

STREET TECHNICAL SPECIFICATIONS

1. SIBARGE PREPARATION
 THE GRANULOUS ASPHALT CONCRETE SHALL CONSIST OF MATERIAL AGGREGATE UNIFORMITY MIXED WITH BITUMENUS ASPHALT CONCRETE (ASPHALT CEMENT) GRADE 90.
 THE ASPHALT CONCRETE SHALL CONFORM WITH THE FOLLOWING REFERNCES:

GRADE	PERCENT PASSING	GRADATION - X
3/4" (19/100MM)	90 - 100	---
3/8" (9.5/50MM)	60 - 85	---
#4 (4.75MM)	49 - 54	---
#10 (2.0MM)	18 - 21	---
#20 (0.85MM)	8 - 11	---

2. SIBARGE PREPARATION
 THE CLASS 2 BASE, SAND OR CRUSHER FINES BENEATH A.C. PAVEMENT AND CONCRETE IMPAST/STRUCTURE SHALL BE PLACED TO WITHIN 4.00 FEET OF DESIGN SIBARGE PRIOR TO THE PLACEMENT OF A.C. PAVEMENT OR P.C.C. CONCRETE. THE CITY ENGINEER SHALL FIELD VERIFY THE SIBARGE ELEVATIONS IN PLACEMENT OF P.C.C. CONCRETE OR A.C. PAVEMENT SHALL NOT BE ALLOWED UNTIL THE ENGINEER HAS APPROVED THE SIBARGE DESIGN GRADE.

3.0 SAND
 GRANULAR SAND FREE OF CLAY, SILT AND DELICIOUS MATERIAL SHALL BE DELIVERED TO THE SITE AND PLACED AS NOTED ON THE PLANS. SAND SHALL BE COMPACTED TO 90 PERCENT OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT PER ASTM D-1557 UNLESS OTHERWISE NOTED ON THE PLANS. THE MATERIAL PASSING THE NUMBER 200 SIEVE SHALL BE 7 PERCENT. THE SAND SHALL CONFORM TO THE FOLLOWING GRADATION PERCENTAGES:

SIZE	PERCENT PASSING
3/8"	100
NO. 4	98-99
NO. 10	75-80
NO. 16	60-65
NO. 30	45-50
NO. 40	35-40
NO. 60	25-30
NO. 100	15-20
NO. 200	7-10

4.0 CRUSHER FINES
 CRUSHER FINES SHALL BE ALLOWED TO BE UTILIZED IN LEU OF SAND IF APPROVED BY THE CITY ENGINEER.
 CRUSHER FINES SHALL CONSIST OF DECOMPOSED GRANITE INDIGENOUS TO THE IMPERIAL VALLEY. CRUSHER FINES UTILIZED FOR THIS PROJECT SHALL CONFORM TO THE FOLLOWING GRADATION REQUIREMENTS:

SIZE	PERCENT PASSING
1" (25.40MM)	100
3/4" (19.00MM)	87-100
#4 (4.75MM)	30-65
#20 (0.85MM)	5-35
#30 (0.750MM)	0-12

P.C.C. CONCRETE VALLEY FOR BUT NOT LIMITED TO CURB AND GUTTER, BARBER CURB, SPANDRILS, CROSS-GUTTER, VALETT GUTTER, RIBBON GUTTERS, RESIDENTIAL AND COMMERCIAL DRAWINGS, SIDEWALKS AND ALL OTHER CONCRETE IMPAST/STRUCTURE SHALL CONTAIN A MINIMUM OF 8 SACKS OF CEMENT PER CUBIC YARD. A CONCRETE MIX DESIGN IS TO BE SUBMITTED TO THE ENGINEER WITHIN FIVE (5) DAYS AFTER THE ISSUANCE OF THE NOTICE TO PROCEED. NEW FORMWORK SHALL BE UTILIZED IN THE VERIFICATION OF THE CONCRETE MIX DESIGN. THE FORMWORK SHALL BE DESIGNED TO SUPPORT THE LOAD OF THE FORMWORK FOR LINE AND GRADE PRIOR TO THE PLACEMENT OF CONCRETE. CONCRETE CURB OR SPANDRILS SHALL BE ALLOWED FOR CURB AND GUTTER AND RIBBON GUTTERS DESIGNED AT A SLOPE OF 1:10 UNLESS OTHERWISE NOTED ON THE PLANS. EXPOSED SURFACES OF CONCRETE SHALL RECEIVE A DOUBLE TROWEL FINISH. RIBBON GUTTERS SHALL BE PLACED EVERY 8 LINEAL FEET FOR RIBBON GUTTER, CROSS GUTTER AND JOINTS SHALL BE PLACED EVERY 64 FEET ALONG CURB AND GUTTER, BARBER CURB, VALETT GUTTER AND SPANDRILS UNLESS OTHERWISE ILLUSTRATED ON THE STANDARD PLANS. INSTALLATION OF CONCRETE SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR CONCRETE. THE CONTRACTOR SHALL SUPPLY A FINE CALIBER SAMPLE OF THE CLASS 2 BASE TO THE MATERIAL TESTING LABORATORY WITHIN FOUR (4) DAYS OF THE NOTICE TO PROCEED. THE MATERIAL SHALL BE DELIVERED TO THE TESTING LABORATORY TO DETERMINE THE MAXIMUM DENSITY, GRADATION, R-VALUE, SAND EQUIVALENT TO BASE SHALL BE DETERMINED AND THE TEST RESULTS FORWARDED TO THE CITY ENGINEER FOR APPROVAL. UNLESS OTHERWISE NOTED ON THE PLANS, THE MATERIAL SHALL BE CHECKED AND APPROVED BY THE CITY ENGINEER.
 THE CONTRACTOR SHALL SUPPLY A FINE CALIBER SAMPLE OF THE CLASS 2 BASE TO THE MATERIAL TESTING LABORATORY WITHIN FOUR (4) DAYS OF THE NOTICE TO PROCEED. THE MATERIAL SHALL BE DELIVERED TO THE TESTING LABORATORY TO DETERMINE THE MAXIMUM DENSITY, GRADATION, R-VALUE, SAND EQUIVALENT TO BASE SHALL BE DETERMINED AND THE TEST RESULTS FORWARDED TO THE CITY ENGINEER FOR APPROVAL. UNLESS OTHERWISE NOTED ON THE PLANS, THE MATERIAL SHALL BE CHECKED AND APPROVED BY THE CITY ENGINEER.

CALL BEFORE UNDERGROUND SERVICE ALERT
 CALL: TOLL FREE 811
YOU DIG TWO WORKING DAYS BEFORE YOU DIG

7.0 BRIDGEMOUNT PAVEMENT

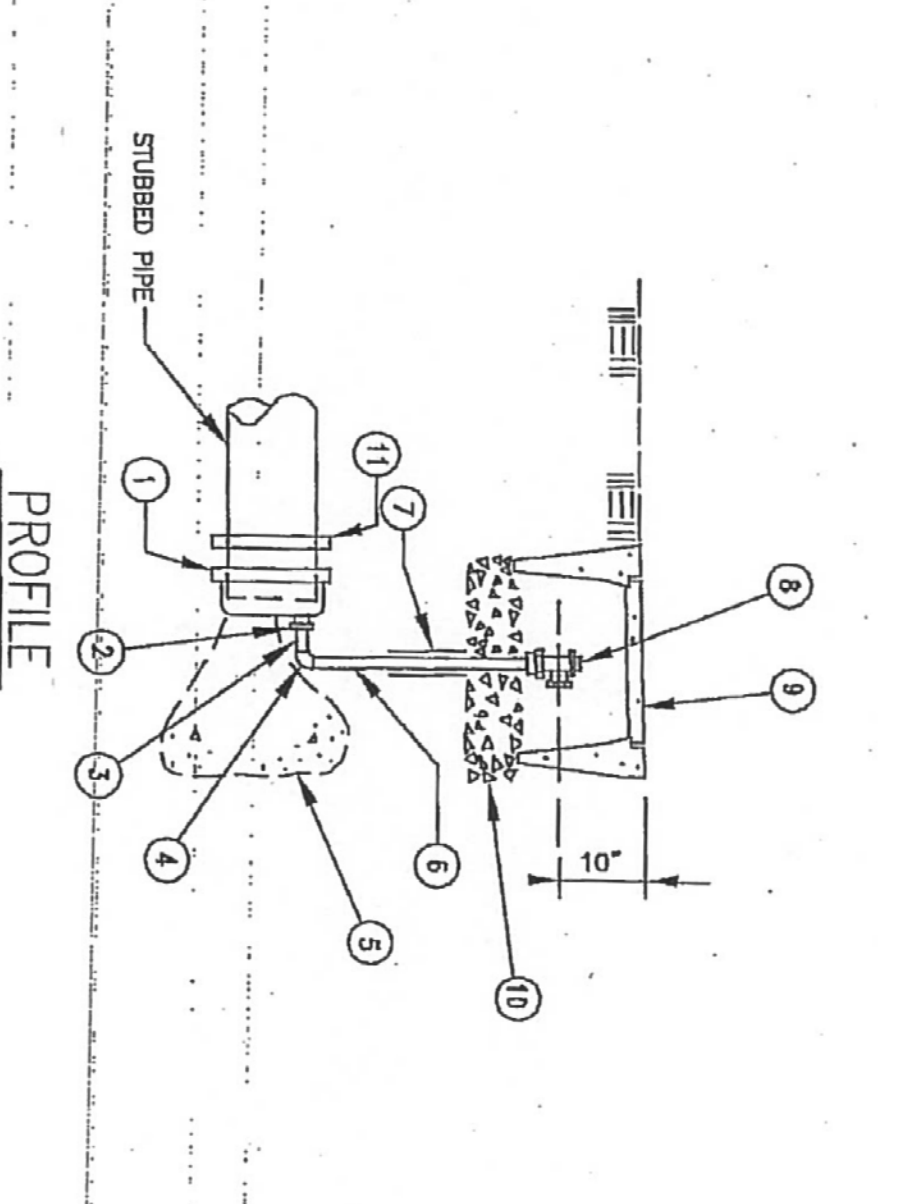
THE BRIDGEMOUNT ASPHALT CONCRETE SHALL CONSIST OF MATERIAL AGGREGATE UNIFORMITY MIXED WITH BITUMENUS ASPHALT CONCRETE (ASPHALT CEMENT) GRADE 90.
 THE ASPHALT CONCRETE SHALL CONFORM WITH THE FOLLOWING REFERNCES:

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3/4" (19/100MM)	90 - 100	---
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#20 (0.85MM)	8 - 11	---

ASPHALT BINDER SHALL BE IN ACCORDANCE WITH THE APPROVED A.C. MIX DESIGN.
 THE ASPHALT CONCRETE SHALL BE TYPE "X" OR "B" AS SET FORTH IN THE STATE OF CALIFORNIA. OTHERWISE, THE CONTRACTOR SHALL SUBMIT A PROPOSED MIX DESIGN TO THE CITY ENGINEER FOR APPROVAL. OTHERWISE, THE CONTRACTOR SHALL SUBMIT A PROPOSED MIX DESIGN TO THE CITY ENGINEER FOR APPROVAL. OTHERWISE, THE CONTRACTOR SHALL SUBMIT A PROPOSED MIX DESIGN TO THE CITY ENGINEER FOR APPROVAL.

ROLLING SHALL CONTINUE UNTIL THE ROLLER MARKS ARE ELIMINATED. THE SURFACE IS OF UNIFORM TEXTURE AND FREE TO GRADE AND CROSS SECTION AND THE REQUIRED FRICTION DENSITY IS OBTAINED. THE ROLLER SHALL BE ACCESSIBLE TO THE ROLLER. THE WHEELS SHALL BE KEPT PROPERLY MAINTAINED. THE ROLLER SHALL BE KEPT PROPERLY MAINTAINED. THE ROLLER SHALL BE KEPT PROPERLY MAINTAINED.

ALL WATER VALVE BOXES AND LIDS, GAS VALVE BOXES AND LIDS, AND OTHER SIMILAR ITEMS SHALL BE INSTALLED AND COVERED WITHIN THE TIME FRAME SPECIFIED IN THE PLANS. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.



CONSTRUCTION NOTES

1. SET TOP OF METERS BOX FLUSH WITH SIDEWALK
2. SPACES OF COPPER TUBING SHALL NOT BE
3. ALL STEEL COILS REQUIRED
4. METERS BOX TO BE PAINTED OSHA SAFETY YELLOW - 2 COATS
5. INSTANT THRUST BLOCK PER TEMPORARY
6. IF BENDS ARE REQUIRED IN COPPER USE
7. DO NOT PLACE CONCRETE ON COPPER OR PIPE
8. 1" POLY-SILENE - 6 MIL-BLUE
9. 1" METAL STOP, ANGLE-COMPRESSION OR FLARE
10. 6" BASE OF 3/8" ROD
11. JOINT RESTRAINT DEVICE

APPROVED BY PUBLIC WORKS DIRECTOR
 CITY OF WESTMORLAND
 DATE: _____
 BY: RAIMIRO BARRALES

ENGINEER OF RECORD
 PLANS PREPARED UNDER THE SUPERVISION OF
 DATE: _____
 BY: ROBERTO C. MARTINEZ
 R.C.E. NO.: 74475

WATER INSTALLATION

1.1 PIPE INSTALLATION
 ALL SECTION COVERS FURNISHING ALL LABOR, SUPERVISION, MATERIALS AND EQUIPMENT AND PERFORMING ALL OPERATIONS NECESSARY TO FINISH AND INSTALL THE PIPING, FITTINGS, AND VALVES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

ALL PIPE SHALL BE SUITABLE FOR USE AS PRESSURE CONDUIT. PROVISIONS MUST BE MADE FOR AN INTERNAL WALL SECTION WITH A F-477. THE BELT SECTION SHALL BE DESIGNED TO BE AT LEAST AS STRONG AS THE MAIN PIPE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

1.2 PIPING
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1.3 FITTINGS FOR THE WATER MAINS SHALL BE COMPOSED OF DUCTILE IRON. THE DUCTILE IRON FITTINGS SHALL CONFORM TO ASTM A536. THE FITTINGS SHALL BE COMPOSED OF DUCTILE IRON. THE DUCTILE IRON FITTINGS SHALL CONFORM TO ASTM A536. THE FITTINGS SHALL BE COMPOSED OF DUCTILE IRON.

1.4 DUCTILE IRON PIPE
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1.5 HARDWARE
 ALL NUTS, BOLTS AND MISCELLANEOUS HARDWARE SHALL BE COMPOSED OF 316 STAINLESS STEEL UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

1.6 TRANSITION COUPLINGS
 THE TRANSITION COUPLINGS SHALL BE INSTALLED AS REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

1.7 RESTROOM FACILITIES
 THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL TO NOTED AND COORDINATE WITH THE CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

REVISION

NO.	REVISION	DATE	BY

GENERAL CONDITIONS

7. TRAFFIC CONTROL
 THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN, PREPARED BY A CALIFORNIA LICENSED ENGINEER TO THE CITY OF WESTMORLAND FOR REVIEW AND APPROVAL PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN ALL NECESSARY TRAFFIC CONTROL TO NOTED AND COORDINATE WITH THE CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

8. SIGNS
 THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL TO NOTED AND COORDINATE WITH THE CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

9. UTILITIES
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12. RESTROOM FACILITIES
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13. ACCESS TO PRIVATE PROPERTY
 THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL TO NOTED AND COORDINATE WITH THE CONSTRUCTION AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

14. CLEAN-UP OF EXISTING STREETS
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES.

ENGINEERING & SURVEYING, INC.
 Phone (760) 363-3652
 341 WEST CROWN CT. STE 300
 IMPERIAL, CA 92251

DWR-SCRP - Water Distribution Piping Replacement
CONSTRUCTION DETAILS AND SPECIFICATIONS
 SHEET 7 OF 7
 DATE: 12/12/2024
 BY: R.W.