL MIST	MUHLENBERGIA CAPILLARIS	21
	TRAILING ROSEMARY	ROSMARINUS OFF. PROSTRATA	22
	1 GALLON SHRUB - GROUND COVER		
	POWIS CASTLE	ARTEMISIA POWIS CASTLE	18
	PARRY'S AGAVE	AGAVE PARRYI	9
	RED LEAF BARBERRY	BERBERIS THUNBERGII ATROPURPUREA	23
	DECORATIVE STONES & BOULDERS		
	BOULDER - FRANKLIN RED 2X2		7
	TURF, GRAVELS, & MULCHES		
	3\"/>		
	3/4\"/>		
	1 1/2\"/>		

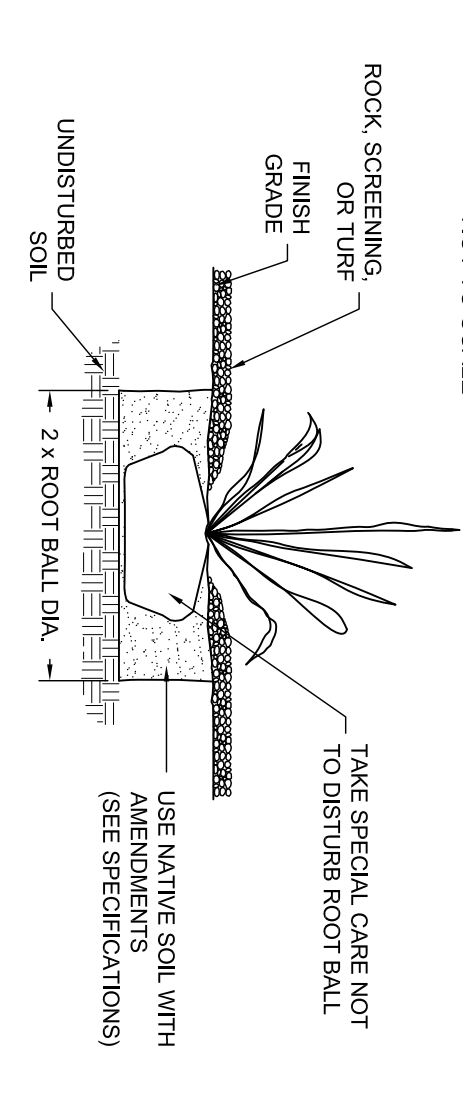
LANDSCAPE NOTES

- ALL UTILITY EASEMENTS SHALL BE MARKED PRIOR TO EXCAVATION, AND PARTICULAR ATTENTION PAID TO TREE PLACEMENT WITHIN AND THROUGHOUT SITE.
- THERE SHALL BE NO STEEL EDGING BETWEEN ROCK TYPES.
- CONTRACTOR SHALL PROVIDE ROCK SAMPLES AND OBTAIN APPROVAL FROM OWNER PRIOR TO FINAL DELIVERY OF QUARRIED MATERIALS.
- CONTRACTOR TO PAY CLOSE ATTENTION TO FINISH GRADES. SHOULD GRAVELEED AREAS EXCEED 4:1 SLOPE, CONTRACTOR TO OBTAIN APPROVAL OF LANDSCAPE DESIGNER PRIOR TO MULCH INSTALLATION.
- ALL TREES SHALL BE SINGLE LEADER TRUNK, UNLESS INDICATED IN PLANS.

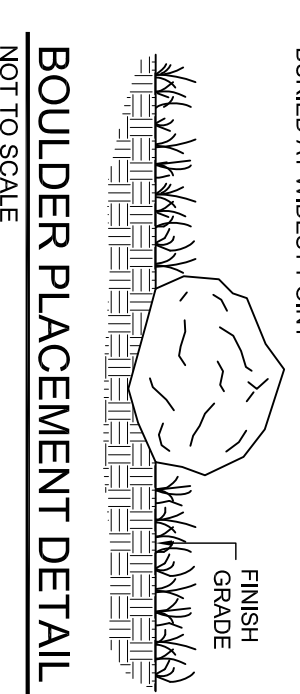
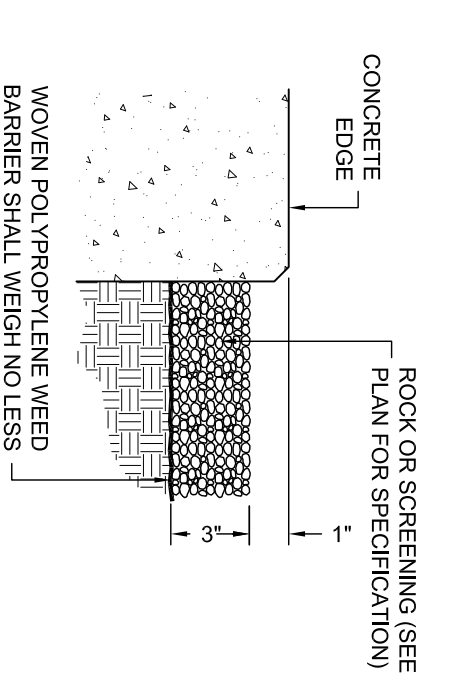


TREE PLANTING DETAIL

SHRUB PLANTING DETAIL

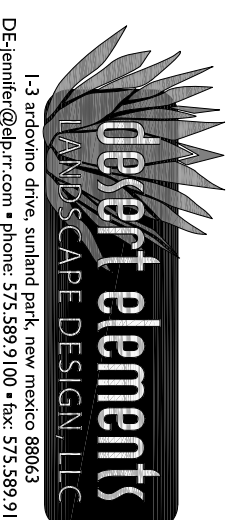


ROCKSCREENING DETAIL

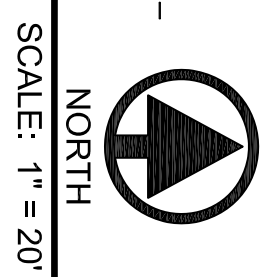
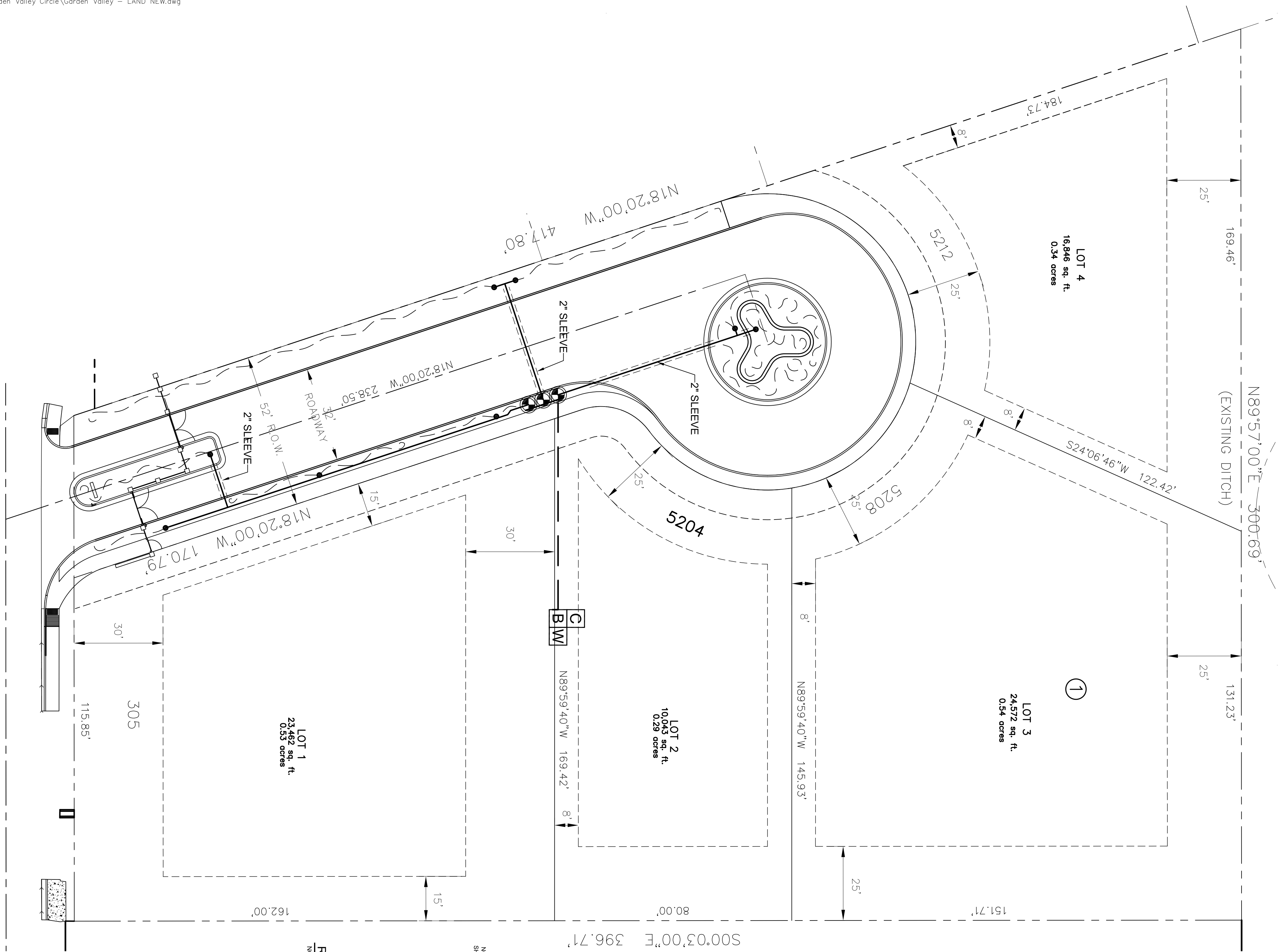


BOULDER PLACEMENT DETAIL

<p>PROJECT TITLE</p> <h1>GARDEN VALLEY SUBDIVISION</h1> <p>EL PASO COUNTY, TEXAS</p>	<p>SCALE:</p> <p>HORIZONTAL: _____</p> <p>VERTICAL: _____</p> <p>CONTOUR INTERVAL: _____</p> <p>DATE: 08-30-12</p> <p>DESIGN BY: CH</p> <p>DRAWN BY: JBA</p> <p>CHKD BY: JBA</p> <p>APPRD BY: JBA</p> <p>JOB NO.: 1203</p>	<p>REFERENCES - BENCHMARK</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>REVISION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			DATE	REVISION	BY			
		DATE	REVISION	BY						
<p>SHEET TITLE</p> <p>LANDSCAPE PLAN</p> <p>SHEET NO.</p>	<p>414 Executive Center Blvd Ste 200 El Paso TX 79902 P 915.532.7272 F 915.532.7373 Texas Registered Engineering Firm F-005146</p>									



IRRIGATION PLAN



IRRIGATION LEGEND

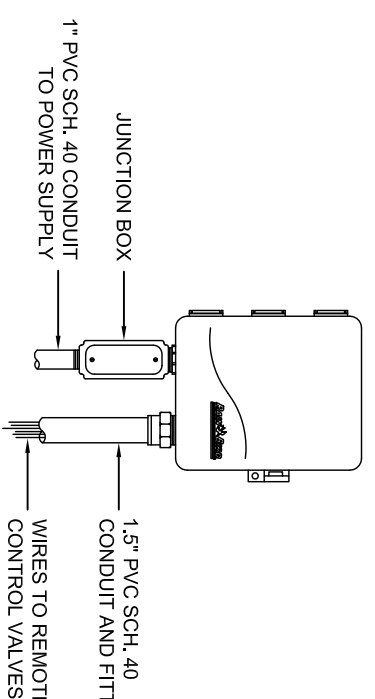
SYMBOL	ITEM
	EXISTING WELL & PUMP
	3/4" FEBCO 825Y RP BACKFLOW PREVENTER W/ POLYKROK ENCLOSURE (BROWN) - MUST NOTE CLASS 2, ASSE #1060 FOR BACKFLOW
	RAINBIRD ESP-4M, 4 STATION CONTROLLER
	COORDINATE LOCATION WITH OWNER & ELECTRICAL CONTRACTOR
	1" REMOTE CONTROL VALVE, RAINBIRD 100-PESEB
	INSTALL AMMAD Y FILTER & PRESSURE REDUCER (30 PSI) AFTER THE VALVE ON ALL DRIP ZONES
	1" MAINLINE - CLASS 200 PVC
	LATERAL LINE - CLASS 200 PVC - 1" UNLESS OTHERWISE INDICATED
	PVC SLEEVE - 2 SIZES LARGER THAN LATERAL OR MAIN
	DRIP LINE 3/4" POLY
	RAINBIRD XP-10 DRIP EMITTERS - 2 PER SHRUB & GROUND COVER
	RAINBIRD XB-20 DRIP EMITTERS - 6 PER TREE

IRRIGATION NOTES

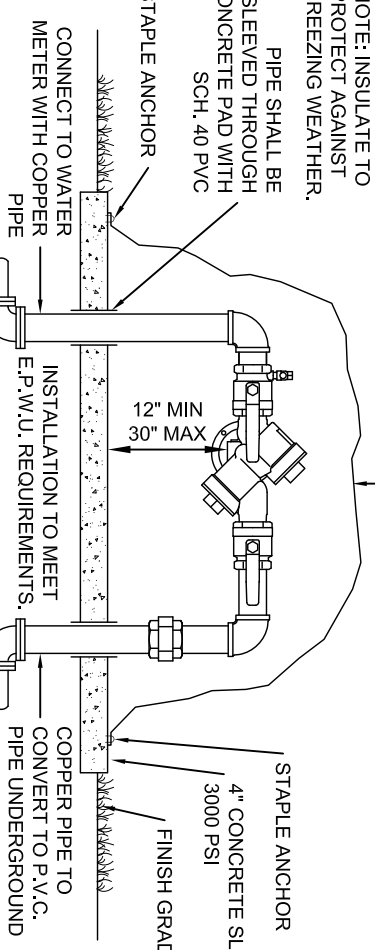
- IRRIGATION IN TEXAS IS REGULATED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY, P.O. BOX 13067, AUSTIN, TX 78711.
- CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING AND PROPOSED UTILITIES AND ALL SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- IRRIGATION SHALL BE INSTALLED ACCORDING TO PLANS, DETAILS, AND SPECIFICATIONS. SHOULD CHANGES BE IMPLEMENTED IN THE FIELD, A NEW SET OF PLANS IS REQUIRED TO BE SUBMITTED TO THE CITY OF EL PASO. LANDSCAPE DESIGNER IS NOT UNDER CONTRACT TO PROVIDE THESE PLANS, EXCEPT AS PROVIDED FOR IN ORIGINAL CONTRACT.
- CONTRACTOR WILL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS DESIGNED, WHEN IT IS OBVIOUS THAT FIELD CONDITIONS EXIST THAT WERE NOT CONSIDERED AT TIME OF DESIGNING THE SYSTEM. ANY CONDITIONS NOTED AS SUCH, SHALL BE REPORTED TO THE ARCHITECT AND IRRIGATION DESIGNER. IF THE CONTRACTOR FAILS TO DO SO, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ANY CORRECTIONS NEEDED.
- PLANS SCHEMATIC FOR READABILITY, CONTRACTOR TO ADJUST AS NECESSARY TO FIT SITE.
- CONTRACTOR SHALL VERIFY STATIC PRESSURE AT METER MEETS SYSTEM NEEDS. LICENSED IRRIGATOR TO AMEND AS NECESSARY.
- PROVIDE SHUTOFF VALVE BETWEEN METER AND BACKFLOW.
- CONTROL VALVE SHALL BE PROVIDED TO MAINTAIN AFTER BACKFLOW.
- CONTRACTOR IS RESPONSIBLE FOR CONNECTING AUTOMATIC CONTROLLER TO ELECTRICITY.
- 1/4 GA. SOLID COPPER WIRE (PVC INSULATED AND UL APPROVED) SHALL RUN FROM CONTROLLER TO VALVES. COMMON WIRE TO BE 12GA.
- ALL CONTROL WIRING FROM THE VALVES TO THE CONTROLLER MUST BE INSTALLED IN A 1" PVC CONDUIT PIPE IF BURIED BENEATH CONCRETE OR ASPHALT SURFACES. LOCATE VALVES AWAY FROM LOW SPOTS OR AREAS OF DRAINAGE FLOW.
- VALVE CAPS SHALL MATCH COLOR OF SURROUNDING MATERIAL, AS CLOSELY AS POSSIBLE.
- ALL MAINLINES SHALL BE BURIED MIN. 18" ALL LATERALS 12".
- MAINTAIN 4" MINIMUM CLEARANCE BETWEEN PIPE RUNNING IN THE SAME TRENCH. CONTROL WIRE SHALL ALWAYS BE TO THE SIDE AND BELOW THE TOP OF THE PIPE RUNNING IN THE SAME TRENCH.
- POLYETHYLENE TUBING TO BE PLACED UNDER WEED BARRIER FABRIC. MICROTUBING TO BE STAKED.
- THE CONTROL WIRING RUNNING BENEATH PAVED SURFACES (DRIVES, SIDEWALKS, ETC.) SHALL BE INSTALLED IN CLASS 200 PVC SLEEVES. SLEEVES SHALL BE OF THE SIZE SO THAT THE INSIDE DIAMETER OF THE SLEEVE IS 2 TIMES GREATER THAN THAT OF THE COMBINED OUTER DIAMETER OF ALL ITEMS INSTALLED IN THE SLEEVES.

NOTE: 2AW ELECTRIC CONTROL WIRE (#14G) AND COMMON GROUND WIRE (#12G) SHALL BE DIRECT BURIAL, COLOR CODED AND ALL SPLICES & CONNECTIONS SHALL BE IN APPROVED RATED METAL CONTROL VALVE.

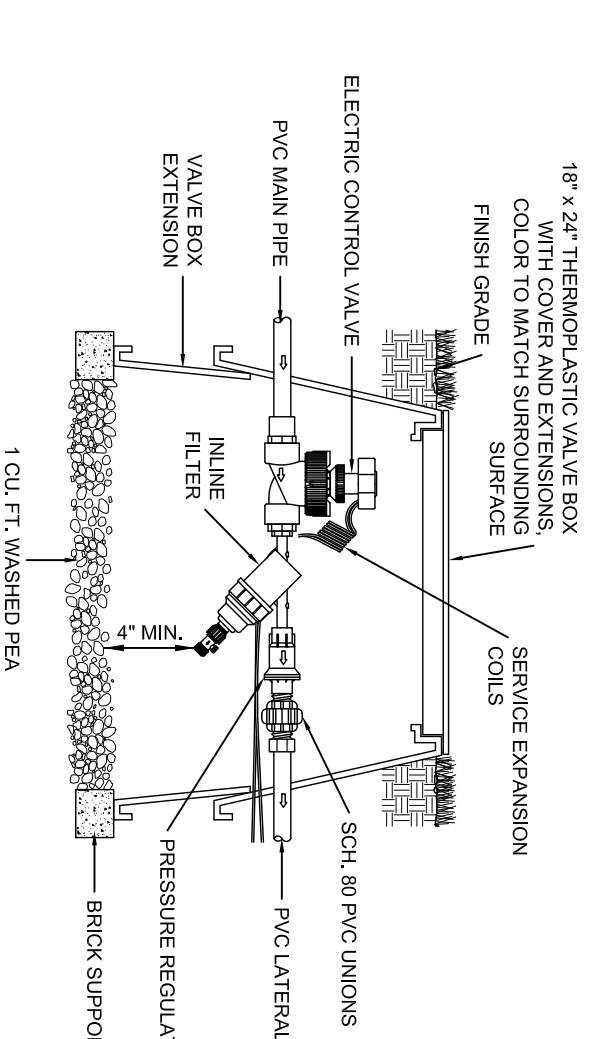
NOTE: AFTER THE VALVE, PIPING SHALL BE INSTALLED TO SET AT APPROPRIATE SIZE OF END USE AND MUST BE CLASS 2, ASSE-1000 CERTIFIED.



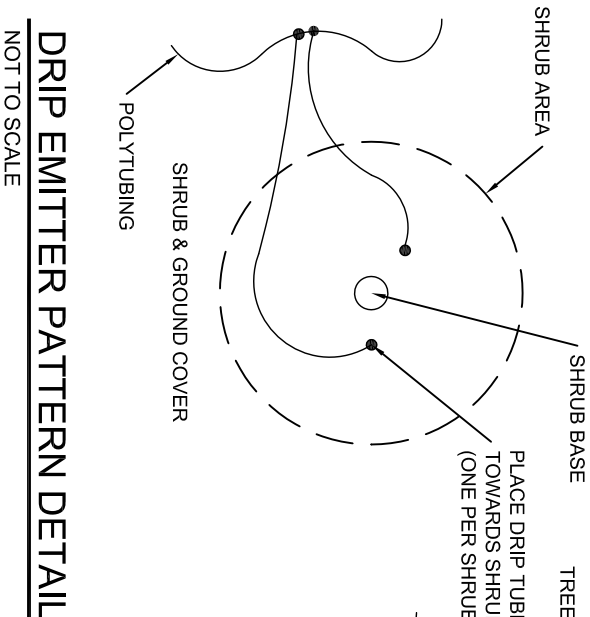
RAINBIRD ESP CONTROLLER DETAIL
 NOT TO SCALE



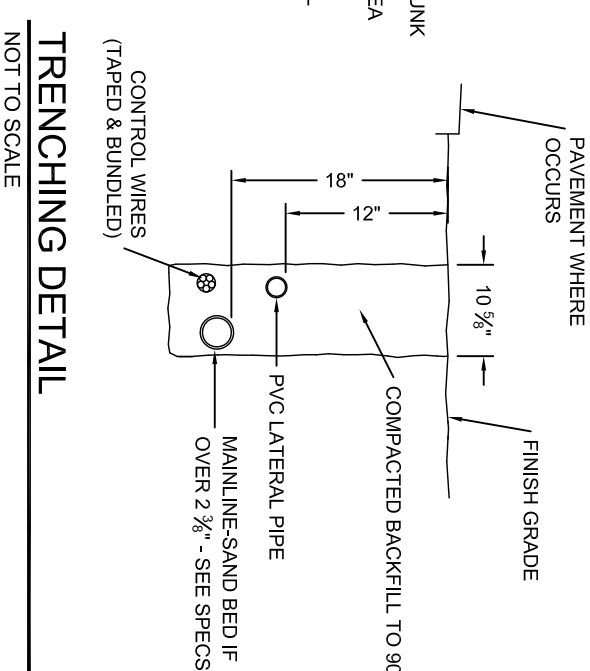
RPA FEBCO Mo 825Y DETAIL
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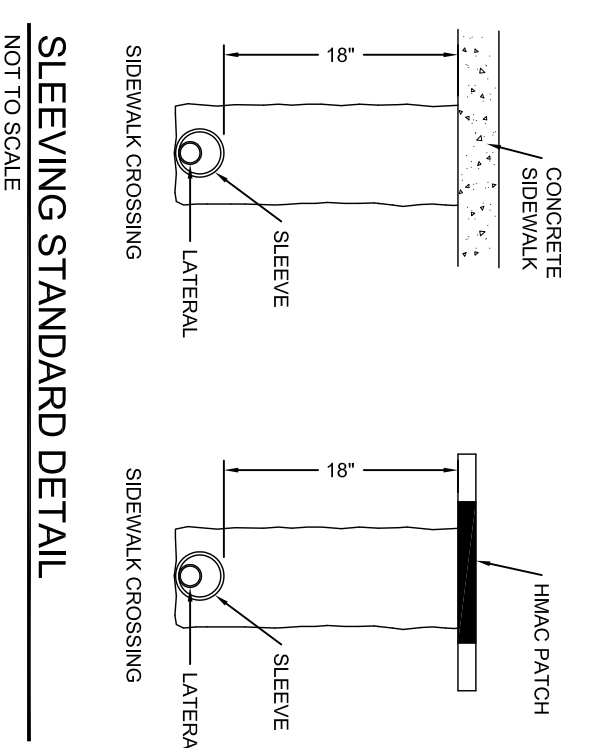
REMOTE CONTROL VALVE, PRESSURE REGULATOR & FILTER
 NOT TO SCALE



DRIP EMITTER PATTERN DETAIL
 NOT TO SCALE



TRENCHING DETAIL
 NOT TO SCALE



SLEEVING STANDARD DETAIL
 NOT TO SCALE

PROJECT TITLE

**GARDEN VALLEY
 SUBDIVISION**
 EL PASO COUNTY, TEXAS

SHEET TITLE

IRRIGATION
 PLAN

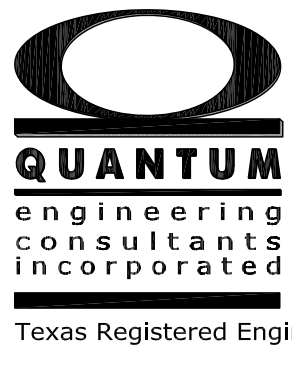
SHEET NO.

L-2

2 OF 2 SHEETS

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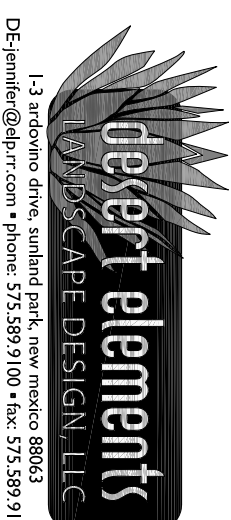
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 VERTICAL: _____
 CONTOUR INTERVAL: _____
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 DESIGN BY: JH
 DRAWN BY: BA
 CHECK BY: BA
 APPVD BY: BA
 JOB NO. 1203



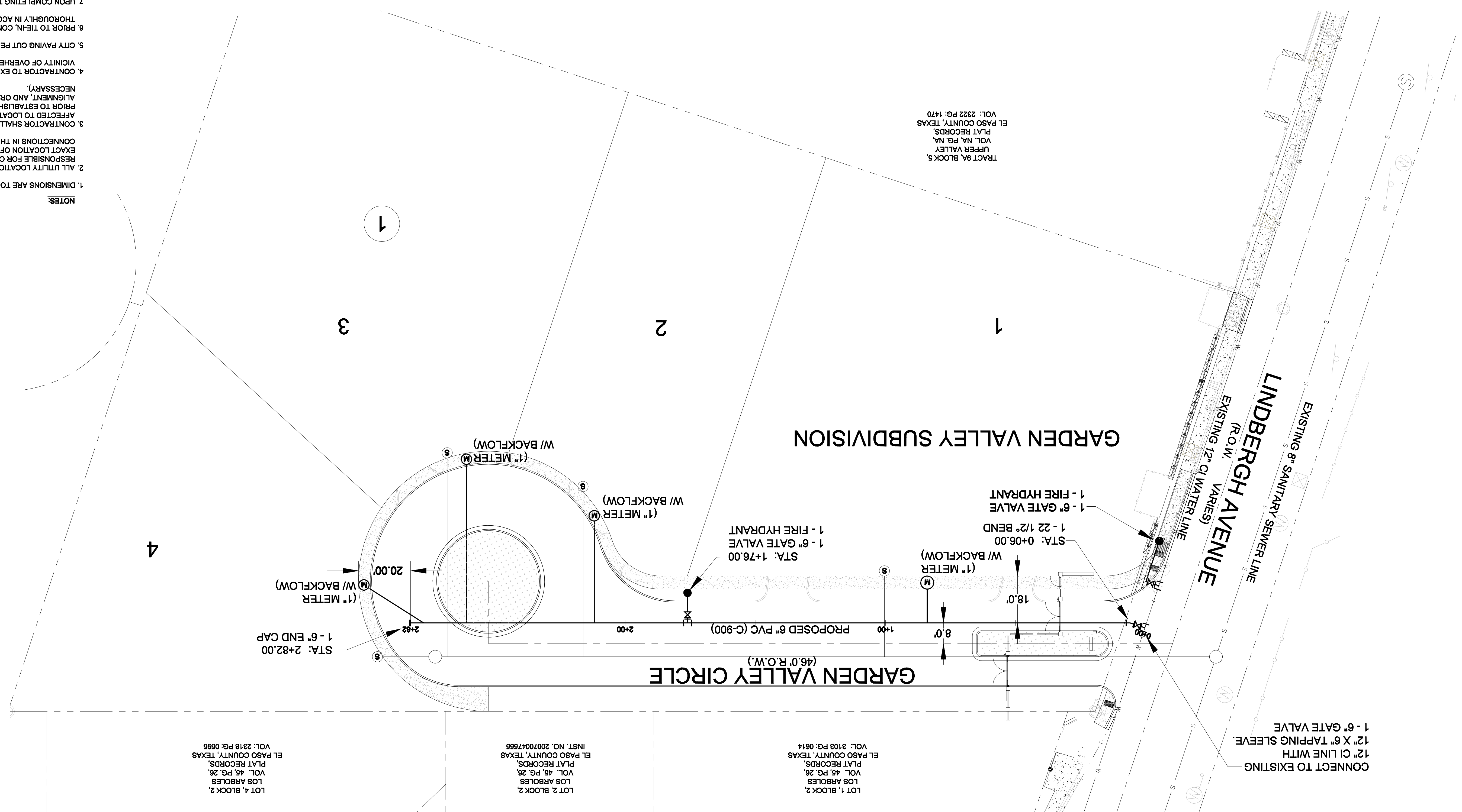
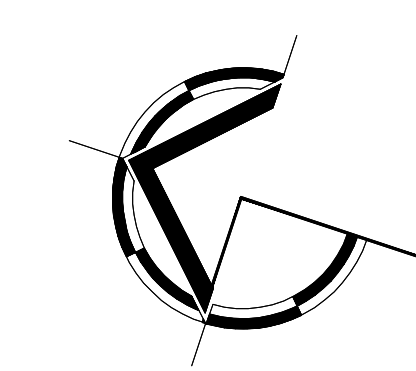
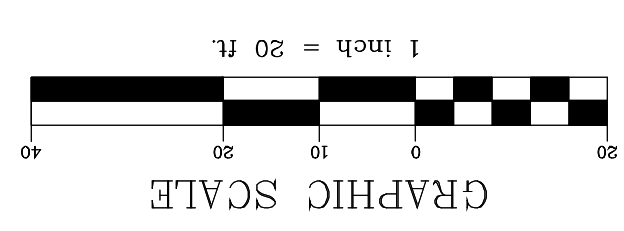
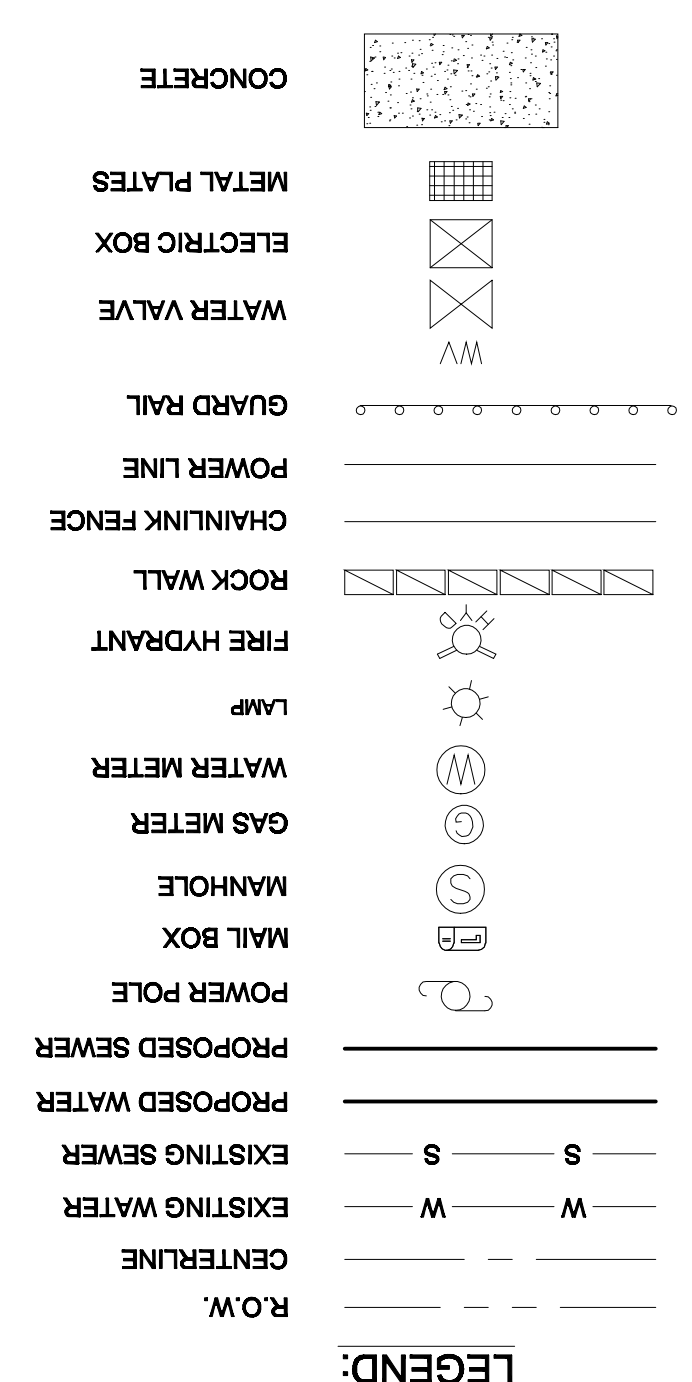
414 Executive Center Blvd
 Ste 200 El Paso TX 79902
 P 915.532.7272
 F 915.532.7373
 Texas Registered Engineering Firm F-005146

REFERENCES - BENCHMARK

DATE	REVISION	BY



U-1	SHEET NO.	PROJECT TITLE GARDEN VALLEY SUBDIVISION EL PASO COUNTY, TEXAS	
WATER DISTRIBUTION PLAN VIEW FOR GARDEN VALLEY CIRCLE		SHEET TITLE	
SCALE: HORIZONTAL: _____ VERTICAL: _____ CONTIGUOUS INTERVAL: _____			
NOTES: 1. DIMENSIONS ARE TO RIGHT-OF-WAY AND PROPOSED CENTERLINE. 2. ALL UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES FOR EXACT LOCATION OF UNDERGROUND UTILITIES INCLUDING SERVICE CONNECTIONS IN THIS AREA, BEFORE EXCAVATION. 3. CONTRACTOR SHALL COORDINATE WITH ALL THE UTILITY COMPANIES AFFECTED TO LOCATE AND VERIFY DEPTHS OF EXISTING UTILITIES PRIOR TO ESTABLISHING THE PIPELINE HORIZONTAL AND VERTICAL ALIGNMENT, AND ORDERING OF MATERIALS. (POT HOLE IF NECESSARY). 4. CONTRACTOR TO EXERCISE CAUTION WHEN PERFORMING WORK IN VICINITY OF OVERHEAD POWER LINES. 5. CITY PAVING CUT PERMIT IS REQUIRED BEFORE EXCAVATION. 6. PRIOR TO THE IN, CONTRACTOR SHALL TEST THE PIPELINE THOROUGHLY IN ACCORDANCE WITH EPWU SPECIFICATIONS. 7. UPON COMPLETING THE INSTALLATION OF THE PIPELINE, RESTORE PAVEMENT STRUCTURE TO ORIGINAL OR BETTER CONDITIONS. 8. CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DRIVEWAYS OR LANDSCAPING BACK TO ORIGINAL OR BETTER CONDITIONS AS A RESULT OF CONSTRUCTION ACTIVITIES. 9. CONTRACTOR TO PROVIDE VEHICULAR ACCESS TO EXISTING DRIVEWAYS AT ALL TIMES. EACH INDIVIDUAL BUSINESS / RESIDENTIAL OWNER ALONG THE PROPOSED PIPELINE INSTALLATION SHALL BE NOTIFIED AT LEAST FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION ACTIVITY TAKING PLACE. 10. CONTRACTOR IS RESPONSIBLE FOR INSTALLING TRENCH SAFETY SYSTEM TO PROVIDE FOR THE SAFE EXCAVATION OF ALL TRENCHES EXCEEDING A DEPTH OF (5) FIVE FEET AS PER O.S.H.A. STANDARDS. 11. ALL PVC ON THESE PLANS SHALL BE ENCASED WITH SELECTED BEDDING MATERIAL AS PER EPWU SPECIFICATIONS. 12. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING WATER AND SANITARY SEWER SERVICE LINES FROM DAMAGE AS A RESULT OF CONSTRUCTION ACTIVITIES. 13. CONTRACTOR SHALL PROVIDE TEMPORARY SERVICE TO CUSTOMERS IF SERVICE WILL BE INTERRUPTED FOR MORE THAN 4 HOURS IN A 24 HOUR PERIOD. 14. CONTRACTOR SHALL REPLACE AND RECONNECT ALL SANITARY SEWER SERVICES AS PER RECONNECTION DETAILS. 15. CONTRACTOR SHALL COORDINATE WITH CITY ENGINEERING DEPARTMENT ON CONSTRUCTION SEQUENCING AND TRAFFIC CONTROL PLANS.			
LEGEND: CONCRETE METAL PLATES ELECTRIC BOX WATER VALVE GUARD RAIL POWER LINE CHAINLINK FENCE ROCK WALL FIRE HYDRANT LAMP WATER METER GAS METER MANHOLE MAIL BOX POWER POLE PROPOSED SEWER PROPOSED WATER EXISTING SEWER EXISTING WATER CENTERLINE R.O.W.			
GRAPHIC SCALE 1 inch = 20 ft.			
REFERENCES - BENCHMARK			
DATE	REVISION		
BY			



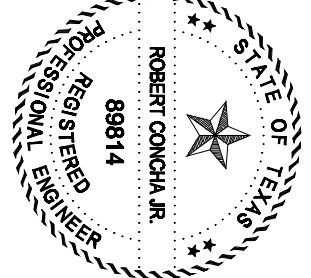
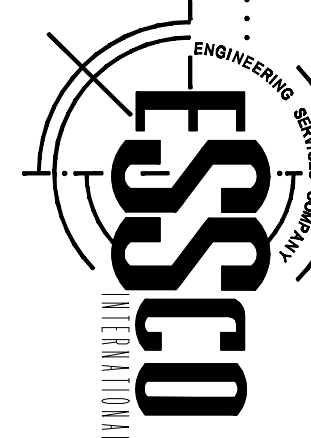
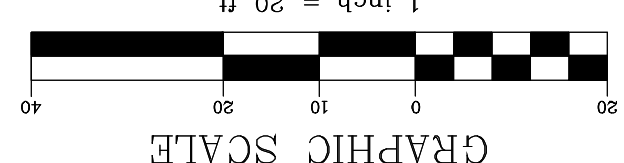
LOT 2, BLOCK 2
LOS ARBOLES
VOL. 45, PG. 26
PLAT RECORDS,
EL PASO COUNTY, TEXAS
VOL. 2318 PG. 0595

LOT 2, BLOCK 2
LOS ARBOLES
VOL. 45, PG. 26
PLAT RECORDS,
EL PASO COUNTY, TEXAS
INST. NO. 20070047555

LOT 1, BLOCK 2
LOS ARBOLES
VOL. 45, PG. 26
PLAT RECORDS,
EL PASO COUNTY, TEXAS
VOL. 3103 PG. 0614

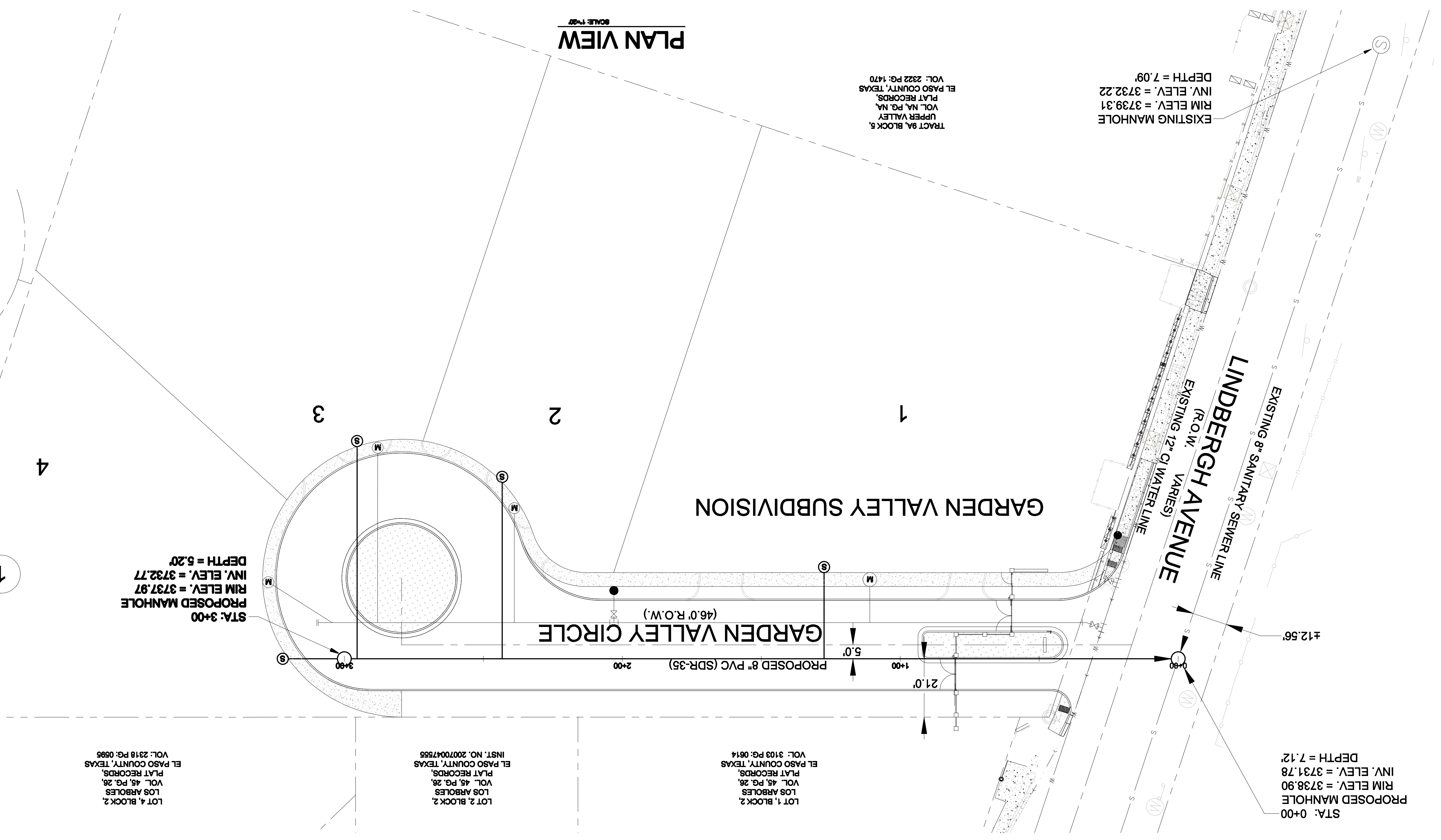
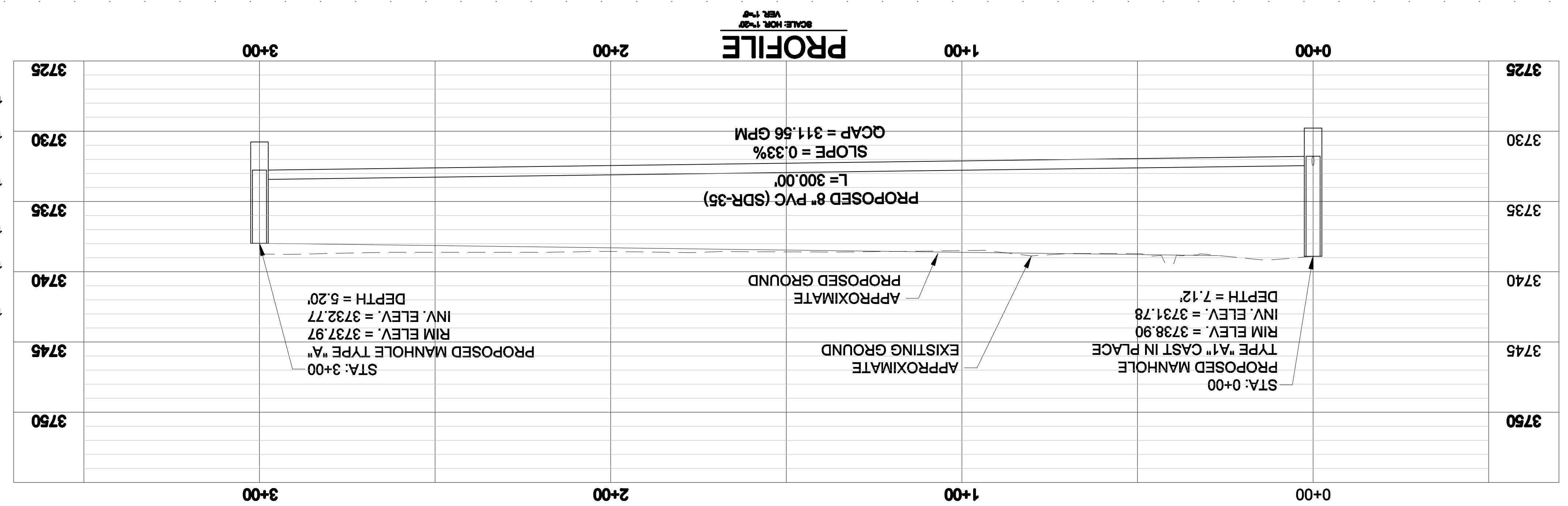
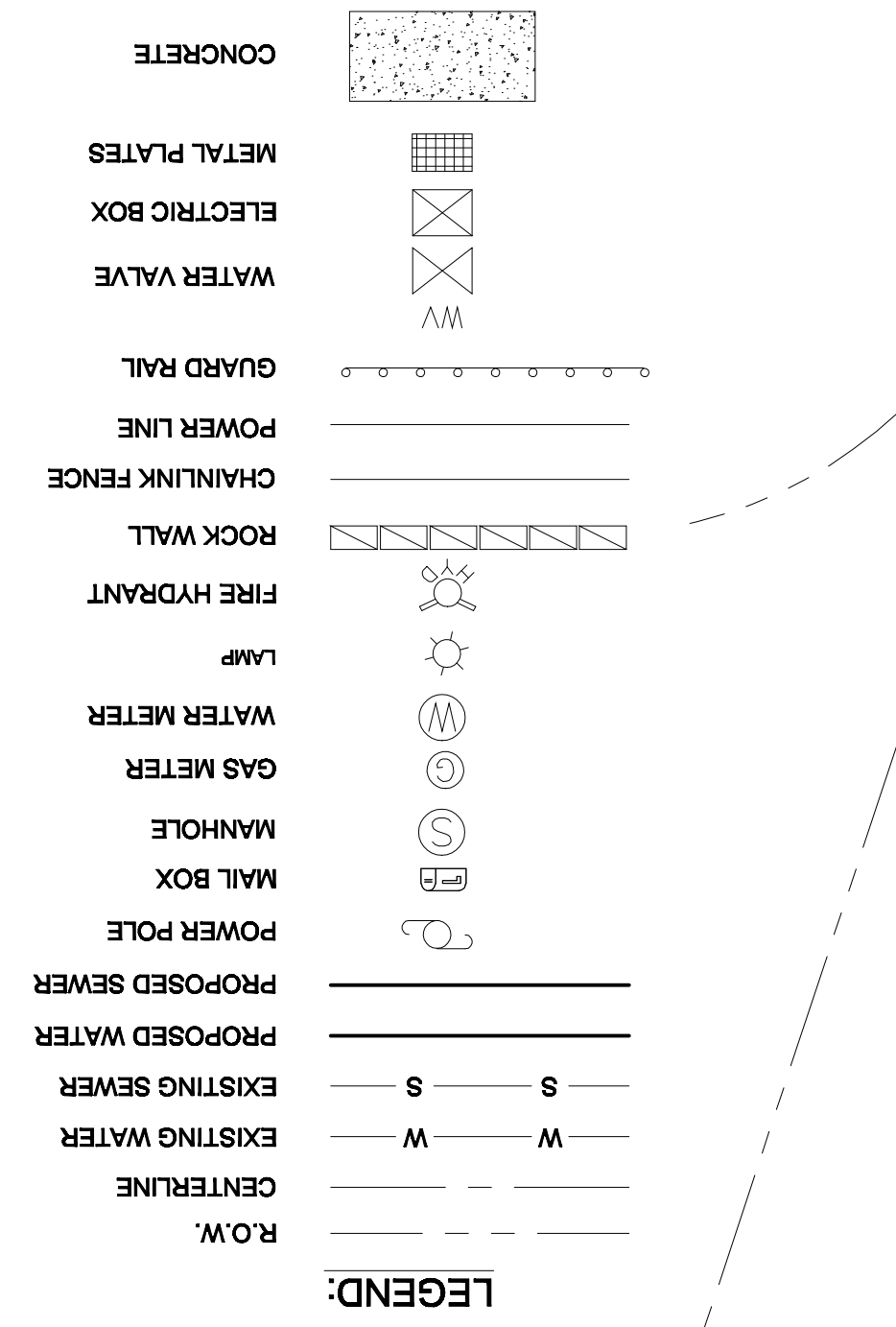
TRACT 9A, BLOCK 5,
UPPER VALLEY,
VOL. 16, PG. 1A,
PLAT RECORDS,
EL PASO COUNTY, TEXAS
VOL. 2322 PG. 1470

CONNECT TO EXISTING
12" CI LINE WITH
12" X 6" TAPPING SLEEVE
1 - 6" GATE VALVE

U-2	SHEET NO.	SHEET TITLE	PROJECT TITLE	SCALE	ENGINEER'S SEAL	REFERENCES - BENCHMARK						
SANITARY SEWER COLLECTION PLAN & PROFILE FOR GARDEN VALLEY CIRCLE			GARDEN VALLEY SUBDIVISION EL PASO COUNTY, TEXAS	HORIZONTAL: VERTICAL: CONTOUR INTERVAL: DATE: 9.3.22 DESIGN BY: ESSCO CHECKED BY: ESSCO APPROVED BY: ESSCO JOB NO. 1203								
					<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>DATE</th> <th>REVISION</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	DATE	REVISION	BY				
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LOS ARBOLES
VOL. 45, PG. 26
PLAT RECORDS,
EL PASO COUNTY, TEXAS
VOL. 2318 PG. 0595

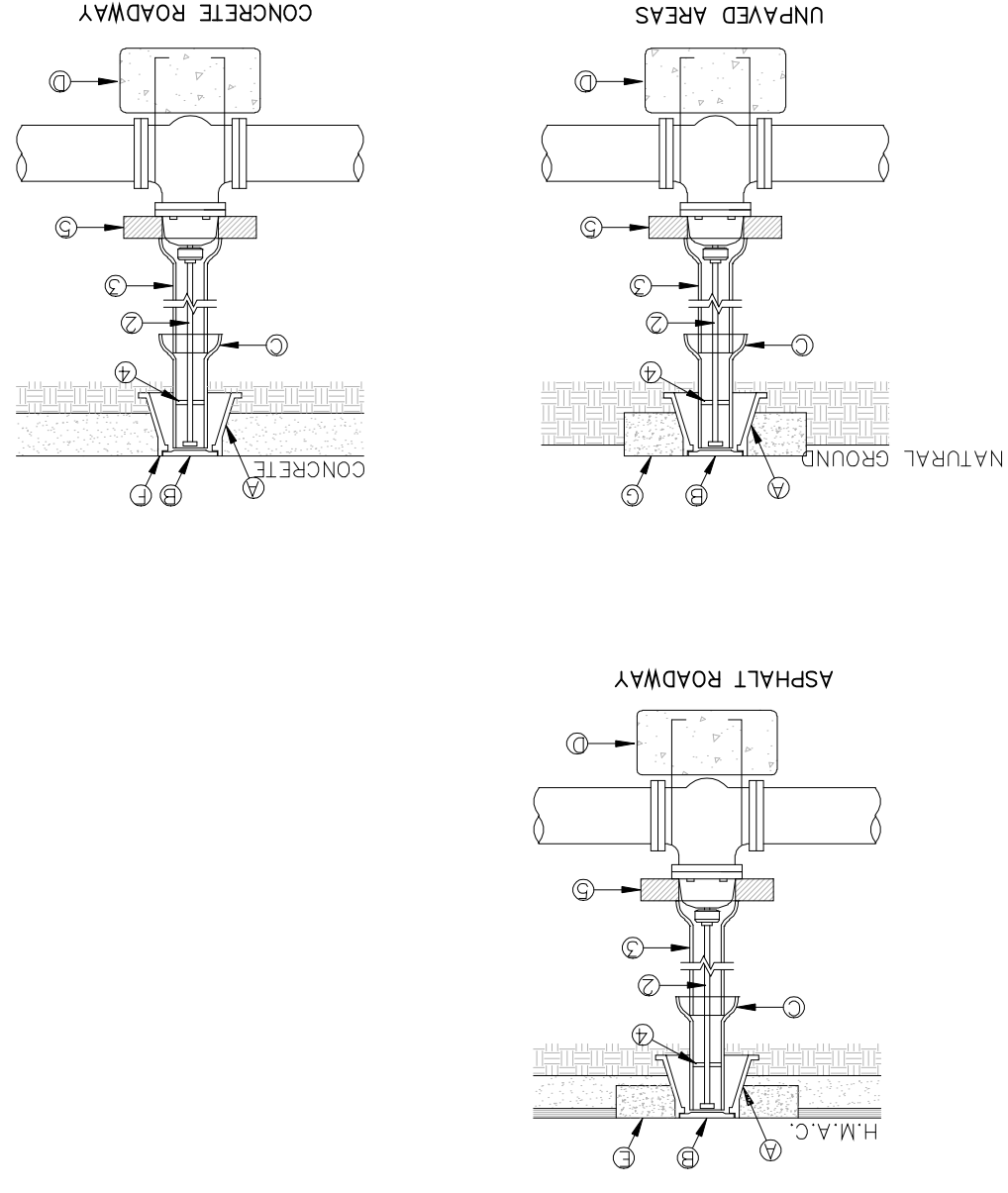
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LOS ARBOLES
VOL. 45, PG. 26
PLAT RECORDS,
EL PASO COUNTY, TEXAS
INST. NO. 20070047555

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EL PASO COUNTY, TEXAS
VOL. 3103 PG. 0614

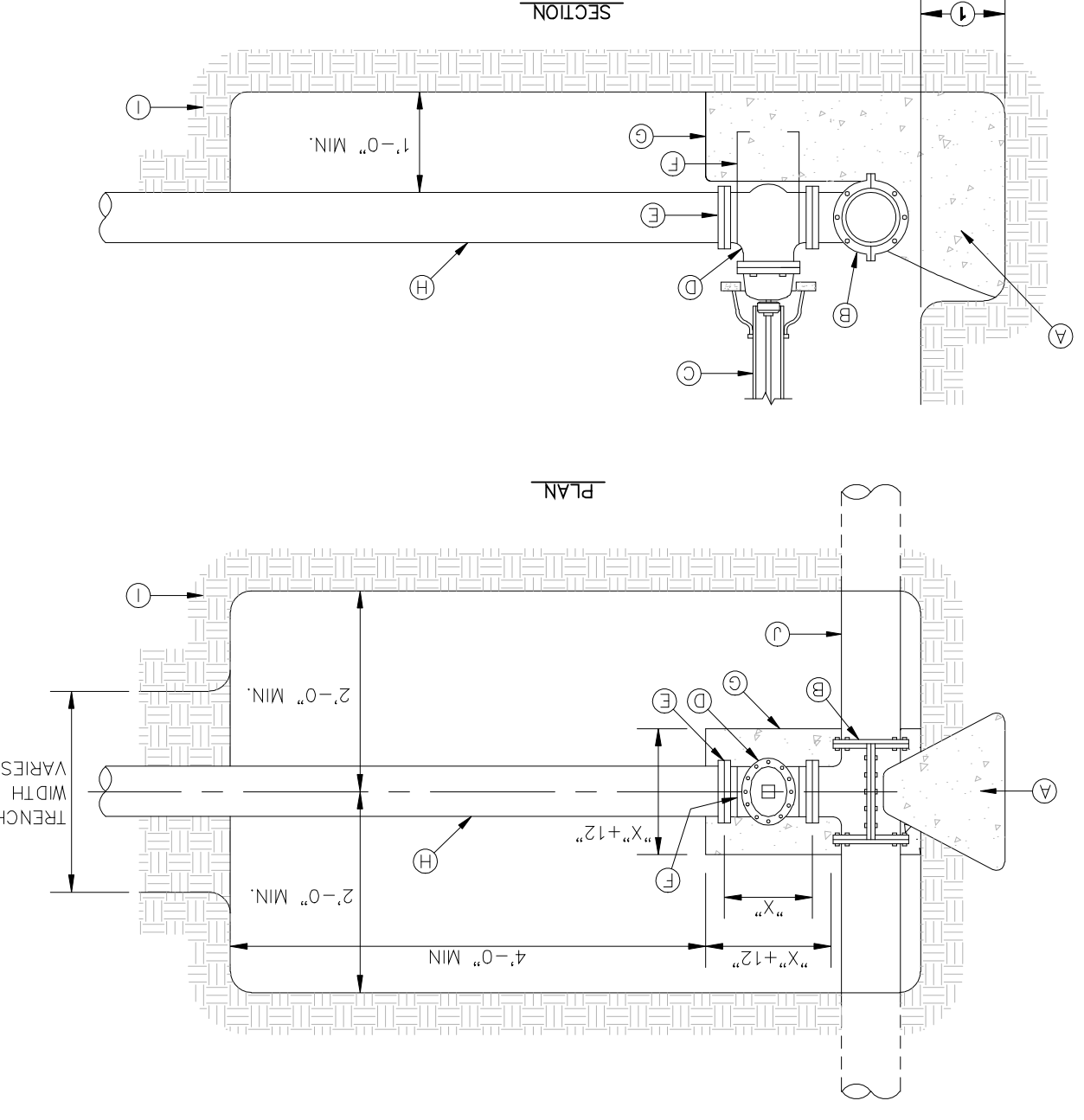
STA: 0+00
PROPOSED MANHOLE
RIM ELEV. = 3738.90
INV. ELEV. = 3731.78
DEPTH = 7.12

EXISTING MANHOLE
RIM ELEV. = 3739.31
INV. ELEV. = 3732.22
DEPTH = 7.09

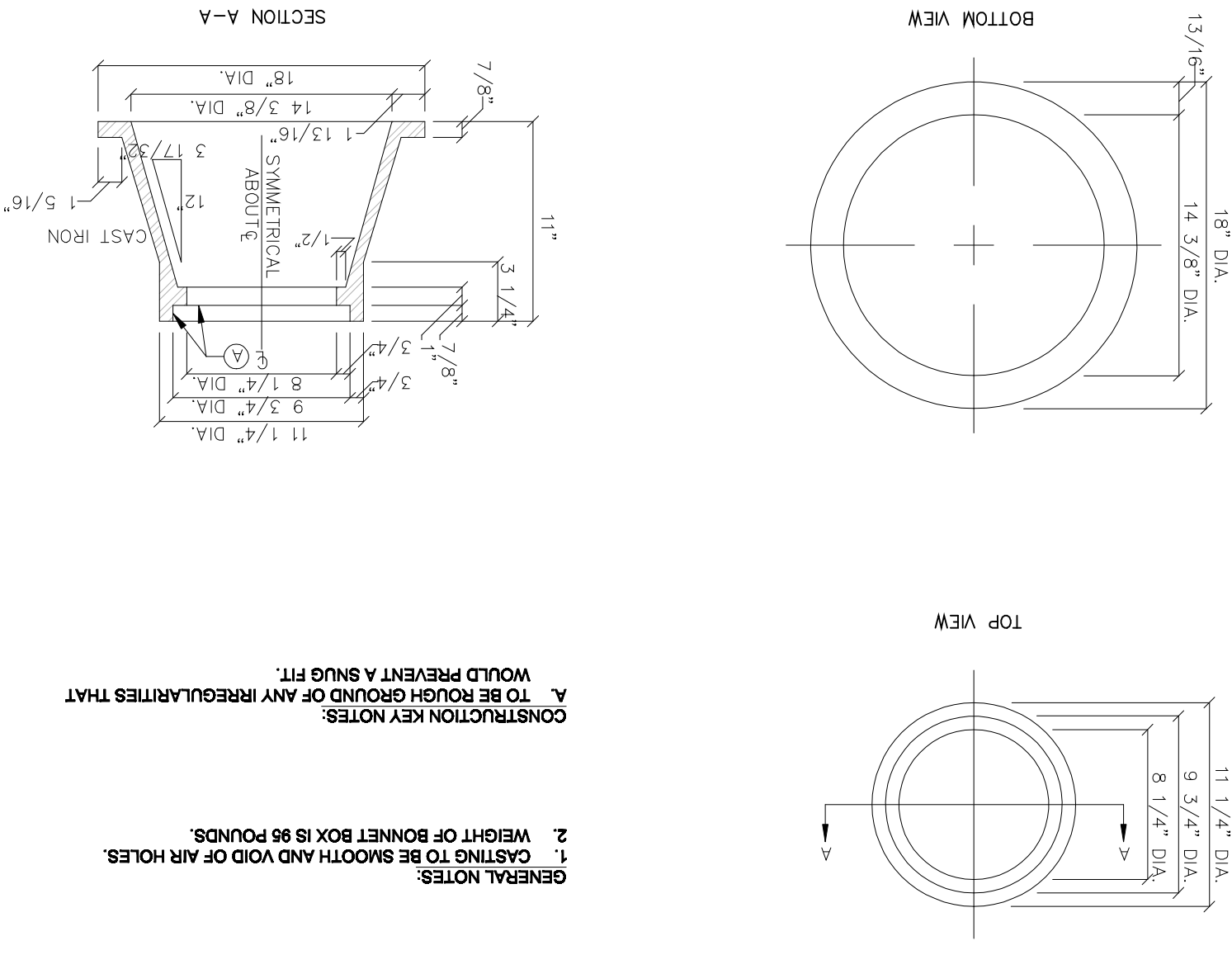
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VOL. 0A, PG. 0A,
PLAT RECORDS,
EL PASO COUNTY, TEXAS
VOL. 2322 PG. 1470



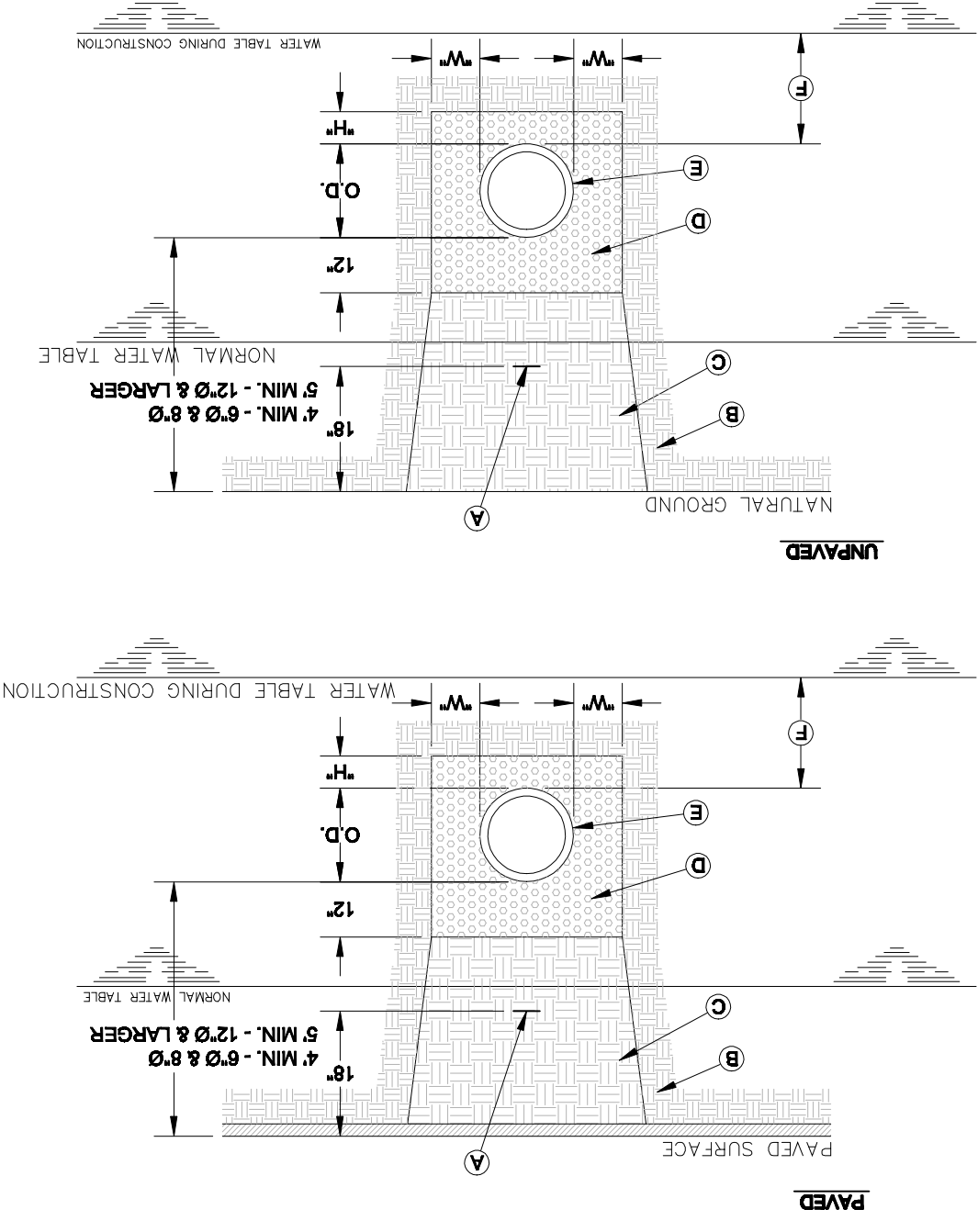
- CONSTRUCTION KEY NOTES:**
1. VALVE TYPE AND VALVE ENDS SHALL BE AS SHOWN
 2. ALL BURIED VALVES 5' AND DEEPER SHALL BE PROVIDED WITH 2" SQUARE ANCHOR WITHIN 36" OF OPERATION WITH 2" SQUARE ANCHOR WITHIN 36" OF VALVE BOX COVER AND 15" TO INDICATE DIRECTION OF ROTATION TO OPEN VALVE.
 3. 3/4" DIA. MINIMUM VITRIFIED CLAY OR SDR 35 P.V.C. PIPE SHALL NOT REST ON VALVE BODY.
 4. 1/2" THICK STEEL TRASH RING VALVE BOX INSIDE DIAMETER MINUS 1/2".
 5. MINIMUM 2" CONCRETE OR BRICK ALL AROUND VALVE BOX COVER.
 6. COAT BURIED PIPE AND BONNET BOX PER SPECIFICATIONS. VALVE SHALL BE WRAPPED IN POLYETHYLENE IN ACCORDANCE WITH SPECIFICATIONS.
 7. BONNET BOX AND 2" ABOVE NATURAL GROUND. CONCRETE APRON (SEE DETAIL 184-2) FLUSH WITH CONCRETE COLLAR NOT NEEDED.
 8. CONCRETE COLLAR NOT NEEDED.
 9. BONNET BOX FLUSH WITH TOP OF CONCRETE OF H.M.A.C.



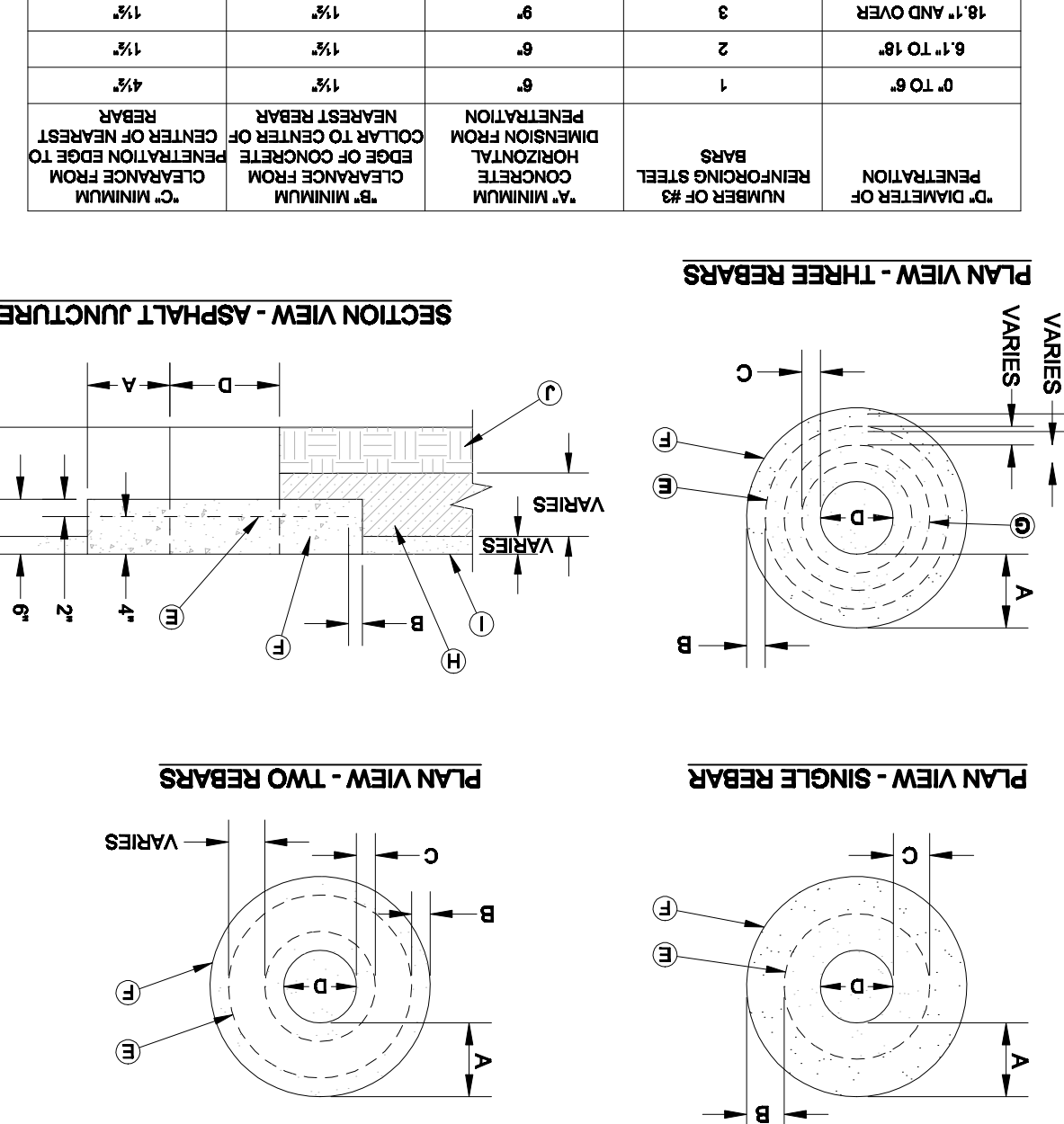
- CONSTRUCTION KEY NOTES:**
1. TAPPING SLEEVE
 2. CONCRETE THRUST BLOCKING, PER DETAIL 270.
 3. RISER INSTALLATION, PER DETAIL 280.
 4. VALVE ENDS FOR TYPE OF PIPE INSTALLED.
 5. 2#4 REBAR HAIRPINS, PAINT UNBERRIED PORTION OF BARS WITH 2 COATS OF COAL TAR EPXY, THEN COVER WITH 2 MINIMUM OF CEMENT MORTAR.
 6. CONCRETE VALVE SUPPORT, PER DETAIL 271.
 7. UNBERRIED EXHIBIT.
 8. EXISTING WATER MAIN TO BE TAPPED.



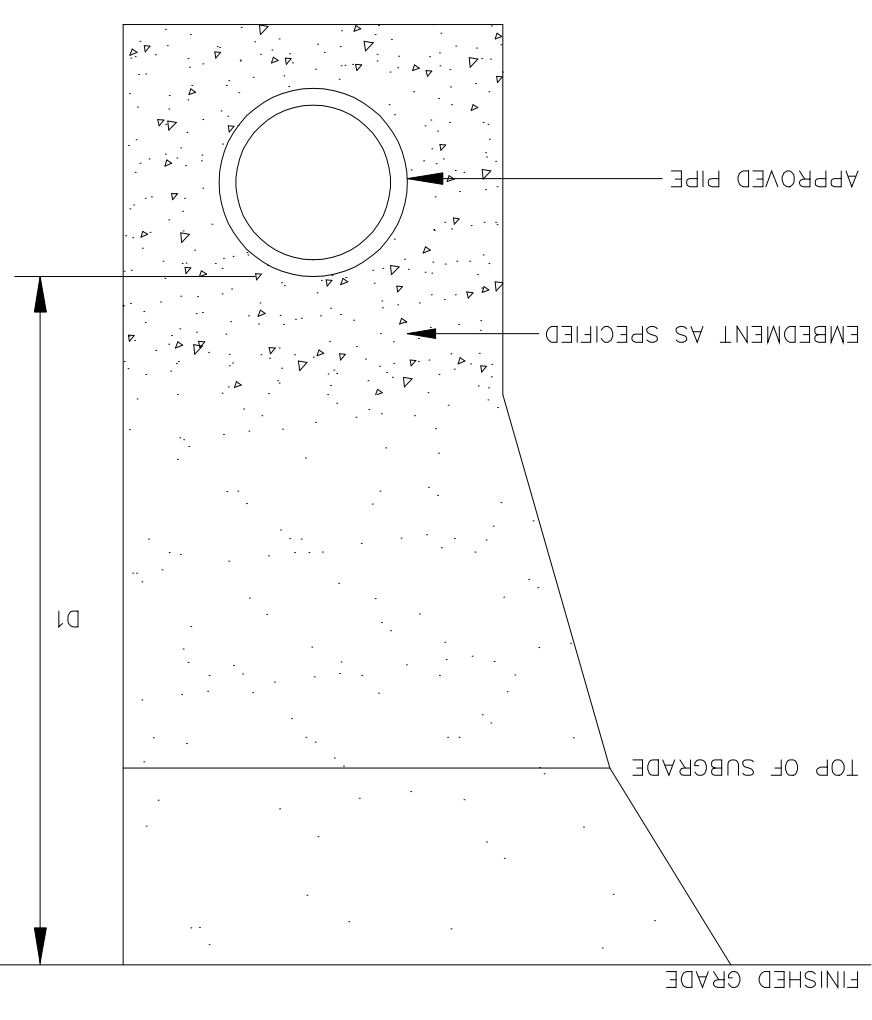
- CONSTRUCTION KEY NOTES:**
1. CASTING TO BE SMOOTH AND VOID OF AIR HOLES.
 2. WEIGHT OF BONNET BOX IS 85 POUNDS.
 3. WOULD PREVENT A SNUG FIT.
 4. TO BE ROUGH GROUND OF ANY IRREGULARITIES THAT



- GENERAL NOTES:**
1. PROVIDE TRENCH SAFETY SYSTEM FOR TRENCH DEPTH GREATER THAN 5 FEET.
 2. BEDDING FOR PRESSURE PIPE IN WET CONDITIONS.
 3. A DRY TRENCH MUST BE MAINTAINED WHILE PLACING BEDDING.
 4. IF THE NATIVE MATERIAL EXCAVATED FROM THE TRENCH IS UNSUITABLE AS BACKFILL MATERIAL, OR THE REQUIRED COMPACTION IS UNATTAINABLE, THE SELECT MATERIAL TO BE MIXED WITH OR USED IN PLACE OF THE NATIVE MATERIAL.
- CONSTRUCTION KEY NOTES:**
1. APPROVED MARKING TAPE.
 2. LAYE MATERIAL BACKFILL.
 3. PAVED CONDITION: COMPACT TO 90% DENSITY PER ASTM D-1557 MODIFIED PROCTOR.
 4. UNPAVED CONDITION: COMPACT TO 85% DENSITY PER ASTM D-1557 MODIFIED PROCTOR.
 5. USE CLASS I GRAVEL PER ASTM D-2421 AND D-2487.
 6. NO COMPACTION REQUIRED, USE MINIMAL TAMPING OR HAUNCH SLOPING CAREFULLY IN THE EMBEDMENT ZONE. IF REQUIRED BY THE ENGINEER, TEST PER ASTM D-424 PERCENT OF RELATIVE POLYETHYLENE SHEETING, MINIMUM 6 MIL THICKNESS.
 7. 18" MINIMUM UNLESS OTHERWISE SPECIFIED.
 8. APPROVED PIPE (WRAP P.V.C PIPE IN APPROVED POLYETHYLENE SHEETING).
 9. TEST PER ASTM D-424 PERCENT OF RELATIVE PENETRATION FROM DIMENSION FROM NEAREST REBAR.
 10. 1/2" MINIMUM CLEARANCE FROM EDGE OF CONCRETE PENETRATION EDGE TO CENTER OF REBAR.
 11. 3/8" MINIMUM REINFORCING STEEL BARS.
 12. GREATER THAN 30"
 13. GREATER THAN 30"
 14. GREATER THAN 30"
 15. GREATER THAN 30"
 16. GREATER THAN 30"
 17. GREATER THAN 30"
 18. GREATER THAN 30"
 19. GREATER THAN 30"
 20. GREATER THAN 30"



- GENERAL NOTES:**
1. IN PLACE
 2. STRENGTH 4000 PSI, HIGH EARLY CONCRETE IS REQUIRED.
 3. CONCRETE COLLAR SHALL BE FLUSH WITH FINISHED GRADE UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
 4. ANY DISTURBED SUBGRADE UNDER THE CONCRETE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
 5. ANY DISTURBED BASE COURSE UNDER THE CONCRETE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
 6. REINFORCING SHALL MEET ASTM C-78 AND TRAFFIC LOADING (HS-20).
 7. NO. 3 REINFORCING STEEL HOOPS SHALL BE SPACED EQUALLY.
 8. REINFORCING SHALL MEET ASTM C-78 AND TRAFFIC LOADING (HS-20).
 9. REINFORCING STEEL EQUALLY SPACED.
 10. COMPACTED SUBGRADE.
 11. COMPACTED SUBGRADE.
 12. COMPACTED SUBGRADE.
- CONSTRUCTION KEY NOTES:**
1. REINFORCING STEEL TYPE.
 2. REINFORCING STEEL TYPE.
 3. REINFORCING STEEL TYPE.
 4. REINFORCING STEEL TYPE.
 5. REINFORCING STEEL TYPE.
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 18. REINFORCING STEEL TYPE.
 19. REINFORCING STEEL TYPE.
 20. REINFORCING STEEL TYPE.



- CONSTRUCTION KEY NOTES:**
1. REFER TO UTILITY DETAIL FOR PAVEMENT REPLACEMENT AND BACKFILL REQUIREMENTS.
 2. TRENCH SAFETY SYSTEMS SHALL BE USED WHEN TRENCH DEPTH EXCEEDS 5 FEET.
 3. COVER FOR WATER MAINS SHALL DEPEND ON THE PIPE SIZE AND THE FOLLOWING INSTALLATION CONDITIONS.
 4. NORMAL LINE INSTALLATION, STREET AND DRAINAGE PRODUCTS, WATERLINE RELOCATION.
 5. NEW SUBDIVISIONS, NON-PAVED AREA AND SHALL BE AS FOLLOWS:
- PIPE SIZE DIMENSION CONDITION
- | | | |
|--------------|--------|---------|
| 12" & LARGER | A OR B | D1 = 5" |
| 6", 8" | B | D1 = 4" |
| 6", 8" | A | D1 = 4" |

SCALE:

HORIZONTAL: 1" = 10'

VERTICAL: 1" = 4'

CONTOUR INTERVAL: 4'-12"

DATE: 8-13-12

DESIGN BY: ESSCO

DRAWN BY: ESSCO

CHECK BY: ESSCO

APP'D BY: ESSCO

JOB NO. 1203

PROJECT TITLE:

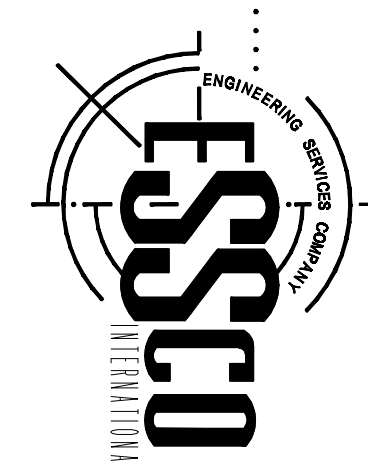
GARDEN VALLEY
SUBDIVISION
EL PASO COUNTY, TEXAS

SHEET TITLE:

WATER DISTRIBUTION
DETAILS

REFERENCES - BENCHMARK

DATE	REVISION	BY

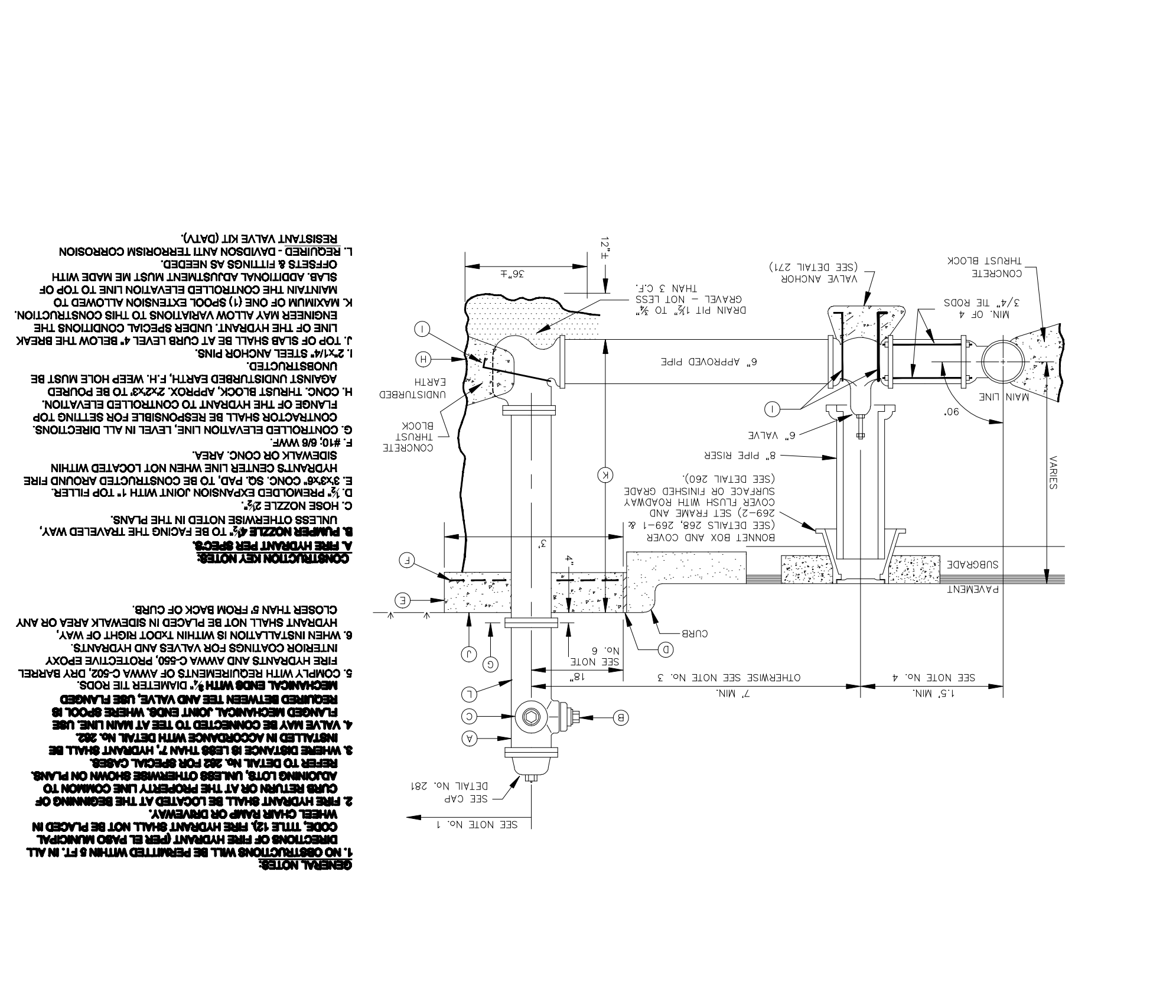


ENGINEER'S SEAL

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERNAL REVIEW OF CONSTRUCTION PURPOSES.

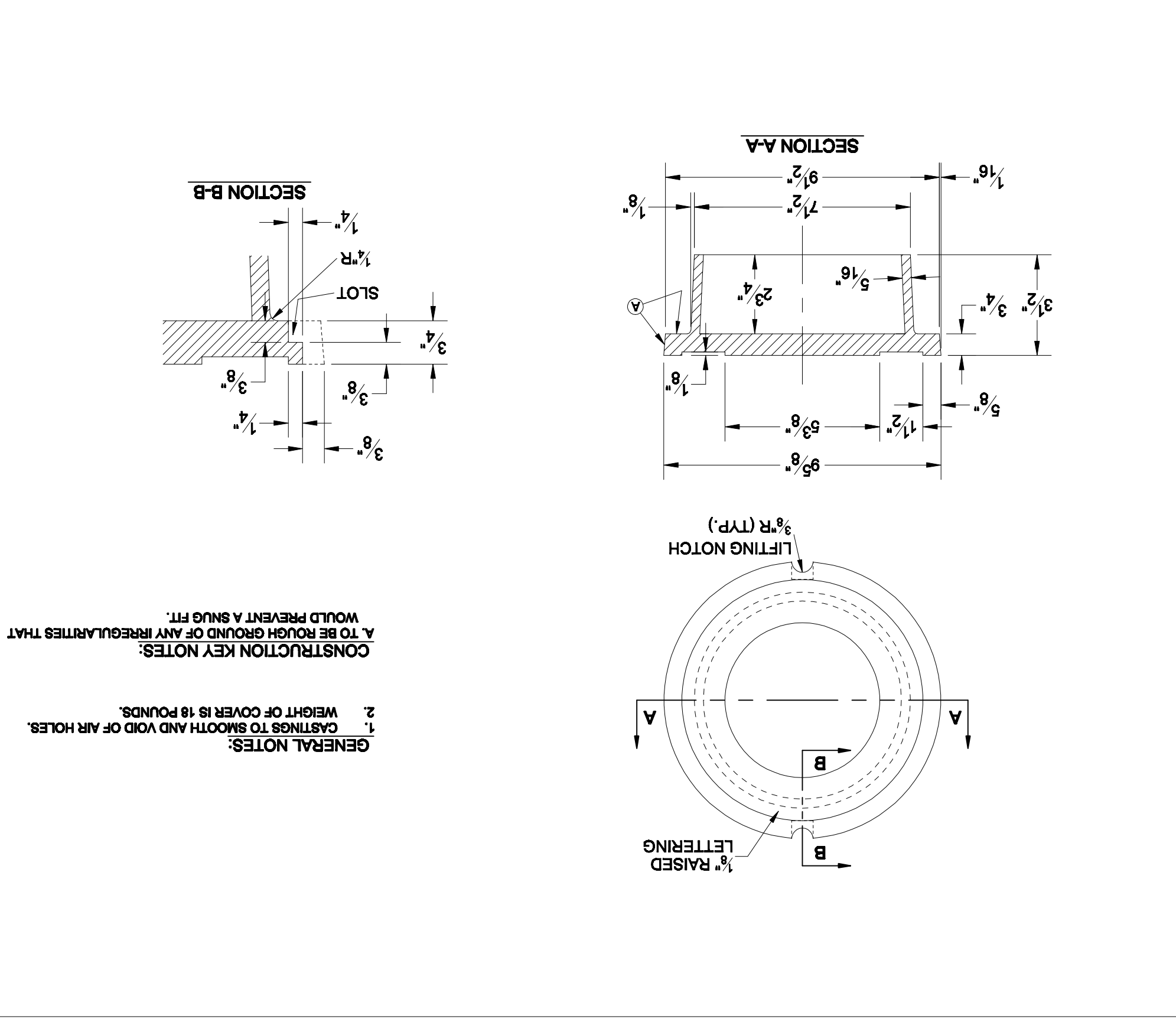
ROBERT CONCHA, JR.
0881
AUGUST 13, 2012

FIRE HYDRANT INSTALLATION



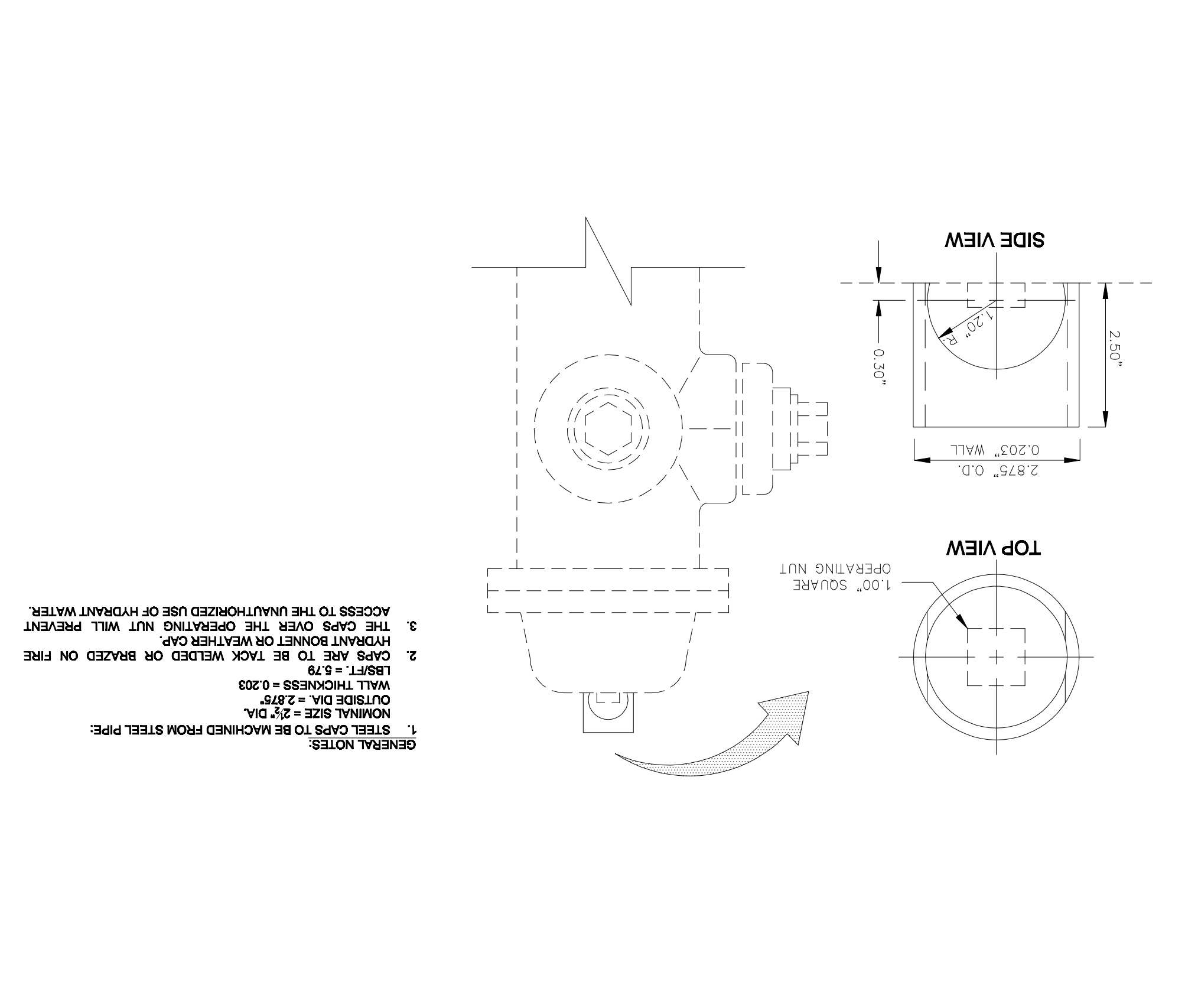
GENERAL NOTES:
 1. NO CONNECTIONS WILL BE RESULTED WITHIN 8 FT. IN ALL DIRECTIONS OF FIRE HYDRANT PER E. HANDBOOK. ALL CONNECTIONS TO THE HYDRANT SHALL BE MADE AT THE BONNET OR THROUGH THE VALVE.
 2. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 3. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 4. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 5. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 6. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 7. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 8. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 9. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.
 10. FIRE HYDRANT SHALL BE LOCATED AT THE BEGINNING OF CURB OR AT THE END OF CURB.

BONNET BOX COVER (FLIP RESISTANT)



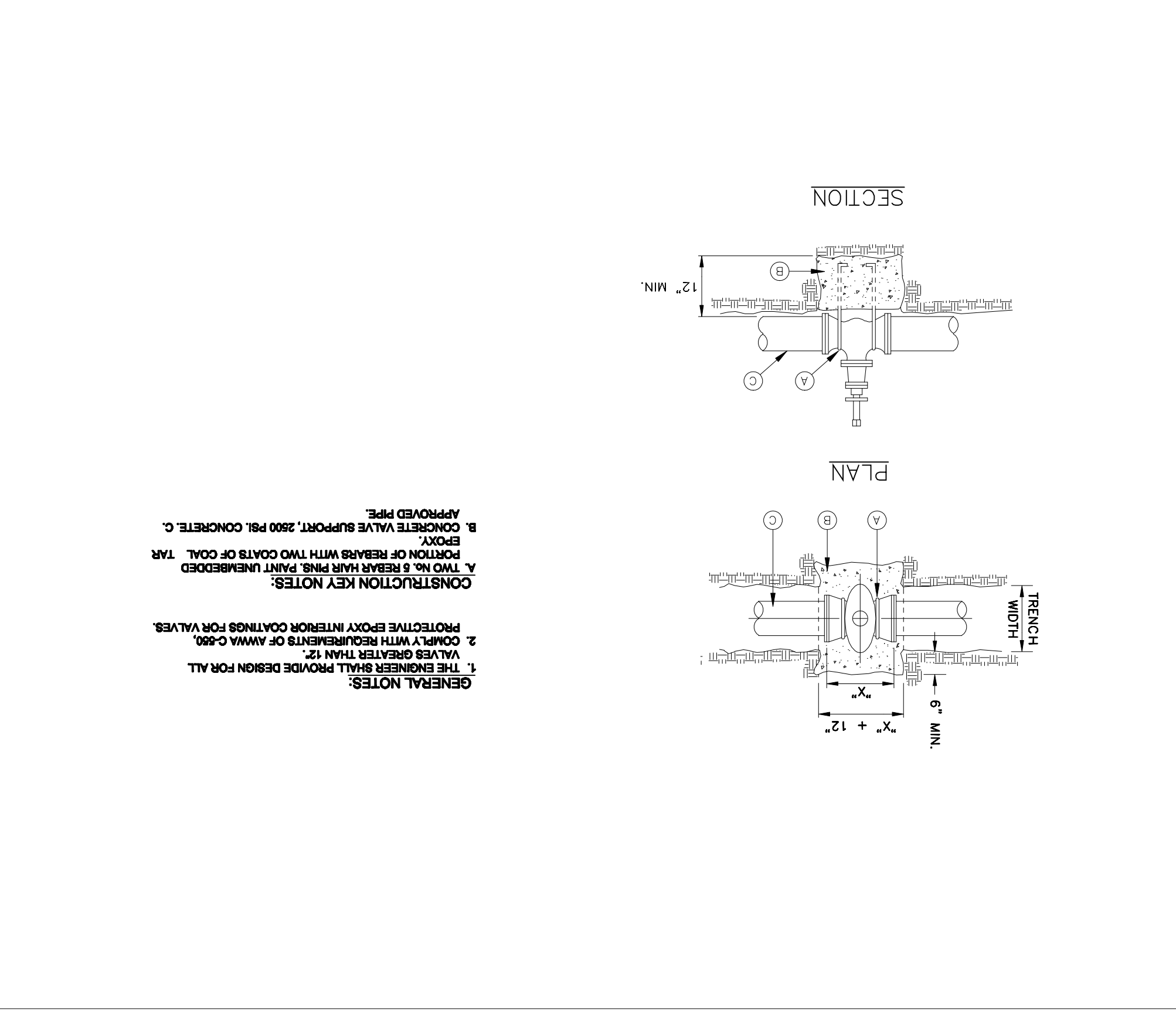
GENERAL NOTES:
 1. COVERINGS TO SMOOTH AND VOID OF AIR HOLES.
 2. WEIGHT OF COVER IS 18 POUNDS.
 3. TO BE ROUND GROUND OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.

FIRE HYDRANT CAP



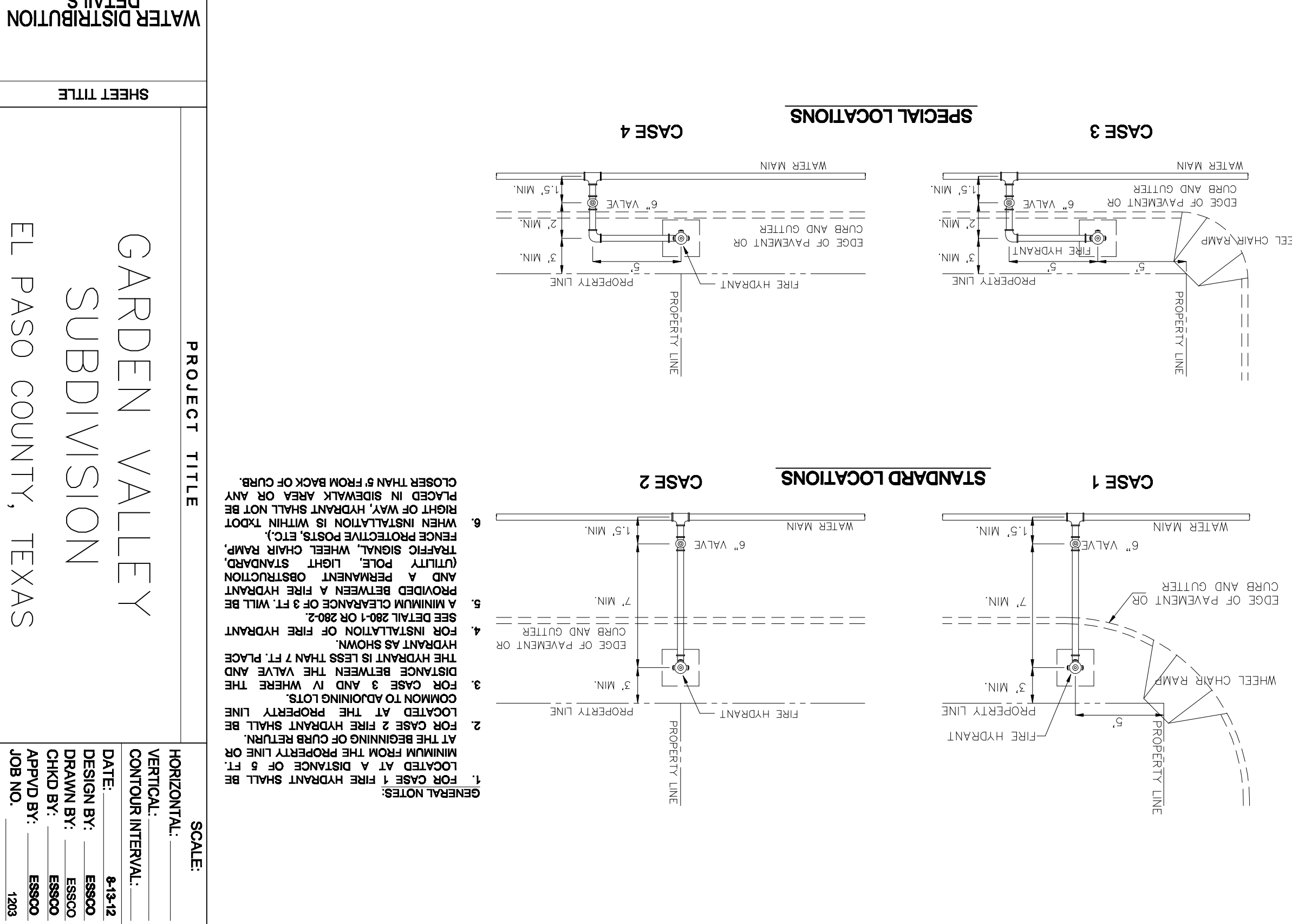
GENERAL NOTES:
 1. STEEL CAPS TO BE MACHINED FROM STEEL PIPE.
 2. CAPS ARE TO BE TACK WELDED OR BRAZED ON FIRE HYDRANT BONNET OR WEATHER CAP.
 3. ACCESS TO THE UNAUTHORIZED USE OF HYDRANT WATER. THE CAP OVER THE OPERATING NUT WILL PREVENT THE UNAUTHORIZED USE OF HYDRANT WATER.

VALVE ANCHOR



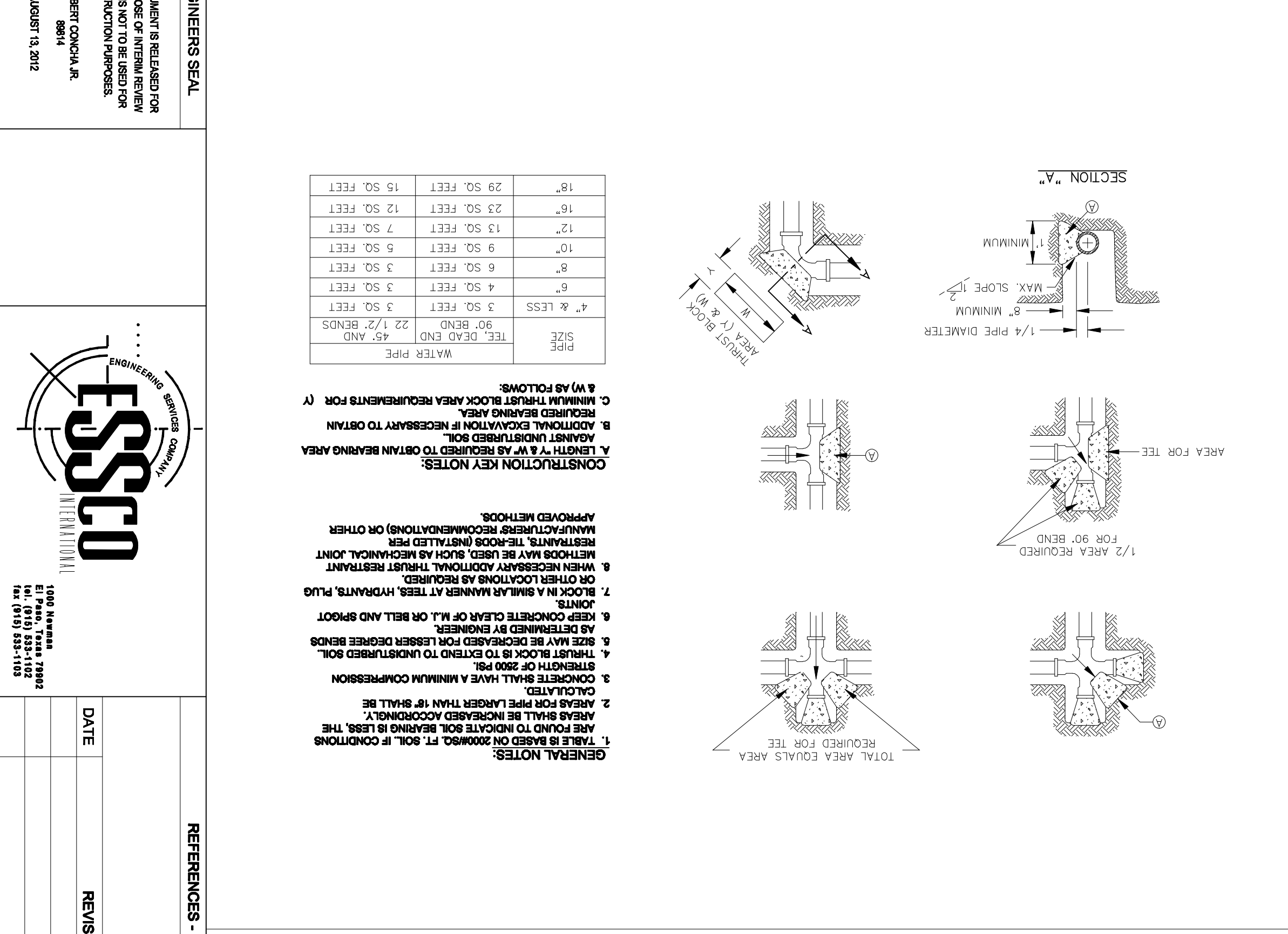
GENERAL NOTES:
 1. THE ENGINEER SHALL PROVIDE DESIGN FOR ALL VALVE ANCHORS.
 2. PROTECTIVE EPOXY INTERIOR COATINGS FOR VALVES.
 3. COAT WITH RESISTANT OF APPROX. 2500 PSI CONCRETE.
 4. CONCRETE VALVE SUPPORT, 2500 PSI CONCRETE.

FIRE HYDRANT LOCATIONS



GENERAL NOTES:
 1. FOR CASE 1 FIRE HYDRANT SHALL BE LOCATED AT A DISTANCE OF 6 FT. MINIMUM FROM THE PROPERTY LINE OR AT THE BEGINNING OF CURB RETURN.
 2. FOR CASE 2 FIRE HYDRANT SHALL BE LOCATED AT THE PROPERTY LINE OR AT THE BEGINNING OF CURB RETURN.
 3. FOR CASE 3 AND 4 WHERE THE DISTANCE BETWEEN THE VALVE AND THE HYDRANT IS LESS THAN 7 FT. PLACE THE HYDRANT IN THE MIDDLE OF THE DISTANCE.
 4. FOR INSTALLATION OF FIRE HYDRANT PROVIDED BETWEEN A FIRE HYDRANT AND A PERMANENT OBSTRUCTION (LIGHT STAND, TRAFFIC SIGNAL, WHEEL CHAIR RAMP, CURB AND GUTTER, ETC.) WHEN INSTALLATION IS WITHIN 100 FT. IN SIDEWALK AREA OR ANY PLACED IN SIDEWALK AREA OR ANY CLOSER THAN 5' FROM BACK OF CURB.

CONCRETE THRUST BLOCKING



GENERAL NOTES:
 1. TABLE IS BASED ON 2000 PSI, 4\"/>

REFERENCES - BENCHMARK

DATE	REVISION	BY

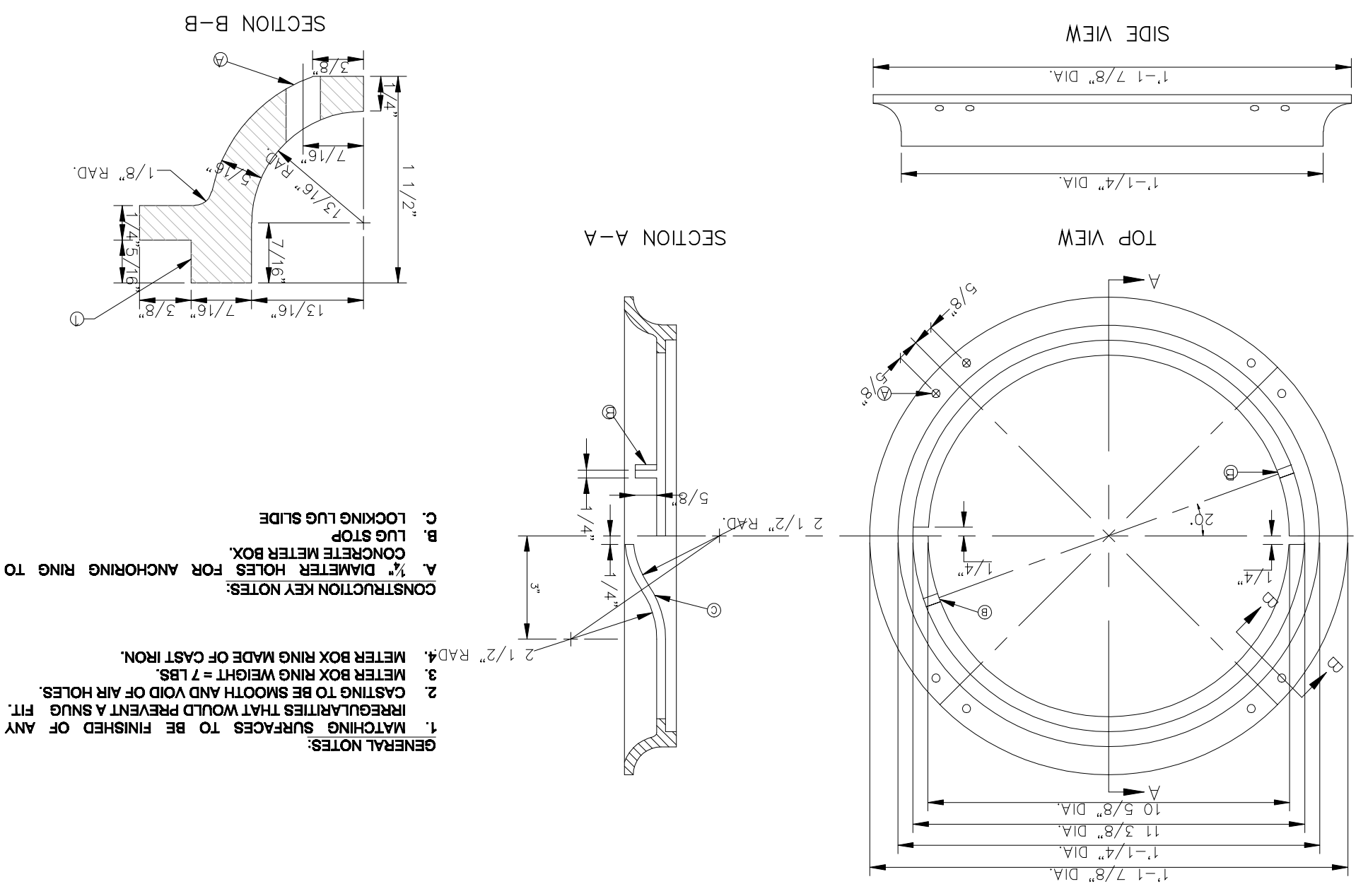
PROJECT TITLE: GARDEN VALLEY SUBDIVISION, EL PASO COUNTY, TEXAS

SCALE: HORIZONTAL: 1"=40', VERTICAL: 1"=10'

DESIGN BY: ESSCO, DRAWN BY: ESSCO, CHECK BY: ESSCO, APP'D BY: ESSCO, JOB NO. 1203

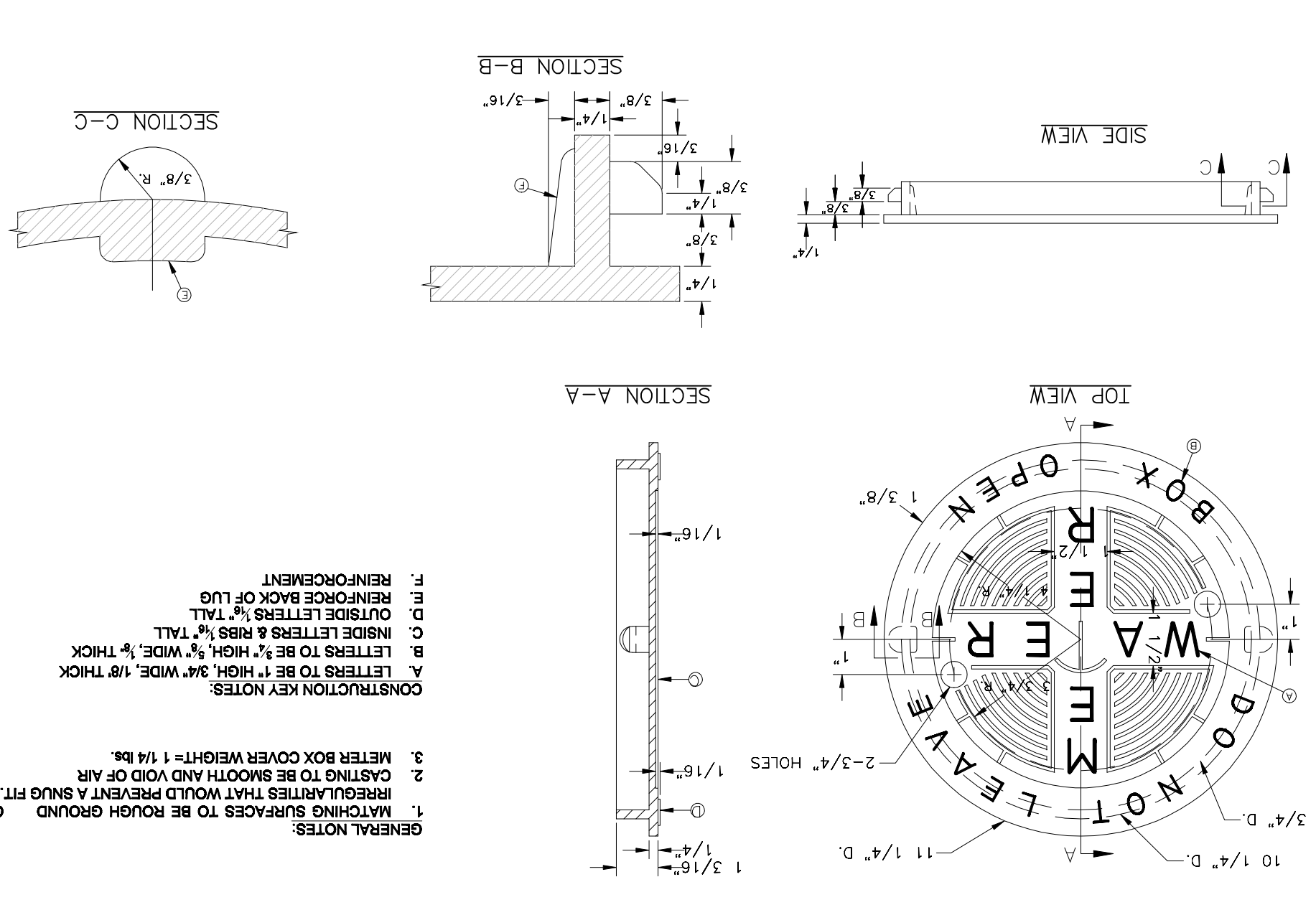
ENGINEER'S SEAL: ESSCO ENGINEERING SERVICES, INC., 1400 W. HUNTER, SUITE 100, EL PASO, TEXAS 79902, TEL: (915) 223-1103, FAX: (915) 223-1103, AUGUST 13, 2012

METER BOX RING FOR
TYPE "A" & "B" METER BOXES



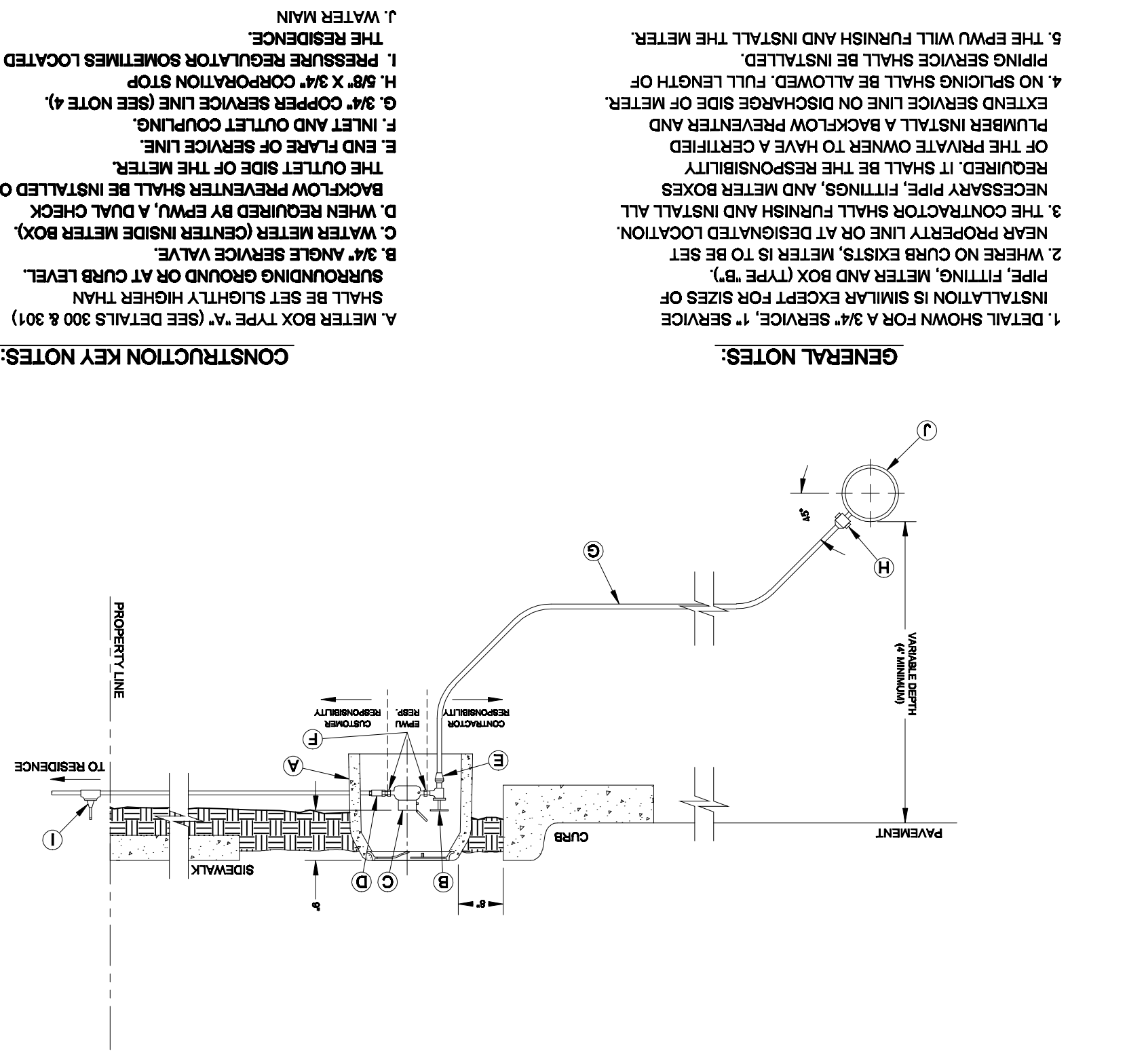
- GENERAL NOTES:
1. MATCHING SURFACES TO BE FINISHED OR ANY
 2. CASTING TO BE SMOOTH AND VOID OF AIR HOLES.
 3. METER BOX RING WEIGHT = 2 LBS.
 4. METER BOX RING MADE OF CAST IRON.
- CONSTRUCTION KEY NOTES:
- A. 1/2" DIAMETER HOLES FOR ANCHORING RING TO CONCRETE METER BOX.
 - B. 1/2" LOCKING LUG SLIDE.
 - C. LOCKING LUG SLIDE.

METER BOX COVER FOR
TYPE "A" & "B" METER BOXES



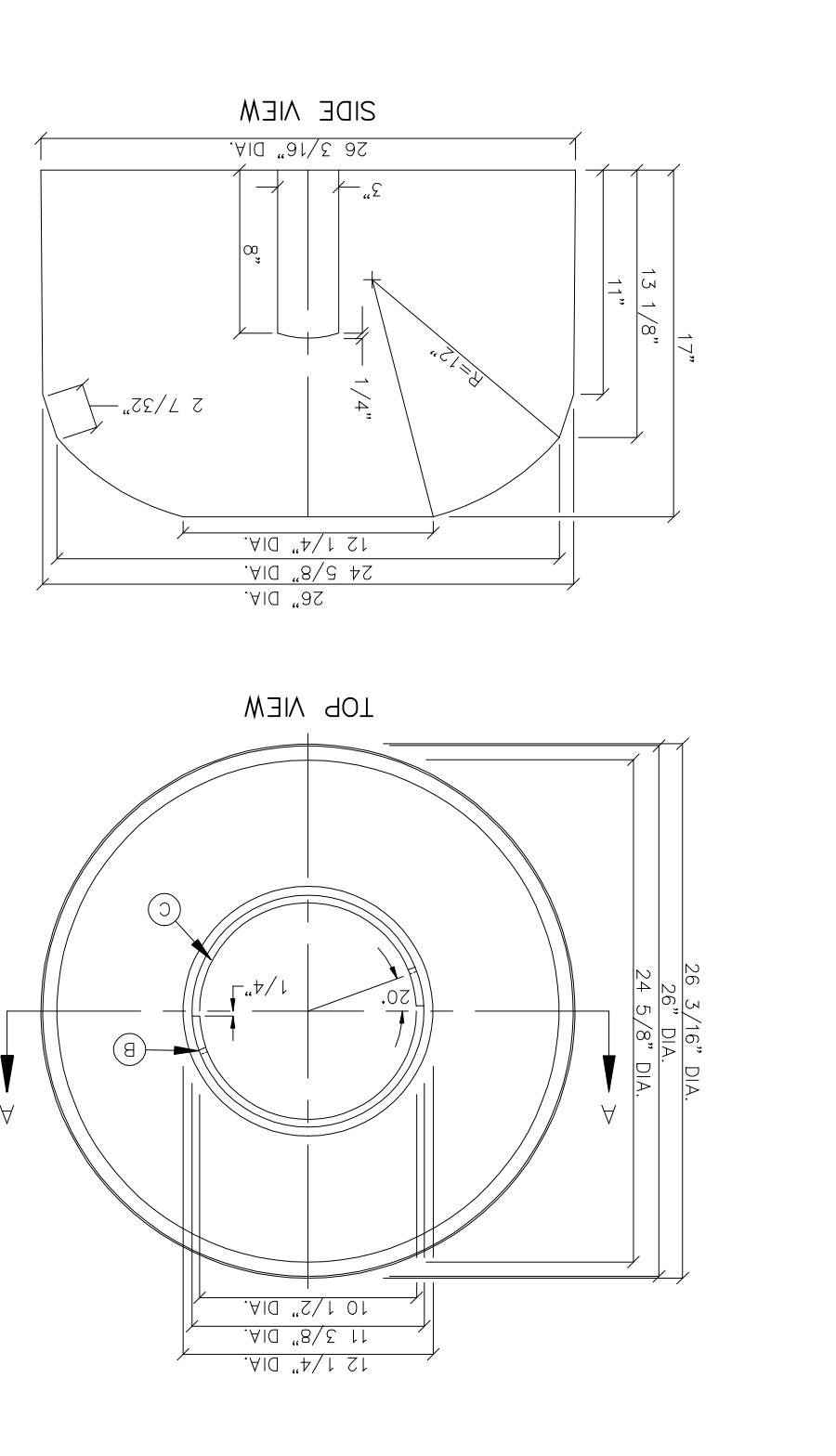
- GENERAL NOTES:
1. MATCHING SURFACES TO BE ROUGH GROUND OF ANY
 2. CASTING TO BE SMOOTH AND VOID OF AIR
 3. METER BOX COVER WEIGHT = 1 1/4 LBS.
- CONSTRUCTION KEY NOTES:
- A. LETTERS TO BE 1/2" HIGH, 3/4" WIDE, 1/8" THICK
 - B. INSIDE LETTERS & RIBS 1/4" TALL
 - C. OUTSIDE LETTERS 1/2" TALL
 - D. REINFORCE BACK OF LUG
 - E. REINFORCEMENT
 - F. REINFORCEMENT

SERVICE LINE 3/4" AND 1" INSTALLATION BY CONTRACTOR



- GENERAL NOTES:
1. DETAIL SHOWN FOR A 3/4" SERVICE. 1" SERVICE INSTALLATION IS SIMILAR EXCEPT FOR SIZES OF PIPE, FITTING, METER AND BOX (TYPE "B").
 2. WHERE NO CURB EXISTS, METER IS TO BE SET NEAR PROPERTY LINE OR AT DESIGNATED LOCATION.
 3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY PIPE, FITTINGS, AND METER BOXES. REQUIRED IT SHALL BE THE RESPONSIBILITY OF THE PRIVATE OWNER TO HAVE A CERTIFIED PLUMBER INSTALL A BACKFLOW PREVENTER AND EXTEND SERVICE LINE ON DISCHARGE SIDE OF METER. 4. NO SPACING SHALL BE ALLOWED. FULL LENGTH OF PIPING SERVICE SHALL BE INSTALLED.
 5. THE EPWU WILL FURNISH AND INSTALL THE METER.
- CONSTRUCTION KEY NOTES:
- A. METER BOX TYPE "A" (SEE DETAILS 300 & 301) SHALL BE SET SLIGHTLY HIGHER THAN SURROUNDING GROUND OR AT CURB LEVEL.
 - B. 3/4" ANGLE SERVICE VALVE.
 - C. WATER METER (CENTER INSIDE METER BOX).
 - D. WHEN REQUIRED BY EPWU, A DUAL CHECK BACKFLOW PREVENTER SHALL BE INSTALLED ON THE OUTLET SIDE OF THE METER.
 - E. 2" RIB FLANGE OF SERVICE LINE.
 - F. 1/2" INLET AND OUTLET COUPLING.
 - G. 3/4" COPPER SERVICE LINE (SEE NOTE 4).
 - H. 3/4" X 3/4" CORPUSCULE STOP.
 - I. PRESSURE REGULATOR (SOMETIMES LOCATED NEAR THE RESIDENCE).
 - J. WATER MAIN.

METER BOX TYPE "B" FOR 1" SERVICE INSTALLATION

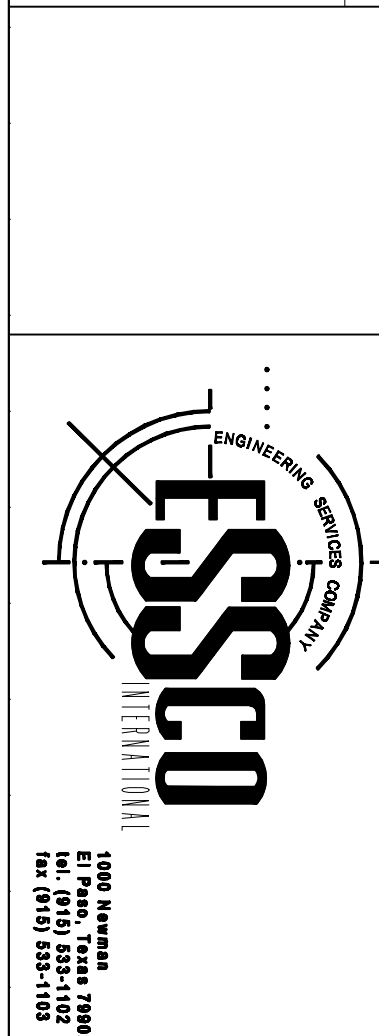


- CONSTRUCTION KEY NOTES:
- A. 3/16" 9 GAUGE BLACK ANNEALED WIRE
 - B. LUG STOP
 - C. CAST IRON RING
- GENERAL NOTES:
1. INSTALL TO GRADE MATCHING TOP OF CURB
 2. ANGLE VALVE SHALL BE IN LINE WITH THE METER BOXES SHALL NOT BE INSTALLED UNDER SIDEWALKS, DRIVEWAYS, OR PROPOSED ABOVE GROUND STRUCTURES.
 3. WHERE NO CURBING EXISTS, INSTALL BOXES IN ACCESSIBLE LOCATIONS BEYOND LIMITS OF STREET SURFACING, WALKS AND DRIVEWAYS.
 4. METER BOX RING AND COVER PER EPWU DETAILS 300 AND 301.
 5. WHERE IT IS NECESSARY TO INSTALL A TYPE "B" BOX FOR 1" METERS INSTEAD OF TRAFFIC SIGNING SURFACES, BOX SHALL BE ENCASED IN 12" CONCRETE, 3000 PSI, MINIMUM.
 6. METER BOX SHALL BE SINGLE UNIT CONSTRUCTION; STRENGTH OF 4000 PSI.
 7. CONCRETE TO HAVE A MINIMUM 28 DAYS COMPRESSIVE

PROJECT TITLE
GARDEN VALLEY
SUBDIVISION
EL PASO COUNTY, TEXAS

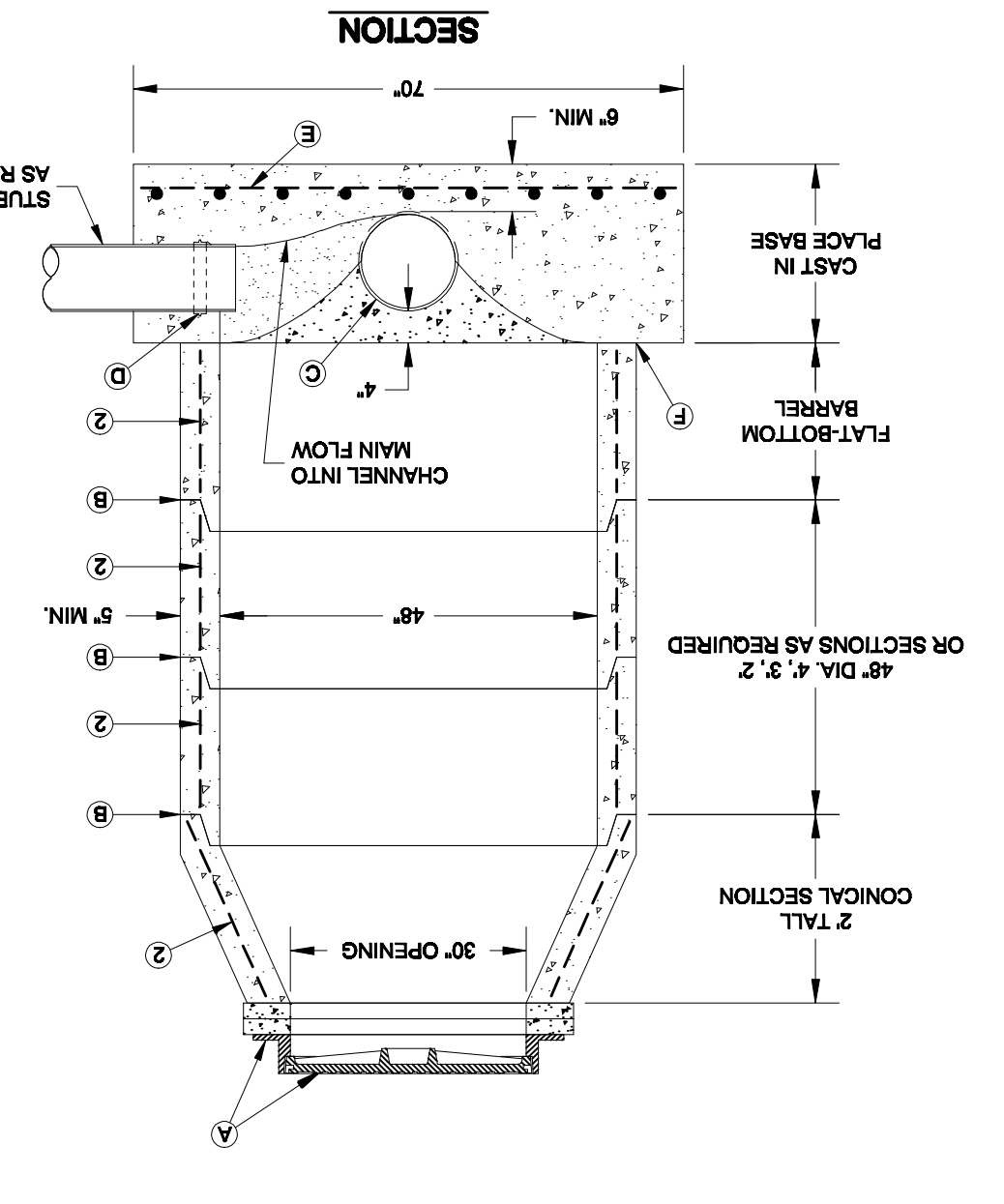
SCALE:
HORIZONTAL:
VERTICAL:
CONTOUR INTERVAL:
DATE: 6-18-12
DESIGN BY: ESSCO
DRAWN BY: ESSCO
CHECK BY: ESSCO
APPROV BY: ESSCO
JOB NO. 1203

ENGINEERS SEAL
THIS DOCUMENT IS VALID FOR THE PURPOSE OF INSTALLATION ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.
ROBERT COOK, JR.
P.E.
AUGUST 13, 2012

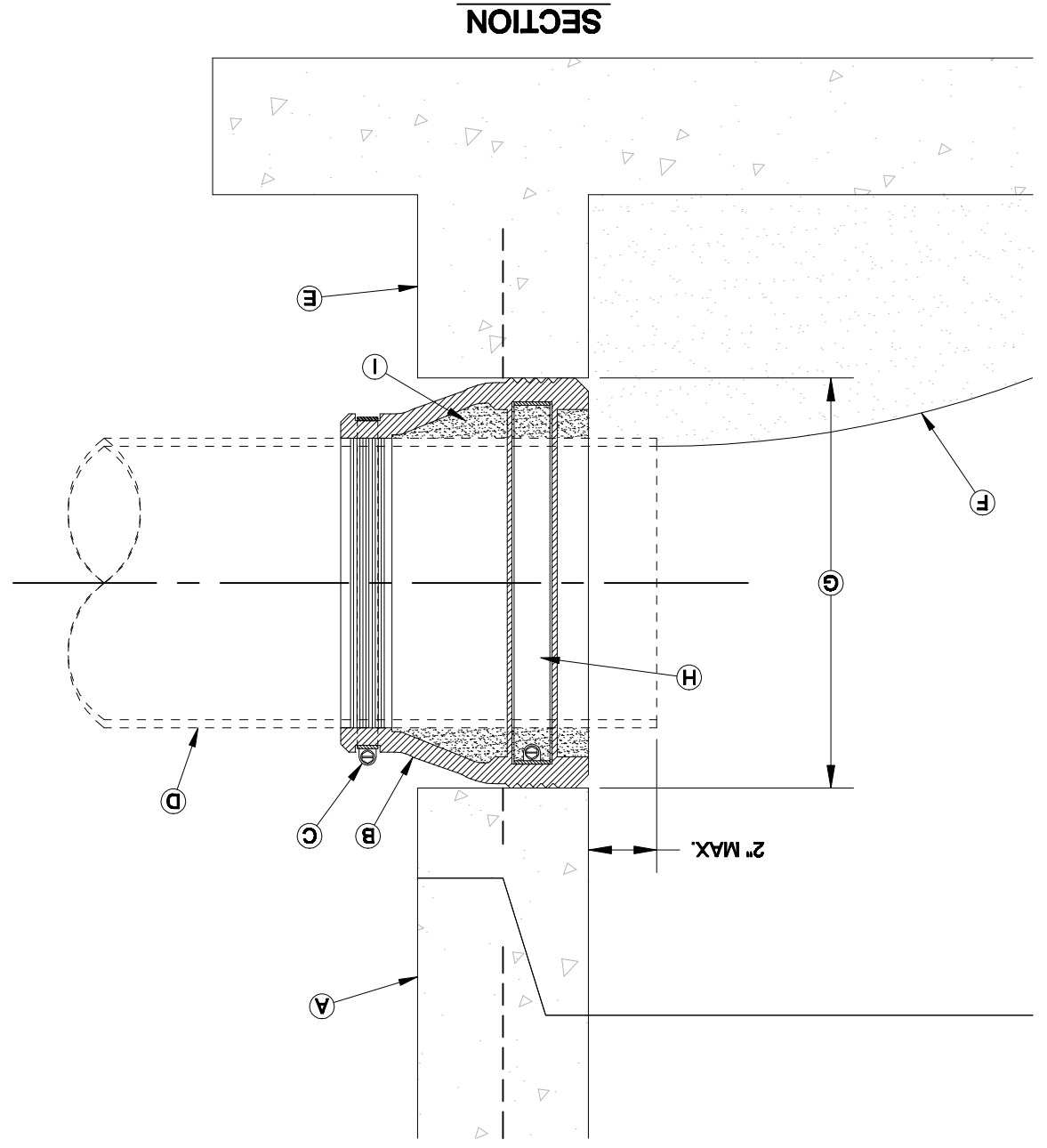


DATE	REVISION	BY

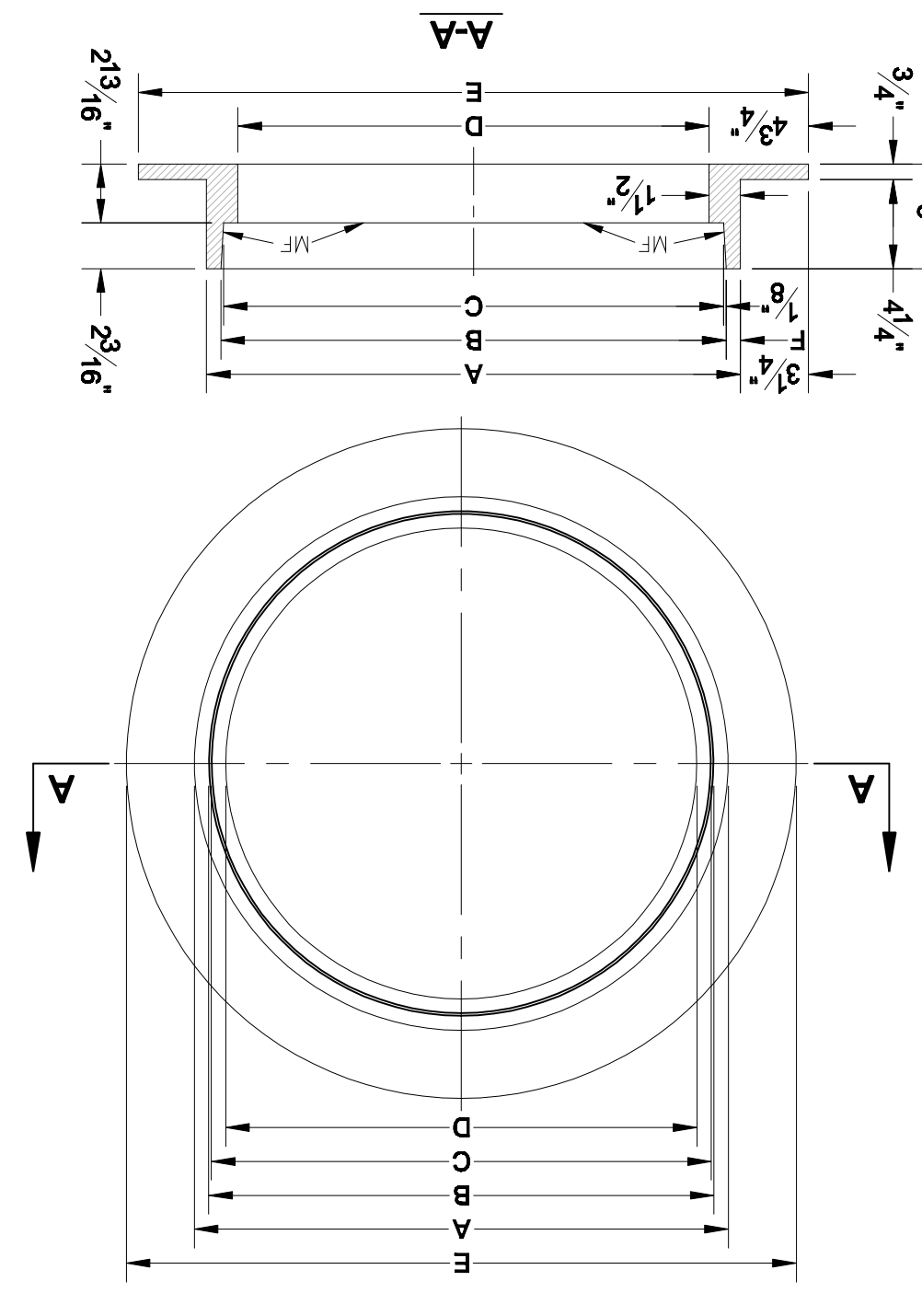
REFERENCES - BENCHMARK



GENERAL NOTES:
1. MANHOLE TYPE "A" SHALL BE USED FOR LINES 2" AND SMALLER. NOT TO BE USED IN GROUNDWATER.
2. PRECAST MANHOLE SECTIONS SHALL BE OF REINFORCED CONCRETE CONFORMING TO ASTM C-478 AND SHALL MEET HS-20 LOADING.
3. CEMENT SHALL BE TYPE II, PER ASTM C-150, AND MUST CONTAIN A MINIMUM OF 4% FLY ASH OF THE TOTAL MANHOLE WEIGHT.
4. THE BASE SHALL BE CAST IN PLACE CONCRETE (MINIMUM 28 DAY COMPRESSIVE STRENGTH 4000 PSI) Poured ON UNDISTURBED OR THOUGHLY COMPACTED SUB-BASE. UNBARRERED OR THOUGHLY COMPACTED SUB-BASE. THE SUBGRADE UNDER THE BASE SHALL BE COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM D-1557.
5. THE SUBGRADE UNDER THE BASE SHALL BE COMPACTED TO 95% DENSITY IN ACCORDANCE WITH ASTM D-1557.
6. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH FINISHED GRADE (SEE DETAIL 189).
7. FRAME AND COVER FLUSH WITH ROADWAY SURFACE OR CHANNEL INTO MAIN FLOW.
8. PIPE GASKET CUT OUT.
9. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH FINISHED GRADE (SEE DETAIL 189).
10. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH FINISHED GRADE (SEE DETAIL 189).
11. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH FINISHED GRADE (SEE DETAIL 189).
12. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH FINISHED GRADE (SEE DETAIL 189).

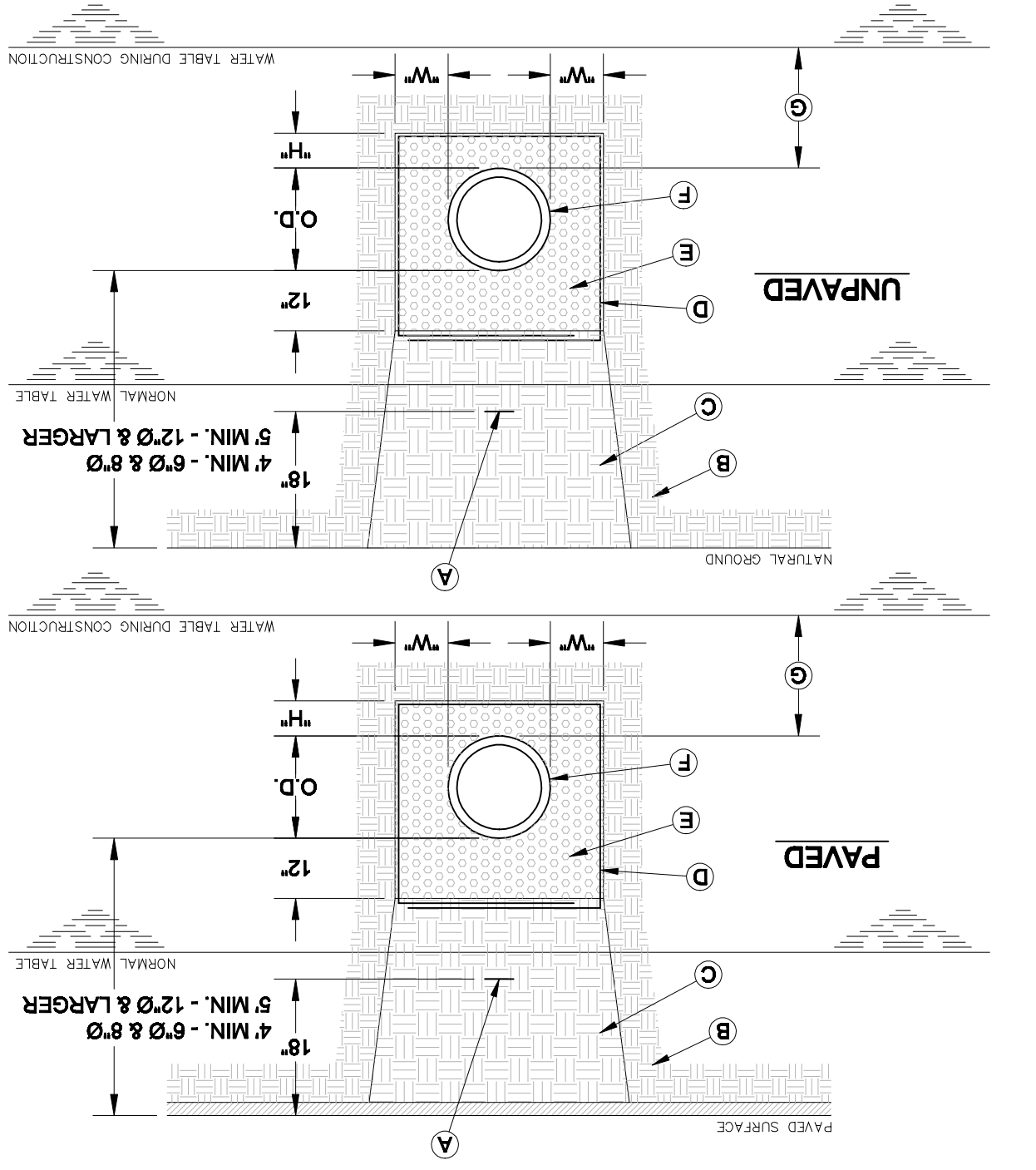


CONSTRUCTION KEY NOTES:
1. MANHOLE CONNECTOR SHALL BE KOR-SEAL OR EQUAL MEETING THE REQUIREMENTS OF ASTM C-623.
2. CONNECTOR SHALL BE FINISHED BY CONTRACTOR.
3. MANHOLE CONNECTOR SHALL BE KOR-SEAL OR EQUAL MEETING THE REQUIREMENTS OF ASTM C-623.
4. CONNECTOR SHALL BE FINISHED BY CONTRACTOR.
5. MANHOLE CONNECTOR SHALL BE KOR-SEAL OR EQUAL MEETING THE REQUIREMENTS OF ASTM C-623.
6. CONNECTOR SHALL BE FINISHED BY CONTRACTOR.
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10. CONNECTOR SHALL BE FINISHED BY CONTRACTOR.
11. MANHOLE CONNECTOR SHALL BE KOR-SEAL OR EQUAL MEETING THE REQUIREMENTS OF ASTM C-623.
12. CONNECTOR SHALL BE FINISHED BY CONTRACTOR.

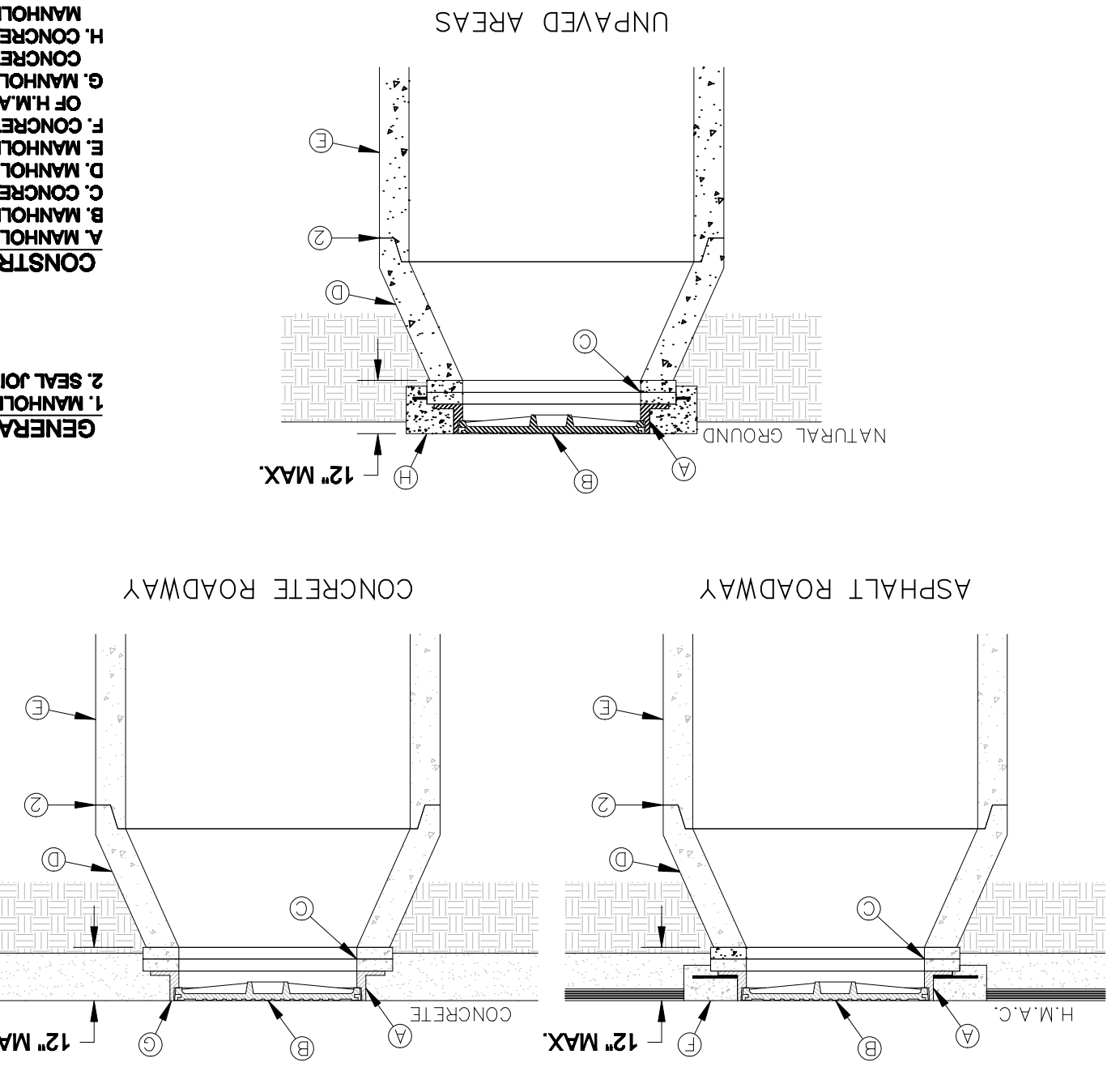


MANHOLE RING	MANHOLE TYPE	WEIGHT
A	ALL TYPES	25 1/2"
B	"MANHOLE TYPE A, A1, A2 & C"	24 1/8"
C	"MANHOLE TYPE A, A1, A2 & C"	23 7/8"
D	"MANHOLE TYPE A, A1, A2 & C"	22 1/2"
E	"MANHOLE TYPE A, A1, A2 & C"	39 3/4"
F	"MANHOLE TYPE A, A1, A2 & C"	205 lbs.

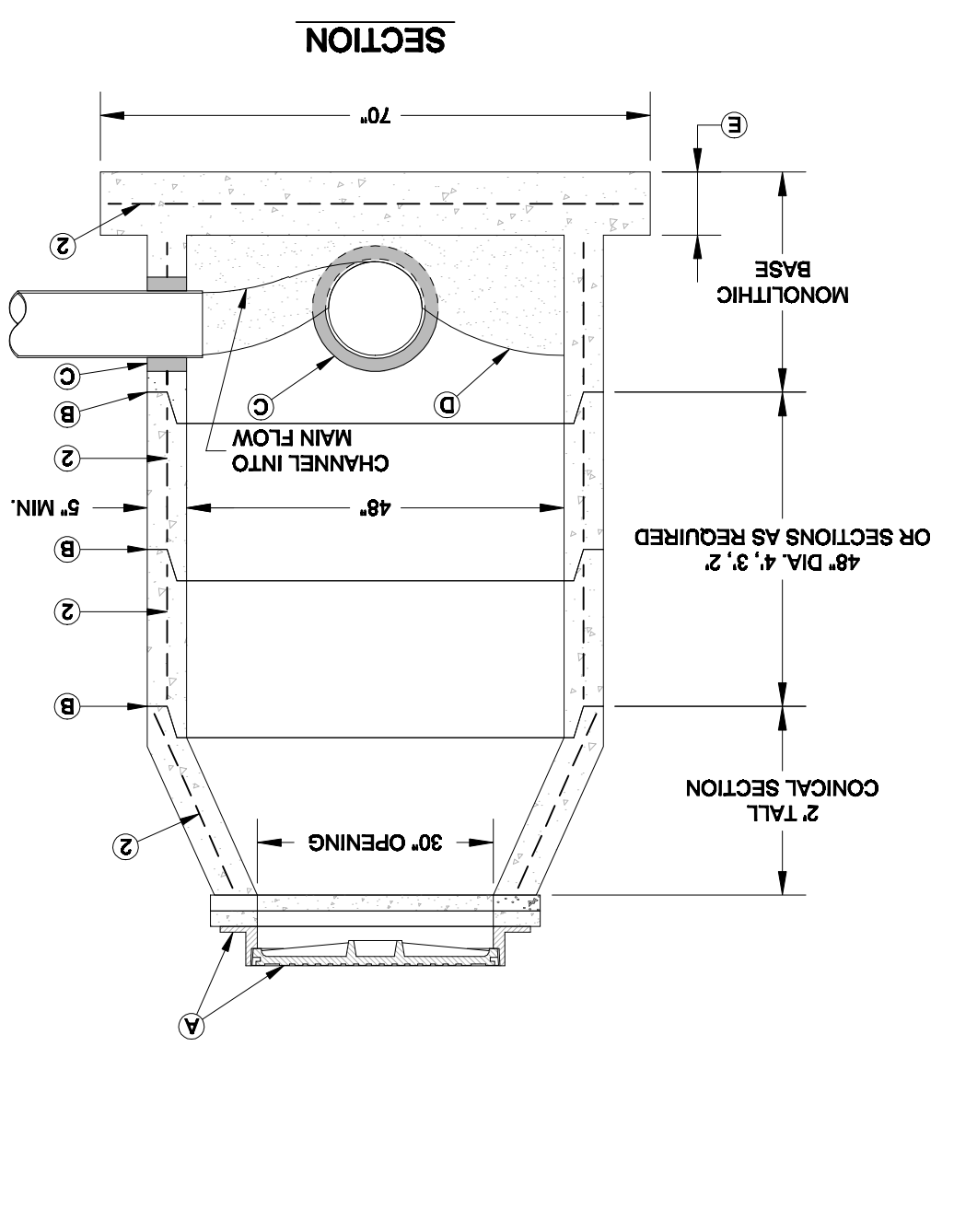
GENERAL NOTES:
1. MATCHING SURFACES MARKED "MF" TO BE FINISHED OR ANY IRREGULARITIES THAT WOULD PREVENT A SMOOTH FIT. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
2. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
3. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
4. AS CAST DIMENSIONS MAY VARY 1/8" PER FOOT (AASHTO M306-07).
5. WEIGHT MAY VARY 5% (AASHTO M306-07).
6. WEIGHT MAY VARY 5% (AASHTO M306-07).
7. WEIGHT MAY VARY 5% (AASHTO M306-07).
8. WEIGHT MAY VARY 5% (AASHTO M306-07).
9. WEIGHT MAY VARY 5% (AASHTO M306-07).
10. WEIGHT MAY VARY 5% (AASHTO M306-07).
11. WEIGHT MAY VARY 5% (AASHTO M306-07).
12. WEIGHT MAY VARY 5% (AASHTO M306-07).



GENERAL NOTES:
1. BEDDING FOR PRESSURE PIPE IN WET CONDITIONS. PROVIDE TRENCH SAFETY SYSTEM FOR TRENCH DEPTHS GREATER THAN 5 FEET.
2. A OR TRENCH SAFETY SYSTEM FOR TRENCH DEPTHS GREATER THAN 5 FEET.
3. A OR TRENCH SAFETY SYSTEM FOR TRENCH DEPTHS GREATER THAN 5 FEET.
4. THE RATE MATERIAL EXCAVATED FROM THE TRENCH IS UNSUITABLE AS BACKFILL MATERIAL. OR THE RATE MATERIAL EXCAVATED FROM THE TRENCH IS UNSUITABLE AS BACKFILL MATERIAL. OR THE RATE MATERIAL EXCAVATED FROM THE TRENCH IS UNSUITABLE AS BACKFILL MATERIAL.
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CONSTRUCTION KEY NOTES:
1. MANHOLE TYPE SHALL BE AS SHOWN ON THE PLANS.
2. SEAL JOINTS PER SPECIFICATIONS.
3. SEAL JOINTS PER SPECIFICATIONS.
4. SEAL JOINTS PER SPECIFICATIONS.
5. SEAL JOINTS PER SPECIFICATIONS.
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11. SEAL JOINTS PER SPECIFICATIONS.
12. SEAL JOINTS PER SPECIFICATIONS.



CONSTRUCTION KEY NOTES:
1. MANHOLE RING AND COVER (SEE DETAILS 377 & 379). SET FRAME AND COVER FLUSH WITH ROADWAY SURFACE OR CHANNEL INTO MAIN FLOW.
2. ALL JOINTS TO BE TONGUE, GROOVE AND SEALED WITH FINISHED GRADE (SEE DETAIL 189).
3. PIPE OPENINGS/KNOCKOUTS AS REQUIRED TO FIT PIPE SIZE AND SHALL HAVE EXPOSED PIPE TO MANHOLE CONNECTORS (COMPRESSION TYPE ASTM-A23).
4. GROUT AS REQUIRED.
5. GROUT AS REQUIRED.
6. GROUT AS REQUIRED.
7. GROUT AS REQUIRED.
8. GROUT AS REQUIRED.
9. GROUT AS REQUIRED.
10. GROUT AS REQUIRED.
11. GROUT AS REQUIRED.
12. GROUT AS REQUIRED.

U-6

SHEET NO. SANITARY SEWER DETAILS

SHEET TITLE: GARDEN VALLEY SUBDIVISION EL PASO COUNTY, TEXAS

PROJECT TITLE: GARDEN VALLEY SUBDIVISION EL PASO COUNTY, TEXAS

SCALE: HORIZONTAL: 1"=40' VERTICAL: 1"=4'

DATE: 6-13-12
DESIGN BY: ESSCO
DRAWN BY: ESSCO
CHECK BY: ESSCO
APP'D BY: ESSCO
JOB NO. 1203

ENGINEERS SEAL: ROBERT DONAHUE, 000113, AUGUST 13, 2012

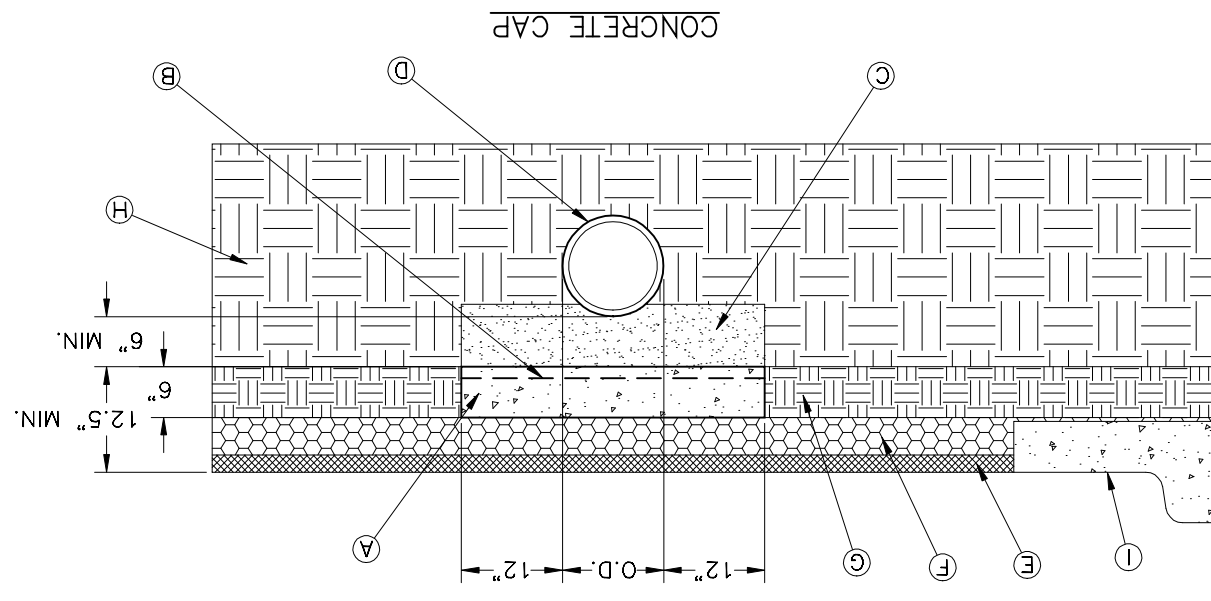
REFERENCES - BENCHMARK

DATE: REVISION: BY:

ESSCO

1000 Westwood Blvd., Suite 1000
El Paso, Texas 79902
Tel: (915) 233-1122
Fax: (915) 233-1123

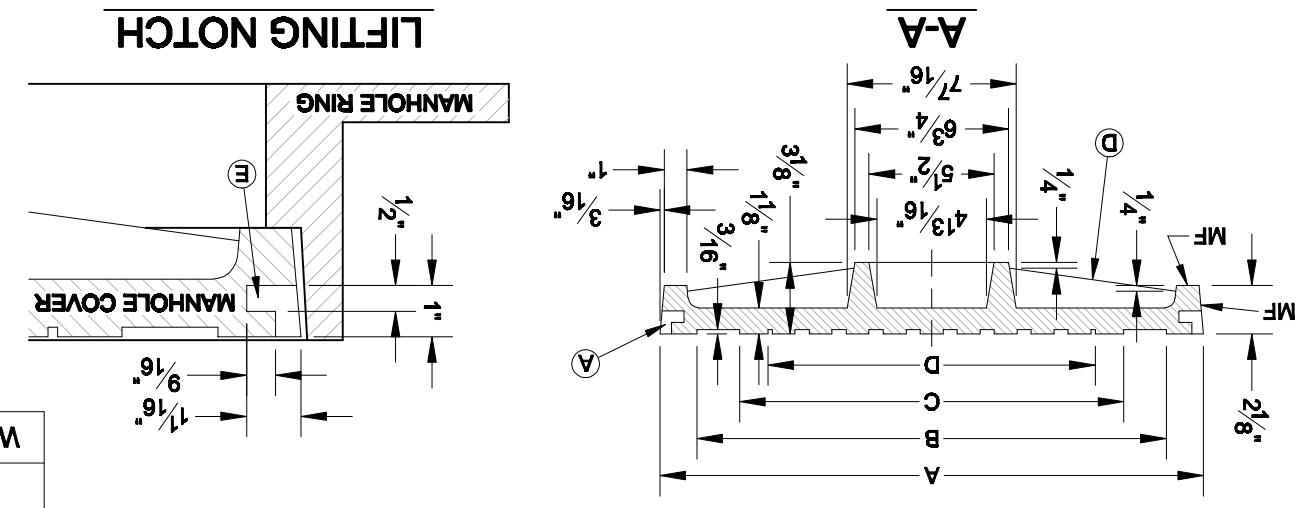
CONCRETE CAP (PAVED CONDITION)



CONSTRUCTION KEY NOTES:
 A. CONCRETE CAP 3000 P.S.I. CLASS "A"
 B. (8#-10 W/M) WIRE MESH
 C. SAND CUSHION
 D. PROPOSED OR EXISTING PIPE
 E. MANHOLE
 F. BASE
 G. SUB-BASE
 H. COMPACTED BACKFILL
 I. CONCRETE CURB

GENERAL NOTES:
 1. DETAIL USED WHEN STANDARD COVER CANNOT BE MET. NEW PAVEMENT ELEVATION, MANHOLE THICKNESS, BASE THICKNESS AND SUB-BASE THICKNESS IS TO BE PROPOSED BY OTHERS.
 2. NEW PAVEMENT ELEVATION, MANHOLE THICKNESS, BASE THICKNESS AND SUB-BASE THICKNESS IS TO BE PROPOSED BY OTHERS.

SEWER MANHOLE COVER



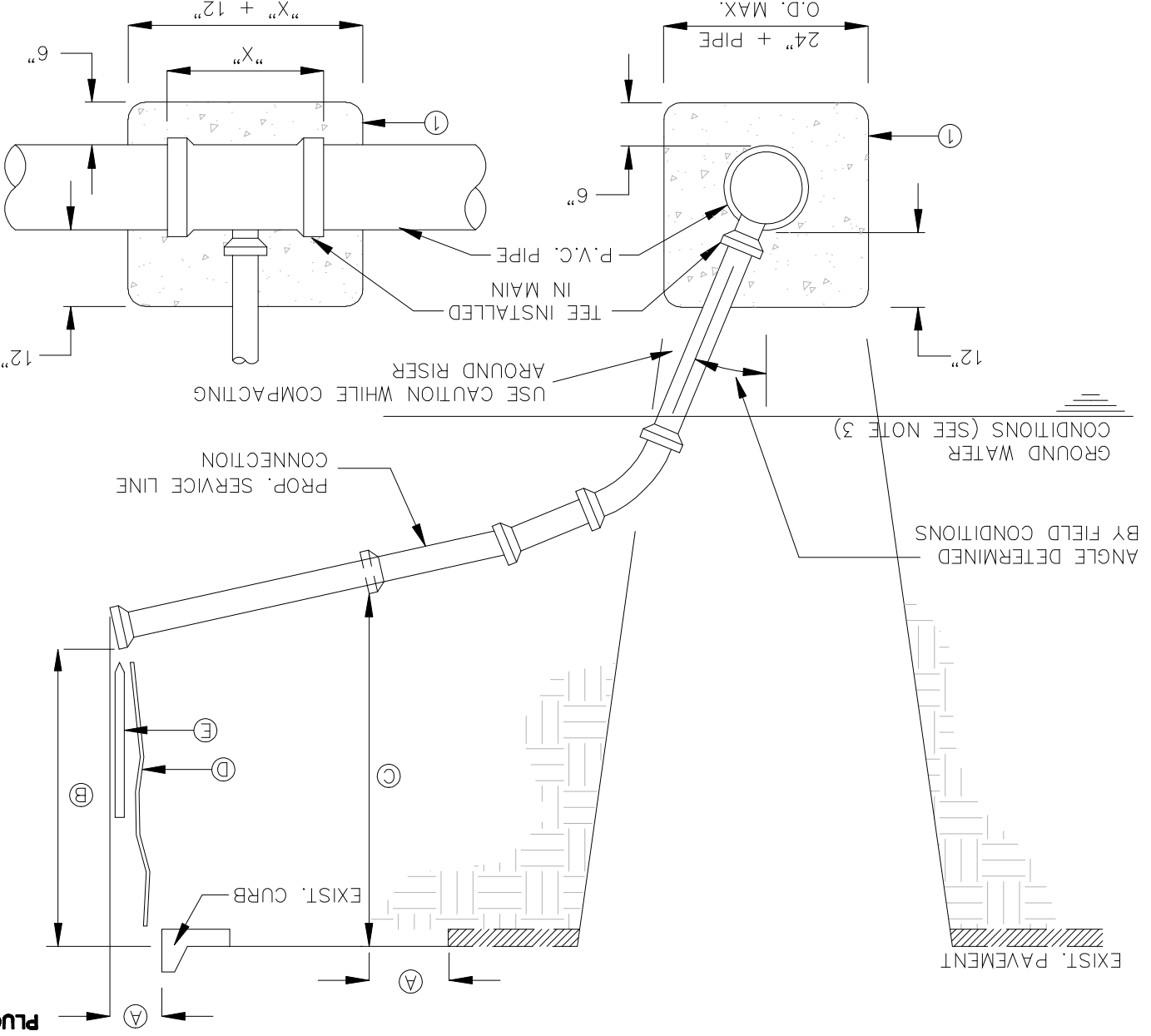
MANHOLE COVER

MANHOLE COVER	MANHOLE TYPE	WEIGHT
A, A1, A2 & C	ALL TYPES	313#
A		205#
B		243#
C		217#
D		143#
		165 lbs.

CONSTRUCTION KEY NOTES:
 1. MATCHING SURFACES MARKED "MP" TO BE FINISHED OR ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
 2. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
 3. CASTING MUST MEET REQUIREMENTS OF AASHTO M306-07.
 4. MAN-CAST DIMENSIONS MAY VARY 1/8" PER FOOT (AASHTO M306-07).
 5. WEIGHT MAY VARY 5%± (AASHTO M306-07).
 E. SLOT.
 D. REINFORCING RIBS.
 C. 1" SQUARES (5/8" TALL) WITH 5/8" SPACE BETWEEN.
 B. 1/2" RADIUS LIFTING RING.
 A. LIFTING NOTCH.

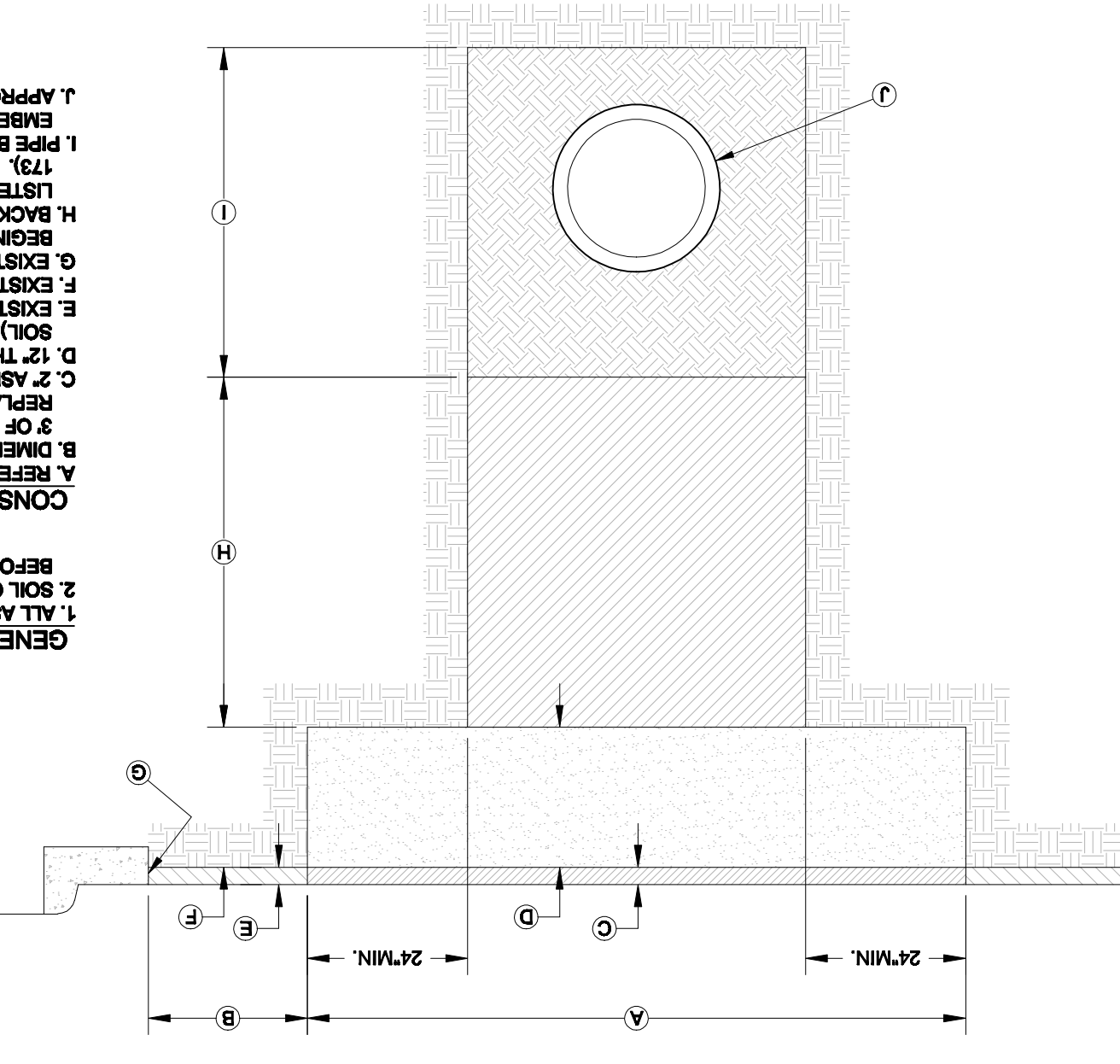
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 3. CASTING MUST MEET REQUIREMENTS OF AASHTO M306-07.
 4. MAN-CAST DIMENSIONS MAY VARY 1/8" PER FOOT (AASHTO M306-07).
 5. WEIGHT MAY VARY 5%± (AASHTO M306-07).
 E. SLOT.
 D. REINFORCING RIBS.
 C. 1" SQUARES (5/8" TALL) WITH 5/8" SPACE BETWEEN.
 B. 1/2" RADIUS LIFTING RING.
 A. LIFTING NOTCH.

SEWER SERVICE RISER AND SERVICE LINE CONNECTION



CONSTRUCTION KEY NOTES:
 1. IN GROUND/WATER CONDITIONS ONLY; P.V.C. ADDLERS OR TEES ARE TO BE ENCASED WITH CLASS B CONCRETE. UNDER CERTAIN CONDITIONS FIELD INVESTIGATIONS WILL BE REQUIRED TO DETERMINE THE ADEQUACY OF RISERS ON LATERAL EXISTING SERVICE AND EXISTING PAVING SHALL BE INSTALLED TO 3/8" MINIMUM TOP OF GROUND OR PAVEMENT, UNLESS CONDITIONS REQUIRE OTHERWISE.
 2. 18" FOR STANDARD SUBDIVISION, 3.0' FOR SUBDIVISIONS WITH ON-SITE PONDING OR FLAT TERRAIN.
 3. WHEN GROUND WATER IS ENCOUNTERED SERVICE RISER SHALL BE EXTENDED ABOVE ANTICIPATED WATER TABLE LEVEL.
 4. PLUGGED END OF PROPOSED SERVICE LINE.
 5. WOODEN STAKE (1"x2"x36") VERTICALLY PLACED AT ANGLE DETERMINED BY FIELD CONDITIONS.
 6. PROPOSED SERVICE LINE CONNECTION.
 7. USE CAUTION WHILE COMPACTING AROUND RISER.
 8. TEE INSTALLED IN MAIN.
 9. P.V.C. PIPE.
 10. 12" O.D. MAX. 24" + PIPE

PAVEMENT REPLACEMENT



CONSTRUCTION KEY NOTES:
 1. ALL ASPHALT CUTS MUST BE SAW CUT.
 2. SOIL CEMENT SLURRY SHALL BE ALLOWED TO CURE BEFORE PAVING OR OPENING TO ALL TRAFFIC.
 3. REFER TO SPEC'S FOR LIMIT OF PAVING WIDTH.
 4. DIMENSION VARIES, WHERE CUTTER FACE, ETC. IS WITHIN 3" OF SAW CUT EDGE, CONTRACTOR SHALL REMOVE & REPLACE EXISTING HMA/C IN THIS AREA.
 5. EXISTING HMA/C THICKNESS MAY VARY, EXISTING HMA/C COURSE THICKNESS MAY VARY, BEGINNING OF SHOULDER.
 6. EXISTING CUTTER FACE EDGE OF PAVEMENT OR LISTED IN EMBEDMENT DETAILS (DETAIL 171 THRU DETAIL 179).
 7. BACKFILL DEPTH VARIES, REFER TO REQUIREMENTS H. BACKFILL DEPTH VARIES, REFER TO REQUIREMENTS I. PIPE BEDDING AS SPECIFIED, REFER TO APPROPRIATE EMBEDMENT DETAIL (DETAIL 171 THRU DETAIL 179).
 8. APPROVED PIPE.
 9. J. APPROVED PIPE.

SCALE:
 HORIZONTAL: 1" = 10'
 VERTICAL: 1" = 4'
 CONTOUR INTERVAL: 4'-18"±
 DATE: 8-18-12
 DESIGN BY: ESSCO
 DRAWN BY: ESSCO
 CHECK BY: ESSCO
 APP'D BY: ESSCO
 JOB NO. 1203

ENGINEER'S SEAL
 THIS DOCUMENT IS RESERVED FOR THE PURPOSE OF AN EXISTING RECORD ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION PURPOSES.
 ROBERT GONZALEZ
 10/11/2012