

DEPARTMENT OF PUBLIC WORKS

MARCH 2011



500 SOUTH MAIN STREET PARKING GARAGE

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FUNDED BY:

CITY OF LAS VEGAS

BID NUMBER:

512-80

REVIEWED BY:

CLV CITY ENGINEER _____ DATE _____

CLV TRAFFIC ENGINEER _____ DATE _____

CLV ENGINEERING DESIGN PROJECT MANAGER _____ DATE _____

SOUTHWEST GAS CORPORATION _____ DATE _____

COX COMMUNICATION LAS VEGAS, INC. _____ DATE _____

NV ENERGY DISTRIBUTION _____ DATE _____

NV ENERGY TRANSMISSION _____ DATE _____

NVE ACKNOWLEDGES THAT WE HAVE RECEIVED YOUR PLANS AND WILL PROVIDE SERVICE TO ALL ELECTRICAL NEEDS ASSOCIATED WITH THIS PROJECT. NVE RESERVES THE RIGHT TO ADDRESS ANY EXISTING OR FUTURE CONFLICTS ONCE THE FINAL DESIGN IS COMPLETED. THE NEW SERVICE AND THE RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO THE NEVADA PUBLIC UTILITY COMMISSION'S RULES AND REGULATIONS.

CENTURYLINK _____ DATE _____

THE AFFIXED CENTURYLINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER

DATE _____ ESN 018

This grading plan is a part of drainage study # 4518 which was received on 4/5/11 and App'd on 4/11/11. Page 1 of 14.



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NO.	DESCRIPTION

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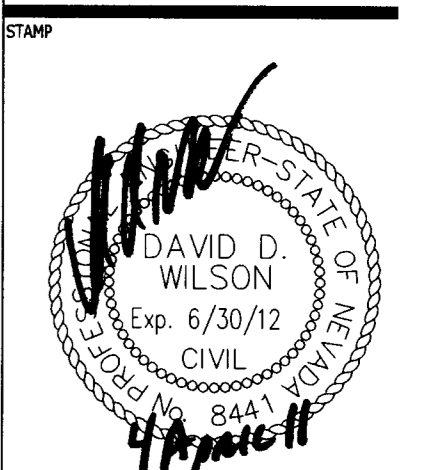
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DEPARTMENT OF PUBLIC WORKS
 500 SOUTH MAIN STREET
 PARKING GARAGE
 COVER SHEET



OWNER: CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS

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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 ISSUE; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA, NEVADA", LATEST REVISED EDITION, 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 ARE LOCATED ON CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORILY 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 AT 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE QUALITY CONTROL DIVISION, 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 REQUIRED FOR THIS CONSTRUCTION.
- EXPANSION JOINTS REQUIRED MAXIMUM EVERY 300 FEET (300') IN EXTRUDED-TYPE CURB.
- AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS.
- CURB AND GUTTER WITH A GRADE OF LESS THAN FOUR-TENTHS OF ONE PERCENT SHALL BE WATER-TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION. ANY CURB AND GUTTER FOUND 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 PROJECT REPRESENTATIVE.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS, OR AS DESIGNATED IN THE FIELD BY CITY PROJECT REPRESENTATIVE.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER AND 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 PROJECT REPRESENTATIVE IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION.
- 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. 625.550.
- UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC. SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOW LINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE AFFECTED UTILITY COMPANY AND THE CITY ENGINEER.
- 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 CLV 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 MDT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.

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 FULL 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 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
A) PAVEMENT AREA SUBGRADE	+0.0" to -0.1"	+0.0" to -0.1"
B) ENGINEERED FILL	0.5"+	+0.1" to -0.1"
- COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE. COMPACTION SHALL COMPLY WITH THE REQUIREMENTS OF THE ENGINEER.
- 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, SUCH ITEM SHALL BE PROVIDED, AS DIRECTED BY THE CITY ENGINEER, AT NO EXPENSE TO THE CITY OF LAS VEGAS. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

CITY OF LAS VEGAS - TRAFFIC NOTES

- ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK", LATEST EDITION, AND TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEVELOPMENT 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 PERMANENT SIGNS ARE INSTALLED.
- WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIED A NEED FOR STUDENTS SAFE CROSSING THROUGH THAT ZONE, THE CONTRACTOR IS REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD" THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF THE 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 MARKINGS, SUCH PAVEMENT MARKINGS 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 VIP 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 1150 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 PROPOSED 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 PORTION OF THE ROAD'S RIGHT OF WAY 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 THE PLACEMENT OF STREET NAME SIGNS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO ENSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED ATESA TRAFFIC CONTROL TECHNICIAN OR IMSA 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 NO: 828-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL. THE 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 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 ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SUCH THAT ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.

LAS VEGAS VALLEY WATER DISTRICT (LVVWD) STANDARD NOTES

- LVVWD PROJECT NO. _____
- NO WORK SHALL BEGIN UNTIL THE PLANS HAVE BEEN APPROVED 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 CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO THE BUSINESS DAY PRIOR TO THE REQUESTED 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 RECENT DRAFT OR LATEST 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 AND 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 258-3802, 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 SHUT DOWN. 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 CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVVWD (702-258-3227) 48 HOURS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW THE DISTRICT TO TAKE THE FINAL METER READING. AFTER THE FINAL READING THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS: EXISTING SERVICE LATERALS THAT ARE TO BE ABANDONED FROM THE EXISTING WATER MAINS SHALL HAVE THE CORPORATION STOPS TURNED OFF AT THE MAIN, A MINIMUM OF TWELVE (12) INCHES OF THE LATERAL OUT NEAR THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR INSTALLED ON THE CORPORATION STOP, IF THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR PULLED FROM THE EXISTING WATER MAIN, THE MAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, IN A MANNER APPROVED BY THE DISTRICT. IF THE CORPORATION STOP IS NOT WATER TIGHT, THE CONTRACTOR SHALL NOTIFY LVVWD COMMUNICATION SUPPORT CENTER (702-258-7171) FOR THE FURTHER DIRECTION. THE EXISTING METER(S) SHALL BE REMOVED AND DELIVERED TO THE DISTRICT. THE CONTRACTOR SHALL REMOVE THE EXISTING SERVICE METER BOX AND APPURTENANCES, FILL AND GRADE CONTRACTOR SHALL REMOVE THE EXISTING SERVICE METER BOX AND APPURTENANCES, FILL AND GRADE ANY AND ALL RESULTING VOIDS, AND REPLACE OR RESTORE TO ORIGINAL CONDITIONS OR BETTER, ALL LANDSCAPING, IRRIGATION SYSTEMS, CONCRETE, SIDEWALKS, ASPHALT, OR ANY OTHER ITEMS DAMAGED OR REMOVED DURING THE REMOVAL OF THE EXISTING SERVICE METER BOX.

CITY OF LAS VEGAS - FIRE DEPARTMENT 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:
 - KENNEDY-GUARDIAN MODELS K81A AND K81D
 - MUELLER-SUPER CENTURION 250 MODEL A-423
 - CLOW-MEDALLION MODEL F-2548LVD
 - TROY VALVE - PATRIOT MODEL PTB100M WATER HYDRANT
 - 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 THE 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 - 300 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 TRAFFIC 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 LEADS INSTALLED ON A SINGLE SYSTEM. SECTIONAL CONTROL VALVES SHALL BE INSTALLED IN A WATER MAIN, 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 IMPROVED LOADS OF THE FIRE APPARATUS.
- THE GRADIENT FOR A FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FEET PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%.
- THE TURNING RADIUS OF A 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 FLOW LINE TO THE FLOW LINE WHEN SERVING NO MORE THAN 6 RESIDENCES, AND WHEN ON STREET PARKING IS DISALLOWED.
- ALL FIRE APPARATUS ACCESS ROAD 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 IN 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 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 FIRE LINES, 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 LINES. 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.

NOTE: THE DISTRICT CAN NOT GUARANTEE A WATER-TIGHT SHUTDOWN WHERE CONNECTIONS OR REPAIRS TO EXISTING FACILITIES ARE REQUIRED. THE CONTRACTOR SHALL ENSURE ALL LABOR AND EQUIPMENT IS AVAILABLE TO REMOVE FUGITIVE WATER WHICH MAY IMPEDE CONSTRUCTION AT ALL TIMES. COORDINATION WITH INSPECTION DIVISION MUST TAKE PLACE PRIOR TO ANY TRIAL SHUTDOWN. CONTRACTOR TO INSTALL TEMPORARY SERVICE TO ENSURE PROPER SHUTDOWN IN THE EVENT NO OTHER APPURTENANCES ARE AVAILABLE. ESN 048
 THE LOCATION OF ALL WATER SERVICE LINES ARE NOT SHOWN ON THE DRAWINGS. HOWEVER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO RELOCATE ALL WATER SERVICE MAINS AND LINES INTERFERING WITH CONSTRUCTION ACCORDING TO THE LAS VEGAS VALLEY WATER DISTRICT'S STANDARDS. ANY WATER METER TO BE OUT OF SERVICE MUST BE PROVIDED WITH TEMPORARY SERVICE.

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 REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION.
- NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE TRAFFIC ENGINEERING DIVISION AND THE CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623 OF THE UNIFORM STANDARD SPECIFICATIONS.
- ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- ALL EMPTY CONDUITS SHALL HAVE PULL STRINGS INSTALLED PRIOR TO FINAL INSPECTION.
- ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL PROVIDE A MINIMUM CLEARANCE AROUND STREET LIGHT POLES IN ACCORDANCE WITH USD NO. 320A.
- AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TRAFFIC ENGINEERING DIVISION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
- SERVICE POINT SHALL BE COORDINATED WITH NV ENERGY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT OR AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON THE PLANS OR IN THE SPECIAL PROVISIONS.

CITY OF LAS VEGAS - SEWER NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS 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 PAVED IN STREETS EIGHTY FOOT (80') R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY FOOT (80') 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" SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
- SEWER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCHES (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 ENGINEER PRIOR TO THE ACCEPTANCE BY THE CITY OF LAS VEGAS.
- INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PVC PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

DEVIATION FROM STANDARDS

NONE



REVISIONS

NO.	DATE	DESCRIPTION

CONSULTANT
 OWNER
 CITY OF LAS VEGAS
 DEPARTMENT OF PUBLIC WORKS
 343 NORTH RANCHO DRIVE
 LAS VEGAS, NEVADA 89104

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 PROJECT ENGINEER
 STRUCTURAL ENGINEER /
 WATER PIPING
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CIVIL ENGINEER
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REVISIONS

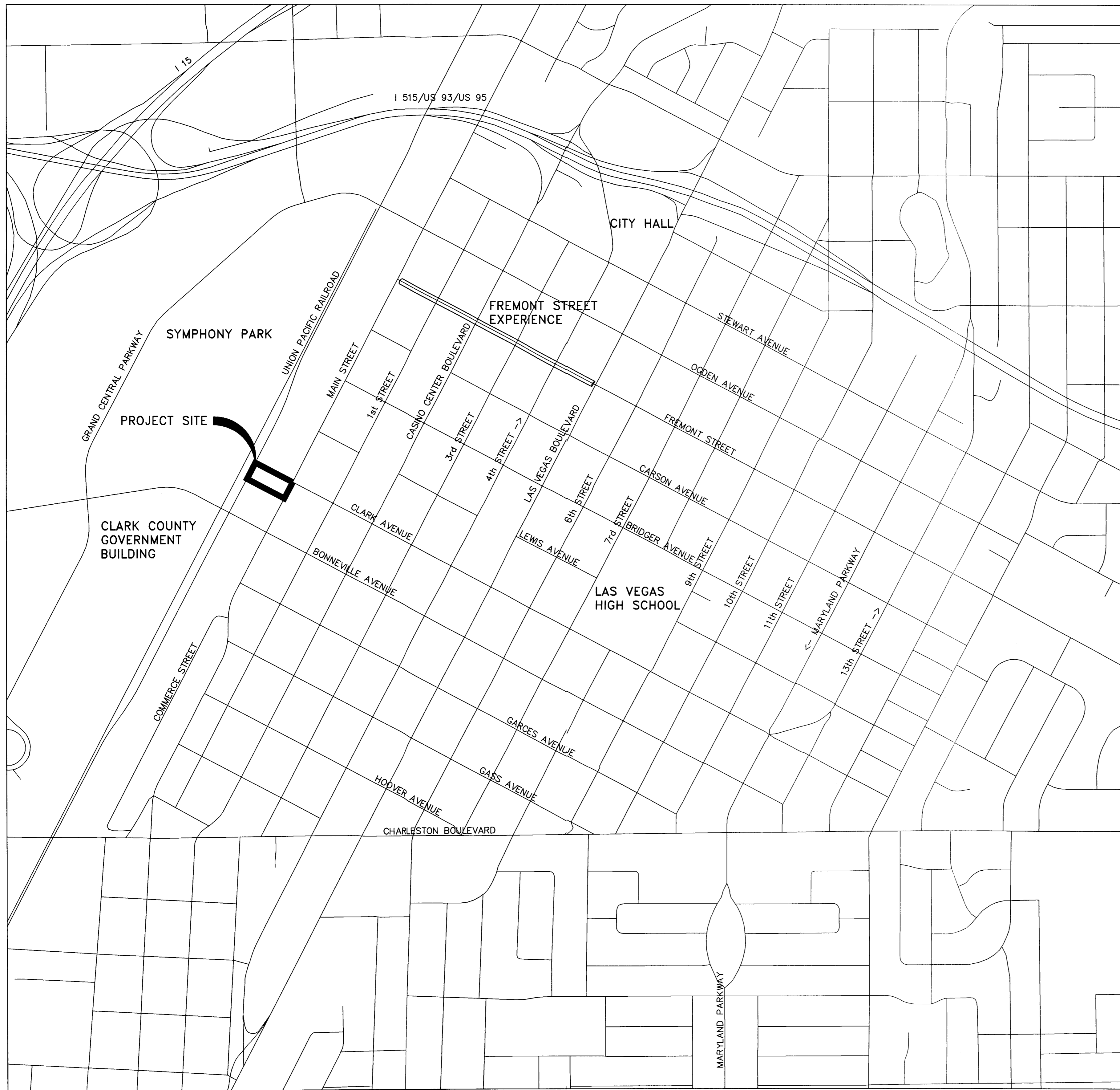
CONSULTANT

PROJECT MANAGER

PROJECT ENGINEER

CIVIL ENGINEER

MEP CONSULTANTS



ABBREVIATIONS

<ul style="list-style-type: none"> ● A.B. AGGREGATE BASE AC ASPHALTIC CONCRETE ACP ASBESTOS CEMENT PIPE AVE AVENUE BC BACK OF CURB BCR BEGIN CURB RETURN BLVD BOULEVARD BM BENCHMARK BVC BEGIN VERT. CURVE CALC CALCULATED EX GRADE CCAUUSD CLARK COUNTY AREA UNIFORM STANDARD DRAWING CIP CAST IRON PIPE CL CENTERLINE CLV CITY OF LAS VEGAS CONNECTION CONN CONNECTION CTV CABLE TELEVISION CY CUBIC YARD D OR Δ DELTA / ANGLE DESC DESCRIPTION DCCA DOUBLE CHECK DETECTOR ASSEMBLY DCSWW DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS DG DECOMPOSED GRANITE DIP DUCTILE IRON PIPE E EAST EA EACH ECR END CURB RETURN ELEV ELEVATION ELEC ELECTRICAL EVC END VERT. CURVE EXIST EXISTING EX OR EX. EXISTING FAST FREWAY AND ARTERIAL SYSTEM OF TRANSPORTATION FG FINISH GROUND PH FIRE HYDRANT FS FINISHED SURFACE FL FLOWLINE FT FOOT OR FEET GB GRADE BREAK GPM/H GALLONS PER MINUTE/HOUR HP HIGH POINT HT HEIGHT INT INTERSECTION INV INVERT LA LANDSCAPE LF LINEAR FEET LT LEFT LWWD LAS VEGAS VALEY WATER DISTRICT MAX MAXIMUM MEP MECHANICAL ELECTRICAL PLUMBING ENGINEER MH MANHOLE 	<ul style="list-style-type: none"> MIN MINIMUM N NORTH NTS NOT TO SCALE NVE NEVADA ENERGY PC POINT OF CURVATURE PCC POINT OF COMPOUND CURVATURE PE POLY ETHYLENE PRC POINT OF REVERSE CURVATURE PROJ CT PROJECTED TOP OF CURB PT POINT OF TANGENCY PSI POUNDS PER SQUARE INCH PVC POLY VINYL CHLORIDE PVI POINT OF VERT INFLECTION R RADIUS RCP REINFORCED CONCRETE PIPE RPPA REDUCED PRINCIPLE PRESSURE ASSEMBLY RT RIGHT OF WAY R/W RIGHT OF WAY S SOUTH SD STORM DRAIN SF SQUARE FOOT OR FEET SS SANITARY SEWER SSMH SANITARY SEWER MANHOLE ST STREET STL STEEL STA STATION STD STANDARD SIDEWALK FINISH GRADE SW SQUARE YARDS SY SQUARE YARDS TC TOP OF CURB THW THERMO-PLASTIC HEAT AND WATER RESISTANT INSULATED WIRE (TYP) TYPICAL UDACS UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS USDPWC UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION UTAC ULTRA THIN ASPHALT CONCRETE VC VERTICAL CURVE VERT VERTICAL W WEST OR WATER WL WATERLINE WTR WATER ± PLUS OR MINUS
--	---

SYMBOLS AND LINE TYPE LEGEND

---	RIGHT-OFF-WAY LINE
---	LOT LINE
--- STA. ---	CENTERLINE AND STATIONING
---	EASEMENT LINE
---	FLOW LINE
---	EDGE OF IMPROVEMENTS
---	SAWCUT LINE
---	BACK OF CURB
---	EDGE OF PAVEMENT
---	EXIST. CURB/EDGE OF PAVEMENT
---	SCREENING WALL
---	RETAINING WALL
---	EXIST. INDEX CONTOUR
---	EXIST. INTER CONTOUR
---	INDEX CONTOUR
---	MINOR CONTOUR
---	END CAP
---	HEADWALL
---	STORM DRAIN
---	EXISTING SSANITARY SEWER
---	EXISTING WATER LINE
---	EXISTING SSTORM DRAIN
---	EXISTING EEELEC CONDUIT
---	EXISTING OVERHEAD POWER
---	EXISTING GAS
---	EXISTING FFIBER OPTIC

---	PROPOSED	---	EXISTING
---	CAP W/ BLOW OFF	---	FIRE HYDRANT
---	GATE VALVE	---	REDUCER
---	METER	---	RPPA
---	SERVICE PEDESTAL	---	STREET SIGN
---	STREET LIGHT	---	SPOT ELEVATION
---	FLOW DIRECTION	---	SLOPE GRADE
---	DESIGN GRADES (BY-OTHER)	---	CALCULATED EX GRADE (CONFIRM IN FIELD)

This grading plan is a part of drainage study #4518 which was received on 4/5/11 and App'd on 4/11/11. Page 3 of 14

APPROVED FOR CONSTRUCTION
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
 DATE _____ ESN 018



REVISIONS

OWNER: CITY OF LAS VEGAS
 DEPARTMENT OF PUBLIC WORKS
 CAPITAL PROJECT MANAGEMENT
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 LAS VEGAS, NEVADA 89106

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DEPARTMENT OF PUBLIC WORKS
500 SOUTH MAIN STREET
PARKING GARAGE
 ABBREVIATIONS, LEGEND, AND VICINITY MAP

STAMP
 DAVID D WILSON
 Exp. 6/30/12
 CIVIL
 4/11/11

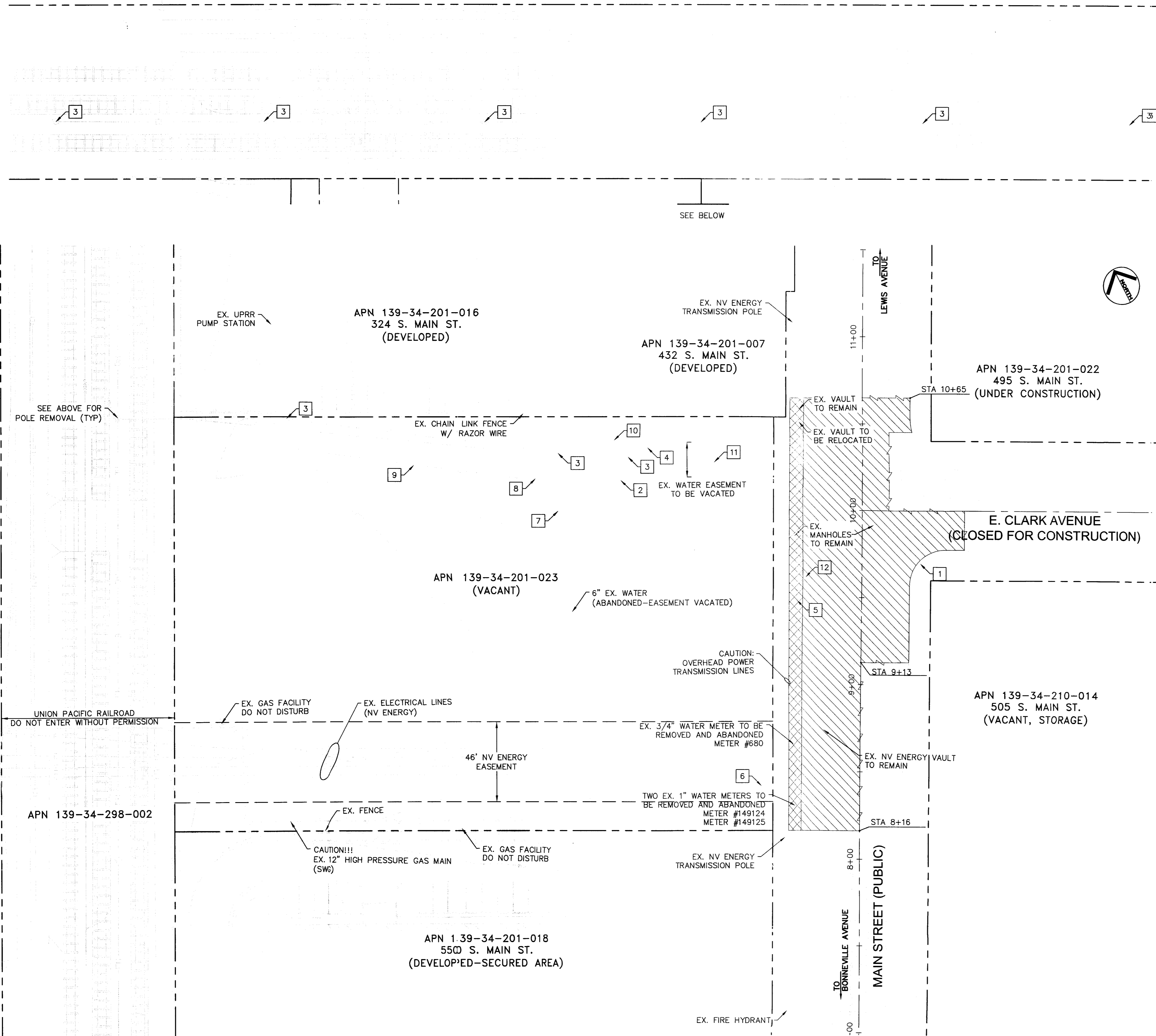
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DRAWN	MAG
FILE	092708GN.DWG
DATE	3/25/2011
SCALE	AS SHOWN
SID NO	09.15341.19
CLV DWG NO	512-80
HANSEN NO	28435
SHR NO	

C0.2

811 SAFETY ALERT
 Call Before You Dig
 Call Before You Overhead
 Call Before You UnderGround
 1-702-432-5300
 1-702-227-2829

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DEMOLITION NOTES

- 1 REMOVE EXISTING SIDEWALK RAMP.
- 2 REMOVE EXISTING FIRE HYDRANT AND BOLLARDS.
- 3 REMOVE EXISTING POWER POLES AND WIRING PER ELECTRICAL PLAN. OVERHEAD AND UNDERGROUND POWER TO BE REMOVED FROM POLE TO UPRR PUMP STATION.
- 4 REMOVE CONCRETE SLAB AND PROTECT UTILITIES UNTIL RELOCATED.
- 5 REMOVE EXISTING STREETLIGHT.
- 6 RELOCATE EXISTING ELECTRICAL CONDUIT STUB PER NV ENERGY.
- 7 REMOVE EXISTING GUIDE WIRE.
- 8 EXISTING SANITARY SEWER CLEAN OUT TO BE ABANDONED.
- 9 EXISTING SEWER TO BE ABANDONED - NO EASEMENT OF RECORD.
- 10 EXISTING 4" DCDA TO BE REMOVED UPON INSTALLATION OF NEW SERVICE. WATER SERVICE REQUIRED AT ALL TIMES.
- 11 EXISTING 6" WATER LINE TO BE ABANDONED.
- 12 REMOVE EXISTING DROP INLET.

- REMOVE EXISTING CONCRETE SIDEWALK, CURB, AND GUTTER.
- REMOVE EXISTING ASPHALT PAVEMENT AND BASE.
- SAWCUT EXISTING PAVEMENT



REVISIONS

CONSULTANT

Owner: CITY OF LAS VEGAS
DEPARTMENT OF PUBLIC WORKS
CITY PROJECT MANAGEMENT
333 NORTH RANCHO DRIVE
LAS VEGAS, NEVADA 89106

Client: THE WHITING TURNER CONTRACTING COMPANY
8732 VIA ALBERTA DRIVE SUITE 300
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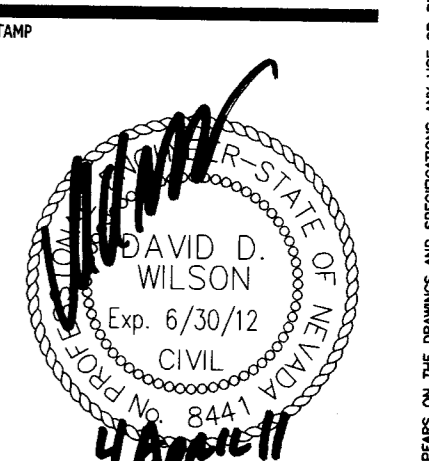
Consultants: Designer:
PROJECT MANAGEMENT /
PARKING CONSULTANT
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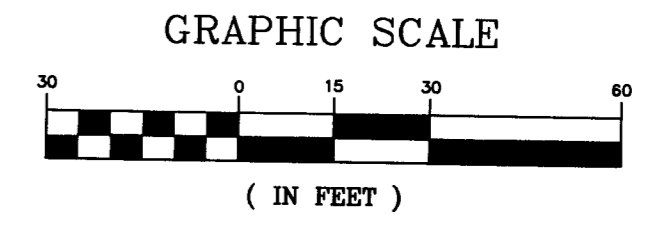
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DEPARTMENT OF PUBLIC WORKS
500 SOUTH MAIN STREET
PARKING GARAGE
DEMOLITION PLAN



This grading plan is a part of drainage study # 4518 which was received on 4/5/11 and Appld on 4/4/11. Page 5 of 14.



811
know what's below
Call before you dig 1-702-227-2929

SAFETY ALERT
Call Before You Overhead
UnderGround
1-702-432-5300
BEFORE YOU DIG CALL BEFORE YOU DIG UNDERGROUND

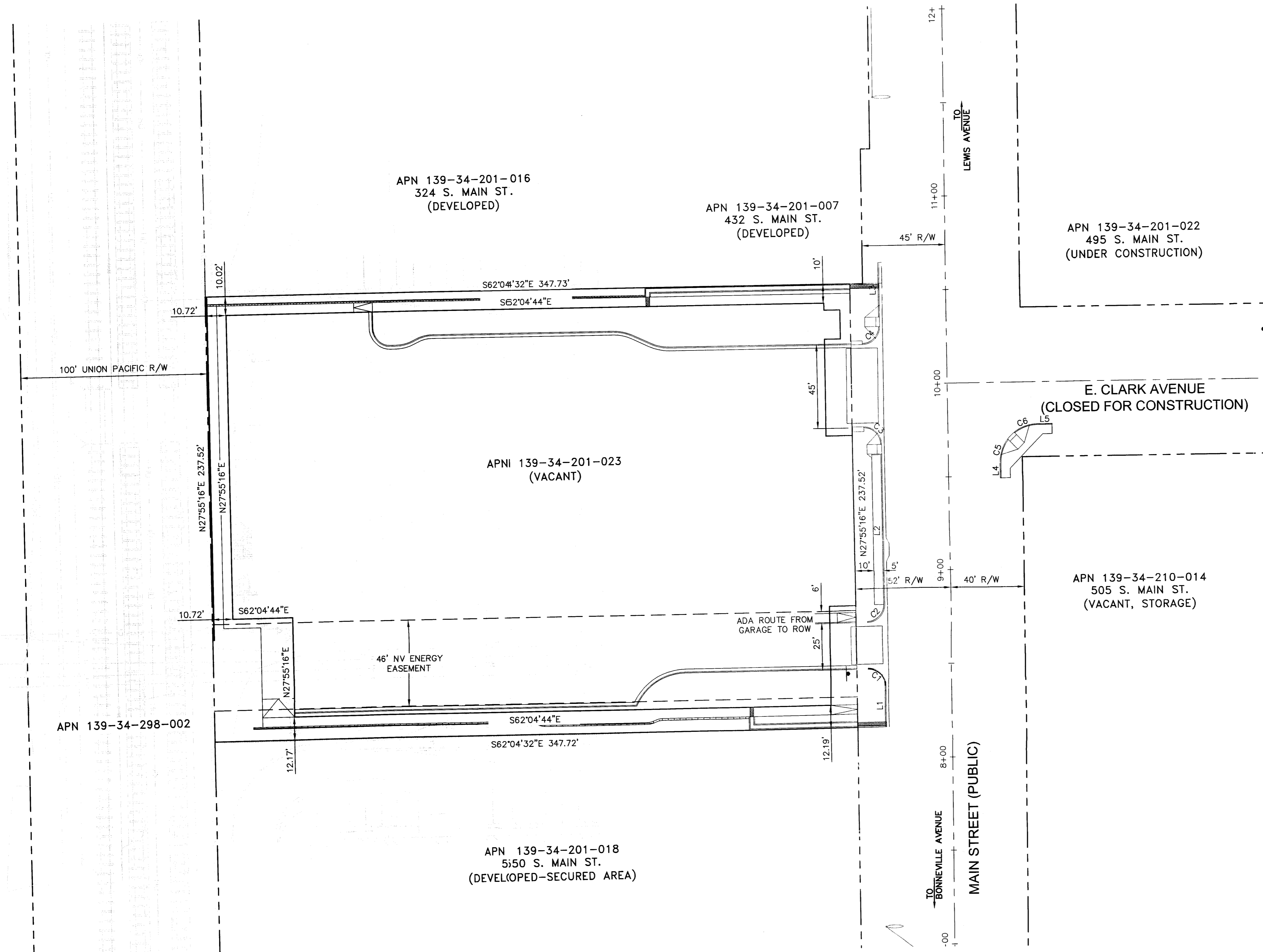
OWNER: CITY OF LAS VEGAS
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TDD: (702) 386-9108

DRAWN	MAG
FILE	092708DWG
DATE	3/25/2011
SCALE	AS SHOWN
BID NO	09.15341.19
CLV DWG NO	512-80
HANSEN NO	28435
SHT NO	C1.0

DRAWING IS INSTRUMENTS OF SERVICE AND THE PROPERTY OF THE DESIGN PROFESSIONAL WHOSE SEAL OF CERTIFICATION APPEARS ON THE DRAWING AND PARTICIPATIONS ANY USE OF REPRODUCTION IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT IS STRICTLY PROHIBITED. COPIES OF THE DRAWING AND SPECIFICATIONS RETURNED BY THE CLIENT MAY BE UTILIZED ONLY FOR OCCUPANCY OF THE PROJECT FOR WHICH THEY WERE PREPARED AND NOT FOR THE CONSTRUCTION OF ANY OTHER PROJECT. N.E.C. 082.390

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LINE TABLE		
LINE	LENGTH	BEARING
L1	22.33'	N28°05'15"E
L2	86.20'	S27°57'34"W
L3	34.10'	N28°09'37"E
L4	7.98'	S27°53'40"W
L5	7.98'	S62°06'26"E

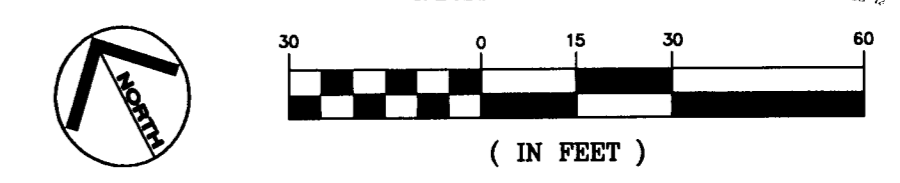
CURVE TABLE		
CURVE	LENGTH	RADIUS
C1	14.14'	9.00'
C2	14.13'	9.00'
C3	14.14'	9.00'
C4	14.14'	9.00'
C5	13.20'	20.00'
C6	13.20'	20.00'

NOTE
ALL DIMENSIONS ARE TO BACK OF CURB, EDGE OF PAVEMENT, BUILDING FACE, PROPERTY LINE, OR RIGHT-OF-WAY.

BASIS OF BEARING
NORTH 27°55'28" EAST BEING THE BEARING OF THE NDOT CENTERLINE OF MAIN STREET BETWEEN BONNEVILLE AND LEWIS. SITUATE IN THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 34, TOWNSHIP 20 SOUTH, RANGE 61 EAST, M.D.M., CITY OF LAS VEGAS, CLARK COUNTY, NEVADA AS SHOWN BY MAP THEREOF ON FILE IN THE CLARK COUNTY RECORDER'S OFFICE IN FILE 97, PAGE 72 OF PARCEL MAPS.

BENCHMARK
CITY OF LAS VEGAS BENCHMARK No. 8LV01 34W4
A RIVET AND PLATE IN THE BASE OF A STREET LIGHT AT THE NORTHEAST CORNER OF MAIN AND BONNEVILLE.
ELEVATION = 617.801 METERS (NAVD'88)
ELEVATION = 2026.90 US SURVEY FEET (NAVD'88)

This grading plan is a part of drainage study #4518 which was received on 4/5/11 and App'd on 4/11/11. Page 6 of 14.



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1-702-432-5300



REVISIONS

CONSULTANT
OWNER: CITY OF LAS VEGAS
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LAS VEGAS, NEVADA 89106

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DEPARTMENT OF PUBLIC WORKS
500 SOUTH MAIN STREET
PARKING GARAGE
HORIZONTAL CONTROL PLAN

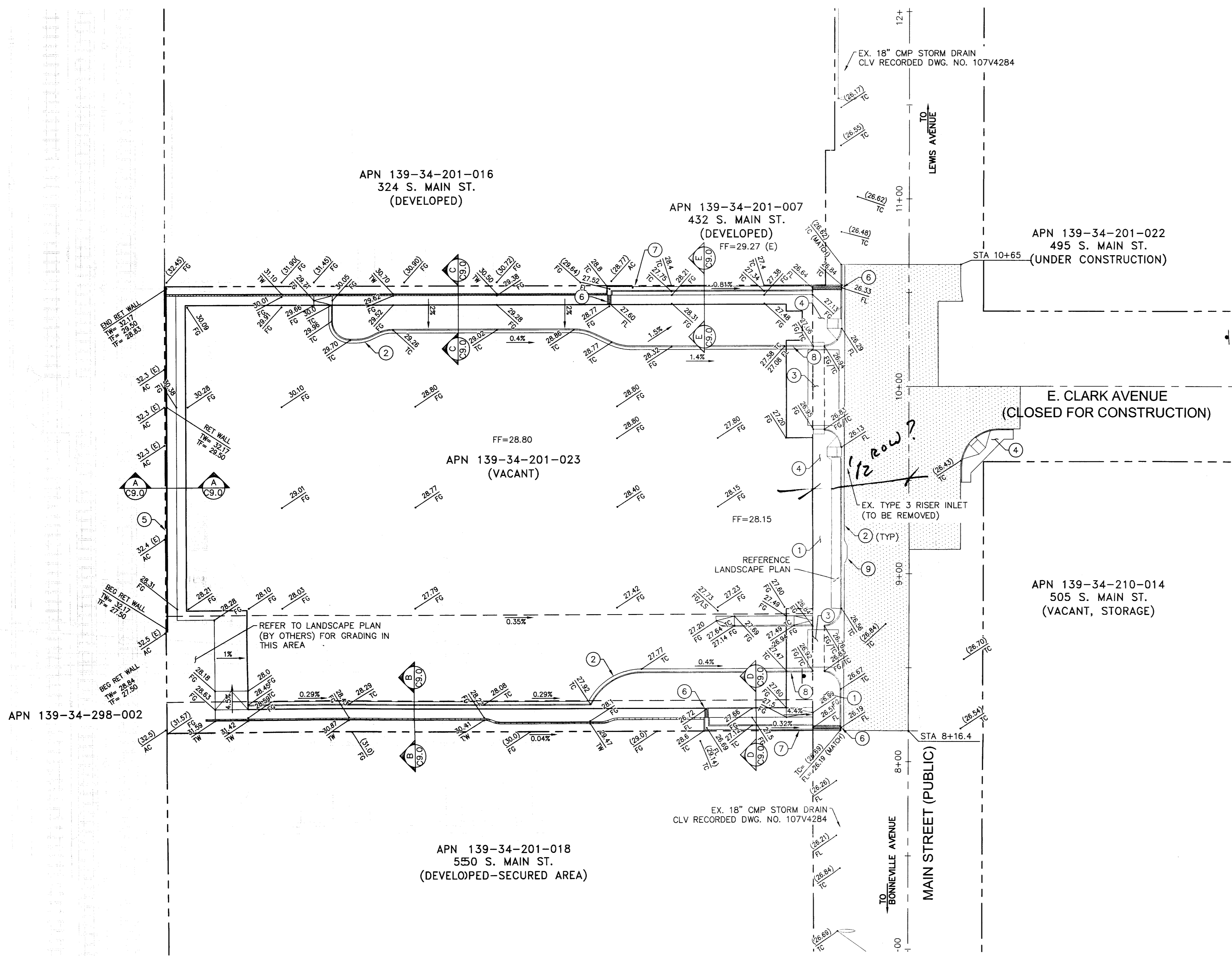
STAMP
DAVID D. WILSON
Exp. 6/30/12
CIVIL ENGINEER
8441

OWNER: CITY OF LAS VEGAS
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333 NORTH RANCHO DRIVE
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TDD: (702) 386-9108

DRAWN MAG
FILE 092708HC.DWG
DATE 3/25/2011
SCALE AS SHOWN
BD NO 09.15341.19
CLV DWG NO 512-80
HANSEN NO 28435
SHT NO C2.0

REVISIONS AND SPECIFICATIONS REMAINED BY THE CLIENT MAY BE UTILIZED ONLY FOR OCCUPANCY OF THE GARAGE. ANY OTHER PROJECT IS A C. 03/10/10

K:\LAV_Civil\092708\092708GD.dwg Apr 04, 2011 03:06pm wode.watkinson



CONSTRUCTION NOTES

- 1 CONSTRUCT CONCRETE SIDEWALK PER CCAUSD DWG. NO. 234 AND LAS VEGAS DOWNTOWN CENTENNIAL STANDARDS. MATCH NEW SIDEWALK TO THE NEAREST EXISTING EXPANSION JOINT.
- 2 CONSTRUCT "L" TYPE CURB AND GUTTER PER CCAUSD DWG. NO. 216.
- 3 INSTALL DRIVEWAY PER LAS VEGAS DOWNTOWN CENTENNIAL STANDARDS.
- 4 INSTALL SIDEWALK RAMPS PER DOWNTOWN CENTENNIAL STANDARDS, CCAUSD DWG. NO. 235, AND LANDSCAPE PLAN.
- 5 INSTALL CONCRETE RETAINING WALL. SEE STRUCTURAL PLANS FOR DETAILS.
- 6 INSTALL SIDEWALK DRAIN PER CCAUSD DWG. NO. 236.
- 7 TOP OF WALL/CURB TO MATCH EXISTING FINISH GRADE.
- 8 TRANSITION LAST 10 FEET OF "L" TYPE CURB TO SPILL TYPE CURB TO MATCH SIDEWALK.
- 9 INSTALL TYPE C-D MODIFIED DROP INLET PER CCAUSD DWG. NO. 412A, D(N)=±3.3', L=5", INV=±22.7.

CONSTRUCT NEW PAVEMENT SECTION PER DETAIL ON SHEET C9.0.



REVISIONS

CONSULTANT

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DEPARTMENT OF PUBLIC WORKS
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DEPARTMENT OF PUBLIC WORKS

500 SOUTH MAIN STREET

PARKING GARAGE

GRADING PLAN

STAMP

DAVID D. WILSON
Exp. 6/30/12
CIVIL
4/11/11

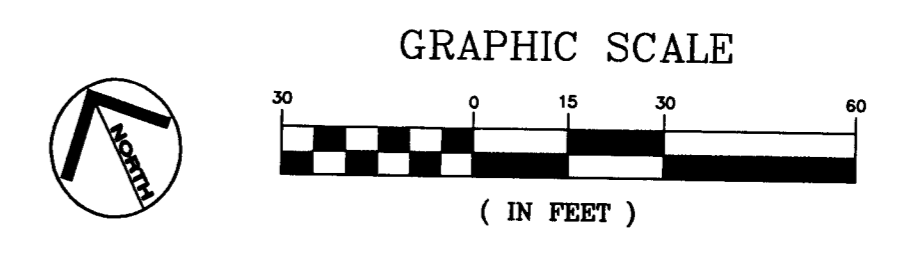
OWNER: CITY OF LAS VEGAS
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FAX: (702) 384-4846
TDD: (702) 386-9108

DRAWN	MAG
FILE	092708GD.DWG
DATE	3/25/2011
SCALE	AS SHOWN
BID NO	09.15341.19
CLV DWG NO	512-80
HANGEN NO	28435
SHT NO	

C3.0

This grading plan is a part of drainage study #4518 which was received on 4/5/11 and Appl on 4/11/11. Page 7 of 14.



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REVISIONS

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 PHONE 702.896.1199 FAX 702.896.1133

DEPARTMENT OF PUBLIC WORKS

500 SOUTH MAIN STREET PARKING GARAGE

UTILITY PLAN

STAMP

OWNER: CITY OF LAS VEGAS
 DEPARTMENT OF PUBLIC WORKS

333 NORTH RANCHO DRIVE
 LAS VEGAS, NEVADA 89106
 PHONE: (702) 229-6525
 FAX: (702) 388-4846
 TDD: (702) 386-9108

DRAWN: MAG
 FILE: 092708UT.DWG
 DATE: 3/25/2011
 SCALE: AS SHOWN
 BID NO: 09.15341.19
 CIVIL DWG NO: 512-80
 HANSEN NO: 28435
 SHEET NO:

C4.0

UTILITY NOTES

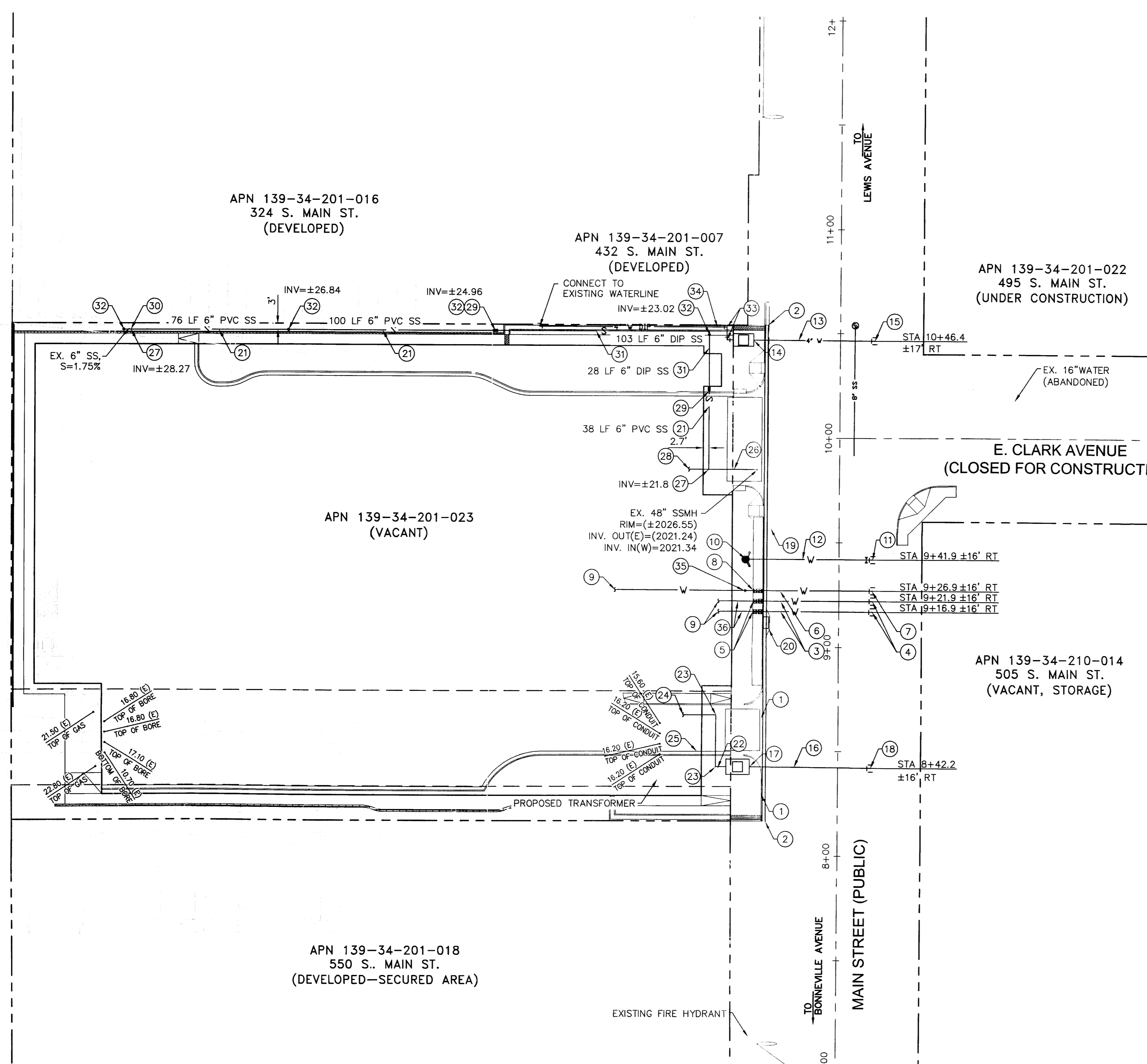
- 1 ABANDON AND REMOVE EXISTING WATER METERS PER UDACS. CONTRACTOR TO COORDINATE THE REMOVAL OF EXISTING METERS WITH THE LAS VEGAS VALLEY WATER DISTRICT PRIOR TO REMOVING TO VERIFY APPLICABILITY OF WATER SERVICE CREDITS.
- 2 REMOVE EXISTING 18" CMP STORM DRAIN AND REPLACE WITH 18" CLASS III RCP STORM DRAIN. CONNECT NEW STORM DRAIN SECTION USING REINFORCED CONCRETE COLLAR PER DETAIL ON SHEET C9.0.
- 3 INSTALL 2" WATER LATERAL (APPROX. 52 LF). TRENCH AND BACKFILL PER UDACS PLATE NO. 17.
- 4 INSTALL 2" SERVICE SADDLE AND CORPORATION STOP PER UDACS PLATE NO. 3.
- 5 INSTALL 2" WATER METER AND 2" BACKFLOW PREVENTOR ASSEMBLY (BELOW GRADE INSTALLATION) PER UDACS PLATE NO. 3 AND 8.
- 6 INSTALL 1 1/2" WATER LATERAL (APPROX. 52 LF). TRENCH AND BACKFILL PER UDACS PLATE NO. 17.
- 7 INSTALL 1 1/2" SERVICE SADDLE AND CORPORATION STOP PER UDACS PLATE NO. 3.
- 8 INSTALL 1 1/2" WATER METER AND 1 1/2" BACKFLOW PREVENTOR ASSEMBLY (BELOW GRADE INSTALLATION) PER UDACS PLATE NO. 3 AND 8.
- 9 REFER TO PLUMBING PLANS (BY OTHERS) FOR CONTINUATION.
- 10 INSTALL FIRE HYDRANT ASSEMBLY W/GATE VALVE AND BLUE REFLECTIVE MARKERS PER UDACS PLATE NO. 39 & 40.
- 11 WET TAP EXISTING 12" WATERLINE WITH 12"x6" MECHANICAL JOINT TAPPING SLEEVE AND VALVE PER UDACS PLATE NO. 34.
- 12 INSTALL 6" PVC WATERLINE (APPROX. 60 LF).
- 13 INSTALL 4" LATERAL (APPROX. 63 LF). TRENCH AND BACKFILL PER UDACS PLATE NO. 17.
- 14 INSTALL 4" DCDA PER UDACS PLATE NO. 60 (BELOW GROUND INSTALLATION) AND VAULT PER UDACS DRAWING NO. C-475.
- 15 WET TAP EXISTING 12" WATERLINE WITH 12"x4" MECHANICAL JOINT TAPPING SLEEVE AND VALVE PER UDACS PLATE NO. 3A.
- 16 INSTALL 8" LATERAL (APPROX. 66 LF). TRENCH AND BACKFILL PER UDACS PLATE NO. 17.
- 17 INSTALL 8" DCDA PER UDACS PLATE NO. 60 (BELOW GROUND INSTALLATION) AND VAULT PER UDACS DRAWING NO. C-475.
- 18 WET TAP EXISTING 12" WATERLINE WITH 12"x8" MECHANICAL JOINT TAPPING SLEEVE AND VALVE PER UDACS PLATE NO. 34.
- 19 REMOVE EXISTING TYPE 3 PIPE RISER INLET.
- 20 INSTALL TYPE C-D MODIFIED DROP INLET PER CCAUSD DWG. NO. 412A, D(IN)=±3.3', L=5', INV=±22.7.
- 21 INSTALL 6" SDR35 PVC SANITARY SEWER PIPE, S=1.88%.
- 22 RELOCATE EXISTING ELECTRICAL STUBS TO PROPOSED TRANSFORMER - REFERENCE NV ENERGY PLANS.
- 23 INSTALL 8" 90° BEND WITH THRUST BLOCK PER UDACS PLATE NO. 31.
- 24 INSTALL 8" C900 PVC - REFER TO FIRE PREVENTION PLANS (BY OTHERS) FOR CONTINUATION.
- 25 INSTALL 8" C900 PVC WATERLINE (APPROX. 50 LF).
- 26 INSTALL 6" PVC SANITARY SEWER (APPROX. 35 LF), S=2%
- 27 INSTALL 6"x6" WYE.
- 28 STUB AND CAP FOR FUTURE CONNECTION. REFER TO PLUMBING PLANS (OTHERS) FOR CONTINUATION. INV 6"=±22.04
- 29 TRANSITION FROM 6" PVC SANITARY SEWER TO 6" DUCTILE IRON PIPE SANITARY SEWER
- 30 SANITARY SEWER CONNECTION POINT. CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING 6" SANITARY SEWER, AND THAT THE SYSTEM GRAVITY FLOWS EASTERLY FROM THE PROPOSED CONNECTION POINT. PROPOSED INVERT AT CONNECTION POINT = ±28.18.
- 31 INSTALL 6" DUCTILE IRON PIPE SANITARY SEWER PIPE, S=1.88%.
- 32 INSTALL 6" CLEAN-OUT PER DETAIL ON SHEET C9.0.
- 33 INSTALL 4" 90° ELBOW WITH THRUST BLOCK.
- 34 INSTALL 4" DUCTILE IRON PIPE WATERLINE (APPROX. 90 LF).
- 35 INSTALL 1 1/2"x2" REDUCER.
- 36 INSTALL 2" DIAMETER COPPER WATERLINE OR APPROVED EQUAL (APPROX. 16 LF).

This grading is scale
 part of drainage
 on 4/5/11 and Appl'd on
 4/11/11 Page 8 of 14

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 CALL BEFORE YOU OVERHEAD



APPROVED FOR CONSTRUCTION

Las Vegas Valley Water District Engineering Services Manager
 Date _____ Project No. TBD ESN 018

CITY OF LAS VEGAS FIRE DEPARTMENT

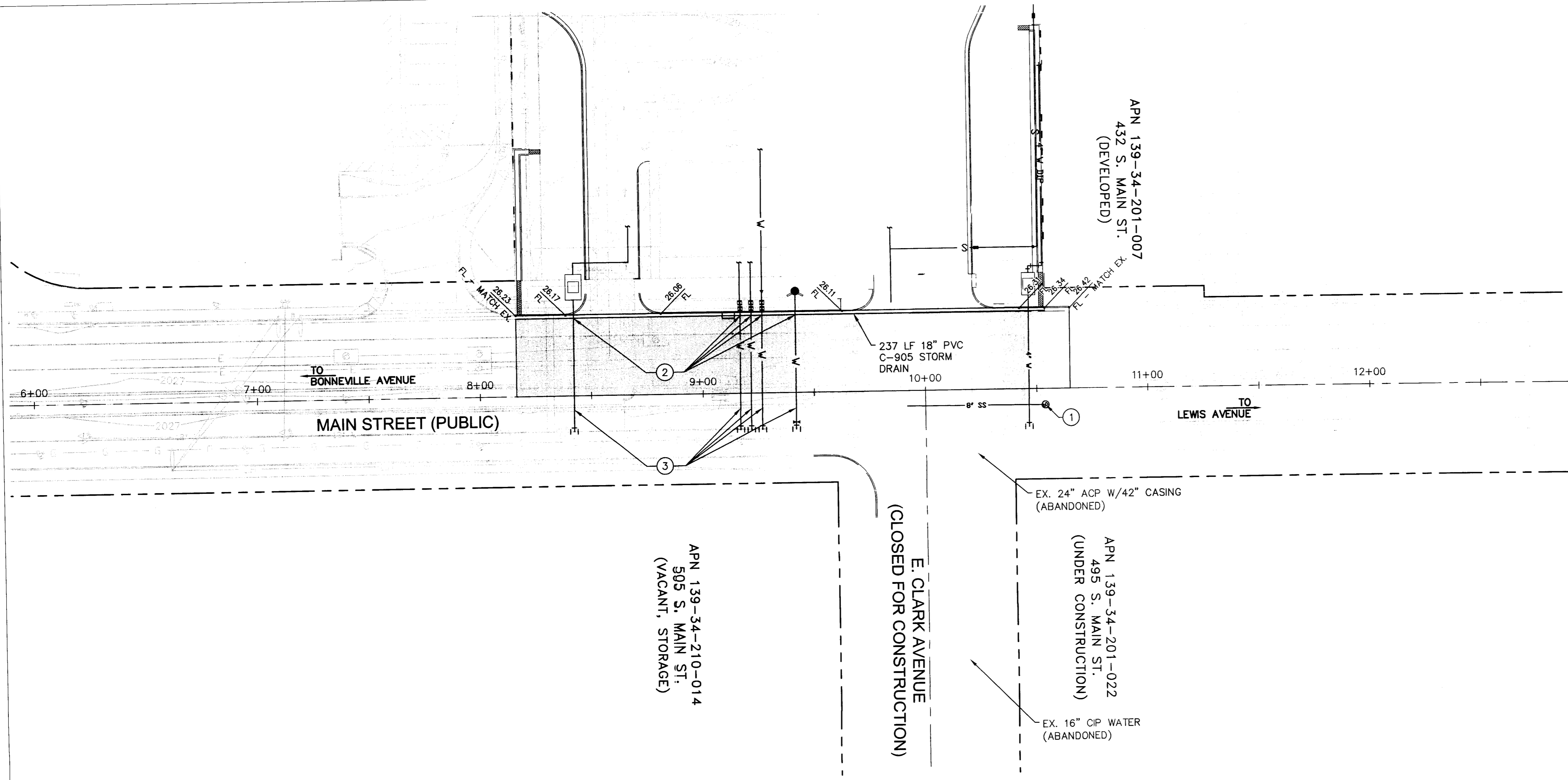
BUILDING DATA	WORST CASE COMMERCIAL
CONSTRUCTION TYPE	TYPE IIA
FIRE FLOW (20 PSI RESIDUAL)	3,000
LARGEST BUILDING AREA	313,781 sf
NUMBER OF STORIES	5
BUILDING HEIGHT	74.5'
OCCUPANCY TYPE	S2, B
BUILDING SPRINKLER SYSTEM (Y/N)	Y

BY: DATE:
 APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF ANY VIOLATION OF ANY OF THE PROVISIONS OF STATE OR COUNTY LAWS. FIRE FLOW 3000 GPM @ 20 PSI RESIDUAL.
 APPROVAL BY THE FIRE DEPARTMENT HAVING JURISDICTION IS REQUIRED PRIOR TO OBTAINING FINAL APPROVAL FROM THE LAS VEGAS VALLEY WATER DISTRICT.

NOTES:

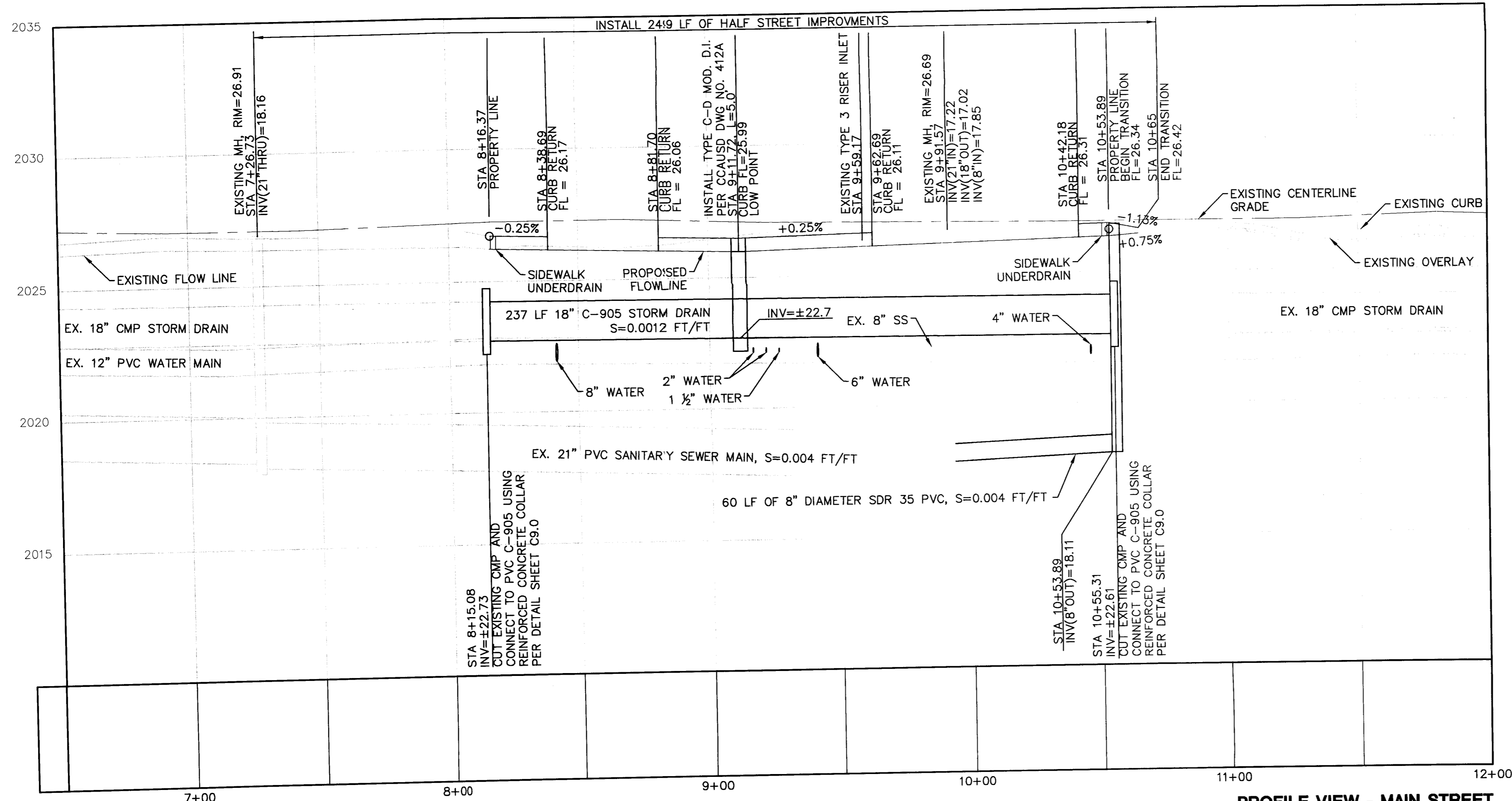
1. ALL EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT SHOWN IN THEIR PROPER LOCATION.
2. CONTRACTOR TO POTHOLE AND VERIFY UTILITY ELEVATIONS AT CONNECTION POINTS, VERIFY CONSTRUCTABILITY AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. ON-SITE UTILITIES ARE TO BE INSTALLED PER THE CURRENTLY ADOPTED DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER AND POTABLE WATER SYSTEMS.

K:\LAV_Civil\092708 Whiting Turner\000 - 500 S. Main Street\CADD\092708PP.dwg Apr 04, 2011 03:01pm wade.watkinson



- UTILITY NOTES**
- INSTALL 8" DIAMETER SDR 35 PVC SEWER MAIN WITH 48" STANDARD PRECAST SANITARY SEWER MANHOLE PER DCSWCS.
 - WATER LATERAL/STORM DRAIN CROSSING MUST MEET THE REQUIREMENTS OF UDACS, SECTION 2. UNIFORM DESIGN AND CONSTRUCTION STANDARDS, SECTION 2.19.02. "FOR WATER LATERAL BELOW STORM DRAIN, VERTICAL SEPARATION OF NO LESS THAN 6" MUST BE MAINTAINED," AND "THE STORM DRAIN MUST BE CONSTRUCTED OF WATER SUPPLY QUALITY MATERIALS." CONTRACTOR TO VERIFY VERTICAL AND HORIZONTAL LOCATION OF UTILITIES AND COMPLIANCE WITH UDACS SECTION 2.19. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
 - CONTRACTOR TO VERIFY LOCATION OF EXISTING SANITARY SEWER AND VERIFY THAT WATER LATERALS ARE IN CONFORMANCE WITH UDACS SECTION 2.19. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES DUE TO FIELD CONDITIONS.

- NOTES:**
- CONTRACTOR TO POTHOLE AND VERIFY UTILITY ELEVATIONS AT CONNECTION POINTS, VERIFY CONSTRUCTABILITY AND CONSULT ENGINEER.



PROFILE VIEW - MAIN STREET
SCALE: (H) 1" = 30'
(V) 1" = 3'

APPROVED FOR CONSTRUCTION
Las Vegas Valley Water District Engineering Services Manager
Date _____ Project No. TBD ESN 018

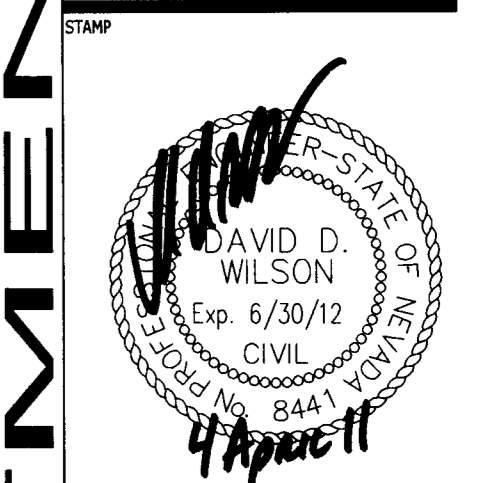
GRAPHIC SCALE
This grading plan is a part of drainage study # 4518 which was received on 4/15/11 and App'd on 4/14/11. **SAFETY ALERT** Call before you dig. Before You Overhead. Call before you dig. 1-702-227-2929



REVISIONS

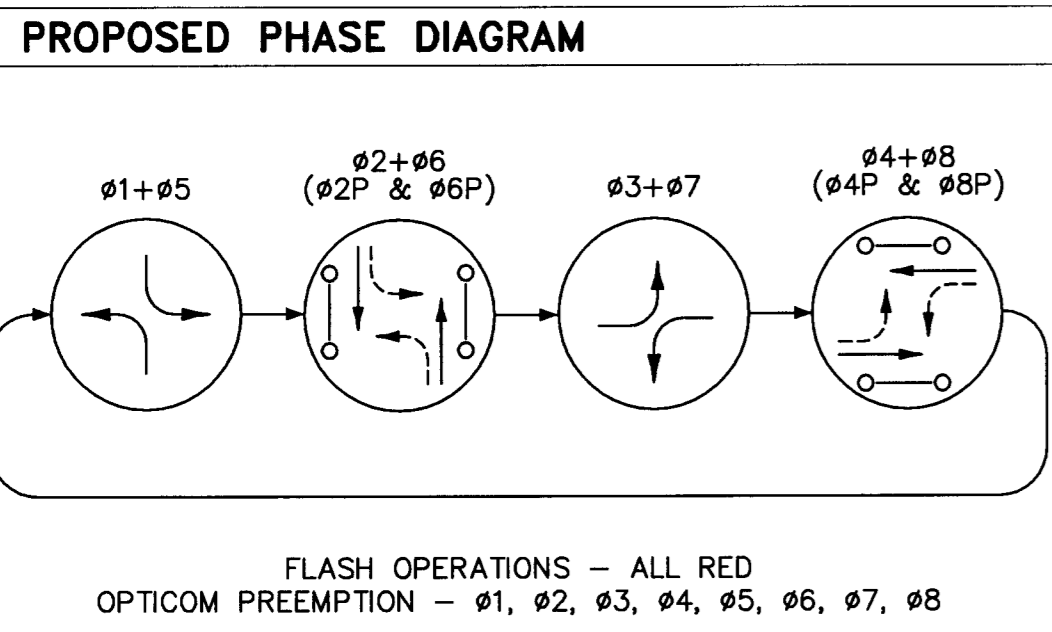
CONSULTANT
Owner: CITY OF LAS VEGAS, DEPARTMENT OF PUBLIC WORKS, CAPITAL PROJECT MANAGEMENT, 333 NORTH RANCHO DRIVE, LAS VEGAS, NEVADA 89108
Client: THE WHITING TURNER CONTRACTING COMPANY, 6720 VIA ALBERTI PARKWAY, SUITE 300, LAS VEGAS, NEVADA 89119, PHONE 702.502.0700, FAX 702.650.2650
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DEPARTMENT OF PUBLIC WORKS
500 SOUTH MAIN STREET
PARKING GARAGE
MAIN STREET PLAN



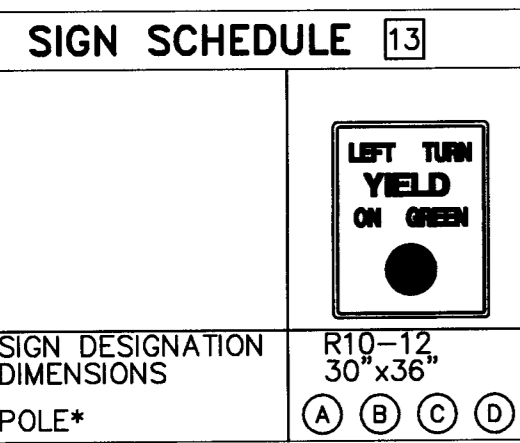
OWNER: CITY OF LAS VEGAS, DEPARTMENT OF PUBLIC WORKS
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TDD: (702) 386-9108

DRAWN	MAG
FILE	092708PP.DWG
DATE	3/25/2011
SCALE	AS SHOWN
RID NO	09.15341.19
CLV DWG NO	512-80
PLANSET NO	28435
SHEET NO	C5.0



POLE	ORDINAL	STREET NAME	SUFFIX	BLOCK*	DOUBLE SIDED	NEW/EXISTING
(A)	S	Main	St	500	YES	NEW
(B)	-	Parking Garage	-	-	YES	NEW
(C)	S	Main	St	400	NO	NEW
(D)	E	Clark	Ave	00	YES	NEW

STREET NAME SIGN (SEE DETAIL CCAUSD 404.416, 404.417 AND CLV MODIFIED DETAIL ON SHEET C6.1)
 * CONTRACTOR SHALL VERIFY BLOCK NUMBER PRIOR TO FABRICATION OF SIGN.



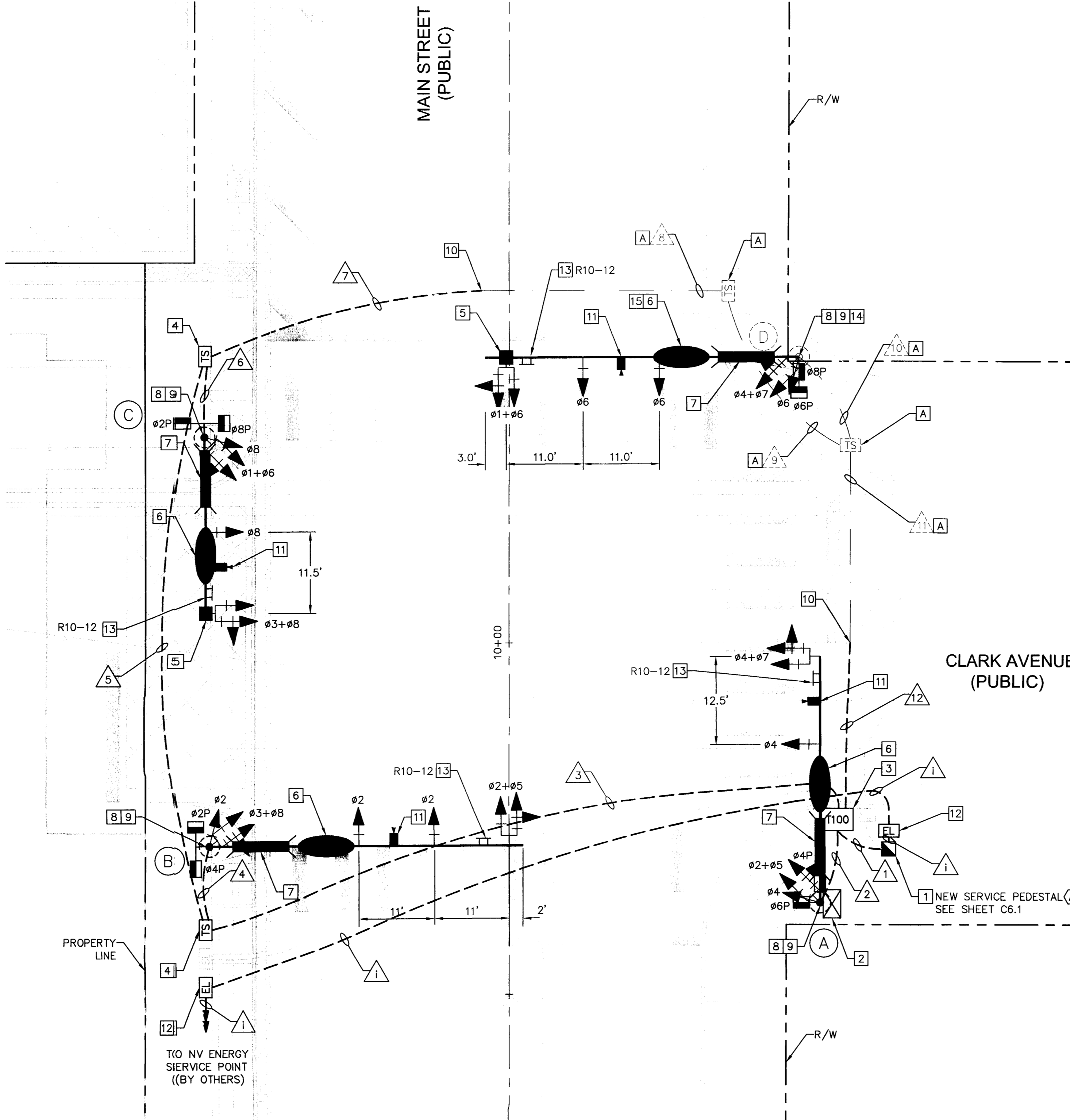
WIRE & CABLE	FROM	TO	CONDUIT**											
			1	2	3	4	5	6	7	8	9	10	11	12
3 No. 3/0 AWG	SERVICE POINT	SERVICE METER												
2 No. 4 AWG	SERVICE METER	CONTROLLER												
1 No. 8 AWG	SERVICE METER	T100 VAULT (INT. LIGHTING)												
1-25 COND. No. 14 1-VD CABLE	CONTROLLER	POLE A												
1-25 COND. No. 14 1-VD CABLE	CONTROLLER	POLE B												
1-25 COND. No. 14 1-VD CABLE	CONTROLLER	POLE C												
1-25 COND. No. 14 1-VD CABLE	CONTROLLER	POLE D												
2-No. 10 COND.	T100 VAULT	POLE A (INT. LIGHTING)												
2-No. 10 COND.	T100 VAULT	POLE B (INT. LIGHTING)												
2-No. 10 COND.	T100 VAULT	POLE C (INT. LIGHTING)												
2-No. 10 COND.	T100 VAULT	POLE D (INT. LIGHTING)												
1-No. 8 (GREEN)	T100 VAULT TO POLES													
PULL ROPE	(NUMBER AS SHOWN)		1	1	3	3	1	3	1	3	2	1	2	2

* CONTRACTOR SHALL COORDINATE WITH NV ENERGY TO CONNECT PROPOSED SERVICE PEDESTAL TO SERVICE POINT.
 ** CONTRACTOR SHALL INSTALL A No. 8 TRACER WIRE IN ALL CONDUITS THAT ARE EMPTY (NO CONDUCTORS/CABLING)

POLE AND EQUIPMENT SCHEDULE

POLE	LOCATION AND OFFSET	TYPE HEIGHT FOUND.	MAST ARM QUAD LENGTH	LUMINAIRE QUAD LENGTH	VEHICLE SIGNALS				PEDESTRIAN SIGNALS		EMERGENCY VEHICLE DETECTOR	REMARKS	
					VEHICLE		PEDESTRIAN		PEDESTRIAN PUSH BUTTON				
					TYPE	QUAD	TYPE	QUAD	PHASE	ARROW			QUAD
(A)	MAIN STREET STA 09+63, 45'± RT	XX-A 30'	1 35'	1 15'	M-5 MA 4	MA 4	PP PP	1 4	04 06	R L	1 4	-	[2][6][7][8][9][11][13]
(B)	MAIN STREET STA 09+71, 43'± LT	XX-A 30'	2 45'	2 15'	(2) M-2 B-14T	MA 1	W-3T	4 4	04 06	R L	4 3	-	[6][7][8][9][11][13]
(C)	MAIN STREET STA 10+29, 43'± LT	XX-A 30'	3 25'	3 15'	M-5 MA 2	MA 2	W-3T	1 4	02 06	R L	4 1	ONE-WAY	[5][6][7][8][9][11][13]
(D)	MAIN STREET EXISTING	XX-A 30' (E)	4 45'	4 15'	M-5 MA 3	MA 3	W-4T**	2 4	06 08	R L	4 3	TWO-WAY	[5][6][7][8][9][11][13][14][15]

SEE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (CCAUSD) FOR POLE, POLE FOUNDATION, SIGNAL MOUNTING HARDWARE AND OTHER DETAILS RELATED TO SIGNAL POLE INSTALLATION.
 * ALL POLES, MAST ARMS, AND LUMINAIRES SHALL CONFORM TO THE CITY OF LAS VEGAS CENTENNIAL STANDARDS.
 ** SEE SHEET C6.1 FOR PEDESTRIAN SIGNAL ASSEMBLY DETAIL.
 (E) EXISTING EQUIPMENT
 PP- REFER TO CCAUSD NO. 404.1201 FOR POLE PLATE PEDESTRIAN SIGNAL ASSEMBLY MOUNTING DETAIL.

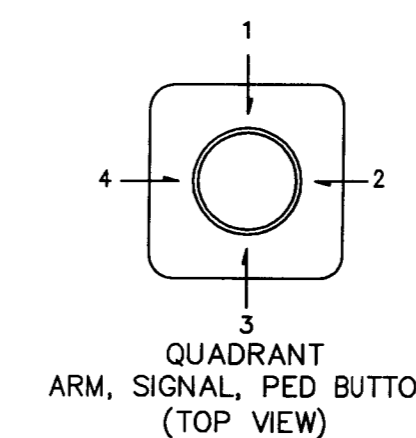


CONSTRUCTION NOTES (THIS SHEET ONLY)

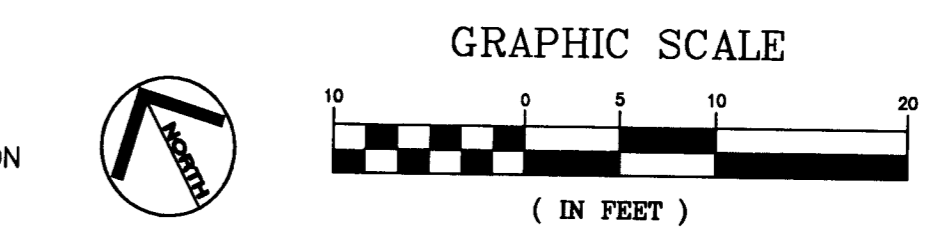
- FURNISH AND INSTALL NEW 200 AMP 120/240 VAC SERVICE PEDESTAL.
- INSTALL CITY PROVIDED XX-A POLE AND POLE MOUNTED TRAFFIC SIGNAL CABINET ASSEMBLY. CONTRACTOR SHALL FURNISH AND INSTALL POLE FOUNDATION, MAST ARMS AND ALL HARDWARE AS SHOWN ON PLANS. ALL NECESSARY AMPLIFIER UNITS, MODULES, LIGHT CONTROL UNITS, SWITCHES, OPTIC, FLASHERS, AREA WIDE COMPUTER CONTROL, ETC. SHALL BE PROVIDED AND WIRED IN CABINET BY THE CONTRACTOR TO ACTIVATE THE PHASE OPERATION AS SHOWN. CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT DETAILING ANY CHANGES TO THE CONTROLLER OPERATION OR CABINET CONFIGURATION. CABINET SHALL BE ORIENTED SO MAINTENANCE PERSONNEL SHALL BE FACING TRAFFIC WHEN SERVICING OR AS DIRECTED BY THE RESIDENT ENGINEER.
- FURNISH AND INSTALL TYPE 100 VAULT MARKED "TRAFFIC SIGNAL". SEE SPECIFICATIONS FOR DETAILS AND VENDOR CONTACT.
- FURNISH AND INSTALL NO. 7 PULL BOX MARKED "TRAFFIC SIGNAL" IN ACCORDANCE WITH CCAUSD No.404.130 AND 404.140.
- FURNISH AND INSTALL 3M MODEL 722 OPTICOM SENSORS ON THE TRAFFIC SIGNAL HEAD(S) IDENTIFIED ON PLAN. FURNISH AND INSTALL ALL EQUIPMENT TO MAKE SYSTEM OPERATIONAL. RUN OPTICOM DETECTOR CABLE, 3M MODEL 138 FROM THE CONTROLLER TO THE SENSORS INDICATED ON PLANS AS SHOWN IN THE CONDUIT AND WIRE SCHEDULE. WIRE CONTROLLER AND PROVIDE ONE (1) 3M MODEL 754 PHASE SELECTOR.
- FURNISH AND INSTALL 400 WATT HIGH PRESSURE SODIUM INTERSECTION LIGHTING WITH IES MC3 DISTRIBUTION COMPLETE WITH 120V MAGNETIC REGULATOR TYPE BALLAST (GARCO CA22-1-3-400HPS-120-OC-RAL6012 MF PC OR APPROVED EQUAL) AND AREA LIGHTING RESEARCH ELECTRONIC PHOTOCCELL (#2190VP3) AS INDICATED ON PLANS. LIGHTING SHALL CONFORM TO CITY OF LAS VEGAS CENTENNIAL STANDARDS.
- FURNISH AND INSTALL INTERNALLY-ILLUMINATED STREET NAME SIGN ON MAST ARM. SEE STREET NAME SIGN SCHEDULE THIS SHEET.
- FURNISH AND INSTALL AUDIBLE/TACTILE TYPE PEDESTRIAN PUSH BUTTONS ON POLE.
- FURNISH AND INSTALL COUNTDOWN TYPE PEDESTRIAN SIGNAL HEADS ON POLE.
- INTERCEPT EXISTING CONDUIT STUB-OUT IDENTIFIED TO BE INSTALLED AS PART OF CITY OF LAS VEGAS CITY HALL PROJECT. SEE CLV DWG. NO. 521-298. FURNISH AND INSTALL NEW CONDUIT.
- FURNISH AND INSTALL VIDEO DETECTION CAMERA ON EXTENSION POLE.
- FURNISH AND INSTALL NO. 3 1/2 PULL BOX MARKED "ELECTRICAL" IN ACCORDANCE WITH CCAUSD NO. 404.110 AND 404.140.
- FURNISH AND INSTALL SIGN ON MAST ARM. SEE SIGN SCHEDULE THIS SHEET.
- CONTRACTOR SHALL VERIFY MAST ARM MOUNTING PLATE DIMENSIONS AND BOLT PATTERN ON EXISTING POLE PRIOR TO ORDERING MAST ARM.
- REMOVE AND SALVAGE EXISTING INTERSECTION LIGHTING INCLUDING 10' ARM AND 250 WATT LAMP. REPLACE WITH NEW ARM AND LAMP AS SHOWN IN POLE AND EQUIPMENT SCHEDULE (THIS SHEET).
- CONDUIT OR PULL BOX IDENTIFIED TO BE INSTALLED AS PART OF CITY OF LAS VEGAS CITY HALL PROJECT. SEE CLV DWG. NO. 521-298.

GENERAL NOTES (THIS SHEET ONLY)

- CONTRACTOR SHALL VERIFY TYPE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTING SIGNAL POLE FOUNDATIONS.
- CONTRACTOR SHALL INSTALL RED MARKING TAPE 18" BELOW GRADE, ABOVE ALL PROPOSED CONDUITS.
- CONTRACTOR SHALL VERIFY ALL UTILITY CONFLICTS AND OBSTACLES PRIOR TO TRENCHING.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, INCLUDING LANDSCAPING FROM DAMAGE. ALL IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
- SEE SHEET C7.0 FOR STREET LIGHT AND INTERCONNECT DESIGN.
- PULL BOX AND VAULT LOCATIONS AND CONDUIT ROUTING ARE SCHEMATIC FOR THE PURPOSES OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION.
- CONTRACTOR SHALL COORDINATE WITH THE NEW CITY HALL PROJECT AS NECESSARY TO FACILITATE CONSTRUCTION OF RELATED IMPROVEMENTS.
- ALL POLES, MAST ARMS, LUMINAIRES, CABINETS AND RELATED EQUIPMENT SHALL CONFORM TO THE CITY OF LAS VEGAS CENTENNIAL STANDARDS.



This grading plan is a part of drainage study #4510 which was received on 9/5/11 and App'd on 9/11/11. Page 10 of 14.



811 SAFETY ALERT
 Call before you dig
 Call before you Overhead
 Call before you UnderGround
 1-702-432-5300
 PREVENT AN UNNECESSARY SYSTEM OF TRANSPORTATION



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 DEPARTMENT OF PUBLIC WORKS
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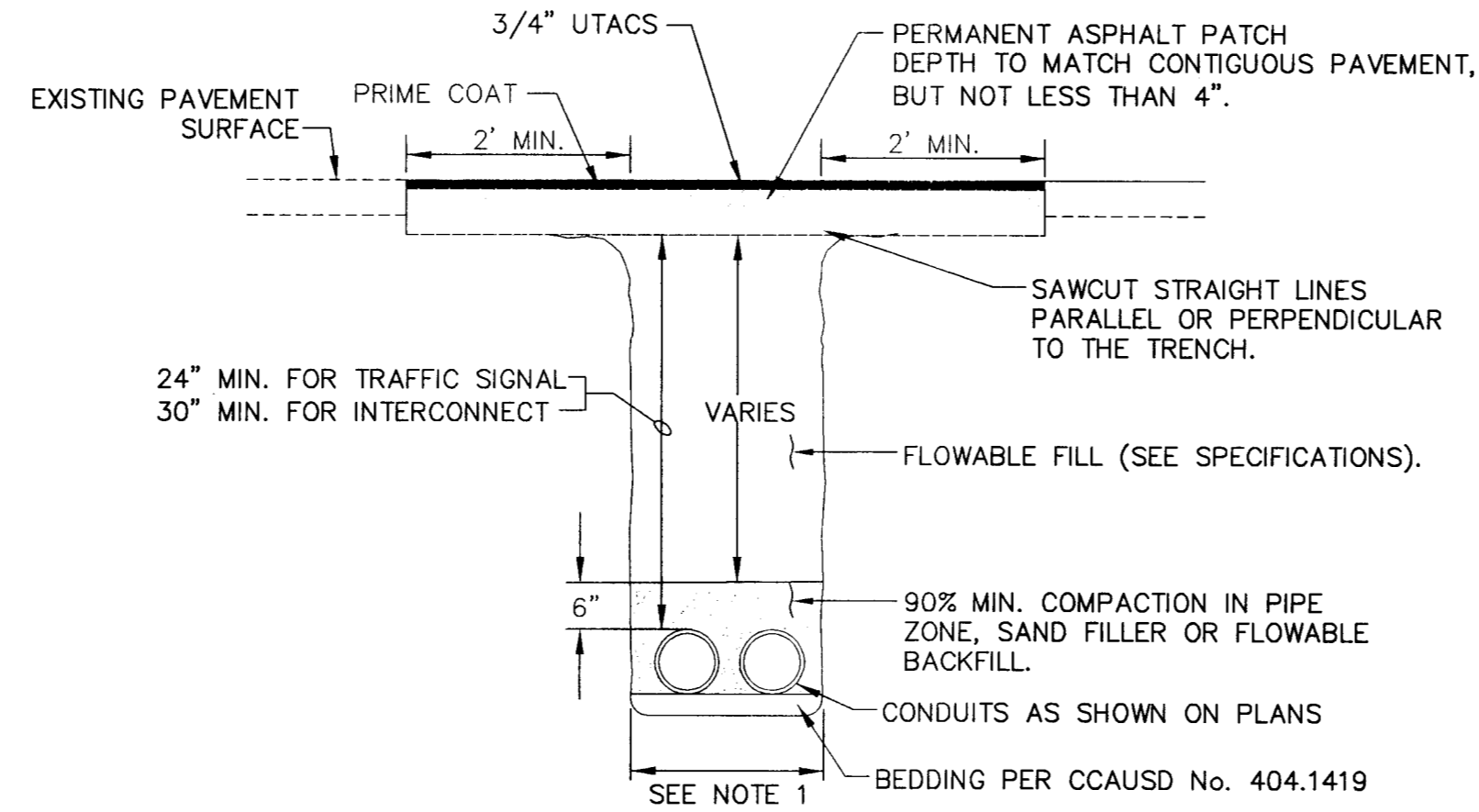
DEPARTMENT OF PUBLIC WORKS
 500 SOUTH MAIN STREET
 PARKING GARAGE
 TRAFFIC SIGNAL PLAN

STAMP
 RANDY W. CARROLL
 Exp. 12/31/12
 CIVIL
 License No. 16131 (NV) S.E.
 4-4-11

OWNER: CITY OF LAS VEGAS
 DEPARTMENT OF PUBLIC WORKS
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 FILE: 092708TS.DWG
 DATE: 3/25/2011
 SCALE: AS SHOWN
 NO. NO: 09.15341.19
 CLV DWG NO: 512-80
 WAREN NO: 28435
 SHT NO: C6.0

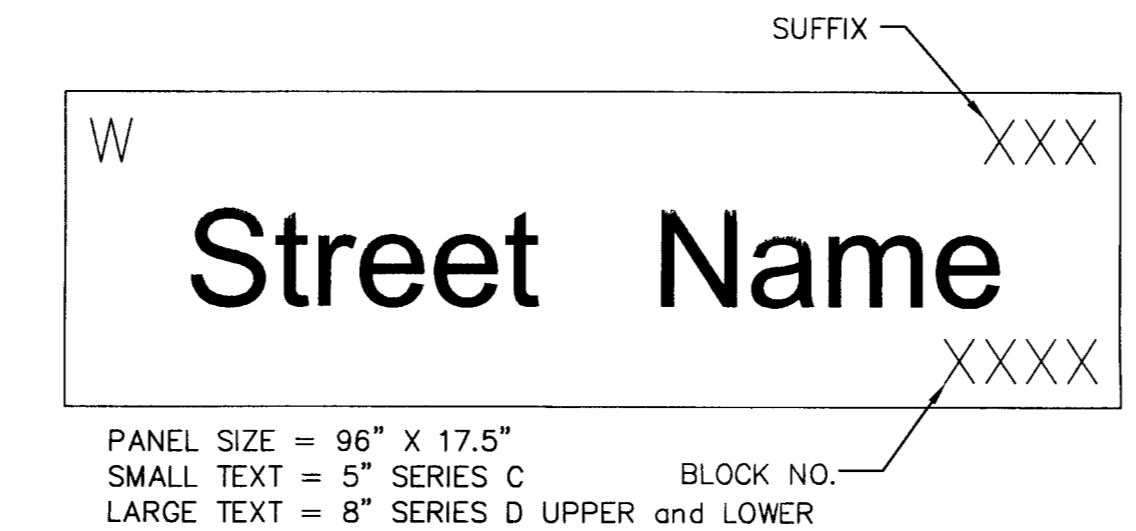
CITY OF LAS VEGAS TRAFFIC SIGNAL NOTES

- ALL WORK PERFORMED ON ANY TRAFFIC SIGNAL COMPONENT MUST BE UNDER THE DIRECT ON-SITE SUPERVISION OF AN IMSA CERTIFIED TECHNICIAN. THE LEVEL OF CERTIFICATION REQUIRED SHALL BE LEVEL II EFFECTIVE MARCH 30, 2001.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATIONS OF THEIR INSTALLATIONS 72 HOURS PRIOR TO CONSTRUCTION. APPROXIMATE CALL-BEFORE-YOU-OVERHEAD 1-702-227-2929
CALL-BEFORE-YOU-DIG 1-800-227-2600
STREETLIGHTS (NEVA EVANS) 1-702-229-6331
F.A.S.T. (JESUS MARMOLEJO) 1-702-432-5300
- ALL TRAFFIC SIGNAL INSTALLATIONS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, VOLUMES I AND II, ADOPTED BY THE REGIONAL TRANSPORTATION COMMISSION APRIL 8, 1992 WITH ALL SUBSEQUENT REVISIONS.
- SERVICE SHALL HAVE 1-60 AMP SINGLE POLE BREAKER FOR SIGNAL, AND 2-40 AMP SINGLE POLE BREAKERS FOR STREET LIGHTS. SERVICE SHALL BE 200 AMP PAD MOUNT.
- LINE SIDE OF METER TO BE WIRED WITH THREE #3/0 AWG THW. LOAD SIDE SHALL BE WIRED WITH FOUR #4 AWG THW (2 BLACK, 2 WHITE) AND ONE #8 AWG THW (GREEN).
- LUMINARIES ON ALL SIGNAL POLES SHALL BE 400 WATT HIGH PRESSURE SODIUM CUTOFF (G.E. M400A) WITH MC-111 DISTRIBUTION. EACH LUMINAIRE SHALL HAVE AN INDIVIDUAL 1000 WATT P.E. CONTROL. FOR LUMINARIES THERE SHALL BE 2(TWO)-#4 AWG THW CONDUCTORS FROM THE SERVICE TO THE CABINET. IN THE CABINET, THE #4 AWG THW CONDUCTORS SHALL BRANCH OFF INTO #10 AWG THW CONDUCTORS INDIVIDUALLY FUSED WITH 10 AMP FUSES. THERE SHALL BE NO SPLICES BETWEEN THE CABINET AND LUMINAIRE FIXTURES.
- THE INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE WIRED TO THE LUMINAIRE PHOTO CELL FOR CONTROL WITH #10 AWG THW COPPER STRANDED WIRE (TYPICAL). IN THE EVENT THERE IS NO LUMINAIRE ON THE TRAFFIC SIGNAL POLE, THE 1000 WATT P.E. CONTROL SHALL BE MOUNTED ON THE POLE CAP.
- CHECK CONDUIT AND CABLE SCHEDULE FOR CONDUIT, CABLE, AND WIRE SIZE. VERIFY ALL EXISTING CONDUIT RUNS.
- ALL PULL BOXES SHALL BE IN ACCORDANCE WITH UNIFORM STANDARD DRAWINGS FOR PULL BOXES, DRAWINGS NUMBERS 404.110 TO 404.141.
- TRAFFIC SIGNAL CABLE SHALL BE 15 OR 25 CONDUCTOR #14 AWG SOLID (TYPICAL) CABLE AND SHALL CONFORM TO IMSA SPEC. NO. 20-1.
- PEDESTRIAN PUSH BUTTONS SHALL BE AUDIBLE TACTILE "POLARA NAVIGATOR" TYPE (2 WIRE SYSTEM) IN ACCORDANCE WITH CITY OF LAS VEGAS SPECIAL PROVISIONS AND SECTION 623 OF THE CCA USS. PUSH BUTTON SIGNS SHALL BE R10-3e PER MUTCD, 2003 EDITION, WITH FULL MOUNTING BRACKETS. ALL PUSH BUTTONS TO BE MOUNTED 42" ABOVE SIDEWALK. THE MAXIMUM HORIZONTAL REACH DISTANCE IS TO BE 24". SIDEWALK RAMPS WILL BE ACCORDING TO UNIFORM STANDARD DRAWING No. 235 (1-4) LATEST EDITION.
- THE PLACING OF POLES AND CABINETS SHALL BE AS INDICATED ON THE PLANS. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER. THE ROUTING AND TERMINATION OF CONDUITS AND THE LOCATIONS OF PULL BOX AND VAULTS ARE SCHEMATIC FOR THE PURPOSE OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION. FINAL LOCATION(S) SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- MAST ARM R10-12 SIGNS TO BE ADJACENT (NO GAP) TO THE M-5 SIGNAL HEAD.
- CITY OF LAS VEGAS TO PROVIDE XX-A POLE AND POLE MOUNTED TRAFFIC SIGNAL CABINET ASSEMBLY. CONTRACTOR SHALL FURNISH AND INSTALL POLE FOUNDATION, MAST ARMS AND ALL HARDWARE AS SHOWN ON PLANS. ALL NECESSARY AMPLIFIER UNITS, MODULES, LIGHT CONTROL UNITS, SWITCHES, OPTICOM, FLASHERS, AREA WIDE COMPUTER CONTROL, ETC. SHALL BE PROVIDED BY CONTRACTOR AND WIRED IN CABINET TO ACTIVATE THE PHASE OPERATION AS SHOWN. CABINET SHALL BE ORIENTED SO MAINTENANCE PERSONNEL SHALL BE FACING TRAFFIC WHEN SERVICING OR AS DIRECTED BY THE FIELD ENGINEER. ALL EQUIPMENT SHALL BE PER CITY OF LAS VEGAS DOWNTOWN CENTENNIAL PLAN AND AS SPECIFIED IN NOTE 17.
- THE CONTRACTOR SHALL SUPPLY A 2070N OR M53 CONTROLLER TO THE CITY OF LAS VEGAS TRAFFIC SIGNAL REPAIR SHOP, FOURTEEN DAYS PRIOR TO SIGNAL TURN-ON, FOR TESTING PURPOSES. THE CONTRACTOR SHALL DELIVER THE CONTROLLER TO AND PICKUP THE CONTROLLER AT 2801 E. CHARLESTON BOULEVARD. CONTRACTOR SHALL NOTIFY THE TRAFFIC SIGNAL REPAIR SHOP (229-6075) SEVEN DAYS PRIOR TO PICKUP. ALL 2070N CONTROLLERS MUST BE COMPATIBLE WITH AND FUNCTION PROPERLY WITH OS9 1996 OPERATION SYSTEM, THE LATEST REVISION OF THE "NEXT PHASE INTERSECTION MANAGEMENT SOFTWARE" (SIEMENS) AND THE ICONS (SIEMENS) GENERAL SOFTWARE.
- CONTRACTOR SHALL POTHOLE SIGNAL POLE LOCATIONS PRIOR TO ORDERING OF POLES.
- SIGNAL POLES (BOTH WITH AND WITHOUT MAST ARMS), MAST ARMS AND LUMINAIRE ARMS SHALL BE STEEL POLES AND NOT GALVANIZED IN CONFORMANCE TO CITY OF LAS VEGAS SPECIAL PROVISIONS TO SECTION 623 T.02.09 OF THE CCA USS. THE POLES SHALL BE FACTORY PRIMED WITH AMERON AMERCOAT 370 AND FACTORY SPRAY PAINTED WITH AMERON AMERSHIELD PAINT OR APPROVED EQUAL. THE POLES SHALL BE PREPARED AND PAINTED PER MANUFACTURER'S SPECIFICATIONS. THE FOLLOWING ELEMENTS OF THE TRAFFIC SIGNAL SYSTEM SHALL BE COLORED RAL 6012 "BLACK GREEN" COLOR CONSISTENT WITH THE CITY OF LAS VEGAS DOWNTOWN CENTENNIAL PLAN: TRAFFIC SIGNAL POLE; TRAFFIC SIGNAL MAST ARM; TRAFFIC LUMINAIRE ARM; TRAFFIC SIGNAL LUMINAIRE HEAD (REFERENCE SUBSECTION 623 G.02.07 LUMINAIRE ON SIGNAL POLES). THE TRAFFIC SIGNAL MAST ARM SHALL BE FACTORY PRIMED WITH AMERON AMERCOAT 370 AND SHALL BE DELIVERED WITH NO TENONS MOUNTED TO THE MAST ARM. AFTER THE TRAFFIC SIGNAL POLE FOUNDATION IS CONSTRUCTED, THE TENONS SHALL BE FABRICATED IN THE FIELD AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ALL WELDING SHALL CONFORM TO AWS D 2.0, "SPECIFICATION FOR WELDED HIGHWAY AND RAILWAY BRIDGES", AND TO ANY ADDITIONAL REQUIREMENTS OF SECTION 623 T.02.09 OF THE SPECIFICATIONS. ALL WELDERS MUST BE CERTIFIED BY THE AMERICAN WELDING SOCIETY OR SIMILAR ORGANIZATION IN THE WELDING OF STEEL AND GALVANIZED STEEL. AFTER INSTALLATION OF THE TENONS, THE MAST ARM SHALL BE SHOP SPRAY PAINTED WITH AMERON AMERSHIELD TO MATCH THE TRAFFIC SIGNAL POLE.
- ALL VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS SHALL HAVE LIGHT EMITTING DIODE (LED) TYPE INDICATIONS, IN CONFORMANCE TO CITY OF LAS VEGAS SPECIAL PROVISIONS TO SECTION 623 OF THE CLARK COUNTY AREA, UNIFORM STANDARD SPECIFICATIONS. ALL PEDESTRIAN SIGNAL FACES SHALL PROVIDE "WALKING PERSON", "HAND" AND "CROWD" MESSAGES AS PROVIDED BY DURALIGHT MODEL #JXM-300VE OR DIALIGHT MODEL #430-6479-801, OR APPROVED EQUAL.
- VIDEO DETECTION SYSTEMS WILL BE EITHER ITERIS EDGE 2 WITH EDGECONNECT PAK, (IP ADDRESSABLE); OR PEEK VIDEOTRAK IQ (WITH ETHERNET PORT). WHEN VIDEO DETECTION IS SPECIFIED ON THE TRAFFIC SIGNAL PLANS. ALL VIDEO DETECTION SYSTEMS WILL BE STAND ALONE SYSTEMS TO INCLUDE ALL NECESSARY EQUIPMENT TO PROGRAM THE VIDEO DETECTION SYSTEM. A PROGRAMMING "MOUSE", KEYPAD OR LAPTOP COMPUTER (IF REQUIRED FOR PROGRAMMING THE VIDEO DETECTION SYSTEM) AND APPROPRIATE SOFTWARE WILL BE SUPPLIED WITH EACH VIDEO SYSTEM. PERSONAL COMPUTERS (PCS) MAY NOT BE SUBSTITUTED FOR LAPTOPS. A VIDEO MONITOR (COLOR FLAT SCREEN OR CRT) 9" TO 13" WILL BE SUPPLIED WITH EACH VIDEO DETECTION SYSTEM. EACH VIDEO CAMERA WILL HAVE POWER AND VIDEO CABLE DIRECTLY FROM THE CABINET. COAXIAL CABLE WILL BE TYPE 8281 (SOLID CENTER CONDUCTOR). CAMERAS THAT USE A PREFABRICATED CABLE INTEGRATING POWER AND COAXIAL CABLE INTO A SINGLE WEATHERPROOF CONNECTOR ARE ACCEPTABLE. "BNC" ARE THE ONLY ACCEPTABLE TERMINATION OF COAXIAL CABLES. CAMERAS WILL BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND PER CLV TRAFFIC ENGINEER APPROVAL. EXTENSION BRACKETS (TYPE AB-0166-5-62 OR EQUIVALENT) WILL BE USED WHEN MOUNTING VIDEO CAMERAS ON MAST ARMS. A VIDEO FILTER (CX06-BNYC OR EQUIVALENT) WILL BE INSTALLED IN THE SIGNAL CABINET FOR EACH CAMERA VIDEO INPUT.
- LOOP DETECTORS SHALL BE PREFORMED LOOPS AS MANUFACTURED BY RENO A & E OR NEVER-FAIL LOOP SYSTEMS. TWO (2) CHANNEL RACK- MOUNTED DETECTOR AMPLIFIERS SHALL BE INSTALLED IN THE CONTROLLER CABINET WHICH ACCOMMODATE 24 SEPARATE CHANNELS. LOOP LEAD-IN CABLE SHALL BE 6-PAIR 18 AWG MULTIPLE CONDUCTOR CABLE AS SPECIFIED IN SECTION 623T.02.04 OF THE CLV SPECIAL PROVISIONS. ALL WIRING HARNESES, RACK POSITIONS, AND LOOP LEAD-IN CABLE SHALL BE CLEARLY MARKED AS TO THE APPROPRIATE PHASE AND LETTER DESIGNATION TO WHICH IT BELONGS AS SHOWN ON THE TRAFFIC SIGNAL PLANS. ALL LOOPS SHALL BE INSTALLED IN THE ROADWAY PRIOR TO PLACEMENT OF THE FINAL PAVEMENT LIFT. LOOPS SHALL BE LOCATED AS SHOWN ON THE TRAFFIC SIGNAL PLANS AND APPROVED BY THE CLV TRAFFIC ENGINEERING DIVISION PRIOR TO INSTALLATION. REFER TO SECTION 623T.02.04 OF THE CLV SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
- OPTICAL PREEMPTION UNITS WILL BE 3M (ENCODING CAPABLE), MODEL 754 PHASE SELECTOR INSTALLED IN A MODEL 760 CARD RACK; OPTICAL SENSORS WILL BE MODEL 721 AND WILL BE INTERFACED TO THE TRAFFIC SIGNAL CONTROLLER CABINET WITH M-138 CABLE.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY CONSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE CITY.
- INTERCONNECT CABLE SHALL BE AS SHOWN IN THE WIRE SCHEDULE.
- THE CONTRACTOR SHALL INSTALL CROSSWALKS, STOP BARS, STRIPING AND SIGNS AS IDENTIFIED ON THE PLANS.



- NOTES:**
- 36" MAX WIDTH; 6" MIN. WIDTH
 - CONDUIT COUPLINGS SHALL BE STAGGERED.
 - SEE CCAUSD No. 404.1419 FOR ADDITIONAL TRENCH DETAILS.

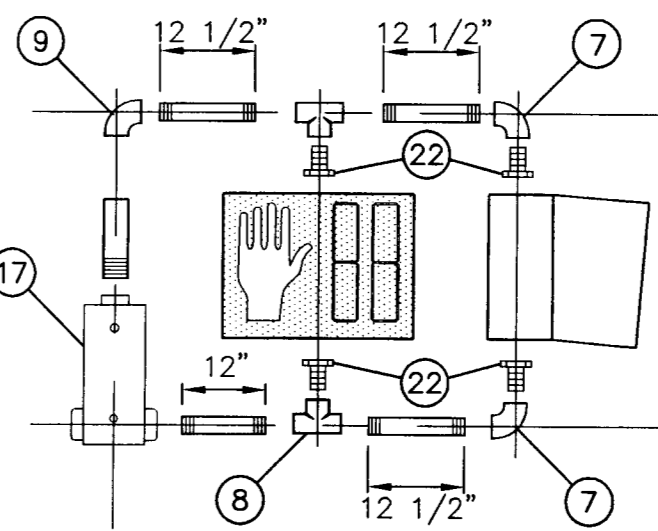
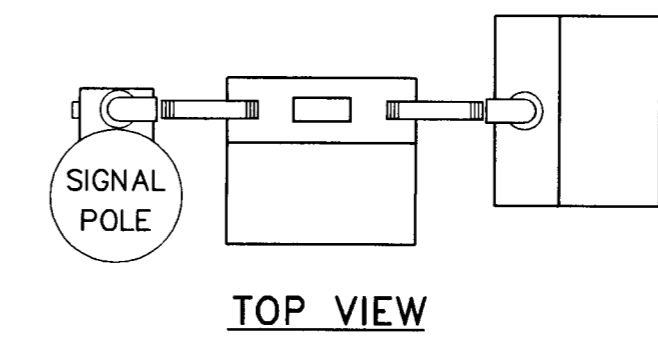
CONDUIT TRENCH IN PAVEMENT
MINIMUM 6" TRENCH N.T.S.



STREET NAME SIGN DETAIL
CLV MODIFIED N.T.S.

PROPOSED SERVICE PEDESTAL EQUIPMENT												
SERVICE TYPE	USE ****	INTERSECTION LOCATION (SEE SHEET C6.0 FOR APPROXIMATE STATION AND OFFSET)	PEDESTAL PLAN ID	EXISTING (E) OR NEW (N)	EXISTING SERVICE ADDRESS	MAIN BREAKER (AMP)	NEW EQUIPMENT					
							60A, 240V, 2P CKT BKR (ST LIGHTING)	60A, 240V, 2P CONTACTOR(S) (ST LIGHTING)	BY-PASS SWITCH (CONTACTOR)	15A, 120V, 1P CKT BKR (PE CONTROL)	60A, 120V, 10 CKT BKR (TRAFFIC SIGNAL)	40A, 120V, 1P CKT BKR (INT LIGHTING)
PEDESTAL	TS/SL	MAIN ST. & CLARK AVE. *** (SE CORNER)	A	N **	NEW SERVICE	200	2	2	2	1	1	1

- *** CONTRACTOR SHALL FURNISH AND INSTALL 200 AMP 120/240 VAC SERVICE PEDESTAL ONTO CONCRETE FOUNDATION PER CCAUSD No. 404.214. PROVIDE THE PEDESTAL WITH EQUIPMENT AS SHOWN IN SERVICE PEDESTAL TABLE ON THIS SHEET. PROVIDE 1-#2 AWG 3 STRAND BARE COPPER GROUNDING CONDUCTOR TO EARTH. PROVIDE ADDITIONAL 2" CONDUIT STUB FROM SERVICE PEDESTAL FOUNDATION FOR FUTURE USE. INDICATE LOCATION OF CONDUIT STUB ON AS-BUILT DRAWINGS. COORDINATE WITH THE DESIGN/BUILD CONTRACTOR AND NV ENERGY FOR SERVICE CONNECTION. FOR THE SERVICE CONNECTION BETWEEN THE TRANSFORMER AND THE SERVICE PEDESTAL, THE CONDUCTORS SHALL BE AS SHOWN ON PLANS. CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR SERVICE CONNECTION PER NV ENERGY SPECIFICATIONS UP TO TRANSFORMER.
- *** CONTRACTOR TO STAKE FOUNDATION LOCATION FOR APPROVAL BY RESIDENT ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR TO POTHOLE NEW FOUNDATION LOCATIONS PRIOR TO CONSTRUCTION TO IDENTIFY ALL SUBSURFACE CONFLICTS. IF CONFLICTS ARE IDENTIFIED THE CONTRACTOR SHALL WORK WITH THE RESIDENT ENGINEER TO DETERMINE AN ALTERNATE FOUNDATION LOCATION.
- **** TS=TRAFFIC SIGNAL, SL=STREET LIGHT.



- NOTES:**
- FOR ITEMIZED PARTS, SEE CCAUSD No. 404.1005.
 - THE HAND SYMBOL (DON'T WALK) IS PORTLAND ORANGE AND HUMAN SYMBOL (WALK) IS LUNAR WHITE.
 - DETAIL SHOWN FOR CONTRACTOR REFERENCE. CONTRACTOR INSTALLATION AT SOME LOCATION MAY REQUIRE A DIFFERENT LAYOUT OF PARTS.

W-4T
PEDESTRIAN SIGNAL ASSEMBLY N.T.S.



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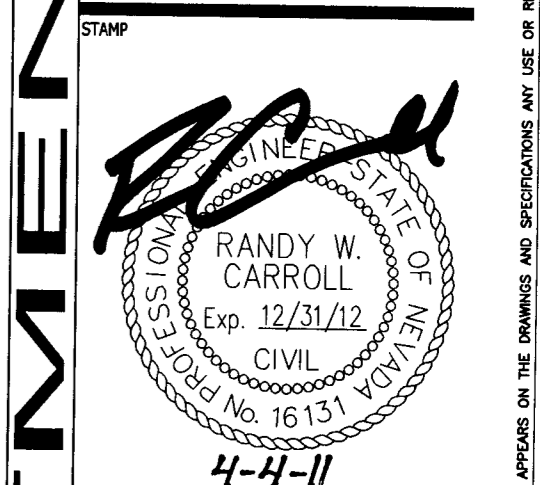
DEPARTMENT OF PUBLIC WORKS

500 SOUTH MAIN STREET

PARKING GARAGE

TRAFFIC SIGNAL

NOTES AND DETAILS



OWNER: CITY OF LAS VEGAS
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DRAWN: ARP
DATE: 09/27/08TS.DWG
DATE: 3/25/2011
SCALE: AS SHOWN
BID NO: 09.15341.19
CLV DWG NO: 512-80
HANSEN NO: 28435
SHEET NO:

This grading plan is a part of drainage study #4518 which was received on 4/5/11 and App'd on 4/11/11. Page 11 of 14



INTERCONNECT CONSTRUCTION NOTES (THIS SHEET ONLY)

- 1 FURNISH AND INSTALL 1-4" CONDUIT WITH 1-6 PAIR PE39 #22 AWG CABLE AND PULL ROPE.
- 2 INTERCEPT EXISTING VAULT IDENTIFIED TO BE INSTALLED AS PART OF CITY OF LAS VEGAS CITY HALL PROJECT AND INSTALL NEW CONDUIT. SEE CLV DWG. N. 521-298.
- 3 INTERCEPT EXISTING CONDUIT IDENTIFIED TO BE INSTALLED AS PART OF CITY OF LAS VEGAS CITY HALL PROJECT AND INSTALL NEW CONDUIT. SEE CLV DWG. N. 521-298.
- 4 INTERCEPT EXISTING TRAFFIC SIGNAL INTERCONNECT CONDUIT AND INSTALL NEW TYPE 200 VAULT MARKED "FIBER OPTIC" PER CCAUSD No. 404.133 AND 404.140.
- 5 FURNISH AND INSTALL 1-6 PAIR PE39 #22 AWG CABLE AND PULL ROPE IN EXISTING CONDUIT.
- 6 CONDUIT OR PULL BOX/VAULT IDENTIFIED TO BE INSTALLED AS PART OF CITY OF LAS VEGAS CITY HALL PROJECT. SEE CLV DWG. NO. 521-298.
- 7 BACK PULL EXISTING CLV SIGNAL INTERCONNECT CABLE (SIC) FROM EXISTING TRAFFIC SIGNAL CABINET AT MAIN ST. AND BONNEVILLE AVE. AND INSTALL IN NEW AND EXISTING CONDUITS TO NEW TRAFFIC SIGNAL CABINET AT CLARK AVE. AND MAIN STREET. TERMINATE SIC IN CABINETS TO PROVIDE A FULLY FUNCTIONAL INTERCONNECT SYSTEM.
- 8 INSTALL 1-6 PAIR PE39 #22 AWG CABLE IN EXISTING CONDUIT TO TRAFFIC SIGNAL CABINET AT BONNEVILLE AVE. AND MAIN ST. TO PROVIDE A FULLY FUNCTIONAL INTERCONNECT SYSTEM.
- 9 TRAFFIC SIGNAL EQUIPMENT. SEE SHEET C6.0.

STREET LIGHT CONSTRUCTION NOTES (THIS SHEET ONLY)

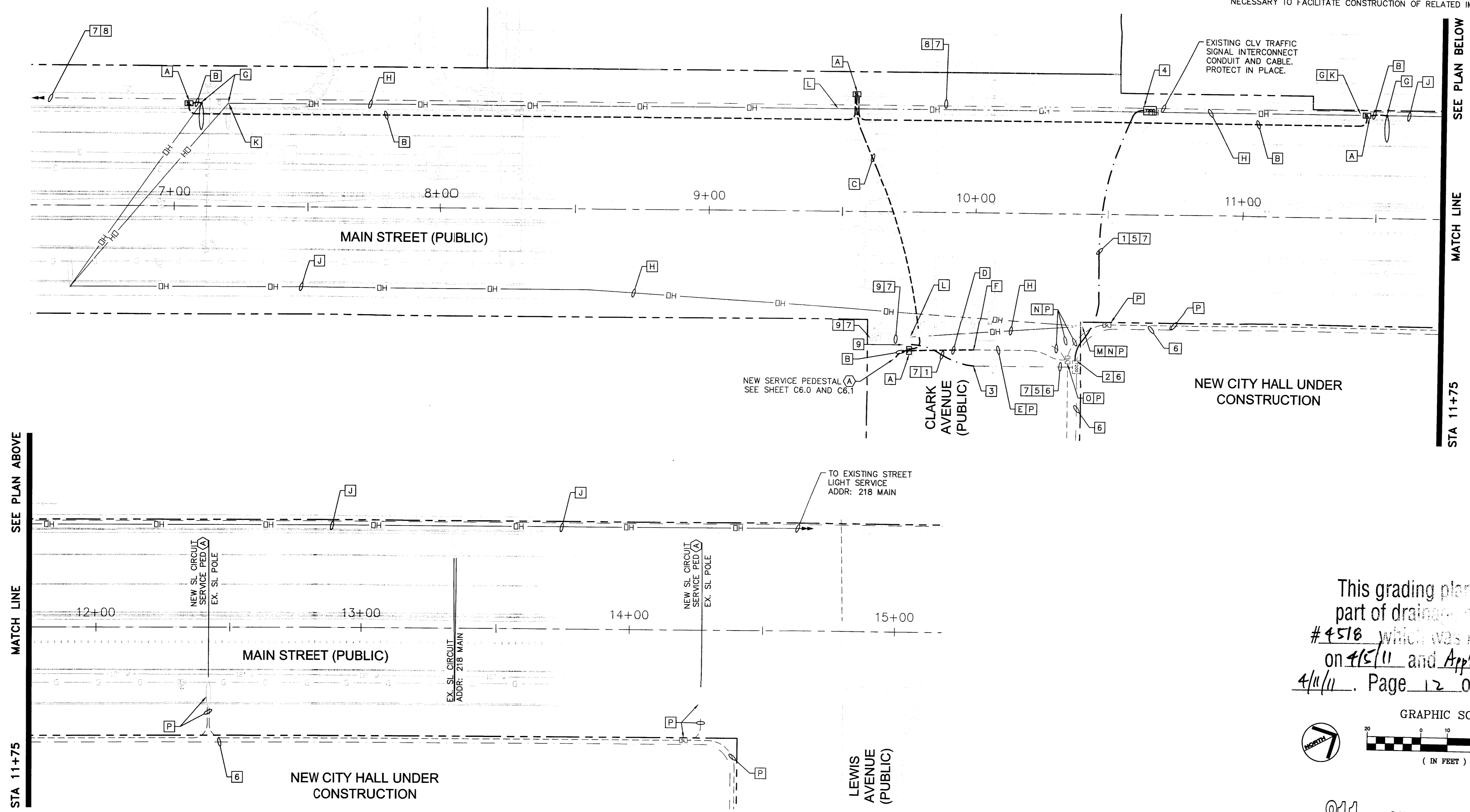
- A FURNISH AND INSTALL No. 5 PULL BOX MARKED "STREET LIGHT" PER CCAUSD No. 323.
- B FURNISH AND INSTALL 1-2" PVC CONDUIT WITH PULL ROPE, 2-#4 (BLACK +, RED -) THW AND 1-#8 THW (GREEN GROUND) STREET LIGHTING CONDUCTORS IN CONDUIT.
- C FURNISH AND INSTALL 1-2" PVC CONDUIT WITH PULL ROPE AND 1-#8 THW (GREEN) GROUND/TRACER WIRE.
- D FURNISH AND INSTALL 1-1.25" PVC CONDUIT WITH PULL ROPE, 2-#4 (BLACK +, RED -) THW AND 1-#8 THW (GREEN GROUND) STREET LIGHTING CONDUCTORS IN CONDUIT.
- E FURNISH AND INSTALL PULL ROPE, 2-#4 (BLACK +, RED -) THW AND 1-#8 THW (GREEN GROUND) STREET LIGHTING CONDUCTORS IN EXISTING CONDUIT.
- F INTERCEPT EXISTING CONDUIT AND INSTALL NEW CONDUIT.
- G REMOVE AND RELOCATE EXISTING STREET LIGHT POLE TO NEW FOUNDATION. FURNISH AND INSTALL FOUNDATION PER CCAUSD No. 321. SET ANCHOR BOLTS TO MATCH BOLT PATTERN ON EXISTING POLE. RECONNECT RELOCATED STREET LIGHT TO OVERHEAD CONDUCTORS, CUT AND BACK FEED OVERHEAD CONDUCTORS INTO RELOCATED POLE, THROUGH POLE BASE, AND INTO NEW PULL BOX. SPLICE CONDUCTORS TO NEW CONDUCTORS IN NEW STREET LIGHT PULL BOX TO MAINTAIN EXISTING STREET LIGHTING CIRCUIT. REVISE OVERHEAD CONDUCTOR LENGTH OR INSTALL NEW OVERHEAD CONDUCTOR TO MATCH NEW POLE LOCATION IF NECESSARY.

STREET LIGHT CONSTRUCTION NOTES CONT. (THIS SHEET ONLY)

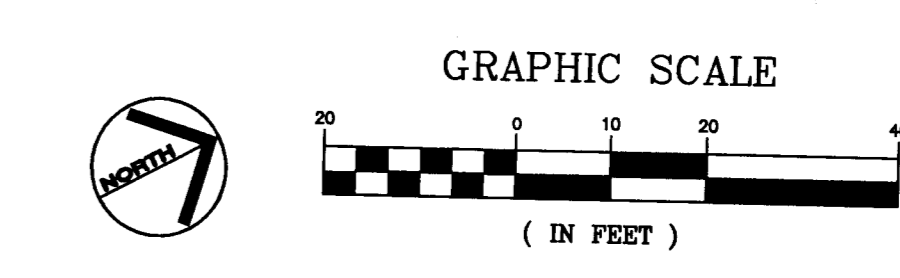
- H DISCONNECT AND REMOVE EXISTING CONDUCTORS FROM OVERHEAD RUNS.
- J PROTECT OVERHEAD CONDUCTORS IN PLACE TO MAINTAIN EXISTING STREET LIGHTING CIRCUIT.
- K REMOVE EXISTING STREET LIGHT POLE FOUNDATION A MINIMUM OF 18" BELOW FINISHED GRADE AND RECONSTRUCT TO MATCH SURROUNDING AREA.
- L REMOVE AND SALVAGE EXISTING STREET LIGHT POLE AND EQUIPMENT. SEE GENERAL NOTES (THIS SHEET) FOR DELIVERY REQUIREMENTS. REMOVE POLE FOUNDATION A MINIMUM OF 18" BELOW FINISHED GRADE AND RECONSTRUCT TO MATCH SURROUNDING AREA.
- M REMOVE OVERHEAD CONDUCTORS FROM EXISTING POLE.
- N DISCONNECT INTERSECTION LIGHT FROM EXISTING STREET LIGHT CIRCUIT AND BACK PULL CONDUCTORS TO NEAREST STREET LIGHT PULL BOX.
- O SPLICE EXISTING CONDUCTORS TO NEW CONDUCTORS IN EXISTING STREET LIGHT PULL BOX TO CREATE NEW STREET LIGHTING CIRCUIT.
- P CONDUIT, PULL BOX/VAULT OR POLE IDENTIFIED TO BE INSTALLED AS PART OF CITY OF LAS VEGAS CITY HALL PROJECT. SEE CLV DWG. NO. 521-298.

GENERAL NOTES (THIS SHEET ONLY)

1. CONTRACTOR SHALL VERIFY TYPE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTING POLE FOUNDATIONS.
2. CONTRACTOR SHALL INSTALL RED MARKING TAPE 18" BELOW GRADE, ABOVE ALL PROPOSED CONDUITS.
3. CONTRACTOR SHALL VERIFY ALL UTILITY CONFLICTS AND OBSTACLES PRIOR TO TRENCHING.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, INCLUDING LANDSCAPING FROM DAMAGE. ALL IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
5. ALL STREET LIGHT EQUIPMENT THAT IS TO BE SALVAGED SHALL BE RETURNED TO THE CLV EAST SERVICE YARD. PROVIDE 24 HOUR NOTICE PRIOR TO DELIVERY. CALL 702-229-3661 TO SCHEDULE DELIVERY TIME. CONTRACTOR MUST HAVE A MEANS TO UNLOAD EQUIPMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EQUIPMENT AND MATERIALS INCURRED IN THIS PROCESS.
6. CONTRACTOR SHALL MAINTAIN EXISTING SIGNAL INTERCONNECT COMMUNICATIONS WITHIN AND ADJACENT TO THE PROJECT DURING CONSTRUCTION.
7. SEE SHEETS C6.0 AND C6.1 FOR TRAFFIC SIGNAL DESIGN.
8. PULL BOX AND VAULT LOCATIONS AND CONDUIT ROUTING ARE SCHEMATIC FOR THE PURPOSE OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION.
9. CONTRACTOR SHALL COORDINATE WITH THE NEW CITY HALL PROJECT AS NECESSARY TO FACILITATE CONSTRUCTION OF RELATED IMPROVEMENTS.



This grading plan is a part of drainage study #4518 which was received on 4/15/11 and App'd on 4/11/11. Page 12 of 14



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 LAS VEGAS, NEVADA 89106
 Client: THE WATKINS TURNER CONTRACTING COMPANY
 6720 VIA AUSTI PARWAY, SUITE 300
 LAS VEGAS, NEVADA 89116
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PARKING GARAGE
 STREET LIGHTING AND FIBER OPTIC INTERCONNECT PLAN

STAMP
 RANDY W. CARROLL
 Exp. 12/31/12
 CIVIL
 License No. 16131
 4-4-11

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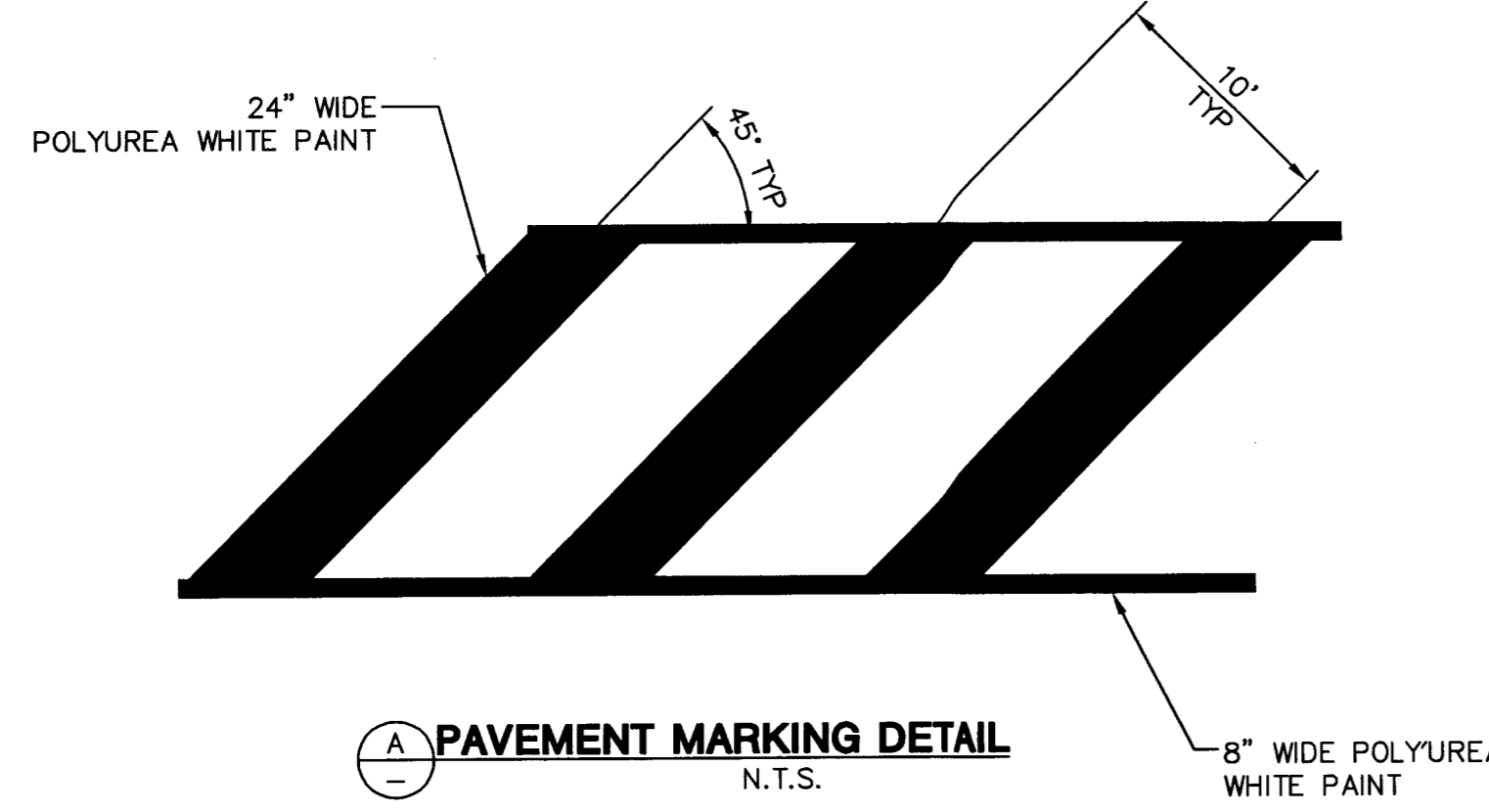
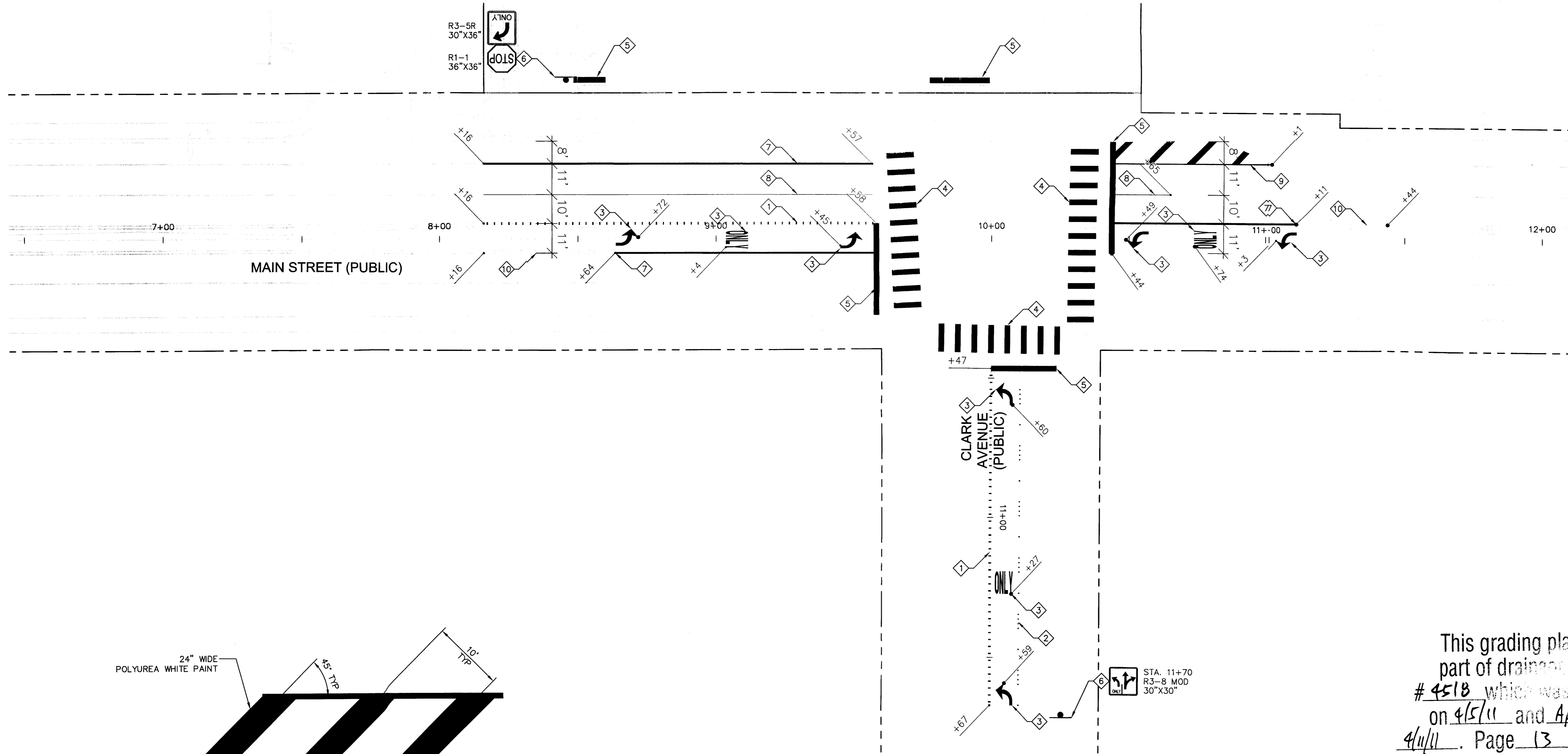
333 NORTH RANCHO DRIVE
 LAS VEGAS, NEVADA 89106
 PHONE: (702) 229-6535
 FAX: (702) 384-4846
 TDD: (702) 386-9101

DRAWN: ARP
 FILE: 092708SL&FO.DWG
 DATE: 3/25/2011
 SCALE: AS SHOWN
 BID NO: 09.15341.19
 CLV DWG NO: 512-80
 HANSEN NO: 28435
 SHEET NO:

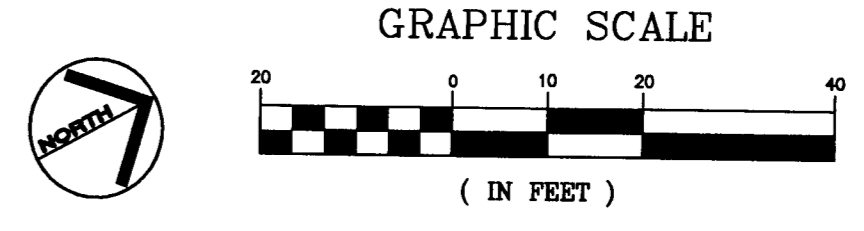
C7.0

CONSTRUCTION NOTES (THIS SHEET ONLY)

- 1 INSTALL TYPE 1 CENTERLINE PER CCAUSD DWG. NO. 244 USING RAISED PAVEMENT MARKERS.
- 2 INSTALL ADDED TURN LANE MARKINGS PER CCAUSD DWG. NO. 246.
- 3 INSTALL LEGEND USING TYPE II PAVEMENT MARKING MATERIAL PER CCAUSD DWG. NO. 246.
- 4 INSTALL CROSSWALK USING TYPE II PAVEMENT MARKING MATERIAL PER CCAUSD DWG. NO. 254A.
- 5 INSTALL STOP BAR USING TYPE II PAVEMENT MARKING MATERIAL PER CCAUSD DWG. NO. 254A.
- 6 INSTALL SIGN AND POST PER CITY OF LAS VEGAS AND MUTCD REQUIREMENTS.
- 7 INSTALL 8" POLYUREA WHITE PAINT.
- 8 INSTALL TYPE 4 LANE DELINEATION PER CCAUSD DWG. NO. 244A.
- 9 INSTALL PAVEMENT MARKING PER DETAIL A, THIS SHEET.
- 10 REMOVE EXISTING LANE DELINEATION MARKING.



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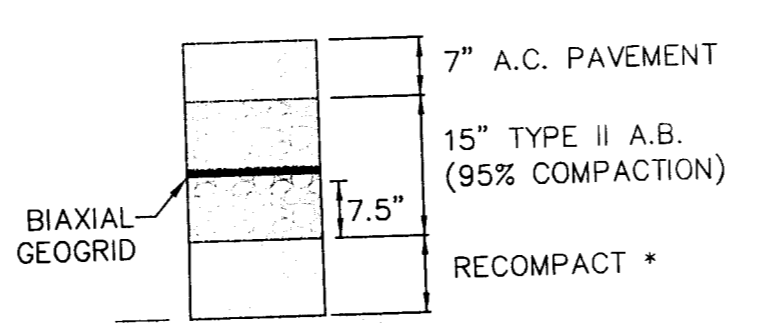
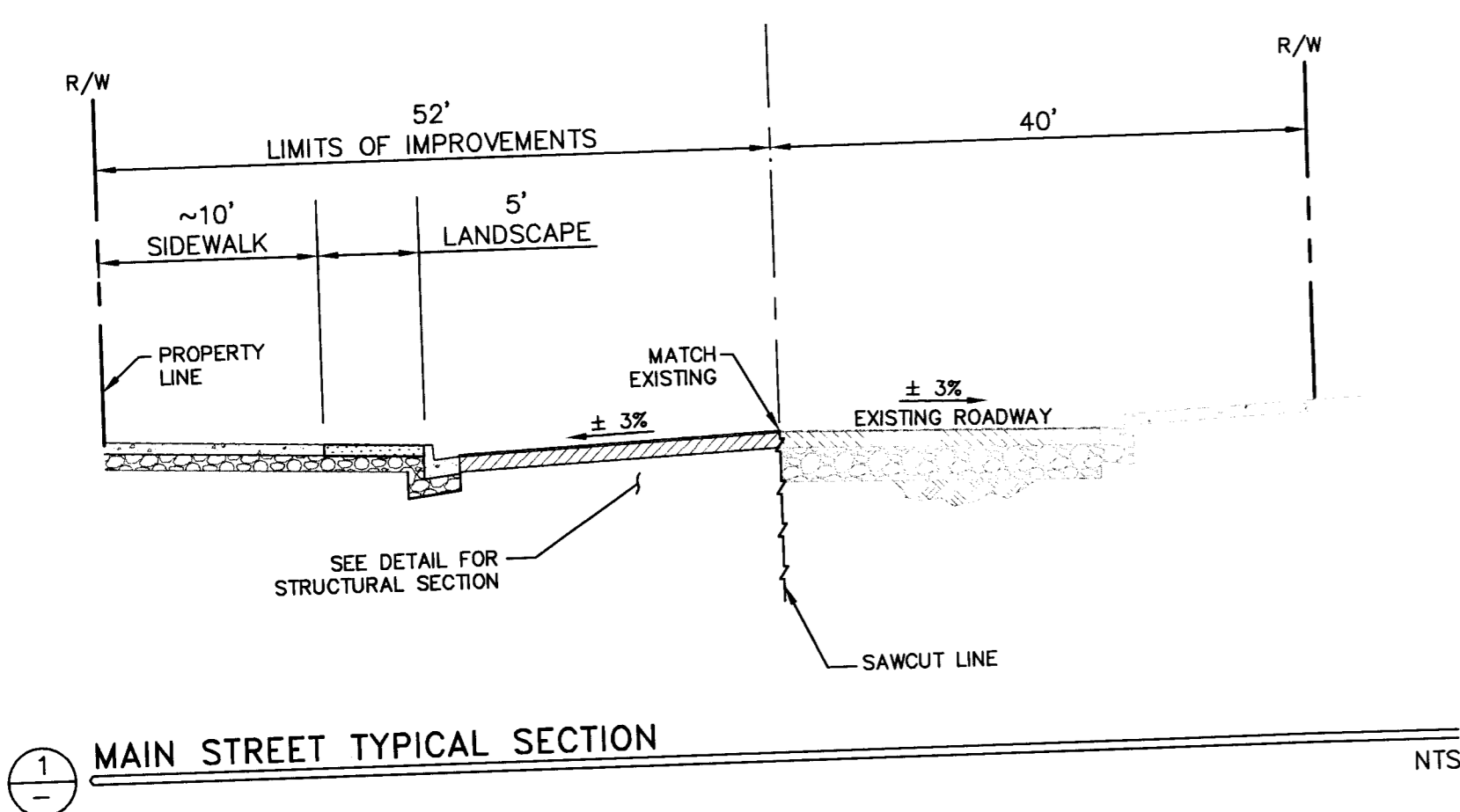
DEPARTMENT OF PUBLIC WORKS
500 SOUTH MAIN STREET
PARKING GARAGE
SIGNING AND MARKING PLAN

STAMP

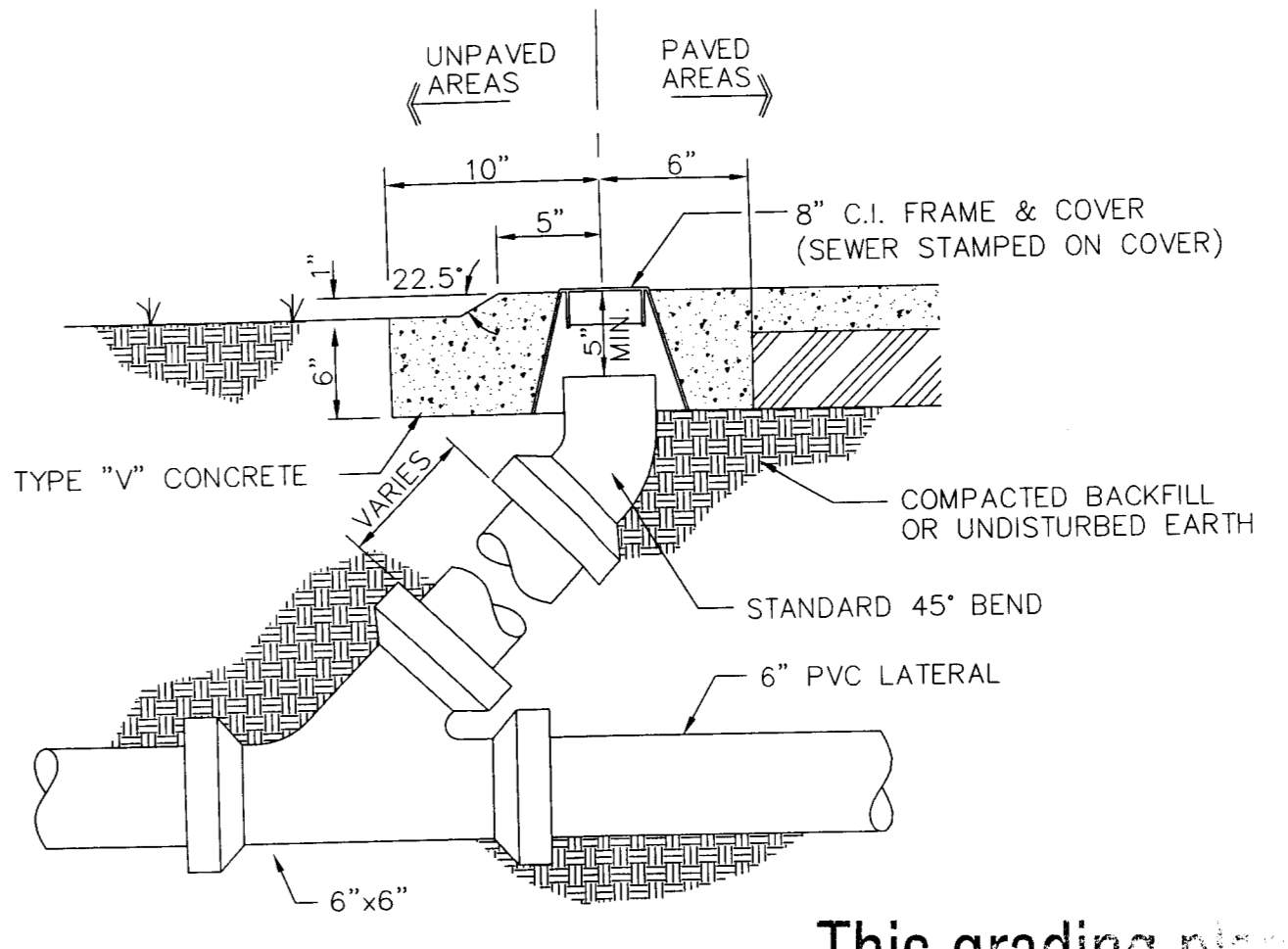
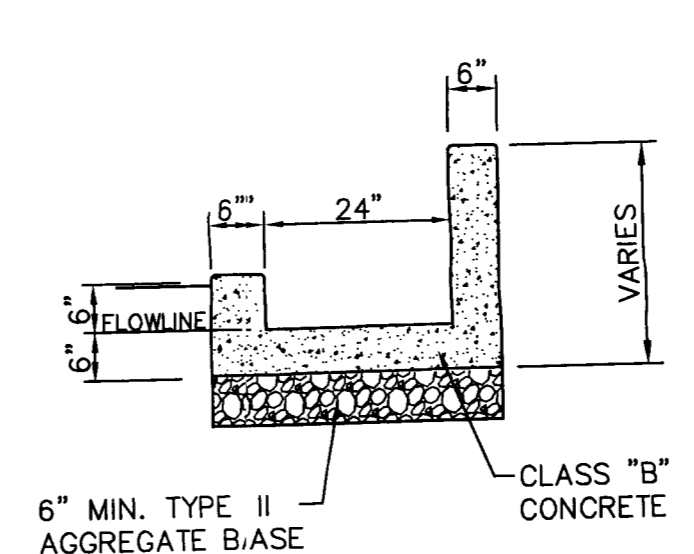
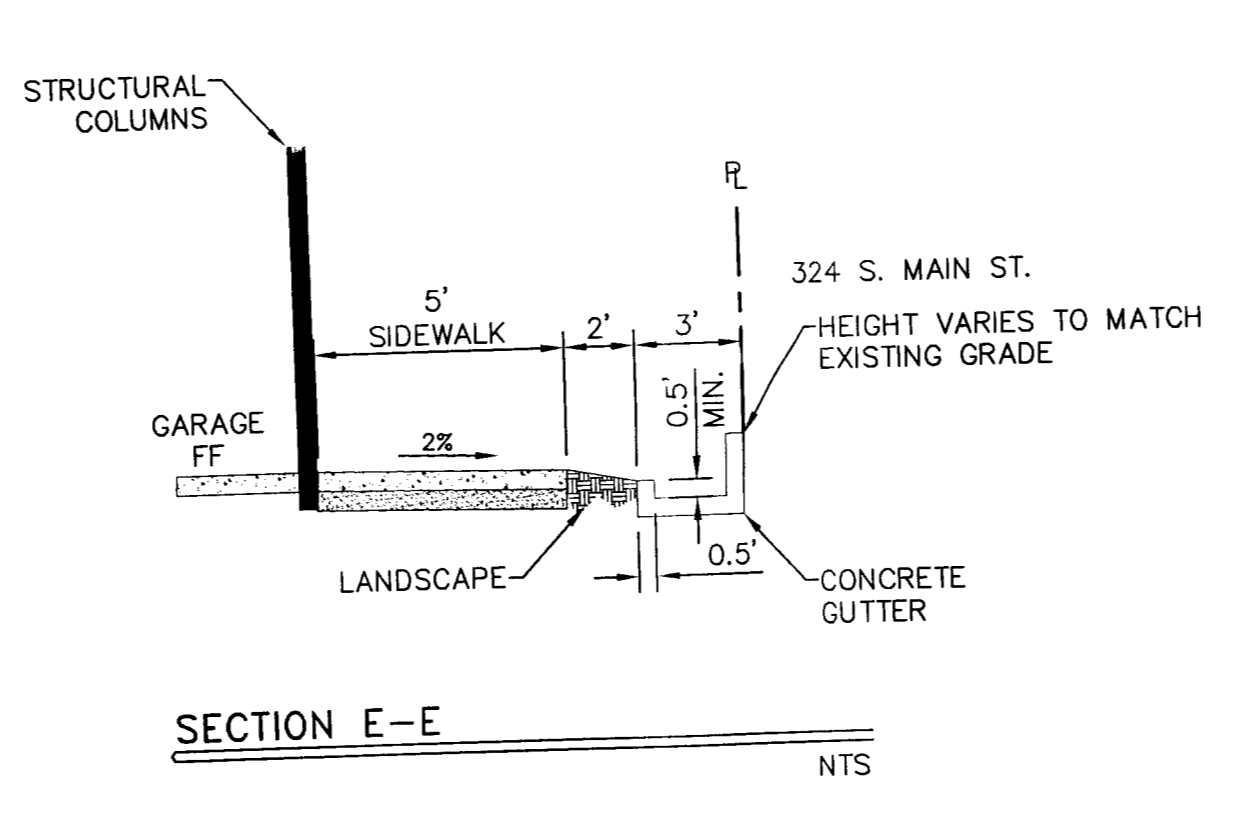
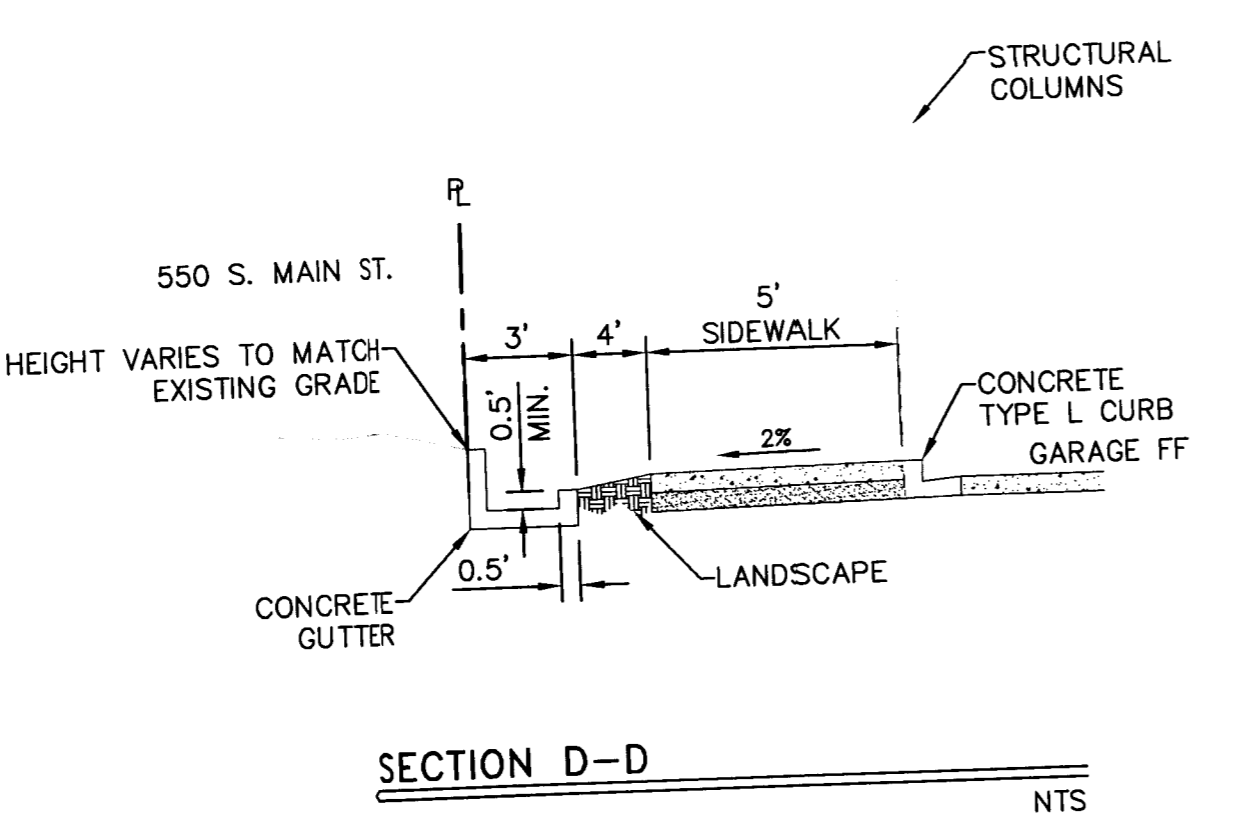
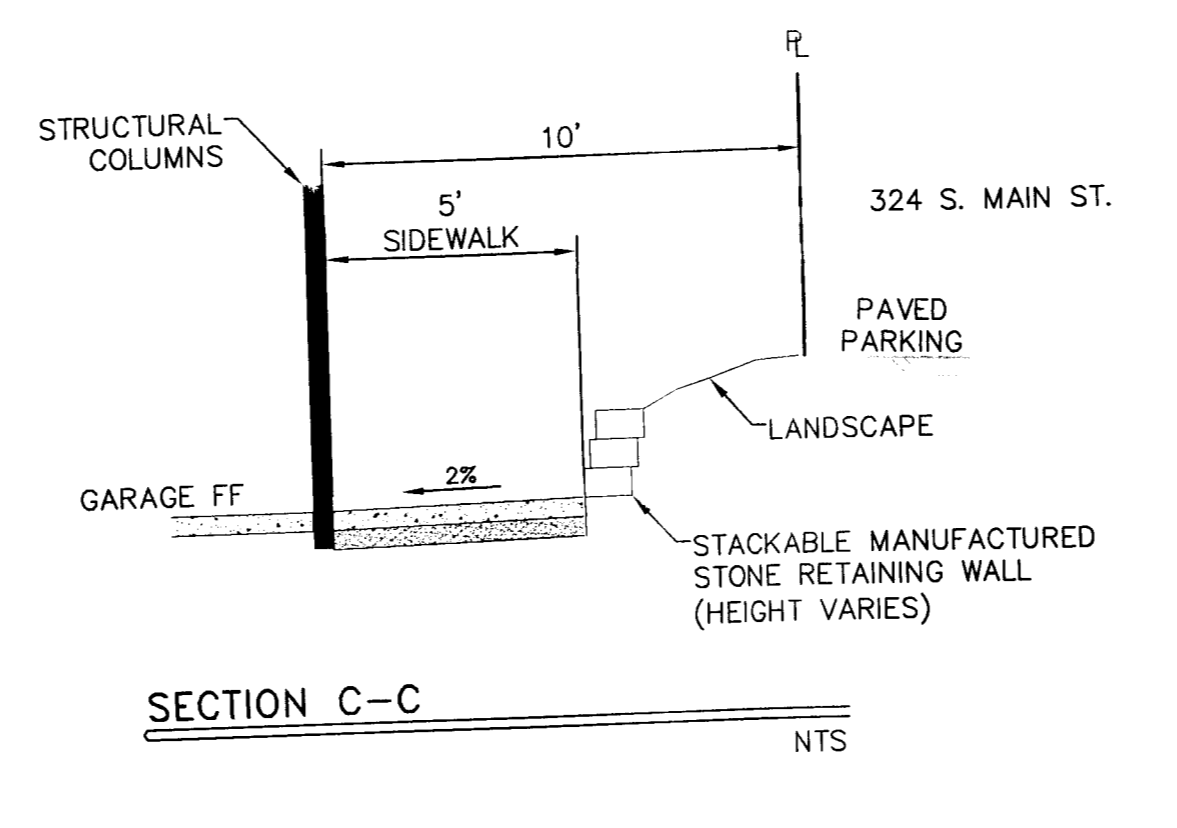
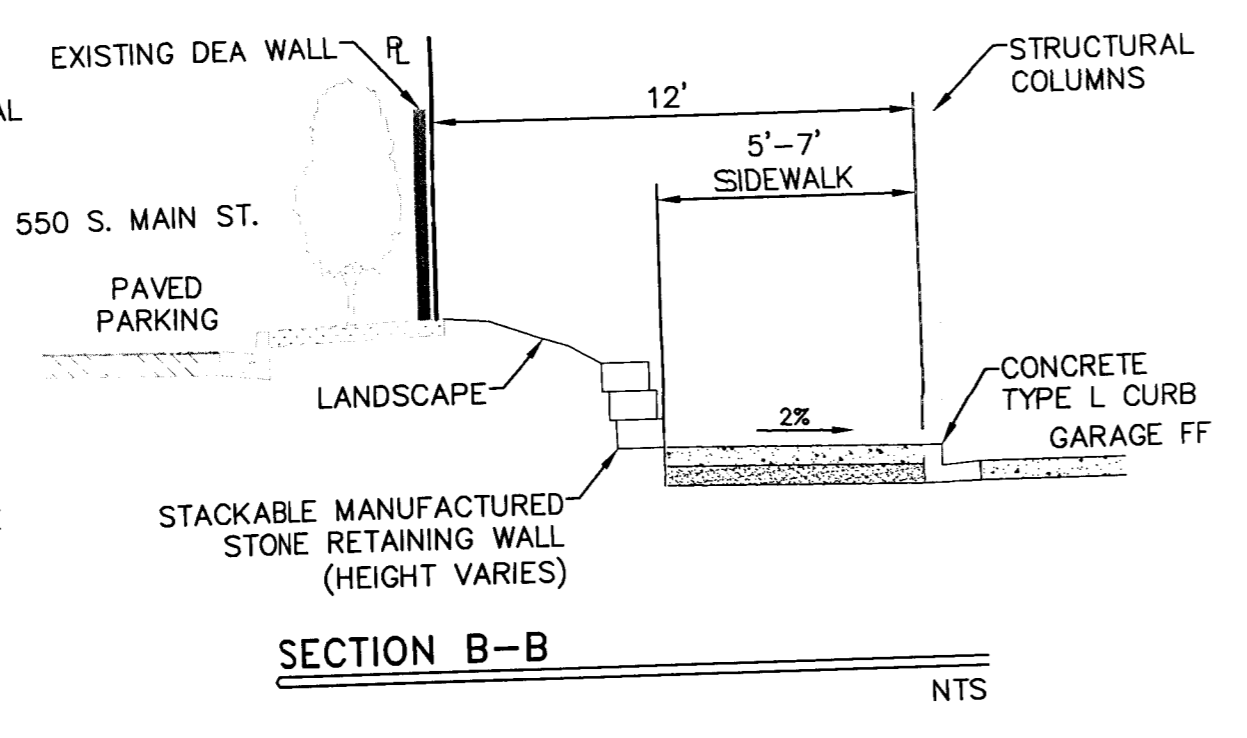
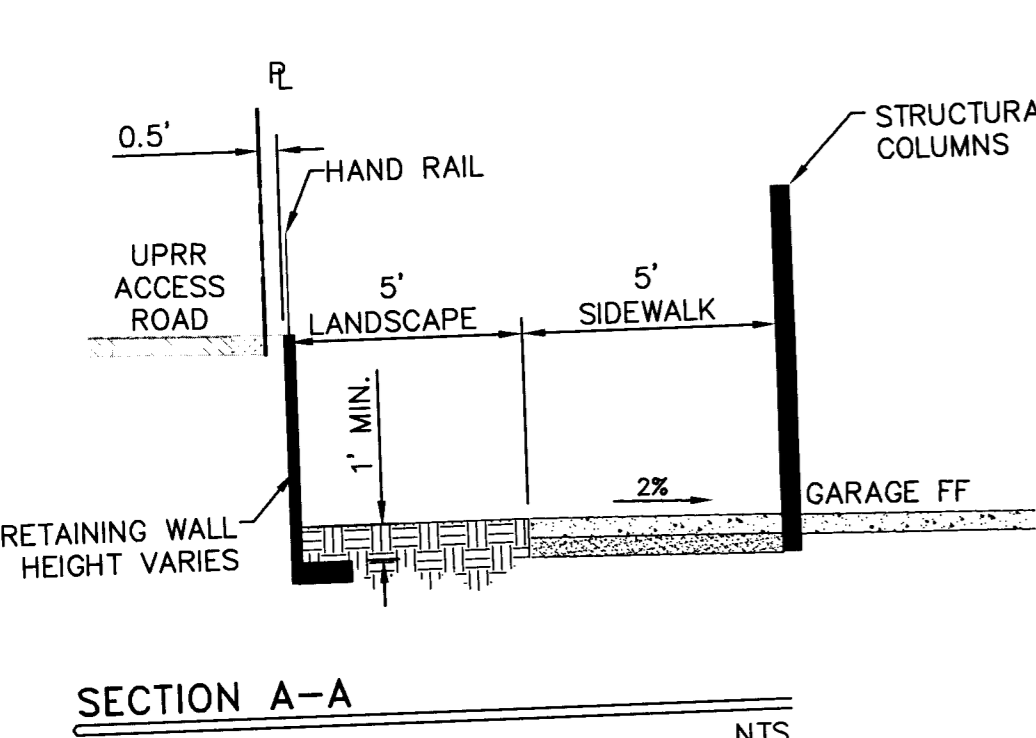
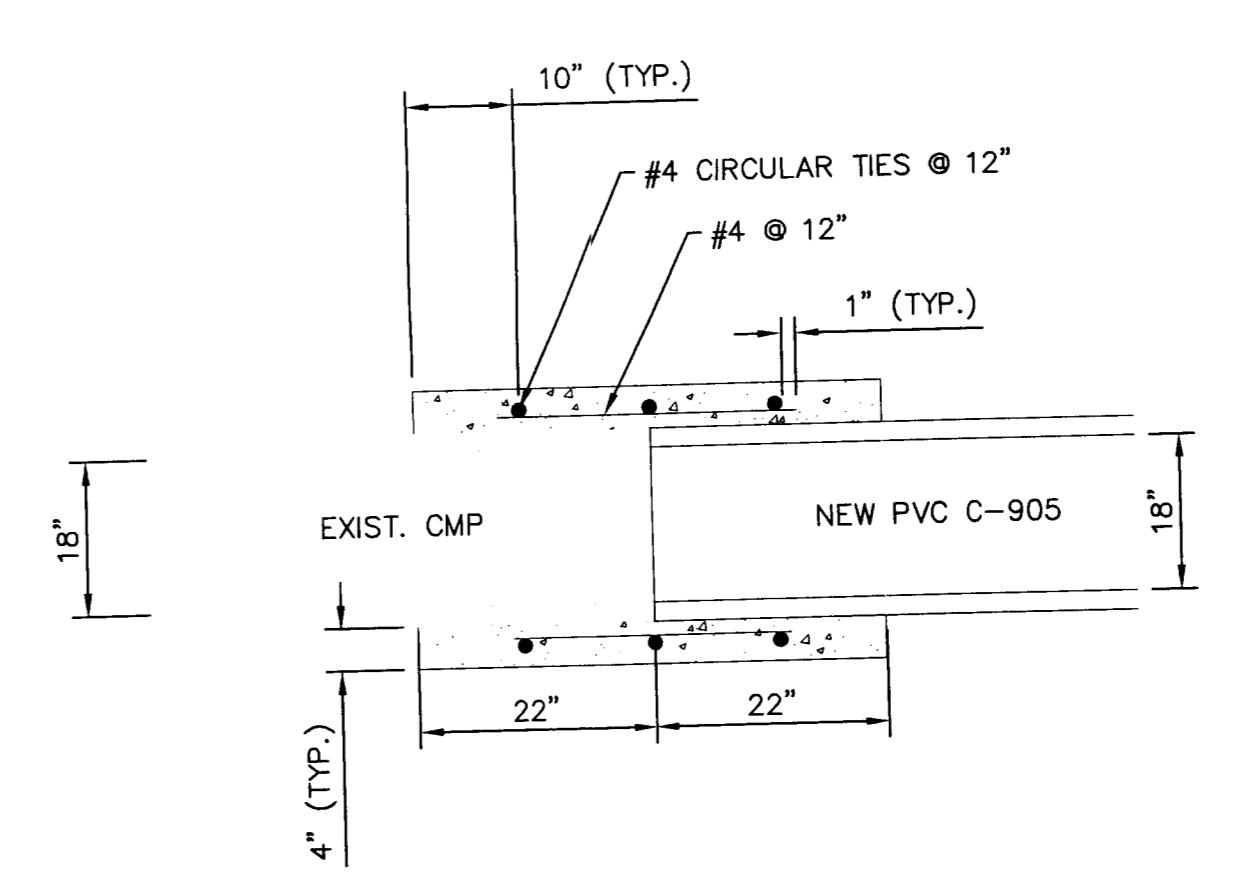
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DRAWN: MAG
FILE: 092708SM.DWG
DATE: 3/25/2011
SCALE: AS SHOWN
IND NO: 09.15341.19
CIV DWG NO: 512-80
HANSEN NO: 28435
SHT NO: C8.0

K:\LAV_Civil\092708 Whiting Turner\000 - 500 S. Main Street\CAD\092708TY.dwg Apr 04, 2011 03:52pm wade.watkinson



* RECOMPACT TO 95% MIN. 8" OF SUBGRADE. USE STRUCTURAL FILL IF NEEDED.



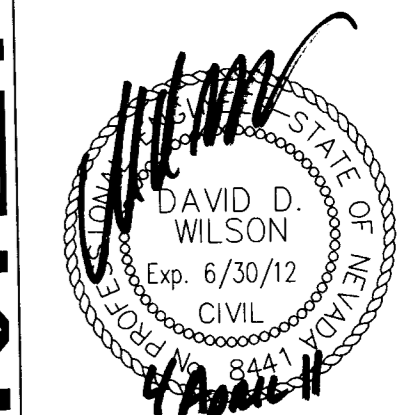
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DATE	092708TY.DWG
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CLV DWG NO	512-80
REVISION NO	28435
SHIT NO	C9.0