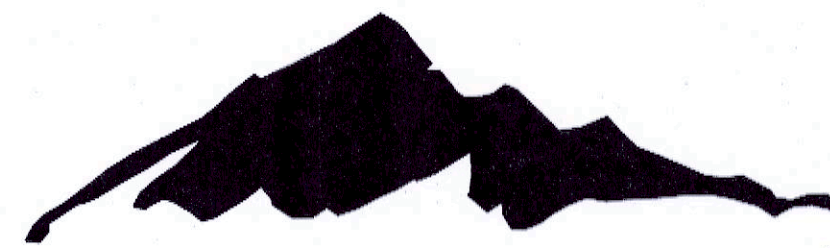


SHEET INDEX		
NO	DWG	SHEET DESCRIPTION
1	G1	COVER SHEET
2	G2	GENERAL NOTES
3	G3	PROJECT DATA
4	HC1	HORIZONTAL CONTROL PLAN 1
5	HC2	HORIZONTAL CONTROL PLAN 2
6	HC3	HORIZONTAL CONTROL PLAN 3
7	HC4	HORIZONTAL CONTROL PLAN 4
8	HC5	HORIZONTAL CONTROL PLAN 5
9	HC6	HORIZONTAL CONTROL PLAN 6
10	HC7	LINE & CURVE DATA 1
11	GD1	GRADING PLAN 1
12	GD2	GRADING PLAN 2
13	GD3	GRADING PLAN 3
14	GD4	GRADING PLAN 4
15	GD5	GRADING PLAN 5
16	GD6	GRADING PLAN 6
17	MU1	MASTER UTILITY PLAN - WATER
18	MU2	MASTER UTILITY PLAN - STORM DRAIN
19	MU3	MASTER UTILITY PLAN - SEWER
20	UT1	UTILITY PLAN 1
21	UT2	UTILITY PLAN 2
22	UT3	UTILITY PLAN 3
23	UT4	UTILITY PLAN 4
24	UT5	UTILITY PLAN 5
25	UT6	UTILITY PLAN 6
26	PP1	PLAN AND PROFILE 1
27	PP2	PLAN AND PROFILE 2
28	DT1	DETAILS AND SECTIONS 1
29	DT2	DETAILS AND SECTIONS 2
30	DT3	DETAILS AND SECTIONS 3
31	TR1	SIGNAGE AND STRIPING PLAN 1
32	TR2	SIGNAGE AND STRIPING PLAN 2
33	TR3	SIGNAGE AND STRIPING PLAN 3
34	TR4	SIGNAGE AND STRIPING PLAN 4
35	TR5	SIGNAGE AND STRIPING PLAN 5

SUMMERLIN



SM

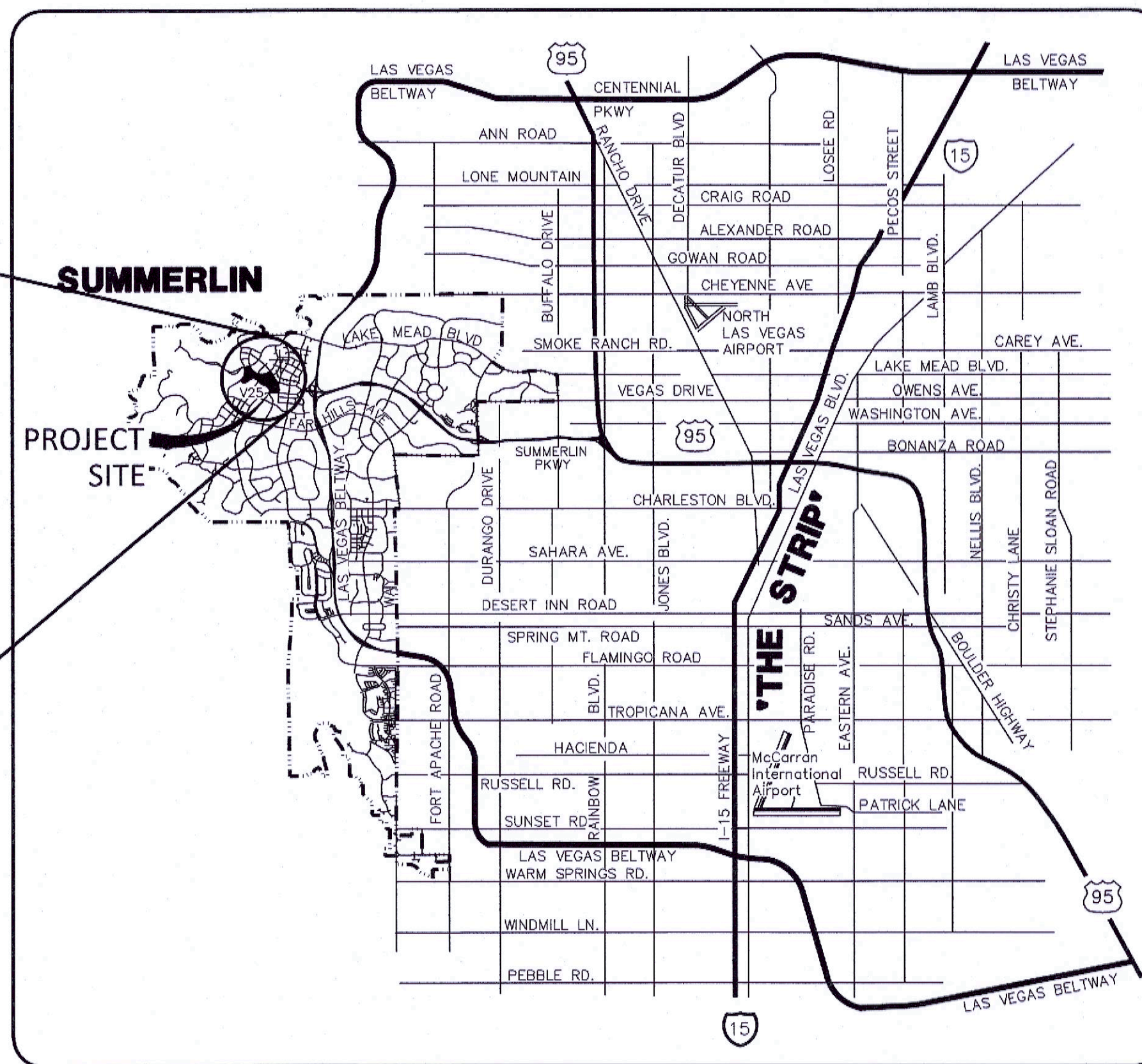
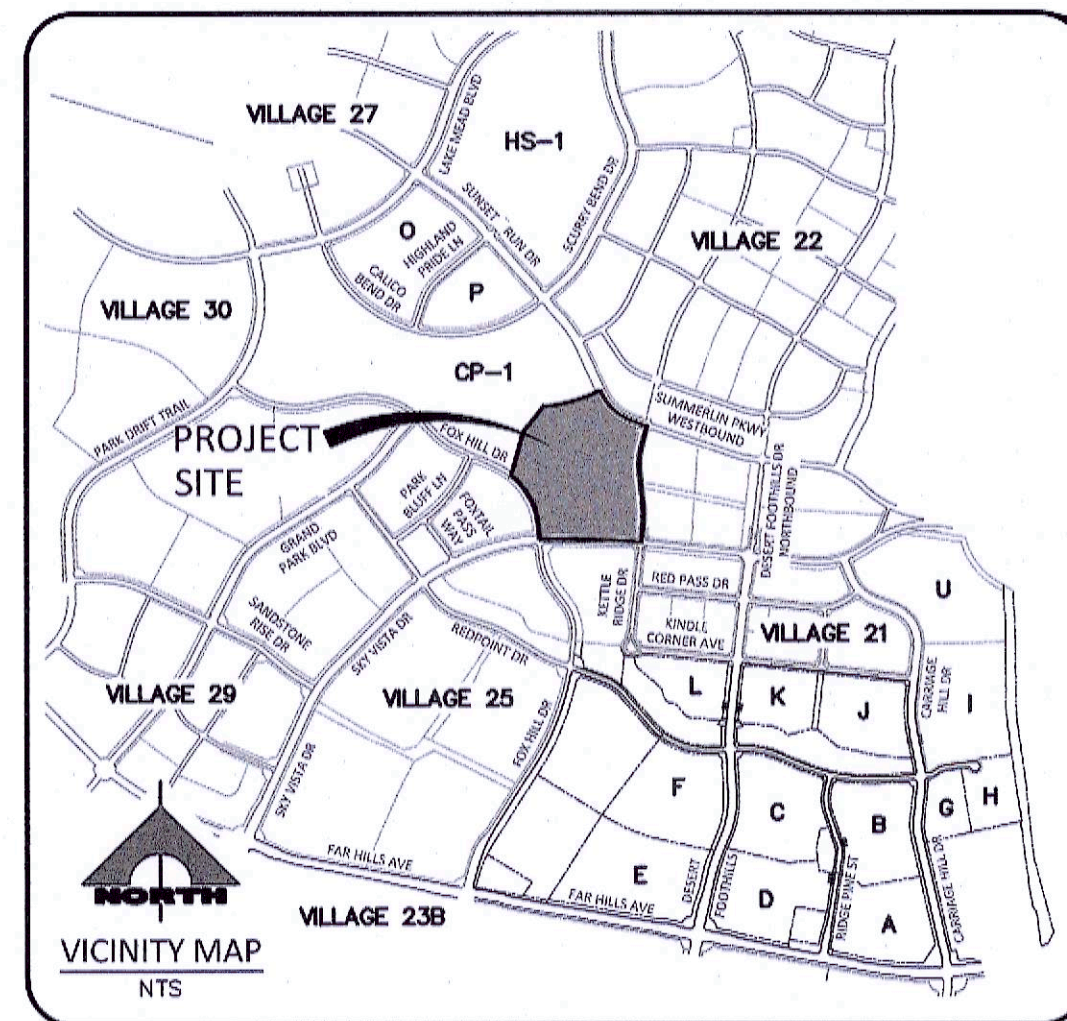
VILLAGE 25

SUMMERLIN COUNCIL PARK AT GRAND PARK IMPROVEMENTS

A.P.N. 137-22-711-001

2022

22.37 AC

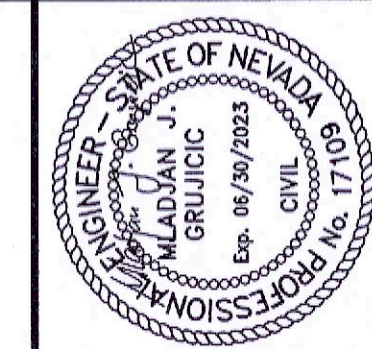


OWNER/DEVELOPER

THE HOWARD HUGHES COMPANY, LLC
10845 GRIFFITH PEAK DRIVE, SUITE 160
LAS VEGAS, NEVADA 89135
OFFICE PHONE NO. (702) 791-4300

ENGINEER

GCV
ENGINEERS & SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com



CAUTION TO CONTRACTOR
THE CONTRACTOR SHALL BE RESPONSIBLE TO INVESTIGATE AND VERIFY THE ACTUAL LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND FACILITIES AT LEAST 48 HOURS IN ADVANCE OF THE PERFORMANCE OF ANY WORK.

THE HOWARD HUGHES COMPANY, LLC
KEVIN T. ORROCK
PRESIDENT, SUMMERLIN
DATE

CLV PLANNING DEPARTMENT
THIS PLAN MEETS THE APPLICABLE STANDARDS OF THE DEPARTMENT OF PLANNING.
CITY OF LAS VEGAS PLANNING DEPARTMENT
DATE

DRY UTILITY APPROVALS
COX COMMUNICATIONS LAS VEGAS, INC. DATE
CENTRAL TELEPHONE CO., DBA CENTURYLINK DATE
THE AFFIXED CENTURYLINK APPROVAL DOES NOT ASSUME OR GUARANTEE LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICT WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.
NV ENERGY DATE
NV ENERGY - TRANSMISSION ENGINEERING DATE
SOUTHWEST GAS CORPORATION SWG UID DATE

APPROVALS
CITY OF LAS VEGAS ENGINEERING
DATE

DRAINAGE CERTIFICATION
I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY D55579A ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.
12/9/2022
DATE
MLADJAN J. GRUJICIC, P.E. NO. 17109

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. 140622 FIRST APPROVAL DATE:
LVWMD APPROVED FIRE FLOW: TOTAL 1,500 GPM / ON-SITE 1,500 GPM
SHEETS: G1-G3, MU1-MU3, UT1-UT6, DT3

LAS VEGAS FIRE & RESCUE APPROVAL
LAS VEGAS FIRE & RESCUE
DATE

PROJECT NO. 62025-660-1
DESIGN: CS
DRAWN: CS/MP
CHECK: LP/MS
PLOT DATE: 12-09-22
PLOT TIME: 13:58:39
CHRISTIAN SALCEDO

THE HOWARD HUGHES COMPANY, LLC
VILLAGE 25 SUMMERLIN COUNCIL PARK
AT GRAND PARK

DRAWING
G1
1 OF 35 SHTS

L#: LXX-XXXX-XXXX CLV#: 107XXXX

	TYPICAL PROPOSED LINEWORK		DETAIL BUBBLE W/ REF.
	TYPICAL EXISTING LINEWORK		BENCHMARK
	TYPICAL FUTURE LINEWORK		GATE VALVE
	SECTION LINE		PRESSURE REDUCING VALVE
	EASEMENT LINE		BACK WATER VALVE
	EDGE OF PAVEMENT		DROP INLET
	LOTLINE		FIRE HYDRANT
	RIGHT-OF-WAY LINE		WATER METER
	PROPERTY LINE		WATER RPFA
	CENTERLINE		WATER RPDA
	TYPICAL UTILITY LINE 4" - 12" (SINGLE LINE)		TRAFFIC SIGNAL PULL BOX
	TYPICAL UTILITY LINE > THAN 12" (DOUBLE LINE)		STREET LIGHT CLARK COUNTY
	TYPICAL SEWER LINE W/MH		STREET LIGHT SUMMERLIN STD
	TYPICAL WATER LINE W/GV		
	TYPICAL STORM LINE W/MH		
	100 YR HYDRAULIC GRADE LINE		
	CONCRETE OR STEEL ENCASEMENT		
	TYPICAL STUB & BLOW-OFF		TRAFFIC SIGNAL/FLASHER
	EX. GAS LINE		EXISTING TELE POLE
	EX. ELECTRICAL		EXISTING POWER POLE
	EX. CABLE TV		EXISTING POLE
	EX. TELEPHONE		EX. ELEC MARKER
	EX. OVERHEAD POWER LINES		
	EX. ELEC & PWR POLES		TRANSFORMER PAD
			SERVICE PEDESTAL
	TYPICAL CURB & GUTTER, SIDEWALK AND RAMP		PULLBOX
			PROPOSED CONTOUR
	POST AND CABLE FENCE		EXISTING CONTOUR
	WROUGHT IRON FENCE		PROPOSED SPOT ELEVATION
	CHAIN LINK FENCE		EXISTING SPOT ELEVATION
	SAWCUT		PROPOSED SLOPE
	PAVEMENT RESORATION AREA		
	PROPOSED ABANDONMENT		
	EXISTING ABANDONMENT		
	CUT LINE LIMITS		
	FILL LINE LIMITS		

SEWER QUANTITIES (PRIVATE)	
6" C-900	1,261 LF
6" CLEANOUT	17 EA
320 GAL GREASE INTERCEPTOR	1 EA
12"X6" REDUCER	1 EA

QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.

<u>WATER QUANTITIES (PRIVATE)</u>	
2" PE	1,188 LF
6" PVC	1,148 LF
6"x2" REDUCER	5 EA
6" CAP & BLOW-OFF	2 EA
DRINKING FOUNDATION	7 EA
3" WATER METER	2 EA

**QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR
IS TO VERIFY DURING BIDDING PROCESS.**

ROAD IMPROVEMENT QUANTITIES (PRIVATE)		
EXCAVATION	357,103	CY
EMBANKMENT	35,338	CY
NET (CUT)	321,765	CY
2" A.C. PAVEMENT	12,929	SY
4" TYPE II AGGREGATE BASE	1,437	CY
"L" TYPE CURB & GUTTER	3,888	LF
"A" TYPE MEDIAN CURB	5,777	LF
CROSS GUTTER	4,974	SY
PAVEMENT STRIPING	2,440	LF
PAVEMENT MARKING	2,440	LF
SIGNAGE	12	EA
SIDEWALK 4"	160,587	SF
SIDEWALK STAIRS	25	EA

QUANTITIES ARE ESTIMATES ONLY. CONTRACTOR IS TO VERIFY DURING BIDDING PROCESS.

SOUTHWEST GAS APPROVAL

SOUTHERN NEVADA - SOUTHWEST GAS CORPORATION

GENERAL NOTES

1. IN THE EVENT OF NATURAL GAS EMERGENCIES CALL 911 AND 1-877-860-6020.
2. MINIMUM HORIZONTAL AND VERTICAL CLEARANCES BETWEEN NATURAL GAS FACILITIES AND ANY UNDERGROUND UTILITIES AND/OR STRUCTURES, INCLUDING BUT NOT LIMITED TO WATER, SEWER, STORM DRAIN, COMMUNICATIONS, AND ELECTRIC SHALL BE AT LEAST 12-INCHES OR GREATER AS DICTATED BY LOCAL CODES AND STANDARDS.
1/4" APPROVED BY ALL AFFECTED UTILITIES AND/OR MUNICIPALITIES
3. FOR VALVE ADJUSTMENT CONTACT 702-528-7855 14 DAYS PRIOR TO CONSTRUCTION
4. FOR ADJUSTMENT OF CATHODIC PROTECTION TEST POINTS CONTACT 702-528-7873 14 DAYS PRIOR TO CONSTRUCTION.
5. IN THE EVENT OF A NATURAL GAS CONFLICT WITH PROPOSED UTILITIES AND STRUCTURES CONTACT 702-365-2099
6. FOR STANDBY WHEN EXCAVATING (INCLUDING SAW CUTTING AND PAVEMENT REMOVAL) OVER OR NEAR HIGH PRESSURE GAS LINES CONTACT 702-278-8451 48 HOURS PRIOR TO CONSTRUCTION.

BASIS OF BEARING AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FT/US)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FT/US)
EASTING AT CENTRAL MERIDIAN: 300,000.00 M (984,250.0000 FT/US)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DETERMINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK			
BM#	DESCRIPTION	NAVD 88 DATUM	NAVD 85 DATUM
CLV BM N96. 5LV0926W6	CITY OF LAS VEGAS RIVET AND PLATE IN TOP OF CURB AT THE SOUTHEAST CORNER OF CARRIAGE HILLS DR. AND FAR HILLS AVE.	3229.22 (FEET)	984.267 (METERS)

<u>APPROVED FOR CONSTRUCTION</u>	
LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES	
PROJECT NO. 140622	FIRST APPROVAL DATE: _____
L#: LXX-XXXXX-XXXX	CLV#: 107XXXX

[illegible]

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY DS5579A ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

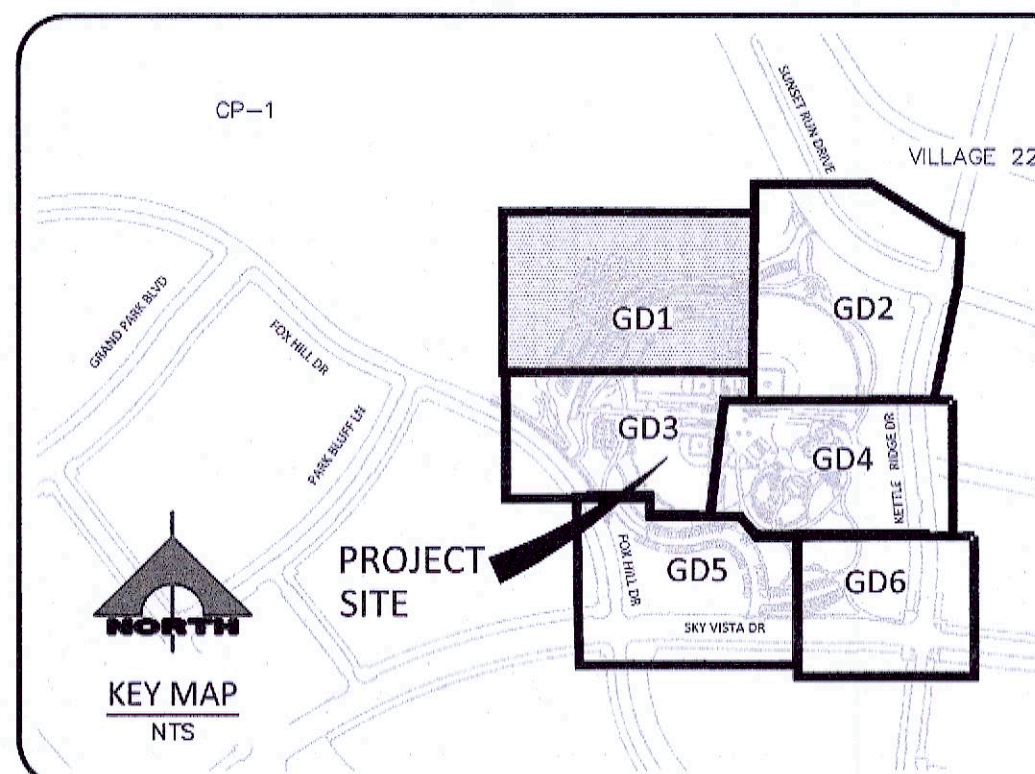
12/9/2022

MLADJAN J. GRUJICIC, P.E. NO. 17109 DATE

FOR GRAND PARK DETENTION BASIN EXISTING
IMPROVEMENTS, REFER TO THE FOLLOWING SET:
"SUMMERLIN WEST VILLAGE 25 GRAND PARK DETENTION
BASIN DETENTION BASIN PLANS"
BY VTN
CLV #731-109, L20-00361

STRUCTURE	SIZE & TYPE	DEPTH	RIM	INV IN	INV OUT	Q100	NORTHING	EASTING
DI #1	5.0' TYPE "CM2" DI	9.99	3463.22	3453.23	3453.23	0	1291359.1547	869394.5209
DI #2	7.5' TYPE "CM2" DI	5.48	3469.48	3464.00	3464.00	0	1291301.0508	869164.9154
DI #3	24"x24" JENSEN PRE-CAST DI	4.50	3470.02		3465.52	0	1291291.6070	869116.9983
DI #4	24"x24" JENSEN PRE-CAST DI	4.50	3459.01		3454.51	0	1291418.0564	869408.0474
DI #5	24"x36" JENSEN PRE-CAST DI	3.00	3480.73		3477.73	0	1291553.2920	869077.1959
DI #6	18"x18" JENSEN PRE-CAST DI	5.47	3495.17	3489.70	3489.70	0	1291897.0353	869080.2846
DI #7	12"x12" JENSEN PRE-CAST DI	2.50	3499.26		3496.76	0	1291907.1337	869028.5878
DI #8	18"x18" JENSEN PRE-CAST DI	4.00	3498.95		3494.95	0	1291893.7129	868941.6656
DI #9	5.0' TYPE "CM2" DI	7.63	3511.77		3506.30	0	1291866.0292	868601.2587
DI #10	24"x24" JENSEN PRE-CAST DI	4.00	3472.97		3468.97	0	1291654.5583	869403.2683
DI #11	24"x36" JENSEN PRE-CAST DI	3.44	3473.38	3469.94	3469.94	0	1291838.0354	869433.7600
DI #12	12"x12" JENSEN PRE-CAST DI	14.64	3484.87		3470.23	0	1291895.2234	869434.8827
DI #13	7.50' TYPE CM2 DI	2.61	3482.01		3479.40	0	1292346.5017	869279.6812
DI #14	18"x18" JENSEN PRE-CAST DI	4.50	3478.74		3474.24	0	1291506.3692	869146.0333
SDMH #1	48" TYPE II	5.63	3444.96	3439.33 3439.33	3439.33	0	1291302.9088	869553.6180
SDMH #2	48" TYPE II	12.16	3455.66	3443.50 3443.50	3443.50	0	1291378.7017	869437.0692
SDMH #3	72" STORMCEPTOR	11.11	3454.70	3443.59	3443.59	0	1291369.8551	869422.1288
SDMH #4	48" TYPE II	7.30	3459.07	3451.77 3451.77	3451.77	0	1291412.1410	869402.3501

STRUCTURE	SIZE & TYPE	DEPTH	RIM	INV IN	INV OUT	Q100	NORTHING	EASTING
SDMH #5	48" TYPE II	10.85	3473.85	3463.00 3463.00	3463.00	0	1291509.1843	869332.2512
SDMH #6	48" TYPE II	10.15	3478.26	3468.11	3468.11	0	1291547.8693	869308.6035
SDMH #7	48" TYPE II	4.59	3473.39	3468.80 3468.80	3468.80	0	1291640.7054	869401.8606
SDMH #8	48" TYPE II	5.33	3475.15	3469.82 3469.82	3469.82	0	1291816.1128	869445.6377
SDMH #9	60" TYPE I	4.00	3474.40	3470.40	3470.40	0	1291946.2493	869501.3003
SDMH #10	60" TYPE I	6.00	3478.38	3473.38	3473.38	0	1292122.8810	869472.1540
SDMH #11	72" STORMCEPTOR	6.56	3485.51	3478.95	3478.95	0	1292288.5154	869348.9614
SDMH #12	48" TYPE II	7.16	3480.81	3473.65 3473.65	3473.65	0	1291518.4992	869176.8793
SDMH #13	48" TYPE II	8.36	3484.64	3476.28 3476.28	3476.28	0	1291572.0384	869114.4059
SDMH #14	60" TYPE I	6.27	3493.48	3487.21	3487.21	0	1291797.0477	869101.8719
SDMH #15	48" TYPE II	5.54	3494.99	3489.45 3489.45	3489.45	0	1291867.3033	869076.9998
SDMH #16	48" TYPE II	5.44	3499.49	3494.05 3494.05	3494.05	0	1291872.9712	868957.1698
SDMH #17	60" TYPE I	5.95	3511.49	3505.54	3505.54	0	1291887.5753	868648.4133



1
R) CONSTRUCT SIDEWALK RAMP PER $\left(\frac{A}{232} \right)$ USD

2
R) INSTALL DECORATIVE/RETAINING WALLS, SEE LANDSCAPE PLANS (BY OTHERS)

3
R) INSTALL 6" PVC UNDERDRAIN

4
R) INSTALL STAIRS PER $\left(\frac{A}{DT2} \right)$

5
R) CONSTRUCT 8' CROSS GUTTER PER $\left(\frac{228}{USD} \right)$

6
R) INSTALL 0" FLUSH CURB PER $\left(\frac{2}{DT1} \right)$

7
R) CONSTRUCT 32' FACE OF CURB TO FACE OF CURB DRIVEWAY PER $\left(\frac{222.1}{USD} \right)$ $\left(\frac{22}{USD} \right)$

8
R) PROPOSED SIDEWALK SEE LANDSCAPE PLANS

9
R) INSTALL 3" A.C. PAVEMENT OVER 4" TYPE II AGGREGATE

10
R) CONSTRUCT RETAINING WALL - SEE PLANS BY OTHERS

11
R) INSTALL 24" "L" TYPE CURB & GUTTER PER $\left(\frac{216}{USD} \right)$

12
R) INSTALL MODIFIED "A" CURB PER $\left(\frac{1}{DT1} \right)$

13
R) INSTALL PRE-CAST BUMPER BLOCKS PER $\left(\frac{238}{USD} \right)$

14
R) CONSTRUCT 2' CURB OPENING PER $\left(\frac{1}{DT1} \right)$

15
R) INSTALL 3' VALLEY GUTTER PER $\left(\frac{3}{DT1} \right)$

16
R) CONSTRUCT TRASH ENCLOSURE - SEE LANDSCAPE PLANS FOR DETAILS

17
R) INSTALL 6" BOLLARDS PER $\left(\frac{6}{DT1} \right)$

18
R) INSTALL 2' SIDEWALK DRAIN PER $\left(\frac{236}{USD} \right)$

19
R) INSTALL 8" PVC UNDERDRAIN

1 30	INSTALL 60" TYPE I MANHOLE	4040 CCAR40	403 CCAR30	408.51 CCAR51
2 30	INSTALL 48" TYPE II MANHOLE	401 CCAR40	403 CCAR30	408.51 CCAR51
3 30	INSTALL S6 STORMWATER SEPARATOR MANHOLE PER			7 DTI
4 30	INSTALL TYPE "CM2" DROP INLET PER	421 CCAR40	421.2 CCAR20	
5 30	PRECAST DRAINAGE BASIN-INLET JENSEN MODEL (SEE PLANS FOR HEIGHT AND SIZE), GRADED LID OR EQUAL			
6 30	REMOVE PLUG & CONNECT TO EX. STORM WITH MANHOLE, SIZE AND INVERT PER PLANS (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EX. STORM DRAIN PRIOR TO CONSTRUCTION)			
* CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION				

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FT/US)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR

STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N

LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W

NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FT/US)

EASTING AT CENTRAL MERIDIAN: 500,000.00 M (984,250.0000 FT/US)

SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

1. A. DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BM#	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM No. 5LV0926W6	CITY OF LAS VEGAS RIVET AND PLATE IN TOP OF CURB AT THE SOUTHEAST CORNER OF CARRIAGE HILLS DR. AND FAR HILLS AVE.	3229.22 (FEET)	984.267 (METERS)

THE ONSITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE SUMMERLIN MASTER HOA

ALL STORM DRAIN DROP INLETS TO
BE CONSTRUCTED PER USDCCA DWG
NO. 421
(STORMWATER QUALITY MANAGEMENT
STAMP AND SIGN DETAIL)

POST-CONSTRUCTION BMPs (PCBMPs)/ CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORM WATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.

Call before you Dig!
Avoid cutting underground utility lines. It's costly!

Call
811

OR

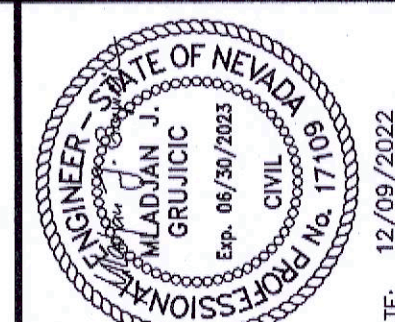
1-800-648-2444

FAST
Call before you dig
UnderGround
1-702-432-5300
FREEWAY AND ARTERIAL

AVOID HITTING OVERHEAD
POWER LINES. IT'S COSTLY.

**CALL BEFORE
YOU DO
OVERHEAD**

1-800-927-2222



PROJECT NO.
62025-660-1

GCW
ENGINEERS & SURVEYORS

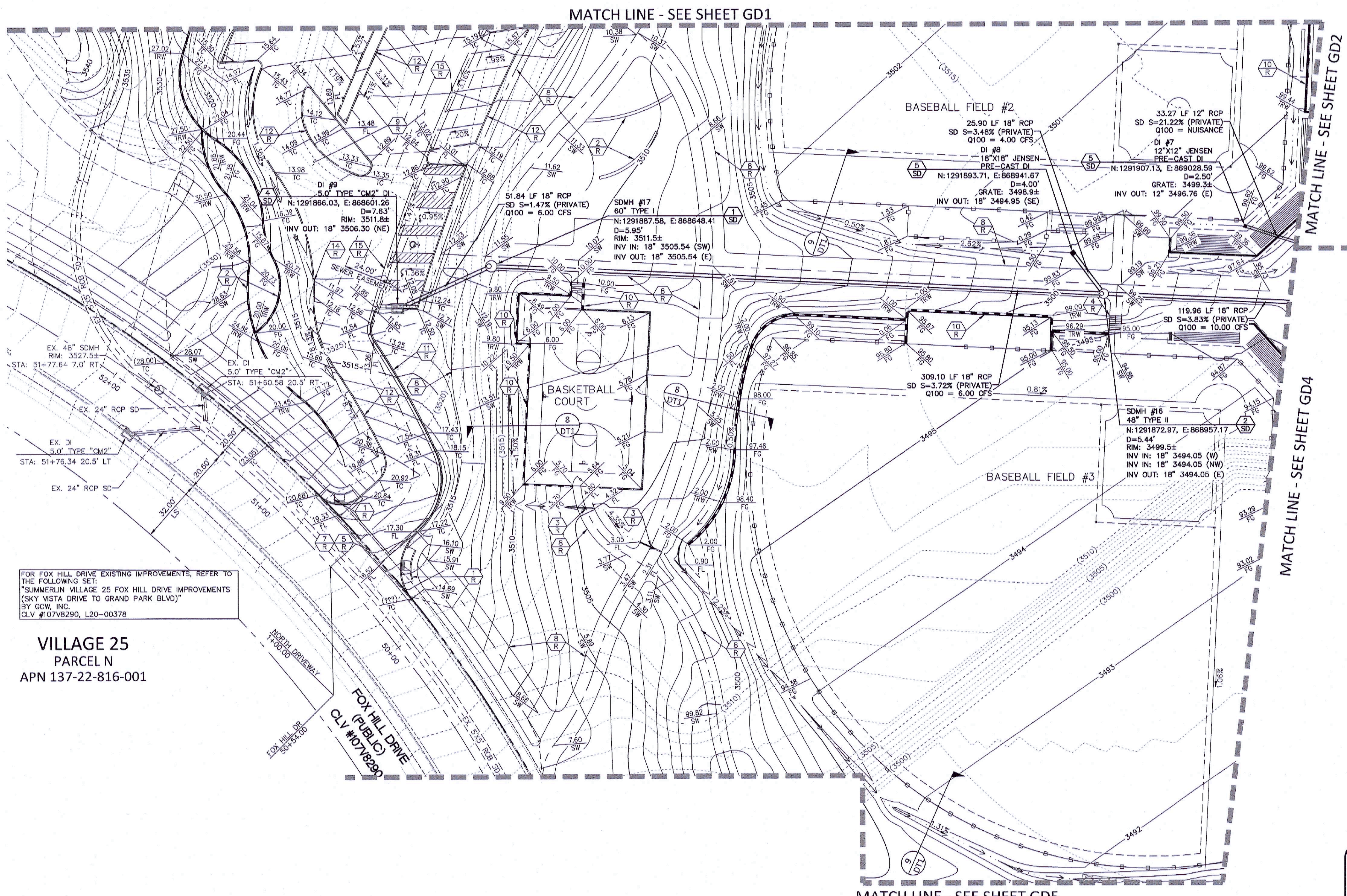
GRADING PLAN 1

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 25 SUMMERLIN COUNCIL PARK
AT GRAND PARK

DRAWING
GD1

11 OF 35 SHOTS



FOR FOX HILL DRIVE EXISTING IMPROVEMENTS, REFER TO THE FOLLOWING SET:
"SUMMERLIN VILLAGE 25 FOX HILL DRIVE IMPROVEMENTS (SKY VISTA DRIVE TO GRAND PARK BLVD)"
BY GCW, INC.
CLV #107V8290, L20-00378

VILLAGE 25
PARCEL N
APN 137-22-816-001

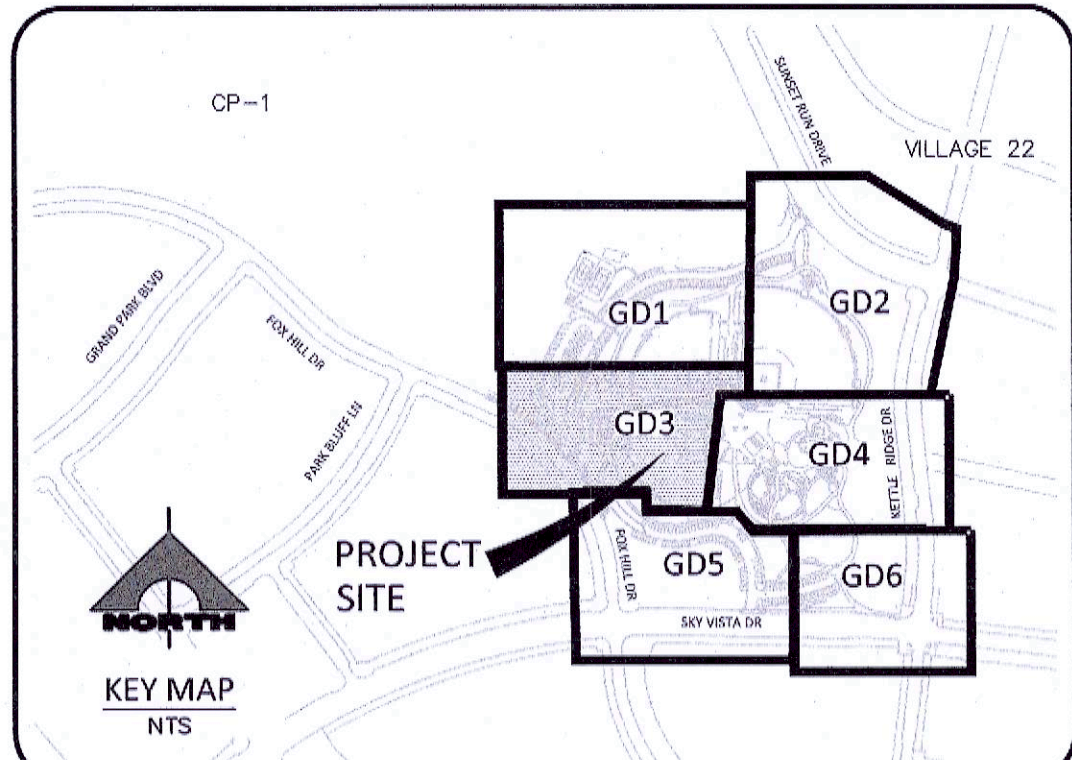
FOX HILL DRIVE
CLV #107V8290

STORM DRAIN NOTE
THE ON-SITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE SUMMERLIN MASTER HOA

STORM DRAIN STAMP
ALL STORM DRAIN DROP INLETS TO BE CONSTRUCTED PER USDOCA DWG NO. 421 (STORMWATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL)

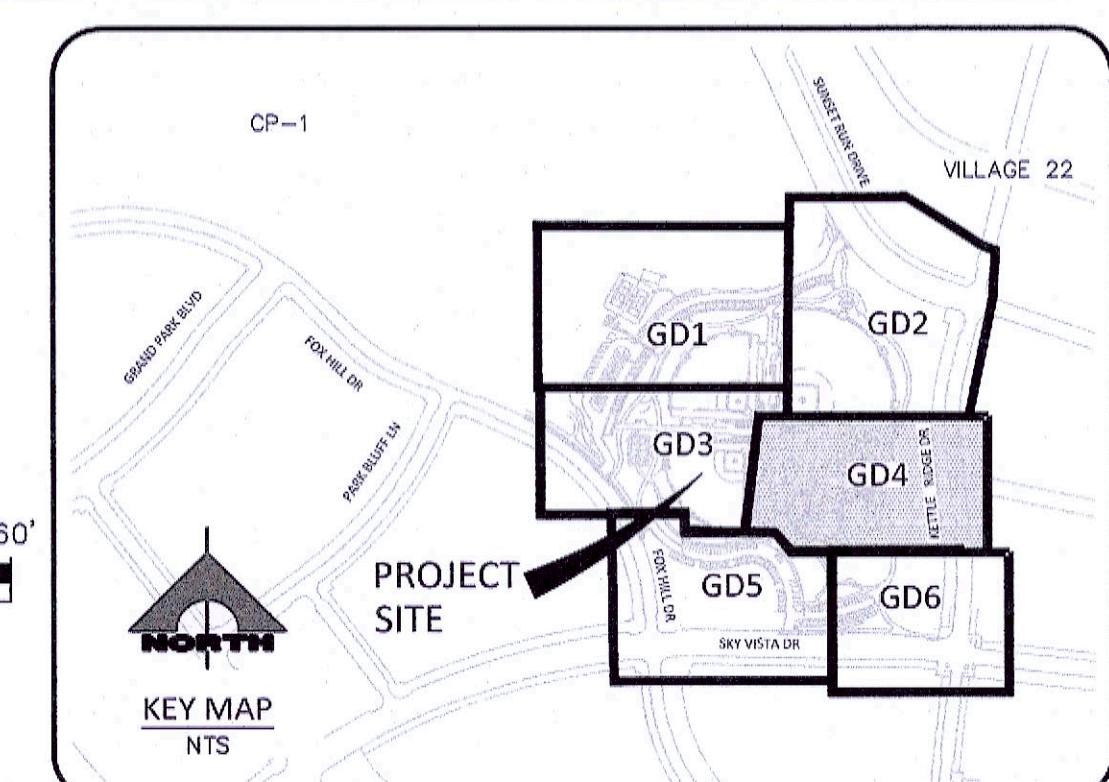
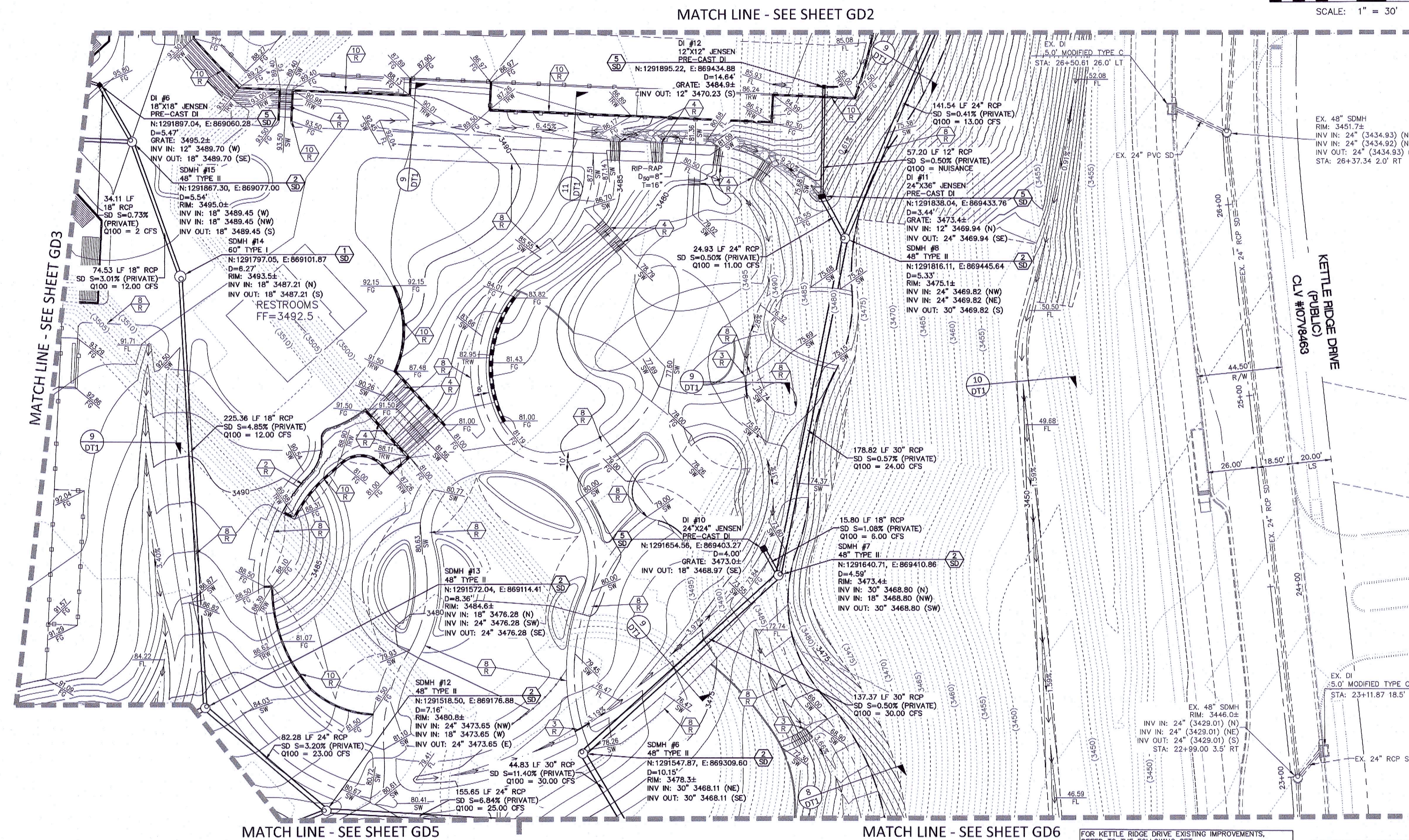
BMP NOTE
POST-CONSTRUCTION BMPs (PCBMPs)/ CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORM WATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.

DRAINAGE CERTIFICATION
I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY DSS579A ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.
MLADJAN J. GRUJICIG, P.E. NO. 17109
12/9/2022
DATE



- ROADWAY CONSTRUCTION NOTES**
- 1. CONSTRUCT SIDEWALK RAMP PER 235 USD
 - 2. INSTALL DECORATIVE/RETAINING WALLS, SEE LANDSCAPE PLANS (BY OTHERS)
 - 3. INSTALL 6" PVC UNDERDRAIN
 - 4. INSTALL STAIRS PER 212 USD
 - 5. CONSTRUCT 8" CROSS GUTTER PER 228 USD
 - 6. INSTALL 0" FLUSH CURB PER 211 USD
 - 7. CONSTRUCT 32" FACE OF CURB TO FACE OF CURB DRIVEWAY PER 222.1 USD 225 USD
 - 8. PROPOSED SIDEWALK SEE LANDSCAPE PLANS
 - 9. INSTALL 3" A.C. PAVEMENT OVER 4" TYPE II AGGREGATE
 - 10. CONSTRUCT RETAINING WALL - SEE PLANS BY OTHERS
 - 11. INSTALL 24" "L" TYPE CURB & GUTTER PER 216 USD
 - 12. INSTALL MODIFIED "A" CURB PER 211 USD
 - 13. INSTALL PRE-CAST BUMPER BLOCKS PER 238 USD
 - 14. CONSTRUCT 2' CURB OPENING PER 1 DTI
 - 15. INSTALL 3' VALLEY GUTTER PER 1 DTI
 - 16. CONSTRUCT TRASH ENCLOSURE - SEE LANDSCAPE PLANS FOR DETAILS
 - 17. INSTALL 6" BOLLARDS PER 6 DTI
 - 18. INSTALL 2' SIDEWALK DRAIN PER 236 USD
 - 19. INSTALL 8" PVC UNDERDRAIN

- STORM DRAIN**
- 1. INSTALL 60" TYPE I MANHOLE 401 403 408.51 409.51 410.51 411.51 412.51 413.51 414.51 415.51 416.51 417.51 418.51 419.51 420.51 421.51 422.51 423.51 424.51 425.51 426.51 427.51 428.51 429.51 430.51 431.51 432.51 433.51 434.51 435.51 436.51 437.51 438.51 439.51 440.51 441.51 442.51 443.51 444.51 445.51 446.51 447.51 448.51 449.51 450.51 451.51 452.51 453.51 454.51 455.51 456.51 457.51 458.51 459.51 460.51 461.51 462.51 463.51 464.51 465.51 466.51 467.51 468.51 469.51 470.51 471.51 472.51 473.51 474.51 475.51 476.51 477.51 478.51 479.51 480.51 481.51 482.51 483.51 484.51 485.51 486.51 487.51 488.51 489.51 490.51 491.51 492.51 493.51 494.51 495.51 496.51 497.51 498.51 499.51 500.51 501.51 502.51 503.51 504.51 505.51 506.51 507.51 508.51 509.51 510.51 511.51 512.51 513.51 514.51 515.51 516.51 517.51 518.51 519.51 520.51 521.51 522.51 523.51 524.51 525.51 526.51 527.51 528.51 529.51 530.51 531.51 532.51 533.51 534.51 535.51 536.51 537.51 538.51 539.51 540.51 541.51 542.51 543.51 544.51 545.51 546.51 547.51 548.51 549.51 550.51 551.51 552.51 553.51 554.51 555.51 556.51 557.51 558.51 559.51 560.51 561.51 562.51 563.51 564.51 565.51 566.51 567.51 568.51 569.51 570.51 571.51 572.51 573.51 574.51 575.51 576.51 577.51 578.51 579.51 580.51 581.51 582.51 583.51 584.51 585.51 586.51 587.51 588.51 589.51 590.51 591.51 592.51 593.51 594.51 595.51 596.51 597.51 598.51 599.51 600.51 601.51 602.51 603.51 604.51 605.51 606.51 607.51 608.51 609.51 610.51 611.51 612.51 613.51 614.51 615.51 616.51 617.51 618.51 619.51 620.51 621.51 622.51 623.51 624.51 625.51 626.51 627.51 628.51 629.51 630.51 631.51 632.51 633.51 634.51 635.51 636.51 637.51 638.51 639.51 640.51 641.51 642.51 643.51 644.51 645.51 646.51 647.51 648.51 649.51 650.51 651.51 652.51 653.51 654.51 655.51 656.51 657.51 658.51 659.51 660.51 661.51 662.51 663.51 664.51 665.51 666.51 667.51 668.51 669.51 670.51 671.51 672.51 673.51 674.51 675.51 676.51 677.51 678.51 679.51 680.51 681.51 682.51 683.51 684.51 685.51 686.51 687.51 688.51 689.51 690.51 691.51 692.51 693.51 694.51 695.51 696.51 697.51 698.51 699.51 700.51 701.51 702.51 703.51 704.51 705.51 706.51 707.51 708.51 709.51 710.51 711.51 712.51 713.51 714.51 715.51 716.51 717.51 718.51 719.51 720.51 721.51 722.51 723.51 724.51 725.51 726.51 727.51 728.51 729.51 730.51 731.51 732.51 733.51 734.51 735.51 736.51 737.51 738.51 739.51 740.51 741.51 742.51 743.51 744.51 745.51 746.51 747.51 748.51 749.51 750.51 751.51 752.51 753.51 754.51 755.51 756.51 757.51 758.51 759.51 760.51 761.51 762.51 763.51 764.51 765.51 766.51 767.51 768.51 769.51 770.51 771.51 772.51 773.51 774.51 775.51 776.51 777.51 778.51 779.51 780.51 781.51 782.51 783.51 784.51 785.51 786.51 787.51 788.51 789.51 790.51 791.51 792.51 793.51 794.51 795.51 796.51 797.51 798.51 799.51 800.51 801.51 802.51 803.51 804.51 805.51 806.51 807.51 808.51 809.51 810.51 811.51 812.51 813.51 814.51 815.51 816.51 817.51 818.51 819.51 820.51 821.51 822.51 823.51 824.51 825.51 826.51 827.51 828.51 829.51 830.51 831.51 832.51 833.51 834.51 835.51 836.51 837.51 838.51 839.51 840.51 841.51 842.51 843.51 844.51 845.51 846.51 847.51 848.51 849.51 850.51 851.51 852.51 853.51 854.51 855.51 856.51 857.51 858.51 859.51 860.51 861.51 862.51 863.51 864.51 865.51 866.51 867.51 868.51 869.51 870.51 871.51 872.51 873.51 874.51 875.51 876.51 877.51 878.51 879.51 880.51 881.51 882.51 883.51 884.51 885.51 886.51 887.51 888.51 889.51 890.51 891.51 892.51 893.51 894.51 895.51 896.51 897.51 898.51 899.51 900.51 901.51 902.51 903.51 904.51 905.51 906.51 907.51 908.51 909.51 910.51 911.51 912.51 913.51 914.51 915.51 916.51 917.51 918.51 919.51 920.51 921.51 922.51 923.51 924.51 925.51 926.51 927.51 928.51 929.51 930.51 931.51 932.51 933.51 934.51 935.51 936.51 937.51 938.51 939.51 940.51 941.51 942.51 943.51 944.51 945.51 946.51 947.51 948.51 949.51 950.51 951.51 952.51 953.51 954.51 955.51 956.51 957.51 958.51 959.51 960.51 961.51 962.51 963.51 964.51 965.51 966.51 967.51 968.51 969.51 970.51 971.51 972.51 973.51 974.51 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1603.51 1604.51 1605.51 1606.51 1607.51 1608.51 1609.51 1610.51 1611.51 1612.51 1613.51 1614.51 1615.51 1616.51 1617.51 1618.51 1619.51 1620.51 1621.51 1622.51 1623.51 1624.51 1625.51 1626.51 1627.51 1628.51 1629.51 1630.51 1631.51 1632.51 1633.51 1634.51 1635.51 1636.51 1637.51 1638.51 1639.51 1640.51 1641.51 1642.51 1643.51 1644.51 1645.51 1646.51 1647.51 1648.51 1649.51 1650.51 1651.51 1652.51 1653.51 1654.51 1655.51 1656.51 1657.51 1658.51 1659.51 1660.51 1661.51 1662.51 1663.51 1664.51 1665.51 1666.51 1667.51 1668.51 1669.51 1670.51 1671.51 1672.51 1673.51 1674.51 1675.51 1676.51 1677.51 1678.51 1679.51 1680.51 1681.51 1682.51 1683.51 1684.51 1685.51 1686.51 1687.51 1688.51 1689.51 1690.51 1691.51 1692.51 1693.51 1694.51 1695.51 1696.51 1697.51 1698.51 1699.51 1700.51 1701.51 1702.51 1703.51 1704.51 1705.51 1706.51 1707.51 1708.51 1709.51 1710.51 1711.51 1712.51 1713.51 1714.51 1715.51 1716.51 1717.51 1718.51 1719.51 1720.51 1721.51 1722.51 1723.51 1724.51 1725.51 1726.51 1727.51 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1853.51 1854.51 1855.51 1856.51 1857.51 1858.51 1859.51 1860.51 1



1 R	CONSTRUCT SIDEWALK RAMP PER	235 USD
2 R	INSTALL DECORATIVE/RETAINING WALLS, SEE LANDSCAPE PLANS (BY OTHERS)	
3 R	INSTALL 6" PVC UNDERDRAIN	
4 R	INSTALL STAIRS PER	A DT2
5 R	CONSTRUCT 8" CROSS GUTTER PER	228 USD
6 R	INSTALL 0" FLUSH CURB PER	2 DT1
7 R	CONSTRUCT 32' FACE OF CURB TO FACE OF CURB DRIVEWAY PER	222.1 USD
8 R	PROPOSED SIDEWALK SEE LANDSCAPE PLANS	225 USD
9 R	INSTALL 3" A.C. PAVEMENT OVER 4" TYPE II AGGREGATE	
10 R	CONSTRUCT RETAINING WALL - SEE PLANS BY OTHERS	
11 R	INSTALL 24" "L" TYPE CURB & GUTTER PER	216 USD
12 R	INSTALL MODIFIED "A" CURB PER	4 DT1
13 R	INSTALL PRE-CAST BUMPER BLOCKS PER	238 USD
14 R	CONSTRUCT 2' CURB OPENING PER	1 DT1
15 R	INSTALL 3' VALLEY GUTTER PER	3 DT1
16 R	CONSTRUCT TRASH ENCLOSURE - SEE LANDSCAPE PLANS FOR DETAILS	
17 R	INSTALL 6" BOLLARDS PER	6 DT1
18 R	INSTALL 2' SIDEWALK DRAIN PER	236 USD
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STORM DRAIN			
1 SD	INSTALL 60" TYPE I MANHOLE	401 CCALSD	403 CCALSD
2 SD	INSTALL 48" TYPE II MANHOLE	401 CCALSD	403 CCALSD
3 SD	INSTALL 56 STORMWATER SEPARATOR MANHOLE PER	401 CCALSD	403 CCALSD
			7 DTI
4 SD	INSTALL TYPE "CM2" DROP INLET PER	421 CCALSD	421.1 CCALSD
5 SD	PRECAST DRAINAGE BASIN-INLET JENSEN MODEL (SEE PLANS FOR HEIGHT AND SIZE), GRATED LID OR EQUAL		
6 SD	REMOVE PLUG & CONNECT TO EX. STORM WITH MANHOLE, SIZE AND INVERT PER PLANS (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EX. STORM DRAIN PRIOR TO CONSTRUCTION)		
* CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION			

BASIS OF BEARING AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS): LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAD MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FT/US)

DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00

SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)

ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR

STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N

LATITUDE OF CENTRAL MERIDIAN: 114°58'00"W

NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FT/US)

EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FT/US)

SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:

1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DETERMINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK			
BM#	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM NO. 5LVO926W6	CITY OF LAS VEGAS RIVET AND PLATE IN TOP OF CURB AT THE SOUTHEAST CORNER OF CARRIAGE HILLS DR. AND FAR HILLS AVE.	3229.22 (FEET)	984.267 (METERS)

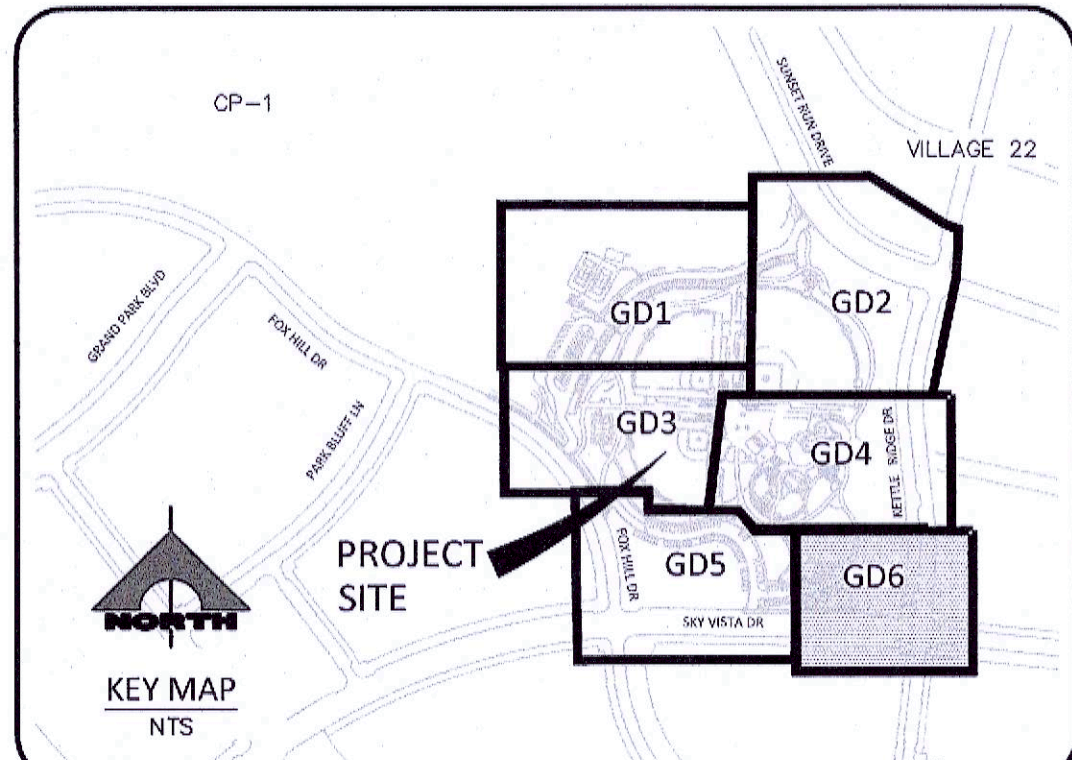
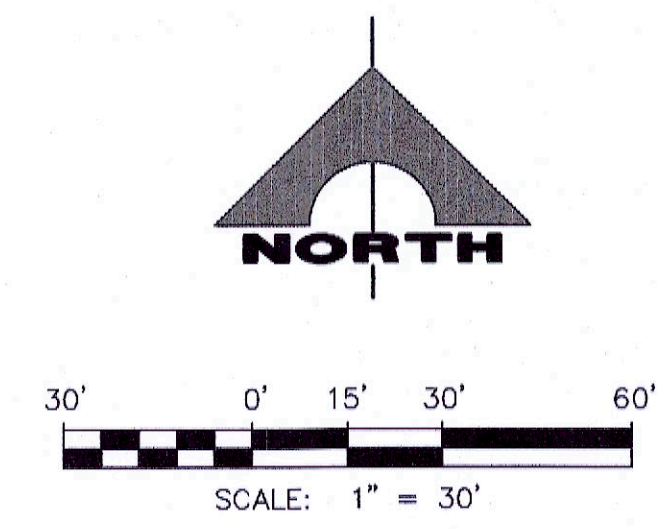
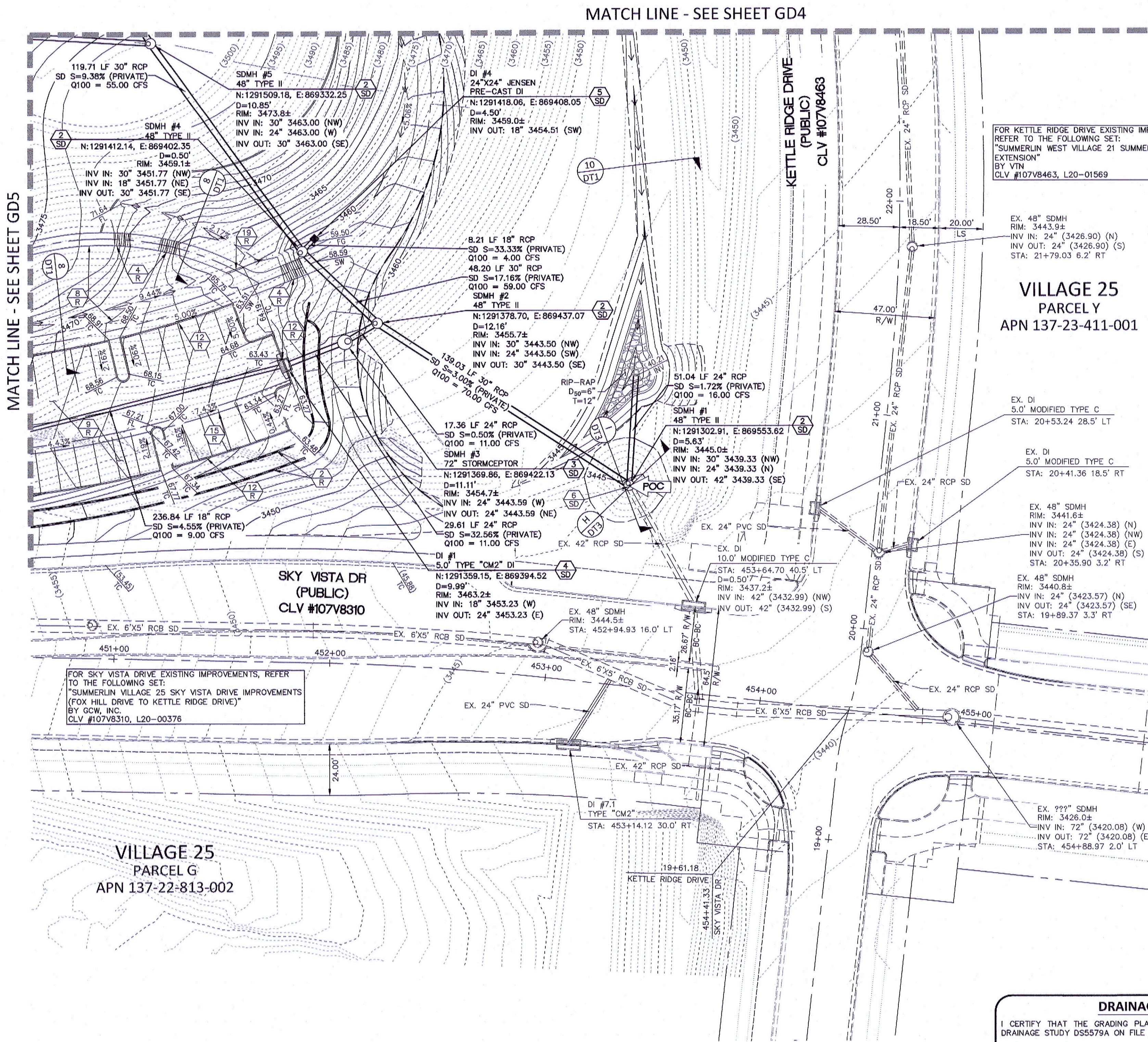
Call before you Dig Avoid cutting underground utility lines. It's costly. Call  OR 1-800-642-2444	FAST Call before you UnderGround 1-702-432-5300 FREEMAN AND ARTERIAL SYSTEMS OF TRANSPORTATION	POWER HITTING OVERHEAD POLE LINES. IT'S COSTLY CALL BEFORE YOU DO OVERHEAD  1-702-227-2929
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	12/9/2022
MLADJAN J. GRUJICIC, P.E. NO. 17109	DATE

STORM DRAIN NOTE
THE ONSITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE SUMMERLIN MASTER HOA

STORM DRAIN STAMP
ALL STORM DRAIN DROP INLETS TO
BE CONSTRUCTED PER USDCCA DWG
NO. 421
(STORMWATER QUALITY MANAGEMENT
STAMP AND SIGN DETAIL)

BMP NOTE
POST-CONSTRUCTION BMPs (PCBMPs)/ CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORM WATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.



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 - CONSTRUCT RETAINING WALL - SEE PLANS BY OTHERS
 - INSTALL 24" "L" TYPE CURB & GUTTER PER 216 USD
 - INSTALL MODIFIED "A" CURB PER 211 USD
 - INSTALL PRE-CAST BUMPER BLOCKS PER 238 USD
 - CONSTRUCT 2" CURB OPENING PER 1 DTI
 - INSTALL 3" VALLEY GUTTER PER 3 DTI
 - CONSTRUCT TRASH ENCLOSURE - SEE LANDSCAPE PLANS FOR DETAILS
 - INSTALL 6" BOLLARDS PER 6 DTI
 - INSTALL 2" SIDEWALK DRAIN PER 236 USD
 - INSTALL 8" PVC UNDERDRAIN

- ### STORM DRAIN
- INSTALL 60" TYPE I MANHOLE 401 CCAUSD 403 CCAUSD 408.51 CCAUSD
 - INSTALL 48" TYPE II MANHOLE 401 CCAUSD 403 CCAUSD 408.51 CCAUSD
 - INSTALL 56 STORMWATER SEPARATOR MANHOLE PER 7 DTI
 - INSTALL TYPE "CM2" DROP INLET PER 421 CCAUSD 421.1 CCAUSD
 - PRECAST DRAINAGE BASIN-INLET JENSEN MODEL (SEE PLANS FOR HEIGHT AND SIZE), GRATED LID OR EQUAL
 - REMOVE PLUG & CONNECT TO EX. STORM WITH MANHOLE, SIZE AND INVERT PER PLANS (CONTRACTOR TO VERIFY SIZE, INVERT, AND LOCATION OF EX. STORM DRAIN PRIOR TO CONSTRUCTION)
- * CONTRACTOR TO VERIFY SIZE, INVERT AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION

BASIS OF BEARING AND COORDINATES

GRID NORTH AS DEFINED BY THE CENTRAL MERIDIAN OF THE NEVADA COORDINATE REFERENCE SYSTEM (NCRS), LAS VEGAS HIGH ELEVATION ZONE, NORTH AMERICAN DATUM OF 1983; SAID MERIDIAN BEING COINCIDENT WITH 114°58' WEST OF THE GREENWICH MERIDIAN.

LINEAR UNIT: US SURVEY FOOT (FTUS)
DATUM (REFERENCE FRAME): NAD 83 (2011) EPOCH 2010.00
SYSTEM: NEVADA COORDINATE REFERENCE SYSTEM (NCRS)
ZONE: LAS VEGAS HIGH ELEVATION ZONE

PROJECTION: TRANSVERSE MERCATOR
STANDARD PARALLEL (AND LATITUDE OF GRID ORIGIN): 36°15'00"N
LONGITUDE OF CENTRAL MERIDIAN: 114°58'00"W
NORTHING AT GRID ORIGIN: 400,000.00 M (1,312,333.3333 FTUS)
EASTING AT CENTRAL MERIDIAN: 300,000 M (984,250.0000 FTUS)
SCALE FACTOR ON CENTRAL MERIDIAN: 1.000135 (EXACT)

NOTES:
1. ALL DISTANCES AND BEARINGS SHOWN HEREON ARE PROJECTED (GRID) VALUES BASED ON THE PRECEDING PROJECTION DEFINITION. THE PROJECTION WAS DEFINED SUCH THAT PROJECTED (GRID) DISTANCES ARE EQUIVALENT TO "GROUND" DISTANCES IN THE PROJECT AREA.
2. GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BENCHMARK			
BM#	DESCRIPTION	NAVD 88 DATUM	NAVD 88 DATUM
CLV BM No. 421	CITY OF LAS VEGAS RIVET AND PLATE IN TOP OF CURB AT THE SOUTHEAST CORNER OF CARRIAGE HILLS DR. AND FAR HILLS AVE.	3229.22 (FEET)	984.267 (METERS)

STORM DRAIN NOTE

THE ONSITE STORM DRAINS AND THE ASSOCIATED FACILITIES ARE PRIVATELY OWNED AND TO BE PRIVATELY MAINTAINED BY THE SUMMERLIN MASTER HOA

STORM DRAIN STAMP

ALL STORM DRAIN DROP INLETS TO BE CONSTRUCTED PER USDOCA DWG NO. 421 (STORMWATER QUALITY MANAGEMENT STAMP AND SIGN DETAIL)

BMP NOTE

POST-CONSTRUCTION BMPs (PCBMPs)/ CONTROL MEASURES NOTED ON THE GRADING PLANS ARE MANDATORY PERMANENT REGULATORY STORM WATER POLLUTION CONTROLS. THESE PCBMPs MUST BE INSTALLED PER THE APPROVED PLANS AND MUST BE PERMANENTLY MAINTAINED.

DRAINAGE CERTIFICATION

I CERTIFY THAT THE GRADING PLANS ARE IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY DSS579A ON FILE AT THE CITY OF LAS VEGAS FOR THIS PROJECT.

MLADJAN J. GRUJICIC, P.E. NO. 17109 DATE 12/9/2022

Call before you Dig

811

1-800-642-2444

Call before you UnderGround

FAST

1-702-432-6300

FREEDOM AND ARTERIAL SYSTEM OF TRANSPORTATION

CALL BEFORE YOU DO OVERHEAD

1-702-227-2929

THE HOWARD HUGHES COMPANY, LLC

VILLAGE 25 SUMMERLIN COUNCIL PARK AT GRAND PARK

DRAWING GD6 16 OF 35 SHTS

PROJECT NO. 62025-660-1

DESIGN: CS

DRAWN: CS/MP

CHECK: LP/JS

PLOT DATE: 12-09-22

PLOT TIME: 14:07:54

CREATED: SALCDD

1555 S. RAINBOW BLVD. LAS VEGAS, NV 89146

T: 702.804.2000 F: 702.804.2299

gcwengineering.com

ENGINEERS & SURVEYORS

STATE OF NEVADA

PROFESSIONAL ENGINEER

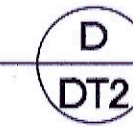
MLADJAN J. GRUJICIC

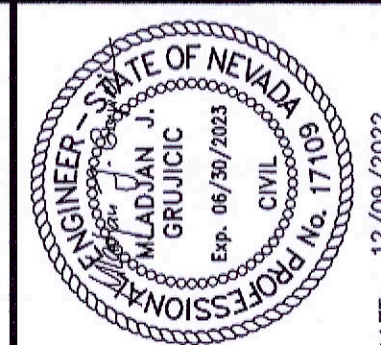
Exp. 06/29/2023

No. 17109

CIVIL

DATE: 12/09/2022





PROJECT NO.	62025-660-1
DESIGN	CS
DRAWN	CS/NP
CHECK	LP/AG
DATE	12-09-22
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PROJECT NO. 62025-660-1
DESIGN CS
DRAWN CS/NP
CHECK LP/AG
DATE 12-09-22
PLOT TIME 13:17:34
CHRISTIAN SALCEDO

1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcvengineering.com

GCV
ENGINEERS & SURVEYORS

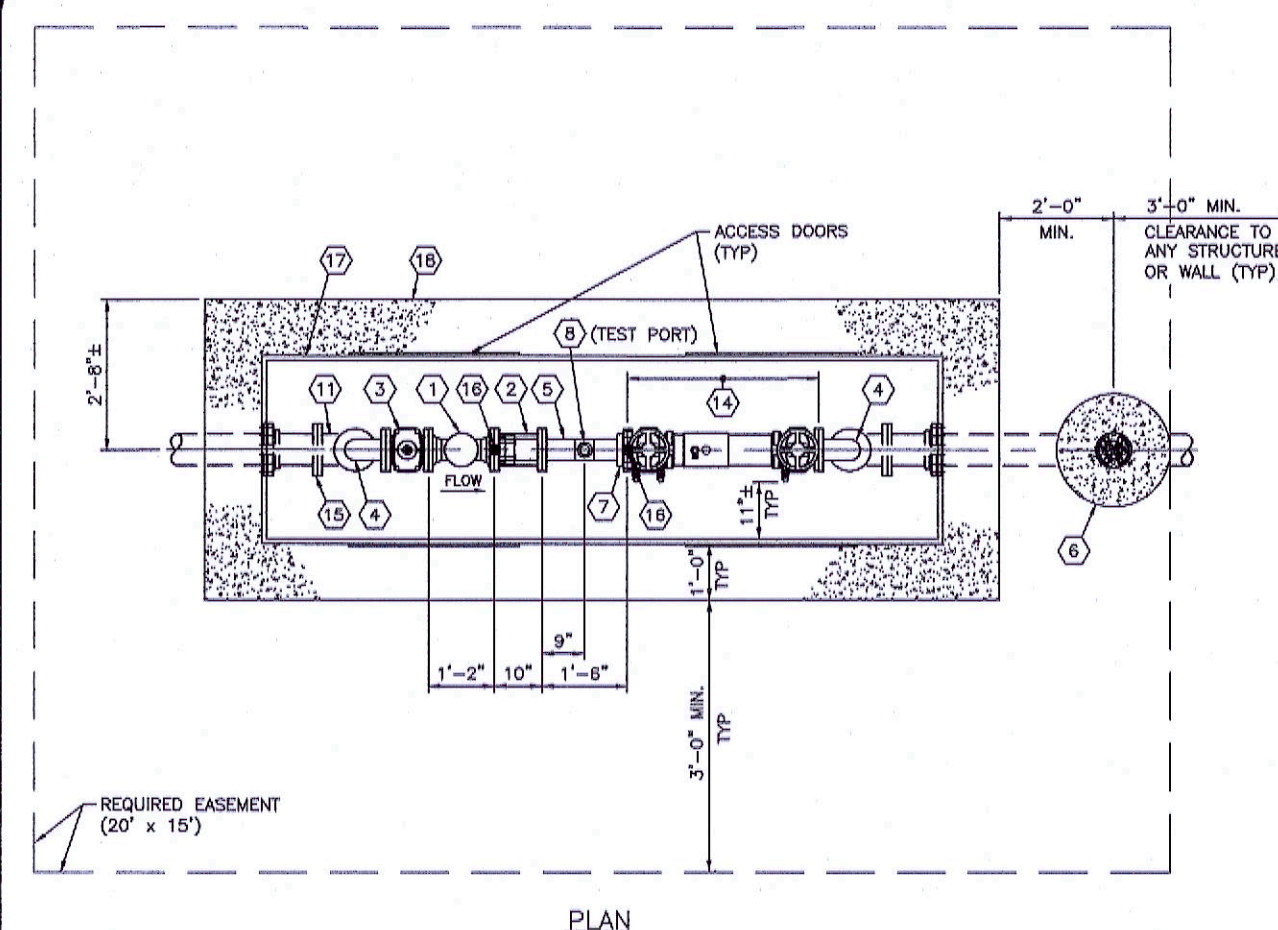
THE HOWARD HUGHES COMPANY, LLC
VILLAGE 25 SUMMERLIN COUNCIL PARK
AT GRAND PARK

TYPICAL DETAILS & SECTIONS 3

DRAWING
DT3
30 OF 35 SHTS

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT PLANNING AND ENGINEERING SERVICES
PROJECT NO. 140622 FIRST APPROVAL DATE:
LVVWD APPROVED FIRE FLOW: TOTAL 1,500 GPM / ON-SITE 1,500 GPM



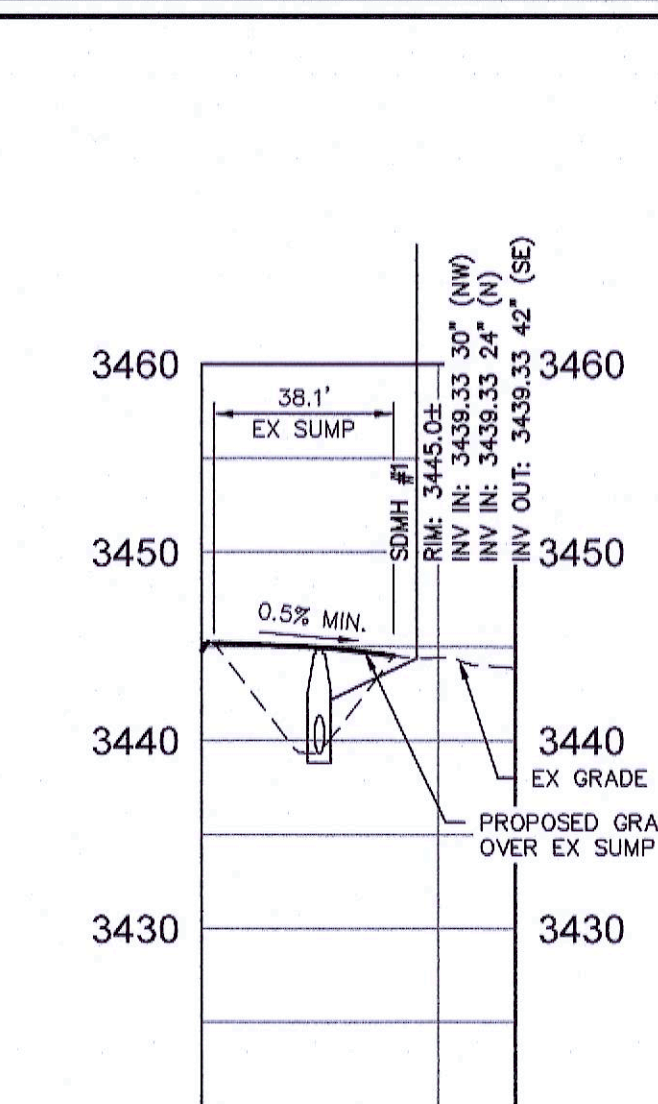
- DESIGNER/ENGINEER NOTES:
- PRIOR TO SELECTION OF METER/BACKFLOW ASSEMBLY, DETAIL ENGINEER TO VERIFY EXISTING METER AND BACKFLOW CAPACITY, FIRE FLOW AND EXISTING PRESSURE AT THE ASSEMBLY.
 - BASED ON RESEARCH RESULTS, IF MORE THAN ONE STANDARD METER/BACKFLOW ASSEMBLY OR MANUFACTURERS MAY BE UTILIZED THEN ALL APPLICABLE DETAILS ARE TO BE SHOWN ON THE DRAWINGS FOR CONTRACTOR SELECTION.
 - ALL ASSEMBLY PIPING, CONNECTIONS AND EASMENT SIZES TO ACCOMMODATE THE LARGEST LAYOUT OPTION REGARDLESS OF CONTRACTOR SELECTION TO AVOID CONFLICTS DURING CONSTRUCTION.
- REMOVE THESE NOTES WHEN DETAIL USED

- INSTALLATION NOTES:
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY AND ALL DAMAGED OR DISTURBED EXISTING LANDSCAPING AND IRRIGATION FACILITIES, IN AND ADJACENT TO PROJECT SITE, DURING CONSTRUCTION OPERATIONS.
 - CONTRACTOR TO HAVE NEVADA LICENSED PROFESSIONAL LAND SURVEYOR LOCATE LVVWD EASEMENT PRIOR TO CONSTRUCTION.
 - CONTRACTOR TO LOCATE, ON-SITE, PIPING AND CONFIRM DIAMETER, PIPE DEPTH, AND PIPE MATERIAL PRIOR TO ORDERING MATERIAL AND INSTALLATION.
 - CONTRACTOR TO VERIFY DIMENSIONS OF CABINET BASED ON INSTALLED DIMENSIONS OF PIPE AND FITTINGS PRIOR TO FABRICATION.
 - CONTRACTOR TO INSTALL VALVE LOCK DEVICE WITH DISTRICT PROVIDED LOCK (AS REQUIRED).
 - APPROVED EQUAL MATERIALS CAN BE FOUND ON THE LVVWD APPROVED PRODUCTS LIST.
 - 12" MIN CLEARANCE IS REQUIRED FROM THE RELIEF VALVE TO ASSEMBLY PAD. ASSEMBLY PAD FINISHED GRADE MUST BE AT OR ABOVE HIGH-WATER LEVEL OF SURROUNDING AREA.
 - TEST PORT OUTLET LOCATION TO BE A MINIMUM OF TWO (2) PIPE DIAMETERS DOWNSTREAM THE WATER METER FLANGE.
 - BYPASS OUTLETS TO BE ROTATED 15° AND ARE ONLY REQUIRED ON NON-LOOPED SERVICES.

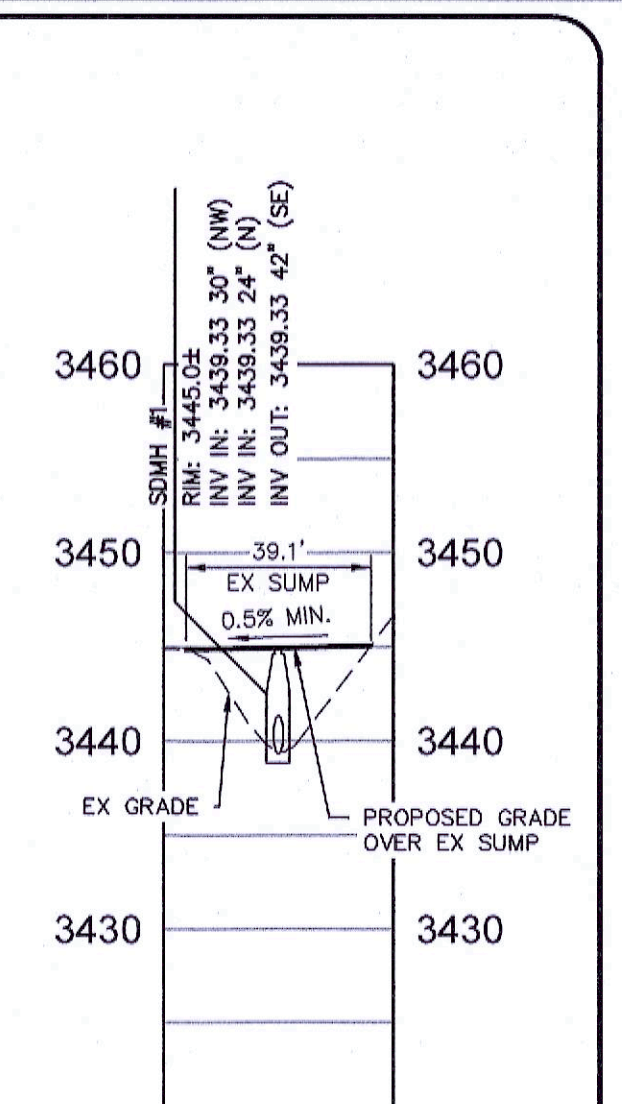
MATERIAL LIST

- | | |
|--|--|
| 1 4" WATER METER (LVVWD FURNISHED) | 12 CONCRETE THRUST/ANCHOR BLOCK |
| 2 4" RESTRAINED DISMANTLING JOINT | 13 6" x 4" FLG REDUCER |
| 3 4" FLG GATE VALVE WITH HANDWHEEL | 14 4" AMES COLT MAXIM 400 REDUCED PRESSURE PRINCIPLE (RPPA) BACKFLOW ASSEMBLY OR APPROVED EQUAL (NOTE 6) |
| 4 4" FLG 90° BEND | 15 4" ADAPTER FLANGE (RESTRAINED) |
| 5 4" FLG x PE DUCTILE IRON PIPE (CUT TO FIT) | 16 ADJUSTABLE PIPE SUPPORT |
| 6 VALVE BOX AND COLLAR (NOTE 5) | 17 APPROVED ENCLOSURE WITH 4 DOORS (CONTRACTOR TO SUBMIT SHOP DRAWINGS) |
| 7 4" ADAPTER FLANGE (RESTRAINED) | 18 CONCRETE PAD WITH WELDED WIRE FABRIC, 4' x 4' - W1.4 x W1.4 |
| 8 2" SERVICE SADDLE AND 2" CORP STOP (SEE NOTES 8 & 9) | 19 4" FLG x PE DUCTILE IRON PIPE (CUT TO FIT) |
| 9 4" FLG x PE DUCTILE IRON PIPE (CUT TO FIT) | 20 6" FLG GATE VALVE |
| 10 1/2" EXPANSION JOINT MATERIAL | |
| 11 6" FLG 90° BEND | |

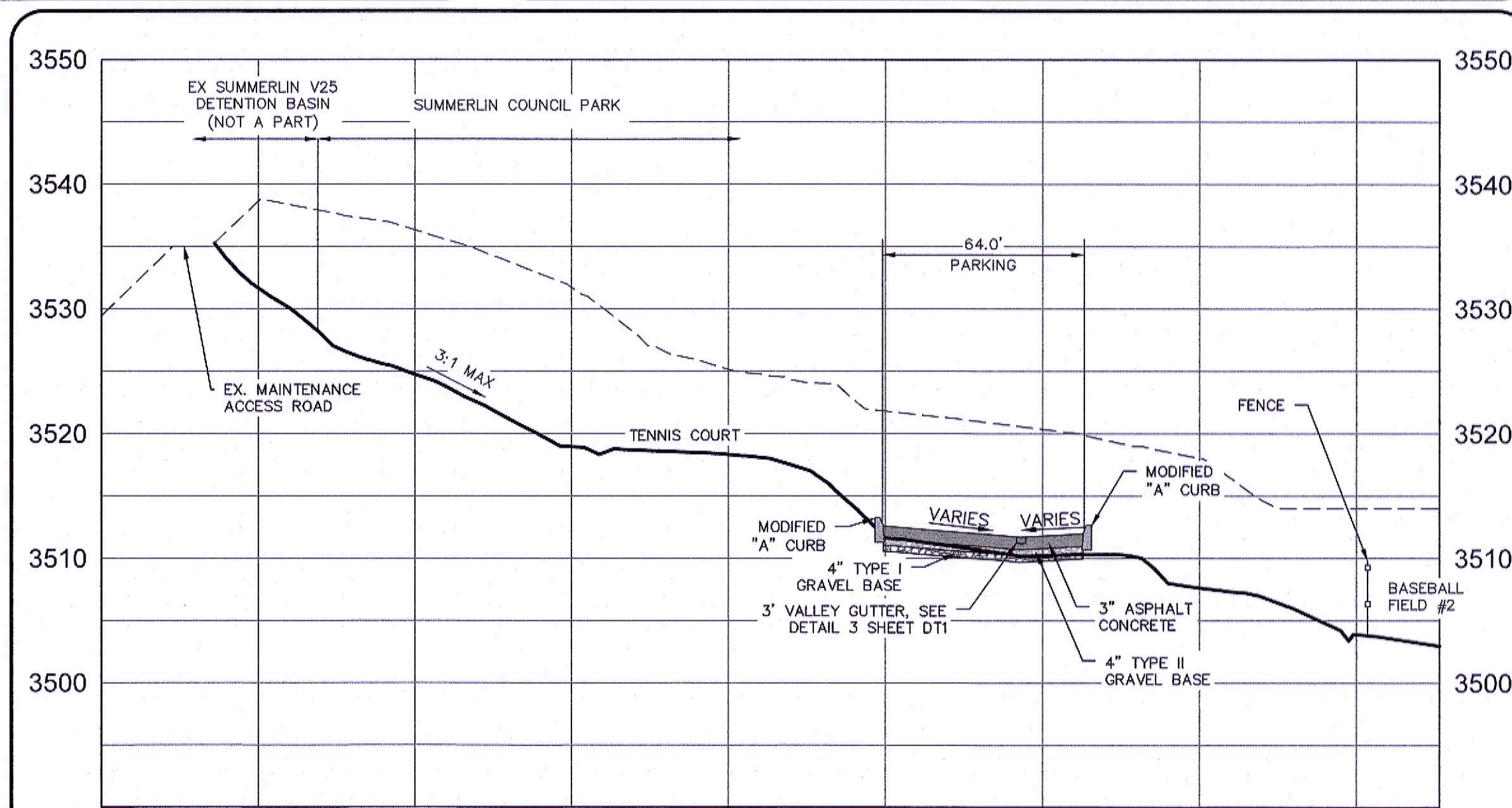
4" METER W/ COLT MAXIM REDUCED PRESSURE PRINCIPLE ASSEMBLY
SCALE: NTS (USE NRS GATE VALVES ONLY) BF1-3 042722 DT3



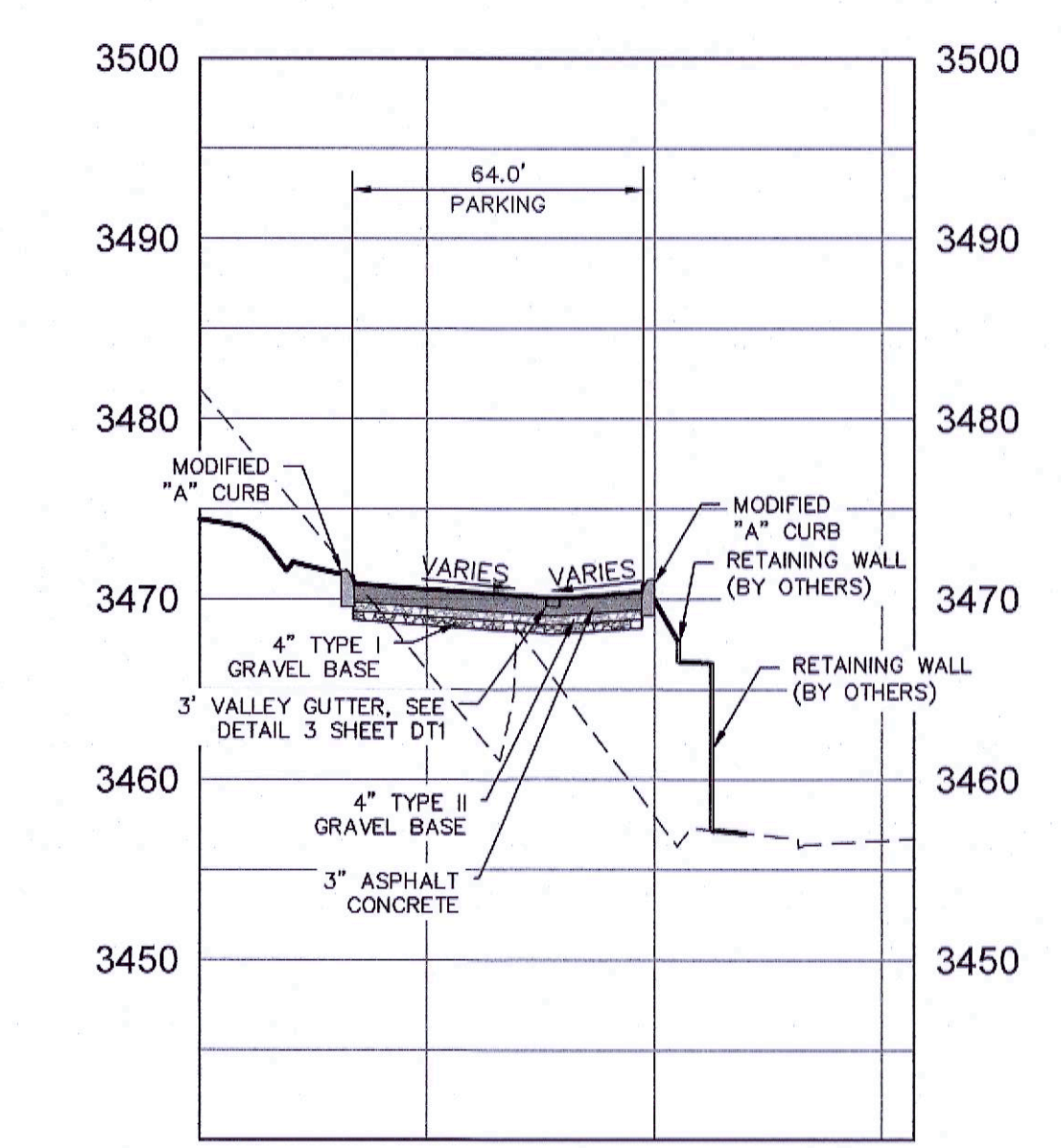
TYPICAL FILL SECTION I
SCALE: NTS DT3



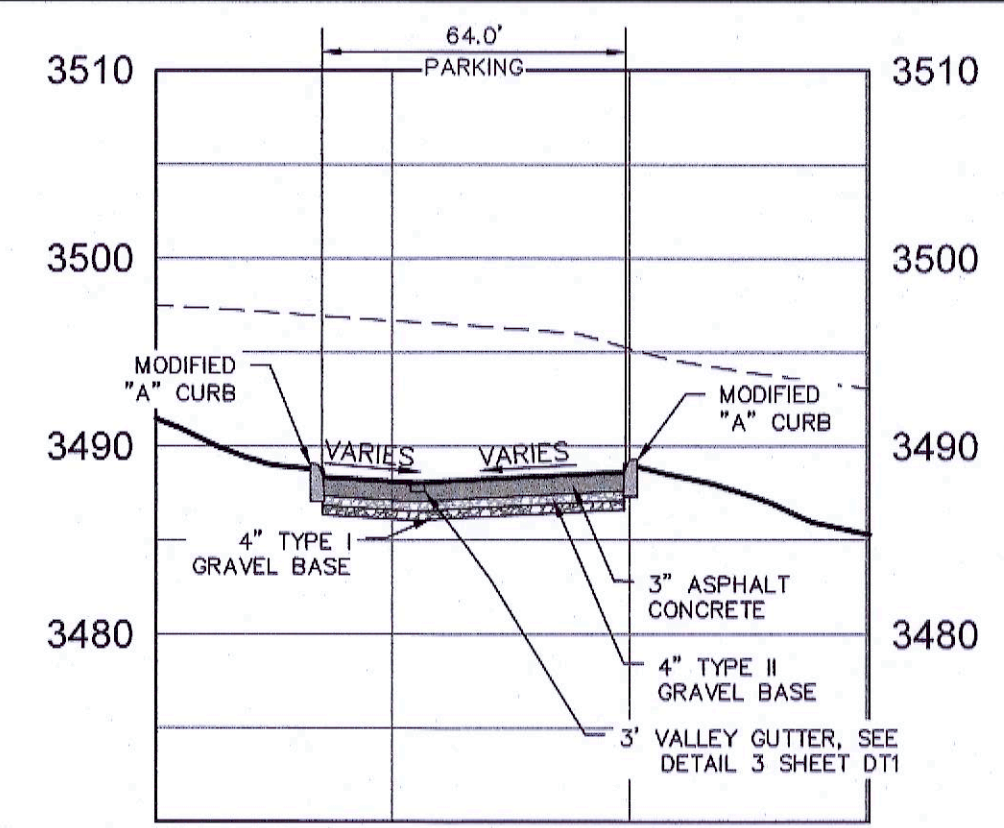
TYPICAL FILL SECTION H
SCALE: NTS DT3



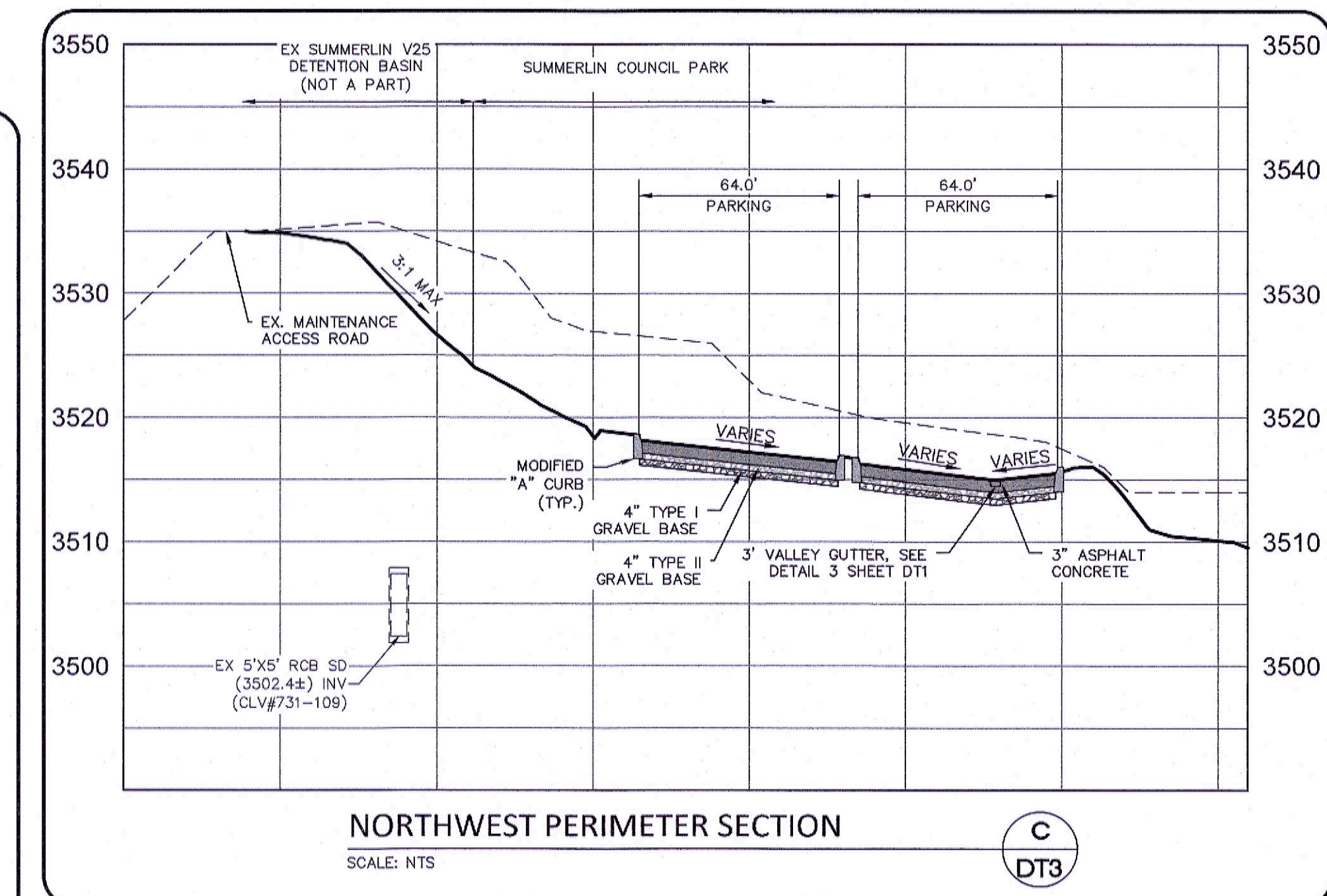
NORTHWEST PERIMETER SECTION D
SCALE: NTS DT3



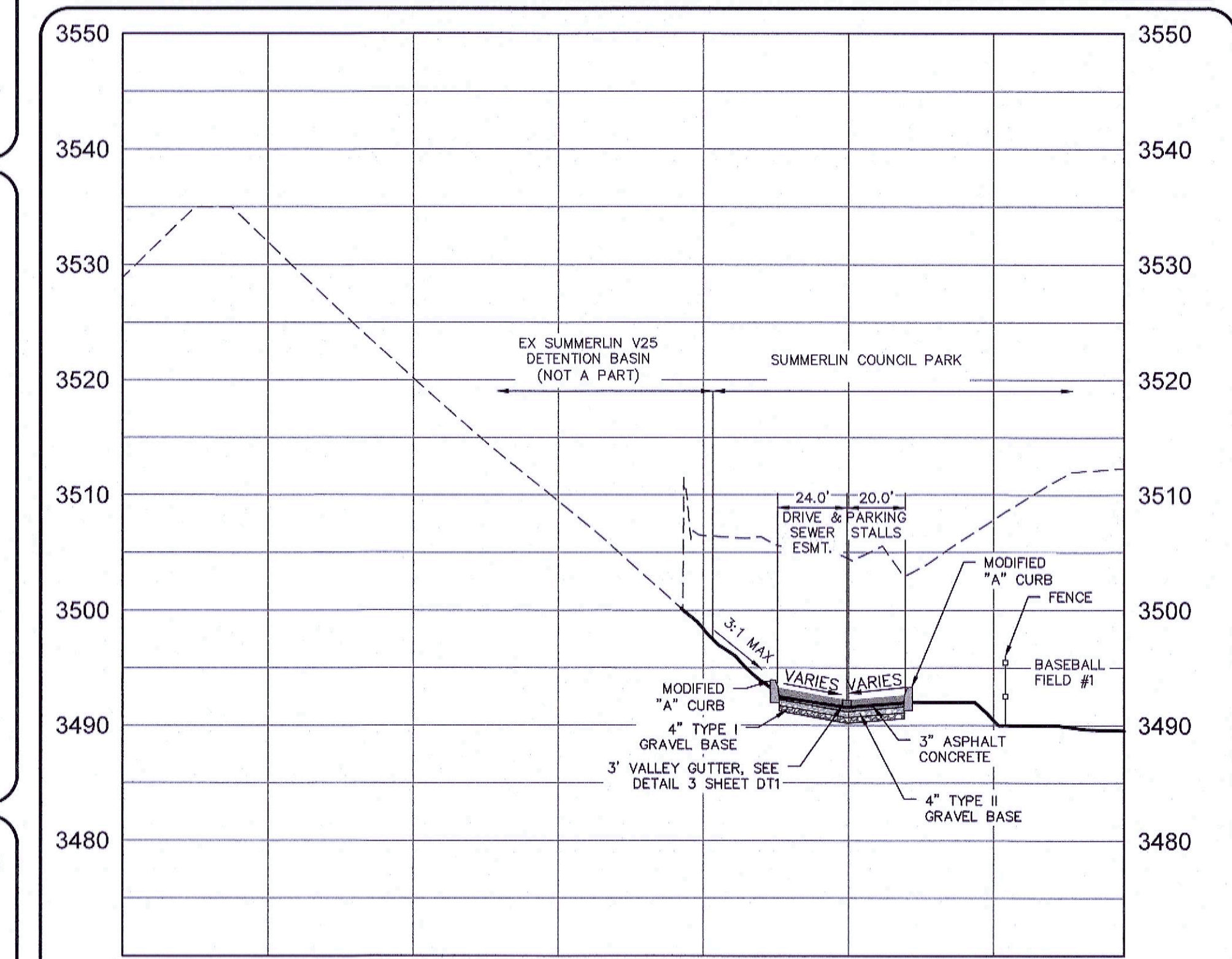
NORTHWEST PERIMETER SECTION F
SCALE: NTS DT3



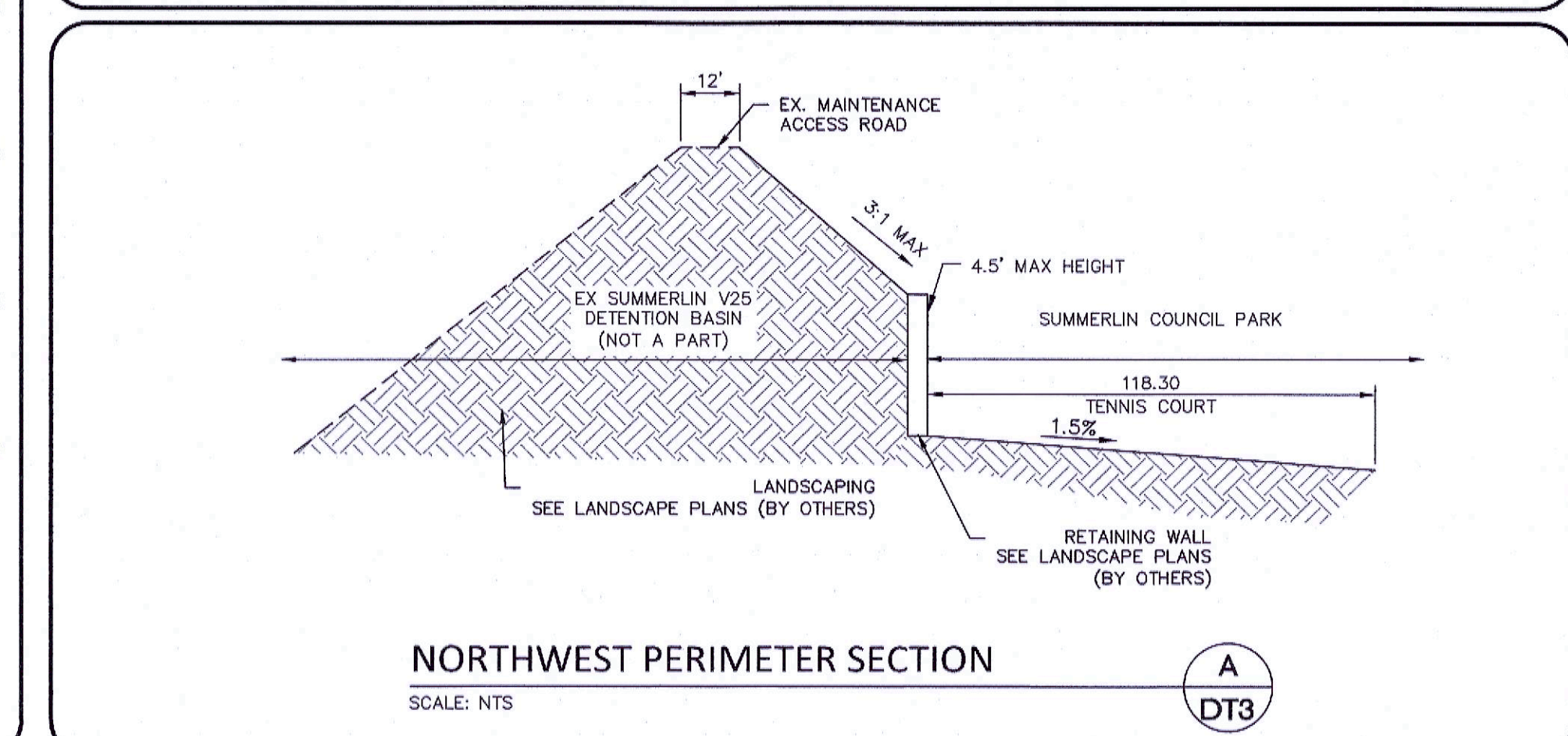
NORTHWEST PERIMETER SECTION E
SCALE: NTS DT3



NORTHWEST PERIMETER SECTION C
SCALE: NTS DT3



NORTHWEST PERIMETER SECTION B
SCALE: NTS DT3



NORTHWEST PERIMETER SECTION A
SCALE: NTS DT3