

SANITARY SEWER IMPROVEMENTS

OAKWOOD KNOLLS, CHAPEL HILL AND SKYVIEW/HIBROOK

TREATMENT PLANTS

BOROUGH OF OAKLAND

BERGEN COUNTY, NEW JERSEY

BOROUGH OF OAKLAND

MAYOR
LINDA H. SCHWAGER

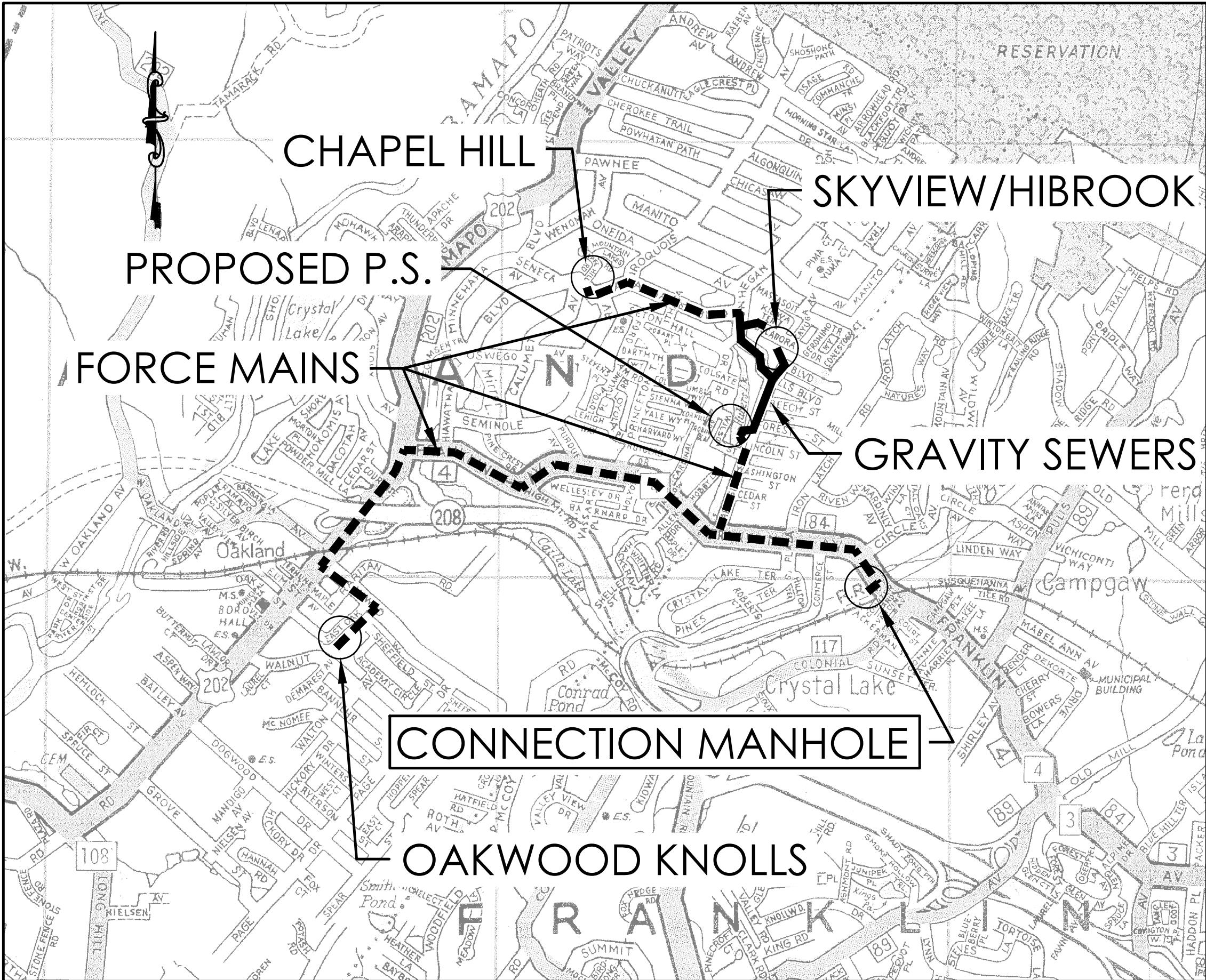
COUNCIL MEMBERS
LEWIS LEVY, COUNCIL PRESIDENT
JOHN P. BIALE
GRANT VAN ECK
ROBERT KNAPP
PAT PIGNATELLI
RUSSELL TALAMINI

BOROUGH ADMINISTRATOR
RICHARD S. KUNZE

BOROUGH CLERK
LISA M. DUNCAN

BOROUGH ATTORNEY
BRIAN M. CHEWCASKIE, ESQ.

BOROUGH ENGINEER
KEVIN J. BOSWELL, P.E.

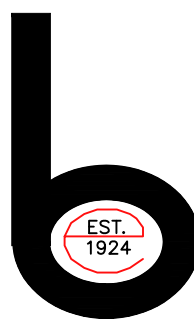


PROJECT LOCATION MAP
N.T.S.

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	KEY MAP
3-18	OAKWOOD KNOLLS CONSTRUCTION PLANS
19-23	CHAPEL HILL CONSTRUCTION PLANS
24-26	LAKESIDE BLVD. CONSTRUCTION PLANS
27	TUSCARORA EASEMENT PROPOSED GRAVITY SEWER
28	PROPOSED LAKESIDE BLVD. PUMPING STATION
29	OAKWOOD KNOLLS TREATMENT PLANT DEMOLITION PLAN
30	CHAPEL HILL TREATMENT PLANT DEMOLITION PLAN
31	SKYVIEW TREATMENT PLANT DEMOLITION PLAN
32-37	ELECTRICAL PLANS
38-42	CONSTRUCTION DETAILS
43-45	TRAFFIC AND PROTECTION
46	SOIL EROSION AND SEDIMENT CONTROL PLANS AND DETAILS

PUBLIC UTILITIES

GAS: PUBLIC SERVICE ELECTRIC AND GAS (GAS)
ELECTRIC: ORANGE AND ROCKLAND UTILITIES
CABLE: ALTICE USA (CABLEVISION)
TELEPHONE: VERIZON
WATER: OAKLAND DEPARTMENT OF PUBLIC WORKS

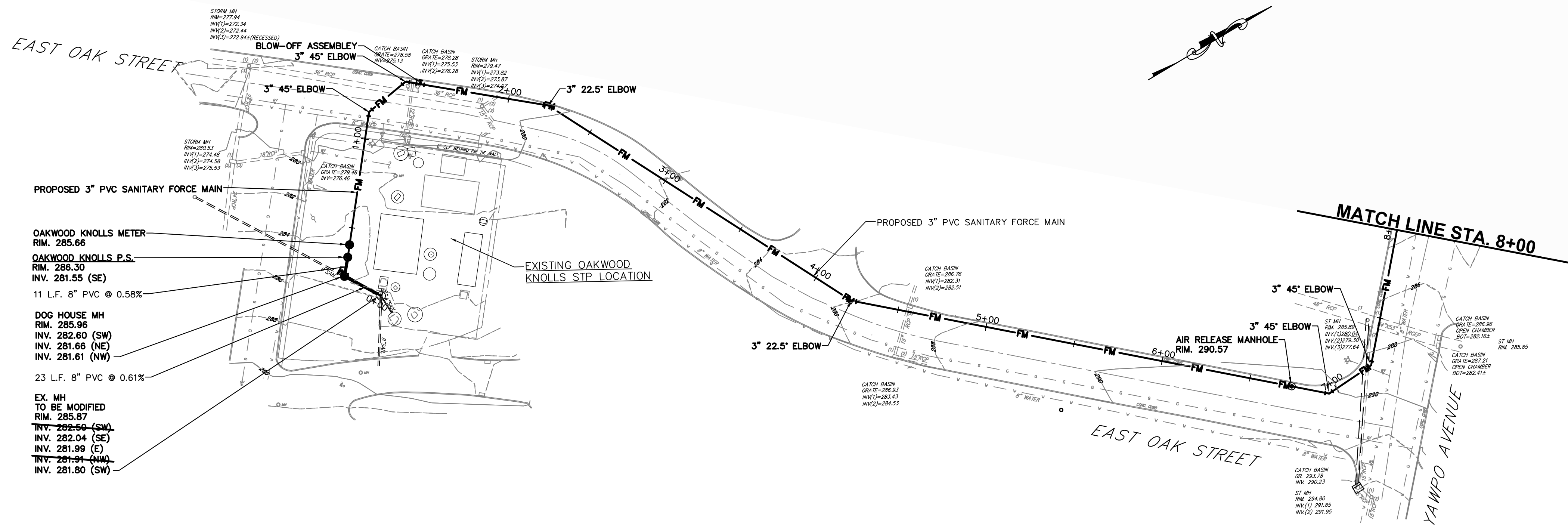


Plans prepared by:
BOSWELL ENGINEERING
330 PHILLIPS AVENUE
SOUTH HACKENSACK, NEW JERSEY 07606
Tel (201) 641-0770 . Fax (201) 641-1831
NJ Certificate of Authorization No. 24GA27958000

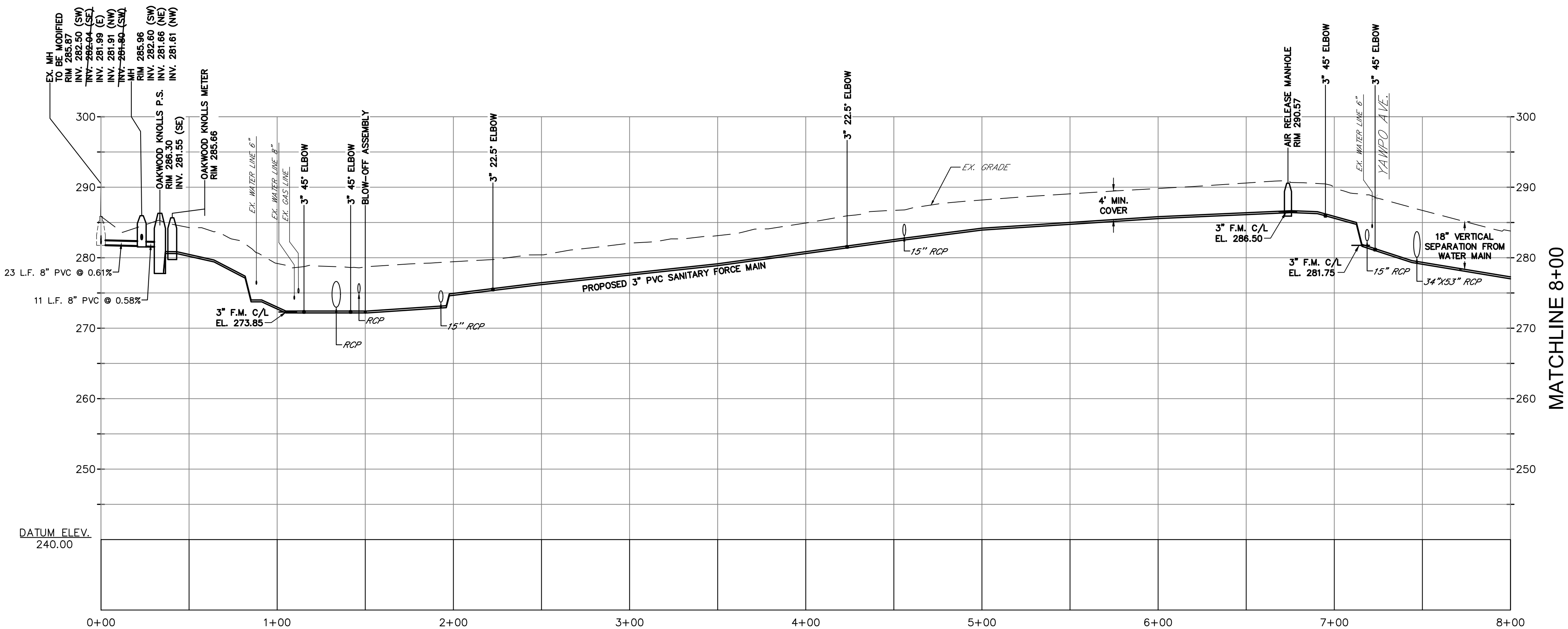
KEVIN J. BOSWELL
PROFESSIONAL ENGINEER, N.J. LIC. 32943

FINAL FOR SEWER DESIGN

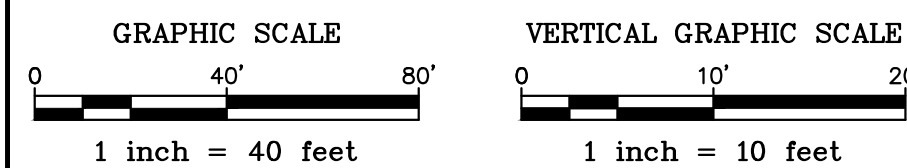
JOB NO. OK-1653
SHEET 1 OF 46



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



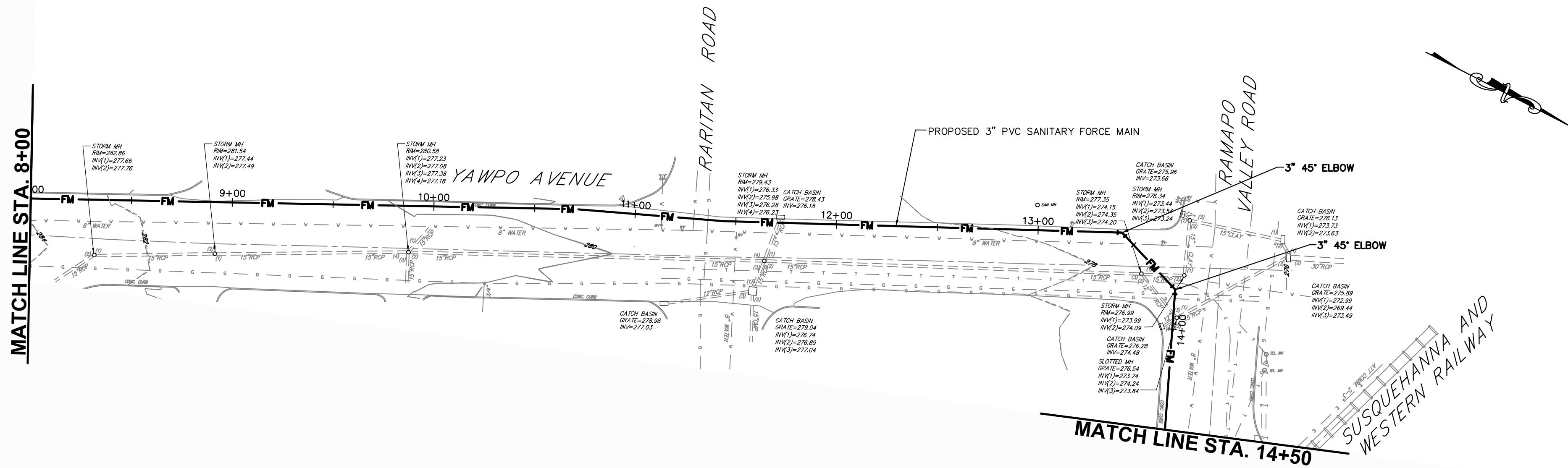
FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

Boswell Engineering
ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

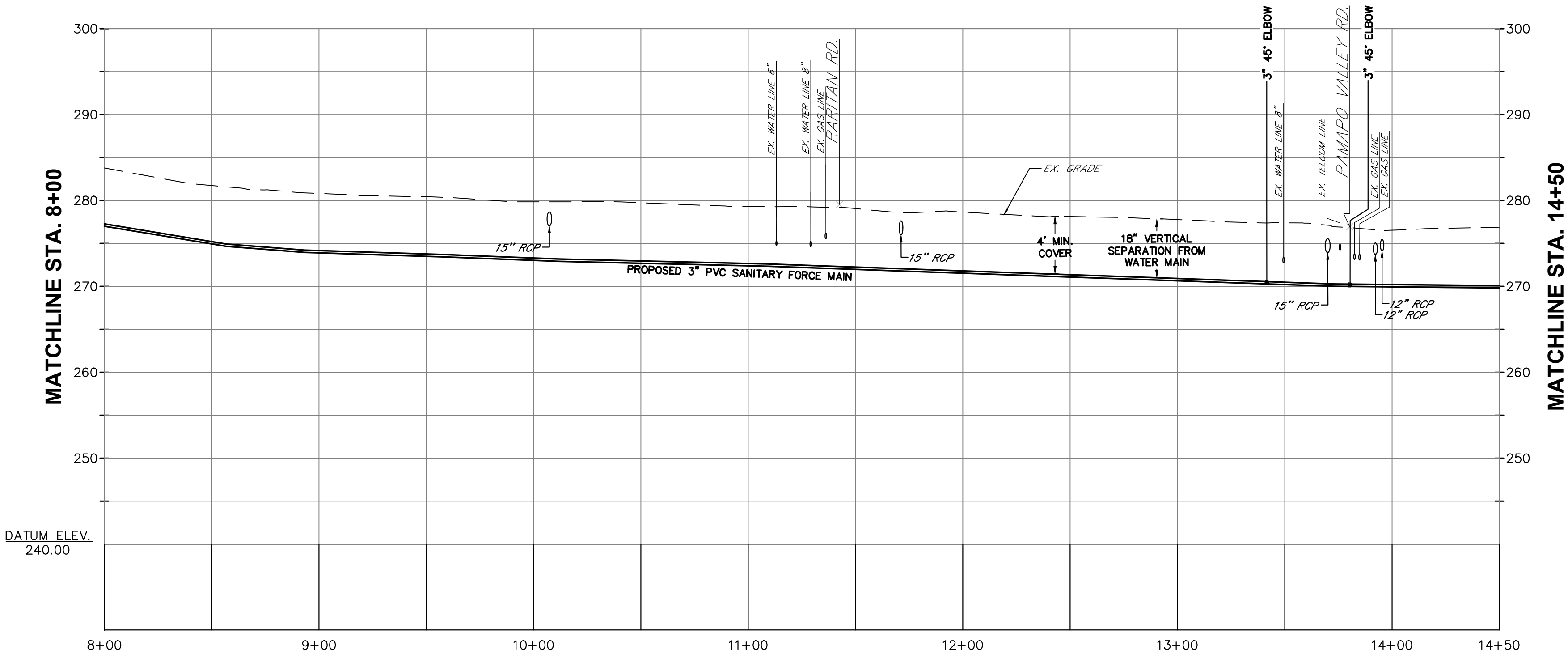
KEVIN J. BOSWELL
Kevin J. Boswell
PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ



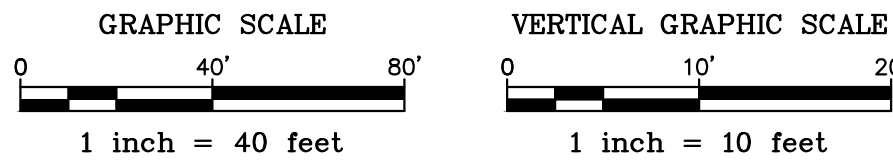
PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'

NOTE:
STATE ROADWAY AND HIGHWAY LIMITS FOR THE ENTIRE LENGTH OF RAMAPO VALLEY ROAD (RT. 202) AND THE CROSSING OF STATE HIGHWAY RT. 287.



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'

FINAL FOR SEWER DESIGN



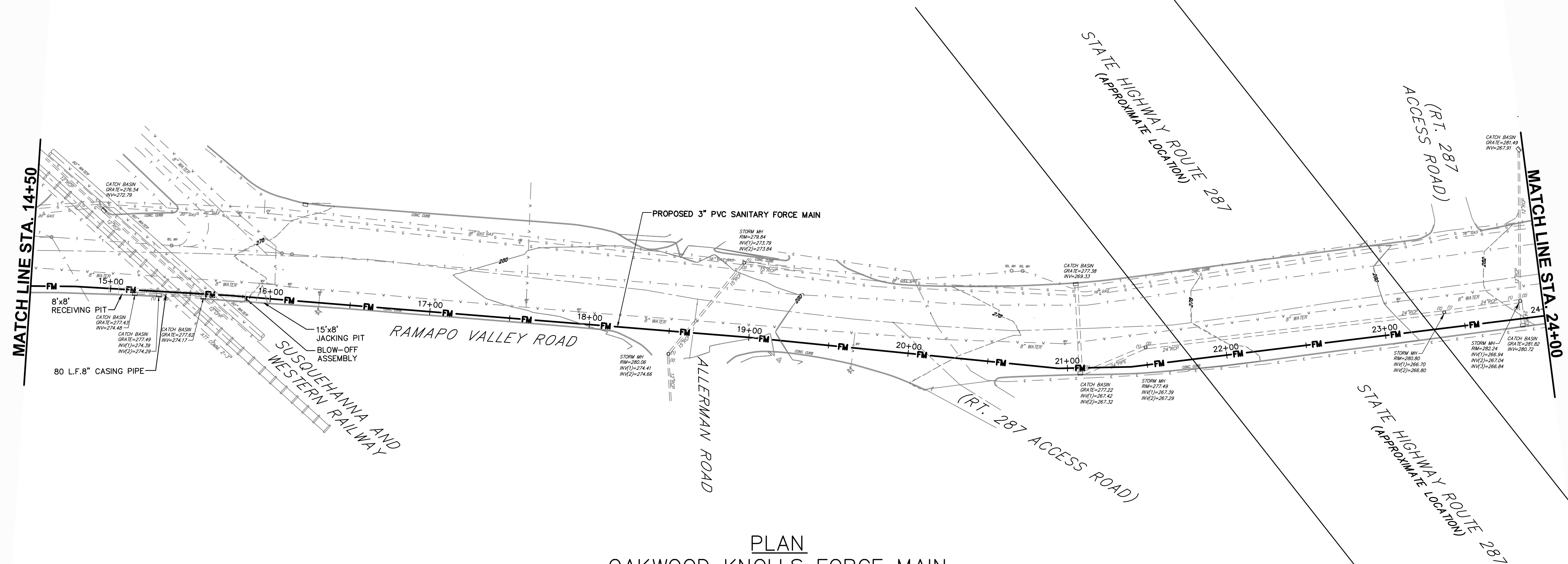
NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

Boswell Engineering
EST. 1924
ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

KEVIN J. BOSWELL

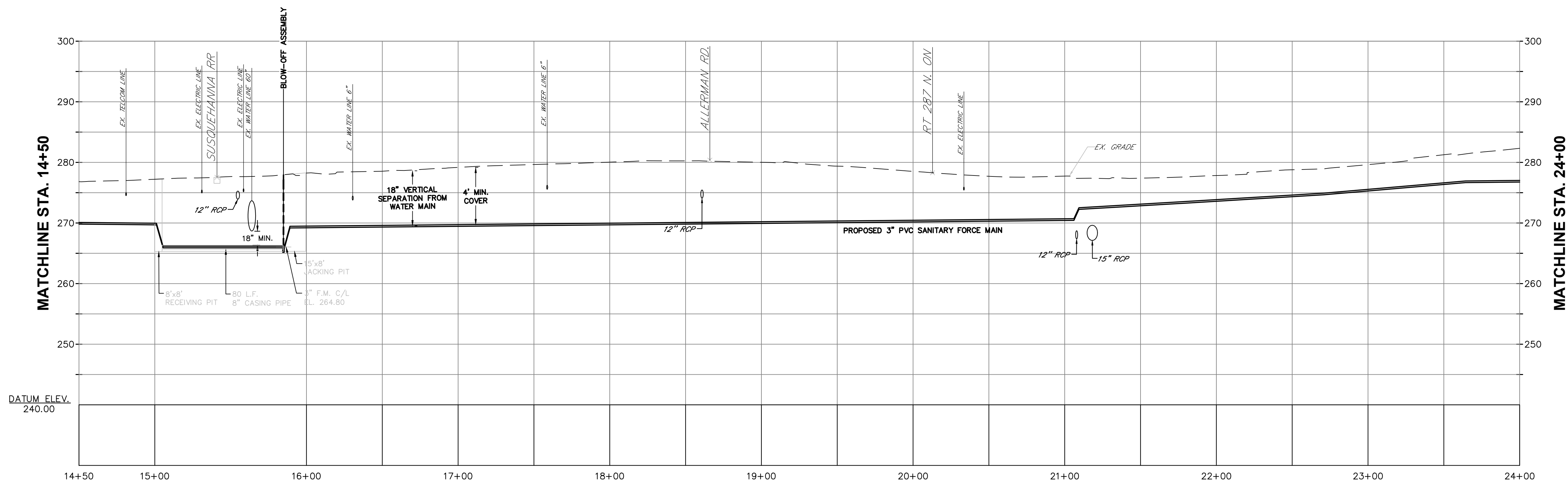
Kevin J. Boswell

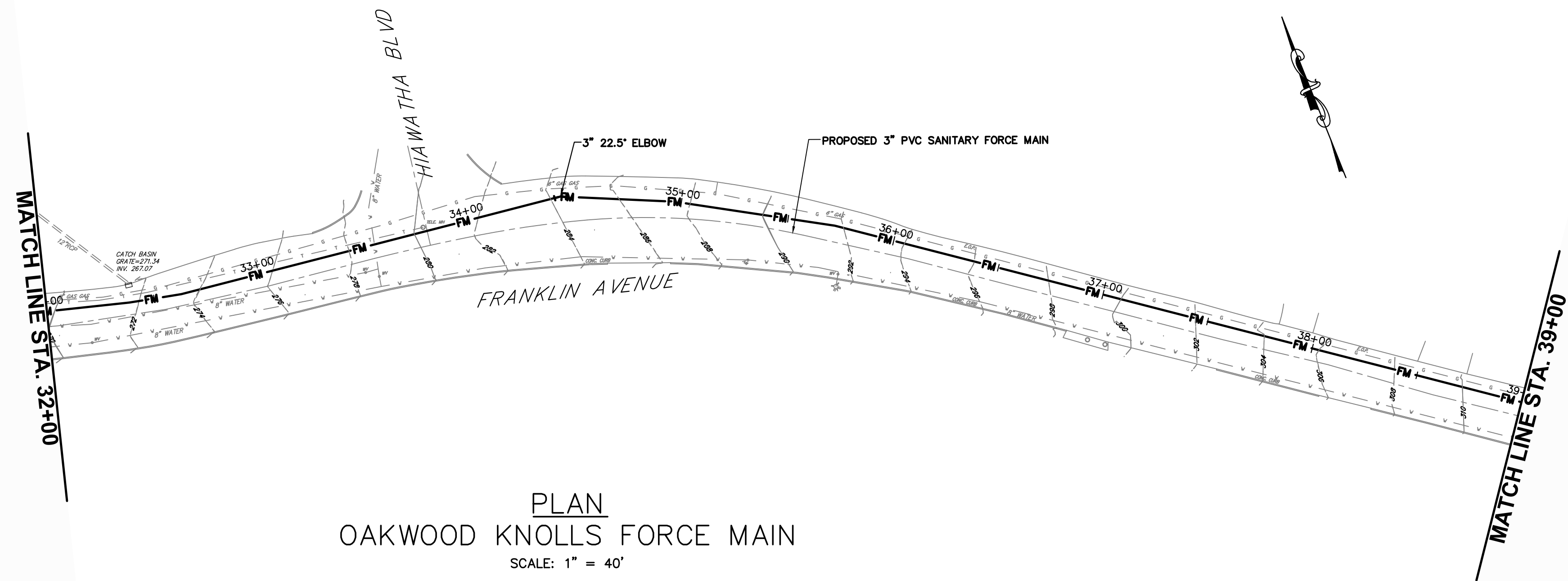
PROFESSIONAL ENGINEER



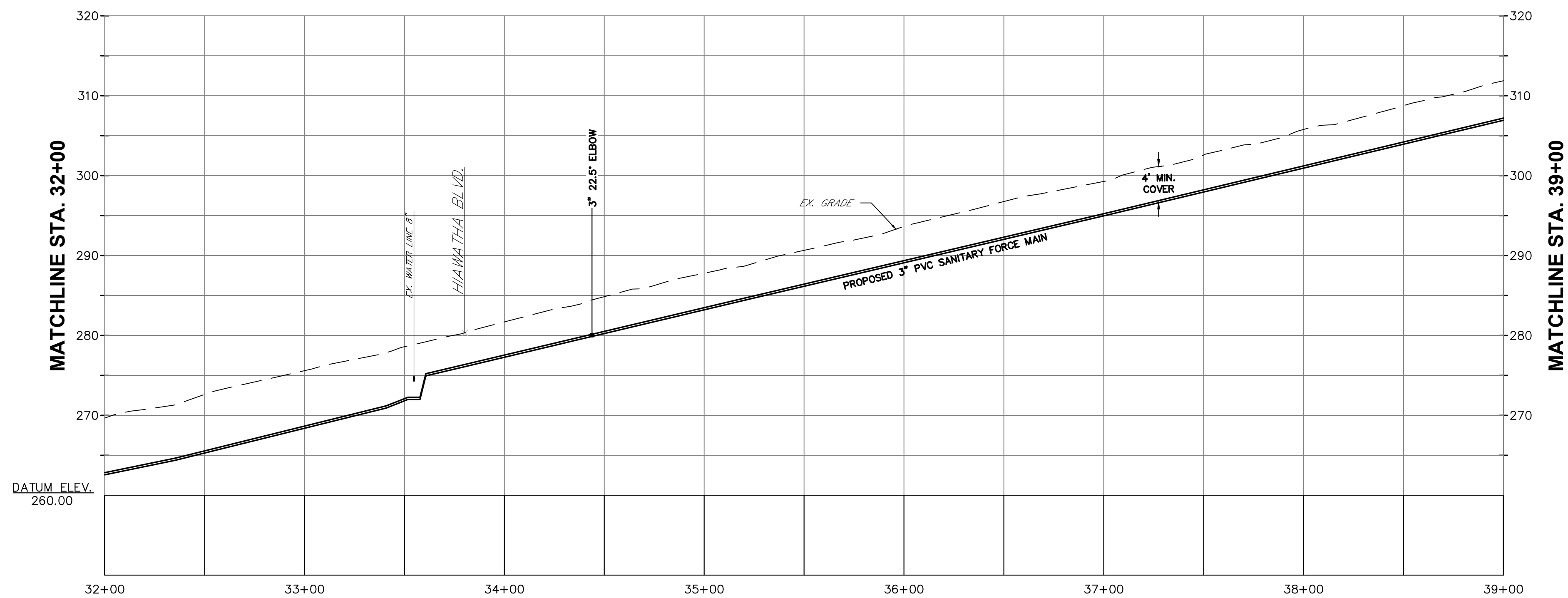
PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'

NOTE:
STATE ROADWAY AND HIGHWAY LIMITS OF THE ENTIRE LENGTH OF RAMAPO VALLEY ROAD (RT. 202) AND THE CROSSING OF STATE HIGHWAY RT. 287.

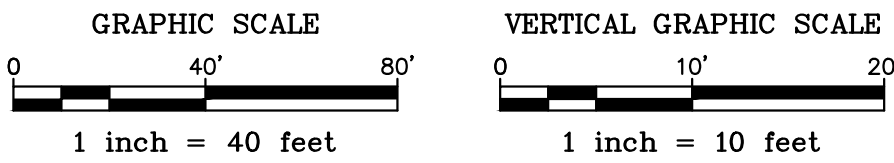




PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

EST. 1924

BOSWELL ENGINEERING

ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

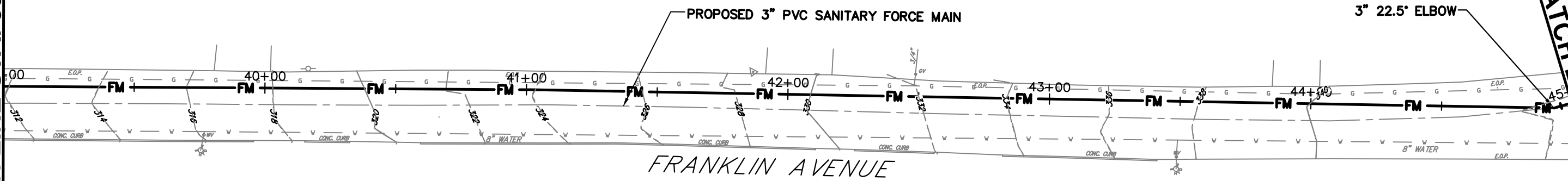
KEVIN J. BOSWELL

PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ

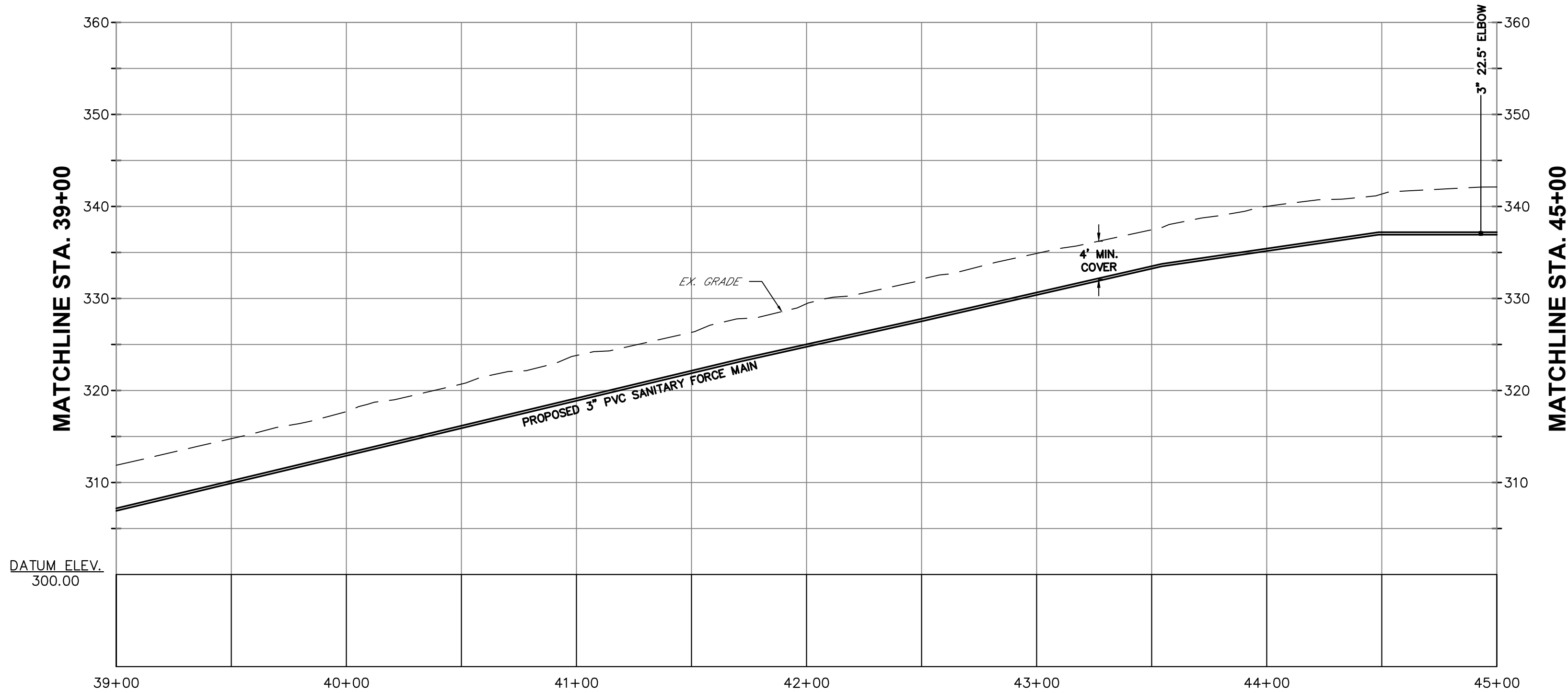
PROFESSIONAL ENGINEER N.J. LIC. 44832

MATCHLINE STA. 39+00

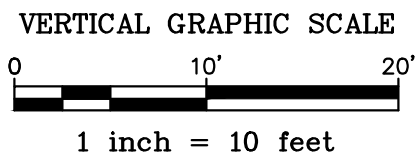
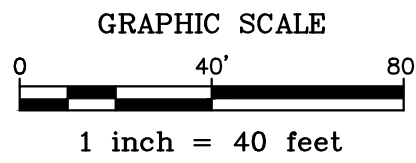


MATCHLINE STA. 45+00

PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORIZ. 1" = 40'
VERT. 1" = 10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY



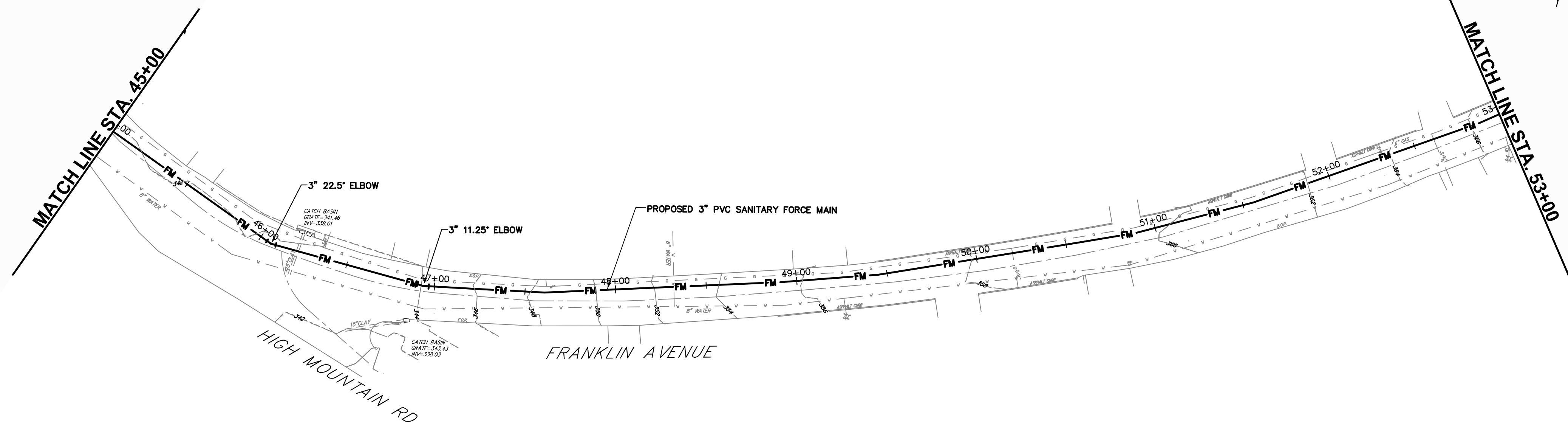
BOSWELL ENGINEERING
ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

KEVIN J. BOSWELL

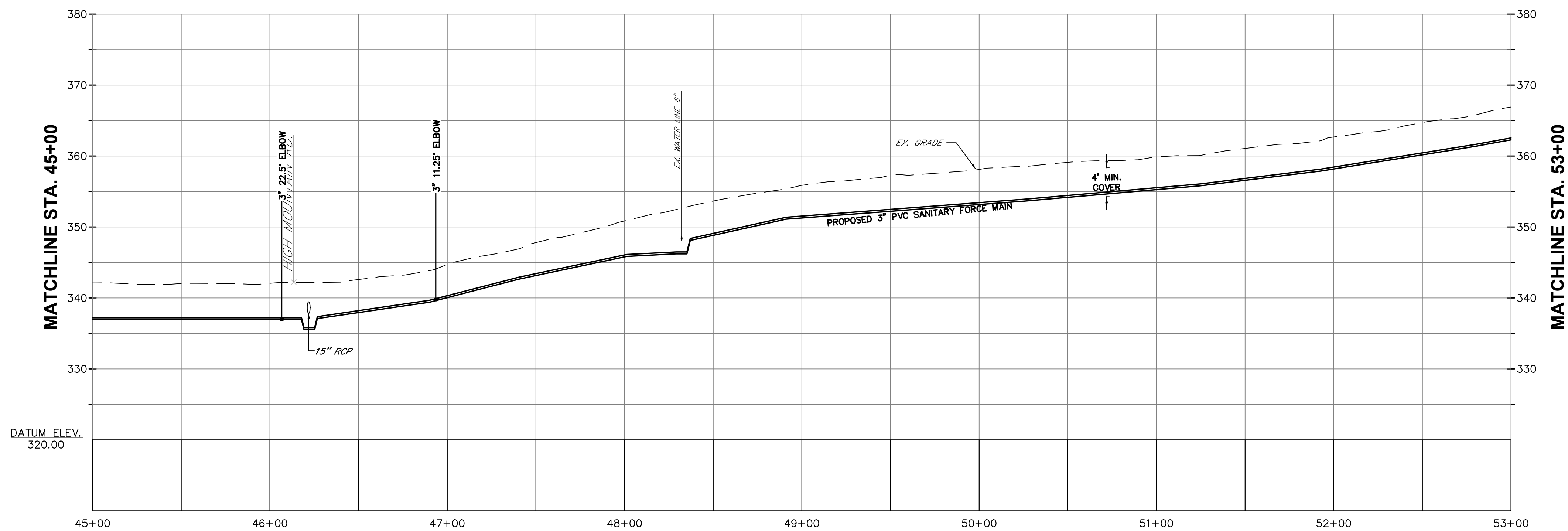
PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ

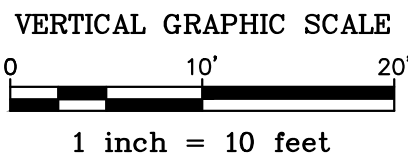
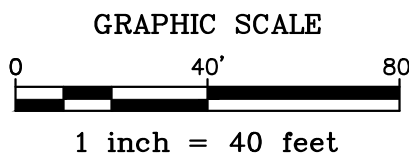
PROFESSIONAL ENGINEER N.J. LIC. 44832



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'

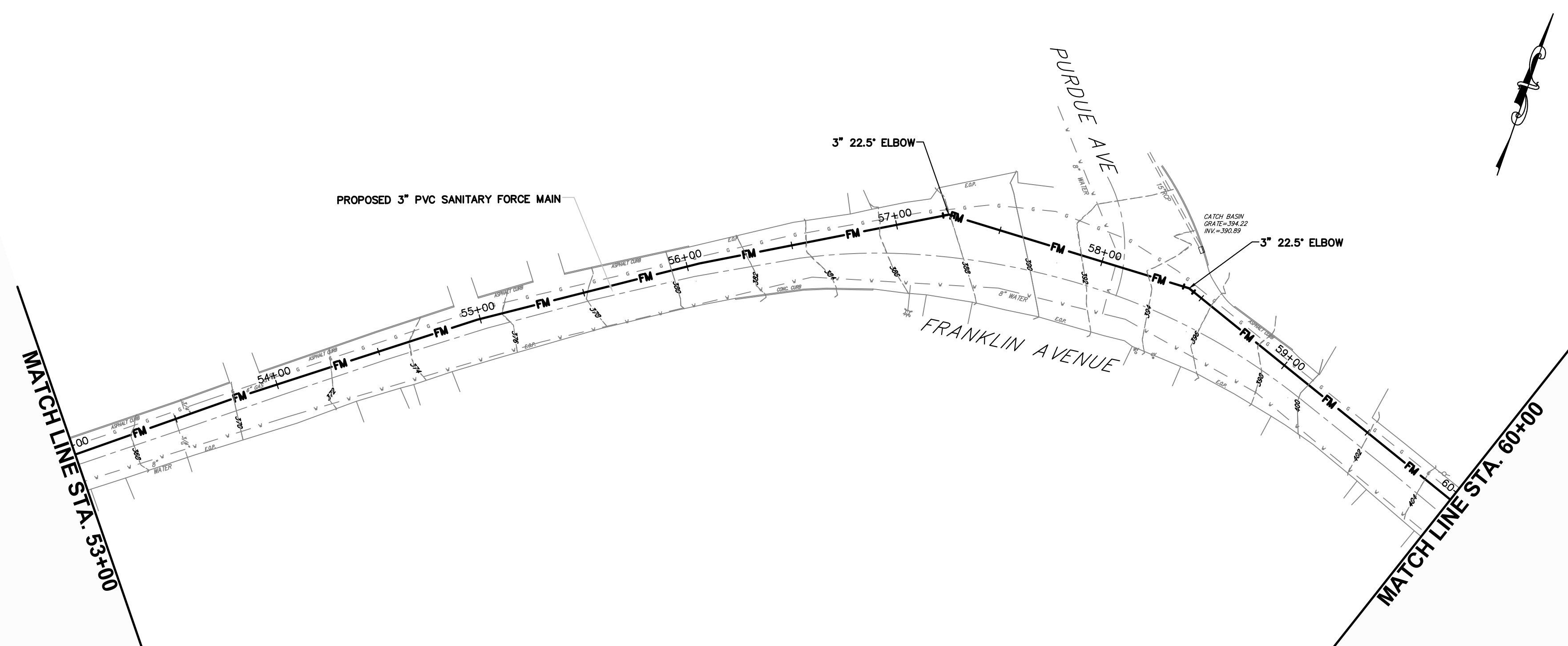


PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'

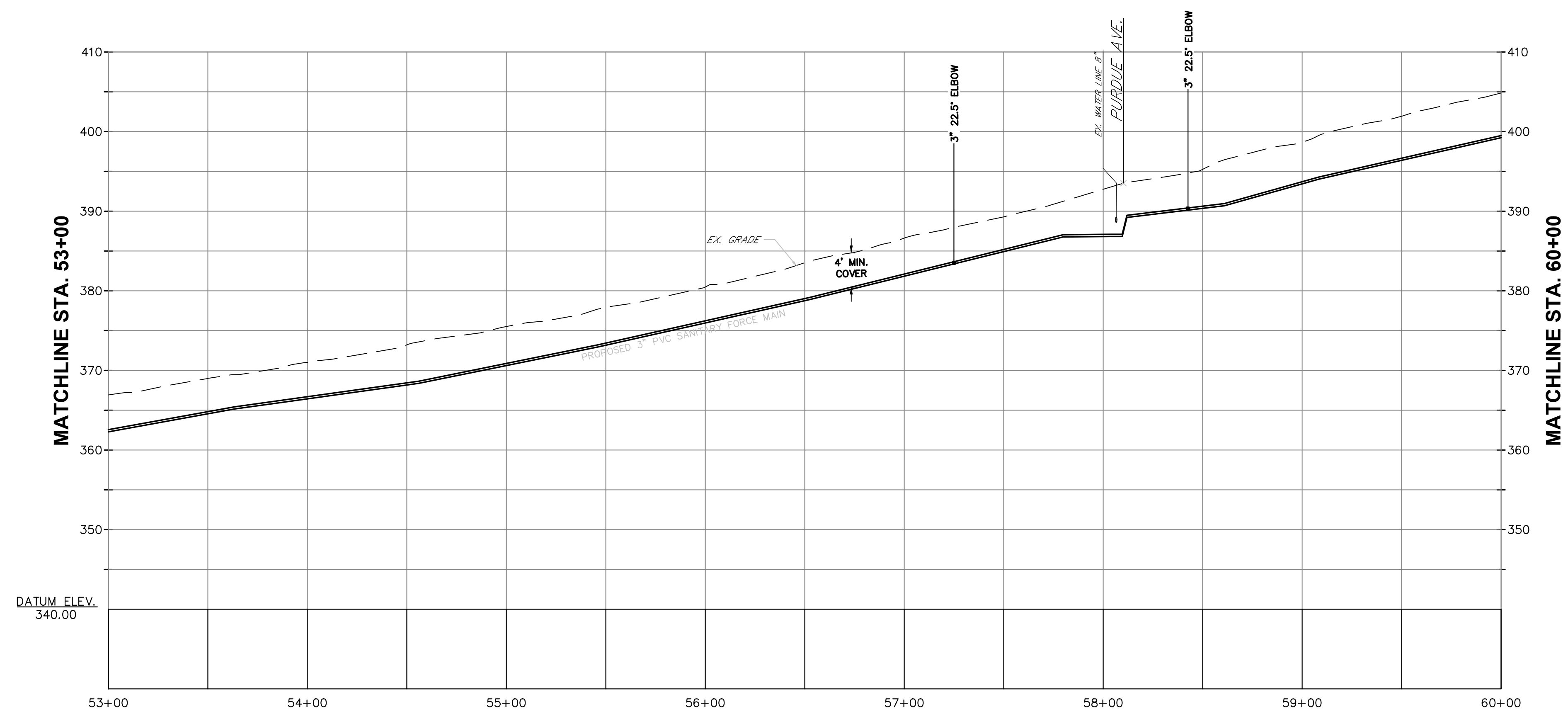


FINAL FOR SEWER DESIGN

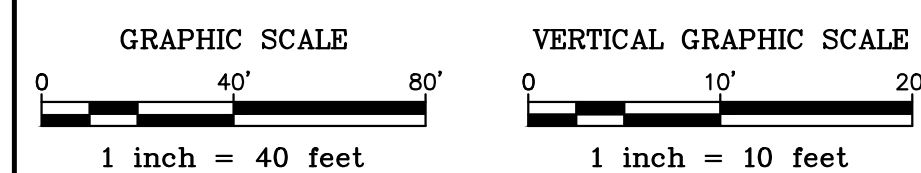
NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY	



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

EST. 1924

BOSWELL ENGINEERING

ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

KEVIN J. BOSWELL

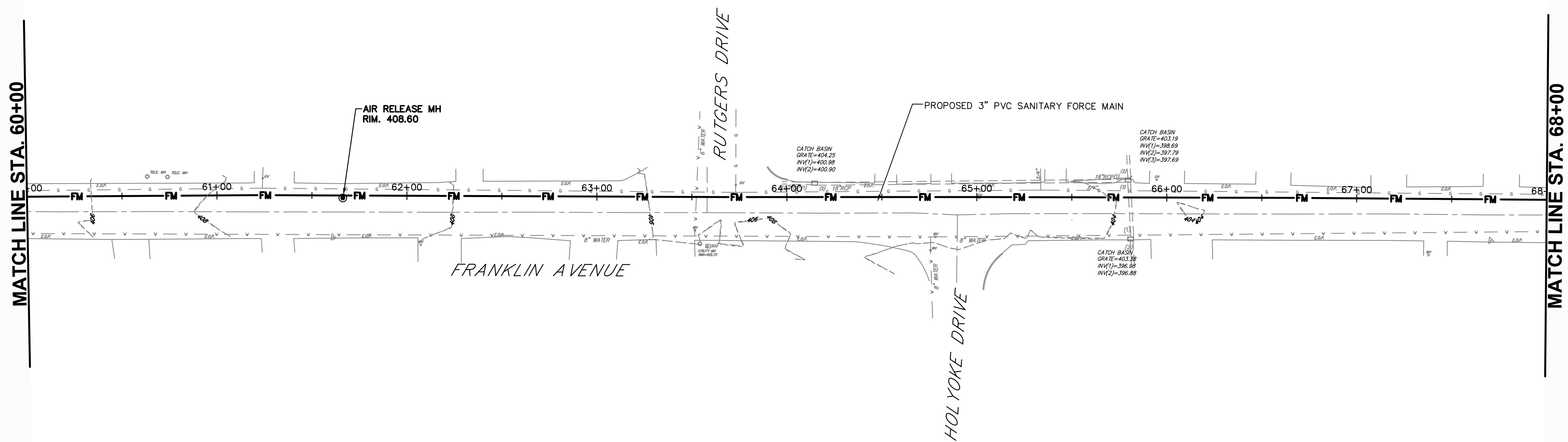
PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ

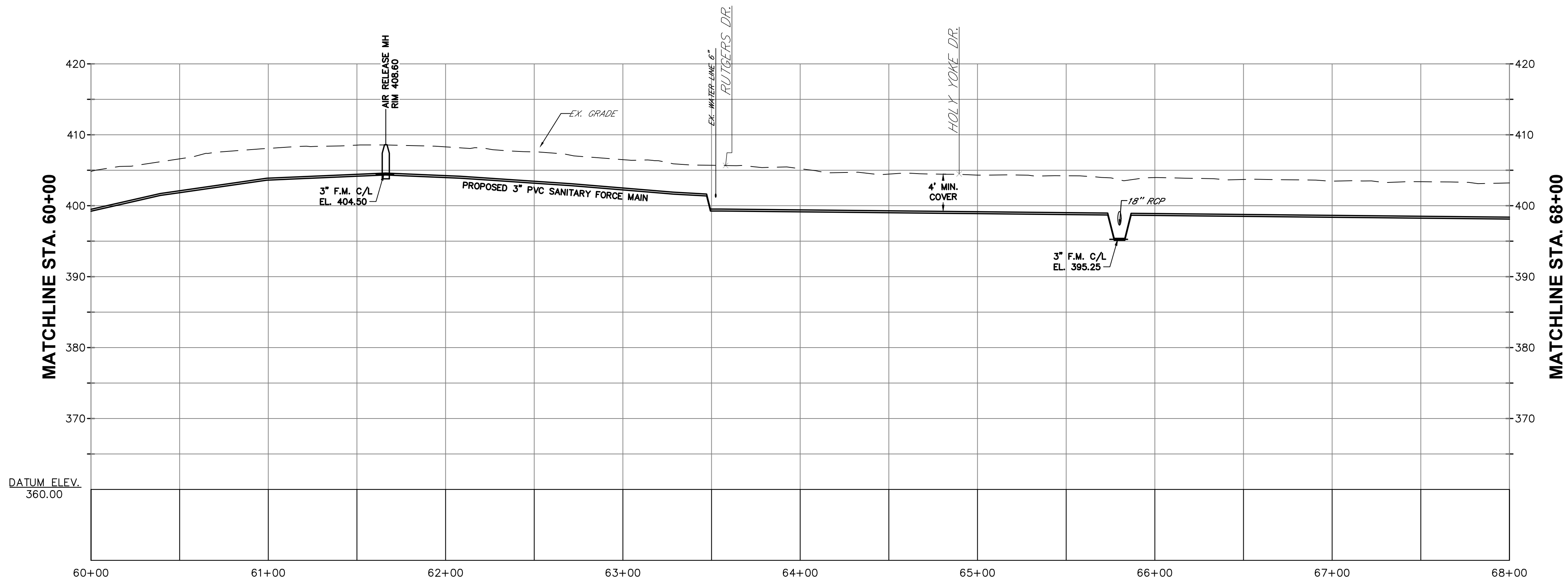
PROFESSIONAL ENGINEER N.J. LIC. 44832

SANITARY SEWER IMPROVEMENTS
OAKWOOD KNOLLS, CHAPEL HILL AND
SKYVIEW/HIBROOK TREATMENT PLANTS
OAKWOOD KNOLLS CONSTRUCTION PLAN-8
BERGEN COUNTY BOROUGH OF OAKLAND NEW JERSEY

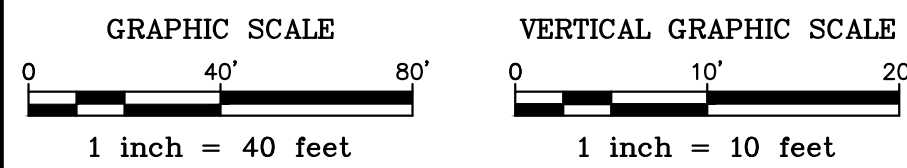
SURVEYED BY RR	DESIGNED BY AG	SCALE: AS SHOWN
----------------	----------------	-----------------



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY	



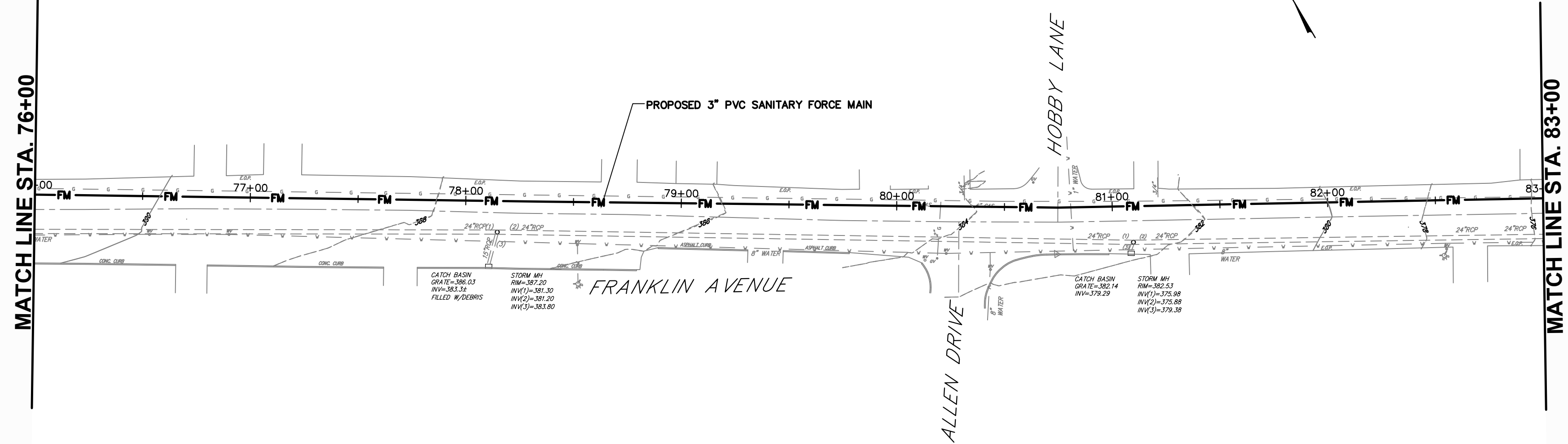
BOSWELL ENGINEERING

ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

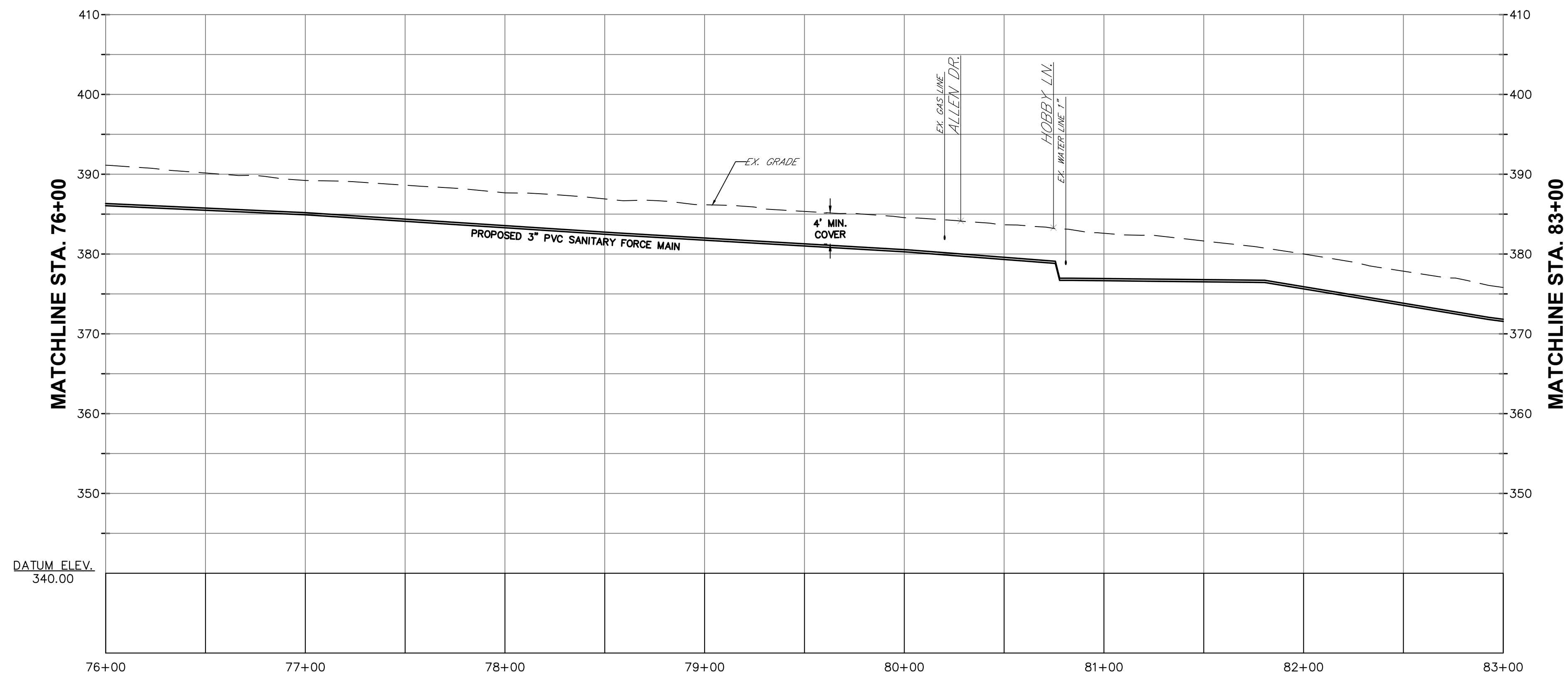
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

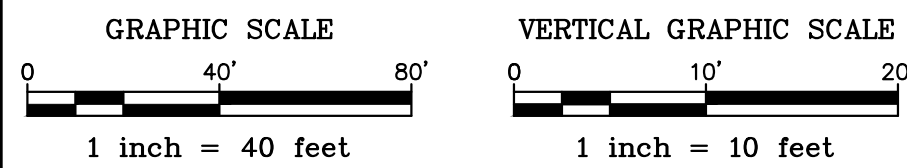
N.J. CERTIFICATE OF AUTHORIZATION No



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

EST. 1924

BOSWELL ENGINEERING

ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

KEVIN J. BOSWELL

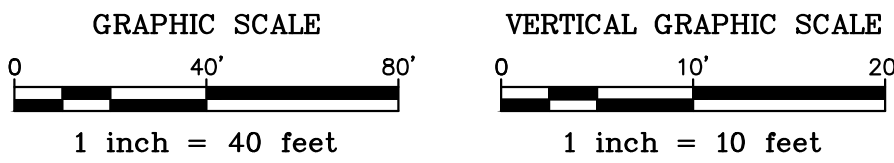
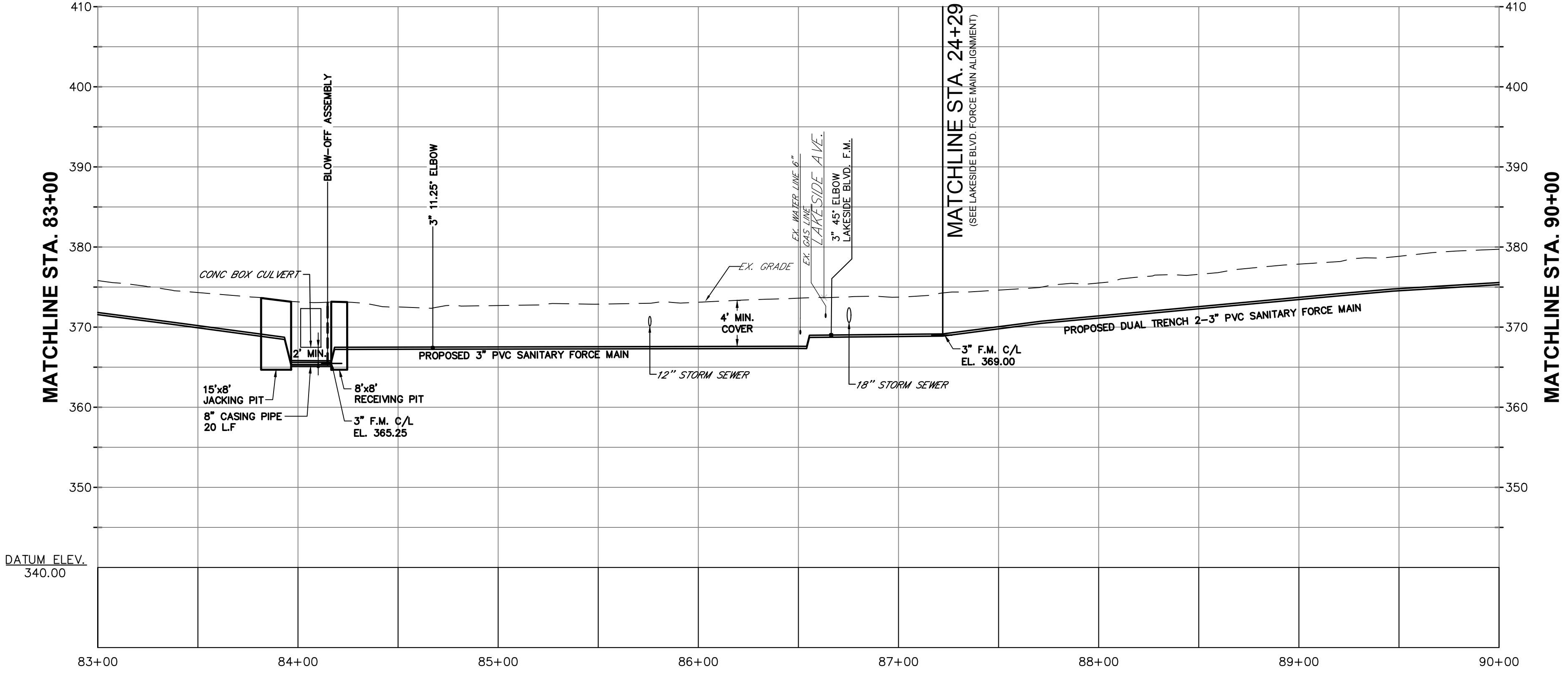
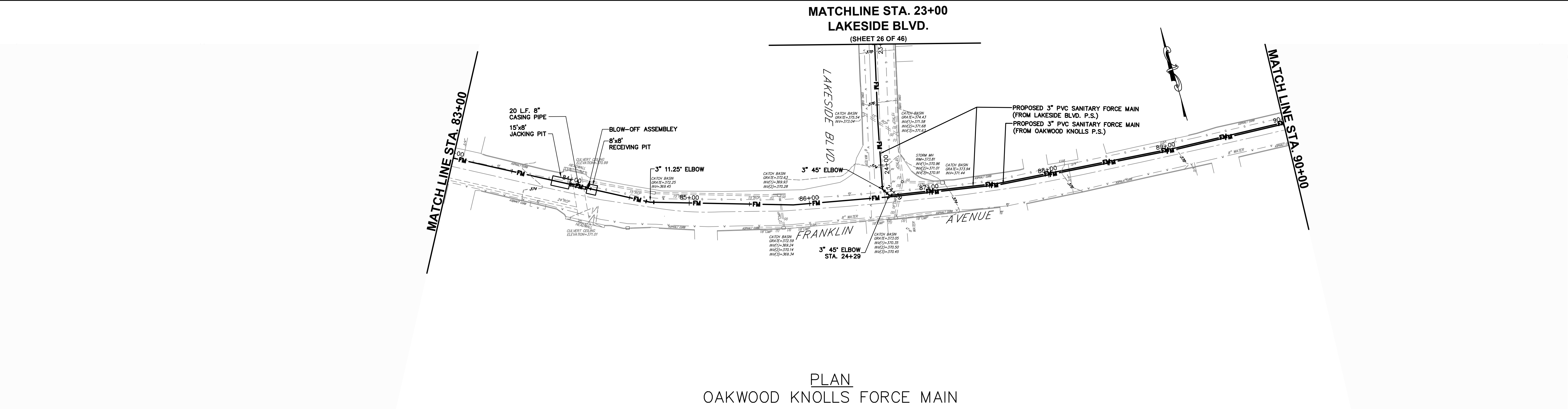
PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ

PROFESSIONAL ENGINEER N.J. LIC. 44832

SANITARY SEWER IMPROVEMENTS
OAKWOOD KNOLLS, CHAPEL HILL AND
SKYVIEW/HIBROOK TREATMENT PLANTS
OAKWOOD KNOLLS CONSTRUCTION PLAN-11

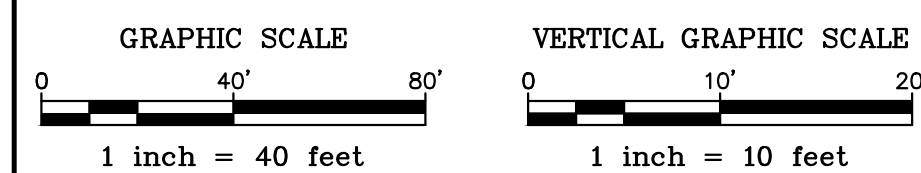
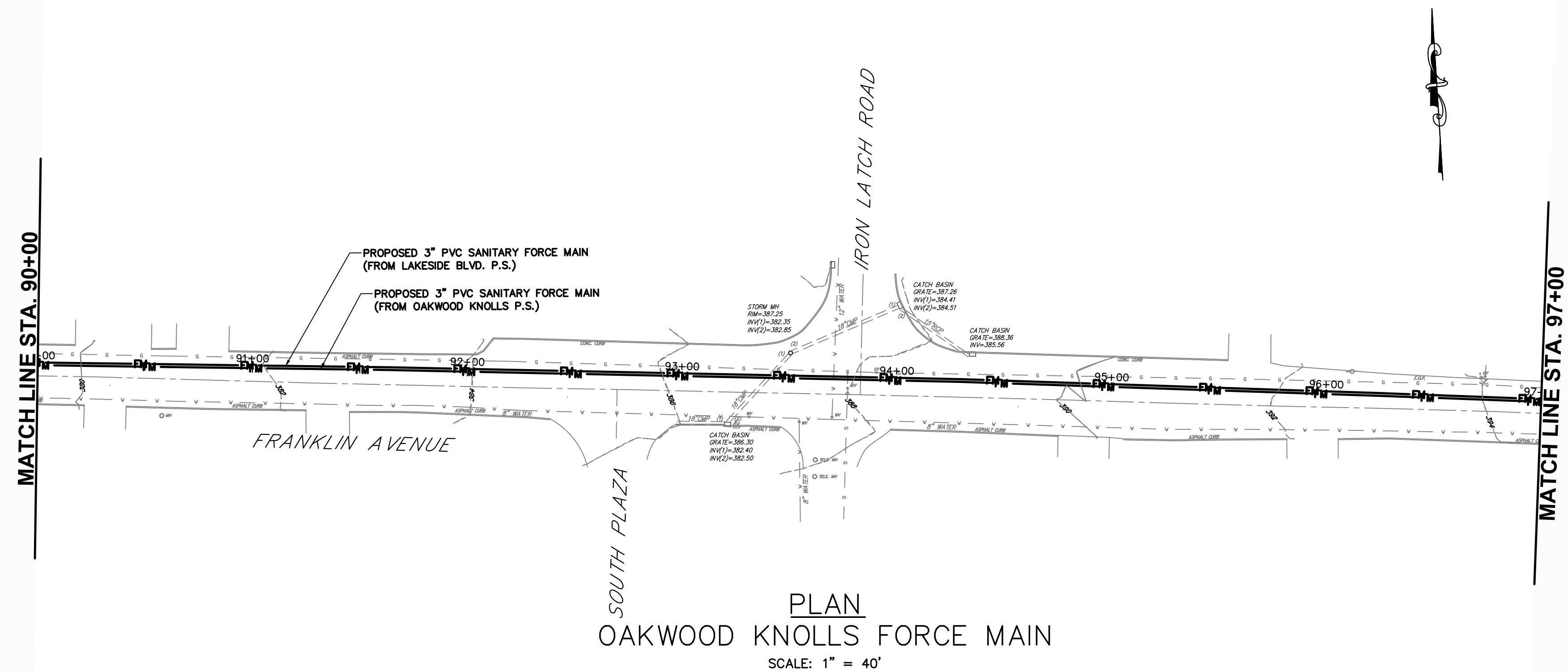
BERGEN COUNTY BOROUGH OF OAKLAND



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

BOSWELL ENGINEERING
ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000



NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

Boswell ENGINEERING
EST. 1924
ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

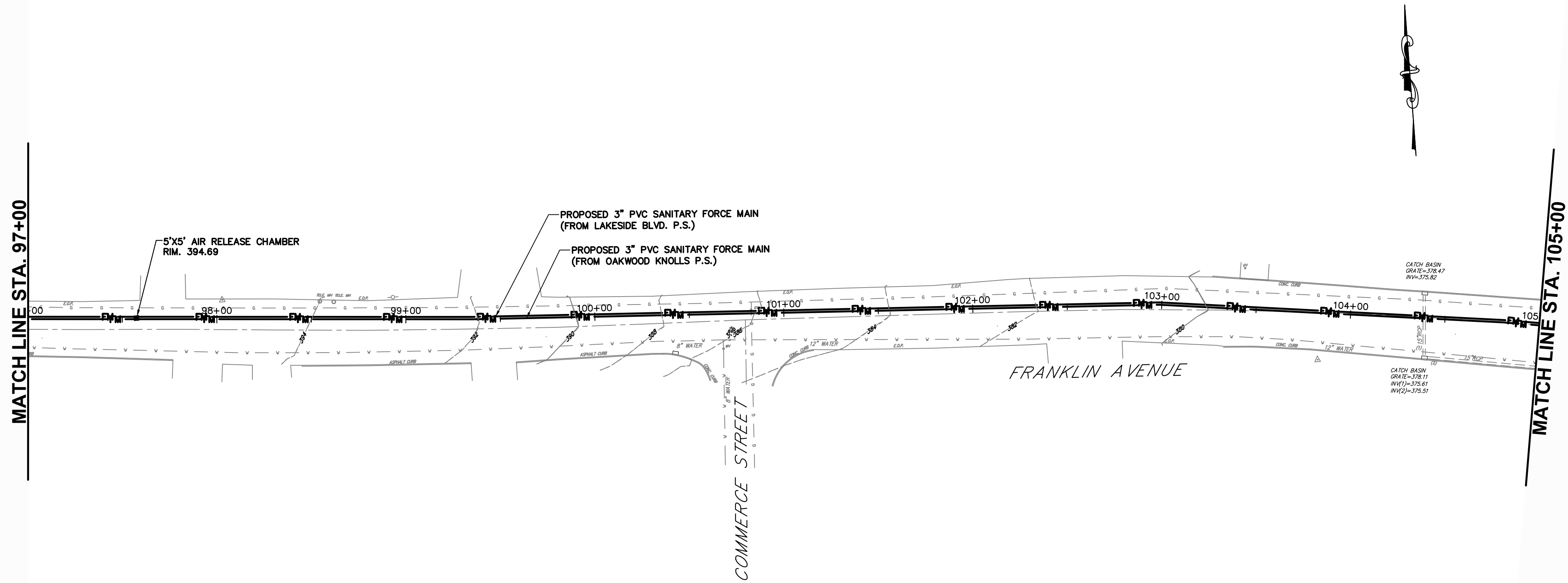
KEVIN J. BOSWELL
Kevin J. Boswell
PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ
PROFESSIONAL ENGINEER N.J. LIC. 44832

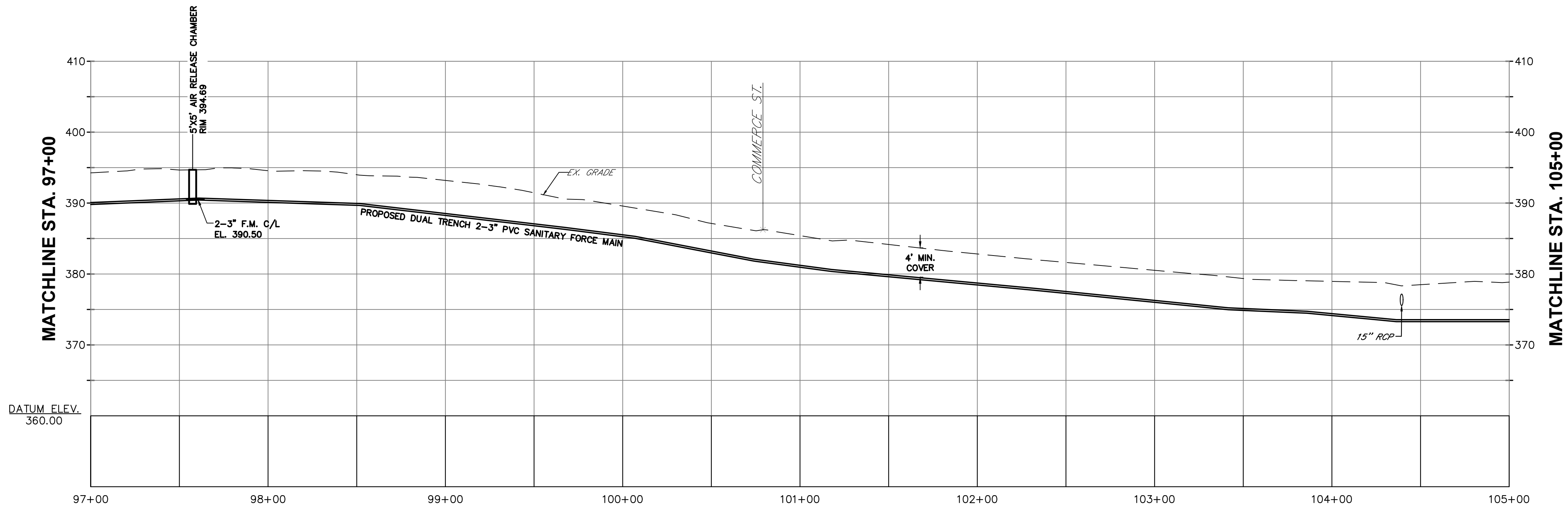
FINAL FOR SEWER DESIGN

SANITARY SEWER IMPROVEMENTS
OAKWOOD KNOLLS, CHAPEL HILL AND
SKYVIEW/HIBROOK TREATMENT PLANTS
OAKWOOD KNOLLS CONSTRUCTION PLAN-13
BERGEN COUNTY BOROUGH OF OAKLAND NEW JERSEY

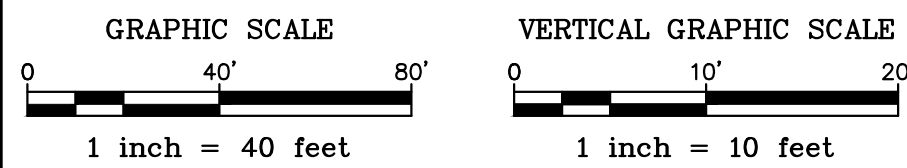
SURVEYED BY RR	DESIGNED BY AG	SCALE: AS SHOWN	JOB NO. OK-1653	DATE 4/24/20
DRAWN BY JMM				



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY



BOSWELL ENGINEERING

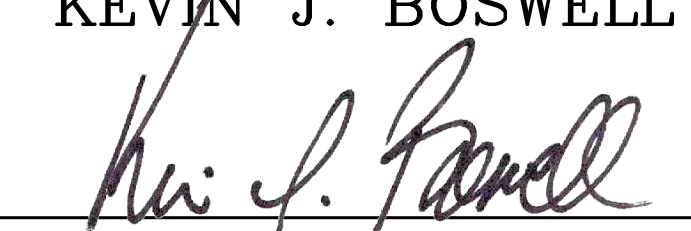
ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

KEVIN J. BOSWELL



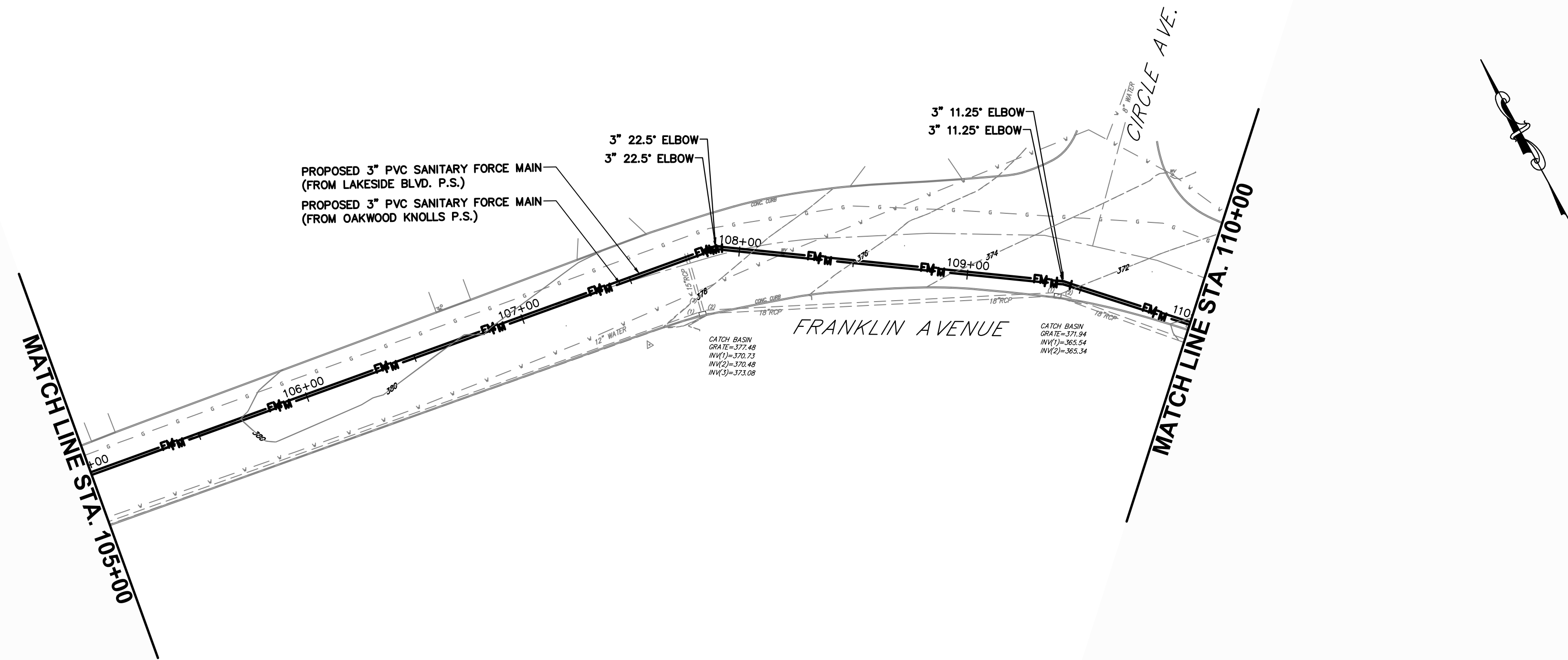
PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ

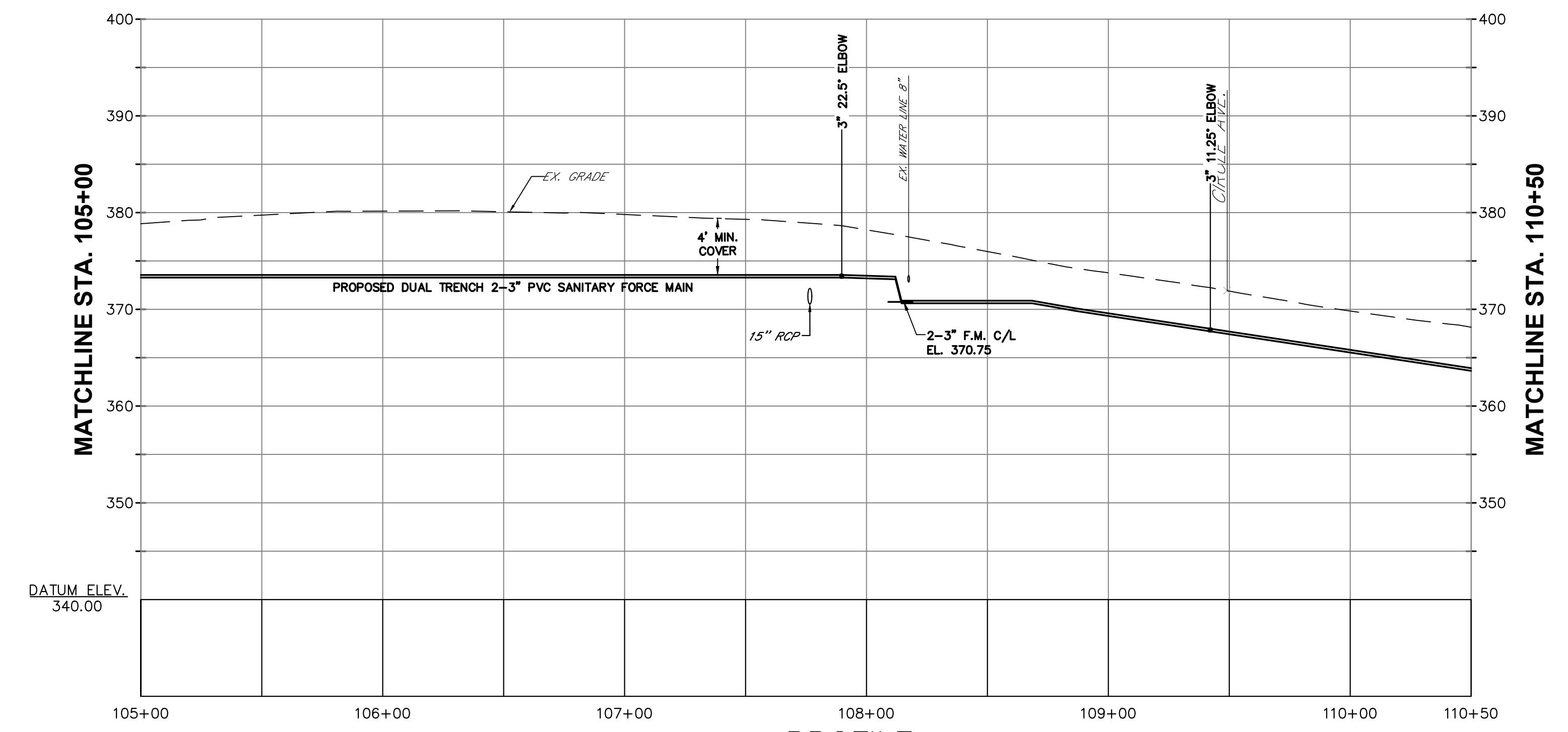
PROFESSIONAL ENGINEER N.J. LIC. 44832

SANITARY SEWER IMPROVEMENTS
OAKWOOD KNOLLS, CHAPEL HILL AND
SKYVIEW/HIBROOK TREATMENT PLANTS
OAKWOOD KNOLLS CONSTRUCTION PLAN-14
BERGEN COUNTY BOROUGH OF OAKLAND NEW JERSEY

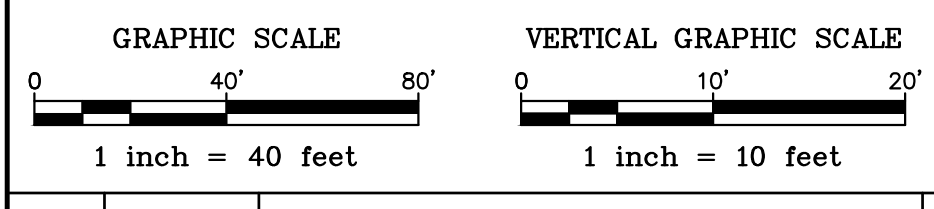
SURVEYED BY: R



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'

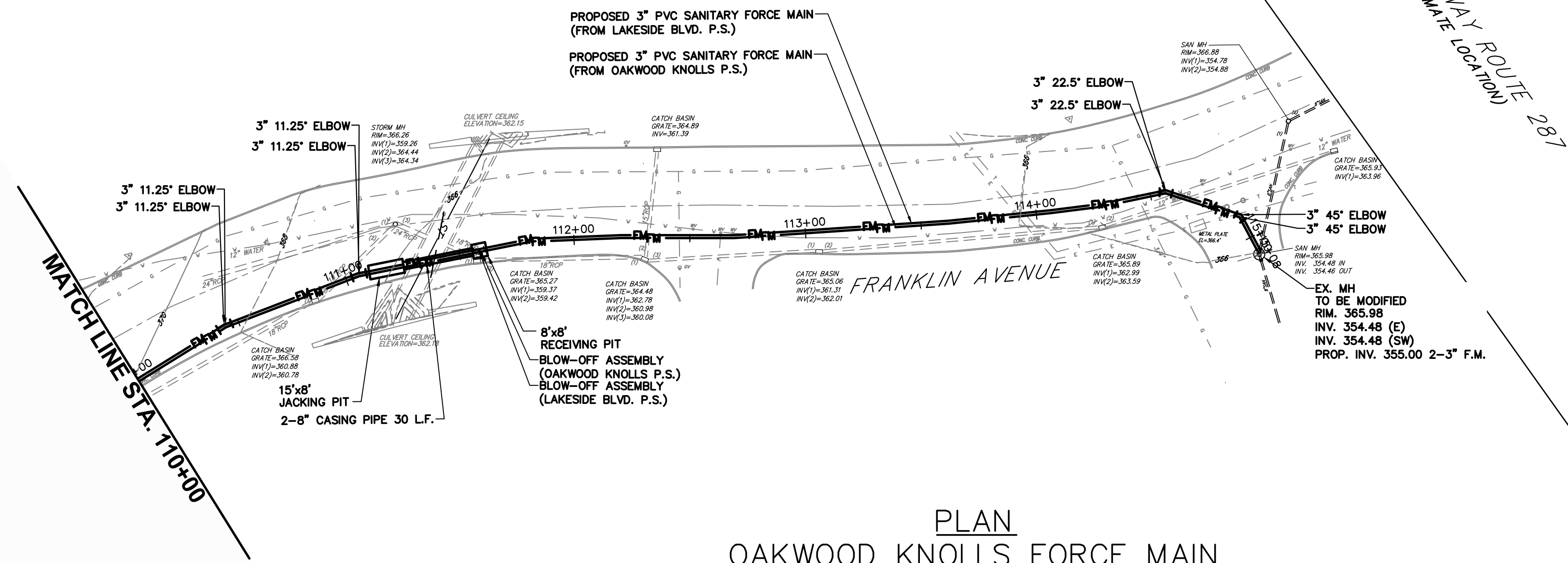


FINAL FOR SEWER DESIGN

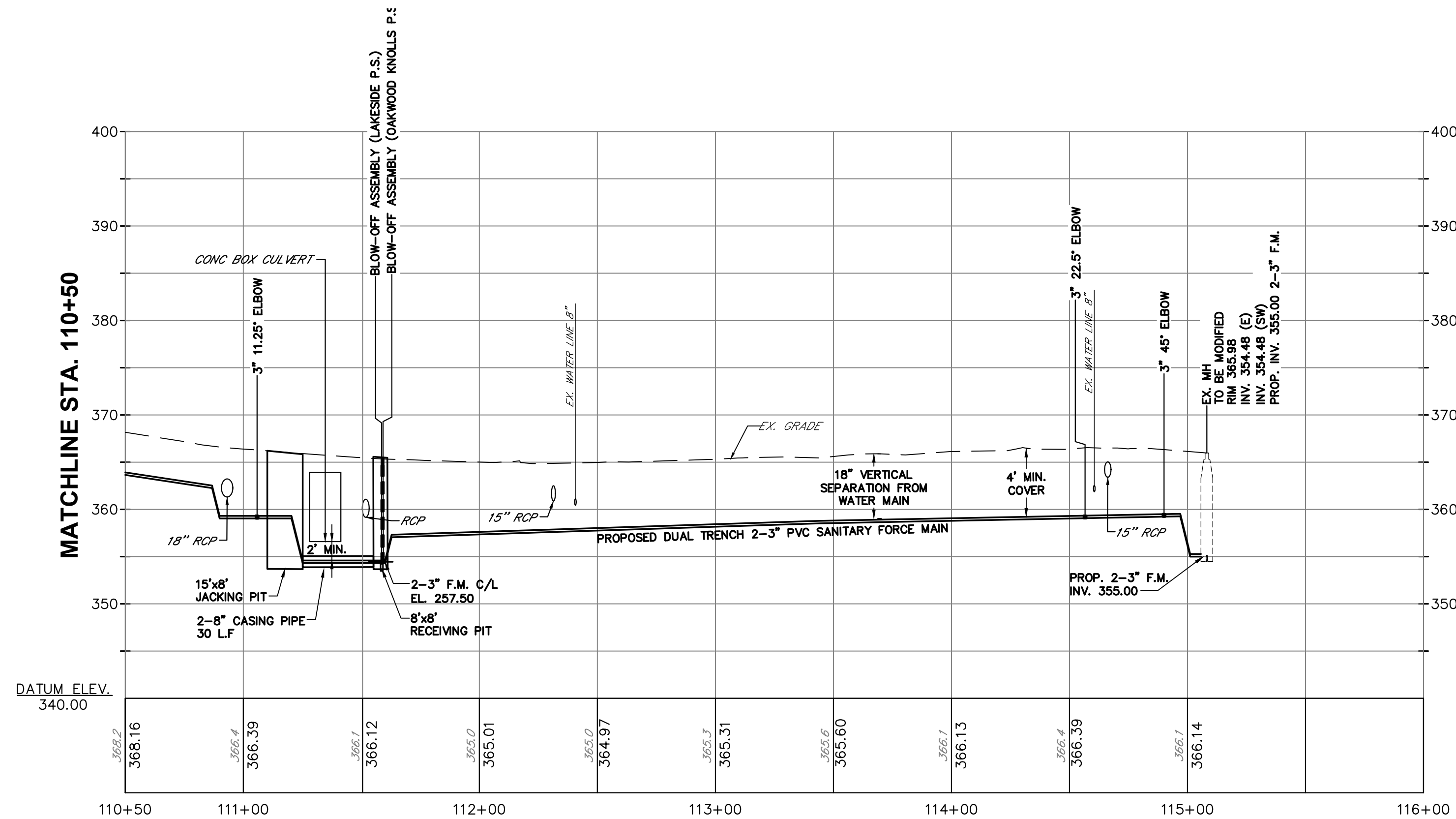
NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY



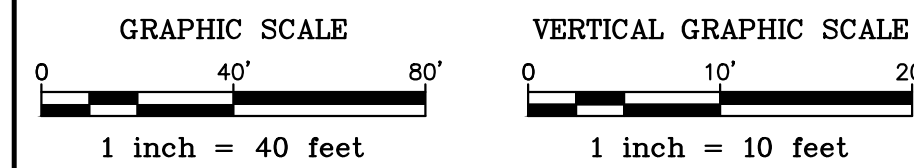
BOSWELL ENGINEERING
ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000



PLAN
OAKWOOD KNOLLS FORCE MAIN
SCALE: 1" = 40'



PROFILE
OAKWOOD KNOLLS FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

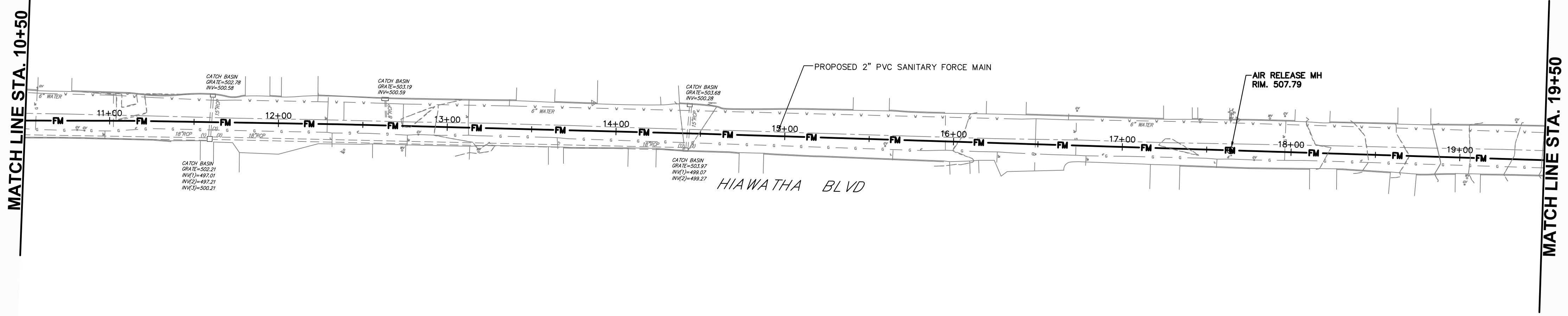
NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY

EST. 1924

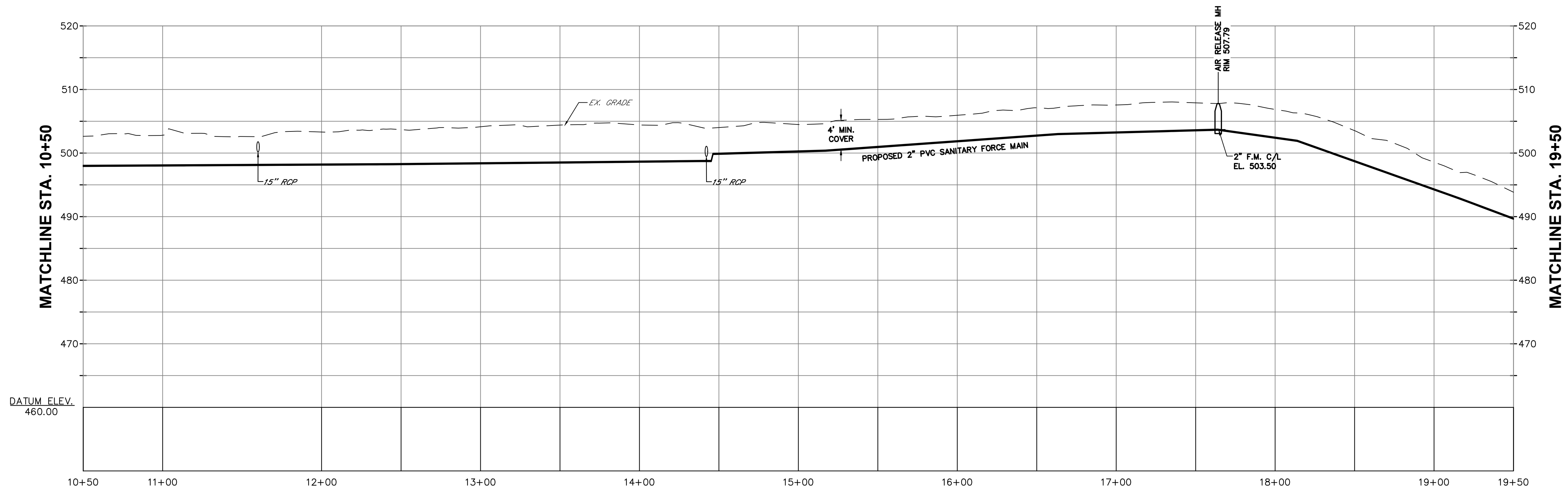
BOSWELL ENGINEERING

ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

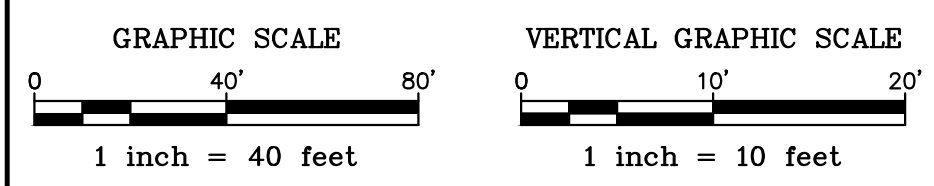
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 0760



PLAN
CHAPEL HILL FORCE MAIN
SCALE: 1" = 40'



PROFILE
CHAPEL HILL FORCE MAIN
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY



BOSWELL ENGINEERING

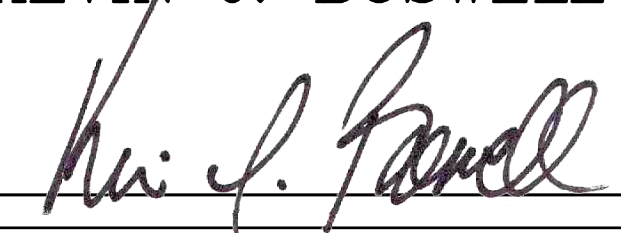
ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

KEVIN J. BOSWELL



PROFESSIONAL ENGINEER N.J. LIC. 32943

GISELLE DIAZ

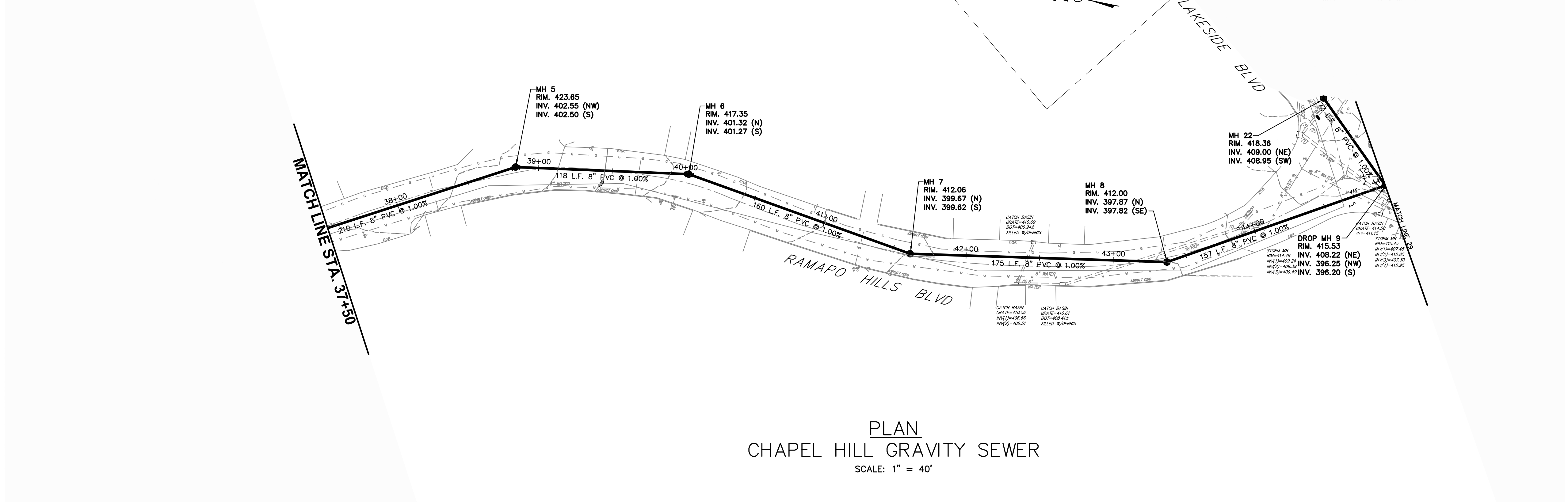
PROFESSIONAL ENGINEER N.J. LIC. 44832

SANITARY SEWER IMPROVEMENTS
OAKWOOD KNOLLS, CHAPEL HILL AND
SKYVIEW/HIBROOK TREATMENT PLANTS
CHAPEL HILL CONSTRUCTION PLAN-2

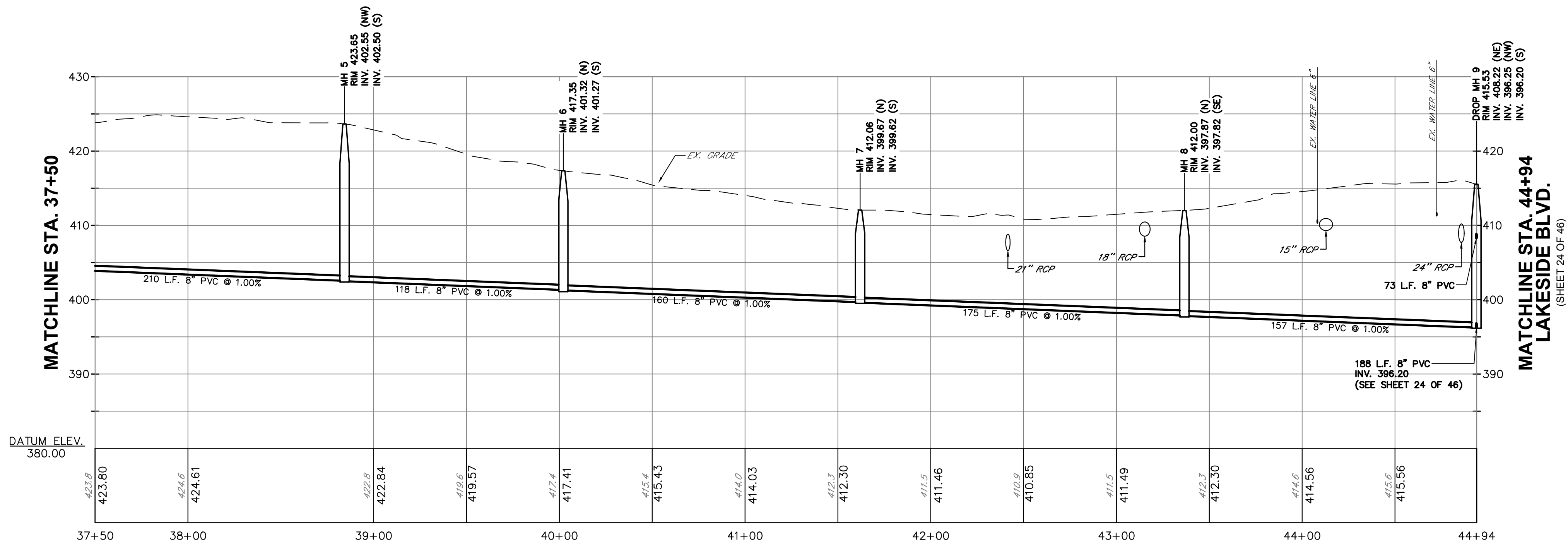
BERGEN COUNTY BOROUGH OF OAKLAND NEW JERSEY

SURVEYED BY RR	DESIGNED BY AG	SCALE: AS SHOWN	JOB NO. OK-1653	DATE 4/24/20
DRAWN BY JMM	CHECKED BY GD			

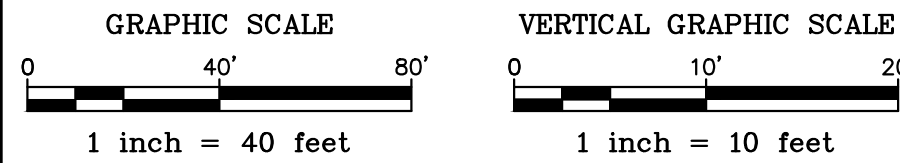
DRAWING NO. OK-1653-CP.DWG SHEET 20 OF 46



PLAN
CHAPEL HILL GRAVITY SEWER
SCALE: 1" = 40'



PROFILE
CHAPEL HILL GRAVITY SEWER
SCALE:
HORZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY



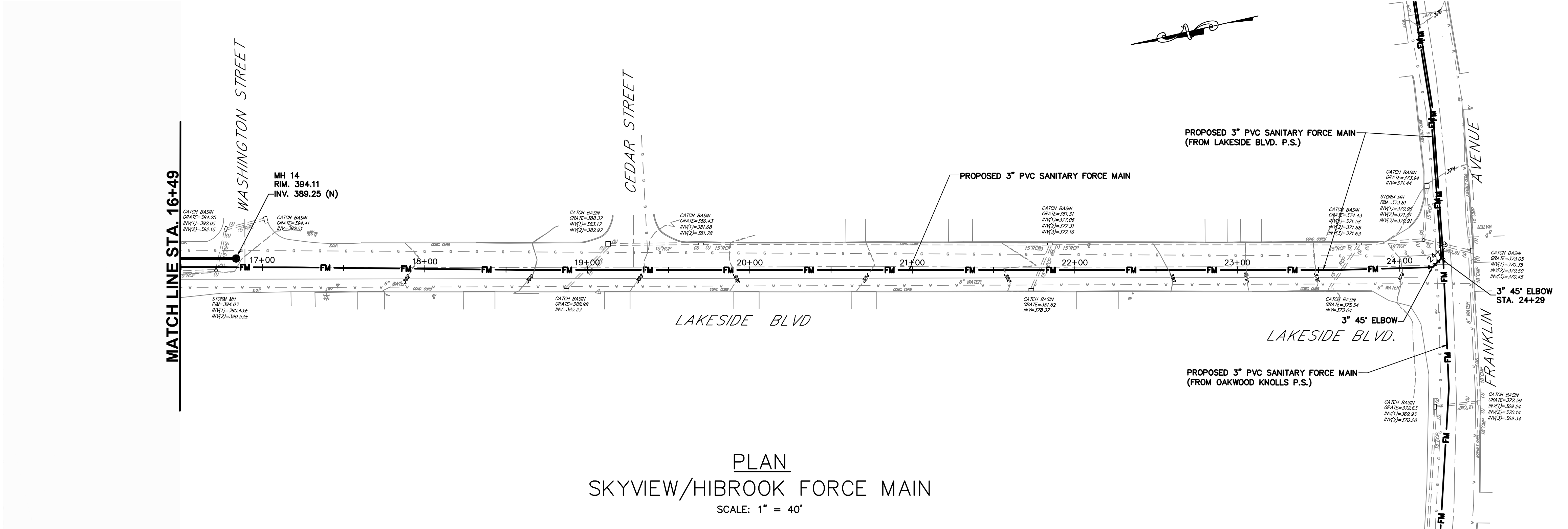
BOSWELL ENGINEERING

ENGINEERS – SURVEYORS – PLANNERS – SCIENTISTS

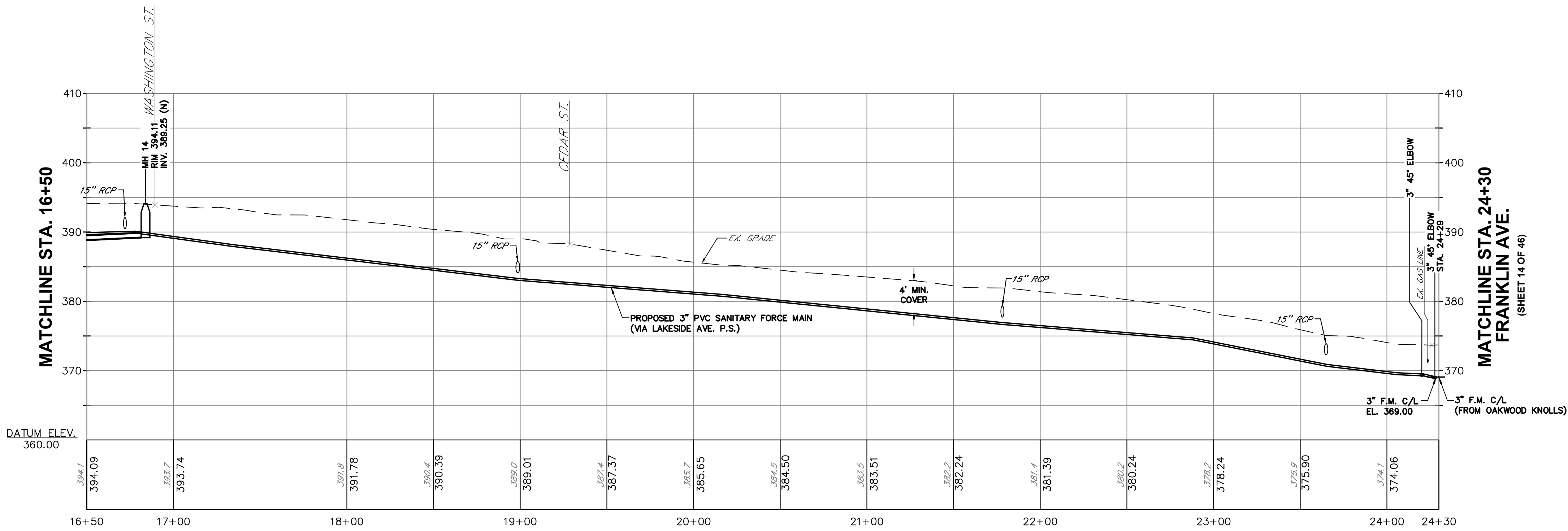
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606

TEL: (201) 641-0770 • FAX: (201) 641-1831

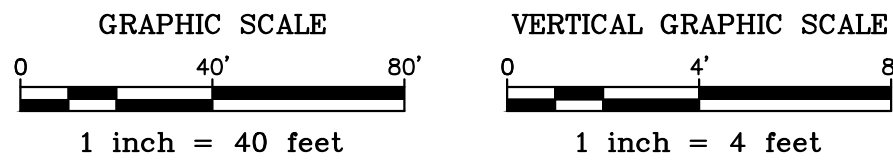
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000



PLAN
SKYVIEW/HIBROOK FORCE MAIN
SCALE: 1" = 40'

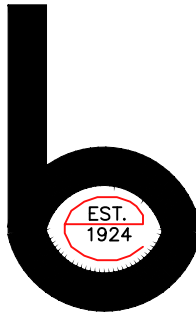


PROFILE
LAKESIDE BLVD. FORCE MAIN
SCALE:
HORIZ. 1" = 40'
VERT. 1"=10'



FINAL FOR SEWER DESIGN

NO.	DATE	DESCRIPTION	SURVEYED BY	DRAWN BY	DESIGNED BY	CHECKED BY



BOSWELL ENGINEERING

ENGINEERS — SURVEYORS — PLANNERS — SCIENTISTS
330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606
TEL: (201) 641-0770 • FAX: (201) 641-1831
N.J. CERTIFICATE OF AUTHORIZATION No. 24GA27958000

KEVIN J. BOSWELL

