APPENDIX A

Plan Submittal Checklists

Water and Sanitary Sewer Design Plan Submittal Checklist (General)

CITY OF WACO

Date: _____ Submittal No.: _____

Name of Project: _____

Location of Project (*address or nearest intersection*): _____

_____

Council District(s): _____ ETJ: ☐ Yes ☐ No

Type of Project: ☐ New Development ☐ Redevelopment ☐ Public Infrastructure

(check all that apply)

Scope of Project: ☐ Private Water connection to public system (*Include Checklist W-1*)

☐ Private Sanitary Sewer connection to public system (*Include Checklist SS-1*)

☐ Public Water system improvements (*Include Checklist W-2*)

☐ Public Sanitary Sewer system improvements (*Include Checklist SS-2*)

(check all that apply)

Name of Owner: _____ Telephone No.: _____

Owner Contact: _____ E-mail Address: _____

Owner Address: _____

Engineering Firm: _____ Telephone No.: _____

Name of Engineer: _____ E-mail Address: _____

Engineer Address: _____

For City Use:

Reviewed By: _____ Accepted: ☐ Yes ☐ No

Date: _____

Comments: _____

_____

_____

_____

Private Sanitary Sewer Connection to Public System Plan Submittal Checklist (SS-1)

CITY OF WACO

Date: _____ Submittal No.: _____

Name of Project: _____

Has a Loading Analysis or Sanitary Sewer Study been performed to determine if there is adequate capacity to support the development?

☐ Yes ☐ No ☐ N/A

Please check that each of the following plan requirements have been met prior to submitting for review and include this checklist with your plan submittal. ***Plans not meeting the below requirements may be returned without a review and marked "Incomplete".***

General Plan Requirements:

- ☐ Include a copy of the recorded or proposed plat
- ☐ Minimum font size is 0.11" (full-size)
- ☐ All sheets to be on 22"x34" paper (full-size)
- ☐ North arrow and scale(s) shown on all applicable sheets
- ☐ Sheet names/numbers provided on each sheet
- ☐ Plans organized in a logical manner
- ☐ No overlapping text

Cover Sheet Requirements:

- ☐ Identify name of project (and phase(s) if applicable) and include along right edge of all sheets
- ☐ Identify owner/developer
- ☐ Provide location map that identifies limits of project
- ☐ Identify Engineering firm name and registration number in accordance with TBPE Board Rules
- ☐ Provide Engineer's name and seal (Preliminary or Final)
- ☐ Provide Sheet Index (provide on subsequent sheet for large plan sets)

Sanitary Sewer Layout Sheet Requirements:

- ☐ Provide Sheet Legend
- ☐ Scale shown both graphically and numerically (1" = 100', typical)
- ☐ Clearly identify existing and proposed sanitary sewer infrastructure (including line sizes, manholes, cleanouts and flow direction arrows)
- ☐ Label streets, easements, creeks, floodplains, TxDOT and RR rights-of-way
- ☐ Identify subdivision names, blocks and lot numbers

Sanitary Sewer Plan/Profile Sheet Requirements:

- ☐ Design is in accordance with Texas Administrative Code (TAC), Title 30, Chapter 217 Design Criteria for Domestic Wastewater Systems
- ☐ Design is in accordance with the City of Waco's Water and Sanitary Sewer Design Manual, applicable City Ordinances, and applicable Plumbing Codes (If not, please include a Variance Request form)
- ☐ Clearly identify all existing surface and known underground facilities including public and franchise utilities (including sizes, depths and pipe materials, if known)
- ☐ Clearly identify existing and proposed sanitary sewer infrastructure (including line sizes, pipe materials (if known), manholes, cleanouts and flow direction arrows)
- ☐ Clearly identify all Sanitary Sewers on private property as "Private" or "Public" within a dedicated sanitary sewer easement
- ☐ Identify all existing and proposed easements (type, width, etc.)
- ☐ Show locations of all existing and proposed sanitary sewer services
- ☐ All sanitary sewer service connections shall be perpendicular to the main
- ☐ Provide dimensions from property lines to service location(s)
- ☐ Minimum sewer service size shall be 4-inch (residential) and 6-inch (commercial)
- ☐ 6-inch and larger sewer service must connect at a manhole
- ☐ Include "Warning to Contractor" utility locate note (1-800-DIG-TESS)
- ☐ Note stating that proposed sanitary sewer service taps must be performed by a pre-approved contractor under the direct supervision of a designated City of Waco utility inspector
- ☐ Note stating that proposed private sanitary sewer improvements must be installed by a Licensed Plumber

Sanitary Sewer Detail Sheet Requirements:

- ☐ Include applicable City of Waco standard details
- ☐ Details are legible at half-scale (11"x17")
- ☐ Provide additional details as necessary

Public Sanitary Sewer Improvements Plan Submittal Checklist (SS-2)

CITY OF WACO

Date: _____ Submittal No.: _____

Name of Project: _____

Please check that each of the following plan requirements have been met prior to submitting for review and include this checklist with your plan submittal. ***Plans not meeting the below requirements may be returned without a review and marked "Incomplete".***

General Plan Requirements:

- ☐ Include a standard title block (see Example)
- ☐ Each sheet shall be sealed by a Licensed Professional Engineer in the State of Texas and include the Engineering Firm name and registration number
- ☐ Minimum font size is 0.11" (full-size)
- ☐ All sheets to be on 22"x34" paper (full-size)
- ☐ North arrow and scale(s) shown on all applicable sheets
- ☐ Sheet names/numbers provided on each sheet
- ☐ Use City of Waco standard symbols and abbreviations
- ☐ Plans organized in a logical manner
- ☐ No overlapping text

Cover Sheet Requirements (see Example):

- ☐ Identify name of project (and phase(s) if applicable) and include along right edge of all sheets
- ☐ Identify City Project No., and include along right edge of all sheets
- ☐ Identify current Mayor, City Manager, and Council Members
- ☐ Provide signature and date lines for approval from the City Project Engineer, City Engineer, Water Utility Services Director and Director of other affected departments
- ☐ Provide location map that identifies limits of project
- ☐ Identify Engineering firm name and registration number in accordance with TBPE Board Rules
- ☐ Provide month and year of plan set
- ☐ Provide Sheet Index (provide on subsequent sheet for large plan sets)

General Notes, Quantities, Legend and Utility Contact Sheet Requirements (provide as many sheets as necessary to clearly show) (see Example):

- ☐ Provide contact information for all utility providers and other entities affected by the project (company, contact name and phone number)
- ☐ Provide project general notes

- [ ] Provide a Quantity take off summary for each plan/profile sheet and project total
- [ ] Provide a plan/profile sheet legend

Sanitary Sewer Layout Sheet Requirements (see Example):

- [ ] Provide Sheet Legend (if different from plan/profile legend)
- [ ] Scale shown both graphically and numerically (1” = 100’, typical)
- [ ] Clearly identify existing and proposed sanitary sewer infrastructure (including line sizes, manholes, cleanouts and flow direction arrows)
- [ ] Locate benchmarks and control points
- [ ] Label streets, easements, creeks, floodplains, TxDOT and RR rights-of-way
- [ ] Identify subdivision names, blocks and lot numbers

Sanitary Sewer Plan/Profile Sheet Requirements (see Example):

- [ ] Design is in accordance with Texas Administrative Code (TAC), Title 30, Chapter 217: Design Criteria for Domestic Wastewater Systems
- [ ] Design is in accordance with the City of Waco’s Water and Sanitary Sewer Design Manual (If not, please include a Variance Request form)
- [ ] Clearly identify all existing surface and known underground facilities including public and franchise utilities (including sizes, depths and pipe materials, if known)
- [ ] Clearly identify existing and proposed sanitary sewer infrastructure (including line sizes, pipe materials (if known), manholes, cleanouts and flow direction arrows)
- [ ] Identify all existing and proposed easements (type, width, etc.)
- [ ] Identify Station, Northing and Easting at all proposed manholes, service taps and appurtenances
- [ ] All proposed sanitary sewer lines are profiled below the plan view, aligned horizontally, and stationed from downstream to upstream (left to right)
- [ ] Identify existing and proposed line sizes, pipe materials, manholes, cleanouts and other appurtenances in the profile view
- [ ] Identify proposed installation method (open-cut, pipe-bursting, bore, etc.) in profile
- [ ] Identify existing ground surface (including proposed ground surface if applicable) in profile
- [ ] Identify existing and proposed utility crossings in the profile view (min. 2’ vertical separation required) along with existing parallel utilities within 5’ (if depth is known)
- [ ] Proposed embedment, backfill and surface repair is shown in profile
- [ ] Flowline elevations are called out in the profile view at all manholes and at 50’ stations
- [ ] Include “Warning to Contractor” utility locate note (1-800-DIG-TESS)
- [ ] Note stating that proposed private sanitary sewer improvements must be installed by a Licensed Plumber (if applicable)

Sanitary Sewer Detail Sheet Requirements (see Example):

- [ ] Include applicable City of Waco standard details
- [ ] Details are legible at half-scale (11”x17”)
- [ ] Provide additional details as necessary

Private Water Connection to Public System Plan Submittal Checklist (W-1)

CITY OF WACO

Date: _____ Submittal No.: _____

Name of Project: _____

Has a Loading Analysis and/or Water Study been performed to determine if there is adequate capacity to support the required water demand?

☐ Yes ☐ No ☐ N/A

Please check that each of the following plan requirements have been met prior to submitting for review and include this checklist with your plan submittal. ***Plans not meeting the below requirements may be returned without a review and marked "Incomplete".***

General Plan Requirements:

- ☐ Include a copy of the recorded or proposed plat
- ☐ Minimum font size is 0.11"
- ☐ All sheets to be on 22"x34" paper (full-size)
- ☐ North arrow and scale(s) shown on all applicable sheets
- ☐ Sheet names/numbers provided on each sheet
- ☐ Plans organized in a logical manner
- ☐ No overlapping text

Cover Sheet Requirements:

- ☐ Identify name of project (and phase(s) if applicable) and include along right edge of all sheets
- ☐ Identify owner/developer
- ☐ Provide location map that identifies limits of project
- ☐ Identify Engineering firm name and registration number in accordance with TBPE Board Rules
- ☐ Provide Engineer's name and seal (Preliminary or Final)
- ☐ Provide Sheet Index (provide on subsequent sheet for large plan sets)

Water Layout Sheet Requirements:

- ☐ Provide Sheet Legend
- ☐ Scale shown both graphically and numerically (1" = 100', typical)
- ☐ Clearly identify existing and proposed water infrastructure (including line sizes, gate valves, fire hydrants and other appurtenances)
- ☐ Label streets, easements, creeks, floodplains, TxDOT and RR rights-of-way
- ☐ Identify subdivision names, blocks and lot numbers

Water Plan/Profile Sheet Requirements:

- ☐ Design is in accordance with Texas Administrative Code (TAC), Title 30, Chapter 290, Subchapter D Rules and Regulations for Public Water Systems
- ☐ Design is in accordance with the City of Waco's Water and Sanitary Sewer Design Manual, applicable City Ordinances, and applicable Fire and Plumbing Codes (If not, please include a Variance Request form)
- ☐ Clearly identify all existing surface and known underground facilities including public and franchise utilities (including sizes, depths and pipe materials, if known)
- ☐ Clearly identify existing and proposed water infrastructure (including line sizes, pipe materials (if known), gate valves, fire hydrants, water services/meters and other appurtenances)
- ☐ Clearly identify all water lines on private property as "Private" or "Public" within a dedicated water easement
- ☐ Identify all existing and proposed easements (type, width, etc.)
- ☐ Show locations of all existing and proposed water services
- ☐ Identify all existing water lines and services to be abandoned
- ☐ All proposed water service connections shall be perpendicular to the main
- ☐ Provide dimensions from property lines to service location(s)
- ☐ Minimum water service tap size shall be 1-inch for residential, 2-inch for commercial
- ☐ Identify purpose/type of water connection (domestic, fire, irrigation)
- ☐ Include "Warning to Contractor" utility locate note (1-800-DIG-TESS)
- ☐ Note stating that proposed water service taps must be performed by a pre-approved contractor under the direct supervision of a designated City of Waco utility inspector
- ☐ Note stating that proposed private water improvements must be installed by a Licensed Plumber

Water Detail Sheet Requirements:

- ☐ Include applicable City of Waco standard details
- ☐ Details are legible at half-scale (11"x17")
- ☐ Provide additional details as necessary

Public Water Improvements
Plan Submittal Checklist (W-2)

CITY OF WACO

Date: _____ Submittal No.: _____

Name of Project: _____

Please check that each of the following plan requirements have been met prior to submitting for review and include this checklist with your plan submittal. ***Plans not meeting the below requirements may be returned without a review and marked "Incomplete".***

General Plan Requirements:

- ☐ Include a standard title block (see Example)
- ☐ Each sheet shall be sealed by a Licensed Professional Engineer in the State of Texas and include the Engineering Firm name and registration number
- ☐ Minimum font size is 0.11" (full-size)
- ☐ All sheets to be on 22"x34" paper (full-size)
- ☐ North arrow and scale(s) shown on all applicable sheets
- ☐ Sheet names/numbers provided on each sheet
- ☐ Use City of Waco standard symbols and abbreviations
- ☐ Plans organized in a logical manner
- ☐ No overlapping text

Cover Sheet Requirements (see Example):

- ☐ Identify name of project (and phase(s) if applicable) and include along right edge of all sheets
- ☐ Identify City Project No., and include along right edge of all sheets
- ☐ Identify current Mayor, City Manager, and Council Members
- ☐ Provide signature and date lines for approval from the City Project Engineer, City Engineer, Water Utility Services Director and Director of other affected departments
- ☐ Provide location map that identifies limits of project
- ☐ Identify Engineering firm name and registration number in accordance with TBPE Board Rules
- ☐ Provide month and year of plan set
- ☐ Provide Sheet Index (provide on subsequent sheet for large plan sets)

General Notes, Quantities, Legend and Utility Contact Sheet Requirements (provide as many sheets as necessary to clearly show) (see Example):

- ☐ Provide contact information for all utility providers and other entities affected by the project (company, contact name and phone number)
- ☐ Provide project general notes

- [ ] Provide a Quantity take off summary for each plan/profile sheet and project total
- [ ] Provide a plan/profile sheet legend

Water Layout Sheet Requirements (see Example):

- [ ] Provide Sheet Legend (if different from plan/profile legend)
- [ ] Scale shown both graphically and numerically (1” = 100’, typical)
- [ ] Clearly identify existing and proposed water infrastructure (including line sizes, gate valves, fire hydrants and other appurtenances)
- [ ] Identify fire hydrant coverage
- [ ] Locate benchmarks and control points
- [ ] Label streets, easements, creeks, floodplains, TxDOT and RR rights-of-way
- [ ] Identify subdivision names, blocks and lot numbers

Water Plan/Profile Sheet Requirements (see Example):

- [ ] Design is in accordance with Texas Administrative Code (TAC), Title 30, Chapter 290, Subchapter D: Rules and Regulations for Public Water Systems
- [ ] Design is in accordance with the City of Waco’s Water and Sanitary Sewer Design Manual (If not, please include a Variance Request form)
- [ ] Clearly identify all existing surface and known underground facilities including public and franchise utilities (including sizes, depths and pipe materials, if known)
- [ ] Clearly identify existing and proposed water infrastructure (including line sizes, pipe materials (if known), gate valves, fire hydrants, water services/meters and other appurtenances)
- [ ] Identify all existing and proposed easements (type, width, etc.)
- [ ] Identify Station, Northing and Easting at all proposed appurtenances, beginning and end stations, deflections, PI’s, grade breaks and horizontal/vertical curves
- [ ] All water lines 12” and larger are profiled below the plan view, aligned horizontally, stationed from left to right, and identify installation method (open-cut, bore, etc.)
- [ ] Identify existing and proposed line sizes, pipe materials, gate valves, fire hydrants and other appurtenances in the profile view
- [ ] Identify existing and proposed utility crossings in the profile view (min. 2’ vertical separation required) along with existing parallel utilities within 5’ (if depth is known)
- [ ] Proposed embedment, backfill and surface repair is shown (in profile, if applicable)
- [ ] Top of pipe elevations are called out in the profile view at all bends, deflections, appurtenances and at 50’ stations
- [ ] Include “Warning to Contractor” utility locate note (1-800-DIG-TESS)
- [ ] Note stating that proposed private water improvements must be installed by a Licensed Plumber (if applicable)

Water Detail Sheet Requirements (see Example):

- [ ] Include applicable City of Waco standard details
- [ ] Details are legible at half-scale (11”x17”)
- [ ] Provide additional details as necessary

APPENDIX B

Standard Drafting Symbols

Standard Drafting Symbols

CITY OF WACO

General

Right-of-Way Line

Property Line

Existing Easement Line

Proposed Easement Line

BM-1 City of Waco Benchmark

TBM-1 Temporary Benchmark

IRF Property Corner

CP-1 Control Point

B-1 Geotechnical Boring Location

Gravel Pavement

Asphalt Pavement

Asphalt Pavement w/Conc Curb & Gutter

Concrete Pavement

Concrete Pavement w/ Curb & Gutter

Chain Link Fence

12" OAK Tree with Size and Type

Barbed Wire Fence

Building/Structure

Wooden Fence

Standard Drafting Symbols

CITY OF WACO

EX 24" SD	Existing Storm Drain Line	SD	Existing Storm Drain Inlet
SD	Existing Storm Drain Manhole/Vault	SD	Proposed Storm Drain Manhole/Vault
OHE	Existing Overhead Electric Line		Existing Power Pole
			Existing Guy Wire
UGE	Existing Underground Electric Line	LP	Existing Light Pole
E	Existing Electric Manhole/Vault	EM	Existing Electric Meter
UGT	Existing Underground Telecommunications Line	T	Existing Telecommunications Manhole/Vault
T	Existing Telecommunications Pedestal	TSB	Existing Traffic Signal Box
4" GAS	Existing Underground Gas Line with Size	G	Existing Gas Meter
	Existing Sign		Existing Mailbox

Standard Drafting Symbols

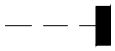
CITY OF WACO

Water (Plan)

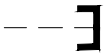
6" W	Existing Water Line: Smaller than 12"	6" W	Proposed Water Line: Smaller than 12"
16" W	Existing Water Line: 12" and larger	16" W	Proposed Water Line: 12" and larger
	Existing Gate Valve		Proposed Gate Galve
	Existing Gate Valve & Vault (16" & larger)		Proposed Gate Valve & Vault (16" & larger)
	Existing Reducer		Proposed Reducer
	Existing Fire Hydrant		Proposed Fire Hydrant
W	Existing Water Meter		Proposed Water Meter
	Existing Air Release Valve		Proposed Air Release Valve
BO	Existing Blow-off Manhole	BO	Proposed Blow-off Manhole
IB	Irrigation Box	IRR	Irrigation Control Valve

Standard Drafting Symbols

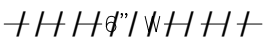
CITY OF WACO



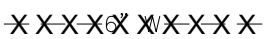
Water Line Plug



Water Line Cap

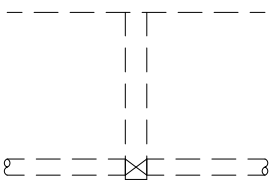


Abandon Existing Line



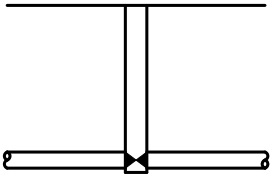
Remove Existing Line

Water (Profile)



Existing Surface

Existing Water Line and Gate Valve

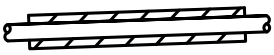


Proposed Surface

Proposed Water Line and Gate Valve

Existing Utility Crossing

Proposed Utility Crossing



Proposed Steel Casing Pipe

Standard Drafting Symbols

CITY OF WACO

Sanitary Sewer (Plan)

6"SS	Existing Sanitary Sewer Line: Smaller than 12"	6"SS	Proposed Sanitary Sewer Line: Smaller than 12"
16"SS	Existing Sanitary Sewer Line: 12" and larger	16"SS	Proposed Sanitary Sewer Line: 12" and larger
RSV	Existing Residential Service	RSV	Proposed Residential Service
CSV	Existing Commercial Service	CSV	Proposed Commercial Service
SS	Existing Sanitary Sewer Manhole	SS	Proposed Sanitary Sewer Manhole
CO	Existing Cleanout	CO	Proposed Cleanout

Sanitary Sewer (Profile)

	Existing Surface		Proposed Surface
	Existing Sanitary Sewer Main and Manhole		Proposed Sanitary Sewer Main and Manhole
	Existing Utility Crossing		Proposed Utility Crossing
			Proposed Steel Casing Pipe

APPENDIX C

Standard Abbreviations

Standard Abbreviations

CITY OF WACO

∠	Angle	EMB	Embedment
Δ	Delta Angle	ELEV	Elevation
ACP	Asbestos Cement Pipe	ETJ	Extraterritorial Jurisdiction
ANSI	American National Standards Institute	EQ	Equal
AREMA	American Railway Engineering & Maintenance-of-way Association	EX	Existing
ARV	Air Release Valve	FO	Fiber Optics
ASTM	American Society of Testing Materials	FH	Fire Hydrant
AWWA	American Water Works Association	FL	Fire Line
ARV	Air Release Valve	FLG	Flange
B/C	Back of Curb	F/C	Face of Curb
BFV	Butterfly Valve	F/L	Flow Line
BK	Back	FWD	Forward
B/L	Base Line	FT	Foot (Feet)
BM	Benchmark	GALV	Galvanized
B-O	Blow-off	GM	Gas Meter
BOTOC	By Other Than Open Cut	GV	Gate Valve
B/W	Bottom of Wall	GPD	Gallons per Day
C-C	Center-to-Center	GPM	Gallons per Minute
C/L	Centerline	G/L	Ground Line
C/O	Cleanout	HDPE	High-density Polyethylene
CI	Cast Iron	HMAC	Hot Mix Asphaltic Concrete
CIPP	Cast-in-place Pipe	HORIZ.	Horizontal
CTR	Center	HP	Horse Power
CMP	Corrugated Metal Pipe	I/I	Inflow/Infiltration
CONC	Concrete	ID	Inside Diameter
CONN	Connect/Connection	IP	Iron Pipe or Iron Pin
COW	City of Waco	IPF	Iron Pin Found
CFS	Cubic Feet per Second	IPS	Iron Pin Set
CY	Cubic Yard(s)	IRR	Irrigation
DI	Ductile Iron (Pipe)	JT	Joint
DIA	Diameter	LF	Linear Foot (Feet)
E	East	LT	Left or Left Turn
EA	Each	LS	Light Standard
EF	Each Face	MAINT	Maintenance
EW	Each Way	MAX	Maximum

MH	Manhole	SDR	Standard Dimension Ratio
MJ	Mechanical Joint	SH	State Highway
MGD	Million Gallons per Day	SPC	Special
MIN	Minimum	SPEC	Specifications
MISC	Miscellaneous	SSMH	Sanitary Sewer Manhole
MON	Monument	ST.	Street
MULT	Multiple	STA	Station
N/A	Not Applicable	STD	Standard
N	North	STRUC	Structure/Structural
OC	On Center	SUE	Subsurface Utility Engineering
OD	Outside Diameter	SVC	Service
OHE	Overhead Electric	TAC	Texas Administrative Code
OHT	Overhead Telephone/Cable	TAN	Tangent or Tangential
OPP	Opposite	TBM	Temporary Benchmark
ORIG	Original	TCEQ	Texas Commission on
P/L	Property Line	T/C	Top of Curb
PCC	Point of Compound Curvature	TEL	Telephone
PCCP	Pre-stressed Concrete Cylinder Pipe	TMUTCD	Texas Manual on Uniform Traffic Control Devices
PE	Plain End	TOT	Total
POC	Point of Curvature	T/P	Top of Pavement
POT	Point of Tangency	TR	Tract
PP	Power Pole	TS	Traffic Signal
PPV	Pressure Plane Valve	TXDOT	Texas Department of
PRV	Pressure Reducing Valve	TYP	Typical
PSI	Pounds per Square Inch	T/W	Top of Wall
PVC	Polyvinyl Chloride	UE	Underground Electric
PVMT	Pavement	UT	Underground Telephone/Cable
R	Radius	VAR	Variable or Varies
RCP	Reinforced Concrete Pipe	VCP	Vitrified Clay Pipe
RCCP	Reinforced Concrete Cylinder Pipe	VERT	Vertical
REF	Reference	W	West
REINF	Reinforced	WL	Water Line
ROW	Right-of-way	WM	Water Meter
RR	Railroad	WSEL	Water Surface Elevation
RT	Right or Right Turn	WTP	Water Treatment Plant
SS	Sanitary Sewer	WUSD	Water Utility Services Department
S	South	WV	Water Valve
S.S.	Stainless Steel	WW	Wastewater
SD	Storm Drain	WWTP	Wastewater Treatment Plant

APPENDIX D

Request for Variance

Request for Variance

CITY OF WACO

Date: _____ Submittal No.: _____

Name of Project: _____

Location of Project (*include map*): _____

Type of Project: ☐ New Development ☐ Redevelopment ☐ Public Infrastructure

(check all that apply)

Specify the design criteria, including specific section(s), requested to be varied:

_____

_____

Explain why the variance should be granted (attach supporting documents, if applicable):

_____

_____

Name of Owner: _____ Telephone No.: _____

Owner Contact: _____ E-mail Address: _____

Owner Address: _____

Engineering Firm: _____ Telephone No.: _____

Name of Engineer: _____ E-mail Address: _____

Engineer Address: _____

For City Use:

Reviewed By: _____ Accepted: ☐ Yes ☐ No

Date: _____

Comments: _____

_____

_____

_____

APPENDIX E

Construction Plan Sheet Examples

APPENDIX F

Fire Pump Requirements and Sample Agreement

In order to accommodate this request, the WUSD requires special conditions be met. First, in accordance with Ordinance 26-84, a complete, signed and sealed project plans and specifications set shall be made available to the WUSD for review.
Second, this particular development will be required to adhere to the conditions listed below:

1) The public water supply shall be protected by an approved backflow device that conforms to City of Waco standards and meets all required codes as of January 31, 2020. Confirmation shall be made in writing to the WUSD.
2) The fire protection design consultant for the Project Name project shall be a Certified Fire Protection Specialist, or other code appropriate licensed individual, authorized to perform fire protection services in the State of Texas and shall submit the following information and/or calculations:
    a. Fire Protection Credentials
    b. Size of private fire main and velocity within fire main for peak fire system demand.
        i. Certify proposed fire flows will not damage existing fire lines.
    c. Complete set of fire system plans and system calculations for WUSD review.
    d. Provide an approved pressure sensing device, pressure sustaining valve or other, to limit supply pressure at the pump to 20 PSI.
    e. Perform a fire flow test at maximum fire system operation and certify that water system pressure, located at the public side of the backflow device, does not drop below 30 PSI.
    f. Provide the fire pump curve, the fire pump manufacturer's flow test certification, and a certified copy of the fire pump field test.
3) The utility design consultant for the Project Name project shall be a professional engineer licensed to perform work in the State of Texas and shall submit the following information and/or calculations:

    a. Perform fire system demand calculations to illustrate the fire pump, operating at maximum fire system capacity, does not drop water system pressure below 35 PSI at the public water system connection. Calculations shall assume the pressure plane elevated tank is operating at half capacity, or elevation of XXX. Should 35 PSI not be maintained, the professional engineer must complete a detailed pressure plane model study to verify no portions of the pressure plane drop below 20 PSI.
    b. Perform an appropriate site investigation to ensure the domestic water service is separate from the fire service. (Alternatively, a plumber licensed in the State of Texas may perform this service.)
    c. Perform an appropriate site investigate to ensure the domestic service has adequate backflow protection and that the backflow device has been tested within the past 12 months. (Alternatively, a plumber licensed in the State of Texas may perform this service.)
    d. Complete and submit a sealed engineering report addressing the required conditions for this site.

Once the City of Waco WUSD has received and approved of the requested information, the City will require the property owner to execute a fire pump agreement. The general tenets of the agreement are:

1) Fire pumps shall be tested in accordance with NFPA and Waco Fire Department requirements.
2) No changes will be allowed to the fire system pump without written approval from the WUSD.

3) The property owner will provide reasonable access to WUSD employees to review the fire pump and all fire system components, including but not limited to hydrants, backflow devices, piping, valves, and other ancillary equipment that may impact the public water system.

Please note that without execution of a fire pump agreement, the WUSD will place a HOLD on the building certificate of occupancy.

In addition to these requirements, the WUSD department notes that any special conditions agreed to shall only govern a fire pump connected directly to a building fire sprinkler system.

19-_____

THE STATE OF TEXAS §
§ **FIRE PUMP USE AGREEMENT**
COUNTY OF McLENNAN §

THIS CONTRACT for connection of a fire pump is entered into by and between the **CITY OF WACO** ("City") and Entity Name**,** ("Entity Name"), subject to the following terms and conditions:

WHEREAS, Entity Name is constructing a hotel on Lot XX, Block XX, Subdivision Name in Waco, Texas, also known as Project Address, and pursuant to the City of Waco, Texas, Code of Ordinances Section 26-84, has requested approval to connect a fire pump to the City of Waco's water system;

WHEREAS, Project Name has submitted specifications as required by the Waco's Code; and

WHEREAS, the City has approved of the specifications provided by Hyatt Place,

NOW, THEREFORE, the **CITY OF WACO** ("City") and Entity Name**,** ("Entity Name"), agree to the following terms and conditions:

1. The above recitals are hereby incorporated into and made a part of this Agreement.

2. Compensation**.** There is no fee for the connection of a fire pump to access the Waco water system. Any water consumed by the use of said fire pump, for a use that is not fire-related, will be at a rate as determined by the City of Waco's fee schedule, as amended.

3. Entity Name may not assign any rights acquired under this Contract without the prior written approval of the City.

4. Entity Name has submitted the consultant's paperwork for the fire pump system plans, which is attached hereto as "Exhibit A" and incorporated herein for all purposes. Entity Name is responsible for the following:

    a. Purchase, installation, and maintenance of the fire pump and appurtenances;

    b. Maintain 35 PSI at public water system connection;

    c. Maintain domestic water service separate from fire service;

    d. Maintain fire pump certification (and maintaining certification throughout life of connection to City's water system; and

    e. Ensure that fire pumps are tested in accordance with NFPA and Waco Fire Department requirements.

5. Hyatt Place hereby grants to the City and its employees and agents reasonable access to enter Hyatt Place's property to review the fire pump and all fire system components, including, but not limited to, hydrants, backflow devices, piping, valves, and other ancillary equipment that has a potential to impact the public water system.

6. Any changes to the specifications in Exhibit A must be approved in writing by City before the change is implemented to the fire pump or water usage therefrom.

7. If the City exercises its authority to impose certain water use restrictions (such as limitations on outside watering), Hyatt Place shall comply with all said restrictions.

8. If Entity Name is notified by the City to stop use of the fire pump, Hyatt Place may not resume use of fire pump **until notified by the City** that Entity Name may begin use again.

9. If Entity Name temporarily stops service of the fire pump due to maintenance, or is required by the City to stop service, Hyatt Place must notify The City of Waco Fire Department and following all of their regulations and guidelines including Fire Watch.

10. The City maintains the right to require Entity Name to make changes to the fire pump if needed.

11. No changes to the fire pump, its flow, or pressure can be made without prior written authorization by the City. Hyatt Place shall provide the City with the identification number, size in horsepower, flow, and pressure of the fire pump that is put into use.

12. Water quality**.** The City is not a guarantor as to the level or quantity of water to be available.

13. Indemnification**.** Entity Name agrees to assume full responsibility and liability for the fire pump and water use rendered under this Contract and hereby agrees to indemnify, protect, and hold harmless the City, its elected officials, employees, agents, and servants, of and from all claims, demands, and causes of actions of every kind and character, including the cost of defense thereof, for any injury to, including death of, persons and any losses for damages to property caused by or alleged to be caused, arising out of, or alleged to arise out of, either directly or indirectly or in connection with the fire pump and/or water use to be rendered hereunder, whether or not said claims, demands, causes of actions are caused by the sole negligence of the City, its elected officials, employees, agents, or servants, or whether it was caused by concurrent negligence of the City and a party to this Contract, or whether it was caused by concurrent negligence of the City and some other third party. Even if Hyatt Place provides appropriate insurance naming City as an additional insured, this section shall continue to apply. Said insurance policies are to contain or be endorsed to contain the following additional provisions: (1) "Other insurance" clause shall not apply to the City where the City is an additional insured shown on the policy; and (2) Provide not less than ten (10) calendar days advance notice to the City of any suspension, cancellation, non-renewal or material change in coverage.

14. Venue; performance**.** This Contract is governed by the laws of the State of Texas and venue will be within Waco, McLennan County, Texas, and all obligations under this Contract shall be performed in Waco, McLennan County, Texas.

15. **Notice.**

    a. All notices, requests, consents, waivers and other communications required or permitted to be given hereunder shall be in writing and shall be deemed to have been given:

        (1) If transmitted by facsimile, upon acknowledgment of receipt thereof in writing by facsimile or otherwise;

(2) If personally delivered, upon delivery or refusal of delivery;

(3) If mailed by registered or certified United States mail, return receipt requested, postage prepaid, upon delivery or refusal of delivery; or

(4) If sent by a nationally recognized overnight delivery service, upon delivery or refusal of delivery.

b. Except as otherwise provided in this Contract, all notices, consents, waivers or other communications required or permitted to be given hereunder shall be addressed to the respective Party to whom such notice, consent, waiver or other communication relates.

FOR CITY	FOR _____
Mike Norman Utilities Operations Manager Water Utilities Services, City of Waco P.O. Box 2570 Waco, Texas 76702-2570 Email: WileyS@wacotx.gov Tel.: (254) 750-5640 Fax: (254) 750-5880	*Name:* _____ *Title/Dept:* _____ *Address:* _____ _____ *Tel:* _____ *Fax:* _____ *Cell Ph:* _____ *Email:* _____

16. No Waiver**.** Nothing in this Contract shall be deemed to waive, modify or amend any legal defense available at law or in equity to any of the Parties nor to create any legal rights or claim on behalf of any third party. No Party waives, modifies, or alters to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas or the United States.

17. Entire Contract**.** This Contract and any Exhibits hereto embody the entire contract and understanding of the Parties hereto and supersede any and all prior contracts, arrangements and understandings relating to the matters provided for herein. No amendment, waiver of compliance with any provision or condition hereof or consent pursuant to this Contract shall be effective unless evidenced by an instrument in writing signed by the Party against whom enforcement of any amendment, waiver or consent is sought. This Contract may not be amended or modified except in writing executed by all Parties and authorized by their respective governing bodies.

18. Article and Section Headings**.** The Article and Section headings contained herein are for convenience and reference and are not intended to define or limit the scope of any provision of this contract.

19. Misspelled Words**.** Misspelling of one or more words in this contract shall not void this contract. Such misspelled words shall be read so as to have the meaning apparently intended by the parties.

20. Multiple Copies**.** This Contract may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall be considered fully executed as of the date when all Parties have executed an identical counterpart, notwithstanding that all signatures may not appear on the same counterpart.

21. No Boycotting. Chapter 2270 of the Texas Government Code prohibits the City from entering into a contract for goods or services that (a) has a value of $100,000 or more that is to be paid wholly or partly from public funds and (b) is with a for-profit company, not including a sole proprietorship, that has 10 or more full-time employees unless the contract contains a written verification from the company that it (1) does not boycott Israel, and (2) will not boycott Israel during the term of the contract. Boycotting Israel includes refusing to deal with, terminating business activities with, or otherwise taking any action intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or with an Israeli controlled territory, but does not include an action made for ordinary business purposes. Hyatt Place will complete a Chapter 2270 Verification Form, which will be attached hereto as Exhibit B.

22. Foreign Terrorist Organization Verification. Hyatt Place acknowledges that effective September 1, 2017, the City is required to comply with Section 2252.151, Subchapter F of the Texas Government Code, enacted by Senate Bill 252 (85th Texas Legislature). The Code requires the Texas Comptroller to prepare and maintain a list of companies known to have contracts with or provide supplies or services to a foreign terrorist organization. Further, the law prevents a governmental entity from entering into a contract with a company that is identified on the list prepared and maintained by the Texas Comptroller. By executing this Agreement, Hyatt Place certifies that it is not a company identified on the Texas Comptroller's list as a company engaged in business with Iran, Sudan, or foreign terrorist organization.

CITY OF WACO, TEXAS

BY: _____
Lisa Tyer, Director of Utilities

Date Signed: _____

APPROVED AS TO FROM & LEGALITY:

_____
Jennifer Richie, City Attorney

ATTEST/WITNESS:

By: _____

Print Name: _____

Print Title: _____

Entity Name

By: _____

Print Name: _____

Print Title: _____

Date Signed: _____

ATTEST/WITNESS:

By: _____

Print Name: _____

Print Title: _____

APPENDIX G

Fire Pump Study Checklist

CITY OF WACO FIRE PUMP STUDY CHECKLIST

CITY OF WACO
WATER UTILITY SERVICES

Project Name _____

Project Location _____

Project Description _____

Estimated Construction Schedule _____

Modeling/Study Checklist:

☐ Provide proposed project fire line demand (GPM): _____

☐ Provide proposed maximum fire line size: _____

☐ Identify site impacted Pressure Planes with map or exhibit (attached) and write the Pressure Plan numbers here: _____

☐ Met with the Water Utilities Department to discuss the project (provide date of meeting): _____

☐ Provide the elevation of the impacted pressure plane elevated tank at half of full capacity: _____

☐ A system fire flow test has been performed. Enter the following information from the test report:

date: _____

time: _____

hydrant fixture number: _____

Name of the person who performed the test: _____

☐ Prepared the layout of proposed project site and utilities with map or exhibit (attach)

☐The private fire main is sized for peak fire system demand and meets velocity requirements

☐ Fire system demand calculations have been performed which certify, operating at maximum fire system capacity, the water system pressure does not drop below 35 psi at the public water system connection when the pressure plane elevated tank is half full.

☐ If 35 psi cannot be maintained, a detailed pressure plane model study had been performed by the Professional Engineer to verify no portions of the pressure plane drop below 20 psi

☐ Fire system plans and system calculations have been submitted to Water Utility Services for review

☐ The fire pump curve, the fire pump manufacturer's flow test certification, and a certified copy of the fire pump field test has been provided to Water Utility Services for review

☐ Identified all impacts on the City water system due to proposed fire line and pump, and made recommendations

☐ The credentials of the Fire Protection Specialist have been provided to Water Utility Services

☐ A sealed engineering report including the above components has been submitted to the City for review

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Construction Plan Checklist:

☐ Fire lines are at least one standard pipe size smaller than the size of the public line, at the connection point.

☐ Fire line within the public right of way or utility easement are constructed perpendicular to the water distribution line without horizontal bends.

☐ There are no branches or tees off the fire line prior to the backflow assembly

☐ Fire lines have, at minimum, have a double detector check assembly that conforms to City Standards and Codes and is located at one of the following locations (check one of the two):

- ☐ in a vault at the private property side of the property line.
- ☐ In a building within 150 feet of the water main, at a location approved by the fire Marshal.

☐ An approved pressure sensing device, pressure sustaining valve, or other Water Utility Services approved device is provided in the fire pump system to ensure that water supply pressure of does not fall below 20 psi due to pump operation (Leave unchecked if no fire pump)

☐ A site investigation has been conducted to verify the domestic water service is separate from the fire service.

☐ All fire lines 8” in diameter or greater are profiled in the construction plans

☐ A complete signed and sealed project construction plans and specifications set has been submitted to the Water Utility Services Department for review.

<u>If any of the above items is not checked, provide explanation/justification below:</u>

THIS FORM TO BE SIGNED BY ONE OF THE FOLLOWING PROFESSIONALS:

I hereby certify, as the **Professional Engineer of Record** for the project named above and an active licensed Professional Engineer in the State of Texas, that the above items are included in the submitted engineering model, engineering study and/or construction plans to the best of my ability.

Engineering Firm _____

Name of Engineer _____ PE License # _____

Signature _____ Date _____

Or

I hereby certify, as the **Certified Fire Protection Specialist** for the project named above, I am authorized to perform fire protection services in the State of Texas and the above items are included in the submitted calculations, specifications, or construction plans to the best of my ability.

Company Name _____

Name of Certified Fire Protection Specialist _____ License # _____

Signature _____ Date _____

APPENDIX H

Water Study Checklist

CITY OF WACO WATER AND SEWER STUDY & DESIGN CHECKLIST

CITY OF WACO
WATER UTILITY SERVICES

Project Name _____

Project Location _____

Project Description _____

Estimated Construction Schedule _____

Modeling/Study Checklist:

☐ Provide proposed project water ADD (GPM): _____

☐ Identify site impacted Pressure Planes with map or exhibit (attached) and write the Pressure Plan numbers here: _____

☐ Met with the Water Utilities Department to discuss the project (provide date of meeting):_____

☐ Provide the Waco Water Master Plan minimum required water main size: _____

☐ Provide additional Water Study's used and the minimum required main size, if applicable: _____

☐ Identify through water modeling software the minimum required water main sizing needed: _____

☐ If a fire pump is necessary for this project, the fire pump checklist has been completed.

☐ Fire flow minimum gallons per minute (GPM) and fire flow duration have been met per design manual or current Fire Code requirements, whichever is higher.

☐ Water main minimum and maximum flow velocity requirements have been met.

☐ A minimum of 35 psi operating pressure at any point in the affected pressure plane using peak hour flow has been met.

☐ A minimum of 20 psi operating pressure at any point in the affected pressure plane using max day flow plus fire flow has been met.

Construction Plan Checklist:

☐ New water distribution lines (16" or less) are placed in the center of the outermost lane of traffic, in the northern or eastern portion of the right-of-way.

☐ Water lines are placed in the center of designated water line easement.

☐ Street and major utility crossings are installed 90 degrees to the centerline of the roadway/utility

☐ There are no designed deflections (bending) of pipe sections.

☐ The maximum deflection angle of pipe joints is 50% of the manufacture's recommendation.

☐ Water line bends are 45° or less and consist of standard fitting sizes (45°, 22.5°, 11.25°).

☐ Water lines ≤ 12" diameter have a min. depth of 42"; and water lines ≥ 16" have a min. depth of 60".

☐ All vertical and horizontal fittings are designed with restrained joints and concrete thrust blocking.

☐ Separation distances between water and sewer mains are at least 9 ft, or follow Waco Utilities' Design Manual for closer horizontal separations.

☐ A 5 ft minimum horizontal distance between water mains and other parallel utilities is maintained.

☐ Vertical separation distances between water mains and other utilities are at least 2 ft, and Texas Administrative Code and City Standard Detail and Design Manual requirements have been met with respected to crossings.

☐ Coordination with crossing or parallel utility companies has been completed during design (Atmos Gas, Oncor, AT&T, Fiberlight, etc.).

☐ Residential and Commercial water mains have min. 8" diameter, Industrial mains min. 12" diameter.

☐ Fire lines are a minimum of one standard pipe size smaller than the public line that feeds them.

☐ Fire lines do not provide domestic water service, have no horizontal bending in public R.O.W, and do not contain branches or tees prior to the backflow assembly.

☐ A Corrosion Study has been prepared if applicable and the utility design incorporates corrosion protection measures.

☐ Water service connections are only on public water lines that front the property being served.

☐ Water service taps are perpendicular to the public water main and do not contain horizontal bends or deflections to the meter.

☐ Tapping sleeves and valves are only used for 4" service connections (if applicable). 1" or 2" services (if applicable) use tapping saddles.

☐ No dead-ends exist in water lines except temporary dead ends where a looped or interconnected system is part of a future phase shown on a plat.

☐ Fire hydrant, water valve, air release valve and blow-off assembly spacing, sizing and other location requirements have been met as per Waco's design manual.

☐ Residential service lines are a min. of 1" and commercial service lines are a min. of 2" in diameter.

☐ All water mains, fittings, service lines, and fire lines 8" in diameter or greater are profiled.

☐ Appropriate backflow protection assemblies have been included in the design for fire, domestic, and irrigation services, if required.

☐ Texas Department of Transportation, Railroad or river, stream and lake crossing design manual requirements have been met, if applicable.

☐ The latest revision of the City's Standard Details and Specifications have been reviewed and incorporated into the utility design.

☐ A complete signed and sealed project construction plans and specifications set has been completed and submitted to the City of Waco Water Utilities Department for review.

<u>If any of the above items is not checked, provide explanation/justification below:</u>

I hereby certify, as the engineer of record for the project named above and an active licensed Professional Engineer in the State of Texas, that the above items are included in the submitted engineering model, engineering study and/or construction plans to the best of my ability.

Engineering Firm _____

Name of Engineer _____ PE License # _____

Signature _____ Date _____

APPENDIX I

Sewer Study Checklist

CITY OF WACO WATER AND SEWER STUDY CHECKLIST

CITY OF WACO
WATER UTILITY SERVICES

Project Name _____

Project Location _____

Project Description _____

Estimated Construction Schedule _____

Modeling/Study Checklist:

☐ Provide proposed project average dry weather flow (ADWF): _____

☐ Provide proposed project peaking factor (R): _____

☐ Provide proposed project peak dry weather flow (PDWF): _____

☐ Provide proposed project inflow and infiltration (I/I): _____

☐ Provide proposed project peak wet weather flow (PWWF): _____

☐ Identify impacted Sewer Basin with map or exhibit and enter name: _____

☐ Meet with the Water Utilities Department to discuss the project (provide date of meeting): _____

☐ Provide the Waco Water Master Plan minimum required sanitary sewer main size: _____

☐ Provide additional Sewer Study's used and the minimum required sanitary sewer main size, if applicable: _____

☐ Identify layout of proposed project site and utilities with map or exhibit

☐ Confirm through modeling or demonstrated calculation that all new and existing impacted sanitary sewers meet the minimum requirements of City of Waco's the Design Manual:

- ☐ Sewer mains (≤ 15") PDWF ≤ 65% of the capacity of the pipe flowing full
- ☐ Sewer mains (≤ 15") PWWF ≤ 85% of the capacity of the pipe flowing full
- ☐ Interceptor mains (≥ 18") PWWF ≤ 80% of the capacity of the pipe flowing full

☐ Lift stations and force mains are designed in accordance with Texas Administrative Code Title 30 Chapters 217.59 - 217.68 and 217.90 - 217.100 and the City's Standard Details and Standard Specifications for Construction.

☐ If a lift station is proposed, a sealed Engineering Report has been submitted to the City for review that includes justification for the lift station, cost analysis comparing a gravity system extension and a 30-year maintained lift station, storage requirements, electrical power availability including emergency power, downstream capacity analysis, SCADA communication, security and access and odor requirements.

☐ If siphons or aerial crossings are proposed, a sealed Engineering Report has been submitted to the City for review that analyzes multiple sewerage alternatives and demonstrates a gravity sewerage system is not feasible.

☐ Identify the "pass through service" or the wastewater flow needed to pass through the development to serve other customers in the wastewater basin, if applicable.

Construction Plan Checklist:

☐ New sewer lateral and collector mains are placed in outermost lane of traffic, 9' from back of curb, in the southern or western portion of the right-of-way, where possible.

☐ Horizontal alignment is maintained, to the greatest extent possible, throughout the project.

☐ Sewer mains are installed 90 degrees to the roadway/utility centerline

☐ Sewer mains are not closer than 5 ft from the right-of-way or property lines

☐ Sewer mains are placed in the center of designated sanitary sewer easements

☐ Sewer main extensions extend to a point 10' into the property frontage w/ consideration for future service extension

☐ Curved sewer main alignments do not exceed 50% of the manufacturer's recommended deflection of the pipe joint. Maximum manhole spacing is 300' along a curved main

☐ All pipe grade breaks, pipe intersections, changes in pipe size, changes in pipe material, or changes in alignment occur at manholes

☐ Sewer mains have a min. depth of cover of 6 ft (from flow line to surface) while bury depth in excess of 8 ft is avoided unless absolutely necessary.

☐ Parallel water and sewer mains have at least 9 ft of horizontal separation or fulfill the requirement of the City of Waco's Design Manual and Texas Administrative Code (TAC) Title 30, Chapter 290.44 if they are closer.

☐ A 5 ft minimum horizontal distance between sewer mains and other parallel utilities is maintained

☐ Vertical separation distances between sewer mains and other utilities are at least 2 ft, the requirement of the City of Waco's Design Manual have been met.

☐ Coordination with crossing or parallel utility companies has been completed during design (Atmos Gas, Oncor, AT&T, Fiberlight, etc.)

☐ Pipe slopes meet the City of Waco design manual requirements as per Table 5.4.1

☐ Public sewer service connections are a minimum of 4" diameter for residential connections and 6" diameter for non-residential connections

☐ Standard sewer service connections have a minimum pipe slope of 2%

☐ Sewer service taps are only connected to laterals or collector mains ≤ 15" in diameter and are perpendicular to the public sanitary sewer main with no bends or deflections to the cleanout

☐ Non-residential service connections occur at a sewer manhole and are no greater than 90 degrees or less than 45 degrees from the upstream direction of the flow within the main

☐ Manholes with an incoming main more than 24" above the outlet invert elevation use an external drop structure

☐ Manhole inside diameter sizing and maximum allowable spacing are as per Design Manual Tables 5.8.1 & 5.8.2.

☐ Manholes within the 100-year floodplain or use watertight ring and covers

☐ Corrosion protection measures have been investigated and are included in the design where applicable

☐ Manhole venting requirements have been met and are included in the design

☐ Two-way cleanouts are located near right-of-way/easement lines to demarcate public vs. private ownership

☐ Texas Department of Transportation, Railroad or river, stream and lake crossing requirements have been met, if applicable

☐ Pretreatment facilities, including fats, oils and grease removal systems and oil/sand separators, are included in the design for industrial users proposing to connect to City's sewer system per 40 CFR Subsection 403

☐ The City's Standard Details and Specifications have been reviewed and incorporated into the utility design. Relevant Standard Details are included in the design set and are referenced in the drawings where applicable.

☐ A complete signed and sealed project construction plans and specifications set has been completed and submitted to the City of Waco Water Utilities Department for review.

If any of the above items is not checked, provide explanation/justification below:

I hereby certify, as the engineer of record for the project named above and an active licensed Professional Engineer in the State of Texas, that the above items are included in the submitted engineering model, engineering study and/or construction plans to the best of my ability.

Engineering Firm _____

Name of Engineer _____ PE License # _____

Signature _____ Date _____