

12/22/14 L:\LAS VEGAS\143995-SMALL DIAMETER ASSESSMENT - YEAR 4\1-CADD\2-SHEETS\GENERAL\143995-G02.DWG

ABBREVIATIONS

AC	AT	MLCP	MULTI-LAYER COMPOSITE PIPE
ACP	ASBESTOS CEMENT PIPE	NPC	NEVADA POWER COMPANY
AEP	AUTHORIZATION TO ENTER PROPERTY	NHS	NOT TO SCALE
APPROX.	APPROXIMATE	OHP	OVERHEAD POWER LINE
B/C, BC	BACK OF CURB	PC	POINT OF CURVE
BCR	BACK OF CURB RADIUS	PCB	POURED CONCRETE BOX
BM	BENCHMARK	P.I.P.	PROTECT IN PLACE
BOT	BOTTOM	PP	POWER POLE
B.R.	BACK OF RAMP	PT	POINT OF TANGENCY
CHP	CURED IN PLACE PIPE	PRC	POINT OF REVERSE CURVE
CL	CENTERLINE	PB	PULLBOX
CTV	CABLE T.V.	PL	PROPERTY LINE
CLV	CITY OF LAS VEGAS	PVC	POLYVINYL CHLORIDE
COMM.	COMMERCIAL	R	RADIUS
CONC.	CONCRETE	RCP	REINFORCED CONCRETE PIPE
COND.	CONDUCTOR	RT	RIGHT
CLSM	CONTROLLED LOW STRENGTH MATERIAL	R/W, R.O.W.	RIGHT OF WAY
C & G	CURB AND GUTTER	S	SLOPE
D/W	DRIVEWAY	SD	STEEL CYLINDER CONCRETE PIPE
DI	DUCTILE IRON	SD	STORM DRAIN
DWG.	DRAWING	SF	SQUARE FOOT
ECR	END OF CURB RETURN (AT B/C)	SH	SHEET
EFT	EFFLUENT	SS	SANITARY SEWER
ELEC.	ELECTRIC	STA.	STATION
EOP, EP	EDGE OF PAVEMENT	STD.	STANDARD
ELEV.	ELEVATION	STL	STEEL
EL	ELBOW	STRUCT.	STRUCTURE
EW	EFFLUENT WATERLINE	SY	SQUARE YARD
EXIST., EX.	EXISTING	S/W	SIDEWALK
EXOH	EXISTING OVERHEAD UTILITY	T	TELEPHONE LINE
FD	FOUND	TC	TOP OF CURB
FL	FLOWLINE	TEL	TELEPHONE
FG	FINISHED GRADE	TRANS.	TRANSITION
FH	FIRE HYDRANT	T.R.C.	TOP OF RAMP CURB
FM	FORCE MAIN	TS	TRAFFIC SIGNAL
FT	FOOT/FEET	TYP.	TYPICAL
FC	FACE OF CURB	UG	UNDERGROUND
G	GAS	U.S.D.	UNIFORM STANDARD DRAWING
GV	GAS VALVE	WC	WATER LINE
GW	GUY WIRE	WM	WHEEL CHAIR
HP	HIGH PRESSURE	WPCF	WATER METER
INT.	INTERSECTION	W	WATER POLLUTION CONTROL
INV.	INVERT	WV	WATER VALVE
L	LENGTH	W/	WITH
LF	LINEAL FOOT, LINEAR FEET	△	INCLUDED DELTA ANGLE
LT	LEFT		
MH	MANHOLE		

BASIS OF BEARINGS

NORTH 27°40'11" EAST-BEING THE CENTERLINE OF THIRD STREET BETWEEN CLARK AVENUE AND LEWIS AVENUE AS SHOWN ON FILE 185 OF SURVEY, PAGE 61, OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK ID BRIDGERS, 2008 ADJUSTMENT (UPDATED 05/24/2010) BEING A RIVET & PLATE IN TOP OF CURB @ NE CORNER OF LAS VEGAS BLVD & BRIDGE

PUBLISHED ELEVATION: 612.837m/2010.62 FT.

SCOPE OF WORK

INSTALL DISCHARGE PIPING FROM AN EXISTING SUMP PUMP TO AN EXISTING SANITARY SEWER MANHOLE. ABANDON EXISTING DISCHARGE LINE TO EXISTING STORM DRAIN. REPLACE CONTROL PANEL TO SUMP PUMPS.

LEGEND

---	CENTERLINE
---	RIGHT OF WAY LINE
---	PROPERTY LINE
---	AUTHORIZATION TO ENTER PROPERTY (AEP)
---	EDGE OF ASPHALT
---	EXISTING CMU WALL
---	EXISTING CMU RETAINING WALL
---	EXISTING CHAINLINK FENCE
---	EXISTING SANITARY SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING EFFLUENT WATER LINE
---	EXISTING GAS LINE
---	EXISTING CABLE TELEVISION
---	EXISTING UNDERGROUND TELEPHONE
---	EXISTING UNDERGROUND POWER
---	EXISTING OVERHEAD POWER
+	BENCHMARK
+	EXISTING CABLE T.V. PULL BOX
+	EXISTING ELECTRIC VAULT/PULL BOX
+	EXISTING ELECTRIC MANHOLE
+	EXISTING FIRE HYDRANT
+	FOUND MONUMENT AS NOTED
+	EXISTING GAS VALVE
+	EXISTING POWER OR TELEPHONE POLE
+	EXISTING SANITARY SEWER MANHOLE
+	SET MONUMENT AS NOTED
+	EXISTING SIGN
+	EXISTING STORM DRAIN MANHOLE
+	EXISTING STREET LIGHT
+	EXISTING STREET LIGHT PULL BOX
+	EXISTING TELEPHONE MANHOLE
+	EXISTING TELEPHONE PULL BOX
+	EXISTING WATER METER
+	WATER VALVE
+	EXISTING LIGHT POLE
+	EXISTING GUY WIRE
+	EXISTING TREE
+	EXISTING TREE OR LANDSCAPING LINE
+	DEMOLITION

LVVWD STANDARD NOTES

LVVWD PROJECT # 122995

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT# IDENTIFIED ABOVE.
- ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS), THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3602, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
- ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD PRE-APPROVED MATERIALS AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
- TELEPHONE "CALL BEFORE YOU DIG" AT 811 OR 1-800-227-2600.
- THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ADJUTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.

APPROVED FOR CONSTRUCTION

[Signature]
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
MANAGER
PROJECT NO. 122995 DATE: 1/4/15
(NO NEW FACILITIES)

CODE ANALYSIS

CODE YEAR: 1997 UBC
• IMPROVEMENTS 2012 UPC *
• 2011 NEC **
OCCUPYING GROUP: GROUP S-3
TYPE OF CONSTRUCTION: TYPE I FIRE RESISTIVE
FIRE SPRINKLERS: YES FULL SPRINKLERS
BUILDING HEIGHT/STORIES: 2 STORIES ABOVE GROUND
BUILDING SQ. AREA-BASEMENT: 63,610 SF, UPPER LEVEL 63,610
SF TOTAL = 190,830 SF

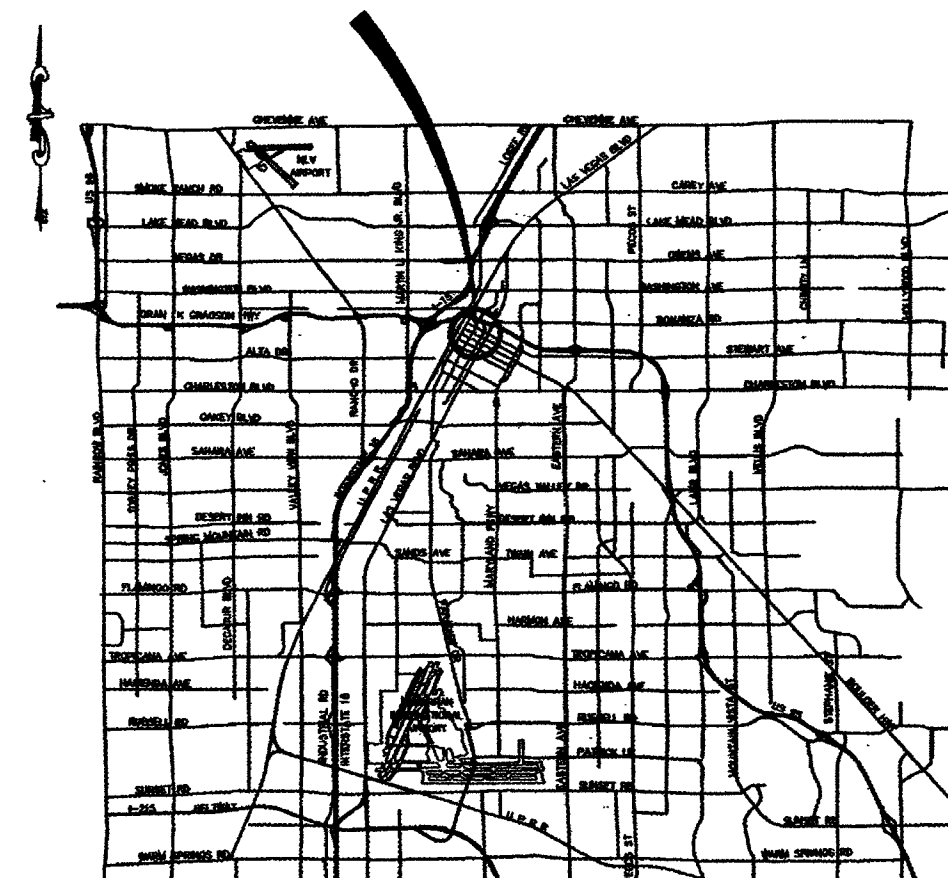
* THIS IS AN ENGINEERED SYSTEM.

** ELECTRICAL EQUIPMENT IS BEING REPLACED IN-KIND.

Brown and Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082

PROJECT VICINITY



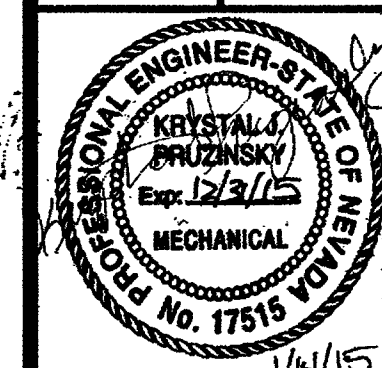
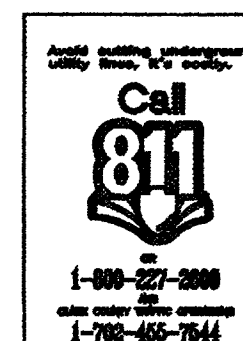
VICINITY MAP

NOT TO SCALE

SHEET INDEX

SHEET NUMBER	DRAWING NUMBER	DESCRIPTION
1	G-01	COVER SHEET
2	G-02	LEGEND, VICINITY MAP AND SHEET INDEX
3	G-03	CITY OF LAS VEGAS GENERAL NOTES
4	G-04	SITE PLAN
5	D-01	DEMOLITION PLAN
6	C-01	PIPING PLAN AND PROFILE
7	C-02	MISCELLANEOUS DETAILS
8	E-01	SYMBOLS, ABBREVIATIONS AND NOTES
9	E-02	STANDARD CONTROL AND ONE-LINE DIAGRAM LEGENDS AND SYMBOLS
10	E-03	DETAILS
11	E-04	PARKING GARAGE SUMP PUMPS
12	E-11	CONTROL PANEL SCHEMATICS 1 OF 3
13	E-12	CONTROL PANEL SCHEMATICS 2 OF 3
14	E-13	CONTROL PANEL SCHEMATIC 3 OF 3

AS BUILT



Sheet
G-02
2 of 14
DRAWING NO.
307V1096

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION

TITLE: CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS
LEGEND, VICINITY MAP
AND SHEET INDEX

SHEET:

DESIGNED BY: JPO
DRAWN BY: DD
CHECKED BY: KP
DATE: 11/20/2014

NO. DATE: DESCRIPTION APPD

CITY OF LAS VEGAS GENERAL NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 'UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA', LATEST EDITION; THE 'UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA, NEVADA', LATEST EDITION; THE 'SUMMERLIN IMPROVEMENT STANDARDS FOR WORK IN THE SUMMERLIN AREA' AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS DEVIATIONS FROM STANDARDS.
 - THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CIVIL PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
 - THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
 - ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS. ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
 - TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
 - PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS EVERY FOR THIS CONSTRUCTION.
 - EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
 - AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE UP OF ALL GUTTERS AFTER COMPACTION. EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
 - CURB AND GUTTER FLOW TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
 - SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
 - CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
 - ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE (COMPANY) REPORT #, DATE) APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
 - EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
 - THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
 - UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
- WALL NOTES:
- ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
 - ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
 - CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC., TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
 - MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
 - WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC. THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
 - SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S) SHALL BE PROVIDED TO THE OFFSITE INSPECTION AND TESTING SECTION PRIOR TO PROJECT ACCEPTANCE. THE MAP(S) SHALL INCLUDE THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, AND THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXITS THE PUBLIC RIGHT-OF-WAY. THE LOCATION SHALL BE DESCRIBED BY STATE PLANE COORDINATES WHICH SHALL BE BASED ON THE NEVADA COORDINATE SYSTEM OF 1983, EAST ZONE AS DEFINED BY THE NEVADA REVISED STATUTES CHAPTER 327, AND TIED TO THE CITY OF LAS VEGAS VERTICAL CONTROL BENCHMARK NETWORK. COORDINATES MUST BE CERTIFIED BY A NEVADA PROFESSIONAL LAND SURVEYOR TO HAVE POSITIONAL CERTANTIES OF +/- 0.1 METER (+/- 0.3 FEET). A SEPARATE ELECTRONIC COMMA DELIMITED FILE FOR THE SANITARY SEWER AND STORM DRAIN COORDINATES SHALL ALSO ACCOMPANY THE SANITARY SEWER AND STORM DRAIN FINAL LOCATION MAP(S).
 - SANITARY SEWER SERVICE LATERALS REQUIRE THE INSTALLATION OF A MARKER BALL AT THE CONNECTION OF THE SEWER SERVICE LATERAL TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERAL EXITS THE PUBLIC RIGHT-OF-WAY. STORM DRAIN LATERALS REQUIRE THE INSTALLATION OF A MARKER BALL AT THE CONNECTION OF THE STORM DRAIN LATERAL TO THE STORM DRAIN MAIN AND WHERE THE STORM DRAIN LATERAL EXITS THE PUBLIC RIGHT-OF-WAY OR WHERE THE STORM DRAIN LATERAL CONNECTS TO A DROP INLET. THE MARKER BALL SHALL BE 3M 4" MARKER BALL 1404-XR OR APPROVED EQUAL.
 - CCTV VIDEO INSPECTION IS REQUIRED FOR ALL SEWER AND STORM DRAINS. THE CCTV VIDEO INSPECTIONS NEED TO BE PERFORMED PER THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS LATEST ADDITION.
 - A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.

DEVIATIONS FROM STANDARDS

THERE ARE NO DEVIATIONS FROM APPLICABLE CLARK COUNTY STANDARDS, UNLESS STATED IN THE SPECIAL PROVISIONS.

CITY OF LAS VEGAS STREETLIGHT NOTES

- ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST EDITION, AND THE UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST EDITION, AND ANY ADOPTED SPECIAL AREA STANDARDS.
- NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF UTILITY ENGINEERING AND THE CITY ENGINEER.
- ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- ALL STREET LIGHTING CONDUITS STUB SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE INSTALLED, AS TRACER WIRE. WHEN 'EMPTY' CONDUIT IS COMPLETELY INSTALLED FROM PB TO PB, IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #8 THW WIRE WITH THE ENDS TAPED OR 'SAFE OFF' PRIOR TO FINAL INSPECTION.
- ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE USD NO. 320A.
- AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TEFD PRIOR TO ANY PRE-FINAL INSPECTION. THE ASBUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
- SERVICE POINT SHALL BE COORDINATED WITH MY ENERGY COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE CIVIL PLANS.
- IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
- WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED, AT NO EXPENSE TO THE CITY OF LAS VEGAS, BEFORE STREETLIGHT BASES ARE INSTALLED.
- THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
- THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREET LIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS. THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS FOR ALL NEW PUBLIC STREET LIGHTS AND/OR SERVICE/S INSTALLED UNDER THIS PLAN DESIGN WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFD) AT (702) 229-6331.

CITY OF LAS VEGAS TRAFFIC NOTES

- ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', LATEST EDITION.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCORAGED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL BE FABRICATED WITH DIAMOND GRADE VPI CLASS 6 REFLECTIVE SHEETING OR APPROVED EQUAL. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 3M SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. SCHOOL ZONE SIGNS SHALL HAVE 3M SERIES 1160 ANTI-GRAFFITI PROTECTIVE OVERLAY FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
- WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC onto the PORTIONS OF THE ROAD(S) BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
- STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR MESA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
- WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
- ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS OTHERWISE DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT TRANSITIONS, MARKINGS AND SIGNING THAT ARE REQUIRED TO MATCH ADJACENT ROADWAY SEGMENTS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING TOY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

CITY OF LAS VEGAS GENERAL NOTES

LAS VEGAS FIRE & RESCUE GENERAL NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT'S ORDINANCE # 5667, 'HYDRANT SPECIFICATIONS', AND HYDRANT INSTALLATION SPECIFICATION.
- AUTHORIZED FIRE HYDRANTS FOR THIS PROJECT ARE:
A. KENNEDY - GUARDIAN MODELS KB1A AND KB1D
B. MUELLER - SUPER CENTURION 250 MODEL A-423
C. CLOW - MEDALLION MODEL F-2546LVO
D. TROY VALVE - PATRIOT MODEL PT8100N NEVADA HYDRANT
E. U.S. PIPE - METROFLOW/M-03
- ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW.
- TO IDENTIFY THE FIRE HYDRANT LOCATIONS, CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF STREET ADJACENT TO THE FIRE HYDRANTS AS REQUIRED BY ORDINANCE # 5667.
- ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CALL THE CITY OF LAS VEGAS INSPECTION HOT-LINE AT 229-2071 TO REQUEST AN INSPECTION BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- PAINTING OF THE CURBS AND FIRE HYDRANTS AND ALL OTHER WORK NECESSARY AS REQUIRED BY ORDINANCE # 5667, FOR THE PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- A PERMIT IS REQUIRED FROM THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR THE ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK.
- PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.
- PRIOR TO THE FINAL OCCUPANCY, A FLOW TEST MUST BE WITNESSED BY THE CITY OF LAS VEGAS FIRE DEPARTMENT TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW.
- ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A. APPROVED, AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE.
- FIRE HYDRANTS SPACING SHALL BE:
RESIDENTIAL - 600 FEET UNSPRINKLERED; 600 FEET SPRINKLERED.
COMMERCIAL - 300 FEET UNSPRINKLERED; 400 FEET SPRINKLERED.
- WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT MAXIMUM 1,000 FOOT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR OR MORE TRAFFIC LANES AND HAVE A COUNT OF MORE THAN 30,000 PER DAY, HYDRANTS ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FEET ON AN ALTERNATING BASIS.
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION.
- THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FEET AS MEASURED BY AN APPROVED ROUTE.
- THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FEET, AS MEASURED BY AN APPROVED ROUTE.
- THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FEET.
- TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM. SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN.
- ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS.
- THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 26 FEET PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%.
- THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FEET OUTSIDE AND 28 FEET INSIDE TURNING RADIUS.
- VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL BE NOT LESS THAN 13 FEET 6 INCHES.
- FIRE DEPARTMENT ACCESS ROADS IN ALL RESIDENTIAL DEVELOPMENTS (EXCEPT FOR THE APARTMENT BUILDINGS) SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 36 FEET FLOW LINE TO THE FLOW LINE (THIS WIDTH MAY BE REDUCED TO 24 FEET, IF ALL BUILDINGS FRONTING THE STREET ARE SPRINKLERED) FOR MAIN RESIDENTIAL STREETS, WITH PARKING PERMITTED ON BOTH SIDES OF THE STREET. PRIVATE DRIVE AISLES, DRIVEWAYS, ETC. SHALL BE ALLOWED TO BE REDUCED TO A MINIMUM WIDTH OF 24 FEET WIDE FLOW LINE TO THE FLOW LINE WHEN SERVING NO MORE THAN 6 RESIDENCES, AND WHEN ON STREET PARKING IS DISALLOWED.
- ALL FIRE APPARATUS ACCESS ROADS IN COMMERCIAL DEVELOPMENTS AND APARTMENT COMPLEXES SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 24 FEET (FLOW LINE TO THE FLOW LINE), PROVIDED NO PARKING IS ALLOWED ON EITHER SIDE; 32 FEET (FLOW LINE TO THE FLOW LINE), IF PARALLEL PARKING IS ALLOWED ON ONE SIDE ONLY; AND 40 FEET (FLOW LINE TO THE FLOW LINE), IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. THESE WIDTHS MAY BE REDUCED BY 4 FEET IF ALL BUILDINGS ARE SPRINKLERED.
- A FIRE DEPARTMENT ACCESS ROAD SHALL EXTEND TO WITHIN 50 FEET OF A SINGLE EXTERIOR DOOR PROVIDING ACCESS TO THE INTERIOR OF THE BUILDING.
- A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 250 FEET IF THE BUILDING IS SPRINKLERED.
- APPROVED SECONDARY FIRE APPARATUS ACCESS SHALL BE PROVIDED FOR 100 OR MORE DWELLING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FEET, AND FOR ALL COMMERCIAL, INDUSTRIAL, AND MULTI-FAMILY RESIDENTIAL DEVELOPMENTS.
- ALL DEAD-END FIRE APPARATUS ACCESS ROADS AND OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND AREA HAVING A MINIMUM DIAMETER OF 81 FEET.
- ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE. ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS 100 FEET ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FEET OR LESS THAN 6 FEET FROM ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT IF A CURB IS NOT PROVIDED SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

Brown and Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082

CITY OF LAS VEGAS SEWER NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF DESIGN AND CONSTRUCTION STANDARD FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY PLANNING ENGINEER.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
- ALL MANHOLES IN PAVED STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" 'S SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
- WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWMD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY PLANNING ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
- INSTALLATION OF CURVED SEWERS REQUIRED THE USE OF C-900 PVC PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

CITY OF LAS VEGAS GRADING NOTES

- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
- CONTRACTOR SHALL TAKE THE RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
- THE CONTRACTOR IS WARRANTED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
- THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
- CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED: HORIZONTAL VERTICAL COMPACTION
A. PAVEMENT AREA SUBGRADE 0.1+ +0.0 TO -0.1" SEE SOILS REPORT.
B. ENGINEERED FILL 0.5+ +0.1 TO -0.1" SEE SOILS REPORT COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
- THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
- THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
- IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

AS BUILT

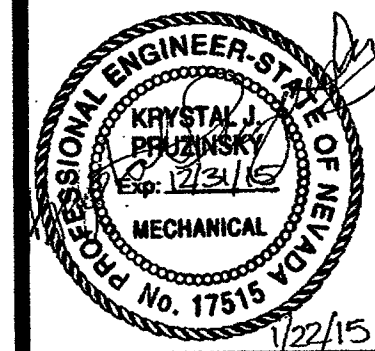
REVISIONS	DESCRIPTION	DATE	APPD

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION



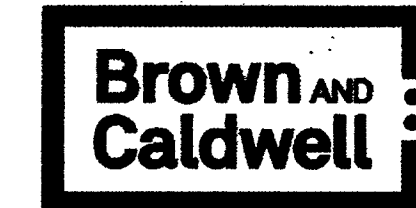
CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS

CITY OF LAS VEGAS
GENERAL NOTES

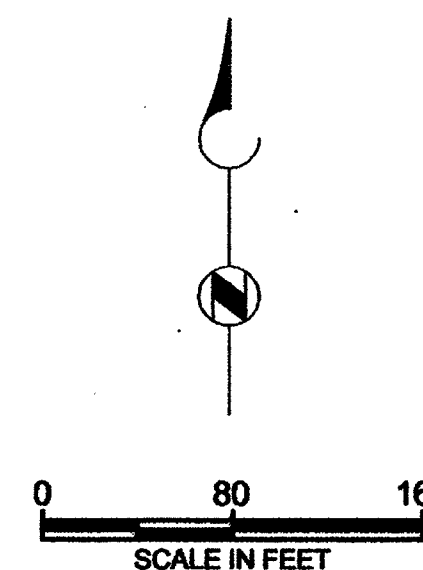


Sheet
G-03
3 of 14
DRAWING NO.
307V1076

1/14/15 P:\LAS VEGAS\143895-SMALL DIAMETER ASSESSMENT - YEAR 4\1-CADD\2-SHEETS\GENERAL\43895-G04.DWG

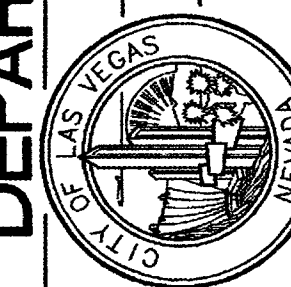


8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082



REVISIONS		NO.	DATE	DESCRIPTION	APP'D

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION



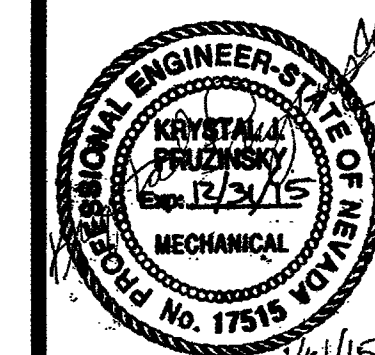
DESIGNED BY: JPO
DRAWN BY: DD
CHECKED BY: KP

DATE: 11/20/2014

TITLE: CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS

SHEET:

SITE PLAN



Sheet

G-04

4 of 14

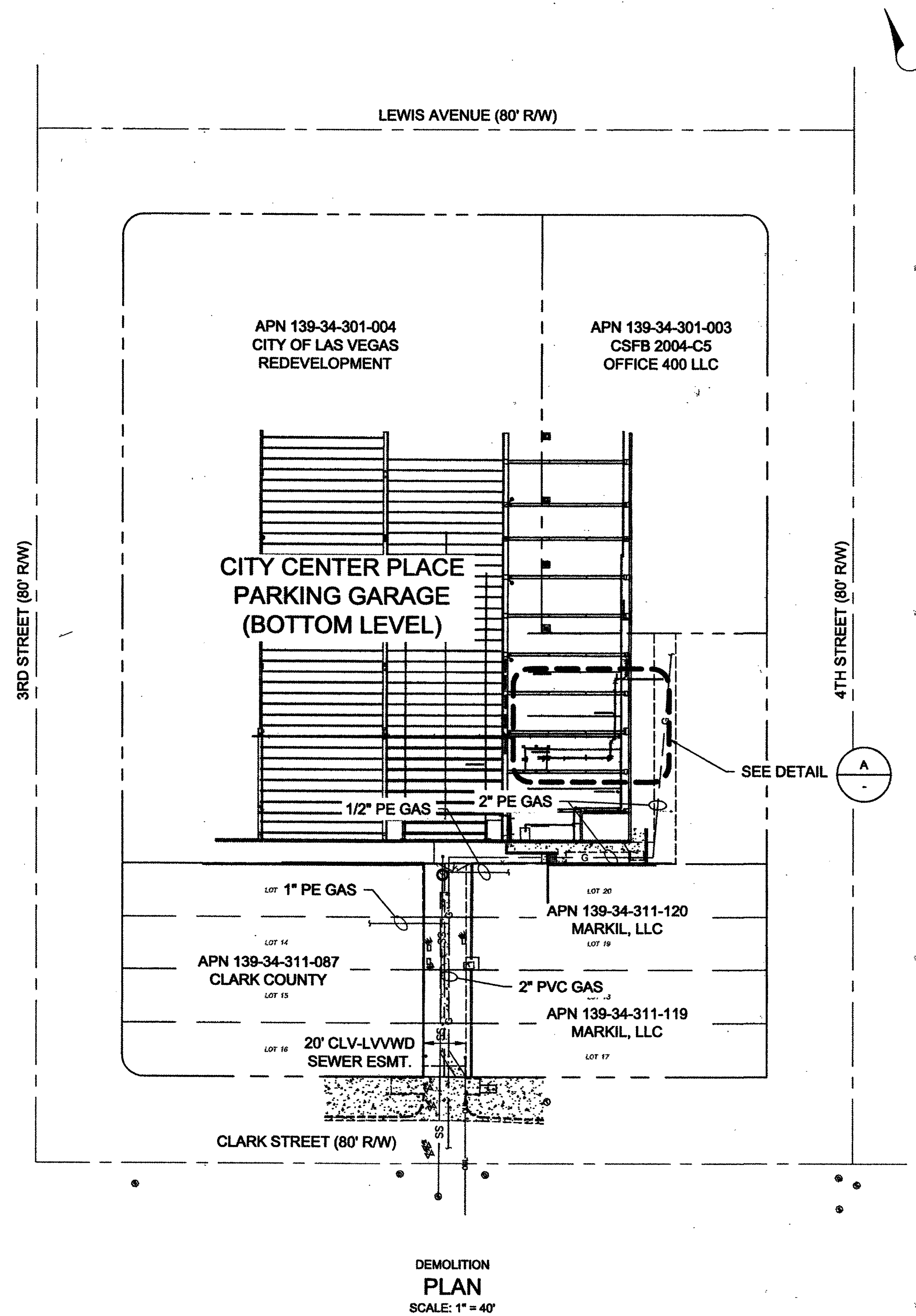
DRAWING NO.
307V1096

AS BUILT

APPROVED FOR CONSTRUCTION

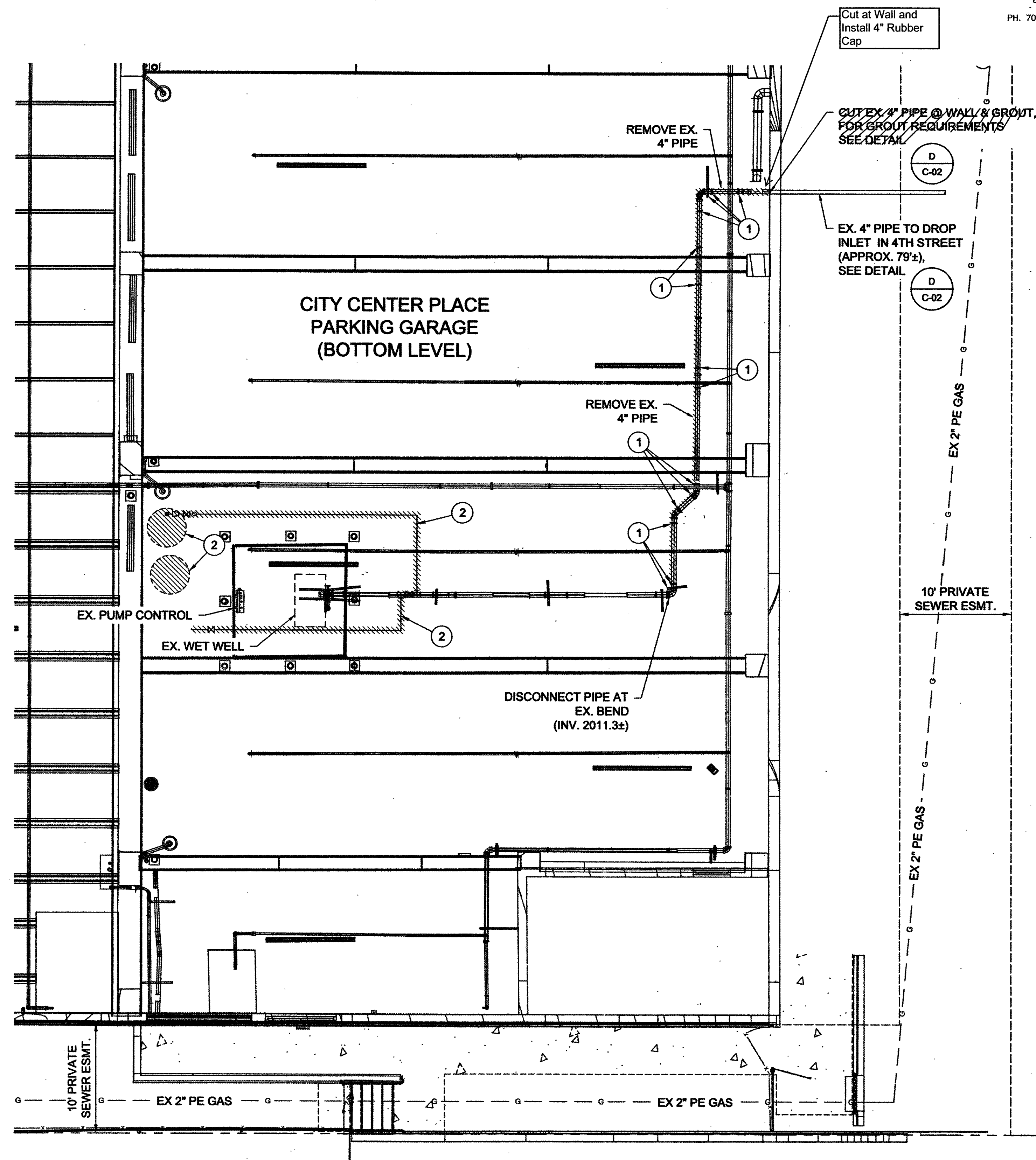
Dishon, Jr.
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
MANAGER
PROJECT NO. 122995 DATE: 1/14/15
(NO NEW FACILITIES)

1/22/15 L:\LAS VEGAS\143895-SMALL DIAMETER ASSESSMENT - YEAR 4\11-CADD\2-SHEETS\DEMOLITION\143895-D01.DWG



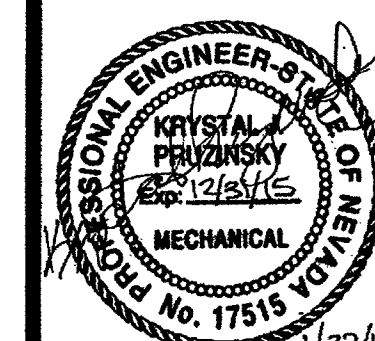
KEY NOTES:

- 1 REMOVE EXISTING PIPE HANGER
- 2 REMOVE EXISTING CARBON FILTER SYSTEM INCLUDING PIPING AND APPURTENANCES AND DELIVER TO CITY



DEMOLITION
DETAIL
SCALE: 1" = 6'

AS BUILT



Sheet
D-01
5 of 14
DRAWING NO.
307V1096

Brown and Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89115
PH. 702-938-4080 FAX 702-938-4082

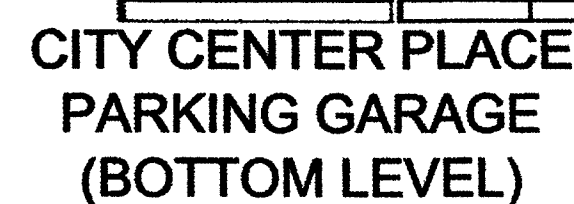
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION

TITLE: CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS

DEMOLITION PLAN

DESIGNED BY: JPO
DRAWN BY: DO
CHECKED BY: KP
DATE: 11/20/2014

REVISIONS	NO.	DATE	DESCRIPTION	APP'D

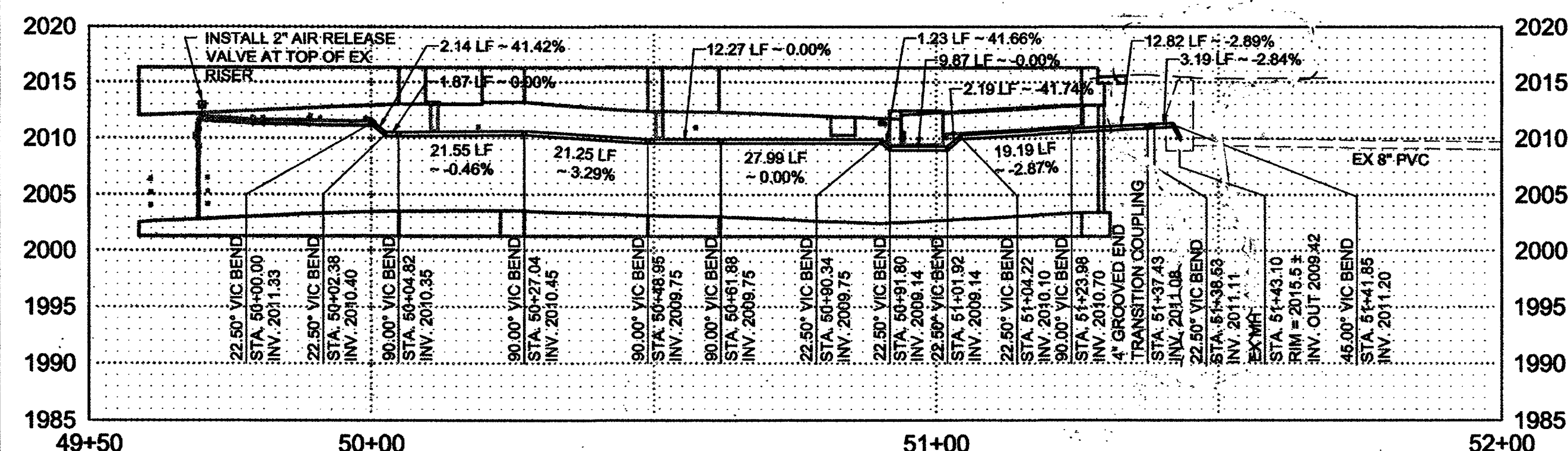


APN 139-34-301-004
CITY OF LAS VEGAS
REDEVELOPMENT

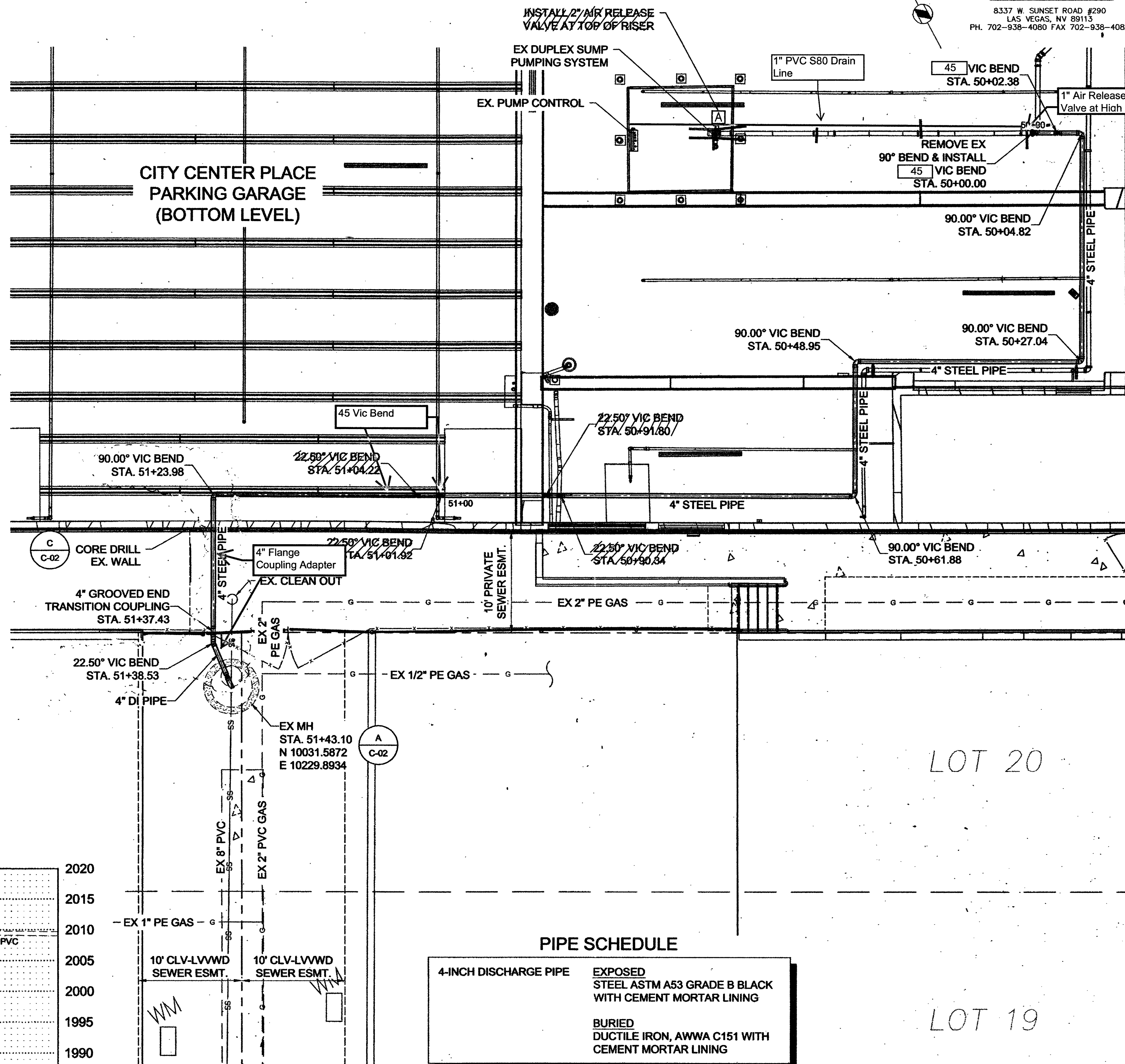
APN 139-34-301-003
CSFB 2004-C5
OFFICE 400 LLC

CLARK STREET (80' R/W)

PLAN
SCALE: 1" = 40'



PROFILE
SCALE H: 1" = 20'
V: 1" = 10'



PIPE SCHEDULE

4-INCH DISCHARGE PIPE EXPOSED
STEEL ASTM A53 GRADE B BLACK
WITH CEMENT MORTAR LINING

BURIED
DUCTILE IRON, AWWA C151 WITH
CEMENT MORTAR LINING

DETAIL
SCALE: 1"

AS BUILT

APPROVED FOR CONSTRUCTION

[Signature]

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
MANAGER

PROJECT NO. 122995 DATE: 1/14/15
(NO NEW FACILITIES)

Brown AND Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082



DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION

CENTER PLACE GROUNDWATER DISCHARGE IMPROVEMENTS

PIPING PLAN AND PROFILE

DESIGNED BY: JPO
DRAWN BY: DD
CHECKED BY: KR

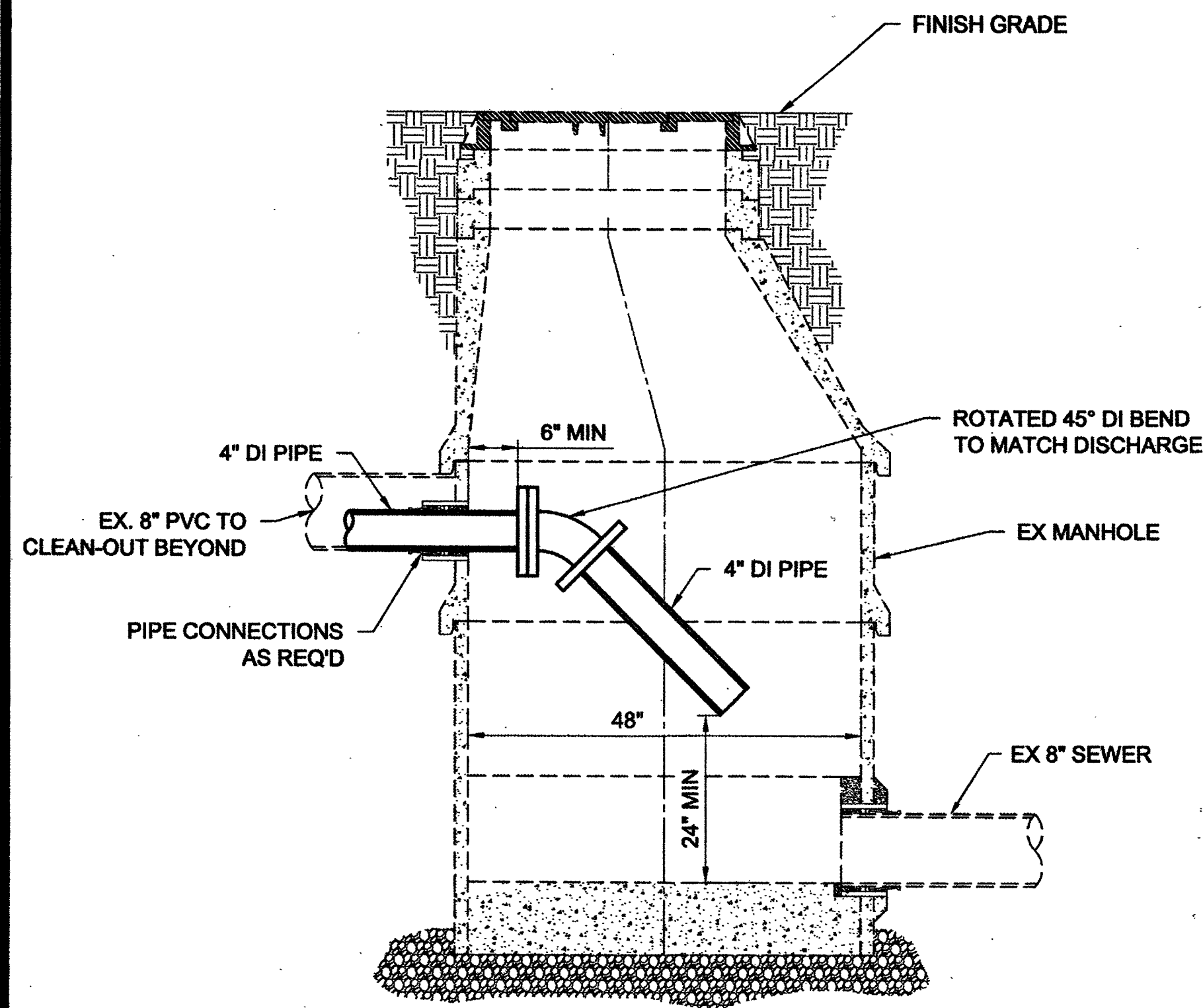
DATE: 11/20/2014

DATE:	...
NIC	...

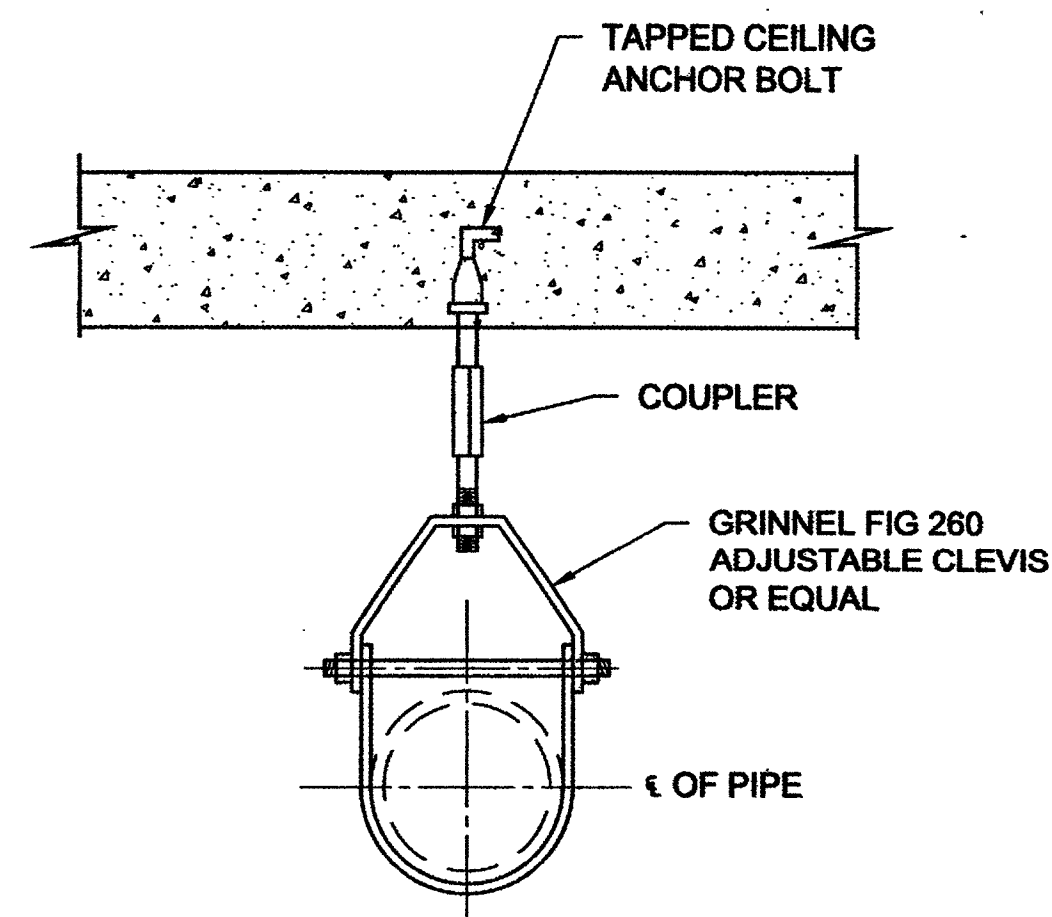
DESCRIPTION	ABB'N
...	...

Sheet
C-01
6 of 14
DRAWING NO.
307V1096

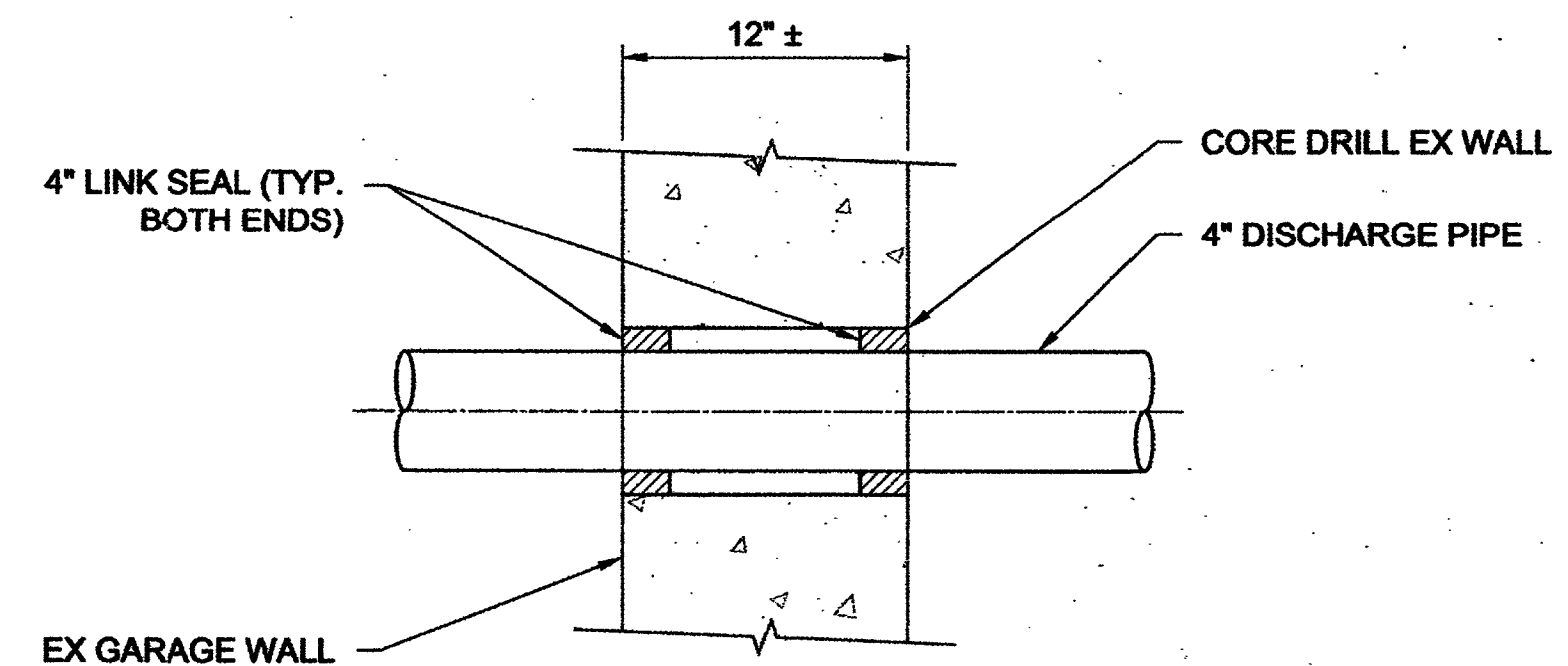
11/18/14 L:\LAS VEGAS\143895-SMALL DIAMETER ASSESSMENT - YEAR 4\11-CADD\2-SHEETS\CIVIL\143895-C02.DWG



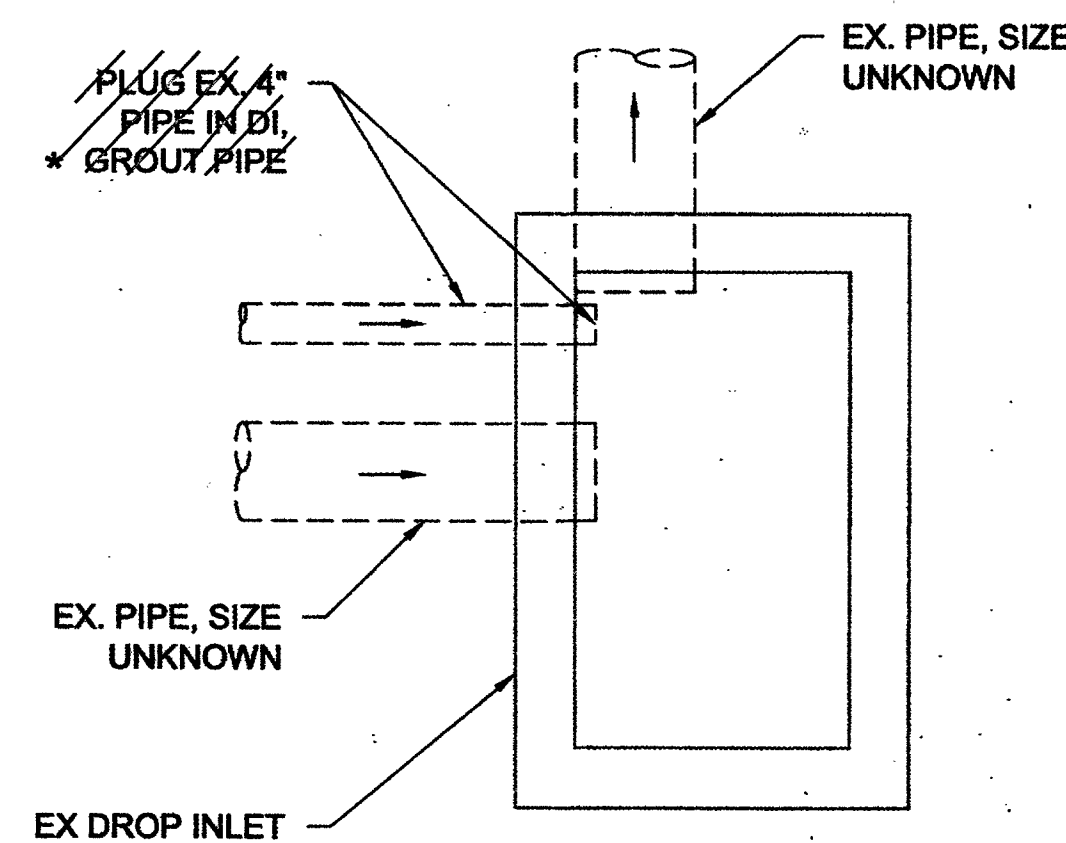
DETAIL A
N.T.S.



DETAIL B
N.T.S.

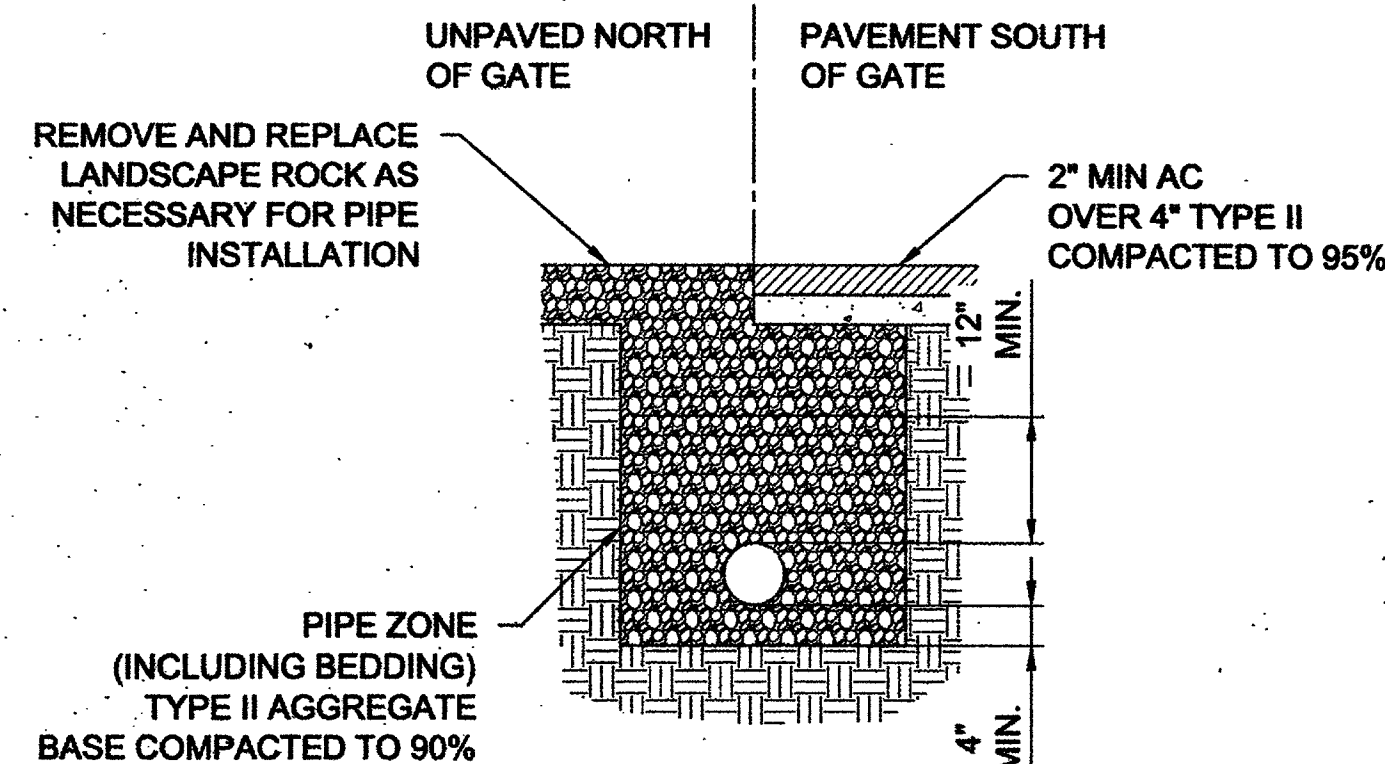


DETAIL C
N.T.S.



DETAIL D
N.T.S.

* GROUT WITH MASTERFLOW 713 BY MASTER BUILDERS, FIVE STAR US GROUT CORP. OR AGENCY APPROVED NON-METALLIC, NON-SHRINK TYPE V GROUT WITH ADDITIVES FOR PROTECTION AGAINST HYDROGEN SULFIDE (H₂S) ATTACK.



DETAIL E
N.T.S.

Brown AND Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082

REVISIONS		NO.	DATE	DESCRIPTION	APP'D

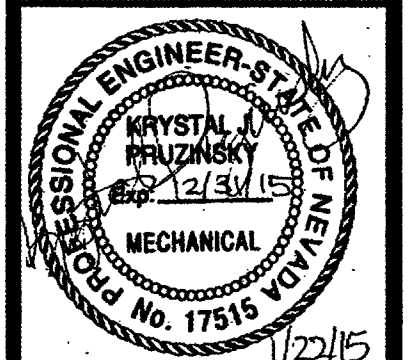
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION



DESIGNED BY: JPO
DRAWN BY: DD
CHECKED BY: KP
DATE: 5/14/2014

TITLE: CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS

SHEET: MISCELLANEOUS DETAILS

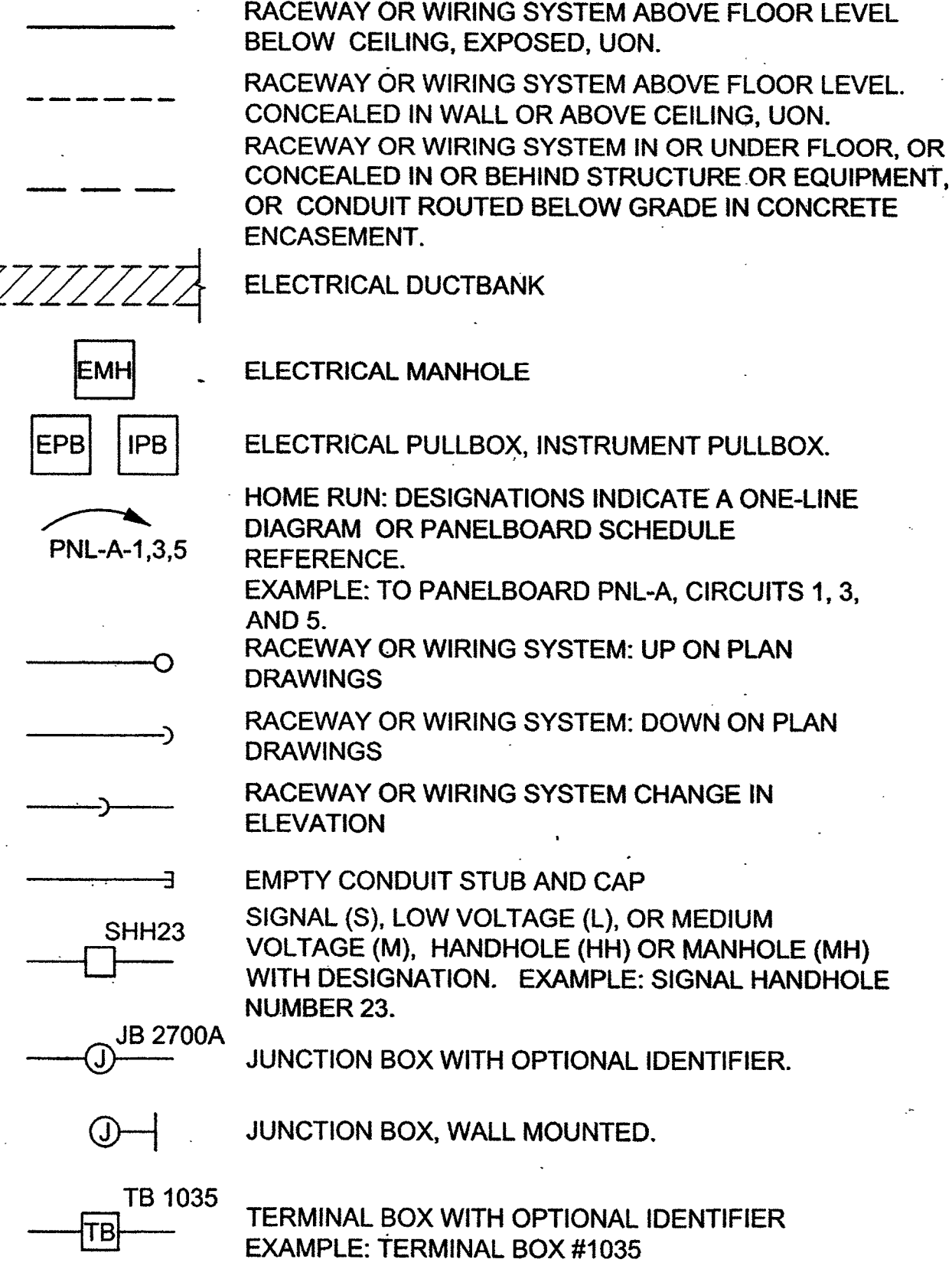


Sheet
C-02
7 of 14
DRAWING NO.
307V1076

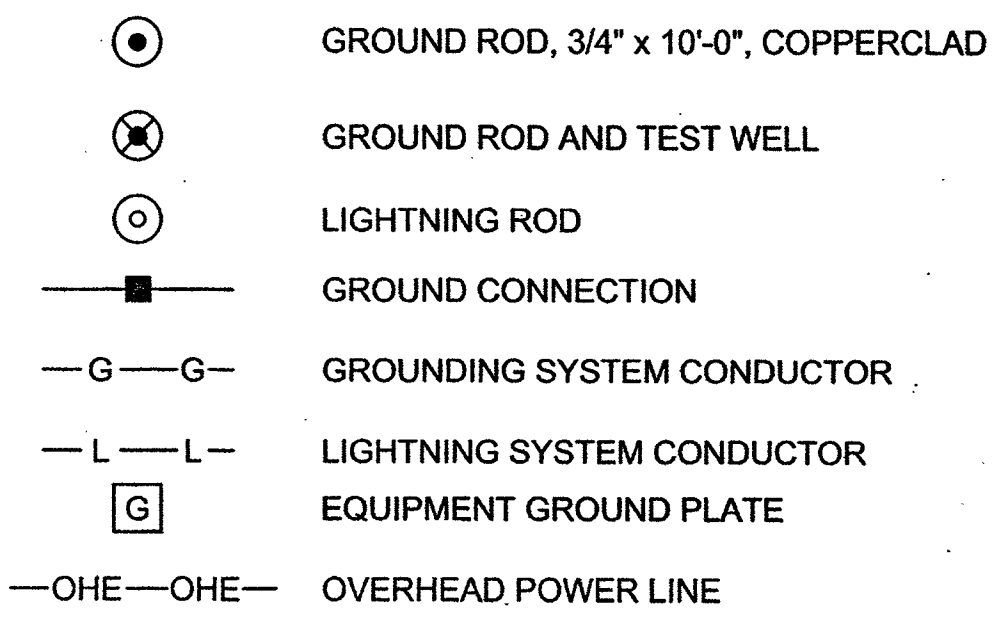
AS BUILT

SYMBOLS:

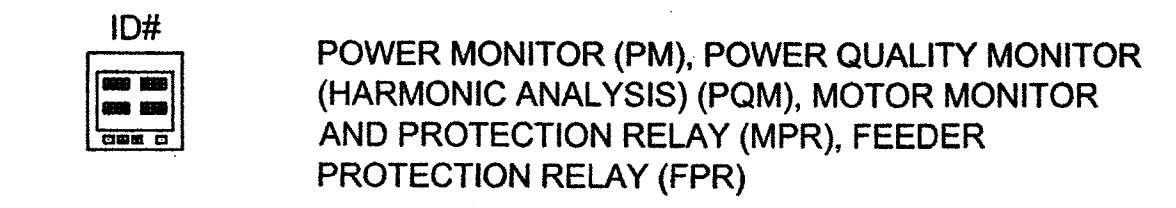
CIRCUIT AND RACEWAYS:



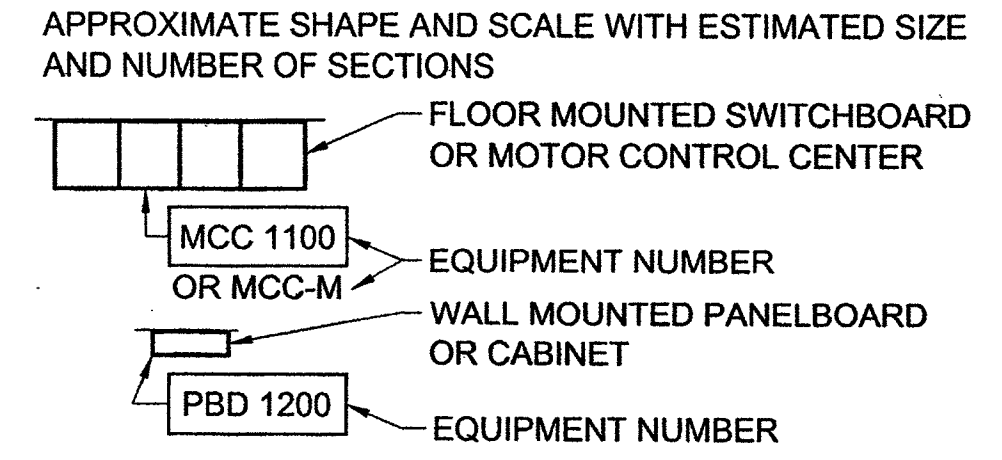
GROUNDING:



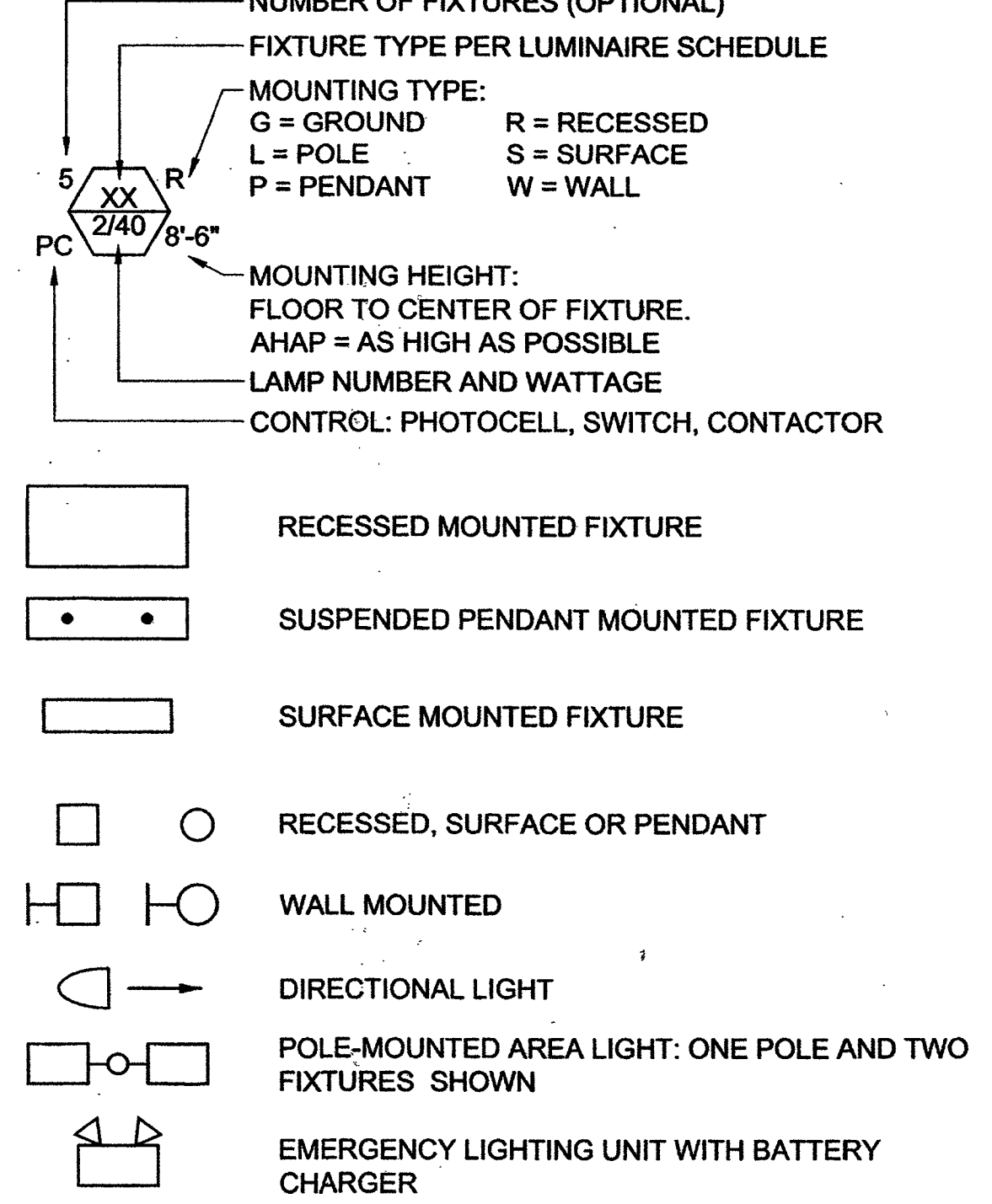
METERING (ANSI/IEEE FUNCTIONS AS SPECIFIED):



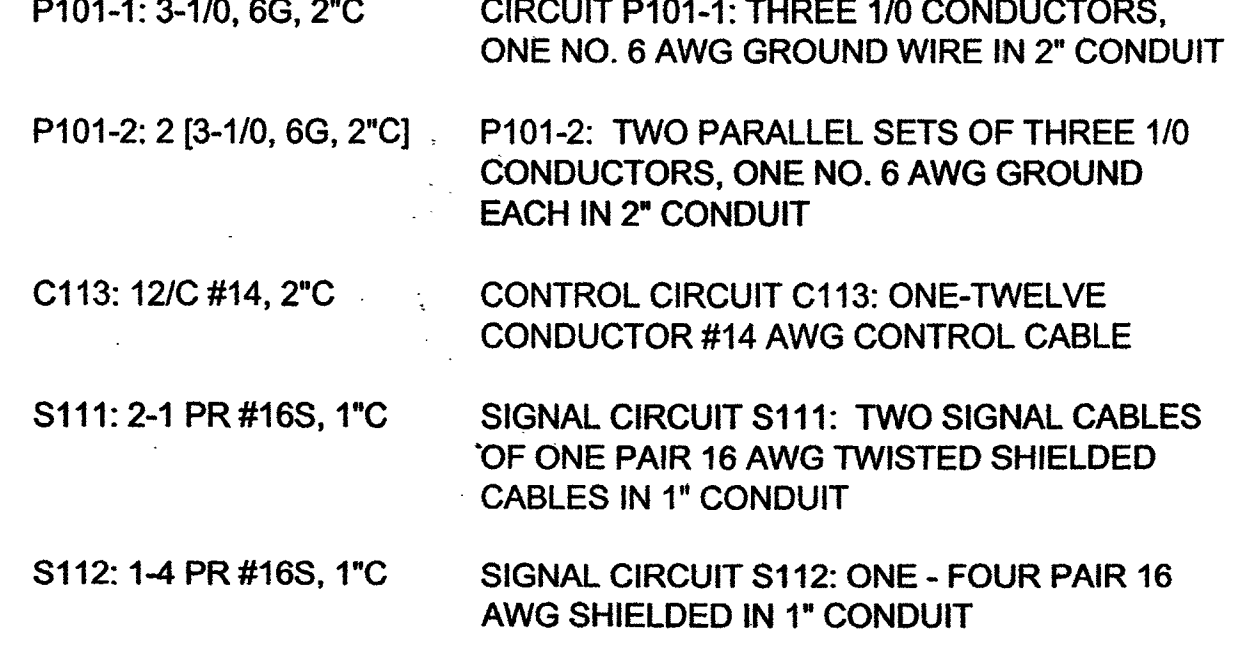
POWER DISTRIBUTION EQUIPMENT:



LUMINAIRES:



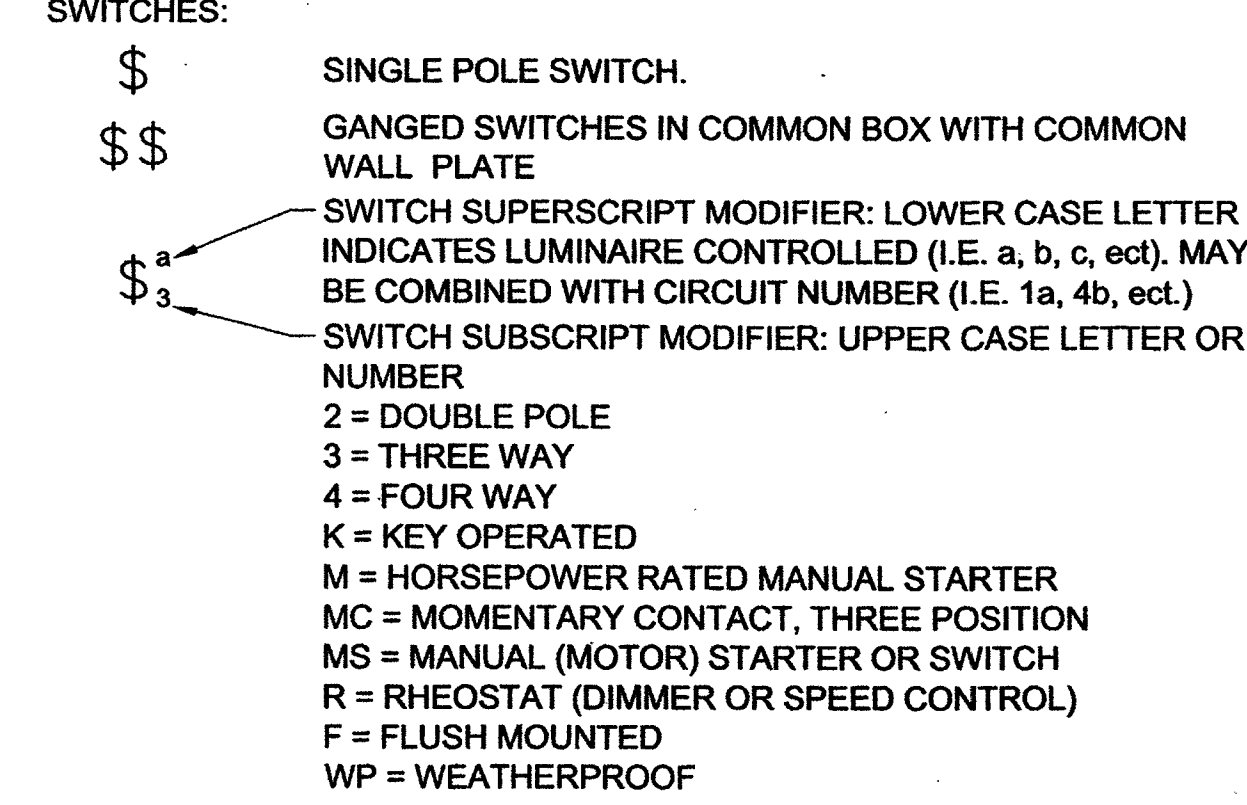
CIRCUIT IDENTIFICATION:



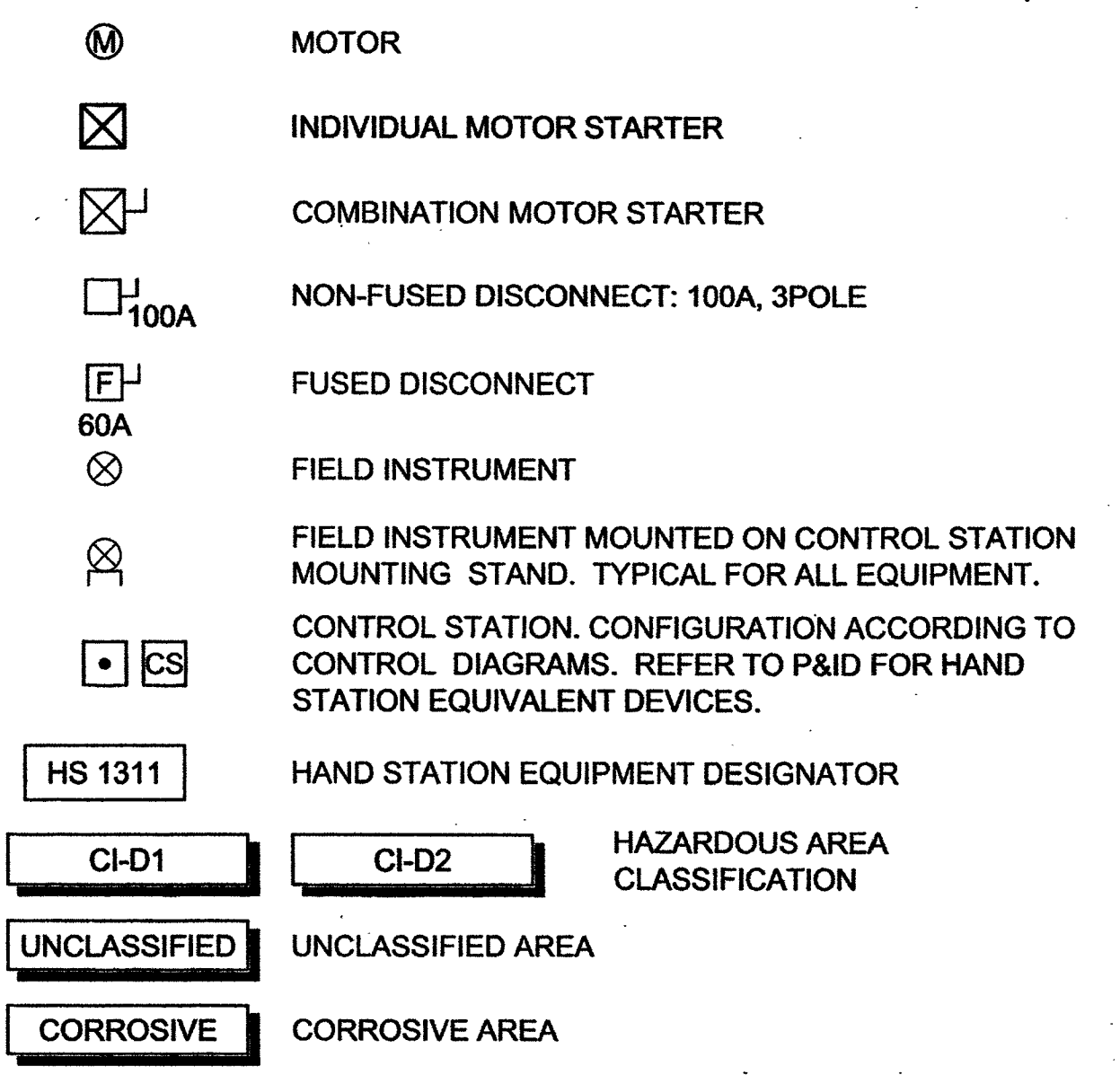
TELEPHONE SYSTEMS:

EXTERNAL LINE OR PLANT PHONE SYSTEM OUTLET

WIRING DEVICES:



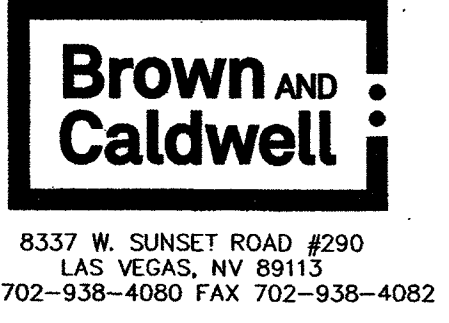
EQUIPMENT AND AREA CLASSIFICATIONS:



ABBREVIATIONS:

- NOTES:
1. ABBREVIATIONS SHOWN ON ELECTRICAL DRAWINGS ARE IN ACCORDANCE WITH ASME STANDARD Y14.38A
2. ABBREVIATIONS ON THIS SHEET ARE IN ADDITION TO THE ABBREVIATIONS DEFINED ON OTHER DRAWINGS.
3. ABBREVIATIONS HERE IN SHALL TAKE PRECEDENCE IN CASE OF CONFLICT.
4. ABBREVIATIONS ARE NOT EQUIPMENT NUMBERING PREFIXES LISTED ON OTHER DRAWINGS.

A, AMP	AMP(S), AMPERE(S)	HH	HANDHOLE	OT	OIL TIGHT
AC	ALTERNATING CURRENT	HID	HIGH INTENSITY DISCHARGE	OWS	OPERATOR WORKSTATION
AFF	ABOVE FINISHED FLOOR	HP	HORSEPOWER	P	POLE, PHASE
AHAP	AS HIGH AS POSSIBLE	HPS	HIGH PRESSURE SODIUM	PB	PUSH-BUTTON, PULLBOX
AIC	AMPS	HTR	HEATER	PCP	PROCESS CONTROL
AL	ALUMINUM	HV	HIGH VOLTAGE	PF	PANEL
ARCH	ARCHITECT(URAL)	HVAC	HEATING, & AIR CONDITIONING	PH	POWER FACTOR
ASYM	ASYMMETRICAL	HZ	HERTZ (CYCLES PER SECOND)	PLC	PHASE
AUTO	AUTOMATIC	I/O	INPUT / OUTPUT	PMM	PROGRAMMABLE LOGIC CONTROLLER
AUX	AUXILIARY	ICOM	INTERCOM		POWER MONITORING
AWG	AMERICAN WIRE GAUGE	ID	INSIDE DIAMETER	PNL	PANEL
BC	BARE COPPER	IMC	INDIVIDUAL MOTOR CONTROLLER	PP	POWER PANEL
BLDG	BUILDING	INCAND	INCANDESCENT	PRI	PRIMARY
BOT	BOTTOM	INST	INSTANTANEOUS, INSTRUMENT	PT	POTENTIAL TRANSFORMER
C	CONDUCTOR, CONDUIT	INTLK	INTERLOCK	PVC	POLYVINYL CHLORIDE
CB	CIRCUIT BREAKER	IPB	INSTRUMENT PULLBOX	PWR	POWER
CKT	CIRCUIT	JB	JUNCTION BOX	RCPT	RECEPTACLE
CLG	CEILING	KCMIL	1000 CIRCULAR MIL	RE STL	REINFORCED STEEL
CM	CENTIMETERS	KV	KILOVOLT	REF	REFERENCE
CNTL	CONTROL	KVA	KILOVOLT-AMPERE	REQD	REQUIRED
CONC	CONCRETE	KVAR	KILOVOLT-AMPERE REACTIVE	RMS	ROOT MEAN SQUARE
CPT	CONTROL POWER TRANSFORMER	KW	KILOWATT	RTD	RESISTANCE TEMPERATURE DETECTOR
CT	CURRENT TRANSFORMER	KWH	KILOWATT HOUR	RTU	REMOTE TERMINAL UNIT
CU	COPPER	L	LONG	SA	SURGE ARRESTOR
DB	DIRECT BURIAL	LA	LIGHTNING	SCR	SILICON CONTROLLED RECTIFIER
DC	DIRECT CURRENT, DATA CABLE	LCP	ARRESTOR	SD	SMOKE DETECTOR
DET	DETAIL	LT	LONG TIME	SEC	SECONDARY
DIAG	DIAGRAM	LTG	LIGHTING	SEL	SELECTOR
DISC	DISCONNECT	LV	LOW VOLTAGE	SPD	SURGE PROTECTIVE DEVICE
DWG	DRAWING	M	METER	SPEC	SPECIFICATION
EA	EACH	MA	MILLIAMPERE	SPKR	SPEAKER
EC	EMPTY CONDUIT	MBS	MANUAL BYPASS SWITCH	ST	SHORT TIME
ECP	EQUIPMENT CONTROL PANEL	MCC	MOTOR CONTROL CENTER	SUB	SUBSTATION
EG	ENGINE	MCP	MOTOR CIRCUIT PROTECTOR	SW	SWITCH
EL	ELEVATION	MECH	MECHANICAL	SWBD	SWITCHBOARD
ELEC	ELECTRIC(AL)	MFR	MANUFACTURE	SWGR	SWITCHGEAR
EMER	EMERGENCY	MH	MANHOLE, METAL HALIDE	SYMM	SYMMETRICAL
EMH	ELECTRICAL MANHOLE	MIC	MICROPHONE	SYS	SYSTEM
ENCL	ENCLOSURE / ENCLOSURE	MISC	MISCELLANEOUS	TB	TERMINAL BOX
EP	EXPLOSION PROOF	MM	MILLIMETER	TEL	TELEPHONE
EPB	ELECTRICAL PULLBOX	MOV	MOTOR OPERATED VALVE	TEMP	TEMPERATURE
EQUIP	EQUIPMENT	MPC	MINI POWER CENTER	TFR	TRANSFORMER
EX	EXISTING	MTS	MANUAL TRANSFER SWITCH	TRI	TRIAD
F.O.	FAIL OPENED	MV	MILLIVOLT, MEDIUM VOLTAGE	TV	TELEVISION
FDR	FEEDER	MVMC	MEDIUM VOLTAGE MOTOR CONTROL	TYP	TYPICAL
FL	FLUORESCENT	N.C.	NORMALLY CLOSED	U/G	UNDERGROUND
FLA	FULL LOAD AMPS	N.O.	NORMALLY OPENED	UON	UNLESS OTHERWISE NOTED
FLEX	FLEXIBLE CONDUIT	N/A	NOT APPLICABLE	UPS	UNINTERRUPTIBLE POWER SUPPLY
FO	FIBER OPTIC	NEUT,N	NEUTRAL	V	VOLT
FUT	FUTURE	NF	NON-FUSED	VA	VOLT-AMPERE
GDR	GROUNDING RESISTOR	NIC	NOT IN CONTRACT	VAR	VOLT-AMPERE REACTIVE
GEC	GROUND CONDUCTOR	NO.	NUMBER	VC	VACUUM CONTACTOR
GF	GROUND FAULT	NOM	NOMINAL	W	WATT, WIRE, WIDE
GFI	GROUND FAULT INTERRUPTER	NP	NAMEPLATE	W/	WITH
GND, G	GROUND	NTS	NOT TO SCALE	W/O	WITHOUT
GRS	GALVANIZED RIGID STEEL	OC	ON CENTER	WG	WITH GROUND
H	HIGH	OD	OUTSIDE DIAMETER	WP	WEATHERPROOF
HGT	HEIGHT	OH	OVERHEAD	WW	WIREWAY
		OIS	INTERFACE STATION	XMTR	TRANSMITTER
				Z	IMPEDANCE



REVISIONS

NO.	DATE	DESCRIPTION	APP'D

DESIGNED BY: KWC
DRAWN BY: CJC
CHECKED BY:
DATE: 5/14/2014

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION

CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS

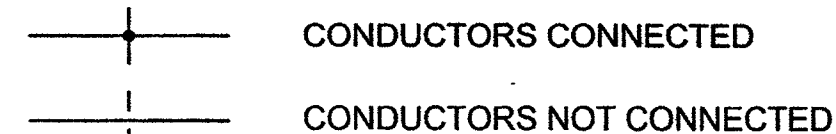
SYMBOLS, ABBREVIATIONS AND NOTES

Sheet
E-01
8 of 14
DRAWING NO.
307V1096

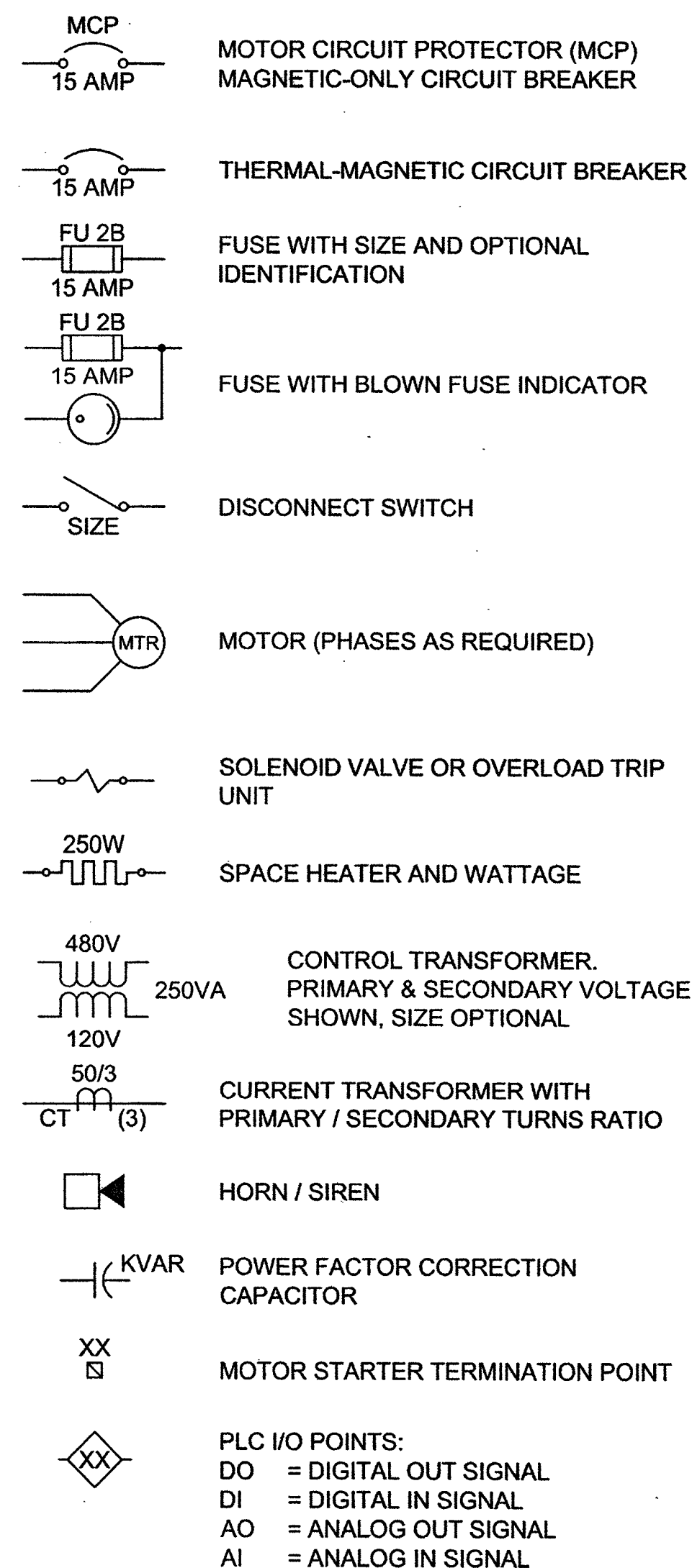
AS BUILT

CONTROL DIAGRAMS:

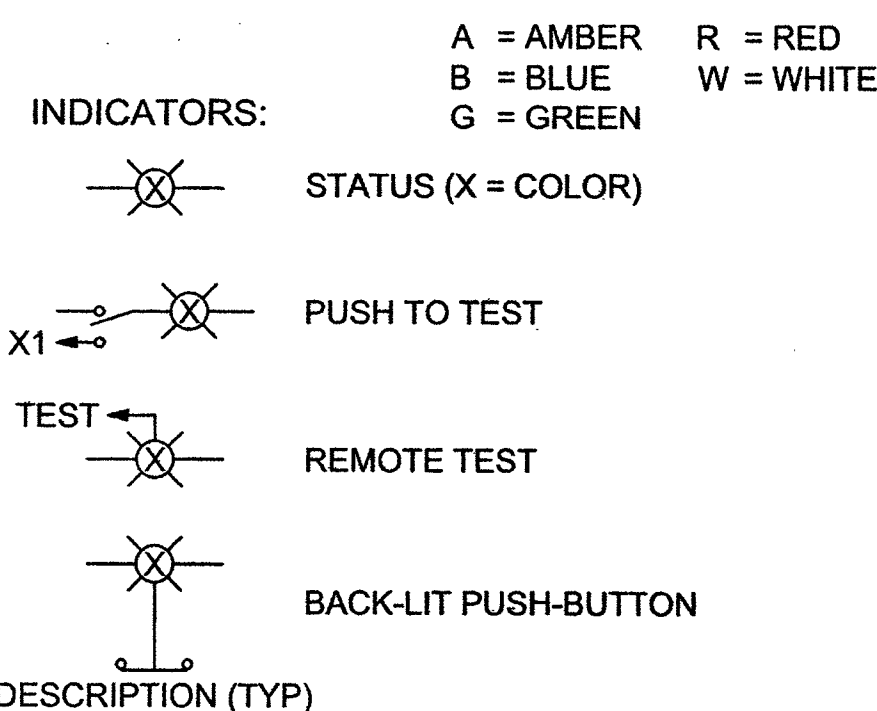
LINEWORK:



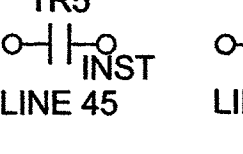
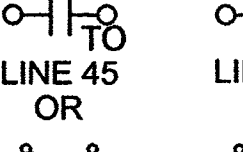
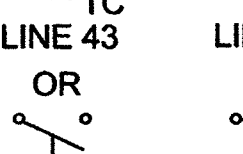
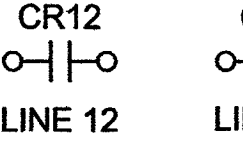
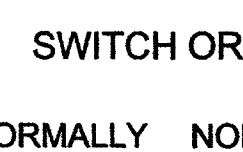
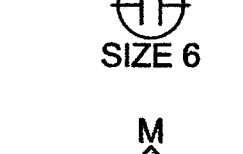
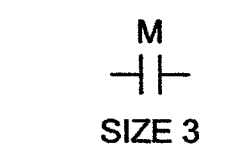
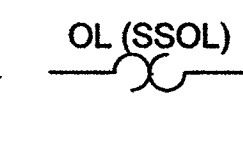
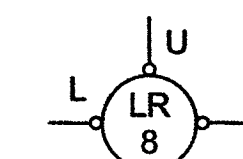
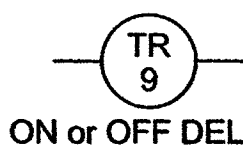
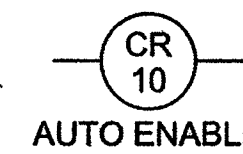
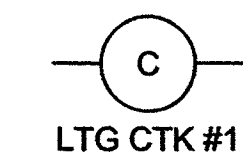
MISCELLANEOUS:



STATUS INDICATORS: SHOWN WITH DESCRIPTION AND COLOR (X):



COILS:



- A) RELAYS OR CONTACTOR COILS WITH DESCRIPTION OR REFERENCE
C = CONTACTOR, LIGHTING OR GENERAL USE
F = FAST OR FORWARD
IC = ISOLATION CONTACTOR
M = MAIN OR LINE
MO = MOTOR OPERATED
R = RUN OR REVERSE
S = SLOW OR START
T = TRIP COIL
1M = FIRST MAIN OR WYE
2M = SECOND OR DELTA
B) RELAY COILS WITH NUMERIC PREFIX OR SUFFIX
CR = CONTROL RELAY
MR = MACHINE TOOL RELAY
TR = TIMING RELAY
C) TIME DELAY COIL WITH NUMERIC PREFIX OR SUFFIX, DELAY ACTION, TIMING RANGE AND SETTING
D) MECHANICALLY LATCHED RELAY WITH UNLATCH COIL

- C) TIME DELAY COIL WITH NUMERIC PREFIX OR SUFFIX, DELAY ACTION, TIMING RANGE AND SETTING
D) MECHANICALLY LATCHED RELAY WITH UNLATCH COIL

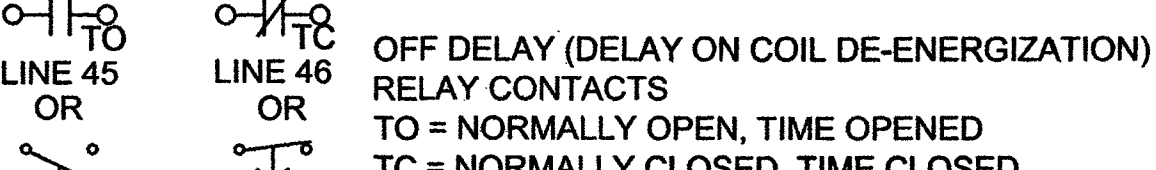
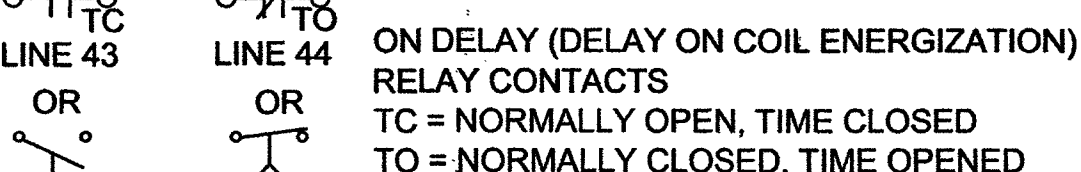
- D) MECHANICALLY LATCHED RELAY WITH UNLATCH COIL
THERMAL OVERLOAD RELAY OR SOLID STATE OVERLOAD RELAY

- METER WITH ALPHA IDENTIFIERS
ETM = ELAPSED TIME
A = AMMETER
V = VOLTMETER

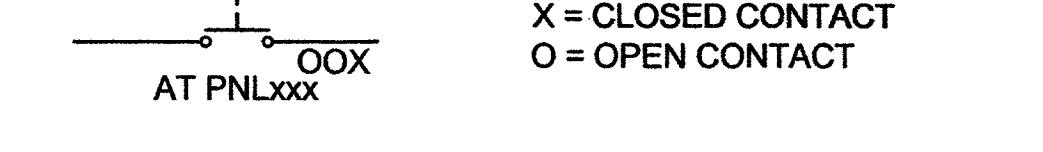
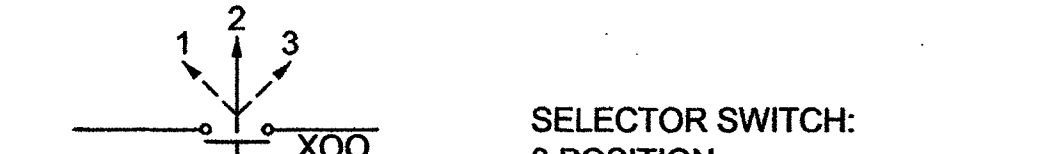
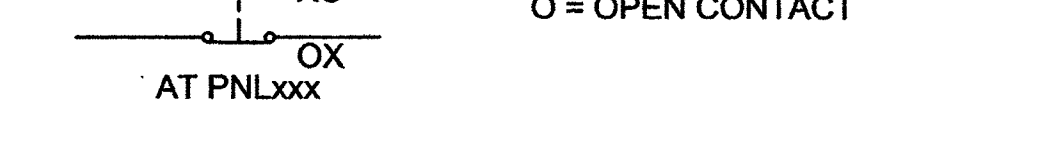
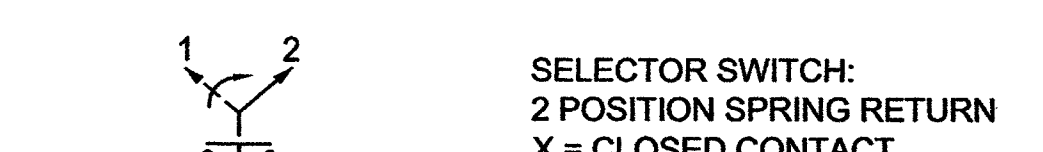
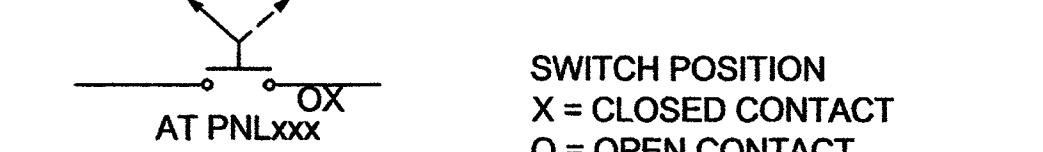
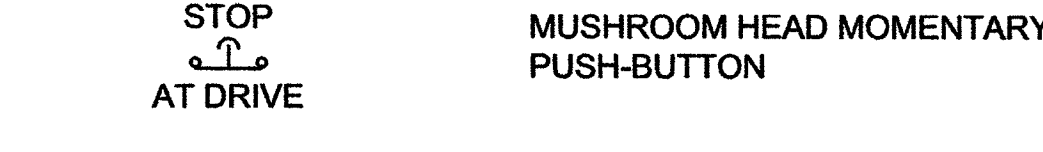
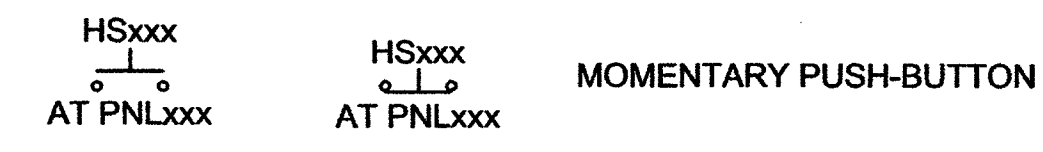
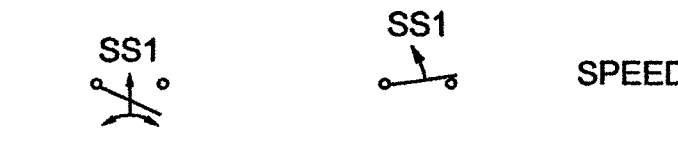
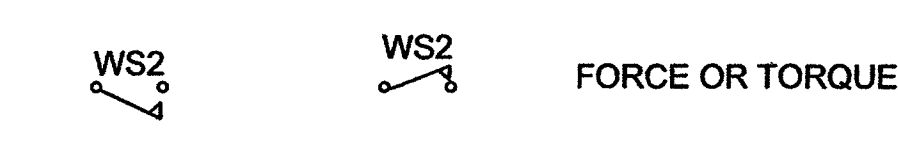
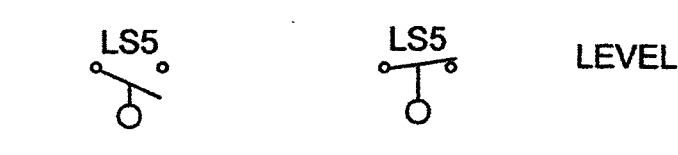
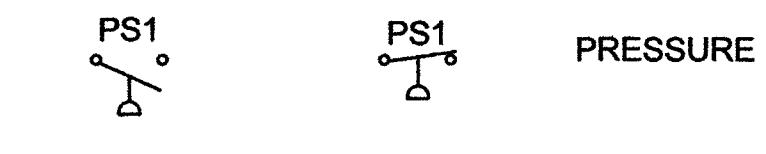
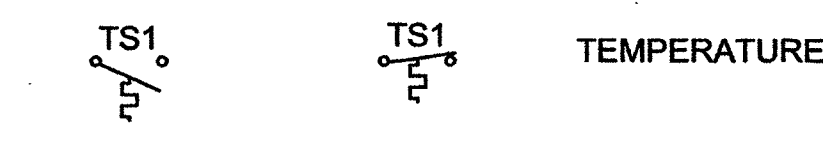
- AIR-BREAK CONTACTOR WITH NEMA SIZE
VACUUM CONTACTOR WITH NEMA SIZE
REDUCED VOLTAGE SOLID STATE STARTER

SWITCH OR INTERLOCK CONTACTS:

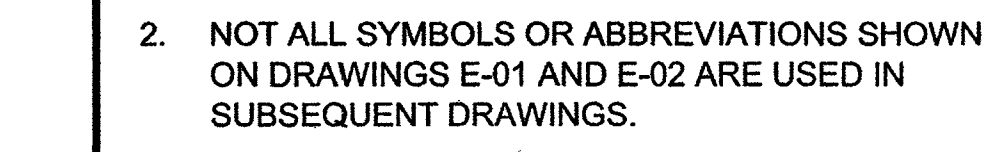
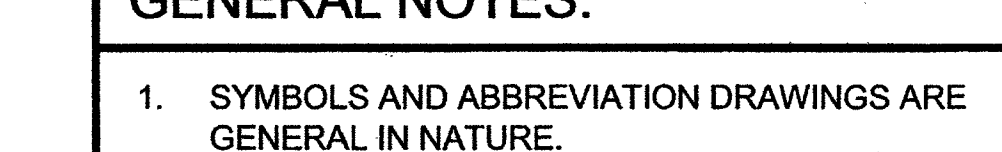
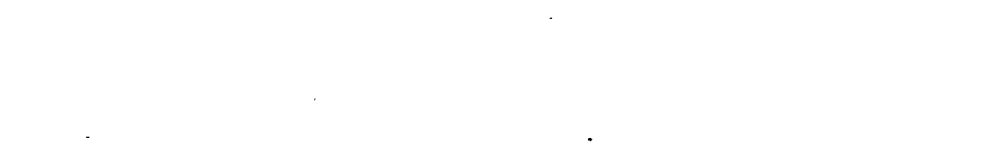
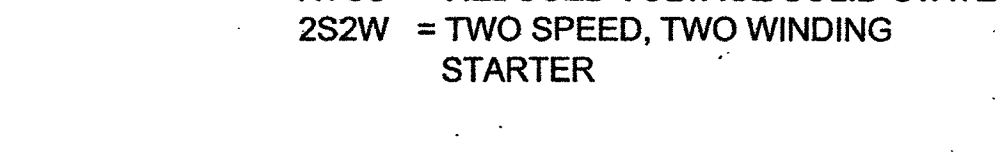
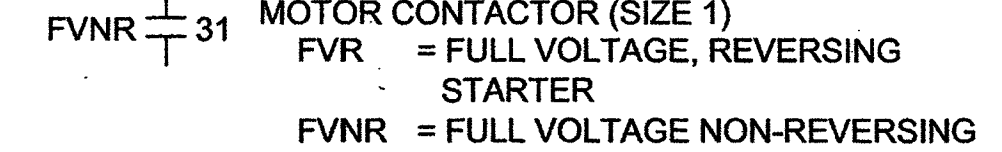
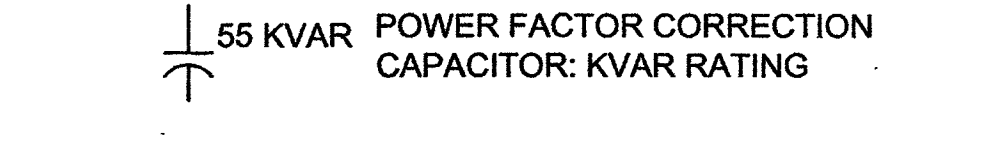
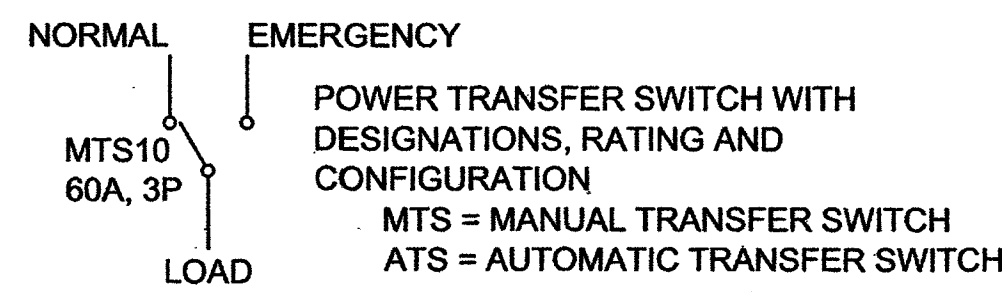
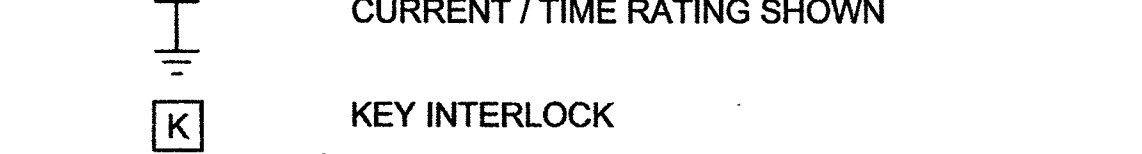
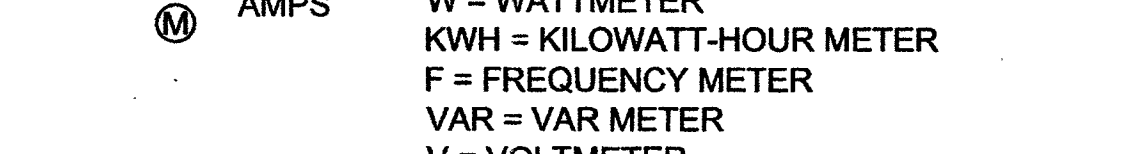
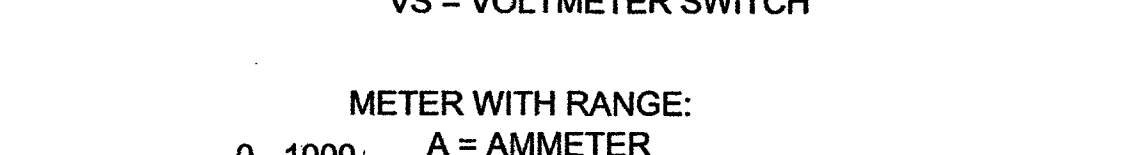
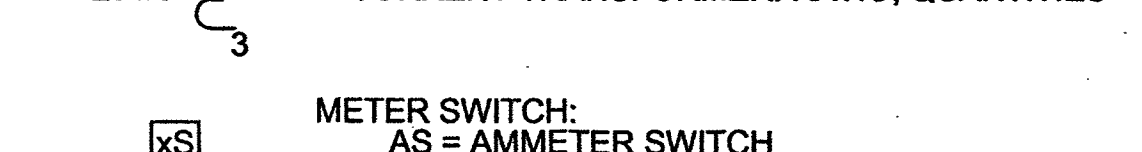
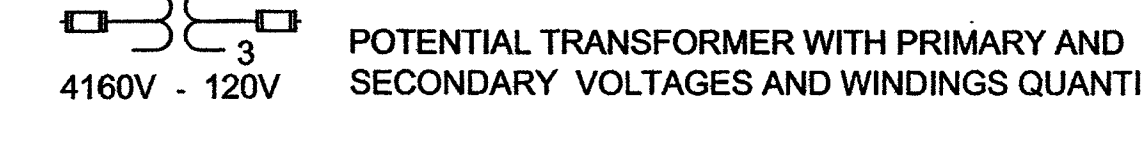
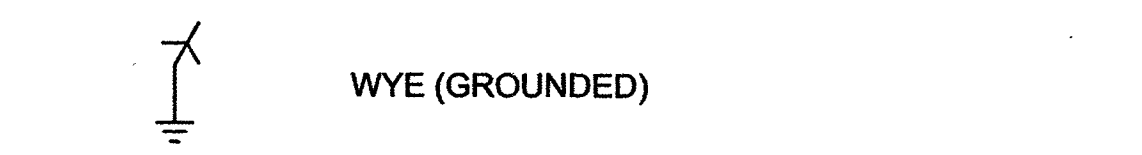
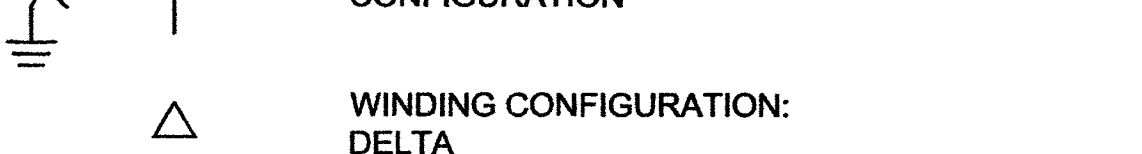
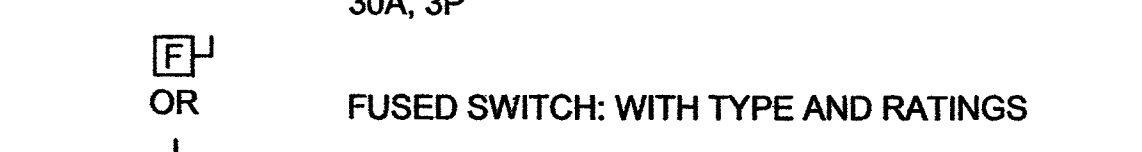
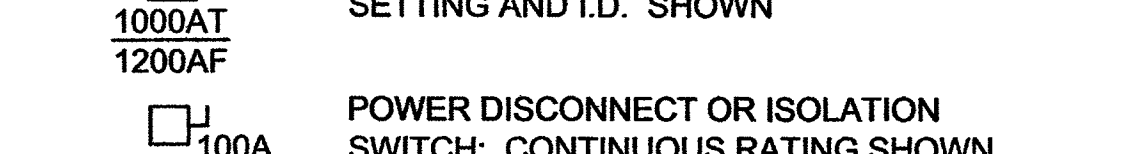
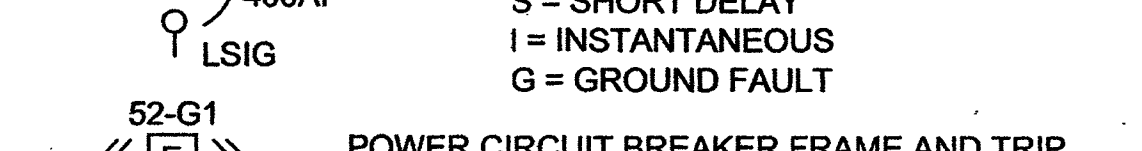
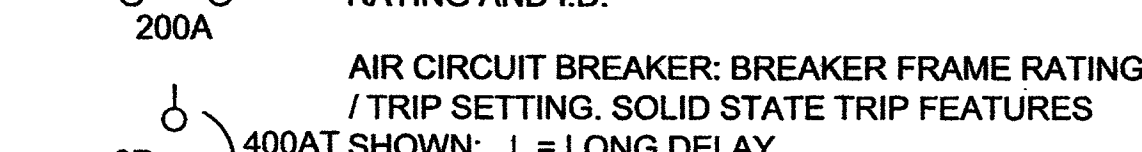
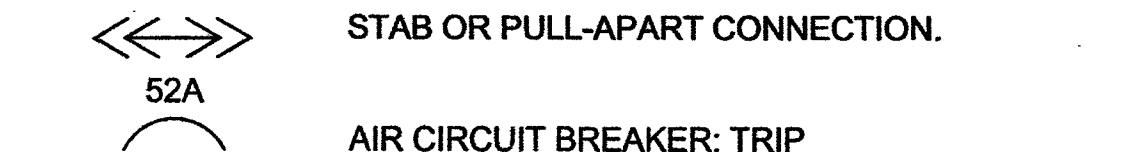
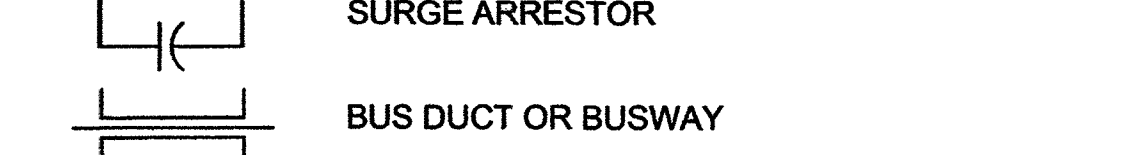
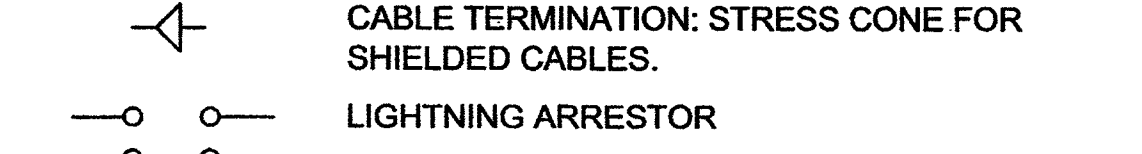
- NORMALLY OPEN (NO)
NORMALLY CLOSED (NC)



SWITCHES: (SHOWN WITH OPTIONAL LOCATION REFERENCE)



ONE LINE DIAGRAMS:



Brown and Caldwell

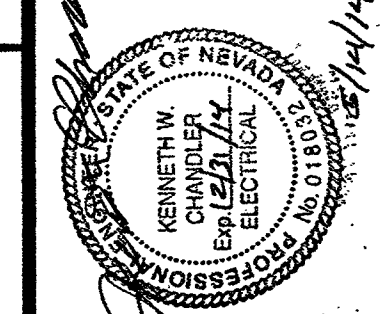
8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082

GENERAL NOTES:

- SYMBOLS AND ABBREVIATION DRAWINGS ARE GENERAL IN NATURE.
- NOT ALL SYMBOLS OR ABBREVIATIONS SHOWN ON DRAWINGS E-01 AND E-02 ARE USED IN SUBSEQUENT DRAWINGS.

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION

CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS
STANDARD CONTROL AND ONE-LINE
DIAGRAM LEGENDS AND SYMBOLS



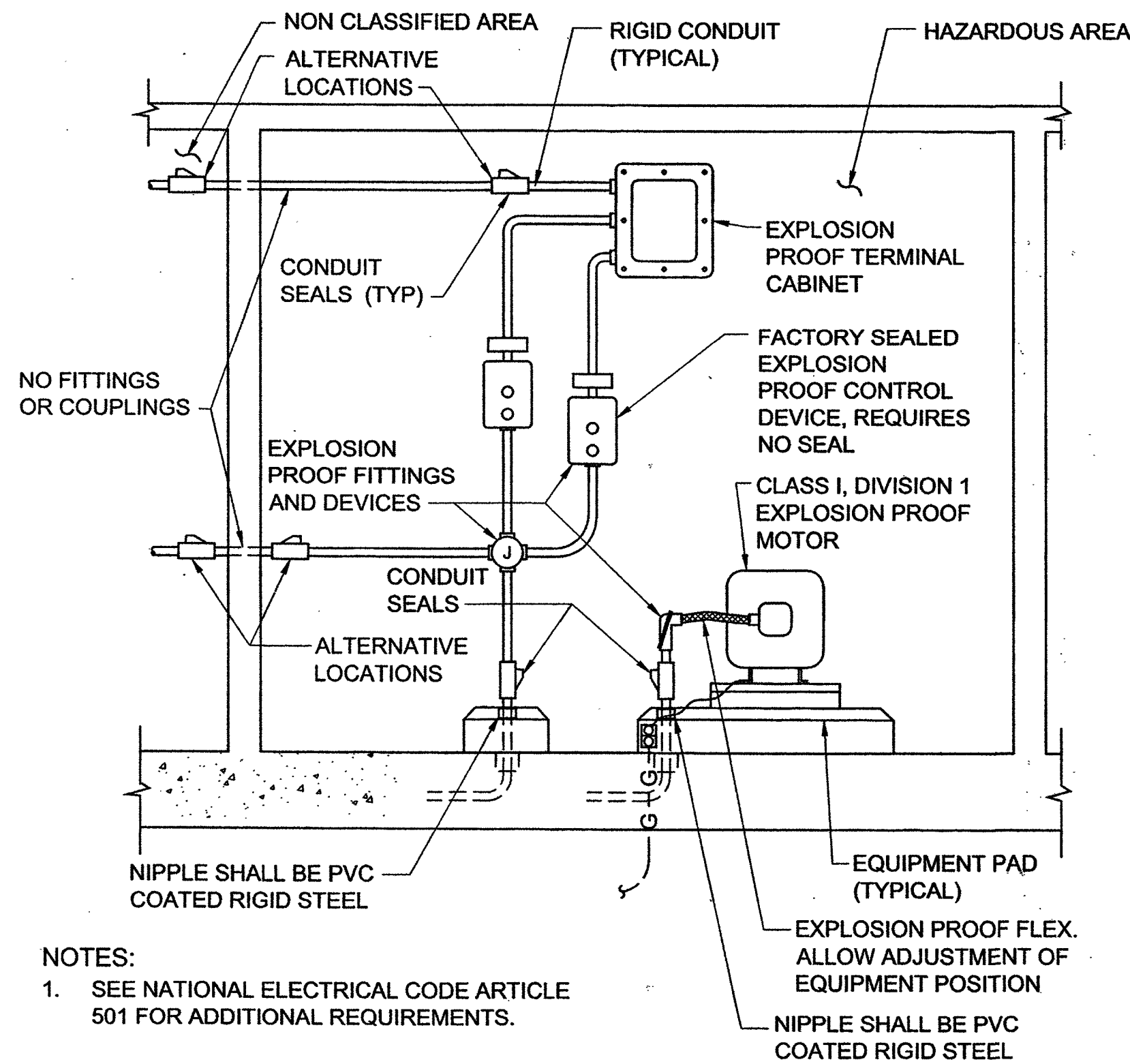
Sheet
E-02
9 of 14
DRAWING NO.
307V1096

DESIGNED BY: KWC
DRAWN BY: CJR
CHECKED BY:
DATE: 5/14/2014

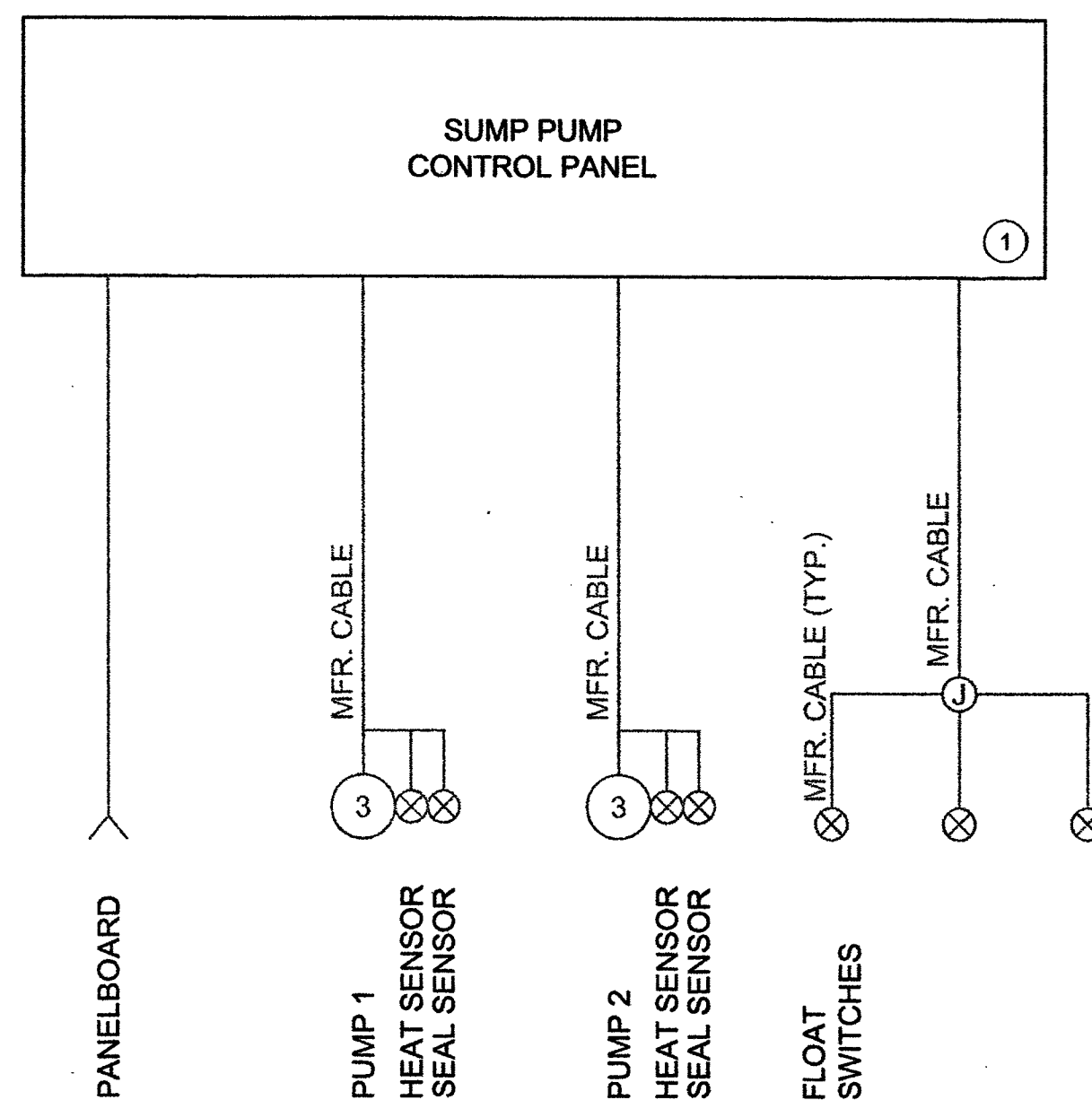
5/14/14 \\BCVEGFP01\PROJECTS\LAS VEGAS\143895-SMALL DIAMETER ASSESSMENT - YEAR 4\11-CADD\2-SHEETS\ELECTRICAL\143895-E03.DWG

Brown AND Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89115
PH. 702-938-4080 FAX 702-938-4082



HAZARDOUS AREA RACEWAYS
TYPICAL
DETAIL (E2901)
SCALE: NONE



SINGLE-LINE DIAGRAM
DETAIL (A/E-4)
SCALE: NONE

GENERAL NOTES:

- REPLACE SUMP PUMP CONTROL PANEL. CONTROLS TO MATCH EXISTING, REFER TO DRAWINGS E-11, E-12 AND E-13 FOR HYDROMATIC PUMP SCHEMATICS.
- COORDINATE SHUTDOWN FOR REPLACEMENT WITH THE OWNER.

KEY NOTES:

- CONTROL PANEL, SUBMIT FOR APPROVAL PRIOR TO FABRICATION: UL508A LABELED. UL913 INTRINSICALLY SAFE CIRCUITS FOR FLOATS AND SENSORS. SWING-OUT DEAD FRONT INTERNAL DOOR WITH DISCONNECT. ALL CONTROLS ON INTERNAL DOOR, NOT ON EXTERNAL DOOR. NEMA 4 OR 4X ENCLOSURE.

AS BUILT

REVISIONS	NO.	DATE	DESCRIPTION	APP'D

DESIGNED BY: KWC
DRAWN BY: CUR
CHECKED BY:

DATE: 5/14/2014

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION

TITLE: CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS

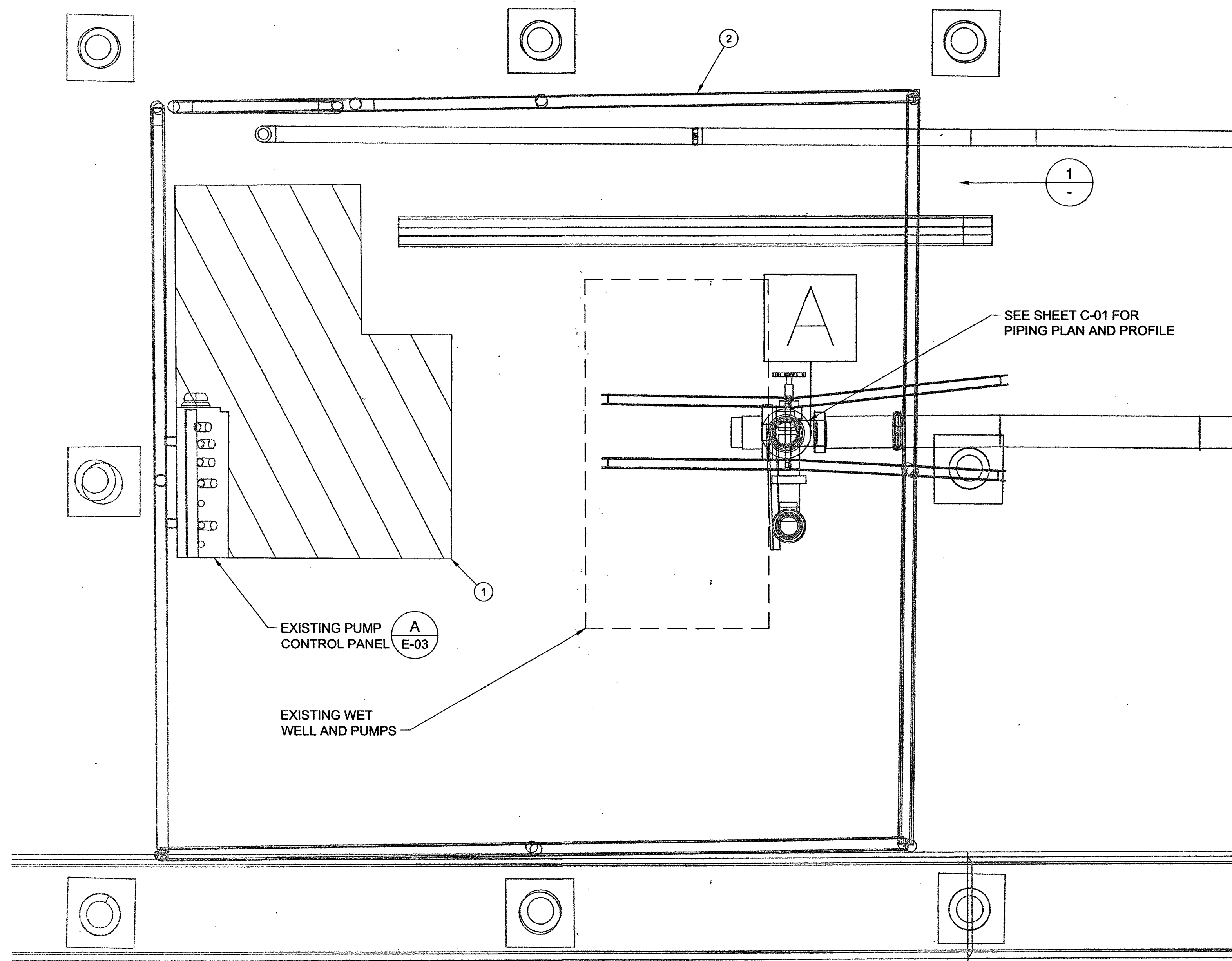
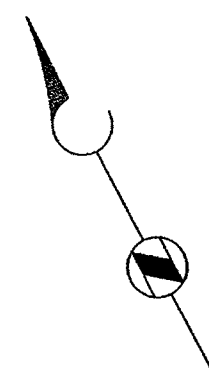
SHEET:

DETAILS

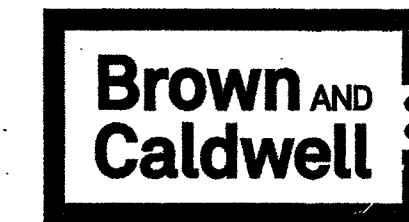
5/14/14

Sheet
E-03
10 of 14
DRAWING NO.
307V1096

11/20/14 \\BOVEGFP01\PROJECTS\LAS VEGAS\143895-SMALL DIAMETER ASSESSMENT - YEAR 4\11-CADD\2-SHEETS\ELECTRICAL\143895-E04.DWG



AS BUILT



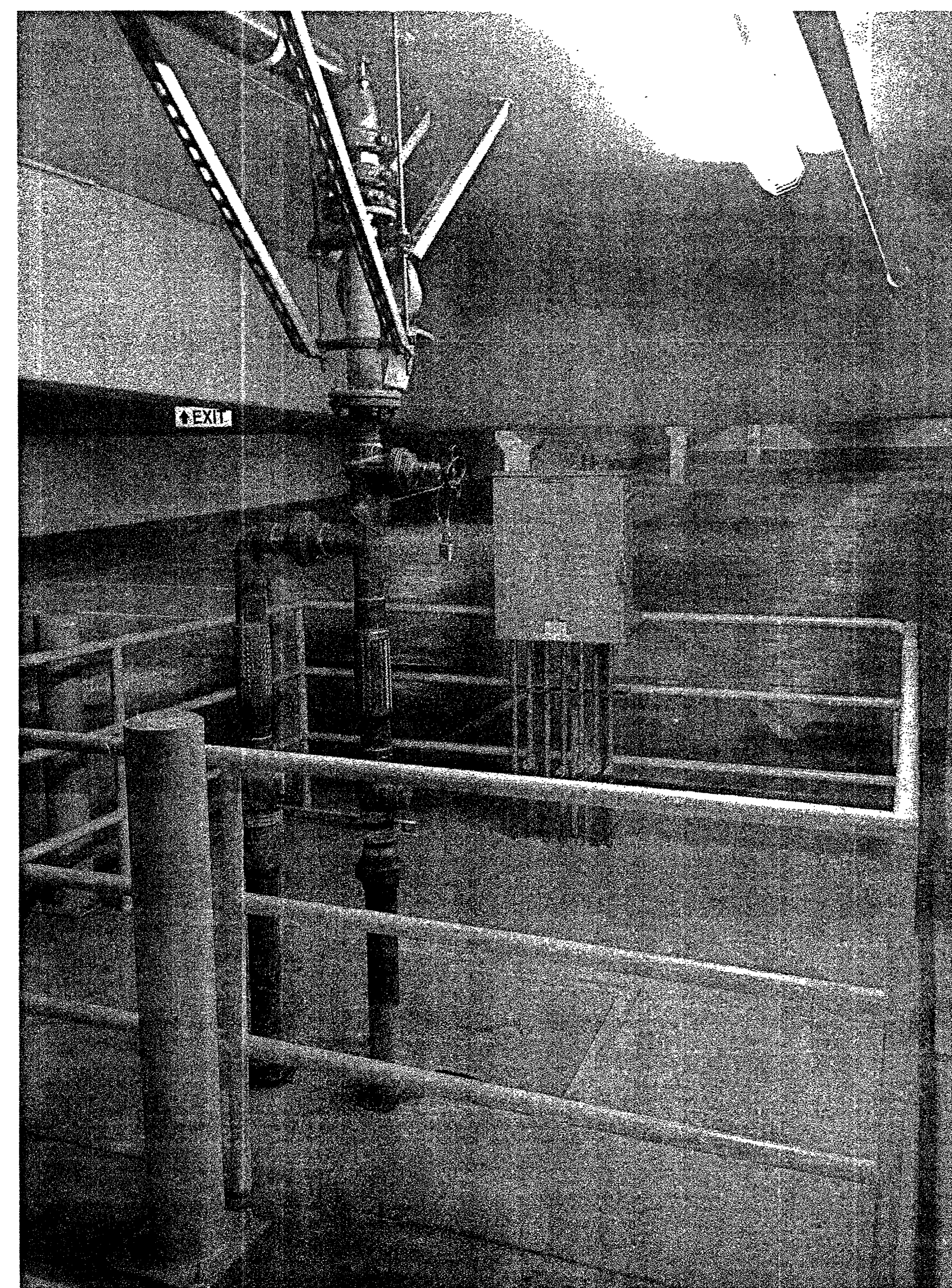
8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89115
PH. 702-938-4080 FAX 702-938-4082

GENERAL NOTES:

- HAZARDOUS AREA: CLASS I DIVISION 1 INSIDE WET WELL, SEWER, AND MANHOLES.
- HAZARDOUS AREA: CLASS I DIVISION 2 18" ABOVE AND 3 FOOT PERIMETER OF WET WELL HATCH.
- MODIFY ANY EXISTING CIRCUIT RACEWAYS IN HAZARDOUS AREAS PER DETAIL E2901/E-03 AND THE NEC ARTICLE 500 AND 501: HAZARDOUS LOCATIONS.

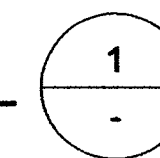
KEY NOTES:

- NEC WORKING SPACE TO REMAIN CLEAR
- EXISTING GUARD RAIL

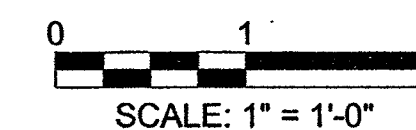


EXISTING SUMP RISER AND
CONTROL PANEL

DETAIL



SCALE: NONE



REVISIONS		NO.	DATE	DESCRIPTION	APP'D.

DESIGNED BY: KWC DRAWN BY: CJR CHECKED BY:	DATE: 11/20/2014	DEPARTMENT OF PUBLIC WORKS	
		ENGINEERING DESIGN SECTION	
		CITY CENTER PLACE GROUNDWATER DISCHARGE IMPROVEMENTS	
		PARKING GARAGE SUMP PUMPS	

	Sheet
	E-04
	11 of 14

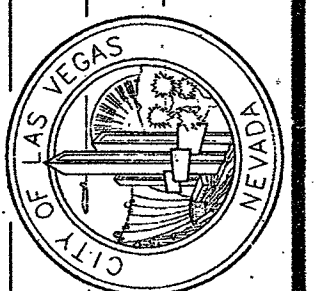
DRAWING NO. 307V1096

Brown and Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082

REVISIONS	NO.	DATE	DESCRIPTION	APP'D

DEPARTMENT OF PUBLIC WORKS
ENGINEERING DESIGN SECTION



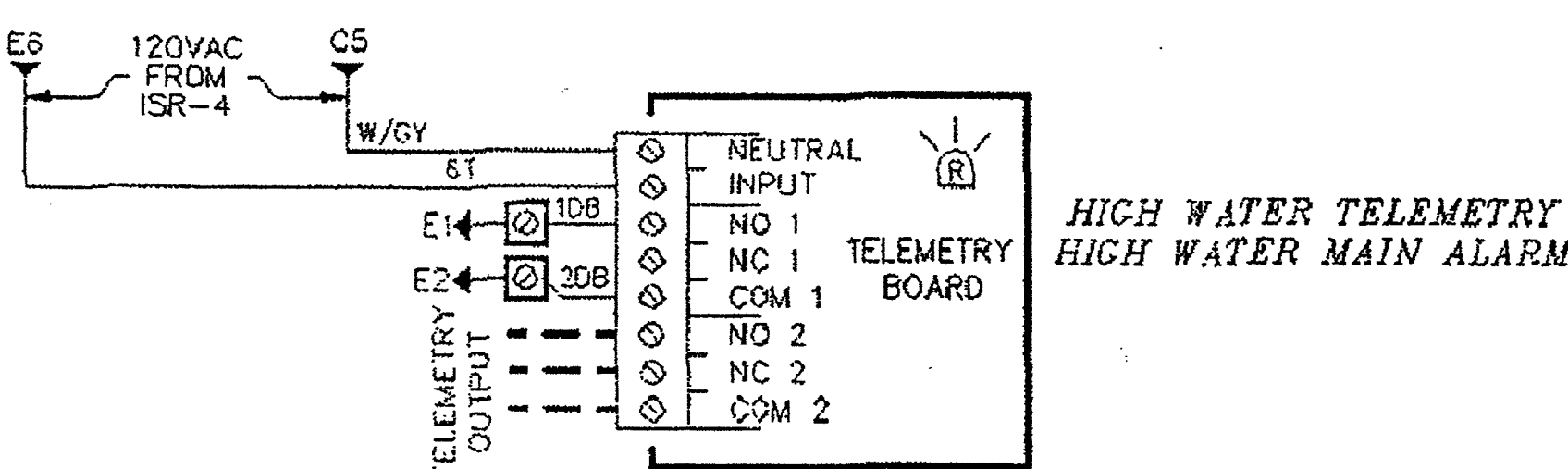
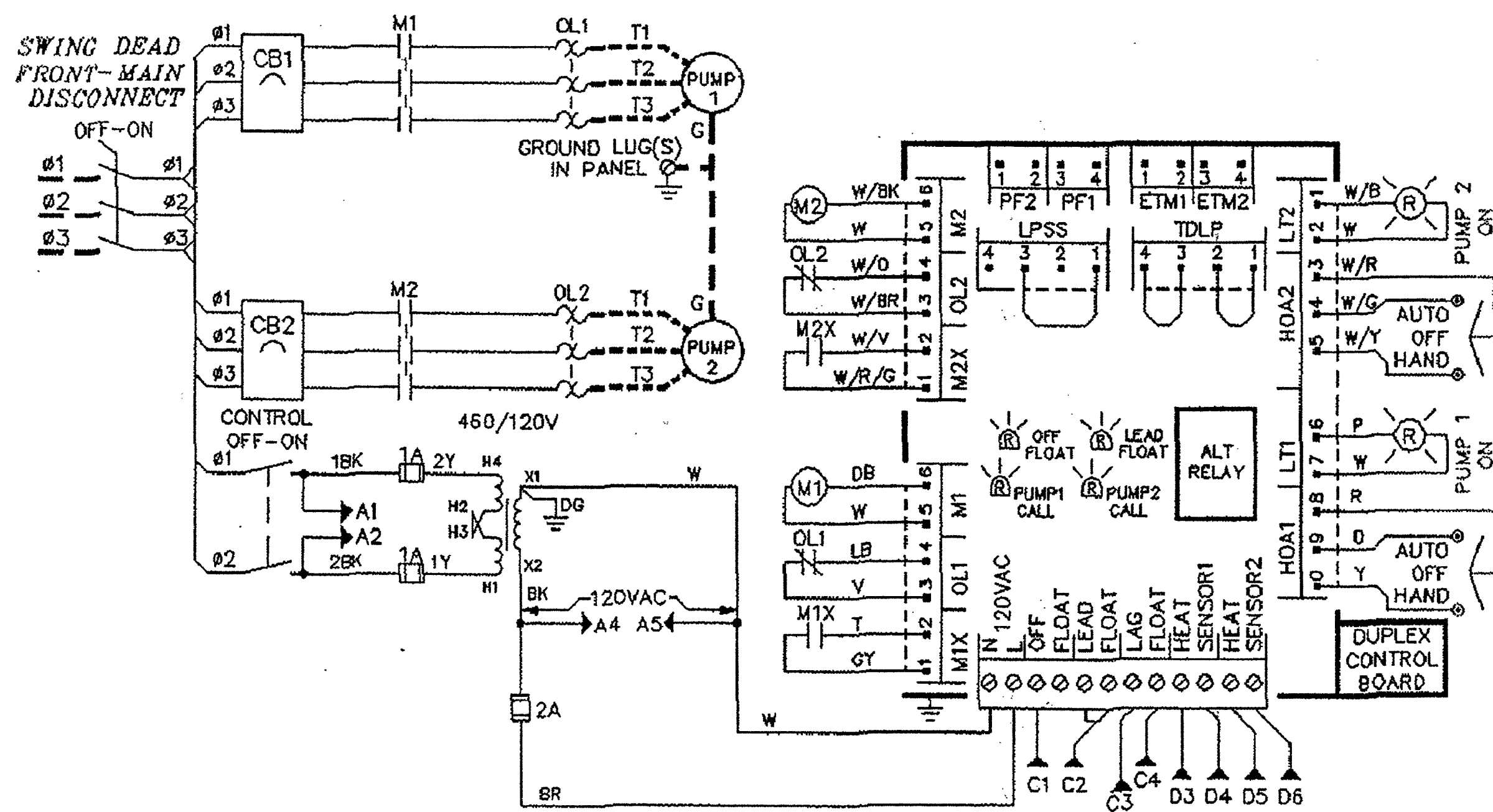
CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS
CONTROL PANEL SCHEMATICS 1 OF 3

REFERENCE
DRAWING

Sheet
E-11
12 of 14
DRAWING NO
307V1096

460 VOLTS, THREE PHASE, DUPLEX

NOTE: CONNECT PANEL GROUND LUG TO A GROUND ROD
OR A GROUND WIRE FROM THE SUPPLY SERVICE



BASE TYPE BA3 NOTE: USE COPPER, 60°C WIRE INSULATION FOR ALL FIELD WIRING TERMINALS

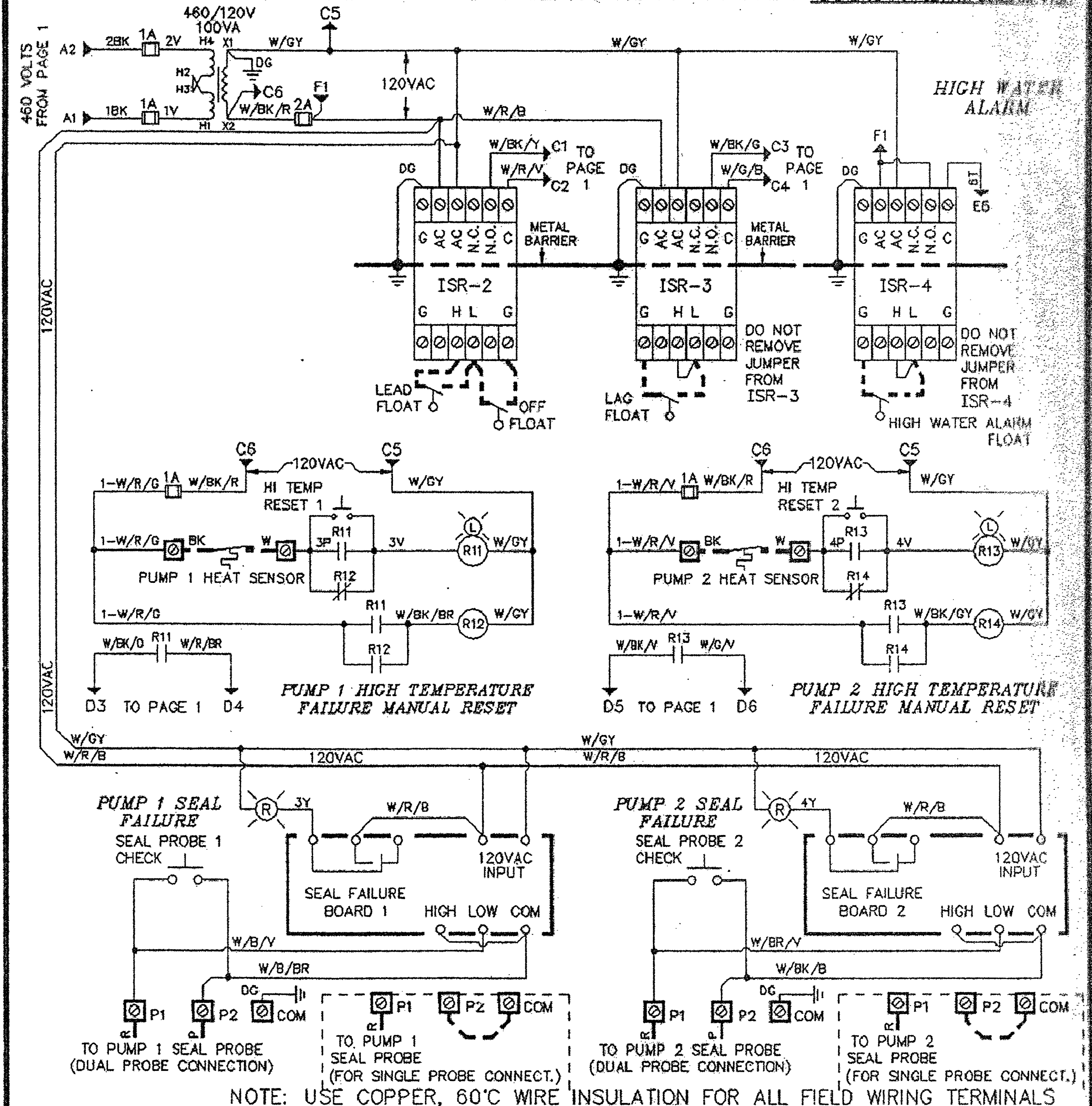
MODEL NO. 4.8-BA3-BB2-BC1-BE2-BN1-FA2-FD3-PH3-Q02

	ELECTRICAL SCHEMATIC/ DIAGRAM	PANEL PART NO. 6201E296035
		DATE: 05-03-2001 PAGE 1 OF 3

NOTE: WARNING: DISCONNECT POWER BEFORE SERVICING !
IMPORTANT: METAL BACK PANEL TO BE CONNECTED TO A GOOD GROUND IN ACCORDANCE WITH LOCAL ELECTRICAL CODES
SYMBOLS FOR CONTINUATION OF WIRING WITHIN THIS SCHEMATIC

INTRINSICALLY SAFE, U.L. 913, 460 VOLTS, DUPLEX CONTROLS

CAUTION: MAINTAIN SEPARATION BETWEEN INTRINSICALLY SAFE WIRING AND OTHER WIRING.
REMOVAL OF METAL BARRIERS WILL VOID THE INTRINSIC SAFETY. REFERENCE INSTALLATION BULLETIN #101

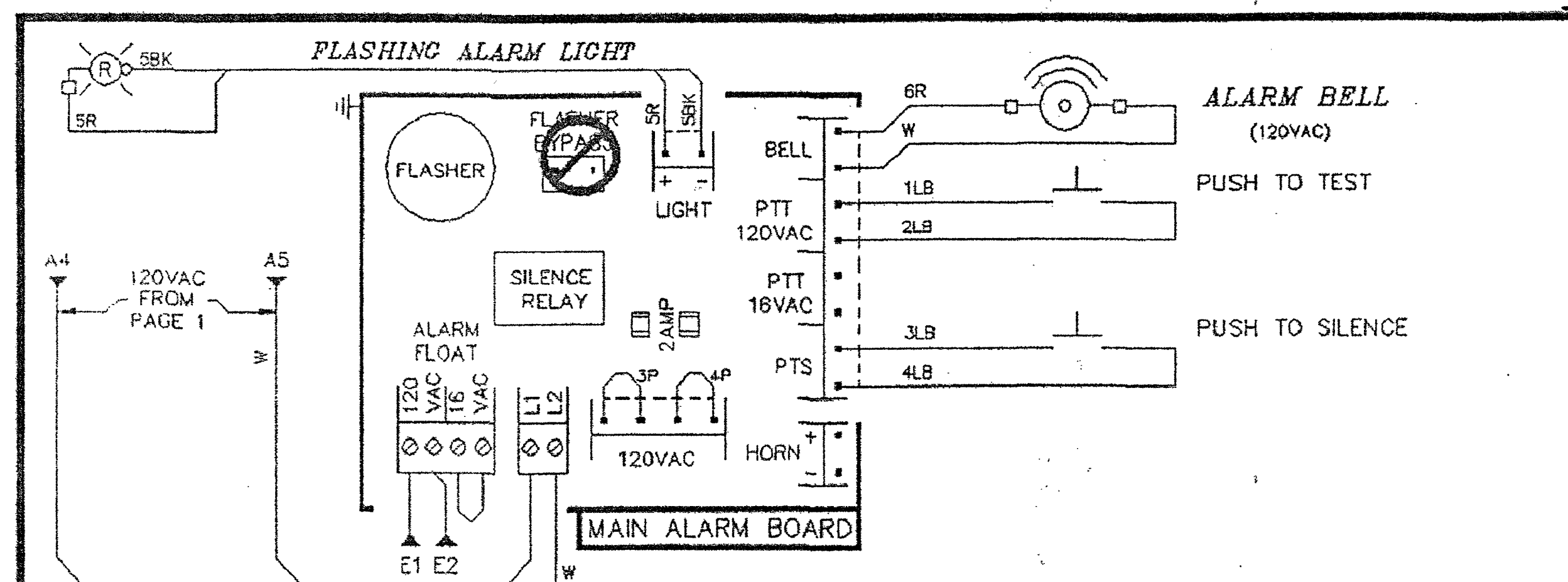


MODEL NO. 4.8-BA3-BB2-BC1-BE2-BN1-FA2-FD3-PH3-Q02

	ELECTRICAL SCHEMATIC/ DIAGRAM	PANEL PART NO. 6201E296035
		DATE: 05-03-2001 PAGE 2 OF 3

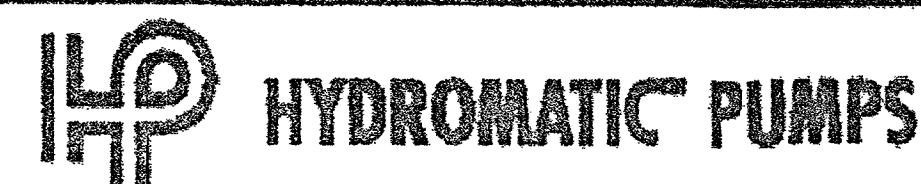
NOTE: WARNING: DISCONNECT POWER BEFORE SERVICING !
IMPORTANT: METAL BACK PANEL TO BE CONNECTED TO A GOOD GROUND IN ACCORDANCE WITH LOCAL ELECTRICAL CODES
SYMBOLS FOR CONTINUATION OF WIRING WITHIN THIS SCHEMATIC

AS BUILT



NOTE: USE COPPER, 60°C WIRE INSULATION FOR ALL FIELD WIRING TERMINALS

MODEL NO. 4.8-BA3-BB2-BC1-BE2-BN1-FA2-FD3-PH3-QQ2



ELECTRICAL
SCHEMATIC/
DIAGRAM

PANEL PART NO. 6201E296035

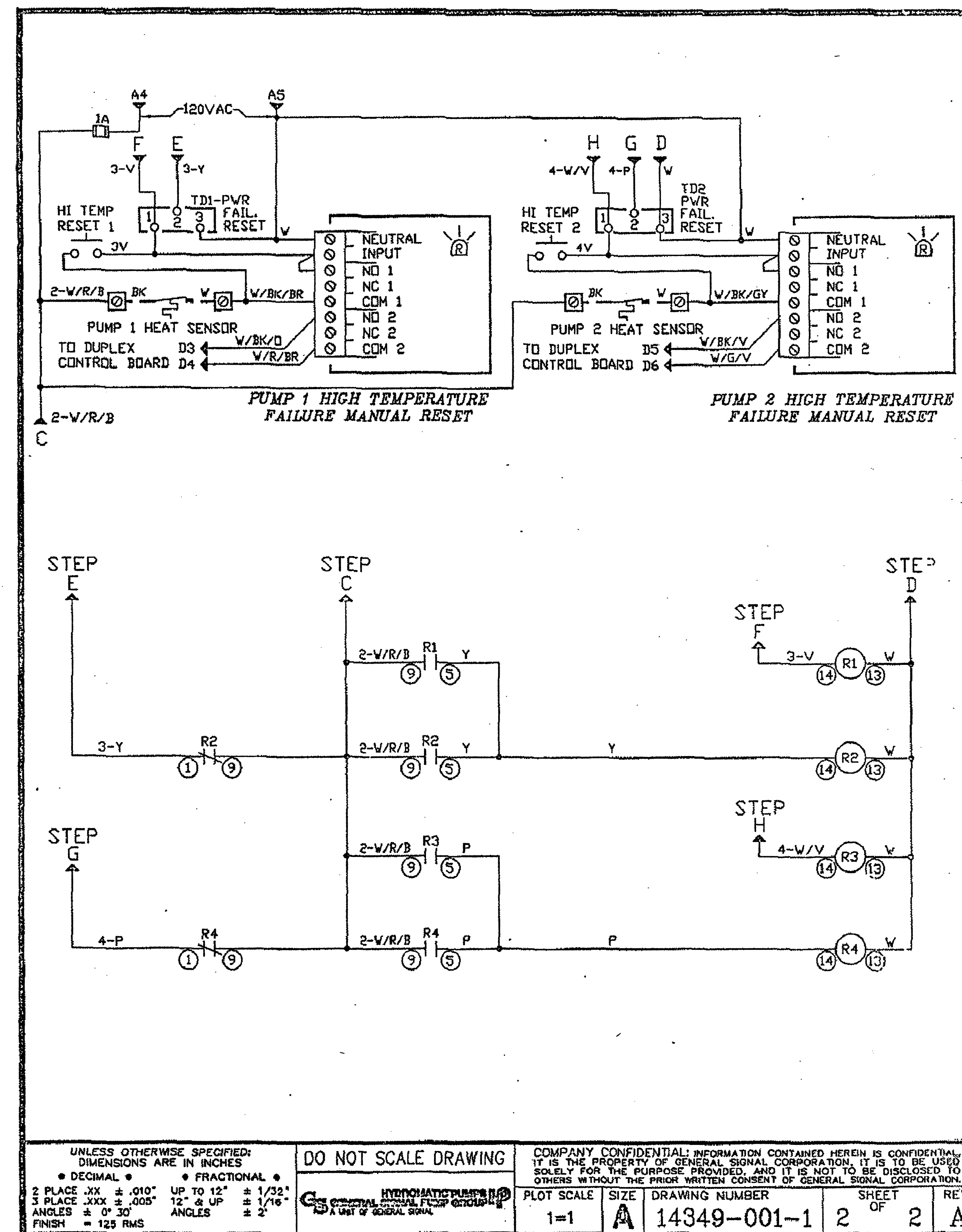
DATE: 05-03-2001 PAGE 3 OF 3

704-11

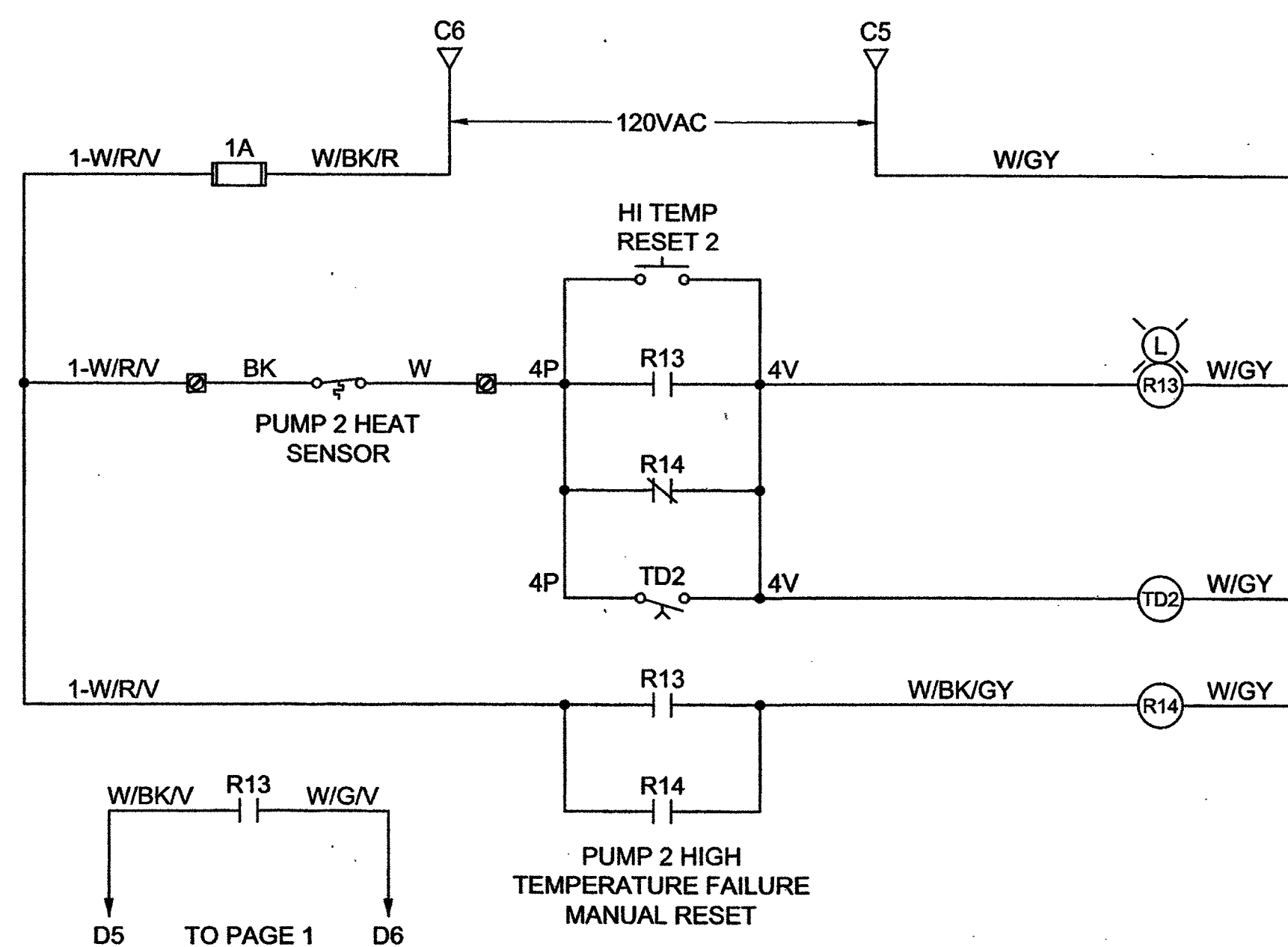
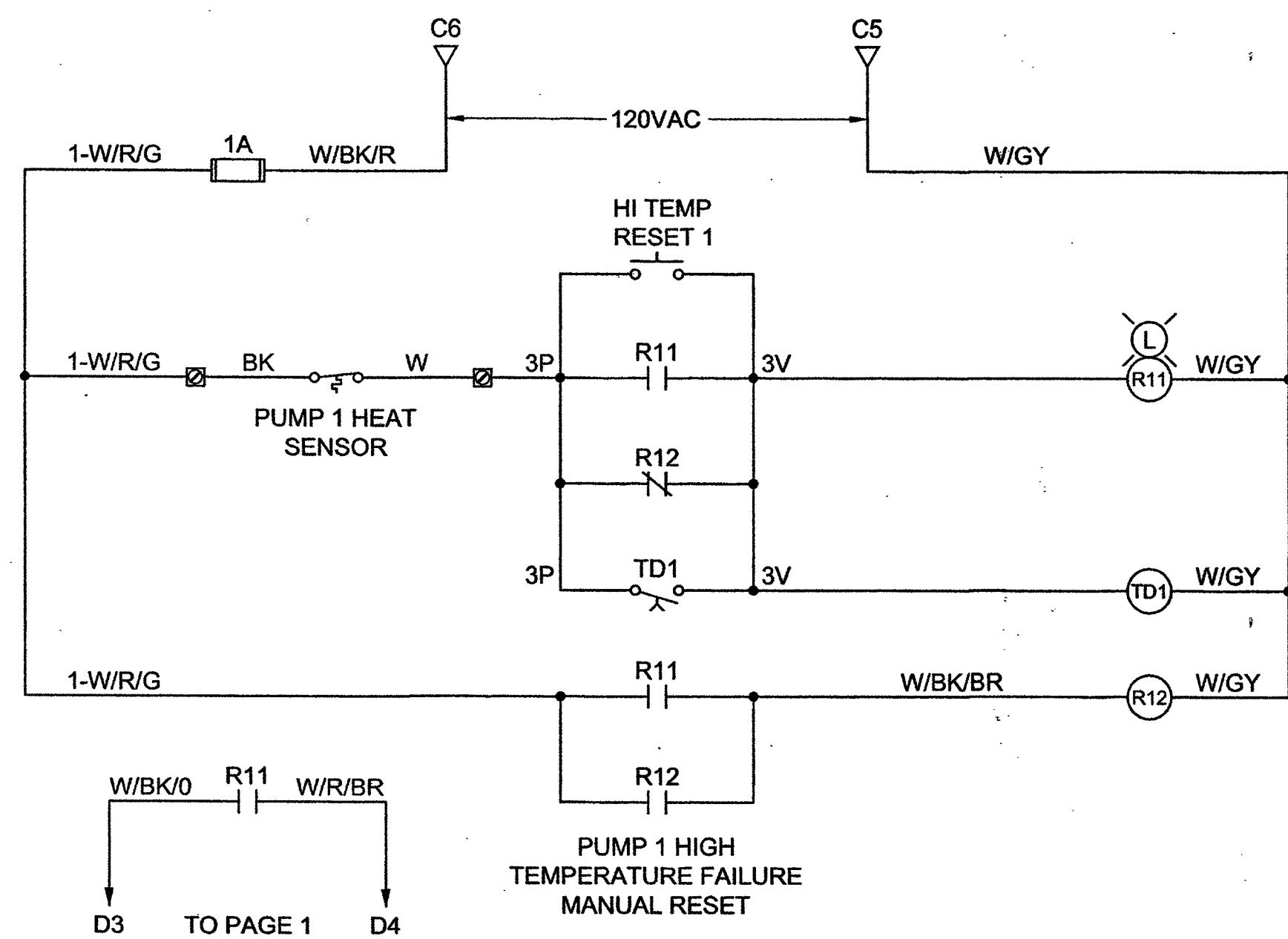
WARNING: DISCONNECT POWER BEFORE SERVICING !

IMPORTANT: METAL BACK PANEL TO BE CONNECTED TO A GOOD GROUND IN ACCORDANCE WITH LOCAL ELECTRICAL CODES

→ SYMBOLS FOR CONTINUATION OF WIRING WITHIN THIS SCHEMATIC ←



AS BUILT



GENERAL NOTES:

1. TD1 AND TD2 ARE PNEUMATIC NORMALLY OPEN .1 - 3 SECONDS OFF DELAYS.

Brown AND Caldwell

8337 W. SUNSET ROAD #290
LAS VEGAS, NV 89113
PH. 702-938-4080 FAX 702-938-4082

AS BUILT

REFERENCE DRAWING

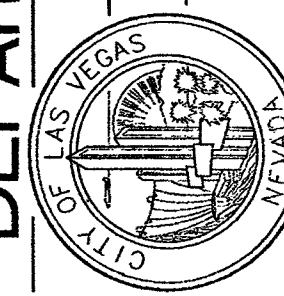
Sheet
E-13
14 of 14
DRAWING NO.
307V1096

**TITLE: CITY CENTER PLACE GROUNDWATER
DISCHARGE IMPROVEMENTS**

CONTROL PANEL SCHEMATIC 3 OF 3



DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DESIGN SECTION



DESIGNED BY: KWC
DRAWN BY: CJR
CHECKED BY:

DATE: 5/14/2014

[illegible]