

MATCHLINE "ECW" 45+00.00
(SEE SHEET DR2)

MATCHLINE "ECW" 54+00.00
(SEE ABOVE RIGHT)

MATCHLINE "ECW" 54+00.00
(SEE BELOW LEFT)



CALL BEFORE CONSTRUCTION		
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-6300
BEFORE YOU OVERHEAD	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

REMOVAL KEY NOTES

- REMOVE AND REPLACE AC PAVEMENT PER DETAIL 1 AND 2, SHT. DT1
- REMOVE 6" PVC WATER
- REMOVE 10" PVC WATER
- REMOVE 12" PVC WATER
- REMOVE AND REPLACE AC PATH, INSTALL TACTILE WARNING PANELS PER COUSD 235 AT INTERSECTIONS
- ABANDON 6" PVC SS PER DCSWCS 3.18.1(c)
- ABANDON SSMH PER DCSWCS 3.18.2(a)
- REMOVE 6" PVC SS PER DCSWCS 3.18.1(b)
- REMOVE AND REPLACE 48" SSMH
- REMOVE AND REPLACE CROSS GUTTER PER COUSD #229
- PROTECT-IN-PLACE
- REMOVE AND REPLACE 30 INCH ROLL CURB RESIDENTIAL AREA PER COUSD #217.2.S1

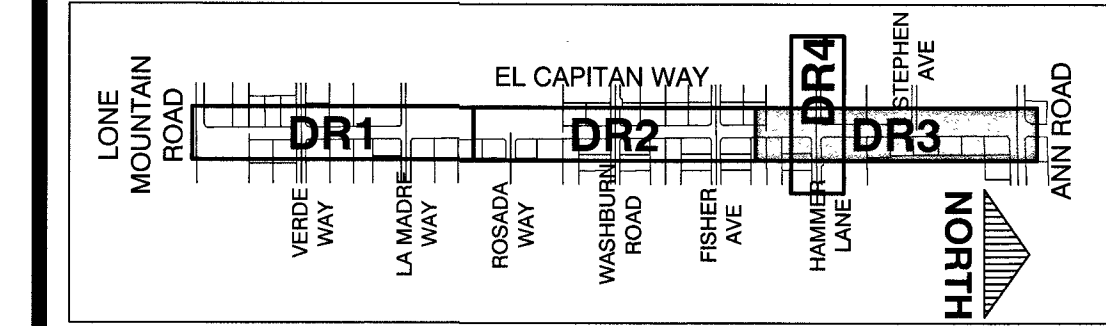
LEGEND

- REMOVE AND REPLACE 4" AC PAVEMENT
- REMOVE AND REPLACE 2" AC PAVEMENT

DISCLAIMER NOTE

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KEY MAP



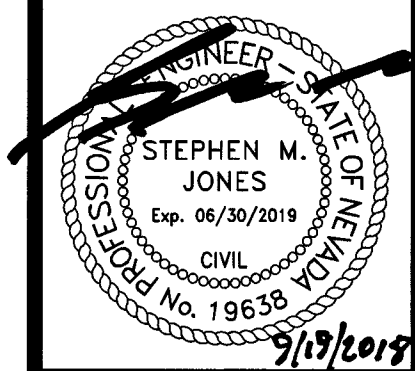
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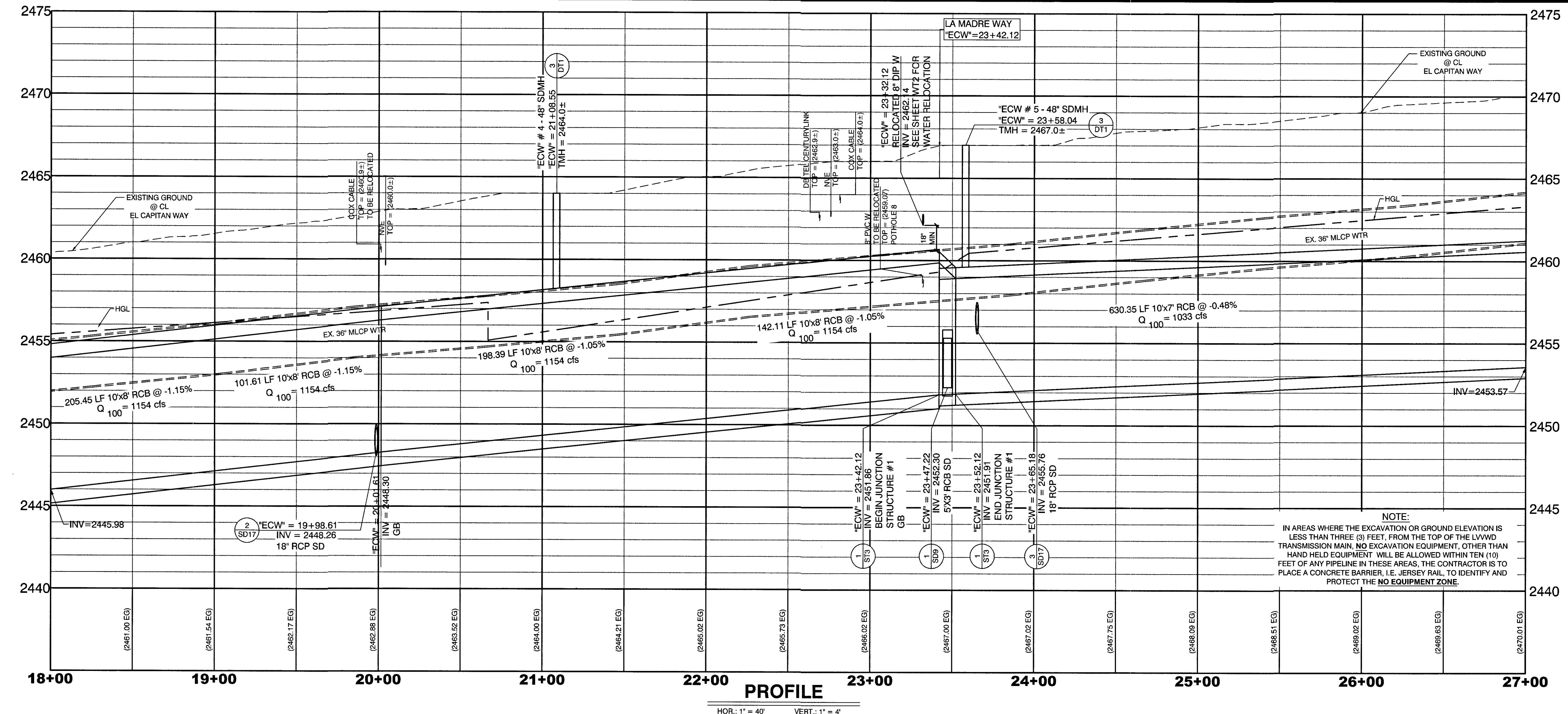
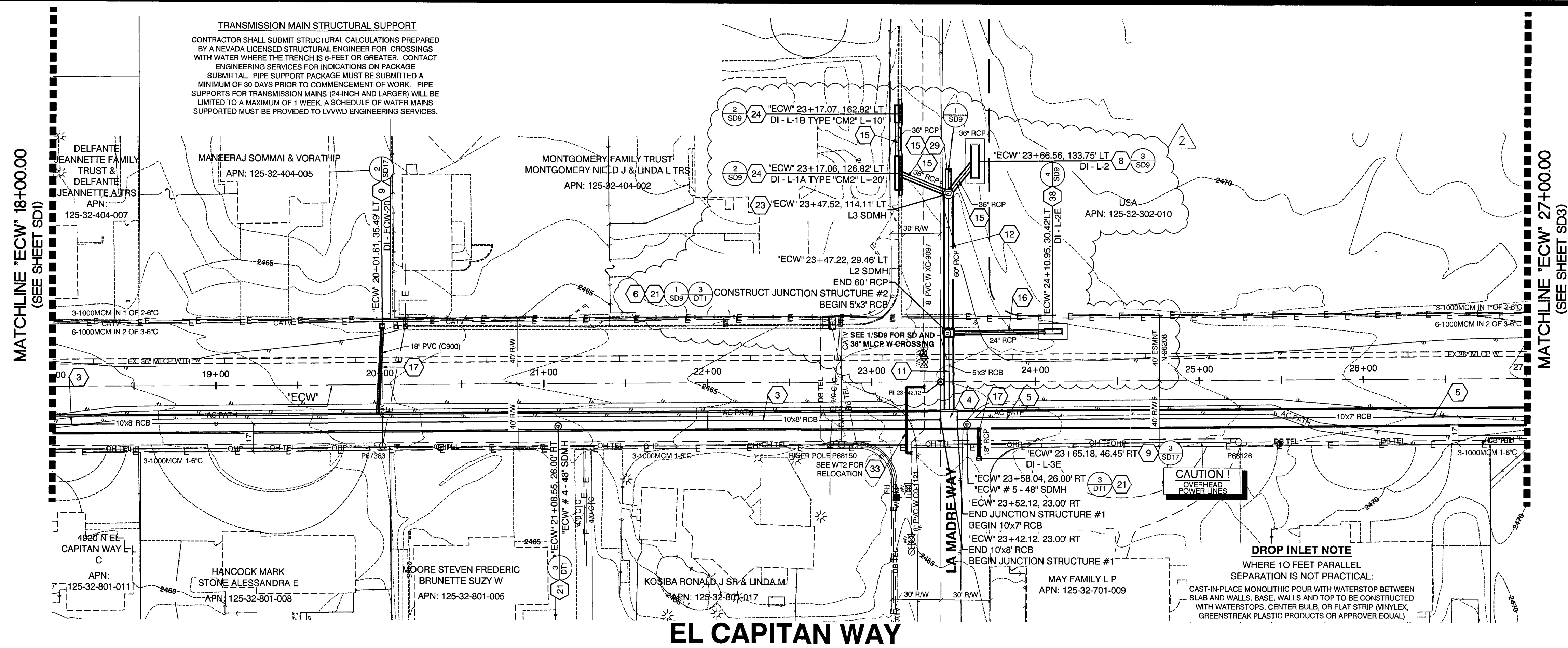
END OF PROJECT "ECW" 64+50.00

APPROVED FOR CONSTRUCTION
DaShade 9/24/18
 LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
 PROJECT No. 125005 FIRST APPROVED DATE: 11/21/17

PREPARED FOR CITY OF LAS VEGAS		PREPARED BY GCW 1555 S. RAINBOW BLVD. LAS VEGAS, NV 89146 TEL: 702.800.2000 FAX: 702.800.2000 ENGINEERS & SURVEYORS www.gcwengineering.com	
BID# 17-69691 H# 63691	DESIGNED BY: RKB DRAWN BY: RKB CHECKED BY: SJ	DATE: 11/14/17 SUBMITTAL STAGE: 100% - FINAL	TITLE GOWAN NORTH - EL CAPITAN BRANCH LONE MOUNTAIN ROAD TO ANN ROAD SHEET DEMOLITION/REMOVAL PLAN "ECW" 45+00.00 TO "ECW" 64+50.00
PROJECT No. 125005 AGREEMENT No. 125-32-102-029		PROJECT No. 125005 AGREEMENT No. 125-32-102-029	



SHEET
DR3
 16 OF 52
 DRAWING NO.
327V294



GRAPHIC SCALE
(IN FEET)

CALL BEFORE CONSTRUCTION

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BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

- CONSTRUCTION KEY NOTES**
- REMOVE END CAP AND CONNECT TO EXISTING 12"x5" RCB PER DETAIL 1, SHT. ST2
 - CONSTRUCT TRANSITION STRUCTURE #1 PER DETAIL 1, SHT. ST2
 - CONSTRUCT 10"x8" RCB PER DETAIL 1, SHT. DT1
 - CONSTRUCT JUNCTION STRUCTURE #1 PER DETAIL 1, SHT. ST3
 - CONSTRUCT 10"x7" RCB PER DETAIL 1, SHT. DT1
 - CONSTRUCT JUNCTION STRUCTURE #2 PER DETAIL 1, SHT. ST4
 - CONSTRUCT 10"x4" SPECIAL DROP INLET PER DETAIL 1, SHT. ST6 AND USD #421 AND DETAIL 4, SHT. DT1
 - CONSTRUCT 20"x4" SPECIAL DROP INLET PER DETAIL 1, SHT. ST6 AND USD #421 AND DETAIL 4, SHT. DT1
 - CONSTRUCT 10"x7" DROP INLET PER DETAIL 1, SHT. ST6 AND USD #421 AND DETAIL 4, SHT. DT1
 - CONSTRUCT JUNCTION STRUCTURE #3 PER DETAIL 1, SHT. ST5
 - CONSTRUCT 5"x3" RCB PER DETAIL 1, SHT. DT1
 - CONSTRUCT 60" RCP PER DETAIL 2, SHT. DT1. CLASS III UNLESS OTHERWISE NOTED IN PROFILE
 - CONSTRUCT 54" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
 - CONSTRUCT 48" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
 - CONSTRUCT 36" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
 - CONSTRUCT 24" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
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 - CONSTRUCT 36" PVC (C900) PER DETAIL 2, SHT. DT1
 - CONSTRUCT 24" PVC (C900) PER DETAIL 2, SHT. DT1
 - CONSTRUCT 18" PVC (C900) PER DETAIL 2, SHT. DT1
 - CONSTRUCT 48" ACCESS MANHOLE PER DETAIL 3, SHT. DT1 WITH 30" FRAME AND COVER PER USD #408
 - CONSTRUCT TYPE II MANHOLE PER USD #405 WITH 30" FRAME AND COVER PER USD #408
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 - CONSTRUCT TYPE "CM2" DROP INLET PER USD #412.1 AND USD #421 (LENGTH PER PLAN)
 - INSTALL RCB PLUG, PER DETAIL 2, SHT. ST3
 - INSTALL 60" RCP PLUG, PER DETAIL 2, SHT. ST4
 - NOT USED
 - INSTALL 48" RCP PLUG, PER DETAIL 2, SHT. ST4
 - INSTALL 36" RCP PLUG, PER DETAIL 2, SHT. ST4
 - CONSTRUCT 8" PVC SEWER LINE PER DCSWCS PLATES 17 AND 18
 - CONSTRUCT 12" DIP WATER LINE PER UDACS PLATES 17 AND 18
 - CONSTRUCT 10" DIP WATER LINE PER UDACS PLATES 17 AND 18
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 - CONSTRUCT 30" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
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 - CONSTRUCT 10"x2" SPECIAL DROP INLET PER DETAIL 1, SHT. ST6 AND USD #421 AND PER DETAIL 4, SHT. DT1
 - INSTALL 30" RCP PLUG PER DETAIL 2, SHT. ST4
 - INSTALL 42" RCP PLUG PER DETAIL 2, SHT. ST4
 - INSTALL JUNCTION STRUCTURE #4, PER DETAIL 2, SHT. ST5
 - INSTALL JUNCTION STRUCTURE #5, PER DETAIL 3, SHT. ST5
 - INSTALL CONCRETE COLLAR PER DETAIL 8, SHT. DT1
 - CONSTRUCT 42" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
 - INSTALL 24" RCP PLUG, PER DETAIL 2, SHT. ST4
 - NOT USED
 - CONSTRUCT 24"x38" HERCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
 - CONSTRUCT 19"x30" HERCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE

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KEY MAP

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT No. 125005 FIRST APPROVED DATE: 11/21/17

PREPARED BY
GCW
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2299
F: 702.804.2299
gcwengineering.com

DESIGNED BY: RKB
DRAWN BY: RKB
CHECKED BY: SJ

DATE: 11/14/17
SUBMITTAL STAGE: 100% - FINAL

REVISIONS

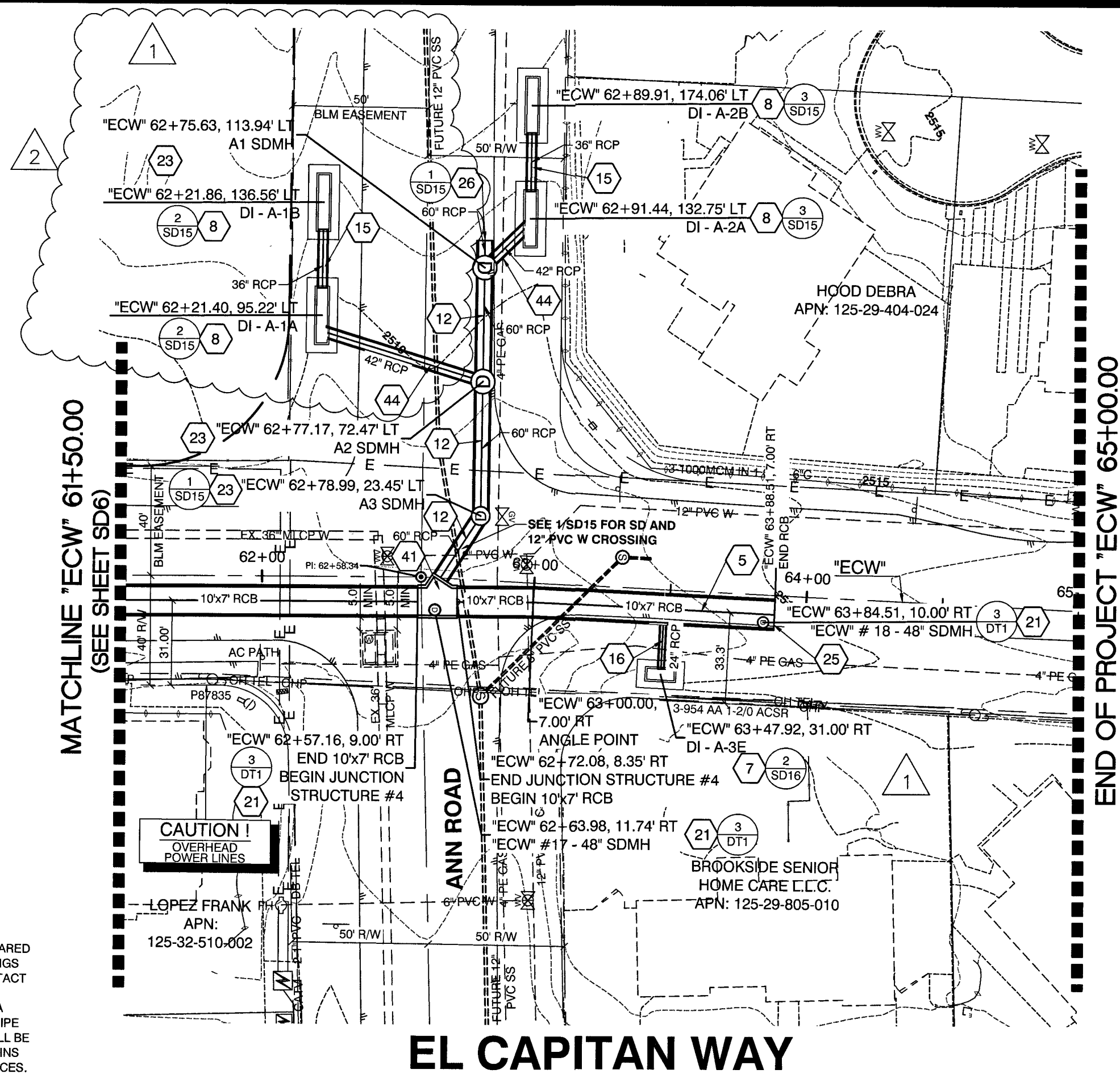
NO.	DATE	REVISIONS
2	8/21/18	OBTAINED BLM EASEMENT

GOWAN NORTH - EL CAPITAN BRANCH
LONE MOUNTAIN ROAD TO ANN ROAD

PLAN AND PROFILE
"ECW" 18+00.00 TO "ECW" 27+00.00

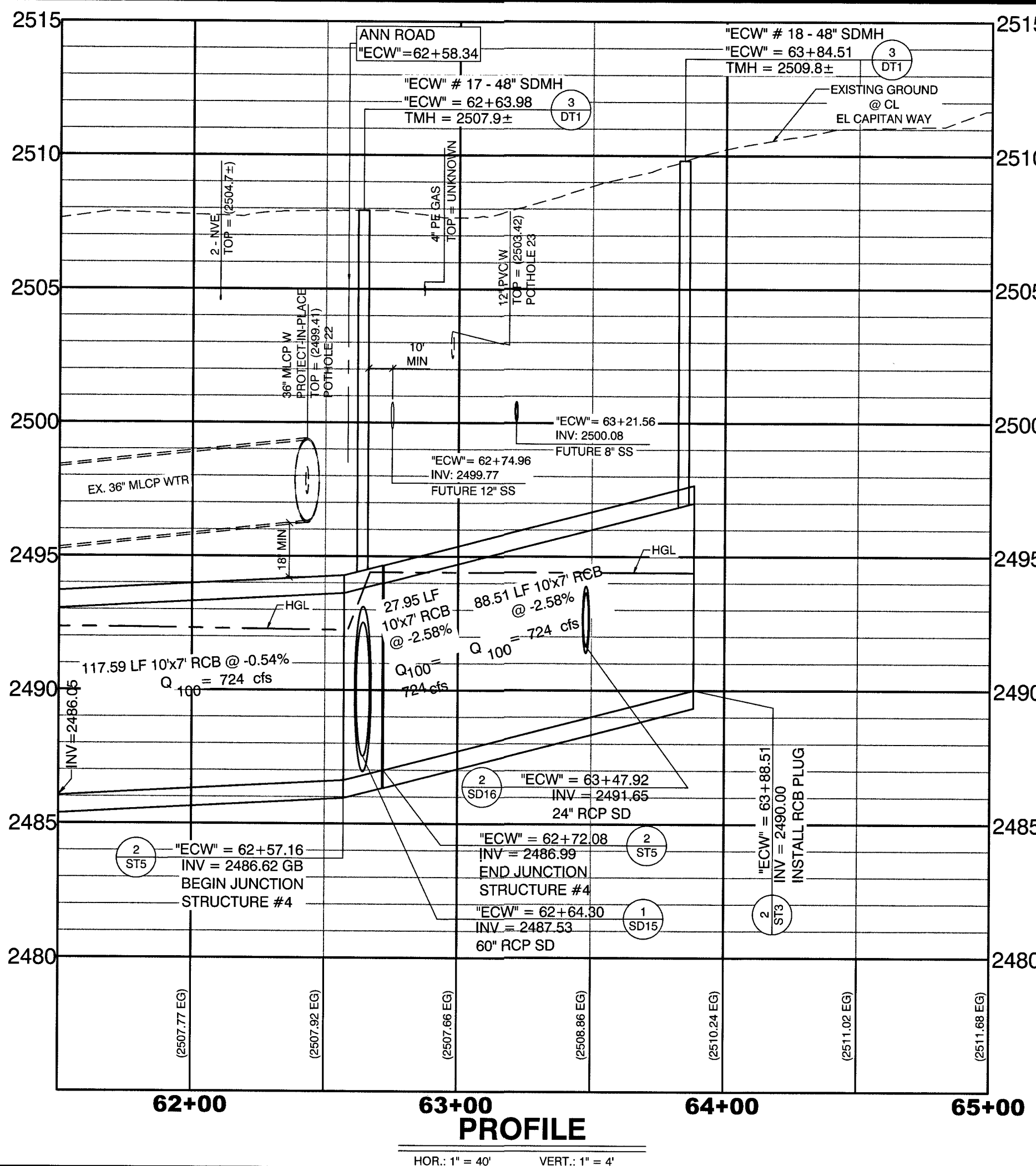
SD2
24 OF 52
DRAWING No. 327V294

PROJ.#: 125005 AGREE#116136 QS:125-32-SE XC:11372



NOTE:
IN AREAS WHERE THE EXCAVATION OR GROUND ELEVATION IS LESS THAN THREE (3) FEET, FROM THE TOP OF THE LVVWD TRANSMISSION MAIN, NO EXCAVATION EQUIPMENT, OTHER THAN HAND HELD EQUIPMENT, WILL BE ALLOWED WITHIN TEN (10) FEET OF ANY PIPELINE IN THESE AREAS. THE CONTRACTOR IS TO PLACE A CONCRETE BARRIER, I.E. JERSEY RAIL, TO IDENTIFY AND PROTECT THE NO EQUIPMENT ZONE.

TRANSMISSION MAIN STRUCTURAL SUPPORT
CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS PREPARED BY A NEVADA LICENSED STRUCTURAL ENGINEER FOR CROSSINGS WITH WATER WHERE THE TRENCH IS 6-FEET OR GREATER. CONTACT ENGINEERING SERVICES FOR INDICATIONS ON PACKAGE SUBMITTAL. PIPE SUPPORT PACKAGE MUST BE SUBMITTED A MINIMUM OF 30 DAYS PRIOR TO COMMENCEMENT OF WORK. PIPE SUPPORTS FOR TRANSMISSION MAINS (24-INCH AND LARGER) WILL BE LIMITED TO A MAXIMUM OF 1 WEEK. A SCHEDULE OF WATER MAINS SUPPORTED MUST BE PROVIDED TO LVVWD ENGINEERING SERVICES.



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BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
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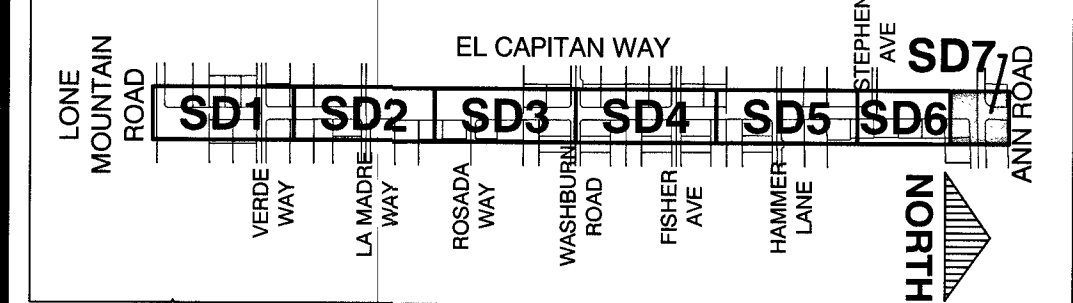
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- CONSTRUCT 10x6" RCB PER DETAIL 1, SHT. DT1
- CONSTRUCT JUNCTION STRUCTURE #1 PER DETAIL 1, SHT. ST3
- CONSTRUCT 10x7" RCB PER DETAIL 1, SHT. DT1
- CONSTRUCT JUNCTION STRUCTURE #2 PER DETAIL 1, SHT. ST4
- CONSTRUCT 10x4" SPECIAL DROP INLET PER DETAIL 1, SHT. ST6 AND USD #421 AND DETAIL 4, SHT. DT1
- CONSTRUCT 24x14" SPECIAL DROP INLET PER DETAIL 1, SHT. ST6 AND USD #421 AND DETAIL 4, SHT. DT1
- CONSTRUCT 12x6" DROP INLET PER DETAIL 1, SHT. ST6 AND USD #421 AND DETAIL 4, SHT. DT1
- CONSTRUCT JUNCTION STRUCTURE #3 PER DETAIL 1, SHT. ST5
- CONSTRUCT 5x3" RCB PER DETAIL 1, SHT. DT1
- CONSTRUCT 60" RCP PER DETAIL 2, SHT. DT1, CLASS III UNLESS OTHERWISE NOTED IN PROFILE
- CONSTRUCT 54" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
- CONSTRUCT 48" RCP PER DETAIL 2, SHT. DT1 CLASS III UNLESS OTHERWISE NOTED IN PROFILE
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DISCLAIMER NOTE

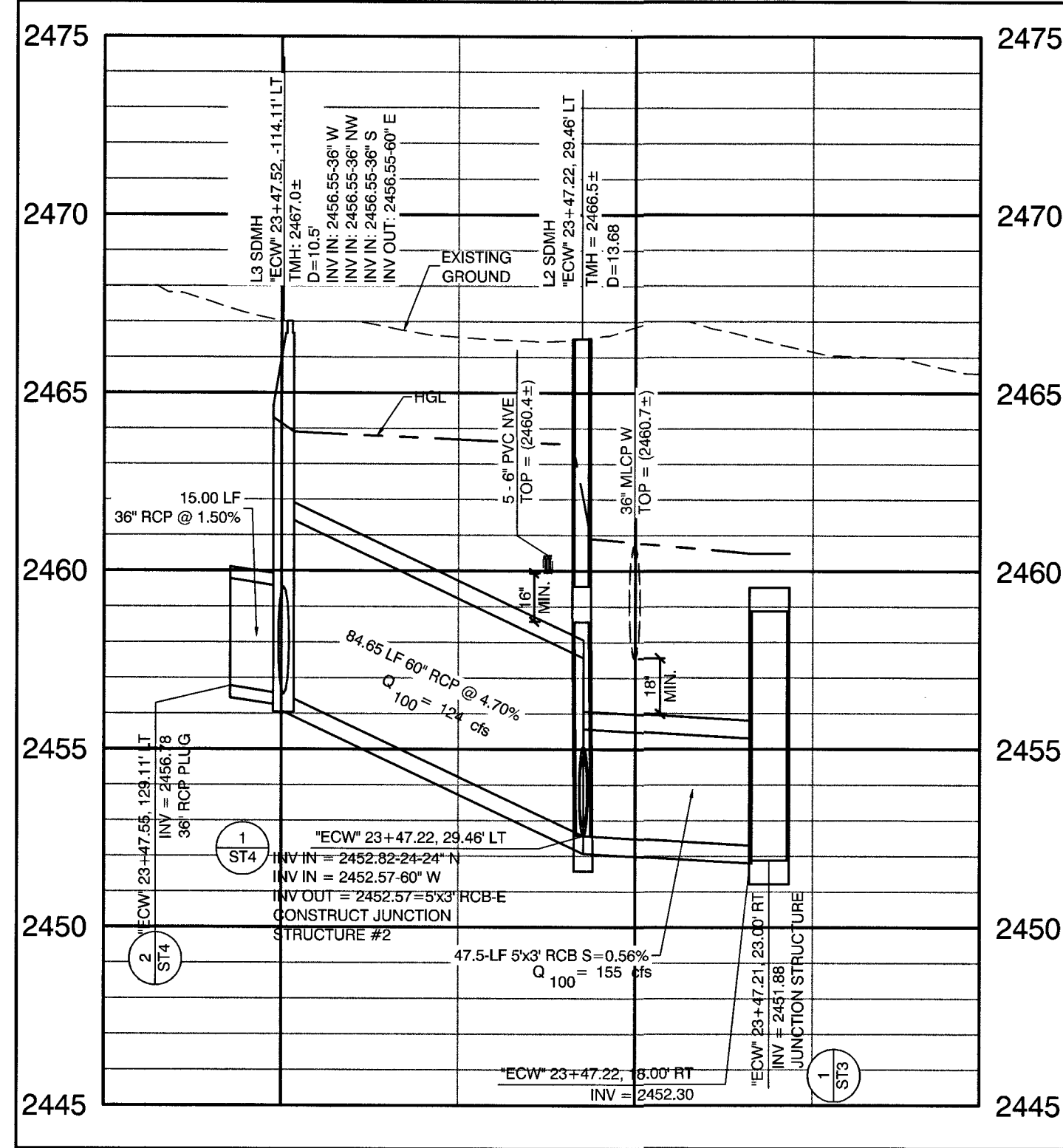
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KEY MAP



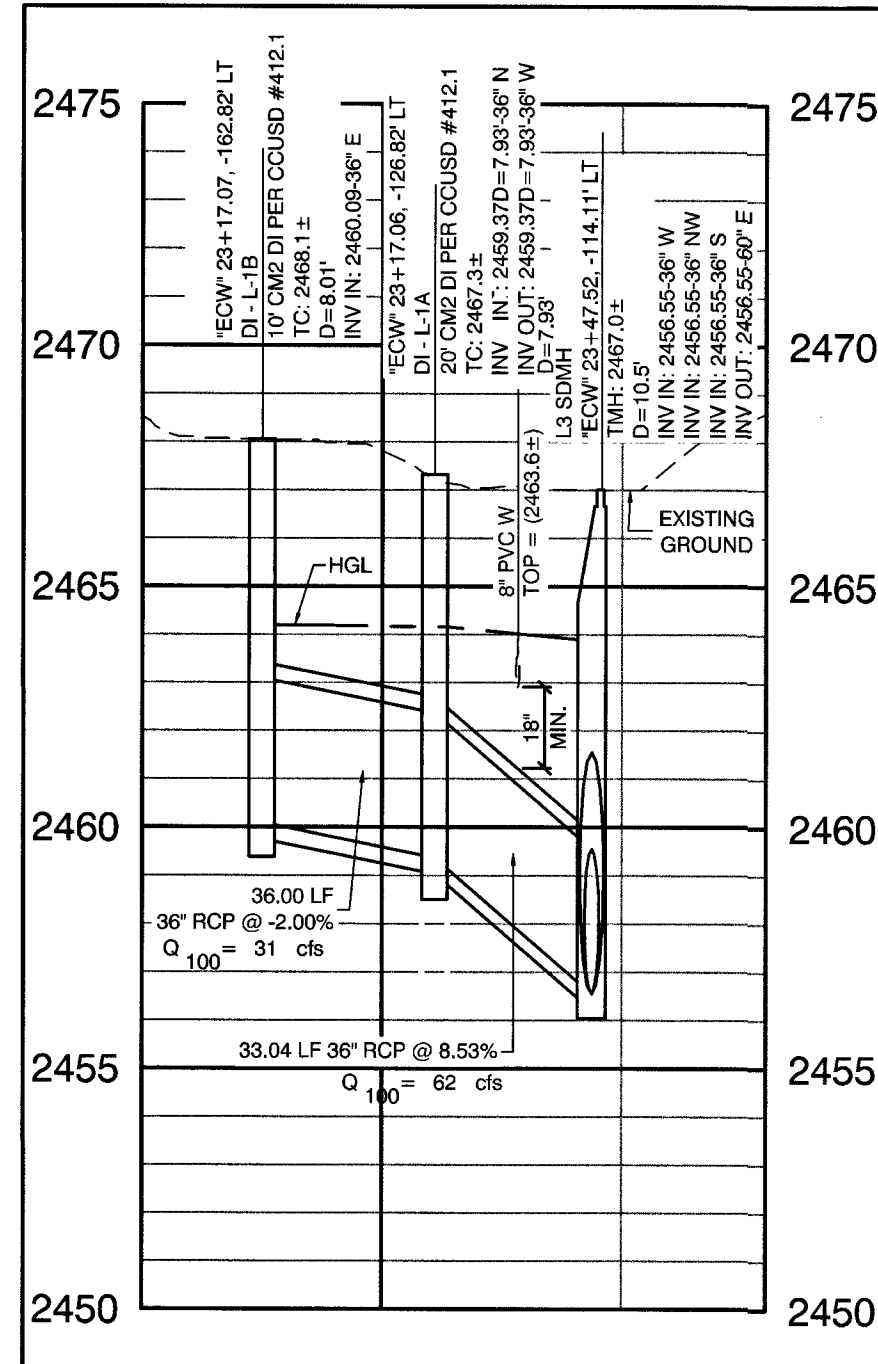
APPROVED FOR CONSTRUCTION
One Thade 9/24/18
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT No. 125005 FIRST APPROVED DATE: 11/21/17

PREPARED BY		CITY OF LAS VEGAS	
DESIGNED BY: RKB		DRAWN BY: RKB	
CHECKED BY: SJ		SUBMITTAL STAGE: 100% - FINAL	
DATE: 11/14/17		DATE: 9/27/18	
H# 63891		H# 63891	
TITLE: GOWAN NORTH - EL CAPITAN BRANCH LONE MOUNTAIN ROAD TO ANN ROAD		SHEET: SD7	
PLAN AND PROFILE		DRAWING NO. 327V294	
"ECW" 61+50.00 TO "ECW" 65+00.00		PROJECT No. 125005	
PROJ# 125005 AGREE# 116136 QS:125-32-SE XC:11372		DATE: 9/24/18	



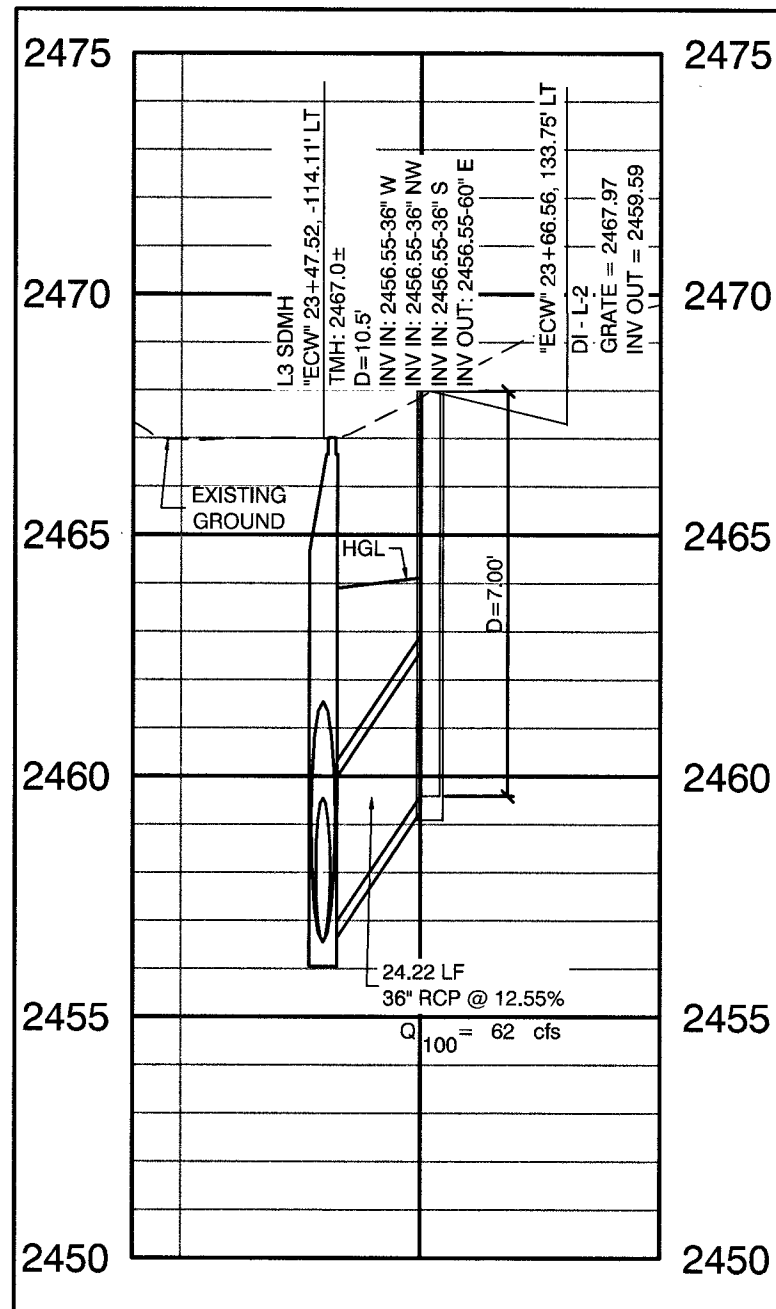
**STORM DRAIN LATERAL
LA MADRE WAY**
SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

1
SD9



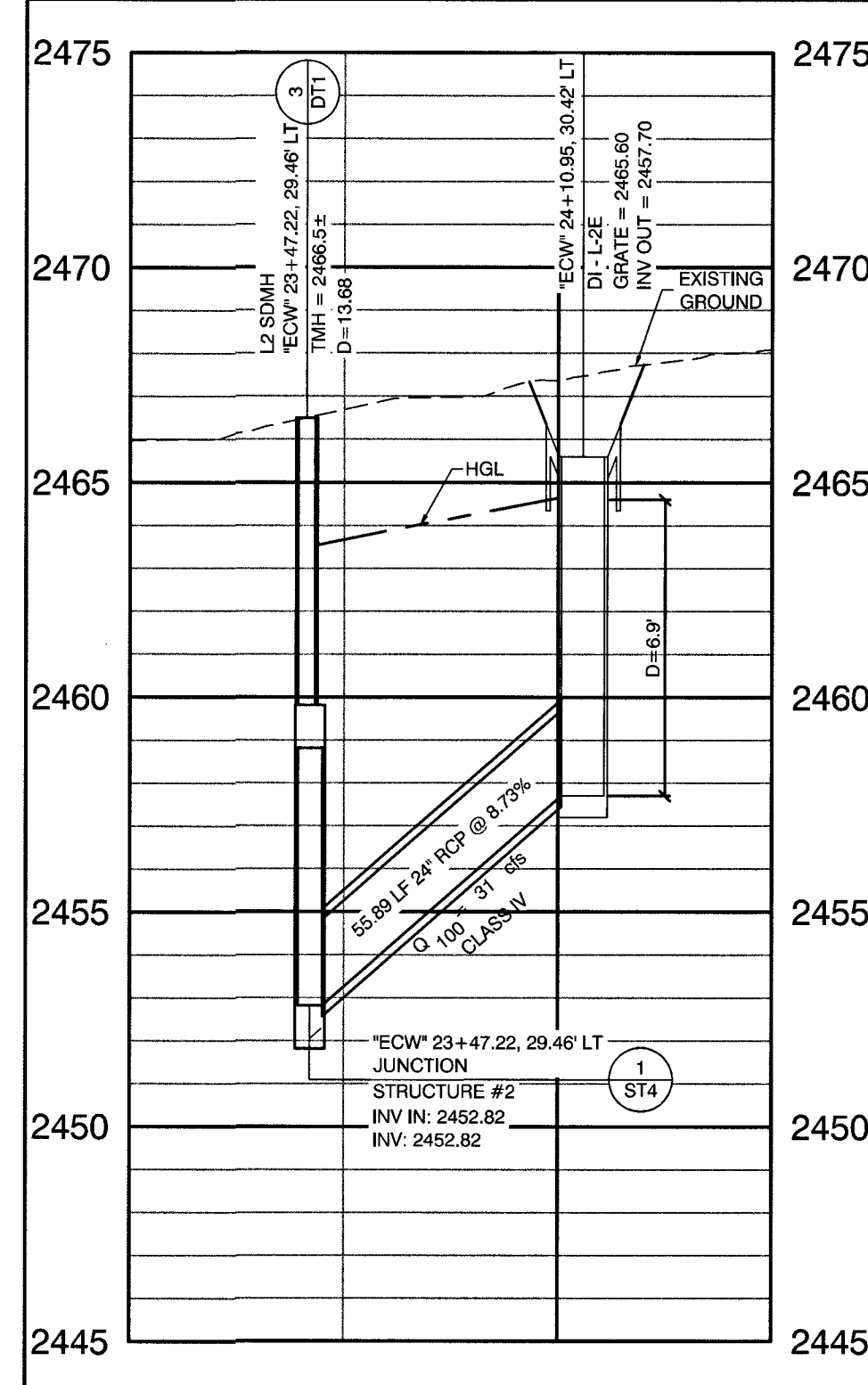
**STORM DRAIN LATERAL
LA MADRE WAY**
SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

2
SD9



**STORM DRAIN LATERAL
LA MADRE WAY**
SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

3
SD9



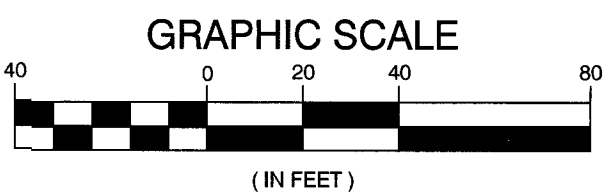
**STORM DRAIN LATERAL
EL CAPITAN WAY**
SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

4
SD9

CONTROLLED LOW STRENGTH:
PROTECT WATERLINES IN PLACE. WHENEVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS 1 CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

NOTE:
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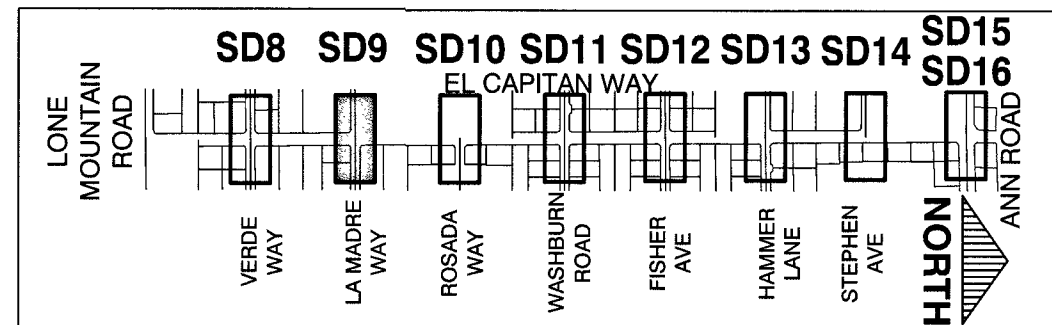
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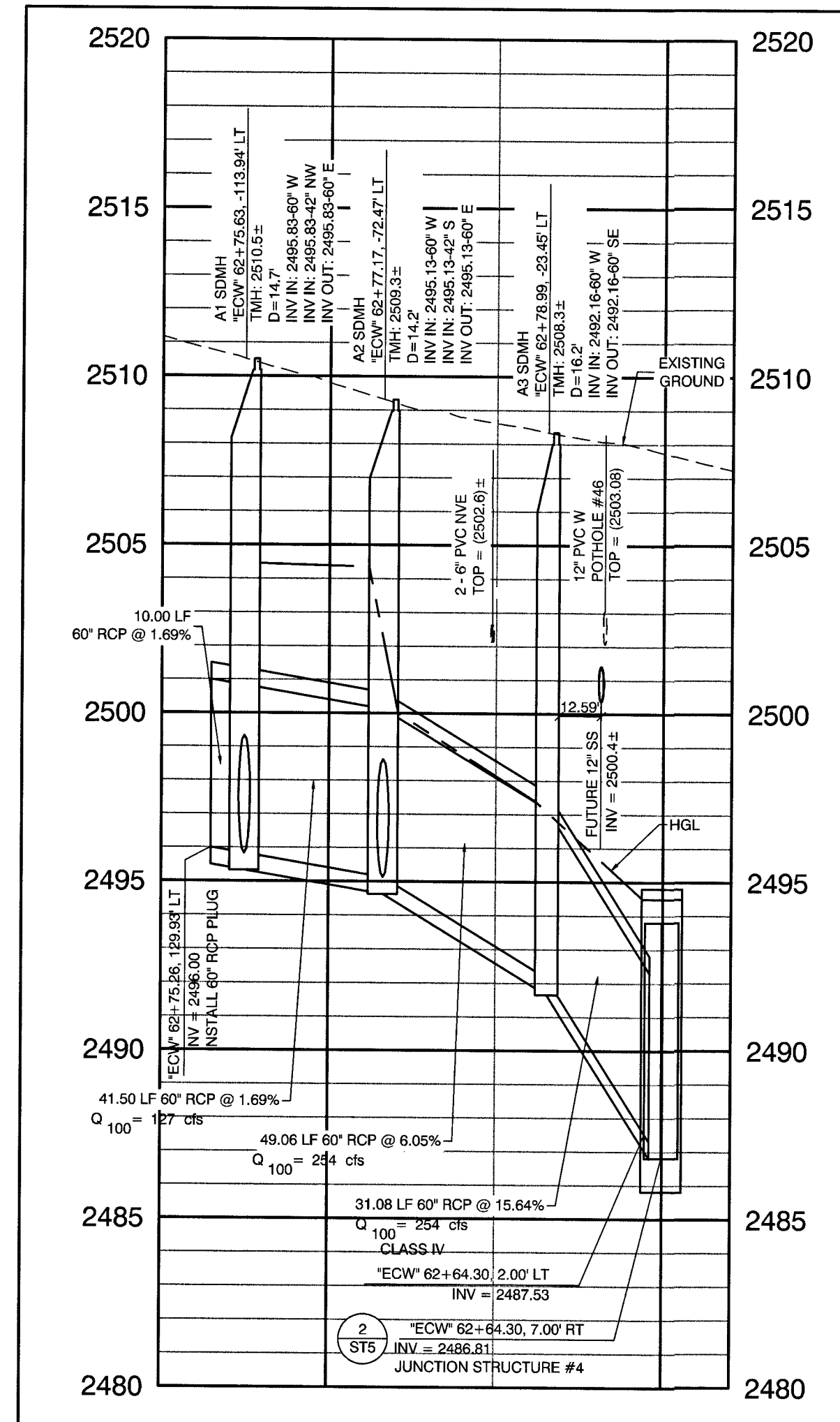
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KEY MAP



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LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT No. 125005 FIRST APPROVED DATE: 11/21/17

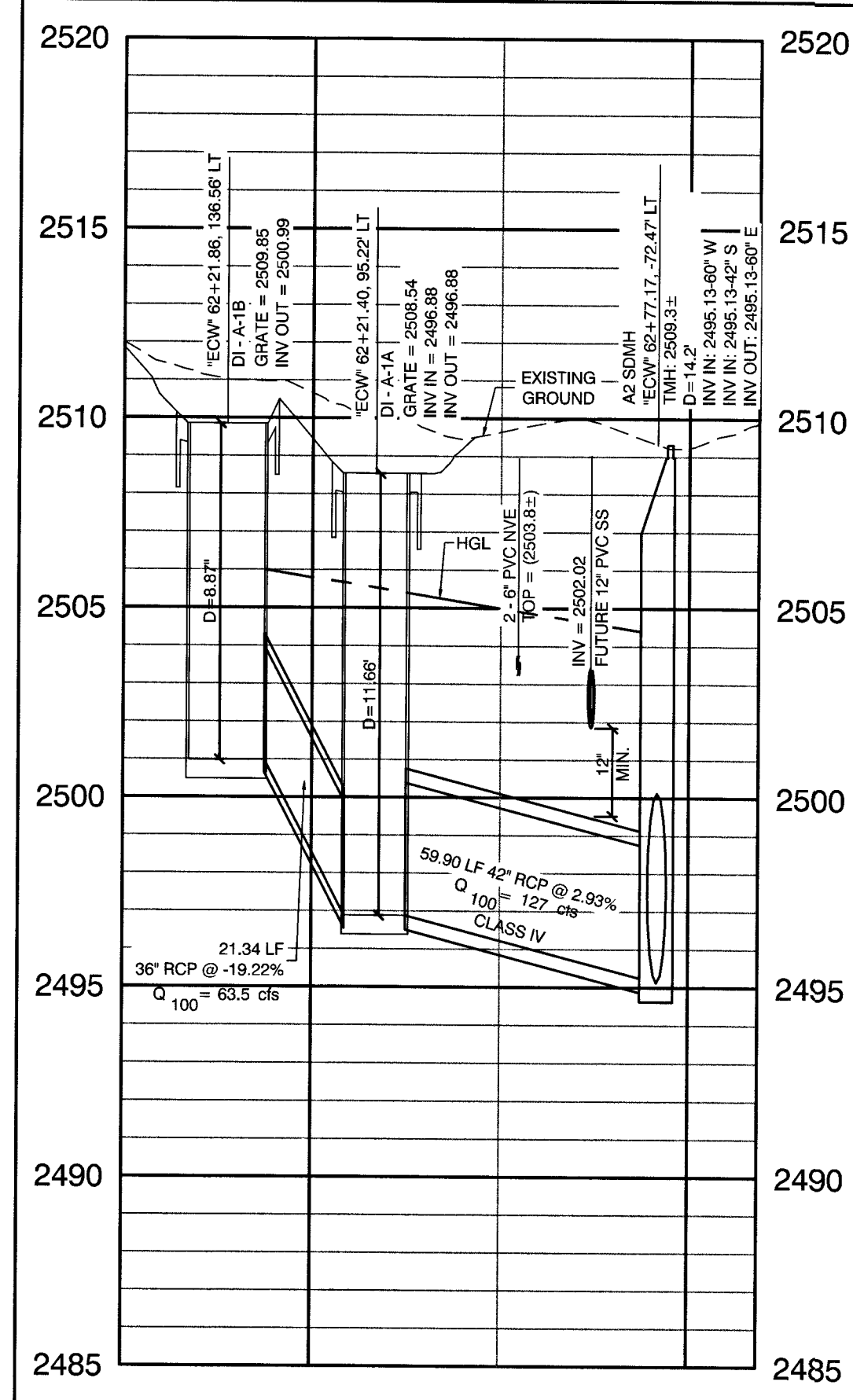
PREPARED BY		CITY OF LAS VEGAS		DESIGNED BY: RKB		DRAWN BY: RKB		CHECKED BY: SJ	
H# 63691		DATE: 11/14/17		SUBMITTAL STAGE: 100% - FINAL		DESIGNED BY: RKB		DRAWN BY: RKB	
1555 S. RAINBOW BLVD. LAS VEGAS, NV 89146 T: 702.804.2000 F: 702.804.2259 gseengineering.com		ENGINEERS' SURVEYORS		OBTAINED BLM EASEMENT		NO. DATE		REVISIONS	
TITLE		GOWAN NORTH - EL CAPITAN BRANCH LONE MOUNTAIN ROAD TO ANN ROAD		SHEET		SD9		31 OF 52	
DRAWING NO.		327V294		PROJECT No. 125005		FIRST APPROVED DATE: 11/21/17			



STORM DRAIN LATERAL ANN ROAD

SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

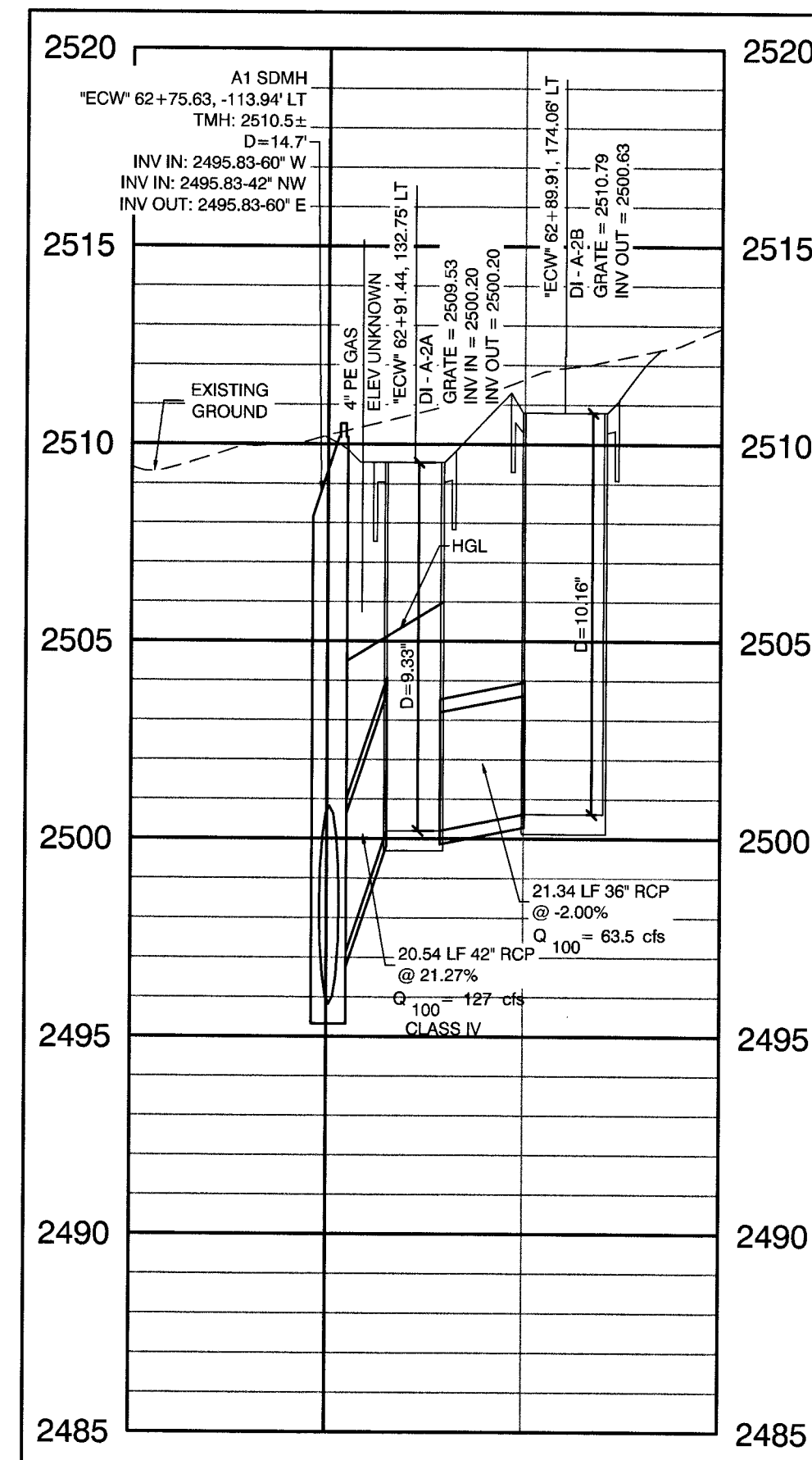
1
SD15



STORM DRAIN LATERAL ANN ROAD

SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

2
SD15



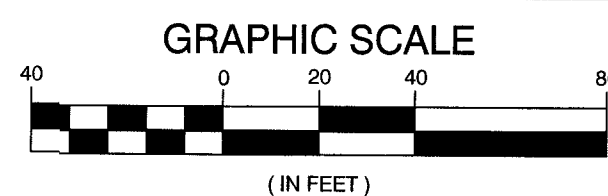
STORM DRAIN LATERAL ANN ROAD

SCALE: HORIZ. 1" = 40'
VERT. 1" = 4'

3
SD15

CAUTION: GASLINE RELOCATION NOTE

CONTRACTOR TO COORDINATE WITH SOUTHWEST GAS.



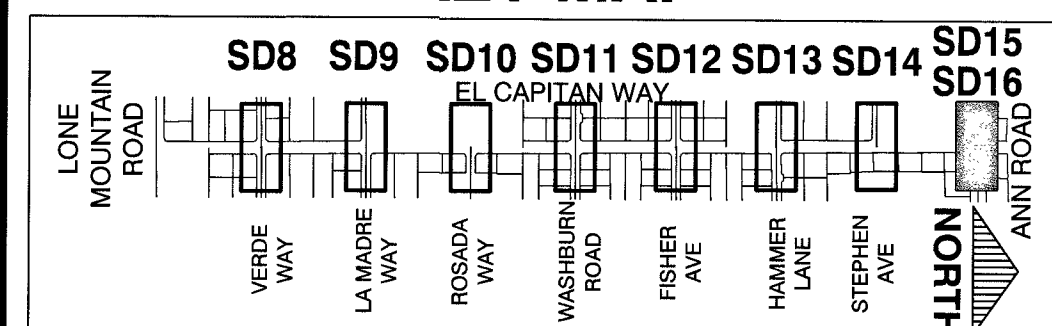
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KEY MAP



CONTROLLED LOW STRENGTH:
PROTECT WATERLINES IN PLACE. WHENEVER A WATERLINE IS ABOVE A STORM DRAIN OR SEWER WHERE COMPACTION REQUIREMENTS UNDER A WATERLINE CANNOT BE MET, BACKFILL TRENCH WITH CLASS I CONTROLLED LOW STRENGTH MATERIAL (CLSM) TO THE SPRINGLINE OF THE WATERLINE. THIS REQUIREMENT IS FOR STRUCTURAL SUPPORT ONLY. ADDITIONAL HEALTH REGULATIONS MAY APPLY PER UDACS 2.22.

NOTE:
IN AREAS WHERE THE EXCAVATION OR GROUND ELEVATION IS LESS THAN THREE (3) FEET FROM THE TOP OF THE LVVWD TRANSMISSION MAIN, NO EXCAVATION EQUIPMENT, OTHER THAN HAND HELD EQUIPMENT, WILL BE ALLOWED WITHIN TEN (10) FEET OF ANY PIPELINE IN THESE AREAS. THE CONTRACTOR IS TO PLACE A CONCRETE BARRIER, I.E. JERSEY RAIL, TO IDENTIFY AND PROTECT THE NO EQUIPMENT ZONE.

TRANSMISSION MAIN STRUCTURAL SUPPORT
CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS PREPARED BY A NEVADA LICENSED STRUCTURAL ENGINEER FOR CROSSINGS WITH WATER WHERE THE TRENCH IS 6-FEET OR GREATER. CONTACT ENGINEERING SERVICES FOR INDICATIONS ON PACKAGE SUBMITTAL. PIPE SUPPORT PACKAGE MUST BE SUBMITTED A MINIMUM OF 30 DAYS PRIOR TO COMMENCEMENT OF WORK. PIPE SUPPORTS FOR TRANSMISSION MAINS (24-INCH AND LARGER) WILL BE LIMITED TO A MAXIMUM OF 1 WEEK. A SCHEDULE OF WATER MAINS SUPPORTED MUST BE PROVIDED TO LVVWD ENGINEERING SERVICES.

APPROVED FOR CONSTRUCTION
9/24/18
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT No. 125005 FIRST APPROVED DATE: 11/21/17

NO.	DATE	REVISIONS
1	8/21/18	OBTAINED BLM EASEMENT
2	3/14/18	STORM DRAIN REVISION ON ANN ROAD

PREPARED BY
GCW
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DESIGNED BY: RKB
DRAWN BY: RKB
CHECKED BY: SJ
DATE: 11/14/17
SUBMITTAL STAGE:
100% - FINAL

PREPARED FOR
CITY OF LAS VEGAS
GOWAN NORTH - EL CAPITAN BRANCH
LONE MOUNTAIN ROAD TO ANN ROAD
LATERAL PROFILES
ANN ROAD - 1

ENGINEER
STEPHEN M. JONES
Exp. 06/30/2019
CIVIL
Professional No. 19638
9/19/2018

SHEET
SD15
37 OF 52
DRAWING NO.
327V294