



# 21-INCH INTERCEPTOR CONNECTION TO DOE BRANCH TRUNK SEWER ~ PHASE FOUR SOUTHEAST SECTOR (PWK SEW 2014-06)

JUNE 2015

MAYOR  
SEAN TERRY

MAYOR PRO TEM  
CARMEN ROBERTS

CITY COUNCIL

ERIK GEIGER  
WAYNE NABORS  
ANDY HOPKINS

CARMEN ROBERTS  
LORI VADEN  
CHAD ANDERSON

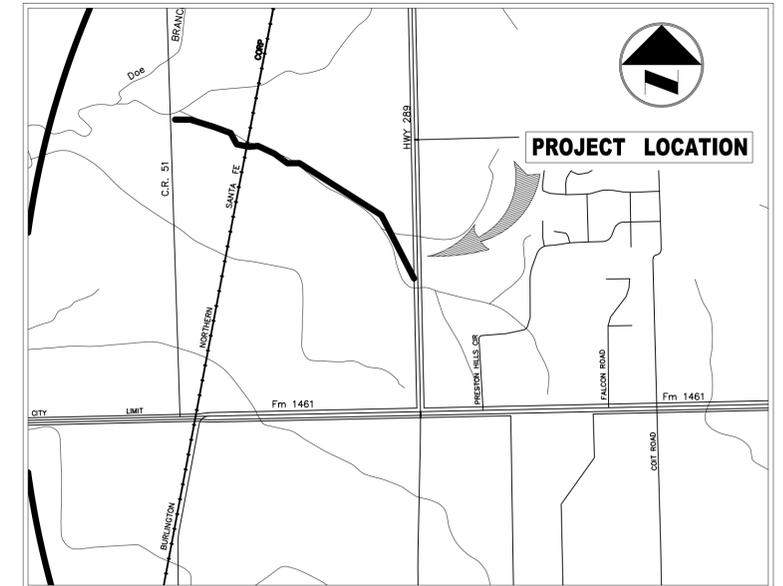
CITY MANAGER  
MIKE FOREMAN

CITY ENGINEER  
GABE JOHNSON, P.E., P.H., CFM

RECORD DRAWING  
The Improvements shown on these drawings were prepared from information provided by the Owner and/or information provided by the General Contractor. To the best of our knowledge, the information provided herein represents the improvements as constructed.  
DATE: 08/29/2016



VICINITY MAP



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8350 N. CENTRAL EXPWY. SUITE 1000 PH. 972.235.3031  
DALLAS, TX 75206 FAX 972.235.9544  
TX REG. ENGINEERING FIRM F-14439  
TX REG. SURVEYING FIRM LS-101938-05

GENERAL PROJECT NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, 4TH EDITION AS AMENDED BY THE CITY OF CELINA. THE CONTRACTOR SHALL REFERENCE THE LATEST CITY OF CELINA STANDARD DETAILS PROVIDED IN THE CELINA PUBLIC WORKS DEPARTMENTS "STANDARDS OF DESIGN AND CONSTRUCTION" MANUAL FOR DETAILS NOT PROVIDED IN THESE PLANS. THE CONTRACTOR SHALL POSSESS ONE SET OF THE N.C.T.C.O.G. STANDARD SPECIFICATIONS AND DETAILS AND THE CITY OF CELINA'S "STANDARDS OF DESIGN AND CONSTRUCTION" MANUAL ON THE PROJECT SITE AT ALL TIMES. IN THE EVENT OF A CONFLICT WITH N.C.T.C.O.G., THE DESIGN ENGINEER SHALL BE NOTIFIED TO PROVIDE CLARIFICATION.
2. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL BE FAMILIAR WITH THE PLANS, ALL NOTES, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, THE CITY STANDARDS FOR CONSTRUCTION, AND ANY OTHER APPLICABLE STANDARDS AND SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK SPECIFIED. FAILURE ON THE PART OF THE CONTRACTOR TO BE FAMILIAR WITH ALL STANDARDS AND SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
3. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSINGS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
4. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, AND FIRE HYDRANTS, ETC.. CONTRACTOR TO ADJUST TO PROPER LINE AND GRADE PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING AND GRADING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING THE CONSTRUCTION OF THE PAVING FOR THIS PROJECT.
5. PROTECT AND MAINTAIN ROADWAY TRAFFIC THROUGHOUT THE PROJECT, PROVIDING A MINIMUM OF ONE (1) LANE OPEN IN EACH DIRECTION.
6. PROVIDE AND MAINTAIN INTERIM ACCESS FROM ROADWAYS CURRENTLY IN USE TO ALL DRIVEWAYS AND INTERSECTING STREETS OR ALLEYS. THE CONTRACTOR SHALL PROVIDE ACCESS AT ALL TIMES DURING CONSTRUCTION TO ALL LOCAL RESIDENTS, BUSINESSES, MAIL SERVICE, AND TRASH PICK UP.
7. MAINTAIN NORMAL PROJECT DRAINAGE UNTIL NEW DRAINAGE FACILITIES ARE FUNCTIONAL, INCLUDING, WHERE NECESSARY, INTERIM REPLACEMENT OF EXISTING DRAINAGE STRUCTURES REMOVED FOR CONSTRUCTION OF NEW DRAINAGE FACILITIES.
8. MAINTAIN ALL WORK AND MATERIAL STORAGE AREAS IN ORDERLY CONDITION, FREE OF DEBRIS AND WASTE. ON COMPLETION OF CONSTRUCTION, CLEAN UP THE PROJECT AND ADJACENT AFFECTED AREAS TO ACCEPTABLE CONDITION, ALL AS PROVIDED IN THE GENERAL CONDITIONS.
9. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING TRENCH SAFETY. ENTRANCE LAYOUTS, RAMPS, LANDSCAPE, AND SIDEWALKS.
10. EXACT SAWCUT PAVEMENT REMOVAL AND REPLACEMENT LIMITS WITHIN THE PUBLIC RIGHT-OF-WAY IS TO BE APPROVED BY PROJECT REPRESENTATIVE.
11. A SITE SPECIFIC TRENCH SAFETY PLAN SHALL INCLUDE A PLAN FOR EACH BORE PIT.
12. AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL ERECT A TEMPORARY SECURITY FENCE AT ALL EXCAVATIONS.
13. ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS THROUGHOUT THE CONSTRUCTION. ANY AND ALL EXCAVATIONS NEAR TRAVEL LANES OR DRIVEWAYS SHALL BE COVERED WITH TRAFFIC-SUPPORTING METAL PLATES OR BACKFILLED AND TOPPED WITH TEMPORARY ASPHALT PAVEMENT UNTIL PERMANENT CONCRETE PAVEMENT IS REPLACED. METAL PLATES SHALL BE BEDDED ON TEMPORARY PAVEMENT MATERIAL AND SHIMMED TO PREVENT MOVEMENT. BEDDING SHALL BE TAPERED ON ALL SIDES TO PROVIDE SMOOTH TRANSITION FOR ALL USERS. AN ADVANCE WARNING SIGN SHALL BE USED TO IDENTIFY THE PRESENCE OF A PLATE.
14. FINISHED GROUND SHALL HAVE NO MORE ROCKS OVER 1 INCH THAN SURROUNDING UNDISTURBED GROUND. ALL ROCK LARGER THAN 1 INCH SHALL BE COLLECTED AND DISPOSED OF BY THE CONTRACTOR.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SERVICE LINES CROSSED OR EXPOSED BY HIS CONSTRUCTION OPERATIONS. WHERE EXISTING SERVICE LINES ARE CUT, BROKEN, OR DAMAGED. THE CONTRACTOR SHALL IMMEDIATELY REPLACE THE SERVICE LINES WITH THE SAME TYPE OF ORIGINAL CONSTRUCTION, OR BETTER TYPE OF ORIGINAL CONSTRUCTION, OR BETTER.
16. UTILITY OWNERS SHALL DETERMINE IF, WHEN AND WHICH UTILITY OR LIGHT POLES (IN THE VICINITY OF PROPOSED CONSTRUCTION) HAVE A NEED FOR ADDITIONAL SUPPORT. ONCE THE UTILITY OWNER MAKES THE DECISION AS TO WHETHER OR NOT UTILITY POLES AND LIGHT STANDARDS/POLES (NEAR EXCAVATION) REQUIRE ADDITIONAL SUPPORT, THE CONTRACTOR SHALL PROVIDE FOR SUPPORT OF SAID POLE OR LIGHT (NO PAY).
17. TEMPORARY FENCING SHALL BE REQUIRED WHERE THERE IS EVIDENCE OF LIVESTOCK AND WHERE DAMAGED OR REMOVED FENCES ARE NOT TO BE REPLACED BY THE END OF THE SAME WORK DAY. TEMPORARY FENCING SHALL BE CONSTRUCTED TO PROVIDE THE SAME LEVEL OF SECURITY AS THE ORIGINAL PERMANENT FENCING.
18. CONTRACTOR SHALL RESET ALL IRON RODS AND OTHER PROPERTY MARKERS DISTURBED BY CONSTRUCTION (NO SEPARATE PAY ITEM.)
19. CONTRACTOR SHALL PROTECT EXISTING CONCRETE PAVEMENT FROM TRACKED EQUIPMENT.
20. PAVEMENT REMOVAL AND REPLACEMENT SHOWN ON PLANS REFLECT ALLOWABLE TRENCH WIDTH. PAVEMENT REPLACEMENT SHALL BE PAID AS PROVIDED FOR IN THE PROPOSAL AND BID SCHEDULE. ALL DRIVEWAYS ARE TO BE RETURNED TO ORIGINAL OR BETTER CONDITION.
21. DAMAGED IRRIGATION SYSTEMS SHALL BE REPAIRED OR REPLACED TO THE PROPERTY OWNER'S SATISFACTION (NO SEPARATE PAY ITEM). CONTRACTOR SHALL IMMEDIATELY REPAIR DAMAGE TO UNDERGROUND SPRINKLER SYSTEMS. ALL REPAIRS SHALL BE COMPLETED BY AN IRRIGATOR LICENSED IN THE STATE OF TEXAS.
22. BACKFILL FOR ALL BORE PITS SHALL BE PLACED IN 8-INCH LOOSE LIFTS (LOOSE MEASUREMENT) AND BE MECHANICALLY COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 AT OPTIMUM MOISTURE PLUS OR MINUS TWO POINTS.
23. REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATION OF ALL KNOWN UNDERGROUND UTILITIES AND SERVICE LINES. HOWEVER, THE OWNER ASSUMES NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL EXISTING SUBSURFACE UTILITIES OR UTILITY LINES, OR TO SHOW THEM IN THEIR EXACT LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES, SERVICE LINES OR THE LIKE, WHICH ARE CROSSED OR EXPOSED BY THE CONSTRUCTION OPERATION.
24. CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT IF IT IS NECESSARY TO CHANGE OR MOVE UTILITY, THE PROGRESS OF THE WORK WILL NOT BE DELAYED.
25. ANY FENCE REMOVED FOR CONVENIENCE OF CONSTRUCTION SHALL BE REPLACED OR RECONSTRUCTED. NEW MATERIALS SHALL MATCH EXISTING FENCES. WOOD FENCES SHALL BE REPLACED WITH NEW CEDAR WITH THE POSTS MATCHING THE EXISTING POSTS.
26. THE CONTRACTOR SHALL REPLACE ALL SHRUBS, PLANTS, TREES, ETC. THAT ARE REMOVED FOR CONVENIENCE OF CONSTRUCTION AT HIS EXPENSE. NEW SHRUBS, PLANTS, TREES, ETC. SHALL BE EQUAL TO OR BETTER THAN THE EXISTING ONES OR MEET THE NEEDS AND APPROVAL OF THE PROPERTY OWNER AND THE PROJECT REPRESENTATIVE.
27. THE CONTRACTOR SHALL NOT DISPOSE OF WASTE AND ANY MATERIALS INTO STREAMS OR WATERWAYS. THE CONTRACTOR SHALL SECURE ALL EXCAVATION AT THE END OF EACH DAY AND DISPOSE OF ALL EXCESS MATERIALS. DISPOSAL SITE SHALL BE DOCUMENTED AND PROVIDED TO THE PROJECT REPRESENTATIVE.
28. THE CONTRACTOR SHALL OBTAIN TPDES STORM WATER PERMIT, POST ALL PERMITS ON THE CONSTRUCTION SITE, SUBMIT A NOTICE OF INTENT (NOI) AND SUBMIT A NOTICE OF TERMINATION (NOT). THE CONTRACTOR AND HIS SUB -CONTRACTORS SHALL BE THE SOLE OPERATOR AND PERMITTEES OF THE CONSTRUCTION SITE.
29. CONTRACTOR SHALL GRADE GROUND AND DITCHES DISTURBED BY CONSTRUCTION TO PREVENT PONDING OF STORM WATER RUNOFF. GRADING SHALL BE SUBSIDIARY TO THE PROJECT BID ITEMS.
30. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE COVERED WITH TOPSOIL. TOPSOIL SHALL BE STOCKPILED, REPLACED AND DISC HARROWED TO A MINIMUM DEPTH OF 4-INCHES.
31. CONTRACTOR SHALL RESTORE GRASS AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WITH GRASS COMPARABLE TO EXISTING. PROJECT REPRESENTATIVE SHALL DIRECT LIMITS AND TYPE OF RESTORATION. RESTORE ESTABLISHED LAWN AREAS, INCLUDING EASEMENTS AND PARKWAYS BY SODDING. RESTORE GRASS AREAS ALONG ALIGNMENT NOT REQUIRING SODDING USING HYDROMULCH METHOD. REESTABLISHED AREAS SHALL BE WATERED, FERTILIZED AND MAINTAINED FOR A PERIOD NOT LESS THAN FOUR WEEKS, OR AS REQUIRED TO ESTABLISH AN ACCEPTABLE LAWN.
32. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE ALL NECESSARY TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

GENERAL PROJECT NOTES

33. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ALL NECESSARY PERMITS, LICENSES, ETC.
  34. THE OWNER'S ENGINEER WILL PERFORM CERTAIN CONSTRUCTION STAKING. REFERENCE THE CONSTRUCTION DOCUMENTS, WHICH OUTLINE THE SCOPE OF THIS SERVICE.
  35. IT WILL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO PROTECT ALL EXISTING PUBLIC AND PRIVATE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL ASSUME FULL LIABILITY TO THOSE COMPANIES FOR ANY DAMAGES CAUSED TO THEIR FACILITIES.
- |  |                |
|--|----------------|
| CITY OF CELINA, GENERAL INFORMATION            | (972) 382-2682 |
| COSERV   | (800) 274-4014 |
| UPPER TRINITY REGIONAL WATER DISTRICT          | (972) 219-1228 |
| GTE TELECOMMUNICATIONS                         | (800) 344-8377 |
| TXU ELECTRIC                                   | (817) 992-6204 |
| ATMOS ENERGY (FIELD ENGINEER ROBIN RICHARDSON) | (972) 485-6204 |
36. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO ADJACENT DEVELOPED OR UNDEVELOPED PROPERTY AREAS WILL BE ALLOWED UNLESS SPECIFIED IN THE PLANS. ANY DAMAGE RESULTING THEREFROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR.
  37. OTHER CONSTRUCTION MAY BE UNDERWAY AT THE SAME TIME AND IN THE GENERAL AREA OF THE SUBJECT PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY AND COORDINATE WITH OTHER CONTRACTORS TO DETERMINE A CONSTRUCTION SCHEDULE THAT WILL OFFER THE LEAST HINDRANCE TO ALL INVOLVED. THE OWNER'S ENGINEER WILL BE NOTIFIED OF ALL COORDINATION. IN THE EVENT OF A SCHEDULING CONFLICT THE OWNER'S ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
  38. CONSTRUCTION INSPECTION WILL BE PERFORMED BY REPRESENTATIVES OF THE OWNER, ENGINEER, GEOTECHNICAL ENGINEER, AND REVIEWING AUTHORITIES AND AGENCIES. UNRESTRICTED ACCESS SHALL BE PROVIDED TO THEM AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING AND SCHEDULING REQUIRED INSPECTIONS.
  39. SIGNS ALONG ROUTE REMOVED FOR CONVENIENCE OF CONSTRUCTION SHALL BE REESTABLISHED AFTER COMPLETION OF BACKFILLING IN THAT AREA (NO SEPARATE PAY ITEM).

GENERAL NOTES FOR SANITARY SEWER CONSTRUCTION

1. ALL NON-PRESSURE TYPE MANHOLES ARE TO BE CONSTRUCTED WITH A MINIMUM OF 2 - PRECAST CONCRETE GRADE RINGS AND WITH AN INTERNAL CHIMNEY SEAL. THE MAXIMUM ALLOWABLE EXTENSION OF MANHOLE NECKS USING GRADE RINGS IS LIMITED TO 30".
2. ALL MANHOLES ARE TO HAVE INVERTS CONSTRUCTED PER MISCELLANEOUS DETAILS.
3. ALL SANITARY SEWER MAIN STUBOUTS FROM MANHOLES SHALL BE A MINIMUM OF 5 FEET IN LENGTH AND TERMINATED WITH A WATER TIGHT STOPPER OR CAP.
4. FOR ALL MANHOLES WITH CAST IN PLACE BASES, THE FIRST PIPE JOINT MUST EXTEND MINIMUM OF 5 FEET PAST THE EDGE OF MANHOLE, WITH A CONCRETE CRADLE POURED INTEGRALLY WITH THE BASE, AND UNDER THE ENTIRE PIPE JOINT LENGTH.
5. ALL CAST IN PLACE MANHOLES ARE TO BE CONSTRUCTED WITH PIPE TO MANHOLE CONNECTORS PER MISCELLANEOUS DETAILS, OR WITH A CONNECTOR AS APPROVED BY THE OWNER'S PROJECT REPRESENTATIVE.
6. MINIMUM MANHOLE WALL THICKNESS ARE PER ASTM C76-08a AS FOLLOWS: THE STANDARD THICKNESSES ARE: 48" MANHOLE-5" WALL; 60" MANHOLE-6" WALL; 72" MANHOLE-7" WALL. REFER TO MISC DETAILS FOR ADDITIONAL INFORMATION.

LEGEND			
B.	BOLLARD	TELE ☐	TELEPHONE BOX
EM ⊕	ELECTRIC METER	⋈	FLOOD LIGHT
PP •	POWER POLE	FP •	FLAG POLE
LS ✖	LIGHT STANDARD	SIGN	TRAFFIC SIGN
WM ⊖	WATER METER	IRS	1/2-INCH IRON ROD W/"PACHECO KOCH" CAP SET
WV ⊖	WATER VALVE	(C.M.)	CONTROLLING MONUMENT
ICV ⊕	IRRIGATION CONTROL VALVE	---	PROPERTY LINE
FR ⊕	FIRE HYDRANT	-x-	FENCE
CO	CLEANOUT	-OHL-	OVERHEAD UTILITY LINE
MH ⊙	MANHOLE	⊕	COORDINATE DESIGNATION
TSC ☐	TRAFFIC SIGNAL CONTROL	----	PROPOSED FENCE
TSP •	TRAFFIC SIGNAL POLE		



	08-25-2016	RECORD DRAWING
NO.	DATE	REVISION

**Pacheco Koch** 8350 N. CENTRAL EXPWY, SUITE 1000  
DALLAS, TX 75206 972.235.3031  
TX REG. ENGINEERING FIRM F-14439  
TX REG. SURVEYING FIRM LS-101938-05

GENERAL NOTES				
21" SEWER INTERCEPTOR SOUTHEAST SECTOR				
CITY OF CELINA, COLLIN COUNTY, TEXAS				
DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	2

BID ITEM #	BID ITEM	SPEC	UNITS	SHEET 4	SHEET 5	SHEET 6	SHEET 7	SHEET 8	SHEET 9	SHEET 10	SHEET 11	TOTAL	PROPOSAL QUANTITY
1	Mobilization, Demobilization, Bonds, Insurance	TxDOT 500	LS									1	1
2	Traffic Control & Barricades	TxDOT 502	LS									1	1
3	Project Sign	107.2	EA									2	2
4	Temporary Erosion, Sedimentation and Water Pollution Prevention (SWPPP)	201	LS									1	1
5	General Site Preparation	203.3	LS									1	1
6	60" Diameter Sanitary Sewer Manhole	Tech Spec	EA	1	3	3	2	2	1	1	1	14	14
7	60" Diameter Sanitary Sewer Manhole Extra Depth	Tech Spec	VF	7	19	22	16	16	9	9	11	109	109
7A	Sanitary Sewer Manhole Vent	Tech Spec	EA				1					1	1
7B	Sanitary Sewer Drop Connection	Tech Spec	EA				1	1				2	2
8	Connect to Existing Manhole	Tech Spec	EA	1								1	1
9	21" PVC (F679 PS115) Sanitary Sewer Main	501.17	LF	724	900	797	900	900	900	900	624	6645	6645
10	21" Sanitary Sewer Main (BOTO)	Tech Spec	LF			103						103	103
11	Vacuum Test Sanitary Sewer Manhole	Tech Spec	EA	1	3	3	2	2	1	1	1	14	14
12	Television Inspection	507.5	LF	724	900	900	900	900	900	900	624	6748	6748
13	Rock Foundation	504.3	CY									0	100
14	Sand Backfill	504.6	CY									0	100
15	Flowable Backfill	504.6	CY		112		140			123		375	400
16	Rock Riprap - Type A	803.3	CY				23			25		48	100
17	Hydromulch Seeding of Work Zone	202	SY	4025	5000	4430	5000	5000	5000	5000	345	33800	38900
18	Trench Safety & Support	107.19	LF	724	900	797	900	900	900	900	624	6645	6645
19	Investigation	Tech Spec	EA									0	3



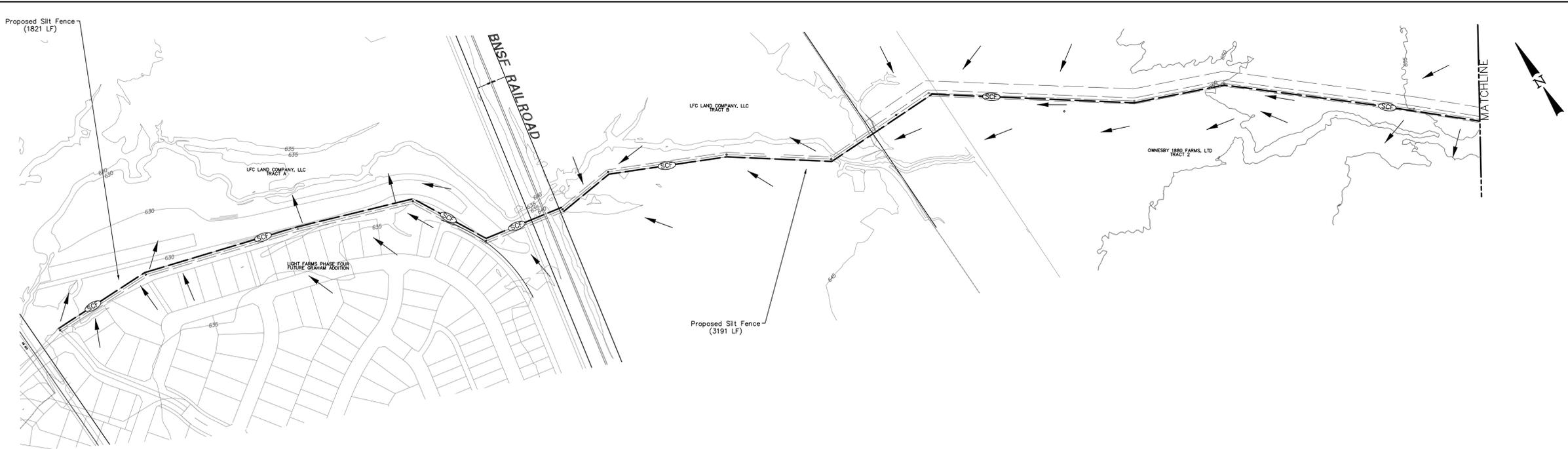
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**QUANTITY SHEET**

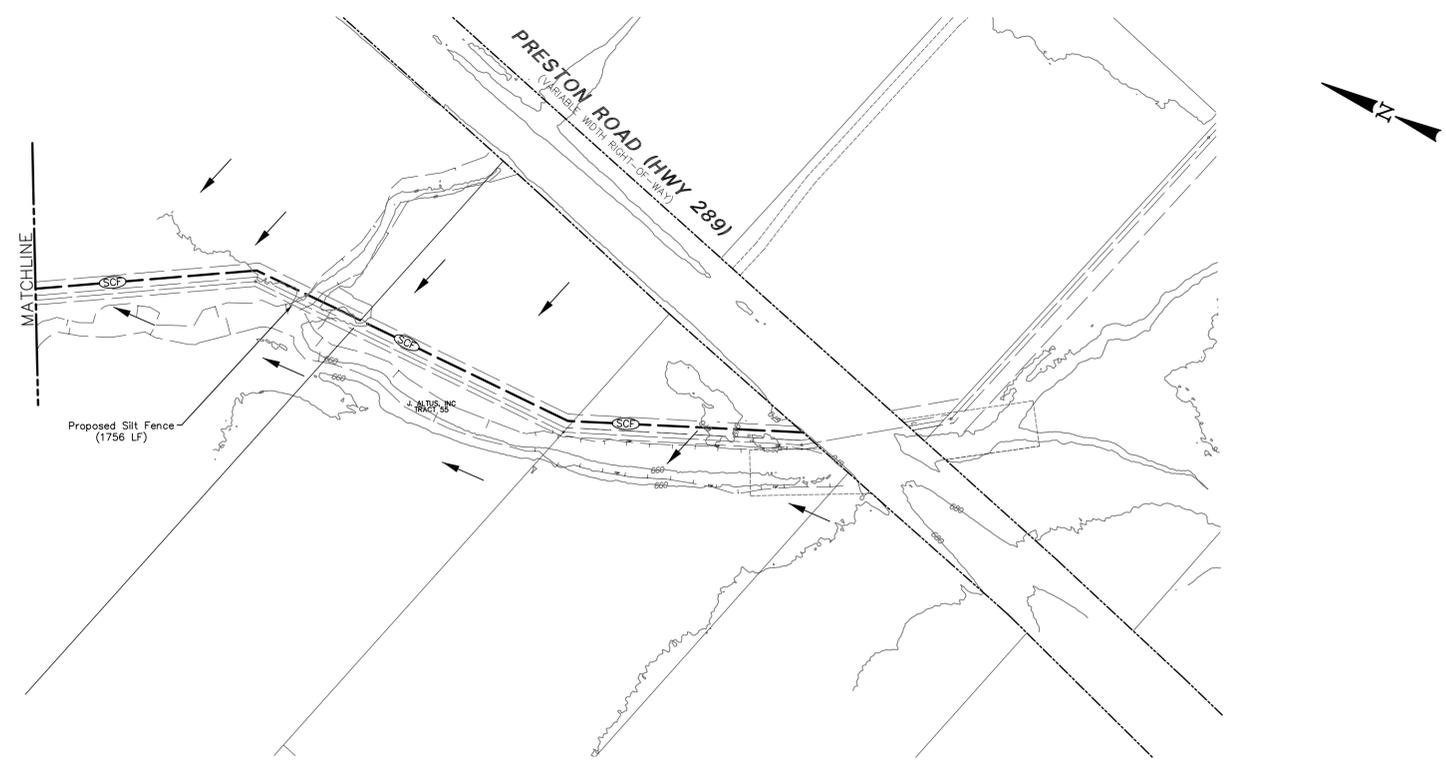
**21" SEWER INTERCEPTOR  
SOUTHEAST SECTOR**  
CITY OF CELINA, COLLIN COUNTY, TEXAS

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	3



- LEGEND**
- BALED HAY
  - DIRECTION OF FLOW
  - CONTOUR INTERVAL 10'

- NOTES:**
1. TEMPORARY EROSION CONTROL ELEMENTS TO REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED OR AS DIRECTED BY ENGINEER.
  2. ALL DISTURBED AREAS TO RECEIVE HYDROMULCH SEEDING. SOD AS DIRECTED BY ENGINEER.
  3. LOCATION OF EROSION CONTROL ELEMENTS IS APPROXIMATE AND MAY BE ADJUSTED IN THE FIELD.



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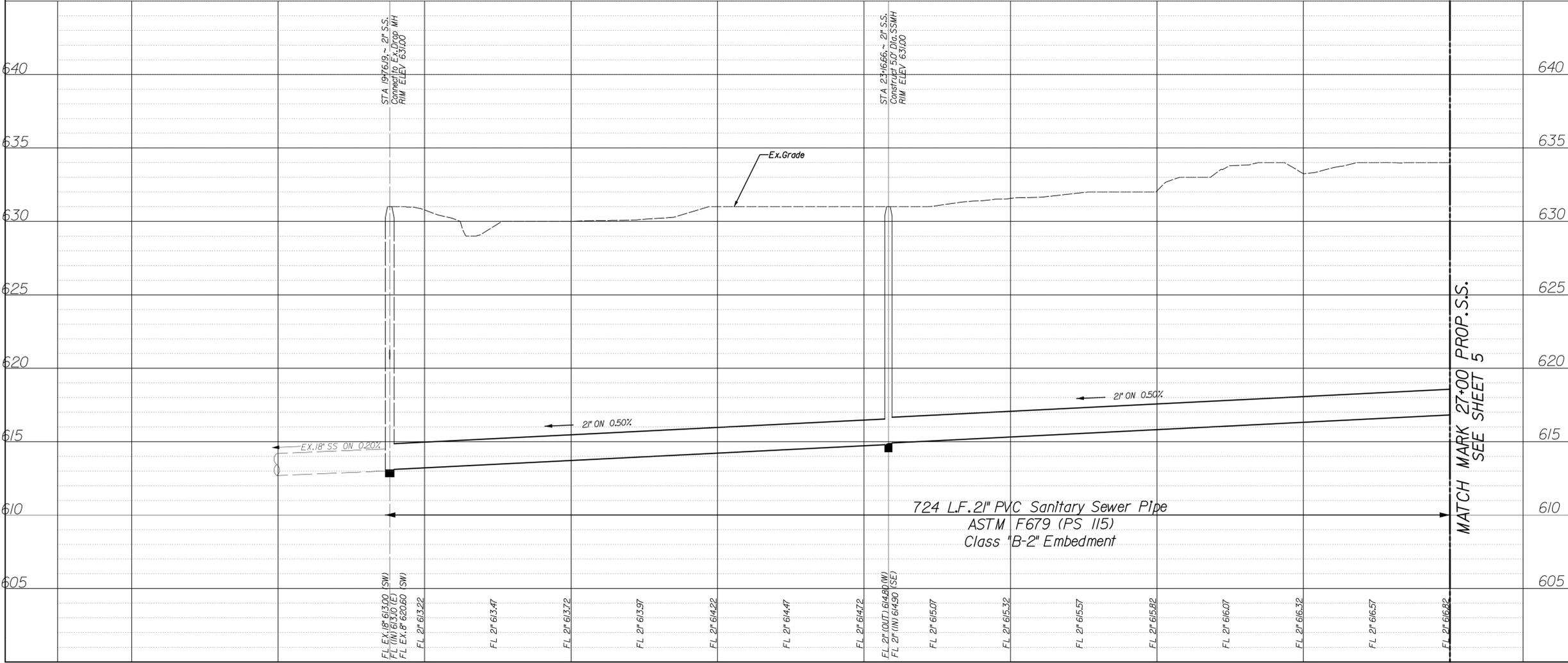
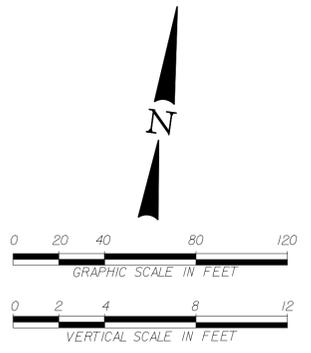
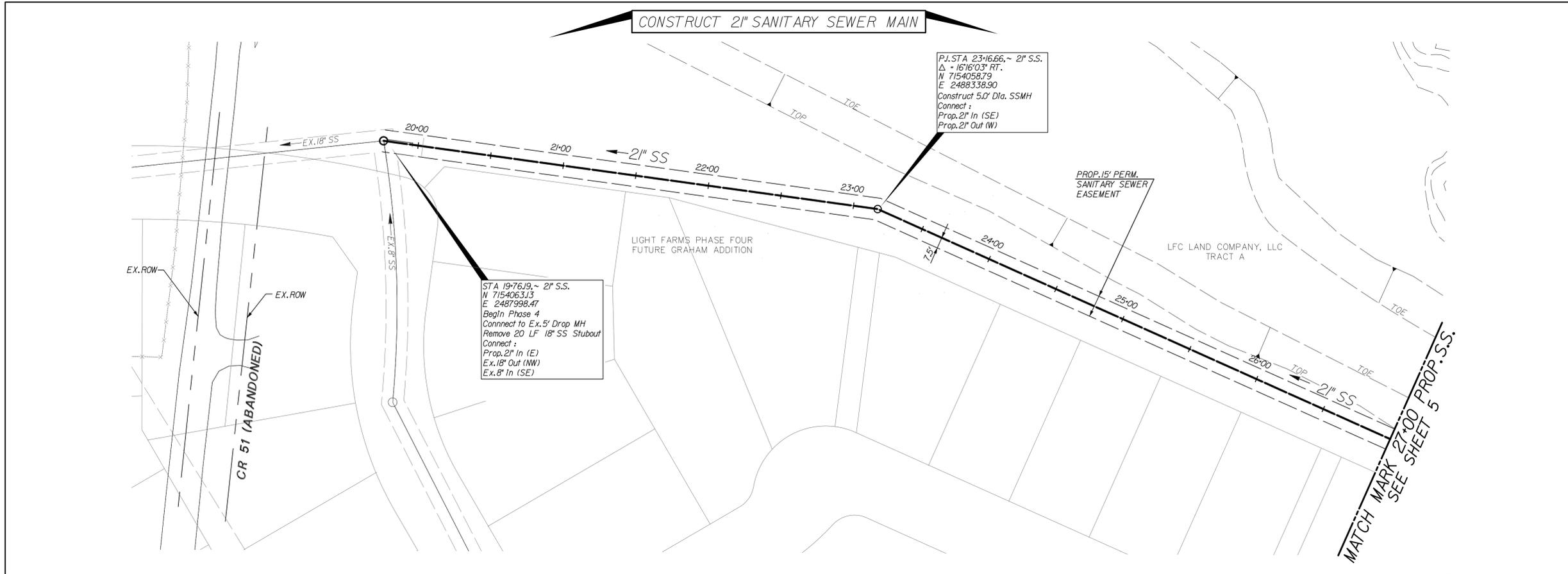
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**EROSION CONTROL PLAN**

**21" SEWER INTERCEPTOR  
 SOUTHEAST SECTOR**

CITY OF CELINA, COLLIN COUNTY, TEXAS

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	MAY 2015	3551-14.141	14



Point	Northing	Easting	Elev.	Description
40	7154000.86	2489603.67	638.52	1/2\"/>
41	7153695.12	2489956.72	640.88	1/2\"/>



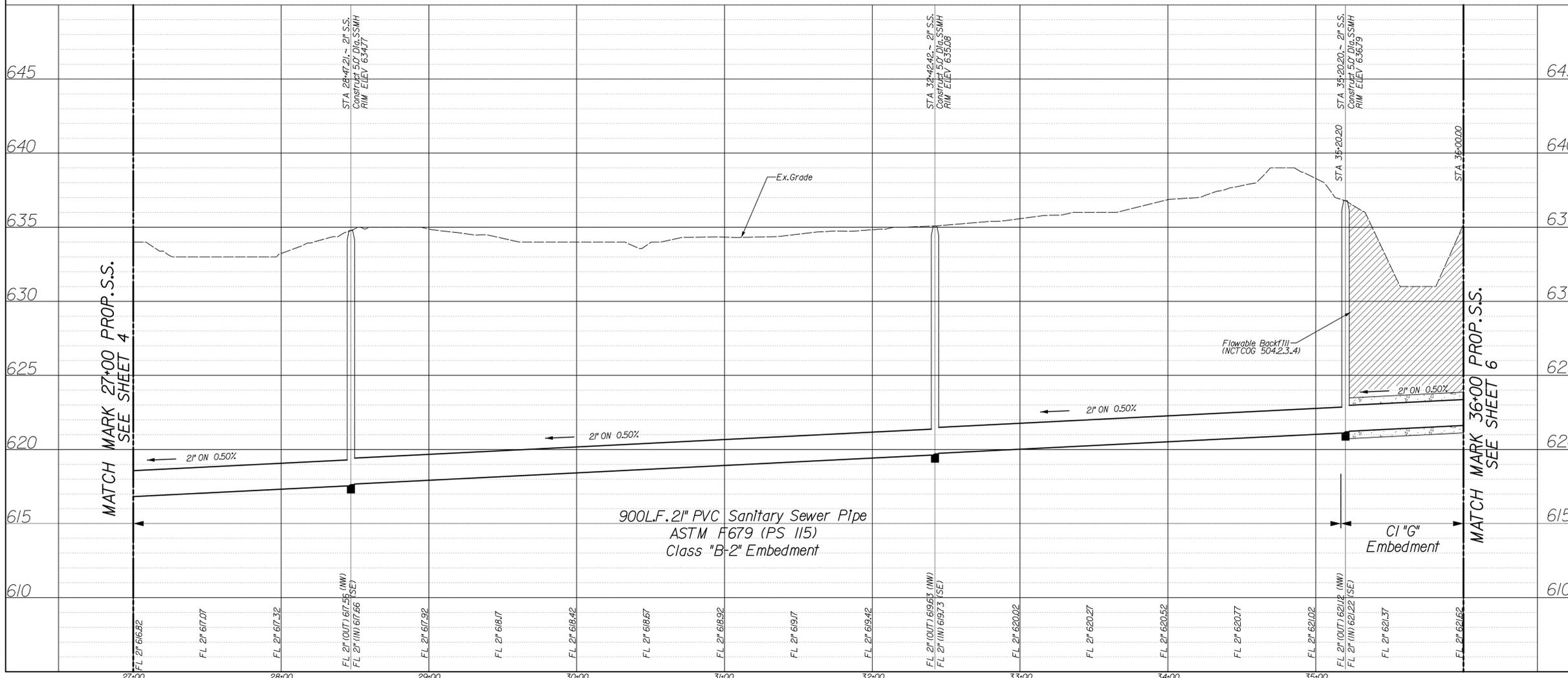
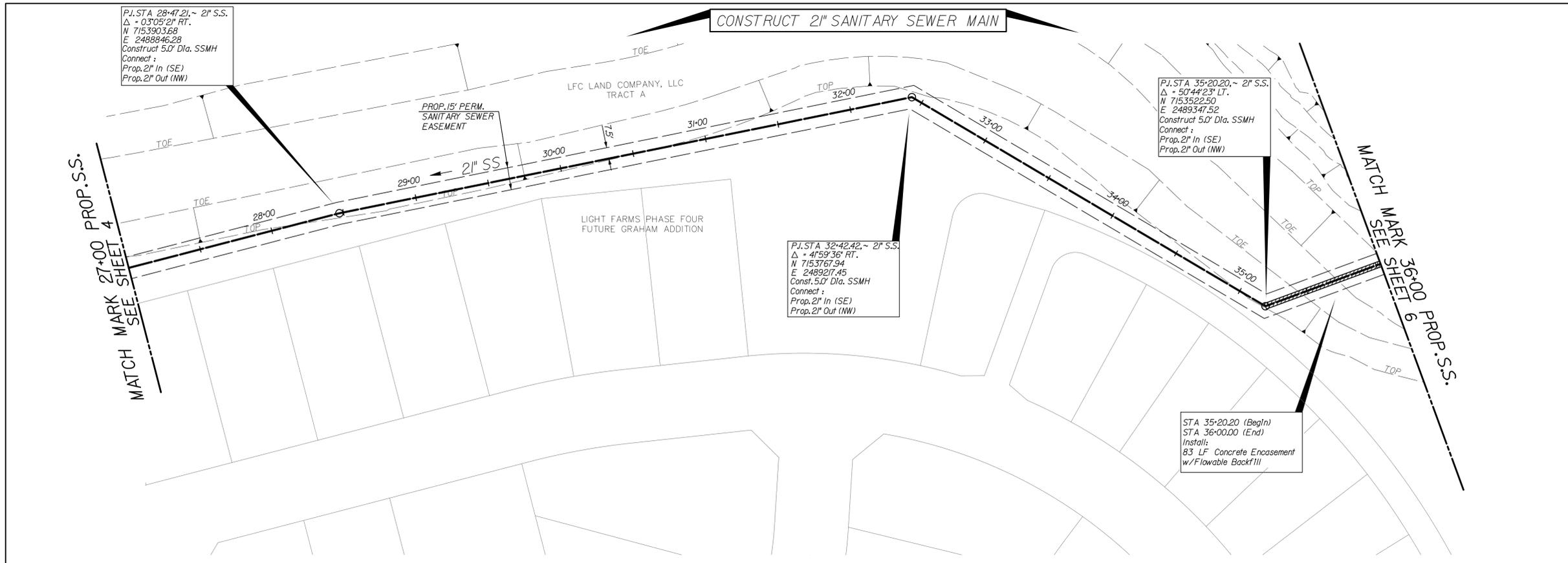
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**INTERCEPTOR MAIN  
 PLAN & PROFILE  
 STA. 19+73.03 TO STA. 27+00**

**21\"/>
 SOUTHEAST SECTOR  
 CITY OF CELINA, COLLIN COUNTY, TEXAS**

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	<b>4</b>



Point	Northing	Easting	Elev.	Description
40	7154000.86	2489603.67	638.52	1/2" IRON SET W/RED CAP
41	7153695.12	2489956.72	640.88	1/2" IRON SET W/RED CAP



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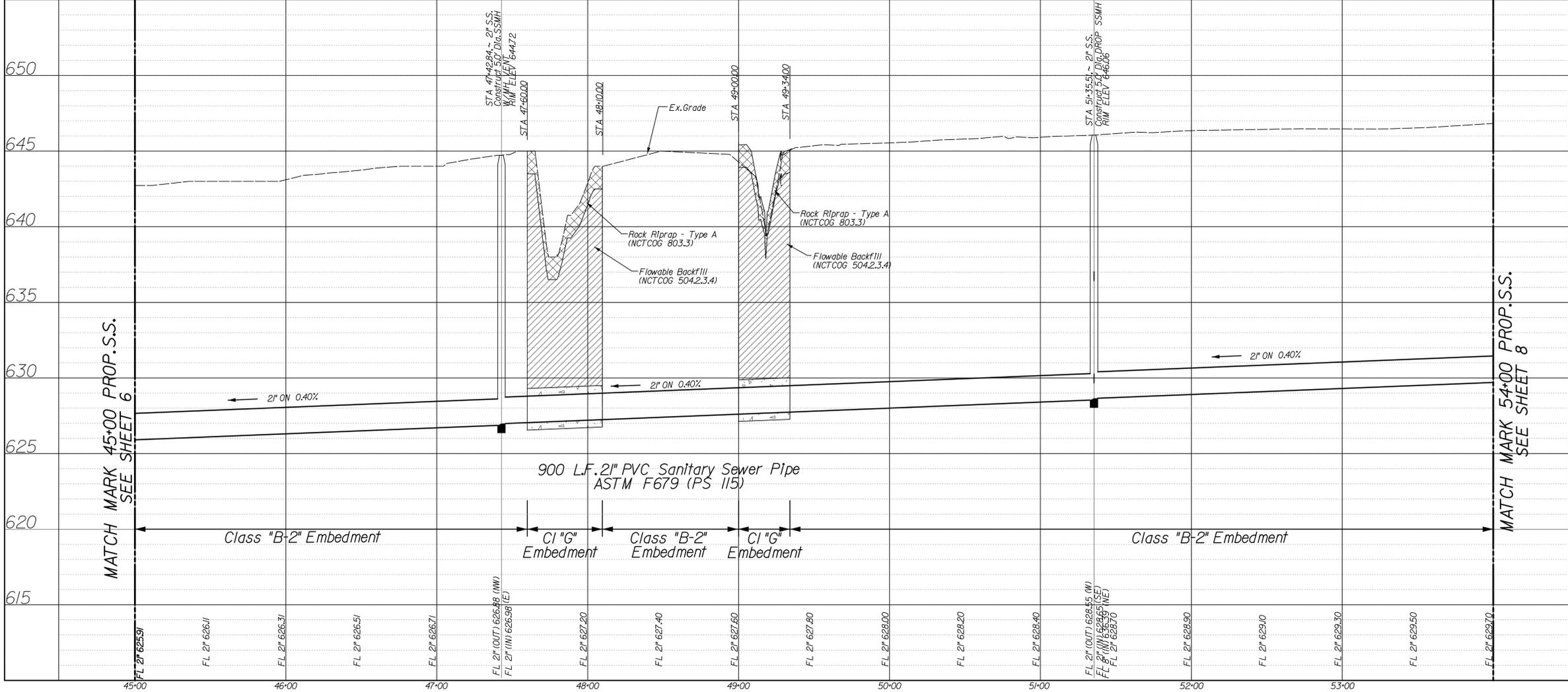
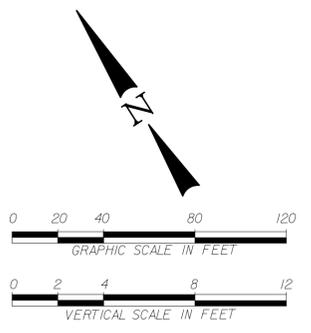
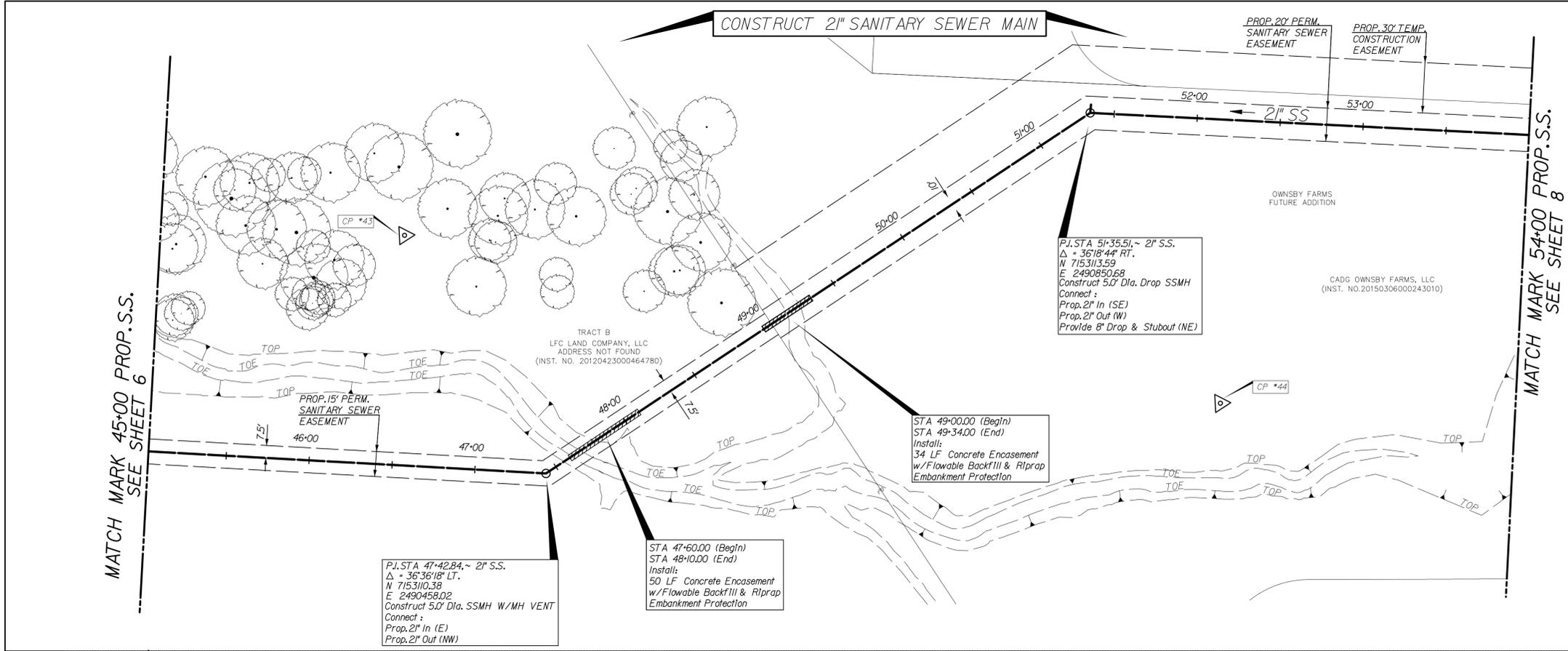
**INTERCEPTOR MAIN  
 PLAN & PROFILE  
 STA. 27+00 TO STA. 36+00**

**21" SEWER INTERCEPTOR  
 SOUTHEAST SECTOR**

*CITY OF CELINA, COLLIN COUNTY, TEXAS*

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	<b>5</b>





Point	Northing	Eastng	Elev.	Description
43	7153276.62	2490464.36	642.82	1/2"-IRON SET W/RED CAP
44	7152924.74	2490821.57	646.53	1/2"-IRON SET W/RED CAP



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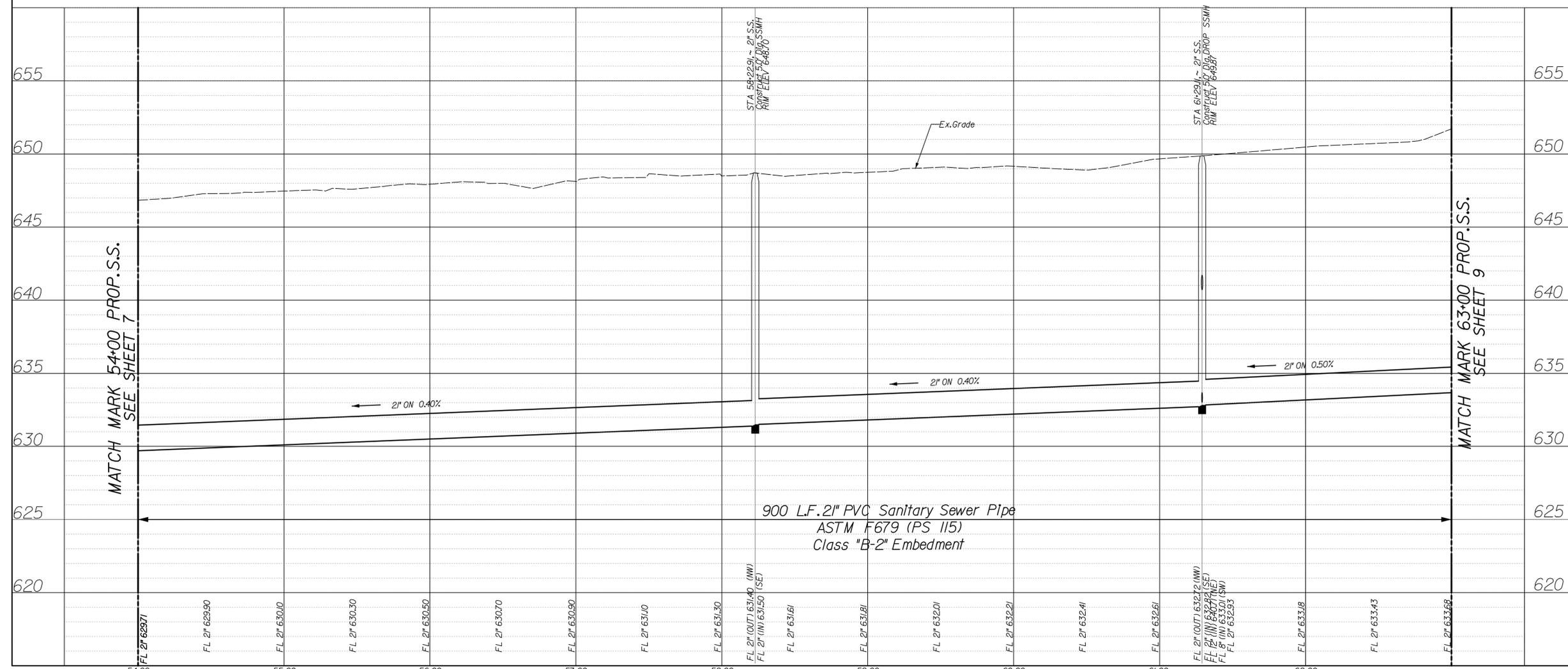
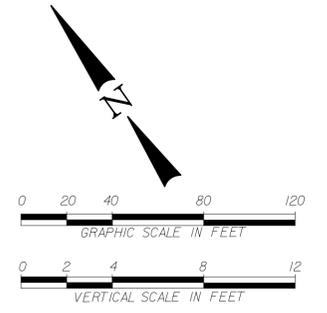
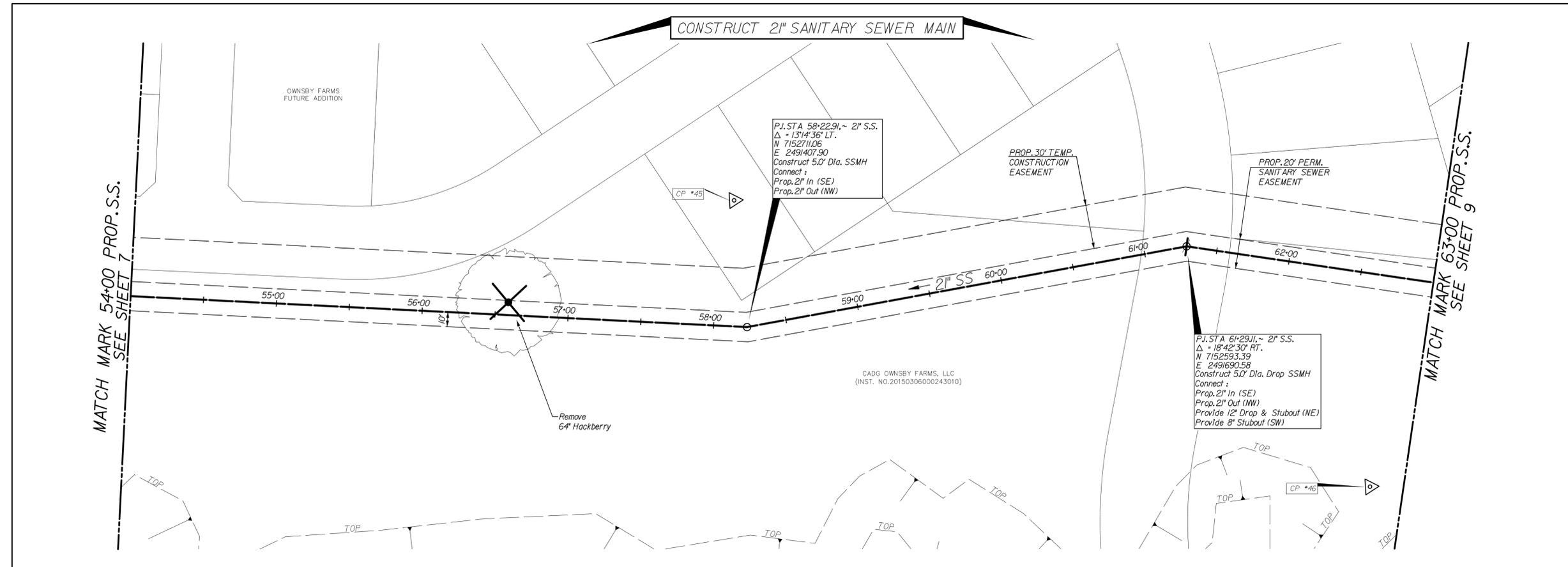
**Pacheco Koch** 8350 N. CENTRAL EXPWY, SUITE 1000  
DALLAS, TX 75206 972.235.3031  
TX REG. ENGINEERING FIRM F-14439  
TX REG. SURVEYING FIRM LS-101938-05

**INTERCEPTOR MAIN  
PLAN & PROFILE  
STA. 45+00 TO STA. 54+00**

**21" SEWER INTERCEPTOR  
SOUTHEAST SECTOR**

CITY OF CELINA, COLLIN COUNTY, TEXAS

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	7



Point	Northing	Easting	Elev.	Description
45	7152788.51	2491447.57	649.25	1/2" IRON SET W/RED CAP
46	7152387.26	2491706.66	650.81	1/2" IRON SET W/RED CAP



NO.	DATE	REVISION
	08-25-2016	RECORD DRAWING

**Pacheco Koch** 8350 N. CENTRAL EXPWY. SUITE 1000  
 DALLAS, TX 75206 972.235.3031  
 TX REG. ENGINEERING FIRM F-14439  
 TX REG. SURVEYING FIRM LS-101938-05

**INTERCEPTOR MAIN  
 PLAN & PROFILE  
 STA. 54+00 TO STA. 63+00**

**21" SEWER INTERCEPTOR  
 SOUTHEAST SECTOR**

CITY OF CELINA, COLLIN COUNTY, TEXAS

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	8

CONSTRUCT 2" SANITARY SEWER MAIN

P.I. STA 67+67.71, ~ 2" S.S.  
 Δ = 0'25'30" RT.  
 N 7152718.3  
 E 249270.27  
 Construct 5.0' Dia. SSMH  
 Connect :  
 Prop. 2" In (SE)  
 Prop. 2" Out (NW)

CADG OWNSBY FARMS, LLC  
 (INST. NO. 2015030600024301C)

OWNSBY FARMS  
 FUTURE ADDITION

REMAINDER OF TRACT 3  
 OWNSBY 1880 FARMS, LTD.  
 (VOL. 4332, PG. 1047)

PROP. 20' PERM.  
 SANITARY SEWER  
 EASEMENT

PROP. 30' TEMP.  
 CONSTRUCTION  
 EASEMENT

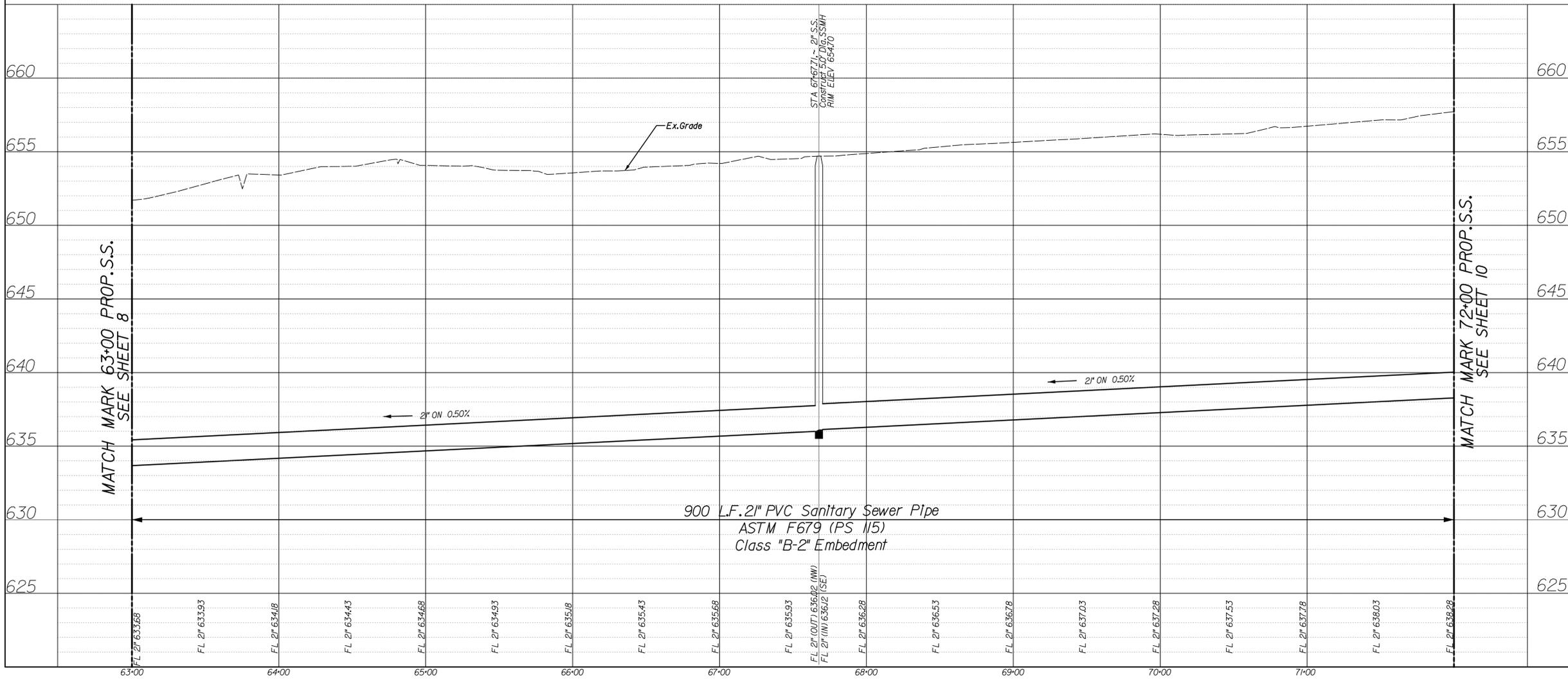
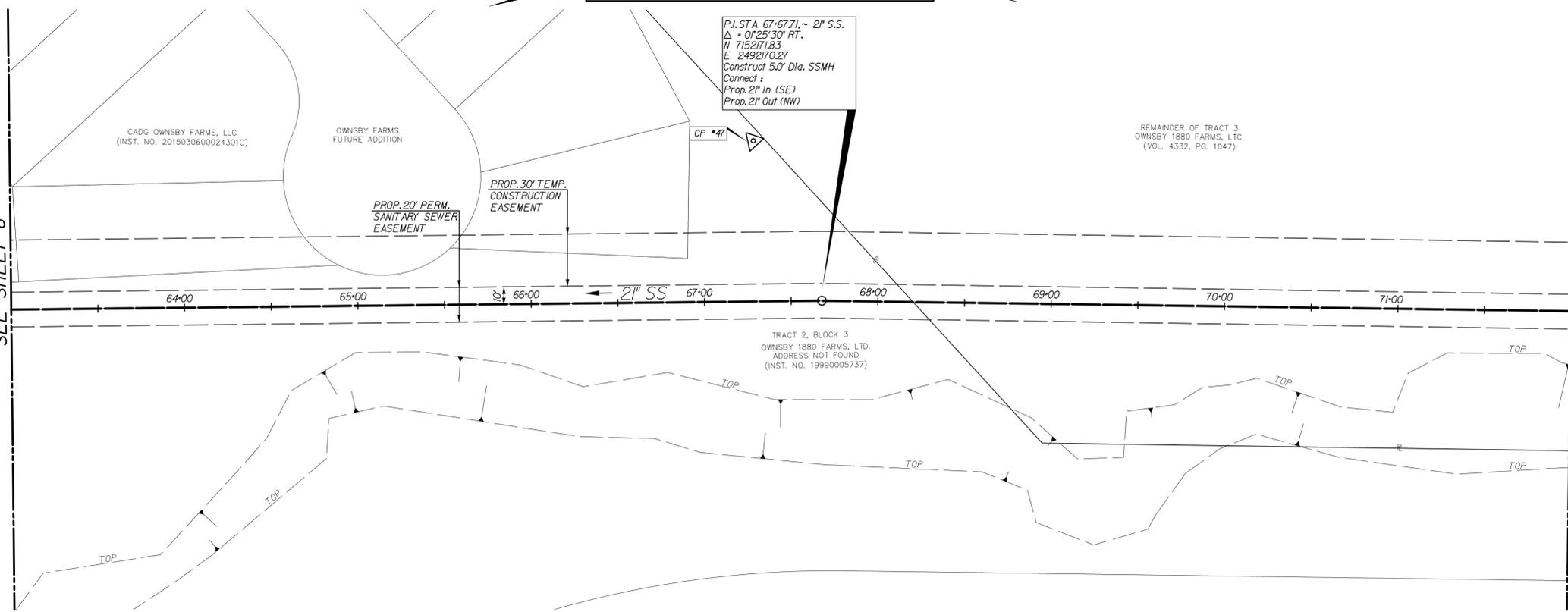
CP \*47

TRACT 2, BLOCK 3  
 OWNSBY 1880 FARMS, LTD.  
 ADDRESS NOT FOUND  
 (INST. NO. 19990005737)



MATCH MARK 63+00 PROP. S.S.  
 SEE SHEET 8

MATCH MARK 72+00 PROP. S.S.  
 SEE SHEET 10



900 LF. 21" PVC Sanitary Sewer Pipe  
 ASTM F679 (PS 115)  
 Class "B-2" Embedment

STA. 67+67.71 ~ 2" S.S.  
 Construct 5.0' Dia. SSMH  
 RIM ELEV 654.70

Point	Northing	Easting	Elev.	Description
49	7152266.80	2492202.35	654.61	1/2"-IRON SET W/RED CAP
48	7151808.11	2492518.68	657.94	1/2"-IRON SET W/RED CAP



NO.	DATE	REVISION
	08-25-2016	RECORD DRAWING

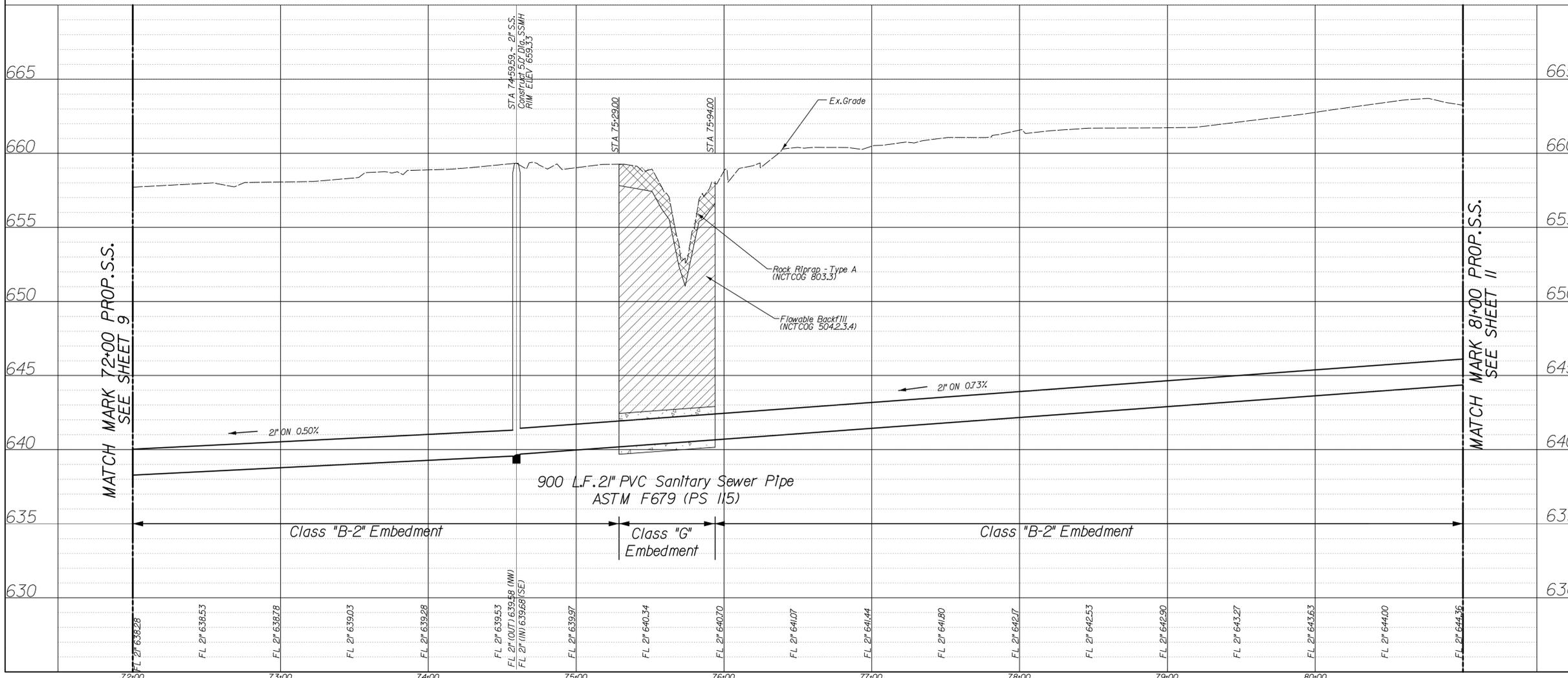
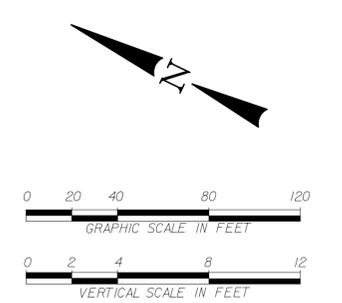
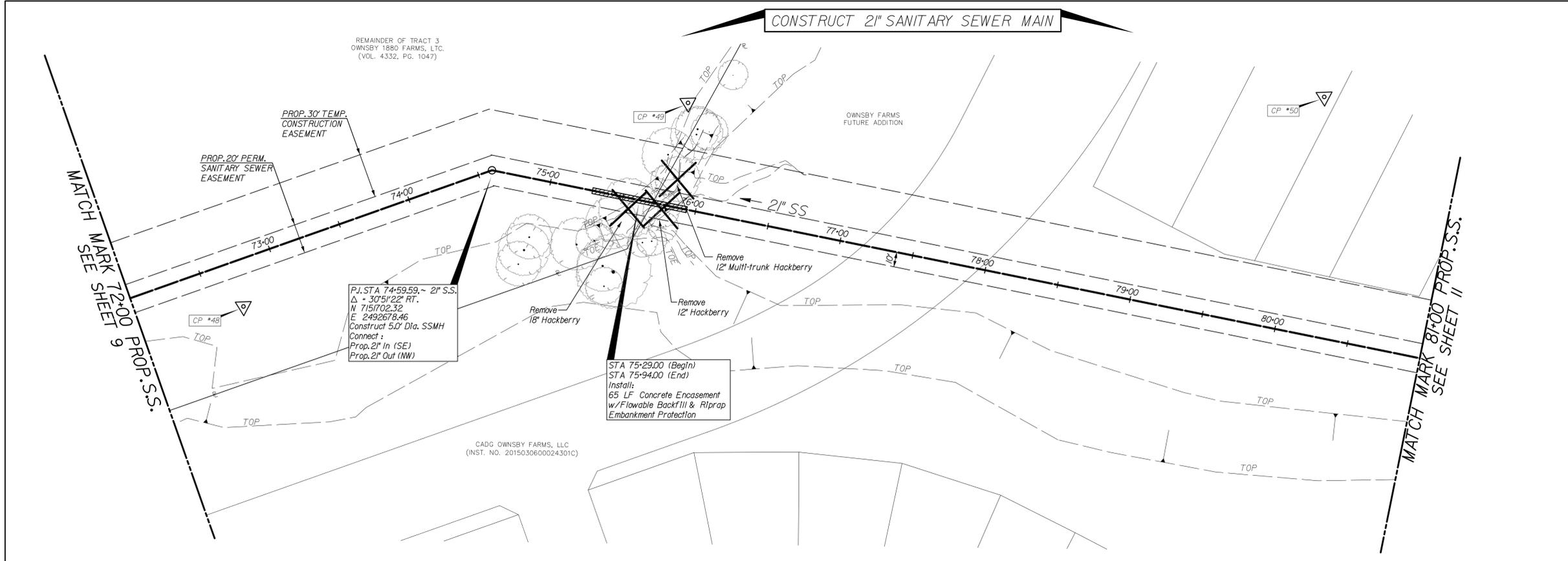
**Pacheco Koch**  
 8350 N. CENTRAL EXPWY, SUITE 1000  
 DALLAS, TX 75206 972.235.3031  
 TX REG. ENGINEERING FIRM F-14439  
 TX REG. SURVEYING FIRM LS-101938-05

**INTERCEPTOR MAIN  
 PLAN & PROFILE  
 STA. 63+00 TO STA. 72+00**

**21" SEWER INTERCEPTOR  
 SOUTHEAST SECTOR**

CITY OF CELINA, COLLIN COUNTY, TEXAS

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	9



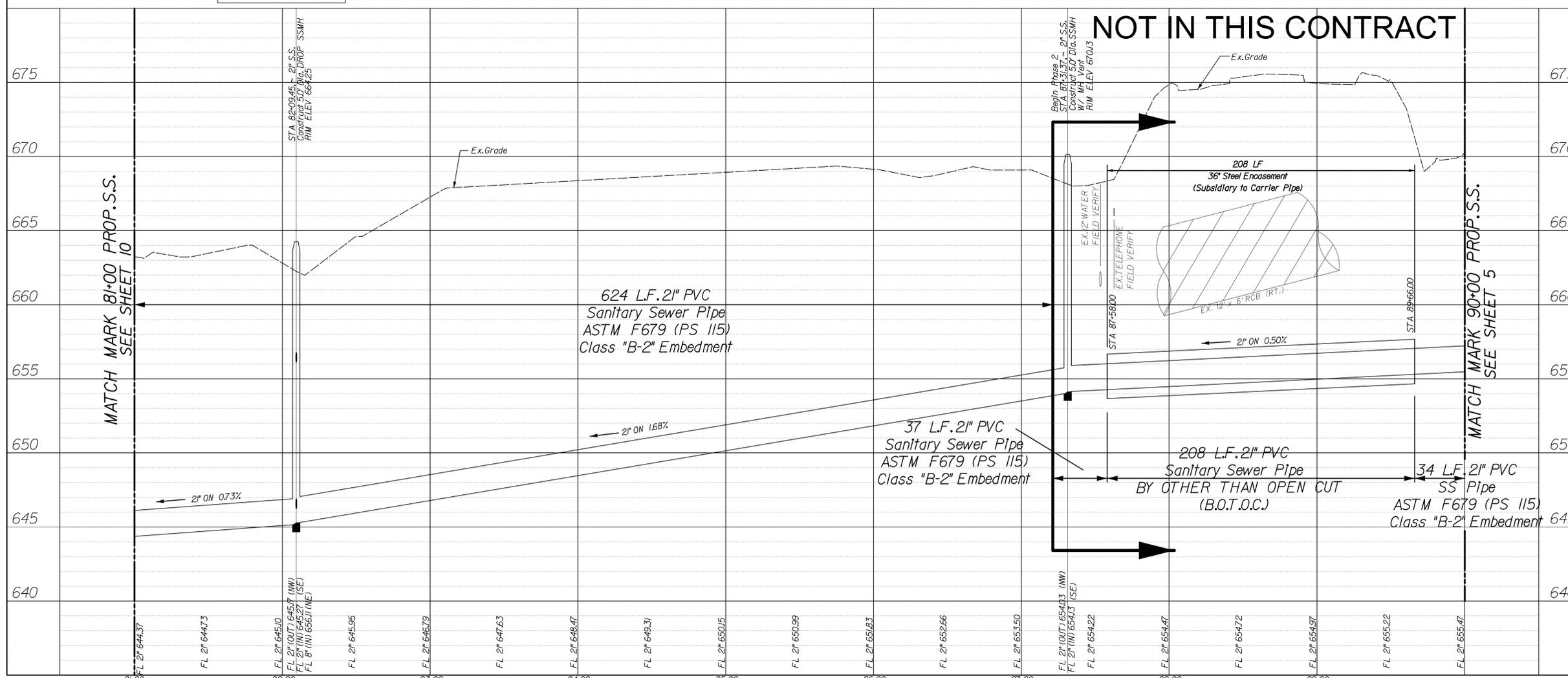
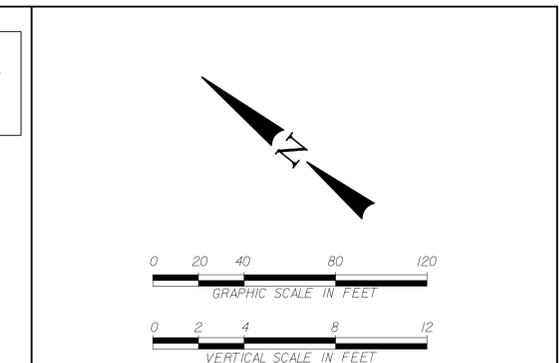
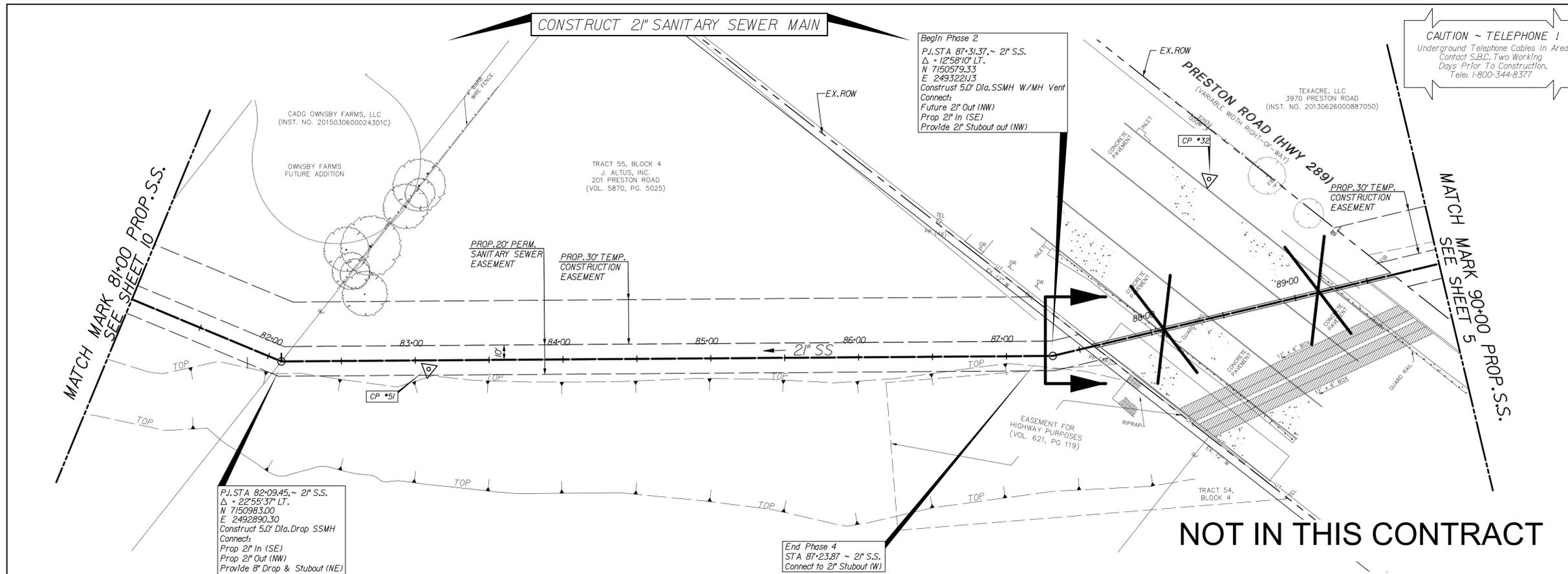
Point	Northing	Easting	Elev.	Description
48	7151808.11	2492518.68	657.94	1/2"-IRON SET W/RED CAP
49	7151606.25	2492780.59	659.93	1/2"-IRON SET W/RED CAP
50	7151227.50	2492985.12	662.62	1/2"-IRON SET W/RED CAP



NO.	DATE	REVISION
	08-25-2016	RECORD DRAWING

**Pacheco Koch** 8350 N. CENTRAL EXPWY, SUITE 1000  
DALLAS, TX 75206 972.235.3031  
TX REG. ENGINEERING FIRM F-14439  
TX REG. SURVEYING FIRM LS-101938-05

<b>INTERCEPTOR MAIN PLAN &amp; PROFILE STA. 72+00 TO STA. 81+00</b>				
<b>21" SEWER INTERCEPTOR SOUTHEAST SECTOR</b>				
CITY OF CELINA, COLLIN COUNTY, TEXAS				
DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	10



Point	Northing	Easting	Elev.	Description
32	7150572.06	2493380.38	674.70	1/2" IRON SET W/ RED CAP
51	7150902.21	2492948.87	667.24	1/2" IRON SET W/ RED CAP



NO.	DATE	REVISION
	08-25-2016	RECORD DRAWING

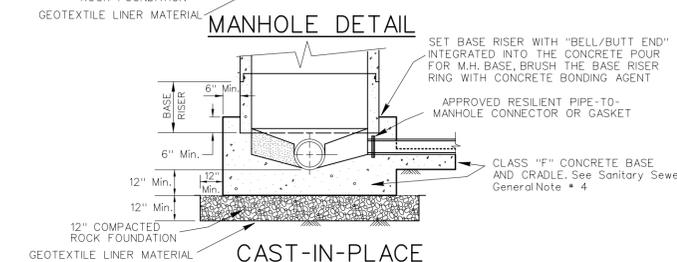
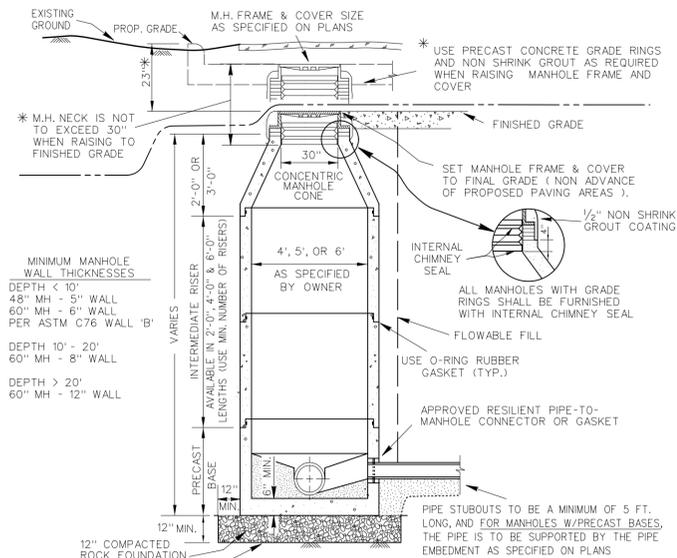
**Pacheco Koch**  
 8350 N. CENTRAL EXPWY., SUITE 1000  
 DALLAS, TX 75206 972.235.3031  
 TX REG. ENGINEERING FIRM F-14439  
 TX REG. SURVEYING FIRM LS-101938-05

**INTERCEPTOR MAIN  
 PLAN & PROFILE  
 STA. 81+00 TO STA. 87+23.87**

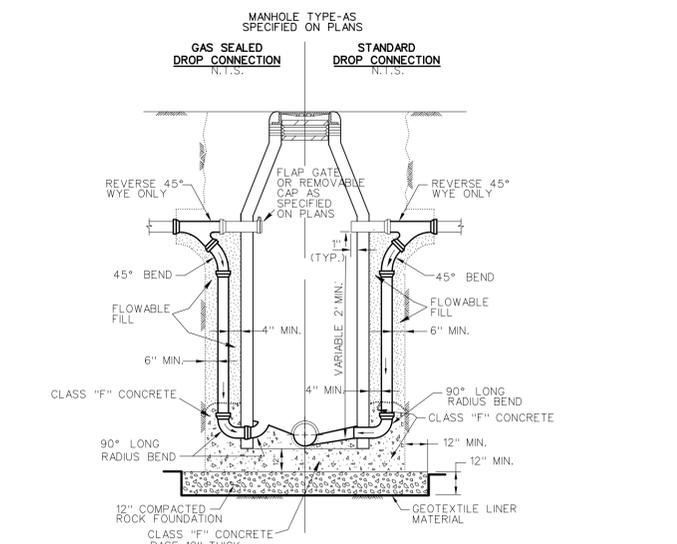
**21" SEWER INTERCEPTOR  
 SOUTHEAST SECTOR**

CITY OF CELINA, COLLIN COUNTY, TEXAS

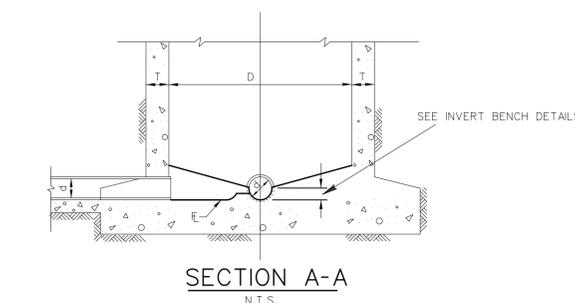
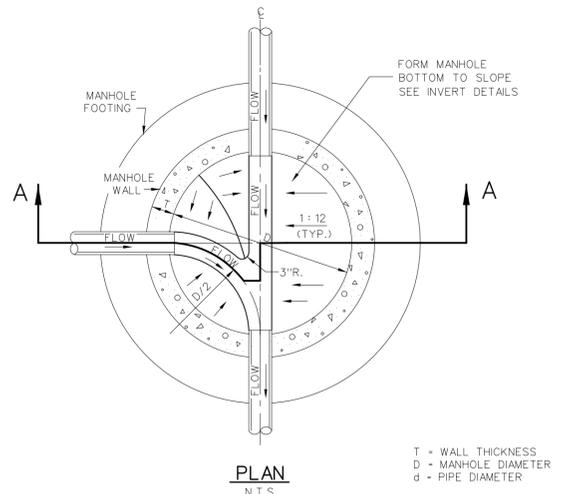
DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	11



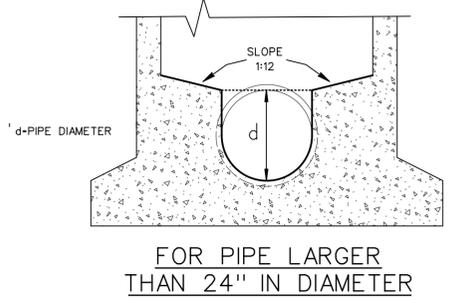
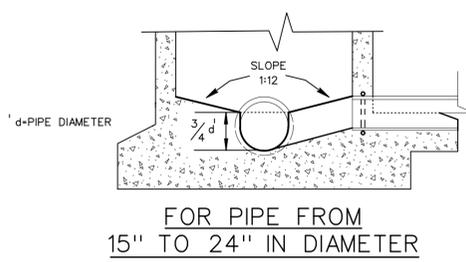
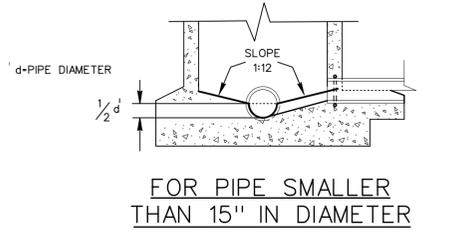
**SANITARY SEWER MANHOLE PRECAST**



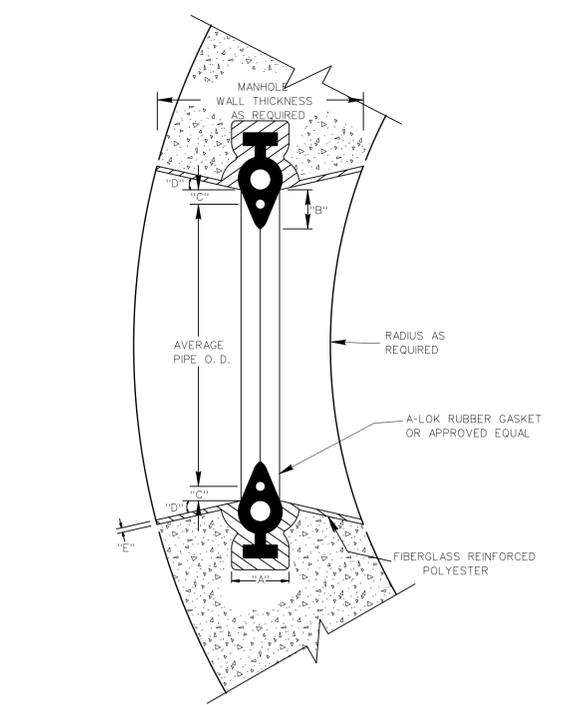
**SANITARY SEWER MANHOLE OUTSIDE DROP CONNECTIONS**



**SANITARY SEWER MANHOLE INVERT INTERSECTION DETAIL**

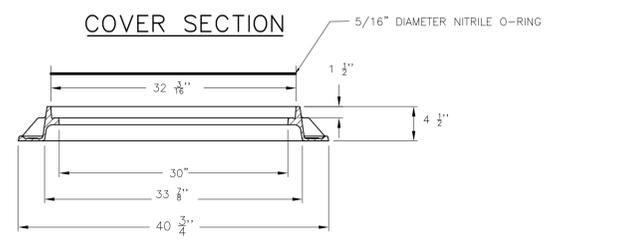
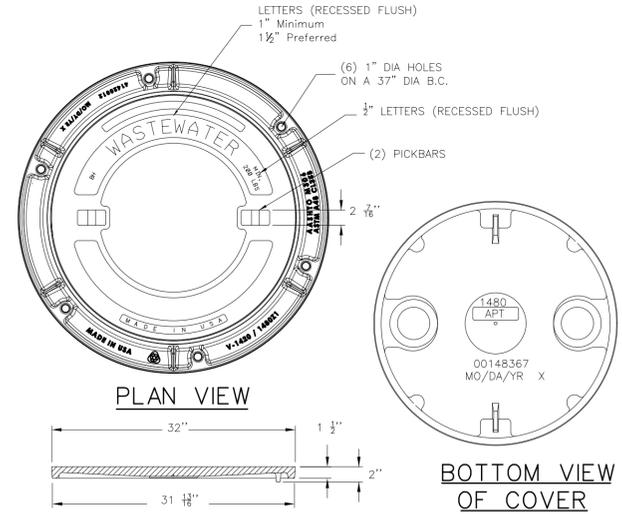


**SANITARY SEWER MANHOLE INVERT BENCH DETAIL**



PIPE SIZE	A	B	C	D	E
4" - 6"	1 1/2"	7/8"	3/8"	10"	1/4"-3/8"
8" - 21"	2 1/8"	1 3/8"	5/8"	10"	1/4"-3/8"
24" - 60"	2 3/8"	1 3/4"	3/4"	10"	1/4"-3/8"

**MANHOLE PIPE CONNECTOR (FOR CAST-IN-PLACE MANHOLES)**



LID MAY BE IDENTIFIED WITH EITHER "SANITARY SEWER" OR "SANITARY SEWER"  
 COVER - GRAY IRON ASTM A48 CL35B  
 FRAME - GRAY IRON ASTM A48 CL35B

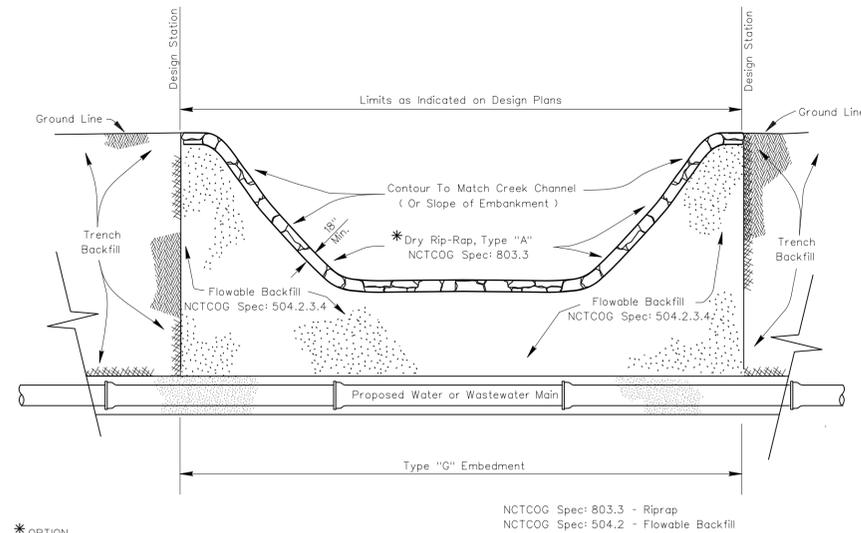
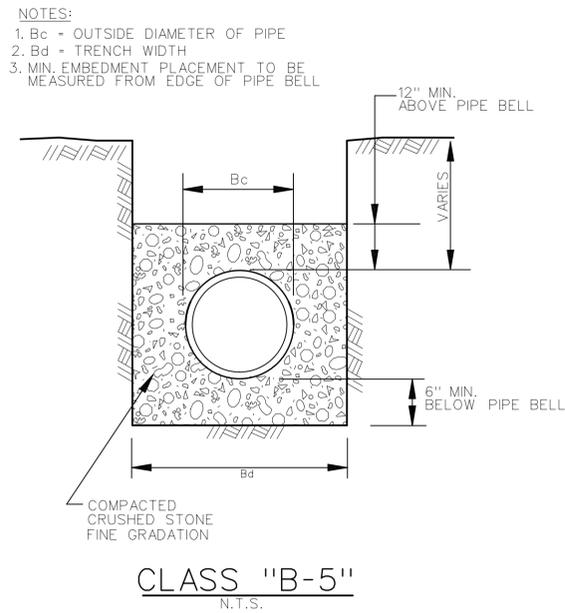
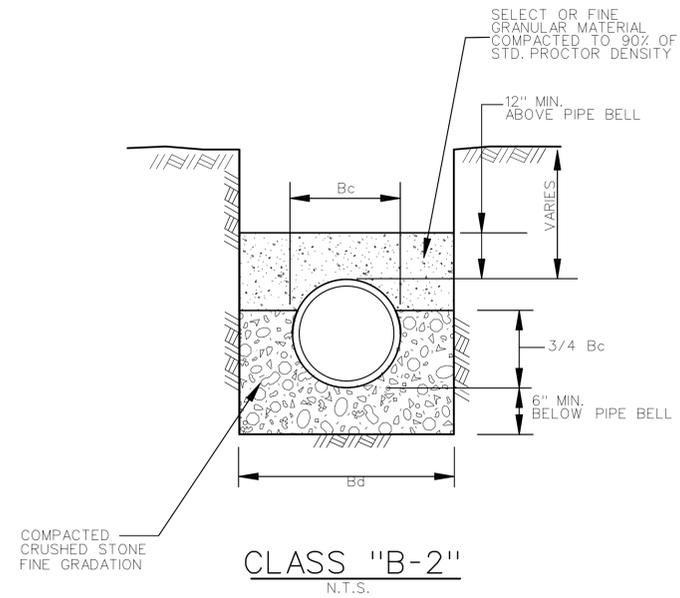
**WATERTIGHT 32\"/>**



NO.	DATE	REVISION
	08-25-2016	RECORD DRAWING

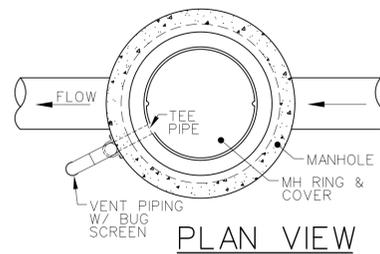
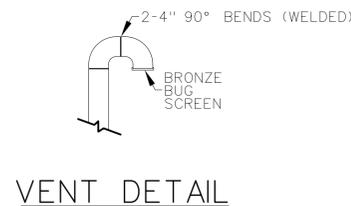
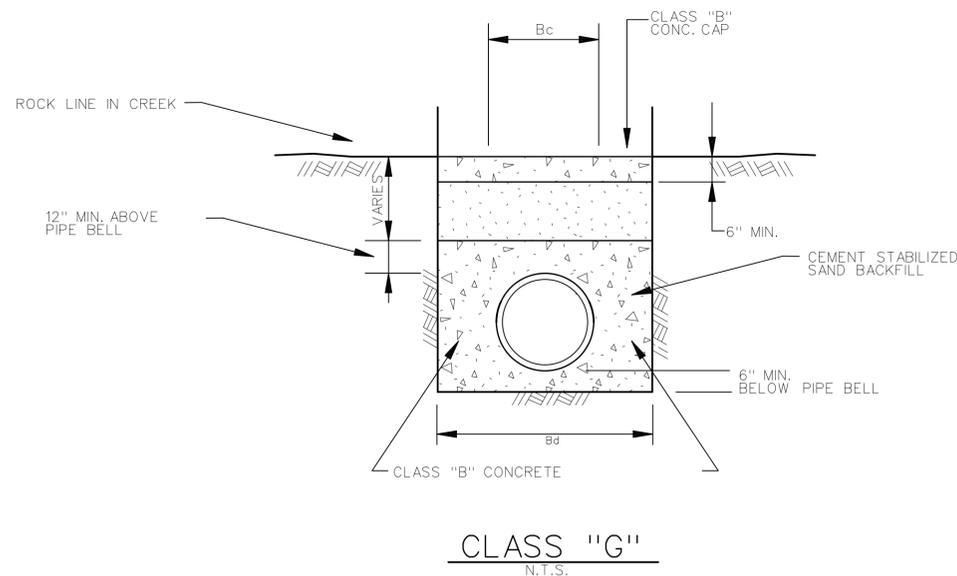
**Pacheco Koch** 8350 N. CENTRAL EXPWY. SUITE 1000 DALLAS, TX 75206 972.235.3031  
 TX REG. ENGINEERING FIRM F-14439 TX REG. SURVEYING FIRM LS-101938-05

MISCELLANEOUS DETAILS				
21" SEWER INTERCEPTOR SOUTHEAST SECTOR				
CITY OF CELINA, COLLIN COUNTY, TEXAS				
DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	12

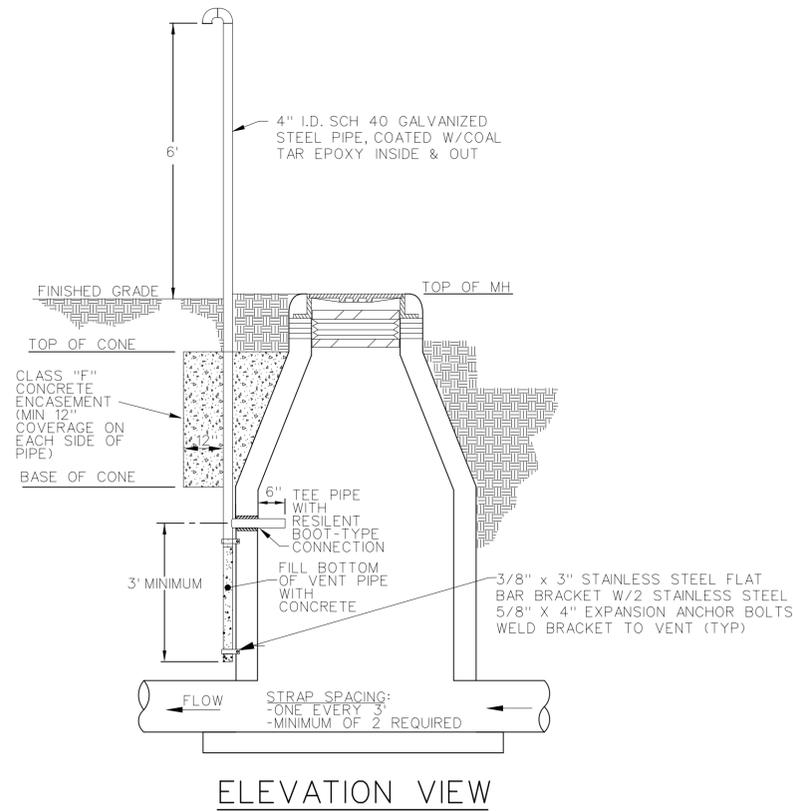


**STABILIZED BACKFILL & RIP-RAP DETAIL FOR EMBANKMENT SLOPE PROTECTION**  
N.T.S.

**PIPE EMBEDMENT**



NOTES:  
1. VENT PIPE OPENING IN PRECAST CONCRETE MANHOLE WALL SHALL BE CORED WITH A CONCRETE CORING MACHINE.  
2. LOCATION OF VENT PIPE SHALL BE AS DIRECTED BY THE CONSTRUCTION INSPECTOR.



**STANDARD MANHOLE VENT**



NO.	DATE	REVISION
	08-25-2016	RECORD DRAWING

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8350 N. CENTRAL EXP'Y., SUITE 1000  
DALLAS, TX 75206 972.235.3031  
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**MISCELLANEOUS DETAILS**

**21" SEWER INTERCEPTOR SOUTHEAST SECTOR**

CITY OF CELINA, COLLIN COUNTY, TEXAS

DESIGN	DRAWN	DATE	JOB NO.	SHEET
PK	PK	JUNE 2015	3551-14.141	13