

DS #: 4710

APN: 125-17-601-007; -610; 013 & 015

PROJECT: DC Plaza

SUBMITTAL: 1st Submittal

SCANNED BY/DATE:

CHECKED BY/DATE:



CITY OF LAS VEGAS		DATE:
INTER-OFFICE MEMORANDUM		December 22, 2014
TO: Land Development Services Department of Building & Safety		FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: DC Plaza	COPIES TO: Civil Squared Engineering
Cross Streets:	South of Durango Drive & Farm Road	Farm & Durango Investors LLC
File Number:	F:\Depot\DSMemos\DS4710A.doc	Bart Anderson, P.E., DevCo
Parcel Number:	125-17-601-007; -010; -013 & -015	NDOT
Zoning Action:	SDR-XXXXX and more	
FEMA Flood Zone	YES NO X	
Proposed Storm Drain	YES NO X	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1 st Submittal	11/17/2014	12/18/2014	See Comments Below	\$400.00	376943: \$400
TOTAL FEES (LDDRS):				\$400.00	----

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:
X	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. Provide a copy of the zoning/planning conditions associated with this site (**SDR-xxxxx and more**) 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.
2. Sites with a grade difference of 2 feet above or below existing are required to have approval from the *City Planning and Development Department*. The engineer must submit copies of the grading plans and detail sheet with a letter justifying the grade difference to the *City Planning Department* (229-6301). The engineer must provide Planning approval with the next submittal.
3. The project proposes to construct facilities and/or increase flows within *Nevada Department of Transportation* (NDOT) right-of-way (*Durango Drive*). The engineer must contact NDOT for encroachment permit for the proposed project.
4. Address whether a commercial subdivision map is proposed to combine the existing parcel lines in the subject development. Note that buildings cannot cross parcel lines. Review and resolve in the next submittal.

5. It is very confusing to envision where the NDOT right-of-way limit in *Durango Drive* is. The proposed 18"-storm drain system and onsite swale along *Durango Drive* convey public water. This storm drain system will be owned and to be maintained by NDOT. The engineer/developer is advised to coordinate with NDOT for an agreement for the adoption of the proposed drainage system in their right-of-way. A public drainage easement may need to be dedicated to NDOT for that purpose. This must be addressed and resolved prior to the final approval of the subject drainage study.
6. The discharge in the storm drain system stated in Comment #5 must be conveyed in a storm drain in *Farm Road*. Extend an existing 24"-RCP in *Farm* at the southeast corner of the subject site to the intersection of *Farm* and *Durango* to intercept the *Durango* discharge. Review and revise all pertinent plans accordingly.
7. Per the street improvement plans of **Lowe's of Caroline's Court** project (**Sheet C-4.7**), the three (3) stated drop inlets on the east side of *Durango Drive* are indeed connected to each of their corresponding inlets on the west side of *Durango*. The stated sub-basins for each inlet in *Durango Drive* in the subject study (**Figure-10** and **Figure-11**) are therefore incorrect. Each sub-basins must include the west half of *Durango Drive*.

Per the 5'-contours on GISMO, it appears that the bridge deck of *Durango Drive* over U.S 95 is the true high point of *Durango Drive*. Sub-basin "STD1a" may need to be expanded. Provide topographical survey to prove otherwise. This must be addressed in the next submittal.

8. Provide a lateral to the existing drop inlet at the BCR of *Durango Drive* discharging to the proposed onsite swale. As required in Comment #6 above, this discharge must be connected to an extended storm drain in *Farm Road* instead of surface runoff. Review and revise all pertinent plans accordingly.
9. **Sheet C4.01:**

The hump in the driveway entrance in *Durango Drive* does not provide adequate freeboard. The required freeboard is six inches minimum.

10. **Sheet C4.03:**

The finished floor elevations of *Building A* and *Building C* are below the corresponding street elevation in *Durango Drive*. As a minimum, provide a stem wall somewhere around the two buildings for flood protection. The stem wall must provide at least 18" tall solid grouted 8"-CMU. Review and revise accordingly in the next submittal.

11. **Sheet C4.04:**

- The finished floor elevations of *Building E* and *Building F* are lower than the adjacent island curb. This is not acceptable. Review and revise accordingly.
 - Provide perimeter wall along the southern boundary. Revise *Section Details N/C8.02, P/C8.02* and *Q/C8.02* accordingly.
 - Label finished floor elevations of existing houses in the adjacent *Village of Centennial Springs* to the south.
12. Provide a note on the grading plans: All Onsite Storm Drain Systems and the associated facilities are Privately Owned and to be Privately Maintained by the Owners/HOA.

13. Provide a note in the Final Map: "ALL SUBDIVIDED PARCELS COMPRISING THIS COMMERCIAL SUBDIVISION SHALL PROVIDE PERPETUAL INTERSITE COMMON DRAINAGE RIGHTS ACROSS ALL EXISTING AND FUTURE PARCEL LIMITS".
14. Add a note in all pertinent sheets for the construction of all storm drain drop inlets per a newly adopted USDCCA Drawing No. 421 (*Stormwater Quality Management Stamp and Sign Detail*).

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/17
AREA G-17

 *** FAX TX REPORT ***

TRANSMISSION OK

JOB NO. 0130
 DESTINATION ADDRESS 7022488070
 PSWD/SUBADDRESS
 DESTINATION ID
 ST. TIME 12/22 11:42
 USAGE T 00' 54
 PGS. 3
 RESULT OK

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM

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 Department of Building & Safety

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FROM:

Albert Sung, P.E.
 Flood Control Project Engineer
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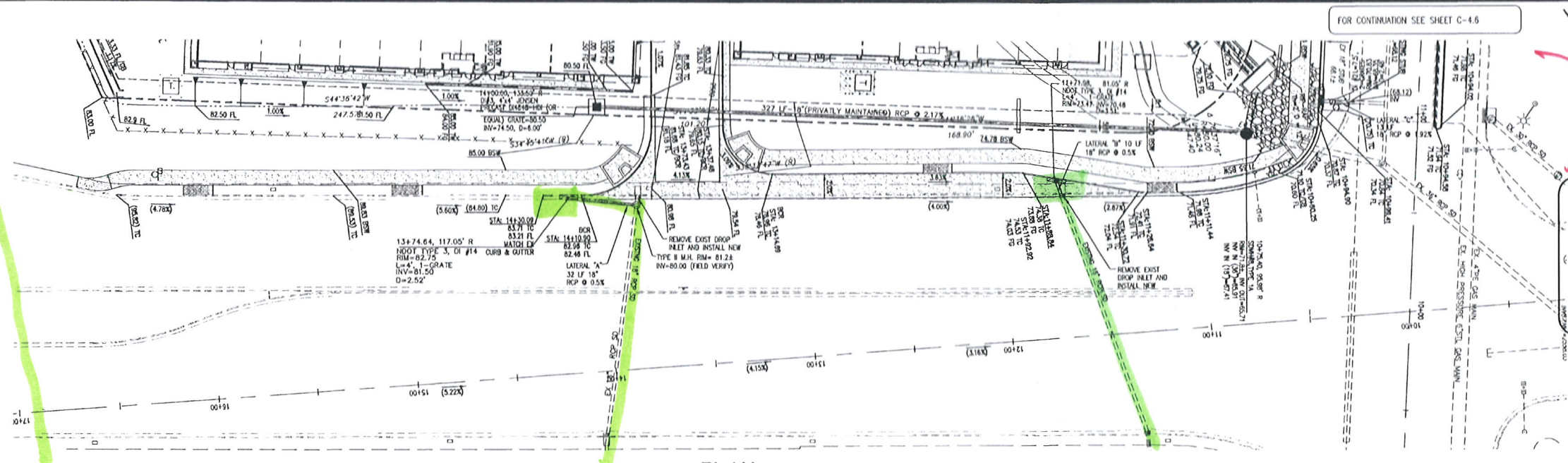
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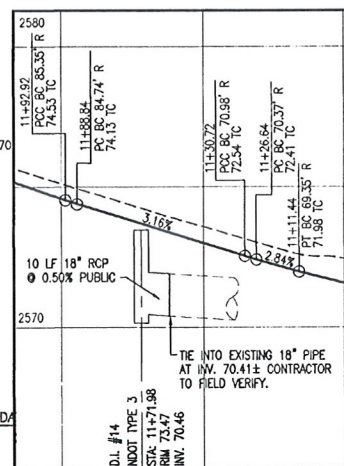
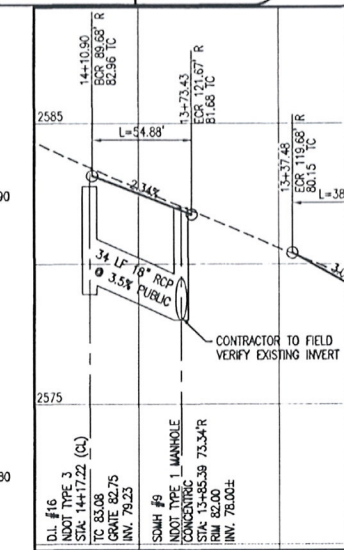
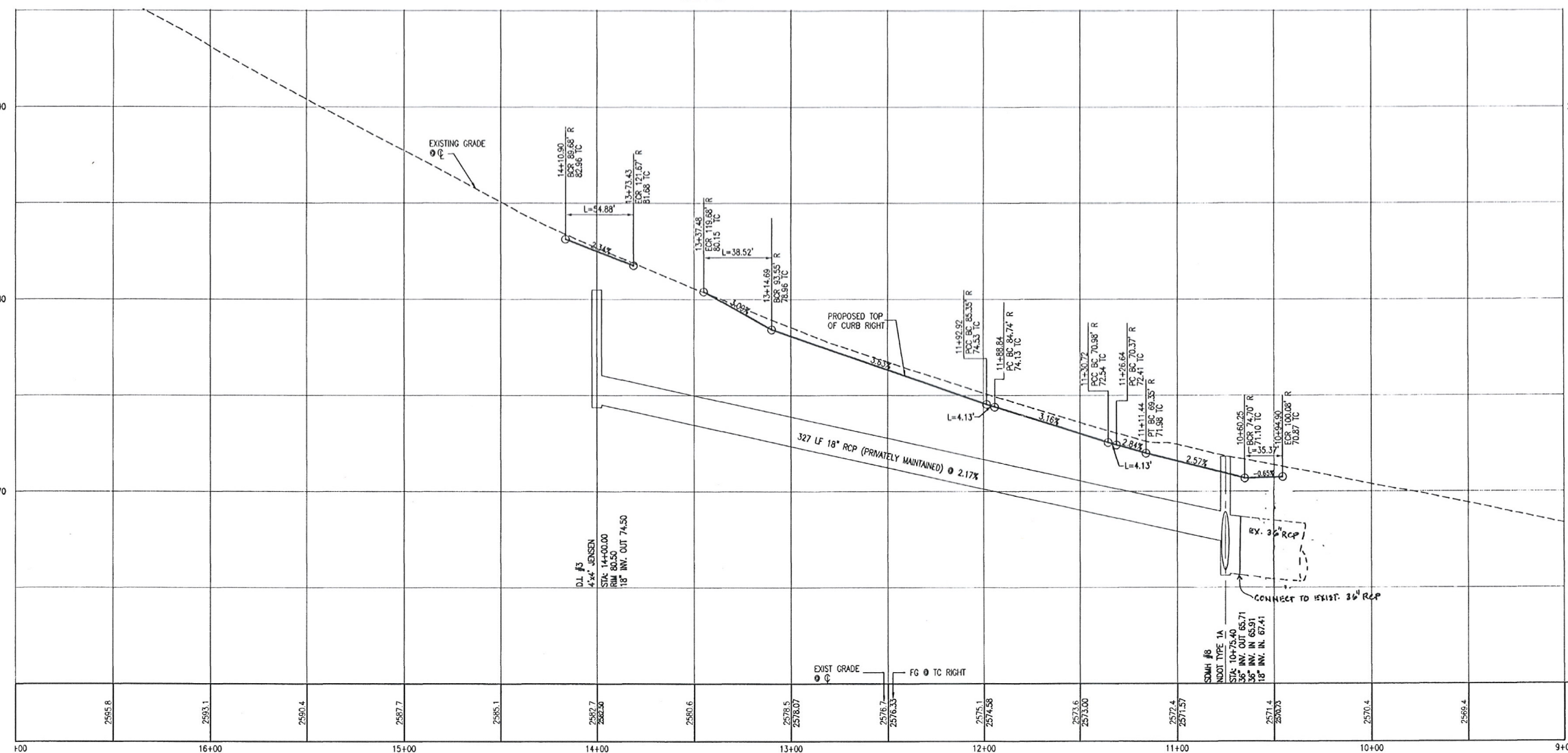
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PLAN
SCALE: 1"=30'



NOTE:
"Construction of new facilities or modifications of existing drainage structures within the Department right-of-way shall be in compliance with current Department Standard Plans and Specifications for Roadway and Bridge Construction and the Department's Drainage Manual."

107Y4969

REVISIONS	
DATE	DESCRIPTION

EKN ENGINEERING

Engineers / Planners / Surveyors
1000 MAIN STREET, SUITE 200, LAS VEGAS, NV 89102
TEL: (702) 462-5777 FAX: (702) 462-0779
JULIE HARRIS, P.E. (702) 462-5777
JILL HARRIS, P.E. (702) 462-5777
JILL HARRIS, P.E. (702) 462-5777
JILL HARRIS, P.E. (702) 462-5777

PROFESSIONAL ENGINEER - STATE OF NEVADA
MATTHEW W. LOSER
EXP. 12/31/2008
No. 018487

LOWE'S HWY, INC.
1530 FARADAY AVE., SUITE 140
CARLSBAD, CA 92008
760.804.5300 (V) 760.918.9112 (F)

LOWE'S

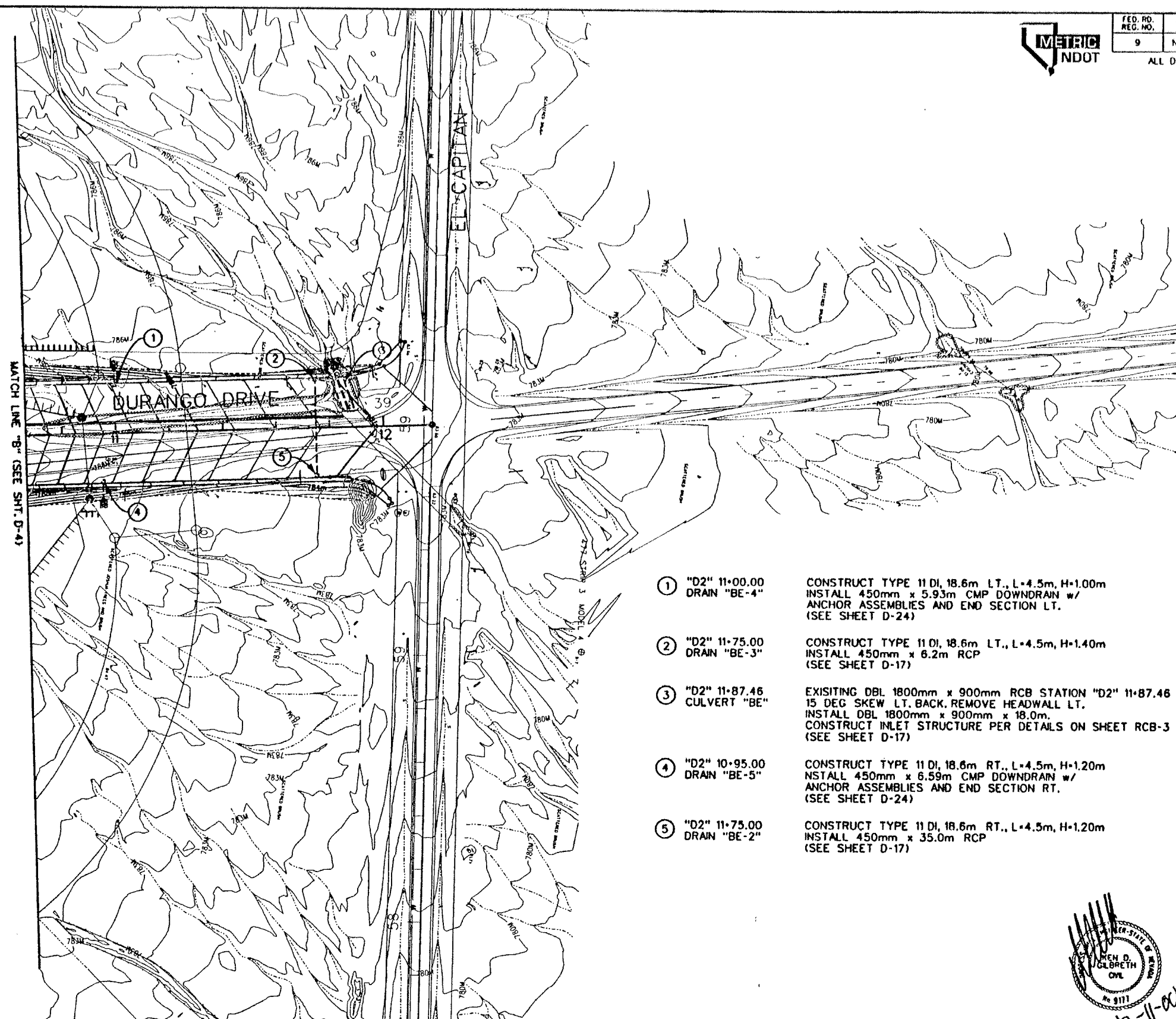
STREET PLAN AND PROFILE
DURANGO DRIVE
LOWE'S OF CAROLINE'S COURT
LAS VEGAS, NEVADA

ORIGINAL ISSUE
DATE: 07-24-04
PERMIT SET
ISSUE DATE: TBO
CONSTRUCTION
SET ISSUE DATE: TBO
DRAWING NUMBER
C-4.7
18 of 75 SHEETS

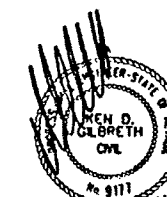


FED. RD. REG. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
9	NEVADA	STP-095-2(022)	CLARK	D-9

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN



- ① "D2" 11+00.00 DRAIN "BE-4"
CONSTRUCT TYPE 11 DI, 18.6m LT., L=4.5m, H=1.00m
INSTALL 450mm x 5.93m CMP DOWNDRAIN w/
ANCHOR ASSEMBLIES AND END SECTION LT.
(SEE SHEET D-24)
- ② "D2" 11+75.00 DRAIN "BE-3"
CONSTRUCT TYPE 11 DI, 18.6m LT., L=4.5m, H=1.40m
INSTALL 450mm x 6.2m RCP
(SEE SHEET D-17)
- ③ "D2" 11+87.46 CULVERT "BE"
EXISTING DBL 1800mm x 900mm RCB STATION "D2" 11+87.46
15 DEG SKEW LT. BACK, REMOVE HEADWALL LT.
INSTALL DBL 1800mm x 900mm x 18.0m.
CONSTRUCT INLET STRUCTURE PER DETAILS ON SHEET RCB-3
(SEE SHEET D-17)
- ④ "D2" 10+95.00 DRAIN "BE-5"
CONSTRUCT TYPE 11 DI, 18.6m RT., L=4.5m, H=1.20m
INSTALL 450mm x 6.59m CMP DOWNDRAIN w/
ANCHOR ASSEMBLIES AND END SECTION RT.
(SEE SHEET D-24)
- ⑤ "D2" 11+75.00 DRAIN "BE-2"
CONSTRUCT TYPE 11 DI, 18.6m RT., L=4.5m, H=1.20m
INSTALL 450mm x 35.0m RCP
(SEE SHEET D-17)



STATE OF NEVADA DEPARTMENT OF TRANSPORTATION	
DURANGO DR. / US 95 INTERCHANGE	
73	107V3813
DRAINAGE PLAN	
DESIGN BY DRAWN BY CHECKED BY REVIEWED BY	BOH L.S. KDC

11/22/00

11 DEC 2000

\\cadd\subwork\5563\drainage\all sheets\1-d-09.dgn

57913

NOTE:
GRATE ELEVATION IS CALCULATED FROM
THE CENTERLINE OF THE DROP INLET AT
THE NORMAL FLOWLINE OF THE GUTTER.

METRIC
Profile Window

FED. RD. DIST. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
9	NEVADA	STP-095-2(022)	CLARK	D-17

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