

ADDENDUM NO. 2

March 23, 2017

TO: Plans and Specifications for
Throckmorton Road from SH 5 To CR 418
City of Melissa, TX
H&F Project No. 01014

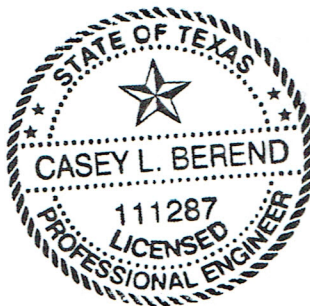
BY: H&F Consulting, Inc.
1710 Cooper St.
Melissa, Texas 75454
Phone: 972-837-2111

BID OPENING DATE: MARCH 28, 2017
BID OPENING TIME: 2:05 PM

This Addendum is hereby made a part of the Contract Documents to the same extent as if it were originally included therein. The following modifications, clarifications, additions, or deletions shall be made to the appropriate sections of the plans and specifications and shall become a part of, and attached to, the Contract Documents.

1. Modification: Corrections were made to storm sewer and water quantities. A revised bid proposal is attached.
2. Modification: The unit for bid item D7 (EA) was corrected to be LF in the bid proposal.
3. Clarification: The attached City standard detail 3010AM needs to be used for embedment of bid items SD1-SD7. TxDOT Specification 400 needs to be used for embedment of bid items SD8-SD13 (box culverts). The attached City standard detail 3061M needs to be used for water line installation.

END OF ADDENDUM NO. 2 (SEE ATTACHMENTS)



Casey Berend
3/23/2017

SECTION E - BID PROPOSAL FORM - ATTACHMENT A

BID PROPOSAL: THROCKMORTON ROAD

CITY OF MELISSA, TEXAS

ITEM NO.	DESCRIPTION / UNIT PRICE	SPEC. REF.	TOTAL EST. QTY	UNIT	UNIT PRICE	TOTAL AMT.
D1	Remove existing headwall, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	1	EA	\$ _____ -	\$ _____ -
D2	Remove existing safety end treatment, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	2	EA	\$ _____ -	\$ _____ -
D3	Remove existing gravel, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	1816	SY	\$ _____ -	\$ _____ -
D4	Remove existing concrete pavement, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	1251	SY	\$ _____ -	\$ _____ -
D5	Remove existing asphalt pavement, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	875	SY	\$ _____ -	\$ _____ -
D6	Remove existing barricades, for the amount of: _____ dollars and _____ cents per each.		16	EA	\$ _____ -	\$ _____ -
D7	Remove existing 24" culverts, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	92	LF	\$ _____ -	\$ _____ -
D8	Remove existing fence, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	1213	LF	\$ _____ -	\$ _____ -
P1	Embankment, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.7	20455	CY	\$ _____ -	\$ _____ -
P2	Subgrade Preparation, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 301.1	29866	SY	\$ _____ -	\$ _____ -
P3	2" Type D HMA on 4" Type B HMA, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 302 NCTCOG Detail 2110	301	SY	\$ _____ -	\$ _____ -

P4	4" Thick Concrete Sidewalk, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 305.2 Melissa Detail 2170M*	2292	SY		\$ _____ -	\$ _____ -
P5	Concrete Sidewalk Integral with Retaining Wall, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 305.2 NCTCOG 802.2 Melissa Detail 2180M*	322	SY		\$ _____ -	\$ _____ -
P6	9.5" Thick Concrete Pavement with Monolithic Curb, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 303, 305.1 NCTCOG Details: 2050, 2060, 2130, 2140, 2150A, 2150B Melissa Details: 2010M*, 2020M*, 2070AM*, 2120M*	26090	SY		\$ _____ -	\$ _____ -
P7	Accessible Ramp (Type 7), complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 305.2 TxDOT Detail PED-12A	8	EA		\$ _____ -	\$ _____ -
P8	Stamped/Colored Concrete, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG Detail 2130 Melissa Detail 2310M*	317	SY		\$ _____ -	\$ _____ -
P9	Median Maintenance Ramp, complete and in place for the amount of: _____ dollars and _____ cents per each.	SAME CONCRETE SPECIFICATIONS AS MONLITHIC CONCRETE CURB	5	EA		\$ _____ -	\$ _____ -
S1	Furnish and Install Small Roadside Sign Supports and Assembly, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 644	28	EA		\$ _____ -	\$ _____ -
S2	REFL PAV MRK TY I (W) 24" SOLID (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	89	LF		\$ _____ -	\$ _____ -
S3	REFL PAV MRK TY I (W) 8" SOLID (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	1051	LF		\$ _____ -	\$ _____ -
S4	REFL PAV MRK TY I (W) 4" BRK (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	10716	LF		\$ _____ -	\$ _____ -
S5	REFL PAV MRK TY I (W) ARROW (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	10	EA		\$ _____ -	\$ _____ -

S6	REFL PAV MRK TY I (W) WORD (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	10	EA	\$ _____ -	\$ _____ -
S7	PAV SURF PREP FOR MRK (4"), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	10716	LF	\$ _____ -	\$ _____ -
S8	PAV SURF PREP FOR MRK (8"), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	1051	LF	\$ _____ -	\$ _____ -
S9	PAV SURF PREP FOR MRK (24"), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	89	LF	\$ _____ -	\$ _____ -
S10	PAV SURF PREP FOR MRK (ARROW), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	10	EA	\$ _____ -	\$ _____ -
S11	PAV SURF PREP FOR MRK (WORD), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	10	EA	\$ _____ -	\$ _____ -
SD1	15" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	146	LF	\$ _____ -	\$ _____ -
SD2	18" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	1223	LF	\$ _____ -	\$ _____ -
SD3	21" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	193	LF	\$ _____ -	\$ _____ -
SD4	24" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	452	LF	\$ _____ -	\$ _____ -
SD5	30" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	133	LF	\$ _____ -	\$ _____ -

SD6	36" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	1243	LF	\$ _____ -	\$ _____ -
SD7	42" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	349	LF	\$ _____ -	\$ _____ -
SD8	48" CLASS III RCP, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 464 Melissa Detail 6001M*	432	LF	\$ _____ -	\$ _____ -
SD9	6'x4' RCB, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 462 Melissa Detail 6001M* TxDOT Details: SCC-MD, SCP-MD, MC-MD, SCC-6, SCP-6, MC-6-23	1000	LF	\$ _____ -	\$ _____ -
SD10	7'x4' RCB, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 462 Melissa Detail 6001M* TxDOT Details: SCC-MD, SCP-MD, MC-MD, SCC-7, SCP-7, MC-7-10	119	LF	\$ _____ -	\$ _____ -
SD11	8'x4' RCB, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 462 Melissa Detail 6001M* TxDOT Details: SCC-MD, SCP-MD, MC-MD, SCC-8, SCP-8, MC-8-23	281	LF	\$ _____ -	\$ _____ -
SD12	9'x4' RCB, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 462 Melissa Detail 6001M* TxDOT Details: SCC-MD, SCP-MD, MC-MD, SCC-9, SCP-9, MC-9-23	731	LF	\$ _____ -	\$ _____ -
SD13	10'x6' RCB, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 462 Melissa Detail 6001M* TxDOT Details: SCC-MD, SCP-MD, MC-MD, SCC-10, SCP-10, MC-10-23	848	LF	\$ _____ -	\$ _____ -
SD14	6'x5' RCB, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 462 Melissa Detail 6001M* TxDOT Details: SCC-MD, SCP-MD, MC-MD, SCC-6, SCP-6, MC-6-23	120	LF	\$ _____ -	\$ _____ -
SD15	Pipe Size Change Concrete Collar, complete and in place for the amount of: _____ dollars and _____ cents per each.		7	EA	\$ _____ -	\$ _____ -
SD16	Type "A" Storm Manhole, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 502	1	EA	\$ _____ -	\$ _____ -
SD17	Rock Riprap, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 803	791	CY	\$ _____ -	\$ _____ -

SD18	10' Recessed Inlet, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 702 NCTCOG Details: 6030A, 6030B, 6030D Melissa Details 6030CM*	24	EA	\$ _____ -	\$ _____ -
SD19	Connect to existing storm drain, including any necessary appurtenances, complete and in place for the amount of: _____ dollars and _____ cents per each.		4	EA	\$ _____ -	\$ _____ -
SD20	TXDOT PW Headwall, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 466 TxDOT Details: PW, ECD	2	EA	\$ _____ -	\$ _____ -
SD21	Safety End Treatment for 6' Box Culvert, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 467 TxDOT Detail SET B-PD	1	EA	\$ _____ -	\$ _____ -
SD22	2'X2' WYE Inlet, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 471	4	EA	\$ _____ -	\$ _____ -
SD23	Concrete Pilot Channel, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 303	8	CY	\$ _____ -	\$ _____ -
SD24	Installation and maintenance of storm drain Trench Safety System, as specified herein, complete and in place, for the amount of: _____ dollars and _____ cents per linear foot.	NCTCOG 107.19.3	7270	LF	\$ _____ -	\$ _____ -
SS1	Adjust existing sanitary sewer manhole to proposed grade, including vacuum testing, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 502.1, 502.9 NCTCOG Details: 5080, 5090 Melissa Details: 5002M*, 5020M*, 5030M*, 5085BM*	2	EA	\$ _____ -	\$ _____ -
W1	6" C900 DR 18 - PVC, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 501 Melissa Detail 4001M*	20	LF	\$ _____ -	\$ _____ -
W2	12" C900 DR 18 - PVC, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 501 Melissa Detail 4001M*	161	LF	\$ _____ -	\$ _____ -
W3	16" C900 DR 18 - PVC, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 501 Melissa Detail 4001M*	332	LF	\$ _____ -	\$ _____ -

W4	Fire Hydrant Assembly, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 502 Melissa Details: 4001M*, 4120AM*-4120DM*	2	EA	\$ _____ -	\$ _____ -
W5	6" Gate Valves, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 502 Melissa Details: 4001M*, 4050M*	2	EA	\$ _____ -	\$ _____ -
W6	Remove Existing Waterline, complete and in place for the amount of: _____ dollars and _____ cents per each.		549	LF	\$ _____ -	\$ _____ -
W7	Remove Existing Air Release Valve, complete and in place for the amount of: _____ dollars and _____ cents per each.		1	EA	\$ _____ -	\$ _____ -
W8	Connect to existing waterline, including any necessary appurtenances, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 501	5	EA	\$ _____ -	\$ _____ -
W9	Installation and maintenance of waterline Trench Safety System, as specified herein, complete and in place, for the amount of: _____ dollars and _____ cents per linear foot.	NCTCOG 107.19.3	513	LF	\$ _____ -	\$ _____ -
W10	Water Testing, complete for the amount of: _____ dollars and _____ cents per each.	NCTCOG 506 Melissa Details: 4002AM* 4002EM*	513	LF	\$ _____ -	\$ _____ -
W11	Adjust existing Water Valve to proposed grade (without vault <16"), complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 502 Melissa Details: 4050M*, 4051M*	10	EA	\$ _____ -	\$ _____ -
W12	Remove existing water valve for the amount of: _____ dollars and _____ cents per each.		1	EA	\$ _____ -	\$ _____ -
W13	Steel encasement, complete and in place for the amount of: _____ dollars and _____ cents per each.		111	LF	\$ _____ -	\$ _____ -
W14	12" butterfly valve, complete and in place for the amount of: _____ dollars and _____ cents per each.		2	EA	\$ _____ -	\$ _____ -

W15	16" butterfly valve, complete and in place for the amount of: _____ dollars and _____ cents per each.	Melissa Details: 4055M	1	EA	\$ _____ -	\$ _____ -
W16	Combination air vacuum valve, complete and in place for the amount of: _____ dollars and _____ cents per each.	Melissa Details: 4090M	1	EA	\$ _____ -	\$ _____ -
T1	Implementation of Traffic Control Plan for the duration of the project, complete and in place, for the amount of: _____ dollars and _____ cents per lump sum paid out in equal payments for the duration of the project.	NCTCOG 105.5 TxDOT 502	1	LS	\$ _____ -	\$ _____ -
I1	Drilled Shaft Foundation (RDWY ILL POLE)(8FT X 30 INCHES DIA), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 416	248	LF	\$ _____ -	\$ _____ -
I2	Conduit (PVC)(SCHD 40)(2"), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 618	5625	LF	\$ _____ -	\$ _____ -
I3	Conduit (PVC)(SCHD 80)(2"), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 618	10	LF	\$ _____ -	\$ _____ -
I4	Conduit (PVC)(SCHD 80)(2") BORE, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 618	190	LF	\$ _____ -	\$ _____ -
I5	Electric Conductor (NO. 6) BARE, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 620	5925	LF	\$ _____ -	\$ _____ -
I6	Electric Conductor (NO. 6) INSULATED, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 620	11850	LF	\$ _____ -	\$ _____ -
I7	Ground Box TY C (162911 W/ APRON), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 624	3	EA	\$ _____ -	\$ _____ -
I8	Electrical Service Type A (240/480)60(NS)AL(E)PS(U), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 610	1	EA	\$ _____ -	\$ _____ -

I9	Luminaire Pole (SINGLE ARM) (30' WITH 4' ARM), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 610	31	EA	\$ _____ -	\$ _____ -
E1	Unclassified Street Excavation, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.4	31735	CY	\$ _____ -	\$ _____ -
EC1	Temporary Erosion, Sedimentation and Water Pollution Prevention and Control, including SWPPP, as necessary for erosion protection and prevention of storm water pollution, complete and in place, for the amount of: _____ dollars and _____ cents per lump sum paid out in equal payments for the duration of the project.	NCTCOG 201 NCTCOG Details: 1020A, 1020B, 1060A, 1060B, 1070A, 1070B Melissa Detail 1120M*	1	LS	\$ _____ -	\$ _____ -
L1	4" Topsoil, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 202.2	33453	SY	\$ _____ -	\$ _____ -
L2	Hydraulic mulching on all areas of non-farmland disturbed during the project, to be applied in the specified manner, and methods to comply with NCTCOG section 202.6.4.4, complete and in place, for the amount of: _____ dollars and _____ cents per acre.	NCTCOG 202.6	33453	SY	\$ _____ -	\$ _____ -
L3	Replace existing Fence with like kind, material, height, and color along proposed right-of-way, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 801	700	LF	\$ _____ -	\$ _____ -
L4	Landscape Retaining Wall, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 802	716	SF	\$ _____ -	\$ _____ -
L5	Erosion Control Blanket on all disturbed areas with a grade equal to or greater than 4:1, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 201.15 NCTCOG Details: 1160A, 1160B	2614	SY	\$ _____ -	\$ _____ -
M1	Mobilization and Comprehensive Site Preparation and Protection, including all necessary activities specified in 202.1, 202.2, and 203, for protection of site, work, and existing utilities and trees (when specified as protected), complete and in place, for the amount of: _____ dollars and _____ cents per lump sum paid out in equal payments for the duration of the project..	NCTCOG 200	1	LS	\$ _____ -	\$ _____ -
M2	Project allowance, to be used only with prior City authorization, for the amount of: FIFTEEN-THOUSAND _____ dollars and <u>ZERO</u> cents per each.		1	EA	\$ _____ -	\$ _____ -

M3	Provide project sign, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 107.21	1	LS	\$ _____ -	\$ _____ -
M4	Provide Pedestrian Handrail, complete and in place for the amount of: _____ dollars and _____ cents per LF.	TXDOT PRD-13 (TYPE C)	352	LF	\$ _____ -	\$ _____ -
M5	Provide Traffic Rail, complete and in place for the amount of: _____ dollars and _____ cents per LF.	TXDOT TYPE T 411	230	LF	\$ _____ -	\$ _____ -

BID ALTERNATE 1

P2	Subgrade Preparation, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 301.1	696	SY	\$ _____ -	\$ _____ -
P6	9.5" Thick Concrete Pavement with Monolithic Curb, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 303, 305.1 NCTCOG Details: 2050, 2060, 2130, 2140, 2150A, 2150B Melissa Details: 2010M*, 2020M*, 2070AM*, 2120M*	620	SY	\$ _____ -	\$ _____ -
P8	Stamped/Colored Concrete, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG Detail 2130 Melissa Detail 2310M*	24	SY	\$ _____ -	\$ _____ -
L1	4" Topsoil, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 202.2	-688	SY	\$ _____ -	\$ _____ -
L2	Hydraulic mulching on all areas of non-farmland disturbed during the project, to be applied in the specified manner, and methods to comply with NCTCOG section 202.6.4.4, complete and in place, for the amount of: _____ dollars and _____ cents per acre.	NCTCOG 202.6	-688	SY	\$ _____ -	\$ _____ -
S1	Furnish and Install Small Roadside Sign Supports and Assembly, complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 644	2	EA	\$ _____ -	\$ _____ -
S3	REFL PAV MRK TY I (W) 8" SOLID (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	163	LF	\$ _____ -	\$ _____ -
S5	REFL PAV MRK TY I (W) ARROW (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	1	EA	\$ _____ -	\$ _____ -

S6	REFL PAV MRK TY I (W) WORD (100MIL), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 666	1	EA	\$ _____ -	\$ _____ -
S8	PAV SURF PREP FOR MRK (8"), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	163	LF	\$ _____ -	\$ _____ -
S10	PAV SURF PREP FOR MRK (ARROW), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	1	EA	\$ _____ -	\$ _____ -
S11	PAV SURF PREP FOR MRK (WORD), complete and in place for the amount of: _____ dollars and _____ cents per each.	TxDOT 678	1	EA	\$ _____ -	\$ _____ -
BID ALTERNATE 2 (INCLUDE RAILROAD PROTECTIVE LIABILITY INSURANCE)						
D4	Remove existing concrete pavement, for the amount of: _____ dollars and _____ cents per each.	NCTCOG 203.3	449	SY	\$ _____ -	\$ _____ -
P2	Subgrade Preparation, complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 301.1	696	SY	\$ _____ -	\$ _____ -
P9	10" Thick Concrete Pavement complete and in place for the amount of: _____ dollars and _____ cents per each.	NCTCOG 303, 305.1 NCTCOG Details: 2050, 2060, 2130, 2140, 2150A, 2150B Melissa Details: 2010M*, 2020M*, 2070AM*, 2120M*	449	SY	\$ _____ -	\$ _____ -

TOTAL AMOUNT OF BASE BID: \$ _____ -

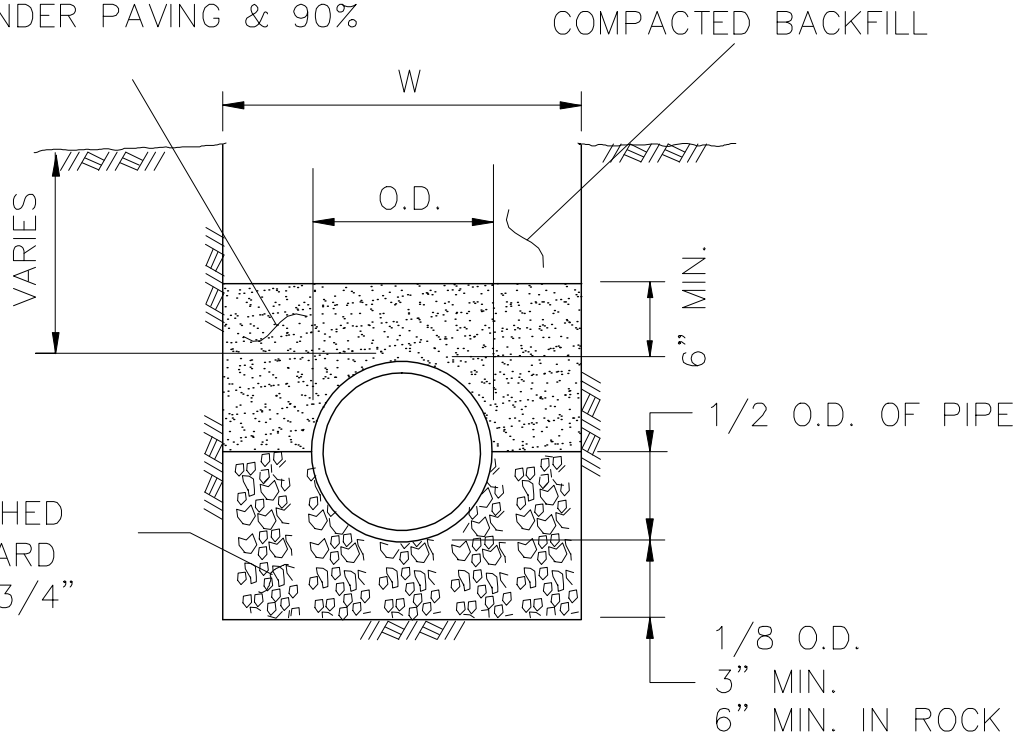
TOTAL AMOUNT OF BID ALTERNATE 1: \$ _____ -

TOTAL AMOUNT OF BID ALTERNATE 2: \$ _____ -

SUBMITTED BY: _____

SUBMITTED ON: _____

TYPE "B" BACKFILL PER NCTCOG
 504.2.3.3 (4TH ed.) COMPACTED
 TO 95% STANDARD PROCTOR
 DENSITY UNDER PAVING & 90%
 ELSEWHERE



GRADE 4 CRUSHED
 STONE (STANDARD
 GRADATION - 3/4"
 NOM.)

NOTES:

1. THE DEPTH OF TRENCH BELOW PIPE ARE AS FOLLOWS:
 3" MIN. FOR 27" PIPE & SMALLER
 4" MIN. FOR 30" TO 60" PIPE
 6" MIN. FOR 66" PIPE & LARGER
2. O.D. = OUTSIDE DIAMETER OF PIPE.
3. W = TRENCH WIDTH = O.D. PLUS 24" FOR PIPE GREATER THAN 24" AND O.D. PLUS 16" FOR PIPE 24" AND SMALLER.

M* - CITY OF MELISSA REVISION

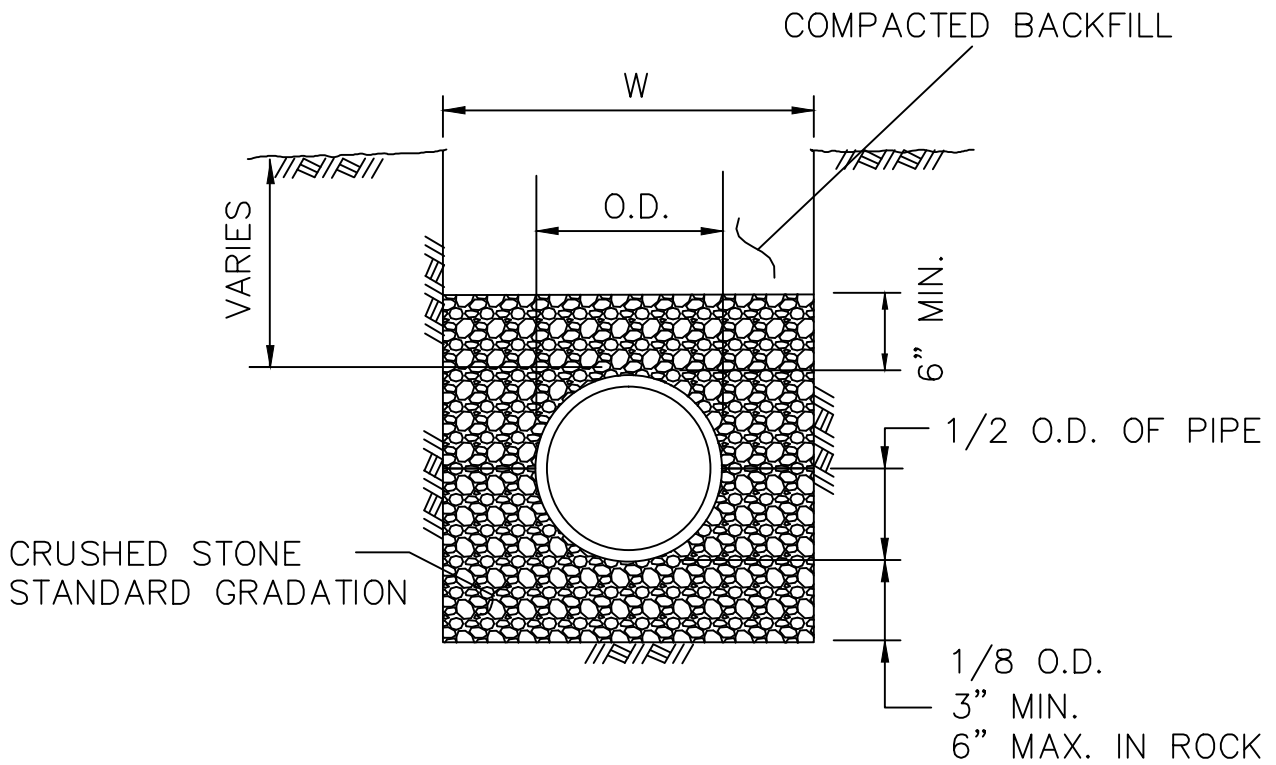
STORM SEWER PIPE BEDDING DETAIL

NCTCOG STANDARD SPECIFICATION REFERENCE
 504

CITY OF MELISSA



DATE 02/02/10 STANDARD DRAWING NO. 3010AM*



NOTES:

1. CLASS H EMBEDMENT ACCEPTABLE FOR STANDARD P.V.C. SEWER INSTALLATION. STANDARD P.V.C., R.C.C.P., AND DUCTILE IRON WATER LINE INSTALLATION.

2. O.D. = OUTSIDE DIAMETER OF PIPE.

3. W = TRENCH WIDTH.

WIDTH OF TRENCH SHALL BE 24 INCHES PLUS O.D. FOR PIPE GREATER THAN 24 INCHES IN DIAMETER AND O.D. PLUS SIXTEEN INCHES FOR PIPE LESS THAN OR EQUAL TO 24 INCHES I.D.

M* - CITY OF MELISSA REVISION

CLASS H EMBEDMENT

CITY OF MELISSA



NCTCOG STANDARD SPECIFICATION REFERENCE
504

DATE 07/20/09
STANDARD DRAWING NO. 3061M*