PLANS FOR THE CONSTRUCTION OF

PARK AND STREETSCAPE IMPROVEMENTS

VITRUVIAN PARK

FOR

VITRUVIAN PARK PUBLIC INFRASTRUCTURE-PHASE 1C

TOWN OF ADDISON, TEXAS

PUBLIC WORKS # 2009-04

Addison!®

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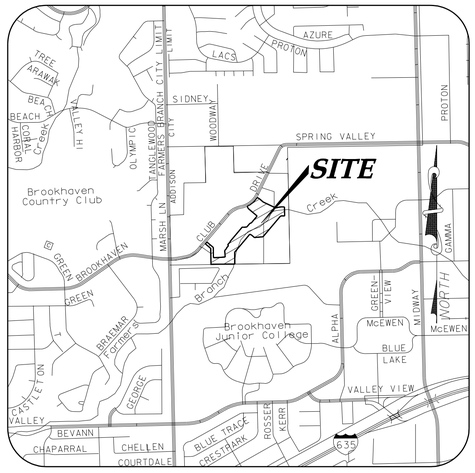

VICINITY MAP

NOT TO SCALE
(MAPSCO GRID 13 & 14)

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APRIL 26, 2010

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ICON PROJECT #5029-01

RECORD DRAWINGS 06/18/12

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PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

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NO.	REVISION	BY	DATE

Addison! TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

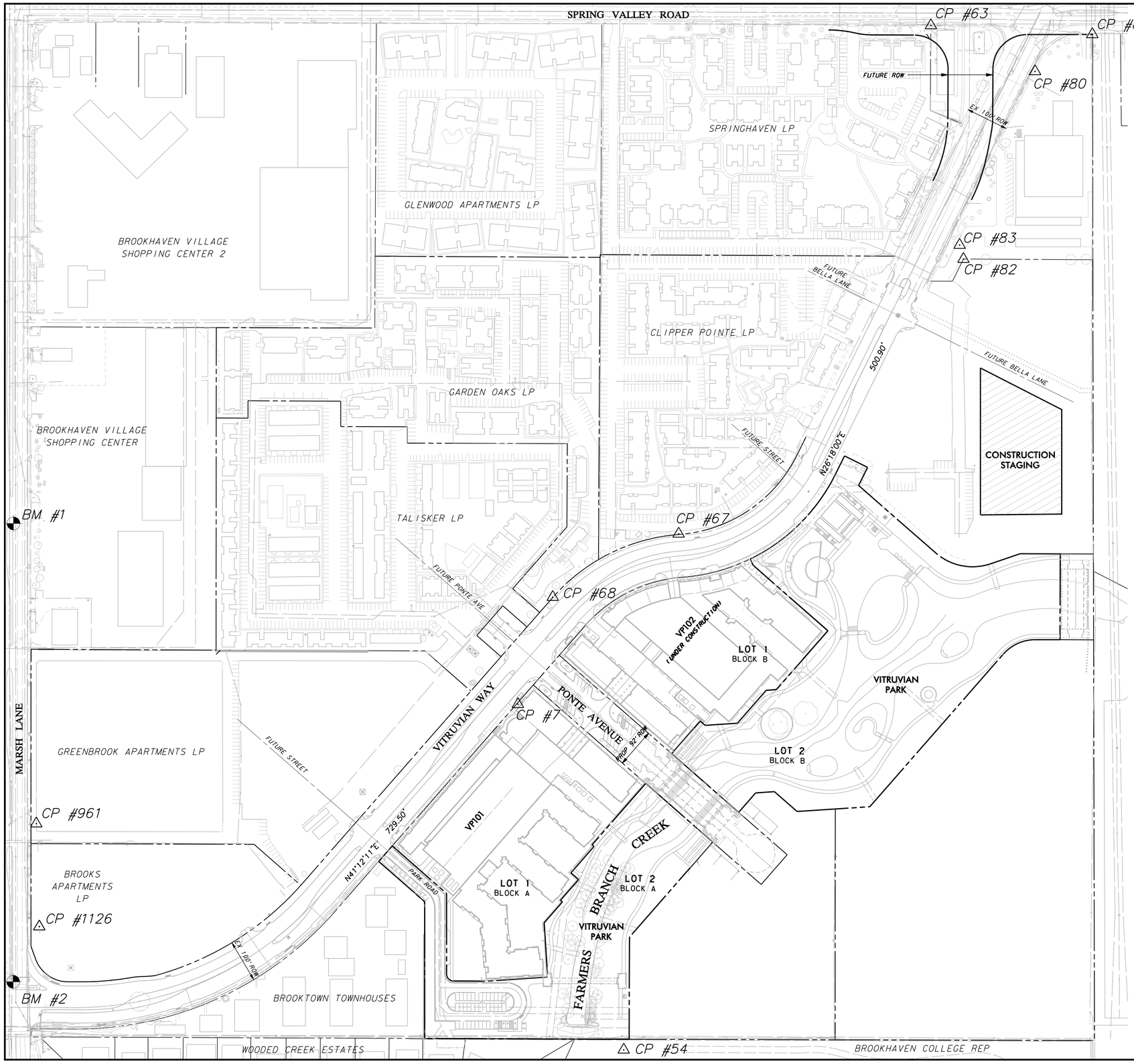
INDEX OF DRAWINGS

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	ID

RECORD DRAWINGS

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK



CP #7	CP #67	CP #81	CP #961
CPIR 5/8"YC2509	IRF 1/2"	IRF 1/2" HZ	TP/6D SET
N 8354.44	N 8751.47	N 9915.07	N 8076.39
E 11036.81	E 11411.24	E 12375.13	E 9914.62
ELEV 564.75	ELEV 570.89	ELEV 584.42	ELEV

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CPIR 5/8"YC # 2509J	IRF 1/2" BENT	IRF 1/2"	TP/PK SET
N 7549.40	N 8604.13	N 9391.52	N 7836.48
E 11283.24	E 11117.93	E 12074.82	E 9921.51
ELEV 549.86	ELEV 569.99	ELEV 573.99	ELEV 547.9

CP #63	CP #80	CP #83
IRF 3/8"	IRF 1/2"	CPPK J
N 9935.76	N 9828.79	N 8424.30
E 11998.95	E 12241.73	E 12065.87
ELEV 583.02	ELEV 582.65	ELEV 573.53

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

NORTH
0 60 120 180 240
GRAPHIC SCALE IN FEET
SCALE: 1"=120'

Addison TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

OVERALL PLAN & PROJECT CONTROL

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PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C001

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

GENERAL CONSTRUCTION NOTES

1. STANDARDS AND SPECIFICATIONS: ALL MATERIALS, CONSTRUCTION METHODS, WORKMANSHIP, EQUIPMENT, SERVICES AND TESTING FOR ALL PUBLIC IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' ORDINANCES, REGULATIONS, REQUIREMENTS, STATUTES, SPECIFICATIONS AND DETAILS, LATEST PRINTING AND AMENDMENTS THERETO. THE GOVERNING AUTHORITIES' PUBLIC WORKS AND WATER DEPARTMENT REQUIREMENTS, PLUMBING CODES, AND FIRE DEPARTMENT REGULATIONS SHALL TAKE PRECEDENT FOR ALL PUBLIC IMPROVEMENTS WHERE APPLICABLE. ALL OTHER PUBLIC CONSTRUCTION, NOT REGULATED BY THE GOVERNING AUTHORITY, SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, NORTH CENTRAL TEXAS – NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, LATEST PRINTING AND AMENDMENTS THERETO, EXCEPT AS MODIFIED OR AMENDED BY THE PROJECT CONTRACT DOCUMENTS.

2. EXAMINATION OF SITE: THE CONTRACTOR ACKNOWLEDGES THAT HE HAS INVESTIGATED AND SATISFIED HIMSELF AS TO THE CONDITIONS AFFECTING THE WORK, INCLUDING BUT NOT RESTRICTED TO THOSE BEARING UPON TRANSPORTATION, DISPOSAL, HANDLING AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRIC POWER, ROADS AND UNCERTAINTIES OF WEATHER, OR SIMILAR PHYSICAL CONDITIONS AT THE SITE, CONDITIONS OF THE GROUND, THE CHARACTER OF EQUIPMENT AND FACILITIES NEEDED PRELIMINARY TO AND DURING PERFORMANCE OF THE WORK. THE CONTRACTOR ACKNOWLEDGES THAT HE HAS INSPECTED THE SITE OF THE WORK AND IS FAMILIAR WITH THE SOIL CONDITIONS TO BE ENCOUNTERED. ANY FAILURE BY THE CONTRACTOR TO ACQUAINT HIMSELF WITH THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM FROM RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK. THE TOWN OF ADDISON ASSUMES NO RESPONSIBILITY FOR ANY CONCLUSIONS OR INTERPRETATIONS MADE BY THE CONTRACTOR ON THE BASIS OF THE INFORMATION MADE AVAILABLE BY THE TOWN OF ADDISON.

3. SUBSURFACE INVESTIGATION: SUBSURFACE EXPLORATION TO ASCERTAIN THE NATURE OF SOILS, INCLUDING THE AMOUNT OF ROCK, IF ANY, IS THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SUCH SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO DETERMINE THE NATURE OF THE MATERIAL TO BE ENCOUNTERED. SOME SUBSURFACE EXPLORATION HAS BEEN PERFORMED BY THE GEOTECHNICAL ENGINEER OF RECORD ON THE PROJECT AND IS PROVIDED FOR INFORMATIONAL PURPOSES. THE TOWN OF ADDISON AND ENGINEER DISCLAIM ANY RESPONSIBILITY FOR THE ACCURACY, TRUE LOCATION AND EXTENT OF THE SOILS INFORMATION THAT HAS BEEN PREPARED BY OTHERS. THEY FURTHER DISCLAIM RESPONSIBILITY FOR INTERPRETATION OF THAT DATA BY THE CONTRACTOR, AS IN PROJECTING SOIL BEARING VALUES, ROCK PROFILES, SOILS STABILITY AND THE PRESENCE, LEVEL AND EXTENT OF UNDERGROUND WATER.

4. TOPOGRAPHIC SURVEY: TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THE PLANS IS PROVIDED FOR INFORMATIONAL PURPOSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE INFORMATION SHOWN IS CORRECT, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY ERRORS, DISCREPANCIES OR OMISSIONS TO THE SURVEY INFORMATION PROVIDED. ANY COSTS INCURRED AS THE RESULT OF NOT CONFIRMING THE ACTUAL SURVEY SHALL BE BORNE BY THE CONTRACTOR.

5. COMPLIANCE WITH LAWS: THE CONTRACTOR SHALL FULLY COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, INCLUDING ALL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS CONTRACT AND THE WORK TO BE DONE THEREUNDER, WHICH EXIST OR MAY BE ENACTED LATER BY GOVERNMENTAL BODIES HAVING JURISDICTION OR AUTHORITY FOR SUCH ENACTMENT. ALL WORK REQUIRED UNDER THIS CONTRACT SHALL COMPLY WITH ALL REQUIREMENTS OF LAW, REGULATION, PERMIT OR LICENSE. IF THE CONTRACTOR FINDS THAT THERE IS A VARIANCE, HE SHALL IMMEDIATELY REPORT THIS TO THE TOWN OF ADDISON FOR RESOLUTION.

6. PUBLIC CONVENIENCE AND SAFETY: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

MATERIALS STORED ON THE WORK SITE SHALL BE SO PLACED, AND THE WORK SHALL AT ALL TIMES BE SO CONDUCTED, AS TO CAUSE NO GREATER OBSTRUCTION TO THE TRAVELING PUBLIC THAN IS CONSIDERED ACCEPTABLE BY THE GOVERNING AUTHORITIES. THE MATERIALS EXCAVATED SHALL BE PLACED SO AS NOT TO ENDANGER THE WORK OR PREVENT FREE ACCESS TO ALL FIRE HYDRANTS, WATER VALVES, GAS VALVES, MANHOLES, AND FIRE ALARM OR POLICE CALL BOXES IN THE VICINITY.

THE TOWN OF ADDISON RESERVES THE RIGHT TO REMEDY ANY NEGLECT ON THE PART OF THE CONTRACTOR WITH REGARDS TO THE PUBLIC CONVENIENCE AND SAFETY WHICH MAY COME TO THE TOWN OF ADDISON'S ATTENTION, AFTER 24 HOURS NOTICE IN WRITING TO THE CONTRACTOR, SAVE IN CASES OF EMERGENCY, WHEN THE TOWN OF ADDISON SHALL HAVE THE RIGHT TO REMEDY ANY NEGLECT WITHOUT NOTICE; AND, IN EITHER CASE, THE COST OF SUCH WORK DONE BY THE TOWN OF ADDISON SHALL BE DEDUCTED FROM THE MONIES DUE OR TO BECOME DUE THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ADDISON AND THE GOVERNING AUTHORITIES WHEN ANY STREET IS TO BE CLOSED OR OBSTRUCTED; SUCH NOTICE SHALL IN THE CASE OF MAJOR THOROUGHFARES OR STREETS UPON WHICH TRANSIT BY THE GOVERNING AUTHORITIES, KEEP ANY STREET OR STREETS IN CONDITION FOR UNOBSTRUCTED USE BY EMERGENCY SERVICES. WHERE THE CONTRACTOR IS REQUIRED TO CONSTRUCT TEMPORARY BRIDGES OR TO MAKE OTHER ARRANGEMENTS FOR CROSSING OVER DITCHES OR STREAMS, HIS RESPONSIBILITY FOR ACCIDENTS SHALL INCLUDE THE ROADWAY APPROACHES AS WELL AS THE STRUCTURES OF SUCH CROSSINGS.

7. STORM WATER POLLUTION PREVENTION PLAN (SWP3): THE CONTRACTOR SHALL COMPLY WITH THE CONDITIONS OF THE SWP3 WHILE CONDUCTING HIS ACTIVITIES ON THE PROJECT. IN ADDITION TO CONSTRUCTING THOSE ITEMS INDICATED ON THE PLAN SHEETS, COMPLIANCE WITH THE SWP3 INCLUDES CONFORMANCE TO CERTAIN PRACTICES AND PROCEDURES (IDENTIFIED IN THE SWP3) DURING PROJECT CONSTRUCTION.

8. PERMITS AND LICENSES: THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND LICENSES NECESSARY FOR THE EXECUTION OF THE WORK AND SHALL FULLY COMPLY WITH ALL THEIR TERMS AND CONDITIONS. WHENEVER THE WORK UNDER THIS CONTRACT REQUIRES THE OBTAINING OF PERMITS FROM THE GOVERNING AUTHORITIES, THE CONTRACTOR SHALL FURNISH DUPLICATE COPIES OF SUCH PERMITS TO THE ENGINEER BEFORE THE WORK COVERED THEREBY IS STARTED. NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS ARE OBTAINED.

9. BONDS: PERFORMANCE, PAYMENT AND MAINTENANCE BONDS WILL BE REQUIRED FROM THE CONTRACTOR FOR ALL WORK CONSIDERED TO BE "PUBLIC" IMPROVEMENTS. BONDS SHALL BE IN THE FORM AND IN THE AMOUNTS AS REQUIRED BY THE GOVERNING AUTHORITIES.

10. VENDOR'S CERTIFICATION: ALL MATERIALS USED IN CONSTRUCTION SHALL HAVE A VENDOR'S CERTIFIED TEST REPORT. TEST REPORTS SHALL BE DELIVERED TO THE ENGINEER BEFORE PERMISSION WILL BE GRANTED FOR USE OF THE MATERIAL. ALL VENDOR'S TEST REPORTS SHALL BE SUBJECT TO REVIEW BY THE ENGINEER, AND SHALL BE SUBJECT TO VERIFICATION BY TESTING OF SAMPLES OF MATERIALS AS RECEIVED FOR USE ON THE PROJECT. IN THE EVENT ADDITIONAL TESTS ARE REQUIRED, THEY SHALL BE PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY AND SHALL BE PAID FOR BY THE CONTRACTOR.

11. TESTING: THE TESTING AND CONTROL OF ALL MATERIALS USED IN THE WORK SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY, EMPLOYED AND PAID DIRECTLY BY THE TOWN OF ADDISON. IN THE EVENT THE RESULTS OF INITIAL TESTING DO NOT COMPLY WITH THE PLANS AND SPECIFICATIONS, SUBSEQUENT TESTS NECESSARY TO DETERMINE THE ACCEPTABILITY OF MATERIALS OR CONSTRUCTION SHALL BE FURNISHED AND PAID BY THE CONTRACTOR AS DIRECTED BY THE TOWN OF ADDISON. PAYMENT WILL BE MADE BY DEDUCTION FROM PAYMENT DUE THE CONTRACTOR.

12. INSPECTION: INSPECTION OF THE PROPOSED CONSTRUCTION WILL BE PROVIDED BY AND PAID FOR BY THE TOWN OF ADDISON. THE CONTRACTOR SHALL PROVIDE ASSISTANCE BY PROVIDING EXCAVATION, TRENCH SAFETY, OR OTHER WORK NECESSARY TO FACILITATE INSPECTION ACTIVITIES, AND SHALL GIVE SUFFICIENT NOTICE WELL IN ADVANCE OF PENDING CONSTRUCTION ACTIVITIES TO THE TOWN OF ADDISON FOR SCHEDULING OF INSPECTION SERVICES.

13. SHOP DRAWINGS: THE CONTRACTOR SHALL PROVIDE, REVIEW, APPROVE AND SUBMIT ALL SHOP DRAWINGS, PRODUCT DATA AND SAMPLES REQUIRED BY THE GOVERNING AUTHORITIES AND THE PROJECT CONTRACT DOCUMENTS IN ACCORDANCE WITH ITEM 1.28 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, NORTH CENTRAL TEXAS – NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS.

14. SURVEYING: ALL SURVEYING REQUIRED FOR CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL EMPLOY A REGISTERED PROFESSIONAL LAND SURVEYOR TO PREFORM ALL SURVEY, LAYOUT AND MEASUREMENT WORK NECESSARY FOR THE COMPLETION OF THE PROJECT.

15. PROTECTION OF PROPERTY CORNERS AND BENCHMARKS: THE CONTRACTOR SHALL PROTECT ALL PROPERTY CORNER MARKERS AND BENCHMARKS, AND WHEN ANY SUCH MARKERS OR MONUMENTS ARE IN DANGER OF BEING DISTURBED, THEY SHALL BE PROPERLY REFERENCED AND IF DISTURBED SHALL BE RESET BY A REGISTERED PUBLIC SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

16. EXISTING STRUCTURES: THE PLANS SHOW THE LOCATION OF ALL KNOWN SURFACE AND SUBSURFACE STRUCTURES, HOWEVER, THE TOWN OF ADDISON AND ENGINEER ASSUME NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES ON THE PLANS, OR TO SHOW THEM IN THEIR EXACT LOCATION. SUCH FAILURE SHALL NOT BE CONSIDERED SUFFICIENT BASIS FOR CLAIMS FOR ADDITIONAL COMPENSATION FOR EXTRA WORK OR FOR INCREASING THE PAY QUANTITIES IN ANY MANNER WHATSOEVER, UNLESS THE OBSTRUCTION ENCOUNTERED IS SUCH AS TO REQUIRE CHANGES IN THE LINES OR GRADES, OR REQUIRE THE CONSTRUCTION OF SPECIAL WORK, FOR WHICH PROVISIONS ARE NOT MADE IN THE PLANS.

17. PROTECTION OF EXISTING UTILITIES: AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT", TEXAS ONE CALL SYSTEM MUST BE CONTACTED (800-245-4545) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

THE LOCATION AND DIMENSIONS SHOWN ON THE PLANS RELATIVE TO EXISTING UTILITIES ARE BASED ON THE BEST RECORDS AND/OR FIELD INFORMATION AVAILABLE AND ARE NOT GUARANTEED BY THE TOWN OF ADDISON OR ENGINEER TO BE ACCURATE AS TO LOCATION AND DEPTH. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF HIS ACTIVITIES IN ORDER THAT HE MAY NEGOTIATE SUCH LOCAL ADJUSTMENTS AS NECESSARY IN THE CONSTRUCTION PROCESS TO PROVIDE ADEQUATE CLEARANCES.

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL EXISTING UTILITIES, SERVICES AND STRUCTURES ENCOUNTERED, WHETHER OR NOT THEY ARE INDICATED ON THE PLANS. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT HIS EXPENSE. TO AVOID UNNECESSARY INTERFERENCE'S OR DELAYS, THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVALS, REPLACEMENTS AND CONSTRUCTION WITH THE APPROPRIATE GOVERNING AUTHORITIES, THEN REQUEST WRITTEN AUTHORIZATION FROM THE ENGINEER. THE TOWN OF ADDISON WILL NOT BE LIABLE FOR DAMAGES DUE TO DELAY AS A RESULT OF THE ABOVE.

18. DAMAGE TO EXISTING FACILITIES: ALL UTILITIES, PAVEMENT, SIDEWALKS, WALLS, FENCES, ETC. NOT DESIGNATED TO BE REMOVED BUT THAT ARE DAMAGED DURING CONSTRUCTION ACTIVITIES SHALL BE REPLACED TO A CONDITION AS GOOD AS OR BETTER THAN THE CONDITIONS PRIOR TO STARTING THE WORK, SOLELY AT THE EXPENSE OF THE CONTRACTOR.

19. FIRE AND LIFE SAFETY SYSTEMS: CONTRACTOR SHALL NOT REMOVE, DISABLE OR DISRUPT EXISTING FIRE OR LIFE SAFETY SYSTEMS WITHOUT WRITTEN PERMISSION FROM THE GOVERNING AUTHORITY.

20. TRENCH SAFETY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND MAINTAIN A VIABLE TRENCH SAFETY SYSTEM AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS DIRECTED TO BECOME KNOWLEDGEABLE AND FAMILIAR WITH THE STANDARDS AS SET BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE STATE OF TEXAS LAW CONCERNING TRENCHING AND SHORING. THE CONTRACTOR SHALL PROVIDE TRENCH SAFETY SYSTEM PLANS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF TEXAS, FOR THE IMPLEMENTATION OF SAFETY CONTROL MEASURES, MEETING THE REQUIREMENTS OF THE GOVERNING AUTHORITIES, THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.

21. SAFETY RESTRICTIONS – WORK NEAR HIGH VOLTAGE LINES: THE FOLLOWING PROCEDURES WILL BE FOLLOWED REGARDING THE SUBJECT ITEM ON THIS CONTRACT:

A. A WARNING SIGN NOT LESS THAN FIVE INCHES BY SEVEN INCHES PAINTED YELLOW WITH BLACK LETTERS THAT ARE LEGIBLE AT 12 FEET SHALL BE PLACED INSIDE AND OUTSIDE VEHICLES SUCH AS CRANES, DERRICKS, POWER SHOVELS, DRILLING RIGS, PILE DRIVER, HOISTING EQUIPMENT OR SIMILAR APPARATUS. THE WARNING SIGN SHALL READ AS FOLLOWS: "WARNING – UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

B. EQUIPMENT THAT MAY BE OPERATED WITHIN TEN FEET OF HIGH VOLTAGE LINES SHALL HAVE AN INSULATING CAGE-TYPE OF GUARD ABOUT THE BOOM OR ARM, EXCEPT BACKHOES OR DIPPERS, AND INSULATOR LINKS ON THE LIFT HOOK CONNECTIONS.

C. WHEN NECESSARY TO WORK WITHIN SIX FEET OF HIGH VOLTAGE ELECTRIC LINES, NOTIFY THE POWER COMPANY WHO WILL ERECT TEMPORARY MECHANICAL BARRIERS, DE-ENERGIZE THE LINE OR RAISE OR LOWER THE LINE. THE WORK DONE BY THE POWER COMPANY SHALL BE AT THE EXPENSE OF THE CONTRACTOR. THE NOTIFYING DEPARTMENT SHALL MAINTAIN AN ACCURATE LOG OF ALL SUCH CALLS TO THE POWER COMPANY AND SHALL RECORD ACTION TAKEN IN EACH CASE.

D. THE CONTRACTOR IS REQUIRED TO MAKE ARRANGEMENTS WITH THE POWER COMPANY FOR THE TEMPORARY RELOCATION OR RAISING OF HIGH VOLTAGE LINES AT THE CONTRACTOR'S SOLE COST AND EXPENSE.

E. NO PERSON SHALL WORK WITHIN SIX FEET OF A HIGH VOLTAGE LINE WITHOUT PROTECTION HAVING BEEN TAKEN AS OUTLINED IN PARAGRAPH C. ABOVE.

22. TRAFFIC CONTROL: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DEVELOP AND SUBMIT FOR APPROVAL BY THE GOVERNING AUTHORITIES, A TRAFFIC CONTROL PLAN, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS, OUTLINING TRAFFIC MANAGEMENT PROCEDURES TO BE PROVIDED DURING CONSTRUCTION. TRAFFIC CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

A. CONSTRUCTION OF SIGNING AND BARRICADES SHALL CONFORM WITH THE "2003 TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS CURRENTLY AMENDED, TEXAS DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION.

B. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH BARRICADES, FLARES, FLAGMEN, ETC., FOR THE PROTECTION OF THE PUBLIC, EMPLOYEES AND THE WORK.

C. THE CONTRACTOR SHALL PERFORM HIS WORK IN SUCH A MANNER AS TO CREATE A MINIMUM OF INTERRUPTION TO TRAFFIC ALONG ADJACENT ROADWAYS. TWO WAY TRAFFIC MUST BE MAINTAINED ON ALL ROADWAYS AT ALL TIMES THROUGHOUT CONSTRUCTION UNLESS WRITTEN PERMISSION IS GRANTED BY THE GOVERNING AUTHORITIES.

D. ALL SIGNAGE, MARKINGS, LIGHTING, BARRICADES, FLAGMEN AND OTHER DEVICES AND PERSONNEL REQUIRED FOR TRAFFIC CONTROL DURING CONSTRUCTION OF THE PROJECT WILL BE INCLUDED IN THE CONTRACT AMOUNT.

E. ALL TRAFFIC CONTROL DEVICES USED DURING NIGHTTIME SHALL BE REFLECTORIZED, ILLUMINATED FROM WITHIN OR EXTERNALLY ILLUMINATED.

F. THE CONTRACTOR SHALL NOT REMOVE ANY REGULATORY SIGN, INSTRUCTIONAL SIGN, WARNING SIGN, STREET NAME SIGN OR ANY SIGNAL, WHICH CURRENTLY EXISTS, WITHOUT THE CONSENT OF THE GOVERNING AUTHORITIES.

G. THE CONTRACTOR SHALL MAINTAIN AND REPLACE WHERE NECESSARY ALL SIGNS, LIGHTS, MARKINGS AND TEMPORARY PAVEMENT THROUGHOUT THE CONSTRUCTION PERIOD.

H. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL MEASURES AT THE END OF CONSTRUCTION AND RESTORE UNIMPROVED PAVEMENT AND OTHER DISTURBED AREAS TO THEIR ORIGINAL CONDITION.

23. ACCESS TO ADJACENT PROPERTIES: ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE GOVERNING AUTHORITIES.

24. ACCESS ROUTES, STAGING AREAS AND STORAGE AREAS: ALL PRIVATE HAUL ROADS AND ACCESS ROUTES AND THE LOCATION OF ALL STAGING AREAS AND STORAGE AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE TOWN OF ADDISON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL ROADS AND OTHER FACILITIES USED DURING CONSTRUCTION. UPON COMPLETION OF THE PROJECT, ALL HAUL ROADS, ACCESS ROADS, STAGING AREAS AND STORAGE AREAS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT AT THE TIME THE CONTRACTOR COMMENCES WORK ON THE PROJECT.

25. PARKING OF CONSTRUCTION EQUIPMENT: AT NIGHT AND DURING ALL OTHER PERIODS OF TIME WHEN EQUIPMENT IS NOT BEING ACTIVELY USED FOR THE CONSTRUCTION WORK, THE CONTRACTOR SHALL PARK THE EQUIPMENT AT LOCATIONS, WHICH ARE APPROVED BY THE TOWN OF ADDISON. DURING THE CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL COMPLY WITH THE PRESENT ZONING REQUIREMENTS OF THE GOVERNING AUTHORITIES IN THE USE OF VACANT PROPERTY FOR STORAGE PURPOSES. THE CONTRACTOR SHALL ALSO PROVIDE ADEQUATE BARRICADES, MARKERS AND LIGHTS TO PROTECT THE TOWN OF ADDISON, THE GOVERNING AUTHORITIES, THE PUBLIC AND THE OTHER WORK. ALL BARRICADES, LIGHTS, AND MARKERS MUST MEET THE REQUIREMENTS OF THE GOVERNING AUTHORITIES' REGULATIONS.

26. WATER FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR PURCHASING WATER FROM THE GOVERNING AUTHORITY FOR HIS USE ON THE PROJECT SITE. COSTS ASSOCIATED WITH THIS SERVICE SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

27. TEMPORARY ELECTRIC AND COMMUNICATIONS FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR INSTALLATION AND PURCHASING OF TEMPORARY ELECTRIC AND COMMUNICATIONS SERVICES FROM THE GOVERNING AUTHORITIES FOR HIS USE ON THE PROJECT SITE. COSTS ASSOCIATED WITH THESE SERVICES SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

28. FENCES: ALL FENCES ENCOUNTERED AND REMOVED DURING CONSTRUCTION, EXCEPT THOSE DESIGNATED TO BE REMOVED OR RELOCATED, SHALL BE RESTORED TO THE ORIGINAL OR BETTER THAN CONDITION UPON COMPLETION OF THE PROJECT. WHERE WIRE FENCING, EITHER WIRE MESH OR BARBED WIRE, IS TO BE CROSSED, THE CONTRACTOR SHALL SET CROSS-BRACED POSTS ON EITHER SIDE OF THE CROSSING. TEMPORARY FENCING SHALL BE ERECTED IN PLACE OF THE FENCING REMOVED WHENEVER THE WORK IS NOT IN PROGRESS, AND WHEN THE SITE IS VACATED OVERNIGHT AND/OR AT ALL TIMES TO PREVENT PERSONS AND/OR LIVESTOCK FROM ENTERING THE CONSTRUCTION AREA. THE COST OF FENCE REMOVAL, TEMPORARY CLOSURES AND REPLACEMENT SHALL BE INCLUDED IN THE CONTRACT.

29. DRAINAGE CHANNELS: WHERE EXISTING DRAINAGE CHANNELS ARE TEMPORARILY DISTURBED OR BLOCKED DURING CONSTRUCTION, IT SHALL BE RESTORED TO THE ORIGINAL CONDITION, GRADE AND CROSS SECTION AFTER CONSTRUCTION IS COMPLETED.

30. COORDINATION WITH OTHERS: IN THE EVENT THAT OTHER CONTRACTORS ARE DOING WORK IN THE SAME AREA SIMULTANEOUSLY WITH THE PROJECT, THE CONTRACTOR SHALL COORDINATE HIS PROPOSED CONSTRUCTION WITH THAT OF THE OTHER CONTRACTORS.

31. CONDITION OF SITE DURING CONSTRUCTION: DURING CONSTRUCTION OF THE WORK, THE CONTRACTOR SHALL, AT ALL TIMES, KEEP THE SITE OF THE WORK AND ADJACENT PREMISES AS FREE FROM MATERIAL, DEBRIS AND RUBBISH AS IS PRACTICABLE AND SHALL REMOVE SAME FROM ANY PORTION OF THE SITE IF, IN THE OPINION OF THE TOWN OF ADDISON, SUCH MATERIAL, DEBRIS OR RUBBISH CONSTITUTES A NUISANCE OR IS OBJECTIONABLE. IN CASE OF FAILURE ON THE PART OF THE CONTRACTOR UNDER HIS CONTRACT, OR WHERE SUFFICIENT CONTRACT FUNDS ARE UNAVAILABLE FOR THIS PURPOSE, THE CONTRACTOR OR HIS SURETY SHALL REIMBURSE THE TOWN OF ADDISON FOR ALL SUCH COSTS.

32. EXISTING ROADWAYS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF EXISTING PAVED ROADS. ALL COSTS ASSOCIATED WITH MAINTAINING THE CLEANLINESS OF EXISTING ROADS SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

33. DUST CONTROL: THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO CONTROL DUST ON THE PROJECT SITE BY SPRINKLING OF WATER, OR ANY OTHER METHODS APPROVED BY THE GOVERNING AUTHORITIES, AND SHALL PROVIDE ALL EQUIPMENT AND PERSONNEL REQUIRED TO PREVENT DUST FROM BECOMING A NUISANCE TO THE ADJACENT PROPERTIES.

34. CLEAN-UP FOR FINAL ACCEPTANCE: THE CONTRACTOR SHALL MAKE A FINAL CLEAN UP OF ALL PARTS OF THE WORK BEFORE ACCEPTANCE BY THE TOWN OF ADDISON. THIS CLEAN UP SHALL INCLUDE REMOVAL OF ALL OBJECTIONABLE MATERIALS AND, IN GENERAL, PREPARING THE SITE OF THE WORK IN AN ORDERLY MANNER OF APPEARANCE.

35. REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK: ALL WORK WHICH HAS BEEN REJECTED OR CONDEMNED SHALL BE REPAIRED, OR IF IT CANNOT BE REPAIRED SATISFACTORILY, IT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. DEFECTIVE MATERIALS SHALL BE IMMEDIATELY REMOVED FROM THE WORK SITE. WORK DONE BEYOND THE LINE OR NOT IN CONFORMITY WITH THE GRADES SHOWN ON THE DRAWINGS OR AS PROVIDED, WORK DONE WITHOUT REQUIRED INSPECTION, OR ANY EXTRA OR UNCLASSIFIED WORK DONE WITHOUT WRITTEN AUTHORITY AND PRIOR AGREEMENT IN WRITING AS TO PRICES, SHALL BE AT THE CONTRACTOR'S RISK, AND WILL BE CONSIDERED UNAUTHORIZED, AND AT THE OPTION OF THE TOWN OF ADDISON MAY NOT BE MEASURED AND PAID FOR AND MAY BE ORDERED REMOVED AT THE CONTRACTOR'S EXPENSE. UPON FAILURE OF THE CONTRACTOR TO REPAIR SATISFACTORILY OR TO REMOVE AND REPLACE, IF SO DIRECTED, REJECTED, UNAUTHORIZED OR CONDEMNED WORK OR MATERIALS IMMEDIATELY AFTER RECEIVING NOTICE FROM THE TOWN OF ADDISON. THE TOWN OF ADDISON WILL, AFTER GIVING WRITTEN NOTICE TO THE CONTRACTOR, HAVE THE AUTHORITY TO CAUSE DEFECTIVE WORK TO BE REMEDIED OR REMOVED AND REPLACED, OR TO CAUSE UNAUTHORIZED WORK TO BE REMOVED AND TO DEDUCT THE COST THEREOF FROM ANY MONIES DUE OR TO BECOME DUE THE CONTRACTOR.

36. DISPOSITION AND DISPOSAL OF EXCESS AND UNSUITABLE MATERIALS: ALL MATERIALS TO BE REMOVED FROM THE SITE INCLUDING BUT NOT LIMITED TO EXCESS MATERIAL AND UNSUITABLE MATERIALS SUCH AS LARGE ROCKS, REFUSE, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE PROJECT AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL ALSO COMPLY WITH ALL APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE.

37. SEEDING: THE CONTRACTOR SHALL PROVIDE SEEDING, WATERING, FERTILIZING AND REQUIRED MAINTENANCE FOR THE GRASSING OF ALL UNPAVED AREAS OF DEDICATED RIGHT-OF-WAY, EASEMENTS, AND ALL OTHER DISTURBED AREAS OF CONSTRUCTION FOR THE PROJECT. SEEDING SHALL ALSO BE PROVIDED IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN IN ORDER TO ESTABLISH A GRASS COVER ON DISTURBED AREAS SUBJECTED TO THE EROSION OF THE SOIL SURFACE.

38. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF ALL MATERIALS AND SYSTEMS COVERED BY THE PROJECT CONTRACT DOCUMENTS. THESE RECORD PRINTS WILL BE REVIEWED BY THE ENGINEER EACH MONTH PRIOR TO THE PRELIMINARY REVIEW OF CONTRACTOR'S REQUEST FOR PAYMENT. IF THE DRAWINGS ARE NOT COMPLETE, ACCURATE AND UP-TO DATE, THE ENGINEER WILL NOT ACCEPT THE PAYMENT REQUEST. THE COMPLETED SET OF "RECORD" DRAWINGS MUST BE DELIVERED TO THE ENGINEER BEFORE REQUESTING FINAL PAYMENT.

ABBREVIATIONS

APPROX	APPROXIMATELY
ASPH	ASPHALT
BC	BACK OF CURB
B-B	BACK TO BACK OF CURB
BM	BENCHMARK
BW	BOTTOM OF WALL
CATV	CABLE TV
CFS	CUBIC FEET PER SECOND
CI	CURB INLET
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CONST	CONSTRUCT
CL	CENTER LINE
DCO	DOUBLE CLEANOUT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	DOMESTIC WATER
EL	ELEVATION
EMH	ELECTRIC MANHOLE
EP	EDGE OF PAVEMENT
EX	EXISTING
FC	FACE OF CURB
F-F	FACE TO FACE OF CURB
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FM	FORCE MAIN
FO	FIBER OPTICS
FP	FINISHED PAD
FPS	FEET PER SECOND
FL	FLOW LINE
FUT	FUTURE
FW	FIRE WATER
G	GAS
GI	GRATE INLET
GM	GAS METER
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HDWL	HEADWALL
HMAC	HOT MIX ASPHALTIC CONCRETE
HORIZ	HORIZONTAL
HP	HIGH POINT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
IRR	IRRIGATION
JB	JUNCTION BOX
JT	JOINT
LF	LINEAR FEET
LP	LOW POINT
LT	LEFT
MH	MANHOLE
N/A	NOT APPLICABLE
NG	NATURAL GROUND (EXISTING)
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PI	POINT OF INTERSECTION
PIV	POST INDICATOR VALVE
PL	PROPERTY LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PR	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
OCEW	ON CENTER EACH WAY
OHE	OVERHEAD ELECTRIC
R	RADIUS
RCB	REINFORCED CONCRETE BOX
RCI	RECESSED CURB INLET
RCP	REINFORCED CONCRETE PIPE
RCCP	REINFORCED CONCRETE CYLINDRICAL PIPE
REC	RECESSED
REINF	REINFORCED
RL	RIDGE LINE
ROW	RIGHT OF WAY
RT	RIGHT
SF	SQUARE FEET
SD	STORM DRAIN
SQ	SQUARE
SS	SANITARY SEWER
STA	STATION
SY	SQUARE YARD
T	TELEPHONE
TC	TOP OF CURB
TDUCT	TOP OF DUCT
TG	TOP OF GROUND
TMH	TELEPHONE MANHOLE
TOB	TOP OF BANK
TOS	TOE OF SLOPE
TP	TOP OF PAVEMENT
TPIPE	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
W	WATER
WV	WATER VALVE

LEGEND

	EXISTING	PROPOSED	FUTURE
PROPERTY LINE			N/A
BUILDING			
FINISH FLOOR ELEVATION	FFE=650.00	FFE=650.00	N/A
SPOT ELEVATION	x 650.50	x 650.50	N/A
CURB			
ASPHALT PAVEMENT			N/A
RIDGE LINE	N/A	RL	N/A
SWALE or VALLEY GUTTER			N/A
CONTOUR LINE	675	675	674
STORM DRAIN	21"SD	21"SD	
STORM DRAIN MANHOLE			
CURB INLET	CI		
RECESSED CURB INLET	CI		
GRATE INLET	GI		N/A
WATER LINE	8"W	8"W	8"W
FIRE HYDRANT			N/A
WATER VALVE			N/A
WATER METER BOX		W	N/A
IRRIGATION METER	N/A	I	N/A
SANITARY SEWER LINE	8"SS	8"SS	8"SS
SANITARY SEWER MANHOLE	SSMH		
CLEANOUT	CO		
LIGHT POLE			N/A
POWER POLE	PP		N/A
DOWN GUY			N/A
SIGN			N/A
ACCESSIBLE PARKING			N/A
RETAINING WALL			N/A
WOOD FENCE			N/A
SCREEN WALL FENCE			N/A
CHAIN LINK FENCE			N/A
WIRE FENCE			N/A
TREE		N/A	N/A
OVERHEAD WIRES	OHW	N/A	N/A
OVERHEAD ELECTRIC LINE	OHE	OHE	N/A
OVERHEAD TELEPHONE LINE	OHT	OHT	N/A
UNDERGROUND ELECTRIC LINE	UGE	UGE	N/A
UNDERGROUND TELEPHONE LINE	UGT	UGT	N/A
UNDERGROUND CABLE LINE	CATV	CATV	N/A
ELECTRIC METER	EM	EM	N/A
ELECTRIC TRANSFORMER	T	T	N/A
GAS METER	GM	GM	N/A
GAS LINE	G	G	N/A
AIR CONDITIONING UNIT	☒	☒	N/A

BRUCE F. DUNNE
62654
06/29/11

NO.	REVISION	BY	DATE

Addison!
TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

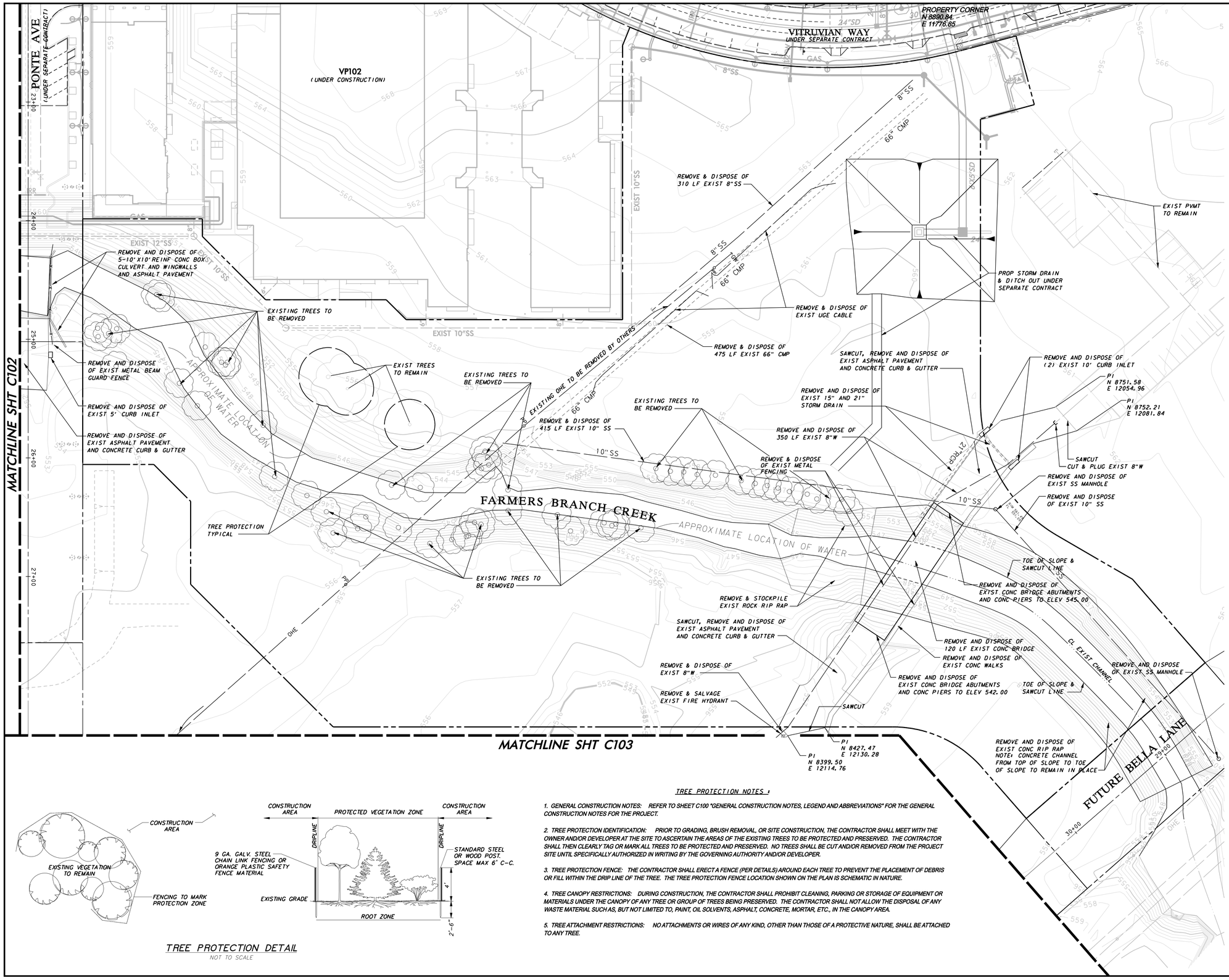
GENERAL CONSTRUCTION NOTES,
LEGEND & ABBREVIATIONS

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C100

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK



DEMOLITION NOTES:

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.

2. INGRESS AND EGRESS: THE CONTRACTOR SHALL MAINTAIN INGRESS AND EGRESS TO THE SITE AND ADJACENT PROPERTIES AT ALL TIMES AND CONDUCT HIS OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSES.

3. PROTECTION OF EXISTING FACILITIES: CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS, FENCING, BRACING AND SHORING, AND SECURITY DEVICES TO PROTECT EXISTING STRUCTURES, UTILITIES, APPURTENANCES, TREES AND LANDSCAPING, AND TO PREVENT MOVEMENT OR SETTLEMENT OF EXISTING STRUCTURES WHICH ARE NOT TO BE DEMOLISHED AND/OR REMOVED.

4. STORAGE OF MATERIALS FOR RE-USE: CONTRACTOR SHALL REMOVE AND STORE ON SITE (WHERE DESIGNATED BY THE DEVELOPER), ALL MATERIALS (SUCH AS ASPHALT AND CONCRETE PAVEMENT & SUITABLE EARTHEN MATERIAL) TO BE SALVAGED OR RE-INSTALLED LATER IN CONSTRUCTION.

5. FRANCHISE UTILITY COORDINATION: THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL FRANCHISE UTILITY COMPANIES FOR THE REMOVAL AND/ OR RELOCATION OF THE RESPECTIVE UTILITY LINES AND APPARATUSES USED BY EACH UTILITY. ALL WORK ASSOCIATED WITH FRANCHISE UTILITY REMOVAL RELOCATION AND/OR MODIFICATIONS ARE TO BE PERFORMED ONLY BY THAT UTILITY PROVIDER UNLESS SPECIFICALLY NOTED OTHERWISE.

6. TREE REMOVAL: THE TREES DESIGNATED TO BE REMOVED HAVE A LARGE "X" THROUGH THE TREE SYMBOL. STOCKPILING OF TREES AFTER CUTTING/REMOVAL IS NOT ALLOWED. CONTRACTOR SHALL DISPOSE OF TREE CARCASSES IMMEDIATELY AFTER THEY ARE TAKEN DOWN BY CHIPPING & SPREADING THE MULCH ON THE SITE AS DIRECTED BY THE ENGINEER.

7. SAWCUTTING OF EXISTING PAVEMENT: SAWCUTTING, WHERE INDICATED ON THE DRAWINGS FOR REMOVAL OF EXISTING PAVEMENT, SHALL BE A FULL DEPTH CUT THAT IS NEAT AND TRUE IN ALIGNMENT.

WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

TREE PROTECTION DETAIL
NOT TO SCALE

TREE PROTECTION NOTES :

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.

2. TREE PROTECTION IDENTIFICATION: PRIOR TO GRADING, BRUSH REMOVAL, OR SITE CONSTRUCTION, THE CONTRACTOR SHALL MEET WITH THE OWNER AND/OR DEVELOPER AT THE SITE TO ASCERTAIN THE AREAS OF THE EXISTING TREES TO BE PROTECTED AND PRESERVED. THE CONTRACTOR SHALL THEN CLEARLY TAG OR MARK ALL TREES TO BE PROTECTED AND PRESERVED. NO TREES SHALL BE CUT AND/OR REMOVED FROM THE PROJECT SITE UNTIL SPECIFICALLY AUTHORIZED IN WRITING BY THE GOVERNING AUTHORITY AND/OR DEVELOPER.

3. TREE PROTECTION FENCE: THE CONTRACTOR SHALL ERECT A FENCE (PER DETAILS) AROUND EACH TREE TO PREVENT THE PLACEMENT OF DEBRIS OR FILL WITHIN THE DRIP LINE OF THE TREE. THE TREE PROTECTION FENCE LOCATION SHOWN ON THE PLAN IS SCHEMATIC IN NATURE.

4. TREE CANOPY RESTRICTIONS: DURING CONSTRUCTION, THE CONTRACTOR SHALL PROHIBIT CLEANING, PARKING OR STORAGE OF EQUIPMENT OR MATERIALS UNDER THE CANOPY OF ANY TREE OR GROUP OF TREES BEING PRESERVED. THE CONTRACTOR SHALL NOT ALLOW THE DISPOSAL OF ANY WASTE MATERIAL SUCH AS, BUT NOT LIMITED TO, PAINT, OIL SOLVENTS, ASPHALT, CONCRETE, MORTAR, ETC., IN THE CANOPY AREA.

5. TREE ATTACHMENT RESTRICTIONS: NO ATTACHMENTS OR WIRES OF ANY KIND, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY TREE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

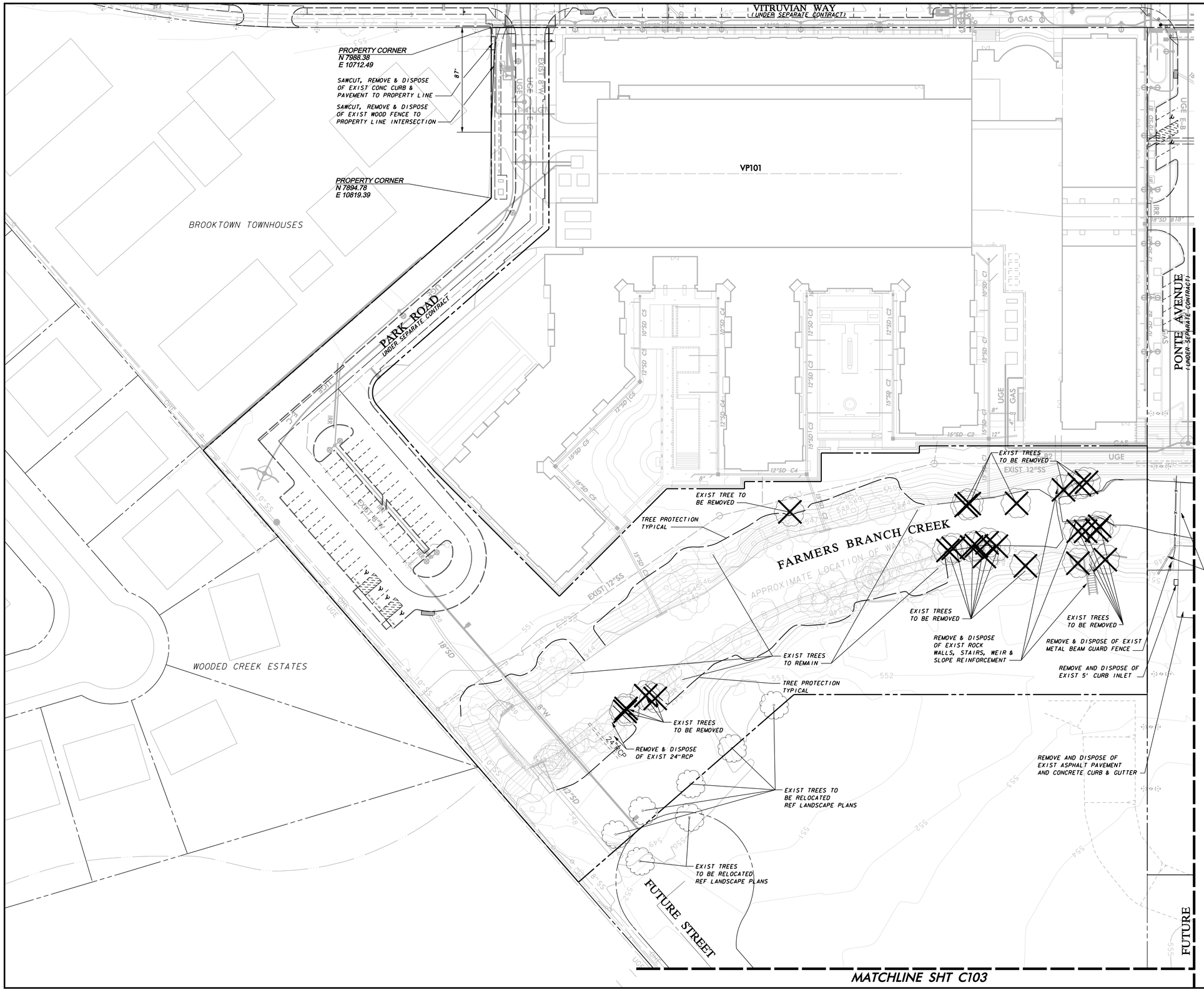
DEMOLITION PLAN NORTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C101

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12



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STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

DEMOLITION PLAN SOUTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C102

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

MATCHLINE SHT C101

MATCHLINE SHT C101

FUTURE PONTE AVE

EXIST POWER POLE TO BE REMOVED BY OTHERS

EXIST OHE TO BE REMOVED BY OTHERS

EXIST OHE TO REMAIN

EXIST POWER POLE TO REMAIN

REMOVE AND DISPOSE OF EXIST 8"W

8"W

REMOVE AND DISPOSE OF EXIST ASPHALT PAVEMENT UNDER SEPARATE CONTRACT

REMOVE AND DISPOSE OF EXIST CONC CURB UNDER SEPARATE CONTRACT

6+00 7+00 8+00 9+00 10+00 31+00 32+00 33+00

OHE UGE

PROPERTY CORNER
N 7572.77
E 11776.02

PROPERTY CORNER
N 7571.07
E 12380.18

NORTH

0 20 40 60 80
GRAPHIC SCALE IN FEET
SCALE: 1"=40'

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STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

DEMOLITION PLAN EAST

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C103

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

MATCHLINE SHT C202

VP102
(UNDER CONSTRUCTION)

VP102 CONSTRUCTION LIMITS TYPICAL

ISLAND 1

ISLAND 2

BELVEDERE

AMPHITHEATER

GROTTO

ESPLANADE

FARMERS BRANCH CREEK

VITRUVIAN WAY

CENTER OF PERFORMANCE LIGHTING FOUNDATION N 8610.07 E 11705.95

CENTER OF PERFORMANCE LIGHTING FOUNDATION N 8648.93 E 11673.67

CENTER OF PERFORMANCE LIGHTING FOUNDATION N 8699.23 E 11678.87

CENTER OF PERFORMANCE LIGHTING FOUNDATION N 8731.50 E 11717.18

RADIUS PT N 8668.46 E 11736.71

RADIUS PT N 8728.11 E 11889.83

CENTER OF IRRIGATION CONTROL - VP N 8871.60 E 11837.61

CENTER OF IRRIGATION CONTROL - VW N 8876.83 E 11840.19

CENTER OF TRANSFORMER PAD N 8901.67 E 11840.30

PROPERTY CORNER N 8678.15 E 11585.12

PROPERTY CORNER N 8692.87 E 11577.64

PROPERTY CORNER N 8890.84 E 11776.85

PROPERTY CORNER N 8932.98 E 11797.67

PROPERTY CORNER N 8525.77 E 11759.17

PROPERTY CORNER N 8470.88 E 12167.40

PROPERTY CORNER N 8505.01 E 12242.92

PROPERTY CORNER N 8504.85 E 12299.79

PROPERTY CORNER N 8681.64 E 12137.60

PROPERTY CORNER N 8705.11 E 12206.94

PROPERTY CORNER N 8702.60 E 12300.34

PROPERTY CORNER N 8706.97 E 12010.29

PROPERTY CORNER N 8864.26 E 11830.64

PROPERTY CORNER N 8906.39 E 11851.46

CURVE DATA
Δ=48° 57' 26"
R=100.00'
L= 85.45'

CURVE DATA
Δ=59° 54' 11"
R=130.00'
L=135.92'

CURVE DATA
Δ=37° 45' 24"
R=434.00'
L=285.99'

N41° 12' 11"E 182.53'

N48° 47' 49"W 231.33'

N26° 56' 02"W 16.51'

S41° 12' 11"W 471.68'

S48° 47' 49"E 238.78'

N89° 50' 23"W 56.87'

S00° 09' 37"W 200.00'

S89° 50' 23"E 93.41'

N71° 18' 00"E 73.20'

N63° 42' 00"W 60.00'

S26° 18' 00"W, 47.00'

N26° 18' 00"E 47.00'

LINE DATA		
L	BEARING	LENGTH
1	N41° 12' 56"E	63.98'
2	N48° 47' 04"W	11.07'
3	N48° 47' 04"W	11.07'
4	S41° 12' 56"W	17.75'
5	N48° 47' 49"W	56.32'
6	S41° 12' 07"W	4.66'
7	S48° 47' 33"E	84.43'
8	N48° 47' 16"W	44.52'
9		
10		
11	N89° 50' 23"W	58.37'
12	N48° 47' 49"W	14.59'
13		
14	S41° 12' 11"W	25.57'
15	N41° 12' 11"E	

CURVE DATA				RADIUS POINT		CURVE DATA				RADIUS POINT	
C	DELTA	RADIUS	LENGTH	NORTHING	EASTING	C	DELTA	RADIUS	LENGTH	NORTHING	EASTING
1	27° 00' 11"	278.24'	131.13'	11539.42	8632.06	29	63° 31' 35"	54.94'	60.92'	12152.84	8498.08
2	34° 37' 50"	362.81'	219.29'	11443.16	9522.12	30	46° 18' 24"	40.17'	32.47'	12057.99	8505.17
3	04° 45' 32"	329.96'	31.96'	11495.86	8659.94	31	42° 55' 42"	108.27'	82.12'	12014.76	8557.78
4	60° 36' 46"	10.00'	10.58'	11798.58	8505.25	32	93° 48' 19"	88.80'	145.38'	12002.68	8361.09
5	87° 14' 56"	10.00'	15.23'	11798.71	8534.16	33	11° 52' 06"	262.28'	54.33'	12127.19	8116.23
6	33° 53' 26"	60.00'	35.05'	11716.76	8519.10	34	07° 31' 45"	202.47'	26.61'	11877.11	8507.96
7	42° 43' 25"	329.96'	32.33'	11733.39	8519.49	35	03° 15' 13"	202.47'	11.52'	11877.11	8507.96
8	22° 21' 46"	193.89'	75.68'	11628.73	8411.28	36	20° 59' 19"	206.00'	75.46'	12176.35	8229.91
9	57° 38' 34"	85.09'	85.60'	11736.71	8668.46	37	22° 41' 03"	192.00'	76.02'	12001.17	8587.28
10	77° 40' 39"	18.00'	24.40'	11634.40	8655.83	38	48° 57' 26"	112.50'	96.13'	12242.64	8405.01
11	56° 20' 15"	14.52'	14.28'	11610.85	8690.67	39	05° 39' 03"	319.81'	31.54'	11474.02	8980.17
12	88° 18' 43"	8.52'	13.14'	11590.57	8679.72	40	90° 00' 00"	10.00'	15.71'	11985.82	8662.99
13	144° 39' 09"	8.50'	21.46'	11613.95	8692.37	41	8° 20' 58"	359.34'	52.37'	12300.81	8333.26
14	17° 40' 39"	18.00'	24.40'	11638.46	8699.64	42	176° 49' 57"	24.00'	74.07'	12062.44	8498.89
15	13° 35' 27"	85.09'	20.18'	11736.71	8668.46	43	30° 42' 30"	80.87'	43.34'	12098.84	8455.18
16	17° 28' 01"	130.53'	39.79'	11776.61	8646.64	44	116° 46' 49"	14.87'	30.30'	12036.97	8478.16
17	177° 38' 07"	5.11'	15.85'	11707.39	8769.06	45	30° 42' 30"	80.87'	43.34'	12027.04	8543.42
18	137° 01' 48"	3.00'	7.17'	11774.86	8554.90	46	108° 22' 41"	37.17'	70.30'	11868.10	8495.45
19	02° 33' 35"	961.88'	43.97'	10830.63	8448.23	47	49° 24' 35"	175.00'	150.91'	11796.78	8613.39
20	34° 26' 58"	213.79'	128.54'	11592.14	8518.99	48	152° 48' 10"	60.00'	160.01'	11910.22	8594.55
21	63° 10' 02"	37.46'	41.29'	11736.66	8668.52	49	49° 24' 35"	175.00'	150.91'	12002.52	8525.94
22	64° 21' 47"	97.41'	109.43'	12063.21	8698.29	50	87° 47' 13"	11.00'	16.85'	11846.04	8514.62
23	23° 18' 17"	451.45'	183.60'	12189.97	8633.66	51	115° 44' 00"	13.01'	26.27'	11869.97	8514.14
24	70° 09' 44"	108.00'	132.25'	12074.53	8742.16	52	86° 19' 29"	95.39'	143.72'	11842.01	8591.27
25	20° 46' 12"	359.34'	130.26'	12300.81	8333.26	53	58° 07' 14"	14.18'	14.38'	11945.84	8623.13
26	10° 00' 00"	162.31'	28.33'	12279.73	8484.23	54	24° 28' 28"	172.81'	73.82'	11613.40	8548.41
27	10° 00' 00"	93.51'	16.32'	12279.73	8484.23						
28	22° 20' 21"	388.65'	151.64'	12278.91	8189.09						

LAYOUT & DIMENSIONAL CONTROL NOTES

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.

2. SURVEYING: ALL SURVEYING REQUIRED FOR CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE DEVELOPER SHALL PROVIDE THE PROPERTY CORNERS AND TWO BENCHMARKS FOR USE AS HORIZONTAL AND VERTICAL DATUM. THE CONTRACTOR SHALL EMPLOY A REGISTERED PROFESSIONAL LAND SURVEYOR TO PERFORM ALL ADDITIONAL SURVEY, LAYOUT AND MEASUREMENT WORK NECESSARY FOR THE COMPLETION OF THE PROJECT.

3. PROTECTION OF PROPERTY CORNERS AND BENCHMARKS: THE CONTRACTOR SHALL PROTECT ALL PROPERTY CORNER MARKERS AND BENCHMARKS, AND WHEN ANY SUCH MARKERS OR MONUMENTS ARE IN DANGER OF BEING DISTURBED, THEY SHALL BE PROPERLY REFERENCED AND IF DISTURBED, SHALL BE RESET BY A REGISTERED PUBLIC SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

4. DIMENSIONAL CONTROL: ALL PAVING DIMENSIONS AND COORDINATES SHOWN ARE TO EDGE OF PAVEMENT WHERE APPLICABLE. ALL WALL DIMENSIONS AND CONTROLS SHOWN ARE AT FACE OF WALL.

5. CURB RADII: ALL CURB RADII SHALL BE 3' UNLESS OTHERWISE NOTED.

6. BUILDING DIMENSIONS: CONTRACTOR SHALL REFER TO BUILDING PLANS FOR ACTUAL BUILDING DIMENSIONS. THE DIMENSIONS AND CORNERS SHOWN ARE TO FACE OF OUTSIDE WALLS OF BUILDING.

GRAPHIC SCALE IN FEET
SCALE: 1"=30'

WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

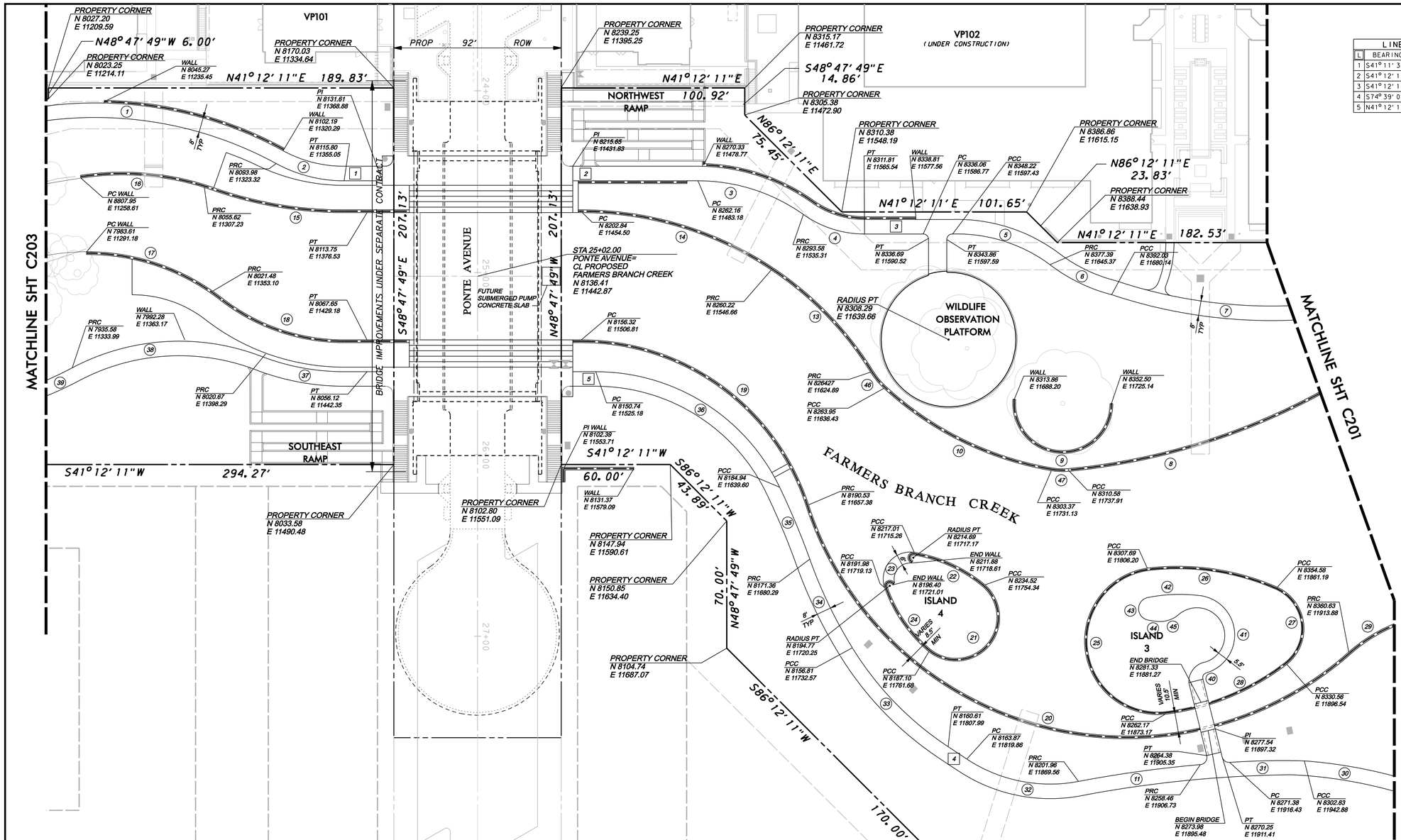
LAYOUT & DIMENSIONAL CONTROL PLAN NORTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C201

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



LINE DATA		
L	BEARING	LENGTH
1	S41° 11' 32"W	21.00'
2	S41° 12' 11"W	68.82'
3	S41° 12' 11"W	32.23'
4	S74° 39' 09"W	12.31'
5	N41° 12' 11"E	12.65'

NORTH

0 15 30 45 60

GRAPHIC SCALE IN FEET
SCALE: 1"=30'

CURVE DATA				RADIUS POINT	
C	DELTA	RADIUS	LENGTH	NORTHING	EASTING
1	48° 01' 02"	208.00'	174.32'	11395.23	7898.81
2	28° 34' 59"	78.00'	38.91'	11296.35	8167.17
3	35° 25' 58"	100.00'	61.84'	11558.42	8196.29
4	35° 25' 58"	58.00'	35.87'	11521.90	8350.01
5	38° 16' 43"	85.58'	57.18'	11663.42	8293.73
6	22° 58' 28"	94.71'	37.98'	11626.73	8470.24
7	27° 00' 11"	278.24'	131.13'	11539.42	8632.06
8	34° 37' 50"	362.81'	219.29'	11443.16	8522.12
9	184° 35' 02"	27.50'	88.59'	11707.44	8332.44
10	33° 07' 41"	179.90'	104.02'	11617.51	8442.85
11	05° 50' 52"	432.22'	67.66'	12441.24	7866.34
12					
13	24° 21' 40"	185.61'	78.92'	11595.15	8081.05
14	33° 31' 53"	188.18'	110.13'	11595.82	8078.57
15	17° 20' 29"	300.00'	90.80'	11151.28	8311.90
16	26° 14' 13"	150.00'	68.69'	11385.20	7927.48
17	34° 54' 21"	121.00'	73.72'	11382.37	7904.07
18	34° 30' 48"	150.00'	90.36'	11316.82	8167.03
19	71° 56' 18"	131.36'	165.05'	11605.65	8069.78
20	84° 35' 09"	184.04'	271.69'	11729.85	8359.70
21	176° 49' 57"	24.00'	74.07'	11757.36	8210.71
22	30° 42' 30"	80.87'	43.34'	11766.69	8154.60
23	116° 46' 49"	14.87'	30.30'	11724.90	8205.69
24	30° 42' 30"	80.87'	43.34'	11749.29	8267.02

CURVE DATA				RADIUS POINT	
C	DELTA	RADIUS	LENGTH	NORTHING	EASTING
25	176° 49' 57"	40.50'	125.00'	11840.32	8285.86
26	30° 42' 30"	136.47'	73.14'	11919.09	8231.00
27	116° 46' 49"	25.09'	51.13'	11871.47	8331.70
28	30° 42' 30"	136.47'	73.14'	11760.32	8338.91
29	93° 48' 19"	88.80'	145.38'	12002.68	8361.09
30	11° 52' 06"	262.28'	54.33'	12127.19	8116.23
31	05° 27' 02"	432.22'	41.12'	12260.04	8009.19
32	44° 14' 09"	83.16'	64.20'	11797.85	8244.06
33	24° 54' 56"	175.05'	76.12'	11761.66	8329.42
34	12° 01' 58"	257.91'	54.16'	11775.21	8411.17
35	05° 52' 49"	418.16'	42.92'	11527.76	7782.01
36	64° 18' 35"	112.19'	125.92'	11609.59	8076.83
37	19° 26' 09"	167.50'	56.82'	11316.82	8167.03
38	47° 38' 30"	132.05'	109.80'	11462.52	7905.30
39	21° 54' 58"	192.88'	73.78'	11146.24	7979.80
40	91° 18' 56"	2.70'	4.30'	11873.36	8293.00
41	158° 47' 36"	21.77'	60.35'	11851.16	8303.29
42	18° 02' 25"	90.00'	28.29'	11896.57	8252.36
43	153° 53' 50"	6.30'	16.92'	11824.02	8294.11
44	10° 12' 30"	36.00'	6.41'	11806.55	8318.12
45	43° 44' 58"	15.30'	11.68'	11821.50	8303.81
46	15° 15' 22"	43.50'	11.58'	11631.85	8307.21
47	15° 10' 04"	37.50'	9.93'	11707.44	8332.44

LAYOUT & DIMENSIONAL CONTROL NOTES

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.

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WARNING

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BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

LAYOUT & DIMENSIONAL CONTROL PLAN CENTER

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C202

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

LINE DATA		
L	BEARING	LENGTH
1	N00° 13' 39"E	20.87'
2	N86° 11' 57"E	23.49'
3	N21° 45' 28"E	55.09'
4	N00° 09' 57"E	63.70'
5	N00° 09' 37"E	67.50'

CURVE DATA				RADIUS POINT	
C	DELTA	RADIUS	LENGTH	NORTHING	EASTING
1	48° 35' 43"	8.00'	6.78'	11053.82	7612.79
2	75° 16' 47"	55.50'	72.92'	11012.01	7660.59
3	112° 39' 22"	12.00'	23.59'	11072.44	7690.66
4					
5	16° 20' 14"	72.58'	20.70'	11185.24	7728.18
6	25° 04' 08"	108.00'	47.25'	11012.10	7779.48
7	56° 26' 44"	90.00'	88.66'	11197.45	7807.40
8	26° 07' 19"	132.12'	60.24'	11058.91	7973.73
9	70° 33' 12"	18.98'	23.37'	11155.56	7940.28
10	109° 26' 48"	8.00'	15.28'	11182.82	7970.90
11	40° 01' 02"	208.00'	174.32'	11395.23	7898.81
12	21° 54' 58"	192.88'	73.78'	11146.24	7979.80
13	35° 00' 53"	134.32'	82.15'	11413.76	7791.22

NORTH

0 15 30 45 60

GRAPHIC SCALE IN FEET
SCALE: 1"=30'

LAYOUT & DIMENSIONAL CONTROL NOTES

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.

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WARNING

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BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

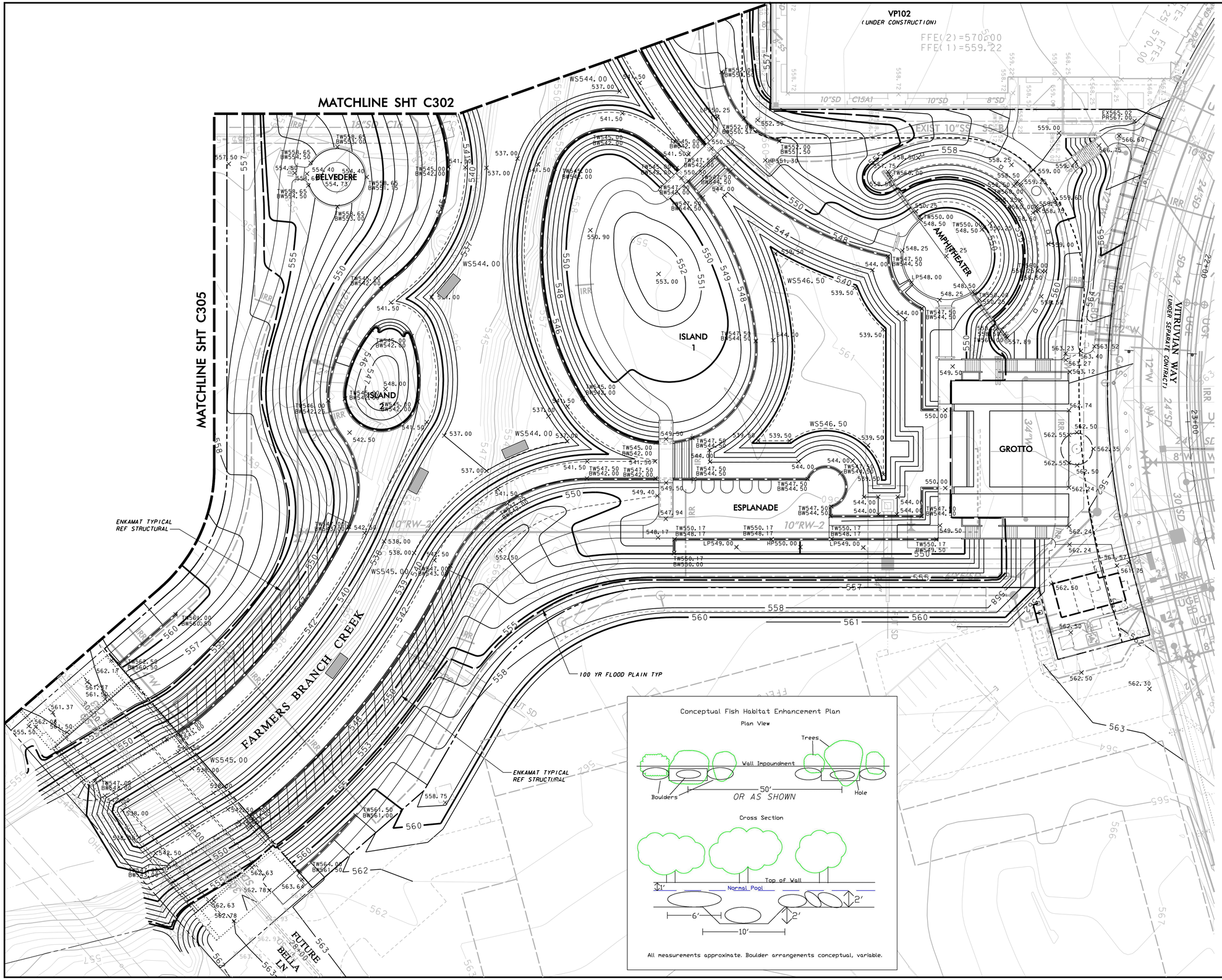
LAYOUT & DIMENSIONAL CONTROL PLAN SOUTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C203

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



NORTH

0 15 30 45 60

GRAPHIC SCALE IN FEET
SCALE: 1"=30'

APPROXIMATE LOCATION OF FISH HABITAT
SEE DETAIL THIS SHEET

GRADING AND EXCAVATION NOTES:

1. *REFER TO SHEET C304 "GENERAL GRADING AND EXCAVATION NOTES" FOR THIS PROJECT.*
2. *THE PROPOSED CONTOURS INDICATED ON THE GRADING PLAN ARE FINISHED GRADES AND ARE SHOWN AT ONE-FOOT INTERVALS. SPOT ELEVATIONS SHOWN IN PAVED AREAS ARE TOP OF PAVEMENT, UNLESS NOTED OTHERWISE.*
3. *THE CONTRACTOR SHALL BE RESPONSIBLE FOR MASS GRADING OF THE SITE TO THE FOLLOWING ELEVATIONS:*

   ** 12" BELOW FINISHED GRADE FOR ALL AREAS WITHIN THE CONFINES OF THE LAKE AREA FOR PLACEMENT OF CLAY LINER MATERIAL*
   - *6" BELOW FINISHED GRADE FOR ALL HEAVY DUTY SIDEWALK PAVEMENT AREAS.*
   - *4" BELOW FINISHED GRADE FOR ALL STANDARD SIDEWALK PAVEMENT AREAS.*
   - *4" BELOW FINISHED GRADE FOR ALL LANDSCAPE AREAS.*

   A TOLERANCE OF +/- 0.10 FEET OF THE FINISHED GRADE WILL BE ALLOWED FOR ALL AREAS UNDER PROPOSED PAVEMENT. ALL LANDSCAPE AREAS ARE TO BE GRADED WITHIN +/- 0.30 FEET OF THE FINISHED GRADE.
4. *ALL LANDSCAPE AREAS WITHIN THE LIMITS OF THE PARK PROPERTY NOT DESIGNATED TO BE PAVED OR THAT ARE LOCATED WITHIN THE LIMITS OF THE LAKE AND CREEK AREAS SHALL RECEIVE FOUR (4) INCHES OF TOPSOIL. REFER TO THE LANDSCAPE PLANS FOR LIMITS OF TOPSOIL PLACEMENT.*

Conceptual Fish Habitat Enhancement Plan

Plan View

Cross Section

All measurements approximate. Boulder arrangements conceptual, variable.

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BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

GRADING PLAN NORTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C301

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

MATCHLINE SHT C303

MATCHLINE SHT C304

MATCHLINE SHT C305

MATCHLINE SHT C301

VP101

VP102
(UNDER CONSTRUCTION)

PONTE AVENUE
UNDER SEPARATE CONTRACT

NORTHWEST RAMP

SOUTHEAST RAMP

ROCK BOULDER SLOPE PROTECTION TYPICAL

ENKAMAT TYPICAL REF STRUCTURAL

WILDLIFE OBSERVATION PLATFORM

100 YR FLOOD PLAIN TYP

ISLAND 4

ISLAND 3

FARMERS BRANCH CK

APPROXIMATE LOCATION OF FISH HABITAT SEE DETAIL SHEET C301

NORTH

0 15 30 45 60

GRAPHIC SCALE IN FEET
SCALE: 1"=30'

GRADING AND EXCAVATION NOTES:

1. REFER TO SHEET C304 "GENERAL GRADING AND EXCAVATION NOTES" FOR THIS PROJECT.
2. THE PROPOSED CONTOURS INDICATED ON THE GRADING PLAN ARE FINISHED GRADES AND ARE SHOWN AT ONE-FOOT INTERVALS. SPOT ELEVATIONS SHOWN IN PAVED AREAS ARE TOP OF PAVEMENT, UNLESS NOTED OTHERWISE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MASS GRADING OF THE SITE TO THE FOLLOWING ELEVATIONS:

   * 12" BELOW FINISHED GRADE FOR ALL AREAS WITHIN THE CONFINES OF THE LAKE AREA FOR PLACEMENT OF CLAY LINER MATERIAL
   * 6" BELOW FINISHED GRADE FOR ALL HEAVY DUTY SIDEWALK PAVEMENT AREAS.
   * 4" BELOW FINISHED GRADE FOR ALL STANDARD SIDEWALK PAVEMENT AREAS.
   * 4" BELOW FINISHED GRADE FOR ALL LANDSCAPE AREAS.

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4. ALL LANDSCAPE AREAS WITHIN THE LIMITS OF THE PARK PROPERTY NOT DESIGNATED TO BE PAVED OR THAT ARE LOCATED WITHIN THE LIMITS OF THE LAKE AND CREEK AREAS SHALL RECEIVE FOUR (4) INCHES OF TOPSOIL. REFER TO THE LANDSCAPE PLANS FOR LIMITS OF TOPSOIL PLACEMENT.

WARNING

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SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

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SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

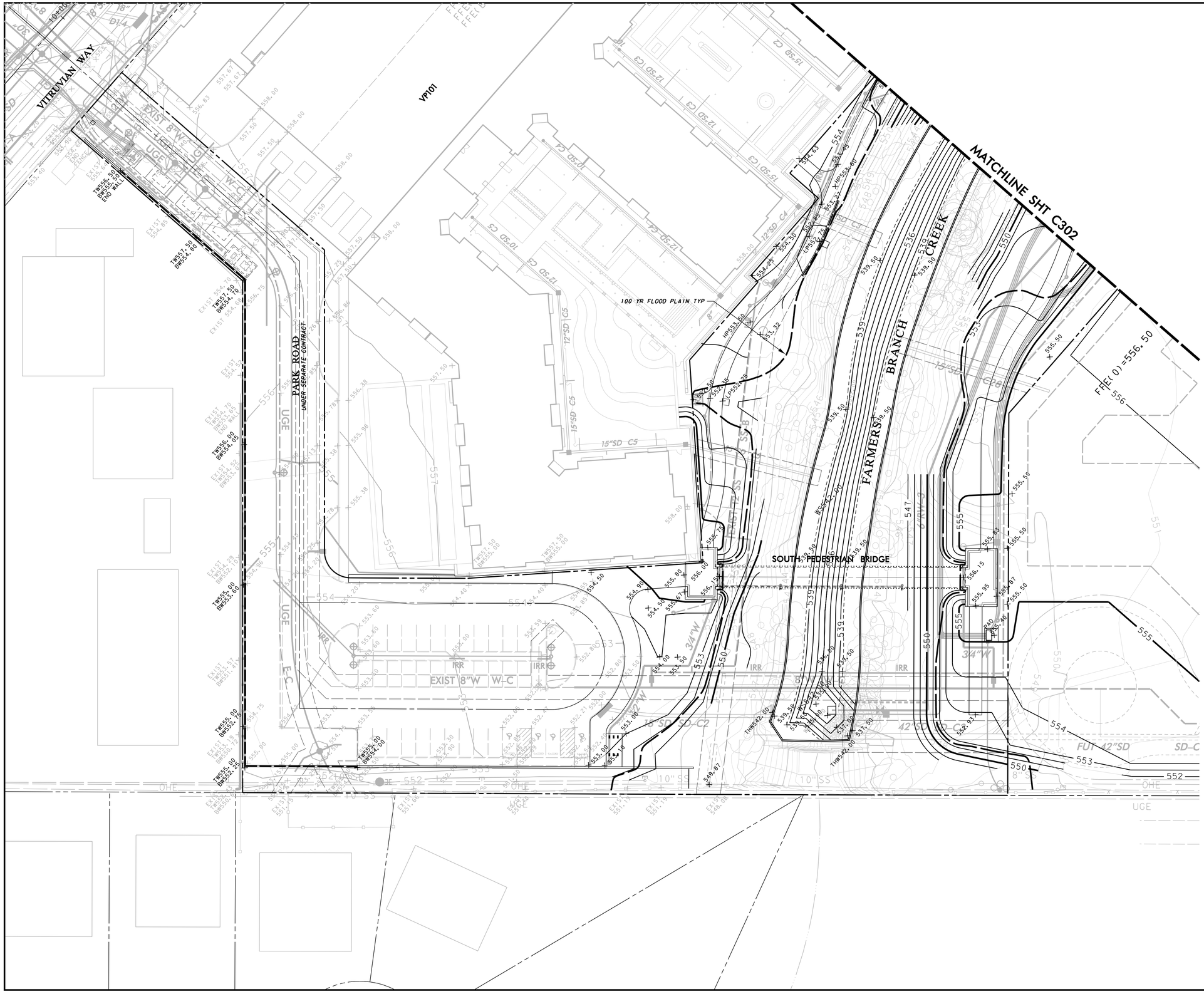
GRADING PLAN
CENTER

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C302

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



NORTH

0 15 30 45 60

GRAPHIC SCALE IN FEET
SCALE: 1"=30'

GRADING AND EXCAVATION NOTES:

1. *REFER TO SHEET C304 "GENERAL GRADING AND EXCAVATION NOTES" FOR THIS PROJECT.*
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SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison *TOWN OF ADDISON*
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

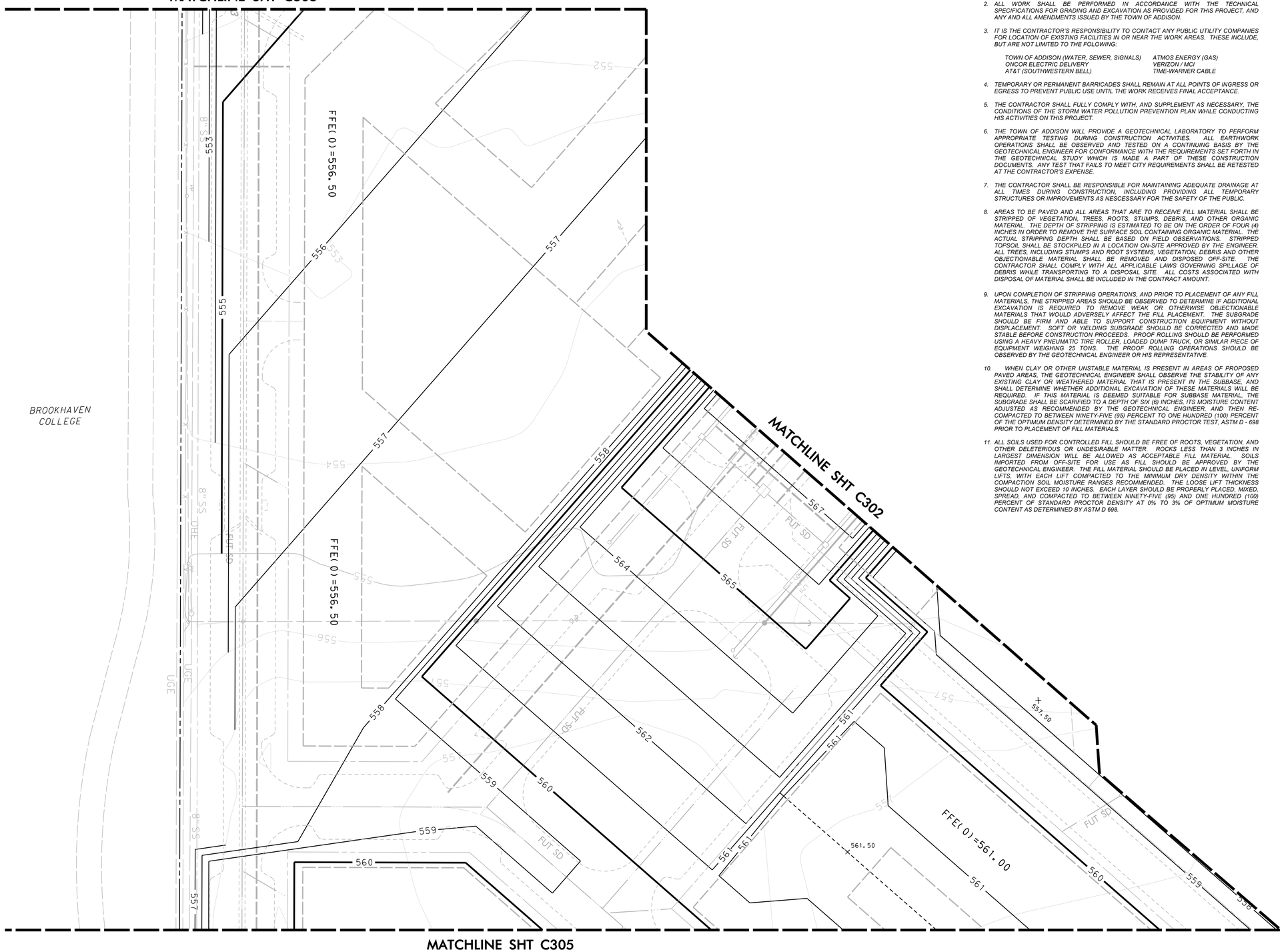
GRADING PLAN SOUTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW # 2009-04	C303

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12



GENERAL GRADING AND EXCAVATION NOTES:

1. *REFER TO SHEET C304 FOR "GENERAL GRADING AND EXCAVATION NOTES" FOR THIS PROJECT.*
2. *ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS FOR GRADING AND EXCAVATION AS PROVIDED FOR THIS PROJECT, AND ANY AND ALL AMENDMENTS ISSUED BY THE TOWN OF ADDISON.*
3. *IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ANY PUBLIC UTILITY COMPANIES FOR LOCATION OF EXISTING FACILITIES IN OR NEAR THE WORK AREAS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLOWING:*

TOWN OF ADDISON (WATER, SEWER, SIGNALS)	*ATMOS ENERGY (GAS)*
ONCOR ELECTRIC DELIVERY	*VERIZON / MCI*
AT&T (SOUTHWESTERN BELL)	*TIME-WARNER CABLE*

4. *TEMPORARY OR PERMANENT BARRICADES SHALL REMAIN AT ALL POINTS OF INGRESS OR EGRESS TO PREVENT PUBLIC USE UNTIL THE WORK RECEIVES FINAL ACCEPTANCE.*
5. *THE CONTRACTOR SHALL FULLY COMPLY WITH, AND SUPPLEMENT AS NECESSARY, THE CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN WHILE CONDUCTING HIS ACTIVITIES ON THIS PROJECT.*
6. *THE TOWN OF ADDISON WILL PROVIDE A GEOTECHNICAL LABORATORY TO PERFORM APPROPRIATE TESTING DURING CONSTRUCTION ACTIVITIES. ALL EARTHWORK OPERATIONS SHALL BE OBSERVED AND TESTED ON A CONTINUING BASIS BY THE GEOTECHNICAL ENGINEER FOR CONFORMANCE WITH THE REQUIREMENTS SET FORTH IN THE GEOTECHNICAL STUDY WHICH IS MADE A PART OF THESE CONSTRUCTION DOCUMENTS. ANY TEST THAT FAILS TO MEET CITY REQUIREMENTS SHALL BE RETESTED AT THE CONTRACTOR'S EXPENSE.*
7. *THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AT ALL TIMES DURING CONSTRUCTION, INCLUDING PROVIDING ALL TEMPORARY STRUCTURES OR IMPROVEMENTS AS NESCESSARY FOR THE SAFETY OF THE PUBLIC.*
8. *AREAS TO BE PAVED AND ALL AREAS THAT ARE TO RECEIVE FILL MATERIAL SHALL BE STRIPPED OF VEGETATION, TREES, ROOTS, STUMPS, DEBRIS, AND OTHER ORGANIC MATERIAL. THE DEPTH OF STRIPPING IS ESTIMATED TO BE ON THE ORDER OF FOUR (4) INCHES IN ORDER TO REMOVE THE SURFACE SOIL CONTAINING ORGANIC MATERIAL. THE ACTUAL STRIPPING DEPTH SHALL BE BASED ON FIELD OBSERVATIONS. STRIPPED TOPSOIL SHALL BE STOCKPILED IN A LOCATION ON-SITE APPROVED BY THE ENGINEER. ALL TREES, INCLUDING STUMPS AND ROOT SYSTEMS, VEGETATION, DEBRIS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OFF-SITE. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE. ALL COSTS ASSOCIATED WITH DISPOSAL OF MATERIAL SHALL BE INCLUDED IN THE CONTRACT AMOUNT.*
9. *UPON COMPLETION OF STRIPPING OPERATIONS, AND PRIOR TO PLACEMENT OF ANY FILL MATERIALS, THE STRIPPED AREAS SHOULD BE OBSERVED TO DETERMINE IF ADDITIONAL EXCAVATION IS REQUIRED TO REMOVE WEAK OR OTHERWISE OBJECTIONABLE MATERIALS THAT WOULD ADVERSELY AFFECT THE FILL PLACEMENT. THE SUBGRADE SHOULD BE FIRM AND ABLE TO SUPPORT CONSTRUCTION EQUIPMENT WITHOUT DISPLACEMENT. SOFT OR YIELDING SUBGRADE SHOULD BE CORRECTED AND MADE STABLE BEFORE CONSTRUCTION PROCEEDS. PROOF ROLLING SHOULD BE PERFORMED USING A HEAVY PNEUMATIC TIRE ROLLER, LOADED DUMP TRUCK, OR SIMILAR PIECE OF EQUIPMENT WEIGHING 25 TONS. THE PROOF ROLLING OPERATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE.*
10. *WHEN CLAY OR OTHER UNSTABLE MATERIAL IS PRESENT IN AREAS OF PROPOSED PAVED AREAS, THE GEOTECHNICAL ENGINEER SHALL OBSERVE THE STABILITY OF ANY EXISTING CLAY OR WEATHERED MATERIAL THAT IS PRESENT IN THE SUBBASE, AND SHALL DETERMINE WHETHER ADDITIONAL EXCAVATION OF THESE MATERIALS WILL BE REQUIRED. IF THIS MATERIAL IS DEEMED SUITABLE FOR SUBBASE MATERIAL, THE SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF SIX (6) INCHES, ITS MOISTURE CONTENT ADJUSTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER, AND THEN RE-COMPACTED TO BETWEEN NINETY-FIVE (95) PERCENT TO ONE HUNDRED (100) PERCENT OF THE OPTIMUM DENSITY DETERMINED BY THE STANDARD PROCTOR TEST, ASTM D - 698 PRIOR TO PLACEMENT OF FILL MATERIALS.*
11. *ALL SOILS USED FOR CONTROLLED FILL SHOULD BE FREE OF ROOTS, VEGETATION, AND OTHER DELETERIOUS OR UNDESIRABLE MATTER. ROCKS LESS THAN 3 INCHES IN LARGEST DIMENSION WILL BE ALLOWED AS ACCEPTABLE FILL MATERIAL. SOILS IMPORTED FROM OFF-SITE FOR USE AS FILL SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER. THE FILL MATERIAL SHOULD BE PLACED IN LEVEL, UNIFORM LIFTS, WITH EACH LIFT COMPACTED TO THE MINIMUM DRY DENSITY WITHIN THE COMPACTION SOIL MOISTURE RANGES RECOMMENDED. THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED 10 INCHES. EACH LAYER SHOULD BE PROPERLY PLACED, MIXED, SPREAD, AND COMPACTED TO BETWEEN NINETY-FIVE (95) AND ONE HUNDRED (100) PERCENT OF STANDARD PROCTOR DENSITY AT 0% TO 3% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698.*

NORTH

0 15 30 45 60

GRAPHIC SCALE IN FEET
SCALE: 1"=30'

GRADING AND EXCAVATION NOTES:

1. *REFER TO SHEET C304 "GENERAL GRADING AND EXCAVATION NOTES" FOR THIS PROJECT.*
2. *THE PROPOSED CONTOURS INDICATED ON THE GRADING PLAN ARE FINISHED GRADES AND ARE SHOWN AT ONE-FOOT INTERVALS. SPOT ELEVATIONS SHOWN IN PAVED AREAS ARE TOP OF PAVEMENT, UNLESS NOTED OTHERWISE.*
3. *THE CONTRACTOR SHALL BE RESPONSIBLE FOR MASS GRADING OF THE SITE TO THE FOLLOWING ELEVATIONS:*

   ** 12" BELOW FINISHED GRADE FOR ALL AREAS WITHIN THE CONFINES OF THE LAKE AREA FOR PLACEMENT OF CLAY LINER MATERIAL.*
   ** 6" BELOW FINISHED GRADE FOR ALL HEAVY DUTY SIDEWALK PAVEMENT AREAS.*
   ** 4" BELOW FINISHED GRADE FOR ALL STANDARD SIDEWALK PAVEMENT AREAS.*
   ** 4" BELOW FINISHED GRADE FOR ALL LANDSCAPE AREAS.*

   A TOLERANCE OF +/- 0.10 FEET OF THE FINISHED GRADE WILL BE ALLOWED FOR ALL AREAS UNDER PROPOSED PAVEMENT. ALL LANDSCAPE AREAS ARE TO BE GRADED WITHIN +/- 0.30 FEET OF THE FINISHED GRADE.
4. *ALL LANDSCAPE AREAS WITHIN THE LIMITS OF THE PARK PROPERTY NOT DESIGNATED TO BE PAVED OR THAT ARE LOCATED WITHIN THE LIMITS OF THE LAKE AND CREEK AREAS SHALL RECEIVE FOUR (4) INCHES OF TOPSOIL. REFER TO THE LANDSCAPE PLANS FOR LIMITS OF TOPSOIL PLACEMENT.*

WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison *TOWN OF ADDISON*
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

GRADING PLAN SOUTHEAST

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C304

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

MATCHLINE SHT C304

MATCHLINE SHT C302

MATCHLINE SHT C301

NORTH

0 15 30 45 60
GRAPHIC SCALE IN FEET
SCALE: 1"=30'

FFE(0)=561.00

561.50

562.00

561.75

FUT SD

OHE

UGE

PARISH EPISCOPAL SCHOOL

WARNING

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GRADING AND EXCAVATION NOTES:

1. REFER TO SHEET C304 "GENERAL GRADING AND EXCAVATION NOTES" FOR THIS PROJECT.
2. THE PROPOSED CONTOURS INDICATED ON THE GRADING PLAN ARE FINISHED GRADES AND ARE SHOWN AT ONE-FOOT INTERVALS. SPOT ELEVATIONS SHOWN IN PAVED AREAS ARE TOP OF PAVEMENT, UNLESS NOTED OTHERWISE.
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   * 6" BELOW FINISHED GRADE FOR ALL HEAVY DUTY SIDEWALK PAVEMENT AREAS.
   * 4" BELOW FINISHED GRADE FOR ALL STANDARD SIDEWALK PAVEMENT AREAS.
   * 4" BELOW FINISHED GRADE FOR ALL LANDSCAPE AREAS.

   A TOLERANCE OF +/- 0.10 FEET OF THE FINISHED GRADE WILL BE ALLOWED FOR ALL AREAS UNDER PROPOSED PAVEMENT. ALL LANDSCAPE AREAS ARE TO BE GRADED WITHIN +/- 0.30 FEET OF THE FINISHED GRADE.
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BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

GRADING PLAN NORTHEAST

icon Consulting Engineers, Inc.
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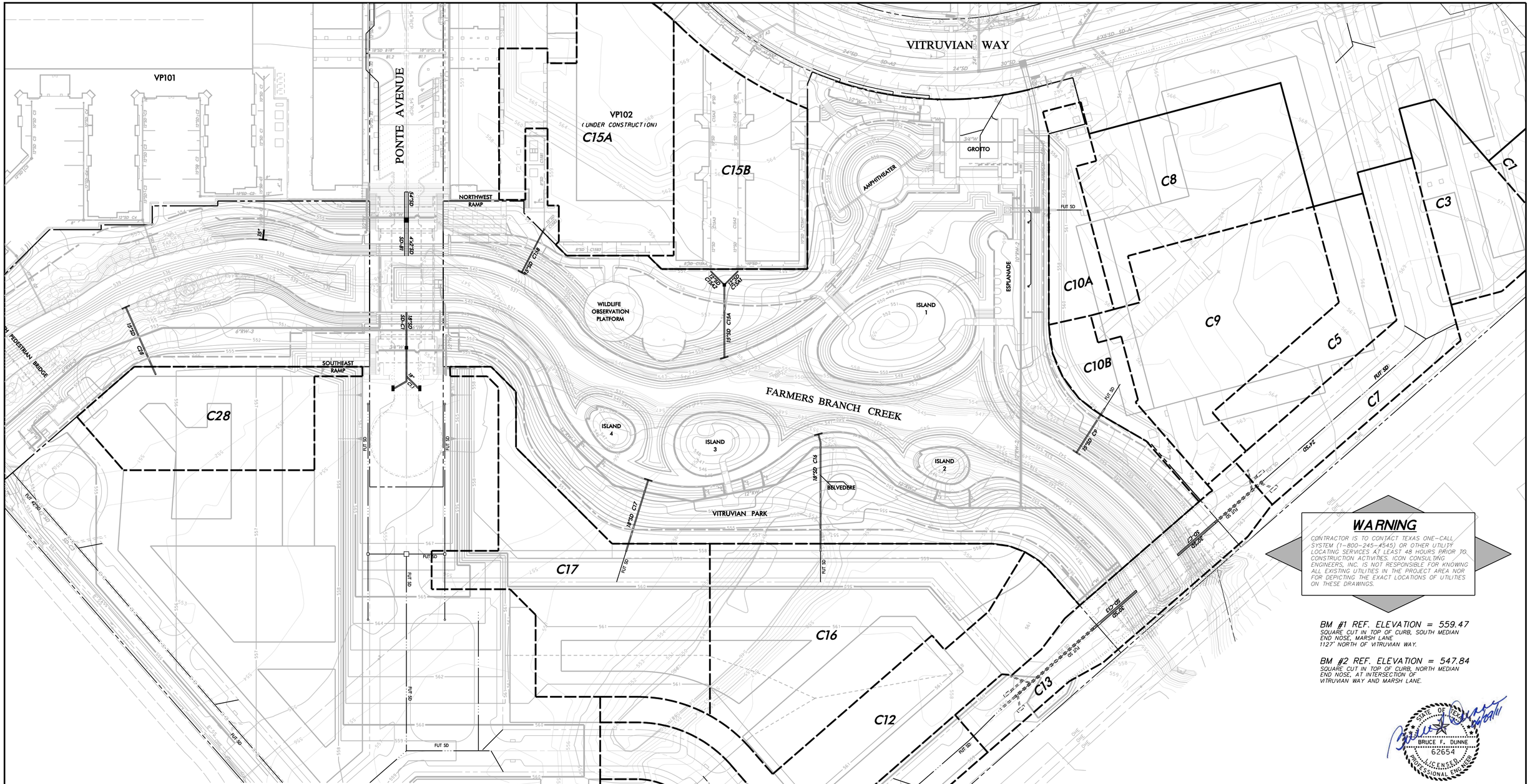
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C305

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12



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BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

DRAINAGE AREA CALCULATIONS - PROPOSED VITRUVIAN PARK

AREA NO.	AREA (acres)	RUNOFF COEFF.	CA	Tc (min)	I2 (in/hr)	Q2 (cfs)	I5 (in/hr)	Q5 (cfs)	I10 (in/hr)	Q10 (cfs)	I25 (in/hr)	Q25 (cfs)	I50 (in/hr)	Q50 (cfs)	I100 (in/hr)	Q100 (cfs)	COLLECTION POINT
C1	0.38	0.90	0.34	10.0	5.2	1.8	5.9	2.0	6.5	2.2	7.4	2.5	8.2	2.8	8.9	3.0	FUTURE ROOF DRAINS
C3	0.58	0.90	0.52	10.0	5.2	2.7	5.9	3.1	6.5	3.4	7.4	3.9	8.2	4.3	8.9	4.6	FUTURE ROOF DRAINS
C5	0.55	0.90	0.50	10.0	5.2	2.6	5.9	2.9	6.5	3.2	7.4	3.7	8.2	4.0	8.9	4.4	FUTURE ROOF DRAINS
C7	0.83	0.90	0.75	10.0	5.2	3.9	5.9	4.4	6.5	4.8	7.4	5.6	8.2	6.1	8.9	6.6	FUTURE CURB INLETS
C8	1.03	0.90	0.93	10.0	5.2	4.8	5.9	5.5	6.5	6.0	7.4	6.9	8.2	7.6	8.9	8.2	FUTURE ROOF DRAINS
C9	1.25	0.90	1.13	10.0	5.2	5.9	5.9	6.6	6.5	7.3	7.4	8.4	8.2	9.2	8.9	10.0	FUTURE ROOF DRAINS
C10A	0.34	0.90	0.31	10.0	5.2	1.6	5.9	1.8	6.5	2.0	7.4	2.3	8.2	2.5	8.9	2.7	FUTURE ROOF & AREA DRAINS
C10B	0.28	0.90	0.25	10.0	5.2	1.3	5.9	1.5	6.5	1.6	7.4	1.9	8.2	2.1	8.9	2.2	FUTURE ROOF & AREA DRAINS
C12	1.12	0.90	1.01	10.0	5.2	5.3	5.9	5.9	6.5	6.5	7.4	7.5	8.2	8.2	8.9	9.0	FUTURE ROOF DRAINS
C13	0.74	0.90	0.67	10.0	5.2	3.5	5.9	3.9	6.5	4.3	7.4	5.0	8.2	5.4	8.9	5.9	FUTURE CURB INLETS
C15A	1.32	0.90	1.19	10.0	5.2	6.2	5.9	7.0	6.5	7.7	7.4	8.8	8.2	9.7	8.9	10.5	FUTURE ROOF & AREA DRAINS
C15B	0.96	0.90	0.86	10.0	5.2	4.5	5.9	5.1	6.5	5.6	7.4	6.4	8.2	7.1	8.9	7.7	FUTURE ROOF & AREA DRAINS
C16	1.59	0.90	1.43	10.0	5.2	7.5	5.9	8.4	6.5	9.3	7.4	10.6	8.2	11.7	8.9	12.7	FUTURE ROOF & AREA DRAINS
C17	1.42	0.90	1.28	10.0	5.2	6.7	5.9	7.5	6.5	8.3	7.4	9.5	8.2	10.4	8.9	11.3	FUTURE ROOF & AREA DRAINS
C19	0.34	0.90	0.31	10.0	5.2	1.6	5.9	1.8	6.5	2.0	7.4	2.3	8.2	2.5	8.9	2.7	FUTURE CURB INLETS
C20	0.81	0.90	0.73	10.0	5.2	3.8	5.9	4.3	6.5	4.7	7.4	5.4	8.2	5.9	8.9	6.5	FUTURE CURB INLETS
C21	0.71	0.90	0.64	10.0	5.2	3.3	5.9	3.8	6.5	4.1	7.4	4.8	8.2	5.2	8.9	5.7	FUTURE ROOF & AREA DRAINS
C28	0.80	0.90	0.72	10.0	5.2	3.8	5.9	4.2	6.5	4.7	7.4	5.4	8.2	5.9	8.9	6.4	FUTURE ROOF & AREA DRAINS
	12.7					**59.8**		**67.3**		**74.2**		**85.1**		**93.3**		**101.6**	

LEGEND

DRAINAGE AREA DESIGNATION **B26**
DRAINAGE AREA BOUNDARY
DRAINAGE AREA SUB DIVIDE
DIRECTION OF FLOW

NORTH

0 30 60 90 120
GRAPHIC SCALE IN FEET
SCALE: 1"=60'

BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS

NO.	REVISION	BY	DATE

Addison *TOWN OF ADDISON*
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

DRAINAGE AREA MAP & CALCULATIONS

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Civil Engineers - Designers - Planners
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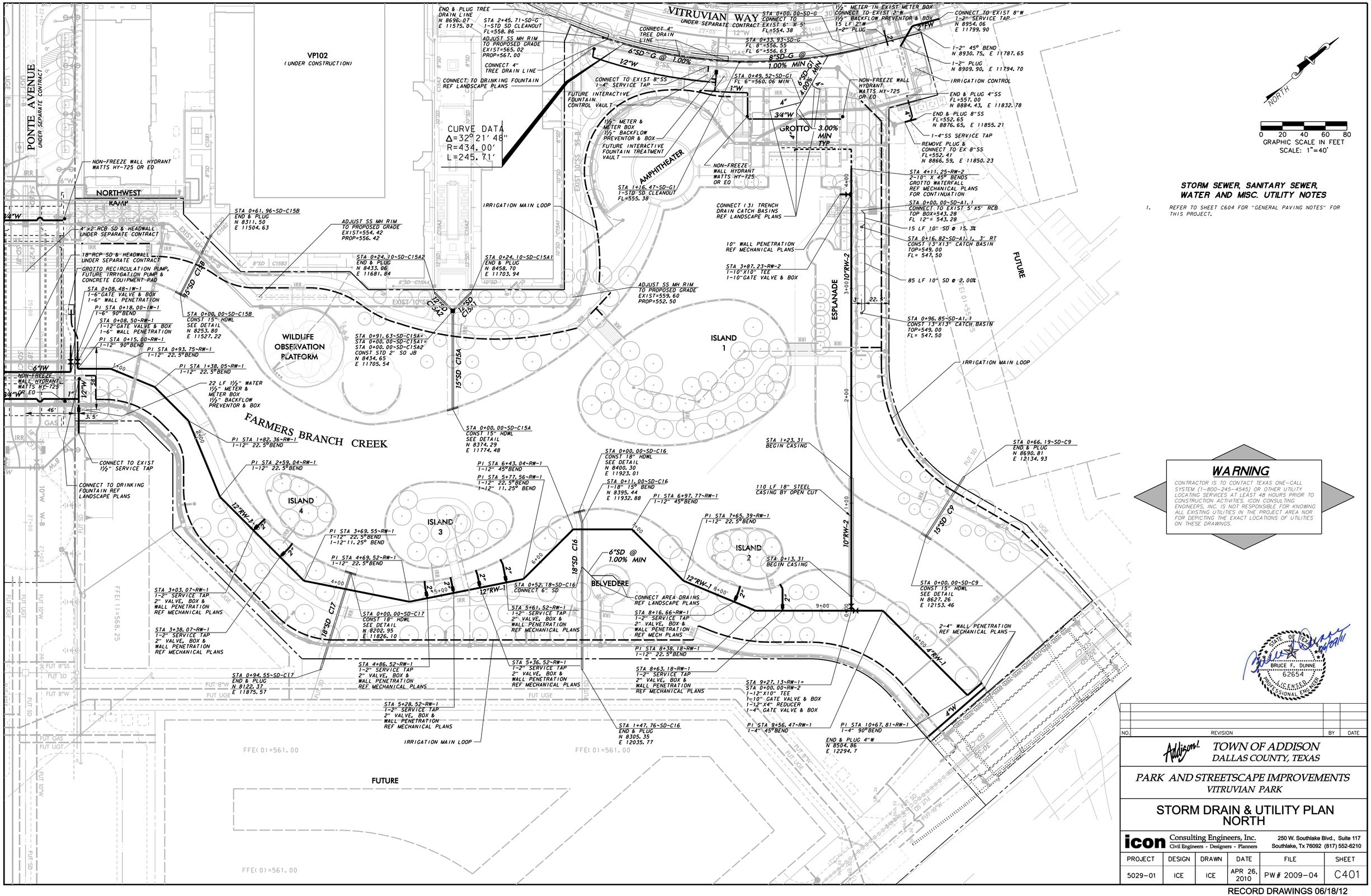
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C400

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



STORM SEWER, SANITARY SEWER, WATER AND MISC. UTILITY NOTES

1. REFER TO SHEET C604 FOR "GENERAL PAVING NOTES" FOR THIS PROJECT.

WARNING

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STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

STORM DRAIN & UTILITY PLAN NORTH

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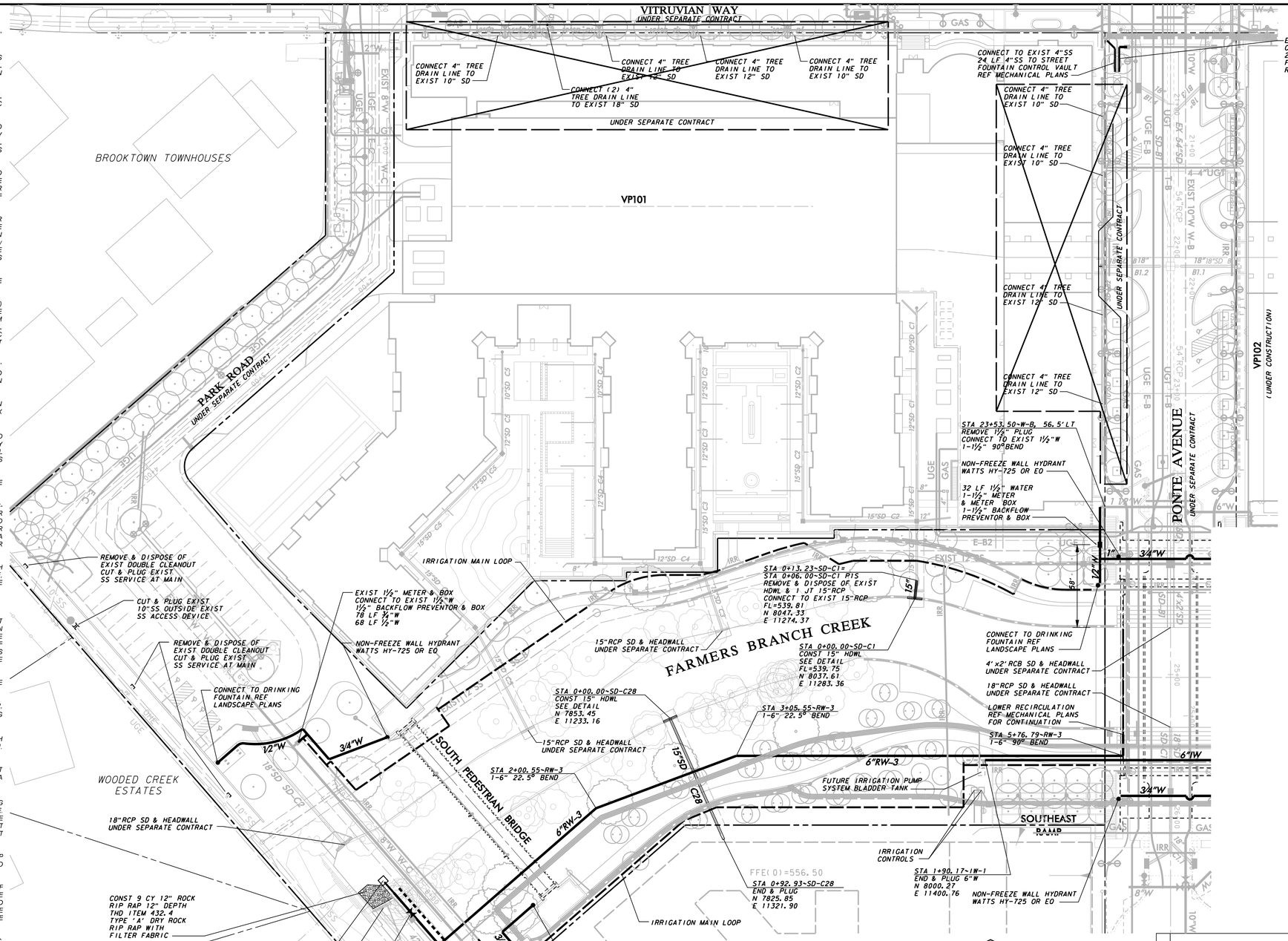
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C401

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

GENERAL STORM DRAIN, SANITARY SEWER, WATER, AND MISC. UTILITY NOTES:

1. REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THIS PROJECT.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG), AND ANY AND ALL AMENDMENTS BY THE TOWN OF ADDISON, AS WELL AS STANDARD CONSTRUCTION DETAILS SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL COVER ALL OPEN EXCAVATIONS WITH ANCHORED STEEL PLATING, DURING NON-WORKING HOURS, ALONG EXISTING ROADWAYS AND TRAFFIC AREAS.
4. THE CONTRACTOR SHALL VERIFY THE SIZE, TYPE, ELEVATION, CONFIGURATION, AND ANGULATION OF EXISTING STORM DRAIN, WATER, SEWER AND OTHER MISC. UTILITY LINES PRIOR TO CONSTRUCTION OF TIE-IN MATERIALS. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS TO EXISTING FACILITIES DAMAGED BY HIS ACTIVITIES.
5. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE SUPPORT AND PROTECTION OF ALL UTILITY POLES, FENCES, TREES, SHRUBS, GAS MAINS, TELEPHONE CABLES, ELECTRIC CABLES, DRAINAGE PIPES, UTILITY SERVICES, AND ALL OTHER UTILITIES AND STRUCTURES BOTH ABOVE AND BELOW THE GROUND, THE COST OF WHICH SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
6. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ASSURE PROPER DEPTHS ARE ACHIEVED. IN THE EVENT OF A CONFLICT BETWEEN WATER AND/OR MISC. UTILITY LINES WITH STORM DRAIN AND/OR SANITARY SEWER PIPING, THE CONTRACTOR SHALL ADJUST THE WATER LINE / MISC. UTILITY LINES DOWNWARDS IN SUCH A MANNER SO THAT THE PIPE MANUFACTURER'S RECOMMENDATIONS ON THE PIPE DEFLECTION AND JOINT STRESS ARE NOT EXCEEDED.
7. ALL STORM DRAIN STRUCTURES INCLUDING INLETS, DRAINS AND CLEANOUTS MUST BE ADJUSTED TO FINAL FINISHED GRADE BY THE CONTRACTOR.
8. ALL PIPE FOR STORM DRAIN IMPROVEMENTS FIFTEEN (15") THROUGH THIRTY-SIX (36") SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS III. REINFORCED CONCRETE PIPE JOINTS SHALL BE SEALED WITH RAMNECK OR APPROVED EQUAL. ALL PIPE FOR STORM DRAINAGE IMPROVEMENTS TWO (2") THROUGH TWELVE (12") SHALL BE POLYVINYL CHLORIDE PIPE (PVC), SDR-35 UNLESS NOTED OTHERWISE. ALL PIPE ENTERING PUBLIC STORM DRAIN STRUCTURES SHALL BE GROUTED TO ASSURE WATERTIGHT CONNECTIONS.
9. EMBEDMENT FOR STORM DRAIN PIPING SHALL CONSIST OF GRADE 4 CRUSHED STONE (3' BELOW PIPE FOR 27" AND SMALLER PIPES, AND 4" BELOW PIPE FOR 30" PIPES AND LARGER) TO THE CRADLE OF THE PIPE, WITH SELECT NATIVE SOIL LESS THAN 3" IN DIAMETER OR GRANULAR MATERIAL TO 6" OVER THE TOP OF PIPE.
10. FINISH BACKFILL SHALL BE NATIVE SOIL FREE OF ALL ROCKS AND CLODS GREATER THAN THREE INCHES IN DIAMETER, COMPACTED TO 95% STANDARD PROCTOR DENSITY, IN SIX (6) INCH MAXIMUM LOOSE LIFTS, WITH ZERO TO PLUS THREE, OPTIMUM MOISTURE.
11. THE CONTRACTOR SHALL VERIFY THE SIZE, TYPE, ELEVATION, CONFIGURATION, AND ANGULATION OF EXISTING STORM DRAIN, WATER, SANITARY SEWER AND MISC. UTILITY LINES PRIOR TO CONSTRUCTION OF TIE-IN MATERIALS. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS TO EXISTING FACILITIES DAMAGED BY HIS ACTIVITIES.
12. ALL WATER MAIN MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON'S WATER SYSTEM REQUIREMENTS.
13. ALL WATER MAINS TWELVE-INCH (12") DIAMETER AND SMALLER SHALL BE ANSI/AWWA C-900 PVC PRESSURE PIPE WITH CAST IRON O.D. OR WHEN PIPE PENETRATES METER VAULT WALLS IT SHALL BE DUCTILE IRON. PIPE JOINTS SHALL BE RUBBER RING AND INTEGRAL THICKENED BELL, ASSEMBLED WITH A FACTORY SUPPLIED LUBRICANT. WATER MAINS SHALL HAVE A MINIMUM CLASS RATING OF 150-PSI FOR DOMESTIC USE AND A MINIMUM CLASS RATING OF 200-PSI FOR FIRE LINE APPLICATIONS. JOINT MATERIAL FOR PVC SHALL CONFORM TO ASTM F471.
14. EMBEDMENT FOR WATER, SEWER AND MISC. UTILITY PIPING SHALL COMPLY WITH NCTCOG CLASS "B+" EMBEDMENT OF CRUSHED STONE TO THE SPRING LINE OF THE PIPE, WITH SAND (12" MIN.) OVER THE PIPE. A LAYER OF GEO-TEXTILE FABRIC SHALL BE PLACED ON TOP OF THE STONE PRIOR TO THE PLACEMENT OF THE SAND.
15. THE MINIMUM COVER TO THE TOP OF ALL WATER LINES SHALL BE FOUR FEET (4').
16. THE CONTRACTOR SHALL SUPPLY AND INSTALL ANY ADDITIONAL BENDS WITH THRUST BLOCKING AND OTHER APPURTENANCES REQUIRED TO ASSURE PROPER INSTALLATION OF WATER MAINS AND LATERALS. THE CONTRACTOR MAY PULL PIPE AS NEEDED AT THE BENDS WHERE THE DEFLECTION ANGLE OF THE PIPE DOES NOT MATCH THE ANGLE OF THE BEND PROVIDED THE PIPE DEFLECTION IS WITHIN TOLERABLE MANUFACTURERS LIMITS. THE COST FOR ADDITIONAL BENDS AND BLOCKING SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
17. ALL VALVES, DUCTILE IRON AND CAST IRON PIPE, FITTINGS AND SPECIALS SHALL BE POLYETHYLENE WRAPPED (MINIMUM 8 MIL THICKNESS).
18. HORIZONTAL BLOCKING FOR WATER LINES HAS BEEN OMITTED FOR CLARITY, HOWEVER, BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' STANDARD DETAILS.
19. ALL FITTINGS SHALL BE DUCTILE IRON, FULL BODIED, MECHANICAL JOINT TYPE WITH RESTRAINING GLANDS, AND HAVE A MINIMUM RATED WORKING PRESSURE OF 250 PSI. FITTINGS SHALL BE WRAPPED WITH 8-MIL POLY PRIOR TO BACKFILL.
20. ALL VALVES AND FITTINGS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED. THRUST BLOCKING SHALL BE MINIMUM 3000 PSI CONCRETE AND BE ABLE TO WITHSTAND A MINIMUM 200 PSI TEST PRESSURE.
21. THRUST BLOCKING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' STANDARD DETAILS. DO NOT COVER BELLS OR FLANGES WITH CONCRETE. THE CONTRACTOR SHALL REMOVE EXISTING THRUST BLOCKING OR RESTRAINTS WHERE NECESSARY TO ALLOW THE WORK TO PROCEED, AND SHALL REPLACE THE THRUST BLOCKS WHERE REQUIRED. THE COST TO REMOVE, REPLACE OR PROVIDE THRUST BLOCKING SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
22. NO PERSON SHALL OPEN, TURN OFF, INTERFERE WITH, ATTACH ANY HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE TOWN OF ADDISON UNLESS DULY AUTHORIZED TO DO SO BY THE TOWN OF ADDISON PUBLIC WORKS DEPARTMENT (972-450-2871).
23. ALL WASTEWATER MAIN PIPING SHALL MEET THE EXTRA STRENGTH REQUIREMENTS OF ASTM SPECIFICATION D3034 (SDR-35). PIPE SHALL HAVE THE BELL AND SPIGOT TYPE JOINTS, CONSISTING OF INTEGRAL WALL SECTION WITH FACTORY INSTALLED COMPRESSION RUBBER RING GASKET, SECURELY LOCKED IN BELL GROOVE TO PROVIDE POSITIVE SEAL UNDER ALL INSTALLATION CONDITIONS. PIPE SHALL BE LAID WITH THE BELL END ON THE UPSTREAM SIDE.
24. ALL EXISTING AND PROPOSED IMPROVEMENTS (VALVES, MANHOLES, FIRE HYDRANTS, WATER METERS, ETC.) SHALL BE ADJUSTED TO FINAL FINISHED GRADE BY THE CONTRACTOR.
25. WATER LINES SHALL BE TESTED BOTH BACTERIOLOGICALLY AND HYDROSTATICALLY. WATER MAINS SHALL BE HYROSTATICALLY TESTED AT 150 PSI FOR FOUR (4) HOURS. FIRE LINES SHALL BE HYDROSTATICALLY TESTED AT 200 PSI FOR (2) HOURS. ALL BLEEDER LINES SHALL BE REMOVED UPON COMPLETION OF TESTING BY REMOVING THE CORPORATION STOP AND INSTALLING A BRASS PLUG. HEAVILY CHLORINATED WATER (3.5 MG/L OR GREATER FREE CHLORINE) RESULTING FROM WATER LINE STERILIZATION SHALL BE DIRECTED TO THE SANITARY SEWER AFTER THE MANDATORY CHLORINE RETENTION TIME (USUALLY 24 HOURS) UNLESS OTHERWISE NOTED.
26. THE CONTRACTOR SHALL PROVIDE VERIFICATION OF COMPLETION AND COMPLIANCE OF ALL REQUIRED TESTS (PRESSURE, BACTERIOLOGICAL, BACKFLOW, VACUUM, MANDREL, VHS VIDEO OF SANITARY SEWER AND STORM DRAIN, ETC.) TO THE TOWN OF ADDISON.



WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

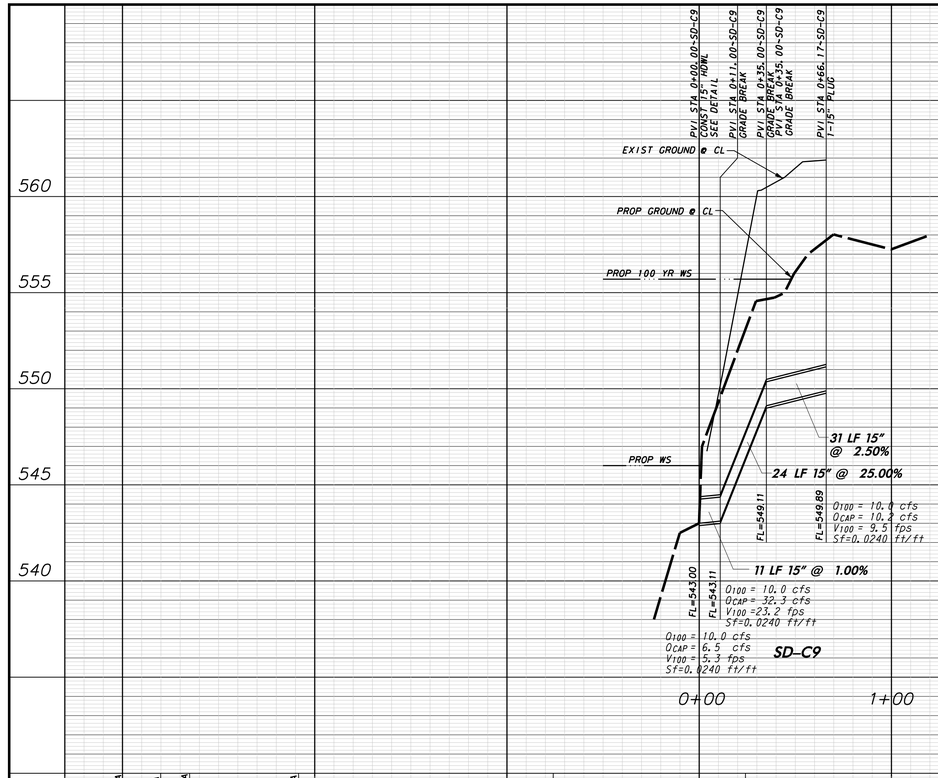
STORM DRAIN & UTILITY PLAN SOUTH

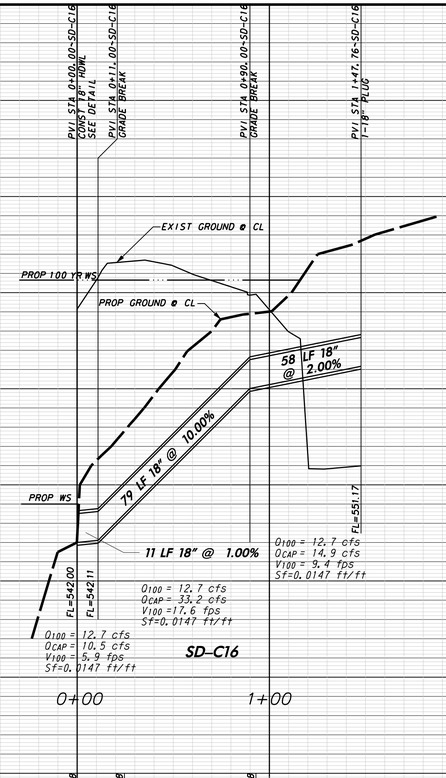
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

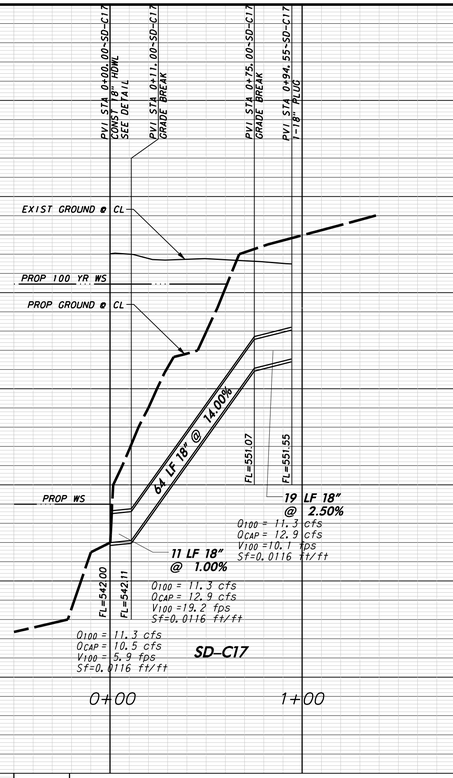
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C402

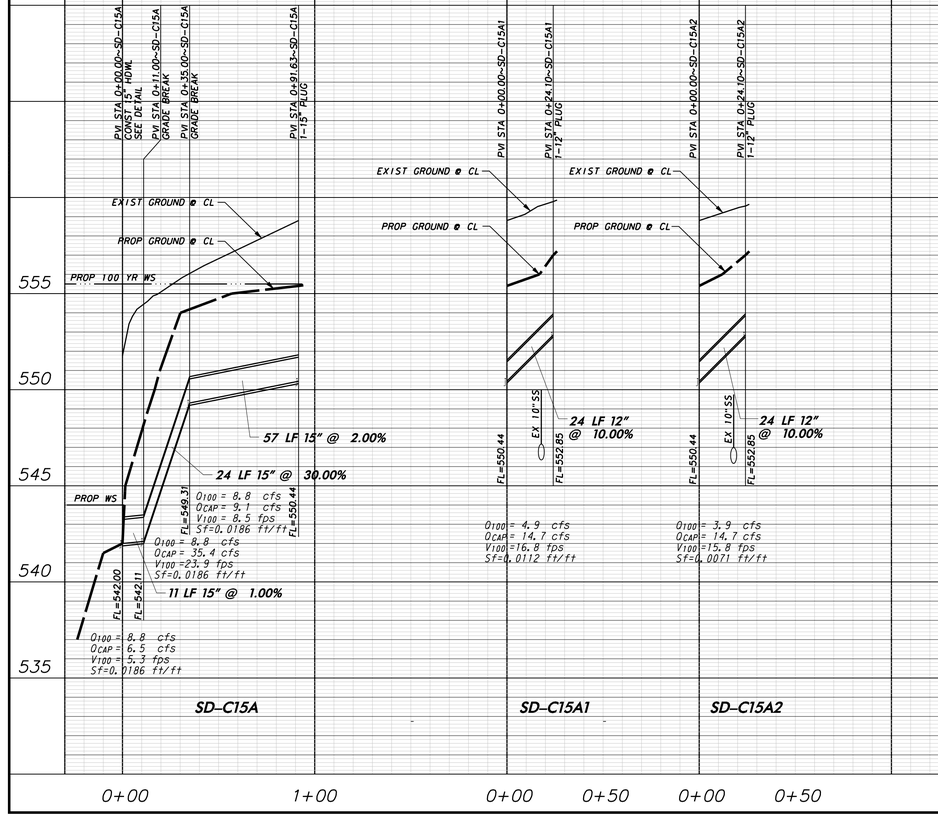
RECORD DRAWINGS 06/18/12

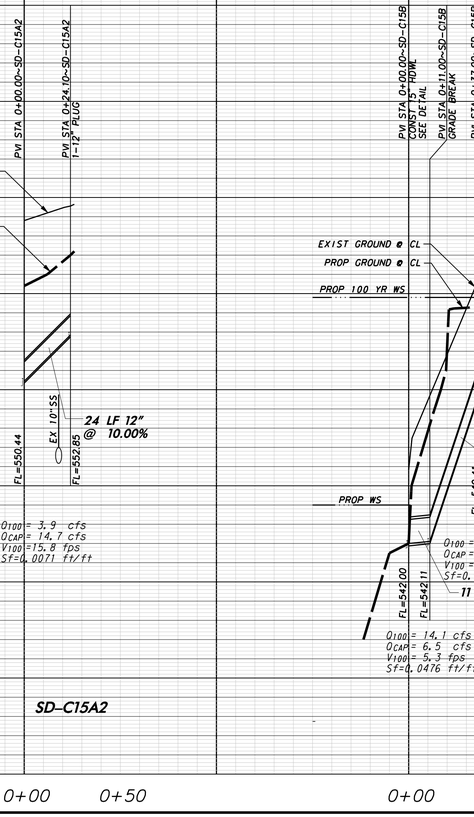
PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

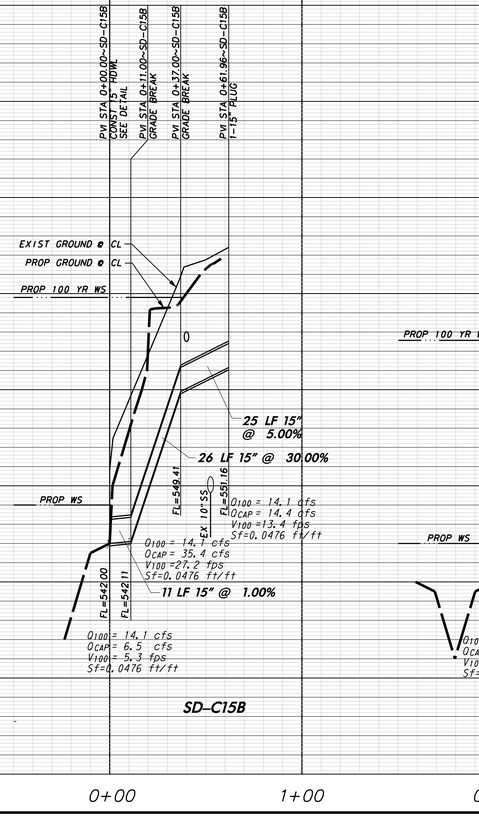


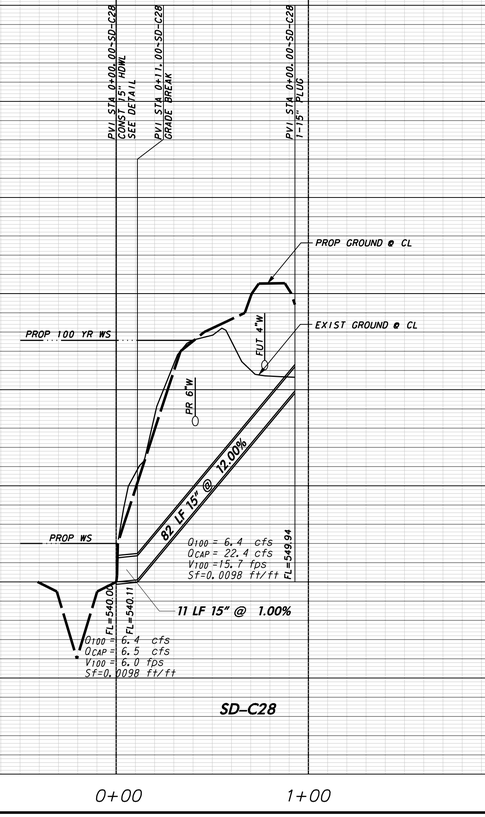












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PROFILE SCALE:

0 20 40 60 80
SCALE: 1"=40' HORIZ

0 2 4 6 8
SCALE: 1"=4' VERT

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

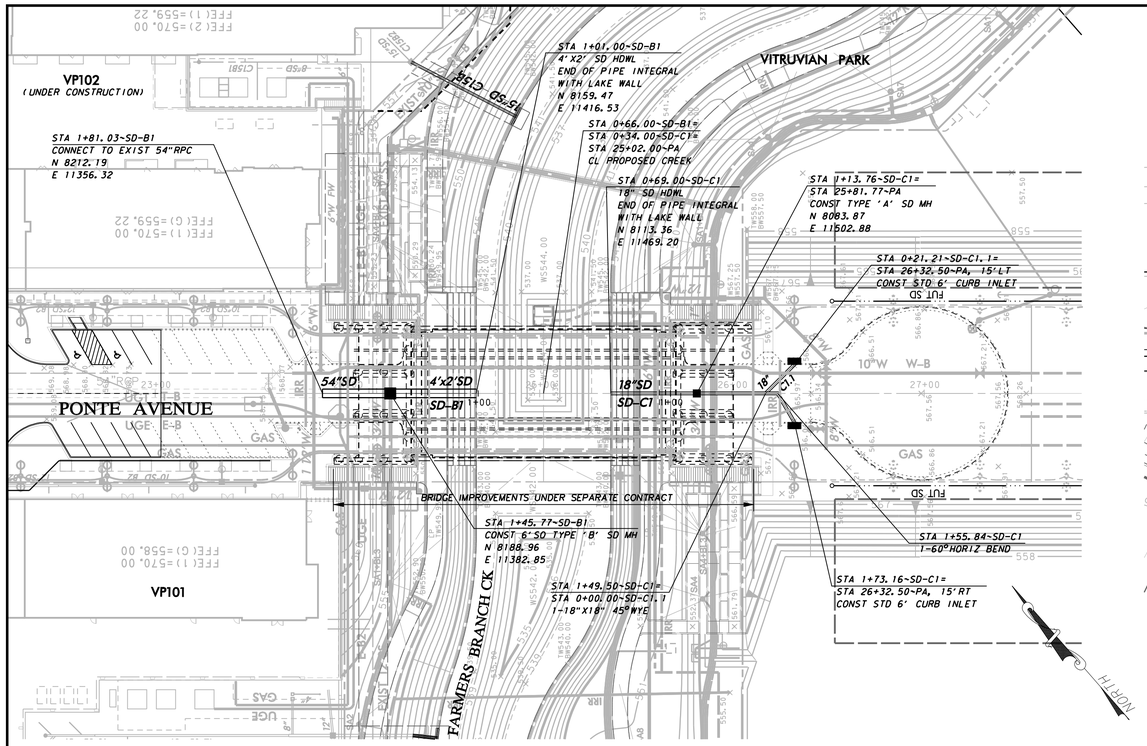
STORM DRAIN PROFILES

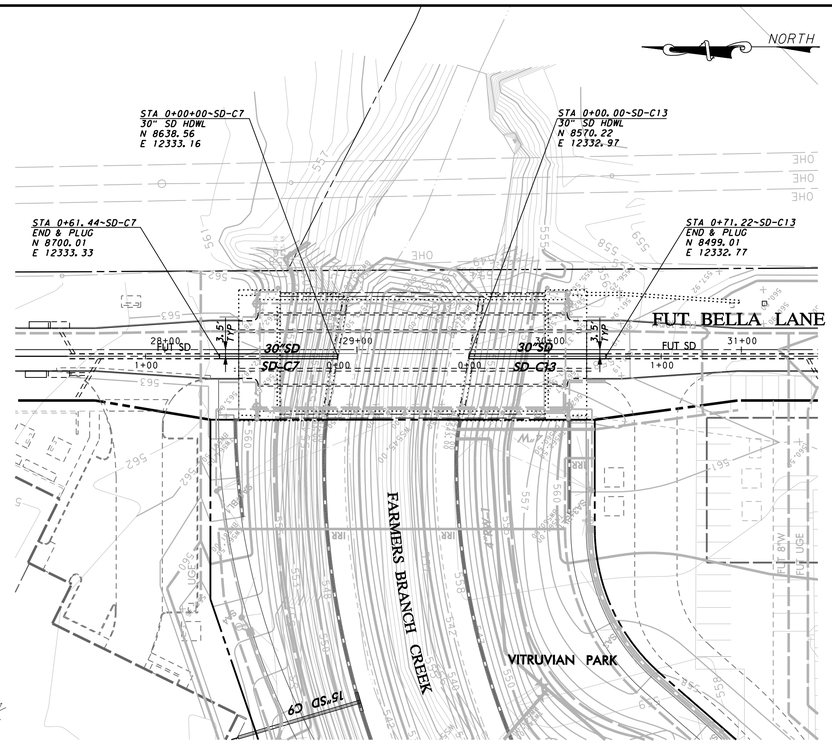
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW # 2009-04	C403

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

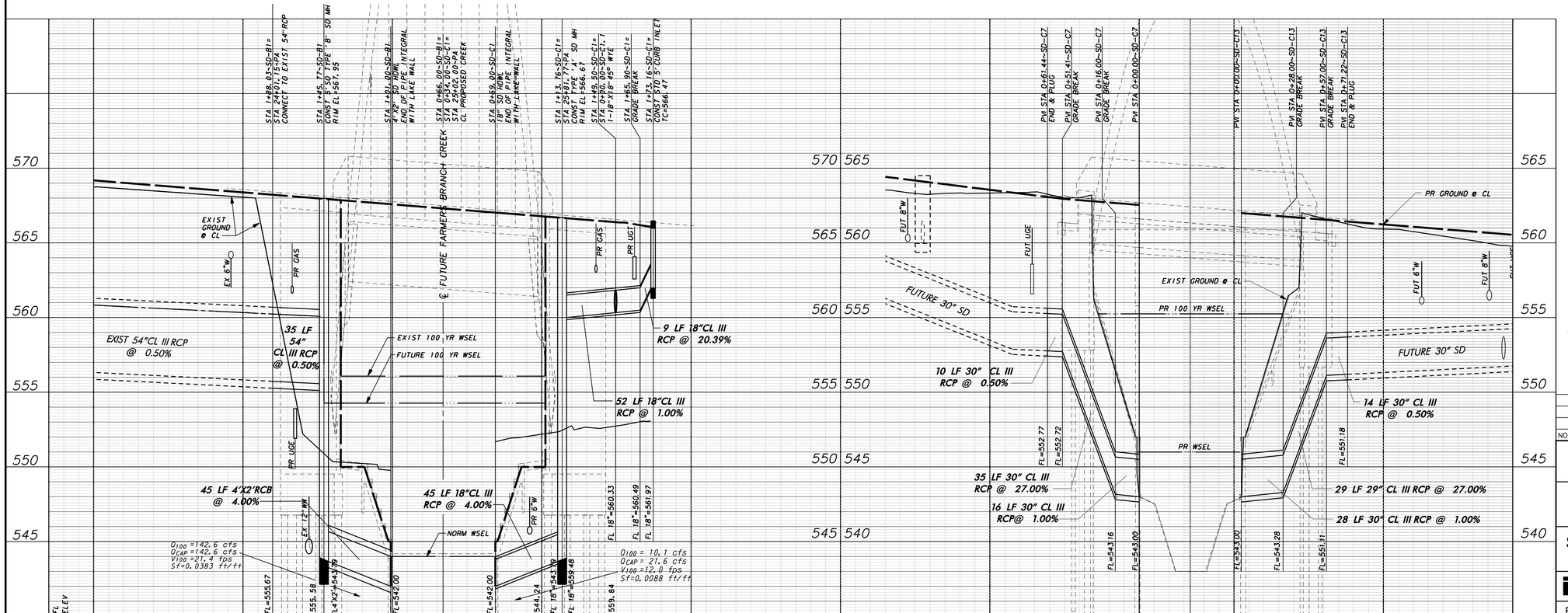




BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

0 20 40 60 80
GRAPHIC SCALE IN FEET
SCALE: 1"=40'



PROFILE SCALE:
0 20 40 60 80
SCALE: 1"=40' HORIZ
0 2 4 6 8
SCALE: 1"=4' VERT

WARNING

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STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER
10/28/10

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

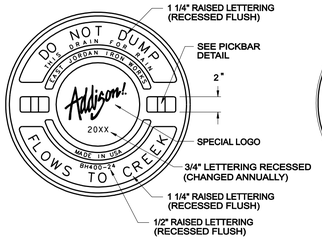
STORM DRAIN PLAN & PROFILE-PA & BL LINES B1 & C1 AND C7 & C13

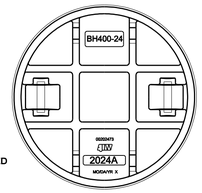
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C404

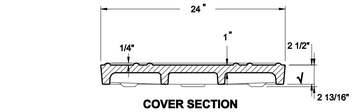
RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

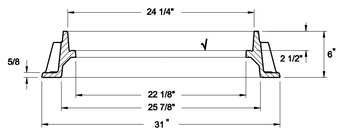




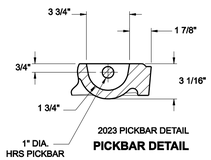
BOTTOM VIEW OF COVER



COVER SECTION



FRAME SECTION



PICKBAR DETAIL

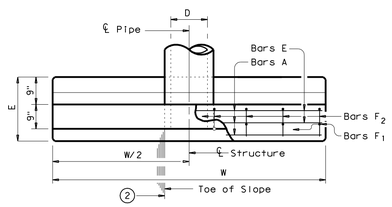
LOAD RATING	COATING	ESTIMATED WEIGHT	MATERIAL SPECIFICATION
HEAVY DUTY	DIPPED	COVER: 193 LBS FRAME: 151 LBS	COVER - GRAY IRON ASTM A48 CL35B FRAME - GRAY IRON ASTM A48 CL35B

√ DESIGNATES MACHINE SURFACE

CAST IRON FRAME AND COVER

ELEVATION

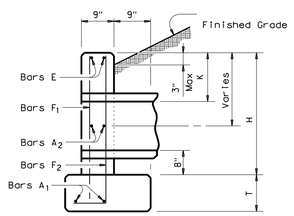
TABLE OF CONSTANT DIMENSIONS					
DIA. OF PIPE, D	W	K	H	T	E
12"	9'-0"	1'-0"	2'-8"	9"	1'-9"
15"	10'-3"	1'-0"	2'-11"	9"	1'-9"
18"	11'-6"	1'-0"	3'-2"	9"	1'-9"
21"	12'-9"	1'-0"	3'-5"	9"	2'-0"
24"	14'-0"	1'-0"	3'-8"	9"	2'-0"
30"	16'-6"	1'-0"	4'-2"	9"	2'-3"
36"	19'-0"	1'-0"	4'-8"	1'-0"	2'-6"
42"	21'-6"	1'-0"	5'-2"	1'-0"	2'-9"



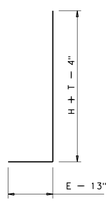
PLAN OF NON-SKEWED PIPE

TABLE OF REINFORCING STEEL (3)			
Bar	Size	Spa	No.
A1	# 5	~	2
A2	# 5	1'-6"	~
E	# 5	~	2
F	# 5	1'-0"	~

(3) Quantities shown are for one structure end. (One headwall)



℄ SECTION



BARS F_2

GENERAL NOTES:

Designed according to current AASHTO Standard and Interim Specifications.

Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete.

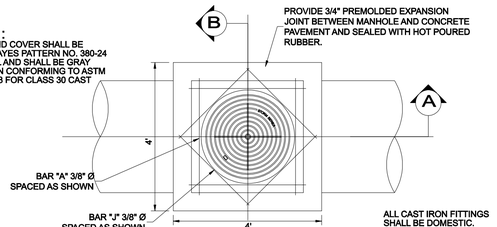
All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.

No bridge rails of any type may be mounted directly to these culvert headwalls.

CONCRETE HEADWALL WITH PARALLEL WINGS FOR NON-SKEWED PIPE CULVERT

NOT TO SCALE

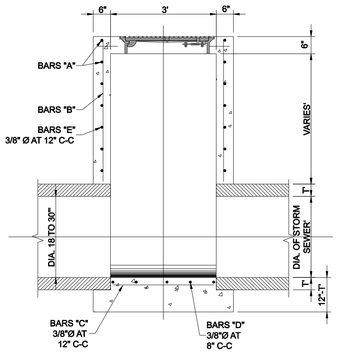
NOTE :
FRAME AND COVER SHALL BE BASS & HAYES PATTERN NO. 380-24 OR EQUAL AND SHALL BE GRAY CAST IRON CONFORMING TO ASTM SPEC. A-48 FOR CLASS 30 CAST IRON.



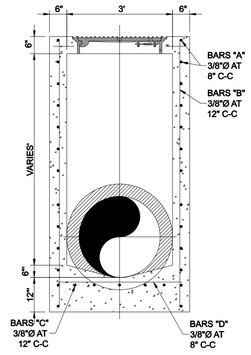
TYPE A & TYPE B STORM SEWER MANHOLE

NOTE : MAXIMUM PIPE SIZE TO BE USED 78"Ø

PLAN
N.T.S.



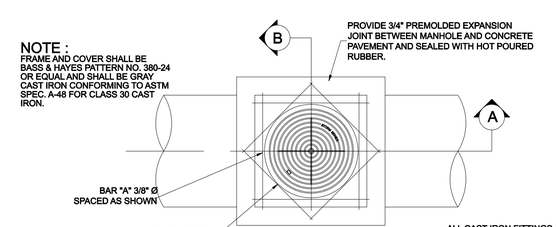
SECTION A
N.T.S.



SECTION B
N.T.S.

TYPE 'A' STORM DRAIN MANHOLE
N.T.S.

NOTE :
FRAME AND COVER SHALL BE BASS & HAYES PATTERN NO. 380-24 OR EQUAL AND SHALL BE GRAY CAST IRON CONFORMING TO ASTM SPEC. A-48 FOR CLASS 30 CAST IRON.



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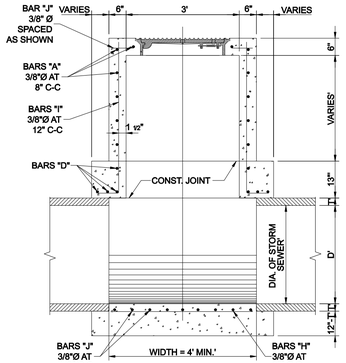
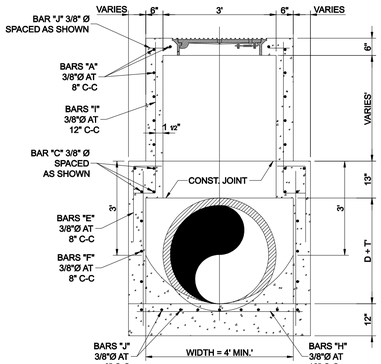
PLAN
N.T.S.

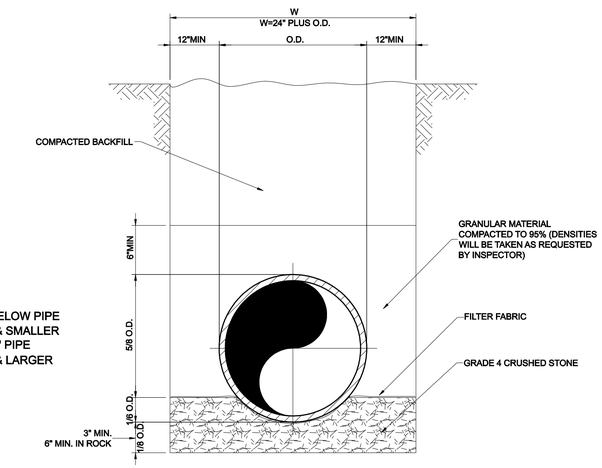


SECTION A
N.T.S.



SECTION B
N.T.S.

TYPE 'B' STORM DRAIN MANHOLE
N.T.S.



NOTE :
DEPTH OF TRENCH BELOW PIPE
3" MIN. FOR 27" PIPE & SMALLER
4" MIN. FOR 30" TO 60" PIPE
6" MIN. FOR 66" PIPE & LARGER

RCP STORM SEWER PIPE BEDDING

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

STORM DRAIN DETAILS

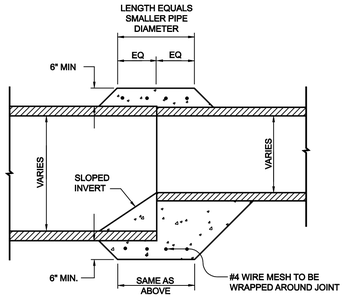
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C405

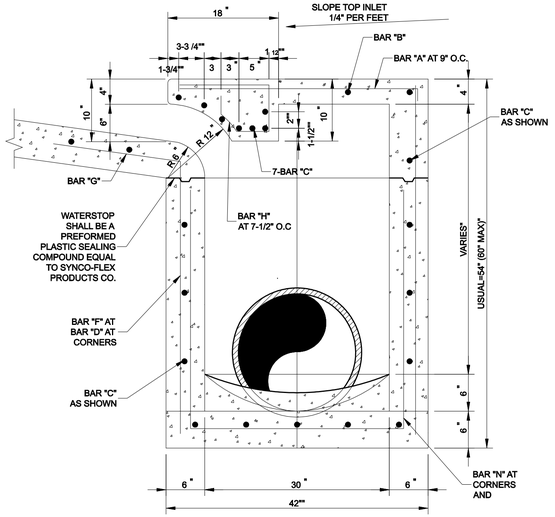
PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

NOTES
1. THIS PROCEDURE/DETAIL WILL ONLY BE USED WHEN 1 PREFAB REDUCTION IS NOT POSSIBLE.
2. CONCRETE FOR COLLAR WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS OTHER BIDS.
3. CONCRETE SHALL BE 5 SACK 3000 PSI.

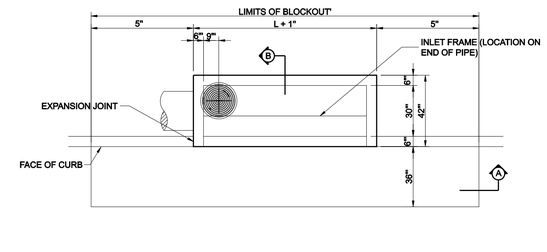


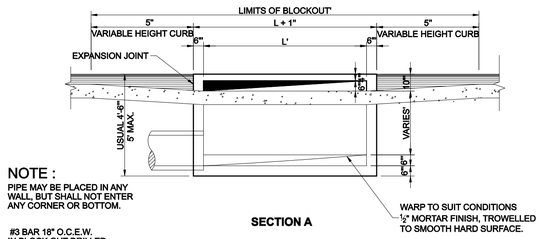
PIPE COLLAR DETAIL



SECTION B

STANDARD CURB INLET
6, 8 AND 10 FOOT
N.T.S.





NOTE :
PIPE MAY BE PLACED IN ANY WALL, BUT SHALL NOT ENTER ANY CORNER OR BOTTOM.

#3 BAR 18" O.C.E.W. IN BLOCK OUT DRILLED INTO EXISTING CONCRETE.

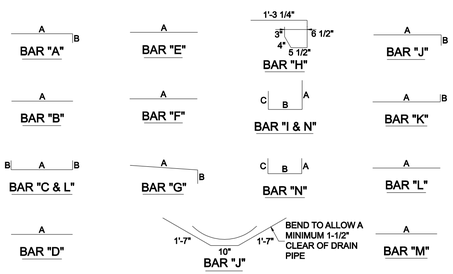
SECTION A

STANDARD CURB INLET
6, 8 AND 10 FOOT
N.T.S.

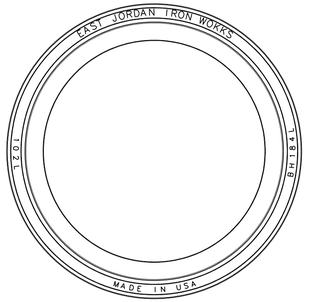
REINFORCING STEEL SCHEDULE
DIMENSIONS ARE FOR MAXIMUM SIZE INLETS

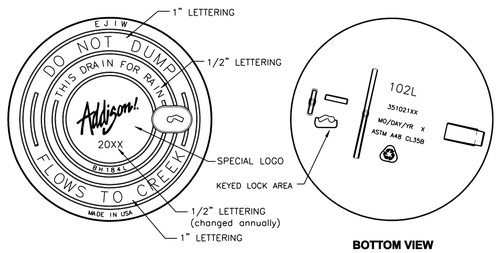
INLET LENGTH	BAR TYPE	BAR DIA. (1/8")	NO. REQ'D.	BAR DIMENSIONS A	B	C	INLET LENGTH	BAR TYPE	BAR DIA. (1/8")	NO. REQ'D.	BAR DIMENSIONS A	B	C
6'	A	3	15	3'-2"	0'-6"	–	8'	A	3	19	3'-2"	0'-6"	–
	B	3	2	11'-6"	–	–		B	3	2	15'-6"	–	–
	C	4	16	13'-4"	0'-6"	–		C	4	16	17'-4"	0'-6"	–
	D	4	9	4'-8"	–	–		D	4	9	4'-8"	–	–
	E	5	6	13'-4"	–	–		E	5	6	17'-4"	–	–
	F	4	5	1'-2"	–	–		F	4	5	1'-2"	–	–
	G	3	12	2'-0"	1'-3"	–		G	3	12	2'-0"	1'-3"	–
	H	3	26	*	*	*		H	3	26	*	*	*
	I	4	12	4'-8"	3'-2"	3'-2"		I	4	16	4'-8"	3'-2"	3'-2"
	J	5	1	*	*	*		J	5	1	*	*	*
	K	5	6	3'-2"	0'-6"	–		K	5	6	3'-2"	0'-6"	–
	L	4	11	3'-2"	0'-6"	–		L	4	11	3'-2"	0'-6"	–
	M	4	2	3'-0"**	–	–		M	4	2	3'-0"**	–	–
	N	4	2	4'-8"	3'-2"	4'-8"		N	4	2	4'-8"	3'-2"	4'-8"
7'	A	3	17	3'-2"	0'-6"	–	10'	A	3	23	3'-2"	0'-6"	–
	B	3	2	13'-6"	–	–		B	3	2	19'-6"	–	–
	C	4	16	15'-4"	0'-6"	–		C	4	16	21'-4"	0'-6"	–
	D	4	9	4'-8"	–	–		D	4	9	4'-8"	–	–
	E	5	6	15'-4"	–	–		E	5	6	21'-4"	–	–
	F	4	5	1'-2"	–	–		F	4	5	1'-2"	–	–
	G	3	15	2'-0"	1'-3"	–		G	3	15	2'-0"	1'-3"	–
	H	3	32	*	*	*		H	3	32	*	*	*
	I	4	14	4'-8"	3'-2"	3'-2"		I	4	20	4'-8"	3'-2"	3'-2"
	J	5	1	*	*	*		J	5	1	*	*	*
	K	5	6	3'-2"	0'-6"	–		K	5	6	3'-2"	0'-6"	–
	L	4	11	3'-2"	0'-6"	–		L	4	11	3'-2"	0'-6"	–
	M	4	2	3'-0"**	–	–		M	4	2	3'-0"**	–	–
	N	4	2	4'-8"	3'-2"	4'-8"		N	4	2	4'-8"	3'-2"	4'-8"

* SEE DIAGRAM FOR DIMENSION
** FIELD CUT AS REQUIRED TO ACCOMMODATE DRAIN PIPE

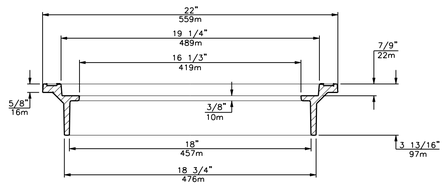


BAR DIAGRAMS

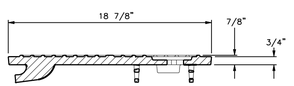




BOTTOM VIEW



RING SECTION



COVER SECTION

LOAD RATING	COATING	ESTIMATED WEIGHT	MATERIAL SPECIFICATION
LIGHT DUTY INLET COVER NON-TRAFFIC INLET RING	DIPPED	COVER: 60 LBS FRAME: 151 LBS	COVER - GRAY IRON ASTM A48 CL35B FRAME - GRAY IRON ASTM A48 CL35B

√ DESIGNATES MACHINE SURFACE

INLET FRAME AND COVER

GENERAL NOTES

1. ALL CONCRETE DRAINAGE STRUCTURES SHALL HAVE A MINIMUM COMPRESSED STRENGTH OF 3600 P.S.I.
2. ALL CRUSHED STONE SHALL BE 3/4", PASSING #4 SIEVE.
3. ALL FIELD JOINTS WILL BE APPROVED BY THE CITY ENGINEER IF NECESSARY. FIELD JOINTS SHALL BE WIPED ON THE INSIDE AND OUTSIDE TO PROVIDE FOR SMOOTH FLOW OF WATER.
4. RAMNECK COMPOUND OR APPROVED EQUAL SHALL BE USED FOR JOINT SEALS.
5. ALL STORM SEWER PIPE SHALL BE CAMERA INSPECTED AFTER THE INSTALLATION OF ALL PAVING, UTILITIES, AND PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison
TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

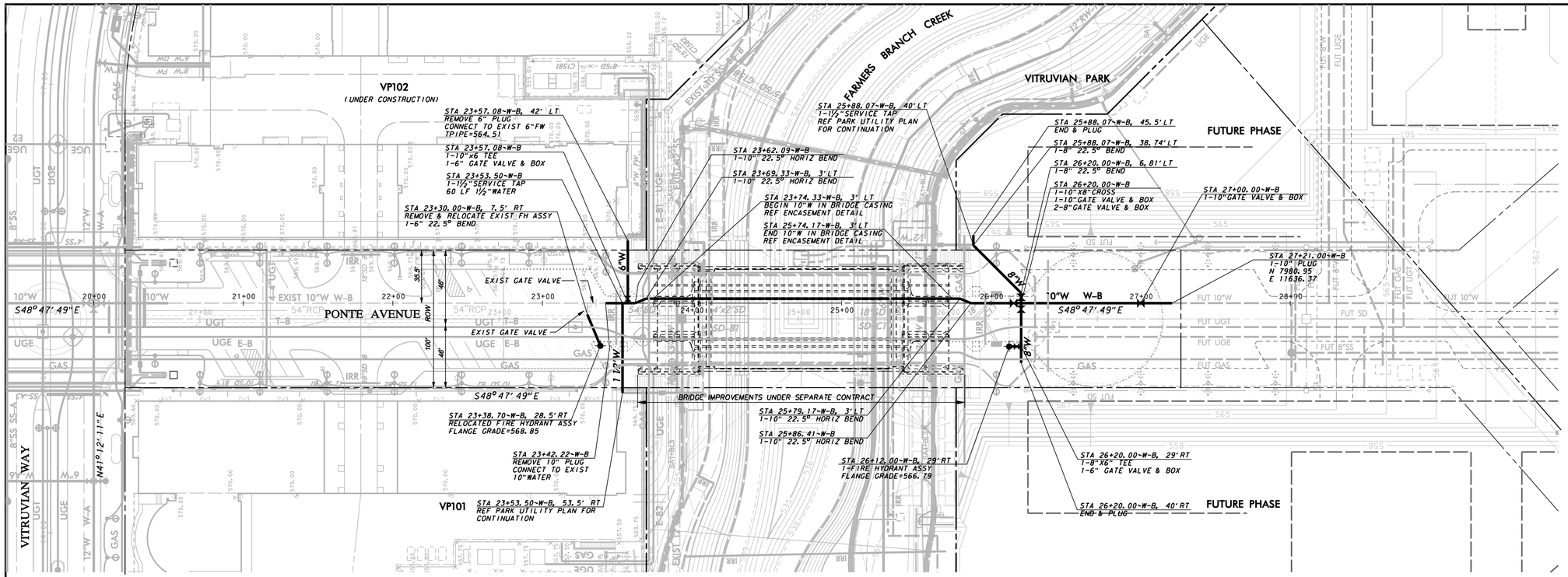
STORM DRAIN DETAILS

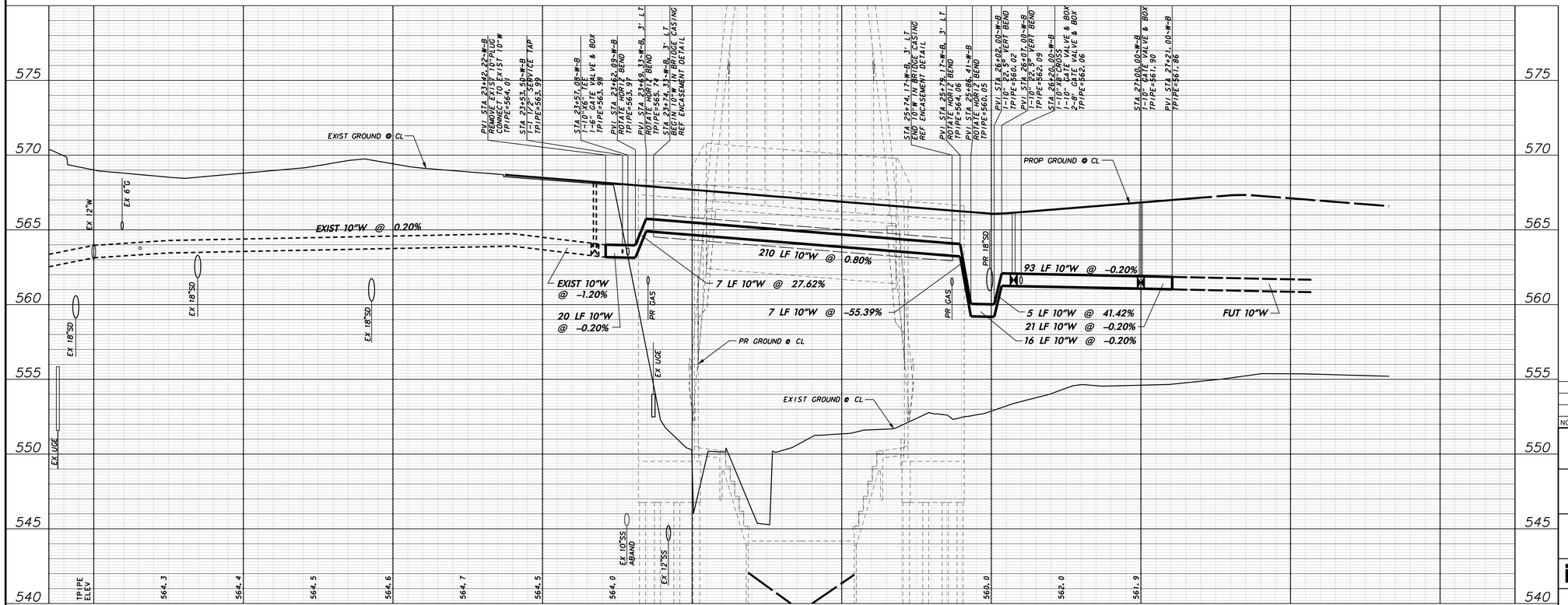
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C406

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

RECORD DRAWINGS 06/18/12





WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

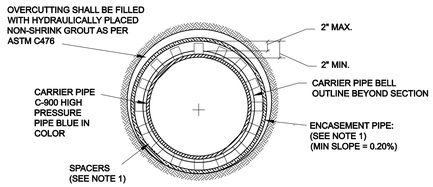
WATER LINE PLAN & PROFILE-PA
LINE B-STA. 23+42.22 TO 27+21.00

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW # 2009-04	C407

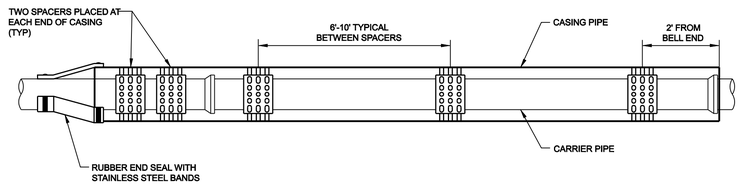
RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



SECTION

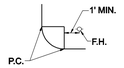
NOTES:
(1) HIGH DENSITY POLYETHYLENE SPACERS, RACI OR EQUAL, SHALL BE USED. WHERE NO CASING PIPE IS REQUIRED OVERCUTTING AROUND UTILITY SHALL BE FILLED WITH HYDRAULICALLY PLACED NON-SHRINK GROUT AS PER ASTM C476.
(2) END GROUTING FOR ALL ENCASEMENTS SHALL BE AS PER ASTM STANDARD C476 (1:7 GROUT WITH 5% TO 40% AIR ENTRAINMENT). GROUT SHALL BE PLACED BY HYDRAULIC PUMP FROM THE LOWER END OF THE ENCASEMENT PIPE, THEREBY INSURING COMPLETE FILLING OF ENCASEMENT PIPE.
(3) ENCASEMENT PIPE SHALL BE EITHER DUCTILE IRON PIPE OR HIGH DENSITY STEEL PIPE. ALL JOINTS TO BE WELDED 100%.



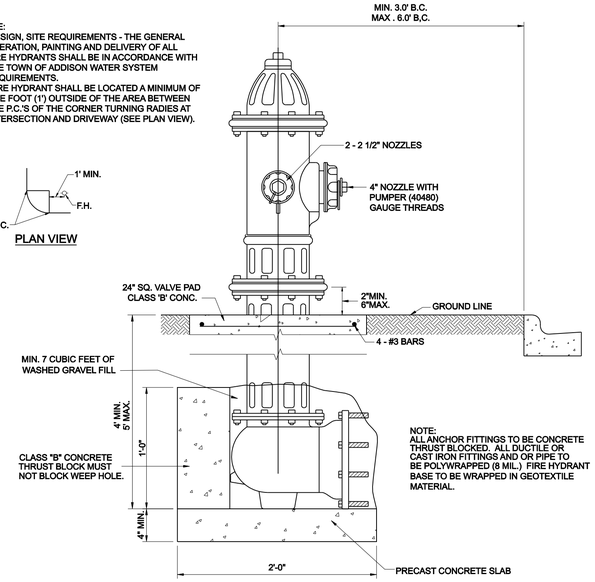
INSULATOR SPACING DETAIL

WATER MAIN ENCASEMENT

NOTE:
1. DESIGN, SITE REQUIREMENTS - THE GENERAL OPERATION, PAINTING AND DELIVERY OF ALL FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON WATER SYSTEM REQUIREMENTS.
2. FIRE HYDRANT SHALL BE LOCATED A MINIMUM OF ONE FOOT (1') OUTSIDE OF THE AREA BETWEEN THE P.C.'S OF THE CORNER TURNING RADIES AT INTERSECTION AND DRIVEWAY (SEE PLAN VIEW).

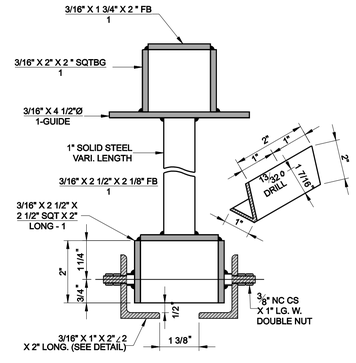


PLAN VIEW



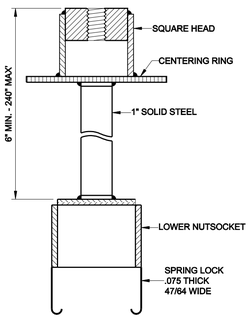
NOTE:
ALL ANCHOR FITTINGS TO BE CONCRETE THRUST BLOCKED. ALL DUCTILE OR CAST IRON FITTINGS AND OR PIPE TO BE POLYWRAPPED (8 MIL.) FIRE HYDRANT BASE TO BE WRAPPED IN GEOTEXTILE MATERIAL.

TYPICAL FIRE HYDRANT INSTALLATION

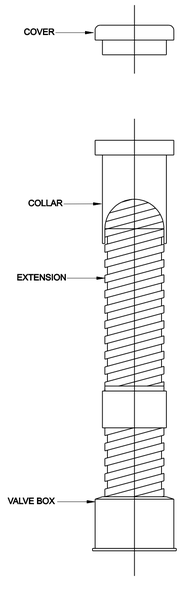


NOTE: TO BE USED ON ALL VALVES DEEPER THAN 5'-0".

TYPE - B
VALVE EXTENSION

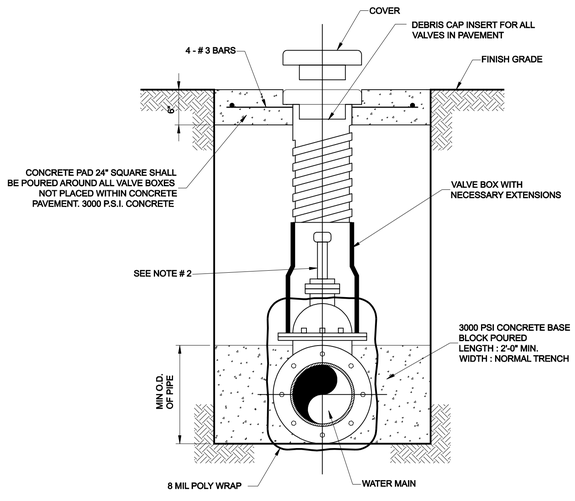


SPRING LOCK
VALVE EXTENSION



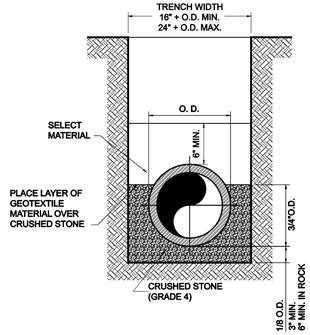
VALVE BOX WITH EXTENSION

ALL CAST IRON FITTINGS SHALL BE DOMESTIC.



TYPICAL VALVE SETTING & BOX

NOTE:
1. 4"-12" R.S. GATE VALVES SHALL BE IN ACCORDANCE WITH TOWN OF ADDISON WATER SYSTEM REQUIREMENTS AND AWWA STD C509. ALL VALVES SHALL BE MUELLER OR APPROVED EQUAL.
2. A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE THATS OPERATING NUT IS LOCATED IN EXCESS OF 5 FEET BELOW THE TOP OF VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT ITS TOP IS WITHIN 5 FEET OF VALVE BOX LID.
3. BLUE DOT (3") ON NEAREST CURB FACE TO VALVE.
4. ALL IRON MATERIALS SHALL BE DOMESTIC.



CRUSHED STONE SHALL BE 3/4", PASSING # 4 SIEVE

CLASS "B+" EMBEDMENT

TYPICAL BACKFILL WATER MAIN
P.V.C. WATER PIPE

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

UTILITY DETAILS

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

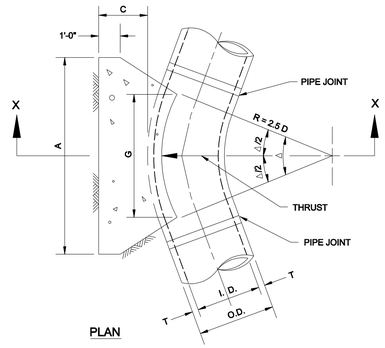
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C408

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

I.D. (IN.)	Δ= 30° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)	I.D. (IN.)	Δ= 45° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)
4,6,8	1.0	2.6	2.0	1.5	0.2	1.0	1.5	0.1	4,6,8	1.5	3.9	2.0	2.0	0.2	1.5	1.5	0.1
10,12	1.5	5.9	2.5	2.5	0.3	2.0	1.5	0.2	10,12	2.2	8.7	3.5	2.5	0.5	2.0	2.5	0.3
16,18	2.2	13.2	3.5	4.0	0.8	2.5	3.0	0.4	16,18	3.2	19.5	4.5	4.5	1.2	3.0	3.5	0.6
20	2.4	16.3	4.5	4.0	1.0	3.0	3.0	0.5	20	3.6	24.1	5.5	4.5	1.5	3.5	3.5	0.7
24	2.9	23.4	6.0	4.0	1.4	3.5	3.5	0.7	24	4.3	34.6	8.0	4.5	2.3	4.5	4.0	1.1
30	3.6	27.5	6.5	5.0	1.9	3.5	4.0	0.9	30	5.4	40.6	8.5	5.0	3.2	5.5	4.0	1.6
36	4.4	39.5	7.0	6.0	3.4	4.5	4.5	1.6	36	6.5	58.5	10.0	6.0	5.3	6.5	4.5	2.6
42	5.1	53.8	8.0	7.0	5.1	5.5	5.0	2.5	42	7.5	79.6	11.5	7.0	8.1	8.0	5.0	4.2
48	5.8	70.3	9.0	8.0	7.4	6.0	6.0	3.7	48	8.6	104.0	13.0	8.0	11.9	9.0	6.0	6.3
54	6.5	89.0	10.0	9.0	10.3	7.0	6.5	5.3	54	9.7	131.5	15.0	9.0	17.1	10.5	6.5	8.9
60	7.3	110.0	11.0	10.0	13.9	7.5	7.5	7.3	60	10.7	162.4	16.5	10.0	23.1	11.0	7.5	12.0
66	8.0	132.9	12.5	11.0	18.9	8.5	8.0	9.6	66	11.8	196.5	18.0	11.0	30.1	12.0	8.5	16.2
72	8.7	158.2	13.5	12.0	24.0	9.0	9.0	12.3	72	12.9	233.9	19.5	12.0	38.6	14.0	8.5	20.7
78	9.4	185.6	14.5	13.0	30.0	10.0	9.5	15.6	78	13.9	274.5	21.5	13.0	49.8	14.5	9.5	25.9
84	10.1	215.3	15.5	14.0	37.1	10.5	10.5	19.5	84	15.0	318.4	23.0	14.0	61.2	15.5	10.5	32.6
90	10.9	247.1	16.5	15.0	45.0	11.5	11.0	23.9	90	16.1	365.5	24.5	15.0	74.5	17.5	10.5	39.6
96	11.6	281.2	18.0	16.0	55.5	12.5	11.5	28.9	96	17.1	415.6	26.0	16.0	89.5	18.5	11.5	48.5

I.D. (IN.)	T (IN.)	Δ = 11.25° (FT.)	Δ ≥ 22.50° (FT.)	E (FT.)
4,6,8	0.4	1.5	1.5	0.9
10,12	0.5	1.5	1.5	1.2
16,18	0.6	1.5	1.5	1.6
20	0.7	1.5	1.5	1.8
24	0.9	1.5	1.5	2.1
30	2.9	1.5	1.9	2.6
36	4.5	1.5	2.3	3.3
42	5.0	1.8	2.6	3.8
48	5.5	2.0	3.0	4.3
54	6.0	2.3	3.4	4.8
60	6.5	2.5	3.8	5.3
66	6.8	2.8	4.1	5.7
72	7.5	3.0	4.5	6.3
78	7.5	3.3	4.9	6.7
84	8.0	3.5	5.3	7.2
90	8.5	3.8	5.6	7.7
96	9.0	4.0	6.0	8.2



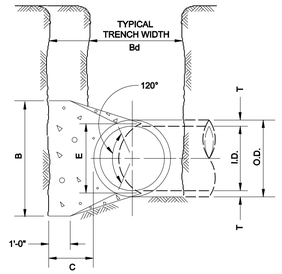
PLAN

I.D. (IN.)	Δ= 67.50° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)	I.D. (IN.)	Δ= 90° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)
4,6,8	2.1	5.6	3.0	2.0	0.3	2.0	1.5	0.2	4,6,8	2.7	7.1	5.0	1.5	0.4	2.0	2.0	0.2
10,12	3.1	12.6	5.5	2.5	0.8	3.5	2.0	0.4	10,12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0.5
16,18	4.7	28.3	7.5	4.0	1.9	5.5	3.0	0.9	16,18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1.0
20	5.2	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.6	44.4	10.0	4.5	3.1	6.0	4.0	1.5
24	6.2	50.3	11.5	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	5.0	8.0	4.0	2.1
30	7.8	58.9	12.0	5.0	4.8	7.5	4.0	2.2	30	9.9	75.0	15.0	5.0	6.7	10.0	4.0	3.3
36	9.4	84.9	14.5	6.0	8.2	9.5	4.5	3.8	36	11.9	108.0	18.0	6.0	11.4	12.0	4.5	5.3
42	10.9	115.5	17.0	7.0	12.8	11.0	5.5	6.3	42	13.9	147.0	21.0	7.0	17.8	14.0	5.5	8.7
48	12.5	150.9	19.0	8.0	18.4	13.0	6.0	9.2	48	15.9	192.0	24.0	8.0	26.2	16.0	6.0	12.4
54	14.0	191.0	21.5	9.0	26.0	15.0	6.5	12.9	54	17.9	243.0	27.0	9.0	36.9	18.0	7.0	18.1
60	15.6	235.8	24.0	10.0	35.6	16.0	7.5	17.6	60	19.9	299.8	30.0	10.0	50.3	20.0	7.5	24.0
66	17.1	285.3	26.0	11.0	46.0	18.0	8.0	23.0	66	21.8	362.8	33.0	11.0	66.2	22.0	8.5	32.5
72	18.7	339.5	28.5	12.0	57.8	19.0	9.0	28.4	72	23.8	431.8	36.0	12.0	85.6	24.0	9.0	41.0
78	20.2	398.5	31.0	13.0	75.7	21.0	9.5	37.4	78	25.7	506.7	39.0	13.0	108.2	26.0	10.0	53.2
84	21.8	462.1	33.5	14.0	94.7	22.0	10.5	46.5	84	27.7	587.7	42.0	14.0	134.4	28.0	10.5	64.8
90	23.3	530.5	35.5	15.0	114.4	24.5	11.0	58.2	90	29.0	674.6	45.0	15.0	164.9	30.0	11.5	81.2
96	24.9	603.6	38.0	16.0	138.9	25.5	12.0	70.0	96	31.6	767.5	48.0	16.0	199.0	32.0	12.0	95.1

TABLES OF DIMENSIONS AND QUANTITIES

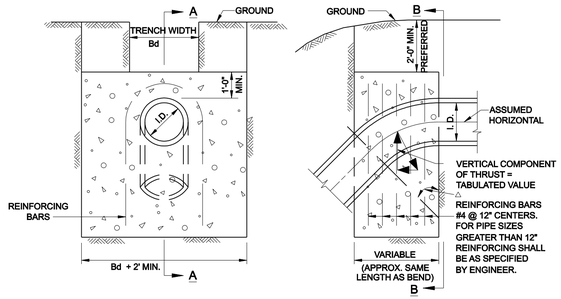
I.D. (IN.)	Δ= 11.25° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)	I.D. (IN.)	Δ≥ 22.50° G (FT.)	THRUST (TONS)	EARTH A (FT.)	EARTH B (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK B (FT.)	ROCK VOL. (C.Y.)
4,6,8	0.4	1.0	1.0	1.5	0.1	1.0	1.0	0.1	4,6,8	0.8	2.0	1.5	1.5	0.1	1.0	1.0	0.1
10,12	0.6	2.2	1.5	1.5	0.1	1.0	1.5	0.1	10,12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1
16,18	0.8	5.0	2.0	2.5	0.3	1.5	2.0	0.2	16,18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3
20	0.9	6.2	2.0	3.5	0.4	1.5	3.0	0.3	20	1.8	12.3	3.5	3.5	0.7	2.0	3.0	0.4
24	1.1	8.9	3.0	3.5	0.5	1.5	3.0	0.3	24	2.2	17.7	4.0	4.5	1.0	3.0	3.5	0.5
30	1.4	10.4	3.0	3.5	0.6	2.0	3.5	0.4	30	2.7	20.7	5.0	4.5	1.5	3.0	4.0	0.8
36	1.7	15.0	3.5	4.5	0.9	2.0	4.0	0.5	36	3.3	29.8	5.5	5.5	2.3	4.0	4.0	1.3
42	1.9	20.4	4.5	5.0	1.5	2.5	5.0	0.8	42	3.8	40.5	7.0	6.0	3.9	4.5	5.0	2.1
48	2.2	26.6	4.5	6.0	2.0	2.5	6.0	1.1	48	4.4	52.9	8.0	7.0	5.7	4.5	6.0	2.8
54	2.5	33.7	6.0	6.0	3.0	3.0	6.0	1.4	54	4.9	67.0	9.0	8.0	8.0	6.0	6.0	4.1
60	2.7	41.6	6.0	7.0	3.8	3.0	7.0	1.8	60	5.5	82.7	9.5	9.0	10.6	6.0	7.0	5.3
66	3.0	50.3	6.5	8.0	5.1	3.5	8.0	2.7	66	6.0	100.1	10.5	10.0	14.1	6.5	8.0	7.2
72	3.3	59.9	7.5	8.0	6.3	4.0	8.0	3.3	72	6.6	119.1	11.0	11.0	17.6	7.5	8.0	9.1
78	3.6	70.2	8.0	9.0	8.1	4.0	9.0	3.9	78	7.1	139.8	12.0	12.0	22.5	8.0	9.0	11.7
84	3.8	81.5	8.5	10.0	10.3	4.5	10.0	5.3	84	7.6	162.1	13.0	12.5	27.2	8.5	10.0	14.8
90	4.1	93.5	9.5	10.0	12.2	5.0	10.0	6.3	90	8.2	186.1	14.0	13.5	33.7	9.5	10.0	17.7
96	4.4	106.4	10.0	11.0	15.0	5.0	11.0	7.4	96	8.7	211.7	15.0	14.5	41.2	10.0	11.0	21.8

TABLES OF DIMENSIONS AND QUANTITIES



SECTION X-X

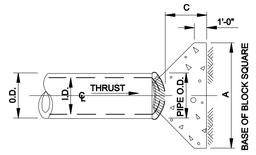
HORIZONTAL THRUST BLOCK



ELEVATION "B-B" SECTION "A-A"

Δ → / I.D. (IN.)	11.25° THRUST (TONS)	11.25° VOL. (C.Y.)	22.50° THRUST (TONS)	22.50° VOL. (C.Y.)	30° THRUST (TONS)	30° VOL. (C.Y.)	45° THRUST (TONS)	45° VOL. (C.Y.)	67.50° THRUST (TONS)	67.50° VOL. (C.Y.)	90° THRUST (TONS)	90° VOL. (C.Y.)	← Δ / I.D. (IN.)
4,6,8	1.0	0.5	2.0	1.0	2.5	1.3	3.6	1.8	4.6	2.3	5.0	2.5	4,6,8
10,12	2.2	1.1	4.3	2.2	5.7	2.8	8.0	4.0	10.5	5.2	11.3	5.7	10,12
16,18	5.0	2.5	9.7	4.9	12.7	6.4	18.0	9.0	23.5	11.8	25.5	12.7	16,18
20	6.1	3.1	12.0	6.0	15.7	7.9	22.2	11.1	29.2	14.5	31.4	15.7	20
24	8.2	4.4	17.3	8.7	22.6	11.3	32.0	16.0	41.8	20.9	45.2	22.6	24
30	10.5	5.2	20.3	10.1	26.5	13.3	37.5	18.8	49.0	24.5	53.1	26.5	30
36	14.9	7.5	29.2	14.6	38.2	19.1	54.0	27.0	70.5	35.3	76.4	38.2	36
42	20.3	10.1	39.8	19.9	52.0	26.0	73.5	36.7	96.0	48.0	104.0	52.0	42
48	26.5	13.2	51.9	26.0	67.9	33.9	96.0	48.0	126.0	62.7	136.0	67.9	48
54	33.5	16.8	65.7	32.9	85.9	42.9	122.0	60.7	159.0	79.4	172.0	85.9	54
60	41.4	20.7	81.2	40.6	106.0	53.0	150.0	75.0	196.0	98.0	212.0	106.0	60
66	50.1	25.0	98.2	49.1	128.0	64.2	182.0	90.7	237.0	119.0	257.0	128.0	66
72	59.6	29.8	117.0	58.4	153.0	76.3	216.0	108.0	282.0	141.0	305.0	153.0	72
78	69.9	35.0	137.0	68.6	179.0	90.0	254.0	127.0	331.0	166.0	358.0	179.0	78
84	81.1	40.5	159.0	79.5	208.0	104.0	294.0	147.0	384.0	192.0	416.0	208.0	84
90	93.1	46.5	183.0	91.3	239.0	119.0	337.0	169.0	441.0	221.0	477.0	239.0	90
96	106.0	53.0	208.0	104.0	272.0	136.0	384.0	192.0	502.0	251.0	543.0	272.0	96

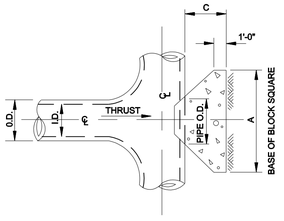
VERTICAL THRUST BLOCK



PLAN OF PLUG THRUST BLOCK

I.D. (IN.)	THRUST (TONS)	C (FT.)	EARTH A (FT.)	EARTH VOL. (C.Y.)	ROCK A (FT.)	ROCK VOL. (C.Y.)
4,6,8	5.1	1.5	2.5	0.3	2.0	0.2
10,12	11.3	1.5	3.5	0.6	2.5	0.3
16,18	25.5	2.0	5.5	1.6	4.0	0.9
20	31.5	2.0	6.0	1.9	4.0	0.9
24	45.2	2.5	7.0	3.1	5.0	1.7
30	53.0	3.0	7.5	4.1	5.5	2.4
36	76.3	4.0	9.0	7.3	6.5	4.2
42	104.0	4.5	10.5	11.0	7.5	6.2
48	136.0	5.0	12.0	15.6	8.5	8.7
54	172.0	5.5	13.5	21.4	9.5	11.9
60	212.0	6.0	15.0	28.4	10.5	15.7
66	257.0	6.5	16.5	36.8	11.5	20.5
72	305.0	7.5	17.5	47.2	12.5	27.2
78	358.0	8.0	19.0	58.9	13.5	33.7
84	416.0	8.5	20.5	72.3	14.5	41.2
90	477.0	9.0	22.0	87.7	15.5	49.7
96	543.0	9.5	23.5	104.8	16.5	61.0

TABLES OF DIMENSIONS AND QUANTITIES



PLAN OF TEE THRUST BLOCK

GENERAL NOTES FOR ALL THRUST BLOCKS:

1. CONCRETE FOR BLOCKING SHALL BE CLASS "B".
2. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 PSI FOR DUCTILE IRON, P.V.C., AND 150 PSI FOR CONCRETE PIPE.
3. VOLUMES OF THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. THE CORRESPONDING WEIGHT OF THE CONCRETE (CLASS "B") IS EQUAL TO OR GREATER THAN THE VERTICAL COMPONENT OF THE THRUST ON THE VERTICAL BEND.
4. WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
5. POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.
6. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
   2000 LBS./S.F. IN ROCK.
7. THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND
8. ALL ANCHOR FITTINGS TO BE CONCRETE THRUST BLOCKED. ALL DUCTILE OR CAST IRON FITTINGS AND / OR PIPE TO BE POLY WRAPPED PRIOR TO POURING THE THRUST BLOCK.
9. CONCRETE SHALL NOT EXTEND BEYOND JOINTS.

HORIZONTAL THRUST BLOCK

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

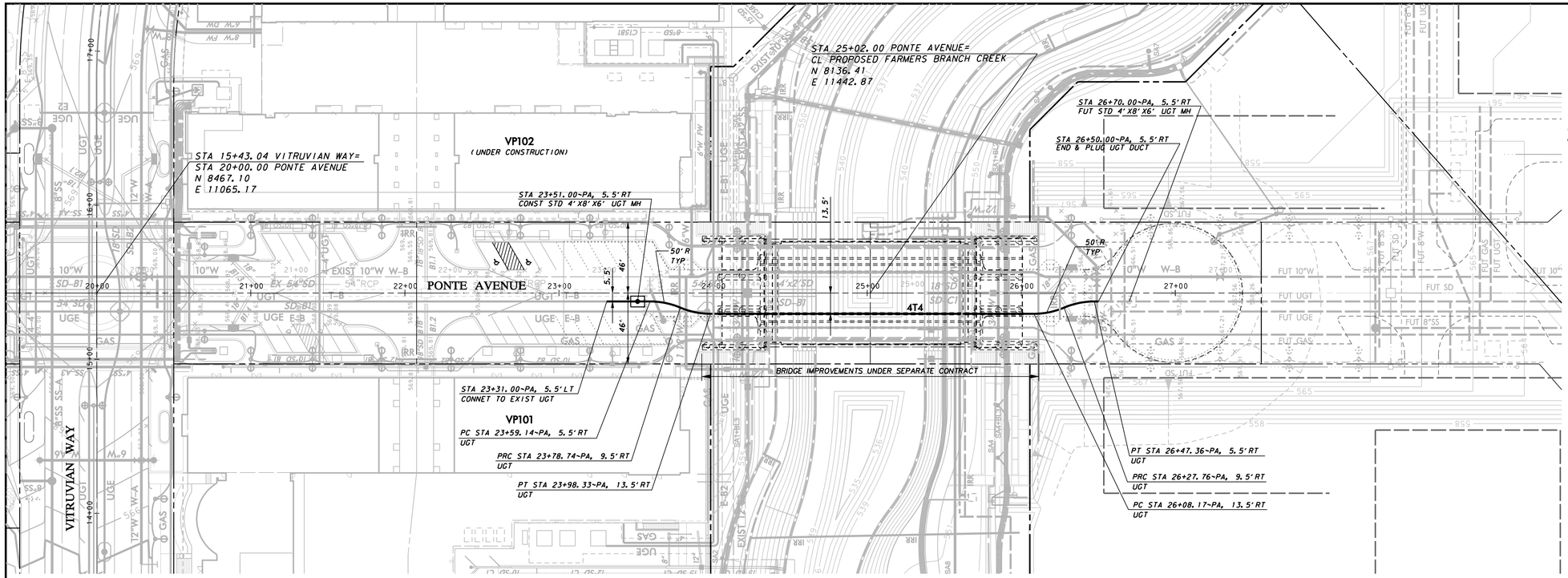
UTILITY DETAILS

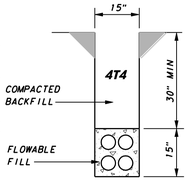
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C409

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

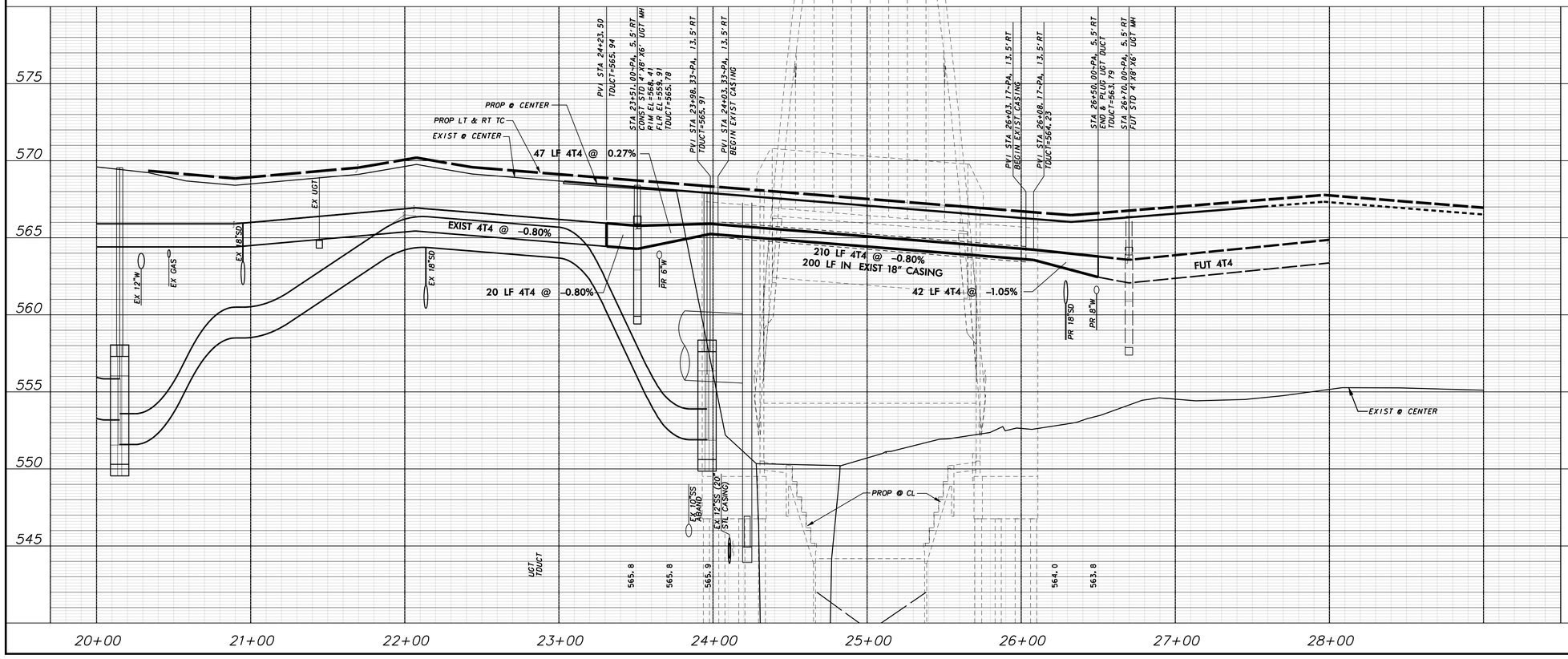
RECORD DRAWINGS 06/18/12





TELEPHONE DUCT NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MANHOLE AND DUCT STRUCTURE FACILITIES AS ESTABLISHED BY AT&T, LATEST EDITION, AND ANY AND ALL APPLICABLE SPECIFICATIONS AND REQUIREMENTS BY THE TOWN OF ADDISON.
2. THE CONTRACTOR MUST BE AN AT&T APPROVED CONTRACTOR OR BECOME AN AT&T APPROVED CONTRACTOR PRIOR TO CONSTRUCTION.
3. AT&T SHALL SUPPLY ALL UGT MANHOLES, MANHOLE NECKS, FRAME AND COVERS, MANHOLE RACKING AND 4" DUCT FOR THIS PROJECT. MATERIALS WILL BE DELIVERED TO A DESIGNATED ON-SITE STORAGE AREA FOR INSTALLATION BY THE CONTRACTOR.
4. THE CONTRACTOR SHALL SUPPLY ALL OTHER MATERIALS FOR THIS PROJECT NOT LISTED ABOVE INCLUDING BUT NOT LIMITED TO STEEL CASING, TIE-WRAPS, CONDUIT SPACERS, PVC ADHESIVE, CONCRETE, SELECT BACKFILL, PULL ROPES, ETC., PER AT&T SPECIFICATIONS UNLESS OTHERWISE SPECIFIED, IN WRITING.
5. THE CONTRACTOR SHALL INSTALL THE AT&T FURNISHED MANHOLE RACKING IN EACH MANHOLE.
6. THE AT&T INSPECTOR IS TO INSPECT ALL MANHOLE INSTALLATIONS PRIOR TO THE PLACING OF BACKFILL AND ALL CONDUIT INSTALLATIONS PRIOR TO THE PLACEMENT OF CONCRETE.
7. THE CONTRACTOR SHALL PROVIDE VERIFICATION OF COMPLETION AND COMPLIANCE OF ANY AND ALL REQUIRED TESTS TO THE SATISFACTION OF AT&T.
8. THE CONTRACTOR SHALL CONTACT AT&T TO REQUEST A FINAL WALK-THROUGH INSPECTION OF THE TELEPHONE DUCT BANK INFRASTRUCTURE WORK.
9. AT&T INSPECTOR SHALL BE NOTIFIED A MINIMUM OF 2 HOURS PRIOR TO THE DELIVERY OF CONCRETE AND SHALL BE PRESENT DURING PLACEMENT.



WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

PROFILE SCALE:
0 20 40 60 80
SCALE: 1"=40' HORIZ
0 2 4 6 8
SCALE: 1"=4' VERT

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

DUCT BANK PLAN & PROFILE - PA LINE B-STA. 23+31.00 TO 27+50.00

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C410

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

PONTE AVENUE

VITRUVIAN WAY

4-PERFORMANCE LIGHTING FOUNDATION

VP102
(UNDER CONSTRUCTION)

GROTTO

AMPHITHEATER

NORTHWEST RAMP

10'X10'X6" CONCRETE EQUIPMENT SLAB WITH 24" DEEP PERIMETER BEAM SEE DETAIL

WILDLIFE OBSERVATION PLATFORM

ESPLANADE

ISLAND 1

FARMERS BRANCH CREEK

ISLAND 4

ISLAND 3

ISLAND 2

BELVEDERE

23+10

24+00

25+00

26+00

27+00

29+00

30+00

31+00

OHE

NORTH

0 20 40 60 80
GRAPHIC SCALE IN FEET
SCALE: 1"=40'

LEGEND

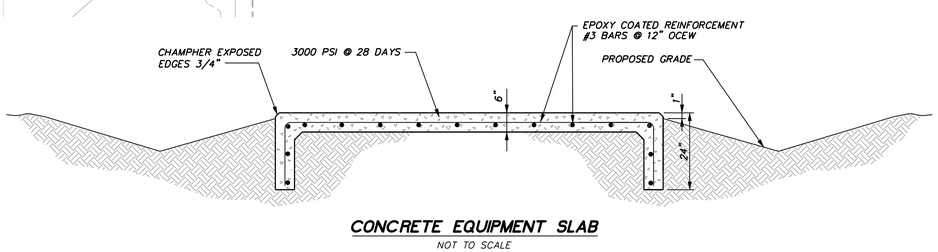
STANDARD DUTY PAVEMENT:
6" (4200 PSI AT 28 DAYS) CONCRETE PVMT. W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT (ASTM D 698). REFERENCE LANDSCAPE PLANS.

MISCELLANEOUS & FLATWORK:
4" REINFORCED CONCRETE FLATWORK (3000 PSI AT 28 DAYS) W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT (ASTM D 698). REFERENCE LANDSCAPE PLANS.

RETAINING WALL:

PAVING NOTES

1. REFER TO SHEET C604 FOR "GENERAL PAVING NOTES" FOR THIS PROJECT.



CONCRETE EQUIPMENT SLAB
NOT TO SCALE

WARNING

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SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

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SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE
1	VP102 COORD-TERRACE CLUB WALK REVISION & PONTE WALK REMOVAL	ICE	01/19/11

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

PAVING PLAN NORTH

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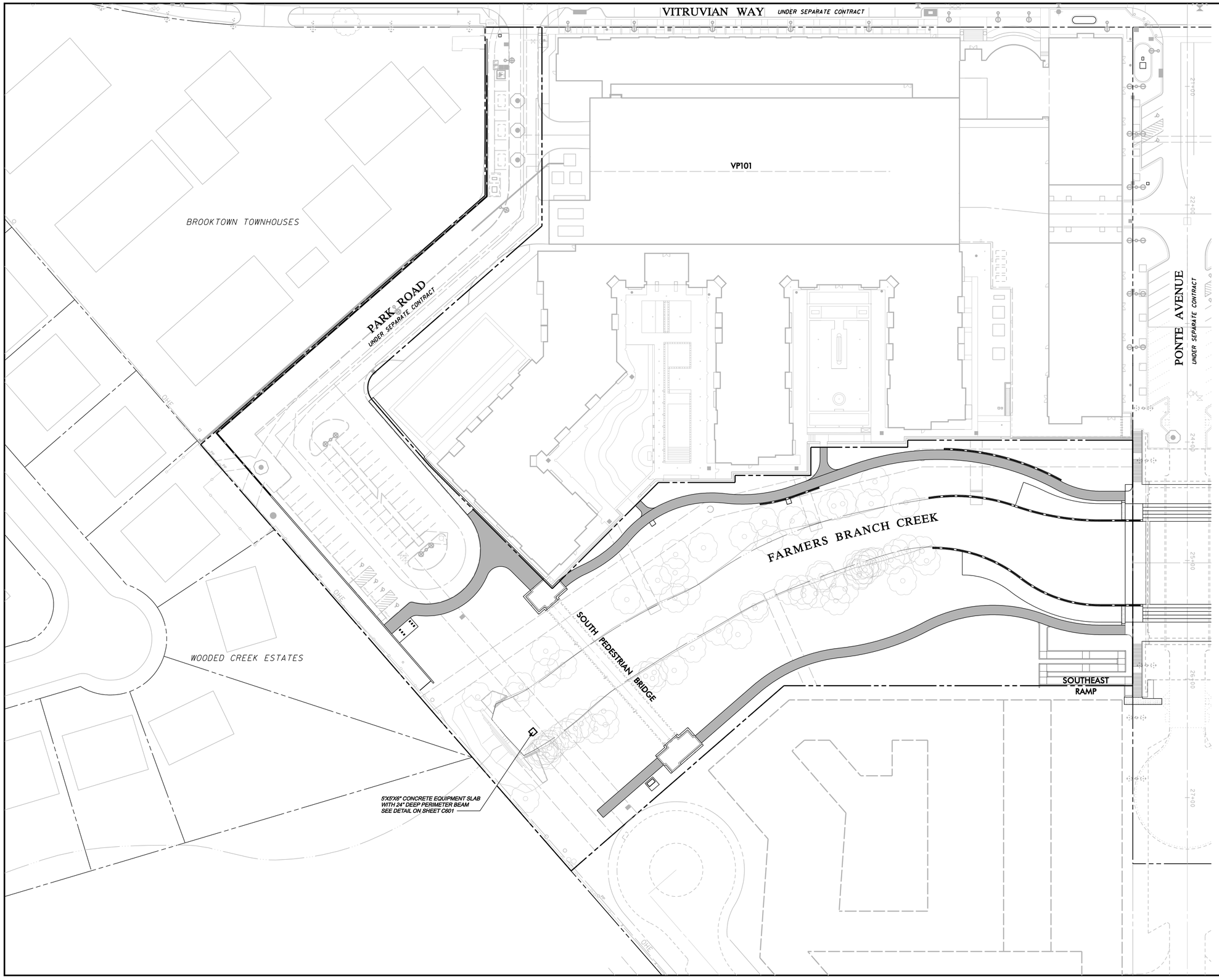
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C601

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



NORTH

0 20 40 60 80
GRAPHIC SCALE IN FEET
SCALE: 1"=40'

LEGEND

STANDARD DUTY PAVEMENT:
6" (4200 PSI AT 28 DAYS) CONCRETE PVMT. W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT (ASTM D 698). REFERENCE LANDSCAPE PLANS.

MISCELLANEOUS & FLATWORK:
4" REINFORCED CONCRETE FLATWORK (3000 PSI AT 28 DAYS) W/ #3 BARS @ 18" O.C.E.W. ON 6" COMPACTED SUBGRADE TO 95% AT OR ABOVE OPTIMUM MOISTURE CONTENT (ASTM D 698). REFERENCE LANDSCAPE PLANS.

RETAINING WALL:

PAVING NOTES

1. REFER TO SHEET C604 FOR "GENERAL PAVING NOTES" FOR

WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

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SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

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SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

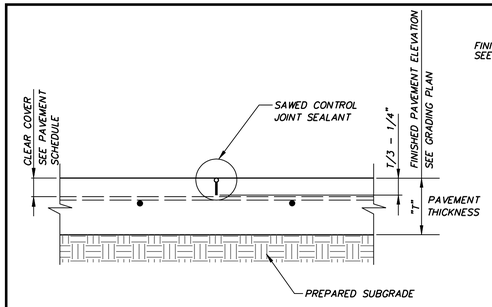
PAVING PLAN SOUTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

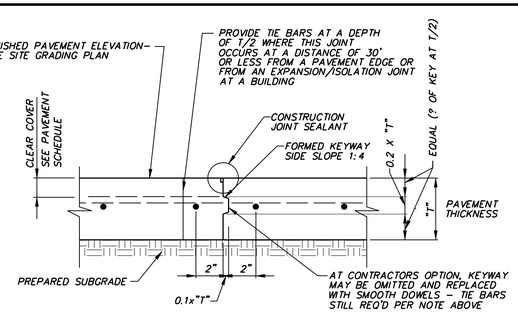
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW # 2009-04	C602

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



LONGITUDINAL CONTROL JOINT
NOT TO SCALE



KEYED LONGITUDINAL CONSTRUCTION JOINT
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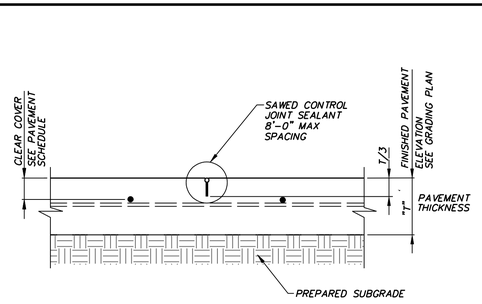

TRANSVERSE CONTROL JOINT
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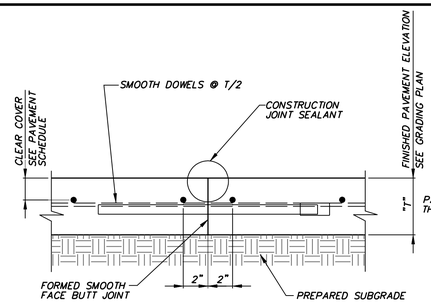
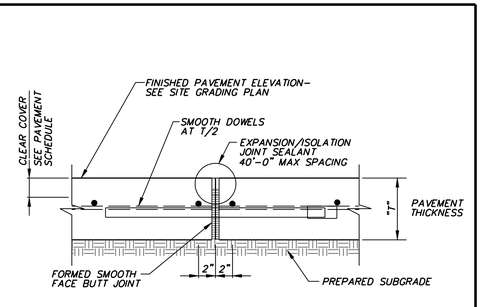
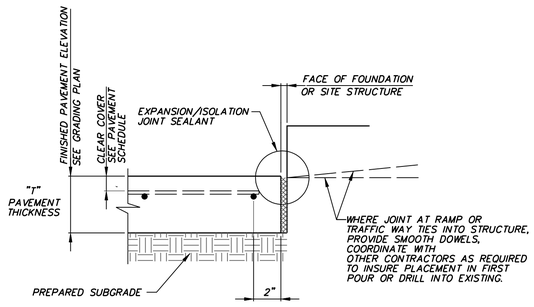


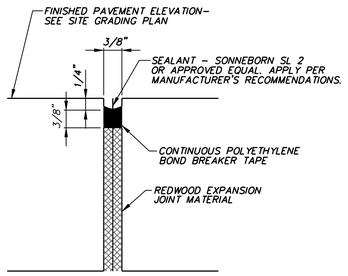
TRANSVERSE CONSTRUCTION JOINT
NOT TO SCALE



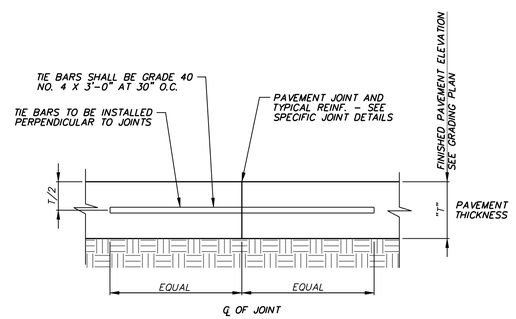
TRANSVERSE EXPANSION JOINT
NOT TO SCALE



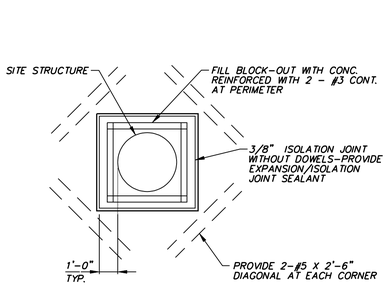
EXPANSION /ISOLATION JOINT AT STRUCTURES
NOT TO SCALE



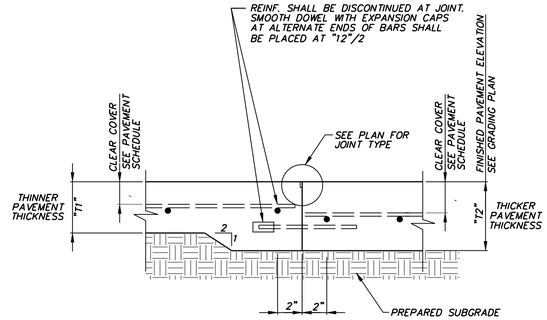
EXPANSION /ISOLATION JOINT SEALANT
NOT TO SCALE



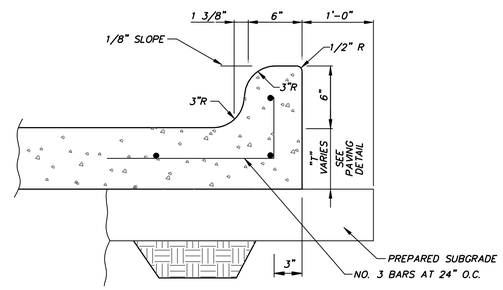
TIE BAR
NOT TO SCALE



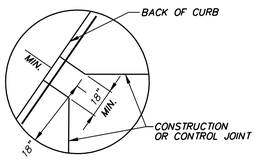
JOINT TREATMENT AT SITE STRUCTURES
NOT TO SCALE



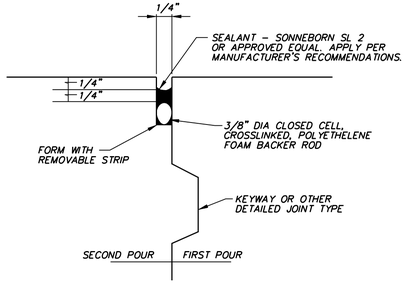
PAVEMENT DEPTH CHANGE/ ISOLATION JOINT
NOT TO SCALE



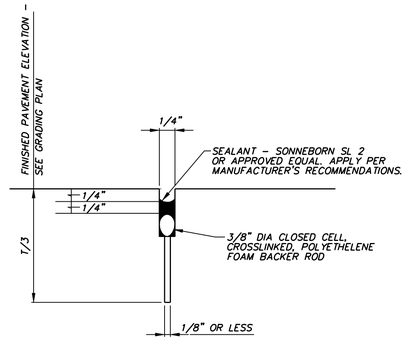
6" INTEGRAL CURB
NOT TO SCALE



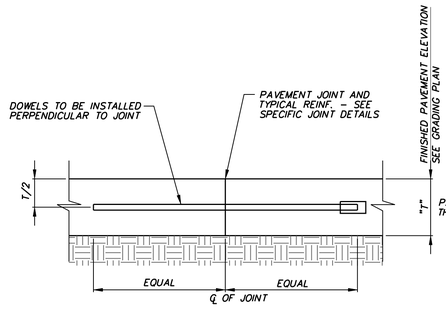
TYPICAL AT ALL ANGLED JOINT TERMINATIONS
NOT TO SCALE



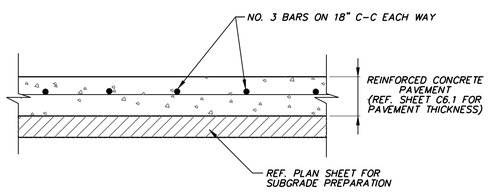
CONSTRUCTION JOINT SEALANT
NOT TO SCALE



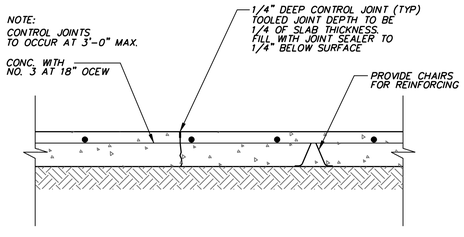
SAWED CONTROL JOINT SEALANT
NOT TO SCALE



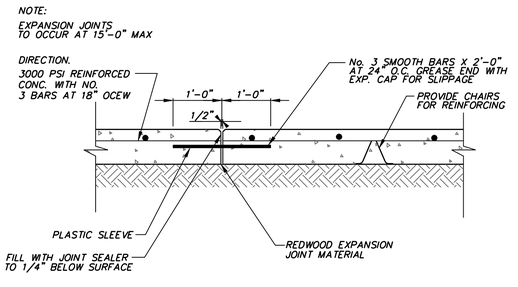
SMOOTH DOWEL
NOT TO SCALE



TYPICAL PAVEMENT SECTION
NOT TO SCALE



MISCELLANEOUS FLATWORK CONTROL JOINT
NOT TO SCALE



MISCELLANEOUS FLATWORK EXPANSION JOINT
NOT TO SCALE

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

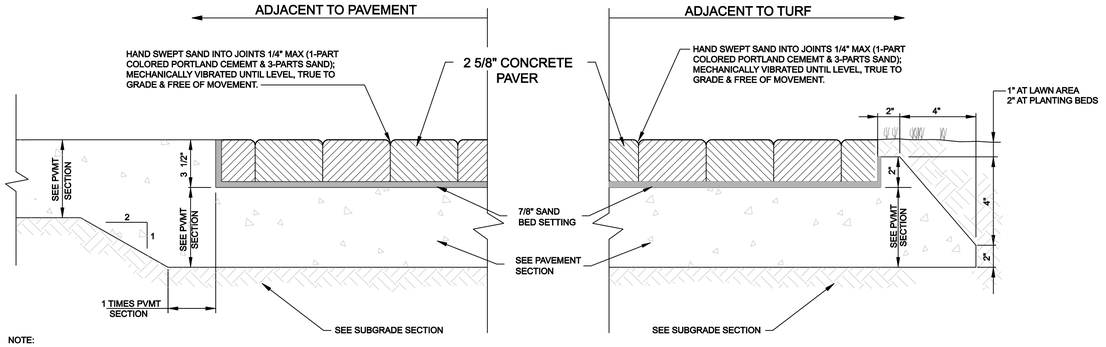
PAVING DETAILS

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C603

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

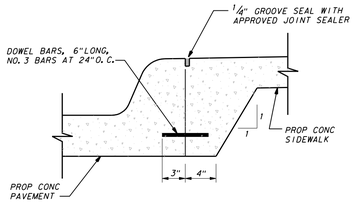
RECORD DRAWINGS 06/18/12



NOTE:
CONTRACTOR SHALL CONFIRM THICKNESS OF FINAL PAVER SELECTION PRIOR TO POURING DROP SLABS IN THE SIDEWALKS

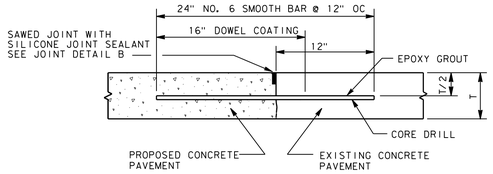
PAVERS ON CONCRETE

N.T.S.



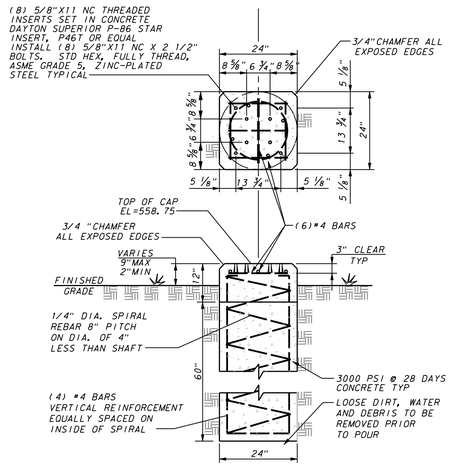
JOINT DETAIL FOR SIDEWALK ADJACENT TO CURB

NOT TO SCALE



PROPOSED TO EXISTING CONCRETE PAVEMENT

NOT TO SCALE



AMPHITHEATER PERFORMANCE LIGHTING BOX TRUSS FOUNDATION

NOT TO SCALE

GENERAL PAVING NOTES:

1. REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THIS PROJECT.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG), AND ANY AND ALL AMENDMENTS BY THE TOWN OF ADDISON, AS WELL AS STANDARD CONSTRUCTION DETAILS SHOWN ON THE PLANS.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ANY PUBLIC UTILITY COMPANIES FOR LOCATION OF EXISTING FACILITIES IN OR NEAR THE WORK AREAS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLOWING:

TOWN OF ADDISON (WATER, SEWER, SIGNALS)	ATMOS ENERGY (GAS)
ONCOR ELECTRIC DELIVERY	VERIZON / MCI
AT&T (SOUTHWESTERN BELL)	TIME-WARNER CABLE

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AT ALL TIMES DURING CONSTRUCTION, INCLUDING PROVIDING ALL TEMPORARY STRUCTURES OR IMPROVEMENTS AS NESCESSARY FOR THE SAFETY OF THE PUBLIC.
5. THE TOWN OF ADDISON WILL PROVIDE A GEOTECHNICAL LABORATORY TO PERFORM APPROPRIATE TESTING DURING CONSTRUCTION ACTIVITIES. ANY TEST THAT FAILS TO MEET CITY REQUIREMENTS SHALL BE RETESTED AT THE CONTRACTORS EXPENSE.
6. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE SUPPORT AND PROTECTION OF ALL UTILITY POLES, FENCES, TREES, SHRUBS, UTILITY SERVICES, BUILDING FOUNDATIONS AND ALL OTHER UTILITIES AND STRUCTURES BOTH ABOVE AND BELOW THE GROUND, THE COST OF WHICH SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
7. THE CONTRACTOR SHALL VERIFY THE ELEVATION, CONFIGURATION, AND ANGULATION OF EXISTING PAVEMENT PRIOR TO CONSTRUCTION OF TIE-IN MATERIALS. WHERE PROPOSED CONCRETE PAVEMENT TO EXISTING CONCRETE PAVEMENT IS TO BE CONSTRUCTED BY THE CONTRACTOR, AT LEAST 15" OF REINFORCING STEEL SHALL BE EXPOSED FROM THE EXISTING PAVEMENT, OR THE CONTRACTOR SHALL PROVIDE HORIZONTAL DOWEL BARS PER THE DETAILS.
8. NO PERSON SHALL OPEN, TURN OFF, INTERFERE WITH, ATTACH ANY HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE TOWN OF ADDISON UNLESS DULY AUTHORIZED TO DO SO BY THE TOWN OF ADDISON PUBLIC WORKS DEPARTMENT (972-450-2871).
9. ALL EXISTING AND PROPOSED IMPROVEMENTS (MANHOLE RIMS, CLEAN-OUTS, FIRE HYDRANTS, VALVE BOXES, WATER METERS AND VAULTS, ETC.) SHALL BE ADJUSTED TO FINAL FINISHED GRADE BY THE CONTRACTOR AT THE TIME OF PAVING.
10. PREPERATION OF SUBGRADE UNDER PAVED AREAS SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF ADDISON SPECIFICATIONS OR THE GEOTECHNICAL REPORT. THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY. PREPARATION OF THE SUBGRADE FOR PAVING WITHIN RIGHT-OF-WAY, STREET USE EASEMENTS AND/OR FIRE LANES SHALL NOT BE INITIATED UNTIL ALL TESTING OF UNDERGROUND UTILITIES HAS BEEN COMPLETED AND VERIFIED TO MEET THE SPECIFICATIONS AND AUTHORIZATION TO PROCEED HAS BEEN RECEIVED FROM THE INSPECTOR.
11. CONCRETE SHOULD BE PORTLAND CEMENT CONCRETE, CONFORMING TO THE REQUIREMENTS OF TxDOT ITEM 421, PORTLAND CEMENT CONCRETE CLASS "P".
12. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE HIS WORK WITH TRENCHING OPERATIONS FOR OTHER UTILITIES INCLUDING GAS, TELEPHONE, AND ELECTRIC SERVICES, LANDSCAPE IRRIGATION CONDUITS, LIGHTING CONDUITS, STREETSCAPE IMPROVEMENTS, ETC. AND SHALL PROVIDE BLOCKOUTS AND/OR FINAL ADJUSTMENT TO FINISH GRADE FOR ALL IMPROVEMENTS, EXISTING AND PROPOSED, WITHIN THE LIMITS OF THE PAVING WORK.
13. ALL CURB SHOWN IS TO BE SIX (6) INCHES HIGH.
14. EXPANSION JOINT MATERIAL SHALL EXTEND COMPLETELY THROUGH THE CURB.
15. ALL REINFORCING BARS SHALL BE GRADE 40 KSI DEFORMED REINFORCING STEEL. SIZE AND SPACING SHALL BE IN ACCORDANCE WITH THE DETAILS. WHERE BARS ARE SPLICED, A 30" DIAMETER LAP SHALL BE USED.
16. ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORTS.
17. THE CONTRACTOR SHALL PROCEED WITH PAVING NO MORE THAN SEVENTY-TWO (72) HOURS AFTER DENSITY/MOISTURE TESTS HAVE BEEN TAKEN AND PASSED BY THE TESTING FIRM. COMPIES OF THE TEST RESULTS SHALL BE FURNISHED TO THE CITY. IN THE EVENT PAVING OPERATIONS HAVE NOT COMMENCED WITHIN THE SEVENTY-TWO (72) HOUR LIMIT, A RETEST SHALL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.
18. CONCRETE SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AND FALLING, BUT MAY BE PLACED WHEN THE TEMPERATURE IS ABOVE 35 DEGREES FAHRENHEIT AND RISING. THE TEMPERATURE READING SHALL BE TAKEN IN THE SHADE AND AWAY FROM ARTIFICIAL HEAT.
19. CONSTRUCTION OF SIDEWALKS, WHEELCHAIR RAMPS AND ACCESSIBLE ROUTES SHALL BE IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND THE AMERICANS DISIBILITY ACT (ADA). ALL CONCRETE FOR HANDICAP RAMPS SHALL HAVE INTEGRAL STAIN INSTEAD OF PAINT.
20. PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE TEXAS "UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS". FIRE LANES SHALL BE STRIPED IN ACCORDANCE WITH THE TOWN OF ADDISON'S REQUIREMENTS. ALL HANDICAP SYMBOLS, SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH TAS AND ADA STANDARDS.
21. MEMBRANE CURING TYPE 2, WHITE PIGMENTED, SHALL BE USED FOR CURING ALL CONCRETE SURFACES IMMEDIATELY AFTER FINISHING OF SURFACES AND SHALL BE IN ACCORDANCE WITH THE TxDOT ITEM #526.
22. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS TO ALL EXISTING FACILITIES DAMAGED BY HIS ACTIVITIES.
23. THE CONTRACTOR SHALL PROVIDE PAVEMENT JOINTING IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
    - A. SAW CUTTING SHALL BE DONE WITHIN EIGHT (8) HOURS OF POUR OR AS SOON AS CONCRETE CAN SUPPORT WEIGHT. PROVIDE A NEAT CUT WHICH IS TRUE IN ALIGNMENT.
    - B. CONTRACTOR SHALL MARK JOINT LOCATIONS AT THE CENTERLINE OF DOWEL LENGTH DURING HIS PAVING OPERATIONS.
    - C. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
    - D. RADIAL JOINTS SHALL BE NO SHORTER THAN EIGHTEEN (18) INCHES.
    - E. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED.
    - F. ODD SHAPED PANELS SHALL BE REINFORCED WITH #3 BARS AT 18" EACH WAY. AN ODD SHAPED PANEL IS CONSIDERED TO BE ONE IN WHICH THE SLAB TAPERS TO A SHARP ANGLE WHEN THE LENGTH TO WIDTH RATIO EXCEEDS 3 TO 1 OR WHEN A SLAB IS NEITHER SQUARE NOR RECTANGULAR.
    - G. THE CONTRACTOR SHALL SUBMIT HIS DESIRED JOINT LAYOUT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK.
24. THE CONTRACTOR SHALL PROVIDE VERIFICATION OF COMPLETION AND COMPLIANCE OF ANY AND ALL REQUIRED TESTS TO THE TOWN OF ADDISON.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

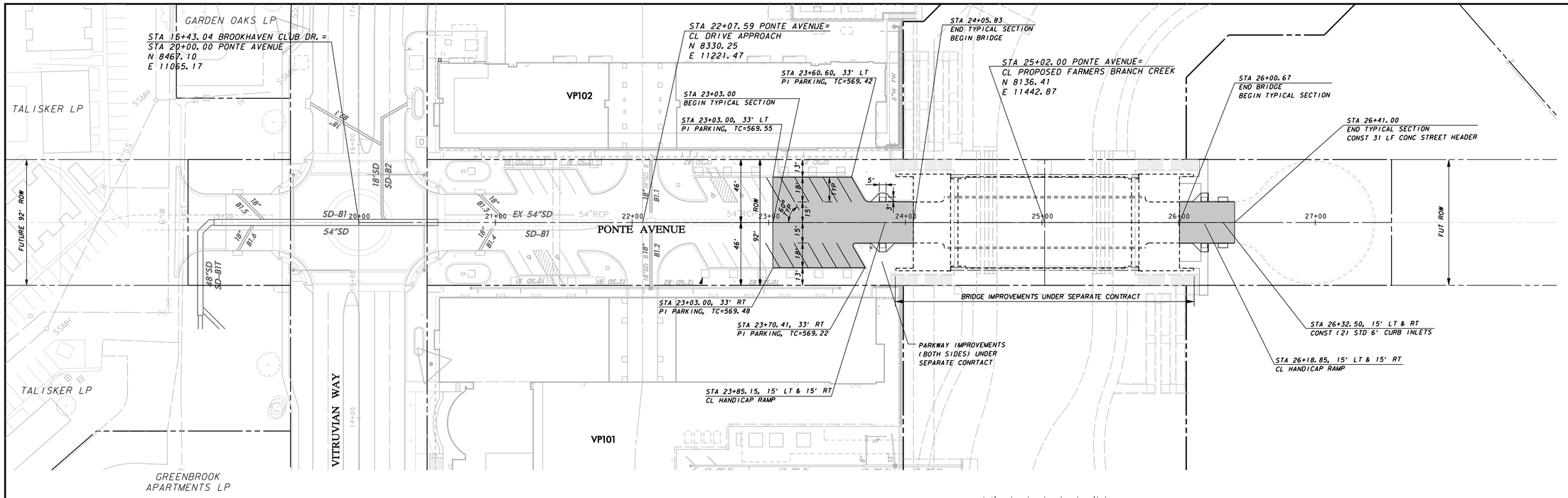
PAVING DETAILS

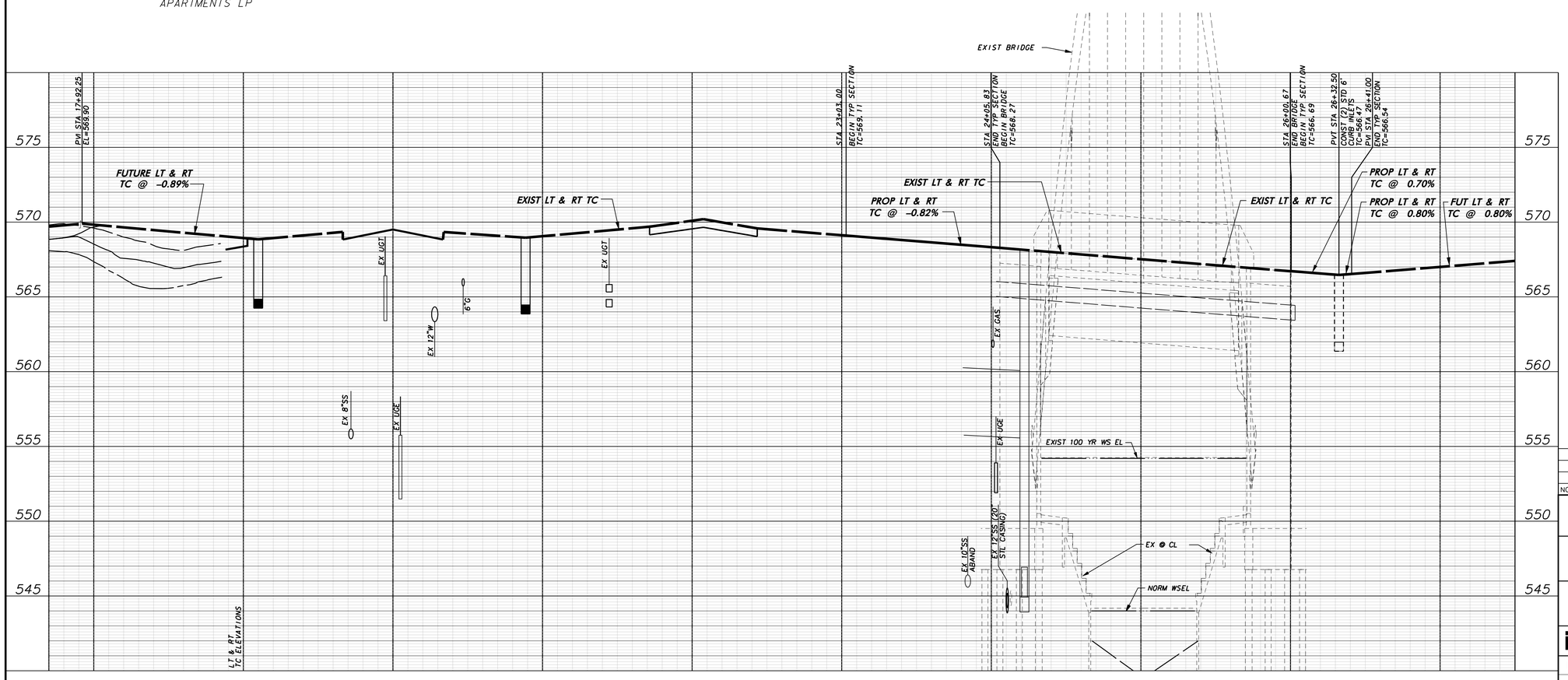
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C604

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12





WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN
END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN
END NOSE, AT INTERSECTION OF
VITRUVIAN WAY AND MARSH LANE.

PROFILE SCALE:
0 20 40 60 80
SCALE: 1"=40' HORIZ
0 2 4 6 8
SCALE: 1"=4' VERT

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

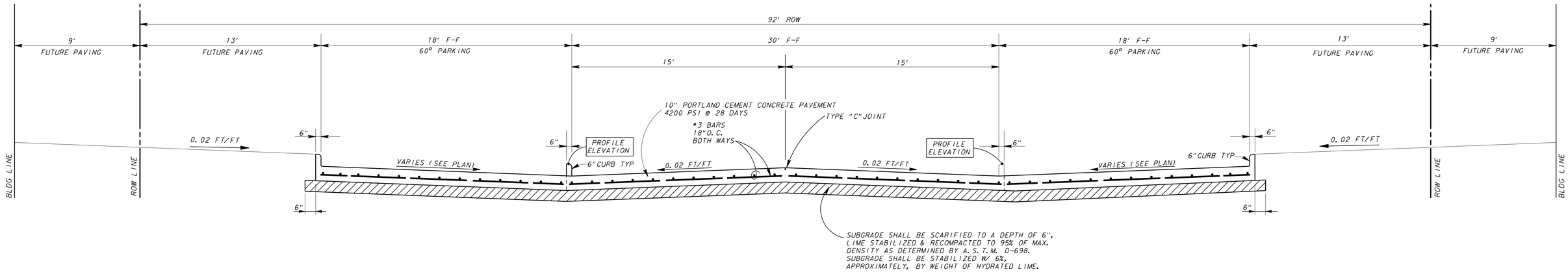
PAVING PLAN & PROFILE - PA
STA 23+03.00 TO STA 26+41.00

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW # 2009-04	C605

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



TYPICAL SECTION – PONTE AVENUE

NOT TO SCALE

GRADING & PAVING GENERAL NOTES

1. REFER TO SHEET 4 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THIS PROJECT.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD SPECIFICATIONS AS PUBLISHED BY NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND ANY AND ALL AMENDMENTS BY THE TOWN OF ADDISON, AS WELL AS STANDARD CONSTRUCTION DETAILS OF THE TOWN OF ADDISON.
3. PRIOR TO COMMENCING CONSTRUCTION, THE TOWN OF ADDISON, THE CONSULTING ENGINEERS, THE SUCCESSFUL CONTRACTOR, UTILITY COMPANIES, AND ANY OTHER AFFECTED PARTIES, SHALL CONVENE FOR A PRE-CONSTRUCTION CONFERENCE AT LEAST 48 HOURS PRIOR TO THE BEGINNING OF CONSTRUCTION.
4. THE CONTRACTOR SHALL OBTAIN A RIGHT-OF-WAY PERMIT FROM THE TOWN OF ADDISON PRIOR TO WORKING WITHIN THE PUBLIC RIGHT-OF-WAY.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ANY PUBLIC UTILITY COMPANIES FOR LOCATION OF EXISTING FACILITIES IN OR NEAR THE WORK AREAS. THESE INCLUDE, BUT ARE NOT LIMITED TO THE FOLOWING:

TOWN OF ADDISON (WATER, SEWER, SIGNALS)	ATMOS ENERGY (GAS)
ONCOR ELECTRIC DELIVERY	VERIZON / MCI
AT&T (SOUTHWESTERN BELL)	TIME-WARNER CABLE

6. THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE ENGINEER (SIX SETS EACH), FOR APPROVAL OF ALL MATERIALS TO BE ADDED TO THE PUBLIC INFRASTRUCTURE, PRIOR TO INCORPORATING MATERIALS INTO THE JOB.
7. THE CONTRACTOR SHALL EXECUTE AN "EXCAVATION PERFORMANCE AND MAINTENANCE BOND" PRIOR TO WORKING WITHIN THE PUBLIC RIGHT-OF-WAY.
8. THE CONTRACTOR SHALL PROVIDE A MAINTENANCE BOND FOR PUBLIC INFRASTRUCTURE WORK IN THE FOLLOWING AMOUNTS:
   - 100% FOR VALUATIONS LESS THAN OR EQUAL TO $5,000.
   - $5,000 FOR VALUATION GREATER THAN $5,000. AND LESS THAN $50,000.
   - 10% FOR VALUATIONS GREATER THAN $50,000.

   BONDS SHALL BE FOR A PERIOD OF TWO YEARS BEGINNING WITH THE DATE OF FINAL ACCEPTANCE BY THE TOWN.
9. THE CONTRACTOR SHALL FULLY COMPLY WITH, AND SUPPLEMENT AS NECESSARY, THE CONDITIONS OF THE STORM WATER POLLUTION PREVENTION PLAN WHILE CONDUCTING HIS ACTIVITIES ON THIS PROJECT.
10. THE TOWN OF ADDISON PUBLIC WORKS DEPARTMENT WILL APPROVE AND/OR DETERMINE THE TRAFFIC CONTROL PLAN AND WORKING HOURS. CONTACT THE ASSISTANT CITY ENGINEER AT (972) 450-2857 OR THE PUBLIC WORKS INSPECTOR AT (972) 450-2871. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT, AND SUPPLEMENT AS NECESSARY, THE TRAFFIC CONTROL MEASURES ON THIS PROJECT, INCLUDING PROVIDING ADEQUATE FLAGMEN, SIGNAGE, STRIPING AND WARNING DEVICES, ETC., DURING CONSTRUCTION IN ACCORDANCE WITH THE TEXAS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD). THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION DURING WORKING HOURS OR PROVIDE AN ALL-WEATHER DETOUR AROUND THE CONSTRUCTION SITE, INCLUDING PUBLIC NOTIFICATION AND SIGNING.
11. TEMPORARY OR PERMANENT BARRICADES SHALL REMAIN AT ALL POINTS OF INGRESS OR EGRESS TO PREVENT PUBLIC USE UNTIL THE WORK RECEIVES FINAL ACCEPTANCE.
12. THE TOWN OF ADDISON WILL PROVIDE A GEOTECHNICAL LABORATORY TO PERFORM APPROPRIATE TESTING DURING CONSTRUCTION ACTIVITIES. ALL EARTHWORK OPERATIONS SHALL BE OBSERVED AND TESTED ON A CONTINUING BASIS BY THE GEOTECHNICAL ENGINEER FOR CONFORMANCE WITH THE REQUIREMENTS SET FORTH IN THE GEOTECHNICAL STUDY WHICH IS MADE A PART OF THESE CONSTRUCTION DOCUMENTS. ANY TEST THAT FAILS TO MEET CITY REQUIREMENTS SHALL BE RETESTED AT THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE AT ALL TIMES DURING CONSTRUCTION, INCLUDING PROVIDING ALL TEMPORARY STRUCTURES OR IMPROVEMENTS AS NESCESSARY FOR THE SAFETY OF THE PUBLIC.
14. ANY ADJACENT PROPERTIES AFFECTED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS, OR BETTER.
15. AREAS TO BE PAVED AND ALL AREAS THAT ARE TO RECEIVE FILL MATERIAL SHALL BE STRIPPED OF VEGETATION, TREES, ROOTS, STUMPS, DEBRIS, AND OTHER ORGANIC MATERIAL. THE DEPTH OF STRIPPING IS ESTIMATED TO BE ON THE ORDER OF FOUR (4) INCHES IN ORDER TO REMOVE THE SURFACE SOIL CONTAINING ORGANIC MATERIAL. THE ACTUAL STRIPPING DEPTH SHALL BE BASED ON FIELD OBSERVATIONS. STRIPPED TOPSOIL SHALL BE STOCKPILED IN A LOCATION ON-SITE APPROVED BY THE ENGINEER. ALL TREES, INCLUDING STUMPS AND ROOT SYSTEMS, VEGETATION, DEBRIS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OFF-SITE. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE. ALL COSTS ASSOCIATED WITH DISPOSAL OF MATERIAL SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
16. BURNING SHALL NOT BE PERMITTED ON THE PROJECT SITE UNLESS APPROVED IN WRITING BY THE GOVERNING AUTHORITIES.
17. UPON COMPLETION OF STRIPPING OPERATIONS, AND PRIOR TO PLACEMENT OF ANY FILL MATERIALS, THE STRIPPED AREAS SHOULD BE OBSERVED TO DETERMINE IF ADDITIONAL EXCAVATION IS REQUIRED TO REMOVE WEAK OR OTHERWISE OBJECTIONABLE MATERIALS THAT WOULD ADVERSELY AFFECT THE FILL PLACEMENT. THE SUBGRADE SHOULD BE FIRM AND ABLE TO SUPPORT CONSTRUCTION EQUIPMENT WITHOUT DISPLACEMENT. SOFT OR YIELDING SUBGRADE SHOULD BE CORRECTED AND MADE STABLE BEFORE CONSTRUCTION PROCEEDS. PROOF ROLLING SHOULD BE PERFORMED USING A HEAVY PNEUMATIC TIRE ROLLER, LOADED DUMP TRUCK, OR SIMILAR PIECE OF EQUIPMENT WEIGHING 25 TONS. THE PROOF ROLLING OPERATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE.
18. WHEN CLAY OR OTHER UNSTABLE MATERIAL IS PRESENT IN AREAS OF PROPOSED PAVED AREAS, THE GEOTECHNICAL ENGINEER SHALL OBSERVE THE STABILITY OF ANY EXISTING CLAY OR WEATHERED MATERIAL THAT IS PRESENT IN THE SUBBASE, AND SHALL DETERMINE WHETHER ADDITIONAL EXCAVATION OF THESE MATERIALS WILL BE REQUIRED. IF THIS MATERIAL IS DEEMED SUITABLE FOR SUBBASE MATERIAL, THE SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF SIX (6) INCHES, ITS MOISTURE CONTENT ADJUSTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER, AND THEN RE-COMPACTED TO BETWEEN NINETY-FIVE (95) PERCENT TO ONE HUNDRED (100) PERCENT OF THE OPTIMUM DENSITY DETERMINED BY THE STANDARD PROCTOR TEST, ASTM D - 698 PRIOR TO PLACEMENT OF FILL MATERIALS.
19. ALL SOILS USED FOR CONTROLLED FILL SHOULD BE FREE OF ROOTS, VEGETATION, AND OTHER DELETERIOUS OR UNDESIRABLE MATTER. ROCKS LESS THAN 3 INCHES IN LARGEST DIMENSION WILL BE ALLOWED AS ACCEPTABLE FILL MATERIAL. SOILS IMPORTED FROM OFF-SITE FOR USE AS FILL SHOULD BE APPROVED BY THE GEOTECHNICAL ENGINEER. THE FILL MATERIAL SHOULD BE PLACED IN LEVEL, UNIFORM LIFTS, WITH EACH LIFT COMPACTED TO THE MINIMUM DRY DENSITY WITHIN THE COMPACTION SOIL MOISTURE RANGES RECOMMENDED. THE LOOSE LIFT THICKNESS SHOULD NOT EXCEED 10 INCHES. EACH LAYER SHOULD BE PROPERLY PLACED, MIXED, SPREAD, AND COMPACTED TO BETWEEN NINETY-FIVE (95) AND ONE HUNDRED (100) PERCENT OF STANDARD PROCTOR DENSITY AT 0% TO 3% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 698.
20. THE PROPOSED CONTOURS INDICATED ON THE GRADING PLAN ARE FINISHED GRADES AND ARE SHOWN AT ONE-FOOT INTERVALS. SPOT ELEVATIONS SHOWN IN PAVED AREAS ARE TOP OF PAVEMENT, UNLESS NOTED OTHERWISE.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MASS GRADING OF THE SITE TO THE FOLLOWING ELEVATIONS:
   - 8" BELOW FINISHED GRADE FOR ALL STREET PAVEMENT AREAS.
   - 4" BELOW FINISHED GRADE FOR ALL SIDEWALK PAVEMENT AREAS.
   - 6" BELOW FINISHED GRADE FOR ALL LANDSCAPE AREAS.

   A TOLERANCE OF +/- 0.10 FEET OF THE FINISHED GRADE WILL BE ALLOWED FOR ALL AREAS UNDER PROPOSED PAVEMENT. ALL LANDSCAPE AREAS ARE TO BE GRADED WITHIN +/- 0.30 FEET OF THE FINISHED GRADE.
22. ALL LANDSCAPE AREAS AND OTHER DISTURBED AREAS WITHIN THE LIMITS OF THE PROPERTY NOT DESIGNATED TO BE PAVED SHALL RECEIVE SIX (6) INCHES OF TOPSOIL. REFER TO THE EROSION AND SEDIMENT CONTROL PLANS AND/OR LANDSCAPE PLANS FOR LIMITS OF TOPSOIL PLACEMENT.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALCULATING THE EARTHWORK QUANTITIES BASED ON THE EXISTING AND PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ON THESE PLANS. ALL EARTHWORK SHALL BE CONSIDERED UNCLASSIFIED EXCAVATION AND BID ON A LUMP SUM BASIS, UNLESS NOTED OTHERWISE.
24. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR THE SUPPORT AND PROTECTION OF ALL UTILITY POLES, FENCES, TREES, SHRUBS, UTILITY SERVICES, BUILDING FOUNDATIONS AND ALL OTHER UTILITIES AND STRUCTURES BOTH ABOVE AND BELOW THE GROUND, THE COST OF WHICH SHALL BE INCLUDED IN THE CONTRACT AMOUNT.
25. THE CONTRACTOR SHALL VERIFY THE ELEVATION, CONFIGURATION, AND ANGULATION OF EXISTING PAVEMENT PRIOR TO CONSTRUCTION OF TIE-IN MATERIALS. WHERE PROPOSED CONCRETE PAVEMENT TO EXISTING CONCRETE PAVEMENT IS TO BE CONSTRUCTED BY THE CONTRACTOR, AT LEAST 15" OF REINFORCING STEEL SHALL BE EXPOSED FROM THE EXISTING PAVEMENT, OR THE CONTRACTOR SHALL PROVIDE HORIZONTAL DOWEL BARS PER THE DETAILS.
26. NO PERSON SHALL OPEN, TURN OFF, INTERFERE WITH, ATTACH ANY HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE TOWN OF ADDISON UNLESS DULY AUTHORIZED TO DO SO BY THE TOWN OF ADDISON PUBLIC WORKS DEPARTMENT (972-450-2871).
27. ALL EXISTING AND PROPOSED IMPROVEMENTS (MANHOLE RIMS, CLEAN-OUTS, FIRE HYDRANTS, VALVE BOXES, WATER METERS AND VAULTS, ETC.) SHALL BE ADJUSTED TO FINAL FINISHED GRADE BY THE CONTRACTOR AT THE TIME OF PAVING.
28. PREPERATION OF SUBGRADE UNDER PAVED AREAS SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF ADDISON SPECIFICATIONS OR THE GEOTECHNICAL REPORT. THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY. PREPARATION OF THE SUBGRADE FOR PAVING WITHIN RIGHT-OF-WAY, STREET USE EASEMENTS AND/OR FIRE LANES SHALL NOT BE INITIATED UNTIL ALL TESTING OF UNDERGROUND UTILITIES HAS BEEN COMPLETED AND VERIFIED TO MEET THE SPECIFICATIONS AND AUTHORIZATION TO PROCEED HAS BEEN RECEIVED FROM THE INSPECTOR.
29. ALL FILL UNDER PAVEMENT AREAS SHALL BE COMPACTED TO A DENSITY OF AT LEAST NINETY-FIVE (95) PERCENT STANDARD PROCTOR AS PER ASTM D698 AT OR ABOVE OPTIMUM MOISTURE CONTENT (+-3%). LIFTS SHALL BE AS SPECIFIED IN THE GEOTECHNICAL REPORT AND AS APPROVED BY THE TOWN OF ADDISON. ALL FILL MATERIAL SHALL BE TESTED AS INSTALLED AND CERTIFIED BY AN APPROVED SOILS LABORATORY.
30. THE SUBGRADE SHALL BE PROOF-ROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO FIRM SUBGRADE AND BACKFILLED AND RE-COMPACTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT. PAVEMENT SUBGRADE SHOULD NOT BE ALLOWED TO RETAIN WATER. WET MATERIAL SHALL BE REMOVED TO DRY, SOUND MATERIAL AND APPROPRIATE DENSITY ACHIEVED PRIOR TO PAVING OPERATIONS.
31. CONCRETE SHOULD BE PORTLAND CEMENT CONCRETE, CONFORMING TO THE REQUIREMENTS OF TxDOT ITEM 421, PORTLAND CEMENT CONCRETE CLASS "P".
32. HYDRATED LIME (IF REQUIRED) SHALL MEET THE REQUIREMENTS OF TxDOT ITEM 260, LIME TREATMENT USED AS SUBGRADE. LIME SHALL BE APPPLIED AT THE RATE AND THICKNESS AS RECOMMENDED IN THE GEOTECHNICAL REPORT, THOROUGHLY MIXED AND BLENDED WITH THE SUBGRADE AND UNIFORMLY COMPACTED TO A MINIMUM OF 100 PERCENT OF STANDARD PROCTOR (ASTM D698) DETERMINED BY THAT TEST. LIME STABILIZATION SHALL EXTEND ONE (1) FOOT OUTSIDE THE LIMITS OF THE PAVED AREA. IT SHOULD BE PROTECTED AND MAINTAINED IN A MOIST CONDITION UNTIL THE PAVEMENT IS PLACED.
33. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE HIS WORK WITH TRENCHING OPERATIONS FOR OTHER UTILITIES INCLUDING GAS, TELEPHONE, AND ELECTRIC SERVICES, LANDSCAPE IRRIGATION CONDUITS, LIGHTING CONDUITS, STREETSCAPE IMPROVEMENTS, ETC. AND SHALL PROVIDE BLOCKOUTS AND/OR FINAL ADJUSTMENT TO FINISH GRADE FOR ALL IMPROVEMENTS, EXISTING AND PROPOSED, WITHIN THE LIMITS OF THE PAVING WORK.
34. ALL CURB SHOWN IS TO BE SIX (6) INCHES HIGH.
35. EXPANSION JOINT MATERIAL SHALL EXTEND COMPLETELY THROUGH THE CURB.
36. ALL REINFORCING BARS SHALL BE GRADE 40 KSI DEFORMED REINFORCING STEEL. SIZE AND SPACING SHALL BE IN ACCORDANCE WITH THE DETAILS. WHERE BARS ARE SPLICED, A 30" DIAMETER LAP SHALL BE USED.
37. ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS OR OTHER APPROVED SUPPORTS.
38. THE CONTRACTOR SHALL PROCEED WITH PAVING NO MORE THAN SEVENTY-TWO (72) HOURS AFTER DENSITY/MOISTURE TESTS HAVE BEEN TAKEN AND PASSED BY THE TESTING FIRM. COMPIES OF THE TEST RESULTS SHALL BE FURNISHED TO THE CITY. IN THE EVENT PAVING OPERATIONS HAVE NOT COMMENCED WITHIN THE SEVENTY-TWO (72) HOUR LIMIT, A RETEST SHALL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.
39. CONCRETE SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AND FALLING, BUT MAY BE PLACED WHEN THE TEMPERATURE IS ABOVE 35 DEGREES AND RISING. THE TEMPERATURE READING SHALL BE TAKEN IN THE SHADE AND AWAY FROM ARTIFICIAL HEAT.
40. CONSTRUCTION OF SIDEWALKS, WHEELCHAIR RAMPS AND ACCESSIBLE ROUTES SHALL BE IN ACCORDANCE WITH THE TEXAS ACCESSIBILITY STANDARDS (TAS) AND/OR THE AMERICANS DISIBILITY ACT (ADA). ALL CONCRETE FOR HANDICAP RAMPS SHALL HAVE TRUNCATED DOMES.
41. PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE TEXAS "UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS". FIRE LANES SHALL BE STRIPED IN ACCORDANCE WITH THE TOWN OF ADDISON'S REQUIREMENTS. ALL HANDICAP SYMBOLS, SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH TAS AND/OR ADA STANDARDS.
42. MEMBRANE CURING TYPE 2, WHITE PIGMENTED, SHALL BE USED FOR CURING ALL CONCRETE SURFACES IMMEDIATELY AFTER FINISHING OF SURFACES AND SHALL BE IN ACCORDANCE WITH THE TxDOT ITEM #526.
43. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR REPAIRS TO ALL EXISTING FACILITIES DAMAGED BY HIS ACTIVITIES.
44. THE CONTRACTOR SHALL PROVIDE PAVEMENT JOINTING IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
   - A. SAW CUTTING SHALL BE DONE WITHIN EIGHT (8) HOURS OF POUR OR AS SOON AS CONCRETE CAN SUPPORT WEIGHT. PROVIDE A NEAT CUT WHICH IS TRUE IN ALIGNMENT.
   - B. CONTRACTOR SHALL MARK JOINT LOCATIONS AT THE CENTERLINE OF DOWEL LENGTH DURING HIS PAVING OPERATIONS.
   - C. ALL JOINTS ARE TO CONTINUE THROUGH THE CURB.
   - D. RADIAL JOINTS SHALL BE NO SHORTER THAN EIGHTEEN (18) INCHES.
   - E. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CLEANED OF DEBRIS, BLOWN DRY AND IMMEDIATELY SEALED.
   - F. ODD SHAPED PANELS SHALL BE REINFORCED WITH #3 BARS AT 18" EACH WAY. AN ODD SHAPED PANEL IS CONSIDERED TO BE ONE IN WHICH THE SLAB TAPERS TO A SHARP ANGLE WHEN THE LENGTH TO WIDTH RATIO EXCEEDS 3 TO 1 OR WHEN A SLAB IS NEITHER SQUARE NOR RECTANGULAR.
   - G. THE CONTRACTOR SHALL SUBMIT HIS DESIRED JOINT LAYOUT PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING WORK.
45. THE CONTRACTOR SHALL PROVIDE VERIFICATION OF COMPLETION AND COMPLIANCE OF ANY AND ALL REQUIRED TESTS TO THE TOWN OF ADDISON.
46. THE CONTRACTOR SHALL CALL (972) 450-2847 TO REQUEST A FINAL WALK-THROUGH INSPECTION OF THE PUBLIC INFRASTRUCTURE WORK.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

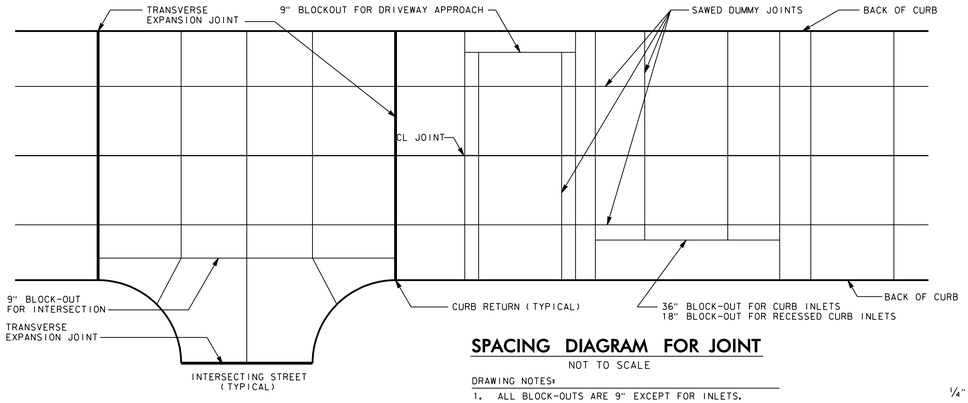
PAVEMENT SECTION & GENERAL NOTES

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C606

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

RECORD DRAWINGS 06/18/12



SPACING DIAGRAM FOR JOINT

NOT TO SCALE

DRAWING NOTES:

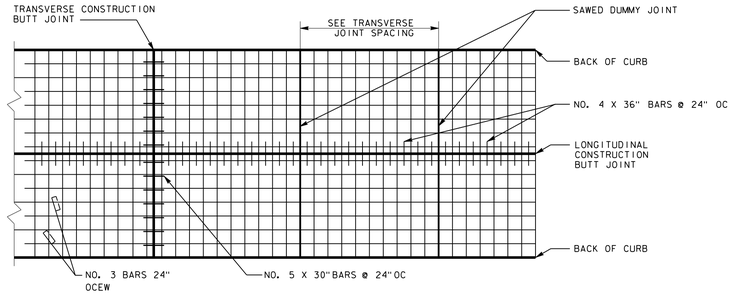
1. ALL BLOCK-OUTS ARE 9" EXCEPT FOR INLETS.
2. END OF EACH BLOCK-OUT TO HAVE TRANSVERSE JOINT.

TRANSVERSE JOINT SPACING	
PAVEMENT THICKNESS	SPACING
T = 5"	10 FEET
T = 6"	12 FEET
T = 7"	14 FEET
T = 8"	16 FEET

TRANSVERSE EXPANSION JT SPACING
VARIES (200' C-C MAXIMUM)

LONGITUDINAL JOINT SPACING	
STREET WIDTH	SPACING
22' TO 30'	ON CL
36' & 40'	ON CL & 8' FROM BACK OF CURB
38'	6' LT & RT OFF CL
44'	ON CL AND 11' OFF CL
48'	ON CL AND 12' OFF CL
60'	6' AND 18' OFF CL
76'	8', 20' AND 32' OFF CL

JOINT DEPTH	
PAVEMENT THICKNESS	JOINT DEPTH
T = 5"	1 1/4"
T = 6"	1 1/2"
T = 7"	1 3/4"
T = 8"	2"

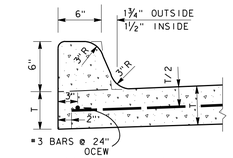


PLAN OF STEEL LAYOUT

NOT TO SCALE

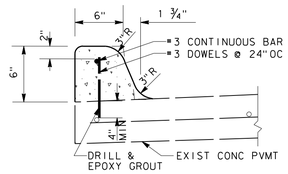
DRAWING NOTES:

1. THE REINFORCING STEEL WILL EXTEND THROUGH LONGITUDINAL CONSTRUCTION BUTT, SAWED DUMMY, AND TRANSVERSE CONSTRUCTION BUTT JOINTS.



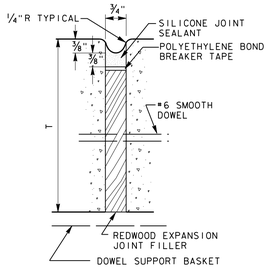
MONOLITHIC CURB

NOT TO SCALE



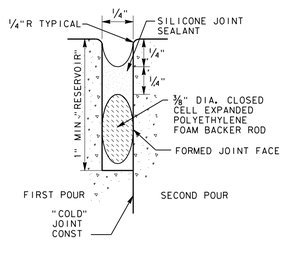
ATTACHED CURB

NOT TO SCALE



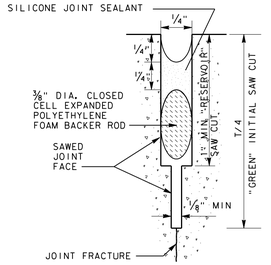
JOINT DETAIL A
SEAL FOR TRANSVERSE EXPANSION JOINT

NOT TO SCALE



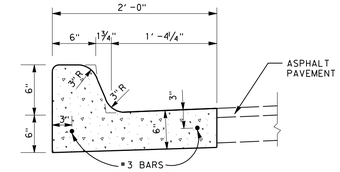
JOINT DETAIL B
SEAL FOR LONGITUDINAL AND TRANSVERSE CONSTRUCTION BUTT JOINT

NOT TO SCALE



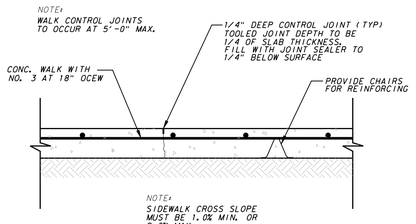
JOINT DETAIL C
SEAL FOR SAWED DUMMY JOINT

NOT TO SCALE



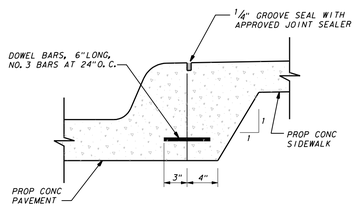
6" CURB AND GUTTER

NOT TO SCALE



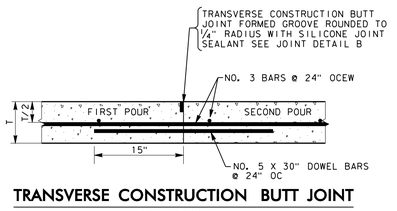
SIDEWALK CONTROL JOINT

NOT TO SCALE



JOINT DETAIL FOR SIDEWALK ADJACENT TO CURB

NOT TO SCALE



TRANSVERSE CONSTRUCTION BUTT JOINT

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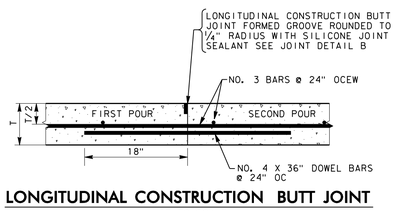
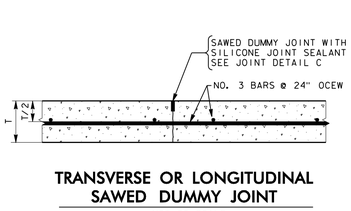


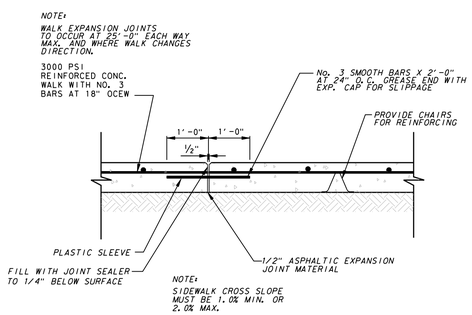
LONGITUDINAL CONSTRUCTION BUTT JOINT

NOT TO SCALE



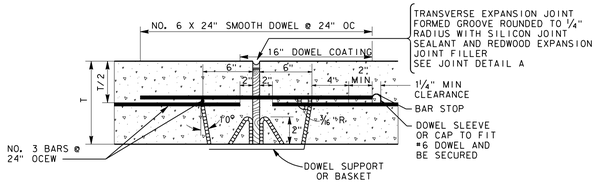
TRANSVERSE OR LONGITUDINAL SAWED DUMMY JOINT

NOT TO SCALE



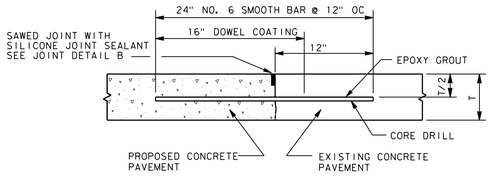
SIDEWALK EXPANSION JOINT

NOT TO SCALE



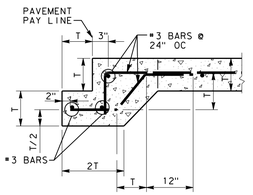
TRANSVERSE EXPANSION JOINT

NOT TO SCALE



PROPOSED TO EXISTING CONCRETE PAVEMENT

NOT TO SCALE



CONCRETE STREET HEADER

NOT TO SCALE

NOTE:
PAVEMENT BARS TO BE BENT DOWN INTO HEADER. HEADER & PAVEMENT TO BE MONOLITHIC. (CONC HEADER TO BE PAID FOR PER LINEAR FOOT)

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

PAVING DETAILS

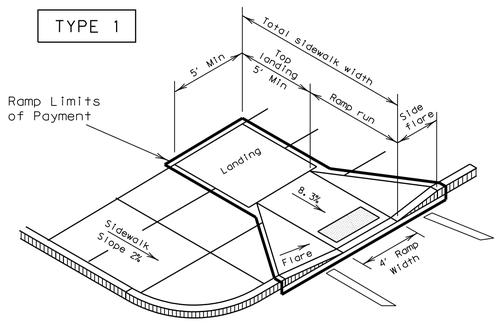
icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C607

RECORD DRAWINGS 06/18/12

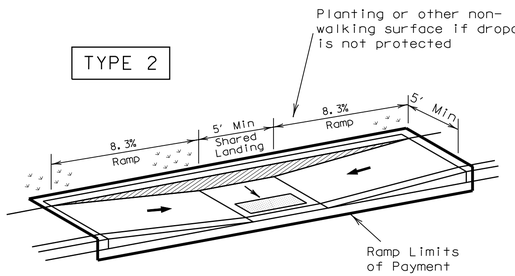
PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

TYPE 1



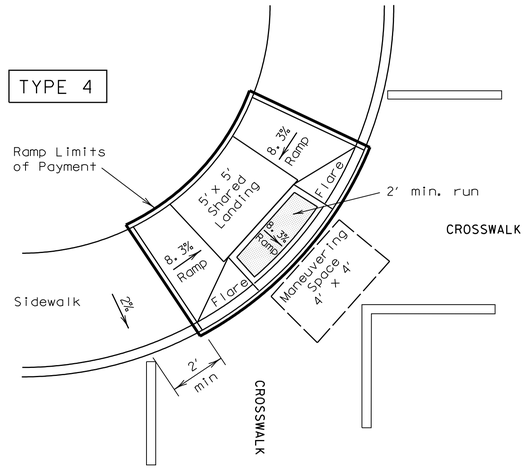
PERPENDICULAR CURB RAMP

TYPE 2



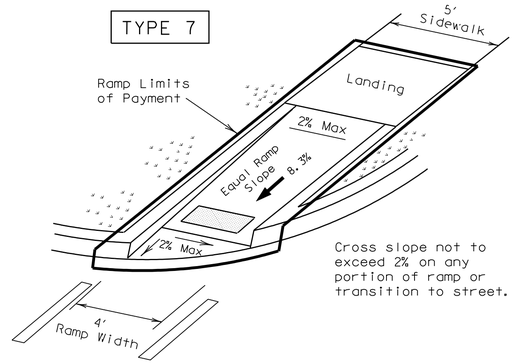
PARALLEL CURB RAMP
(Use only where water will not pond in the landing.)

TYPE 4



DIAGONAL COMBINATION CURB RAMP
Perpendicular to the Tangent of the Curb Radius and Contained in Crosswalk

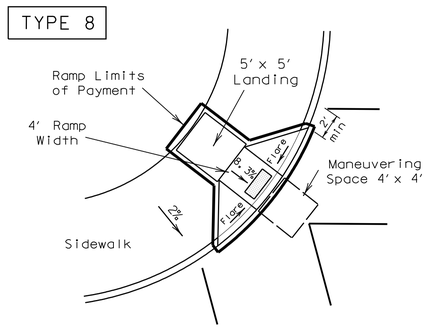
TYPE 7



Cross slope not to exceed 2% on any portion of ramp or transition to street.

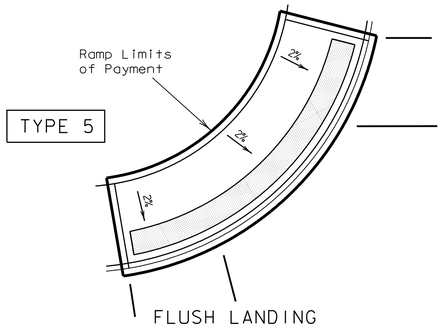
DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk set back from curb)

TYPE 8



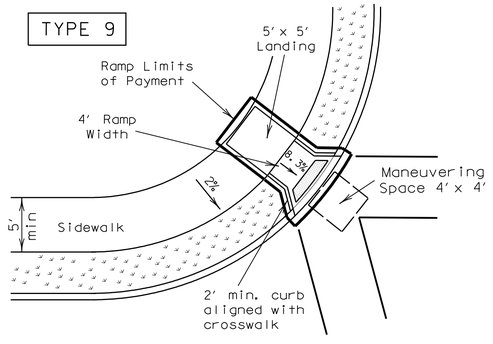
DIAGONAL CURB RAMP (FLARED SIDES)

TYPE 5

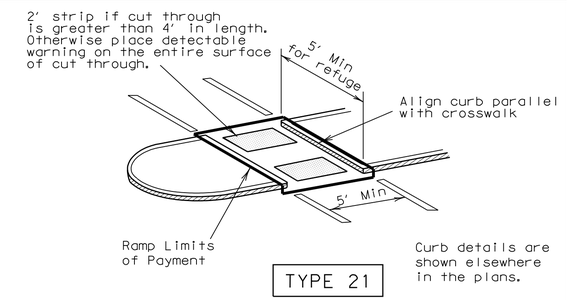


FLUSH LANDING

TYPE 9



DIAGONAL CURB RAMP (RETURNED CURB)

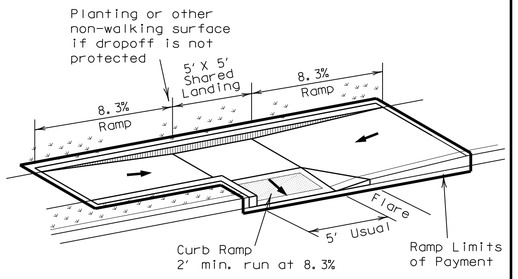


TYPE 20

TYPE 21

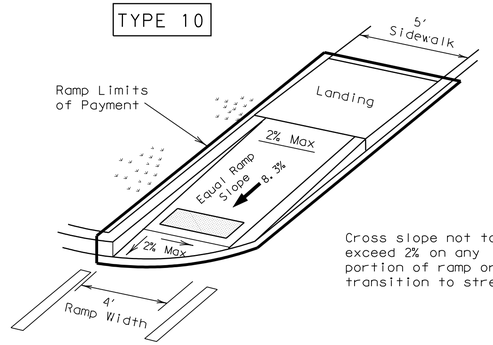
Curb details are shown elsewhere in the plans.

CURB RAMPS AT MEDIAN ISLANDS



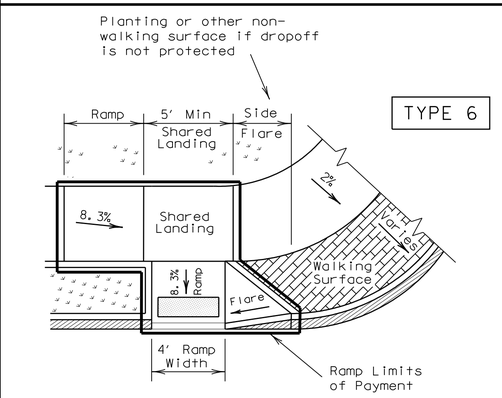
TYPE 3

TYPE 10



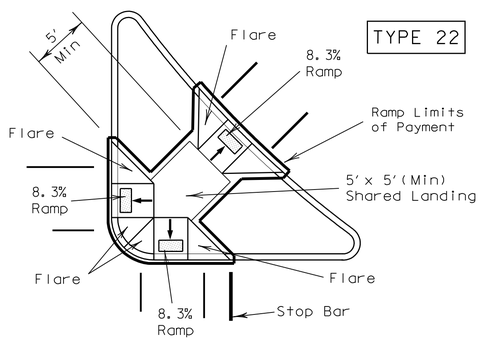
Cross slope not to exceed 2% on any portion of ramp or transition to street.

DIRECTIONAL RAMP WITHIN RADIUS
(Sidewalk adjacent to curb)



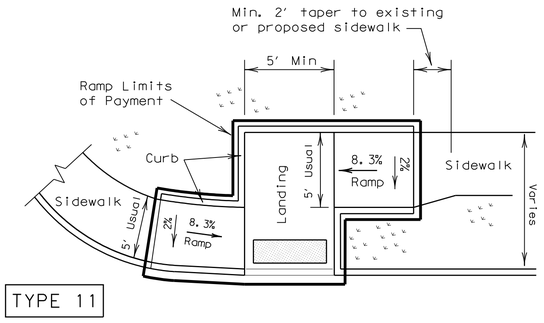
TYPE 6

COMBINATION CURB RAMPS



TYPE 22

COMBINATION ISLAND RAMPS



TYPE 11

OFFSET PARALLEL CURB RAMP

NOTES:

See General Notes on sheet 2 of 4 for more information.

Denotes planting or non-walking surface.

Texas Department of Transpo
Design Division (Roadway)

PEDESTRIAN FACILITIES
CURB RAMPS

PED-05

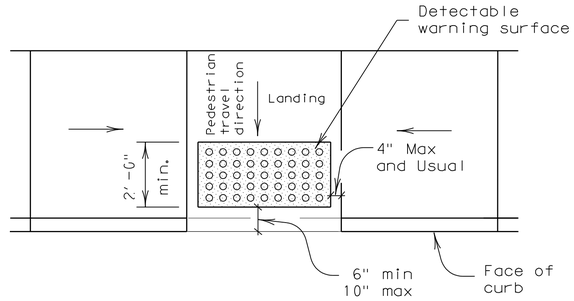
SHEET 1 OF 4

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:	
© TxDOT March 2002	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS					C608
	COUNTY		CONTROL	SECT	JOB	HIGHWAY

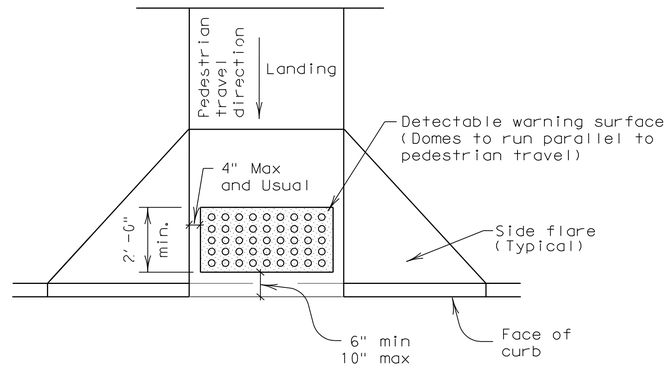
DETECTABLE WARNINGS

General Notes for Detectable Warnings

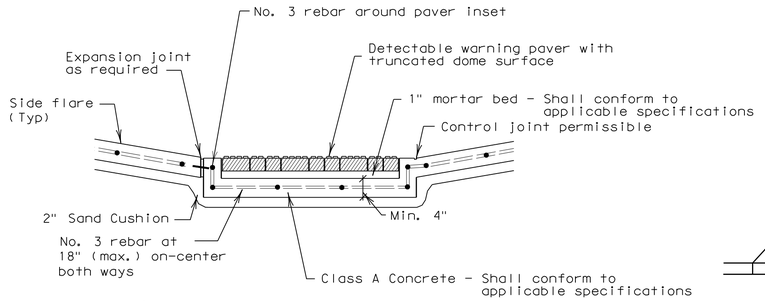
1. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with Section 4.29 of the Texas Accessibility Standards (TAS). The surface must contrast visually with adjoining surfaces, including side flares. Furnish dark brown or dark red detectable warning surface adjacent to uncolored concrete, unless specified elsewhere in the plans.
2. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
3. Align truncated domes in the direction of pedestrian travel when entering the street.
4. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.
5. Detectable warning surfaces shall be a minimum of 24" in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
6. Detectable warning surfaces shall be located so that the edge nearest the curb line is a minimum of 6" and a maximum of 10" from the extension of the face of curb. Detectable warning surfaces may be curved along the corner radius.
7. TxDOT maintains a list of Qualified Detectable Warning Materials. Details are provided herein for the placement of landscape pavers. For other materials, refer to the manufacturer's product manual for proper installation.



Typical placement of detectable warning surface on landing at street edge.



Typical placement of detectable warning surface on sloping ramp run.

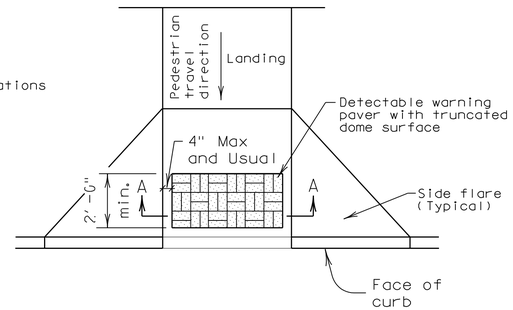


Section A-A

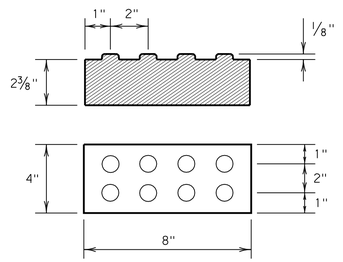
General Notes (Pavers)

Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.

Lay full-size units first followed by closure units consisting of at least 25 percent of a full unit. Cut detectable warning paver units using a power saw.



Truncated Dome Pattern Curb Ramp



Detectable Warning Paver

DETECTABLE WARNING PAVER (OPTION)

Pedestrian Facilities General Notes

1. All slopes are maximum allowable. The least possible slope that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
2. The minimum sidewalk width is 5'. Where the sidewalk is adjacent to the back of curb, a 6' sidewalk width is encouraged. Where a 5' sidewalk can not be provided due to site constraints, a minimum 3' sidewalk with 5'x 5' passing areas at intervals not to exceed 200' is required.
3. Landings shall be 5'x 5' minimum with a maximum 2% slope in any direction.
4. Maneuvering space at the bottom of curb ramps shall be a minimum of 4'x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
5. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
6. Curb ramps with returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planting or other non-walking surface or because the side approach is substantially obstructed. Otherwise, provide flared sides.
7. Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) and 16 TAC §68.102.
8. To serve as a pedestrian refuge area, the median should be a minimum of 5' wide. Medians should be designed to provide accessible passage over or through them.
9. Small channelization islands, which do not provide a minimum 5'x 5' landing at the top of curb ramps, shall be cut through level with the surface of the street.
10. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall be aligned with theoretical crosswalks, or as directed by the Engineer.
11. Existing features that comply with TAS may remain in place unless otherwise shown on the plans.
12. Handrails are not required on curb ramps. Provide curb ramps wherever on accessible route crosses (penetrates) a curb.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Separate curb ramp and landings from adjacent sidewalk and any other elements with premold or board joint of ¾" unless otherwise directed by the Engineer.
15. Provide a smooth transition where the curb ramps connect to the street.
16. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
17. Flare slope shall not exceed 10% measured along curb line.

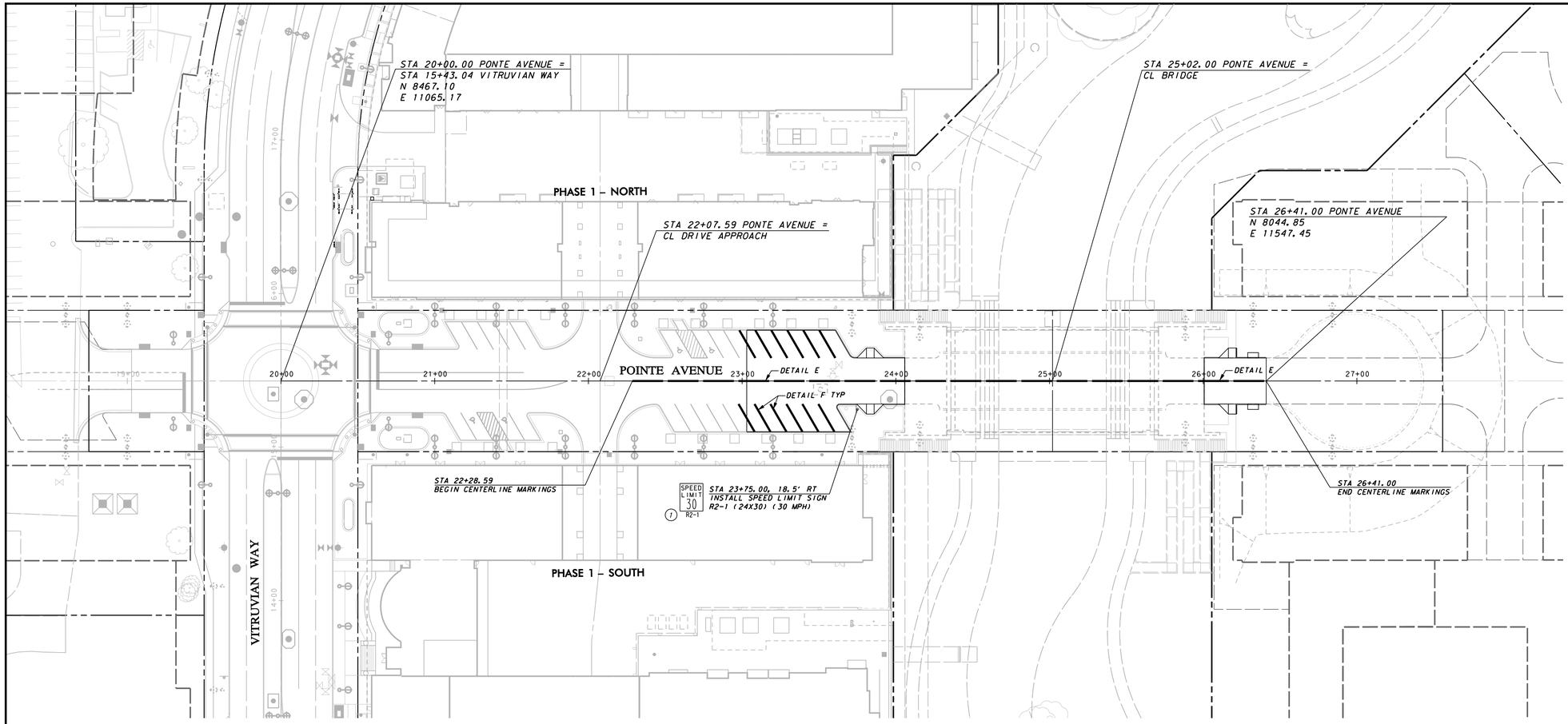
Texas Department of Transpo
Design Division (Roadway)

PEDESTRIAN FACILITIES

GENERAL NOTES AND DETECTABLE WARNINGS

PED-05

FILE: ped05.dgn	DN: EH	CK:	DW: BGD	CK:	
© TxDOT March 2002	DIST	FEDERAL AID PROJECT			SHEET
REVISIONS					C609
	COUNTY		CONTROL	SECT	JOB	HIGHWAY



PAVEMENT MARKING & SIGNAGE NOTES:

1. SIGN LOCATIONS SHOWN ON PLANS ARE DIAGRAMMATIC. SIGNS WILL BE PLACED IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST ADDITION.
2. REFLECTIVE SHEETING WILL BE DESIGNATED AS:
   TYPE A=ENGINEER GRADE
   TYPE B=SUPER ENGINEER GRADE
   TYPE C=HIGH INTENSITY PRISMATIC
3. BREAKAWAY SUPPORT IS TO BE PROVIDED.
4. DO NOT REMOVE EXISTING PAVEMENT MARKINGS OR SIGNAGE PRIOR TO NEW ROADWAY OPENING TO TRAFFIC.
5. ALL PAVEMENT MARKINGS TO BE ALKYD THERMOPLASTIC WITH 0.090 INCHES THICKNESS.

SUMMARY OF SMALL SIGNS (WITHOUT REMOVABLE COPY)

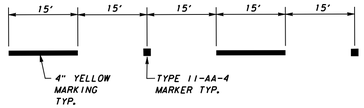
SIGN NO. ○	SIGN TYPE	SIGN TEXT	SIGN DIMENSIONS (INCHES)	REFLECTIVE SHEETING	PLYWOOD TYPE A	ALUMINUM TYPE A	TYPE OF MOUNT	QUANTITY
1	R2-1	SPEED LIMIT	24X30	C		X	A	1

WARNING

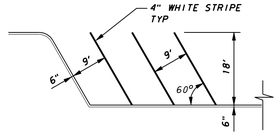
CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.



DETAIL E
TYPICAL CENTERLINE MARKINGS
NOT TO SCALE



DETAIL F
TYPICAL 60° PARKING
NOT TO SCALE

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

PAVEMENT MARKING AND SIGNAGE-PA
STA 22+07.59 TO STA 26+41.00

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C610

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

MATCHLINE SHT C702

PONTE AVENUE (UNDER SEPARATE CONTRACT)

VP102
(UNDER CONSTRUCTION)

VITRUVIAN WAY
UNDER SEPARATE CONTRACT

VITRUVIAN PARK

FARMERS BRANCH CREEK

MAINTAIN EXIST SILT FENCE

REMOVE EXIST EROSION CONTROL BLANKET

REMOVE EXIST SILT FENCE

MAINTAIN EXIST CONSTRUCTION ENTRANCE

REMOVE EXIST INLET PROTECTION

REMOVE EXIST CONSTRUCTION ENTRANCE

PROPERTY CORNER
N 8504.63
E 12378.17

MATCHLINE SHT C703

NORTH

0 20 40 60 80
GRAPHIC SCALE IN FEET
SCALE: 1"=40'

EROSION CONTROL NOTES

1. GENERAL CONSTRUCTION NOTES: REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.

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LEGEND

SILT FENCE — SF

EXISTING SILT FENCE — SF

INLET PROTECTION — IP

STABILIZED CONSTRUCTION ENTRANCE — CE

EROSION CONTROL BLANKET CURLEX II OR APPROVED EQ. NATURAL COLOR

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

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SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER
06/18/12

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

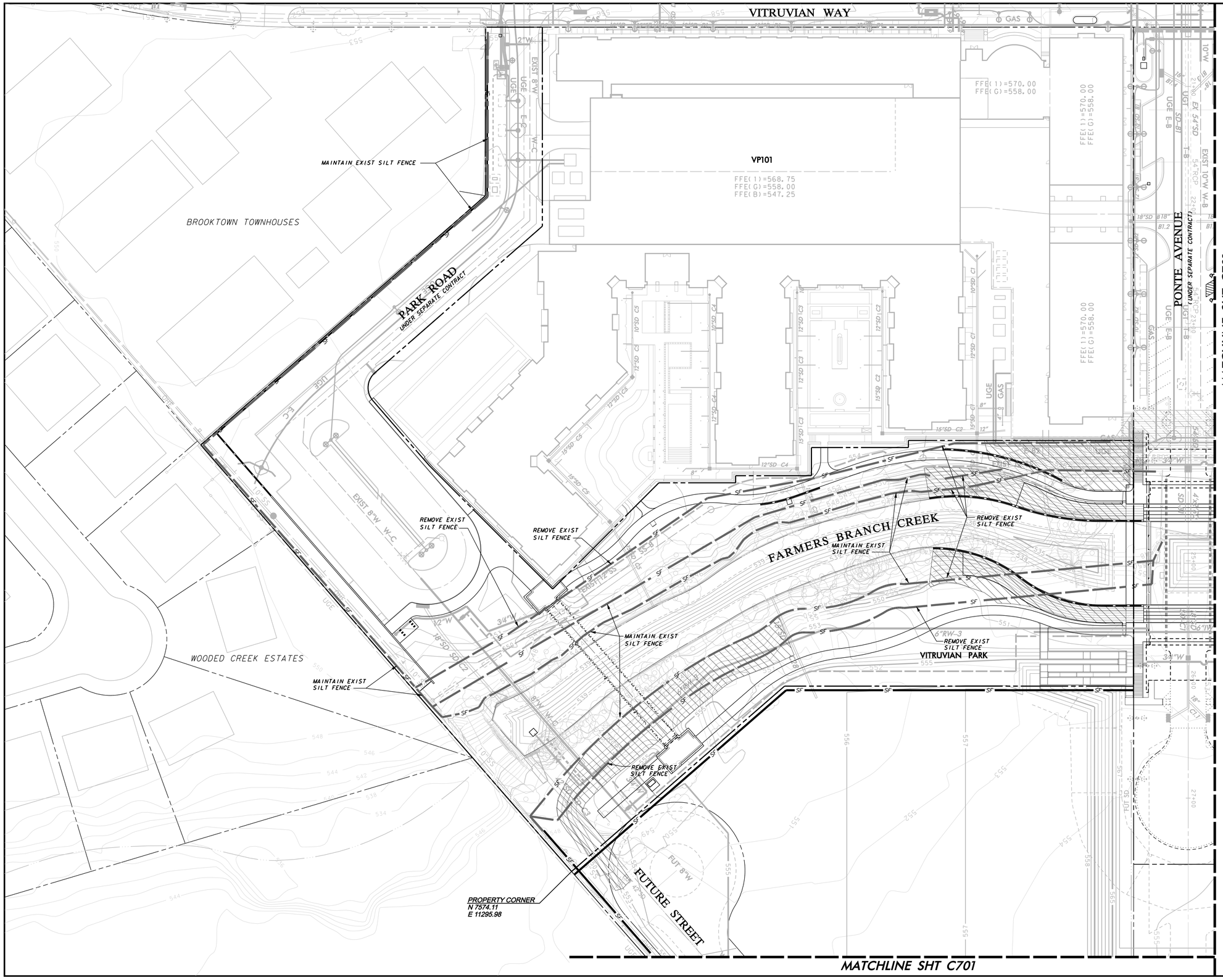
EROSION & SEDIMENT CONTROL PLAN NORTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C701

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12



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LEGEND

- SILT FENCE — SF
- EXISTING SILT FENCE — SF
- INLET PROTECTION (IP)
- STABILIZED CONSTRUCTION ENTRANCE (CE)
- EROSION CONTROL BLANKET CURLEX II OR APPROVED EQ. NATURAL COLOR

NORTH

0 20 40 60 80
GRAPHIC SCALE IN FEET
SCALE: 1"=40'

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

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STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

EROSION & SEDIMENT CONTROL PLAN SOUTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C702

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

MATCHLINE SHT C702

MATCHLINE SHT C701

FUTURE STREET

PROPERTY CORNER
N 7572.77
E 11776.02

PROPERTY CORNER
N 7571.07
E 12380.18

EROSION CONTROL NOTES

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LEGEND

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- EXISTING SILT FENCE — SF
- INLET PROTECTION — IP
- STABILIZED CONSTRUCTION ENTRANCE — CE
- EROSION CONTROL BLANKET CURLEX II OR APPROVED EQ, NATURAL COLOR

NORTH

0 20 40 60 80
GRAPHIC SCALE IN FEET
SCALE: 1"=40'

WARNING

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BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED
PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

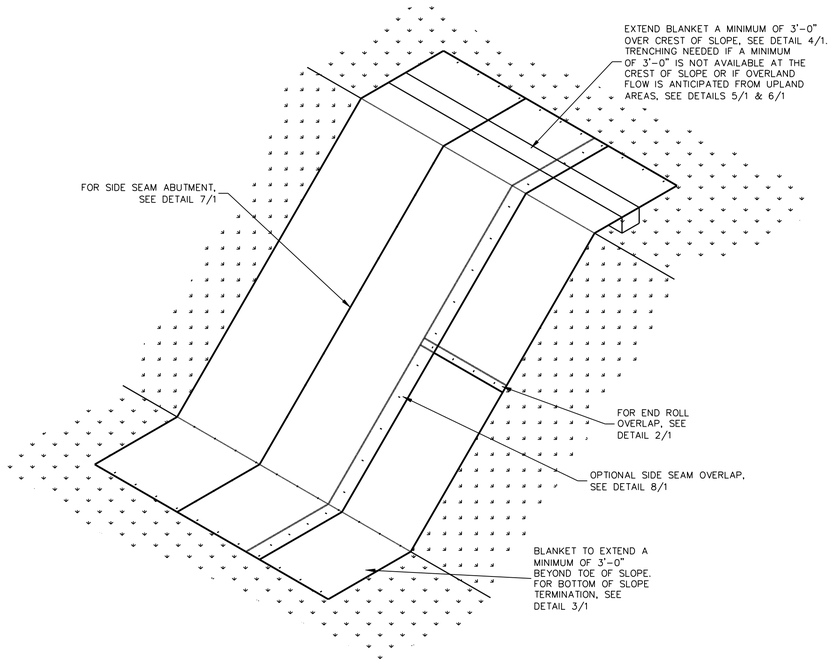
EROSION & SEDIMENT CONTROL PLAN EAST

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

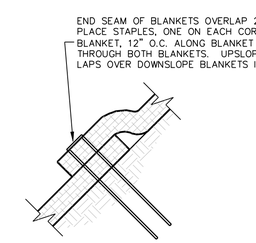
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C703

RECORD DRAWINGS 06/18/12

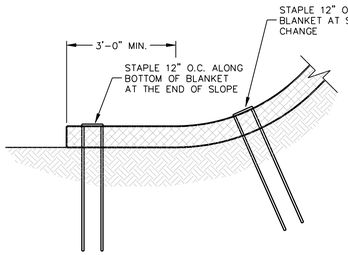
PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



SLOPE DETAIL 1/1
NO SCALE

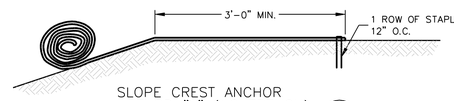


END ROLL OVERLAP 2/1
NO SCALE



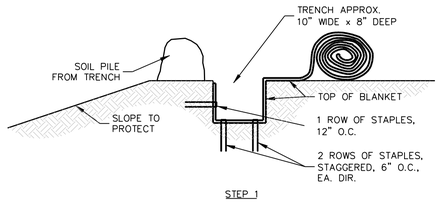
BOTTOM OF SLOPE TERMINATION 3/1
NO SCALE

EROSION CONTROL BLANKET
NOT TO SCALE

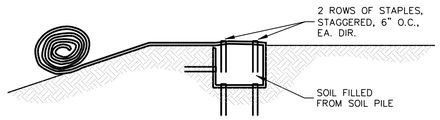


SLOPE CREST ANCHOR METHOD "A" (NO TRENCH) 4/1
NO SCALE

DO NOT NEED TO TRENCH BLANKET IN IF IT CAN BE EXTENDED A MINIMUM OF 3'-0" OVER THE CREST OF THE SLOPE.

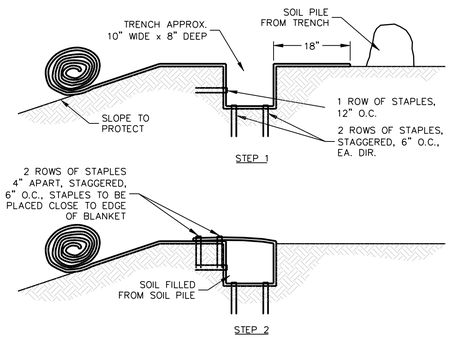


STEP 1

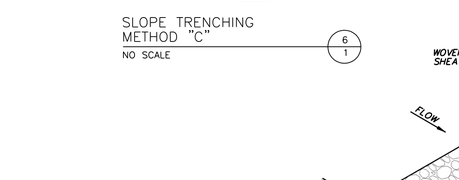


STEP 2

SLOPE TRENCHING METHOD "B" 5/1
NO SCALE

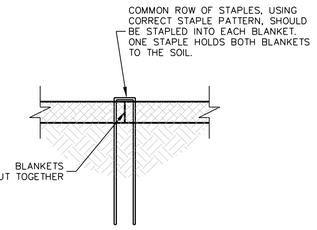


STEP 1

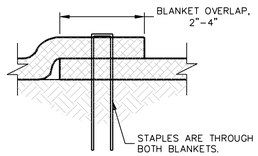


STEP 2

SLOPE TRENCHING METHOD "C" 6/1
NO SCALE



SIDE SEAM ABUT STAPLE DETAIL 7/1
NO SCALE



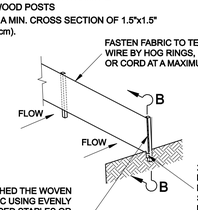
SIDE SEAM OVERLAP STAPLE DETAIL 8/1
NO SCALE

NOTES:
1. STAPLE PATTERNS ARE DEPENDENT ON SITE CONDITIONS. SEE CURLEX® STAPLE PATTERN GUIDE FOR DETAILS.
2. E-STAPLE® MAY BE USED IN PLACE OF WIRE STAPLES.
3. CURLEX® IN NEUTRAL COLOR.

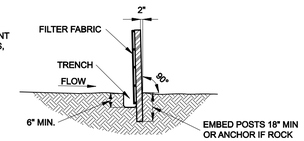
NOTES: SILT FENCE

1. Posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source. The post must be embedded a minimum of 18 inches.
2. 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 flow. Where fence cannot be trenched in (e.g. pavement), weight fabric flap with washed grave on the uphill side to
3. The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
4. Silt fence shall be securely fastened to each support post or to woven wire, which is in turn attached to the support post. There shall be a 6 inch double overlap, securely fastened where ends of fabric meet.
5. Inspection shall be made daily or after each rainfall. Repair or replacement shall be made promptly as needed.
6. Silt fence shall be removed when the site is completely stabilized so as not to block or impede storm flow or drainage.
7. Accumulated silt shall be removed when it reached a depth of 3 inches. The silt shall be disposed of at an approved site and in such a manner as to prevent flow under fence not contribute to adtitional siltation.

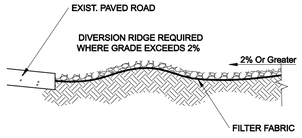
4' MIN. STEEL OR WOOD POSTS SPACED AT 5' TO 8' SOFTWOOD POSTS SHALL BE 3" MIN. IN. DIA. OR NOMINAL 2"x4" HARDWOOD POSTS SHALL HAVE A MIN. CROSS SECTION OF 1.5"x1.5" (3.8 cm x 3.8 cm).



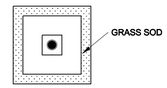
SILT FENCE



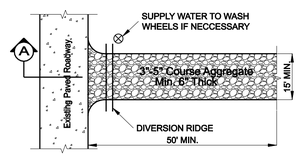
SECTION A



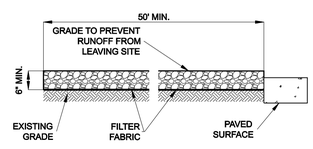
SECTION B



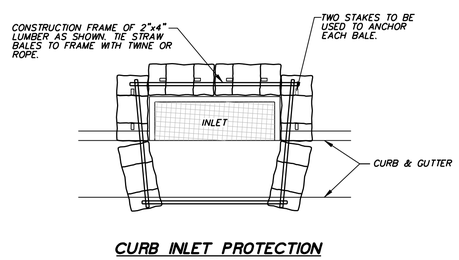
DROP INLET PROTECTION (TYP)



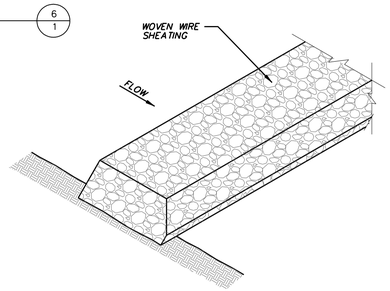
PLAN



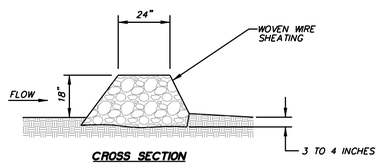
TEMPORARY STONE CONSTRUCTION ENTRANCE / EXIT



CURB INLET PROTECTION
NOT TO SCALE



ISOMETRIC PLAN VIEW



CROSS SECTION

NOTES:
1. USE OPEN GRADED ROCK 4-8 INCHES IN DIAMETER FOR STREAM FLOW CONDITION. USE OPEN GRADED ROCK 3-5 INCHES IN DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK DAM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING A MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE SIZE OF 20 GAUGE AND SHALL BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP.
3. THE ROCK DAM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN EVENT AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE DAM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
5. WHEN THE SITE IS COMPLETELY STABILIZED, THE DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

ROCK CHECK DAM
NOT TO SCALE

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

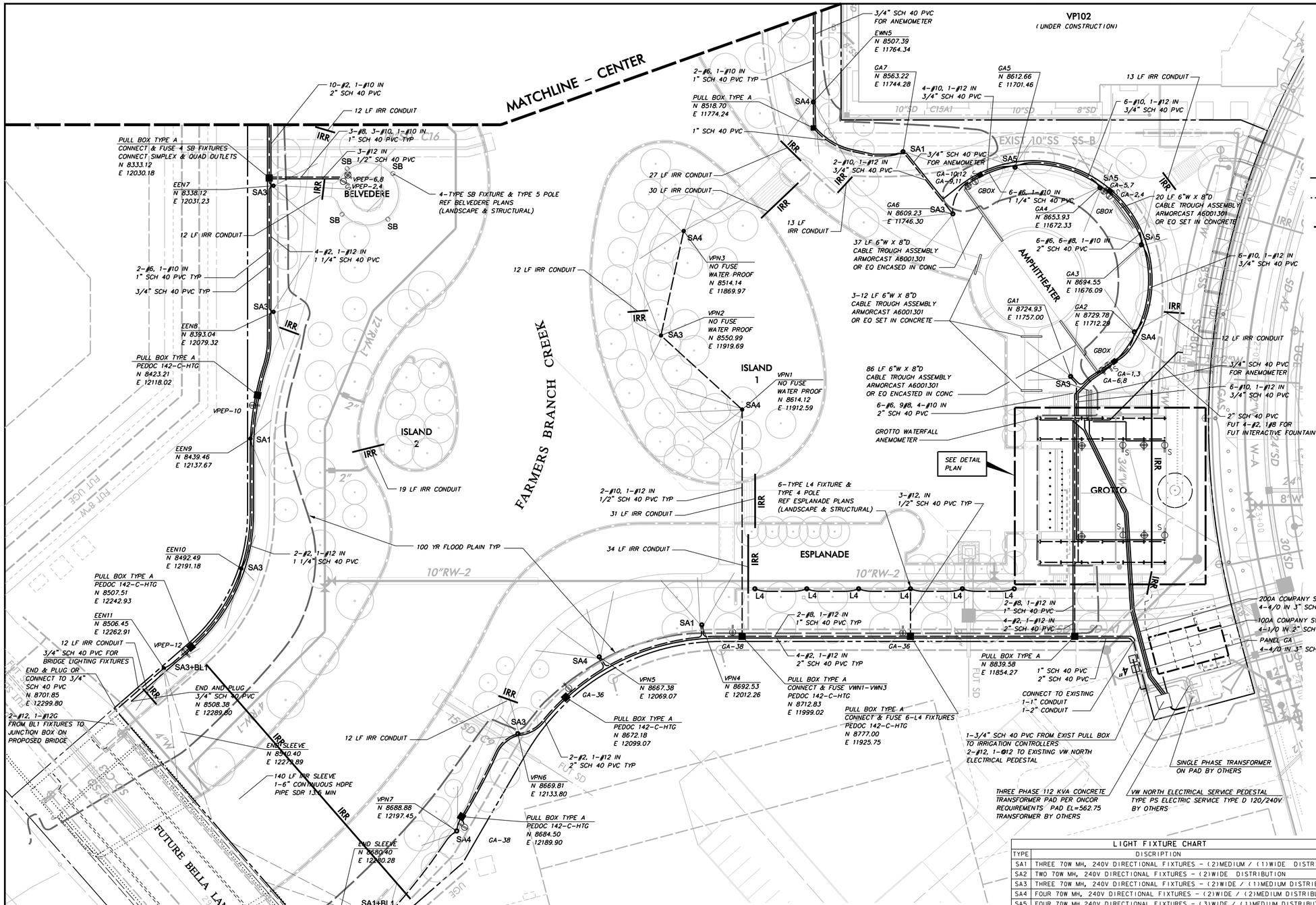
EROSION & SEDIMENT CONTROL DETAILS

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C704

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12



LEGEND

- DULPEX 20A GFCI RECEPTACLE HUBBELL GFR5362SGW OR EQ
- SIMPLEX 30A 120/240V 4 WIRE L14-30 LOCKING RECEPTACLE HUBBELL OR EQ WITH WHILE-IN-USE WATERPROOF COVER
- QUAD (2) CIRCUIT 20A GFCI RECEPTACLE (2) HUBBELL GFR5362SGW OR EQ WITH WHILE-IN-USE WATERPROOF COVER
- SAX — LIGHT POLE BASE AND FIXTURE TYPE
- XX-XX — PANEL DESIGNATION & CIRCUIT NUMBER
- POWER CONDUIT
- LIGHTING CONDUIT
- IRR — IRRIGATION SLEEVE – 1-6" & 1-2" SCH 40 PVC UNLESS OTHERWISE NOTED

LIGHTING, ELECTRICAL & CONDUIT NOTES

1. REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
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3. REFER TO SHEET C807 - ED (1)-03 FOR ELECTRIC DETAILS - CONDUIT. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED.
4. REFER TO SHEET C808 - ED (2)-03 FOR ELECTRIC DETAILS - CONDUCTORS.
5. REFER TO SHEET C809 - ED (3 -03 FOR ELECTRIC DETAILS - GROUND BOXES. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED. CONCRETE APRON IS NOT REQUIRED.
6. REFER TO SHEET C810 - ED (8)-03 FOR ELECTRIC DETAILS - ELECTRICAL SERVICE SUPPORT PEDESTAL SERVICE TYPE PS. PEDESTAL SERVICE SHALL BE ALUMINUM, COLOR GRAY. RIGID METAL ELBOWS ARE NOT REQUIRED.
7. WATER, SANITARY SEWER, AND STORM DRAIN LINES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL LOCATE ALL UTILITY LINES IN THE AREA PRIOR TO DIGGING.
8. ALL CONDUITS AT LIGHT POLE BASES TO BE WITHIN THE DRILLED SHAFT FOUNDATION. NO EXPOSED CONDUIT AT POLE BASES WILL BE ALLOWED.
9. ALL CONDUITS, JBOXES, DEVICE BOXES, ETC. TO BE CONCEALED WITHIN THE STRUCTURES. NO EXPOSED CONDUITS WILL BE ALLOWED UNLESS IN CONCEALED OR OTHER APPROVED AREAS.
10. CONNECTION TO POWER COMPANY CIRCUITS TO BE MADE ONLY BY POWER COMPANY.
11. UNLESS OTHERWISE INDICATED ALL WORK SHALL CONFORM TO THE 2008 NATIONAL ELECTRICAL CODE (NFPA 70) AND THE 2007 NATIONAL ELECTRICAL SAFETY CODE (ANSI C2).
12. ALL EMPTY CONDUIT INSTALLED FOR FUTURE EXTENSION SHALL BE TURNED UP AND EXTENDED UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS.
13. IRRIGATION SLEEVES "IRR" SHALL CONSIST OF 1-6" SCH 40 PVC AND 1-2" SCH 40 PVC INSTALLED WITH MINIMUM 24" COVER AND EXTENDING 2' BEYOND THE BACKS OF CURB OR EDGE OF PAVEMENT AND UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS.

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SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

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SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS — BRUCE F. DUNNE — 62654 — LICENSED PROFESSIONAL ENGINEER

PARK LIGHTING

NO.	TYPE			NO.	TYPE		
	FIXTURE	POLE	BASE		FIXTURE	POLE	BASE
EEN7	SA3	2	1	GA5	SA5	3	1
EEN8	SA3	2	1	GA6	SA3	2	1
EEN9	SA1	2	1	GA7	SA1	2	1
EEN10	SA3	2	1				
EEN11	SA3+BL1	6	1	VWN1	SA4	3	2
				VWN2	SA3	2	2
EWN5	SA4	3	1	VWN3	SA4	3	2
				VWN4	SA1	2	1
GA1	SA3	2	1	VWN5	SA4	3	1
GA2	SA4	3	1	VWN6	SA3	2	1
GA3	SA5	3	1	VWN7	SA4	3	1
GA4	SA5	3	1	VWN8	SA1+BL1	6	1

LIGHT POLE CHART

TYPE	DESCRIPTION
1	24'-7" CONCRETE TAPERED ROUND – DOUBLE SIDE MOUNT
2	24'-7" CONCRETE TAPERED ROUND – TRIPLE SIDE MOUNT
3	24'-7" CONCRETE TAPERED ROUND – QUAD SIDE MOUNT
4	9'-8" ALUMINUM TAPERED ROUND – HINGED BASE
5	7'-8" ALUMINUM TAPERED ROUND – HINGED BASE
6	24'-7" CONCRETE TAPERED ROUND – FIVE SIDE MOUNT
7	24'-7" CONCRETE TAPERED ROUND – SEVEN SIDE MOUNT

LIGHT FIXTURE CHART

TYPE	DISCRIPTION
SA1	THREE 70W MH, 240V DIRECTIONAL FIXTURES – (2)MEDIUM / (1)WIDE DISTRIBUTION
SA2	TWO 70W MH, 240V DIRECTIONAL FIXTURES – (2)WIDE DISTRIBUTION
SA3	THREE 70W MH, 240V DIRECTIONAL FIXTURES – (2)WIDE / (1)MEDIUM DISTRIBUTION
SA4	FOUR 70W MH, 240V DIRECTIONAL FIXTURES – (2)WIDE / (2)MEDIUM DISTRIBUTION
SA5	FOUR 70W MH, 240V DIRECTIONAL FIXTURES – (3)WIDE / (1)MEDIUM DISTRIBUTION
SA6	THREE 70W MH, 240V DIRECTIONAL FIXTURES – (3)WIDE DISTRIBUTION
SA7	TWO 70W MH, 240V DIRECTIONAL FIXTURES –(2)MEDIUM DISTRIBUTION
SA8	TWO 70W MH, 240V DIRECTIONAL FIXTURES – (1)WIDE / (1)MEDIUM DISTRIBUTION
SB	SINGLE 70W MH, 240V FIXTURE ON PEDESTRIAN POLE – BELVEDERE
SE-1	SUSPENDED STRAND LIGHTING 0.9W, 24V ON 12" CENTERS WITH 3 – OTRAN XFERS
SE-T	SUSPENDED STRAND LIGHTING TRANSFORMER – 150W, 240V / 24V
SK1	TRELLIS COLUMN DOWNLIGHTS – 20W, MR16/40
SK2	TRELLIS COLUMN DOWNLIGHTS – 50W, MR16/40
L4	SINGLE 70W MH, 240V FIXTURE W/INTEGRAL BALLAST ON PEDESTRIAN POLE-ESPLANADE
L5	SINGLE VAPORTITE CFL FIXTURE, 120V, SURFACE MOUNT
BL1	TWO 150W MH, 240V DIRECTIONAL FIXTURES – HORIZONTAL MEDIUM DISTRIBUTION
BL2	THREE 150W MH, 240V DIRECTIONAL FIXTURES – HORIZONTAL MEDIUM DISTRIBUTION
BL3	THREE 150W MH, 240V DIRECTIONAL FIXTURES – HORIZ (2) M/(1) W DISTRIBUTION

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

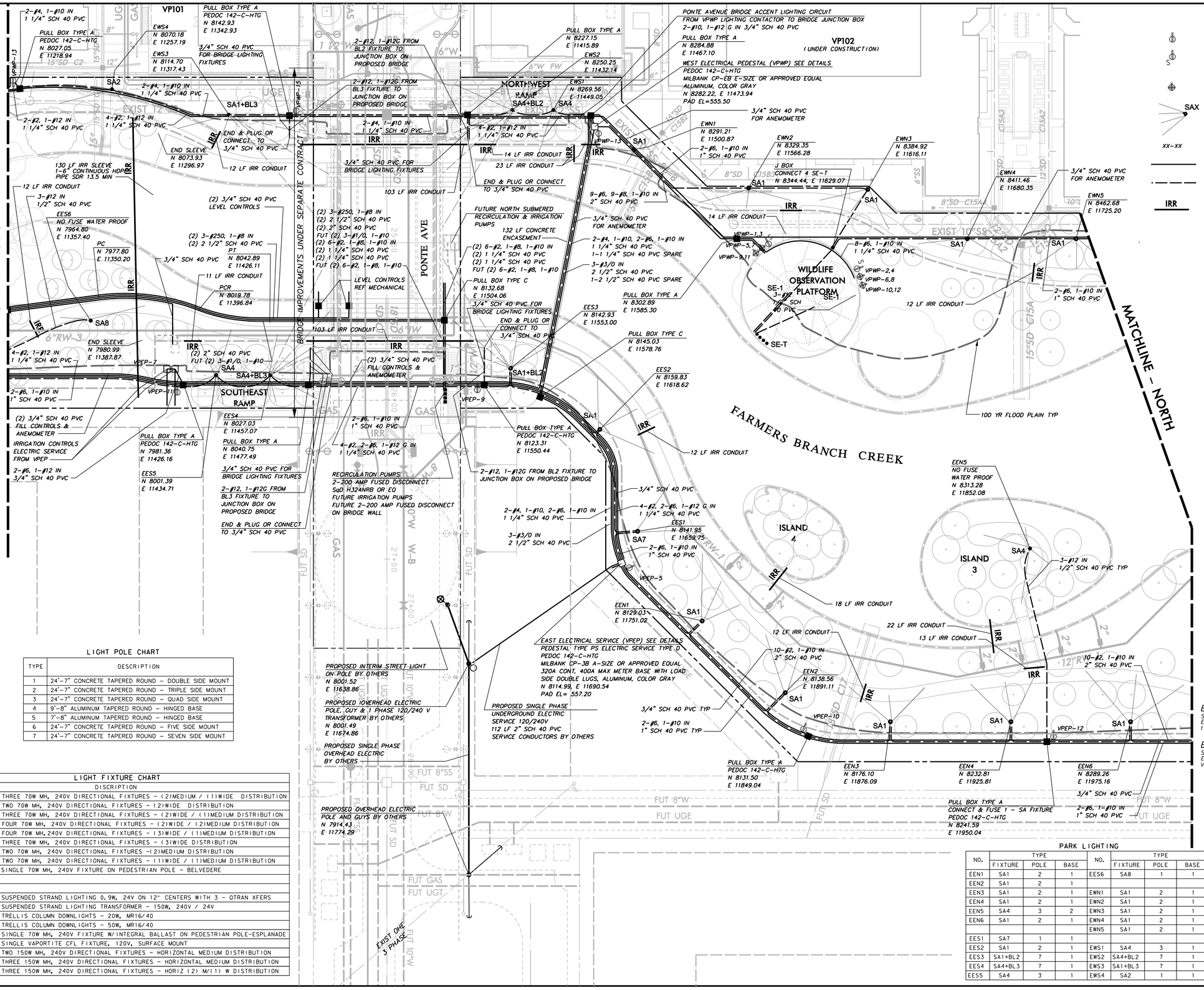
PARK LIGHTING & ELECTRICAL PLAN NORTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C801

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK



LIGHT POLE CHART

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SA3	THREE 70W MH, 240V DIRECTIONAL FIXTURES – (2)WIDE / (1)MEDIUM DISTRIBUTION
SA4	FOUR 70W MH, 240V DIRECTIONAL FIXTURES – (2)WIDE / (2)MEDIUM DISTRIBUTION
SA5	FOUR 70W MH,240V DIRECTIONAL FIXTURES – (3)WIDE / (1)MEDIUM DISTRIBUTION
SA6	THREE 70W MH, 240V DIRECTIONAL FIXTURES – (3)WIDE DISTRIBUTION
SA7	TWO 70W MH, 240V DIRECTIONAL FIXTURES –(2)MEDIUM DISTRIBUTION
SA8	TWO 70W MH, 240V DIRECTIONAL FIXTURES – (1)WIDE / (1)MEDIUM DISTRIBUTION
SB	SINGLE 70W MH, 240V FIXTURE ON PEDESTRIAN POLE – BELVEDERE
SE–1	SUSPENDED STRAND LIGHTING 0.9W, 24V ON 12" CENTERS WITH 3 – QTRAN XFERS
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SK2	TRELLIS COLUMN DOWNLIGHTS – 50W, MR16/40
L4	SINGLE 70W MH, 240V FIXTURE W/INTEGRAL BALLAST ON PEDESTRIAN POLE–ESPLANADE
L5	SINGLE VAPORTITE CFL FIXTURE, 120V, SURFACE MOUNT
BL1	TWO 150W MH, 240V DIRECTIONAL FIXTURES – HORIZONTAL MEDIUM DISTRIBUTION
BL2	THREE 150W MH, 240V DIRECTIONAL FIXTURES – HORIZONTAL MEDIUM DISTRIBUTION
BL3	THREE 150W MH, 240V DIRECTIONAL FIXTURES – HORIZ (2) W/(1) W DISTRIBUTION

LIGHTING, ELECTRICAL & CONDUIT NOTES

1. *REFER TO SHEET C100 " GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.*
2. *REFER TO SHEET C804 FOR GENERAL ELECTRICAL NOTES FOR THE PROJECT.*
3. *REFER TO SHEET C807 – ED (1)-03 FOR ELECTRIC DETAILS - CONDUIT. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED.*
4. *REFER TO SHEET C808 - ED (2)-03 FOR ELECTRIC DETAILS - CONDUCTORS.*
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9. *ALL CONDUITS, JBOXES, DEVICE BOXES, ETC. TO BE CONCEALED WITHIN THE STRUCTURES. NO EXPOSED CONDUITS WILL BE ALLOWED UNLESS IN CONCEALED OR OTHER APPROVED AREAS.*
10. *CONNECTION TO POWER COMPANY CIRCUITS TO BE MADE ONLY BY POWER COMPANY.*
11. *UNLESS OTHERWISE INDICATED ALL WORK SHALL CONFORM TO THE 2008 NATIONAL ELECTRICAL CODE (NFPA 70) AND THE 2007 NATIONAL ELECTRICAL SAFETY CODE (ANSI C2).*
12. *ALL EMPTY CONDUIT INSTALLED FOR FUTURE EXTENSION SHALL BE TURNED UP AND EXTENDED UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS.*
13. *IRRIGATION SLEEVES "IRR" SHALL CONSIST OF 1-6" SCH 40 PVC AND 1-2" SCH 40 PVC INSTALLED WITH MINIMUM 24" COVER AND EXTENDING 2' BEYOND THE BACKS OF CURB OR EDGE OF PAVEMENT AND UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS.*

WARNING

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BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

PARK LIGHTING

NO.	TYPE			NO.	TYPE		
	FIXTURE	POLE	BASE		FIXTURE	POLE	BASE
EEN1	SA1	2	1	EES6	SA8	1	1
EEN2	SA1	2	1				
EEN3	SA1	2	1	EWN1	SA1	2	1
EEN4	SA1	2	1	EWN2	SA1	2	1
EEN5	SA4	3	2	EWN3	SA1	2	1
EEN6	SA1	2	1	EWN4	SA1	2	1
				EWN5	SA1	2	1
EES1	SA7	1	1				
EES2	SA1	2	1	EWS1	SA4	3	1
EES3	SA1+BL2	7	1	EWS2	SA4+BL2	7	1
EES4	SA4+BL3	7	1	EWS3	SA1+BL3	7	1
EES5	SA4	3	1	EWS4	SA2	1	1

NO.	REVISION	BY	DATE

Addison TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

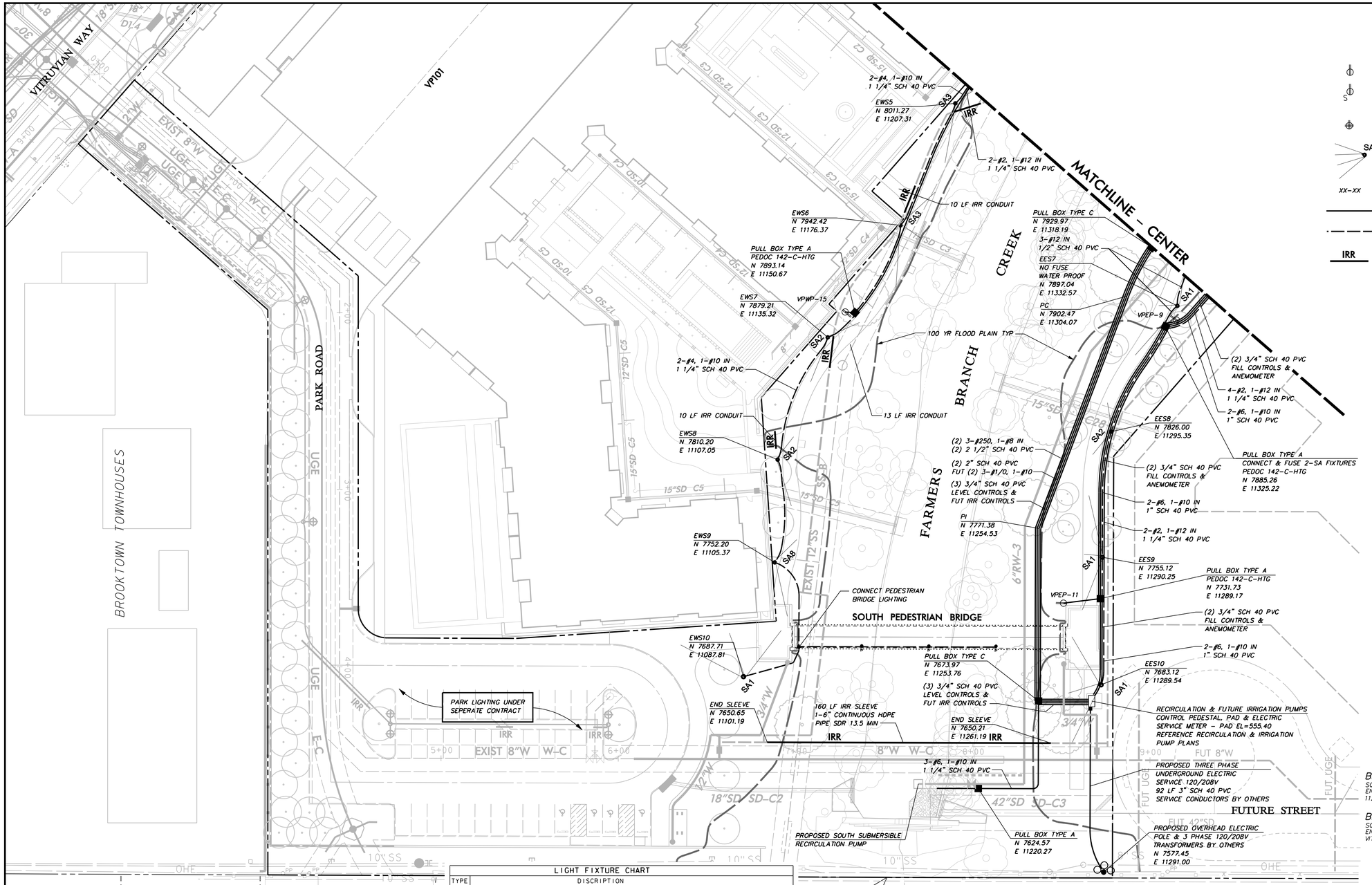
PARK LIGHTING & ELECTRICAL PLAN CENTER

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029–01	ICE	ICE	APR 26, 2010	PW# 2009–04	C802

RECORD DRAWINGS 06/18/12

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK



LEGEND

- DULPEX 20A GFCI RECEPTACLE HUBBELL GFR5362SGW OR EQ
- SIMPLEX 30A 120/240V 4 WIRE L14-30 LOCKING RECEPTACLE HUBBELL OR EQ WITH WHILE-IN-USE WATERPROOF COVER
- QUAD (2) CIRCUIT 20A GFCI RECEPTACLE (2) HUBBELL GFR5362SGW OR EQ WITH WHILE-IN-USE WATERPROOF COVER
- SAX — LIGHT POLE BASE AND FIXTURE TYPE
- XX-XX — PANEL DESIGNATION & CIRCUIT NUMBER
- POWER CONDUIT
- LIGHTING CONDUIT
- IRR — IRRIGATION SLEEVE – 1-6" & 1-2" SCH 40 PVC UNLESS OTHERWISE NOTED

NORTH

0 15 30 45 60
GRAPHIC SCALE IN FEET
SCALE: 1"=30'

LIGHTING, ELECTRICAL & CONDUIT NOTES

1. REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
2. REFER TO SHEET C804 FOR GENERAL ELECTRICAL NOTES FOR THE PROJECT.
3. REFER TO SHEET C807 - ED (1)-03 FOR ELECTRIC DETAILS - CONDUIT. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED.
4. REFER TO SHEET C808 - ED (2)-03 FOR ELECTRIC DETAILS - CONDUCTORS.
5. REFER TO SHEET C809 - ED (3 -03 FOR ELECTRIC DETAILS - GROUND BOXES. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED. CONCRETE APRON IS NOT REQUIRED.
6. REFER TO SHEET C810 - ED (8)-03 FOR ELECTRIC DETAILS - ELECTRICAL SERVICE SUPPORT PEDESTAL SERVICE TYPE PS. PEDESTAL SERVICE SHALL BE ALUMINUM, COLOR GRAY. RIGID METAL ELBOWS ARE NOT REQUIRED.
7. WATER, SANITARY SEWER, AND STORM DRAIN LINES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL LOCATE ALL UTILITY LINES IN THE AREA PRIOR TO DIGGING.
8. ALL CONDUITS AT LIGHT POLE BASES TO BE WITHIN THE DRILLED SHAFT FOUNDATION. NO EXPOSED CONDUIT AT POLE BASES WILL BE ALLOWED.
9. ALL CONDUITS, JBOXES, DEVICE BOXES, ETC. TO BE CONCEALED WITHIN THE STRUCTURES. NO EXPOSED CONDUITS WILL BE ALLOWED UNLESS IN CONCEALED OR OTHER APPROVED AREAS.
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STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

LIGHT FIXTURE CHART

TYPE	DISCRIPTION
SA1	THREE 70W MH, 240V DIRECTIONAL FIXTURES - (2)MEDIUM / (1)WIDE DISTRIBUTION
SA2	TWO 70W MH, 240V DIRECTIONAL FIXTURES - (2)WIDE DISTRIBUTION
SA3	THREE 70W MH, 240V DIRECTIONAL FIXTURES - (2)WIDE / (1)MEDIUM DISTRIBUTION
SA4	FOUR 70W MH, 240V DIRECTIONAL FIXTURES - (2)WIDE / (2)MEDIUM DISTRIBUTION
SA5	FOUR 70W MH,240V DIRECTIONAL FIXTURES - (3)WIDE / (1)MEDIUM DISTRIBUTION
SA6	THREE 70W MH, 240V DIRECTIONAL FIXTURES - (3)WIDE DISTRIBUTION
SA7	TWO 70W MH, 240V DIRECTIONAL FIXTURES -(2)MEDIUM DISTRIBUTION
SA8	TWO 70W MH, 240V DIRECTIONAL FIXTURES - (1)WIDE / (1)MEDIUM DISTRIBUTION
SB	SINGLE 70W MH, 240V FIXTURE ON PEDESTRIAN POLE - BELVEDERE
SE-1	SUSPENDED STRAND LIGHTING 0.9W, 24V ON 12" CENTERS WITH 3 - OTRAN XFERS
SE-T	SUSPENDED STRAND LIGHTING TRANSFORMER - 150W, 240V / 24V
SK1	TRELLIS COLUMN DOWNLIGHTS - 20W, MR16/40
SK2	TRELLIS COLUMN DOWNLIGHTS - 50W, MR16/40
L4	SINGLE 70W MH, 240V FIXTURE W/INTEGRAL BALLAST ON PEDESTRIAN POLE-ESPLANADE
L5	SINGLE VAPORTITE CFL FIXTURE, 120V, SURFACE MOUNT
BL1	TWO 150W MH, 240V DIRECTIONAL FIXTURES - HORIZONTAL MEDIUM DISTRIBUTION
BL2	THREE 150W MH, 240V DIRECTIONAL FIXTURES - HORIZONTAL MEDIUM DISTRIBUTION
BL3	THREE 150W MH, 240V DIRECTIONAL FIXTURES - HORIZ (2) M/(1) W DISTRIBUTION

PARK LIGHTING

NO.	TYPE			NO.	TYPE		
	FIXTURE	POLE	BASE		FIXTURE	POLE	BASE
EES7	SA1	2	1	EWS10	SA1	2	1
EES8	SA2	1	1				
EES9	SA1	2	1				
EES10	SA1	2	1				
EWS5	SA3	2	1				
EWS6	SA3	2	1				
EWS7	SA2	1	1				
EWS8	SA2	1	1				
EWS9	SA8	1	1				

LIGHT POLE CHART

TYPE	DESCRIPTION
1	24'-7" CONCRETE TAPERED ROUND - DOUBLE SIDE MOUNT
2	24'-7" CONCRETE TAPERED ROUND - TRIPLE SIDE MOUNT
3	24'-7" CONCRETE TAPERED ROUND - QUAD SIDE MOUNT
4	9'-8" ALUMINUM TAPERED ROUND - HINGED BASE
5	7'-8" ALUMINUM TAPERED ROUND - HINGED BASE
6	24'-7" CONCRETE TAPERED ROUND - FIVE SIDE MOUNT
7	24'-7" CONCRETE TAPERED ROUND - SEVEN SIDE MOUNT

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

PARK LIGHTING & ELECTRICAL PLAN SOUTH

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C803

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

Panel Schedule	Single Phase		
Project:	Vitruvian Park	Date:	9/25/2009
Panel Name:	VPEP - East Pedestal	Volts<L-L>: 240	Main Bkr: 200 Amps
Mfg:		Volts<L-G>: 120	Main Lugs: Amps
Model:		Phase: 1	Panel AIC: 22,000 Amps
Description:		Wires: 3	Neutral Bar: Y Y / N
Location:	I	"I" = Indoor, "O" = Outdoor	Ground Bar: Y Y / N
Breaker Mounting:	S	"S" = Standard, "B" = Bolt-In	

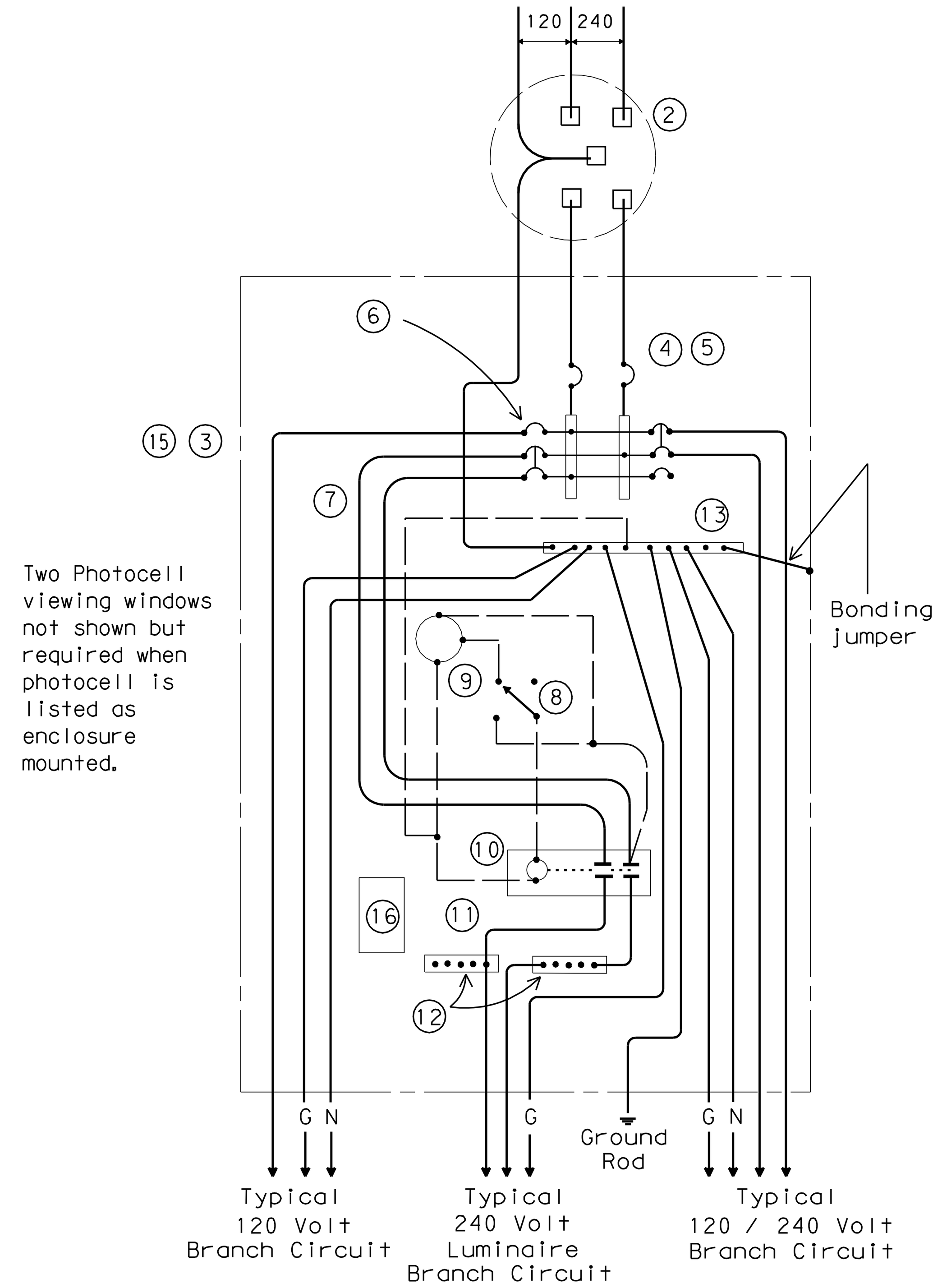
Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves		Load VA L1		Load VA L2		Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves
1		65	2	Lighting Contactor	<	4464								
						2880	> > ---------- > >			2		30	2	Belvedere Simplex Outlet
3		65		Lighting Contactor	< < -------- < <			4464						
								2880	>	4		30		Belvedere Simplex Outlet
5		20	1	Pedestal Duplex Outlet	<	1920								
						1920	> > ---------- > >			6		20	2	Belvedere Quad Outlet 1
7		20	1	Irrigation Controls	< < -------- < <			1920						
								1920	>	8		20		Belvedere Quad Outlet 1
9		20	1	Two Duplex Outlets - S	<	1920								
						1920	> > ---------- > >			10		20	1	Two Duplex Outlets - N
11		20	1	Two Duplex Outlets - S	< < -------- < <			1920						
								1920	>	12		20	1	Two Duplex Outlets - N
13				Space	<									
							> > ---------- > >			14		20	1	Spare
15				Space	< < -------- < <									
									>	16				Space
17				Space	<									
							> > ---------- > >			18				Space
				Connected VA per Leg =		15024		15024						
				Total Amps per Leg =		125		125						

VPEP - LIGHTING DISTRIBUTION TERMINAL BLOCKS 2 POLE, MAIN = 1, BRANCH = 6 SqD LBA 263106 OR EQ
VITRUVIAN PARK WEST NORTH, VITRUVIAN PARK WEST SOUTH, VITRUVIAN PARK EAST NORTH, VITRUVIAN PARK EAST SOUTH, SPACE & SPACE

Panel Schedule	Single Phase		
Project:	Vitruvian Park	Date:	8/16/2010
Panel Name:	VPWP - West Pedestal	Volts<L-L>: 240	Main Bkr: 200 Amps
Mfg:		Volts<L-G>: 120	Main Lugs: Amps
Model:		Phase: 1	Panel AIC: 22,000 Amps
Description:		Wires: 3	Neutral Bar: Y Y / N
Location:	I	"I" = Indoor, "O" = Outdoor	Ground Bar: Y Y / N
Breaker Mounting:	S	"S" = Standard, "B" = Bolt-In	

Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves		Load VA L1		Load VA L2		Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves
1		30	2	WO Simplex Outlet 2 - S	<	2880								
						2880	> > ---------- > >			2		30	2	WO Simplex Outlet 1 - N
3		30		WO Simplex Outlet 2 - S	< < -------- < <			2880						
								2880	>	4		30		WO Simplex Outlet 1 - N
5		20	2	WO Quad Outlet 3 - S	<	1920								
						1920	> > ---------- > >			6		20	2	WO Quad Outlet 1 - N
7		20		WO Quad Outlet 3 - S	< < -------- < <			1920						
								1920	>	8		20		WO Quad Outlet 1 - N
9		20	2	WO Quad Outlet 4 - S	<	1920								
						1920	> > ---------- > >			10		20	2	WO Quad Outlet 2 - N
11		20		WO Quad Outlet 4 - S	< < -------- < <			1920						
								1920	>	12		20		WO Quad Outlet 2 - N
13		20	1	Two Duplex Outlets - S	<	1920								
						1920	> > ---------- > >			14		20	1	Spare
15		20	1	Two Duplex Outlets - S	< < -------- < <			1920						
									>	16		20	1	Spare
17		20	2	Lighting Contactor (BAL)	<	1920								
							> > ---------- > >			18				Space
19		20		Lighting Contactor (BAL)	< < -------- < <			1920						
									>	20				Space
				Connected VA per Leg =		19200		17280						
				Total Amps per Leg =		160		144						

VPWP - LIGHTING CONTACTOR TO SERVE PONTE AVENUE BRIDGE ACCENT LIGHTING.
NO DISTRIBUTION BLOCKS REQUIRED.



SCHEMATIC TYPE D

120/240 VOLTS – THREE WIRE

TYPE D SERVICE NOTES

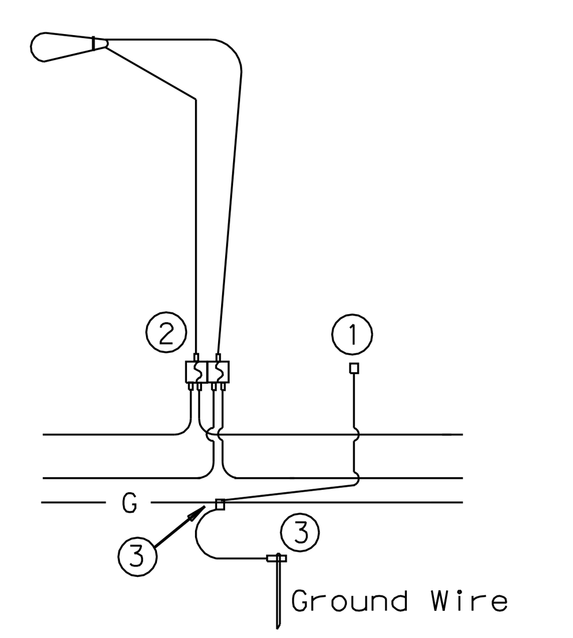
Photocell and lighting contactor shall be located in the same UL type 3R enclosure with load center. There shall be a window on each side of enclosure to allow operation of photocell. Both photocell, contactor and breaker area shall have dead front trim. Type D load center with lighting controls shall have power distribution blocks for a minimum of 12, #2 conductors.

SCHEMATIC LEGEND

1 – Omit
2 – Meter
3 – Service Assembly Enclosure
4 – Main Disconnect Breaker
5 – Lightning Arrestor – Delta LA302 or Eq
6 – Circuit Breakers
7 – Lighting Contactor Feed – 2-#2cu
8 – Control Station ("H-O-A" Switch)
9 – Photo Electric Control (enclosure-mounted)
10 – Lighting Contactor – 100 amp
11 – Power Distribution Block Feed – 2-#2cu
12 – Power Distribution Terminal Blocks – SqD LBA or Eq
13 – Neutral/Ground Bus
14 – Omit
15 – Load Center
16 – Mechanical 24 Hr Time Clock

——— Power Wiring
— — — Control Wiring
—N— Neutral Conductor (for 120 volt loads only)
—G— Equipment grounding conductor-always required

ELECTRIC SERVICE PEDESTAL SCHEMATIC



FOR THREE-WIRE CIRCUIT-CENTER GROUNDED

LUMINAIRES SERVED AT 240V FOR 120/240 VOLT SERVICE

SINGLE FIXTURE

NOTES:

1. Use threaded, copper or tin-plated copper, pole bonding connector, sized appropriately for conductors.
2. Double-Pole inline fuse and connector, sized appropriately for conductors. Bussmann TRON HEY with 2A0660 & 2A0661 insulating Boots and LIMITRON KTK-R fast acting fuses or equal –
3. Split Bolt or other connector.

ELECTRICAL CONNECTION DETAIL

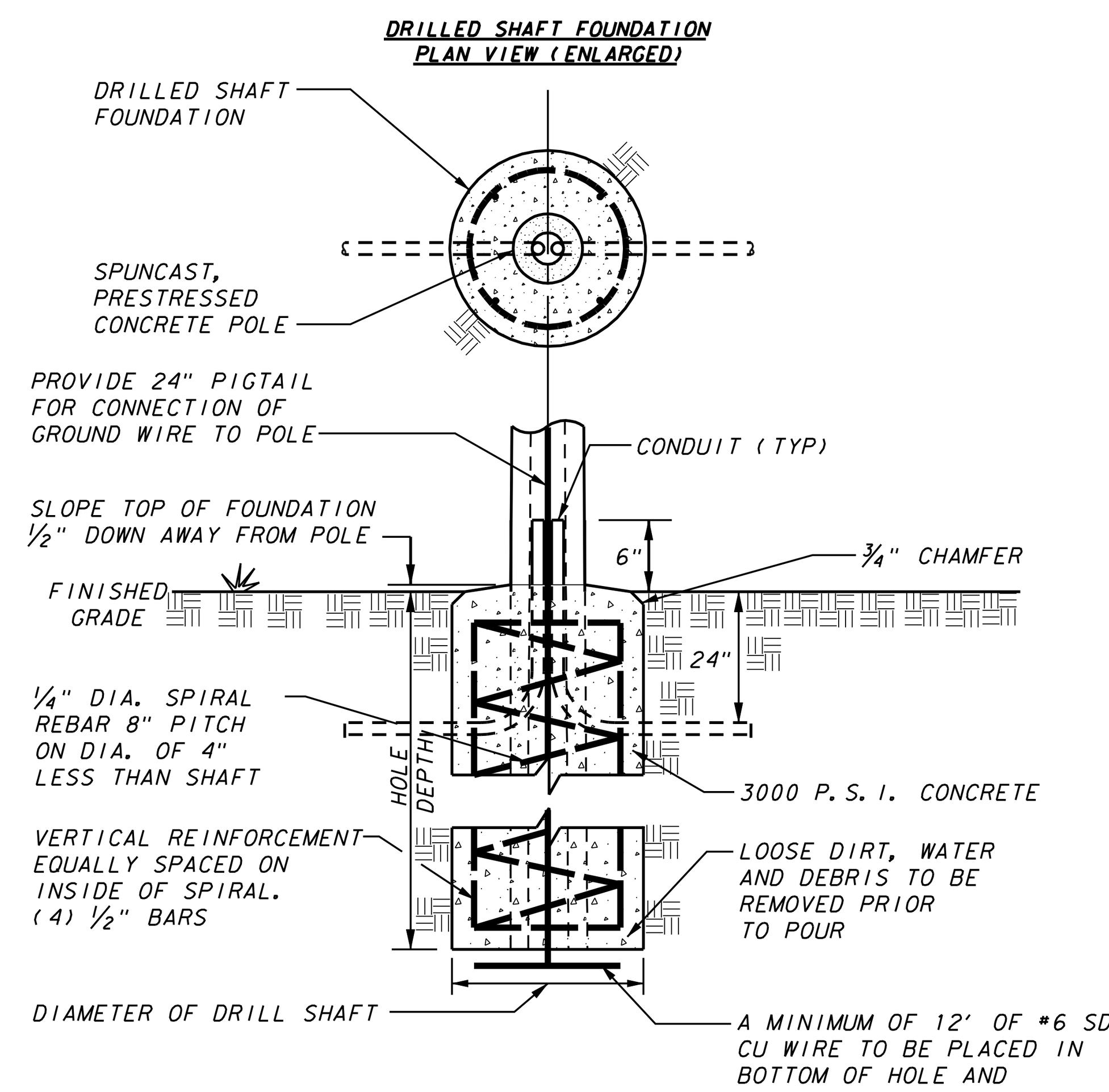
GENERAL ELECTRICAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2005 NATIONAL ELECTRICAL CODE, N.F.P.A. 70, 2006 IECC, 2006 IBC AND ALL LOCAL AND STATE CODES AND REGULATIONS. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY THE BUILDING AND SAFETY CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ANY LEGAL BODY HAVING JURISDICTION.
2. ALL MATERIAL FURNISHED AND ALL LABOR PERFROMED UNDER THESE CONTRACTS SHALL BE IN STRICT ACCORDANCE WITH THE RULES, REGULATIONS, AND CODES OF NATIONAL, STATE, MUNICIPAL OR ANY OTHER AUTHORITIES THAT MAY HAVE LAWFUL JURISDICTION PERTAINING TO THE WORK SPECIFIED. EACH CONTRACTOR WILL OBTAIN ALL NECESSARY PERMITS, LICENSES, AND CERTIFICATES OF APPROVAL AND PAY THEIR FEES TO CARRY OUT HIS WORK.
3. CONTRACTOR IS CAUTIONED OF HIS SOLE RESPONSIBILITY TO ASCERTAIN THE LOCATION OF ANY AND ALL BURIED UTILITIES, AND ONLY BY EXERCISE OF DUE CAUTION CAN DAMAGE TO SAID UTILITIES AND ASSOCIATED PROPERTIES, ALONG WITH PERSONNEL INJURY OF LOSS OR LIFE, BE AVOIDED.
4. ALL CHANGES OR VARIATIONS NECESSITATED BY UNFORESEEN CONDITIONS SHALL BE VERIFIED WITH ENGINEER BEFORE SUCH CHANGES OR VARIATIONS ARE UNDERTAKEN.
5. EACH CONTRACTOR SHALL MAKE HIMSELF & HIS TRADESMEN FAMILIAR WITH THE COMPLETE SET OF DRAWINGS AND SHALL BE PARTICULARLY AWARE OF ANY AND ALL CONFLICTS REGARDING HIS TRADE AND OTHER TRADES OCCUPYING THE SAME AREA; I.E. PIPES, DUCTS, CONDUIT, ETC. WHEN INSTALLING ITEMS OF HIS TRADE EACH CONTRACTOR SHALL CONSULT WITH OTHER TRADES OCCUPYING THE SAME AREA AND THE ENGINEER TO DETERMINE THE BEST SOLUTION TO THE CONFLICT. ALL DECISIONS BY THE ENGINEER SHALL BE FINAL AND BINDING TO ALL PARTIES CONCERNED.
6. THE LOCATION OF ALL PIPES, OUTLETS, FIXTURES, ETC, SHOWN ON PLANS IS THE DESIGN INTENT. ANY REVISION OR ADJUSTMENT SHALL BE COORDINATED AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE ENGINEER RESERVES THE RIGHT TO MAKE REASONABLE CHANGES TO THE INDICATED LOCATIONS BEFORE WORK IS ROUGHED-IN WITHOUT ADDITIONAL CHARGE TO THE OWNER.
7. FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH ACTUAL EQUIPMENT SUPPLIED.
8. VERIFY EXACT LOCATIONS OF EXISITING AND NEW UNDERGROUND UTILITIES, PIPING AND RACEWAY SYSTEMS PRIOR TO TRENCHING. PROVIDE NECESSARY TRENCHING, BACKFILL, EXCAVATION, SUPPORTS, SERVICES (CONDUIT AND/OR WIRE), PULLBOXES, TRANSFORMER PADS, SAWCUTTING AND PATCHING, CONCRETE/PAVING, ETC. AS REQUIRED. CONTRACTOR SHALL OBTAIN AND VERIFY EXACT UTILITY COMPANY DRAWINGS AND REQUIREMENTS.
9. CONTRACTOR SHALL BE RESPONSIBILE FOR REPLACING EQUIPMENT WHICH IS DAMAGED DUE TO INCORRECT FIELD WIRING OR FACTORY WIRING IN EQUIPMENT.
10. ALL COST INCURRED BY THE ACCEPTANCE OF SUBSTITUTIONS SHALL BE BORNE BY THE CONTRACTOR. PROOF FOR THE EQUALITY OF SUBSTITUTIONS SHALL BE BY THE CONTRACTOR.
11. ALL ELECTRICAL ITEMS SHALL BE U.L. LABELED AND LISTED FOR THEIR SPECIFIC USE.
12. THE ELECTRICAL CONTRACTOR SHALL PAY ALL COSTS REQUIRED BY THE LOCAL UTILITY COMPANY PROVIDING SERVICES INDICATED. ELECTRICAL CONTRACTOR SHALL COORDINATE METERING, TRANSFORMER PAD, CONNECTION POINTS AND GROUNDING WITH UTILITY COMPANY.
13. ALL SERVICE ENTRANCE EQUIPMENT, INCLUDING BUT NOT LIMITED TO ANY MAIN DISCONNECT SWITCH, PANEL, OR SWITCHBOARD, SHALL BE LISTED AND LABELED AS "SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT."
14. THE ELECTRICAL SYSTEMS SHALL BE SOLIDLY GROUNDED. ALL NON-CURRENT CARRYING METAL PARTS OF THE ELECTRICAL SYSTEM, I.E., RACEWAYS, EQUIPMENT ENCLOSURES, FRAMES, JUNCTION AND OUTLET BOXES AND OTHER CONDUCTIVE ITEMS IN CLOSE PROXIMITY WITH ELECTRICAL CIRCUITS, SHALL BE GROUNDED TO PROVIDE A LOW IMPEDANCE PATH FOR POTENTIAL GROUND FAULTS.
15. EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSTALLED IN ALL RACEWAYS AND CABLES.
16. THE NEUTRAL AND GROUND BUS SHALL BE BONDED TOGETHER AT ALL SERVICE EQUIPEMENT.
17. CONDUIT SHALL BE RUN PARALLEL OR AT RIGHT ANGLES TO WALLS, CEILINGS, AND STRUCTURAL MEMBERS.
18. ALL RACEWAYS SHALL BE INSTALLED CONCEALED EXCEPT IN UNFINISHED SPACES WHERE INDICATED ON DRAWINGS.
19. ALL EMPTY CONDUITS SHALL BE EQUIPPED WITH A PULL WIRE-200 LB TEST NYLON.
20. OPEN TRENCHES SHALL BE PROTECTED AND SUPERVISED AT ALL TIMES.
21. SELECT GRANULAR STRUCTURAL BACKFILL IS REQUIRED AROUND, AND 12" ABOVE, ALL CONDUIT.
22. ELECTRICAL "WARNING TAPE" SHALL BE INSTALLED IN ALL TRENCHES 12" ABOVE HIGHEST CONDUIT.
23. FASTENERS AND SUPPORTS SHALL BE AS MANUFACTURED BY GEDNEY, EFCOR OR EQUAL. SUPPORTING DEVICES SHALL BE THOSE AS MANUFACTURED FOR A SPECIFIC PURPOSE. NAILS, WIRE OR PIPE STRAP SHALL NOT BE USED.
24. ALL CIRCUIT CONDUCTORS SHALL BE COPPER, 90°C, XHHW-2 INSULATION.
25. WIRE NO. 8 AWG AND LARGER SHALL BE STRANDED, NO. 10 AND SMALLER SHALL BE SOLID. MINIMUM CONDUCTOR SIZE SHALL BE NO. 12.
26. ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS, NO. 8 AWG AND SMALLER, SHALL BE COLOR CODED AS FOLLOWS (WHERE APPROVED BY THE AUTHORITY HAVING JURISDICTION):

    120/208 VOLT SYSTEM

    PHASE A - BLACK
    PHASE B – RED
    PHASE C - BLUE
    NEUTRAL – WHITE
    GROUND - GREEN

27. CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT, TRANSFORMER SIZE, AND SERVICE CONDUCTOR FROM ELECTRIC POWER UTILITY BEFORE ORDERING BREAKERS.
28. ELECTRICAL CONTRACTOR SHALL VERIFY THE MOTOR UNIT LOADS BEFORE ORDERING BREAKERS.
29. PANELBOARDS SHALL HAVE BOLT-IN CIRCUIT BREAKERS AND ALUMINUM BUSSING.
30. OVERCURRENT PROTECTIVE DEVICES SHALL BE AUTOMATIC TRIP THERMAL MAGNETIC TYPE WITH QUICK-MAKE, QUICK-BREAK FOR BOTH MANUAL AND AUTOMATIC OPERATIONS. ALL MULTIPOLE BREAKERS SHALL BE COMMON TRIP; HANDLE TIES WILL NOT BE ACCEPTED.
31. SWITCHBOARDS, DISTRUBUTION BOARDS, PANELBOARDS, DISCONNECT SWITCHES AND MOTOR CONTROL CENTERS SHALL BE MANUFACTURED BY SQUARE 'D', GENERAL ELECTRIC, SIEMENS, OR EATON/CUTLER HAMMER.
32. TYPEWRITTEN PANELBOARD SCHEDULES AND DESIGNATION PLATES SHALL BE PROVIDED BY THE CONTRACTOR FOR ALL PANELBOARDS. PANELBOARD DESIGNATIONS SHALL BE PHENOLIC-ENGRAVED.
33. WIRE TERMINATION PROVISIONS FOR PANELBOARDS, CIRCUIT BREAKERS, SAFETY SWITCHES AND ALL OTHER ELECTRICAL APPARATUS SHALL BE LISTED AS SUITABLE FOR 75°C MINIMUM.
34. SAFETY-TYPE DISCONNECT SWITCHES SHALL BE HEAVY DUTY WITH QUICK-MAKE, QUICK-BREAK MECHANISM WITH INTERLOCKING COVER WHICH NORMALLY CANNOT BE OPENED WHEN THE SWITCH IS IN THE 'ON' POSITION. SWITCH SHALL HAVE PROVISIONS FOR PAD-LOCKING IN THE OPEN OR CLOSED POSITION. FUSIBLE DISCONNECT SWITCHES SHALL HAVE REJECTION-TYPE FUSEHOLDERS. FUSES SHALL BE NON-RENEWABLE, DUAL ELEMENT TIME-DELAY 'RK1' OR 'RK5', OR AS SPECIFIED OTHERWISE. ACCEPTABLE MANUFACTURES: SQUARE 'D', GENERAL ELECTRIC, SIEMENS, OR EATON/CUTLER HAMMER.
35. UNLESS INDICATED ON DRAWINGS, BALLASTS PROVIDED WITH FIXTURES SHALL BE ETL-CBM APPROVED, HIGH POWER FACTOR, WITH U.L. LABEL. ALL BALLASTS FOR RAPID START LAMPS SHALL BE PREMIUM CLASS P.
36. ALL FIXTURES TO BE FURNISHED COMPLETE WITH LAMPS.
37. UNLESS OTHERWISE NOTED, DUPLEX RECEPTACLES SHALL BE RATED 20 AMP, HUBBELL CR5362 OR APPROVED EQUAL.
38. UNLESS OTHERWISE NOTED, TOGGLE SWITCHES SHALL BE 20 AMP, HUBBELL CS1221 OR APPROVED EQUAL.
39. UNLESS OTHERWISE NOTED, DEVICE PLATES SHALL BE NYLON.
40. PANEL, WIRING DEVICES, SWITCHES AND DISCONNECTS, LIGHTING FIXTURES AND FUSE SUBMITTALS SHALL BE REQUIRED, AND ARE TO INCLUDE MANUFACTURER'S DATA, TEST REPORTS, PERFORMANCE DATA AND CERTIFICATIONS.



TYPE NO.	SHAFT DEPTH	SHAFT DIA.
1	59"	24"
2	59"	30"

DRILLED SHAFT FOUNDATION EMBEDDED POLE

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

PARK LIGHTING & ELECTRICAL DETAILS

icon Consulting Engineers, Inc. Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117 Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C804

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

VITRUVIAN WAY

12"W
CURB
1 1/2" W
SL
GAS
SD
SS
8"SS
W
IRR
UGE
6' X 5' SD
18"SD
FUTURE RESTROOMS
FUTURE INTERACTIVE FOUNTAIN VAULT
FUTURE INTERACTIVE FOUNTAIN TREATMENT
FUTURE INTERACTIVE FOUNTAIN
GA 30,32,34 FUTURE
GA 22,24
GA 13,15
GA 25,27
GA 14,16
GA 18,20
GA 26,28
GA 17,19
GA 21,23
GA 29,31
GA 1,3
GA 6,8
SK1
SK2
S
L5
AMPITHEATER PARK LIGHTING
PERFORMANCE LIGHTING FOUNDATION
200A COMPANY SWITCH (LIGHTING)
100A COMPANY SWITCH (SOUND)
CABLE TROUGH TYPICAL
PANEL GAL GA LIGHTING CONTROLS
PANEL GA TO GAL 4-#6 IN 1 1/4" CONDUIT
PANEL GA
STD SPST TOGGLE @ 48" HT TYPICAL
VPN LIGHTING
VPN POWER
6' X 5' SD
GROTTO POOL
GROTTO WATERFALL
GROTO WATERFALL ANEMOMETER MOUNTING HEIGHT SAME AS LIGHT FIXTURES
10"W

GROTTO PLAN
SCALE: 1/8" = 1'-0'

LEGEND

- DULPEX 20A GFCI RECEPTACLE HUBBELL GFR5362SGW OR EQ
- SIMPLEX 30A 120/240V 4 WIRE L14-30 LOCKING RECEPTACLE HUBBELL OR EQ WITH WHILE-IN-USE WATERPROOF COVER
- QUAD (2) CIRCUIT 20A GFCI RECEPTACLE (2) HUBBELL GFR5362SGW OR EQ WITH WHILE-IN-USE WATERPROOF COVER
- SAX — LIGHT POLE BASE AND FIXTURE TYPE
- XX-XX — PANEL DESIGNATION & CIRCUIT NUMBER
- POWER CONDUIT
- LIGHTING CONDUIT
- IRR — IRRIGATION SLEEVE - 1-6" & 1-2" SCH 40 PVC UNLESS OTHERWISE NOTED

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

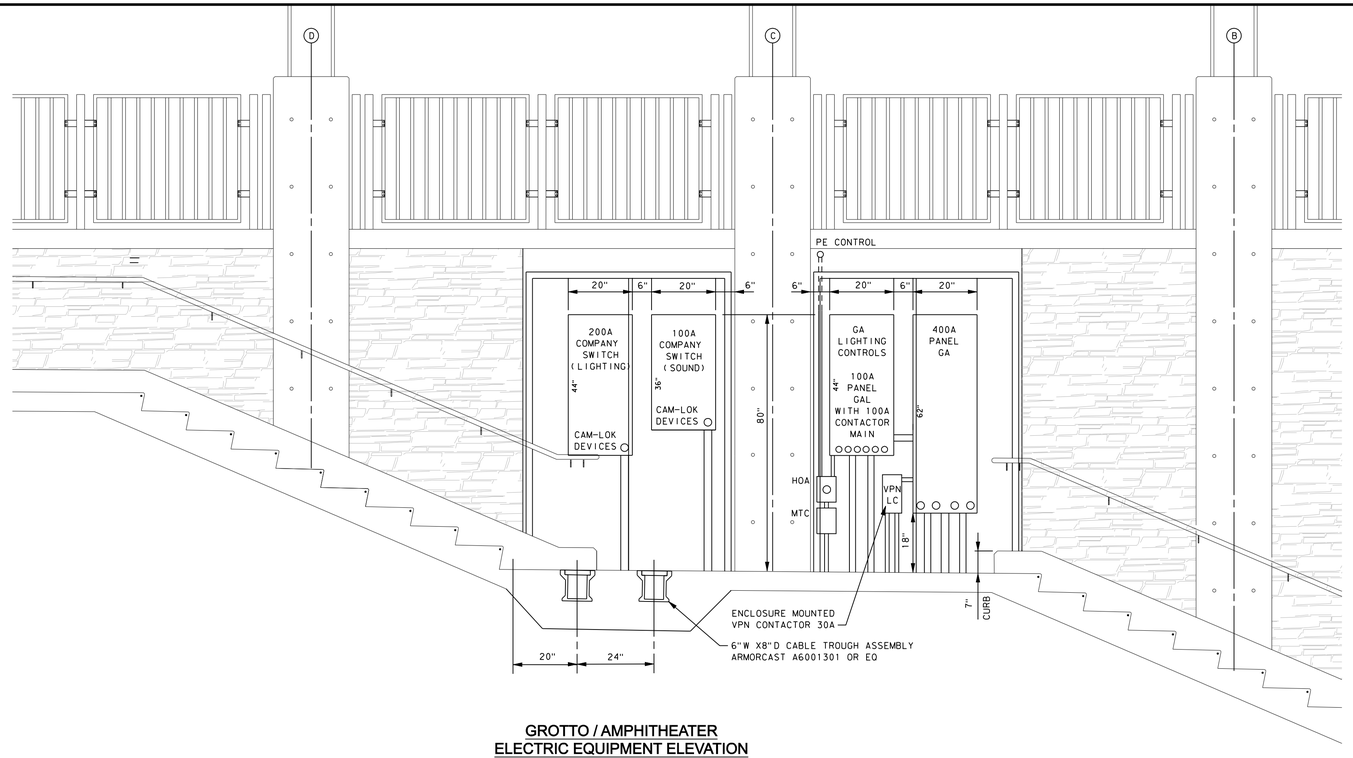
PARK LIGHTING & ELECTRICAL PLAN GROTTO

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW # 2009-04	C805

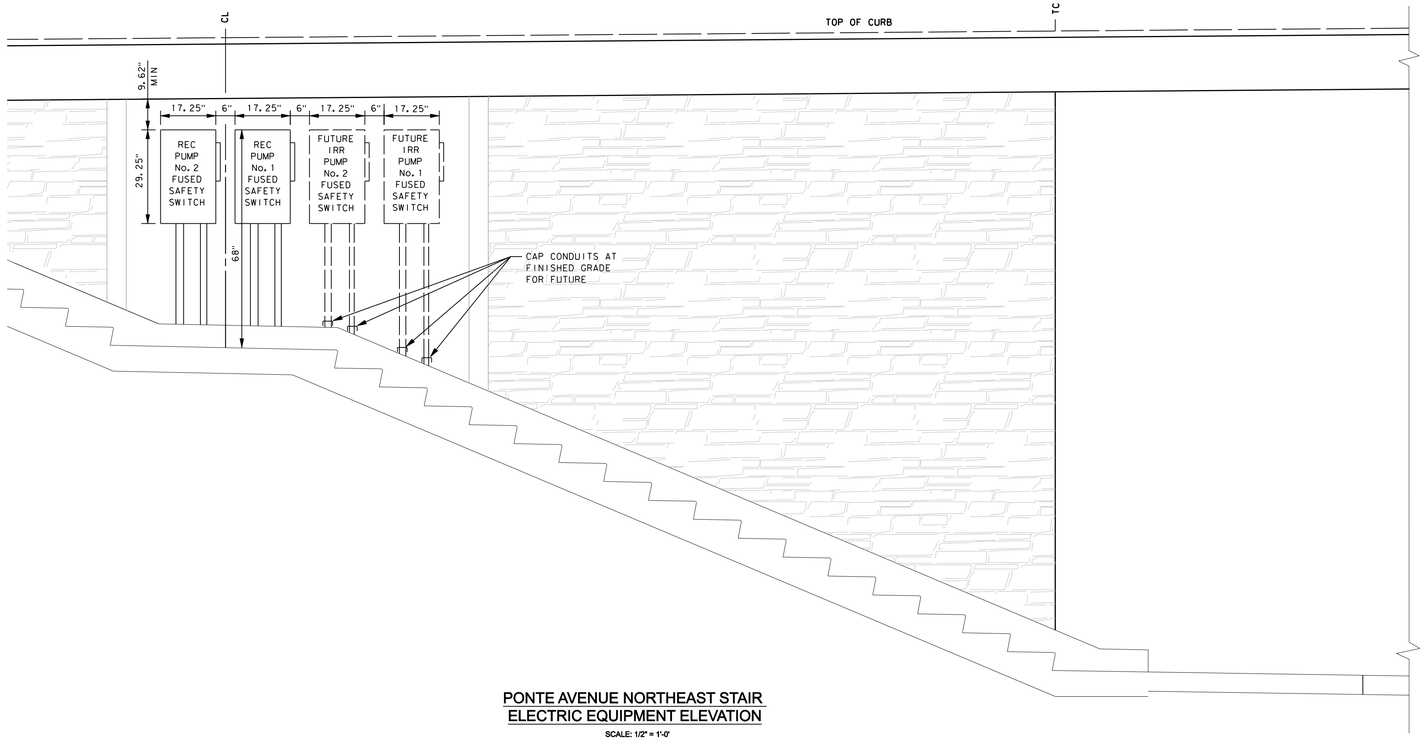
PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12



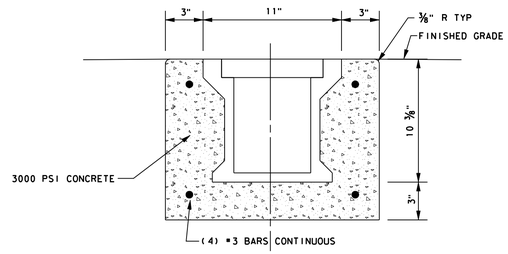
GROTTO / AMPHITHEATER
ELECTRIC EQUIPMENT ELEVATION

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



PONTE AVENUE NORTHEAST STAIR
ELECTRIC EQUIPMENT ELEVATION

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



TYPICAL SECTION
CABLE TROUGH ASSEMBLY
ENCASED IN CONCRETE

SCALE: 2" = 1'-0"

Panel Schedule: Single Phase — Project: Vitruvian Park — Date: 9/28/2009

Panel Name:	GAL - G / A Lighting			Volts<L-L>:	208			Main Bkr:		Amps			
Mfg:				Volts<L-G>:	120			Main Lugs:	GAL Contactor - 100	Amps			
Model:				Phase:	1			Panel AIC:	22,000	Amps			
Description:				Wires:	3			Neutral Bar:	Y	Y / N			
Location:	I	"I" = Indoor, "O" = Outdoor						Ground Bar:	Y	Y / N			
Breaker Mounting:	S	"S" = Standard, "B" = Bolt-In											

Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves	Load VA L1	Load VA L2	Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves
1		15	2	Ampith Lighting (Back)	< 435		2		15	1	Grotto Lighting (N-O)
					448 >						
3		15		Ampith Lighting (Back)	< < ------- < <	435					
						322 >	4		15	1	Grotto Lighting (N-C)
5		15	2	Ampith Lighting (Front)	< 316						
					392 >		6		15	1	Grotto Lighting (N-I)
7		15		Ampith Lighting (Front)	< < ------- < <	316					
						448 >	8		15	1	Grotto Lighting (S-O)
9		15	2	Ampith Lighting (Lake)	< 237						
					322 >		10		15	1	Grotto Lighting (S-C)
11		15		Ampith Lighting (Lake)	< < ------- < <	237					
						392 >	12		15	1	Grotto Lighting (S-I)
13		15	1	Grotto Lighting (WF-S)	< 2000						
					500 >		14		15	1	Grotto Lighting (Pool-N)
15		15	1	Grotto Lighting (WF-C)	< < ------- < <	2000					
						500 >	16		15	1	Grotto Lighting (Pool-C)
17		15	1	Grotto Lighting (WF-N)	< < ------- < <	1000					
						500 >	18		15	1	Grotto Lighting (Pool-S)
				Connected VA per Leg =	4650	6150					
				Total Amps per Leg =	39	51					

ALL BREAKERS SHALL BE SWITCH RATED.
NO TANDEM BREAKERS ALLOWED.
ENCLOSURE MOUNTED PHOTO ELECTRIC CONTROL, MECHANICAL 24 HR TIME CLOCK AND HOA SWITCH REQUIRED FOR CONTACTOR OPERATION.

Panel Schedule: Three Phase — Project: Vitruvian Park — Date: 4/23/2010

Panel Name:	GA - Grotto / Amphitheater			Volts<L-L>:	208			Main Bkr:	400	Amps			
Mfg:				Volts<L-G>:	120			Main Lugs:		Amps			
Model:				Phase:	3			Panel AIC:	22,000	Amps			
Description:				Wires:	4			Neutral Bar:	Y	Y / N			
Location:	I	"I" = Indoor, "O" = Outdoor						Ground Bar:	Y	Y / N			
Breaker Mounting:	S	"S" = Standard, "B" = Bolt-In											

Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves	Load VA Phase A	Load VA Phase B	Load VA Phase C	Pos. No.	Bkr No.	Trip Amps	No. Bkr Poles	Serves
1		30	2	Ampith Simplex Outlet N	< 2500							
					2500 >	> ---------- > >		2		30	2	Ampith Simplex Outlet C
3		30		Ampith Simplex Outlet N	< < ------- < <	2500						
						2500 >	> ------- > >	4		30		Ampith Simplex Outlet C
5		20	2	Ampith Quad Outlet 2 C	< < ---------- < <	1920						
						1920 >		6		20	2	Ampith Quad Outlet 1 N
7		20		Ampith Quad Outlet 2 C	< 1920							
					1920 >	> ---------- > >		8		20		Ampith Quad Outlet 1 N
9		20	2	Ampith Quad Outlet 3 S	< < ------- < <	1920						
						2500 >	> ------- > >	10		30	2	Ampith Simplex Outlet S
11		20		Ampith Quad Outlet 3 S	< < ---------- < <	1920						
						2500 >		12		30		Ampith Simplex Outlet S
13		20	2	Grotto Quad Outlet 1 S	< 1920							
					2500 >	> ---------- > >		14		30	2	Grotto Simplex Outlet 1 N
15		20		Grotto Quad Outlet 1 S	< < ------- < <	1920						
						2500 >	> ------- > >	16		30		Grotto Simplex Outlet 1 N
17		20	2	Grotto Quad Outlet 2 S	< < ---------- < <	1920						
						1920 >		18		20	2	Grotto Quad Outlet 1 N
19		20		Grotto Quad Outlet 2 S	< 1920							
					1920 >	> ---------- > >		20		20		Grotto Quad Outlet 1 N
21		20	2	Grotto Quad Outlet 2 N	< < ------- < <	1920						
						2500 >	> ------- > >	22		30	2	Grotto Simplex Outlet 1 S
23		20		Grotto Quad Outlet 2 N	< < ---------- < <	1920						
						2500 >		24		30		Grotto Simplex Outlet 1 S
25		30	2	Grotto Simplex Outlet 2 S	< 2500							
					2500 >	> ---------- > >		26		30	2	Grotto Simplex Outlet 2 N
27		30		Grotto Simplex Outlet 2 S	< < ------- < <	2500						
						2500 >	> ------- > >	28		30		Grotto Simplex Outlet 2 N
29		65	2	Panel GAL Contactor	< < ---------- < <	6150						
						6000 >		30		50	3	Future Interactive Fountain
31		65		Panel GAL Contactor	< 4650							
					6000 >	> ---------- > >		32		50		Future Interactive Fountain
33		30	2	VPN Contactor	< < ------- < <	2400						
						6000 >	> ------- > >	34		50		Future Interactive Fountain
35		30		VPN Contactor	< < ---------- < <	2400						
						1920 >		36		20	1	Two Duplex Outlets - N1
37				Space	<							
					1920 >	> ---------- > >		38		20	1	Two Duplex Outlets - N2
39				Space	< < ------- < <							
						> ------- > >		40				Space
41				Space	< < ---------- < <							
							>	42				Space
				Connected VA per Phase =	34670	31660	32990					
				Total Amps per Phase =	289	264	275					

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

PARK LIGHTING & ELECTRICAL DETAILS

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW # 2009-04	C806

PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK

RECORD DRAWINGS 06/18/12

I. GENERAL REQUIREMENTS FOR ALL ELECTRICAL WORK

The location of all conductors, conduits, junction boxes, ground boxes, and electrical services is diagrammatic only and may be shifted by the Engineer to accommodate local conditions.

Materials shall be new and unused. Materials and installation shall comply with the applicable provisions of the National Electrical Code (NEC), National Electrical Manufacturers Association (NEMA) standards, and shall be Underwriters Laboratories (UL) Listed unless otherwise shown on the plans or specifications or approved by the Engineer in writing. Faulty fabrication or poor workmanship in any material, equipment, or installation shall be justification for rejection. When reference is made to UL, it can be considered to mean a Nationally Recognized Independent Testing Lab (NRTL). Comparable standards of Canadian Standard Association, Electrical Testing Laboratories or Factory Mutual can be equal to the referenced UL standard. Where reference is made to NEMA listed devices, IEC listed devices shall not be considered to be an acceptable equal to a NEMA listed device. Acceptable devices may have both a NEMA and IEC listing.

With the exception of high strength bolts, miscellaneous nuts, bolts and hardware may be stainless steel when plans specify galvanized, provided that bolts are 1/2 inch or less in diameter. The Contractor shall provide the following electrical test instruments as required by the Engineer to confirm compliance with the contract and the NEC. Those test instruments are voltmeter, amp probe, megger (1000 volt DC) and torque wrenches. All meters shall have been properly calibrated within one year. Calibration certification shall be provided to the Engineer upon request. Calibration certification tag shall also be applied to the meter. The Contractor shall operate meters during inspection as requested by the Engineer. Grounding shall be as shown on the plans and in accordance with the NEC. Metallic conduit, light poles, luminaires on bridge structures, and all metal enclosures shall be bonded to the system-grounding conductor. The ground rod in each ground box or junction box at the bridge ends, and in each ground box installed for underpass lighting will also be bonded to the system grounding conductor. The grounding conductor shall be bare or, if insulated, shall be green. Ground rods, connectors, and bonding jumpers will not be paid for separately, but will be subsidiary to the various bid items.

SUBMITTALS:

The contractor shall submit for approval six (6) copies of catalog cut sheets for each of the following three (3) categories.
Category 1. Electrical services including photocell.
Catagory 2. Breakaway disconnects, heat shrink tubing, heat shrink filler tape, GelCaps and ground boxes which will include loading capacity certification.
Category 3. Highmast assembly kits, when applicable. See Item 614 "Highmast Illumination Assemblies". Submittals shall be legible and shall be marked to indicate which product on a cut sheet is to be supplied. Where manufacturers provide warranties and guarantees as a customary trade practice, the Contractor shall furnish to the State such warranties and guarantees.
Any deviation from plans or specifications, including deviations due to plan error shauld be prominently displayed on the submittal.
Any changes not prominently noted in submittal and incorporated into the work without proper authorization will constitute grounds for rejection of that portion of the work.

II. CONDUIT

A. MATERIALS

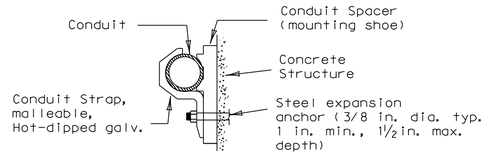
1. Conduit and fittings shall be UL Listed for the intended use shown on plan sheets.
2. Conduit shall be the type shown by descriptive code or shown elsewhere on the plans. Substitution of the various types of conduits will not be permitted. All flexible conduit in rigid metallic conduit (RMC) systems shall be Liquidtight Flexible Metal (LFMC) conduit. All flexible conduit in PVC systems shall be Liquidtight Flexible Non-metallic conduit (LFNC).
3. All exposed conduits shall be RMC, unless otherwise specifically shown on the plans. All metal conduit shall be properly grounded.
4. Couplings, connectors, conduit bodies, grounding bushings, and offset nipples for RMC shall be electro-zinc plated steel or hot dipped galvanized malleable iron, threaded or threadless compression type, rain-tight and shall be UL listed for the intended use.
5. Expansion joints for metal conduit shall be provided with an internal or external bonding jumper and shall be UL listed.
6. Unless otherwise shown on the plans, junction box minimum sizes shall be in accordance with the following table which applies to the greatest number of conductors entering the box through one conduit with no more than four conduits per box. When a mixture of conductor sizes are present, the conductors shall be counted as if all are of the larger size. Situations not applicable to the table shall be sized in accordance with NEC 370-28.

AWG	3 CONDUCTORS	5 CONDUCTORS	7 CONDUCTORS
#1	10" x 10" x 4"	12" x 12" x 4"	16" x 16" x 4"
#2	8" x 8" x 4"	10" x 10" x 4"	12" x 12" x 4"
#4	8" x 8" x 4"	10" x 10" x 4"	10" x 10" x 4"
#6	8" x 8" x 4"	8" x 8" x 4"	10" x 10" x 4"
#8	8" x 8" x 4"	8" x 8" x 4"	8" x 8" x 4"

7. RMC system junction boxes equal to or smaller, in any dimension, than 12 x 12 x 6 (HxWxD), surface mounted and containing conductors #8 or larger, shall be hot dipped galvanized cast iron with minimum wall thickness of 3/16 inch, shall have external mounting lugs, and shall be UL listed Crouse-Hinds Type WAB, OZ/Gedney Type YS or approved equal. Unless otherwise shown elsewhere on the plans, RMC system junction boxes larger than the aforementioned boxes but equal to or smaller, in any dimension, than 18 x 18 x 6 (HxWxD) shall be 14-ga. stainless steel; RMC system junction boxes larger than 18 x 18 x 6 (HxWxD) shall be 12-ga. stainless steel. All metal junction boxes shall be equipped with a threaded hole or lug for grounding. Stainless steel boxes 12 x 12 x 6 and larger need not be UL Listed but shall meet the other requirements of the NEC and shall have ribs, stiffeners, or thicker metal and shall have external mounting feet. Junction boxes with an internal volume of more than 100 cu. in. may be supported by connection of two or more rigid metal conduits, where specifically shown on the plans or where approved by the Engineer.
8. Junction boxes containing only #10 or #12 AWG conductors shall be Crouse Hinds Type GRFX, Appleton Type JBOX, two-gang FD, or similar approved cast iron box. Boxes shall be sized according to NEC Table 370-16(a).
9. IMC and EMT conduit shall not be used unless specifically required by the plan layout sheets. Junction boxes in EMT conduit systems shall be made from galvanized sheeting and shall be UL listed and approved for outdoor use, unless otherwise noted on the plans. Sheet metal junction boxes shall be sized in accordance with the NEC. Junction boxes for IMC conduit systems shall meet the requirements of boxes used with RMC systems.
10. Junction boxes in PVC conduit systems shall be PVC, intended for outdoor use, unless otherwise noted on the plans.
11. Elbows in PVC conduit systems one inch and larger shall be rigid metal, with the exception of traffic signal systems which may have PVC elbows instead of rigid. If any part of the rigid metal elbow is buried less than 18 inches underground the elbow and rigid metal extension shall be grounded. Grounding shall be accomplished by means of a grounding bushing installed on the extension. Unless specifically shown on the plans, rigid metal elbows containing, or entering ground boxes containing only communications conductors, loop detectors, or other low voltage power limited circuits need not be grounded unless a ground wire is present in the conduit or ground box. The rigid metal elbows located in concrete foundations may be extended with PVC conduit and need not be grounded provided that the end of the elbow nearest the end of the conduit run exiting the foundation is at least 2 inches below the concrete. RMC elbows will not be eliminated. RMC elbows will not be paid for directly, but will be subsidiary to various bid items.
12. High-Density Polyethylene (HDPE) conduit shall meet the requirements of Item 622, Duct Cable, except that the HDPE conduit, when bid under Item 618, Conduit, shall not contain factory installed conductors. Fittings for HDPE conduit shall be UL listed as an electrical conduit connector or shall be thermally fused using an electrically heated wound wire resistance welding method. HDPE conduit may be substituted for bored schedule 40 or schedule 80 PVC conduit. When such substitution is made, bored HDPE shall be schedule 40 of the size PVC being replaced. The HDPE conduit shall transition to PVC (or RMC elbow when required) at the bore pit. Size and schedule shall be as shown on the plans. Substituted conduit may not be extended to ground boxes or foundations; RMC elbows shall be installed at ground boxes and foundations. RMC elbows will not be eliminated.
13. All conduit support hardware including straps, nuts, bolts, screws, retaining anchors and washers shall be hot dipped galvanized or stainless steel. Strut type conduit straps shall be stainless steel or hot dipped galvanized. Strut type straps need not be made of malleable type material. Stamped-cadmium plated straps will not be allowed. Straps having only one mounting hole shall not be allowed for use on conduits 2 inches and larger with the exception of electrical service poles where stainless steel standoff straps will be allowed. Two piece conduit straps designed to be used with a mounting shoe shall be installed only with the correctly sized shoe.

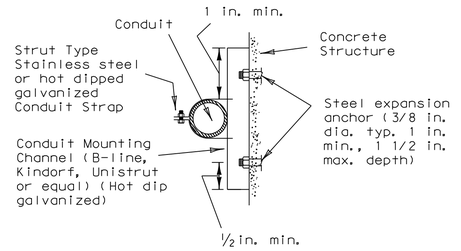
B. CONSTRUCTION METHODS

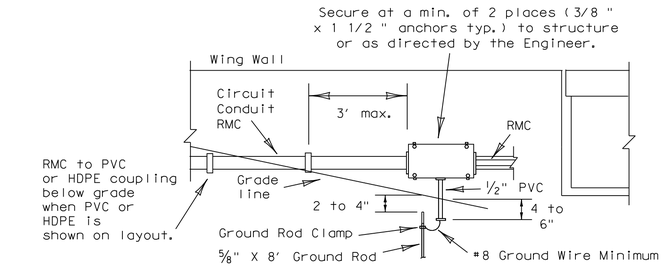
1. Conduit in structures shall have expansion fittings at structure expansion joints. All straight runs of RMC conduit exposed on structures such as bridges shall have expansion joints installed at maximum intervals of 150 feet. Expansion joints shall be installed so they allow for movement of the conduit. Installation of the joint in such a manner that will not allow for movement shall be repaired at no expense to the state. The method of determining the final setting length of the expansion joint shall be provided to the Engineer upon request.
2. Conduit supports shall be spaced at maximum intervals of 5 feet. Conduit spacers shall be used with metal conduit placed on surfaces of concrete structures (See conduit mounting options).
3. Conduit supports shall not be attached directly to prestressed concrete beams except as shown specifically in the plans and approved by the Engineer.
4. Unless otherwise shown on the plans, conduit placed beneath existing roadways, driveways, or sidewalks, or after the base or surfacing operation has begun, shall be accomplished by jacking or boring. The Contractor shall back fill and compact the bore pits to the bottom of the conduit prior to installing connecting conduit or duct cable to prevent bending of the connection.
5. Conduit trenched in the subgrade of new roadways shall be backfilled with excavated material, unless otherwise noted on the plans. Conduit trenched in the sub-base of new roadways shall be backfilled with cement-stabilized base.
6. Open ends of all conduit and raceways shall be fitted with temporary caps or plugs to prevent entry of dirt, debris and rodents during construction. The temporary cap may be constructed of duct tape, but in all cases shall be tightly fixed to the conduit and shall be durable. The contractor shall clean out the conduit and prove it clear in accordance with Standard Specifications Item 618.3 prior to installing any conductors.
7. Conduit entry into the top of enclosures such as safety switches, meter cans, service enclosures, auxiliary enclosures and junction boxes shall be made weatherproof using conduit sealing hubs, or threaded bosses.
8. A bonding jumper shall be installed from each grounding bushing to the nearest grounding rod, grounding lug, and/or equipment grounding conductor. All jumpers shall be the same size as equipment grounding conductor. Conduit used as casing under roadways for duct cable need not be grounded if duct extends full length through the casing. At electrical services, grounding electrode conductor shall be a solid Copper #6 AWG.
9. Metal junction boxes shall be bonded to the grounding conductor in accordance with the NEC.
10. Conduits entering ground boxes shall be placed so that the conduit ends shall be not less than 3 inches nor more than 6 inches from bottom of box (See ground box detail on sheet ED(3).
11. Conduit ends shall be sealed with heat shrink boots with waterproof sealant, urethane foam, or by other methods approved by the Engineer. Sealing shall be done after completion of any required pull tests. Duct tape shall not be used as a permanent conduit sealant. Silicone caulking shall not be used as a sealant.
12. All strut mounting material and hardware shall be hot-dip galvanized or shall be stainless steel. The cut ends of strut and non-galvanized rigid metal conduit threads shall be coated with a zinc rich paint (90% or more zinc content). Zinc rich paint may only be used to touch up galvanized material as allowed under item 445.6 galvanizing. The painting of non-galvanized material with a zinc rich paint shall not be considered as an approved alternative for galvanized materials.
13. All PVC conduit terminations shall be fitted with bushings or bell ends. All metal conduit terminations shall be fitted with a grounding type bushing.



CONDUIT MOUNTING OPTIONS

(Attachment to concrete surfaces)
(See para. II.B.2)

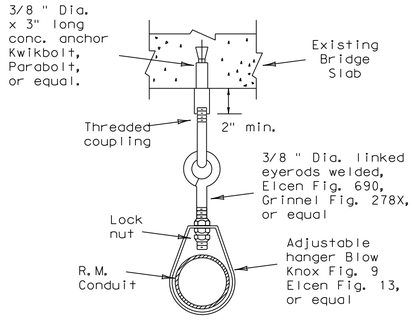




TYPICAL CONDUIT ENTRY TO BRIDGE STRUCTURE DETAIL

NOTES

1.) Ground rod clamp to be UL listed for direct burial.
2.) For conduit placed in structure, use flush-mounted box.
3.) Bond junction box and metal conduits to equipment grounding conductor and grounding electrode conductor using listed connector.
4.) Seal all conduits entering the junction box from underground.
5.) Install bell end or bushing on 1/2 " PVC conduit both ends.
6.) Ground rod to be driven within 8 inches of 1/2 inch PVC conduit end.



CONDUIT HANGER DETAIL

(Attachment to horizontal surfaces)
Hangers need not be UL listed for electrical use
ie: plumber pipe hangers are acceptable

5/03 Revision

1 Revised notes.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

ELECTRICAL DETAILS-CONDUIT

ED(1)-03

© TxDOT January 1992	DN-KB	CK-JW	DW-DN	CK-GC	NEG NO.
REVISIONS 4-98 12-00 3-03 5-03	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET C807
		6			
	COUNTY		CONTROL	SECTION	JOB / HIGHWAY

I. ELECTRICAL CONDUCTORS

A. MATERIALS

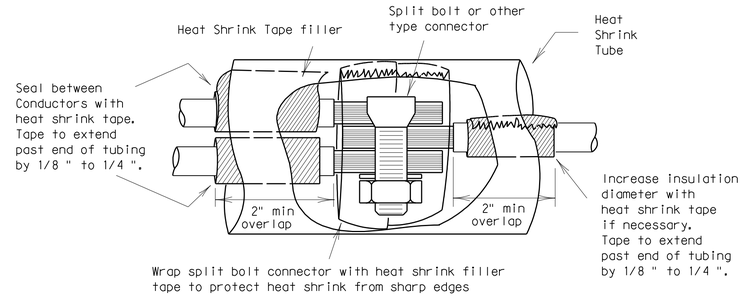
1. Insulated conductors shall be NEC Type XHHW. Insulated conductors shall be color coded in accordance with the NEC, articles 200, 250, and 310; i.e. insulation of grounded conductors (neutrals) shall be white. Grounding conductors (ground wires) shall be bare or insulation shall be green. Insulation of ungrounded conductors (hots) shall be any color except green, white, or gray. Identification of conductors #6 American Wire Guage (AWG) and smaller shall be by continuous jacket color. Color coding of electrical conductors #4 AWG and larger shall be either by continuous color jacket or by colored tape. Colored tape marker shall consist of a half-lap of tape covering a 6-inch length of conductor.
2. Where two or more circuits are present in one conduit or enclosure, the conductors of each circuit shall be identified by a permanent non-metallic tag at each accessible location. The tag shall be fastened to the conductors by two plastic straps. Each tag shall indicate circuit number, letter, or other identification shown in the plans.
3. Grounding electrode conductor #6 AWG for bonding to ground rod at electrical service, shall be solid. Connection of conductor to ground rod shall be made using UL Listed connectors designed for such purposes.
4. Heat Shrink Tape filler shall be used to seal the ends of heat shrink tubing around two or more conductors that are insulated with heat shrink tubing. Tape material shall have a minimum dielectric strength of 225 volts per mil and shall be cross-linked butyl rubber. Tape shall be supplied in rolls and shall have a backing (release paper) to prevent the tape from sticking to itself.
5. Heat shrink tubing shall be heavy wall, UL listed for 600 volts or greater and shall have factory applied internal sealant.
6. GelCaps shall be UL listed for 600-volt applications. GelCap shall have see-through elastomer molded cover. Cover shall be filled with high dielectric insulating gel silicone sealant to provide waterseal. Cover shall be held in place by snap-lock, molded clamp made of UV stable polypropylene.
7. Splicing materials, insulating materials, breakaway disconnects, GelCaps and fuse holders will not be paid for directly but shall be subsidiary to various bid items.

B. CONSTRUCTION METHODS

1. After conductors have been installed in conduit, a pull test shall be made on conductors. When any length of conductor cannot be freely pulled, the Contractor shall make any needed alterations or repairs at no expense to the State.
2. The Contractor shall perform insulation resistance tests in accordance with Item 620, "Electrical Conductors." The Contractor shall coordinate with the Engineer to witness the tests.
3. A sufficient length of conductor for making up connections shall be left in ground boxes (2 feet minimum, 3 feet maximum, to point of splice, 3 feet minimum, 4 feet maximum, when conductor is pulled through with no splice), enclosures, weatherheads and pole bases (1 foot minimum, 1.5 feet maximum).
4. Splices shall be made only in junction boxes, ground boxes, pole bases, or electrical enclosures and shall be made with listed compression or screw type pressure connectors, terminal blocks, bolted lugs, or split bolt connectors. Splices shall be insulated with heavy wall heat shrink tubing or GelCaps and shall be made so as to provide a watertight splice. Heat shrink sleeve shall overlap conductor insulation a minimum of 2 inches on both sides of the splice. Where heat shrink tubing may not shrink sufficiently to provide a watertight seal around the individual conductors, prior to heating the tubing, the Contractor shall increase the diameter of the conductors insulation using heat shrink filler tape to provide a watertight seal between the individual conductors and the heat shrink tubing. Tape shall be visible after completion of all splices. Where filler tape is used but not visible, the Engineer shall approve each individual splice by conducting a physical inspection of each splice. When it appears the tubing has been burned, or overheated the tubing shall be considered to be defective and shall be replaced.
5. GelCaps when used in place of heat shrink method of splicing, shall be sized and installed according to manufacturer's specifications. (Raychem GelCap and GelCap SL or equal.)
6. Wire nuts may be used for #8 AWG or smaller conductors in above-ground junction boxes, but not in pole bases or ground boxes. Wire nuts shall be positioned upright to prevent the accumulation of water. Wire nuts used at these locations shall have factory applied waterproof sealant.
7. Conductors in illumination poles shall be supported by a J-hook in the top of the pole.
8. All conductors bid under Item 620 "Electrical Conductors" shall have breakaway electrical disconnects installed anytime conductors pass through a break-away support device.
9. For terminating the conductors, insulation-jacketing material shall be removed in such a manner as to not nick any of the individual strands of the conductor. When individual conductor strands are removed, the conductor shall be considered to be damaged.
10. When a conductor or cable has been damaged, or fails to pass an insulation resistance test, the conductor shall be replaced.
11. Duct tape, black electrical tape, or wire nuts shall not be used in the repair of a damaged conductor.
12. For terminations, no more than one wire may be installed under a single pressure connector, unless the device is listed for more than one wire.
13. Conductors connected to break-away in line fuse holders must be installed in accordance with the specific manufacturer's installation instructions. Where threaded connections are made, they shall be properly torqued. Where crimp type connections are made, crimps shall be made using properly sized crimping pliers. Proper conductor terminations are critical to the safe operation of break-away devices.
14. Waterproofing boots shall be properly trimmed to fit snugly around the conductor so as to provide a water proof connection. No more than one wire may enter a single opening in any one boot. Water proofing boots must provide the correct number of openings. Where only one wire is to be connected to a boot, the boot may not be a two wire type.

SPLICE OPTION 3

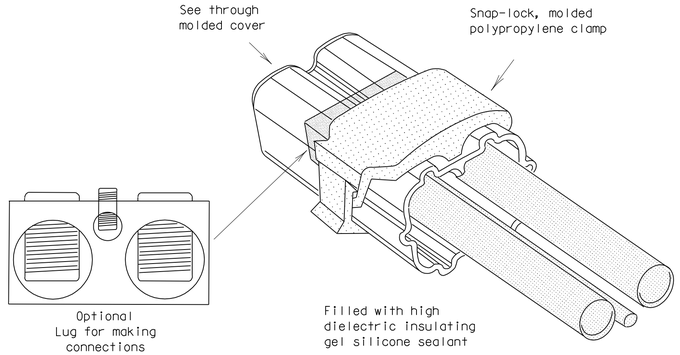
SPLIT BOLT



SPLICE OPTION 4

GELCAP

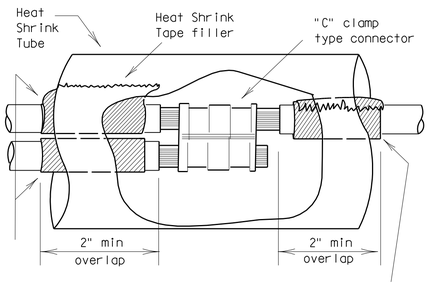
GelCap shall be sized and installed according to manufacturers specifications



15. All conduits that contain circuit wiring of 50 volts or more shall contain an equipment grounding conductor (EGC). Conduit for traffic signals shall have an EGC, with a minimum size of #8 AWG stranded. Unless otherwise shown on the plans, the EGC for all other conduits shall be the same AWG size as the largest current carrying conductor contained in that conduit. The EGC shall be paid for item 620-Electrical Conductors.

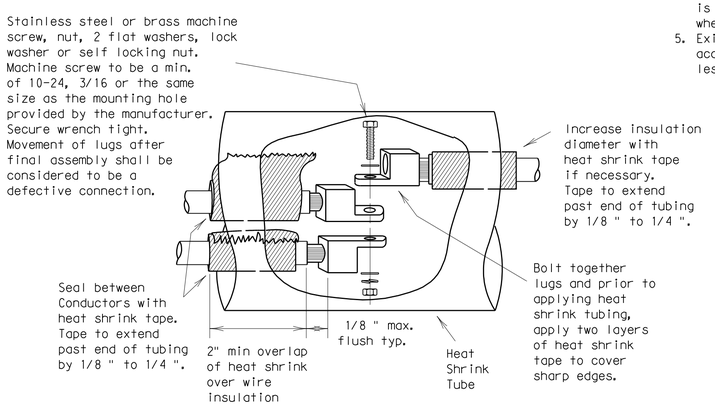
C. TEMPORARY WIRING

1. Temporary conductors and electrical equipment to provide power for utilization equipment, shall be installed in accordance with the NEC article 305. All temporary wiring materials and methods shall comply with the standard sheets. All power outlets for portable electrical equipment, power tools, ice machines, ice storage bins and refrigerators located outdoors at grade, supplied from a utility power source, shall be provided with a ground fault circuit interrupter.
2. Residual current protective devices (GFCI) may be any one of the following: molded cord and plug set, receptacle, or circuit breaker type.
3. Where wire nuts are approved for temporary wiring, they shall be of the self-sealing type.
4. All conductor splices must be contained within a listed enclosure, ground box or the splices will be more than ten feet above grade vertically and more than five feet horizontally from any metal structure. Where temporary conductors are installed in any area that is likely to be subjected to vehicle traffic, or mobile construction equipment, the vertical clearance to ground shall be at least 18 feet when measured at the lowest point. Where power conductors are to be supported by a span wire, the span wire shall be properly grounded.
5. Existing conduit containing service conductors uncovered during the construction process shall be repaired in a timely manner in accordance with the NEC. Existing non-metallic conduit exposed during construction shall not be left exposed above grade, or with less than eighteen inches of cover, without protective methods approved by the Engineer.



SPLICE OPTION 1

C-CLAMP



SPLICE OPTION 2

BOLTED WIRE LUGS

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

ELECTRICAL DETAILS-CONDUCTORS

ED(2)-03

DN - KB	CK - JW	DW - DN	CK - GC	NEG NO.

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
10-93		6		C808
4-98				
12-00	COUNTY	CONTROL	SECTION JOB	HIGHWAY
3-03				

II. GROUND RODS

A. MATERIALS

1. All ground rods installed at electrical services, including supplemental lightning protection ground rods specified by the plans in other locations such as pole bases, shall be copper clad and UL listed. Rods shall be a minimum diameter of 5/8 inch. The length shall be a minimum of 8 feet. Larger diameter or longer length rods may be called for in some specific locations, see the individual plans sheets.
2. Ground rod clamps shall be listed to be in direct contact with the soil. Where concrete encasement is required, the clamp shall be listed for concrete encasement.

B. CONSTRUCTION METHODS

1. Ground rods installed in locations such as pole bases, to provide supplemental lightning protection need not be totally in contact with the soil. Where called for in the plans, rods may be encased in soil or concrete or any combination of soil and concrete. When concrete encased, the connection of the conductor to the rod shall be readily accessible for inspection or repairs. When driven into the soil the upper end shall be between 2 to 4 inches below finished grade. Ground rods shall not be placed in the same drilled hole as a timber pole.
2. Ground rods shall be installed such that the end imprinted with the rod's part number is installed as being the upper end.
3. Non-conductive coatings such as concrete splatter shall be removed from the rod at the clamp location.
4. Routing of lightning protection ground rod wires shall be run as short and straight as possible. Where bends are required they shall have a minimum radius of four inches.
5. Unless specifically called for by the plans, conduits used for ground rod wires shall be non-metallic. Where metal conduits are specified, a grounding bushing and properly sized bonding jumper shall be provided and properly installed on each end.
6. Where rocky soil or a solid rock bottom is encountered when driving a ground rod and the horizontal trench placement method is the only viable solution, written authorization from the Engineer must be obtained.

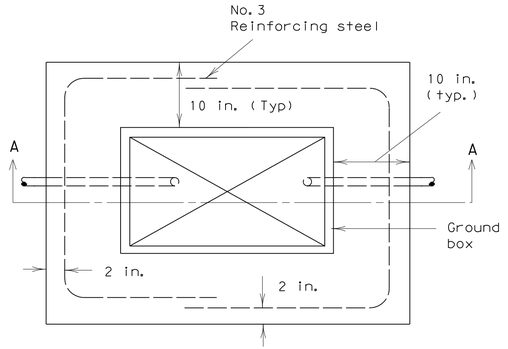
III. GROUND BOX

A. MATERIALS

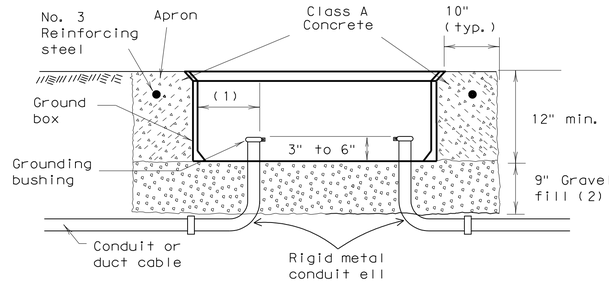
1. Ground boxes 16x30x24 inches (WxLxD) or smaller shall be polymer concrete of the type required by the descriptive code shown elsewhere. Larger ground boxes shall be as shown elsewhere in the plans.
2. All ground boxes and covers shall be permanently marked either by impress or by permanent ink, with manufacturer's model number and manufacturer's name or logo.
3. Covers shall be bolted down, and bolt holes in the box shall be arranged to drain dirt.
4. Ground box Types A, B, C, D & E shall meet the following requirements:
   a. Ground boxes and covers be manufactured from polymer concrete reinforced with continuous strands of woven or stitched borosilicate fiberglass cloth. The polymer concrete shall be made from catalyzed polyester resin, sand and aggregate, and shall have a minimum compressive strength of 11,000 psi. Polymer concrete containing chopped fiberglass or fiberglass reinforced plastic is not acceptable.
   b. Minimum inside dimensions shall be as follows (width x length x depth):
      Type A shall be 11.5 inches x 21 inches x 10 inches, (122311)
      Type B shall be 11.5 inches x 21 inches x 20 inches, (122322)
      Type C shall be 15.25 inches x 28.25 inches x 10 inches, (162911)
      Type D shall be 15.25 inches x 28.25 inches x 20 inches, (162922)
      Type E shall be 11.5 inches x 21 inches x 16 inches, (122317)
   c. Bottom edge of box or extension shall be footed with a minimum 1 1/4 inch flange.
   d. Ground boxes shall withstand 600 lbs. per sq. ft. applied over the entire sidewall with less than 1/4 inch deflection per foot length of box. Ground boxes and covers shall withstand a test loading of 20,000 lbs. over a 10 inch by 10 inch area centered on the cover with less than 1/2 inch deflection. Ground boxes and covers shall meet Western Underground Standards 3.6. Manufacturer shall supply certification by an independent laboratory or sealed by a Texas-Licensed Professional Engineer.
   e. Covers shall be 2 inch (nominal) thick polymer concrete. All hardware shall be stainless steel. Cover shall be secured with two 1/2 inch stainless steel bolts. Bolts shall be self-retaining and shall withstand a minimum of 70 ft-lbs. torque and shall have a minimum 750 lbs. straight pull out strength. Nuts shall be floating and shall provide a minimum of 1/2 inch movement from the center of the nut. Covers shall be skid resistant, minimum 0.5 coefficient of friction. Covers shall be interchangeable between manufacturers and shall conform to the dimensions shown herein. Unless otherwise approved by the Engineer, cover shall be legibly imprinted with the following words in minimum 1 inch letters:
      Ground Boxes containing wiring for traffic signals shall be labeled, Danger High Voltage Traffic Signal.
      Ground boxes containing wiring for illumination systems shall be labeled, Danger High Voltage Illumination.
      Ground boxes containing wiring for traffic management systems shall be labeled, Danger High Voltage Traffic Management.
      Ground boxes containing wiring for sign illumination systems shall be labeled, Danger High Voltage Sign Illumination.
      Ground boxes containing wiring for traffic signals that also contain illumination, powered by the signal electrical service, shall be labeled, Danger High Voltage Traffic Signal.

B. CONSTRUCTION METHODS

1. Ground boxes shall be set on a 9 inch (minimum) bed of aggregate from 3/4 " up to 2" in size. Aggregate shall be in place prior to setting box and conduits shall be capped. Any gravel or dirt in conduit shall be removed.
2. When required by item descriptive code, construction of an apron encasing a ground box including concrete and reinforcing steel shall not be paid for directly but shall be subsidiary to the ground box. Reinforcing steel may be field bent. Concrete for aprons shall be considered miscellaneous concrete for testing purposes. Aprons shall be cast in place.
3. Conduit holes may be cut in the walls of type B & D boxes at least 18 inches beneath the cover.
4. If, within the limits of this project, the Contractor must utilize an existing ground box equipped with a metal cover, the Contractor shall bond the cover to the grounding conductor with a 3 foot long flexible stranded jumper the same size as the grounding conductor. Connection of bonding jumper to metal ground cover shall not be paid for directly but shall be subsidiary to various bid items. The box(es) must be clearly shown on the plans with plan notes fully describing the work required.
5. If there are other ground boxes with metal Covers within the project limits but not involved in the contract, the Engineer may direct the Contractor to ground the covers, designating and identifying the specific boxes in writing. This work will be paid for separately.
6. Termination to metal ground box covers shall be made using a tank ground type lug.



PLAN VIEW

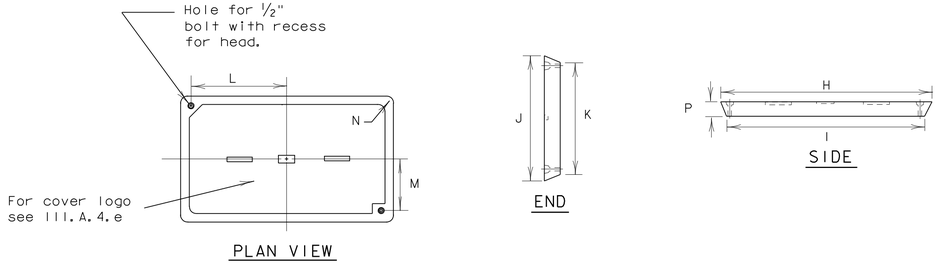


SECTION A - A

APRON FOR GROUND BOXES

(Where required)

(1) Final position of end of conduit shall not exceed one-half the distance to the side of box opposite the conduit entry.
(2) Place gravel "under" the box. not "in" the box. Gravel should not encroach on the interior volume of the box.
(3) Install bushing on the upper end of all ells.
(4) Where a ground rod is present in the ground box, connect it to any and all equipment grounding conductors using a listed connector.
(5) Maintain sufficient space between all conduits so as to allow for proper installation of bushings.
(6) All conduits shall be installed in a neat and workmanlike manner.
(7) All conduits installed in the ground box shall be sealed after completion of conductor installation and any required pull tests. Silicone shall not be used as sealant.



PLAN VIEW

END

GROUND BOX COVER

GROUND BOX COVER DIMENSIONS								
BOX	DIMENSIONS (INCHES)							
SIZE	H	I	J	K	L	M	N	P
A, B & E	23 1/4	23	13 3/4	13 1/2	9 7/8	5 1/8	1 3/8	2
C & D	30 1/2	30 1/4	17 1/2	17 1/4	13 1/4	6 3/4	1 3/8	2

5/03 Revision

1 Revised notes.

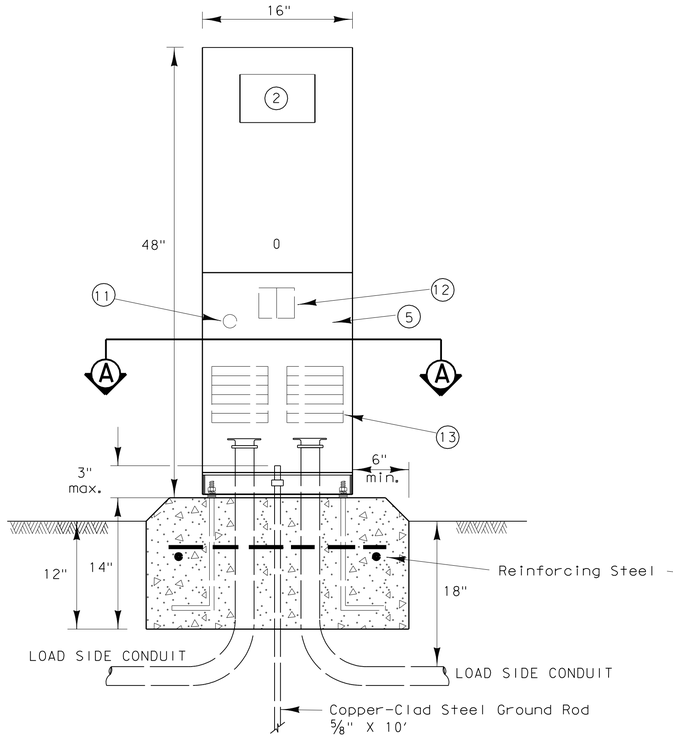
STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

ELECTRICAL DETAILS- GROUND BOXES

ED(3)-03

DN: KB	CK: JW	DW: DN	CK: GC	MEG NO.:

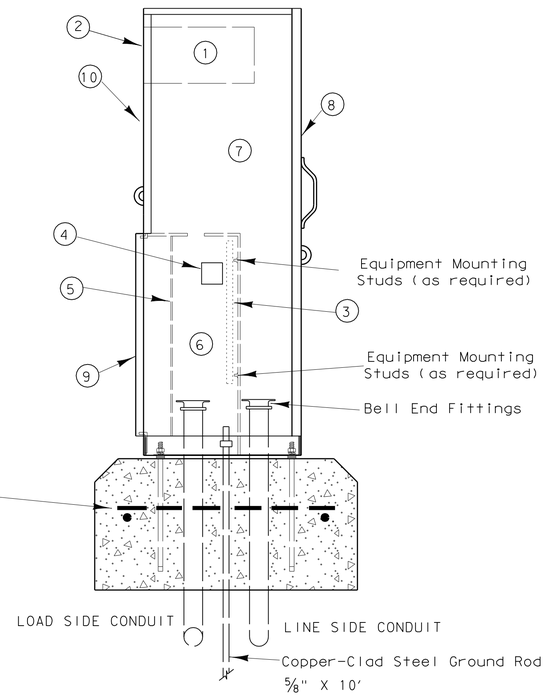
REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
4-98				
12-00		6		C809
3-03	COUNTY	CONTROL	SECTION	JOB / HIGHWAY
5-03				



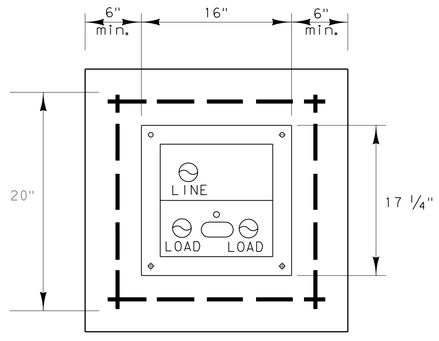
Note: Ells in foundation are rigid metal, size called for on the plans. Extension conduits from these ells may be PVC, provided ends of rigid metal conduits are more than 2 in. below top of concrete foundation. Where extension conduits are metal, grounding bushing must be installed and a bonding jumper properly terminated.

FRONT VIEW

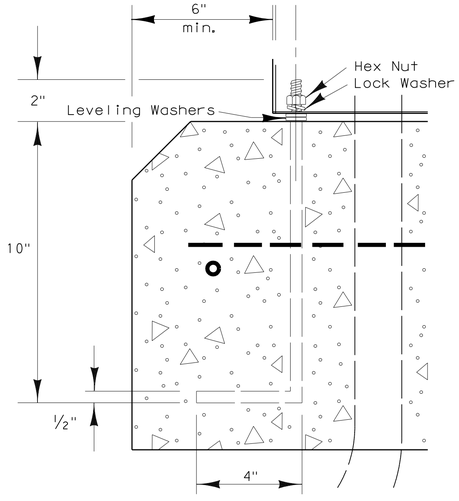
Ty C shown, Ty A similar except that Ty A shall have individual circuit breakers mounted on a equipment mounting panel. CB Handles shall protrude through hinged deadfront trim.



SIDE VIEW



SECTION A-A



ANCHOR BOLT DETAIL

GENERAL NOTES

1. The pedestal service shall be UL type 3R, and shall be constructed of a minimum of 12 guage stainless steel or aluminum as required by descriptive code. Stainless steel shall not be painted. For aluminum, the finish shall be an electrostatic applied poly-urethane baked on powder, light green in color, or color as shown elsewhere and as approved by the Engineer. The front of the interior dead front trim shall be permanently labeled, "Danger High Voltage" with OSHA style label. The exterior of the pedestal service door shall be permanently labeled with a placard as to its use (i.e. Roadway Lighting, Traffic Signals, etc.). Placard shall be neat and professional in appearance. Lettering shall be 1" minimum height.
2. Utility Access Door shall have stainless steel piano hinge and provisions for padlocking.
3. Pedestal door shall have stainless steel piano hinge and stainless steel latch with provisions for padlocking.
4. Meter Access shall be hinged and capable of padlocking.
5. All mounting hardware and installation details of services shall be in accordance with utility company specifications. The Contractor is responsible for contacting the local utility company and obtaining their approval of pedestal details prior to making submittal to the Department and prior to constructing the electrical pedestal service. Any changes required by the utility company shall be noted on the submittals.
6. Meter Socket shall be a minimum of 100 amp rating and shall comply with the local utility requirements.
7. Photoelectric Control shall meet the requirements as shown on ED(5). Shield to control stray light is allowable. The Contractor shall be responsible for proper operation of the photo-electric control. The Contractor shall move and/or adjust or shield the photocell from stray or ambient nighttime light or shall make any other adjustments required for proper operation. The photocell shall face North when practicable. Unless otherwise shown on the plans, the photocell shall turn on the illumination system at 1.0 +(-) 0.5 foot-candle and turn off the illumination system at two footcandles higher than turn on.
8. The Control Station (H-O-A Switch) shall be as shown on ED(5) except that H-O-A Switch operating handle shall protrude through hinged deadfront trim and NEMA 1 enclosure will not be required.
9. Concrete for pedestal service foundation shall be class A or C and shall be in accordance with Item 420, "CONCRETE STRUCTURES", except that concrete will not be paid for directly but shall be considered subsidiary to Item 628, "ELECTRICAL SERVICES".
10. Reinforcing steel shall be #4 rebar in accordance with Item 440, "REINFORCING STEEL".
11. Anchor bolts shall be A36M55 in accordance with Item 449, "ANCHOR BOLTS". Anchor bolts shall be 1/2 inch x 12 inches x 4 inches (dia. x length x hook length).
12. All conduit and conductors attached to the pedestal service and within 12 inches of the pedestal service will not be paid for directly, but shall be subsidiary to the pedestal service. All service conduit and conductors from the utility company transformer to a point 12 inches from the pedestal service shall be paid for separately. Service conduit shall be the size and type as shown in the Electrical Service Data.
13. Dimensions may vary to accomodate required equipment, utility company requirements, or manufacturer's standard equipment dimensions. The Contractor shall submit to the Engineer for approval, six (6) copies of brochures and/or drawings of the pedestal service to be supplied, including actual dimensions, and a paint color sample.
14. A separate enclosure as shown on ED(4) or ED(5) for photocell shall not be used for pedestal services. Photocell shall be installed as shown here.
15. The pedestal door shall have a mechanically attached data pocket on the inside. Pocket shall be either metal or thermoplastic and shall measure at least 12 inches by 12 inches. The Contractor shall prepare and submit a schematic drawing unique to an individual service. The approved drawing shall be laminated and placed in the document pocket of the service at the time of shipment to the job site. All applicable wiring diagrams and plan sheet layouts for all equipment and branch breaker circuits supplied by that service shall also be laminated and placed in the document pocket prior to shipping.
16. ⚠1 Ground rod clamp to be UL listed for direct burial. All non-conductive coating to be removed from ground rod at clamp location. Ground rod wire to be #6 AWG solid copper. Metal conduit ells to have grounding bushing and bonding jumpers correctly installed.
17. All conduits entering enclosures from underground must be sealed. Silicone shall not be allowed.
18. All conductors shall be megged and pull tested. Traffic signal cable not to be megged after connection, as electronics will be damaged.
19. Top of concrete foundation to be finished in a neat and workman like manner. If leveling washers are used, no more than 1/8 in. height shall be used at any one corner. Maximum dip or rise in foundation is not to exceed 1/8 in per foot. When properly installed, top of service enclosure shall read level front to back and side to side within 1/4 in. Rocking or movement of the service enclosure shall be repaired by the contractor at no cost to the state.
20. Liquidtight flexible metal conduit shall not be allowed on PS type services.

LEGEND

1. METER SOCKET, (when required)
2. METER SOCKET WINDOW, (when required)
3. EQUIPMENT MOUNTING PANEL
4. PHOTO ELECTRIC CONTROL WINDOW, (when required)
5. HINGED DEADFRONT TRIM
6. LOAD SIDE CONDUIT AREA
7. LINE SIDE CONDUIT AREA
8. UTILITY ACCESS DOOR, with handle
9. PEDESTAL DOOR
10. HINGED METER ACCESS
11. CONTROL STATION (H-O-A Switch)
12. MAIN DISCONNECT
13. BRANCH CIRCUIT BREAKERS

5/03 Revision

⚠1 Revised notes.

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

ELECTRICAL DETAILS
ELECTRICAL SERVICE SUPPORT
PEDESTAL SERVICE TYPE PS

ED(8)-03

DN - KB	CK - JW	DW - DN	CK - GC	NEG NO.

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
12-00		6		C810
3-03				
5-03	COUNTY	CONTROL	SECTION	JOB / HIGHWAY

VITRUVIAN WAY

PONTE AVENUE

℄ PROPOSED STREET FOUNTAIN

32'

9' BOC REF

15'

PROPOSED STREET FOUNTAIN

ANEMOMETER CONDUIT

3-#4, 1-#8 IN EXIST 2" CONDUIT FROM EXIST PAP-11, 13

PROPOSED BACKFLOW DEVICE & ENCLOSURE

PROPOSED FOUNTAIN CONTROL VAULT

32' REF

12'-6" REF

6'

13'-6"

EQ EQ

3"SS

1"W

1 1/2"W

VP101

VP102
(UNDER CONSTRUCTION)

EXIST PAP ELECTRICAL PEDESTAL

UGT UGE SL GAS SIG 12"W 10"W 8"W 6"W 4"SS SD FW DW

WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

NORTH

0 5 10 15 20
GRAPHIC SCALE IN FEET
SCALE: 1"=10'

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

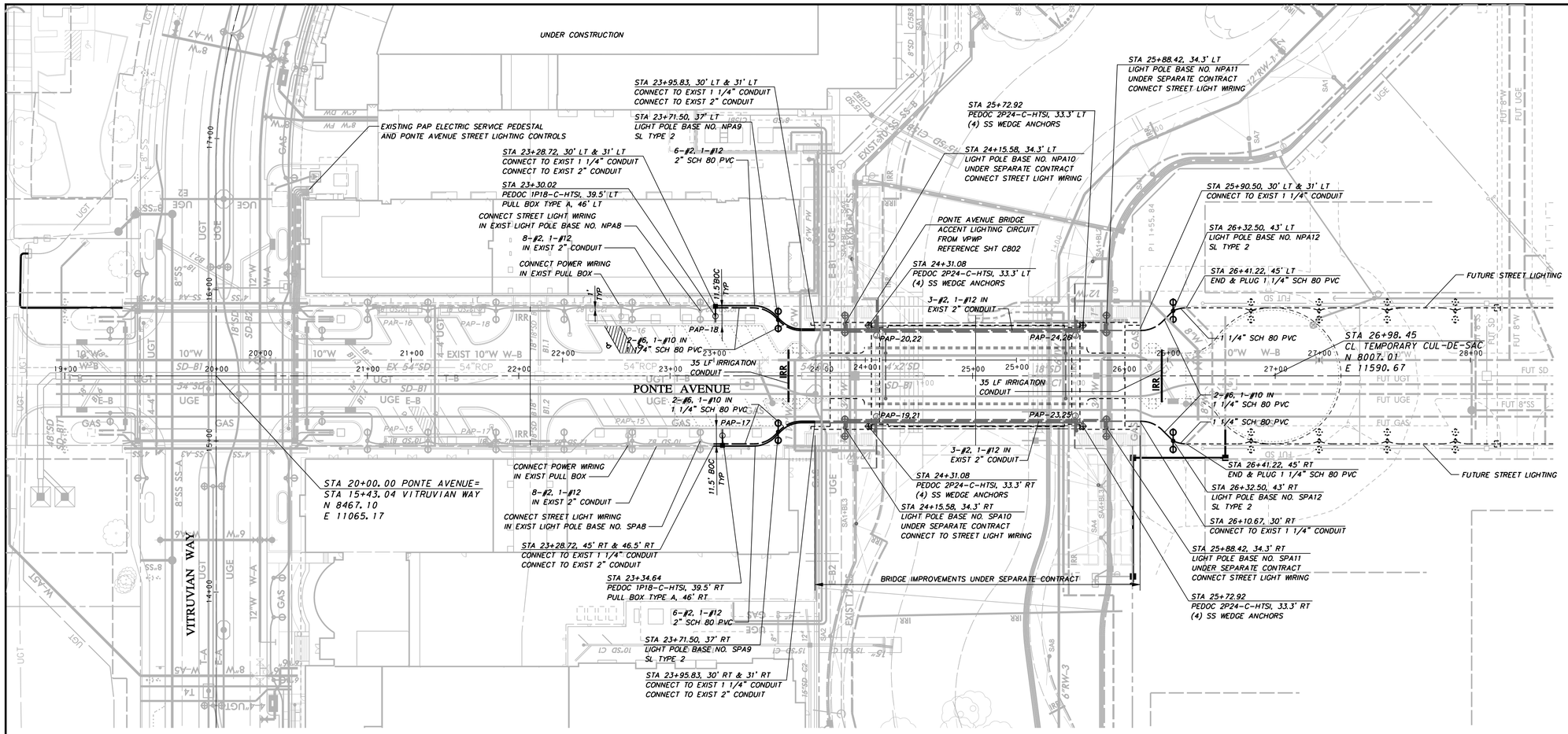
LAYOUT & ELECTRICAL PLAN
STREET FOUNTAIN

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C811

RECORD DRAWINGS 06/18/12

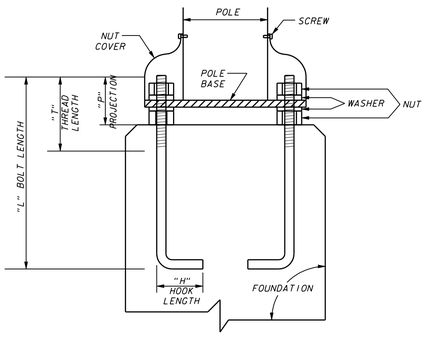
PARK AND STREETSCAPE IMPROVEMENTS - VITRUVIAN PARK



LEGEND

- PULL BOX (GROUND BOX)
- PVC CONDUIT (LIGHTING)
- PVC CONDUIT (POWER)
- TRANSFORMER ON PAD *
- STREET LIGHT – 250W
- STREET LIGHT – FUTURE 250W
- STREET LIGHT – 100W
- STREET LIGHT – FUTURE 100W
- DUPLEX 20A GFCI RECEPTACLE HUBBELL GFR5362SGW OR EQ
- QUAD (2) CIRCUIT 20A GFCI RECEPTACLE, (2) HUBBLE GFR5362SGW OR EQ

* PROVIDED BY POWER COMPANY

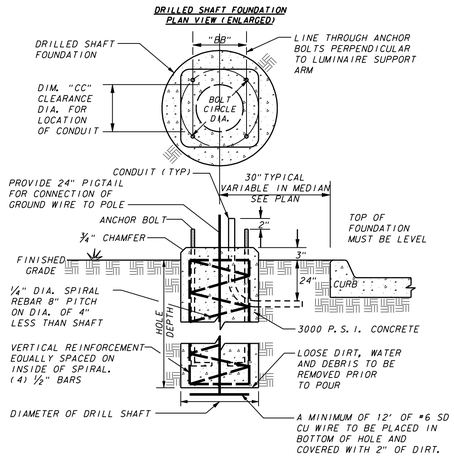


NOTES:
1. USE ANCHOR BOLT TEMPLATE FURNISHED BY POLE MANUFACTURER FOR ANCHOR BOLT ALIGNMENT.
2. ALL EXPOSED HARDWARE TO BE STAINLESS STEEL.

TYPE NO.	BOLT DIA. (IN.)	LENGTH "L" (IN.)	HOOK "H" (IN.)	THREAD "T" (IN.)	PROJECTION "P" (IN.)
45	¾	17	3 ½	5 ½	3 ½
47	1	36	4	6	4

SUPPLY 2 NUTS & 2 WASHERS WITH EACH BOLT

ANCHOR BOLT DETAIL



TYPE NO.	SHAFT DEPTH	SHAFT DIA.	BOLT CIRCLE DIA.	ANCHOR TYPE NO.	CONDUIT CLEARANCE DIM. "CC"	DISTANCE ACROSS BOLTS DIM "BB"
1	60"	18"	9 ½"	45	4 ½"	6 ¾"
2	60"	18"	9 ½"	45	4 ½"	6 ¾"
3	72"	24"	11 ½"	47	7 ½	8 ⅞"
4	72"	24"	11 ½"	47	7 ½	8 ⅞"

DRILLED SHAFT FOUNDATION

STREET LIGHTING & CONDUIT NOTES

1. REFER TO SHEET C100 "GENERAL CONSTRUCTION NOTES, LEGEND AND ABBREVIATIONS" FOR THE GENERAL CONSTRUCTION NOTES FOR THE PROJECT.
2. REFER TO SHEET ED(1)-03 FOR ELECTRIC DETAILS – CONDUIT. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED.
3. REFER TO SHEET ED(2)-03 FOR ELECTRIC DETAILS – CONDUCTORS.
4. REFER TO SHEET ED(3)-03 FOR ELECTRIC DETAILS – GROUND BOXES. RIGID METAL CONDUIT ELBOWS ARE NOT REQUIRED. CONCRETE APRON IS NOT REQUIRED.
5. WATER, SANITARY SEWER, AND STORM DRAIN LINES ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL LOCATE ALL UTILITY LINES IN THE AREA PRIOR TO DIGGING.
6. INSTALL SCHEDULE 40 PVC UNDERGROUND (24" MIN COVER) . ALL STREET AND DRIVEWAY CROSSINGS (30" MIN COVER). ALL BENDS TO LONG RADIUS.
7. ALL CONDUIT AT POLE BASES TO BE WITHIN THE DRILLED SHAFT FOUNDATION. NO EXPOSED CONDUIT AT POLE BASES WILL BE ALLOWED
8. SL TYPE 2 – TWIN 100W 240V MH LUMINARE ON 11'-8" POLE, COLOR SILVER– REFERENCE SPECIAL PROVISIONS
9. CONNECTION TO POWER COMPANY CIRCUITS TO BE MADE ONLY BY POWER COMPANY.
10. UNLESS OTHERWISE INDICATED ALL WORK SHALL CONFORM TO THE 2008 NATIONAL ELECTRICAL CODE (NFPA 70) AND THE 2007 NATIONAL ELECTRICAL SAFETY CODE (ANSI C2).
11. ALL EMPTY CONDUIT INSTALLED FOR FUTURE EXTENSION SHALL BE TURNED UP AND EXTENDED UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS.
12. REFER TO REFERENCED SHEETS FOR STREET LIGHTING DETAILS.
13. IRRIGATION SLEEVES "IRR" SHALL CONSIST OF 1–6" SCH 40 PVC AND 1–2" SCH 40 PVC INSTALLED WITH MINIMUM 24" COVER AND EXTENDING 2' BEYOND THE BACKS OF CURB OR EDGE OF PAVEMENT AND UP TO FINISHED GRADE. CAP ENDS OF ALL CONDUITS.

WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE
1127' NORTH OF VITRUVIAN WAY.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.

STATE OF TEXAS
BRUCE F. DUNNE
62654
LICENSED PROFESSIONAL ENGINEER

NO.	REVISION	BY	DATE

Addison

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

PARK AND STREETSCAPE IMPROVEMENTS
VITRUVIAN PARK

STREET LIGHT & CONDUIT PLAN PA

icon Consulting Engineers, Inc.
Civil Engineers - Designers - Planners
250 W. Southlake Blvd., Suite 117
Southlake, Tx 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5029-01	ICE	ICE	APR 26, 2010	PW# 2009-04	C812

PARK AND STREETSCAPE IMPROVEMENTS – VITRUVIAN PARK

RECORD DRAWINGS 06/18/12