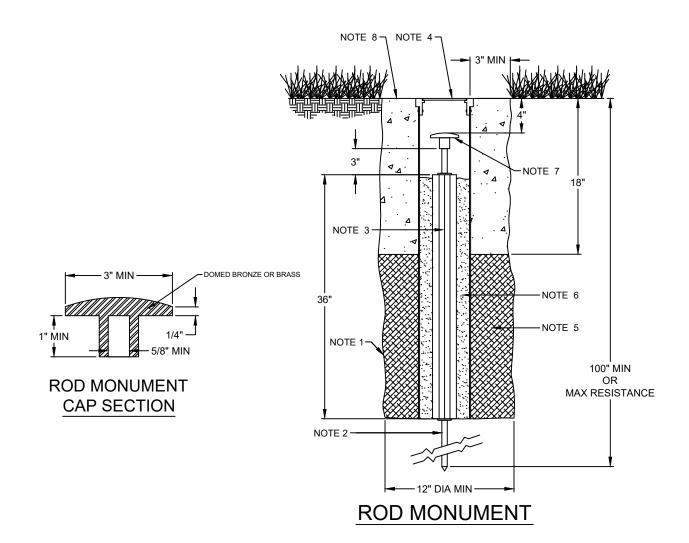


- ASPHALT: Install type A marker in corner locations that fall in asphalt. Drill through asphalt and recess the plastic cap ¹/₄ below the surface of the asphalt. Type C markers are not allowed in corner locations that fall in asphalt.
- 2. CONCRETE: Install type C markers in corner location that fall in concrete. Where corner locations fall in concrete that will have snow removal during the winter months install type C marker sufficiently recessed in the concrete so that the washer and mechanical concrete anchor is completely below the surface of the concrete.



PROPERTY CORNER MARKERS

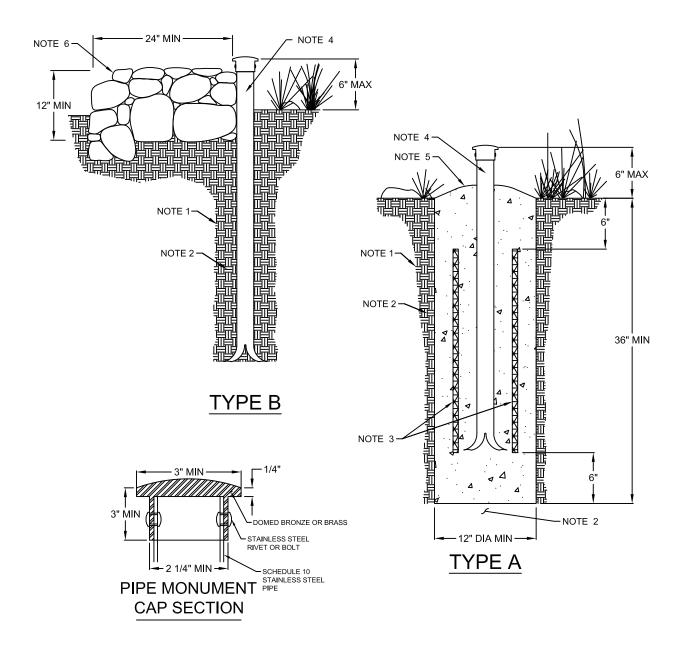


- 1. EXCAVATION: Call Blue Stakes before excavating and installing rod. Install rod only after cleared by all Blue Stakes.
- 2. ROD: Install by driving a $\frac{1}{100}$ stainless steel rod sections (Berntsen MSS91604 or equivalent*) with drive point (Berntsen MSS12 or equivalent*) to a depth of 100" below the surface of the ground or until a point of max resistance when the rod refuses to drive further.
- 3. SECURITY SLEEVE: Fill plastic finned floating security sleeve and bushings (Berntsen TSS3-Y or equivalent*) $\frac{3}{4}$ full of food grade grease. Install security sleeve over rod per manufacturers specifications.
- 4. MONUMENT ACCESS COVER: Connect access cover (Berntsen BMAC6 or equivalent*) directly to a 6" DIA schedule 40 PVC pipe (35" long) with a two part epoxy. Install monument access cover flush with finished landscape.
- BACKFILL (OUTSIDE): Tamp and compact untreated base course into excavated hole outside of the 6" DIA schedule 40 PVC pipe (35" long) before placement of concrete around cover. Install and compact backfill material with hand held equipment per APWA Section 32 05 10.
- 6. BACKFILL (INSIDE): Backfill inside of the 6" DIA schedule 40 PVC pipe (35" long) with tamped washed sand. Backfill shall not overfill above the height of the floating sleeve.
- 7. CAP: Bond cap (Berntsen RBS325BR or equivalent*) directly to rod with a two part, putty type, epoxy for metal to metal applications (no plastic spacers).
- 8. CONCRETE: Install 4000 psi concrete post mix flush with finished landscape and monument access cover.
 - * The Weber County Surveyor's Office may have rod sections, rod drive points, security sleeves, monument access covers, and monument caps on hand and available for purchase at cost plus a convenience fee. Contact the Surveyor's Office for availability and pricing. Equivalent products shall be approved by the County Surveyor prior to construction.





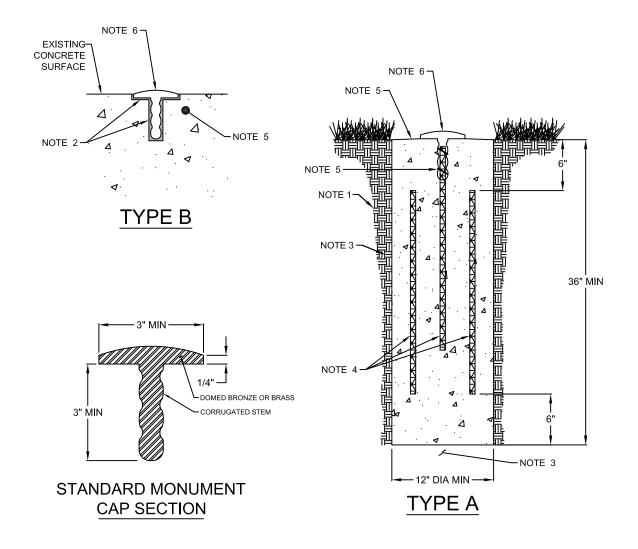




- 1. EXCAVATION: Call Blue Stakes before excavating and installing monument. Install monument only after cleared by all Blue Stakes.
- BACKFILL: Tamp and compact bottom of excavated hole to ensure solid base before placement of monument. Tamp and compact native material, and small stones where available, into the void of the excavation on all sides of the monument with hand held equipment per APWA Section 32 05 10.
- 3. REINFORCEMENT: #5 (% " diameter) galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.
- 4. PIPE AND CAP: Install pipe and cap plumb. The center of the cap shall not exceed 0.04' (Approx. ½"), in any direction, of the actual position of the monument. Install pipe and cap centered in the concrete base of a Type A monument. Inside of pipe shall be filled with concrete or native material before installation. Pipe and cap shall be a Berntsen SSBNBF30 or equivalent.*
- 5. CONCRETE: Finish concrete with a dome or slope to prevent water collection and puddling around the pipe and cap. Class 4000 per APWA Section 03 30 04. Type B monuments to be installed in remote areas where the installation of concrete is not practical. Pre-approval by the County Surveyor shall be obtained prior to installation of a Type B monuments.
- 6. MOUND OF STONES: Where possible, Type B monuments shall have a mound of stones built, tamped, and compacted around the pipe and cap to support and secure the monument. Mound of stones shall completely encircle the pipe and cap. Mound of stones shall not exceed ½ of the overall height of the pipe and cap.
 - * The Weber County Surveyor's Office may have pipe and cap monuments on hand and available for purchase at cost plus a convenience fee. Contact the Surveyor's Office for availability and pricing. Equivalent products shall be approved by the County Surveyor prior to construction.



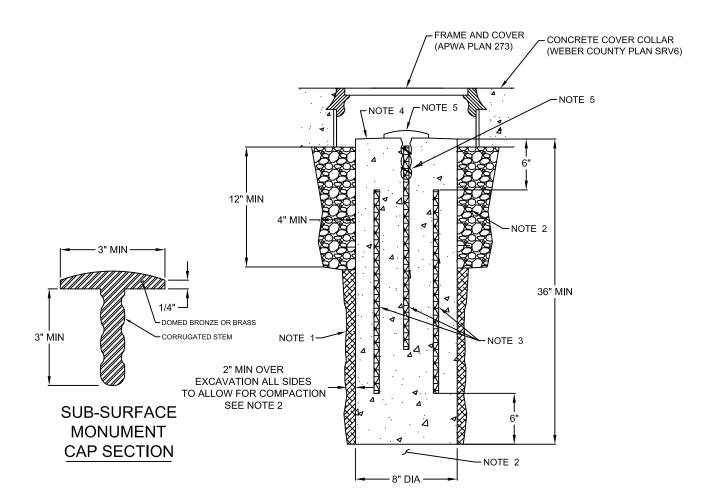
PLAN SRV3 WEBER COUNTY PUBLIC WORKS STANDARDS



- 1. EXCAVATION: Type A: call Blue Stakes before excavating and installing monument. Install monument only after cleared by all Blue Stakes.
- 2. CORE DRILLING: Type B: core drill concrete to counter sink cap until top outside edge is flush with existing surface of concrete. Core hole not to exceed ¼" gap between concrete and cap. Type B shall not be installed in concrete surfaces where snow removal is necessary.
- BACKFILL: Tamp and compact bottom of excavated hole to ensure solid base before placement of monument. Tamp and compact native material, and small stones where available, into the void of the excavation on all sides of the monument with hand held equipment per APWA Section 32 05 10.
- 4. REINFORCEMENT: #5 (%" diameter) galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.
- CONCRETE: Type A: finish concrete with a dome or slope to prevent water collection and puddling around the cap. Class 4000 per APWA Section 03 30 04. Type B: type, size, and quality of structure to be pre-approval by the County Surveyor prior to installation of a Type B monuments.
- 6. CAP: Type A: attach Weber County Survey domed cap to steel rebar with wire, clamp, or other approved device. Install cap in monument base before concrete sets. The center of the cap shall not exceed 0.04' (Approx. ½"), in any direction, of the actual position of the monument. Monument cap shall be centered in the monument base. Type B: install cap (Berntsen C35DB or equivalent*) directly to existing concrete by core drilling and bonding cap to concrete with a two part epoxy or concrete adhesive rated at or above 2400 psi shear strength in a 4000 psi concrete. Ensure concrete is free of dirt, oil, and loose debris prior to placement. The center of the cap shall not exceed 0.04' (Approx. ½"), in any direction, of the actual position of the monument.
 - * Per UCA 17-23-14(3)(c)(iv)(B) the Weber County Surveyor's Office will provide one monument cap per monument encroachment permit. One monument cap will also be provided, per monument location, to developers as a part of any monument improvement agreement. Monument caps needed for any other circumstance are available for purchase from the County Surveyor's Office at cost plus a convenience fee. Contact the Surveyor's Office for availability and pricing. Equivalent products shall be approved by the County Surveyor prior to construction.

PLAN SRV4 WEBER COUNTY PUBLIC WORKS STANDARDS



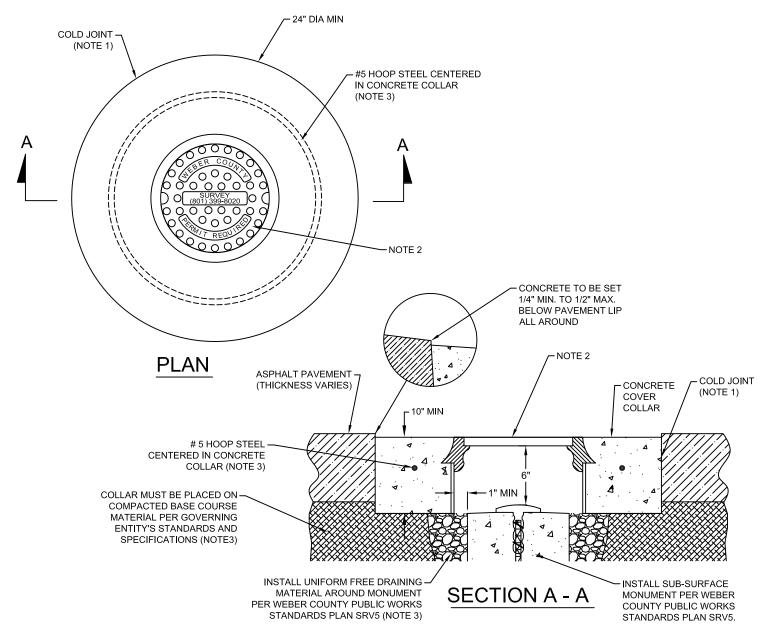


- 1. EXCAVATION: Call Blue Stakes before excavating and installing monument. Install monument only after cleared by all Blue Stakes. Over excavate the first 12" of the monument hole beneath collar to a diameter of 16" min (or 4" wider than the diameter of the monument) for the installation of free draining material to drain water out of the monument box. All over excavation of the bottom 22" of the monument hole must be compacted per governing entity's standards and specifications.
- 2. BACKFILL: Tamp and compact bottom of excavated hole to ensure solid base before placement of monument. Compact over excavation on bottom 22" of monument with untreated base course with hand held equipment per APWA Section 32 05 10 and per governing entity's standards and specifications. Tamp and compact ¼" min to ¾" max uniform free draining material into the void of the over excavation of the first 12" of the monument below the collar with hand held equipment per APWA Section 32 05 10.
- 3. REINFORCEMENT: #5 (%" diameter) galvanized or epoxy coated, deformed, 60 ksi yield grade steel, ASTM A 615.
- 4. CONCRETE: Finish concrete with a dome or slope to prevent water collection and puddling around the cap. Class 4000 per APWA Section 03 30 04.
- CAP: Attach Weber County Survey domed cap to steel rebar with wire, clamp, or other approved device. Monument cap shall be centered in the monument base. Install cap in monument base before concrete sets. The center of the cap shall not exceed 0.04' (Approx. ½"), in any direction, of the actual position of the monument.

SUB-SURFACE MONUMENT

* Per UCA 17-23-14(3)(c)(iv)(B) the Weber County Surveyor's Office will provide one monument cap per monument encroachment permit. One monument cap will also be provided, per monument location, to developers as a part of any monument improvement agreement. Monument caps needed for any other circumstance are available for purchase from the County Surveyor's Office at cost plus a convenience fee. Contact the Surveyor's Office for availability and pricing. Equivalent products shall be approved by the County Surveyor prior to construction.

PLAN SRV5 WEBER COUNTY PUBLIC WORKS STANDARDS

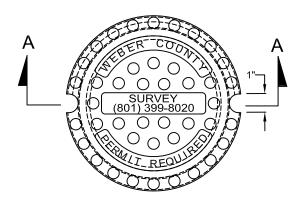


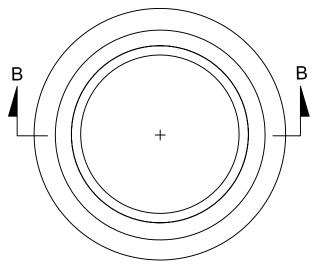
- JOINT: Provide a neat vertical and concentric circle cut joint between concrete and existing asphalt surface. Clean edges of all dirt, oil, and 1. loose debris. Concrete to be set $\frac{1}{4}$ " minimum to $\frac{1}{2}$ " maximum below pavement lip all around joint.
- FRAME AND COVER: Install Weber County Survey traffic rated frame and cover, per Weber County Public Works Standards Plan SRV7, on 2. top of a 12" IDA SONO Tube or PVC Pipe cut to the appropriate size to ensure top of frame and cover will be level with concrete collar. Frame and cover to be centered over and shall be separate and independent from the sub-surface monument.*
- BACKFILL: Collar shall be placed on compact untreated base course per governing entity's standards and specifications, and compacted 4," 3. min to ³/₄" max uniform free draining material per Weber County Publics Works Standards Plan SRV5.
- 3. REINFORCEMENT: Install #5 (%" diameter) galvanized or epoxy coated hoop, deformed, 60 ksi yield grade steel, ASTM A 615.
- CONCRETE PLACEMENT: APWA Section 03 30 10. Fill annular space around frame and cover with class 4000 concrete per APWA 4. Section 03 30 04. A fiber mesh additive per ASTM 1116 may be added to the concrete mix instead of the hoop of steel. Apply a broom finish. Apply a curing agent.
- CURING AGENT: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00. 4.
 - * Per UCA 17-23-14(3)(c)(iv)(B) the Weber County Surveyor's Office will provide one frame and cover per monument encroachment permit. One frame and cover will also be provided, per monument location, to developers as a part of any monument improvement agreement. Frame and covers needed for any other circumstance are available for purchase from the County Surveyor's Office at cost plus a convenience fee. Contact the Surveyor's Office for availability and pricing. Equivalent products shall be approved by the County Surveyor prior to construction. PLAN

July 2019

SRV6 COVER COLLAR FOR SURVEY MONUMENTS WEBER COUNTY PUBLIC WORKS

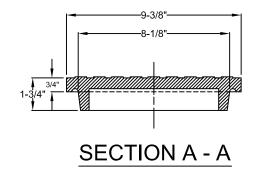
STANDARDS

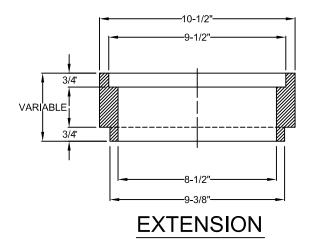


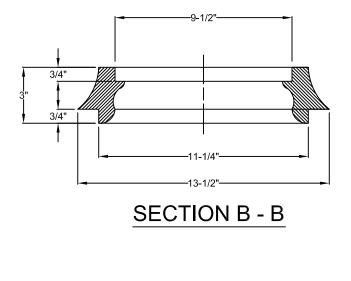


COVER

FRAME







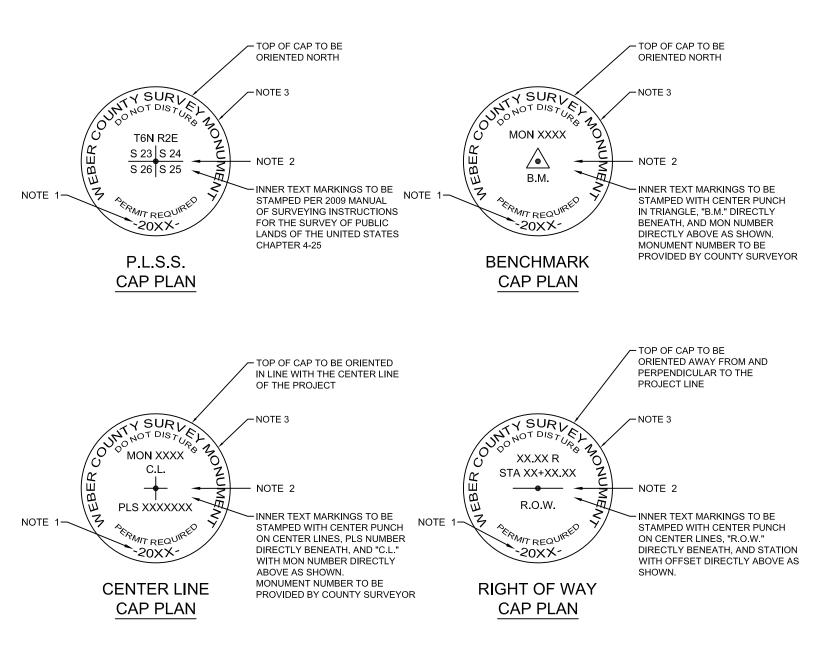
NOTE: USE EXTENSION IN PORTLAND CEMENT CONCRETE PAVEMENTS. USE FRAME IN ASPHALT CONCRETE PAVEMENTS.

- 1. CASTINGS: Gray iron class 20 minimum per ASTM A 48.
- 2. COATINGS: Coat all metal parts with asphaltum paint.
- 3. SETTING: Set frame independent of monument base.

Per UCA 17-23-14(3)(c)(iv)(B) the Weber County Surveyor's Office will provide one frame and cover per monument encroachment permit. One frame and cover will also be provided, per monument location, to developers as a part of any monument improvement agreement. Frame and covers needed for any other circumstance are available for purchase from the County Surveyor's Office at cost plus a convenience fee. Contact the Surveyor's Office for availability and pricing. Equivalent products shall be approved by the County Surveyor prior to construction.



PLAN SRV7 WEBER COUNTY PUBLIC WORKS STANDARDS



- 1. DATE: Stamp the full year of the date when the monument was constructed.
- 2. SYMBOL AND CENTER PUNCH: Apply a center punch at the actual surveyed position for the monument. Center punch of the surveyed position shall be within 0.04' (Approx. ½") of the center of the cap.
- 3. OUTER TEXT: Caps shall be brass or bronze. Text along outer edges of cap shall be pre-stamped.

PLAN SRV8 WEBER COUNTY PUBLIC WORKS STANDARDS

July 2019

MONUMENT CAP PLANS