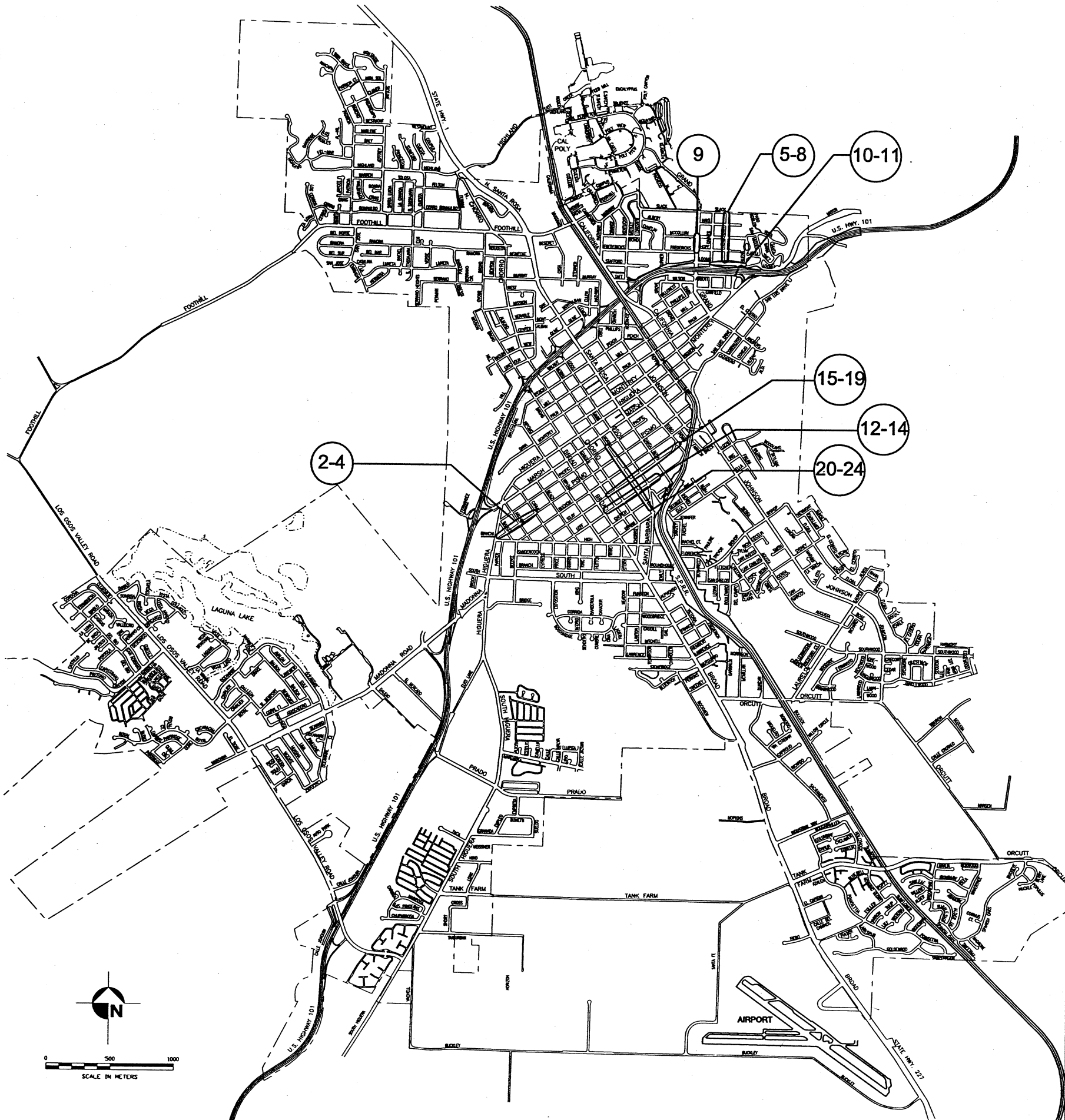
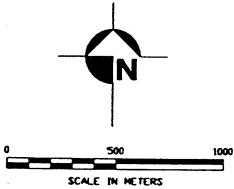


general notes

- 1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR PERMITTEE TO CONTACT "UNDERGROUND SERVICE ALERT U.S.A." TOLL FREE AT 1-800-227-2600 FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION, FOR LOCATION OF POWER, TELEPHONE, OIL AND NATURAL GAS UNDERGROUND FACILITIES. CONTRACTOR OR PERMITTEE SHALL ALSO CONTACT THE APPROPRIATE AGENCY FOR THE LOCATION OF CABLE T.V., WATER, SEWER, DRAINAGE OR UNDERGROUND FACILITIES.
- 2. THE CONTRACTOR SHALL POSSESS A CLASS "A" LICENSE AT THE TIME THE CONTRACT IS AWARDED.
- 3. CONTRACTOR SHALL VERIFY DEPTH & LOCATION, OF ALL CROSSINGS PRIOR TO LAYING PIPE SO THAT PIPE ALIGNMENT AND GRADE CAN BE ADJUSTED AS NEEDED.
- 4. CONTRACTOR SHALL VERIFY DEPTH, LOCATION, SIZE OF AND MATERIAL OF PIPE AT ALL TIE-INS. WATERLINE ALIGNMENT AND GRADE SHALL BE ADJUSTED AS NEEDED BASED ON THE FINDINGS. CONTRACTOR SHALL PROVIDE ALL THE NECESSARY PIPE, FITTINGS ADAPTERS, THRUST BLOCKS AS NEEDED TO ACCOMPLISH THE TIE-IN.
- 5. CONTRACTOR MAY PROVIDE TEMPORARY BLOW-OFFS, CONNECTIONS, VALVES, ETC. AS NEEDED TO FACILITATE TESTING, DESINFECTING AND FLUSHING OF NEW PIPELINE.
- 6. SEWER LATERALS EXIST WHICH ARE NOT SHOWN ON THESE PLANS. CONTRACTOR TO PROCEED WITH CAUTION WHEN TRENCHING AND SHALL HAVE THE NECESSARY MATERIALS ON HAND TO FIX LATERALS IF DAMAGED.

M datum:

VERTICAL CONTROL: BENCHMARK NO.(S) 87, 88 & S-22 AS PUBLISHED IN THE CITY OF SAN LUIS OBISPO 2001 BENCHMARK SYSTEM. THE CITY'S BENCHMARK SYSTEM IS BASED UPON THE NAVD 1988 DATUM



index to plans

sheet no.	description
1	Cover Street
2-4	Pismo Street
5-8	Henderson Street
9	Grand Avenue
10-11	Loomis Street
12-14	Leff Street
15-19	Islay Street
20-24	Morro Street



city of
san luis obispo

san luis obispo county, california

WATER IMPROVEMENT PROJECT

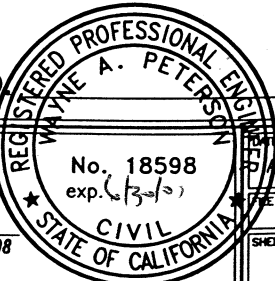
Pismo St. from Higuera St. - Carmel St.
Henderson St. from Slack St. - Loomis St.
Grand Ave. from Fredericks St. - McCollum St.
Loomis St. from Graves St. - Buena Vista St.
Leff St. from Broad St. - Morro St.
Islay St. from Garden St. - Toro St.
Morro St. from Pacific St. - Santa Barbara St.

SPECIFICATION NO. 90156

APPROVED BY

Wayne A. Peterson
City Engineer

R.C.E. 18598



90156

APRIL 2001

FILE NO./LOCATION

90156

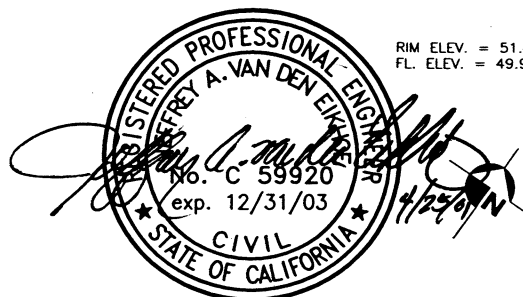
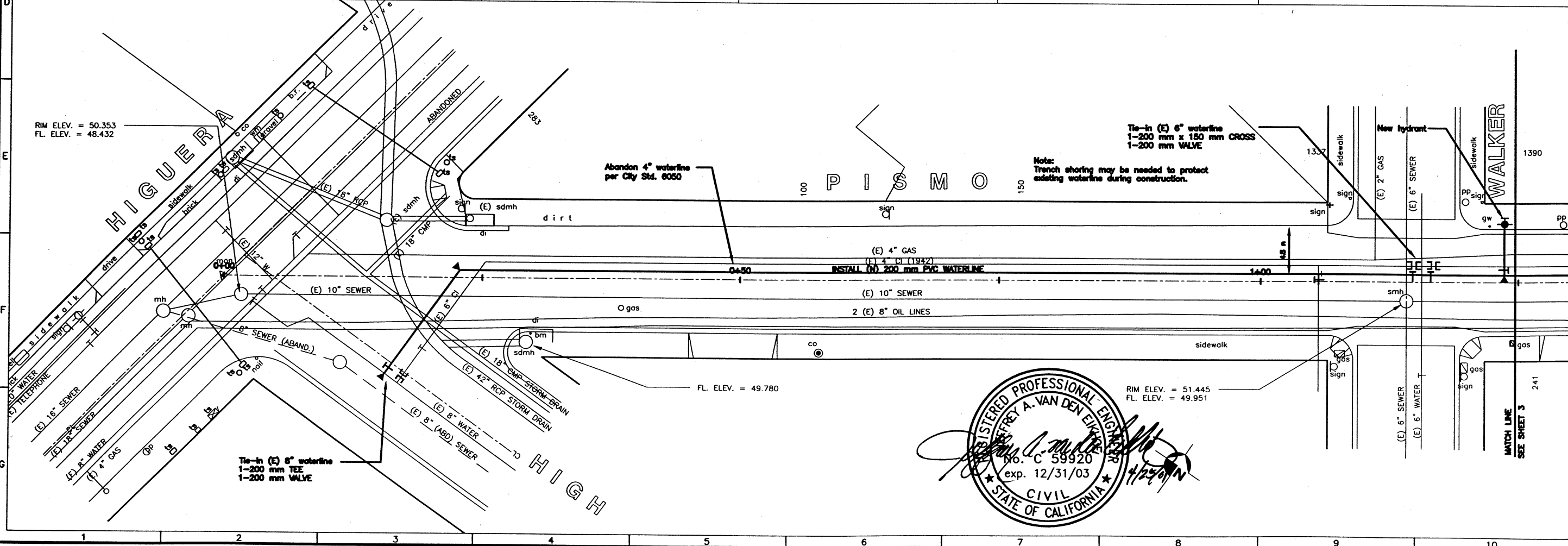
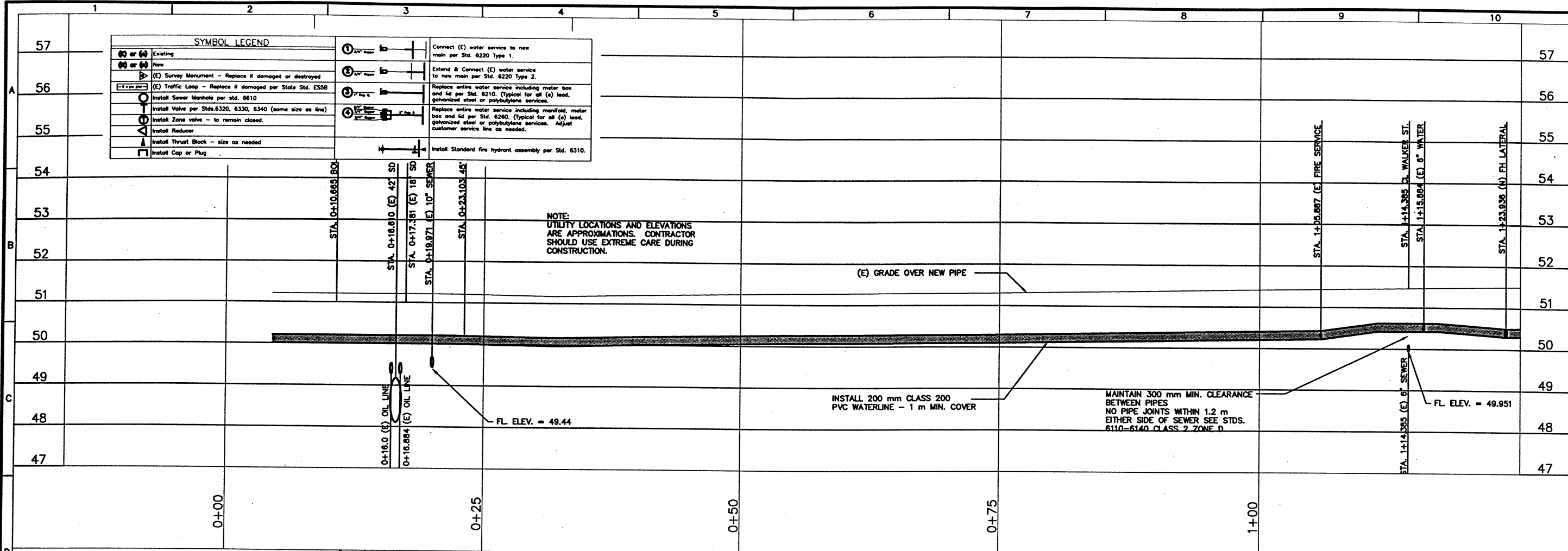
SHEET

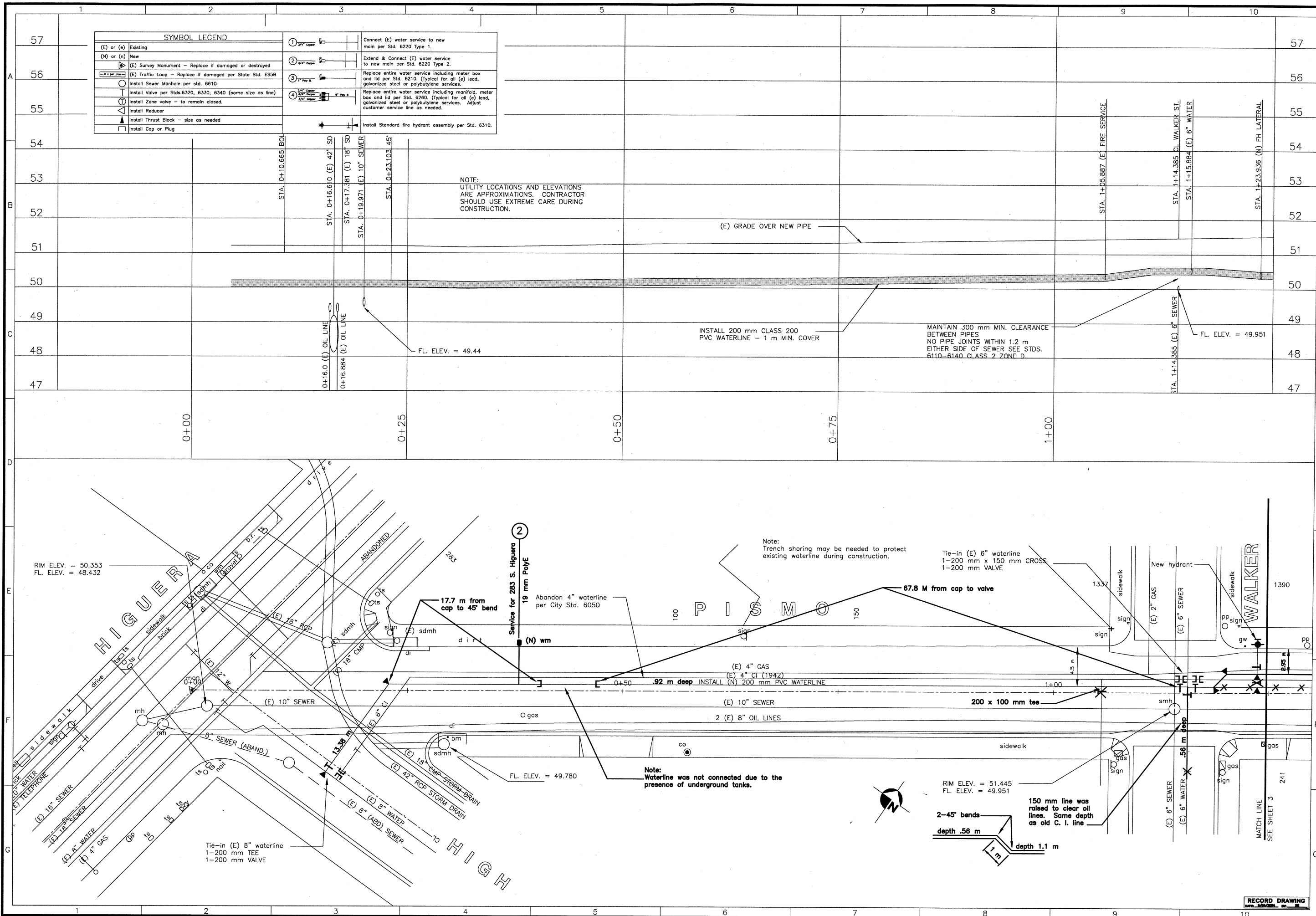
1 of 24

SYMBOL LEGEND

	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. ES58
	Install Sewer Manhole per std. 6610
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Install Standard fire hydrant assembly per Std. 6310.

NOTE:
UTILITY LOCATIONS AND ELEVATIONS
ARE APPROXIMATIONS. CONTRACTOR
SHOULD USE EXTREME CARE DURING
CONSTRUCTION.

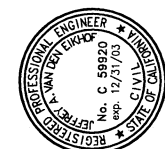




SYMBOL LEGEND	
(E) or (e)	Existing
(N) or (n)	New
(E) Survey Monument	Replace if damaged or destroyed
(E) Traffic Loop	Replace if damaged per State Std. ESSB
○	Install Sewer Manhole per std. 6610
○	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
○	Install Zone valve - to remain closed.
○	Install Reducer
▲	Install Thrust Block - size as needed
□	Install Cap or Plug

① 3/4" Copper	Connect (E) water service to new main per Std. 6220 Type 1.
② 3/4" Copper	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
③ 1" Poly B.	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polybutylene services.
④ 3/4" Copper	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.

+	Install Standard fire hydrant assembly per Std. 6310.
---	---



City of
san luis obispo

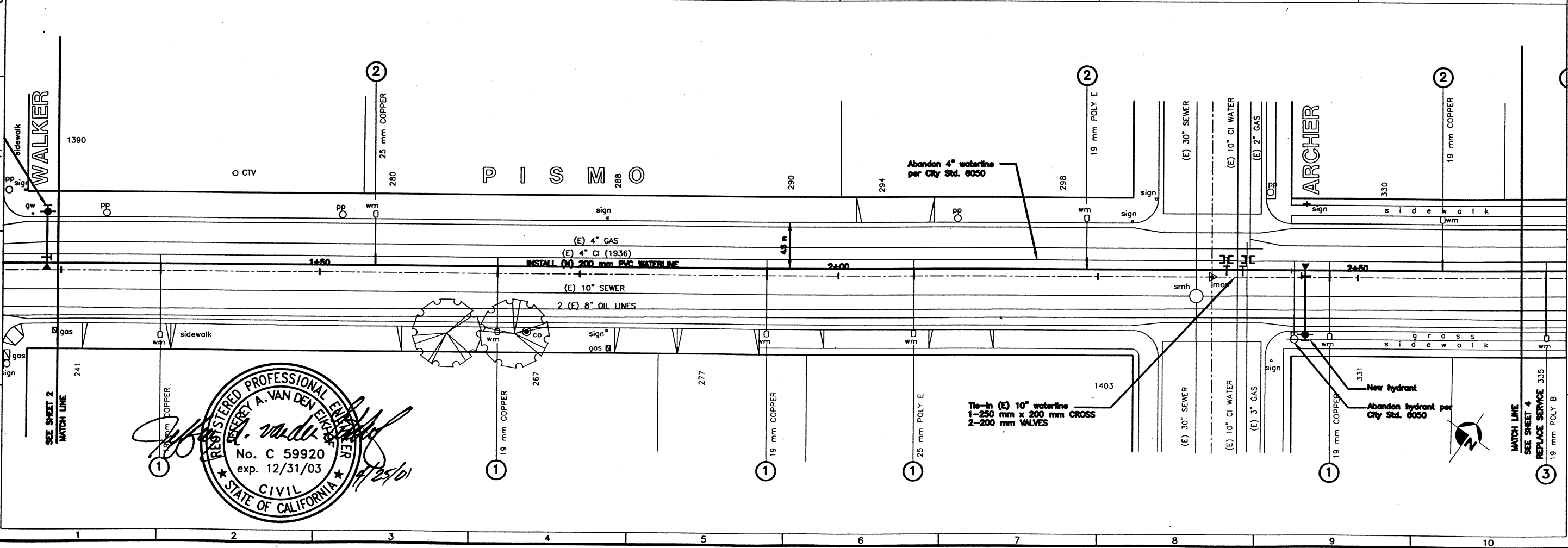
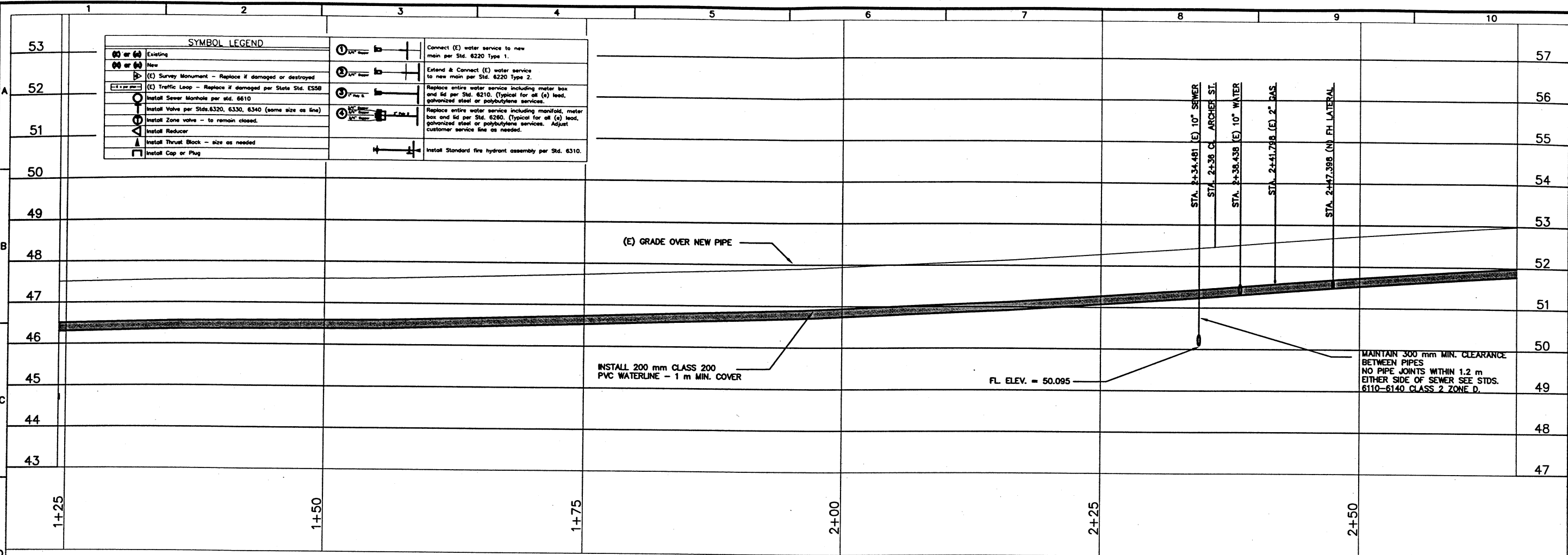
Drawn By & Date	Record Drawing
Drawn By & Date	Scale: 1:400

WATER IMPROVEMENT PROJECT
PISMO STREET
SOUTH HIGUERA ST. - WALKER STREET

DESIGNED BY:	JAV
DRAWN BY:	SR
CHECKED BY:	
APPROVED BY:	
DATE:	4/19/01
CITY SPECIFICATION NO.	90156
SHEET NO.	

SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. ESSB
	Install Sewer Manhole per std. 6610
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug

	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (a) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (a) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.



REVISIONS:

Drawn By & Date	Record Drawing
Drawn By & Date	

PROJECT TITLE:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE:

CITY SPECIFICATION NO.:

SHEET NO.:

WATER IMPROVEMENT PROJECT

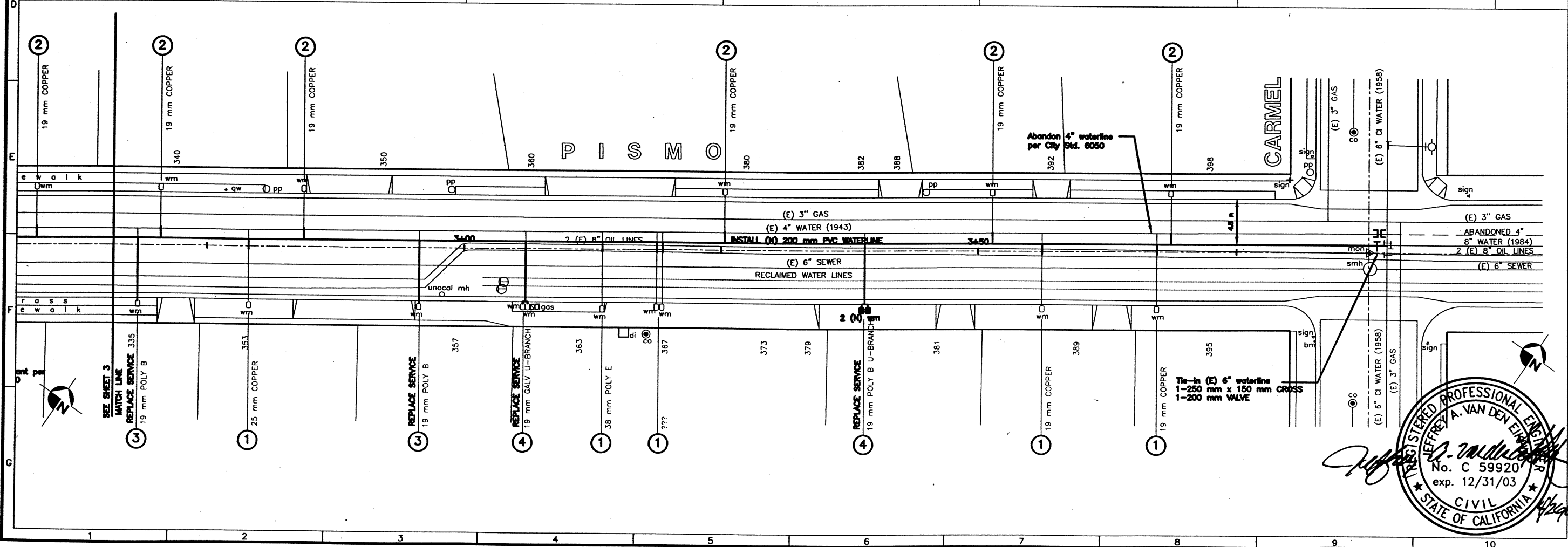
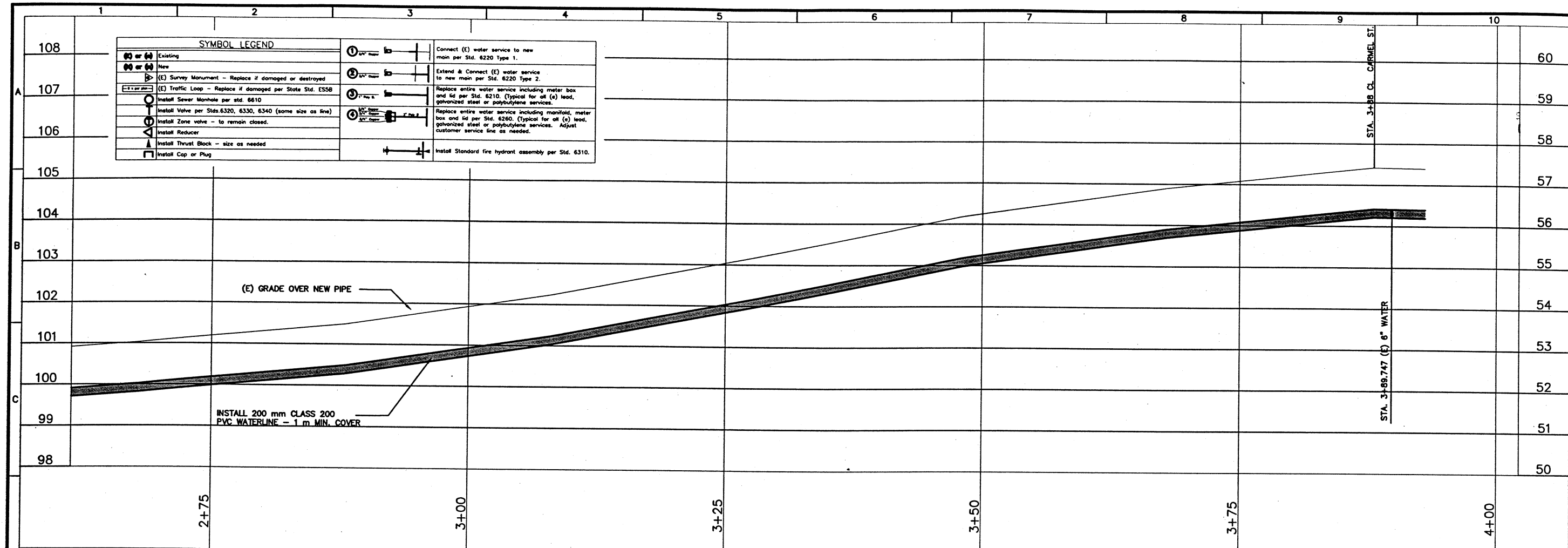
PISMO STREET

WALKER STREET - ARCHER STREET

1:400 SCALE

3 of 24

SYMBOL LEGEND		
	Existing	
	New	
	(E) Survey Monument - Replace if damaged or destroyed	
	(E) Traffic Loop - Replace if damaged per State Std. ES58	
	Install Sewer Manhole per std. 6610	
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)	
	Install Zone valve - to remain closed.	
	Install Reducer	
	Install Thrust Block - size as needed	
	Install Cap or Plug	
	Install Standard fire hydrant assembly per Std. 6310.	
	Connect (E) water service to new main per Std. 6220 Type 1.	
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.	
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polyethylene services.	
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polyethylene services. Adjust customer service line as needed.	



city of
san luis obispo

REVISIONS:

Drawn By & Date	Record Drawing	Drawn By & Date

PROJECT TITLE:
WATER IMPROVEMENT PROJECT

SHEET TITLE:
**PISMO STREET
ARCHER STREET - CARMEL STREET**

DESIGNED BY:
JAV

DRAWN BY:
SR

CHECKED BY:

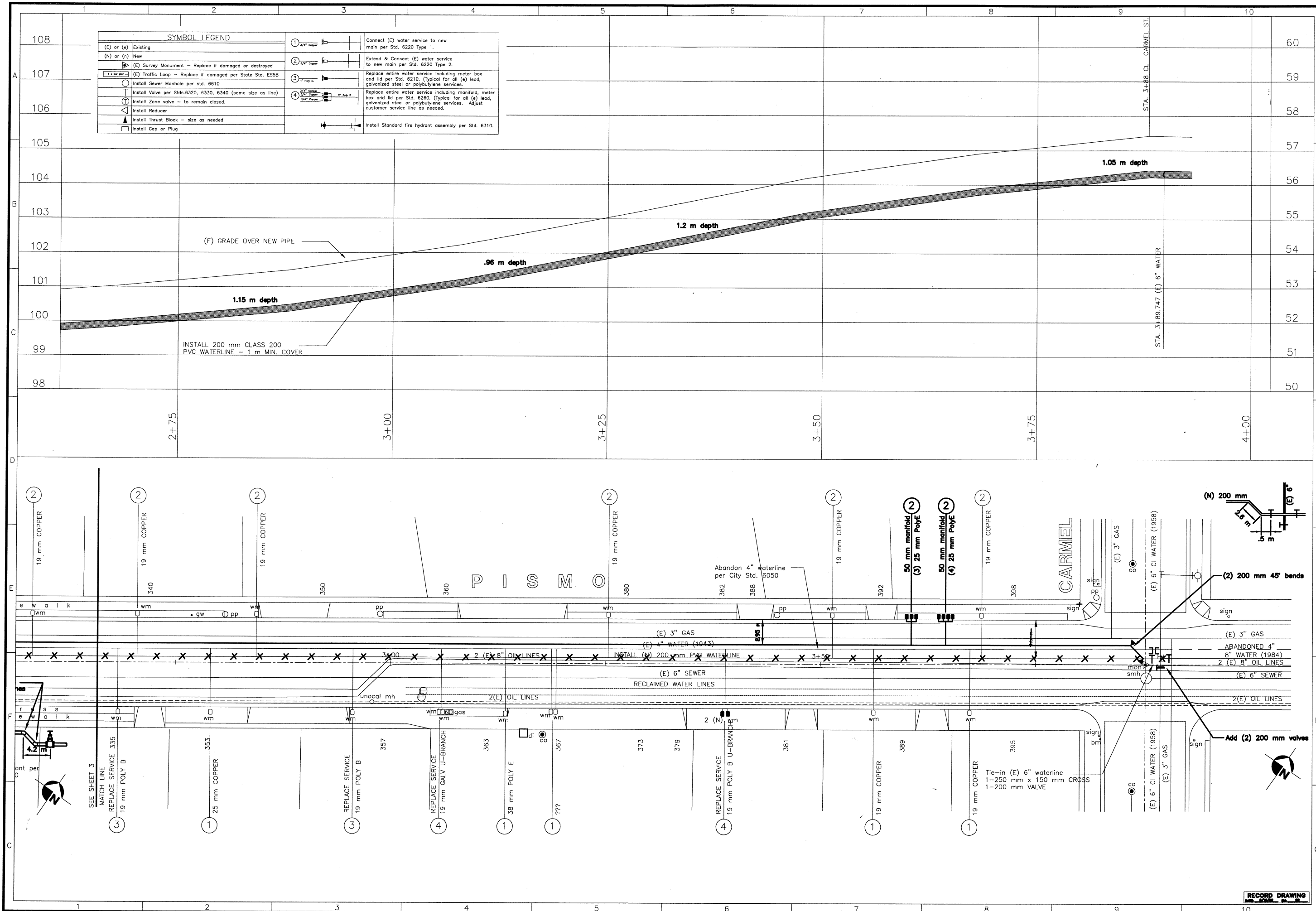
APPROVED BY:

DATE:
4/19/01

CITY SPECIFICATION NO.
90156

SHEET NO.
4 of 24

REGISTERED PROFESSIONAL ENGINEER
JEFFREY A. VAN DEN ENK
No. C 59920
exp. 12/31/03
CIVIL
STATE OF CALIFORNIA



PROFESSIONAL ENGINEER
No. C 59926
Exp. 12/31/03
CIVIL

REGISTERED
1986

city of

san luis obispo

Drawn By & Date

Record Drawing

Drawn By & Date

Electric Scales
H: 1:400
V: SCALE

PROJECT TITLE:
WATER IMPROVEMENT PROJECT

SHEET TITLE:
PISMO STREET
ARCHER STREET - CARMEL STREET

DESIGNED BY:
JAV

DRAWN BY:
SR

CHECKED BY:

CHECKED BY:

APPROVED BY:

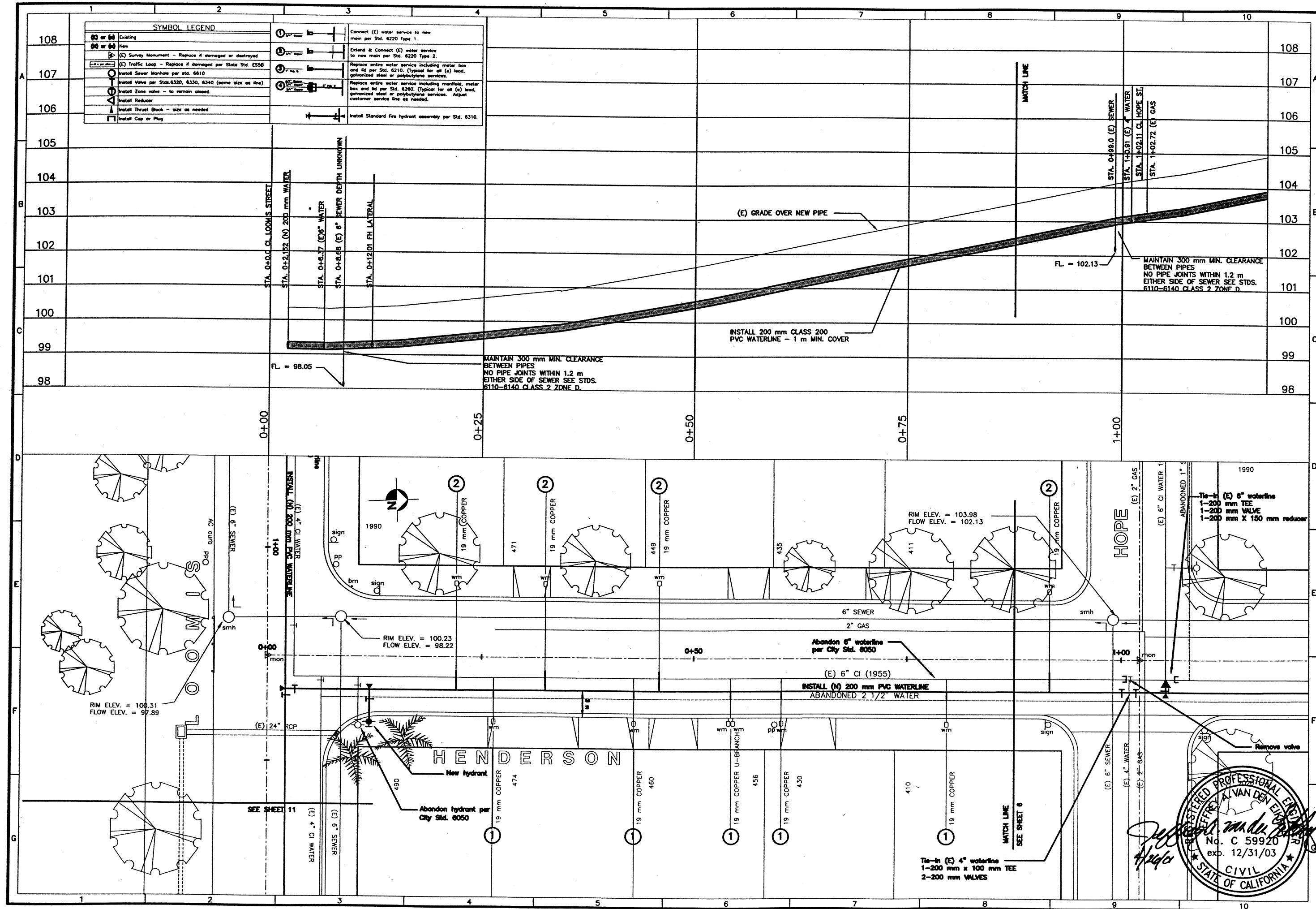
DATE:
4/19/01

CITY SPECIFICATION NO.
90156

SHEET NO.

4A of 24

RECORD DRAWING



SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. E558
	Install Sewer Manhole per std. 6610
	Install Valve per Std. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (a) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (a) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.

city of
san luis obispo

Drawn By & Date	Record Drawing	Drawn By & Date
Scale: 1" = 40'		

PROJECT TITLE:
WATER IMPROVEMENT PROJECT

SHEET TITLE:
**HENDERSON STREET
LOOMIS STREET - HOPE STREET**

DESIGNED BY:
JAV

DRAWN BY:
SR

CHECKED BY:

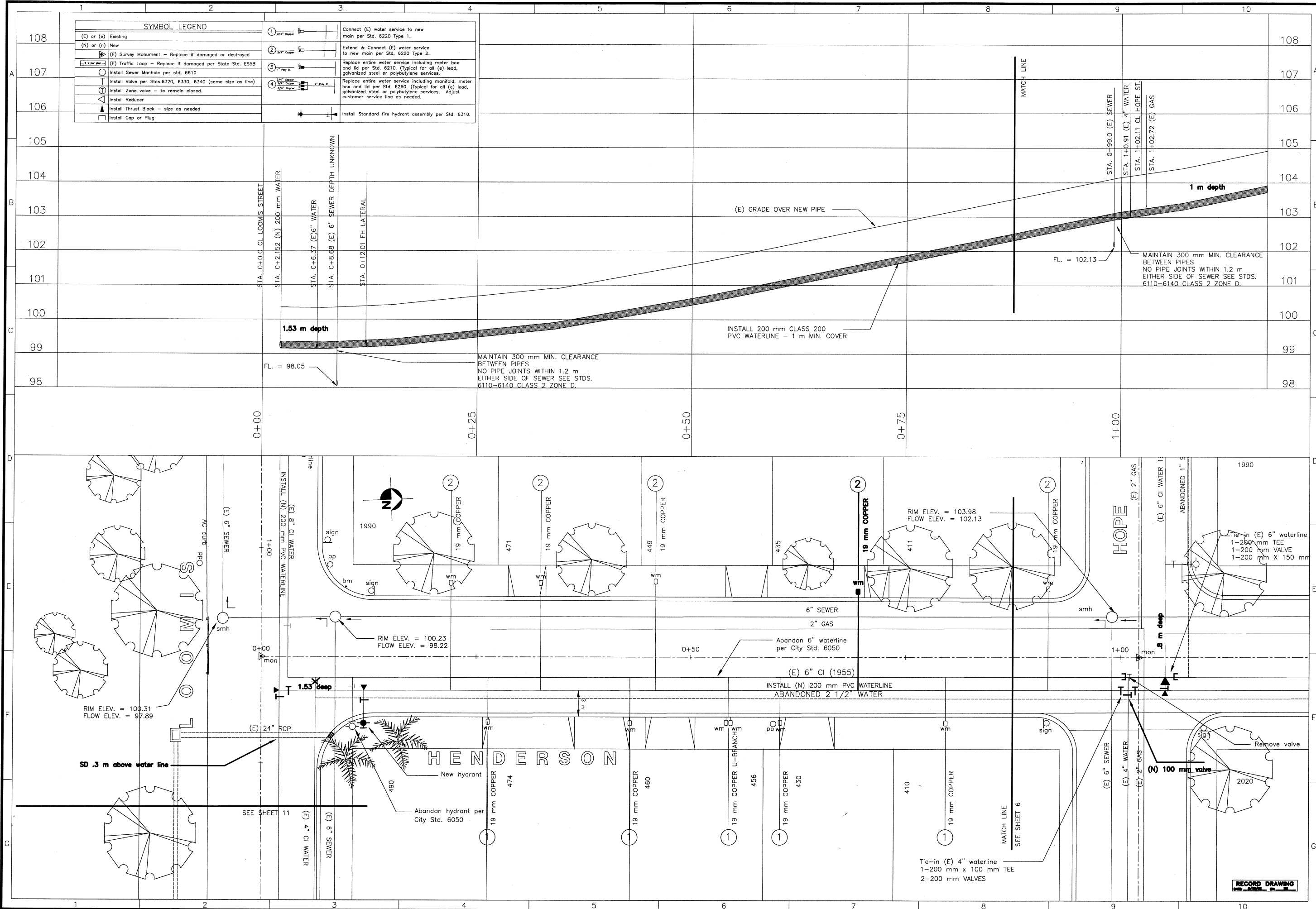
APPROVED BY:

DATE:
4/19/01

CITY SPECIFICATION NO.
90156

SHEET NO.
5 of 24

REMOVE VALVE



SYMBOL LEGEND	
(E) or (e) Existing	1 3/4" Copper
(N) or (n) New	2 3/4" Copper
(E) Survey Monument - Replace if damaged or destroyed	3 1" Poly B
(E) Traffic Loop - Replace if damaged per State Std. E55B	4 3/4" Copper
Install Sewer Manhole per std. 6610	5 3/4" Copper
Install Valve per Sids.6320, 6330, 6340 (same size as line)	6 3/4" Copper
Install Zone valve - to remain closed.	7 3/4" Copper
Install Reducer	8 3/4" Copper
Install Thrust Block - size as needed	9 3/4" Copper
Install Cap or Plug	10 3/4" Copper

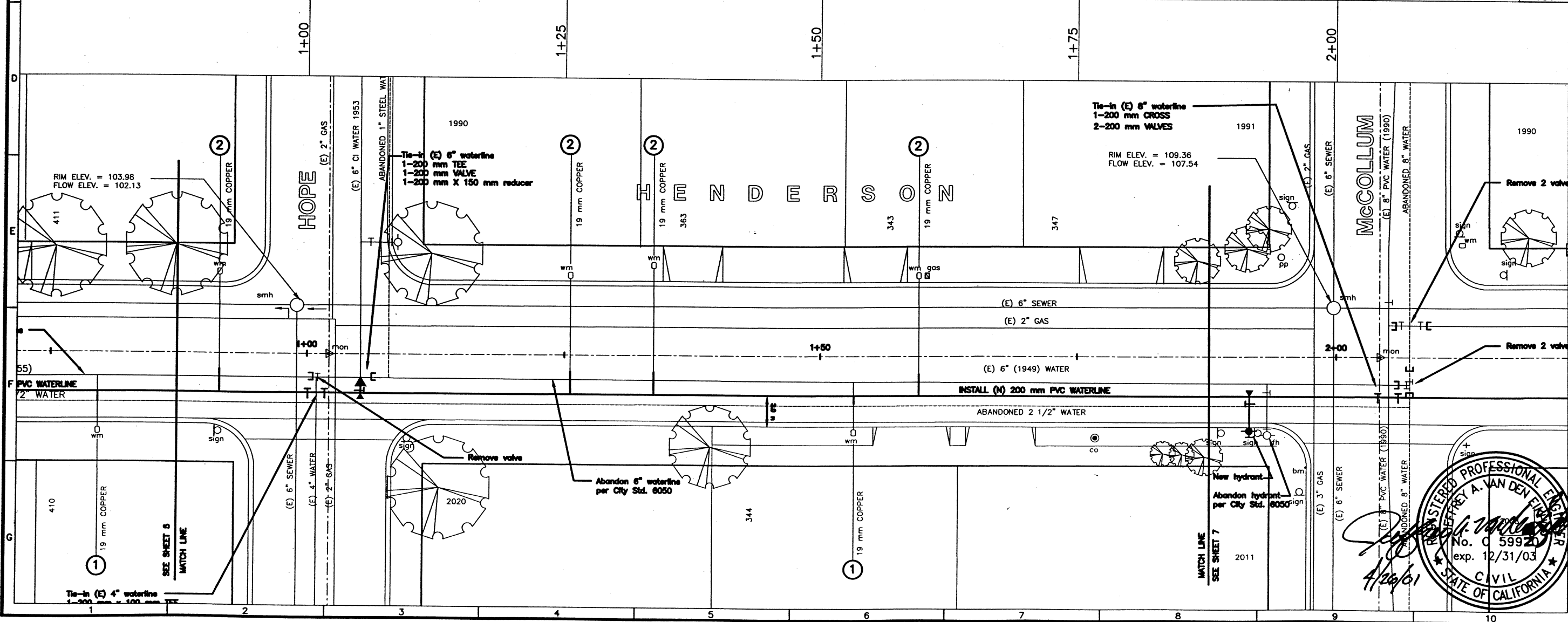
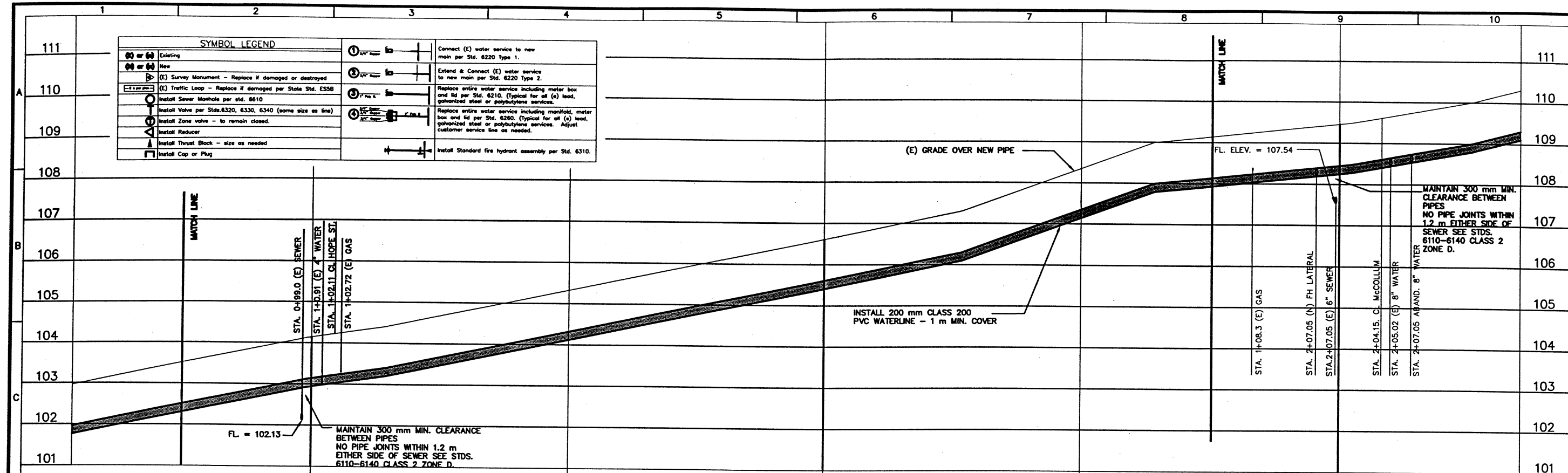


City of
san luis obispo

Drawn By & Date	Record Drawing
Drawn By & Date	Record Drawing

PROJECT TITLE:	WATER IMPROVEMENT PROJECT
DESIGNED BY:	JAV
DRAWN BY:	SR
CHECKED BY:	
APPROVED BY:	
DATE:	4/19/01
CITY SPECIFICATION NO.	90156
SHEET NO.	5A of 24

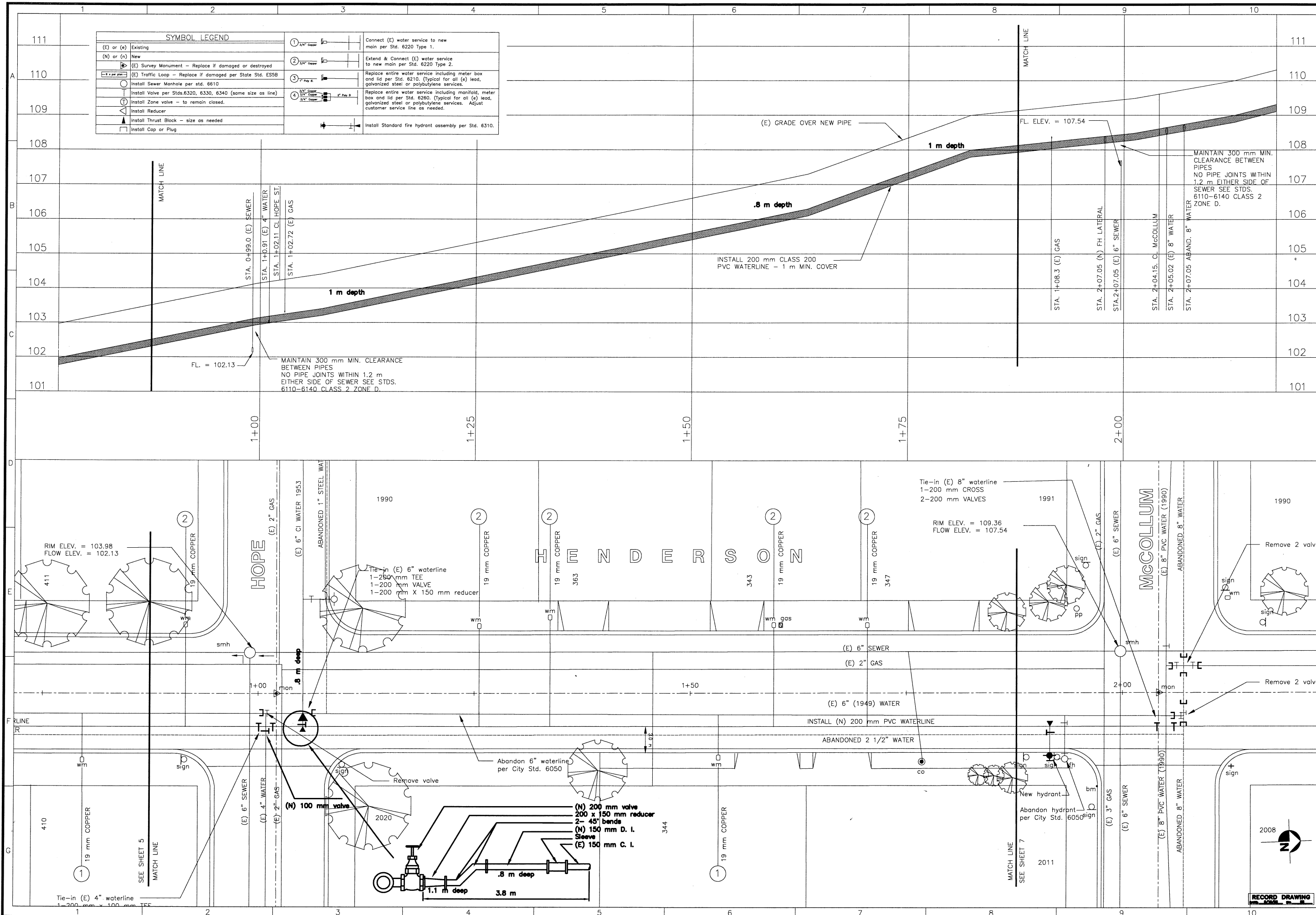
SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. ESSB
	Install Sewer Manhole per std. 6610
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Install Standard fire hydrant assembly per Std. 6310.
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (E) lead, galvanized steel or polybutylene services.)
	Replace entire water service including manifold, meter box and lid per Std. 6280. (Typical for all (E) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.)



Drawn By & Date	Record Drawing
Drawn By & Date	
Scale	1:400
Scale	SCALE

DESIGNED BY:	JAV
DRAWN BY:	SR
CHECKED BY:	JAV
APPROVED BY:	WAP
DATE:	04/19/01
CITY SPECIFICATION NO.	90156
SHEET NO.	6 of 24





SYMBOL LEGEND

	Existing		Connect (E) water service to new main per Std. 6220 Type 1.
	New		Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	(E) Survey Monument - Replace if damaged or destroyed		Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polyethylene services.
	(E) Traffic Loop - Replace if damaged per State Std. E558		Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polyethylene services. Adjust customer service line as needed.
	Install Sewer Manhole per Std. 6610		Install Standard fire hydrant assembly per Std. 6310.
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)		
	Install Zone valve - to remain closed.		
	Install Reducer		
	Install Thrust Block - size as needed		
	Install Cap or Plug		

MAINTAIN 300 mm MIN. CLEARANCE BETWEEN PIPES
NO PIPE JOINTS WITHIN 1.2 m
EITHER SIDE OF SEWER SEE STDS.
6110-6140 CLASS 2 ZONE D.

(E) GRADE OVER NEW PIPE

FL. ELEV. = 107.54

RIM ELEV. = 116.6
FL. ELEV. = 114.9

INSTALL 200 mm CLASS 200
PVC WATERLINE - 1 m MIN. COVER

MAINTAIN 300 mm MIN.
CLEARANCE BETWEEN
PIPES
NO PIPE JOINTS WITHIN
1.2 m EITHER SIDE OF

FL. ELEV. = 107.54

Tie-in (E) 8" waterline
1-200 mm CROSS
2-200 mm VALVES

RIM ELEV. = 109.36
FLOW ELEV. = 107.54

MCCOLLUM

HENDERSON

HAYS

RIM ELEV. = 116.64
FLOW ELEV. = 114.93

(E) 6" SEWER
(E) 2" GAS

(E) 6" (1949) WATER

INSTALL (N) 200 mm PVC WATERLINE

Tie-in (E) 4" waterline
1-200 mm CROSS
3-200 mm VALVES
2-200 mm x 100 mm reducers

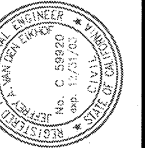


city of
san luis obispo

Drawn By & Date
Record Drawing
Drawn By & Date
Scale: 1:400
N

WATER IMPROVEMENT PROJECT
HENDERSON STREET
MCCOLLUM STREET - HAYS STREET

DESIGNED BY: JAV
DRAWN BY: SR
CHECKED BY: JAV
APPROVED BY: WAP
DATE: 4/19/01
CITY SPECIFICATION NO. 90156
SHEET NO.



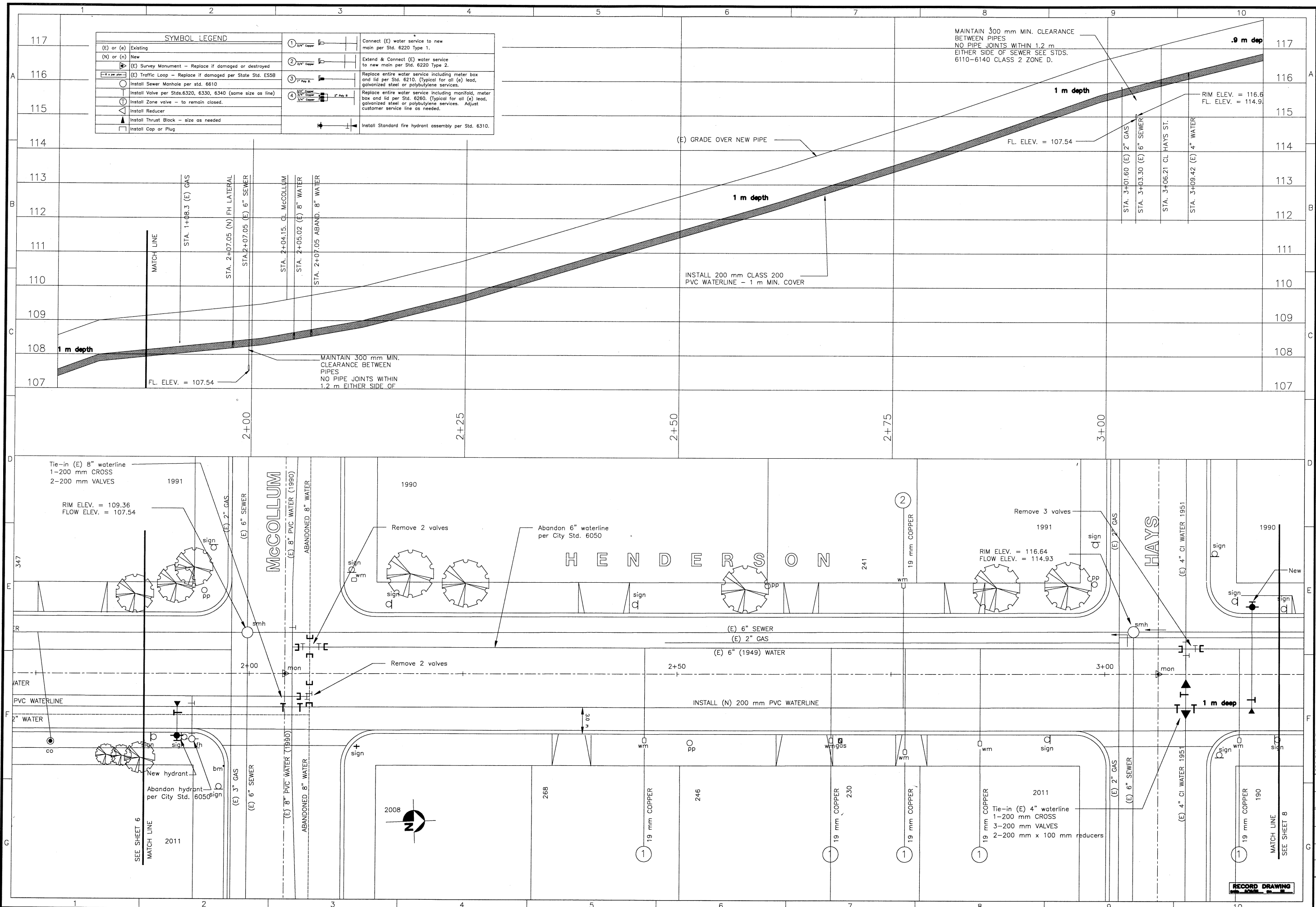
City of
san luis obispo

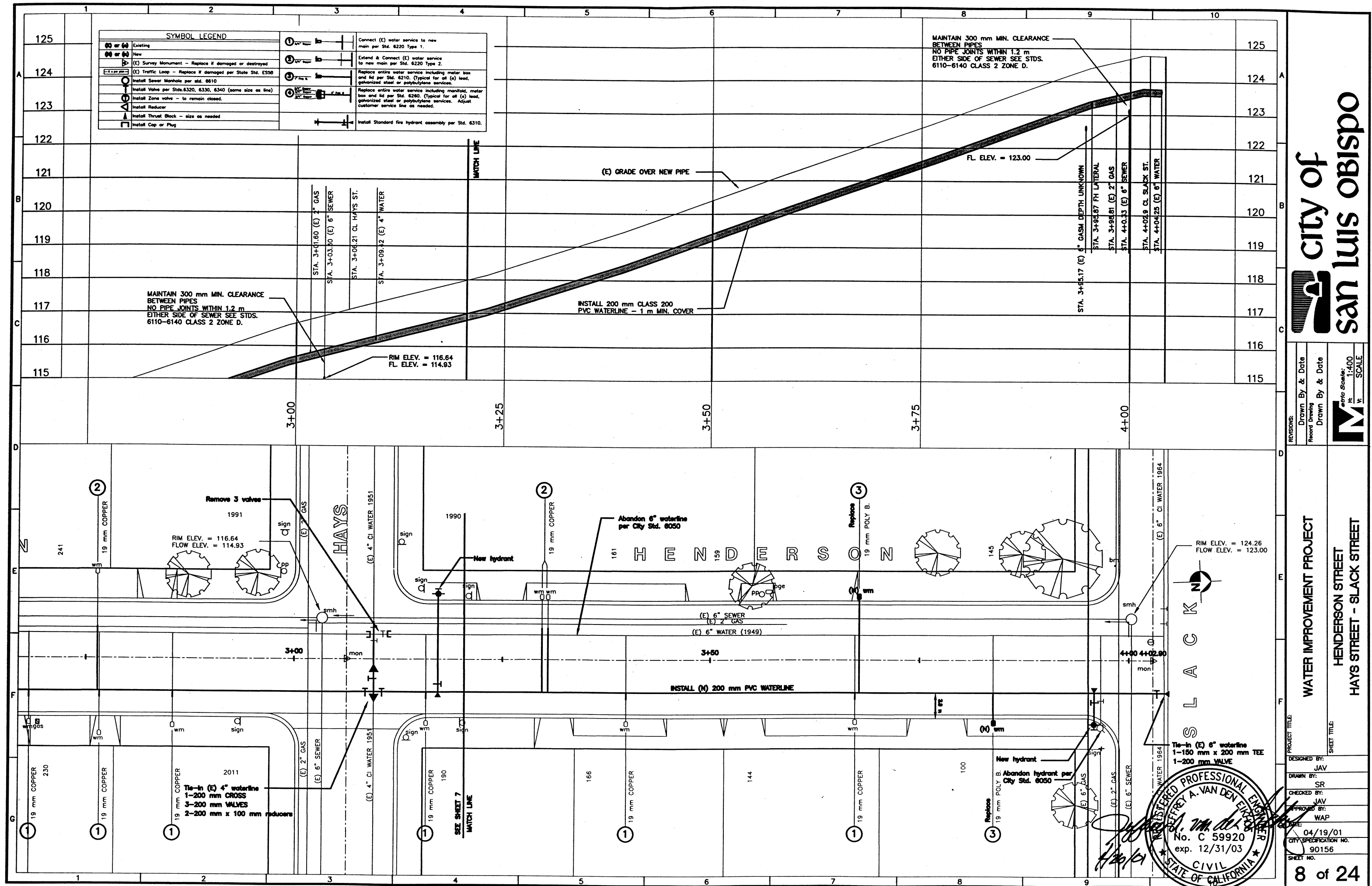
REVISIONS:
Drawn By & Date
Record Drawing
Drawn By & Date
Metric Scale
H: 1/4"=1'-0"
V: 1/8"=1'-0"
SCALE

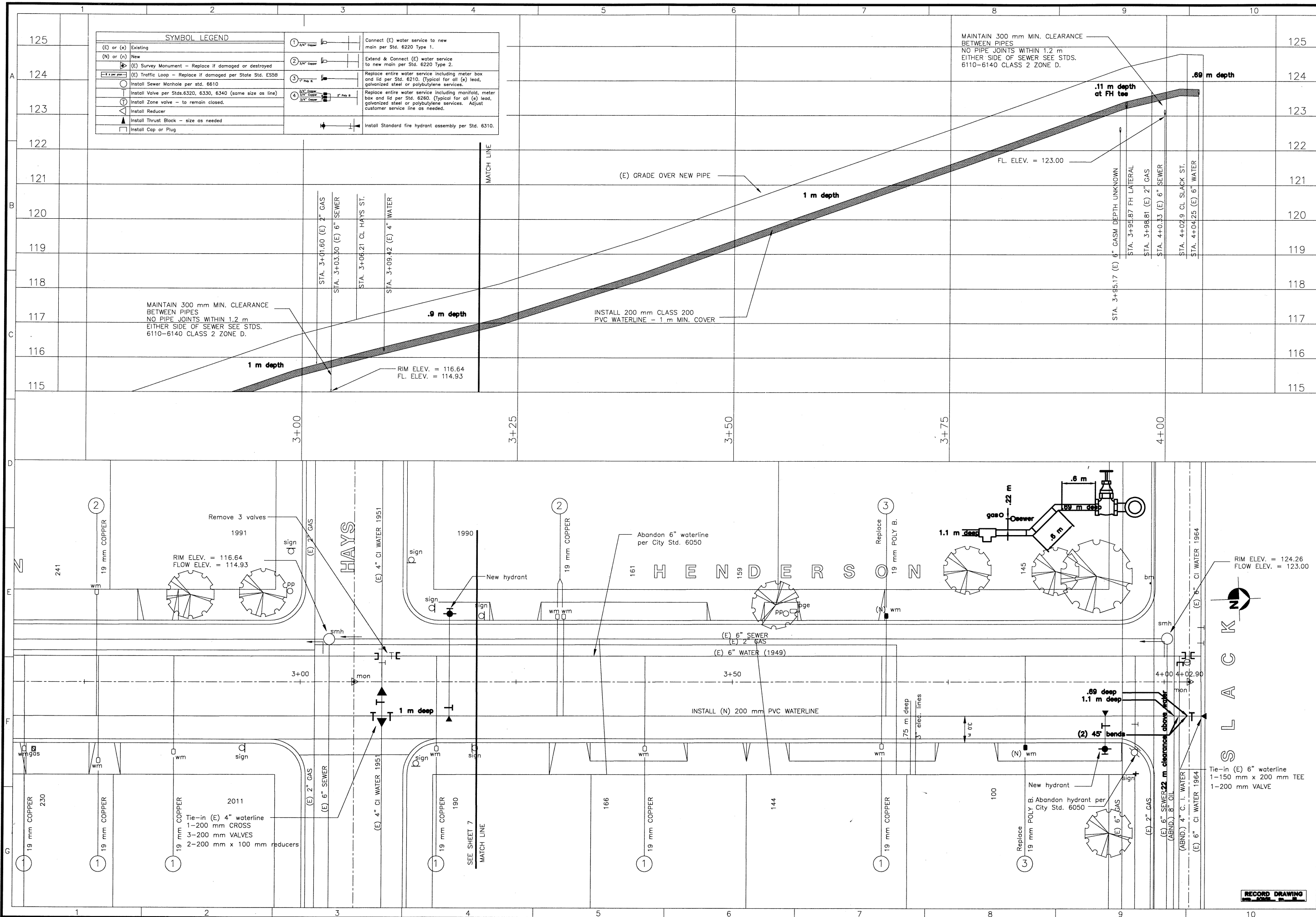
PROJECT TITLE:
WATER IMPROVEMENT PROJECT
SHEET TITLE:
**HENDERSON STREET
MCCOLLUM STREET - HAYS STREET**

DESIGNED BY:
JAV
DRAWN BY:
SR
CHECKED BY:
JAV
APPROVED BY:
WAP
DATE:
4/19/01
CITY SPECIFICATION NO.
90156
SHEET NO.

7A of 24







SYMBOL LEGEND	
(E) or (e) Existing	1 3/4" Copper
(N) or (n) New	2 3/4" Copper
(E) Survey Monument - Replace if damaged or destroyed	3 1" Poly B.
(E) Traffic Loop - Replace if damaged per State Std. ES58	4 3/4" Copper
Install Sewer Manhole per std. 6610	5 3/4" Copper
Install Valve per Stds. 6320, 6330, 6340 (same size as line)	6 3/4" Copper
Install Zone valve - to remain closed.	7 3/4" Copper
Install Reducer	8 3/4" Copper
Install Thrust Block - size as needed	9 3/4" Copper
Install Cap or Plug	10 3/4" Copper



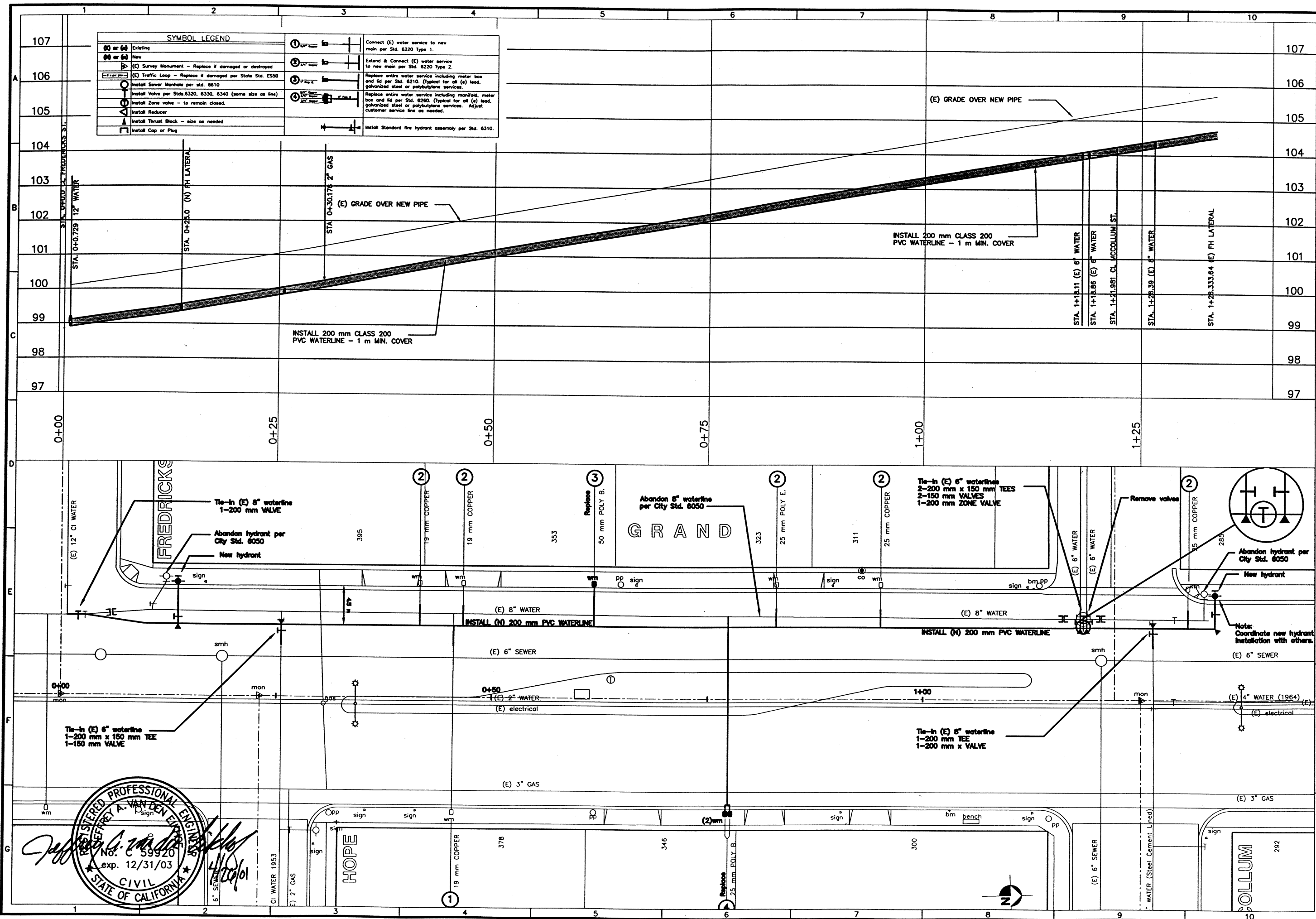
city of
san luis obispo

Drawn By & Date	Record Drawing
Drawn By & Date	Record Drawing

PROJECT TITLE:	
WATER IMPROVEMENT PROJECT	
SHEET TITLE:	
HENDERSON STREET HAYS STREET - SLACK STREET	
DESIGNED BY:	JAV
DRAWN BY:	SR
CHECKED BY:	JAV
APPROVED BY:	WAP
DATE:	04/19/01
CITY SPECIFICATION NO.	90156
SHEET NO.	8A of 24

SYMBOL LEGEND

Existing New (E) Survey Monument - Replace if damaged or destroyed (E) Traffic Loop - Replace if damaged or destroyed Install Sewer Manhole per std. 6610 Install Valve per Stds. 6320, 6330, 6340 (same size as line) Install Zone valve - to remain closed. Install Reducer Install Thrust Block - size as needed Install Cap or Plug	Connect (E) water service to new main per Std. 6220 Type 1. Extend & Connect (E) water service to new main per Std. 6220 Type 2. Replace entire water service including meter box and lid per Std. 6210. (Typical for all (a) lead, galvanized steel or polyethylene services. Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (a) lead, galvanized steel or polyethylene services. Adjust customer service line as needed. Install Standard fire hydrant assembly per Std. 6310.
---	--



city of

san luis obispo

REVISIONS:

Drawn By & Date	Record Drawing	Drawn By & Date

Graphic Scale:

1" = 40'

SCALE

PROJECT TITLE:

WATER IMPROVEMENT PROJECT

SHEET TITLE:

GRAND AVENUE
FREDRICKS STREET - MCCOLLUM STREET

DESIGNED BY:

JAV

DRAWN BY:

SR

CHECKED BY:

APPROVED BY:

DATE:

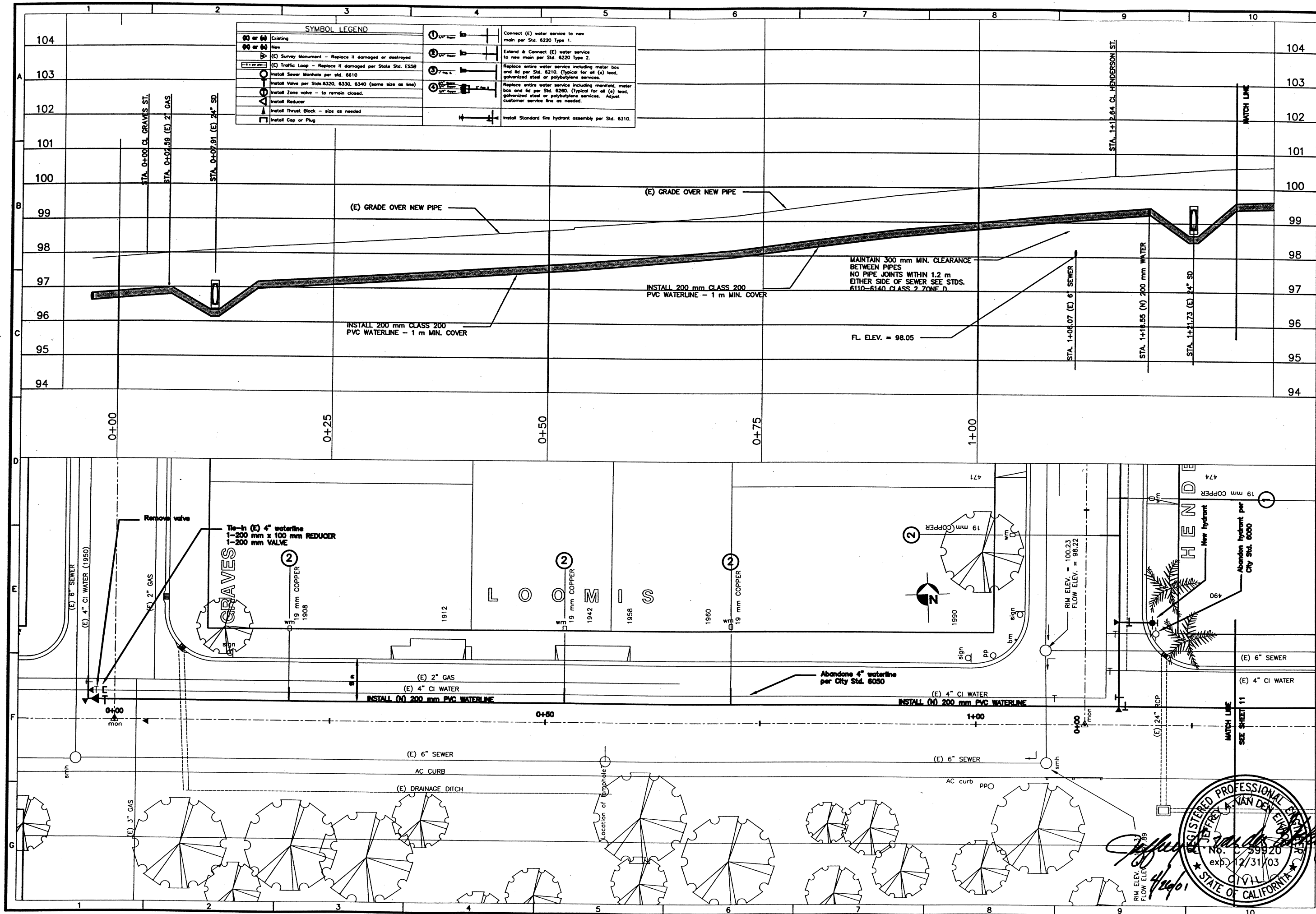
4/19/01

CITY SPECIFICATION NO.

90156

SHEET NO.

9 of 24



city of
san luis obispo

REVISIONS:

Drawn By & Date	Record Drawing
Drawn By & Date	Drawn By & Date

Scale: 1" = 40'

SCALE

PROJECT TITLE:

WATER IMPROVEMENT PROJECT

SHEET TITLE:

LOOMIS STREET
GRAVES STREET - HENDERSON STREET

DESIGNED BY:

JAV

DRAWN BY:

SR

CHECKED BY:

JAV

APPROVED BY:

WAP

DATE:

4/19/01

CITY SPECIFICATION NO.

90156

SHEET NO.

10 of 24

REGISTERED PROFESSIONAL ENGINEER

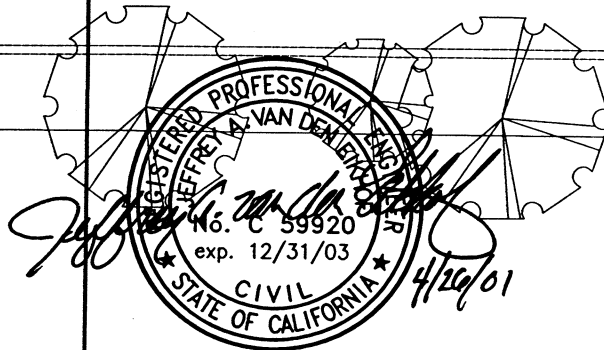
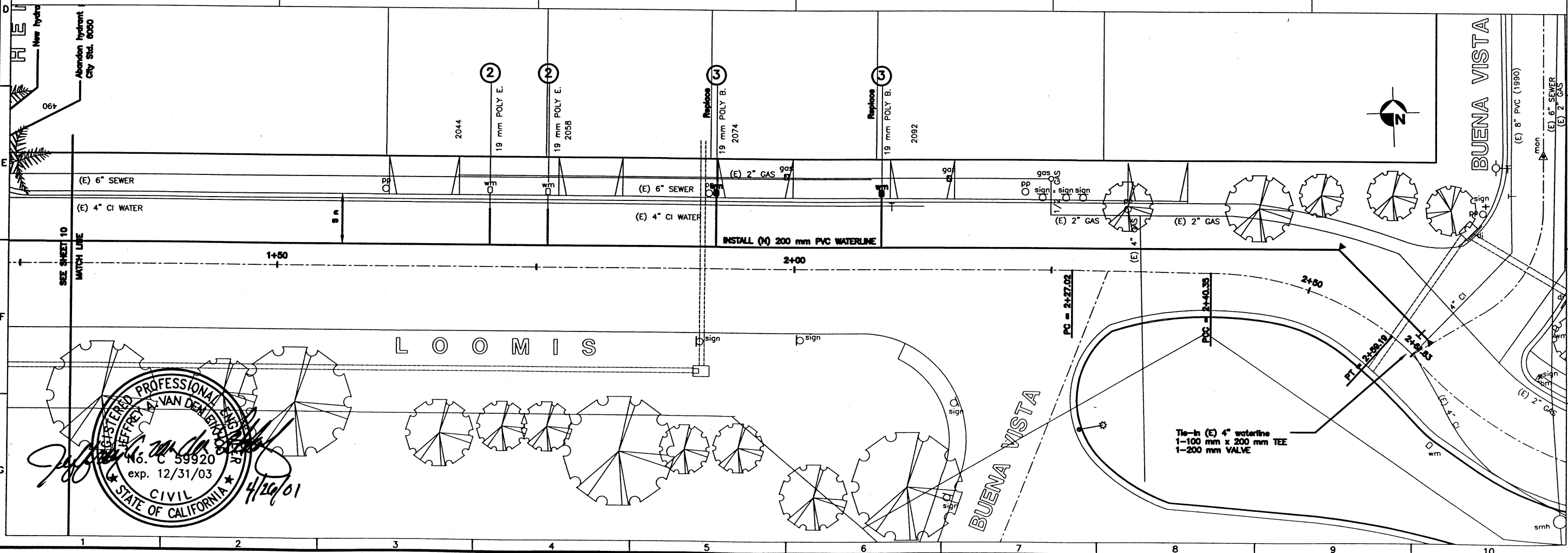
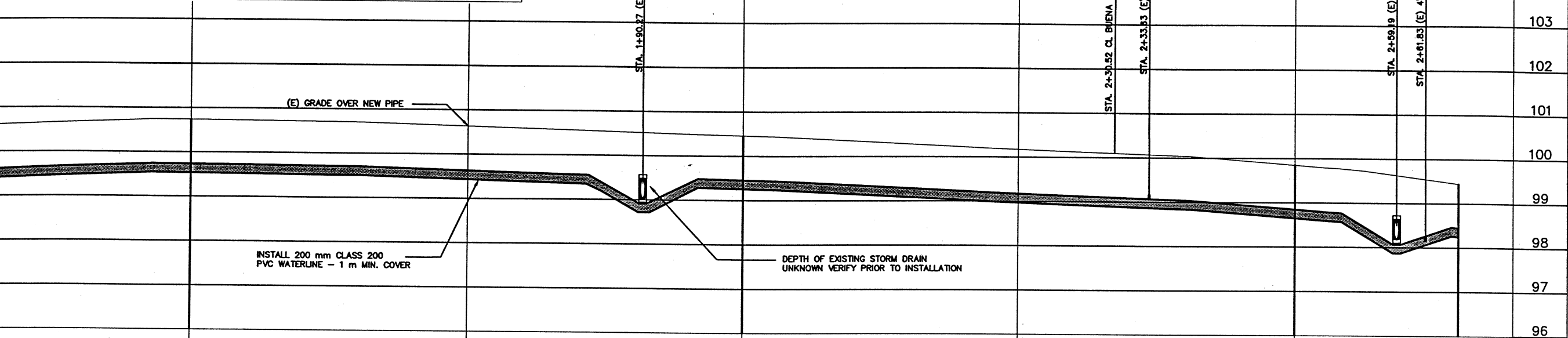
JEFFREY A. KAN

No. 39920

exp. 2/31/03

STATE OF CALIFORNIA

SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. E558
	Install Sewer Manhole per std. 6610
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Install Standard fire hydrant assembly per Std. 6310.
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polyethylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polyethylene services. Adjust customer service line as needed.



city of

san luis obispo

REVISIONS:

Drawn By & Date

Record Drawing

Drawn By & Date

Scale: 1:400

PROJECT TITLE:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE:

CITY SPECIFICATION NO.:

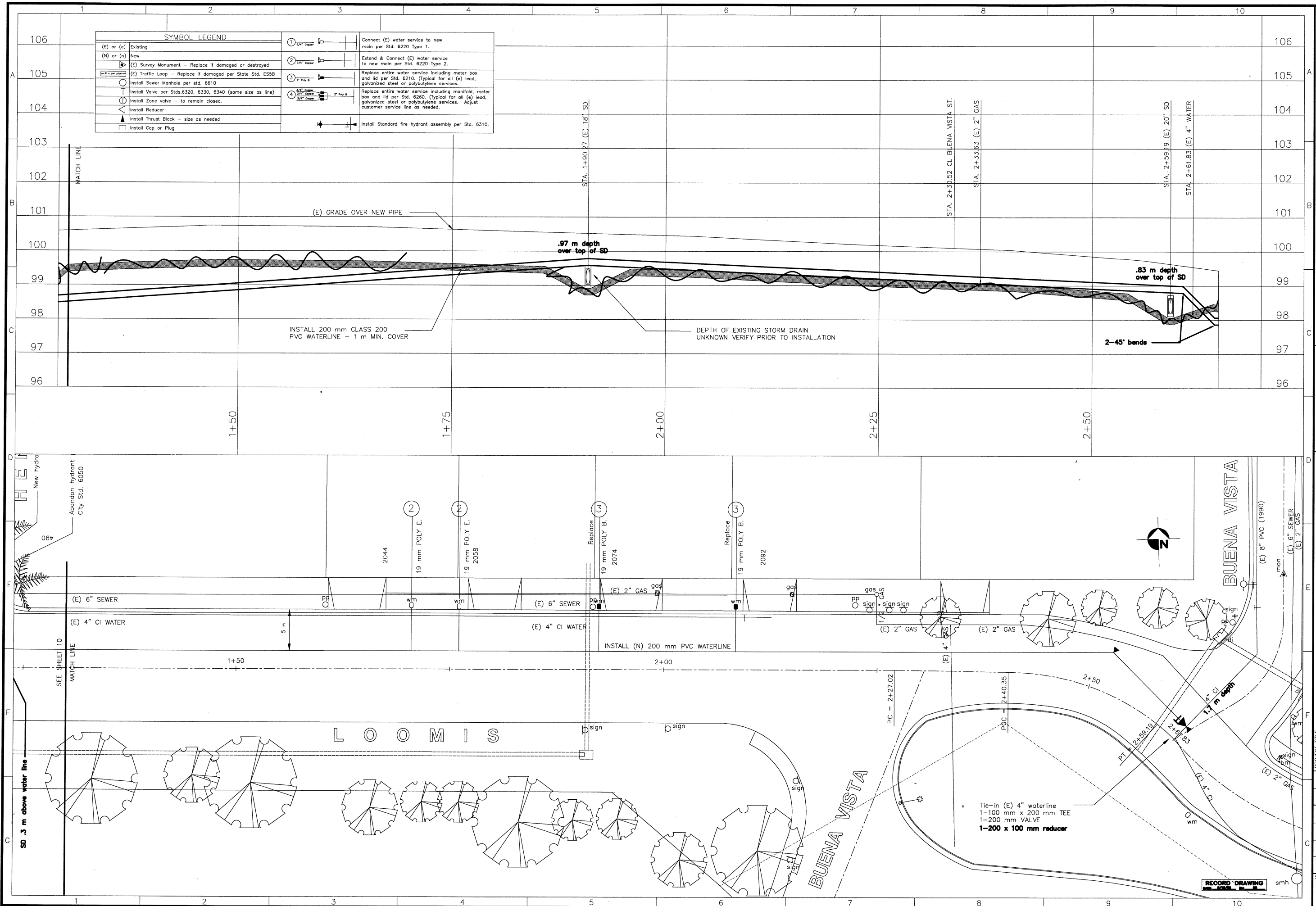
SHEET NO.:

WATER IMPROVEMENT PROJECT

LOOMIS STREET

GRAVES STREET - HENDERSON STREET

11 of 24



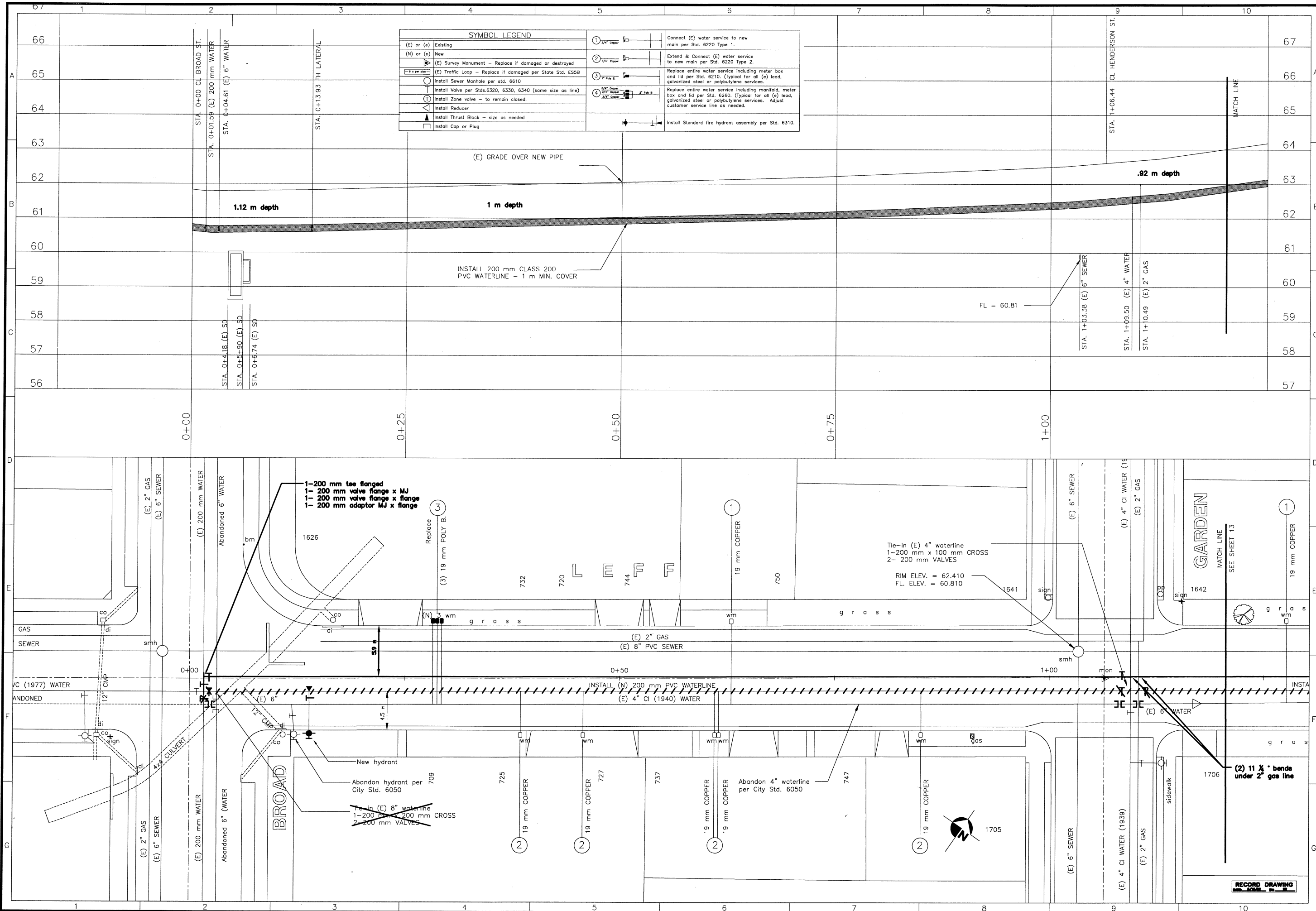
Professional Engineer
C 50920
Exp. 12/31/23

city of
san luis obispo

REVISIONS:
Drawn By & Date
Record Drawing
Drawn By & Date
Checked By
Approved By
DATE: 4/19/01
CITY SPECIFICATION NO. 90156
SHEET NO. 11A of 24

PROJECT TITLE:
WATER IMPROVEMENT PROJECT
LOOMIS STREET - HENDERSON STREET

DESIGNED BY:
JAV
DRAWN BY:
SR
CHECKED BY:
CHECKED BY:
APPROVED BY:
APPROVED BY:
DATE: 4/19/01
CITY SPECIFICATION NO. 90156
SHEET NO. 11A of 24



SYMBOL LEGEND	
(E) or (e)	Existing
(N) or (n)	New
	(E) Survey Monument – Replace if damaged or destroyed
	(E) Traffic Loop – Replace if damaged per State Std. ESSB
	Install Sewer Manhole per std. 6610
	Install Valve per Stds.6320, 6330, 6340 (same size as line)
	Install Zone valve – to remain closed.
	Install Reducer
	Install Thrust Block – size as needed
	Install Cap or Plug

city of

san luis obispo

WATER IMPROVEMENT PROJECT

LEFF STREET

BROAD STREET - GARDEN STREET

REVISIONS:

Drawn By & Date	Record Drawing	Drawn By & Date

Scale: 1"=40'

DESIGNED BY: JAV

DRAWN BY: SR

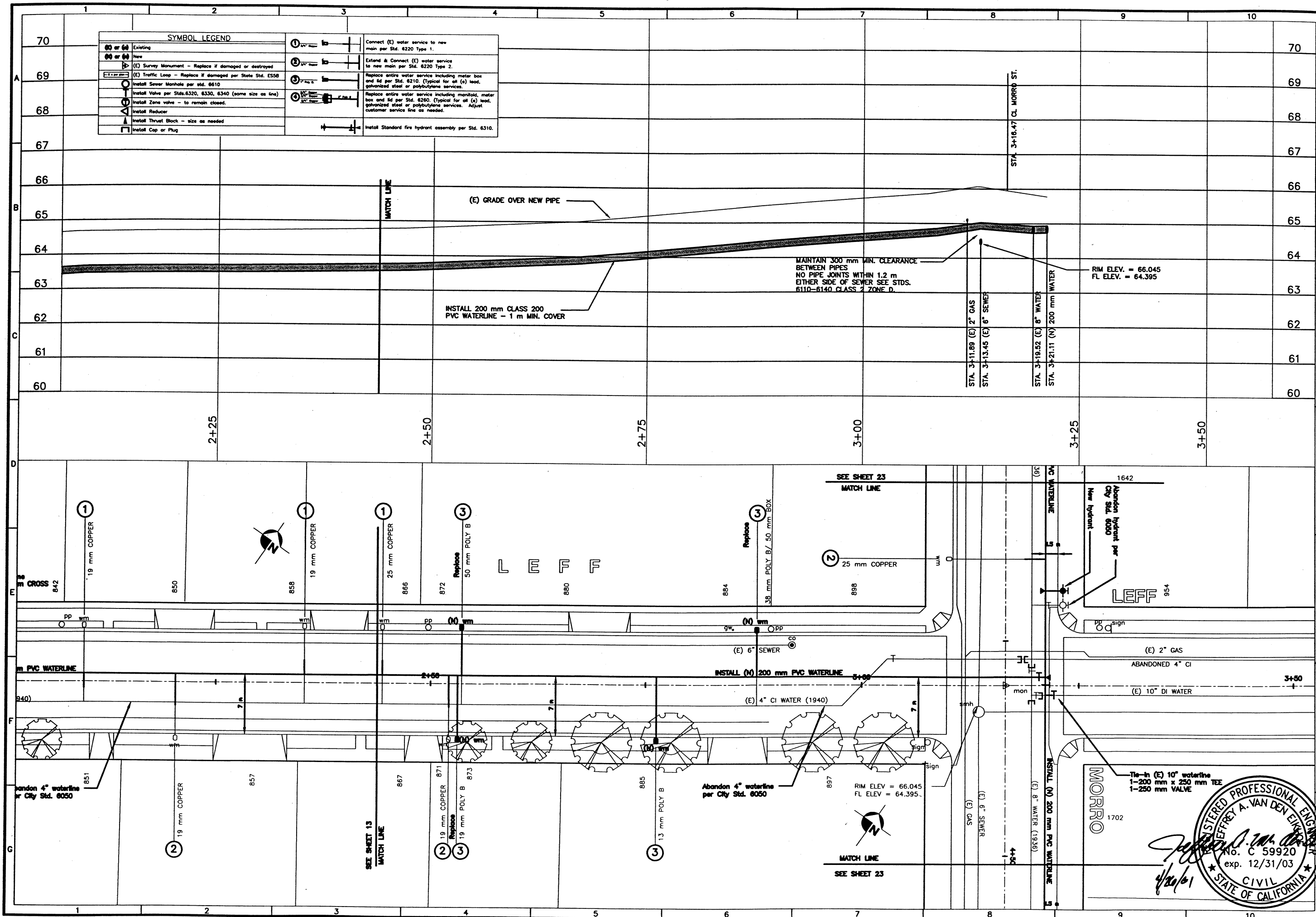
CHECKED BY: JAV

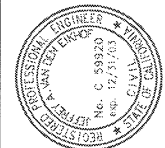
APPROVED BY: WAP

DATE: 4/19/01

CITY SPECIFICATION NO. 90156

SHEET NO. 12 A of 24



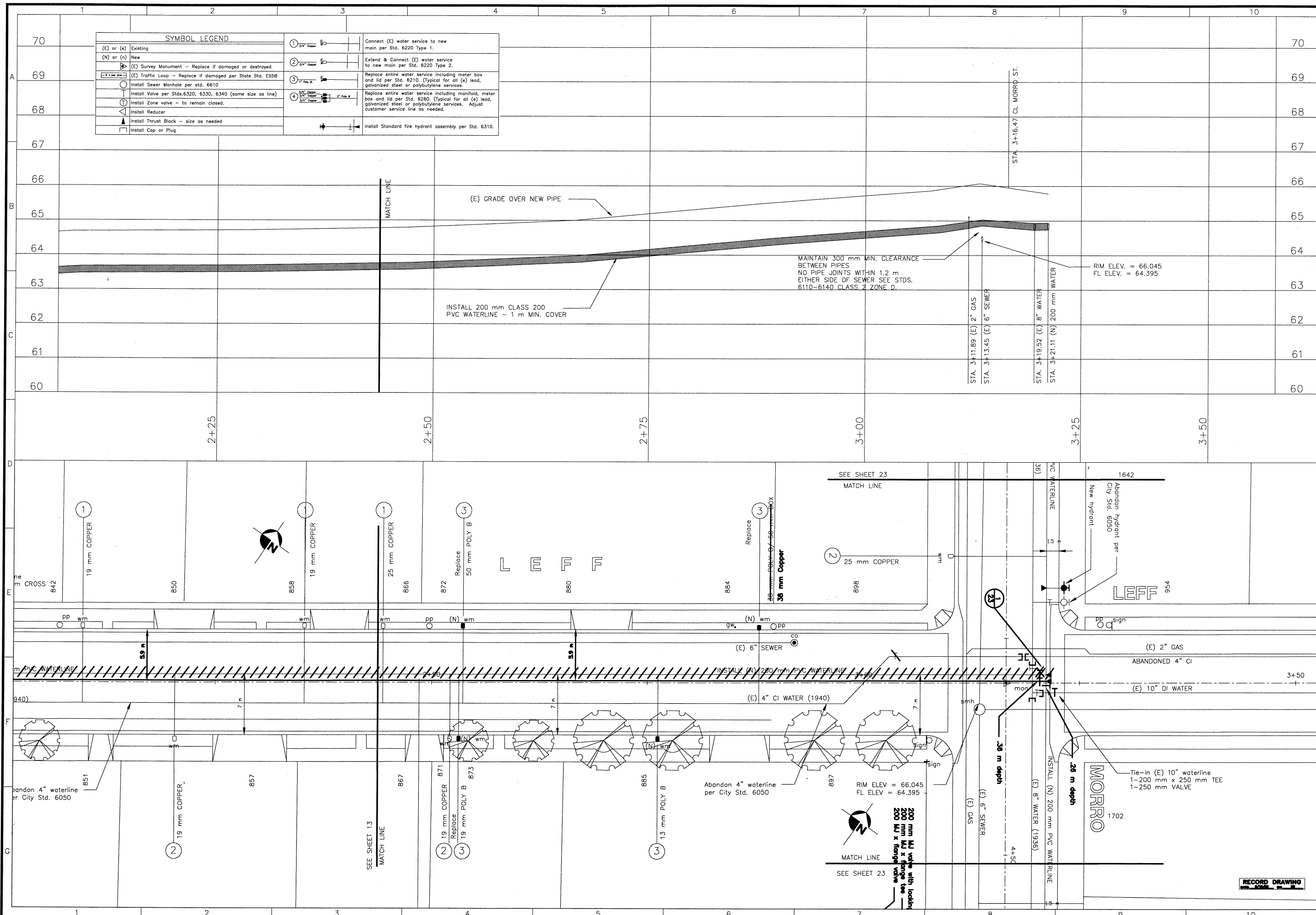


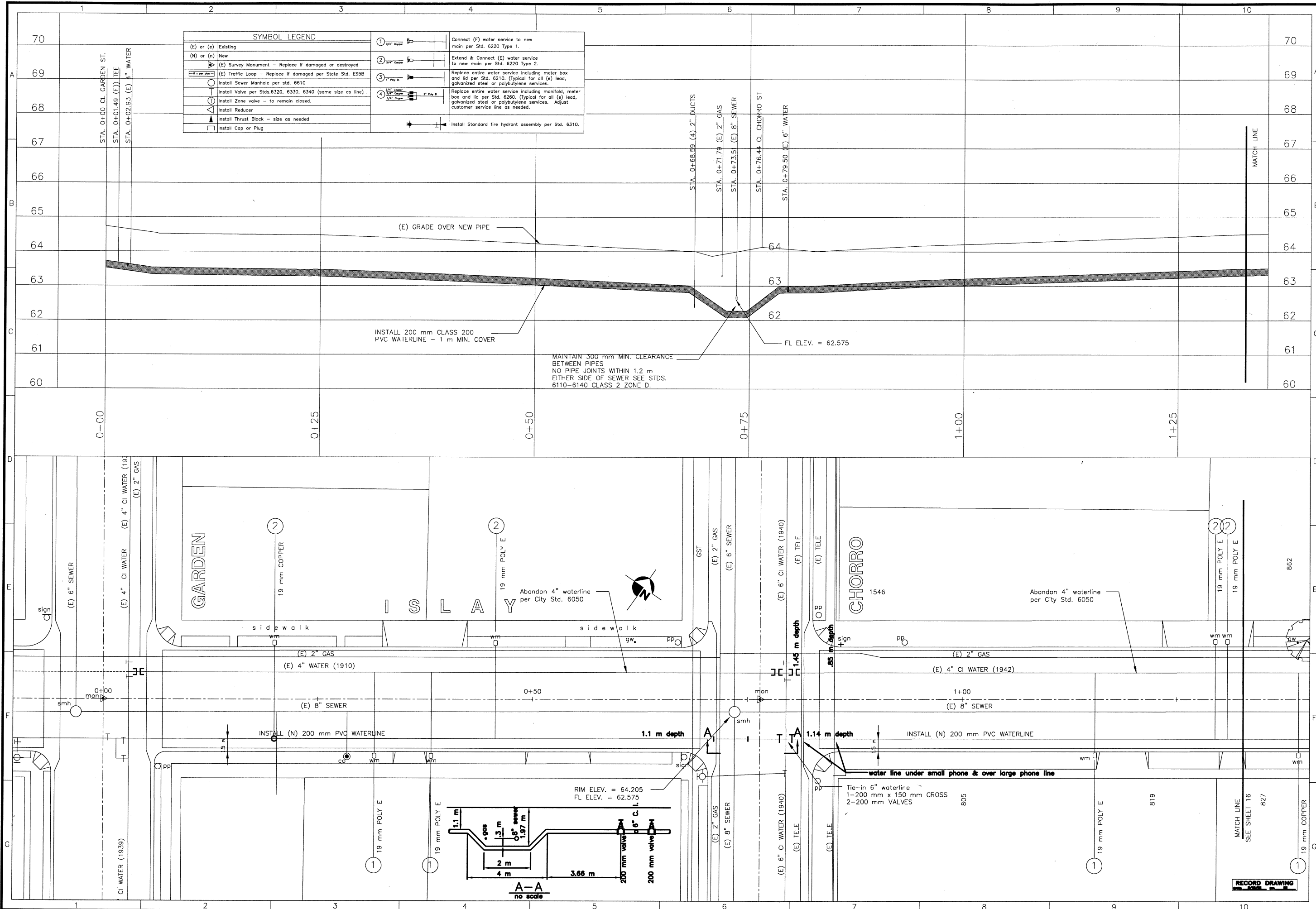
City of san luis obispo

REVISIONS:
Drawn By & Date
Record Drawing
Drawn By & Date
M
Scale
1" = 40'
1" = 100'

PROJECT TITLE:
WATER IMPROVEMENT PROJECT
SHEET TITLE:
LEFF STREET
CHORRO STREET - MORRO STREET

DESIGNED BY:
JAV
DRAWN BY:
SR
CHECKED BY:
JAV
APPROVED BY:
WAP
DATE:
4/19/01
CITY SPECIFICATION NO.
90156
SHEET NO.





SYMBOL LEGEND	
(E) or (e)	Existing
(N) or (n)	New
⬮	(E) Survey Monument - Replace if damaged or destroyed
⬮	(E) Traffic Loop - Replace if damaged per State Std. ESSB
⊙	Install Sewer Manhole per std. 6610
⊙	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
⊙	Install Zone valve - to remain closed.
⊙	Install Reducer
⊙	Install Thrust Block - size as needed
⊙	Install Cap or Plug

① 3/4" Copper	Connect (E) water service to new main per Std. 6220 Type 1.
② 3/4" Copper	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
③ 1" Poly E	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polyethylene services.
④ 3/4" Copper	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polyethylene services. Adjust customer service line as needed.
⊙	Install Standard fire hydrant assembly per Std. 6310.

City of san luis obispo

REVISIONS:

Drawn By & Date	Record Drawing
Drawn By & Date	Record Drawing

Metric Scale
1:400
H
V
SCALE

PROJECT TITLE:
WATER IMPROVEMENT PROJECT

SHEET TITLE:
**ISLAY STREET
GARDEN STREET - CHORRO STREET**

DESIGNED BY:
JAV

DRAWN BY:
SR

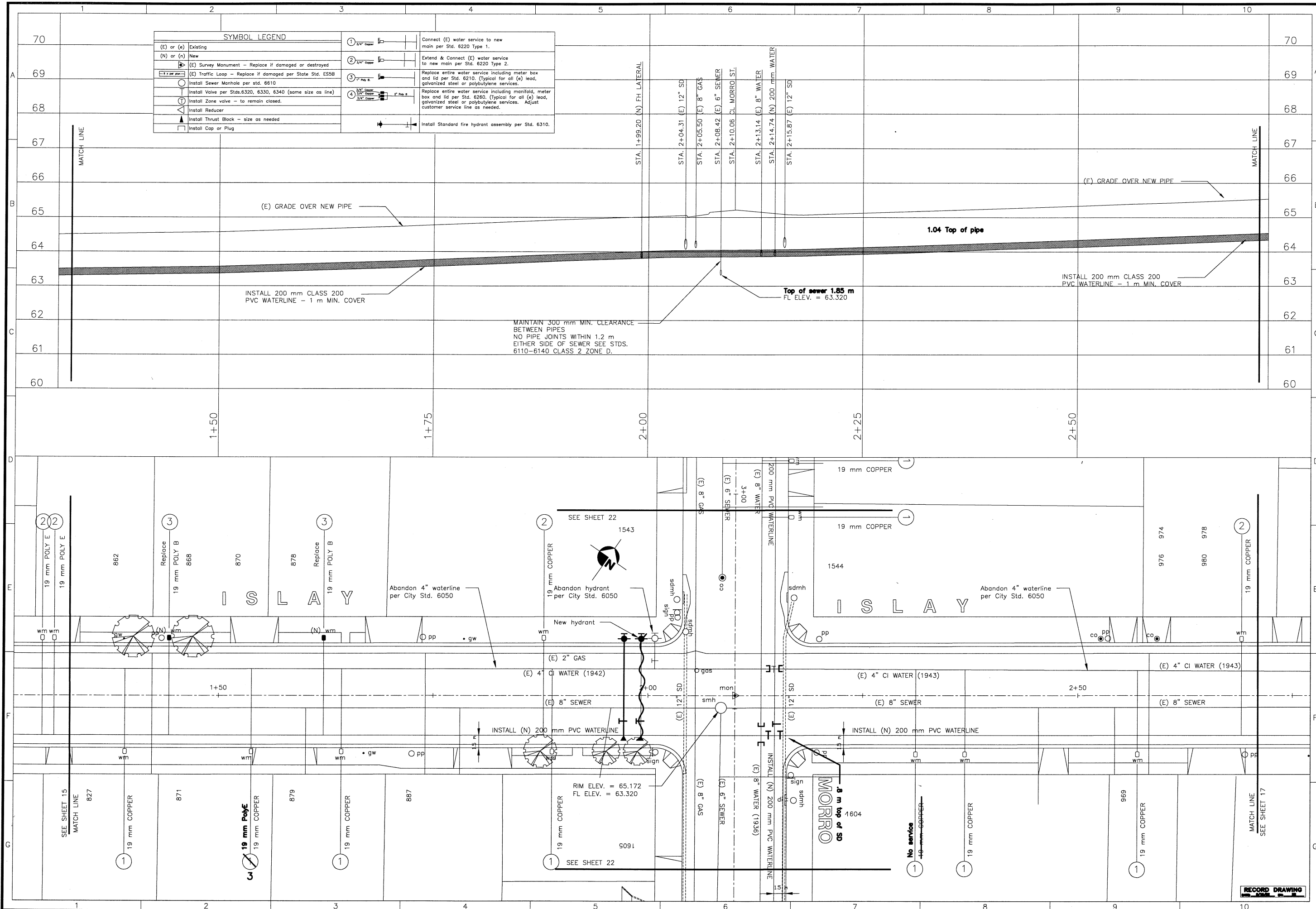
CHECKED BY:

APPROVED BY:

DATE:
4/10/01

CITY SPECIFICATION NO.
90156

SHEET NO.
15A of 24



SYMBOL LEGEND	
(E) or (a)	Existing
(N) or (n)	New
	(E) Survey Monument – Replace if damaged or destroyed
	(E) Traffic Loop – Replace if damaged per State Std. ES5B
	Install Sewer Manhole per std. 6610
	Install Valve per Stds.6320, 6330, 6340 (same size as line)
	Install Zone valve – to remain closed.
	Install Reducer
	Install Thrust Block – size as needed
	Install Cap or Plug
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (a) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (a) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.

City of San Luis Obispo

REVISIONS:

Drawn By & Date	Record Drawing	Drawn By & Date

PROJECT TITLE:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE:

CITY SPECIFICATION NO.

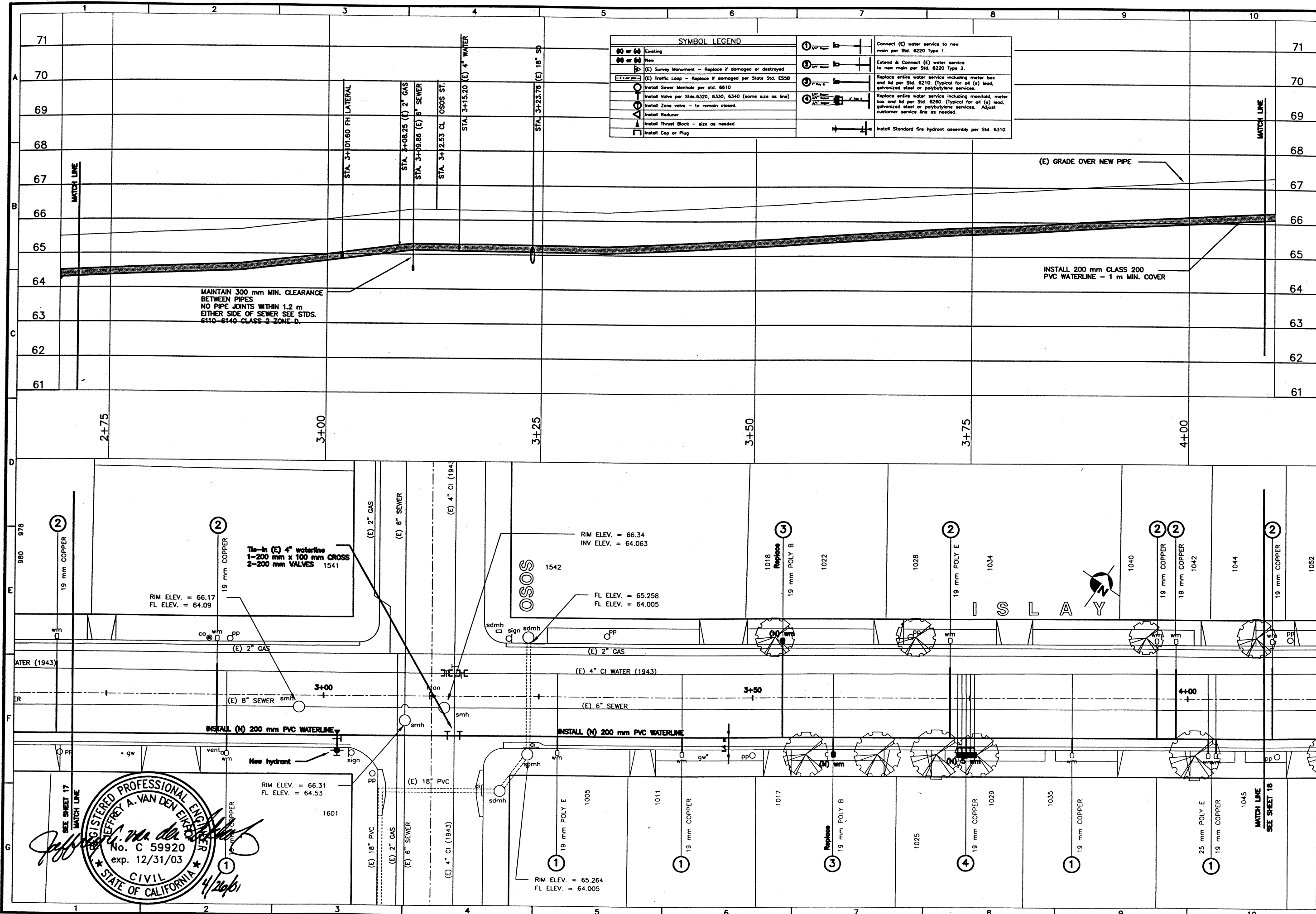
SHEET NO.

WATER IMPROVEMENT PROJECT

ISLAY STREET

CHORRO STREET - MORRO STREET

16A of 24

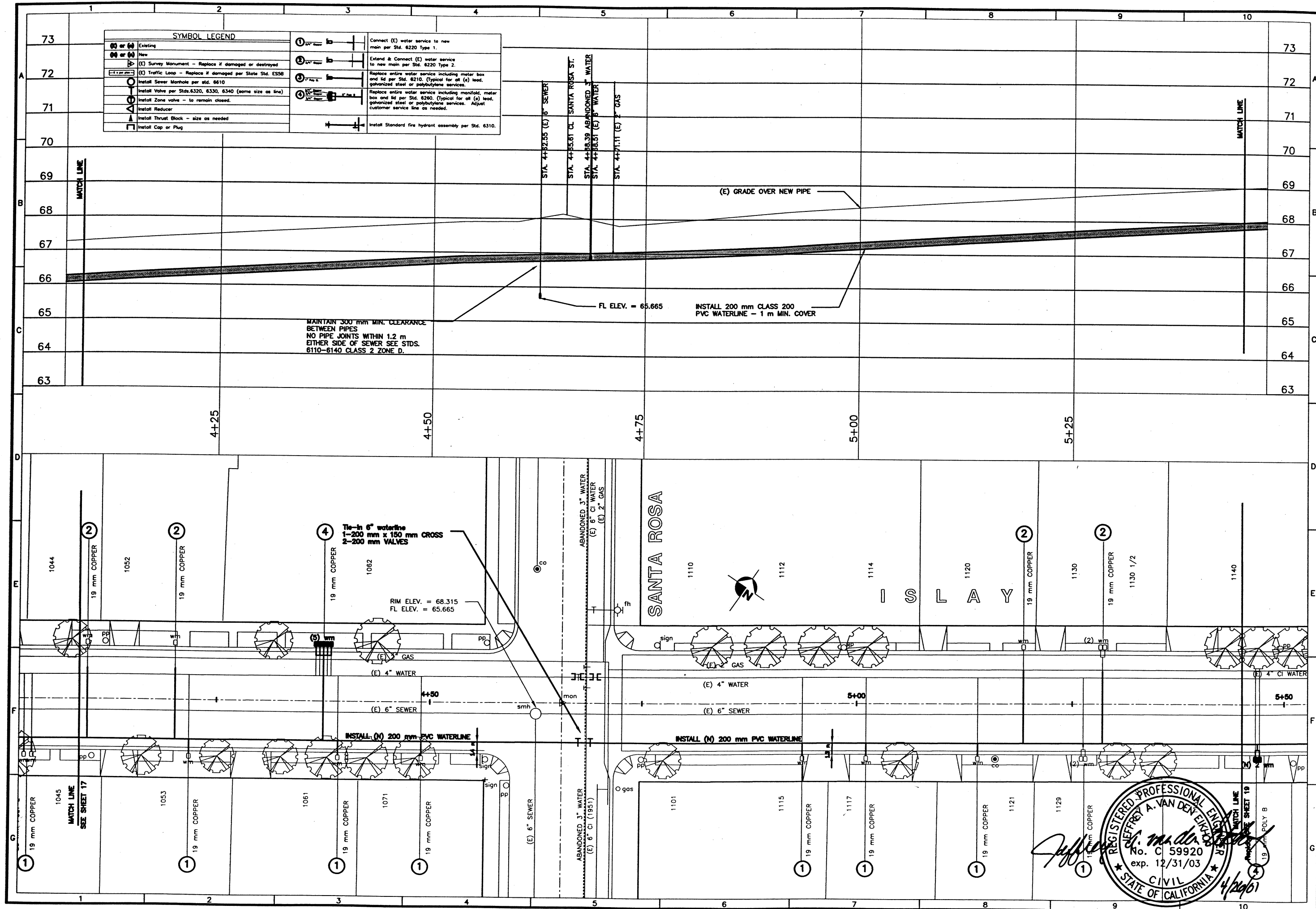


SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. E538
	Install Sewer Manhole per std. 6610
	Install Valve per Sds. 6320, 6330, 6340 (some size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and sd per Std. 6210. (Typical for all (a) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and sd per Std. 6260. (Typical for all (a) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.

City of
san luis obispo

Drawn By & Date	Record Drawing
Drawn By & Date	Scale: 1:400
	SCALE

DESIGNED BY:	JAV
DRAWN BY:	SR
CHECKED BY:	
APPROVED BY:	
DATE:	4/19/01
CITY SPECIFICATION NO.	90156
SHEET NO.	17 of 24





city of

san luis obispo

REVISIONS:

Drawn By & Date

Record Drawing

Drawn By & Date

Graphic Scale: 1" = 40'

Graphic Scale: 1" = 40'

PROJECT TITLE:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE:

CITY SPECIFICATION NO.:

SHEET NO.:

WATER IMPROVEMENT PROJECT

ISLAY STREET

OSOS STREET - SANTA ROSA STREET

REGISTERED PROFESSIONAL ENGINEER

JEFFREY A. VAN DEN ENK

No. C 59920

exp. 12/31/03

CIVIL

STATE OF CALIFORNIA

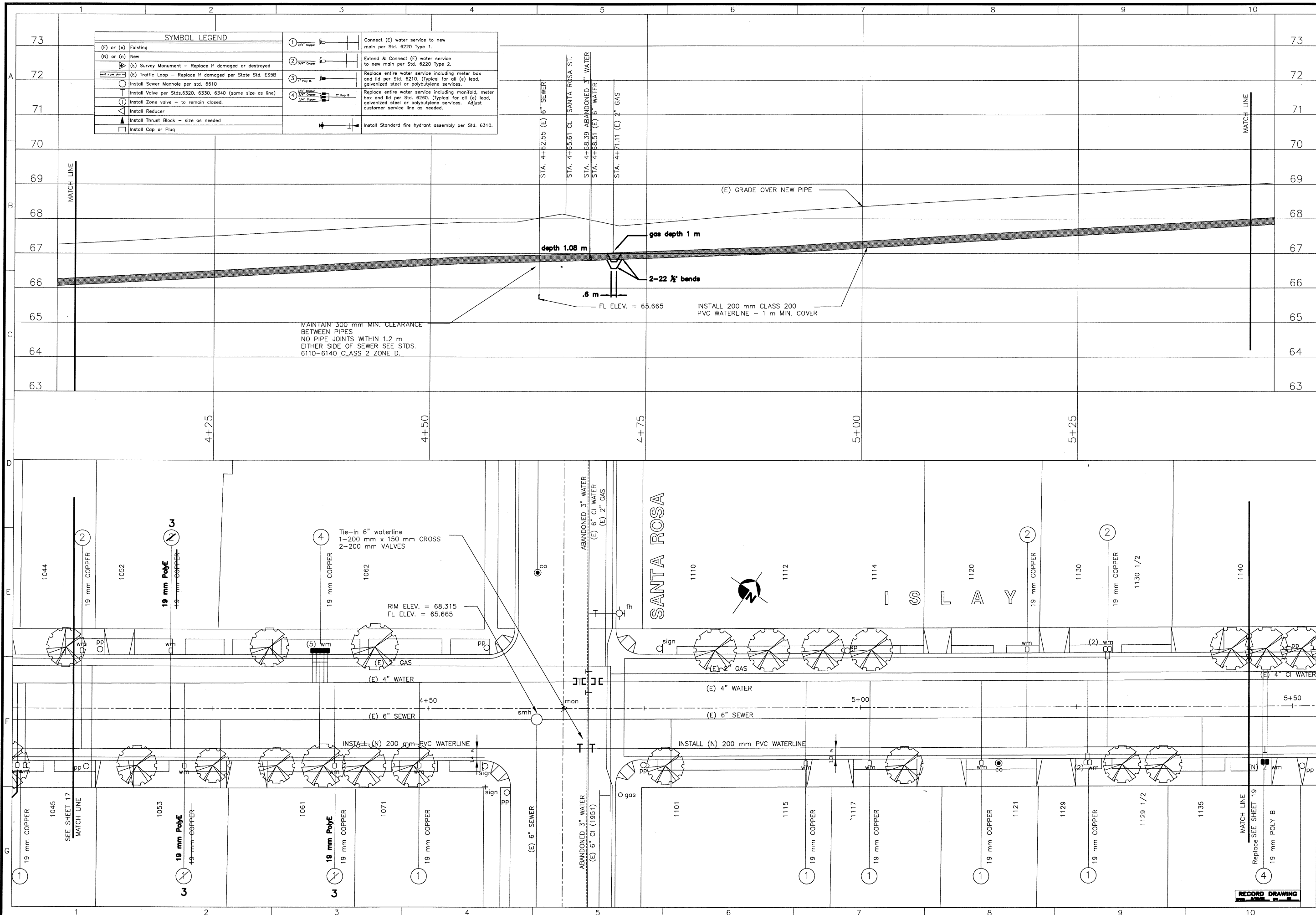
18 of 24



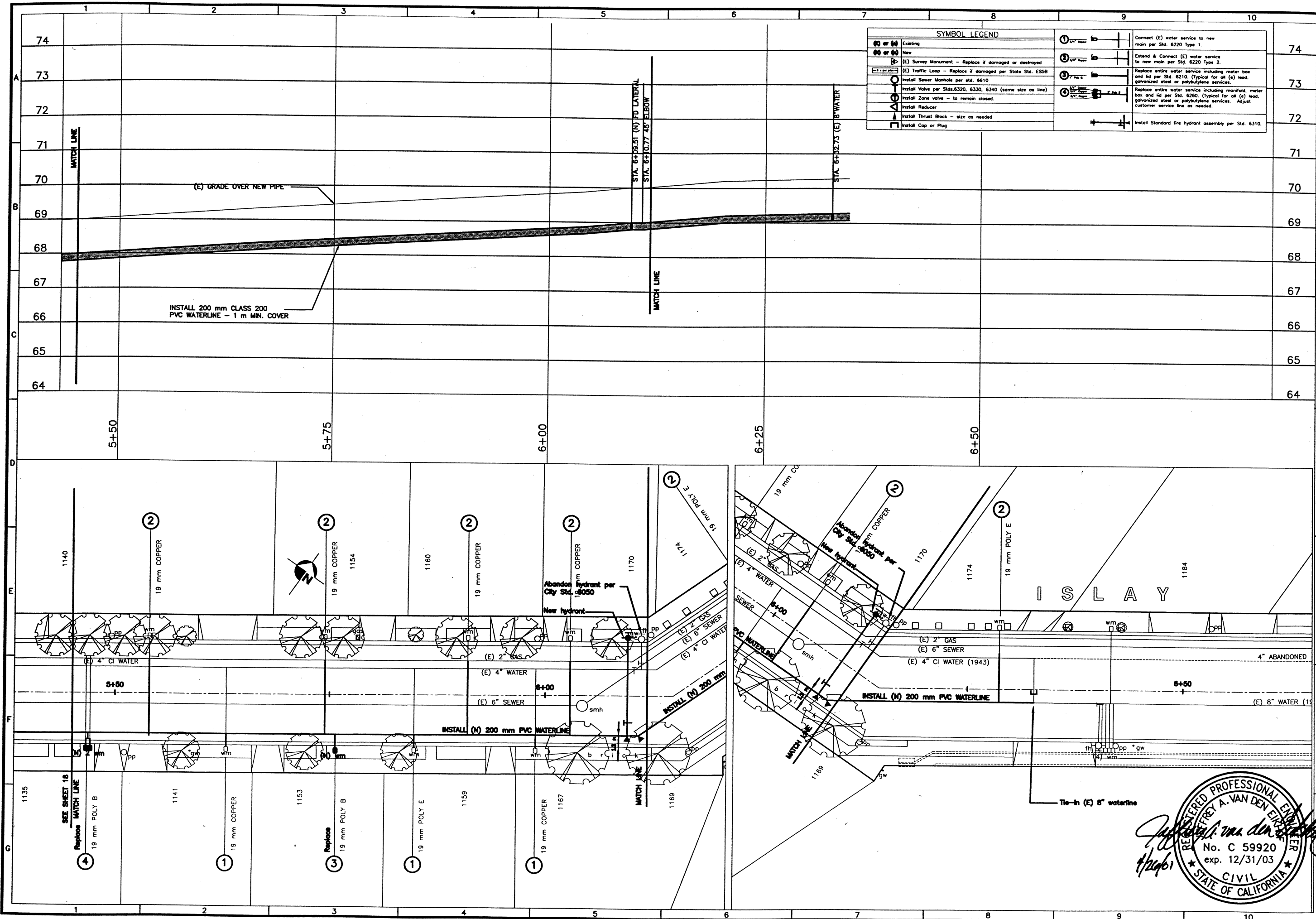
City of
san luis obispo

Drawn By & Date	Record Drawing
Drawn By & Date	Drawn By & Date
Scale	Scale

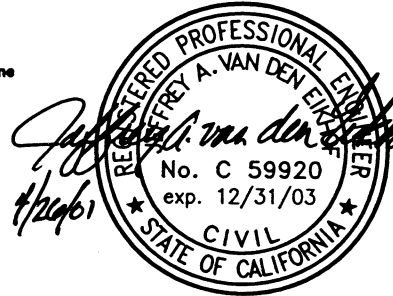
PROJECT TITLE:	WATER IMPROVEMENT PROJECT
SHEET TITLE:	ISLAY STREET OSOS STREET - SANTA ROSA STREET
DESIGNED BY:	JAV
DRAWN BY:	SR
CHECKED BY:	
APPROVED BY:	
DATE:	4/19/01
CITY SPECIFICATION NO.	90156
SHEET NO.	18A of 24

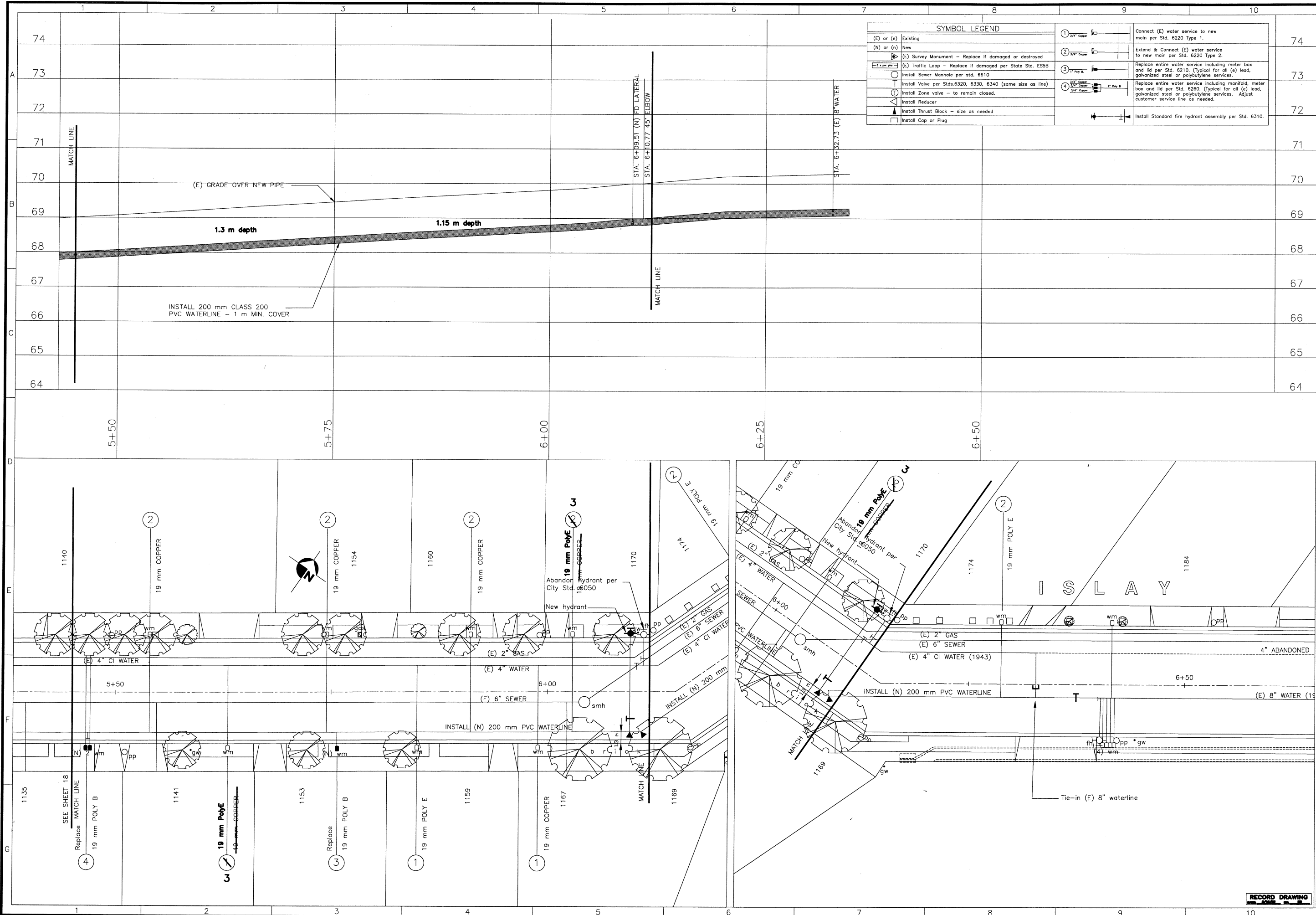


SYMBOL LEGEND	
(E) or (e)	Existing
(N) or (n)	New
▶	(E) Survey Monument - Replace if damaged or destroyed
⬢	(E) Traffic Loop - Replace if damaged per State Std. ESSB
⊙	Install Sewer Manhole per std. 6610
⊙	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
⊙	Install Zone valve - to remain closed.
⊙	Install Reducer
⊙	Install Thrust Block - size as needed
⊙	Install Cap or Plug
① 3/4" Copper	Connect (E) water service to new main per Std. 6220 Type 1.
② 3/4" Copper	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
③ 1" Poly B.	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polybutylene services.
④ 3/4" Copper	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
⊕	Install Standard fire hydrant assembly per Std. 6310.



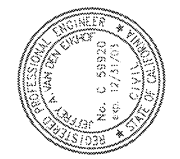
SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. ESSB
	Install Sewer Manhole per std. 6610
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.





SYMBOL LEGEND	
(E) or (e)	Existing
(N) or (n)	New
◻	(E) Survey Monument - Replace if damaged or destroyed
◻	(E) Traffic Loop - Replace if damaged per State Std. ESSB
○	Install Sewer Manhole per std. 6610
○	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
○	Install Zone valve - to remain closed.
○	Install Reducer
○	Install Thrust Block - size as needed
□	Install Cap or Plug

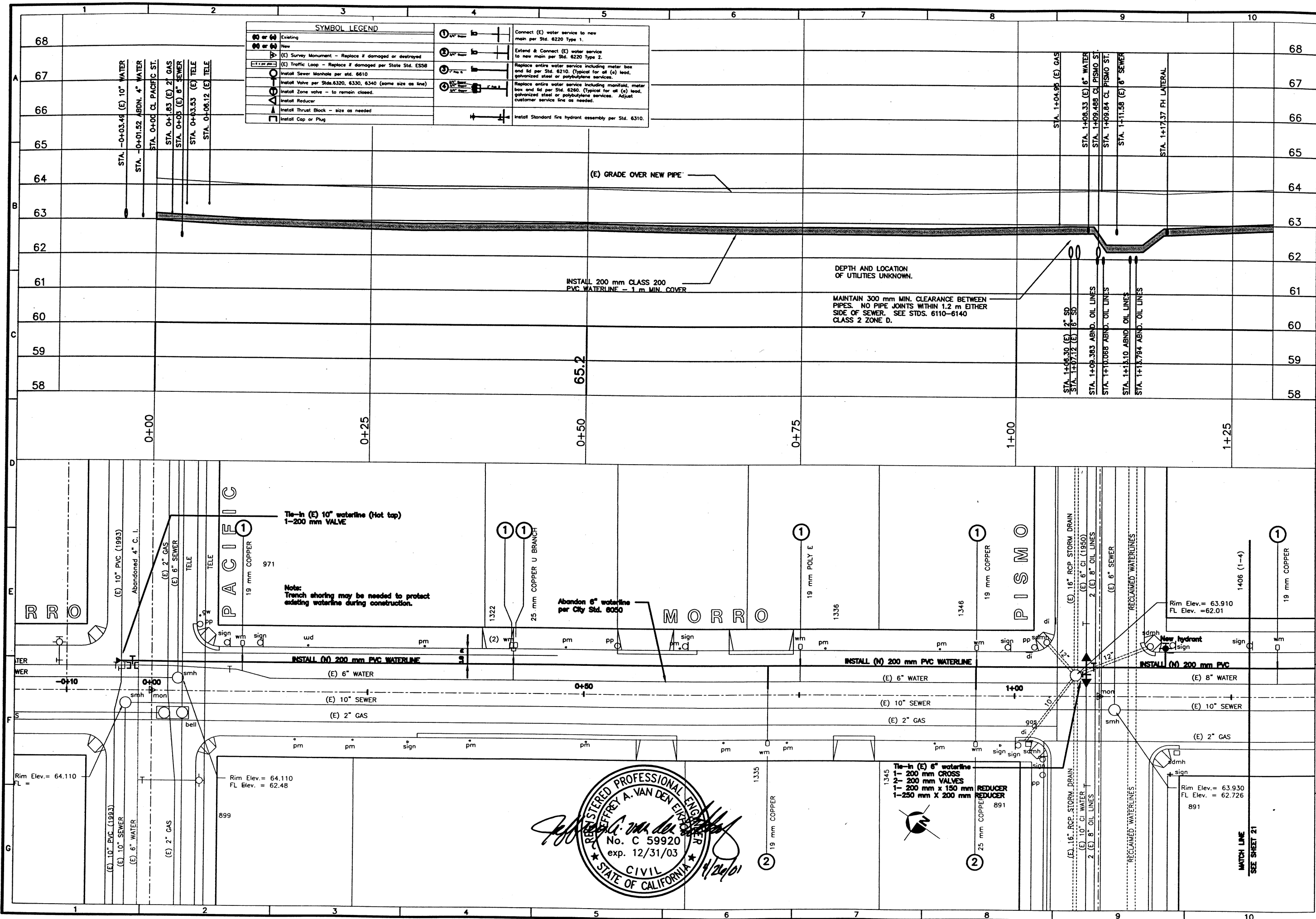
① 3/4\"/>
② 3/4\"/>
③ 1\"/>
④ 3/4\"/>
⑤ 3/4\"/>
⑥ 1\"/>
⑦ 1\"/>
⑧ 1\"/>
⑨ 1\"/>
⑩ 1\"/>



city of
san luis obispo

REVISIONS:	Drawn By & Date	Record Drawing
	Drawn By & Date	

PROJECT TITLE:	WATER IMPROVEMENT PROJECT
SHEET TITLE:	ISLAY STREET SANTA ROSA STREET - TORO STREET
DESIGNED BY:	JAV
DRAWN BY:	SR
CHECKED BY:	
APPROVED BY:	
DATE:	4/19/01
CITY SPECIFICATION NO.	90156
SHEET NO.	19A of 24



SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. E558
	Install Sewer Manhole per std. 6610
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Install Standard fire hydrant assembly per Std. 6310.

City of
San Luis Obispo

REVISIONS:

Drawn By & Date
Record Drawing
Drawn By & Date

PROJECT TITLE:

WATER IMPROVEMENT PROJECT

SHEET TITLE:

**MORRO STREET
PACIFIC STREET - PISMO STREET**

DESIGNED BY:

JAV

DRAWN BY:

SR

CHECKED BY:

APPROVED BY:

DATE:

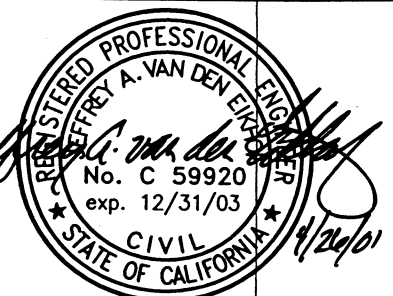
4/19/01

CITY SPECIFICATION NO.

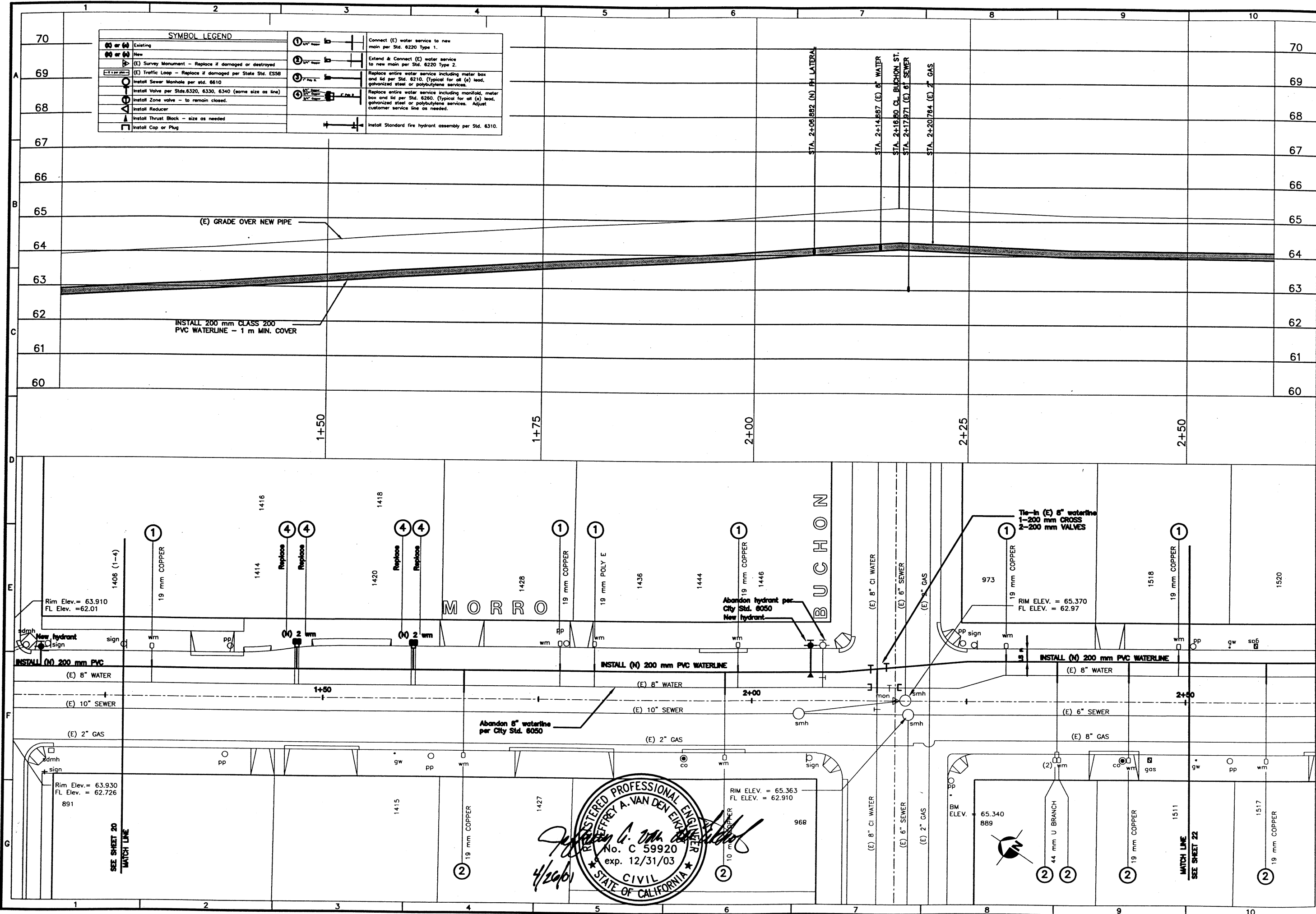
90156

SHEET NO.

20 of 24



SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. ES58
	Install Sewer Manhole per std. 6610
	Install Valve per State Std. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Install Standard fire hydrant assembly per Std. 6310.



city of
san luis obispo

REVISIONS:

Drawn By & Date	Record Drawing
Drawn By & Date	

North Arrow
 Scale: 1" = 40'

PROJECT TITLE:

WATER IMPROVEMENT PROJECT

SHEET TITLE:

MORRO STREET
PISMO STREET - BUCHON STREET

DESIGNED BY:

JAV

DRAWN BY:

SR

CHECKED BY:

APPROVED BY:

DATE:

4/19/01

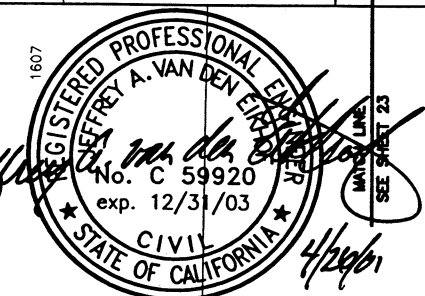
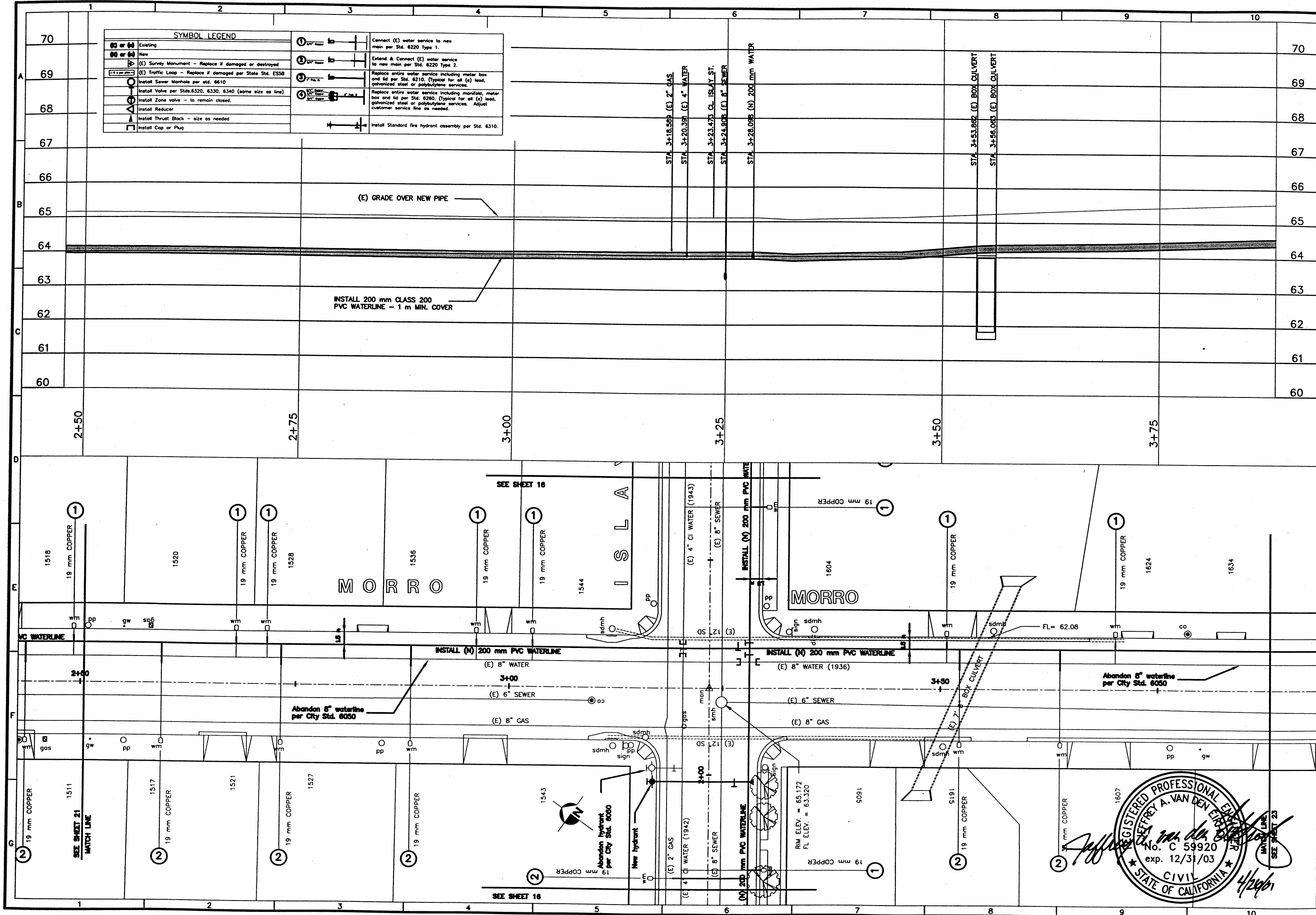
CITY SPECIFICATION NO.:

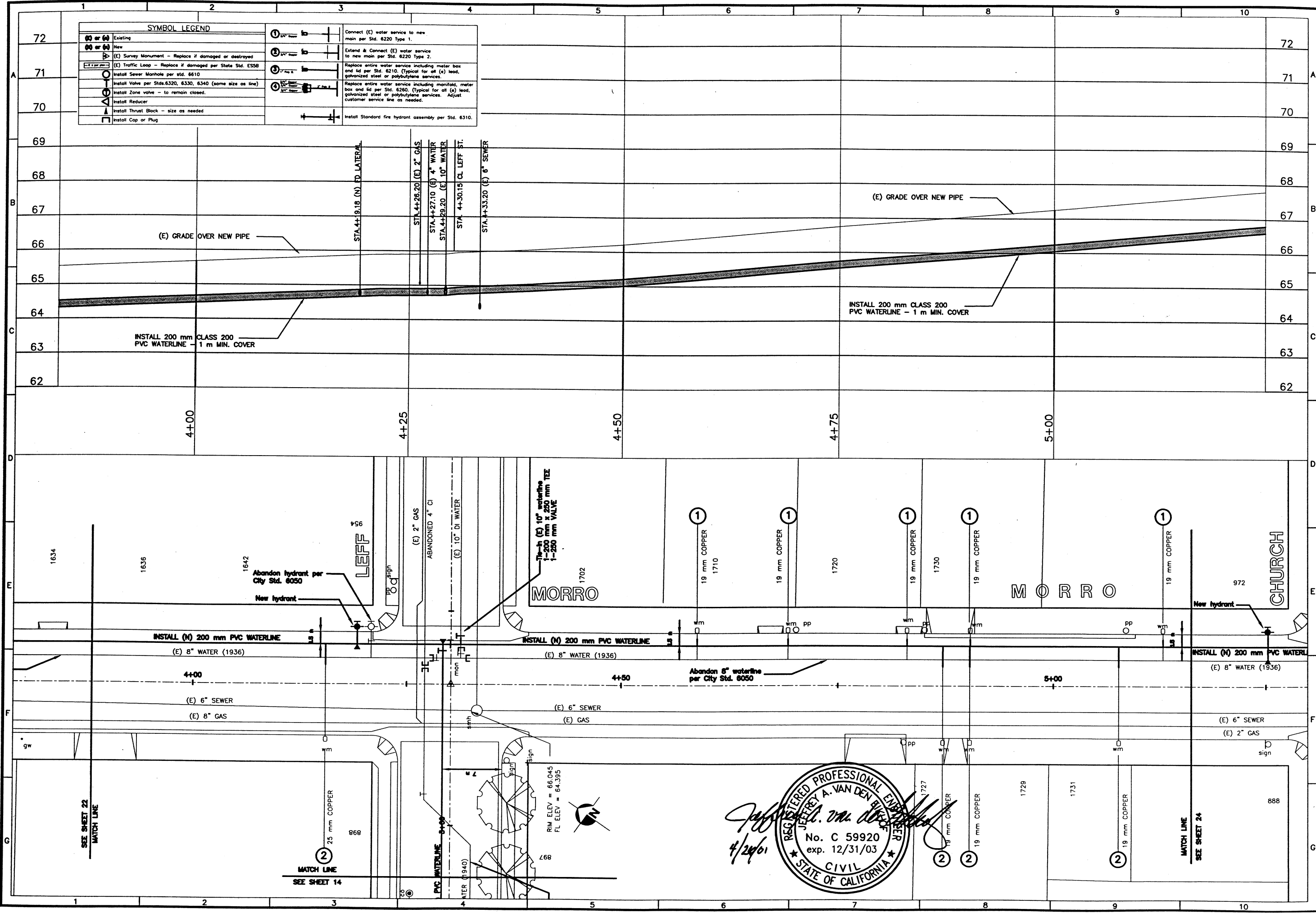
90156

SHEET NO.:

21 of 24

SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. ESSB
	Install Sewer Manhole per std. 6610
	Install Valve per Stds. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Install Standard fire hydrant assembly per Std. 6310.
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.





SYMBOL LEGEND	
	Existing
	New
	(E) Survey Monument - Replace if damaged or destroyed
	(E) Traffic Loop - Replace if damaged per State Std. ESSB
	Install Sewer Manhole per std. 6610
	Install Valve per State Std. 6320, 6330, 6340 (same size as line)
	Install Zone valve - to remain closed.
	Install Reducer
	Install Thrust Block - size as needed
	Install Cap or Plug
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.

city of
san luis obispo

REVISIONS:

Drawn By & Date

Record Drawing

Drawn By & Date

Metric Scale:

1" = 40'

SCALE

PROJECT TITLE:

WATER IMPROVEMENT PROJECT

SHEET TITLE:

MORRO STREET
ISLAY STREET - CHURCH STREET

DESIGNED BY:

JAV

DRAWN BY:

SR

CHECKED BY:

APPROVED BY:

DATE:

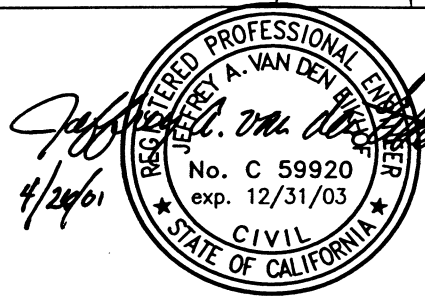
4/19/01

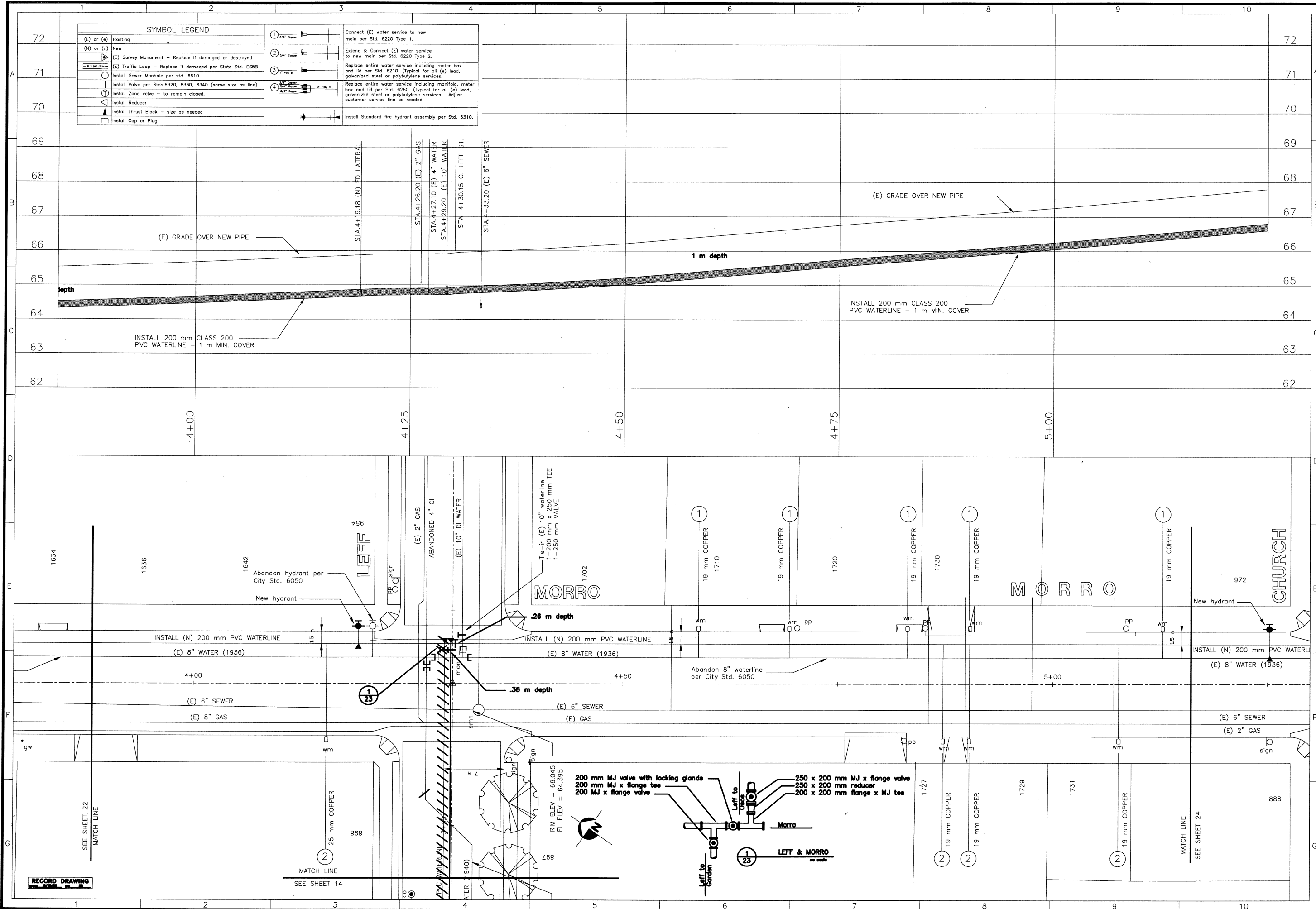
CITY SPECIFICATION NO.

90156

SHEET NO.

23 of 24





SYMBOL LEGEND	
(E) or (e) Existing	
(N) or (n) New	
 (E) Survey Monument – Replace if damaged or destroyed	
 (E) Traffic Loop – Replace if damaged per State Std. ESSB	
 Install Sewer Manhole per std. 6610	
 Install Valve per Stds. 6320, 6330, 6340 (same size as line)	
 Install Zone valve – to remain closed.	
 Install Reducer	
 Install Thrust Block – size as needed	
 Install Cap or Plug	
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.

city of

san luis obispo

REVISIONS:

Drawn By & Date

Record Drawing

Drawn By & Date

Scale

PROJECT TITLE:

DESIGNED BY:

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE:

CITY SPECIFICATION NO.

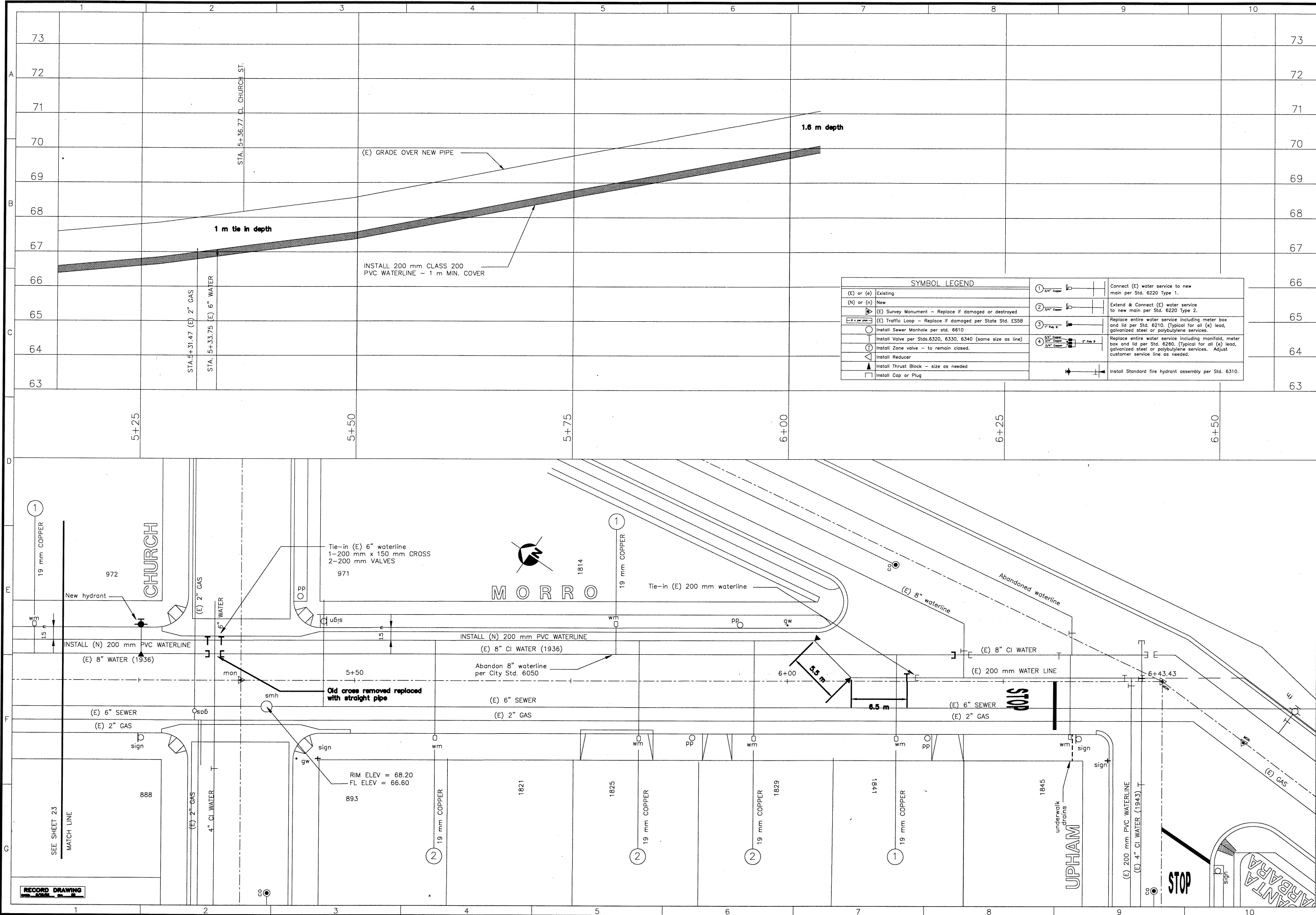
SHEET NO.

WATER IMPROVEMENT PROJECT

MORRO STREET

ISLAY STREET - CHURCH STREET

23A of 24



SYMBOL LEGEND	
(E) or (e) Existing	1 3/4" Copper
(N) or (n) New	2 3/4" Copper
(E) Survey Monument - Replace if damaged or destroyed	3 1" Poly B
(E) Traffic Loop - Replace if damaged per State Std. ES5B	4 3/4" Copper
Install Sewer Manhole per std. 6610	5 3/4" Copper
Install Valve per Stds. 6320, 6330, 6340 (same size as line)	6 1" Poly B
Install Zone valve - to remain closed.	
Install Reducer	
Install Thrust Block - size as needed	
Install Cap or Plug	
	Connect (E) water service to new main per Std. 6220 Type 1.
	Extend & Connect (E) water service to new main per Std. 6220 Type 2.
	Replace entire water service including meter box and lid per Std. 6210. (Typical for all (e) lead, galvanized steel or polybutylene services.
	Replace entire water service including manifold, meter box and lid per Std. 6260. (Typical for all (e) lead, galvanized steel or polybutylene services. Adjust customer service line as needed.
	Install Standard fire hydrant assembly per Std. 6310.

Professional Engineer
No. C 59920
Exp. 12/31/23
Civil
State of CA

city of

san luis obispo

REVISIONS:
Drawn By & Date
Record Drawing
Drawn By & Date
Scale: 1"=40'
H: 1:400
V: SCALE

WATER IMPROVEMENT PROJECT

MORRO STREET
CHURCH STREET - UPHAM STREET

DESIGNED BY: JAV
DRAWN BY: SR
CHECKED BY:
APPROVED BY:
DATE: 4/18/01
CITY SPECIFICATION NO. 90156
SHEET NO. 24A of 24