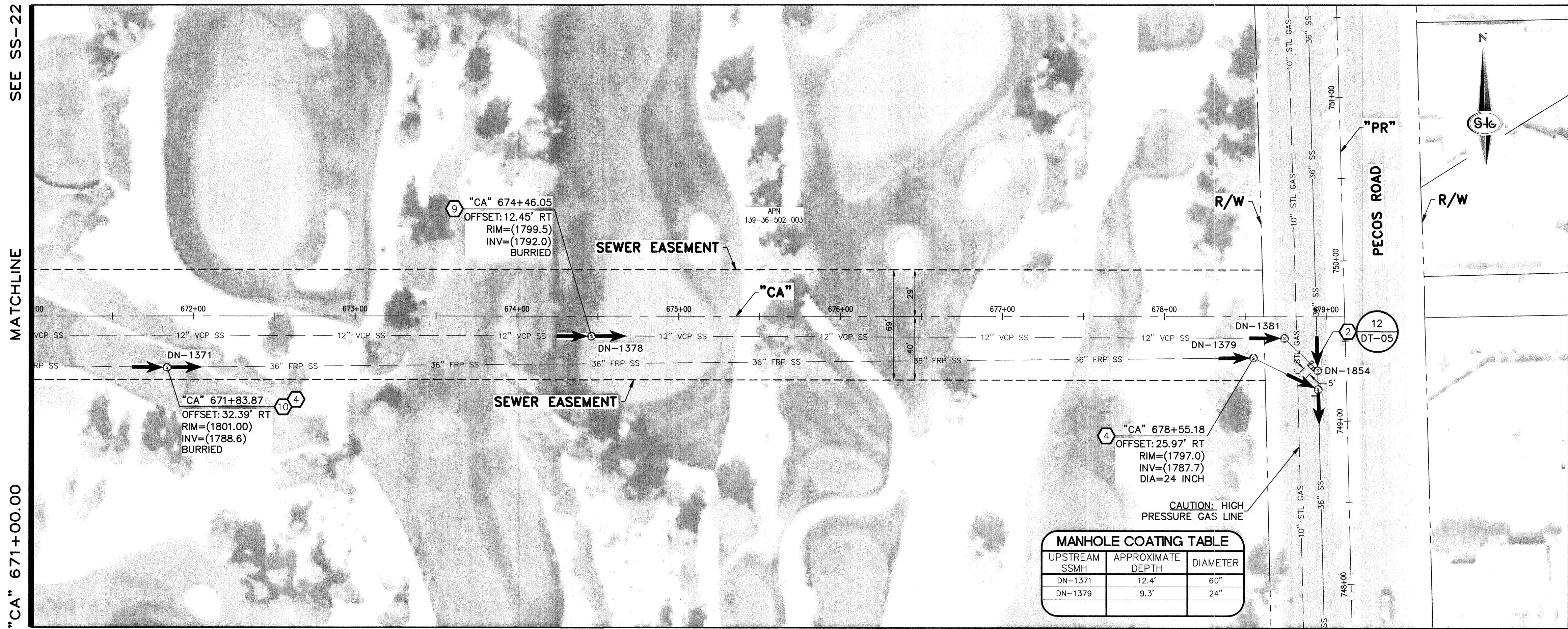
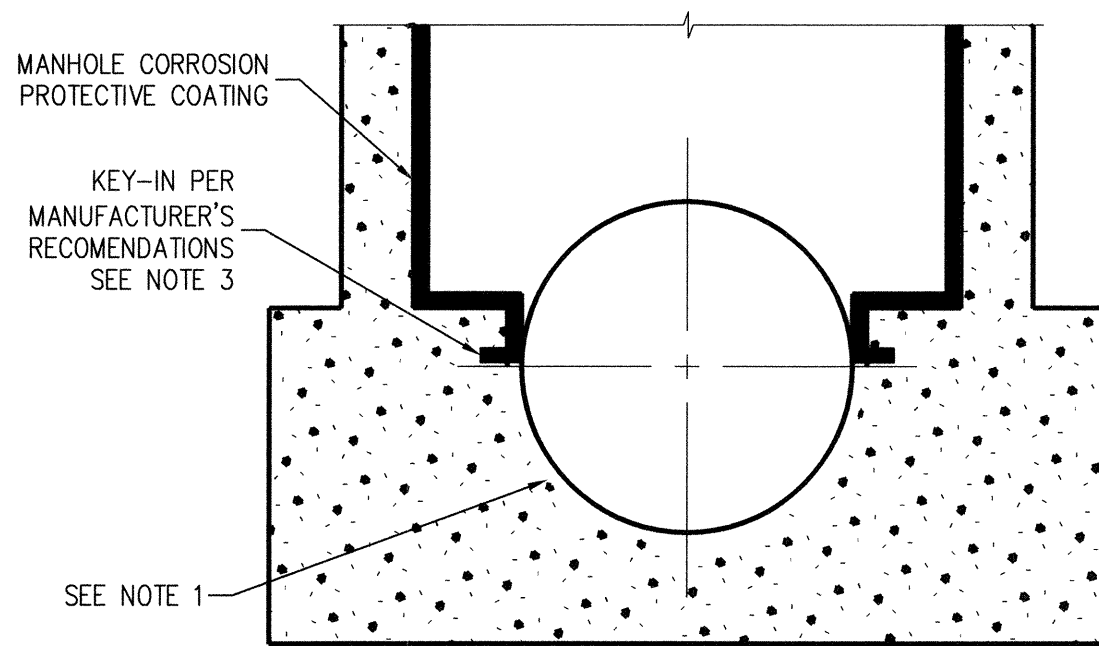
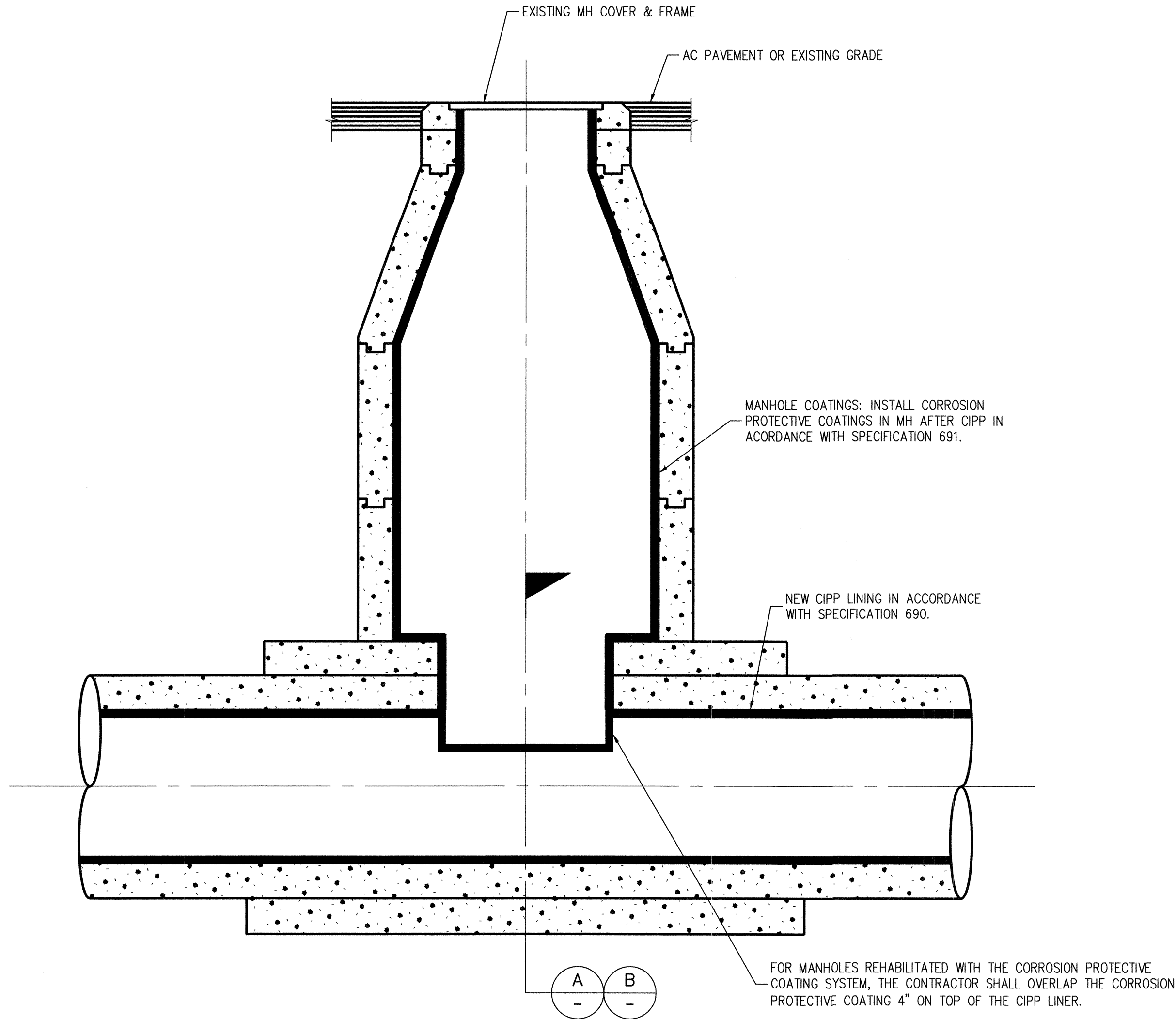
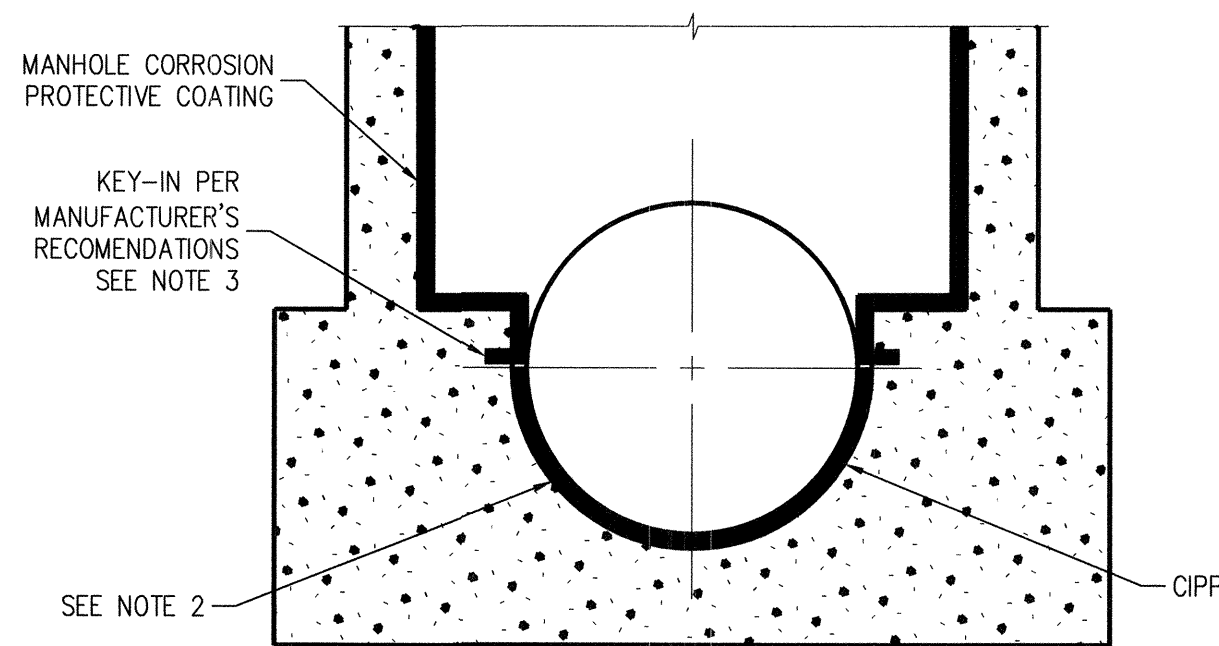




F:\CLV\2020\Engineering\DT-01.dwg, 4/29/14 4:15:04 AM, jbarlow



SECTION A



SECTION B

NOTES:

- MANHOLES NOT LINED THROUGH WITH CIPP SHALL BE COATED WITH CORROSION PROTECTIVE COATING DOWN TO THE SPRINGLINE OF THE PIPE CHANNEL AS SHOWN IN SECTION A AND SPECIAL PROVISION SECTION 691.
- MANHOLES LINED THROUGH WITH CIPP SHALL BE COATED WITH CORROSION PROTECTIVE COATING AND CIPP LINED AS SHOWN IN SECTION B AND SPECIAL PROVISIONS SECTION 691.
- ANY DEVIATIONS FROM THE ACTUAL KEY-IN LOCATION SHOWN IN THE DETAIL WILL REQUIRE APPROVAL BY OWNER OR OWNER'S REPRESENTATIVE.

MANHOLE CORROSION PROTECTIVE DETAIL

NOT TO SCALE

1
DT-01

LVVWD REQUIREMENT FOR BELOW PAVEMENT INSTALLATION:

PRIOR TO COMMENCEMENT OF WORK IN ANY LOCATION WHERE THE CONTRACTOR ELECTS TO TEMPORARILY INSTALL THE BYPASS SEWER LINE BELOW PAVEMENT, A SHOP DRAWING INDICATING THE MEANS AND METHOD MUST BE SUBMITTED TO AND APPROVED BY THE LVVWD FOR SEWER-WATER SEPARATION MITIGATION.

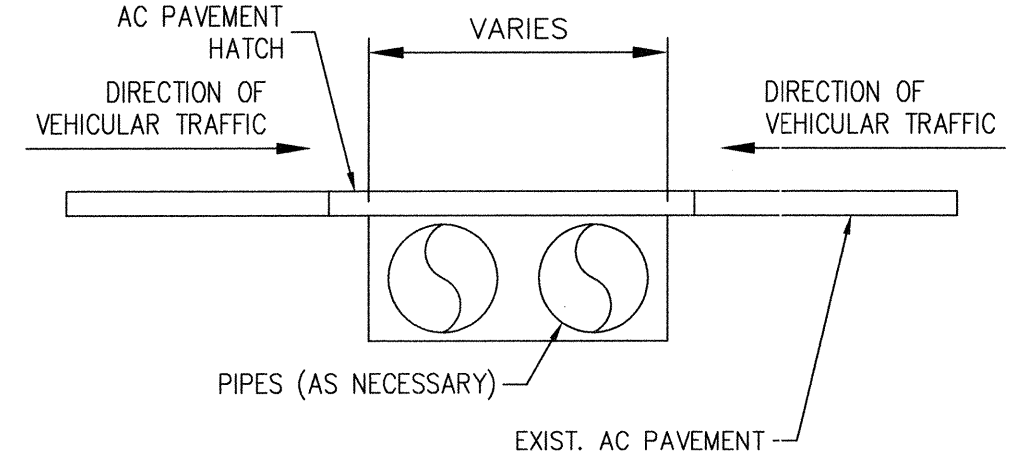
LVVWD REQUIREMENT FOR BELOW PAVEMENT INSTALLATION:

[Signature]
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES MANAGER
PROJECT NO. 121821 DATE: 04/15/14

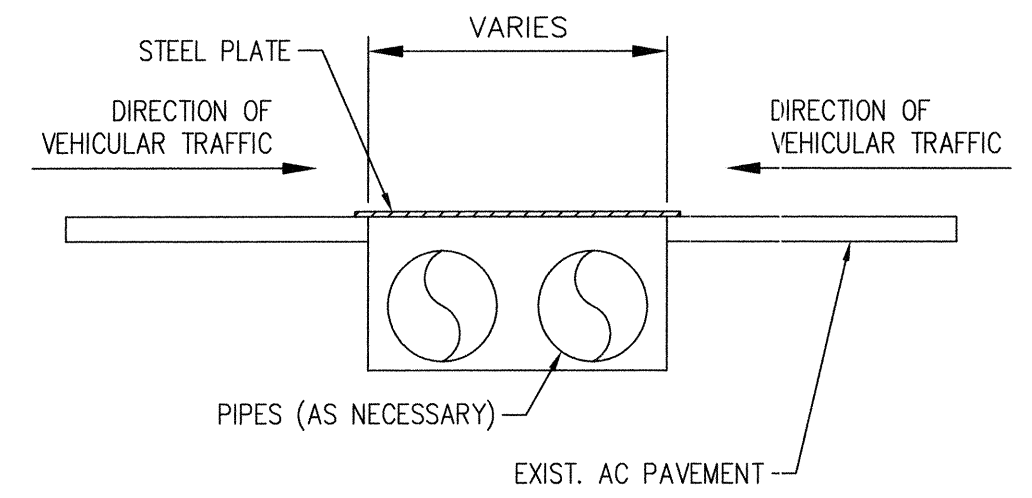
LVVWD SHOP DRAWINGS

NOT TO SCALE

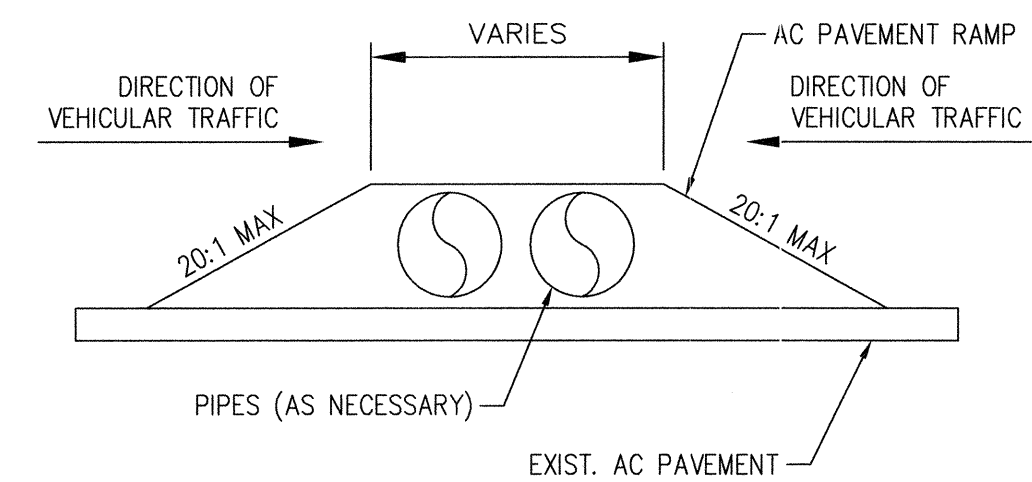
2
DT-01



*CASE 1 FOR SPEEDS > 25 MPH



*CASE 2 FOR SPEEDS <= 25 MPH



CASE 2 FOR SPEEDS <= 25 MPH
& PIPE UP TO 18 IN DIA.

* REQUIRES DISTRICT APPROVAL (SEE DETAIL 2, THIS SHEET)

NOTES:

- EXISTING TRAFFIC SIGNAL DETECTOR LOOPS THAT ARE IN CONFLICT WITH CONSTRUCTION ACTIVITIES SHALL BE DISCONNECTED FROM THE LOOP LEAD-IN CABLE IN THE PULL BOX PRIOR TO BEGINNING WORK. EXISTING DETECTOR LOOPS THAT ARE DAMAGED SHALL BE REPLACED IN THEIR EXISTING LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND DOCUMENTING THE EXISTING LOCATIONS. THE THROUGH TRAVEL LANES WILL HAVE AT LEAST ONE, AND UP TO FOUR EXISTING LOOP DETECTORS FOR PRESENCE DETECTION AND ONE EXISTING LOOP DETECTOR FOR ADVANCED DETECTION. LEFT-TURN LANE(S) WILL HAVE A MINIMUM OF FOUR PRESENCE LOOP DETECTORS. DETECTOR LOOPS SHALL BE REPLACED WITH 6' X 6' LOOPS. LOOPS SHALL BE CONNECTED/RECONNECTED TO EXISTING LOOPS LEAD-IN CABLE IN EXISTING PULL BOX. ALL LOOPS SHALL BE PER CITY OF LAS VEGAS SPECIAL PROVISION 623T.02.04 AND INSTALL PER USDCCA DRAWING NUMBERS 826, 827, 828, AND 834. CONTRACTOR IS RESPONSIBLE FOR RE-ESTABLISHING VEHICLE DETECTION TO ALL TRAVEL AND TURN LANES, TO THE SATISFACTION OF THE ENGINEER. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF THE DETECTOR LOOPS SO ADJACENT LOOPS ARE NOT UNINTENTIONALLY DAMAGED. THE LOOP CABLE FROM ADJACENT LANES MAY CROSS THE PATH OF THE BYPASS PUMP PIPE AND COULD BE DAMAGED FROM CONSTRUCTION ACTIVITIES, IF THE LOOPS ARE DAMAGED, CONTRACTOR SHALL REPLACE AT THEIR SOLE EXPENSE. CONTRACTOR SHALL PROTECT ALL STREETLIGHT AND TRAFFIC SIGNAL CONDUITS IN PLACE.

SIGNALIZED INTERSECTIONS WITH LOOP DETECTORS ARE:

OAKLEY BOULEVARD/MAIN STREET
OAKLEY BOULEVARD/LAS VEGAS BOULEVARD
OAKLEY BOULEVARD/MARYLAND PARKWAY
GRAND CENTRAL PARKWAY/BONNEVILLE AVENUE
GRAND CENTRAL PARKWAY/CLARK AVENUE
GRAND CENTRAL PARKWAY/CITY PARKWAY
GRAND CENTRAL PARKWAY/MAIN STREET
BONNEVILLE AVENUE/MAIN STREET
CARSON AVENUE/7TH STREET
CARSON AVENUE/MARYLAND PARKWAY
CARSON AVENUE/13TH STREET

SIGNALIZED INTERSECTIONS WITH VIDEO DETECTORS ARE:

OAKLEY BOULEVARD/EASTERN AVENUE

SIGNALIZED INTERSECTIONS WITH UNKNOWN DETECTION ARE:

FREMONT STREET/7TH STREET

- PERMANENT PAVEMENT REPLACEMENT TO FOLLOW JURISDICTIONAL REQUIREMENTS.
- ALL EXISTING STRIPING AND PAVEMENT MARKINGS THAT ARE REMOVED AS PART OF THE BYPASS PUMPING SHALL BE REPLACED TO MATCH EXISTING.
- ANY CONCRETE CROSS GUTTER, CONCRETE/PAVER CROSSWALK THAT ARE DAMAGED OR REMOVED AS PART OF THE BYPASS PUMPING SHALL BE REPLACED TO MATCH EXISTING.

BYPASS PIPING TRAFFIC DETAILS

NOT TO SCALE

3
DT-01

NO.	DATE	DESCRIPTION	APP'D

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

CITY ENGINEER: DAVID BOWERS, PE, PTOE
PROGRAM MANAGER: JEREMY LEAVITT, P.E.

DESIGNED BY: JSR
DRAWN BY: JAS
CHECKED BY: RWC

DATE: 4/1/14

SANITARY SEWER REHABILITATION GROUP B

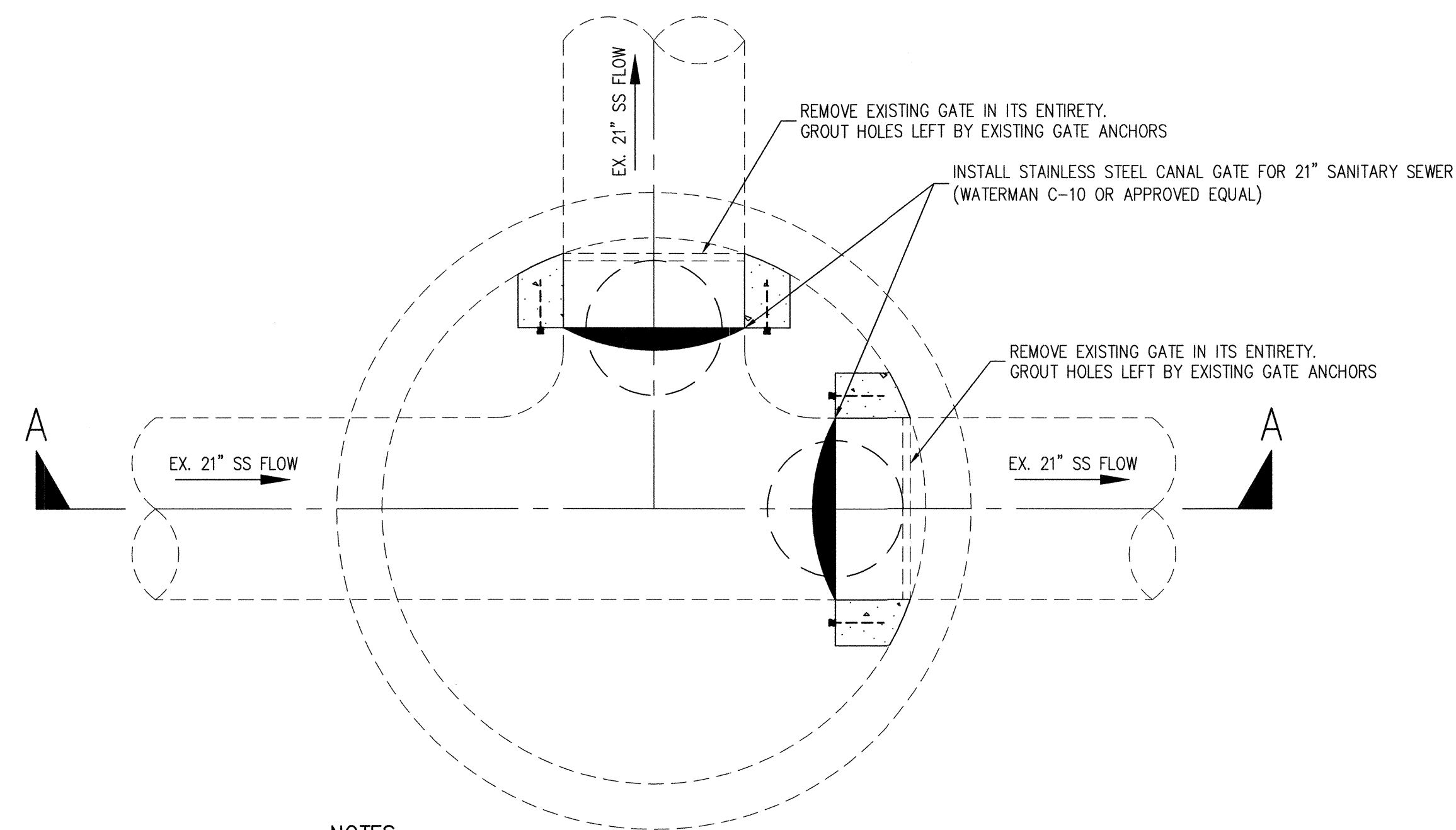
TITLE: SANITARY SEWER REHABILITATION GROUP B

SHEET: DETAILS

SEAL
PROFESSIONAL ENGINEER - STATE OF NEVADA
RANDY W. CARROLL
Exp. 12/31/2014
CIVIL
161631 KENNEDY

Sheet
DT-01
28 of 59
DRAWING NO.
307V1063

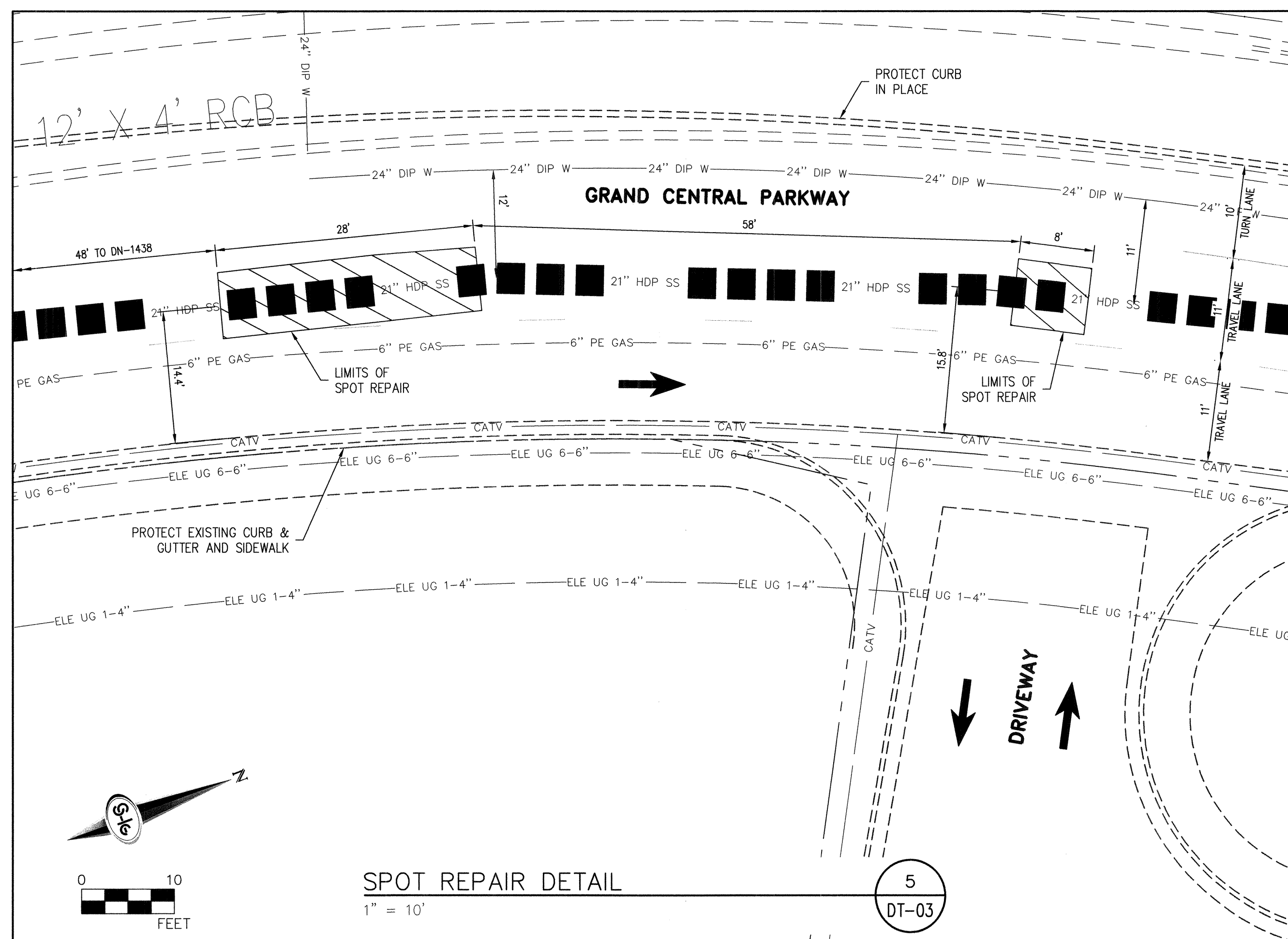
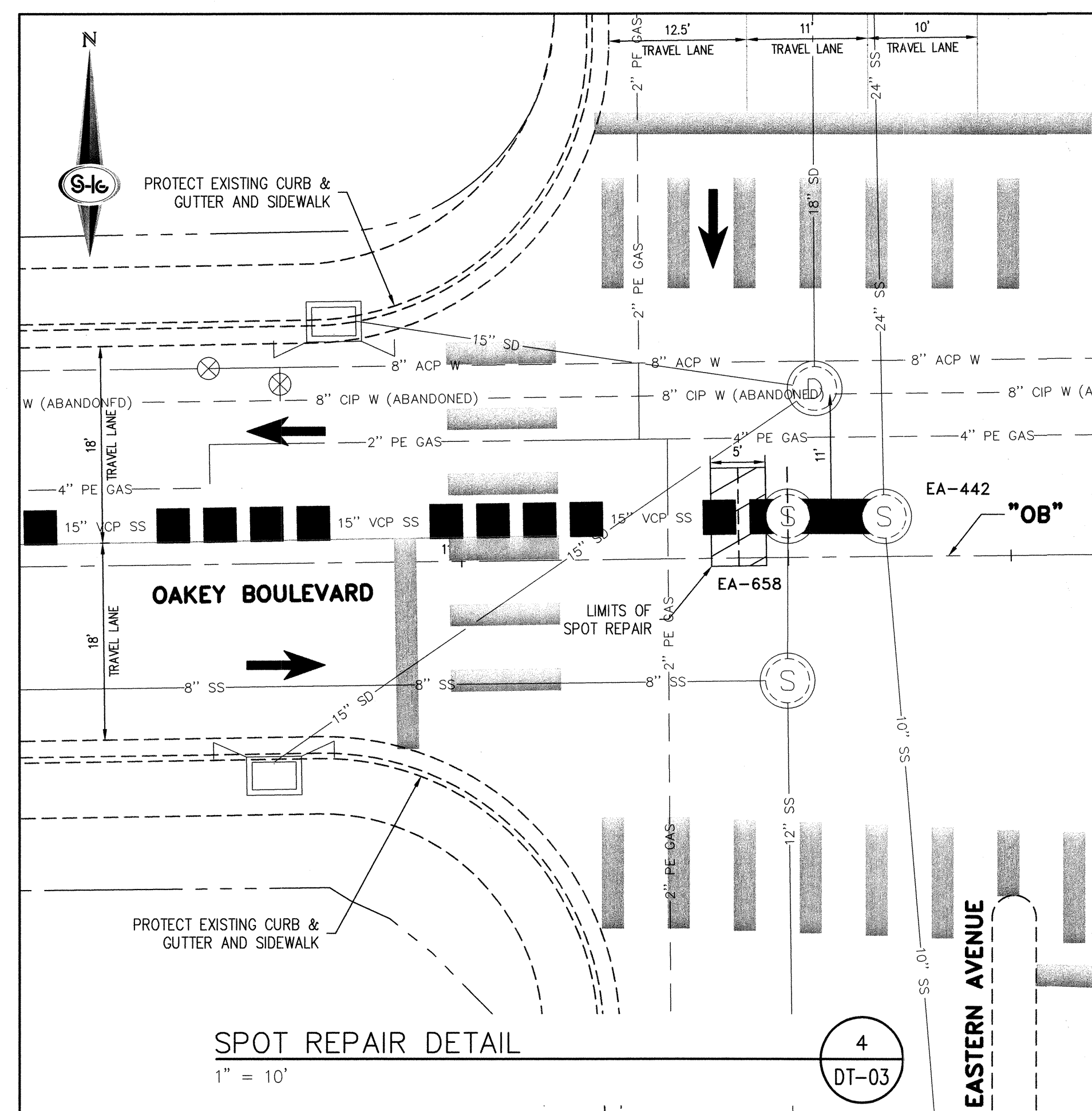
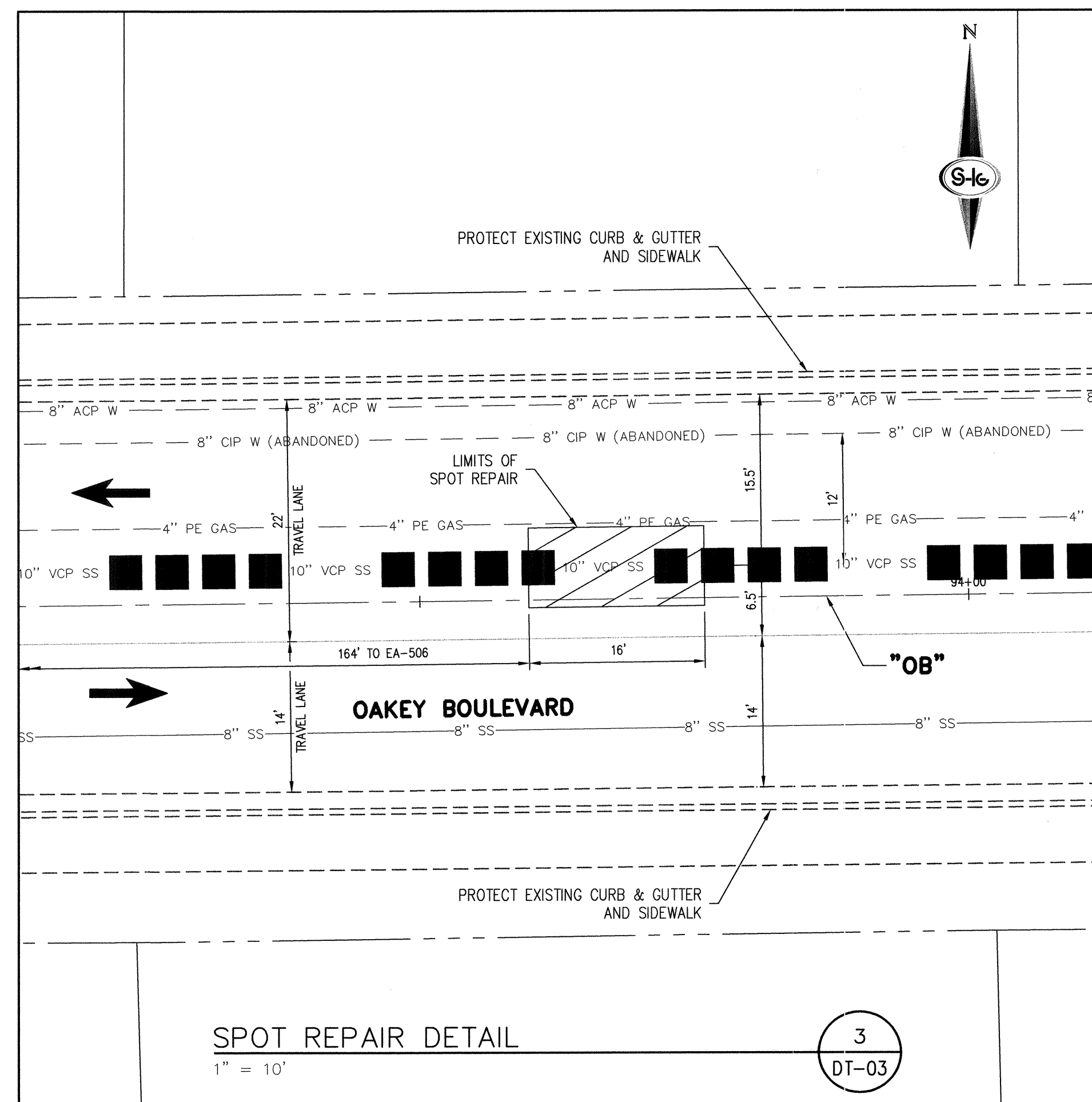
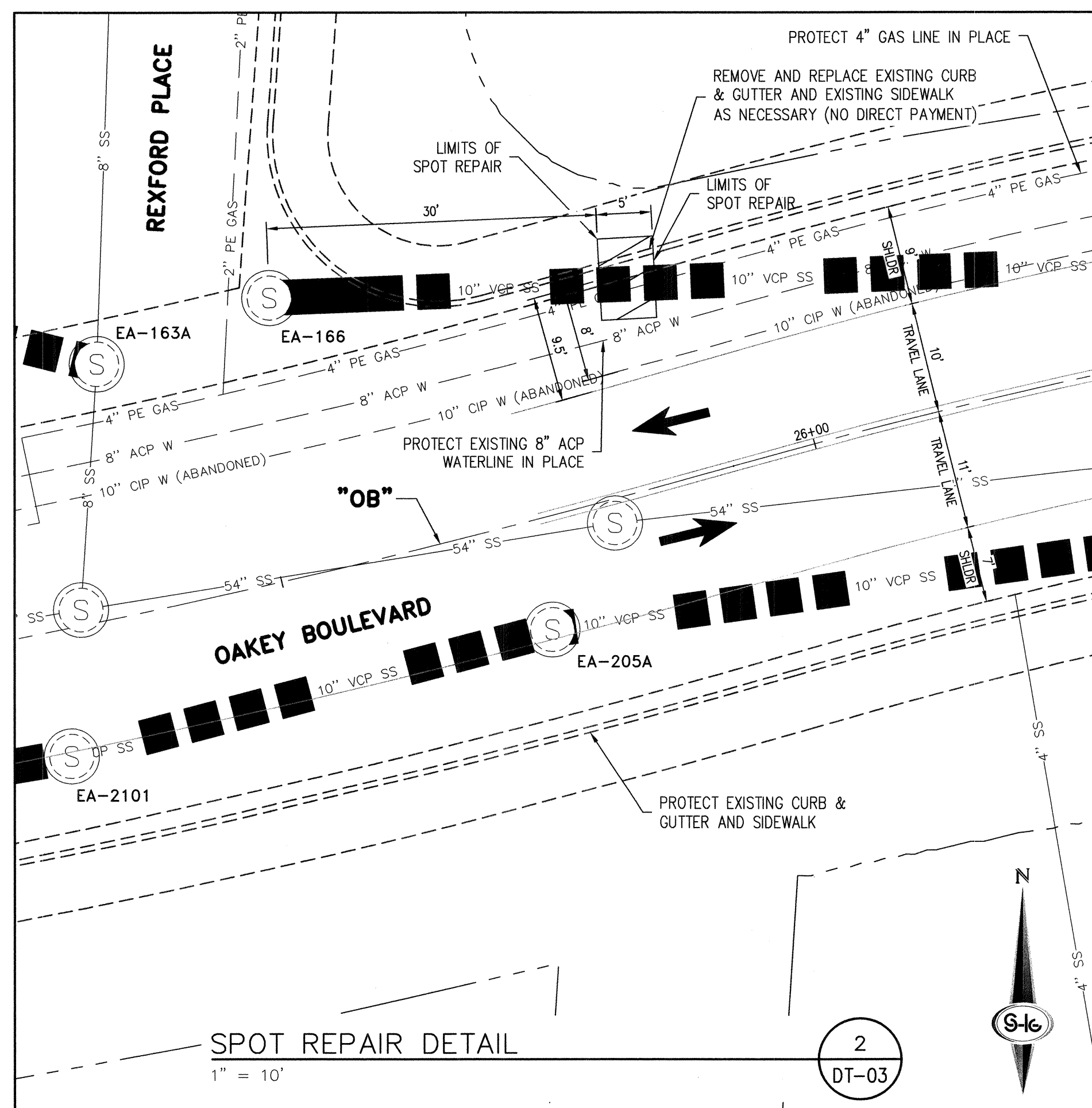
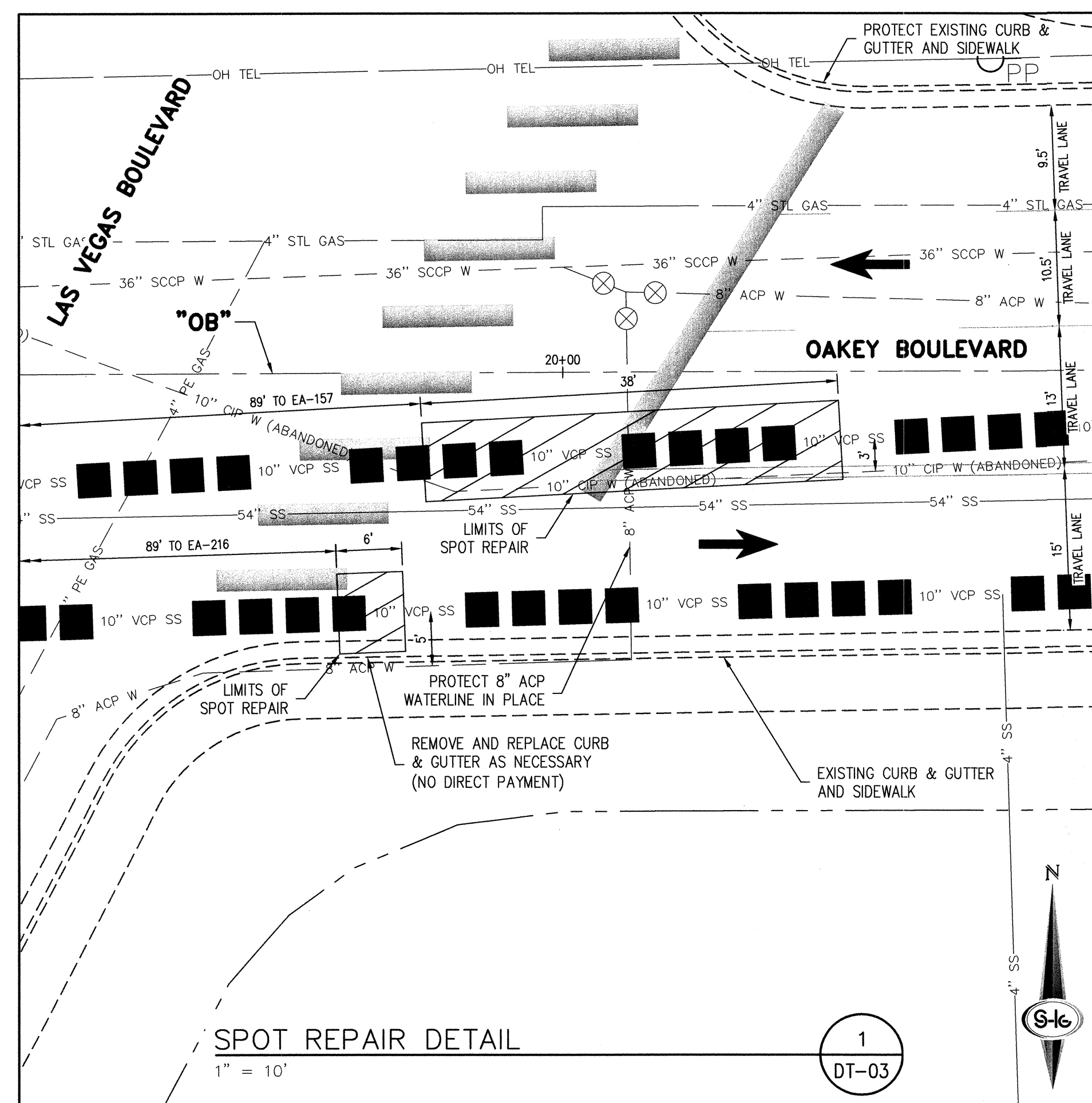
HANSEN NO. 144802
BID NO. 144802



2

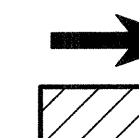


Sheet
DT-02
29 of 59
DRAWING NO.
307V1063



ALL EXISTING ASBESTOS CEMENT (ACP) WATERLINES CROSSING A
TRENCH EXCAVATION GREATER THAN 6 FT. WIDE SHALL BE
REPLACED WITH DUCTILE IRON PIPE

LEGEND



REMOVE AND REPLACE SANITARY SEWER LINE

NOTES

1. CONTRACTOR SHALL PATCH THE EXISTING PAVEMENT THAT IS IMPACTED BY THE SANITARY SEWER PIPE AND MANHOLE REPLACEMENT PER USDOCA STD. DWG. NO. 500.1 THRU 500.5 AND 503.1 AND 503.2.
2. CONTRACTOR SHALL REPLACE ALL RAISED PAVEMENT MARKERS, MARKING FILM, PAVEMENT PAINT AND GREEN BIKE LANE MARKING FILM DAMAGED BY CONSTRUCTION ACTIVITIES.
3. SAWCUT LINE MUST BE PARALLEL AND PERPENDICULAR TO ROADWAY (CANNOT BE IN WHEEL PATH).

APPROVED FOR CONSTRUCTION

Don Meade
LVWD ENGINEERING SERVICES MANAGER
PROJECT NO. 121821

04/15/14
DATE



DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

CITY ENGINEER:	DAVID BOWERS, PE, PTOE
PROGRAM MANAGER:	JEREMY LEAVITT, P.E.
DESIGNED BY:	JSR

DATE: 4/1/14

NO.	DATE:	DESCRIPTION
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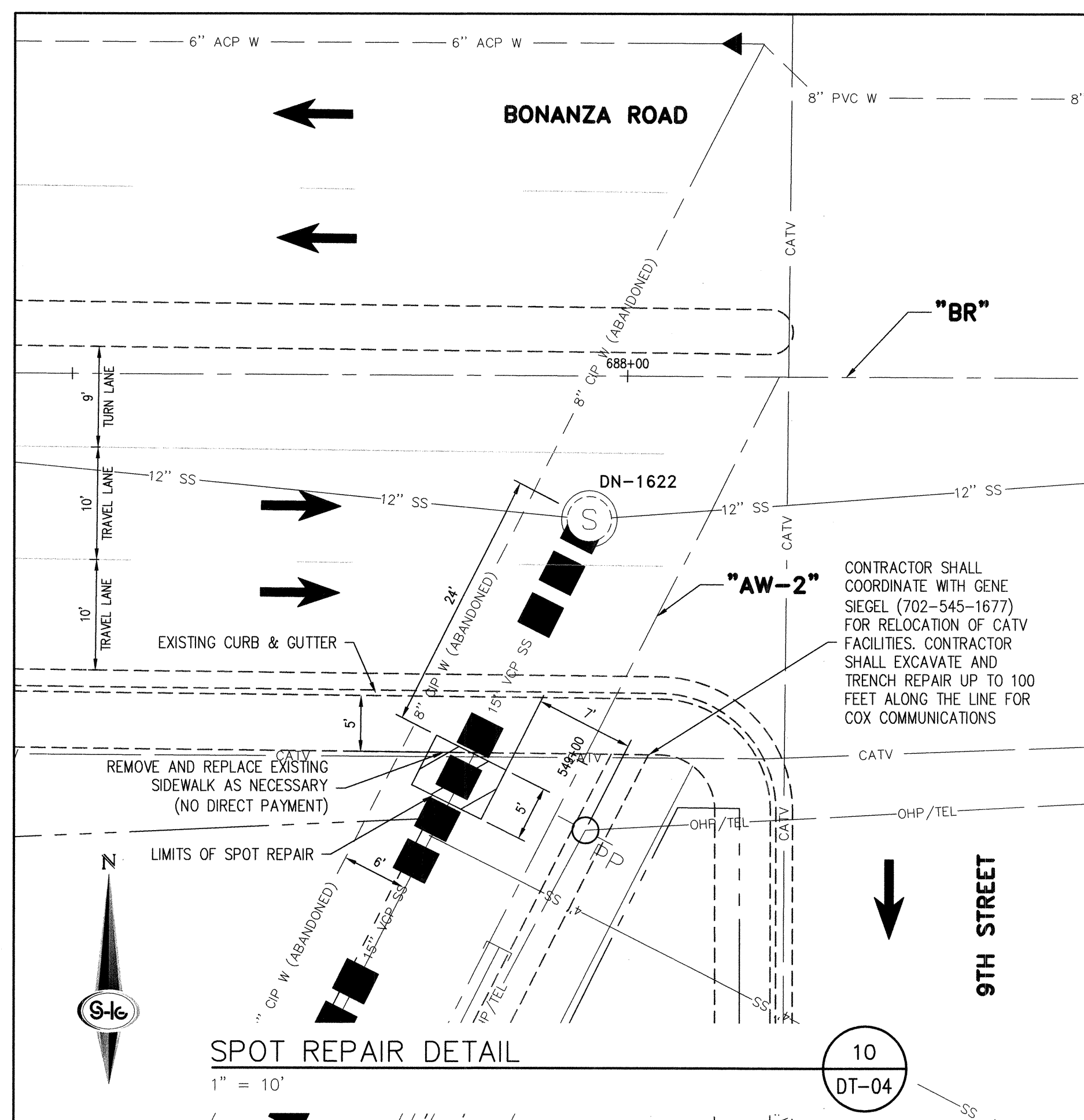
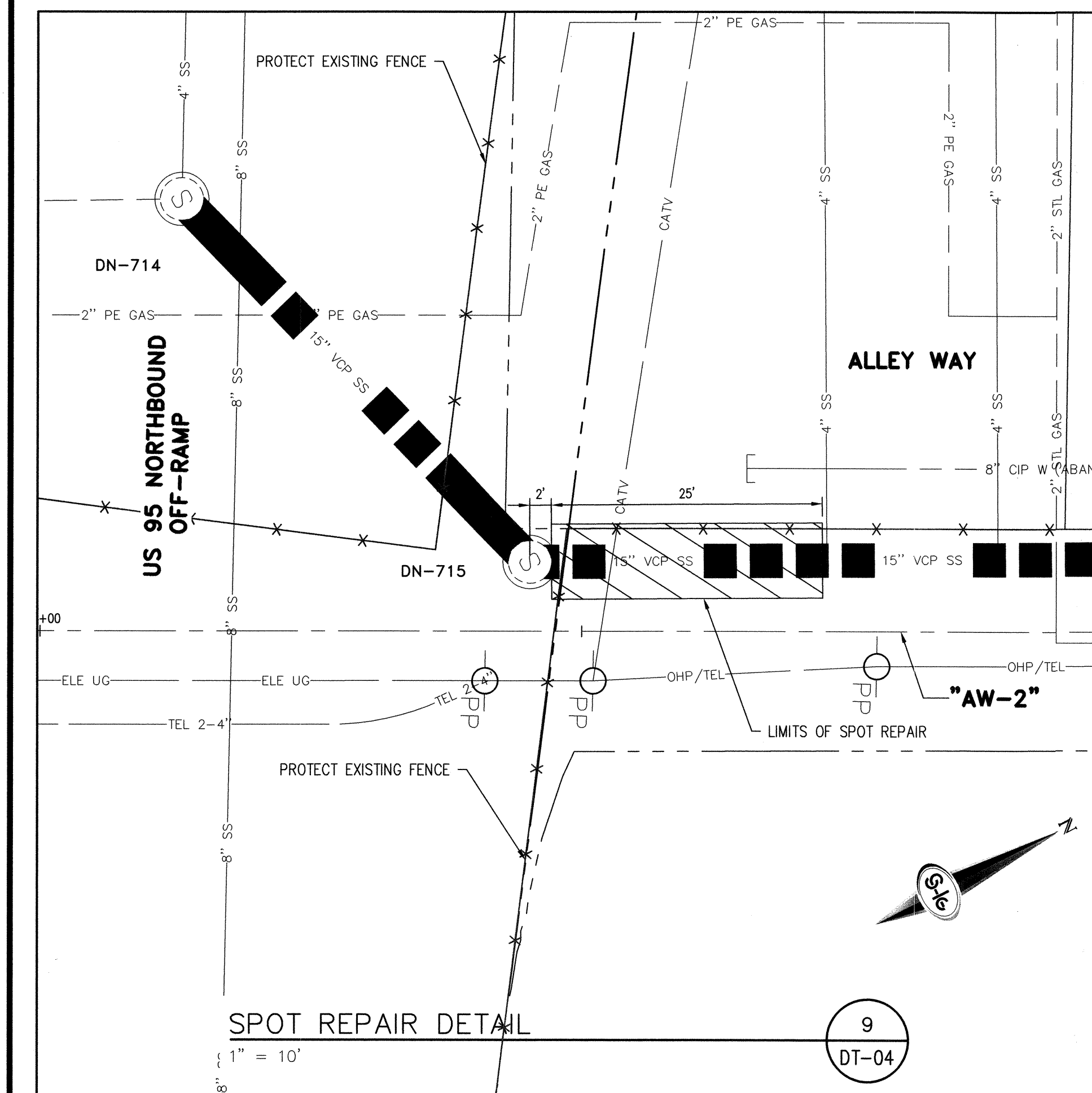
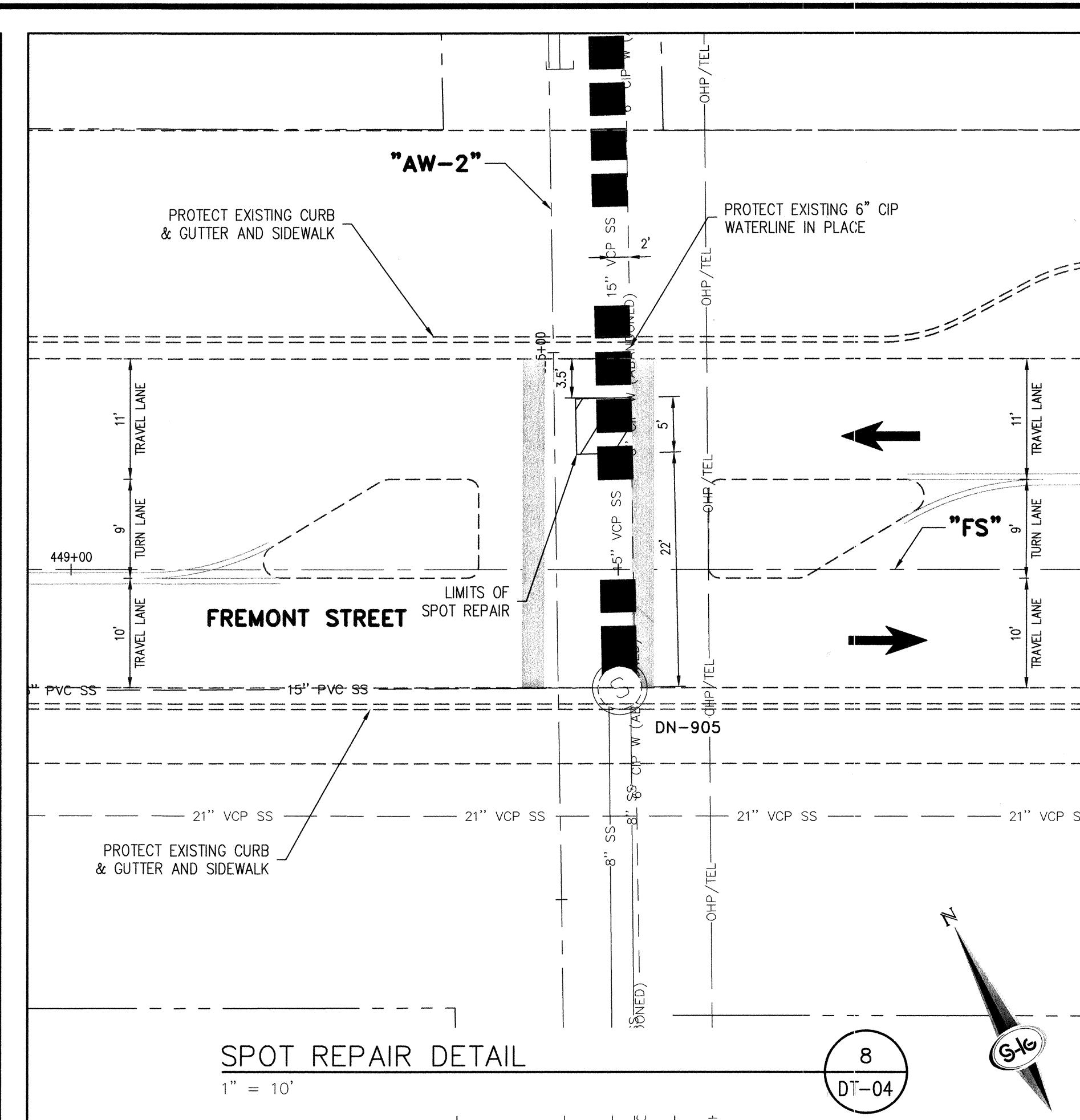
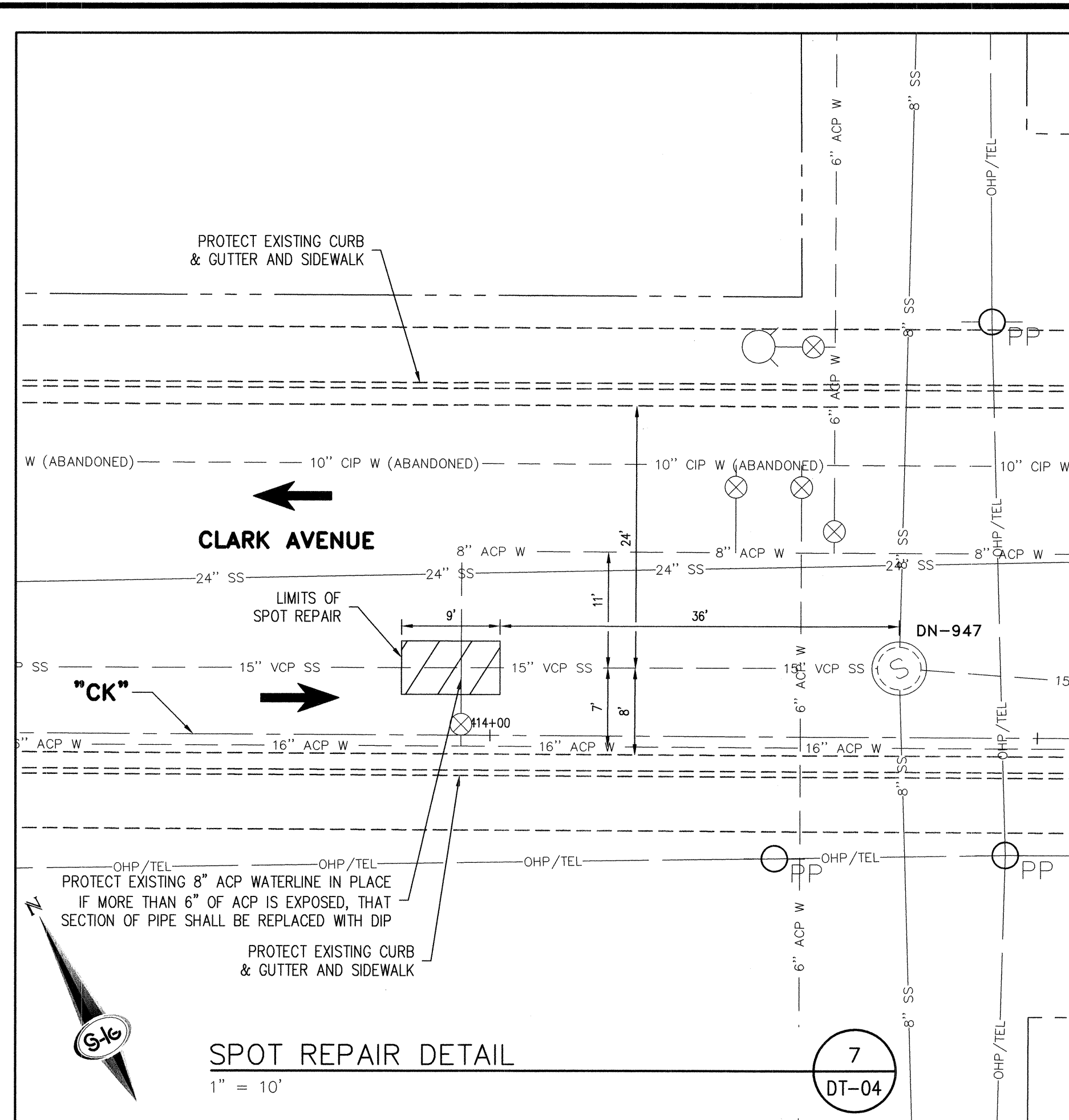
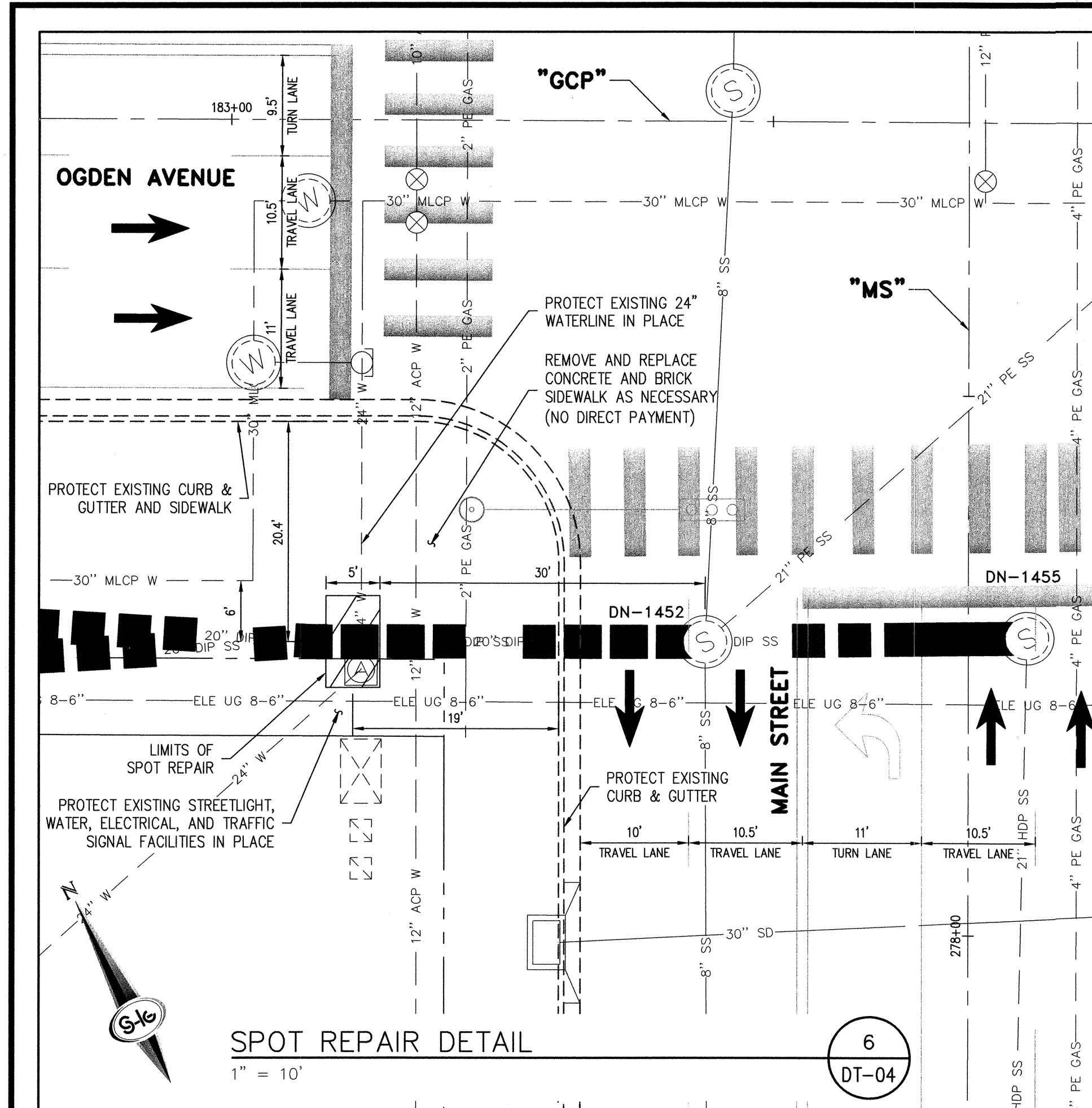
NO.	DATE:	DESCRIPTION	APP'D
SANITARY SEWER REHABILITATION GROUP			

TITLE: **SANITARY SEWER REHABILITATION
GROUP B**

DETAILS

Sheet
DT-03
30 of 59
DRAWING NO.
307V1063

ANSEN NO. 46802 BID NO. 14 46802



ALL EXISTING ASBESTOS CEMENT (ACP) WATERLINES CROSSING A TRENCH EXCAVATION GREATER THAN 6 FT. WIDE SHALL BE REPLACED WITH DUCTILE IRON PIPE

LEGEND
→ VEHICLE TRAVEL DIRECTION
[Hatched Box] REMOVE AND REPLACE SANITARY SEWER LINE

NOTES
1. CONTRACTOR SHALL PATCH THE EXISTING PAVEMENT THAT IS IMPACTED BY THE SANITARY SEWER PIPE AND MANHOLE REPLACEMENT PER USDOCA STD. DWG. NO. 500.1 THRU 500.5 AND 503.1 AND 503.2.
2. CONTRACTOR SHALL REPLACE ALL RAISED PAVEMENT MARKERS, MARKING FILM, PAVEMENT PAINT AND GREEN BIKE LANE MARKING FILM DAMAGED BY CONSTRUCTION ACTIVITIES.
3. SAWCUT LINE MUST BE PARALLEL AND PERPENDICULAR TO ROADWAY (CANNOT BE IN WHEEL PATH).

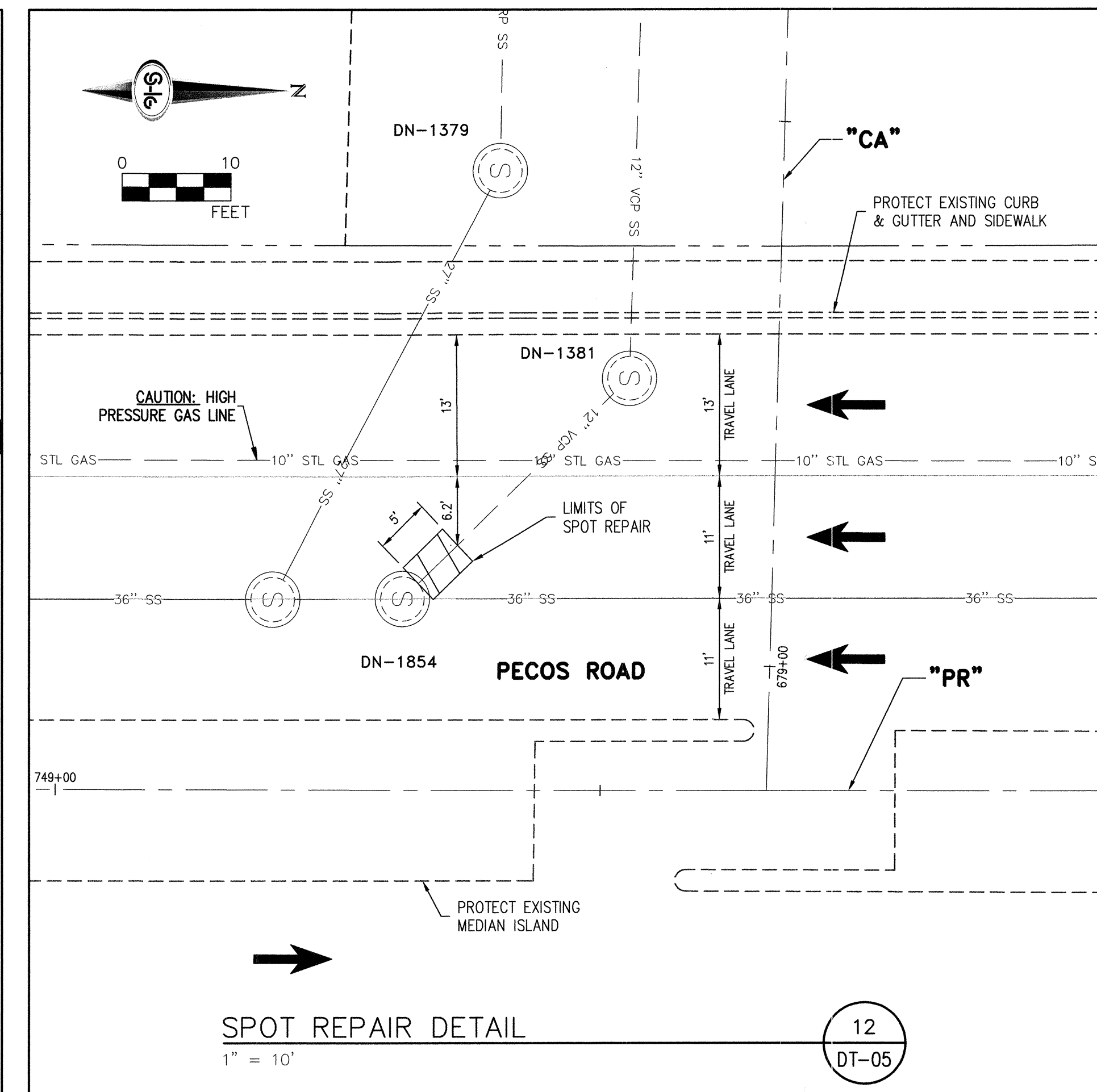
APPROVED FOR CONSTRUCTION
LWWD ENGINEERING SERVICES MANAGER
PROJECT NO. 121821
DATE: 04/15/14

REVISIONS	NO.	DATE	DESCRIPTION	APP'D

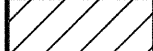
DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT
CITY ENGINEER: DAVID BOWERS, PE, PTOE
PROGRAM MANAGER: JEREMY LEAVITT, P.E.
DESIGNED BY: JSR
DRAWN BY: JAS
CHECKED BY: RWC
DATE: 4/1/14
SHEET: 31 OF 59
DRAWING NO. 307V1063

SANITARY SEWER REHABILITATION GROUP B
DETAILS
SHEET: 31 OF 59
DRAWING NO. 307V1063

PROFESSIONAL ENGINEER - SANITARY
Randy W. Carroll
Exp. 12/31/2014
CIVIL
16131
Hansen No. 46802



LEGEND

VEHICLE TRAVEL DIRECTION

REMOVE AND REPLACE SANITARY SEWER LINE

NOTES

- CONTRACTOR SHALL PATCH THE EXISTING PAVEMENT THAT IS IMPACTED BY THE SANITARY SEWER PIPE AND MANHOLE REPLACEMENT PER USODCA STD. DWG. NO. 500.1 THRU 500.5 AND 503.1 AND 503.2.
- CONTRACTOR SHALL REPLACE ALL RAISED PAVEMENT MARKERS, MARKING FILM, PAVEMENT PAINT AND GREEN BIKE LANE MARKING FILM DAMAGED BY CONSTRUCTION ACTIVITIES.
- SWGOUT LINE MUST BE PARALLEL AND PERPENDICULAR TO ROADWAY (CANNOT BE IN WHEEL PATH).

APPROVED FOR CONSTRUCTION

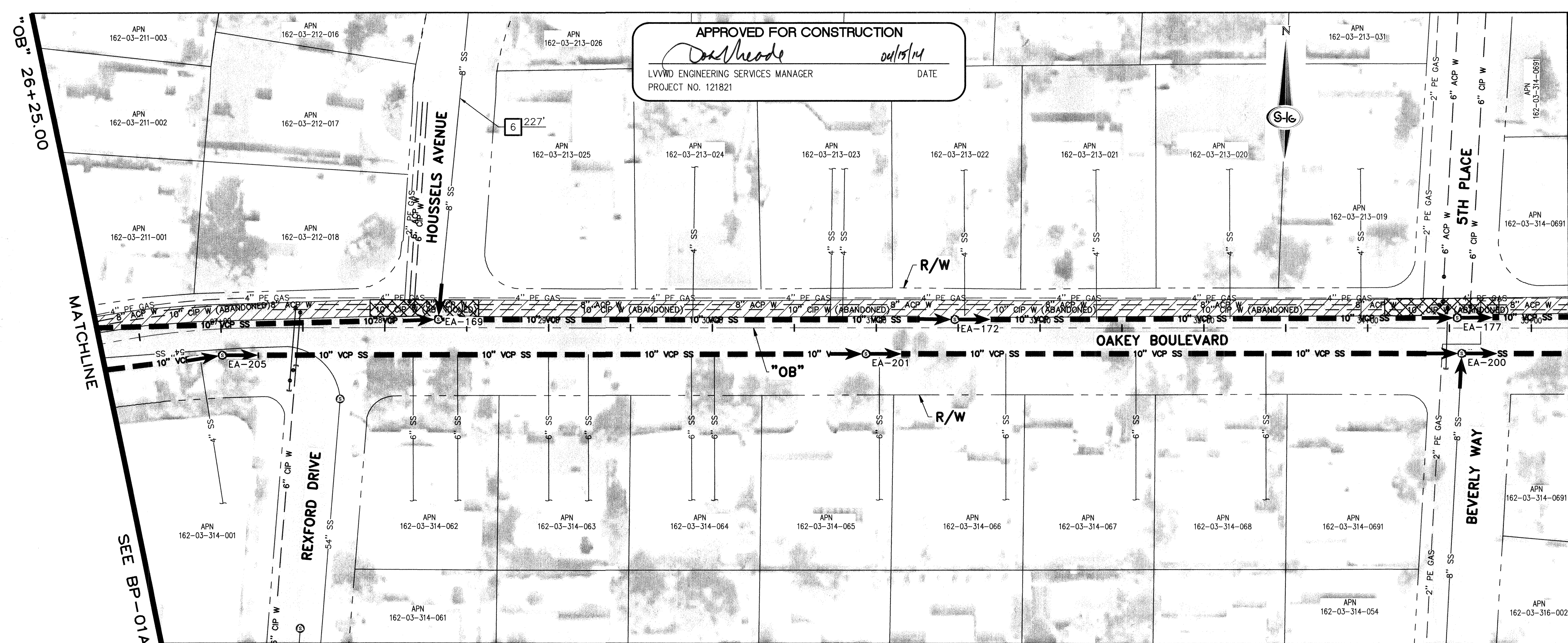
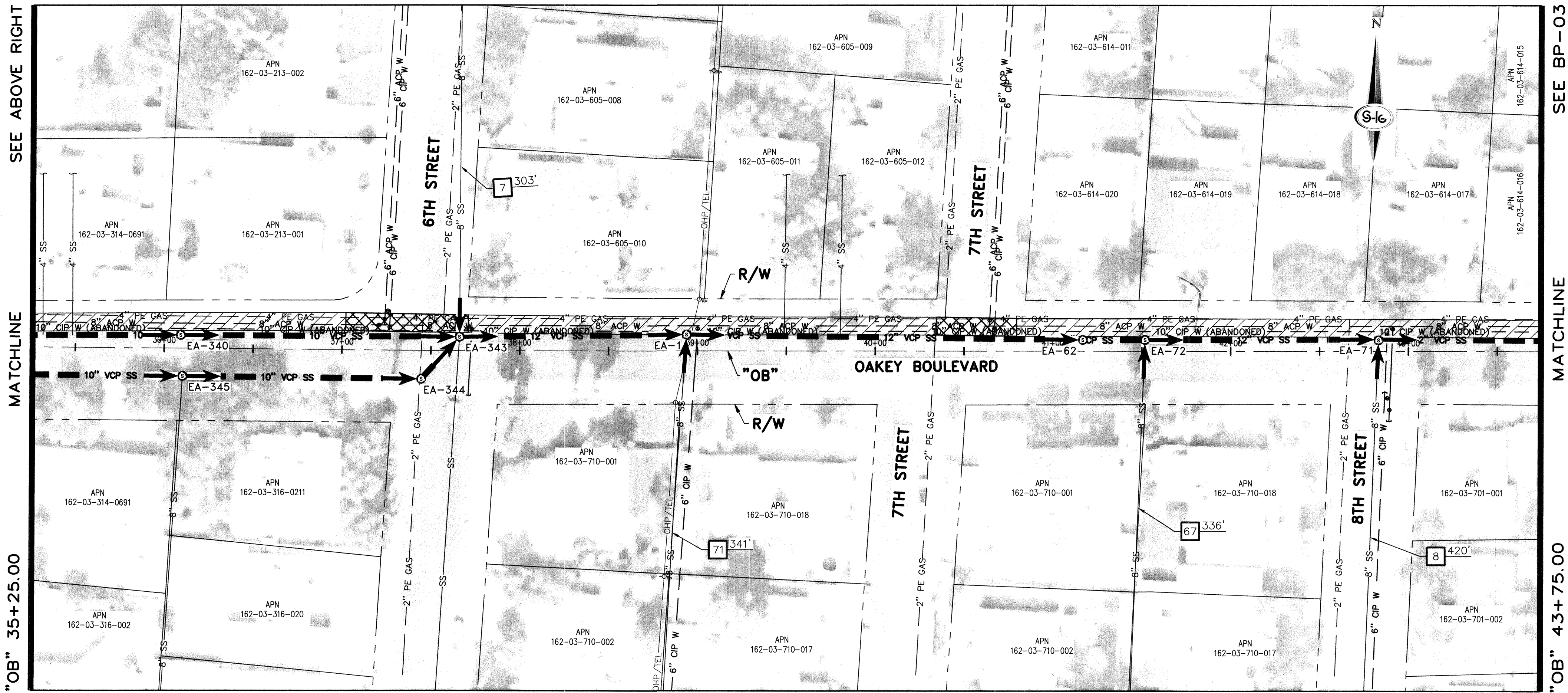

 LVMVO ENGINEERING SERVICES MANAGER

04/15/14

DATE

PROJECT NO. 121821

TITLE: SANITARY SEWER REHABILITATION GROUP B		DEPARTMENT OF PUBLIC WORKS CAPITAL PROJECT MANAGEMENT		REVISIONS	
SHEET: DETAILS		 CITY ENGINEER: DAVID BOWERS, P.E., PTOE PROGRAM MANAGER: JEREMY LEAVITT, P.E. DESIGNED BY: JSR DRAWN BY: JAS CHECKED BY: RWC DATE: 4/1/14			
 SEAL PROFESSIONAL ENGINEER RANDY W. CARROLL Exp. 12/31/2014 CIVIL No. 16131 STATE OF NEVADA 4/10/14		Sheet DT-05 32 of 59 DRAWING NO. 307V1063		NO. DATE: DESCRIPTION APP'D	
PROJECT NO. 468002		BID NO. 14-46802		SANITARY SEWER REHABILITATION GROUP B	



SEE BELOW LEFT
MATCHLINE
"OB" 35+25.00

CONSTRUCTION BYPASS NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEWER BYPASS DESIGN FOR DE-WATERING OF THE PIPE DURING REHABILITATION. THIS INCLUDES ALL PUMPING EQUIPMENT, PIPING AND FITTINGS, POWER, COLLECTION AND DISTRIBUTION ELEMENTS TO ACHIEVE THE BYPASSING OF THE EXISTING SEWAGE FROM INTAKE POINT TO DISCHARGE POINT.
- CONTRACTOR SHALL PROVIDE NOTIFICATION TO ALL BUSINESSES AND RESIDENTS IMPACTED BY THE SEWER REHABILITATION PROJECT (SEE SPECIFICATION SECTION 107.07).
- CONTRACTOR SHALL PREPARE AND SUBMIT A TEMPORARY BYPASS PLAN (TBP) FOR THE BYPASS OPERATION (SEE SPECIFICATION SECTION 695). CONTRACTOR SHALL HAVE AN APPROVED TBP PRIOR TO PIPE LINING.
- CONTRACTOR SHALL BYPASS ALL MAINLINE AND LATERAL FLOWS. QUANTITY OF SEWAGE TO BE BYPASSED IS THE SUM OF ALL FLOWS ENTERING THE PIPELINE BEFORE POINT OF DISCHARGE.
- SEE SPECIFICATION SECTION 659 FOR OODR CONTROL REQUIREMENTS.
- CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN (TCP) TO THE AUTHORITY HAVING JURISDICTION OF THE LOCATION OF THE WORK (SEE SPECIFICATION SECTION 624).
- CONTRACTOR BYPASS PLANS MUST CONSIDER THE EXISTING SPEED LIMITS AND ALLOWABLE REDUCTIONS IN DETERMINING THE LOCATION OF PIPING AND THE REQUIRED TCP ELEMENTS. CONTRACTOR SHALL BE ALLOWED TO REDUCE SPEED AT EACH LOCATION WHERE THE PIPING CROSSES PERPENDICULAR TO A LANE(S) OF TRAFFIC BY 10 MPH. THE LOCATION AND CONSTRUCTION OF THE BYPASS PIPING SHALL CONFORM TO DETAIL 3 SHOWN ON DRAWING DT-01. CONTRACTOR MAY REQUEST A VARIANCE TO THESE DETAILS BY SHOWING ALTERNATIVES THAT WILL ACHIEVE THE REQUIRED SPEED LIMITS, PROVIDE SAFETY TO VEHICLES AND PEDESTRIANS, AND DESIRED RESULTS FOR THE BYPASSING OF SEWAGE.
- IF REQUIRED, REMOVE AND REINSTALL MANHOLE FRAME, COVER, GRADE RINGS, AND CONE PER SD-4 OF THE DCSWCS.
- CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS TO ALL ADJOINING PROPERTIES ACCESSIBLE TO THE PUBLIC AND EMERGENCY VEHICLES. DESIGNS FOR ACCESS WILL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE CONTROLLING AGENCY FOR REVIEW AND APPROVAL.
- CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS THROUGH RAMPS AT CROSSWALKS. CONTRACTOR TO REPLACE ALL REMOVED OR DAMAGED TRAFFIC PAVEMENT STRIPING AND MARKINGS.
- ALL BYPASS OPERATIONS ARE TO OCCUR WITHIN THE BYPASS CORRIDOR SHOWN ON THE BYPASS DRAWINGS. IF THE CONTRACTOR REQUIRES AN ADDITIONAL CLOSURE AREA, THEY MUST OBTAIN APPROVAL FROM THE AUTHORITY HAVING JURISDICTION OF THE LOCATION OF THE WORK.
- CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING STAGING AREAS.
- CONTRACTOR SHALL MAINTAIN STORM FLOW TO EXISTING DROP INLETS. DESIGNS FOR MAINTAINING FLOW WILL BE PREPARED BY THE CONTRACTOR AND INCLUDED IN THE TBP.
- BYPASS PIPING THROUGH SIGNALIZED AND/OR MAJOR INTERSECTIONS SHALL BE INSTALLED USING CUT AND COVER METHODS AS SHOWN ON SHEET DT-01. SAWCUT TO BE SQUARED UP WITH TRAVEL LANES AND EXTENDED LANE LINE TO LANE LINE. CONTRACTOR TO PROTECT IN PLACE ALL EXISTING STREET LIGHTS, DETECTOR LOOPS, AND TRAFFIC CONDUITS/WIRES.

LEGEND

1 BYPASS PIPING, MAINTAIN PEDESTRIAN AND DRIVEWAY/ALLEY ACCESS AT ALL TIMES

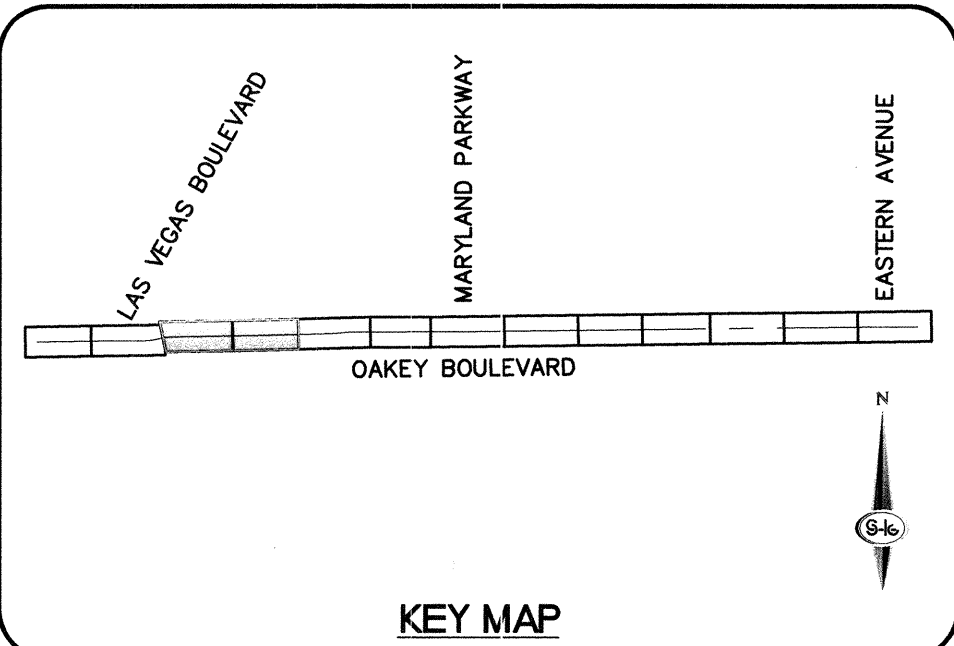
2 FLOW BYPASS ACCESS DETAIL SEE DETAIL 3 ON SHEET DT-01

3 FLOW NUMBER, SEE ESTIMATED FLOW TABLE BELOW

***ESTIMATED SANITARY SEWER FLOWS**

FLOW NO.	PIPE DIA.	ADWF (MGD)	PEAK (MGD)	DESCRIPTION
6	8"	0.47	1.41	ESTIMATED FLOW
7	8"	0.52	1.56	ESTIMATED FLOW
8	8"	0.85	2.55	ESTIMATED FLOW
67	8"	0.47	1.41	ESTIMATED FLOW
71	8"	0.47	1.41	ESTIMATED FLOW

* FLOWS SHOWN ARE ESTIMATES PROVIDED FOR BIDDING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING FLOWS PRIOR TO DESIGN OF BYPASS PLAN.



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Call before you Dig
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1-800-227-2600

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT MANAGEMENT

CITY ENGINEER: DAVID BOWERS, PE, PTOE
PROGRAM MANAGER: JEREMY LEAVITT, P.E.
DESIGNED BY: JSR
DRAWN BY: JAS
CHECKED BY: RWC

DATE: 4/1/14

NO. DATE: DESCRIPTION APP'D

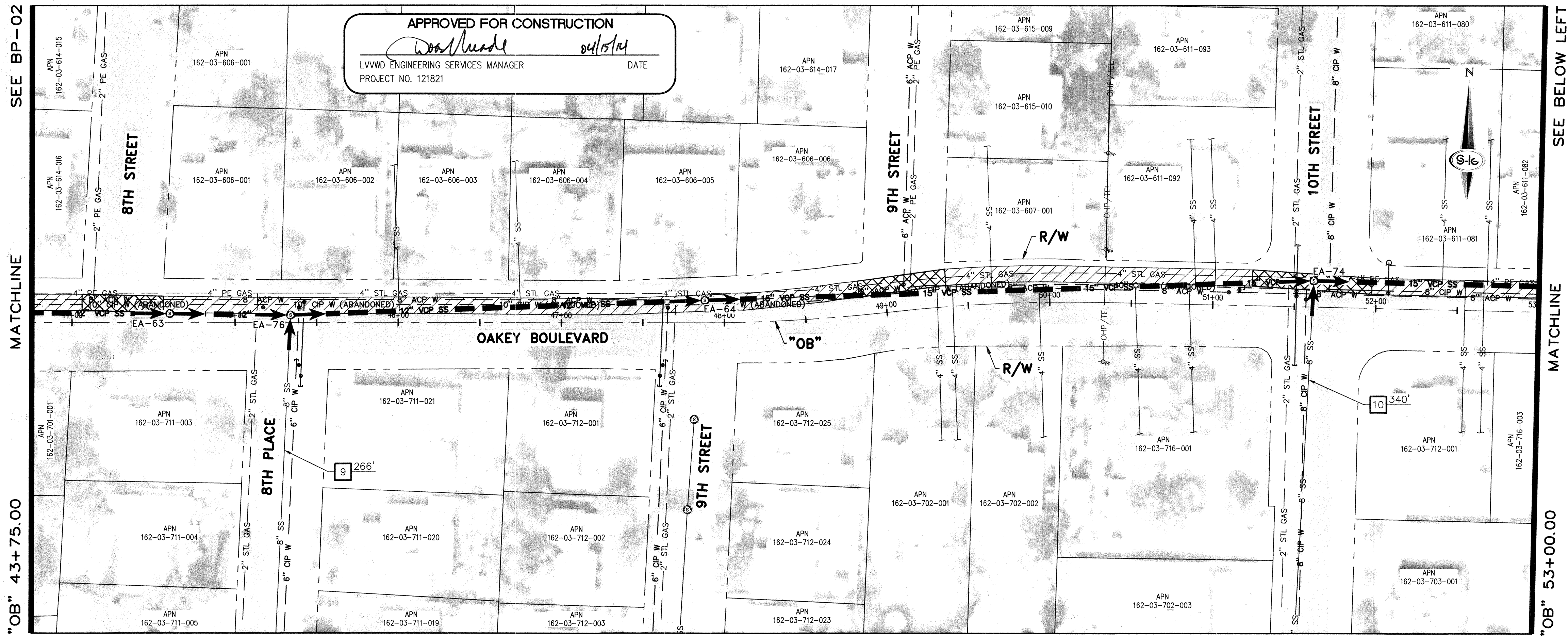
SANITARY SEWER REHABILITATION GROUP B

SANITARY SEWER REHABILITATION GROUP B

OAKEY BOULEVARD
"OB" 26+25.00 TO "OB" 43+75.00

BP-02A
35 of 59
307V1063

DRAWING NO. 46802
BID NO. 14-4882



- ### CONSTRUCTION BYPASS NOTES:
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE SEWER BYPASS DESIGN FOR DE-WATERING OF THE PIPE DURING REHABILITATION. THIS INCLUDES ALL PUMPING EQUIPMENT, PIPING AND FITTINGS, POWER, COLLECTION AND DISTRIBUTION ELEMENTS TO ACHIEVE THE BYPASSING OF THE EXISTING SEWAGE FROM INTAKE POINT TO DISCHARGE POINT.
 - CONTRACTOR SHALL PROVIDE NOTIFICATION TO ALL BUSINESSES AND RESIDENTS IMPACTED BY THE SEWER REHABILITATION PROJECT (SEE SPECIFICATION SECTION 107.07).
 - CONTRACTOR SHALL PREPARE AND SUBMIT A TEMPORARY BYPASS PLAN (TBP) FOR THE BYPASS OPERATION (SEE SPECIFICATION SECTION 695). CONTRACTOR SHALL HAVE AN APPROVED TBP PRIOR TO PIPE LINING.
 - CONTRACTOR SHALL BYPASS ALL MAINLINE AND LATERAL FLOWS. QUANTITY OF SEWAGE TO BE BYPASSED IS THE SUM OF ALL FLOWS ENTERING THE PIPELINE BEFORE POINT OF DISCHARGE.
 - SEE SPECIFICATION SECTION 659 FOR ODDOR CONTROL REQUIREMENTS.
 - CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN (TCP) TO THE AUTHORITY HAVING JURISDICTION OF THE LOCATION OF THE WORK (SEE SPECIFICATION SECTION 624).
 - CONTRACTOR BYPASS PLANS MUST CONSIDER THE EXISTING SPEED LIMITS AND ALLOWABLE REDUCTIONS IN DETERMINING THE LOCATION OF PIPING AND THE REQUIRED TCP ELEMENTS. CONTRACTOR SHALL BE ALLOWED TO REDUCE SPEED AT EACH LOCATION WHERE THE PIPING CROSSES PERPENDICULAR TO A LANE(S) OF TRAFFIC BY 10 MPH. THE LOCATION AND CONSTRUCTION OF THE BYPASS PIPING SHALL CONFORM TO DETAIL 3 SHOWN ON DRAWING DT-01. CONTRACTOR MAY REQUEST A VARIANCE TO THESE DETAILS BY SHOWING ALTERNATIVES THAT WILL ACHIEVE THE REQUIRED SPEED LIMITS, PROVIDE SAFETY TO VEHICLES AND PEDESTRIANS, AND DESIRED RESULTS FOR THE BYPASSING OF SEWAGE.
 - IF REQUIRED, REMOVE AND REINSTALL MANHOLE FRAME, COVER, GRADE RINGS, AND CONE PER SD-4 OF THE DCSMS.
 - CONTRACTOR SHALL MAINTAIN DRIVEWAY ACCESS TO ALL ADJOINING PROPERTIES ACCESSIBLE TO THE PUBLIC AND EMERGENCY VEHICLES. DESIGNS FOR ACCESS WILL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE CONTROLLING AGENCY FOR REVIEW AND APPROVAL.
 - CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS THROUGH RAMPS AT CROSSWALKS. CONTRACTOR TO REPLACE ALL REMOVED OR DAMAGED TRAFFIC PAVEMENT STRIPING AND MARKINGS.
 - ALL BYPASS OPERATIONS ARE TO OCCUR WITHIN THE BYPASS CORRIDOR SHOWN ON THE BYPASS DRAWINGS. IF THE CONTRACTOR REQUIRES AN ADDITIONAL CLOSURE AREA, THEY MUST OBTAIN APPROVAL FROM THE AUTHORITY HAVING JURISDICTION OF THE LOCATION OF THE WORK.
 - CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING STAGING AREAS.
 - CONTRACTOR SHALL MAINTAIN STORM FLOW TO EXISTING DROP INLETS. DESIGNS FOR MAINTAINING FLOW WILL BE PREPARED BY THE CONTRACTOR AND INCLUDED IN THE TBP.
 - BYPASS PIPING THROUGH SIGNALIZED AND/OR MAJOR INTERSECTIONS SHALL BE INSTALLED USING CUT AND COVER METHODS AS SHOWN ON SHEET DT-01. SAWCUT TO BE SQUARED UP WITH TRAVEL LANES AND EXTENDED LANE LINE TO LANE LINE. CONTRACTOR TO PROTECT IN PLACE ALL EXISTING STREET LIGHTS, DETECTOR LOOPS, AND TRAFFIC CONDUITS/WIRES.

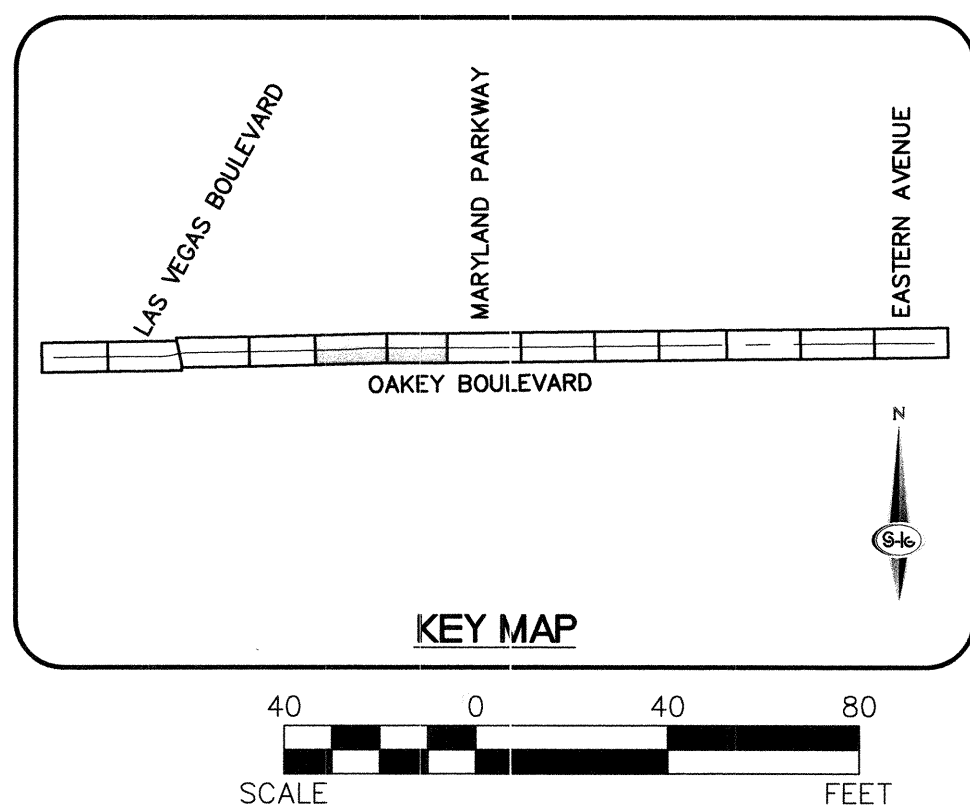
LEGEND

	BYPASS PIPING, MAINTAIN PEDESTRIAN AND DRIVEWAY/ALLEY ACCESS AT ALL TIMES
	FLOW BYPASS ACCESS DETAIL SEE DETAIL 3 ON SHEET DT-01
	FLOW NUMBER, SEE ESTIMATED FLOW TABLE BELOW

*ESTIMATED SANITARY SEWER FLOWS

FLOW NO.	PIPE DIA	ADW (MGD)	PEAK (MGD)	DESCRIPTION
9	8"	0.64	1.92	ESTIMATED FLOW
10	8"	0.82	2.46	ESTIMATED FLOW

* FLOWS SHOWN ARE ESTIMATES PROVIDED FOR BIDDING PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING FLOWS PRIOR TO DESIGN OF BYPASS PLAN.



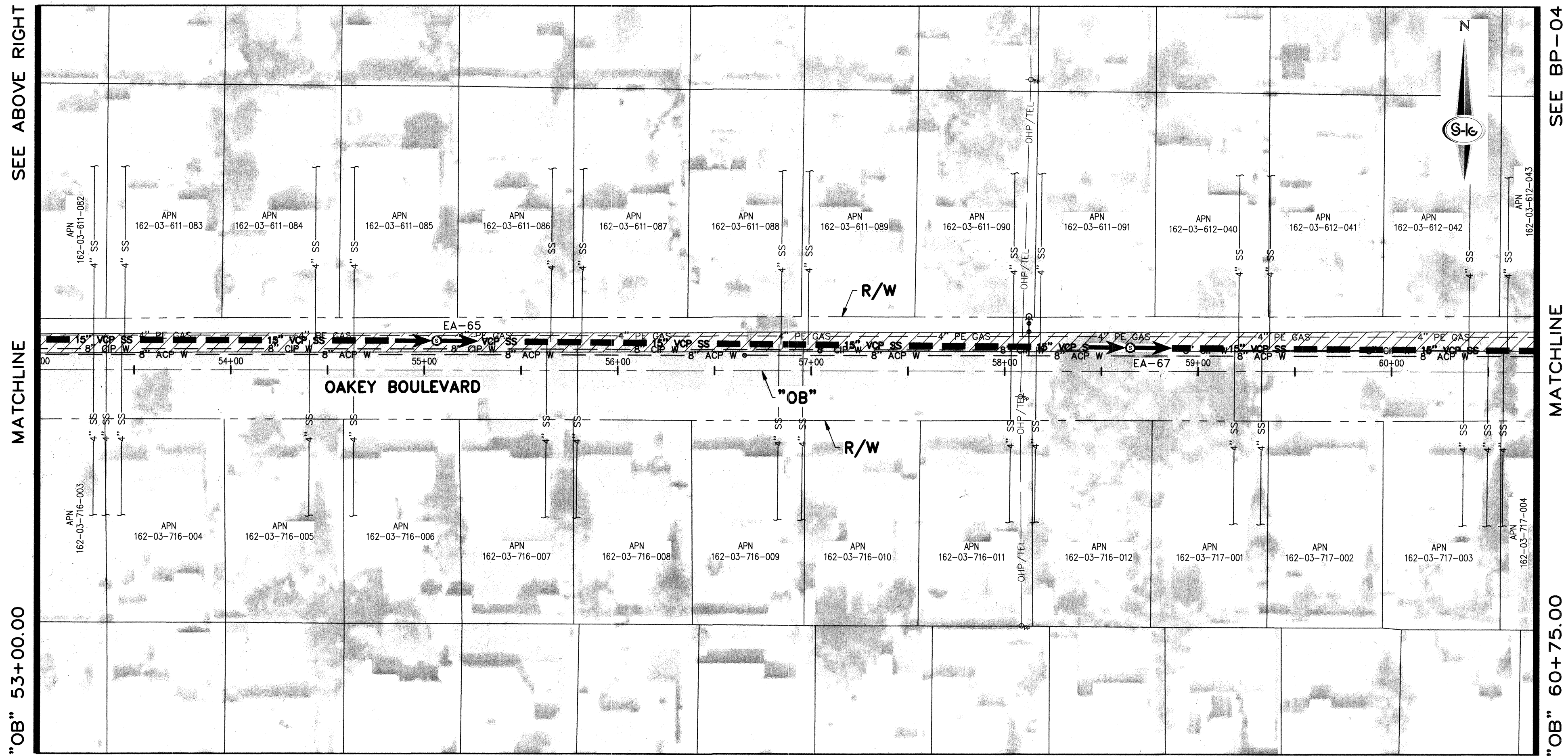
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DEPARTMENT OF PUBLIC WORKS

CAPITAL PROJECT MANAGEMENT



SANITARY SEWER REHABILITATION GROUP B

OAKLEY BOULEVARD



Sheet

BP-03

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DRAWING NO. 307V1063

NO.	DATE	DESCRIPTION	APP'D

CITY ENGINEER: DAVID BOWERS, PE, PTOE

PROGRAM MANAGER: JEREMY LEAVITT, P.E.

DESIGNED BY: JSR

DRAWN BY: JAS

CHECKED BY: RWC

DATE: 4/1/14