MORGAN CITY CORPORATION

PUBLIC WORKS STANDARD DRAWINGS

SUBMITTED & RECOMMENDED

Matthew E. Hartvigsen 08-24-2023

MATTHEW HARTVIGSEN, P.E. — DATE
CONSULTING CITY ENGINEER

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

MORGAN CITY
EST. 1868
BUILDING ON PIONEER DREAMS

APPROVAL

DocuSigned by:
Ty Bailey
E5460E71E4D740A...
8/28/2023 | 11:34 AM PDT

TY BAILEY — DATE
CITY MANAGER

SPECIAL STANDARD NOTES:

A. THE CITY ADOPTS THE FOLLOWING AS STANDARDS FOR ALL ISSUES RELATED TO THE DESIGN, CONSTRUCTION, AND MAINTENANCE OF IMPROVEMENTS NOT SPECIFICALLY COVERED BY THIS MANUAL:
   1. APWA: MANUAL OF STANDARD SPECIFICATIONS (CURRENT EDITION) AND ALL ADOPTED AMENDMENTS
   2. APWA: MANUAL OF STANDARD PLANS (CURRENT EDITION)

B. AS TO ANY PARTICULAR ISSUE, IF A CONFLICT EXISTS BETWEEN ANY OF THE FOREGOING STANDARDS, THE CITY STANDARDS TAKE PRECEDENCE.

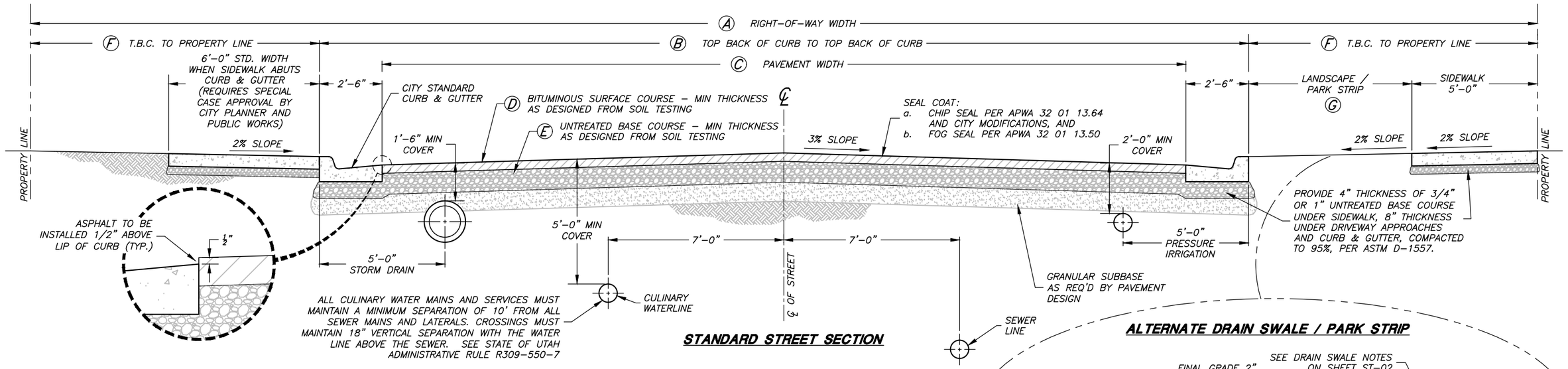
C. AT THE CITY'S SOLE DISCRETION, ALTERNATE METHODS OF CONSTRUCTION OR DEVIATIONS FROM THESE STANDARDS MAY BE REQUIRED OR APPROVED BY THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR (OR THEIR DESIGNEE), WHEN SUCH ARE NECESSARY TO MEET THE BEST INTERESTS OF THE CITY.

JUNE 2023

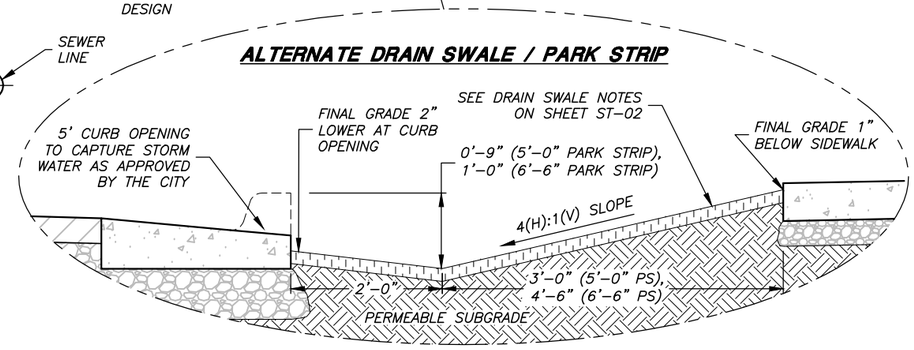
JONES & ASSOCIATES
CONSULTING ENGINEERS

INDEX OF DRAWINGS (38 Sheets)

THE MORGAN CITY POWER ELECTRICAL STANDARDS AND POLICY ARE INCLUDED HEREIN BY REFERENCE.



STANDARD STREET SECTION



GENERAL STREET DESIGNATIONS	R.O.W. WIDTH Ⓐ	T.B.C. TO T.B.C. Ⓑ	ASPHALT WIDTH Ⓒ	HMA Ⓓ	UNTREATED BASE COURSE Ⓔ	T.B.C. TO PROPERTY LINE Ⓕ	PARKSTRIP Ⓖ
LOCAL-1 (SEE NOTE 4)	**60'-0"**	37'-0"	32'-0"	3" MIN.	8" MIN.	11'-6"	6'-6"
LOCAL-2 (SEE NOTES 5 & 6)	**60'-0"**	40'-0"	35'-0"	3" MIN.	8" MIN.	10'-0"	5'-0"
COLLECTOR	**66'-0"**	46'-0"	41'-0"	4" MIN.	10" MIN.	10'-0"	5'-0"
MINOR ARTERIAL	**84'-0"**	64'-0"	59'-0"	NOTE 2	NOTE 2	10'-0"	5'-0"
ARTERIAL	**100'-0"**	80'-0"	75'-0"	NOTE 2	NOTE 2	10'-0"	5'-0"

STANDARD STREET SECTION NOTES:

A1. THIS STREET SECTION STANDARD APPLIES TO ALL ROADWAYS REGARDLESS OF WHETHER THEY ARE PUBLIC OR PRIVATELY OWNED.

A2. NEW CONSTRUCTION IN EXISTING STREETS SHALL ALLOW A MINIMUM HORIZONTAL SEPARATION OF 3 FT BETWEEN EXISTING AND NEW UTILITIES.

A3. ROADWAY PAVEMENT SHALL EXTEND TO THE DRIVEWAY PAVEMENT OR SIDEWALK AT DRIVEWAYS WHEN NO CURB & GUTTER IS PRESENT. THIS IS TO HELP PREVENT DAMAGE TO THE EDGE OF THE ROADWAY PAVEMENT.

STREET DESIGNATION NOTES:

1. TOP BACK OF CURB ON BOTH SIDES OF ROAD TO BE SAME ELEVATIONS.
2. THE CITY ENGINEER SHALL VERIFY PAVEMENT DESIGN PRESCRIBED BY SOILS REPORT. (SEE SPECIFICATIONS)
3. COMMERCIAL AND INDUSTRIAL STREET SECTIONS ARE DETERMINED BASED ON A TRAFFIC ANALYSIS OF EXISTING AND PROJECTED USE.
4. THE LOCAL-1 STREET DESIGNATION IS INTENDED FOR THE R-1 ZONES WHERE THE INCONVENIENCE CAUSED BY THE LACK OF TWO MOVING LANES IS REMARKABLY LOW. WITH APPROVAL FROM THE CITY PLANNER AND CITY ENGINEER, THIS STREET DESIGNATION MAY ALSO BE USED IN OTHER AREAS WHERE ON-STREET PARKING IS NOT PERMITTED IN ORDER TO ALLOW FOR TWO MOVING TRAFFIC LANES.
5. THE LOCAL-2 STREET DESIGNATION IS INTENDED FOR USE IN THE RM ZONES TO ACCOMMODATE HIGHER TRAFFIC DEMANDS FROM MULTI-FAMILY DEVELOPMENT.
6. THE LOCAL-2 STREET DESIGNATION SHALL BE USED FOR ROADWAYS THAT QUALIFY TO BE WIDER (AS PER UTAH CODE 10-9A-508(5)(b). THE CITY CAN REQUIRE THE INSTALLATION OF PAVEMENT IN EXCESS OF 32 FEET FOR RESIDENTIAL ROADS THAT MEET THE FOLLOWING CONDITIONS:
   - TO ADDRESS SPECIFIC TRAFFIC FLOW CONSTRAINTS AT AN INTERSECTION, MID-BLOCK CROSSINGS, OR OTHER AREAS;
   - TO ADDRESS AN APPLICABLE GENERAL OR MASTER PLAN IMPROVEMENT, INCLUDING TRANSPORTATION, BICYCLE LANES, TRAILS, OR OTHER SIMILAR IMPROVEMENTS THAT ARE NOT INCLUDED WITHIN AN IMPACT FEE AREA;
   - TO ADDRESS TRAFFIC FLOW CONSTRAINTS FOR SERVICE TO OR ABUTTING HIGHER DENSITY DEVELOPMENTS OR USES THAT GENERATE HIGHER TRAFFIC VOLUMES, INCLUDING COMMUNITY CENTERS, SCHOOLS, AND OTHER SIMILAR USES;
   - AS NEEDED FOR THE INSTALLATION OR LOCATION OF A UTILITY WHICH IS MAINTAINED BY THE MUNICIPALITY AND IS CONSIDERED A TRANSMISSION LINE OR REQUIRES ADDITIONAL ROADWAY WIDTH;
   - FOR THIRD-PARTY UTILITY LINES THAT HAVE AN EASEMENT PREVENTING THE INSTALLATION OF UTILITIES MAINTAINED BY THE MUNICIPALITY WITHIN THE ROADWAY;
   - FOR UTILITIES OVER 12 FEET IN DEPTH;
   - FOR ROADWAYS WITH A DESIGN SPEED THAT EXCEEDS 25 MILES PER HOUR;
   - AS NEEDED FOR FLOOD AND STORMWATER ROUTING;
   - AS NEEDED TO MEET FIRE CODE REQUIREMENTS FOR PARKING AND HYDRANTS;
   - OR AS NEEDED TO ACCOMMODATE STREET PARKING.

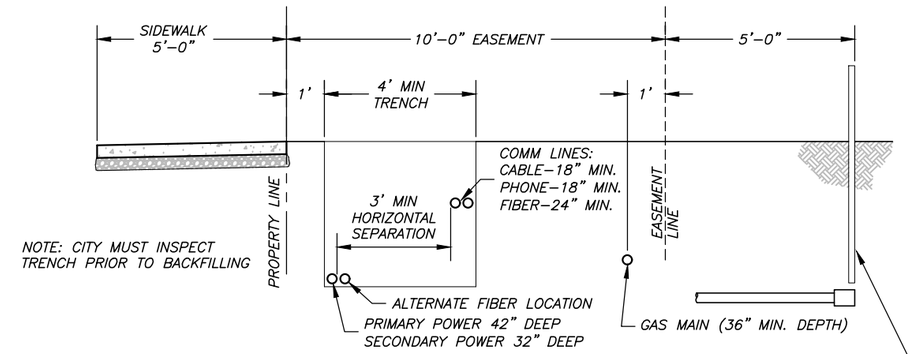
TYPICAL CW, IRR, OR SEWER UTILITY SERVICE FROM STREET NOTES:

B1. EXTEND SANITARY SEWER AND CULINARY WATER LATERALS 15 FT BEYOND PROPERTY LINE.

B2. EXTEND PRESSURE IRRIGATION LATERALS TO 1 FT BEYOND PROPERTY LINE.

B3. MAX. SANITARY SEWER LATERAL DEPTH TO BE 10' BELOW SIDEWALK ELEVATION.

B4. SS LATERAL TO BE LOCATED 15 FT FROM DOWN STREAM PROPERTY LINE, AND CW TO BE LOCATED 5 FT FROM PROPERTY LINE.



UTILITY EASEMENT SECTION

FOR EASEMENTS BEHIND SIDEWALK

UTILITY COVER MINIMUM REQUIREMENTS TO TOP OF PIPE OR CONDUIT		
UTILITY	INCHES	FEET
CULINARY WATER	60 IN	5'-0"
SANITARY SEWER	48 IN	4'-0"
SECONDARY WATER	24 IN	2'-0"
STORM DRAIN	18 IN	1'-6"
GAS SERVICES	18 IN	1'-6"
GAS MAINS	36 IN	3'-0"
PRIMARY POWER	42 IN	3'-6"
SECONDARY POWER	32 IN	2'-8"
PHONE	18 IN	1'-6"
CABLE	18 IN	1'-6"

UTILITY COVER REQUIREMENT NOTE:

A. DEPTHS ARE TO PAVEMENT ABOVE EXCEPT WHERE UTILITIES ARE LOCATED BEHIND CURB. DEPTH TO UTILITIES BEHIND CURB SHALL BE MEASURED FROM THE TOP BACK OF CURB.

B. BORING FOR DRY UTILITIES MAX. DEPTH OF 30" OR AS OTHERWISE APPROVED BY THE CITY

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CITY ENGINEER

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SCALE: N.T.S.

DESIGNED _____
DRAWN _____
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MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
TYPICAL STREET SECTION DETAILS

SHEET: ST-01
OF 1 SHEETS
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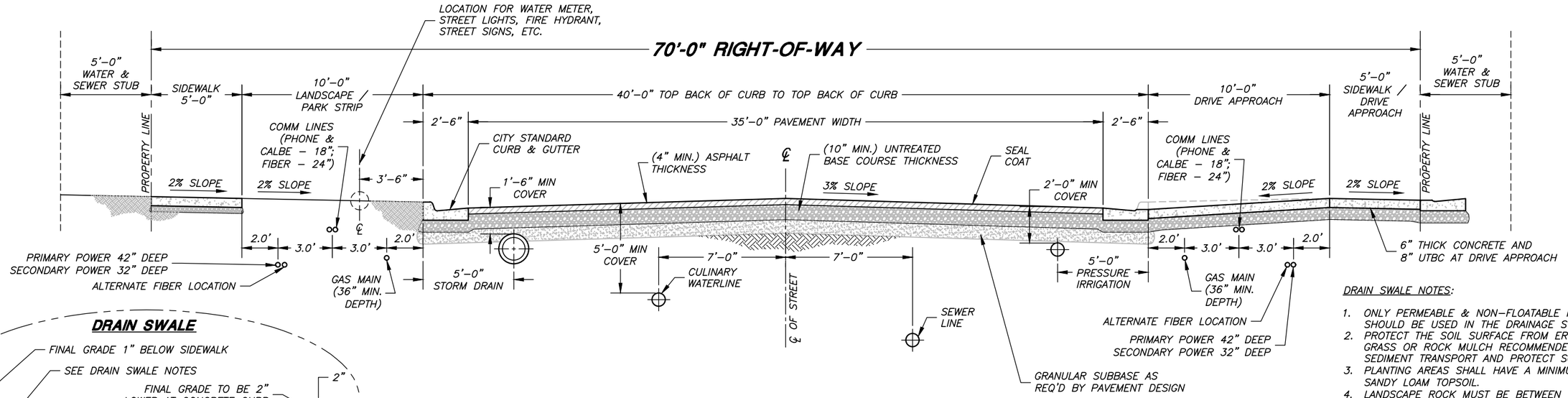
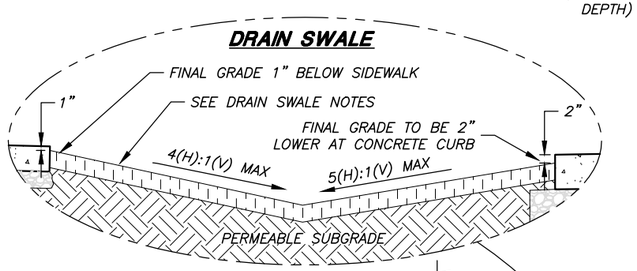
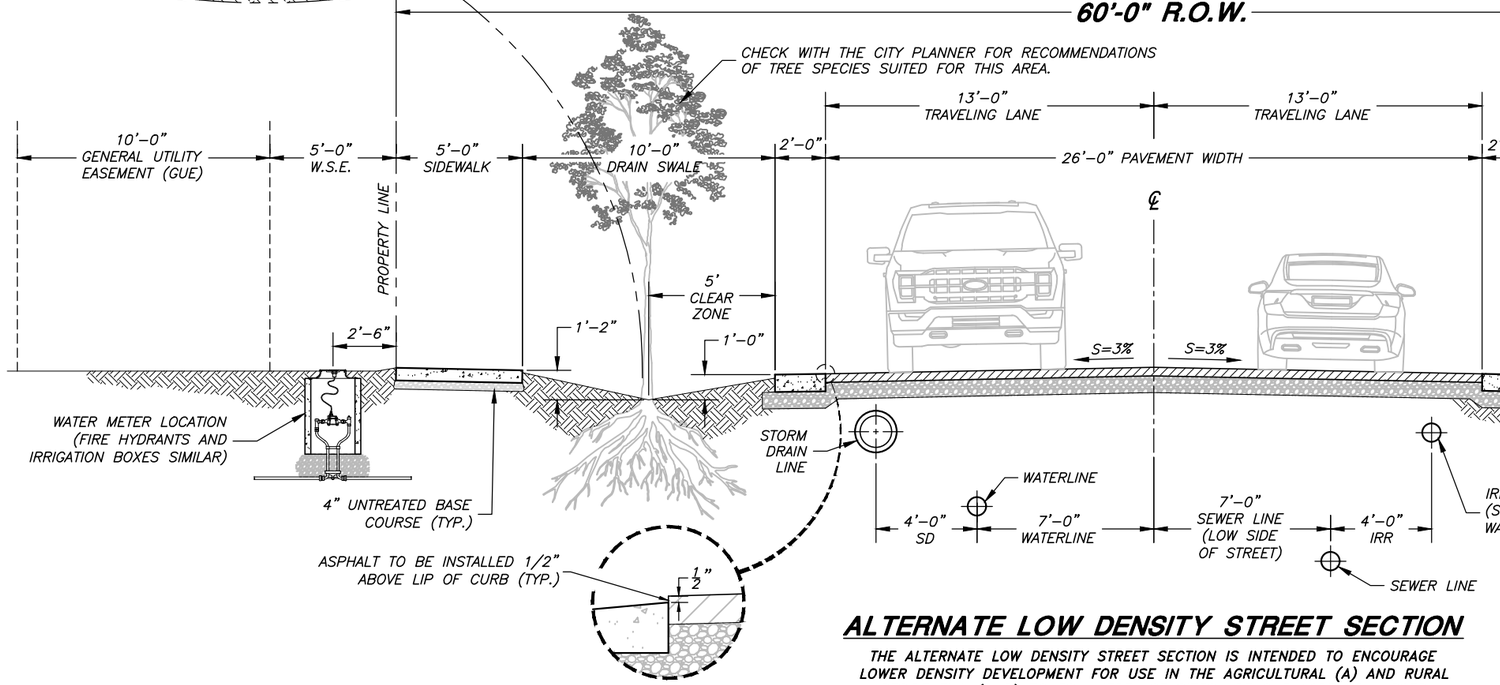


TYPICAL INDUSTRIAL ZONE STREET SECTION





ALTERNATE LOW DENSITY STREET SECTION

THE ALTERNATE LOW DENSITY STREET SECTION IS INTENDED TO ENCOURAGE LOWER DENSITY DEVELOPMENT FOR USE IN THE AGRICULTURAL (A) AND RURAL RESIDENTIAL (R-R) ZONES WHERE LOT SIZES ARE ONE ACRE OR LARGER.

DRAIN SWALE NOTES:

1. ONLY PERMEABLE & NON-FLOATABLE MATERIALS SHOULD BE USED IN THE DRAINAGE SWALE.
2. PROTECT THE SOIL SURFACE FROM EROSION. TURF GRASS OR ROCK MULCH RECOMMENDED TO REDUCE SEDIMENT TRANSPORT AND PROTECT SOIL.
3. PLANTING AREAS SHALL HAVE A MINIMUM OF 8" OF SANDY LOAM TOPSOIL.
4. LANDSCAPE ROCK MUST BE BETWEEN 1.5" & 4" IN SIZE AND PLACED OVER 15-20 YEAR WEED BARRIER FABRIC. LANDSCAPE ROCK SHOULD BE 3" TO 4" IN DEPTH.
5. NON-TURF GRASS AREAS SHALL HAVE AT LEAST 50% PLANTING COVERAGE AT MATURITY, NOT INCLUDING TREE CANOPY. MATURE HEIGHTS OF PLANTS SHALL BE LESS THAN 36" TALL. NATIVE AND LOCALLY ADAPTED PLANTS ARE ENCOURAGED.
6. DRAIN SWALES ARE NOT RECOMMENDED ON ROADS WITH GRADES OVER 6% THAT MAY RESULT IN HIGH WATER CHANNEL VELOCITIES.
7. NO VEHICULAR OBSTRUCTIONS SUCH AS LANDSCAPE BOULDERS OR TREES ARE TO BE PLACED IN THE CLEAR ZONE. ORNAMENTAL GRASSES AND SHRUBS ARE PERMITTED. MAIL CBU (CLUSTER-BOX UNITS) ARE ALSO PERMITTED WITH AN APPROPRIATE PROTECTION CURB. SEE DETAIL ON SHEET ST-11.
8. ROADSIDE TREE CANOPY TO BE TRIMMED PER CITY ORDINANCE FOR BETTER CLEARANCE AND VISIBILITY.
9. HOME OWNER OR HOA IS RESPONSIBLE FOR ALL MAINTENANCE OF THE DRAIN SWALE/PARK STRIP.

ALTERNATE LOW DENSITY STREET SECTION GENERAL NOTES:

1. THIS ALTERNATE STREET SECTION REQUIRES A RECOMMENDATION FROM THE CITY PLANNER AND CITY ENGINEER WITH APPROVAL FROM THE PLANNING COMMISSION.
2. STREET LIGHTS, FIRE HYDRANTS, AND WATER METERS TO BE LOCATED WITHIN THE 5' WATER SERVICE EASEMENT (W.S.E.).
3. ROADSIDE DRAINAGE SWALES SHALL NOT BE FILLED IN AND SHALL BE MAINTAINED BY THE PROPERTY OWNER.
4. NO HARD SURFACING MAY BE PLACED IN THE LANDSCAPE SWALE OTHER THAN AT APPROVED DRIVE APPROACHES.
5. REFER TO SHEET ST-01, GENERAL STREET DESIGNATIONS, FOR STANDARD PAVEMENT SECTION, BURIED UTILITY LINE DEPTHS, ETC.
6. MAIL CBU (CLUSTER-BOX UNIT) PLACEMENT, SEE DETAIL ON SHEET ST-11.
7. THE SURFACE OF THE LANDSCAPE SWALE SHALL BE LEFT TWO INCHES BELOW CONCRETE TO HELP RETAIN STORM WATER RUNOFF.

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
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MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
INDUSTRIAL ZONE AND ALTERNATE STREET SECTION DETAILS

SHEET: **ST-02** OF 1 SHEETS
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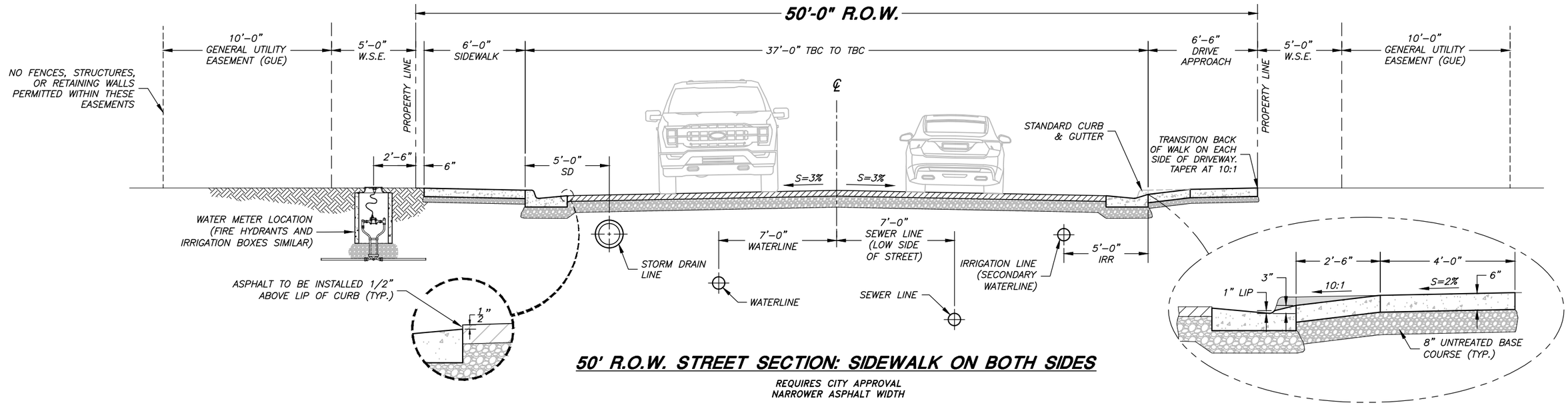
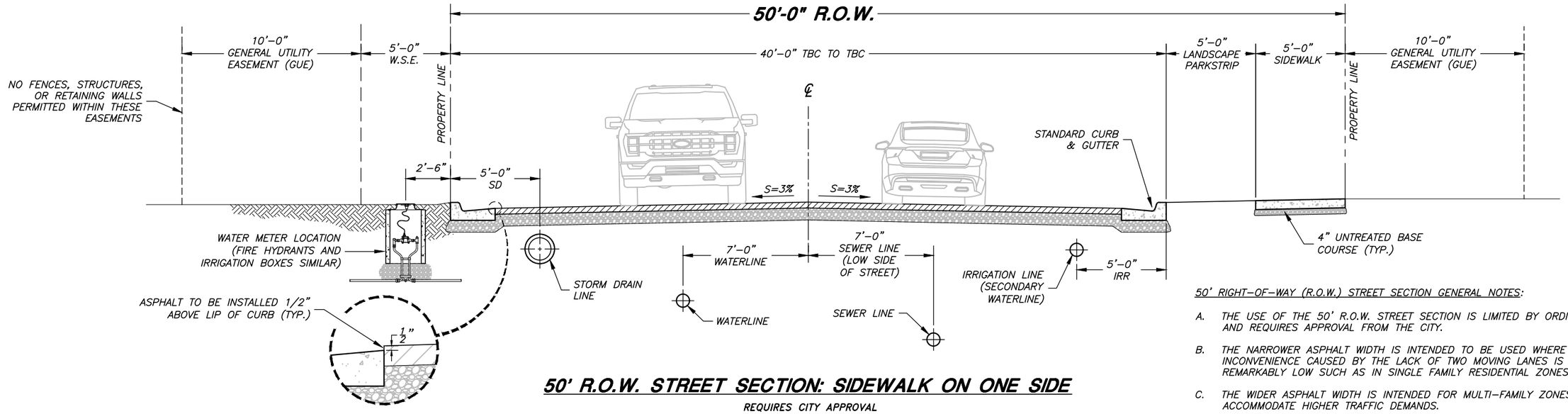


50' R.O.W. STREET SECTION: SIDEWALK ON BOTH SIDES

REQUIRES CITY APPROVAL
NARROWER ASPHALT WIDTH



50' R.O.W. STREET SECTION: SIDEWALK ON ONE SIDE

REQUIRES CITY APPROVAL
WIDER ASPHALT WIDTH

<u>50' RIGHT-OF-WAY (R.O.W.) STREET SECTION GENERAL NOTES</u>:

A. THE USE OF THE 50' R.O.W. STREET SECTION IS LIMITED BY ORDINANCE AND REQUIRES APPROVAL FROM THE CITY.

B. THE NARROWER ASPHALT WIDTH IS INTENDED TO BE USED WHERE THE INCONVENIENCE CAUSED BY THE LACK OF TWO MOVING LANES IS REMARKABLY LOW SUCH AS IN SINGLE FAMILY RESIDENTIAL ZONES.

C. THE WIDER ASPHALT WIDTH IS INTENDED FOR MULTI-FAMILY ZONES TO ACCOMMODATE HIGHER TRAFFIC DEMANDS.

D. STREET LIGHTS, FIRE HYDRANTS, AND WATER METERS TO BE LOCATED WITHIN THE 5' WATER SERVICE EASEMENT (W.S.E.) OR BEHIND CURB.

E. REFER TO SHEET ST-01, GENERAL STREET DESIGNATIONS, FOR STANDARD PAVEMENT SECTION, BURIED UTILITY LINE DEPTHS, ETC.

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MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

50' R.O.W. STREET SECTION DETAILS

SHEET: ST-03
OF 1 SHEETS
0

GENERAL ORIENTATION

60' R.O.W.
32' ASPHALT
10' PUE
GAS
CABLE
PHONE
POWER
PROPERTY LINE
PRESSURE IRRIGATION
SANITARY SEWER LINE
℄ OF STREET
CULINARY WATER LINE
STORM DRAIN
5'-0"
7'-0"
7'-0"
5'-0"
IRR
S
W
SD

STANDARD SINGLE OR DOUBLE INLET CATCH BASIN

20' RADIUS FOR RESIDENTIAL; 30' RADIUS FOR STATE ROADS OR AS APPROVED BY UDOT

STORM DRAIN COMBO BOX (TYP.)

THE MINIMUM ACCESS DISTANCE (DRIVE APPROACH TO THE NEAREST CONNECTING STREET RIGHT-OF-WAY) SHALL BE: 20' MIN TO DRIVEWAY (RESIDENTIAL), 40' MIN TO DRIVEWAY (OTHER)

DRIVEWAY SETBACK IS 3' MINIMUM IN RESIDENTIAL ZONES. HOWEVER, DRIVE APPROACHES MUST BE SET BACK 10 FEET FROM THE EXTENSION OF THE PROPERTY LINE TO CREATE SPACE FOR WATER METERS, FIRE HYDRANTS, STREET LIGHTS, AND OTHER EQUIPMENT LOCATED IN THE PARK-STRIP.

**WHEN A DEVELOPER/DEVELOPMENT CONSTRUCTS A NEW STREET ALONG THE FRONTAGE (FRONT, SIDE, REAR) OF AN EXISTING HOME, THE DEVELOPMENT IS ALSO REQUIRED TO COMPLETE THE R.O.W. IMPROVEMENTS (NEW CURB & GUTTER, SIDEWALK, DRIVEWAY APPROACH, ETC.) AND THE LANDSCAPING OF THE NEW PARKSTRIP AT THE EXISTING HOME.

LOCATE SEWER LATERALS IN THE CENTER OF THE LOT OR 15' FROM EDGE OF PROPERTY LINE ON LOW END SIDE OF LOT

10.0' MIN. SEPARATION

PAIR WATER SERVICES WHERE POSSIBLE. LOCATE LATERALS 5' FROM EDGE OF PROPERTY LINE (TYP).

PAIR IRRIGATION SERVICES WHERE POSSIBLE. LOCATE BOXES 5' FROM EDGE OF PROPERTY LINE (TYP.)

GENERAL LOT LATERAL CONFIGURATION DETAIL

(STANDARD STREET PLAN)

DRIVEWAY APPROACH
WIDTH
WIDTH

UTILITY CONDUIT REQ'D AT ALL CROSSINGS (TYP.)

CLUSTER CW VALVES AS SHOWN

STORM DRAIN MANHOLE W/ CONCRETE COLLAR

GATE VALVE W/ CONCRETE COLLAR

SURVEY MONUMENT

SEWER MANHOLE W/ CONCRETE COLLAR

SECONDARY WATER VALVES

CROSS DRAIN (TYP.)

EXPANSION JOINT (TYP.)

RESIDENTIAL: THERE SHALL BE NO MORE THAN TWO APPROACHES. TOTAL WIDTH MUST BE LESS THAN HALF OF THE LOT FRONTAGE, BUT NO MORE THAN 36'. (TWO APPROACHES MUST BE APPROVED BY THE CITY)

CULINARY WATER METERS (TYP.)

SECONDARY WATER METERS (TYP.)

CONC. CURB & GUTTER EXPANSION JOINTS EVERY 50' & CONTRACTION JOINTS EVERY 10' TYP. (SEE JOINT DETAIL ON SHEET ST-08)

CONCRETE CURB & GUTTER (TYP.)

MAILBOX/CBU (SEE NOTES A-C THIS SHEET)

5'

CONTRACTION JOINT

COLD JOINT

FH VALVE W/ CONCRETE COLLAR

STD. ADA RAMP TYP. ALL CORNERS

FIRE HYDRANT (LOCATE AT CURB PC)

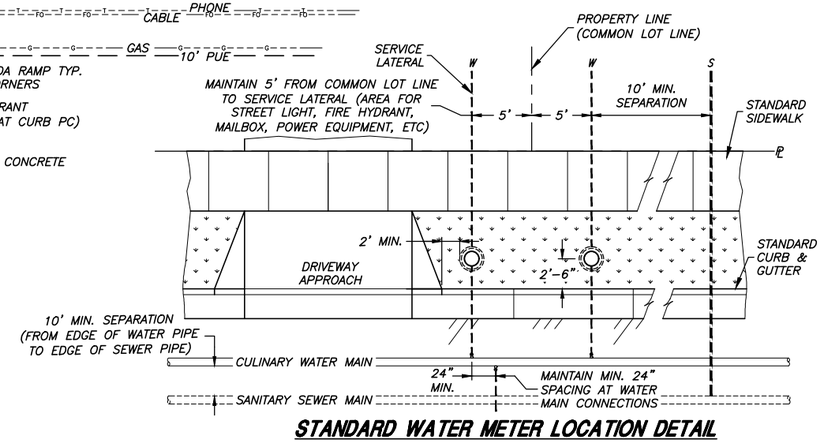
STANDARD CONCRETE SIDEWALK

EXPANSION JOINT

5' SIDEWALK EXPANSION JOINTS EVERY 50' & CONTRACTION JOINTS EVERY 5' TYP. (SEE JOINT DETAIL ON SHEET ST-08)

INTERSECTION DETAIL

STANDARD STREET PLAN



STANDARD WATER METER LOCATION DETAIL

GENERAL NOTES:

1. WATER VALVES ARE REQUIRED ON EACH BRANCH OF THE CULINARY MAIN. VALVES SHALL HAVE A MAXIMUM SPACING OF 1000 FEET.
2. LOCATE IRRIGATION VALVES AS REQUIRED BY THE IRRIGATION UTILITY PROVIDER.
3. SEE DRAWINGS ST-01 AND ST-02 FOR ROADWAY SECTION AND UTILITY EASEMENT DETAILS.
4. SEE DRAWING ST-08 FOR CROSS DRAIN, SIDEWALK, CURB & GUTTER, MONUMENTS, AND CONCRETE COLLAR DETAILS.
5. SEE DRAWING ST-06 FOR DRIVE APPROACH DETAILS.
6. SEE DRAWING ST-07 FOR ADA RAMP DETAILS.
7. SEE DRAWING ST-12 FOR STREET SIGNS.
8. SEE CITY ELECTRICAL STANDARDS FOR STREET LIGHT LOCATION AND DETAILS.

MAILBOX/CBU NOTES:

A. MAILBOXES SHALL NOT BE PLACED IN THE SIDEWALK. NO MAILBOX OR CBU BOX EDGES SHALL EXTEND PAST THE TBC.

B. PRIOR TO INSTALLATION, CONTACT THE LOCAL POSTMASTER FOR MAILBOX/CBU LOCATION APPROVAL.

C. FOLLOW USPS GUIDELINES & POLICIES FOR THE PLACEMENT, INSTALLATION, AND ACCESS REQUIREMENTS FOR ALL MAILBOX AND CBU UNITS.

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PUBLIC WORKS STANDARDS

STREET INTERSECTION AND UTILITY LATERAL CONFIGURATION DETAILS

SHEET: ST-04
OF 1 SHEETS
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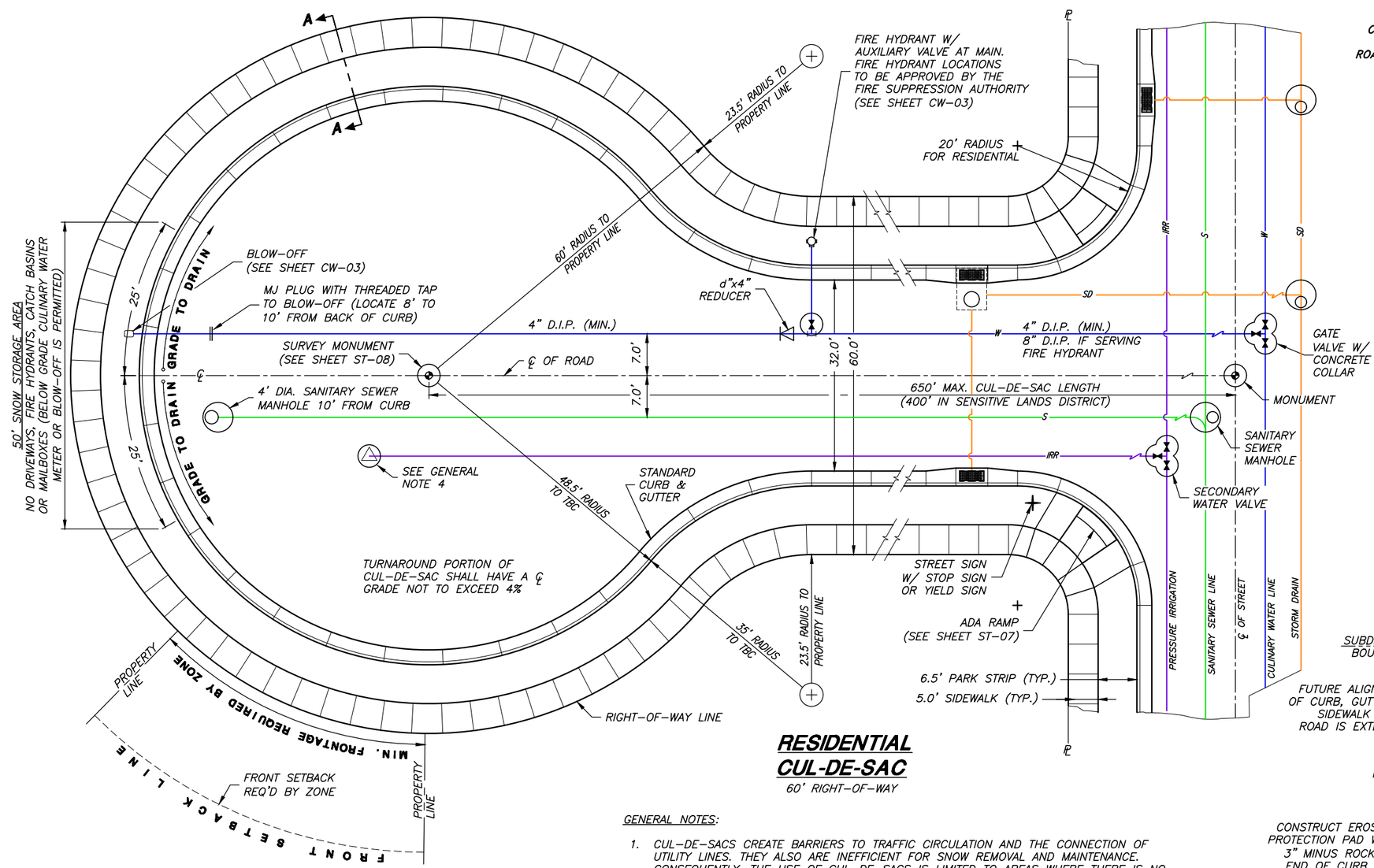
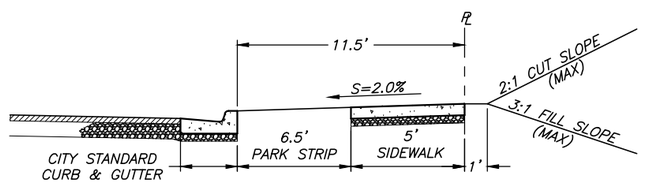


RESIDENTIAL CUL-DE-SAC

60' RIGHT-OF-WAY

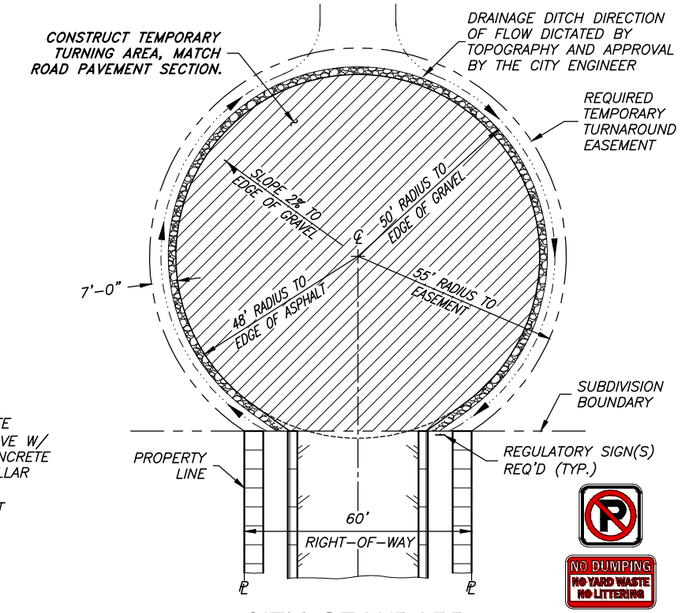


SECTION A-A

REQUIRED GRADING BETWEEN TBC AND PROPERTY LINE

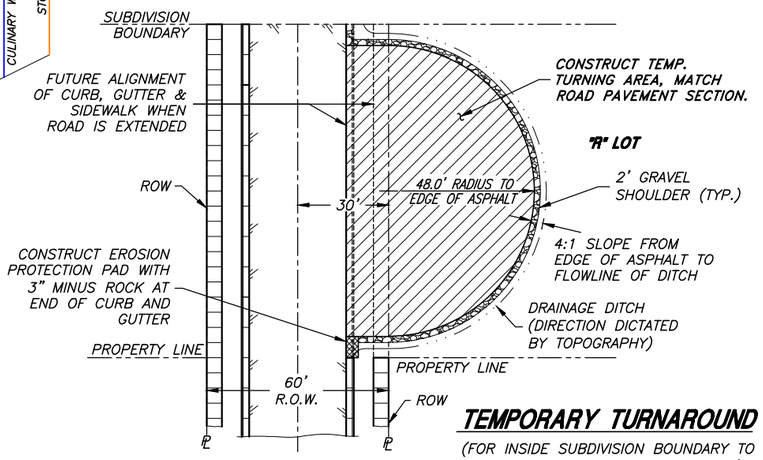
GENERAL NOTES:

1. CUL-DE-SACS CREATE BARRIERS TO TRAFFIC CIRCULATION AND THE CONNECTION OF UTILITY LINES. THEY ALSO ARE INEFFICIENT FOR SNOW REMOVAL AND MAINTENANCE. CONSEQUENTLY, THE USE OF CUL-DE-SACS IS LIMITED TO AREAS WHERE THERE IS NO FEASIBLE WAY TO EXTEND THE ROAD TO THE END OF THE PROPERTY.
2. THE CIRCULAR CUL-DE-SAC LAYOUT ON THIS SHEET IS THE CITY STANDARD DESIGN. OTHER ALTERNATE DESIGNS MAY BE CONSIDERED AS APPROVED BY THE CITY ENGINEER.
3. MODIFIED CUL-DE-SACS (KNUCKLE, EYEBROW, BULB, OR HALF CUL-DE-SACS) ARE NOT PERMITTED.
4. DEVELOPER SHALL PROVIDE AN AIR RELIEF OR BLOW-OFF AS DETERMINED BY THE SECONDARY WATER PROVIDER AND IN ACCORDANCE WITH THEIR STANDARDS AND APPROVED BY THE CITY ENGINEER.
5. NO DRIVEWAYS, FIRE HYDRANTS, OR MAIL BOXES ARE PERMITTED WITHIN THE 50' SNOW STORAGE AREA. THE 50' SNOW STORAGE AREA SHALL BE SHOWN ON THE IMPROVEMENT/CONSTRUCTION PLANS PRIOR TO SUBDIVISION AND/OR CUL-DE-SAC APPROVAL.
6. SIDEWALK CROSS-SLOPE VARIANCE FROM 2% AS APPROVED BY THE CITY ENGINEER
7. THE ASPHALT WIDTH LEADING UP TO A CUL-DE-SAC SHOULD BE WIDENED TO A MINIMUM OF 35 FEET IF IT SERVES MULTIFAMILY DEVELOPMENT.



CITY STANDARD TEMPORARY TURNAROUND

(FOR OUTSIDE OF SUBDIVISION BOUNDARY AND TO BE MAINTAINED BY PROPERTY OR EASEMENT OWNER)



TEMPORARY TURNAROUND

(FOR INSIDE SUBDIVISION BOUNDARY TO BE MAINTAINED BY PROPERTY OWNER)

TEMP. TURNAROUND NOTES:

THE LOT ON WHICH THE TURN AROUND IS CONSTRUCTED SHALL BE RESTRICTED AS FOLLOWS:

A. PLATTED AS AN "R" "RESTRICTED" LOT.
B. THIS LOT CANNOT BE SOLD OR BUILDING PERMITS ISSUED UNTIL THE ROAD IS EXTENDED BEYOND THE SUBDIVISION BOUNDARY COMPLETE WITH CURB, GUTTER & SIDEWALK.
C. THE ADJOINING DEVELOPMENT (THE ONE EXTENDING THE ROADWAY) SHALL PAY TO EXTEND THE CURB & GUTTER, SIDEWALK, AND TIE IN THE ASPHALT WHEN THE ROADWAY IS EXTENDED.

REGISTERED PROFESSIONAL ENGINEER
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08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

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JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
www.jonescivil.com

MORGAN CITY EST. 1868

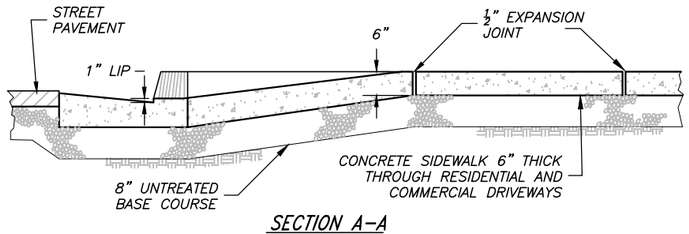
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

CUL-DE-SAC AND TEMPORARY TURNAROUND DETAILS

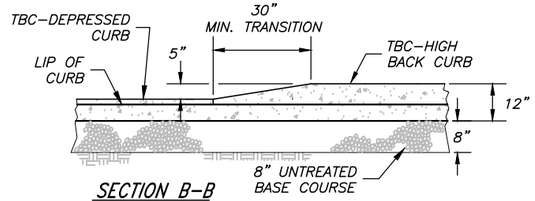
SHEET: ST-05
OF 1 SHEETS
0

DRIVEWAY APPROACH NOTES:

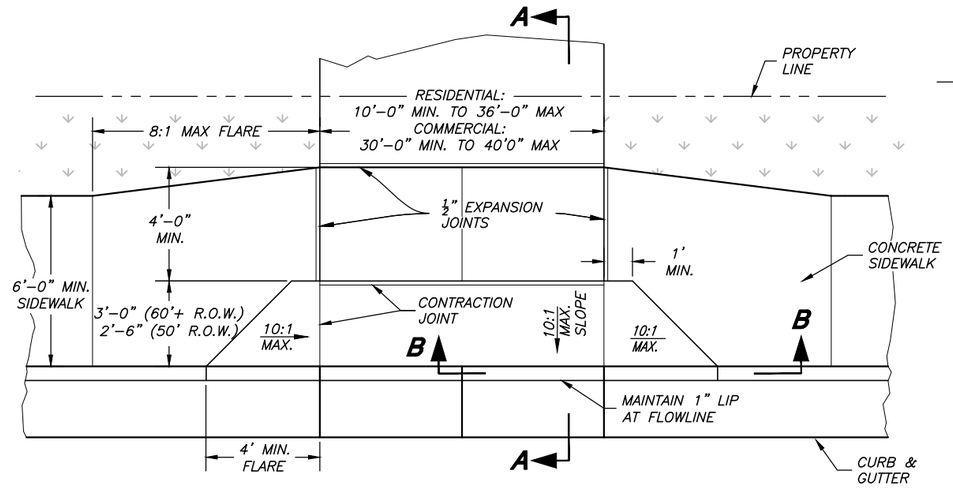
1. IN AREAS WITHOUT CURB, GUTTER OR SIDEWALK THE DEVELOPER / PROPERTY OWNER SHALL BE RESPONSIBLE TO DESIGN THE FUTURE CURB WITH ELEVATIONS AND MATCH THE PROPOSED DRIVEWAY TO IT AS APPROVED BY THE CITY ENGINEER AND PUBLIC WORKS DIRECTOR.
2. IN AREAS WITHOUT CURB, GUTTER OR SIDEWALK THE DEVELOPER / PROPERTY OWNER SHALL EXTEND THE ROADWAY PAVING AT THE FULL WIDTH OF THE PROPOSED DRIVEWAY TO THE PROPERTY LINE TO HELP PRESERVE THE EDGE OF ASPHALT AT THE ROAD.
3. IN NEW SUBDIVISIONS WHERE FUTURE DRIVEWAY LOCATIONS ARE UNKNOWN, THE DRIVEWAY APPROACH SHALL BE MADE BY SAW CUTTING THE BACK OF THE EXISTING CURB TO THE REQUIRED DRIVEWAY WIDTH. ALL SAW CUTTING SHALL BE ACCOMPLISHED BY A CITY APPROVED LICENSED CONTRACTOR.
4. SCORE SIDEWALK 1/4 OF SIDEWALK THICKNESS AT EACH 5'–0" OR 6'–0" SECTION. EXPANSION JOINTS AT EACH 50'–0" (5'–0" SIDEWALK) OR 48'–0" (6'–0" SIDEWALK), PROVIDE ADDITIONAL CONTRACTION JOINTS ON OVERSIZED DRIVEWAYS AT 5'–0" MAX. SPACING
5. FOR EACH SINGLE FAMILY OR TWO–FAMILY DWELLING, NOT MORE THAN TWO (2) APPROACHES SHALL BE ALLOWED. TWO APPROACHES MUST BE APPROVED BY THE CITY.
6. THE COMBINED WIDTH OF ALL APPROACHES SERVING A LOT SHALL BE LESS THAN HALF (FIFTY (50) PERCENT) OF THE LOT FRONTAGE, BUT NO MORE THAN 36'–0".
7. APPROACHES SHALL NOT BE ALLOWED ON CORNER LOTS WITHIN THE CLEAR VIEW AREA.



SECTION A–A

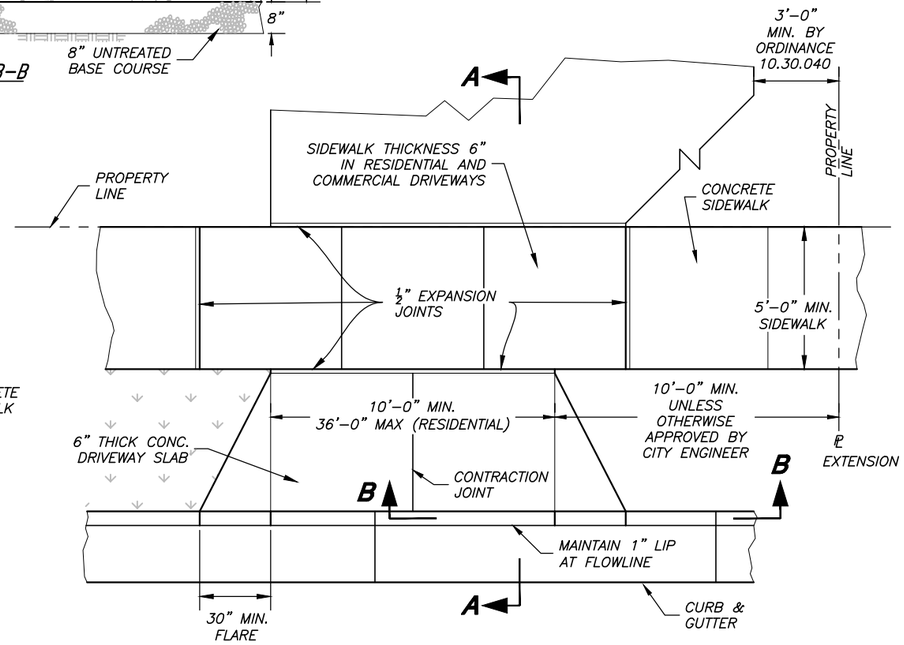


SECTION B–B



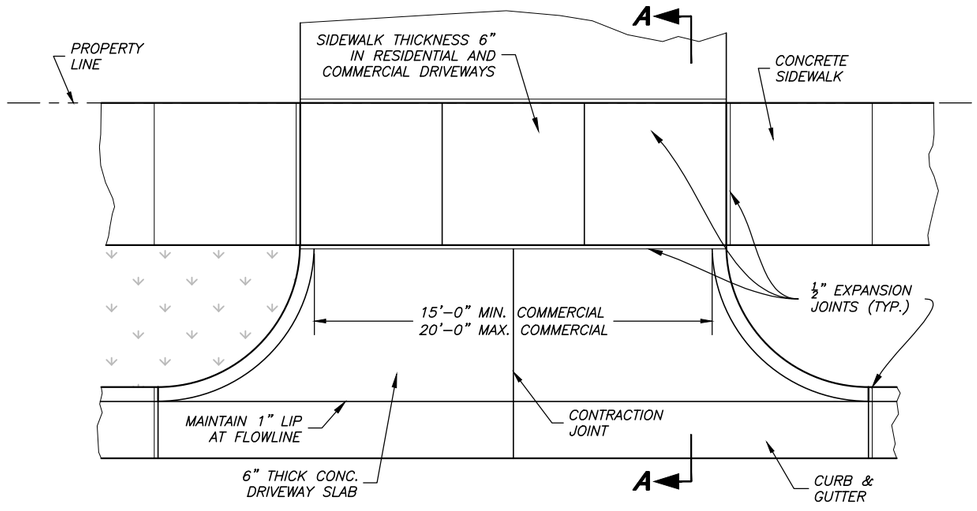
DRIVEWAY APPROACH W/ ADJACENT SIDEWALK

(REQUIRES SPECIAL CASE APPROVAL BY CITY PUBLIC WORKS)

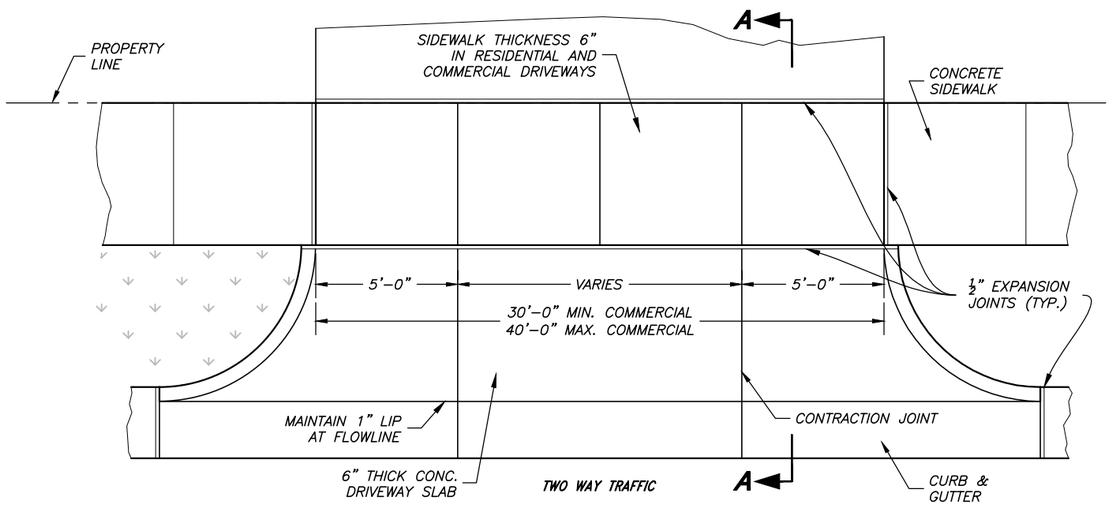


TYPE 2 DRIVEWAY APPROACH

(PREFERRED STYLE FOR RESIDENTIAL DEVELOPMENT)



ONE WAY TRAFFIC APPROACH



TYPE 1 DRIVEWAY APPROACH

(PREFERRED STYLE FOR COMMERCIAL DEVELOPMENT)

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
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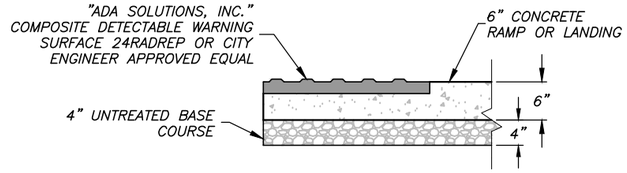
PUBLIC WORKS STANDARDS

DRIVEWAY APPROACH DETAILS

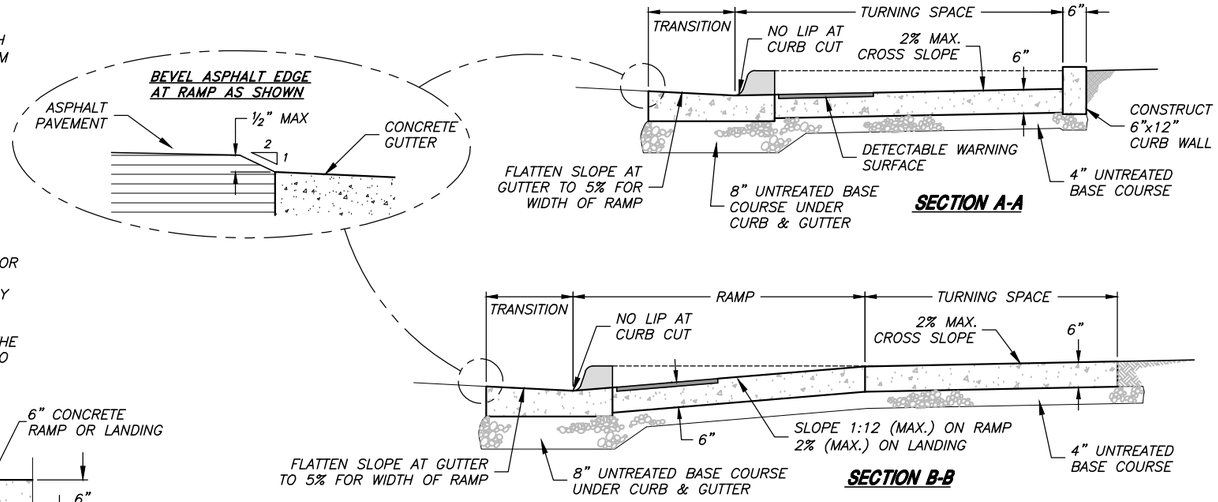
SHEET: ST-06 OF 1 SHEETS
0

DETECTABLE WARNING SURFACE NOTES:

1. LOCATE THE DETECTABLE WARNING SURFACE SO THE OUTSIDE CORNER NEAREST THE STREET IS WITHIN 1 INCH OF THE BACK OF CURB (TBC). PROVIDE 2–FOOT MINIMUM DEPTH.
2. PROVIDE DETECTABLE WARNING SURFACE FOR FULL WIDTH OF CURB CUT.
3. THE DETECTABLE WARNING SURFACE DOMES SHALL BE ORIENTED SUCH THAT THE ROWS ARE PARALLEL WITH THE DIRECTION OF PEDESTRIAN TRAVEL TO THE RAMP ON THE OPPOSITE SIDE OF THE STREET.
4. THE STANDARD COLOR FOR THE DETECTABLE WARNING SURFACE SHALL BE DARK GRAY OR PRE–APPROVED CONTRASTING COLOR. WHEN THE EXISTING SIDEWALK COLOR IS NOT STANDARD CONCRETE, THE COLOR OF THE DETECTABLE WARNING SURFACE SHALL BE DETERMINED BY THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE.
5. WHEN A DETECTABLE WARNING SURFACE DOME IS CUT, THE REMAINING PORTION OF THE DOME SHALL BE BEVELED TO A MAXIMUM SLOPE OF 1:2.



DETECTABLE WARNING SURFACE DETAIL



ADA RAMP NOTES:

A. WHERE DESIGNATED BY THE CITY, ALTERNATE UDOT OR APWA RAMP DESIGNS MAY BE USED WITH PRIOR APPROVAL OF THE CITY ENGINEER AND THE CITY PUBLIC WORKS DEPARTMENT. SUBMIT ENGINEERED CONSTRUCTION PLANS TO CITY ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.

B. SITE CONDITIONS WILL VARY. CONFIGURATION OF RAMP, LANDING, AND TRANSITION MAY BE CHANGED, BUT THEY MUST MEET DIMENSIONS AND SLOPES AS SHOWN IN THE MOST RECENT EDITION OF THE U.D.O.T. STANDARDS & SPECIFICATIONS (SHEETS PA1 THROUGH PA5). THE USE OF FLARES, CURB WALLS, ETC. ARE AT THE DISCRETION OF THE ENGINEER.

C. LOCATE CURB CUT WITHIN CROSSWALK.

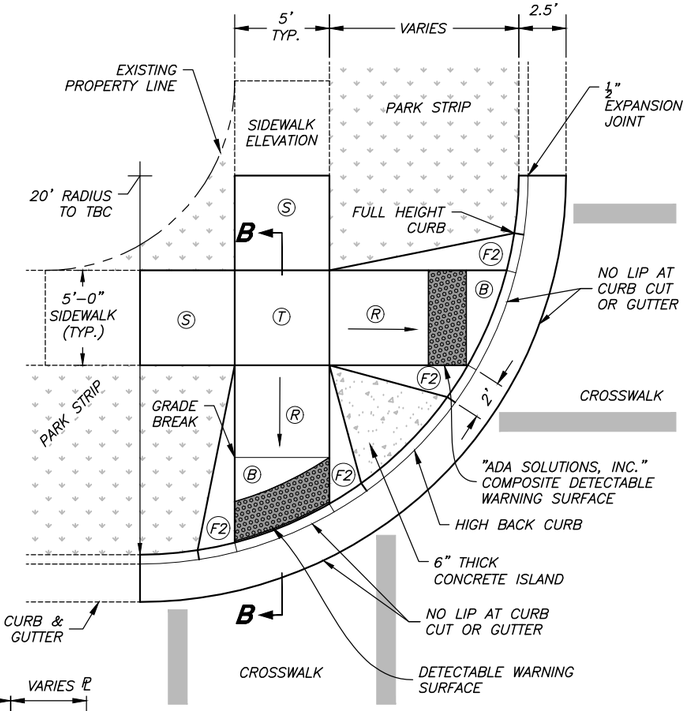
D. RAMP GRADE BREAK MUST BE PERPENDICULAR TO THE RUNNING SLOPE.

SLOPE TABLE			
	ITEM	MAX RUNNING SLOPE*	MAX. CROSS SLOPE*
(T)	TURNING SPACE [2]	2% (1V:48H)	2% (1V:48H)
(R)	RAMP	8.3% (1V:12H)	2% (1V:48H)
(S)	SIDEWALK	5% (1:20) [1]	2% (1V:48H)
(F1)	TRAVERSABLE SURFACE	10% (1V:10H)	--
(F2)	NON–TRAVERSABLE SURFACE	25% (1V:4H)	--
(B)	BLENDED TRANSITION	5% (1V:20H) 2% MIN.	2% (1V:48H)

* RUNNING SLOPE IS IN THE DIRECTION OF PEDESTRIAN TRAVEL. CROSS SLOPE IS PERPENDICULAR TO PEDESTRIAN TRAVEL.

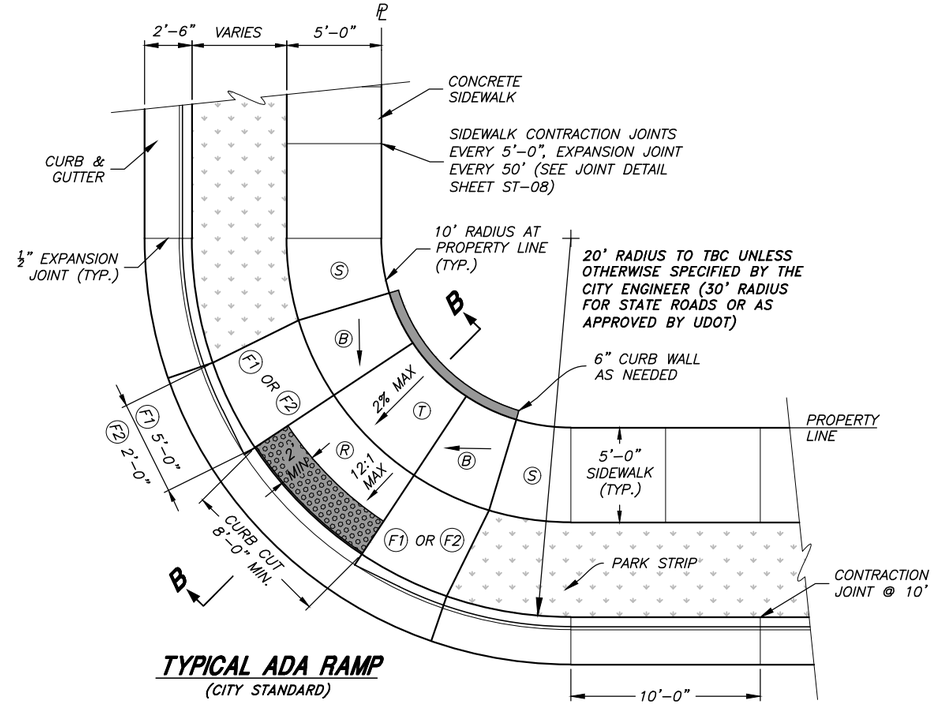
[1] 5% MAX OR NATURAL SLOPE OF LAND

[2] NOT TO EXCEED 2% IN ANY DIRECTION



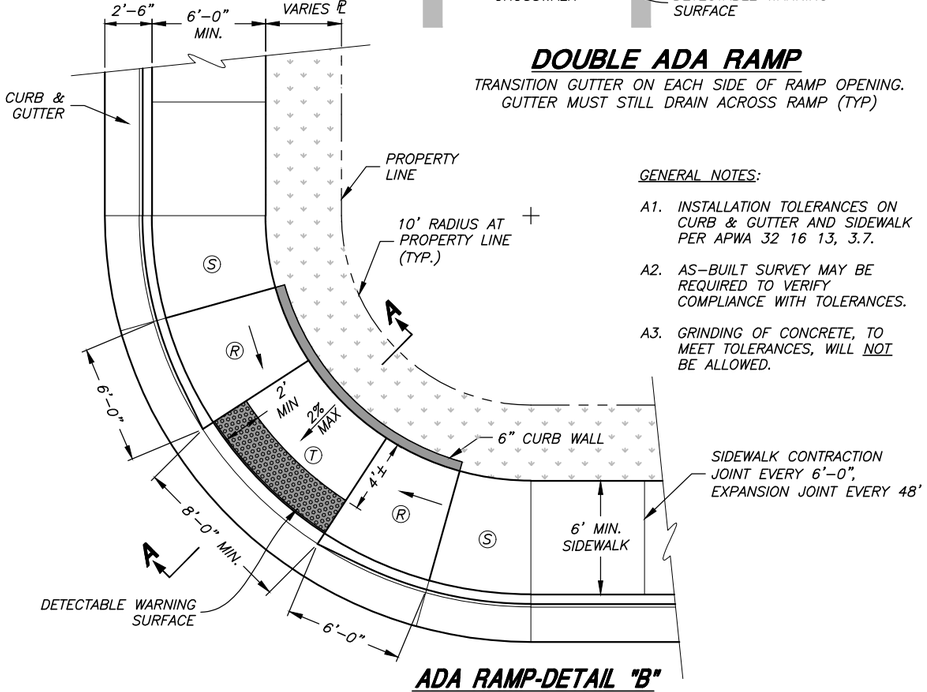
DOUBLE ADA RAMP

TRANSITION GUTTER ON EACH SIDE OF RAMP OPENING. GUTTER MUST STILL DRAIN ACROSS RAMP (TYP)



TYPICAL ADA RAMP

(CITY STANDARD)



GENERAL NOTES:

A1. INSTALLATION TOLERANCES ON CURB & GUTTER AND SIDEWALK PER APWA 32 16 13, 3.7.

A2. AS–BUILT SURVEY MAY BE REQUIRED TO VERIFY COMPLIANCE WITH TOLERANCES.

A3. GRINDING OF CONCRETE, TO MEET TOLERANCES, WILL NOT BE ALLOWED.

ADA RAMP-DETAIL "B"

(WITHOUT PARK STRIP) – REQUIRES SPECIAL CASE APPROVAL BY CITY PUBLIC WORKS

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
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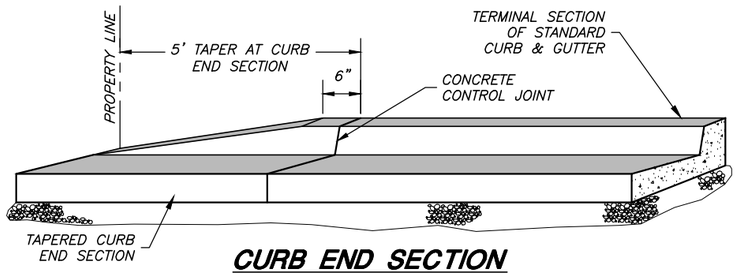
PUBLIC WORKS STANDARDS

TYPICAL ADA RAMP DETAILS

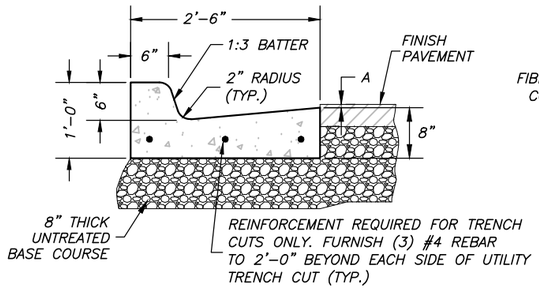
SHEET: ST-07 OF 1 SHEETS 0



CURB END SECTION

CURB END SECTION NOTE:

CONSTRUCT CURB END SECTION FOR IMPROVED SAFETY AND TO PREVENT SNOW PLOW DAMAGE. CONTRACTOR REQUIRED TO SAW-CUT AND REMOVE TAPERED CURB END SECTION AND CONSTRUCT NEW CURB AND GUTTER WHEN CURB AND GUTTER IS EXTENDED. ASPHALT SHALL ALSO BE SAW CUT ONE FOOT FROM LIP OF GUTTER AND PATCHED.

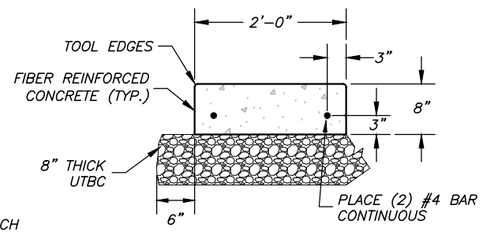


CURB & GUTTER SECTION

(CITY STANDARD)

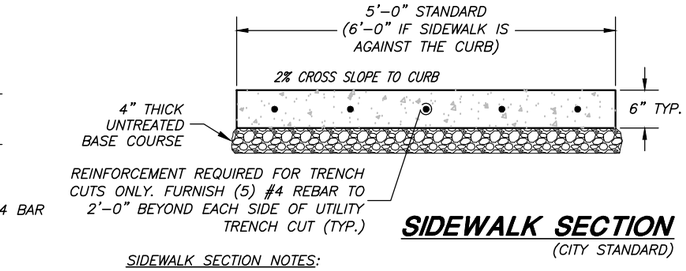
STANDARD CURB SECTION NOTES:

B1. CONTRACTION JOINTS @ 10ft EXPANSION JOINTS @ 50ft
B2. WHERE CURBS ARE SAW CUT THEY SHALL SLOPE TOWARD THE STREET AT 1/4" PER FOOT.
B3. WHEN REPLACING CURB DUE TO CONSTRUCTION ACTIVITY, NEW CURB MUST EXTEND 5' MIN. PAST TRENCH ON EACH SIDE.
B4. CURB & GUTTER SHALL BE CONSTRUCTED WITH CLASS B (3500 PSI) CONCRETE.



RIBBON CURB SECTION

STANDARD FOR ALTERNATE (RURAL) STREET SECTION (CONCRETE EDGE FOR ASPHALT)

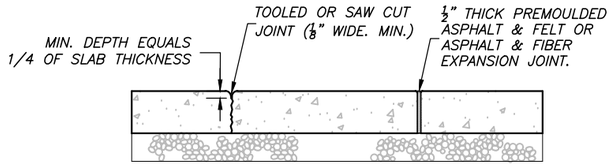


SIDEWALK SECTION

(CITY STANDARD)

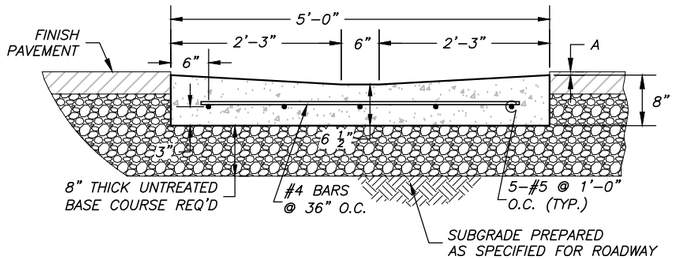
SIDEWALK SECTION NOTES:

A1. **6" THICKNESS IN RESIDENTIAL AND COMMERCIAL DRIVEWAYS**
A2. EXPANSION JOINTS @ 50 ft. (5'-0" SIDEWALK) OR 48'-0" (6'-0" SIDEWALK)
A3. CONTRACTION JOINTS SPACING SHALL MATCH SIDEWALK WIDTH BUT SHALL NOT EXCEED 10 FT AND SHALL BE AT LEAST ONE FOURTH OF THE SLAB THICKNESS.
A4. SIDEWALKS SHALL BE CONSTRUCTED WITH CLASS B (3500 PSI) CONCRETE.



CONTRACTION JOINT (CRACK CONTROL JOINT) **EXPANSION JOINT**

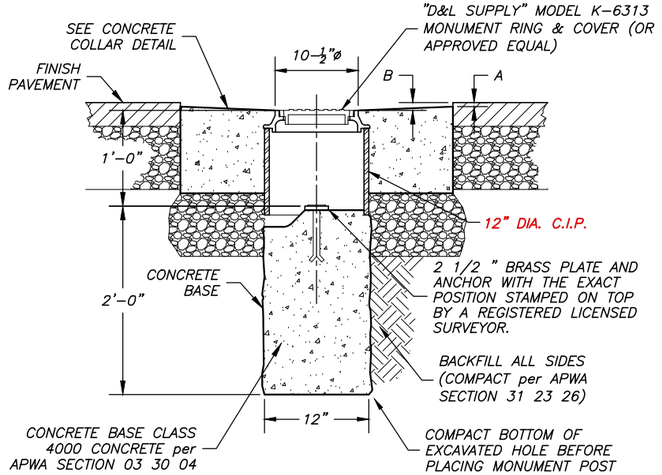
JOINT DETAIL



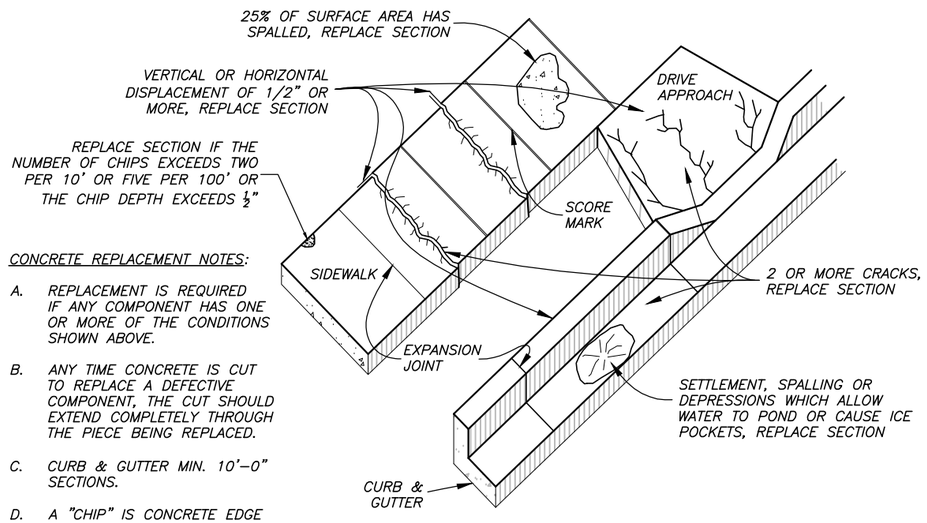
CROSS DRAIN SECTION

CROSS DRAIN NOTES:

C1. CONSTRUCTION & EXPANSION JOINTS @ 5ft, EXPANSION JOINTS @ EDGE OF APRON.
C2. CROSS DRAINS SHALL BE CONSTRUCTED WITH CLASS B (3500 PSI) CONCRETE.



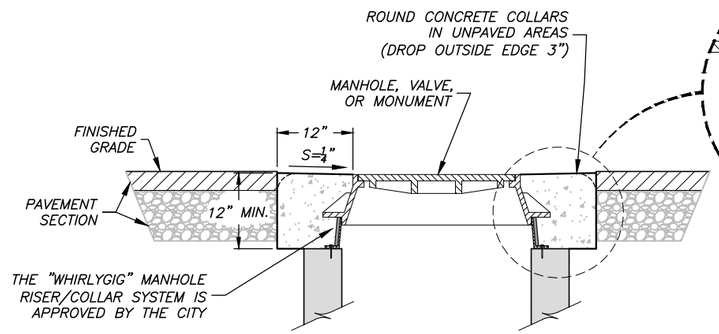
SURVEY MONUMENT DETAIL



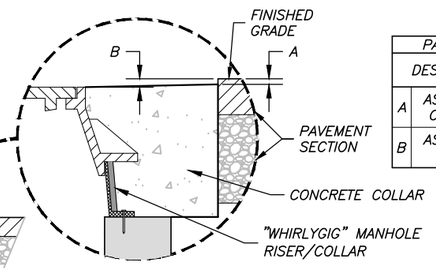
CONCRETE REPLACEMENT NOTES:

A. REPLACEMENT IS REQUIRED IF ANY COMPONENT HAS ONE OR MORE OF THE CONDITIONS SHOWN ABOVE.
B. ANY TIME CONCRETE IS CUT TO REPLACE A DEFECTIVE COMPONENT, THE CUT SHOULD EXTEND COMPLETELY THROUGH THE PIECE BEING REPLACED.
C. CURB & GUTTER MIN. 10'-0" SECTIONS.
D. A "CHIP" IS CONCRETE EDGE DAMAGE THAT IS DEEPER THAN 1/4" AND LARGER THAN 2" DIA.

DEFECTIVE CONCRETE REPLACEMENT CRITERIA



CONCRETE COLLAR DETAIL



PAVEMENT DIMENSION TABLE			
	DESCRIPTION	NEW ROAD	OVERLAY
A	ASPHALT TO CONCRETE	1/2"	1/4"
B	ASPHALT TO RING	3/4"	1/2"

CONCRETE COLLAR NOTES:

1. CONCRETE COLLARS ARE REQUIRED ON ALL MANHOLES AND WATER VALVES.
2. THE LOCATION OF MANHOLES AND VALVES IN UNPAVED AREAS SHALL BE INDICATED WITH A MARKER. USE "RHINO" 2-RAIL MARKER WITH POLYTECH COATING. MARKERS SHALL BE YELLOW IN COLOR WITH APPROPRIATE DECAL "WARNING SEWER MANHOLE", "WARNING WATER VALVE".
3. ALL CONCRETE COLLARS TO BE INSTALLED WITHIN 14 DAYS AFTER PAVING.
4. COLLARS AROUND MANHOLES AND CULINARY WATER VALVES ARE TO BE ROUND.
5. COLLARS AROUND IRRIGATION VALVES ARE TO BE ROUND (SEE SHEET LS-01)

REGISTERED PROFESSIONAL ENGINEER — No. 323821 — MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
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MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
SIDEWALK, CURB & GUTTER, CONCRETE COLLAR, SURVEY MONUMENT, AND DEFECTIVE CONCRETE REPLACEMENT DETAILS

SHEET: ST-08
OF 1 SHEETS
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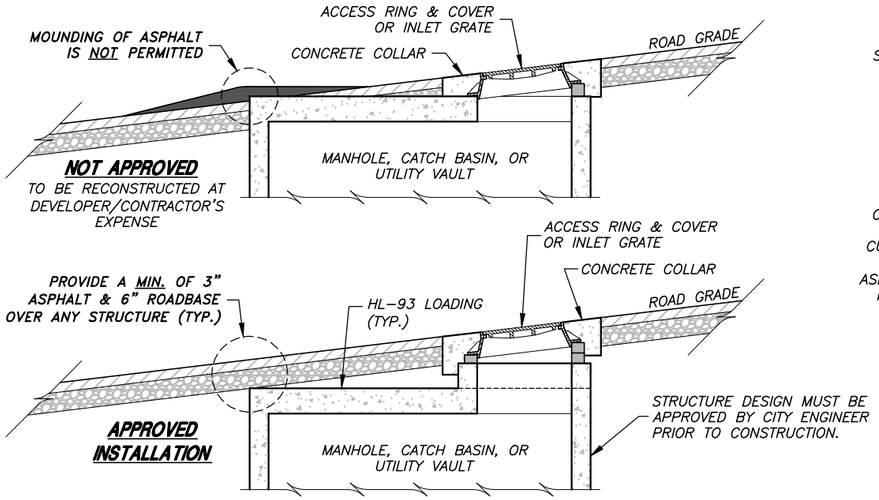
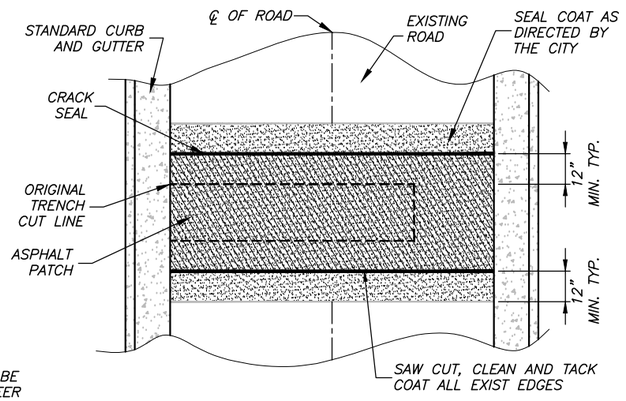
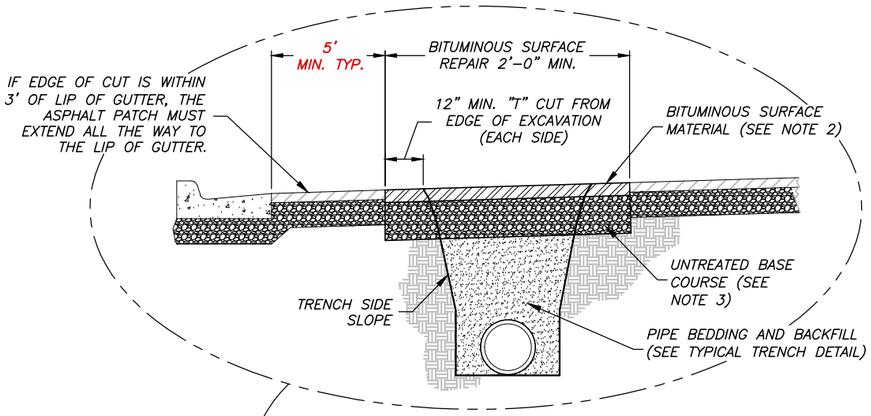
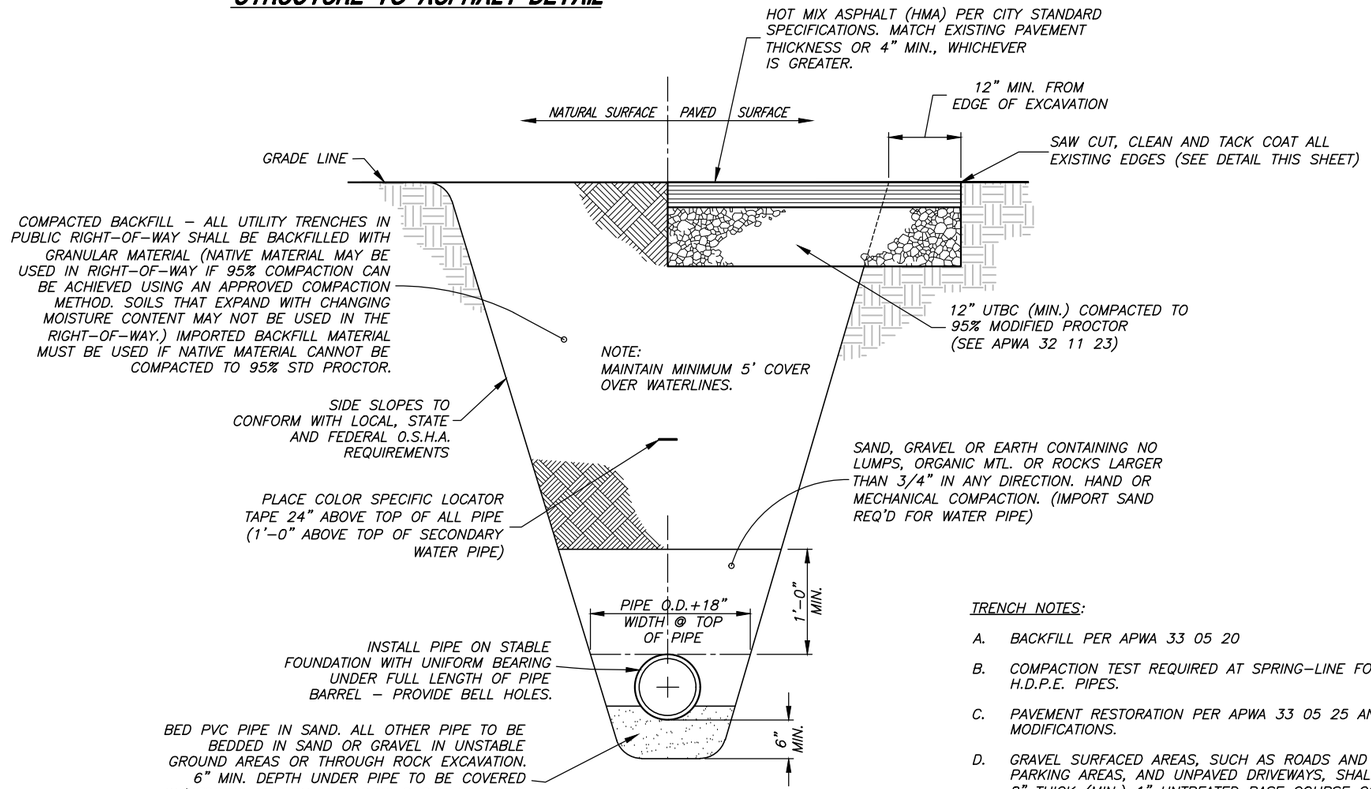


STRUCTURE TO ASPHALT DETAIL

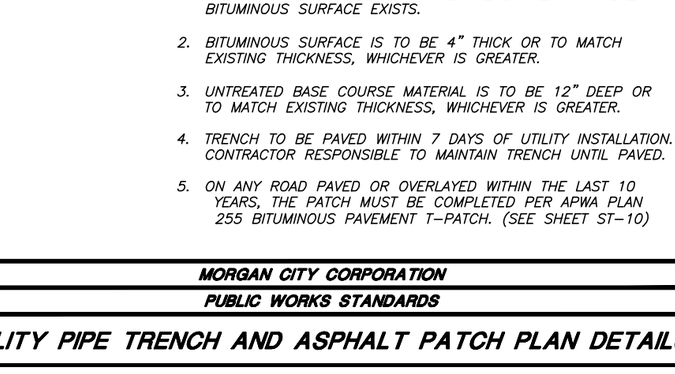


TYPICAL HORIZONTAL ASPHALT PATCH PLAN





TYPICAL TRENCH SECTION



TYPICAL PARALLEL ASPHALT PATCH PLAN

TRENCH NOTES:

A. BACKFILL PER APWA 33 05 20

B. COMPACTION TEST REQUIRED AT SPRING-LINE FOR ALL P.V.C. OR H.D.P.E. PIPES.

C. PAVEMENT RESTORATION PER APWA 33 05 25 AND CITY MODIFICATIONS.

D. GRAVEL SURFACED AREAS, SUCH AS ROADS AND SHOULDERS, PARKING AREAS, AND UNPAVED DRIVEWAYS, SHALL BE REPAIRED WITH 8" THICK (MIN.) 1" UNTREATED BASE COURSE COMPACTED TO 95% MODIFIED PROCTOR.

E. WATER & SEWER LINES, INCLUDING SERVICE LINES, SHALL NOT BE INSTALLED IN THE SAME TRENCH.

ASPHALT PATCH NOTES:

1. SAW CUT BITUMINOUS ASPHALT SURFACE 12" WIDER THAN TRENCH ON EACH SIDE FOR FINAL TRENCH REPAIR WHERE BITUMINOUS SURFACE EXISTS.
2. BITUMINOUS SURFACE IS TO BE 4" THICK OR TO MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
3. UNTREATED BASE COURSE MATERIAL IS TO BE 12" DEEP OR TO MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
4. TRENCH TO BE PAVED WITHIN 7 DAYS OF UTILITY INSTALLATION. CONTRACTOR RESPONSIBLE TO MAINTAIN TRENCH UNTIL PAVED.
5. ON ANY ROAD PAVED OR OVERLAYED WITHIN THE LAST 10 YEARS, THE PATCH MUST BE COMPLETED PER APWA PLAN 255 BITUMINOUS PAVEMENT T-PATCH. (SEE SHEET ST-10)

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER

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UTILITY PIPE TRENCH AND ASPHALT PATCH PLAN DETAILS

SHEET: ST-09
OF 1 SHEETS
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BITUMINOUS PAVEMENT T–PATCH NOTES:

1. GENERAL:

A. VERTICAL CUTS IN BITUMINOUS PAVEMENT MAY BE DONE BY SAW OR PAVEMENT ZIPPING. IF CUTS GREATER THAN 6 INCHES ARE NECESSARY TO PREVENT PAVEMENT "BREAK OFF" CONSULT CITY ENGINEER FOR DIRECTION ON HANDLING ADDITIONAL COSTS.

B. REPAIR A T–PATCH RESTORATION IF ANY OF THE FOLLOWING CONDITIONS OCCUR PRIOR TO FINAL PAYMENT OR AT THE END OF THE ONE YEAR CORRECTION PERIOD:

1) PAVEMENT SURFACE DISTORTION EXCEEDS 1/4–INCH DEVIATION IN 10 FEET.
REPAIR OPTION – PLANE OFF SURFACE DISTORTIONS. COAT PLANED SURFACE WITH A CATIONIC OR ANIONIC MULSION THAT COMPLIES WITH APWA SECTION 32 12 03.

2) SEPARATION APPEARS AT A CONNECTION TO AN EXITING PAVEMENT OR ANY STREET FIXTURE.
REPAIR OPTION – BLOW SEPARATION CLEAN AND APPLY JOINT SEALANT, PLAN 265.

3) CRACKS AT LEAST 1–FOOT LONG AND 1/4–INCH WIDE OCCUR MORE OFTEN THAN 1 IN 10 SQUARE FEET.
REPAIR OPTION – BLOW CLEAN AND APPLY CRACK SEAL, PLAN 265.

4) PAVEMENT RAVELING IS GREATER THAN 1 SQUARE FOOT PER 100 SQUARE FEET.
REPAIR OPTION – MILL AND INLAY, APWA SECTIONS 32 01 16.71 AND 32 12 05.

2. PRODUCTS:

A. BASE COURSE: UNTREATED BASE COURSE, APWA SECTION 32 11 23. DO NOT USE GRAVEL AS A BASE COURSE WITHOUT ENGINEER'S PERMISSION.

B. FLOWABLE FILL: TARGET IS 60 PSI IN 28 DAYS WITH 90 PSI MAXIMUM IN 28 DAYS, APWA SECTION 31 05 15. IT MUST FLOW EASILY REQUIRING NO VIBRATION FOR CONSOLIDATION.

C. REINFORCEMENT: NO. 5 GALVANIZED OR EPOXY COATED, DEFORMED, 60 KSI YIELD GRADE STEEL, ASTM A615.

D. CONCRETE: CLASS 4000, APWA SECTION 03 30 04.

E. TACK COAT: APWA SECTION 32 12 05.

F. BITUMINOUS CONCRETE: APWA SECTION 32 12 05.

1) WARM WEATHER PATCH: PG64–22–DM–1/2, UNLESS INDICATED OTHERWISE.

2) COLD WEATHER PATCH: MODIFIED MC–250–FM–1 AS INDICATED IN APWA SECTION 33 05 25.

3. EXECUTION:

A. BASE COURSE PLACEMENT: APWA SECTION 32 05 10. MAXIMUM LIFT THICKNESS BEFORE COMPACTION IS 8–INCHES WHEN USING RIDING EQUIPMENT OR 6–INCHES WHEN USING HAND HELD EQUIPMENT. COMPACTION IS 95 PERCENT OR GREATER RELATIVE TO A MODIFIED PROCTOR DENSITY, APWA SECTION 31 23 26.

B. FLOWABLE FILL: CURE TO INITIAL SET BEFORE PLACING AGGREGATE BASE OR BITUMINOUS PAVEMENT. USE IN EXCAVATIONS THAT ARE TOO NARROW TO RECEIVE COMPACTION EQUIPMENT.

C. TACK COAT: CLEAN ALL HORIZONTAL AND VERTICAL SURFACES. APPLY FULL COVERAGE ALL SURFACES.

D. PAVEMENT PLACEMENT: FOLLOW APWA SECTION 32 12 16.13. UNLESS INDICATED OTHERWISE, LIFT THICKNESS IS 3–INCHES MINIMUM AFTER COMPACTION. COMPACT TO 94 PERCENT OF ASTM D2041 (RICE DENSITY) PLUS OR MINUS 2 PERCENT.

E. BITUMINOUS CONCRETE SUBSTITUTION: IF BITUMINOUS CONCRETE IS SUBSTITUTED FOR PORTLAND CEMENT CONCRETE SUBSTRATE, OMIT REBAR AND PROVIDE 1.25 INCHES OF BITUMINOUS CONCRETE FOR EACH 1 INCH OF PORTLAND CEMENT CONCRETE. FOLLOW PARAGRAPH E REQUIREMENTS.

F. REINFORCEMENT: REQUIRED IF THICKNESS OF EXISTING PORTLAND–CEMENT CONCRETE SUBSTRATE IS 6–INCHES OR GREATER. NOT REQUIRED IF:

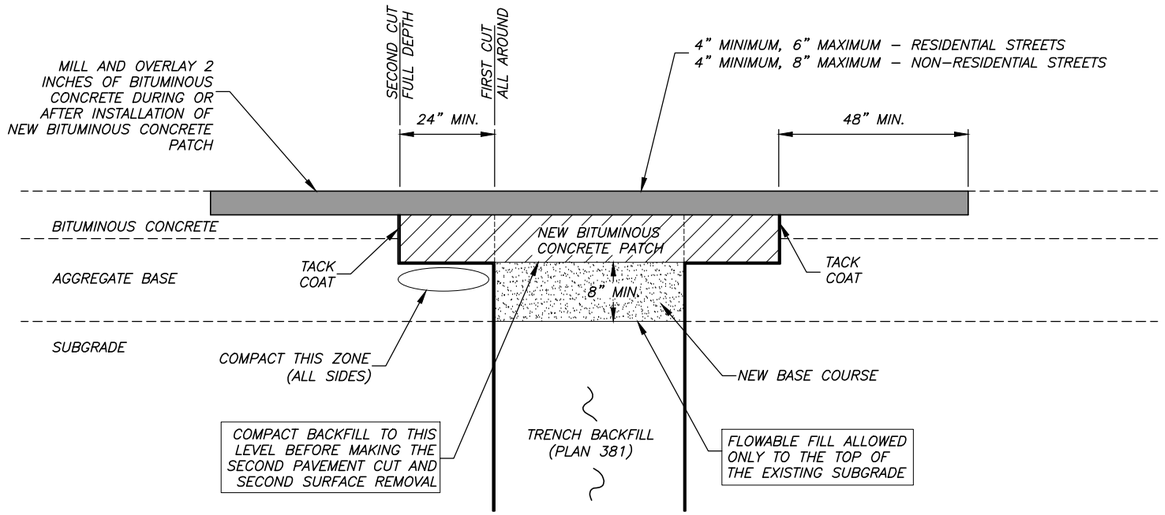
1) LESS THAN 6–INCHES THICK,

2) IF EXISTING CONCRETE IS DETERIORATING,

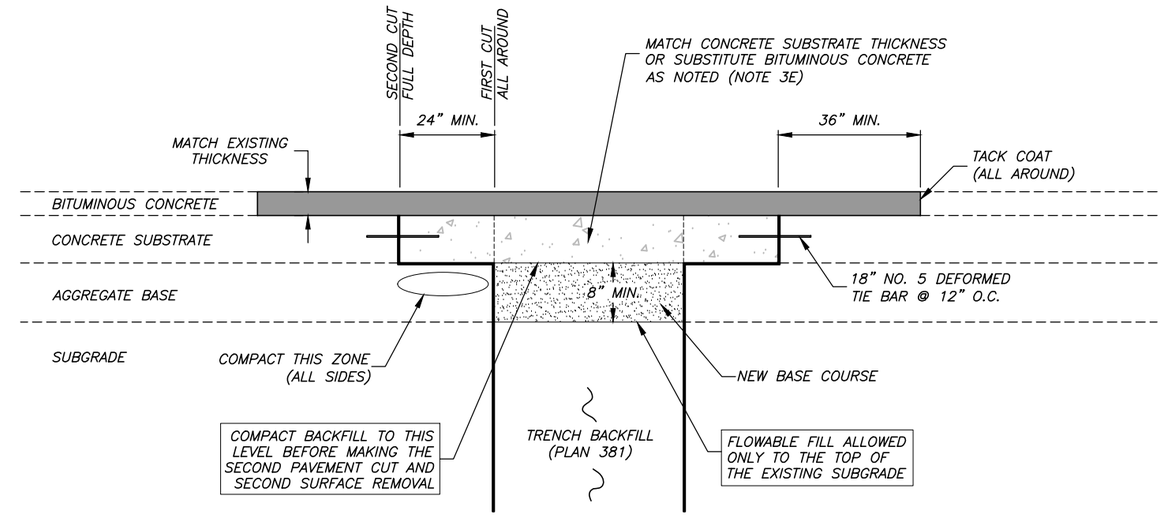
3) IF EXCAVATION IS LESS THAN 3 FEET SQUARE, OR

4) IF BITUMINOUS PAVEMENT IS SUBSTITUTED FOR PORTLAND–CEMENT CONCRETE SUBSTRATE.

G. CONCRETE SUBSTRATE: CURE TO INITIAL SET BEFORE PLACING NEW BITUMINOUS CONCRETE PATCH.



BITUMINOUS CONCRETE RESTORATION



COMPOSITE RESTORATION

APWA Utah Chapter

Bituminous pavement T-patch

Plan 255
November 2015

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED _____
DRAWN _____
CHECKED _____

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MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
APWA PLAN 255 BITUMINOUS PAVEMENT T-PATCH

SHEET: ST-10
OF 1 SHEETS
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UTILITY POTHOLE NOTES:

A1. CONTRACTOR SHALL PLACE A TEMPORARY PAINT MARK ON THE PAVEMENT TO ASSURE CORE IS REPLACED IN THE SAME ORIENTATION.

A2. CORING SHALL BE COMPLETED PERPENDICULAR TO THE HORIZON (NOT THE PAVEMENT), AND SHALL EXTEND THE FULL ASPHALT DEPTH. CORING SHALL BE COMPLETED USING A KEYHOLE CORING SAW CAPABLE OF REMOVING AN INTACT CORE OF PAVEMENT.

A3. CORES SHALL NOT BE LESS THAN 6 INCHES IN DIAMETER AND NO MORE THAN 24 INCHES IN DIAMETER.

A4. SOIL SHALL BE REMOVED USING AIR/VACUUM EXTRACTION METHODS AND DISPOSED PROPERLY OFF SITE.

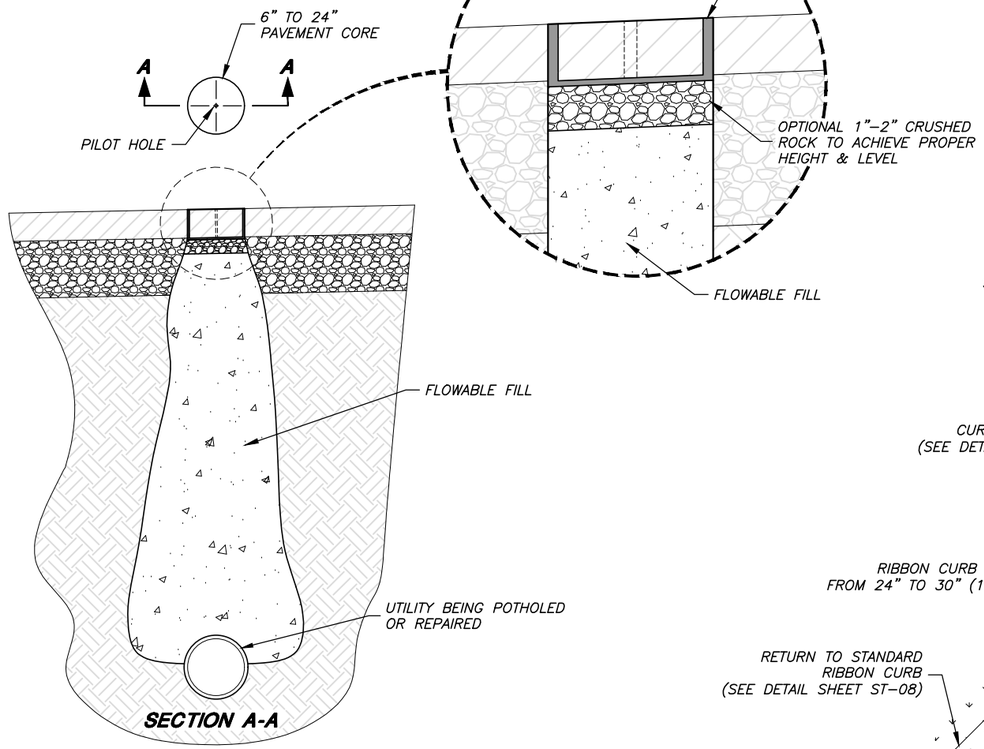
A5. FLOWABLE FILL SHALL BE USED TO BACKFILL THE HOLE TO WITHIN ONE TO TWO INCHES OF THE BOTTOM OF THE EXISTING PAVEMENT.

A6. COMPACTED GRAVEL IF NECESSARY SHALL BE USED TO BRING THE POTHOLE TO THE BOTTOM OF PAVEMENT GRADE. THE TEMPORARY PAINT MARK SHALL BE USED TO ALIGN THE CORE TO ITS ORIGINAL POSITION AND THE GRAVEL SHALL BE USED TO LEVEL THE CORE SO THE FINISH GRADE IS FLUSH WITH THE SURROUNDING ASPHALT.

A7. PAVEMENT BONDING COMPOUND SHALL BE USED TO RESTORE THE CORE TO ITS ORIGINAL CONDITION COMPLETELY FLUSH WITH THE SURROUNDING ASPHALT. THE COMPOUND SHALL BE POURED IN THE POTHOLE AND THE CORE PLACE IN AFTER CAUSING THE PAVEMENT BONDING COMPOUND TO FLOW TO THE SURFACE. ALL EXCESS BONDING AGENT SHALL BE REMOVED.

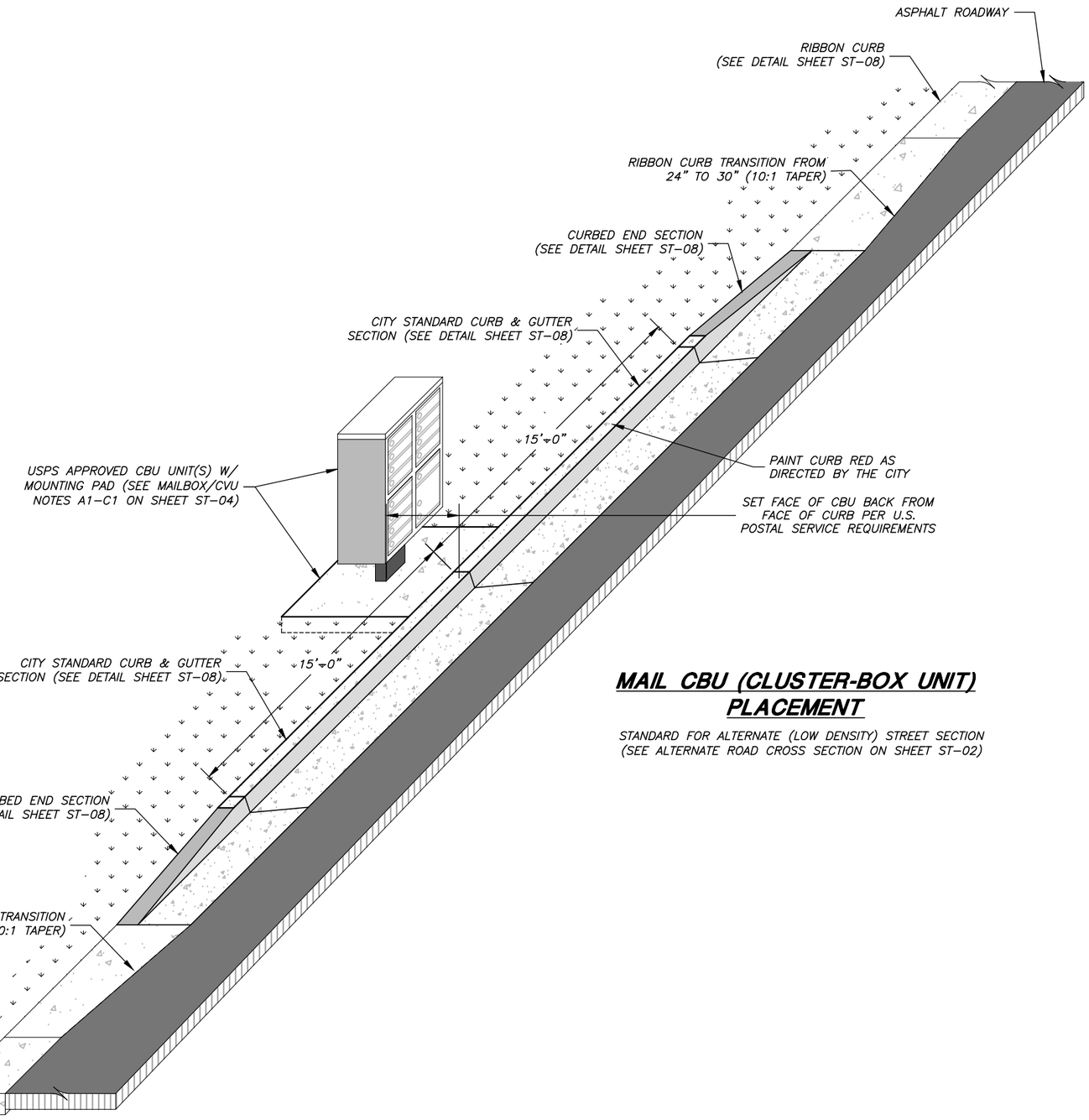
A8. CORES SHALL BE ALLOWED TO CURE FOR A MINIMUM OF ONE HOUR PRIOR TO OPENING TO TRAFFIC.

BOND MATERIAL PROPERTIES		
PROPERTY	ASTM TEST METHOD	REQUIREMENTS
BOND STRENGTH, PSI (@ 70° F., 30 MIN. CURE)	C882	200 MIN.
COMPRESSIVE STRENGTH, PSI (@ 70° F., 60 MIN. CURE)	C109	1500 MIN.



UTILITY POTHOLING DETAIL

KEYHOLE METHOD



MAIL CBU (CLUSTER-BOX UNIT) PLACEMENT

STANDARD FOR ALTERNATE (LOW DENSITY) STREET SECTION
(SEE ALTERNATE ROAD CROSS SECTION ON SHEET ST–02)

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E Hartvigsen
CITY ENGINEER
08-24-2023
DATE

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MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
UTILITY POTHOLING DETAIL AND ALTERANTE STREET SECTION MAIL CBU PLACEMENT DETAIL

SHEET: ST-11
OF 1 SHEETS
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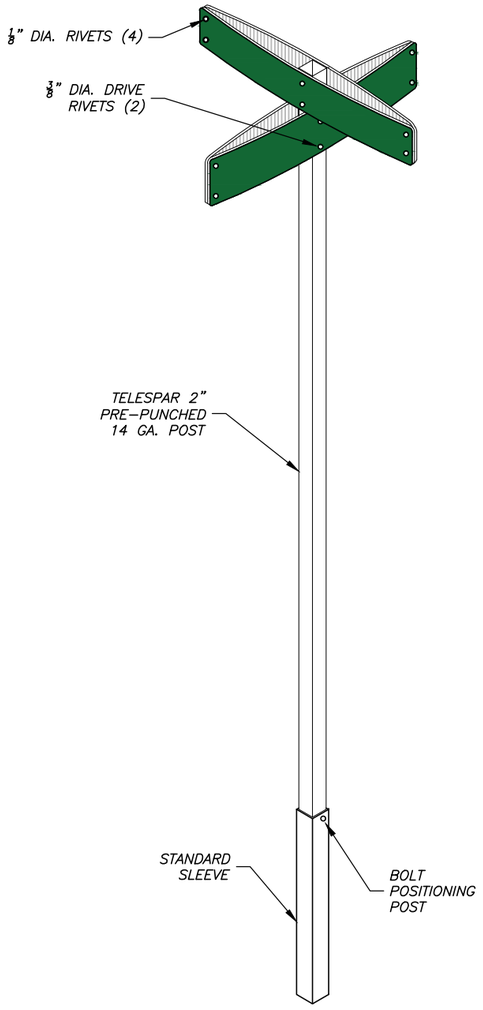


STREET SIGN & POST

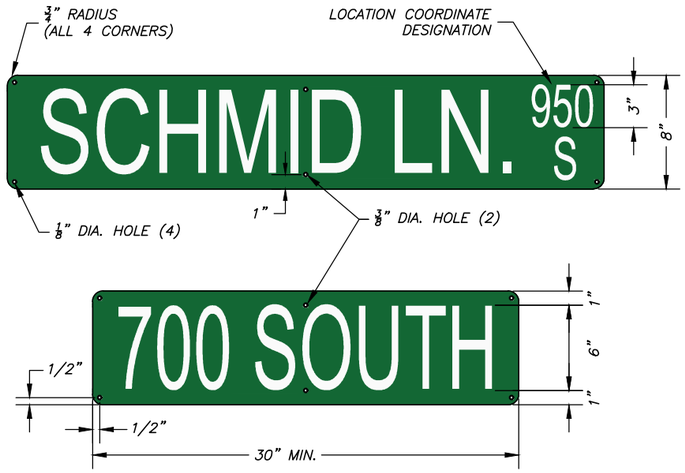


PLATE DETAIL

STREET SIGN NOTES:

A. SIGNS SHALL BE FURNISHED & INSTALLED BY THE DEVELOPER AT LOCATIONS DESIGNATED BY THE CITY. INSTALLATION SHALL BE IN ACCORDANCE WITH CURRENT "MUTCD" STANDARDS.

B. STREET SIGN BACKGROUND SHALL BE REGULATORY GREEN, BOTH STREET AND TRAFFIC SIGNS SHALL BE AT THE VERY LEAST HIGH INTENSITY REFLECTIVE SHEETING (9FP-85 TYPE IIIA)

C. LEGEND SHALL BE WHITE LETTERS (FONT: HIGHWAY C), HIGH INTENSITY REFLECTIVE SHEETING (9FP-85 IIIA)

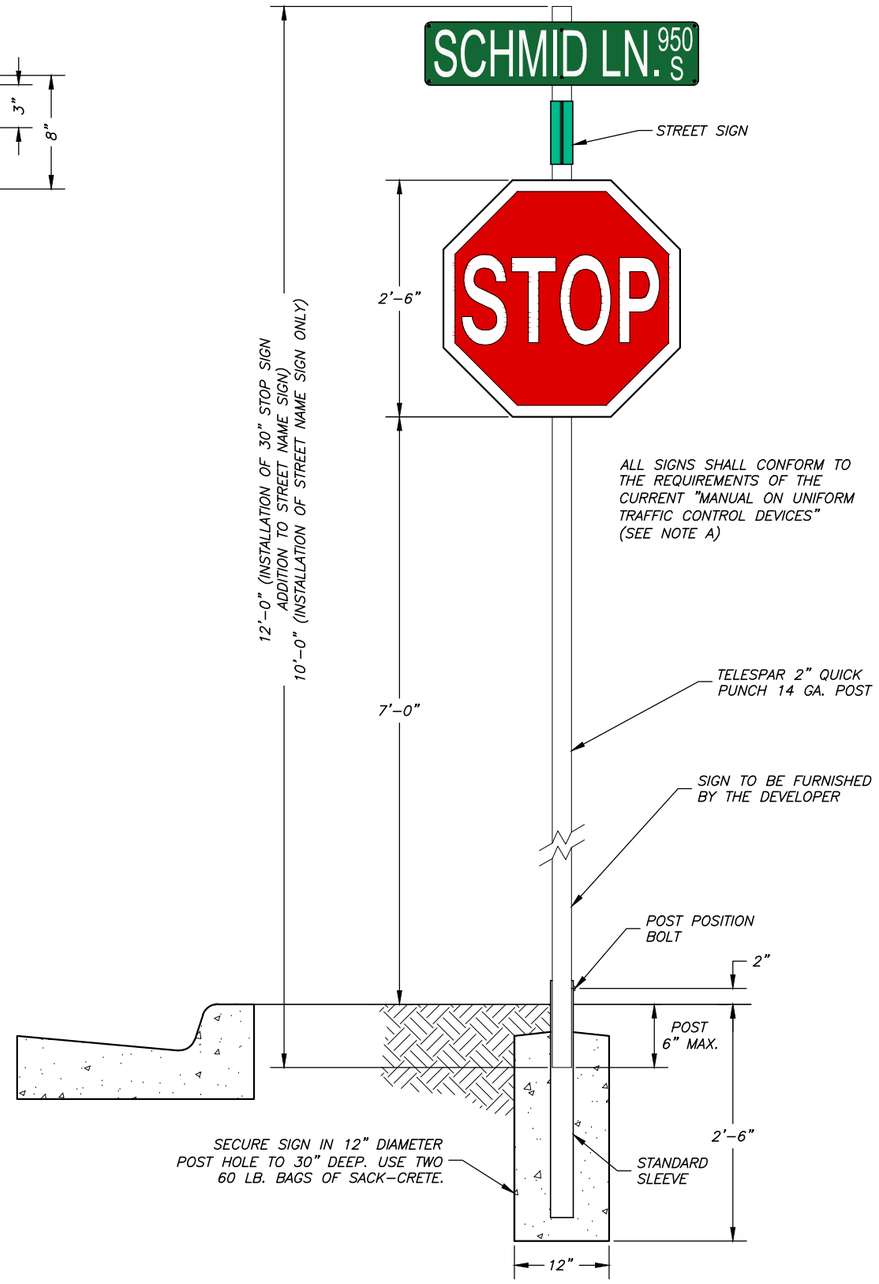
D. SIGN BLANK SHALL BE 6081-T6 HEAT TREATED HIGH TENSILE DEGREASED ALUMINUM W/ ALODINE 1200 FINISH-THICKNESS SHALL BE 0.08"

E. EACH SIGN SHALL CONSIST OF TWO PLATES RIVETED TOGETHER & MOUNTED AS SHOWN

F. SIGNS ON PRIVATE ROADS SHALL MEET ALL SPECIFICATIONS FOR STANDARD SIGNS. (PRIVATE SIGNS WILL NOT BE MAINTAINED BY THE CITY.)

G. ALL STREETS WITH NAMES MUST ALSO SHOW LOCATIONS COORDINATE DESIGNATION

H. CONTACT CITY PRIOR TO MAKING SIGNS TO VERIFY PROPER NAMES AND COORDINATES



STREET / TRAFFIC SIGN & POST

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

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SCALE: N.T.S.

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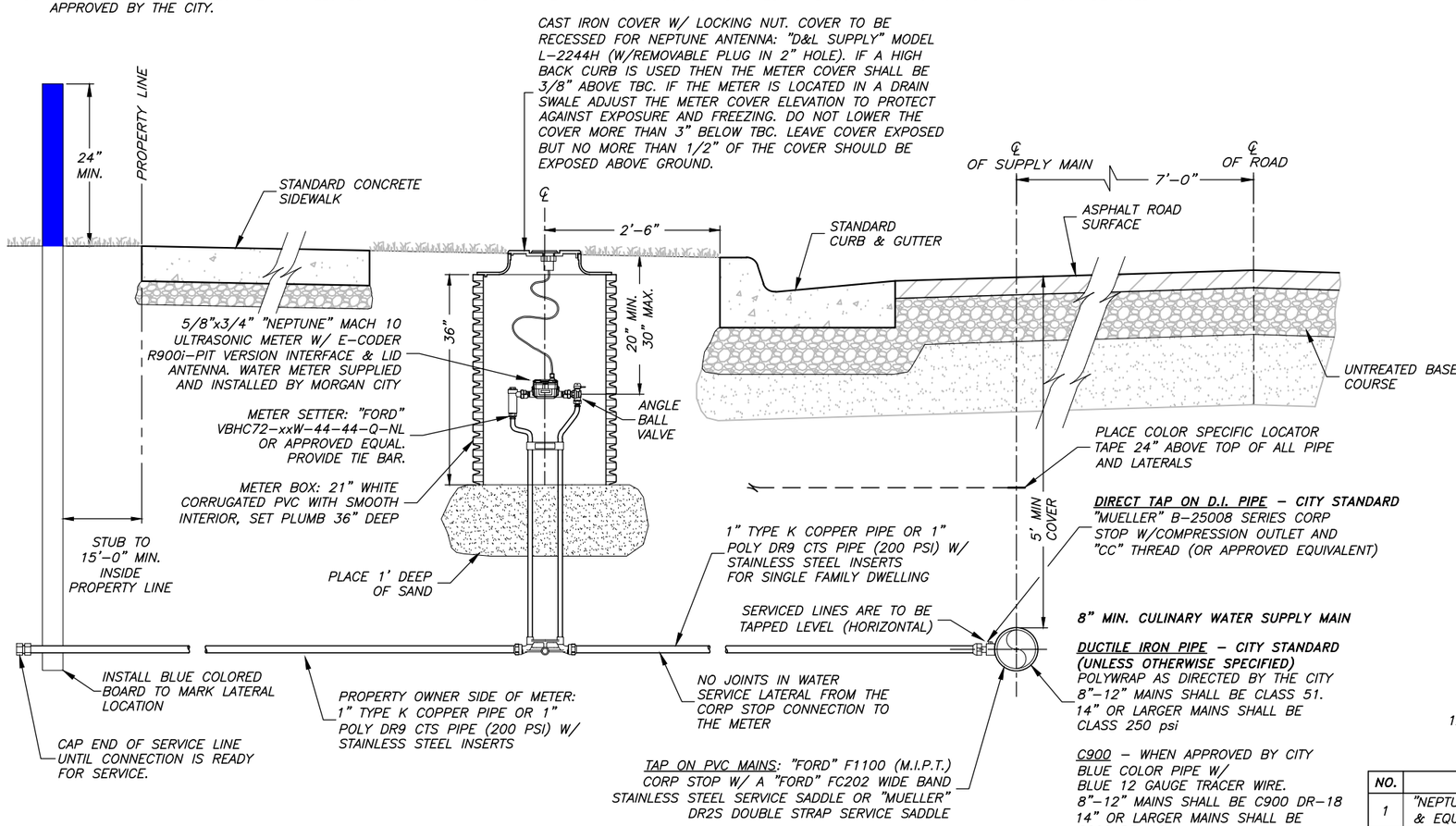
PUBLIC WORKS STANDARDS

STREET SIGN DETAILS

SHEET: ST-12
OF 1 SHEETS
0

GENERAL WATER SERVICE NOTES:

1. ¾" WATER SERVICE LINES ARE ONLY TO BE USED WHEN AN EXISTING ¾" SERVICE IS REPLACED AS APPROVED BY THE CITY. NEW CONSTRUCTION SHALL BE REQUIRED TO CONSTRUCT A MINIMUM 1" SERVICE LINE TO THE METER.
2. THE CITY SHALL PROVIDE THE METER FOR NEW SERVICES 2" AND SMALLER UPON APPLICATION AND PAYMENT OF APPLICABLE FEES.
3. ANY WORK ON WATER SERVICE LINES AND CONNECTIONS SHALL BE PERFORMED BY AN APPROPRIATELY LICENSED PLUMBER/CONTRACTOR.
4. THE APPLICANT SHALL BE REQUIRED TO SUBMIT A TAP-PERMIT PRIOR TO CONNECTING TO THE WATER MAIN.
5. TAPS SHALL BE PERFORMED BY A CITY APPROVED LICENSED PLUMBER/CONTRACTOR FOLLOWING APPLICATION AND PAYMENT OF ALL APPLICABLE FEES.
6. WATER SERVICE LINES THAT ARE ABANDONED SHALL BE DISCONNECTED AND REMOVED BACK TO THE MAIN LINE INCLUDING CAPPING THE CORPORATION STOP AT THE MAIN AT THE PROPERTY OWNER'S EXPENSE. THE WATER UTILITY MUST BE NOTIFIED OF ALL CHANGES TO SERVICE LINES INCLUDING ABANDONMENT. ABANDONMENT SHALL BE DETERMINED WHEN A SERVICE WILL NO LONGER BE USED OR IS DEEMED UNNECESSARY BY THE CITY. ONLY ONE SERVICE IS ALLOWED PER LOT.
7. EXISTING GALVANIZED WATER SERVICE LINES SHALL BE REMOVED AND REPLACED BACK TO THE MAIN WITH A NEW CORP STOP FOR ALL REDEVELOPMENT PROJECTS.
8. JUMPERS IN METER BOXES ARE NOT ALLOWED AS A WAY TO OBTAIN WATER FOR CONSTRUCTION ACTIVITIES. A TEMPORARY CONSTRUCTION METER MUST BE USED AND APPROVED BY THE CITY.



TYPICAL WATER CONNECTION

RESIDENTIAL WATER SERVICE AND METER

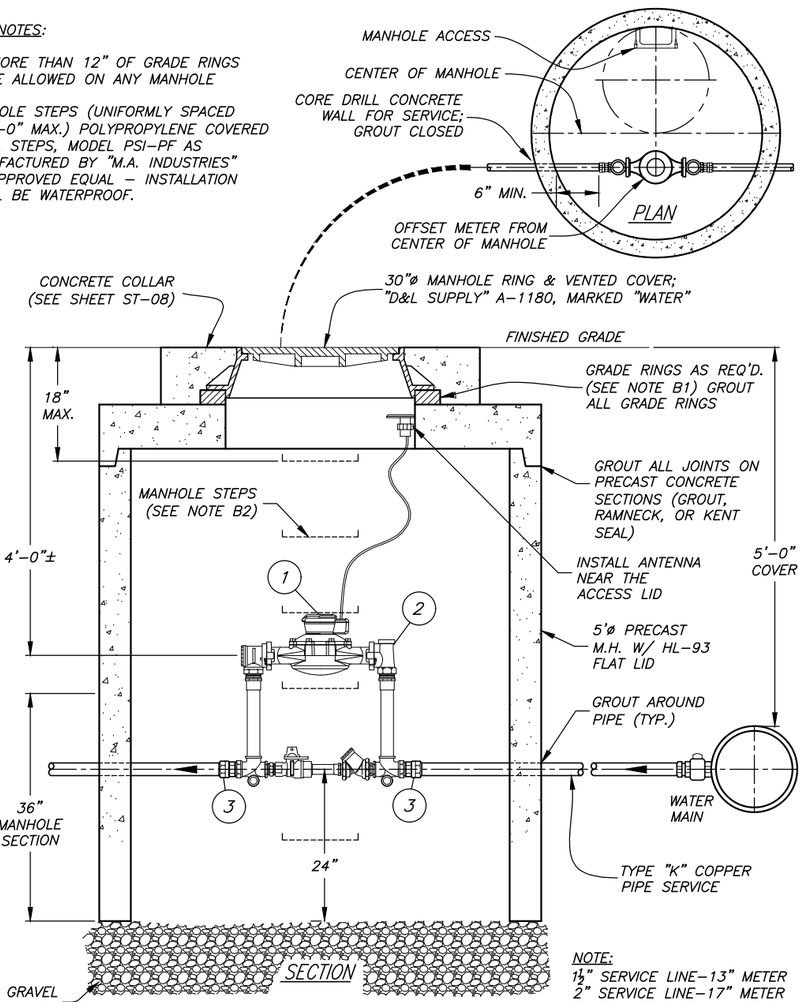
1" METER NOTES:

A. METER BOX AND SETTER INSTALLED BY DEVELOPER.
B. METER BOX SHALL NOT BE LOCATED WITHIN TWO FEET OF A DRIVEWAY OR APPROACH.
C. THE TOP OF THE METER BOX LID SHALL BE PLACED ⅜" ABOVE THE TOP BACK OF CURB ELEVATION AND SHALL NOT BE COVERED BY LANDSCAPING.
D. THE PVC METER BOX SHALL BE WHITE IN COLOR, CORRUGATED WITH SMOOTH INTERIOR.
E. ALL NEW WATER SERVICE LINES SHALL BE A MINIMUM OF 1" DIAMETER. METER SIZE MAY BE REDUCED TO ¾" AT THE METER BOX. BILLING RATES ARE SUBJECT TO METER SIZE.
F. FOR TYPICAL INSTALLATION THE CITY WILL BE RESPONSIBLE FOR THE SERVICE LINE FROM THE MAIN UP TO AND INCLUDING THE METER. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE SERVICE LINE AND FITTINGS AFTER THE METER.

MANHOLE NOTES:

B1. NO MORE THAN 12" OF GRADE RINGS TO BE ALLOWED ON ANY MANHOLE

B2. MANHOLE STEPS (UNIFORMLY SPACED @ 1'-0" MAX.) POLYPROPYLENE COVERED STEEL STEPS, MODEL PSI-PF AS MANUFACTURED BY "M.A. INDUSTRIES" OR APPROVED EQUAL - INSTALLATION SHALL BE WATERPROOF.



NOTE:
1½" SERVICE LINE-13" METER
2" SERVICE LINE-17" METER

1 1/2" & 2" WATER METER STATION

NO.	DESCRIPTION (1 ½" & 2" METER STA.)	JOINT TYPE	1 ½" LINE	2" LINE
1	"NEPTUNE" T-10 METER W/ E-CODER) R900i PIT VERSION INTERFACE & EQUIPPED W/ LID ANTENNA	OVAL FL	1 ½"	2"
2	"MUELLER" H-1423-2 METER YOKE - 18" HEIGHT (OR APPROVED EQUAL)	--	1 ½"	2"
3	"MUELLER" 110 COMPRESSION CONNECTION COUPLING (OR APPROVED EQUAL)	COMP. X MIPT	2 X 1 ½"	2"

1 ½" AND 2" METER NOTES:

A1. 1 ½" & 2" METERS TO BE SUPPLIED AND INSTALLED BY THE CITY
A2. 1 ½" AND 2" METERS SHALL REQUIRE 2" CORPORATION STOP AT THE MAIN AND 2" SERVICE LINE TO THE METER BOX.
A3. PROPERTY OWNER OR CONTRACTOR SHALL PAY FOR ALL COSTS OF INSTALLATION INCLUDING ALL MATERIALS, ALL EXCAVATION AND FILL, ASPHALT REPLACEMENT AND WATER MAIN CONNECTION. (CITY TO FURNISH METER).
A4. INSPECTION OF ALL WATER LINE INSTALLATIONS WILL BE DONE BY MORGAN CITY WATER DEPARTMENT WITH A 48 HOUR MINIMUM NOTICE REQUIRED PRIOR TO START OF WORK.
A5. IF APPLICABLE, A CUT PERMIT MUST BE REQUESTED AND APPROVED PRIOR TO START OF WORK.
A6. ALL SERVICE LINES TO METER SHALL BE TYPE "K" COPPER.
A7. METER SHALL BE OFFSET FROM CENTER OF MANHOLE TO ALLOW ACCESS.
A8. FOR TYPICAL INSTALLATION THE CITY WILL BE RESPONSIBLE FOR THE SERVICE LINE FROM THE MAIN UP TO AND INCLUDING THE METER. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE SERVICE LINE AND FITTINGS AFTER THE METER.

REGISTERED PROFESSIONAL ENGINEER No. 323821 MATTHEW E. HARTVIGSEN STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

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WATER SERVICE DETAILS: 1" TO 2"

SHEET: CW-01
OF 1 SHEETS
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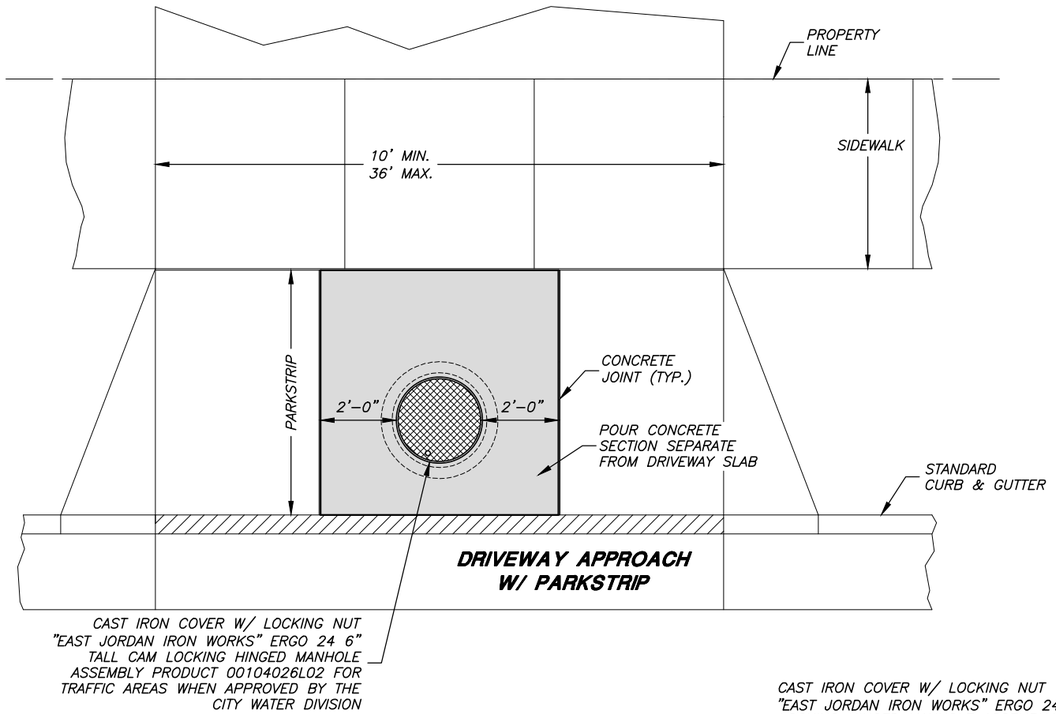


DRIVEWAY APPROACH W/ PARKSTRIP

SAMPLING STATION NOTES:

A. SAMPLING STATIONS SHALL BE 5' BURY, WITH A ¾" FIP INLET, AND A ¾" UNTHREADED NOZZLE.

B. ALL STATIONS SHALL BE ENCLOSED IN A LOCKABLE, NON-REMOVABLE, ALUMINUM-CAST HOUSING.

C. WHEN OPENED, THE STATION SHALL REQUIRE NO KEY FOR OPERATION, AND THE WATER WILL FLOW IN AN ALL BRASS WATERWAY.

D. ALL WORKING PARTS WILL ALSO BE OF BRASS AND BE REMOVABLE FROM ABOVE GROUND WITH NO DIGGING. EXTERIOR PIPING SHALL BE BRASS PIPE.

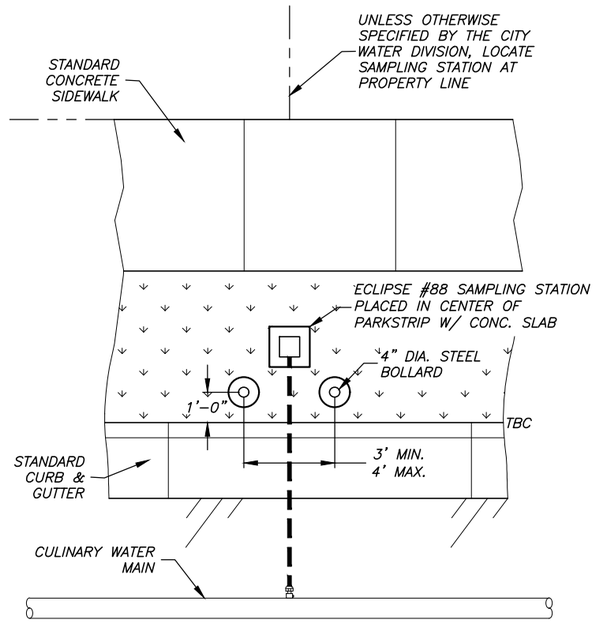
E. A COPPER VENT TUBE WILL ENABLE EACH STATION TO BE PUMPED FREE OF STANDING WATER TO PREVENT FREEZING AND TO MINIMIZE BACTERIA GROWTH.

F. ECLIPSE NO. 88 SAMPLING STATION SHALL BE MANUFACTURED BY KUPFERLE FOUNDRY, ST. LOUIS, MO 63102

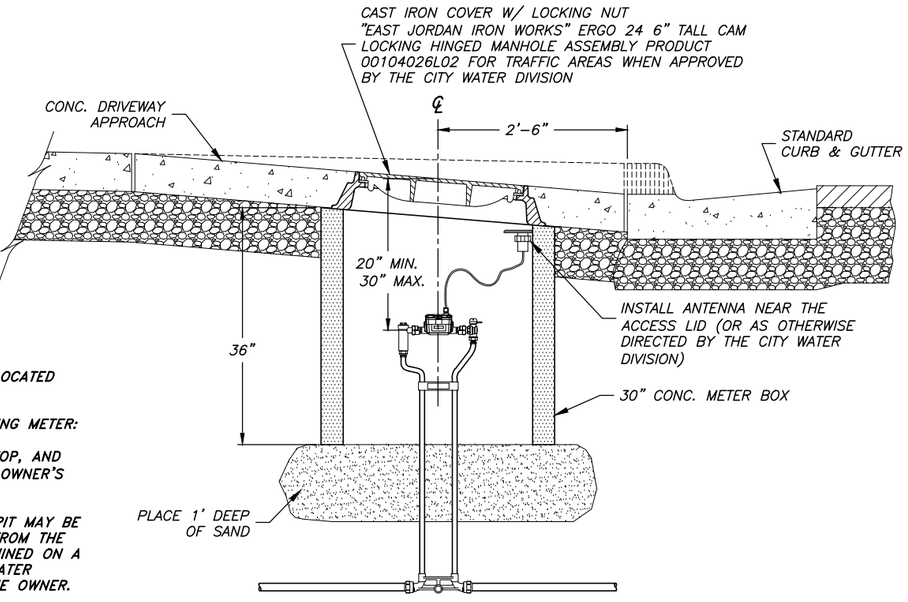
G. TYPICALLY, A SAMPLING STATION IS REQUIRED FOR EVERY 80 LOTS OR ONE PER DEVELOPMENT FOR DEVELOPMENTS SMALLER THAN 80 LOTS. LOCATION AS DIRECTED BY THE CITY ENGINEER OR WATER SYSTEM OPERATOR.

H. PROVIDE 2 STEEL BOLLARDS TO PROTECT SAMPLING STATION. PLACE IN FRONT OF SAMPLING STATION AS SHOWN IN THE DETAIL ON THIS SHEET.

I. PROVIDE A GALVANIZED STEEL CASING PIPE TO PROTECT/SUPPORT THE 1/4 INCH COPPER VENT TUBE. FILL W/ SPRAY FOAM INSULATION AFTER INSTALLATION. (CONSULT CITY WATER DIVISION PRIOR TO CONSTRUCTION)



STANDARD SAMPLING STATION LOCATION

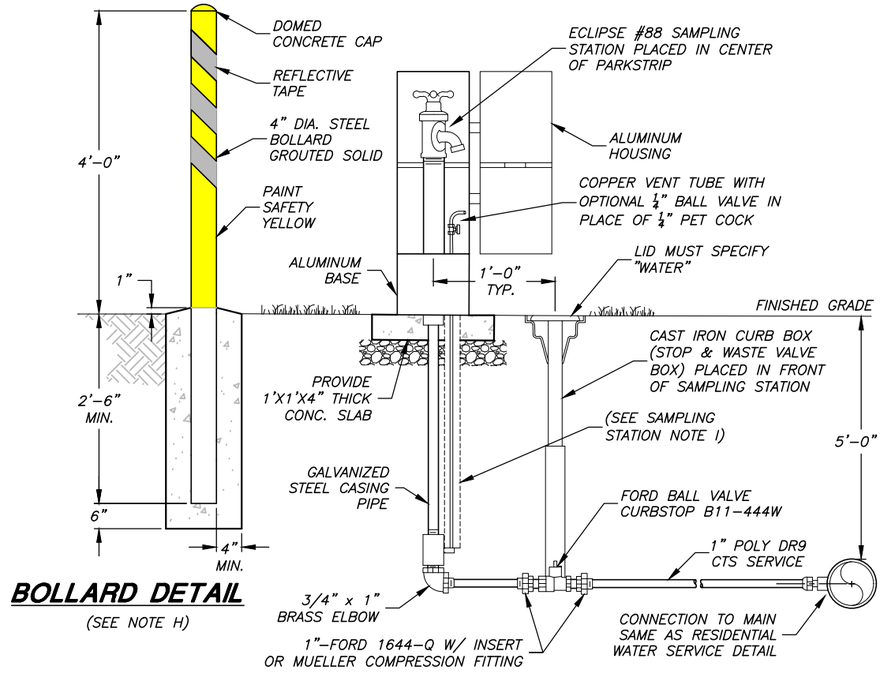


METER LOCATION NOTES:

1. CULINARY WATER METERS SHALL NOT BE LOCATED WITHIN THE DRIVEWAY AREA.
2. IF A DRIVEWAY IS PLACED OVER AN EXISTING METER:
   a. THE "ENTIRE" SERVICE LINE, CORP STOP, AND METER SHALL BE RELOCATED AT THE OWNER'S EXPENSE, OR
   b. A HIGH TRAFFIC RESIDENTIAL METER PIT MAY BE INSTALLED WITH WRITTEN APPROVAL FROM THE CITY WATER DIVISION. THIS IS DETERMINED ON A CASE BY CASE BASIS BY THE CITY WATER DIVISION AND TO BE PAID FOR BY THE OWNER.

HIGH TRAFFIC RESIDENTIAL METER PIT DETAIL

THE USE OF A HIGH TRAFFIC RESIDENTIAL SERVICE METER PIT IS SITE SPECIFIC AND REQUIRES WRITTEN APPROVAL FROM THE CITY WATER DIVISION PRIOR TO INSTALLATION



BOLLARD DETAIL

(SEE NOTE H)

CULINARY WATER SAMPLING STATION

REGISTERED PROFESSIONAL ENGINEER — No. 323821 — MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED _____
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PUBLIC WORKS STANDARDS

HIGH TRAFFIC RESIDENTIAL METER PIT AND SAMPLING STATION DETAILS

SHEET: CW-02
OF 1 SHEETS
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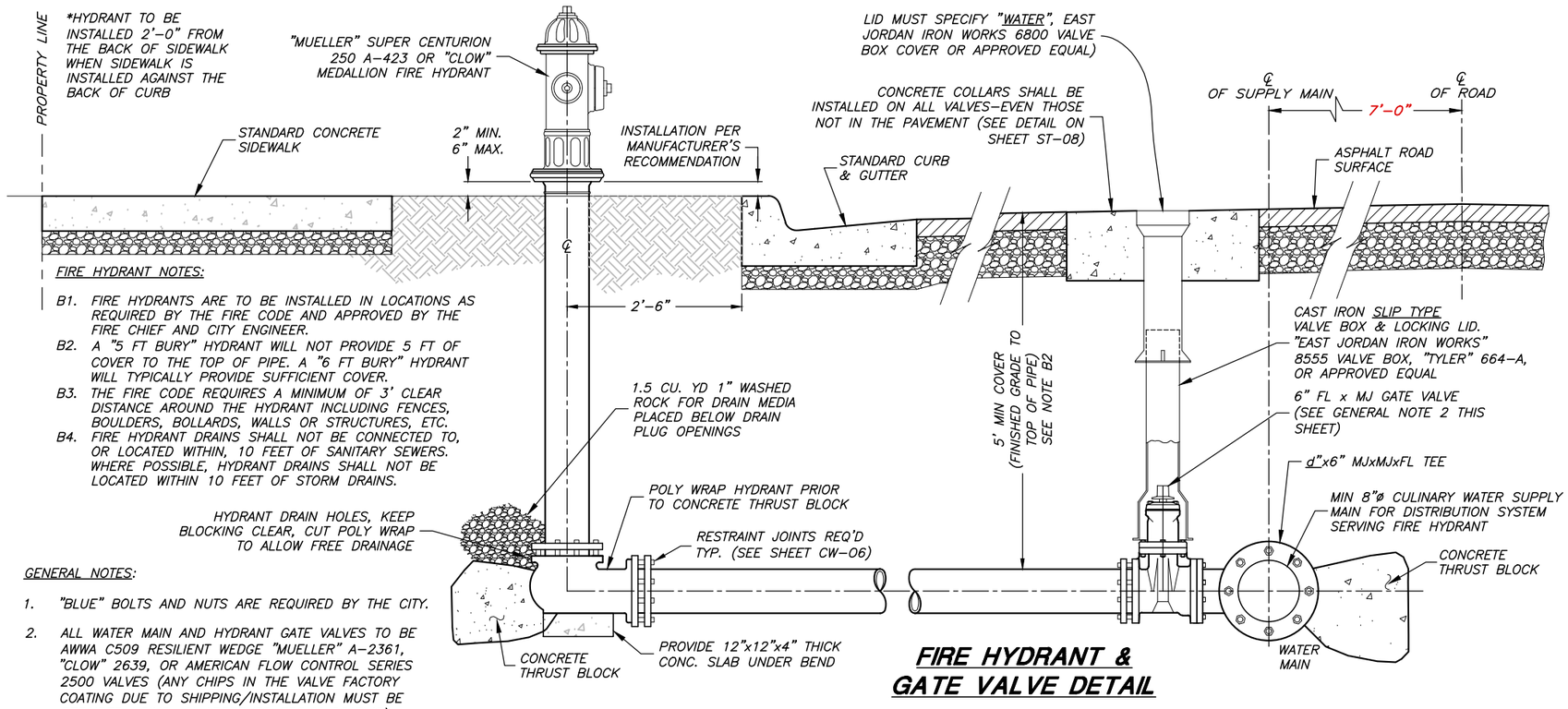


FIRE HYDRANT NOTES:

B1. FIRE HYDRANTS ARE TO BE INSTALLED IN LOCATIONS AS REQUIRED BY THE FIRE CODE AND APPROVED BY THE FIRE CHIEF AND CITY ENGINEER.

B2. A "5 FT BURY" HYDRANT WILL NOT PROVIDE 5 FT OF COVER TO THE TOP OF PIPE. A "6 FT BURY" HYDRANT WILL TYPICALLY PROVIDE SUFFICIENT COVER.

B3. THE FIRE CODE REQUIRES A MINIMUM OF 3' CLEAR DISTANCE AROUND THE HYDRANT INCLUDING FENCES, BOULDERS, BOLLARDS, WALLS OR STRUCTURES, ETC.

B4. FIRE HYDRANT DRAINS SHALL NOT BE CONNECTED TO, OR LOCATED WITHIN, 10 FEET OF SANITARY SEWERS. WHERE POSSIBLE, HYDRANT DRAINS SHALL NOT BE LOCATED WITHIN 10 FEET OF STORM DRAINS.

GENERAL NOTES:

1. "BLUE" BOLTS AND NUTS ARE REQUIRED BY THE CITY.

2. ALL WATER MAIN AND HYDRANT GATE VALVES TO BE AWWA C509 RESILIENT WEDGE "MUELLER" A-2361, "CLOW" 2639, OR AMERICAN FLOW CONTROL SERIES 2500 VALVES (ANY CHIPS IN THE VALVE FACTORY COATING DUE TO SHIPPING/INSTALLATION MUST BE REPAIRED USING AN APPROVED EPOXY COATING)

3. ALL SPECIFIED BRANDS OF MATERIALS SHOWN ON THESE DRAWINGS ARE "CITY STANDARDS." OTHER EQUIVALENT BRANDS MAY BE USED WITH THE PRIOR APPROVAL OF THE CITY ENGINEER AND THE CITY WATER SYSTEM DEPARTMENT.

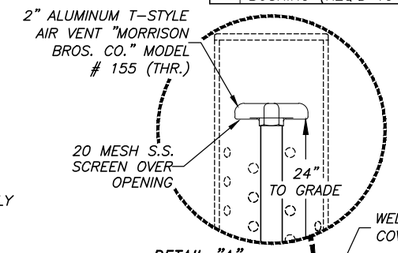
4. PIPES, JOINTS, FITTINGS, VALVES, & FIRE HYDRANTS SHALL CONFORM TO ANSI / NSF 61.

5. ALL WATER SYSTEM MATERIALS SHALL BE NEW; USED MATERIAL ARE NOT ALLOWED.

FIRE HYDRANT & GATE VALVE DETAIL

AIR/VAC PIPE & FITTING SCHEDULE

NO.	DESCRIPTION	FITTING
A	2" COMBINATION AIR-VACUUM RELIEF VALVE "A.R.I." MODEL D-040 W/ NPT CONNECTIONS	THR.
B	2" BRASS BALL VALVE (1/4 TURN) "FORD" B11-xxx-HB-67-NL OR APPROVED EQUAL	THR.
C	"FORD FC202 WIDE BAND STAINLESS STEEL OR "MUELLER" DR2S DOUBLE STRAP SERVICE SADDLE	
D	2" SCH. 80 PVC PIPE	THR.
Da	2" POLY PIPE	THR.
E	2" GALV. STEEL 90° ELBOW	THR.
F	2" SCH. 80 PVC UNION	THR.
G	2" BRASS PIPE	THR.
H	2" SCH. 80 PVC TEE	THR.
I	2" GALV. STEEL PIPE	THR.
J	1 1/2" x 2" SCH. 80 PVC REDUCER OR REDUCER BUSHING (REQ'D TO UPSIZE "A.R.I." VALVE OUTLET)	THR.

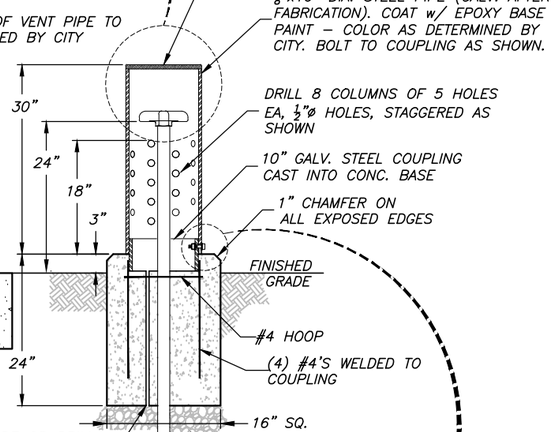


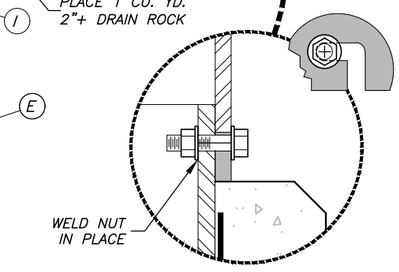
AIR/VACUUM RELIEF STATION NOTES:

A1. USE AN "APCO" 145C HEAVY-DUTY COMBINATION AIR VAC WHEN SPECIFIED BY THE CITY WATER DEPARTMENT.

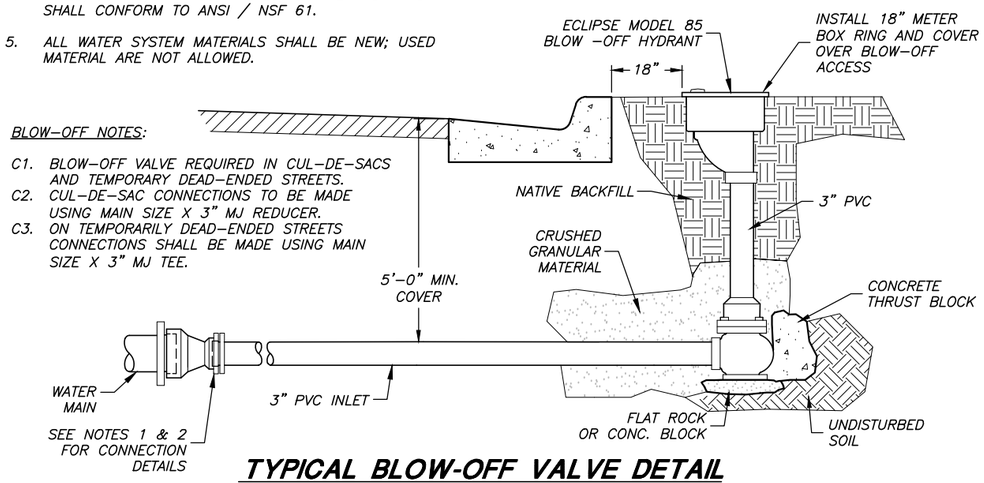
A2. NO MORE THAN 12" OF GRADE RINGS TO BE ALLOWED ON ANY MANHOLE.

DETAIL "A"





DETAIL "B"



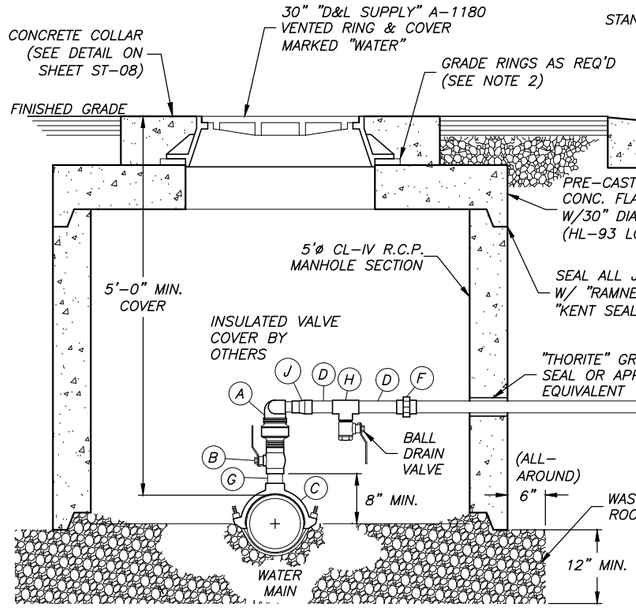
BLOW-OFF NOTES:

C1. BLOW-OFF VALVE REQUIRED IN CUL-DE-SACS AND TEMPORARY DEAD-ENDED STREETS.

C2. CUL-DE-SAC CONNECTIONS TO BE MADE USING MAIN SIZE X 3" MJ REDUCER.

C3. ON TEMPORARILY DEAD-ENDED STREETS CONNECTIONS SHALL BE MADE USING MAIN SIZE X 3" MJ TEE.

TYPICAL BLOW-OFF VALVE DETAIL



AIR/VACUUM RELIEF STATION

(BURIED WATER MAIN APPLICATION)

REGISTERED PROFESSIONAL ENGINEER No. 323821 MATTHEW E. HARTVIGSEN STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

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6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
www.jonescivil.com

MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
FIRE HYDRANT, BLOW-OFF, AND AIR/VACUUM RELIEF STATION DETAILS

SHEET: CW-03
OF 1 SHEETS
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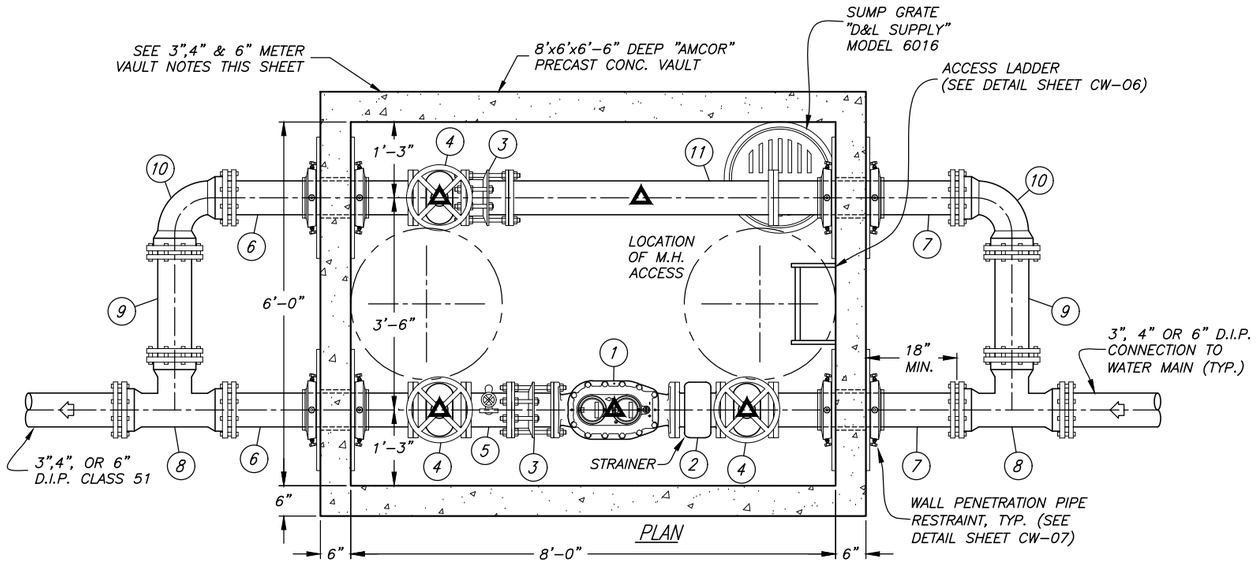

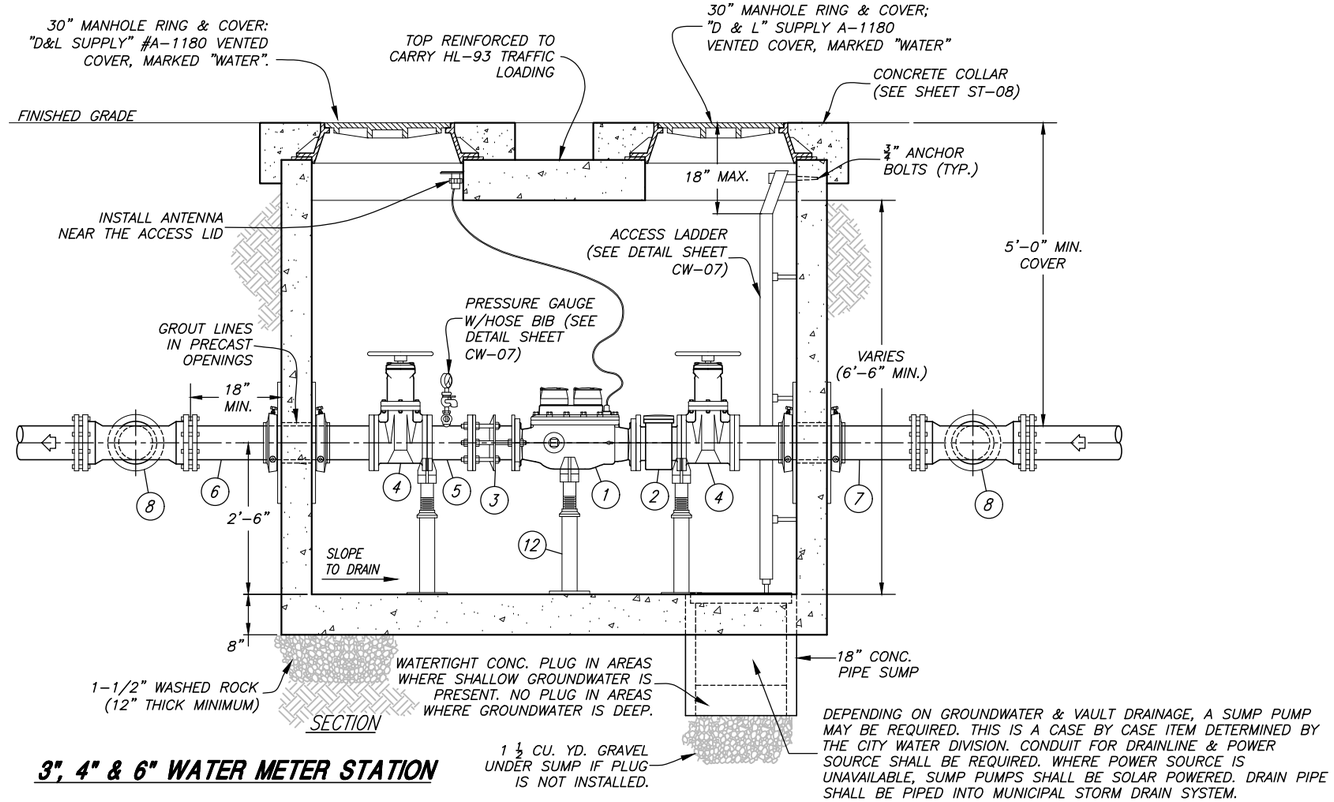

3", 4" & 6" WATER METER STATION

PIPE & FITTING SCHEDULE					
NO.	DESCRIPTION (3", 4" & 6" METER STA.)	JOINT TYPE	3" LINE	4" LINE	6" LINE
1	"NEPTUNE" TRU/FLO COMPOUND METER (SEE NOTE B3)	FL	3"	4"	6"
2	NEPTUNE LEAD-FREE COPPER STRAINER	FL	3"	4"	6"
3	"ROMAC" DJ400 DISMANTLING JOINT (2)	FL	3"	4"	6"
4	"MUELLER" RESILIENT WEDGE GATE VALVE W/ HANDWHEEL (3)	FL	3" A-2362	4" A-2361	6" A-2361
5	9" D.I. SPOOL PIECE (1)	FLxFL	3"	4"	6"
6	D.I. NIPPLE PIECE (2)	FLxPE	3"	4"	6"
7	D.I. NIPPLE PIECE (2)	FLxPE	3"	4"	6"
8	D.I. TEE (2)	MJ	3"x3"x3"	4"x4"x4"	6"x6"x6"
9	D.I. PIPE SECTION (2)	PE	3"	4"	6"
10	D.I. 90° ELBOW (2)	MJ	3"	4"	6"
11	D.I. SPOOL PIECE	FL	3"	4"	6"
12	"CLOW" F-1608 OR "ANVIL" #264 GALV. PIPE SUPPORT W/ 3" COMPANION FLANGE & VARIABLE HEIGHT 3" NIPPLE (5 EA REQ'D.)				△ SYMBOL

3", 4" & 6" METER VAULT NOTES:

A1. ALL FITTINGS SHALL BE AWWA C-110 WITH 125 LB. FLANGES. ALL PIPING SHALL BE DUCTILE IRON PIPE CLASS 350 P.S.I. MIN.

A2. ALL FITTINGS OUTSIDE OF THE VAULT ARE TO BE DUCTILE IRON MJ WITH THRUST RESTRAINT RETAINER GLANDS ("ROMAC", MJRG, OR APPROVED EQUAL).

A3. "BLUE" BOLTS AND NUTS ARE REQUIRED BY THE CITY.

A4. PENETRATION WALLS NEED TO BE ADEQUATELY DESIGNED STRUCTURALLY FOR ANTICIPATED THRUST.

A5. THE PRECAST VAULT MANUFACTURER IS RESPONSIBLE FOR DESIGN RELATED TO TRAFFIC LOADING AND THRUST. VERIFICATION OF PROPER DESIGN MUST BE PROVIDED TO THE CITY BY THE DEVELOPER, CONTRACTOR, OR PROPERTY OWNER AS THE CASE MAY BE.

A6. ALL WALL PIPE PENETRATIONS ARE TO BE SEALED TO PREVENT WATER INFILTRATION. USE "LINK-SEAL" ON CAST-IN-PLACE VAULTS. PRECAST VAULTS SEAL AS DIRECTED BY CITY WATER DEPARTMENT.

A7. NO MORE THAN 12" OF GRADE RINGS TO BE ALLOWED ON ANY MANHOLE OR STRUCTURE.

METER NOTES:

B1. ALL METERS TO BE RADIO-READ COMPATIBLE WITH "NEPTUNE" E-CODER R900i PIT VERSION INTERFACE & EQUIPPED WITH A THROUGH THE LID ANTENNA.

B2. METERS TO BE APPROVED BY WATER DEPARTMENT PRIOR TO INSTALLATION.

GENERAL NOTES:

C1. PROPERTY OWNER OR CONTRACTOR SHALL PAY FOR ALL COSTS OF INSTALLATION INCLUDING ALL MATERIALS, ALL EXCAVATION AND FILL, ASPHALT REPLACEMENT AND WATER MAIN CONNECTION.

C2. INSPECTION OF ALL WATER LINE INSTALLATIONS WILL BE DONE BY THE CITY WATER DEPARTMENT, WITH A 48 HOUR MINIMUM NOTICE REQUIRED PRIOR TO START OF WORK.

C3. IF APPLICABLE, A MORGAN CITY CUT PERMIT MUST BE REQUESTED AND APPROVED PRIOR TO START OF WORK.

C4. ALL SPECIFIED BRANDS OF MATERIALS SHOWN ON THESE DRAWINGS ARE "CITY STANDARDS." OTHER EQUIVALENT BRANDS MAY BE USED WITH THE PRIOR APPROVAL OF THE CITY ENGINEER AND THE CITY WATER DEPARTMENT.

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

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MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

WATER METER STATION DETAILS: 3" TO 6"

SHEET: CW-04
OF 1 SHEETS
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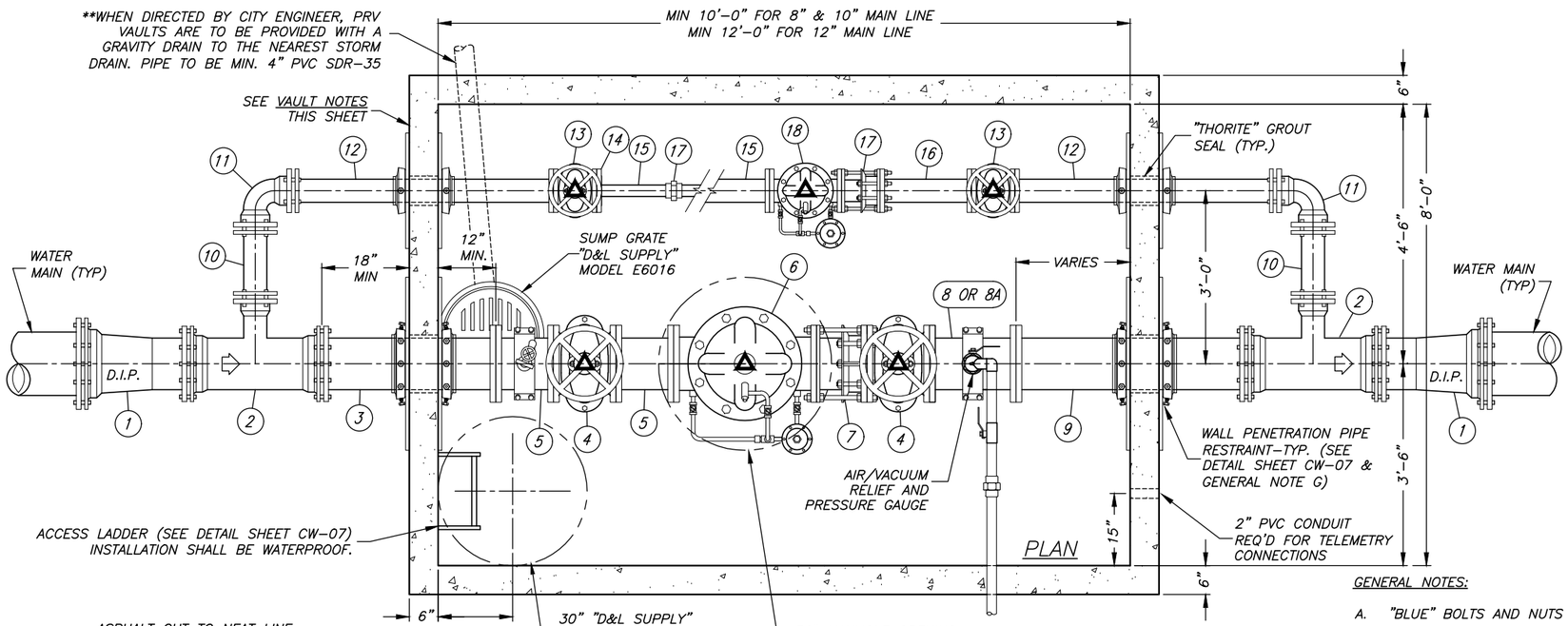

PIPE & FITTING SCHEDULE

NO.	DESCRIPTION	JOINT TYPE	8" LINE	10" LINE	12" LINE
1	D.I. REDUCER (2)	MJ	8"x6"	10"x8"	12"x10"
2	D.I. REDUCING TEE (2)	MJ	6"x6"x4"	8"x8"x4"	10"x10"x4"
3	D.I. NIPPLE PIECE	FLxPE	6"	8"	10"
4	"MUELLER" A-2361 GATE VALVE W/ HANDWHEEL (2)	FL	6"	8"	10"
5	12" D.I. SPOOL PIECE (2)	FL	6"	8"	10"
6	"CLA-VAL" 90-01 PRESSURE REDUCTION VALVE	FL	6"	8"	10"
7	"ROMAC" DJ400 DISMANTLING JOINT	FL	6"	8"	10"
8	18" D.I. SPOOL PIECE	FL	6"	--	10"
8A	15" D.I. SPOOL PIECE	FL	--	8"	--
9	D.I. NIPPLE PIECE	FLxPE	6"	8"	10"
10	D.I. PIPE SECTION (2)	PE	4"	4"	4"
11	D.I. 90° ELBOW (2)	MJ	4"	4"	4"
12	D.I. NIPPLE PIECE	FLxPE	4"	4"	4"
13	"MUELLER" A-2361 GATE VALVE W/ HANDWHEEL (2)	FL	4"	4"	4"
14	BLIND FLANGE W/ THREADED CONNECTION (2)	FLxTHR.	4"x2 ½"	--	--
15	D.I. SPOOL PIECE	FL	--	4"	4"
	GALVANIZED PIPE	THR.	2 1/2"	--	--
16	D.I. SPOOL PIECE	FL	--	4"	4"
	GALVANIZED PIPE	THR.	2 1/2"	--	--
17	"ROMAC" DJ400 DISMANTLING JOINT	FL	--	4"	4"
	GALVANIZED UNION	THR.	2 1/2"	--	--
18	"CLA-VAL" 90-01 PRESSURE REDUCTION VALVE	FL	--	4"	4"
		THR.	2 1/2"	--	--
19	"CLOW" F-1608 OR "ANVIL" #264 GALV. PIPE SUPPORT W/ 3" COMPANION FLANGE & VARIABLE HEIGHT 3" NIPPLE (6 EA REQ'D.)				▲ SYMBOL

GENERAL NOTES:

A. "BLUE" BOLTS AND NUTS ARE REQUIRED BY THE CITY.

B. ALL FITTINGS OUTSIDE OF THE VAULT ARE TO BE DUCTILE IRON MJ WITH THRUST RESTRAINT RETAINER GLANDS ("ROMAC", MJRG, OR APPROVED EQUAL)

C. STRUCTURE, PIPING & VALVE SIZES FOR P.R.V. STATIONS ON LINE SIZES GREATER THAN 12" SHALL BE SPECIFIED BY THE CITY ENGINEER.

D. ALL SPECIFIED BRANDS OF MATERIALS SHOWN ON THESE DRAWINGS ARE "CITY STANDARDS." OTHER EQUIVALENT BRANDS MAY BE USED WITH THE PRIOR APPROVAL OF THE CITY ENGINEER AND THE CITY WATER DIVISION.

E. WHEN AN AIR/VACUUM RELIEF IS NOT NEEDED A PRESSURE GAUGE IS STILL REQUIRED ON THE DOWNSTREAM SIDE OF THE PRV.

F. NO MORE THAN 12" OF GRADE RINGS TO ALLOWED ON ANY MANHOLE OR STRUCTURE.

GENERAL NOTES CONT.:

G. ALL WALL PIPE PENETRATIONS AND JOINTS SHALL BE SEALED TO PREVENT WATER INFILTRATION. USE "LINK-SEAL" ON CAST-IN-PLACE VAULTS. PRECAST VAULTS SEAL AS DIRECTED BY CITY WATER DIVISION. APPROVED PRODUCTS ARE:
(a) "PRIME RESIN"- PRIMEFLEX 900XLV
(b) "MANUS PRODUCTS"- MANUS BOND 75AM

PRV GENERAL SPECIFICATIONS:

A1. PRV TO BE CLA-VAL #90-01 YBCSKC
A2. 150 # FLANGED FOR 250 PSI WORKING PRESSURE, 300# FLANGED IF GREATER THAN 250 PSI
A3. DUCTILE IRON BODY GLOBE PATTERN
A4. EPOXY LINED AND COATED
A5. STAINLESS STEEL INTERNAL TRIM
A6. BRONZE PILOT CONTROLS
A7. STAINLESS STEEL TUBES & FITTINGS
A8. SPRING RANGES FOR PRESSURE REDUCING PILOT
A9. X101 VALVE POSITION INDICATOR
A10. CK2 ISOLATION BALL VALVES (STAINLESS)
A11. CV FLOW CONTROL (OPENING)

COATING NOTES:

B1. THE P.R.V. VALVE SHALL INCLUDE FACTORY INSTALLED INTERIOR EPOXY COATING.

B2. ALL NEW AND EXISTING PIPING, VALVES, FITTINGS, METERS, ETC, INSIDE THE VAULT SHALL BE EPOXY PAINTED BLUE.

B3. METAL SURFACES TO BE PAINTED SHALL BE PRIMED AND THEN PAINTED W/ TWO COATS OF BLUE EPOXY PAINT.

VAULT NOTES:

C1. PRE-PLUMBED PRV VAULTS ARE THE PREFERRED OPTION FOR INSTALLATION. THE USE AND LOCATION OF A PRE-PLUMBED PRV VAULT SHALL BE AS DIRECTED BY THE CITY ENGINEER FOLLOWING REVIEW OF CURRENT SITE CONDITIONS.

C2. WHERE APPLICABLE, A HIGH PRESSURE RELIEF VALVE ASSEMBLY MAY BE REQUIRED. THIS IS A CASE BY CASE ITEM DETERMINED BY THE CITY WATER DIVISION (PRV VAULT WILL NEED TO BE LENGTHENED TO ACCOMMODATE SUCH VALVE)

C3. PRECAST CONCRETE STRUCTURE CAN BE REPLACED WITH CAST-IN-PLACE CONCRETE VAULT. SUBMIT ENGINEERED CONSTRUCTION PLANS WITH REBAR DETAILS TO CITY ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.

C4. PENETRATION WALLS NEED TO BE ADEQUATELY DESIGNED STRUCTURALLY FOR ANTICIPATED THRUST.

C5. THE PRECAST VAULT MANUFACTURER IS RESPONSIBLE FOR DESIGN RELATED TO HL-93 TRAFFIC LOADING AND THRUST. VERIFICATION OF PROPER DESIGN MUST BE PROVIDED TO THE CITY BY THE DEVELOPER, CONTRACTOR, OR PROPERTY OWNER AS THE CASE MAY BE.

PRESSURE REDUCTION STATION

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
www.jonescivil.com

MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
PRESSURE REDUCTION STATION

SHEET: CW-05
OF 1 SHEETS
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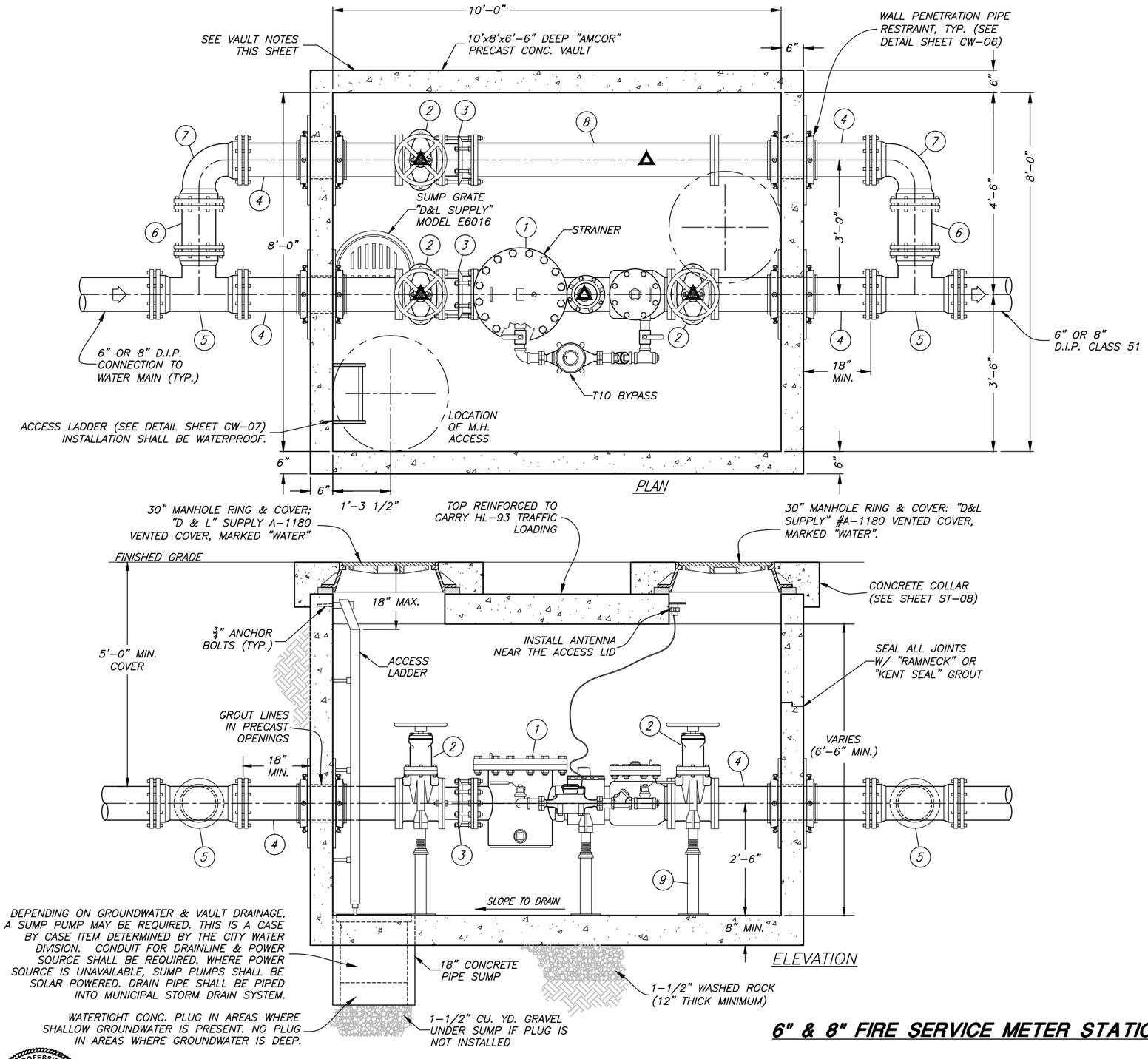

PIPE & FITTING SCHEDULE				
NO.	DESCRIPTION (6" & 8" METER STA.)	JOINT TYPE	6" LINE	8" LINE
1*	"NEPTUNE" PROTECTUS III W/ T10 BYPASS METER & R900i RADIO	FL	6"	8"
2	"MUELLER" RESILIENT WEDGE GATE VALVE W/ HANDWHEEL (3)	FL	6" A–2361	8" A–2361
3	"ROMAC" DJ400 DISMANTLING JOINT (2)	FL	6"	8"
4	D.I. NIPPLE PIECE (4)	FLxPE	6"	8"
5	D.I. TEE (2)	MJ	6"x6"x6"	8"x8"x8"
6	D.I. PIPE SECTION (2)	PE	6"	8"
7	D.I. 90° ELBOW (2)	MJ	6"	8"
8	D.I. SPOOL PIECE	FL	6"	8"
9	"CLOW" F–1608 OR "ANVIL" #264 GALV. PIPE SUPPORT W/ 3" COMPANION FLANGE & VARIABLE HEIGHT 3" NIPPLE (5 EA REQ'D.)			▲ SYMBOL

* METER TO BE SUPPLIED BY OWNER OR CONTRACTOR AND NOT BY CITY.

FIRE LINE NOTES:

A1. NO WATER SERVICE OR FIRE LINES TO BUILDINGS ARE PERMITTED TO CONNECT TO AUXILIARY LINES SERVICING FIRE HYDRANTS.

A2. COMMERCIAL FIRE LINES FROM THE MAIN TO BUILDING SHALL BE SEPARATE LINES AND NOT PART OF THE WATER SERVICE LATERAL.

FIRE METER VAULT NOTES:

B1. ALL FITTINGS SHALL BE AWWA C–110 WITH 125 LB. FLANGES. ALL PIPING SHALL BE DUCTILE IRON PIPE CLASS 350 P.S.I. MIN.

B2. ALL FITTINGS OUTSIDE OF THE VAULT ARE TO BE DUCTILE IRON MJ WITH THRUST RESTRAINT RETAINER GLANDS ("ROMAC", MJRG, OR APPROVED EQUAL).

B3. "BLUE" BOLTS AND NUTS ARE REQUIRED BY THE CITY.

B4. PENETRATION WALLS NEED TO BE ADEQUATELY DESIGNED STRUCTURALLY FOR ANTICIPATED THRUST.

B5. THE PRECAST VAULT MANUFACTURER IS RESPONSIBLE FOR DESIGN RELATED TO TRAFFIC LOADING AND THRUST. VERIFICATION OF PROPER DESIGN MUST BE PROVIDED TO THE CITY BY THE DEVELOPER, CONTRACTOR, OR PROPERTY OWNER AS THE CASE MAY BE.

B6. ALL WALL PIPE PENETRATIONS ARE TO BE SEALED TO PREVENT WATER INFILTRATION. USE "LINK–SEAL" ON CAST–IN–PLACE VAULTS. PRECAST VAULTS SEAL AS DIRECTED BY CITY WATER DEPARTMENT.

B7. NO MORE THAN 12" OF GRADE RINGS TO BE ALLOWED ON ANY MANHOLE OR STRUCTURE.

METER NOTES:

C1. ALL METERS TO BE RADIO–READ COMPATIBLE WITH "NEPTUNE" E–CODER R900i PIT VERSION INTERFACE & EQUIPPED WITH A THROUGH THE LID ANTENNA.

C2. METERS TO BE APPROVED BY WATER DEPARTMENT PRIOR TO INSTALLATION.

GENERAL NOTES:

D1. PROPERTY OWNER OR CONTRACTOR SHALL PAY FOR ALL COSTS OF INSTALLATION INCLUDING ALL MATERIALS, ALL EXCAVATION AND FILL, ASPHALT REPLACEMENT AND WATER MAIN CONNECTION.

D2. INSPECTION OF ALL WATER LINE INSTALLATIONS WILL BE DONE BY THE CITY WATER DEPARTMENT, WITH A 48 HOUR MINIMUM NOTICE REQUIRED PRIOR TO START OF WORK.

D3. CONTRACTOR IS RESPONSIBLE FOR ALL COUNTY, STATE, OR CITY ROAD CUT PERMITS AND REGULATIONS.

D4. ALL SPECIFIED BRANDS OF MATERIALS SHOWN ON THESE DRAWINGS ARE "CITY STANDARDS." OTHER EQUIVALENT BRANDS MAY BE USED WITH THE PRIOR APPROVAL OF THE CITY ENGINEER AND THE CITY WATER DEPARTMENT.

6" & 8" FIRE SERVICE METER STATION

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER

08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

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MORGAN CITY EST. 1868

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TYPICAL FIRE METER STATION

SHEET: CW-06
OF 1 SHEETS
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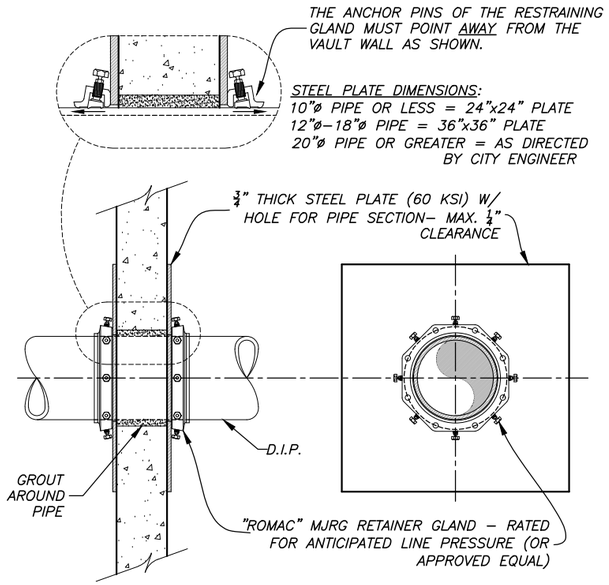
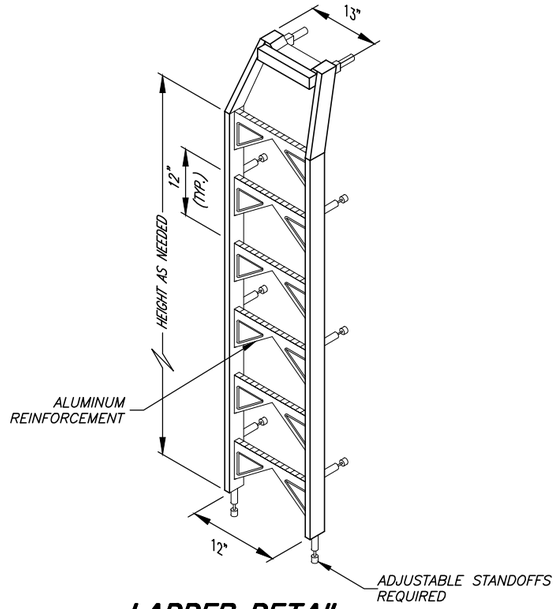


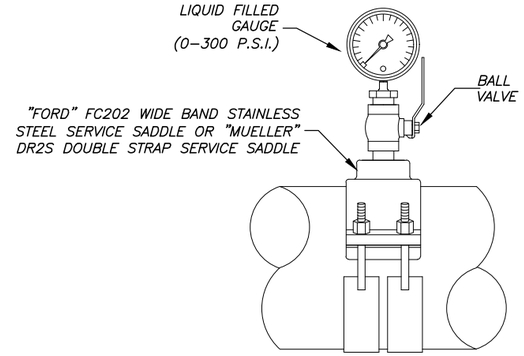
WALL PENETRATION DETAIL

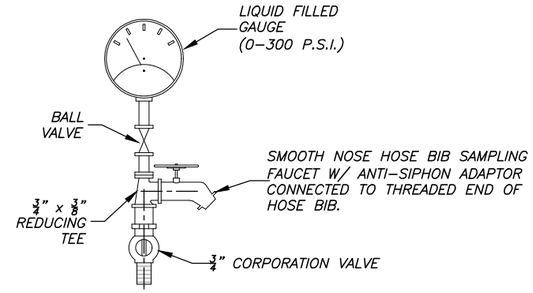
FOR PRECAST VAULT (TYP)



LADDER DETAIL

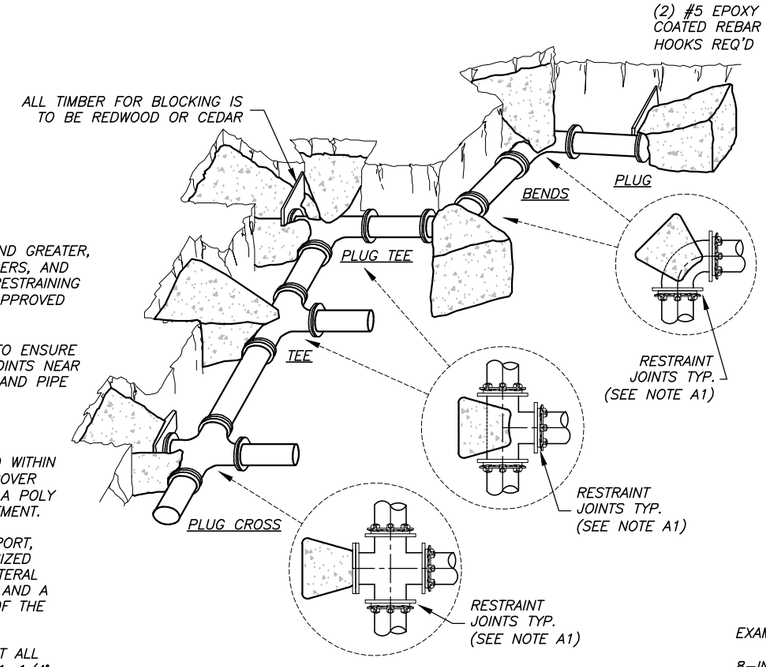
M.A. INDUSTRIES HIGH MOLECULAR WEIGHT (HDPE) POLY-EUROTHANE LADDER W/ ALUMINUM REINFORCEMENT (ASTM B-221) OR APPROVED EQUAL





(WITH SAMPLING FAUCET DETAIL)

PRESSURE GAUGE



TYPICAL RETAINER GLANDS & THRUST BLOCKING

PIPE RESTRAINT

A1. FOR NOMINAL PIPE DIAMETERS 8" AND GREATER, ALL BENDS, CROSSES, TEES, REDUCERS, AND VALVES SHALL BE INSTALLED WITH RESTRAINING JOINTS ("MEGA-LUG", "ALPHA" OR APPROVED EQUAL).

A2. DESIGN SHALL ALSO BE REQUIRED TO ENSURE ADEQUATE RESTRAINT FOR PIPING JOINTS NEAR FITTINGS BASED ON PIPE DIAMETER AND PIPE PRESSURE.

THRUST BLOCKING NOTES:

B1. CONCRETE SHALL NOT BE PLACED WITHIN 1-1/2" OF JOINTS AND BOLTS. COVER ALL METAL CONTACT AREAS WITH A POLY WRAP PRIOR TO CONCRETE PLACEMENT.

B2. IN THE ABSENCE OF A SOILS REPORT, ALL THRUST BLOCKS SHALL BE SIZED ON THE BASIS OF A MAXIMUM LATERAL BEARING VALUE FOR 2000 P.S.F. AND A THRUST RESULTING FROM 200% OF THE WATER LINE STATIC LINE TEST.

B3. THRUST BLOCKS ARE REQUIRED AT ALL BENDS OF 22-1/2° OR MORE. 11-1/4° BENDS SHALL HAVE RETAINER GLANDS.

B4. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3000 PSI IN 28 DAYS.

THRUST PER PSI OF WATER PRESSURE AT VARIOUS FITTINGS

PIPE SIZE (IN.)	DEAD END OR TEE (LB.)	90° ELBOW (LB.)	45° ELBOW (LB.)	22-1/2° ELBOW (LB.)	SIDE THRUST (LB.)
4	19	27	15	7	35
6	39	55	30	15	72
8	67	94	51	26	122
10	109	154	84	43	197
12	155	218	119	61	278
14	210	296	161	82	377
16	272	383	209	106	486
18	351	494	269	137	665
20	434	611	333	169	790
24	623	878	487	244	1150
30	947	1,332	722	377	
36	1,356	1,905	1,032	542	

TABLE NOTES:

C1. IN USING THE ABOVE TABLE, USE THE MAXIMUM INTERNAL PRESSURE ANTICIPATED (I.E. HYDROSTATIC TEST PRESSURE, POSSIBLE SURGE PRESSURE DUE TO PUMP SHUT OFF, ETC.).

C2. SEE SOILS REPORT FOR BEARING STRENGTH OF SOIL. IN THE ABSENCE OF A SOILS REPORT, AN AVERAGE SOIL (SPADABLE MEDIUM CLAY) CAN BE ASSUMED TO HAVE A BEARING STRENGTH OF 2000 P.S.F.

EXAMPLE:

8-INCH 90° ELBOW, PRESSURE 200 LB./SQ. IN.
FROM TABLE: THRUST = 94 X 200 = 18,800 LB.
ASSUME BEARING STRENGTH = 2.000 LB./SQ. FT.

18,8000 / 2,000 = 9.4 SQ. FT. AREA OF BEARING REQUIRED FOR THRUST BLOCK

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
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MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

THRUST BLOCKING AND MISCELLANEOUS UTILITY VAULT DETAILS

SHEET: CW-07
OF 1 SHEETS
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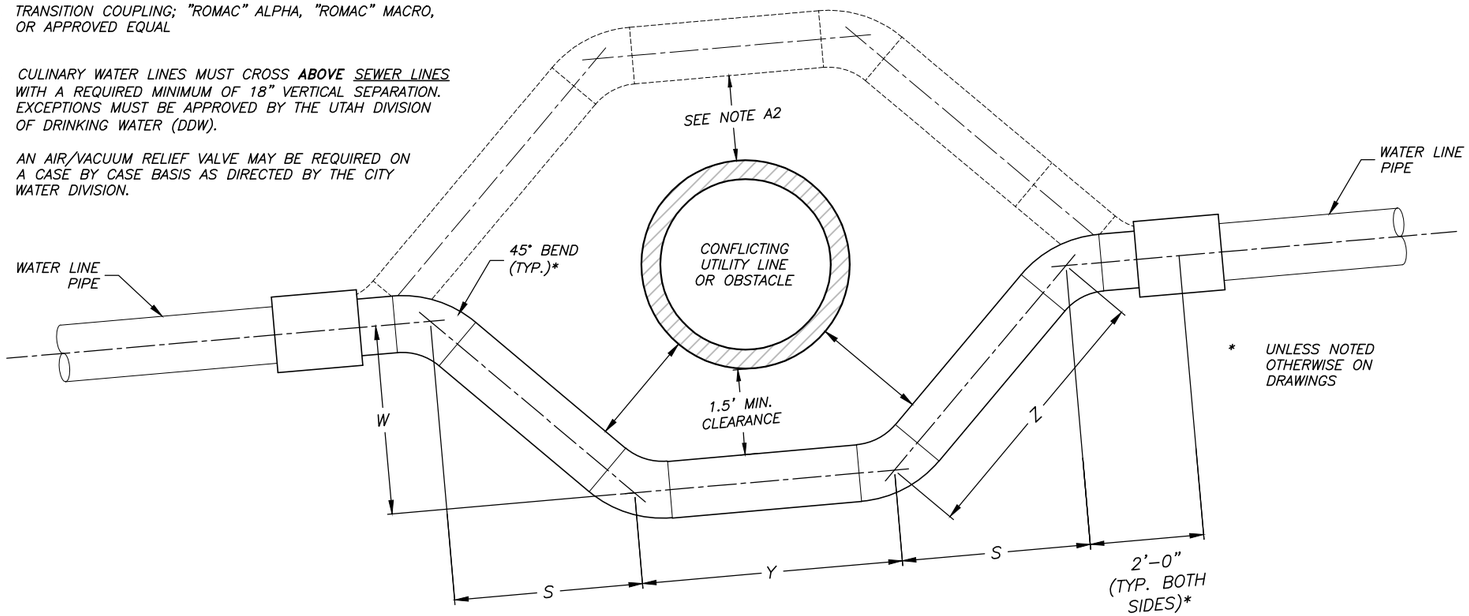
A1. TRANSITION COUPLING; "ROMAC" ALPHA, "ROMAC" MACRO, OR APPROVED EQUAL

A2. CULINARY WATER LINES MUST CROSS **ABOVE** SEWER LINES WITH A REQUIRED MINIMUM OF 18" VERTICAL SEPARATION. EXCEPTIONS MUST BE APPROVED BY THE UTAH DIVISION OF DRINKING WATER (DDW).

A3. AN AIR/VACUUM RELIEF VALVE MAY BE REQUIRED ON A CASE BY CASE BASIS AS DIRECTED BY THE CITY WATER DIVISION.



PREFABRICATED STAINLESS STEEL LOOP SCHEDULE 40

PREFABRICATED STAINLESS STEEL LOOP NOTES:

1. LINING AND COATING SPECIFICATIONS FOR UNDERGROUND PIPING:

   ALL FABRICATED STAINLESS STEEL PIPING SHALL BE SANDBLASTED TO "NEAR WHITE" (SSPC-SP10). EACH SECTION OF PIPE AND OR FITTINGS SHALL BE PRIMED BY THE SPRAYING METHOD WITH TNEMEC SERIES FC-20 POTA POX (FAST CURE) EPOXY-POLYAMIDE 20-1255 BEIGE PRIMER. THIS SHALL BE 7.0 MILS WET AND 4.0 MILS AFTER DRYING. THE MINIMUM DRYING TIME SHALL BE 3 HOURS AT 77 DEGREES F, OR 12 HOURS AT 50 DEGREES F. BEFORE INTERMEDIATE COATS ARE APPLIED. PROPER CURING WILL NOT OCCUR UNDER 35 DEGREES F.

   INTERMEDIATE AND TOPCOAT SHALL B E TNEMEC SERIES FC-20 POTA POX (FAST CURE) EPOXY POLYAMIDE 20-AA83 TANK WHITE APPLIED BY THE SPRAYING METHOD. EACH COAT SHALL BE 9.0 MILS WET AND 5.0 MILS DRY PER COAT. THE MINIMUM DRY TIME SHALL BE 3 HOURS AT 77 DEGREES F. OR 12 HOURS AT 50 DEGREES F. BEFORE FINISH COAT IS APPLIED. PROPER CURING WILL NOT OCCUR UN 35 DEGREES F.

   TOTAL DRY FILM THICKNESS SHALL BE 14.0 MILS (MINIMUM).

   ALL WELDED JOINTS OR OTHER REPAIRS SHALL BE MADE IN THE SAME MANNER AS LISTED ABOVE.

   ALL UNDERGROUND LOOPS, SPOOL, AND FABRICATED PIPING SHALL BE DOUBLE TAPE WRAPPED AFTER THE ABVOVE COATINGS, WITH POLYKEN 934-35 PIPE WRAP OR EQUAL.

   ALL TNEMEC PRODUCTS LISTED ABOVE ARE LISTED BY THE STATE OF UTAH, BOARD OF HEALTH, NSF AND CONFORMS TO AWWA 1D01 INSIDE SYSTEM NO. 1.

2. ALL WELDING IS TO BE FULL PENETRATION BUTT WELDS PER AWWA C-200 OR C-206.

3. BACKFILL AND COMPACT TRENCH TO SPECIFIED COMPACTION PRIOR TO SUPPLYING TEST PRESSURE AT WATER LINE LOOPS.

4. INSPECTION: PRIOR TO BACKFILLING TRENCH EXCAVATION, SECURE INSPECTION OF INSTALLATION BY CITY WATER DIVISION.

5 BACKFILL: PROVIDE AND PLACE PER APWA SECTION 33 05 20. COMPACT PER APWA SECTION 31 23 26 TO A MODIFIED PROCTOR DENSITY OF 95-PERCENT OR GREATER. MAXIMUM LIFT THICKNESS IS 8-INCHES BEFORE COMPACTION.

6. GREASE: APPLY POLY-FM GREASE TO ALL BURIED METAL SURFACES. WRAP WITH 8-MILLIMETER THICK POLYETHYLENE SHEET AND TAPE WRAP.

7. O.D. OF STAINLESS STEEL LOOP TO MATCH O.D. OF CONNECTING WATER LINE PIPE.

8. ALL STAINLESS STEEL LOOPS WITH A "Y" DIMENSION OF 10 FEET OR GREATER SHALL REQUIRE UPLIFT AND DOWN THRUST BLOCKS.

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

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MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
PREFABRICATED STAINLESS STEEL WATERLINE LOOP DETAIL

SHEET: CW-08 OF 1 SHEETS
0

GENERAL NOTES:

1. THESE MINIMUM STANDARDS ARE REQUIRED FOR IRRIGATION MAIN LINES, SERVICES AND ASSOCIATED APPURTENANCES LOCATED WITHIN THE CITY'S RIGHT-OF-WAY. ADDITIONAL STANDARDS SHALL BE OBTAINED FROM THE IRRIGATION COMPANY PROVIDING SERVICE.

2. AS PERMITTED, IRRIGATION CONNECTIONS TO THE CULINARY WATER DISTRIBUTION SYSTEM MUST HAVE APPROPRIATE BACK-FLOW DEVICE(S) APPROVED BY THE CITY.

3. **IRRIGATION SERVICES CONNECTED TO THE CITY'S IRRIGATION SYSTEM SHALL FOLLOW THE SAME MAIN LINE CONNECTION DETAILS AS CULINARY WATER SERVICES OTHER THAN THE USE OF POLY PIPE. USE THE SAME SADDLE, CORP STOP, ETC. AS SHOWN ON THIS DETAIL SHEET AND ON THE CULINARY WATER SERVICE DETAILS.**

4. IF AN IRRIGATION CONNECTION IS PERMITTED TO THE CULINARY WATER DISTRIBUTION SYSTEM AND IT IS REQUIRED TO BE METERED THEN THE IRRIGATION SERVICE METER SHALL FOLLOW THE STANDARDS FOR CULINARY WATER SERVICE METERS.

5. VALVE BOX COVERS ON IRRIGATION VALVES SHALL BE TRIANGULAR AS SHOWN IN THE DETAIL ON SHEET LS-02.

6. FITTINGS SHALL BE STAINLESS UNLESS SPECIFIED OTHERWISE.

7. VALVE & METER ENCLOSURE LIDS SHALL BE STAMPED "IRRIGATION"

8. ALL COMPRESSION-TYPE CONNECTIONS REQUIRE STAINLESS STEEL INSERT STIFFENERS.

9. THE TUBING SHOULD BE INSERTED INTO THE FITTING SO THAT THE END OF THE TUBING IS WELL PAST THE RUBBER GASKET AND AT LEAST 1/8" FROM THE BOTTOM OF THE SOCKET.

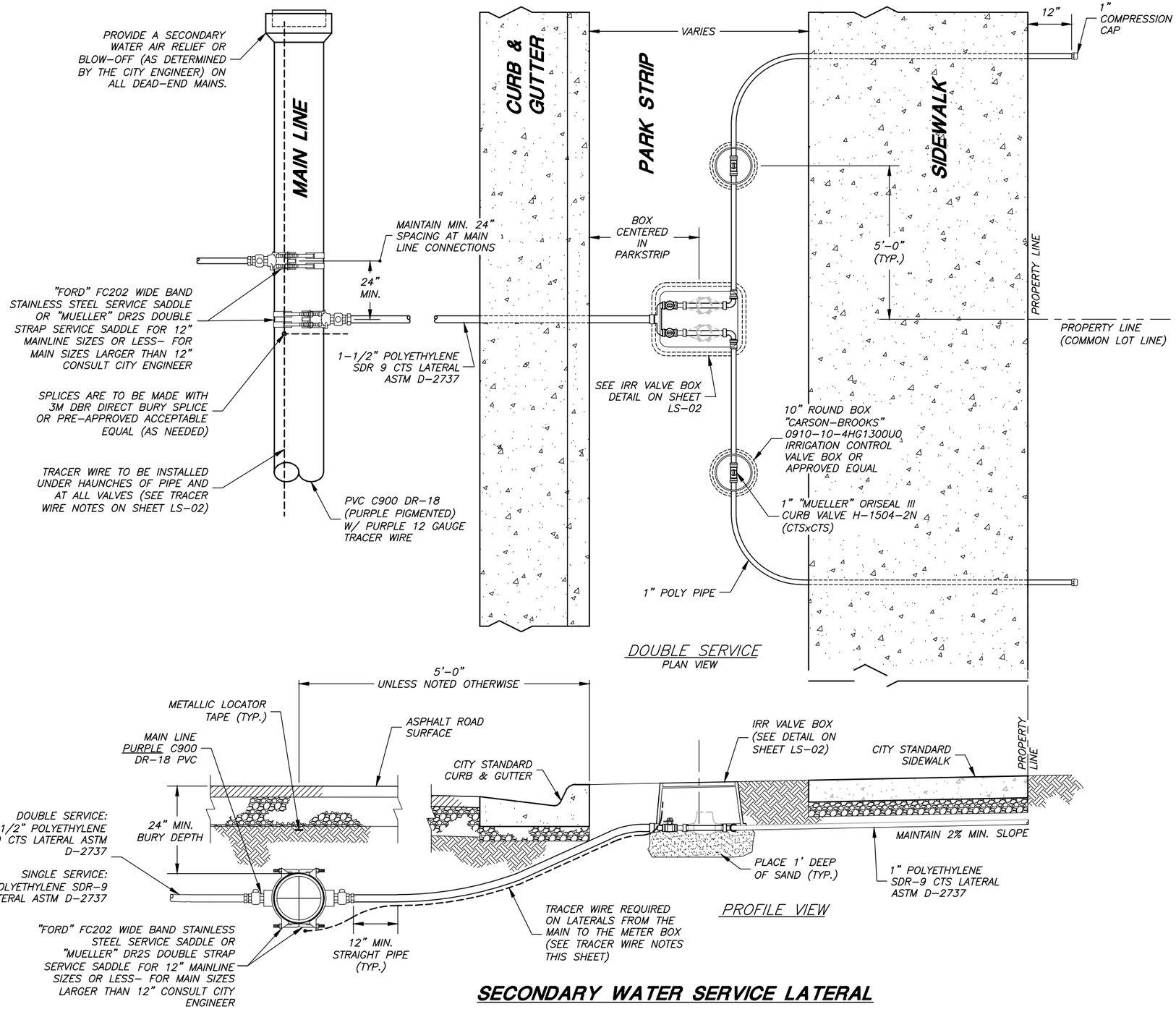
TRACER WIRE NOTES:

A1. ALL SECONDARY WATER LINES SHALL HAVE A MINIMUM 12 GA. INSULATED TRACER WIRE INSTALLED UNDER THE HAUNCHES OF THE PIPE PRIOR TO BACKFILLING.

A2. TRACER WIRES SHALL TERMINATE AT ALL METERS. AT SERVICE SADDLES AND TAPPING SLEEVES, THE TRACER WIRE SHALL NOT BE ALLOWED TO BE PLACED BETWEEN THE SADDLE AND THE PIPE. A GROUNDING ROD SHALL BE INSTALLED AT ALL TRACER SYSTEM TERMINAL POINTS.

A3. TRACER WIRE SHALL BE COPPER WIRE WITH PURPLE INSULATION RATED FOR DIRECT BURIAL. ALL WIRE CONNECTORS SHALL BE 3M DBR DIRECT BURY SPLICE OR PRE-APPROVED ACCEPTABLE EQUAL AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONTINUITY.

A4. ALL TRACER WIRE SHALL BE TESTED FOR CONTINUITY IN THE PRESENCE OF THE PUBLIC WORKS INSPECTOR PRIOR TO ASPHALT PLACEMENT. ANY TRACER WIRE FOUND NOT TO BE CONTINUOUS AFTER TESTING SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR PRIOR TO ASPHALT PLACEMENT.



SECONDARY WATER SERVICE LATERAL

REGISTERED PROFESSIONAL ENGINEER
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STATE OF UTAH

Matthew E. Hartvigsen
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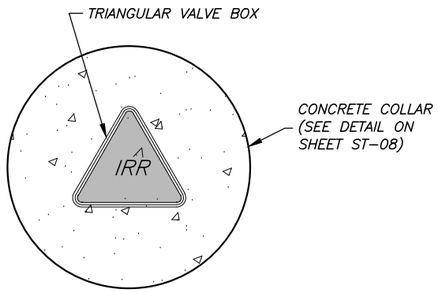
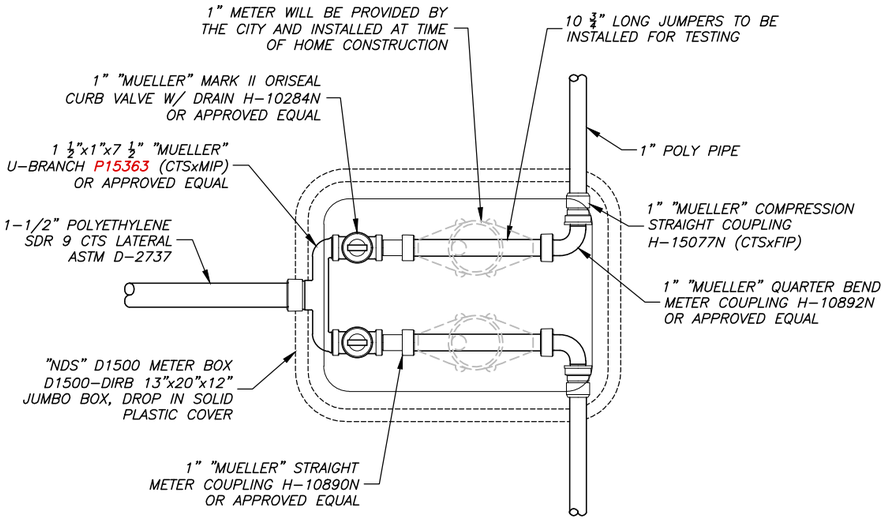
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
CITY PRESSURE IRRIGATION (SECONDARY WATER) SERVICE LATERALS

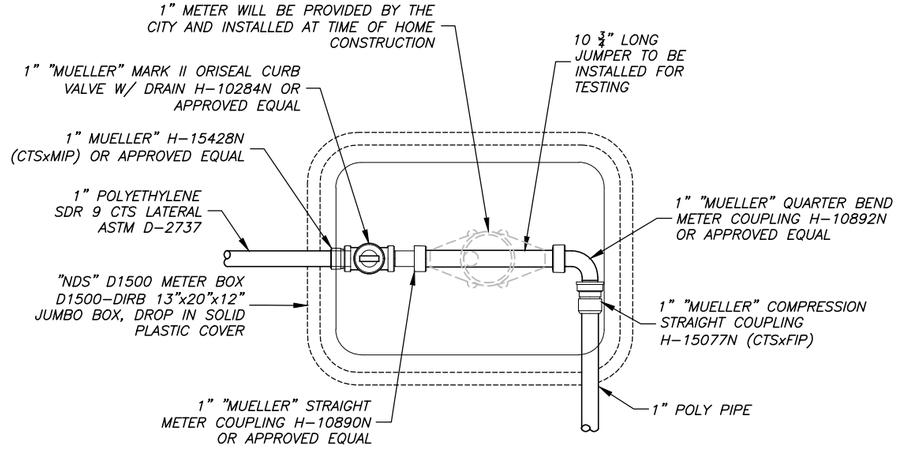
SHEET: LS-01
OF 1 SHEETS
0



STREET VALVE COVER NOTE:
LID FOR SECONDARY WATER TO BE "D&L SUPPLY" M–9009, (OR EQUAL) STAMPED "IRR" OR " IRRIGATION"



DOUBLE IRR VALVE BOX DETAIL
N.T.S.



SINGLE IRR VALVE BOX DETAIL
N.T.S.

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

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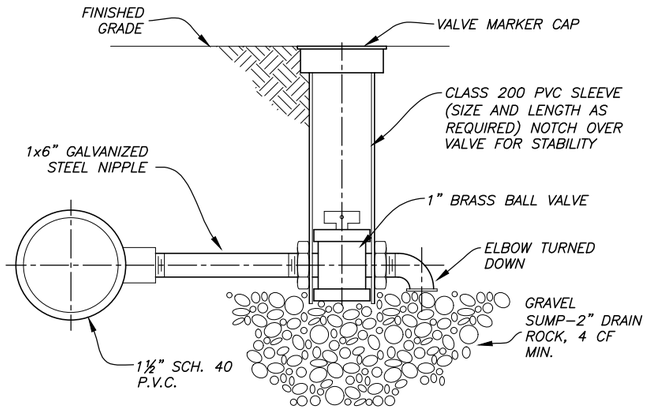
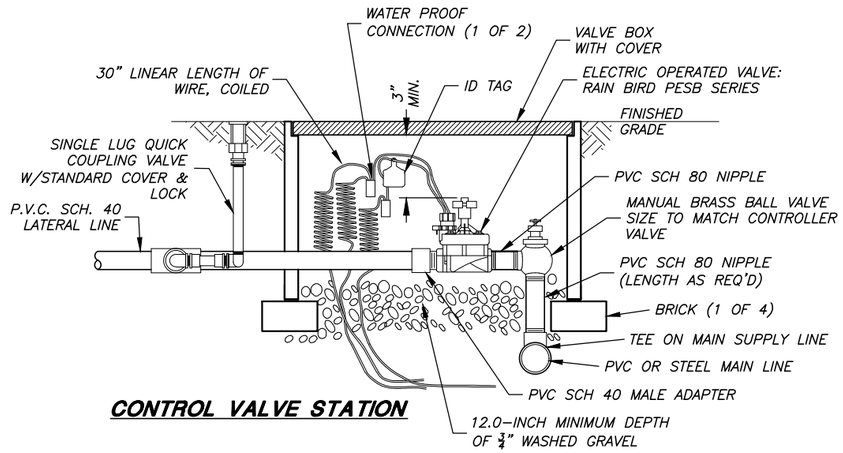
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
CITY PRESSURE IRRIGATION (SECONDARY WATER) VALVE BOX DETAILS

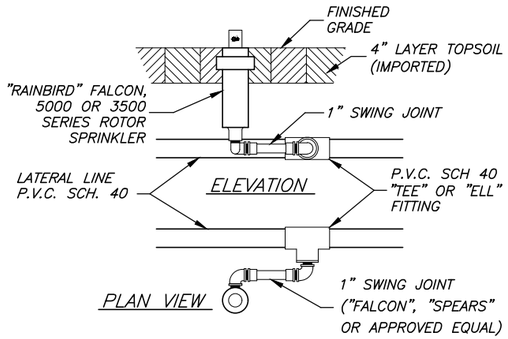
SHEET: LS-02
OF 1 SHEETS
0



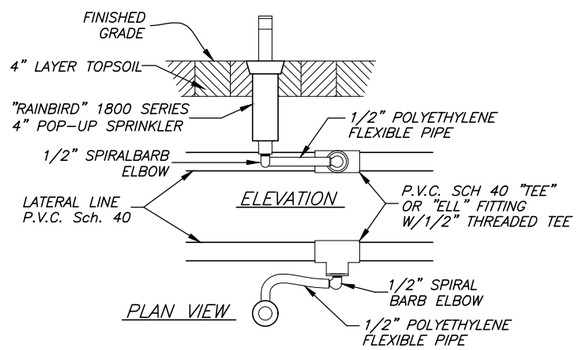
MANUAL DRAIN VALVE



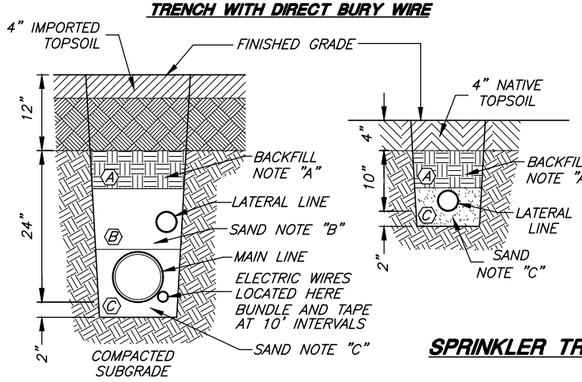
CONTROL VALVE STATION

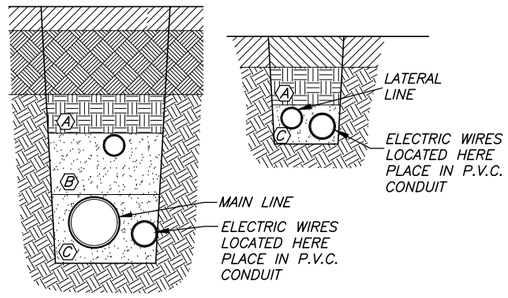


ROTOR HEAD CONNECTION DETAIL



1800 SERIES HEAD CONNECTION DETAIL





SPRINKLER TRENCH DETAILS

TRENCH NOTES:

Ⓐ USE EXCAVATED TRENCH MATERIAL NOT TO EXCEED 2" DIAMETER ROCKS.

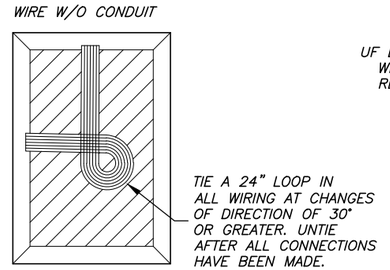
Ⓑ IN CASES WHERE LATERAL LINE IS INSTALLED IN MAINLINE TRENCH, USE SAND TO BACKFILL TRENCH SO THAT LATERAL LINE IS 14" BELOW FINISHED GRADE & COVERED W/ SAND.

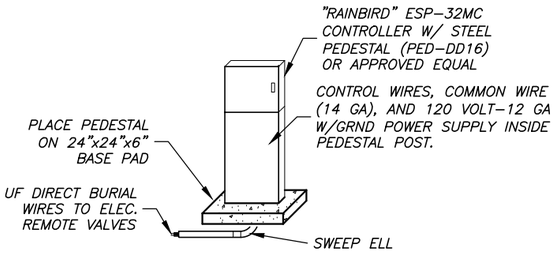
Ⓒ USE SAND TO PROVIDE A 2" BED AND COVER ALL P.V.C. PIPES AND ELECTRICAL WIRES. IN CASES WHEN NATIVE MATERIAL IS NOT ACCEPTABLE AS BACKFILL.

GEN. NOTE:
LOCATE ALL TRENCHES 12" AWAY FROM BUILDINGS, SIDEWALKS, OR ANY HARD SURFACE. SETTLE ALL TRENCHES W/ WATER PRIOR TO FINE GRADING AND RAKING OF TOPSOIL. MAIN LINES RUNNING IN SAME TRENCH SHOULD BE SIDE BY SIDE WITH A MINIMUM DISTANCE OF 6" APART.

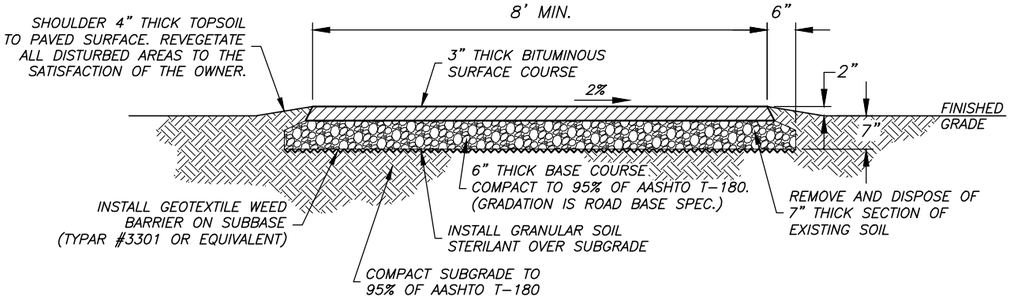
SPRINKLER NOTES:

1. INSTALL ALL WIRING ACCORDING TO LOCAL CODES. ALL WIRES ABOVE FINISHED GRADE TO BE INSTALLED IN METAL CONDUITS.
2. SPACE SPRINKLER HEADS AT A MAXIMUM OF 95% OF COVERAGE DISTANCE.





AUTOMATIC CLOCK DETAIL



ASPHALT TRAIL CROSS SECTION

TRAIL NOTES:

A1. TRAILS SHOULD BE DESIGNED AND CONSTRUCTED AT GRADES LESS THAN 8% GRADE TO PROMOTE ACCESSIBLE USE.

A2. GRADE AVERAGES OF LESS THAN 6% WILL PROVIDE THE MOST USER FRIENDLY EXPERIENCE AND ARE PREFERRED.

A3. WHERE POSSIBLE A SLIGHT MEANDERING ALIGNMENT SHOULD BE USED.

A4. WHERE REQUIRED BENCHES SHOULD BE SPACED APPROXIMATELY EVERY ¼ MILE

A5. CROSS SLOPE TO DRAIN TO CURB WHERE PRESENT.

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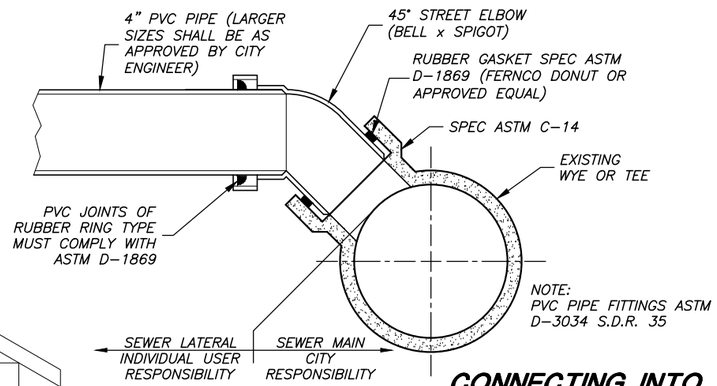
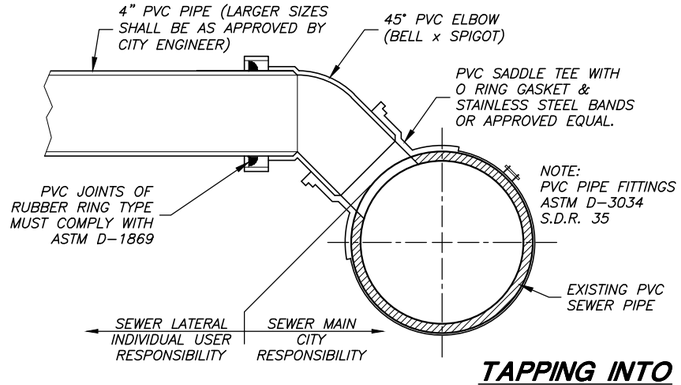
MUNICIPAL SPRINKLER IRRIGATION AND TRAIL SECTION DETAILS

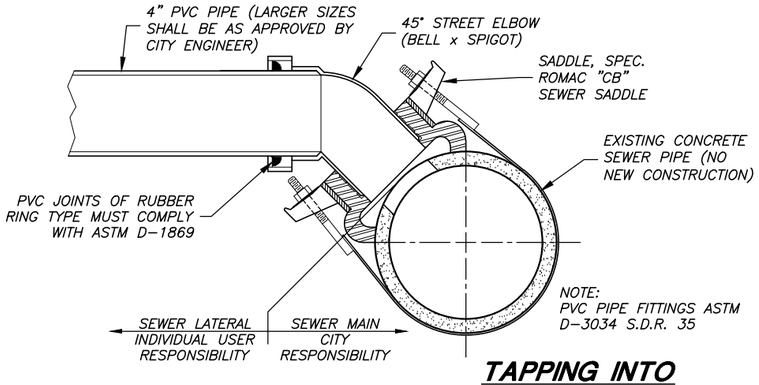
SHEET: LS-03
OF 1 SHEETS
0



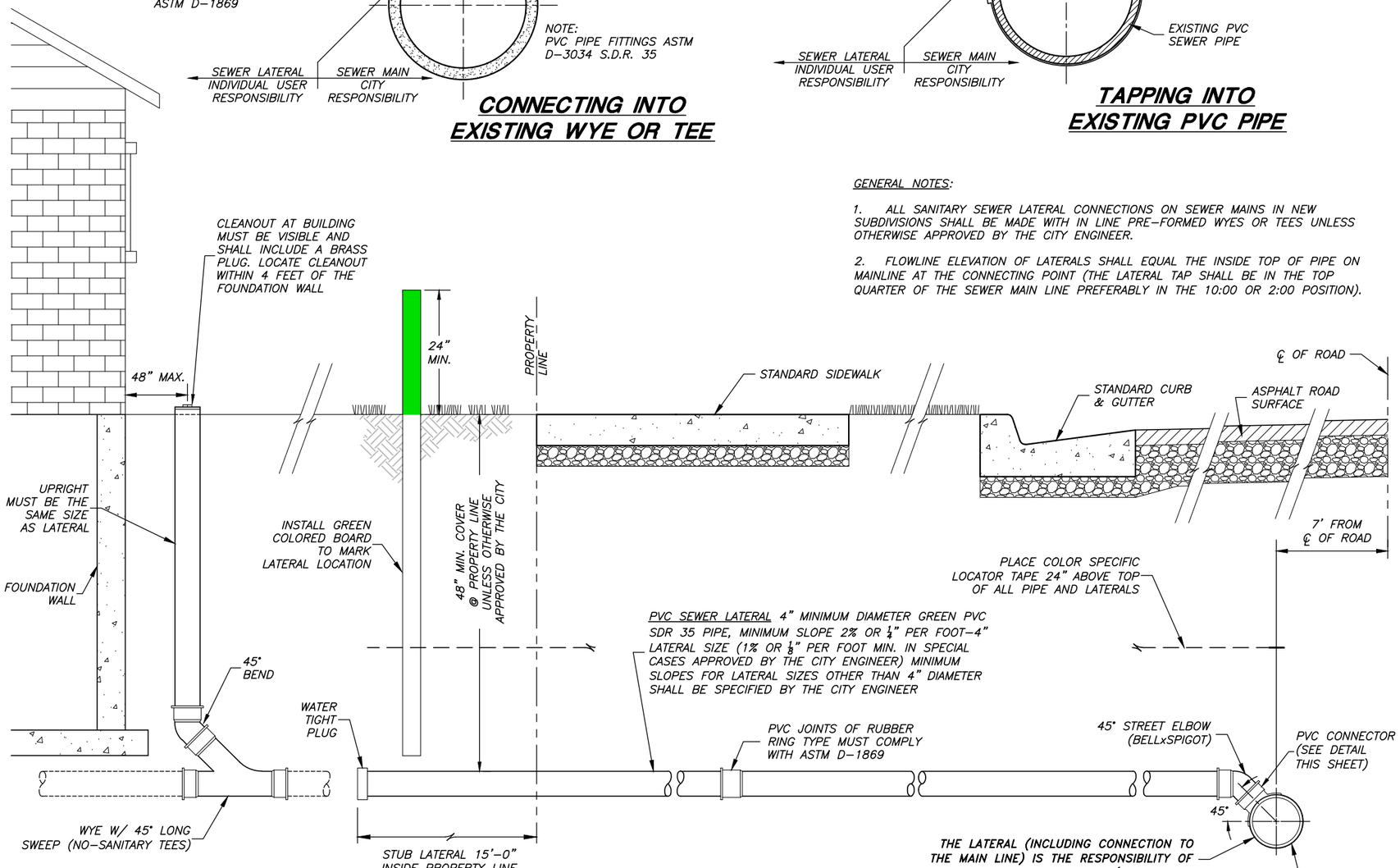
CONNECTING INTO EXISTING WYE OR TEE



TAPPING INTO EXISTING PVC PIPE



TAPPING INTO EXISTING CONCRETE PIPE



TYPICAL SEWER LATERAL CLEANOUT

TYPICAL SEWER LATERAL CONNECTION

GENERAL NOTES:

1. ALL SANITARY SEWER LATERAL CONNECTIONS ON SEWER MAINS IN NEW SUBDIVISIONS SHALL BE MADE WITH IN LINE PRE-FORMED WYES OR TEES UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

2. FLOWLINE ELEVATION OF LATERALS SHALL EQUAL THE INSIDE TOP OF PIPE ON MAINLINE AT THE CONNECTING POINT (THE LATERAL TAP SHALL BE IN THE TOP QUARTER OF THE SEWER MAIN LINE PREFERABLY IN THE 10:00 OR 2:00 POSITION).

GENERAL NOTES CONTINUED:

3. SANITARY SEWER SERVICE LATERAL CONNECTIONS SHALL NOT BE ALLOWED IN SEWER MANHOLES.

4. SANITARY SEWER MAINS SHALL BE "GREEN" IN COLOR. SEWER LATERALS CAN BE GREEN OR WHITE IN COLOR. IRRIGATION PIPES SHALL BE "PURPLE" IN COLOR. PREVIOUS YEARS PIPE COLORS MAY VARY THROUGHOUT THE CITY. **CONTRACTOR TO VERIFY EXISTING PIPE PRIOR TO MAKING ANY CONNECTION.**

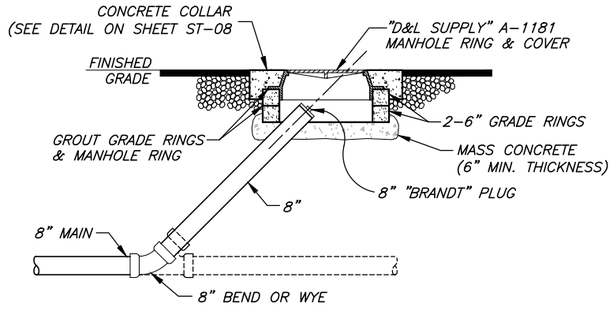
5. THE SANITARY SEWER CLEANOUT AT THE STRUCTURE SHALL BE INSTALLED PER PLUMBING/BUILDING CODE STANDARD AND SHALL BE MARKED AND FITTED WITH A BRASS CAP FOR LOCATION PURPOSES. CLEANOUT SHALL BE INSTALLED AT GRADE LOCATED NO MORE THAN 4 FEET FROM THE STRUCTURE FOUNDATION.

6. ALL CULINARY WATER MAINS AND SERVICES MUST MAINTAIN A MINIMUM SEPARATION ABOVE ALL SEWER MAINS AND LATERALS OF 18" VERTICAL AND 10'-0" HORIZONTAL IN ACCORDANCE WITH THE STATE OF UTAH DIVISION OF DRINKING WATER (DDW) RULES SECTION R309-550-7. EXCEPTIONS MUST BE APPROVED BY DDW.

7. ALL SANITARY SEWER LINES SHALL BE INSPECTED BY MEANS OF VIDEO CAMERA AND AIR TESTED WHEN CONSTRUCTED. SEE APWA 33 08 00 AND CITY MODIFICATIONS FOR MORE INFORMATION.

8. THE LOCATION OF THE SEWER LATERAL MUST BE DOCUMENTED AND SUBMITTED TO THE CITY ON SCALED AS-BUILT DRAWINGS.

9. END OF LINE MANHOLES ARE PREFERRED FOR SEWER CLEAN OUT PURPOSES. IN CIRCUMSTANCES WHERE A MANHOLE MAY NOT BE APPROPRIATE THE END OF THE SEWER MAIN MAY BE CONSTRUCTED WITH A VERTICAL BEND AND SURFACE CLEAN OUT AS APPROVED BY THE SEWER SYSTEM MANAGER. THESE CIRCUMSTANCES INCLUDE CONSTRUCTION IN A FLOODPLAIN OR WHEN USED AS A TEMPORARY MEASURE WHERE ONE DEVELOPMENT ENDS AND IT IS UNCERTAIN WHERE THE NEXT MANHOLE SHOULD BE LOCATED FOR FUTURE SEWER SYSTEM EXPANSION.



DRAIN/SEWER MAINLINE CLEANOUT

TEMPORARY (USE ONLY UPON APPROVAL FROM THE SEWER SYSTEM MANAGER)

REGISTERED PROFESSIONAL ENGINEER — No. 323821 — MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER

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SANITARY SEWER LATERAL, MAIN LINE CONNECTION & CLEANOUT DETAILS

SHEET: SS-01
OF 1 SHEETS
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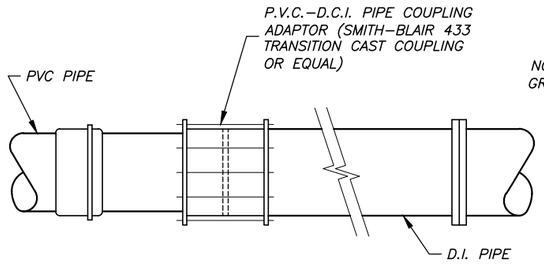
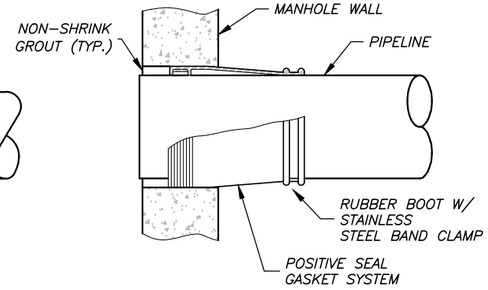
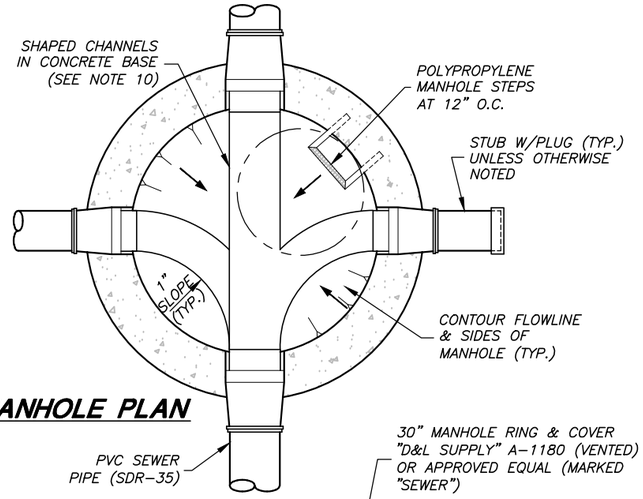


TYPICAL D.I. PIPE TO PVC PIPE CONNECTION



RUBBER BOOT DETAIL



MANHOLE PLAN

GENERAL NOTES:

1. SECURE INVERTS IN ALL MANHOLES DURING CONSTRUCTION SO AS TO PREVENT GRAVEL AND OTHER DEBRIS FROM COLLECTING INSIDE.
2. A LARGER DIAMETER MANHOLE MAY BE REQUIRED BY THE DESIGN ENGINEER AFTER EVALUATION OF THE NUMBER, SIZE, AND ANGLE OF THE PIPES THAT CONNECT TO THE MANHOLE.
3. NO MORE THAN 12" OF GRADE RINGS TO BE ALLOWED ON ANY MANHOLE.
4. **ALL TERMINATING SEWER MAINS SHALL END WITH A CITY STANDARD MANHOLE UNLESS OTHERWISE DIRECTED BY THE CITY SEWER SYSTEM MANAGER.**
5. **SERVICE LATERAL CONNECTIONS SHALL NOT BE ALLOWED IN SEWER MANHOLES.**
6. ALL SANITARY SEWER LINES SHALL BE INSPECTED BY MEANS OF VIDEO CAMERA AND AIR TESTED WHEN CONSTRUCTED. SEE APWA 33 08 00 AND CITY MODIFICATIONS FOR MORE INFORMATION.
7. WHERE THE DIFFERENCE IN ELEVATION BETWEEN THE INCOMING SEWER AND MANHOLE INVERT IS LESS THAN 24 INCHES, THE INVERT SHOULD BE FILLETED.
8. FLAT MANHOLE RINGS & COVERS (SLAB CONSTRUCTION) ARE NOT ALLOWED ON ANY MANHOLE CONE SECTION.
9. CAST–IN–PLACE MANHOLE BASE SECTIONS SHALL ONLY BE USED WHEN CONNECTING TO AN EXISTING SEWER MAIN LINE. BASE, CONTOUR FLOWLINES AND SHAPED CHANNELS MUST BE INSPECTED BY THE CITY AT THE TIME OF CONSTRUCTION.
10. **THE REQUIRED SHAPED SEWER CHANNELS IN THE BASE OF THE MANHOLE MUST BE INSPECTED BY THE CITY TO ENSURE A SUITABLE FLOW PATTERN. ANY CHANNELS NOT FORMED OR FUNCTIONING CORRECTLY SHALL BE REPLACED OR REFORMED AT THE DEVELOPERS AND/OR CONTRACTORS EXPENSE.**

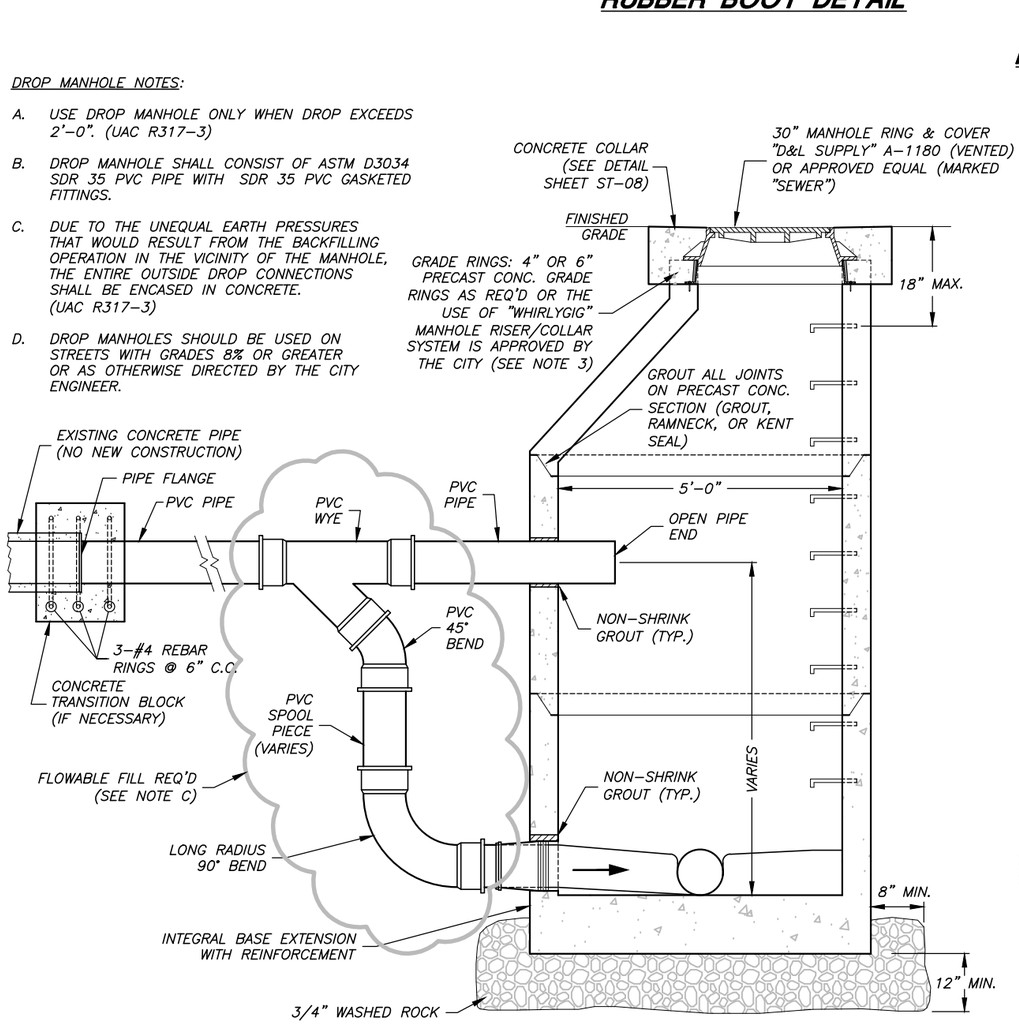
DROP MANHOLE NOTES:

A. USE DROP MANHOLE ONLY WHEN DROP EXCEEDS 2'–0". (UAC R317–3)

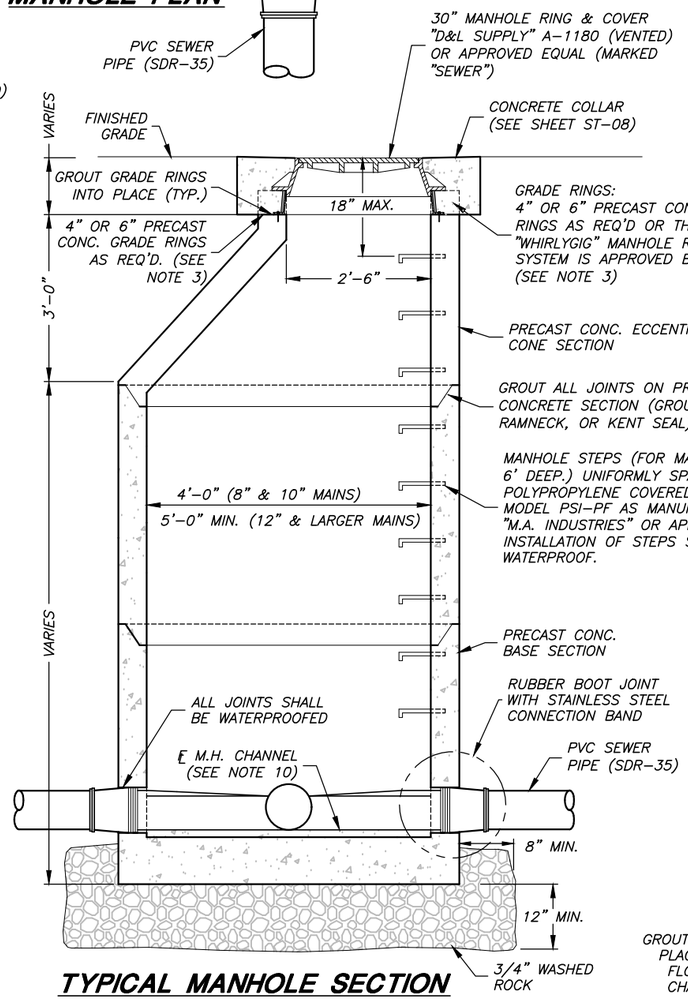
B. DROP MANHOLE SHALL CONSIST OF ASTM D3034 SDR 35 PVC PIPE WITH SDR 35 PVC GASKETED FITTINGS.

C. DUE TO THE UNEQUAL EARTH PRESSURES THAT WOULD RESULT FROM THE BACKFILLING OPERATION IN THE VICINITY OF THE MANHOLE, THE ENTIRE OUTSIDE DROP CONNECTIONS SHALL BE ENCASED IN CONCRETE. (UAC R317–3)

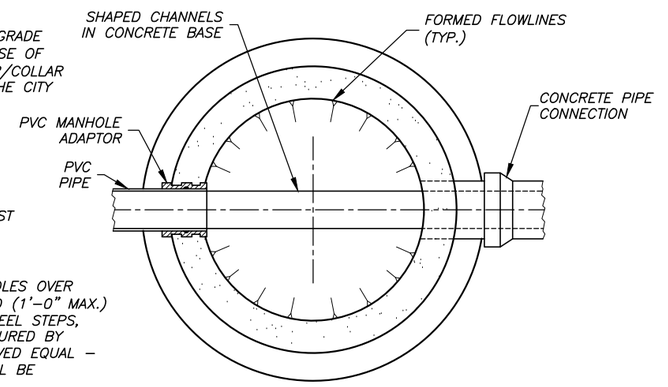
D. DROP MANHOLES SHOULD BE USED ON STREETS WITH GRADES 8% OR GREATER OR AS OTHERWISE DIRECTED BY THE CITY ENGINEER.

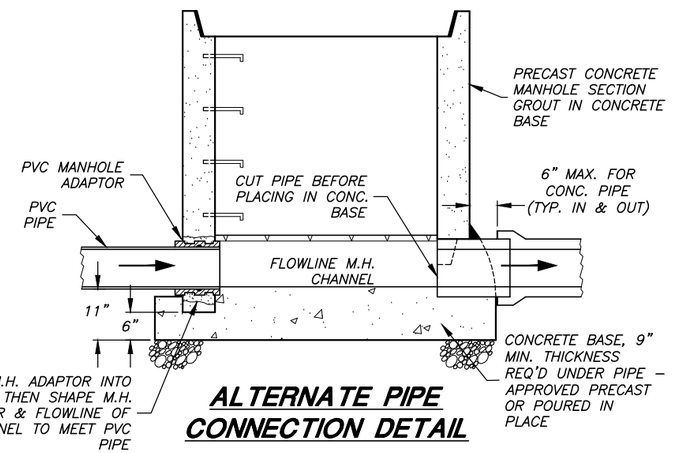


TYPICAL DROP MANHOLE SECTION



TYPICAL MANHOLE SECTION





ALTERNATE PIPE CONNECTION DETAIL

REGISTERED PROFESSIONAL ENGINEER — No. 323821 — MATTHEW E. HARTVIGSSEN — STATE OF UTAH

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PUBLIC WORKS STANDARDS

SANITARY SEWER MANHOLE DETAILS

SHEET: SS-02
OF 1 SHEETS
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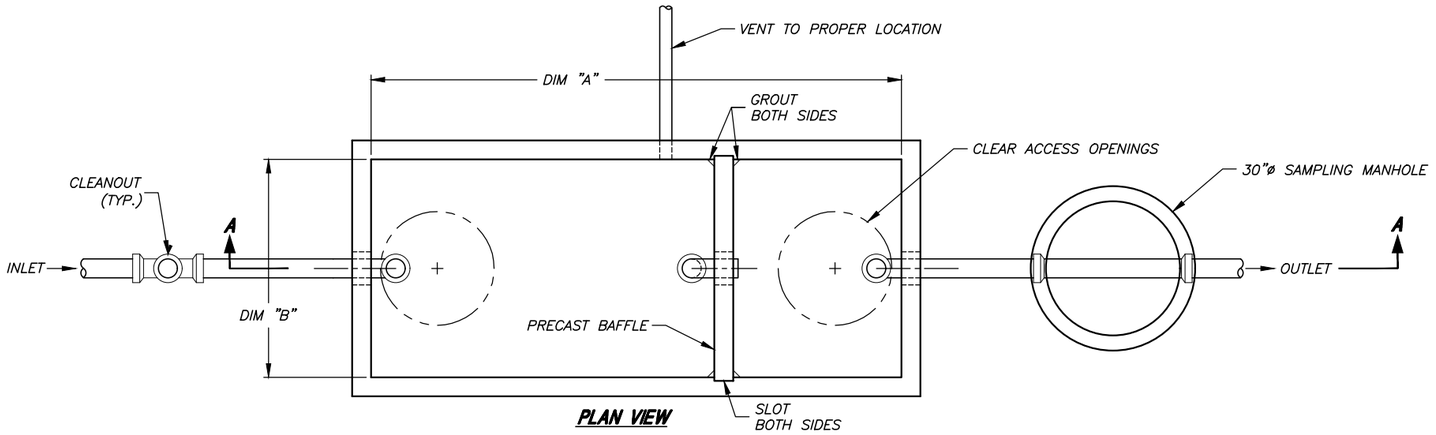
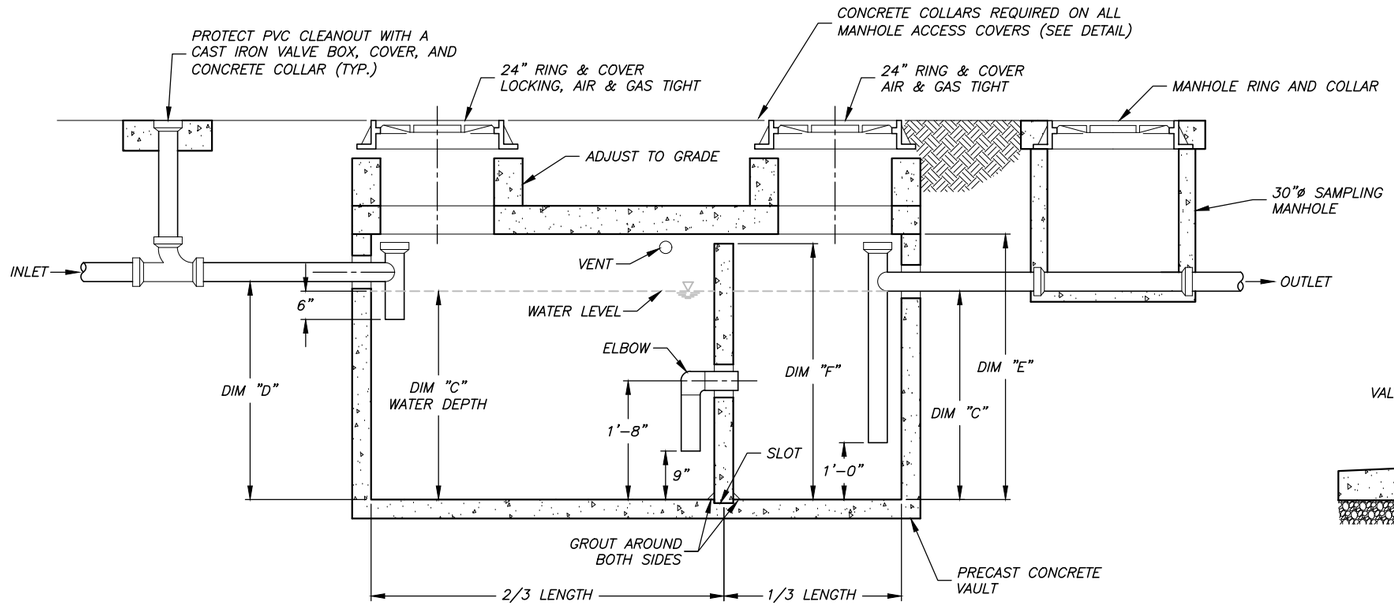


PLAN VIEW



SECTION VIEW AA

NOTES:
1. 30" MINIMUM SAMPLING MANHOLE REQUIRED DOWNSTREAM OF INTERCEPTOR IF EXTENSIVE SAMPLING IS NEEDED
2. CONCRETE: 28 DAY COMPRESSIVE STRENGTH f'c = 4500 psi
3. REBAR: ASTM A-615 GRADE 60
4. MESH: ASTM A-185 GRADE 65
5. DESIGN: ACI-318-83 BUILDING CODE
   ASTM C-857 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES"
6. LOADS: H-20 TRUCK WHEEL w/ 30% IMPACT PER AASHTO
7. FILL w/ CLEAN WATER PRIOR TO START-UP OF SYSTEM
8. CONTRACTOR TO SUPPLY & INSTALL ALL PIPING & SAMPLING TEES
9. GRAY WATER ONLY, BLACK WATER SHALL BE CARRIED BY SEPARATE SIDE SEWER

PRECAST GREASE INTERCEPTOR

1,000 – 5,000 GALLON CAPACITIES

DESIGN CRITERIA:

UNIFORM PLUMBING CODE – APPENDIX H

NUMBER OF MEALS PER PEAK HOURS	x	WASTE FLOW RATE	x	RETENTION TIME	x	STORAGE FACTOR	=	CAPACITY IN GALLONS

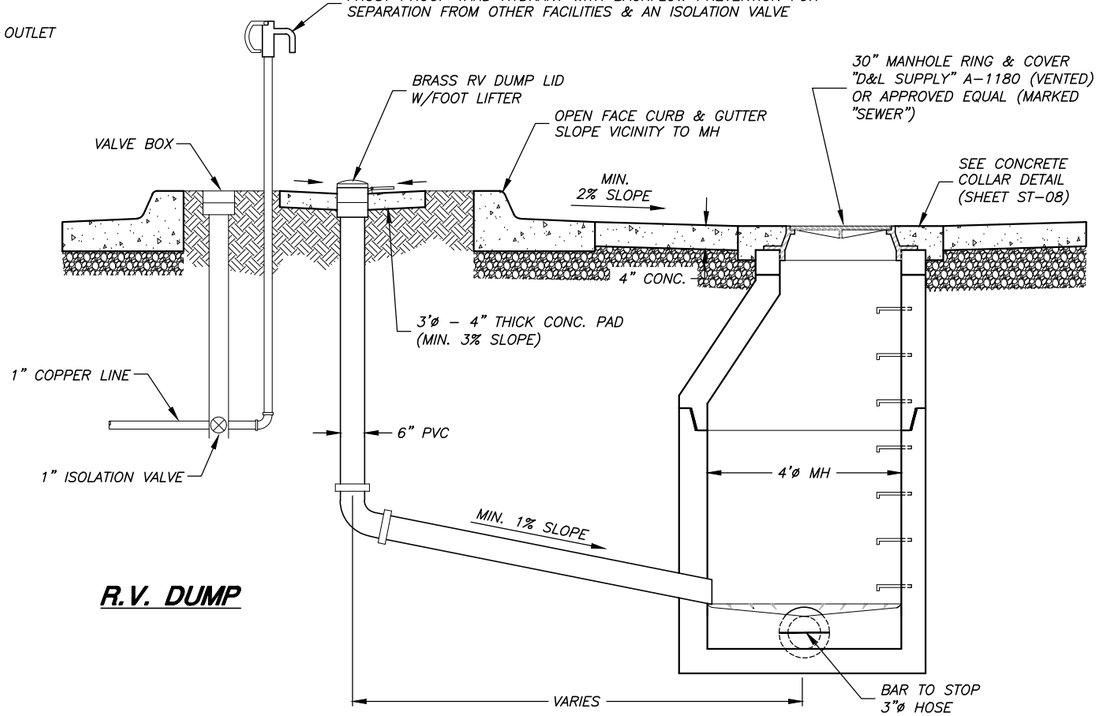
NOTE: MORGAN CITY MINIMUM CAPACITY OF 1,000 GALLONS REQUIRED

GALLON CAPACITY	1000	1500	1800	2500	3000	3500	5000
DIM "A"	11'-0"	11'-0"	11'-0"	12'-0"	12'-0"	15'-0"	18'-0"
DIM "B"	4'-0"	4'-0"	4'-0"	6'-0"	6'-0"	6'-0"	6'-0"
DIM "C" WATER DEPTH	3'-2"	4'-7"	5'-6"	4'-6"	5'-6"	5'-4"	6'-2"
DIM "D"	3'-4"	4'-9"	5'-8"	4'-8"	5'-8"	5'-6"	6'-4"
DIM "E"	4'-0"	6'-0"	7'-0"	6'-0"	7'-0"	7'-0"	7'-0"
DIM "F"	3'-10"	5'-10"	6'-10"	5'-10"	6'-10"	6'-10"	6'-10"
WEIGHT	22,500	26,100	27,300	33,025	34,450	42,700	63,822

GENERAL NOTES:

A. ALL GREASE & SEPARATORS ARE TO BE SIZED BY THE DEVELOPING ENGINEER. SUBMIT ENGINEERED CONSTRUCTION PLANS AND DETAILS TO THE CITY SEWER SYSTEM MANAGER AND THE CITY ENGINEER FOR REVIEW AND FINAL APPROVAL PRIOR TO CONSTRUCTION.

B. ALL HYDROMECHANICAL GREASE INTERCEPTORS; FATS, OILS, AND GREASES DISPOSAL SYSTEMS AND AUTOMATIC GREASE REMOVAL DEVICES SHALL BE SIZED, DESIGNED AND TESTED, AND INSTALLED IN COMPLIANCE WITH ASME A112.14.3



R.V. DUMP

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

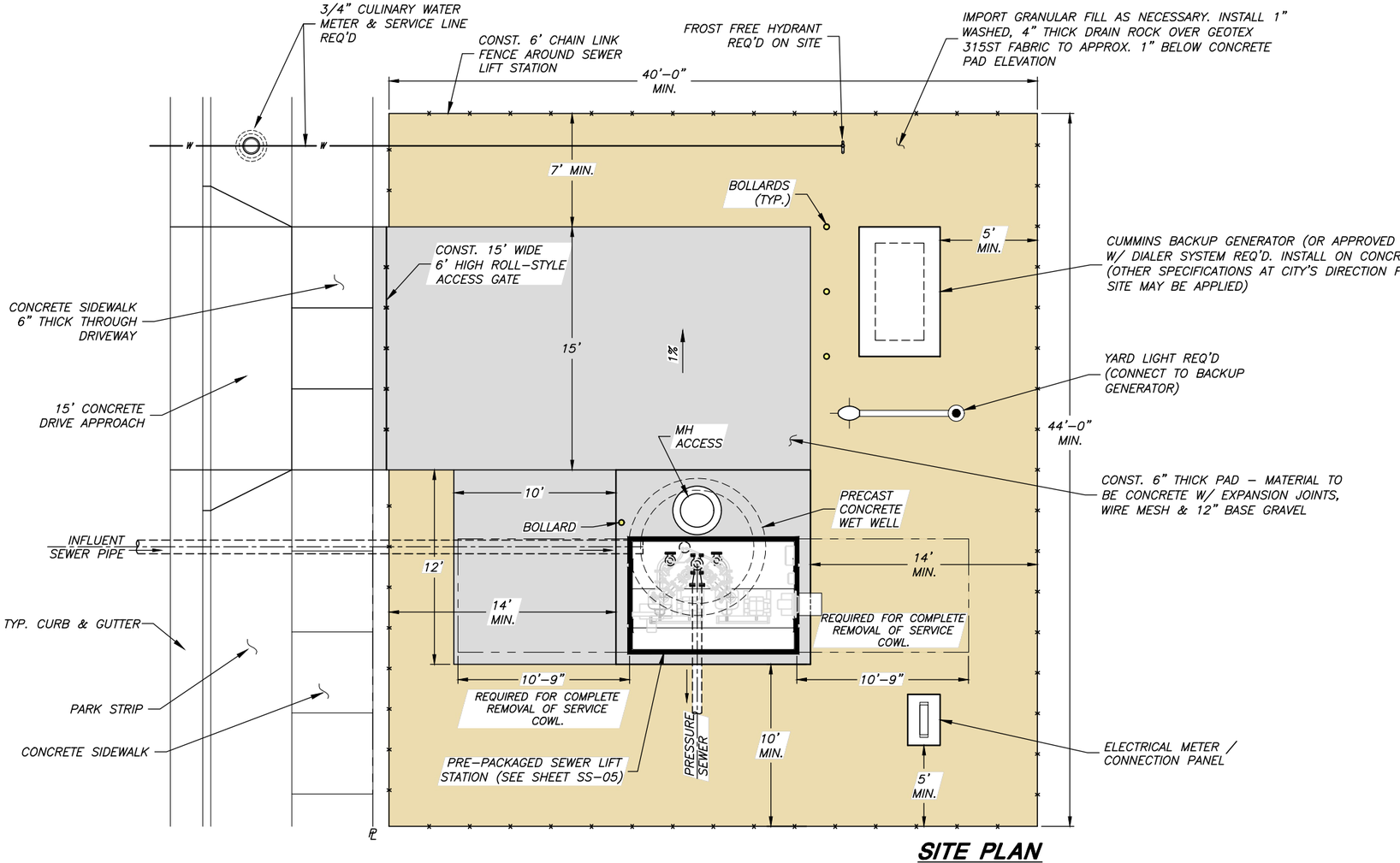
JA JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
www.jonescivil.com

MORGAN CITY EST. 1868

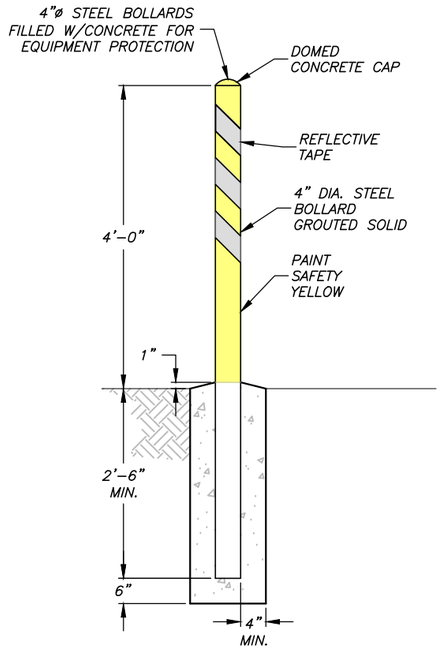
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

GREASE INTERCEPTOR & RV DUMP DETAILS

SHEET: SS-03
OF 1 SHEETS
0



SITE PLAN
PRESSURE SEWER PRE-PACKAGED PUMP STATION



BOLLARD DETAIL

PROVIDE A MIN. OF 4 STEEL BOLLARDS TO PROTECT PUMP STATION EQUIPMENT. (LOCATE AS SHOWN IN THE SITE PLAN ON THIS SHEET)

GENERAL NOTES:

1) 14 GAUGE TRACER WIRE REQUIRED ON PRESSURE LINE W/ACCESS BOX INSTALLED EVERY 400-500
2) SPECIAL CONSTRUCTION METHODS WILL BE REQUIRED IN DRINKING WATER SOURCE PROTECTION ZONE 2.
3) ALL VAULT PIPE CONNECTIONS ARE TO HAVE AN APPROVED WATERTIGHT SEAL.
4) THE PRECAST WET WELL MANUFACTURER IS RESPONSIBLE FOR DESIGN RELATED TO HL-93 TRAFFIC LOADING AND THRUST. VERIFICATION OF PROPER DESIGN MUST BE PROVIDED TO THE CITY BY THE CONTRACTOR.
5) PUMPS WILL BE SIZED SO THAT A SINGLE PUMP WILL HANDLE THE PEAK EXPECTED FLOW RATE. STANDARD SYSTEM OPERATION WILL ALTERNATE BETWEEN THE TWO PUMPS.
6) PIPING WILL BE SIZED TO MAINTAIN A MINIMUM 2 FT/SEC VELOCITY.
7) VAULT SHALL BE SUPPLIED WITH POWER FOR ALL EQUIPMENT, WHETHER SHOWN AND/OR NOTED, FOR A COMPLETE AND OPERABLE INSTALLATION.
8) PUMPS MUST BE SIZED TO HANDLE A 3" MINIMUM DIAMETER SPHERE.
9) SUBMIT SITE PLAN DESIGN TO CITY FOR WRITTEN APPROVAL PRIOR TO CONSTRUCTION. PROPERTY FENCE TO BE 6' HIGH CHAIN LINK W/ MINIMUM 15' WIDE ACCESS GATE FOR PUMP STATION MAINTENANCE.
10) ELECTRICAL WORK WILL BE COORDINATED WITH THE CITY'S POWER DEPARTMENT.
    a. COORDINATE INSTALLATION OF POWER TRANSFORMER & POWER LINE W/ MORGAN POWER DEPARTMENT & CONSTRUCT TRANSFORMER PAD PER THE DEPARTMENT SPECS.
    b. ALL ELECTRICAL FIXTURES, CONDUITS & FITTINGS TO BE NON-CORROSIVE MATERIAL.
    c. ALL ELECTRICAL TO BE TO NEC COMMERCIAL CODES.
    d. ALL ELECTRICAL WIRING TO BE ENCLOSED IN CONDUIT.

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

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South Ogden, Utah 84403 (801) 476-9767
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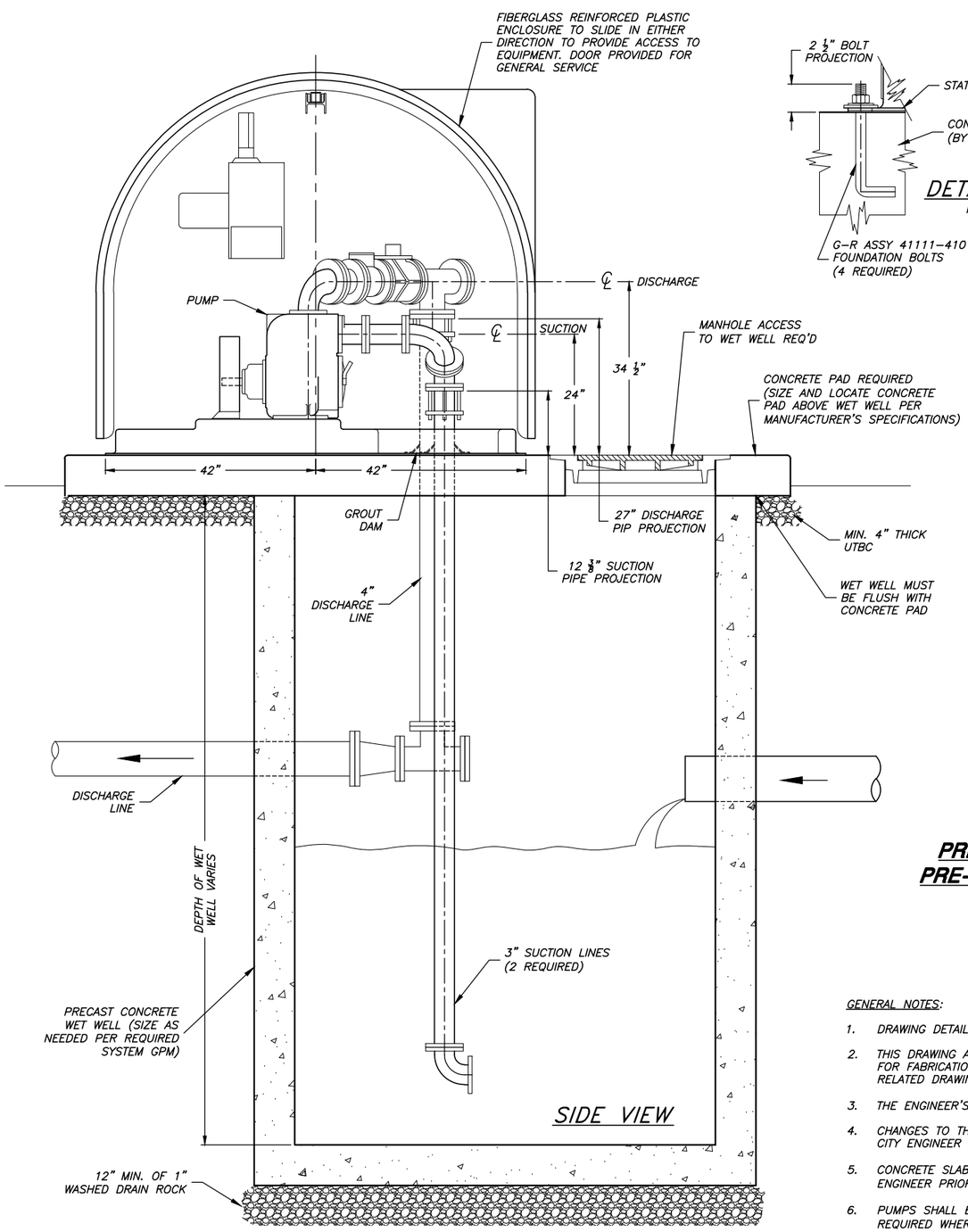
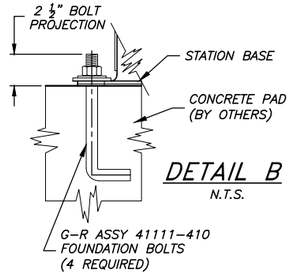
MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

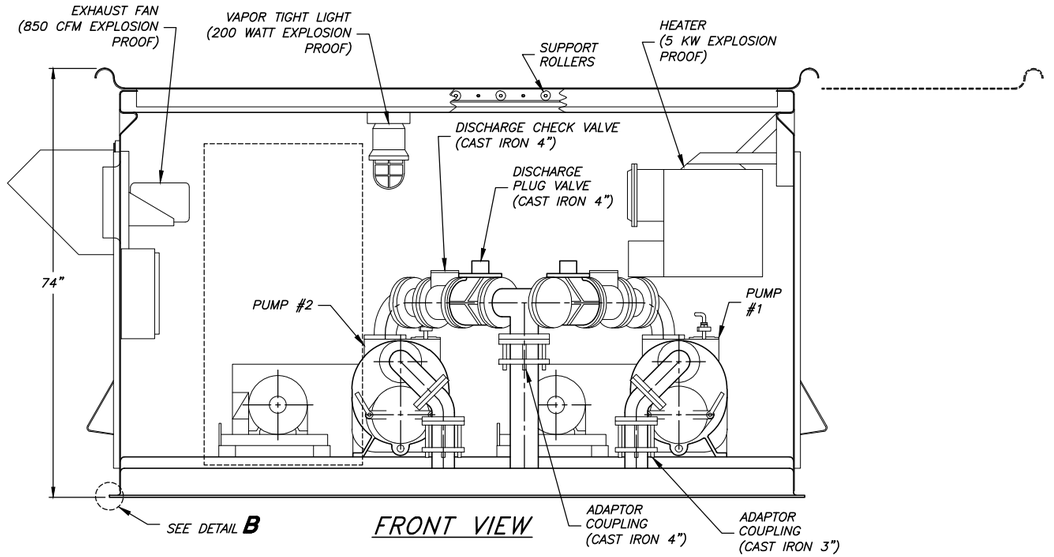
TYPICAL SEWER LIFT STATION SITE LAYOUT

SHEET: SS-04
OF 1 SHEETS
0

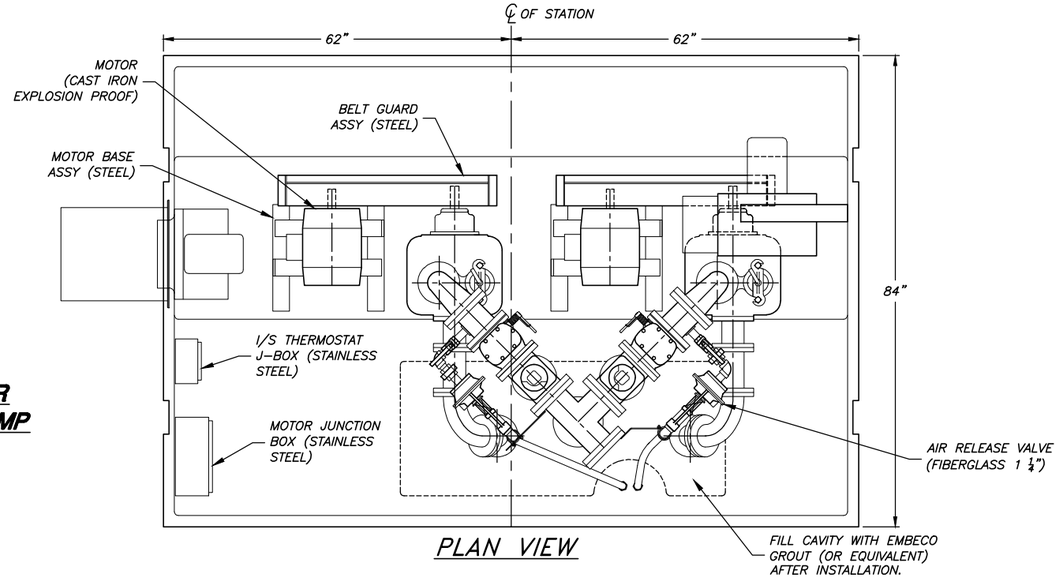




DETAIL B
N.T.S.



FRONT VIEW



PLAN VIEW

PRESSURE SEWER PRE-PACKAGED PUMP STATION

GENERAL NOTES:

1. DRAWING DETAILS PROVIDED BY THE GORMAN-RUPP CO.
2. THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS FOR THE SOLE PURPOSE OF A DESIGN CONCEPT AND IS NOT FOR FABRICATION. CONTACT MANUFACTURER DIRECTLY FOR THE DESIGN, SIZING, AND ALL PUMP STATION CONSTRUCTION RELATED DRAWINGS AS REQUIRED FOR THE PROJECT SPECIFIC PRESSURE SEWER SYSTEM SIZING AND PUMPING NEEDS.
3. THE ENGINEER'S STAMP AFFIXED HERETO IS ONLY FOR THE PURPOSE OF IDENTIFYING THIS PRODUCT AS THE CITY STANDARD.
4. CHANGES TO THIS DETAIL WILL BE MADE BY THE MANUFACTURER AT THEIR DISCRETION OR UNDER THE DIRECTION OF THE CITY ENGINEER OR PUBLIC WORKS DEPARTMENT.
5. CONCRETE SLAB AND WET WELL DETAILS TO BE PROVIDED BY THE DEVELOPER/CONTRACTOR AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION/INSTALLATION.
6. PUMPS SHALL BE SELF PRIMING SUPER T SERIES WITH ERADICATOR. PROVIDE PLC AND MOTOR STARTERS (VFD'S MAY BE REQUIRED WHERE SYSTEM EXPANSION IS EXPECTED).

GORMAN-RUPP	THE GORMAN-RUPP CO. MANSFIELD, OHIO ST. THOMAS, ONTARIO
NAME	7' X 10' ABOVEGROUND SEWAGE LIFT STATION ASSY
DRN. GH / CHK. / APP. / DATE 11-12-70	
D	45113-004 / SERIAL NO. 14-7976-A

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSSEN — STATE OF UTAH

Matthew E Hartvigsen
CITY ENGINEER
08-24-2023
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SCALE: N.T.S.

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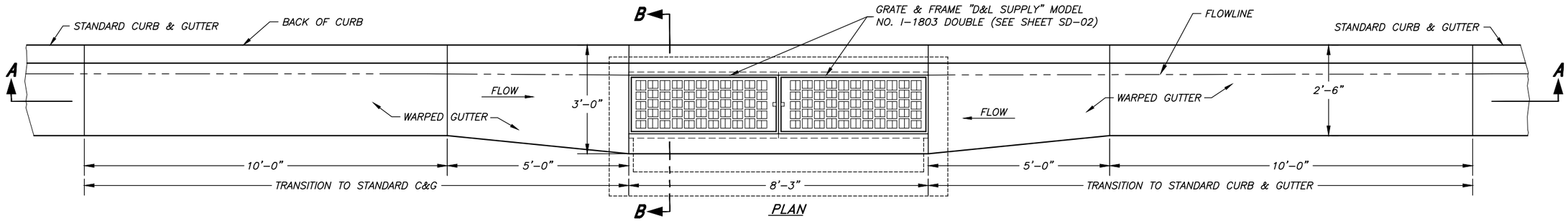
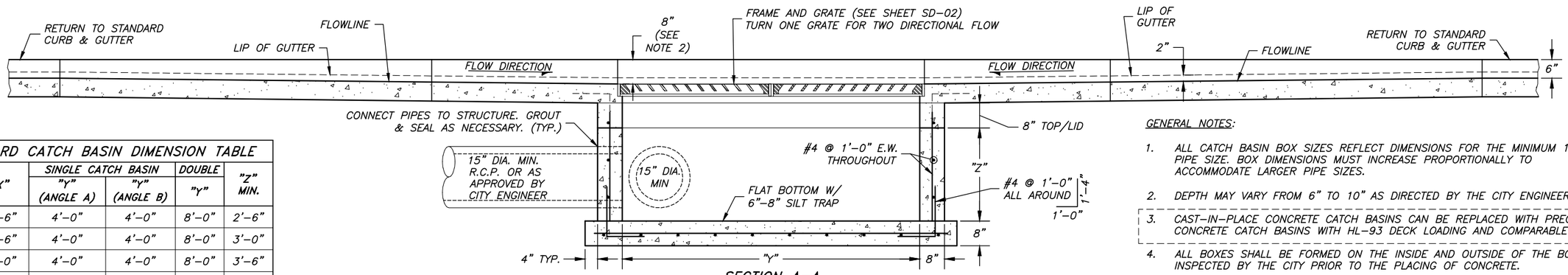
MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
PRESSURE SEWER PRE-PACKAGED PUMP STATION

SHEET: SS-05
OF 1 SHEETS
0



PLAN



SECTION A-A

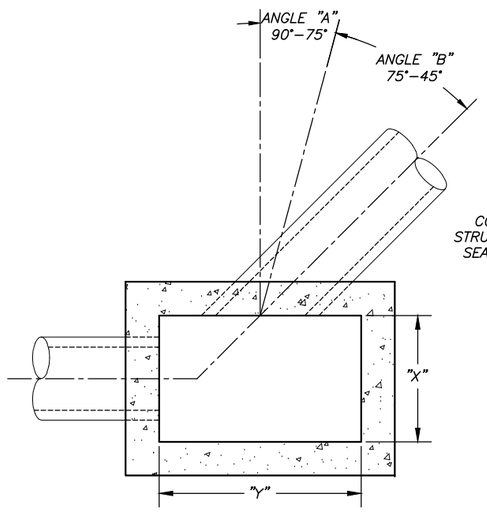
DOUBLE CATCH BASIN

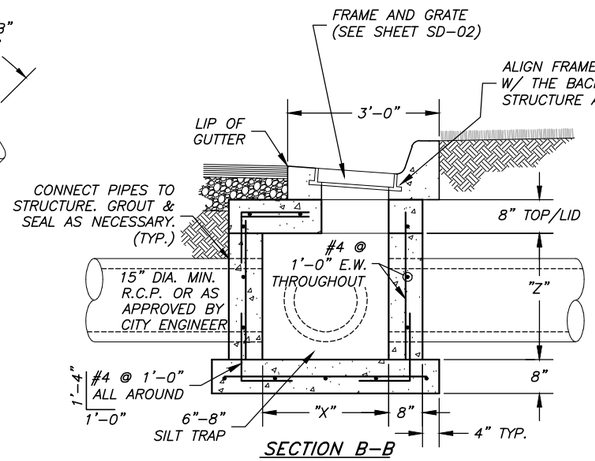
STANDARD CATCH BASIN DIMENSION TABLE					
PIPE SIZE (IN.)	"X"	SINGLE CATCH BASIN "Y" (ANGLE A)	SINGLE CATCH BASIN "Y" (ANGLE B)	DOUBLE "Y"	"Z" MIN.
15	2'-6"	4'-0"	4'-0"	8'-0"	2'-6"
18	2'-6"	4'-0"	4'-0"	8'-0"	3'-0"
21	4'-0"	4'-0"	4'-0"	8'-0"	3'-6"
24	4'-0"	4'-0"	5'-0"	8'-0"	3'-6"
30	4'-0"	4'-0"	6'-0"	8'-0"	4'-0"
36	4'-0"	5'-0"	6'-0"	8'-0"	4'-6"
42	6'-0"	6'-0"	7'-0"	8'-0"	5'-6"
48	6'-0"	6'-0"	8'-0"	8'-0"	6'-0"

****WHERE POSSIBLE, LOCATE CATCH BASINS AT RADIUS CORNERS AND PROPERTY LINES FOR ALL STREET TYPES.**

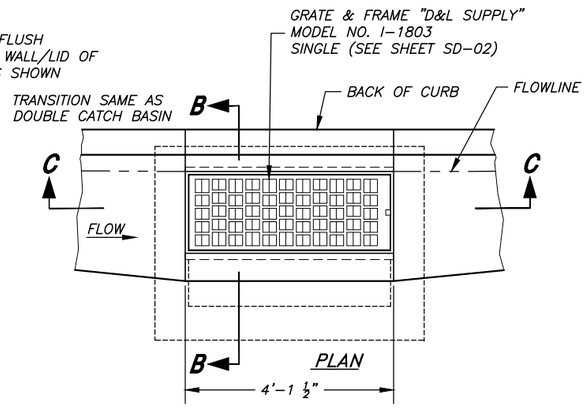
GENERAL NOTES:

1. ALL CATCH BASIN BOX SIZES REFLECT DIMENSIONS FOR THE MINIMUM 15"ø PIPE SIZE. BOX DIMENSIONS MUST INCREASE PROPORTIONALLY TO ACCOMMODATE LARGER PIPE SIZES.
2. DEPTH MAY VARY FROM 6" TO 10" AS DIRECTED BY THE CITY ENGINEER.
3. CAST-IN-PLACE CONCRETE CATCH BASINS CAN BE REPLACED WITH PRECAST CONCRETE CATCH BASINS WITH HL-93 DECK LOADING AND COMPARABLE SIZE.
4. ALL BOXES SHALL BE FORMED ON THE INSIDE AND OUTSIDE OF THE BOX AND INSPECTED BY THE CITY PRIOR TO THE PLACING OF CONCRETE.
5. DOUBLE CATCH BASINS WILL BE REQUIRED IN LOCATIONS SPECIFIED BY THE CITY ENGINEER (TYPICALLY IN LOW SPOTS OR WHERE ADDITIONAL INLET CAPACITY IS NEEDED).
6. STORM DRAIN LINES SHALL BE 15 INCH MINIMUM DIAMETER REINFORCED CONCRETE PIPE (RCP), OF APPROPRIATE CLASS.
7. ALTERNATE STRUCTURE (E.G. COMBO BOXES) MAY BE USED WITH APPROVAL OF THE CITY ENGINEER.
8. HOODED STYLE CATCH BASINS SHALL ONLY BE USED WHEN DIRECTED BY THE CITY. HOODED STYLE CATCH BASINS HAVE AN OPENING IN THE BACK OF THE CURB THAT ALLOWS THE PASSAGE OF LARGER OBJECTS INTO THE STORM DRAIN SYSTEM.

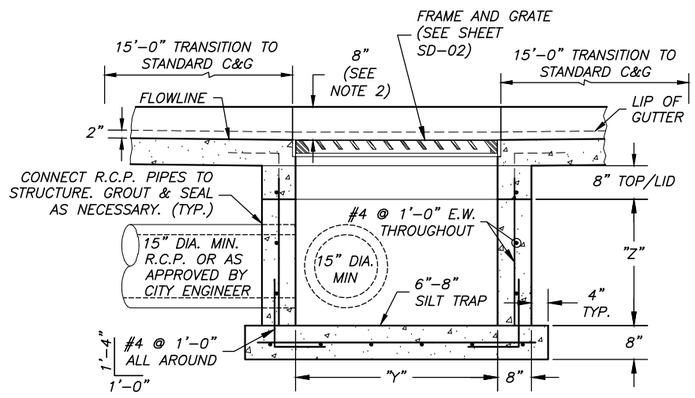




SECTION B-B



SINGLE CATCH BASIN



SECTION C-C

REGISTERED PROFESSIONAL ENGINEER — No. 323821 — MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

JA JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
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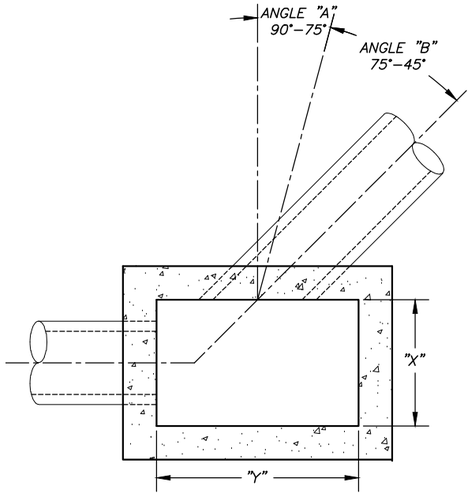
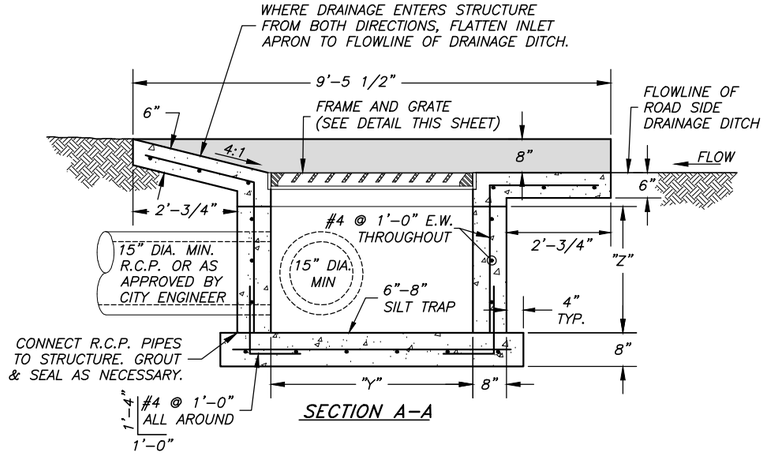
MORGAN CITY EST. 1868

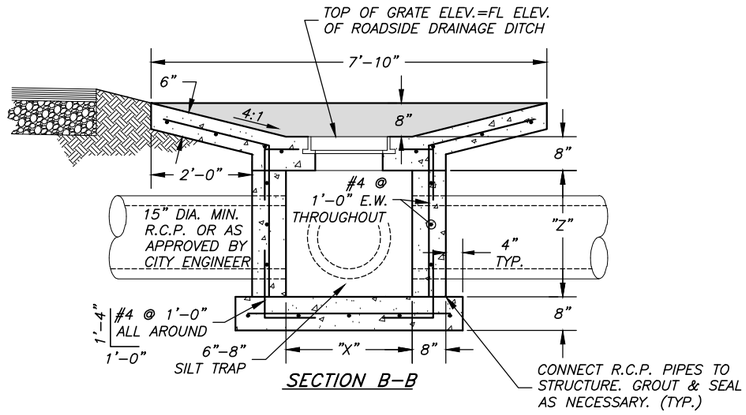
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

SINGLE AND DOUBLE CATCH BASIN DETAILS

SHEET: SD-01
OF 1 SHEETS
0



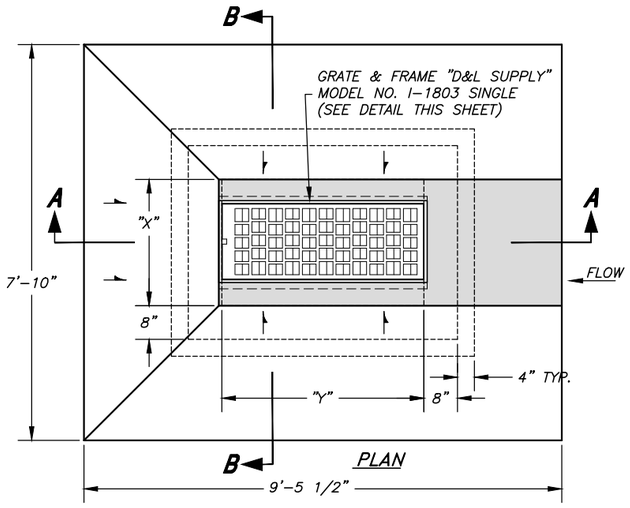




DRAINAGE DITCH INLET BOX DIMENSION TABLE				
PIPE SIZE (IN.)	"X"	INLET BOX "Y" (ANGLE A)	INLET BOX "Y" (ANGLE B)	"Z" MIN.
15	2'–6"	4'–0"	4'–0"	2'–6"
18	2'–6"	4'–0"	4'–0"	3'–0"
21	4'–0"	4'–0"	4'–0"	3'–6"
24	4'–0"	4'–0"	5'–0"	3'–6"
30	4'–0"	4'–0"	6'–0"	4'–0"
36	4'–0"	5'–0"	6'–0"	4'–6"
42	6'–0"	6'–0"	7'–0"	5'–6"
48	6'–0"	6'–0"	8'–0"	6'–0"

GENERAL NOTE:

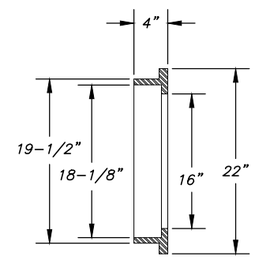
STORM DRAIN LINES SHALL BE 15 INCH MINIMUM DIAMETER REINFORCED CONCRETE PIPE (RCP), OF APPROPRIATE CLASS.

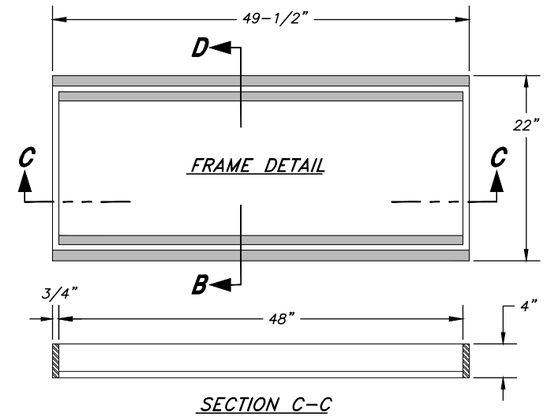


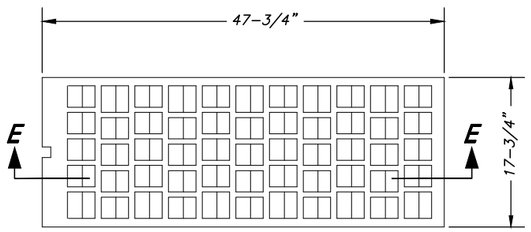
DRAINAGE DITCH / SWALE INLET BOX

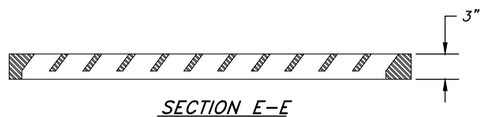
DRAINAGE BOX NOTES:

1. ALL BOX SIZES REFLECT DIMENSIONS FOR THE MINIMUM 15"ø PIPE SIZE. BOX DIMENSIONS MUST INCREASE PROPORTIONALLY TO ACCOMMODATE LARGER PIPE SIZES. (SEE TABLE THIS SHEET)
2. CAST–IN–PLACE CONCRETE STRUCTURES CAN BE REPLACED WITH PRECAST CONCRETE STRUCTURES WITH HL–93 DECK LOADING AND COMPARABLE SIZE.
3. ALL BOXES SHALL BE FORMED ON THE INSIDE AND OUTSIDE OF THE BOX AND INSPECTED BY THE CITY PRIOR TO THE PLACING OF CONCRETE.









FRAME AND GRATE NOTES:

A1. GRATE AND FRAME SHALL BE AS MANUFACTURED BY "D&L SUPPLY" I–1803

B1. BICYCLE SAFE GRATE REQUIRED.

C1. "OR EQUAL" GRATES AND FRAMES WILL BE CONSIDERED AS APPROVED BY THE CITY ENGINEER.

FRAME & GRATE DETAILS

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

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MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS
DRAINAGE INLET BOX & GENERAL GRATE AND FRAME DETAILS

SHEET: SD-02
OF 1 SHEETS
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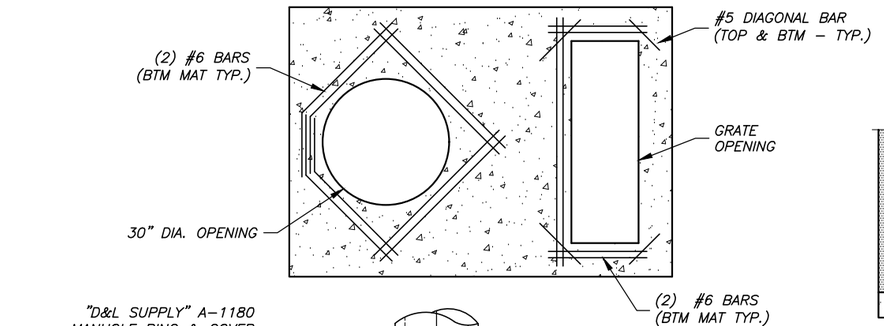
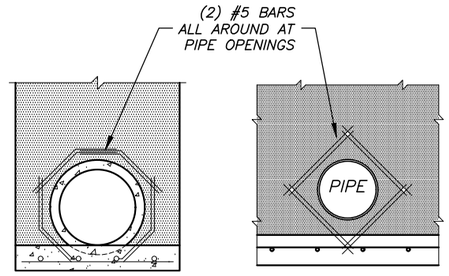
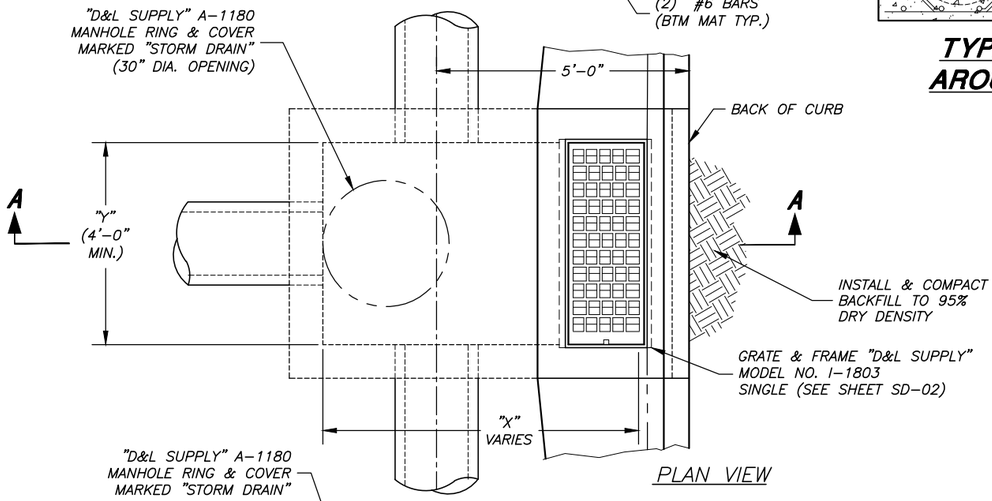
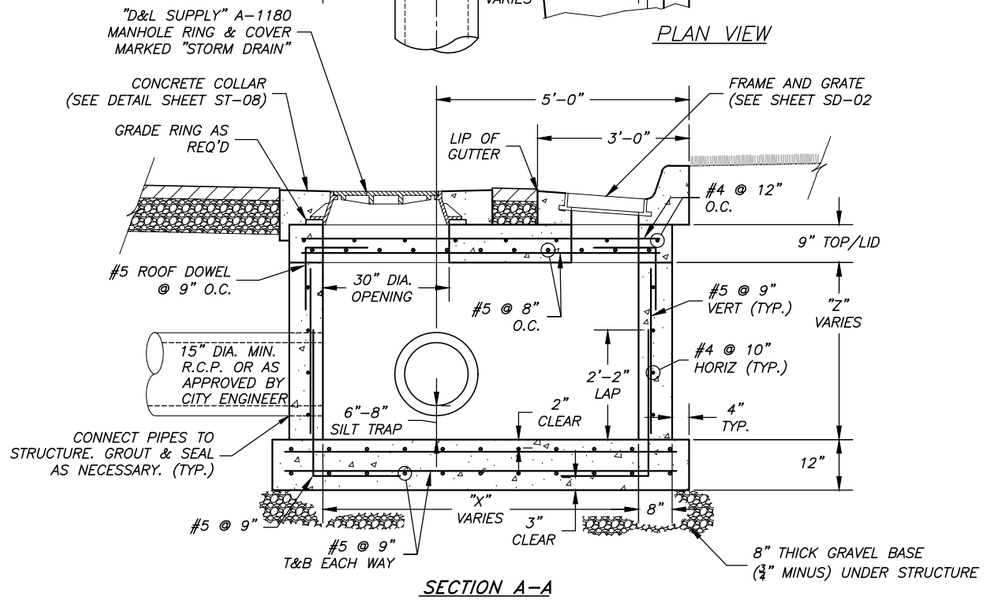




TYPICAL REINFORCING AROUND PIPE OPENINGS

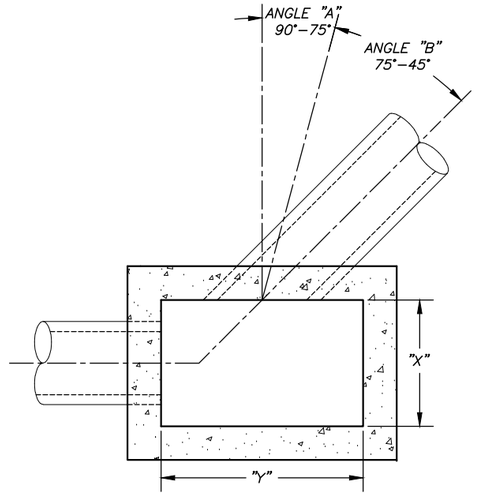


PLAN VIEW

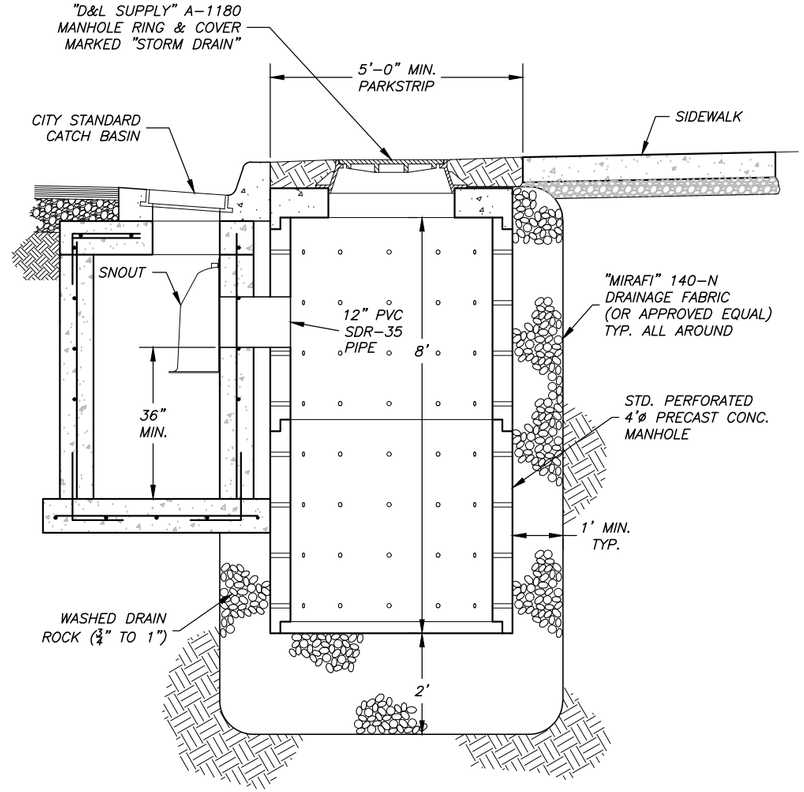


SECTION A-A

TYPICAL COMBINATION CATCH BASIN/CLEAN-OUT



DRAINAGE DITCH INLET BOX DIMENSION TABLE				
PIPE SIZE (IN.)	"X"	INLET BOX "Y" (ANGLE A)	INLET BOX "Y" (ANGLE B)	"Z" MIN.
15	VARIES	4'-0"	4'-0"	2'-6"
18	VARIES	4'-0"	4'-0"	3'-0"
21	VARIES	4'-0"	4'-0"	3'-6"
24	VARIES	4'-0"	5'-0"	3'-6"
30	VARIES	4'-0"	6'-0"	4'-0"
36	VARIES	5'-0"	6'-0"	4'-6"
42	VARIES	6'-0"	7'-0"	5'-6"
48	VARIES	6'-0"	8'-0"	6'-0"



TYPICAL SUMP DETAIL

GENERAL NOTES:

1. ALL CATCH BASIN BOX SIZES REFLECT DIMENSIONS FOR THE MINIMUM 15"ø PIPE SIZE. BOX DIMENSIONS MUST INCREASE PROPORTIONALLY TO ACCOMMODATE LARGER PIPE SIZES.
2. **CAST-IN-PLACE CONCRETE CATCH BASINS CAN BE REPLACED WITH PRECAST CONCRETE CATCH BASINS WITH HL-93 DECK LOADING AND COMPARABLE SIZE.**
3. ALL BOXES SHALL BE FORMED ON THE INSIDE AND OUTSIDE OF THE BOX AND INSPECTED BY THE CITY PRIOR TO THE PLACING OF CONCRETE.
4. DOUBLE CATCH BASINS WILL BE REQUIRED IN LOCATIONS SPECIFIED BY THE CITY ENGINEER (TYPICALLY IN LOW SPOTS OR WHERE ADDITIONAL INLET CAPACITY IS NEEDED).
5. STORM DRAIN LINES SHALL BE 15 INCH MINIMUM DIAMETER REINFORCED CONCRETE PIPE (RCP), OF APPROPRIATE CLASS.
6. NO HOODED STYLE CATCH BASINS ARE PERMITTED. HOODED STYLE CATCH BASINS HAVE AN OPENING IN THE BACK OF THE CURB THAT ALLOWS THE PASSAGE OF LARGER OBJECTS INTO THE STORM DRAIN SYSTEM.
7. STORM DRAIN LINES SHALL BE 15 INCH MINIMUM DIAMETER REINFORCED CONCRETE PIPE (RCP), OF APPROPRIATE CLASS.

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

JA JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476-9767
www.jonescivil.com

MORGAN CITY EST. 1868

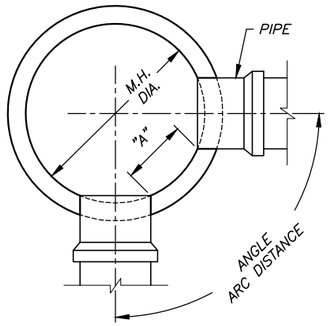
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

STORM DRAIN COMBO BOX AND SUMP DETAILS

SHEET: SD-03
OF 1 SHEETS
0

PIPE SIZES

M.H. SIZE	IN–LINE M.H. 180°	JUNCTION MANHOLE (ANGLE / ARC DISTANCE) 90°	85°	80°	75°	70°	65°	60°	55°	50°	45°
4'ø M.H.	15"–24"	15"–18"	15"–18"	15"	15"	––	––	––	––	––	––
5'ø M.H.	27"–30"	21"–24"	21"–24"	18"–21"	18"–21"	15"–18"	15"–18"	15"	––	––	––
6'ø M.H.	36"–48"	27"–30"	27"–30"	24"–27"	24"	21"–24"	21"	18"	15"–18"	15"	––
7'ø M.H.	54"	36"	36"	30"	27"–30"	27"	24"	21"–24"	21"	18"	15"
8'ø M.H.	60"	42"	42"	36"	36"	30"	27"–30"	27"	24"	21"	18"



SIZING NOTES:

1. SUGGESTED "A" DISTANCE IS 6" OR GREATER FOR 48", 60" AND 72" DIAMETER MANHOLES
2. SUGGESTED "A" DISTANCE IS 8" OR GREATER FOR 84" AND 96" DIAMETER MANHOLES

GENERAL NOTES:

A. STORM DRAIN MANHOLE DIAMETER TO BE DETERMINED BY THE DESIGN ENGINEER AFTER EVALUATION OF THE NUMBER, SIZE, AND PIPE ENTRY ANGLE OF THE PIPES THAT CONNECT TO THE MANHOLE.

B. NO MORE THAN 12" OF GRADE RINGS TO BE ALLOWED ON ANY MANHOLE

C. PLYWOOD COVERS SHALL BE USED AT MANHOLE FLOOR TO COVER FLOWLINE DURING CONSTRUCTION AND MAINTENANCE ACTIVITIES.

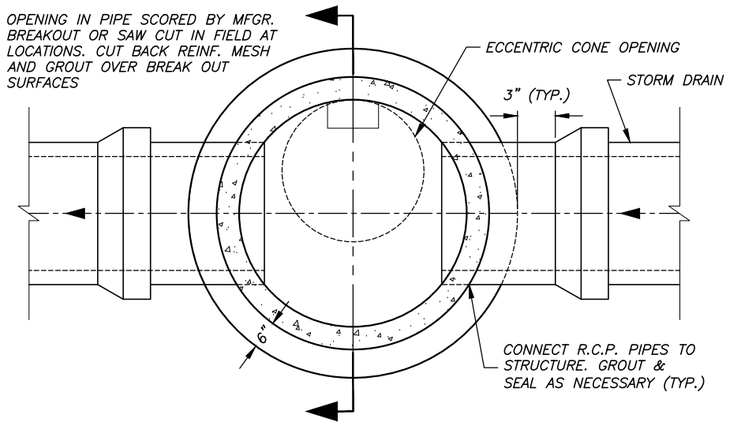
D. ALL INTERIOR JOINTS SHALL BE SMOOTH AND EVENLY GROUTED WITH NON–SHRINK GROUT MIX.

E. MANHOLE STEPS UNIFORMLY SPACED (1'–0" MAX.) POLYPROPYLENE COVERED STEEL STEPS, MODEL PSI–PF AS MANUFACTURED BY "M.A. INDUSTRIES" OR APPROVED EQUAL – INSTALLATION OF STEPS SHALL BE WATERPROOF.

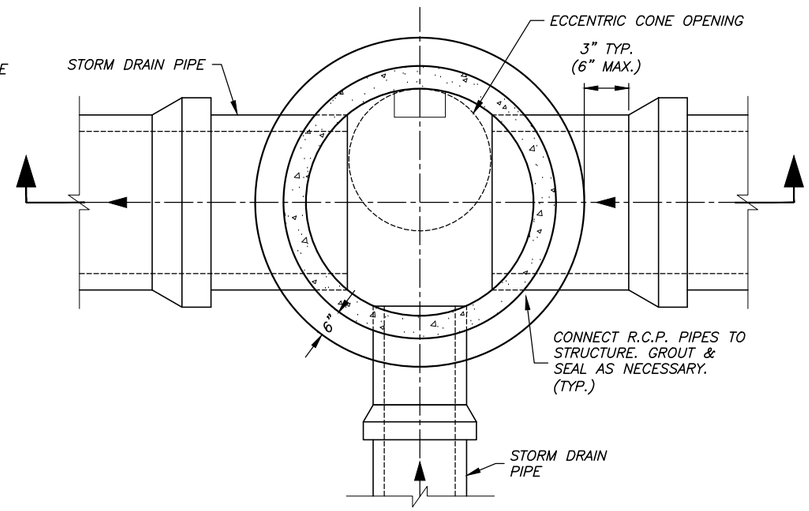
F. STORM DRAIN LINES SHALL BE 15 INCH MINIMUM DIAMETER REINFORCED CONCRETE PIPE (RCP), OF APPROPRIATE CLASS.

G. FLAT MANHOLE RINGS & COVERS (SLAB CONSTRUCTION) ARE NOT ALLOWED ON ANY MANHOLE CONE SECTION.

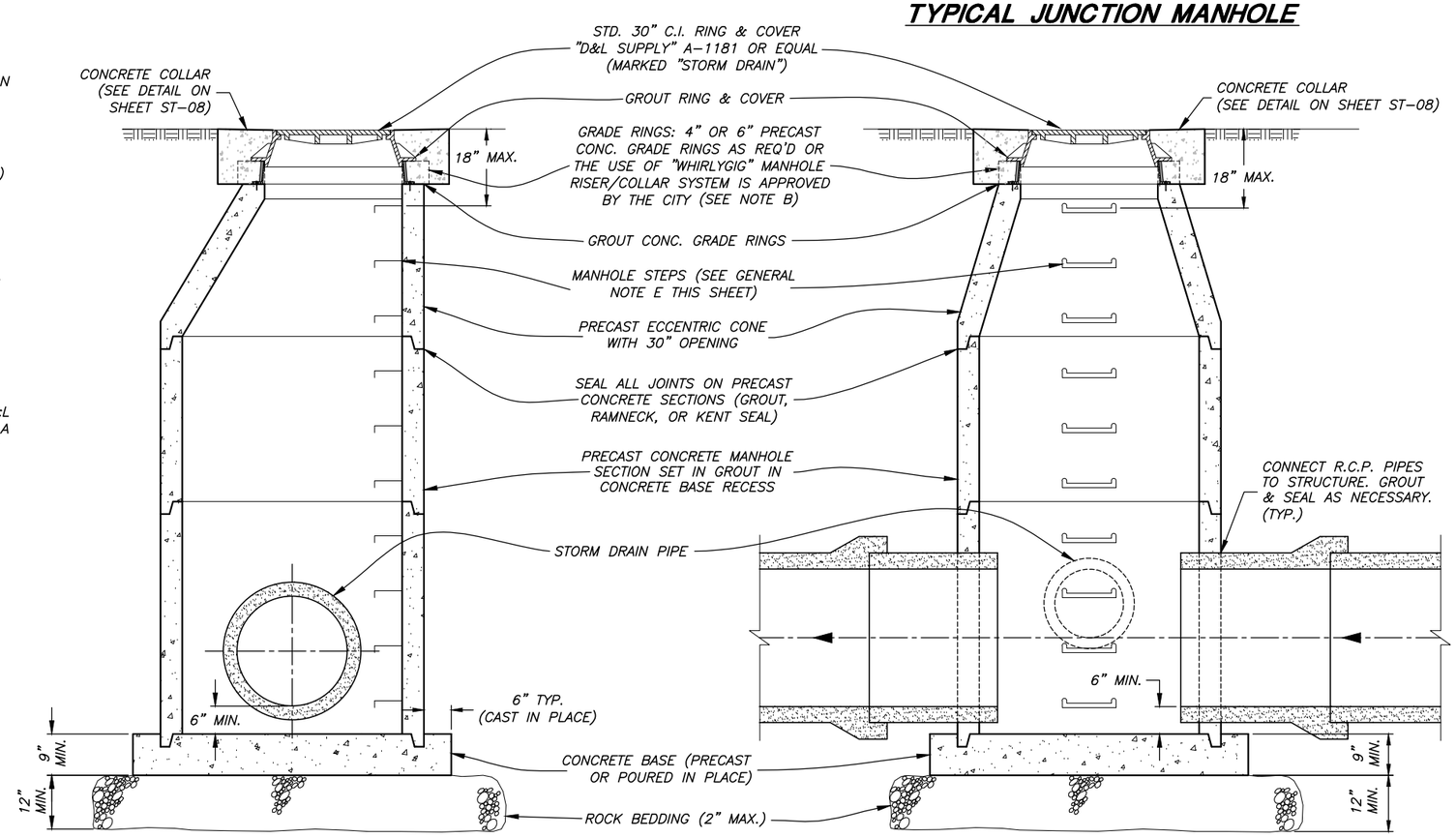
H. THE USE OF STORM DRAIN UTILITY VAULTS (BOXES) WITH STD. 30" C.I. RING & COVER ("D&L SUPPLY" A–1181 MARKED "STORM DRAIN") AND A CONCRETE COLLAR IS ACCEPTED WHEN APPROVED BY THE CITY.



TYPICAL LINE MANHOLE



TYPICAL JUNCTION MANHOLE



REGISTERED PROFESSIONAL ENGINEER
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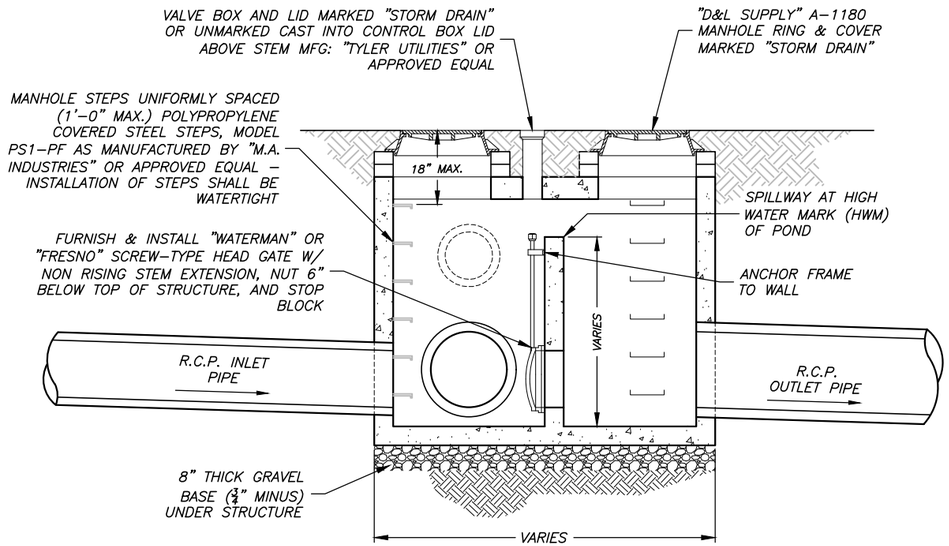
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

STORM DRAIN MANHOLE DETAILS

SHEET: SD-04
OF 1 SHEETS
0



SECTION B-B

GENERAL NOTES:

1. IT IS UNDERSTOOD THAT THIS CONTROL STRUCTURE DETAIL MAY NOT BE APPLICABLE TO ALL SITUATIONS. THIS RECOMMENDED DETAIL SHOULD BE FOLLOWED AS MUCH AS PRACTICAL. VARIATIONS CAN BE APPROVED BY THE PUBLIC WORKS DEPARTMENT AND CITY ENGINEER.
2. STRUCTURE DESIGN AND FLOW CALCULATIONS MUST BE APPROVED BY CITY ENGINEER PRIOR TO CONSTRUCTION.
3. STORM DRAIN LINES SHALL BE 15 INCH MINIMUM DIAMETER REINFORCED CONCRETE PIPE (RCP), OF APPROPRIATE CLASS.
4. THE SURFACE AREA OF THE BASIN SHALL BE SODDED AND SHALL BE PROVIDED WITH AN AUTOMATED SPRINKLER SYSTEM APPROVED BY THE CITY ENGINEER.
5. LOW FLOWS MUST BE PIPED CONTINUOUSLY TO THE CONTROL STRUCTURE. NO OPEN FLOW IS PERMITTED THROUGH THE BASIN.
6. INCLINED GRATES ARE REQUIRED ON ALL PIPES/INLETS WHERE OPEN CHANNELS, DITCHES, OR PONDS DISCHARGE DIRECTLY INTO THE STORM DRAIN SYSTEM. GRATES SHALL BE REMOVABLE FOR MAINTENANCE PURPOSES GRATES SHALL BE HOT DIPPED GALVANIZED WITH BARS AT MAXIMUM 3 INCH SPACING.

STRUCTURAL NOTES:

A. PRECAST CONCRETE STRUCTURE CAN BE REPLACED WITH CAST-IN-PLACE CONCRETE VAULT. SUBMIT ENGINEERED CONSTRUCTION PLANS WITH REBAR DETAILS TO CITY ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.

B. ADD REINFORCEMENT AROUND OPENINGS EQUAL TO REINFORCEMENT DISPLACED BY OPENING.

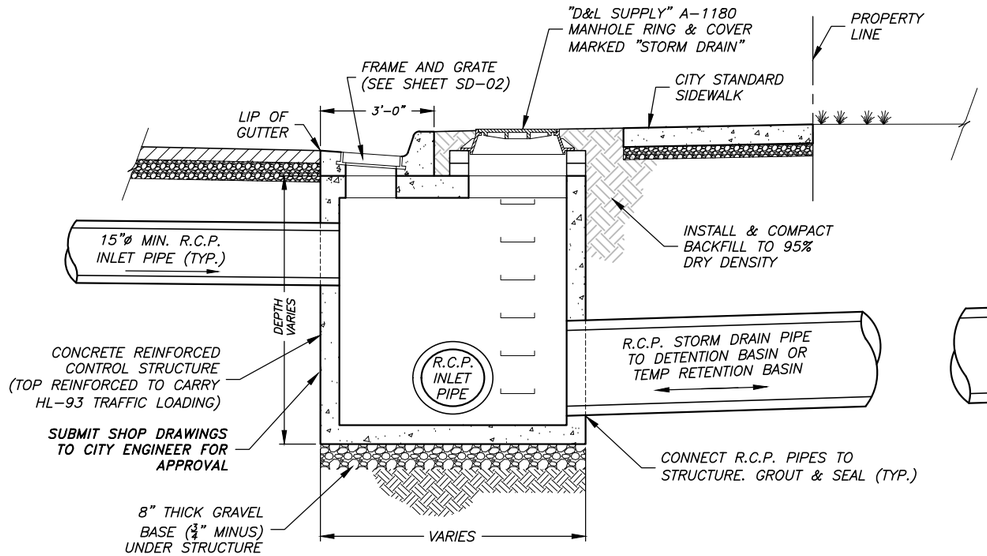
C. THE PRECAST VAULT MANUFACTURER IS RESPONSIBLE FOR DESIGN RELATED TO TRAFFIC LOADING AND THRUST. VERIFICATION OF PROPER DESIGN MUST BE PROVIDED TO THE CITY BY THE DEVELOPER, CONTRACTOR, OR PROPERTY OWNER AS THE CASE MAY BE.

D. REINFORCEMENT TO CONFORM WITH ASTM A 615 GRADE 60

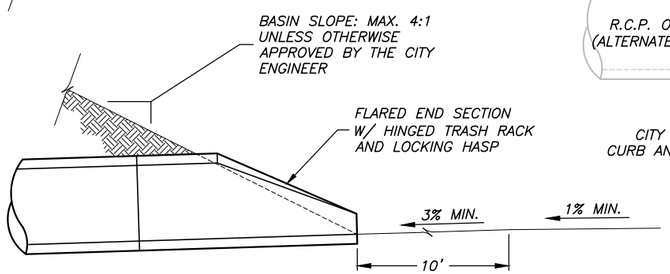
E. CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI

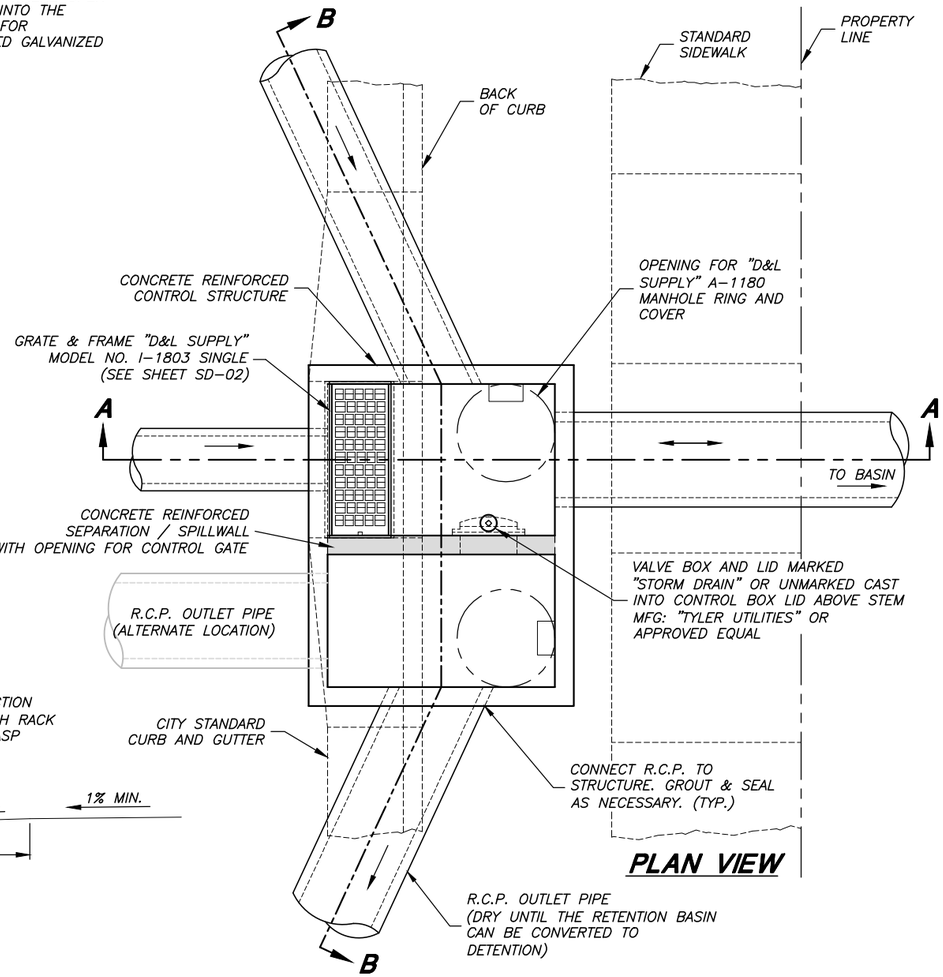
F. USE AN AIR-ENTRAINING AGENT ON ALL CONCRETE EXPOSED TO FROST.

G. HL-93 LOADING



SECTION A-A





PLAN VIEW

INLET/OUTLET CONTROL STRUCTURE

(PRECAST OR CAST-IN-PLACE)

REGISTERED PROFESSIONAL ENGINEER — No. 323821 MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER

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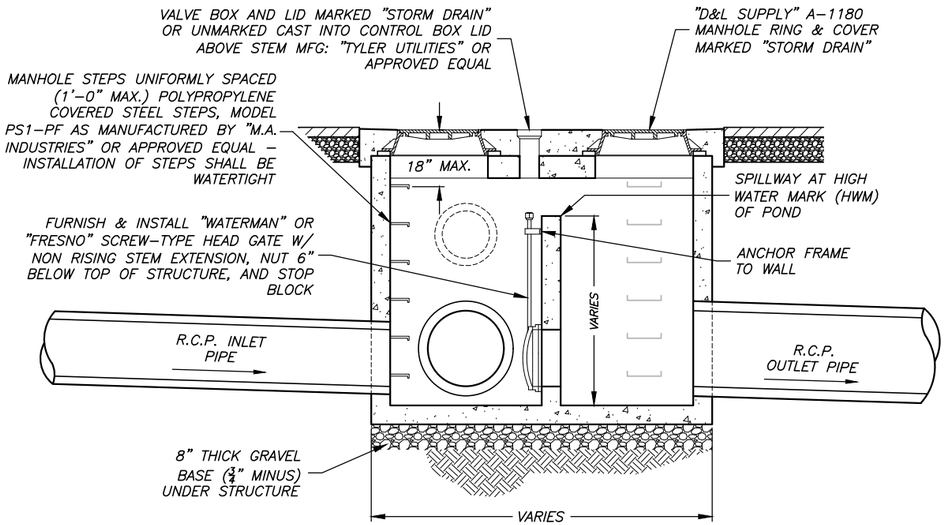
MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

STORM WATER INLET/OUTLET CONTROL STRUCTURE DETAILS

SHEET: SD-05
OF 1 SHEETS
0



SECTION B-B

GENERAL NOTES:

1. IT IS UNDERSTOOD THAT THIS CONTROL STRUCTURE DETAIL MAY NOT BE APPLICABLE TO ALL SITUATIONS. THIS RECOMMENDED DETAIL SHOULD BE FOLLOWED AS MUCH AS PRACTICAL. VARIATIONS CAN BE APPROVED BY THE PUBLIC WORKS DEPARTMENT AND CITY ENGINEER.
2. STRUCTURE DESIGN AND FLOW CALCULATIONS MUST BE APPROVED BY CITY ENGINEER PRIOR TO CONSTRUCTION.
3. STORM DRAIN LINES SHALL BE 15 INCH MINIMUM DIAMETER REINFORCED CONCRETE PIPE (RCP), OF APPROPRIATE CLASS.
4. THE SURFACE AREA OF THE BASIN SHALL BE SODDED AND SHALL BE PROVIDED WITH AN AUTOMATED SPRINKLER SYSTEM APPROVED BY THE CITY ENGINEER.
5. LOW FLOWS MUST BE PIPED CONTINUOUSLY TO THE CONTROL STRUCTURE. NO OPEN FLOW IS PERMITTED THROUGH THE BASIN.
6. INCLINED GRATES ARE REQUIRED ON ALL PIPES/INLETS WHERE OPEN CHANNELS, DITCHES, OR PONDS DISCHARGE DIRECTLY INTO THE STORM DRAIN SYSTEM. GRATES SHALL BE REMOVABLE FOR MAINTENANCE PURPOSES GRATES SHALL BE HOT DIPPED GALVANIZED WITH BARS AT MAXIMUM 3 INCH SPACING.

STRUCTURAL NOTES:

A. PRECAST CONCRETE STRUCTURE CAN BE REPLACED WITH CAST-IN-PLACE CONCRETE VAULT. SUBMIT ENGINEERED CONSTRUCTION PLANS WITH REBAR DETAILS TO CITY ENGINEER FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.

B. ADD REINFORCEMENT AROUND OPENINGS EQUAL TO REINFORCEMENT DISPLACED BY OPENING.

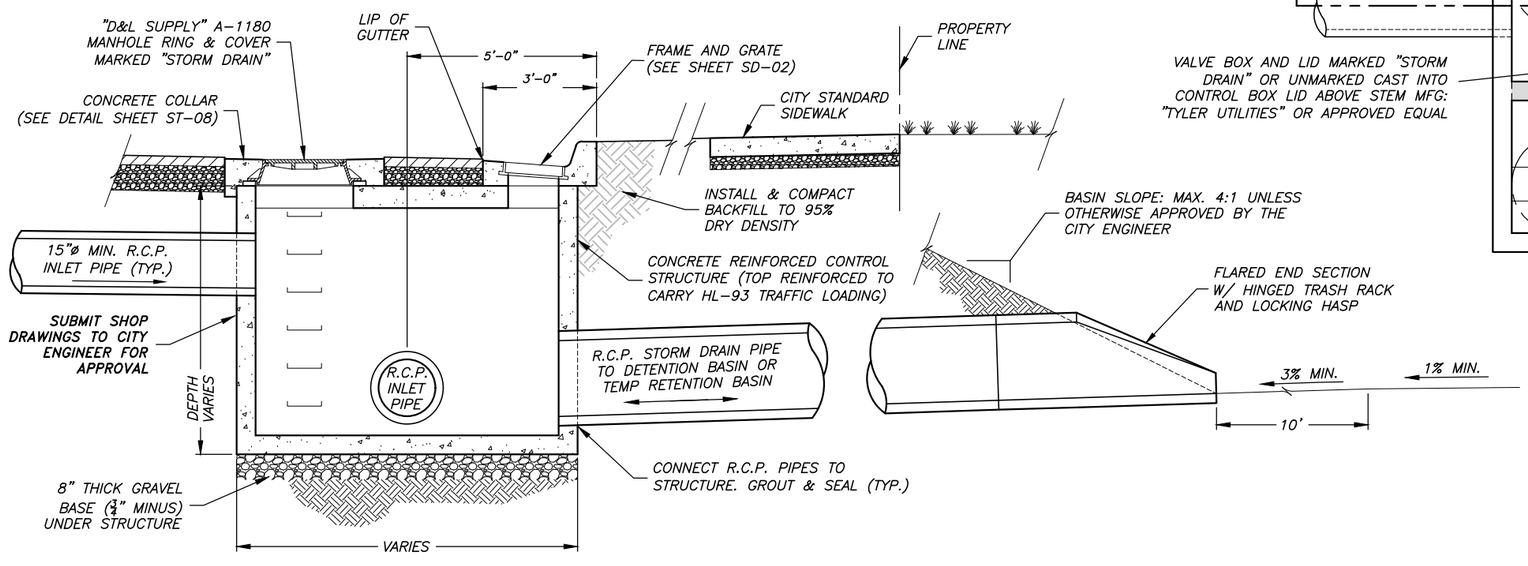
C. THE PRECAST VAULT MANUFACTURER IS RESPONSIBLE FOR DESIGN RELATED TO TRAFFIC LOADING AND THRUST. VERIFICATION OF PROPER DESIGN MUST BE PROVIDED TO THE CITY BY THE DEVELOPER, CONTRACTOR, OR PROPERTY OWNER AS THE CASE MAY BE.

D. REINFORCEMENT TO CONFORM WITH ASTM A 615 GRADE 60

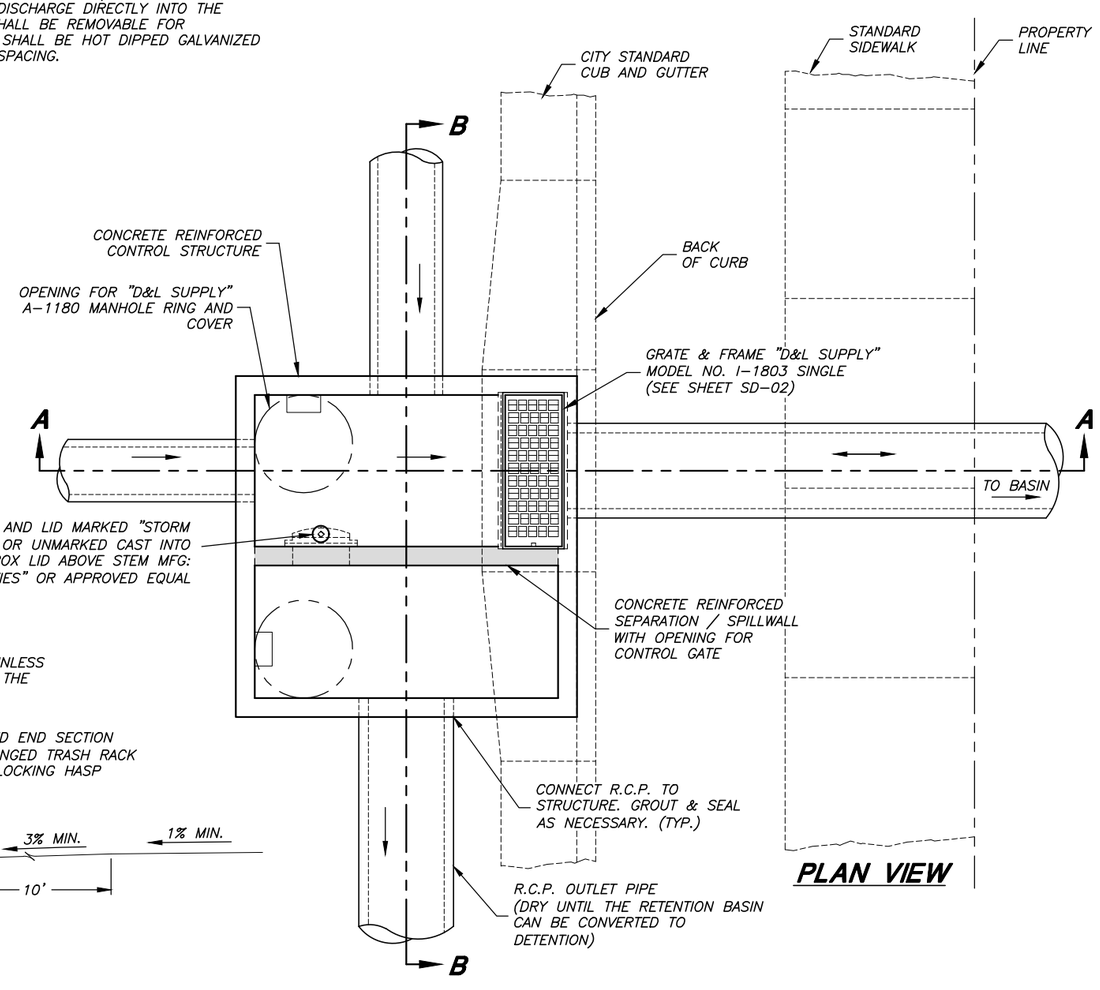
E. CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI

F. USE AN AIR-ENTRAINING AGENT ON ALL CONCRETE EXPOSED TO FROST.

G. HL-93 LOADING



SECTION A-A



PLAN VIEW

INLET/OUTLET CONTROL STRUCTURE

(PRECAST OR CAST-IN-PLACE)

REGISTERED PROFESSIONAL ENGINEER — No. 323821 — MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER

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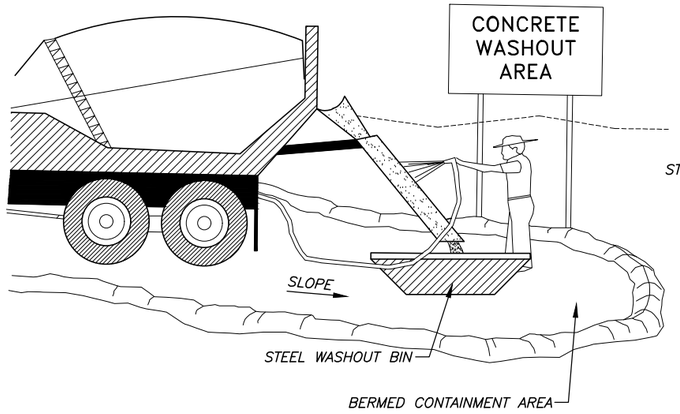
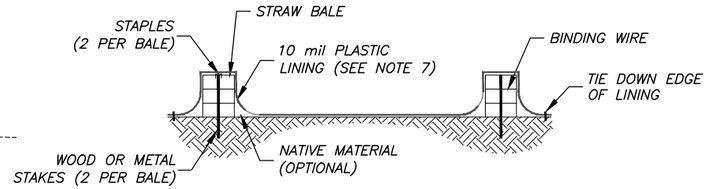
PUBLIC WORKS STANDARDS

STORM WATER INLET/OUTLET CONTROL STRUCTURE DETAILS

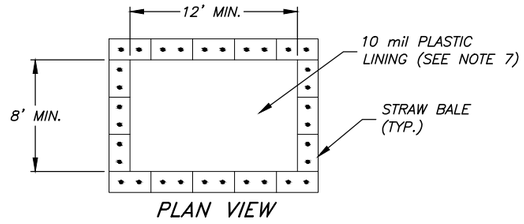
SHEET: SD-06
OF 1 SHEETS
0



STEEL BIN CONCRETE WASHOUT



SECTION VIEW



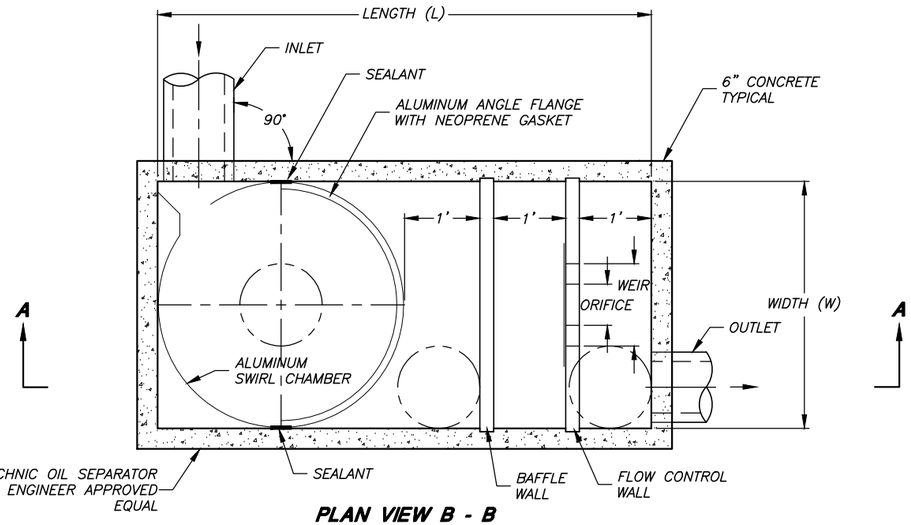
PLAN VIEW

STRAW BALE CONCRETE WASHOUT

CONCRETE WASHOUT

CONCRETE WASHOUT NOTES:

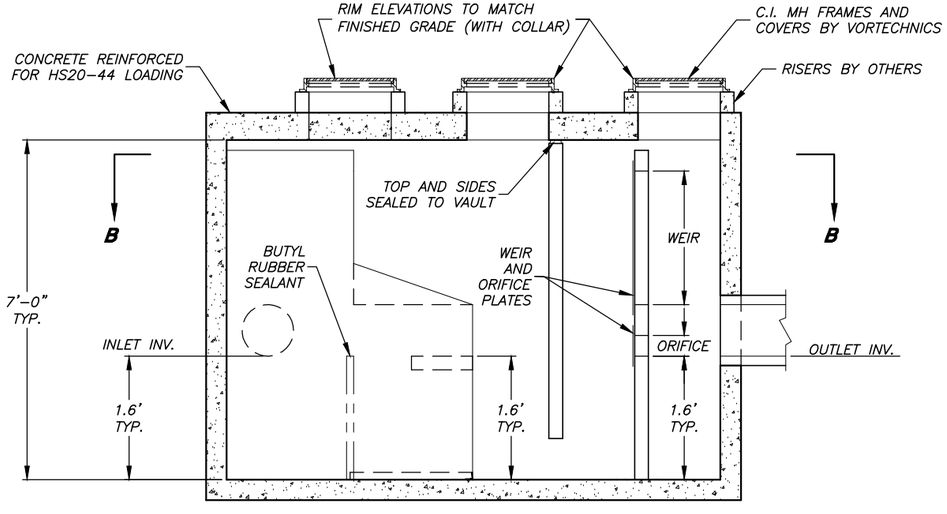
1. THE WASHOUT AREA SHALL BE CONSTRUCTED PRIOR TO CONCRETE POURS ON-SITE.
2. EXCESS AND WASTE CONCRETE SHALL BE DISPOSED OF EITHER OFF SITE OR AT THE DESIGNATED WASHOUT AREAS ONLY. SIGNS SHALL BE POSTED MARKING THE LOCATION OF THE WASHOUT AREA TO ENSURE EQUIPMENT OPERATORS USE THE PROPER FACILITY.
3. EXCESS AND WASTE CONCRETE SHALL NOT BE WASHED INTO THE STREET OR INTO A DRAINAGE SYSTEM. THE WASHOUT SHALL BE A MINIMUM OF 50 FEET FROM ANY STORM DRAIN INLETS.
4. FOR WASHOUT OF CONCRETE AND MORTAR PRODUCTS ONSITE, A DESIGNATED CONTAINMENT FACILITY OF SUFFICIENT CAPACITY TO RETAIN LIQUID AND SOLID WASTE SHALL BE PROVIDED.
5. ONSITE CONCRETE WASHOUT CONTAINMENT FACILITY SHALL BE EITHER A STEEL BIN, STRAW BALE WASHOUT, OR AN APPROVED ALTERNATE. (SEE DETAILS THIS SHEET)
6. SLURRY FROM CONCRETE AND ASPHALT SAW CUTTING SHALL BE VACUUMED OR CONTAINED, DRIED, PICKED UP AND DISPOSED OF PROPERLY.
7. PLASTIC LINING SHALL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
8. THE WASHOUT AREAS SHALL BE INSPECTED DAILY TO ENSURE THAT ALL CONCRETE WASHING IS BEING DISCHARGED INTO THE WASHOUT AREA, NO LEAKS OR TEARS ARE PRESENT, AND TO IDENTIFY WHEN CONCRETE WASTES NEED TO BE REMOVED. THE WASHOUT AREAS SHALL BE CLEANED OUT ONCE THE AREA IS FILLED TO 75 PERCENT OF THE HOLDING CAPACITY.



PLAN VIEW B - B

Vortechs™ Model	Aluminum Swirl Chamber Diameter / Area (ft / ft²)	Treated Flow (cfs)	Sediment Storage (yds³)	Approx. Size L x W (ft)
1000	3 / 7	1.6	0.7	9 x 3
2000	4 / 13	2.8	1.2	10 x 4
3000	5 / 20	4.5	1.8	11 x 5
4000	6 / 28	6.0	2.4	12 x 6
5000	7 / 38	8.5	3.2	13 x 7
7000	8 / 50	11.0	4.0	14 x 8
9000	9 / 64	14.0	4.8	15 x 9
11000	10 / 79	17.5	5.6	16 x 10
16000	12 / 113	25.0	7.1	18 x 12

OIL/WATER SEPARATOR CHART



SECTION A - A

OIL/WATER SEPARATOR

OIL/WATER SEPARATOR NOTE:

ALL OIL/WATER SEPARATORS ARE TO BE SIZED BY THE DEVELOPING ENGINEER. SUBMIT ENGINEERED CONSTRUCTION PLANS AND DETAILS TO THE MORGAN CITY PUBLIC WORKS DEPARTMENT AND THE CITY ENGINEER FOR REVIEW AND FINAL APPROVAL PRIOR TO CONSTRUCTION.

REGISTERED PROFESSIONAL ENGINEER
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MATTHEW E. HARTVIGSSEN
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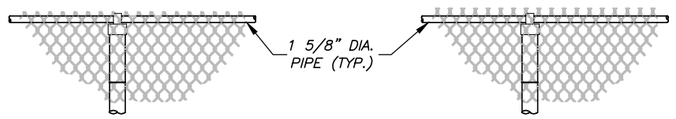
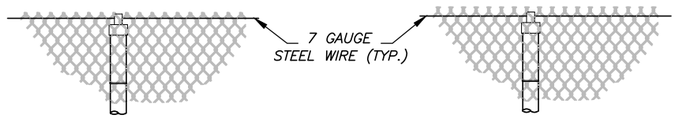
OIL/WATER SEPARATOR AND CONCRETE WASHOUT DETAILS

SHEET: SD-07
OF 1 SHEETS
0



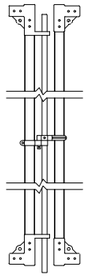
KNUCKLED SELVAGE
TYPE I

TWISTED & BARBED SELVAGE
TYPE II

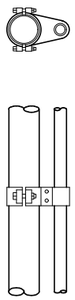


KNUCKLED SELVAGE
W/ TENSION WIRE
TYPE III

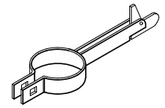
TWISTED & BARBED
SELVAGE W/ TENSION WIRE
TYPE IV



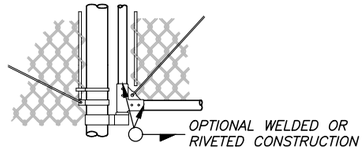
DROP ROD
ASSEMBLY



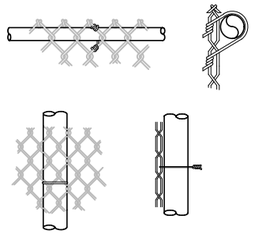
TOP GATE HINGE



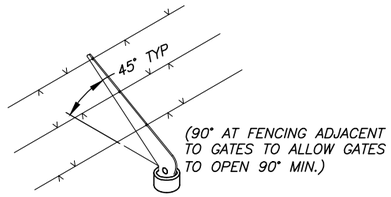
GATE KEEPER



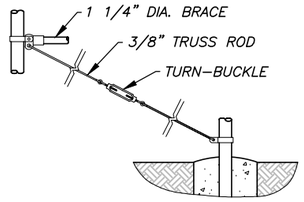
BOTTOM GATE HINGE
AND GATE DETAIL



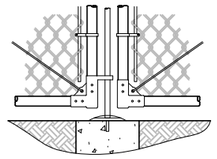
PIPE POST TIE



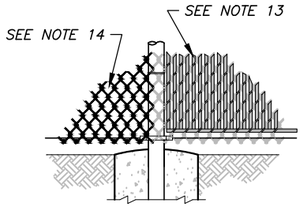
COMBINATION CAP AND
BARBED WIRE SUPPORTING ARM



BRACE & TRUSS CONNECTIONS



CENTER GATE STOP
AND GATE DETAIL



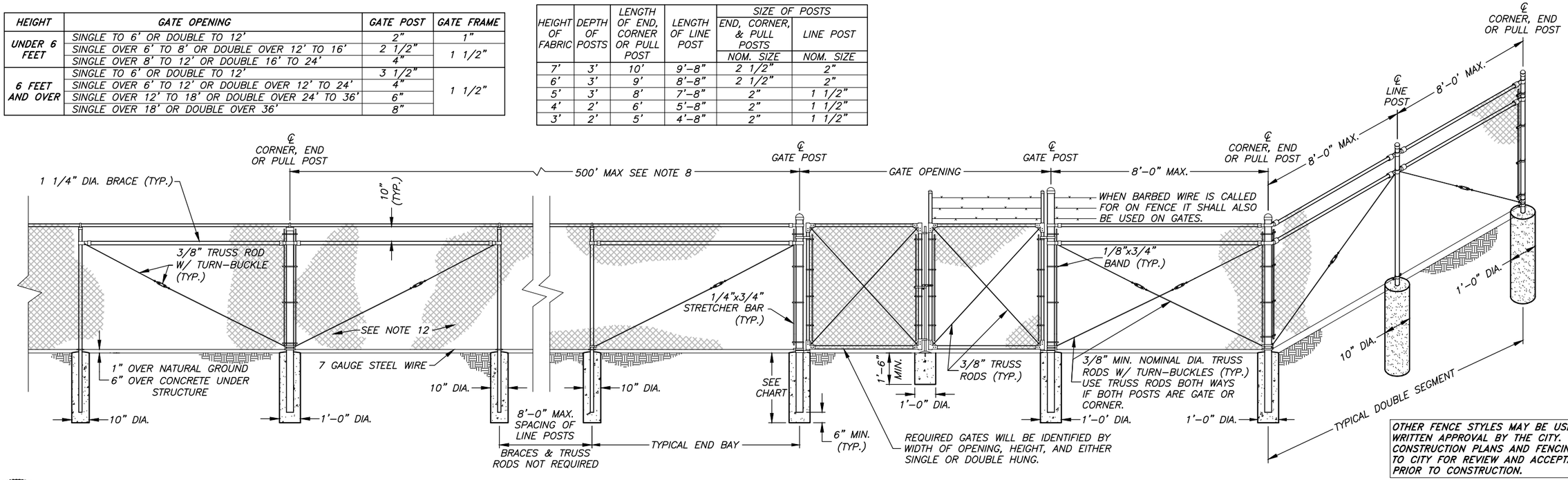
SLATS & VINYL
COATING DETAIL

GENERAL NOTES:

1. *MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.*
2. *TOP SUPPORT – TYPES I AND II TUBULAR RAIL, TYPES III AND IV TENSION WIRE.*
3. *BARB WIRE SHALL BE USED WHEN APPROVED BY THE CITY.*
4. *TWISTED AND BARBED SELVAGE TOP AND BOTTOM SHALL BE USED ON FENCES 5–FEET HIGH OR GREATER.*
5. *KNUCKLED SELVAGE ON TOP AND TWISTED AND BARBED ON BOTTOM SHALL BE USED ON FENCES LESS THAN 5–FEET.*
6. *ALL STEEL PIPE MEMBERS SHALL CONFORM TO ASTM A53 HOT DIPPED ZINC COATED HIGH TENSILE STEEL PIPE.*
7. *POSTS SHALL BE SCHEDULE 40 PIPE.*
8. *LINE POSTS SHALL BE LOCATED AT EQUAL SPACING FOR EACH SEGMENT WITH A MAXIMUM SPACING AS FOLLOWS:*
   a. *TANGENT SECTIONS TO 500–FOOT RADIUS NOT MORE THAN 8–FEET.*
   b. *UNDER 500–FOOT RADIUS TO 200–FOOT RADIUS NOT MORE THAN 8–FEET.*
   c. *UNDER 200–FOOT RADIUS TO 100–FOOT RADIUS NOT MORE THAN 6–FEET.*
   d. *UNDER 100–FOOT RADIUS NOT MORE THAN 5–FEET.*
9. *TRUSS RODS AND BRACES SHALL NOT BE REQUIRED FOR FABRIC HEIGHT LESS THAN 5–FEET.*
10. *TENSION WIRE SHALL BE 7 GAUGE ZINC– OR ALUMINUM–COATED COIL SPRING STEEL TENSION WIRE.*
11. *ALL POSTS SHALL BE SET IN 3000 PSI CONCRETE AND SHALL BE TOPPED WITH BALL TYPE OR OTHER APPROVED ORNAMENT.*
12. *ALL FABRIC SHALL BE 2" GALVANIZED 9 GAUGE MESH.*
13. *WHITE VERTICAL SEMI–PRIVACY VINYL SLATS WITH BOTTOM–LOCKING SLAT, WHEN REQUIRED BY THE CITY. OTHER COLORS AS APPROVED BY THE CITY.*
14. *BLACK VINYL COATED CHAINLINK FENCING WHEN REQUIRED BY THE CITY.*
15. *ALL FENCING SHALL CONFORM TO LOCATION AND HEIGHT LIMITATIONS AS STATED IN THE MORGAN CITY FENCING ORDINANCE.*

HEIGHT	GATE OPENING	GATE POST	GATE FRAME
UNDER 6 FEET	SINGLE TO 6' OR DOUBLE TO 12'	2"	1"
	SINGLE OVER 6' TO 8' OR DOUBLE OVER 12' TO 16'	2 1/2"	1 1/2"
	SINGLE OVER 8' TO 12' OR DOUBLE 16' TO 24'	4"	
6 FEET AND OVER	SINGLE TO 6' OR DOUBLE TO 12'	3 1/2"	1 1/2"
	SINGLE OVER 6' TO 12' OR DOUBLE OVER 12' TO 24'	4"	
	SINGLE OVER 12' TO 18' OR DOUBLE OVER 24' TO 36'	6"	
	SINGLE OVER 18' OR DOUBLE OVER 36'	8"	

HEIGHT OF FABRIC	DEPTH OF POSTS	LENGTH OF END, CORNER OR PULL POST	LENGTH OF LINE POST	SIZE OF POSTS	
				END, CORNER, & PULL POSTS	LINE POST
				NOM. SIZE	NOM. SIZE
7'	3'	10'	9'–8"	2 1/2"	2"
6'	3'	9'	8'–8"	2 1/2"	2"
5'	3'	8'	7'–8"	2"	1 1/2"
4'	2'	6'	5'–8"	2"	1 1/2"
3'	2'	5'	4'–8"	2"	1 1/2"



OTHER FENCE STYLES MAY BE USED WITH WRITTEN APPROVAL BY THE CITY. SUBMIT CONSTRUCTION PLANS AND FENCING DETAILS TO CITY FOR REVIEW AND ACCEPTANCE PRIOR TO CONSTRUCTION.

REGISTERED PROFESSIONAL ENGINEER — No. 323821 — MATTHEW E. HARTVIGSEN — STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER

08-24-2023
DATE

REV.	DATE

SCALE: N.T.S.

DESIGNED
DRAWN
CHECKED

JONES & ASSOCIATES
CONSULTING ENGINEERS
6080 Fashion Point Drive
South Ogden, Utah 84403 (801) 476–9767
www.jonescivil.com

MORGAN CITY EST. 1868

MORGAN CITY CORPORATION
PUBLIC WORKS STANDARDS

GENERAL CHAIN LINK FENCE DETAILS

SHEET: **FC-01** OF 1 SHEETS
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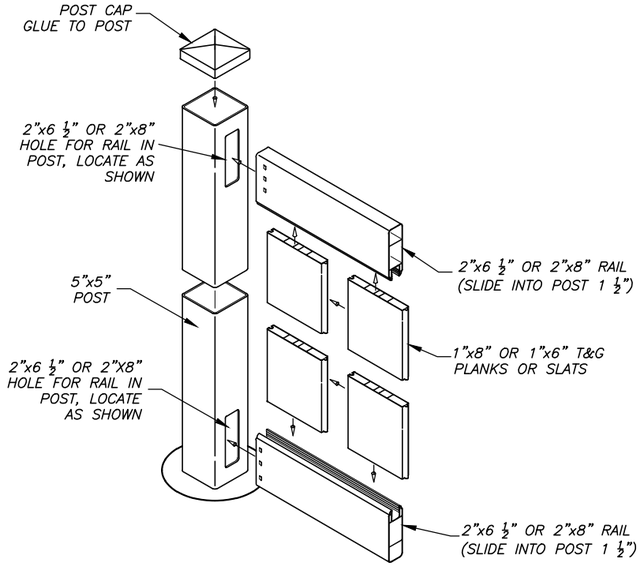
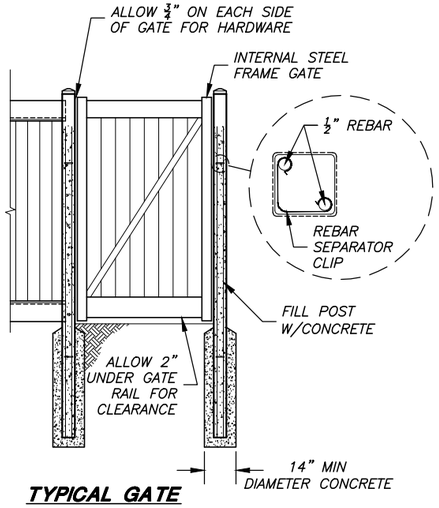


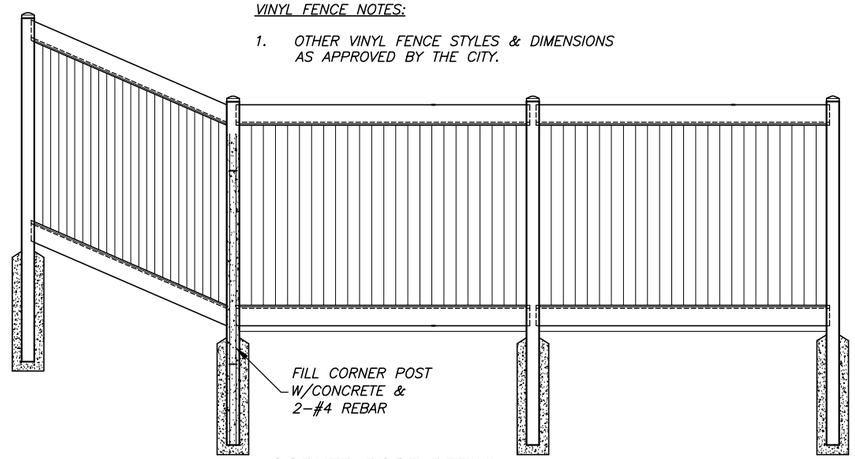
TYPICAL VINYL FENCE INSTALLATION DETAIL



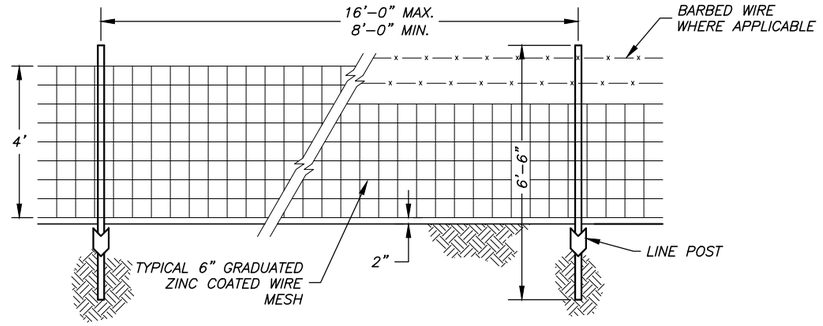
TYPICAL GATE

VINYL FENCE NOTES:

1. OTHER VINYL FENCE STYLES & DIMENSIONS AS APPROVED BY THE CITY.



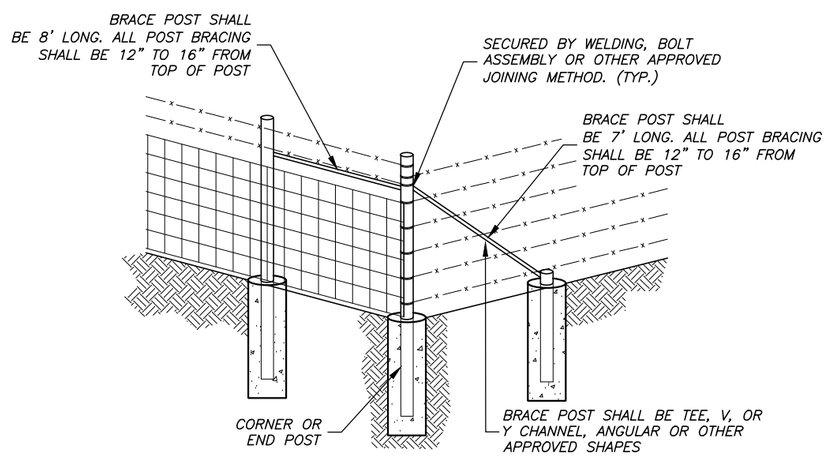
CORNER POST DETAIL



TYPICAL WIRE MESH FENCE

TYPICAL 6' PRIVACY FENCE

TYPICAL 8' PRIVACY FENCE



TYPICAL CORNER / END POST BRACING DETAIL

REGISTERED PROFESSIONAL ENGINEER
No. 323821
MATTHEW E. HARTVIGSEN
STATE OF UTAH

Matthew E. Hartvigsen
CITY ENGINEER
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PUBLIC WORKS STANDARDS

VINYL & WIRE FENCING DETAILS

SHEET: FC-02
OF 1 SHEETS
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