

DS #: 4541

APN: 125-09-401-033

PROJECT: Gilcrease Nature Sanctuary

SUBMITTAL: 2nd

SCANNED BY/DATE: \_\_\_\_\_

CHECKED BY/DATE: \_\_\_\_\_





|                                                                       |                                                          |                                                                                                   |
|-----------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>CITY OF LAS VEGAS</b>                                              |                                                          | <b>DATE:</b>                                                                                      |
| <b>INTER-OFFICE MEMORANDUM</b>                                        |                                                          | March 8, 2012                                                                                     |
| <b>TO:</b><br>Land Development Services<br>Department of Public Works |                                                          | <b>FROM:</b><br>Albert Sung, P.E.<br>Flood Control Project Engineer<br>Department of Public Works |
| <b>SUBJECT:</b>                                                       | Drainage Study for:<br><b>Gilcrease Nature Sanctuary</b> | <b>COPIES TO:</b><br>Hauntec                                                                      |
| <b>Cross Streets:</b>                                                 | SEC of Al Carrison Way & Racel Street                    | Gilcrease Nature Sanctuary                                                                        |
| <b>File Number:</b>                                                   | F:\Depot\DSMemos\DS4541B.doc                             | Bart Anderson, P.E., DevCo                                                                        |
| <b>Parcel Number:</b>                                                 | 125-09-401-033                                           | CCRFCFCD                                                                                          |
| <b>Zoning Action:</b>                                                 | SDR-43981; ZON-43982 & GPA-43983                         | CCPW                                                                                              |
| <b>FEMA Flood Zone</b>                                                | YES NO <b>X</b>                                          |                                                                                                   |
| <b>Proposed Storm Drain</b>                                           | YES NO <b>X</b>                                          |                                                                                                   |

| HISTORY                   | DATE RECEIVED | DATE REVIEWED | COMMENTS                   | REVIEW FEES     | FEES PAID<br>Payment Trn # |
|---------------------------|---------------|---------------|----------------------------|-----------------|----------------------------|
| 1 <sup>st</sup> Submittal | 12/21/2011    | 1/9/2012      | Not Approved               | \$400.00        | 269514: \$400              |
| 2 <sup>nd</sup> Submittal | 2/28/2012     | 3/8/2012      | See Comments Below         | \$400.00        | 276548: \$400              |
|                           |               |               | <b>TOTAL FEES (LDDRS):</b> | <b>\$800.00</b> | ----                       |

**REMARKS:**

The Drainage Study for the subject project has been reviewed and:

|          |                                                                                                |
|----------|------------------------------------------------------------------------------------------------|
|          | is approved subject to conformance to all City standards and the following conditions:         |
|          | must be resubmitted or supplemented including the following:                                   |
| <b>X</b> | is conditionally approved subject to Clark County Regional Flood Control District concurrence. |
| <b>X</b> | is conditionally approved subject to Clark County Public Works Department concurrence.         |

1. **This drainage study is acceptable in concept;** however, *City of Las Vegas* will not formally accept the study until the *Clark County Regional Flood Control District (CCRFCFCD)* has issued a letter of concurrence. The Engineer should contact the CCRFCFCD to confirm that they have begun their review.
2. The site is also adjacent to the jurisdiction of the County of Clark. The engineer must coordinate with *Clark County Department of Public Works (CCPW)* and incorporate any concerns for boundary conditions along the eastern and western borders. CCPW concurrence is required prior to final acceptance of the study.
3. Provide a 5'-Modified Type CM drop inlet at each of the upstream and downstream end of the improvement in *Racel Street*.

In an effort to increase administrative efficiency, the City of Las Vegas Public Works Department requires all soil reports, drainage studies and traffic impact analysis submittals to be accompanied by an electronic copy of the submittal. Electronic documents must be submitted with one original hard copy of the study. Electronic documents should be on a universal computer-readable digital output replicating your submittal to be used for archival or display purposes. This may be more than one file if necessary. An Indexed Portable Document Format (PDF) or Print Ready CAD file formats with a minimum of 300dpi are the desired formats, but provided it is a high quality digitized replication of the submittal, other formats may be acceptable. If figures are in color, they must be scanned in color and saved as a separate file. The new submittal requirement is effective on **July 1, 2011**. If there are any questions regarding these new requirements, please contact Albert Sung in the Flood Section at (702) 229-2001 or Rick Schroder in Traffic Engineering at (702) 229-6327.

**NOTE:** Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the *Nevada Division of Environmental Protection* a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see <http://ndep.nv.gov/bwpc/storm01.htm> or call (775) 687-9429.

**END OF REMARKS**

ays

T/R/S: T19S/R60E/09  
AREA G-09

**HAUNTEC**  
Civil Engineering Services

2721 Ironside Drive  
Las Vegas, Nevada 89108  
Phone: (702) 219-5785

February 28, 2012

**City of Las Vegas**  
**Department of Public Works**  
**Land Development Services**  
333 North Rancho Drive  
Las Vegas, Nevada 89106

Attn: Albert Sung, P.E.  
Flood Control Project Engineer  
Department of Public Works

Subject: Addendum to the Technical Drainage Study for Gilcrease Nature Sanctuary  
(SDR-43981; ZON-43982 & GPA-43983)  
(APN 125-09-401-033) (DS4541)

Dear Mr. Sung:

This addendum to the Technical Drainage Study for Gilcrease Nature Sanctuary is our response to City of Las Vegas Comment Letter dated January 10, 2012. Each comment is restated and followed with our response.

1. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) master planned facility. There, CCRFCD concurrence is required prior to final approval of the drainage study.  
**Response: CCRFCD has a copy of the Technical Drainage Study, but is awaiting the City of Las Vegas approval prior to their review. Once received, HAUNTEC will provide the City of Las Vegas a copy of the CCRFCD Concurrence Letter.**
2. The site is also adjacent to the jurisdiction of the County of Clark. The engineer must coordinate with *Clark County Department of Public Works* (CCPW) and incorporate any concerns for boundary conditions along the eastern and western borders. CCPW concurrence is required prior to final acceptance of the study.  
**Response: CCPW has a copy of the Technical Drainage Study, but is awaiting the City of Las Vegas approval prior to their review. Once received, HAUNTEC will provide the City of Las Vegas a copy of the CCPW Concurrence Letter.**
3. Provide a copy of the zoning/planning conditions associated with this site (**SDR-43981; ZON-43982 & GPA-43983**) with the next submittal to verify compliance with conditions. Flood Control will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the City Council). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.  
**Response: Attached are the Zoning/Planning conditions as issued by the City Council on February 15, 2012. None of the conditions impact the Technical Drainage Study. (See attached)**
4. It appears that a hump is proposed in the west driveway in Racel Street for onsite protection from a major storm event. The anticipated 100-year flow depth in Racel Street

Rec'd: 2/28/12  
DS 4541  
G-09  
\$400

is 0.70'. Per the proposed high point elevations show on the grading plan, the hump is not high enough to provide for a minimum of six (6) inches freeboard above the 100-year water surface in the street. Review and revise the high point elevations accordingly.

**Response: The driveway design grades have been revised to provide an adequate hump of a minimum of 6-inches of freeboard above the 100-year water surface in Racel Street.**

5. Identify an existing 15'-wide easement for flood control along the southern border of the subject property. Label easement with the recorded document number on the grading plan.

**Response: The grading plan has been revised to the show the 15ft-wide drainage easement along with the recorded document number. (See attached)**

6. Identify an existing Clark County Regional Flood Control facility (78" RCP) in Racel Street. Label with recorded construction document number on the grading plan.

**Response: The grading plan has been revised to the show the Clark County Regional Flood Control facility (78" RCP) in Racel Street along with the recorded construction document number. (See attached)**

7. Identify an existing storm drain system in Al Carrison Avenue. Label the size and type of the associated drop inlets and storm drains with the City of Las Vegas recorded drawing number on the grading plan.

**Response: The grading plan has been revised to the show the existing storm drain system in Al Carrison Avenue along with the City of Las Vegas recorded drawing number. (See attached)**

8. Show the existing residential development to the north of Racel Street on the grading plan.

**Response: The grading plan has been revised to the show the existing residential development to the north of Racel Street. (See attached)**

9. **Section A/C2:** Show proposed curb & gutter and sidewalk in section detail.

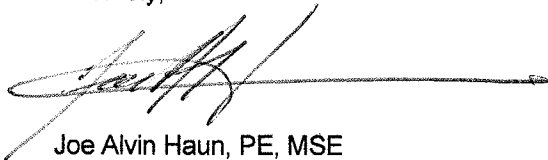
**Response: The section has been revised. (See attached)**

10. **Section D/C2:** Revise the 30' width to 40' between the centerline of the street and the right-of-way line.

**Response: The section has been revised. (See attached)**

If additional information is required, please contact me.

Sincerely,



Joe Alvin Haun, PE, MSE  
HAUNTEC Civil Engineering Services



February 16, 2012

LAS VEGAS CITY COUNCIL

CAROLYN G. GOODMAN  
MAYOR

STAVROS S. ANTHONY  
MAYOR PRO TEM

STEVE WOLFSON

LOIS TARKANIAN

STEVEN D. ROSS

RICKI Y. BARLOW

BOB COFFIN

ELIZABETH N. FRETWELL  
CITY MANAGER

Ms. Jessica Pigula  
5028 Ropers Rock Court  
Las Vegas, Nevada 89131

RE: SDR-43981 – SITE DEVELOPMENT PLAN REVIEW  
RELATED TO GPA-43983 AND ZON-43982  
CITY COUNCIL MEETING OF FEBRUARY 15, 2012

Dear Ms. Pigula:

The City Council at a regular meeting held February 15, 2012, APPROVED the request for a Site Development Plan Review FOR A COMMERCIAL RECREATION/AMUSEMENT (OUTDOOR) FACILITY (NATURE SANCTUARY) on 7.88 acres at 8103 Racel Street (APN 125-09-401-033). The Notice of Final Action was filed with the Las Vegas City Clerk on February 16, 2012. This approval is subject to:

Planning

1. Approval of and conformance to the Conditions of Approval for General Plan Amendment (GPA-43923) and Rezoning (ZON-43982) shall be required, if approved.
2. This approval shall be void two years from the date of final approval, unless exercised pursuant to the provisions of LVMC Title 19.16. An Extension of Time may be filed for consideration by the City of Las Vegas.
3. All development shall be in conformance with the site plan, and building elevations, date stamped 11/23/11, and landscape plans date stamped 12/12/11, except as amended by conditions herein.
4. Any changes based upon right-of-way, traffic or drainage studies or street improvements required by the city or public utilities shall not reduce the widths of perimeter landscape buffers, height of walls or quantities of plant materials from that on submitted landscape plans date stamped 12/12/11. Any changes based upon subsequently submitted studies must be accommodated elsewhere on the site.

CITY OF LAS VEGAS  
400 STEWART AVENUE  
LAS VEGAS, NEVADA 89101

VOICE 702.229.6011  
TTY 702.386.9108  
[www.lasvegasnevada.gov](http://www.lasvegasnevada.gov)

5. Prior to occupancy, all necessary building permits shall be obtained and final inspections shall be completed in compliance with Title 19 and all codes as required by the Department of Building and Safety.
6. These Conditions of Approval shall be affixed to the cover sheet of any plan set submitted for building permit.
7. A fully operational fire protection system, including fire apparatus roads, fire hydrants and water supply, shall be installed and shall be functioning prior to construction of any combustible structures.
8. All City Code requirements and design standards of all City Departments must be satisfied, except as modified herein.

Public Works

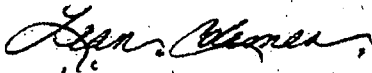
9. Construct all incomplete half-street improvements on Racel Street and Al Carrison Street in accordance with the approved Site Plan concurrent with on-site development as shown on the approved Phasing Plan. Racel Street may be constructed to a 60-foot width to match the adjacent street improvements. All existing paving damaged or removed by this development shall be restored at its original location and to its original width concurrent with development of this site. Extend all required underground utilities, such as electrical, telephone, etc., located within public rights-of-way, past the boundaries of this site prior to construction of hard surfacing (asphalt or concrete).
10. Grant Pedestrian Access Easements for all public sidewalks not located within the public right-of-way.
11. Abandon all existing septic tank systems in accordance with Southern Nevada Health District regulations and connect to the City of Las Vegas public sewer system.
12. Unless otherwise allowed by the City Engineer, construct sidewalk on at least one side of all access drives connecting this site to the adjacent public streets concurrent with development of this site. The connecting sidewalk shall extend from the sidewalk on the public street to the first intersection of the on-site roadway network and shall be terminated on-site with a handicap ramp.
13. Landscape and maintain all unimproved rights-of-way adjacent to this site. All landscaping and private improvements installed with this project shall be situated and maintained so as to not create sight visibility obstructions for vehicular traffic at all development access drives and abutting street intersections.
14. Submit an Encroachment Agreement for all landscaping and private improvements, if any, located in the public right-of-way adjacent to this site prior to occupancy of this site. The applicant must carry an insurance policy for the term of the encroachment agreement and add the City of Las Vegas as an additionally insured entity on this insurance policy. If requested by the City, the applicant shall remove landscaping and private improvements

Ms. Jessica Pigula  
SDR-43981 - Page Three  
February 16, 2012

encroaching in the public right-of-way at the applicant's expense pursuant to the terms of the City's encroachment agreement. The installation and maintenance of all private structures in the public right-of-way shall be the responsibility of the adjacent property owner(s) and shall be transferred with the sale of the property for the entire term of the Encroachment Agreement.

15. A Drainage Plan and Technical Drainage Study must be submitted to and approved by the Department of Public Works prior to the issuance of any building or grading permits or submittal of any construction drawings, whichever may occur first. Provide and improve all drainageways recommended in the approved drainage plan/study. The developer of this site shall be responsible to construct such neighborhood or local drainage facility improvements as are recommended by the City of Las Vegas Neighborhood Drainage Studies and approved Drainage Plan/Study concurrent with development of this site.

Sincerely,



Lean Coleman  
Deputy City Clerk II for  
Beverly K. Bridges, MMC, City Clerk

cc: Mr. Dan Vowels  
Encompass Studio  
10799 West Twain Avenue  
Las Vegas, Nevada 89135

Ms. Barbara Price  
Gilcrease Nature Sanctuary  
8103 Racel Street  
Las Vegas, Nevada 89129





February 16, 2012

LAS VEGAS CITY COUNCIL

CAROLYN G. GOODMAN  
MAYOR

STAVROS S. ANTHONY  
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STEVE WOLFSON  
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BOB COFFIN

ELIZABETH N. FRETWELL  
CITY MANAGER

Ms. Jessica Pigula  
5028 Ropers Rock Court  
Las Vegas, Nevada 89131

RE: ZON-43982 – REZONING  
RELATED TO GPA-43983 AND SDR-43981  
CITY COUNCIL MEETING OF FEBRUARY 15, 2012

Dear Ms. Pigula:

The City Council at a regular meeting held February 15, 2012, APPROVED the request for a Rezoning FROM R-E (RESIDENCE ESTATES) TO: C-V (CIVIC) DISTRICT on 7.88 acres at 8103 Racel Street (APN 125-09-401-033). The Notice of Final Action was filed with the Las Vegas City Clerk on February 16, 2012.

Sincerely,

A handwritten signature in black ink, appearing to read "Lean Coleman".

Lean Coleman  
Deputy City Clerk II for  
Beverly K. Bridges, MMC, City Clerk

cc: Mr. Dan Vowels  
Encompass Studio  
10799 West Twain Avenue  
Las Vegas, Nevada 89135

Ms. Barbara Price  
Gilcrease Nature Sanctuary  
8103 Racel Street  
Las Vegas, Nevada 89129

CITY OF LAS VEGAS  
400 STEWART AVENUE  
LAS VEGAS, NEVADA 89101

VOICE 702.229.6011

TTY 702.386.9108

[www.lasvegasnevada.gov](http://www.lasvegasnevada.gov)



February 16, 2102

LAS VEGAS CITY COUNCIL

CAROLYN G. GOODMAN  
MAYOR

STAVROS S. ANTHONY  
MAYOR PRO TEM

STEVE WOLFSON

LOIS TARKANIAN

STEVEN D. ROSS

RICKI Y. BARLOW

BOB COFFIN

ELIZABETH N. FRETWELL  
CITY MANAGER

Ms. Jessica Pigula  
5028 Ropers Rock Court  
Las Vegas, Nevada 89131

RE: GPA-43983 - GENERAL PLAN AMENDMENT  
RELATED TO ZON-43982 AND SDR-43981  
CITY COUNCIL MEETING OF FEBRUARY 15, 2012

Dear Ms. Pigula:

The City Council at a regular meeting held February 15, 2012, APPROVED the request for a General Plan Amendment from PCD (PLANNED COMMUNITY DEVELOPMENT) TO: PF (PUBLIC FACILITIES) on 7.88 acres at 8103 Racel Street (APN 125-09-401-033). The Notice of Final Action was filed with the Las Vegas City Clerk on February 16, 2012.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lean Coleman".

Lean Coleman  
Deputy City Clerk II for  
Beverly K. Bridges, MMC, City Clerk

cc: Mr. Dan Vowels  
Encompass Studio  
10799 West Twain Avenue  
Las Vegas, Nevada 89135

Ms. Barbara Price  
Gilcrease Nature Sanctuary  
8103 Racel Street  
Las Vegas, Nevada 89129

CITY OF LAS VEGAS  
400 STEWART AVENUE  
LAS VEGAS, NEVADA 89101

VOICE 702.229.6011

TTY 702.386.9108

www.lasvegasnevada.gov



2721 Ironside Drive  
Las Vegas, Nevada 89108  
(702) 219-5785



# Transmittal

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**To:** Albert Sung, P.E. **From:** Joe Alvin Haun, PE  
City of Las Vegas – Department of Public  
**Company:** Works, Land Development Services **Date:** February 29, 2012

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**Phone:** (702)

---

**Re:** Addendum to the Technical Drainage Study for  
Gilcrease Nature Sanctuary  
(SDR-43981, ZON-43982, & GPA-43983)  
(APN 125-09-401-033) (DS4541A)

---

☐ Urgent    ☐ For Review    ☐ Please Comment    ☒ As Requested    ☐ Please Recycle

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● **Comments:**

Attached is the Addendum to the Technical Drainage Study for Gilcrease Nature Sanctuary. The following items are attached:

- City of Las Vegas Drainage Study Comment Letter
- Addendum Letter
- Revised Grading Plan
- CD with the Grading Plan pdf files and the Addendum Letter

If you have any questions or need additional information, please contact me.

Thanks,

Joe Alvin Haun, PE, MSE

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[illegible]

TRASH ENCLOSURE: 1 PROVIDER

AS-101

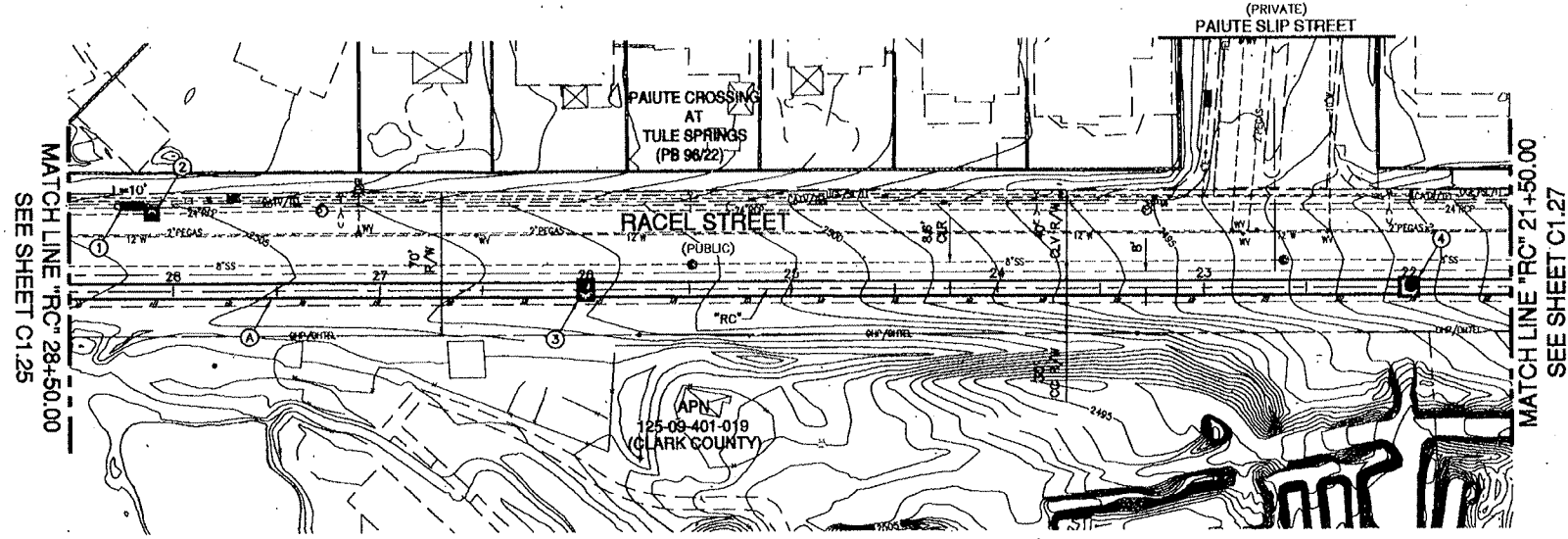
SCALE: 1'-0" = 40

CLARK COUNTY  
DEPARTMENT OF DEVELOPMENT  
SERVICES

Acceptance of plans for filing  
By: *[Signature]* 1.7.10

Acceptance of these plans for filing 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 and/or specifications. Clark County shall be held free from damages which may result from the construction of the improvements from the engineering design depicted herein.

NOTE: Power poles and/or other existing facilities not in proper location based on proposed improvements shown herein will be relocated at no expense to Clark County.

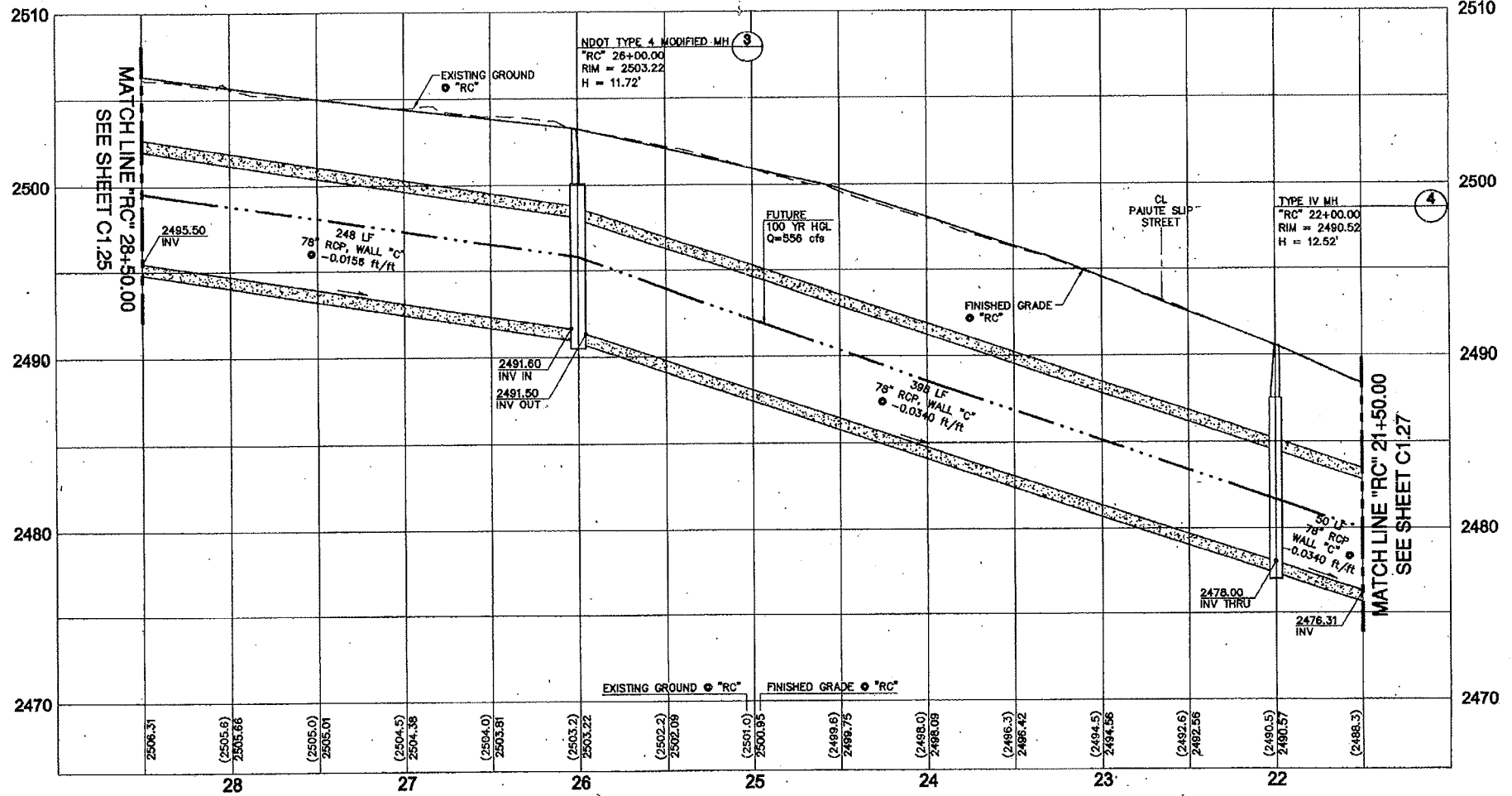


CLARK COUNTY INSPECTOR MUST INSPECT THE INSTALLATION OF THE TWO DROP INLETS ALONG RACEL AND THE BACKFILL AND AC ALONG ALL CLARK COUNTY RIGHT OF WAY.

Call Southwest Gas at 965-2286 for Standby when excavating over or near High Pressure Gas lines.

- CONSTRUCTION ITEMS:**
- ① "RC" 28+19.48, 43.00' RT CONSTRUCT TYPE "DM" INLET (L=10.0'). INSTALL 3 LF OF 18" RCP. (SEE LAT. #26, SHEET LPI.5 AND DETAIL A/D1.12)
  - ② "RC" 28+10.04, 36.53' RT CONSTRUCT TYPE III MH (MODIFIED). CONNECT EXISTING RCPs. (SEE LAT. #26, SHEET LPI.5 AND DETAIL A/D1.8)
  - ③ "RC" 28+00.00 CONSTRUCT NDOT TYPE 4 MODIFIED MH. INSTALL 398 LF OF 78" RCP. (SEE BELOW AND DETAIL A/D1.8)
  - ④ "RC" 22+00.00 CONSTRUCT TYPE IV MH. INSTALL 398 LF OF 78" RCP. (SEE BELOW AND DETAIL B/D1.8)
  - ⑤ SEE SHEET C1.25 FOR CONSTRUCTION ITEMS

- NOTES:**
- PROTECT IN PLACE ALL EXISTING IMPROVEMENTS NOT DESIGNATED FOR REMOVAL.
  - ALL RCP SHALL BE CLASS III PIPE UNLESS OTHERWISE SPECIFIED. WHERE SPECIFIED, USE WALL "C" PER ASTM C76, WITH 6000 PSI CONCRETE.
  - SEE SHEET R1.8 ROADWAY RECONSTRUCTION ITEMS. PAVEMENT RESTORATION AND TRENCH BACKFILL IN CLARK COUNTY RIGHT OF WAY ("RC" 21+50.00 TO "RC" 28+50.00) SHALL MEET REQUIREMENTS OF CALSD No. 500B.1 AND 503AR. USE DETAIL A/D1.23 FOR STORM DRAIN TRENCH BACKFILL IN CITY OF LAS VEGAS RIGHT OF WAY.
  - SEE SHEET S11.8 FOR SIGNAGE AND STRIPING ITEMS.
  - SEE SHEET LPI.8 FOR UTILITY ITEMS.
- (IN FEET)

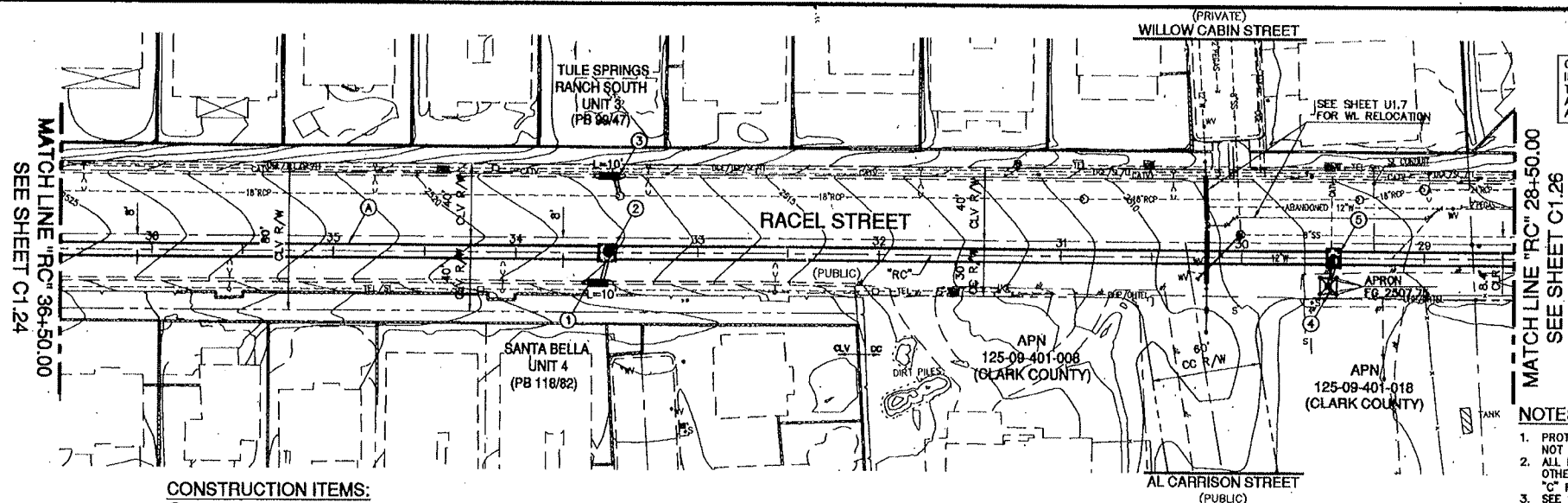


|                                                                                                                                                                                   |                                                                                                                                             |                    |                  |                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|----------------|
| CLARK COUNTY<br>DEPARTMENT OF PUBLIC WORKS                                                                                                                                        | NO.                                                                                                                                         | DATE               | DESCRIPTION      | BY             |
|                                                                                                                                                                                   |                                                                                                                                             |                    |                  |                |
|                                                                                                                                                                                   |                                                                                                                                             |                    |                  |                |
|                                                                                                                                                                                   |                                                                                                                                             |                    |                  |                |
| PROJECT TITLE:<br><b>RACEL STREET<br/>         GRADING AND DRAINAGE<br/>         PLAN AND PROFILE<br/>         "RC" 21+50.00 TO "RC" 28+50.00<br/>         AT FLOYD LAMB PARK</b> | SCALE (H:V) AS SHOWN                                                                                                                        | SCALE (V:AS SHOWN) | DATE: 12/02/2009 | DESIGN BY: FKR |
|                                                                                                                                                                                   | FIELD BOOK #                                                                                                                                |                    |                  |                |
|                                                                                                                                                                                   |                                                                                                                                             |                    |                  |                |
|                                                                                                                                                                                   | <b>THE Louis Berger Group, INC.</b><br>500 E. Amigo Court, Suite 100<br>Las Vegas, Nevada 89119<br>Phone: 702-738-0704<br>Fax: 702-738-0704 |                    |                  |                |
|                                                                                                                                                                                   | NORTH AND SOUTH ENVIRONMENTAL ENHANCEMENT AREAS AT FLOYD LAMB PARK                                                                          |                    |                  |                |
| SHEET:<br><b>C1.26</b><br>50 OF 314<br>CLV DRAWING NO:<br>927V282                                                                                                                 | HTE#09-14377 H#12828                                                                                                                        |                    |                  |                |

Acceptance of plans for filing  
By W. J. [Signature] 1.7.10

Acceptance of these plans for filing shall not be construed to be a permit for or approval of any violation of any of the provisions of the state or county laws and/or specifications. Clark County shall be held free from damages which may result from the construction of the improvements from the engineering design depicted herein.

NOTE: Power poles and/or other existing facilities not in proper location based on proposed improvements shown herein will be relocated at no expense to Clark County.



CLARK COUNTY INSPECTOR MUST  
INSPECT THE INSTALLATION OF THE  
TWO DROP INLETS ALONG RACEL  
AND THE BACKFILL AND AC ALONG  
ALL CLARK COUNTY RIGHT OF WAY.

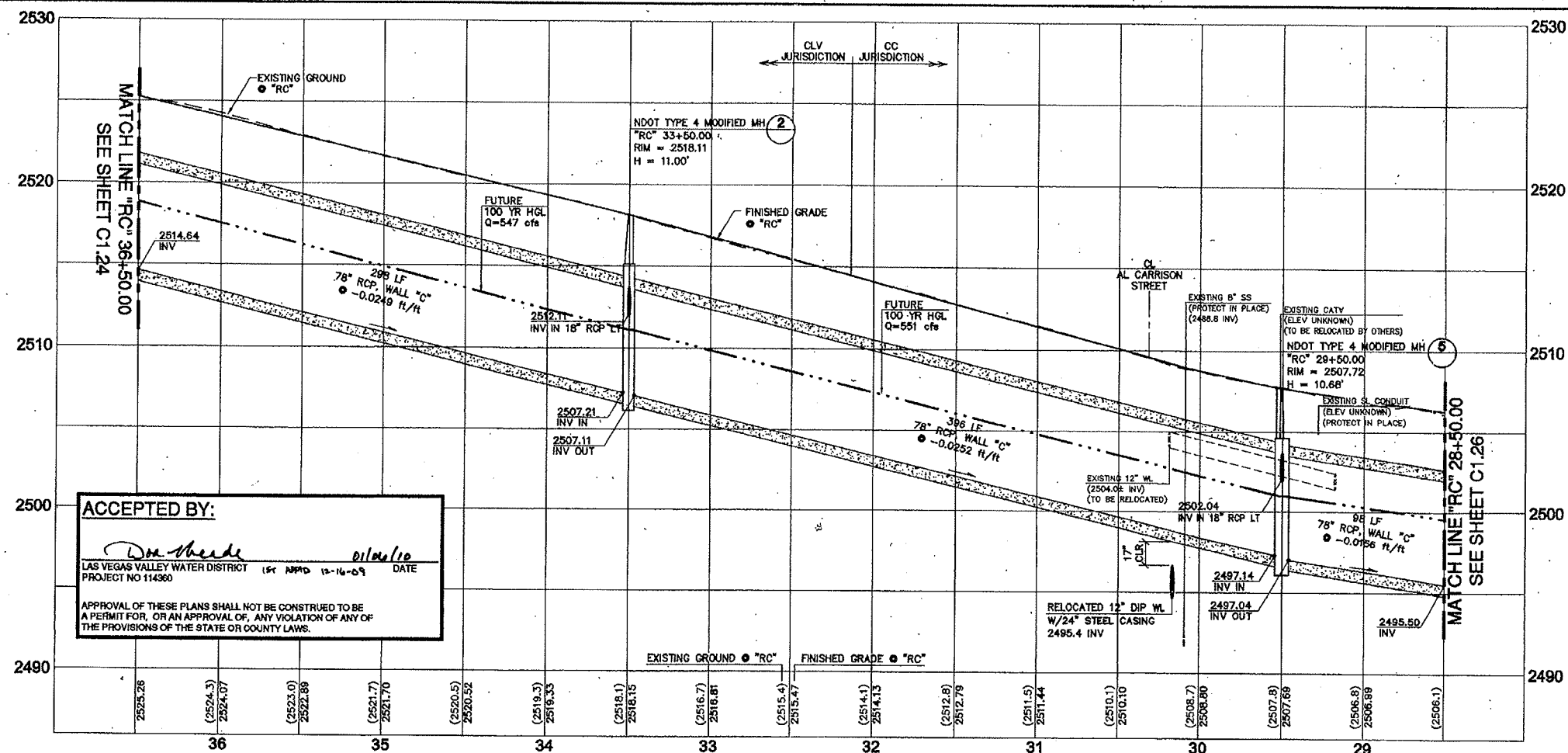
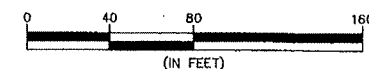
**Call Southwest Gas  
at 365-2296 for Standby  
when excavating over or near  
High Pressure Gas lines.**

**CONSTRUCTION ITEMS:**

- |                            |                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|                            | (PUBLIC)                                                                                                                             |
| ① "RC" 33+54.81, 18.45' LT | CONSTRUCT TYPE "DM" INLET (L=10.0'). INSTALL 12 LF OF 18" RCP.<br>(SEE LAT. #24, SHEET LP1.4 AND DETAIL A/D1.12)                     |
| ② "RC" 33+50.00            | CONSTRUCT NDOT TYPE 4 MODIFIED MH. INSTALL 366 LF OF 78" RCP.<br>(SEE BELOW, SHEET LP1.4 AND DETAIL A/D1.9)                          |
| ③ "RC" 33+48.77, 41.87' RT | CONSTRUCT TYPE "DM" INLET (L=10.0'). INSTALL 8' LF OF 18" RCP.<br>(SEE LAT. #23, SHEET LP1.4 AND DETAIL A/D1.12)                     |
| ④ "RC" 28+52.78, 15.05' LT | CONSTRUCT NDOT TYPE 2 DROP INLET W/ CONCRETE APRON. INSTALL 12 LF OF 18" RCP.<br>(SEE LAT. #25, SHEET LP1.4 AND DETAILS A & B/D1.13) |
|                            | ⑤ "RC" 28+50.00<br>A SEE SHEET C1.24 FOR CONSTRUCTION ITEMS                                                                          |

## NOTES:

1. PROTECT IN PLACE ALL EXISTING IMPROVEMENTS NOT DESIGNATED FOR REMOVAL.
2. ALL RCP SHALL BE CLASS III PIPE UNLESS OTHERWISE SPECIFIED. WHERE SPECIFIED, USE WALL "C" PER ASTM C76, WITH 6000 PSI CONCRETE.
3. SEE SHEET R17 FOR ROADWAY RECONSTRUCTION ITEMS.
4. PREVENT SECTORIAL EROSION BY LENGTH BACKFILL IN CLARK COUNTY RIGHT OF WAY ("RC" 28+50.00 TO "RC" 32+13.00) SHALL MEET REQUIREMENTS OF CALSADA No. 5006R.1 AND 503AR. USE DETAIL A/D123 FOR STORM DRAIN BACKFILL IN CITY OF LAS VEGAS RIGHT OF WAY.
5. SEE SHEET S17 FOR CURB AND STRIPING ITEMS.
6. SEE SHEET U17 FOR UTILITY ITEMS.



ACCEPTED BY:

Doc. No. 100-100000 DATE 01/06/10  
 LAS VEGAS VALLEY WATER DISTRICT 1st APPLICANT 12-16-09 DATE

APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS.

[illegible]

|                |
|----------------|
| WA #           |
| DESIGN BY: FOR |

**Group, INC.**  
 Voice: 702-736-6632  
 Fax: 702-736-0704

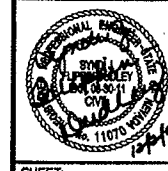
|       |                     |
|-------|---------------------|
| SHOWN | SCALE (V): AS SHOWN |
|       | DATE: 12/02/2009    |

**THE Louis Berge**  
 500 E. Amigo Court, Suite 100  
 Las Vegas, Nevada 89119.



**PUBLIC WORKS**  
PROJECT TITLE:  
**NORTH AND SOUTH  
ENVIRONMENTAL  
ENHANCEMENT AREAS  
AT FLOYD LAMB PARK**

DEPARTMENT OF  
RACEL STREET  
GRADING AND DRAINAGE  
PLAN AND PROFILE  
"RC" 28+50.00 TO "RC" 36+50.00



SHEET:  
**C1.25**  
49 OF 314  
CLV DRAWING NO:  
00000000

**HTE#09-14877**

**H#12828**



### LEGEND

|        |                                  |
|--------|----------------------------------|
| ---    | SUBDIVISION BOUNDARY             |
| ---    | SECTION LINE                     |
| ---    | ADJACENT PARCEL/PROPERTY LINE    |
| ---    | EASEMENT LINE                    |
| ---    | TIE LINES                        |
| ---    | STREET CENTERLINE                |
| ---    | RIGHT-OF-WAY LINE                |
| ---    | EXISTING CONTOUR LINE            |
| ---    | EXISTING FIRE HYDRANT            |
| ac     | ARCES                            |
| APN    | TOP OF ASPHALT ELEVATION         |
| CONC   | ASSESSOR PARCEL NUMBER           |
| EX     | TOP CONCRETE SURFACE ELEVATION   |
| FG     | EXISTING                         |
| FL     | FINISHED GRADE ELEVATION         |
| GB     | FLOW LINE ELEVATION              |
| MIN FF | GRADE BREAK                      |
| NAP    | MINIMUM FINISHED FLOOR ELEVATION |
| RCB    | NOT-A-PART                       |
| SD     | REINFORCED CONCRETE BOX CULVERT  |
| SF     | STORM DRAIN                      |
| SMH    | SQUARE FEET                      |
| SW     | SEWER MANHOLE ELEVATION          |
| TC     | PROPOSED SIDEWALK ELEVATION      |
|        | TOP OF CURB ELEVATION            |

### BENCHMARK

CLARK COUNTY BENCH MARK # 7C20 25WS "1997" RIVET AND ROUND ALUMINUM PLATE IN A CONCRETE BASE OF A METAL POWER POLE, NORTHEAST CORNER OF RAINBOW BLVD. AND WARM SPRINGS RD. POLE # "95650". ELEVATION 2510.33/765.149 METERS (NAVD '88 DATUM).

### BASIS OF BEARING

THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 35, TOWNSHIP 21 SOUTH, RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN BY THE MAP ON FILE IN FILE 99, PAGE 46 OF SURVEYS IN CLARK COUNTY RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

### FLOOD ZONE NOTE

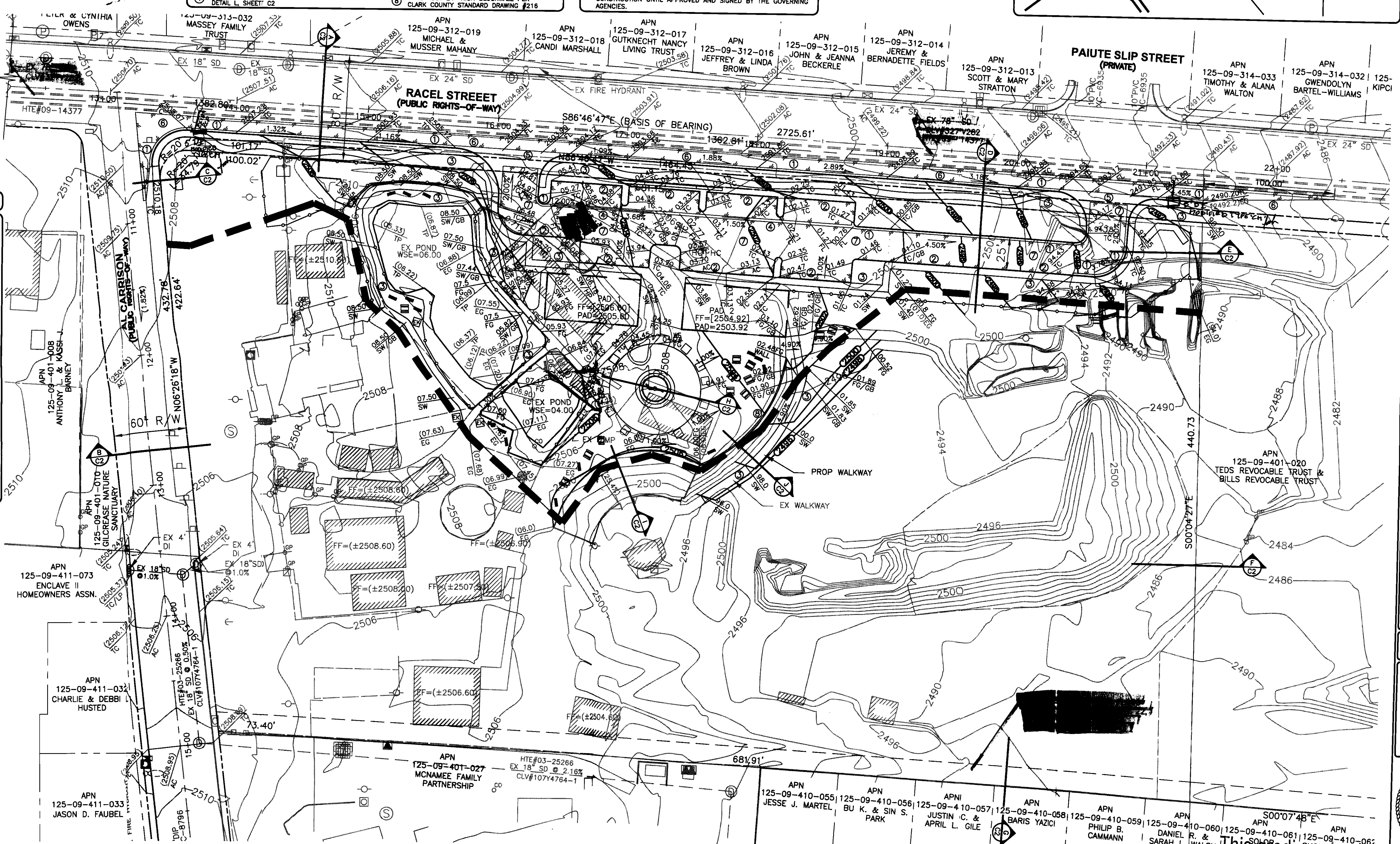
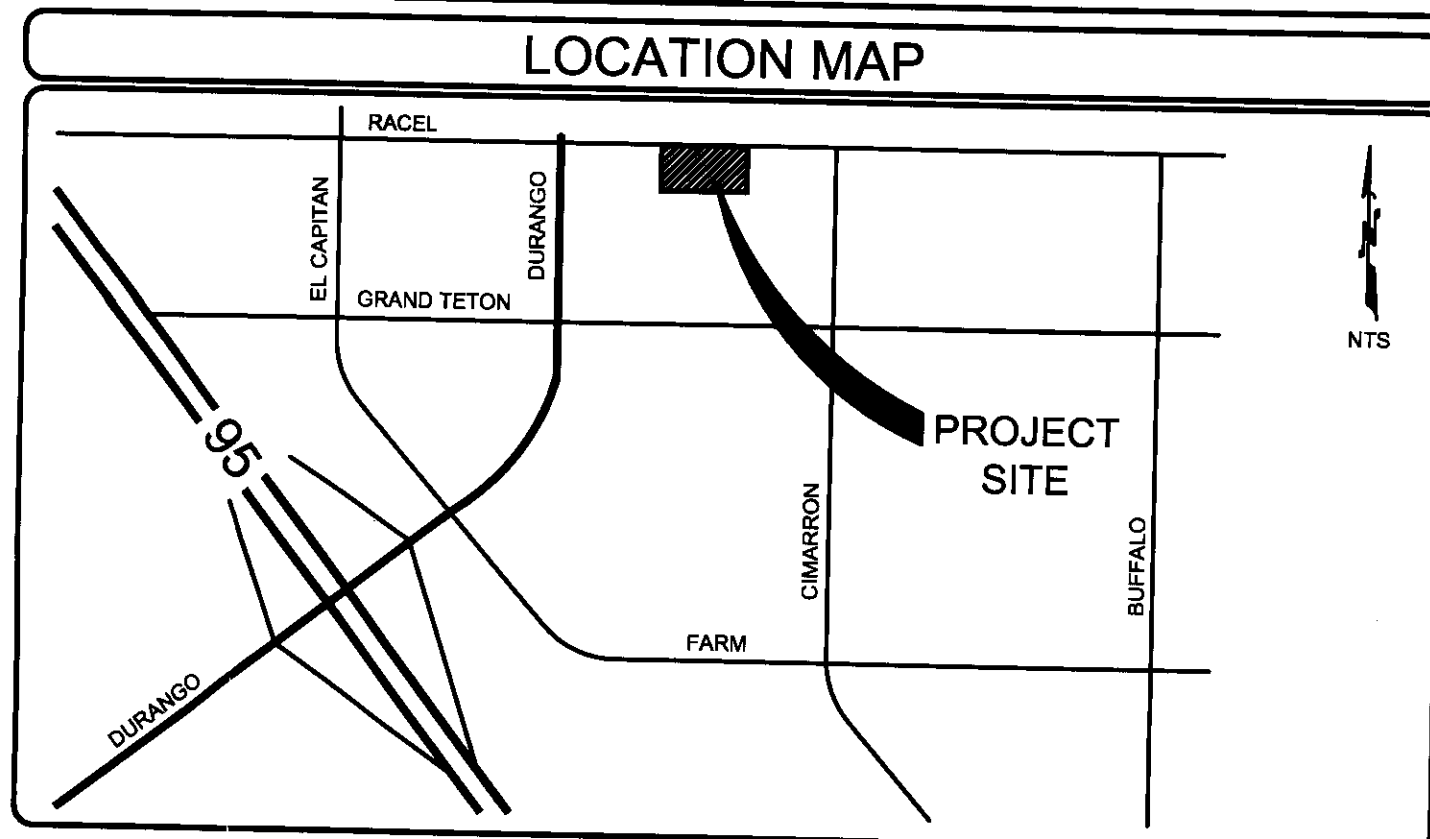
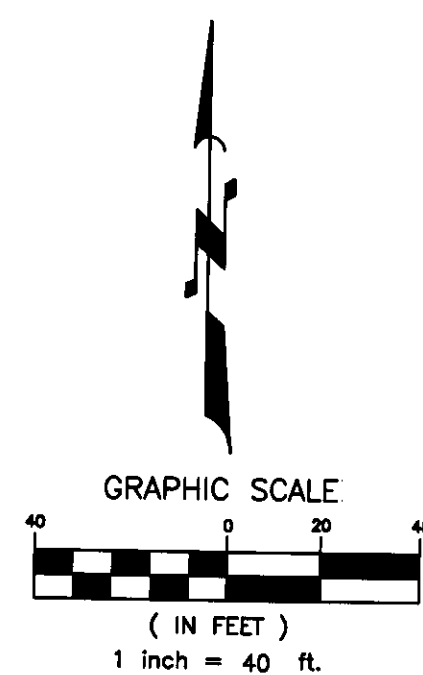
ACCORDING TO FEMA FIRM MAP, COMMUNITY PANEL NUMBER 32003 C 2561 E, DATED SEPTEMBER 27, 2002 AND REVISED TO REFLECT LOW DATED SEPTEMBER 6, 2006, THE SITE IS LOCATED IN A FLOOD ZONE X, AN AREA OUTSIDE OF THE 0.2% ANNUAL CHANCE OF FLOODPLAIN.

### CONSTRUCTION NOTES

1. CONSTRUCT 24" TYPE CURE & GUTTER PER CLARK COUNTY STANDARD DRAWING #218
2. CONSTRUCT 6" TYPE A CURE PER CLARK COUNTY STANDARD DRAWING #219
3. CONSTRUCT CONCRETE SIDEWALK PER CLARK COUNTY STANDARD DRAWING #234
4. CONSTRUCT 24" WIDE VALLEY GUTTER PER DETAIL L, SHEET C2
5. CONSTRUCT 8" WIDE CROSS GUTTER PER CLARK COUNTY STANDARD DRAWING #228
6. CONSTRUCT 3" AC OVER 5" TYPE II PER DETAIL K, SHEET C2
7. CONSTRUCT 2" AC OVER 5" TYPE II PER DETAIL K, SHEET C2
8. CONSTRUCT 24" HIGH BLOCKWALL PER CLARK COUNTY STANDARD DRAWING #216

### ENGINEER'S NOTES

1. CONTRACTOR TO VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR DUST AND EROSION CONTROL DURING CONSTRUCTION.
3. ENGINEER TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
4. THESE PLANS SHALL NOT, IN PART OR IN WHOLE, BE USED FOR CONSTRUCTION UNTIL APPROVED AND SIGNED BY THE GOVERNING AGENCIES.



### GRADING PLAN CERTIFICATION

I CERTIFY THAT THIS PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT (No. \_\_\_\_\_).

JOE ALVIN HAIN, PE 14439 DATE 3/8/12

Call before you Dig. 1-800-227-2600

Call before you OVERHEAD 1-800-227-2929

### CITY OF LAS VEGAS DEPARTMENT OF PUBLIC WORKS

ACCEPTANCE OF PLANS FOR FILING:

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

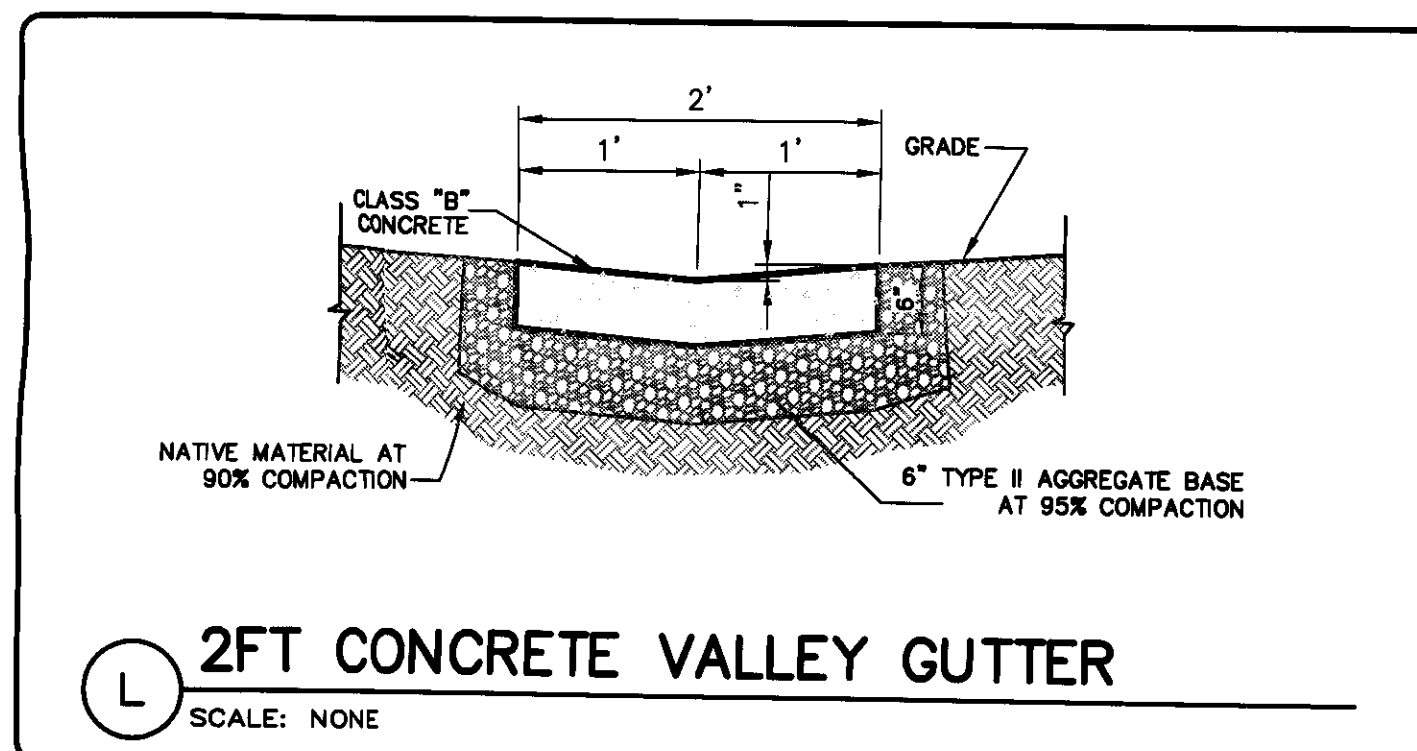
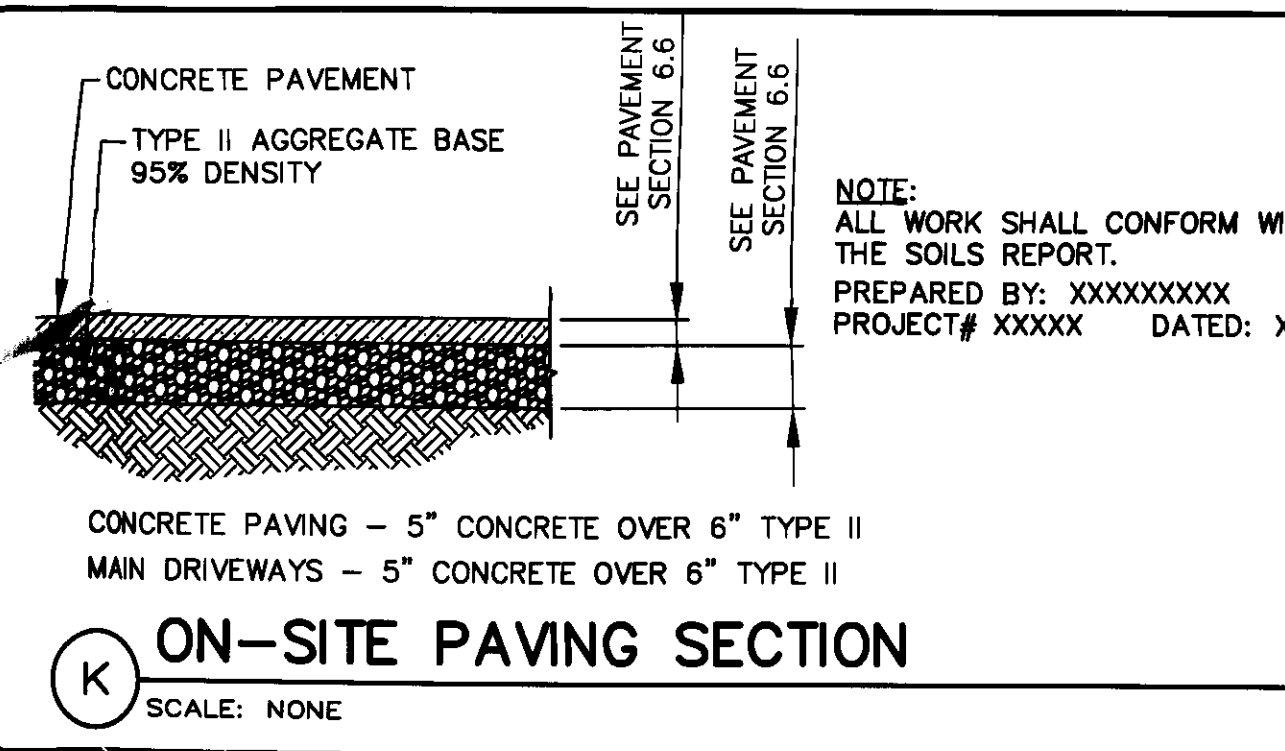
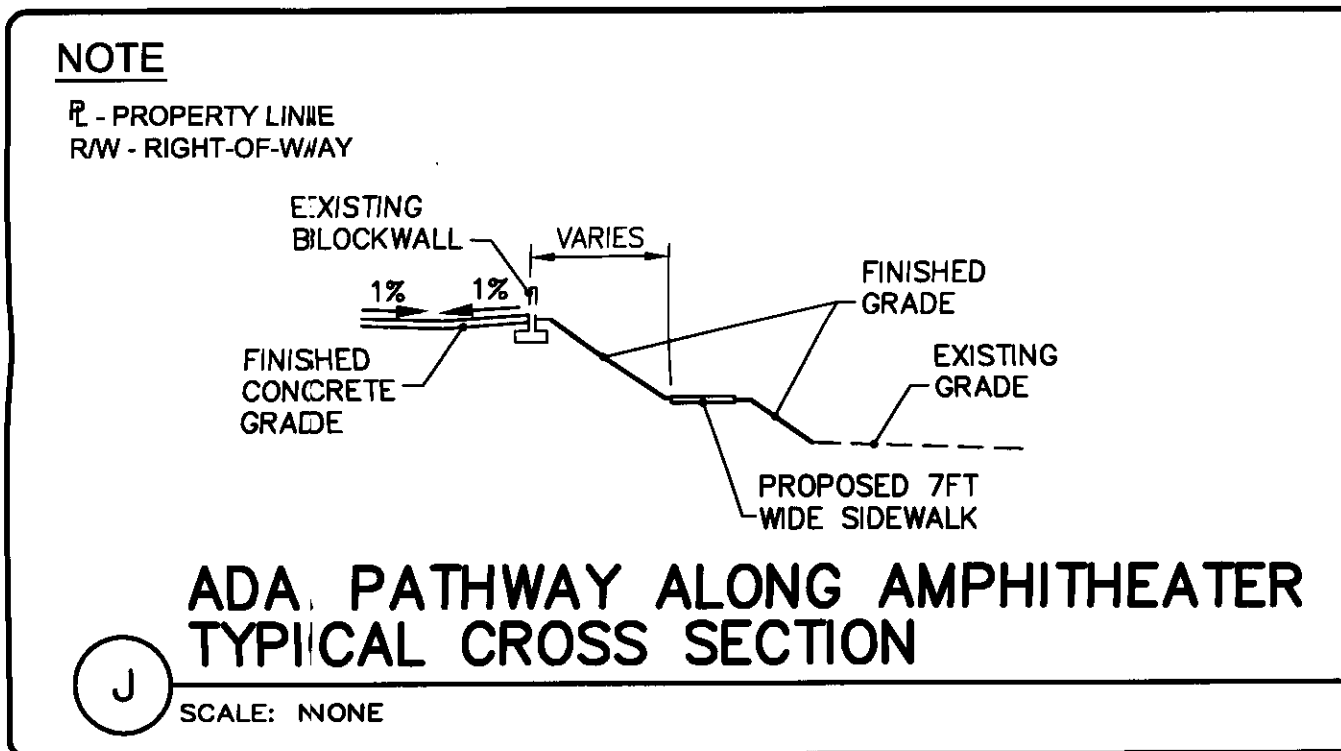
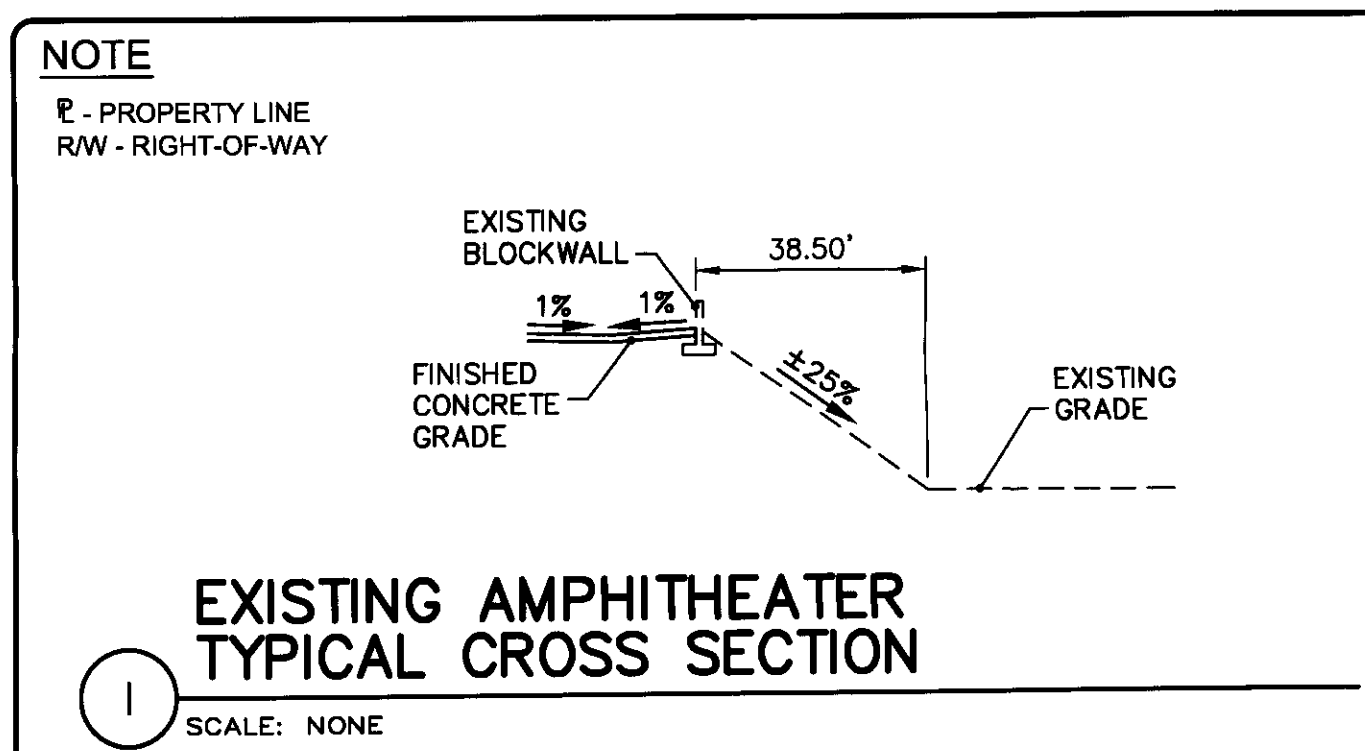
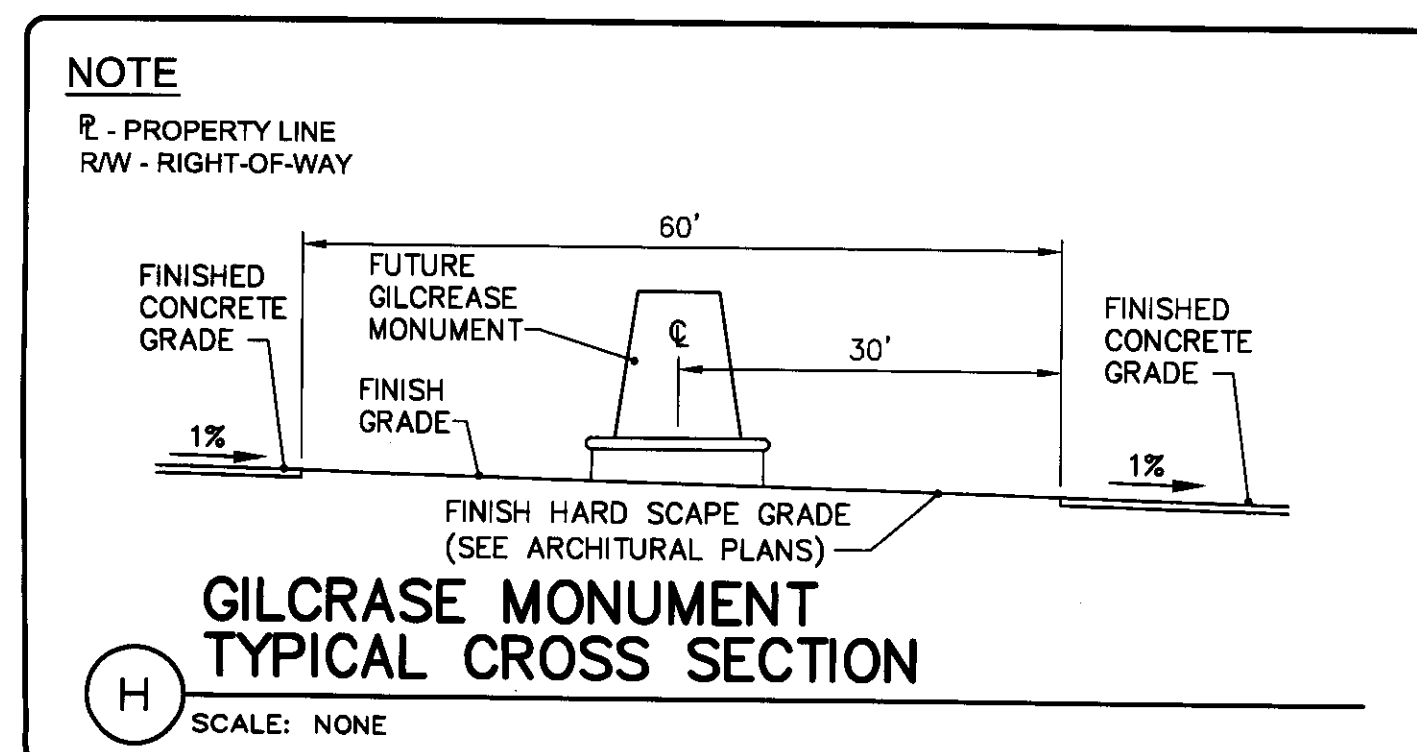
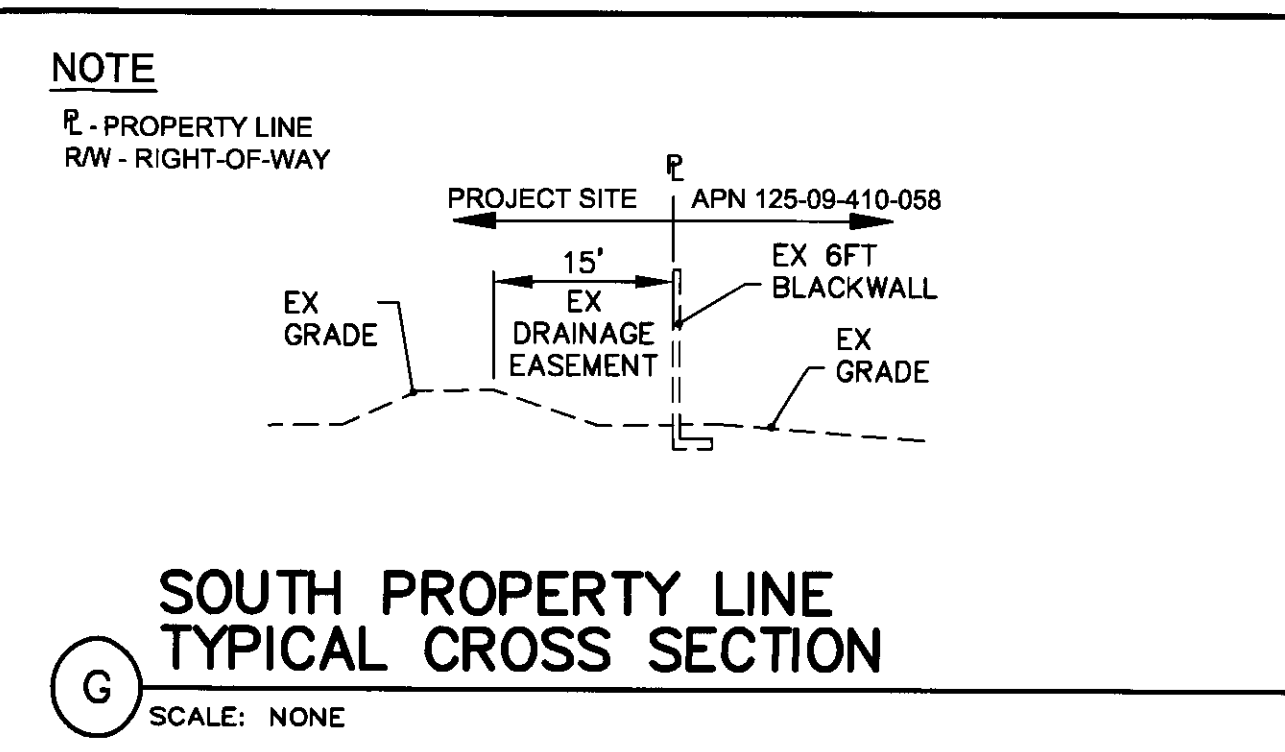
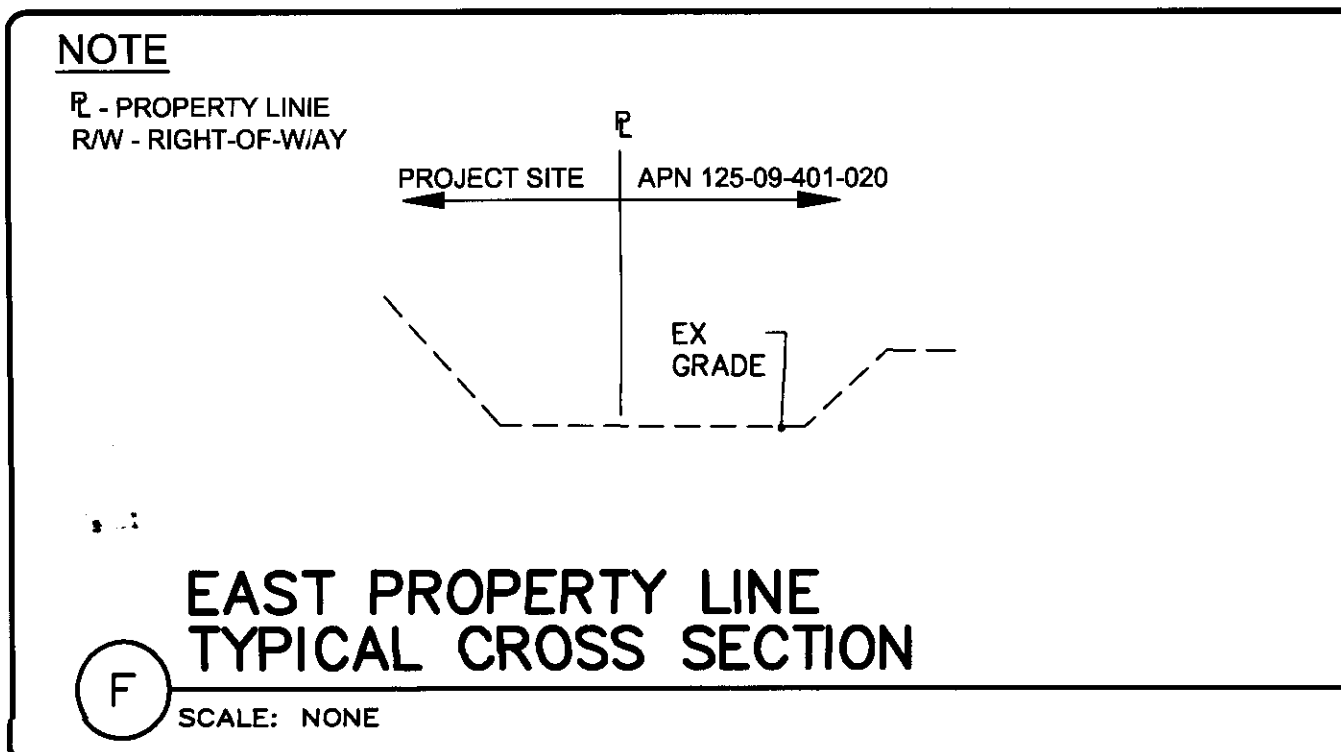
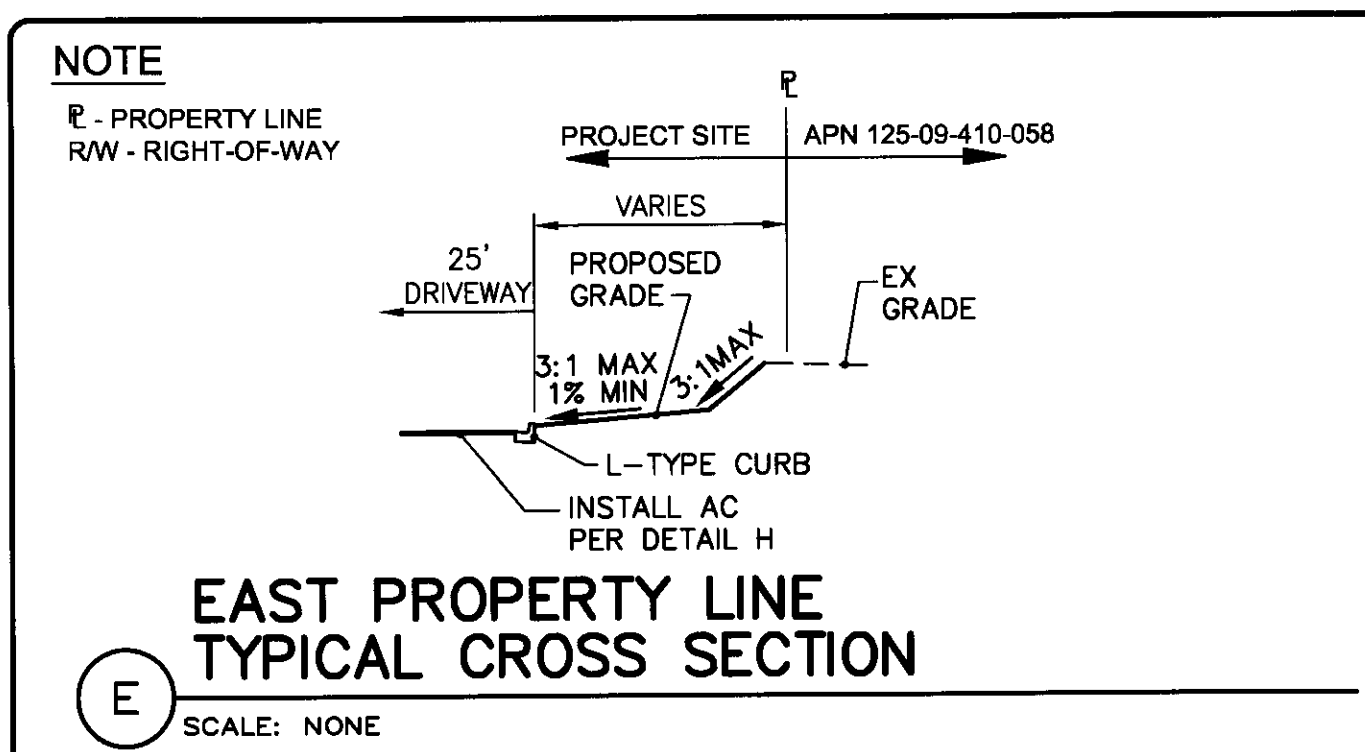
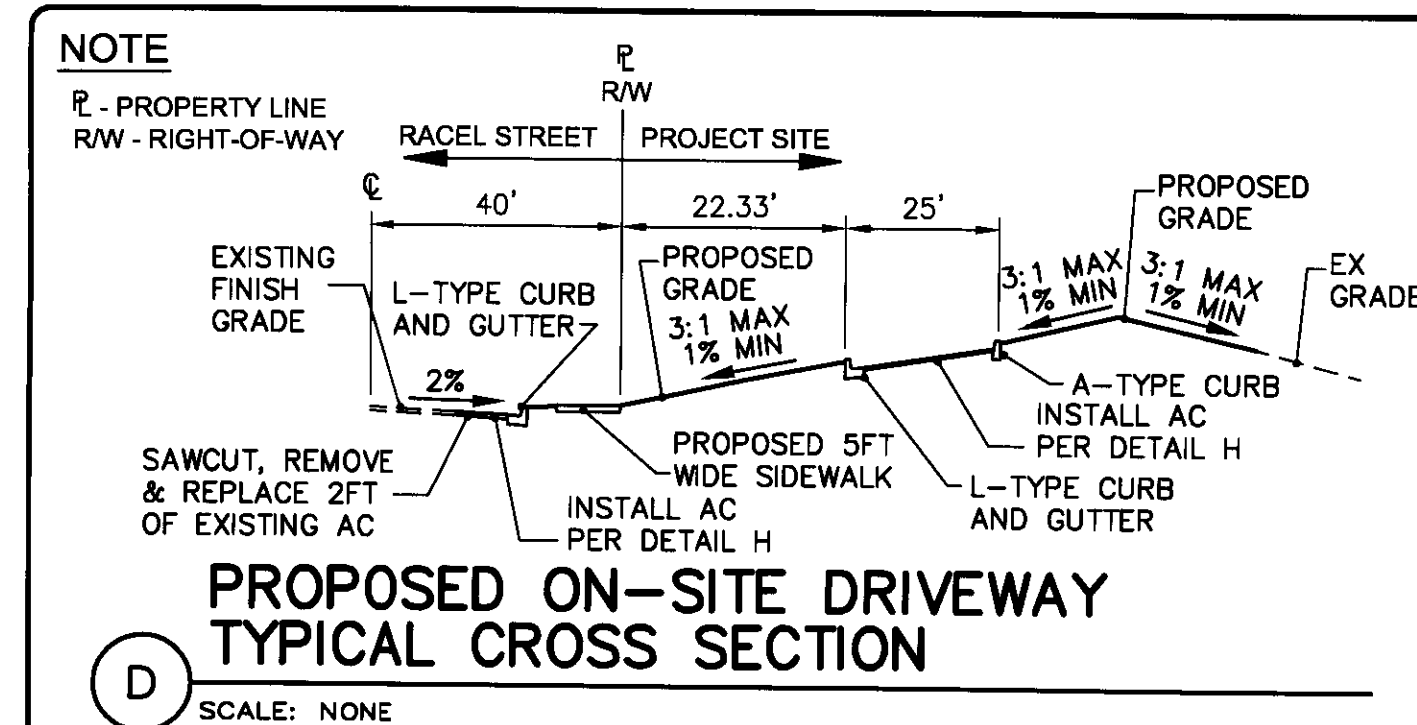
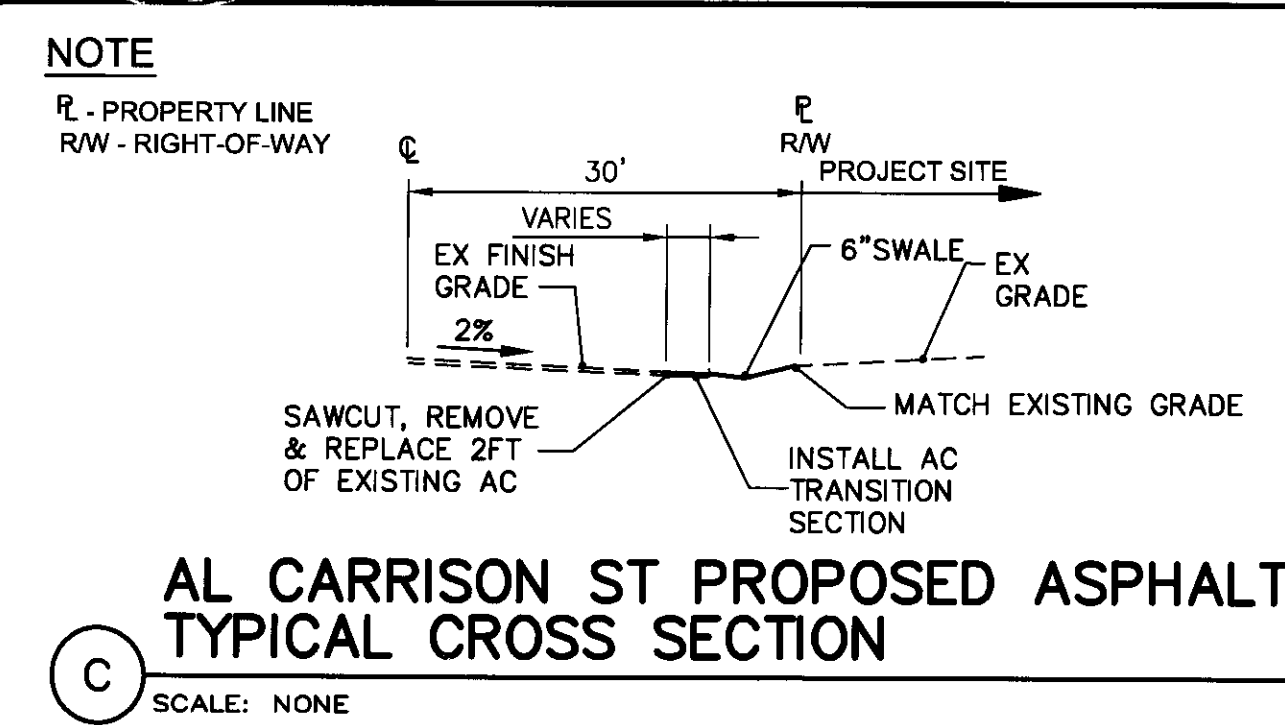
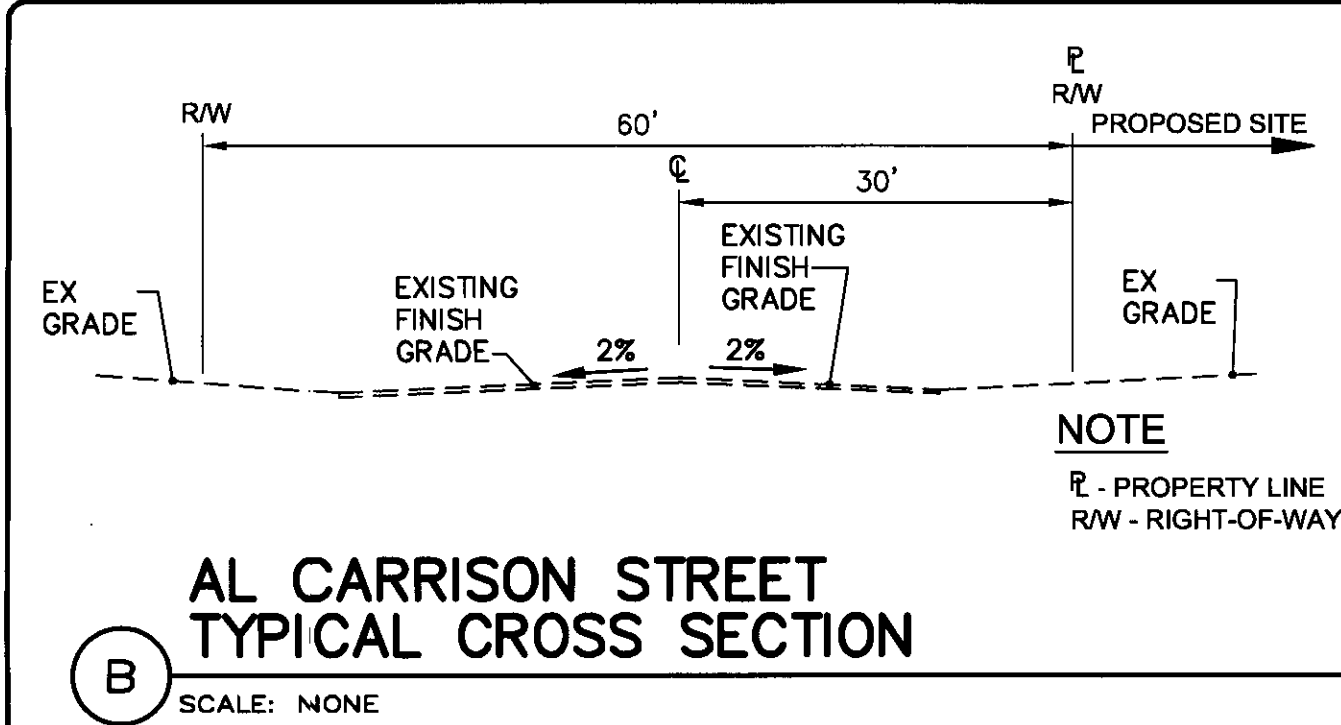
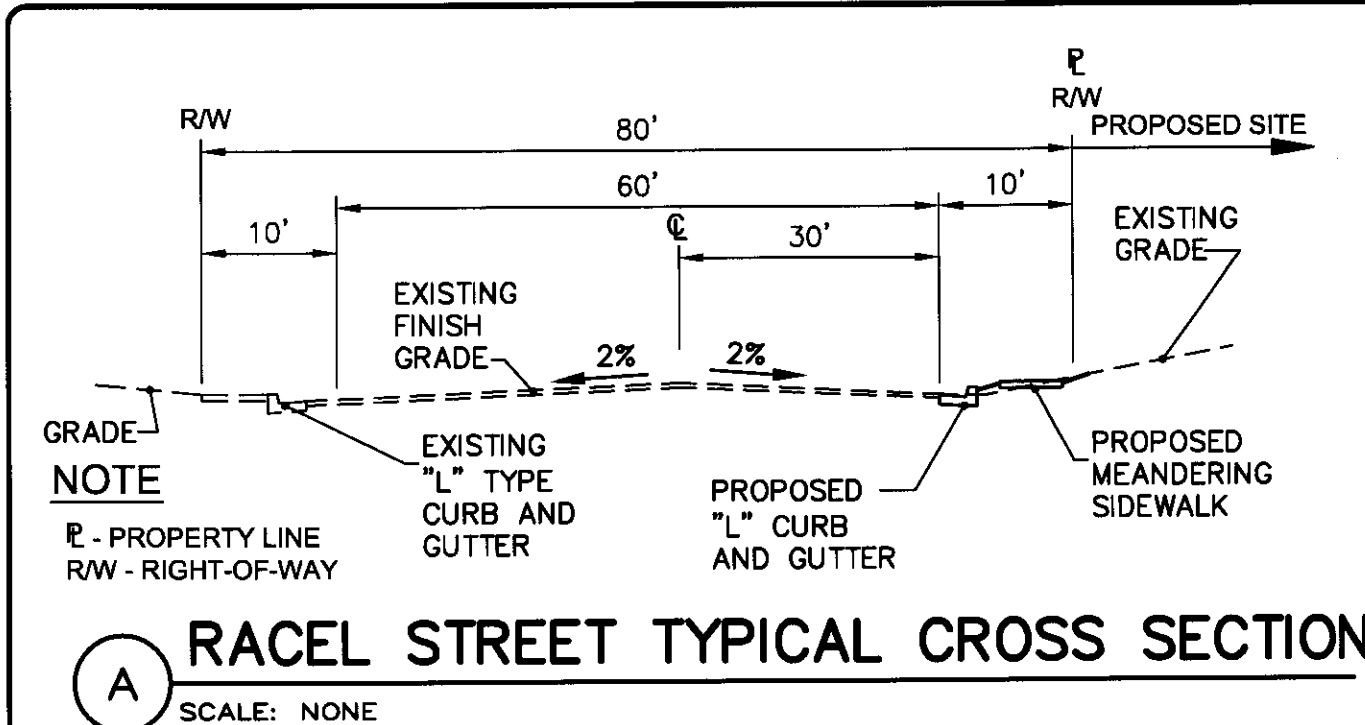
ACCEPTANCE OF THESE PLANS FOR FILING SHALL NOT BE CONSTRUED TO BE A PERMIT FOR, OR AN APPROVAL OF, ANY VIOLATION OF ANY OF THE PROVISIONS OF THE STATE OR COUNTY LAWS AND/OR SPECIFICATIONS. CLARK COUNTY SHALL BE HELD FREE FROM DAMAGES WHICH MAY RESULT FROM THE CONSTRUCTION OF THE IMPROVEMENTS FROM THE ENGINEERING DESIGN DEPICTED HEREIN. NOTE: POWER POLES AND/OR OTHER EXISTING FACILITIES NOT IN PROPER LOCATION, BASED ON PROPOSED IMPROVEMENTS SHOWN HEREON WILL BE RELOCATED AT NO EXPENSE TO CLARK COUNTY.

This grading plan is a part of drainage study # 4541 which was received on 3/8/12 and approved on 3/8/12. Page 1 of 2

H#:

|                                                                                                                              |                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>ENGINEER</b><br>JOE ALVIN HAIN<br>PE 14439<br>CIVIL<br>8/30/13<br>EXP.                                                    |                                                                                                      |
| <b>OWNER/DEVELOPER</b><br>GILCREASE NATURE SANCTUARY<br>8103 RACEL STREET<br>LAS VEGAS, NEVADA 89131<br>PHONE (702) 505-5127 | <b>ENGINEER</b><br>HAUNTEC<br>2721 IRONSIDE DRIVE<br>LAS VEGAS, NEVADA 89108<br>PHONE (702) 219-5785 |
| <b>DESIGNER</b><br>DRAWN BY:                                                                                                 | <b>PROJECT</b><br>GILCREASE NATURE SANCTUARY<br>PHASE 1<br>APN 125-09-401-033<br>LAS VEGAS, NEVADA   |
| <b>GRADING PLAN</b>                                                                                                          | <b>REVISIONS</b><br>NO. DATE BY                                                                      |
| <b>JOB NO.</b><br>11-0004                                                                                                    | <b>SHEET NO.</b><br>C1<br>1 OF 2                                                                     |





| ESTIMATE OF QUANTITIES                                     |          |         |          |
|------------------------------------------------------------|----------|---------|----------|
| ESTIMATE OF PUBLIC QUANTITIES FOR PERMITTING PURPOSES ONLY |          |         |          |
| STREET IMPROVEMENTS                                        | PRIVATE  | PUBLIC  | TOTAL    |
| 3" A.C. PAVEMENT W/6" TYPE II, 6" TYPE I AGGREGATE BASE    | 0 SY     | 1002 SY | 1002 SY  |
| 2" A.C. PAVEMENT W/6" TYPE II, 6" TYPE I AGGREGATE BASE    | 2,164 SY | 0 SY    | 2,164 SY |
| 5" CONCRETE SIDEWALK WITH 5" TYPE II AGGREGATE BASE        | 4,452 SY | 451 SY  | 4,903 SY |
| 24" SIDEWALK UNDERDRAIN                                    | 0 EA     | 1 EA    | 1 EA     |
| 2" L-TYPE CURB/ TYPE II BASE                               | 281 LF   | 825 LF  | 1106 LF  |
| 6" A-TYPE CURB/ TYPE II BASE                               | 893 LF   | 0 LF    | 893 LF   |
| 2" CONCRETE VALLEY GUTTER                                  | 231 LF   | 0 LF    | 231 LF   |
| 8' CONCRETE VALLEY GUTTER                                  | 0 LF     | 56 LF   | 56 LF    |
|                                                            |          |         |          |
|                                                            |          |         |          |
|                                                            |          |         |          |

NOTICE TO CONTRACTORS:  
QUANTITIES SHOWN ARE FOR PERMITTING PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN QUANTITY TAKE OFF, AND BID ACCORDINGLY.

**QUANTITY ESTIMATES**  
SCALE: NTS

## SWPPP 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 AT, THE PUBLIC RIGHTS OF WAY OF THE CITY OF LAS VEGAS 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 THE CITY OF LAS VEGAS, TITLE 19 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 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 NVR1000000, SECTION III.A.5.

4. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, EXPOSED FOR STORAGE OR MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY 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 BE NECESSARY, SUCH AS DURING MAINTENANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER 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.

Basis of bearing

THE WEST LINE OF THE NORTHWEST QUARTER (NW 1/4) OF THE  
SOUTHEAST QUARTER (SE 1/4) OF SECTION 35, TOWNSHIP 21 SOUTH,  
RANGE 60 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN BY THE  
MAP ON FILE IN FILE 99, PAGE 46 OF SURVEYS IN CLARK COUNTY  
RECORDER'S OFFICE, CLARK COUNTY, NEVADA.

## BENCHMARK

CLARK COUNTY BENCH MARK # 7C20 2SWS "1997" RIVET AND ROUND ALUMINUM PLATE IN A CONCRETE BASE. NE CORNER OF POWER POLE. NORTHEAST CORNER OF RAINBOW BLVD. AND WARM SPRINGS RD. POLE # "95650". ELEVATION 2510.33/765.149 METERS (NAVD 88 DATUM)

#4541 which was received on ~~NOTES~~ <sup>2/6/</sup> and ~~and~~ <sup>card</sup> on

1. THERE ARE NO EXISTING STRUCTURES OR FACILITIES ON THE PROPERTY. 2  
2. THERE ARE EXISTING IRRIGATION OR DRAINAGE EASEMENTS ON THE PROPERTY.  
3. THERE ARE NO EXISTING STORM DRAINS ADJACENT TO THE SITE.

H#:

**OWNER/DEVELOPER:**  
**GILCREASE NATURE SANCTUARY**  
8103 RACE STREET

AS VEGAS, NEVADA 89131  
PHONE (702) 505-5127

**HAUNTEC**  
2721 IRONSIDE DRIVE  
LAS VEGAS, NEVADA 89108

PHONE: (702) 219-5785

## GRADING DETAILS

PROJECT: GILCREASE NATURE SANCTUARY

PHASE 1  
PN 125-09-401-033

DESIGNER:  
DRAWN BY:

PROFESSIONAL ENGINEER-STATE OF NEVADA  
 JOE ALVIN HAUN  
 EXP: 6/30/13  
 CIVIL  
 No. 14439

JOB NO.  
11-0004

CLV DWG. NO.

SHEET NO.  
02

2 OF 2