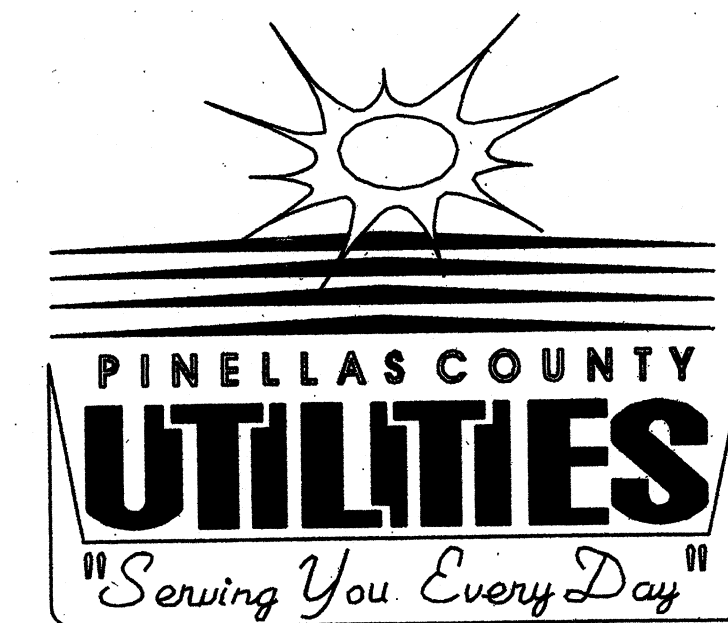


# PINELLAS COUNTY UTILITIES ENGINEERING

## PINELLAS COUNTY, FLORIDA

BOARD OF COUNTY COMMISSIONERS  
PROJECT NO. 723-624314-1432  
MAXIMO No. 138514

### BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS



BOCA CIEGA  
30" F.M.

SET NO.

BID NO.

#### INDEX OF DRAWINGS

SHEET NO.	SHEET DESCRIPTION
<b>GENERAL</b>	
G-01	TITLE SHEET AND DRAWING INDEX
G-02	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
G-03	KEY SHEET AND PROJECT CONTROL SHEET

#### PLAN AND PROFILE

P-01	PARK BOULEVARD (78TH AVENUE)
P-02	PARK BOULEVARD (78TH AVENUE)
P-03	PARK BOULEVARD (78TH AVENUE)
P-04	PARK BOULEVARD (78TH AVENUE)
P-05	PARK BOULEVARD (78TH AVENUE)
P-06	PARK BOULEVARD (78TH AVENUE)
P-07	PARK BOULEVARD (78TH AVENUE)
P-08	PARK BOULEVARD (78TH AVENUE)/78TH STREET NORTH
P-09	78TH STREET NORTH
P-10	JOE'S CREEK PRESERVE
P-11	JOE'S CREEK PRESERVE/NORTHSIDE CHRISTIAN SCHOOL
P-12	NORTHSIDE CHRISTIAN SCHOOL/WESTCHESTER BOULEVARD
P-13	WESTCHESTER BOULEVARD

#### PROFILE

W-01	CROSS BAYOU CANAL CROSSING
W-02	CROSS BAYOU CANAL CROSSING/JOE'S CREEK CROSSING #1
W-03	JOE'S CREEK CROSSING #2

#### DETAIL

D-01	MISCELLANEOUS DETAILS
D-02	MISCELLANEOUS DETAILS

#### TRAFFIC CONTROL PLANS (TCP)

TCP-01	NOTES, LEGEND AND ABBREVIATIONS
TCP-02	DETOUR
TCP-03	WORK ZONE PHASE 1 AND 2
TCP-04	WORK ZONE PHASE 3
TCP-05	WORK ZONE PHASE 4
TCP-06	TYPICAL SECTIONS AND DETAILS
TCP-07	HDD DETAILS
TCP-08	WORK ZONES 20" FM ISOLATION AND GROUTING

PREPARED BY:



**PARSONS ENGINEERING SCIENCE, INC.**  
3450 BUSCHWOOD PARK DRIVE, SUITE 345  
TAMPA, FLORIDA 33618  
PHONE (813) 938-4650

BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS  
PCU PROJECT NO. 723-624314-1432  
MAXIMO NO.: 138514

SUBMITTED FOR APPROVAL:

*Dinesh M. Kamath* 7/20/01  
DINESH M. KAMATH, P.E. REG. NO. 40157 DATE  
ENGINEER OF RECORD

RECOMMENDED FOR APPROVAL:

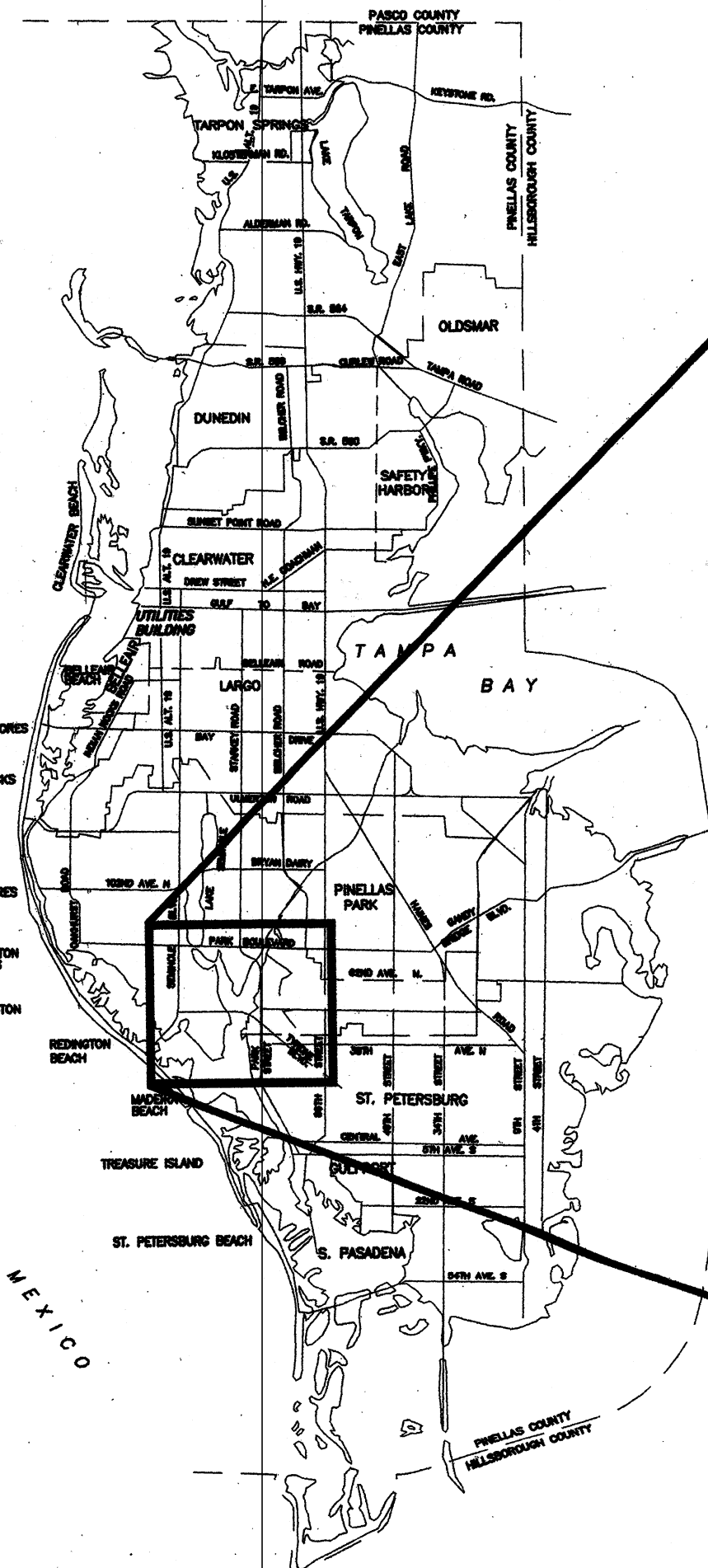
*William H. Gill* 8/1/01  
WILLIAM H. GILL, P.E. DATE  
SENIOR ENGINEER

*R. Peter Stasis* 8/1/01  
R. PETER STASIS, P.E. DATE  
DIRECTOR, UTILITIES ENGINEERING

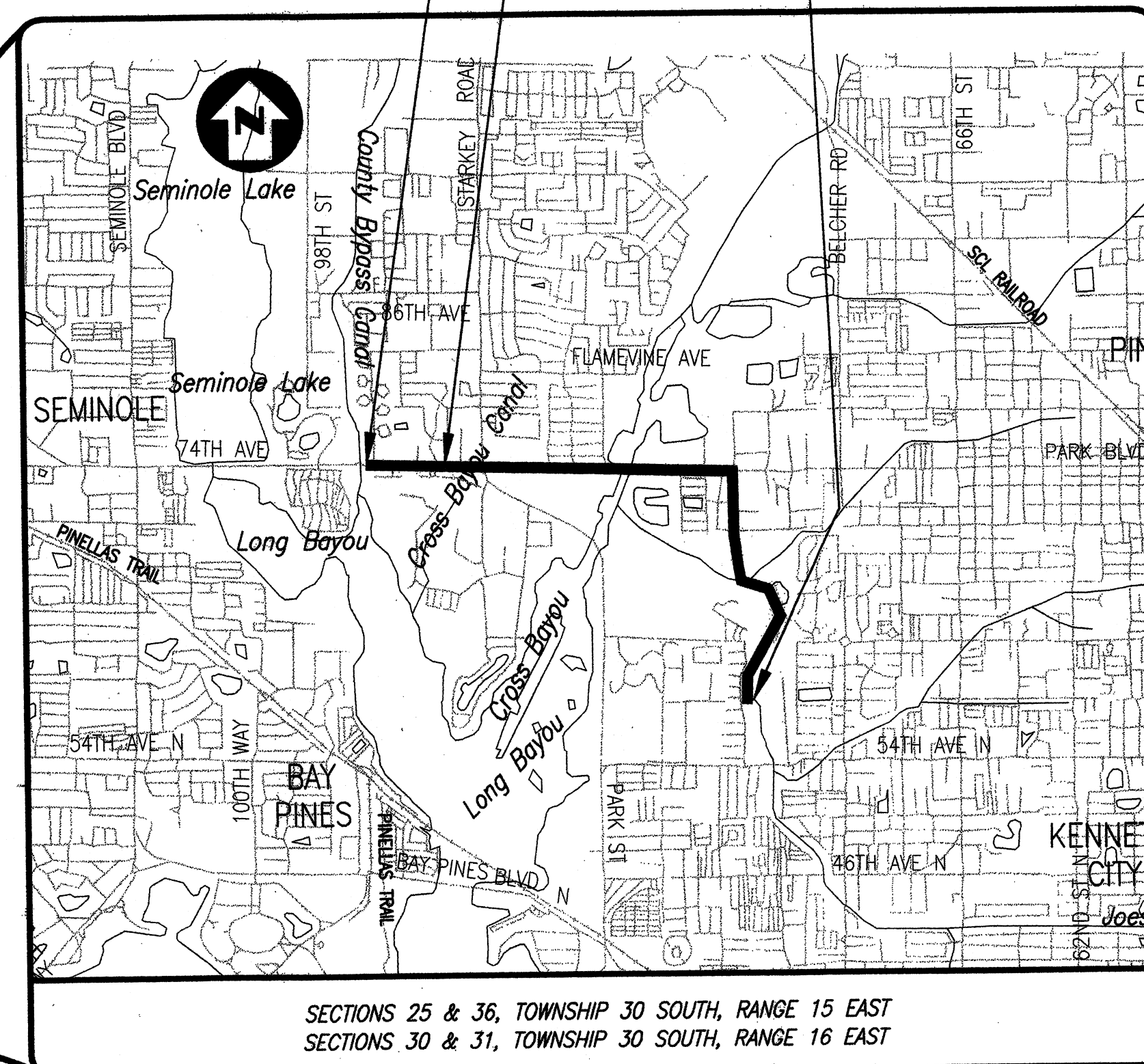
Boca Ciega 30" F.M.

## BID SUBMITTAL

JULY 2001



LOCATION MAP  
NOT TO SCALE



KEY MAP  
SCALE 1"=3,000'±

BEGIN PROJECT  
STA 5+41.4  
(BASELINE SURVEY PARK BLVD)

END PROJECT  
STA 213+50.9  
(BASELINE SURVEY WESTCHESTER BLVD)

ROUTE OF NEW  
30" FORCE MAIN



## GENERAL NOTES

- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE DRAWINGS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. ALSO THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC., WHICH ARE WITHIN THE PROJECT AREA AND/OR WHICH HAVE BEEN INSTALLED AND CONSTRUCTED SINCE THE PREPARATION OF THESE DRAWINGS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY PRIOR TO CONSTRUCTION TO VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THESE DRAWINGS) AFFECTING HIS WORK. THE CONTRACTOR WILL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR WILL NOTIFY ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. FIELD CONDITIONS MAY NECESSITATE ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED UTILITIES TO AVOID OBSTACLES. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH WORKING AROUND UTILITIES NOT SHOWN ON DRAWINGS. MINOR UTILITIES (SPRINKLER AND SERVICE CONNECTIONS) ARE NOT SHOWN. COSTS ASSOCIATED WITH THE REPAIRS OF MINOR UTILITIES WILL BE PAID BY THE CONTRACTOR. COMPANIES THAT HAVE UTILITIES ALONG THE SELECTED ALIGNMENT INCLUDE THE FOLLOWING:
  - VERIZON MEDIA VENTURES  
1280 E. CLEVELAND STREET  
FLCW-5033  
CLEARWATER, FL 34615  
ATTN: CUSTOMER REPAIR  
TELE: (800) 483-1000
  - PINELLAS COUNTY PUBLIC WORKS  
440 COURT ST.  
CLEARWATER, FL 34756  
ATTN: HIGHWAY DEPT  
TELE: (727) 464-8900
  - VERIZON  
1280 EAST CLEVELAND ST.  
CLEARWATER, FL 34615  
ATTN: JOHN LIDO  
TELE: (727) 562-1120
  - FLORIDA POWER CORP.  
2501 25th STREET N.  
ST. PETERSBURG, FL 33713  
ATTN: CUSTOMER SERVICE  
TELE: (727) 895-8711
  - PINELLAS COUNTY UTILITIES DEPARTMENT  
14 S FORT HARRISON AVENUE  
CLEARWATER, FL 33756  
ATTN: GMD  
TELE: (727) 464-5800
- THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO CONDUCTING ANY INVESTIGATIONS, TO CONDUCT WHAT THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED. (E.G. GROUNDWATER CONDITIONS, PROPOSED WORK BY OTHERS, ETC.) AND UPON WHICH THEIR BIDS WILL BE BASED. CONTRACTOR WILL COORDINATE ALL INVESTIGATIONS WITH THE ENGINEER PRIOR TO EXCAVATION. THE CONSTRUCTION DRAWINGS ARE TO BE USED BY THE CONTRACTOR IN CONJUNCTION WITH THE CONTRACT SPECIFICATIONS.
- THE CONTRACTOR WILL PROVIDE AT LEAST FORTY EIGHT (48) HOURS NOTICE TO ALL THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR WILL CONTACT "SUNSHINE STATE ONE CALL" 48 HRS PRIOR TO OPERATIONS AT 1-800-432-4770.
- ANY EXISTING UTILITIES THAT ARE IN CONFLICT WITH THE PROPOSED FORCE MAIN, WILL BE TEMPORARILY RELOCATED AS REQUIRED TO PROVIDE CONTINUOUS SERVICE BY THE UTILITY. AFTER CONSTRUCTION, THE UTILITY WILL BE RETURNED TO ITS ORIGINAL LOCATION AT NO ADDITIONAL COST TO PINELLAS COUNTY.
- ANY PERMANENT RELOCATION OF EXISTING UTILITIES NOT SHOWN ON THE DRAWINGS, REQUIRES APPROVAL OF THE ENGINEER AND/OR OWNER PRIOR TO RELOCATION AND WILL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF PINELLAS COUNTY. NECESSARY FIELD ADJUSTMENTS ARE SUBJECT TO THE APPROVAL BY THE HIGHWAY INSPECTOR.
- ALL TEST POINT PIPING WILL BE CUT FROM THE CORPORATION STOP, PLUGGED AND COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR PRIOR TO FINAL ACCEPTANCE. THE CORPORATION STOP WILL BE CAPPED AND REMAIN IN PLACE.
- LOCATIONS FOR ALL AIR VALVES ARE APPROXIMATE. THE CONTRACTOR WILL LOCATE AIR VALVES IN THE FIELD AT THE HIGHEST POINT BEFORE THE DOWNWARD BREAK IN THE VICINITY OF THE STATION INDICATED. ALL FINAL LOCATIONS FOR AIR VALVES MUST BE APPROVED BY THE ENGINEER.
- EXISTING POTABLE WATER AND SANITARY SERVICE LATERALS ARE NOT SHOWN ON THE DRAWINGS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL LATERALS PRIOR TO CONSTRUCTION. POTABLE WATER AND SANITARY SEWER SERVICES WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- PORTIONS OF CONSTRUCTION OF THIS PROJECT, AUTHORIZED BY PERMIT OR LICENSE AGREEMENT, WILL BE SUBJECT TO INSPECTION AND TESTS AS MAY BE NECESSARY BY THE PERMIT GRANTING AUTHORITY. COPIES OF THE PERMITS ARE CONTAINED IN SECTION 01060 OF THE SPECIFICATIONS. ALL CONTRACTOR SUPERVISORY PERSONNEL WILL FURNISH INFORMATION TO AND COOPERATE WITH THESE AUTHORITIES IN CONDUCTING THEIR TESTING AND INSPECTION PROGRAM. THESE AUTHORITIES INCLUDE:
  - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
  - PINELLAS COUNTY UTILITIES DEPARTMENT
  - PINELLAS COUNTY DEPARTMENT OF PUBLIC WORKS
  - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION
  - DEPARTMENT OF THE ARMY CORP OF ENGINEERS
- TWO WEEKS PRIOR TO BEGINNING CONSTRUCTION OPERATIONS, THE CONTRACTOR WILL NOTIFY PRINCIPALS OF THE FOLLOWING AGENCIES OF THE IMPENDING CONSTRUCTION SCHEDULE:
  - 911 EMERGENCY COMMUNICATIONS CENTER - TELEPHONE NOTIFICATION IS SUFFICIENT - 464-3850.
  - PINELLAS COUNTY SHERIFF'S DEPARTMENT - WRITTEN NOTIFICATION IS REQUIRED FOR THE FOLLOWING DIVISIONS:
    - PATROL DIVISION, ATTN: MAJOR VAUGHAN  
10750 ULMERTON, LARGO, FL 34648
    - COMMUNICATIONS DIVISION, ATTN: CAPT. WIGGINS  
10750 ULMERTON, LARGO, FL 34648
  - PINELLAS COUNTY SCHOOL SYSTEM, TRANSPORTATION DIVISION - TELEPHONE NOTIFICATION IS SUFFICIENT. CONTRACTOR WILL CONTACT THE LEALMAN COMPOUND ATTN: SUZETTE LASSITER @ 522-3171
  - US POST OFFICE, ST. PETERSBURG - WRITTEN NOTIFICATION IS REQUIRED. SEND NOTICE TO US POST OFFICE, ATTN: BRENDA LICATA, 3135 1ST AVENUE N., ST. PETERSBURG, FL 33730-9998.

- ALL PROPOSED WORK MUST COMPLY WITH THE PINELLAS COUNTY UTILITY ORDINANCE 92-63 AS AMENDED BY 94-38, PINELLAS COUNTY SITE DEVELOPMENT ORDINANCE 92-62, AS AMENDED BY 94-37, PINELLAS COUNTY ACCESS MANAGEMENT ORDINANCE 90-13, AS AMENDED BY 92-58, AND MINIMUM TESTING FREQUENCY REQUIREMENTS.
- RESTORATION OF CURB, STREET, DRIVEWAYS AND PLACEMENT OF SOD WILL BE COMPLETED PRIOR TO EXCAVATION STARTING IN ANOTHER AREA BY CONTRACTOR.
- NOTIFY PROPERTY OWNERS REGARDING SPRINKLER SYSTEM, PLANTS AND MAIL BOXES THAT WILL BE DISTURBED DURING CONSTRUCTION, PRIOR TO STARTING WORK.
- OFFSETS ARE MEASURED FROM THE SURVEY BASELINE.
- ALL DIMENSIONS SHOWN ARE APPROXIMATE AND ARE TO BE VERIFIED BY THE CONTRACTOR. HORIZONTAL AND VERTICAL ALIGNMENT CHANGES ARE TO BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- MINIMUM COVER OVER ALL FORCE MAINS WILL NOT BE LESS THAN 48 INCHES AS MEASURED FROM THE FINISHED GRADE. FORCE MAINS WILL HAVE A CONTINUOUS SLOPE 0.10% MINIMUM UP TO COMBINATION AIR/VACUUM VALVES TO PERMIT THE RELEASE OF AIR AND GASES TRAPPED IN THE MAINS, UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL COORDINATE WITH FLORIDA POWER CORPORATION PRIOR TO CONSTRUCTION TO PROTECT EXISTING POWER POLES AS REQUIRED DURING THE INSTALLATION OF THE FORCE MAIN.
- NO STOCKPILING OF MATERIAL IN ROADWAY OR ON SIDEWALK; ALL DIRT AND DEBRIS WILL BE REMOVED FROM RIGHT-OF-WAY DAILY. ROADS AND SIDEWALK TO BE SWEEPED DAILY AS PART OF DAILY CLEAN-UP.
- SURVEY INFORMATION WAS COMPILED BY FORESIGHT SURVEYORS, INC., APRIL 2001.
- INFORMATION SHOWN FOR THE EXISTING 20" FORCE MAIN, THE EXISTING 36" FORCE MAIN AND EXISTING FORCE MAIN INTERCONNECTS LOCATIONS, WAS OBTAINED FROM AS-BUILT DRAWINGS PREPARED BY ANDERSON, JOHNSON, HENRY, PARRISH, ISSUED MAY 1974. (JOB# 13873)
- CONTRACTOR SHALL REPLACE ANY CURBS, DRIVEWAYS, SIDEWALKS, LANDSCAPING, AND OTHER EXISTING IMPROVEMENTS DISTURBED OR DAMAGED BY THE CONSTRUCTION TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITION TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL ISOLATE AND GROUT FILL THE ABANDONED 20" FM FROM THE "OLD PS-016" PUMP STATION (LOCATED EAST OF SEMINOLE BLVD.) TO THE PROJECT'S SOUTHERN CONNECTION POINT AT STA 213+28 (WESTCHESTER BLVD). THE ABANDONED 20" FORCE MAIN IS UNDER PRESSURE. THE CONTRACTOR SHALL PROVIDE ALL THE NECESSARY EQUIPMENT FOR ISOLATION AND GROUT FILLING OF THE 20" FORCE MAIN IN A SAFE MANNER.

## PINELLAS COUNTY PUBLIC WORKS GENERAL NOTES

- ALL PROPOSED WORK MUST COMPLY WITH FDOT INDEX No. 700.
- ANY PORTION OF THE ROADWAY THAT SUSTAINS EXCESSIVE CONSTRUCTION RELATED DAMAGE, IN THE OPINION OF PINELLAS COUNTY HIGHWAY DEPARTMENT, WILL BE REPAIRED AT CONTRACTOR EXPENSE IN A MANNER SPECIFIED BY PINELLAS COUNTY HIGHWAY DEPARTMENT.
- ALL RIGHT-OF-WAY INSTALLATIONS WILL BE IN ACCORDANCE WITH PRACTICES REFERENCED IN THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION UTILITIES ACCOMMODATIONS MANUAL.
- CONTRACTOR WILL LIMIT CONSTRUCTION OPERATIONS WITHIN COUNTY RIGHT-OF-WAY AND/OR EASEMENTS UNLESS MORE STRINGENT LIMITS OF CONSTRUCTION ARE SHOWN ON THE DRAWINGS.
- ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN PINELLAS COUNTY LAND DEVELOPMENT, ZONING AND/OR RELATED ORDINANCES, AND MINIMUM TESTING FREQUENCY REQUIREMENTS.
- ANY SIDEWALK WHICH BECOMES UNDERMINED MUST BE REMOVED AND REPLACED. SIDEWALKS ARE TO BE RECONSTRUCTED WITHIN THREE (3) DAYS AFTER REMOVAL. WHEN EXISTING SIDEWALK IS REMOVED, IT IS TO BE REMOVED TO THE NEAREST JOINT.
- PLACE EXPANSION JOINTS WHERE 4" AND 6" CONCRETE ABUT.
- DO NOT DISTURB EXISTING UNDERDRAIN OR STORM SYSTEMS. IF FILTRATION BED IS DISTURBED, CONTACT THE AREA INSPECTOR WITH THE PINELLAS COUNTY HIGHWAY DEPARTMENT AT 464-8900 FOR ASSISTANCE.
- TYPE OF SOD USED TO RESTORE OWNER-MAINTAINED AREA IN RIGHT-OF-WAY SHALL BE COORDINATED WITH OWNER.
- ALL PITS SHALL BE TIGHT SHEETED AND HAVE A WELL POINT SYSTEM IN OPERATION AT ALL TIMES.
- ANY PAVEMENT OPEN-CUT ALONG PARK BOULEVARD SHALL BE REPAIRED WITH FLOWABLE FILL AND TEMPORARY ASPHALT. THIS TEMPORARY REPAIR WILL BE FOLLOWED BY PAVEMENT MILLING AND RESURFACING TO FULL LANE WIDTH. THE PINELLAS COUNTY HIGHWAY DEPARTMENT INSPECTOR SHALL SET THE ACTUAL RESTORATION LIMITS.

## ABBREVIATIONS

ARV	AIR RELEASE VALVE	MJ	MECHANICAL JOINT
ASTM	AMERICAN SOCIETY OF TESTING & MATERIALS	N	NORTH
ASSY	ASSEMBLY	NA	NOT APPLICABLE
BC	BURIED CABLE	NE	NORTH EAST
BE	BURIED ELECTRIC	NGVD	NATIONAL GEODETIC VERTICAL DATUM
BF	BLIND FLANGE	NOM	NOMINAL
BFV	BUTTERFLY VALVE	NRS	NON RISING STEM
BOA	BLOW-OFF DRAIN ASSEMBLY	NTS	NOT TO SCALE
BOC	BACK OF CURB	NW	NORTH WEST
BT	BURIED TELEPHONE	OC	OVERHEAD CABLE
BWD	BACKWARD	OD	OUTSIDE DIAMETER
BWF	BARBED WIRE FENCE	OE	OVERHEAD ELECTRIC
CAV	COMBINATION AIR VALVE	O/S	OFF-SET
CB	CATCH BASIN	OHL	OVERHEAD LINE
CI	CAST IRON	PC	POINT OF CURVATURE
CL	CLASS	PCC	POINT OF CONTINUOUS CURVATURE
CLF	CHAIN LINK FENCE	PCEd	PINELLAS COUNTY ENGINEERING DEPARTMENT
CMF	CORRUGATED METAL PIPE	PCU	PINELLAS COUNTY UTILITIES
CONC.	CONCRETE	PI	POINT OF INTERSECTION
CONST.	CONSTRUCTION	PP	POWER POLE
CPLG	COUPLING	PRC	POINT OF REVERSE CURVATURE
DI	DRAIN INLET	PROP	PROPOSED
DIA	DIAMETER	PSI	POUNDS PER SQUARE INCH
DIP	DUCTILE IRON PIPE	PT	POINT OF TANGENCY
EA	EACH	PVC	POLYVINYL CHLORIDE PIPE
ECMP	ELLIPTICAL CORRUGATED METAL PIPE	R	RADIUS
EL	ELBOW	RCW	RECLAIMED WATER
ELEV.	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EOP	EDGE OF PAVEMENT	REQ'D	REQUIRED
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	RT	RIGHT
EXIST	EXISTING	R/W, ROW	RIGHT OF WAY
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	S/W	SIDEWALK
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	SAN	SANITARY
FIN	FINISHED	SRD	STATE ROAD DEPARTMENT
FLG	FLANGED	SS	STORM SEWER
FM	FORCE MAIN	STA	STATION
FO	FIBER OPTIC	STL	STEEL
FOC	FACE OF CURB	SW	SOUTH WEST
FT	FEET	SWR	SEWER
FWD	FORWARD	TBM	TEMPORARY BENCHMARK
G	GAS	TBOA	TEMPORARY BLOW-OFF DRAIN ASSEMBLY
GA	GAUGE	TEL	TELEPHONE
FSI	FORESIGHT SURVEYORS, INC.	THK	THICK
GI	GRATE INLET	TP	TRAVERSE POINT
GV	GATE VALVE	TYP	TYPICAL
HORZ	HORIZONTAL	UD	UNDER DRAIN
ID	INSIDE DIAMETER	VCP	VITRIFIED CLAY PIPE
IN	INCHES	VERT	VERTICAL
INV	INVERT	VPI	VERTICAL POINT OF INTERSECTION
LF	LINEAR FEET	W/	WITH
LR	LONG RADIUS	W/O	WITHOUT
LT	LEFT	W	WATER, WEST
M	METERS	WF	WOOD FENCE
MANUF	MANUFACTURER	B-2	SOIL BORING & BORING NUMBER
MAX	MAXIMUM	WM	WATER METER
MECH	MECHANICAL	WV	WATER VALVE
MH	MANHOLE	WWF	WELDED WIRE FABRIC
MIN	MINIMUM		

## LEGEND

### EXISTING

TBM	TEMPORARY BENCHMARK	CO.	COUNTY
SEC	SECTION	REF. PT.	REFERENCE POINT
TWP	TOWNSHIP	RT	RIGHT OF BASELINE
RNG	RANGE	LT	LEFT OF BASELINE
CONC.	CONCRETE	LB	LICENSED BUSINESS
COR.	CORNER	CL	CENTERLINE
STA.	STATION	CL	CORNER
OHL	OVERHEAD LINE(S)	CL	PALM TREE
EL	ELEVATION	CL	OAK TREE
EL	ELEVATION	CL	PINE TREE
EL	ELEVATION	CL	MELALEUCA TREE
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE	CL	WATER VALVE
PVC	POLYVINYL CHLORIDE PIPE	CL	FORCE MAIN VALVE
OPP	CORRUGATED PLASTIC PIPE	CL	GAS VALVE
INV	INVERT	CL	POWER POLE
EP	EDGE OF PAVEMENT	CL	UTILITY POLE/LIGHT POLE
MES	MITERED END SECTION	CL	WATER METER
TOB	TOP OF BANK	CL	GUY WIRE
TOS	TOE OF SLOPE	CL	FIRE HYDRANT
FND	FOUND	CL	SIGN
FIR	FOUND IRON ROD	CL	ELECTRIC BOX
FIRYC	FOUND IRON ROD w/YELLOW CAP	CL	GTE PEDESTAL
FIP	FOUND IRON PIPE	CL	VENT
FPK	FOUND PK NAIL	CL	TRAFFIC BOX
FPK&D	FOUND PK NAIL & DISK	CL	TRAFFIC POLE
FN+T	FOUND NAIL & TACK	CL	PEDESTRIAN CROSS
FN+TT	FOUND NAIL & TIN TAB	CL	WALK SIGNAL
FN+D	FOUND NAIL & DISK	CL	REFLECTOR POST
FRPS	FOUND RAILROAD SPIKE	CL	MAILBOX
FXC	FOUND X-CUT	CL	SPOT GRADE
SIR	SET IRON ROD	CL	GAS LINE
SIRRC	SET IRON ROD w/RED CAP	CL	
SN	SET NAIL	CL	
SN+TT	SET NAIL & TIN TAB	CL	
SPK&TT	SET PK NAIL & TIN TAB	CL	
SXC	SET X-CUT	CL	
PP	POWER POLE	CL	
CLF	CHAIN LINK FENCE	CL	
BWF	BARBED WIRE FENCE	CL	
R/W	RIGHT OF WAY	CL	
R	RECORD	CL	
M	MEASURED	CL	

### PROPOSED

GATE VALVE		LIMITS OF REFURBISHMENT	
COMBINATION AIR VALVE		LIMITS OF CURB AND SIDEWALK REFURBISHMENT	
RIGHT OF WAY OR EASEMENT LIMITS			
FORCE MAIN			
RESTRAINED JOINT PIPE/HDPE PIPE			
RESTRAINED JOINT PIPE LIMITS			

### SOIL BORINGS

USCS CLASS.	MATERIAL DESCRIPTION	SYMBOLS
SP	FINE SAND OR FINE SAND WITH ROOTS OR FINE SAND WITH SHELL FRAGMENTS OR FINE SAND WITH FINELY DIVIDED ORGANIC MATERIAL OR SLIGHTLY ORGANIC FINE SAND	SOIL BORING LOCATION
SP-SM	SLIGHTLY SILTY FINE SAND OR SLIGHTLY SILTY FINE SAND WITH SHELL FRAGMENTS OR SLIGHTLY SILTY FINE SAND WITH FINELY DIVIDED ORGANIC MATERIAL OR SLIGHTLY ORGANIC TO ORGANIC, SLIGHTLY SILTY FINE SAND	GROUNDWATER ENCOUNTERED (GROUNDWATER LEVEL MEASURED ON DATE DRILLED)
SM	SILTY FINE SAND OR SILTY FINE SAND WITH SHELL FRAGMENTS	N STANDARD PENETRATION RESISTANCE IN BLOWS PER FOOT
SC	CLAYEY FINE SAND	
CH	CLAY OR SILTY CLAY OR SANDY CLAY	50/0.1' 50 BLOWS FOR 0.1 FEET PENETRATION INTO SOIL
MH	SILT OR CLAYEY SILT OR CEMENTED SILT	
ML	CALCAREOUS, CLAYEY SILT OR CALCAREOUS, CEMENTED, CLAYEY SILT	-200 PERCENT PASSING #200 SIEVE
LS	LIMESTONE OR SILTY LIMESTONE OR CLAYEY LIMESTONE	CI CHLORIDE CONTENT (PPM)
		S SULFATE CONTENT (PPM)

GEOTECHNICAL BORING INFORMATION FROM GEOTECHNICAL EVALUATION FOR SANITARY FORCE MAIN (APRIL 2001) BY DRIGGER'S ENGINEERING, INC. AVAILABLE FOR INSPECTION AT PINELLAS COUNTY UTILITIES ENGINEERING OFFICE.

DRAWING NO.

G-02

REV.

0

PARSONS ENGINEERING SCIENCE, INC.

OFFICES IN PRINCIPAL CITIES

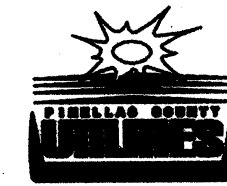


3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked *[Signature]*  
Reviewed *[Signature]*  
Approved *[Signature]*  
Reg. No. 40157  
Date FEBRUARY 2001

PINELLAS COUNTY UTILITIES



14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS

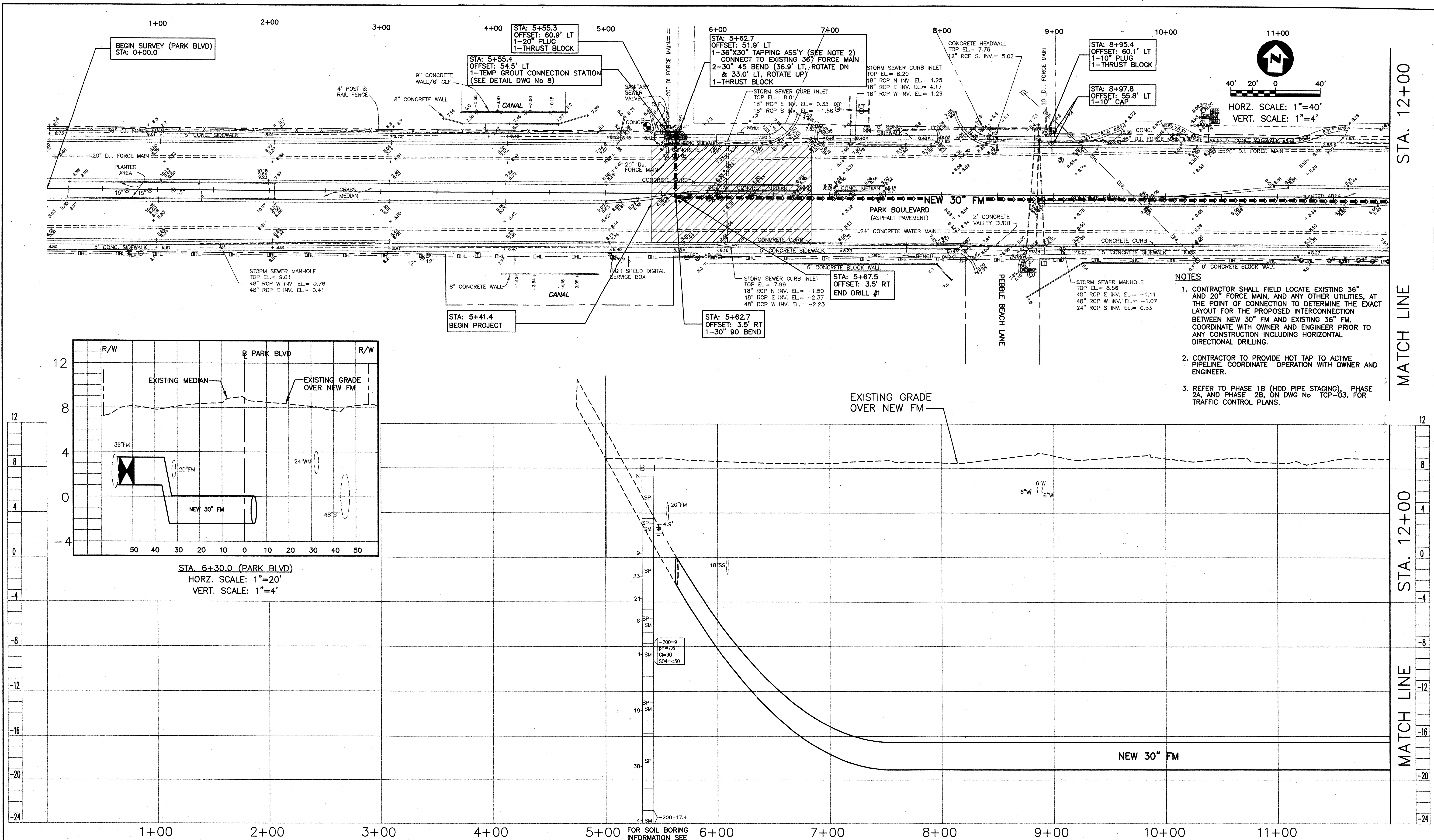
PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

GENERAL NOTES, LEGEND  
AND ABBREVIATIONS





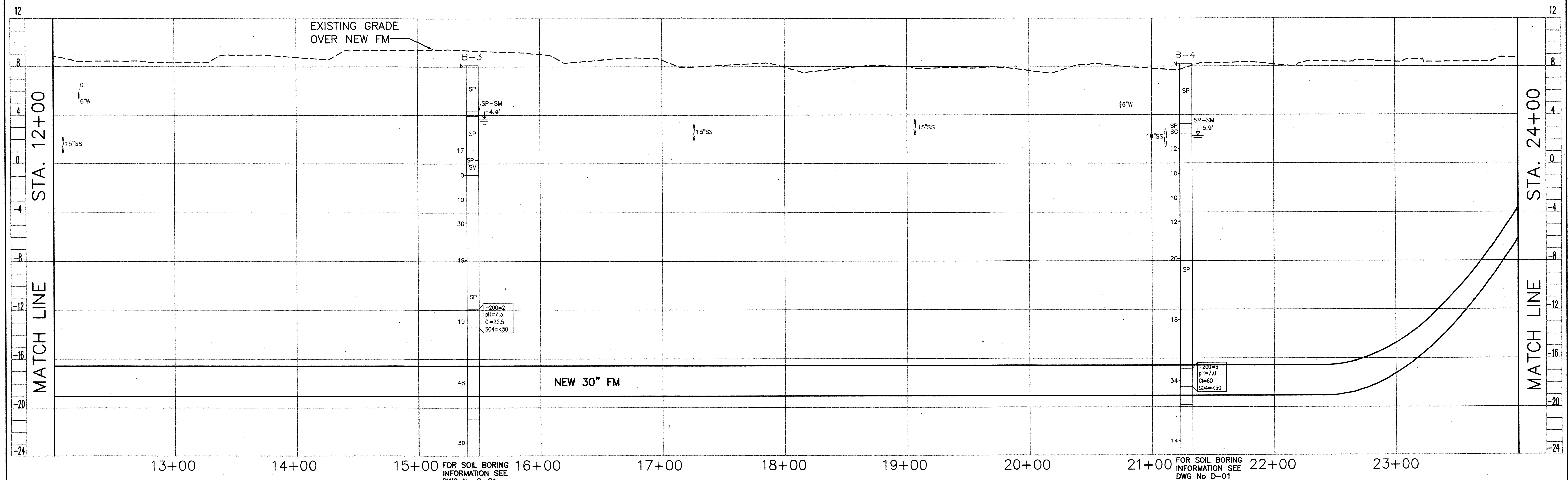
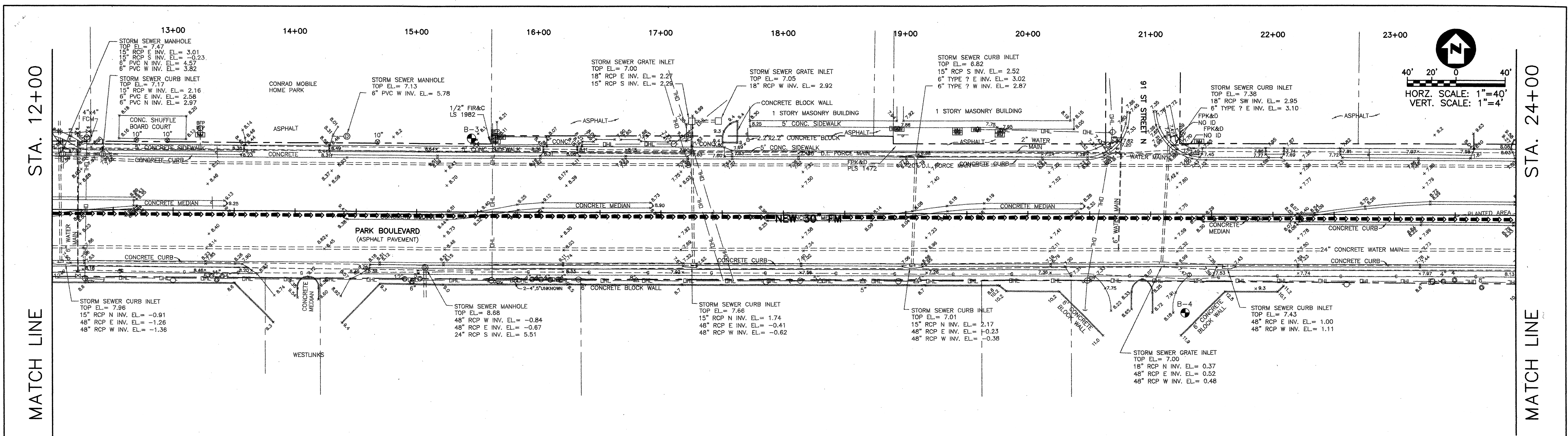




<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		<b>BOCA CIEGA</b> SANITARY FORCE MAIN IMPROVEMENTS PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		<b>PLAN AND PROFILE</b> PARK BOULEVARD (78TH AVENUE) STA 0+00 TO STA 12+00		DRAWING NO. <b>P-01</b>
Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked H. [Signature] Reviewed J. [Signature] Approved [Signature] Reg. No. 40157 Date FEBRUARY 2001		Issue Certification		0 7/01 RELEASED FOR BIDDING/CONSTRUCTION Rev Date Description		REV. 0		

XREF: 8729K03.DWG, 8729K05.DWG, 8729K01A.DWG, 8729K07.DWG  
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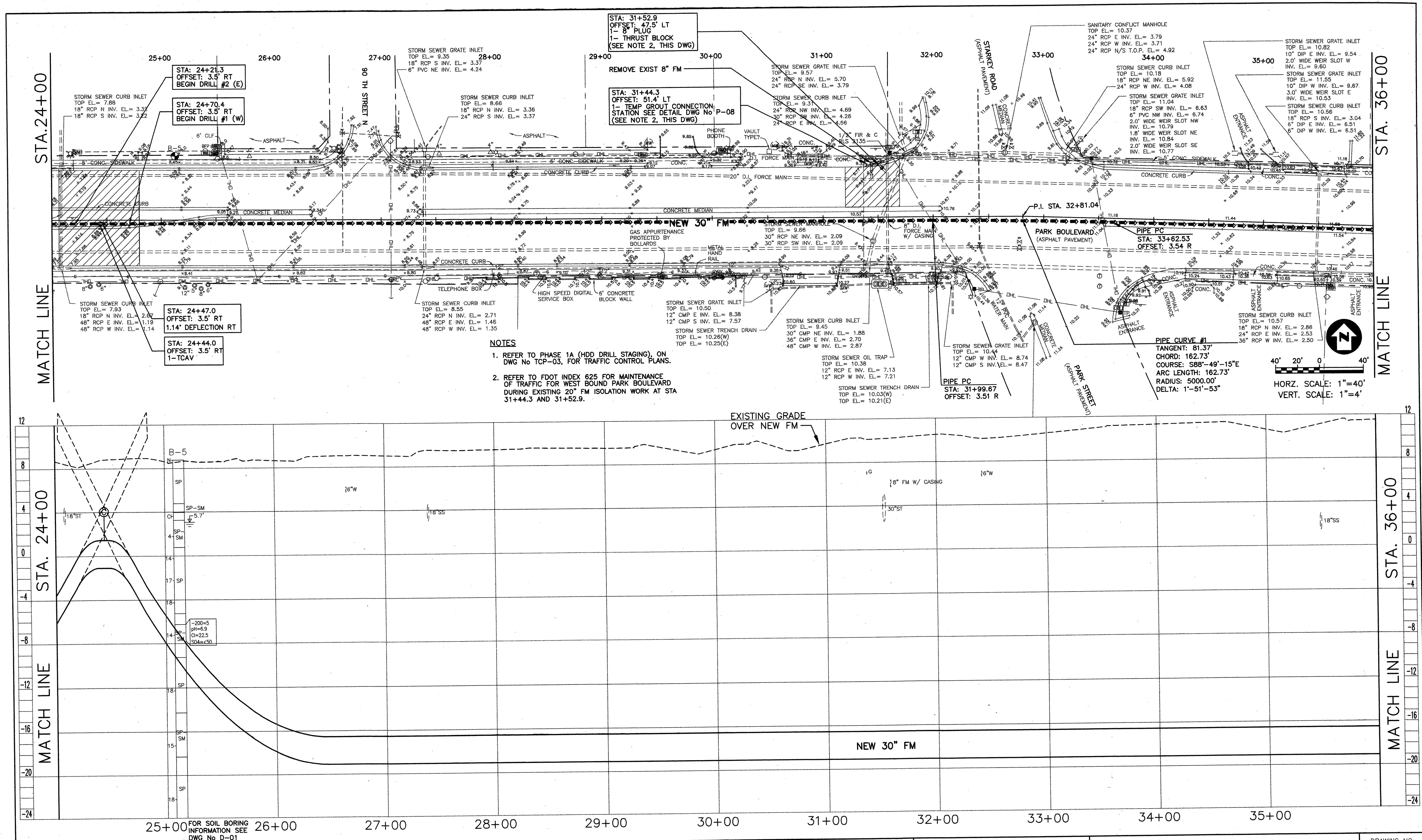




<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		Issue Certification Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked M. [Signature] Reviewed J. [Signature] Approved [Signature] Reg. No. 40157 Date FEBRUARY 2001		<b>PINELLAS COUNTY UTILITIES</b>  14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		<b>BOCA CIEGA</b> SANITARY FORCE MAIN IMPROVEMENTS PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		<b>PLAN AND PROFILE</b> PARK BOULEVARD (78TH AVENUE) STA 12+00 TO STA 24+00		DRAWING NO. <b>P-02</b> REV. <b>0</b>	
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REF: R729X03.DWG, R729X05.DWG, R729X01A.DWG  
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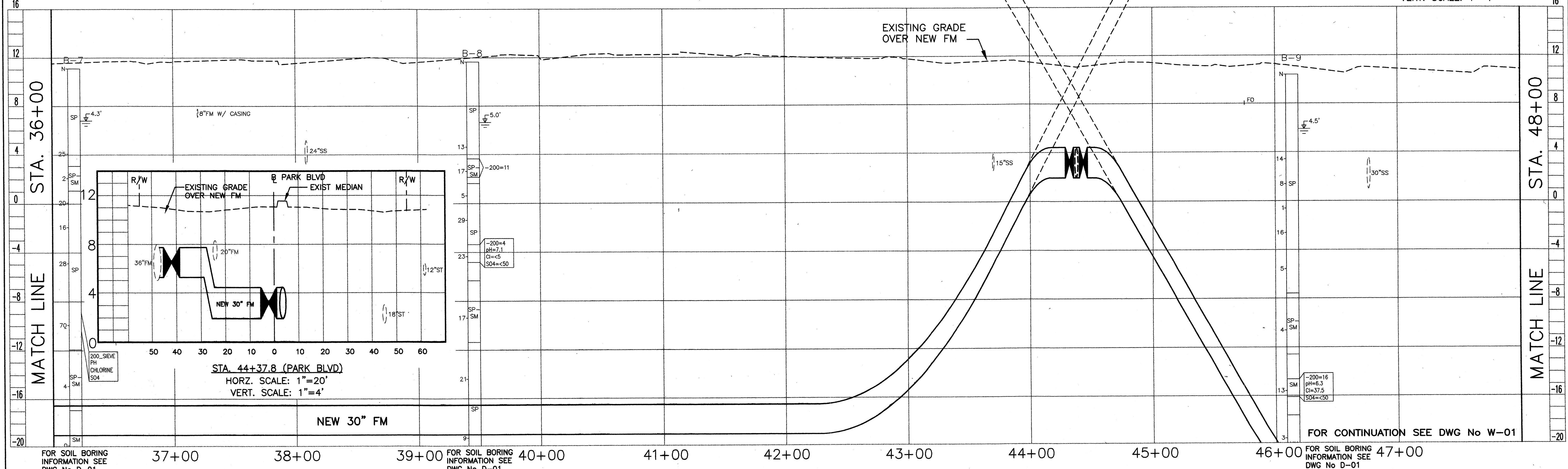
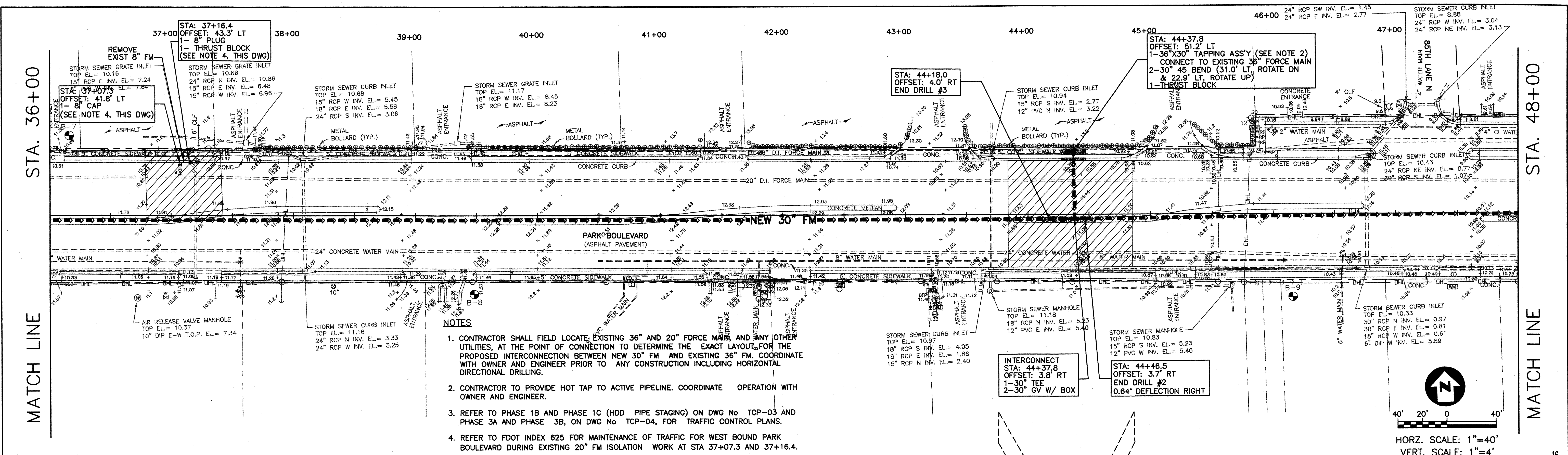
<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked <i>[Signature]</i> Reviewed <i>[Signature]</i> Approved <i>[Signature]</i> Reg. No. 40157 Date FEBRUARY 2001	<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588	BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514	PLAN AND PROFILE PARK BOULEVARD (78TH AVENUE) STA 24+00 TO STA 36+00	DRAWING NO. <b>P-03</b> REV. <b>0</b>
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Rev	Date	Description
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION

By *[Signature]*

XREF: 8729X03.DWG, 8729X05.DWG, 8729X01A.DWG  
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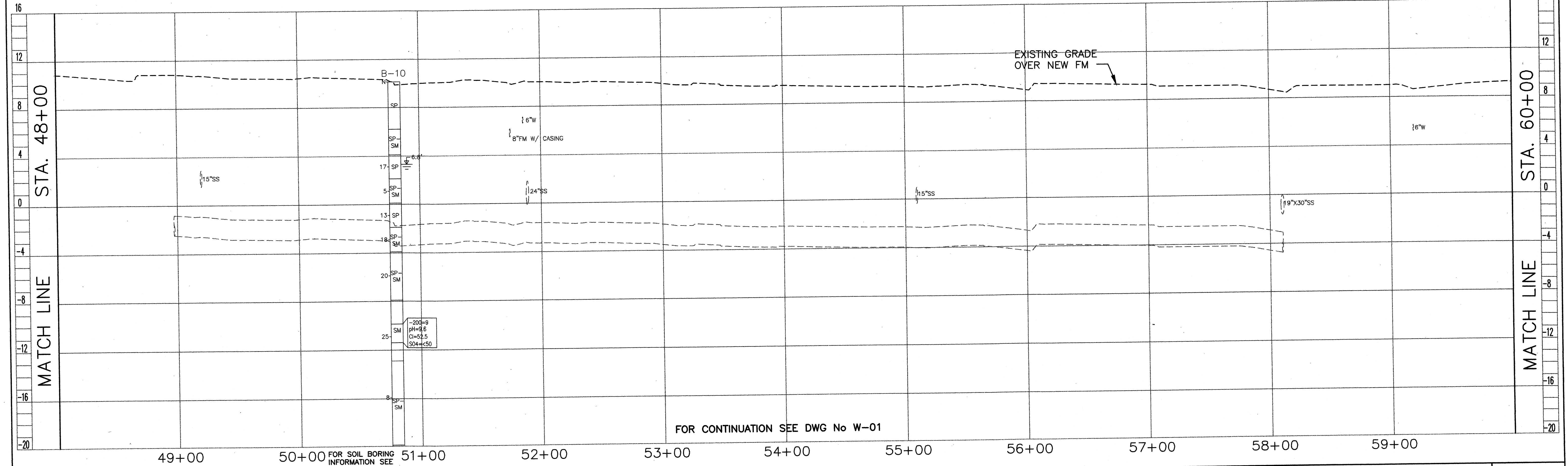
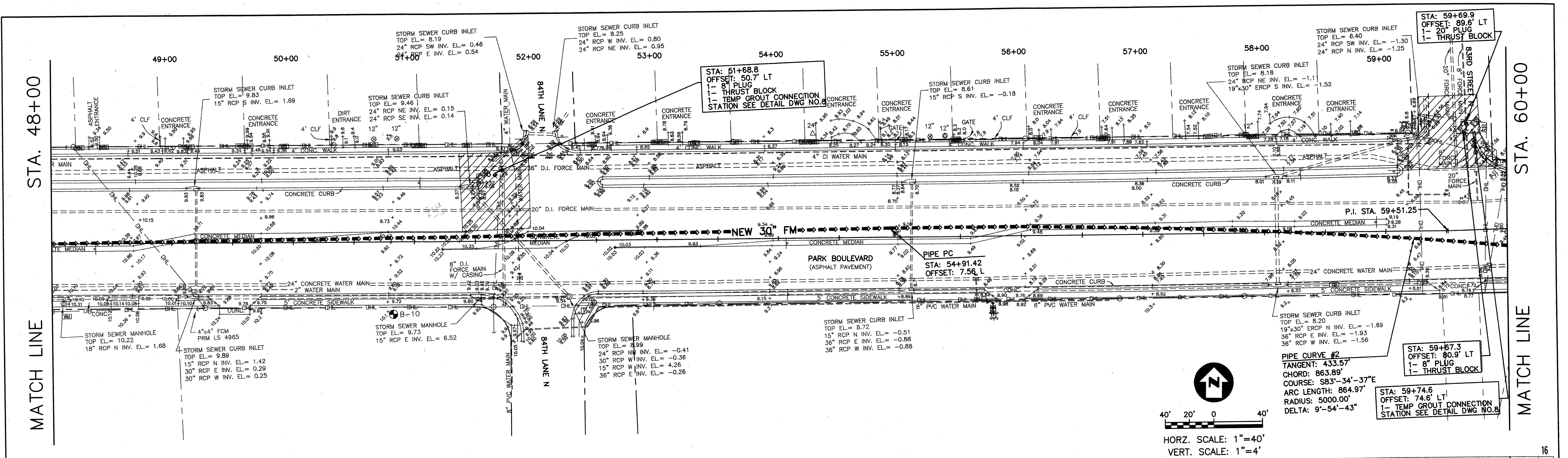




<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		<b>BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS</b> PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		<b>PLAN AND PROFILE PARK BOULEVARD (78TH AVENUE) STA 36+00 TO STA 48+00</b>		DRAWING NO. <b>P-04</b>
Job No. <b>738729</b> Designed <b>D. KAMATH</b> Drawn <b>F. DeSANTO</b> Checked <b>J. DeSANTO</b> Reviewed <b>J. DeSANTO</b> Reg. No. <b>40157</b> Date <b>FEBRUARY 2001</b>		Issue Certification		FOR SOIL BORING INFORMATION SEE DWG No D-01		FOR SOIL BORING INFORMATION SEE DWG No D-01		REV. <b>0</b>

0 7/01 RELEASED FOR BIDDING/CONSTRUCTION

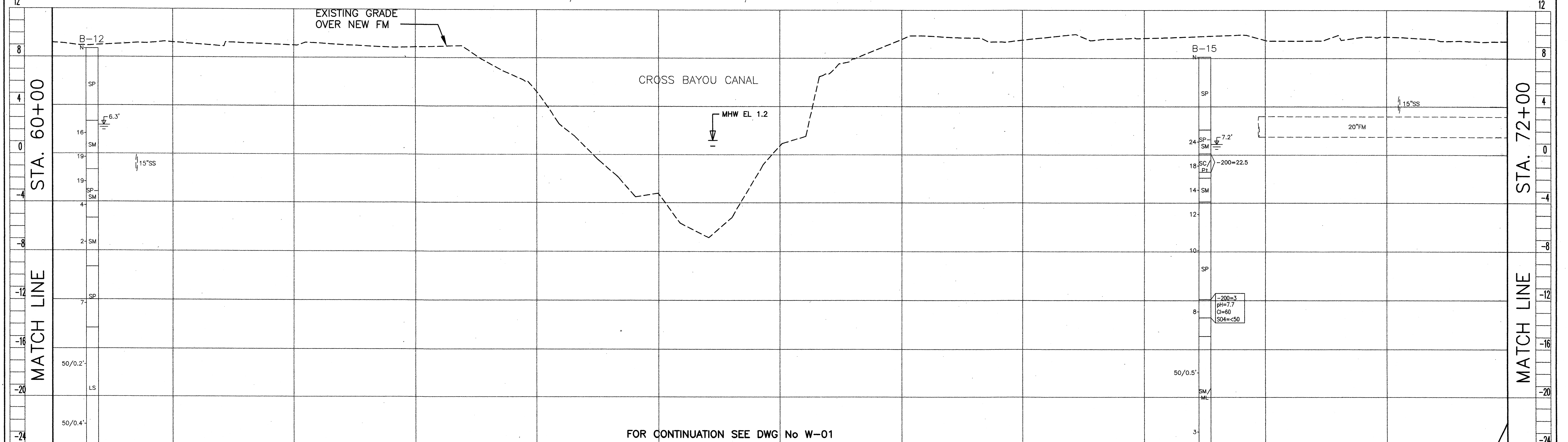
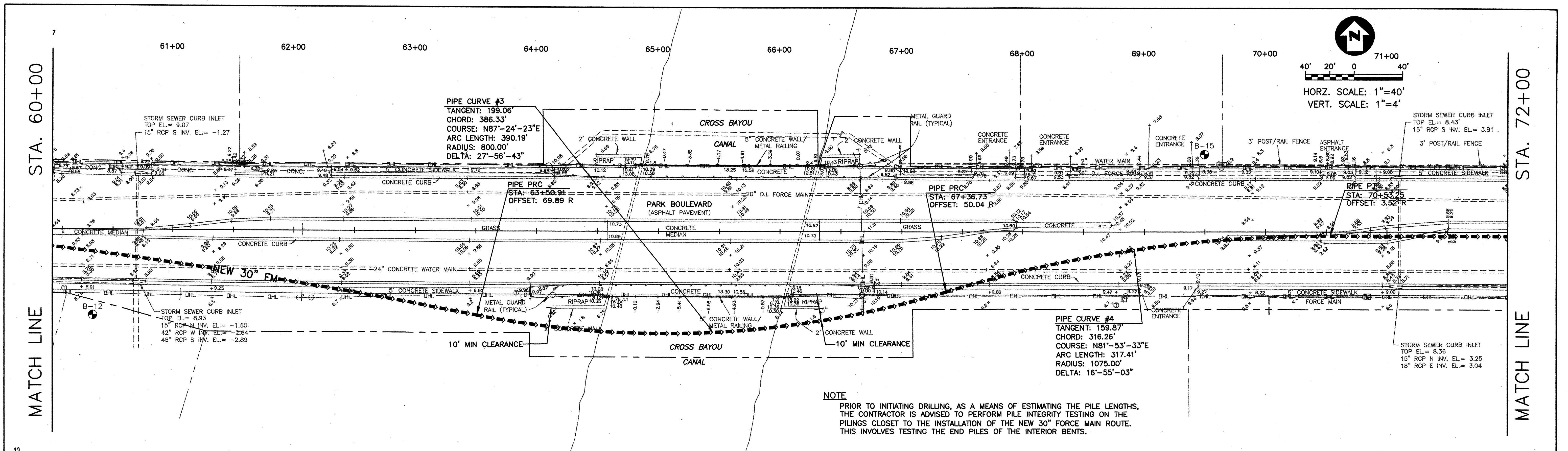




<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		Issue Certification Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked <i>[Signature]</i> Reviewed <i>[Signature]</i> Approved <i>[Signature]</i> Reg. No. 40157 Date FEBRUARY 2001	<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588	BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514	PLAN AND PROFILE PARK BOULEVARD (78TH AVENUE) STA 48+00 TO STA 60+00	DRAWING NO. <b>P-05</b> REV. 0
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0 7/01 RELEASED FOR BIDDING/CONSTRUCTION  
 Rev Date Description  
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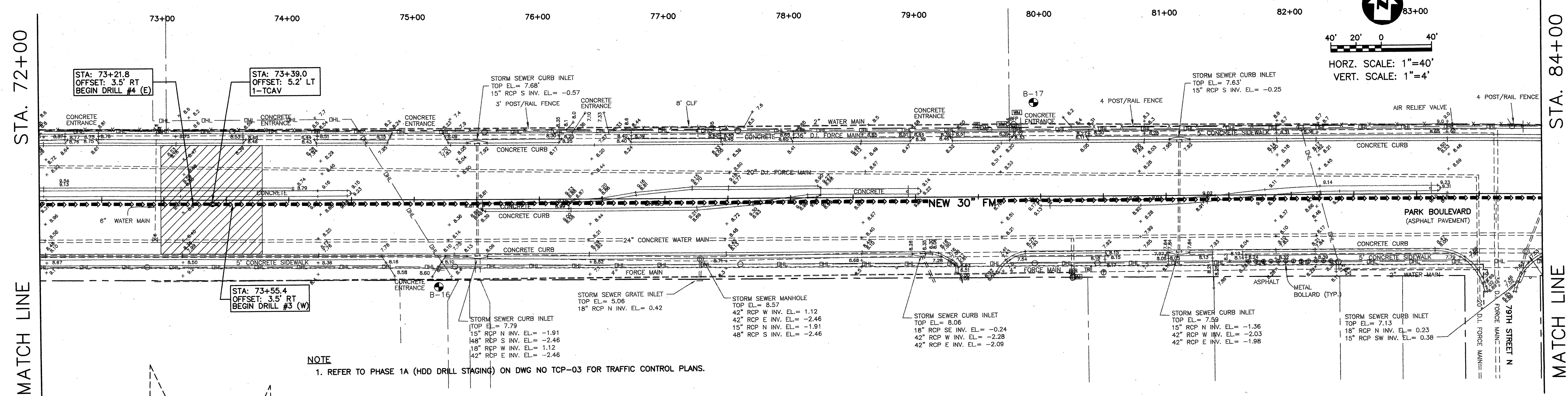


FOR SOIL BORING INFORMATION SEE DWG No D-01		61+00      62+00      63+00      64+00      65+00      66+00      67+00      68+00      69+00      70+00      71+00		FOR SOIL BORING INFORMATION SEE DWG No D-01	
0    7/01    RELEASED FOR BIDDING/CONSTRUCTION		<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		Issue Certification Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked M. DeSANTO Reviewed [Signature] Approved [Signature] Reg. No. 40157 Date FEBRUARY 2001	
PINELLAS COUNTY UTILITIES 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		PLAN AND PROFILE PARK BOULEVARD (78TH AVENUE) STA 60+00 TO STA 72+00	
DRAWING NO. P-06		REV. 0		0	

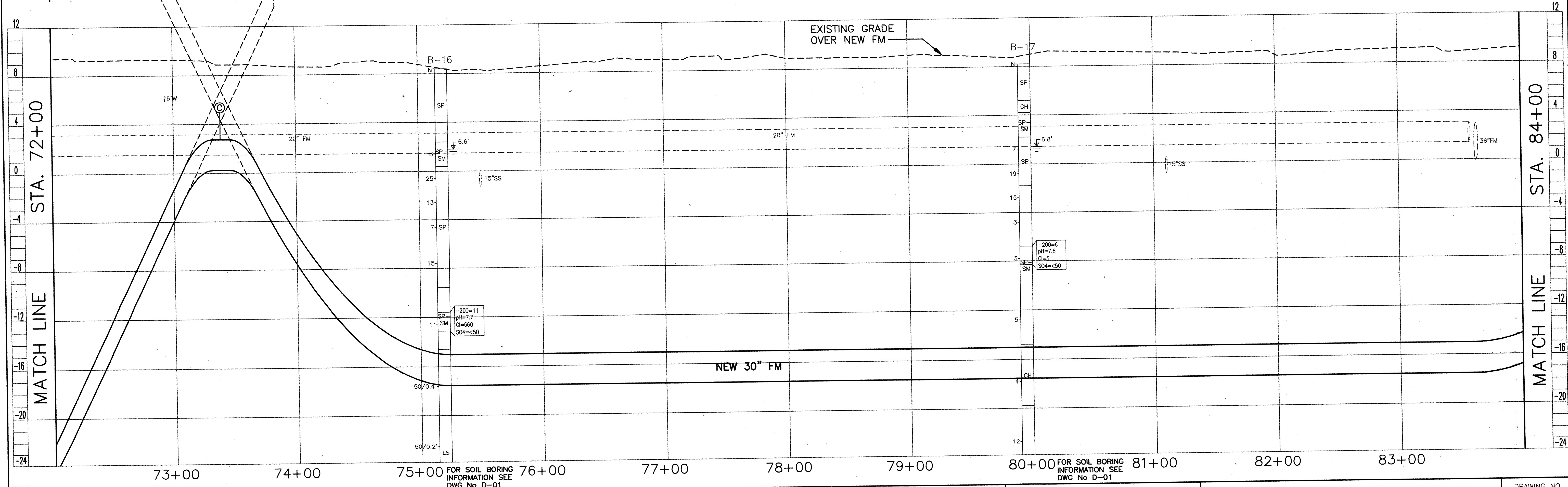




HORZ. SCALE: 1"=40'  
VERT. SCALE: 1"=4'



NOTE  
1. REFER TO PHASE 1A (HDD DRILL STAGING) ON DWG NO TCP-03 FOR TRAFFIC CONTROL PLANS.



<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33758 (813) 464-3588		<b>BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS</b> PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		<b>PLAN AND PROFILE PARK BOULEVARD (78TH AVENUE) STA 72+00 TO STA 84+00</b>		DRAWING NO. <b>P-07</b> REV. <b>0</b>	
Issue Certification		Job No. <b>738729</b> Designed <b>D. KAMATH</b> Drawn <b>F. DeSANTO</b> Checked <b>M. [Signature]</b> Reviewed <b>[Signature]</b> Approved <b>[Signature]</b> Reg. No. <b>40157</b> Date <b>FEBRUARY 2001</b>							
By <b>[Signature]</b>									

Rev 0 7/01 RELEASED FOR BIDDING/CONSTRUCTION  
XREF: 8729X03.DWG, 8729X01A.DWG, 8729X05.DWG  
J:\CADD\738729\8729X03.DWG (BOCA\_CIEGA\_Plan\_Profile) (8729p07.dwg, 07/20/2001 at 13:49, FAD, 1:1)





TEMPORARY PIGGING AND  
GROUTING STATION  
NOT TO SCALE

TEMPORARY GROUT CONNECTION & PIGGING STATION @ OLD PS 016  
(4000'± WEST OF BEGINNING OF PROJECT)  
NOT TO SCALE

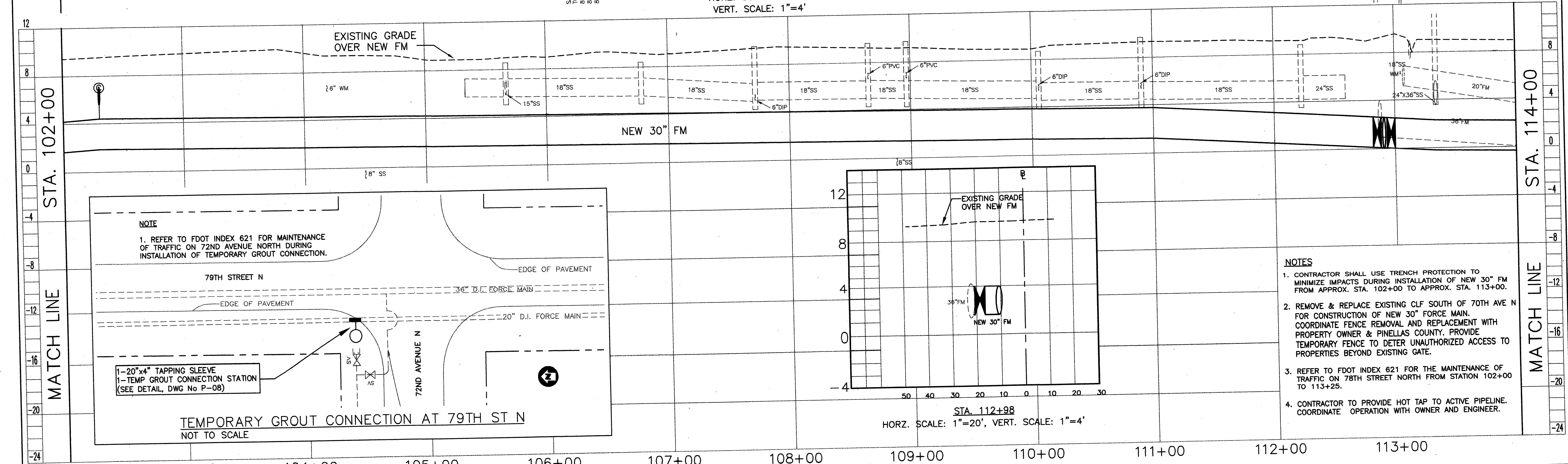
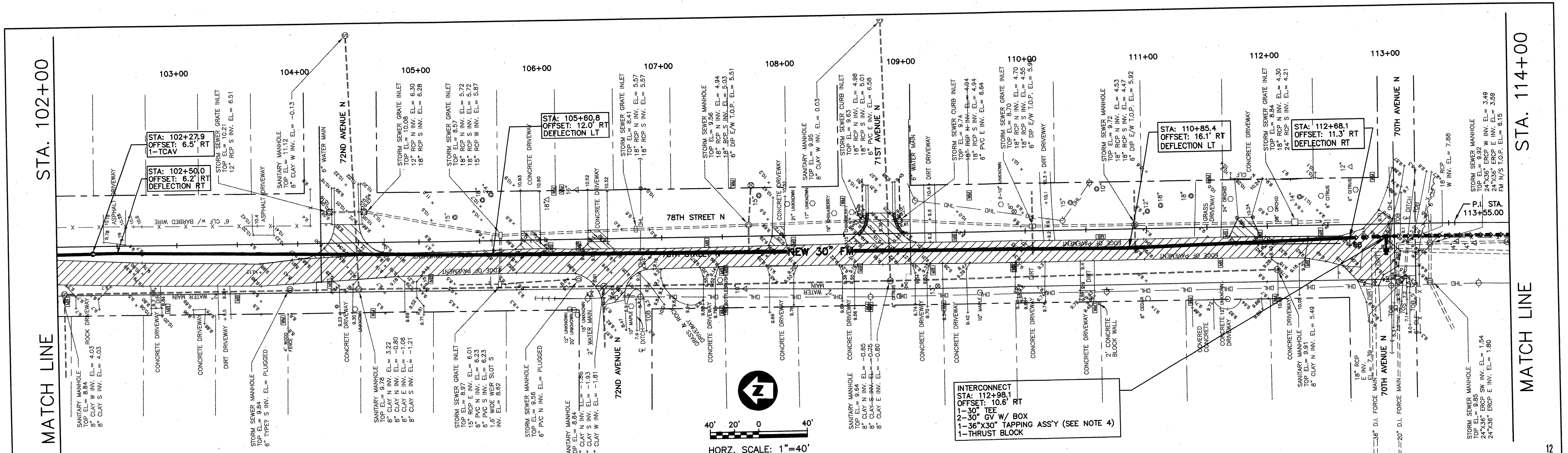
GROUT CONNECTION (2110'± WEST OF BEGINNING OF PROJECT)  
NOT TO SCALE

TEMPORARY GROUT CONNECTION AND 20" FM ISOLATION AT  
SEMINOLE PARK ENTRANCE  
NOT TO SCALE

TEMPORARY GROUTING CONNECTION  
NOT TO SCALE

1. CONTRACTOR IS STRONGLY ADVISED TO PERFORM SUBSURFACE UTILITY INVESTIGATIONS PRIOR TO CONSTRUCTION. ANY DEVIATION FROM THIS PLAN MAY EFFECT THE LAYOUT OF THE TRAFFIC CONTROL PLANS PROVIDED HEREIN; THEREFORE, ANY FINDINGS THAT PREVENTS THE CONTRACTOR FROM PRECEDING WITH THE WORK AS SHOWN, SHALL BE REPORTED TO THE ENGINEER PRIOR TO THE START OF WORK PERTAINING TO THE GROUTING OF EXISTING 20" FM.





<p><b>PARSONS ENGINEERING SCIENCE, INC.</b></p> <p>OFFICES IN PRINCIPAL CITIES</p> <p>3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650</p>	<p>Issue Certification</p> <p>Job No. 738729</p> <p>Designed R. VELASCO</p> <p>Drawn M. BAKER</p> <p>Checked M. BAKER</p> <p>Reviewed J. LANE</p> <p>Approved J. LANE</p> <p>Reg. No. 40157</p> <p>Date FEBRUARY 2001</p>	<p><b>PINELLAS COUNTY UTILITIES</b></p> <p>14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588</p>	<p><b>BOCA CIEGA</b></p> <p><b>SANITARY FORCE MAIN IMPROVEMENTS</b></p> <p>PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514</p>	<p><b>PLAN AND PROFILE</b></p> <p><b>78TH STREET NORTH</b></p> <p><b>STA 102+00 TO STA 114+00</b></p>	<p>DRAWING NO.</p> <p><b>P-09</b></p> <p>REV.</p> <p><b>0</b></p>
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0 7/01 RELEASED FOR BIDDING/CONSTRUCTION

Rev Date Description

By

0 7/01 RELEASED FOR BIDDING/CONSTRUCTION

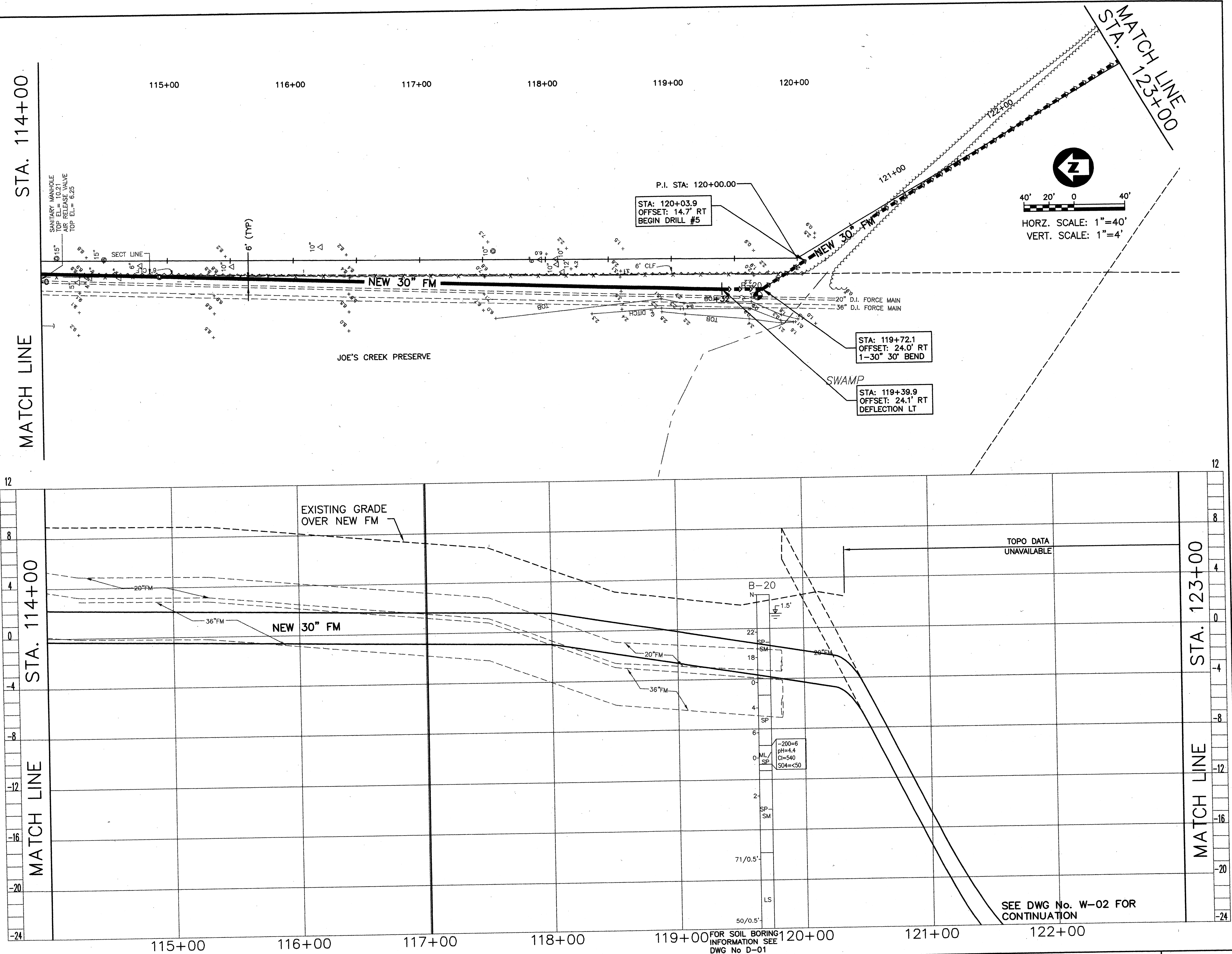
Rev Date Description

By



**NOTES**

1. CONTRACTOR SHALL FIELD LOCATE EXISTING 36" AND 20" FORCE MAINS, AND ANY OTHER UTILITIES, TO DETERMINE THE EXACT LOCATION OF THE HDD ENTRY POINT AND LAYOUT FOR THE NEW 30" FM. COORDINATE WITH OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION INCLUDING HORIZONTAL DIRECTIONAL DRILLING.
2. REMOVE AND REPLACE EXISTING CLF IF NECESSARY FOR CONSTRUCTION OF NEW 30" FORCE MAIN. COORDINATE FENCE REMOVAL AND REPLACEMENT WITH PROPERTY OWNER AND PINELLAS COUNTY. PROVIDE TEMPORARY FENCE TO DETER UNAUTHORIZED ACCESS TO PROPERTIES BEYOND EXISTING GATE.



Rev	Date	Description
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION

**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES

**PARSONS**

3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed R. VELASCO  
Drawn N. MUMFORD  
Checked *[Signature]*  
Reviewed *[Signature]*  
Approved *[Signature]*  
Reg. No. 40157  
Date FEBRUARY 2001

**PINELLAS COUNTY UTILITIES**

14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

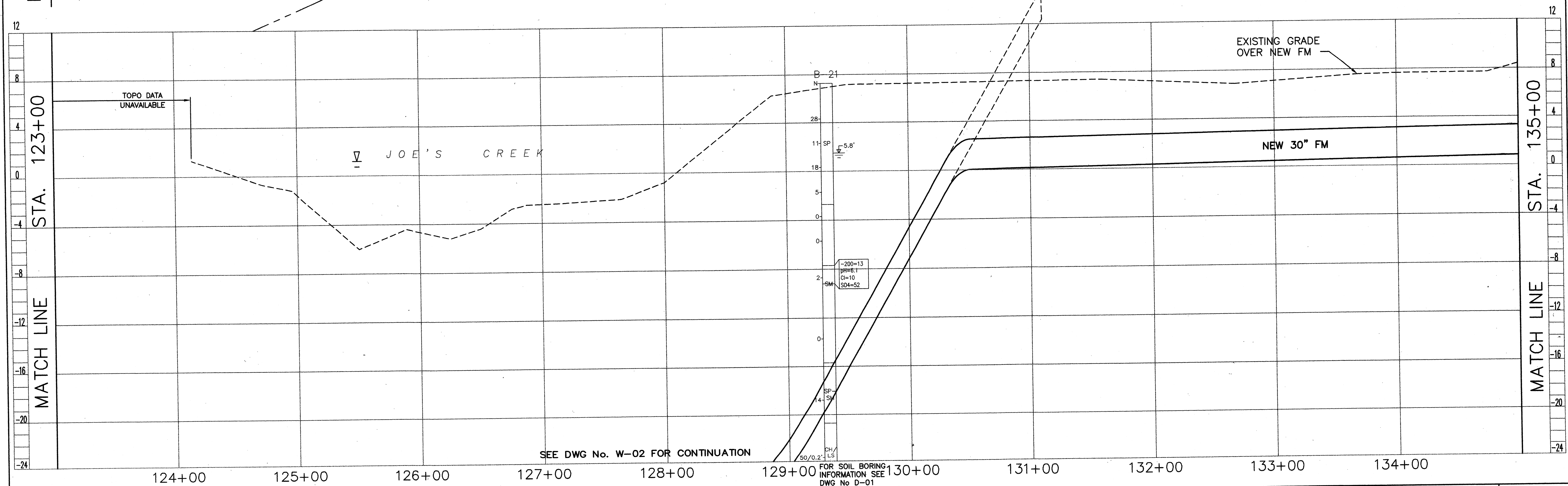
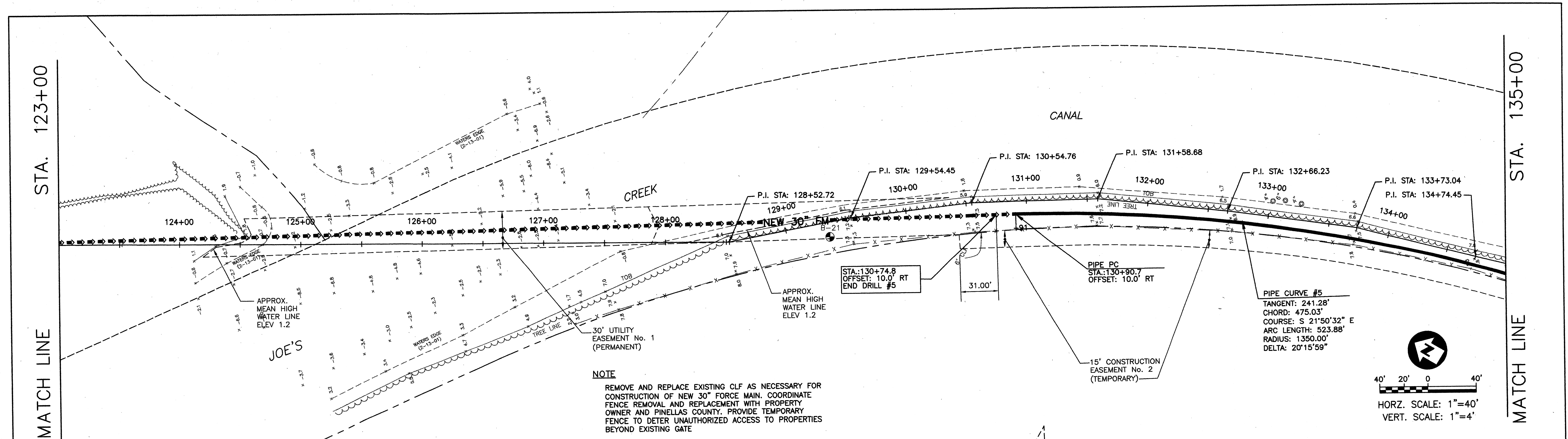
**BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS**




PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

**PLAN AND PROFILE  
JOE'S CREEK PRESERVE  
STA 114+00 TO STA 123+00**

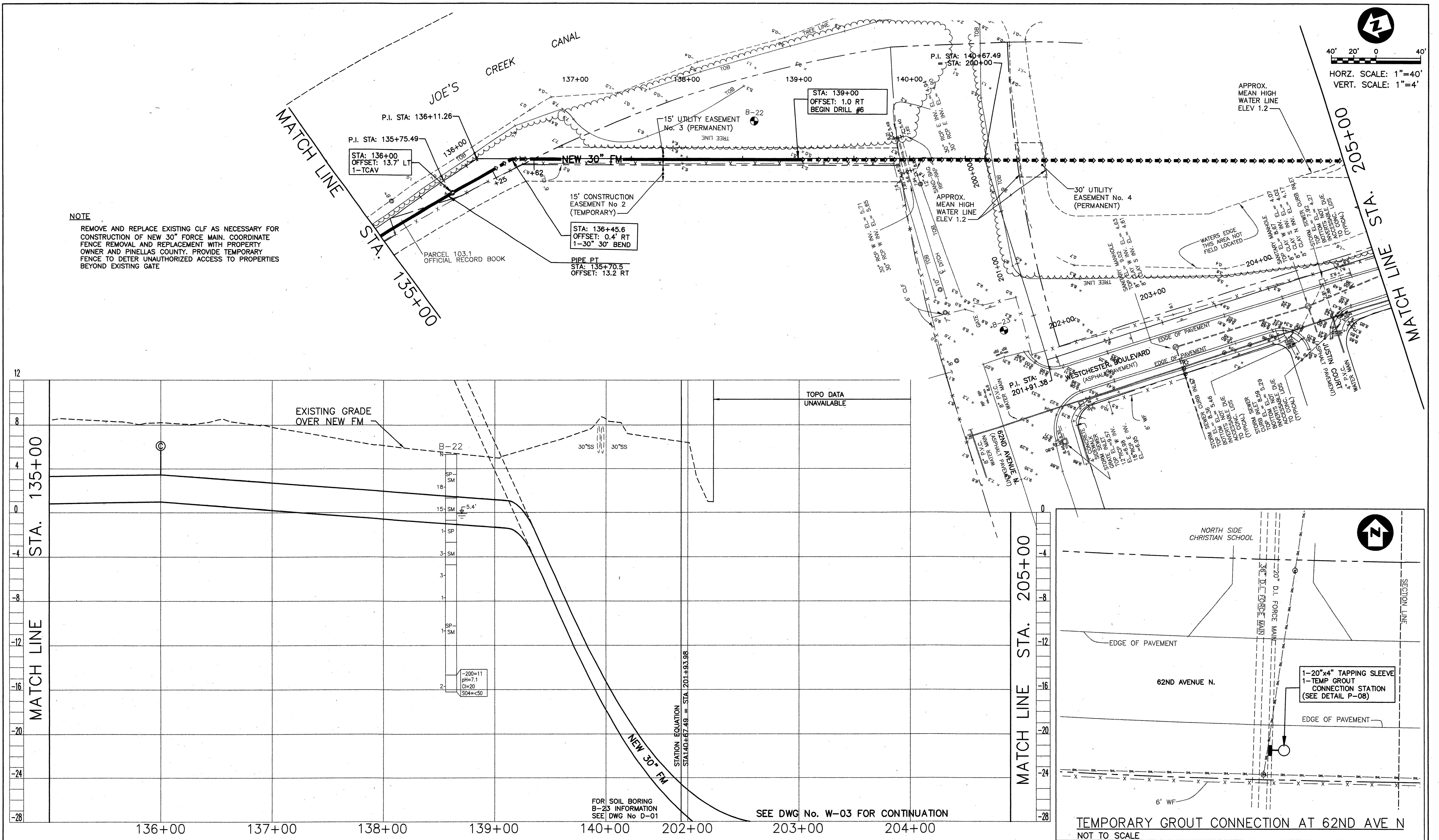
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REV. 0





			<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES   3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650		Issue Certification Job No. <u>738729</u> Designed <u>D. KAMATH</u> Drawn <u>F. DeSANTO</u> Checked <u>M. [Signature]</u> Reviewed <u>[Signature]</u> Approved <u>[Signature]</u> Reg. No. <u>40157</u> Date <u>FEBRUARY 2001</u>		<b>PINELLAS COUNTY UTILITIES</b>  14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS  PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		PLAN AND PROFILE JOE'S CREEK PRESERVE/ NORTHSIDE CHRISTIAN SCHOOL STA 123+00 TO STA 135+00		DRAWING NO. P-11  REV. 0	
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION	 By											
Rev	Date	Description												





<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4850		Issue Certification Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked <i>[Signature]</i> Reviewed <i>[Signature]</i> Approved <i>[Signature]</i> Reg. No. 40157 Date FEBRUARY 2001		<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		<b>BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS</b> PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		<b>PLAN AND PROFILE</b> NORTHSIDE CHRISTIAN SCHOOL/ WESTCHESTER BOULEVARD STA 135+00 TO STA 205+00		DRAWING NO. <b>P-12</b> REV. 0	
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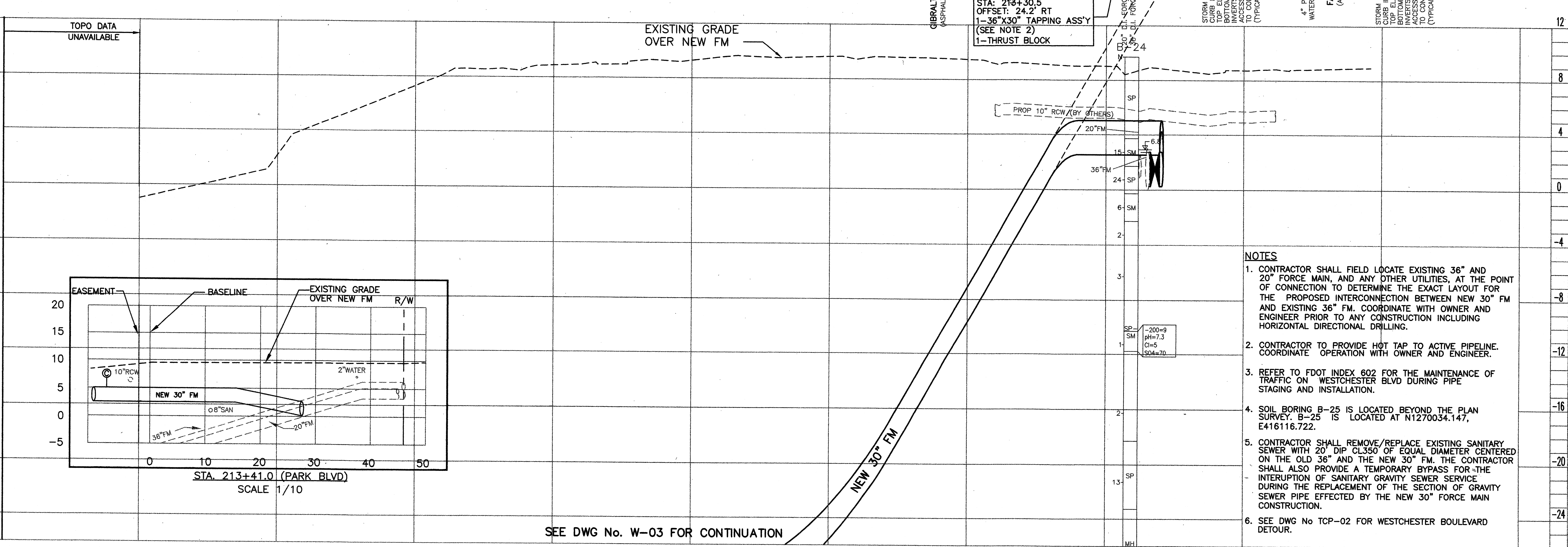


MATCH LINE STA. 205+00

STA. 205+00

MATCH LINE

12  
8  
4  
0  
-4  
-8  
-12  
-16  
-20  
-24



206+00

207+00

208+00

209+00

210+00

211+00

212+00

213+00

214+00

215+00

FOR SOIL BORING  
INFORMATION SEE  
DWG No. D-01

Rev	Date	Description
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION

**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES

3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked M. [Signature]  
Reviewed [Signature]  
Approved [Signature]  
Reg. No. 40157  
Date FEBRUARY 2001

**PINELLAS COUNTY UTILITIES**

14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

**BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS**

PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

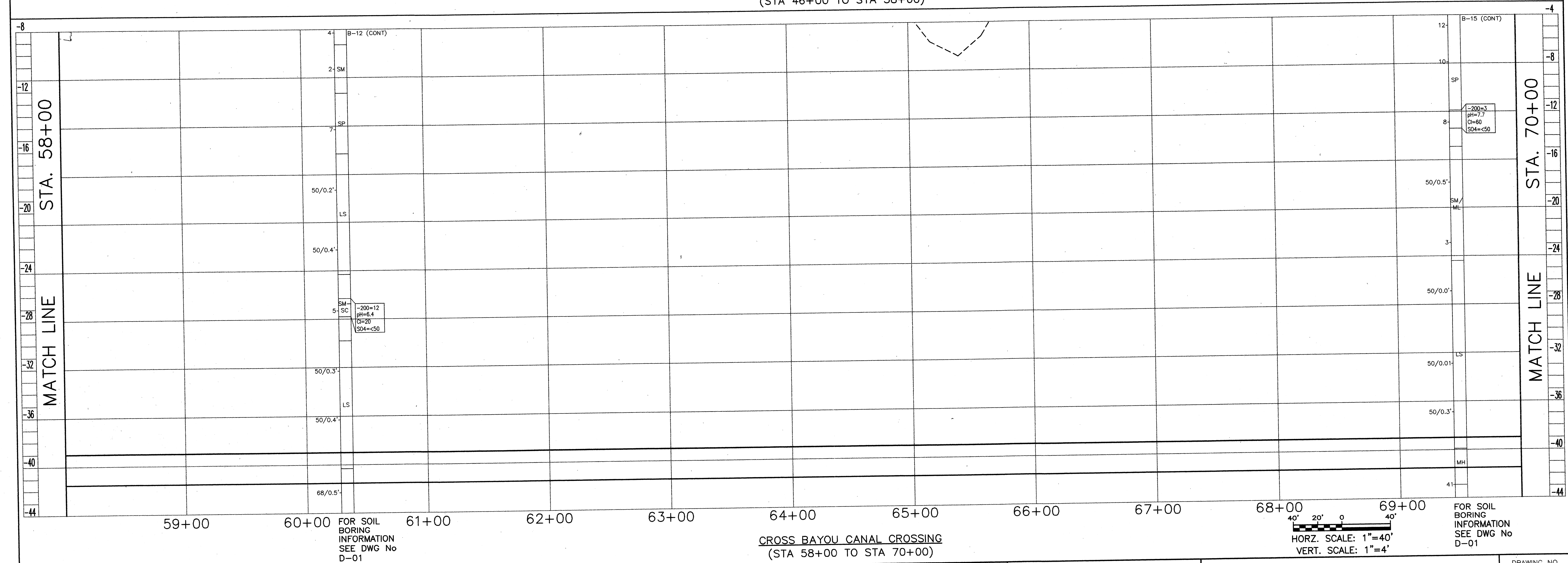
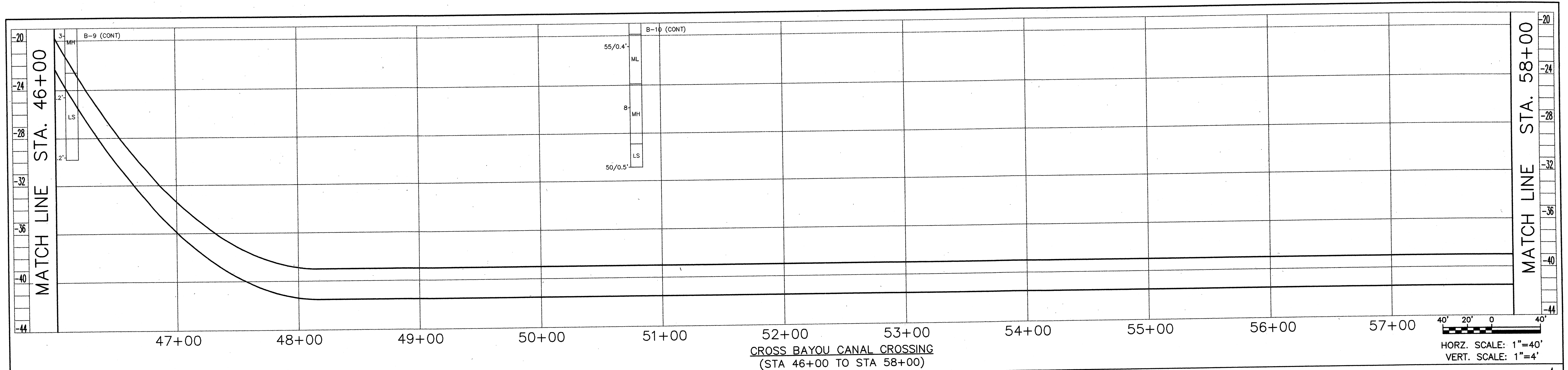
**PLAN AND PROFILE  
WESTCHESTER BOULEVARD  
STA 205+00 TO STA 215+64.92**

DRAWING NO.  
**P-13**

REV.  
**0**

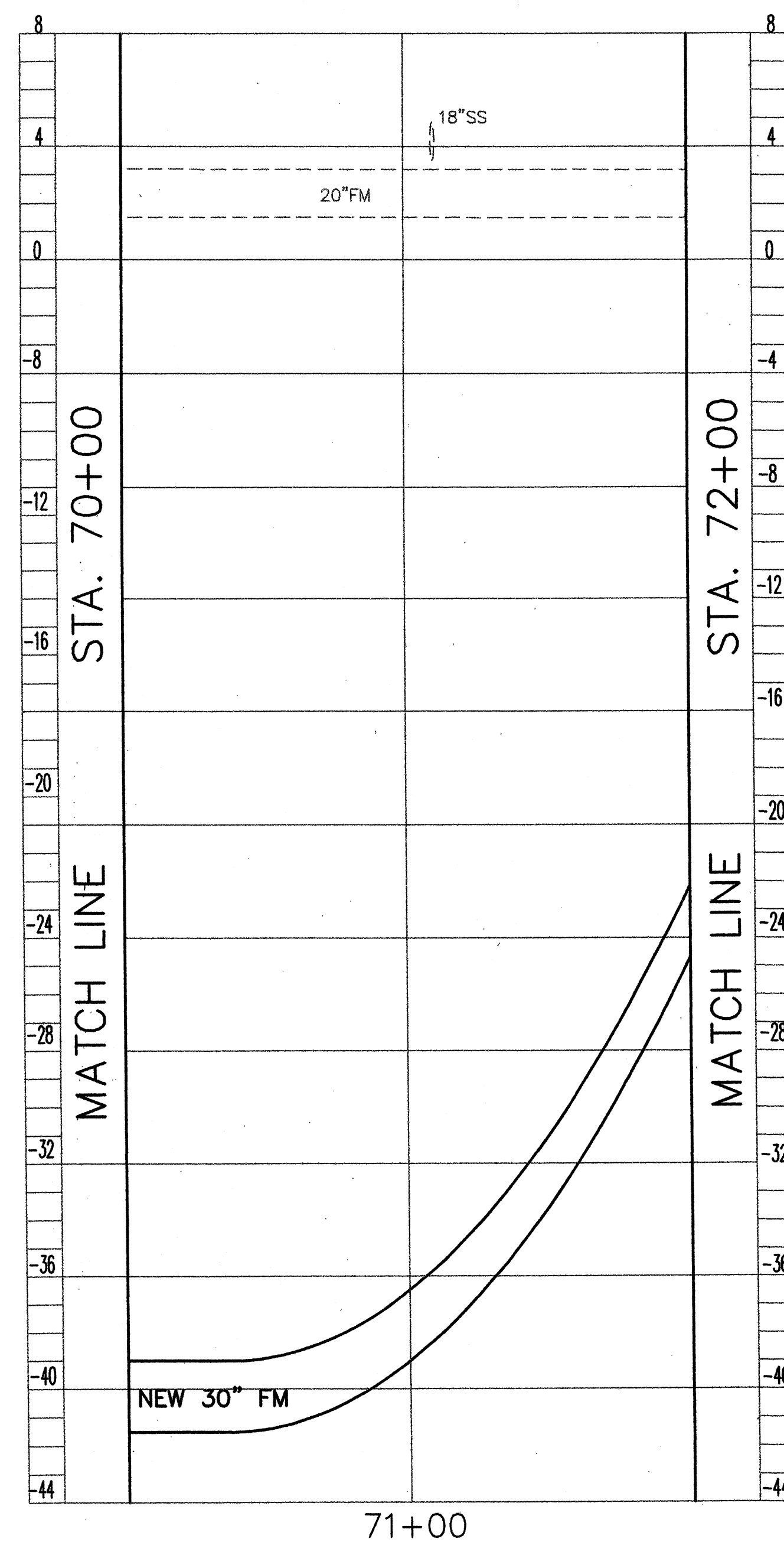
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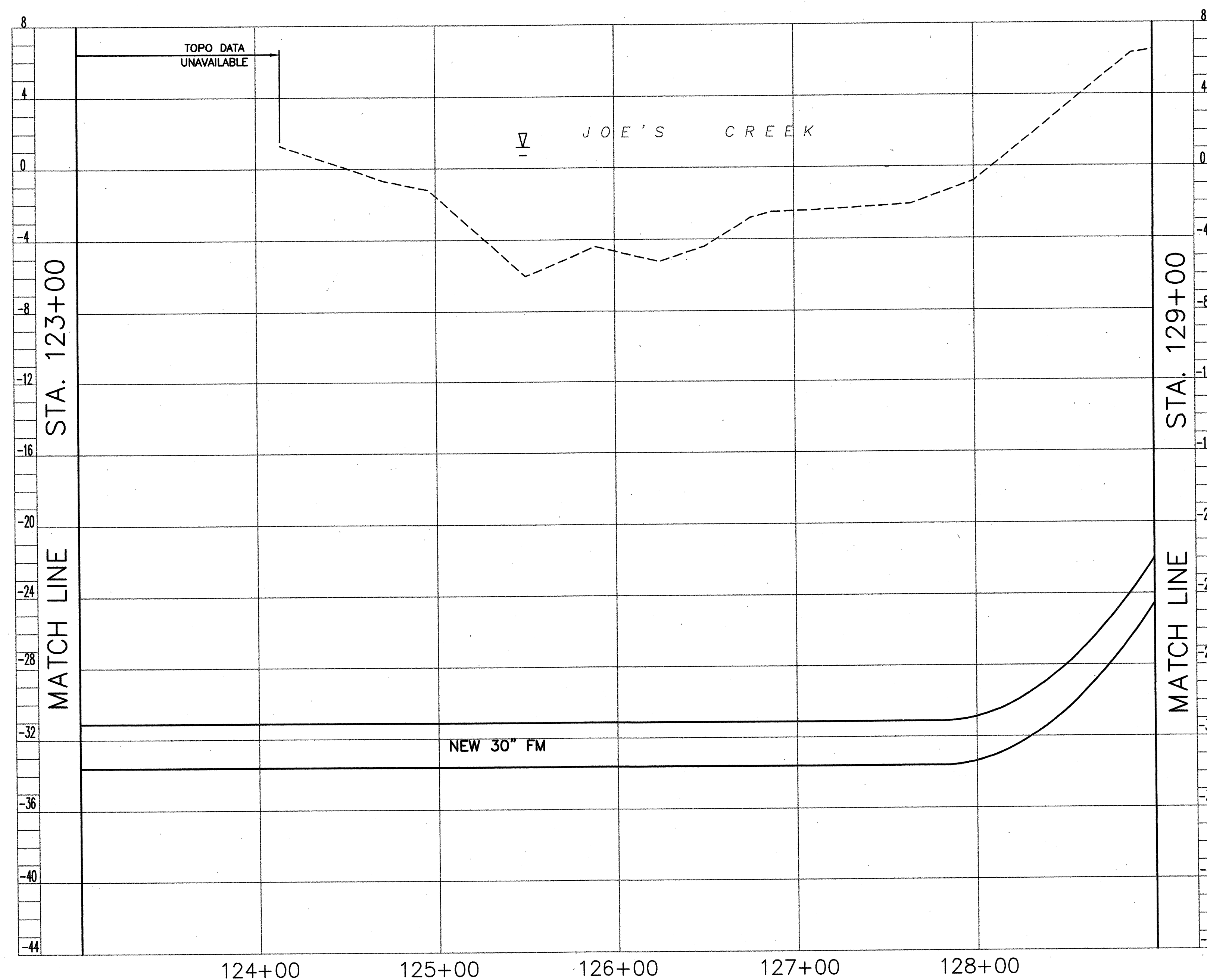
<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-6500		Issue Certification Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked M. [Signature] Reviewed [Signature] Approved [Signature] Reg. No. 40157 Date FEBRUARY 2001		<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		PROFILE CROSS BAYOU CANAL CROSSING STA 46+00 TO STA 70+00		DRAWING NO. W-01 REV. 0	
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CROSS BAYOU CANAL CROSSING  
(STA 70+00 TO STA 72+00)

40' 20' 0 40'  
HORZ. SCALE: 1"=40'  
VERT. SCALE: 1"=4'



JOE'S CREEK CROSSING  
(STA 120+00 TO STA 129+00)

40' 20' 0 40'  
HORZ. SCALE: 1"=40'  
VERT. SCALE: 1"=4'

Rev	Date	Description
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION

By

**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES



3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked M. [Signature]  
Reviewed [Signature]  
Approved [Signature]  
Reg. No. 40157  
Date FEBRUARY 2001

**PINELLAS COUNTY  
UTILITIES**



14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

**BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS**

PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

**PROFILE  
CROSS BAYOU CANAL CROSSING  
STA 70+00 TO STA 72+00/  
JOE'S CREEK CROSSING #1  
STA 123+00 TO STA 129+00**

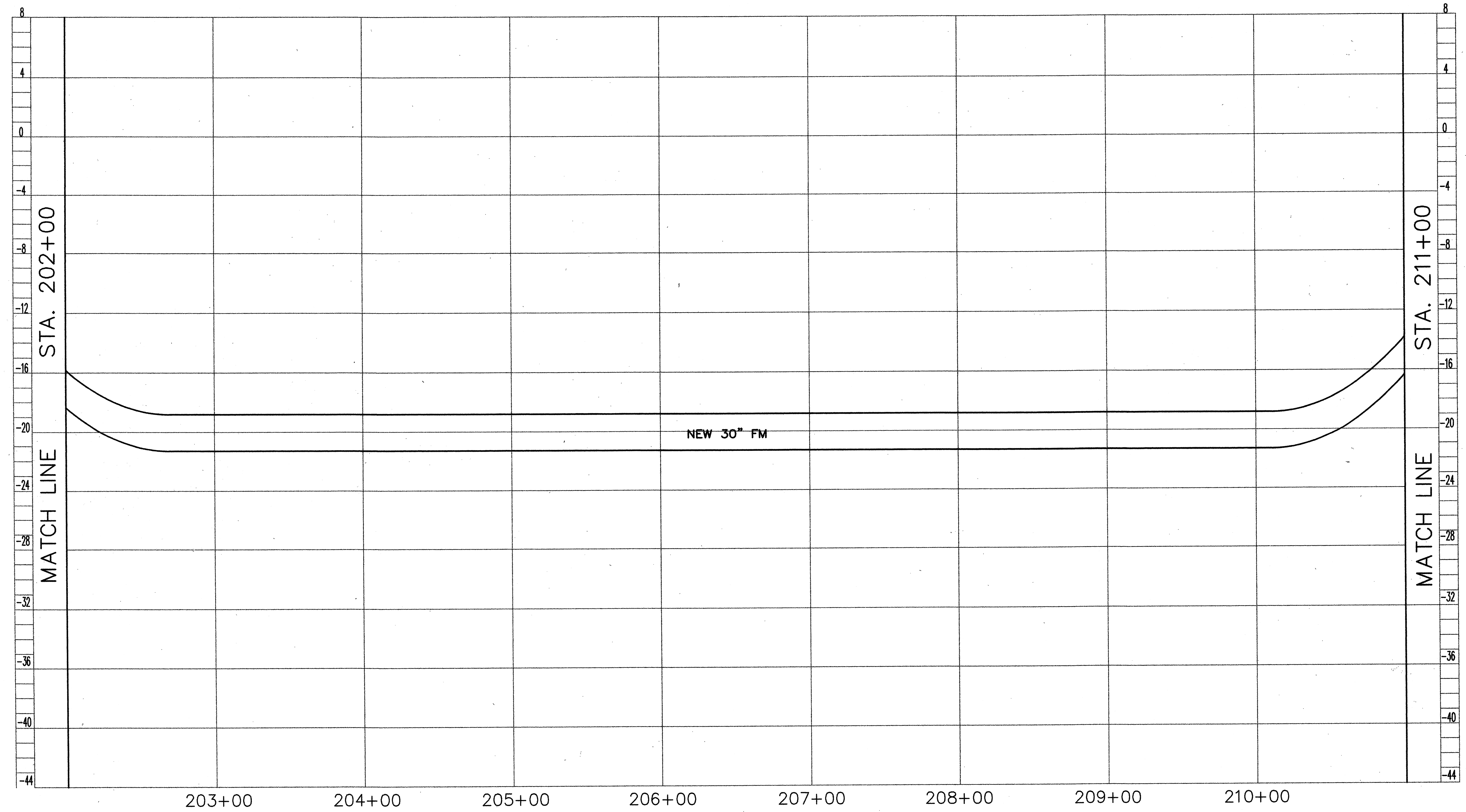
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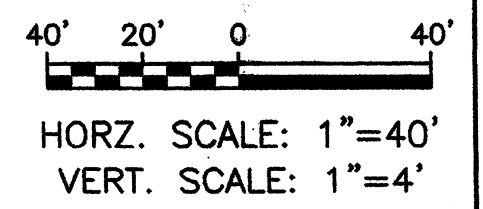
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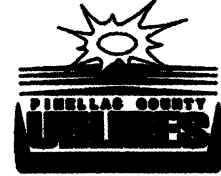
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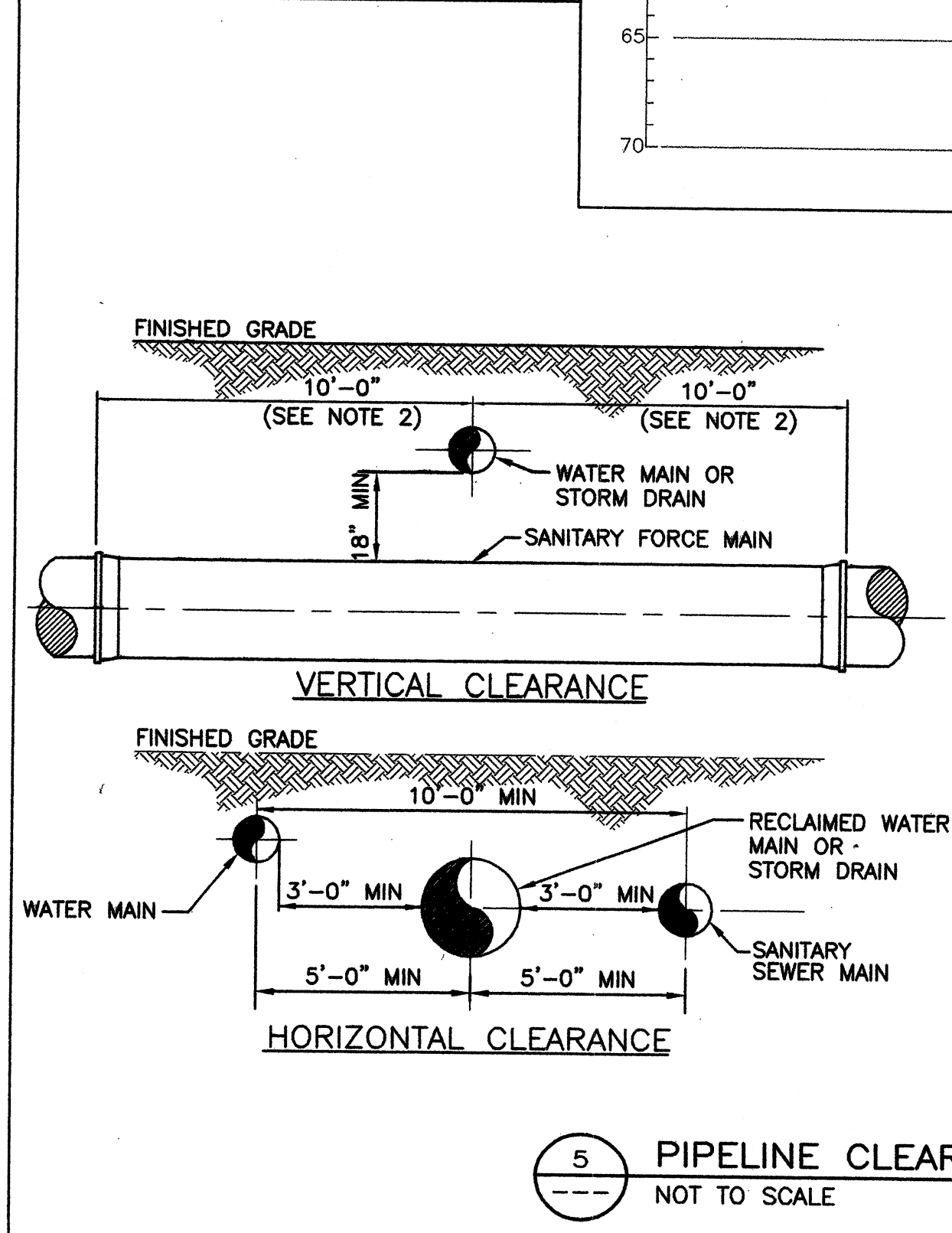
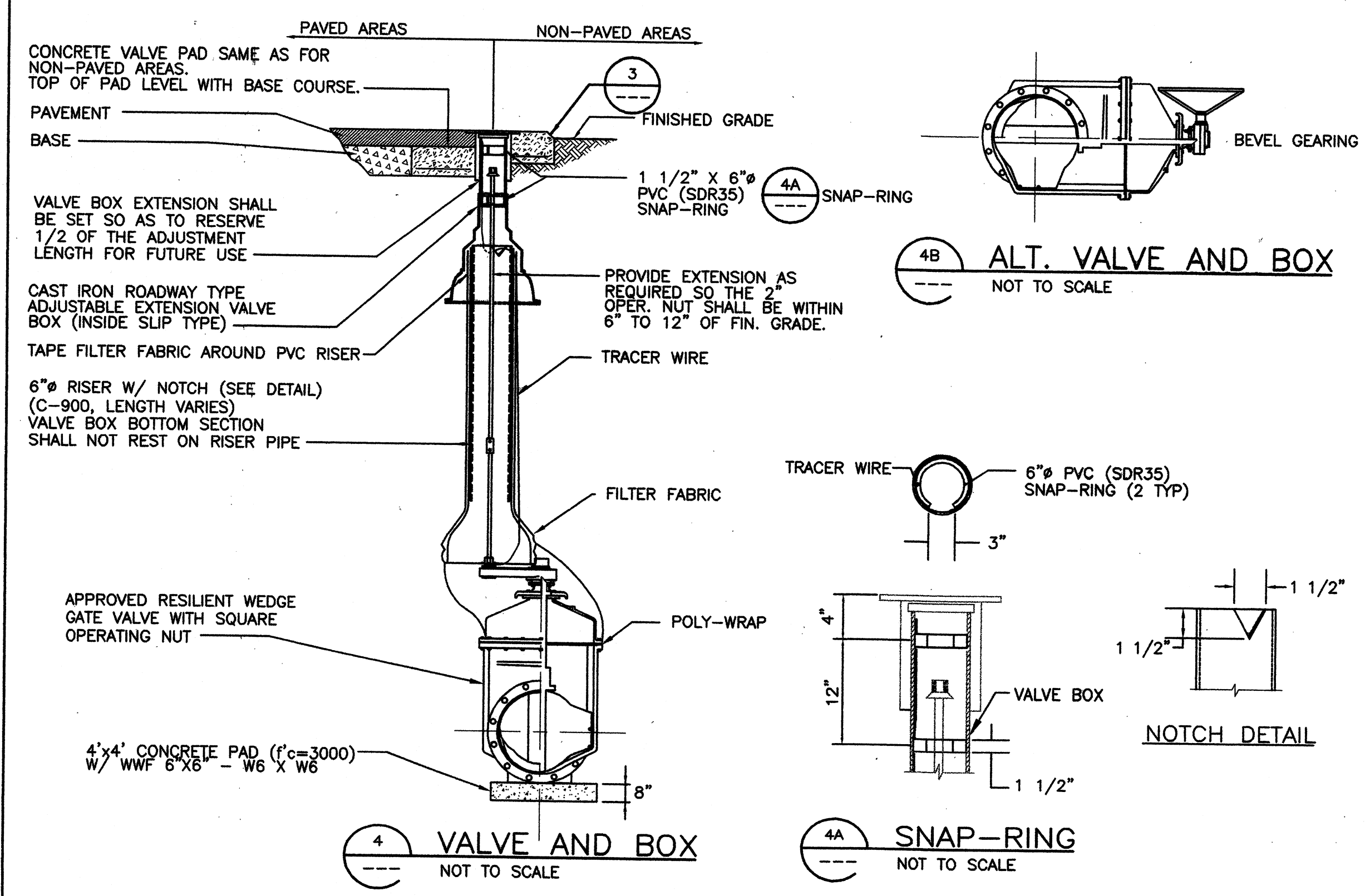
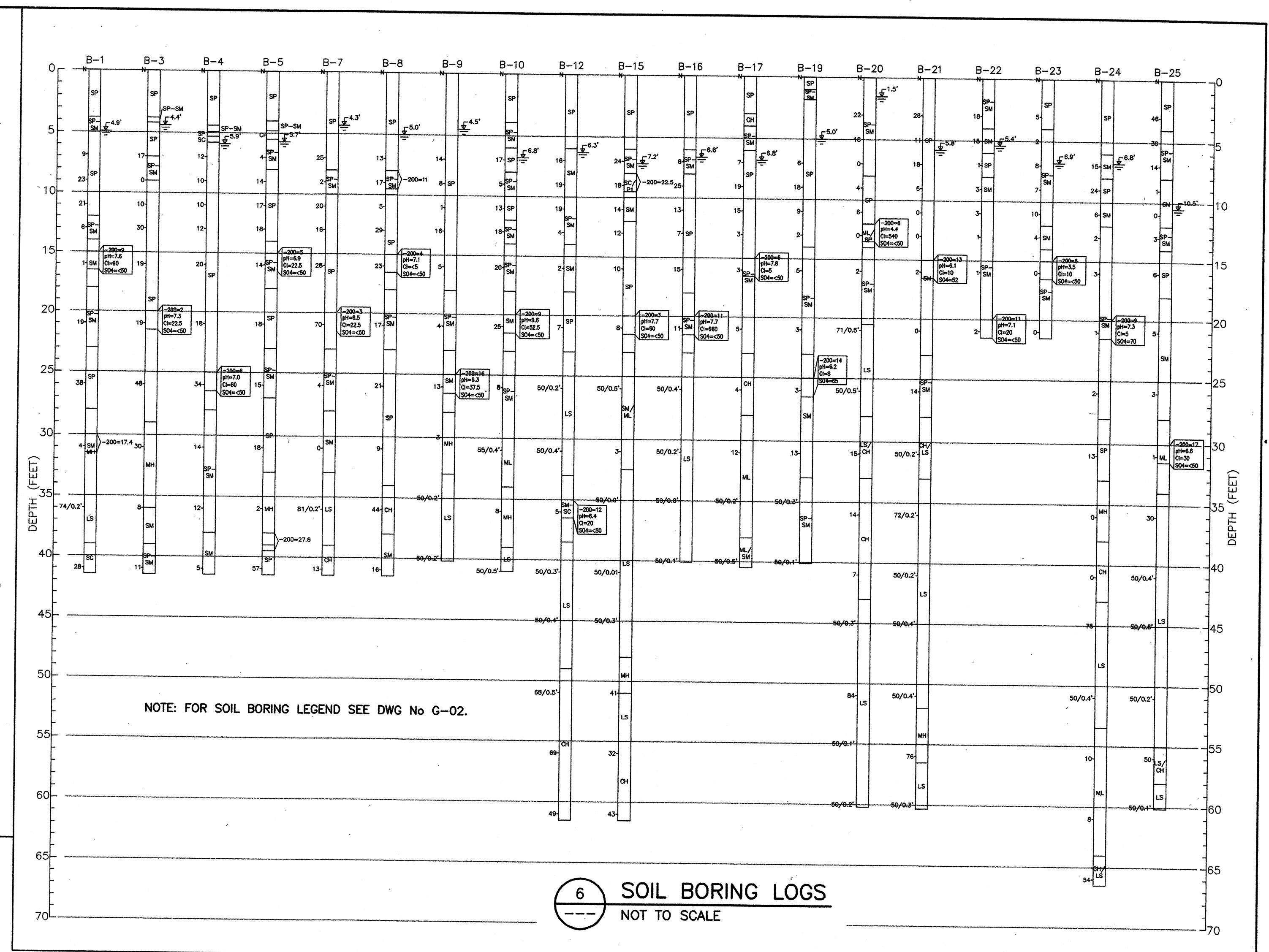
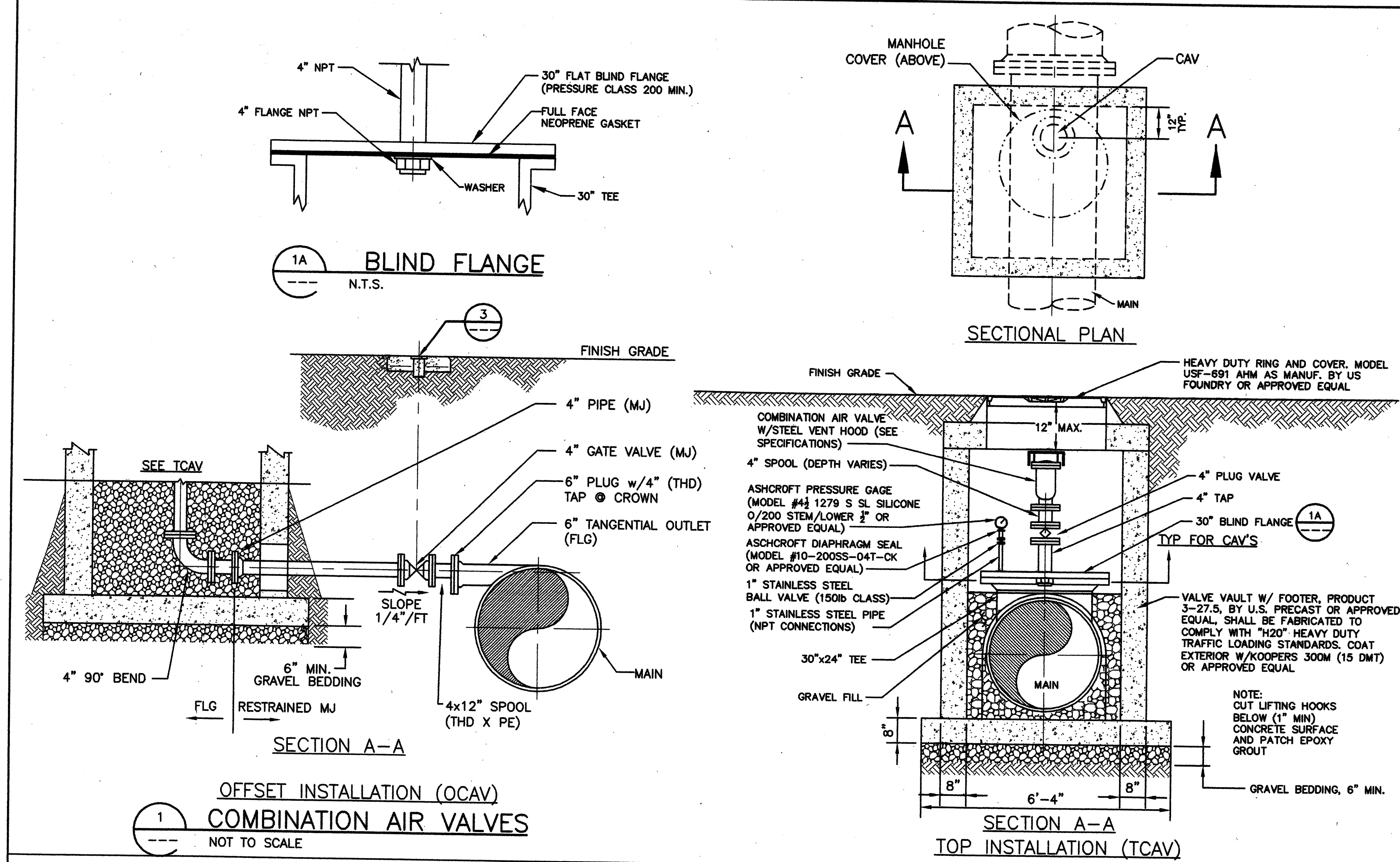
JOE'S CREEK CROSSING  
(STA 202+00 TO STA 211+00)



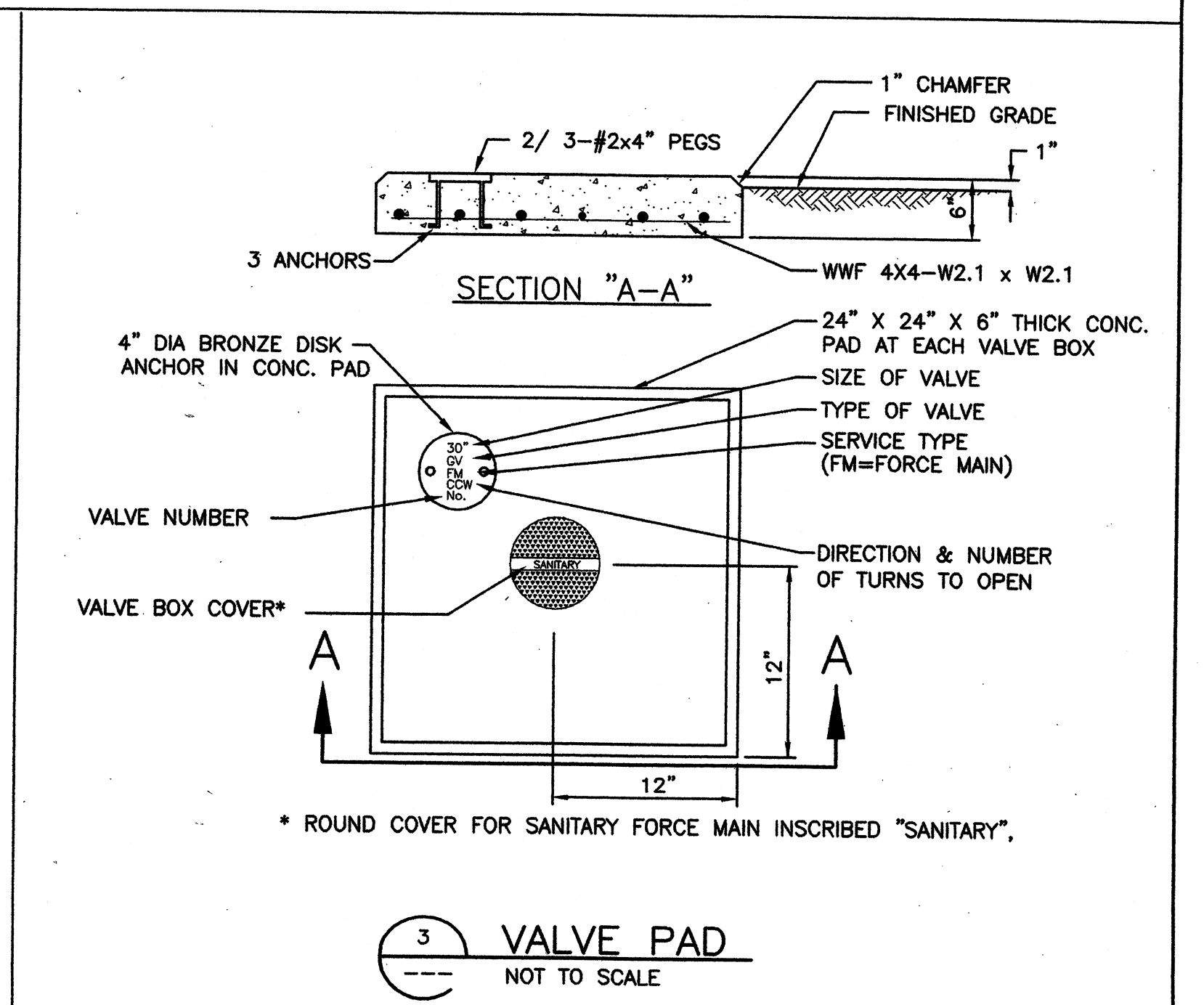
			 <b>PARSONS</b> 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650	Issue Certification	Job No. 738729 Designed <u>D. KAMATH</u> Drawn <u>F. DeSANTO</u> Checked <u>H. [Signature]</u> Reviewed <u>[Signature]</u> Approved <u>[Signature]</u> Reg. No. 40157 Date APRIL 2001	 <b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588	BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS  PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514	PROFILE JOE'S CREEK CROSSING #2 STA 202+00 TO STA 211+00	DRAWING NO. W-03	
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION							REV. 0	

XREF: 8729x02.DWG, 8729x003.DWG  
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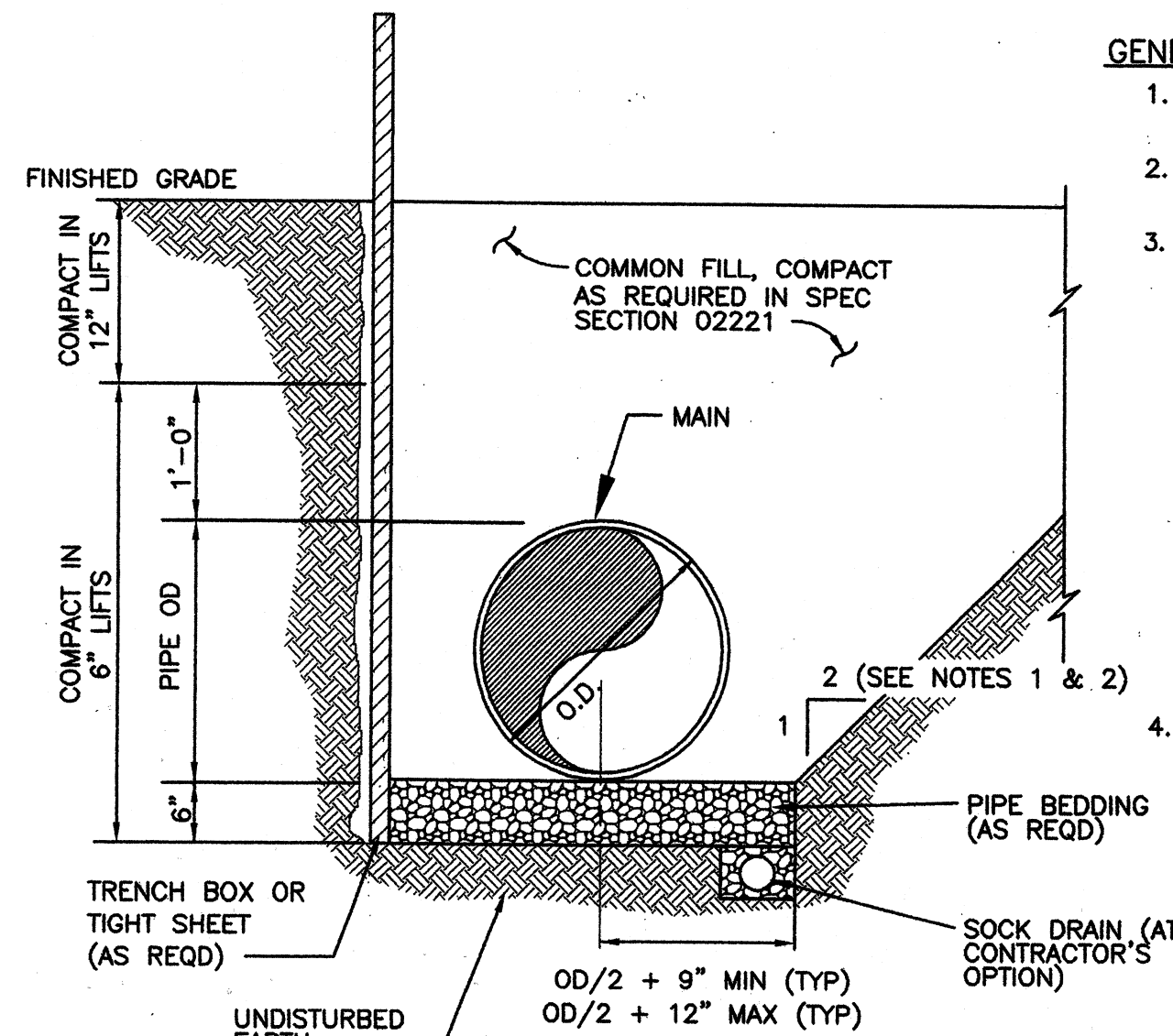




- NOTES**
1. THE GREATER HORIZONTAL CLEARANCE DIMENSION SHALL GOVERN.
  2. WHEN THE VERTICAL CLEARANCE BETWEEN WATER & ROW MAINS IS 18 INCHES OR LESS, D.I.P. JOINTS SHALL BE A MIN. OF 10 FEET EACH WAY FROM CENTERLINE OF WATER MAIN, UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS.
  3. WHEN THE VERTICAL CLEARANCE BETWEEN WATER & ROW MAINS IS 18 INCHES OR LESS, VCP AND/OR PVC PIPE SHALL BE REPLACED FOR A MIN. OF 10 FEET EACH WAY FROM CENTERLINE OF WATER OR RECLAIMED WATER MAIN, UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS.
  4. CONCRETE ENCASUREMENT IS NOT PERMITTED UNLESS OTHERWISE SHOWN ON THE CONTRACT DRAWINGS OR APPROVED BY THE RESIDENT PROJECT REPRESENTATIVE FOR EACH SPECIFIC CASE.
  5. MAINTAIN A MINIMUM OF (5) FEET CLEARANCE BETWEEN WATER LINES AND TUNNEL SHAFTS OR BORE PITS.
  6. ALL RECLAIMED WATER MAINS SHALL HAVE A MINIMUM COVER OF (48) INCHES BELOW FINAL GRADE OR AS SHOWN ON THE PLANS. RECLAIMED WATER MAINS THAT CROSS UNDER TO EXISTING DITCHES SHALL HAVE A MINIMUM COVER OF (36) INCHES TO FINAL GRADE.
  7. ALL WATER LINES UP TO (12) INCHES IN DIAMETER SHALL HAVE A MINIMUM COVER OF (30) INCHES.



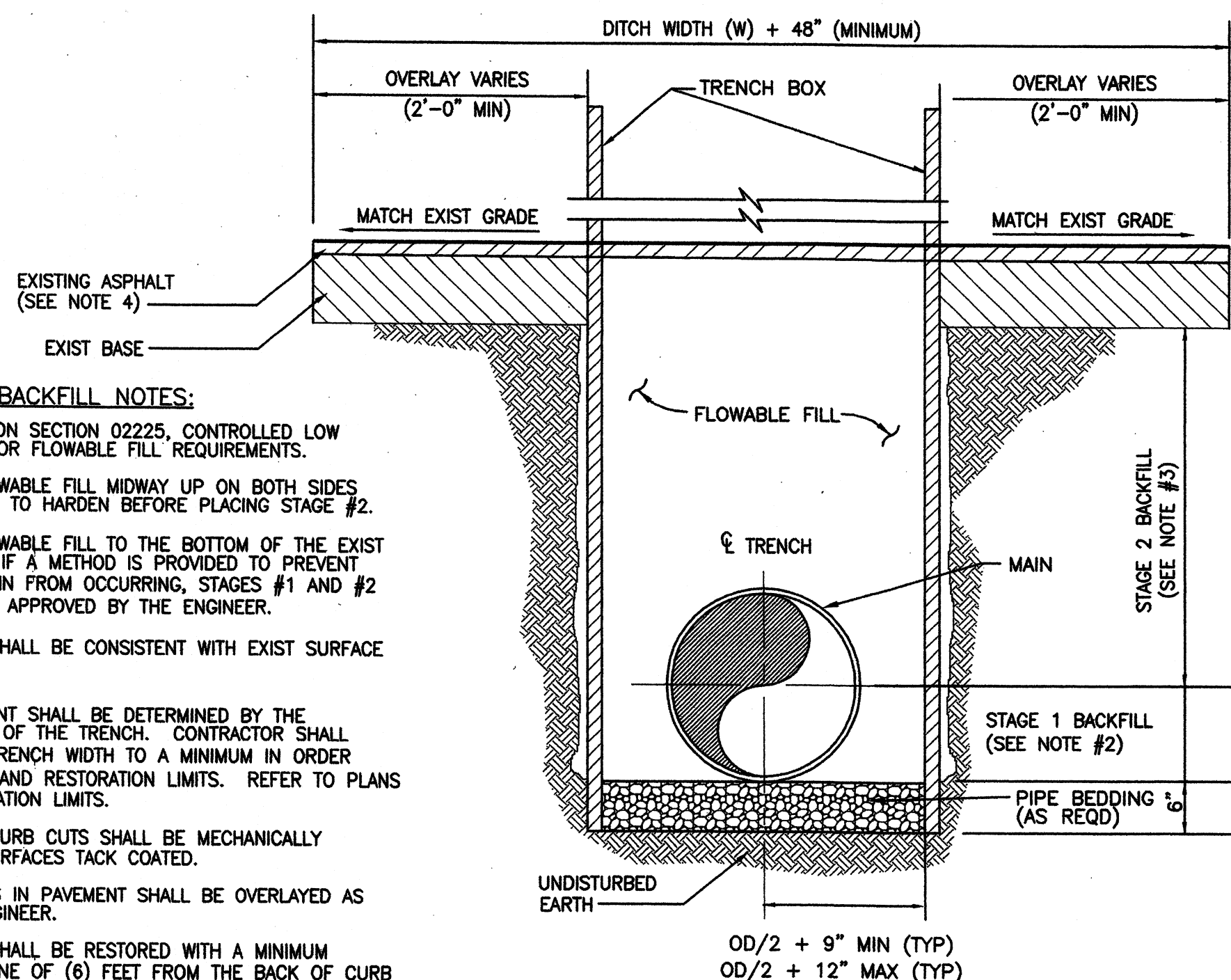




#### GENERAL TRENCH/BACKFILL NOTES:

1. TRENCH EXCAVATION SHALL BE IN ACCORDANCE WITH OSHA TRENCH AND SAFETY ACT FOR TYPE C SOILS AT A MINIMUM.
2. AS RECOMMENDED IN THE REPORT OF GEOTECHNICAL EXPLORATION (APRIL 2001).
3. LABORATORY TESTS SHOULD BE FORWARDED TO THE FOLLOWING, WHERE APPLICABLE:  
  
PINELLAS COUNTY HIGHWAY DEPT  
22211 U.S. HWY. 19 N.  
CLEARWATER, FL 34625  
PHONE: (727) 464-8900  
  
PUBLIC WORKS/ENGINEERING:  
(727) 541-0767  
STREETS & DRAINAGE-REPAIR:  
(727) 541-0772  
UTILITIES DESIGN:  
(727) 541-0881
4. STEEL PLATES DESIGNED FOR MINIMUM H-20 TRAFFIC LOADING, SHALL BE USED TO COVER EXCAVATION DURING HOURS OF NO CONSTRUCTION.

1 CONVENTIONAL BACKFILL DETAIL  
--- NOT TO SCALE



#### PAVEMENT TRENCH/BACKFILL NOTES:

1. REFER TO SPECIFICATION SECTION 02225, CONTROLLED LOW STRENGTH MATERIAL FOR FLOWABLE FILL REQUIREMENTS.
2. STAGE #1, PLACE FLOWABLE FILL MIDWAY UP ON BOTH SIDES OF THE MAIN. ALLOW TO HARDEN BEFORE PLACING STAGE #2.
3. STAGE #2, PLACE FLOWABLE FILL TO THE BOTTOM OF THE EXIST REPLACEMENT BASE. IF A METHOD IS PROVIDED TO PREVENT FLOTATION OF THE MAIN FROM OCCURRING, STAGES #1 AND #2 MAY BE COMBINED AS APPROVED BY THE ENGINEER.
4. ASPHALTIC SURFACE SHALL BE CONSISTENT WITH EXIST SURFACE AND THICKNESS.
5. PAVEMENT REPLACEMENT SHALL BE DETERMINED BY THE LOCATION AND DEPTH OF THE TRENCH. CONTRACTOR SHALL ENDEAVOR TO KEEP TRENCH WIDTH TO A MINIMUM IN ORDER TO MINIMIZE IMPACTS AND RESTORATION LIMITS. REFER TO PLANS FOR MINIMUM RESTORATION LIMITS.
6. ALL PAVEMENT AND CURB CUTS SHALL BE MECHANICALLY SAW-CUT AND ALL SURFACES TACK COATED.
7. CONSTRUCTION SCARS IN PAVEMENT SHALL BE OVERLAYED AS DIRECTED BY THE ENGINEER.
8. ROADWAY SECTIONS SHALL BE RESTORED WITH A MINIMUM SHOULDER/CLEAR ZONE OF (6) FEET FROM THE BACK OF CURB OR (8) FEET FROM THE EDGE OF PAVEMENT AND A MAXIMUM SLOPE OF (3/4) INCH PER LINEAR FOOT. NO PERMANENT OBSTACLES ARE ALLOWED FROM ANY EDGE WITHIN THIS AREA.
9. PRIOR TO COMMENCEMENT OF WORK AND/OR THE START OF RESTORATION, COORDINATE THE EXTENT OF ROADWAY OVERLAY AFTER PATCHING WITH THE ENGINEER AND A REPRESENTATIVE OF PINELLAS COUNTY HIGHWAY DIVISION, FDOT, OR LOCAL MUNICIPALITY, AS APPLICABLE, TO ENSURE MUTUAL AGREEMENT.
10. ALL ROADWAYS THAT ARE OPEN CUT MUST BE MILLED A MINIMUM OF 2" PRIOR TO OVERLAY.
11. OPEN CUT STREETS HAVING CURB WILL HAVE MINIMUM FOUR (4) FOOT SECTION OF CURB REMOVED ON EACH SIDE OF THE MAIN. THE CURB WILL BE SAW CUT AND REMOVED TO THE NEAREST JOINT. IN NO CASE SHALL LESS THAN FOUR (4) FEET OF CURB REMAIN. AFTER PIPE IS LAID, THE AREA BENEATH THE CURB WILL BE TREATED AS A CURB PAD FOR NEWLY CONSTRUCTED CURB WITH APPROVED STABILIZED MATERIAL USED AS BACKFILL TO BE COMPACTED AND TESTED FOR DENSITY.

3 FLOWABLE FILL PAVEMENT CUT DETAILS  
--- NOT TO SCALE

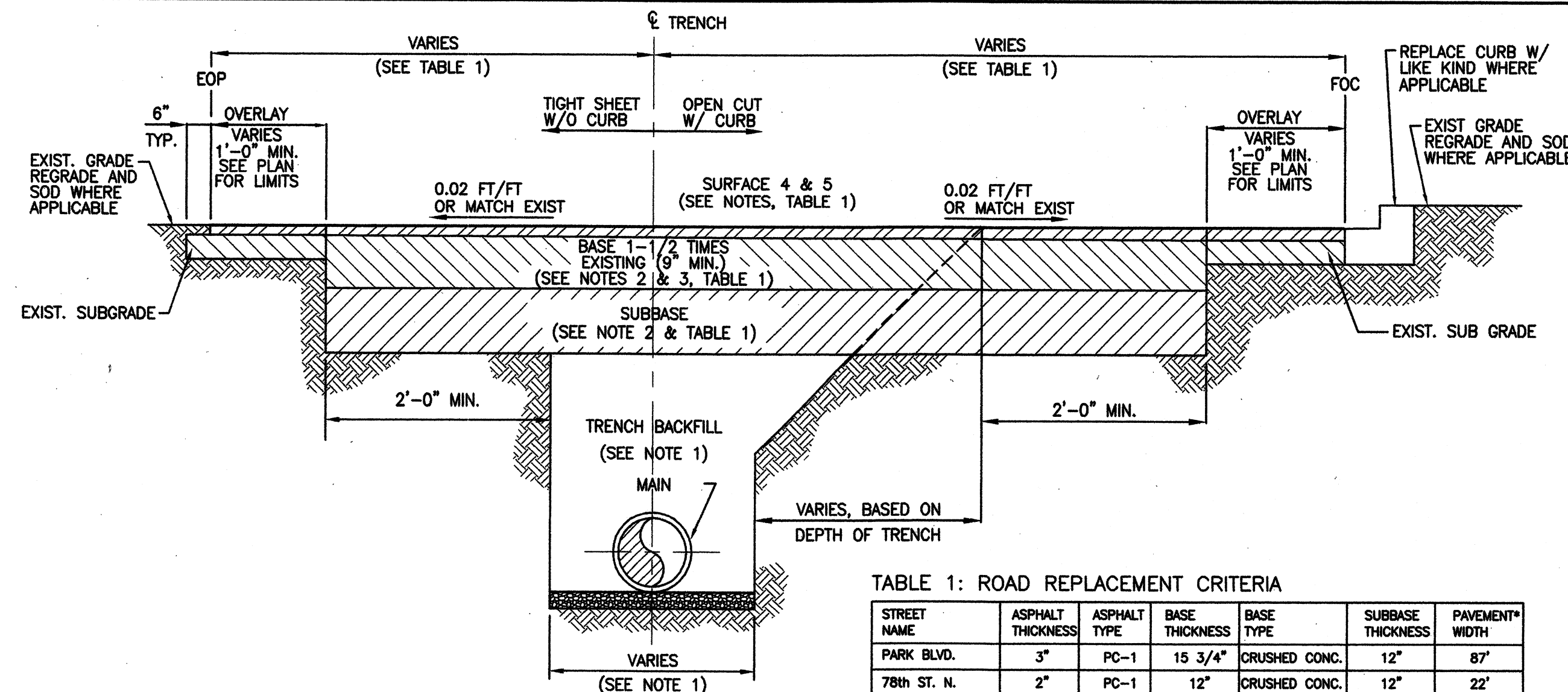


TABLE 1: ROAD REPLACEMENT CRITERIA

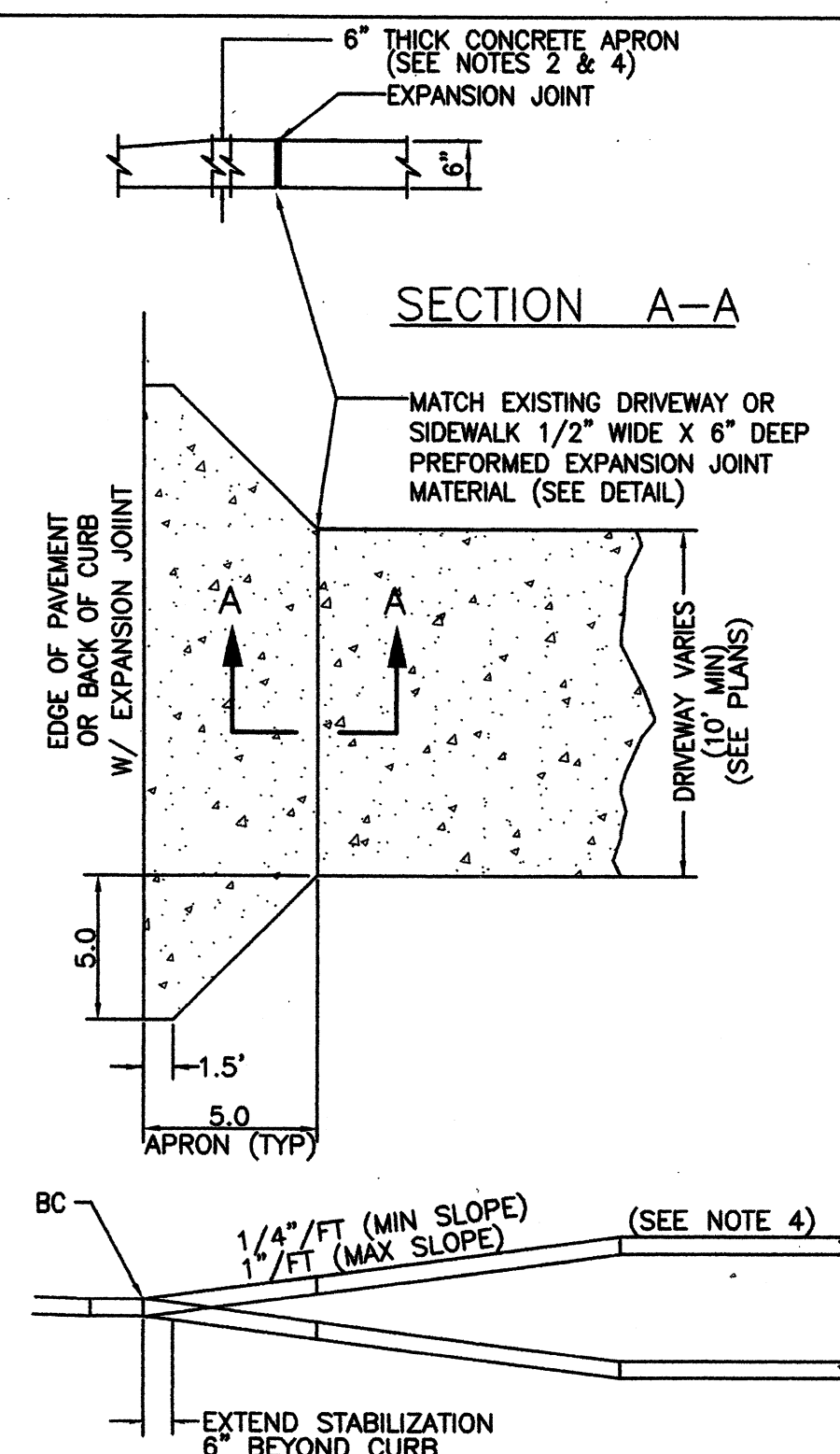
STREET NAME	ASPHALT THICKNESS	ASPHALT TYPE	BASE THICKNESS	BASE TYPE	SUBBASE THICKNESS	PAVEMENT WIDTH
PARK BLVD.	3"	PC-1	15 3/4"	CRUSHED CONC.	12"	87'
78th ST. N.	2"	PC-1	12"	CRUSHED CONC.	12"	22'

\* MATCH EXISTING WIDTH AT MINIMUM.

#### NOTES:

1. REFER TO SPECIFICATIONS AND OTHER DETAILS FOR EXCAVATION AND BACKFILL REQUIREMENTS.
2. SUBBASE SHALL BE OF SPECIFIED MATERIAL WITH AN LBR OF NOT LESS THAN 40, COMPACTED TO 98% OF MAXIMUM DENSITY AS DETERMINED BY A.A.S.H.T.O. T-180. LAB REPORTS ARE REQUIRED.
3. AFTER SPREADING IS COMPLETED, THE CRUSHED CONCRETE BASE SHALL BE UNIFORMLY COMPACTED, WITH WATER BEING ADDED AS REQUIRED TO A DENSITY OF NOT LESS THAN 100% OF THE MAXIMUM DENSITY AS DETERMINED BY A.A.S.H.T.O. T-180. LAB REPORTS ARE REQUIRED.
4. ALL PAVEMENT AND CURB CUTS SHALL BE MECHANICALLY SAW-CUT AND ALL SURFACES TACK COATED.
5. SURFACE TO BE CONSISTENT WITH EXISTING SURFACE AND THICKNESS; WITH MINIMUM OF 1 1/2", TYPE OF ASPHALT TO BE IN ACCORDANCE WITH PINELLAS COUNTY ASPHALT SPECIFICATIONS AND TABLE 1.
6. OVERLAY OF CONSTRUCTION SCARS TO PAVEMENT AND TRENCH WILL BE REQUIRED AS PER ENGINEER OR INSPECTOR.
7. OVERLAY EXISTING ROAD WITH 150 POUNDS PER SQUARE YARD OF PC-1 TO INCLUDE ANY LEVELING NECESSARY TO MEET PINELLAS COUNTY ASPHALT SPECIFICATIONS.
8. LABORATORY TESTS SHOULD BE FORWARDED TO: PINELLAS COUNTY HIGHWAY DEPARTMENT 22211 U.S. HWY. 19 N. CLEARWATER, FL. 34625 (PHONE (813) 464-8900)
9. ROADWAY SECTIONS SHALL BE RESTORED WITH A MINIMUM SHOULDER/CLEAR ZONE OF (6) FEET FROM THE BACK OF CURB OR (8) FEET FROM THE EDGE OF PAVEMENT AND A MAXIMUM SLOPE OF (3/4) INCH PER LINEAR FOOT. NO PERMANENT OBSTACLES ARE ALLOWED FROM ANY EDGE WITHIN THIS AREA.
10. PRIOR TO COMMENCEMENT OF WORK AND/OR THE START OF RESTORATION, COORDINATE THE EXTENT OF ROADWAY OVERLAY AFTER PATCHING WITH A REPRESENTATIVE OF PINELLAS COUNTY HIGHWAY DIVISION TO ENSURE MUTUAL AGREEMENT.
11. ALL ROADWAYS THAT ARE OPEN CUT MUST BE MILLED A MINIMUM OF 2" PRIOR TO OVERLAY.
12. OPEN CUT STREETS HAVING CURB WILL HAVE MINIMUM 4' SECTIONS OF CURB REMOVED ON EACH SIDE. THE CURB WILL BE SAW CUT AND REMOVED. AFTER PIPE IS LAID, THE AREA BENEATH THE CURB WILL BE TREATED AS A CURB PAD FOR NEWLY CONSTRUCTED CURB WITH APPROVED STABILIZED MATERIAL USED AS BACKFILL TO BE COMPACTED AND TESTED FOR DENSITY.

2 TYPICAL PAVEMENT CUT DETAILS  
--- NOT TO SCALE

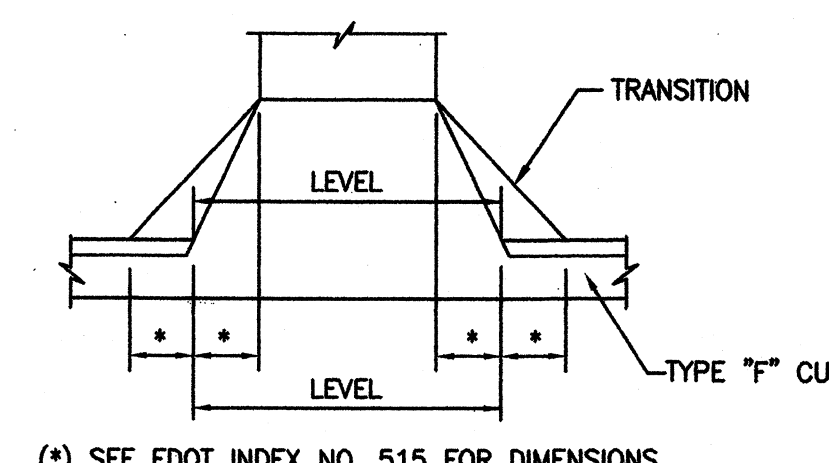


#### PLAN AND PROFILE VIEW

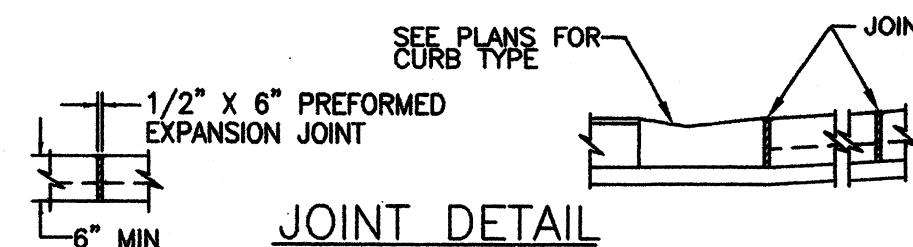
CONCRETE DRIVEWAY APRON (PCDPW INDEX 1340)  
--- NOT TO SCALE

#### NOTES:

1. THE LOCATION OF DRIVEWAYS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. CONCRETE DRIVEWAY APRONS AND SIDEWALK CROSSINGS SHALL BE CONSTRUCTED OF CEMENT CONCRETE PAVEMENT (3000 PSI), 6" THICK REINFORCED WITH 6" X 6" #10/#10 WELDED WIRE FABRIC, (2" MINIMUM COVER FROM THE BOTTOM).
3. EXCEPT AS SPECIFIED ABOVE, THE ENGINEER SHALL DETERMINE IN THE FIELD WHAT MATERIALS SHALL BE USED IN THE CONSTRUCTION OF DRIVEWAYS.
4. CONSTRUCTION OF APRON/DRIVEWAY CROSS SLOPES SHALL COMPLY WITH FDOT INDEX NO. 515 (SHEET 3 OF 6) FOR ADA REQUIREMENTS.
5. REMOVE TREE ROOTS WITHIN 10' OF PROPOSED GRADE.
6. IF THIS IS AN ASSESSMENT PROJECT AND THE DISTANCE BETWEEN THE APRON AND THE EXISTING DRIVEWAY IS 2'-0" OR LESS, THE CONTRACTOR SHALL EXTEND APRON CONSTRUCTION TO CONNECT TO EXISTING DRIVEWAY (PAYABLE UNDER THIS CONTRACT). IF THE DISTANCE IS GREATER THAN 2'-0", CONSTRUCTION OF THE DRIVEWAY SHALL BE AGREED UPON BY THE PROPERTY OWNER AND CONTRACTOR, AT THE PROPERTY OWNERS EXPENSE.
7. FOR TYPE "F" CURB, SEE FDOT INDEX NO. 515 AND DETAIL BELOW.
8. COMMERCIAL DRIVEWAYS AND SINGLE FAMILY DRIVEWAY CONNECTING TO AN ARTERIAL ROADWAY SHALL BE INSTALLED PER FDOT INDEX 515.



(\* SEE FDOT INDEX NO. 515 FOR DIMENSIONS)



SIDEWALK THROUGH EXISTING DRIVEWAYS (PCDPW INDEX 1353)  
--- NOT TO SCALE

#### NOTES:

1. SEE PLANS FOR LIMITS OF SIDEWALKS AT ALL DRIVEWAYS.
2. PLACE 1/2" EXPANSION JOINT WHERE CONCRETE ABUTS CONCRETE CURBS, SIDEWALKS OR DRIVEWAYS.
3. SIDEWALK SHALL COMPLY WITH FDOT INDEX NO. 515 AND PINELLAS COUNTY ORDINANCES. (SEE PC NO. 1340)
4. REMOVE TREE ROOTS WITHIN 10' OF PROPOSED GRADE.

Rev	Date	Description
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION

#### PARSONS ENGINEERING SCIENCE, INC.

OFFICES IN PRINCIPAL CITIES



3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

#### Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked M. [Signature]  
Reviewed J. [Signature]  
Approved [Signature]  
Reg. No. 40157  
Date MARCH 2001

#### PINELLAS COUNTY UTILITIES



14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

#### BOCA CIEGA SANITARY FORCE MAIN IMPROVEMENTS

PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

#### MISCELLANEOUS DETAILS

DRAWING NO.

D-02

REV.

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GENERAL

1. CONTRACTOR SHALL AT ALL TIMES ADHERE TO THE DESIGN REQUIREMENTS SET FORTH IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1988 EDITION WITH 1993 UPDATES, THE FLORIDA DOT ROADWAY AND TRAFFIC DESIGN STANDARDS (LATEST EDITION), INTERIM STANDARD INDEXES AND THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. TRAFFIC CONTROL DEVICES, PAVEMENT MARKINGS AND SIGNINGS NECESSARY FOR THE CONTROL OF TRAFFIC SHALL ALSO CONFORM TO THE DESIGN REQUIREMENTS SET FORTH IN THE ABOVE LISTED STANDARDS AND SPECIFICATIONS.
2. THE SEQUENCE OF CONSTRUCTION AND METHODS DESCRIBED IN THIS PLAN SET IS A SUGGESTED TCP AND IS INCLUDED TO ESTABLISH THE MINIMUM ACCEPTABLE TCP. THE CONTRACTOR HAS, AT HIS EXPENSE, THE OPTION TO SUBMIT FOR APPROVAL BY THE ENGINEER AND THE PINELLAS CO. PUBLIC WORKS DEPT., AN ALTERNATE TCP BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER AND BE IN ACCORDANCE WITH FDOT INDEX 600 SERIES AND THE MUTCD. REFER TO SPECIFICATION SECTION 01570, TRAFFIC CONTROL, FOR ADDITIONAL REQUIREMENTS. THE SAFETY OF THE WORKERS DURING ALL PHASES OF CONSTRUCTION SHALL BE CONSIDERED FOR APPROVAL. ALTERNATE TCP PLANS MUST BE EQUIVALENT IN PROVIDING SAFE TRAVEL FOR MOTORING PUBLIC. THE CONTRACTOR SHALL PLAN FOR CONSIDERATION OF APPROVAL PRIOR TO CONSTRUCTION. ALL ALTERNATE TCP PLANS MUST BE SIGNED AND SEALED.
3. ADDITIONAL TRAFFIC ALTERATIONS WHICH ARE NOT SHOWN ON THE TCP, BUT ARE NECESSARY TO MEET THE CONTRACTORS MEANS AND METHODS TO CONSTRUCT THE PROJECT SHALL BE SUBMITTED IN WRITING TO THE ENGINEER AND APPROVAL SHALL BE OBTAINED 72 HOURS PRIOR TO THE COMMENCEMENT OF WORK. SUBMITTAL MATERIAL SHALL INCLUDE SKETCHES, CALCULATIONS AND OTHER DATA REQUIRED BY THE ENGINEER AND AS SPECIFIED IN SPECIFICATION SECTION 01570, TRAFFIC CONTROL.
4. TCZ REQUIREMENTS SHOWN IN THE DETAILS ARE MINIMUM REQUIREMENTS. ADDITIONAL TCP'S MAY BE REQUIRED. ALL ADDITIONAL TRAFFIC CONTROL COSTS SHALL BE BORNE BY THE CONTRACTOR.
5. ADDITIONAL BARRICADES, SIGNING, LIGHTING OR OTHER TRAFFIC CONTROLS SHALL BE PROVIDED FOR LIMITED WORK AREAS ACCORDING TO APPLICABLE TRAFFIC CONTROL INDEXES.
6. THE WORK AREA SHALL BE PROTECTED BY BARRICADES, TEMPORARY CONCRETE BARRIER WALL AND CONSTRUCTION SIGNS AS SHOWN ON THE TCP, AS DIRECTED BY THE ENGINEER AND AS REQUIRED BY THE MUTCD AND THE STANDARD INDEX, 600 SERIES.
7. ALTHOUGH TYPE II BARRICADE OR DRUM REFERENCES ARE SHOWN IN THE PLANS, THE CONTRACTOR MAY ELECT TO USE APPLICABLE DEVICES AS PER THE STANDARD INDEX NO. 600.
8. SPEED LIMITS SHALL ONLY BE MODIFIED DURING ACTIVE WORK ZONES AND NOT THE LENGTH AND DURATION OF THE ENTIRE PROJECT.
9. THE CONTRACTOR SHALL REMOVE OR COVER ANY EXISTING OR PROPOSED SIGNS OR PAVEMENT MARKINGS WHICH CONFLICT WITH THE TCP. WHEN THE CONFLICT NO LONGER EXISTS THE CONTRACTOR SHALL RESTORE THE SIGNS OR THE PAVEMENT MARKINGS TO THEIR ORIGINAL POSITION. REMOVAL OF EXISTING AND/OR TEMPORARY PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY THE FOLLOWING METHODS: ASPHALT OVERLAY, SAND OR NON-TRAFFIC AREAS AS DESIGNATED BY THE ENGINEER. GRINDING SHALL ONLY BE PERMITTED IN TEMPORARY PAVEMENT MARKINGS IS PROHIBITED.
10. A FULL-TIME CERTIFIED MAINTENANCE OF TRAFFIC SUPERVISOR SHALL BE ON SITE WHEN CONTRACTOR IS WORKING AND SHALL BE ON 24 HOUR CALL FOR EMERGENCIES WHEN THE CONTRACTOR IS NOT WORKING. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE SUPERVISOR AND A 24 HOUR ON CALL TELEPHONE NUMBER.
11. CALL PINELLAS COUNTY TRAFFIC DEPT., SIGNAL DIVISION (464-8909) [AT LEAST FIVE (5) WORKING DAYS IN ADVANCE] WHEN WORK IS SCHEDULED NEAR SIGNAL CONDUITS.
12. CONTRACTOR SHALL PROVIDE ALL WARNING SIGNALS, SIGNS, BARRICADES, LIGHTS, AND FLAG MEN AS REQUIRED BY FDOT IN THE "MANUAL ON TRAFFIC CONTROL & SAFE PRACTICES" (FDOT INDEXES 600-650), TO ENSURE THAT SAFE PASSAGE OF VEHICULAR AND PEDESTRIAN TRAFFIC IS MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
13. WORK ZONES WITH MORE THAN ONE FLAGMAN OR IN AREAS WHERE FLAGMAN ARE NOT WITHIN LINE OF SIGHT, SHALL UTILIZE RADIO COMMUNICATIONS IN ADDITION TO SIGNAL FOR TRAFFIC CONTROL.
14. A UNIFORMED OFF DUTY LAW ENFORCEMENT OFFICER WITH A MARKED VEHICLE WILL BE REQUIRED FOR THE SETUP OF EACH LANE CLOSURE (MINIMUM TIME IN ACCORDANCE WITH LAW ENFORCEMENT AGENCY'S POLICIES) UNTIL LANE CLOSURE IS ESTABLISHED. IF THE CONTRACTOR ELECTS OR IS REQUIRED TO USE OFFICERS FOR ANY OTHER ACTIVITY, HE SHALL DO SO AT HIS OWN EXPENSE WITH NO ADDITIONAL COMPENSATION.
15. LANE WIDTHS FOR MAINTENANCE OF TWO-WAY TRAFFIC SHALL BE NO LESS THAN 11 FEET.
16. PRIOR TO MAKING DETOURS AND/OR LANE CLOSURES SUBMIT TCP'S AND SCHEDULES FOR APPROVAL BY THE ENGINEER. TCP'S SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- A) LOCATION OF MATERIAL STOCKPILES AND EQUIPMENT.
  - B) TEMPORARY SIGNING DURING EACH PHASE OF CONSTRUCTION.
  - C) DETOURS AND STREET CLOSURES, IF ANY. DURING EACH PHASE OF CONSTRUCTION.
17. THE CONTRACTOR SHALL CONTACT THE FOLLOWING AGENCIES AND SHALL PROVIDE THE DAILY NOTIFICATION OF THE LIMITS OF ROAD CLOSURE(S) AND AS INDICATED IN THE FOLLOWING:
- EMS & FIRE ADMINISTRATION  
DWAINE BOOTH, ASSISTANT FIRE COORDINATOR  
RICHARD ORANGE, FIRE COORDINATOR  
(727) 582-2000
- PINELLAS COUNTY SCHOOL TRANSPORTATION DEPARTMENT  
NANCY BLACKWELDER, EDUCATION LOGISTICS PROGRAM COORDINATOR  
(727) 547-7115
- PROVIDE A SAFE AND UNOBSTRUCTED PEDESTRIAN PATHWAY, WHICH WILL ENSURE THAT ALL SCHOOL PEDESTRIANS HAVE ACCESS TO AND FROM BUS STOP AT ALL TIMES. THE REVISED ROUTED MUST BE CLEARLY DEFINED PAVED, AND APPROPRIATELY PROTECTED FROM ALL CONSTRUCTION ACTIVITIES AND OTHER, NOT SPECIFICALLY MENTIONED HEREIN.
- UNITED STATES POST OFFICE  
JERRY PERUZZI, MANAGER SEMINOLE BRANCH  
(727) 393-3280
- TEMPORARILY RELOCATE MAILBOXES TO THE OPPOSITE SIDE OF THE ROADWAY OR WHERE LANE ACCESS IS AVAILABLE.
- PINELLAS COUNTY SHERIFF'S OFFICE  
DISPATCH CENTER  
(727) 582-6177
- THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE OF THE DATE AND TIME FOR ALL SCHEDULED ROAD CLOSURE(S) AND LANE CLOSURES AND AS INDICATED BELOW FOR THE FOLLOWING AGENCIES:
18. TEMPORARY LANE CLOSURES SHALL TAKE PLACE AT THE DISCRETION OF THE ENGINEER. TEMPORARY LANE CLOSURES ARE PROHIBITED BETWEEN THE HOURS FROM 7:00 AM TO 9:00 AM AND FROM 4:00 PM AND 6:00 PM MONDAY THROUGH FRIDAY. THE CONTRACTOR SHALL NOTIFY ALL LOCAL LAW ENFORCEMENT AGENCIES PRIOR TO A LANE CLOSURE.
19. ANY WORK REQUIRING LANE CLOSURES SHALL BE COMPLETED AS SOON AS PRACTICAL AS DETERMINED BY THE ENGINEER AND THE LANES OPENED TO TRAFFIC WITH PROPER PAVEMENT MARKINGS AND WARNING DEVICES IN PLACE.
20. AT THE DISCRETION OF THE ENGINEER, IF A LANE CLOSING SHOULD CAUSE EXTENDED CONGESTION, THE CONTRACTOR WILL BE DIRECTED TO REOPEN THE CLOSED LANE UNTIL THE TRAFFIC IS RETURNED TO AN ACCEPTABLE FLOW AT NO ADDITIONAL COST TO THE OWNER.

21. ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REFLECT PAVEMENT MARKINGS.
22. NO STREET SHALL BE CLOSED WITHOUT THE WRITTEN PERMISSION OF THE PINELLAS COUNTY TRAFFIC DIVISION AND THE TOWNSHIP OR CITY WHERE THE WORK IS PERFORMED. AT LEAST 48 HOURS ADVANCE COORDINATION IS REQUIRED.
23. THE CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS AT ALL SIDE STREETS, DRIVEWAYS AND ADJACENT PROPERTY FOR LOCAL TRAFFIC AND MAIL DELIVERY. MAILBOXES SHALL BE RELOCATED AS REQUIRED TO FACILITATE MAIL DELIVERY, AND TO MEET US POSTAL REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE COUNTY TO NOTIFY PROPERTY OWNERS IN ADVANCE OF TEMPORARY DRIVEWAY CLOSURES.
24. THE EXISTING DRAINAGE SYSTEM SHALL BE KEPT OPERATIONAL OR TEMPORARY DRAINAGE PROVIDED ALONG WITH THE SILT FENCE AS REQUIRED. THE CONTRACTOR SHALL PROVIDE THE NECESSARY TEMPORARY DRAINAGE, AS APPROVED BY THE ENGINEER TO FACILITATE DRAINAGE OF TRAVEL LANES DURING CONSTRUCTION.
25. CONSTRUCTION SEQUENCES SHALL BE COORDINATED TO PROVIDE DRAINAGE OF THE TRAVEL LANES AT ALL TIMES.
26. ALL TEMPORARY CONCRETE BARRIER WALL SHALL HAVE DRAIN SLOTS (TO BE DETERMINED BY THE ENGINEER) AS PER STANDARD INDEX NO. 415.
27. THE AREAS TO BE MILLED SHALL BE DETERMINED BY THE PINELLAS COUNTY HIGHWAY INSPECTOR. MILLING AND RESURFACING OPERATION SHALL BE DONE FROM HIGH SIDE TO LOW SIDE TO MAINTAIN DRAINAGE.
28. CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE PROTECTION (THROUGH THE USE OF GUARDRAIL OF BARRIER WALL) OF ALL SLOPES AND OBSTRUCTIONS, AS A RESULT OF THE CONSTRUCTION OPERATIONS.
29. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A WORK ZONE SCHEDULE SO THAT ANY LOCATION UNDER CONSTRUCTION WILL NOT BE LEFT IN A HAZARDOUS CONDITION AT THE COMPLETION OF ANY WORK PERIOD.
30. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN CLEAR ZONE REQUIREMENTS FOR EQUIPMENT, MATERIALS STORAGE, AND WORK ZONE PROTECTION AS SPECIFIED IN FDOT STANDARD INDEX 600. CONSTRUCTION EQUIPMENT AND STORED MATERIALS ARE TO BE KEPT OUTSIDE TRAFFIC CONTROL CLEAR ZONE.
31. UTILITY RELOCATIONS INCLUDED WITHIN THE PROJECT LIMITS SHALL BE SPECIFICALLY PHASED INTO AND COORDINATED WITH THE TCP.
32. THE FIRST TWO WARNING SIGNS, EACH SIDE, SHALL HAVE AN 18"x18" (MIN) ORANGE FLAG AND A TYPE B LIGHT ATTACHED AND OPERATING AT ALL TIMES.
33. CONSTRUCTION WARNING SIGNS ARE TO BE HIGH INTENSITY SHEETING, REFLECTORIZED AND REMOVABLE.
34. WARNING LIGHTS: WARNING LIGHTS SHALL BE IN ACCORDANCE WITH SECTION 6E-5 OF THE MUTCD: TYPE B HIGH INTENSITY FLASHING WARNING LIGHTS SHALL BE MOUNTED ON THE FIRST AND SECOND ADVANCE WARNING SIGNS WHERE TWO OR MORE SIGNS ARE USED. THIS APPLIES TO ANY WORK ZONE. TYPE C STEADY-BURN LIGHTS ARE TO BE MOUNTED ON TOP OF ALL CONCRETE BARRIER WALLS, BARRICADES, DRUMS, VERTICAL PANELS AND USED IN COMBINATION WITH THOSE DEVICES TO DELINEATE THE TRAVEL WAY ON LANE CLOSURES, LANE CHANGES, DETOUR CURVES AND OTHER SIMILAR CONDITIONS SPACED ACCORDING TO STANDARD INDEX 600 SERIES. STEADY-BURN LIGHTS ARE INTENDED TO BE PLACED IN A LINE TO DELINEATE THE TRAVELED WAY THROUGH AND AROUND OBSTRUCTIONS IN THE TRANSITION, BUFFER, WORK AND TERMINATION AREAS OF THE TCP.
35. TEMPORARY RPM'S SHALL BE INSTALLED ON LANE LINES ON TANGENT SECTIONS THROUGHOUT THE WORK ZONE WHERE VEHICLE PATHS ARE NARROWED FROM THEIR NORMAL WIDTHS AND IN ACCORDANCE WITH INDEX 600 SERIES.
36. PAVEMENT RPM'S AS REQUIRED FOR EDGE AND LANE LINES SHALL BE PLACED WITHIN 72 HOURS OF COMPLETION OF THE FRICTION COURSE AT NO ADDITIONAL COST. OTHER LOCATIONS FOR THE RPM PLACEMENT MAY BE DESIGNATED BY THE ENGINEER.
37. ALL EXISTING WARNINGS AND RPM'S THAT HAVE BEEN ALTERED OR REMOVED DUE TO CONSTRUCTION OPERATIONS AND WHICH WILL NOT BE REPLACED BY NEW WARNINGS AND RPM'S SHALL BE PLACED UPON COMPLETION OF THE PHASE(S) OF CONSTRUCTION WHICH REQUIRE THEIR ALTERATION OR REMOVAL.
38. DURING AND AFTER COMPLETION OF EACH CONSTRUCTION PHASE, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY PAVEMENT WARNINGS (I.E., LANE LINES, ARROWS, CROSSWALK, STOP BARS, RPM, ETC.) UNTIL THE FINAL FRICTION COURSE IS PLACED AND PERMANENT WARNINGS INSTALLED.
39. TEMPORARY RPM'S SHALL BE PLACED THROUGHOUT THE LENGTH OF ALL TRAVEL WAYS AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL REPLACE ON A DAILY BASIS ANY TEMPORARY RPM'S THAT ARE EITHER MISSING OR DAMAGED AT NO ADDITIONAL COST TO THE OWNER.
40. ALL TRANSITIONAL TAPERS AND BUFFERS ON THE APPROACH ENDS OF TEMPORARY CONCRETE BARRIER WALLS SHALL CONFORM TO INDEX 415.
41. INERTIAL CRASH CUSHION ARRAYS SHALL BE IN ACCORDANCE WITH INDEX 417.
42. CONTRACTOR SHALL ADHERE TO INDEX 600 FOR DROP OFF CRITERIA.
43. DURING ALL PHASES OF CONSTRUCTION, PROVISIONS MUST BE MADE FOR MAINTAINING PEDESTRIAN TRAFFIC. TEMPORARY CROSSWALKS OR WALKWAYS SHALL BE IN ACCORDANCE WITH FDOT INDEX 600. TEMPORARY WALKWAYS AND PEDESTRIAN LANDINGS MUST CONSIST OF A HARD SURFACE (CONCRETE, ASPHALT, OR COMPACTED LIMEROCK) WITHOUT ABRUPT CHANGES IN GRADE AND SHALL MEET THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA). TRAFFIC CONTROL DEVICES SHALL BE UTILIZED TO DELINEATE TEMPORARY WALKWAYS AND ADDITIONALLY, TAPE, ROPE, PLASTIC FENCING OR PLASTIC CHAIN SHALL BE STRUNG BETWEEN DEVICES TO DISCOURAGE PEDESTRIAN MOVEMENTS OFF THE DESIGNATED PATHWAY.
44. IF ANY CONFLICTS EXIST BETWEEN THIS TCP AND THE MUTCD AND/OR FDOT STANDARD INDEXES, THE MUTCD AND FDOT STANDARD INDEXES SHALL GOVERN.
45. WHENEVER CONSTRUCTION EQUIPMENT IS BEING DRIVEN OR TRANSPORTED ON TO OPEN TRAVEL LANES, THE CONTRACTOR SHALL UTILIZE INDEX NO. 627.
46. WHEN OTHER CONSTRUCTION OR MAINTENANCE OPERATIONS OCCUR WITHIN ONE (1) MILE OF EACH INDIVIDUAL TCP, THE "END ROAD WORK" IS TO BE OMITTED AND SIGNING TO BE IN ACCORDANCE WITH INDEX NO. 600.
47. TEMPORARY LANE CLOSURES IN EXCESS OF 15 MINUTES WILL NOT BE ALLOWED.
48. CONTRACTOR SHALL ADHERE TO ADDITIONAL WORK HOUR REQUIREMENTS AS SPECIFIED IN SPECIFICATION SECTION 01010, SUMMARY OF WORK AND SECTION 01050, COORDINATION.
49. ALL ADVANCED WARNING SIGN SPACING SHALL BE IN ACCORDANCE WITH THE MUTCD.
50. PCMSs SHALL BE PLACED APPROX 100 FT PRIOR TO EACH PROJECT IDENTIFICATION SIGN (LOCATION OF PROJECT IDENTIFICATION SIGN AS SPECIFIED) 30 DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PROPOSED LOCATION OF PCMSs SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
51. CONTRACTOR SHALL MAINTAIN AT ALL TIMES ACCESS TO BUSINESSES AND INSTALL "BUSINESS OPEN" SIGNS THROUGH ALL TRAFFIC CONTROL ZONES PER THE MUTCD.
52. THE EXISTING POSTED SPEED LIMIT SIGNS SHALL BE COVERED AND NEW SPEED LIMITS SIGN INSTALLED TO ACCOMMODATE THE PHASES OF CONSTRUCTION. THE PLACEMENT SHALL BE IN ACCORDANCE WITH FDOT INDEX 17302. THESE SIGNS SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETED.
53. THE TEMPORARY PAVEMENT SHOWN IN THE PLANS SHALL CONSIST OF 8 INCH LAYER OF CRUSHED CONCRETE OR LIMEROCK BASE CONSTRUCTED IN ACCORDANCE WITH THE PINELLAS COUNTY STANDARDS AND SPECIFICATIONS. THE PRICE AND PAYMENT FOR ALL MATERIALS, INSTALLATION, MODIFICATIONS, REMOVAL OR RESTORATION FOR TEMPORARY PAVEMENT ARE INCLUDED UNDER MAINTENANCE OF TRAFFIC (LUMP SUM). TEMPORARY PAVEMENT SHALL BE MAINTAINED IN A SMOOTH SAFE OPERATING CONDITION AT ALL TIMES.

54. THESE MOT PLANS SHOW MOT REQUIREMENTS TO BE UTILIZED DURING THE CONSTRUCTION OF PIPELINES. FOR MOT REQUIREMENTS TO BE UTILIZED DURING PLACEMENT OF SIGNS, MARKERS, CONSTRUCTION AND REMOVAL OF TEMPORARY PAVEMENT, ETC. THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF FDOT 600 SERIES AND THE M.U.T.C.D.
55. CONTRACTOR SHALL MAKE ARRANGEMENTS WITH HOMEOWNERS AS TO HOW THEY WILL GET IN AND OUT OF THEIR DRIVEWAYS DURING ALL PHASES OF THE CONSTRUCTION.
56. ORANGE SAFETY BARRICADE FENCING SHALL ENCOMPASS ENTIRE WORK ZONE.
57. CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DIMENSIONS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL NOT SCALE THE DRAWINGS IN LIEU OF DIMENSION SHOWN ON THE DRAWINGS.
58. ADDITIONAL PROTECTION FOR OBJECTS WITHIN 3 FEET OF THE WORK ZONE SHALL BE PROTECTED WITH EXTRA BARRICADES AS NECESSARY.
59. FOR OPEN CUT INSTALLATION, THE CONTRACTOR SHALL OPEN CUT, INSTALL THE PIPELINE, PROPERLY BACKFILL, AND RESTORE THE ROAD TO DRIVEABLE CONDITIONS BETWEEN 9 AM TO 3 PM EACH DAY, OR AS DIRECTED BY THE ENGINEER. THE TEMPORARY SURFACE SHALL CONSISTS OF 8-INCH LIMEROCK OR CRUSHED CONCRETE BASE, WHICH IS MAINTAINED AND SAFE FOR MOTORISTS AT ALL TIMES. FINAL ROAD RESTORATION WILL BE CONDUCTED IN SEGMENTS BETWEEN INTERSECTIONS PRIOR TO OPEN CUTTING ADDITIONAL SEGMENTS. ALL WORK SHALL NOT EXCEED 500 LINEAR FEET.
60. ALL RESTORATION (COURSE PAVEMENT) SHALL BE TESTED FOR COUNTY STANDARDS.
61. ALL FINAL RESTORATION SHALL BE TESTED PER COUNTY STANDARDS.
62. THE CONTRACTOR SHALL PROVIDE FOR A SAFE PEDESTRIAN WALKING ROUTE THROUGH THE WORK ZONE AS PER FDOT INDEX 660. FOR THOSE SIDEWALK SEGMENTS, WHICH ARE NOT PART OF A SCHOOL ROUTE, THE CONTRACTOR SHALL HAVE BARRIER WALLS PLACED NEAR THE SIDEWALK SEPARATING THE PEDESTRIAN FROM THE WORK ZONE.
63. CONTRACTOR SHALL COORDINATE ALL APPROPRIATE SCHEDULING.
64. FOR SCHOOL GUARDS AND CROSSINGS, CONTACT SHERON LANE AT 727-562-6200.
65. ALL CUL-DE-SACS, ONE-WAY STREETS, APARTMENT COMPLEXES, AND CONDOMINIUMS MUST BE OPEN TO RESIDENTS AT ALL TIMES.
66. ONE LANE OF TRAFFIC MUST BE MAINTAINED AT ALL TIMES.
67. NO MORE THAN 2 WORK ZONES SHALL BE PERMITTED AT ONE TIME AND MUST BE IN ACCORDANCE WITH THE TCP. TWO WORK ZONES WILL NOT BE PERMITTED BASED ON THE FOLLOWING:
- A) TWO ADJACENT WORK ZONES BETWEEN TWO INTERSECTIONS.
  - B) TWO ADJACENT WORK ZONES WITH ONE INTERSECTION CLOSURE.
  - C) TWO ADJACENT WORK ZONES WITH TWO INTERSECTION CLOSURES.
  - D) IF TWO ADJACENT PIPELINE AND ROADWAY WORK ZONES ARE IN CONFLICT, THE PIPELINE SHALL TAKE PRECEDENCE DUE TO PROJECT CONSTRAINTS.
68. ALL TRAFFIC MUST BE DETOURED, AT A MINIMUM, TO THE SAME LEVEL OF SERVICE ROUTES.
69. ONLY TWO (2) PITS/OPEN CUT INSTALLATIONS ALONG PARK BLVD SHALL OCCUR SIMULTANEOUSLY. BEFORE ANOTHER PIT CAN BE INSTALLED, ONE OF THE PREVIOUS PITS MUST BE BACK FILLED, COMPACTED AND TRAFFIC CONTROL SIGNS AND DEVICES REMOVED.

LEGEND

	WORK ZONE/STAGING ZONE
	TYPE I OR TYPE II BARRICADE OR VERTICAL PANEL OR DRUM (W/STEADY BURNING LIGHT AT NIGHT ONLY)
	TYPE III BARRICADE W/FLASHING LIGHTS
	TUBULAR MARKER OR VERTICAL PANEL
	WORK ZONE SIGN
	SIGN W/18"x18" ORANGE FLAG AND TYPE B LIGHT
	ADVANCE WARNING ARROW PANEL
	FLAGMAN
	TRAFFIC FLOW
	CRASH CUSHION

ABBREVIATIONS

MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
RPM	RAISED REFLECTORIZED PAVEMENT MARKER
TCP	TRAFFIC CONTROL PLAN
TCZ	TRAFFIC CONTROL THROUGH WORK ZONE

0	7/01	RELEASED FOR BIDDING/CONSTRUCTION
Rev	Date	Description

**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES

**P PARSONS** 3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked M. [Signature]  
Reviewed [Signature]  
Approved [Signature]  
Reg. No. 40157  
Date MARCH 2001

**PINELLAS COUNTY UTILITIES**

14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

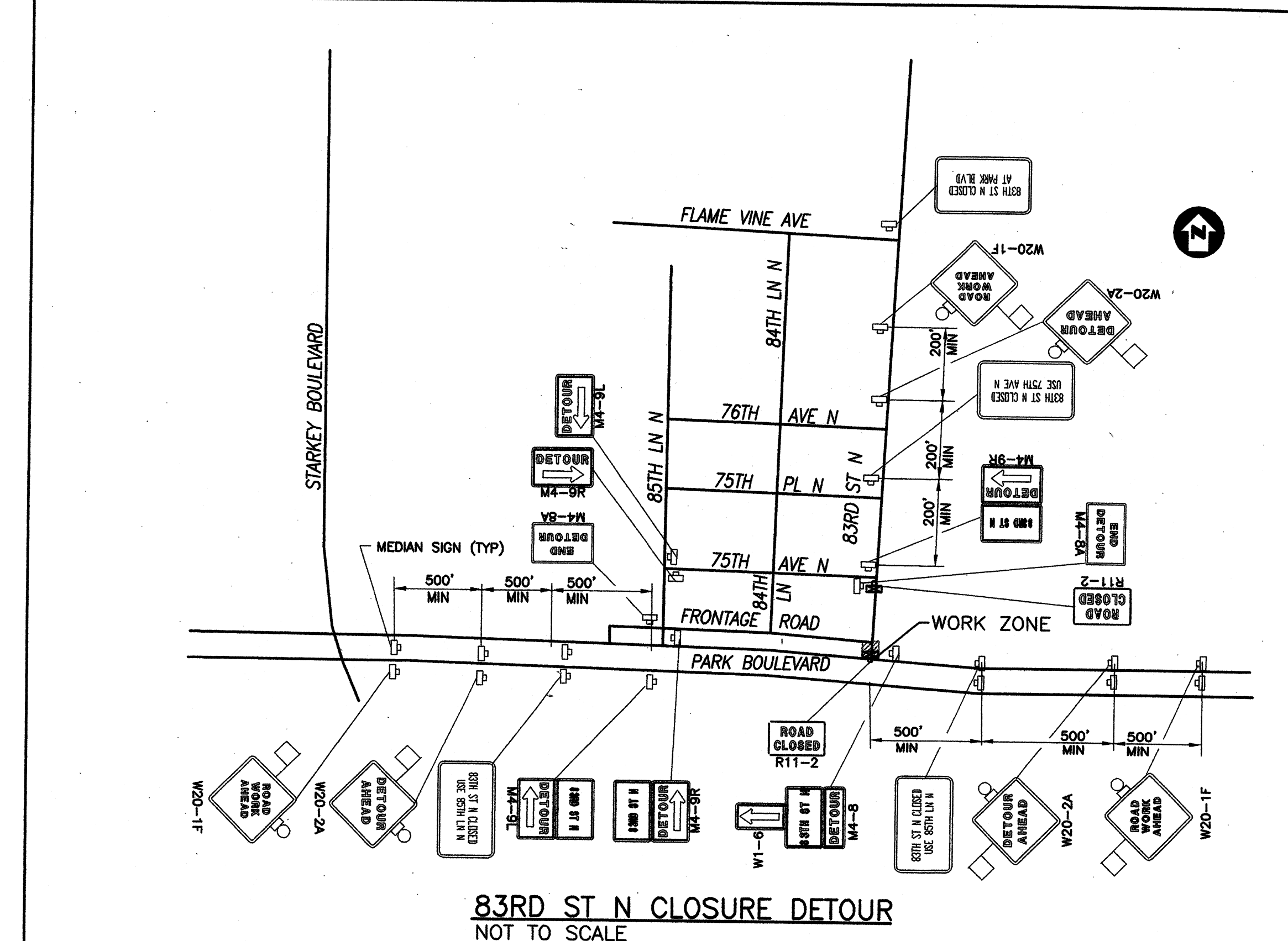
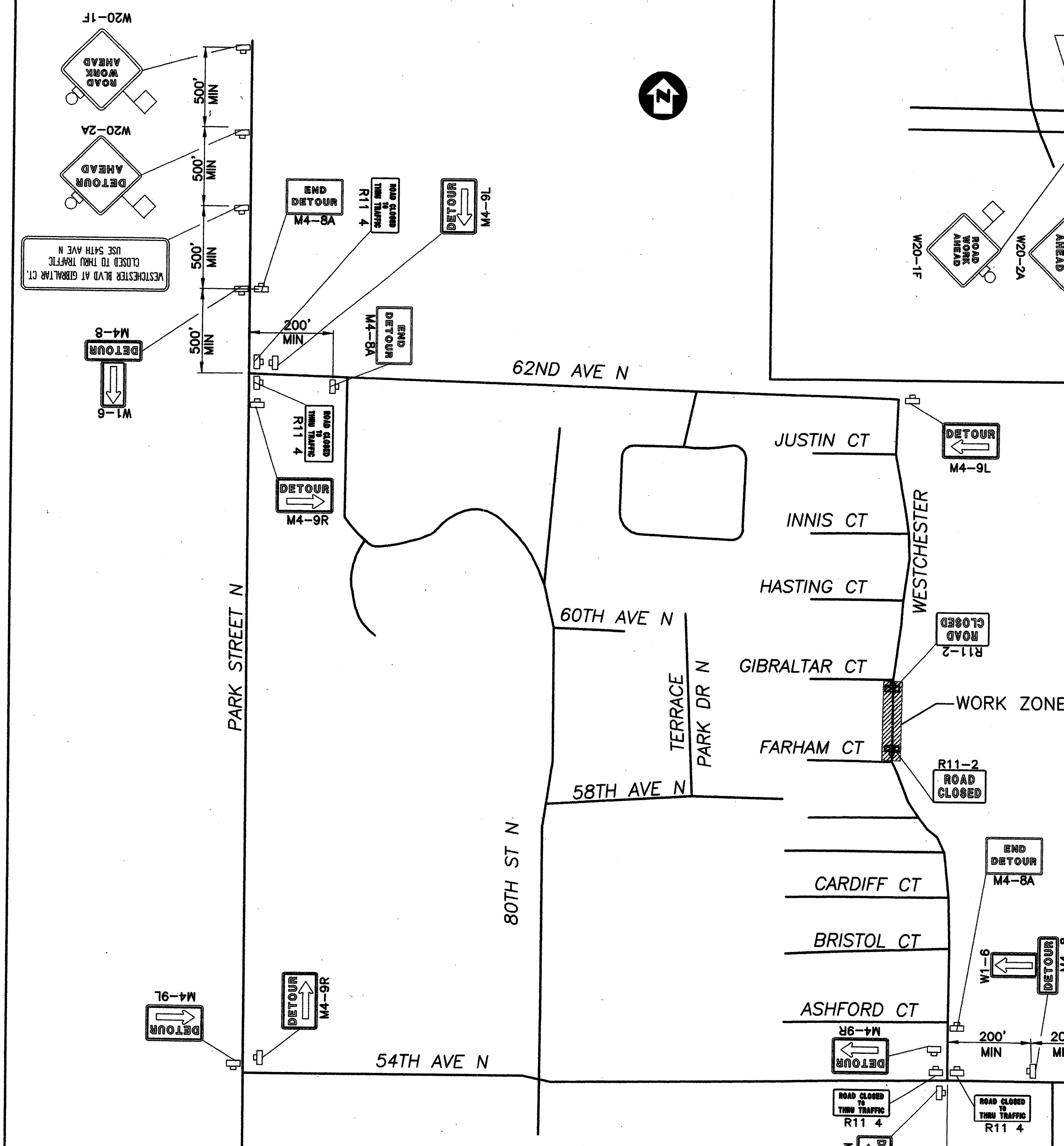
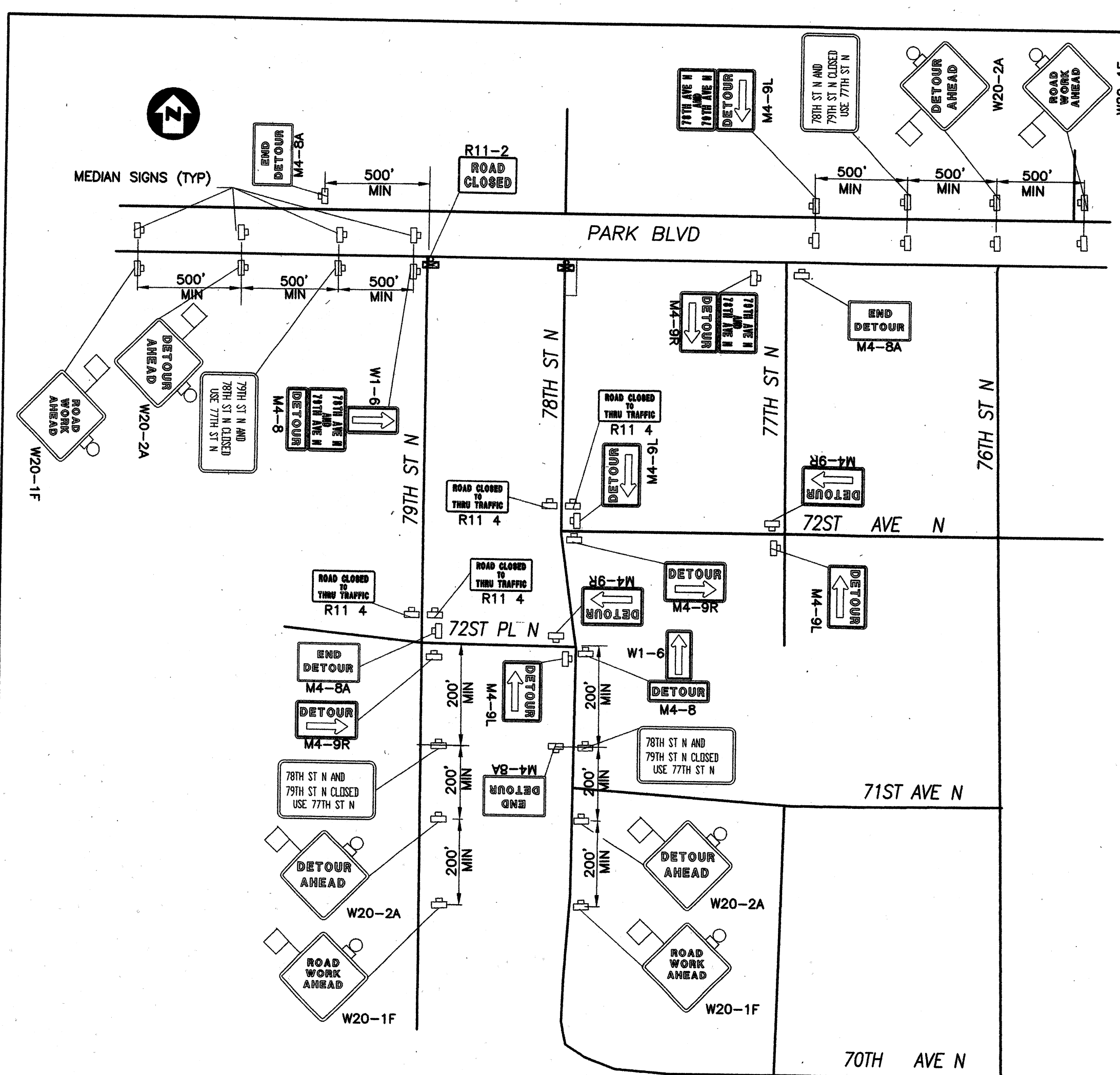
**BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS**

PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

**TRAFFIC CONTROL PLAN  
NOTES, LEGEND AND  
ABBREVIATIONS**

DRAWING NO.	TCP-01
REV.	0






**NOTE**

1. CONTRACTOR SHALL COORDINATE WITH THE SCHOOL AND PROVIDE A SHERIFF'S DEPUTY TO DIRECT TRAFFIC DURING SCHOOL STUDENT DROP-OFF AND PICK-UP HOURS.

0	7/01	RELEASED FOR BIDDING/CONSTRUCTION
Rev	Date	Description

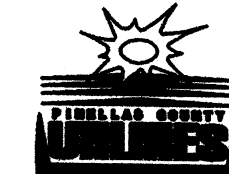
**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES

 **PARSONS** 3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification
---------------------

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked *M. DeSanto*  
Reviewed *J. Fout*  
Approved *[Signature]*  
Reg. No. 40157  
Date MARCH 2001

**PINELLAS COUNTY  
UTILITIES**



14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS  
PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

TRAFFIC CONTROL PLANS  
DETOUR

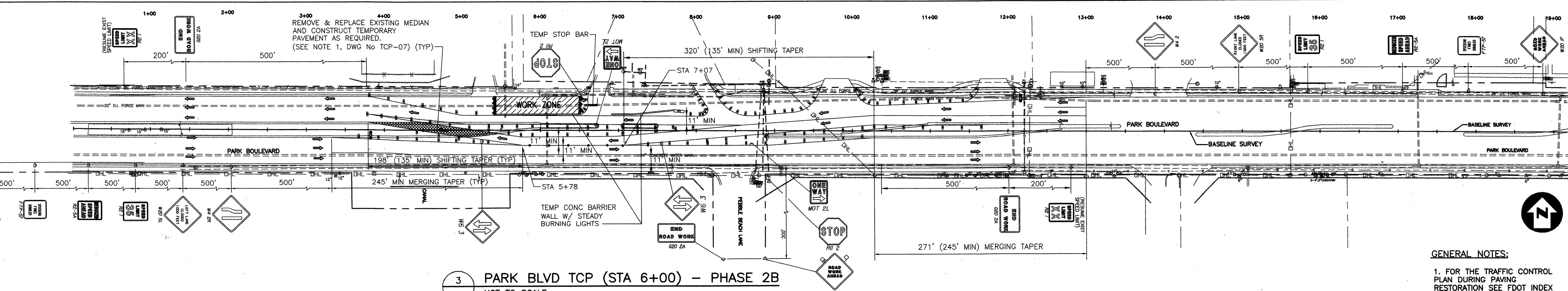
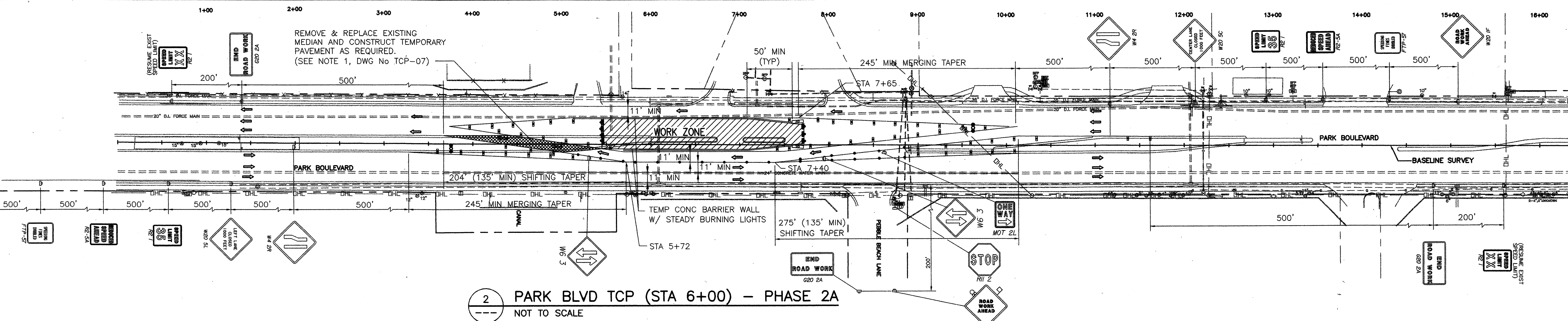
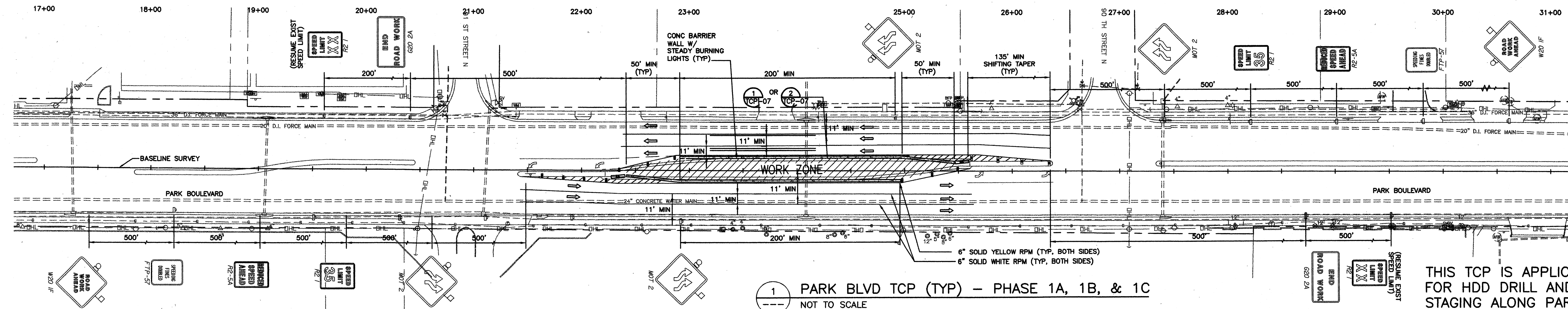
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TCP-02

REV.

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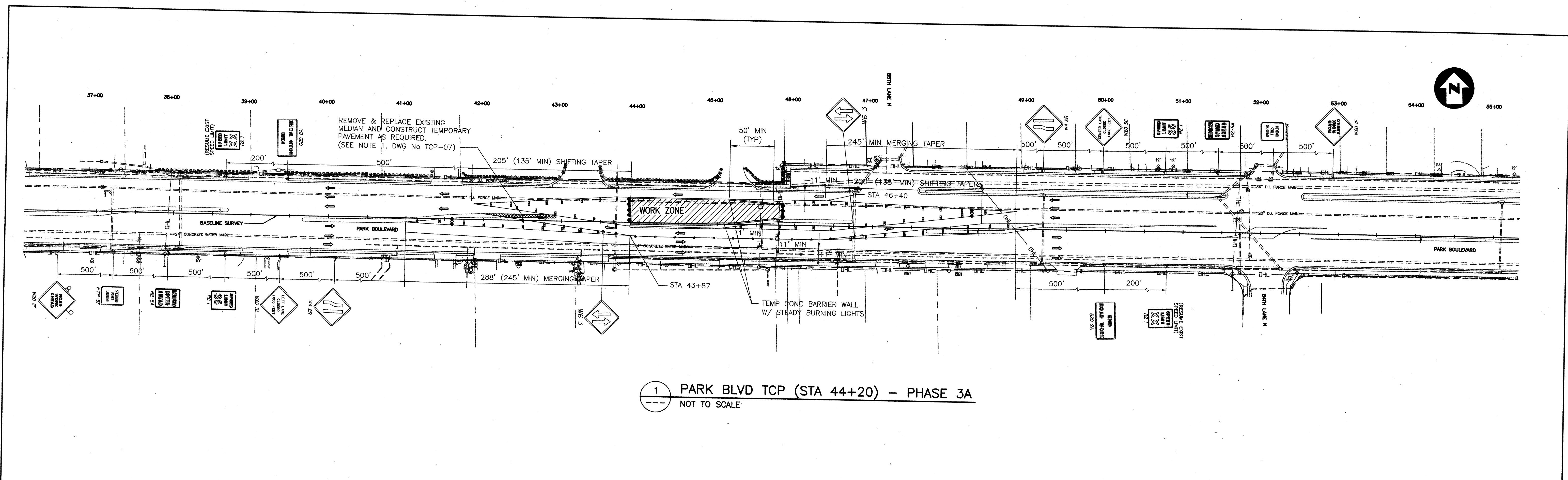
GENERAL NOTES:

1. FOR THE TRAFFIC CONTROL PLAN DURING PAVING RESTORATION SEE FDOT INDEX No 625.

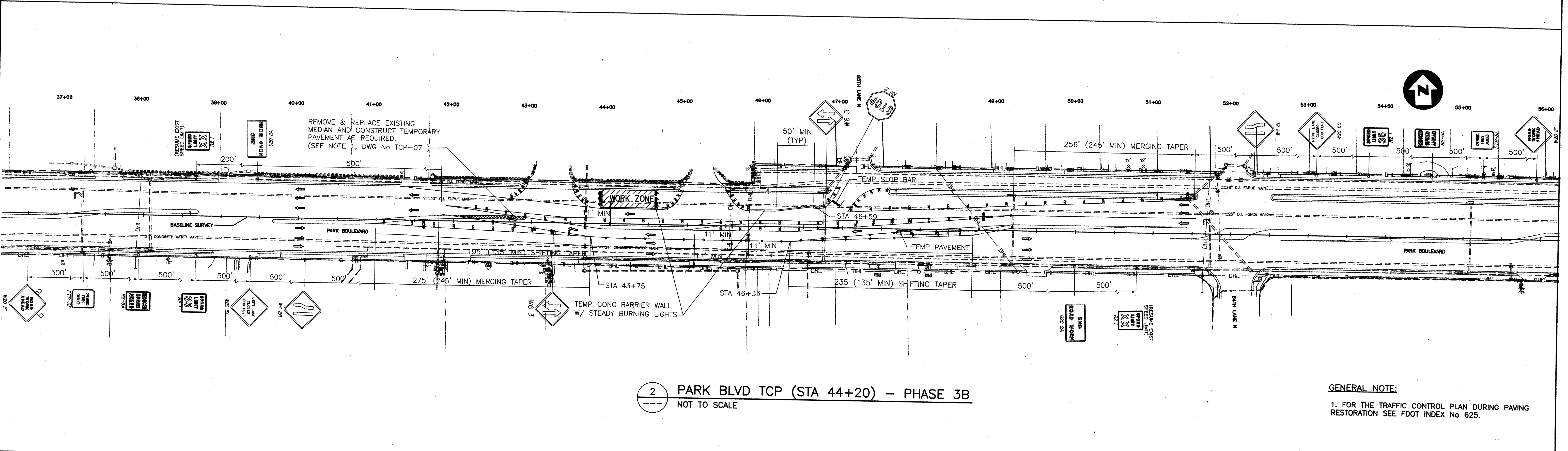
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1 PARK BLVD TCP (STA 44+20) - PHASE 3A  
NOT TO SCALE



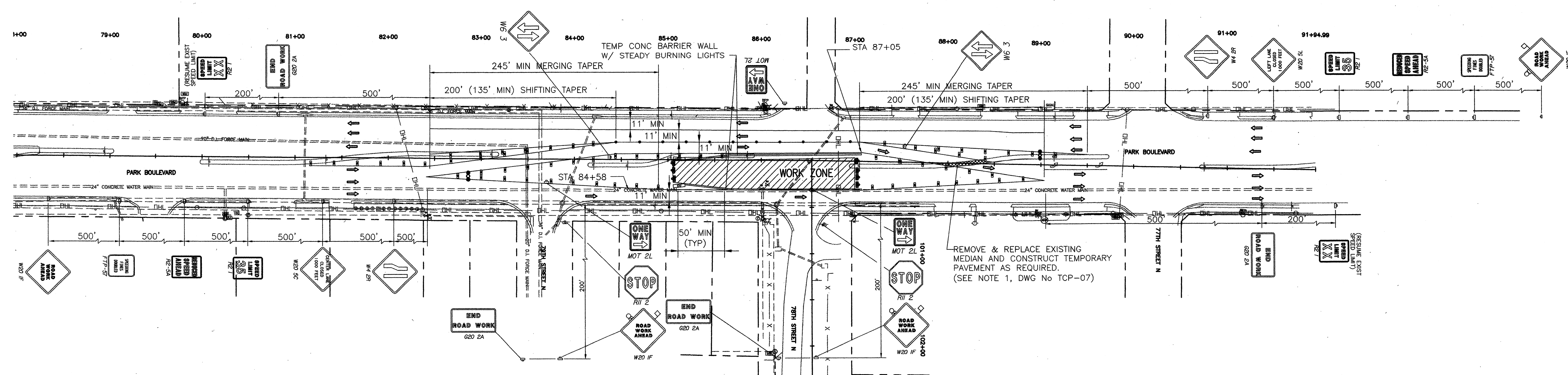
2 PARK BLVD TCP (STA 44+20) - PHASE 3B  
NOT TO SCALE

GENERAL NOTE:  
1. FOR THE TRAFFIC CONTROL PLAN DURING PAVING RESTORATION SEE FDOT INDEX No 625.

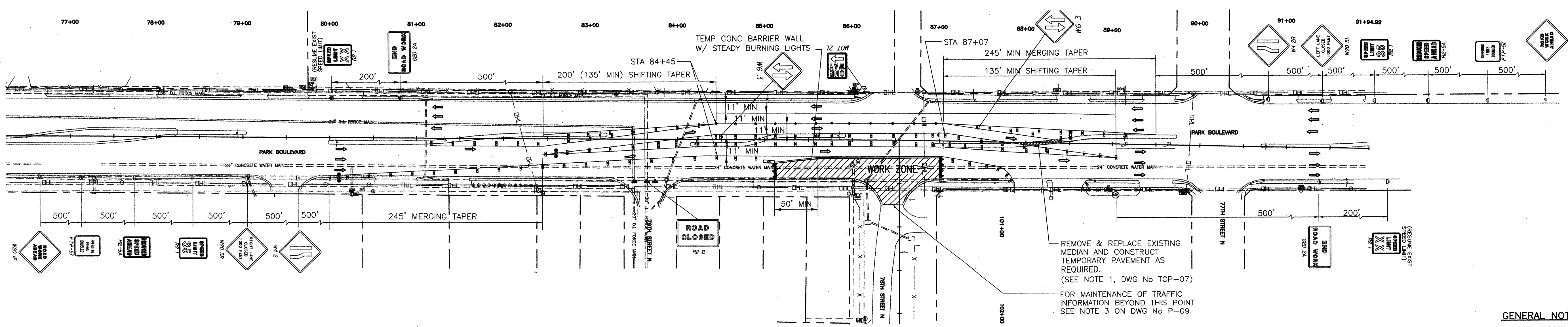
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REF: TCP-04P05.DWG  
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1 PARK BLVD TCP (STA 86+50) - PHASE 4A  
NOT TO SCALE



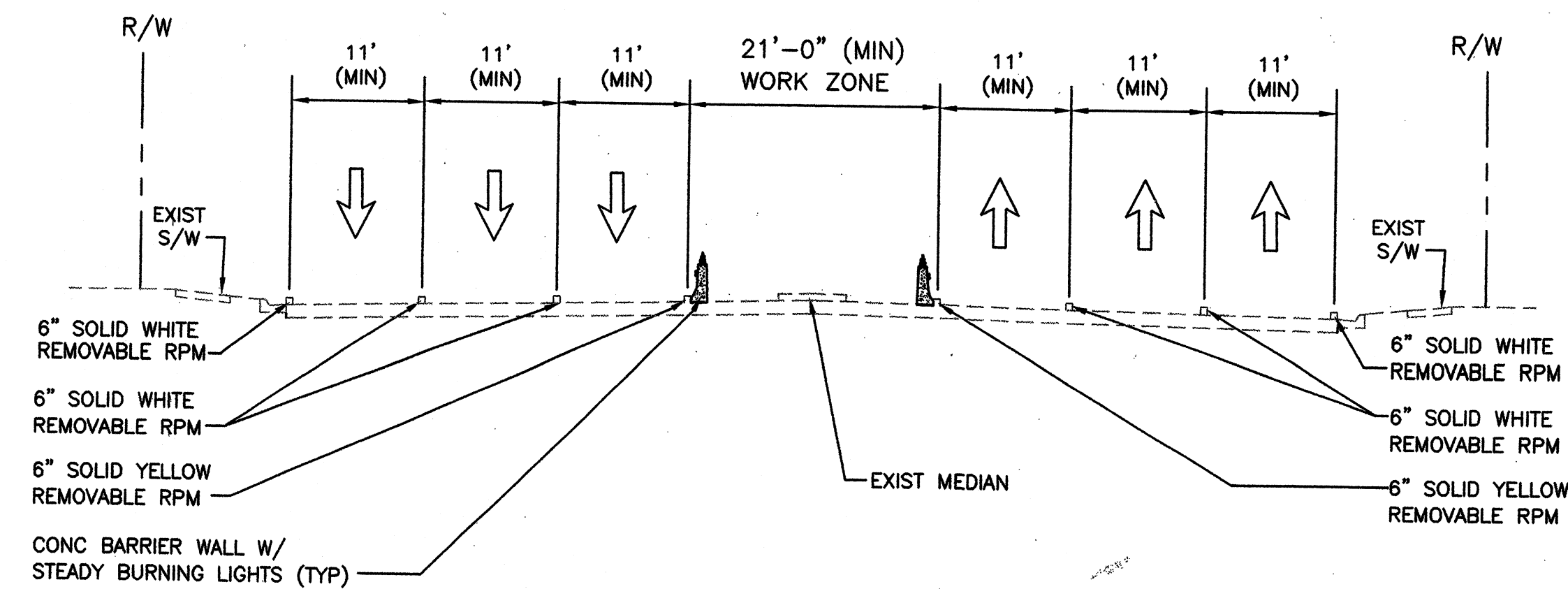
2 PARK BLVD TCP (STA 86+50) - PHASE 4B  
NOT TO SCALE

- GENERAL NOTES:**
1. INSTALL DETOUR SIGNAGE PER DWGS TCP-02 AS APPLICABLE.
  2. REFER TO FDOT INDEX No 625 FOR THE MAINTENANCE OF TRAFFIC ON PARK BLVD DURING PAVING RESTORATION.
  3. REFER TO FDOT INDEX 621 FOR THE MAINTENANCE OF TRAFFIC ON 78TH STREET NORTH FROM STA 100+65 TO 102+50.

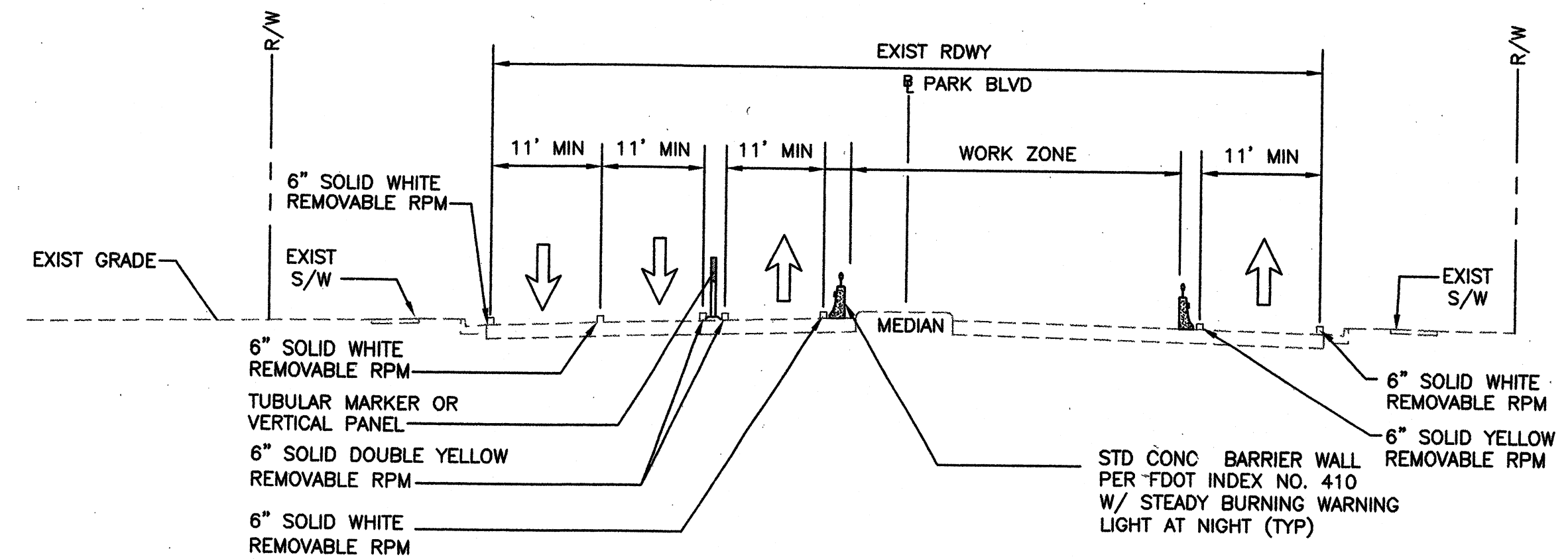
<b>PARSONS ENGINEERING SCIENCE, INC.</b> OFFICES IN PRINCIPAL CITIES 3450 BUSCHWOOD PARK DRIVE • SUITE 345 TAMPA, FL 33618 • (813) 933-4650			Issue Certification Job No. 738729 Designed D. KAMATH Drawn F. DeSANTO Checked J. LANE Reviewed J. LANE Approved J. LANE Reg. No. 40157 Date MARCH 2001		<b>PINELLAS COUNTY UTILITIES</b> 14 S. FORT HARRISON AVE. CLEARWATER, FL 33756 (813) 464-3588		<b>BOCA CIEGA</b> SANITARY FORCE MAIN IMPROVEMENTS PROJECT NUMBER 723-624314-1432 MAXIMO NUMBER 138514		<b>TRAFFIC CONTROL PLANS</b> WORK ZONE PHASE 4		DRAWING NO. <b>TCP-05</b> REV. 0	
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0 7/01 RELEASED FOR BIDDING/CONSTRUCTION  
 Rev Date Description  
 By

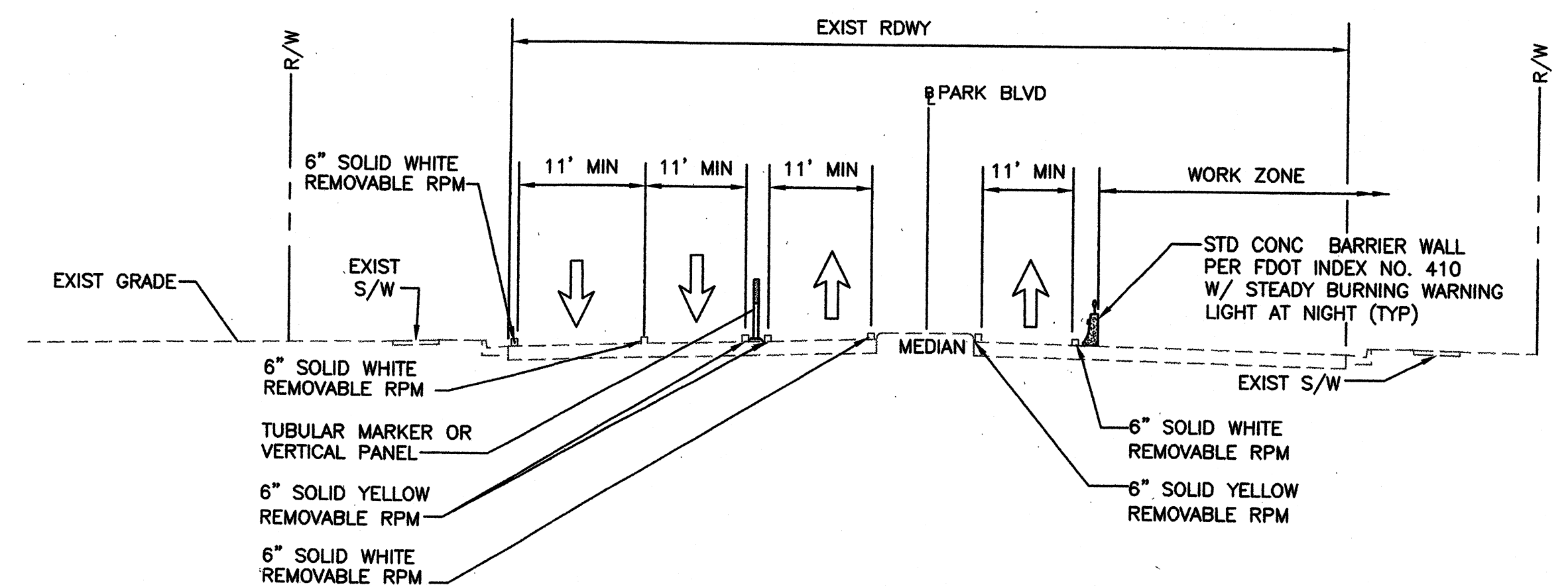




1 PARK BLVD TCP (TYP) - PHASE 1A, 1B, 1C  
TCP-03  
TCP-04  
TCP-05  
NOT TO SCALE



2 PARK BLVD TCP (TYP) - PHASE 2A, 3A & 4A  
TCP-03  
TCP-04  
TCP-05  
NOT TO SCALE



3 PARK BLVD TCP (TYP) - PHASE 2B, 3B & 4B  
TCP-03  
TCP-04  
TCP-05  
NOT TO SCALE

Rev	Date	Description
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**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES

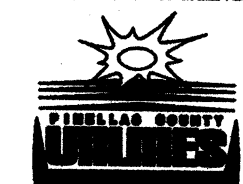


3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked M. DeSANTO  
Reviewed J. DeSANTO  
Approved J. DeSANTO  
Reg. No. 40157  
Date MARCH 2001

**PINELLAS COUNTY UTILITIES**



14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS

PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

TRAFFIC CONTROL PLAN  
TYPICAL SECTIONS & DETAILS

DRAWING NO.

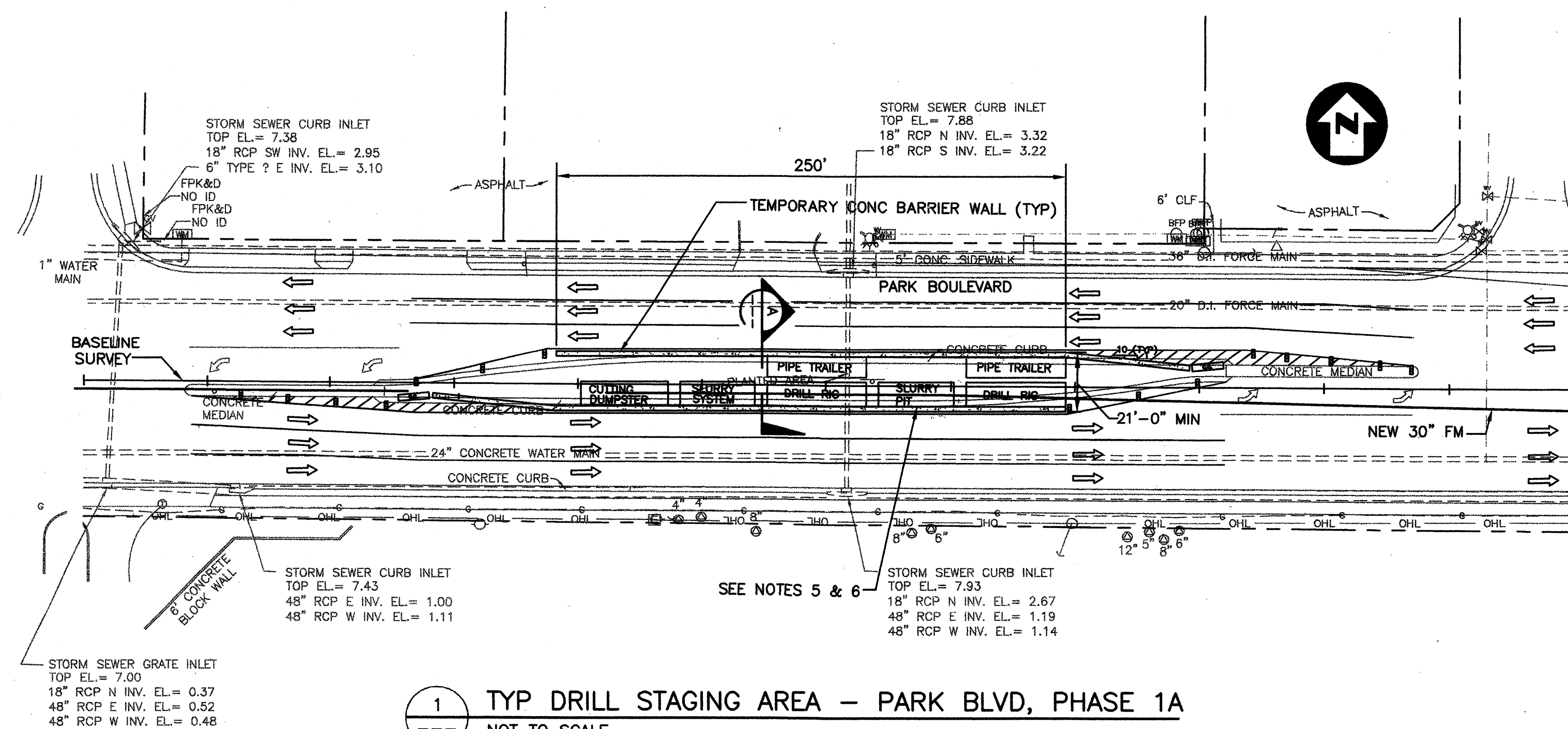
TCP-06

REV.

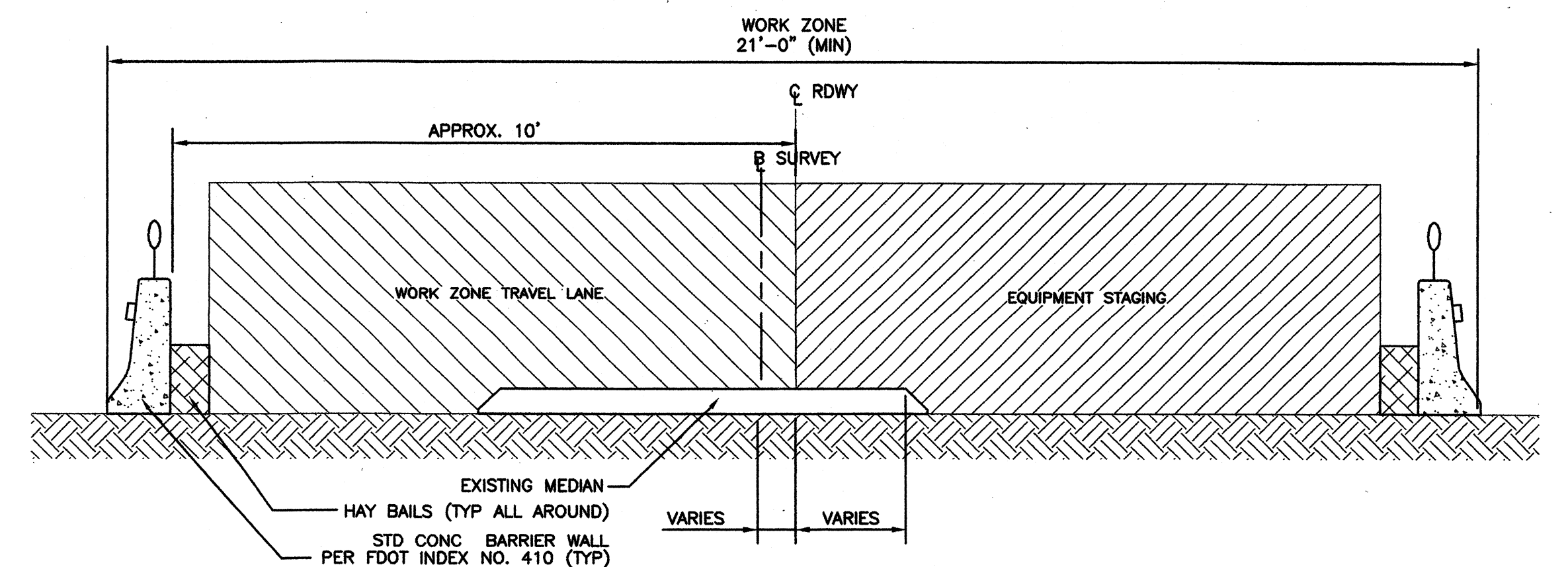
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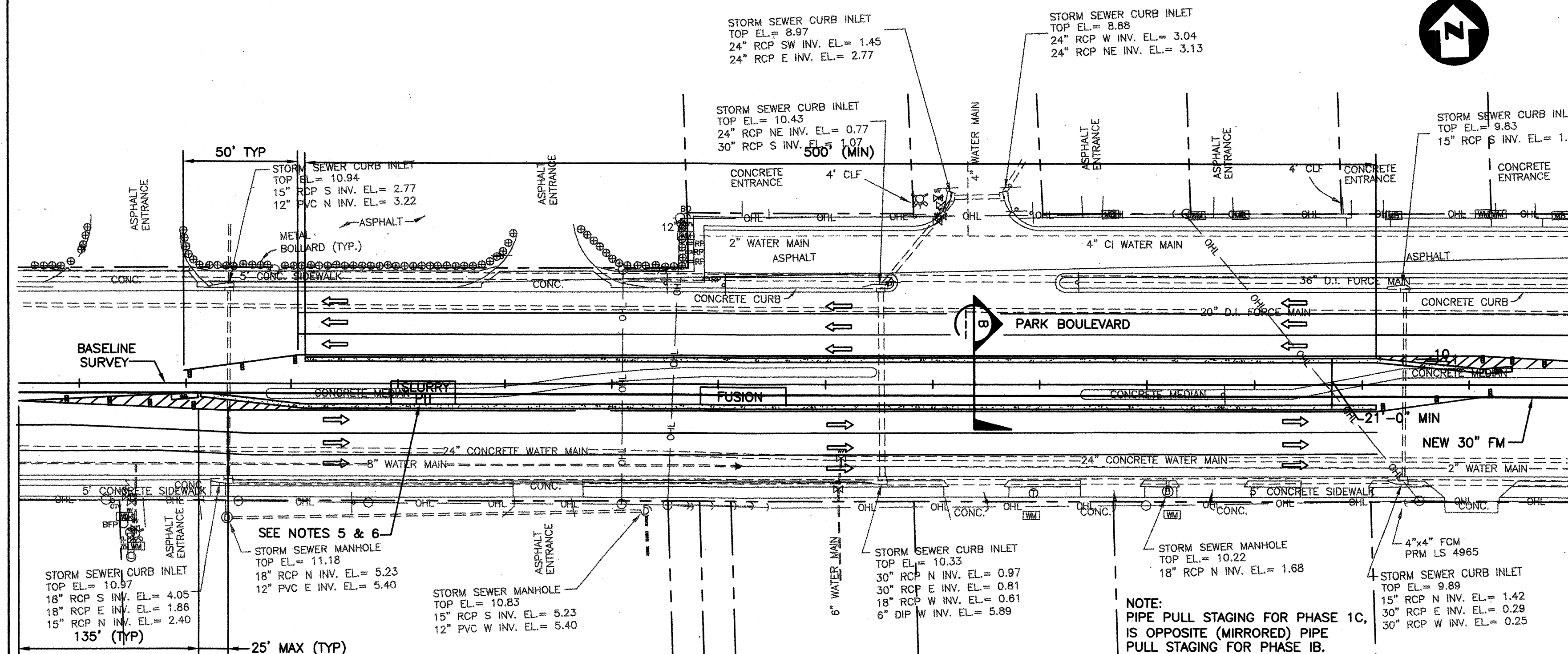
1 TYP DRILL STAGING AREA - PARK BLVD, PHASE 1A  
NOT TO SCALE



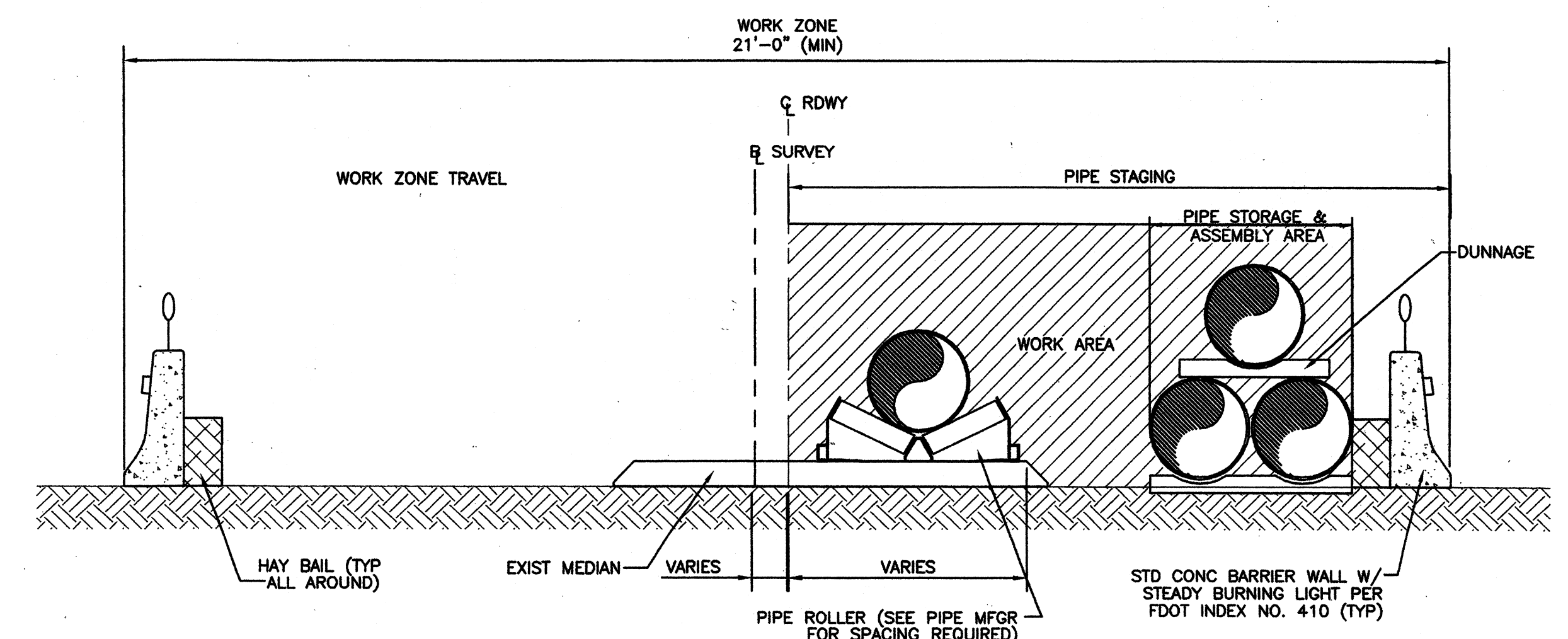
A SECTION  
NOT TO SCALE

#### GENERAL NOTES FOR DETAILS 1 & 2

1. DAMAGE TO EXISTING FACILITIES OUTSIDE MINIMUM LIMITS OF RESTORATION DUE TO STAGING/INSTALLATION OPERATIONS SHALL BE RESTORED TO LIKE NEW CONDITION AT NO ADDITIONAL COST TO THE OWNER.
2. SPEED THROUGH WORK ZONE = 35 MPH.
3. REFER TO FDOT INDEX No. 417 FOR INERTIAL CRASH CUSHION DESIGN.
4. DETAILS INDICATE THE LOCATION OF THE SLURRY PIT UTILIZED FOR TRAFFIC CONTROL PLANNING. AS APPROVED BY THE ENGINEER, IF THE CONTRACTOR ELECTS TO RELOCATE THE SLURRY PIT, THE RESULTING SHIFT IN THE TOP SETUP I.E. BARRICADES, LANE SHIFTS, ETC. SHALL NOT BLOCK OR ENCROACH ON ANY SIGNALIZED INTERSECTIONS.
5. ALL SLURRY PITS SHALL BE TIGHT SHEETED TO PRESERVE AND PROTECT ROADWAY AND/OR OTHER SURFACE IMPROVEMENTS. A WELL POINT SYSTEM SHALL BE IN OPERATION AT ALL TIMES DURING THE CONSTRUCTION OF THE FORCE MAIN.
6. PROVIDE SPLASH WALLS TO PREVENT DRILLING FLUID FROM EXITING STAGING AREA.
7. SEE TRAFFIC CONTROL PLANS TOP-01 THROUGH TOP-07 FOR RPM AND ADDITIONAL INFORMATION.
8. OVERLAY EXISTING ROAD WITH 150 LBS/SQ YD OF "PC-3" TO INCLUDE ANY LEVELING NECESSARY TO MEET PINELLAS COUNTY ASPHALT SPECIFICATIONS.
9. OLD ROADWAY SHALL BE MILLED 2" PRIOR TO OVERLAY.
10. ALL DRAINAGE STRUCTURES WITHIN PINELLAS COUNTY RIGHT-OF WAY AND/OR EASEMENTS MUST HAVE A MINIMUM OF TEN (10) SQUARE FEET OF INTERIOR FLOOR AREA (EXCEPT UNDERDRAIN INSPECTION BOXES).



2 TYP PIPE STAGING AREA - PARK BLVD, PHASE 1B & 1C  
NOT TO SCALE



B SECTION  
NOT TO SCALE

Rev	Date	Description
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION

**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES

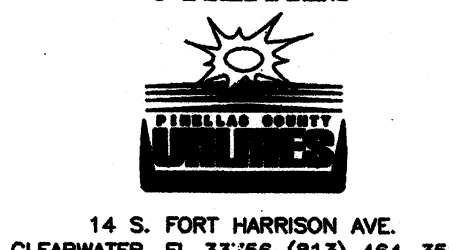


3450 BUSHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked M. [Signature]  
Reviewed [Signature]  
Approved [Signature]  
Reg. No. 40157  
Date MARCH 2001

**PINELLAS COUNTY UTILITIES**



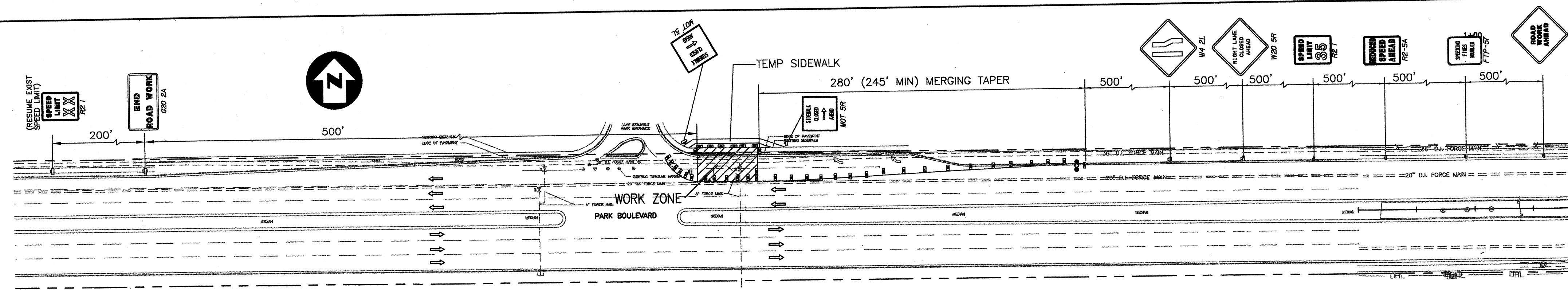
BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS  
PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

TRAFFIC CONTROL PLANS  
HDD DETAILS

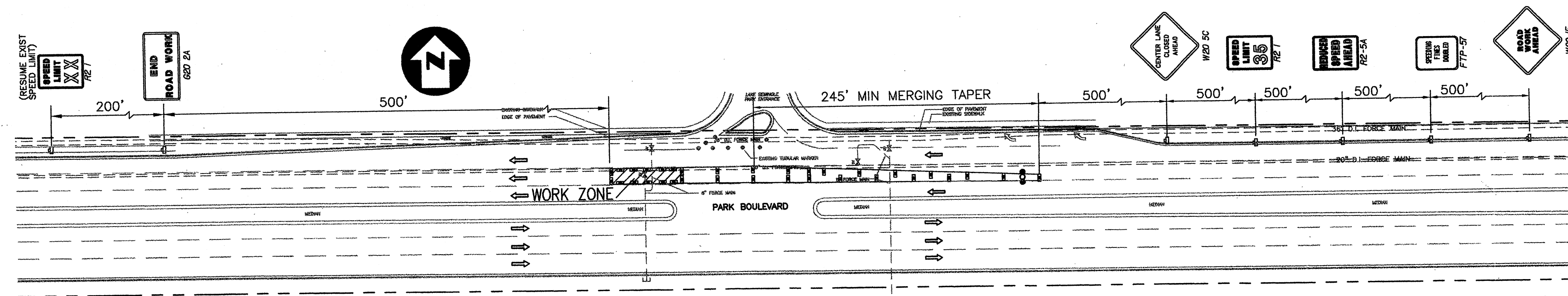
DRAWING NO.  
TCP-07

REV.  
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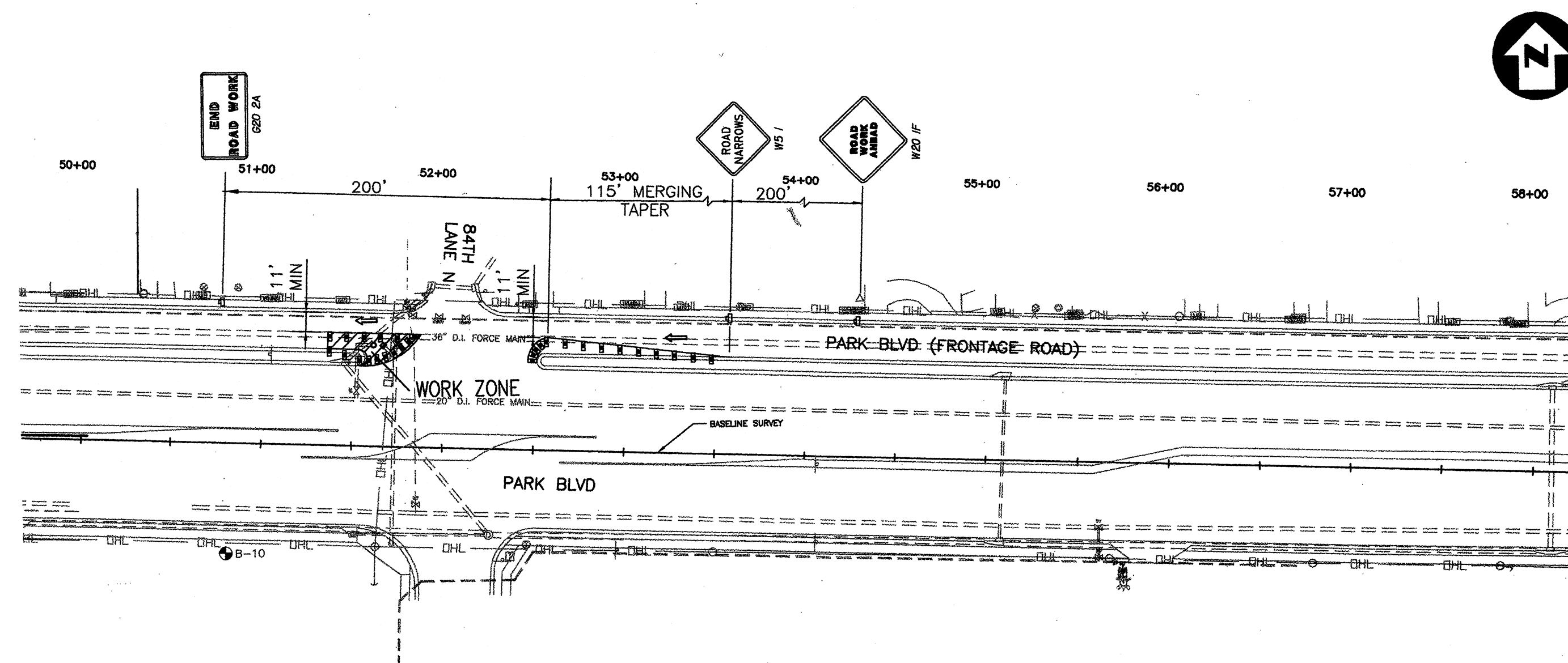




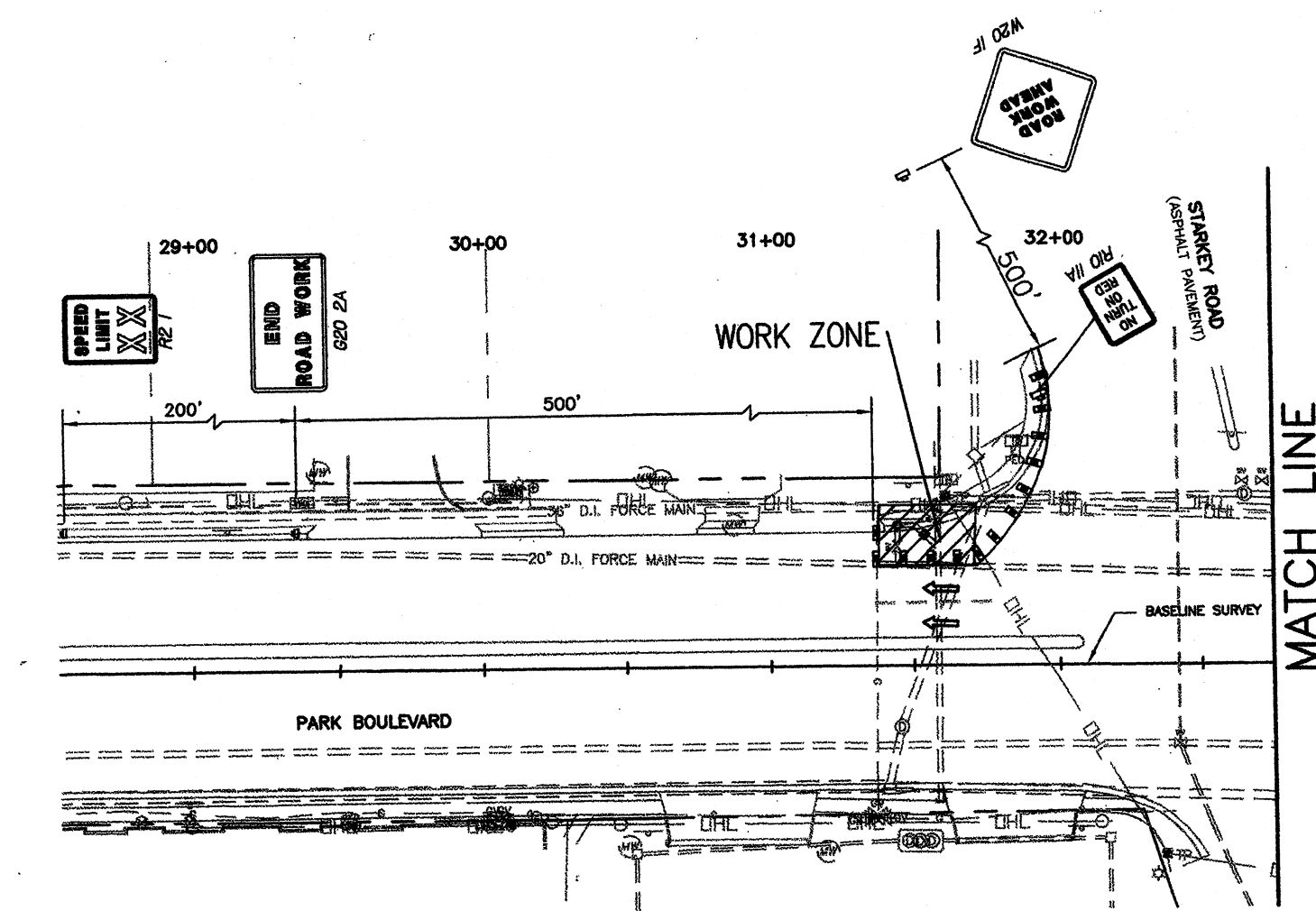
1 PARK BLVD TCP AT SEMINOLE LAKE PARK ENTRANCE (EAST)  
NOT TO SCALE



2 PARK BLVD TCP AT SEMINOLE LAKE PARK ENTRANCE (WEST)  
NOT TO SCALE



3 PARK BLVD FRONTAGE ROAD TCP AT 84TH PLACE N  
NOT TO SCALE



4 PARK BLVD TCP AT STARKEY ROAD  
NOT TO SCALE

GENERAL NOTE:  
1. REFER TO FDOT INDEX No 625 FOR THE MAINTENANCE OF TRAFFIC ON PARK BLVD DURING PAVING RESTORATION.

Rev	Date	Description
0	7/01	RELEASED FOR BIDDING/CONSTRUCTION

**PARSONS ENGINEERING SCIENCE, INC.**  
OFFICES IN PRINCIPAL CITIES

By **PARSONS**

3450 BUSCHWOOD PARK DRIVE • SUITE 345  
TAMPA, FL 33618 • (813) 933-4650

Issue Certification

Job No. 738729  
Designed D. KAMATH  
Drawn F. DeSANTO  
Checked M.   
Reviewed   
Approved   
Reg. No. 40157  
Date JULY 2001

**PINELLAS COUNTY UTILITIES**

14 S. FORT HARRISON AVE.  
CLEARWATER, FL 33756 (813) 464-3588

BOCA CIEGA  
SANITARY FORCE MAIN  
IMPROVEMENTS

PROJECT NUMBER 723-624314-1432  
MAXIMO NUMBER 138514

TRAFFIC CONTROL PLANS  
WORK ZONES  
20" FM ISOLATION AND GROUTING

DRAWING NO.  
TCP-08

REV.  
0