

Date: 2/24/20  
Project: Del Mar Heights School Rebuild  
Owner: Del Mar Union School District  
Project No: 19009-00  
DSA No. 04-119103  
Report: Meeting Minutes – DSA Pre Application Meeting  
Location: DSA San Diego  
Present: Karen Gibb, Supervising Architect/Project Services, DSA  
Ron Laplante, Supervising Structural Engineer, DSA  
Danijela Trubint, Supervising Architect/Fire & Life Safety, DSA  
Chris Delehanty, Exec Director of Capital Programs & Technology, DMUSD  
Ben Pitts, KNA Structural Engineers  
Jon Baker, BakerNowicki Design Studio  
Scott Moreland, BakerNowicki Design Studio  
Distribution: Attendees, BNds File 3.5

Notes.

**1. General Comments.**

- a. Make sure construction documents are complete and coordinated for a successful intake.
- b. VE should take place prior to submittal
- c. Review will be in house. DSA will be assigning 2 staff for structural review.

**2. Increments.**

- a. Increment 1 and 2 will be submitted to DSA on the same day.
- b. Increment 1 will include:
  - i. Demolition
  - ii. Rough Grading
  - iii. Concrete Segmental Retaining Wall
  - iv. Underground Utilities (including underground fire service and fire flow).
  - v. Option: BNds to look at including landscaping and irrigation above retaining wall.
- c. Increment 1 comments will be back to BNds within 3 weeks.
- d. Increment 2 comments will be back to BNds within 4 months.

### 3. Structural Safety.

- a. Concrete segmental retaining wall.
  - i. Will have landscape above it and will not be surcharged.
  - ii. Will be designed to the soil type on-site. It is important that same soil will be used as backfill.
  - iii. There needs to be details in the retaining wall drawings for any penetrations in the geo-grid for trees or light poles.
  - iv. Refer to IR 16-3, Earth Retaining Systems with Precast Concrete or Concrete Masonry Units.
- b. Shade structures.
  - i. If shade structures are included, the structural properties of the fabric and wires will need to be addressed in calculations unless they are PC approved and not modified.
- c. Structural approach.
  - i. For Building M (Multi-Purpose Building) at the South end, options were discussed regarding adding an Ordinary Concentric Braced Frame (OCBF), a Special Concentric Braced Frame (SCBF), or a Special Moment Frame (SMF) where plywood shear walls were not possible. Ron Laplante agreed that if OCBF was chosen KNA should send a prelim layout for his further review so the appropriate R factor could be used for loads in that direction and possibly not applied to all the shear walls in that direction.
  - ii. KNA confirmed the soil conditions on the site are good.
- d. Deferred approvals.
  - i. Currently planned deferred approvals:
    - 1. Curtain walls over 10ft
      - a. Refer to IR 24-2 for submittal requirements of window wall systems.
    - 2. Lunch shelter.
      - a. Fiberglass sandwich panel system is proposed. DSA noted to watch for substitutions that do not meet flame spread requirements.
      - b. DSA noted that the spans for the calculations will need to match the spans of the supporting structure.
      - c. This will only be accepted as deferred if we show the product data at time of project submittal.

- ii. BNds to look at options with KNA to reduce curtain wall spans to 10ft maximum and avoid a deferred approval.
- e. Solar.
  - i. The current plan is to include solar documentation as part of project submittal.
  - ii. If it is not included:
    - 1. Solar project will be a separate A-number.
    - 2. Weight and infrastructure will be accommodated now in the design.
  - iii. The load path for attachment needs to carry down to the roof structure.
  - iv. If attaching to standing seam roof with S-5 clips or similar, the roof attachment to structure needs to be included in the calculations.
- f. Kitchen.
  - i. Kitchen equipment to have necessary anchorage and bracing details included. Make sure kitchen consultant uses attachment details specific to the project's wood construction. This is often overlooked with some submittals re-using standard details that do not apply.
- g. Storm water.
  - i. There will not be any underground vaults as part of the storm water treatment design.
- h. Exterior siding.
  - i. If exterior cladding will be over furring channels with air space, corner details need to account for wind loading.

#### **4. Fire & Life Safety.**

- a. Options for a second emergency access have been evaluated, with input from the Fire Marshal and one point of access has been determined to be adequate for the site.
- b. Fire walls.
  - i. BNds to remove fire walls if possible.
  - ii. Each side of wall needs to be structurally independent of the other in case of collapse. Combining the seismic joint and fire wall would benefit this.
  - iii. If fire wall is a double wall, there will need to be a fire door in each wall.
- c. BNds to verify brush management requirements at perimeter of site.
- d. Safe dispersal area.

- i. Edge of safe dispersal area shall not touch or overlap fire lane. Maximize the distance between them.
  - ii. A pole mounted sign is to be mounted in a conspicuous location.
  - iii. 5% of the area needs to be accessible.
  - iv. Safe dispersal area and path to it need to be illuminated.
- e. Code analysis.
  - i. Remove arbor from building area since it is designed as an open trellis.
- f. Wildfire exposure.
  - i. Only the portion of the site that is within the fire severity zone will need to comply with wildfire exposure requirements.
  - For exterior cladding, any openings/spacing gaps in cladding materials will result in need for fire protection on underlying wood substrate.
- g. Fire Lane.
  - i. Fire lane required to be 30ft wide at drop off areas (10ft for vehicles, 20ft for fire lane).
  - ii. Turf is an acceptable surface material for fire lane as long as the sub-base is designed by Civil to adequately support the required loading.

**5. Accessibility.**

- a. The campus path of travel was reviewed with main pedestrian entrance at the north end, and stair/ramp access at the south end.

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End of Document

This record is intended to summarize the comments made and agreements reached. Participants wishing to modify or clarify this record shall submit a written copy of such interpretation to the author in a timely manner. Upon receipt, the interpretation shall be added as an amendment and distributed at the next available meeting.

# DEL MAR HEIGHTS SCHOOL REBUILD

DEL MAR UNION SCHOOL DISTRICT

13555 BOQUITA DRIVE, DEL MAR, CA 92014

INCREMENT 01

02.11.2020

**BakerNowicki**  
design studio

731 Ninth Avenue, Suite A  
San Diego, California 92101  
619.795.2450

WITHIN LIMIT OF WORK, DEMOLISH EXISTING BUILDINGS, UTILITIES, HARDSCAPE, LANDSCAPE, AND TREES, UNLESS NOTED OTHERWISE.  
CONSTRUCT NEW GEOGRID RETAINING WALL.  
CONSTRUCT NEW UNDERGROUND UTILITIES.  
PROVIDE ROUGH GRADING FOR PROPOSED PAD ELEVATIONS IN ANTICIPATION OF NEW CONSTRUCTION AS PROPOSED IN INC 02.

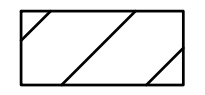
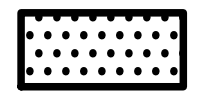








DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

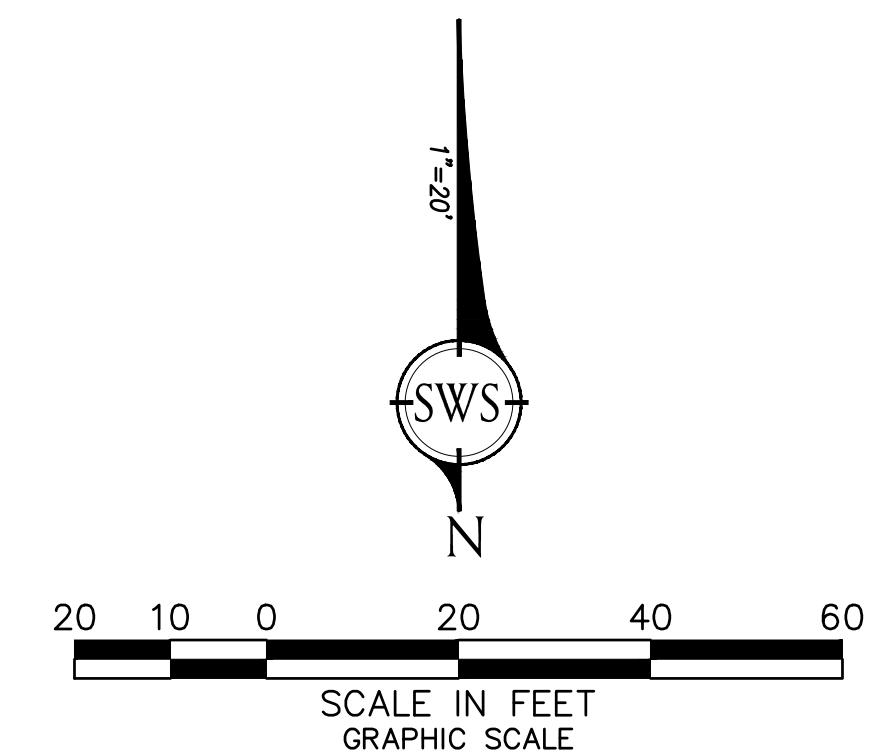
KEYNOTES

**DEMOLITION LEGEND AND NOTES**

-  REMOVE EXISTING BUILDINGS AND STRUCTURES
-  REMOVE EXISTING SURFACE IMPROVEMENTS
-  REMOVE EXISTING PLAYGROUND STRUCTURES
-  W REMOVE EXISTING WATERLINE
-  S REMOVE EXISTING SEWER LINE
-  SD REMOVE EXISTING STORM DRAIN



SEE SHEET C2.2



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 DATE: Feb 15, 2014  
 FILE: D:\projects\2013\13-008\PROJECT\CONSTRUCTION\13-008\_R02P-10.dwg



**DEMOLITION PLAN**

NO. DATE ISSUE PROJECT NO: 19-069  
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DRAWING  
**C2.1**



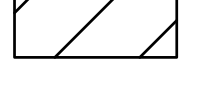

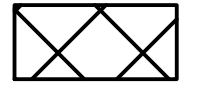
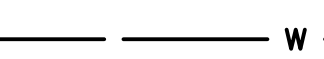
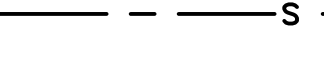

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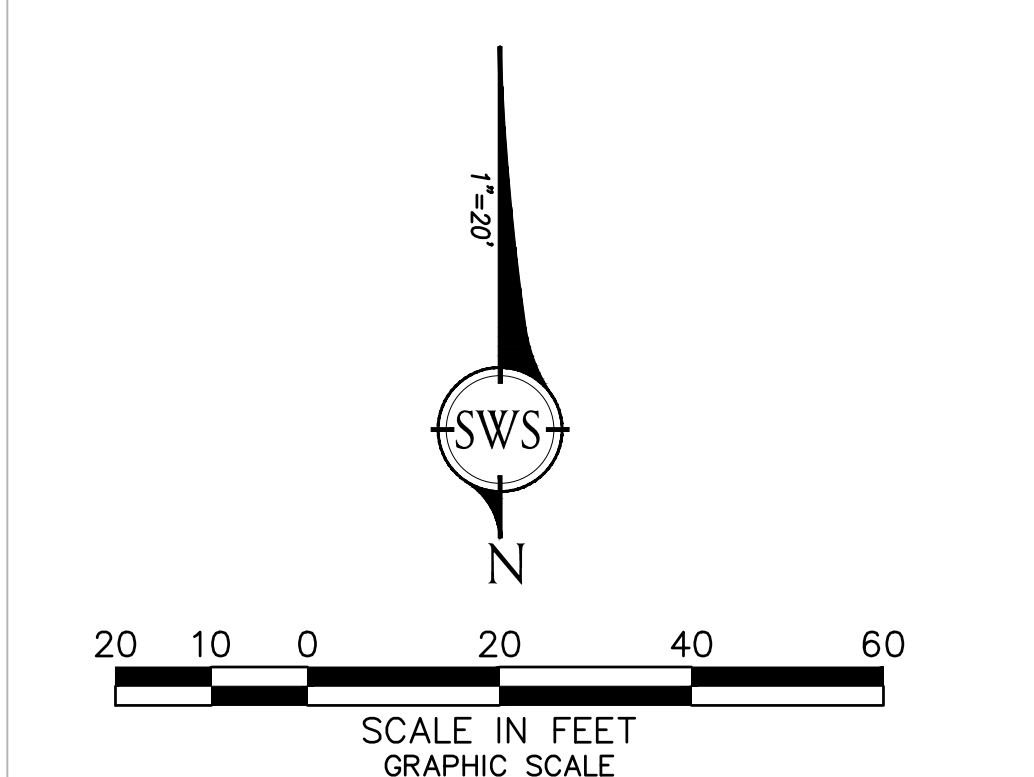


DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

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**DEMOLITION PLAN**

NO. DATE ISSUE PROJECT NO: 19-069  
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DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

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  - ③ PLANTER/LANDSCAPE ISLAND PER LANDSCAPE PLANS
  - ④ CATCH BASIN/DRAIN PER UTILITY PLAN SHEETS C5.1-C5.6
  - ⑤ FENCING AND GATES PER ARCHITECTURAL PLANS
  - ⑥ AUDITORIUM BENCH SEATING PER LANDSCAPE PLANS

NOTE: SEE SHEET C... FOR PAVING AND HARDSCAPE INFORMATION



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**ROUGH GRADING PLAN**

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DRAWING  
**C4.1**

DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

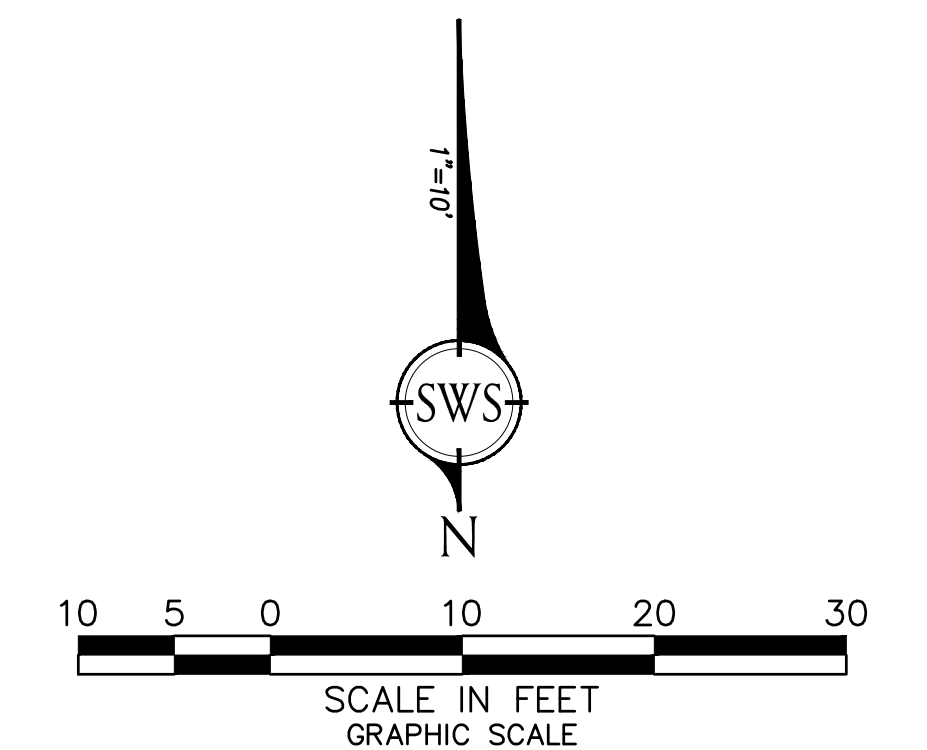
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SEE SHEET C4.1

SEE SHEET C4.4



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**ROUGH GRADING PLAN**

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**C4.2**

SEE SHEET C4.1

DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

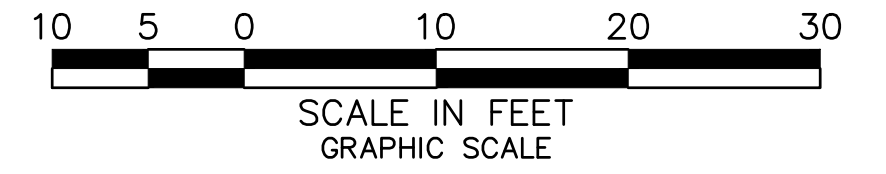
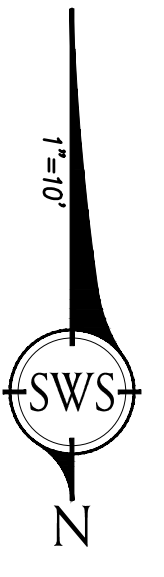
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SEE SHEET C4.4



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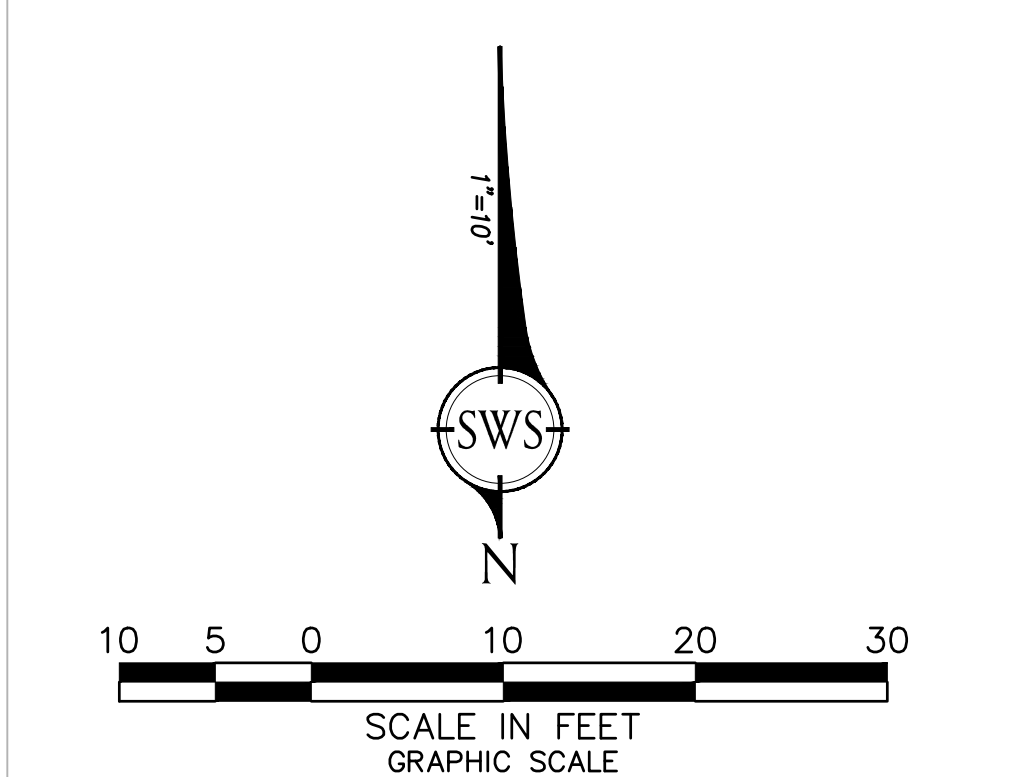
SEE SHEET C4.5

DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

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SEE SHEET C4.3

SEE SHEET C4.2

SEE SHEET C4.6

SEE SHEET C4.3



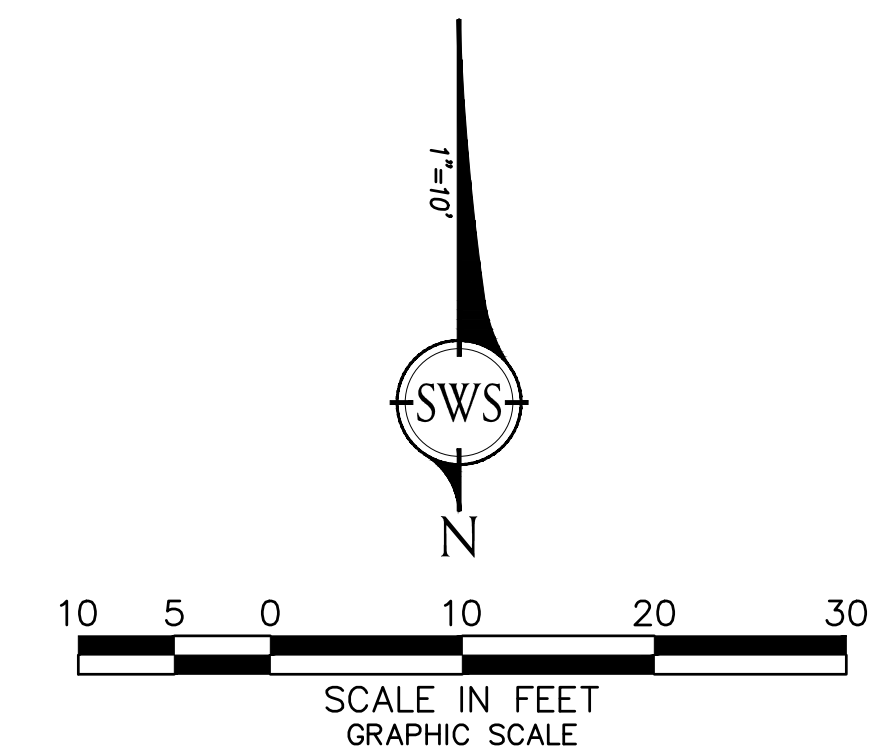
DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
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SEE SHEET C4.6



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DRAWING  
**C4.5**

SEE SHEET C4.4

SEE SHEET C4.5



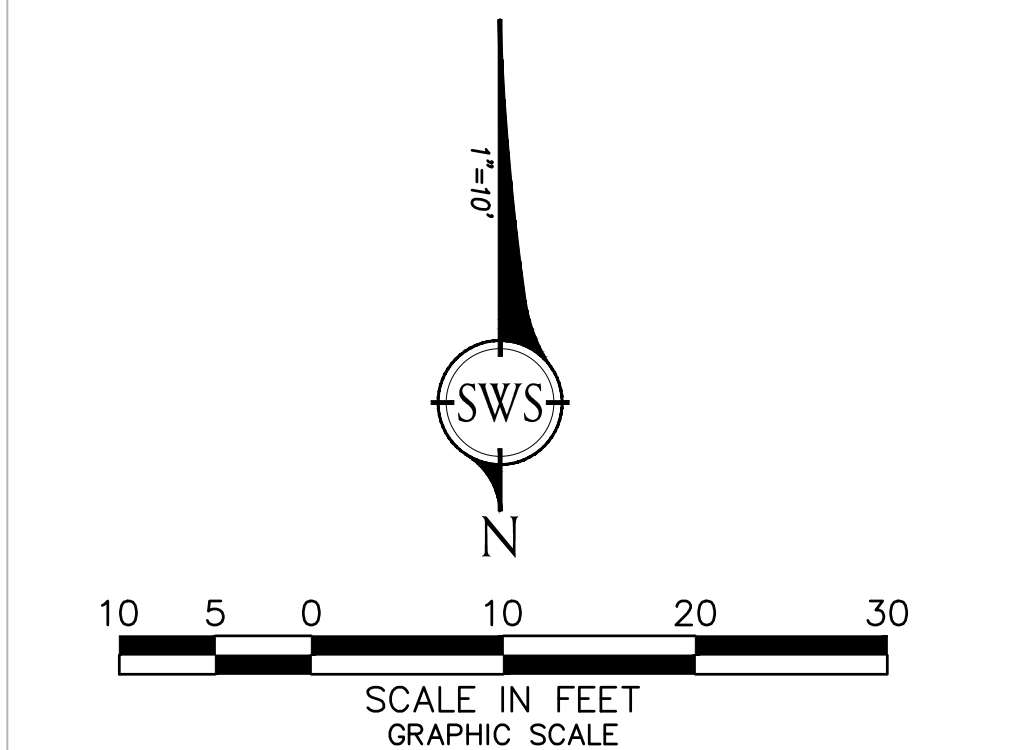
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INCREMENT 1 - ROUGH GRADING

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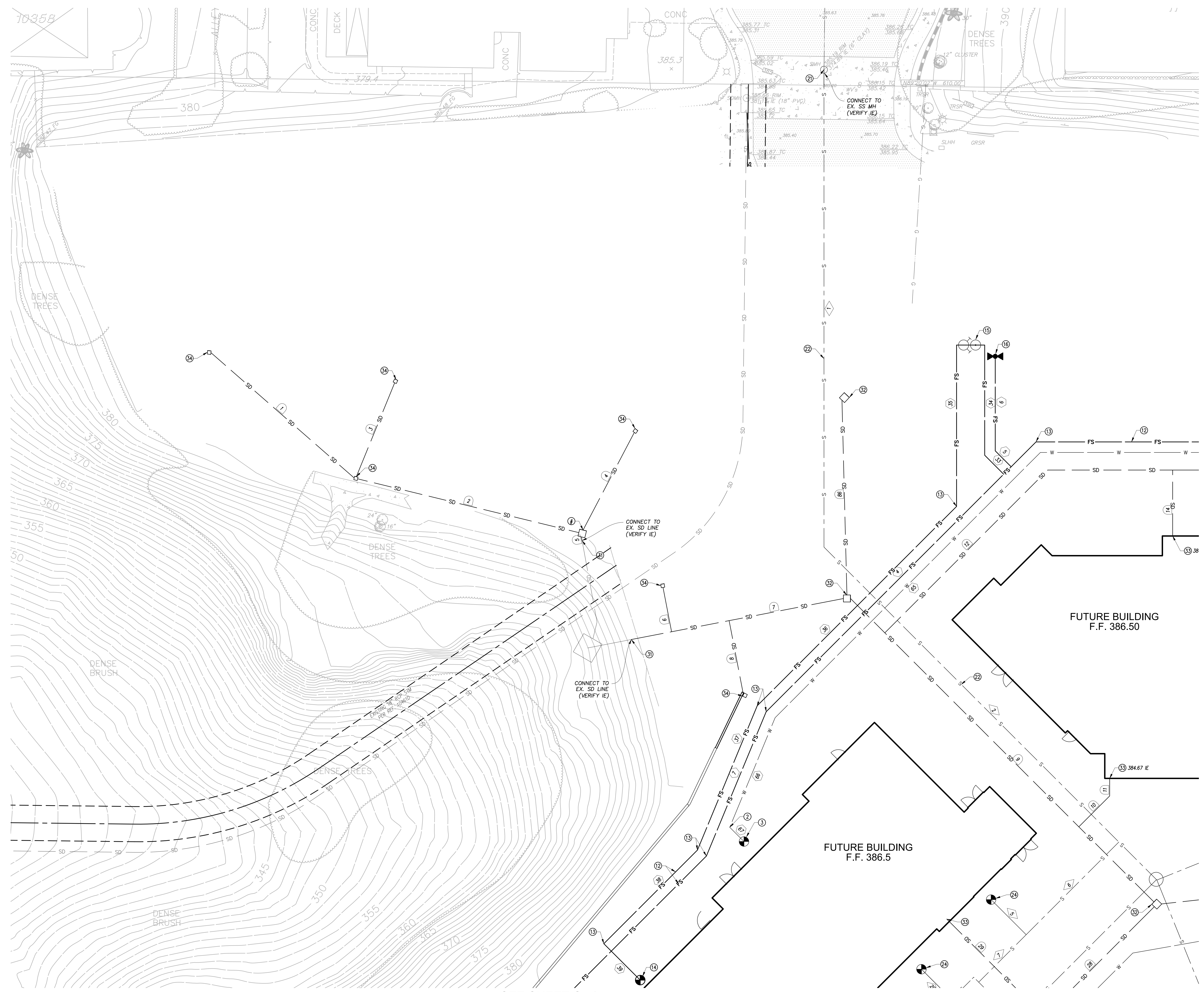
**DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING**

KEYNOTES

**CONSTRUCTION NOTES**

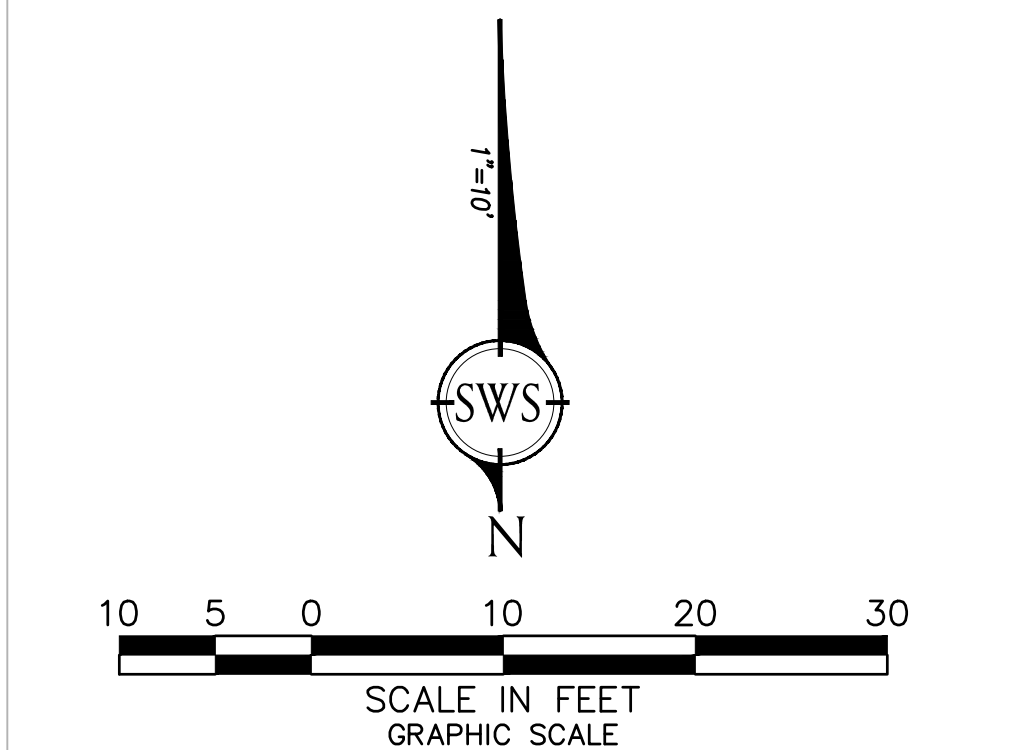
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- ③ WATER POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ④ GATE VALVE
  
- ⑪ CONNECT TO EXISTING FIRE LINE
- ⑫ FIRE SERVICE PER DATA TABLE HEREON
- ⑬ THRUST BLOCK PER SIZING TABLE HEREON
- ⑭ FIRE POINT OF CONNECTION - SEE FIRE SPRINKLER PLANS FOR CONTINUATION
- ⑮ FDC/PIV PER DETAIL
- ⑯ FIRE HYDRANT ASSEMBLY PER CITY DETAIL
  
- ⑰ CONNECT TO EXISTING SEWER MANHOLE
- ⑱ SEWER SERVICE PER DATA TABLE HEREON
- ⑲ SEWER CLEANOUT PER DETAIL
- ⑳ SEWER POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉑ SEWER WYE CONNECTION
  
- ㉒ CONNECT TO EXISTING STORM DRAIN LINE
- ㉓ 2'X2' PRECAST CONCRETE CATCH BASIN W/ TRAFFIC RATED HEEL-PROOF GRATE
- ㉔ ROOF DRAIN POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉕ 12"X12" NDS CATCH BASIN

NOTE: SEE SHEET C5.7 FOR UTILITY DATA TABLES



SEE SHEET C5.2

SEE SHEET C5.3



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Civil Engineering • Land Planning • Surveying  
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San Marcos, CA 92078  
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DATE: Feb. 15, 2017 Time: 10:00 AM  
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**UTILITY PLAN**

NO. DATE ISSUE PROJECT NO: 19-069  
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DRAWING  
**C5.1**



DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

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SEE SHEET C5.1

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**UTILITY PLAN**

NO. DATE ISSUE PROJECT NO: 19-069 DATE:

DRAWING  
**C5.2**



SEE SHEET C5.1

FUTURE BUILDING  
F.F. 384.25

SEE SHEET C5.5

DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

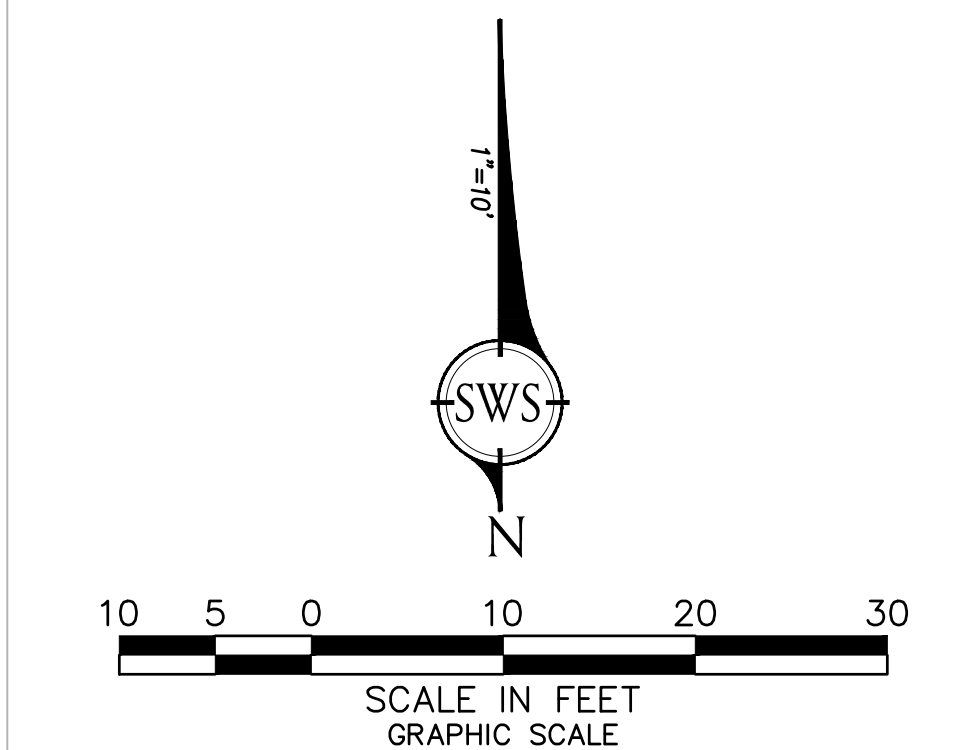
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- ⑳ SEWER POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉑ SEWER WYE CONNECTION
  
- ㉒ CONNECT TO EXISTING STORM DRAIN LINE
- ㉓ 2'X2' PRECAST CONCRETE CATCH BASIN W/ TRAFFIC RATED HEEL-PROOF GRATE
- ㉔ ROOF DRAIN POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉕ 12"X12" NDS CATCH BASIN

NOTE: SEE SHEET C5.7 FOR UTILITY DATA TABLES

SEE SHEET C5.4



**SWS ENGINEERING, INC.**  
Civil Engineering • Land Planning • Surveying  
1633 Lake San Marcos Drive, Suite 200 San Marcos, CA 92078  
P: 760-744-0011 F: 760-744-0046  
31045 Temecula Parkway, Suite 201 Temecula, CA 92592  
P: 951-261-5407 F: 951-687-0451  
DATE: Feb 15, 2017 Time: 10:00 AM  
FILE: C:\projects\2017\17-008\PROJECT\CONSTRUCTION\17-008\_R02P-05.dwg



**UTILITY PLAN**

NO. DATE ISSUE PROJECT NO: 19-069  
DATE:

DRAWING  
**C5.3**

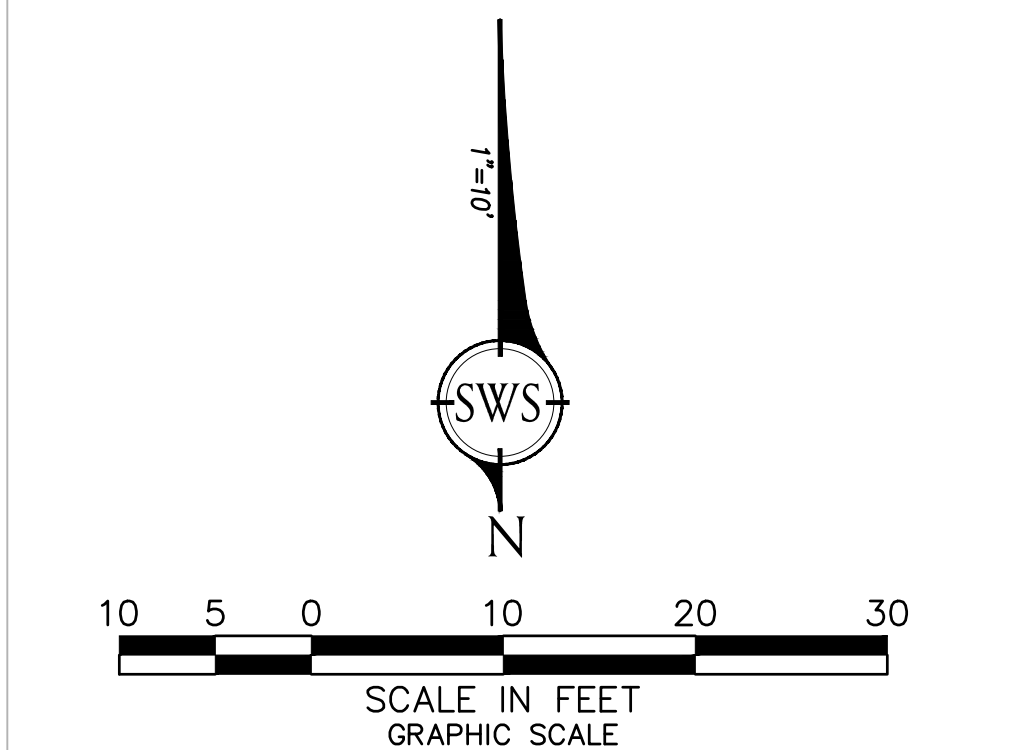
DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

**CONSTRUCTION NOTES**

- ① CONNECT TO EXISTING WATER LINE
- ② WATER SERVICE PER DATA TABLE HEREON
- ③ WATER POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ④ GATE VALVE
  
- ⑪ CONNECT TO EXISTING FIRE LINE
- ⑫ FIRE SERVICE PER DATA TABLE HEREON
- ⑬ THRUST BLOCK PER SIZING TABLE HEREON
- ⑭ FIRE POINT OF CONNECTION - SEE FIRE SPRINKLER PLANS FOR CONTINUATION
- ⑮ FDC/PIV PER DETAIL
- ⑯ FIRE HYDRANT ASSEMBLY PER CITY DETAIL
  
- ⑰ CONNECT TO EXISTING SEWER MANHOLE
- ⑱ SEWER SERVICE PER DATA TABLE HEREON
- ⑲ SEWER CLEANOUT PER DETAIL
- ⑳ SEWER POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉑ SEWER WYE CONNECTION
  
- ㉒ CONNECT TO EXISTING STORM DRAIN LINE
- ㉓ 2'X2' PRECAST CONCRETE CATCH BASIN W/ TRAFFIC RATED HEEL-PROOF GRATE
- ㉔ ROOF DRAIN POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉕ 12"X12" NDS CATCH BASIN

NOTE: SEE SHEET C5.7 FOR UTILITY DATA TABLES



**SWS ENGINEERING, INC.**  
 CIVIL ENGINEERING • LAND PLANNING • SURVEYING  
 1633 Lake San Marcos Drive, Suite 200 San Marcos, CA 92178  
 31045 Temecula Parkway, Suite 201 Temecula, CA 92592  
 P: 760-744-0111 F: 760-744-0646 P: 951-261-5407 F: 951-487-9451  
 DATE: Feb 15, 2017 10am by: [Signature] DWG: [Signature]  
 FILE: C:\projects\2017\16-008\PROJECT\CONSTRUCTION\16-008\_R02P-10.dwg



**UTILITY PLAN**

NO. DATE ISSUE PROJECT NO: 19-069  
DATE:

DRAWING  
**C5.4**

SEE SHEET C5.2



SEE SHEET C5.3

SEE SHEET C5.6

SEE SHEET C5.3

DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

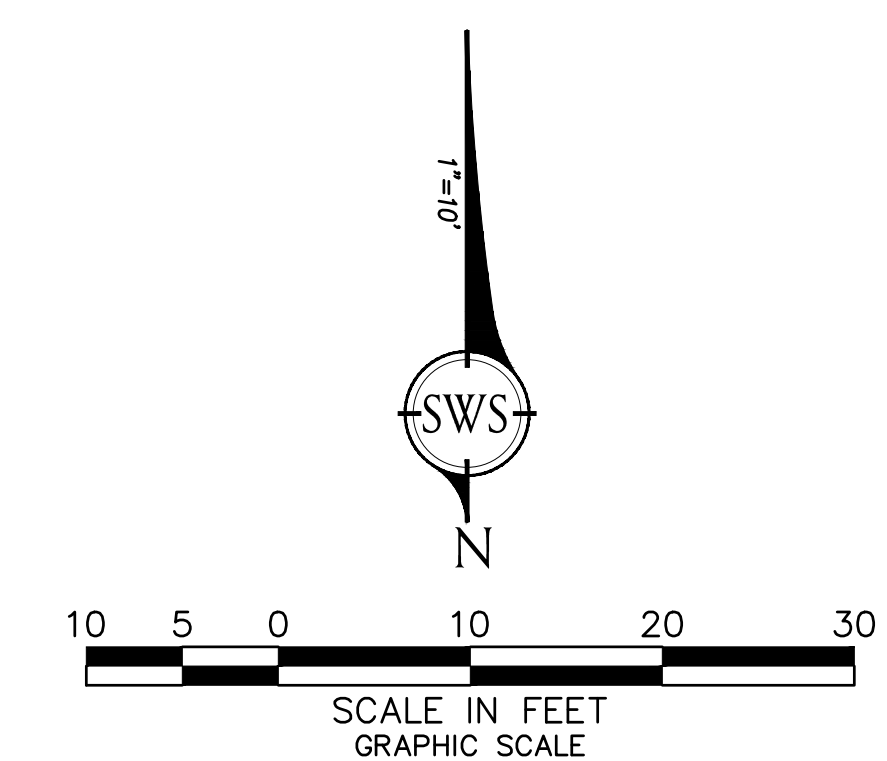
KEYNOTES

**CONSTRUCTION NOTES**

- ① CONNECT TO EXISTING WATER LINE
- ② WATER SERVICE PER DATA TABLE HEREON
- ③ WATER POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ④ GATE VALVE
  
- ⑪ CONNECT TO EXISTING FIRE LINE
- ⑫ FIRE SERVICE PER DATA TABLE HEREON
- ⑬ THRUST BLOCK PER SIZING TABLE HEREON
- ⑭ FIRE POINT OF CONNECTION - SEE FIRE SPRINKLER PLANS FOR CONTINUATION
- ⑮ FDC/PIV PER DETAIL
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- ㉔ ROOF DRAIN POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉕ 12"X12" NDS CATCH BASIN

NOTE: SEE SHEET C5.7 FOR UTILITY DATA TABLES

SEE SHEET C5.6



**SWS ENGINEERING, INC.**  
 CIVIL ENGINEERING • LAND PLANNING • SURVEYING  
 1633 Lake San Marcos Drive, Suite 200 San Marcos, CA 92078 P: 760-744-0111 F: 760-744-0046  
 31045 Temecula Parkway, Suite 201 Temecula, CA 92592 P: 951-261-5407 F: 951-487-9451  
 DATE: Feb 15, 2017 7:18pm by: [Name] DWG: [Name]  
 FILE: C:\projects\2017\17-008\DWG\CONSTRUCTION\1708-008\_R02P-05.dwg



**UTILITY PLAN**

NO.	DATE	ISSUE	PROJECT NO:	19-069
			DATE:	

SEE SHEET C5.4

SEE SHEET C5.5



FUTURE BUILDING  
F.F. 384.25

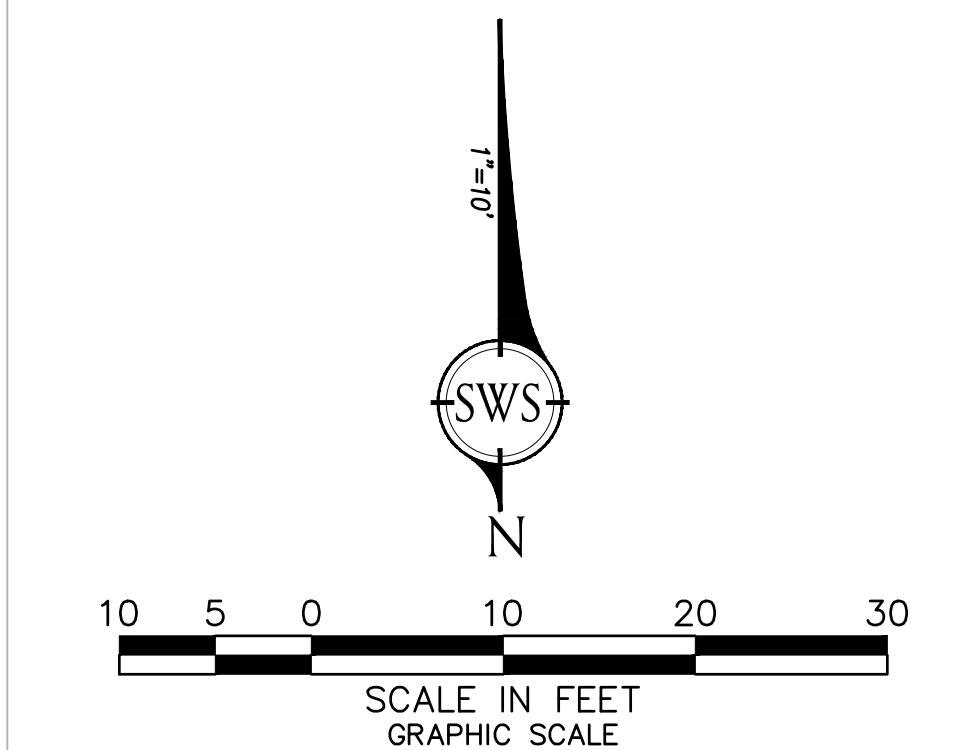
DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

**CONSTRUCTION NOTES**

- ① CONNECT TO EXISTING WATER LINE
- ② WATER SERVICE PER DATA TABLE HEREON
- ③ WATER POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ④ GATE VALVE
  
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- ㉓ 2'X2' PRECAST CONCRETE CATCH BASIN W/ TRAFFIC RATED HEEL-PROOF GRATE
- ㉔ ROOF DRAIN POINT OF CONNECTION - SEE PLUMBING PLANS FOR CONTINUATION
- ㉕ 12"X12" NDS CATCH BASIN

NOTE: SEE SHEET C5.7 FOR UTILITY DATA TABLES



**SWS ENGINEERING, INC.**  
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 1633 Lake San Marcos Drive, Suite 200, San Marcos, CA 92078  
 31045 Temecula Parkway, Suite 201, Temecula, CA 92592  
 P: 760-744-0011 F: 760-744-0046  
 DATE: Feb 15, 2017 10:00 AM  
 FILED: C:\projects\2017\17-008\170202\_Construction\170202\_008\_R02P-05.dwg



UTILITY PLAN

NO.	DATE	ISSUE	PROJECT NO:	19-069
			DATE:	

DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES

SEWER LINE LINE DATA TABLE			
SYM	LENGTH	BEARING	DESCRIPTION
1	135.76'	S00°00'00"E	
2	133.87'	S45°00'00"E	
3	289.98'	S22°00'00"E	
4	155.29'	S00°00'00"E	
5	14.11'	S45°00'00"E	
6	37.28'	N45°00'00"E	
7	19.09'	N45°00'00"E	
8	2.91'	N45°00'00"E	
9	134.92'	N68°03'51"E	
10	12.84'	N68°00'00"E	
11	24.30'	N22°00'19"W	
12	149.90'	N45°00'00"E	
13	42.90'	N10°00'03"W	
14	35.47'	N34°59'57"E	
15	80.81'	N79°59'57"E	
16	2.17'	S10°02'06"E	
17	8.54'	S80°00'00"W	
18	9.89'	S10°00'16"E	
19	4.86'	S45°03'49"E	
20	14.11'	N45°00'00"W	
21	7.65'	S89°56'34"E	

FIRE SERVICE DATA TABLE			
SYM	LENGTH	BEARING	DESCRIPTION
1	77.63'	S80°00'00"W	
2	506.28'	N10°00'00"W	
3	193.23'	N90°00'00"W	
4	108.50'	S45°00'00"W	
5	6.40'	N45°00'00"E	
6	26.88'	N00°00'00"E	
7	44.42'	S22°30'00"W	
8	182.47'	S45°00'00"W	
9	34.10'	S22°30'00"W	
10	56.93'	S22°30'00"E	
11	57.33'	S67°30'00"E	
13	25.18'	S22°30'00"W	
14	111.72'	N90°00'00"E	
16	220.23'	S44°18'01"E	
17	10.46'	S44°18'01"E	
18	113.83'	S10°00'00"E	
19	130.52'	N80°00'00"E	
20	7.82'	N10°00'00"W	
21	103.53'	N12°30'00"E	
22	29.50'	N79°54'30"E	
24	31.19'	S10°00'00"E	
25	18.23'	S10°00'00"E	
26	28.08'	S31°27'11"E	
27	33.41'	N79°59'48"E	
28	3.00'	S10°00'00"E	
29	50.28'	S80°00'00"W	
30	33.84'	N80°00'00"E	
31	137.00'	S10°00'01"E	
32	53.71'	S80°00'00"W	
33	7.64'	S45°00'00"E	
34	31.33'	S00°00'00"E	
35	45.89'	N00°00'00"E	
36	80.15'	N45°00'00"E	
37	44.42'	N22°30'00"E	
38	37.65'	N45°00'00"E	
39	14.64'	N45°00'00"W	
40	27.00'	N79°59'51"E	
45	13.22'	N45°41'59"E	

WATERLINE DATA TABLE			
SYM	LENGTH	BEARING	DESCRIPTION
60	21.16'	N81°05'25"W	
61	54.99'	S80°00'01"W	
62	503.17'	N10°00'00"W	
63	189.47'	N90°00'00"W	
64	18.75'	S00°00'00"E	
65	106.66'	S45°00'00"E	
66	33.73'	S22°30'00"W	
67	5.73'	S45°00'00"E	
68	6.53'	S12°29'57"W	
69	31.51'	S10°00'03"E	
70	43.76'	S34°58'57"W	
71	72.35'	S79°59'57"W	
72	26.34'	N82°00'00"W	
73	9.71'	N45°00'00"W	
74	133.44'	N80°00'00"E	
75	16.08'	S80°00'00"E	
76	29.38'	S80°00'00"W	
77	52.58'	S12°32'28"W	
78	56.82'	S12°27'43"W	
79	20.50'	S80°00'00"W	
80	22.08'	N77°30'03"W	
81	3.47'	S12°29'57"W	
82	8.52'	N23°44'57"E	
83	114.72'	N45°00'00"E	
84	185.42'	N80°00'00"E	
85	20.04'	S77°30'00"E	

STORM DRAIN LINE DATA TABLE			
SYM	LENGTH	BEARING	DESCRIPTION
1	54.12'	S48°49'33"E	
2	64.73'	S76°19'40"E	
3	28.84'	N22°12'39"E	
4	31.36'	S27°41'04"W	
5	1.06'	N11°01'59"W	
6	12.83'	N10°55'58"W	
7	61.39'	N79°04'02"E	
8	21.42'	S10°55'58"E	
9	122.05'	S45°00'00"E	
10	12.41'	N45°00'00"E	
11	5.00'	N00°00'00"E	
12	65.48'	N45°00'00"E	
13	115.12'	N90°00'00"E	
14	18.75'	N00°00'00"E	
15	44.28'	N00°00'00"E	
16	12.50'	N00°00'00"E	
17	35.11'	N83°46'32"E	
18	38.06'	S06°27'42"W	
19	43.17'	N80°09'22"E	
20	42.67'	N80°09'22"E	
21	43.21'	N80°09'22"E	
22	48.27'	S10°01'09"E	
23	60.08'	N10°01'09"W	
24	47.03'	N79°58'51"E	
25	10.00'	N10°01'09"W	
26	13.02'	S80°00'00"W	
27	9.07'	S10°00'00"E	
28	63.11'	S45°00'00"W	
29	39.24'	N45°00'00"W	
30	63.98'	S45°00'00"W	
31	29.51'	N45°00'00"W	
32	21.40'	N90°00'00"W	
33	28.18'	N45°00'00"W	
34	75.00'	S45°04'44"W	
35	8.85'	N45°00'00"W	
36	47.86'	S22°13'42"W	
37	48.53'	S12°03'35"E	
38	35.90'	S39°01'54"E	
39	41.99'	S20°02'00"W	
40	53.02'	N68°21'05"W	
41	79.32'	N78°08'23"E	
43	70.26'	N40°44'16"E	
44	64.79'	S54°00'00"E	
45	67.18'	S54°00'00"E	
46	29.40'	N54°00'00"W	
47	38.78'	S79°59'57"W	
48	12.34'	N60°40'06"W	
49	99.91'	N36°00'00"E	
50	52.19'	N60°01'46"W	
51	32.42'	N67°06'46"E	

STORM DRAIN LINE DATA TABLE			
SYM	LENGTH	BEARING	DESCRIPTION
53	45.01'	N39°18'23"E	
54	136.53'	S22°01'21"E	
55	47.41'	N67°12'58"E	
56	5.00'	N10°00'00"W	
57	6.97'	N67°27'38"E	
59	6.03'	N67°58'39"E	
60	5.84'	N10°00'04"W	
61	35.54'	S45°00'00"E	
63	52.33'	N55°38'37"E	
64	76.72'	N76°30'16"E	
65	8.30'	N45°00'00"E	
66	12.37'	S14°01'31"E	
67	33.36'	S18°30'48"E	
70	33.71'	N15°13'09"W	
71	90.70'	S65°26'10"W	
72	127.28'	N65°24'08"E	
73	13.72'	N24°35'52"W	
74	117.94'	S80°00'00"W	
75	31.68'	S57°30'00"W	
76	74.05'	S77°30'00"E	
77	81.28'	S12°30'00"W	
78	70.76'	N00°37'35"W	
79	59.58'	N81°23'13"E	
80	13.04'	N80°00'00"E	
81	29.40'	N80°00'00"E	
82	13.04'	N80°00'00"E	
83	12.36'	N80°00'00"E	
84	75.13'	N10°00'00"W	
85	12.44'	S80°00'00"W	
86	55.40'	S01°27'30"E	
87	150.69'	N10°00'00"W	

**SWS ENGINEERING, INC.**  
 CIVIL ENGINEERING • LAND PLANNING • SURVEYING  
 1633 Lake San Marcos Drive, Suite 300, San Marcos, CA 92178  
 P: 760-744-0111 F: 760-744-0046  
 31045 Temecula Parkway, Suite 201, Temecula, CA 92592  
 P: 951-261-5407 F: 951-587-8451  
 DATE: Feb. 15, 2017 10am by SWS/SP/SC  
 FILED IN: 170210101 (17-00000) Contract: 170210101-0000\_0100-05.dwg



UTILITY PLAN

NO. DATE ISSUE PROJECT NO: 19-069  
DATE:

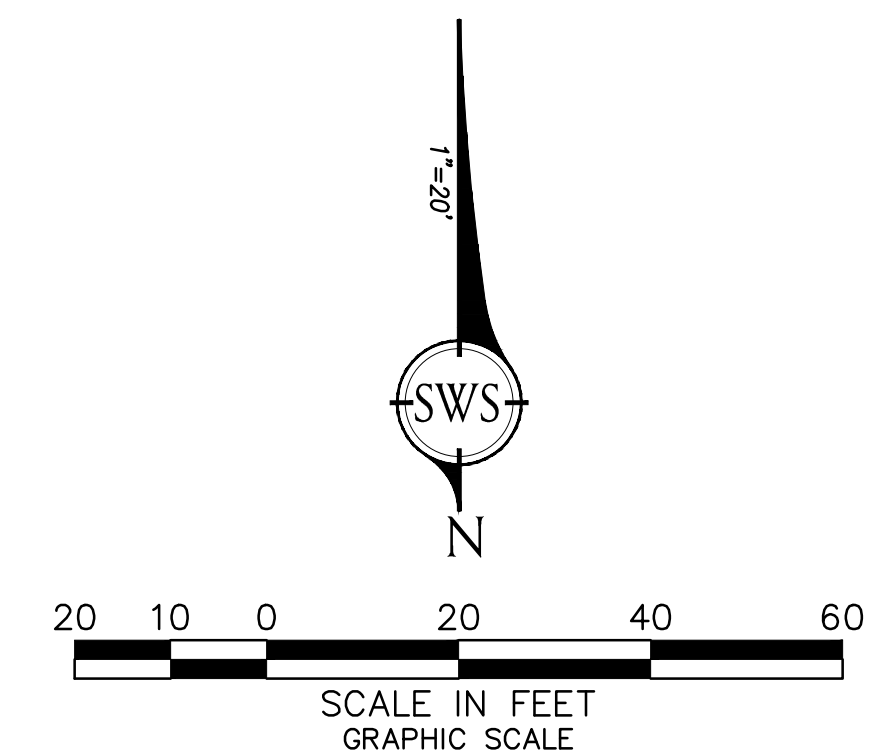
DRAWING  
**C5.7**

DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES



SEE SHEET C6.2



**SWS ENGINEERING, INC.**  
CIVIL ENGINEERING • LAND PLANNING • SURVEYING  
1633 Lake San Marcos Drive, Suite 300 San Marcos, CA 92078  
P: 760-744-0011 F: 760-744-0046  
31045 Temecula Parkway, Suite 201 Temecula, CA 92592  
P: 951-261-5407 F: 951-587-9451  
DATE: Feb 15, 2017 10:27am by Matt Spencer  
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**EROSION CONTROL  
PLAN**

NO. DATE ISSUE PROJECT NO: 19-069  
DATE:

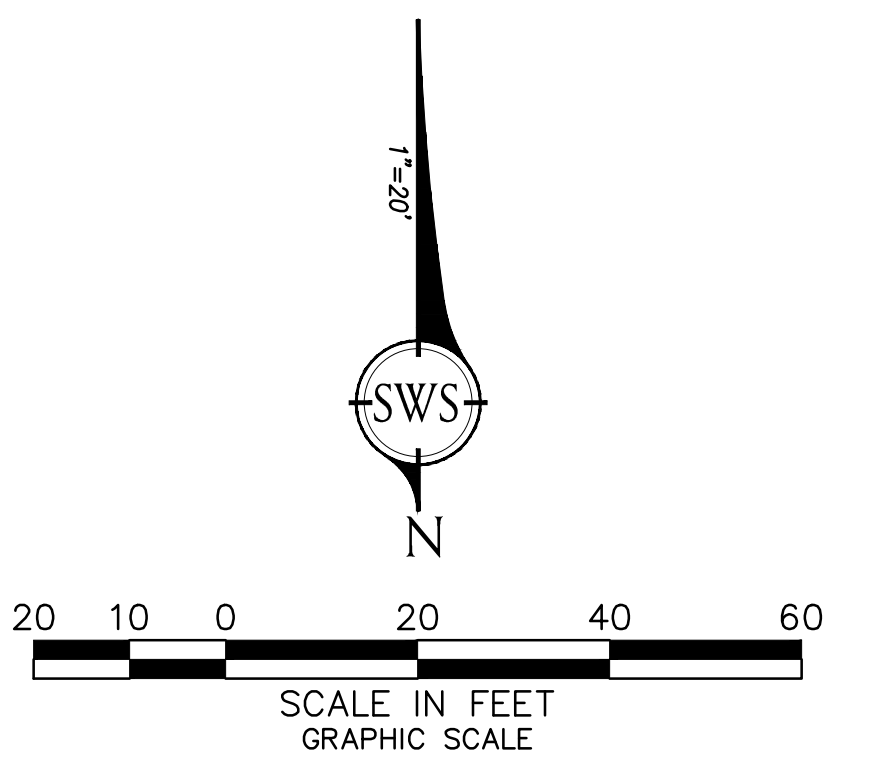
DRAWING  
**C6.1**

SEE SHEET C6.1



DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL  
INCREMENT 1 - ROUGH GRADING

KEYNOTES



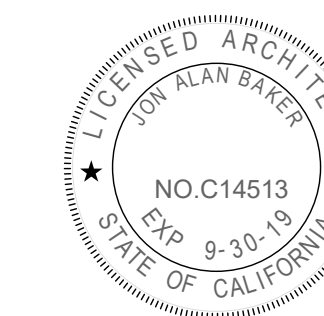
**SWS ENGINEERING, INC.**  
 CIVIL ENGINEERING • LAND PLANNING • SURVEYING  
 1633 Lake San Marcos Drive, Suite 300 San Marcos, CA 92078  
 760-744-0111 F: 760-744-0646  
 31045 Temecula Parkway, Suite 201 Temecula, CA 92592  
 951-261-5407 F: 951-587-9451  
 DATE: Feb 15, 2018; by Matt Spencer  
 FILE D:\projects\2018\18-008\EROD\Construction\18-008\_EROD\_R02.dwg



**EROSION CONTROL PLAN**

NO. DATE ISSUE PROJECT NO: 19-069  
DATE:





DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL REBUILD

LEGEND

- SITE DEMOLITION AREA AND AREA OF ROUGH GRADING
- INCREMENT OF PROPOSED BUILDING AREAS INCLUDED IN AREA OF ROUGH GRADING



BIM 360//19009-00 Del Mar Heights ESARCH-BNDS-DMHS.rvt 2/17/2020 7:44:55 AM

1 INC 01 - SITE PLAN - OVERALL  
AAS 0.1 1" = 30'-0"

**BakerNowicki**  
design studio  
731 Ninth Avenue, Suite A, San Diego, California 92101  
619.795.2450  
www.bnstudio.com

INC 01 - OVERALL SITE PLAN

NO.	DATE	ISSUE	PROJECT NO:	19009
			DATE:	02.11.2020

DRAWING  
A0.2





DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL

**JOHNSON**  
CONSULTING ENGINEERS, INC.

Power | Lighting | Multimedia  
Communications | Data Networking

12875 Brookprinter Place, Suite 300  
Poway, CA 92064  
P 858.679.4030 | F 858.513.0559  
www.jce-inc.com

19009  
2/14/2020 8:20:53 PM

**BakerNowicki**  
design studio

731 Ninth Avenue, Suite A, San Diego, California 92101  
619.795.2450  
www.bndesignstudio.com

UTILITY SITE PLAN

NO.	DATE	ISSUE
1	08/31/2019	PROJECT NO: 19009 DATE: 08/31/2019

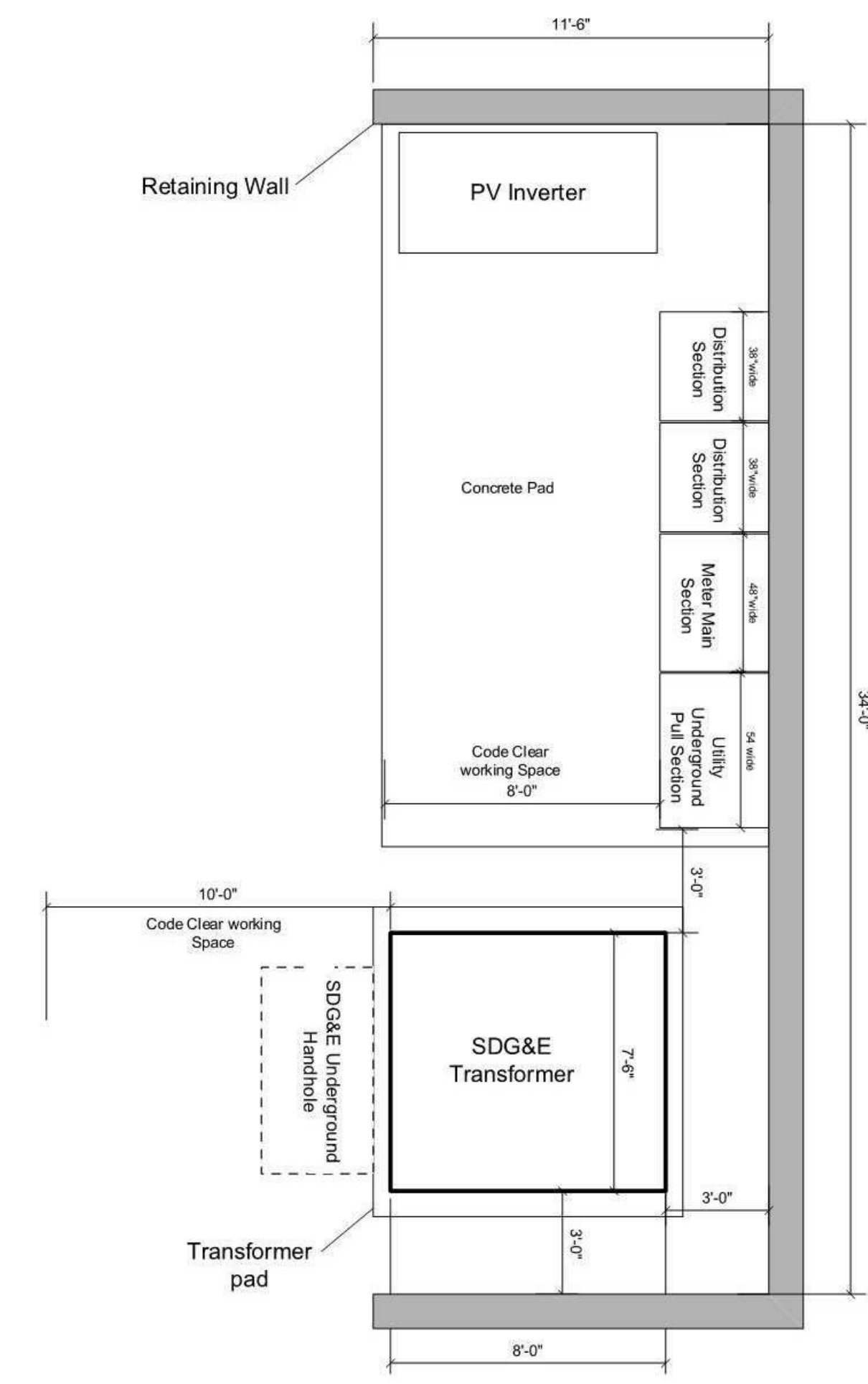
DRAWING  
**E1.1**

**1** UTILITY SITE PLAN  
1" = 30'-0"

B:\19009\19009-00 Del Mar Heights ES\ELEC\CEE-DMHS.rvt  
2/14/2020 8:28:53 PM



**2** SITE ELECTRICAL SERVICE  
E1.1 1/4" = 1'-0"



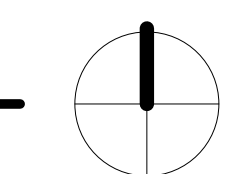
**DEL MAR UNION SCHOOL DISTRICT  
DEL MAR HEIGHTS SCHOOL**

**GENERAL NOTES:**  
1. FURNISH AND INSTALL ALL UTILITY CO. SERVICES TO THE SITE TO COMPLY WITH LOCAL UTILITY CO. REQUIREMENTS. VERIFY ALL REQUIREMENTS PRIOR TO INSTALLATION.

**KEY NOTES:**  
1. PROVIDE 2" C. WITH PULL STRING TO SWITCHBOARD (SBA) FOR FUTURE ELECTRIC VEHICLE CHARGING STATION. STUB CONDUIT, PROVIDE CAP AND MARKER ON PAVEMENT AT THE INDICATED STUB

BIM 360://19009-00 Del Mar Heights ES/ELEC-CEE-DMHS.rvt  
2/14/2020 6:29:05 PM

**1** OVERALL SITE PLAN  
1" = 30'-0"



**JOHNSON**  
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12875 Brookprinter Place, Suite 300  
Poway, CA 92064  
P 858.679.4030 | F 858.513.0559  
www.jce-inc.com

REGISTERED PROFESSIONAL ENGINEER  
NO. E 14781  
Exp. 6-30-2021  
ELECTRICAL  
STATE OF CALIFORNIA

1/9/2017 2/14/2020 6:29:05 PM

**BakerNowicki**  
design studio  
731 Ninth Avenue, Suite A, San Diego, California 92101  
619.795.2450  
www.bndesignstudio.com

**OVERALL SITE PLAN**

NO. DATE ISSUE  
PROJECT NO: 19009  
DATE: 08/31/2019

DRAWING  
**E1.2**



Owner \_\_\_\_\_  
 Project Name \_\_\_\_\_



FLOW TEST EFFECTIVE POINT  
 STATIC PRESSURE 80.9 PSI  
 RESIDUAL PRESSURE 70.15 PSI  
 TEST ELEV. -400 FT  
 REF. ELEV. -3'-0"

**PROTECTION DESIGN AND CONSULTING**  
 2851 Camino Del Rio S. # 210  
 San Diego, California 92108  
 www.protectiondesign.com  
 phone 619.255.8964  
 fax 619.255.9547

IDENTIFICATION OF THE ARCHITECT OFFICE OF REGULATION SERVICES  
 NO. C28042  
 RPL # \_\_\_\_\_  
 AC \_\_\_\_\_ FILS \_\_\_\_\_ SS \_\_\_\_\_  
 DATE: \_\_\_\_\_

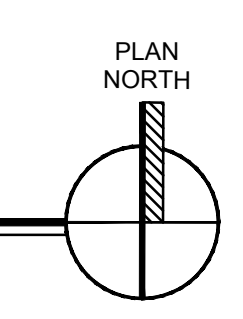
**UNDERGROUND SITE FIRE PIPING**

NO. DATE ISSUE PROJECT NO: Issue Date

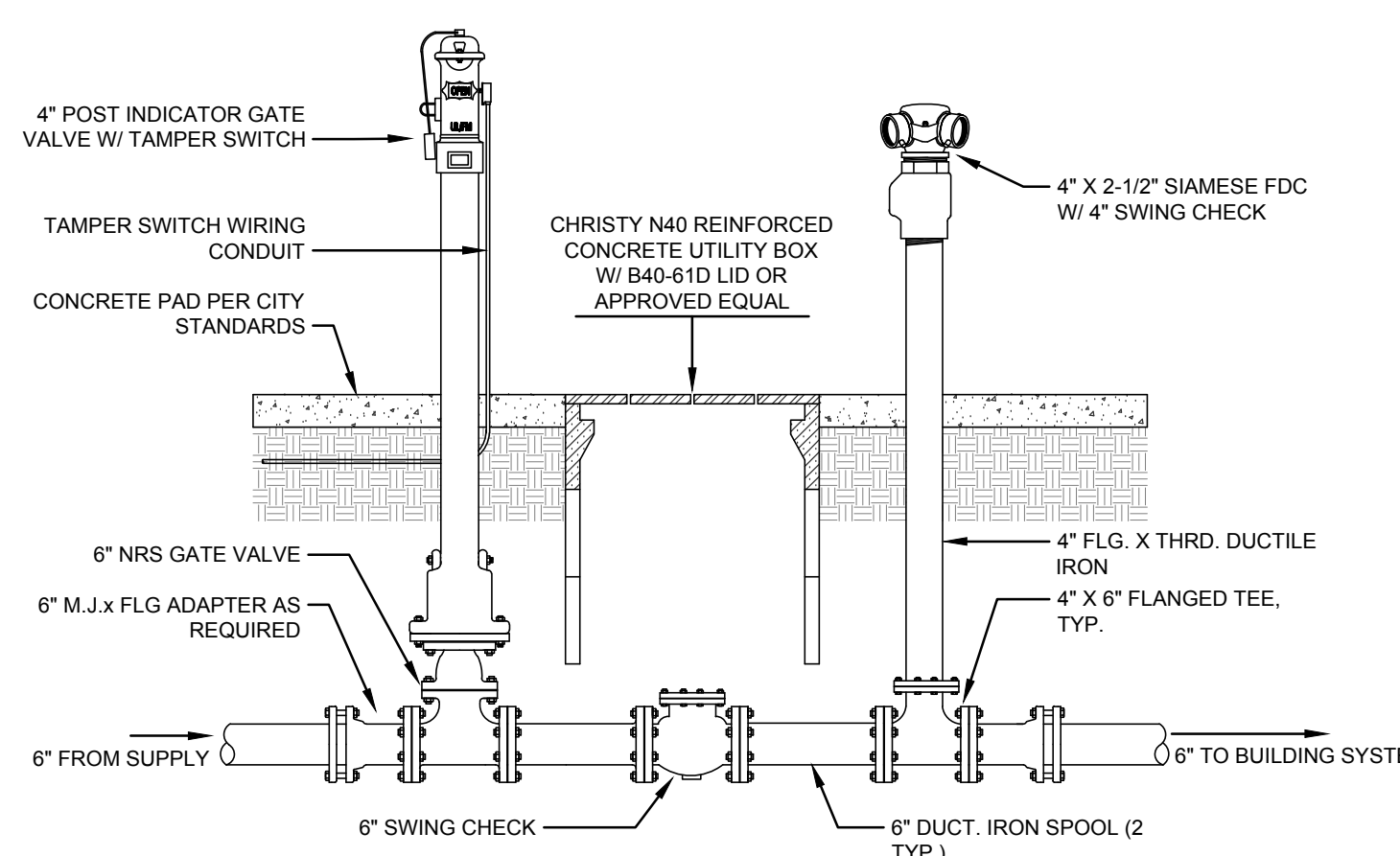
DRAWING  
**FP-1.1**

**UNDERGROUND SITE FIRE PIPING PLAN**

SCALE: 1" = 30'-0"

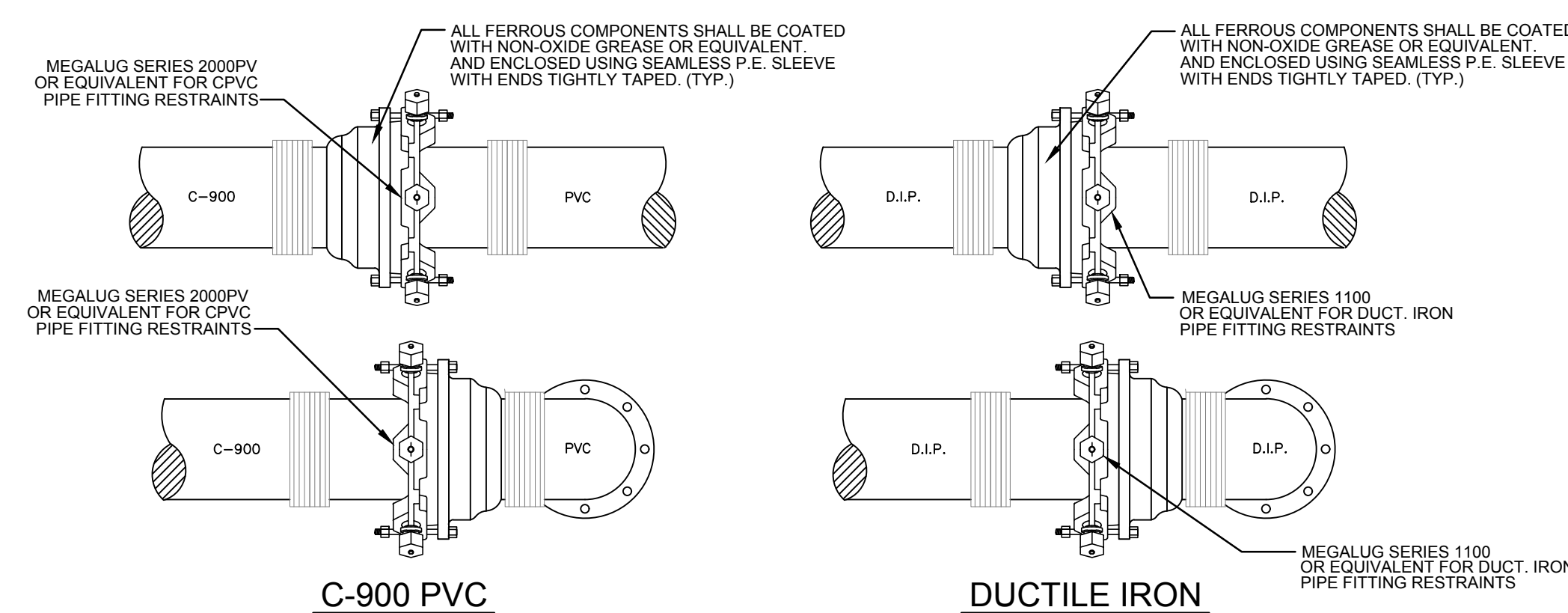
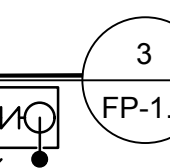


Owner  
Project Name



**NEW PIV / FDC DETAIL**  
NOT TO SCALE

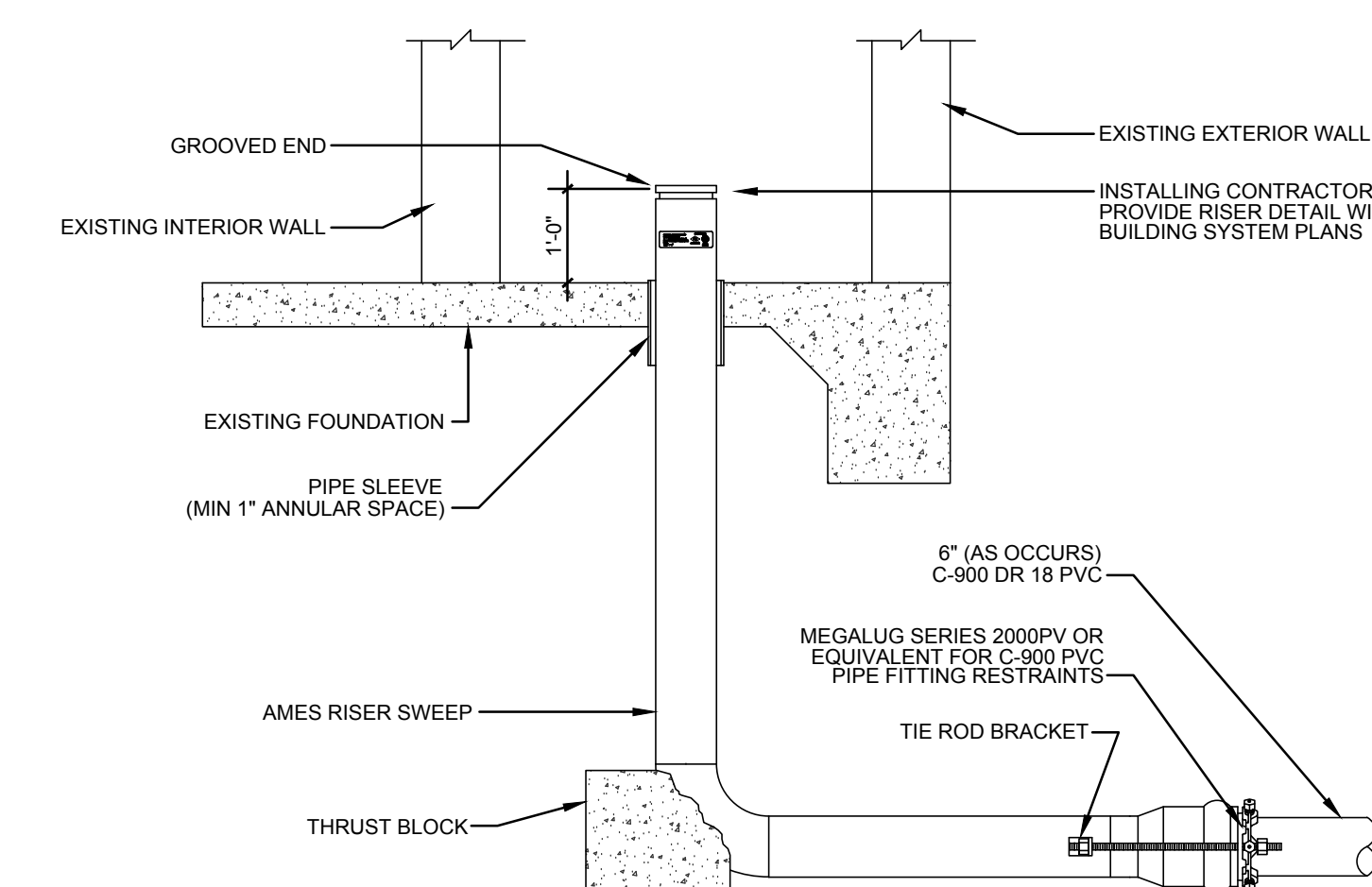
SHOWN ON PLAN AS



**MEGALUG C-900 / DUCT. IRON JOINT RESTRAINT**

NOT TO SCALE

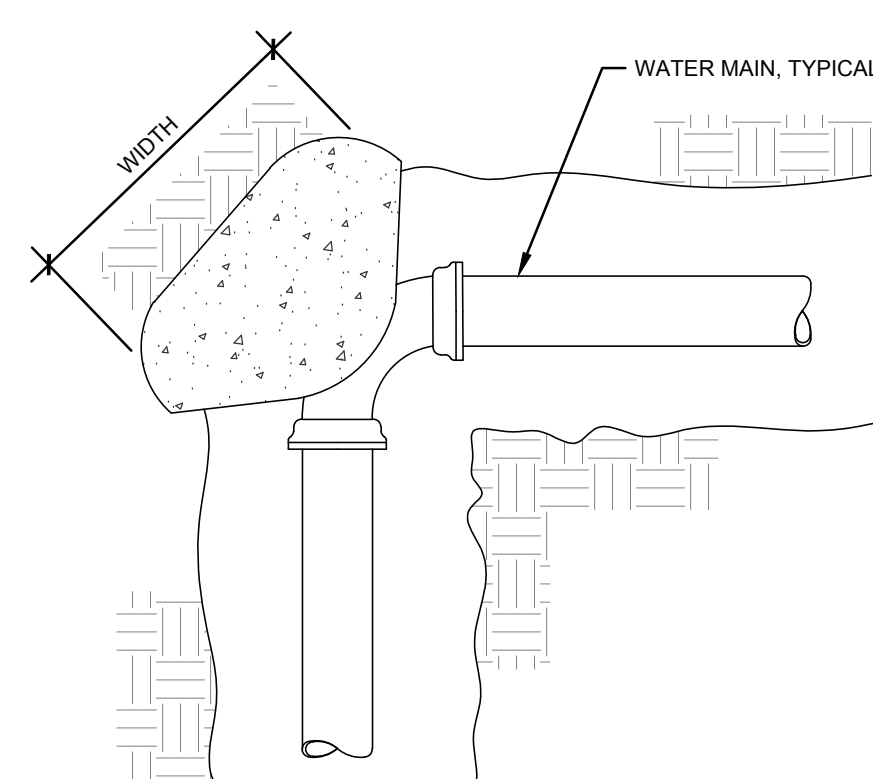
3  
FP-1.2



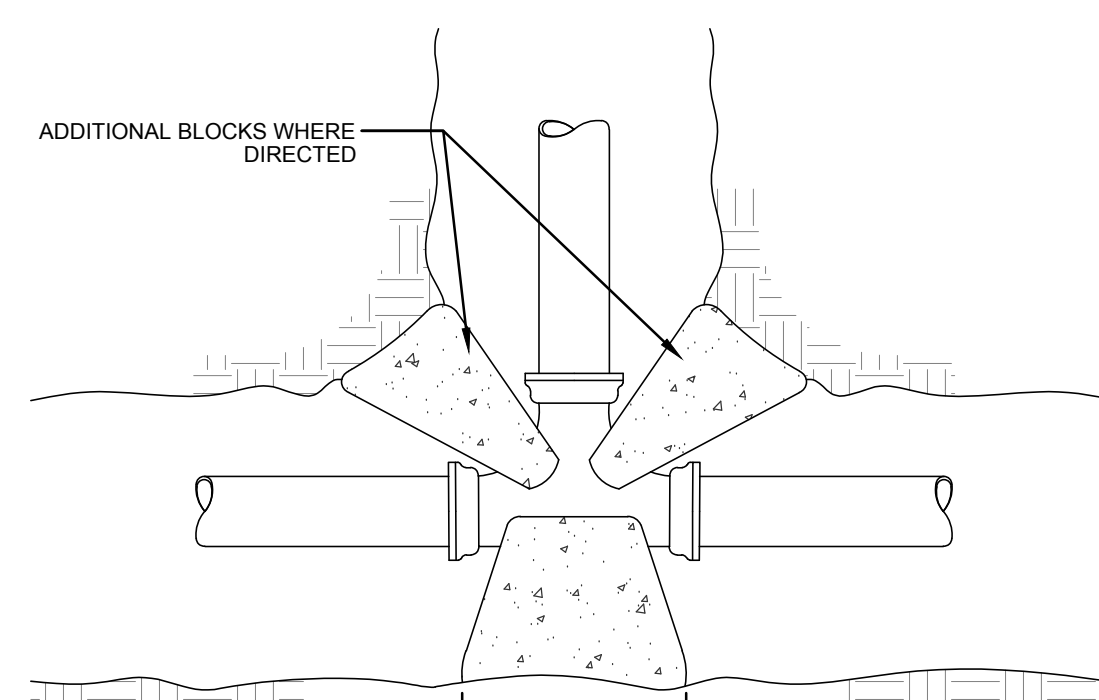
**TYPICAL SERVICE ENTRY DETAIL**

NOT TO SCALE

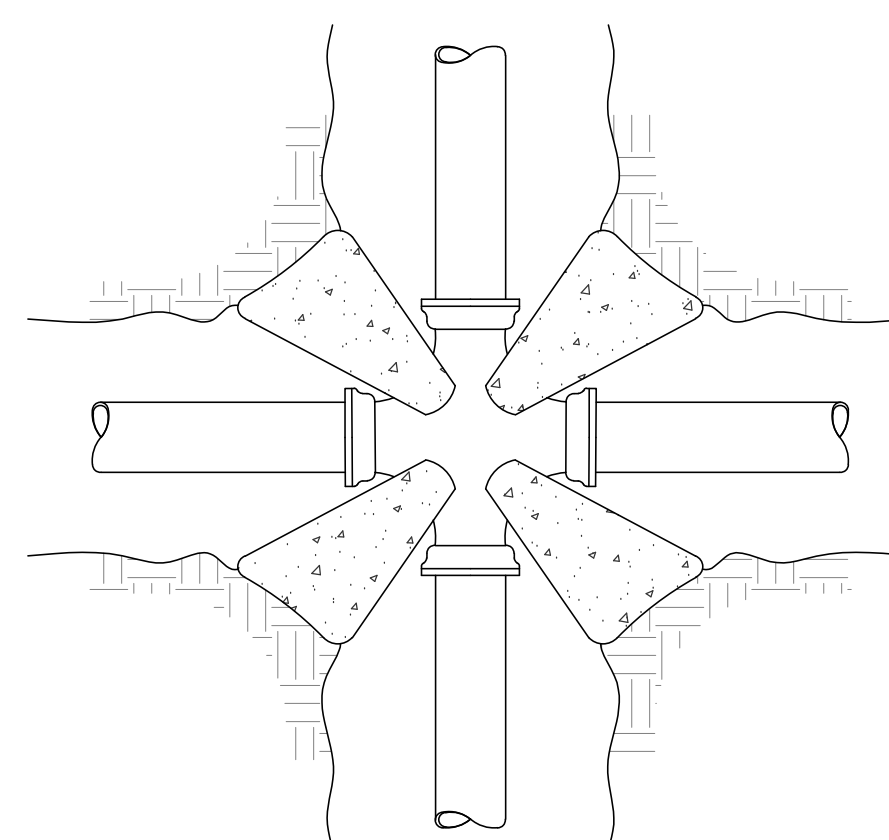
SHOWN ON PLANS AS



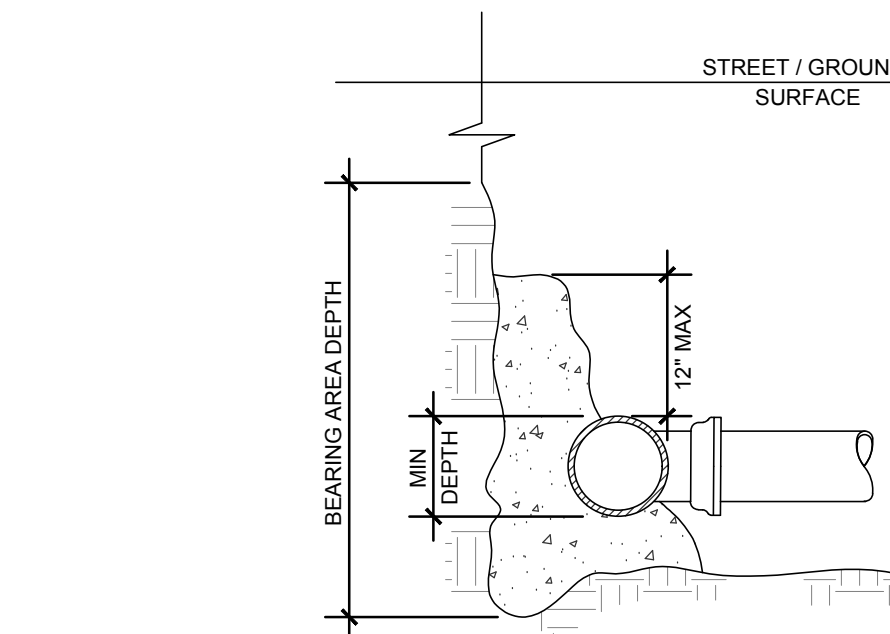
**BEND**



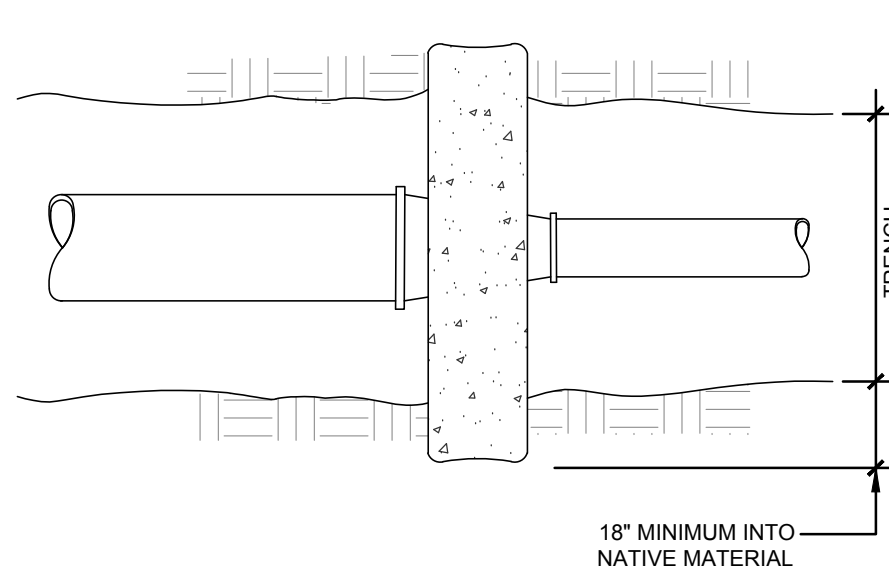
**TEE - PLAN**



**CROSS**

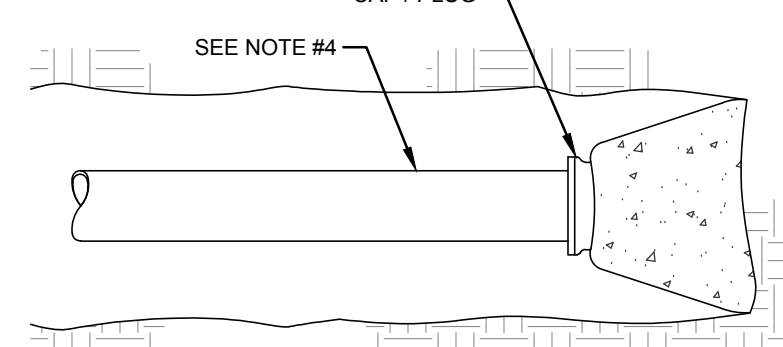


**TEE - ELEVATION**

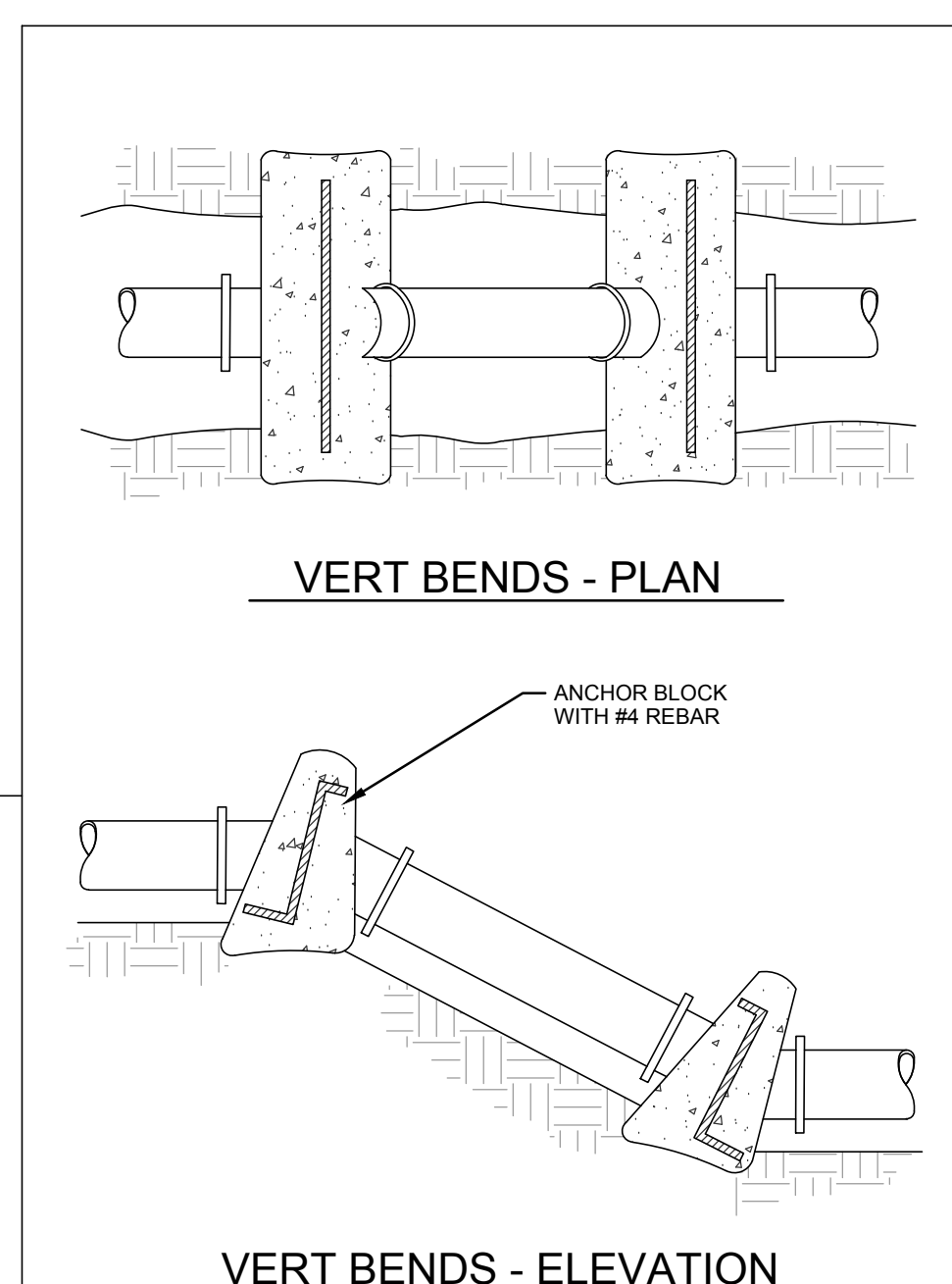


**REDUCER**

SEE NOTE #1 BELOW



**END CAP**



**VERT BENDS - PLAN**

**VERT BENDS - ELEVATION**

INSTALLATION SHALL CONFORM TO N.F.P.A. 13 (2016 ED.), SECTION 10.8.2 (a) TO SOLVE FOR THRUST BLOCK BEARING AREA (A) IN SQUARE INCHES:  
WHERE:  $A_b = \frac{T}{S_b} \times S_f \times 144$   
T = THRUST IN POUNDS FROM NFPA 13 TABLE A-10.8.2 (a) (CORRECTED FOR PRESSURE OF 150 PSI DOWNSTREAM OF FDC)  
 $S_b$  = SOIL BEARING STRENGTH FROM NFPA 13 TABLE A-10.8.2 (c) (SEE PAGE 0.3 IN THE MATERIALS SUBMITTAL FOR SOIL BEARING STRENGTH REFERENCES.)  
( $S_b$ ) = SAFETY FACTOR OF 1.5

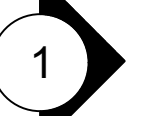
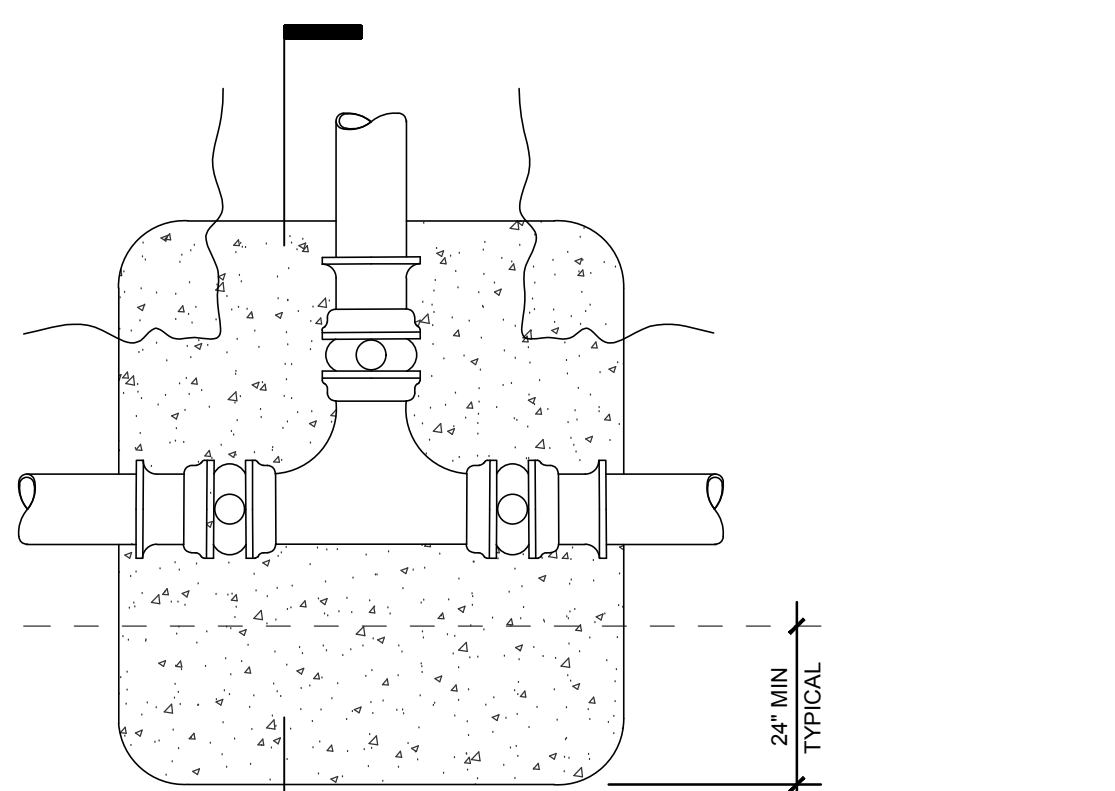
FITTING SIZE & TYPE MIN. $A_b$ IN SQ. IN.	HEIGHT (h) MIN 1/2 PIPE OD	WIDTH (w) MIN (h) MAX. (2h)	$A_b$ (ACTUAL)
6" 90° TEE 456.88 SQ. IN.	17	27	459
6" 45° ELBOW 247.28 SQ. IN.	12	21	252

FOR 6" 90° OR TEE:  
 $A_b = \frac{5288}{2500} \times 144 \times 1.5$      $A_b = 456.88$  SQ. IN.  
FOR 6" 45° ELBOW:  
 $A_b = \frac{2982}{2500} \times 144 \times 1.5$      $A_b = 247.28$  SQ. IN.

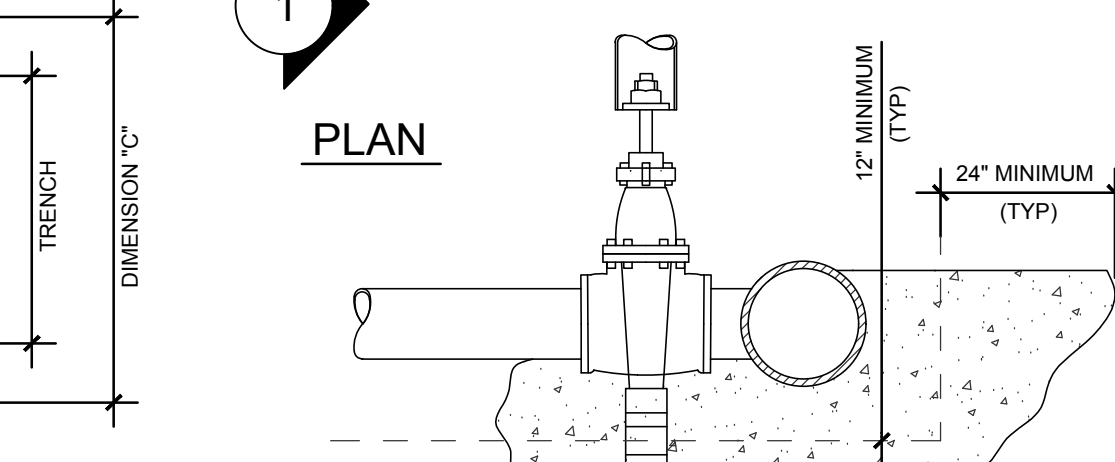
**VALVE SUPPORT BLOCK**

VALVE SIZE	DIMENSION "A"	DIMENSION "B"
4"	12"	12"
6"	12"	12"
8"	13"	14"
10"	14"	16"
12"	15"	18"

DIMENSION "C" = TRENCH WIDTH PLUS TWO TIMES THE PIPE DIAMETER



**PLAN**



**SECTION 1**

**TEE WITH GATE VALVES**

NOTES: SHEET 1 OF 3

- 1) THE ANCHOR BLOCKS ON VERTICAL BENDS REQUIRE ENGINEER APPROVAL.
- 2) A MINIMUM OF 6" OF CONCRETE SHALL BE POURED ON WETTED UNDISTURBED OR COMPACTED SOIL BENEATH EACH INSTALLATION.
- 3) TEE SHALL BE CONCRETE BLOCKED A MINIMUM OF 6" ON ALL THREE SIDES.
- 4) USE 12" - 18" LENGTH OF PIPE BETWEEN THE END CAP AND THE LAST JOINT AS A BOND BREAKER ON DEAD END BLOCKING.

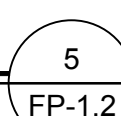
NOTES: SHEET 2 OF 3

- 1) BEARING AREA BASED ON SOIL BEARING VALUE OF 1500 PSF AND 225 PSI LINE PRESSURE AND A MINIMUM OF 3" COVER.  
FOR BEARING = 1000 PSF, 1.5 X AREA SHOWN  
FOR BEARING = 500 PSF, 3.0 X AREA SHOWN
- 2) ENGINEER SHALL DETERMINE SIZES, REFER TO SPECIFICATIONS FOR THRUST AND ANCHOR BLOCK SIZING.
- 3) THRUST BLOCKS SHALL BE CENTERED ON THE FITTING SO THAT THE BEARING AREA IS EXACTLY OPPOSITE THE RESULTANT DIRECTION OF THRUST.
- 4) CONCRETE SHALL BE PLACED SO THAT FITTINGS AND VALVES ARE ACCESSIBLE FOR REPAIR OR REPLACEMENT.

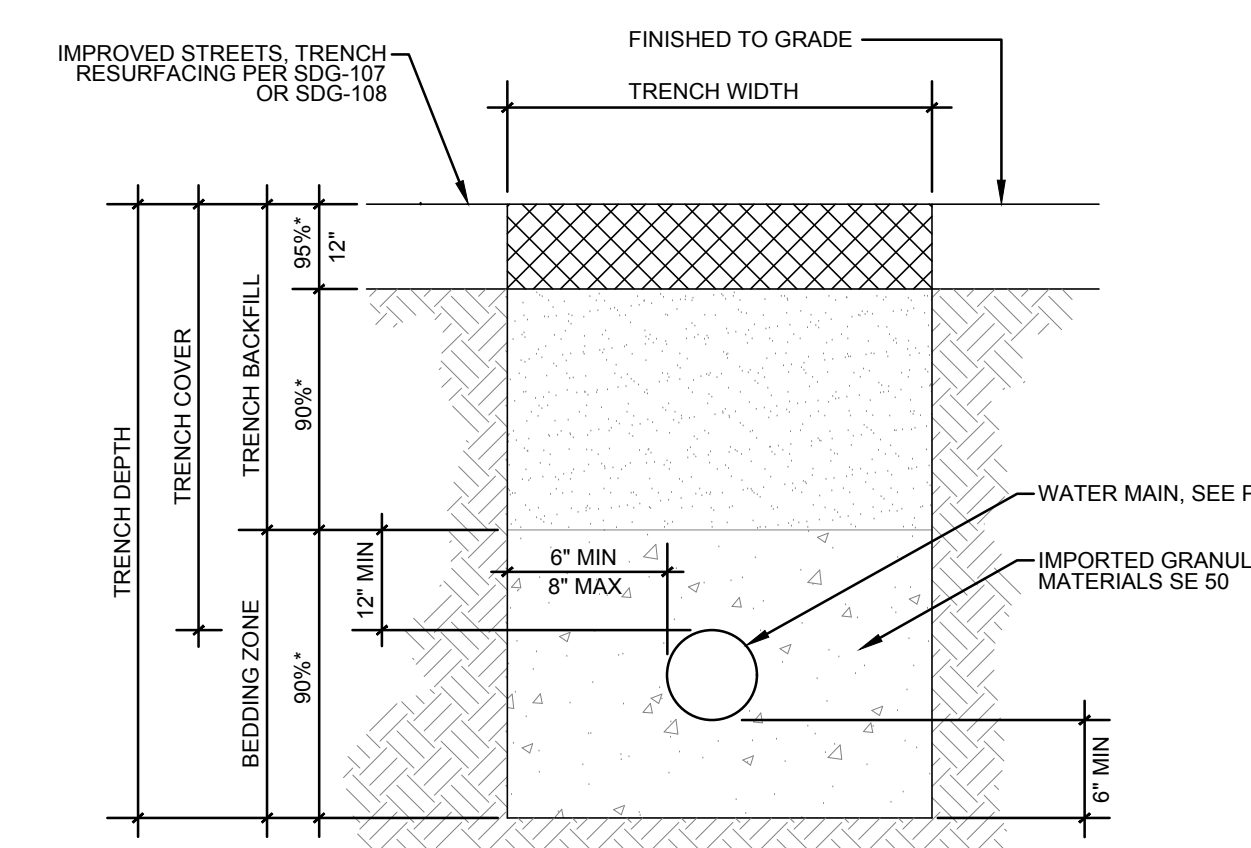
NOTES: SHEET 3 OF 3

- 1) BEARING AREA "B" MUST BE EQUAL TO OR GREATER THAN THE AREA REQUIRED FOR A 90° ELBOW INSTALLATION.
- 2) INSTALL SAND BAGS AROUND BUTTERFLY VALVE ACTUATOR TO ISOLATE IT FROM CONCRETE.
- 3) BFVS INSTALLED AT CROSSES OR TEES REQUIRE A FLANGED DUCTILE IRON SPOOL TO BE INSTALLED BETWEEN THE FITTING AND VALVE IN ACCORDANCE WITH THE SPECIFICATIONS.

SHOWN ON PLAN AS



5  
FP-1.2

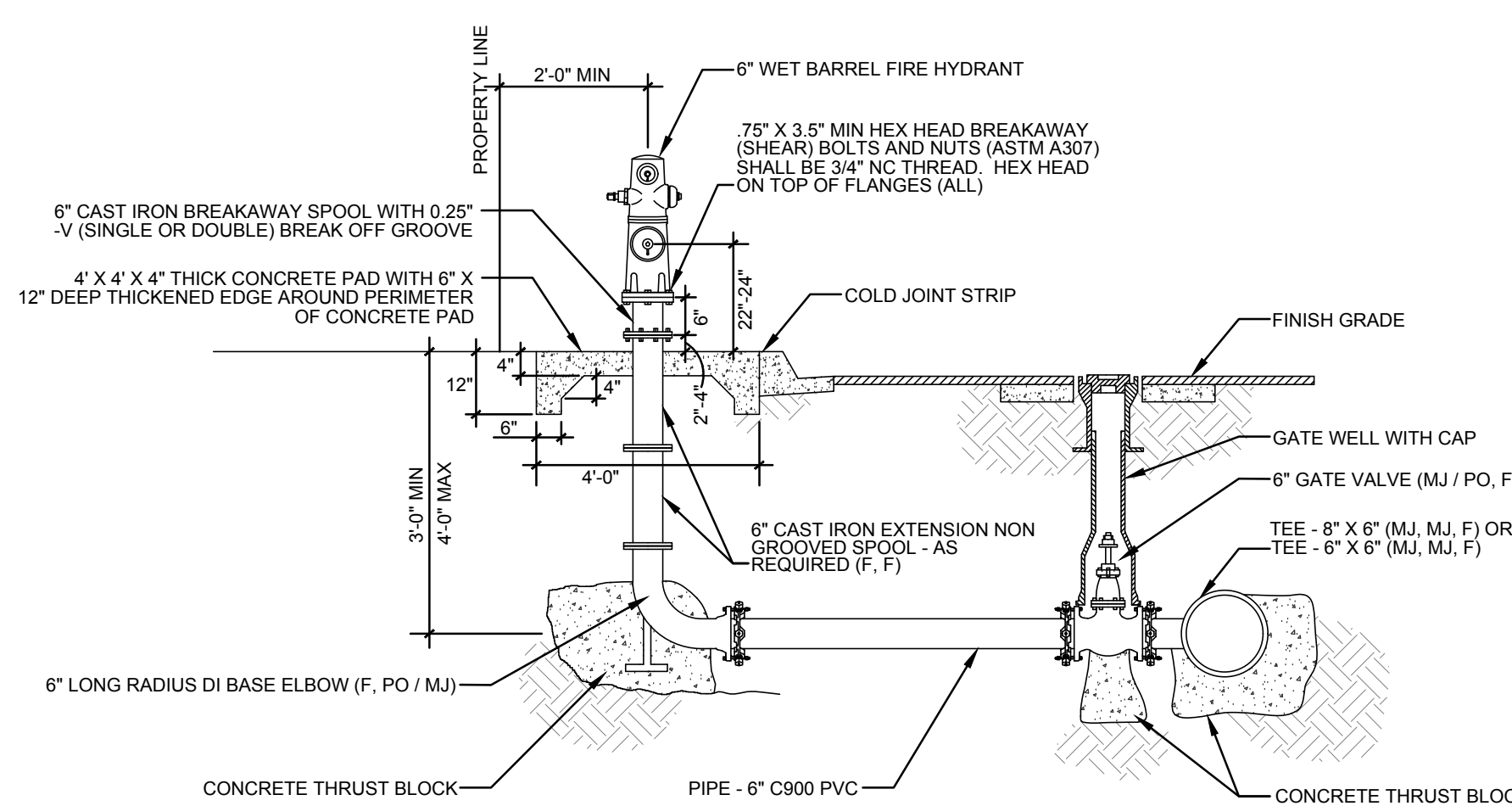


- NOTES:
- 1) (1) INDICATES MINIMUM RELATIVE COMPACTION.
  - 2) MINIMUM COVER: 3" FOR DISTRIBUTION MAINS, 5" FOR TRANSMISSION MAINS.
  - 3) METAL TAPE SHALL BE INSTALLED ABOVE PIPE, 4" BELOW TRENCH CAP AND 12" BELOW FINISH GRADE IN UNIMPROVED STREETS.
  - 4) 1" SAND CUSHION OR A 6" MINIMUM SAND CUSHION WITH 1" NEOPRENE PAD SHALL BE PLACED FOR ALL CROSSINGS UTILITIES WHEN VERTICAL CLEARANCE IS 1" OR LESS. THE NEOPRENE PAD SHALL BE PLACED ON THE MOST FRAGILE UTILITY.
  - 5) FOR MAINS LARGER THAN 16", TRENCH WIDTH SHALL BE AS SHOWN ON THE PLANS.

**TYPICAL TRENCH SECTION DETAIL**

NOT TO SCALE

2  
FP-1.2



- NOTES:
- 1) NUMBER OF OUTLETS SHALL BE AS SHOWN ON THE PLANS.
  - 2) CONNECT TO BASE OF THE HYDRANT WITH SHEAR BOLTS INSTALLED WITH HEX HEAD ON TOP OF THE FLANGE (3/16" DIAMETER HOLE 2" DEEP IN BOLTS GALVANIZED AFTER BORING).
  - 3) A BLUE IDENTIFICATION ROAD DOT SHALL BE PLACED IN THE STREET TO IDENTIFY THE PLACEMENT OF THE FIRE HYDRANT

**NEW FIRE HYDRANT DETAIL**

NOT TO SCALE

SHOWN ON PLAN AS



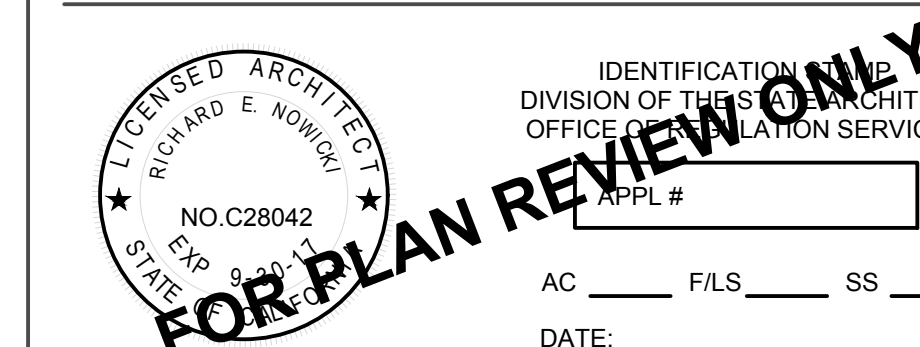
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FP-1.2

**CONCRETE THRUST AND ANCHOR BLOCK INSTALLATIONS - SDW-151**

NOT TO SCALE



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**FIRE PROTECTION UNDERGROUND DETAILS**

NO. DATE ISSUE PROJECT NO: DATE: Issue Date

DRAWING  
**FP-1.2**