

- NOTE:
- STANDARD EMBEDMENT FOR SANITARY SEWER, OR DESIGN ENGINEER SHALL SPECIFY OTHER EMBEDMENT.
 - IN ROCK TRENCHES THE MINIMUM UNDERCUT WILL BE 6"
 - FOR FORCE MAINS AND O-RING PIPE, SEE MANUFACTURER SPECS FOR EMBEDMENT
 - MIN. THICKNESS SHALL APPLY TO THICKNESS AROUND PIPE AND OVER TOP OF BELLS

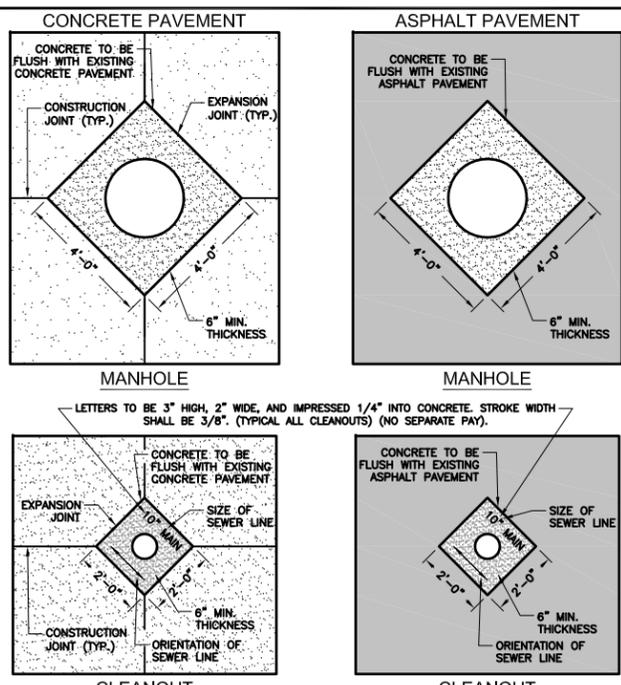
EMBEDMENT FOR SEWER CONDUITS
N.T.S.

DATE: JUNE 2015

STANDARD DETAIL: 340

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
516 Ranch House Road • Willow Park, Texas 76087
Phone: 817-441-7108 • Fax: 817-441-6900

NO ADDITIONS OR CHANGES SHALL BE MADE TO THE STANDARD DETAIL SHEETS UNLESS APPROVED BY THE CITY OF WILLOW PARK.



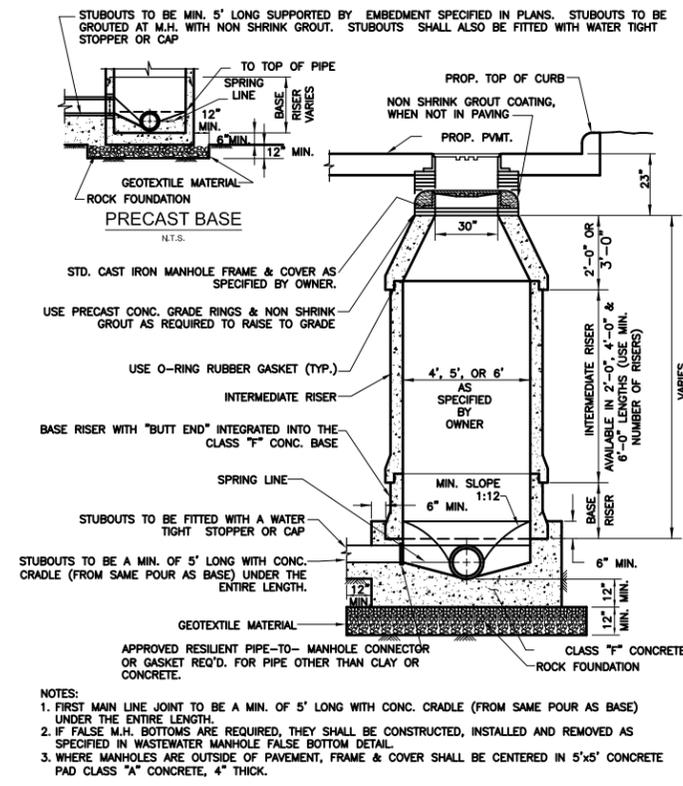
- NOTES:
- ALL CONCRETE PAVEMENT SHALL BE REMOVED ALONG NEAT SAW CUT LINES.
 - MANHOLE BOYOUT REQUIRED FOR ALL MANHOLES (STORM AND SANITARY) AND CLEANOUTS LOCATED IN PAVEMENT.
 - SEE JOINT DETAILS.
 - SEE MANHOLE DETAILS.
 - SEE CLEANOUT DETAILS.
- SANITARY SEWER MANHOLE AND CLEANOUT BLOCKOUT**
N.T.S.

DATE: JUNE 2015

STANDARD DETAIL: 315

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- NOTES:
- FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER THE ENTIRE LENGTH.
 - IF FALSE M.H. BOTTOMS ARE REQUIRED, THEY SHALL BE CONSTRUCTED, INSTALLED AND REMOVED AS SPECIFIED IN WASTEWATER MANHOLE FALSE BOTTOM DETAIL.
 - WHERE MANHOLES ARE OUTSIDE OF PAVEMENT, FRAME & COVER SHALL BE CENTERED IN 5'x5' CONCRETE PAD CLASS "A" CONCRETE, 4" THICK.

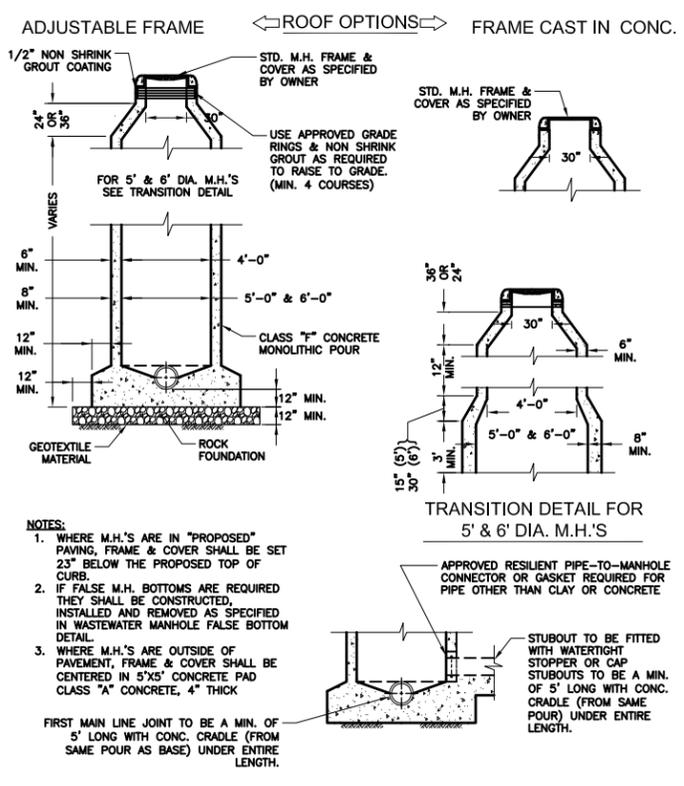
PRECAST WASTEWATER MANHOLE
N.T.S.

DATE: JUNE 2015

STANDARD DETAIL: 305

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
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- NOTES:
- WHERE M.H.'S ARE IN "PROPOSED" PAVING, FRAME & COVER SHALL BE SET 23" BELOW THE PROPOSED TOP OF CURB.
 - IF FALSE M.H. BOTTOMS ARE REQUIRED, INSTALLED AND REMOVED AS SPECIFIED IN WASTEWATER MANHOLE FALSE BOTTOM DETAIL.
 - WHERE M.H.'S ARE OUTSIDE OF PAVEMENT, FRAME & COVER SHALL BE CENTERED IN 5'x5' CONCRETE PAD CLASS "A" CONCRETE, 4" THICK.
- FIRST MAIN LINE JOINT TO BE A MIN. OF 5' LONG WITH CONC. CRADLE (FROM SAME POUR AS BASE) UNDER ENTIRE LENGTH.

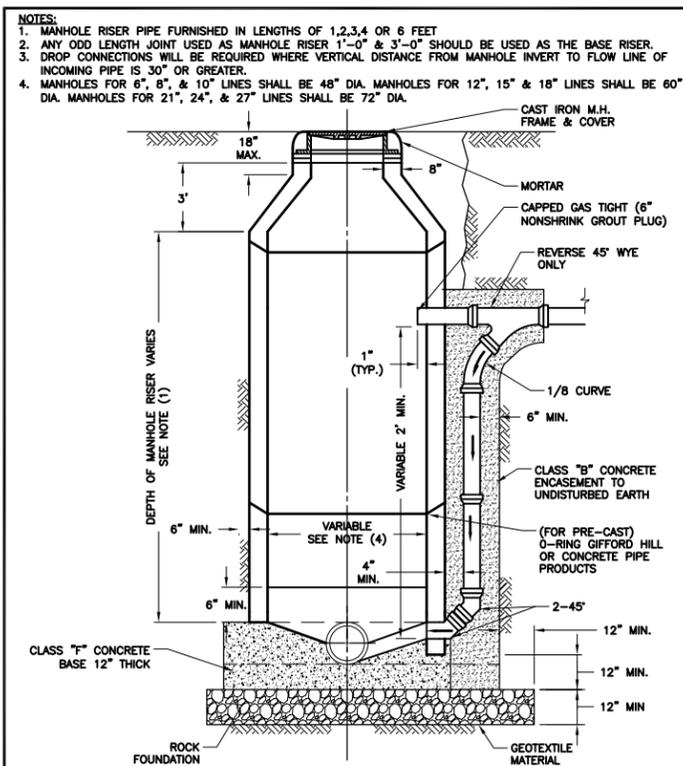
CAST-IN-PLACE WASTEWATER MANHOLE
N.T.S.

DATE: JUNE 2015

STANDARD DETAIL: 300

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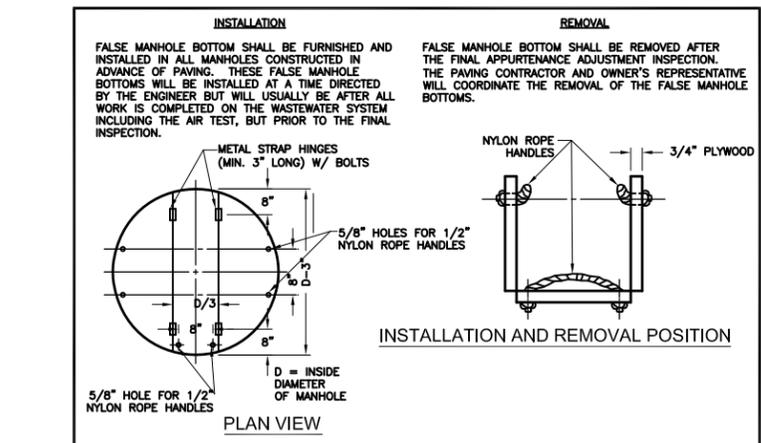
STANDARD MANHOLE WITH OUTSIDE DROP CONNECTION
N.T.S.

DATE: JUNE 2015

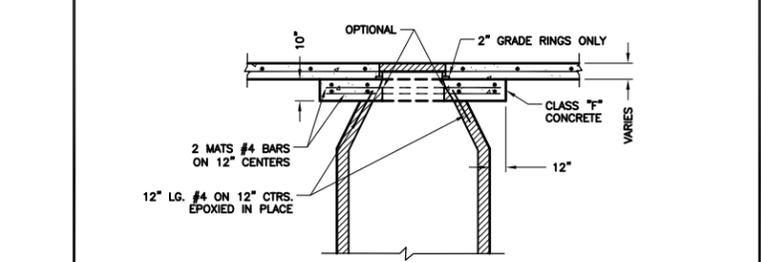
STANDARD DETAIL: 305

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WASTEWATER MANHOLE - FALSE BOTTOM
N.T.S.



MANHOLE HEIGHT ADJUSTMENT DETAIL (FOR EXISTING BRICK OR POURED IN PLACE MANHOLES)
N.T.S.

DATE: JUNE 2015

STANDARD DETAIL: 310

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
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REVISIONS:

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
516 Ranch House Road
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STANDARD DETAILS

CITY OF WILLOW PARK, TEXAS
PARKER COUNTY, TEXAS
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STANDARD DETAIL: 300

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DATE: JUNE 2015

STANDARD DETAIL: 315

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
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DATE: JUNE 2015

STANDARD DETAIL: 305

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
516 Ranch House Road • Willow Park, Texas 76087
Phone: 817-441-7108 • Fax: 817-441-6900

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DATE: JUNE 2015

STANDARD DETAIL: 310

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
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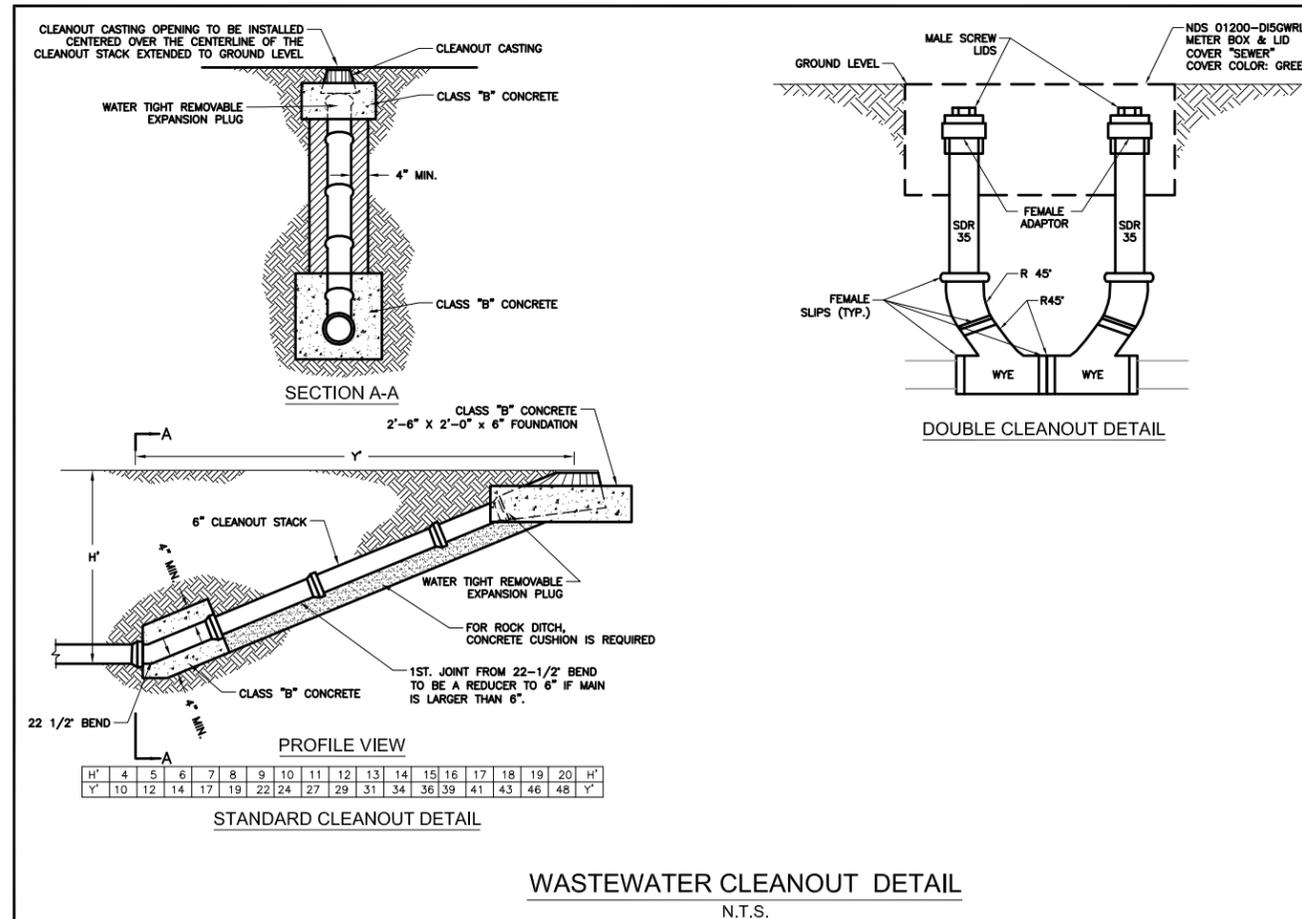
22x34 SCALE: N.T.S.
11x17 SCALE: N.T.S.
DATE: JUNE 2015
DRAWN: X.X.X.
CHECKED: X.X.X.
APPROVED: X.X.X.

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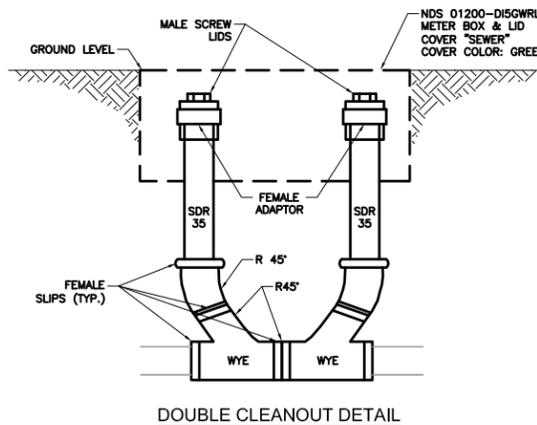
SHEET TITLE: SEWER DETAILS

SHEET NO.: C-SS01

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WASTEWATER CLEANOUT DETAIL
 N.T.S.



DOUBLE CLEANOUT DETAIL

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
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 Phone: 817-441-7108 Fax: 817-441-6900

STANDARD DETAIL: 320

NO ADDITIONS OR CHANGES SHALL BE MADE TO THE STANDARD DETAIL SHEETS UNLESS APPROVED BY THE CITY OF WILLOW PARK.

DATE: JUNE 2015

SEWER COLLECTION MATERIALS

STANDARD BOLT DOWN TYPE RING & COVER (TO BE USED ON TRUNKLINES, AREAS OF FLOORING, OR AS SPECIFIED)
 5/8" STAINLESS HEX CAP SCREWS
 ACCEPTABLE BRANDS:
 BASS & HAYES VRM-30 WATERTIGHT OR APPROVED EQUAL

STANDARD 400 LB RING & LID (TO BE USED AT ALL TIMES)
 PATTERN #400-300
 ACCEPTABLE BRANDS:
 BASS & HAYES VRM-30 OR APPROVED EQUAL

STANDARD 400 LB RING EXTENSION
 PATTERN #400-30
 3" RISE ONLY
 ACCEPTABLE BRANDS:
 BASS & HAYES
 MANHOLE PIPE CONNECTOR DESIGNED TO MEET RESILIENT CONNECTORS REQUIREMENT OF ASTM C-923

STANDARD SANITARY SEWER FIELD CLEANOUT
 PATTERN #339
 ACCEPTABLE BRANDS:
 BASS & HAYES
 MANHOLE PIPE CONNECTORS
 GPK MANHOLE COUPLING
 ULTRA-RIB MANHOLE SLEEVE COUPLING
 CEMENT COUPLING WITH O-RING RUBBER GASKET FOR PIPE OTHER THAN CLAY OR CONC. ALT. COUPLINGS MUST BE APPROVED BY CONSTR. ENGINEER.

NOTES:

- ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE REQUIREMENTS SET FORTH IN THE LATEST EDITION OF THE CITY OF WILLOW PARK AND WATER DEPARTMENT STANDARDS.
- IN THE EVENT AN ITEM IS NOT COVERED BY THIS MANUAL, THEN THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION-NORTH CENTRAL TEXAS" AS ADOPTED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS COVERING SUCH ITEMS SHALL APPLY.
- FORMS FOR CAST IN PLACE MANHOLES SHALL REMAIN IN PLACE, UNDISTURBED, FOR A MINIMUM OF 24 HOURS.
- GRAVITY PIPE FOR SEWER APPLICATIONS
 4"-15" SDR-35* (GRAVITY)
 4"-12" AWWA C-900-07-DR14 GREEN
 GREATER THAN OR EQUAL TO 14" AWWA C-905-10-DR18 GREEN
- ALL RESIDENTIAL SEWER SERVICES SHALL BE 4" MINIMUM.
- LOCATE SANITARY SEWER SERVICES IN MIDDLE OF LOTS, 4' POST R.O.W. LINE. - MAXIMUM 4' DEEP.
- ALL STUBOUTS SHALL BE ONE (1) FULL JOINT OF PIPE, AND/OR 3' PAST ANY PAVEMENT.
- METAL TAPE FOR SERVICES TO BE ATTACHED TO THE ENDS OF ALL SERVICE LINES AND EXTEND ABOVE GROUND LEVEL. THE TAPE SHALL MEET THE FOLLOWING SPECIFICATIONS:
 A. REEF INDUSTRIES, INC. OR EQUAL.
 B. ROLL MARKED CONTINUOUSLY, "CAUTION SEWER LINE".
 C. TWO (2) INCHES IN WIDTH.
 D. GREEN TAPE FOR SEWER SERVICES.
- FREE FALL OF CONCRETE NOT TO EXCEED 5 FT. MAX.
- CONTRACTOR SHALL MEET TCEQ STANDARDS FOR SEPARATION OF WATER AND SEWER CONDUITS WHERE APPLICABLE.

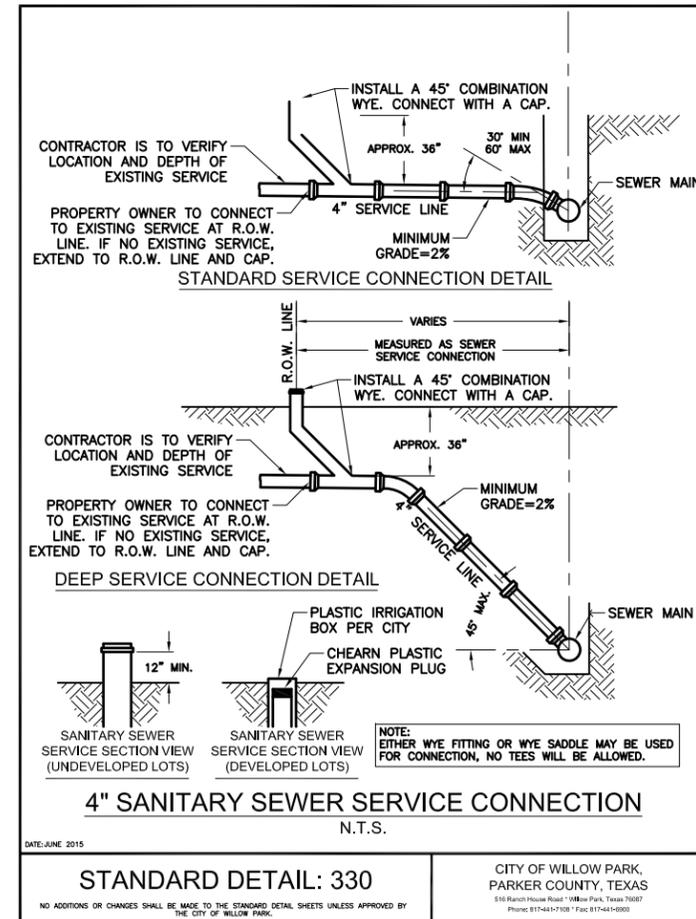
SEWER COLLECTION MATERIALS AND NOTES

CITY OF WILLOW PARK, PARKER COUNTY, TEXAS
 516 Ranch House Road Willow Park, Texas 76087
 Phone: 817-441-7108 Fax: 817-441-6900

STANDARD DETAIL: 350

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DATE: JUNE 2015



4" SANITARY SEWER SERVICE CONNECTION
 N.T.S.

STANDARD DETAIL: 330

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REVISIONS:

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CITY OF WILLOW PARK, TEXAS

STANDARD DETAILS

22x34 SCALE:	N.T.S.
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SHEET TITLE:
 SEWER DETAILS

SHEET NO.: C-SS02