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LEGEND

CL OR SURVEY LINE
PROPERTY LINE
ROW LINE

EASEMENT LINE
SAWTOOTH LINE
SCARP LINE

DESCRIPTION:
EXISTING:
PROPOSED:

CONTOUR LINES
EDGE OF PAVEMENT
"A" TYPE CURBS
"L" TYPE CURBS

WALLS
FENCES
AC PAVEMENT
CONCRETE

SPOT ELEVATIONS
SIGNS
MANHOLE W/ DESCRIPTION
MANHOLE DESCRIPTIONS

FIRE HYDRANTS
GATE VALVES
REDUCERS
CLEAN OUTS

UTILITY BOX OR VAULT
BACKWATER VALVES
100W HPS
150W HPS
200W HPS
250W HPS

STREETLIGHTS
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CITY OF LAS VEGAS STREETLIGHT NOTES

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION (USS), AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA" (USD), LATEST REVISION.
 2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS, ETC., LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC AND CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623 OF THE USS.
 3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION IN ACCORDANCE WITH SECTION 623 G.03.01 OF THE USS.
 4. ALL EMPTY CONDUIT SHALL HAVE AT LEAST ONE GREEN NO. #8 AWG WIRE INSTALLED AS TRACER WIRE IN ACCORDANCE WITH SECTION 623 G.02.01 OF THE USS PRIOR TO BACKFILLING AND FINAL INSPECTION.
 5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN COMPLIANCE WITH USD 320A WHEN POLE IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.
 6. 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.
 7. SERVICE POINTS SHALL BE COORDINATED WITH NV ENERGY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICEPOINTS SHALL BE SHOWN ON THE PLANS.
 8. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREETLIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED BEFORE STREETLIGHT BASES ARE INSTALLED. AT NO EXPENSE TO THE CITY OF LAS VEGAS.
 9. THE CONTRACTOR SHALL FURNISH COMPLETE CONDUIT, WIRE, ETC. FROM SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON THE PLANS.
- REVISED JUNE 28, 2016 (LD VERSION)

CITY OF LAS VEGAS GRADING NOTES

1. 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.
 2. 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.
 3. 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.
 4. THE CONTRACTOR IS WARNED 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.
 5. 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.
 6. 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	0.5"	+0.0/0.0 -0.1"	SEE SOILS REPORT
B. ENGINEERED FILL	0.5"	+0.1/0.0 -0.1"	SEE SOILS REPORT

COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
 7. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
 8. 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.
 9. 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.
 10. 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.
- REVISED 04/15/10

CITY OF LAS VEGAS SEWER NOTES

1. 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.
 2. 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 ENGINEER.
 3. CHISEL "S" OR "C" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
 4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
 5. ALL MANHOLES PAVED IN 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.
 6. 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.
 7. WATER 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 INCH (18) UNDER A WATER MAIN.
 8. 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.
 9. 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 ACCEPTANCE BY THE CITY OF LAS VEGAS.
 10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.
- REVISED 04/15/10

CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE & RESCUE ADOPTED FIRE CODE ORDINANCE #6325 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
 2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICT'S - APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
 3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE & RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTORS MATERIAL TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [FC § 105.7.12]
 4. 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. [FC § 3310, § 3312]
 5. TO IDENTIFY THE FIRE HYDRANT LOCATIONS, THE CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF STREET ADJACENT TO THE FIRE HYDRANTS. [FC § 507.5.7.3]
 6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE LINES, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CENTER LINE LOCATIONS ARE ACCEPTABLE FOR THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [FC § 108.3]
 7. 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. [FC § 507.2.1, NFPA 24]
 8. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [FC § 507]
 9. PRIVATE HYDRANTS SHALL BE PAINTED RED. [FC § 507.5.7.1]
 10. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [FC § 507]
 11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [FC § C102]

RESIDENTIAL	COMMERCIAL
500 FEET UNSPRINKLERED; 600 FEET SPRINKLERED.	400 FEET UNSPRINKLERED; 400 FEET SPRINKLERED.
 12. WHERE THE WATER MAINS ARE STENDED ALONG STREETS OR NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) 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 FT ON AN ALTERNATING BASIS. [FC § C102.8]
 13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
 14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [FC § C102.12]
 15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT, AS MEASURED BY AN APPROVED ROUTE. [FC § C102.4]
 16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [FC § C102.7]
 17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT. [FC § C102.6]
 18. TWO (2) SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 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. [FC § C104]
 19. 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. [FC § 503.2.3]
 20. THE GRADIENT FOR THE FIRE APPARATUS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [FC § 503.2.7, § 503.2.8]
 21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [FC § 503.2.4]
 22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13 FT 6 INS. [FC § 503.2.1]
 23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FT FLOW LINE TO FLOW LINE WITH PARALLEL PARKING PERMITTED ON BOTH SIDES. NOT LESS THAN 32 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE PARKING IS PERMITTED ONLY ON ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD, NOT LESS THAN 24 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE. FIRE LANES THROUGH PARKING LOTS SHALL NOT BE LESS THAN 24 FT. [FC § 503.2.1.1]
 24. FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS. THIS DISTANCE COULD BE INCREASED TO 250 FT IF THE BUILDING IS SPRINKLERED. [FC § 503.1.1]
 25. 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 FT. COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE BUILDINGS EXCEED 2 STORIES OR 30 FT IN HEIGHT, OR EXCEEDING 62,000 SQ FT IN AREA. [FC § 503.1.2]
 26. ALL DEAD-END FIRE APPARATUS ROADS AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [FC § 503.2.5]
 27. 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 OF 100 FT ALONG THE 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 FT OR LESS THAN 6 FT FROM THE ROADWAY LEVEL. THE CURB ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [FC § 503.3]
 28. ELECTRONICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SMO SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE IFC § 503.6 AND IFC APPENDIX M.
- EFFECTIVE DATE 03-01-2016

DEVIATIONS FROM STANDARDS

NONE.

CITY OF LAS VEGAS GENERAL NOTES

1. 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 SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION 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".
 2. 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 SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING 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.
 3. 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.
 4. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
 5. 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.
 6. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
 7. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
 8. AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE UP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMP AND CROSS GUTTERS.
 9. CURB AND GUTTER FLOW SHALL BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
 10. 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.
 11. 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.
 12. ALL GRADING WORK SHALL CONFORM TO THE SOLS REPORT AS PREPARED BY THE (COMPANY, REPORT #, DATE) APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
 13. 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.
 14. 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.E.S. STATUTE NO. 625.360 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
 15. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APPROXS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
 16. WALL NOTES:
 - 16.1. 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.
 - 16.2. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
 17. 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.
 18. 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.
 19. 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.
 20. AFTER HAUNCHING AND PRIOR TO BACKFILL OPERATIONS WHICH WOULD COVER SANITARY SEWER AND STORM DRAIN FACILITIES, CONTRACTOR IS REQUIRED TO SCHEDULE GLV OPEN-TRENCH UTILITY SURVEY INSPECTION FOR DETERMINATION OF FINAL LOCATION COORDINATES. FACILITIES TO BE LOCATED BY GLV SHALL INCLUDE AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS, OR
 22. 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 EDITION.
 23. A SEPARATE BORING PERMIT IS REQUIRED FOR ALL BORING ACTIVITIES.
- REVISED 06/04/2018

SOUTHERN NEVADA - SOUTHWEST GAS CORPORATION GENERAL NOTES:

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020.
 2. THERE SHALL BE A MINIMUM HORIZONTAL AND VERTICAL CLEARANCE OF 12-INCHES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND FACILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC.
 3. FOR VALVE ADJUSTMENT CONTACT 702-668-6107 48 HOURS PRIOR TO CONSTRUCTION.
 4. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND/OR STRUCTURES CONTACT 702-365-2099.
- ALL CIVIL IMPROVEMENT PLANS MUST INCLUDE SOUTHWEST GAS CORPORATION HIGH PRESSURE NOTES ON THE NOTES SHEET AND ALL SHEETS DEPICTING HIGH PRESSURE NATURAL GAS MAINS AS INDICATED BELOW:

CAUTION: HIGH PRESSURE GAS!!
CALL SOUTHWEST GAS AT 702-400-1789 FOR STAND-BY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES 48 HOURS PRIOR TO CONSTRUCTION.

Paula Kennedy 4/22/19

CITY OF LAS VEGAS TRAFFIC NOTES

1. ALL CONSTRUCTION SIGNING, BARRICAADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
 2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
 3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION 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.
 4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE AVOIDED IN THE 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.
 5. IF THE IMPROVEMENTS NECESSITATE THE OBSTRUCTION, 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.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. ALL NEW TRAFFIC SIGNS SHALL UTILIZE TYPE X RETROREFLECTIVE SHEETING IN ACCORDANCE WITH COAUS 627 AND 716 AND SHALL HAVE AN ANTI-GRAFFITI PROTECTIVE OVERLAY FILM AND IS A MATCHING COMPONENT TO, AND OF THE SAME MANUFACTURER AS THE RETROREFLECTIVE SHEETING TO WHICH IT IS APPLIED. 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.
 7. 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.
 8. 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 HEREON, REGARDLESS OF THE STATUS OF THE COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
 9. 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 PROVIDE A CERTIFIED ATSSA TRAFFIC CONTROL TECHNICIAN OR USA WORK ZONE SAFETY SPECIALIST SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
 10. 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.
 11. 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.
 12. GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PH 482-4442) 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.
 13. ANY WORK WITHIN 300' OF A SIGNALIZED INTERSECTION WILL BE NIGHT WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS TRAFFIC ENGINEER.
 14. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING ANY TRAFFIC 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 SIGNAGE. THE CONTRACTOR SHALL PROVIDE ADEQUATE TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED.
- REVISED 7/3/13

LAS VEGAS VALLEY WATER DISTRICT NOTES

- LVVWD PROJECT # 135386**
1. NO WORK SHALL BEGIN UNTIL THE WATER 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 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.
 2. 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.
 3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
 4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
 5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
 6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
 7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
 8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
 9. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED, AND AN ACCESSIBLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
 10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD OR FROM STORM DRAIN TELEPHONE 258-3152 OR 258-3802, TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
 11. 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.
 12. 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.
 13. TELEPHONE CALL BEFORE YOU DIG AT 811 OR 1-800-227-2600.
 14. THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARD SPECIFICATIONS, 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.
 15. 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 IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ADJACENT TO 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.
 15. NO LEAD COMPLIANCE NOTE:
TO COMPLY WITH THE FEDERAL SAFE DRINKING WATER ACT, ALL WATER WORKS BRASS PRODUCTS PROPOSED TO BE RELOCATED, OR INSTALLED AS NEW MUST BE INSTALLED WITH THE LEAD FREE APPROVED PRODUCT. THE OLD LEADED PRODUCT MAY NOT BE REUSED.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT No. 135386 FIRST APPROVED DATE: 5-6-19

QUANTITIES

DESCRIPTION	PUBLIC QUANTITY	PRIVATE QUANTITY
CURB & GUTTER (TYPE "L" & "A")	1,639 LF	LF
CROSS GUTTER	2,251 SF	SF
SIDEWALK 4"	12,737 SF	SF
SIDEWALK RAMP	13 EA	EA
SIDEWALK UNDERDRAIN	3 EA	EA
TYPE II GRAVEL	545 CY	CY
3" AC PAVEMENT	26 SY	SY
4" AC PAVEMENT	1,939 SY	SY
PAVEMENT STRIPING COLLECTOR	829 LF	LF
STREETLIGHT (STANDARD BASE)	2 EA	EA
STREET/STOP SIGNS	10 EA	EA

SEWER QUANTITIES

DESCRIPTION	PUBLIC QUANTITY	PRIVATE QUANTITY
6" SEWER	LF	79.50 LF
8" SEWER	LF	298.11 LF
12" SEWER	LF	25.13 LF
48" SSMH	EA	2 EA
60" SSMH	1 EA	EA
72" SSMH	1 EA	EA

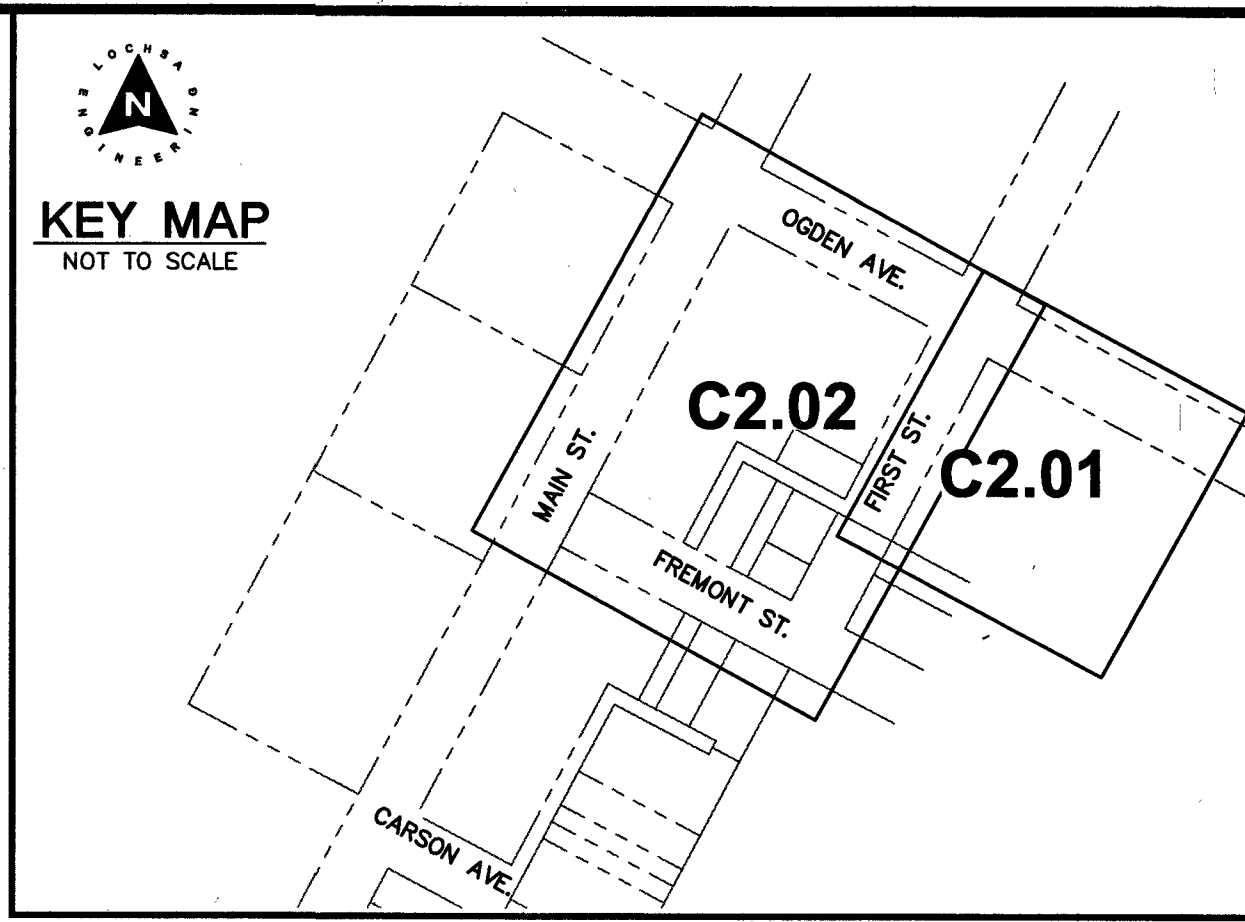
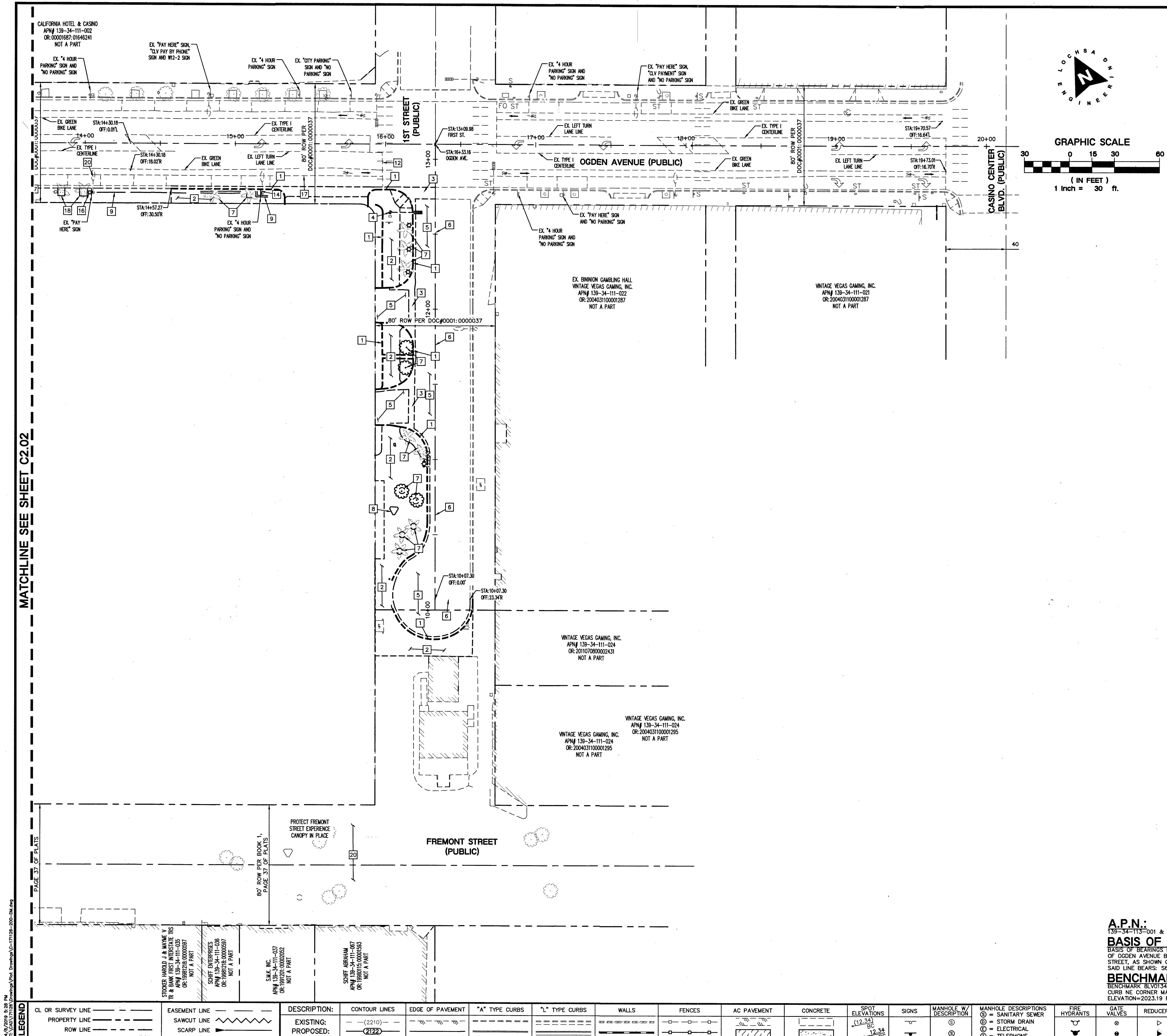
WATER QUANTITIES

DESCRIPTION	PUBLIC QUANTITY	PRIVATE QUANTITY
10" WATER	154 LF	LF
12" WATER	313 LF	LF
IRRIGATION SLEEVES	73 LF	LF

STORM DRAIN QUANTITIES

DESCRIPTION	PUBLIC QUANTITY	PRIVATE QUANTITY
24" STORM DRAIN	21 LF	LF
30" STORM DRAIN	59 LF	LF
36" STORM DRAIN	13 LF	LF
15" MODIFIED TYPE C INLET	1 EA	EA
30" MODIFIED TYPE C INLET	1 EA	EA
72" SSMH	4 EA	EA
48" SSMH	EA	1 EA

<



NOTE:
1. SEE SHEETS C5.01, C5.02 FOR WATER AND SEWER DEMOLITION AND RELOCATION.
2. SEE SHEETS C4.01, C4.02 FOR STORM DRAIN DEMOLITION AND RELOCATION.

- DEMOLITION NOTES:**
ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH AREA UNIFORM STANDARD DRAWINGS LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.
NOT ALL NOTES USED ON THIS SHEET -
- 1 REMOVE & DISPOSE OF EXISTING CURB AND GUTTER.
 - 2 REMOVE & DISPOSE OF EXISTING SIDEWALK.
 - 3 REMOVE & DISPOSE OF EXISTING CROSS GUTTER.
 - 4 RELOCATE EXISTING SIGNAL/STREET LIGHT POLE.
 - 5 REMOVE & DISPOSE OF EXISTING AC.
 - 6 SAWCUT AND MATCH EXISTING.
 - 7 RELOCATE EXISTING LANDSCAPE. SEE LANDSCAPE PLANS FOR RELOCATION AND NEW PLANTING.
 - 8 REMOVE EX SIGN AND RETURN TO OWNER.
 - 9 REMOVE EX WALL.
 - 10 REMOVE EX FENCE AND RETURN TO OWNER.
 - 11 REMOVE EX BOLLARDS AND RETURN TO OWNER.
 - 12 OBLITERATE EX. STRIPING.
 - 13 OBLITERATE EX. PARKING LINES.
 - 14 REMOVE EX. SIGNS.
 - 15 REMOVE EX. SIGNS. EX. W12-2 SIGN TO REMAIN.
 - 16 REMOVE EX. PARKING PAYMENT KIOSK AND RETURN TO CLV.
 - 17 OBLITERATE EX. GREEN BIKE LANE.
 - 18 EX. TREES TO BE REMOVED AND REPLACED. SEE LANDSCAPE PLANS FOR RELOCATION AND NEW PLANTING.
 - 19 EX. ELEC. TO BE REMOVED/RELOCATED OR ADJUSTED TO GRADE PER ELEC. PLAN.
 - 20 PROTECT IN PLACE

NOTE:
LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

SAFETY ALERT
Call Before You Dig
Call Before You Dig
Call Before You Dig

A.P.N.:
139-34-111-001 & 139-34-112-001
BASIS OF BEARINGS:
BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF OGDEN AVENUE BETWEEN MAIN STREET AND FIRST STREET, AS SHOWN ON FILE 67, PAGE 79 OF SURVEYS. SAID LINE BEARS: S62°04'36"E
BENCHMARK:
BENCHMARK BLV013ANNWS BEING A RIVET & PLATE TOP CURB NE CORNER MAIN ST. & FREMONT ST. ELEVATION=2023.19 FEET (616.669 METERS)

MATCHLINE SEE SHEET C2.02

4/8/2019 5:28 PM C:\Users\jlo\OneDrive\Projects\18 Fremont Street Hotel and Casino\18-Fremont-Street-Hotel-and-Casino.dwg

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	(2210)								(12.34)		⊙	⊙ = SANITARY SEWER ⊙ = STORM DRAIN ⊙ = ELECTRICAL ⊙ = TELEPHONE						BWV				
ROW LINE	SCARP LINE	PROPOSED:	(2122)								12.34		⊙							BWV				

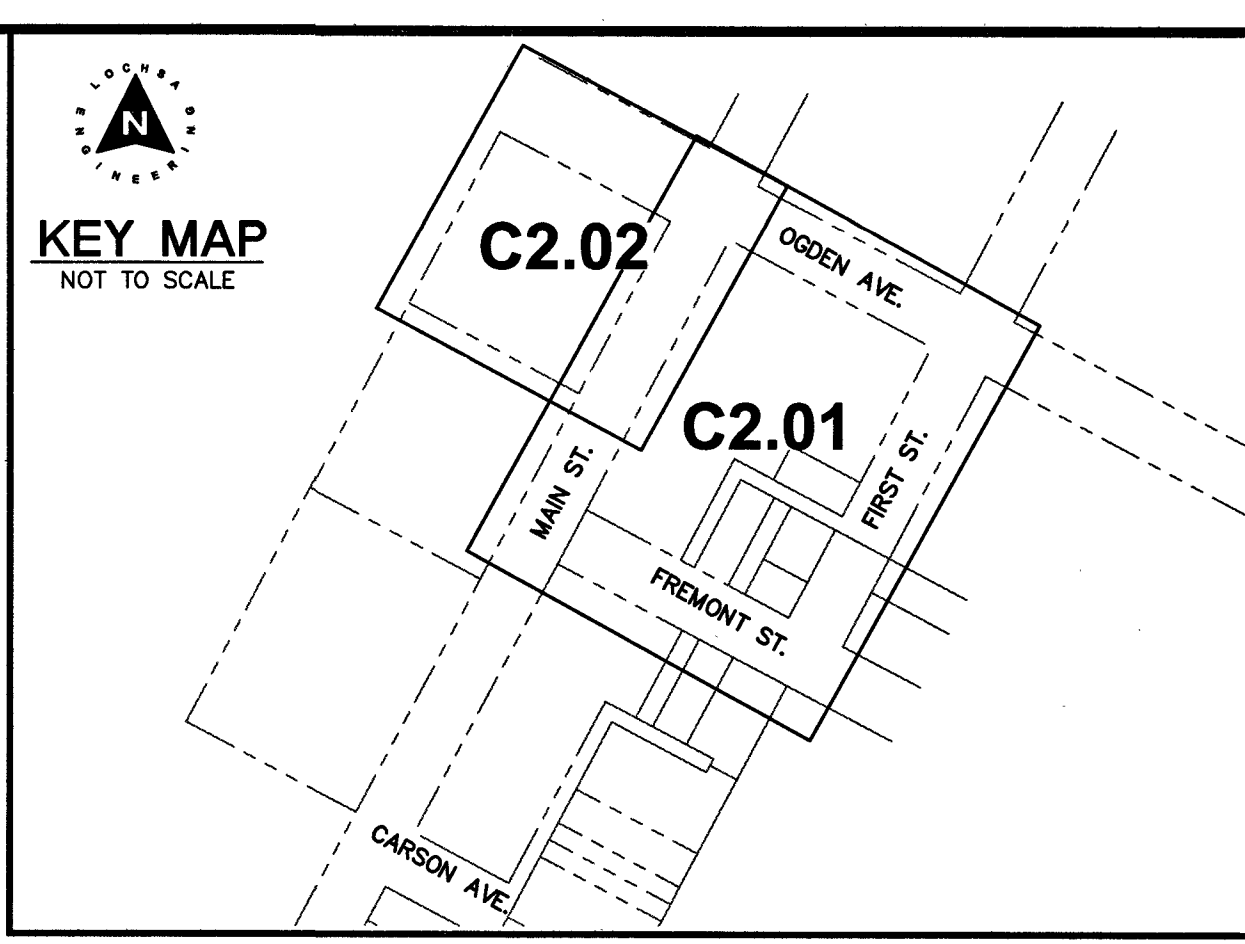
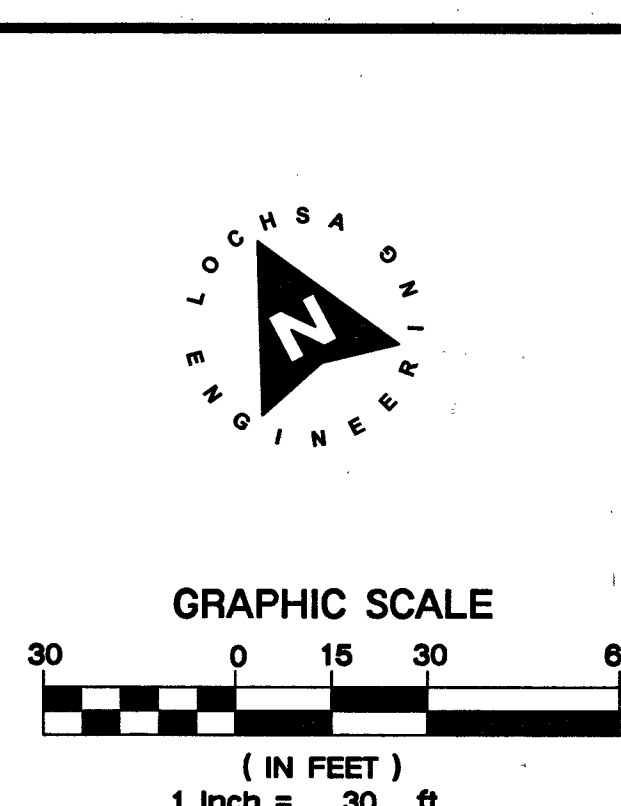
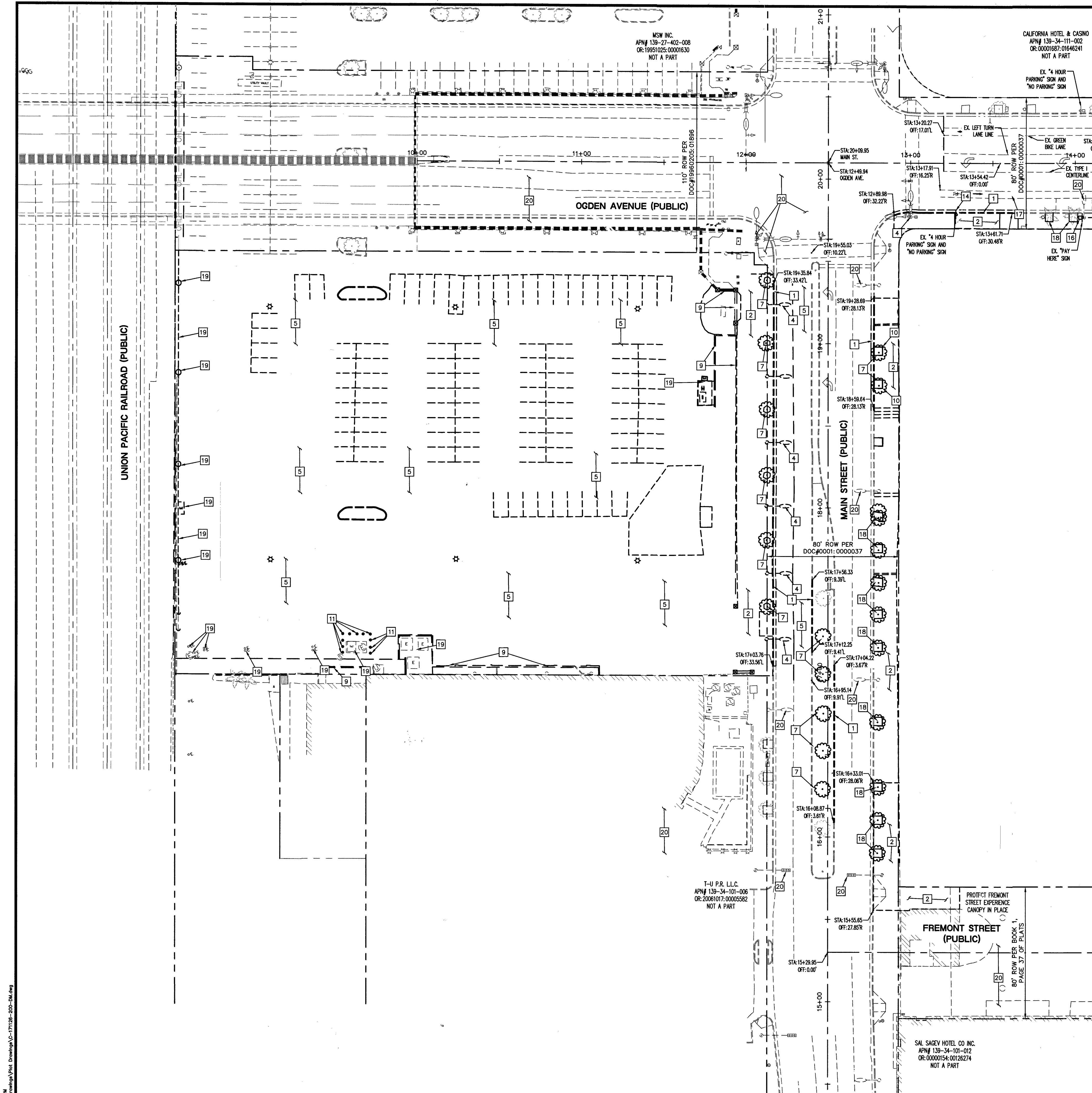
6345 South Jones Blvd.
Suite 100
Las Vegas, NV 89118
Phone (702) 365-8312
Fax (702) 365-8317
www.lochsa.com

Lochsa
engineering

PROJECT No.: 171126
DATE: 04/08/19
SCALE: 1"=30'
DRAWN BY: JWN
DESIGNED BY: NMG
CHECKED BY: GMM
04/08/19
SHEET No. C2.01
CLV No. 1077521
L18-02490

DEMOLITION PLANS
SHEET 1 OF 2
18 FREMONT STREET
HOTEL AND CASINO
CITY OF LAS VEGAS

DESCRIPTION:
BY:
DATE:
REV:



NOTE:
1. SEE SHEETS C5.01, C5.02 FOR WATER AND SEWER DEMOLITION AND RELOCATION.
2. SEE SHEETS C4.01, C4.02 FOR STORM DRAIN DEMOLITION AND RELOCATION.

- DEMOLITION NOTES:**
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 - 20. PROTECT IN PLACE.

MATCHLINE SEE SHEET C2.01

A.P.N.:
139-34-113-001 & 139-34-112-001
BASIS OF BEARINGS:
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BENCHMARK:
BENCHMARK ELEVATION BEING A RIVET & PLATE TOP CURB NE CORNER MAIN ST. & FREMONT ST. ELEVATION=2023.19 FEET (616.669 METERS)

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CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	(2210)								(12.34)		⑤	⑤ SANITARY SEWER	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤
ROW LINE	SCARP LINE	PROPOSED:	(2122)								(12.34)		⑤	⑤ STORM DRAIN	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤	⑤

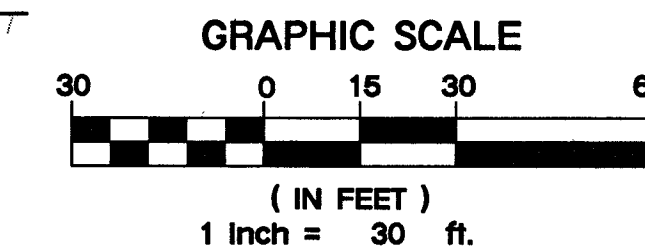
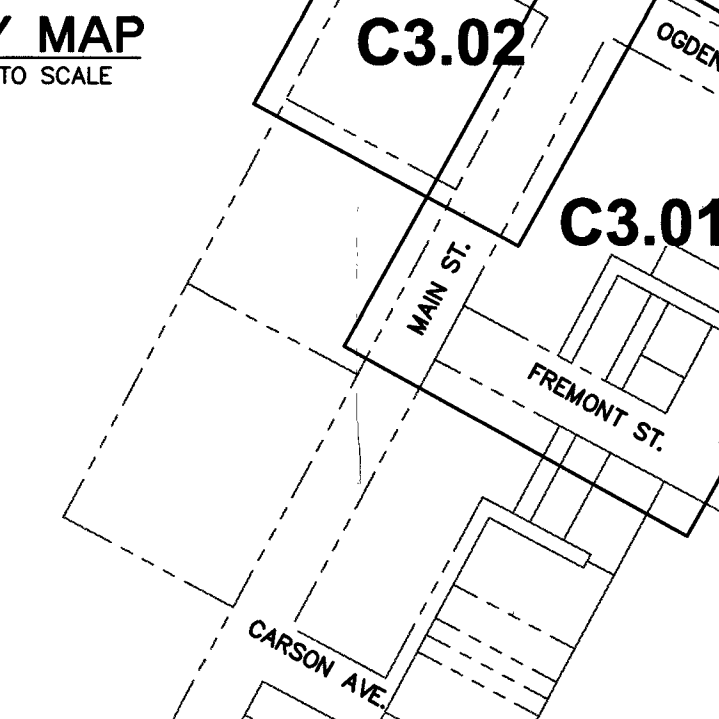
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DEMOLITION PLANS
SHEET 2 OF 2

18 FREMONT STREET
HOTEL AND CASINO
CITY OF LAS VEGAS

SHEET
PROJECT No.: 171126
DATE: 04/08/19
SCALE: 1"=30'
DRAWN BY: JWN
DESIGNED BY: NMG
CHECKED BY: GMM
SEAL
GUY M. MORRIS
EXP. 12-31-19
CIVIL
No. 14526
04/08/19
SHEET No.
C2.02
SHEET 4 OF 15
CLV No. 1077521
L18-02490



CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C1	14.16'	9.00'	090°09'45"	9.03'
C2	8.20'	22.86'	020°44'07"	4.14'
C3	30.37'	25.00'	069°36'15"	17.38'
C4	3.86'	2.00'	110°30'12"	2.88'
C5	4.12'	1.31'	180°00'00"	INFINITY'
C6	14.14'	9.00'	090°00'39"	9.00'
C8	14.12'	9.00'	089°52'36"	8.98'
C9	4.71'	3.00'	090°00'56"	3.00'
C10	3.14'	2.00'	089°59'04"	2.00'
C11	14.14'	9.00'	090°00'00"	9.00'
C12	7.90'	5.00'	090°34'51"	5.05'
C13	31.42'	20.00'	090°00'00"	20.00'
C14	20.92'	15.00'	079°54'54"	12.57'
C15	62.36'	82.00'	043°34'33"	32.78'
C16	73.57'	116.05'	036°19'25"	38.07'
C17	40.47'	25.00'	092°45'42"	26.24'
C18	23.59'	15.00'	090°06'20"	15.03'
C19	27.66'	74.50'	021°16'21"	13.99'
C20	28.03'	75.50'	021°16'21"	14.18'
C21	39.27'	25.00'	090°00'02"	25.00'
C22	14.11'	9.00'	089°50'42"	8.98'
C23	5.40'	10.00'	030°57'08"	2.77'
C24	39.93'	74.00'	030°55'04"	20.46'
C25	1.75'	0.56'	179°55'05"	078.87'
C26	1.51'	0.48'	179°58'05"	1723.31'
C27	11.91'	20.00'	034°06'30"	6.14'
C28	29.91'	50.00'	034°16'42"	15.42'
C29	115.04'	30.70'	214°43'58"	98.15'
C30	12.12'	20.00'	034°43'02"	6.25'
C31	15.71'	10.00'	090°00'57"	10.00'

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	56.95'	S62°05'32"
L2	2.23'	S27°44'43"
L3	11.71'	S62°12'00"
L4	31.04'	S62°05'32"
L5	44.00'	S27°54'28"
L6	28.19'	S62°05'32"
L7	41.34'	S62°05'32"
L8	6.79'	N27°55'24"
L9	116.53'	S62°05'32"
L11	7.77'	N27°55'24"
L12	8.00'	N62°04'36"
L13	10.14'	S62°05'32"
L14	2.60'	N27°55'24"
L15	79.23'	N62°04'36"
L16	64.26'	N62°05'32"
L17	22.96'	S59°33'45"
L18	9.04'	N27°40'33"
L19	50.97'	S62°05'32"
L20	23.99'	N27°54'26"
L21	33.64'	N27°54'26"
L22	30.83'	S62°05'32"
L23	56.48'	S62°05'32"
L24	5.96'	S27°45'10"
L25	8.94'	N27°54'03"
L26	63.99'	N27°54'03"
L27	96.52'	N27°55'24"
L28	4.08'	S62°05'33"
L29	9.36'	N27°44'08"
L30	9.36'	N27°44'08"

TRAFFIC NOTES:

- ① INSTALL PARKING WITH 4" WHITE PAINTED LINES. (TYPICAL)
- ② INSTALL WHITE PAINTED LINES IN CROSSWALK AREA.
- ③ INSTALL 4" WHITE PAINTED LANE LINES. (TYPICAL)
- ④ INSTALL PRE-CAST BUMP BLOCK 2' FROM FACE OF CURB PER CCAUSD NO. 238 - DETAIL 5 ON C7.01.
- ⑤ ARROWS SEE 171208.

NOTE:

LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

SAFETY ALERT

Avoid hitting underground traffic signal and street light system cabling. It's costly.

Call Before You Overhead

1-702-432-5300

Call before you UnderGround

811

or
1-702-227-2929

REPAIR AN ARMED SYSTEM OF UNDERGROUND 1-800-227-2600

HORIZONTAL CONTROL PLANS
SHEET 1 OF 2

**HORIZONTAL CONTROL PLAN
SHEET 1 OF 2**

**18 FREMONT STREET
HOTEL AND CASINO
CITY OF LAS VEGAS**

SHEET

PROJECT No.:	17112
--------------	-------

DATE: 17/11/2012

04/08/1

SCALE:

DRAWN BY: _____

DESIGNED BY:

CHECKED BY: NM

CHECKED BY: GM



SEAL
ENGINEERS

guy m.

MORRIS
EXP. 12-31-19

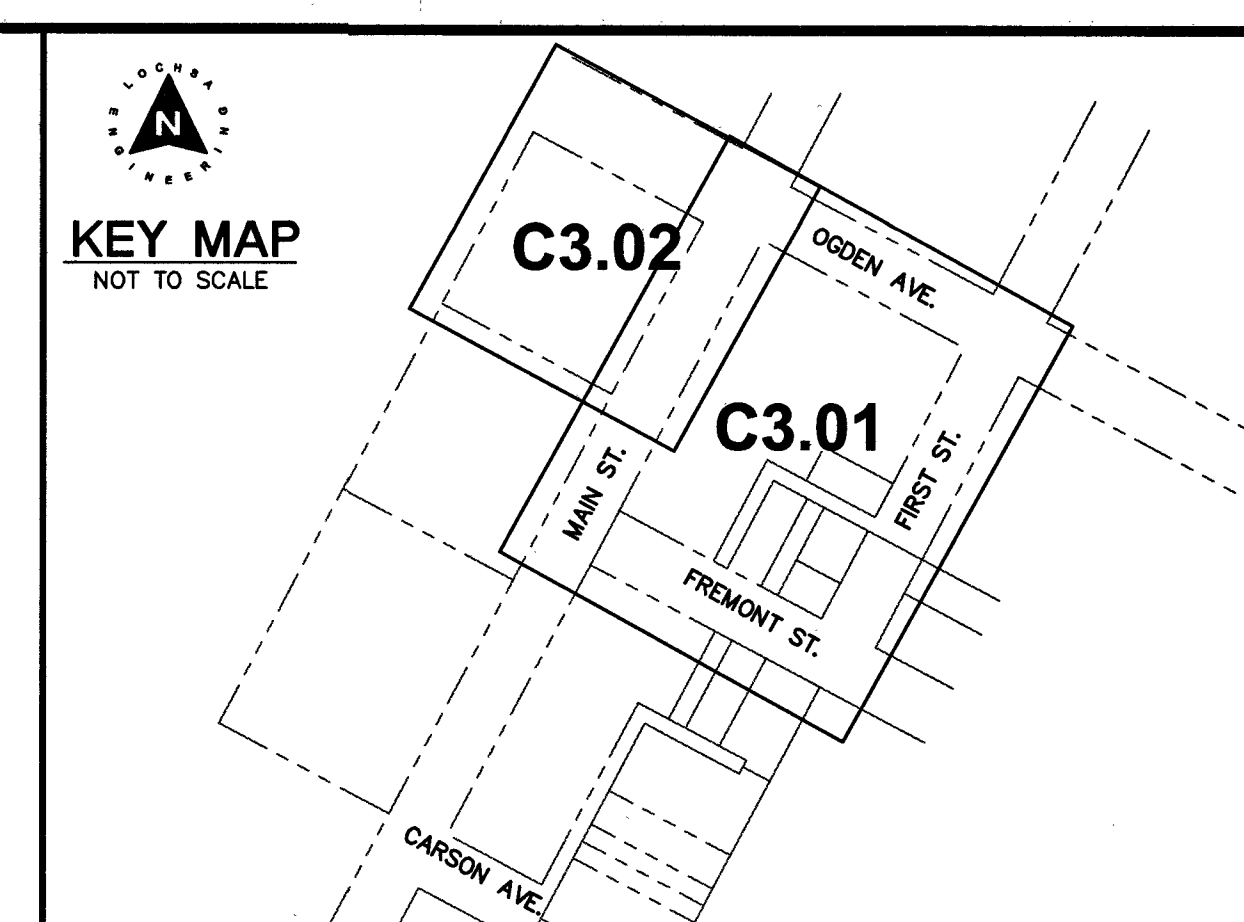
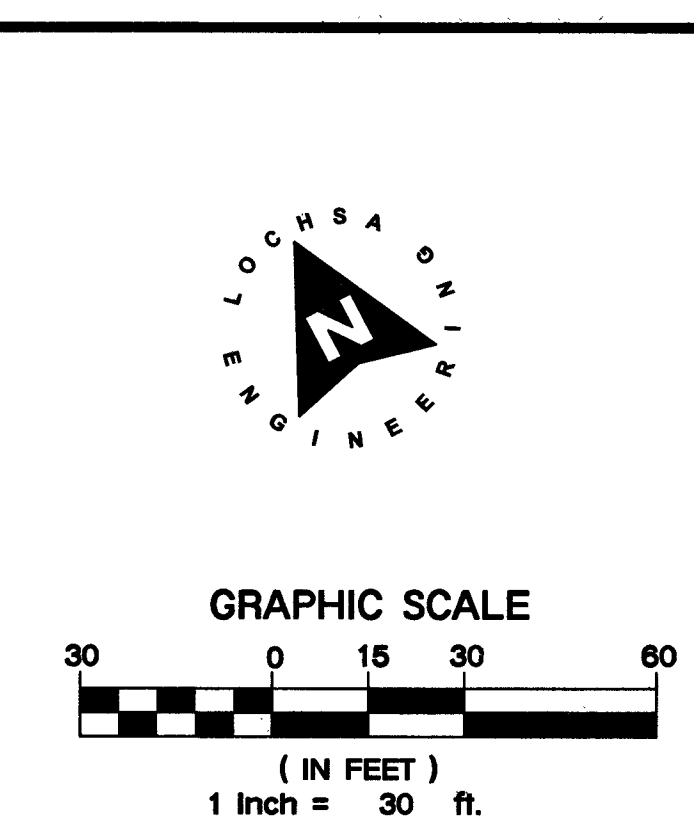
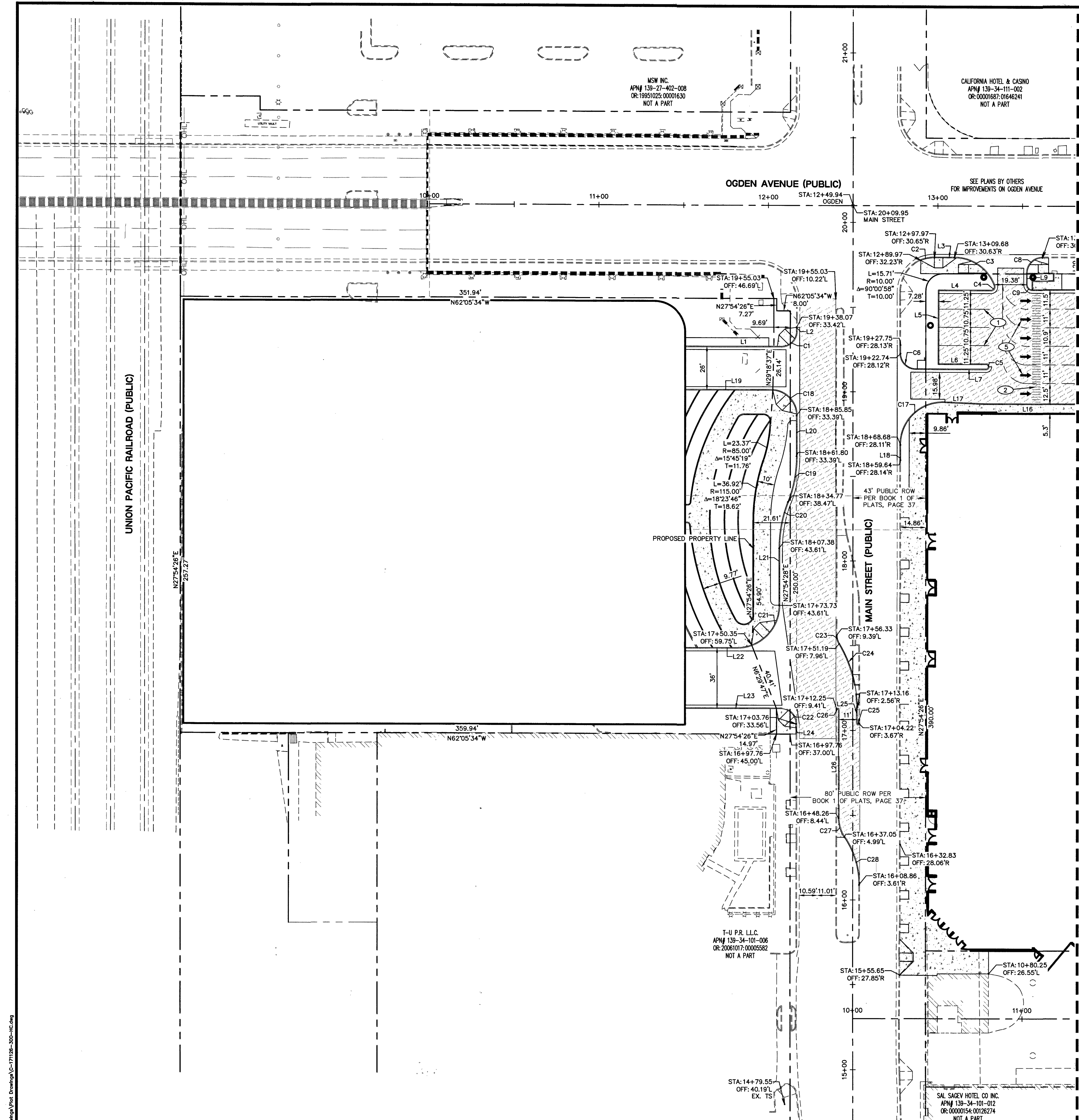
CIVIL
No. 14526

04/08/19

SHEET No.
C3.01

SHEET 5 OF 15
CLV No. 107V7521
118-02400

L18-02490



CURVE TABLE				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C1	14.16'	9.00'	090°09'45"	9.03'
C2	8.20'	22.66'	020°44'07"	4.14'
C3	30.37'	25.00'	069°36'15"	17.38'
C4	3.86'	2.00'	110°30'12"	2.88'
C5	4.12'	1.31'	180°00'00"	INFINITY
C6	14.14'	9.00'	090°00'39"	9.00'
C8	14.12'	9.00'	089°52'36"	8.98'
C9	4.71'	3.00'	090°00'56"	3.00'
C10	3.14'	2.00'	089°59'04"	2.00'
C11	14.14'	9.00'	090°00'00"	9.00'
C12	7.90'	5.00'	090°34'51"	5.05'
C13	31.42'	20.00'	090°00'00"	20.00'
C14	20.92'	15.00'	079°54'54"	12.57'
C15	62.36'	82.00'	043°34'33"	32.78'
C16	73.57'	116.05'	036°19'25"	38.07'
C17	40.47'	25.00'	092°45'42"	26.24'
C18	23.59'	15.00'	090°06'20"	15.03'
C19	27.66'	74.50'	021°16'21"	13.99'
C20	28.03'	75.50'	021°16'21"	14.18'
C21	39.27'	25.00'	090°00'02"	25.00'
C22	14.11'	9.00'	089°50'42"	8.98'
C23	5.40'	10.00'	030°57'08"	2.77'
C24	39.93'	74.00'	030°55'04"	20.46'
C25	1.75'	0.56'	179°55'05"	778.87'
C26	1.51'	0.48'	179°58'05"	1723.31'
C27	11.91'	20.00'	034°06'30"	6.14'
C28	29.91'	50.00'	034°16'42"	15.42'
C29	115.04'	30.70'	214°43'58"	98.15'
C30	12.12'	20.00'	034°43'02"	6.25'
C31	15.71'	10.00'	090°00'57"	10.00'

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	56.95'	S62°05'32"E
L2	2.23'	S27°44'43"W
L3	11.71'	S62°12'00"E
L4	31.04'	S62°05'32"E
L5	44.00'	S27°54'28"W
L6	28.19'	S62°05'32"E
L7	41.34'	S62°05'32"E
L9	6.79'	N27°55'24"E
L10	116.53'	S62°05'32"E
L11	7.77'	N27°55'24"E
L12	8.00'	N62°04'36"W
L13	10.14'	S62°05'32"E
L14	2.60'	N27°55'24"E
L15	79.23'	S62°04'36"E
L16	64.26'	N62°05'32"W
L17	22.96'	S59°33'45"E
L18	9.04'	N27°40'33"E
L19	50.97'	S62°05'32"E
L20	23.99'	N27°54'26"E
L21	33.64'	N27°54'26"E
L22	30.83'	S62°05'32"E
L23	56.48'	S62°05'32"E
L24	5.96'	S27°45'10"W
L25	8.94'	N27°54'03"E
L26	63.99'	N27°54'03"E
L27	96.52'	N27°55'24"E
L28	4.08'	S62°05'33"E
L29	9.36'	N27°44'08"E
L30	9.36'	N27°44'08"E

- TRAFFIC NOTES:**
- INSTALL PARKING WITH 4" WHITE PAINTED LINES. (TYPICAL)
 - INSTALL WHITE PAINTED LINES IN CROSSWALK AREA.
 - INSTALL 4" WHITE PAINTED LANE LINES. (TYPICAL)
 - INSTALL PRE-CAST BUMP BLOCK 2' FROM FACE OF CURB PER CCAUSD NO. 238 - DETAIL 5 ON C7.01.
 - ARROWS SEE 171208.

NOTE:
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SAFETY ALERT
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Before you dig
Underground
Call before you dig
Underground
Call before you dig
Underground

A.P.N.:
139-34-113-001 & 139-34-112-001
BASIS OF BEARINGS:
BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF OGDEN AVENUE BETWEEN MAIN STREET AND FIRST STREET, AS SHOWN ON FILE 67, PAGE 79 OF SURVEYS. SAID LINE BEARS: S62°04'36"E
BENCHMARK:
BENCHMARK BLVD/3RD AVENUE BEING A RIVET & PLATE TOP CURB NE CORNER MAIN ST. & FREMONT ST. ELEVATION=2023.19 FEET (616.669 METERS)

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS
PROPERTY LINE	SAWTOOTH LINE	EXISTING:	(2210)								(12.34)		⑤	⑤ = SANITARY SEWER ⑥ = STORM DRAIN ⑦ = ELECTRICAL ⑧ = TELEPHONE						(BWV)				
ROW LINE	SCARP LINE	PROPOSED:	(2122)								(12.34)		⑤							(BWV)				

6446 South Jones Blvd.
Suite 100
Las Vegas, NV 89118
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Fax (702) 365-9317
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engineering

HORIZONTAL CONTROL PLANS
SHEET 2 OF 2

18 FREMONT STREET
HOTEL AND CASINO
CITY OF LAS VEGAS

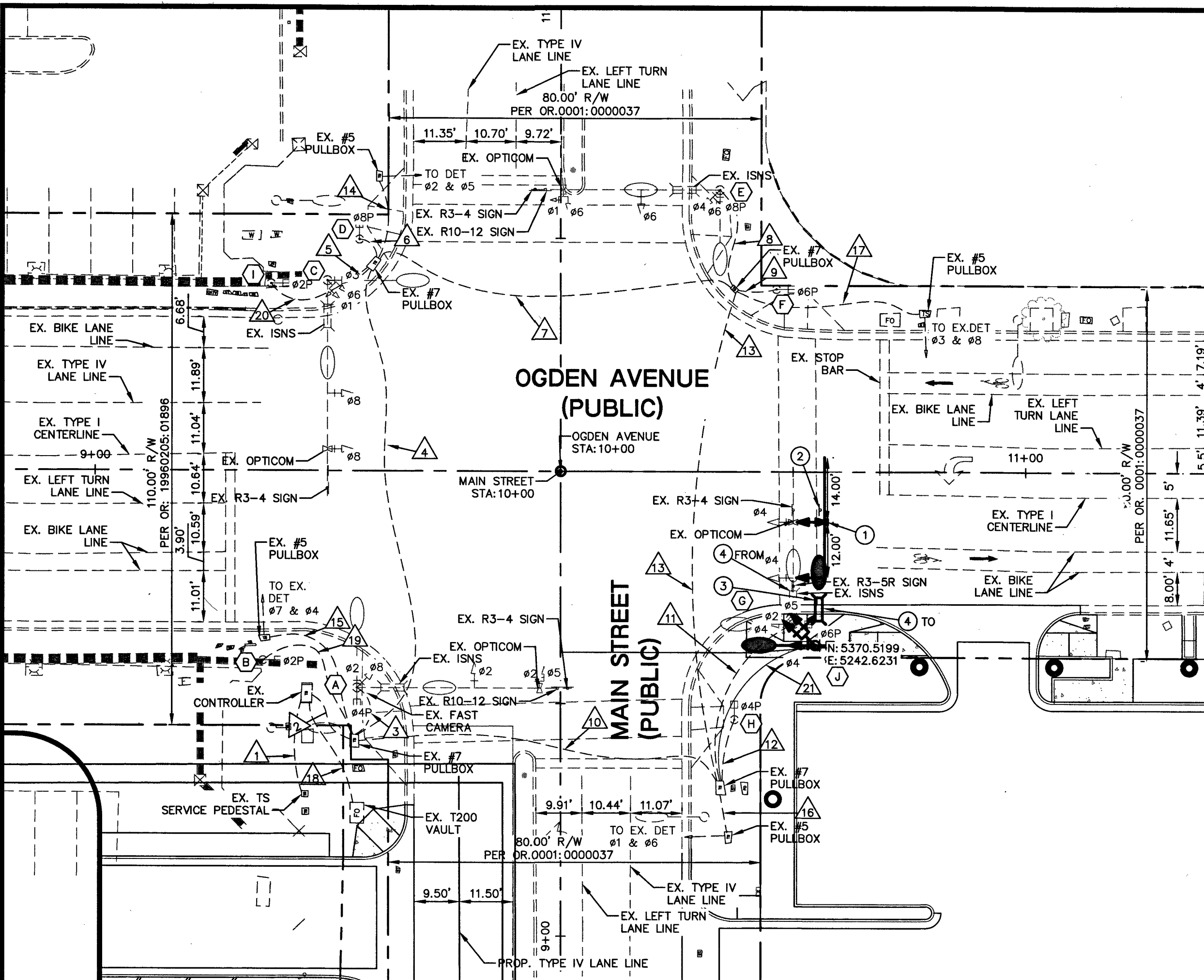
SHEET
PROJECT No.: 171126
DATE: 04/08/19
SCALE: 1"=30'
DRAWN BY: NMG
DESIGNED BY: NMG
CHECKED BY: GMM

SEAL
GUY M. MORRIS
EXP. 12-31-19
CIVIL
No. 14526

04/08/19
SHEET No.
C3.02
OF 15
CLV No. 107V7521
L18-02490

LEGEND	ELEVATION: 2020.17 FEET (610.00 METERS)																								
	CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS
	PROPERTY LINE	SAWCUT LINE	EXISTING:	---(2210)---								12.34 BC		③	③ = SANITARY SEWER ④ = STORM DRAIN ⑤ = ELECTRICAL ⑥ = TELEPHONE										
	ROW LINE	SCARP LINE	PROPOSED:									12.34 BC		③											

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CONDUIT AND WIRE SCHEDULE

WIRE & CONDUCTOR	FROM	TO	CONDUIT																		REMARKS
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
EX. (4) #4 EX. (1) #8	SERVICE PEDISTAL	CONTROLLER	X																		
(1) 25 COND #14 (1) OPTICOM CABLE	CONTROLLER	POLE J	X																		INSTALL NEW WIRE
EX. (1) 15 COND #14	CONTROLLER	POLE I	X	X																	
EX. (1) 25 COND EX. (1) OPTICOM CABLE	CONTROLLER	POLE A	X	X																	
EX. (1) 15 COND #14	CONTROLLER	POLE B	X																		
EX. (1) 25 COND #14 EX. (1) OPTICOM CABLE	CONTROLLER	POLE C	X	X	X																
EX. (1) 15 COND #14	CONTROLLER	POLE D	X	X	X																
EX. (1) 25 COND #14 (1) OPTICOM CABLE	CONTROLLER	POLE E	X	X		X	X														
EX. (1) 15 COND #14	CONTROLLER	POLE F	X	X		X	X														
EX. (1) 25 COND #14 (1) OPTICOM CABLE	CONTROLLER	POLE G	X						X	X											REMOVE EXISTING WIRE
EX. (1) 15 COND #14	CONTROLLER	POLE H	X						X	X											
EX. (4) #10 COND	CONTROLLER	POLE A (INT. LIGHTING)	X	X																	
EX. (4) #10 COND	CONTROLLER	POLE C (INT. LIGHTING)	X	X	X																
EX. (4) #10 COND	CONTROLLER	POLE E (INT. LIGHTING)	X	X		X	X														
EX. (4) #10 COND	CONTROLLER	POLE G (INT. LIGHTING)	X						X	X											REMOVE EXISTING WIRE
(4) #10 AWG THW (1) #8 AWG THW	CONTROLLER	POLE J (INT. LIGHTING)	X						X												INSTALL NEW WIRE
EX. 6PR #18 LOOP LEAD IN CABLE (#2)	CONTROLLER	DET PULL BOX	X	X							X										
EX. 6PR #18 LOOP LEAD IN CABLE (#4)	CONTROLLER	DET PULL BOX	X								X										
EX. 6PR #18 LOOP LEAD IN CABLE (#1)	CONTROLLER	DET PULL BOX	X								X										
EX. 6PR #18 LOOP LEAD IN CABLE (#3)	CONTROLLER	DET PULL BOX	X	X		X									X						
EX. CCHU MODEL CA295H CABLE	CONTROLLER	CCTV CAMERA	X	X																	REMOVE EXISTING WIRE
-	TYPE 200 PB	CONTROLLER																	X		
6PR #18 LOOP LEAD IH CABLE	CONTROLLER	#3 & #8 DET PULLBOX	X	X	X														X		INSTALL NEW WIRE

NOTE: (E) INDICATES EXISTING CONDUIT
NOTE: (N) INDICATES NEW CONDUIT

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	---(2210)---	=====	=====	=====	=====	=====	=====	=====	(12.34) 80	①	①	① = SANITARY SEWER ② = STORM DRAIN ③ = ELECTRICAL ④ = TELEPHONE	①	①	①	①	①	(BWV)	(BWV)	(BWV)	(BWV)	(BWV)
ROW LINE	SCARP LINE	PROPOSED:	---(2122)---	=====	=====	=====	=====	=====	=====	=====	(12.34) 80	①	①		①	①	①	①	①	(BWV)	(BWV)	(BWV)	(BWV)	(BWV)

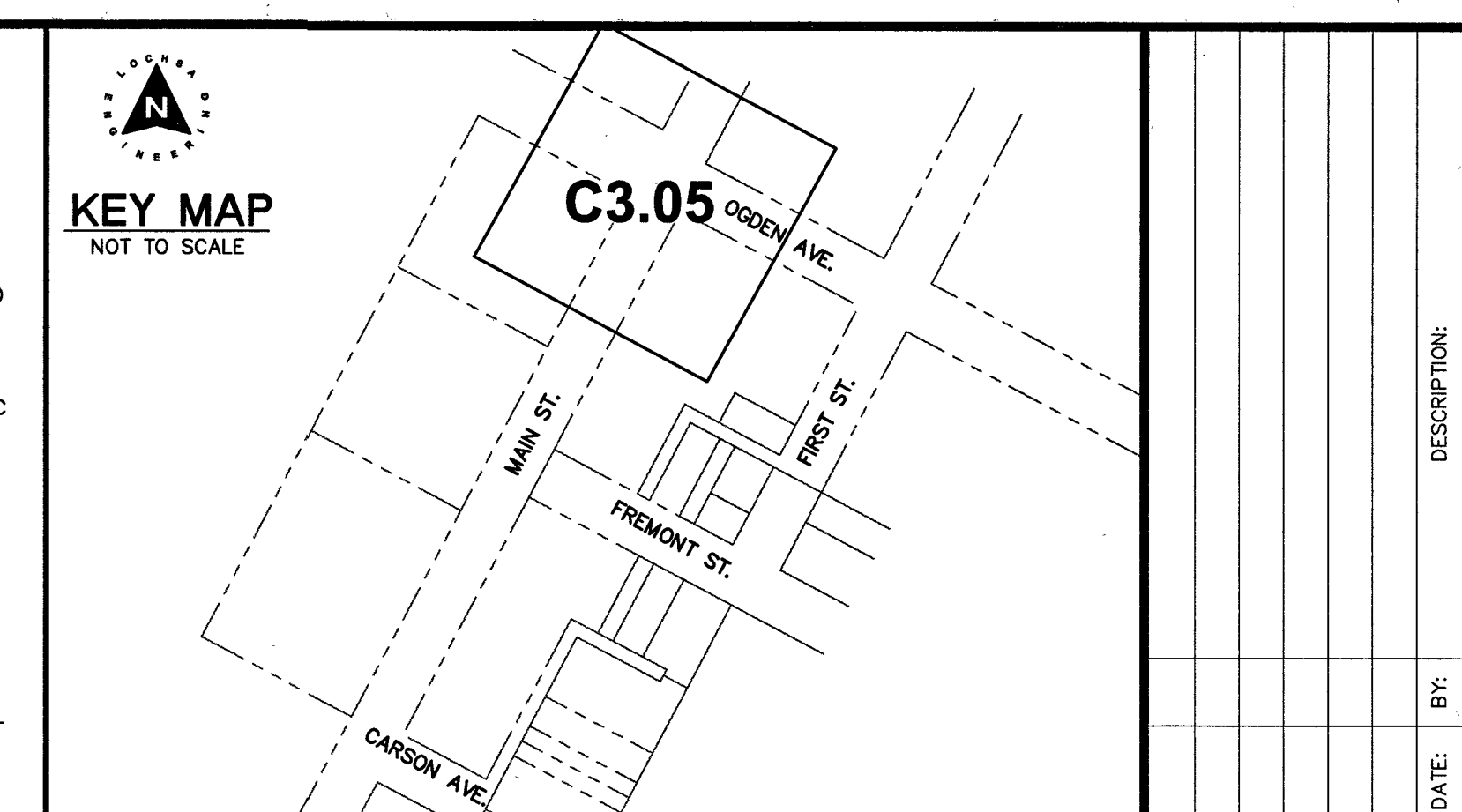
CITY OF LAS VEGAS
TRAFFIC SIGNAL NOTES (CIP):

- ALL WORK PERFORMED ON ANY TRAFFIC SIGNAL COMPONENT SHALL BE UNDER THE DIRECT ON-SITE SUPERVISION OF AN INSA CERTIFIED TECHNICIAN. THE LEVEL OF CERTIFICATION REQUIRED SHALL BE LEVEL II.
- 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.

CALL-BEFORE-YOU-OVERHEAD 1-702-227-2929
CALL-BEFORE-YOU-DIG 1-800-227-2600
STREETLIGHTS 1-702-229-6331
A.S.T.
- 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. BRACKET MOUNTED (SIDE-MOUNTED) VEHICLE SIGNAL ASSEMBLIES WITH 2 OR MORE SIGNAL HEADS SHALL HAVE AN ADDITIONAL ELBOW AS SHOWN IN UNIFORM STANDARD DRAWING NUMBER 863 AND SHOWN AS OPTION B IN UNIFORM STANDARD DRAWING NUMBER 844. AND SHALL HAVE A MINORALLAC SUPPORT AS SHOWN IN UNIFORM STANDARD DRAWING NUMBER 863 IF ONE OF THE SIGNAL HEADS CONTAINS 4 OR MORE SIGNAL MODULES.
- SERVICE SHALL HAVE 1-60 AMP SINGLE POLE BREAKER FOR SIGNAL, AND ONE 40 AMP SINGLE POLE BREAKERS FOR STREET LIGHTS. SERVICE SHALL BE 200 AMP PADMOUNT.
- 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 #6 AWG THW (GREEN).
- LUMINAIRES ON ALL SIGNAL POLES SHALL BE AN APPROVED LED EQUAL TO A 400 WATT HIGH PRESSURE SODIUM FABRICATED IN THE FIELD AT THE LOCATION SHOWN ON THE PLANS OR AS DIRECTED BY THE TRAFFIC ENGINEER AND/OR HIS AUTHORIZED REPRESENTATIVE. FOR TENON FABRICATION DETAILS SEE CLARK COUNTY AREA U.S.D. NO. 808 SHEET 2. ALL WELDING SHALL CONFORM TO AWS D 2.0. "SPECIFICATION FOR WELDED HIGHWAYS AND RAILWAY BRIDGES," AND TO ANY ADDITIONAL REQUIREMENTS OF SECTION 623 OF THE SPECIAL PROVISIONS. ALL EXPOSED WELDS, SHALL BE PROVIDED FOR REPAIRING DAMAGED GALVANIZED SURFACES.
- THE INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE WIRED TO THE LUMINAIRES PHOTO CELL FOR CONTROL WITH #10 AWG THW COPPER STRANDED WIRE (TYPICAL). THE SIGN SHALL BE WIRED TO THE LUMINAIRE DIRECTLY ABOVE IT. 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. ALL NEW ILLUMINATED STREET NAME SIGNS SHALL HAVE LIGHT EMITTING DIODE (LED) LAMPS PER SECTION 623.1.02.01 OF THE SPECIAL PROVISIONS.
- CHECK CONDUIT AND CABLE SCHEDULE FOR CONDUIT, CABLE, AND WIRE SIZE. VERIFY ALL EXISTING CONDUIT RUNS.
- ALL PULLBOXES SHALL BE IN ACCORDANCE WITH UNIFORM STANDARD DRAWINGS NO. 705, NO. 706, AND NO. 707.
- TRAFFIC SIGNAL CABLE SHALL BE 15 OR 25 CONDUCTOR #14 AWG SOLID (TYPICAL) CABLE AND SHALL CONFORM TO INSA SPEC. NO. 20-1.
- PEDESTRIAN PUSH BUTTONS SHALL BE AUDIBLE TACTILE "POLARA NAVIGATOR" TYPE (2 WIRE SYSTEM) OR CAMPBELL COMPANY ADVANCED ACCESSIBLE PEDESTRIAN SYSTEM BUTTONS WITH AAPS APC (CONTROLLER) 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, 2009 EDITION, WITH FULL MOUNTING BRACKETS, AS MODIFIED BY THE MANUFACTURER TO FIT ON A 9"X12" SIGN, AND SHALL BE FORCED ENAMELED METAL. ALL PUSH BUTTONS TO BE MOUNTED 42" ABOVE SIDEWALK. THE MAXIMUM HORIZONTAL REACH DISTANCE IS TO BE 10". SIDEWALK RAMP SHALL BE ACCORDING TO U.S.D. NO. 235 (1-4) LATEST EDITION. WHEN AN EXISTING SIGN WITH EXISTING AUDIBLE-TACTILE PUSH BUTTONS IS MODIFIED, THE CONTRACTOR SHALL VERIFY NEW PEDESTRIAN PUSH BUTTONS OR CABINET EQUIPMENT MATCHES THE MANUFACTURE AND MODEL OF ANY EXISTING EQUIPMENT SCHEDULED TO REMAIN, TO PROVIDE A FULLY FUNCTIONING SYSTEM. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CABINET EQUIPMENT, INCLUDING THE PEDESTRIAN PUSH BUTTON CONTROL UNIT, INTERFACE PANEL, AND ANY REQUIRED HARNESSSES, TO PROVIDE A FULLY FUNCTIONING SYSTEM.
- THE ROUTING AND TERMINATION OF CONDUITS AND THE PLACING OF POLES AND CABINETS SHALL BE AS INDICATED ON THE PLANS. ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
- MAST ARM R10-12 SIGNS TO BE ADJACENT (NO GAP) TO THE M-5 SIGNAL HEAD. WHERE FLASHING YELLOW ARROW LEFT TURN SIGNS ARE USED, A MAST ARM R10-12F LEFT TURN YIELD ON FLASHING YELLOW ARROW SIGN SHALL BE MOUNTED ADJACENT TO THE M-4 SIGNAL HEAD.
- TRAFFIC SIGNAL CABINET SHALL BE A TYPE VII CABINET UNLESS OTHERWISE SPECIFIED IN THE PLANS. THIS IS COMMONLY REFERRED TO AS AN "RT" CABINET. THE CABINET SHALL CONFORM TO THE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS AND THE CITY OF LAS VEGAS SPECIAL PROVISIONS. INSTALL CABINET NEAR THE R.O.W. LINE OR AS SHOWN ON THE DRAWINGS. THE TRAFFIC SIGNAL CABINET SHALL BE EQUIPPED WITH 16 LOAD BAY POSITIONS, SHALL BE A 48 DETECTOR CHANNEL R CABINET AND SHALL INCLUDE TWO (2) RACK-MOUNTED, 12 SLOT, LOOP DETECTION RACKS, WITH 2 DETECTOR CHANNELS PER SLOT FULLY WIRABLE, SO THAT ALL CHANNELS ARE USABLE AND 4 CHANNEL SLOTS THAT CAN ACCOMMODATE VIDEO DETECTION CARDS. THE CABINET SHALL CONTAIN A 764 OPTICOM PHASE SELECTOR IN A 768 RACK, WITH A 768 AUXILIARY INTERFACE PANEL MOUNTED IN THE CABINET AND FULLY WIRED FOR GREEN SENSE CAPABILITIES.
- THE CONTRACTOR SHALL SUPPLY A MALFUNCTION MANAGEMENT UNIT (MMU) AND TRAFFIC SIGNAL CONTROLLER TO THE CITY OF LAS VEGAS TRAFFIC SIGNAL REPAIR SHOP. A MINIMUM OF FOURTEEN PRIOR TO SIGNAL TURN-ON OR PRIOR TO CONVERTING TO A NEW PHASING SCHEME, FOR TESTING AND PROGRAMMING PURPOSES. THE CONTROLLER SHALL BE A NATEX 980 A10 152 TYPE 2 N10P SAME COMPLIANT SIGNAL CONTROLLER WITH INSTALLED AND LICENSED APOGEE CONTROLLER SOFTWARE, LATEST VERSION, AND THE MMU SHALL BE A MODEL MMU-16000E AS MANUFACTURED BY RENO A & E. THE CONTRACTOR SHALL DELIVER THE CONTROLLER AND MMU TO, AND PICKUP THE CONTROLLER AT 2824 E. CHARLESTON BOULEVARD. CONTRACTOR SHALL NOTIFY THE TRAFFIC SIGNAL REPAIR SHOP (229-8076) SEVEN DAYS PRIOR TO PICKUP. THE CITY, AT ITS DISCRETION, MAY PROVIDE A DIFFERENT MODEL OF MMU OR CONTROLLER FOR INITIAL TURN-ON IN WHICH CASE, THE CITY WILL SWAP THE CONTROLLER OR MMU AFTER THE PROJECT IS ACCEPTED.
- ALL MAST ARMS TO BE HOT-DIP GALVANIZED BY THE MANUFACTURER. THE MAST ARM IS TO BE FABRICATED WITH END TENON ONLY. THE END TENON SHALL BE FACTORY INSTALLED AND THE REMAINING TENONS SHALL BE FABRICATED IN THE FIELD AT THE LOCATION SHOWN ON THE PLANS OR AS DIRECTED BY THE TRAFFIC ENGINEER AND/OR HIS AUTHORIZED REPRESENTATIVE. FOR TENON FABRICATION DETAILS SEE CLARK COUNTY AREA U.S.D. NO. 808 SHEET 2. ALL WELDING SHALL CONFORM TO AWS D 2.0. "SPECIFICATION FOR WELDED HIGHWAYS AND RAILWAY BRIDGES," AND TO ANY ADDITIONAL REQUIREMENTS OF SECTION 623 OF THE SPECIAL PROVISIONS. ALL EXPOSED WELDS, SHALL BE PROVIDED FOR REPAIRING DAMAGED GALVANIZED SURFACES.
- ALL VEHICLE AND PEDESTRIAN SIGNAL INDICATIONS SHALL HAVE LIGHT EMITTING DIODE (LED) TYPE INDICATIONS, IN CONFORMANCE TO CITY OF LAS VEGAS SPECIAL PROVISIONS AND TO SECTION 623 OF THE CCA USS. ALL PEDESTRIAN SIGNAL FACES SHALL BE PROTECT WALKING SURFACES, PERSON, "HAND", AND "COUNTDOWN" MESSAGES AS PROVIDED BY DURALIGHT MODEL #JXM-400-VEIL OR DIALIGHT MODEL #430-6479-001X, OR APPROVED EQUAL. THE "COUNTDOWN" MESSAGE SHALL NOT FLASH. WHERE EXISTING SIGNALS ARE MODIFIED, THE CONTRACTOR SHALL VERIFY THAT LED PEDESTRIAN INDICATIONS FOR A SPECIFIC PHASE ARE THE SAME MANUFACTURE SO THAT THEY FUNCTION CORRECTLY, OR SHALL REPLACE ALL COUNTDOWN PEDESTRIAN INDICATIONS FOR THAT PHASE.
- VIDEO DETECTION SYSTEMS WILL BE EITHER ITERIS EDGE 2 WITH EDGECONNECT PAK, (IP ADDRESSABLE); PEEK VIDEOTRAK IQ (WITH ETHERNET PORT); OR TRAFICON VIP WITH VIEWCOM (IP ADDRESSABLE). 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 (PC'S) MAY NOT BE SUBSTITUTED FOR LAPTOPS. A VIDEO MONITOR (COLOR FLAT SCREEN) 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 6281 (SOLID CENTER CONDUCTOR) CAMERAS THAT USE A PREFABRICATED CABLE INTEGRATING POWER AND COAXIAL CABLE INTO A SINGLE WEATHERPROOF CONNECTOR ARE ACCEPTABLE. "BUT" ARE THE ONLY ACCEPTABLE TERMINATION OF COAXIAL CABLES. CAMERAS WILL BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND PER CLV TRAFFIC ENGINEER APPROVAL. VIDEO CAMERA SHALL BE COLOR AND SHALL BE MOUNTED ON A MINIMUM 6 FOOT RISER ON THE SIGNAL MAST ARM WITH EXTENSION BRACKETS (TYPE AB-0166-5-62 OR EQUIVALENT). THE LOCATION OF THE CAMERA ON THE MAST ARM SHALL BE APPROVED BY THE TRAFFIC SIGNAL SUPERVISOR. A VIDEO FILTER (CX06-BNYC OR EQUIVALENT) WILL BE INSTALLED IN THE SIGNAL CABINET FOR EACH CAMERA VIDEO INPUT. VIDEO DETECTION PROCESSORS AND COMMUNICATIONS CARDS SHALL BE PROVIDED WITH THE LATEST VERSIONS OF THE MANUFACTURER'S SOFTWARE. THE CONTRACTOR SHALL AIM CAMERAS AND PROGRAM AND CONFIGURE THE VIDEO DETECTION PROCESSORS TO PROVIDE A FULLY FUNCTIONING SYSTEM.
- WHERE NEW LOOPS WILL BE OVERLAD WITH NEW PAVEMENT, LOOP DETECTORS SHALL BE PERFORMED LOOPS AS MANUFACTURED BY RENO A & E OR NEVER-FAIL LOOP SYSTEMS, AND ALL LOOPS SHALL BE INSTALLED IN THE ROADWAY PRIOR TO PLACEMENT OF THE FINAL PAVEMENT

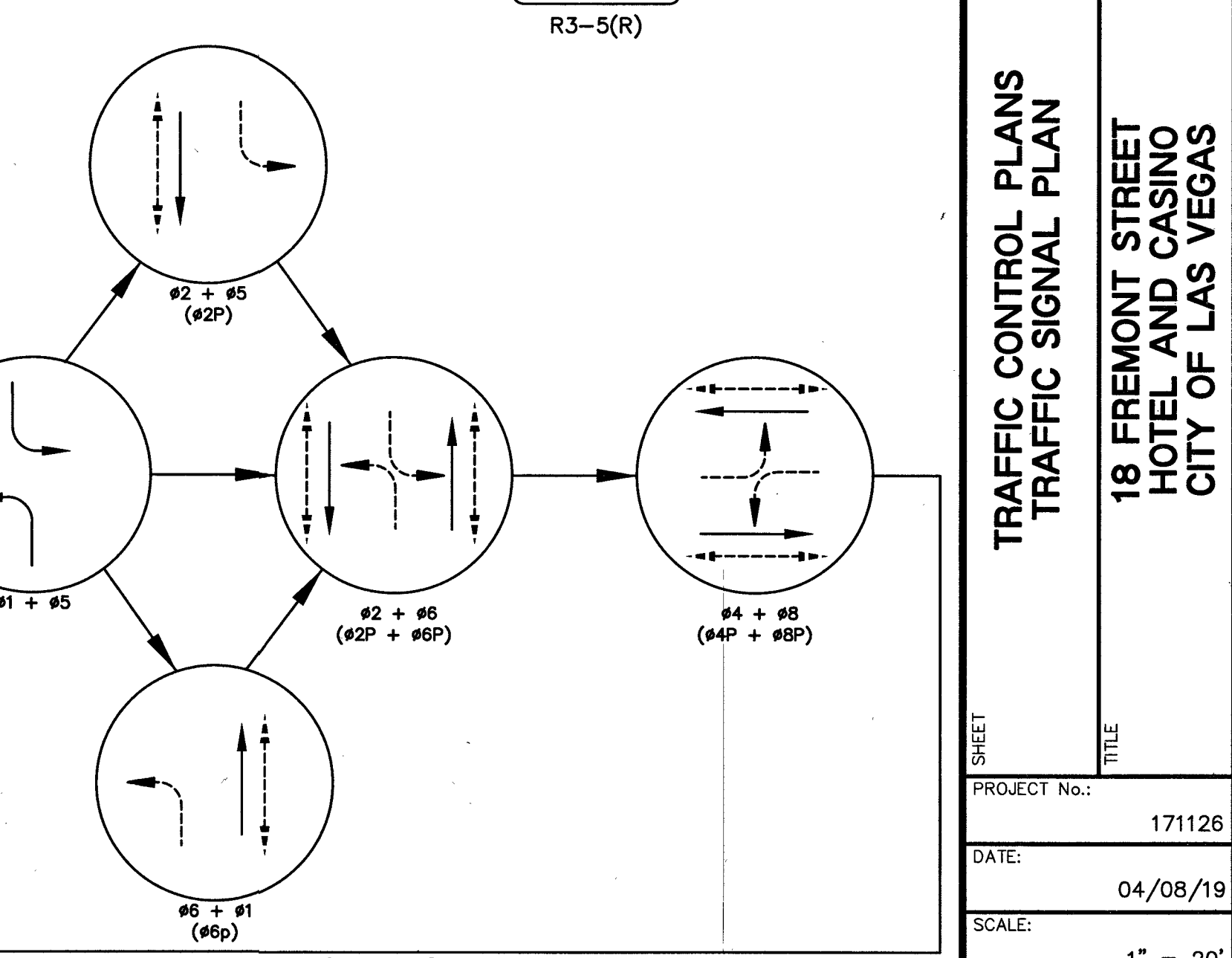
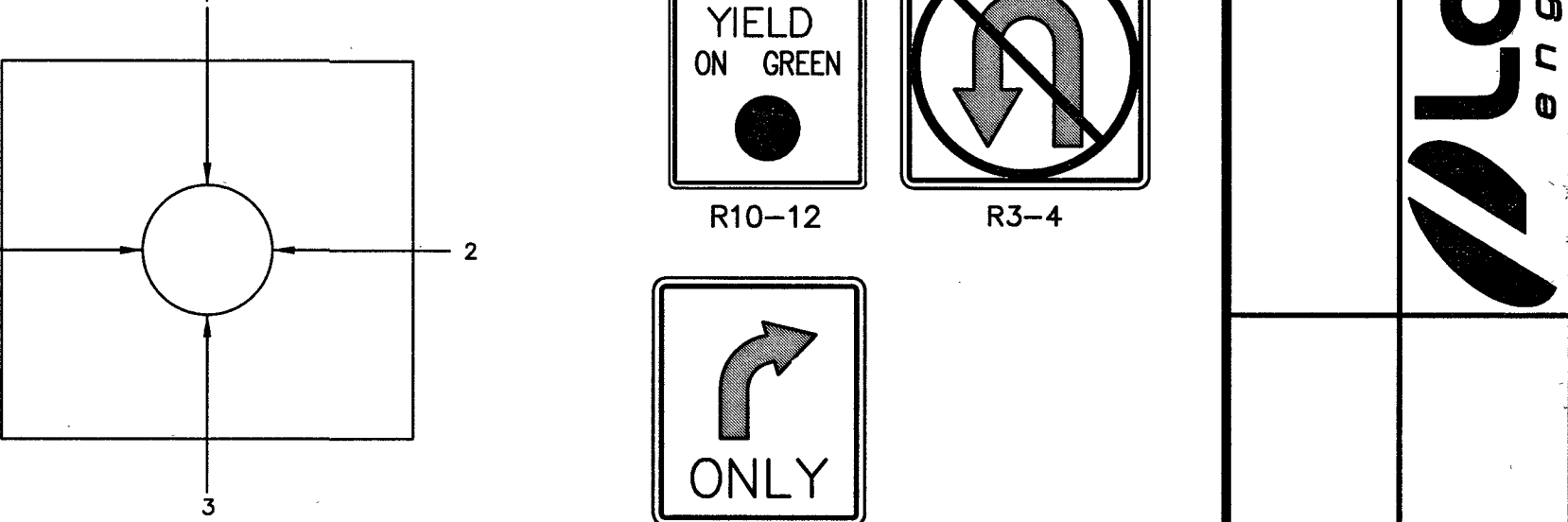
POLE SCHEDULE

POLE	POLE				SIGNALS (VEH.)				SIGNALS (PEDESTRIAN)				PED. PUSH BUTTON		REMARKS
	TYPE OF FOUNDATION	LOCATION STATION	TYPE	SIG. ARM QUAD	LUM. ARM QUAD	LNG	TYPE	QUAD	TYPE	QUAD	QUAD	QUAD	SIGN	ARROW	
(A)	H	EXISTING	XX	2	EX.	1	EX.	(1)M-5 (1)M-2 B-2T	EX.	W-0T	EX.	EX.	LT		EX. POLE
(B)	C	EXISTING	1-B	-	-	-	-	-	W-1T	EX.	EX.	EX.	RT		EX. POLE
(C)	H	EXISTING	XX	3	EX.	2	EX.	(2)M-2 B-14T	EX.	W-0T	EX.	EX.	LT		EX. POLE
(D)	C	EXISTING	1-B	-	-	-	-	-	W-1T	EX.	EX.	EX.	RT		EX. POLE
(E)	H	EXISTING	XX	4	EX.	3	EX.	(1)M-5 (1)M-2 B-2T	EX.	W-0T	EX.	EX.	LT		EX. POLE
(F)	C	EXISTING	1-B	-	-	-	-	-	W-1T	EX.	EX.	EX.	RT		EX. POLE
(G)	H	EXISTING	XX	1	EX.	4	EX.	(2)M-2 B-14T	EX.	W-0T	EX.	EX.	LT		EX. POLE REMOVED UPON ACTIVATION OF POLE J
(H)	C	EXISTING	1-B	-	-	-	-	-	W-1T	EX.	EX.	EX.	RT		EX. POLE
(I)	C	EXISTING	1-B	-	-	-	-	-	W-1T	TOP	2	LT			EX. POLE
(J)	L	STA: 10+54.77 OFF: 37.40' R	XX-A	1	40'	1	15'	(2)M-2 (1)B14-T	MA	W-0T	3	4	LT		NEW POLE TO BE PAINTED PER CLV STANDARDS



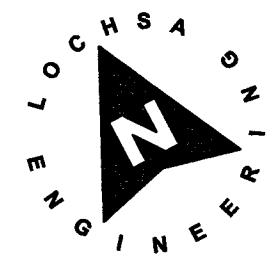
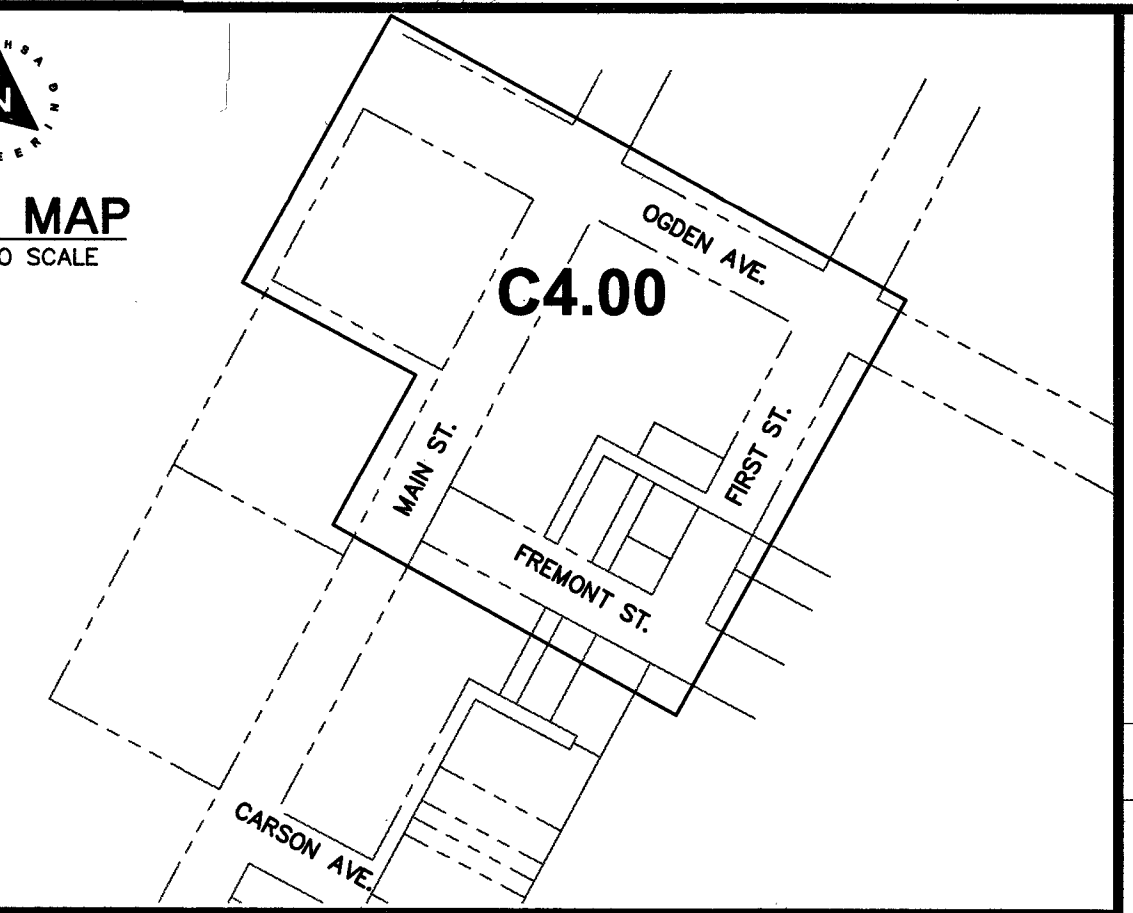
TRAFFIC NOTES:

- INSTALL OPTICOM DETECTOR
- INSTALL R3-4 SIGN (36"x36")
- INSTALL R3-5R SIGN (30"x36")
- RELOCATE EX. ILLUMINATED STREET NAME SIGN FROM POLE G TO POLE J.
- INSTALL (4) 6"x6" DETECTOR LOOPS PER CCAUSD 833.





KEY MAP
NOT TO SCALE



GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

STORMWATER MANAGEMENT NOTES:

1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT MEET THE PERFORMANCE STANDARDS SPECIFIED IN CLARK COUNTY TITLE 24.40 AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES OR MORE. THE CONTRACTOR OR HIS AGENT SHALL UPDATE OR MODIFY THE STORMWATER POLLUTION PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.12.
5. ACCUMULATED SEDIMENT IN BMPs SHALL BE REMOVED WITHIN SEVEN DAYS AFTER A STORMWATER RUNOFF EVENT OR PRIOR TO THE NEXT ANTICIPATED STORM EVENT, WHICHEVER IS EARLIER. SEDIMENT MUST BE REMOVED WHEN BMP DESIGN CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR MORE.

GRADING PLAN CERTIFICATION

NAME: GUY M. MORRIS PE # 14526 DATE: 4-8-19

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

NOTE:

LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

SAFETY ALERT

Call Before you Overhead

Call before you dig

Call before you UnderGround

1-702-227-2929 1-702-432-5300 1-800-227-2600

A.P.N.:

139-34-113-001 & 139-34-112-001

BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF OGDEN AVENUE BETWEEN MAIN STREET AND FIRST STREET, AS SHOWN ON FILE 67, PAGE 79 OF SURVEYS.

SAID LINE BEARS: S62°04'36"E

BENCHMARK:

BENCHMARK BLVD/3RD/4TH BEING A RIVET & PLATE TOP CURB NE CORNER MAIN ST. & FREMONT ST. ELEVATION=2023.19 FEET (616.669 METERS)

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS
PROPERTY LINE	SAWTOOTH LINE	EXISTING:	(2210)								(12.34) BC		⊙	⊙ = SANITARY SEWER	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
ROW LINE	SCARP LINE	PROPOSED:	(2122)								(12.34) BC		⊙	⊙ = STORM DRAIN	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
													⊙	⊙ = TELEPHONE	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

GRADING PLANS
OVERALL SITE GRADING

18 FREMONT STREET
HOTEL AND CASINO
CITY OF LAS VEGAS

PROJECT No.: 171126

DATE: 04/08/19

SCALE: 1"=40'

DRAWN BY: NMG

DESIGNED BY: NMG

CHECKED BY: GMM

DATE: 04/08/19

SHEET No. 9 of 15

CLV No. 1077521

L18-02490

DATE: 04/08/19

BY: NMG

DATE: 04/08/19

BY: GMM

DATE: 04/08/19

BY: NMG

DATE: 04/08/19

BY: GMM

DATE: 04/08/19

BY: NMG

DATE: 04/08/19

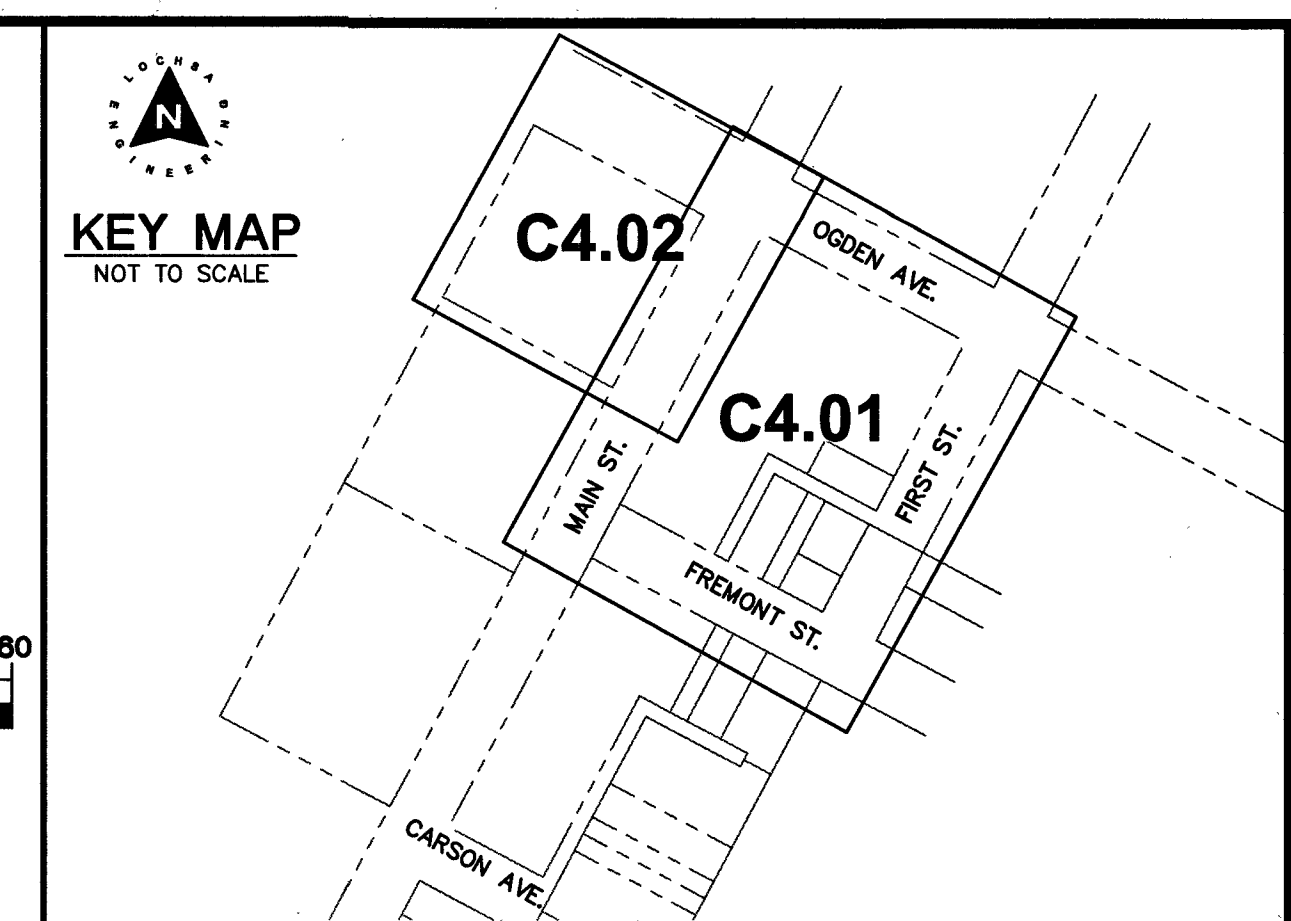
BY: GMM

DATE: 04/08/19

BY: NMG

DATE: 04/08/19

BY: GMM



- NOT ALL NOTES USED ON THIS SHEET -
- 1. INSTALL 72" STORM DRAIN MANHOLE PER C.C.A.U.S.D. NO. 403 WITH CONCRETE COLLAR COVER CCAUSD #408. REFER TO C.C.A.U.S.D. NO. 409 FOR MANHOLE COVER AND RING.
- 2. INSTALL MODIFIED TYPE "C" DRAIN INLET WITH GRATE PER CCAUSD #412.1. INSTALL STAMP PER CCAUSD #412.
- 3. REMOVE EXISTING INLET.
- 4. CONTRACTOR TO CONNECT EXISTING 24" ROP TO NEW MANHOLE A. SAME SLOPE. CONTRACTOR TO FIELD VERIFY THE EXISTING INVERT AND REPORT ANY ISSUES TO ENGINEERING.
- 5. INSTALL 48" STORM DRAIN MANHOLE PER C.C.A.U.S.D. NO. 403 WITH CONCRETE COLLAR COVER CCAUSD #408. REFER TO C.C.A.U.S.D. NO. 409 FOR MANHOLE COVER AND RING.
- 6. CAP ROP DRAIN. SEE PLUMBING PLANS FOR CONTINUATION.
- 7. EX. SIDEWALK UNDER DRAIN TO BE REMOVED SIDEWALK TO BE REMOVED BETWEEN JOINTS AND REPLACED..
- 8. CONNECT TO EX. STORM DRAIN.

= ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "CLARK COUNTY UTAH UNIFORM STANDARD DRAWINGS" (C.A.U.S.D.'S) LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.

= NOT ALL NOTES USED ON THIS SHEET =

[1] CONSTRUCT AC PAVEMENT PER DETAIL 2 ON C7.01.

[2] CONSTRUCT "A" TYPE CURB PER DETAIL 1 ON C7.01.

[3] CONSTRUCT "C" TYPE CURB PER CCAUSD NO. 216.

[4] CONSTRUCT CONC. SIDEWALK PER CCAUSD NO. 234. REFER TO ARCH. PLANS FOR FINISHING SPECIFICATIONS.

[5] CONSTRUCT CROSS GROSS CURB PER CCAUSD NO. 228.

[6] CONSTRUCT CASE II SIDEWALK RAMP PER CCAUSD NO. 235.

[7] INSTALL TURNED DOWN SIDEWALK EDGE WHERE NECESSARY PER DETAIL 3 ON C7.01 ALONG RAMP. INSTALL RAILING ALONG RAMP.

[8] CONSTRUCT SIDEWALK RAMP PER DETAIL 9 ON C7.01.

[9] NOT USED

[10] CONSTRUCT SIDEWALK RAMP PER DETAIL 4 ON C7.01.

[11] CONSTRUCT COMMERCIAL DRIVEWAY PER CCAUSD NO. 222.1 WITH CROSS GROSS CURB PER CCAUSD NO. 228.

[12] SAWCUT AND MATCH EXISTING.

[13] CONSTRUCT 2" "U" CHANNEL PER DETAIL 6 ON C7.01.

[14] INSTALL SIDEWALK RAMP PER CCAUSD NO. 236. WITH 2" SPUR FOR TRANSITION PER DETAIL 1 ON C7.01.

CONTRACTOR TO ADJUST ALL EXISTING UTILITIES TO
MATCH PROPOSED FINISH GRADE ELEVATIONS.

THE PROJECT SITE IS COVERED BY THE FLOOD INSURANCE RATE MAP (FIRM) FOR THE CLARK COUNTY AND INCORPORATED AREAS, NEVADA, COMMUNITY PANEL NUMBER: 32003C2170F, EFFECTIVE DATE: NOVEMBER 16, 2011. THE SITE FALLS WITHIN ZONE 'X', DESCRIBED BY FEMA AS: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

1. SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL MEASURES, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
2. CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON FLOOR GRADING PLANS. EXCESSIVE EROSION OR BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL NOTIFY LOCHSA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. LOCHSA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE, NO PONDING ALLOWED. CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT. NOT INCLUDED TO THE PROJECT IS EXCAVATION, FILLING AND COMPACT. REFER TO THE REPORT PREPARED BY GEOTECHNICAL & ENVIRONMENTAL SERVICES, PROJECT NO. 0077-1-1-01-01.

NAME: GUY M. MORRIS PE # 14526 DATE 4-8-19

CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH
APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE
CITY OF LAS VEGAS FOR THIS PROJECT.

LOESCH ENGINEERING ASSUMES NO RESPONSIBILITY FOR
EXISTING UTILITIES LOCATIONS AND ELEVATIONS. THE UTILITIES
SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE
INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO
FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES,
INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY
SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND
IRRIGATION LINES PRIOR TO THE COMMENCEMENT
OF CONSTRUCTION. PRIOR TO ANY FIELD, THE
CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S
REPRESENTATIVE, AND THE PROJECT ENGINEER, IMMEDIATELY,

Call Before You Overhead

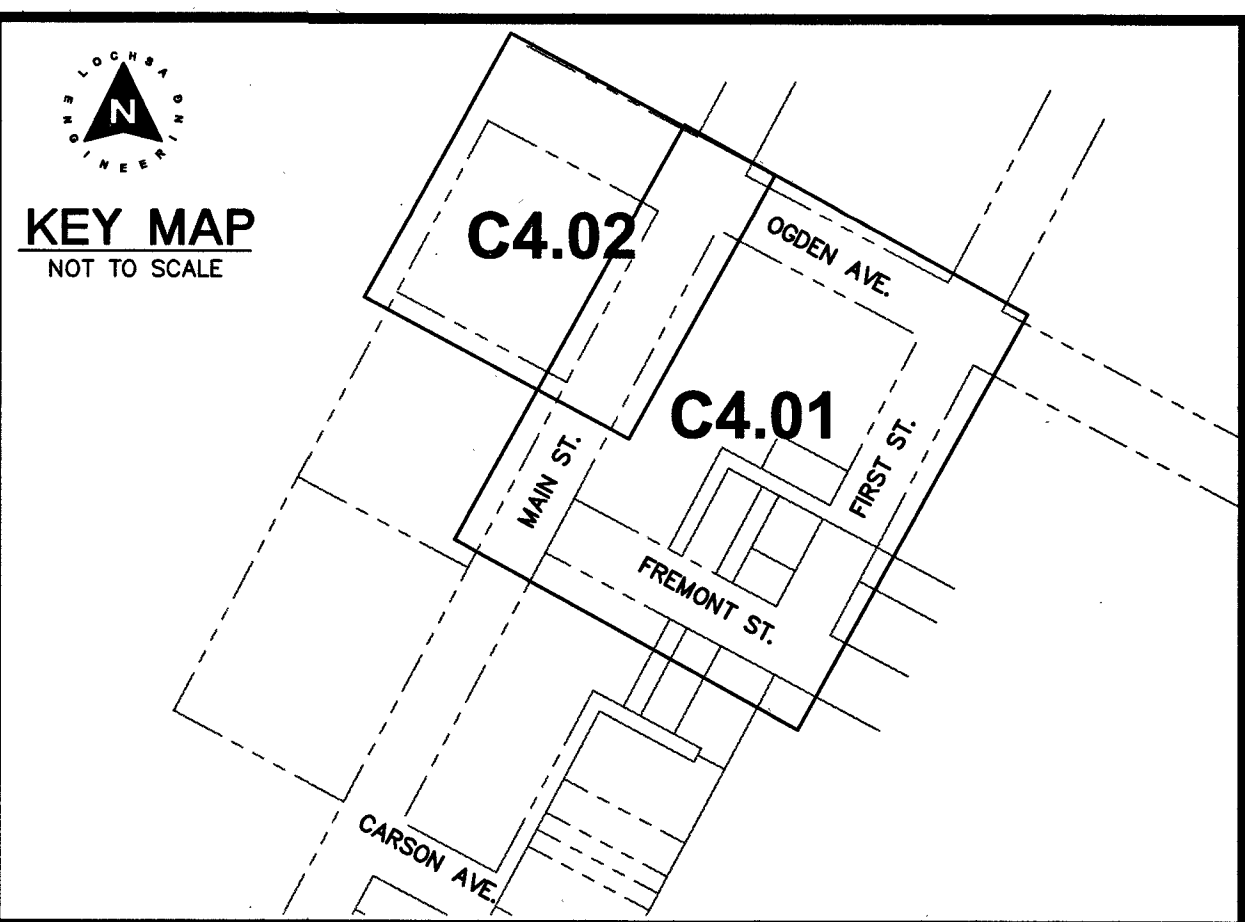
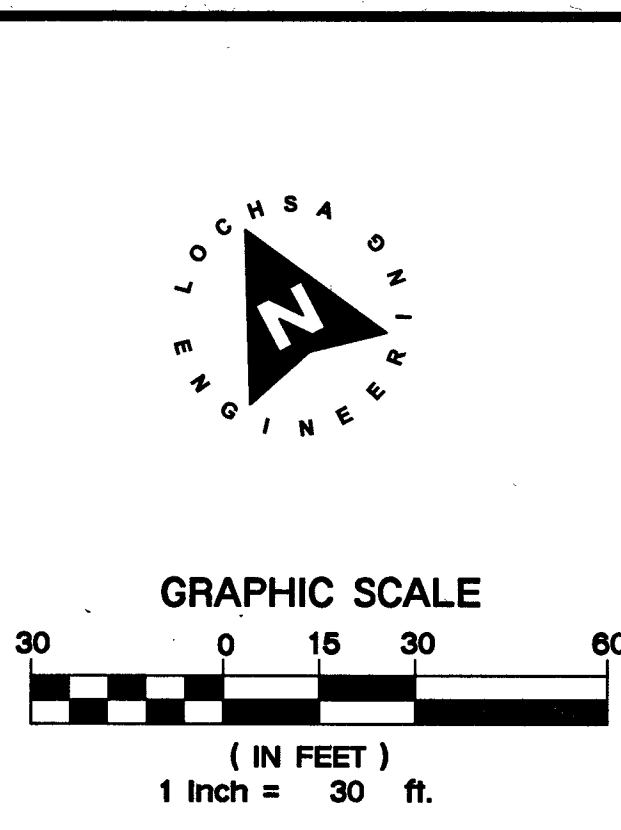
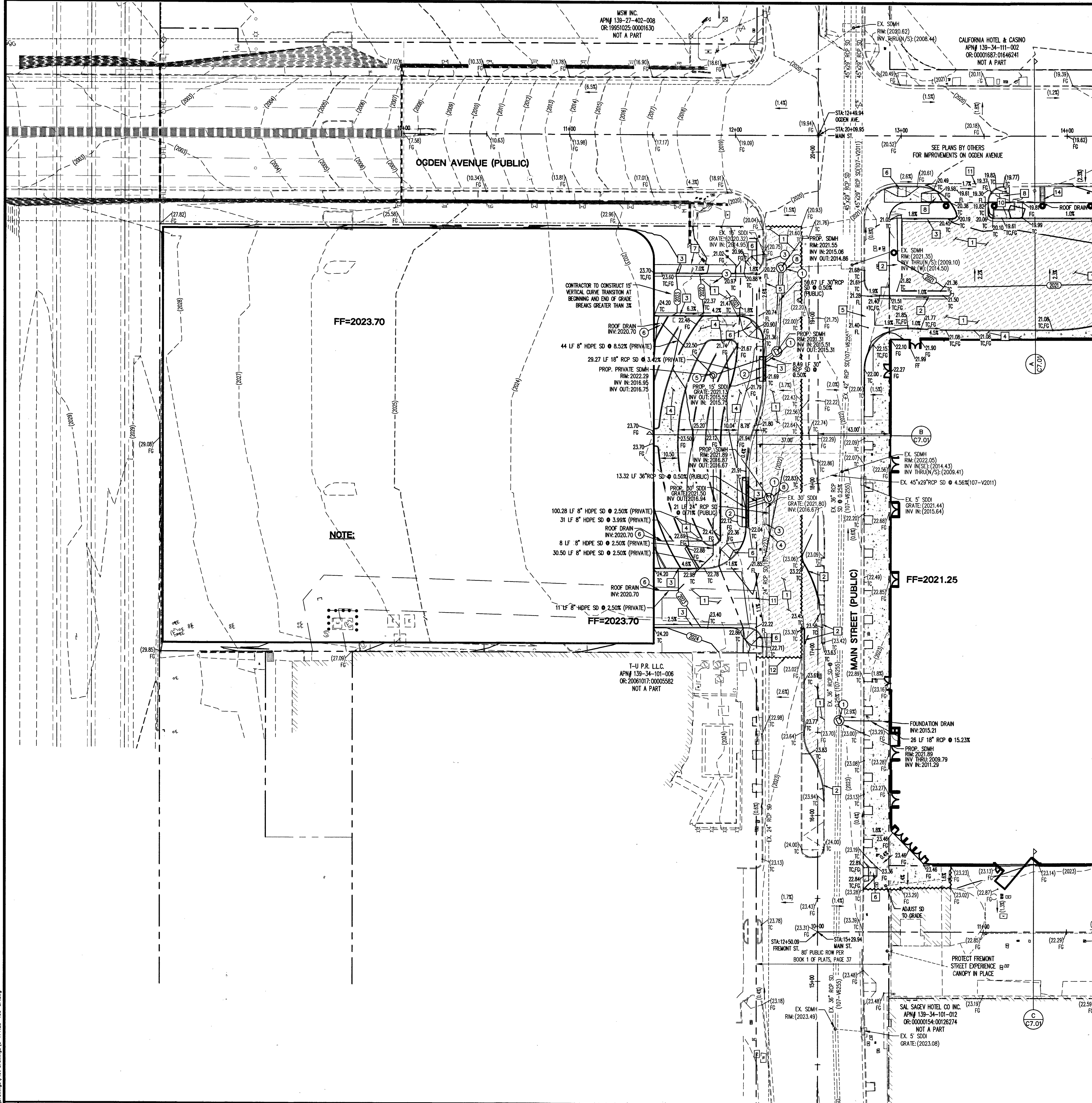
AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CONDUITS IT'S COSTLY.

Call before you UnderGround

utility lines. It's costly.

Call 811

[illegible]



STORM DRAIN CONSTRUCTION NOTES:

- NOT ALL NOTES USED ON THIS SHEET
- INSTALL 72" STORM DRAIN MANHOLE PER C.C.A.U.S.D. NO. 403 WITH CONCRETE COLLAR PER CCAUSD #408. REFER TO C.C.A.U.S.D. NO. 409 FOR MANHOLE COVER AND RING.
- INSTALL MODIFIED TYPE "C" DROP INLET WITH GRATE PER CCAUSD #412.1. INSTALL STAMP PER CCAUSD #421
- REMOVE EXISTING INLET.
- CONTRACTOR TO CONNECT EXISTING 24" RCP TO NEW MANHOLE AT SAME SLOPE. CONTRACTOR TO FIELD VERIFY THE EXISTING INVERT AND REPORT ANY ISSUES TO ENGINEERING.
- INSTALL 48" STORM DRAIN MANHOLE PER C.C.A.U.S.D. NO. 403 WITH CONCRETE COLLAR PER CCAUSD #408. REFER TO C.C.A.U.S.D. NO. 409 FOR MANHOLE COVER AND RING.
- CAP ROOF DRAIN. SEE PLUMBING PLANS FOR CONTINUATION.
- EX. SIDEWALK UNDER DRAIN TO BE REMOVED SIDEWALK TO BE REMOVED BETWEEN JOINTS AND REPLACED.
- CONNECT TO EX. STORM DRAIN.

MAX 2% H.S. BUILDING FF
MIN. 5% L.S.
TYPICAL GRADING AWAY FROM BUILDING

CONSTRUCTION NOTES:

- ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH "CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS (C.C.A.U.S.D.)" LATEST EDITION AND/OR REGULATING ENTITY HAVING JURISDICTION.
- NOT ALL NOTES USED ON THIS SHEET
- CONSTRUCT AC PAVEMENT PER DETAIL 2 ON C7.01.
- CONSTRUCT "A" TYPE CURB PER DETAIL 1 ON C7.01.
- CONSTRUCT "L" TYPE CURB PER CCAUSD NO. 216.
- CONSTRUCT CONC. SIDEWALK PER CCAUSD NO. 234. REFER TO ARCH. PLANS FOR FINISHING SPECIFICATIONS.
- CONSTRUCT CROSS GUTTER PER CCAUSD NO. 228.
- CONSTRUCT CASE II SIDEWALK RAMP PER CCAUSD NO. 235.
- INSTALL TURNED DOWN SIDEWALK EDGE WHERE NECESSARY PER DETAIL 3 ON C7.01 ALONG RAMP. INSTALL RAILING ALONG RAMP.
- CONSTRUCT SIDEWALK RAMP PER DETAIL 9 ON C7.01.
- NOT USED
- CONSTRUCT SIDEWALK RAMP PER DETAIL 4 ON C7.01.
- CONSTRUCT COMMERCIAL DRIVEWAY PER CCAUSD NO. 222.1 WITH CROSS GUTTER PER CCAUSD NO. 228.
- SAWCUT AND MATCH EXISTING.
- CONSTRUCT 2" "U" CHANNEL PER DETAIL 6 ON C7.01.
- INSTALL SIDEWALK DRAIN PER CCAUSD NO. 236. WITH 2" GRATE FOR ROOF DRAIN. PER DETAIL 8 ON C7.01

CUT	FILL
6284 CY	450 CY

NOTE: CUT/FILL QUANTITIES ARE TO FINISHED GRADE & DO NOT INCLUDE MATERIAL THICKNESS'S, FOOTINGS, ETC.

EXISTING UTILITY NOTE:

CONTRACTOR TO ADJUST ALL EXISTING UTILITIES TO MATCH PROPOSED FINISH GRADE ELEVATIONS.

FLOOD ZONE NOTE:

THE PROJECT SITE IS COVERED BY THE FLOOD INSURANCE RATE MAP (FIRM) FOR THE CLARK COUNTY AND INCORPORATED AREAS, NEVADA, COMMUNITY PANEL NUMBER: 32003C2170F. EFFECTIVE DATE: NOVEMBER 16, 2011. THE SITE FALLS WITHIN ZONE "X", DESCRIBED BY FEMA AS: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

GRADING NOTES:

- SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED AND SILTY MATERIALS SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
- CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON ROUGH GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL NOTIFY LOCHSA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. LOCHSA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY CORRECTIVE WORK DONE BY OTHERS.
- CONTRACTOR TO ENSURE POSITIVE DRAINAGE, NO PONDING ALLOWED. CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING AND COMPACTION. REFER TO THE REPORT PREPARED BY GEOTECHNICAL & ENVIRONMENTAL SERVICES, PROJECT No. 20174217E1, DATED May 7, 2018.

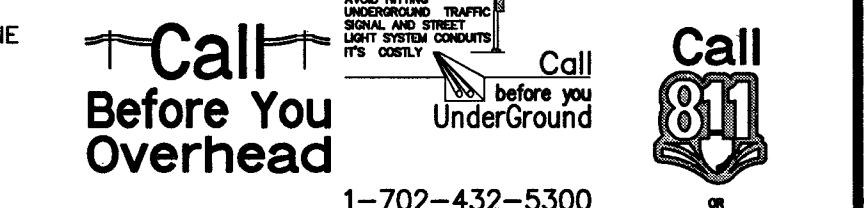
GRADING PLAN CERTIFICATION

NAME: GUY M. MORRIS PE # 14526 DATE: 4-8-19
CERTIFY THAT THIS GRADING PLAN IS IN CONFORMANCE WITH APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

NOTE:

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SAFETY ALERT



A.P.N.:
139-34-113-001 & 139-34-112-001

BASIS OF BEARINGS:
BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF OGDEN AVENUE BETWEEN MAIN STREET AND FIRST STREET, AS SHOWN ON FILE 67, PAGE 79 OF SURVEYS. SAID LINE BEARS: S62°04'36"E

BENCHMARK:
BENCHMARK BLV013ANNW6 BEING A RIVET & PLATE TOP CURB NE CORNER MAIN ST. & FREMONT ST. ELEVATION=2023.19 FEET (616.669 METERS)

1-702-227-2929 1-702-432-5300
FREMONT AND MAIN ST. & FREMONT ST. 1-800-227-2600

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100w HPS STREETLIGHTS	150w HPS STREETLIGHTS	200w HPS STREETLIGHTS	250w HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	EXISTING:	(2210)								(12.34)		⑥	⑥ = SANITARY SEWER ⑥ = STORM DRAIN ⑥ = ELECTRICAL ⑥ = TELEPHONE										
ROW LINE	SCARP LINE	PROPOSED:	(2122)										⑥											

6345 South Jones Blvd.
Suite 100
Las Vegas, NV 89118
Phone (702) 965-9312
Fax (702) 965-9317
www.lochsa.com

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engineering

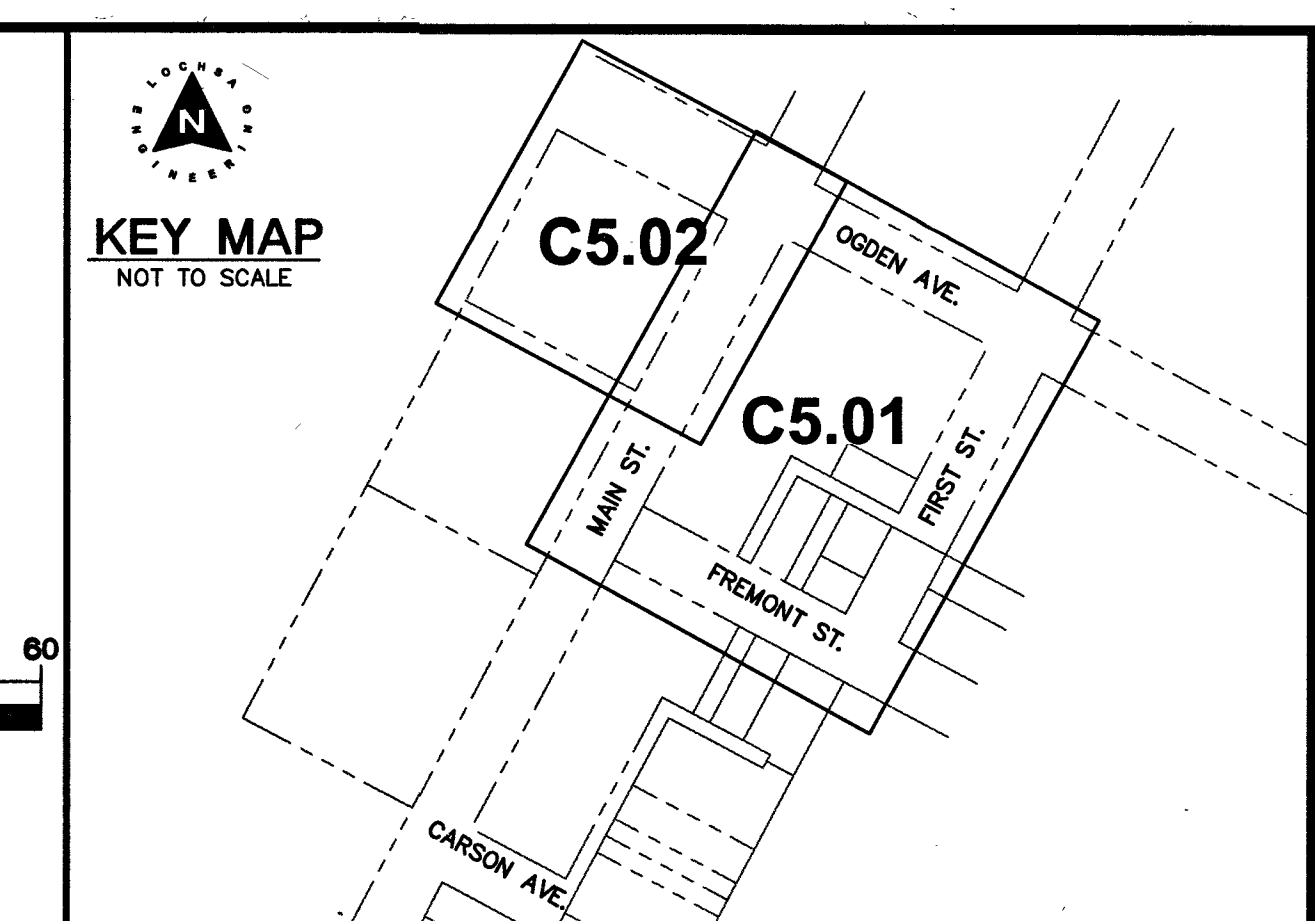
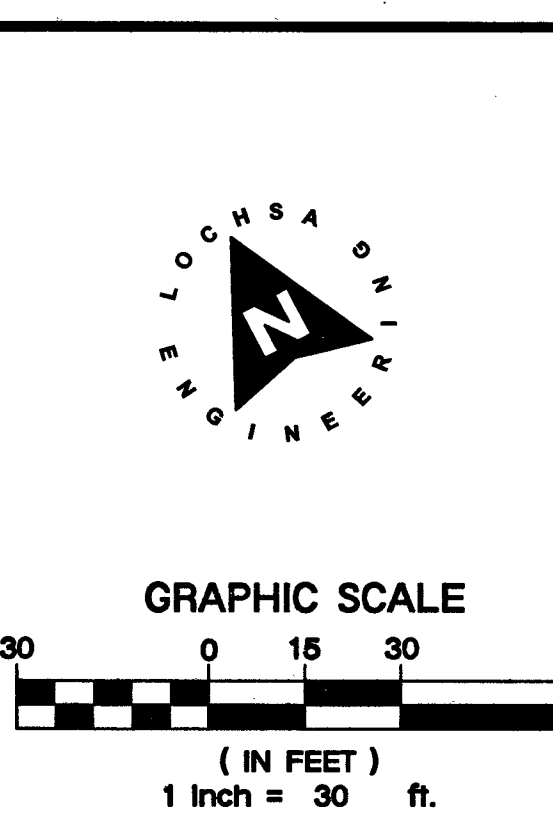
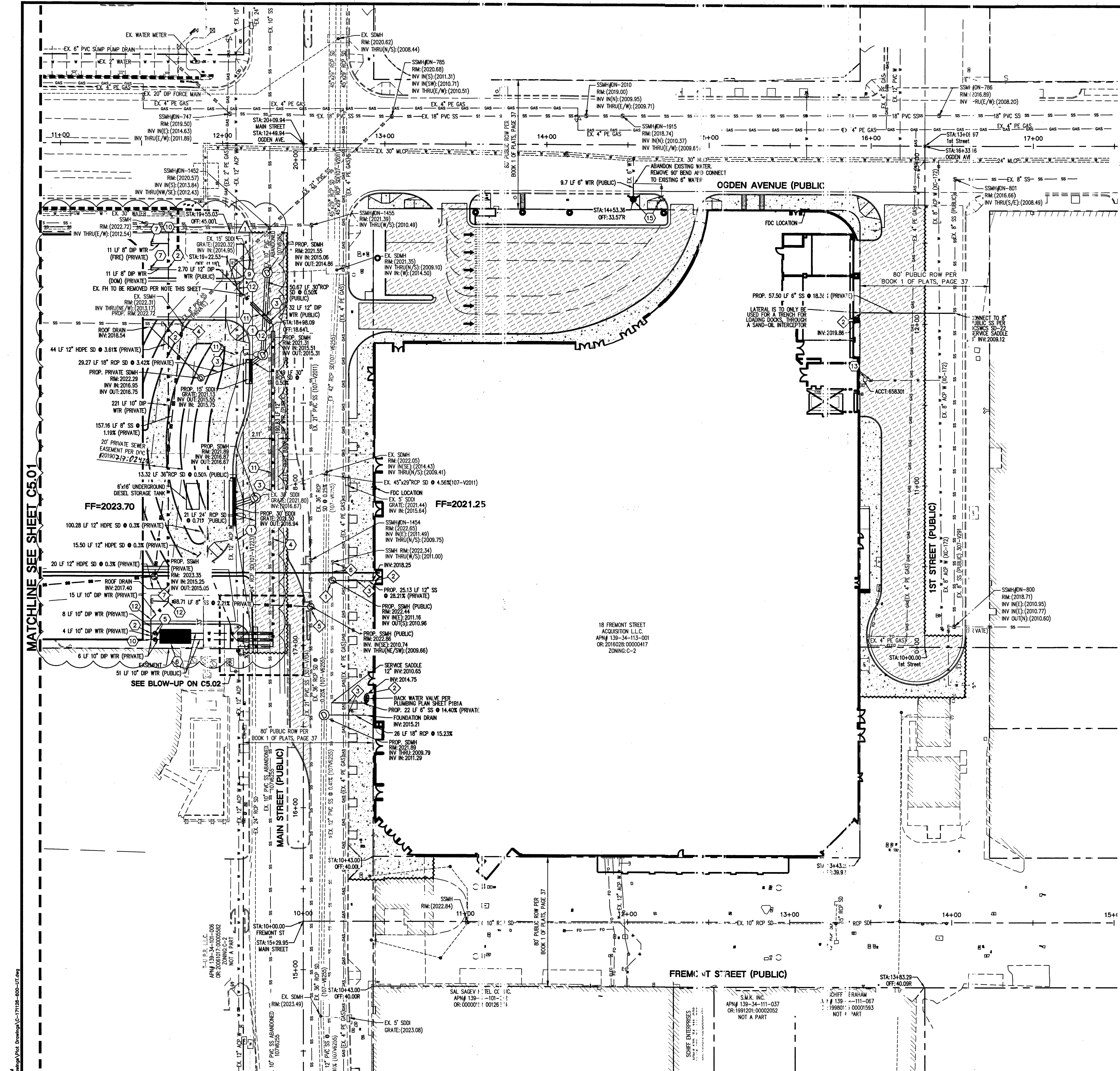
GRADING PLANS
SHEET 2 OF 2

18 FREMONT STREET
HOTEL AND CASINO
CITY OF LAS VEGAS

PROJECT No.: 171126
DATE: 04/08/19
SCALE: 1"=30'
DRAWN BY: NMG
DESIGNED BY: NMG
CHECKED BY: GMM

SEAL
GUY M. MORRIS
EXP. 12-31-19
CIVIL
No. 14526
04/08/19

SHEET No. C4.02
SHEET 11 of 15
CLV No. 107V7521
L18-02490



FIRE FLOW CALCULATIONS
BASED ON BUILDING WITH HIGHEST DEMAND:

SQUARE FOOTAGE:	1,228,355
LARGEST AREA BETWEEN 4 HR.	N/A
AREA SEPARATION WALLS:	461'-0"
NUMBER OF STORIES:	37 + BASEMENT
TOTAL CONSTRUCTION:	A-2, A-4, B, F-1, F-2, M, S-1, S-2
OCCUPANCY:	YES
SPRINKLER SYSTEM:	4
EXPOSURES:	4
ROOF CONSTRUCTION:	STEEL DECKING
FLOW REQUIRED @ 20 PSI	4500 GPM
RESIDUAL (50% REDUCTION):	N/A
MAX. STORAGE HEIGHT:	2168
PRESSURE ZONE:	

FIRE HYDRANT & LATERAL ABANDONMENT:
WHERE SHOWN ON THE DRAWING, THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER FIRE HYDRANT BARRELS AND NO PORTION OF THE REMAINING FIRE HYDRANT ASSEMBLY IS TO REMAIN IN PLACE. THE EXISTING VALVE SHALL BE ABANDONED BY A CLOSED POSITION UNLESS SHOWN OTHERWISE. BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE AND BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI. THE REMAINING PORTION OF THE LATERAL SHALL BE CUT WITHIN ONE (1) FOOT OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE EXISTING CONCRETE HYDRANT PAD SHALL BE REMOVED.

UTILITY NOTES:
EXISTING SITE UTILITIES HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITY LOCATIONS PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO EXERCISE CAUTION DURING ALL EXCAVATION OPERATIONS TO AVOID IMPACT TO EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE TO ADJUST ALL EXISTING MANHOLES, CLEAN-OUTS, VALVES, BOXES AND ANY RELATED UTILITY IMPROVEMENTS ENCOUNTERED DURING CONSTRUCTION.

- ALL WATER, SANITARY SEWER AND STORM DRAIN IMPROVEMENTS SHALL CONFORM TO THE LATEST VERSION OF UDACS, DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND APPLICABLE CITY STANDARDS AND GUIDELINES.
1. ALL ON-SITE WATER LINES 4" - 12" TO BE CL 150, C900 PVC. ALL ON-SITE WATER LINES GREATER THAN 12" TO BE D.I.P. ALL ON-SITE WATER LINES SMALLER THAN 4" TO BE COPPER.
 2. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITY STUBS PRIOR TO CONSTRUCTION.
 3. ALL EXISTING UTILITY STRUCTURES WITHIN CONSTRUCTION AREA SHALL BE ADJUSTED TO MATCH FINISH GRADE (I.E. W/ BOX, W/WH, ANNOCE BOX, FH, TEL BOX, ETC.).
 4. ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.

EASEMENT WITH TREES, SHRUBS, DECORATIVE ROCKS, BLOCK WALL OR FENCE:
TREES, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL, SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VAULT(S), BACKFLOW ASSEMBLY, AND PIPING FROM THE ADJACENT RIGHT OF WAY.

SEWER CONSTRUCTION NOTES:
- NOT ALL NOTES USED ON THIS SHEET -

ALL GRAVITY SANITARY SEWER LINES TO BE SDR-35 PVC, UNLESS NOTED OTHERWISE.

INSTALL 60" SANITARY SEWER MANHOLE W/ SINGLE 24" LID PER DCSWCS DWG NO. SD-1A, SD-1B, & SD-4, AND CORROSION PROTECTION PER DCSWCS 3.16.8.B.

STUB & CAP SANITARY SEWER SERVICE. REFER TO PLUMBING PLANS FOR CONTINUATION. NO CLEANOUTS ALLOWED IN RIGHT OF WAY.

SAWCUT, TRENCH AND BACKFILL PER DCSWCS SD-16. REPLACE CURB, GUTTER AND SIDEWALK AS NECESSARY.

MUST "CORE DRILL" EXH/WH PER DCSWCS SEC. 3.16.4. MUST INSTALL "CORROSION PROTECTION" IN EXH/WH PER DCSWCS SEC. 3.16.8 AND SEC. 4.9.8.

INSTALL 72" SANITARY SEWER MANHOLE W/ DUAL CONCENTRIC LIDS PER DCSWCS DWG NO. SD-1A, SD-1B, SD-2 & SD-4, AND CORROSION PROTECTION PER DCSWCS 3.16.8.B.

ABANDON SS MAIN PER DCSWCS 3.18.1B AND ABANDON SSMH PER DCSWCS 3.18.2A.

INSTALL 48" SANITARY SEWER MANHOLE PER DCSWCS DWG NO. SD-1A, SD-1B, & SD-4.

AP.N.:
139-34-113-001 & 139-34-112-001

BASIS OF BEARINGS:
BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF OGDEN AVENUE BETWEEN MAIN STREET AND FIRST STREET, AS SHOWN ON FILE 67, PAGE 79 OF SURVEYS. SAID LINE BEARS: S82°04'36"E

BENCHMARK:
BENCHMARK BLVD13ANNWS BEING A RIVET & PLATE TOP CURB NE CORNER MAIN ST. & FREMONT ST. ELEVATION=2023.19 FEET (616.669 METERS)

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 135386 FIRST APPROVED DATE: 5-6-19
LVMWD APPROVED FIRE FLOW 4500 GPM/ONSITE 4500 GPM

SAFETY ALERT
Call before you dig
Before You Overhead
1-702-227-2929
1-702-432-5300
1-800-227-2800

- WATER CONSTRUCTION NOTES:**
- ALL WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS" (UDACS). - NOT ALL NOTES USED ON THIS SHEET -
1. EX. ACP WATER TO BE REMOVED BETWEEN CONNECTION POINTS.
 2. INSTALL TEE W/THRUST BLOCK PER UDACS PLATE NO. 31 (SAME SIZE AS PIPE)
 3. INSTALL UTILITY CROSSING PER UDACS SECTION 2.22.02.
 4. TRENCH AND BACKFILL PER UDACS PLATE NO. 17. CONTRACTOR TO REPAIR CURB, GUTTER & SIDEWALK TO MATCH EXISTING TYPE & GRADE.
 5. INSTALL GATE VALVE PER UDACS PLATE NO. 30 & 39.
 6. INSTALL DUAL 8" METER AND 10" RPPA PER DETAIL 7.07.01.
 7. INSTALL CAP. SEE PLUMBING PLANS FOR CONTINUATION.
 8. INSTALL FIRE HYDRANT PER UDACS PLATE NO. 40.
 9. CONNECT TO EXISTING 12" ACP WATER.
 10. INSTALL 90° BEND W/THRUST BLOCK (SAME SIZE AS PIPE) PER UDACS PLATE NO.31.
 11. INSTALL STEEL CASING PER UDACS PLATE NO. 23.
 12. INSTALL 45° BEND W/THRUST BLOCK (SAME SIZE AS PIPE) PER UDACS PLATE NO.31.
 13. REMOVE EX. WATER METER PER UDACS SEC. 2.17.04.
 14. INSTALL SLEEVE AND RECONNECT IRRIGATION.
 15. RELOCATE EX. FH TO LOCATION SHOWN & ABANDON EX. LATERAL. SEE PLAN LOCATION & FH NOTE THIS SHEET.

NOTE:
CONTRACTOR TO INCLUDE COST OF UNDERGROUND UTILITY DETECTION COMPANY TO LOCATE AND MARK ALL EXISTING UTILITIES PRIOR TO ANY DEMOLITION OR EXCAVATION. ENGINEER TO BE PROVIDED WITH AS-BUILT SKETCH OF EXISTING UTILITIES, AND IS TO BE NOTIFIED IMMEDIATELY OF ANY POTENTIAL CONFLICTS WITH PROPOSED UTILITIES AND/OR FINISHED GRADES.

SOUTHWEST GAS CORPORATION
DATE: _____

CITY OF LAS VEGAS FIRE DEPARTMENT APPROVAL
BY: _____ DATE: 8-22-19

FIRE DEPARTMENT APPROVAL
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 THE STATE OR COUNTY LAWS. FIRE FLOW 4500 GPM AT 20 P.S.I. RESIDUAL.

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 135386 FIRST APPROVED DATE: 5-6-19
LVMWD APPROVED FIRE FLOW 4500 GPM/ONSITE 4500 GPM

NOTE:
PROTECT IN PLACE AND ADJUST LVMWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVMWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.

NOTE:
LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

SAFETY ALERT
Call before you dig
Before You Overhead
1-702-227-2929
1-702-432-5300
1-800-227-2800

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAV. INT.	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS
CL OR SURVEY LINE	EASEMENT LINE	EXISTING:	(2210)	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAV. INT.	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS
PROPERTY LINE	SAWCUT LINE	PROPOSED:	(2122)	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAV. INT.	CONCRETE	SPOT ELEVATIONS	SIGNS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS
ROW LINE	SCARP LINE																							

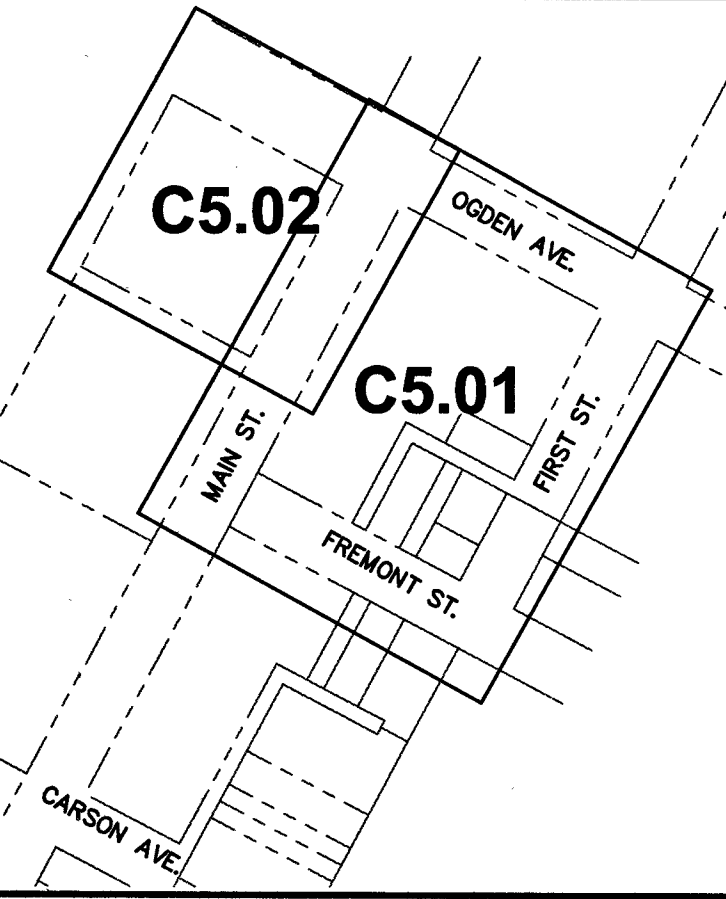
UTILITY PLANS
SHEET 1 OF 2

PROJECT NO.: 171126
DATE: 08/12/19
SCALE: 1"=30'
DRAWN BY: JVN
DESIGNED BY: NNG
CHECKED BY: GNV

SHEET NO. 12 OF 15
CLV NO. 107V7521
L18-02490

Lochsa
ENGINEERING

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Las Vegas, NV 89118
Phone (702) 365-9512
Fax (702) 365-9517
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SAFETY ALERT



Call

Before You Overhead

1-702-227-2929



AVOID HITTING UNDERGROUND TRAFFIC SIGNAL AND STREET LIGHT SYSTEM CONDUITS IT'S COSTLY

Call
before you
UnderGround

1-702-432-5300

Call before you

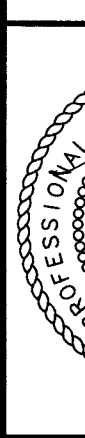
Avoid cutting underground utility lines. It's costly

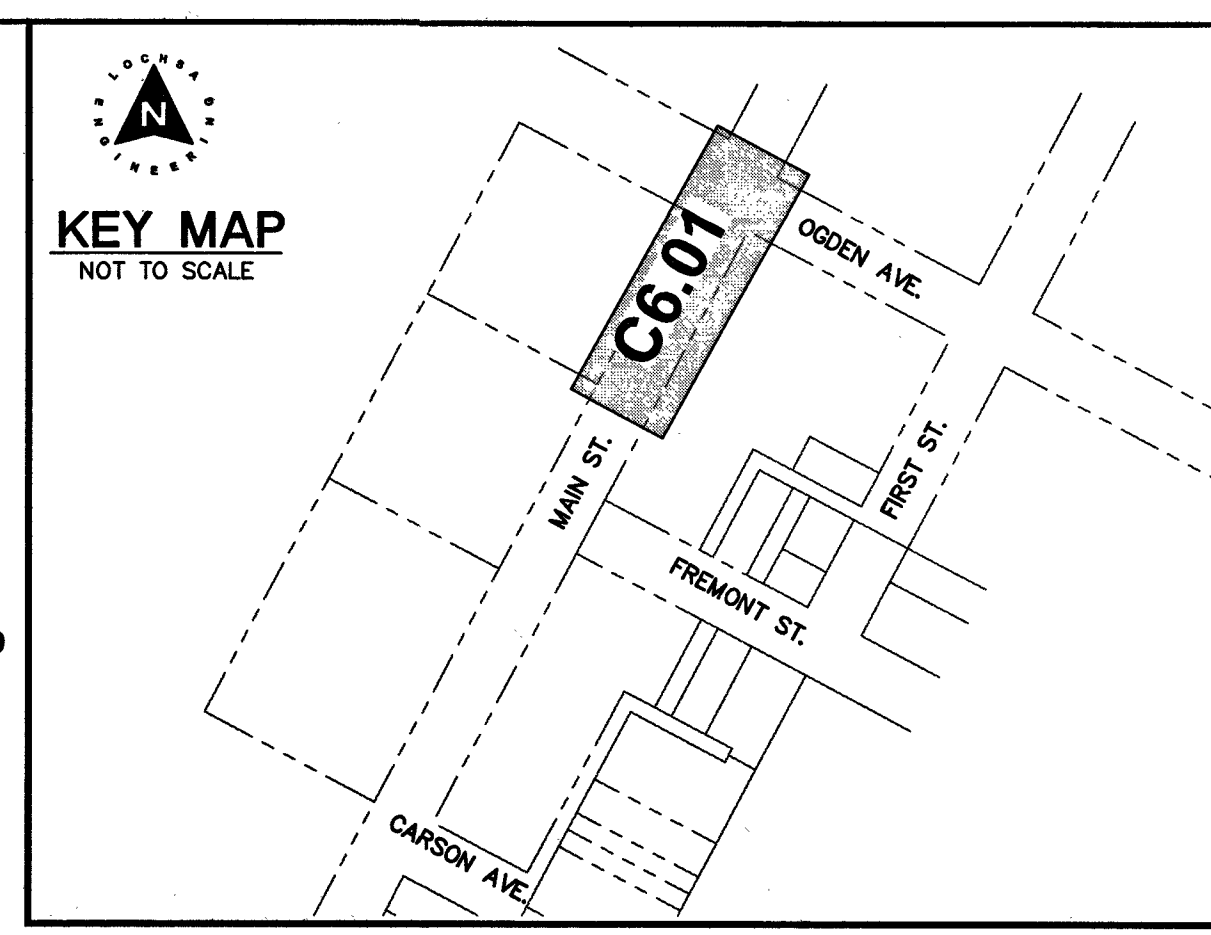
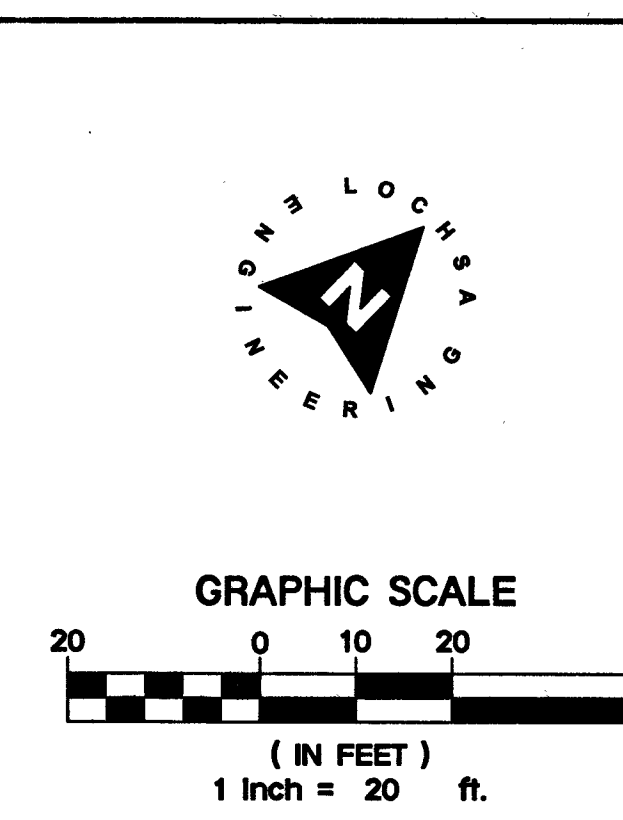
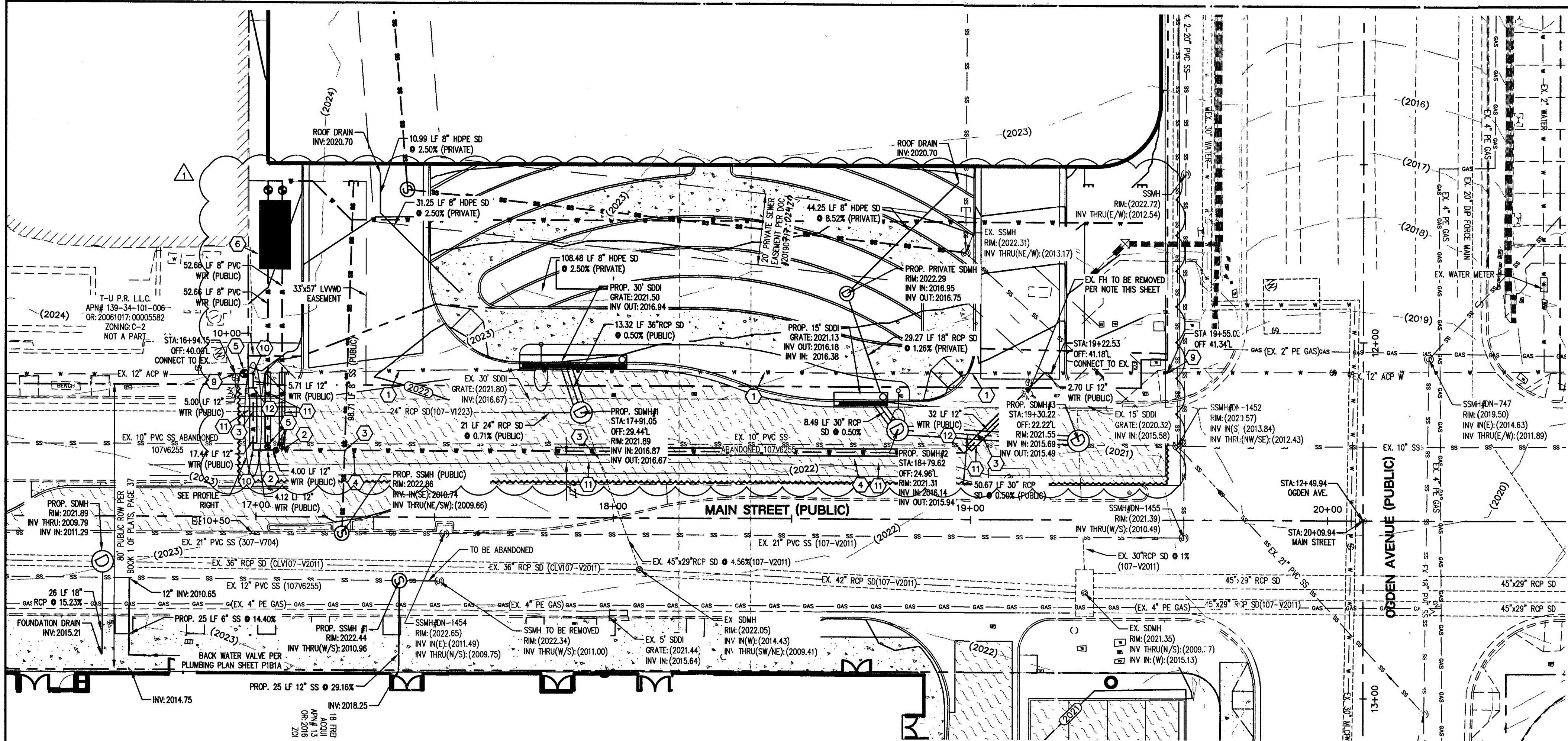
Call

811



1-800-227-2811

UTILITY PLANS SHEET 2 OF 2	18 FREMONT STREET HOTEL AND CASINO CITY OF LAS VEGAS		8345 South Jones Blvd Suite 100 Las Vegas, NV 89118 Phone (702) 365-9712 Fax (702) 365-9317 www.lochsa.com	REV.: DATE: BY:	DESCRIPTION:
			07/01/19 JWN <i>01/19 JWN</i>	CLV 58 10-9-11 <i>CLV 58 10-9-11</i>	
SHEET PROJECT No.: DATE: SCALE: DRAWN BY: DESIGNED BY: CHECKED BY:		171126 08/12/19 1"=30' JWN NMG GMM			
		08/12/19 Sheet No. C5.02 SHEET 13 OF 15 CLV No. 107V7521 L18-02490			



WATER CONSTRUCTION NOTES:

- ALL WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE "UNIFORM DESIGN AND CONSTRUCTION STANDARD FOR WATER DISTRIBUTION SYSTEMS" (UDACS). - NOT ALL NOTES USED ON THIS SHEET -
- EX. ACP WATER TO BE REMOVED BETWEEN CONNECTION POINTS.
- INSTALL TEE W/THRUST BLOCK PER UDACS PLATE NO. 31 (SAME SIZE AS PIPE)
- INSTALL UTILITY CROSSING PER UDACS SECTION 2.22.02.
- TRENCH AND BACKFILL PER UDACS PLATE NO. 17. CONTRACTOR TO REPAIR CURB, GUTTER & SIDEWALK TO MATCH EXISTING TYPE & GRADE.
- INSTALL GATE VALVE PER UDACS PLATE NO. 30 & 38.
- INSTALL DUAL 8" METER AND 10" RPPA PER DETAIL 7 ON C7.01.
- INSTALL CAP. SEE PLUMBING PLANS FOR CONTINUATION.
- INSTALL FIRE HYDRANT PER UDACS PLATE NO. 40.
- CONNECT TO EXISTING 12" ACP WATER.
- INSTALL 90° BEND W/THRUST BLOCK (SAME SIZE AS PIPE) PER UDACS PLATE NO.31.
- INSTALL STEEL CASING PER UDACS PLATE NO. 23.
- INSTALL 45° BEND W/THRUST BLOCK (SAME SIZE AS PIPE) PER UDACS PLATE NO.31.
- REMOVE EX. WATER METER PER UDACS SEC. 217.04.

FIRE HYDRANT & LATERAL ABANDONMENT:

WHERE SHOWN ON THE DRAWING, THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER FIRE HYDRANT BARRELS SO NO PORTION OF THE REMAINING FIRE HYDRANT ASSEMBLY IS CLOSER THAN (2) FEET TO THE EXISTING GRADE. THE EXISTING HYDRANT SHALL BE DELIVERED TO THE AGENCY. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE AND BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE II AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF A LEAST TWO-THOUSAND (2,000) PSI. THE REMAINING PORTION OF THE LATERAL SHALL BE CUT WITHIN ONE (1) FOOT OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE EXISTING CONCRETE HYDRANT PAD SHALL BE REMOVED.

UTILITY NOTES:

EXISTING SITE UTILITIES HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITY LOCATIONS PRIOR TO START OF CONSTRUCTION. CONTRACTOR TO EXERCISE CAUTION DURING ALL EXCAVATION OPERATIONS TO AVOID IMPACT TO EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE TO ADJUST ALL EXISTING MANHOLES, CLEAN-OUTS, VALVES, BOXES AND ANY RELATED UTILITY IMPROVEMENTS ENCOUNTERED DURING CONSTRUCTION.

ALL WATER, SANITARY SEWER AND STORM DRAIN IMPROVEMENTS SHALL CONFORM TO THE LATEST VERSION OF UDACS DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND APPLICABLE CITY STANDARDS AND GUIDELINES.

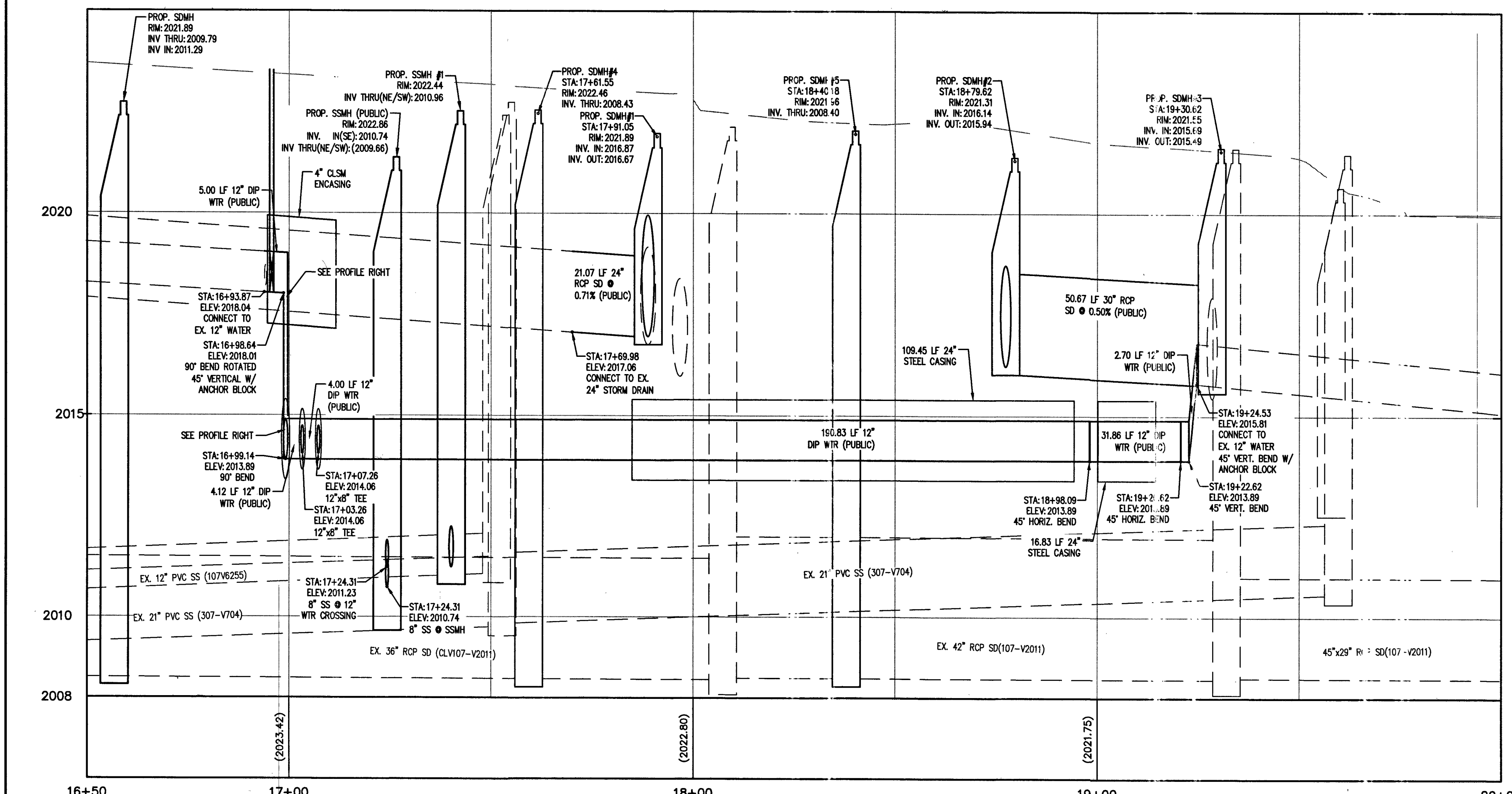
- ALL ON-SITE WATER LINES 4" - 12" TO BE CL 150, C900 PVC. ALL ON-SITE WATER LINES GREATER THAN 12" TO BE D.I.P. ALL ON-SITE WATER LINES SMALLER THAN 4" TO BE COPPER.
- CONTRACTOR TO FIELD VERIFY LOCATION OF ALL UTILITY STUBS PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITY STRUCTURES WITHIN CONSTRUCTION AREA SHALL BE ADJUSTED TO MATCH FINISH GRADE (I.E. W.V. BOX, W.M., ANNODE BOX, FH, TEL. BOX, ETC.).
- ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPE UNLESS INDICATED OTHERWISE.

EASEMENT WITH TREES, SHRUBS, DECORATIVE ROCKS, BLOCK WALL OR FENCE

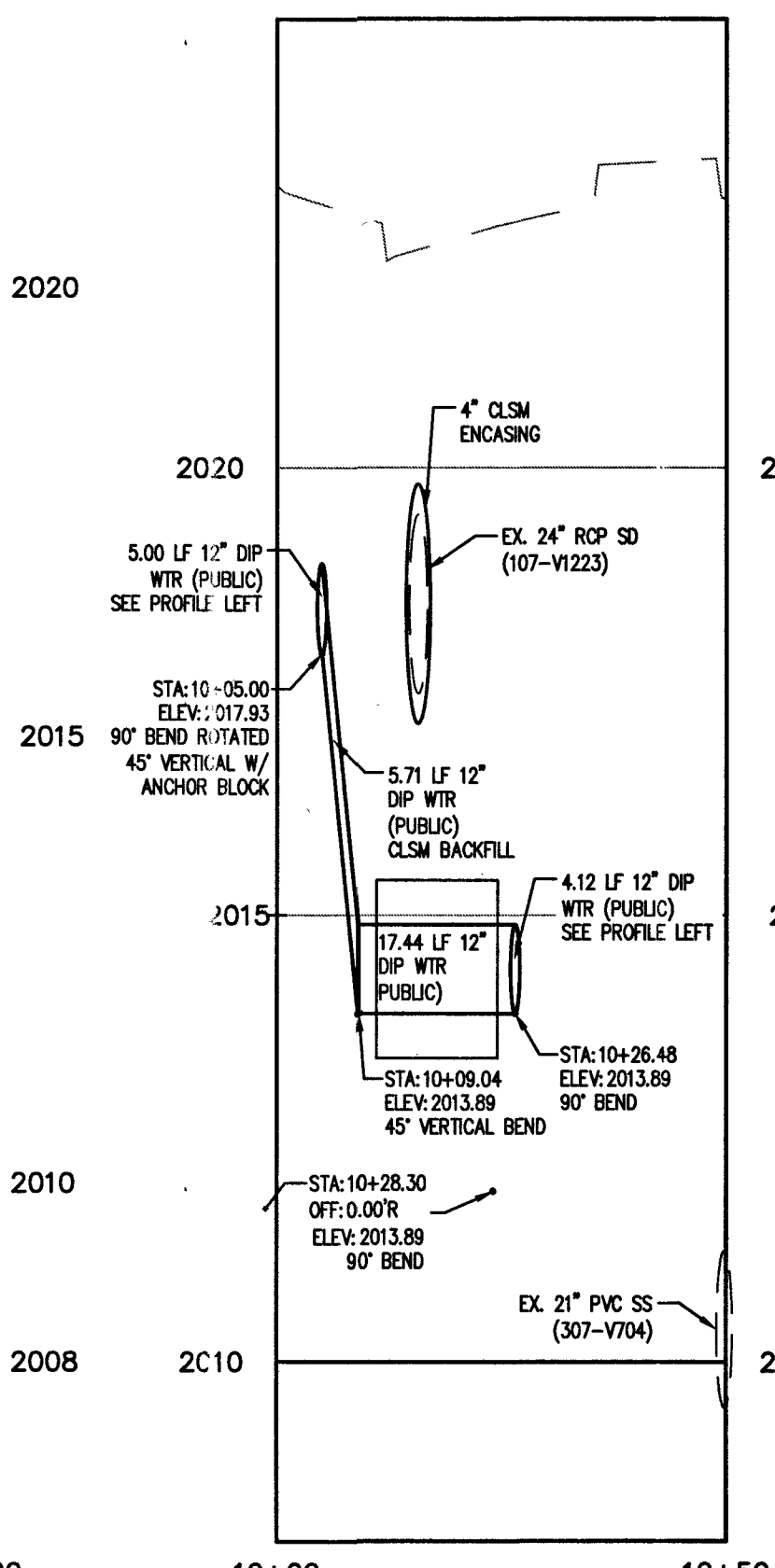
TREE'S, SHRUBS, OR DECORATIVE ROCKS, AND ANY BLOCK WALL OR OTHER FENCE MATERIAL, SHALL BE DESIGNED AND CONSTRUCTED AROUND THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS TO THE VALUABLE BACKFLOW ASSEMBLY, AND PIPING FROM THE ADJACENT RIGHT OF WAY.

NOTE:

PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.



MAIN STREET PROFILE VIEW
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE 1"=2'



water PROFILE VIEW
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'

A.P.N.:

139-34-113-001 & 139-34-112-001

BASIS OF BEARINGS:

BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF ODDEN AVENUE BETWEEN MAIN STREET AND FIRST STREET, AS SHOWN ON FILE 67, PAGE 79 OF SURVEYS. SAID LINE BEARS: S62°04'36"E

BENCHMARK:

BENCHMARK BLV0134NNW BEING A RIVET & PLATE TOP CURB NE CORNER MAIN ST. & FREMONT ST. ELEVATION=2023.19 FEET (616.669 METERS)

NOTE:

LOCHSA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS PLAN ARE FROM THE BEST AVAILABLE INFORMATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES, INCLUDING BUT NOT LIMITED TO, THE WATER, FIRE, SANITARY SEWER, STORM SEWER, TELEPHONE, POWER, GAS, AND IRRIGATION LINES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. IF CONFLICT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE PROJECT ARCHITECT, OWNER'S REPRESENTATIVE AND THE PROJECT ENGINEER IMMEDIATELY.

SAFETY ALERT

Call before you dig. Avoid cutting underground utility lines. It's costly. Call 811 before you dig. Call before you dig. Call before you dig.

1-702-227-2929 1-702-432-5300 1-800-227-2800

CL OR SURVEY LINE	EASEMENT LINE	DESCRIPTION:	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SHIMS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS
CL OR SURVEY LINE	EASEMENT LINE	EXISTING: (2210) PROPOSED: (2122)	CONTOUR LINES	EDGE OF PAVEMENT	"A" TYPE CURBS	"L" TYPE CURBS	WALLS	FENCES	AC PAVEMENT	CONCRETE	SPOT ELEVATIONS	SHIMS	MANHOLE W/ DESCRIPTION	MANHOLE DESCRIPTIONS	FIRE HYDRANTS	GATE VALVES	REDUCERS	CLEAN OUTS	UTILITY BOX OR VAULT	BACKWATER VALVES	100W HPS STREETLIGHTS	150W HPS STREETLIGHTS	200W HPS STREETLIGHTS	250W HPS STREETLIGHTS

07/01/19 JMN REVISED UTILITY LAYOUTS TO ADDRESS CONFLICTS IN THE FIELD

9/19/19 JMN

CLV 66 10-4-11

REV: DATE: BY: DESCRIPTION:

6345 South Jones Blvd.
Las Vegas, NV 89118
Phone (702) 365-9312
Fax (702) 365-9317
www.lochsa.com

Lochsa
engineering

PLAN AND PROFILE
MAIN STREET

18 FREMONT STREET
HOTEL AND CASINO
CITY OF LAS VEGAS

PROJ#135386A 139-34-112

SHEET 171126

DATE: 08/12/19

SCALE: 1"=20'

DRAWN BY: NMG

DESIGNED BY: NMG

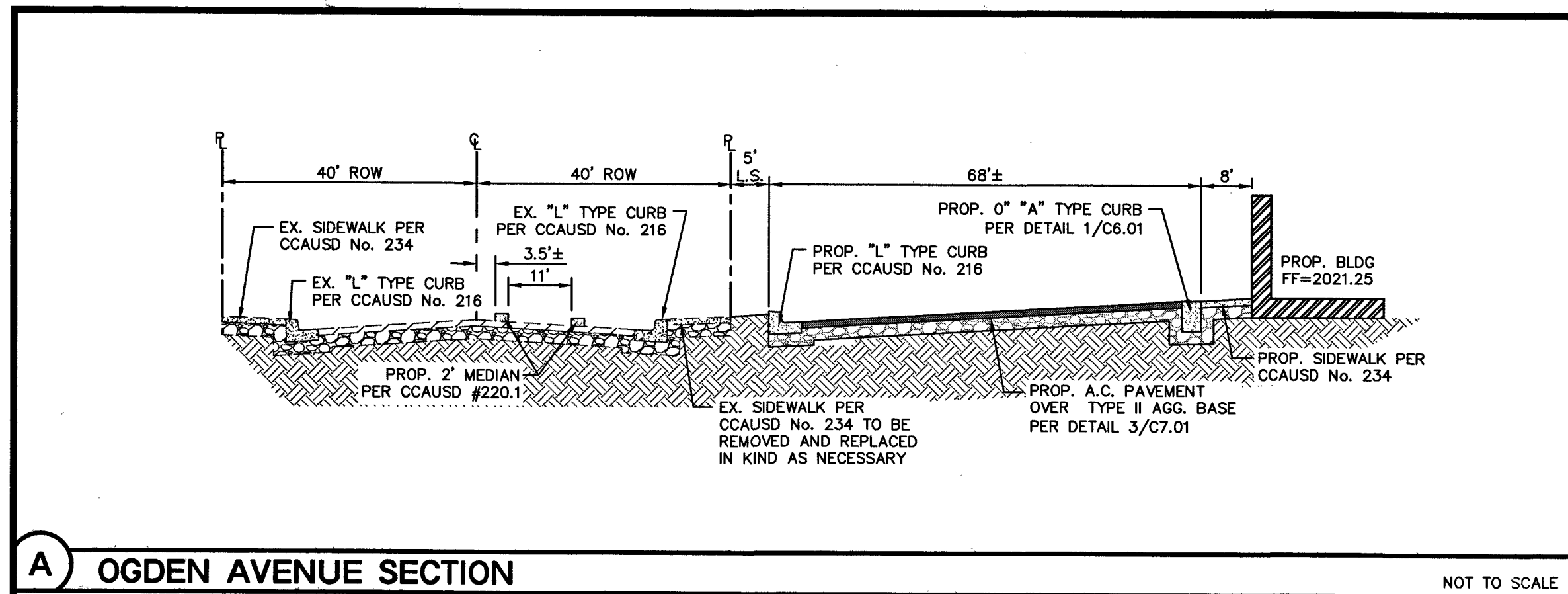
CHECKED BY: GMM

EXP. 12-31-19

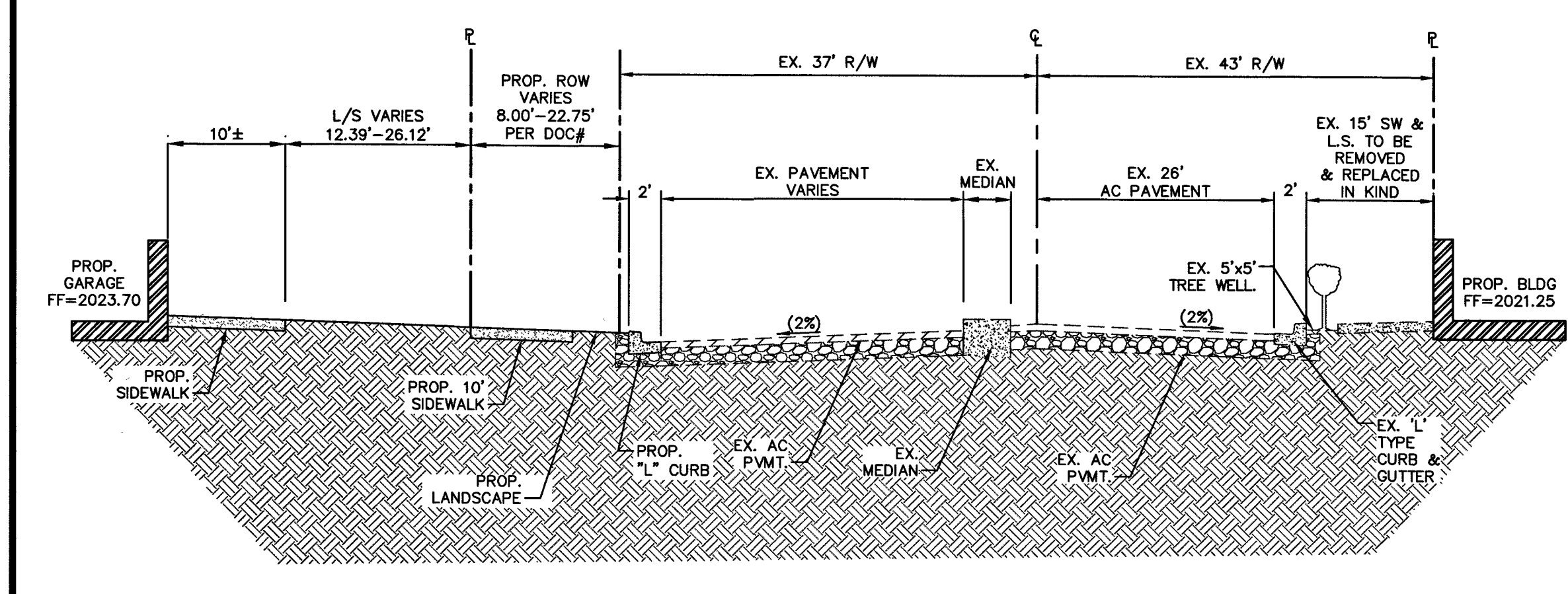
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08/12/19

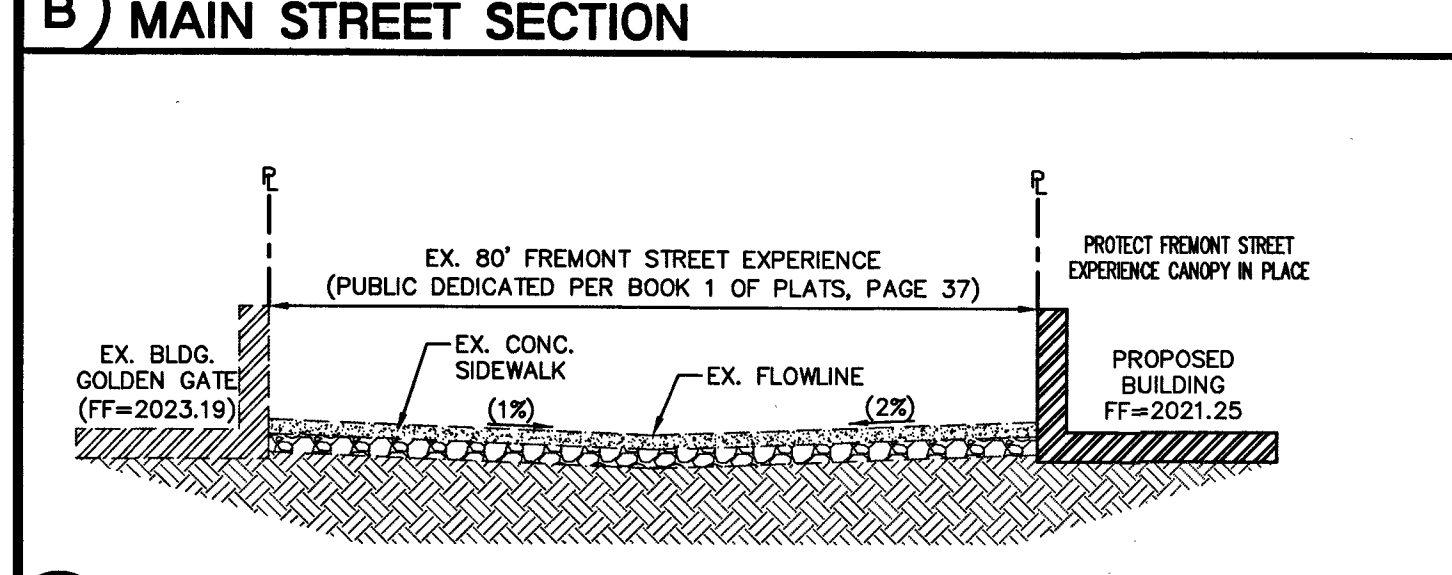
C6.01
SHEET 14 OF 15
CLV No. 107V752
L18-02490



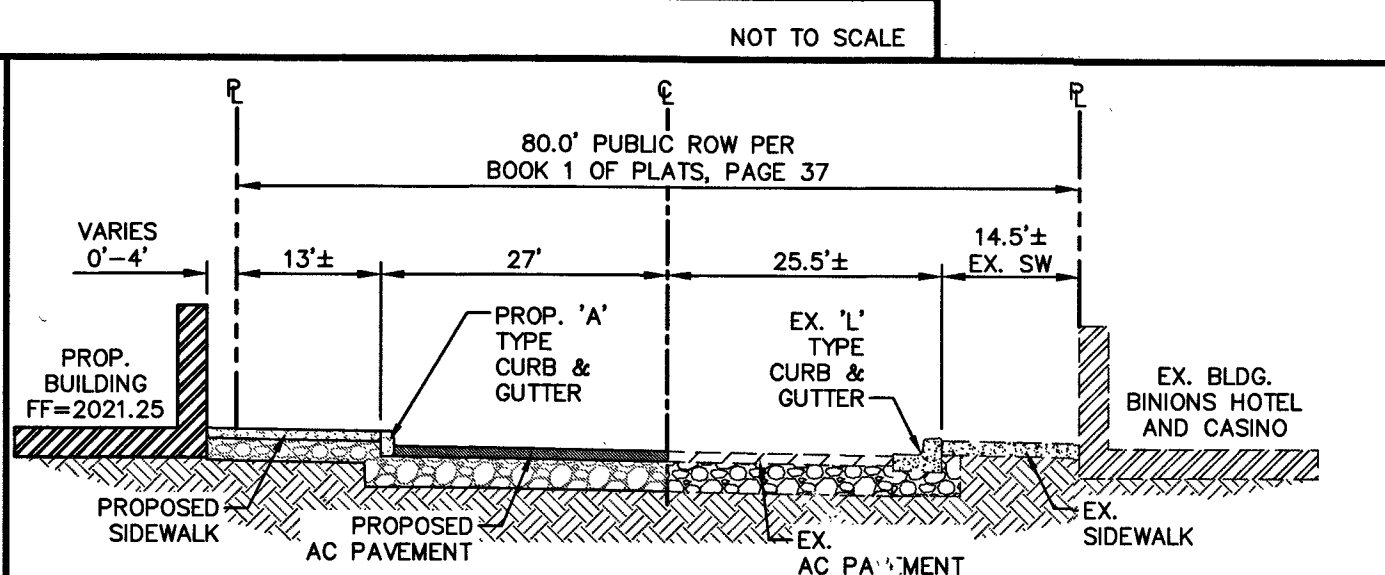
A OGDEN AVENUE SECTION NOT TO SCALE



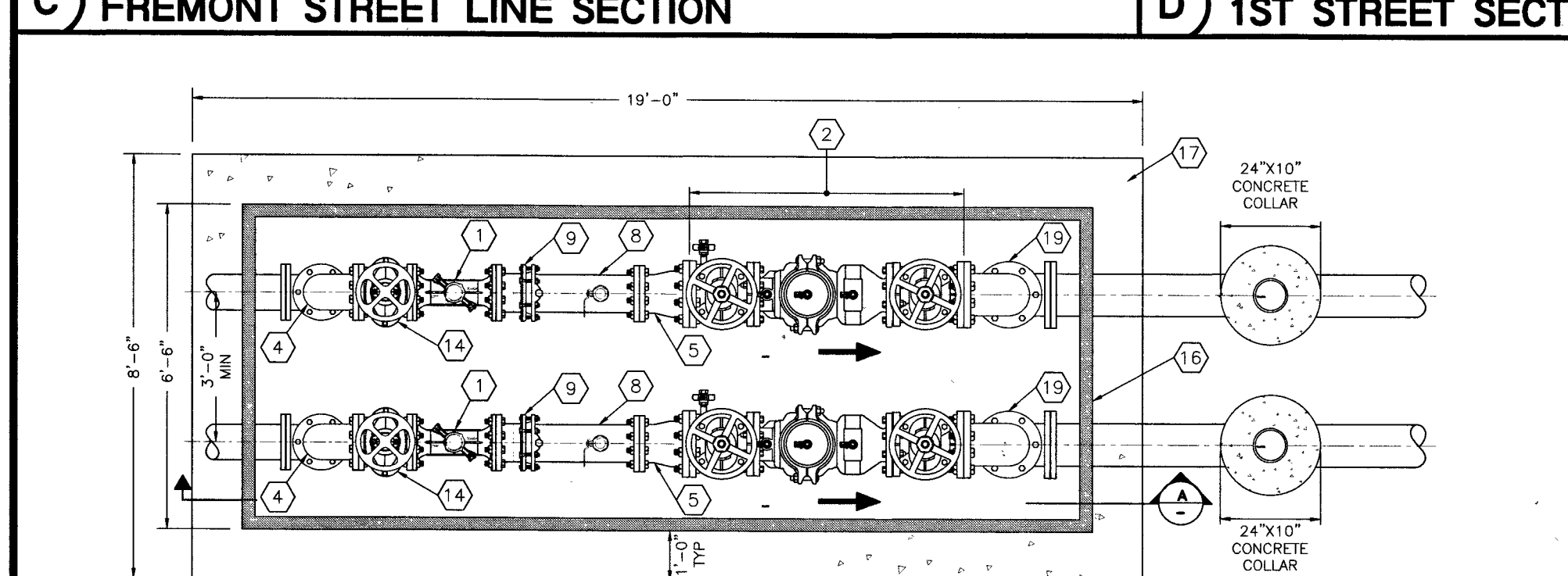
B MAIN STREET SECTION NOT TO SCALE



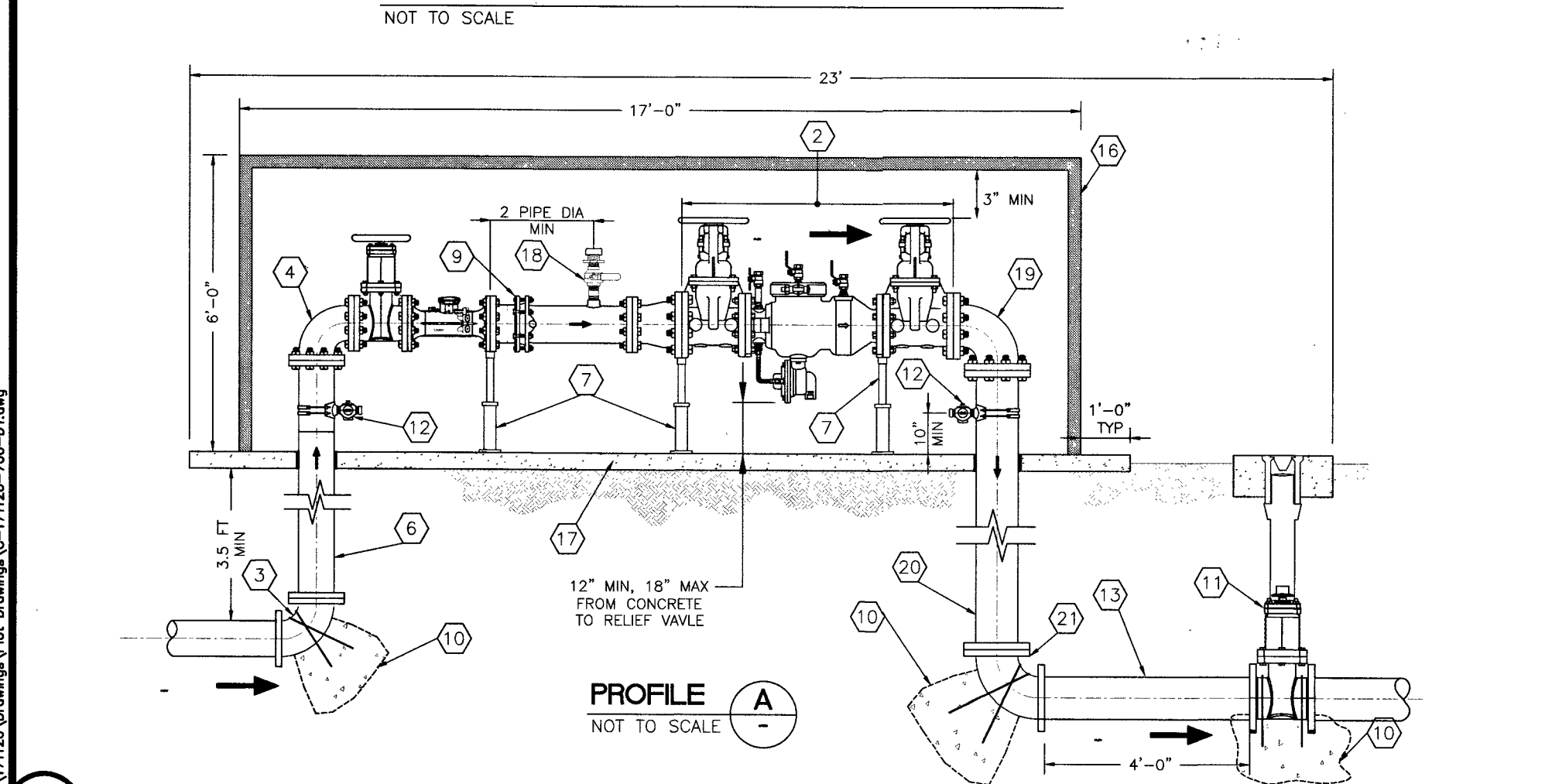
C FREMONT STREET LINE SECTION



D 1ST STREET SECTION



PLAN VIEW OF 8" METER ASSEMBLY WITH 10" RPPA NOT TO SCALE



7

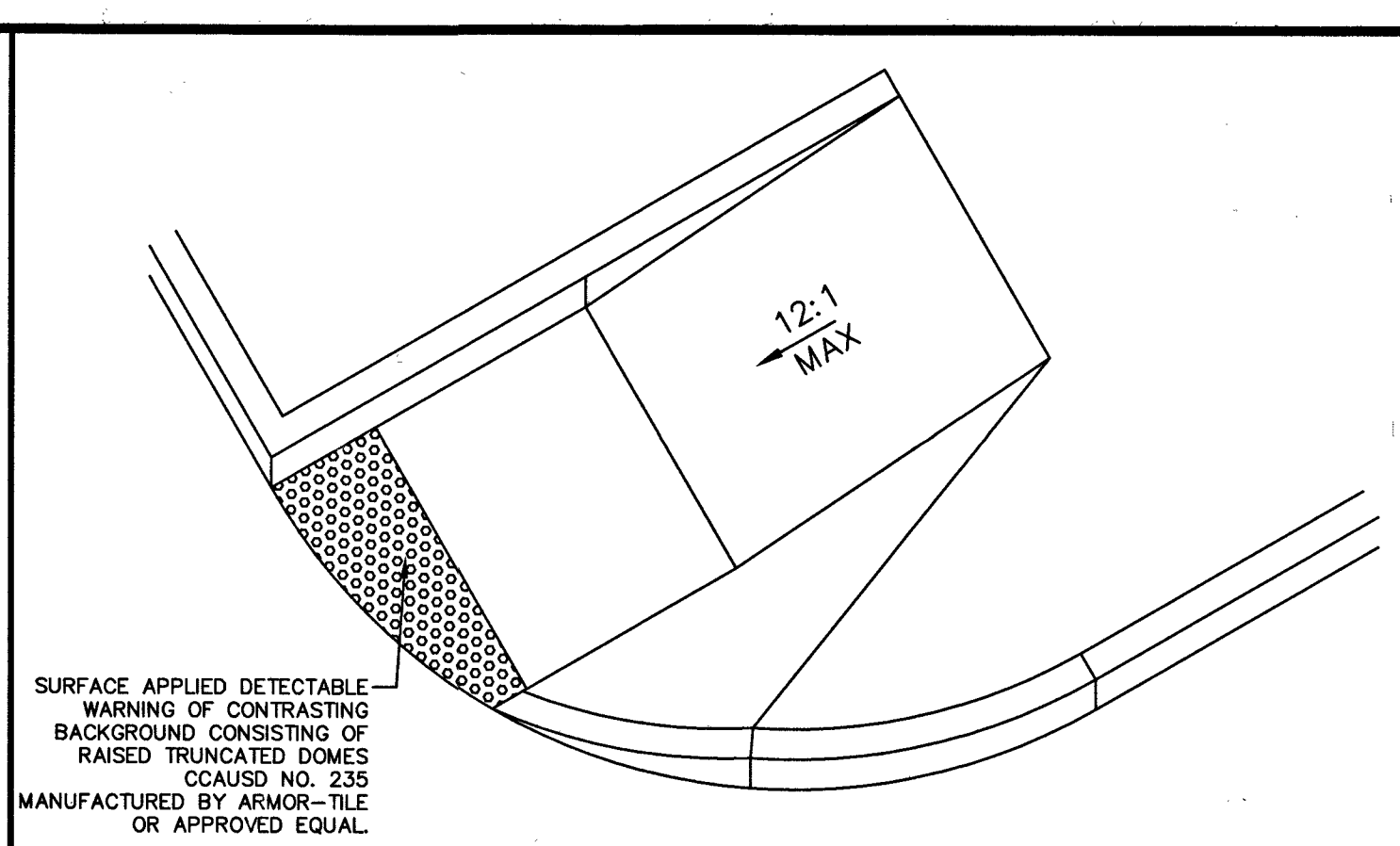
- MATERIAL LIST**
- 8" WATER METER (OCTAVE-ULTRASONIC)
 - APPROVED IN LINE 10" REDUCED PRESSURE PRINCIPLE ASSEMBLY RPPA (WITH NRS VALVES)
 - 8" PO X MJ RESTRAINT 90° BEND
 - 8" FLG X FLG 90° BEND
 - 10" X 8" FLG X FLG REDUCER
 - 8" FLG X PE DIP (CUT AS REQUIRED)
 - ADJUSTABLE PIPE SUPPORTS
 - 8" FLG X PE DIP SPOOL WITH 2" TEST PORT
 - 8" RPPA RESTRAINED FLANGED COUPLING ADAPTER
 - CONCRETE THRUST/ANCHOR BLOCK
 - PO X PO GATE VALVE TO MATCH PIPE SIZE
 - 2" SERVICE SADDLE AND 2" N.P.T. CORP STOP W/ BRASS CAP (BYPASS TO BE INSTALLED 45° OFFSET FROM FLOW)
 - 10" PE X PE PIPE SPOOL
 - FLG X FLG NRS GATE VALVE
 - NOT USED
 - INSULATED ENCLOSURE
 - CONCRETE PAD (4" THICK) WITH WELDED WIRE FABRIC, 4 x 4 - W1.4 x W1.4
 - 2" BALL VALVE WITH BRASS FIRE HOSE DOUBLE MALE NIPPLE 2" NPT X 2.5" NH ADAPTER AND BRASS CAP
 - 10" FLG X FLG 90° BEND
 - 10" FLG X PE DIP (CUT AS REQUIRED)
 - 10" PO X MJ RESTRAINT 90° BEND

DIMENSION NOTES:

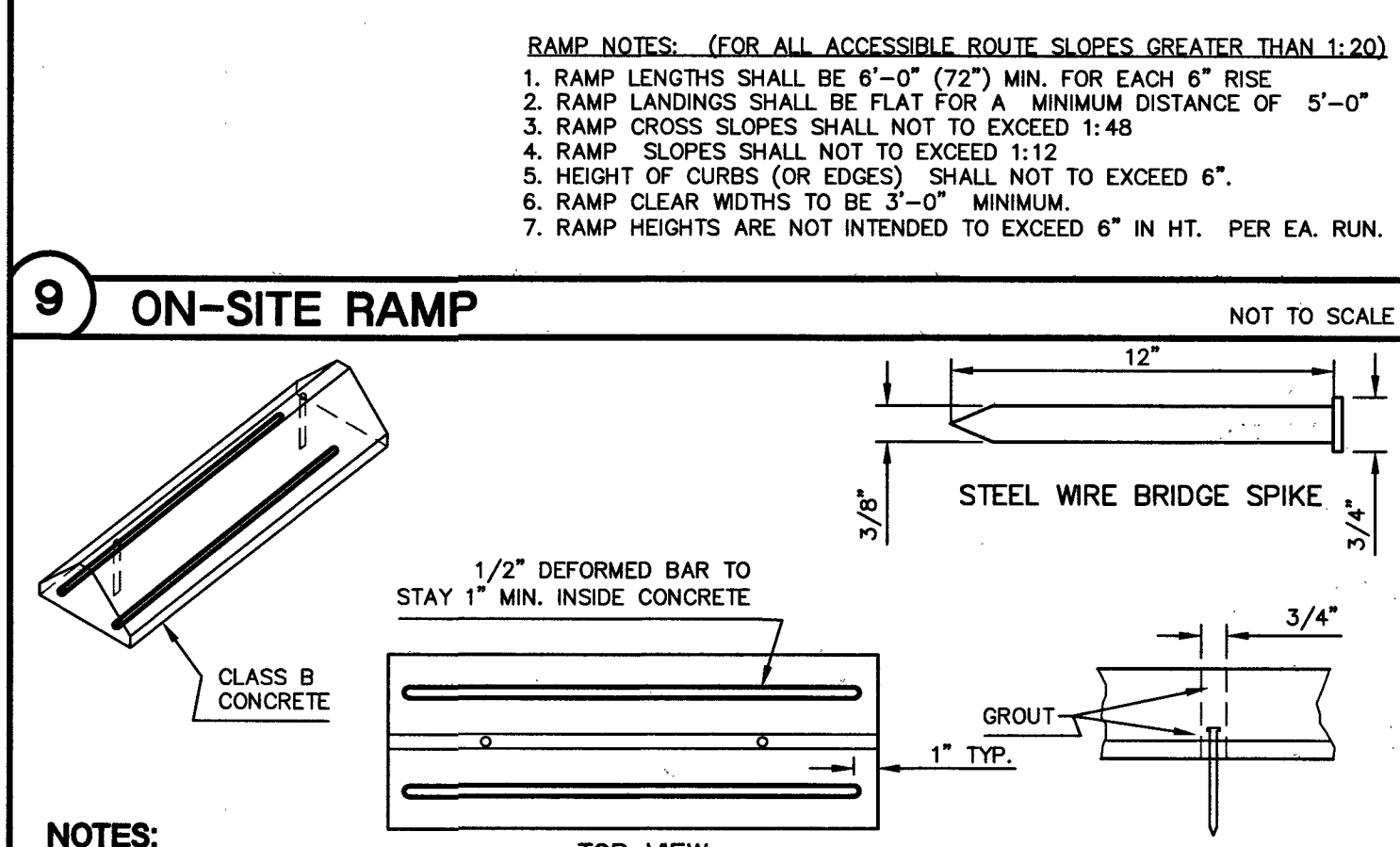
1. IF RPPA MODEL "WATTS LF909" IS USED, THE LENGTH OF THE ASSEMBLY GOES FROM 17FT TO 19FT, AND THE WIDTH GOES FROM 3.5FT TO 4FT.

APPROVED FOR CONSTRUCTION

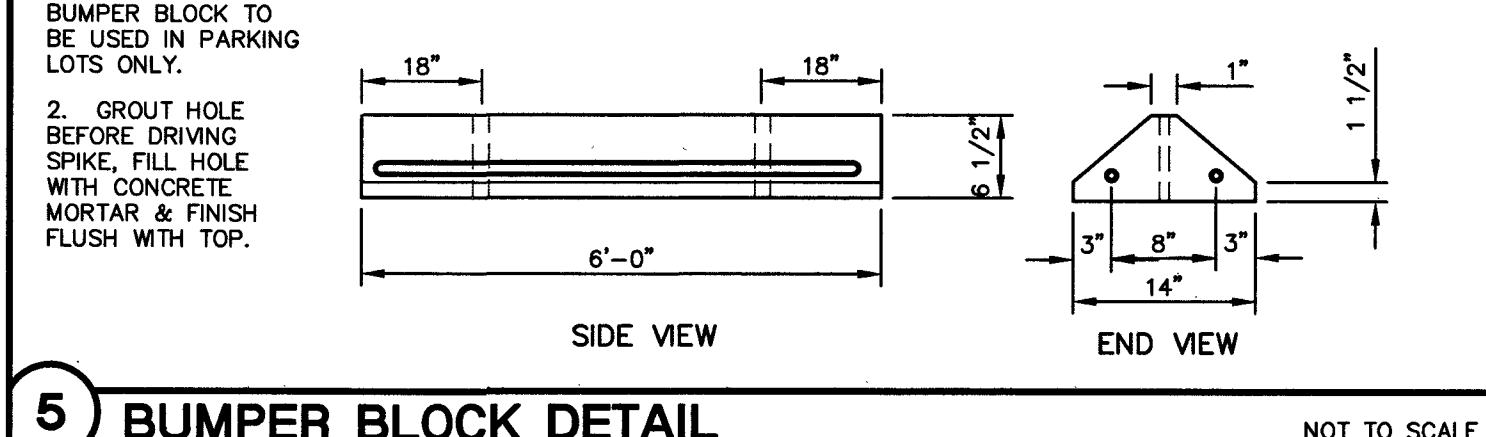
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT/No. 135386 FIRST APPROVED DATE: 5-14-19
LVWD APPROVED FIRE FLOW 4500 GPM/ONSITE 4500 GPM



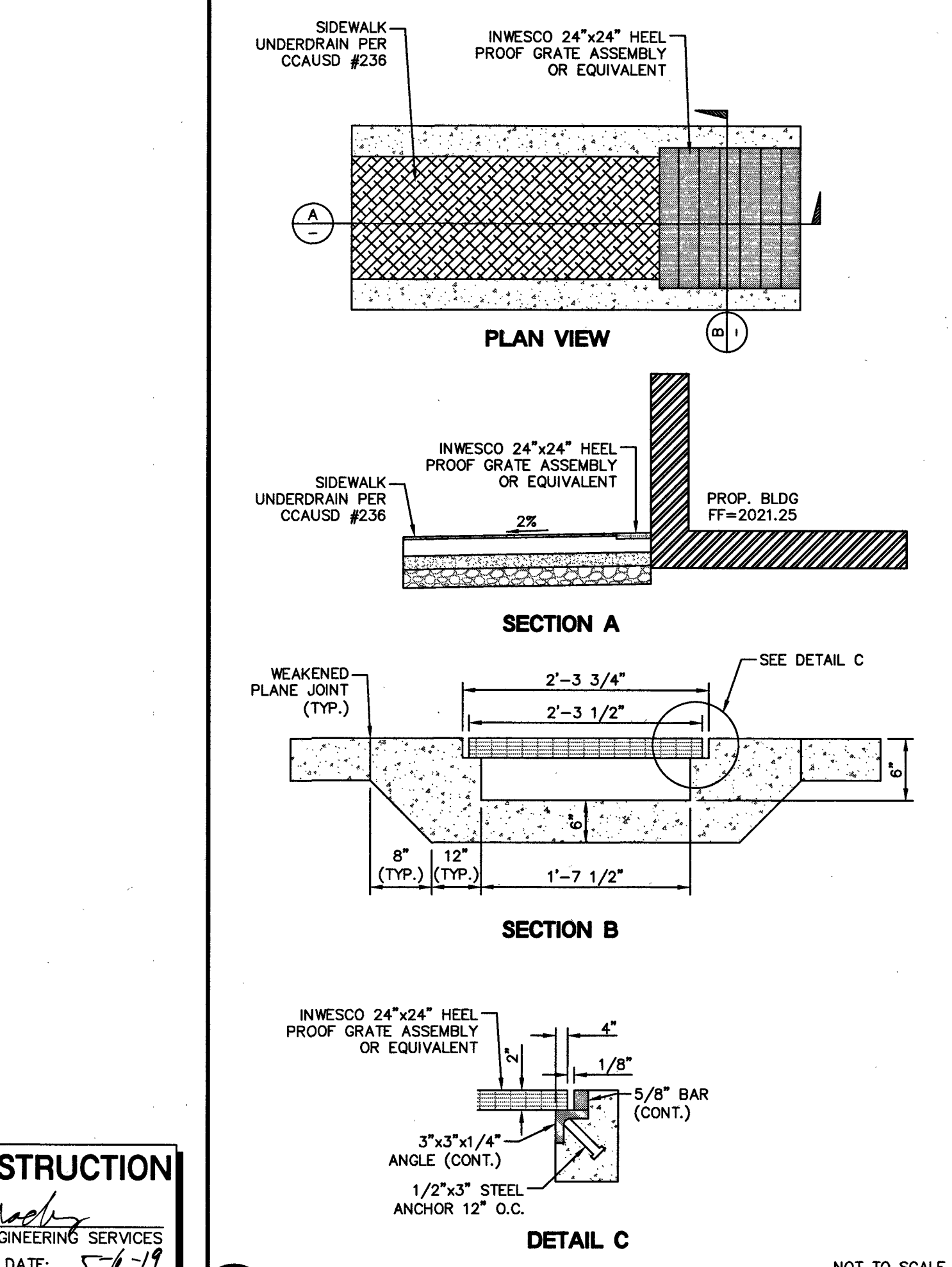
9 ON-SITE RAMP NOT TO SCALE



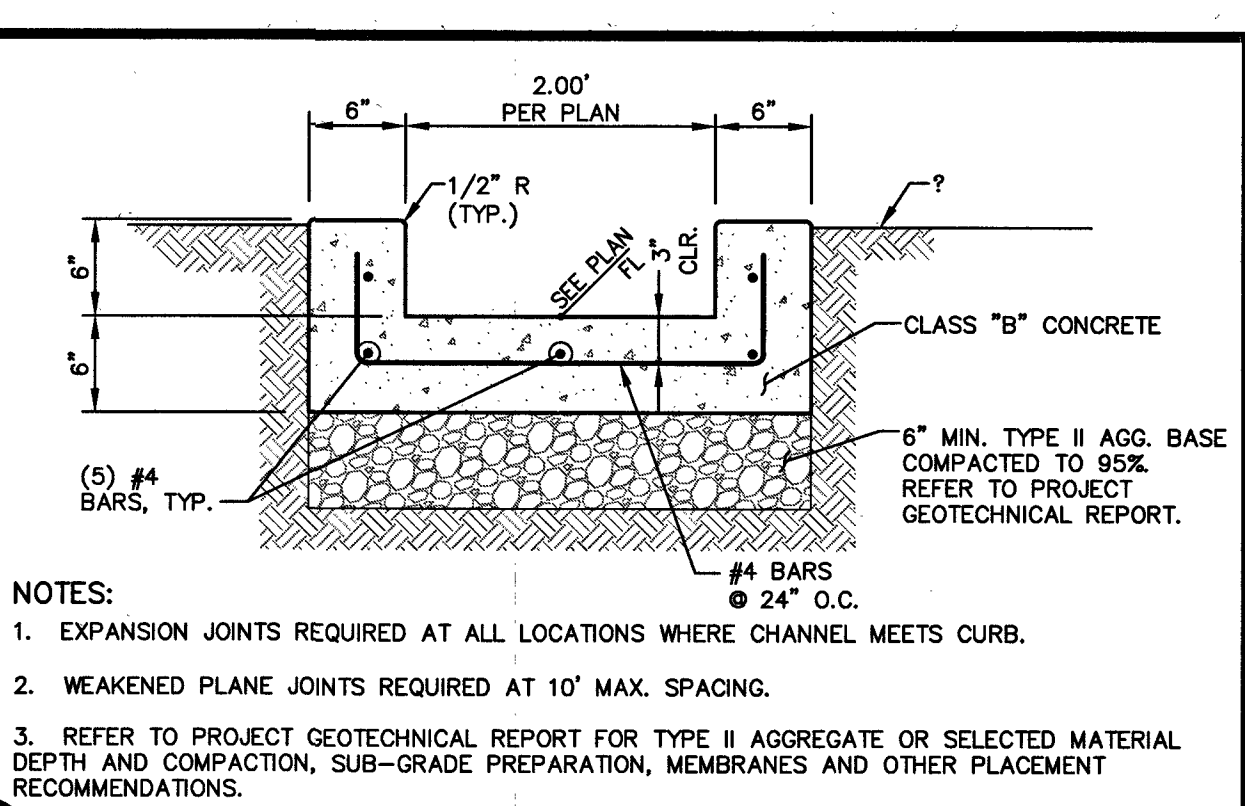
9 ON-SITE RAMP NOT TO SCALE



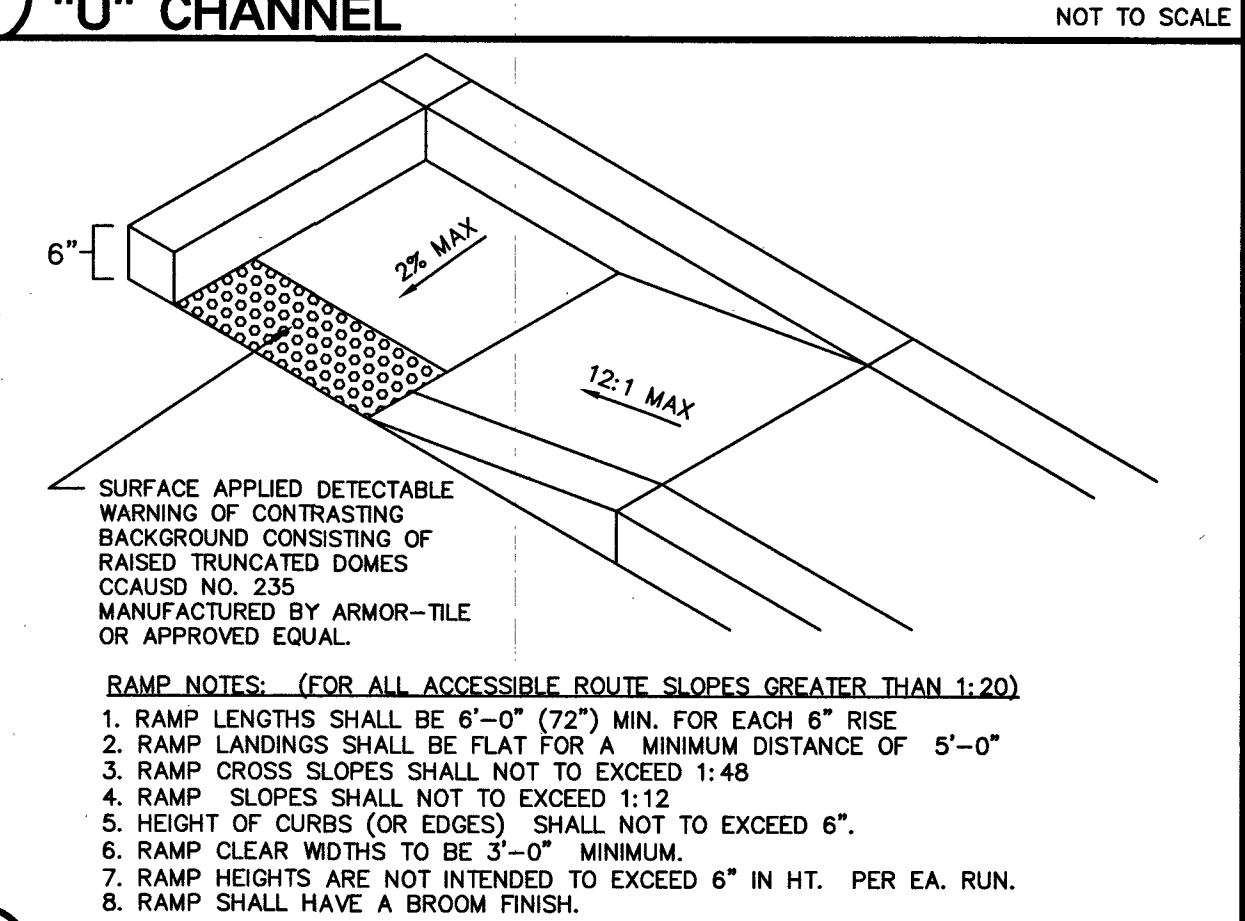
5 BUMPER BLOCK DETAIL NOT TO SCALE



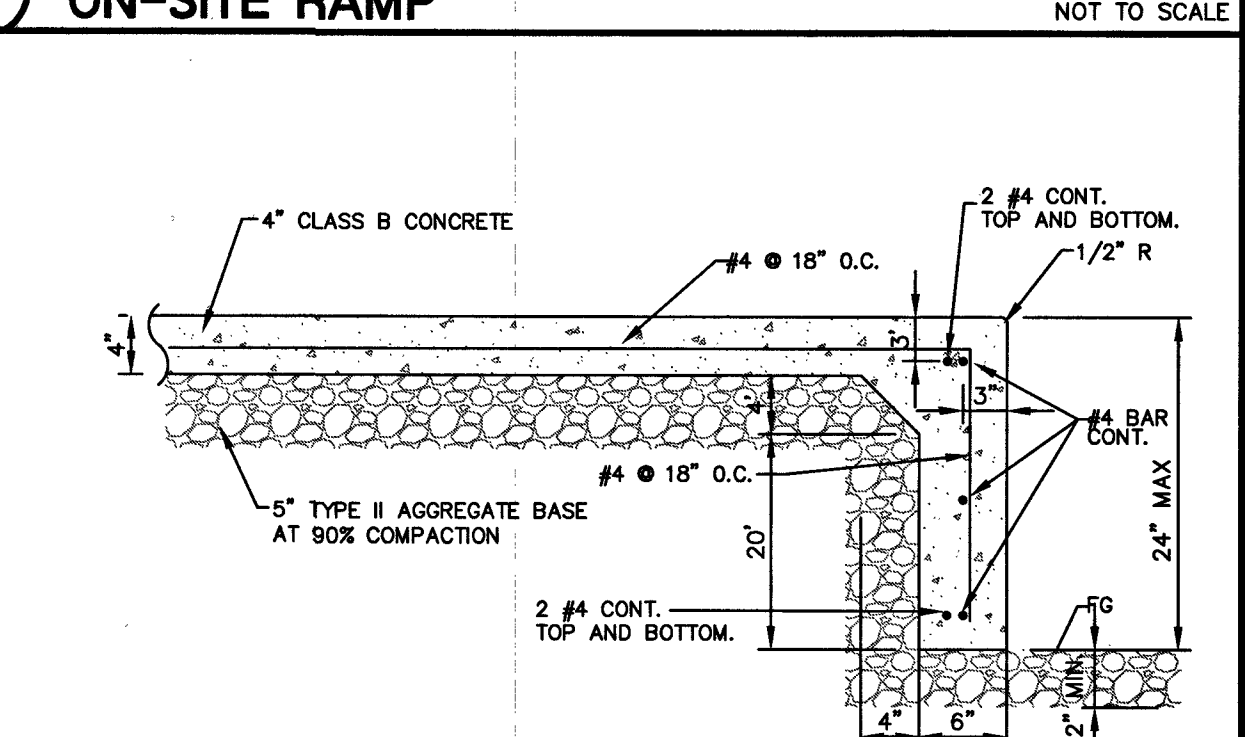
8 GRATE ASSEMBLY/SW UNDERDRAIN TRANSITION NOT TO SCALE



6 "U" CHANNEL NOT TO SCALE



4 ON-SITE RAMP NOT TO SCALE



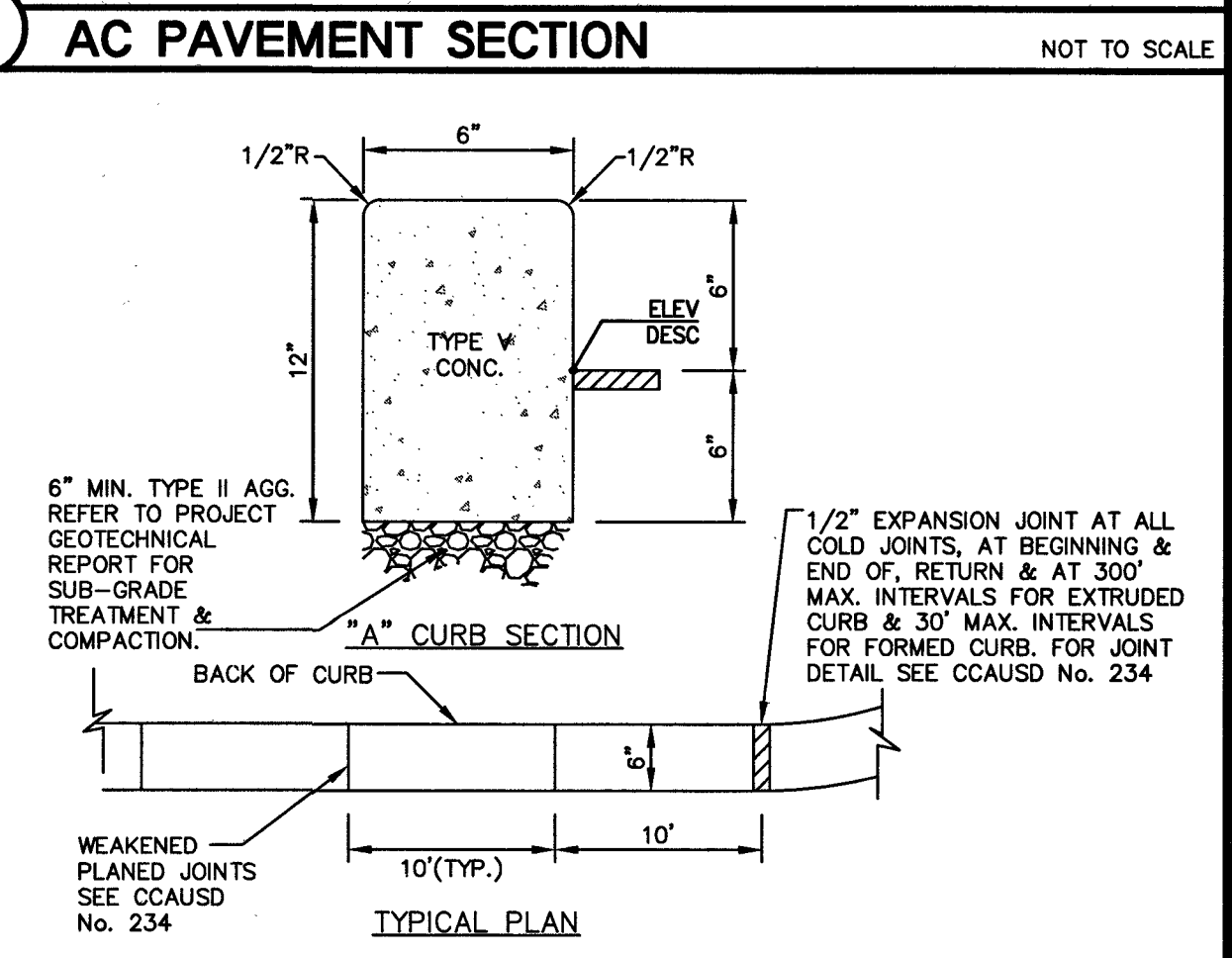
3 TURNED DOWN SIDEWALK NOT TO SCALE

PAVEMENT SECTION AS PROPOSED IN GEOTECHNICAL REPORT PREPARED BY: GES PROJECT NO. 20174217E1 DATED: May 7, 2018

TYPE OF TRAFFIC	ASPHALT (inches)	TYPE II BASE COURSE (inches)
AUTOMOBILE PARKING	3	7
MAIN CORRIDORS & HEAVY DUTY TRUCK	3	10

REFER TO PROJECT GEOTECHNICAL REPORT FOR ALL SUB-GRADE PREPARATION & COMPACTION.
NOTE: ALL AGGREGATE BASES SHALL BE COMPACTIONED PER GEOTECHNICAL REPORT.

2 AC PAVEMENT SECTION NOT TO SCALE



1 ON-SITE 'A' CURB NOT TO SCALE

Lochsa Engineering

6545 South Jones Blvd.
Las Vegas, NV 89118
Phone (702) 365-5912
Fax (702) 365-5917
www.lochsa.com

DETAIL SHEETS
DETAIL SHEET

18 FREMONT STREET HOTEL AND CASINO CITY OF LAS VEGAS

PROJ.#:135386 QS:139-34-NW

SHEET No. 171126

DATE: 04/08/19

SCALE: N/A

DRAWN BY: JWN

DESIGNED BY: NMG

CHECKED BY: GMM

GUY M. MORRIS
EXP. 12-31-19
CIVIL
No. 14526

04/08/19

SHEET No. **C7.01**

SHEET 15 OF 15

CLV No. 107V7521

L18-02490

1. THE HARDSCAPE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR ADHERING TO ALL THE REQUIREMENTS STATED UNDER THE GENERAL REQUIREMENTS AND CONDITIONS AS WELL AS THE SPECIFIC CRITERIA OUTLINED HEREIN AND ON THE LANDSCAPE DRAWINGS.
2. THE SCOPE OF WORK FOR THE HARDSCAPE CONTRACTOR FOR THIS PROJECT SHALL INCLUDE THE PROVISION OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ALL TASKS ASSOCIATED WITH THE HARDSCAPE (HS) INSTALLATION AS SHOWN ON THE DRAWINGS OR NOTED HEREIN. THE HARDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR REASONABLE ACCESS TO POWER AND POTABLE WATER SOURCES AS REQUIRED.
3. THE HARDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL WORK (INCLUDING DELIVERY, STORAGE AND DISPOSAL OF THEIR MATERIALS) IS PERFORMED IN COMPLIANCE WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THE WORK.
4. THE HARDSCAPE CONTRACTOR SHALL ASSIGN A QUALIFIED PROJECT MANAGER AND FIELD SUPERVISOR TO WORK DIRECTLY WITH THE LANDSCAPE ARCHITECT AND SUPERVISE THE WORK AT ALL TIMES THROUGH FINAL OWNER ACCEPTANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PROJECT MANAGER HAS A COMPLETE, CURRENT SET OF DOCUMENTS ON-SITE AT ALL TIMES.
5. THE HARDSCAPE CONTRACTOR FOR THIS PROJECT MUST BE ABLE TO DOCUMENT A MINIMUM OF FIVE (5) YEARS OF COMPARABLE EXPERIENCE IN THE INSTALLATION OF HARDSCAPE FOR PROJECTS OF SIMILAR SCALE, INTENSITY AND QUALITY. GENERAL CONTRACTOR MUST SUBMIT DOCUMENTATION TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO BID AWARD.
6. THE HARDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH EXISTING SITE CONDITIONS AND NOTIFYING THE OWNER IN WRITING OF ANY CONCERNS PRIOR TO COMMENCEMENT OF WORK. THIS EVALUATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, VERIFICATION OF SURFACE AND SUBSURFACE UTILITIES, GRADES, DIMENSIONS, AND SOIL CONDITIONS.
7. THE HARDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH PROJECT PLANS AND SCOPES OF WORK RELATED TO ASSOCIATED TRADES TO BE PERFORMED BY OTHERS IN ORDER TO IDENTIFY KEY COORDINATION ITEMS INCLUDING, BUT NOT LIMITED TO, SITE ACCESS, MATERIAL STORAGE, SCHEDULING AND SEQUENCING OF WORK. THE HARDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL SITE ISSUES WITH THE GENERAL CONTRACTOR.
8. THE HARDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT WORK, MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO THEIR ACTIVITIES. THE HARDSCAPE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY THAT MAY OCCUR AS A RESULT OF THEIR EXECUTION OF THEIR WORK.
9. THE HARDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE AREA, MATERIALS AND EQUIPMENT WITHIN THE LIMITS OF WORK IN A SAFE, NEAT AND ORDERLY MANNER. EXCESS MATERIALS AND DEBRIS ARE TO BE REMOVED FROM THE WORK AREA NO LESS THAN WEEKLY OR AS DIRECTED BY THE GENERAL CONTRACTOR.
10. THE HARDSCAPE CONTRACTOR SHALL COORDINATE ANY EXCAVATION IN THE VICINITY OF PRE-EXISTING OR NEWLY INSTALLED UTILITIES WITH THE GENERAL CONTRACTOR. IT IS THE RESPONSIBILITY OF THE HARDSCAPE CONTRACTOR TO NOTIFY ALL NECESSARY UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO DIGGING FOR FIELD VERIFICATION OF ALL UNDERGROUND UTILITIES AND OTHER ELEMENTS. THE CONTRACTOR MUST COORDINATE WITH THE GENERAL CONTRACTOR PRIOR TO INITIATING OPERATIONS EMERGENCY REPAIR PLANS AND ANY POSSIBLE SERVICE INTERRUPTION(S) ON-SITE AND OFF. THE HARDSCAPE CONTRACTOR SHALL BEAR THE SOLE RESPONSIBILITY OF ANY DAMAGE TO SUBSURFACE UTILITIES CAUSED BY THEIR WORK. RETURN OF SERVICES TO OFF-SITE AREAS (IF ANY) MUST BE IMMEDIATE.
11. THE HARDSCAPE CONTRACTOR MUST TAKE PRECAUTIONS TO PROTECT ALL EXISTING SITE ROADS, PARKING LOTS, CURBS AND UTILITIES FROM DAMAGE. THIS APPLIES NOT ONLY TO THE AREA WITHIN THE LIMITS OF WORK BUT ALSO ALONG ANY LOCAL ACCESS ROADS OR ROADWAYS.
12. THE HARDSCAPE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY MEASURES DURING CONSTRUCTION OPERATIONS TO PROTECT THE PUBLIC ACCORDING TO ALL APPLICABLE CODES AND RECOGNIZED LOCAL PRACTICES.
13. THE HARDSCAPE CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR TO ENSURE THAT TEMPORARY

THE HARDSCAPE CONTRACTOR SHALL USE THE COORDINATE GEOMETRY AND DIMENSIONS INDICATED ON THE SITE LAYOUT PLANS TO STAKE ALL SITE ELEMENTS, PAVEMENT AND PAVEMENT PATTERNS. FINAL LIMITS OF PAVING AND JOINTING PATTERNS MAY BE ADJUSTED IN THE FIELD AT THE DISCRETION OF THE OWNER.

34. THE HARDSCAPE CONTRACTOR IS REQUIRED TO PREPARE THE FOLLOWING MOCK-UPS FOR REVIEW AND APPROVAL A MINIMUM OF THIRTY (30) DAYS PRIOR TO INTENDED DATE OF INSTALLATION:

THE HARDSCAPE CONTRACTOR SHALL PREPARE A SHOP DRAWING FOR OWNER REVIEW AND APPROVAL THAT INDICATES THE SEQUENCE OF POURS AS WELL AS THE PROPOSED LOCATIONS OF FOR EACH TYPE OF PAVING JOINT (EXPANSION, CONTRACTION, CONSTRUCTION, SOLATION). THE DESIGN INTENT OF THE JOINTING

THE HARDSCAPE CONTRACTOR SHALL ENSURE THAT STANDARD CONCRETE PAVING FINISHES BE SLIP-RESISTANT WITH A MINIMUM COEFFICIENT OF FRICTION OF (0.5). IN AREAS IN WHICH WET CONDITIONS ARE ANTICIPATED (I.E. POOLS, SPAS, FOUNTAINS) A COEFFICIENT OF (0.6) IS REQUIRED.

107V7521 L18-02490

57. THE CONTRACTOR IS REQUIRED TO PROVIDE AND INSTALL ALL SITE FURNISHINGS AS SHOWN ON THE DRAWINGS AND/OR IN THE SPECIFICATIONS. THE CONTRACTOR'S RESPONSIBILITY IS INCLUSIVE OF ORDERING, PURCHASING, DELIVERY, UNPACKING, ASSEMBLING, INSTALLATION AND PROTECTION.
58. THE CONTRACTOR IS REQUIRED TO CONFIRM THE QUANTITY REQUIRED FOR EACH SITE FURNISHING ITEM WITH THE OWNER PRIOR TO PROCUREMENT. ANY INCREASE OR DECREASE IN ELEMENTS FROM THE QUANTITY SHOWN IN THE DRAWINGS WILL BE ADJUSTED ON A UNIT COST BASIS.
59. THE PRODUCT SPECIFICATIONS SHOWN ON THE DRAWINGS ARE FOR BIDDING PURPOSES. THE OWNER RESERVES THE RIGHT TO REVIEW AND APPROVE ALL SITE FURNISHINGS PRIOR TO PROCUREMENT. IF PRODUCT SPECIFICATION IS MODIFIED DURING REVIEW PROCESS CONTRACT WILL BE ADJUSTED ACCORDINGLY. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING TO THE OWNER FOR REVIEW NO LESS THAN 30 DAYS PRIOR TO INTENDED DATE OF ORDER.
 - A. MANUFACTURER'S DATA INCLUDING AT A MINIMUM; PHOTO, INSTALLATION RECOMMENDATIONS AND MAINTENANCE RECOMMENDATIONS.
 - B. SHOP DRAWINGS IDENTIFYING ALL MATERIAL SIZES, SHAPES, FINISH AND QUALITY OF ALL COMPONENTS.
 - C. COLOR SAMPLES
 - D. ONE FULL-SIZE SAMPLE OF EACH ELEMENT OR A MANUFACTURER'S LIST OF EXISTING LOCAL INSTALLATIONS THAT MAY BE REVIEWED IN PLACE BY THE OWNER.
 - E. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL SITE FURNISHINGS ARE DELIVERED TO THE PROJECT SITE WITH MANUFACTURER'S TAGS AND LABELS INTACT AND IN CLEAN, DRY LEGIBLE CONDITION. COPIES OF ALL SHIPPING TICKETS ARE TO BE SUBMITTED TO THE OWNER.
 - F. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING ALL SITE FURNISHINGS ARRIVING ON-SITE PRIOR TO ACCEPTING DELIVERY. INSPECTION IS TO VERIFY CORRECT PRODUCT AND QUANTITY AS WELL AS TO VISUALLY INSPECT FOR ANY DAMAGE, BLEMISHES OR DEFECTS.
 - G. UPON RECEIPT OF DELIVERY THE CONTRACTOR ASSUMES RESPONSIBILITY FOR STORING, HANDLING AND MAINTAINING SITE FURNISHINGS IN A MANNER TO PREVENT DEFECTS, DAMAGE, CRACKS, CHIPS, STAINS. FURNISHINGS SHALL BE COMPLETELY CLEAN AND FREE OF DAMAGES UPON FINAL PLACEMENT AND APPROVAL.
 - H. FINAL LOCATIONS OF SITE FURNISHINGS ON SITE ARE SUBJECT TO ADJUSTMENT AT THE DIRECTION OF THE OWNER. CONTRACTOR IS RESPONSIBLE FOR OBTAINING OWNER APPROVAL PRIOR TO INSTALLATION.
 - I. TO MINIMIZE RISK OF DAMAGE IT IS RECOMMENDED THAT NO SITE FURNISHINGS BE INSTALLED MORE THAN THIRTY DAYS PRIOR TO DATE OF PROJECT TURNOVER. INSTALLED SITE FURNISHING ARE TO BE COVERED AND CONSIDERED OFF-LIMITS TO CONSTRUCTION WORKERS.
 - J. ALL FURNITURE ANCHORS, FASTENINGS, FITTINGS AND MOUNTING HARDWARE ARE TO COMMERCIAL QUALITY STAINLESS STEEL. FASTENERS ARE TO BE VANDAL AND THEFT RESISTANT PIECES AND SHOULD BE CONCEALED, RECESSED, CAPPED OR PLUGGED.
 - K. AT THE TIME OF PROJECT CLOSE-OUT THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A MINIMUM OF TWENTY PIECES OF EACH ANCHORING FASTENER TO BE HELD AS ATTIC STOCK FOR REPLACEMENT.
 - L. INSTALL ALL MATERIALS PER MANUFACTURERS SPECIFICATION.
60. ALL STONE REQUIRED MUST BE PURCHASED FROM THE SAME LOCATION.
61. STONE PAVING IS TO BE SET INTO THIN-SET MORTAR SETTING BED UNLESS OTHERWISE DOCUMENTED IN PLANS.
62. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL STONE PAVING IS DELIVERED TO THE PROJECT SITE WITH MANUFACTURER'S TAGS AND LABELS INTACT AND IN CLEAN, DRY LEGIBLE CONDITION. COPIES OF ALL SHIPPING TICKETS ARE TO BE SUBMITTED TO THE OWNER.
63. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING ALL STONE PAVING ARRIVING ON-SITE PRIOR TO ACCEPTING DELIVERY. INSPECTION IS TO VERIFY CORRECT PRODUCT

2. CONTRACTOR SHALL VERIFY PRESSURE PRIOR TO

107V7521 L18-02490

49. THE LANDSCAPE CONTRACTOR SHALL INSTALL PLANT MATERIALS USING THE BEST HORTICULTURAL PRACTICES:

- A. PROTECT PLANT MATERIAL FROM DAMAGE DURING DELIVERY, STAGING AND INSTALLATION.
- B. DO NOT BEGIN INSTALLATION OF SHRUB AND GROUNDCOVER MATERIALS PRIOR TO COMPLETION OF IRRIGATION INSTALLATION AND FINISH GRADING,
- C. DO NOT INSTALL PLANT MATERIALS IN TEMPERATURES LESS THAN 32° FAHRENHEIT.
- D. DO NOT INSTALL PLANT MATERIALS IN WINDS IN EXCESS OF 31 MILES PER HOUR.
- E. DO NOT WILLFULLY INSTALL PLANT MATERIAL IF DEEMED SITE CONDITIONS WILL IMPEDE THE ABILITY OF PLANT MATERIAL TO THRIVE WITHOUT NOTIFYING PROJECT MANAGER OF CONCERNS PRIOR TO INSTALLATION.
- F. PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS INCLUSIVE OF ALL PERMITS AND INSPECTIONS REQUIRED BY FEDERAL, STATE AND LOCAL JURISDICTIONS.
- G. THE USE OF CABLES AND CHAINS FOR THE LIFTING OF TREES IS PROHIBITED. TREES ARE TO LIFTED USING NYLON STRAPS A MINIMUM OF 4 IN WIDTH. WRAP TRUNKS TO PROTECT FROM SCRAPING AND SCARRING.
- H. THE "CHOKE" STRAPPING METHOD FOR LIFTING TREES IS PROHIBITED.
- I. DO NOT DROP PLANT MATERIAL.
- J. LIMIT THE AMOUNT OF PLANTS TO BE INSTALLED PER DAY TO THOSE THAT CAN ADEQUATELY BE WATERED IN THE SAME DAY.
- K. CAREFULLY REMOVE CONTAINERIZED PLANTS FROM THEIR CANS TO AVOID BREAKING THE ROOT BALL. CONTAINERS SHOULD ONLY BE REMOVED IMMEDIATELY PRIOR TO INSTALLATION AND PLANTS SHOULD BE IMMEDIATELY WATERED AFTER PLACEMENT.
- L. REMOVE BURLAP FROM AT LEAST THE TOP THIRD OF THE ROOT BALL FOR ALL B&B MATERIAL. REMOVE WIRE BASKETS TO A MINIMUM DEPTH OF 20 IN.
- M. PLANT MATERIAL MUST BE INSTALLED AT CORRECT ELEVATION IN RELATION TO FINISH GRADE AS INDICATED ON THE PLANTING DETAILS AFTER SETTTLING. PLANTS SET AT INCORRECT ELEVATIONS WILL NEED TO BE RAISED OR LOWERED ACCORDINGLY AT NO ADDITIONAL COST TO THE PROJECT MANAGER.
- N. SET FERTILIZER TABLETS ON TOP OF ROOT BALL FOR ALL TREES LAID OUT FOR PLANTING TO ALLOW PROJECT MANAGER TO CONFIRM CORRECT AMOUNT. SET TABLETS AT A DEPTH EQUAL TO ½ THE ROOT BALL WHEN INSTALLED.
- O. PLANTING PITS FOR TREES AND SHRUBS MUST BE EXCAVATED TO THE DIMENSIONS SPECIFIED ON THE PLANTING DETAILS. FOLLOWING PLANTING AREA IMMEDIATELY SURROUNDING PLANT IS TO BE TAMPED FIRM AND USE WATER JET TECHNIQUE TO REMOVE ALL AIR POCKETS REPEATING AS REQUIRED.
- P. APPLY RETWETTING AGENT TO THE SURFACE OF ALL PLANT PITS FOR TREES AND SHRUBS PER MANUFACTURER'S RECOMMENDATIONS.
- Q. APPLY MULCH IN EVEN LAYER TO 3 IN MIN. DEPTH. DO NOT PLACE MULCH WITHOUT THE APPROVAL OF THE PROJECT MANAGER THAT WEED REMOVAL AND FINE GRADING REQUIREMENTS HAVE BEEN MET.
- R. CONTINUOUSLY MONITOR STATUS OF INSTALLED MATERIALS AND MAKE MODIFICATIONS, CLEAN-UPS AND REPLACEMENTS AS REQUIRED.

FINE GRADING NOTES

- 1. THE LANDSCAPE AREAS WITHIN THE LIMITS OF WORK SHOULD BE ROUGH GRADED TO WITHIN +/- 8 - 10" OF FINISH GRADE IN SHRUB AREAS AND +/- 1.5" IN SOD AREAS PRIOR TO BEGINNING PLANT INSTALLATION.
- 2. FINISHED GRADE IN PLANTING AREAS SHALL BE HELD BE 2 IN BELOW THE FINISHED ELEVATIONS SHOWN FOR ALL ADJACENT HARDSCAPE SURFACES.
- 3. ALL FILL REQUIRED SHALL BE CLEAN, WELL DRAINING SOIL. FILL SHALL BE CLEAN AND FREE OF ALL MATERIAL HARMFUL TO PLANT GROWTH AND DELETERIOUS MATERIAL SUCH AS ROCKS (LARGER THAN 2 IN DIA.), COMPACTED CLAY, ROADBED OR SURFACING MATERIAL, MUCK, ROOTS, BRANCHES, ETC.
- 4. FINAL CONTOURING WITHIN PLANTING AREAS SHALL BE HAND RAKED TO PROVIDE SMOOTH, CONTINUOUS ARCS EVEN IN TRANSITION AND VOID OF DEPRESSIONS AND SURFACE IRREGULARITIES. REPAIR ANY SCARRING CAUSED BY EROSION DURING THE COURSE OF CONSTRUCTION.
- 5. THE LANDSCAPE CONTRACTOR IS TO ENSURE THAT THEIR WORK DOES NOT ADVERSELY IMPACT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS.
- 6. GRADING IN ALL PLANTING AND HARDSCAPE AREAS OF THE PROJECT SHALL POSITIVELY DRAIN TO DRAINAGE STRUCTURES INDICATED ON THE SITE GRADING AND CIVIL ENGINEERING PLANS.
- 7. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR

8. THE LANDSCAPE CONTRACTOR IS TO PERFORM SAMPLE PERCOLATION TEST BY EXCAVATING TREE PITS TO THEIR FULL DEPTHS AND FILLING COMPLETELY TO FINISH GRADE. PIT SHOULD DRAIN TO ½ DEPTH WITHIN TWO HOURS AND ENTIRELY WITHIN EIGHT HOURS. IF PITS FAIL TO SATISFY THESE REQUIREMENTS THE LANDSCAPE CONTRACTOR MUST NOTIFY THE PROJECT MANAGER IMMEDIATELY.
9. THE LANDSCAPE CONTRACTOR IS TO REMAIN VIGILANT IN IDENTIFYING CONDITIONS THAT COULD ADVERSELY EFFECT ABILITY OF LANDSCAPE MATERIAL TO THRIVE. CONDITIONS TO BE MONITORED INCLUDE, BUT ARE NOT LIMITED TO, THE PRESENCE OF HARD-PAN, RUBBLE, ROAD BASE, CONSTRUCTION DEBRIS, IMPERMEABLE SOILS, CHEMICAL SPILLS AND WASH-OUTS.
10. SHOULD THE CONSTRUCTION DICTATE THAT ANY TREE BE INSTALLED PRIOR TO THE COMPLETION OF THE ROUGH GRADING ACTIVITIES THE LANDSCAPE CONTRACTOR SHALL RELY ON A SURVEYED ELEVATION BASED ON A CONFIRMED BENCHMARK TO SET THE TREE(S) WITH THE CORRECT RELATIONSHIP TO FINISH GRADE.

1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE THE PROJECT MANAGER WITH ADVANCE NOTICE FOR THE FOLLOWING SITE VISITS WITHIN THE TIME FRAME INDICATED. IT IS THE RESPONSIBILITY OF THE CONSTRUCTION MANAGER TO VERIFY THE STATUS OF THE LANDSCAPE WORK PRIOR TO FORWARDING REQUEST TO PROJECT MANAGER.
 - A. PRECONSTRUCTION CONFERENCE: 7 DAYS
 - B. FINAL GRADE REVIEW: 72 HOURS
 - C. PLANT MATERIAL REVIEW: 72 HOURS
 - D. PLANT LAYOUT REVIEW: 72 HOURS
 - E. PREMULCH REVIEW: 72 HOURS
 - F. PRE-PUNCH COURTESY REVIEW: 72 HOURS
 - G. PUNCH LIST (SUBSTANTIAL COMPLETION) REVIEW: 7 DAYS
 - H. FINAL WALK-THROUGH: 7 DAYS

1. THE LANDSCAPE CONTRACTOR IS REQUIRED TO SUBMIT EACH OF THE FOLLOWING TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL A MINIMUM OF THIRTY (30) DAYS PRIOR TO BEGINNING WORK:
 - A. DOCUMENTATION OF LANDSCAPE CONTRACTOR'S QUALIFICATIONS.
 - B. DOCUMENTATION OF LANDSCAPE SUPERVISOR'S QUALIFICATIONS.
2. THE LANDSCAPE CONTRACTOR IS REQUIRED TO SUBMIT EACH OF THE FOLLOWING TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL A MINIMUM OF THIRTY (30) DAYS PRIOR TO INTENDED DATE OF USE:
 - A. DOCUMENTATION OF PLANT NURSERY QUALIFICATIONS.
 - B. TEST REPORTS AND RECOMMENDATIONS FROM CERTIFIED TESTING LABORATORY.
 - C. ONE QUART SAMPLES OF EXISTING SITE SOIL FROM EACH SAMPLE AREA.
 - D. ONE QUART SAMPLES OF EACH SOIL AMENDMENT (IF ANY).
 - E. ONE QUART SAMPLES OF EACH AMENDED SOIL (IF ANY).
 - F. ONE QUART SAMPLES OF EACH MULCH TYPE SPECIFIED.
 - G. ONE QUART SAMPLE OF PEAT.
 - H. ONE QUART SAMPLES OF EACH BACKFILL MIX.
 - I. ONE QUART SAMPLE OF ANY IMPORTED FILL MATERIAL (IF ANY).
 - J. MANUFACTURER'S PRODUCT DATA AND RECOMMENDED APPLICATION RATES FOR ALL FERTILIZERS.
 - K. TEST REPORTS FROM CERTIFIED LABORATORY ON AMENDED SOILS.
 - L. MANUFACTURER'S CERTIFICATE OF CHEMICAL COMPOSITION FOR ALL FERTILIZERS INCLUDING PERCENTAGE AND DERIVATION OF NITROGEN, PHOSPHORUS, POTASSIUM AND MICRO-NUTRIENTS.
 - M. WRITTEN DOCUMENTATION OF WEED CONTROL PROGRAM.
 - N. PROPOSED SEQUENCE AND DURATION OF INSTALLATION BY ZONE.
 - O. WRITTEN PLAN FOR EMERGENCY UTILITY SERVICE REPAIR.

A. 'AS-BUILT' RECORD DOCUMENTS OF INSTALLATION (3 SETS) IDENTIFYING ANY DEVIATIONS FROM CONSTRUCTION PLANS. THESE PLANS ARE TO BE UPDATED BY THE CONTRACTOR AT LEAST WEEKLY THROUGHOUT THE CONSTRUCTION PERIOD FOR INFORMAL PROGRESS REVIEW BY THE PROJECT

1. ALUMINUM SULFATE: SUITABLE FOR HORTICULTURAL PURPOSES, SHALL BE RECOGNIZED MANUFACTURER'S STANDARD, COMMERCIAL GRADE.
2. ANTI-DESSICANT: 'WILT-PRUF', 'DOWWAX', 'FOLIGARD' OR PROJECT MANAGER APPROVED EQUAL. APPLY BE MANUFACTURER'S RECOMMENDATIONS.
3. BURLAP: BURLAP USED IN ALL 'B&B' NURSERY STOCK MUST BE OF 100% BIODEGRADABLE, NATURAL FIBER PER ANSI Z-60.1. ABSOLUTELY NO SYNTHETIC FABRIC (I.E. LENO) WILL BE PERMITTED. ALL B&B MATERIAL SHALL BE SOURCED FROM NURSERIES ASSOCIATED WITH 'ROOTS PLUS'.
4. DOLOMITE: GROUND LIMESTONE CONTAINING NO LESS THAN 85% OF TOTAL CARBONATE AND GROUND TO A SIZE SUCH THAT 50% WILL PASS THROUGH A 100 MESH SIEVE AND 90% WILL PASS THROUGH A 200 MESH SIEVE.
5. FERTILIZER TABLETS: 3/4 OUNCE, SLOW RELEASE, 'AGRIFORM' PLANTING TABLET AS MANUFACTURED BY SIERRA CHEMICAL COMPANY THAT CONSISTS OF THE FOLLOWING PERCENTAGES BY WEIGHT : 20% NITROGEN, 10% PHOSPHORIC ACID AND 5% POTASH. APPLY AT A RATE PER MANUFACTURER'S RECOMMENDATION OR THE FOLLOWING MINIMUMS:
 - A. A) ONE TABLET PER 1/2 IN OF TREE CALIPER.
 - B. B) ONE TABLET PER 1 GALLON SHRUB CONTAINER.
 - C. C) TWO TABLETS PER 2 GALLON SHRUB CONTAINER.
 - D. D) THREE TABLETS PER 5 GALLON SHRUB CONTAINER.
 - E. E) FOUR TABLETS PER 7 GALLON SHRUB CONTAINER.
 - F. F) FIVE TABLETS PER 10 GALLON SHRUB CONTAINER.

8. MULCH: CONTRACTOR TO SUBMIT SAMPLE IN ONE QUART BAG OF LOCALLY USED MULCH. MUST BE FREE OF WEED, SEED, FUNGUS, ROCKS, HERBICIDES AND OTHER DELETERIOUS MATERIALS. BALED SPECIFICALLY FOR HORTICULTURAL USE.
9. OSMOCOTE: TIME CONTROL RELEASE FERTILIZER AS MANUFACTURED BY SIERRA CHEMICAL COMPANY.
10. PEAT: MILLED CANADIAN SPAGNUM PEAT, MIN. 90% ORGANIC, LOW SALT, LOW ALKALINITY, LIGHT BROWN AND FIBROUS, FREE OF ROCKS AND EXCESSIVE STICKS. CONSISTENT pH LEVEL BETWEEN 4.0 AND 5.0. HAVING NO PARTICLES GREATER THAN 1/2 IN DIAMETER.

20. REWETTING AGENT: 'SATURAID' AS MANUFACTURED BY FLORIKA E.S.A. CORP.

107V7521 L18-02490

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL THE REQUIREMENTS STATED UNDER GENERAL REQUIREMENTS AND CONDITIONS AS WELL AS THE SPECIFIC CRITERIA OUTLINED HEREIN AND ON THE LANDSCAPE DRAWINGS.
2. THE SCOPE OF WORK FOR THE LANDSCAPE CONTRACTOR FOR THIS PROJECT SHALL INCLUDE THE PROVISION OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ALL TASKS ASSOCIATED WITH THE LANDSCAPE AND IRRIGATION INSTALLATION AS SHOWN ON THE DRAWINGS OR NOTED HEREIN. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE CONSTRUCTION MANAGER REASONABLE ACCESS TO POWER AND POTABLE WATER SOURCES AS REQUIRED.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL WORK (INCLUDING DELIVERY, STORAGE AND DISPOSAL OF THEIR MATERIALS) IS PERFORMED IN COMPLIANCE WITH APPLICABLE JURISDICTIONAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS ASSOCIATED WITH THE WORK
4. THE LANDSCAPE CONTRACTOR SHALL ASSIGN A QUALIFIED PROJECT MANAGER AND FIELD SUPERVISOR TO WORK DIRECTLY WITH THE LANDSCAPE ARCHITECT AND SUPERVISE THE WORK AT ALL TIMES THROUGH FINAL PROJECT MANAGER ACCEPTANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PROJECT MANAGER HAS A COMPLETE, CURRENT SET OF DOCUMENTS ON-SITE AT ALL TIMES.
5. THE LANDSCAPE CONTRACTOR FOR THIS PROJECT MUST BE ABLE TO DOCUMENT A MINIMUM OF FIVE (5) YEARS OF COMPARABLE EXPERIENCE IN THE INSTALLATION OF PLANT MATERIAL FOR PROJECTS IN THE PROJECT AREA OF SIMILAR SCALE, INTENSITY AND QUALITY. CONSTRUCTION MANAGER MUST SUBMIT DOCUMENTATION TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO BID AWARD.
6. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH EXISTING SITE CONDITIONS AND NOTIFYING THE PROJECT MANAGER IN WRITING OF ANY CONCERNS PRIOR TO COMMENCEMENT OF WORK. THIS EVALUATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, VERIFICATION OF SURFACE AND SUBSURFACE UTILITIES, GRADES, DIMENSIONS AND SOIL CONDITIONS.
7. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH PROJECT PLANS AND SCOPES OF WORK RELATED TO ASSOCIATED TRADES TO BE PERFORMED BY OTHERS IN ORDER TO IDENTIFY KEY COORDINATION ITEMS INCLUDING, BUT NOT LIMITED TO, SITE ACCESS, MATERIAL STORAGE, SCHEDULING AND SEQUENCING OF WORK. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL SITE ISSUES WITH THE CONSTRUCTION MANAGER.
8. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT WORK, MATERIALS AND EQUIPMENT FROM DAMAGE DUE TO THEIR ACTIVITIES. THE LANDSCAPE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY THAT MAY OCCUR AS A RESULT OF THEIR EXECUTION OF THEIR WORK.
9. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE AREA, MATERIALS AND EQUIPMENT WITHIN THE LIMITS OF WORK IN A SAFE, NEAT AND ORDERLY MANNER. EXCESS MATERIALS AND DEBRIS ARE TO BE REMOVED FROM THE WORK AREA NO LESS THAN WEEKLY OR AS DIRECTED BY THE CONSTRUCTION MANAGER.
10. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING WORK ACTIVITIES WITHIN THE LIMITS OF WORK AND PERFORMING WORK AT TIMES, AND IN A MANNER, AS PRESCRIBED BY THE CONSTRUCTION MANAGER.
11. THE LANDSCAPE CONTRACTOR SHALL COORDINATE ANY EXCAVATION IN THE VICINITY OF PRE-EXISTING OR NEWLY INSTALLED UTILITIES WITH THE CONSTRUCTION MANAGER. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO NOTIFY ALL NECESSARY UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO DIGGING FOR FIELD VERIFICATION OF ALL UNDERGROUND UTILITIES AND OTHER ELEMENTS. THE CONTRACTOR MUST COORDINATE WITH THE CONSTRUCTION MANAGER PRIOR TO INITIATING OPERATIONS EMERGENCY REPAIR PLANS AND ANY POSSIBLE SERVICE INTERRUPTION(S) ON-SITE AND OFF. THE LANDSCAPE CONTRACTOR SHALL BEAR THE SOLE RESPONSIBILITY OF ANY DAMAGE TO SUBSURFACE UTILITIES CAUSED BY THEIR WORK. RETURN OF SERVICES TO OFF-SITE AREAS (IF ANY) MUST BE IMMEDIATE.
12. THE LANDSCAPE CONTRACTOR MUST TAKE PRECAUTIONS TO PROTECT ALL EXISTING SITE ROADS, PARKING LOTS, CURBS AND UTILITIES FROM DAMAGE. THIS APPLIES NOT ONLY TO THE AREA WITHIN THE LIMITS OF WORK BUT ALSO ALONG ANY LOCAL ACCESS ROADS
13. THE LANDSCAPE CONTRACTOR SHALL PROVIDE ALL

PLANT SPECIES RECOMMENDATION AS SPECIFIED BY THE LANDSCAPE ARCHITECT ARE BASED ON AVAILABLE DATA RELATED TO THE SOILS AND WATER QUALITY AT THE TIME OF DESIGN. LANDSCAPE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SURVIVAL OF PLANT MATERIAL AND MUST COORDINATE ANY CHANGES TO THE PROPOSED

THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PRETILLAGE TO SCARIFY SOILS IN ALL PLANTING AREAS TO A MINIMUM DEPTH OF 4 IN. DENSELY COMPACTED AREAS BETWEEN 85% AND 90% ARE TO BE CROSS RIPPED TO A MINIMUM 12 IN DEPTH. DENSELY COMPACTED AREAS IN EXCESS OF 90% MUST BE CROSS RIPPED TO A MINIMUM 24 IN DEPTH. IN THE PROCESS OF TILLING ARE UNACCEPTABLE MATERIALS INCLUDING, BUT NOT LIMITED TO, FOREIGN DEBRIS, CONSTRUCTION WASTE, ROOTS, CONCRETE, ASPHALT, PETROLEUM AND ROCKS GREATER THAN 2 IN DIA. ON AVERAGE. IN AREAS TO RECEIVE SOD TILL IN FERTILIZER TO A DEPTH OF 2 IN AT RATE OF 4 LBS OF NITROGEN PER 1000F².

THE PROJECT MANAGER RESERVES THE RIGHT TO DEFER
ANY AND ALL REVIEW RESPONSIBILITIES RELATED TO

AT THE END OF THE WARRANTY PERIOD THE PROJECT MANAGER RESERVES THE RIGHT TO HAVE THE CONTRACTOR REPLACE ANY DECLINING MATERIAL OR REQUEST AN EXTENSION OF UP TO NINETY DAYS ON ANY SPECIFIC MATERIAL.

2.0

L004



ARCHITECT
STEELMAN PARTNERS LLP

DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT. THE DRAWINGS AND SPECIFICATIONS SHALL NOT BE USED ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT. ANY USE OR REPRODUCTION OF THIS DRAWING IN WHOLE OR PART BY ANY MEANS IS STRICTLY PROHIBITED EXCEPT WITH SPECIFIC WRITTEN CONSENT OF STEELMAN PARTNERS LLP.

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SHEET TITLE

SITE LAYOUT

JOB #: 20160058

ISSUED FOR

ISSUE DATE:
04/08/2019

SCALE: _____
PER VIEW

SHEF

L100²¹

107V7521 L18-02490

SITE LEGEND

- 
TRASH RECEPTACLE
 TYPE 1
 TYPE 2 RE: 4-L109
 - 
BENCH
 RE: 3-L109
 - 
POT TYPE 1
 - 
POT TYPE 2
 - 
POT TYPE 3
 - 
BIKE RACK
 RE: 5-L109

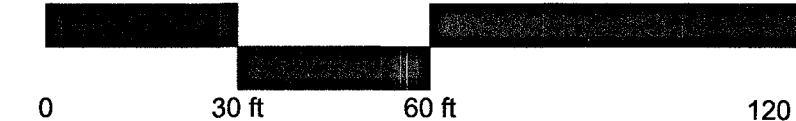
CONCRETE PAVERS TO MATCH CLV SPECS

CONCRETE PAVING TO MATCH CLV SPECS

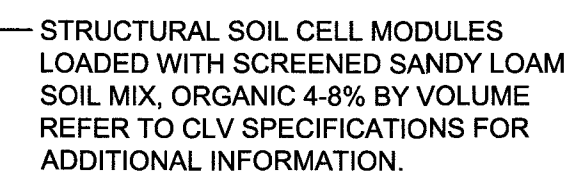
SPECIALTY ARRIVAL PAVING

SCALE 1"=30'-0"

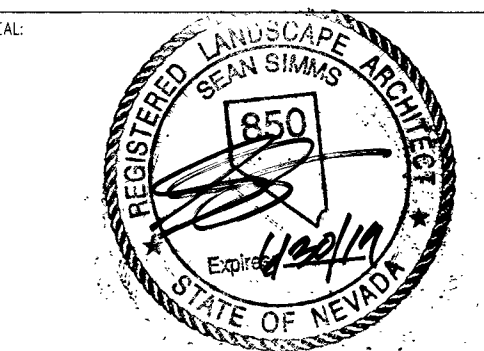
SCALE 1"=30'-0"



22
L101
107V7521 L18-0249



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



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DETAILS

160058

ISSUED FOR:

ISSUE DATE: 04/08/2019

PER VIEW

MEET:

23

L102

107V7521 L18-02490

VARIES

CURB & GUTTER

PER PLAN

LINEAR BARRIER TO CURB SIDE OF FREE PIT 36" DEPTH (RS900 OR EQUAL)

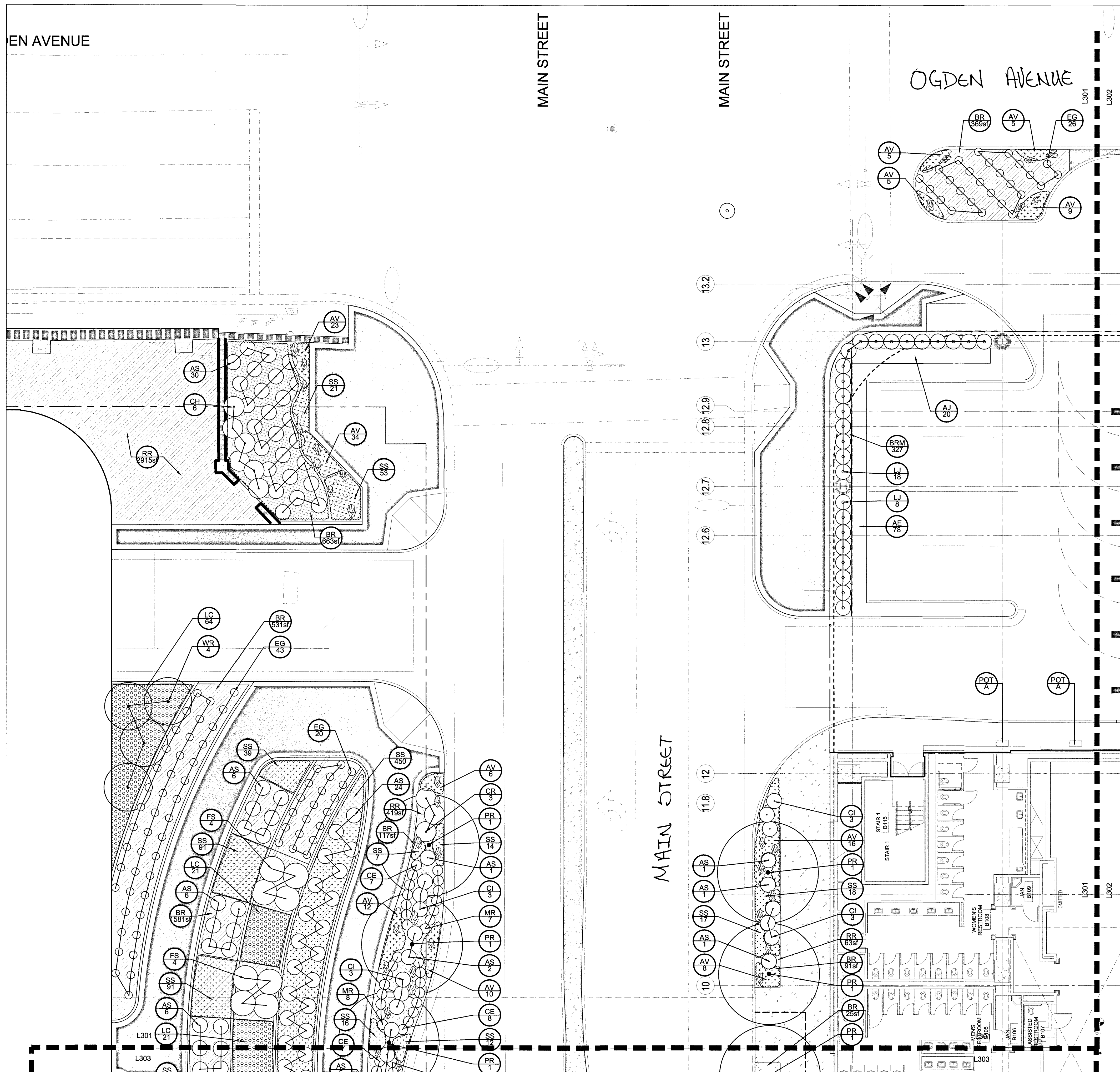
STRUCTURAL SOIL CELL MODULES LOADED WITH SCREENED SANDY LOAM SOIL MIX, JORGANIC 4-8% BY VOLUME

PRECINCT SINGLE INLET FOR INITIAL WATERING OF ROOTBALL ZONE (RRPREC1 ROOTRAIN OR EQUAL)

DEEP WATERING AND AERATION SYSTEM (RRARB2 ROOTRAIN OR EQUAL)

2 STRUCTURAL SOIL CELLS

NTS



07V7521 L18-02490

ARCHITECTURE	MULTIMEDIA
INTERIOR DESIGN	GRAPHIC DESIGN
LIGHTING DESIGN	PRODUCT DESIGN

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7



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VISIONS:

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ET TITLE:

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DATE:

04/08/2019

EY:

29

107V7521 418-02490

1 TREE PLANTING (SIDEWALKS)
DRAWING SCALE: 1/2"=1'-0"

2 TREE PLANTING (MEDIANS)
DRAWING SCALE: 1/2"=1'-0"

5 STEEL LANDSCAPE EDGING

DRAWING SCALE: 1"=1'-0"

7 TREE SIZE (MINIMUMS) _____
DRAWING _____ SCALE: 1/2"=1'-0"

NOTE: CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING PITS/BEDS PRIOR TO INSTALLATION. REMOVE CONTAINER COMPLETELY OR REMOVE BURLAP FROM TOP 2/3 OF ROOTBALL. REMOVE ALL WIRE AND STRING.

MIN ALL SIDES

RECEIVE PLANTING SOIL AS SHOWN

6 MEDIAN MOUNDING
DRAWING SCALE: 1/2"=1'-0"